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30 June 2015

Ms. Melanie Morash
Remedial Project Manager
U. S. Environmental Protection Agency
Region 9
75 Hawthorne Street, SFD-7-1
San Francisco, CA 94105

Re: Vapor Intrusion Evaluation Report
Former TRW Microwave Site
825 Stewart Drive, Sunnyvale, California

Dear Ms. Morash:

Northrop Grumman Systems Corporation is submitting the enclosed Vapor Intrusion Evaluation Report to present the results of the vapor intrusion sampling and assessment conducted at the former TRW Microwave site in May 2015. The sampling was performed under conservative worst-case conditions without mechanical ventilation operating in the building. The results indicate that indoor air concentrations are below the most stringent state and federal industrial screening levels and do not pose a risk to human health under an industrial exposure scenario.

If you have any questions regarding the information provided in this report, please do not hesitate to contact me at 310-332-5057, or our project manager, Linda Niemeyer, at 760-944-9490.

Sincerely,

Joseph P. Kwan
Corporate Director, Environmental Remediation
on behalf of Northrop Grumman Systems Corporation

Enclosure: Vapor Intrusion Evaluation Report

cc: Rebecca Mora - AECOM
Linda Niemeyer - Watermark

AECOM

VAPOR INTRUSION EVALUATION REPORT

FORMER TRW MICROWAVE SITE
825 STEWART DRIVE
SUNNYVALE, CALIFORNIA

JUNE 2015

VAPOR INTRUSION EVALUATION REPORT

FORMER TRW MICROWAVE SITE
825 STEWART DRIVE
SUNNYVALE, CALIFORNIA

June 30, 2015

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1.0 INTRODUCTION

This Vapor Intrusion Evaluation Report (Report) has been prepared by AECOM Technical Services, Inc. (AECOM) on behalf of Northrop Grumman Systems Corporation (Northrop Grumman) to present the results of vapor intrusion (VI) evaluation sampling performed on May 6, 2015 at the former TRW Microwave Site (the Site) located in the City of Sunnyvale, California (Figure 1). Figure 2 shows the current site layout.

All work was performed in accordance with the Work Plan Addendum for Vapor Intrusion Evaluation Sampling and Analysis (Work Plan Addendum, AECOM 2015). The results of this sampling effort will be used to assess whether the building is suitable for human occupancy and if so, obtain a certificate of occupancy from the City of Sunnyvale.

1.1 Background

During the Five-Year Review process conducted in accordance with the requirements of the Record of Decision, the VI pathway was identified as requiring evaluation for protectiveness. VI investigations were performed at the Site between 2003 and 2004 and the results of these investigations summarized in the Third Five-Year Review Report (Camp Dresser & Mckee, Inc. [CDM] 2009).

In 2013, a VI investigation was performed in response to the December 6, 2012 Requirement for Vapor Intrusion Sampling and Analysis Work Plan and Report letter from the San Francisco Regional Water Quality Control Board (RWQCB). The purpose of the 2013 VI investigation, as described below, was to update the VI pathway evaluation to reflect changes in site conditions.

1.1.1 Previous 2013 Vapor Sampling Event

Indoor air, outdoor air, and sub-slab vapor sampling were performed in December 2013 to evaluate the extent of VI into the building, the results of which are discussed in detail in the Vapor Intrusion Evaluation Report (AECOM 2014a). The results of this sampling indicated that trichloroethene (TCE) was the only VI-related chemical that presented risk above a 1×10^{6} exposure level, at 3×10^{-6} in the existing building under the industrial exposure scenario. These results are within the low end of the Comprehensive Environmental Restoration, Compensation, and Liability Act (CERCLA) risk management range (1×10^{-4} to 1×10^{-6}) with a hazard index (HI) approaching 1.

Based on these results, the following recommendations were presented in the Vapor Intrusion Evaluation Report (AECOM 2014a), and approved by USEPA, to adequately mitigate VI risk to building occupants:

1. To the extent possible, remove conduits that are suspected to contribute to the VI pathway. This includes abandonment of the Eductor and groundwater monitoring wells located

within the building and the elimination of other open conduits to VI that currently exist in the unfinished building (but will likely be addressed once the building interior is completed), such as the incomplete drain lines, electrical conduits, and other cut-outs in the concrete slab foundation of the building.

2. As part of completing the building construction, work with the property owner to ensure that a mechanical ventilation system will be installed and operated at the typical air exchange rate of 1 building volume of air per hour. Based on the previous evaluation of this mitigation measure conducted by CDM (CDM 2004), installation and operation of a standard mechanical ventilation system is expected to mitigate VI risk.

3. Following installation and operation of mechanical ventilation, collect samples of indoor air prior to building occupancy in potential work areas and near potential conduits for VI (i.e., near the elevator) to assess whether VI risk (both long- and short-term) has been mitigated.

1.1.2 Changes in Site Conditions Subsequent to 2013 VI Evaluation Sampling

At the request of the property owner and as a conservative, proactive measure, Northrop Grumman agreed to install a passive Sub-Slab Vapor Collection (SVC) system below the existing site building. In August and September 2014, the passive SVC system was installed beneath the concrete floor of the entire building in accordance with the Passive Sub-Slab Vapor Collection System Installation Work Plan (AECOM 2014b). The purpose of the passive SVC system is to passively collect vapors below the building slab and vent them to the atmosphere as a protective measure against vapor intrusion. The layout of the passive SVC system is shown on Figure 3.

From October through November 2014, a targeted excavation of the former source area was performed in accordance with the Well Destruction and Source Removal Work Plan (AECOM 2014c). The excavation was performed using large-diameter augers to remove residual contaminated material. The extent of the excavation was guided by the results of a membrane interface probe investigation, as well as additional confirmation soil borings. Based on the results of confirmation soil borings, the extent of the excavation was expanded, as explained in the Work Plan Addendum for Source Area Removal Activities (AECOM 2014d). The final area that was excavated is shown on Figure 3. A total of approximately 590 tons of soil and semi-solids and approximately 9,000 gallons of water were removed from the source area. A detailed description of excavation activities at the Site is provided in the Source Area Soil Removal Report (Orion Environmental Inc. [Orion] 2015a). Repairs to the SVC system were performed where necessary following the excavation activities, as detailed in the Memorandum: Summary of Repairs to the Passive Sub-Slab Vapor Collection System (Orion 2015b; included as Appendix A to this report).

Concurrently with source area excavation activities, the Eductor and all wells within the building (T-2A, T-2B, T-2C, and T-3A) were destroyed via overdrilling per the Well Destruction and Source Removal Work Plan (AECOM 2014c). These wells were removed to prevent them from serving

as a potential VI pathway once the building is occupied following the redevelopment activities currently being conducted by the new owner.

On January 21, 2015, the building was inspected for potential VI conduits by AECOM and the property owner. This included the area around pipes, seams, and/or cracks in the concrete slab, and unsealed spaces between the walls of the three sections of the buildings. Potential conduits identified during the walkthrough included inadequate seals where pipes penetrate the slab, narrow gaps between the interior walls of each part of the building where soil is exposed directly to the atmosphere, contraction joints in the concrete slab, and the elevator shaft. Between April 3and May 1, 2015, these potential conduits were sealed, as detailed in the Memorandum: Summary of Concrete Slab Sealing (Orion 2015c; included as Appendix B to this report).

1.2 Objectives

The primary objectives of the sampling described in this Report are to:

- Assess the VI pathway under current Site conditions;
- Evaluate the efficacy of the passive SVC system; and
- Support attainment of a certificate of occupancy from the City of Sunnyvale after evaluation of analytical results.

This report presents the methods and procedures used for collecting multiple lines of evidence for evaluating the VI pathway and the measures taken to ensure that data obtained are reliable and usable. Data obtained during the VI sampling event were used to assess potential risk to future industrial users. The project action limits (PALs) for groundwater chemicals of concern (COCs) and other additional volatile organic compounds (VOCs) detected at the Site during previous VI investigations are listed in Table 1. These PALs include USEPA Regional Screening Levels (RSLs) for indoor air industrial exposure, most recently published in June 2015 (USEPA 2015a), and the Department of Toxic Substances Control (DTSC) Office of Human and Ecological Risk (HERO) Note 3, published in May 2015 (DTSC HERO 2015).

1.3 Report Organization

This Report is organized as follows:

- Section 1 provides an introduction, background, and the project objectives.
- Section 2 describes the scope of the investigation, including pre-sampling activities, field activities, laboratory analyses, and quality assurance procedures.
- Section 3 describes how the data were evaluated.

- Section 4 includes interpretation of results, uncertainties inherent in the sampling and data evaluation process, conclusions, and recommendations.
- Section 5 provides references.

2.0 SCOPE OF WORK

Field activities were performed in accordance with the Work Plan Addendum (AECOM 2015). The protocol for the soil vapor sampling and analysis followed guidelines in the Advisory – Active Soil Gas Investigations (California Environmental Protection Agency 2012). Other resources that were consulted during preparation of this report and development of the Work Plan include the Guidance for the Evaluation and Mitigation of Subsurface Vapor Intrusion to Indoor Air (DTSC 2011a) and the Vapor Intrusion Mitigation Advisory (DTSC 2011b).

Field activities included sampling of three sub-slab vapor wells (SS-5, SS-7, and SS-11) and collection of five indoor air samples (IA-1 through IA-5) and one outdoor ambient air sample (OA-1). The locations of the sub-slab and indoor air sampling locations are shown on Figure 3. In general, VI samples are collected in the vicinity of potential conduits. However, as described in Section 1.1.2, all identified potential conduits were sealed prior to sampling. Therefore, sample locations were selected to evaluate the VI pathway in each of the three building sections (Section 1, Section 2, and Section 3) shown on Figure 3. Four locations were sampled in Section 1 (the two-story section of the building): (1) Indoor Air Sample IA-1, located above the location of the previously removed underground storage tank and recent soil excavation, (2) Indoor Air Sample IA-4, located near the elevator on the first floor, (3) Indoor Air Sample IA-5, located near the elevator on the second floor, and (4) Sub-Slab Monitoring Point SS-5, within the same section of the building as Indoor Air Sample IA-4. In the remainder of the building, one pair of co-located samples were collected in each section (Indoor Air Sample IA-2 co-located with Sub-Slab Monitoring Point SS-7 in Section 2 and Indoor Air Sample IA-3 co-located with Sub-Slab Monitoring Point SS-11 in Section 3). Outdoor ambient air sample OA-1 was collected on the roof of Section 2, near the intake of the heating, ventilation, and cooling (HVAC) system, located near the southwestern portion of the building (not shown on Figure 3). Photographs showing sampling equipment layout and helium leak testing are included in Appendix C. Additional details regarding field activities are provided in the following sections.

2.1 Field Activities

Prior to the start of sampling, the HVAC system was installed in the building, operated for a minimum of 72 hours, and then turned off 36 hours prior to sampling. The HVAC system is designed to automatically close the outdoor intakes when the system is turned off, and it was confirmed via visual inspection that all vents were in the closed position after system shutdown occurred. Sampling was performed on May 6, 2015 with the HVAC system off. Sample times and other data were recorded on field data sheets included in Appendix D. A photoionization detector (PID) capable of detecting VOCs to one part per billion (ppb) was used to identify

potential sources of VOCs inside the building, as well as to collect readings in the vicinity of the outdoor air sample and the roof vents for the SVC system. As summarized in Table 2, background PID readings within the building were greater than 200 ppb at all locations and were generally greater in the recently-constructed restrooms. Differential pressure measurements, recorded at the same locations (see field data sheets included in Appendix E) ranged from -3.5 pascals (Pa) in the men's restroom located in building Section 3 to 6.5 Pa in the women's restroom located in Section 1. Temperatures inside the building ranged from 65 degrees Fahrenheit (°F) to 78 °F during sampling. Ambient weather conditions prior to and during sampling (recorded on field forms included in Appendix D) were dry with no rainfall; the outdoor temperature was in the high 60s to low 70s °F. Wind speed was negligible on the day of sampling, with gusts of up to 7 miles per hour. All field activities were performed in accordance with the Work Plan Addendum. The following subsections provide details regarding the procedures followed during sample collection.

2.1.1 Sub-Slab Vapor Well Sampling

2.1.1.1 Sampling Equipment

All gauges and flow control manifolds were supplied by TestAmerica Laboratories Inc., West Sacramento, California (TAMS), a California-certified laboratory. The gauges and manifolds were connected by chromatography-grade, stainless steel tubing and dedicated airtight, flexible, Teflon® tubing, materials that have a low capacity for adsorbing VOCs. Sample trains were assembled using 0.25-inch outer diameter nylon tubing for all vapor sampling. Swagelok® type connectors were used for connections between tubing and other sampling components.

Samples were collected in 1-liter Summa® canisters for the sub-slab vapor monitoring points and 6-liter Summa® canisters for the indoor and outdoor air samples. All Summa® canisters were provided by TAMS with all 6-liter canisters individually certified as clean and the 1-liter Summa® canisters batch certified as clean. Canister certifications are provided in Appendix E. Each canister was field-verified to have a vacuum of at least 26 inches of mercury (in Hg) prior to sampling. Initial and final vacuum readings were recorded on field forms provided in Appendix D.

2.1.1.2 Leak Testing

Prior to sampling, AECOM performed leak testing at each sub-slab monitoring point, using laboratory-grade helium introduced into a clear plastic shroud covering the monitoring point (Photograph C-8 in Appendix C). The sampling equipment was connected in a sample train comprised of a PID used as a purge pump and the Summa® canister equipped with the laboratory-supplied flow regulator and vacuum gauge. Vapors were drawn from the monitoring point using the PID with built-in motor, and the magnitude of total VOCs was assessed.

Laboratory-grade helium was used as the tracer gas to test for air leakage into the sampling system for the purpose of sample integrity verification. Helium from a cylinder was introduced via a port in the shroud to maintain a concentration of at least 10 percent helium by volume beneath the shroud. The helium concentration under the shroud was monitored using a helium detector

via a second port in the shroud. A third port was connected to the PID for purging, leak testing, and measuring total VOCs in the sample. During leak testing, a portable helium detector was connected to the sampling train and used to confirm that helium was not detected in the sample train above a concentration of 5 percent of the helium concentration inside the shroud. The non-detection of helium above this concentration confirmed that the monitoring point was properly sealed and the sampling pump did not draw ambient air into the sample train. Helium measurements recorded during leak testing are provided on field forms included in Appendix D.

Sampling equipment was thoroughly inspected to ensure tight fittings between all components. To minimize the potential for leakage, the soil vapor sampling rate was maintained at less than 200 milliliters per minute using a flow controller supplied by TAMS. Prior to sampling, a shut-in test was performed at each well. A shut-in test allows evaluation of the sample train for potential leaks and is accomplished by opening the Summa® canister valve with the well Swagelok® valve still closed. A vacuum was created and then the pump was closed off from the sample train and the initial vacuum pressure recorded. The sample train was considered to pass the leak test when constant vacuum was maintained for 10 minutes.

2.1.1.3 Purging

Prior to collecting a soil vapor sample, the sample train and vapor well were purged using a battery-powered PID to evacuate three well volumes; this procedure is followed so that the vapor samples collected are representative of actual soil vapor concentrations. Purge volumes were calculated based on the dimension specifications of all aboveground gauges, tubing, sampling equipment, and belowground tubing. The volumes of the well screen and sand pack were not included in the purge volume calculation because they are assumed to be in equilibrium with soil vapor in the subsurface. Purge volumes and durations were recorded on the vapor sampling field sheets included as Appendix D.

2.1.1.4 Sub-Slab Vapor Sample Collection

Sample collection from each of the soil vapor wells commenced immediately after purging and leak testing. Sample train integrity testing was performed using helium, concurrent with sampling, as described above. A vacuum was created to draw the soil vapor to the surface through the tubing and gauges. The vacuum was created using a PID equipped with a battery-powered pump with the sample collection point on the intake side of the pump to prevent any contaminants present in the pump from being drawn into the sample. A two-way valve and “T” fitting were used to isolate the pump from a separate tube connected to the vapor sample canister (Photograph C-7 in Appendix C). To begin sampling, the valve on the Summa® canister was opened and the time and initial vacuum were documented. As the canister filled, the pressure gauge on the flow controller was observed to confirm that vacuum in the canister was decreasing over time.

Once the samples were collected, the Summa® canister valves were closed and sealed using brass caps supplied by TAMS. Samples were labeled following standard chain-of-custody (CoC) protocols, including noting the final canister vacuums and the serial numbers of all canisters and flow controllers. AECOM documented the sampling activities, such as sampling times and

conditions, on the field sheets included in Appendix D. Samples were delivered directly to the analytical laboratory under CoC protocols within 24 hours of sampling.

Summa® canister vacuum was noted in the field for each sample and upon receipt at the laboratory to evaluate sample integrity following shipment.

2.1.2 Indoor Air and Ambient Outdoor Air Sample Collection

Five indoor air samples were collected for laboratory analysis: one each (IA-1 through IA-3) in building Sections 1through 3 and co-located (within the same section of the building) with Sub-slab Vapor Samples SS-5, SS-7, and SS-11; and the fourth and fifth (IA-4 and IA-5) positioned near the elevator shaft in Section 1 on the first and second floors, respectively (refer to Figure 3). The ambient outdoor air sample (OA-1) was positioned adjacent to the intake area of the HVAC system on the roof of the building (Photograph C-4 in Appendix C). The Summa® canisters were equipped with flow regulators supplied by TAMS and set to allow a 10-hour sampling period. The outdoor air sample was collected to evaluate the contribution from ambient outdoor air to indoor air. Duplicate samples were collected for IA-1 located next to the former source area and for outdoor air sample OA-1.

2.1.2.1 Indoor Air Sampling Procedure

Each indoor air sample was collected using a 6-liter Summa® canister supplied by TAMS. All Summa® canisters were individually certified clean by the laboratory (certifications are provided in Appendix E). Each canister was fitted with a vacuum gauge and evacuated by TAMS to a vacuum greater than 26 in Hg. The canisters were fitted with a laboratory-calibrated flow controller to collect an air sample at a constant flow rate over an approximate 10-hour period. The canister vacuums were recorded prior to sampling and at the conclusion of the sampling interval. The canisters used to collect the indoor air samples were placed approximately 4 feet above the floor to provide a sample representative of the breathing zone. Field data sheets used to record sample times and vacuum pressures are included in Appendix D.

2.1.2.2 Outdoor Air Sampling Procedure

The outdoor air sample and duplicate were collected using certified clean 6-liter Summa® canisters supplied by TAMS. The canisters were fitted with a laboratory supplied vacuum gauge and were received under a vacuum of greater than 26 in Hg. The canisters were fitted with a laboratory-calibrated flow controller regulated to collect the sample at a constant flow rate over an approximate 10-hour period. As with the indoor air samples, the canister vacuums were recorded prior to sampling and at the conclusion of the sampling interval.

2.2 Laboratory Analysis

All vapor samples collected from the sub-slab vapor monitoring points were analyzed for VOCs using modified USEPA Method TO-15 and all indoor and outdoor air samples were analyzed for VOCs using TO-15 selective ion monitoring (SIM). The analytes included in the TO-15 SIM

analysis were specified in the Work Plan Addendum and include those chemicals identified as COCs in groundwater and additional chemicals identified during previous indoor air sampling events at the building (refer to Table 1).

2.3 Quality Assurance Sampling and Procedures

A total of four sub-slab vapor samples and eight indoor/outdoor air samples were collected. One duplicate sample was obtained for the sub-slab vapor samples at Sub-Slab Vapor Monitoring Point SS-5. A duplicate sample of indoor air was obtained at Sample IA-1 and a duplicate of outdoor air was collected at Sample OA-1. Duplicate samples were obtained using a “T” splitter located between the flow controller and two sample canisters (refer to Photographs C-1, C-4, and C-7 in Appendix C).

Samples were labeled following standard CoC protocols, including noting the final canister vacuums and the serial numbers of canisters and flow controllers. AECOM documented sampling activities, including sampling times and conditions, on field sheets (Appendix D). Samples were transported under CoC protocols within 24 hours to TAMS.

Results for all samples, including duplicates, underwent review and validation by Conestoga-Rovers and Associates (CRA), who provided third party data review for this project. All sample collection, laboratory analyses, and data validation were performed according to procedures in the Work Plan Addendum. A Quality Assurance Summary Report (QASR) prepared by CRA is included in Appendix F. The QASR indicates that the sampling data included in this report met the quality objectives for precision, accuracy, representativeness, comparability, and completeness.

3.0 VAPOR INTRUSION PATHWAY EVALUATION AND RISK ANALYSIS

Laboratory analytical results for the sub-slab vapor samples are included in Table 3, and results for indoor and outdoor air included in Table 4. Complete laboratory analytical results are included in Appendix E.

3.1 Evaluation and Results

Indoor air VOC concentrations were compared to sub-slab vapor and ambient outdoor air concentrations to determine whether there is sufficient evidence of a complete VI pathway. Sufficient evidence is considered obtained if 1) a chemical is detected in the sub-slab vapor at a higher concentration than in the indoor air; 2) indoor air samples contain greater concentrations of VOCs than ambient outdoor air, and 3) the presence of the chemical cannot be explained by site activities or current chemical use.

For this report, soil vapor screening levels (SVSLs) were derived for sub-slab soil vapor using the California DTSC default attenuation factor for shallow soil vapor of 0.05. SVSLs were derived using the USEPA Region 9 RSLs (USEPA 2015a) and DTSC HERO Note 3 screening levels (DTSC 2015) divided by the DTSC attenuation factor of 0.05. Note that the installation of the passive SVC system effectively increases the attenuation of sub-slab vapors between the building foundation and indoor air.

The USEPA RSLs and the DTSC HERO Note 3 values that were used as PALs for the indoor air samples are presented in Table 1. RSLs are screening levels derived using equations presented in the RSL Users Guide (USEPA 2015b) that include default reasonable maximum exposure (RME) assumptions for an industrial scenario with an exposure time of 8 hours per day, exposure frequency of 250 days per year, and exposure duration of 25 years. Based on these assumptions, the RSLs are the lower of concentrations in air that correspond to a cancer risk of 1×10^{-6} or a hazard quotient (HQ) of 1.

For some chemicals, the DTSC HERO has established screening levels using similar exposure assumptions but more protective toxicity criteria than those used by USEPA to establish the RSLs. For these chemicals the DTSC HERO Note 3 values are considered the PALs. Table 1 also shows accelerated response and urgent response action levels established for commercial/industrial exposures to TCE that are not to be exceeded.

3.1.1 Sub-Slab Vapor Results

Chemicals detected in sub-slab vapor are presented in Table 3. Of the 23 chemicals detected, TCE is the only chemical detected above the SVSLs derived using both the USEPA RSLs and the DTSC HERO Note 3 screening values. TCE was detected above both the USEPA and DTSC HERO Note 3 SVSL (60 micrograms per cubic meter [$\mu g/m^3$]) in Sub-Slab Monitoring Points SS-5 and SS-7 (neither of which are located above the former site source area). Sub-slab vapor concentrations were highest in Sub-Slab Monitoring Point SS-7, located in Section 2 of the building. Vapor concentrations in this well were an order of magnitude higher than concentrations in the other vapor wells and there are no known on-site sources in that area. Tetrachloroethene (PCE) was detected above the DTSC HERO Note 3 SVSL (42 $\mu g/m^3$) at this same location (SS-7).

3.1.2 Indoor Air and Outdoor Ambient Air Results

Table 4 includes results of indoor air and outdoor air samples with comparison to the USEPA RSLs and the DTSC HERO Note 3 screening levels for industrial exposure. No chemicals were detected above these PALs. During the 2013 VI evaluation sampling event, TCE and vinyl chloride (VC) both exceeded some or all PALs. However, during this 2015 event, the range of TCE concentrations was from 0.20 $\mu g/m^3$ to 0.58 $\mu g/m^3$ in the indoor air samples (compared to the USEPA and DTSC HERO Note 3 screening level of 3 $\mu g/m^3$) and VC was not detected.

Outdoor air concentrations are used to evaluate if a background source may be contributing to or may be the source of indoor air concentrations. Table 4 includes results of the outdoor ambient air concentrations collected at the HVAC intake to the building. A duplicate outdoor air sample was collected and submitted for laboratory analysis. Correlation between the two samples was good, with both having only low detections of several non-COC VOCs.

3.1.3 Risk Results

A screening level risk assessment was conducted using the chemical results from the indoor air sampling described above. The objective of the screening level human health risk assessment was to assess the potential risks and hazards associated with the chemicals detected in the indoor air using default USEPA RME assumptions for industrial exposure.

The screening-level risk assessment was conducted in accordance with recommendations included in the RSL User's Guide (USEPA 2015b). The risk-based concentrations considered appropriate to a screening level assessment are those that have been developed for screening purposes and thus incorporate sufficiently health-protective assumptions to offset the uncertainties associated with predicting future lifetime risks.

Several sources of risk-based screening levels are available. The most extensive list of chemicals is provided by the USEPA RSLs (USEPA 2015a). Potential cumulative cancer risks and non-cancer HI were calculated on a sample-by-sample basis for each sampling location inside the building.

For carcinogens, the concentration of each individual chemical was divided by its RSL; that ratio was multiplied by 10^{-6}, and resultant risks summed to give an estimate of cumulative risk for the location. For non-carcinogens, the simple ratio of each chemical concentration to its RSL gave the HQ for that chemical; these HQs were summed to give the HI for the VI pathway at that location. Cumulative risk and HIs are listed at the bottom of Table 5. Using default RME assumptions and USEPA RSLs, the cumulative risk for all chemicals detected in indoor air ranged from 5×10^{-7} to 6×10^{-7} and the HI was below 0.1.

4.0 INTERPRETATION, UNCERTAINTIES, AND RECOMMENDATIONS

4.1 Interpretation of Results

The interpretation of calculated cancer risks and non-cancer hazards is part of a process called risk management. USEPA has provided guidance for interpreting these risk results within the CERCLA framework by considering cancer risks less than 1×10^{-6} to be acceptable and non-cancer hazards less than 1 as acceptable. A comparison of results of each detected compound to USEPA RSLs and DTSC HERO Note 3 indicate that VOCs do not present a risk above a 1×10^{-6} exposure level in the existing building under the industrial exposure scenario. In addition, cumulative risk for all VOCs is below the 1×10^{-6} risk exposure level and below the HI of 0.1.

Therefore, the chemicals detected in indoor air do not present a human health risk under industrial conditions.

Building conditions at the time of sampling suggest this sampling event represents a worst-case scenario for VI due to the absence of mechanical ventilation (e.g., HVAC off), which would not be representative of normal working conditions in most industrial buildings.

Uncertainties associated with these site features and assumptions are discussed below.

4.2 Uncertainties

Inherent in the screening level evaluation of potential indoor air risk included in this report are uncertainties associated with the various processes that contribute to the final risk result. Understanding the major uncertainties assists with interpretation of the risk characterization results. In general, the risk assessment process operates in a “cascade” fashion, whereby each phase relies on information generated in the previous phase. If uncertainty is introduced, for example, during the data collection phase, it will be carried through each successive risk assessment phase. When successive uncertainties introduce biases, the final health risk estimates may overestimate or underestimate actual risks and hazards.

4.2.1 Uncertainties Introduced by Sampling Design

The assumptions used in this screening level risk evaluation are intended to approximate actual conditions. However, these conditions are often difficult to represent and entail uncertainties in the choice of specific values to represent many of the parameters used to calculate potential risk. These choices include, but are not limited to, the location of the sampling device, how long to collect air samples, and how often to collect the samples.

At the request of USEPA, indoor air samples were targeted to be collected over a 10-hour period. This sample duration is representative of an extended work day, but the actual work shift duration is unknown for the building as it is not yet occupied. In general, sampling locations were selected to represent potential occupied spaces throughout the facility.

4.2.2 Uncertainties Introduced by Exposure Assumptions

The exposure assumptions (frequency, time, and duration) used to calculate potential intake rates are another source of uncertainty. For example, the screening risk evaluation used the RME industrial exposure parameters described in Section 3.1 (8 hours per day, 250 days per year for 25 years); the cumulative RME risk based on an 8-hour work day is below the CERCLA risk management range (10^{-4} to 10^{-6}) while the HI is below 1 for all sections of the building. Given that the data were collected using sample durations from 10 hours, the risk may be overestimated as compared to a standard 8-hour work day.

4.2.3 Uncertainties Inherent in Toxicity Values

Uncertainty is also inherent in toxicity values established to evaluate cancer risks and non-cancer HIs. Such uncertainty is chemical-specific and incorporated into the toxicity value during its development. Application of uncertainty factors is expected to overestimate risks. Uncertainties related to the selection of toxicity criteria used to calculate RSLs were minimized by the inclusion of the more protective DTSC HERO Note 3 screening levels in evaluating risk.

4.3 Conclusions and Recommendations

Based on the results of this sampling event, chemicals detected in indoor air do not pose a human health risk under an industrial exposure scenario. However, these results assume the concrete slab is not penetrated and/or other VI conduits are not created during tenant renovations. To validate that chemicals in indoor air do not pose a risk under an industrial scenario prior to building occupancy, an additional monitoring event should be performed utilizing the same sampling methodology and adjusting the sampling location rationale based on the final building layout after completion of tenant improvements.

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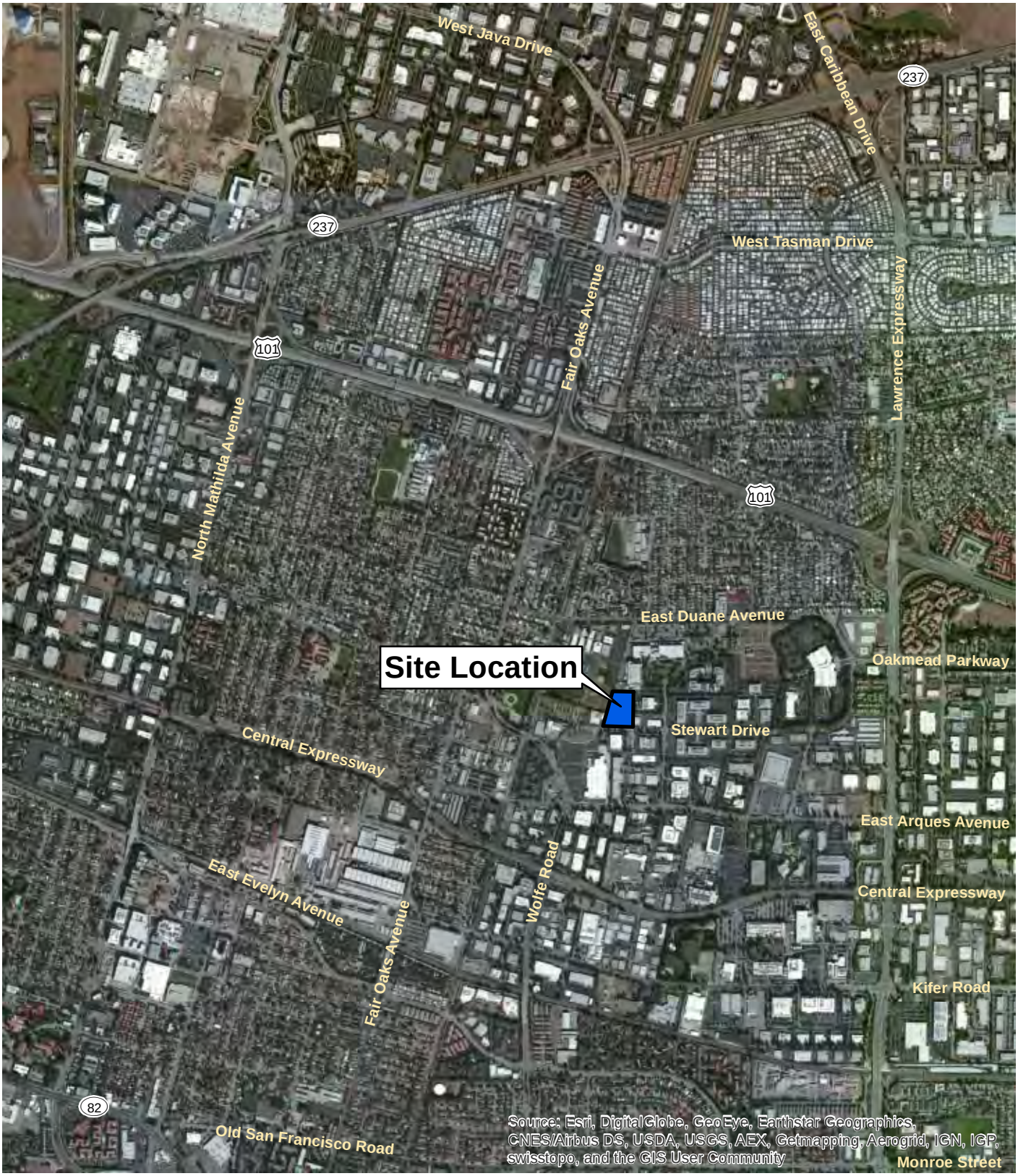
Figures



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0 1,000 2,000 Feet

1 " = 2,000 '

Former TRW Microwave Site

Site Location

Date 06-2015	NORTHROP GRUMMAN	Figure
Project No. 60238860		1

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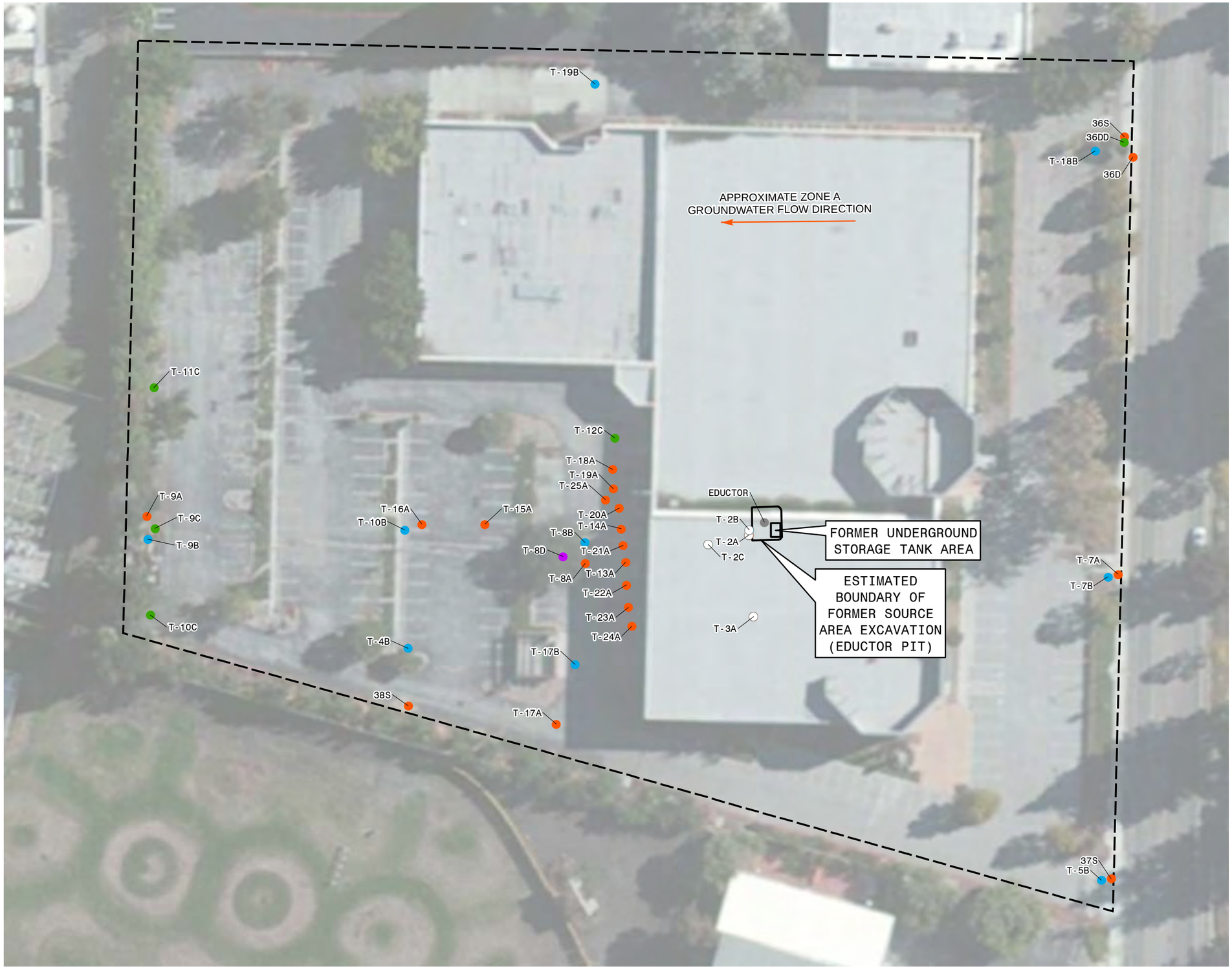

LEGEND

- A-ZONE MONITORING WELL
- B1-ZONE MONITORING WELL
- B2-ZONE MONITORING WELL
- B4-ZONE MONITORING WELL
- EDUCTOR (DESTROYED 2014)
- MONITORING WELL - DESTROYED 2014
- PROPERTY BOUNDARY

N

0 25 50 Feet

1 " = 50 '

Former TRW Microwave Site

Site Layout

Date 06-2015	NORTHROP GRUMMAN	Figure
Project No. 60238860		2

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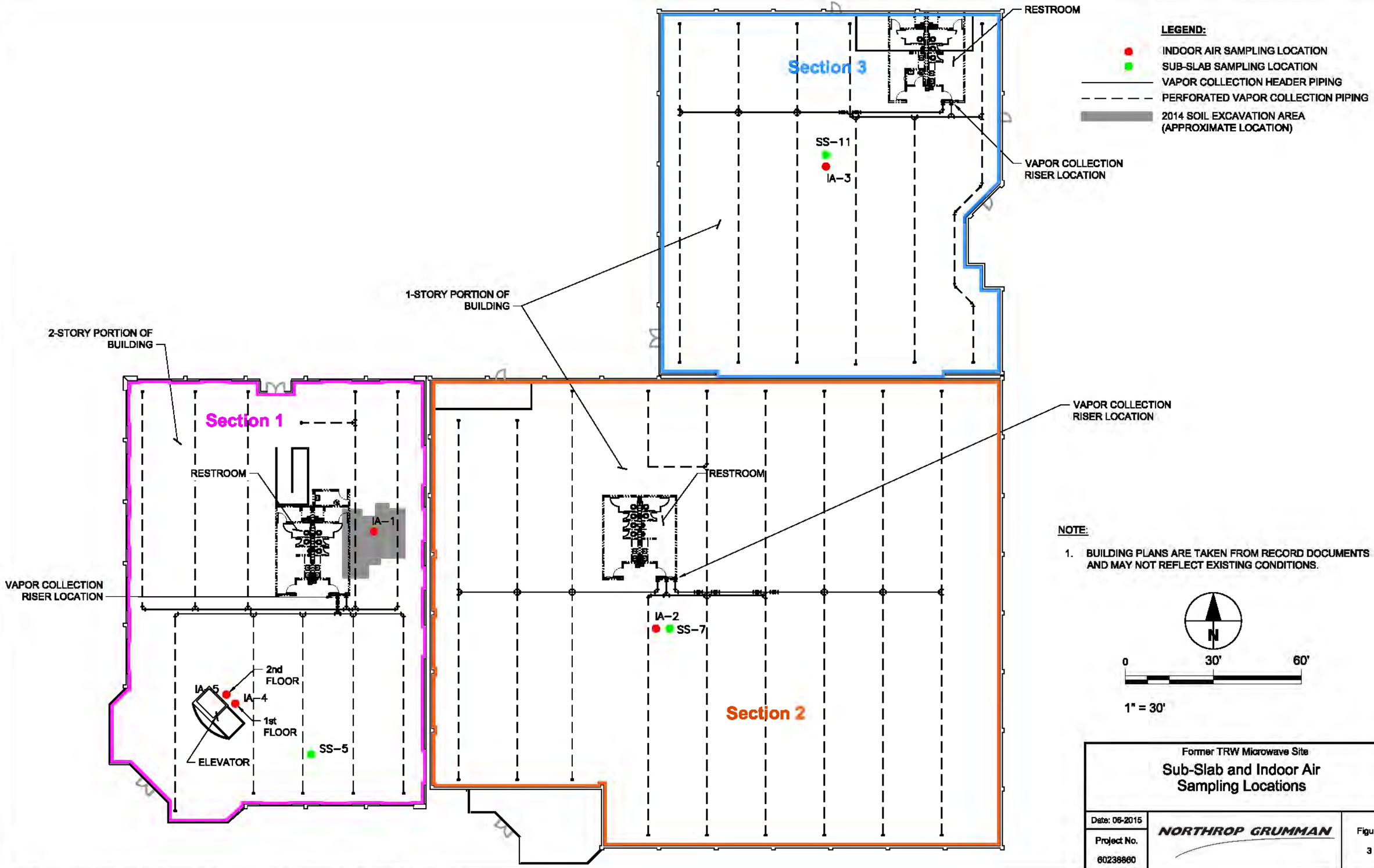

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Tables

TABLE 1. CHEMICALS OF CONCERN INCLUDED IN THE VI EVALUATION AND PROJECT ACTION LEVELS

Analyte	Previous PALs ($\mu g/m^3$)	USEPA Region 9 Industrial RSLs[a] ($\mu g/m^3$)	DTSC HERO Note 3 [b] ($\mu g/m^3$)	USEPA Region 9 Interim Accelerated Response Action Levels (commercial / industrial) ($\mu g/m^3$)	USEPA Region 9 Interim Urgent Response Action Levels (commercial / industrial) ($\mu g/m^3$)	Laboratory Reporting Limit ($\mu g/m^3$)
1,1-dichloroethane (1,1-DCA)	7.7	7.7	7.7	-	-	0.081
1,1-dichloroethene (1,1-DCE)	880	880	310	-	-	0.079
1,2-dichlorobenzene	880	880	880	-	-	0.30
1,1,1-trichloroethane (1,1,1-TCA)	22,000	22,000	4,400	-	-	0.27
chlorobenzene	220	220	220	-	-	0.092
chloroform	0.53	0.53	0.53	-	-	0.098
cis-1,2-dichloroethene	260	NE	35	-	-	0.079
trans-1,2-dichloroethene	260	NE	350	-	-	0.079
tetrachloroethene (PCE)	47	47	2.1	-	-	0.14
trichloroethene (TCE)	3.0	3.0	3.0	8[c] / 7 [d]	24 [c] / 21 [d]	0.11
Freon 11 (trichlorofluoromethane)	3,100	3,100	3,100	-	-	0.25
Freon 12 (dichlorodifluoromethane)	440	440	440	-	-	0.049
Freon 113	130,000	130,000	130,000	-	-	0.23
vinyl chloride	2.8	2.8	0.16	-	-	0.051

Notes:

[a] USEPA Regional Screening Levels for Industrial Exposure (RSLs; USEPA, 2015).

[b] DTSC HERO Note 3 Screening Levels for Industrial Exposure (HERO, 2015).

[c] 8-hour work day

[d] 10-hour work day

$\mu g/m^3$	micrograms per cubic meter
DTSC	Department of Toxic Substances Control
HERO	DTSC Office of Human and Ecological Risk
NE	Not established
PALs	project action levels
USEPA	United States Environmental Protection Agency

TABLE 2. FIELD MEASUREMENTS DURING INDOOR AIR SAMPLING

Location	Description	PID (ppb)	Pressure Differential (Pa)	Temperature (ºF)
1. Section 3	Near SS-11/IA-3	217	-1.5	70
2. Section 3	Men's Restroom	949	-3.5	65
3. Section 3	Women's Restroom	559	0.0	65
4. Section 2	Near SS-7/IA-2	269	-1.0	70
5. Section 2	Men's Restroom	967	0.0	65
6. Section 2	Women's Restroom	1,265	0.0	65
7. Section 1	IA-4/elevator	262	-1.0	77
8. Section 1	Men's Restroom	434	2.5	68
9. Section 1	Women's Restroom	503	6.5	68
10. Section 1	Near IA-1	254	1.0	78
11. Section 2	Roof (outside)	3	-	68
12. Section 2	Passive SVC System Vents (outside)	114-432	-	68
13. Section 3	Roof (outside)	40	-	68
14. Section 3	Passive SVC System Vents (outside)	38	-	68
15. Section 1	Roof (outside)	89	-	68
16. Section 2	Passive SVC System Vents (outside)	104-884	-	68

Notes:

ºF	degrees Fahrenheit
Pa	Pascals
PID	photoionization detector
ppb	parts per billion
SVC	sub-slab vapor collection system

Parameter	Unit	USEPA Region 9 SVSLs [a]	HERO Note 3 SVSLs [b]	SS-5 05/06/2015	SS-5 (Duplicate) 05/06/2015	SS-7 05/06/2015	SS-11 05/06/2015
1,1,1-Trichloroethane	µg/m3	440,000	88,000	2.1 J	1.8 J	53	0.72 J
1,2,4-Trimethylbenzene	µg/m3	620	620	1.5 J	<14	<71	<4.0
2-Butanone (Methyl ethyl ketone) (MEK)	µg/m3	440,000	440,000	12	17	<42	<2.4
2-Hexanone	µg/m3	2,600	-	<2.9	27	<30	<1.7
Acetone	µg/m3	2,800,000	2,800,000	190	170	<210	5.8 J
Benzene	µg/m3	32	8	2.8	2.5 J	<23	<1.3
Carbon disulfide	µg/m3	62,000	62,000	0.59 J	2.2 J	<45	<2.5
Carbon tetrachloride	µg/m3	40	6	<8.8	<18	<91	0.57 J
Chloroform (Trichloromethane)	µg/m3	11	11	3.0	2.6 J	<26	<1.5
cis-1,2-Dichloroethene	µg/m3	-	700	4.3	<5.7	<29	<1.6
Dichlorodifluoromethane (CFC-12)	µg/m3	8,800	8,800	2.7 J	<7.1	<36	2.5
Ethylbenzene	µg/m3	98	98	7.8	6.8	<31	<1.8
m&p-Xylenes	µg/m3	8,800	8,800	31	25	<63	<3.5
o-Xylene	µg/m3	8,800	8,800	11	8.6	<31	<1.8
Methylene chloride	µg/m3	24,000	240	11	10	<25	0.37 J
Styrene	µg/m3	88,000	18,800	0.51 J	<6.1	<31	<1.7
Tetrachloroethene (PCE)	µg/m3	940	42	23	20	290	7.3
Toluene	µg/m3	440,000	26,000	9.4	8.8	<27	0.40 J
trans-1,2-Dichloroethene	µg/m3	-	7,000	1.6 J	<5.7	<29	<1.6
Trichloroethene (TCE)	µg/m3	60	60	250	210	2,100	47
Trichlorofluoromethane (CFC-11)	µg/m3	62,000	62,000	2.0 J	<8.0	<40	1.4 J
Trifluorotrichloroethane (Freon 113)	µg/m3	2,600,000	2,600,000	14	12	130	2.2 J
Vinyl acetate	µg/m3	17,600	-	<4.9	2.6 J	<51	<2.8

Notes:
Only compounds detected in at least one sample are shown on this table. For a full list of analytes, refer to the analytical laboratory report in Appendix F.
SVSLs were calculated by dividing the screening level (USEPA or DTSC HERO Note 3) by an attenuation factor of 0.05.

Exceeds both USEPA Region 9 and HERO Note 3 derived SVSLs
Exceeds HERO Note 3 derived SVSL

[a] USEPA Regional Screening Levels for Industrial Exposure (RSLs; USEPA, 2015)
[b] DTSC HERO Note 3 Screening Levels for Industrial Exposure (HERO, 2015).

µg/m3	micrograms per cubic meter
J	Estimated concentration
DTSC	Department of Toxic Substances Control
HERO	DTSC Office of Human and Ecological Risk
SVSL	Soil Vapor Screening Level
USEPA	United States Environmental Protection Agency

			Fraction:	VOAs	VOAs	VOAs	VOAs	VOAs	VOAs	VOAs
			Parameter:	1,1,1-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2-Dichlorobenzene	1,2-Dichloroethane	Chlorobenzene	Chloroform (Trichloromethane)
			USEPA Region 9 Interim Accelerated RALs (Commercial/Industrial)	-	-	-	-	-	-	-
			USEPA Region 9 Interim Urgent RALs (Commercial/Industrial)	-	-	-	-	-	-	-
			USEPA Region 9 Industrial RSLs	22,000	7.7	880	880	0.47	220	0.53
			DTSC HERO Note 3	4,400	7.7	310	880	0.47	220	0.53
Location ID	*Sample Name*	*Sample Date*	*Unit:*	ug/m3	ug/m3	ug/m3	ug/m3	ug/m3	ug/m3	ug/m3
Indoor Air Samples										
IA-1	J6038-IA1-050615-1	5/6/2015		<0.11	<0.081	<0.079	0.094 J	0.059 J	<0.092	0.12
IA-1	J6038-IA1-050615-2	5/6/2015	Dup	<0.11	<0.081	<0.079	0.095 J	0.064 J	<0.092	0.12
IA-2	J6038-IA2-050615	5/6/2015		<0.11	<0.081	<0.079	0.095 J	0.058 J	<0.092	0.12
IA-3	J6038-IA3-050615	5/6/2015		<0.11	<0.081	<0.079	<0.30	0.056 J	<0.092	0.10
IA-4	J6038-IA4-050615	5/6/2015		<0.11	<0.081	<0.079	0.088 J	0.058 J	<0.092	0.11
IA-5	J6038-IA5-050615	5/6/2015		<0.11	<0.081	<0.079	0.10 J	0.057 J	<0.092	0.11
Outdoor Air Samples										
OA-1	J6038-OA1-050615-1	5/6/2015		<0.11	<0.081	<0.079	<0.30	0.056 J	<0.092	0.088 J
OA-1	J6038-OA1-050615-2	5/6/2015	Dup	<0.11	<0.081	<0.079	<0.30	0.054 J	<0.092	0.079 J

Notes:
[a] 8-hour work day
[b] 10-hour work day
Compunds shown in green are not Site contaminants of concern

-	no RAL for this compound
ug/m3	micrograms per cubic meter
J	estimated concentration
NE	not established
RALs	response action levels

			Fraction:	VOAs	VOAs	VOAs	VOAs	VOAs	VOAs	VOAs	VOAs
			Parameter:	cis-1,2-Dichloroethene	Dichlorodifluoromethane (CFC-12)	Ethylbenzene	m&p-Xylenes	Methylene chloride	o-Xylene	Tetrachloroethene	Toluene
USEPA Region 9 Interim Accelerated RALs (Commercial/Industrial)				-	-	-	-	-	-	-	-
USEPA Region 9 Interim Urgent RALs (Commercial/Industrial)				-	-	-	-	-	-	-	-
USEPA Region 9 Industrial RSLs				NE	440	4.9	440	1,200	440	47	22,000
DTSC HERO Note 3				35	440	4.9	440	12	440	2.1	1,300
Location ID	***Sample Name***	***Sample Date***	***Unit:***	ug/m3	ug/m3	ug/m3	ug/m3	ug/m3	ug/m3	ug/m3	ug/m3
Indoor Air Samples											
IA-1	J6038-IA1-050615-1	5/6/2015		0.023 J	2.3	0.49	2.0	3.6	0.81	0.090 J	5.0
IA-1	J6038-IA1-050615-2	5/6/2015	Dup	0.026 J	2.1	0.51	2.0	3.7	0.84	0.080 J	5.3
IA-2	J6038-IA2-050615	5/6/2015		0.024 J	2.2	0.45	1.8	2.2	0.74	0.082 J	5.6
IA-3	J6038-IA3-050615	5/6/2015		<0.079	1.6	0.40	1.5	0.76	0.66	<0.14	7.9
IA-4	J6038-IA4-050615	5/6/2015		0.028 J	2.1	0.56	2.3	4.5	0.90	0.080 J	5.1
IA-5	J6038-IA5-050615	5/6/2015		0.026 J	2.2	0.59	2.4	5.0	0.97	0.086 J	5.1
Outdoor Air Samples											
OA-1	J6038-OA1-050615-1	5/6/2015		<0.079	2.4	0.11	0.31	0.43 J	0.12	<0.14	0.48
OA-1	J6038-OA1-050615-2	5/6/2015	Dup	<0.079	1.7	0.069 J	0.19	<0.69	0.078 J	<0.14	0.93

Notes:
[a] 8-hour work day
[b] 10-hour work day
Compunds shown in green are not Site contaminants of concern

-	no RAL for this compound
ug/m3	micrograms per cubic meter
J	estimated concentration
NE	not established
RALs	response action levels

			Fraction:	VOAs	VOAs	VOAs	VOAs	VOAs
			Parameter:	trans-1,2-Dichloroethene	Trichloroethene	Trichlorofluoromethane (CFC-11)	Trifluorotrichloroethane (Freon 113)	Vinyl chloride
			USEPA Region 9 Interim Accelerated RALs (Commercial/Industrial)	-	8[a]/7[b]	-	-	-
			USEPA Region 9 Interim Urgent RALs (Commercial/Industrial)	-	24[a]/21[b]	-	-	-
			USEPA Region 9 Industrial RSLs	NE	3.0	3,100	130,000	2.8
			DTSC HERO Note 3	350	3.0	3,100	130,000	0.16
Location ID	***Sample Name***	***Sample Date***	***Unit:***	ug/m3	ug/m3	ug/m3	ug/m3	ug/m3
Indoor Air Samples								
IA-1	J6038-IA1-050615-1	5/6/2015		<0.079	0.50	1.2	0.48	<0.051
IA-1	J6038-IA1-050615-2	5/6/2015	Dup	<0.079	0.51	1.2	0.50	<0.051
IA-2	J6038-IA2-050615	5/6/2015		<0.079	0.50	1.2	0.49	<0.051
IA-3	J6038-IA3-050615	5/6/2015		<0.079	0.20	1.2	0.45	<0.051
IA-4	J6038-IA4-050615	5/6/2015		<0.079	0.54	1.1	0.47	<0.051
IA-5	J6038-IA5-050615	5/6/2015		<0.079	0.58	1.2	0.48	<0.051
Outdoor Air Samples								
OA-1	J6038-OA1-050615-1	5/6/2015		<0.079	<0.11	1.2	0.49	<0.051
OA-1	J6038-OA1-050615-2	5/6/2015	Dup	<0.079	0.039 J	1.1	0.45	<0.051

Notes:
[a] 8-hour work day
[b] 10-hour work day
Compunds shown in green are not Site contaminants of concern

-	no RAL for this compound
ug/m3	micrograms per cubic meter
J	estimated concentration
NE	not established
RALs	response action levels

TABLE 5. SUMMARY OF CUMULATIVE CANCER RISK AND NON-CANCER HAZARD

Sample Location	Analayte	Concentration (µg/m^3)	Cancer RSL (µg/m^3)	Non-Cancer RSL (µg/m^3)	Cancer Risk	Hazard Quotient
IA-1	1,1-Dichorobenzene [2]	0.095	NE	880	NA	<0.1
	1,2-Dichloroethane [1,2]	0.064	0.47	31	1E-07	<0.1
	Chloroform [1]	0.12	0.53	430	2E-07	<0.1
	cis-1,2-Dichloroethene	0.026	NE	NE	NA	NA
	Dichlorodifluoromethane [1]	2.3	NE	440	NA	<0.1
	Ethylbenzene [1]	0.51	4.9	4,400	1E-07	<0.1
	m,p-Xylenes [1]	2	NE	440	NA	<0.1
	Methylene chloride [1]	3.7	1,200	2,600	3E-09	<0.1
	o-Xylene [1]	0.84	NE	440	NA	<0.1
	Tetrachloroethene	0.08	47	180	2E-09	<0.1
	Toluene [1]	5.3	NE	22,000	NA	<0.1
	Trichloroethene [1]	0.51	3	8.8	2E-07	<0.1
	Trichlorofluoromethane [1]	1.2	NE	3,100	NA	<0.1
	Freon 113 [1]	0.5	NE	130,000	NA	<0.1
				Total :	6E-07	<0.1
IA-2	1,1-Dichorobenzene [2]	0.095	NE	880	NA	<0.1
	1,2-Dichloroethane [1,2]	0.058	0.47	31	1E-07	<0.1
	Chloroform [1]	0.12	0.53	430	2E-07	<0.1
	cis-1,2-Dichloroethene	0.024	NE	NE	NA	NA
	Dichlorodifluoromethane [1]	2.2	NE	440	NA	<0.1
	Ethylbenzene [1]	0.45	4.9	4,400	9E-08	<0.1
	m,p-Xylenes [1]	1.8	NE	440	NA	<0.1
	Methylene chloride [1]	2.2	1,200	2,600	2E-09	<0.1
	o-Xylene [1]	0.74	NE	440	NA	<0.1
	Tetrachloroethene	0.082	47	180	2E-09	<0.1
	Toluene [1]	5.6	NE	22,000	NA	<0.1
	Trichloroethene [1]	0.5	3	8.8	2E-07	<0.1
	Trichlorofluoromethane [1]	1.2	NE	3,100	NA	<0.1
	Freon 113 [1]	0.49	NE	130,000	NA	<0.1
				Total :	6E-07	<0.1

TABLE 5. SUMMARY OF CUMULATIVE CANCER RISK AND NON-CANCER HAZARD

Sample Location	Analayte	Concentration (µg/m^3)	Cancer RSL (µg/m^3)	Non-Cancer RSL (µg/m^3)	Cancer Risk	Hazard Quotient
IA-3	1,2-Dichloroethane [1,2]	0.056	0.47	31	1E-07	<0.1
	Chloroform [1]	0.1	0.53	430	2E-07	<0.1
	Dichlorodifluoromethane [1]	1.6	NE	440	NA	<0.1
	Ethylbenzene [1]	0.4	4.9	4,400	8E-08	<0.1
	m,p-Xylenes [1]	1.5	NE	440	NA	<0.1
	Methylene chloride [1]	0.76	1,200	2,600	6E-10	<0.1
	o-Xylene [1]	0.66	NE	440	NA	<0.1
	Toluene [1]	7.9	NE	22,000	NA	<0.1
	Trichloroethene [1]	0.2	3	8.8	7E-08	<0.1
	Trichlorofluoromethane [1]	1.2	NE	3,100	NA	<0.1
	Freon 113 [1]	0.45	NE	130,000	NA	<0.1
				Total :	5E-07	<0.1
IA-4	1,1-Dichorobenzene [2]	0.088	NE	880	NA	<0.1
	1,2-Dichloroethane [1,2]	0.058	0.47	31	1E-07	<0.1
	Chloroform [1]	0.11	0.53	430	2E-07	<0.1
	cis-1,2-Dichloroethene	0.028	NE	NE	NA	NA
	Dichlorodifluoromethane [1]	2.1	NE	440	NA	<0.1
	Ethylbenzene [1]	0.56	4.9	4,400	1E-07	<0.1
	m,p-Xylenes [1]	2.3	NE	440	NA	<0.1
	Methylene chloride [1]	4.5	1,200	2,600	4E-09	<0.1
	o-Xylene [1]	0.9	NE	440	NA	<0.1
	Tetrachloroethene	0.08	47	180	2E-09	<0.1
	Toluene [1]	5.1	NE	22,000	NA	<0.1
	Trichloroethene [1]	0.54	3	8.8	2E-07	<0.1
	Trichlorofluoromethane [1]	1.1	NE	3100	NA	<0.1
	Freon 113 [1]	0.47	NE	130,000	NA	<0.1
				Total :	6E-07	<0.1

TABLE 5. SUMMARY OF CUMULATIVE CANCER RISK AND NON-CANCER HAZARD

Sample Location	Analayte	Concentration (µg/m^3)	Cancer RSL (µg/m^3)	Non-Cancer RSL (µg/m^3)	Cancer Risk	Hazard Quotient
IA-5	1,1-Dichorobenzene [2]	0.1	NE	880	NA	<0.1
	1,2-Dichloroethane [1,2]	0.057	0.47	31	1E-07	<0.1
	Chloroform [1]	0.11	0.53	430	2E-07	<0.1
	cis-1,2-Dichloroethene	0.026	NE	NE	NA	NA
	Dichlorodifluoromethane [1]	2.2	NE	440	NA	<0.1
	Ethylbenzene [1]	0.59	4.9	4,400	1E-07	<0.1
	m,p-Xylenes [1]	2.4	NE	440	NA	<0.1
	Methylene chloride [1]	5	1,200	2,600	4E-09	<0.1
	o-Xylene [1]	0.97	NE	440	NA	<0.1
	Tetrachloroethene	0.086	47	180	2E-09	<0.1
	Toluene [1]	5.1	NE	22,000	NA	<0.1
	Trichloroethene [1]	0.58	3	8.8	2E-07	<0.1
	Trichlorofluoromethane [1]	1.2	NE	3,100	NA	<0.1
	Freon 113 [1]	0.48	NE	130,000	NA	<0.1
				Total :	6E-07	<0.1

Notes:

A duplicate sample was collected at IA-1, and the maximum result from the duplicate and the normal samples was used.

[1] Also detected in an outdoor air sample (i.e., all or some of the indoor results may be from outdoor air).

[2] Chemical not detected in the sub-slab samples (i.e., presence in indoor air may not be due to vapor intrusion).

µg/m^3 micrograms per cubic meter
NA not applicable
NE not established
RSL United States Environmental Protection Agency (USEPA) air Regional Screening Level for industrial exposure scenario (USEPA 2015).

Appendices

APPENDIX A

Memorandum: Summary of Repairs to Passive SVC System (Orion 2015b)

Orion Environmental Inc.
2955 Redondo Avenue 562 988-2755 PHONE
Long Beach, CA 90806 562 988-2759 FAX

DBA Arctos Environmental
2332 5th Street, Suite A 510 525-2180 PHONE
Berkeley, CA 94710 510 525-2392 FAX

Memorandum

Date: 1 May 2015

Subject: Summary of Repairs to the Passive Sub-Slab Vapor Collection System
Former TRW Microwave Site
825 Stewart Drive, Sunnyvale, California

Orion Environmental Inc. (Orion), on behalf of Northrop Grumman Systems Corporation, has prepared this memorandum to document the replacement/repair of the passive sub-slab vapor collection (SVC) system encountered during the remedial activities conducted in the former source area from September through November 2014.

The SVC system was repaired in accordance with AECOM's work plan dated 13 August 2013. Specifically, prior to soil excavation, the contractor cut and removed the SVC piping exposed during concrete removal activities to limit any damage to the remaining SVC piping. Following the excavation activities, the entire excavation was backfilled to the surface and then a new trench was dug with a minimum width of 12 inches. The trench was covered with geotextile fabric, 3/8-inch pea gravel was installed, and new slotted piping was installed approximately 3 inches above the base of the trench and 12 inches below the finished grade. The new piping was connected to the existing SVC piping with couplings in the same manner that the original SVC piping was installed.

This work was conducted under the supervision of Michael P. Purchase, a California-registered engineer.

Michael P. Purchase
R.C.E. No. C71230

REGISTERED PROFESSIONAL ENGINEER
MICHAEL P. PURCHASE
NO. C71230
Exp. 6/30/15
CIVIL
STATE OF CALIFORNIA

APPENDIX B

Memorandum: Summary of Concrete Slab Sealing (Orion 2015c)

Orion Environmental Inc.
2955 Redondo Avenue 562 988-2755 PHONE
Long Beach, CA 90806 562 988-2759 FAX

DBA Arctos Environmental
2332 5th Street, Suite A 510 525-2180 PHONE
Berkeley, CA 94710 510 525-2392 FAX

Memorandum

Date: 8 May 2015

Subject: Summary of Concrete Slab Sealing
Former TRW Microwave Site
825 Stewart Drive, Sunnyvale, California

Orion Environmental Inc. (Orion), on behalf of Northrop Grumman Systems Corporation, has prepared this memorandum to document sealing of the concrete slab in the building at the subject site. The work was performed prior to the vapor intrusion (VI) evaluation that was conducted in May 2015 to assess the VI pathway under current site conditions, as described in AECOM's VI work plan addendum dated 26 March 2015. The purpose of the sealing was to remove any remaining potential VI conduits, such as cracks, seams, utility pipes and holes, and/or other openings in the concrete slab.

Orion retained Innovative Construction Solutions, Inc. (ICS), of Oakland, California, to complete the scope of work described below. ICS performed the work from 3 April to 1 May 2015 under the supervision of Orion.

Scope of Work

The following activities were performed to assist in meeting the objectives of AECOM's VI evaluation:

- Mobilized for field work including (1) preparing a site-specific health and safety plan and (2) moving personnel, equipment, materials, supplies, and tools to the site
- Sealed concrete slab control joints, cracks, and saw cuts
- Sealed concrete slab penetrations
- Sealed gap space between walls
- Inspected elevator shaft slab for cracks.

Sealing of Concrete Slab Control Joints, Cracks, and Saw Cuts
Orion and ICS identified approximately 5,500 linear feet of control joints, cracks, and saw cuts in the concrete slab. ICS sealed these joints, cracks, and cuts using foam backer rod, for cracks greater than 1/4-inch wide, and self-leveling weatherproof sealant material (Photos 1 and 2; Attachment A). The sealing material used was DAP® 3.0™ Advanced Self-Leveling Concrete Sealant.

Sealing of Concrete Slab Penetrations

Orion and ICS identified approximately 85 functional and nonfunctional utility penetrations and holes in the concrete slab. ICS sealed around the functional penetrations using self-leveling weatherproof sealant material (Photo 3; Attachment A). ICS sealed the abandoned nonfunctional penetrations and holes using filler as needed and non-shrink grout flush to grade (Photos 1 and 4; Attachment A). Sealing products used were DAP® 3.0™ Advanced Self-Leveling Concrete Sealant (for functional penetrations) and SpecChem SC Multipurpose Non-Shrink and Non-Metallic Grout (for abandoned nonfunctional penetrations).

Sealing of Gap Space between Walls

Orion and ICS identified approximately 120 linear feet of gap space between the building walls that connect the northern and western sections of the building to the larger middle section. The 16-inch-wide gap spaces, consisting of exposed soil and rough concrete, were created when new buildings/additions were constructed contiguous with the original building. ICS sealed the ground surface within the gap space using a spray-applied vapor barrier (Photo 5; Attachment A). The vapor barrier product used was W. R. Meadows Air Shield™ LM.

Inspection of Elevator Shaft Slab

ICS and Orion visually inspected the concrete slab beneath the elevator shaft on 1 May 2015. Approximately 1 foot of water was observed in the elevator shaft sump during the inspection. The water was removed and the sump was cleaned to allow inspection of the bottom of the sump. No cracks were observed in the elevator shaft slab or sump and therefore no sealing was required (Photos 6 through 10; Attachment A).

This work was conducted under the supervision of Michael P. Purchase, a California-registered engineer.

Michael P. Purchase
R.C.E. No. C71230

REGISTERED PROFESSIONAL ENGINEER
MICHAEL P. PURCHASE
NO. C71230
Exp. 6/30/15
CIVIL
STATE OF CALIFORNIA

ATTACHMENT A

PHOTOS

ATTACHMENT A
PHOTOS

Photo 1 – Sealed Control Joints, Cracks, and Holes

Photo 2 – Sealed Control Joints and Cracks

Photo 3 – Sealed Functional Penetration

Photo 4 – Sealed Abandoned Nonfunctional Penetrations

Photo 5 – Sealed Gap Space between Walls

Photo 6 – Outside of Elevator Shaft

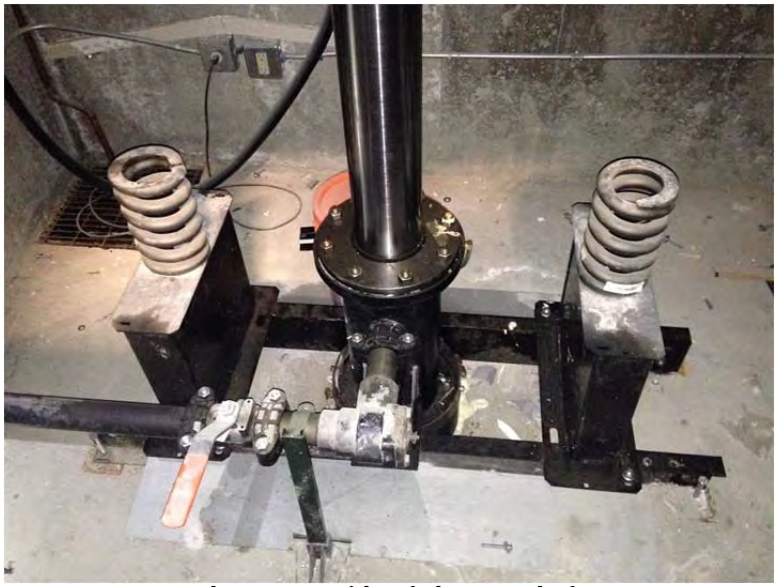

Photo 7 – Inside of Elevator Shaft

Photo 8 – Inside of Elevator Shaft

Photo 9 – Inside of Elevator Shaft

Photo 10 – Elevator Shaft Sump

APPENDIX C

Photographs

PHOTOGRAPHIC LOG

Facility Name:	Site Location:	Project No.
Former TRW Microwave Site	825 Stewart Drive, Sunnyvale, CA	60238860

Photo No.	Date:
C-1	May 6, 2015

Direction Photo Taken:
Northwest

Description:

Indoor Air Sample IA-1 and duplicate.

Photo No.	Date:
C-2	May 6, 2015

Direction Photo Taken:
North

Description:

Indoor Air Sample IA-2

PHOTOGRAPHIC LOG

Facility Name:	Site Location:	Project No.
Former TRW Microwave Site	825 Stewart Drive, Sunnyvale, CA	60238860

Photo No.	Date:
C-3	May 6, 2015

Direction Photo Taken:

South

Description:

Indoor Air Sample IA-4

Photo No.	Date:
C-4	May 6, 2015

Direction Photo Taken:

North-Northeast

Description:

Outdoor Air Sample OA-1 and duplicate

PHOTOGRAPHIC LOG

Facility Name:	Site Location:	Project No.
Former TRW Microwave Site	825 Stewart Drive, Sunnyvale, CA	60238860

Photo No.	Date:
C-5	May 6, 2015

Direction Photo Taken:
Not applicable

Description:

Shut in testing setup.

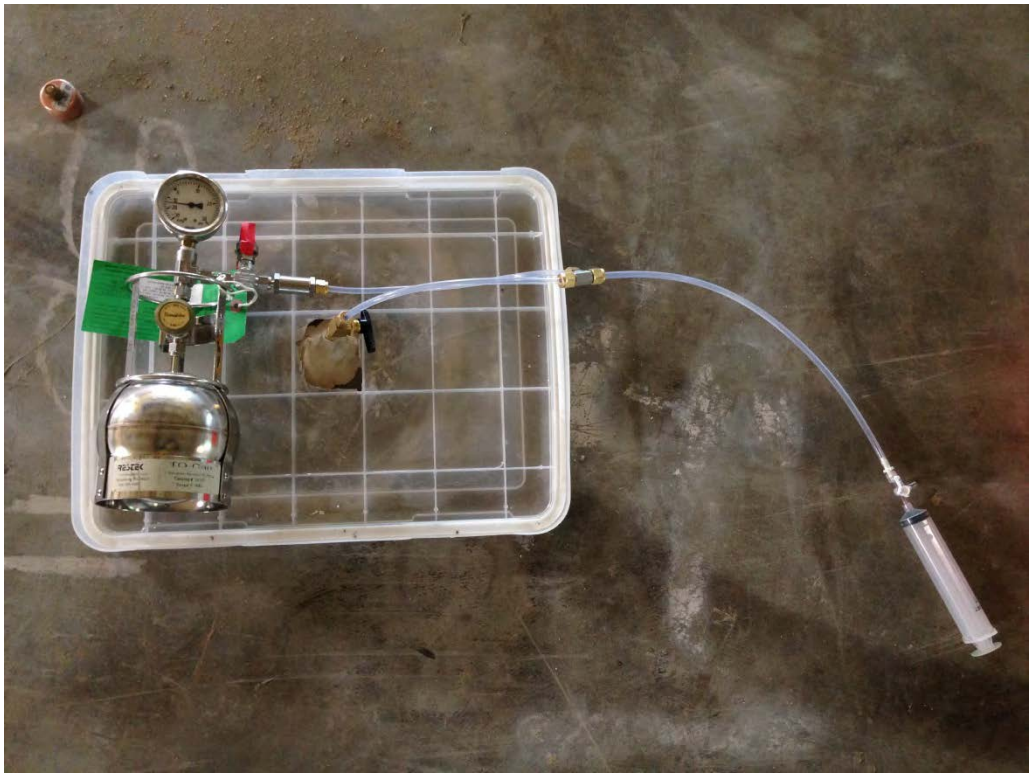

Photo No.	Date:
C-6	May 6, 2015

Direction Photo Taken:
Not applicable.

Description:
Sub-slab well differential pressure measurement.

AECOM

PHOTOGRAPHIC LOG

Facility Name:	Site Location:	Project No.
Former TRW Microwave Site	825 Stewart Drive, Sunnyvale, CA	60238860

Photo No.	Date:
C-7	May 6, 2015

Direction Photo Taken:

Not applicable.

Description:

Duplicate sub-slab sample collection setup at Sub-Slab Well SS-5.

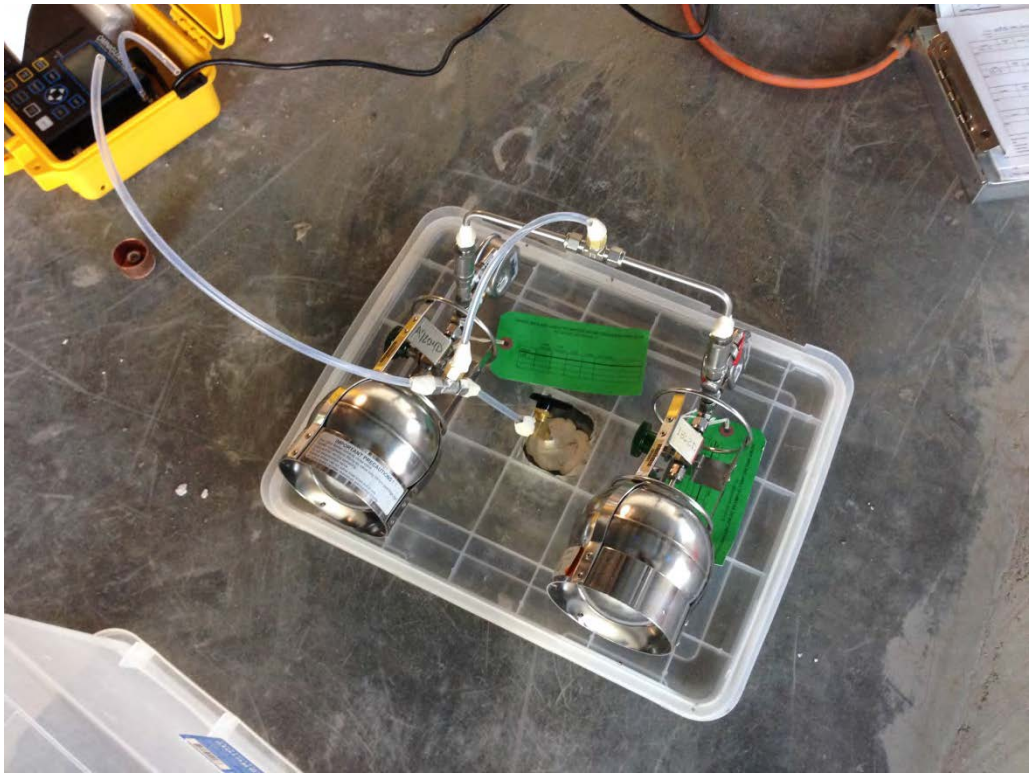

Photo No.	Date:
C-8	May 6, 2015

Direction Photo Taken:
Not applicable.

Description:

Sub-slab well leak testing using helium.

APPENDIX D

FIELD FORMS

- Sub-Slab Vapor Well Field Data
- Indoor and Outdoor Ambient Air Field Data
- Building Pressure/Temperature Readings
- Ambient Weather Conditions During Sampling

Sub Slab Vapor Well Field Data Sheet

PID Used: ppbRAE 3000 PGM7340
He Detector: He/H Multi-Gas Detector MGD-2002 FA00019
PA Meter: Omniguard 4

Building: 825 Stewart Dr.

Page 1 of ____

Location	Sample ID	Cannister	Controller	Date	Shut In Test (Hg/min)	Differential Pressure (Pa)	Purge Time	PID Measurement (ppb)	Sample Time	Shroud Leak Test (Helium)	Well Leak Test (Helium)	Temp (°F)
SS-5	J6038-SS5-050615-1	34000992	7321	5-6-15	1116-1119	Initial: 0.0	1130-1135	Initial: 1615	Start: 1137	62.9%	—	Initial: 75
Notes: • First shut-in test fail, retighten fittings & repeat 1122-1125: PASS • Regulator 7321 reads -18 inHg at ambient (test gauge = -3)					Initial Vacuum: 3		Shroud: 72.3% He: 0		Mid: 1140	60.7%	—	
					Final Vacuum: 3	Post: -1.0	300mL	Post: 339	Stop: 1144	59.1%	0	Post: 75

Location	Sample ID	Cannister	Controller	Date	Shut In Test (Hg/min)	Differential Pressure (Pa)	Purge Time	PID Measurement (ppb)	Sample Time	Shroud Leak Test (Helium)	Well Leak Test (Helium)	Temp (°F)
SS-5	J6038-SS5-050615-2	34000963	7665	5-6-15	1122-1125	Initial: 0.0	1130-1135	Initial: 1615	Start: 1137	62.9%	—	Initial: 75
Notes: ~~Regulator 7321~~ • Vacuum: start 30 end 3 inHg					Initial Vacuum: 10		Shroud: 72.3% He: 0		Mid: 1140	60.7%	—	
					Final Vacuum: 10	Post: -1.0	300mL	Post: 339	Stop: 1144	59.1%	0	Post: 75

Location	Sample ID	Cannister	Controller	Date	Shut In Test (Hg/min)	Differential Pressure (Pa)	Purge Time	PID Measurement (ppb)	Sample Time	Shroud Leak Test (Helium)	Well Leak Test (Helium)	Temp (°F)
SS-7	J6038-SS7-050615	8288	7467	5-6-15	1227-1231	Initial: 0.0	1238-1242	Initial: 2129	Start: 1245	66.0%	—	Initial: 76
Notes: • Vacuum: start 30 end 3.5 inHg					Initial Vacuum: 14		Shroud: 52.0% He: 0		Mid: 1248	64.9%	—	
					Final Vacuum: 14	Post: 0.0	300mL	Post: 425	Stop: 1252	59.7%	0	Post: 76

Location	Sample ID	Cannister	Controller	Date	Shut In Test (Hg/min)	Differential Pressure (Pa)	Purge Time	PID Measurement (ppb)	Sample Time	Shroud Leak Test (Helium)	Well Leak Test (Helium)	Temp (°F)
SS-11	J6038-SS11-050615	34001950	7126	5-6-15	1324-1328	Initial: 0.0	1337-1340	Initial: 783	Start: 1343	73.0%	—	Initial: 75
Notes: • Vacuum: start 30 end 3 inHg					Initial Vacuum: 14		Shroud: 59.1% He: 25 ppm		Mid: 1346	70.1%	—	
					Final Vacuum: 14	Post: 0.0	300mL	Post: 0	Stop: 1350	60.6%	0	Post: 75

Sampler Name(s): Jeremy Quick
Date: 05/06/2015
Project Number: 60238660.B3f
Project Name: TRW Microwave
Analytical Methods: TO-15 Standard

Comments:

Indoor and Outdoor Ambient Air Field Data Sheet

Building: 825 Stewart Dr.

Page 1 of 1

Location	Sample ID	Canister	Controller ID	Sample Date	Sample Start Time	Sample End Time	PID Measurement (ppb)	Initial Vacuum	Initial Temp	Final Vacuum	Final Temp	Comments Differential Pressure (Pa)
Indoor Sec. 1	~~J6038-IA1-050615-1~~	34000014	7254	5-6-15	0758	1758	254	30	70	2	78	1.0
	J6038-IA1-050615-2	8205	7644	5-6-15	0758	1758	254	30+	70	3	78	1.0
	J6038-IA4-050615	34001141	7300	5-6-15	0808	1808	262	30	70	2.5	77	-1.0
	J6038-IA5-050615	34000100	7191	5-6-15	0912	1912	233	30+	70	4	77	—
Indoor Sec. 2	J6038-IA2-050615	34000113	7277	5-6-15	0816	1816	269	30	70	2	70	-0.5
Indoor Sec. 3	J6038-IA3-050615	34000500	7250	5-6-15	0821	1821	217	29	70	4	70	-1.5
Outdoor Sec. 2 roof/HVAC	J6038-OA1-050615-1	34000132	7304	5-6-15	0903	1903	3	30	55	4	70	—
	J6038-OA1-050615-2	7531	7298	5-6-15	0903	1903	3	30+	55	4	70	—

Sampler Name(s): Jeremy Quick

Date: 05/06/2015

Project Number: 60238660.B3f

Project Name: TRW Microwave

Analytical Methods: TO-15 SIM

Comments:

Bldg. Pressure/Temp. Readings

#	Time	Location	PID (ppb)	Pressure (diff., PA)	Temp (°F)
1	1605	SS-11/IA-3	217	-1.5 (50'+)	70
2/3	1608	Sec. 3 mens/womens	949/559	-3.5/0.0 (50'+)	~~70~~ 65
4	1619	Sec. 2 SS-7/IA-2	269	-0.5 (100'+)	70
5/6	1621	Sec. 2 mens/womens	967/1265	0.0/0.0 (100'+)	65
7	1633	Sec. 1 IA-4/elevator	262	-1.0 (50'+)	77
8/9	1638	Sec. 1 mens/womens	434/503	2.5/6.5 (100'+)	68
10	1641	Near IA-1 (~20's)	254	1.0 (100'+)	78
11/12	~1700	Sec. 2 roof/vents	3/114-432	—	68
13/14	~1705	Sec. 3 roof/vents	40/38	—	68
15/16	~1730	Sec. 1 roof/vents	89/104-884	—	68

AMBIENT WEATHER READINGS DURING VIP SAMPLE COLLECTION

Project Name: TRW Microwave **Project Number:** 60238860.B3 ~~X~~ f

Morning Readings		Afternoon Readings	
DATE: 12/9/13	TIME: 1100	TIME:	
TEMP: 43°F	HUMIDITY: 37%	TEMP:	HUMIDITY:
WIND SPD & DIR: 4 mph NNE	GUSTS: up to 14 mph	WIND SPD & DIR:	GUSTS:
BAROMETRIC PRESS: 30.42		BAROMETRIC PRESS:	
CLEAR / CLOUDY COMMENTS:		CLEAR / CLOUDY COMMENTS:	
RECORDED BY: Jenna Lohmann		RECORDED BY:	

DATE: 12/10/13	TIME: 0900	TIME: 1755	
TEMP: 42°F	HUMIDITY: 66%	TEMP: 43°F	HUMIDITY: 51%
WIND SPD & DIR: 0 mph	GUSTS: up to 6 mph	WIND SPD & DIR: 0 mph	GUSTS: up to 8 mph
BAROMETRIC PRESS: 30.27		BAROMETRIC PRESS: 30.17	
CLEAR / CLOUDY COMMENTS:		CLEAR / CLOUDY COMMENTS:	
RECORDED BY: Jenna Lohmann		RECORDED BY: Jenna Lohmann	

DATE: 5-6-15	TIME: 0900	TIME: 1600	
TEMP: 55°F	HUMIDITY: 65%	TEMP: 74°F	HUMIDITY: 51%
WIND SPD & DIR: Calm	GUSTS: —	WIND SPD & DIR: 1mph NNW	GUSTS: ~7 mph W
BAROMETRIC PRESS: 30.15		BAROMETRIC PRESS: 29.85	
CLEAR / CLOUDY COMMENTS:		CLEAR / CLOUDY COMMENTS:	
RECORDED BY: Jeremy Quick		RECORDED BY: Jeremy Quick	

APPENDIX E

Analytical Laboratory Reports, Chain-of-Custody Forms, and Canister Certifications

ANALYTICAL REPORT

Job Number: 320-12924-1

Job Description: TRW Microwave

For:
AECOM, Inc.
999 Town & Country Road
4th Floor
Orange, CA 92868

Attention: Ms. Rebecca Mora

Approved for release.
Laura Turpen
Project Manager I
5/28/2015 8:42 AM

Laura Turpen, Project Manager I
880 Riverside Parkway, West Sacramento, CA, 95605
(916)374-4414
laura.turpen@testamericainc.com
05/28/2015

cc: NGC EDD
Holly Holbrook
Ms. Linda Niemeyer
Ms. Sue Scrocchi

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Qualifiers

Air - GC/MS VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Job Narrative
320-12924-1

This raw data package report was requested on May 27, 2015.

Receipt
The samples were received on 5/8/2015 2:50 PM; the samples arrived in good condition, properly preserved and, where required, on ice.

Air - GC/MS VOA
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

VOA Prep
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Detection Summary

Client: AECOM, Inc.
Project/Site: TRW Microwave

TestAmerica Job ID: 320-12924-1

Client Sample ID: J6038-SS5-050615-1 — Lab Sample ID: 320-12924-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	81		8.8	0.31	ppb v/v	1.75		TO-15	Total/NA
Benzene	0.87		0.70	0.14	ppb v/v	1.75		TO-15	Total/NA
2-Butanone (MEK)	3.9		1.4	0.35	ppb v/v	1.75		TO-15	Total/NA
Carbon disulfide	0.19	J	1.4	0.14	ppb v/v	1.75		TO-15	Total/NA
Chloroform	0.61		0.53	0.17	ppb v/v	1.75		TO-15	Total/NA
Dichlorodifluoromethane	0.55	J	0.70	0.25	ppb v/v	1.75		TO-15	Total/NA
cis-1,2-Dichloroethene	1.1		0.70	0.16	ppb v/v	1.75		TO-15	Total/NA
trans-1,2-Dichloroethene	0.40	J	0.70	0.18	ppb v/v	1.75		TO-15	Total/NA
Ethylbenzene	1.8		0.70	0.11	ppb v/v	1.75		TO-15	Total/NA
Methylene Chloride	3.2		0.70	0.13	ppb v/v	1.75		TO-15	Total/NA
Styrene	0.12	J	0.70	0.10	ppb v/v	1.75		TO-15	Total/NA
Tetrachloroethene	3.3		0.70	0.089	ppb v/v	1.75		TO-15	Total/NA
Toluene	2.5		0.70	0.089	ppb v/v	1.75		TO-15	Total/NA
1,1,2-Trichloro-1,2,2-trifluoroethane	1.8		0.70	0.29	ppb v/v	1.75		TO-15	Total/NA
1,1,1-Trichloroethane	0.39	J	0.53	0.11	ppb v/v	1.75		TO-15	Total/NA
Trichloroethene	46		0.70	0.18	ppb v/v	1.75		TO-15	Total/NA
Trichlorofluoromethane	0.36	J	0.70	0.34	ppb v/v	1.75		TO-15	Total/NA
1,2,4-Trimethylbenzene	0.31	J	1.4	0.28	ppb v/v	1.75		TO-15	Total/NA
m,p-Xylene	7.1		1.4	0.18	ppb v/v	1.75		TO-15	Total/NA
o-Xylene	2.5		0.70	0.095	ppb v/v	1.75		TO-15	Total/NA

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	190		21	0.74	ug/m3	1.75		TO-15	Total/NA
Benzene	2.8		2.2	0.44	ug/m3	1.75		TO-15	Total/NA
2-Butanone (MEK)	12		4.1	1.0	ug/m3	1.75		TO-15	Total/NA
Carbon disulfide	0.59	J	4.4	0.43	ug/m3	1.75		TO-15	Total/NA
Chloroform	3.0		2.6	0.81	ug/m3	1.75		TO-15	Total/NA
Dichlorodifluoromethane	2.7	J	3.5	1.3	ug/m3	1.75		TO-15	Total/NA
cis-1,2-Dichloroethene	4.3		2.8	0.62	ug/m3	1.75		TO-15	Total/NA
trans-1,2-Dichloroethene	1.6	J	2.8	0.69	ug/m3	1.75		TO-15	Total/NA
Ethylbenzene	7.8		3.0	0.48	ug/m3	1.75		TO-15	Total/NA
Methylene Chloride	11		2.4	0.44	ug/m3	1.75		TO-15	Total/NA
Styrene	0.51	J	3.0	0.44	ug/m3	1.75		TO-15	Total/NA
Tetrachloroethene	23		4.7	0.61	ug/m3	1.75		TO-15	Total/NA
Toluene	9.4		2.6	0.34	ug/m3	1.75		TO-15	Total/NA
1,1,2-Trichloro-1,2,2-trifluoroethane	14		5.4	2.2	ug/m3	1.75		TO-15	Total/NA
1,1,1-Trichloroethane	2.1	J	2.9	0.62	ug/m3	1.75		TO-15	Total/NA
Trichloroethene	250		3.8	0.99	ug/m3	1.75		TO-15	Total/NA
Trichlorofluoromethane	2.0	J	3.9	1.9	ug/m3	1.75		TO-15	Total/NA
1,2,4-Trimethylbenzene	1.5	J	6.9	1.4	ug/m3	1.75		TO-15	Total/NA
m,p-Xylene	31		6.1	0.76	ug/m3	1.75		TO-15	Total/NA
o-Xylene	11		3.0	0.41	ug/m3	1.75		TO-15	Total/NA

Client Sample ID: J6038-SS5-050615-2 — Lab Sample ID: 320-12924-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	71		18	0.64	ppb v/v	3.57		TO-15	Total/NA
Benzene	0.78	J	1.4	0.28	ppb v/v	3.57		TO-15	Total/NA
2-Butanone (MEK)	5.9		2.9	0.71	ppb v/v	3.57		TO-15	Total/NA
Carbon disulfide	0.70	J	2.9	0.28	ppb v/v	3.57		TO-15	Total/NA
Chloroform	0.53	J	1.1	0.34	ppb v/v	3.57		TO-15	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: J6038-SS5-050615-2 (Continued) — Lab Sample ID: 320-12924-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Ethylbenzene	1.6		1.4	0.22	ppb v/v	3.57		TO-15	Total/NA
2-Hexanone	6.6		1.4	0.31	ppb v/v	3.57		TO-15	Total/NA
Methylene Chloride	2.9		1.4	0.26	ppb v/v	3.57		TO-15	Total/NA
Tetrachloroethene	2.9		1.4	0.18	ppb v/v	3.57		TO-15	Total/NA
Toluene	2.3		1.4	0.18	ppb v/v	3.57		TO-15	Total/NA
1,1,2-Trichloro-1,2,2-trifluoroethane	1.6		1.4	0.58	ppb v/v	3.57		TO-15	Total/NA
1,1,1-Trichloroethane	0.33	J	1.1	0.23	ppb v/v	3.57		TO-15	Total/NA
Trichloroethene	39		1.4	0.37	ppb v/v	3.57		TO-15	Total/NA
Vinyl acetate	0.73	J	2.9	0.52	ppb v/v	3.57		TO-15	Total/NA
m,p-Xylene	5.8		2.9	0.36	ppb v/v	3.57		TO-15	Total/NA
o-Xylene	2.0		1.4	0.19	ppb v/v	3.57		TO-15	Total/NA

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	170		42	1.5	ug/m3	3.57		TO-15	Total/NA
Benzene	2.5	J	4.6	0.90	ug/m3	3.57		TO-15	Total/NA
2-Butanone (MEK)	17		8.4	2.1	ug/m3	3.57		TO-15	Total/NA
Carbon disulfide	2.2	J	8.9	0.87	ug/m3	3.57		TO-15	Total/NA
Chloroform	2.6	J	5.2	1.7	ug/m3	3.57		TO-15	Total/NA
Ethylbenzene	6.8		6.2	0.98	ug/m3	3.57		TO-15	Total/NA
2-Hexanone	27		5.9	1.3	ug/m3	3.57		TO-15	Total/NA
Methylene Chloride	10		5.0	0.89	ug/m3	3.57		TO-15	Total/NA
Tetrachloroethene	20		9.7	1.2	ug/m3	3.57		TO-15	Total/NA
Toluene	8.8		5.4	0.69	ug/m3	3.57		TO-15	Total/NA
1,1,2-Trichloro-1,2,2-trifluoroethane	12		11	4.5	ug/m3	3.57		TO-15	Total/NA
1,1,1-Trichloroethane	1.8	J	5.8	1.3	ug/m3	3.57		TO-15	Total/NA
Trichloroethene	210		7.7	2.0	ug/m3	3.57		TO-15	Total/NA
Vinyl acetate	2.6	J	10	1.8	ug/m3	3.57		TO-15	Total/NA
m,p-Xylene	25		12	1.6	ug/m3	3.57		TO-15	Total/NA
o-Xylene	8.6		6.2	0.84	ug/m3	3.57		TO-15	Total/NA

Client Sample ID: J6038-SS7-050615 — Lab Sample ID: 320-12924-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Tetrachloroethene	43		7.2	0.92	ppb v/v	18		TO-15	Total/NA
1,1,2-Trichloro-1,2,2-trifluoroethane	17		7.2	2.9	ppb v/v	18		TO-15	Total/NA
1,1,1-Trichloroethane	9.7		5.4	1.2	ppb v/v	18		TO-15	Total/NA
Trichloroethene	380		7.2	1.9	ppb v/v	18		TO-15	Total/NA

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Tetrachloroethene	290		49	6.2	ug/m3	18		TO-15	Total/NA
1,1,2-Trichloro-1,2,2-trifluoroethane	130		55	22	ug/m3	18		TO-15	Total/NA
1,1,1-Trichloroethane	53		29	6.4	ug/m3	18		TO-15	Total/NA
Trichloroethene	2100		39	10	ug/m3	18		TO-15	Total/NA

Client Sample ID: J6038-SS11-050615 — Lab Sample ID: 320-12924-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	2.4	J	5.1	0.18	ppb v/v	1.01		TO-15	Total/NA
Carbon tetrachloride	0.091	J	0.81	0.065	ppb v/v	1.01		TO-15	Total/NA
Dichlorodifluoromethane	0.51		0.40	0.15	ppb v/v	1.01		TO-15	Total/NA
Methylene Chloride	0.11	J	0.40	0.073	ppb v/v	1.01		TO-15	Total/NA
Tetrachloroethene	1.1		0.40	0.052	ppb v/v	1.01		TO-15	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: J6038-SS11-050615 (Continued) — Lab Sample ID: 320-12924-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Toluene	0.11	J	0.40	0.052	ppb v/v	1.01		TO-15	Total/NA
1,1,2-Trichloro-1,2,2-trifluoroethane	0.28	J	0.40	0.16	ppb v/v	1.01		TO-15	Total/NA
1,1,1-Trichloroethane	0.13	J	0.30	0.066	ppb v/v	1.01		TO-15	Total/NA
Trichloroethene	8.8		0.40	0.11	ppb v/v	1.01		TO-15	Total/NA
Trichlorofluoromethane	0.26	J	0.40	0.20	ppb v/v	1.01		TO-15	Total/NA

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	5.8	J	12	0.43	ug/m3	1.01		TO-15	Total/NA
Carbon tetrachloride	0.57	J	5.1	0.41	ug/m3	1.01		TO-15	Total/NA
Dichlorodifluoromethane	2.5		2.0	0.72	ug/m3	1.01		TO-15	Total/NA
Methylene Chloride	0.37	J	1.4	0.25	ug/m3	1.01		TO-15	Total/NA
Tetrachloroethene	7.3		2.7	0.35	ug/m3	1.01		TO-15	Total/NA
Toluene	0.40	J	1.5	0.19	ug/m3	1.01		TO-15	Total/NA
1,1,2-Trichloro-1,2,2-trifluoroethane	2.2	J	3.1	1.3	ug/m3	1.01		TO-15	Total/NA
1,1,1-Trichloroethane	0.72	J	1.7	0.36	ug/m3	1.01		TO-15	Total/NA
Trichloroethene	47		2.2	0.57	ug/m3	1.01		TO-15	Total/NA
Trichlorofluoromethane	1.4	J	2.3	1.1	ug/m3	1.01		TO-15	Total/NA

Client Sample ID: J6038-IA1-050615-1 — Lab Sample ID: 320-12924-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,2-Dichlorobenzene	0.016	J	0.050	0.010	ppb v/v	1		TO-15 SIM	Total/NA
1,2-Dichloroethane	0.015	J	0.020	0.0050	ppb v/v	1		TO-15 SIM	Total/NA
Chloroform	0.024		0.020	0.0050	ppb v/v	1		TO-15 SIM	Total/NA
cis-1,2-Dichloroethene	0.0059	J	0.020	0.0050	ppb v/v	1		TO-15 SIM	Total/NA
Ethylbenzene	0.11		0.020	0.010	ppb v/v	1		TO-15 SIM	Total/NA
Freon 11	0.21		0.045	0.010	ppb v/v	1		TO-15 SIM	Total/NA
Freon 113	0.063		0.030	0.0050	ppb v/v	1		TO-15 SIM	Total/NA
Freon 12	0.46		0.020	0.0050	ppb v/v	1		TO-15 SIM	Total/NA
m,p-Xylene	0.45		0.040	0.020	ppb v/v	1		TO-15 SIM	Total/NA
Methylene Chloride	1.0		0.20	0.10	ppb v/v	1		TO-15 SIM	Total/NA
o-Xylene	0.19		0.020	0.010	ppb v/v	1		TO-15 SIM	Total/NA
Tetrachloroethene	0.013	J	0.020	0.010	ppb v/v	1		TO-15 SIM	Total/NA
Toluene	1.3		0.020	0.010	ppb v/v	1		TO-15 SIM	Total/NA
Trichloroethene	0.093		0.020	0.0050	ppb v/v	1		TO-15 SIM	Total/NA

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,2-Dichlorobenzene	0.094	J	0.30	0.060	ug/m3	1		TO-15 SIM	Total/NA
1,2-Dichloroethane	0.059	J	0.081	0.020	ug/m3	1		TO-15 SIM	Total/NA
Chloroform	0.12		0.098	0.024	ug/m3	1		TO-15 SIM	Total/NA
cis-1,2-Dichloroethene	0.023	J	0.079	0.020	ug/m3	1		TO-15 SIM	Total/NA
Ethylbenzene	0.49		0.087	0.043	ug/m3	1		TO-15 SIM	Total/NA
Freon 11	1.2		0.25	0.056	ug/m3	1		TO-15 SIM	Total/NA
Freon 113	0.48		0.23	0.038	ug/m3	1		TO-15 SIM	Total/NA
Freon 12	2.3		0.099	0.025	ug/m3	1		TO-15 SIM	Total/NA
m,p-Xylene	2.0		0.17	0.087	ug/m3	1		TO-15 SIM	Total/NA
Methylene Chloride	3.6		0.69	0.35	ug/m3	1		TO-15 SIM	Total/NA
o-Xylene	0.81		0.087	0.043	ug/m3	1		TO-15 SIM	Total/NA
Tetrachloroethene	0.090	J	0.14	0.068	ug/m3	1		TO-15 SIM	Total/NA
Toluene	5.0		0.075	0.038	ug/m3	1		TO-15 SIM	Total/NA
Trichloroethene	0.50		0.11	0.027	ug/m3	1		TO-15 SIM	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: AECOM, Inc.
Project/Site: TRW Microwave

TestAmerica Job ID: 320-12924-1

Client Sample ID: J6038-IA1-050615-2 — Lab Sample ID: 320-12924-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,2-Dichlorobenzene	0.016	J	0.050	0.010	ppb v/v	1		TO-15 SIM	Total/NA
1,2-Dichloroethane	0.016	J	0.020	0.0050	ppb v/v	1		TO-15 SIM	Total/NA
Chloroform	0.024		0.020	0.0050	ppb v/v	1		TO-15 SIM	Total/NA
cis-1,2-Dichloroethene	0.0065	J	0.020	0.0050	ppb v/v	1		TO-15 SIM	Total/NA
Ethylbenzene	0.12		0.020	0.010	ppb v/v	1		TO-15 SIM	Total/NA
Freon 11	0.21		0.045	0.010	ppb v/v	1		TO-15 SIM	Total/NA
Freon 113	0.065		0.030	0.0050	ppb v/v	1		TO-15 SIM	Total/NA
Freon 12	0.42		0.020	0.0050	ppb v/v	1		TO-15 SIM	Total/NA
m,p-Xylene	0.47		0.040	0.020	ppb v/v	1		TO-15 SIM	Total/NA
Methylene Chloride	1.1		0.20	0.10	ppb v/v	1		TO-15 SIM	Total/NA
o-Xylene	0.19		0.020	0.010	ppb v/v	1		TO-15 SIM	Total/NA
Tetrachloroethene	0.012	J	0.020	0.010	ppb v/v	1		TO-15 SIM	Total/NA
Toluene	1.4		0.020	0.010	ppb v/v	1		TO-15 SIM	Total/NA
Trichloroethene	0.095		0.020	0.0050	ppb v/v	1		TO-15 SIM	Total/NA

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,2-Dichlorobenzene	0.095	J	0.30	0.060	ug/m3	1		TO-15 SIM	Total/NA
1,2-Dichloroethane	0.064	J	0.081	0.020	ug/m3	1		TO-15 SIM	Total/NA
Chloroform	0.12		0.098	0.024	ug/m3	1		TO-15 SIM	Total/NA
cis-1,2-Dichloroethene	0.026	J	0.079	0.020	ug/m3	1		TO-15 SIM	Total/NA
Ethylbenzene	0.51		0.087	0.043	ug/m3	1		TO-15 SIM	Total/NA
Freon 11	1.2		0.25	0.056	ug/m3	1		TO-15 SIM	Total/NA
Freon 113	0.50		0.23	0.038	ug/m3	1		TO-15 SIM	Total/NA
Freon 12	2.1		0.099	0.025	ug/m3	1		TO-15 SIM	Total/NA
m,p-Xylene	2.0		0.17	0.087	ug/m3	1		TO-15 SIM	Total/NA
Methylene Chloride	3.7		0.69	0.35	ug/m3	1		TO-15 SIM	Total/NA
o-Xylene	0.84		0.087	0.043	ug/m3	1		TO-15 SIM	Total/NA
Tetrachloroethene	0.080	J	0.14	0.068	ug/m3	1		TO-15 SIM	Total/NA
Toluene	5.3		0.075	0.038	ug/m3	1		TO-15 SIM	Total/NA
Trichloroethene	0.51		0.11	0.027	ug/m3	1		TO-15 SIM	Total/NA

Client Sample ID: J6038-IA2-050615 — Lab Sample ID: 320-12924-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,2-Dichlorobenzene	0.016	J	0.050	0.010	ppb v/v	1		TO-15 SIM	Total/NA
1,2-Dichloroethane	0.014	J	0.020	0.0050	ppb v/v	1		TO-15 SIM	Total/NA
Chloroform	0.024		0.020	0.0050	ppb v/v	1		TO-15 SIM	Total/NA
cis-1,2-Dichloroethene	0.0062	J	0.020	0.0050	ppb v/v	1		TO-15 SIM	Total/NA
Ethylbenzene	0.10		0.020	0.010	ppb v/v	1		TO-15 SIM	Total/NA
Freon 11	0.21		0.045	0.010	ppb v/v	1		TO-15 SIM	Total/NA
Freon 113	0.064		0.030	0.0050	ppb v/v	1		TO-15 SIM	Total/NA
Freon 12	0.45		0.020	0.0050	ppb v/v	1		TO-15 SIM	Total/NA
m,p-Xylene	0.41		0.040	0.020	ppb v/v	1		TO-15 SIM	Total/NA
Methylene Chloride	0.64		0.20	0.10	ppb v/v	1		TO-15 SIM	Total/NA
o-Xylene	0.17		0.020	0.010	ppb v/v	1		TO-15 SIM	Total/NA
Tetrachloroethene	0.012	J	0.020	0.010	ppb v/v	1		TO-15 SIM	Total/NA
Toluene	1.5		0.020	0.010	ppb v/v	1		TO-15 SIM	Total/NA
Trichloroethene	0.092		0.020	0.0050	ppb v/v	1		TO-15 SIM	Total/NA

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,2-Dichlorobenzene	0.095	J	0.30	0.060	ug/m3	1		TO-15 SIM	Total/NA
1,2-Dichloroethane	0.058	J	0.081	0.020	ug/m3	1		TO-15 SIM	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: J6038-IA2-050615 (Continued) — Lab Sample ID: 320-12924-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloroform	0.12		0.098	0.024	ug/m3	1		TO-15 SIM	Total/NA
cis-1,2-Dichloroethene	0.024	J	0.079	0.020	ug/m3	1		TO-15 SIM	Total/NA
Ethylbenzene	0.45		0.087	0.043	ug/m3	1		TO-15 SIM	Total/NA
Freon 11	1.2		0.25	0.056	ug/m3	1		TO-15 SIM	Total/NA
Freon 113	0.49		0.23	0.038	ug/m3	1		TO-15 SIM	Total/NA
Freon 12	2.2		0.099	0.025	ug/m3	1		TO-15 SIM	Total/NA
m,p-Xylene	1.8		0.17	0.087	ug/m3	1		TO-15 SIM	Total/NA
Methylene Chloride	2.2		0.69	0.35	ug/m3	1		TO-15 SIM	Total/NA
o-Xylene	0.74		0.087	0.043	ug/m3	1		TO-15 SIM	Total/NA
Tetrachloroethene	0.082	J	0.14	0.068	ug/m3	1		TO-15 SIM	Total/NA
Toluene	5.6		0.075	0.038	ug/m3	1		TO-15 SIM	Total/NA
Trichloroethene	0.50		0.11	0.027	ug/m3	1		TO-15 SIM	Total/NA

Client Sample ID: J6038-IA3-050615 — Lab Sample ID: 320-12924-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,2-Dichloroethane	0.014	J	0.020	0.0050	ppb v/v	1		TO-15 SIM	Total/NA
Chloroform	0.020		0.020	0.0050	ppb v/v	1		TO-15 SIM	Total/NA
Ethylbenzene	0.092		0.020	0.010	ppb v/v	1		TO-15 SIM	Total/NA
Freon 11	0.21		0.045	0.010	ppb v/v	1		TO-15 SIM	Total/NA
Freon 113	0.059		0.030	0.0050	ppb v/v	1		TO-15 SIM	Total/NA
Freon 12	0.33		0.020	0.0050	ppb v/v	1		TO-15 SIM	Total/NA
m,p-Xylene	0.35		0.040	0.020	ppb v/v	1		TO-15 SIM	Total/NA
Methylene Chloride	0.22		0.20	0.10	ppb v/v	1		TO-15 SIM	Total/NA
o-Xylene	0.15		0.020	0.010	ppb v/v	1		TO-15 SIM	Total/NA
Toluene	2.1		0.020	0.010	ppb v/v	1		TO-15 SIM	Total/NA
Trichloroethene	0.038		0.020	0.0050	ppb v/v	1		TO-15 SIM	Total/NA

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,2-Dichloroethane	0.056	J	0.081	0.020	ug/m3	1		TO-15 SIM	Total/NA
Chloroform	0.10		0.098	0.024	ug/m3	1		TO-15 SIM	Total/NA
Ethylbenzene	0.40		0.087	0.043	ug/m3	1		TO-15 SIM	Total/NA
Freon 11	1.2		0.25	0.056	ug/m3	1		TO-15 SIM	Total/NA
Freon 113	0.45		0.23	0.038	ug/m3	1		TO-15 SIM	Total/NA
Freon 12	1.6		0.099	0.025	ug/m3	1		TO-15 SIM	Total/NA
m,p-Xylene	1.5		0.17	0.087	ug/m3	1		TO-15 SIM	Total/NA
Methylene Chloride	0.76		0.69	0.35	ug/m3	1		TO-15 SIM	Total/NA
o-Xylene	0.66		0.087	0.043	ug/m3	1		TO-15 SIM	Total/NA
Toluene	7.9		0.075	0.038	ug/m3	1		TO-15 SIM	Total/NA
Trichloroethene	0.20		0.11	0.027	ug/m3	1		TO-15 SIM	Total/NA

Client Sample ID: J6038-IA4-050615 — Lab Sample ID: 320-12924-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,2-Dichlorobenzene	0.015	J	0.050	0.010	ppb v/v	1		TO-15 SIM	Total/NA
1,2-Dichloroethane	0.014	J	0.020	0.0050	ppb v/v	1		TO-15 SIM	Total/NA
Chloroform	0.023		0.020	0.0050	ppb v/v	1		TO-15 SIM	Total/NA
cis-1,2-Dichloroethene	0.0069	J	0.020	0.0050	ppb v/v	1		TO-15 SIM	Total/NA
Ethylbenzene	0.13		0.020	0.010	ppb v/v	1		TO-15 SIM	Total/NA
Freon 11	0.20		0.045	0.010	ppb v/v	1		TO-15 SIM	Total/NA
Freon 113	0.062		0.030	0.0050	ppb v/v	1		TO-15 SIM	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: J6038-IA4-050615 (Continued) — Lab Sample ID: 320-12924-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Freon 12	0.43		0.020	0.0050	ppb v/v	1		TO-15 SIM	Total/NA
m,p-Xylene	0.52		0.040	0.020	ppb v/v	1		TO-15 SIM	Total/NA
Methylene Chloride	1.3		0.20	0.10	ppb v/v	1		TO-15 SIM	Total/NA
o-Xylene	0.21		0.020	0.010	ppb v/v	1		TO-15 SIM	Total/NA
Tetrachloroethene	0.012	J	0.020	0.010	ppb v/v	1		TO-15 SIM	Total/NA
Toluene	1.4		0.020	0.010	ppb v/v	1		TO-15 SIM	Total/NA
Trichloroethene	0.10		0.020	0.0050	ppb v/v	1		TO-15 SIM	Total/NA

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,2-Dichlorobenzene	0.088	J	0.30	0.060	ug/m3	1		TO-15 SIM	Total/NA
1,2-Dichloroethane	0.058	J	0.081	0.020	ug/m3	1		TO-15 SIM	Total/NA
Chloroform	0.11		0.098	0.024	ug/m3	1		TO-15 SIM	Total/NA
cis-1,2-Dichloroethene	0.028	J	0.079	0.020	ug/m3	1		TO-15 SIM	Total/NA
Ethylbenzene	0.56		0.087	0.043	ug/m3	1		TO-15 SIM	Total/NA
Freon 11	1.1		0.25	0.056	ug/m3	1		TO-15 SIM	Total/NA
Freon 113	0.47		0.23	0.038	ug/m3	1		TO-15 SIM	Total/NA
Freon 12	2.1		0.099	0.025	ug/m3	1		TO-15 SIM	Total/NA
m,p-Xylene	2.3		0.17	0.087	ug/m3	1		TO-15 SIM	Total/NA
Methylene Chloride	4.5		0.69	0.35	ug/m3	1		TO-15 SIM	Total/NA
o-Xylene	0.90		0.087	0.043	ug/m3	1		TO-15 SIM	Total/NA
Tetrachloroethene	0.080	J	0.14	0.068	ug/m3	1		TO-15 SIM	Total/NA
Toluene	5.1		0.075	0.038	ug/m3	1		TO-15 SIM	Total/NA
Trichloroethene	0.54		0.11	0.027	ug/m3	1		TO-15 SIM	Total/NA

Client Sample ID: J6038-IA5-050615 — Lab Sample ID: 320-12924-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,2-Dichlorobenzene	0.017	J	0.050	0.010	ppb v/v	1		TO-15 SIM	Total/NA
1,2-Dichloroethane	0.014	J	0.020	0.0050	ppb v/v	1		TO-15 SIM	Total/NA
Chloroform	0.023		0.020	0.0050	ppb v/v	1		TO-15 SIM	Total/NA
cis-1,2-Dichloroethene	0.0067	J	0.020	0.0050	ppb v/v	1		TO-15 SIM	Total/NA
Ethylbenzene	0.14		0.020	0.010	ppb v/v	1		TO-15 SIM	Total/NA
Freon 11	0.21		0.045	0.010	ppb v/v	1		TO-15 SIM	Total/NA
Freon 113	0.063		0.030	0.0050	ppb v/v	1		TO-15 SIM	Total/NA
Freon 12	0.45		0.020	0.0050	ppb v/v	1		TO-15 SIM	Total/NA
m,p-Xylene	0.56		0.040	0.020	ppb v/v	1		TO-15 SIM	Total/NA
Methylene Chloride	1.4		0.20	0.10	ppb v/v	1		TO-15 SIM	Total/NA
o-Xylene	0.22		0.020	0.010	ppb v/v	1		TO-15 SIM	Total/NA
Tetrachloroethene	0.013	J	0.020	0.010	ppb v/v	1		TO-15 SIM	Total/NA
Toluene	1.3		0.020	0.010	ppb v/v	1		TO-15 SIM	Total/NA
Trichloroethene	0.11		0.020	0.0050	ppb v/v	1		TO-15 SIM	Total/NA

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,2-Dichlorobenzene	0.10	J	0.30	0.060	ug/m3	1		TO-15 SIM	Total/NA
1,2-Dichloroethane	0.057	J	0.081	0.020	ug/m3	1		TO-15 SIM	Total/NA
Chloroform	0.11		0.098	0.024	ug/m3	1		TO-15 SIM	Total/NA
cis-1,2-Dichloroethene	0.026	J	0.079	0.020	ug/m3	1		TO-15 SIM	Total/NA
Ethylbenzene	0.59		0.087	0.043	ug/m3	1		TO-15 SIM	Total/NA
Freon 11	1.2		0.25	0.056	ug/m3	1		TO-15 SIM	Total/NA
Freon 113	0.48		0.23	0.038	ug/m3	1		TO-15 SIM	Total/NA
Freon 12	2.2		0.099	0.025	ug/m3	1		TO-15 SIM	Total/NA
m,p-Xylene	2.4		0.17	0.087	ug/m3	1		TO-15 SIM	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: J6038-IA5-050615 (Continued) — Lab Sample ID: 320-12924-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methylene Chloride	5.0		0.69	0.35	ug/m3	1		TO-15 SIM	Total/NA
o-Xylene	0.97		0.087	0.043	ug/m3	1		TO-15 SIM	Total/NA
Tetrachloroethene	0.086	J	0.14	0.068	ug/m3	1		TO-15 SIM	Total/NA
Toluene	5.1		0.075	0.038	ug/m3	1		TO-15 SIM	Total/NA
Trichloroethene	0.58		0.11	0.027	ug/m3	1		TO-15 SIM	Total/NA

Client Sample ID: J6038-OA1-050615-1 — Lab Sample ID: 320-12924-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,2-Dichloroethane	0.014	J	0.020	0.0050	ppb v/v	1		TO-15 SIM	Total/NA
Chloroform	0.018	J	0.020	0.0050	ppb v/v	1		TO-15 SIM	Total/NA
Ethylbenzene	0.026		0.020	0.010	ppb v/v	1		TO-15 SIM	Total/NA
Freon 11	0.22		0.045	0.010	ppb v/v	1		TO-15 SIM	Total/NA
Freon 113	0.063		0.030	0.0050	ppb v/v	1		TO-15 SIM	Total/NA
Freon 12	0.49		0.020	0.0050	ppb v/v	1		TO-15 SIM	Total/NA
m,p-Xylene	0.071		0.040	0.020	ppb v/v	1		TO-15 SIM	Total/NA
Methylene Chloride	0.12	J	0.20	0.10	ppb v/v	1		TO-15 SIM	Total/NA
o-Xylene	0.029		0.020	0.010	ppb v/v	1		TO-15 SIM	Total/NA
Toluene	0.13		0.020	0.010	ppb v/v	1		TO-15 SIM	Total/NA

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,2-Dichloroethane	0.056	J	0.081	0.020	ug/m3	1		TO-15 SIM	Total/NA
Chloroform	0.088	J	0.098	0.024	ug/m3	1		TO-15 SIM	Total/NA
Ethylbenzene	0.11		0.087	0.043	ug/m3	1		TO-15 SIM	Total/NA
Freon 11	1.2		0.25	0.056	ug/m3	1		TO-15 SIM	Total/NA
Freon 113	0.49		0.23	0.038	ug/m3	1		TO-15 SIM	Total/NA
Freon 12	2.4		0.099	0.025	ug/m3	1		TO-15 SIM	Total/NA
m,p-Xylene	0.31		0.17	0.087	ug/m3	1		TO-15 SIM	Total/NA
Methylene Chloride	0.43	J	0.69	0.35	ug/m3	1		TO-15 SIM	Total/NA
o-Xylene	0.12		0.087	0.043	ug/m3	1		TO-15 SIM	Total/NA
Toluene	0.48		0.075	0.038	ug/m3	1		TO-15 SIM	Total/NA

Client Sample ID: J6038-OA1-050615-2 — Lab Sample ID: 320-12924-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,2-Dichloroethane	0.013	J	0.020	0.0050	ppb v/v	1		TO-15 SIM	Total/NA
Chloroform	0.016	J	0.020	0.0050	ppb v/v	1		TO-15 SIM	Total/NA
Ethylbenzene	0.016	J	0.020	0.010	ppb v/v	1		TO-15 SIM	Total/NA
Freon 11	0.19		0.045	0.010	ppb v/v	1		TO-15 SIM	Total/NA
Freon 113	0.059		0.030	0.0050	ppb v/v	1		TO-15 SIM	Total/NA
Freon 12	0.34		0.020	0.0050	ppb v/v	1		TO-15 SIM	Total/NA
m,p-Xylene	0.045		0.040	0.020	ppb v/v	1		TO-15 SIM	Total/NA
o-Xylene	0.018	J	0.020	0.010	ppb v/v	1		TO-15 SIM	Total/NA
Toluene	0.25		0.020	0.010	ppb v/v	1		TO-15 SIM	Total/NA
Trichloroethene	0.0073	J	0.020	0.0050	ppb v/v	1		TO-15 SIM	Total/NA

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,2-Dichloroethane	0.054	J	0.081	0.020	ug/m3	1		TO-15 SIM	Total/NA
Chloroform	0.079	J	0.098	0.024	ug/m3	1		TO-15 SIM	Total/NA
Ethylbenzene	0.069	J	0.087	0.043	ug/m3	1		TO-15 SIM	Total/NA
Freon 11	1.1		0.25	0.056	ug/m3	1		TO-15 SIM	Total/NA
Freon 113	0.45		0.23	0.038	ug/m3	1		TO-15 SIM	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: AECOM, Inc.
Project/Site: TRW Microwave

TestAmerica Job ID: 320-12924-1

Client Sample ID: J6038-OA1-050615-2 (Continued) — Lab Sample ID: 320-12924-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Freon 12	1.7		0.099	0.025	ug/m3	1		TO-15 SIM	Total/NA
m,p-Xylene	0.19		0.17	0.087	ug/m3	1		TO-15 SIM	Total/NA
o-Xylene	0.078	J	0.087	0.043	ug/m3	1		TO-15 SIM	Total/NA
Toluene	0.93		0.075	0.038	ug/m3	1		TO-15 SIM	Total/NA
Trichloroethene	0.039	J	0.11	0.027	ug/m3	1		TO-15 SIM	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample Results

Client: AECOM, Inc.
Project/Site: TRW Microwave

TestAmerica Job ID: 320-12924-1

Client Sample ID: J6038-SS5-050615-1

Lab Sample ID: 320-12924-1

Date Collected: 05/06/15 11:44
Date Received: 05/08/15 14:50
Sample Container: Summa Canister 1L

Matrix: Air

Method: TO-15 - Volatile Organic Compounds in Ambient Air

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**81**		8.8	0.31	ppb v/v			05/12/15 05:41	1.75
Benzene	**0.87**		0.70	0.14	ppb v/v			05/12/15 05:41	1.75
Benzyl chloride	ND		1.4	0.29	ppb v/v			05/12/15 05:41	1.75
Bromodichloromethane	ND		0.53	0.12	ppb v/v			05/12/15 05:41	1.75
Bromoform	ND		0.70	0.12	ppb v/v			05/12/15 05:41	1.75
Bromomethane	ND		1.4	0.59	ppb v/v			05/12/15 05:41	1.75
2-Butanone (MEK)	**3.9**		1.4	0.35	ppb v/v			05/12/15 05:41	1.75
Carbon disulfide	**0.19**	**J**	1.4	0.14	ppb v/v			05/12/15 05:41	1.75
Carbon tetrachloride	ND		1.4	0.11	ppb v/v			05/12/15 05:41	1.75
Chlorobenzene	ND		0.53	0.11	ppb v/v			05/12/15 05:41	1.75
Chloroethane	ND		1.4	0.54	ppb v/v			05/12/15 05:41	1.75
Chloroform	**0.61**		0.53	0.17	ppb v/v			05/12/15 05:41	1.75
Chloromethane	ND		1.4	0.34	ppb v/v			05/12/15 05:41	1.75
Dibromochloromethane	ND		0.70	0.14	ppb v/v			05/12/15 05:41	1.75
1,2-Dibromoethane (EDB)	ND		1.4	0.13	ppb v/v			05/12/15 05:41	1.75
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND		0.70	0.27	ppb v/v			05/12/15 05:41	1.75
1,2-Dichlorobenzene	ND		0.70	0.23	ppb v/v			05/12/15 05:41	1.75
1,3-Dichlorobenzene	ND		0.70	0.19	ppb v/v			05/12/15 05:41	1.75
1,4-Dichlorobenzene	ND		0.70	0.26	ppb v/v			05/12/15 05:41	1.75
Dichlorodifluoromethane	**0.55**	**J**	0.70	0.25	ppb v/v			05/12/15 05:41	1.75
1,1-Dichloroethane	ND		0.53	0.13	ppb v/v			05/12/15 05:41	1.75
1,2-Dichloroethane	ND		1.4	0.15	ppb v/v			05/12/15 05:41	1.75
1,1-Dichloroethene	ND		1.4	0.23	ppb v/v			05/12/15 05:41	1.75
cis-1,2-Dichloroethene	**1.1**		0.70	0.16	ppb v/v			05/12/15 05:41	1.75
trans-1,2-Dichloroethene	**0.40**	**J**	0.70	0.18	ppb v/v			05/12/15 05:41	1.75
1,2-Dichloropropane	ND		0.70	0.42	ppb v/v			05/12/15 05:41	1.75
cis-1,3-Dichloropropene	ND		0.70	0.18	ppb v/v			05/12/15 05:41	1.75
trans-1,3-Dichloropropene	ND		0.70	0.15	ppb v/v			05/12/15 05:41	1.75
Ethylbenzene	**1.8**		0.70	0.11	ppb v/v			05/12/15 05:41	1.75
4-Ethyltoluene	ND		0.70	0.33	ppb v/v			05/12/15 05:41	1.75
Hexachlorobutadiene	ND		3.5	0.76	ppb v/v			05/12/15 05:41	1.75
2-Hexanone	ND		0.70	0.15	ppb v/v			05/12/15 05:41	1.75
4-Methyl-2-pentanone (MIBK)	ND		0.70	0.24	ppb v/v			05/12/15 05:41	1.75
Methylene Chloride	**3.2**		0.70	0.13	ppb v/v			05/12/15 05:41	1.75
Styrene	**0.12**	**J**	0.70	0.10	ppb v/v			05/12/15 05:41	1.75
1,1,2,2-Tetrachloroethane	ND		0.70	0.12	ppb v/v			05/12/15 05:41	1.75
Tetrachloroethene	**3.3**		0.70	0.089	ppb v/v			05/12/15 05:41	1.75
Toluene	**2.5**		0.70	0.089	ppb v/v			05/12/15 05:41	1.75
1,1,2-Trichloro-1,2,2-trifluoroetha ne	**1.8**		0.70	0.29	ppb v/v			05/12/15 05:41	1.75
1,2,4-Trichlorobenzene	ND		3.5	0.76	ppb v/v			05/12/15 05:41	1.75
1,1,1-Trichloroethane	**0.39**	**J**	0.53	0.11	ppb v/v			05/12/15 05:41	1.75
1,1,2-Trichloroethane	ND		0.70	0.12	ppb v/v			05/12/15 05:41	1.75
Trichloroethene	**46**		0.70	0.18	ppb v/v			05/12/15 05:41	1.75
Trichlorofluoromethane	**0.36**	**J**	0.70	0.34	ppb v/v			05/12/15 05:41	1.75
1,2,4-Trimethylbenzene	**0.31**	**J**	1.4	0.28	ppb v/v			05/12/15 05:41	1.75
1,3,5-Trimethylbenzene	ND		0.70	0.22	ppb v/v			05/12/15 05:41	1.75
Vinyl acetate	ND		1.4	0.25	ppb v/v			05/12/15 05:41	1.75

Client Sample ID: J6038-SS5-050615-1

Lab Sample ID: 320-12924-1

Date Collected: 05/06/15 11:44
Date Received: 05/08/15 14:50
Sample Container: Summa Canister 1L

Matrix: Air

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Vinyl chloride	ND		0.70	0.21	ppb v/v			05/12/15 05:41	1.75
m,p-Xylene	**7.1**		1.4	0.18	ppb v/v			05/12/15 05:41	1.75
o-Xylene	**2.5**		0.70	0.095	ppb v/v			05/12/15 05:41	1.75

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**190**		21	0.74	ug/m3			05/12/15 05:41	1.75
Benzene	**2.8**		2.2	0.44	ug/m3			05/12/15 05:41	1.75
Benzyl chloride	ND		7.2	1.5	ug/m3			05/12/15 05:41	1.75
Bromodichloromethane	ND		3.5	0.77	ug/m3			05/12/15 05:41	1.75
Bromoform	ND		7.2	1.3	ug/m3			05/12/15 05:41	1.75
Bromomethane	ND		5.4	2.3	ug/m3			05/12/15 05:41	1.75
2-Butanone (MEK)	**12**		4.1	1.0	ug/m3			05/12/15 05:41	1.75
Carbon disulfide	**0.59**	**J**	4.4	0.43	ug/m3			05/12/15 05:41	1.75
Carbon tetrachloride	ND		8.8	0.70	ug/m3			05/12/15 05:41	1.75
Chlorobenzene	ND		2.4	0.52	ug/m3			05/12/15 05:41	1.75
Chloroethane	ND		3.7	1.4	ug/m3			05/12/15 05:41	1.75
Chloroform	**3.0**		2.6	0.81	ug/m3			05/12/15 05:41	1.75
Chloromethane	ND		2.9	0.71	ug/m3			05/12/15 05:41	1.75
Dibromochloromethane	ND		6.0	1.2	ug/m3			05/12/15 05:41	1.75
1,2-Dibromoethane (EDB)	ND		11	1.0	ug/m3			05/12/15 05:41	1.75
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND		4.9	1.9	ug/m3			05/12/15 05:41	1.75
1,2-Dichlorobenzene	ND		4.2	1.4	ug/m3			05/12/15 05:41	1.75
1,3-Dichlorobenzene	ND		4.2	1.2	ug/m3			05/12/15 05:41	1.75
1,4-Dichlorobenzene	ND		4.2	1.6	ug/m3			05/12/15 05:41	1.75
Dichlorodifluoromethane	**2.7**	**J**	3.5	1.3	ug/m3			05/12/15 05:41	1.75
1,1-Dichloroethane	ND		2.1	0.51	ug/m3			05/12/15 05:41	1.75
1,2-Dichloroethane	ND		5.7	0.62	ug/m3			05/12/15 05:41	1.75
1,1-Dichloroethene	ND		5.6	0.90	ug/m3			05/12/15 05:41	1.75
cis-1,2-Dichloroethene	**4.3**		2.8	0.62	ug/m3			05/12/15 05:41	1.75
trans-1,2-Dichloroethene	**1.6**	**J**	2.8	0.69	ug/m3			05/12/15 05:41	1.75
1,2-Dichloropropane	ND		3.2	1.9	ug/m3			05/12/15 05:41	1.75
cis-1,3-Dichloropropene	ND		3.2	0.83	ug/m3			05/12/15 05:41	1.75
trans-1,3-Dichloropropene	ND		3.2	0.70	ug/m3			05/12/15 05:41	1.75
Ethylbenzene	**7.8**		3.0	0.48	ug/m3			05/12/15 05:41	1.75
4-Ethyltoluene	ND		3.4	1.6	ug/m3			05/12/15 05:41	1.75
Hexachlorobutadiene	ND		37	8.1	ug/m3			05/12/15 05:41	1.75
2-Hexanone	ND		2.9	0.62	ug/m3			05/12/15 05:41	1.75
4-Methyl-2-pentanone (MIBK)	ND		2.9	0.97	ug/m3			05/12/15 05:41	1.75
Methylene Chloride	**11**		2.4	0.44	ug/m3			05/12/15 05:41	1.75
Styrene	**0.51**	**J**	3.0	0.44	ug/m3			05/12/15 05:41	1.75
1,1,2,2-Tetrachloroethane	ND		4.8	0.83	ug/m3			05/12/15 05:41	1.75
Tetrachloroethene	**23**		4.7	0.61	ug/m3			05/12/15 05:41	1.75
Toluene	**9.4**		2.6	0.34	ug/m3			05/12/15 05:41	1.75
1,1,2-Trichloro-1,2,2-trifluoroetha ne	**14**		5.4	2.2	ug/m3			05/12/15 05:41	1.75
1,2,4-Trichlorobenzene	ND		26	5.6	ug/m3			05/12/15 05:41	1.75
1,1,1-Trichloroethane	**2.1**	**J**	2.9	0.62	ug/m3			05/12/15 05:41	1.75
1,1,2-Trichloroethane	ND		3.8	0.64	ug/m3			05/12/15 05:41	1.75
Trichloroethene	**250**		3.8	0.99	ug/m3			05/12/15 05:41	1.75

Client Sample ID: J6038-SS5-050615-1 — Lab Sample ID: 320-12924-1

Date Collected: 05/06/15 11:44
Matrix: Air
Date Received: 05/08/15 14:50
Sample Container: Summa Canister 1L

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Trichlorofluoromethane	**2.0**	**J**	3.9	1.9	ug/m3			05/12/15 05:41	1.75
1,2,4-Trimethylbenzene	**1.5**	**J**	6.9	1.4	ug/m3			05/12/15 05:41	1.75
1,3,5-Trimethylbenzene	ND		3.4	1.1	ug/m3			05/12/15 05:41	1.75
Vinyl acetate	ND		4.9	0.89	ug/m3			05/12/15 05:41	1.75
Vinyl chloride	ND		1.8	0.54	ug/m3			05/12/15 05:41	1.75
m,p-Xylene	**31**		6.1	0.76	ug/m3			05/12/15 05:41	1.75
o-Xylene	**11**		3.0	0.41	ug/m3			05/12/15 05:41	1.75

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*102*		*70 - 130*		*05/12/15 05:41*	*1.75*
1,2-Dichloroethane-d4 (Surr)	*119*		*70 - 130*		*05/12/15 05:41*	*1.75*
Toluene-d8 (Surr)	*96*		*70 - 130*		*05/12/15 05:41*	*1.75*

Client Sample ID: J6038-SS5-050615-2 — Lab Sample ID: 320-12924-2

Date Collected: 05/06/15 11:44
Matrix: Air
Date Received: 05/08/15 14:50
Sample Container: Summa Canister 1L

Method: TO-15 - Volatile Organic Compounds in Ambient Air

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**71**		18	0.64	ppb v/v			05/12/15 08:11	3.57
Benzene	**0.78**	**J**	1.4	0.28	ppb v/v			05/12/15 08:11	3.57
Benzyl chloride	ND		2.9	0.58	ppb v/v			05/12/15 08:11	3.57
Bromodichloromethane	ND		1.1	0.24	ppb v/v			05/12/15 08:11	3.57
Bromoform	ND		1.4	0.25	ppb v/v			05/12/15 08:11	3.57
Bromomethane	ND		2.9	1.2	ppb v/v			05/12/15 08:11	3.57
2-Butanone (MEK)	**5.9**		2.9	0.71	ppb v/v			05/12/15 08:11	3.57
Carbon disulfide	**0.70**	**J**	2.9	0.28	ppb v/v			05/12/15 08:11	3.57
Carbon tetrachloride	ND		2.9	0.23	ppb v/v			05/12/15 08:11	3.57
Chlorobenzene	ND		1.1	0.23	ppb v/v			05/12/15 08:11	3.57
Chloroethane	ND		2.9	1.1	ppb v/v			05/12/15 08:11	3.57
Chloroform	**0.53**	**J**	1.1	0.34	ppb v/v			05/12/15 08:11	3.57
Chloromethane	ND		2.9	0.70	ppb v/v			05/12/15 08:11	3.57
Dibromochloromethane	ND		1.4	0.28	ppb v/v			05/12/15 08:11	3.57
1,2-Dibromoethane (EDB)	ND		2.9	0.27	ppb v/v			05/12/15 08:11	3.57
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND		1.4	0.55	ppb v/v			05/12/15 08:11	3.57
1,2-Dichlorobenzene	ND		1.4	0.46	ppb v/v			05/12/15 08:11	3.57
1,3-Dichlorobenzene	ND		1.4	0.39	ppb v/v			05/12/15 08:11	3.57
1,4-Dichlorobenzene	ND		1.4	0.53	ppb v/v			05/12/15 08:11	3.57
Dichlorodifluoromethane	ND		1.4	0.52	ppb v/v			05/12/15 08:11	3.57
1,1-Dichloroethane	ND		1.1	0.26	ppb v/v			05/12/15 08:11	3.57
1,2-Dichloroethane	ND		2.9	0.31	ppb v/v			05/12/15 08:11	3.57
1,1-Dichloroethene	ND		2.9	0.46	ppb v/v			05/12/15 08:11	3.57
cis-1,2-Dichloroethene	ND		1.4	0.32	ppb v/v			05/12/15 08:11	3.57
trans-1,2-Dichloroethene	ND		1.4	0.36	ppb v/v			05/12/15 08:11	3.57
1,2-Dichloropropane	ND		1.4	0.86	ppb v/v			05/12/15 08:11	3.57
cis-1,3-Dichloropropene	ND		1.4	0.37	ppb v/v			05/12/15 08:11	3.57
trans-1,3-Dichloropropene	ND		1.4	0.31	ppb v/v			05/12/15 08:11	3.57
Ethylbenzene	**1.6**		1.4	0.22	ppb v/v			05/12/15 08:11	3.57

Client Sample ID: J6038-SS5-050615-2

Lab Sample ID: 320-12924-2

Date Collected: 05/06/15 11:44
Date Received: 05/08/15 14:50
Sample Container: Summa Canister 1L

Matrix: Air

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Ethyltoluene	ND		1.4	0.67	ppb v/v			05/12/15 08:11	3.57
Hexachlorobutadiene	ND		7.1	1.5	ppb v/v			05/12/15 08:11	3.57
2-Hexanone	**6.6**		1.4	0.31	ppb v/v			05/12/15 08:11	3.57
4-Methyl-2-pentanone (MIBK)	ND		1.4	0.48	ppb v/v			05/12/15 08:11	3.57
Methylene Chloride	**2.9**		1.4	0.26	ppb v/v			05/12/15 08:11	3.57
Styrene	ND		1.4	0.21	ppb v/v			05/12/15 08:11	3.57
1,1,2,2-Tetrachloroethane	ND		1.4	0.25	ppb v/v			05/12/15 08:11	3.57
Tetrachloroethene	**2.9**		1.4	0.18	ppb v/v			05/12/15 08:11	3.57
Toluene	**2.3**		1.4	0.18	ppb v/v			05/12/15 08:11	3.57
1,1,2-Trichloro-1,2,2-trifluoroethane	**1.6**		1.4	0.58	ppb v/v			05/12/15 08:11	3.57
1,2,4-Trichlorobenzene	ND		7.1	1.5	ppb v/v			05/12/15 08:11	3.57
1,1,1-Trichloroethane	**0.33**	**J**	1.1	0.23	ppb v/v			05/12/15 08:11	3.57
1,1,2-Trichloroethane	ND		1.4	0.24	ppb v/v			05/12/15 08:11	3.57
Trichloroethene	**39**		1.4	0.37	ppb v/v			05/12/15 08:11	3.57
Trichlorofluoromethane	ND		1.4	0.70	ppb v/v			05/12/15 08:11	3.57
1,2,4-Trimethylbenzene	ND		2.9	0.58	ppb v/v			05/12/15 08:11	3.57
1,3,5-Trimethylbenzene	ND		1.4	0.45	ppb v/v			05/12/15 08:11	3.57
Vinyl acetate	**0.73**	**J**	2.9	0.52	ppb v/v			05/12/15 08:11	3.57
Vinyl chloride	ND		1.4	0.43	ppb v/v			05/12/15 08:11	3.57
m,p-Xylene	**5.8**		2.9	0.36	ppb v/v			05/12/15 08:11	3.57
o-Xylene	**2.0**		1.4	0.19	ppb v/v			05/12/15 08:11	3.57

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**170**		42	1.5	ug/m3			05/12/15 08:11	3.57
Benzene	**2.5**	**J**	4.6	0.90	ug/m3			05/12/15 08:11	3.57
Benzyl chloride	ND		15	3.0	ug/m3			05/12/15 08:11	3.57
Bromodichloromethane	ND		7.2	1.6	ug/m3			05/12/15 08:11	3.57
Bromoform	ND		15	2.6	ug/m3			05/12/15 08:11	3.57
Bromomethane	ND		11	4.6	ug/m3			05/12/15 08:11	3.57
2-Butanone (MEK)	**17**		8.4	2.1	ug/m3			05/12/15 08:11	3.57
Carbon disulfide	**2.2**	**J**	8.9	0.87	ug/m3			05/12/15 08:11	3.57
Carbon tetrachloride	ND		18	1.4	ug/m3			05/12/15 08:11	3.57
Chlorobenzene	ND		4.9	1.1	ug/m3			05/12/15 08:11	3.57
Chloroethane	ND		7.5	2.9	ug/m3			05/12/15 08:11	3.57
Chloroform	**2.6**	**J**	5.2	1.7	ug/m3			05/12/15 08:11	3.57
Chloromethane	ND		5.9	1.5	ug/m3			05/12/15 08:11	3.57
Dibromochloromethane	ND		12	2.4	ug/m3			05/12/15 08:11	3.57
1,2-Dibromoethane (EDB)	ND		22	2.1	ug/m3			05/12/15 08:11	3.57
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND		10	3.9	ug/m3			05/12/15 08:11	3.57
1,2-Dichlorobenzene	ND		8.6	2.8	ug/m3			05/12/15 08:11	3.57
1,3-Dichlorobenzene	ND		8.6	2.4	ug/m3			05/12/15 08:11	3.57
1,4-Dichlorobenzene	ND		8.6	3.2	ug/m3			05/12/15 08:11	3.57
Dichlorodifluoromethane	ND		7.1	2.6	ug/m3			05/12/15 08:11	3.57
1,1-Dichloroethane	ND		4.3	1.0	ug/m3			05/12/15 08:11	3.57
1,2-Dichloroethane	ND		12	1.3	ug/m3			05/12/15 08:11	3.57
1,1-Dichloroethene	ND		11	1.8	ug/m3			05/12/15 08:11	3.57
cis-1,2-Dichloroethene	ND		5.7	1.3	ug/m3			05/12/15 08:11	3.57
trans-1,2-Dichloroethene	ND		5.7	1.4	ug/m3			05/12/15 08:11	3.57

Client Sample ID: J6038-SS5-050615-2

Lab Sample ID: 320-12924-2

Date Collected: 05/06/15 11:44
Matrix: Air
Date Received: 05/08/15 14:50
Sample Container: Summa Canister 1L

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichloropropane	ND		6.6	4.0	ug/m3			05/12/15 08:11	3.57
cis-1,3-Dichloropropene	ND		6.5	1.7	ug/m3			05/12/15 08:11	3.57
trans-1,3-Dichloropropene	ND		6.5	1.4	ug/m3			05/12/15 08:11	3.57
Ethylbenzene	**6.8**		6.2	0.98	ug/m3			05/12/15 08:11	3.57
4-Ethyltoluene	ND		7.0	3.3	ug/m3			05/12/15 08:11	3.57
Hexachlorobutadiene	ND		76	16	ug/m3			05/12/15 08:11	3.57
2-Hexanone	**27**		5.9	1.3	ug/m3			05/12/15 08:11	3.57
4-Methyl-2-pentanone (MIBK)	ND		5.8	2.0	ug/m3			05/12/15 08:11	3.57
Methylene Chloride	**10**		5.0	0.89	ug/m3			05/12/15 08:11	3.57
Styrene	ND		6.1	0.90	ug/m3			05/12/15 08:11	3.57
1,1,2,2-Tetrachloroethane	ND		9.8	1.7	ug/m3			05/12/15 08:11	3.57
Tetrachloroethene	**20**		9.7	1.2	ug/m3			05/12/15 08:11	3.57
Toluene	**8.8**		5.4	0.69	ug/m3			05/12/15 08:11	3.57
1,1,2-Trichloro-1,2,2-trifluoroetha ne	**12**		11	4.5	ug/m3			05/12/15 08:11	3.57
1,2,4-Trichlorobenzene	ND		53	11	ug/m3			05/12/15 08:11	3.57
1,1,1-Trichloroethane	**1.8**	**J**	5.8	1.3	ug/m3			05/12/15 08:11	3.57
1,1,2-Trichloroethane	ND		7.8	1.3	ug/m3			05/12/15 08:11	3.57
Trichloroethene	**210**		7.7	2.0	ug/m3			05/12/15 08:11	3.57
Trichlorofluoromethane	ND		8.0	3.9	ug/m3			05/12/15 08:11	3.57
1,2,4-Trimethylbenzene	ND		14	2.8	ug/m3			05/12/15 08:11	3.57
1,3,5-Trimethylbenzene	ND		7.0	2.2	ug/m3			05/12/15 08:11	3.57
Vinyl acetate	**2.6**	**J**	10	1.8	ug/m3			05/12/15 08:11	3.57
Vinyl chloride	ND		3.7	1.1	ug/m3			05/12/15 08:11	3.57
m,p-Xylene	**25**		12	1.6	ug/m3			05/12/15 08:11	3.57
o-Xylene	**8.6**		6.2	0.84	ug/m3			05/12/15 08:11	3.57

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*103*		*70 - 130*		*05/12/15 08:11*	*3.57*
1,2-Dichloroethane-d4 (Surr)	*117*		*70 - 130*		*05/12/15 08:11*	*3.57*
Toluene-d8 (Surr)	*97*		*70 - 130*		*05/12/15 08:11*	*3.57*

Client Sample ID: J6038-SS7-050615

Lab Sample ID: 320-12924-3

Date Collected: 05/06/15 12:52
Matrix: Air
Date Received: 05/08/15 14:50
Sample Container: Summa Canister 1L

Method: TO-15 - Volatile Organic Compounds in Ambient Air

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		90	3.2	ppb v/v			05/12/15 08:52	18
Benzene	ND		7.2	1.4	ppb v/v			05/12/15 08:52	18
Benzyl chloride	ND		14	2.9	ppb v/v			05/12/15 08:52	18
Bromodichloromethane	ND		5.4	1.2	ppb v/v			05/12/15 08:52	18
Bromoform	ND		7.2	1.3	ppb v/v			05/12/15 08:52	18
Bromomethane	ND		14	6.0	ppb v/v			05/12/15 08:52	18
2-Butanone (MEK)	ND		14	3.6	ppb v/v			05/12/15 08:52	18
Carbon disulfide	ND		14	1.4	ppb v/v			05/12/15 08:52	18
Carbon tetrachloride	ND		14	1.2	ppb v/v			05/12/15 08:52	18
Chlorobenzene	ND		5.4	1.2	ppb v/v			05/12/15 08:52	18

Client Sample ID: J6038-SS7-050615

Lab Sample ID: 320-12924-3

Date Collected: 05/06/15 12:52
Date Received: 05/08/15 14:50
Sample Container: Summa Canister 1L

Matrix: Air

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloroethane	ND		14	5.5	ppb v/v			05/12/15 08:52	18
Chloroform	ND		5.4	1.7	ppb v/v			05/12/15 08:52	18
Chloromethane	ND		14	3.5	ppb v/v			05/12/15 08:52	18
Dibromochloromethane	ND		7.2	1.4	ppb v/v			05/12/15 08:52	18
1,2-Dibromoethane (EDB)	ND		14	1.4	ppb v/v			05/12/15 08:52	18
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND		7.2	2.8	ppb v/v			05/12/15 08:52	18
1,2-Dichlorobenzene	ND		7.2	2.3	ppb v/v			05/12/15 08:52	18
1,3-Dichlorobenzene	ND		7.2	2.0	ppb v/v			05/12/15 08:52	18
1,4-Dichlorobenzene	ND		7.2	2.7	ppb v/v			05/12/15 08:52	18
Dichlorodifluoromethane	ND		7.2	2.6	ppb v/v			05/12/15 08:52	18
1,1-Dichloroethane	ND		5.4	1.3	ppb v/v			05/12/15 08:52	18
1,2-Dichloroethane	ND		14	1.6	ppb v/v			05/12/15 08:52	18
1,1-Dichloroethene	ND		14	2.3	ppb v/v			05/12/15 08:52	18
cis-1,2-Dichloroethene	ND		7.2	1.6	ppb v/v			05/12/15 08:52	18
trans-1,2-Dichloroethene	ND		7.2	1.8	ppb v/v			05/12/15 08:52	18
1,2-Dichloropropane	ND		7.2	4.3	ppb v/v			05/12/15 08:52	18
cis-1,3-Dichloropropene	ND		7.2	1.9	ppb v/v			05/12/15 08:52	18
trans-1,3-Dichloropropene	ND		7.2	1.6	ppb v/v			05/12/15 08:52	18
Ethylbenzene	ND		7.2	1.1	ppb v/v			05/12/15 08:52	18
4-Ethyltoluene	ND		7.2	3.4	ppb v/v			05/12/15 08:52	18
Hexachlorobutadiene	ND		36	7.8	ppb v/v			05/12/15 08:52	18
2-Hexanone	ND		7.2	1.6	ppb v/v			05/12/15 08:52	18
4-Methyl-2-pentanone (MIBK)	ND		7.2	2.4	ppb v/v			05/12/15 08:52	18
Methylene Chloride	ND		7.2	1.3	ppb v/v			05/12/15 08:52	18
Styrene	ND		7.2	1.1	ppb v/v			05/12/15 08:52	18
1,1,2,2-Tetrachloroethane	ND		7.2	1.2	ppb v/v			05/12/15 08:52	18
Tetrachloroethene	**43**		7.2	0.92	ppb v/v			05/12/15 08:52	18
Toluene	ND		7.2	0.92	ppb v/v			05/12/15 08:52	18
1,1,2-Trichloro-1,2,2-trifluoroethane	**17**		7.2	2.9	ppb v/v			05/12/15 08:52	18
1,2,4-Trichlorobenzene	ND		36	7.8	ppb v/v			05/12/15 08:52	18
1,1,1-Trichloroethane	**9.7**		5.4	1.2	ppb v/v			05/12/15 08:52	18
1,1,2-Trichloroethane	ND		7.2	1.2	ppb v/v			05/12/15 08:52	18
Trichloroethene	**380**		7.2	1.9	ppb v/v			05/12/15 08:52	18
Trichlorofluoromethane	ND		7.2	3.5	ppb v/v			05/12/15 08:52	18
1,2,4-Trimethylbenzene	ND		14	2.9	ppb v/v			05/12/15 08:52	18
1,3,5-Trimethylbenzene	ND		7.2	2.3	ppb v/v			05/12/15 08:52	18
Vinyl acetate	ND		14	2.6	ppb v/v			05/12/15 08:52	18
Vinyl chloride	ND		7.2	2.2	ppb v/v			05/12/15 08:52	18
m,p-Xylene	ND		14	1.8	ppb v/v			05/12/15 08:52	18
o-Xylene	ND		7.2	0.97	ppb v/v			05/12/15 08:52	18

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		210	7.6	ug/m3			05/12/15 08:52	18
Benzene	ND		23	4.5	ug/m3			05/12/15 08:52	18
Benzyl chloride	ND		75	15	ug/m3			05/12/15 08:52	18
Bromodichloromethane	ND		36	8.0	ug/m3			05/12/15 08:52	18
Bromoform	ND		74	13	ug/m3			05/12/15 08:52	18
Bromomethane	ND		56	23	ug/m3			05/12/15 08:52	18

Client Sample ID: J6038-SS7-050615

Lab Sample ID: 320-12924-3

Date Collected: 05/06/15 12:52
Matrix: Air
Date Received: 05/08/15 14:50
Sample Container: Summa Canister 1L

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Butanone (MEK)	ND		42	11	ug/m3			05/12/15 08:52	18
Carbon disulfide	ND		45	4.4	ug/m3			05/12/15 08:52	18
Carbon tetrachloride	ND		91	7.2	ug/m3			05/12/15 08:52	18
Chlorobenzene	ND		25	5.3	ug/m3			05/12/15 08:52	18
Chloroethane	ND		38	15	ug/m3			05/12/15 08:52	18
Chloroform	ND		26	8.3	ug/m3			05/12/15 08:52	18
Chloromethane	ND		30	7.3	ug/m3			05/12/15 08:52	18
Dibromochloromethane	ND		61	12	ug/m3			05/12/15 08:52	18
1,2-Dibromoethane (EDB)	ND		110	10	ug/m3			05/12/15 08:52	18
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND		50	20	ug/m3			05/12/15 08:52	18
1,2-Dichlorobenzene	ND		43	14	ug/m3			05/12/15 08:52	18
1,3-Dichlorobenzene	ND		43	12	ug/m3			05/12/15 08:52	18
1,4-Dichlorobenzene	ND		43	16	ug/m3			05/12/15 08:52	18
Dichlorodifluoromethane	ND		36	13	ug/m3			05/12/15 08:52	18
1,1-Dichloroethane	ND		22	5.2	ug/m3			05/12/15 08:52	18
1,2-Dichloroethane	ND		58	6.4	ug/m3			05/12/15 08:52	18
1,1-Dichloroethene	ND		57	9.2	ug/m3			05/12/15 08:52	18
cis-1,2-Dichloroethene	ND		29	6.4	ug/m3			05/12/15 08:52	18
trans-1,2-Dichloroethene	ND		29	7.1	ug/m3			05/12/15 08:52	18
1,2-Dichloropropane	ND		33	20	ug/m3			05/12/15 08:52	18
cis-1,3-Dichloropropene	ND		33	8.5	ug/m3			05/12/15 08:52	18
trans-1,3-Dichloropropene	ND		33	7.2	ug/m3			05/12/15 08:52	18
Ethylbenzene	ND		31	4.9	ug/m3			05/12/15 08:52	18
4-Ethyltoluene	ND		35	17	ug/m3			05/12/15 08:52	18
Hexachlorobutadiene	ND		380	83	ug/m3			05/12/15 08:52	18
2-Hexanone	ND		30	6.4	ug/m3			05/12/15 08:52	18
4-Methyl-2-pentanone (MIBK)	ND		29	10	ug/m3			05/12/15 08:52	18
Methylene Chloride	ND		25	4.5	ug/m3			05/12/15 08:52	18
Styrene	ND		31	4.5	ug/m3			05/12/15 08:52	18
1,1,2,2-Tetrachloroethane	ND		49	8.5	ug/m3			05/12/15 08:52	18
Tetrachloroethene	**290**		49	6.2	ug/m3			05/12/15 08:52	18
Toluene	ND		27	3.5	ug/m3			05/12/15 08:52	18
1,1,2-Trichloro-1,2,2-trifluoroethane	**130**		55	22	ug/m3			05/12/15 08:52	18
1,2,4-Trichlorobenzene	ND		270	58	ug/m3			05/12/15 08:52	18
1,1,1-Trichloroethane	**53**		29	6.4	ug/m3			05/12/15 08:52	18
1,1,2-Trichloroethane	ND		39	6.6	ug/m3			05/12/15 08:52	18
Trichloroethene	**2100**		39	10	ug/m3			05/12/15 08:52	18
Trichlorofluoromethane	ND		40	20	ug/m3			05/12/15 08:52	18
1,2,4-Trimethylbenzene	ND		71	14	ug/m3			05/12/15 08:52	18
1,3,5-Trimethylbenzene	ND		35	11	ug/m3			05/12/15 08:52	18
Vinyl acetate	ND		51	9.2	ug/m3			05/12/15 08:52	18
Vinyl chloride	ND		18	5.5	ug/m3			05/12/15 08:52	18
m,p-Xylene	ND		63	7.8	ug/m3			05/12/15 08:52	18
o-Xylene	ND		31	4.2	ug/m3			05/12/15 08:52	18

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*93*		*70 - 130*		*05/12/15 08:52*	*18*
1,2-Dichloroethane-d4 (Surr)	*115*		*70 - 130*		*05/12/15 08:52*	*18*

Client Sample ID: J6038-SS7-050615

Lab Sample ID: 320-12924-3

Date Collected: 05/06/15 12:52
Matrix: Air
Date Received: 05/08/15 14:50
Sample Container: Summa Canister 1L

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	94		70 - 130		05/12/15 08:52	18

Client Sample ID: J6038-SS11-050615

Lab Sample ID: 320-12924-4

Date Collected: 05/06/15 13:50
Matrix: Air
Date Received: 05/08/15 14:50
Sample Container: Summa Canister 1L

Method: TO-15 - Volatile Organic Compounds in Ambient Air

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**2.4**	**J**	5.1	0.18	ppb v/v			05/11/15 20:47	1.01
Benzene	ND		0.40	0.080	ppb v/v			05/11/15 20:47	1.01
Benzyl chloride	ND		0.81	0.16	ppb v/v			05/11/15 20:47	1.01
Bromodichloromethane	ND		0.30	0.067	ppb v/v			05/11/15 20:47	1.01
Bromoform	ND		0.40	0.071	ppb v/v			05/11/15 20:47	1.01
Bromomethane	ND		0.81	0.34	ppb v/v			05/11/15 20:47	1.01
2-Butanone (MEK)	ND		0.81	0.20	ppb v/v			05/11/15 20:47	1.01
Carbon disulfide	ND		0.81	0.079	ppb v/v			05/11/15 20:47	1.01
Carbon tetrachloride	**0.091**	**J**	0.81	0.065	ppb v/v			05/11/15 20:47	1.01
Chlorobenzene	ND		0.30	0.065	ppb v/v			05/11/15 20:47	1.01
Chloroethane	ND		0.81	0.31	ppb v/v			05/11/15 20:47	1.01
Chloroform	ND		0.30	0.096	ppb v/v			05/11/15 20:47	1.01
Chloromethane	ND		0.81	0.20	ppb v/v			05/11/15 20:47	1.01
Dibromochloromethane	ND		0.40	0.080	ppb v/v			05/11/15 20:47	1.01
1,2-Dibromoethane (EDB)	ND		0.81	0.076	ppb v/v			05/11/15 20:47	1.01
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND		0.40	0.16	ppb v/v			05/11/15 20:47	1.01
1,2-Dichlorobenzene	ND		0.40	0.13	ppb v/v			05/11/15 20:47	1.01
1,3-Dichlorobenzene	ND		0.40	0.11	ppb v/v			05/11/15 20:47	1.01
1,4-Dichlorobenzene	ND		0.40	0.15	ppb v/v			05/11/15 20:47	1.01
Dichlorodifluoromethane	**0.51**		0.40	0.15	ppb v/v			05/11/15 20:47	1.01
1,1-Dichloroethane	ND		0.30	0.073	ppb v/v			05/11/15 20:47	1.01
1,2-Dichloroethane	ND		0.81	0.089	ppb v/v			05/11/15 20:47	1.01
1,1-Dichloroethene	ND		0.81	0.13	ppb v/v			05/11/15 20:47	1.01
cis-1,2-Dichloroethene	ND		0.40	0.090	ppb v/v			05/11/15 20:47	1.01
trans-1,2-Dichloroethene	ND		0.40	0.10	ppb v/v			05/11/15 20:47	1.01
1,2-Dichloropropane	ND		0.40	0.24	ppb v/v			05/11/15 20:47	1.01
cis-1,3-Dichloropropene	ND		0.40	0.11	ppb v/v			05/11/15 20:47	1.01
trans-1,3-Dichloropropene	ND		0.40	0.089	ppb v/v			05/11/15 20:47	1.01
Ethylbenzene	ND		0.40	0.064	ppb v/v			05/11/15 20:47	1.01
4-Ethyltoluene	ND		0.40	0.19	ppb v/v			05/11/15 20:47	1.01
Hexachlorobutadiene	ND		2.0	0.44	ppb v/v			05/11/15 20:47	1.01
2-Hexanone	ND		0.40	0.088	ppb v/v			05/11/15 20:47	1.01
4-Methyl-2-pentanone (MIBK)	ND		0.40	0.14	ppb v/v			05/11/15 20:47	1.01
Methylene Chloride	**0.11**	**J**	0.40	0.073	ppb v/v			05/11/15 20:47	1.01
Styrene	ND		0.40	0.060	ppb v/v			05/11/15 20:47	1.01
1,1,2,2-Tetrachloroethane	ND		0.40	0.070	ppb v/v			05/11/15 20:47	1.01
Tetrachloroethene	**1.1**		0.40	0.052	ppb v/v			05/11/15 20:47	1.01
Toluene	**0.11**	**J**	0.40	0.052	ppb v/v			05/11/15 20:47	1.01

Client Sample ID: J6038-SS11-050615

Lab Sample ID: 320-12924-4

Date Collected: 05/06/15 13:50
Date Received: 05/08/15 14:50
Sample Container: Summa Canister 1L

Matrix: Air

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichloro-1,2,2-trifluoroethane	**0.28**	**J**	0.40	0.16	ppb v/v			05/11/15 20:47	1.01
1,2,4-Trichlorobenzene	ND		2.0	0.44	ppb v/v			05/11/15 20:47	1.01
1,1,1-Trichloroethane	**0.13**	**J**	0.30	0.066	ppb v/v			05/11/15 20:47	1.01
1,1,2-Trichloroethane	ND		0.40	0.068	ppb v/v			05/11/15 20:47	1.01
Trichloroethene	**8.8**		0.40	0.11	ppb v/v			05/11/15 20:47	1.01
Trichlorofluoromethane	**0.26**	**J**	0.40	0.20	ppb v/v			05/11/15 20:47	1.01
1,2,4-Trimethylbenzene	ND		0.81	0.16	ppb v/v			05/11/15 20:47	1.01
1,3,5-Trimethylbenzene	ND		0.40	0.13	ppb v/v			05/11/15 20:47	1.01
Vinyl acetate	ND		0.81	0.15	ppb v/v			05/11/15 20:47	1.01
Vinyl chloride	ND		0.40	0.12	ppb v/v			05/11/15 20:47	1.01
m,p-Xylene	ND		0.81	0.10	ppb v/v			05/11/15 20:47	1.01
o-Xylene	ND		0.40	0.055	ppb v/v			05/11/15 20:47	1.01

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**5.8**	**J**	12	0.43	ug/m3			05/11/15 20:47	1.01
Benzene	ND		1.3	0.25	ug/m3			05/11/15 20:47	1.01
Benzyl chloride	ND		4.2	0.85	ug/m3			05/11/15 20:47	1.01
Bromodichloromethane	ND		2.0	0.45	ug/m3			05/11/15 20:47	1.01
Bromoform	ND		4.2	0.73	ug/m3			05/11/15 20:47	1.01
Bromomethane	ND		3.1	1.3	ug/m3			05/11/15 20:47	1.01
2-Butanone (MEK)	ND		2.4	0.59	ug/m3			05/11/15 20:47	1.01
Carbon disulfide	ND		2.5	0.25	ug/m3			05/11/15 20:47	1.01
Carbon tetrachloride	**0.57**	**J**	5.1	0.41	ug/m3			05/11/15 20:47	1.01
Chlorobenzene	ND		1.4	0.30	ug/m3			05/11/15 20:47	1.01
Chloroethane	ND		2.1	0.82	ug/m3			05/11/15 20:47	1.01
Chloroform	ND		1.5	0.47	ug/m3			05/11/15 20:47	1.01
Chloromethane	ND		1.7	0.41	ug/m3			05/11/15 20:47	1.01
Dibromochloromethane	ND		3.4	0.68	ug/m3			05/11/15 20:47	1.01
1,2-Dibromoethane (EDB)	ND		6.2	0.58	ug/m3			05/11/15 20:47	1.01
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND		2.8	1.1	ug/m3			05/11/15 20:47	1.01
1,2-Dichlorobenzene	ND		2.4	0.79	ug/m3			05/11/15 20:47	1.01
1,3-Dichlorobenzene	ND		2.4	0.67	ug/m3			05/11/15 20:47	1.01
1,4-Dichlorobenzene	ND		2.4	0.90	ug/m3			05/11/15 20:47	1.01
Dichlorodifluoromethane	**2.5**		2.0	0.72	ug/m3			05/11/15 20:47	1.01
1,1-Dichloroethane	ND		1.2	0.29	ug/m3			05/11/15 20:47	1.01
1,2-Dichloroethane	ND		3.3	0.36	ug/m3			05/11/15 20:47	1.01
1,1-Dichloroethene	ND		3.2	0.52	ug/m3			05/11/15 20:47	1.01
cis-1,2-Dichloroethene	ND		1.6	0.36	ug/m3			05/11/15 20:47	1.01
trans-1,2-Dichloroethene	ND		1.6	0.40	ug/m3			05/11/15 20:47	1.01
1,2-Dichloropropane	ND		1.9	1.1	ug/m3			05/11/15 20:47	1.01
cis-1,3-Dichloropropene	ND		1.8	0.48	ug/m3			05/11/15 20:47	1.01
trans-1,3-Dichloropropene	ND		1.8	0.40	ug/m3			05/11/15 20:47	1.01
Ethylbenzene	ND		1.8	0.28	ug/m3			05/11/15 20:47	1.01
4-Ethyltoluene	ND		2.0	0.93	ug/m3			05/11/15 20:47	1.01
Hexachlorobutadiene	ND		22	4.7	ug/m3			05/11/15 20:47	1.01
2-Hexanone	ND		1.7	0.36	ug/m3			05/11/15 20:47	1.01
4-Methyl-2-pentanone (MIBK)	ND		1.7	0.56	ug/m3			05/11/15 20:47	1.01
Methylene Chloride	**0.37**	**J**	1.4	0.25	ug/m3			05/11/15 20:47	1.01

Client Sample ID: J6038-SS11-050615

Lab Sample ID: 320-12924-4

Date Collected: 05/06/15 13:50
Matrix: Air
Date Received: 05/08/15 14:50
Sample Container: Summa Canister 1L

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Styrene	ND		1.7	0.25	ug/m3			05/11/15 20:47	1.01
1,1,2,2-Tetrachloroethane	ND		2.8	0.48	ug/m3			05/11/15 20:47	1.01
Tetrachloroethene	**7.3**		2.7	0.35	ug/m3			05/11/15 20:47	1.01
Toluene	**0.40**	**J**	1.5	0.19	ug/m3			05/11/15 20:47	1.01
1,1,2-Trichloro-1,2,2-trifluoroethane	**2.2**	**J**	3.1	1.3	ug/m3			05/11/15 20:47	1.01
1,2,4-Trichlorobenzene	ND		15	3.2	ug/m3			05/11/15 20:47	1.01
1,1,1-Trichloroethane	**0.72**	**J**	1.7	0.36	ug/m3			05/11/15 20:47	1.01
1,1,2-Trichloroethane	ND		2.2	0.37	ug/m3			05/11/15 20:47	1.01
Trichloroethene	**47**		2.2	0.57	ug/m3			05/11/15 20:47	1.01
Trichlorofluoromethane	**1.4**	**J**	2.3	1.1	ug/m3			05/11/15 20:47	1.01
1,2,4-Trimethylbenzene	ND		4.0	0.80	ug/m3			05/11/15 20:47	1.01
1,3,5-Trimethylbenzene	ND		2.0	0.62	ug/m3			05/11/15 20:47	1.01
Vinyl acetate	ND		2.8	0.52	ug/m3			05/11/15 20:47	1.01
Vinyl chloride	ND		1.0	0.31	ug/m3			05/11/15 20:47	1.01
m,p-Xylene	ND		3.5	0.44	ug/m3			05/11/15 20:47	1.01
o-Xylene	ND		1.8	0.24	ug/m3			05/11/15 20:47	1.01

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*98*		*70 - 130*		*05/11/15 20:47*	*1.01*
1,2-Dichloroethane-d4 (Surr)	*113*		*70 - 130*		*05/11/15 20:47*	*1.01*
Toluene-d8 (Surr)	*94*		*70 - 130*		*05/11/15 20:47*	*1.01*

Client Sample ID: J6038-IA1-050615-1

Lab Sample ID: 320-12924-5

Date Collected: 05/06/15 17:58
Matrix: Air
Date Received: 05/08/15 14:50
Sample Container: Summa Canister 6L

Method: TO-15 SIM - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		0.020	0.0050	ppb v/v			05/11/15 21:47	1
1,1,2-Trichloroethane	ND		0.050	0.0050	ppb v/v			05/11/15 21:47	1
1,1-Dichloroethane	ND		0.020	0.0050	ppb v/v			05/11/15 21:47	1
1,1-Dichloroethene	ND		0.020	0.0050	ppb v/v			05/11/15 21:47	1
1,2-Dichlorobenzene	**0.016**	**J**	0.050	0.010	ppb v/v			05/11/15 21:47	1
1,2-Dichloroethane	**0.015**	**J**	0.020	0.0050	ppb v/v			05/11/15 21:47	1
1,4-Dichlorobenzene	ND		0.10	0.010	ppb v/v			05/11/15 21:47	1
Chlorobenzene	ND		0.020	0.010	ppb v/v			05/11/15 21:47	1
Chloroform	**0.024**		0.020	0.0050	ppb v/v			05/11/15 21:47	1
cis-1,2-Dichloroethene	**0.0059**	**J**	0.020	0.0050	ppb v/v			05/11/15 21:47	1
Ethylbenzene	**0.11**		0.020	0.010	ppb v/v			05/11/15 21:47	1
Freon 11	**0.21**		0.045	0.010	ppb v/v			05/11/15 21:47	1
Freon 113	**0.063**		0.030	0.0050	ppb v/v			05/11/15 21:47	1
Freon 12	**0.46**		0.020	0.0050	ppb v/v			05/11/15 21:47	1
m,p-Xylene	**0.45**		0.040	0.020	ppb v/v			05/11/15 21:47	1
Methylene Chloride	**1.0**		0.20	0.10	ppb v/v			05/11/15 21:47	1
o-Xylene	**0.19**		0.020	0.010	ppb v/v			05/11/15 21:47	1
Tetrachloroethene	**0.013**	**J**	0.020	0.010	ppb v/v			05/11/15 21:47	1
Toluene	**1.3**		0.020	0.010	ppb v/v			05/11/15 21:47	1

Client Sample ID: J6038-IA1-050615-1

Lab Sample ID: 320-12924-5

Date Collected: 05/06/15 17:58
Matrix: Air
Date Received: 05/08/15 14:50
Sample Container: Summa Canister 6L

Method: TO-15 SIM - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,2-Dichloroethene	ND		0.020	0.0050	ppb v/v			05/11/15 21:47	1
Trichloroethene	**0.093**		0.020	0.0050	ppb v/v			05/11/15 21:47	1
Vinyl chloride	ND		0.020	0.010	ppb v/v			05/11/15 21:47	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		0.11	0.027	ug/m3			05/11/15 21:47	1
1,1,2-Trichloroethane	ND		0.27	0.027	ug/m3			05/11/15 21:47	1
1,1-Dichloroethane	ND		0.081	0.020	ug/m3			05/11/15 21:47	1
1,1-Dichloroethene	ND		0.079	0.020	ug/m3			05/11/15 21:47	1
1,2-Dichlorobenzene	**0.094**	**J**	0.30	0.060	ug/m3			05/11/15 21:47	1
1,2-Dichloroethane	**0.059**	**J**	0.081	0.020	ug/m3			05/11/15 21:47	1
1,4-Dichlorobenzene	ND		0.60	0.060	ug/m3			05/11/15 21:47	1
Chlorobenzene	ND		0.092	0.046	ug/m3			05/11/15 21:47	1
Chloroform	**0.12**		0.098	0.024	ug/m3			05/11/15 21:47	1
cis-1,2-Dichloroethene	**0.023**	**J**	0.079	0.020	ug/m3			05/11/15 21:47	1
Ethylbenzene	**0.49**		0.087	0.043	ug/m3			05/11/15 21:47	1
Freon 11	**1.2**		0.25	0.056	ug/m3			05/11/15 21:47	1
Freon 113	**0.48**		0.23	0.038	ug/m3			05/11/15 21:47	1
Freon 12	**2.3**		0.099	0.025	ug/m3			05/11/15 21:47	1
m,p-Xylene	**2.0**		0.17	0.087	ug/m3			05/11/15 21:47	1
Methylene Chloride	**3.6**		0.69	0.35	ug/m3			05/11/15 21:47	1
o-Xylene	**0.81**		0.087	0.043	ug/m3			05/11/15 21:47	1
Tetrachloroethene	**0.090**	**J**	0.14	0.068	ug/m3			05/11/15 21:47	1
Toluene	**5.0**		0.075	0.038	ug/m3			05/11/15 21:47	1
trans-1,2-Dichloroethene	ND		0.079	0.020	ug/m3			05/11/15 21:47	1
Trichloroethene	**0.50**		0.11	0.027	ug/m3			05/11/15 21:47	1
Vinyl chloride	ND		0.051	0.026	ug/m3			05/11/15 21:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*104*		*70 - 130*		*05/11/15 21:47*	*1*
1,2-Dichloroethane-d4 (Surr)	*97*		*70 - 130*		*05/11/15 21:47*	*1*
Toluene-d8 (Surr)	*100*		*70 - 130*		*05/11/15 21:47*	*1*

Client Sample ID: J6038-IA1-050615-2

Lab Sample ID: 320-12924-6

Date Collected: 05/06/15 17:58
Matrix: Air
Date Received: 05/08/15 14:50
Sample Container: Summa Canister 6L

Method: TO-15 SIM - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		0.020	0.0050	ppb v/v			05/11/15 22:45	1
1,1,2-Trichloroethane	ND		0.050	0.0050	ppb v/v			05/11/15 22:45	1
1,1-Dichloroethane	ND		0.020	0.0050	ppb v/v			05/11/15 22:45	1
1,1-Dichloroethene	ND		0.020	0.0050	ppb v/v			05/11/15 22:45	1
1,2-Dichlorobenzene	**0.016**	**J**	0.050	0.010	ppb v/v			05/11/15 22:45	1
1,2-Dichloroethane	**0.016**	**J**	0.020	0.0050	ppb v/v			05/11/15 22:45	1
1,4-Dichlorobenzene	ND		0.10	0.010	ppb v/v			05/11/15 22:45	1
Chlorobenzene	ND		0.020	0.010	ppb v/v			05/11/15 22:45	1
Chloroform	**0.024**		0.020	0.0050	ppb v/v			05/11/15 22:45	1
cis-1,2-Dichloroethene	**0.0065**	**J**	0.020	0.0050	ppb v/v			05/11/15 22:45	1

Client Sample ID: J6038-IA1-050615-2

Lab Sample ID: 320-12924-6

Date Collected: 05/06/15 17:58
Matrix: Air
Date Received: 05/08/15 14:50
Sample Container: Summa Canister 6L

Method: TO-15 SIM - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylbenzene	**0.12**		0.020	0.010	ppb v/v			05/11/15 22:45	1
Freon 11	**0.21**		0.045	0.010	ppb v/v			05/11/15 22:45	1
Freon 113	**0.065**		0.030	0.0050	ppb v/v			05/11/15 22:45	1
Freon 12	**0.42**		0.020	0.0050	ppb v/v			05/11/15 22:45	1
m,p-Xylene	**0.47**		0.040	0.020	ppb v/v			05/11/15 22:45	1
Methylene Chloride	**1.1**		0.20	0.10	ppb v/v			05/11/15 22:45	1
o-Xylene	**0.19**		0.020	0.010	ppb v/v			05/11/15 22:45	1
Tetrachloroethene	**0.012**	**J**	0.020	0.010	ppb v/v			05/11/15 22:45	1
Toluene	**1.4**		0.020	0.010	ppb v/v			05/11/15 22:45	1
trans-1,2-Dichloroethene	ND		0.020	0.0050	ppb v/v			05/11/15 22:45	1
Trichloroethene	**0.095**		0.020	0.0050	ppb v/v			05/11/15 22:45	1
Vinyl chloride	ND		0.020	0.010	ppb v/v			05/11/15 22:45	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		0.11	0.027	ug/m3			05/11/15 22:45	1
1,1,2-Trichloroethane	ND		0.27	0.027	ug/m3			05/11/15 22:45	1
1,1-Dichloroethane	ND		0.081	0.020	ug/m3			05/11/15 22:45	1
1,1-Dichloroethene	ND		0.079	0.020	ug/m3			05/11/15 22:45	1
1,2-Dichlorobenzene	**0.095**	**J**	0.30	0.060	ug/m3			05/11/15 22:45	1
1,2-Dichloroethane	**0.064**	**J**	0.081	0.020	ug/m3			05/11/15 22:45	1
1,4-Dichlorobenzene	ND		0.60	0.060	ug/m3			05/11/15 22:45	1
Chlorobenzene	ND		0.092	0.046	ug/m3			05/11/15 22:45	1
Chloroform	**0.12**		0.098	0.024	ug/m3			05/11/15 22:45	1
cis-1,2-Dichloroethene	**0.026**	**J**	0.079	0.020	ug/m3			05/11/15 22:45	1
Ethylbenzene	**0.51**		0.087	0.043	ug/m3			05/11/15 22:45	1
Freon 11	**1.2**		0.25	0.056	ug/m3			05/11/15 22:45	1
Freon 113	**0.50**		0.23	0.038	ug/m3			05/11/15 22:45	1
Freon 12	**2.1**		0.099	0.025	ug/m3			05/11/15 22:45	1
m,p-Xylene	**2.0**		0.17	0.087	ug/m3			05/11/15 22:45	1
Methylene Chloride	**3.7**		0.69	0.35	ug/m3			05/11/15 22:45	1
o-Xylene	**0.84**		0.087	0.043	ug/m3			05/11/15 22:45	1
Tetrachloroethene	**0.080**	**J**	0.14	0.068	ug/m3			05/11/15 22:45	1
Toluene	**5.3**		0.075	0.038	ug/m3			05/11/15 22:45	1
trans-1,2-Dichloroethene	ND		0.079	0.020	ug/m3			05/11/15 22:45	1
Trichloroethene	**0.51**		0.11	0.027	ug/m3			05/11/15 22:45	1
Vinyl chloride	ND		0.051	0.026	ug/m3			05/11/15 22:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*105*		*70 - 130*		*05/11/15 22:45*	*1*
1,2-Dichloroethane-d4 (Surr)	*96*		*70 - 130*		*05/11/15 22:45*	*1*
Toluene-d8 (Surr)	*101*		*70 - 130*		*05/11/15 22:45*	*1*

Client Sample ID: J6038-IA2-050615

Lab Sample ID: 320-12924-7

Date Collected: 05/06/15 18:16
Matrix: Air
Date Received: 05/08/15 14:50
Sample Container: Summa Canister 6L

Method: TO-15 SIM - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		0.020	0.0050	ppb v/v			05/11/15 23:44	1

Client Sample ID: J6038-IA2-050615

Lab Sample ID: 320-12924-7

Date Collected: 05/06/15 18:16
Date Received: 05/08/15 14:50
Sample Container: Summa Canister 6L

Matrix: Air

Method: TO-15 SIM - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichloroethane	ND		0.050	0.0050	ppb v/v			05/11/15 23:44	1
1,1-Dichloroethane	ND		0.020	0.0050	ppb v/v			05/11/15 23:44	1
1,1-Dichloroethene	ND		0.020	0.0050	ppb v/v			05/11/15 23:44	1
1,2-Dichlorobenzene	**0.016**	**J**	0.050	0.010	ppb v/v			05/11/15 23:44	1
1,2-Dichloroethane	**0.014**	**J**	0.020	0.0050	ppb v/v			05/11/15 23:44	1
1,4-Dichlorobenzene	ND		0.10	0.010	ppb v/v			05/11/15 23:44	1
Chlorobenzene	ND		0.020	0.010	ppb v/v			05/11/15 23:44	1
Chloroform	**0.024**		0.020	0.0050	ppb v/v			05/11/15 23:44	1
cis-1,2-Dichloroethene	**0.0062**	**J**	0.020	0.0050	ppb v/v			05/11/15 23:44	1
Ethylbenzene	**0.10**		0.020	0.010	ppb v/v			05/11/15 23:44	1
Freon 11	**0.21**		0.045	0.010	ppb v/v			05/11/15 23:44	1
Freon 113	**0.064**		0.030	0.0050	ppb v/v			05/11/15 23:44	1
Freon 12	**0.45**		0.020	0.0050	ppb v/v			05/11/15 23:44	1
m,p-Xylene	**0.41**		0.040	0.020	ppb v/v			05/11/15 23:44	1
Methylene Chloride	**0.64**		0.20	0.10	ppb v/v			05/11/15 23:44	1
o-Xylene	**0.17**		0.020	0.010	ppb v/v			05/11/15 23:44	1
Tetrachloroethene	**0.012**	**J**	0.020	0.010	ppb v/v			05/11/15 23:44	1
Toluene	**1.5**		0.020	0.010	ppb v/v			05/11/15 23:44	1
trans-1,2-Dichloroethene	ND		0.020	0.0050	ppb v/v			05/11/15 23:44	1
Trichloroethene	**0.092**		0.020	0.0050	ppb v/v			05/11/15 23:44	1
Vinyl chloride	ND		0.020	0.010	ppb v/v			05/11/15 23:44	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		0.11	0.027	ug/m3			05/11/15 23:44	1
1,1,2-Trichloroethane	ND		0.27	0.027	ug/m3			05/11/15 23:44	1
1,1-Dichloroethane	ND		0.081	0.020	ug/m3			05/11/15 23:44	1
1,1-Dichloroethene	ND		0.079	0.020	ug/m3			05/11/15 23:44	1
1,2-Dichlorobenzene	**0.095**	**J**	0.30	0.060	ug/m3			05/11/15 23:44	1
1,2-Dichloroethane	**0.058**	**J**	0.081	0.020	ug/m3			05/11/15 23:44	1
1,4-Dichlorobenzene	ND		0.60	0.060	ug/m3			05/11/15 23:44	1
Chlorobenzene	ND		0.092	0.046	ug/m3			05/11/15 23:44	1
Chloroform	**0.12**		0.098	0.024	ug/m3			05/11/15 23:44	1
cis-1,2-Dichloroethene	**0.024**	**J**	0.079	0.020	ug/m3			05/11/15 23:44	1
Ethylbenzene	**0.45**		0.087	0.043	ug/m3			05/11/15 23:44	1
Freon 11	**1.2**		0.25	0.056	ug/m3			05/11/15 23:44	1
Freon 113	**0.49**		0.23	0.038	ug/m3			05/11/15 23:44	1
Freon 12	**2.2**		0.099	0.025	ug/m3			05/11/15 23:44	1
m,p-Xylene	**1.8**		0.17	0.087	ug/m3			05/11/15 23:44	1
Methylene Chloride	**2.2**		0.69	0.35	ug/m3			05/11/15 23:44	1
o-Xylene	**0.74**		0.087	0.043	ug/m3			05/11/15 23:44	1
Tetrachloroethene	**0.082**	**J**	0.14	0.068	ug/m3			05/11/15 23:44	1
Toluene	**5.6**		0.075	0.038	ug/m3			05/11/15 23:44	1
trans-1,2-Dichloroethene	ND		0.079	0.020	ug/m3			05/11/15 23:44	1
Trichloroethene	**0.50**		0.11	0.027	ug/m3			05/11/15 23:44	1
Vinyl chloride	ND		0.051	0.026	ug/m3			05/11/15 23:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*103*		*70 - 130*		*05/11/15 23:44*	*1*
1,2-Dichloroethane-d4 (Surr)	*95*		*70 - 130*		*05/11/15 23:44*	*1*

Client Sample ID: J6038-IA2-050615

Lab Sample ID: 320-12924-7

Date Collected: 05/06/15 18:16
Matrix: Air
Date Received: 05/08/15 14:50
Sample Container: Summa Canister 6L

Method: TO-15 SIM - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	100		70 - 130		05/11/15 23:44	1

Client Sample ID: J6038-IA3-050615

Lab Sample ID: 320-12924-8

Date Collected: 05/06/15 18:21
Matrix: Air
Date Received: 05/08/15 14:50
Sample Container: Summa Canister 6L

Method: TO-15 SIM - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		0.020	0.0050	ppb v/v			05/12/15 00:42	1
1,1,2-Trichloroethane	ND		0.050	0.0050	ppb v/v			05/12/15 00:42	1
1,1-Dichloroethane	ND		0.020	0.0050	ppb v/v			05/12/15 00:42	1
1,1-Dichloroethene	ND		0.020	0.0050	ppb v/v			05/12/15 00:42	1
1,2-Dichlorobenzene	ND		0.050	0.010	ppb v/v			05/12/15 00:42	1
1,2-Dichloroethane	**0.014**	**J**	0.020	0.0050	ppb v/v			05/12/15 00:42	1
1,4-Dichlorobenzene	ND		0.10	0.010	ppb v/v			05/12/15 00:42	1
Chlorobenzene	ND		0.020	0.010	ppb v/v			05/12/15 00:42	1
Chloroform	**0.020**		0.020	0.0050	ppb v/v			05/12/15 00:42	1
cis-1,2-Dichloroethene	ND		0.020	0.0050	ppb v/v			05/12/15 00:42	1
Ethylbenzene	**0.092**		0.020	0.010	ppb v/v			05/12/15 00:42	1
Freon 11	**0.21**		0.045	0.010	ppb v/v			05/12/15 00:42	1
Freon 113	**0.059**		0.030	0.0050	ppb v/v			05/12/15 00:42	1
Freon 12	**0.33**		0.020	0.0050	ppb v/v			05/12/15 00:42	1
m,p-Xylene	**0.35**		0.040	0.020	ppb v/v			05/12/15 00:42	1
Methylene Chloride	**0.22**		0.20	0.10	ppb v/v			05/12/15 00:42	1
o-Xylene	**0.15**		0.020	0.010	ppb v/v			05/12/15 00:42	1
Tetrachloroethene	ND		0.020	0.010	ppb v/v			05/12/15 00:42	1
Toluene	**2.1**		0.020	0.010	ppb v/v			05/12/15 00:42	1
trans-1,2-Dichloroethene	ND		0.020	0.0050	ppb v/v			05/12/15 00:42	1
Trichloroethene	**0.038**		0.020	0.0050	ppb v/v			05/12/15 00:42	1
Vinyl chloride	ND		0.020	0.010	ppb v/v			05/12/15 00:42	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		0.11	0.027	ug/m3			05/12/15 00:42	1
1,1,2-Trichloroethane	ND		0.27	0.027	ug/m3			05/12/15 00:42	1
1,1-Dichloroethane	ND		0.081	0.020	ug/m3			05/12/15 00:42	1
1,1-Dichloroethene	ND		0.079	0.020	ug/m3			05/12/15 00:42	1
1,2-Dichlorobenzene	ND		0.30	0.060	ug/m3			05/12/15 00:42	1
1,2-Dichloroethane	**0.056**	**J**	0.081	0.020	ug/m3			05/12/15 00:42	1
1,4-Dichlorobenzene	ND		0.60	0.060	ug/m3			05/12/15 00:42	1
Chlorobenzene	ND		0.092	0.046	ug/m3			05/12/15 00:42	1
Chloroform	**0.10**		0.098	0.024	ug/m3			05/12/15 00:42	1
cis-1,2-Dichloroethene	ND		0.079	0.020	ug/m3			05/12/15 00:42	1
Ethylbenzene	**0.40**		0.087	0.043	ug/m3			05/12/15 00:42	1
Freon 11	**1.2**		0.25	0.056	ug/m3			05/12/15 00:42	1
Freon 113	**0.45**		0.23	0.038	ug/m3			05/12/15 00:42	1
Freon 12	**1.6**		0.099	0.025	ug/m3			05/12/15 00:42	1
m,p-Xylene	**1.5**		0.17	0.087	ug/m3			05/12/15 00:42	1
Methylene Chloride	**0.76**		0.69	0.35	ug/m3			05/12/15 00:42	1

Client Sample ID: J6038-IA3-050615 — Lab Sample ID: 320-12924-8

Date Collected: 05/06/15 18:21 — **Matrix: Air**
Date Received: 05/08/15 14:50
Sample Container: Summa Canister 6L

Method: TO-15 SIM - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
o-Xylene	**0.66**		0.087	0.043	ug/m3			05/12/15 00:42	1
Tetrachloroethene	ND		0.14	0.068	ug/m3			05/12/15 00:42	1
Toluene	**7.9**		0.075	0.038	ug/m3			05/12/15 00:42	1
trans-1,2-Dichloroethene	ND		0.079	0.020	ug/m3			05/12/15 00:42	1
Trichloroethene	**0.20**		0.11	0.027	ug/m3			05/12/15 00:42	1
Vinyl chloride	ND		0.051	0.026	ug/m3			05/12/15 00:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*105*		*70 - 130*		*05/12/15 00:42*	*1*
1,2-Dichloroethane-d4 (Surr)	*95*		*70 - 130*		*05/12/15 00:42*	*1*
Toluene-d8 (Surr)	*100*		*70 - 130*		*05/12/15 00:42*	*1*

Client Sample ID: J6038-IA4-050615 — Lab Sample ID: 320-12924-9

Date Collected: 05/06/15 18:08 — **Matrix: Air**
Date Received: 05/08/15 14:50
Sample Container: Summa Canister 6L

Method: TO-15 SIM - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		0.020	0.0050	ppb v/v			05/12/15 01:40	1
1,1,2-Trichloroethane	ND		0.050	0.0050	ppb v/v			05/12/15 01:40	1
1,1-Dichloroethane	ND		0.020	0.0050	ppb v/v			05/12/15 01:40	1
1,1-Dichloroethene	ND		0.020	0.0050	ppb v/v			05/12/15 01:40	1
1,2-Dichlorobenzene	**0.015**	**J**	0.050	0.010	ppb v/v			05/12/15 01:40	1
1,2-Dichloroethane	**0.014**	**J**	0.020	0.0050	ppb v/v			05/12/15 01:40	1
1,4-Dichlorobenzene	ND		0.10	0.010	ppb v/v			05/12/15 01:40	1
Chlorobenzene	ND		0.020	0.010	ppb v/v			05/12/15 01:40	1
Chloroform	**0.023**		0.020	0.0050	ppb v/v			05/12/15 01:40	1
cis-1,2-Dichloroethene	**0.0069**	**J**	0.020	0.0050	ppb v/v			05/12/15 01:40	1
Ethylbenzene	**0.13**		0.020	0.010	ppb v/v			05/12/15 01:40	1
Freon 11	**0.20**		0.045	0.010	ppb v/v			05/12/15 01:40	1
Freon 113	**0.062**		0.030	0.0050	ppb v/v			05/12/15 01:40	1
Freon 12	**0.43**		0.020	0.0050	ppb v/v			05/12/15 01:40	1
m,p-Xylene	**0.52**		0.040	0.020	ppb v/v			05/12/15 01:40	1
Methylene Chloride	**1.3**		0.20	0.10	ppb v/v			05/12/15 01:40	1
o-Xylene	**0.21**		0.020	0.010	ppb v/v			05/12/15 01:40	1
Tetrachloroethene	**0.012**	**J**	0.020	0.010	ppb v/v			05/12/15 01:40	1
Toluene	**1.4**		0.020	0.010	ppb v/v			05/12/15 01:40	1
trans-1,2-Dichloroethene	ND		0.020	0.0050	ppb v/v			05/12/15 01:40	1
Trichloroethene	**0.10**		0.020	0.0050	ppb v/v			05/12/15 01:40	1
Vinyl chloride	ND		0.020	0.010	ppb v/v			05/12/15 01:40	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		0.11	0.027	ug/m3			05/12/15 01:40	1
1,1,2-Trichloroethane	ND		0.27	0.027	ug/m3			05/12/15 01:40	1
1,1-Dichloroethane	ND		0.081	0.020	ug/m3			05/12/15 01:40	1
1,1-Dichloroethene	ND		0.079	0.020	ug/m3			05/12/15 01:40	1
1,2-Dichlorobenzene	**0.088**	**J**	0.30	0.060	ug/m3			05/12/15 01:40	1
1,2-Dichloroethane	**0.058**	**J**	0.081	0.020	ug/m3			05/12/15 01:40	1
1,4-Dichlorobenzene	ND		0.60	0.060	ug/m3			05/12/15 01:40	1

Client Sample ID: J6038-IA4-050615

Lab Sample ID: 320-12924-9

Date Collected: 05/06/15 18:08
Matrix: Air
Date Received: 05/08/15 14:50
Sample Container: Summa Canister 6L

Method: TO-15 SIM - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chlorobenzene	ND		0.092	0.046	ug/m3			05/12/15 01:40	1
Chloroform	**0.11**		0.098	0.024	ug/m3			05/12/15 01:40	1
cis-1,2-Dichloroethene	**0.028**	**J**	0.079	0.020	ug/m3			05/12/15 01:40	1
Ethylbenzene	**0.56**		0.087	0.043	ug/m3			05/12/15 01:40	1
Freon 11	**1.1**		0.25	0.056	ug/m3			05/12/15 01:40	1
Freon 113	**0.47**		0.23	0.038	ug/m3			05/12/15 01:40	1
Freon 12	**2.1**		0.099	0.025	ug/m3			05/12/15 01:40	1
m,p-Xylene	**2.3**		0.17	0.087	ug/m3			05/12/15 01:40	1
Methylene Chloride	**4.5**		0.69	0.35	ug/m3			05/12/15 01:40	1
o-Xylene	**0.90**		0.087	0.043	ug/m3			05/12/15 01:40	1
Tetrachloroethene	**0.080**	**J**	0.14	0.068	ug/m3			05/12/15 01:40	1
Toluene	**5.1**		0.075	0.038	ug/m3			05/12/15 01:40	1
trans-1,2-Dichloroethene	ND		0.079	0.020	ug/m3			05/12/15 01:40	1
Trichloroethene	**0.54**		0.11	0.027	ug/m3			05/12/15 01:40	1
Vinyl chloride	ND		0.051	0.026	ug/m3			05/12/15 01:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*104*		*70 - 130*		*05/12/15 01:40*	*1*
1,2-Dichloroethane-d4 (Surr)	*96*		*70 - 130*		*05/12/15 01:40*	*1*
Toluene-d8 (Surr)	*100*		*70 - 130*		*05/12/15 01:40*	*1*

Client Sample ID: J6038-IA5-050615

Lab Sample ID: 320-12924-10

Date Collected: 05/06/15 19:12
Matrix: Air
Date Received: 05/08/15 14:50
Sample Container: Summa Canister 6L

Method: TO-15 SIM - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		0.020	0.0050	ppb v/v			05/12/15 02:39	1
1,1,2-Trichloroethane	ND		0.050	0.0050	ppb v/v			05/12/15 02:39	1
1,1-Dichloroethane	ND		0.020	0.0050	ppb v/v			05/12/15 02:39	1
1,1-Dichloroethene	ND		0.020	0.0050	ppb v/v			05/12/15 02:39	1
1,2-Dichlorobenzene	**0.017**	**J**	0.050	0.010	ppb v/v			05/12/15 02:39	1
1,2-Dichloroethane	**0.014**	**J**	0.020	0.0050	ppb v/v			05/12/15 02:39	1
1,4-Dichlorobenzene	ND		0.10	0.010	ppb v/v			05/12/15 02:39	1
Chlorobenzene	ND		0.020	0.010	ppb v/v			05/12/15 02:39	1
Chloroform	**0.023**		0.020	0.0050	ppb v/v			05/12/15 02:39	1
cis-1,2-Dichloroethene	**0.0067**	**J**	0.020	0.0050	ppb v/v			05/12/15 02:39	1
Ethylbenzene	**0.14**		0.020	0.010	ppb v/v			05/12/15 02:39	1
Freon 11	**0.21**		0.045	0.010	ppb v/v			05/12/15 02:39	1
Freon 113	**0.063**		0.030	0.0050	ppb v/v			05/12/15 02:39	1
Freon 12	**0.45**		0.020	0.0050	ppb v/v			05/12/15 02:39	1
m,p-Xylene	**0.56**		0.040	0.020	ppb v/v			05/12/15 02:39	1
Methylene Chloride	**1.4**		0.20	0.10	ppb v/v			05/12/15 02:39	1
o-Xylene	**0.22**		0.020	0.010	ppb v/v			05/12/15 02:39	1
Tetrachloroethene	**0.013**	**J**	0.020	0.010	ppb v/v			05/12/15 02:39	1
Toluene	**1.3**		0.020	0.010	ppb v/v			05/12/15 02:39	1
trans-1,2-Dichloroethene	ND		0.020	0.0050	ppb v/v			05/12/15 02:39	1
Trichloroethene	**0.11**		0.020	0.0050	ppb v/v			05/12/15 02:39	1

Client Sample ID: J6038-IA5-050615

Lab Sample ID: 320-12924-10

Date Collected: 05/06/15 19:12
Matrix: Air
Date Received: 05/08/15 14:50
Sample Container: Summa Canister 6L

Method: TO-15 SIM - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Vinyl chloride	ND		0.020	0.010	ppb v/v			05/12/15 02:39	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		0.11	0.027	ug/m3			05/12/15 02:39	1
1,1,2-Trichloroethane	ND		0.27	0.027	ug/m3			05/12/15 02:39	1
1,1-Dichloroethane	ND		0.081	0.020	ug/m3			05/12/15 02:39	1
1,1-Dichloroethene	ND		0.079	0.020	ug/m3			05/12/15 02:39	1
1,2-Dichlorobenzene	**0.10**	**J**	0.30	0.060	ug/m3			05/12/15 02:39	1
1,2-Dichloroethane	**0.057**	**J**	0.081	0.020	ug/m3			05/12/15 02:39	1
1,4-Dichlorobenzene	ND		0.60	0.060	ug/m3			05/12/15 02:39	1
Chlorobenzene	ND		0.092	0.046	ug/m3			05/12/15 02:39	1
Chloroform	**0.11**		0.098	0.024	ug/m3			05/12/15 02:39	1
cis-1,2-Dichloroethene	**0.026**	**J**	0.079	0.020	ug/m3			05/12/15 02:39	1
Ethylbenzene	**0.59**		0.087	0.043	ug/m3			05/12/15 02:39	1
Freon 11	**1.2**		0.25	0.056	ug/m3			05/12/15 02:39	1
Freon 113	**0.48**		0.23	0.038	ug/m3			05/12/15 02:39	1
Freon 12	**2.2**		0.099	0.025	ug/m3			05/12/15 02:39	1
m,p-Xylene	**2.4**		0.17	0.087	ug/m3			05/12/15 02:39	1
Methylene Chloride	**5.0**		0.69	0.35	ug/m3			05/12/15 02:39	1
o-Xylene	**0.97**		0.087	0.043	ug/m3			05/12/15 02:39	1
Tetrachloroethene	**0.086**	**J**	0.14	0.068	ug/m3			05/12/15 02:39	1
Toluene	**5.1**		0.075	0.038	ug/m3			05/12/15 02:39	1
trans-1,2-Dichloroethene	ND		0.079	0.020	ug/m3			05/12/15 02:39	1
Trichloroethene	**0.58**		0.11	0.027	ug/m3			05/12/15 02:39	1
Vinyl chloride	ND		0.051	0.026	ug/m3			05/12/15 02:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*102*		*70 - 130*		*05/12/15 02:39*	*1*
1,2-Dichloroethane-d4 (Surr)	*94*		*70 - 130*		*05/12/15 02:39*	*1*
Toluene-d8 (Surr)	*100*		*70 - 130*		*05/12/15 02:39*	*1*

Client Sample ID: J6038-OA1-050615-1

Lab Sample ID: 320-12924-11

Date Collected: 05/06/15 19:03
Matrix: Air
Date Received: 05/08/15 14:50
Sample Container: Summa Canister 6L

Method: TO-15 SIM - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		0.020	0.0050	ppb v/v			05/12/15 03:39	1
1,1,2-Trichloroethane	ND		0.050	0.0050	ppb v/v			05/12/15 03:39	1
1,1-Dichloroethane	ND		0.020	0.0050	ppb v/v			05/12/15 03:39	1
1,1-Dichloroethene	ND		0.020	0.0050	ppb v/v			05/12/15 03:39	1
1,2-Dichlorobenzene	ND		0.050	0.010	ppb v/v			05/12/15 03:39	1
1,2-Dichloroethane	**0.014**	**J**	0.020	0.0050	ppb v/v			05/12/15 03:39	1
1,4-Dichlorobenzene	ND		0.10	0.010	ppb v/v			05/12/15 03:39	1
Chlorobenzene	ND		0.020	0.010	ppb v/v			05/12/15 03:39	1
Chloroform	**0.018**	**J**	0.020	0.0050	ppb v/v			05/12/15 03:39	1
cis-1,2-Dichloroethene	ND		0.020	0.0050	ppb v/v			05/12/15 03:39	1
Ethylbenzene	**0.026**		0.020	0.010	ppb v/v			05/12/15 03:39	1
Freon 11	**0.22**		0.045	0.010	ppb v/v			05/12/15 03:39	1

Client Sample ID: J6038-OA1-050615-1

Lab Sample ID: 320-12924-11

Date Collected: 05/06/15 19:03
Matrix: Air
Date Received: 05/08/15 14:50
Sample Container: Summa Canister 6L

Method: TO-15 SIM - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Freon 113	**0.063**		0.030	0.0050	ppb v/v			05/12/15 03:39	1
Freon 12	**0.49**		0.020	0.0050	ppb v/v			05/12/15 03:39	1
m,p-Xylene	**0.071**		0.040	0.020	ppb v/v			05/12/15 03:39	1
Methylene Chloride	**0.12**	**J**	0.20	0.10	ppb v/v			05/12/15 03:39	1
o-Xylene	**0.029**		0.020	0.010	ppb v/v			05/12/15 03:39	1
Tetrachloroethene	ND		0.020	0.010	ppb v/v			05/12/15 03:39	1
Toluene	**0.13**		0.020	0.010	ppb v/v			05/12/15 03:39	1
trans-1,2-Dichloroethene	ND		0.020	0.0050	ppb v/v			05/12/15 03:39	1
Trichloroethene	ND		0.020	0.0050	ppb v/v			05/12/15 03:39	1
Vinyl chloride	ND		0.020	0.010	ppb v/v			05/12/15 03:39	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		0.11	0.027	ug/m3			05/12/15 03:39	1
1,1,2-Trichloroethane	ND		0.27	0.027	ug/m3			05/12/15 03:39	1
1,1-Dichloroethane	ND		0.081	0.020	ug/m3			05/12/15 03:39	1
1,1-Dichloroethene	ND		0.079	0.020	ug/m3			05/12/15 03:39	1
1,2-Dichlorobenzene	ND		0.30	0.060	ug/m3			05/12/15 03:39	1
1,2-Dichloroethane	**0.056**	**J**	0.081	0.020	ug/m3			05/12/15 03:39	1
1,4-Dichlorobenzene	ND		0.60	0.060	ug/m3			05/12/15 03:39	1
Chlorobenzene	ND		0.092	0.046	ug/m3			05/12/15 03:39	1
Chloroform	**0.088**	**J**	0.098	0.024	ug/m3			05/12/15 03:39	1
cis-1,2-Dichloroethene	ND		0.079	0.020	ug/m3			05/12/15 03:39	1
Ethylbenzene	**0.11**		0.087	0.043	ug/m3			05/12/15 03:39	1
Freon 11	**1.2**		0.25	0.056	ug/m3			05/12/15 03:39	1
Freon 113	**0.49**		0.23	0.038	ug/m3			05/12/15 03:39	1
Freon 12	**2.4**		0.099	0.025	ug/m3			05/12/15 03:39	1
m,p-Xylene	**0.31**		0.17	0.087	ug/m3			05/12/15 03:39	1
Methylene Chloride	**0.43**	**J**	0.69	0.35	ug/m3			05/12/15 03:39	1
o-Xylene	**0.12**		0.087	0.043	ug/m3			05/12/15 03:39	1
Tetrachloroethene	ND		0.14	0.068	ug/m3			05/12/15 03:39	1
Toluene	**0.48**		0.075	0.038	ug/m3			05/12/15 03:39	1
trans-1,2-Dichloroethene	ND		0.079	0.020	ug/m3			05/12/15 03:39	1
Trichloroethene	ND		0.11	0.027	ug/m3			05/12/15 03:39	1
Vinyl chloride	ND		0.051	0.026	ug/m3			05/12/15 03:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*101*		*70 - 130*		*05/12/15 03:39*	*1*
1,2-Dichloroethane-d4 (Surr)	*94*		*70 - 130*		*05/12/15 03:39*	*1*
Toluene-d8 (Surr)	*100*		*70 - 130*		*05/12/15 03:39*	*1*

Client Sample ID: J6038-OA1-050615-2

Lab Sample ID: 320-12924-12

Date Collected: 05/06/15 19:03
Matrix: Air
Date Received: 05/08/15 14:50
Sample Container: Summa Canister 6L

Method: TO-15 SIM - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		0.020	0.0050	ppb v/v			05/12/15 04:38	1
1,1,2-Trichloroethane	ND		0.050	0.0050	ppb v/v			05/12/15 04:38	1
1,1-Dichloroethane	ND		0.020	0.0050	ppb v/v			05/12/15 04:38	1

Client Sample ID: J6038-OA1-050615-2

Lab Sample ID: 320-12924-12

Date Collected: 05/06/15 19:03
Date Received: 05/08/15 14:50
Sample Container: Summa Canister 6L

Matrix: Air

Method: TO-15 SIM - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	ND		0.020	0.0050	ppb v/v			05/12/15 04:38	1
1,2-Dichlorobenzene	ND		0.050	0.010	ppb v/v			05/12/15 04:38	1
1,2-Dichloroethane	**0.013**	**J**	0.020	0.0050	ppb v/v			05/12/15 04:38	1
1,4-Dichlorobenzene	ND		0.10	0.010	ppb v/v			05/12/15 04:38	1
Chlorobenzene	ND		0.020	0.010	ppb v/v			05/12/15 04:38	1
Chloroform	**0.016**	**J**	0.020	0.0050	ppb v/v			05/12/15 04:38	1
cis-1,2-Dichloroethene	ND		0.020	0.0050	ppb v/v			05/12/15 04:38	1
Ethylbenzene	**0.016**	**J**	0.020	0.010	ppb v/v			05/12/15 04:38	1
Freon 11	**0.19**		0.045	0.010	ppb v/v			05/12/15 04:38	1
Freon 113	**0.059**		0.030	0.0050	ppb v/v			05/12/15 04:38	1
Freon 12	**0.34**		0.020	0.0050	ppb v/v			05/12/15 04:38	1
m,p-Xylene	**0.045**		0.040	0.020	ppb v/v			05/12/15 04:38	1
Methylene Chloride	ND		0.20	0.10	ppb v/v			05/12/15 04:38	1
o-Xylene	**0.018**	**J**	0.020	0.010	ppb v/v			05/12/15 04:38	1
Tetrachloroethene	ND		0.020	0.010	ppb v/v			05/12/15 04:38	1
Toluene	**0.25**		0.020	0.010	ppb v/v			05/12/15 04:38	1
trans-1,2-Dichloroethene	ND		0.020	0.0050	ppb v/v			05/12/15 04:38	1
Trichloroethene	**0.0073**	**J**	0.020	0.0050	ppb v/v			05/12/15 04:38	1
Vinyl chloride	ND		0.020	0.010	ppb v/v			05/12/15 04:38	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		0.11	0.027	ug/m3			05/12/15 04:38	1
1,1,2-Trichloroethane	ND		0.27	0.027	ug/m3			05/12/15 04:38	1
1,1-Dichloroethane	ND		0.081	0.020	ug/m3			05/12/15 04:38	1
1,1-Dichloroethene	ND		0.079	0.020	ug/m3			05/12/15 04:38	1
1,2-Dichlorobenzene	ND		0.30	0.060	ug/m3			05/12/15 04:38	1
1,2-Dichloroethane	**0.054**	**J**	0.081	0.020	ug/m3			05/12/15 04:38	1
1,4-Dichlorobenzene	ND		0.60	0.060	ug/m3			05/12/15 04:38	1
Chlorobenzene	ND		0.092	0.046	ug/m3			05/12/15 04:38	1
Chloroform	**0.079**	**J**	0.098	0.024	ug/m3			05/12/15 04:38	1
cis-1,2-Dichloroethene	ND		0.079	0.020	ug/m3			05/12/15 04:38	1
Ethylbenzene	**0.069**	**J**	0.087	0.043	ug/m3			05/12/15 04:38	1
Freon 11	**1.1**		0.25	0.056	ug/m3			05/12/15 04:38	1
Freon 113	**0.45**		0.23	0.038	ug/m3			05/12/15 04:38	1
Freon 12	**1.7**		0.099	0.025	ug/m3			05/12/15 04:38	1
m,p-Xylene	**0.19**		0.17	0.087	ug/m3			05/12/15 04:38	1
Methylene Chloride	ND		0.69	0.35	ug/m3			05/12/15 04:38	1
o-Xylene	**0.078**	**J**	0.087	0.043	ug/m3			05/12/15 04:38	1
Tetrachloroethene	ND		0.14	0.068	ug/m3			05/12/15 04:38	1
Toluene	**0.93**		0.075	0.038	ug/m3			05/12/15 04:38	1
trans-1,2-Dichloroethene	ND		0.079	0.020	ug/m3			05/12/15 04:38	1
Trichloroethene	**0.039**	**J**	0.11	0.027	ug/m3			05/12/15 04:38	1
Vinyl chloride	ND		0.051	0.026	ug/m3			05/12/15 04:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*102*		*70 - 130*		*05/12/15 04:38*	*1*
1,2-Dichloroethane-d4 (Surr)	*96*		*70 - 130*		*05/12/15 04:38*	*1*
Toluene-d8 (Surr)	*100*		*70 - 130*		*05/12/15 04:38*	*1*

Default Detection Limits

Client: AECOM, Inc.
Project/Site: TRW Microwave

TestAmerica Job ID: 320-12924-1

Method: TO-15 SIM - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS)

Analyte	RL	MDL	Units	Method
1,1,1-Trichloroethane	0.020	0.0050	ppb v/v	TO-15 SIM
1,1,1-Trichloroethane	0.11	0.027	ug/m3	TO-15 SIM
1,1,2-Trichloroethane	0.050	0.0050	ppb v/v	TO-15 SIM
1,1,2-Trichloroethane	0.27	0.027	ug/m3	TO-15 SIM
1,1-Dichloroethane	0.020	0.0050	ppb v/v	TO-15 SIM
1,1-Dichloroethane	0.081	0.020	ug/m3	TO-15 SIM
1,1-Dichloroethene	0.020	0.0050	ppb v/v	TO-15 SIM
1,1-Dichloroethene	0.079	0.020	ug/m3	TO-15 SIM
1,2-Dichlorobenzene	0.050	0.010	ppb v/v	TO-15 SIM
1,2-Dichlorobenzene	0.30	0.060	ug/m3	TO-15 SIM
1,2-Dichloroethane	0.020	0.0050	ppb v/v	TO-15 SIM
1,2-Dichloroethane	0.081	0.020	ug/m3	TO-15 SIM
1,4-Dichlorobenzene	0.10	0.010	ppb v/v	TO-15 SIM
1,4-Dichlorobenzene	0.60	0.060	ug/m3	TO-15 SIM
Chlorobenzene	0.020	0.010	ppb v/v	TO-15 SIM
Chlorobenzene	0.092	0.046	ug/m3	TO-15 SIM
Chloroform	0.020	0.0050	ppb v/v	TO-15 SIM
Chloroform	0.098	0.024	ug/m3	TO-15 SIM
cis-1,2-Dichloroethene	0.020	0.0050	ppb v/v	TO-15 SIM
cis-1,2-Dichloroethene	0.079	0.020	ug/m3	TO-15 SIM
Ethylbenzene	0.020	0.010	ppb v/v	TO-15 SIM
Ethylbenzene	0.087	0.043	ug/m3	TO-15 SIM
Freon 11	0.045	0.010	ppb v/v	TO-15 SIM
Freon 11	0.25	0.056	ug/m3	TO-15 SIM
Freon 113	0.030	0.0050	ppb v/v	TO-15 SIM
Freon 113	0.23	0.038	ug/m3	TO-15 SIM
Freon 12	0.020	0.0050	ppb v/v	TO-15 SIM
Freon 12	0.099	0.025	ug/m3	TO-15 SIM
m,p-Xylene	0.040	0.020	ppb v/v	TO-15 SIM
m,p-Xylene	0.17	0.087	ug/m3	TO-15 SIM
Methylene Chloride	0.20	0.10	ppb v/v	TO-15 SIM
Methylene Chloride	0.69	0.35	ug/m3	TO-15 SIM
o-Xylene	0.020	0.010	ppb v/v	TO-15 SIM
o-Xylene	0.087	0.043	ug/m3	TO-15 SIM
Tetrachloroethene	0.020	0.010	ppb v/v	TO-15 SIM
Tetrachloroethene	0.14	0.068	ug/m3	TO-15 SIM
Toluene	0.020	0.010	ppb v/v	TO-15 SIM
Toluene	0.075	0.038	ug/m3	TO-15 SIM
trans-1,2-Dichloroethene	0.020	0.0050	ppb v/v	TO-15 SIM
trans-1,2-Dichloroethene	0.079	0.020	ug/m3	TO-15 SIM
Trichloroethene	0.020	0.0050	ppb v/v	TO-15 SIM
Trichloroethene	0.11	0.027	ug/m3	TO-15 SIM
Vinyl chloride	0.020	0.010	ppb v/v	TO-15 SIM
Vinyl chloride	0.051	0.026	ug/m3	TO-15 SIM

Method: TO-15 - Volatile Organic Compounds in Ambient Air

Analyte	RL	MDL	Units	Method
1,1,1-Trichloroethane	0.30	0.065	ppb v/v	TO-15
1,1,1-Trichloroethane	1.6	0.35	ug/m3	TO-15
1,1,2,2-Tetrachloroethane	0.40	0.069	ppb v/v	TO-15
1,1,2,2-Tetrachloroethane	2.7	0.47	ug/m3	TO-15

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Analyte	RL	MDL	Units	Method
1,1,2-Trichloro-1,2,2-trifluoroethane	0.40	0.16	ppb v/v	TO-15
1,1,2-Trichloro-1,2,2-trifluoroethane	3.1	1.2	ug/m3	TO-15
1,1,2-Trichloroethane	0.40	0.067	ppb v/v	TO-15
1,1,2-Trichloroethane	2.2	0.37	ug/m3	TO-15
1,1-Dichloroethane	0.30	0.072	ppb v/v	TO-15
1,1-Dichloroethane	1.2	0.29	ug/m3	TO-15
1,1-Dichloroethene	0.80	0.13	ppb v/v	TO-15
1,1-Dichloroethene	3.2	0.51	ug/m3	TO-15
1,2,4-Trichlorobenzene	2.0	0.43	ppb v/v	TO-15
1,2,4-Trichlorobenzene	15	3.2	ug/m3	TO-15
1,2,4-Trimethylbenzene	0.80	0.16	ppb v/v	TO-15
1,2,4-Trimethylbenzene	3.9	0.80	ug/m3	TO-15
1,2-Dibromoethane (EDB)	0.80	0.075	ppb v/v	TO-15
1,2-Dibromoethane (EDB)	6.1	0.58	ug/m3	TO-15
1,2-Dichloro-1,1,2,2-tetrafluoroethane	0.40	0.16	ppb v/v	TO-15
1,2-Dichloro-1,1,2,2-tetrafluoroethane	2.8	1.1	ug/m3	TO-15
1,2-Dichlorobenzene	0.40	0.13	ppb v/v	TO-15
1,2-Dichlorobenzene	2.4	0.78	ug/m3	TO-15
1,2-Dichloroethane	0.80	0.088	ppb v/v	TO-15
1,2-Dichloroethane	3.2	0.36	ug/m3	TO-15
1,2-Dichloropropane	0.40	0.24	ppb v/v	TO-15
1,2-Dichloropropane	1.8	1.1	ug/m3	TO-15
1,3,5-Trimethylbenzene	0.40	0.13	ppb v/v	TO-15
1,3,5-Trimethylbenzene	2.0	0.61	ug/m3	TO-15
1,3-Dichlorobenzene	0.40	0.11	ppb v/v	TO-15
1,3-Dichlorobenzene	2.4	0.66	ug/m3	TO-15
1,4-Dichlorobenzene	0.40	0.15	ppb v/v	TO-15
1,4-Dichlorobenzene	2.4	0.90	ug/m3	TO-15
2-Butanone (MEK)	0.80	0.20	ppb v/v	TO-15
2-Butanone (MEK)	2.4	0.59	ug/m3	TO-15
2-Hexanone	0.40	0.087	ppb v/v	TO-15
2-Hexanone	1.6	0.36	ug/m3	TO-15
4-Ethyltoluene	0.40	0.19	ppb v/v	TO-15
4-Ethyltoluene	2.0	0.92	ug/m3	TO-15
4-Methyl-2-pentanone (MIBK)	0.40	0.14	ppb v/v	TO-15
4-Methyl-2-pentanone (MIBK)	1.6	0.55	ug/m3	TO-15
Acetone	5.0	0.18	ppb v/v	TO-15
Acetone	12	0.42	ug/m3	TO-15
Benzene	0.40	0.079	ppb v/v	TO-15
Benzene	1.3	0.25	ug/m3	TO-15
Benzyl chloride	0.80	0.16	ppb v/v	TO-15
Benzyl chloride	4.1	0.84	ug/m3	TO-15
Bromodichloromethane	0.30	0.066	ppb v/v	TO-15
Bromodichloromethane	2.0	0.44	ug/m3	TO-15
Bromoform	0.40	0.070	ppb v/v	TO-15
Bromoform	4.1	0.72	ug/m3	TO-15
Bromomethane	0.80	0.34	ppb v/v	TO-15
Bromomethane	3.1	1.3	ug/m3	TO-15
Carbon disulfide	0.80	0.078	ppb v/v	TO-15
Carbon disulfide	2.5	0.24	ug/m3	TO-15
Carbon tetrachloride	0.80	0.064	ppb v/v	TO-15
Carbon tetrachloride	5.0	0.40	ug/m3	TO-15

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Analyte	RL	MDL	Units	Method
Chlorobenzene	0.30	0.064	ppb v/v	TO-15
Chlorobenzene	1.4	0.29	ug/m3	TO-15
Chloroethane	0.80	0.31	ppb v/v	TO-15
Chloroethane	2.1	0.81	ug/m3	TO-15
Chloroform	0.30	0.095	ppb v/v	TO-15
Chloroform	1.5	0.46	ug/m3	TO-15
Chloromethane	0.80	0.20	ppb v/v	TO-15
Chloromethane	1.7	0.41	ug/m3	TO-15
cis-1,2-Dichloroethene	0.40	0.089	ppb v/v	TO-15
cis-1,2-Dichloroethene	1.6	0.35	ug/m3	TO-15
cis-1,3-Dichloropropene	0.40	0.10	ppb v/v	TO-15
cis-1,3-Dichloropropene	1.8	0.47	ug/m3	TO-15
Dibromochloromethane	0.40	0.079	ppb v/v	TO-15
Dibromochloromethane	3.4	0.67	ug/m3	TO-15
Dichlorodifluoromethane	0.40	0.15	ppb v/v	TO-15
Dichlorodifluoromethane	2.0	0.72	ug/m3	TO-15
Ethylbenzene	0.40	0.063	ppb v/v	TO-15
Ethylbenzene	1.7	0.27	ug/m3	TO-15
Hexachlorobutadiene	2.0	0.43	ppb v/v	TO-15
Hexachlorobutadiene	21	4.6	ug/m3	TO-15
m,p-Xylene	0.80	0.10	ppb v/v	TO-15
m,p-Xylene	3.5	0.43	ug/m3	TO-15
Methylene Chloride	0.40	0.072	ppb v/v	TO-15
Methylene Chloride	1.4	0.25	ug/m3	TO-15
o-Xylene	0.40	0.054	ppb v/v	TO-15
o-Xylene	1.7	0.23	ug/m3	TO-15
Styrene	0.40	0.059	ppb v/v	TO-15
Styrene	1.7	0.25	ug/m3	TO-15
Tetrachloroethene	0.40	0.051	ppb v/v	TO-15
Tetrachloroethene	2.7	0.35	ug/m3	TO-15
Toluene	0.40	0.051	ppb v/v	TO-15
Toluene	1.5	0.19	ug/m3	TO-15
trans-1,2-Dichloroethene	0.40	0.10	ppb v/v	TO-15
trans-1,2-Dichloroethene	1.6	0.40	ug/m3	TO-15
trans-1,3-Dichloropropene	0.40	0.088	ppb v/v	TO-15
trans-1,3-Dichloropropene	1.8	0.40	ug/m3	TO-15
Trichloroethene	0.40	0.11	ppb v/v	TO-15
Trichloroethene	2.1	0.56	ug/m3	TO-15
Trichlorofluoromethane	0.40	0.20	ppb v/v	TO-15
Trichlorofluoromethane	2.2	1.1	ug/m3	TO-15
Vinyl acetate	0.80	0.15	ppb v/v	TO-15
Vinyl acetate	2.8	0.51	ug/m3	TO-15
Vinyl chloride	0.40	0.12	ppb v/v	TO-15
Vinyl chloride	1.0	0.31	ug/m3	TO-15

Surrogate Summary

Client: AECOM, Inc.
Project/Site: TRW Microwave

TestAmerica Job ID: 320-12924-1

Method: TO-15 - Volatile Organic Compounds in Ambient Air

Matrix: Air **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)		
		BFB	12DCE	TOL
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	(70-130)
320-12924-1	J6038-SS5-050615-1	102	119	96
320-12924-2	J6038-SS5-050615-2	103	117	97
320-12924-3	J6038-SS7-050615	93	115	94
320-12924-4	J6038-SS11-050615	98	113	94
LCS 320-73563/3	Lab Control Sample	106	109	100
LCSD 320-73563/27	Lab Control Sample Dup	106	108	98
MB 320-73563/6	Method Blank	94	113	94

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)
12DCE = 1,2-Dichloroethane-d4 (Surr)
TOL = Toluene-d8 (Surr)

Method: TO-15 SIM - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS)

Matrix: Air **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)		
		BFB	12DCE	TOL
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	(70-130)
320-12924-5	J6038-IA1-050615-1	104	97	100
320-12924-6	J6038-IA1-050615-2	105	96	101
320-12924-7	J6038-IA2-050615	103	95	100
320-12924-8	J6038-IA3-050615	105	95	100
320-12924-9	J6038-IA4-050615	104	96	100
320-12924-10	J6038-IA5-050615	102	94	100
320-12924-11	J6038-OA1-050615-1	101	94	100
320-12924-12	J6038-OA1-050615-2	102	96	100
LCS 320-73719/4	Lab Control Sample	109	99	100
LCSD 320-73719/5	Lab Control Sample Dup	107	97	100
MB 320-73719/9	Method Blank	102	98	99

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)
12DCE = 1,2-Dichloroethane-d4 (Surr)
TOL = Toluene-d8 (Surr)

Method: TO-15 - Volatile Organic Compounds in Ambient Air

Lab Sample ID: MB 320-73563/6
Matrix: Air
Analysis Batch: 73563

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		5.0	0.18	ppb v/v			05/11/15 16:43	1
Benzene	ND		0.40	0.079	ppb v/v			05/11/15 16:43	1
Benzyl chloride	ND		0.80	0.16	ppb v/v			05/11/15 16:43	1
Bromodichloromethane	ND		0.30	0.066	ppb v/v			05/11/15 16:43	1
Bromoform	ND		0.40	0.070	ppb v/v			05/11/15 16:43	1
Bromomethane	ND		0.80	0.34	ppb v/v			05/11/15 16:43	1
2-Butanone (MEK)	ND		0.80	0.20	ppb v/v			05/11/15 16:43	1
Carbon disulfide	ND		0.80	0.078	ppb v/v			05/11/15 16:43	1
Carbon tetrachloride	ND		0.80	0.064	ppb v/v			05/11/15 16:43	1
Chlorobenzene	ND		0.30	0.064	ppb v/v			05/11/15 16:43	1
Chloroethane	ND		0.80	0.31	ppb v/v			05/11/15 16:43	1
Chloroform	ND		0.30	0.095	ppb v/v			05/11/15 16:43	1
Chloromethane	ND		0.80	0.20	ppb v/v			05/11/15 16:43	1
Dibromochloromethane	ND		0.40	0.079	ppb v/v			05/11/15 16:43	1
1,2-Dibromoethane (EDB)	ND		0.80	0.075	ppb v/v			05/11/15 16:43	1
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND		0.40	0.16	ppb v/v			05/11/15 16:43	1
1,2-Dichlorobenzene	ND		0.40	0.13	ppb v/v			05/11/15 16:43	1
1,3-Dichlorobenzene	ND		0.40	0.11	ppb v/v			05/11/15 16:43	1
1,4-Dichlorobenzene	ND		0.40	0.15	ppb v/v			05/11/15 16:43	1
Dichlorodifluoromethane	ND		0.40	0.15	ppb v/v			05/11/15 16:43	1
1,1-Dichloroethane	ND		0.30	0.072	ppb v/v			05/11/15 16:43	1
1,2-Dichloroethane	ND		0.80	0.088	ppb v/v			05/11/15 16:43	1
1,1-Dichloroethene	ND		0.80	0.13	ppb v/v			05/11/15 16:43	1
cis-1,2-Dichloroethene	ND		0.40	0.089	ppb v/v			05/11/15 16:43	1
trans-1,2-Dichloroethene	ND		0.40	0.10	ppb v/v			05/11/15 16:43	1
1,2-Dichloropropane	ND		0.40	0.24	ppb v/v			05/11/15 16:43	1
cis-1,3-Dichloropropene	ND		0.40	0.10	ppb v/v			05/11/15 16:43	1
trans-1,3-Dichloropropene	ND		0.40	0.088	ppb v/v			05/11/15 16:43	1
Ethylbenzene	ND		0.40	0.063	ppb v/v			05/11/15 16:43	1
4-Ethyltoluene	ND		0.40	0.19	ppb v/v			05/11/15 16:43	1
Hexachlorobutadiene	ND		2.0	0.43	ppb v/v			05/11/15 16:43	1
2-Hexanone	ND		0.40	0.087	ppb v/v			05/11/15 16:43	1
4-Methyl-2-pentanone (MIBK)	ND		0.40	0.14	ppb v/v			05/11/15 16:43	1
Methylene Chloride	ND		0.40	0.072	ppb v/v			05/11/15 16:43	1
Styrene	ND		0.40	0.059	ppb v/v			05/11/15 16:43	1
1,1,2,2-Tetrachloroethane	ND		0.40	0.069	ppb v/v			05/11/15 16:43	1
Tetrachloroethene	ND		0.40	0.051	ppb v/v			05/11/15 16:43	1
Toluene	ND		0.40	0.051	ppb v/v			05/11/15 16:43	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.40	0.16	ppb v/v			05/11/15 16:43	1
1,2,4-Trichlorobenzene	ND		2.0	0.43	ppb v/v			05/11/15 16:43	1
1,1,1-Trichloroethane	ND		0.30	0.065	ppb v/v			05/11/15 16:43	1
1,1,2-Trichloroethane	ND		0.40	0.067	ppb v/v			05/11/15 16:43	1
Trichloroethene	ND		0.40	0.11	ppb v/v			05/11/15 16:43	1
Trichlorofluoromethane	ND		0.40	0.20	ppb v/v			05/11/15 16:43	1
1,2,4-Trimethylbenzene	ND		0.80	0.16	ppb v/v			05/11/15 16:43	1
1,3,5-Trimethylbenzene	ND		0.40	0.13	ppb v/v			05/11/15 16:43	1
Vinyl acetate	ND		0.80	0.15	ppb v/v			05/11/15 16:43	1
Vinyl chloride	ND		0.40	0.12	ppb v/v			05/11/15 16:43	1

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Lab Sample ID: MB 320-73563/6
Matrix: Air
Analysis Batch: 73563

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
m,p-Xylene	ND		0.80	0.10	ppb v/v			05/11/15 16:43	1
o-Xylene	ND		0.40	0.054	ppb v/v			05/11/15 16:43	1

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		12	0.42	ug/m3			05/11/15 16:43	1
Benzene	ND		1.3	0.25	ug/m3			05/11/15 16:43	1
Benzyl chloride	ND		4.1	0.84	ug/m3			05/11/15 16:43	1
Bromodichloromethane	ND		2.0	0.44	ug/m3			05/11/15 16:43	1
Bromoform	ND		4.1	0.72	ug/m3			05/11/15 16:43	1
Bromomethane	ND		3.1	1.3	ug/m3			05/11/15 16:43	1
2-Butanone (MEK)	ND		2.4	0.59	ug/m3			05/11/15 16:43	1
Carbon disulfide	ND		2.5	0.24	ug/m3			05/11/15 16:43	1
Carbon tetrachloride	ND		5.0	0.40	ug/m3			05/11/15 16:43	1
Chlorobenzene	ND		1.4	0.29	ug/m3			05/11/15 16:43	1
Chloroethane	ND		2.1	0.81	ug/m3			05/11/15 16:43	1
Chloroform	ND		1.5	0.46	ug/m3			05/11/15 16:43	1
Chloromethane	ND		1.7	0.41	ug/m3			05/11/15 16:43	1
Dibromochloromethane	ND		3.4	0.67	ug/m3			05/11/15 16:43	1
1,2-Dibromoethane (EDB)	ND		6.1	0.58	ug/m3			05/11/15 16:43	1
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND		2.8	1.1	ug/m3			05/11/15 16:43	1
1,2-Dichlorobenzene	ND		2.4	0.78	ug/m3			05/11/15 16:43	1
1,3-Dichlorobenzene	ND		2.4	0.66	ug/m3			05/11/15 16:43	1
1,4-Dichlorobenzene	ND		2.4	0.90	ug/m3			05/11/15 16:43	1
Dichlorodifluoromethane	ND		2.0	0.72	ug/m3			05/11/15 16:43	1
1,1-Dichloroethane	ND		1.2	0.29	ug/m3			05/11/15 16:43	1
1,2-Dichloroethane	ND		3.2	0.36	ug/m3			05/11/15 16:43	1
1,1-Dichloroethene	ND		3.2	0.51	ug/m3			05/11/15 16:43	1
cis-1,2-Dichloroethene	ND		1.6	0.35	ug/m3			05/11/15 16:43	1
trans-1,2-Dichloroethene	ND		1.6	0.40	ug/m3			05/11/15 16:43	1
1,2-Dichloropropane	ND		1.8	1.1	ug/m3			05/11/15 16:43	1
cis-1,3-Dichloropropene	ND		1.8	0.47	ug/m3			05/11/15 16:43	1
trans-1,3-Dichloropropene	ND		1.8	0.40	ug/m3			05/11/15 16:43	1
Ethylbenzene	ND		1.7	0.27	ug/m3			05/11/15 16:43	1
4-Ethyltoluene	ND		2.0	0.92	ug/m3			05/11/15 16:43	1
Hexachlorobutadiene	ND		21	4.6	ug/m3			05/11/15 16:43	1
2-Hexanone	ND		1.6	0.36	ug/m3			05/11/15 16:43	1
4-Methyl-2-pentanone (MIBK)	ND		1.6	0.55	ug/m3			05/11/15 16:43	1
Methylene Chloride	ND		1.4	0.25	ug/m3			05/11/15 16:43	1
Styrene	ND		1.7	0.25	ug/m3			05/11/15 16:43	1
1,1,2,2-Tetrachloroethane	ND		2.7	0.47	ug/m3			05/11/15 16:43	1
Tetrachloroethene	ND		2.7	0.35	ug/m3			05/11/15 16:43	1
Toluene	ND		1.5	0.19	ug/m3			05/11/15 16:43	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		3.1	1.2	ug/m3			05/11/15 16:43	1
1,2,4-Trichlorobenzene	ND		15	3.2	ug/m3			05/11/15 16:43	1
1,1,1-Trichloroethane	ND		1.6	0.35	ug/m3			05/11/15 16:43	1
1,1,2-Trichloroethane	ND		2.2	0.37	ug/m3			05/11/15 16:43	1
Trichloroethene	ND		2.1	0.56	ug/m3			05/11/15 16:43	1
Trichlorofluoromethane	ND		2.2	1.1	ug/m3			05/11/15 16:43	1

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Lab Sample ID: MB 320-73563/6
Matrix: Air
Analysis Batch: 73563

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	ND		3.9	0.80	ug/m3			05/11/15 16:43	1
1,3,5-Trimethylbenzene	ND		2.0	0.61	ug/m3			05/11/15 16:43	1
Vinyl acetate	ND		2.8	0.51	ug/m3			05/11/15 16:43	1
Vinyl chloride	ND		1.0	0.31	ug/m3			05/11/15 16:43	1
m,p-Xylene	ND		3.5	0.43	ug/m3			05/11/15 16:43	1
o-Xylene	ND		1.7	0.23	ug/m3			05/11/15 16:43	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*94*		*70 - 130*		*05/11/15 16:43*	*1*
1,2-Dichloroethane-d4 (Surr)	*113*		*70 - 130*		*05/11/15 16:43*	*1*
Toluene-d8 (Surr)	*94*		*70 - 130*		*05/11/15 16:43*	*1*

Lab Sample ID: LCS 320-73563/3
Matrix: Air
Analysis Batch: 73563

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	20.0	18.9		ppb v/v		95	71 - 131
Benzene	20.0	16.7		ppb v/v		84	68 - 128
Benzyl chloride	20.0	18.8		ppb v/v		94	58 - 120
Bromodichloromethane	20.0	20.5		ppb v/v		103	65 - 130
Bromoform	20.0	23.4		ppb v/v		117	64 - 144
2-Butanone (MEK)	20.0	15.3		ppb v/v		76	71 - 131
Carbon disulfide	20.0	15.6		ppb v/v		78	63 - 123
Carbon tetrachloride	20.0	22.9		ppb v/v		115	67 - 127
Chlorobenzene	20.0	20.3		ppb v/v		102	70 - 132
Chloroethane	20.0	18.3		ppb v/v		91	70 - 131
Chloroform	20.0	18.4		ppb v/v		92	69 - 129
Chloromethane	20.0	20.8		ppb v/v		104	67 - 127
Dibromochloromethane	20.0	22.5		ppb v/v		112	68 - 128
1,2-Dibromoethane (EDB)	20.0	20.8		ppb v/v		104	68 - 131
1,2-Dichloro-1,1,2,2-tetrafluoroethane	20.0	17.9		ppb v/v		90	64 - 124
1,2-Dichlorobenzene	20.0	23.7		ppb v/v		118	73 - 143
1,3-Dichlorobenzene	20.0	23.9		ppb v/v		119	77 - 136
1,4-Dichlorobenzene	20.0	24.1		ppb v/v		120	73 - 143
Dichlorodifluoromethane	20.0	20.5		ppb v/v		102	69 - 129
1,1-Dichloroethane	20.0	17.5		ppb v/v		87	65 - 125
1,2-Dichloroethane	20.0	23.6		ppb v/v		118	71 - 131
1,1-Dichloroethene	20.0	17.0		ppb v/v		85	53 - 128
cis-1,2-Dichloroethene	20.0	17.0		ppb v/v		85	68 - 128
trans-1,2-Dichloroethene	20.0	18.6		ppb v/v		93	70 - 130
1,2-Dichloropropane	20.0	22.0		ppb v/v		110	74 - 128
cis-1,3-Dichloropropene	20.0	20.0		ppb v/v		100	78 - 132
trans-1,3-Dichloropropene	20.0	19.2		ppb v/v		96	56 - 136
Ethylbenzene	20.0	20.9		ppb v/v		105	76 - 136
4-Ethyltoluene	20.0	20.9		ppb v/v		104	62 - 136
Hexachlorobutadiene	20.0	26.4		ppb v/v		132	42 - 150

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Lab Sample ID: LCS 320-73563/3
Matrix: Air
Analysis Batch: 73563

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
2-Hexanone	20.0	19.3		ppb v/v		96	70 - 128
4-Methyl-2-pentanone (MIBK)	20.0	19.5		ppb v/v		98	73 - 133
Methylene Chloride	20.0	17.9		ppb v/v		89	65 - 125
Styrene	20.0	22.0		ppb v/v		110	76 - 144
1,1,2,2-Tetrachloroethane	20.0	19.0		ppb v/v		95	75 - 135
Tetrachloroethene	20.0	21.1		ppb v/v		105	56 - 138
Toluene	20.0	19.5		ppb v/v		98	71 - 132
1,1,2-Trichloro-1,2,2-trifluoroethane	20.0	16.3		ppb v/v		81	50 - 132
1,2,4-Trichlorobenzene	20.0	25.5		ppb v/v		127	59 - 150
1,1,1-Trichloroethane	20.0	20.4		ppb v/v		102	65 - 124
1,1,2-Trichloroethane	20.0	19.6		ppb v/v		98	71 - 131
Trichloroethene	20.0	19.7		ppb v/v		98	64 - 127
Trichlorofluoromethane	20.0	21.4		ppb v/v		107	68 - 128
1,2,4-Trimethylbenzene	20.0	21.0		ppb v/v		105	61 - 145
1,3,5-Trimethylbenzene	20.0	21.1		ppb v/v		105	65 - 136
Vinyl acetate	20.0	21.0		ppb v/v		105	77 - 134
Vinyl chloride	20.0	18.4		ppb v/v		92	69 - 129
m,p-Xylene	40.0	42.9		ppb v/v		107	75 - 138
o-Xylene	20.0	21.4		ppb v/v		107	77 - 132

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	48	45.0		ug/m3		95	71 - 131
Benzene	64	53.4		ug/m3		84	68 - 128
Benzyl chloride	100	97.2		ug/m3		94	58 - 120
Bromodichloromethane	130	137		ug/m3		103	65 - 130
Bromoform	210	242		ug/m3		117	64 - 144
2-Butanone (MEK)	59	45.0		ug/m3		76	71 - 131
Carbon disulfide	62	48.7		ug/m3		78	63 - 123
Carbon tetrachloride	130	144		ug/m3		115	67 - 127
Chlorobenzene	92	93.6		ug/m3		102	70 - 132
Chloroethane	53	48.2		ug/m3		91	70 - 131
Chloroform	98	89.7		ug/m3		92	69 - 129
Chloromethane	41	43.0		ug/m3		104	67 - 127
Dibromochloromethane	170	191		ug/m3		112	68 - 128
1,2-Dibromoethane (EDB)	150	160		ug/m3		104	68 - 131
1,2-Dichloro-1,1,2,2-tetrafluoroethane	140	125		ug/m3		90	64 - 124
1,2-Dichlorobenzene	120	142		ug/m3		118	73 - 143
1,3-Dichlorobenzene	120	143		ug/m3		119	77 - 136
1,4-Dichlorobenzene	120	145		ug/m3		120	73 - 143
Dichlorodifluoromethane	99	101		ug/m3		102	69 - 129
1,1-Dichloroethane	81	70.7		ug/m3		87	65 - 125
1,2-Dichloroethane	81	95.3		ug/m3		118	71 - 131
1,1-Dichloroethene	79	67.4		ug/m3		85	53 - 128
cis-1,2-Dichloroethene	79	67.5		ug/m3		85	68 - 128
trans-1,2-Dichloroethene	79	73.8		ug/m3		93	70 - 130
1,2-Dichloropropane	92	102		ug/m3		110	74 - 128
cis-1,3-Dichloropropene	91	90.7		ug/m3		100	78 - 132

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Lab Sample ID: LCS 320-73563/3
Matrix: Air
Analysis Batch: 73563

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
trans-1,3-Dichloropropene	91	87.3		ug/m3		96	56 - 136
Ethylbenzene	87	90.8		ug/m3		105	76 - 136
4-Ethyltoluene	98	103		ug/m3		104	62 - 136
Hexachlorobutadiene	210	281		ug/m3		132	42 - 150
2-Hexanone	82	78.9		ug/m3		96	70 - 128
4-Methyl-2-pentanone (MIBK)	82	79.9		ug/m3		98	73 - 133
Methylene Chloride	69	62.0		ug/m3		89	65 - 125
Styrene	85	93.9		ug/m3		110	76 - 144
1,1,2,2-Tetrachloroethane	140	130		ug/m3		95	75 - 135
Tetrachloroethene	140	143		ug/m3		105	56 - 138
Toluene	75	73.6		ug/m3		98	71 - 132
1,1,2-Trichloro-1,2,2-trifluoroethane	150	125		ug/m3		81	50 - 132
1,2,4-Trichlorobenzene	150	189		ug/m3		127	59 - 150
1,1,1-Trichloroethane	110	111		ug/m3		102	65 - 124
1,1,2-Trichloroethane	110	107		ug/m3		98	71 - 131
Trichloroethene	110	106		ug/m3		98	64 - 127
Trichlorofluoromethane	110	121		ug/m3		107	68 - 128
1,2,4-Trimethylbenzene	98	103		ug/m3		105	61 - 145
1,3,5-Trimethylbenzene	98	104		ug/m3		105	65 - 136
Vinyl acetate	70	73.8		ug/m3		105	77 - 134
Vinyl chloride	51	47.1		ug/m3		92	69 - 129
m,p-Xylene	170	186		ug/m3		107	75 - 138
o-Xylene	87	92.9		ug/m3		107	77 - 132

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*106*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*109*		*70 - 130*
Toluene-d8 (Surr)	*100*		*70 - 130*

Lab Sample ID: LCSD 320-73563/27
Matrix: Air
Analysis Batch: 73563

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acetone	20.0	18.6		ppb v/v		93	71 - 131	2	25
Benzene	20.0	16.4		ppb v/v		82	68 - 128	2	25
Benzyl chloride	20.0	18.5		ppb v/v		92	58 - 120	2	25
Bromodichloromethane	20.0	19.8		ppb v/v		99	65 - 130	4	25
Bromoform	20.0	23.0		ppb v/v		115	64 - 144	2	25
2-Butanone (MEK)	20.0	15.1		ppb v/v		76	71 - 131	1	25
Carbon disulfide	20.0	15.3		ppb v/v		77	63 - 123	2	25
Carbon tetrachloride	20.0	22.0		ppb v/v		110	67 - 127	4	25
Chlorobenzene	20.0	19.8		ppb v/v		99	70 - 132	3	25
Chloroethane	20.0	17.9		ppb v/v		90	70 - 131	2	25
Chloroform	20.0	18.0		ppb v/v		90	69 - 129	2	25
Chloromethane	20.0	20.1		ppb v/v		100	67 - 127	4	25
Dibromochloromethane	20.0	22.0		ppb v/v		110	68 - 128	2	25

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Lab Sample ID: LCSD 320-73563/27
Matrix: Air
Analysis Batch: 73563

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2-Dibromoethane (EDB)	20.0	20.5		ppb v/v		103	68 - 131	2	25
1,2-Dichloro-1,1,2,2-tetrafluoroethane	20.0	18.1		ppb v/v		91	64 - 124	1	25
1,2-Dichlorobenzene	20.0	23.3		ppb v/v		116	73 - 143	2	25
1,3-Dichlorobenzene	20.0	23.6		ppb v/v		118	77 - 136	1	25
1,4-Dichlorobenzene	20.0	23.8		ppb v/v		119	73 - 143	1	25
Dichlorodifluoromethane	20.0	19.5		ppb v/v		98	69 - 129	5	25
1,1-Dichloroethane	20.0	17.3		ppb v/v		87	65 - 125	1	25
1,2-Dichloroethane	20.0	22.6		ppb v/v		113	71 - 131	4	25
1,1-Dichloroethene	20.0	16.7		ppb v/v		84	53 - 128	2	25
cis-1,2-Dichloroethene	20.0	16.7		ppb v/v		84	68 - 128	2	25
trans-1,2-Dichloroethene	20.0	18.4		ppb v/v		92	70 - 130	1	25
1,2-Dichloropropane	20.0	21.5		ppb v/v		107	74 - 128	2	25
cis-1,3-Dichloropropene	20.0	19.3		ppb v/v		97	78 - 132	3	25
trans-1,3-Dichloropropene	20.0	19.2		ppb v/v		96	56 - 136	0	25
Ethylbenzene	20.0	20.6		ppb v/v		103	76 - 136	1	25
4-Ethyltoluene	20.0	20.4		ppb v/v		102	62 - 136	2	25
Hexachlorobutadiene	20.0	26.9		ppb v/v		134	42 - 150	2	25
2-Hexanone	20.0	18.8		ppb v/v		94	70 - 128	2	25
4-Methyl-2-pentanone (MIBK)	20.0	18.7		ppb v/v		94	73 - 133	4	25
Methylene Chloride	20.0	17.7		ppb v/v		88	65 - 125	1	25
Styrene	20.0	22.0		ppb v/v		110	76 - 144	0	25
1,1,2,2-Tetrachloroethane	20.0	18.7		ppb v/v		93	75 - 135	2	25
Tetrachloroethene	20.0	20.8		ppb v/v		104	56 - 138	2	25
Toluene	20.0	18.8		ppb v/v		94	71 - 132	4	25
1,1,2-Trichloro-1,2,2-trifluoroethane	20.0	16.0		ppb v/v		80	50 - 132	2	25
1,2,4-Trichlorobenzene	20.0	25.1		ppb v/v		125	59 - 150	2	25
1,1,1-Trichloroethane	20.0	19.9		ppb v/v		100	65 - 124	2	25
1,1,2-Trichloroethane	20.0	19.3		ppb v/v		97	71 - 131	1	25
Trichloroethene	20.0	19.0		ppb v/v		95	64 - 127	4	25
Trichlorofluoromethane	20.0	20.9		ppb v/v		105	68 - 128	2	25
1,2,4-Trimethylbenzene	20.0	23.9		ppb v/v		119	61 - 145	13	25
1,3,5-Trimethylbenzene	20.0	20.9		ppb v/v		105	65 - 136	1	25
Vinyl acetate	20.0	21.0		ppb v/v		105	77 - 134	0	25
Vinyl chloride	20.0	17.9		ppb v/v		90	69 - 129	3	25
m,p-Xylene	40.0	42.6		ppb v/v		106	75 - 138	1	25
o-Xylene	20.0	21.1		ppb v/v		106	77 - 132	1	25

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acetone	48	44.2		ug/m3		93	71 - 131	2	25
Benzene	64	52.3		ug/m3		82	68 - 128	2	25
Benzyl chloride	100	95.7		ug/m3		92	58 - 120	2	25
Bromodichloromethane	130	133		ug/m3		99	65 - 130	4	25
Bromoform	210	237		ug/m3		115	64 - 144	2	25
2-Butanone (MEK)	59	44.6		ug/m3		76	71 - 131	1	25
Carbon disulfide	62	47.8		ug/m3		77	63 - 123	2	25
Carbon tetrachloride	130	139		ug/m3		110	67 - 127	4	25
Chlorobenzene	92	91.3		ug/m3		99	70 - 132	3	25

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Lab Sample ID: LCSD 320-73563/27
Matrix: Air
Analysis Batch: 73563

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloroethane	53	47.2		ug/m3		90	70 - 131	2	25
Chloroform	98	87.7		ug/m3		90	69 - 129	2	25
Chloromethane	41	41.5		ug/m3		100	67 - 127	4	25
Dibromochloromethane	170	188		ug/m3		110	68 - 128	2	25
1,2-Dibromoethane (EDB)	150	158		ug/m3		103	68 - 131	2	25
1,2-Dichloro-1,1,2,2-tetrafluoroethane	140	127		ug/m3		91	64 - 124	1	25
1,2-Dichlorobenzene	120	140		ug/m3		116	73 - 143	2	25
1,3-Dichlorobenzene	120	142		ug/m3		118	77 - 136	1	25
1,4-Dichlorobenzene	120	143		ug/m3		119	73 - 143	1	25
Dichlorodifluoromethane	99	96.6		ug/m3		98	69 - 129	5	25
1,1-Dichloroethane	81	70.1		ug/m3		87	65 - 125	1	25
1,2-Dichloroethane	81	91.5		ug/m3		113	71 - 131	4	25
1,1-Dichloroethene	79	66.3		ug/m3		84	53 - 128	2	25
cis-1,2-Dichloroethene	79	66.3		ug/m3		84	68 - 128	2	25
trans-1,2-Dichloroethene	79	72.8		ug/m3		92	70 - 130	1	25
1,2-Dichloropropane	92	99.2		ug/m3		107	74 - 128	2	25
cis-1,3-Dichloropropene	91	87.7		ug/m3		97	78 - 132	3	25
trans-1,3-Dichloropropene	91	87.3		ug/m3		96	56 - 136	0	25
Ethylbenzene	87	89.6		ug/m3		103	76 - 136	1	25
4-Ethyltoluene	98	100		ug/m3		102	62 - 136	2	25
Hexachlorobutadiene	210	287		ug/m3		134	42 - 150	2	25
2-Hexanone	82	77.1		ug/m3		94	70 - 128	2	25
4-Methyl-2-pentanone (MIBK)	82	76.7		ug/m3		94	73 - 133	4	25
Methylene Chloride	69	61.5		ug/m3		88	65 - 125	1	25
Styrene	85	93.6		ug/m3		110	76 - 144	0	25
1,1,2,2-Tetrachloroethane	140	128		ug/m3		93	75 - 135	2	25
Tetrachloroethene	140	141		ug/m3		104	56 - 138	2	25
Toluene	75	70.7		ug/m3		94	71 - 132	4	25
1,1,2-Trichloro-1,2,2-trifluoroethane	150	122		ug/m3		80	50 - 132	2	25
1,2,4-Trichlorobenzene	150	186		ug/m3		125	59 - 150	2	25
1,1,1-Trichloroethane	110	109		ug/m3		100	65 - 124	2	25
1,1,2-Trichloroethane	110	106		ug/m3		97	71 - 131	1	25
Trichloroethene	110	102		ug/m3		95	64 - 127	4	25
Trichlorofluoromethane	110	118		ug/m3		105	68 - 128	2	25
1,2,4-Trimethylbenzene	98	117		ug/m3		119	61 - 145	13	25
1,3,5-Trimethylbenzene	98	103		ug/m3		105	65 - 136	1	25
Vinyl acetate	70	74.1		ug/m3		105	77 - 134	0	25
Vinyl chloride	51	45.8		ug/m3		90	69 - 129	3	25
m,p-Xylene	170	185		ug/m3		106	75 - 138	1	25
o-Xylene	87	91.6		ug/m3		106	77 - 132	1	25

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*106*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*108*		*70 - 130*
Toluene-d8 (Surr)	*98*		*70 - 130*

Method: TO-15 SIM - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS)

Lab Sample ID: MB 320-73719/9
Matrix: Air
Analysis Batch: 73719

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		0.020	0.0050	ppb v/v			05/11/15 19:27	1
1,1,2-Trichloroethane	ND		0.050	0.0050	ppb v/v			05/11/15 19:27	1
1,1-Dichloroethane	ND		0.020	0.0050	ppb v/v			05/11/15 19:27	1
1,1-Dichloroethene	ND		0.020	0.0050	ppb v/v			05/11/15 19:27	1
1,2-Dichlorobenzene	ND		0.050	0.010	ppb v/v			05/11/15 19:27	1
1,2-Dichloroethane	ND		0.020	0.0050	ppb v/v			05/11/15 19:27	1
1,4-Dichlorobenzene	ND		0.10	0.010	ppb v/v			05/11/15 19:27	1
Chlorobenzene	ND		0.020	0.010	ppb v/v			05/11/15 19:27	1
Chloroform	ND		0.020	0.0050	ppb v/v			05/11/15 19:27	1
cis-1,2-Dichloroethene	ND		0.020	0.0050	ppb v/v			05/11/15 19:27	1
Ethylbenzene	ND		0.020	0.010	ppb v/v			05/11/15 19:27	1
Freon 11	ND		0.045	0.010	ppb v/v			05/11/15 19:27	1
Freon 113	ND		0.030	0.0050	ppb v/v			05/11/15 19:27	1
Freon 12	ND		0.020	0.0050	ppb v/v			05/11/15 19:27	1
m,p-Xylene	ND		0.040	0.020	ppb v/v			05/11/15 19:27	1
Methylene Chloride	ND		0.20	0.10	ppb v/v			05/11/15 19:27	1
o-Xylene	ND		0.020	0.010	ppb v/v			05/11/15 19:27	1
Tetrachloroethene	ND		0.020	0.010	ppb v/v			05/11/15 19:27	1
Toluene	ND		0.020	0.010	ppb v/v			05/11/15 19:27	1
trans-1,2-Dichloroethene	ND		0.020	0.0050	ppb v/v			05/11/15 19:27	1
Trichloroethene	ND		0.020	0.0050	ppb v/v			05/11/15 19:27	1
Vinyl chloride	ND		0.020	0.010	ppb v/v			05/11/15 19:27	1

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		0.11	0.027	ug/m3			05/11/15 19:27	1
1,1,2-Trichloroethane	ND		0.27	0.027	ug/m3			05/11/15 19:27	1
1,1-Dichloroethane	ND		0.081	0.020	ug/m3			05/11/15 19:27	1
1,1-Dichloroethene	ND		0.079	0.020	ug/m3			05/11/15 19:27	1
1,2-Dichlorobenzene	ND		0.30	0.060	ug/m3			05/11/15 19:27	1
1,2-Dichloroethane	ND		0.081	0.020	ug/m3			05/11/15 19:27	1
1,4-Dichlorobenzene	ND		0.60	0.060	ug/m3			05/11/15 19:27	1
Chlorobenzene	ND		0.092	0.046	ug/m3			05/11/15 19:27	1
Chloroform	ND		0.098	0.024	ug/m3			05/11/15 19:27	1
cis-1,2-Dichloroethene	ND		0.079	0.020	ug/m3			05/11/15 19:27	1
Ethylbenzene	ND		0.087	0.043	ug/m3			05/11/15 19:27	1
Freon 11	ND		0.25	0.056	ug/m3			05/11/15 19:27	1
Freon 113	ND		0.23	0.038	ug/m3			05/11/15 19:27	1
Freon 12	ND		0.099	0.025	ug/m3			05/11/15 19:27	1
m,p-Xylene	ND		0.17	0.087	ug/m3			05/11/15 19:27	1
Methylene Chloride	ND		0.69	0.35	ug/m3			05/11/15 19:27	1
o-Xylene	ND		0.087	0.043	ug/m3			05/11/15 19:27	1
Tetrachloroethene	ND		0.14	0.068	ug/m3			05/11/15 19:27	1
Toluene	ND		0.075	0.038	ug/m3			05/11/15 19:27	1
trans-1,2-Dichloroethene	ND		0.079	0.020	ug/m3			05/11/15 19:27	1
Trichloroethene	ND		0.11	0.027	ug/m3			05/11/15 19:27	1
Vinyl chloride	ND		0.051	0.026	ug/m3			05/11/15 19:27	1

Method: TO-15 SIM - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS) (Continued)

Lab Sample ID: MB 320-73719/9
Matrix: Air
Analysis Batch: 73719

Client Sample ID: Method Blank
Prep Type: Total/NA

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*102*		*70 - 130*		*05/11/15 19:27*	*1*
1,2-Dichloroethane-d4 (Surr)	*98*		*70 - 130*		*05/11/15 19:27*	*1*
Toluene-d8 (Surr)	*99*		*70 - 130*		*05/11/15 19:27*	*1*

Lab Sample ID: LCS 320-73719/4
Matrix: Air
Analysis Batch: 73719

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	1.20	1.33		ppb v/v		111	75 - 135
1,1,2-Trichloroethane	1.20	1.10		ppb v/v		92	73 - 133
1,1-Dichloroethane	1.20	1.18		ppb v/v		99	75 - 137
1,1-Dichloroethene	1.20	1.10		ppb v/v		91	70 - 131
1,2-Dichlorobenzene	1.20	1.13		ppb v/v		94	56 - 137
1,2-Dichloroethane	1.20	1.21		ppb v/v		100	75 - 136
1,4-Dichlorobenzene	1.20	1.18		ppb v/v		98	57 - 142
Chlorobenzene	1.20	1.11		ppb v/v		93	69 - 129
Chloroform	1.20	1.26		ppb v/v		105	75 - 135
cis-1,2-Dichloroethene	1.20	1.26		ppb v/v		105	75 - 136
Ethylbenzene	1.20	1.08		ppb v/v		90	73 - 133
Freon 11	1.20	1.33		ppb v/v		110	75 - 139
Freon 113	1.20	1.13		ppb v/v		94	71 - 129
Freon 12	1.20	1.56		ppb v/v		130	75 - 144
m,p-Xylene	2.40	2.18		ppb v/v		91	75 - 136
Methylene Chloride	1.20	1.07		ppb v/v		89	72 - 130
o-Xylene	1.20	1.10		ppb v/v		91	75 - 135
Tetrachloroethene	1.20	1.14		ppb v/v		95	70 - 126
Toluene	1.20	1.17		ppb v/v		98	70 - 130
trans-1,2-Dichloroethene	1.20	1.22		ppb v/v		102	75 - 136
Trichloroethene	1.20	1.22		ppb v/v		102	70 - 130
Vinyl chloride	1.20	1.07		ppb v/v		89	66 - 142

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	6.5	7.26		ug/m3		111	75 - 135
1,1,2-Trichloroethane	6.5	6.03		ug/m3		92	73 - 133
1,1-Dichloroethane	4.9	4.79		ug/m3		99	75 - 137
1,1-Dichloroethene	4.8	4.35		ug/m3		91	70 - 131
1,2-Dichlorobenzene	7.2	6.80		ug/m3		94	56 - 137
1,2-Dichloroethane	4.9	4.88		ug/m3		100	75 - 136
1,4-Dichlorobenzene	7.2	7.11		ug/m3		98	57 - 142
Chlorobenzene	5.5	5.12		ug/m3		93	69 - 129
Chloroform	5.9	6.17		ug/m3		105	75 - 135
cis-1,2-Dichloroethene	4.8	5.01		ug/m3		105	75 - 136
Ethylbenzene	5.2	4.68		ug/m3		90	73 - 133
Freon 11	6.7	7.45		ug/m3		110	75 - 139
Freon 113	9.2	8.64		ug/m3		94	71 - 129
Freon 12	5.9	7.72		ug/m3		130	75 - 144

Method: TO-15 SIM - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS) (Continued)

Lab Sample ID: LCS 320-73719/4
Matrix: Air
Analysis Batch: 73719

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
m,p-Xylene	10	9.45		ug/m3		91	75 - 136
Methylene Chloride	4.2	3.73		ug/m3		89	72 - 130
o-Xylene	5.2	4.76		ug/m3		91	75 - 135
Tetrachloroethene	8.1	7.76		ug/m3		95	70 - 126
Toluene	4.5	4.42		ug/m3		98	70 - 130
trans-1,2-Dichloroethene	4.8	4.85		ug/m3		102	75 - 136
Trichloroethene	6.4	6.57		ug/m3		102	70 - 130
Vinyl chloride	3.1	2.73		ug/m3		89	66 - 142

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*109*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*99*		*70 - 130*
Toluene-d8 (Surr)	*100*		*70 - 130*

Lab Sample ID: LCSD 320-73719/5
Matrix: Air
Analysis Batch: 73719

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1-Trichloroethane	1.20	1.09		ppb v/v		91	75 - 135	20	25
1,1,2-Trichloroethane	1.20	0.905		ppb v/v		75	73 - 133	20	25
1,1-Dichloroethane	1.20	0.975		ppb v/v		81	75 - 137	19	25
1,1-Dichloroethene	1.20	0.915		ppb v/v		76	70 - 131	18	25
1,2-Dichlorobenzene	1.20	0.955		ppb v/v		80	56 - 137	17	25
1,2-Dichloroethane	1.20	0.975		ppb v/v		81	75 - 136	21	25
1,4-Dichlorobenzene	1.20	0.976		ppb v/v		81	57 - 142	19	25
Chlorobenzene	1.20	0.931		ppb v/v		78	69 - 129	18	25
Chloroform	1.20	1.04		ppb v/v		86	75 - 135	20	25
cis-1,2-Dichloroethene	1.20	1.06		ppb v/v		89	75 - 136	17	25
Ethylbenzene	1.20	0.904		ppb v/v		75	73 - 133	18	25
Freon 11	1.20	1.10		ppb v/v		92	75 - 139	18	25
Freon 113	1.20	0.937		ppb v/v		78	71 - 129	18	25
Freon 12	1.20	1.27		ppb v/v		106	75 - 144	21	25
m,p-Xylene	2.40	1.83		ppb v/v		76	75 - 136	17	25
Methylene Chloride	1.20	0.871		ppb v/v		73	72 - 130	21	25
o-Xylene	1.20	0.913		ppb v/v		76	75 - 135	18	25
Tetrachloroethene	1.20	0.946		ppb v/v		79	70 - 126	19	25
Toluene	1.20	0.972		ppb v/v		81	70 - 130	19	25
trans-1,2-Dichloroethene	1.20	1.03		ppb v/v		85	75 - 136	18	25
Trichloroethene	1.20	1.01		ppb v/v		84	70 - 130	19	25
Vinyl chloride	1.20	1.00		ppb v/v		83	66 - 142	7	25

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1-Trichloroethane	6.5	5.96		ug/m3		91	75 - 135	20	25
1,1,2-Trichloroethane	6.5	4.94		ug/m3		75	73 - 133	20	25
1,1-Dichloroethane	4.9	3.94		ug/m3		81	75 - 137	19	25
1,1-Dichloroethene	4.8	3.63		ug/m3		76	70 - 131	18	25

Method: TO-15 SIM - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS) (Continued)

Lab Sample ID: LCSD 320-73719/5
Matrix: Air
Analysis Batch: 73719

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2-Dichlorobenzene			7.2	5.74		ug/m3		80	56 - 137	17	25
1,2-Dichloroethane			4.9	3.95		ug/m3		81	75 - 136	21	25
1,4-Dichlorobenzene			7.2	5.87		ug/m3		81	57 - 142	19	25
Chlorobenzene			5.5	4.29		ug/m3		78	69 - 129	18	25
Chloroform			5.9	5.06		ug/m3		86	75 - 135	20	25
cis-1,2-Dichloroethene			4.8	4.21		ug/m3		89	75 - 136	17	25
Ethylbenzene			5.2	3.92		ug/m3		75	73 - 133	18	25
Freon 11			6.7	6.20		ug/m3		92	75 - 139	18	25
Freon 113			9.2	7.18		ug/m3		78	71 - 129	18	25
Freon 12			5.9	6.28		ug/m3		106	75 - 144	21	25
m,p-Xylene			10	7.94		ug/m3		76	75 - 136	17	25
Methylene Chloride			4.2	3.03		ug/m3		73	72 - 130	21	25
o-Xylene			5.2	3.96		ug/m3		76	75 - 135	18	25
Tetrachloroethene			8.1	6.42		ug/m3		79	70 - 126	19	25
Toluene			4.5	3.66		ug/m3		81	70 - 130	19	25
trans-1,2-Dichloroethene			4.8	4.07		ug/m3		85	75 - 136	18	25
Trichloroethene			6.4	5.45		ug/m3		84	70 - 130	19	25
Vinyl chloride			3.1	2.56		ug/m3		83	66 - 142	7	25

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*107*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*97*		*70 - 130*
Toluene-d8 (Surr)	*100*		*70 - 130*

QC Association Summary

Client: AECOM, Inc.
Project/Site: TRW Microwave

TestAmerica Job ID: 320-12924-1

Air - GC/MS VOA

Analysis Batch: 73563

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-12924-1	J6038-SS5-050615-1	Total/NA	Air	TO-15	
320-12924-2	J6038-SS5-050615-2	Total/NA	Air	TO-15	
320-12924-3	J6038-SS7-050615	Total/NA	Air	TO-15	
320-12924-4	J6038-SS11-050615	Total/NA	Air	TO-15	
LCS 320-73563/3	Lab Control Sample	Total/NA	Air	TO-15	
LCSD 320-73563/27	Lab Control Sample Dup	Total/NA	Air	TO-15	
MB 320-73563/6	Method Blank	Total/NA	Air	TO-15	

Analysis Batch: 73719

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-12924-5	J6038-IA1-050615-1	Total/NA	Air	TO-15 SIM	
320-12924-6	J6038-IA1-050615-2	Total/NA	Air	TO-15 SIM	
320-12924-7	J6038-IA2-050615	Total/NA	Air	TO-15 SIM	
320-12924-8	J6038-IA3-050615	Total/NA	Air	TO-15 SIM	
320-12924-9	J6038-IA4-050615	Total/NA	Air	TO-15 SIM	
320-12924-10	J6038-IA5-050615	Total/NA	Air	TO-15 SIM	
320-12924-11	J6038-OA1-050615-1	Total/NA	Air	TO-15 SIM	
320-12924-12	J6038-OA1-050615-2	Total/NA	Air	TO-15 SIM	
LCS 320-73719/4	Lab Control Sample	Total/NA	Air	TO-15 SIM	
LCSD 320-73719/5	Lab Control Sample Dup	Total/NA	Air	TO-15 SIM	
MB 320-73719/9	Method Blank	Total/NA	Air	TO-15 SIM	

Lab Chronicle

Client: AECOM, Inc.
Project/Site: TRW Microwave

TestAmerica Job ID: 320-12924-1

Client Sample ID: J6038-SS5-050615-1 — Lab Sample ID: 320-12924-1

Date Collected: 05/06/15 11:44 — **Matrix: Air**
Date Received: 05/08/15 14:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO-15		1.75	73563	05/12/15 05:41	SRS	TAL SAC

Client Sample ID: J6038-SS5-050615-2 — Lab Sample ID: 320-12924-2

Date Collected: 05/06/15 11:44 — **Matrix: Air**
Date Received: 05/08/15 14:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO-15		3.57	73563	05/12/15 08:11	SRS	TAL SAC

Client Sample ID: J6038-SS7-050615 — Lab Sample ID: 320-12924-3

Date Collected: 05/06/15 12:52 — **Matrix: Air**
Date Received: 05/08/15 14:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO-15		18	73563	05/12/15 08:52	SRS	TAL SAC

Client Sample ID: J6038-SS11-050615 — Lab Sample ID: 320-12924-4

Date Collected: 05/06/15 13:50 — **Matrix: Air**
Date Received: 05/08/15 14:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO-15		1.01	73563	05/11/15 20:47	SRS	TAL SAC

Client Sample ID: J6038-IA1-050615-1 — Lab Sample ID: 320-12924-5

Date Collected: 05/06/15 17:58 — **Matrix: Air**
Date Received: 05/08/15 14:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO-15 SIM		1	73719	05/11/15 21:47	AMAO	TAL SAC

Client Sample ID: J6038-IA1-050615-2 — Lab Sample ID: 320-12924-6

Date Collected: 05/06/15 17:58 — **Matrix: Air**
Date Received: 05/08/15 14:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO-15 SIM		1	73719	05/11/15 22:45	AMAO	TAL SAC

Client Sample ID: J6038-IA2-050615 — Lab Sample ID: 320-12924-7

Date Collected: 05/06/15 18:16 — **Matrix: Air**
Date Received: 05/08/15 14:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO-15 SIM		1	73719	05/11/15 23:44	AMAO	TAL SAC

Client Sample ID: J6038-IA3-050615 — Lab Sample ID: 320-12924-8

Date Collected: 05/06/15 18:21 — **Matrix: Air**
Date Received: 05/08/15 14:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO-15 SIM		1	73719	05/12/15 00:42	AMAO	TAL SAC

Client Sample ID: J6038-IA4-050615 — Lab Sample ID: 320-12924-9

Date Collected: 05/06/15 18:08 — **Matrix: Air**
Date Received: 05/08/15 14:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO-15 SIM		1	73719	05/12/15 01:40	AMAO	TAL SAC

Client Sample ID: J6038-IA5-050615 — Lab Sample ID: 320-12924-10

Date Collected: 05/06/15 19:12 — **Matrix: Air**
Date Received: 05/08/15 14:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO-15 SIM		1	73719	05/12/15 02:39	AMAO	TAL SAC

Client Sample ID: J6038-OA1-050615-1 — Lab Sample ID: 320-12924-11

Date Collected: 05/06/15 19:03 — **Matrix: Air**
Date Received: 05/08/15 14:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO-15 SIM		1	73719	05/12/15 03:39	AMAO	TAL SAC

Client Sample ID: J6038-OA1-050615-2 — Lab Sample ID: 320-12924-12

Date Collected: 05/06/15 19:03 — **Matrix: Air**
Date Received: 05/08/15 14:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO-15 SIM		1	73719	05/12/15 04:38	AMAO	TAL SAC

Laboratory References:

TAL SAC = TestAmerica Sacramento, 880 Riverside Parkway, West Sacramento, CA 95605, TEL (916)373-5600

Certification Summary

Client: AECOM, Inc.
Project/Site: TRW Microwave

TestAmerica Job ID: 320-12924-1

Laboratory: TestAmerica Sacramento

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
A2LA	DoD ELAP		2928-01	01-31-16
Alaska (UST)	State Program	10	UST-055	12-18-15
Arizona	State Program	9	AZ0708	08-11-15
Arkansas DEQ	State Program	6	88-0691	06-17-15
California	State Program	9	2897	01-31-16
Colorado	State Program	8	N/A	08-31-15
Connecticut	State Program	1	PH-0691	06-30-15
Florida	NELAP	4	E87570	06-30-15
Hawaii	State Program	9	N/A	01-29-16
Illinois	NELAP	5	200060	03-17-16
Kansas	NELAP	7	E-10375	10-31-15
Louisiana	NELAP	6	30612	06-30-15
Michigan	State Program	5	9947	01-31-16
Nevada	State Program	9	CA44	07-31-15
New Jersey	NELAP	2	CA005	06-30-15
New York	NELAP	2	11666	04-01-16
Oregon	NELAP	10	CA200005	01-29-16
Oregon	NELAP Secondary AB	10	E87570	06-30-15
Pennsylvania	NELAP	3	9947	03-31-16
Texas	NELAP	6	T104704399-08-TX	05-31-16
US Fish & Wildlife	Federal		LE148388-0	02-28-16
USDA	Federal		P330-11-00436	12-30-17
USEPA UCMR	Federal	1	CA00044	11-06-16
Utah	NELAP	8	QUAN1	02-28-16
Washington	State Program	10	C581	05-04-16
West Virginia (DW)	State Program	3	9930C	12-31-15
Wyoming	State Program	8	8TMS-Q	01-29-16

Method Summary

Client: AECOM, Inc.
Project/Site: TRW Microwave

TestAmerica Job ID: 320-12924-1

Method	Method Description	Protocol	Laboratory
TO-15	Volatile Organic Compounds in Ambient Air	EPA	TAL SAC
TO-15 SIM	Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS)	EPA-21	TAL SAC

Protocol References:

EPA = US Environmental Protection Agency

EPA-21 = "Compendium Of Methods For The Determination Of Toxic Organic Compounds In Ambient Air", Second Edition, EPA/625/R-96/010B, January 1999

Laboratory References:

TAL SAC = TestAmerica Sacramento, 880 Riverside Parkway, West Sacramento, CA 95605, TEL (916)373-5600

Sample Summary

Client: AECOM, Inc.
Project/Site: TRW Microwave

TestAmerica Job ID: 320-12924-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
320-12924-1	J6038-SS5-050615-1	Air	05/06/15 11:44	05/08/15 14:50
320-12924-2	J6038-SS5-050615-2	Air	05/06/15 11:44	05/08/15 14:50
320-12924-3	J6038-SS7-050615	Air	05/06/15 12:52	05/08/15 14:50
320-12924-4	J6038-SS11-050615	Air	05/06/15 13:50	05/08/15 14:50
320-12924-5	J6038-IA1-050615-1	Air	05/06/15 17:58	05/08/15 14:50
320-12924-6	J6038-IA1-050615-2	Air	05/06/15 17:58	05/08/15 14:50
320-12924-7	J6038-IA2-050615	Air	05/06/15 18:16	05/08/15 14:50
320-12924-8	J6038-IA3-050615	Air	05/06/15 18:21	05/08/15 14:50
320-12924-9	J6038-IA4-050615	Air	05/06/15 18:08	05/08/15 14:50
320-12924-10	J6038-IA5-050615	Air	05/06/15 19:12	05/08/15 14:50
320-12924-11	J6038-OA1-050615-1	Air	05/06/15 19:03	05/08/15 14:50
320-12924-12	J6038-OA1-050615-2	Air	05/06/15 19:03	05/08/15 14:50

AIR - GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Sacramento Job No.: 320-12924-1

SDG No.:

Instrument ID: ATMS2 Analysis Batch Number: 68573

Lab Sample ID: IC 320-68573/11 Client Sample ID:

Date Analyzed: 03/18/15 06:55 Lab File ID: 15031710.D GC Column: RTX-Volatiles ID: 0.32(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
n-Butanol	11.09	Poor chromatography	shardaa	03/18/15 11:41

Lab Sample ID: ICIS 320-68573/12 Client Sample ID:

Date Analyzed: 03/18/15 07:37 Lab File ID: 15031711.D GC Column: RTX-Volatiles ID: 0.32(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
n-Butanol	11.09	Poor chromatography	shardaa	03/18/15 11:44

Lab Sample ID: IC 320-68573/13 Client Sample ID:

Date Analyzed: 03/18/15 08:20 Lab File ID: 15031712.D GC Column: RTX-Volatiles ID: 0.32(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
n-Butanol	11.09	Poor chromatography	shardaa	03/18/15 11:44

Lab Sample ID: IC 320-68573/14 Client Sample ID:

Date Analyzed: 03/18/15 09:04 Lab File ID: 15031713.D GC Column: RTX-Volatiles ID: 0.32(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
n-Butanol	11.09	Poor chromatography	shardaa	03/18/15 11:46

AIR - GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Sacramento Job No.: 320-12924-1

SDG No.:

Instrument ID: ATMS2 Analysis Batch Number: 73563

Lab Sample ID: CCVIS 320-73563/2 Client Sample ID:

Date Analyzed: 05/11/15 13:38 Lab File ID: 15051102.D GC Column: RTX-Volatiles ID: 0.32(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
n-Butanol	11.05	Split Peak	leeh	05/11/15 14:54

AIR - GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Sacramento Job No.: 320-12924-1

SDG No.:

Instrument ID: ATMS5 Analysis Batch Number: 69481

Lab Sample ID: IC 320-69481/3 Client Sample ID:

Date Analyzed: 03/25/15 20:20 Lab File ID: MS5032510.D GC Column: RTX-Volatiles ID: 0.32(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,2-Dichloro-1,1,2,2-tetrafluoroethane	4.42	Poor chromatography	shardaa	03/26/15 13:36
Trichlorofluoromethane	6.46	Poor chromatography	shardaa	03/26/15 13:36
cis-1,2-Dichloroethene	11.30	Poor chromatography	shardaa	03/26/15 13:36
Carbon tetrachloride	13.13	Poor chromatography	shardaa	03/26/15 13:36
cis-1,3-Dichloropropene	16.70	Poor chromatography	shardaa	03/26/15 13:36
Styrene	21.93	Poor chromatography	shardaa	03/26/15 13:36
Hexachlorobutadiene	29.98	Poor chromatography	shardaa	03/26/15 13:36

Lab Sample ID: IC 320-69481/4 Client Sample ID:

Date Analyzed: 03/25/15 21:08 Lab File ID: MS5032511.D GC Column: RTX-Volatiles ID: 0.32(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Chloromethane	4.58	Poor chromatography	shardaa	03/26/15 13:32
Bromomethane	5.65	Poor chromatography	shardaa	03/26/15 13:32
cis-1,2-Dichloroethene	11.30	Poor chromatography	shardaa	03/26/15 13:32
1,1,1-Trichloroethane	12.57	Poor chromatography	shardaa	03/26/15 13:32
Carbon tetrachloride	13.12	Poor chromatography	shardaa	03/26/15 13:32
Tetrachloroethene	18.99	Poor chromatography	shardaa	03/26/15 13:32
1,1,2,2-Tetrachloroethane	22.87	Poor chromatography	shardaa	03/26/15 13:32
1,2,4-Trimethylbenzene	24.64	Poor chromatography	shardaa	03/26/15 13:32
1,3-Dichlorobenzene	25.38	Poor chromatography	shardaa	03/26/15 13:32
Hexachlorobutadiene	29.98	Poor chromatography	shardaa	03/26/15 13:32

AIR - GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Sacramento Job No.: 320-12924-1

SDG No.:

Instrument ID: ATMS5 Analysis Batch Number: 69481

Lab Sample ID: IC 320-69481/5 Client Sample ID:

Date Analyzed: 03/25/15 21:58 Lab File ID: MS5032512.D GC Column: RTX-Volatiles ID: 0.32(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Bromomethane	5.65	Poor chromatography	shardaa	03/26/15 13:27
2-Butanone (MEK)	10.96	Poor chromatography	shardaa	03/26/15 13:27
cis-1,2-Dichloroethene	11.30	Poor chromatography	shardaa	03/26/15 13:27
Carbon tetrachloride	13.13	Poor chromatography	shardaa	03/26/15 13:27
Bromoform	22.47	Poor chromatography	shardaa	03/26/15 13:27
1,1,2,2-Tetrachloroethane	22.87	Poor chromatography	shardaa	03/26/15 13:27
1,3-Dichlorobenzene	25.38	Poor chromatography	shardaa	03/26/15 13:27
Hexachlorobutadiene	29.98	Poor chromatography	shardaa	03/26/15 13:27

Lab Sample ID: IC 320-69481/6 Client Sample ID:

Date Analyzed: 03/25/15 22:49 Lab File ID: MS5032513.D GC Column: RTX-Volatiles ID: 0.32(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Chloromethane	4.59	Poor chromatography	shardaa	03/26/15 13:23
cis-1,2-Dichloroethene	11.30	Poor chromatography	shardaa	03/26/15 13:23
cis-1,3-Dichloropropene	16.70	Poor chromatography	shardaa	03/26/15 13:23
Bromoform	22.47	Poor chromatography	shardaa	03/26/15 13:23

Lab Sample ID: IC 320-69481/7 Client Sample ID:

Date Analyzed: 03/25/15 23:42 Lab File ID: MS5032514.D GC Column: RTX-Volatiles ID: 0.32(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Bromomethane	5.66	Poor chromatography	shardaa	03/26/15 13:21
cis-1,2-Dichloroethene	11.30	Poor chromatography	shardaa	03/26/15 13:21
Hexachlorobutadiene	29.98	Poor chromatography	shardaa	03/26/15 13:21

AIR - GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Sacramento Job No.: 320-12924-1

SDG No.:

Instrument ID: ATMS5 Analysis Batch Number: 73719

Lab Sample ID: 320-12924-7 Client Sample ID: J6038-IA2-050615

Date Analyzed: 05/11/15 23:44 Lab File ID: MS5051114.D GC Column: RTX-Volatiles ID: 0.32(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
cis-1,2-Dichloroethene	11.25	Baseline	ortizam	05/13/15 16:52
1,1,1-Trichloroethane	12.51	Baseline	ortizam	05/13/15 16:52

Lab Sample ID: 320-12924-8 Client Sample ID: J6038-IA3-050615

Date Analyzed: 05/12/15 00:42 Lab File ID: MS5051115.D GC Column: RTX-Volatiles ID: 0.32(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
cis-1,2-Dichloroethene	11.24	Poor chromatography	ortizam	05/13/15 16:54
1,1,1-Trichloroethane	12.51	Poor chromatography	ortizam	05/13/15 16:54

Lab Sample ID: 320-12924-10 Client Sample ID: J6038-IA5-050615

Date Analyzed: 05/12/15 02:39 Lab File ID: MS5051117.D GC Column: RTX-Volatiles ID: 0.32(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Trichlorofluoromethane	6.42	Split Peak	ortizam	05/12/15 12:40
cis-1,2-Dichloroethene	11.24	Baseline	ortizam	05/12/15 12:40

Lab Sample ID: 320-12924-12 Client Sample ID: J6038-OA1-050615-2

Date Analyzed: 05/12/15 04:38 Lab File ID: MS5051119.D GC Column: RTX-Volatiles ID: 0.32(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,1,1-Trichloroethane	12.52	Baseline	ortizam	05/13/15 16:50

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Sacramento Job No.: 320-12924-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
VACORPIC0.20_00014	04/19/15	03/20/15	N2, Lot HOUSE	50 psi absolute	VACORPIC2.5_00147	4 psi absolute	1,1,1-Trichloroethane	0.2 ppb v/v
							1,1,2,2-Tetrachloroethane	0.2 ppb v/v
							1,1,2-Trichloro-1,2,2-trifluoroethane	0.2 ppb v/v
							1,1,2-Trichloroethane	0.2 ppb v/v
							1,1-Dichloroethane	0.2 ppb v/v
							1,1-Dichloroethene	0.2 ppb v/v
							1,2,3-Trichloropropane	0.2 ppb v/v
							1,2,4-Trichlorobenzene	0.2 ppb v/v
							1,2,4-Trimethylbenzene	0.2 ppb v/v
							1,2-Dibromoethane (EDB)	0.2 ppb v/v
							1,2-Dichloro-1,1,2,2-tetrafluoroethane	0.2 ppb v/v
							1,2-Dichlorobenzene	0.2 ppb v/v
							1,2-Dichloroethane	0.2 ppb v/v
							1,2-Dichloropropane	0.2 ppb v/v
							1,3,5-Trimethylbenzene	0.2 ppb v/v
							1,3-Dichlorobenzene	0.2 ppb v/v
							1,4-Dichlorobenzene	0.2 ppb v/v
							1,4-Dioxane	0.2 ppb v/v
							2-Butanone (MEK)	0.2 ppb v/v
							2-Hexanone	0.2 ppb v/v
							4-Ethyltoluene	0.2 ppb v/v
							4-Methyl-2-pentanone (MIBK)	0.2 ppb v/v
							Acetone	0.2 ppb v/v
							Acetonitrile	0.2 ppb v/v
							Acrolein	0.2 ppb v/v
							Acrylonitrile	0.2 ppb v/v
							Benzene	0.2 ppb v/v
							Benzyl chloride	0.16 ppb v/v
							Bromodichloromethane	0.2 ppb v/v
							Bromoform	0.2 ppb v/v
							Bromomethane	0.2 ppb v/v
							Butadiene	0.2 ppb v/v
							Carbon tetrachloride	0.2 ppb v/v
							Chlorobenzene	0.2 ppb v/v
							Chloroethane	0.2 ppb v/v
							Chloroform	0.2 ppb v/v
							Chloromethane	0.2 ppb v/v
							cis-1,2-Dichloroethene	0.2 ppb v/v
							cis-1,3-Dichloropropene	0.2 ppb v/v
							Cyclohexane	0.2 ppb v/v
							Dibromochloromethane	0.2 ppb v/v
							Dichlorodifluoromethane	0.2 ppb v/v
							Ethyl acetate	0.2 ppb v/v
							Ethylbenzene	0.2 ppb v/v
							Freon 11	0.2 ppb v/v

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Sacramento Job No.: 320-12924-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Hexachlorobutadiene	0.2 ppb v/v
							Hexane	0.2 ppb v/v
							Isopropyl alcohol	0.2 ppb v/v
							m,p-Xylene	0.4 ppb v/v
							Methyl tert-butyl ether	0.2 ppb v/v
							Methylene Chloride	0.2 ppb v/v
							n-Heptane	0.2 ppb v/v
							Naphthalene	0.2 ppb v/v
							o-Xylene	0.2 ppb v/v
							Propene	0.2 ppb v/v
							Styrene	0.2 ppb v/v
							Tetrachloroethene	0.2 ppb v/v
							Tetrahydrofuran	0.2 ppb v/v
							Toluene	0.2 ppb v/v
							trans-1,2-Dichloroethene	0.2 ppb v/v
							trans-1,3-Dichloropropene	0.2 ppb v/v
							Trichloroethene	0.2 ppb v/v
							Vinyl acetate	0.2 ppb v/v
							Vinyl chloride	0.2 ppb v/v
.VACORPIC2.5_00147	04/19/15	03/19/15	N2, Lot HOUSE	51.2 psi absolute	VACORPIC40_00181	3.2 psi absolute	1,1,1-Trichloroethane	2.5 ppb v/v
							1,1,2,2-Tetrachloroethane	2.5 ppb v/v
							1,1,2-Trichloro-1,2,2-trifluoroethane	2.5 ppb v/v
							1,1,2-Trichloroethane	2.5 ppb v/v
							1,1-Dichloroethane	2.5 ppb v/v
							1,1-Dichloroethene	2.5 ppb v/v
							1,2,3-Trichloropropane	2.5 ppb v/v
							1,2,4-Trichlorobenzene	2.5 ppb v/v
							1,2,4-Trimethylbenzene	2.5 ppb v/v
							1,2-Dibromoethane (EDB)	2.5 ppb v/v
							1,2-Dichloro-1,1,2,2-tetrafluoroethane	2.5 ppb v/v
							1,2-Dichlorobenzene	2.5 ppb v/v
							1,2-Dichloroethane	2.5 ppb v/v
							1,2-Dichloropropane	2.5 ppb v/v
							1,3,5-Trimethylbenzene	2.5 ppb v/v
							1,3-Dichlorobenzene	2.5 ppb v/v
							1,4-Dichlorobenzene	2.5 ppb v/v
							1,4-Dioxane	2.5 ppb v/v
							2-Butanone (MEK)	2.5 ppb v/v
							2-Hexanone	2.5 ppb v/v
							4-Ethyltoluene	2.5 ppb v/v
							4-Methyl-2-pentanone (MIBK)	2.5 ppb v/v
							Acetone	2.5 ppb v/v
							Acetonitrile	2.5 ppb v/v
							Acrolein	2.5 ppb v/v
							Acrylonitrile	2.5 ppb v/v

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Sacramento Job No.: 320-12924-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Benzene	2.5 ppb v/v
							Benzyl chloride	2 ppb v/v
							Bromodichloromethane	2.5 ppb v/v
							Bromoform	2.5 ppb v/v
							Bromomethane	2.5 ppb v/v
							Butadiene	2.5 ppb v/v
							Carbon tetrachloride	2.5 ppb v/v
							Chlorobenzene	2.5 ppb v/v
							Chloroethane	2.5 ppb v/v
							Chloroform	2.5 ppb v/v
							Chloromethane	2.5 ppb v/v
							cis-1,2-Dichloroethene	2.5 ppb v/v
							cis-1,3-Dichloropropene	2.5 ppb v/v
							Cyclohexane	2.5 ppb v/v
							Dibromochloromethane	2.5 ppb v/v
							Dichlorodifluoromethane	2.5 ppb v/v
							Ethyl acetate	2.5 ppb v/v
							Ethylbenzene	2.5 ppb v/v
							Freon 11	2.5 ppb v/v
							Hexachlorobutadiene	2.5 ppb v/v
							Hexane	2.5 ppb v/v
							Isopropyl alcohol	2.5 ppb v/v
							m,p-Xylene	5 ppb v/v
							Methyl tert-butyl ether	2.5 ppb v/v
							Methylene Chloride	2.5 ppb v/v
							n-Heptane	2.5 ppb v/v
							Naphthalene	2.5 ppb v/v
							o-Xylene	2.5 ppb v/v
							Propene	2.5 ppb v/v
							Styrene	2.5 ppb v/v
							Tetrachloroethene	2.5 ppb v/v
							Tetrahydrofuran	2.5 ppb v/v
							Toluene	2.5 ppb v/v
							trans-1,2-Dichloroethene	2.5 ppb v/v
							trans-1,3-Dichloropropene	2.5 ppb v/v
							Trichloroethene	2.5 ppb v/v
							Vinyl acetate	2.5 ppb v/v
							Vinyl chloride	2.5 ppb v/v
..VACORPIC40_00181	04/19/15	03/19/15	N2, Lot HOUSE	50 psi absolute	VACORPSTKCCV_00020	2 psi absolute	1,1,1-Trichloroethane	40 ppb v/v
							1,1,2,2-Tetrachloroethane	40 ppb v/v
							1,1,2-Trichloro-1,2,2-trifluor oethane	40 ppb v/v
							1,1,2-Trichloroethane	40 ppb v/v
							1,1-Dichloroethane	40 ppb v/v
							1,1-Dichloroethene	40 ppb v/v
							1,2,3-Trichloropropane	40 ppb v/v
							1,2,4-Trichlorobenzene	40 ppb v/v

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Sacramento Job No.: 320-12924-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,2,4-Trimethylbenzene	40 ppb v/v
							1,2-Dibromoethane (EDB)	40 ppb v/v
							1,2-Dichloro-1,1,2,2-tetrafluoroethane	40 ppb v/v
							1,2-Dichlorobenzene	40 ppb v/v
							1,2-Dichloroethane	40 ppb v/v
							1,2-Dichloropropane	40 ppb v/v
							1,3,5-Trimethylbenzene	40 ppb v/v
							1,3-Dichlorobenzene	40 ppb v/v
							1,4-Dichlorobenzene	40 ppb v/v
							1,4-Dioxane	40 ppb v/v
							2-Butanone (MEK)	40 ppb v/v
							2-Hexanone	40 ppb v/v
							4-Ethyltoluene	40 ppb v/v
							4-Methyl-2-pentanone (MIBK)	40 ppb v/v
							Acetone	40 ppb v/v
							Acetonitrile	40 ppb v/v
							Acrolein	40 ppb v/v
							Acrylonitrile	40 ppb v/v
							Benzene	40 ppb v/v
							Benzyl chloride	32 ppb v/v
							Bromodichloromethane	40 ppb v/v
							Bromoform	40 ppb v/v
							Bromomethane	40 ppb v/v
							Butadiene	40 ppb v/v
							Carbon tetrachloride	40 ppb v/v
							Chlorobenzene	40 ppb v/v
							Chloroethane	40 ppb v/v
							Chloroform	40 ppb v/v
							Chloromethane	40 ppb v/v
							cis-1,2-Dichloroethene	40 ppb v/v
							cis-1,3-Dichloropropene	40 ppb v/v
							Cyclohexane	40 ppb v/v
							Dibromochloromethane	40 ppb v/v
							Dichlorodifluoromethane	40 ppb v/v
							Ethyl acetate	40 ppb v/v
							Ethylbenzene	40 ppb v/v
							Freon 11	40 ppb v/v
							Hexachlorobutadiene	40 ppb v/v
							Hexane	40 ppb v/v
							Isopropyl alcohol	40 ppb v/v
							m,p-Xylene	80 ppb v/v
							Methyl tert-butyl ether	40 ppb v/v
							Methylene Chloride	40 ppb v/v
							n-Heptane	40 ppb v/v
							Naphthalene	40 ppb v/v
							o-Xylene	40 ppb v/v
							Propene	40 ppb v/v

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Sacramento Job No.: 320-12924-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Styrene	40 ppb v/v
							Tetrachloroethene	40 ppb v/v
							Tetrahydrofuran	40 ppb v/v
							Toluene	40 ppb v/v
							trans-1,2-Dichloroethene	40 ppb v/v
							trans-1,3-Dichloropropene	40 ppb v/v
							Trichloroethene	40 ppb v/v
							Vinyl acetate	40 ppb v/v
							Vinyl chloride	40 ppb v/v
...VACORPSTKCCV_00020	12/17/15		Linde, Lot CC-230119		(Purchased Reagent)		1,1,1-Trichloroethane	1 ppm v/v
							1,1,2,2-Tetrachloroethane	1 ppm v/v
							1,1,2-Trichloro-1,2,2-trifluor oethane	1 ppm v/v
							1,1,2-Trichloroethane	1 ppm v/v
							1,1-Dichloroethane	1 ppm v/v
							1,1-Dichloroethene	1 ppm v/v
							1,2,3-Trichloropropane	1 ppm v/v
							1,2,4-Trichlorobenzene	1 ppm v/v
							1,2,4-Trimethylbenzene	1 ppm v/v
							1,2-Dibromoethane (EDB)	1 ppm v/v
							1,2-Dichloro-1,1,2,2-tetrafluo roethane	1 ppm v/v
							1,2-Dichlorobenzene	1 ppm v/v
							1,2-Dichloroethane	1 ppm v/v
							1,2-Dichloropropane	1 ppm v/v
							1,3,5-Trimethylbenzene	1 ppm v/v
							1,3-Dichlorobenzene	1 ppm v/v
							1,4-Dichlorobenzene	1 ppm v/v
							1,4-Dioxane	1 ppm v/v
							2-Butanone (MEK)	1 ppm v/v
							2-Hexanone	1 ppm v/v
							4-Ethyltoluene	1 ppm v/v
							4-Methyl-2-pentanone (MIBK)	1 ppm v/v
							Acetone	1 ppm v/v
							Acetonitrile	1 ppm v/v
							Acrolein	1 ppm v/v
							Acrylonitrile	1 ppm v/v
							Benzene	1 ppm v/v
							Benzyl chloride	0.8 ppm v/v
							Bromodichloromethane	1 ppm v/v
							Bromoform	1 ppm v/v
							Bromomethane	1 ppm v/v
							Butadiene	1 ppm v/v
							Carbon tetrachloride	1 ppm v/v
							Chlorobenzene	1 ppm v/v
							Chloroethane	1 ppm v/v
							Chloroform	1 ppm v/v
							Chloromethane	1 ppm v/v

Lab Name: TestAmerica Sacramento Job No.: 320-12924-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							cis-1,2-Dichloroethene	1 ppm v/v
							cis-1,3-Dichloropropene	1 ppm v/v
							Cyclohexane	1 ppm v/v
							Dibromochloromethane	1 ppm v/v
							Dichlorodifluoromethane	1 ppm v/v
							Ethyl acetate	1 ppm v/v
							Ethylbenzene	1 ppm v/v
							Freon 11	1 ppm v/v
							Hexachlorobutadiene	1 ppm v/v
							Hexane	1 ppm v/v
							Isopropyl alcohol	1 ppm v/v
							m,p-Xylene	2 ppm v/v
							Methyl tert-butyl ether	1 ppm v/v
							Methylene Chloride	1 ppm v/v
							n-Heptane	1 ppm v/v
							Naphthalene	1 ppm v/v
							o-Xylene	1 ppm v/v
							Propene	1 ppm v/v
							Styrene	1 ppm v/v
							Tetrachloroethene	1 ppm v/v
							Tetrahydrofuran	1 ppm v/v
							Toluene	1 ppm v/v
							trans-1,2-Dichloroethene	1 ppm v/v
							trans-1,3-Dichloropropene	1 ppm v/v
							Trichloroethene	1 ppm v/v
							Vinyl acetate	1 ppm v/v
							Vinyl chloride	1 ppm v/v
VACORPIC1.0_00008	04/17/15	03/17/15	N2, Lot HOUSE	50 psi absolute	VACORPIC40_00180	1.25 psi absolute	1,1,1-Trichloroethane	1 ppb v/v
							1,1,2,2-Tetrachloroethane	1 ppb v/v
							1,1,2-Trichloro-1,2,2-trifluoroethane	1 ppb v/v
							1,1,2-Trichloroethane	1 ppb v/v
							1,1-Dichloroethane	1 ppb v/v
							1,1-Dichloroethene	1 ppb v/v
							1,2,3-Trichlorobenzene	1 ppb v/v
							1,2,3-Trichloropropane	1 ppb v/v
							1,2,4-Trichlorobenzene	1 ppb v/v
							1,2,4-Trimethylbenzene	1 ppb v/v
							1,2-Dibromoethane (EDB)	1 ppb v/v
							1,2-Dichloro-1,1,2,2-tetrafluoroethane	1 ppb v/v
							1,2-Dichlorobenzene	1 ppb v/v
							1,2-Dichloroethane	1 ppb v/v
							1,2-Dichloropropane	1 ppb v/v
							1,3,5-Trimethylbenzene	1 ppb v/v
							1,3-Dichlorobenzene	1 ppb v/v
							1,4-Dichlorobenzene	1 ppb v/v

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Sacramento Job No.: 320-12924-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,4-Dioxane	1 ppb v/v
							2-Butanone (MEK)	1 ppb v/v
							2-Chlorotoluene	1 ppb v/v
							2-Hexanone	1 ppb v/v
							2-Methyl-2-propanol	1 ppb v/v
							3-Chloro-1-propene	1 ppb v/v
							4-Ethyltoluene	1 ppb v/v
							4-Isopropyltoluene	1 ppb v/v
							4-Methyl-2-pentanone (MIBK)	1 ppb v/v
							Acetone	1 ppb v/v
							Acetonitrile	1 ppb v/v
							Acrolein	1 ppb v/v
							Acrylonitrile	1 ppb v/v
							Alpha Methyl Styrene	1 ppb v/v
							Benzene	1 ppb v/v
							Benzyl chloride	0.8 ppb v/v
							Bromodichloromethane	1 ppb v/v
							Bromoform	1 ppb v/v
							Bromomethane	1 ppb v/v
							Butadiene	1 ppb v/v
							Butane	1 ppb v/v
							C6 Range	1 ppb v/v
							Carbon disulfide	1 ppb v/v
							Carbon tetrachloride	1 ppb v/v
							Chlorobenzene	1 ppb v/v
							Chlorodifluoromethane	1 ppb v/v
							Chloroethane	1 ppb v/v
							Chloroform	1 ppb v/v
							Chloromethane	1 ppb v/v
							cis-1,2-Dichloroethene	1 ppb v/v
							cis-1,3-Dichloropropene	1 ppb v/v
							Cyclohexane	1 ppb v/v
							Dibromochloromethane	1 ppb v/v
							Dibromomethane	1 ppb v/v
							Dichlorodifluoromethane	1 ppb v/v
							Dodecane	1 ppb v/v
							Ethyl acetate	1 ppb v/v
							Ethyl ether	1 ppb v/v
							Ethylbenzene	1 ppb v/v
							Freon 11	1 ppb v/v
							Hexachlorobutadiene	1 ppb v/v
							Hexane	1 ppb v/v
							Isooctane	1 ppb v/v
							Isopropyl alcohol	1 ppb v/v
							Isopropylbenzene	1 ppb v/v
							m,p-Xylene	2 ppb v/v
							Methyl methacrylate	1 ppb v/v
							Methyl tert-butyl ether	1 ppb v/v

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Sacramento Job No.: 320-12924-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Methylene Chloride	1 ppb v/v
							n-Butanol	1 ppb v/v
							n-Butylbenzene	1 ppb v/v
							n-Decane	1 ppb v/v
							n-Heptane	1 ppb v/v
							n-Nonane	1 ppb v/v
							n-Octane	1 ppb v/v
							N-Propylbenzene	1 ppb v/v
							Naphthalene	1 ppb v/v
							Nonmethane Organic Compounds as Hexane	1 ppb v/v
							o-Xylene	1 ppb v/v
							PCE Range	1 ppb v/v
							Pentane	1 ppb v/v
							Propene	1 ppb v/v
							sec-Butylbenzene	1 ppb v/v
							Styrene	1 ppb v/v
							tert-Butylbenzene	1 ppb v/v
							Tetrachloroethene	1 ppb v/v
							Tetrahydrofuran	1 ppb v/v
							Toluene	1 ppb v/v
							Toluene Range	1 ppb v/v
							Total VOC as Hexane	1 ppb v/v
							Total VOCs as Tetrachloroethene (PCE)	1 ppb v/v
							trans-1,2-Dichloroethene	1 ppb v/v
							trans-1,3-Dichloropropene	1 ppb v/v
							Trichloroethene	1 ppb v/v
							Undecane	1 ppb v/v
							Vinyl acetate	1 ppb v/v
							Vinyl bromide	1 ppb v/v
							Vinyl chloride	1 ppb v/v
.VACORPIC40_00180	04/17/15	03/17/15	N2, Lot HOUSE	50 psi absolute	VACORPSTKCCV_00020	2 psi absolute	1,1,1-Trichloroethane	40 ppb v/v
							1,1,2,2-Tetrachloroethane	40 ppb v/v
							1,1,2-Trichloro-1,2,2-trifluoroethane	40 ppb v/v
							1,1,2-Trichloroethane	40 ppb v/v
							1,1-Dichloroethane	40 ppb v/v
							1,1-Dichloroethene	40 ppb v/v
							1,2,3-Trichlorobenzene	40 ppb v/v
							1,2,3-Trichloropropane	40 ppb v/v
							1,2,4-Trichlorobenzene	40 ppb v/v
							1,2,4-Trimethylbenzene	40 ppb v/v
							1,2-Dibromoethane (EDB)	40 ppb v/v
							1,2-Dichloro-1,1,2,2-tetrafluoroethane	40 ppb v/v
							1,2-Dichlorobenzene	40 ppb v/v

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Sacramento Job No.: 320-12924-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,2-Dichloroethane	40 ppb v/v
							1,2-Dichloropropane	40 ppb v/v
							1,3,5-Trimethylbenzene	40 ppb v/v
							1,3-Dichlorobenzene	40 ppb v/v
							1,4-Dichlorobenzene	40 ppb v/v
							1,4-Dioxane	40 ppb v/v
							2-Butanone (MEK)	40 ppb v/v
							2-Chlorotoluene	40 ppb v/v
							2-Hexanone	40 ppb v/v
							2-Methyl-2-propanol	40 ppb v/v
							3-Chloro-1-propene	40 ppb v/v
							4-Ethyltoluene	40 ppb v/v
							4-Isopropyltoluene	40 ppb v/v
							4-Methyl-2-pentanone (MIBK)	40 ppb v/v
							Acetone	40 ppb v/v
							Acetonitrile	40 ppb v/v
							Acrolein	40 ppb v/v
							Acrylonitrile	40 ppb v/v
							Alpha Methyl Styrene	40 ppb v/v
							Benzene	40 ppb v/v
							Benzyl chloride	32 ppb v/v
							Bromodichloromethane	40 ppb v/v
							Bromoform	40 ppb v/v
							Bromomethane	40 ppb v/v
							Butadiene	40 ppb v/v
							Butane	40 ppb v/v
							C6 Range	40 ppb v/v
							Carbon disulfide	40 ppb v/v
							Carbon tetrachloride	40 ppb v/v
							Chlorobenzene	40 ppb v/v
							Chlorodifluoromethane	40 ppb v/v
							Chloroethane	40 ppb v/v
							Chloroform	40 ppb v/v
							Chloromethane	40 ppb v/v
							cis-1,2-Dichloroethene	40 ppb v/v
							cis-1,3-Dichloropropene	40 ppb v/v
							Cyclohexane	40 ppb v/v
							Dibromochloromethane	40 ppb v/v
							Dibromomethane	40 ppb v/v
							Dichlorodifluoromethane	40 ppb v/v
							Dodecane	40 ppb v/v
							Ethyl acetate	40 ppb v/v
							Ethyl ether	40 ppb v/v
							Ethylbenzene	40 ppb v/v
							Freon 11	40 ppb v/v
							Hexachlorobutadiene	40 ppb v/v
							Hexane	40 ppb v/v
							Isooctane	40 ppb v/v

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Sacramento Job No.: 320-12924-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Isopropyl alcohol	40 ppb v/v
							Isopropylbenzene	40 ppb v/v
							m,p-Xylene	80 ppb v/v
							Methyl methacrylate	40 ppb v/v
							Methyl tert-butyl ether	40 ppb v/v
							Methylene Chloride	40 ppb v/v
							n-Butanol	40 ppb v/v
							n-Butylbenzene	40 ppb v/v
							n-Decane	40 ppb v/v
							n-Heptane	40 ppb v/v
							n-Nonane	40 ppb v/v
							n-Octane	40 ppb v/v
							N-Propylbenzene	40 ppb v/v
							Naphthalene	40 ppb v/v
							Nonmethane Organic Compounds as Hexane	40 ppb v/v
							o-Xylene	40 ppb v/v
							PCE Range	40 ppb v/v
							Pentane	40 ppb v/v
							Propene	40 ppb v/v
							sec-Butylbenzene	40 ppb v/v
							Styrene	40 ppb v/v
							tert-Butylbenzene	40 ppb v/v
							Tetrachloroethene	40 ppb v/v
							Tetrahydrofuran	40 ppb v/v
							Toluene	40 ppb v/v
							Toluene Range	40 ppb v/v
							Total VOC as Hexane	40 ppb v/v
							Total VOCs as Tetrachloroethene (PCE)	40 ppb v/v
							trans-1,2-Dichloroethene	40 ppb v/v
							trans-1,3-Dichloropropene	40 ppb v/v
							Trichloroethene	40 ppb v/v
							Undecane	40 ppb v/v
							Vinyl acetate	40 ppb v/v
							Vinyl bromide	40 ppb v/v
							Vinyl chloride	40 ppb v/v
..VACORPSTKCCV_00020	12/17/15		Linde, Lot CC-230119		(Purchased Reagent)		1,1,1-Trichloroethane	1 ppm v/v
							1,1,2,2-Tetrachloroethane	1 ppm v/v
							1,1,2-Trichloro-1,2,2-trifluoroethane	1 ppm v/v
							1,1,2-Trichloroethane	1 ppm v/v
							1,1-Dichloroethane	1 ppm v/v
							1,1-Dichloroethene	1 ppm v/v
							1,2,3-Trichlorobenzene	1 ppm v/v
							1,2,3-Trichloropropane	1 ppm v/v
							1,2,4-Trichlorobenzene	1 ppm v/v
							1,2,4-Trimethylbenzene	1 ppm v/v

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Sacramento Job No.: 320-12924-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,2-Dibromoethane (EDB)	1 ppm v/v
							1,2-Dichloro-1,1,2,2-tetrafluoroethane	1 ppm v/v
							1,2-Dichlorobenzene	1 ppm v/v
							1,2-Dichloroethane	1 ppm v/v
							1,2-Dichloropropane	1 ppm v/v
							1,3,5-Trimethylbenzene	1 ppm v/v
							1,3-Dichlorobenzene	1 ppm v/v
							1,4-Dichlorobenzene	1 ppm v/v
							1,4-Dioxane	1 ppm v/v
							2-Butanone (MEK)	1 ppm v/v
							2-Chlorotoluene	1 ppm v/v
							2-Hexanone	1 ppm v/v
							2-Methyl-2-propanol	1 ppm v/v
							3-Chloro-1-propene	1 ppm v/v
							4-Ethyltoluene	1 ppm v/v
							4-Isopropyltoluene	1 ppm v/v
							4-Methyl-2-pentanone (MIBK)	1 ppm v/v
							Acetone	1 ppm v/v
							Acetonitrile	1 ppm v/v
							Acrolein	1 ppm v/v
							Acrylonitrile	1 ppm v/v
							Alpha Methyl Styrene	1 ppm v/v
							Benzene	1 ppm v/v
							Benzyl chloride	0.8 ppm v/v
							Bromodichloromethane	1 ppm v/v
							Bromoform	1 ppm v/v
							Bromomethane	1 ppm v/v
							Butadiene	1 ppm v/v
							Butane	1 ppm v/v
							C6 Range	1 ppm v/v
							Carbon disulfide	1 ppm v/v
							Carbon tetrachloride	1 ppm v/v
							Chlorobenzene	1 ppm v/v
							Chlorodifluoromethane	1 ppm v/v
							Chloroethane	1 ppm v/v
							Chloroform	1 ppm v/v
							Chloromethane	1 ppm v/v
							cis-1,2-Dichloroethene	1 ppm v/v
							cis-1,3-Dichloropropene	1 ppm v/v
							Cyclohexane	1 ppm v/v
							Dibromochloromethane	1 ppm v/v
							Dibromomethane	1 ppm v/v
							Dichlorodifluoromethane	1 ppm v/v
							Dodecane	1 ppm v/v
							Ethyl acetate	1 ppm v/v
							Ethyl ether	1 ppm v/v
							Ethylbenzene	1 ppm v/v

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Sacramento Job No.: 320-12924-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Freon 11	1 ppm v/v
							Hexachlorobutadiene	1 ppm v/v
							Hexane	1 ppm v/v
							Isooctane	1 ppm v/v
							Isopropyl alcohol	1 ppm v/v
							Isopropylbenzene	1 ppm v/v
							m,p-Xylene	2 ppm v/v
							Methyl methacrylate	1 ppm v/v
							Methyl tert-butyl ether	1 ppm v/v
							Methylene Chloride	1 ppm v/v
							n-Butanol	1 ppm v/v
							n-Butylbenzene	1 ppm v/v
							n-Decane	1 ppm v/v
							n-Heptane	1 ppm v/v
							n-Nonane	1 ppm v/v
							n-Octane	1 ppm v/v
							N-Propylbenzene	1 ppm v/v
							Naphthalene	1 ppm v/v
							Nonmethane Organic Compounds as Hexane	1 ppm v/v
							o-Xylene	1 ppm v/v
							PCE Range	1 ppm v/v
							Pentane	1 ppm v/v
							Propene	1 ppm v/v
							sec-Butylbenzene	1 ppm v/v
							Styrene	1 ppm v/v
							tert-Butylbenzene	1 ppm v/v
							Tetrachloroethene	1 ppm v/v
							Tetrahydrofuran	1 ppm v/v
							Toluene	1 ppm v/v
							Toluene Range	1 ppm v/v
							Total VOC as Hexane	1 ppm v/v
							Total VOCs as Tetrachloroethene (PCE)	1 ppm v/v
							trans-1,2-Dichloroethene	1 ppm v/v
							trans-1,3-Dichloropropene	1 ppm v/v
							Trichloroethene	1 ppm v/v
							Undecane	1 ppm v/v
							Vinyl acetate	1 ppm v/v
							Vinyl bromide	1 ppm v/v
							Vinyl chloride	1 ppm v/v
VACORPIC2.5_00149	04/19/15	03/25/15	N2, Lot HOUSE	51.2 psi absolute	VACORPIC40_00181	3.2 psi absolute	1,1,1-Trichloroethane	2.5 ppb v/v
							1,1,2,2-Tetrachloroethane	2.5 ppb v/v
							1,1,2-Trichloro-1,2,2-trifluoroethane	2.5 ppb v/v
							1,1,2-Trichloroethane	2.5 ppb v/v
							1,1-Dichloroethane	2.5 ppb v/v

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Sacramento Job No.: 320-12924-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,1-Dichloroethene	2.5 ppb v/v
							1,2,3-Trichloropropane	2.5 ppb v/v
							1,2,4-Trichlorobenzene	2.5 ppb v/v
							1,2,4-Trimethylbenzene	2.5 ppb v/v
							1,2-Dibromoethane (EDB)	2.5 ppb v/v
							1,2-Dichloro-1,1,2,2-tetrafluoroethane	2.5 ppb v/v
							1,2-Dichlorobenzene	2.5 ppb v/v
							1,2-Dichloroethane	2.5 ppb v/v
							1,2-Dichloropropane	2.5 ppb v/v
							1,3,5-Trimethylbenzene	2.5 ppb v/v
							1,3-Dichlorobenzene	2.5 ppb v/v
							1,4-Dichlorobenzene	2.5 ppb v/v
							1,4-Dioxane	2.5 ppb v/v
							2-Butanone (MEK)	2.5 ppb v/v
							2-Hexanone	2.5 ppb v/v
							4-Ethyltoluene	2.5 ppb v/v
							4-Methyl-2-pentanone (MIBK)	2.5 ppb v/v
							Acetone	2.5 ppb v/v
							Acetonitrile	2.5 ppb v/v
							Acrolein	2.5 ppb v/v
							Acrylonitrile	2.5 ppb v/v
							Benzene	2.5 ppb v/v
							Benzyl chloride	2 ppb v/v
							Bromodichloromethane	2.5 ppb v/v
							Bromoform	2.5 ppb v/v
							Bromomethane	2.5 ppb v/v
							Butadiene	2.5 ppb v/v
							Carbon tetrachloride	2.5 ppb v/v
							Chlorobenzene	2.5 ppb v/v
							Chloroethane	2.5 ppb v/v
							Chloroform	2.5 ppb v/v
							Chloromethane	2.5 ppb v/v
							cis-1,2-Dichloroethene	2.5 ppb v/v
							cis-1,3-Dichloropropene	2.5 ppb v/v
							Cyclohexane	2.5 ppb v/v
							Dibromochloromethane	2.5 ppb v/v
							Dichlorodifluoromethane	2.5 ppb v/v
							Ethyl acetate	2.5 ppb v/v
							Ethylbenzene	2.5 ppb v/v
							Freon 11	2.5 ppb v/v
							Hexachlorobutadiene	2.5 ppb v/v
							Hexane	2.5 ppb v/v
							Isopropyl alcohol	2.5 ppb v/v
							m,p-Xylene	5 ppb v/v
							Methyl tert-butyl ether	2.5 ppb v/v
							Methylene Chloride	2.5 ppb v/v
							n-Heptane	2.5 ppb v/v

Lab Name: TestAmerica Sacramento Job No.: 320-12924-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Naphthalene	2.5 ppb v/v
							o-Xylene	2.5 ppb v/v
							Propene	2.5 ppb v/v
							Styrene	2.5 ppb v/v
							Tetrachloroethene	2.5 ppb v/v
							Tetrahydrofuran	2.5 ppb v/v
							Toluene	2.5 ppb v/v
							trans-1,2-Dichloroethene	2.5 ppb v/v
							trans-1,3-Dichloropropene	2.5 ppb v/v
							Trichloroethene	2.5 ppb v/v
							Vinyl acetate	2.5 ppb v/v
							Vinyl chloride	2.5 ppb v/v
.VACORPIC40_00181	04/19/15	03/19/15	N2, Lot HOUSE	50 psi absolute	VACORPSTKCCV_00020	2 psi absolute	1,1,1-Trichloroethane	40 ppb v/v
							1,1,2,2-Tetrachloroethane	40 ppb v/v
							1,1,2-Trichloro-1,2,2-trifluoroethane	40 ppb v/v
							1,1,2-Trichloroethane	40 ppb v/v
							1,1-Dichloroethane	40 ppb v/v
							1,1-Dichloroethene	40 ppb v/v
							1,2,3-Trichloropropane	40 ppb v/v
							1,2,4-Trichlorobenzene	40 ppb v/v
							1,2,4-Trimethylbenzene	40 ppb v/v
							1,2-Dibromoethane (EDB)	40 ppb v/v
							1,2-Dichloro-1,1,2,2-tetrafluoroethane	40 ppb v/v
							1,2-Dichlorobenzene	40 ppb v/v
							1,2-Dichloroethane	40 ppb v/v
							1,2-Dichloropropane	40 ppb v/v
							1,3,5-Trimethylbenzene	40 ppb v/v
							1,3-Dichlorobenzene	40 ppb v/v
							1,4-Dichlorobenzene	40 ppb v/v
							1,4-Dioxane	40 ppb v/v
							2-Butanone (MEK)	40 ppb v/v
							2-Hexanone	40 ppb v/v
							4-Ethyltoluene	40 ppb v/v
							4-Methyl-2-pentanone (MIBK)	40 ppb v/v
							Acetone	40 ppb v/v
							Acetonitrile	40 ppb v/v
							Acrolein	40 ppb v/v
							Acrylonitrile	40 ppb v/v
							Benzene	40 ppb v/v
							Benzyl chloride	32 ppb v/v
							Bromodichloromethane	40 ppb v/v
							Bromoform	40 ppb v/v
							Bromomethane	40 ppb v/v
							Butadiene	40 ppb v/v
							Carbon tetrachloride	40 ppb v/v

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Sacramento Job No.: 320-12924-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Chlorobenzene	40 ppb v/v
							Chloroethane	40 ppb v/v
							Chloroform	40 ppb v/v
							Chloromethane	40 ppb v/v
							cis-1,2-Dichloroethene	40 ppb v/v
							cis-1,3-Dichloropropene	40 ppb v/v
							Cyclohexane	40 ppb v/v
							Dibromochloromethane	40 ppb v/v
							Dichlorodifluoromethane	40 ppb v/v
							Ethyl acetate	40 ppb v/v
							Ethylbenzene	40 ppb v/v
							Freon 11	40 ppb v/v
							Hexachlorobutadiene	40 ppb v/v
							Hexane	40 ppb v/v
							Isopropyl alcohol	40 ppb v/v
							m,p-Xylene	80 ppb v/v
							Methyl tert-butyl ether	40 ppb v/v
							Methylene Chloride	40 ppb v/v
							n-Heptane	40 ppb v/v
							Naphthalene	40 ppb v/v
							o-Xylene	40 ppb v/v
							Propene	40 ppb v/v
							Styrene	40 ppb v/v
							Tetrachloroethene	40 ppb v/v
							Tetrahydrofuran	40 ppb v/v
							Toluene	40 ppb v/v
							trans-1,2-Dichloroethene	40 ppb v/v
							trans-1,3-Dichloropropene	40 ppb v/v
							Trichloroethene	40 ppb v/v
							Vinyl acetate	40 ppb v/v
							Vinyl chloride	40 ppb v/v
..VACORPSTKCCV_00020	12/17/15		Linde, Lot CC-230119		(Purchased Reagent)		1,1,1-Trichloroethane	1 ppm v/v
							1,1,2,2-Tetrachloroethane	1 ppm v/v
							1,1,2-Trichloro-1,2,2-trifluor oethane	1 ppm v/v
							1,1,2-Trichloroethane	1 ppm v/v
							1,1-Dichloroethane	1 ppm v/v
							1,1-Dichloroethene	1 ppm v/v
							1,2,3-Trichloropropane	1 ppm v/v
							1,2,4-Trichlorobenzene	1 ppm v/v
							1,2,4-Trimethylbenzene	1 ppm v/v
							1,2-Dibromoethane (EDB)	1 ppm v/v
							1,2-Dichloro-1,1,2,2-tetrafluo roethane	1 ppm v/v
							1,2-Dichlorobenzene	1 ppm v/v
							1,2-Dichloroethane	1 ppm v/v
							1,2-Dichloropropane	1 ppm v/v
							1,3,5-Trimethylbenzene	1 ppm v/v

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Sacramento Job No.: 320-12924-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,3-Dichlorobenzene	1 ppm v/v
							1,4-Dichlorobenzene	1 ppm v/v
							1,4-Dioxane	1 ppm v/v
							2-Butanone (MEK)	1 ppm v/v
							2-Hexanone	1 ppm v/v
							4-Ethyltoluene	1 ppm v/v
							4-Methyl-2-pentanone (MIBK)	1 ppm v/v
							Acetone	1 ppm v/v
							Acetonitrile	1 ppm v/v
							Acrolein	1 ppm v/v
							Acrylonitrile	1 ppm v/v
							Benzene	1 ppm v/v
							Benzyl chloride	0.8 ppm v/v
							Bromodichloromethane	1 ppm v/v
							Bromoform	1 ppm v/v
							Bromomethane	1 ppm v/v
							Butadiene	1 ppm v/v
							Carbon tetrachloride	1 ppm v/v
							Chlorobenzene	1 ppm v/v
							Chloroethane	1 ppm v/v
							Chloroform	1 ppm v/v
							Chloromethane	1 ppm v/v
							cis-1,2-Dichloroethene	1 ppm v/v
							cis-1,3-Dichloropropene	1 ppm v/v
							Cyclohexane	1 ppm v/v
							Dibromochloromethane	1 ppm v/v
							Dichlorodifluoromethane	1 ppm v/v
							Ethyl acetate	1 ppm v/v
							Ethylbenzene	1 ppm v/v
							Freon 11	1 ppm v/v
							Hexachlorobutadiene	1 ppm v/v
							Hexane	1 ppm v/v
							Isopropyl alcohol	1 ppm v/v
							m,p-Xylene	2 ppm v/v
							Methyl tert-butyl ether	1 ppm v/v
							Methylene Chloride	1 ppm v/v
							n-Heptane	1 ppm v/v
							Naphthalene	1 ppm v/v
							o-Xylene	1 ppm v/v
							Propene	1 ppm v/v
							Styrene	1 ppm v/v
							Tetrachloroethene	1 ppm v/v
							Tetrahydrofuran	1 ppm v/v
							Toluene	1 ppm v/v
							trans-1,2-Dichloroethene	1 ppm v/v
							trans-1,3-Dichloropropene	1 ppm v/v
							Trichloroethene	1 ppm v/v
							Vinyl acetate	1 ppm v/v

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Sacramento Job No.: 320-12924-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Vinyl chloride	1 ppm v/v
VACORPIC2.5_00154	06/05/15	05/12/15	N2, Lot HOUSE	49.5 psi absolute	VACORPIC40_00190	3.1 psi absolute	1,1,1-Trichloroethane	2.50505 ppb v/v
							1,1,2-Trichloro-1,2,2-trifluoroethane	2.50505 ppb v/v
							1,1,2-Trichloroethane	2.50505 ppb v/v
							1,1-Dichloroethane	2.50505 ppb v/v
							1,1-Dichloroethene	2.50505 ppb v/v
							1,2-Dichlorobenzene	2.50505 ppb v/v
							1,2-Dichloroethane	2.50505 ppb v/v
							1,4-Dichlorobenzene	2.50505 ppb v/v
							Chlorobenzene	2.50505 ppb v/v
							Chloroform	2.50505 ppb v/v
							cis-1,2-Dichloroethene	2.50505 ppb v/v
							Dichlorodifluoromethane	2.50505 ppb v/v
							Ethylbenzene	2.50505 ppb v/v
							Freon 11	2.50505 ppb v/v
							m,p-Xylene	5.0101 ppb v/v
							Methylene Chloride	2.50505 ppb v/v
							o-Xylene	2.50505 ppb v/v
							Tetrachloroethene	2.50505 ppb v/v
							Toluene	2.50505 ppb v/v
							trans-1,2-Dichloroethene	2.50505 ppb v/v
							Trichloroethene	2.50505 ppb v/v
							Vinyl chloride	2.50505 ppb v/v
.VACORPIC40_00190	06/05/15	05/08/15	N2, Lot HOUSE	50 psi absolute	VACORPSTKCCV_00020	2 psi absolute	1,1,1-Trichloroethane	40 ppb v/v
							1,1,2-Trichloro-1,2,2-trifluoroethane	40 ppb v/v
							1,1,2-Trichloroethane	40 ppb v/v

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Sacramento Job No.: 320-12924-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,1-Dichloroethane	40 ppb v/v
							1,1-Dichloroethene	40 ppb v/v
							1,2-Dichlorobenzene	40 ppb v/v
							1,2-Dichloroethane	40 ppb v/v
							1,4-Dichlorobenzene	40 ppb v/v
							Chlorobenzene	40 ppb v/v
							Chloroform	40 ppb v/v
							cis-1,2-Dichloroethene	40 ppb v/v
							Dichlorodifluoromethane	40 ppb v/v
							Ethylbenzene	40 ppb v/v
							Freon 11	40 ppb v/v
							m,p-Xylene	80 ppb v/v
							Methylene Chloride	40 ppb v/v
							o-Xylene	40 ppb v/v
							Tetrachloroethene	40 ppb v/v
							Toluene	40 ppb v/v
							trans-1,2-Dichloroethene	40 ppb v/v
							Trichloroethene	40 ppb v/v
							Vinyl chloride	40 ppb v/v
..VACORPSTKCCV_00020	12/17/15		Linde, Lot CC-230119		(Purchased Reagent)		1,1,1-Trichloroethane	1 ppm v/v
							1,1,2-Trichloro-1,2,2-trifluor oethane	1 ppm v/v
							1,1,2-Trichloroethane	1 ppm v/v
							1,1-Dichloroethane	1 ppm v/v
							1,1-Dichloroethene	1 ppm v/v
							1,2-Dichlorobenzene	1 ppm v/v
							1,2-Dichloroethane	1 ppm v/v
							1,4-Dichlorobenzene	1 ppm v/v
							Chlorobenzene	1 ppm v/v
							Chloroform	1 ppm v/v
							cis-1,2-Dichloroethene	1 ppm v/v
							Dichlorodifluoromethane	1 ppm v/v
							Ethylbenzene	1 ppm v/v
							Freon 11	1 ppm v/v
							m,p-Xylene	2 ppm v/v
							Methylene Chloride	1 ppm v/v
							o-Xylene	1 ppm v/v
							Tetrachloroethene	1 ppm v/v
							Toluene	1 ppm v/v
							trans-1,2-Dichloroethene	1 ppm v/v
							Trichloroethene	1 ppm v/v
							Vinyl chloride	1 ppm v/v
VACORPIC4.0_00004	03/25/15	03/11/15	N2, Lot HOUSE	50 psi absolute	VACORPIC40_00180	5 psi absolute	1,1,1-Trichloroethane	4 ppb v/v
							1,1,2,2-Tetrachloroethane	4 ppb v/v
							1,1,2-Trichloro-1,2,2-trifluor oethane	4 ppb v/v
							1,1,2-Trichloroethane	4 ppb v/v

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Sacramento Job No.: 320-12924-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,1-Dichloroethane	4 ppb v/v
							1,1-Dichloroethene	4 ppb v/v
							1,2,3-Trichlorobenzene	4 ppb v/v
							1,2,3-Trichloropropane	4 ppb v/v
							1,2,4-Trichlorobenzene	4 ppb v/v
							1,2,4-Trimethylbenzene	4 ppb v/v
							1,2-Dibromoethane (EDB)	4 ppb v/v
							1,2-Dichloro-1,1,2,2-tetrafluoroethane	4 ppb v/v
							1,2-Dichlorobenzene	4 ppb v/v
							1,2-Dichloroethane	4 ppb v/v
							1,2-Dichloropropane	4 ppb v/v
							1,3,5-Trimethylbenzene	4 ppb v/v
							1,3-Dichlorobenzene	4 ppb v/v
							1,4-Dichlorobenzene	4 ppb v/v
							1,4-Dioxane	4 ppb v/v
							2-Butanone (MEK)	4 ppb v/v
							2-Chlorotoluene	4 ppb v/v
							2-Hexanone	4 ppb v/v
							2-Methyl-2-propanol	4 ppb v/v
							3-Chloro-1-propene	4 ppb v/v
							4-Ethyltoluene	4 ppb v/v
							4-Isopropyltoluene	4 ppb v/v
							4-Methyl-2-pentanone (MIBK)	4 ppb v/v
							Acetone	4 ppb v/v
							Acetonitrile	4 ppb v/v
							Acrolein	4 ppb v/v
							Acrylonitrile	4 ppb v/v
							Alpha Methyl Styrene	4 ppb v/v
							Benzene	4 ppb v/v
							Benzyl chloride	3.2 ppb v/v
							Bromodichloromethane	4 ppb v/v
							Bromoform	4 ppb v/v
							Bromomethane	4 ppb v/v
							Butadiene	4 ppb v/v
							Butane	4 ppb v/v
							C6 Range	4 ppb v/v
							Carbon disulfide	4 ppb v/v
							Carbon tetrachloride	4 ppb v/v
							Chlorobenzene	4 ppb v/v
							Chlorodifluoromethane	4 ppb v/v
							Chloroethane	4 ppb v/v
							Chloroform	4 ppb v/v
							Chloromethane	4 ppb v/v
							cis-1,2-Dichloroethene	4 ppb v/v
							cis-1,3-Dichloropropene	4 ppb v/v
							Cyclohexane	4 ppb v/v
							Dibromochloromethane	4 ppb v/v

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Sacramento Job No.: 320-12924-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Dibromomethane	4 ppb v/v
							Dichlorodifluoromethane	4 ppb v/v
							Dodecane	4 ppb v/v
							Ethyl acetate	4 ppb v/v
							Ethyl ether	4 ppb v/v
							Ethylbenzene	4 ppb v/v
							Freon 11	4 ppb v/v
							Hexachlorobutadiene	4 ppb v/v
							Hexane	4 ppb v/v
							Isooctane	4 ppb v/v
							Isopropyl alcohol	4 ppb v/v
							Isopropylbenzene	4 ppb v/v
							m,p-Xylene	8 ppb v/v
							Methyl methacrylate	4 ppb v/v
							Methyl tert-butyl ether	4 ppb v/v
							Methylene Chloride	4 ppb v/v
							n-Butanol	4 ppb v/v
							n-Butylbenzene	4 ppb v/v
							n-Decane	4 ppb v/v
							n-Heptane	4 ppb v/v
							n-Nonane	4 ppb v/v
							n-Octane	4 ppb v/v
							N-Propylbenzene	4 ppb v/v
							Naphthalene	4 ppb v/v
							Nonmethane Organic Compounds as Hexane	4 ppb v/v
							o-Xylene	4 ppb v/v
							PCE Range	4 ppb v/v
							Pentane	4 ppb v/v
							Propene	4 ppb v/v
							sec-Butylbenzene	4 ppb v/v
							Styrene	4 ppb v/v
							tert-Butylbenzene	4 ppb v/v
							Tetrachloroethene	4 ppb v/v
							Tetrahydrofuran	4 ppb v/v
							Toluene	4 ppb v/v
							Toluene Range	4 ppb v/v
							Total VOC as Hexane	4 ppb v/v
							Total VOCs as Tetrachloroethene (PCE)	4 ppb v/v
							trans-1,2-Dichloroethene	4 ppb v/v
							trans-1,3-Dichloropropene	4 ppb v/v
							Trichloroethene	4 ppb v/v
							Undecane	4 ppb v/v
							Vinyl acetate	4 ppb v/v
							Vinyl bromide	4 ppb v/v
							Vinyl chloride	4 ppb v/v

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Sacramento Job No.: 320-12924-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
.VACORPIC40_00180	04/17/15	03/17/15	N2, Lot HOUSE	50 psi absolute	VACORPSTKCCV_00020	2 psi absolute	1,1,1-Trichloroethane	40 ppb v/v
							1,1,2,2-Tetrachloroethane	40 ppb v/v
							1,1,2-Trichloro-1,2,2-trifluoroethane	40 ppb v/v
							1,1,2-Trichloroethane	40 ppb v/v
							1,1-Dichloroethane	40 ppb v/v
							1,1-Dichloroethene	40 ppb v/v
							1,2,3-Trichlorobenzene	40 ppb v/v
							1,2,3-Trichloropropane	40 ppb v/v
							1,2,4-Trichlorobenzene	40 ppb v/v
							1,2,4-Trimethylbenzene	40 ppb v/v
							1,2-Dibromoethane (EDB)	40 ppb v/v
							1,2-Dichloro-1,1,2,2-tetrafluoroethane	40 ppb v/v
							1,2-Dichlorobenzene	40 ppb v/v
							1,2-Dichloroethane	40 ppb v/v
							1,2-Dichloropropane	40 ppb v/v
							1,3,5-Trimethylbenzene	40 ppb v/v
							1,3-Dichlorobenzene	40 ppb v/v
							1,4-Dichlorobenzene	40 ppb v/v
							1,4-Dioxane	40 ppb v/v
							2-Butanone (MEK)	40 ppb v/v
							2-Chlorotoluene	40 ppb v/v
							2-Hexanone	40 ppb v/v
							2-Methyl-2-propanol	40 ppb v/v
							3-Chloro-1-propene	40 ppb v/v
							4-Ethyltoluene	40 ppb v/v
							4-Isopropyltoluene	40 ppb v/v
							4-Methyl-2-pentanone (MIBK)	40 ppb v/v
							Acetone	40 ppb v/v
							Acetonitrile	40 ppb v/v
							Acrolein	40 ppb v/v
							Acrylonitrile	40 ppb v/v
							Alpha Methyl Styrene	40 ppb v/v
							Benzene	40 ppb v/v
							Benzyl chloride	32 ppb v/v
							Bromodichloromethane	40 ppb v/v
							Bromoform	40 ppb v/v
							Bromomethane	40 ppb v/v
							Butadiene	40 ppb v/v
							Butane	40 ppb v/v
							C6 Range	40 ppb v/v
							Carbon disulfide	40 ppb v/v
							Carbon tetrachloride	40 ppb v/v
							Chlorobenzene	40 ppb v/v
							Chlorodifluoromethane	40 ppb v/v
							Chloroethane	40 ppb v/v

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Sacramento Job No.: 320-12924-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Chloroform	40 ppb v/v
							Chloromethane	40 ppb v/v
							cis-1,2-Dichloroethene	40 ppb v/v
							cis-1,3-Dichloropropene	40 ppb v/v
							Cyclohexane	40 ppb v/v
							Dibromochloromethane	40 ppb v/v
							Dibromomethane	40 ppb v/v
							Dichlorodifluoromethane	40 ppb v/v
							Dodecane	40 ppb v/v
							Ethyl acetate	40 ppb v/v
							Ethyl ether	40 ppb v/v
							Ethylbenzene	40 ppb v/v
							Freon 11	40 ppb v/v
							Hexachlorobutadiene	40 ppb v/v
							Hexane	40 ppb v/v
							Isooctane	40 ppb v/v
							Isopropyl alcohol	40 ppb v/v
							Isopropylbenzene	40 ppb v/v
							m,p-Xylene	80 ppb v/v
							Methyl methacrylate	40 ppb v/v
							Methyl tert-butyl ether	40 ppb v/v
							Methylene Chloride	40 ppb v/v
							n-Butanol	40 ppb v/v
							n-Butylbenzene	40 ppb v/v
							n-Decane	40 ppb v/v
							n-Heptane	40 ppb v/v
							n-Nonane	40 ppb v/v
							n-Octane	40 ppb v/v
							N-Propylbenzene	40 ppb v/v
							Naphthalene	40 ppb v/v
							Nonmethane Organic Compounds as Hexane	40 ppb v/v
							o-Xylene	40 ppb v/v
							PCE Range	40 ppb v/v
							Pentane	40 ppb v/v
							Propene	40 ppb v/v
							sec-Butylbenzene	40 ppb v/v
							Styrene	40 ppb v/v
							tert-Butylbenzene	40 ppb v/v
							Tetrachloroethene	40 ppb v/v
							Tetrahydrofuran	40 ppb v/v
							Toluene	40 ppb v/v
							Toluene Range	40 ppb v/v
							Total VOC as Hexane	40 ppb v/v
							Total VOCs as Tetrachloroethene (PCE)	40 ppb v/v
							trans-1,2-Dichloroethene	40 ppb v/v
							trans-1,3-Dichloropropene	40 ppb v/v

Lab Name: TestAmerica Sacramento Job No.: 320-12924-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Trichloroethene	40 ppb v/v
							Undecane	40 ppb v/v
							Vinyl acetate	40 ppb v/v
							Vinyl bromide	40 ppb v/v
							Vinyl chloride	40 ppb v/v
..VACORPSTKCCV_00020	12/17/15		Linde, Lot CC-230119		(Purchased Reagent)		1,1,1-Trichloroethane	1 ppm v/v
							1,1,2,2-Tetrachloroethane	1 ppm v/v
							1,1,2-Trichloro-1,2,2-trifluoroethane	1 ppm v/v
							1,1,2-Trichloroethane	1 ppm v/v
							1,1-Dichloroethane	1 ppm v/v
							1,1-Dichloroethene	1 ppm v/v
							1,2,3-Trichlorobenzene	1 ppm v/v
							1,2,3-Trichloropropane	1 ppm v/v
							1,2,4-Trichlorobenzene	1 ppm v/v
							1,2,4-Trimethylbenzene	1 ppm v/v
							1,2-Dibromoethane (EDB)	1 ppm v/v
							1,2-Dichloro-1,1,2,2-tetrafluoroethane	1 ppm v/v
							1,2-Dichlorobenzene	1 ppm v/v
							1,2-Dichloroethane	1 ppm v/v
							1,2-Dichloropropane	1 ppm v/v
							1,3,5-Trimethylbenzene	1 ppm v/v
							1,3-Dichlorobenzene	1 ppm v/v
							1,4-Dichlorobenzene	1 ppm v/v
							1,4-Dioxane	1 ppm v/v
							2-Butanone (MEK)	1 ppm v/v
							2-Chlorotoluene	1 ppm v/v
							2-Hexanone	1 ppm v/v
							2-Methyl-2-propanol	1 ppm v/v
							3-Chloro-1-propene	1 ppm v/v
							4-Ethyltoluene	1 ppm v/v
							4-Isopropyltoluene	1 ppm v/v
							4-Methyl-2-pentanone (MIBK)	1 ppm v/v
							Acetone	1 ppm v/v
							Acetonitrile	1 ppm v/v
							Acrolein	1 ppm v/v
							Acrylonitrile	1 ppm v/v
							Alpha Methyl Styrene	1 ppm v/v
							Benzene	1 ppm v/v
							Benzyl chloride	0.8 ppm v/v
							Bromodichloromethane	1 ppm v/v
							Bromoform	1 ppm v/v
							Bromomethane	1 ppm v/v
							Butadiene	1 ppm v/v
							Butane	1 ppm v/v
							C6 Range	1 ppm v/v
							Carbon disulfide	1 ppm v/v

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Sacramento Job No.: 320-12924-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Carbon tetrachloride	1 ppm v/v
							Chlorobenzene	1 ppm v/v
							Chlorodifluoromethane	1 ppm v/v
							Chloroethane	1 ppm v/v
							Chloroform	1 ppm v/v
							Chloromethane	1 ppm v/v
							cis-1,2-Dichloroethene	1 ppm v/v
							cis-1,3-Dichloropropene	1 ppm v/v
							Cyclohexane	1 ppm v/v
							Dibromochloromethane	1 ppm v/v
							Dibromomethane	1 ppm v/v
							Dichlorodifluoromethane	1 ppm v/v
							Dodecane	1 ppm v/v
							Ethyl acetate	1 ppm v/v
							Ethyl ether	1 ppm v/v
							Ethylbenzene	1 ppm v/v
							Freon 11	1 ppm v/v
							Hexachlorobutadiene	1 ppm v/v
							Hexane	1 ppm v/v
							Isooctane	1 ppm v/v
							Isopropyl alcohol	1 ppm v/v
							Isopropylbenzene	1 ppm v/v
							m,p-Xylene	2 ppm v/v
							Methyl methacrylate	1 ppm v/v
							Methyl tert-butyl ether	1 ppm v/v
							Methylene Chloride	1 ppm v/v
							n-Butanol	1 ppm v/v
							n-Butylbenzene	1 ppm v/v
							n-Decane	1 ppm v/v
							n-Heptane	1 ppm v/v
							n-Nonane	1 ppm v/v
							n-Octane	1 ppm v/v
							N-Propylbenzene	1 ppm v/v
							Naphthalene	1 ppm v/v
							Nonmethane Organic Compounds as Hexane	1 ppm v/v
							o-Xylene	1 ppm v/v
							PCE Range	1 ppm v/v
							Pentane	1 ppm v/v
							Propene	1 ppm v/v
							sec-Butylbenzene	1 ppm v/v
							Styrene	1 ppm v/v
							tert-Butylbenzene	1 ppm v/v
							Tetrachloroethene	1 ppm v/v
							Tetrahydrofuran	1 ppm v/v
							Toluene	1 ppm v/v
							Toluene Range	1 ppm v/v
							Total VOC as Hexane	1 ppm v/v

Lab Name: TestAmerica Sacramento Job No.: 320-12924-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Total VOCs as Tetrachloroethene (PCE)	1 ppm v/v
							trans-1,2-Dichloroethene	1 ppm v/v
							trans-1,3-Dichloropropene	1 ppm v/v
							Trichloroethene	1 ppm v/v
							Undecane	1 ppm v/v
							Vinyl acetate	1 ppm v/v
							Vinyl bromide	1 ppm v/v
							Vinyl chloride	1 ppm v/v
VACORPIC40_00180	04/17/15	03/17/15	N2, Lot HOUSE	50 psi absolute	VACORPSTKCCV_00020	2 psi absolute	1,1,1-Trichloroethane	40 ppb v/v
							1,1,2,2-Tetrachloroethane	40 ppb v/v
							1,1,2-Trichloro-1,2,2-trifluoroethane	40 ppb v/v
							1,1,2-Trichloroethane	40 ppb v/v
							1,1-Dichloroethane	40 ppb v/v
							1,1-Dichloroethene	40 ppb v/v
							1,2,3-Trichlorobenzene	40 ppb v/v
							1,2,3-Trichloropropane	40 ppb v/v
							1,2,4-Trichlorobenzene	40 ppb v/v
							1,2,4-Trimethylbenzene	40 ppb v/v
							1,2-Dibromoethane (EDB)	40 ppb v/v
							1,2-Dichloro-1,1,2,2-tetrafluoroethane	40 ppb v/v
							1,2-Dichlorobenzene	40 ppb v/v
							1,2-Dichloroethane	40 ppb v/v
							1,2-Dichloropropane	40 ppb v/v
							1,3,5-Trimethylbenzene	40 ppb v/v
							1,3-Dichlorobenzene	40 ppb v/v
							1,4-Dichlorobenzene	40 ppb v/v
							1,4-Dioxane	40 ppb v/v
							2-Butanone (MEK)	40 ppb v/v
							2-Chlorotoluene	40 ppb v/v
							2-Hexanone	40 ppb v/v
							2-Methyl-2-propanol	40 ppb v/v
							3-Chloro-1-propene	40 ppb v/v
							4-Ethyltoluene	40 ppb v/v
							4-Isopropyltoluene	40 ppb v/v
							4-Methyl-2-pentanone (MIBK)	40 ppb v/v
							Acetone	40 ppb v/v
							Acetonitrile	40 ppb v/v
							Acrolein	40 ppb v/v
							Acrylonitrile	40 ppb v/v
							Alpha Methyl Styrene	40 ppb v/v
							Benzene	40 ppb v/v
							Benzyl chloride	32 ppb v/v
							Bromodichloromethane	40 ppb v/v
							Bromoform	40 ppb v/v

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Sacramento Job No.: 320-12924-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Bromomethane	40 ppb v/v
							Butadiene	40 ppb v/v
							Butane	40 ppb v/v
							C6 Range	40 ppb v/v
							Carbon disulfide	40 ppb v/v
							Carbon tetrachloride	40 ppb v/v
							Chlorobenzene	40 ppb v/v
							Chlorodifluoromethane	40 ppb v/v
							Chloroethane	40 ppb v/v
							Chloroform	40 ppb v/v
							Chloromethane	40 ppb v/v
							cis-1,2-Dichloroethene	40 ppb v/v
							cis-1,3-Dichloropropene	40 ppb v/v
							Cyclohexane	40 ppb v/v
							Dibromochloromethane	40 ppb v/v
							Dibromomethane	40 ppb v/v
							Dichlorodifluoromethane	40 ppb v/v
							Dodecane	40 ppb v/v
							Ethyl acetate	40 ppb v/v
							Ethyl ether	40 ppb v/v
							Ethylbenzene	40 ppb v/v
							Freon 11	40 ppb v/v
							Hexachlorobutadiene	40 ppb v/v
							Hexane	40 ppb v/v
							Isooctane	40 ppb v/v
							Isopropyl alcohol	40 ppb v/v
							Isopropylbenzene	40 ppb v/v
							m,p-Xylene	80 ppb v/v
							Methyl methacrylate	40 ppb v/v
							Methyl tert-butyl ether	40 ppb v/v
							Methylene Chloride	40 ppb v/v
							n-Butanol	40 ppb v/v
							n-Butylbenzene	40 ppb v/v
							n-Decane	40 ppb v/v
							n-Heptane	40 ppb v/v
							n-Nonane	40 ppb v/v
							n-Octane	40 ppb v/v
							N-Propylbenzene	40 ppb v/v
							Naphthalene	40 ppb v/v
							Nonmethane Organic Compounds as Hexane	40 ppb v/v
							o-Xylene	40 ppb v/v
							PCE Range	40 ppb v/v
							Pentane	40 ppb v/v
							Propene	40 ppb v/v
							sec-Butylbenzene	40 ppb v/v
							Styrene	40 ppb v/v
							tert-Butylbenzene	40 ppb v/v

Lab Name: TestAmerica Sacramento Job No.: 320-12924-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Tetrachloroethene	40 ppb v/v
							Tetrahydrofuran	40 ppb v/v
							Toluene	40 ppb v/v
							Toluene Range	40 ppb v/v
							Total VOC as Hexane	40 ppb v/v
							Total VOCs as Tetrachloroethene (PCE)	40 ppb v/v
							trans-1,2-Dichloroethene	40 ppb v/v
							trans-1,3-Dichloropropene	40 ppb v/v
							Trichloroethene	40 ppb v/v
							Undecane	40 ppb v/v
							Vinyl acetate	40 ppb v/v
							Vinyl bromide	40 ppb v/v
							Vinyl chloride	40 ppb v/v
.VACORPSTKCCV_00020	12/17/15		Linde, Lot CC-230119		(Purchased Reagent)		1,1,1-Trichloroethane	1 ppm v/v
							1,1,2,2-Tetrachloroethane	1 ppm v/v
							1,1,2-Trichloro-1,2,2-trifluoroethane	1 ppm v/v
							1,1,2-Trichloroethane	1 ppm v/v
							1,1-Dichloroethane	1 ppm v/v
							1,1-Dichloroethene	1 ppm v/v
							1,2,3-Trichlorobenzene	1 ppm v/v
							1,2,3-Trichloropropane	1 ppm v/v
							1,2,4-Trichlorobenzene	1 ppm v/v
							1,2,4-Trimethylbenzene	1 ppm v/v
							1,2-Dibromoethane (EDB)	1 ppm v/v
							1,2-Dichloro-1,1,2,2-tetrafluoroethane	1 ppm v/v
							1,2-Dichlorobenzene	1 ppm v/v
							1,2-Dichloroethane	1 ppm v/v
							1,2-Dichloropropane	1 ppm v/v
							1,3,5-Trimethylbenzene	1 ppm v/v
							1,3-Dichlorobenzene	1 ppm v/v
							1,4-Dichlorobenzene	1 ppm v/v
							1,4-Dioxane	1 ppm v/v
							2-Butanone (MEK)	1 ppm v/v
							2-Chlorotoluene	1 ppm v/v
							2-Hexanone	1 ppm v/v
							2-Methyl-2-propanol	1 ppm v/v
							3-Chloro-1-propene	1 ppm v/v
							4-Ethyltoluene	1 ppm v/v
							4-Isopropyltoluene	1 ppm v/v
							4-Methyl-2-pentanone (MIBK)	1 ppm v/v
							Acetone	1 ppm v/v
							Acetonitrile	1 ppm v/v
							Acrolein	1 ppm v/v
							Acrylonitrile	1 ppm v/v
							Alpha Methyl Styrene	1 ppm v/v

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Sacramento Job No.: 320-12924-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Benzene	1 ppm v/v
							Benzyl chloride	0.8 ppm v/v
							Bromodichloromethane	1 ppm v/v
							Bromoform	1 ppm v/v
							Bromomethane	1 ppm v/v
							Butadiene	1 ppm v/v
							Butane	1 ppm v/v
							C6 Range	1 ppm v/v
							Carbon disulfide	1 ppm v/v
							Carbon tetrachloride	1 ppm v/v
							Chlorobenzene	1 ppm v/v
							Chlorodifluoromethane	1 ppm v/v
							Chloroethane	1 ppm v/v
							Chloroform	1 ppm v/v
							Chloromethane	1 ppm v/v
							cis-1,2-Dichloroethene	1 ppm v/v
							cis-1,3-Dichloropropene	1 ppm v/v
							Cyclohexane	1 ppm v/v
							Dibromochloromethane	1 ppm v/v
							Dibromomethane	1 ppm v/v
							Dichlorodifluoromethane	1 ppm v/v
							Dodecane	1 ppm v/v
							Ethyl acetate	1 ppm v/v
							Ethyl ether	1 ppm v/v
							Ethylbenzene	1 ppm v/v
							Freon 11	1 ppm v/v
							Hexachlorobutadiene	1 ppm v/v
							Hexane	1 ppm v/v
							Isooctane	1 ppm v/v
							Isopropyl alcohol	1 ppm v/v
							Isopropylbenzene	1 ppm v/v
							m,p-Xylene	2 ppm v/v
							Methyl methacrylate	1 ppm v/v
							Methyl tert-butyl ether	1 ppm v/v
							Methylene Chloride	1 ppm v/v
							n-Butanol	1 ppm v/v
							n-Butylbenzene	1 ppm v/v
							n-Decane	1 ppm v/v
							n-Heptane	1 ppm v/v
							n-Nonane	1 ppm v/v
							n-Octane	1 ppm v/v
							N-Propylbenzene	1 ppm v/v
							Naphthalene	1 ppm v/v
							Nonmethane Organic Compounds as Hexane	1 ppm v/v
							o-Xylene	1 ppm v/v
							PCE Range	1 ppm v/v
							Pentane	1 ppm v/v

Lab Name: TestAmerica Sacramento Job No.: 320-12924-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Propene	1 ppm v/v
							sec-Butylbenzene	1 ppm v/v
							Styrene	1 ppm v/v
							tert-Butylbenzene	1 ppm v/v
							Tetrachloroethene	1 ppm v/v
							Tetrahydrofuran	1 ppm v/v
							Toluene	1 ppm v/v
							Toluene Range	1 ppm v/v
							Total VOC as Hexane	1 ppm v/v
							Total VOCs as Tetrachloroethene (PCE)	1 ppm v/v
							trans-1,2-Dichloroethene	1 ppm v/v
							trans-1,3-Dichloropropene	1 ppm v/v
							Trichloroethene	1 ppm v/v
							Undecane	1 ppm v/v
							Vinyl acetate	1 ppm v/v
							Vinyl bromide	1 ppm v/v
							Vinyl chloride	1 ppm v/v
VACORPIC40_00188	06/04/15	05/04/15	N2, Lot HOUSE	50 psi absolute	VACORPSTKCCV_00020	2 psi absolute	1,1,1-Trichloroethane	40 ppb v/v
							1,1,2,2-Tetrachloroethane	40 ppb v/v
							1,1,2-Trichloro-1,2,2-trifluoroethane	40 ppb v/v
							1,1,2-Trichloroethane	40 ppb v/v
							1,1-Dichloroethane	40 ppb v/v
							1,1-Dichloroethene	40 ppb v/v
							1,2,4-Trichlorobenzene	40 ppb v/v
							1,2,4-Trimethylbenzene	40 ppb v/v
							1,2-Dibromoethane (EDB)	40 ppb v/v
							1,2-Dichloro-1,1,2,2-tetrafluoroethane	40 ppb v/v
							1,2-Dichlorobenzene	40 ppb v/v
							1,2-Dichloroethane	40 ppb v/v
							1,2-Dichloropropane	40 ppb v/v
							1,3,5-Trimethylbenzene	40 ppb v/v
							1,3-Dichlorobenzene	40 ppb v/v
							1,4-Dichlorobenzene	40 ppb v/v
							2-Butanone (MEK)	40 ppb v/v
							2-Hexanone	40 ppb v/v
							4-Ethyltoluene	40 ppb v/v
							4-Methyl-2-pentanone (MIBK)	40 ppb v/v
							Acetone	40 ppb v/v
							Benzene	40 ppb v/v
							Benzyl chloride	32 ppb v/v
							Bromodichloromethane	40 ppb v/v
							Bromoform	40 ppb v/v
							Bromomethane	40 ppb v/v
							Carbon disulfide	40 ppb v/v

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Sacramento Job No.: 320-12924-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Carbon tetrachloride	40 ppb v/v
							Chlorobenzene	40 ppb v/v
							Chloroethane	40 ppb v/v
							Chloroform	40 ppb v/v
							Chloromethane	40 ppb v/v
							cis-1,2-Dichloroethene	40 ppb v/v
							cis-1,3-Dichloropropene	40 ppb v/v
							Dibromochloromethane	40 ppb v/v
							Dichlorodifluoromethane	40 ppb v/v
							Ethylbenzene	40 ppb v/v
							Freon 11	40 ppb v/v
							Hexachlorobutadiene	40 ppb v/v
							m,p-Xylene	80 ppb v/v
							Methylene Chloride	40 ppb v/v
							o-Xylene	40 ppb v/v
							Styrene	40 ppb v/v
							Tetrachloroethene	40 ppb v/v
							Toluene	40 ppb v/v
							trans-1,2-Dichloroethene	40 ppb v/v
							trans-1,3-Dichloropropene	40 ppb v/v
							Trichloroethene	40 ppb v/v
							Vinyl acetate	40 ppb v/v
							Vinyl chloride	40 ppb v/v
.VACORPSTKCCV_00020	12/17/15		Linde, Lot CC-230119		(Purchased Reagent)		1,1,1-Trichloroethane	1 ppm v/v
							1,1,2,2-Tetrachloroethane	1 ppm v/v
							1,1,2-Trichloro-1,2,2-trifluor oethane	1 ppm v/v
							1,1,2-Trichloroethane	1 ppm v/v
							1,1-Dichloroethane	1 ppm v/v
							1,1-Dichloroethene	1 ppm v/v
							1,2,4-Trichlorobenzene	1 ppm v/v
							1,2,4-Trimethylbenzene	1 ppm v/v
							1,2-Dibromoethane (EDB)	1 ppm v/v
							1,2-Dichloro-1,1,2,2-tetrafluo roethane	1 ppm v/v
							1,2-Dichlorobenzene	1 ppm v/v
							1,2-Dichloroethane	1 ppm v/v
							1,2-Dichloropropane	1 ppm v/v
							1,3,5-Trimethylbenzene	1 ppm v/v
							1,3-Dichlorobenzene	1 ppm v/v
							1,4-Dichlorobenzene	1 ppm v/v
							2-Butanone (MEK)	1 ppm v/v
							2-Hexanone	1 ppm v/v
							4-Ethyltoluene	1 ppm v/v
							4-Methyl-2-pentanone (MIBK)	1 ppm v/v
							Acetone	1 ppm v/v
							Benzene	1 ppm v/v
							Benzyl chloride	0.8 ppm v/v

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Sacramento Job No.: 320-12924-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Bromodichloromethane	1 ppm v/v
							Bromoform	1 ppm v/v
							Bromomethane	1 ppm v/v
							Carbon disulfide	1 ppm v/v
							Carbon tetrachloride	1 ppm v/v
							Chlorobenzene	1 ppm v/v
							Chloroethane	1 ppm v/v
							Chloroform	1 ppm v/v
							Chloromethane	1 ppm v/v
							cis-1,2-Dichloroethene	1 ppm v/v
							cis-1,3-Dichloropropene	1 ppm v/v
							Dibromochloromethane	1 ppm v/v
							Dichlorodifluoromethane	1 ppm v/v
							Ethylbenzene	1 ppm v/v
							Freon 11	1 ppm v/v
							Hexachlorobutadiene	1 ppm v/v
							m,p-Xylene	2 ppm v/v
							Methylene Chloride	1 ppm v/v
							o-Xylene	1 ppm v/v
							Styrene	1 ppm v/v
							Tetrachloroethene	1 ppm v/v
							Toluene	1 ppm v/v
							trans-1,2-Dichloroethene	1 ppm v/v
							trans-1,3-Dichloropropene	1 ppm v/v
							Trichloroethene	1 ppm v/v
							Vinyl acetate	1 ppm v/v
							Vinyl chloride	1 ppm v/v
VACORPLC2.5_00063	04/19/15	03/25/15	N2, Lot HOUSE	51.2 psi absolute	VACORPLC40_00136	3.2 psi absolute	1,1,1-Trichloroethane	2.5 ppb v/v
							1,1,2-Trichloro-1,2,2-trifluoroethane	2.5 ppb v/v
							1,1,2-Trichloroethane	2.5 ppb v/v
							1,1-Dichloroethane	2.5 ppb v/v
							1,1-Dichloroethene	2.5 ppb v/v
							1,2-Dichlorobenzene	2.5 ppb v/v
							1,2-Dichloroethane	2.5 ppb v/v
							1,4-Dichlorobenzene	2.5 ppb v/v
							Chlorobenzene	2.5 ppb v/v
							Chloroform	2.5 ppb v/v
							cis-1,2-Dichloroethene	2.5 ppb v/v
							Dichlorodifluoromethane	2.5 ppb v/v
							Ethylbenzene	2.5 ppb v/v
							Freon 11	2.5 ppb v/v
							m,p-Xylene	5 ppb v/v
							Methylene Chloride	2.5 ppb v/v
							o-Xylene	2.5 ppb v/v
							Tetrachloroethene	2.5 ppb v/v
							Toluene	2.5 ppb v/v

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Sacramento Job No.: 320-12924-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							trans-1,2-Dichloroethene	2.5 ppb v/v
							Trichloroethene	2.5 ppb v/v
							Vinyl chloride	2.5 ppb v/v
.VACORPLC40_00136	04/19/15	03/19/15	N2, Lot HOUSE LINE	50 psi absolute	VACORPSTKLCS_00009	2 psi absolute	1,1,1-Trichloroethane	40 ppb v/v
							1,1,2-Trichloro-1,2,2-trifluoroethane	40 ppb v/v
							1,1,2-Trichloroethane	40 ppb v/v
							1,1-Dichloroethane	40 ppb v/v
							1,1-Dichloroethene	40 ppb v/v
							1,2-Dichlorobenzene	40 ppb v/v
							1,2-Dichloroethane	40 ppb v/v
							1,4-Dichlorobenzene	40 ppb v/v
							Chlorobenzene	40 ppb v/v
							Chloroform	40 ppb v/v
							cis-1,2-Dichloroethene	40 ppb v/v
							Dichlorodifluoromethane	40 ppb v/v
							Ethylbenzene	40 ppb v/v
							Freon 11	40 ppb v/v
							m,p-Xylene	80 ppb v/v
							Methylene Chloride	40 ppb v/v
							o-Xylene	40 ppb v/v
							Tetrachloroethene	40 ppb v/v
							Toluene	40 ppb v/v
							trans-1,2-Dichloroethene	40 ppb v/v
							Trichloroethene	40 ppb v/v
							Vinyl chloride	40 ppb v/v
..VACORPSTKLCS_00009	01/07/16		Linde, Lot CC-346218		(Purchased Reagent)		1,1,1-Trichloroethane	1 ppm v/v
							1,1,2-Trichloro-1,2,2-trifluoroethane	1 ppm v/v
							1,1,2-Trichloroethane	1 ppm v/v
							1,1-Dichloroethane	1 ppm v/v
							1,1-Dichloroethene	1 ppm v/v
							1,2-Dichlorobenzene	1 ppm v/v
							1,2-Dichloroethane	1 ppm v/v
							1,4-Dichlorobenzene	1 ppm v/v
							Chlorobenzene	1 ppm v/v
							Chloroform	1 ppm v/v
							cis-1,2-Dichloroethene	1 ppm v/v
							Dichlorodifluoromethane	1 ppm v/v
							Ethylbenzene	1 ppm v/v
							Freon 11	1 ppm v/v
							m,p-Xylene	2 ppm v/v
							Methylene Chloride	1 ppm v/v
							o-Xylene	1 ppm v/v
							Tetrachloroethene	1 ppm v/v
							Toluene	1 ppm v/v
							trans-1,2-Dichloroethene	1 ppm v/v

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Sacramento Job No.: 320-12924-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Trichloroethene	1 ppm v/v
							Vinyl chloride	1 ppm v/v
VACORPLC2.5_00065	05/16/15	04/20/15	N2, Lot HOUSE	51.2 psi absolute	VACORPLC40_00139	3.2 psi absolute	1,1,1-Trichloroethane	2.5 ppb v/v
							1,1,2-Trichloro-1,2,2-trifluoroethane	2.5 ppb v/v
							1,1,2-Trichloroethane	2.5 ppb v/v
							1,1-Dichloroethane	2.5 ppb v/v
							1,1-Dichloroethene	2.5 ppb v/v
							1,2-Dichlorobenzene	2.5 ppb v/v
							1,2-Dichloroethane	2.5 ppb v/v
							1,4-Dichlorobenzene	2.5 ppb v/v
							Chlorobenzene	2.5 ppb v/v
							Chloroform	2.5 ppb v/v
							cis-1,2-Dichloroethene	2.5 ppb v/v
							Dichlorodifluoromethane	2.5 ppb v/v
							Ethylbenzene	2.5 ppb v/v
							Freon 11	2.5 ppb v/v
							m,p-Xylene	5 ppb v/v
							Methylene Chloride	2.5 ppb v/v
							o-Xylene	2.5 ppb v/v
							Tetrachloroethene	2.5 ppb v/v
							Toluene	2.5 ppb v/v
							trans-1,2-Dichloroethene	2.5 ppb v/v
							Trichloroethene	2.5 ppb v/v
							Vinyl chloride	2.5 ppb v/v
.VACORPLC40_00139	05/16/15	04/16/15	N2, Lot HOUSE LINE	50 psi absolute	VACORPSTKLCS_00009	2 psi absolute	1,1,1-Trichloroethane	40 ppb v/v
							1,1,2-Trichloro-1,2,2-trifluoroethane	40 ppb v/v
							1,1,2-Trichloroethane	40 ppb v/v
							1,1-Dichloroethane	40 ppb v/v
							1,1-Dichloroethene	40 ppb v/v
							1,2-Dichlorobenzene	40 ppb v/v
							1,2-Dichloroethane	40 ppb v/v
							1,4-Dichlorobenzene	40 ppb v/v
							Chlorobenzene	40 ppb v/v
							Chloroform	40 ppb v/v
							cis-1,2-Dichloroethene	40 ppb v/v
							Dichlorodifluoromethane	40 ppb v/v
							Ethylbenzene	40 ppb v/v
							Freon 11	40 ppb v/v
							m,p-Xylene	80 ppb v/v
							Methylene Chloride	40 ppb v/v
							o-Xylene	40 ppb v/v
							Tetrachloroethene	40 ppb v/v
							Toluene	40 ppb v/v
							trans-1,2-Dichloroethene	40 ppb v/v

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Sacramento Job No.: 320-12924-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Trichloroethene	40 ppb v/v
							Vinyl chloride	40 ppb v/v
..VACORPSTKLCS_00009	01/07/16		Linde, Lot CC-346218		(Purchased Reagent)		1,1,1-Trichloroethane	1 ppm v/v
							1,1,2-Trichloro-1,2,2-trifluoroethane	1 ppm v/v
							1,1,2-Trichloroethane	1 ppm v/v
							1,1-Dichloroethane	1 ppm v/v
							1,1-Dichloroethene	1 ppm v/v
							1,2-Dichlorobenzene	1 ppm v/v
							1,2-Dichloroethane	1 ppm v/v
							1,4-Dichlorobenzene	1 ppm v/v
							Chlorobenzene	1 ppm v/v
							Chloroform	1 ppm v/v
							cis-1,2-Dichloroethene	1 ppm v/v
							Dichlorodifluoromethane	1 ppm v/v
							Ethylbenzene	1 ppm v/v
							Freon 11	1 ppm v/v
							m,p-Xylene	2 ppm v/v
							Methylene Chloride	1 ppm v/v
							o-Xylene	1 ppm v/v
							Tetrachloroethene	1 ppm v/v
							Toluene	1 ppm v/v
							trans-1,2-Dichloroethene	1 ppm v/v
							Trichloroethene	1 ppm v/v
							Vinyl chloride	1 ppm v/v
VACORPLC40_00135	04/17/15	03/17/15	N2, Lot HOUSE LINE	50 psi absolute	VACORPSTKLCS_00009	2 psi absolute	1,1,1-Trichloroethane	40 ppb v/v
							1,1,2,2-Tetrachloroethane	40 ppb v/v
							1,1,2-Trichloro-1,2,2-trifluoroethane	40 ppb v/v
							1,1,2-Trichloroethane	40 ppb v/v
							1,1-Dichloroethane	40 ppb v/v
							1,1-Dichloroethene	40 ppb v/v
							1,2,4-Trichlorobenzene	40 ppb v/v
							1,2,4-Trimethylbenzene	40 ppb v/v
							1,2-Dibromoethane (EDB)	40 ppb v/v
							1,2-Dichloro-1,1,2,2-tetrafluoroethane	40 ppb v/v
							1,2-Dichlorobenzene	40 ppb v/v
							1,2-Dichloroethane	40 ppb v/v
							1,2-Dichloropropane	40 ppb v/v
							1,3,5-Trimethylbenzene	40 ppb v/v
							1,3-Dichlorobenzene	40 ppb v/v
							1,4-Dichlorobenzene	40 ppb v/v
							2-Butanone (MEK)	40 ppb v/v
							2-Hexanone	40 ppb v/v
							4-Ethyltoluene	40 ppb v/v
							4-Methyl-2-pentanone (MIBK)	40 ppb v/v

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Sacramento Job No.: 320-12924-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Acetone	40 ppb v/v
							Benzene	40 ppb v/v
							Benzyl chloride	40 ppb v/v
							Bromodichloromethane	40 ppb v/v
							Bromoform	40 ppb v/v
							Bromomethane	40 ppb v/v
							Carbon disulfide	40 ppb v/v
							Carbon tetrachloride	40 ppb v/v
							Chlorobenzene	40 ppb v/v
							Chloroethane	40 ppb v/v
							Chloroform	40 ppb v/v
							Chloromethane	40 ppb v/v
							cis-1,2-Dichloroethene	40 ppb v/v
							cis-1,3-Dichloropropene	40 ppb v/v
							Dibromochloromethane	40 ppb v/v
							Dichlorodifluoromethane	40 ppb v/v
							Ethylbenzene	40 ppb v/v
							Freon 11	40 ppb v/v
							Hexachlorobutadiene	40 ppb v/v
							m,p-Xylene	80 ppb v/v
							Methylene Chloride	40 ppb v/v
							o-Xylene	40 ppb v/v
							Styrene	40 ppb v/v
							Tetrachloroethene	40 ppb v/v
							Toluene	40 ppb v/v
							trans-1,2-Dichloroethene	40 ppb v/v
							trans-1,3-Dichloropropene	40 ppb v/v
							Trichloroethene	40 ppb v/v
							Vinyl acetate	40 ppb v/v
							Vinyl chloride	40 ppb v/v
.VACORPSTKLCS_00009	01/07/16		Linde, Lot CC-346218		(Purchased Reagent)		1,1,1-Trichloroethane	1 ppm v/v
							1,1,2,2-Tetrachloroethane	1 ppm v/v
							1,1,2-Trichloro-1,2,2-trifluor oethane	1 ppm v/v
							1,1,2-Trichloroethane	1 ppm v/v
							1,1-Dichloroethane	1 ppm v/v
							1,1-Dichloroethene	1 ppm v/v
							1,2,4-Trichlorobenzene	1 ppm v/v
							1,2,4-Trimethylbenzene	1 ppm v/v
							1,2-Dibromoethane (EDB)	1 ppm v/v
							1,2-Dichloro-1,1,2,2-tetrafluo roethane	1 ppm v/v
							1,2-Dichlorobenzene	1 ppm v/v
							1,2-Dichloroethane	1 ppm v/v
							1,2-Dichloropropane	1 ppm v/v
							1,3,5-Trimethylbenzene	1 ppm v/v
							1,3-Dichlorobenzene	1 ppm v/v
							1,4-Dichlorobenzene	1 ppm v/v

Lab Name: TestAmerica Sacramento Job No.: 320-12924-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							2-Butanone (MEK)	1 ppm v/v
							2-Hexanone	1 ppm v/v
							4-Ethyltoluene	1 ppm v/v
							4-Methyl-2-pentanone (MIBK)	1 ppm v/v
							Acetone	1 ppm v/v
							Benzene	1 ppm v/v
							Benzyl chloride	1 ppm v/v
							Bromodichloromethane	1 ppm v/v
							Bromoform	1 ppm v/v
							Bromomethane	1 ppm v/v
							Carbon disulfide	1 ppm v/v
							Carbon tetrachloride	1 ppm v/v
							Chlorobenzene	1 ppm v/v
							Chloroethane	1 ppm v/v
							Chloroform	1 ppm v/v
							Chloromethane	1 ppm v/v
							cis-1,2-Dichloroethene	1 ppm v/v
							cis-1,3-Dichloropropene	1 ppm v/v
							Dibromochloromethane	1 ppm v/v
							Dichlorodifluoromethane	1 ppm v/v
							Ethylbenzene	1 ppm v/v
							Freon 11	1 ppm v/v
							Hexachlorobutadiene	1 ppm v/v
							m,p-Xylene	2 ppm v/v
							Methylene Chloride	1 ppm v/v
							o-Xylene	1 ppm v/v
							Styrene	1 ppm v/v
							Tetrachloroethene	1 ppm v/v
							Toluene	1 ppm v/v
							trans-1,2-Dichloroethene	1 ppm v/v
							trans-1,3-Dichloropropene	1 ppm v/v
							Trichloroethene	1 ppm v/v
							Vinyl acetate	1 ppm v/v
							Vinyl chloride	1 ppm v/v
VACORPLC40_00142	06/08/15	05/08/15	N2, Lot HOUSE LINE	50 psi absolute	VACORPSTKLCS_00009	2 psi absolute	1,1,1-Trichloroethane	40 ppb v/v
							1,1,2,2-Tetrachloroethane	40 ppb v/v
							1,1,2-Trichloro-1,2,2-trifluoroethane	40 ppb v/v
							1,1,2-Trichloroethane	40 ppb v/v
							1,1-Dichloroethane	40 ppb v/v
							1,1-Dichloroethene	40 ppb v/v
							1,2,4-Trichlorobenzene	40 ppb v/v
							1,2,4-Trimethylbenzene	40 ppb v/v
							1,2-Dibromoethane (EDB)	40 ppb v/v
							1,2-Dichloro-1,1,2,2-tetrafluoroethane	40 ppb v/v
							1,2-Dichlorobenzene	40 ppb v/v

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Sacramento Job No.: 320-12924-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,2-Dichloroethane	40 ppb v/v
							1,2-Dichloropropane	40 ppb v/v
							1,3,5-Trimethylbenzene	40 ppb v/v
							1,3-Dichlorobenzene	40 ppb v/v
							1,4-Dichlorobenzene	40 ppb v/v
							2-Butanone (MEK)	40 ppb v/v
							2-Hexanone	40 ppb v/v
							4-Ethyltoluene	40 ppb v/v
							4-Methyl-2-pentanone (MIBK)	40 ppb v/v
							Acetone	40 ppb v/v
							Benzene	40 ppb v/v
							Benzyl chloride	40 ppb v/v
							Bromodichloromethane	40 ppb v/v
							Bromoform	40 ppb v/v
							Bromomethane	40 ppb v/v
							Carbon disulfide	40 ppb v/v
							Carbon tetrachloride	40 ppb v/v
							Chlorobenzene	40 ppb v/v
							Chloroethane	40 ppb v/v
							Chloroform	40 ppb v/v
							Chloromethane	40 ppb v/v
							cis-1,2-Dichloroethene	40 ppb v/v
							cis-1,3-Dichloropropene	40 ppb v/v
							Dibromochloromethane	40 ppb v/v
							Dichlorodifluoromethane	40 ppb v/v
							Ethylbenzene	40 ppb v/v
							Freon 11	40 ppb v/v
							Hexachlorobutadiene	40 ppb v/v
							m,p-Xylene	80 ppb v/v
							Methylene Chloride	40 ppb v/v
							o-Xylene	40 ppb v/v
							Styrene	40 ppb v/v
							Tetrachloroethene	40 ppb v/v
							Toluene	40 ppb v/v
							trans-1,2-Dichloroethene	40 ppb v/v
							trans-1,3-Dichloropropene	40 ppb v/v
							Trichloroethene	40 ppb v/v
							Vinyl acetate	40 ppb v/v
							Vinyl chloride	40 ppb v/v
.VACORPSTKLCS_00009	01/07/16		Linde, Lot CC-346218		(Purchased Reagent)		1,1,1-Trichloroethane	1 ppm v/v
							1,1,2,2-Tetrachloroethane	1 ppm v/v
							1,1,2-Trichloro-1,2,2-trifluor oethane	1 ppm v/v
							1,1,2-Trichloroethane	1 ppm v/v
							1,1-Dichloroethane	1 ppm v/v
							1,1-Dichloroethene	1 ppm v/v
							1,2,4-Trichlorobenzene	1 ppm v/v
							1,2,4-Trimethylbenzene	1 ppm v/v

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Sacramento Job No.: 320-12924-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,2-Dibromoethane (EDB)	1 ppm v/v
							1,2-Dichloro-1,1,2,2-tetrafluoroethane	1 ppm v/v
							1,2-Dichlorobenzene	1 ppm v/v
							1,2-Dichloroethane	1 ppm v/v
							1,2-Dichloropropane	1 ppm v/v
							1,3,5-Trimethylbenzene	1 ppm v/v
							1,3-Dichlorobenzene	1 ppm v/v
							1,4-Dichlorobenzene	1 ppm v/v
							2-Butanone (MEK)	1 ppm v/v
							2-Hexanone	1 ppm v/v
							4-Ethyltoluene	1 ppm v/v
							4-Methyl-2-pentanone (MIBK)	1 ppm v/v
							Acetone	1 ppm v/v
							Benzene	1 ppm v/v
							Benzyl chloride	1 ppm v/v
							Bromodichloromethane	1 ppm v/v
							Bromoform	1 ppm v/v
							Bromomethane	1 ppm v/v
							Carbon disulfide	1 ppm v/v
							Carbon tetrachloride	1 ppm v/v
							Chlorobenzene	1 ppm v/v
							Chloroethane	1 ppm v/v
							Chloroform	1 ppm v/v
							Chloromethane	1 ppm v/v
							cis-1,2-Dichloroethene	1 ppm v/v
							cis-1,3-Dichloropropene	1 ppm v/v
							Dibromochloromethane	1 ppm v/v
							Dichlorodifluoromethane	1 ppm v/v
							Ethylbenzene	1 ppm v/v
							Freon 11	1 ppm v/v
							Hexachlorobutadiene	1 ppm v/v
							m,p-Xylene	2 ppm v/v
							Methylene Chloride	1 ppm v/v
							o-Xylene	1 ppm v/v
							Styrene	1 ppm v/v
							Tetrachloroethene	1 ppm v/v
							Toluene	1 ppm v/v
							trans-1,2-Dichloroethene	1 ppm v/v
							trans-1,3-Dichloropropene	1 ppm v/v
							Trichloroethene	1 ppm v/v
							Vinyl acetate	1 ppm v/v
							Vinyl chloride	1 ppm v/v
VASUISIM_00160	04/16/15	03/16/15	N2, Lot HOUSE	51 psi absolute	VAMSIS300_00016	3.4 psi absolute	1,2-Dichloroethane-d4 (Surr)	20 ppb v/v
							1,4-Difluorobenzene	20 ppb v/v
							4-Bromofluorobenzene (Surr)	20 ppb v/v
							Chlorobenzene-d5 (IS)	20 ppb v/v

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Sacramento Job No.: 320-12924-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Chlorobromomethane (IS)	20 ppb v/v
							Toluene-d8 (Surr)	20 ppb v/v
.VAMSIS300_00016	09/24/15	Linde, Lot 24086333			(Purchased Reagent)		1,2-Dichloroethane-d4 (Surr)	300 ppb v/v
							1,4-Difluorobenzene	300 ppb v/v
							4-Bromofluorobenzene (Surr)	300 ppb v/v
							Chlorobenzene-d5 (IS)	300 ppb v/v
							Chlorobromomethane (IS)	300 ppb v/v
							Toluene-d8 (Surr)	300 ppb v/v
VASUISIM_00172	05/21/15	04/21/15	N2, Lot HOUSE	60 psi absolute	VAMSIS300_00016	4 psi absolute	1,2-Dichloroethane-d4 (Surr)	20 ppb v/v
							4-Bromofluorobenzene (Surr)	20 ppb v/v
							Toluene-d8 (Surr)	20 ppb v/v
.VAMSIS300_00016	09/24/15	Linde, Lot 24086333			(Purchased Reagent)		1,2-Dichloroethane-d4 (Surr)	300 ppb v/v
							4-Bromofluorobenzene (Surr)	300 ppb v/v
							Toluene-d8 (Surr)	300 ppb v/v
VASUISIM_00177	06/10/15	05/10/15	N2, Lot HOUSE	51 psi absolute	VAMSIS300_00016	3.4 psi absolute	1,2-Dichloroethane-d4 (Surr)	20 ppb v/v
							4-Bromofluorobenzene (Surr)	20 ppb v/v
							Toluene-d8 (Surr)	20 ppb v/v
.VAMSIS300_00016	09/24/15	Linde, Lot 24086333			(Purchased Reagent)		1,2-Dichloroethane-d4 (Surr)	300 ppb v/v
							4-Bromofluorobenzene (Surr)	300 ppb v/v
							Toluene-d8 (Surr)	300 ppb v/v

Reagent

VACORPSTKCCV_00020

THE LINDE GROUP

Linde

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880 Riverside Pkwy
West Sacramento, CA 95605-1500

PAGE: 1 of 4

CERTIFICATE OF ANALYSIS

Sales#:	112203337	**Cylinder Size:**	2A (8" X 47.5")
Production#:	2969920	**Cylinder # :**	CC-230119
Certification Date:	Dec-17-2014	**Cylinder Pressure:**	1150 psig
P.O.# :	2586698	**Cylinder Valve:**	CGA 350 / Steel
Blend Type:	CERTIFIED	**Cylinder Volume:**	29.5 Liter
Material#:	14004551	**Cylinder Material:**	Aluminum
Traceability:	NIST by weight	**Gas Volume:**	2300 Liters
Expiration Date:	Dec-17-2015	**Blend Tolerance:**	10% Relative
Do NOT use under:	150 psig	**Analytical Accuracy:**	5% Relative

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COMPONENT	CAS NUMBER	REQUESTED CONC	CERTIFIED CONC
Propylene	115-07-1	1.00 ppm	1.00 ppm
Chlorodifluoromethane	75-45-6	1.00 ppm	1.04 ppm
Freon-12	75-71-8	1.00 ppm	0.97 ppm
Chloromethane	74-87-3	1.00 ppm	1.00 ppm
Freon-114	76-14-2	1.00 ppm	1.00 ppm
Vinyl Chloride	75-01-4	1.00 ppm	1.01 ppm
1,3-Butadiene	106-99-0	1.00 ppm	1.03 ppm
Methanol (No Stability Guarantee)	67-56-1	1.00 ppm	1.03 ppm
n-Butane	106-97-8	1.00 ppm	1.03 ppm
Bromomethane	74-83-9	1.00 ppm	0.98 ppm
Chloroethane	75-00-3	1.00 ppm	0.98 ppm
Vinyl Bromide	593-60-2	1.00 ppm	1.09 ppm
Acetonitrile	75-05-8	1.00 ppm	1.02 ppm
Acrolein (No Stability Guarantee)	107-02-8	1.00 ppm	0.96 ppm
Isopentane	78-78-4	1.00 ppm	1.08 ppm
Acetone	67-64-1	1.00 ppm	1.08 ppm
Freon-11	75-69-4	1.00 ppm	0.96 ppm
Isopropyl Alcohol	67-63-0	1.00 ppm	1.01 ppm
Acrylonitrile	107-13-1	1.00 ppm	1.07 ppm
n-Pentane	109-66-0	1.00 ppm	1.07 ppm
Ethyl Ether	60-29-7	1.00 ppm	1.06 ppm
1,1-Dichloroethene	75-35-4	1.00 ppm	1.10 ppm
Carbon Disulfide (No Stability Guarantee)	75-15-0	1.00 ppm	1.05 ppm
Methylene Chloride	75-09-2	1.00 ppm	1.06 ppm
Tert-Butanol	75-65-0	1.00 ppm	1.06 ppm
3-Chloropropene	107-05-1	1.00 ppm	1.06 ppm
Freon-113	76-13-1	1.00 ppm	1.08 ppm
Trans-1,2-Dichloroethene	156-60-5	1.00 ppm	1.06 ppm
1,1-Dichloroethane	75-34-3	1.00 ppm	1.04 ppm
Methyl Tert Butyl Ether	1634-04-4	1.00 ppm	1.07 ppm

THE LINDE GROUP

SHIPPED TO: Test America W Sacramento
880 Riverside Pkwy
West Sacramento, CA 95605-1500

CERTIFICATE OF ANALYSIS

Sales#:	112203337	**Cylinder Size:**	2A (8" X 47.5")
Production#:	2969920	**Cylinder # :**	CC-230119
Certification Date:	Dec-17-2014	**Cylinder Pressure:**	1150 psig
P.O.# :	2586698	**Cylinder Valve:**	CGA 350 / Steel
Blend Type:	CERTIFIED	**Cylinder Volume:**	29.5 Liter
Material#:	14004551	**Cylinder Material:**	Aluminum
Traceability:	NIST by weight	**Gas Volume:**	2300 Liters
Expiration Date:	Dec-17-2015	**Blend Tolerance:**	10% Relative
Do NOT use under:	150 psig	**Analytical Accuracy:**	5% Relative

COMPONENT	CAS NUMBER	REQUESTED CONC	CERTIFIED CONC
Vinyl Acetate	108-05-4	1.00 ppm	1.04 ppm
Methyl Ethyl Ketone	78-93-3	1.00 ppm	1.10 ppm
Cis-1,2-Dichloroethene	156-59-2	1.00 ppm	1.06 ppm
Hexane	110-54-3	1.00 ppm	1.10 ppm
Chloroform	67-66-3	1.00 ppm	1.06 ppm
Ethyl Acetate	141-78-6	1.00 ppm	1.06 ppm
Tetrahydrofuran	109-99-9	1.00 ppm	1.11 ppm
1,2-Dichloroethane	107-06-2	1.00 ppm	1.05 ppm
1,1,1-Trichloroethane	71-55-6	1.00 ppm	1.03 ppm
Benzene	71-43-2	1.00 ppm	1.05 ppm
1-Butanol	71-36-3	1.00 ppm	1.12 ppm
Carbon Tetrachloride	56-23-5	1.00 ppm	1.08 ppm
Cyclohexane	110-82-7	1.00 ppm	1.08 ppm
Dibromomethane	74-95-3	1.00 ppm	1.04 ppm
1,2-Dichloropropane	78-87-5	1.00 ppm	1.04 ppm
Trichloroethylene	79-01-6	1.00 ppm	1.04 ppm
Bromodichloromethane	75-27-4	1.00 ppm	1.04 ppm
1,4-Dioxane	123-91-1	1.00 ppm	1.04 ppm
2,2,4-Trimethylpentane	540-84-1	1.00 ppm	1.04 ppm
Methyl Methacrylate	80-62-6	1.00 ppm	1.06 ppm
Heptane	142-82-5	1.00 ppm	1.08 ppm
Cis-1,3-Dichloropropene	10061-01-5	1.00 ppm	1.01 ppm
Methyl Isobutyl Ketone	108-10-1	1.00 ppm	1.08 ppm
Trans-1,3-Dichloropropene	10061-02-6	1.00 ppm	1.10 ppm
1,1,2-Trichloroethane	79-00-5	1.00 ppm	1.02 ppm
Toluene	108-88-3	1.00 ppm	1.06 ppm
Methyl Butyl Ketone	591-78-6	1.00 ppm	1.12 ppm
Dibromochloromethane	124-48-1	1.00 ppm	1.09 ppm
1,2-Dibromoethane	106-93-4	1.00 ppm	1.04 ppm
n-Octane	111-65-9	1.00 ppm	1.05 ppm

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PAGE: 3 of 4

CERTIFICATE OF ANALYSIS

Sales#:	112203337	**Cylinder Size:**	2A (8" X 47.5")
Production#:	2969920	**Cylinder # :**	CC-230119
Certification Date:	Dec-17-2014	**Cylinder Pressure:**	1150 psig
P.O.# :	2586698	**Cylinder Valve:**	CGA 350 / Steel
Blend Type:	CERTIFIED	**Cylinder Volume:**	29.5 Liter
Material#:	14004551	**Cylinder Material:**	Aluminum
Traceability:	NIST by weight	**Gas Volume:**	2300 Liters
Expiration Date:	Dec-17-2015	**Blend Tolerance:**	10% Relative
Do NOT use under:	150 psig	**Analytical Accuracy:**	5% Relative

COMPONENT	CAS NUMBER	REQUESTED CONC	CERTIFIED CONC
Tetrachloroethylene	127-18-4	1.00 ppm	0.99 ppm
Chlorobenzene	108-90-7	1.00 ppm	1.05 ppm
Ethylbenzene	100-41-4	1.00 ppm	1.05 ppm
p-xylene	106-42-3	1.00 ppm	1.02 ppm
m-xylene	108-38-3	1.00 ppm	1.02 ppm
Bromoform	75-25-2	1.00 ppm	1.02 ppm
Styrene	100-42-5	1.00 ppm	1.04 ppm
o-xylene	95-47-6	1.00 ppm	1.04 ppm
1,1,2,2-Tetrachloroethane	79-34-5	1.00 ppm	1.04 ppm
1,2,3-Trichloropropane	96-18-4	1.00 ppm	1.03 ppm
Nonane	111-84-2	1.00 ppm	1.02 ppm
Cumene	98-82-8	1.00 ppm	1.04 ppm
2-Chlorotoluene	95-49-8	1.00 ppm	1.08 ppm
n-Propylbenzene	103-65-1	1.00 ppm	0.99 ppm
4-Ethyltoluene	622-96-8	1.00 ppm	1.06 ppm
1,3,5-Trimethylbenzene	108-67-8	1.00 ppm	1.03 ppm
alpha-Methyl Styrene (No Stability Guarantee)	98-83-9	1.00 ppm	1.01 ppm
Tert-Butyl Benzene	98-06-6	1.00 ppm	1.01 ppm
1,2,4-Trimethylbenzene	95-63-6	1.00 ppm	1.01 ppm
1,3-Dichlorobenzene	541-73-1	1.00 ppm	1.00 ppm
Benzyl Chloride (No Stability Guarantee)	100-44-7	1.00 ppm	0.80 ppm
n-Decane	124-18-5	1.00 ppm	1.02 ppm
1,4-Dichlorobenzene	106-46-7	1.00 ppm	1.02 ppm
Sec-Butyl Benzene	135-98-8	1.00 ppm	1.01 ppm
4-Isopropyltoluene	99-87-6	1.00 ppm	1.00 ppm
1,2-Dichlorobenzene	95-50-1	1.00 ppm	0.97 ppm
n-Butyl Benzene	104-51-8	1.00 ppm	1.02 ppm
n-Undecane	1120-21-4	1.00 ppm	0.96 ppm

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CERTIFICATE OF ANALYSIS

Sales#:	112203337	**Cylinder Size:**	2A (8" X 47.5")
Production#:	2969920	**Cylinder # :**	CC-230119
Certification Date:	Dec-17-2014	**Cylinder Pressure:**	1150 psig
P.O.# :	2586698	**Cylinder Valve:**	CGA 350 / Steel
Blend Type:	CERTIFIED	**Cylinder Volume:**	29.5 Liter
Material#:	14004551	**Cylinder Material:**	Aluminum
Traceability:	NIST by weight	**Gas Volume:**	2300 Liters
Expiration Date:	Dec-17-2015	**Blend Tolerance:**	10% Relative
Do NOT use under:	150 psig	**Analytical Accuracy:**	5% Relative

COMPONENT	CAS NUMBER	REQUESTED CONC	CERTIFIED CONC
1,2,4-Trichlorobenzene	120-82-1	1.00 ppm	1.07 ppm
Naphthalene (No Stability Guarantee)	91-20-3	1.00 ppm	1.07 ppm
n-Dodecane	112-40-3	1.00 ppm	0.97 ppm
1,2,3-Trichlorobenzene	87-61-6	1.00 ppm	1.01 ppm
Hexachloro-1,3-Butadiene	87-68-3	1.00 ppm	1.02 ppm
Nitrogen	7727-37-9	Balance	Balance

ANALYST: Lou Lorenzetti

DATE: Dec-17-2014

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*Recertified 1/7/2015. Exp Date 1/7/2016

CERTIFICATE OF ANALYSIS

Sales#:	111092271	**Cylinder Size:**	2A (8" X 47.5")
Production#:	2915430	**Cylinder # :**	CC-346218
Certification Date:	Jan-10-2014	**Cylinder Pressure:**	1100 psig
P.O.# :	2546692	**Cylinder Valve:**	CGA 350 / Steel
Blend Type:	CERTIFIED	**Cylinder Volume:**	29.5 Liter
Material#:	14004551	**Cylinder Material:**	Aluminum
Traceability:	NIST by weight	**Gas Volume:**	2200 Liter
Expiration Date:	* Jan-10-2015	**Blend Tolerance:**	10% Relative
Do NOT use under:	150 psig	**Analytical Accuracy:**	5% Relative

COMPONENT	CAS NUMBER	REQUESTED CONC	CERTIFIED CONC
Propylene	115-07-1	1.00 ppm	1.06 ppm
Chlorodifluoromethane	75-45-6	1.00 ppm	0.99 ppm
Freon-12	75-71-8	1.00 ppm	1.00 ppm
Chloromethane	74-87-3	1.00 ppm	1.02 ppm
Freon-114	76-14-2	1.00 ppm	1.01 ppm
Vinyl Chloride	75-01-4	1.00 ppm	1.02 ppm
1,3-Butadiene	106-99-0	1.00 ppm	1.02 ppm
Methanol (no stability guarantee)	67-56-1	1.00 ppm	0.95 ppm
n-Butane	106-97-8	1.00 ppm	1.01 ppm
Bromomethane	74-83-9	1.00 ppm	1.01 ppm
Chloroethane	75-00-3	1.00 ppm	1.00 ppm
Vinyl Bromide	593-60-2	1.00 ppm	1.03 ppm
Acetonitrile	75-05-8	1.00 ppm	0.96 ppm
Acrolein (No Stability Guarantee)	107-02-8	1.00 ppm	0.91 ppm
Isopentane	78-78-4	1.00 ppm	1.01 ppm
Acetone	67-64-1	1.00 ppm	1.01 ppm
Freon-11	75-69-4	1.00 ppm	0.97 ppm
Isopropyl Alcohol	67-63-0	1.00 ppm	1.08 ppm
Acrylonitrile	107-13-1	1.00 ppm	0.99 ppm
n-Pentane	109-66-0	1.00 ppm	0.99 ppm
Ethyl Ether	60-29-7	1.00 ppm	0.99 ppm
1,1-Dichloroethene	75-35-4	1.00 ppm	0.96 ppm
Carbon Disulfide (No Stability Guarantee)	75-15-0	1.00 ppm	1.03 ppm
Methylene Chloride	75-09-2	1.00 ppm	1.05 ppm
Tert-Butanol		1.00 ppm	1.05 ppm
3-Chloropropene	107-05-1	1.00 ppm	1.05 ppm
Freon-113	76-13-1	1.00 ppm	0.95 ppm
Trans-1,2-Dichloroethene	156-60-5	1.00 ppm	1.01 ppm
1,1-Dichloroethane	75-34-3	1.00 ppm	0.99 ppm
Methyl Tert Butyl Ether	1634-04-4	1.00 ppm	1.03 ppm

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PAGE: 2 of 4

CERTIFICATE OF ANALYSIS

Sales#:	111092271	**Cylinder Size:**	2A (8" X 47.5")
Production#:	2915430	**Cylinder # :**	CC-346218
Certification Date:	Jan-10-2014	**Cylinder Pressure:**	1100 psig
P.O.# :	2546692	**Cylinder Valve:**	CGA 350 / Steel
Blend Type:	CERTIFIED	**Cylinder Volume:**	29.5 Liter
Material#:	14004551	**Cylinder Material:**	Aluminum
Traceability:	NIST by weight	**Gas Volume:**	2200 Liter
Expiration Date:	Jan-10-2015	**Blend Tolerance:**	10% Relative
Do NOT use under:	150 psig	**Analytical Accuracy:**	5% Relative

COMPONENT	CAS NUMBER	REQUESTED CONC	CERTIFIED CONC
Vinyl Acetate (No Stability Guarantee)	108-05-4	1.00 ppm	1.08 ppm
Methyl Ethyl Ketone	78-93-3	1.00 ppm	1.04 ppm
Cis-1,2-Dichloroethene	156-59-2	1.00 ppm	1.02 ppm
Hexane	110-54-3	1.00 ppm	1.00 ppm
Chloroform	67-66-3	1.00 ppm	1.02 ppm
Ethyl Acetate	141-78-6	1.00 ppm	1.02 ppm
Tetrahydrofuran	109-99-9	1.00 ppm	1.03 ppm
1,2-Dichloroethane	107-06-2	1.00 ppm	1.03 ppm
1,1,1-Trichloroethane	71-55-6	1.00 ppm	1.00 ppm
Benzene	71-43-2	1.00 ppm	1.01 ppm
1-Butanol (No Stability Guarantee)		1.00 ppm	1.10 ppm
Carbon Tetrachloride	56-23-5	1.00 ppm	1.04 ppm
Cyclohexane	110-82-7	1.00 ppm	1.02 ppm
Dibromomethane	74-95-3	1.00 ppm	1.03 ppm
1,2-Dichloropropane	78-87-5	1.00 ppm	1.03 ppm
Trichloroethylene	79-01-6	1.00 ppm	1.02 ppm
Bromodichloromethane	75-27-4	1.00 ppm	1.02 ppm
1,4-Dioxane	123-91-1	1.00 ppm	1.02 ppm
2,2,4-Trimethylpentane	540-84-1	1.00 ppm	1.01 ppm
Methyl Methacrylate	80-62-6	1.00 ppm	1.02 ppm
Heptane	142-82-5	1.00 ppm	1.03 ppm
Cis-1,3-Dichloropropene	10061-01-5	1.00 ppm	1.06 ppm
Methyl Isobutyl Ketone	108-10-1	1.00 ppm	1.05 ppm
Trans-1,3-Dichloropropene	10061-02-6	1.00 ppm	0.99 ppm
1,1,2-Trichloroethane	79-00-5	1.00 ppm	1.04 ppm
Toluene	108-88-3	1.00 ppm	1.04 ppm
Methyl Butyl Ketone	591-78-6	1.00 ppm	1.09 ppm
Dibromochloromethane	124-48-1	1.00 ppm	1.14 ppm
1,2-Dibromoethane	106-93-4	1.00 ppm	1.04 ppm
n-Octane	111-65-9	1.00 ppm	1.03 ppm

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CERTIFICATE OF ANALYSIS

Sales#:	111092271	**Cylinder Size:**	2A (8" X 47.5")
Production#:	2915430	**Cylinder # :**	CC-346218
Certification Date:	Jan-10-2014	**Cylinder Pressure:**	1100 psig
P.O.# :	2546692	**Cylinder Valve:**	CGA 350 / Steel
Blend Type:	CERTIFIED	**Cylinder Volume:**	29.5 Liter
Material#:	14004551	**Cylinder Material:**	Aluminum
Traceability:	NIST by weight	**Gas Volume:**	2200 Liter
Expiration Date:	Jan-10-2015	**Blend Tolerance:**	10% Relative
Do NOT use under:	150 psig	**Analytical Accuracy:**	5% Relative

COMPONENT	CAS NUMBER	REQUESTED CONC	CERTIFIED CONC
Tetrachloroethylene	127-18-4	1.00 ppm	0.98 ppm
Chlorobenzene	108-90-7	1.00 ppm	1.06 ppm
Ethylbenzene	100-41-4	1.00 ppm	1.05 ppm
p-xylene	106-42-3	1.00 ppm	1.03 ppm
m-xylene	108-38-3	1.00 ppm	1.03 ppm
Bromoform	75-25-2	1.00 ppm	1.03 ppm
Styrene	100-42-5	1.00 ppm	1.07 ppm
o-xylene	95-47-6	1.00 ppm	1.07 ppm
1,1,2,2-Tetrachloroethane	79-34-5	1.00 ppm	1.07 ppm
1,2,3-Trichloropropane	96-18-4	1.00 ppm	1.04 ppm
Nonane	111-84-2	1.00 ppm	1.00 ppm
Cumene	98-82-8	1.00 ppm	1.05 ppm
2-Chlorotoluene	95-49-8	1.00 ppm	1.07 ppm
n-Propylbenzene	103-65-1	1.00 ppm	1.00 ppm
4-Ethyltoluene	622-96-8	1.00 ppm	1.03 ppm
1,3,5-Trimethylbenzene	108-67-8	1.00 ppm	1.06 ppm
alpha-Methyl Styrene (No Stability Guarantee)	98-83-9	1.00 ppm	1.02 ppm
Tert-Butyl Benzene	98-06-6	1.00 ppm	1.04 ppm
1,2,4-Trimethylbenzene	95-63-6	1.00 ppm	1.04 ppm
1,3-Dichlorobenzene	541-73-1	1.00 ppm	1.09 ppm
Benzyl Chloride (No Stability Guarantee)	100-44-7	1.00 ppm	1.09 ppm
n-Decane	124-18-5	1.00 ppm	1.04 ppm
1,4-Dichlorobenzene	106-46-7	1.00 ppm	1.04 ppm
Sec-Butyl Benzene	135-98-8	1.00 ppm	1.03 ppm
4-Isopropyltoluene	99-87-6	1.00 ppm	1.02 ppm
1,2-Dichlorobenzene	95-50-1	1.00 ppm	1.07 ppm
n-Butyl Benzene	104-51-8	1.00 ppm	1.06 ppm
n-Undecane	1120-21-4	1.00 ppm	0.97 ppm

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PAGE: 4 of 4

CERTIFICATE OF ANALYSIS

Sales#:	111092271	**Cylinder Size:**	2A (8" X 47.5")
Production#:	2915430	**Cylinder # :**	CC-346218
Certification Date:	Jan-10-2014	**Cylinder Pressure:**	1100 psig
P.O.# :	2546692	**Cylinder Valve:**	CGA 350 / Steel
Blend Type:	CERTIFIED	**Cylinder Volume:**	29.5 Liter
Material#:	14004551	**Cylinder Material:**	Aluminum
Traceability:	NIST by weight	**Gas Volume:**	2200 Liter
Expiration Date:	Jan-10-2015	**Blend Tolerance:**	10% Relative
Do NOT use under:	150 psig	**Analytical Accuracy:**	5% Relative

COMPONENT	CAS NUMBER	REQUESTED CONC	CERTIFIED CONC
1,2,4-Trichlorobenzene	120-82-1	1.00 ppm	1.07 ppm
Naphthalene (No Stability Guarantee)	91-20-3	1.00 ppm	1.05 ppm
n-Dodecane	112-40-3	1.00 ppm	1.00 ppm
1,2,3-Trichlorobenzene	87-61-6	1.00 ppm	1.06 ppm
Hexachloro-1,3-Butadiene	87-68-3	1.00 ppm	1.06 ppm
Nitrogen	7727-37-9	Balance	Balance

ANALYST: Lou Lorenzetti

DATE: Jan-10-2014

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Report Date: 09-Feb-2015 13:20:28 Chrom Revision: 2.2 15-Jan-2015 13:05:58

Preliminary Report

TestAmerica Sacramento

LCS, Lab Control Sample Report

Supporting data for recertification material # 14004551 2/20/2015 MCW

Data File:	\\SACCHROM\ChromData\ATMS2\20150107-18576.b\15010707.D				
Lims ID:	LCS 40ppbv				
Client ID:					
Sample Type:	LCS				
Inject. Date:	07-Jan-2015 21:47:30	ALS Bottle#:	14	Worklist Smp#:	9
Purge Vol:	250.000 mL	Dil. Factor:	1.0000		
Sample Info:	LCS 40ppbv				
Misc. Info.:	50mL				
Operator ID:	SRS	Instrument ID:	ATMS2		
Method:	\\SACCHROM\ChromData\ATMS2\20150107-18576.b\TO15_ATMS2N.m				
Limit Group:	MSA - TO15_MOD - ICAL				
Last Update:	09-Jan-2015 10:19:12	Calib Date:	07-Jan-2015 20:24:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\SACCHROM\ChromData\ATMS2\20150107-18576.b\15010705.D				
Column 1 :	RTX Volatiles (0.32 mm)		Det: MS SCAN		
Process Host:	XAWRK032				

Compound	Amount Added	Amount Recovered	%Rec
$ 4 1,2-Dichloroethane-d4 (Surr)	4.00	3.63	90.74
$ 5 Toluene-d8 (Surr)	4.00	3.98	99.44
$ 6 4-Bromofluorobenzene (Surr)	4.00	3.87	96.77
14 Propene	40.0	36.5	91.16
13 Chlorodifluoromethane	40.0	35.3	88.29
15 Dichlorodifluoromethane	40.0	37.4	93.49
19 1,2-Dichloro-1,1,2,2-tetrafluoroethane	40.0	42.2	105.60
18 Chloromethane	40.0	37.6	94.05
22 Butane	40.0	36.1	90.24
20 Vinyl chloride	40.0	37.2	93.02
21 Butadiene	40.0	36.7	91.64
25 Bromomethane	40.0	36.8	91.97
26 Chloroethane	40.0	36.5	91.23
38 Pentane	40.0	33.8	84.42
27 Vinyl bromide	40.0	33.4	83.43
28 Trichlorofluoromethane	40.0	34.1	85.30
37 Isopropyl alcohol	40.0	39.4	98.55
39 Ethyl ether	40.0	25.5	63.73
29 Acrolein	40.0	22.6	56.55
31 Acetone	40.0	25.2	63.08
43 1,1,2-Trichloro-1,2,2-trifluoroethane	40.0	28.5	71.30
30 Acetonitrile	40.0	29.3	73.13

Report Date: 09-Feb-2015 13:20:28 Chrom Revision: 2.2 15-Jan-2015 13:05:58

Preliminary Report

Data File: \\SACCHROM\ChromData\ATMS2\20150107-18576.b\15010707.D

Compound	Amount Added	Amount Recovered	%Rec
41 1,1-Dichloroethene	40.0	29.8	74.48
44 2-Methyl-2-propanol	40.0	41.0	102.45
46 3-Chloro-1-propene	40.0	33.1	82.71
47 Methylene Chloride	40.0	29.6	74.05
42 Acrylonitrile	40.0	24.9	62.24
48 Carbon disulfide	40.0	32.5	81.19
50 Methyl tert-butyl ether	40.0	23.4	58.58
49 trans-1,2-Dichloroethene	40.0	32.0	80.02
55 Hexane	40.0	30.1	75.20
52 Vinyl acetate	40.0	22.3	55.79
53 1,1-Dichloroethane	40.0	30.6	76.60
54 2-Butanone (MEK)	40.0	25.8	64.49
58 Ethyl acetate	40.0	26.1	65.37
57 cis-1,2-Dichloroethene	40.0	30.8	76.98
61 Chloroform	40.0	29.9	74.79
62 Tetrahydrofuran	40.0	25.0	62.59
65 1,1,1-Trichloroethane	40.0	29.9	74.63
70 Cyclohexane	40.0	33.1	82.73
74 Isooctane	40.0	33.5	83.78
67 n-Butanol	40.0	34.1	85.25
69 Carbon tetrachloride	40.0	31.7	79.26
66 1,2-Dichloroethane	40.0	32.0	79.90
68 Benzene	40.0	32.3	80.86
75 n-Heptane	40.0	33.5	83.77
76 Trichloroethene	40.0	37.3	93.16
77 1,2-Dichloropropane	40.0	31.6	79.00
79 Methyl methacrylate	40.0	27.9	69.76
72 1,4-Dioxane	40.0	56.5	141.34
80 Dichlorobromomethane	40.0	32.7	81.74
78 Dibromomethane	40.0	31.8	79.58
81 4-Methyl-2-pentanone (MIBK)	40.0	29.4	73.58
83 cis-1,3-Dichloropropene	40.0	32.3	80.70
88 n-Octane	40.0	34.2	85.55
85 Toluene	40.0	29.9	74.79
84 trans-1,3-Dichloropropene	40.0	30.7	76.86
86 1,1,2-Trichloroethane	40.0	34.1	85.23
87 2-Hexanone	40.0	31.6	78.95

Report Date: 09-Feb-2015 13:20:28 Chrom Revision: 2.2 15-Jan-2015 13:05:58

Preliminary Report

Data File: \\SACCHROM\ChromData\ATMS2\20150107-18576.b\15010707.D

Compound	Amount Added	Amount Recovered	%Rec
93 Tetrachloroethene	40.0	33.3	83.25
92 Chlorodibromomethane	40.0	33.7	84.17
94 Ethylene Dibromide	40.0	33.3	83.28
99 n-Nonane	40.0	34.0	84.96
96 Chlorobenzene	40.0	33.5	83.74
97 Ethylbenzene	40.0	27.2	68.04
98 m-Xylene & p-Xylene	80.0	53.7	67.11
101 o-Xylene	40.0	27.1	67.84
100 Styrene	40.0	26.8	66.89
102 Bromoform	40.0	33.9	84.65
104 Isopropylbenzene	40.0	26.3	65.64
103 1,1,2,2-Tetrachloroethane	40.0	26.8	66.89
105 1,2,3-Trichloropropane	40.0	26.2	65.59
113 n-Decane	40.0	27.6	69.00
107 N-Propylbenzene	40.0	26.4	65.91
110 4-Ethyltoluene	40.0	27.6	69.12
111 1,3,5-Trimethylbenzene	40.0	26.3	65.69
109 2-Chlorotoluene	40.0	27.3	68.21
112 Alpha Methyl Styrene	40.0	25.8	64.59
114 tert-Butylbenzene	40.0	26.0	64.95
115 1,2,4-Trimethylbenzene	40.0	27.8	69.62
116 sec-Butylbenzene	40.0	25.8	64.41
121 4-Isopropyltoluene	40.0	26.6	66.38
117 1,3-Dichlorobenzene	40.0	27.4	68.62
120 1,4-Dichlorobenzene	40.0	26.7	66.77
118 Benzyl chloride	40.0	25.1	62.78
124 Undecane	40.0	23.3	58.28
123 n-Butylbenzene	40.0	25.6	64.12
122 1,2-Dichlorobenzene	40.0	25.7	64.24
125 Dodecane	40.0	46.1	115.30
126 1,2,4-Trichlorobenzene	40.0	27.9	69.64
128 Hexachlorobutadiene	40.0	32.7	81.71
127 Naphthalene	40.0	29.0	72.59
129 1,2,3-Trichlorobenzene	40.0	34.8	86.99
A 157 C6-C7	0	*ND	
A 155 C8-C10	0	*ND	
A 156 C11-C14	0	*ND	

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Preliminary Report

Data File: \\SACCHROM\ChromData\ATMS2\20150107-18576.b\15010707.D

Compound	Amount Added	Amount Recovered	%Rec
A 153 C4-C14	0	*ND	
A 154 C4-C5	0	*ND	
A 146 GRO	40.0	29.5	73.79
A 147 Toluene Range	40.0	29.8	74.56
A 150 Nonmethane Organic Compounds as Hexane	40.0	*ND	
A 151 Total VOCs as Tetrachloroethene (PCE)	40.0	1787.0	4467.51
A 154 Total VOC as Hexane	40.0	*ND	
A 152 TVOC as Toluene	40.0	2016.1	5040.13
A 149 PCE Range	40.0	33.4	83.51
S 155 Xylenes, Total	120.0	80.8	67.36

Reagent

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PAGE: 1 of 1

CERTIFICATE OF ANALYSIS

Sales#:	110808654	**Cylinder Size:**	2A (8" X 47.5")
Production#:	1270593	**Cylinder # :**	CC-361803
Certification Date:	Sep-24-2013	**Cylinder Pressure:**	2000 psig
P.O.# :	2538269	**Cylinder Valve:**	CGA 350 / Steel
Blend Type:	CERTIFIED	**Cylinder Volume:**	29.5 Liter
Material#:	24086333	**Cylinder Material:**	Aluminum
Traceability:	NIST by weight	**Gas Volume:**	4000 Liter
Expiration Date:	Sep-24-2014	**Blend Tolerance:**	20% Relative
Do NOT use under:	150 psig	**Analytical Accuracy:**	10% Relative

330919
ID: VAMSI5300_00016
Exp: 09/24/15 Prpd: LL1
300 PPBV IS/SURR STOCK

COMPONENT	CAS NUMBER	REQUESTED CONC	CERTIFIED CONC
Bromochloromethane	74-97-5	300 ppb	291 ppb
1,2-Dichloroethane-d4	17060-07-0	300 ppb	291 ppb
1,4-Difluorobenzene	540-36-3	300 ppb	300 ppb
Toluene-d8	2037-26-5	300 ppb	300 ppb
Chlorobenzene-d5	3114-55-4	300 ppb	300 ppb
4-Bromofluorobenzene	460-00-4	300 ppb	300 ppb
Nitrogen	7727-37-9	Balance	Balance

Extended Expiration date. 4/19/14. per RH.
Expires: 9/24/15.

Rec'd 10/03/13 CR

ANALYST: Lou Lorenzetti

DATE: Sep-24-2013

TO15

Volatile Organic Compounds in Ambient Air

FORM II
AIR - GC/MS VOA SURROGATE RECOVERY

Lab Name: TestAmerica Sacramento Job No.: 320-12924-1

SDG No.:

Matrix: Air Level: Low

GC Column (1): RTX-Volatil ID: 0.32(mm)

Client Sample ID	Lab Sample ID	DCA #	TOL #	BFB #
J6038-SS5-050615-1	320-12924-1	119	96	102
J6038-SS5-050615-2	320-12924-2	117	97	103
J6038-SS7-050615	320-12924-3	115	94	93
J6038-SS11-050615	320-12924-4	113	94	98
	MB 320-73563/6	113	94	94
	LCS 320-73563/3	109	100	106
	LCSD 320-73563/27	108	98	106

	QC LIMITS
DCA = 1,2-Dichloroethane-d4 (Surr)	70-130
TOL = Toluene-d8 (Surr)	70-130
BFB = 4-Bromofluorobenzene (Surr)	70-130

Column to be used to flag recovery values

FORM II TO-15

FORM III
AIR - GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Sacramento Job No.: 320-12924-1

SDG No.:

Matrix: Air Level: Low Lab File ID: 15051103.D

Lab ID: LCS 320-73563/3 Client ID:

COMPOUND	SPIKE ADDED (ppb v/v)	LCS CONCENTRATION (ppb v/v)	LCS % REC	QC LIMITS REC	#
Acetone	20.0	18.9	95	71-131	
Benzene	20.0	16.7	84	68-128	
Benzyl chloride	20.0	18.8	94	58-120	
Bromodichloromethane	20.0	20.5	103	65-130	
Bromoform	20.0	23.4	117	64-144	
2-Butanone (MEK)	20.0	15.3	76	71-131	
Carbon disulfide	20.0	15.6	78	63-123	
Carbon tetrachloride	20.0	22.9	115	67-127	
Chlorobenzene	20.0	20.3	102	70-132	
Chloroethane	20.0	18.3	91	70-131	
Chloroform	20.0	18.4	92	69-129	
Chloromethane	20.0	20.8	104	67-127	
Dibromochloromethane	20.0	22.5	112	68-128	
1,2-Dibromoethane (EDB)	20.0	20.8	104	68-131	
1,2-Dichloro-1,1,2,2-tetrafluoroethane	20.0	17.9	90	64-124	
1,2-Dichlorobenzene	20.0	23.7	118	73-143	
1,3-Dichlorobenzene	20.0	23.9	119	77-136	
1,4-Dichlorobenzene	20.0	24.1	120	73-143	
Dichlorodifluoromethane	20.0	20.5	102	69-129	
1,1-Dichloroethane	20.0	17.5	87	65-125	
1,2-Dichloroethane	20.0	23.6	118	71-131	
1,1-Dichloroethene	20.0	17.0	85	53-128	
cis-1,2-Dichloroethene	20.0	17.0	85	68-128	
trans-1,2-Dichloroethene	20.0	18.6	93	70-130	
1,2-Dichloropropane	20.0	22.0	110	74-128	
cis-1,3-Dichloropropene	20.0	20.0	100	78-132	
trans-1,3-Dichloropropene	20.0	19.2	96	56-136	
Ethylbenzene	20.0	20.9	105	76-136	
4-Ethyltoluene	20.0	20.9	104	62-136	
Hexachlorobutadiene	20.0	26.4	132	42-150	
2-Hexanone	20.0	19.3	96	70-128	
4-Methyl-2-pentanone (MIBK)	20.0	19.5	98	73-133	
Methylene Chloride	20.0	17.9	89	65-125	
Styrene	20.0	22.0	110	76-144	
1,1,2,2-Tetrachloroethane	20.0	19.0	95	75-135	
Tetrachloroethene	20.0	21.1	105	56-138	
Toluene	20.0	19.5	98	71-132	
1,1,2-Trichloro-1,2,2-trifluoroethane	20.0	16.3	81	50-132	
1,2,4-Trichlorobenzene	20.0	25.5	127	59-150	
1,1,1-Trichloroethane	20.0	20.4	102	65-124	

Column to be used to flag recovery and RPD values

FORM III TO-15

FORM III
AIR - GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Sacramento Job No.: 320-12924-1

SDG No.:

Matrix: Air Level: Low Lab File ID: 15051103.D

Lab ID: LCS 320-73563/3 Client ID:

COMPOUND	SPIKE ADDED (ppb v/v)	LCS CONCENTRATION (ppb v/v)	LCS % REC	QC LIMITS REC	#
1,1,2-Trichloroethane	20.0	19.6	98	71-131	
Trichloroethene	20.0	19.7	98	64-127	
Trichlorofluoromethane	20.0	21.4	107	68-128	
1,2,4-Trimethylbenzene	20.0	21.0	105	61-145	
1,3,5-Trimethylbenzene	20.0	21.1	105	65-136	
Vinyl acetate	20.0	21.0	105	77-134	
Vinyl chloride	20.0	18.4	92	69-129	
m,p-Xylene	40.0	42.9	107	75-138	
o-Xylene	20.0	21.4	107	77-132	

Column to be used to flag recovery and RPD values

FORM III TO-15

FORM III
AIR - GC/MS VOA LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: TestAmerica Sacramento Job No.: 320-12924-1

SDG No.:

Matrix: Air Level: Low Lab File ID: 15051104.D

Lab ID: LCSD 320-73563/27 Client ID:

COMPOUND	SPIKE ADDED (ppb v/v)	LCSD CONCENTRATION (ppb v/v)	LCSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Acetone	20.0	18.6	93	2	25	71-131	
Benzene	20.0	16.4	82	2	25	68-128	
Benzyl chloride	20.0	18.5	92	2	25	58-120	
Bromodichloromethane	20.0	19.8	99	4	25	65-130	
Bromoform	20.0	23.0	115	2	25	64-144	
2-Butanone (MEK)	20.0	15.1	76	1	25	71-131	
Carbon disulfide	20.0	15.3	77	2	25	63-123	
Carbon tetrachloride	20.0	22.0	110	4	25	67-127	
Chlorobenzene	20.0	19.8	99	3	25	70-132	
Chloroethane	20.0	17.9	90	2	25	70-131	
Chloroform	20.0	18.0	90	2	25	69-129	
Chloromethane	20.0	20.1	100	4	25	67-127	
Dibromochloromethane	20.0	22.0	110	2	25	68-128	
1,2-Dibromoethane (EDB)	20.0	20.5	103	2	25	68-131	
1,2-Dichloro-1,1,2,2-tetrafluoroethane	20.0	18.1	91	1	25	64-124	
1,2-Dichlorobenzene	20.0	23.3	116	2	25	73-143	
1,3-Dichlorobenzene	20.0	23.6	118	1	25	77-136	
1,4-Dichlorobenzene	20.0	23.8	119	1	25	73-143	
Dichlorodifluoromethane	20.0	19.5	98	5	25	69-129	
1,1-Dichloroethane	20.0	17.3	87	1	25	65-125	
1,2-Dichloroethane	20.0	22.6	113	4	25	71-131	
1,1-Dichloroethene	20.0	16.7	84	2	25	53-128	
cis-1,2-Dichloroethene	20.0	16.7	84	2	25	68-128	
trans-1,2-Dichloroethene	20.0	18.4	92	1	25	70-130	
1,2-Dichloropropane	20.0	21.5	107	2	25	74-128	
cis-1,3-Dichloropropene	20.0	19.3	97	3	25	78-132	
trans-1,3-Dichloropropene	20.0	19.2	96	0	25	56-136	
Ethylbenzene	20.0	20.6	103	1	25	76-136	
4-Ethyltoluene	20.0	20.4	102	2	25	62-136	
Hexachlorobutadiene	20.0	26.9	134	2	25	42-150	
2-Hexanone	20.0	18.8	94	2	25	70-128	
4-Methyl-2-pentanone (MIBK)	20.0	18.7	94	4	25	73-133	
Methylene Chloride	20.0	17.7	88	1	25	65-125	
Styrene	20.0	22.0	110	0	25	76-144	
1,1,2,2-Tetrachloroethane	20.0	18.7	93	2	25	75-135	
Tetrachloroethene	20.0	20.8	104	2	25	56-138	
Toluene	20.0	18.8	94	4	25	71-132	
1,1,2-Trichloro-1,2,2-trifluoroethane	20.0	16.0	80	2	25	50-132	
1,2,4-Trichlorobenzene	20.0	25.1	125	2	25	59-150	
1,1,1-Trichloroethane	20.0	19.9	100	2	25	65-124	

Column to be used to flag recovery and RPD values

FORM III TO-15

FORM III
AIR - GC/MS VOA LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: TestAmerica Sacramento Job No.: 320-12924-1

SDG No.:

Matrix: Air Level: Low Lab File ID: 15051104.D

Lab ID: LCSD 320-73563/27 Client ID:

COMPOUND	SPIKE ADDED (ppb v/v)	LCSD CONCENTRATION (ppb v/v)	LCSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
1,1,2-Trichloroethane	20.0	19.3	97	1	25	71-131	
Trichloroethene	20.0	19.0	95	4	25	64-127	
Trichlorofluoromethane	20.0	20.9	105	2	25	68-128	
1,2,4-Trimethylbenzene	20.0	23.9	119	13	25	61-145	
1,3,5-Trimethylbenzene	20.0	20.9	105	1	25	65-136	
Vinyl acetate	20.0	21.0	105	0	25	77-134	
Vinyl chloride	20.0	17.9	90	3	25	69-129	
m,p-Xylene	40.0	42.6	106	1	25	75-138	
o-Xylene	20.0	21.1	106	1	25	77-132	

Column to be used to flag recovery and RPD values

FORM III TO-15

FORM IV
AIR - GC/MS VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Sacramento Job No.: 320-12924-1

SDG No.:

Lab File ID: 15051106.D Lab Sample ID: MB 320-73563/6

Matrix: Air Heated Purge:(Y/N) N

Instrument ID: ATMS2 Date Analyzed: 05/11/2015 16:43

GC Column: RTX-Volatiles ID: 0.32(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 320-73563/3	15051103.D	05/11/2015 14:21
	LCSD 320-73563/27	15051104.D	05/11/2015 15:16
J6038-SS11-050615	320-12924-4	15051110.D	05/11/2015 20:47
J6038-SS5-050615-1	320-12924-1	15051122.D	05/12/2015 05:41
J6038-SS5-050615-2	320-12924-2	15051123.D	05/12/2015 08:11
J6038-SS7-050615	320-12924-3	15051124.D	05/12/2015 08:52

FORM V
AIR - GC/MS VOA INSTRUMENT PERFORMANCE CHECK

Lab Name: TestAmerica Sacramento Job No.: 320-12924-1

SDG No.:

Lab File ID: 15031701.D BFB Injection Date: 03/18/2015

Instrument ID: ATMS2 BFB Injection Time: 00:38

Analysis Batch No.: 68573

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	8.0 - 40.0% of mass 95	20.8	
75	30.0 - 66.0% of mass 95	47.0	
95	Base peak, 100% relative abundance	100.0	
96	5.0 - 9.0% of mass 95	6.8	
173	Less than 2.0% of mass 174	0.0	(0.0)1
174	50.0 - 120.0% of mass 95	92.4	
175	4.0 - 9.0 % of mass 174	7.0	(7.6)1
176	93.0 - 101.0% of mass 174	89.2	(96.6)1
177	5.0 - 9.0% of mass 176	5.8	(6.5)2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	IC 320-68573/5	15031704.D	03/18/2015	02:43
	IC 320-68573/6	15031705.D	03/18/2015	03:24
	IC 320-68573/7	15031706.D	03/18/2015	04:06
	IC 320-68573/8	15031707.D	03/18/2015	04:48
	IC 320-68573/9	15031708.D	03/18/2015	05:30
	IC 320-68573/10	15031709.D	03/18/2015	06:14
	IC 320-68573/11	15031710.D	03/18/2015	06:55
	ICIS 320-68573/12	15031711.D	03/18/2015	07:37
	IC 320-68573/13	15031712.D	03/18/2015	08:20
	IC 320-68573/14	15031713.D	03/18/2015	09:04
	ICV 320-68573/16	15031715.D	03/18/2015	10:29

FORM V
AIR - GC/MS VOA INSTRUMENT PERFORMANCE CHECK

Lab Name: TestAmerica Sacramento Job No.: 320-12924-1

SDG No.:

Lab File ID: 15051101.D BFB Injection Date: 05/11/2015

Instrument ID: ATMS2 BFB Injection Time: 12:56

Analysis Batch No.: 73563

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	8.0 - 40.0% of mass 95	24.0	
75	30.0 - 66.0% of mass 95	51.0	
95	Base peak, 100% relative abundance	100.0	
96	5.0 - 9.0% of mass 95	6.6	
173	Less than 2.0% of mass 174	0.0	(0.0)1
174	50.0 - 120.0% of mass 95	101.6	
175	4.0 - 9.0 % of mass 174	7.8	(7.7)1
176	93.0 - 101.0% of mass 174	98.3	(96.7)1
177	5.0 - 9.0% of mass 176	6.6	(6.7)2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 320-73563/2	15051102.D	05/11/2015	13:38
	LCS 320-73563/3	15051103.D	05/11/2015	14:21
	LCSD 320-73563/27	15051104.D	05/11/2015	15:16
	MB 320-73563/6	15051106.D	05/11/2015	16:43
J6038-SS11-050615	320-12924-4	15051110.D	05/11/2015	20:47
J6038-SS5-050615-1	320-12924-1	15051122.D	05/12/2015	05:41
J6038-SS5-050615-2	320-12924-2	15051123.D	05/12/2015	08:11
J6038-SS7-050615	320-12924-3	15051124.D	05/12/2015	08:52

FORM VIII
AIR - GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Sacramento Job No.: 320-12924-1

SDG No.:

Sample No.: ICIS 320-68573/12 Date Analyzed: 03/18/2015 07:37

Instrument ID: ATMS2 GC Column: RTX-Volatiles ID: 0.32(mm)

Lab File ID (Standard): 15031711.D Heated Purge: (Y/N) N

Calibration ID: 12330

		CBM		DFB		CBZ	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		57635	10.33	226906	11.68	194518	15.99
UPPER LIMIT		80689	10.66	317668	12.01	272325	16.32
LOWER LIMIT		34581	10.00	136144	11.35	116711	15.66
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 320-68573/16		60755	10.33	238453	11.67	204500	15.99
CCVIS 320-73563/2		51315	10.29	191392	11.63	167698	15.95

CBM = Chlorobromomethane (IS)
DFB = 1,4-Difluorobenzene
CBZ = Chlorobenzene-d5 (IS)

Area Limit = 60%-140% of internal standard area
RT Limit = ± 0.33 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII TO-15

FORM VIII
AIR - GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Sacramento Job No.: 320-12924-1

SDG No.:

Sample No.: CCVIS 320-73563/2 Date Analyzed: 05/11/2015 13:38

Instrument ID: ATMS2 GC Column: RTX-Volatiles ID: 0.32(mm)

Lab File ID (Standard): 15051102.D Heated Purge: (Y/N) N

Calibration ID: 12352

		CBM		DFB		CBZ	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		51315	10.29	191392	11.63	167698	15.95
UPPER LIMIT		71841	10.62	267949	11.96	234777	16.28
LOWER LIMIT		30789	9.96	114835	11.30	100619	15.62
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 320-73563/3		55565	10.29	205267	11.64	176277	15.95
LCSD 320-73563/27		58480	10.29	218339	11.64	182190	15.94
MB 320-73563/6		46021	10.29	180514	11.63	146930	15.94
320-12924-4	J6038-SS11-050615	48387	10.29	195086	11.63	158805	15.94
320-12924-1	J6038-SS5-050615-1	40477	10.29	161856	11.63	133705	15.94
320-12924-2	J6038-SS5-050615-2	44998	10.29	182064	11.63	148161	15.94
320-12924-3	J6038-SS7-050615	43057	10.29	169467	11.63	134956	15.94

CBM = Chlorobromomethane (IS)
DFB = 1,4-Difluorobenzene
CBZ = Chlorobenzene-d5 (IS)

Area Limit = 60%-140% of internal standard area
RT Limit = ± 0.33 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII TO-15

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento | Job No.: 320-12924-1

SDG No.:

Client Sample ID: J6038-SS5-050615-1 | Lab Sample ID: 320-12924-1

Matrix: Air | Lab File ID: 15051122.D

Analysis Method: TO-15 | Date Collected: 05/06/2015 11:44

Sample wt/vol: 250(mL) | Date Analyzed: 05/12/2015 05:41

Soil Aliquot Vol: | Dilution Factor: 1.75

Soil Extract Vol.: | GC Column: RTX-Volatiles ID: 0.32(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 73563 | Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
67-64-1	Acetone	58.08	81		8.8	0.31
71-43-2	Benzene	78.11	0.87		0.70	0.14
100-44-7	Benzyl chloride	126.58	ND		1.4	0.29
75-27-4	Bromodichloromethane	163.83	ND		0.53	0.12
75-25-2	Bromoform	252.75	ND		0.70	0.12
74-83-9	Bromomethane	94.94	ND		1.4	0.59
78-93-3	2-Butanone (MEK)	72.11	3.9		1.4	0.35
75-15-0	Carbon disulfide	76.14	0.19	J	1.4	0.14
56-23-5	Carbon tetrachloride	153.81	ND		1.4	0.11
108-90-7	Chlorobenzene	112.56	ND		0.53	0.11
75-00-3	Chloroethane	64.52	ND		1.4	0.54
67-66-3	Chloroform	119.38	0.61		0.53	0.17
74-87-3	Chloromethane	50.49	ND		1.4	0.34
124-48-1	Dibromochloromethane	208.29	ND		0.70	0.14
106-93-4	1,2-Dibromoethane (EDB)	187.87	ND		1.4	0.13
76-14-2	1,2-Dichloro-1,1,2,2-tetrafluoroethane	170.92	ND		0.70	0.27
95-50-1	1,2-Dichlorobenzene	147.00	ND		0.70	0.23
541-73-1	1,3-Dichlorobenzene	147.00	ND		0.70	0.19
106-46-7	1,4-Dichlorobenzene	147.00	ND		0.70	0.26
75-71-8	Dichlorodifluoromethane	120.91	0.55	J	0.70	0.25
75-34-3	1,1-Dichloroethane	98.96	ND		0.53	0.13
107-06-2	1,2-Dichloroethane	98.96	ND		1.4	0.15
75-35-4	1,1-Dichloroethene	96.94	ND		1.4	0.23
156-59-2	cis-1,2-Dichloroethene	96.94	1.1		0.70	0.16
156-60-5	trans-1,2-Dichloroethene	96.94	0.40	J	0.70	0.18
78-87-5	1,2-Dichloropropane	112.99	ND		0.70	0.42
10061-01-5	cis-1,3-Dichloropropene	110.97	ND		0.70	0.18
10061-02-6	trans-1,3-Dichloropropene	110.97	ND		0.70	0.15
100-41-4	Ethylbenzene	106.17	1.8		0.70	0.11
622-96-8	4-Ethyltoluene	120.20	ND		0.70	0.33
87-68-3	Hexachlorobutadiene	260.76	ND		3.5	0.76
591-78-6	2-Hexanone	100.20	ND		0.70	0.15
108-10-1	4-Methyl-2-pentanone (MIBK)	100.16	ND		0.70	0.24
75-09-2	Methylene Chloride	84.93	3.2		0.70	0.13

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento | Job No.: 320-12924-1

SDG No.:

Client Sample ID: J6038-SS5-050615-1 | Lab Sample ID: 320-12924-1

Matrix: Air | Lab File ID: 15051122.D

Analysis Method: TO-15 | Date Collected: 05/06/2015 11:44

Sample wt/vol: 250(mL) | Date Analyzed: 05/12/2015 05:41

Soil Aliquot Vol: | Dilution Factor: 1.75

Soil Extract Vol.: | GC Column: RTX-Volatiles ID: 0.32(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 73563 | Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
100-42-5	Styrene	104.15	0.12	J	0.70	0.10
79-34-5	1,1,2,2-Tetrachloroethane	167.85	ND		0.70	0.12
127-18-4	Tetrachloroethene	165.83	3.3		0.70	0.089
108-88-3	Toluene	92.14	2.5		0.70	0.089
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	187.38	1.8		0.70	0.29
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		3.5	0.76
71-55-6	1,1,1-Trichloroethane	133.41	0.39	J	0.53	0.11
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.70	0.12
79-01-6	Trichloroethene	131.39	46		0.70	0.18
75-69-4	Trichlorofluoromethane	137.37	0.36	J	0.70	0.34
95-63-6	1,2,4-Trimethylbenzene	120.20	0.31	J	1.4	0.28
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		0.70	0.22
108-05-4	Vinyl acetate	86.09	ND		1.4	0.25
75-01-4	Vinyl chloride	62.50	ND		0.70	0.21
179601-23-1	m,p-Xylene	106.17	7.1		1.4	0.18
95-47-6	o-Xylene	106.17	2.5		0.70	0.095

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	102		70-130
17060-07-0	1,2-Dichloroethane-d4 (Surr)	119		70-130
2037-26-5	Toluene-d8 (Surr)	96		70-130

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento | Job No.: 320-12924-1

SDG No.:

Client Sample ID: J6038-SS5-050615-1 | Lab Sample ID: 320-12924-1

Matrix: Air | Lab File ID: 15051122.D

Analysis Method: TO-15 | Date Collected: 05/06/2015 11:44

Sample wt/vol: 250(mL) | Date Analyzed: 05/12/2015 05:41

Soil Aliquot Vol: | Dilution Factor: 1.75

Soil Extract Vol.: | GC Column: RTX-Volatiles ID: 0.32(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 73563 | Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
67-64-1	Acetone	58.08	190		21	0.74
71-43-2	Benzene	78.11	2.8		2.2	0.44
100-44-7	Benzyl chloride	126.58	ND		7.2	1.5
75-27-4	Bromodichloromethane	163.83	ND		3.5	0.77
75-25-2	Bromoform	252.75	ND		7.2	1.3
74-83-9	Bromomethane	94.94	ND		5.4	2.3
78-93-3	2-Butanone (MEK)	72.11	12		4.1	1.0
75-15-0	Carbon disulfide	76.14	0.59	J	4.4	0.43
56-23-5	Carbon tetrachloride	153.81	ND		8.8	0.70
108-90-7	Chlorobenzene	112.56	ND		2.4	0.52
75-00-3	Chloroethane	64.52	ND		3.7	1.4
67-66-3	Chloroform	119.38	3.0		2.6	0.81
74-87-3	Chloromethane	50.49	ND		2.9	0.71
124-48-1	Dibromochloromethane	208.29	ND		6.0	1.2
106-93-4	1,2-Dibromoethane (EDB)	187.87	ND		11	1.0
76-14-2	1,2-Dichloro-1,1,2,2-tetrafluoroethane	170.92	ND		4.9	1.9
95-50-1	1,2-Dichlorobenzene	147.00	ND		4.2	1.4
541-73-1	1,3-Dichlorobenzene	147.00	ND		4.2	1.2
106-46-7	1,4-Dichlorobenzene	147.00	ND		4.2	1.6
75-71-8	Dichlorodifluoromethane	120.91	2.7	J	3.5	1.3
75-34-3	1,1-Dichloroethane	98.96	ND		2.1	0.51
107-06-2	1,2-Dichloroethane	98.96	ND		5.7	0.62
75-35-4	1,1-Dichloroethene	96.94	ND		5.6	0.90
156-59-2	cis-1,2-Dichloroethene	96.94	4.3		2.8	0.62
156-60-5	trans-1,2-Dichloroethene	96.94	1.6	J	2.8	0.69
78-87-5	1,2-Dichloropropane	112.99	ND		3.2	1.9
10061-01-5	cis-1,3-Dichloropropene	110.97	ND		3.2	0.83
10061-02-6	trans-1,3-Dichloropropene	110.97	ND		3.2	0.70
100-41-4	Ethylbenzene	106.17	7.8		3.0	0.48
622-96-8	4-Ethyltoluene	120.20	ND		3.4	1.6
87-68-3	Hexachlorobutadiene	260.76	ND		37	8.1
591-78-6	2-Hexanone	100.20	ND		2.9	0.62
108-10-1	4-Methyl-2-pentanone (MIBK)	100.16	ND		2.9	0.97
75-09-2	Methylene Chloride	84.93	11		2.4	0.44

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento | Job No.: 320-12924-1

SDG No.:

Client Sample ID: J6038-SS5-050615-1 | Lab Sample ID: 320-12924-1

Matrix: Air | Lab File ID: 15051122.D

Analysis Method: TO-15 | Date Collected: 05/06/2015 11:44

Sample wt/vol: 250(mL) | Date Analyzed: 05/12/2015 05:41

Soil Aliquot Vol: | Dilution Factor: 1.75

Soil Extract Vol.: | GC Column: RTX-Volatiles ID: 0.32(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 73563 | Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
100-42-5	Styrene	104.15	0.51	J	3.0	0.44
79-34-5	1,1,2,2-Tetrachloroethane	167.85	ND		4.8	0.83
127-18-4	Tetrachloroethene	165.83	23		4.7	0.61
108-88-3	Toluene	92.14	9.4		2.6	0.34
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	187.38	14		5.4	2.2
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		26	5.6
71-55-6	1,1,1-Trichloroethane	133.41	2.1	J	2.9	0.62
79-00-5	1,1,2-Trichloroethane	133.41	ND		3.8	0.64
79-01-6	Trichloroethene	131.39	250		3.8	0.99
75-69-4	Trichlorofluoromethane	137.37	2.0	J	3.9	1.9
95-63-6	1,2,4-Trimethylbenzene	120.20	1.5	J	6.9	1.4
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		3.4	1.1
108-05-4	Vinyl acetate	86.09	ND		4.9	0.89
75-01-4	Vinyl chloride	62.50	ND		1.8	0.54
179601-23-1	m,p-Xylene	106.17	31		6.1	0.76
95-47-6	o-Xylene	106.17	11		3.0	0.41

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	102		70-130
17060-07-0	1,2-Dichloroethane-d4 (Surr)	119		70-130
2037-26-5	Toluene-d8 (Surr)	96		70-130

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\SACCHROM\ChromData\ATMS2\20150511-21702.b\15051122.D
Lims ID: 320-12924-A-1 Lab Sample ID: 320-12924-1
Client ID: J6038-SS5-050615-1
Sample Type: Client
Inject. Date: 12-May-2015 05:41:30 ALS Bottle#: 1 Worklist Smp#: 41
Purge Vol: 250.000 mL Dil. Factor: 1.7500
Sample Info: 320-12924-A-1
Misc. Info.: 436mL
Operator ID: SRS Instrument ID: ATMS2

Method: \\SACCHROM\ChromData\ATMS2\20150511-21702.b\TO15_ATMS2N.m
Limit Group: MSA - TO15 - ICAL
Last Update: 12-May-2015 10:10:51 Calib Date: 18-Mar-2015 18:13:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\SACCHROM\ChromData\ATMS2\20150317-20264.b\15031726.D

Column 1 : RTX Volatiles (0.32 mm) Det: MS SCAN
Process Host: XAWRK037

First Level Reviewer: scottrs Date: 12-May-2015 10:10:51

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	130	10.285	10.285	0.000	97	40477	4.00	
* 2 1,4-Difluorobenzene	114	11.629	11.629	0.000	95	161856	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.943	15.949	-0.006	89	133705	4.00	
$ 4 1,2-Dichloroethane-d4 (Sur	65	11.045	11.051	-0.006	96	63050	4.76	
$ 5 Toluene-d8 (Surr)	100	13.807	13.807	0.000	98	91240	3.83	
$ 6 4-Bromofluorobenzene (Surr	174	17.695	17.695	0.000	95	80193	4.10	
15 Dichlorodifluoromethane	85	4.189	4.189	0.000	98	7791	0.3117	
28 Trichlorofluoromethane	101	6.276	6.276	0.000	94	6491	0.2083	
31 Acetone	43	6.939	6.939	0.000	100	688122	46.4	
43 1,1,2-Trichloro-1,2,2-trif	101	7.067	7.067	0.000	92	23735	1.02	
47 Methylene Chloride	49	7.900	7.900	0.000	92	27284	1.83	
48 Carbon disulfide	76	7.985	7.985	0.000	98	3359	0.1081	
49 trans-1,2-Dichloroethene	61	8.436	8.429	0.007	92	3730	0.2312	
54 2-Butanone (MEK)	72	9.579	9.573	0.006	97	8822	2.26	
57 cis-1,2-Dichloroethene	96	9.859	9.865	-0.006	86	6716	0.6186	
61 Chloroform	83	10.102	10.102	0.000	94	7566	0.3491	
65 1,1,1-Trichloroethane	97	10.717	10.729	-0.012	62	5163	0.2206	
69 Carbon tetrachloride	117	11.106	11.112	-0.006	58	1136	0.0424	
68 Benzene	78	11.289	11.283	0.006	95	16379	0.4986	
76 Trichloroethene	130	12.153	12.153	0.000	96	451551	26.4	
85 Toluene	91	13.917	13.923	-0.006	93	54373	1.43	
93 Tetrachloroethene	166	14.896	14.896	0.000	96	42752	1.90	
97 Ethylbenzene	91	16.095	16.095	0.000	98	44882	1.03	
98 m-Xylene & p-Xylene	91	16.216	16.216	0.000	97	134006	4.04	
101 o-Xylene	91	16.843	16.843	0.000	99	48123	1.42	
100 Styrene	104	16.849	16.861	-0.012	49	1785	0.0683	
111 1,3,5-Trimethylbenzene	120	18.206	18.212	-0.006	92	2188	0.1077	
115 1,2,4-Trimethylbenzene	120	18.802	18.802	0.000	95	3394	0.1758	
117 1,3-Dichlorobenzene	146	19.398	19.392	0.006	1	654	0.0224	
120 1,4-Dichlorobenzene	146	19.538	19.532	0.006	59	775	0.0270	
118 Benzyl chloride	91	19.648	19.648	0.000	1	1440	0.0373	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
122 1,2-Dichlorobenzene	146	20.098	20.092	0.006	95	2790	0.1035	
126 1,2,4-Trichlorobenzene	180	22.896	22.902	-0.006	1	1414	0.0845	
128 Hexachlorobutadiene	225	23.267	23.261	0.006	1	1459	0.0845	

Reagents:

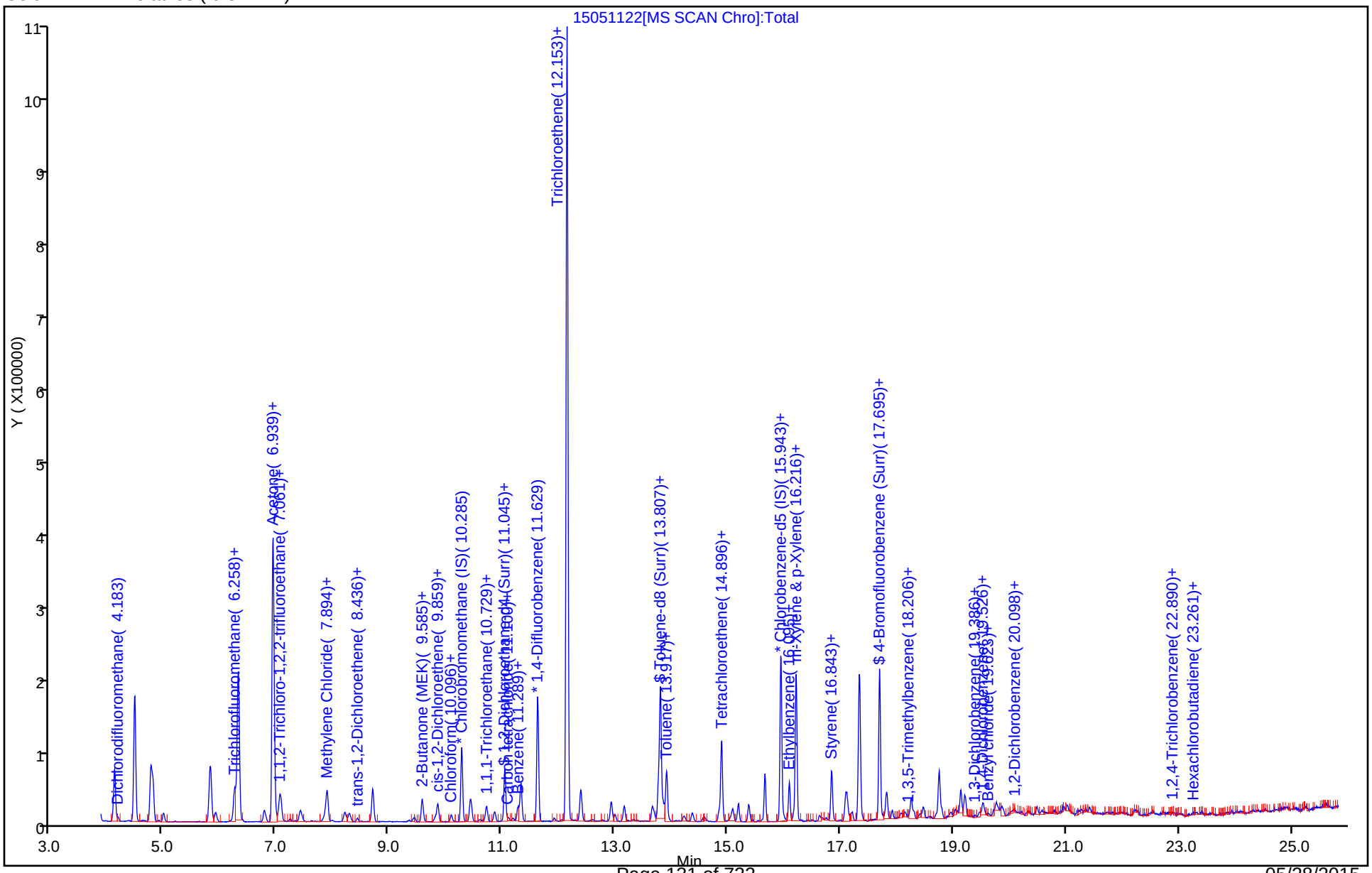
VASUISIM_00177 Amount Added: 50.00 Units: mL Run Reagent

Report Date: 12-May-2015 10:10:52 Chrom Revision: 2.2 05-May-2015 11:39:10

TestAmerica Sacramento

Data File:	\\SACCHROM\ChromData\ATMS2\20150511-21702.b\15051122.D				
Injection Date:	12-May-2015 05:41:30	Instrument ID:	ATMS2	Operator ID:	SRS
Lims ID:	320-12924-A-1	Lab Sample ID:	320-12924-1	Worklist Smp#:	41
Client ID:	J6038-SS5-050615-1				
Purge Vol:	250.000 mL	Dil. Factor:	1.7500	ALS Bottle#:	1
Method:	TO15_ATMS2N	Limit Group:	MSA - TO15 - ICAL		

Column: RTX Volatiles (0.32 mm)

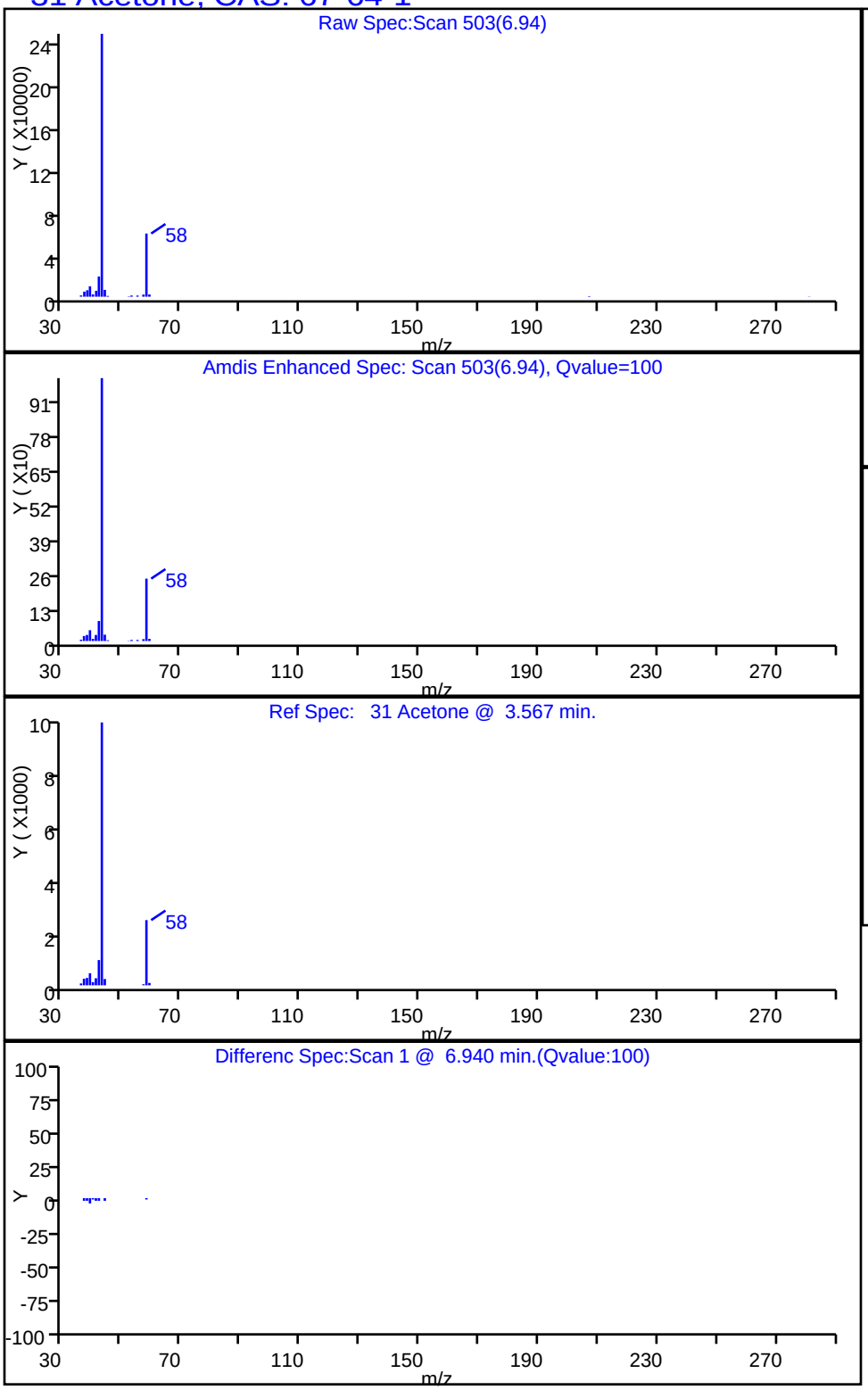


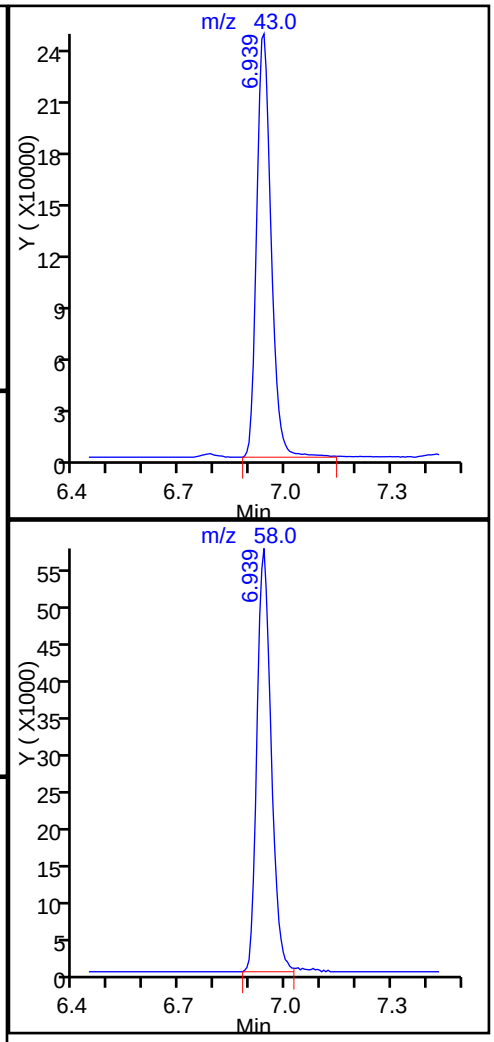
Report Date: 12-May-2015 10:10:52 Chrom Revision: 2.2 05-May-2015 11:39:10

TestAmerica Sacramento

Data File:	\\SACCHROM\ChromData\ATMS2\20150511-21702.b\15051122.D				
Injection Date:	12-May-2015 05:41:30	Instrument ID:	ATMS2		
Lims ID:	320-12924-A-1	Lab Sample ID:	320-12924-1		
Client ID:	J6038-SS5-050615-1				
Operator ID:	SRS	ALS Bottle#:	1	Worklist Smp#:	41
Purge Vol:	250.000 mL	Dil. Factor:	1.7500		
Method:	TO15_ATMS2N	Limit Group:	MSA - TO15 - ICAL		
Column:	RTX Volatiles (0.32 mm)	Detector	MS SCAN		

31 Acetone, CAS: 67-64-1



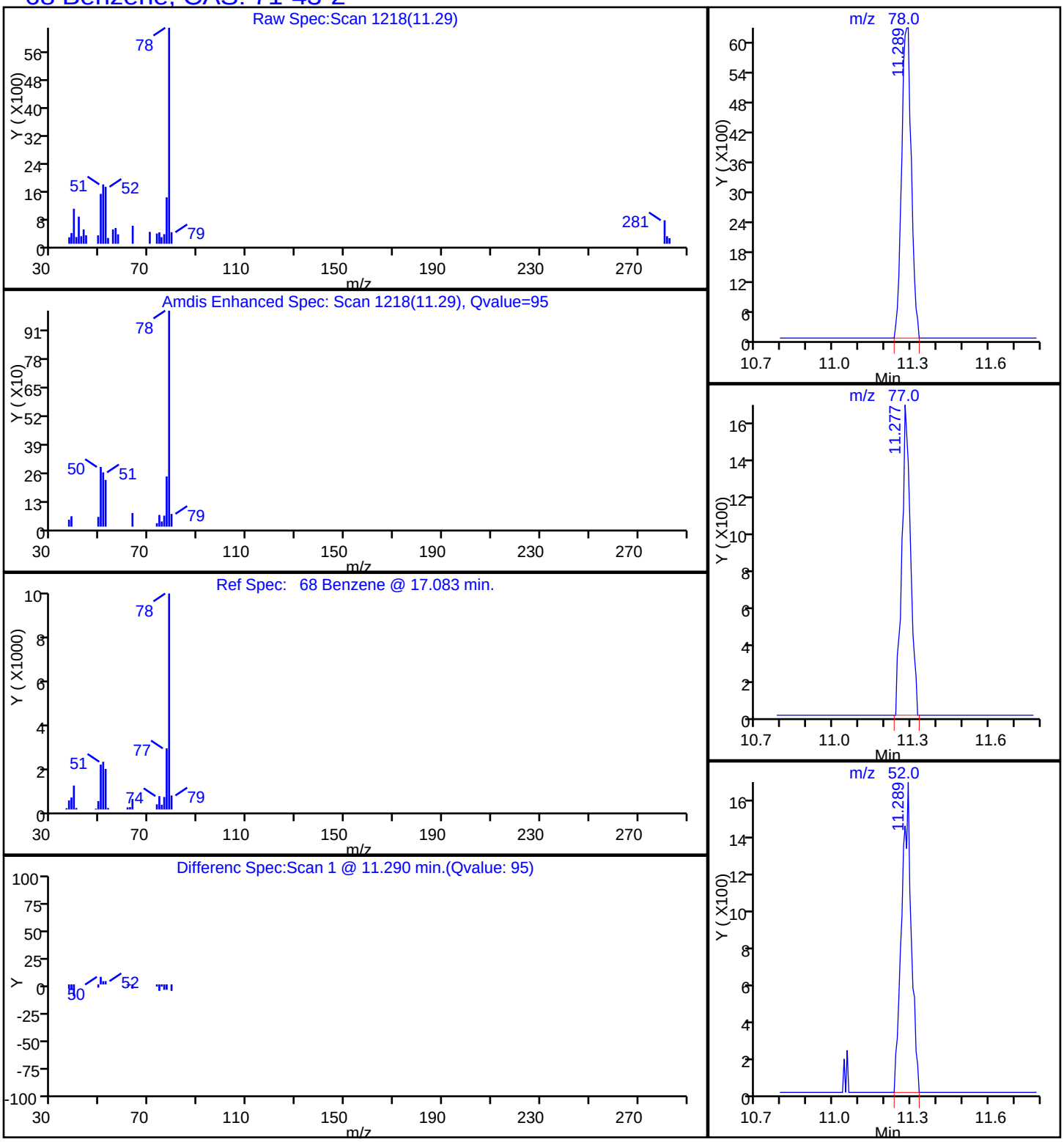


Report Date: 12-May-2015 10:10:52 Chrom Revision: 2.2 05-May-2015 11:39:10

TestAmerica Sacramento

Data File:	\\SACCHROM\ChromData\ATMS2\20150511-21702.b\15051122.D				
Injection Date:	12-May-2015 05:41:30	Instrument ID:	ATMS2		
Lims ID:	320-12924-A-1	Lab Sample ID:	320-12924-1		
Client ID:	J6038-SS5-050615-1				
Operator ID:	SRS	ALS Bottle#:	1	Worklist Smp#:	41
Purge Vol:	250.000 mL	Dil. Factor:	1.7500		
Method:	TO15_ATMS2N	Limit Group:	MSA - TO15 - ICAL		
Column:	RTX Volatiles (0.32 mm)	Detector	MS SCAN		

68 Benzene, CAS: 71-43-2

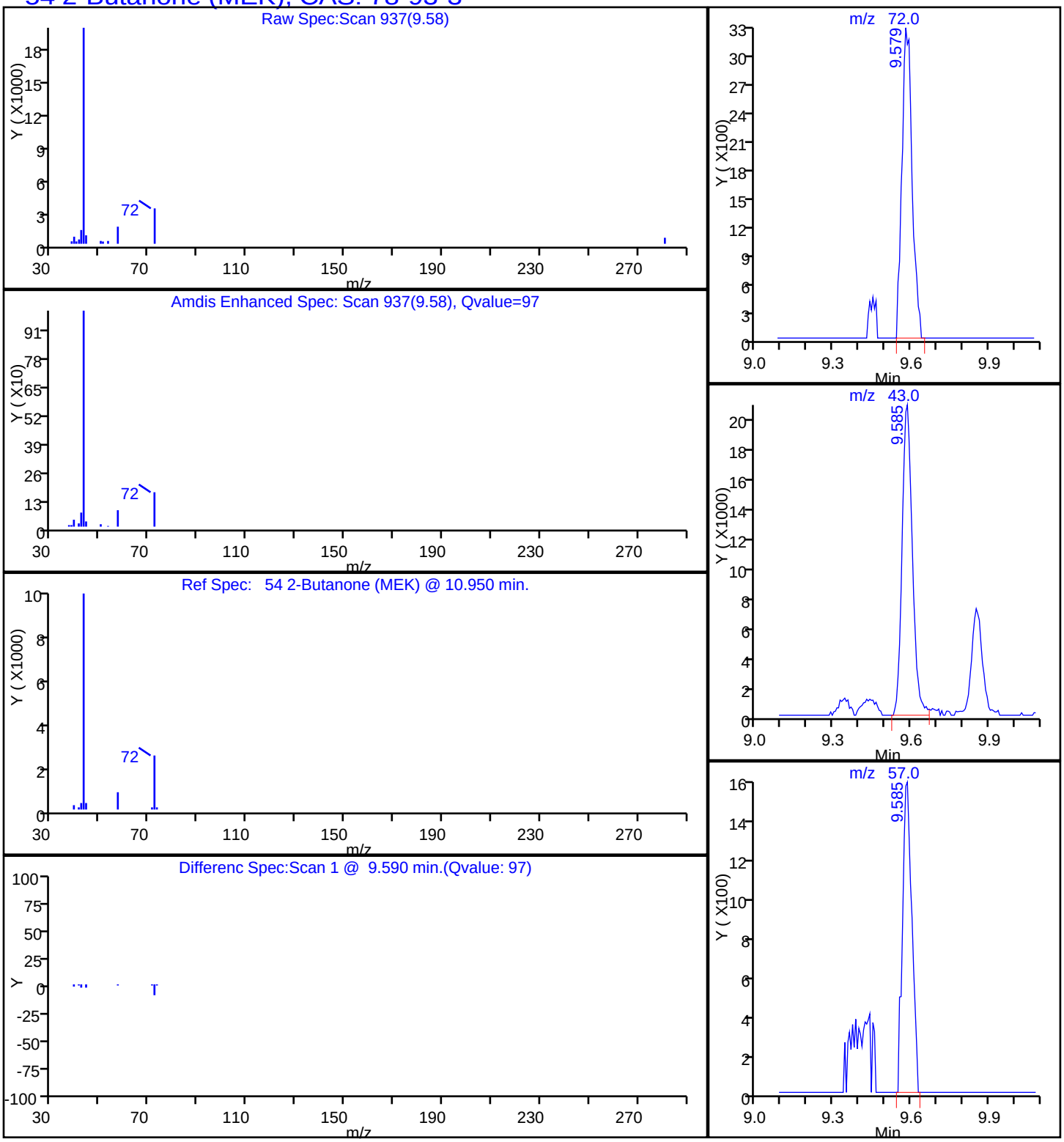


Report Date: 12-May-2015 10:10:52 Chrom Revision: 2.2 05-May-2015 11:39:10

TestAmerica Sacramento

Data File:	\\SACCHROM\ChromData\ATMS2\20150511-21702.b\15051122.D				
Injection Date:	12-May-2015 05:41:30	Instrument ID:	ATMS2		
Lims ID:	320-12924-A-1	Lab Sample ID:	320-12924-1		
Client ID:	J6038-SS5-050615-1				
Operator ID:	SRS	ALS Bottle#:	1	Worklist Smp#:	41
Purge Vol:	250.000 mL	Dil. Factor:	1.7500		
Method:	TO15_ATMS2N	Limit Group:	MSA - TO15 - ICAL		
Column:	RTX Volatiles (0.32 mm)	Detector	MS SCAN		

54 2-Butanone (MEK), CAS: 78-93-3

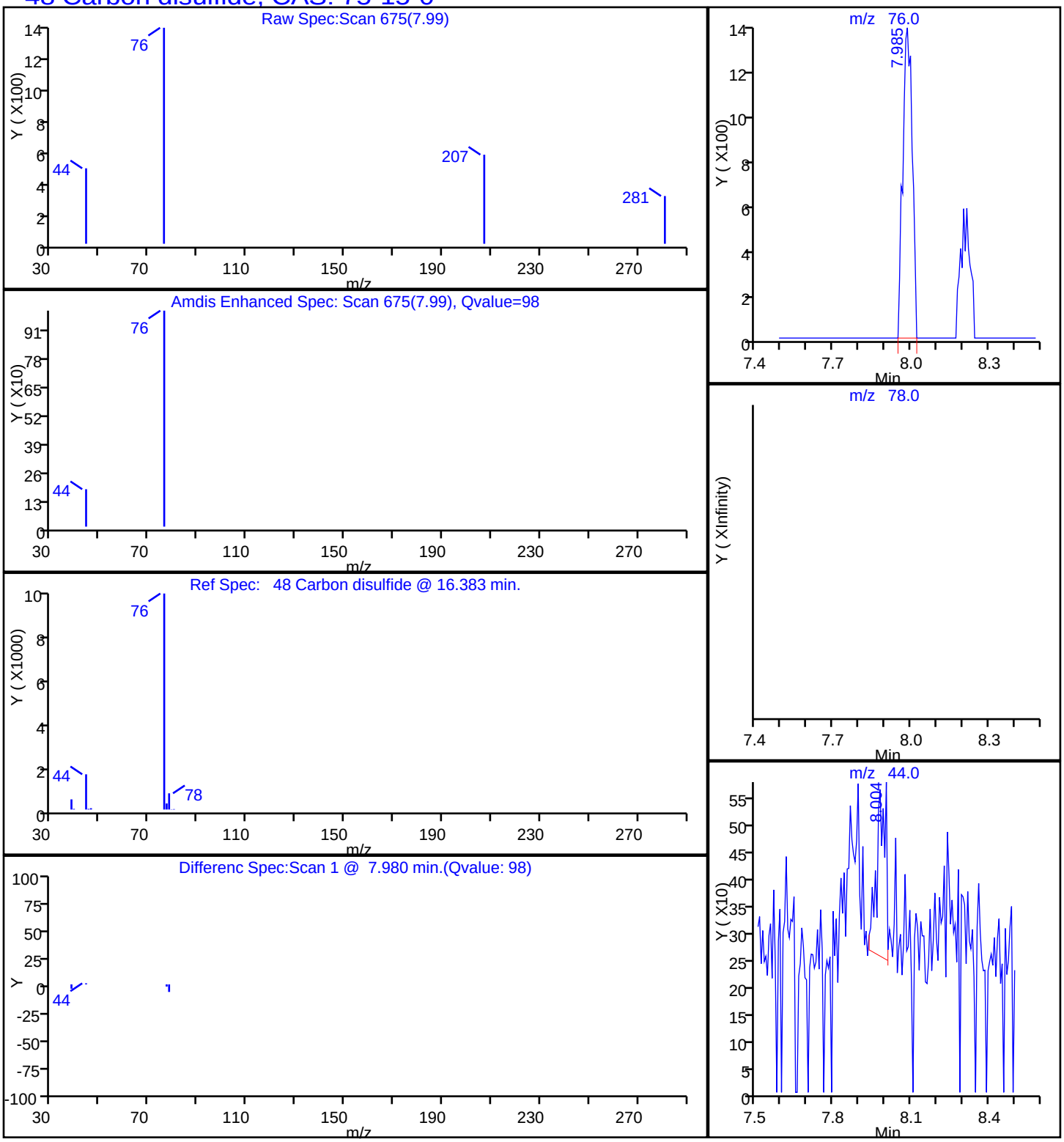


Report Date: 12-May-2015 10:10:52 Chrom Revision: 2.2 05-May-2015 11:39:10

TestAmerica Sacramento

Data File:	\\SACCHROM\ChromData\ATMS2\20150511-21702.b\15051122.D				
Injection Date:	12-May-2015 05:41:30	Instrument ID:	ATMS2		
Lims ID:	320-12924-A-1	Lab Sample ID:	320-12924-1		
Client ID:	J6038-SS5-050615-1				
Operator ID:	SRS	ALS Bottle#:	1	Worklist Smp#:	41
Purge Vol:	250.000 mL	Dil. Factor:	1.7500		
Method:	TO15_ATMS2N	Limit Group:	MSA - TO15 - ICAL		
Column:	RTX Volatiles (0.32 mm)	Detector	MS SCAN		

48 Carbon disulfide, CAS: 75-15-0

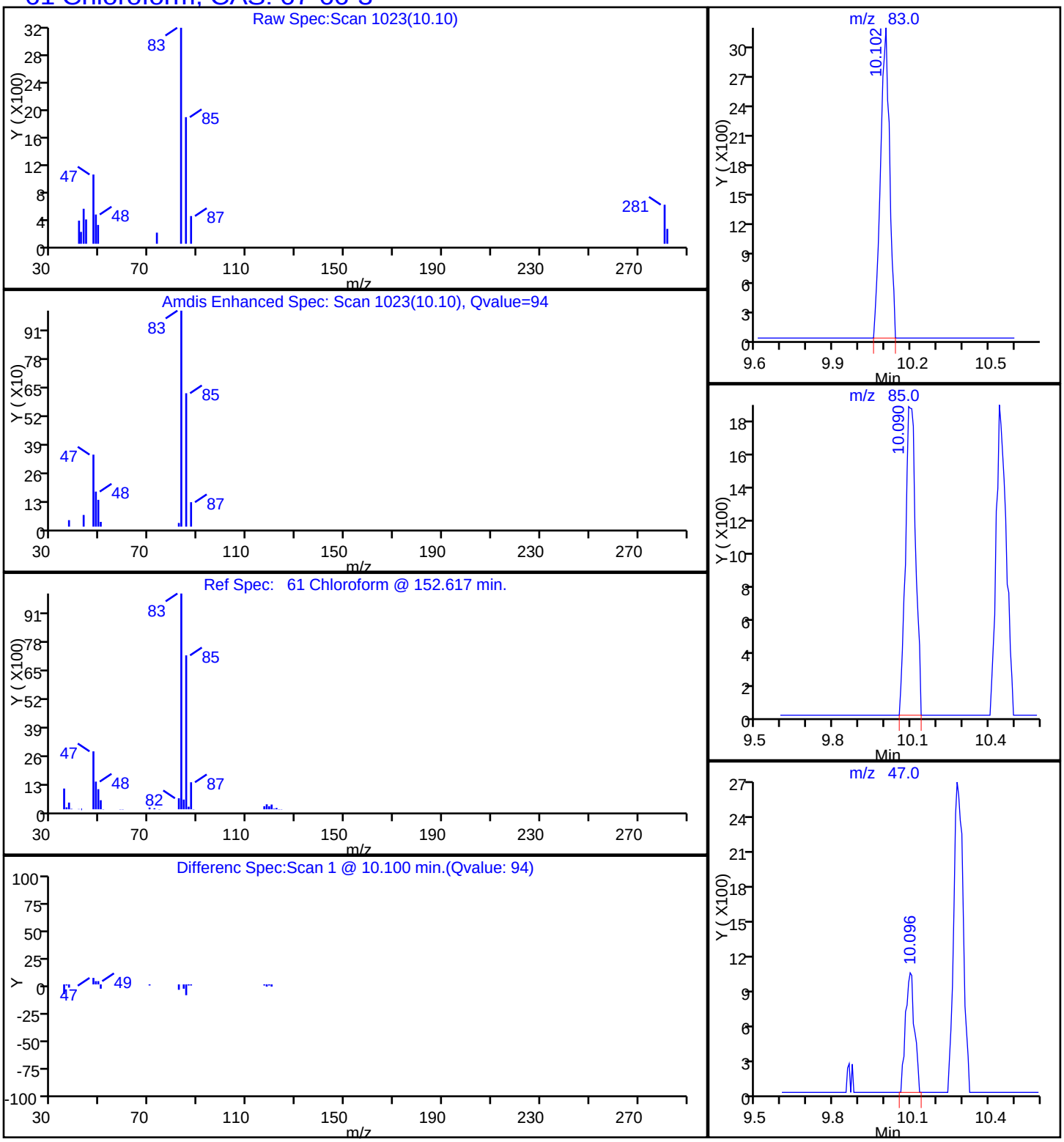


Report Date: 12-May-2015 10:10:52 Chrom Revision: 2.2 05-May-2015 11:39:10

TestAmerica Sacramento

Data File:	\\SACCHROM\ChromData\ATMS2\20150511-21702.b\15051122.D				
Injection Date:	12-May-2015 05:41:30	Instrument ID:	ATMS2		
Lims ID:	320-12924-A-1	Lab Sample ID:	320-12924-1		
Client ID:	J6038-SS5-050615-1				
Operator ID:	SRS	ALS Bottle#:	1	Worklist Smp#:	41
Purge Vol:	250.000 mL	Dil. Factor:	1.7500		
Method:	TO15_ATMS2N	Limit Group:	MSA - TO15 - ICAL		
Column:	RTX Volatiles (0.32 mm)	Detector	MS SCAN		

61 Chloroform, CAS: 67-66-3

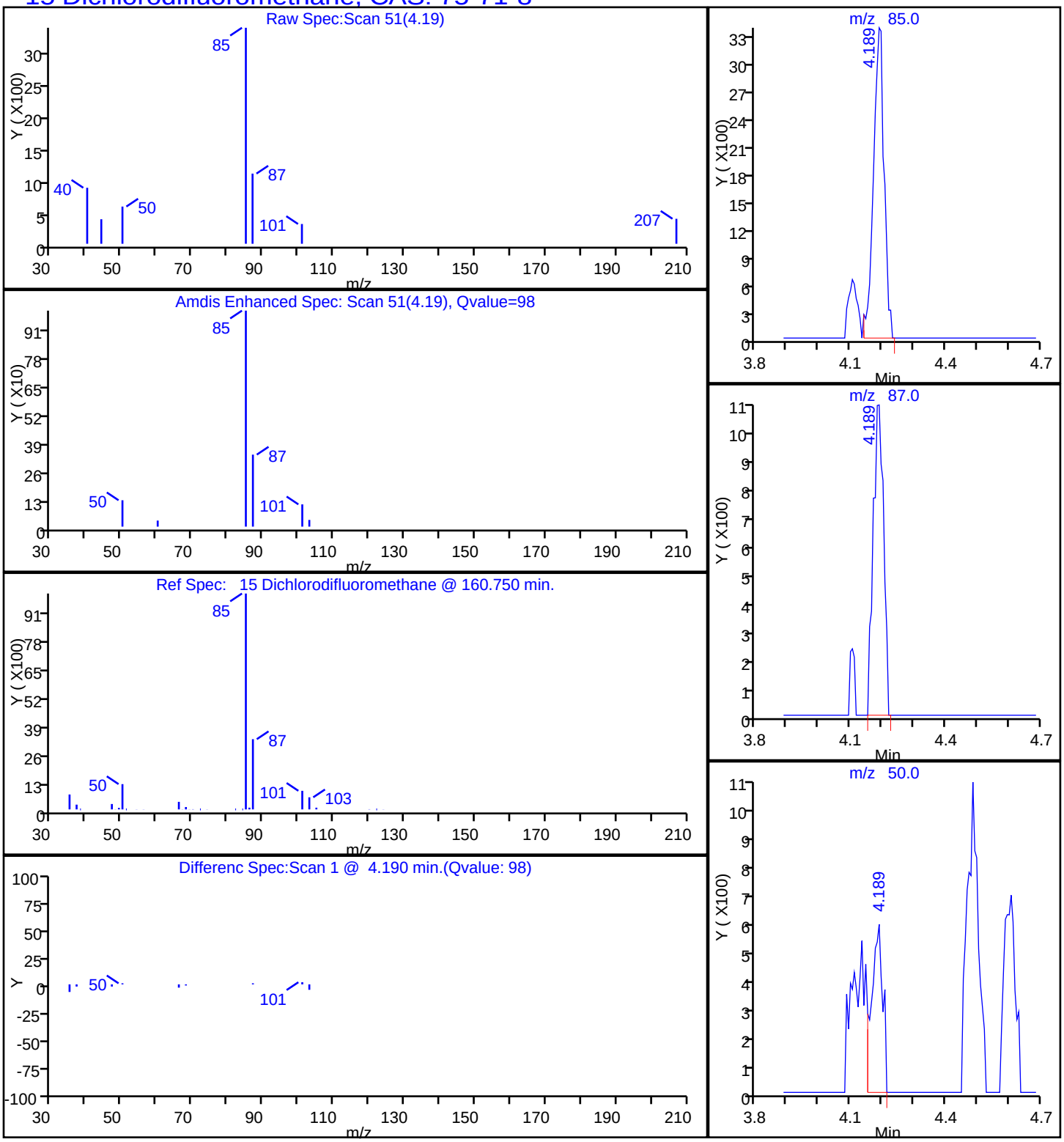


Report Date: 12-May-2015 10:10:52 Chrom Revision: 2.2 05-May-2015 11:39:10

TestAmerica Sacramento

Data File:	\\SACCHROM\ChromData\ATMS2\20150511-21702.b\15051122.D				
Injection Date:	12-May-2015 05:41:30	Instrument ID:	ATMS2		
Lims ID:	320-12924-A-1	Lab Sample ID:	320-12924-1		
Client ID:	J6038-SS5-050615-1				
Operator ID:	SRS	ALS Bottle#:	1	Worklist Smp#:	41
Purge Vol:	250.000 mL	Dil. Factor:	1.7500		
Method:	TO15_ATMS2N	Limit Group:	MSA - TO15 - ICAL		
Column:	RTX Volatiles (0.32 mm)	Detector	MS SCAN		

15 Dichlorodifluoromethane, CAS: 75-71-8

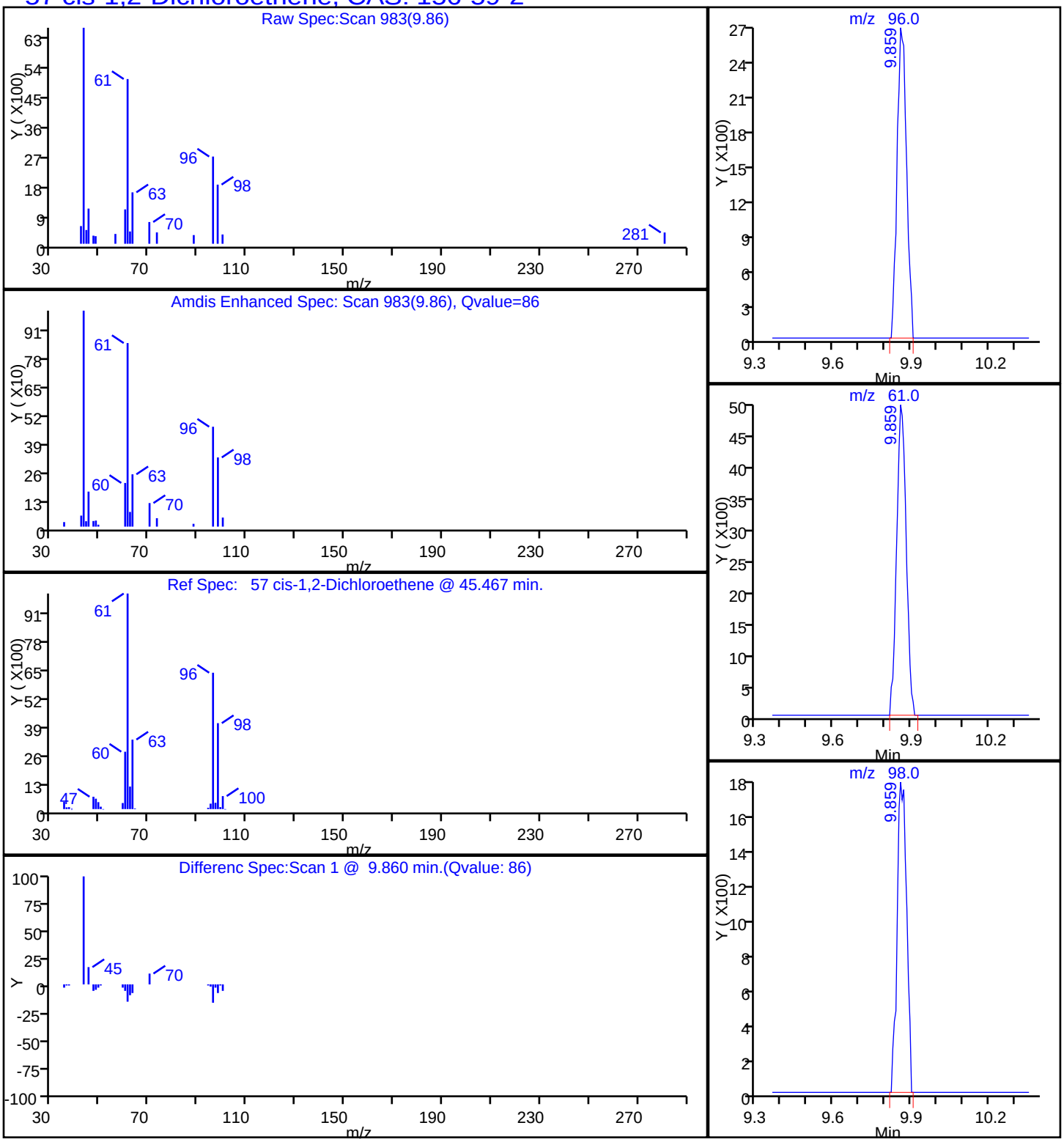


Report Date: 12-May-2015 10:10:52 Chrom Revision: 2.2 05-May-2015 11:39:10

TestAmerica Sacramento

Data File:	\\SACCHROM\ChromData\ATMS2\20150511-21702.b\15051122.D				
Injection Date:	12-May-2015 05:41:30	Instrument ID:	ATMS2		
Lims ID:	320-12924-A-1	Lab Sample ID:	320-12924-1		
Client ID:	J6038-SS5-050615-1				
Operator ID:	SRS	ALS Bottle#:	1	Worklist Smp#:	41
Purge Vol:	250.000 mL	Dil. Factor:	1.7500		
Method:	TO15_ATMS2N	Limit Group:	MSA - TO15 - ICAL		
Column:	RTX Volatiles (0.32 mm)	Detector	MS SCAN		

57 cis-1,2-Dichloroethene, CAS: 156-59-2

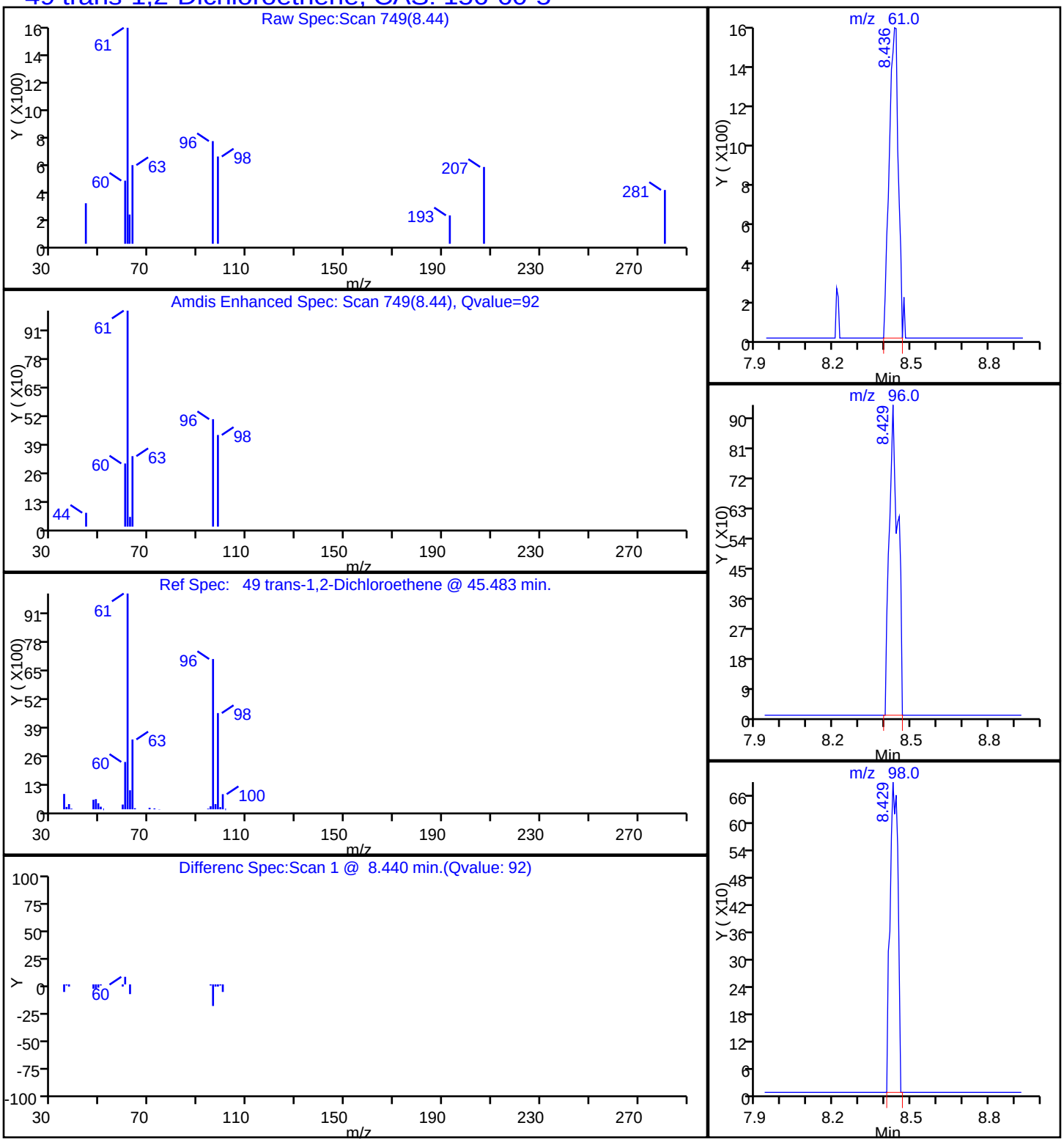


Report Date: 12-May-2015 10:10:52 Chrom Revision: 2.2 05-May-2015 11:39:10

TestAmerica Sacramento

Data File:	\\SACCHROM\ChromData\ATMS2\20150511-21702.b\15051122.D				
Injection Date:	12-May-2015 05:41:30	Instrument ID:	ATMS2		
Lims ID:	320-12924-A-1	Lab Sample ID:	320-12924-1		
Client ID:	J6038-SS5-050615-1				
Operator ID:	SRS	ALS Bottle#:	1	Worklist Smp#:	41
Purge Vol:	250.000 mL	Dil. Factor:	1.7500		
Method:	TO15_ATMS2N	Limit Group:	MSA - TO15 - ICAL		
Column:	RTX Volatiles (0.32 mm)	Detector	MS SCAN		

49 trans-1,2-Dichloroethene, CAS: 156-60-5



Report Date: 12-May-2015 10:10:52 Chrom Revision: 2.2 05-May-2015 11:39:10

TestAmerica Sacramento

Data File:	\\SACCHROM\ChromData\ATMS2\20150511-21702.b\15051122.D				
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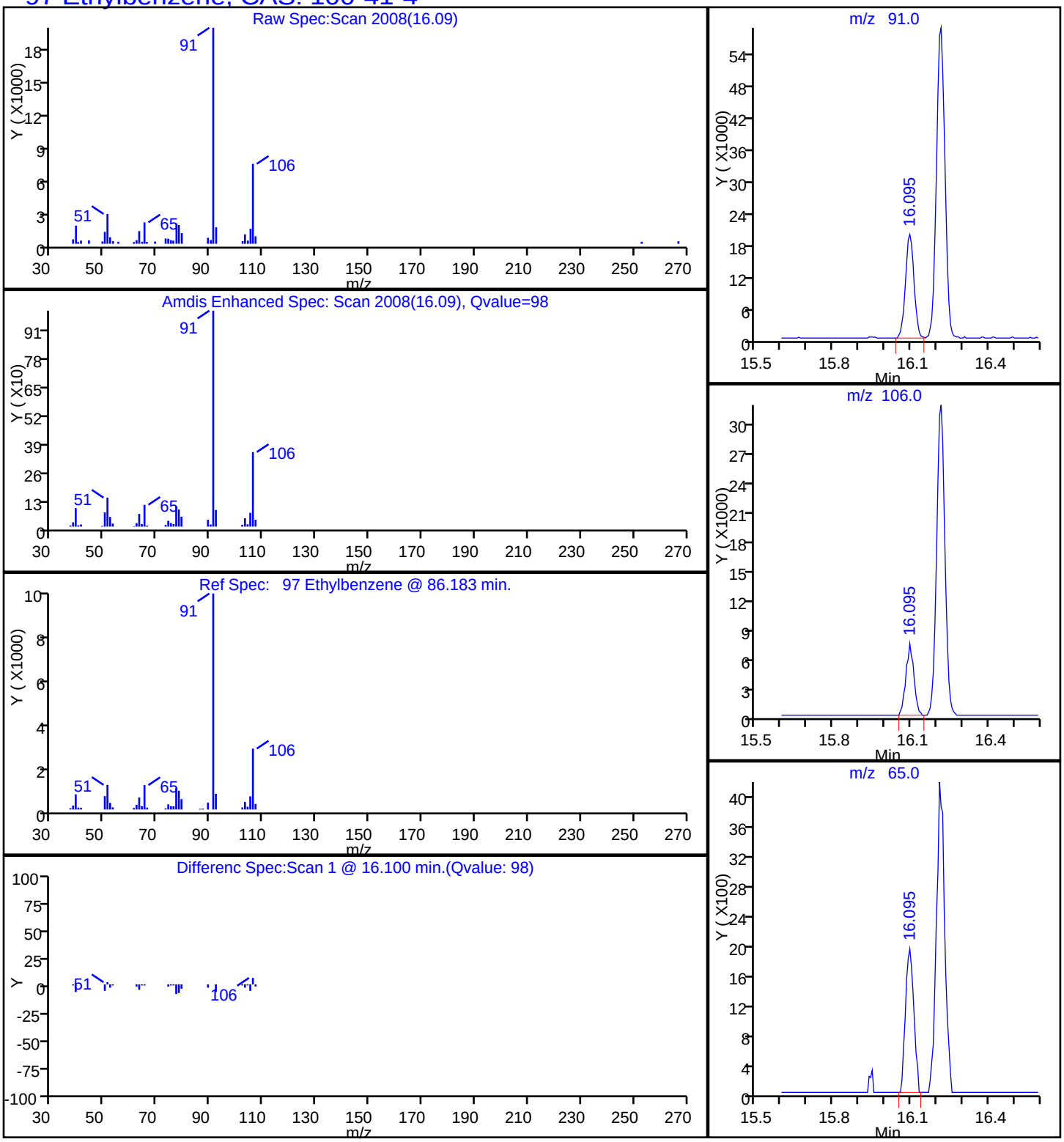
Lims ID:	320-12924-A-1	Lab Sample ID:	320-12924-1		
Client ID:	J6038-SS5-050615-1				
Operator ID:	SRS	ALS Bottle#:	1	Worklist Smp#:	41
Purge Vol:	250.000 mL	Dil. Factor:	1.7500		
Method:	TO15_ATMS2N	Limit Group:	MSA - TO15 - ICAL		
Column:	RTX Volatiles (0.32 mm)	Detector	MS SCAN		

97 Ethylbenzene, CAS: 100-41-4



Report Date: 12-May-2015 10:10:52 Chrom Revision: 2.2 05-May-2015 11:39:10

TestAmerica Sacramento

Data File:	\\SACCHROM\ChromData\ATMS2\20150511-21702.b\15051122.D				
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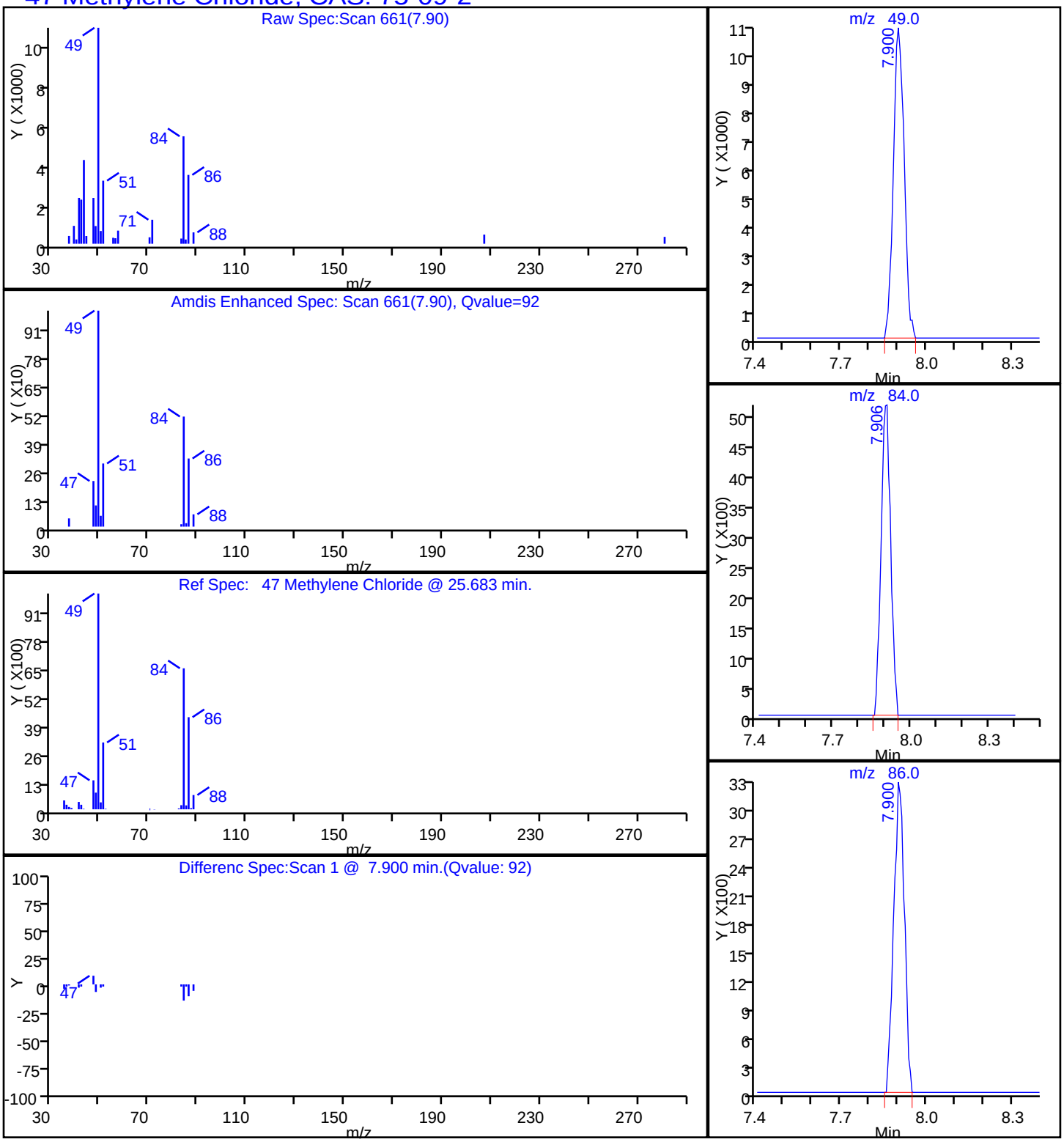
Lims ID:	320-12924-A-1	Lab Sample ID:	320-12924-1		
Client ID:	J6038-SS5-050615-1				
Operator ID:	SRS	ALS Bottle#:	1	Worklist Smp#:	41
Purge Vol:	250.000 mL	Dil. Factor:	1.7500		
Method:	TO15_ATMS2N	Limit Group:	MSA - TO15 - ICAL		
Column:	RTX Volatiles (0.32 mm)	Detector	MS SCAN		

47 Methylene Chloride, CAS: 75-09-2



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TestAmerica Sacramento

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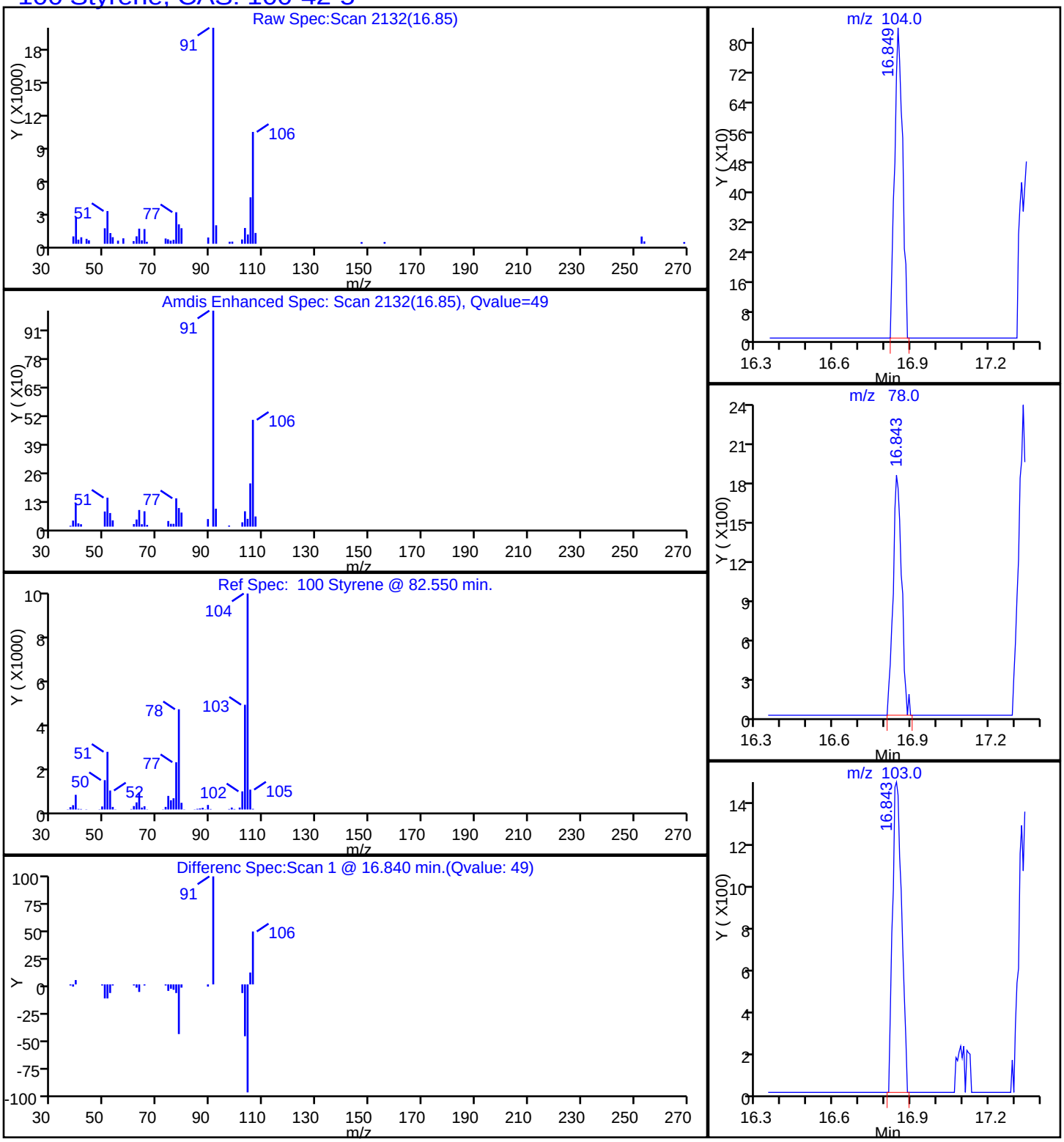
Lims ID:	320-12924-A-1	Lab Sample ID:	320-12924-1		
Client ID:	J6038-SS5-050615-1				
Operator ID:	SRS	ALS Bottle#:	1	Worklist Smp#:	41
Purge Vol:	250.000 mL	Dil. Factor:	1.7500		
Method:	TO15_ATMS2N	Limit Group:	MSA - TO15 - ICAL		
Column:	RTX Volatiles (0.32 mm)	Detector	MS SCAN		

100 Styrene, CAS: 100-42-5



Report Date: 12-May-2015 10:10:52 Chrom Revision: 2.2 05-May-2015 11:39:10

TestAmerica Sacramento

Data File:	\\SACCHROM\ChromData\ATMS2\20150511-21702.b\15051122.D				
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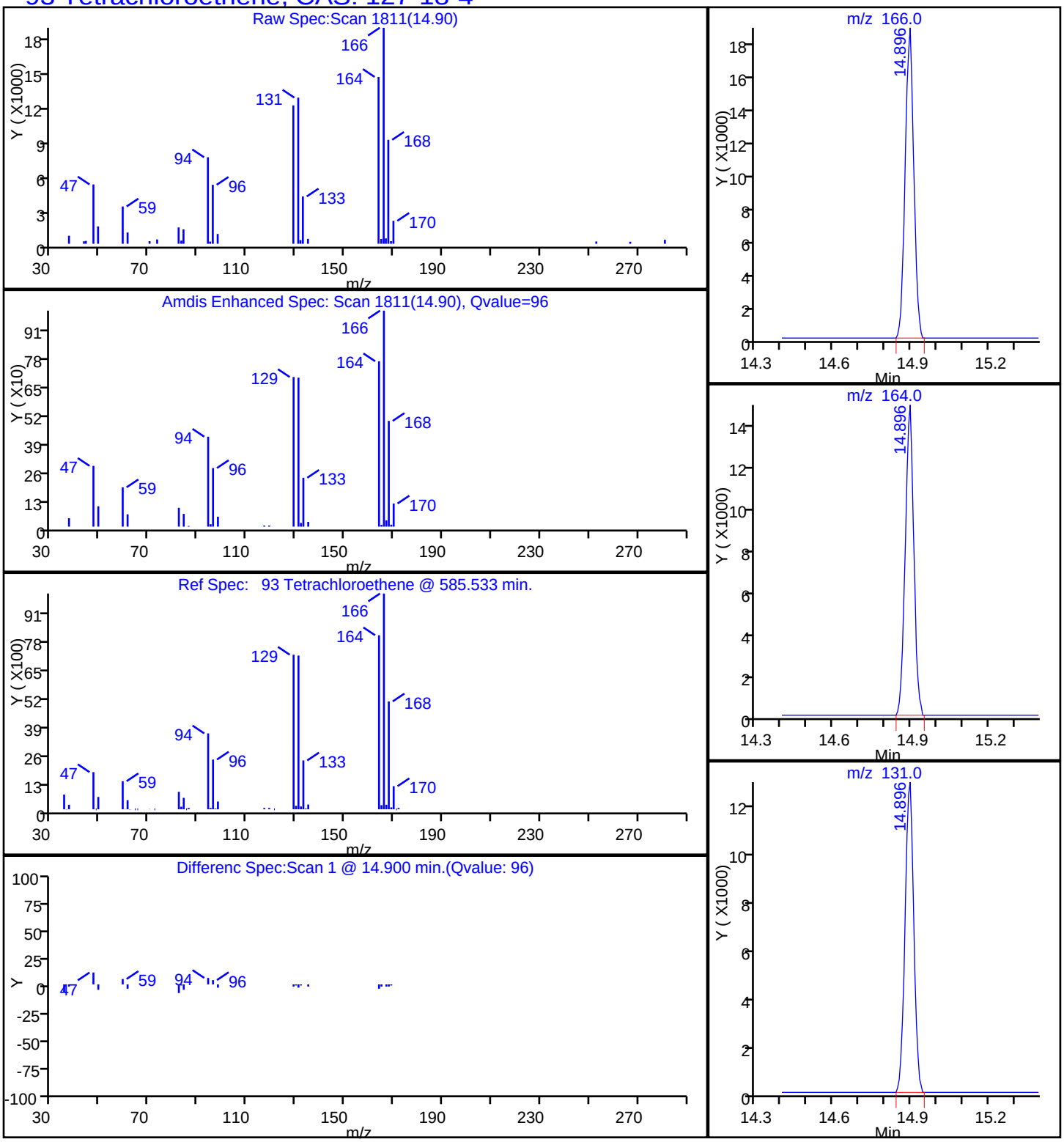
Lims ID:	320-12924-A-1	Lab Sample ID:	320-12924-1		
Client ID:	J6038-SS5-050615-1				
Operator ID:	SRS	ALS Bottle#:	1	Worklist Smp#:	41
Purge Vol:	250.000 mL	Dil. Factor:	1.7500		
Method:	TO15_ATMS2N	Limit Group:	MSA - TO15 - ICAL		
Column:	RTX Volatiles (0.32 mm)	Detector	MS SCAN		

93 Tetrachloroethene, CAS: 127-18-4



Report Date: 12-May-2015 10:10:52 Chrom Revision: 2.2 05-May-2015 11:39:10

TestAmerica Sacramento

Data File:	\\SACCHROM\ChromData\ATMS2\20150511-21702.b\15051122.D				
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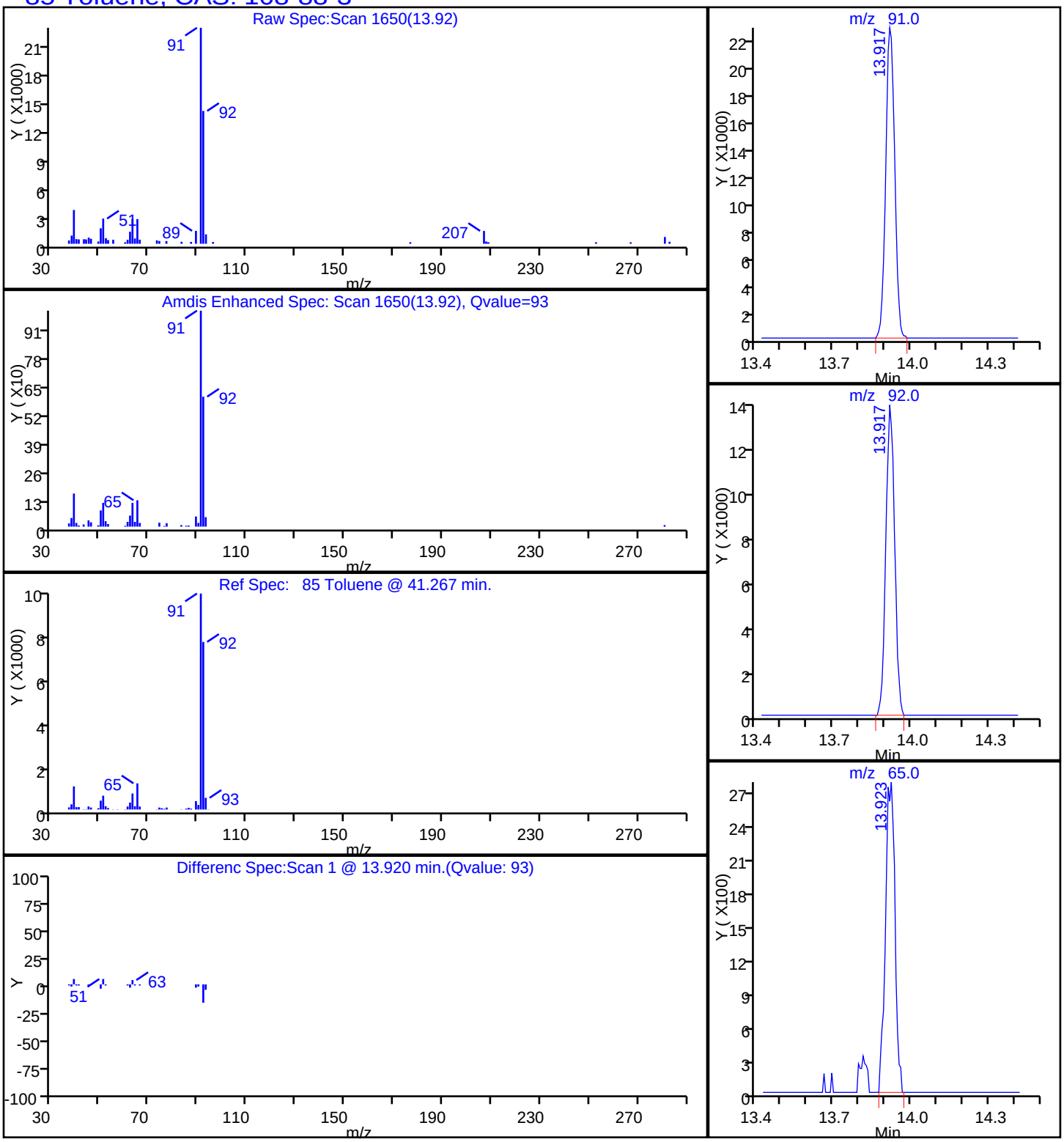
Lims ID:	320-12924-A-1	Lab Sample ID:	320-12924-1		
Client ID:	J6038-SS5-050615-1				
Operator ID:	SRS	ALS Bottle#:	1	Worklist Smp#:	41
Purge Vol:	250.000 mL	Dil. Factor:	1.7500		
Method:	TO15_ATMS2N	Limit Group:	MSA - TO15 - ICAL		
Column:	RTX Volatiles (0.32 mm)	Detector	MS SCAN		

85 Toluene, CAS: 108-88-3

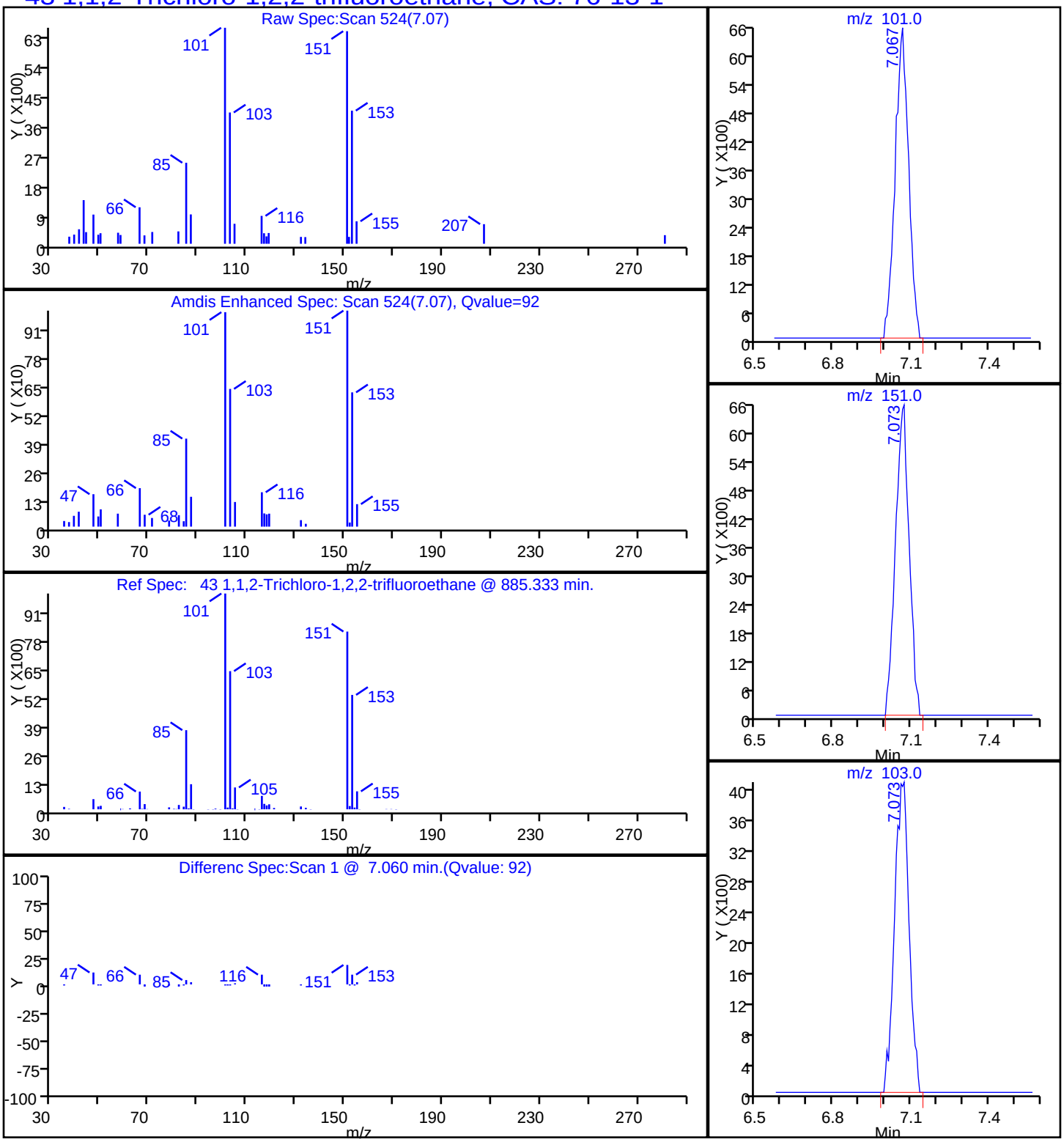


Report Date: 12-May-2015 10:10:52 Chrom Revision: 2.2 05-May-2015 11:39:10

TestAmerica Sacramento

Data File:	\\SACCHROM\ChromData\ATMS2\20150511-21702.b\15051122.D				
Injection Date:	12-May-2015 05:41:30	Instrument ID:	ATMS2		
Lims ID:	320-12924-A-1	Lab Sample ID:	320-12924-1		
Client ID:	J6038-SS5-050615-1				
Operator ID:	SRS	ALS Bottle#:	1	Worklist Smp#:	41
Purge Vol:	250.000 mL	Dil. Factor:	1.7500		
Method:	TO15_ATMS2N	Limit Group:	MSA - TO15 - ICAL		
Column:	RTX Volatiles (0.32 mm)	Detector	MS SCAN		

43 1,1,2-Trichloro-1,2,2-trifluoroethane, CAS: 76-13-1

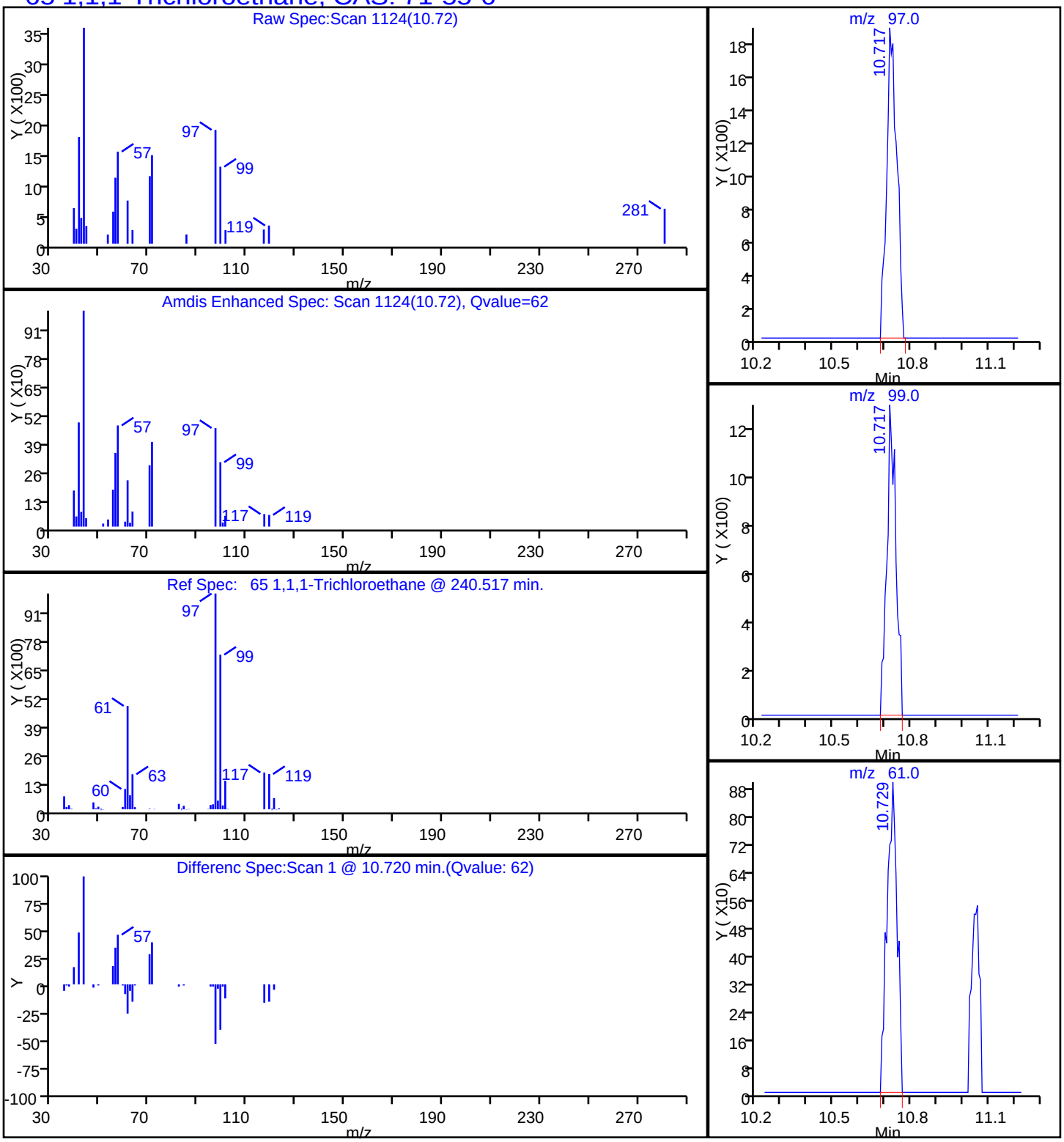


Report Date: 12-May-2015 10:10:52 Chrom Revision: 2.2 05-May-2015 11:39:10

TestAmerica Sacramento

Data File:	\\SACCHROM\ChromData\ATMS2\20150511-21702.b\15051122.D				
Injection Date:	12-May-2015 05:41:30	Instrument ID:	ATMS2		
Lims ID:	320-12924-A-1	Lab Sample ID:	320-12924-1		
Client ID:	J6038-SS5-050615-1				
Operator ID:	SRS	ALS Bottle#:	1	Worklist Smp#:	41
Purge Vol:	250.000 mL	Dil. Factor:	1.7500		
Method:	TO15_ATMS2N	Limit Group:	MSA - TO15 - ICAL		
Column:	RTX Volatiles (0.32 mm)	Detector	MS SCAN		

65 1,1,1-Trichloroethane, CAS: 71-55-6



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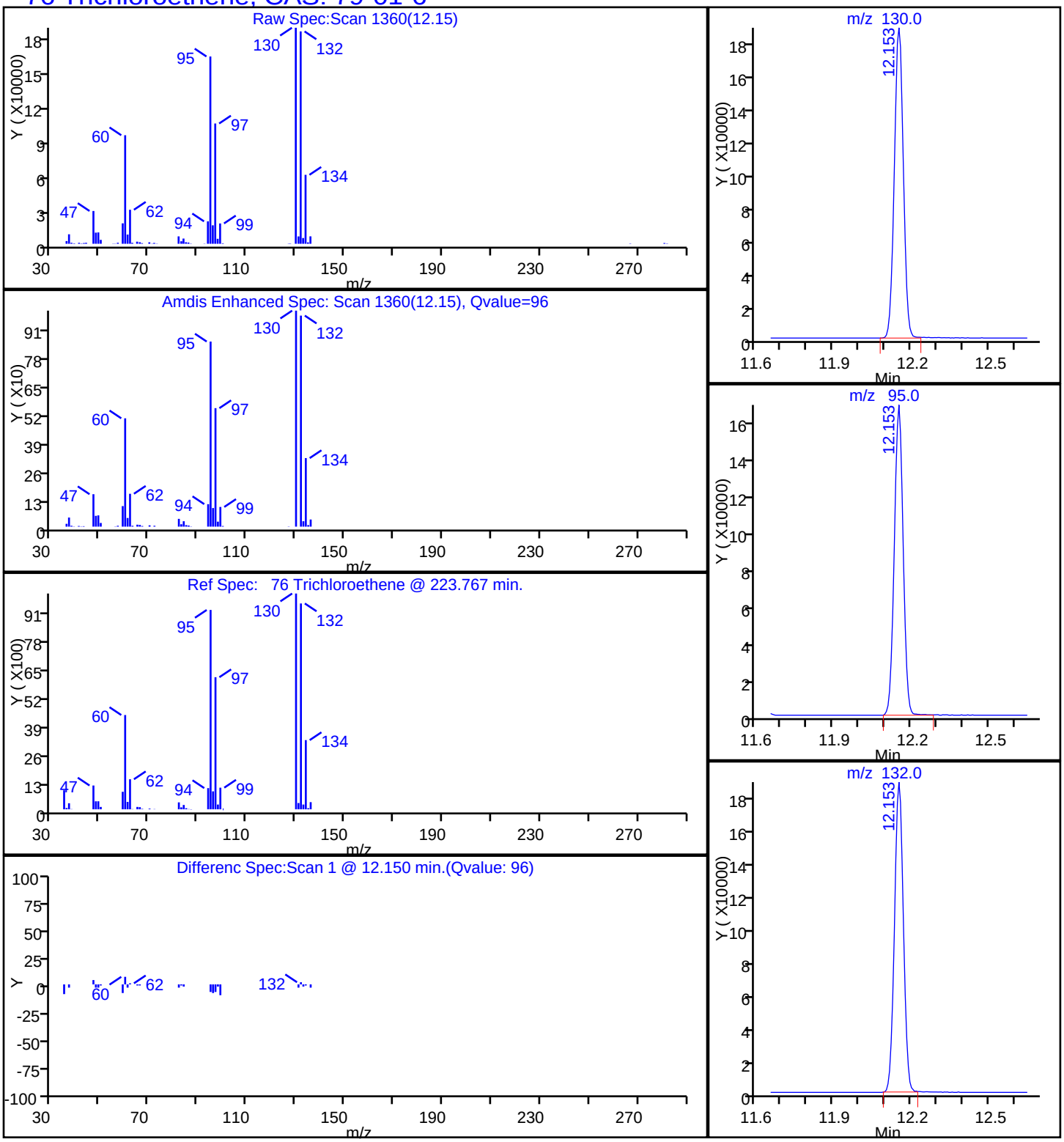
TestAmerica Sacramento

Data File:	\\SACCHROM\ChromData\ATMS2\20150511-21702.b\15051122.D				
Injection Date:	12-May-2015 05:41:30	Instrument ID:	ATMS2		
Lims ID:	320-12924-A-1	Lab Sample ID:	320-12924-1		
Client ID:	J6038-SS5-050615-1				
Operator ID:	SRS	ALS Bottle#:	1	Worklist Smp#:	41
Purge Vol:	250.000 mL	Dil. Factor:	1.7500		
Method:	TO15_ATMS2N	Limit Group:	MSA - TO15 - ICAL		
Column:	RTX Volatiles (0.32 mm)	Detector	MS SCAN		

76 Trichloroethene, CAS: 79-01-6



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TestAmerica Sacramento

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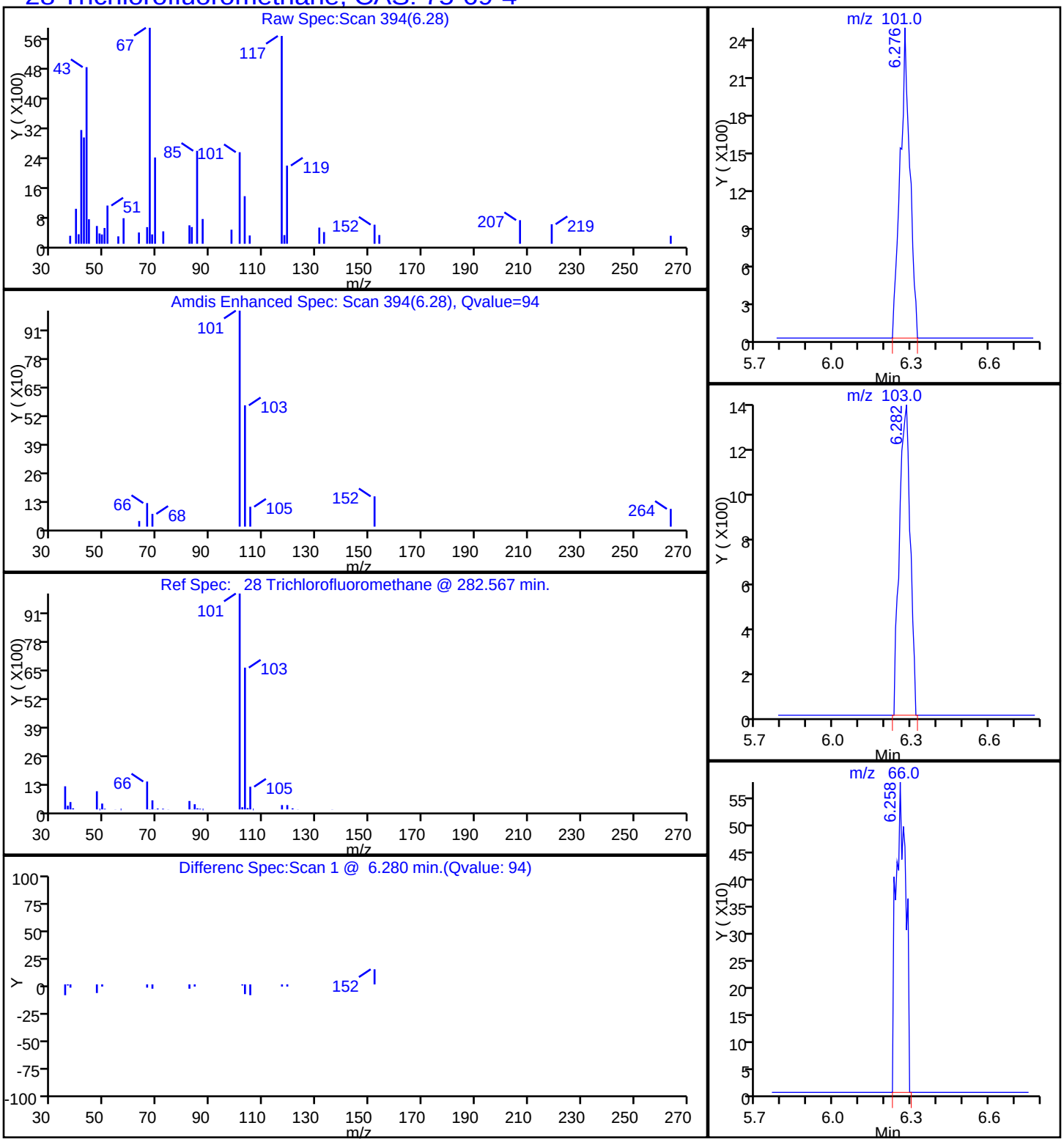
Client ID:	J6038-SS5-050615-1				
Operator ID:	SRS	ALS Bottle#:	1	Worklist Smp#:	41
Purge Vol:	250.000 mL	Dil. Factor:	1.7500		
Method:	TO15_ATMS2N	Limit Group:	MSA - TO15 - ICAL		
Column:	RTX Volatiles (0.32 mm)	Detector	MS SCAN		

28 Trichlorofluoromethane, CAS: 75-69-4



Report Date: 12-May-2015 10:10:52 Chrom Revision: 2.2 05-May-2015 11:39:10

TestAmerica Sacramento

Data File:	\\SACCHROM\ChromData\ATMS2\20150511-21702.b\15051122.D				
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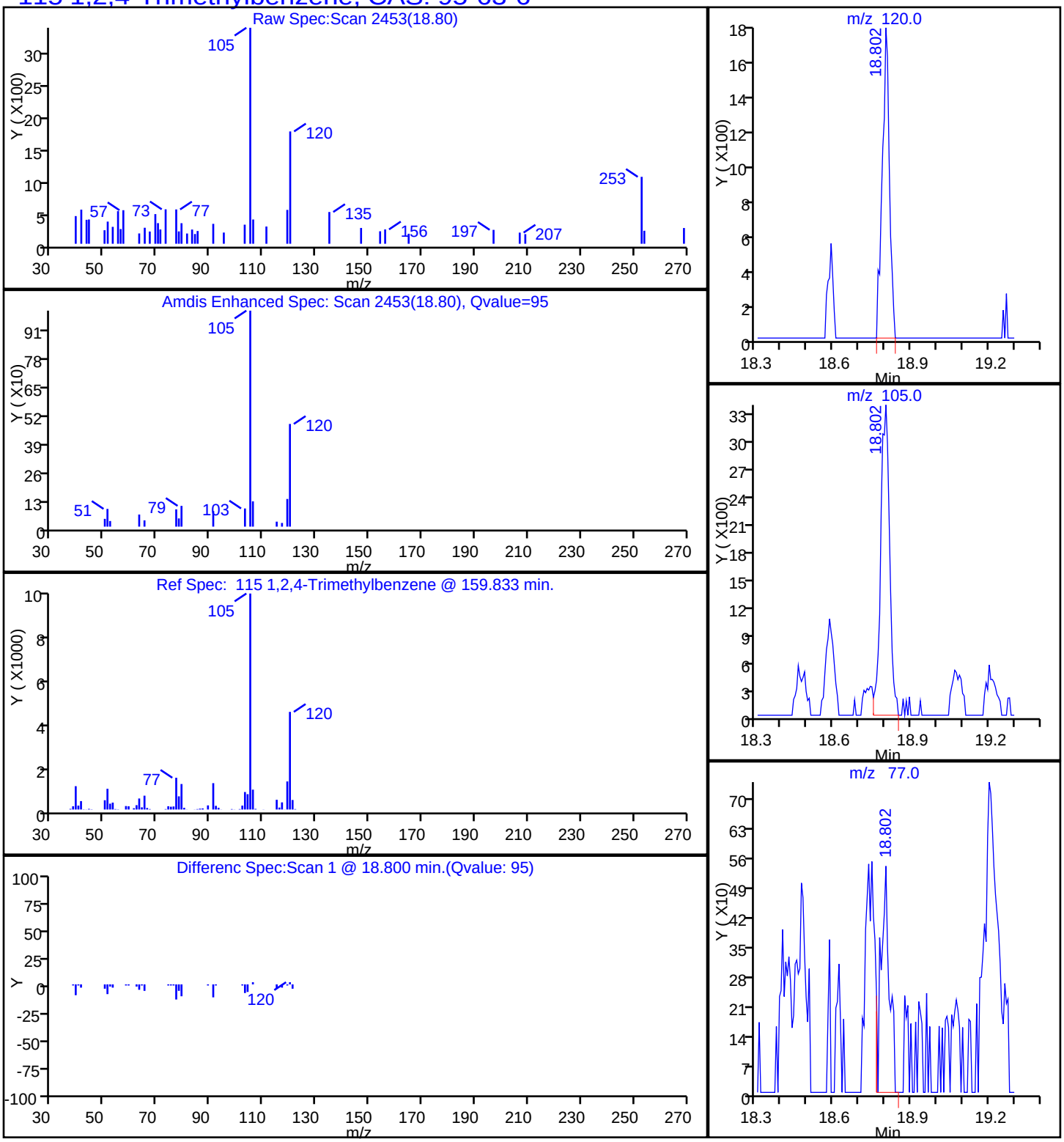
Lims ID:	320-12924-A-1	Lab Sample ID:	320-12924-1		
Client ID:	J6038-SS5-050615-1				
Operator ID:	SRS	ALS Bottle#:	1	Worklist Smp#:	41
Purge Vol:	250.000 mL	Dil. Factor:	1.7500		
Method:	TO15_ATMS2N	Limit Group:	MSA - TO15 - ICAL		
Column:	RTX Volatiles (0.32 mm)	Detector	MS SCAN		

115 1,2,4-Trimethylbenzene, CAS: 95-63-6

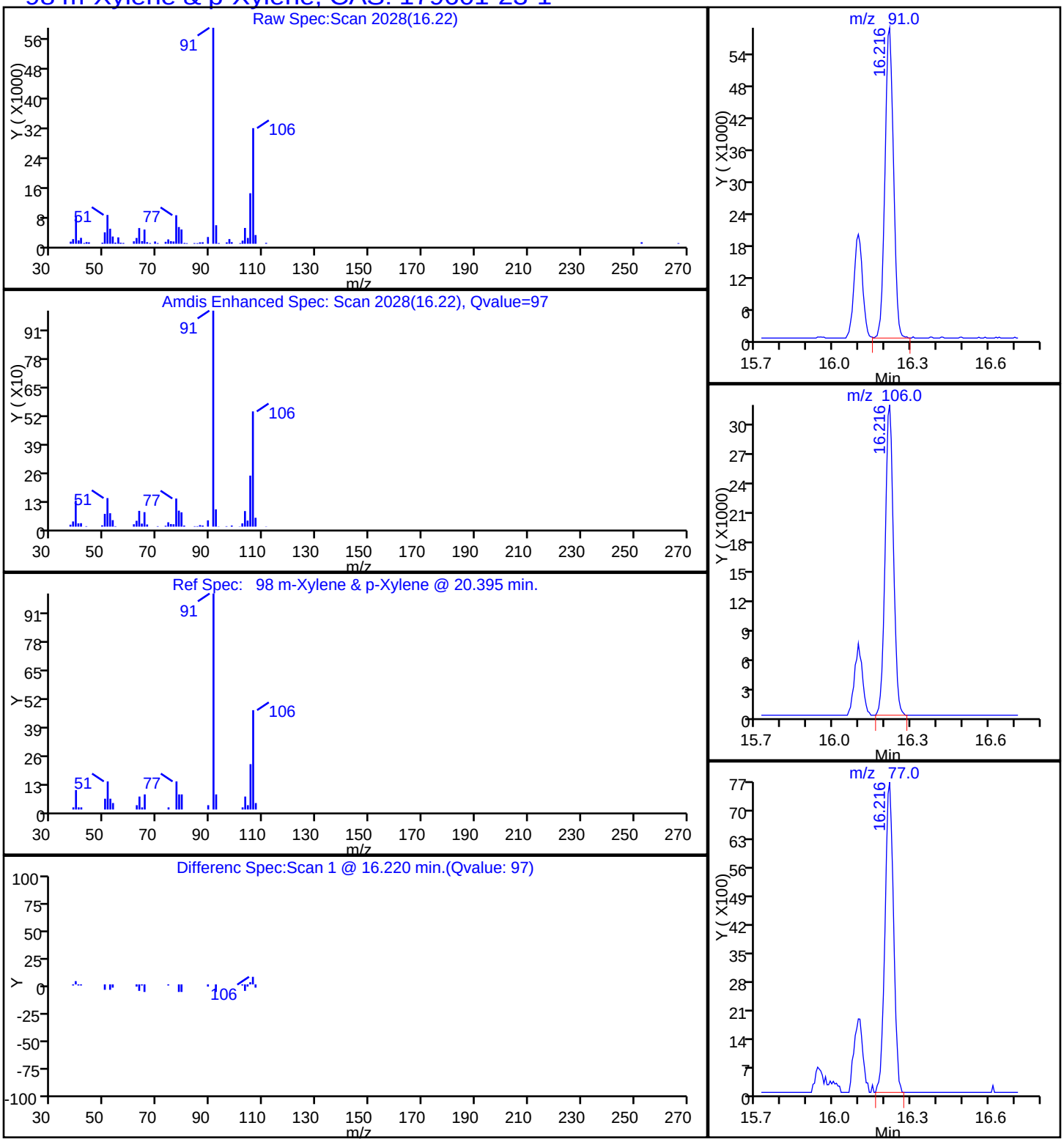


Report Date: 12-May-2015 10:10:52 Chrom Revision: 2.2 05-May-2015 11:39:10

TestAmerica Sacramento

Data File:	\\SACCHROM\ChromData\ATMS2\20150511-21702.b\15051122.D				
Injection Date:	12-May-2015 05:41:30	Instrument ID:	ATMS2		
Lims ID:	320-12924-A-1	Lab Sample ID:	320-12924-1		
Client ID:	J6038-SS5-050615-1				
Operator ID:	SRS	ALS Bottle#:	1	Worklist Smp#:	41
Purge Vol:	250.000 mL	Dil. Factor:	1.7500		
Method:	TO15_ATMS2N	Limit Group:	MSA - TO15 - ICAL		
Column:	RTX Volatiles (0.32 mm)	Detector	MS SCAN		

98 m-Xylene & p-Xylene, CAS: 179601-23-1



Report Date: 12-May-2015 10:10:52 Chrom Revision: 2.2 05-May-2015 11:39:10

TestAmerica Sacramento

Data File:	\\SACCHROM\ChromData\ATMS2\20150511-21702.b\15051122.D				
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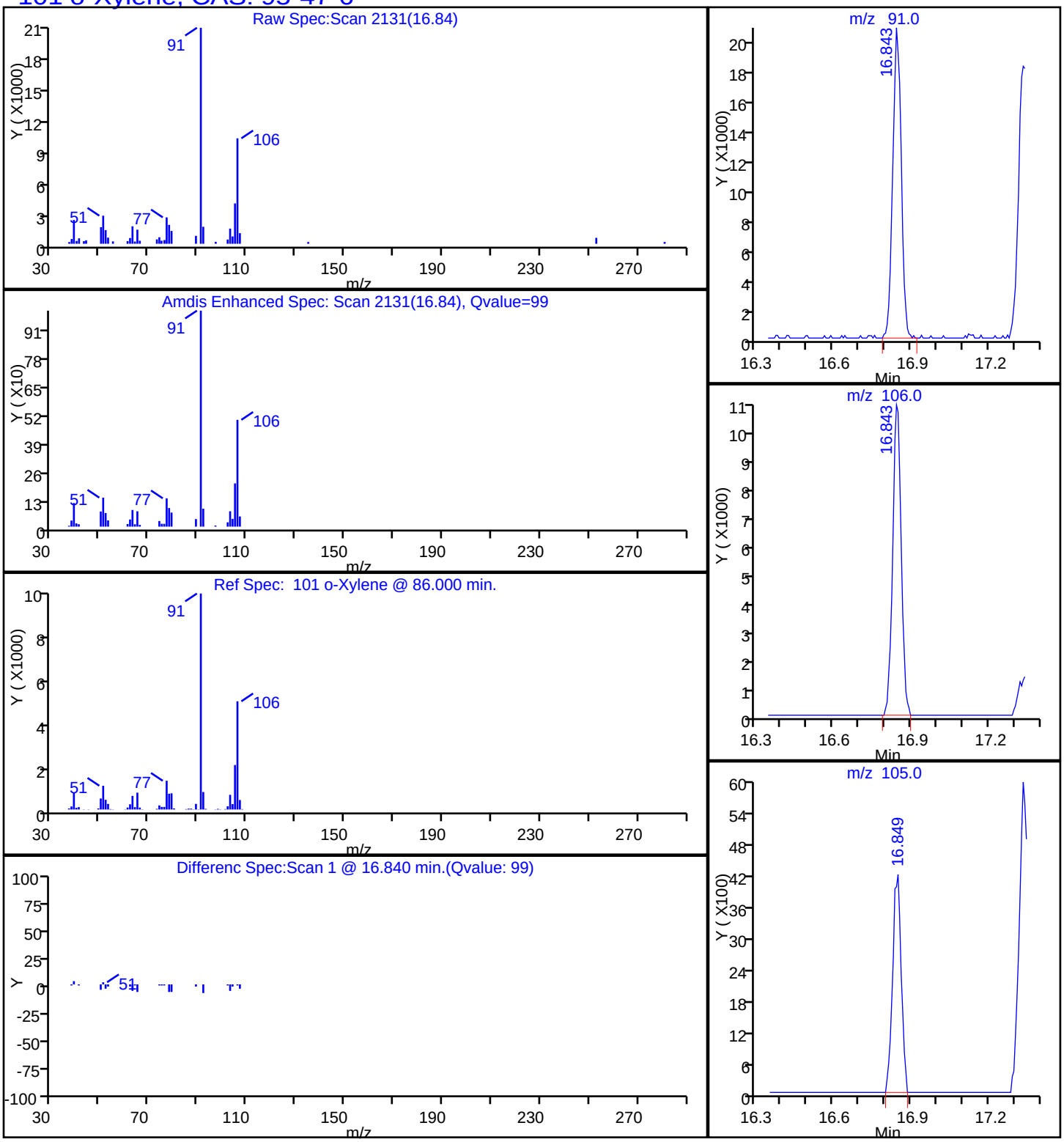
Lims ID:	320-12924-A-1	Lab Sample ID:	320-12924-1		
Client ID:	J6038-SS5-050615-1				
Operator ID:	SRS	ALS Bottle#:	1	Worklist Smp#:	41
Purge Vol:	250.000 mL	Dil. Factor:	1.7500		
Method:	TO15_ATMS2N	Limit Group:	MSA - TO15 - ICAL		
Column:	RTX Volatiles (0.32 mm)	Detector	MS SCAN		

101 o-Xylene, CAS: 95-47-6



FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento | Job No.: 320-12924-1

SDG No.:

Client Sample ID: J6038-SS5-050615-2 | Lab Sample ID: 320-12924-2

Matrix: Air | Lab File ID: 15051123.D

Analysis Method: TO-15 | Date Collected: 05/06/2015 11:44

Sample wt/vol: 125(mL) | Date Analyzed: 05/12/2015 08:11

Soil Aliquot Vol: | Dilution Factor: 3.57

Soil Extract Vol.: | GC Column: RTX-Volatiles ID: 0.32(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 73563 | Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
67-64-1	Acetone	58.08	71		18	0.64
71-43-2	Benzene	78.11	0.78	J	1.4	0.28
100-44-7	Benzyl chloride	126.58	ND		2.9	0.58
75-27-4	Bromodichloromethane	163.83	ND		1.1	0.24
75-25-2	Bromoform	252.75	ND		1.4	0.25
74-83-9	Bromomethane	94.94	ND		2.9	1.2
78-93-3	2-Butanone (MEK)	72.11	5.9		2.9	0.71
75-15-0	Carbon disulfide	76.14	0.70	J	2.9	0.28
56-23-5	Carbon tetrachloride	153.81	ND		2.9	0.23
108-90-7	Chlorobenzene	112.56	ND		1.1	0.23
75-00-3	Chloroethane	64.52	ND		2.9	1.1
67-66-3	Chloroform	119.38	0.53	J	1.1	0.34
74-87-3	Chloromethane	50.49	ND		2.9	0.70
124-48-1	Dibromochloromethane	208.29	ND		1.4	0.28
106-93-4	1,2-Dibromoethane (EDB)	187.87	ND		2.9	0.27
76-14-2	1,2-Dichloro-1,1,2,2-tetrafluoroethane	170.92	ND		1.4	0.55
95-50-1	1,2-Dichlorobenzene	147.00	ND		1.4	0.46
541-73-1	1,3-Dichlorobenzene	147.00	ND		1.4	0.39
106-46-7	1,4-Dichlorobenzene	147.00	ND		1.4	0.53
75-71-8	Dichlorodifluoromethane	120.91	ND		1.4	0.52
75-34-3	1,1-Dichloroethane	98.96	ND		1.1	0.26
107-06-2	1,2-Dichloroethane	98.96	ND		2.9	0.31
75-35-4	1,1-Dichloroethene	96.94	ND		2.9	0.46
156-59-2	cis-1,2-Dichloroethene	96.94	ND		1.4	0.32
156-60-5	trans-1,2-Dichloroethene	96.94	ND		1.4	0.36
78-87-5	1,2-Dichloropropane	112.99	ND		1.4	0.86
10061-01-5	cis-1,3-Dichloropropene	110.97	ND		1.4	0.37
10061-02-6	trans-1,3-Dichloropropene	110.97	ND		1.4	0.31
100-41-4	Ethylbenzene	106.17	1.6		1.4	0.22
622-96-8	4-Ethyltoluene	120.20	ND		1.4	0.67
87-68-3	Hexachlorobutadiene	260.76	ND		7.1	1.5
591-78-6	2-Hexanone	100.20	6.6		1.4	0.31
108-10-1	4-Methyl-2-pentanone (MIBK)	100.16	ND		1.4	0.48
75-09-2	Methylene Chloride	84.93	2.9		1.4	0.26

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento | Job No.: 320-12924-1

SDG No.:

Client Sample ID: J6038-SS5-050615-2 | Lab Sample ID: 320-12924-2

Matrix: Air | Lab File ID: 15051123.D

Analysis Method: TO-15 | Date Collected: 05/06/2015 11:44

Sample wt/vol: 125(mL) | Date Analyzed: 05/12/2015 08:11

Soil Aliquot Vol: | Dilution Factor: 3.57

Soil Extract Vol.: | GC Column: RTX-Volatiles ID: 0.32(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 73563 | Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
100-42-5	Styrene	104.15	ND		1.4	0.21
79-34-5	1,1,2,2-Tetrachloroethane	167.85	ND		1.4	0.25
127-18-4	Tetrachloroethene	165.83	2.9		1.4	0.18
108-88-3	Toluene	92.14	2.3		1.4	0.18
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	187.38	1.6		1.4	0.58
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		7.1	1.5
71-55-6	1,1,1-Trichloroethane	133.41	0.33	J	1.1	0.23
79-00-5	1,1,2-Trichloroethane	133.41	ND		1.4	0.24
79-01-6	Trichloroethene	131.39	39		1.4	0.37
75-69-4	Trichlorofluoromethane	137.37	ND		1.4	0.70
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		2.9	0.58
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		1.4	0.45
108-05-4	Vinyl acetate	86.09	0.73	J	2.9	0.52
75-01-4	Vinyl chloride	62.50	ND		1.4	0.43
179601-23-1	m,p-Xylene	106.17	5.8		2.9	0.36
95-47-6	o-Xylene	106.17	2.0		1.4	0.19

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	103		70-130
17060-07-0	1,2-Dichloroethane-d4 (Surr)	117		70-130
2037-26-5	Toluene-d8 (Surr)	97		70-130

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento | Job No.: 320-12924-1

SDG No.:

Client Sample ID: J6038-SS5-050615-2 | Lab Sample ID: 320-12924-2

Matrix: Air | Lab File ID: 15051123.D

Analysis Method: TO-15 | Date Collected: 05/06/2015 11:44

Sample wt/vol: 125(mL) | Date Analyzed: 05/12/2015 08:11

Soil Aliquot Vol: | Dilution Factor: 3.57

Soil Extract Vol.: | GC Column: RTX-Volatiles ID: 0.32(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 73563 | Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
67-64-1	Acetone	58.08	170		42	1.5
71-43-2	Benzene	78.11	2.5	J	4.6	0.90
100-44-7	Benzyl chloride	126.58	ND		15	3.0
75-27-4	Bromodichloromethane	163.83	ND		7.2	1.6
75-25-2	Bromoform	252.75	ND		15	2.6
74-83-9	Bromomethane	94.94	ND		11	4.6
78-93-3	2-Butanone (MEK)	72.11	17		8.4	2.1
75-15-0	Carbon disulfide	76.14	2.2	J	8.9	0.87
56-23-5	Carbon tetrachloride	153.81	ND		18	1.4
108-90-7	Chlorobenzene	112.56	ND		4.9	1.1
75-00-3	Chloroethane	64.52	ND		7.5	2.9
67-66-3	Chloroform	119.38	2.6	J	5.2	1.7
74-87-3	Chloromethane	50.49	ND		5.9	1.5
124-48-1	Dibromochloromethane	208.29	ND		12	2.4
106-93-4	1,2-Dibromoethane (EDB)	187.87	ND		22	2.1
76-14-2	1,2-Dichloro-1,1,2,2-tetrafluoroethane	170.92	ND		10	3.9
95-50-1	1,2-Dichlorobenzene	147.00	ND		8.6	2.8
541-73-1	1,3-Dichlorobenzene	147.00	ND		8.6	2.4
106-46-7	1,4-Dichlorobenzene	147.00	ND		8.6	3.2
75-71-8	Dichlorodifluoromethane	120.91	ND		7.1	2.6
75-34-3	1,1-Dichloroethane	98.96	ND		4.3	1.0
107-06-2	1,2-Dichloroethane	98.96	ND		12	1.3
75-35-4	1,1-Dichloroethene	96.94	ND		11	1.8
156-59-2	cis-1,2-Dichloroethene	96.94	ND		5.7	1.3
156-60-5	trans-1,2-Dichloroethene	96.94	ND		5.7	1.4
78-87-5	1,2-Dichloropropane	112.99	ND		6.6	4.0
10061-01-5	cis-1,3-Dichloropropene	110.97	ND		6.5	1.7
10061-02-6	trans-1,3-Dichloropropene	110.97	ND		6.5	1.4
100-41-4	Ethylbenzene	106.17	6.8		6.2	0.98
622-96-8	4-Ethyltoluene	120.20	ND		7.0	3.3
87-68-3	Hexachlorobutadiene	260.76	ND		76	16
591-78-6	2-Hexanone	100.20	27		5.9	1.3
108-10-1	4-Methyl-2-pentanone (MIBK)	100.16	ND		5.8	2.0
75-09-2	Methylene Chloride	84.93	10		5.0	0.89

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento | Job No.: 320-12924-1

SDG No.:

Client Sample ID: J6038-SS5-050615-2 | Lab Sample ID: 320-12924-2

Matrix: Air | Lab File ID: 15051123.D

Analysis Method: TO-15 | Date Collected: 05/06/2015 11:44

Sample wt/vol: 125(mL) | Date Analyzed: 05/12/2015 08:11

Soil Aliquot Vol: | Dilution Factor: 3.57

Soil Extract Vol.: | GC Column: RTX-Volatiles ID: 0.32(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 73563 | Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
100-42-5	Styrene	104.15	ND		6.1	0.90
79-34-5	1,1,2,2-Tetrachloroethane	167.85	ND		9.8	1.7
127-18-4	Tetrachloroethene	165.83	20		9.7	1.2
108-88-3	Toluene	92.14	8.8		5.4	0.69
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	187.38	12		11	4.5
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		53	11
71-55-6	1,1,1-Trichloroethane	133.41	1.8	J	5.8	1.3
79-00-5	1,1,2-Trichloroethane	133.41	ND		7.8	1.3
79-01-6	Trichloroethene	131.39	210		7.7	2.0
75-69-4	Trichlorofluoromethane	137.37	ND		8.0	3.9
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		14	2.8
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		7.0	2.2
108-05-4	Vinyl acetate	86.09	2.6	J	10	1.8
75-01-4	Vinyl chloride	62.50	ND		3.7	1.1
179601-23-1	m,p-Xylene	106.17	25		12	1.6
95-47-6	o-Xylene	106.17	8.6		6.2	0.84

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	103		70-130
17060-07-0	1,2-Dichloroethane-d4 (Surr)	117		70-130
2037-26-5	Toluene-d8 (Surr)	97		70-130

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\SACCHROM\ChromData\ATMS2\20150511-21702.b\15051123.D
Lims ID: 320-12924-A-2 Lab Sample ID: 320-12924-2
Client ID: J6038-SS5-050615-2
Sample Type: Client
Inject. Date: 12-May-2015 08:11:30 ALS Bottle#: 2 Worklist Smp#: 39
Purge Vol: 250.000 mL Dil. Factor: 3.5700
Sample Info: 320-12924-A-2
Misc. Info.: 125 mL
Operator ID: SRS Instrument ID: ATMS2

Method: \\SACCHROM\ChromData\ATMS2\20150511-21702.b\TO15_ATMS2N.m
Limit Group: MSA - TO15 - ICAL
Last Update: 12-May-2015 10:12:26 Calib Date: 18-Mar-2015 18:13:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\SACCHROM\ChromData\ATMS2\20150317-20264.b\15031726.D

Column 1 : RTX Volatiles (0.32 mm) Det: MS SCAN
Process Host: XAWRK037

First Level Reviewer: scottrs Date: 12-May-2015 10:12:26

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	130	10.285	10.285	0.000	98	44998	4.00	
* 2 1,4-Difluorobenzene	114	11.630	11.629	0.001	95	182064	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.943	15.949	-0.006	88	148161	4.00	
$ 4 1,2-Dichloroethane-d4 (Sur	65	11.052	11.051	0.001	98	68971	4.68	
$ 5 Toluene-d8 (Surr)	100	13.807	13.807	0.000	98	103975	3.88	
$ 6 4-Bromofluorobenzene (Surr	174	17.695	17.695	0.000	95	89246	4.12	
15 Dichlorodifluoromethane	85	4.183	4.189	-0.006	98	3786	0.1362	
28 Trichlorofluoromethane	101	6.282	6.276	0.006	87	2849	0.0822	
31 Acetone	43	6.939	6.939	0.000	100	329848	20.0	
43 1,1,2-Trichloro-1,2,2-trif	101	7.073	7.067	0.006	90	11433	0.4416	
47 Methylene Chloride	49	7.900	7.900	0.000	92	13628	0.8219	
48 Carbon disulfide	76	7.992	7.985	0.007	99	6773	0.1961	
49 trans-1,2-Dichloroethene	61	8.430	8.429	0.001	1	1672	0.0932	
52 Vinyl acetate	43	9.001	8.995	0.006	98	6021	0.2033	
54 2-Butanone (MEK)	72	9.573	9.573	0.000	97	7124	1.64	
61 Chloroform	83	10.103	10.102	0.001	96	3597	0.1493	
65 1,1,1-Trichloroethane	97	10.717	10.729	-0.012	61	2416	0.0929	
68 Benzene	78	11.277	11.283	-0.006	94	8030	0.2173	
76 Trichloroethene	130	12.153	12.153	0.000	96	212746	11.1	
85 Toluene	91	13.917	13.923	-0.006	92	27880	0.6522	
87 2-Hexanone	58	14.337	14.337	0.000	91	23053	1.85	
93 Tetrachloroethene	166	14.890	14.896	-0.006	96	20280	0.8150	
97 Ethylbenzene	91	16.095	16.095	0.000	98	20988	0.4357	
98 m-Xylene & p-Xylene	91	16.210	16.216	-0.006	98	60210	1.64	
101 o-Xylene	91	16.849	16.843	0.006	98	20862	0.5556	
111 1,3,5-Trimethylbenzene	120	18.206	18.212	-0.006	88	789	0.0350	
115 1,2,4-Trimethylbenzene	120	18.796	18.802	-0.006	47	1811	0.0847	
122 1,2-Dichlorobenzene	146	20.086	20.092	-0.006	90	1310	0.0439	
128 Hexachlorobutadiene	225	23.261	23.261	0.000	1	1155	0.0604	

Reagents:

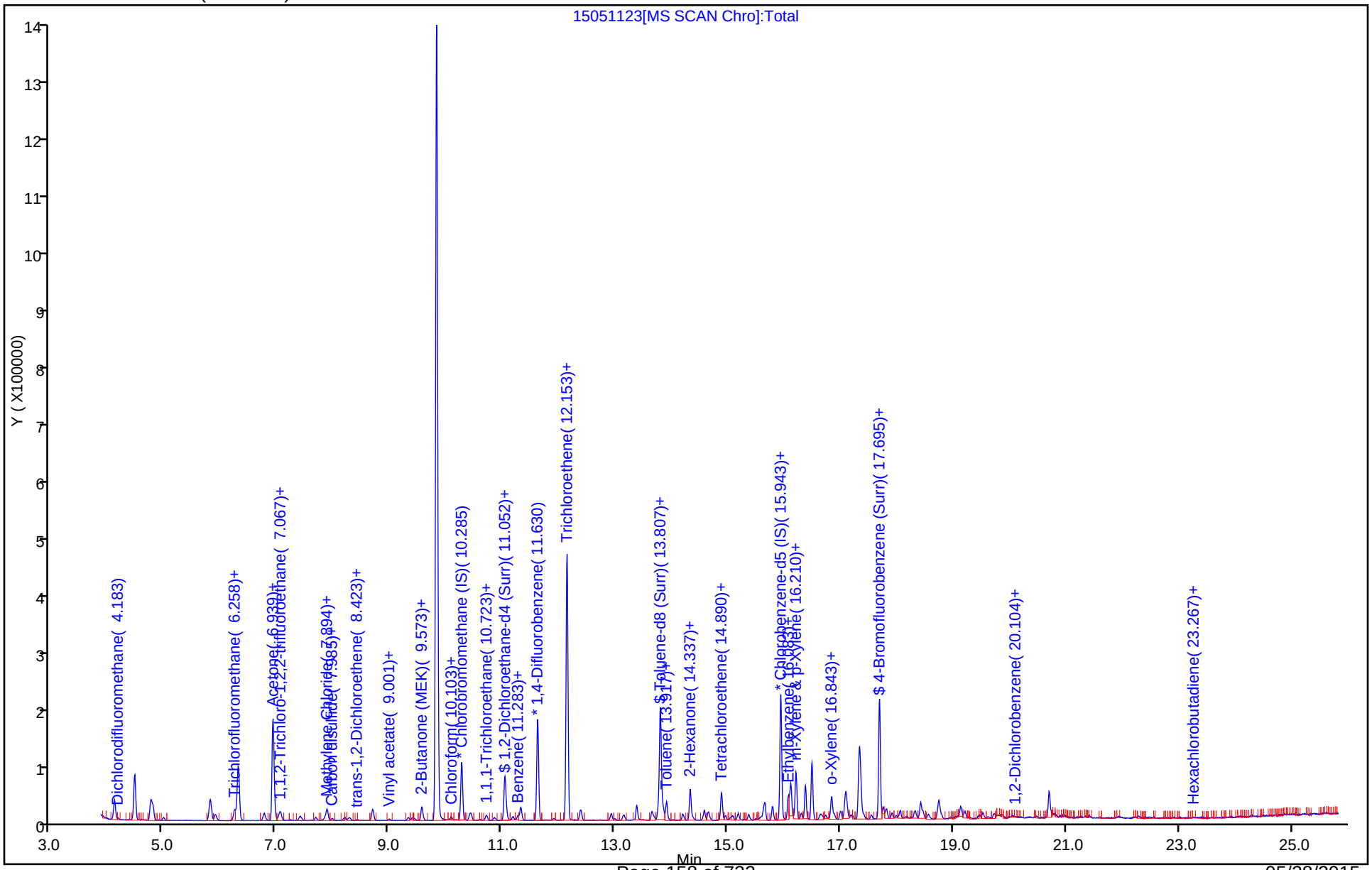
VASUISIM_00177	Amount Added: 50.00	Units: mL	Run Reagent

Report Date: 12-May-2015 10:12:26 Chrom Revision: 2.2 05-May-2015 11:39:10

TestAmerica Sacramento

Data File:	\\SACCHROM\ChromData\ATMS2\20150511-21702.b\15051123.D				
Injection Date:	12-May-2015 08:11:30	Instrument ID:	ATMS2	Operator ID:	SRS
Lims ID:	320-12924-A-2	Lab Sample ID:	320-12924-2	Worklist Smp#:	39
Client ID:	J6038-SS5-050615-2				
Purge Vol:	250.000 mL	Dil. Factor:	3.5700	ALS Bottle#:	2
Method:	TO15_ATMS2N	Limit Group:	MSA - TO15 - ICAL		

Column: RTX Volatiles (0.32 mm)

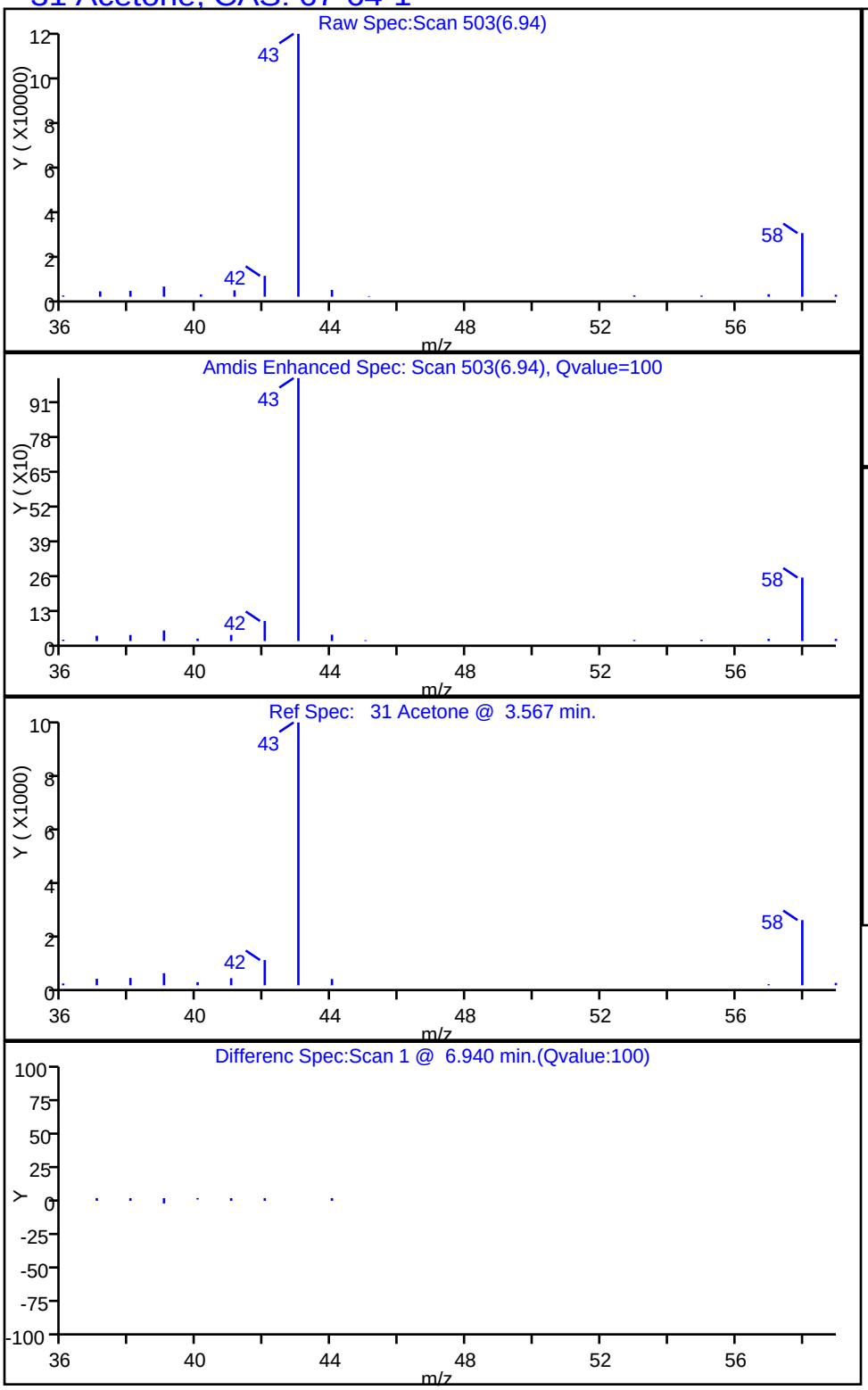


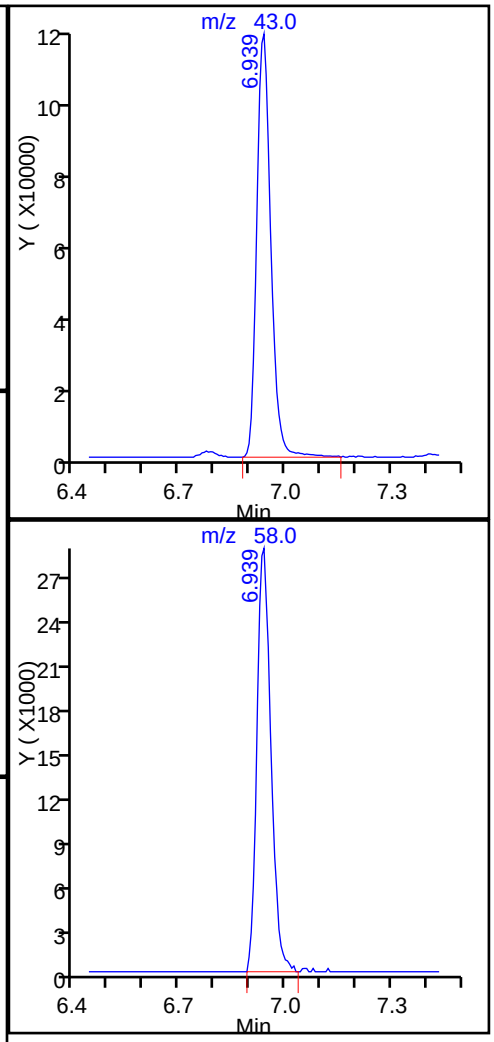
Report Date: 12-May-2015 10:12:26 Chrom Revision: 2.2 05-May-2015 11:39:10

TestAmerica Sacramento

Data File:	\\SACCHROM\ChromData\ATMS2\20150511-21702.b\15051123.D				
Injection Date:	12-May-2015 08:11:30	Instrument ID:	ATMS2		
Lims ID:	320-12924-A-2	Lab Sample ID:	320-12924-2		
Client ID:	J6038-SS5-050615-2				
Operator ID:	SRS	ALS Bottle#:	2	Worklist Smp#:	39
Purge Vol:	250.000 mL	Dil. Factor:	3.5700		
Method:	TO15_ATMS2N	Limit Group:	MSA - TO15 - ICAL		
Column:	RTX Volatiles (0.32 mm)	Detector	MS SCAN		

31 Acetone, CAS: 67-64-1



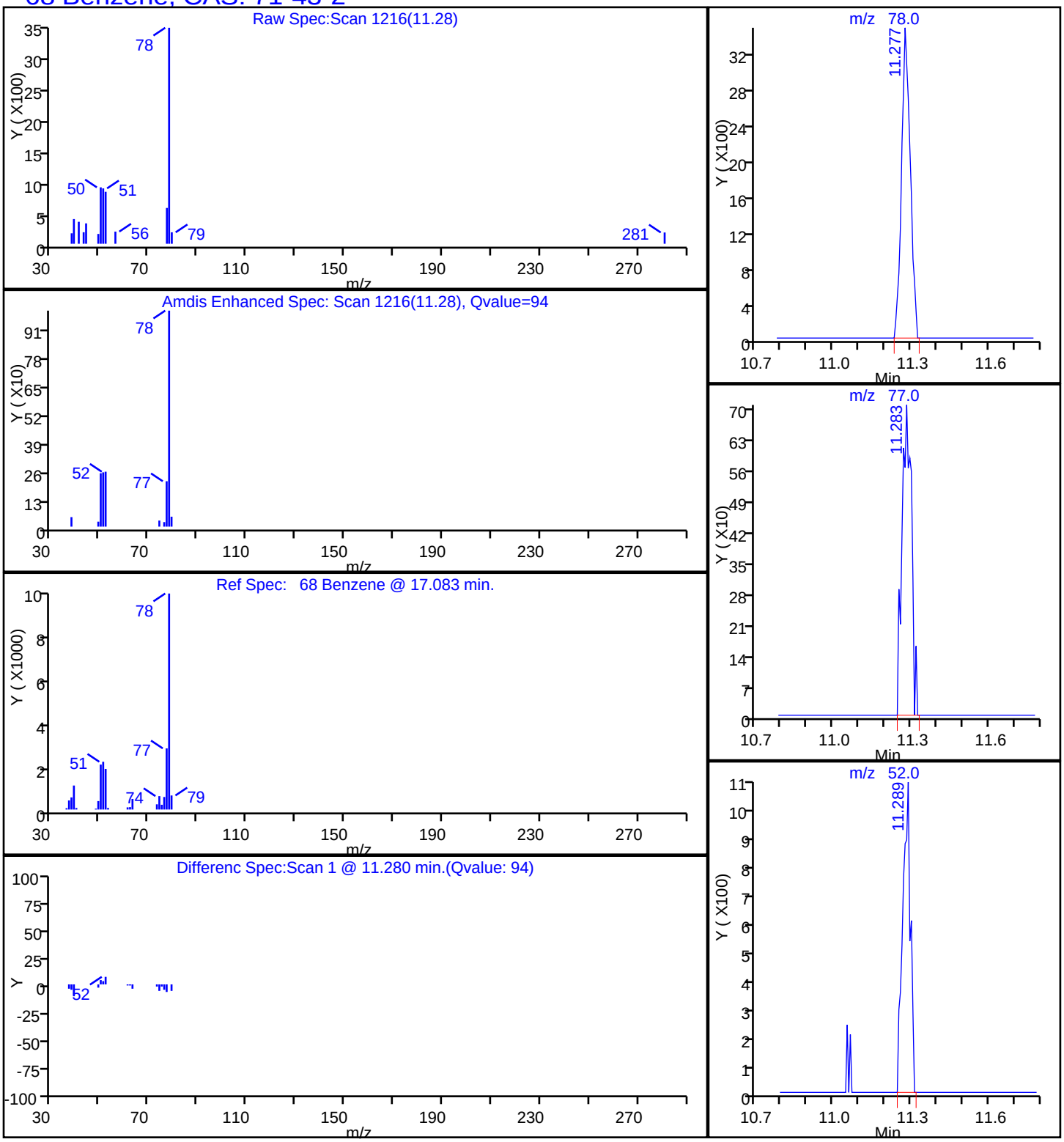


Report Date: 12-May-2015 10:12:27 Chrom Revision: 2.2 05-May-2015 11:39:10

TestAmerica Sacramento

Data File:	\\SACCHROM\ChromData\ATMS2\20150511-21702.b\15051123.D				
Injection Date:	12-May-2015 08:11:30	Instrument ID:	ATMS2		
Lims ID:	320-12924-A-2	Lab Sample ID:	320-12924-2		
Client ID:	J6038-SS5-050615-2				
Operator ID:	SRS	ALS Bottle#:	2	Worklist Smp#:	39
Purge Vol:	250.000 mL	Dil. Factor:	3.5700		
Method:	TO15_ATMS2N	Limit Group:	MSA - TO15 - ICAL		
Column:	RTX Volatiles (0.32 mm)	Detector	MS SCAN		

68 Benzene, CAS: 71-43-2

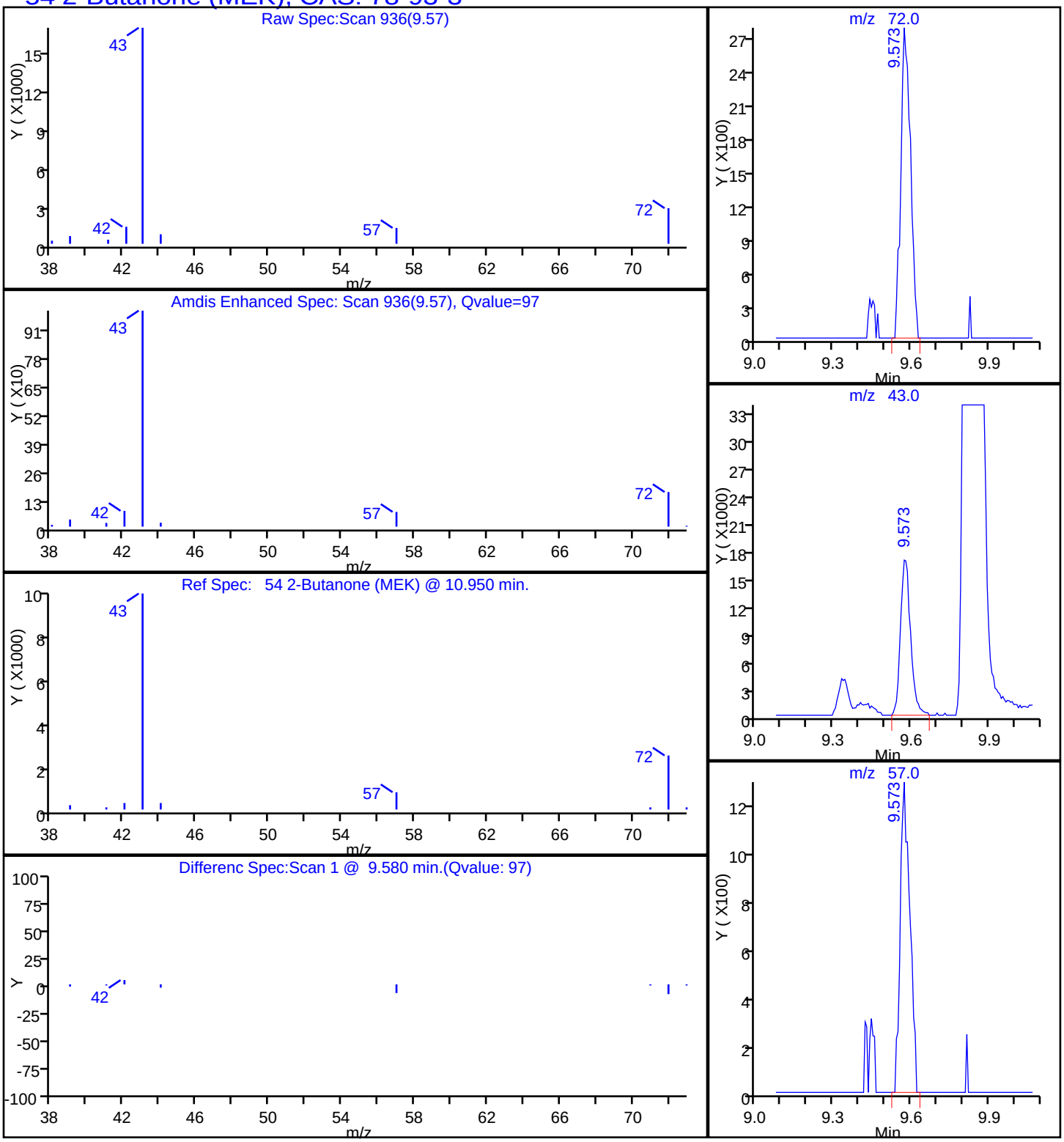


Report Date: 12-May-2015 10:12:27 Chrom Revision: 2.2 05-May-2015 11:39:10

TestAmerica Sacramento

Data File:	\\SACCHROM\ChromData\ATMS2\20150511-21702.b\15051123.D				
Injection Date:	12-May-2015 08:11:30	Instrument ID:	ATMS2		
Lims ID:	320-12924-A-2	Lab Sample ID:	320-12924-2		
Client ID:	J6038-SS5-050615-2				
Operator ID:	SRS	ALS Bottle#:	2	Worklist Smp#:	39
Purge Vol:	250.000 mL	Dil. Factor:	3.5700		
Method:	TO15_ATMS2N	Limit Group:	MSA - TO15 - ICAL		
Column:	RTX Volatiles (0.32 mm)	Detector	MS SCAN		

54 2-Butanone (MEK), CAS: 78-93-3



Report Date: 12-May-2015 10:12:26 Chrom Revision: 2.2 05-May-2015 11:39:10

TestAmerica Sacramento

Data File:	\\SACCHROM\ChromData\ATMS2\20150511-21702.b\15051123.D				
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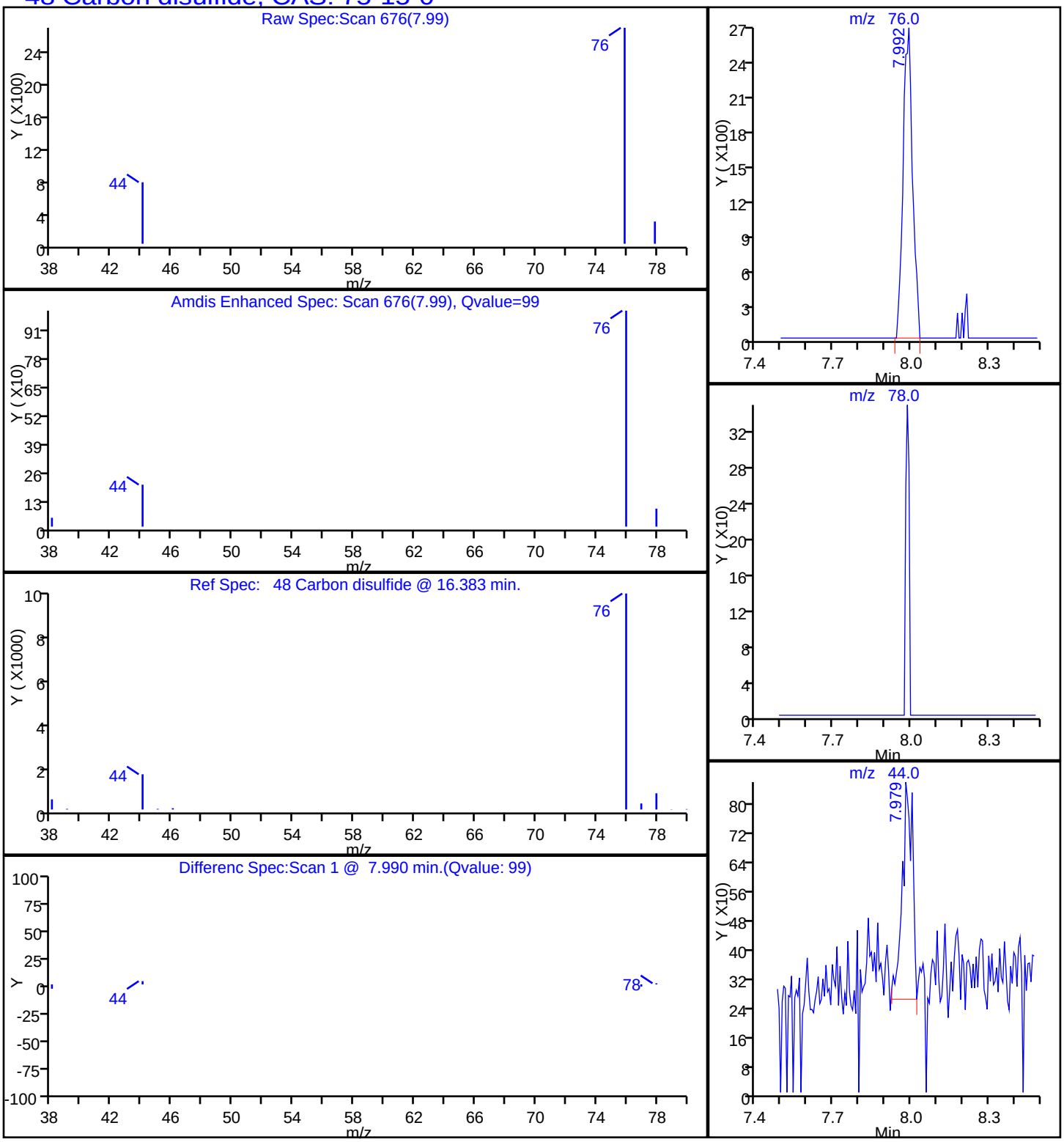
Lims ID:	320-12924-A-2	Lab Sample ID:	320-12924-2		
Client ID:	J6038-SS5-050615-2				
Operator ID:	SRS	ALS Bottle#:	2	Worklist Smp#:	39
Purge Vol:	250.000 mL	Dil. Factor:	3.5700		
Method:	TO15_ATMS2N	Limit Group:	MSA - TO15 - ICAL		
Column:	RTX Volatiles (0.32 mm)	Detector	MS SCAN		

48 Carbon disulfide, CAS: 75-15-0

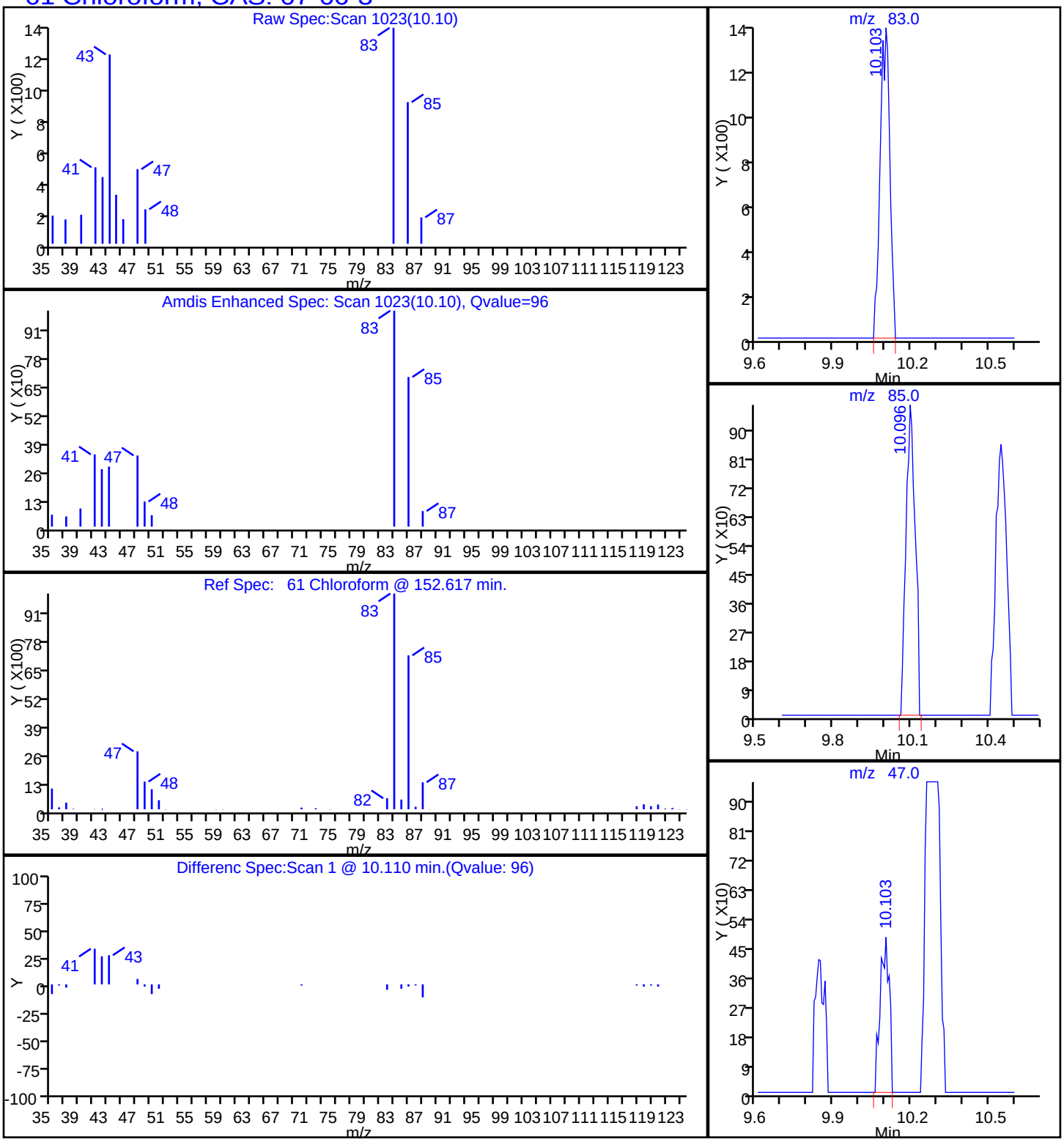


Report Date: 12-May-2015 10:12:27 Chrom Revision: 2.2 05-May-2015 11:39:10

TestAmerica Sacramento

Data File:	\\SACCHROM\ChromData\ATMS2\20150511-21702.b\15051123.D				
Injection Date:	12-May-2015 08:11:30	Instrument ID:	ATMS2		
Lims ID:	320-12924-A-2	Lab Sample ID:	320-12924-2		
Client ID:	J6038-SS5-050615-2				
Operator ID:	SRS	ALS Bottle#:	2	Worklist Smp#:	39
Purge Vol:	250.000 mL	Dil. Factor:	3.5700		
Method:	TO15_ATMS2N	Limit Group:	MSA - TO15 - ICAL		
Column:	RTX Volatiles (0.32 mm)	Detector	MS SCAN		

61 Chloroform, CAS: 67-66-3

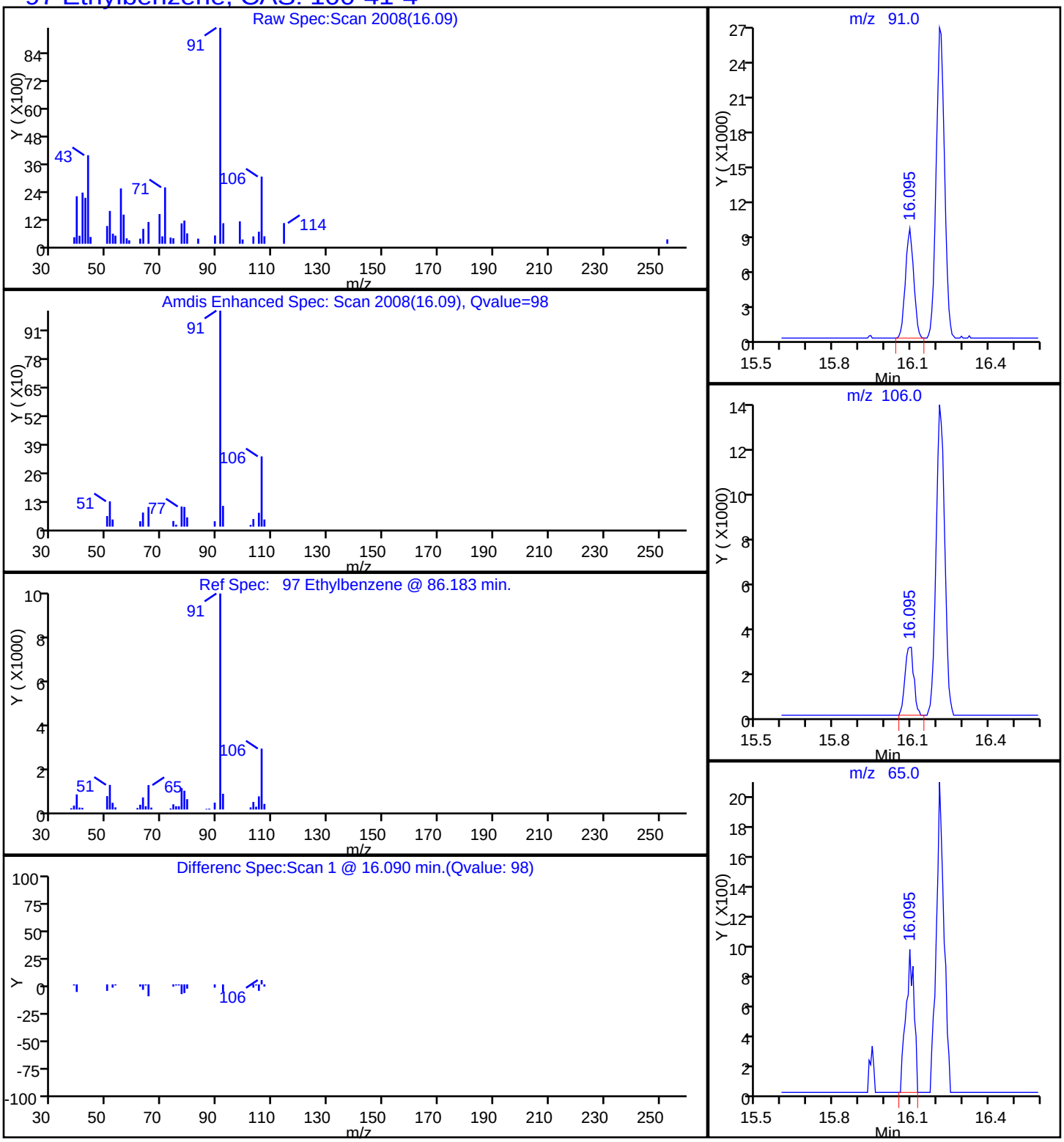


Report Date: 12-May-2015 10:12:27 Chrom Revision: 2.2 05-May-2015 11:39:10

TestAmerica Sacramento

Data File:	\\SACCHROM\ChromData\ATMS2\20150511-21702.b\15051123.D				
Injection Date:	12-May-2015 08:11:30	Instrument ID:	ATMS2		
Lims ID:	320-12924-A-2	Lab Sample ID:	320-12924-2		
Client ID:	J6038-SS5-050615-2				
Operator ID:	SRS	ALS Bottle#:	2	Worklist Smp#:	39
Purge Vol:	250.000 mL	Dil. Factor:	3.5700		
Method:	TO15_ATMS2N	Limit Group:	MSA - TO15 - ICAL		
Column:	RTX Volatiles (0.32 mm)	Detector	MS SCAN		

97 Ethylbenzene, CAS: 100-41-4



Report Date: 12-May-2015 10:12:27 Chrom Revision: 2.2 05-May-2015 11:39:10

TestAmerica Sacramento

Data File:	\\SACCHROM\ChromData\ATMS2\20150511-21702.b\15051123.D				
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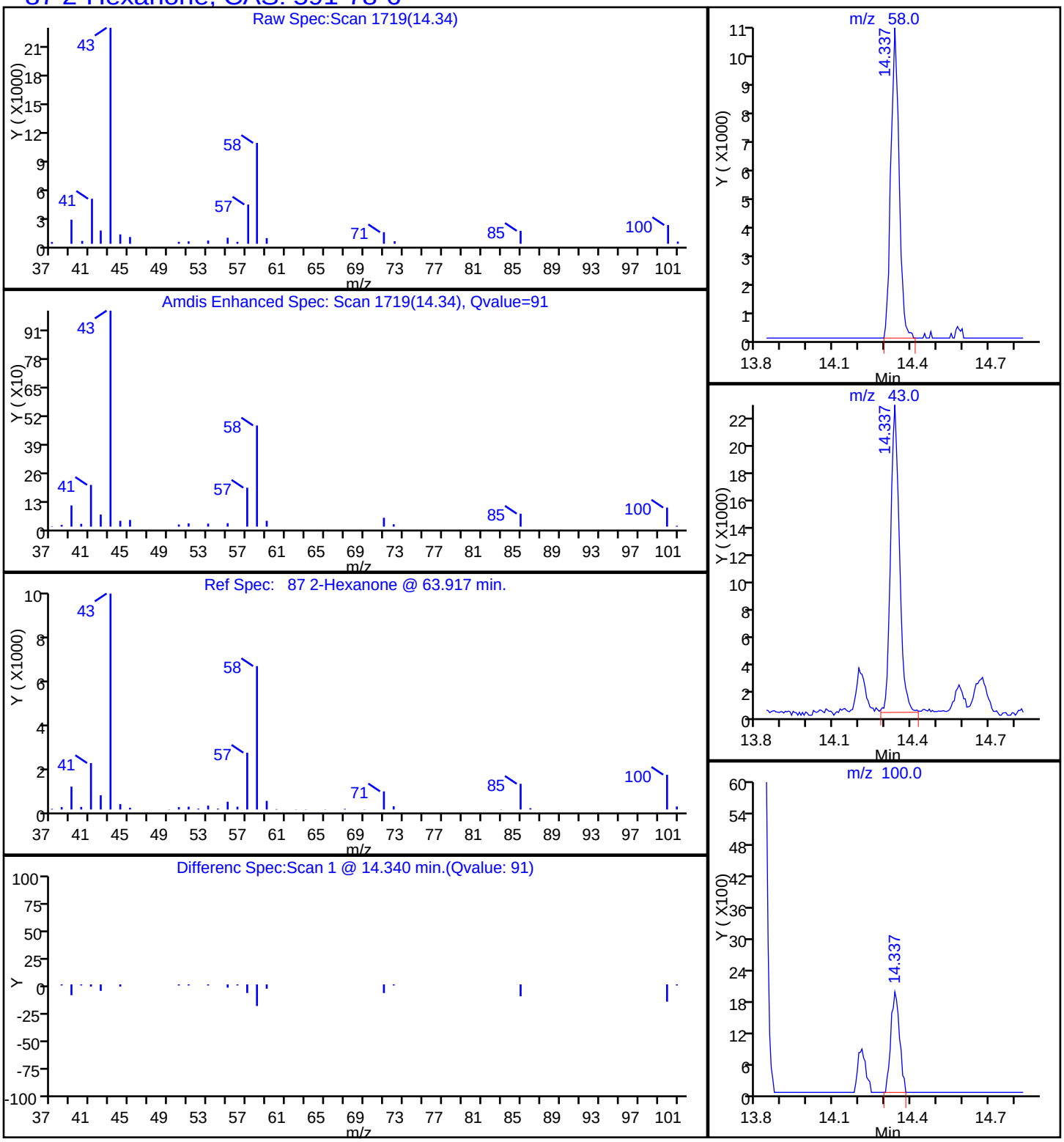
Lims ID:	320-12924-A-2	Lab Sample ID:	320-12924-2		
Client ID:	J6038-SS5-050615-2				
Operator ID:	SRS	ALS Bottle#:	2	Worklist Smp#:	39
Purge Vol:	250.000 mL	Dil. Factor:	3.5700		
Method:	TO15_ATMS2N	Limit Group:	MSA - TO15 - ICAL		
Column:	RTX Volatiles (0.32 mm)	Detector	MS SCAN		

87 2-Hexanone, CAS: 591-78-6

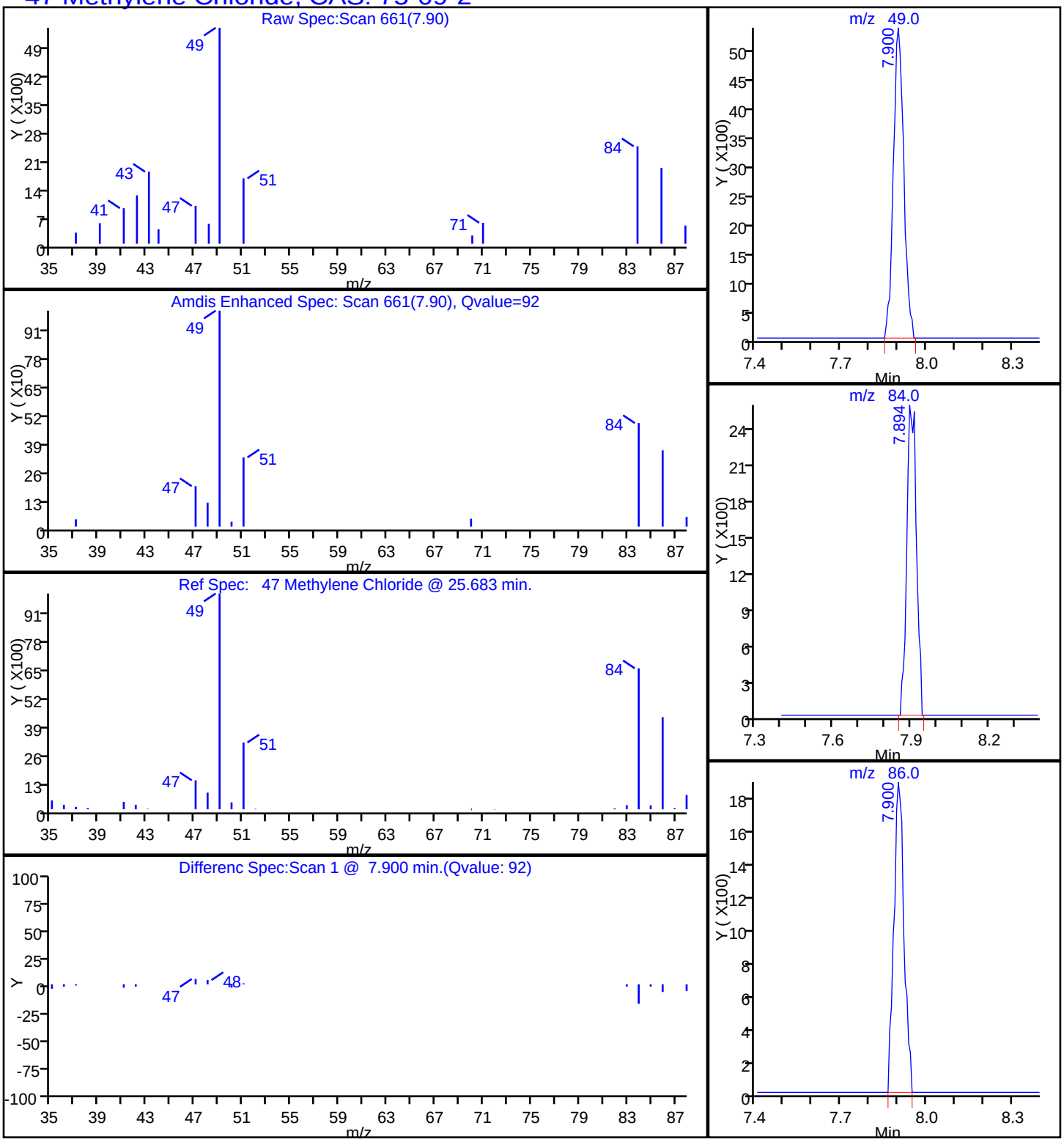


Report Date: 12-May-2015 10:12:26 Chrom Revision: 2.2 05-May-2015 11:39:10

TestAmerica Sacramento

Data File:	\\SACCHROM\ChromData\ATMS2\20150511-21702.b\15051123.D				
Injection Date:	12-May-2015 08:11:30	Instrument ID:	ATMS2		
Lims ID:	320-12924-A-2	Lab Sample ID:	320-12924-2		
Client ID:	J6038-SS5-050615-2				
Operator ID:	SRS	ALS Bottle#:	2	Worklist Smp#:	39
Purge Vol:	250.000 mL	Dil. Factor:	3.5700		
Method:	TO15_ATMS2N	Limit Group:	MSA - TO15 - ICAL		
Column:	RTX Volatiles (0.32 mm)	Detector	MS SCAN		

47 Methylene Chloride, CAS: 75-09-2



Report Date: 12-May-2015 10:12:27 Chrom Revision: 2.2 05-May-2015 11:39:10

TestAmerica Sacramento

Data File:	\\SACCHROM\ChromData\ATMS2\20150511-21702.b\15051123.D				
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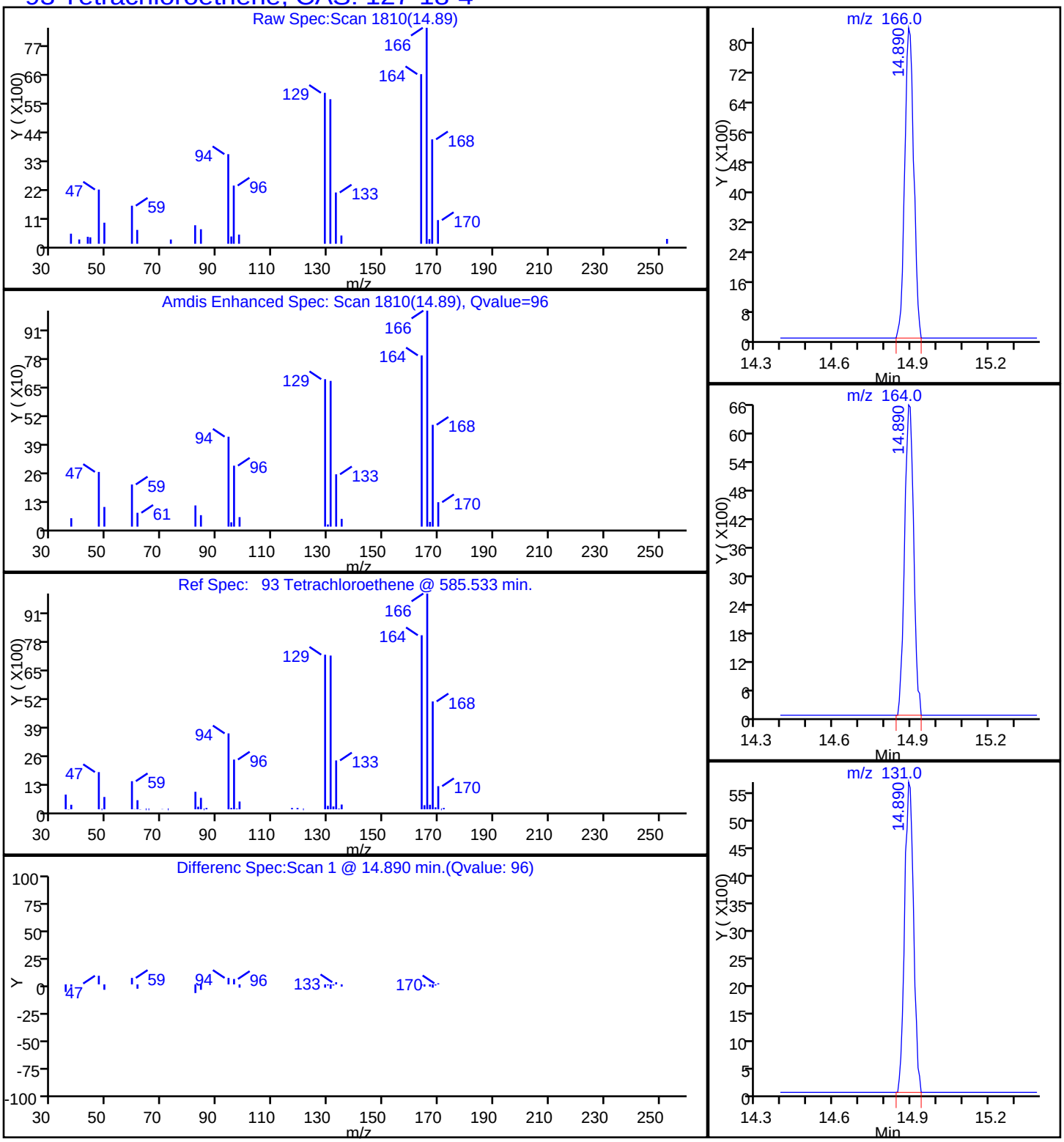
Lims ID:	320-12924-A-2	Lab Sample ID:	320-12924-2		
Client ID:	J6038-SS5-050615-2				
Operator ID:	SRS	ALS Bottle#:	2	Worklist Smp#:	39
Purge Vol:	250.000 mL	Dil. Factor:	3.5700		
Method:	TO15_ATMS2N	Limit Group:	MSA - TO15 - ICAL		
Column:	RTX Volatiles (0.32 mm)	Detector	MS SCAN		

93 Tetrachloroethene, CAS: 127-18-4



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TestAmerica Sacramento

Data File:	\\SACCHROM\ChromData\ATMS2\20150511-21702.b\15051123.D				
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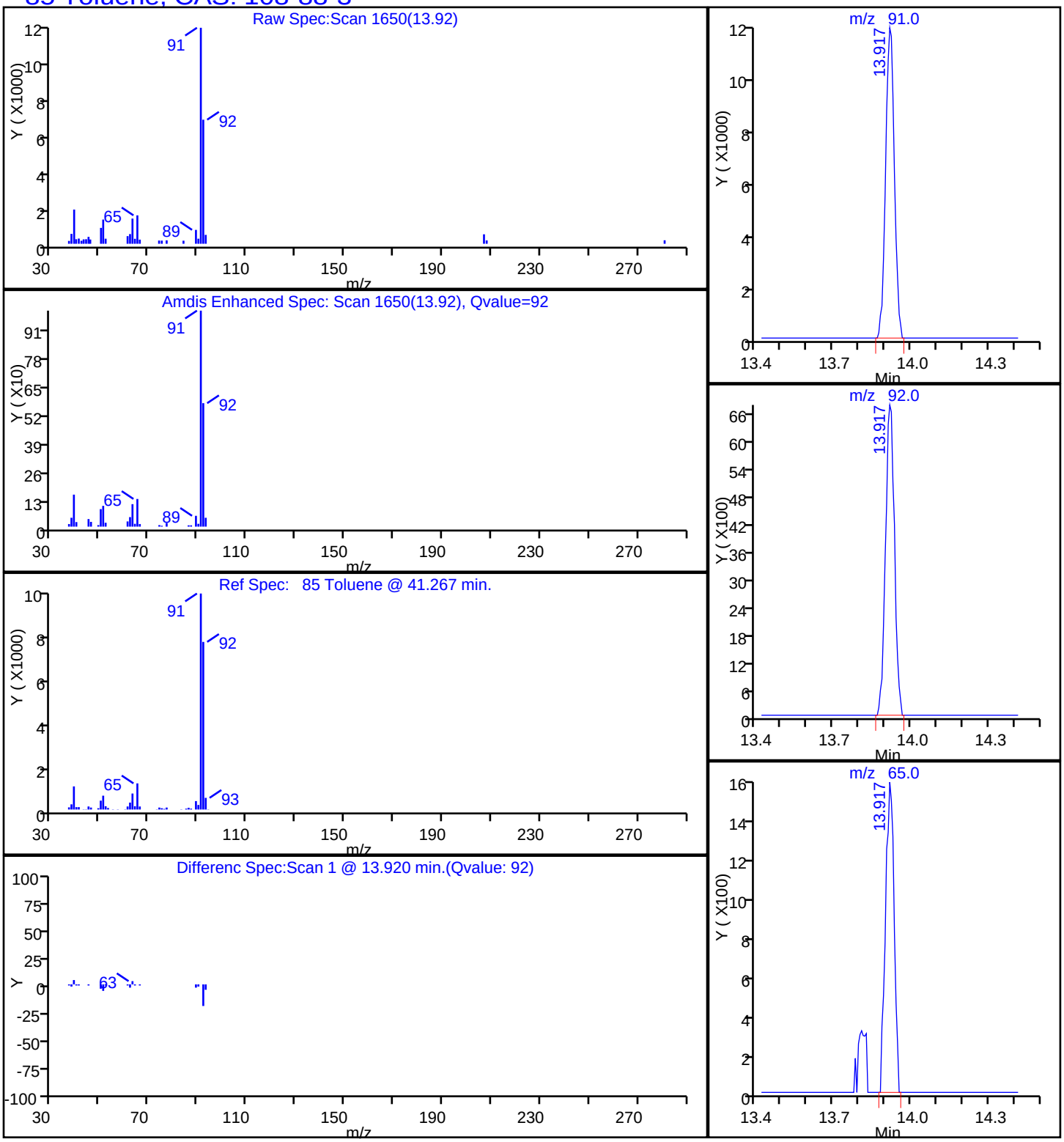
Lims ID:	320-12924-A-2	Lab Sample ID:	320-12924-2		
Client ID:	J6038-SS5-050615-2				
Operator ID:	SRS	ALS Bottle#:	2	Worklist Smp#:	39
Purge Vol:	250.000 mL	Dil. Factor:	3.5700		
Method:	TO15_ATMS2N	Limit Group:	MSA - TO15 - ICAL		
Column:	RTX Volatiles (0.32 mm)	Detector	MS SCAN		

85 Toluene, CAS: 108-88-3

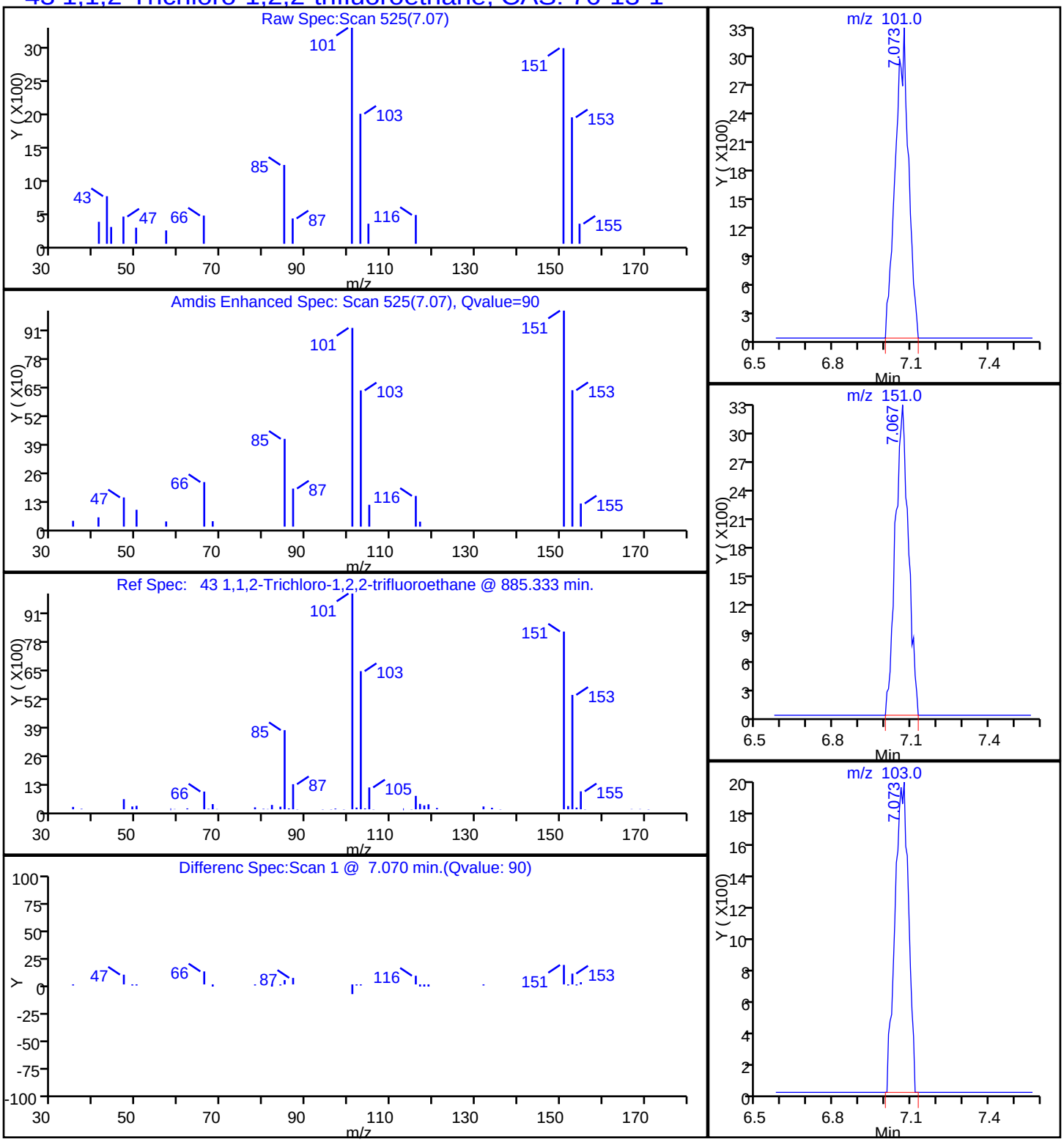


Report Date: 12-May-2015 10:12:26 Chrom Revision: 2.2 05-May-2015 11:39:10

TestAmerica Sacramento

Data File:	\\SACCHROM\ChromData\ATMS2\20150511-21702.b\15051123.D				
Injection Date:	12-May-2015 08:11:30	Instrument ID:	ATMS2		
Lims ID:	320-12924-A-2	Lab Sample ID:	320-12924-2		
Client ID:	J6038-SS5-050615-2				
Operator ID:	SRS	ALS Bottle#:	2	Worklist Smp#:	39
Purge Vol:	250.000 mL	Dil. Factor:	3.5700		
Method:	TO15_ATMS2N	Limit Group:	MSA - TO15 - ICAL		
Column:	RTX Volatiles (0.32 mm)	Detector	MS SCAN		

43 1,1,2-Trichloro-1,2,2-trifluoroethane, CAS: 76-13-1



Report Date: 12-May-2015 10:12:27 Chrom Revision: 2.2 05-May-2015 11:39:10

TestAmerica Sacramento

Data File:	\\SACCHROM\ChromData\ATMS2\20150511-21702.b\15051123.D				
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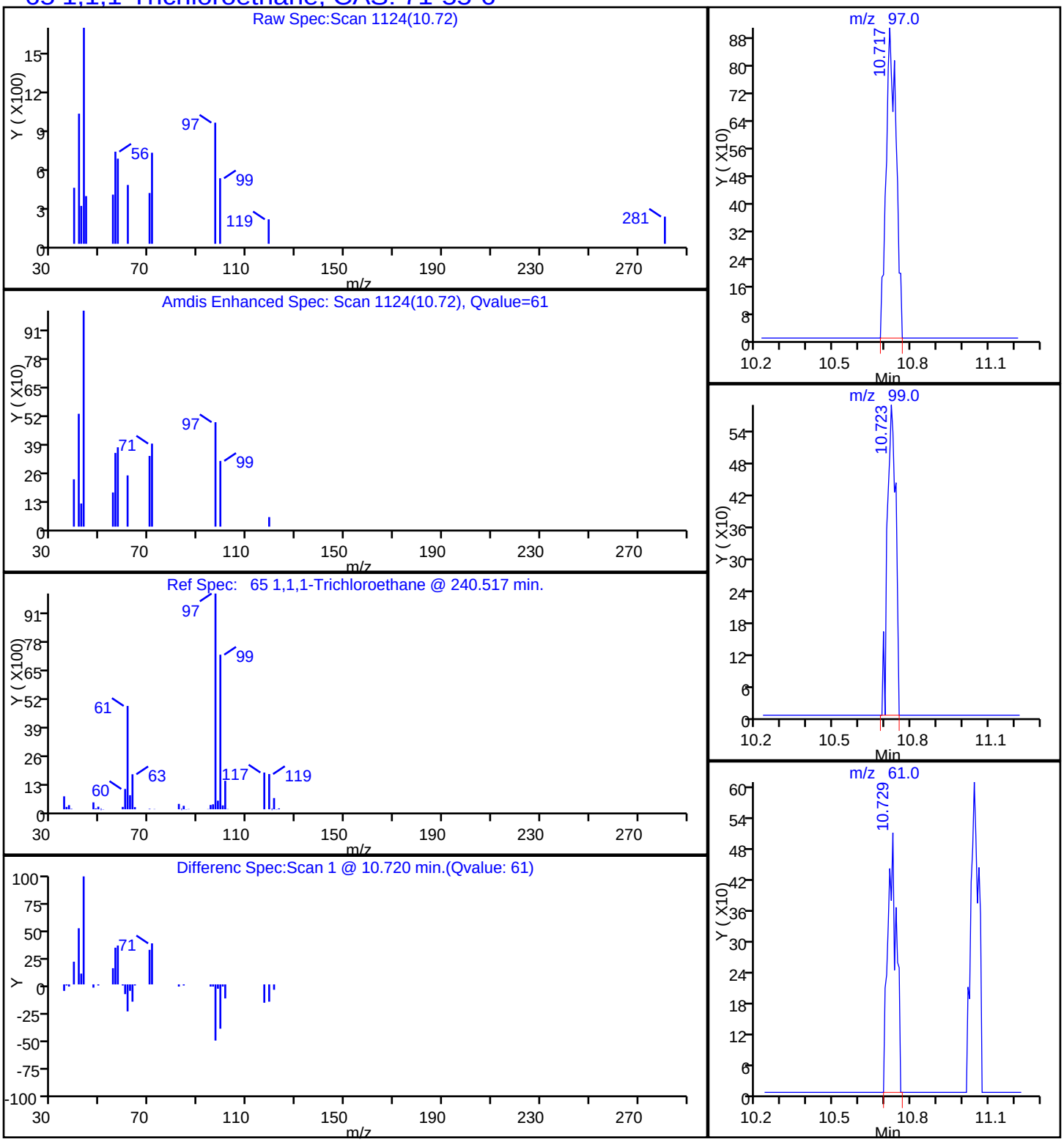
Lims ID:	320-12924-A-2	Lab Sample ID:	320-12924-2		
Client ID:	J6038-SS5-050615-2				
Operator ID:	SRS	ALS Bottle#:	2	Worklist Smp#:	39
Purge Vol:	250.000 mL	Dil. Factor:	3.5700		
Method:	TO15_ATMS2N	Limit Group:	MSA - TO15 - ICAL		
Column:	RTX Volatiles (0.32 mm)	Detector	MS SCAN		

65 1,1,1-Trichloroethane, CAS: 71-55-6

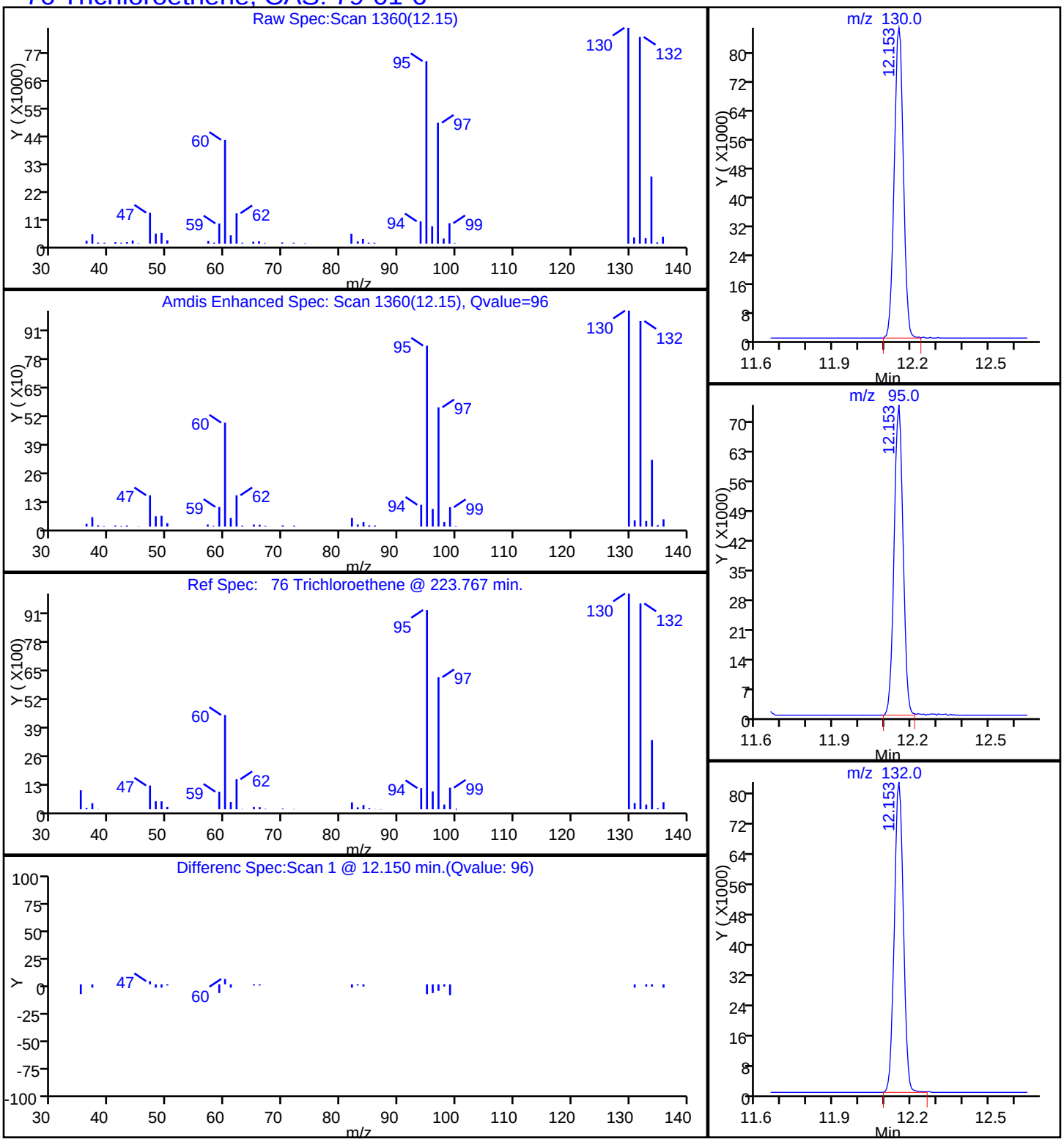


Report Date: 12-May-2015 10:12:27 Chrom Revision: 2.2 05-May-2015 11:39:10

TestAmerica Sacramento

Data File:	\\SACCHROM\ChromData\ATMS2\20150511-21702.b\15051123.D				
Injection Date:	12-May-2015 08:11:30	Instrument ID:	ATMS2		
Lims ID:	320-12924-A-2	Lab Sample ID:	320-12924-2		
Client ID:	J6038-SS5-050615-2				
Operator ID:	SRS	ALS Bottle#:	2	Worklist Smp#:	39
Purge Vol:	250.000 mL	Dil. Factor:	3.5700		
Method:	TO15_ATMS2N	Limit Group:	MSA - TO15 - ICAL		
Column:	RTX Volatiles (0.32 mm)	Detector	MS SCAN		

76 Trichloroethene, CAS: 79-01-6



Report Date: 12-May-2015 10:12:27 Chrom Revision: 2.2 05-May-2015 11:39:10

TestAmerica Sacramento

Data File:	\\SACCHROM\ChromData\ATMS2\20150511-21702.b\15051123.D				
Injection Date:	12-May-2015 08:11:30	Instrument ID:	ATMS2		
Lims ID:	320-12924-A-2	Lab Sample ID:	320-12924-2		
Client ID:	J6038-SS5-050615-2				
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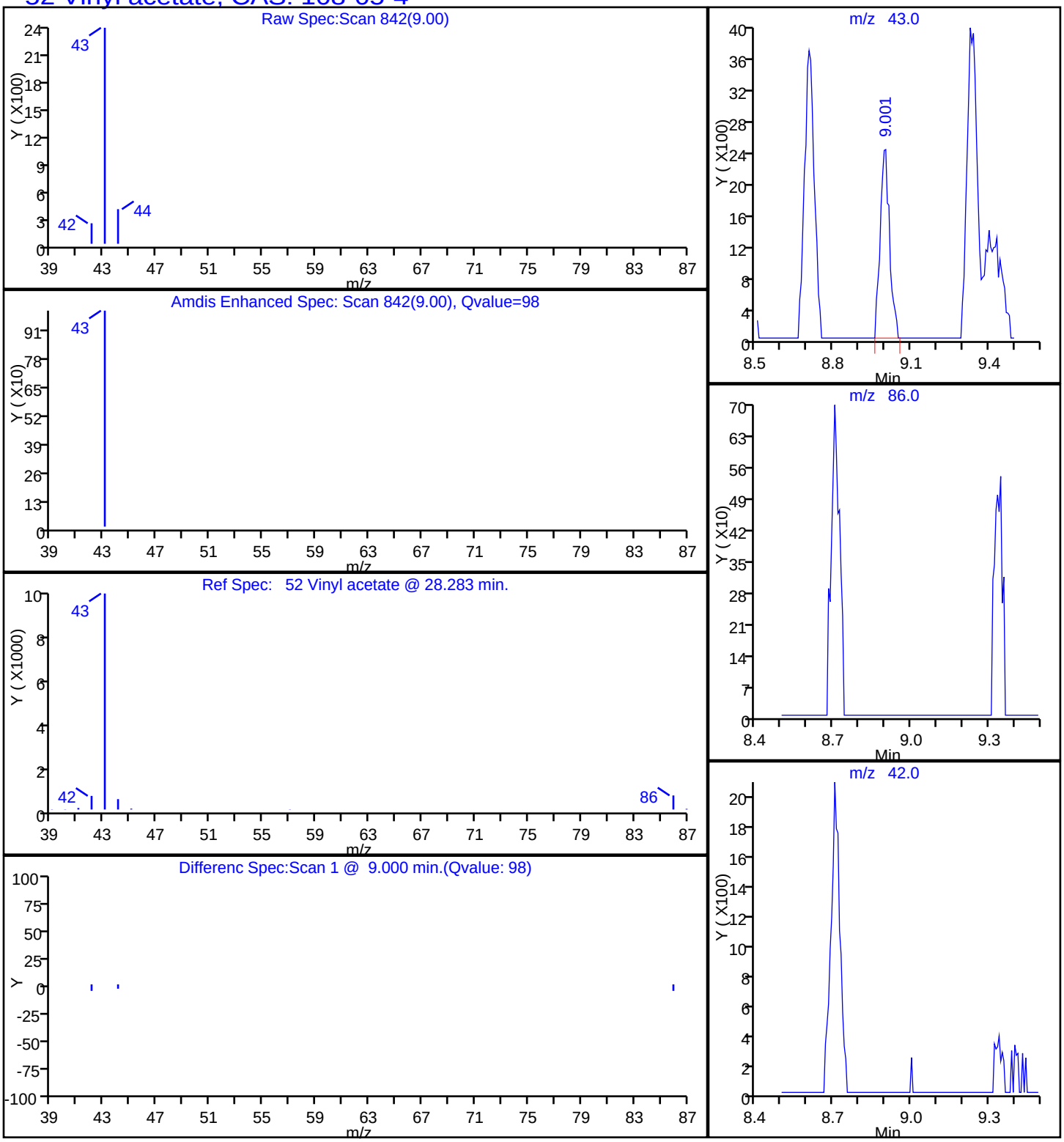
Purge Vol:	250.000 mL	Dil. Factor:	3.5700		
Method:	TO15_ATMS2N	Limit Group:	MSA - TO15 - ICAL		
Column:	RTX Volatiles (0.32 mm)	Detector	MS SCAN		

52 Vinyl acetate, CAS: 108-05-4

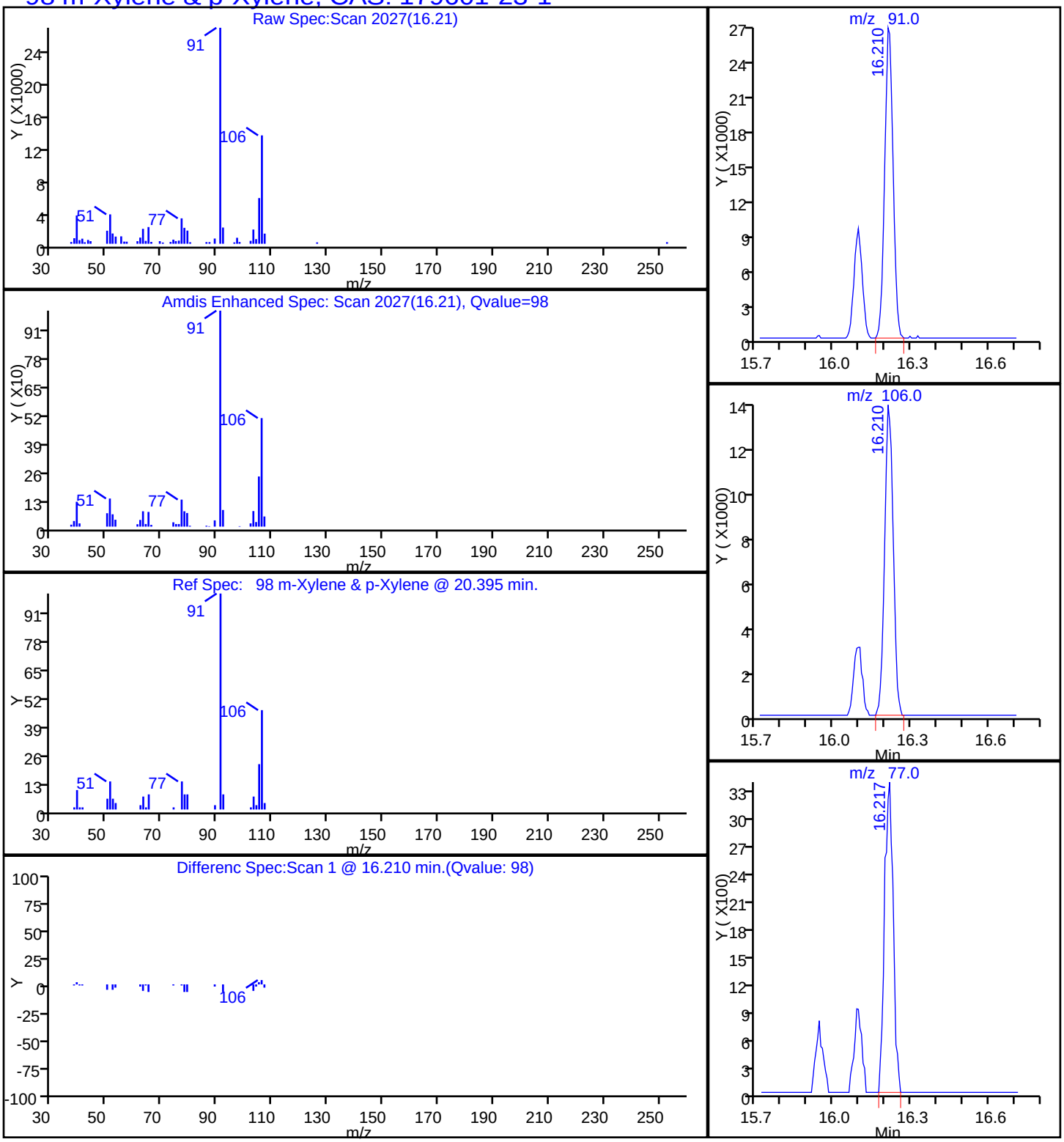


Report Date: 12-May-2015 10:12:27 Chrom Revision: 2.2 05-May-2015 11:39:10

TestAmerica Sacramento

Data File:	\\SACCHROM\ChromData\ATMS2\20150511-21702.b\15051123.D				
Injection Date:	12-May-2015 08:11:30	Instrument ID:	ATMS2		
Lims ID:	320-12924-A-2	Lab Sample ID:	320-12924-2		
Client ID:	J6038-SS5-050615-2				
Operator ID:	SRS	ALS Bottle#:	2	Worklist Smp#:	39
Purge Vol:	250.000 mL	Dil. Factor:	3.5700		
Method:	TO15_ATMS2N	Limit Group:	MSA - TO15 - ICAL		
Column:	RTX Volatiles (0.32 mm)	Detector	MS SCAN		

98 m-Xylene & p-Xylene, CAS: 179601-23-1

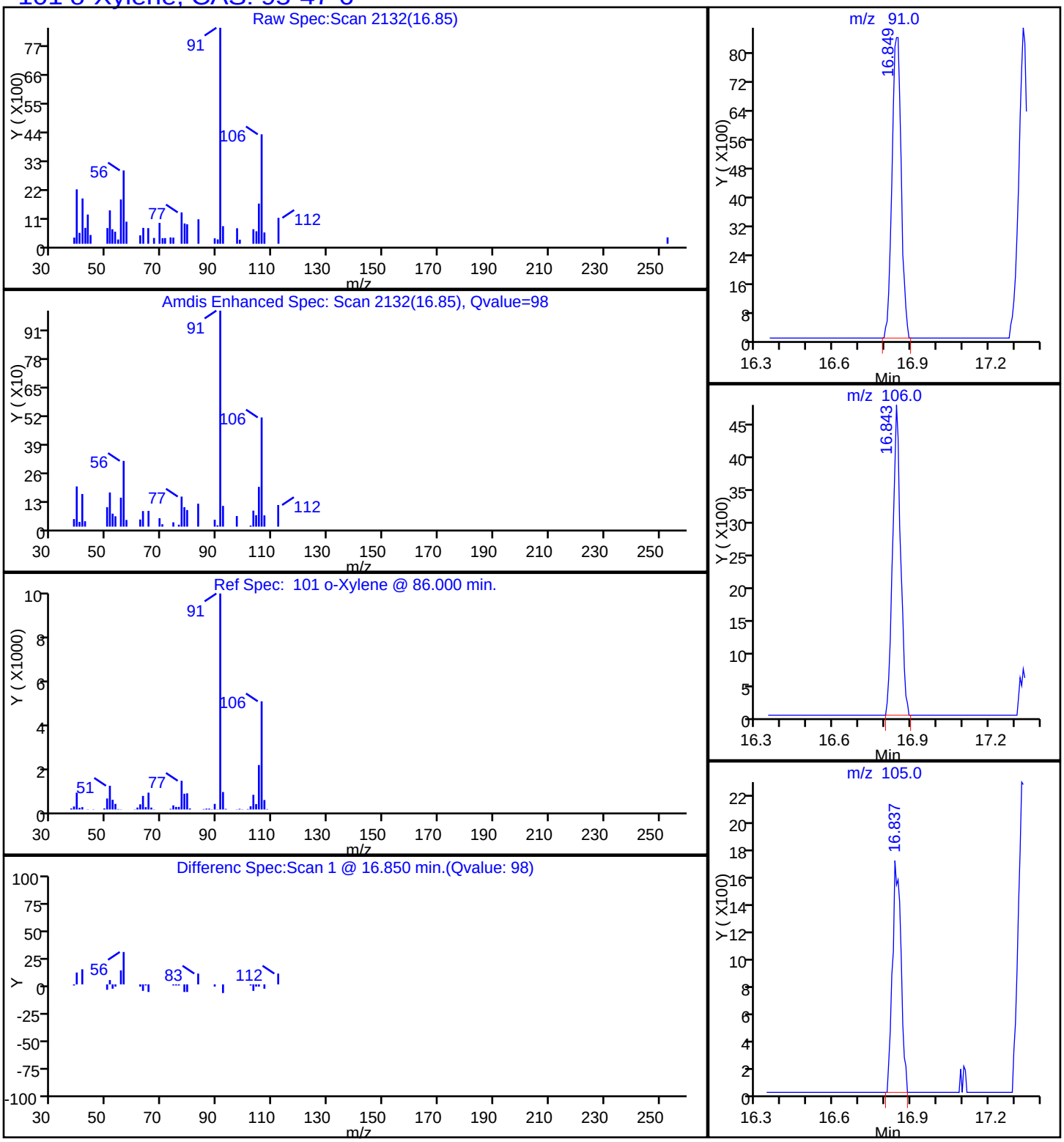


Report Date: 12-May-2015 10:12:27 Chrom Revision: 2.2 05-May-2015 11:39:10

TestAmerica Sacramento

Data File:	\\SACCHROM\ChromData\ATMS2\20150511-21702.b\15051123.D				
Injection Date:	12-May-2015 08:11:30	Instrument ID:	ATMS2		
Lims ID:	320-12924-A-2	Lab Sample ID:	320-12924-2		
Client ID:	J6038-SS5-050615-2				
Operator ID:	SRS	ALS Bottle#:	2	Worklist Smp#:	39
Purge Vol:	250.000 mL	Dil. Factor:	3.5700		
Method:	TO15_ATMS2N	Limit Group:	MSA - TO15 - ICAL		
Column:	RTX Volatiles (0.32 mm)	Detector	MS SCAN		

101 o-Xylene, CAS: 95-47-6



FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento | Job No.: 320-12924-1

SDG No.:

Client Sample ID: J6038-SS7-050615 | Lab Sample ID: 320-12924-3

Matrix: Air | Lab File ID: 15051124.D

Analysis Method: TO-15 | Date Collected: 05/06/2015 12:52

Sample wt/vol: 25(mL) | Date Analyzed: 05/12/2015 08:52

Soil Aliquot Vol: | Dilution Factor: 18

Soil Extract Vol.: | GC Column: RTX-Volatiles ID: 0.32(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 73563 | Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
67-64-1	Acetone	58.08	ND		90	3.2
71-43-2	Benzene	78.11	ND		7.2	1.4
100-44-7	Benzyl chloride	126.58	ND		14	2.9
75-27-4	Bromodichloromethane	163.83	ND		5.4	1.2
75-25-2	Bromoform	252.75	ND		7.2	1.3
74-83-9	Bromomethane	94.94	ND		14	6.0
78-93-3	2-Butanone (MEK)	72.11	ND		14	3.6
75-15-0	Carbon disulfide	76.14	ND		14	1.4
56-23-5	Carbon tetrachloride	153.81	ND		14	1.2
108-90-7	Chlorobenzene	112.56	ND		5.4	1.2
75-00-3	Chloroethane	64.52	ND		14	5.5
67-66-3	Chloroform	119.38	ND		5.4	1.7
74-87-3	Chloromethane	50.49	ND		14	3.5
124-48-1	Dibromochloromethane	208.29	ND		7.2	1.4
106-93-4	1,2-Dibromoethane (EDB)	187.87	ND		14	1.4
76-14-2	1,2-Dichloro-1,1,2,2-tetrafluoroethane	170.92	ND		7.2	2.8
95-50-1	1,2-Dichlorobenzene	147.00	ND		7.2	2.3
541-73-1	1,3-Dichlorobenzene	147.00	ND		7.2	2.0
106-46-7	1,4-Dichlorobenzene	147.00	ND		7.2	2.7
75-71-8	Dichlorodifluoromethane	120.91	ND		7.2	2.6
75-34-3	1,1-Dichloroethane	98.96	ND		5.4	1.3
107-06-2	1,2-Dichloroethane	98.96	ND		14	1.6
75-35-4	1,1-Dichloroethene	96.94	ND		14	2.3
156-59-2	cis-1,2-Dichloroethene	96.94	ND		7.2	1.6
156-60-5	trans-1,2-Dichloroethene	96.94	ND		7.2	1.8
78-87-5	1,2-Dichloropropane	112.99	ND		7.2	4.3
10061-01-5	cis-1,3-Dichloropropene	110.97	ND		7.2	1.9
10061-02-6	trans-1,3-Dichloropropene	110.97	ND		7.2	1.6
100-41-4	Ethylbenzene	106.17	ND		7.2	1.1
622-96-8	4-Ethyltoluene	120.20	ND		7.2	3.4
87-68-3	Hexachlorobutadiene	260.76	ND		36	7.8
591-78-6	2-Hexanone	100.20	ND		7.2	1.6
108-10-1	4-Methyl-2-pentanone (MIBK)	100.16	ND		7.2	2.4
75-09-2	Methylene Chloride	84.93	ND		7.2	1.3

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento Job No.: 320-12924-1

SDG No.:

Client Sample ID: J6038-SS7-050615 Lab Sample ID: 320-12924-3

Matrix: Air Lab File ID: 15051124.D

Analysis Method: TO-15 Date Collected: 05/06/2015 12:52

Sample wt/vol: 25(mL) Date Analyzed: 05/12/2015 08:52

Soil Aliquot Vol: Dilution Factor: 18

Soil Extract Vol.: GC Column: RTX-Volatiles ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 73563 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
100-42-5	Styrene	104.15	ND		7.2	1.1
79-34-5	1,1,2,2-Tetrachloroethane	167.85	ND		7.2	1.2
127-18-4	Tetrachloroethene	165.83	43		7.2	0.92
108-88-3	Toluene	92.14	ND		7.2	0.92
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	187.38	17		7.2	2.9
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		36	7.8
71-55-6	1,1,1-Trichloroethane	133.41	9.7		5.4	1.2
79-00-5	1,1,2-Trichloroethane	133.41	ND		7.2	1.2
79-01-6	Trichloroethene	131.39	380		7.2	1.9
75-69-4	Trichlorofluoromethane	137.37	ND		7.2	3.5
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		14	2.9
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		7.2	2.3
108-05-4	Vinyl acetate	86.09	ND		14	2.6
75-01-4	Vinyl chloride	62.50	ND		7.2	2.2
179601-23-1	m,p-Xylene	106.17	ND		14	1.8
95-47-6	o-Xylene	106.17	ND		7.2	0.97

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	93		70-130
17060-07-0	1,2-Dichloroethane-d4 (Surr)	115		70-130
2037-26-5	Toluene-d8 (Surr)	94		70-130

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento | Job No.: 320-12924-1

SDG No.:

Client Sample ID: J6038-SS7-050615 | Lab Sample ID: 320-12924-3

Matrix: Air | Lab File ID: 15051124.D

Analysis Method: TO-15 | Date Collected: 05/06/2015 12:52

Sample wt/vol: 25(mL) | Date Analyzed: 05/12/2015 08:52

Soil Aliquot Vol: | Dilution Factor: 18

Soil Extract Vol.: | GC Column: RTX-Volatiles ID: 0.32(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 73563 | Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
67-64-1	Acetone	58.08	ND		210	7.6
71-43-2	Benzene	78.11	ND		23	4.5
100-44-7	Benzyl chloride	126.58	ND		75	15
75-27-4	Bromodichloromethane	163.83	ND		36	8.0
75-25-2	Bromoform	252.75	ND		74	13
74-83-9	Bromomethane	94.94	ND		56	23
78-93-3	2-Butanone (MEK)	72.11	ND		42	11
75-15-0	Carbon disulfide	76.14	ND		45	4.4
56-23-5	Carbon tetrachloride	153.81	ND		91	7.2
108-90-7	Chlorobenzene	112.56	ND		25	5.3
75-00-3	Chloroethane	64.52	ND		38	15
67-66-3	Chloroform	119.38	ND		26	8.3
74-87-3	Chloromethane	50.49	ND		30	7.3
124-48-1	Dibromochloromethane	208.29	ND		61	12
106-93-4	1,2-Dibromoethane (EDB)	187.87	ND		110	10
76-14-2	1,2-Dichloro-1,1,2,2-tetrafluoroethane	170.92	ND		50	20
95-50-1	1,2-Dichlorobenzene	147.00	ND		43	14
541-73-1	1,3-Dichlorobenzene	147.00	ND		43	12
106-46-7	1,4-Dichlorobenzene	147.00	ND		43	16
75-71-8	Dichlorodifluoromethane	120.91	ND		36	13
75-34-3	1,1-Dichloroethane	98.96	ND		22	5.2
107-06-2	1,2-Dichloroethane	98.96	ND		58	6.4
75-35-4	1,1-Dichloroethene	96.94	ND		57	9.2
156-59-2	cis-1,2-Dichloroethene	96.94	ND		29	6.4
156-60-5	trans-1,2-Dichloroethene	96.94	ND		29	7.1
78-87-5	1,2-Dichloropropane	112.99	ND		33	20
10061-01-5	cis-1,3-Dichloropropene	110.97	ND		33	8.5
10061-02-6	trans-1,3-Dichloropropene	110.97	ND		33	7.2
100-41-4	Ethylbenzene	106.17	ND		31	4.9
622-96-8	4-Ethyltoluene	120.20	ND		35	17
87-68-3	Hexachlorobutadiene	260.76	ND		380	83
591-78-6	2-Hexanone	100.20	ND		30	6.4
108-10-1	4-Methyl-2-pentanone (MIBK)	100.16	ND		29	10
75-09-2	Methylene Chloride	84.93	ND		25	4.5

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento Job No.: 320-12924-1

SDG No.:

Client Sample ID: J6038-SS7-050615 Lab Sample ID: 320-12924-3

Matrix: Air Lab File ID: 15051124.D

Analysis Method: TO-15 Date Collected: 05/06/2015 12:52

Sample wt/vol: 25(mL) Date Analyzed: 05/12/2015 08:52

Soil Aliquot Vol: Dilution Factor: 18

Soil Extract Vol.: GC Column: RTX-Volatiles ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 73563 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
100-42-5	Styrene	104.15	ND		31	4.5
79-34-5	1,1,2,2-Tetrachloroethane	167.85	ND		49	8.5
127-18-4	Tetrachloroethene	165.83	290		49	6.2
108-88-3	Toluene	92.14	ND		27	3.5
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	187.38	130		55	22
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		270	58
71-55-6	1,1,1-Trichloroethane	133.41	53		29	6.4
79-00-5	1,1,2-Trichloroethane	133.41	ND		39	6.6
79-01-6	Trichloroethene	131.39	2100		39	10
75-69-4	Trichlorofluoromethane	137.37	ND		40	20
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		71	14
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		35	11
108-05-4	Vinyl acetate	86.09	ND		51	9.2
75-01-4	Vinyl chloride	62.50	ND		18	5.5
179601-23-1	m,p-Xylene	106.17	ND		63	7.8
95-47-6	o-Xylene	106.17	ND		31	4.2

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	93		70-130
17060-07-0	1,2-Dichloroethane-d4 (Surr)	115		70-130
2037-26-5	Toluene-d8 (Surr)	94		70-130

TestAmerica Sacramento
Target Compound Quantitation Report

Data File:	\\SACCHROM\ChromData\ATMS2\20150511-21702.b\15051124.D				
Lims ID:	320-12924-A-3	Lab Sample ID:	320-12924-3		
Client ID:	J6038-SS7-050615				
Sample Type:	Client				
Inject. Date:	12-May-2015 08:52:30	ALS Bottle#:	3	Worklist Smp#:	42
Purge Vol:	250.000 mL	Dil. Factor:	18.0000		
Sample Info:	320-12924-A-3				
Misc. Info.:	25 mL				
Operator ID:	SRS	Instrument ID:	ATMS2		
Method:	\\SACCHROM\ChromData\ATMS2\20150511-21702.b\TO15_ATMS2N.m				
Limit Group:	MSA - TO15 - ICAL				
Last Update:	12-May-2015 10:13:26	Calib Date:	18-Mar-2015 18:13:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\SACCHROM\ChromData\ATMS2\20150317-20264.b\15031726.D				
Column 1 :	RTX Volatiles (0.32 mm)		Det: MS SCAN		
Process Host:	XAWRK037				
First Level Reviewer: scottrs		Date:	12-May-2015 10:13:37		

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	130	10.285	10.285	0.000	97	43057	4.00	
* 2 1,4-Difluorobenzene	114	11.629	11.629	0.000	95	169467	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.943	15.949	-0.006	87	134956	4.00	
$ 4 1,2-Dichloroethane-d4 (Sur	65	11.052	11.051	0.001	97	64534	4.58	
$ 5 Toluene-d8 (Surr)	100	13.807	13.807	0.000	98	93498	3.74	
$ 6 4-Bromofluorobenzene (Surr	174	17.695	17.695	0.000	95	73500	3.72	
28 Trichlorofluoromethane	101	6.276	6.276	0.000	31	1756	0.0530	
43 1,1,2-Trichloro-1,2,2-trif	101	7.067	7.067	0.000	94	24030	0.9701	
48 Carbon disulfide	76	7.985	7.985	0.000	94	1081	0.0327	
65 1,1,1-Trichloroethane	97	10.729	10.729	0.000	99	13451	0.5404	
68 Benzene	78	11.283	11.283	0.000	1	881	0.0256	
76 Trichloroethene	130	12.153	12.153	0.000	96	382945	21.4	
93 Tetrachloroethene	166	14.896	14.896	0.000	96	53536	2.36	

Reagents:

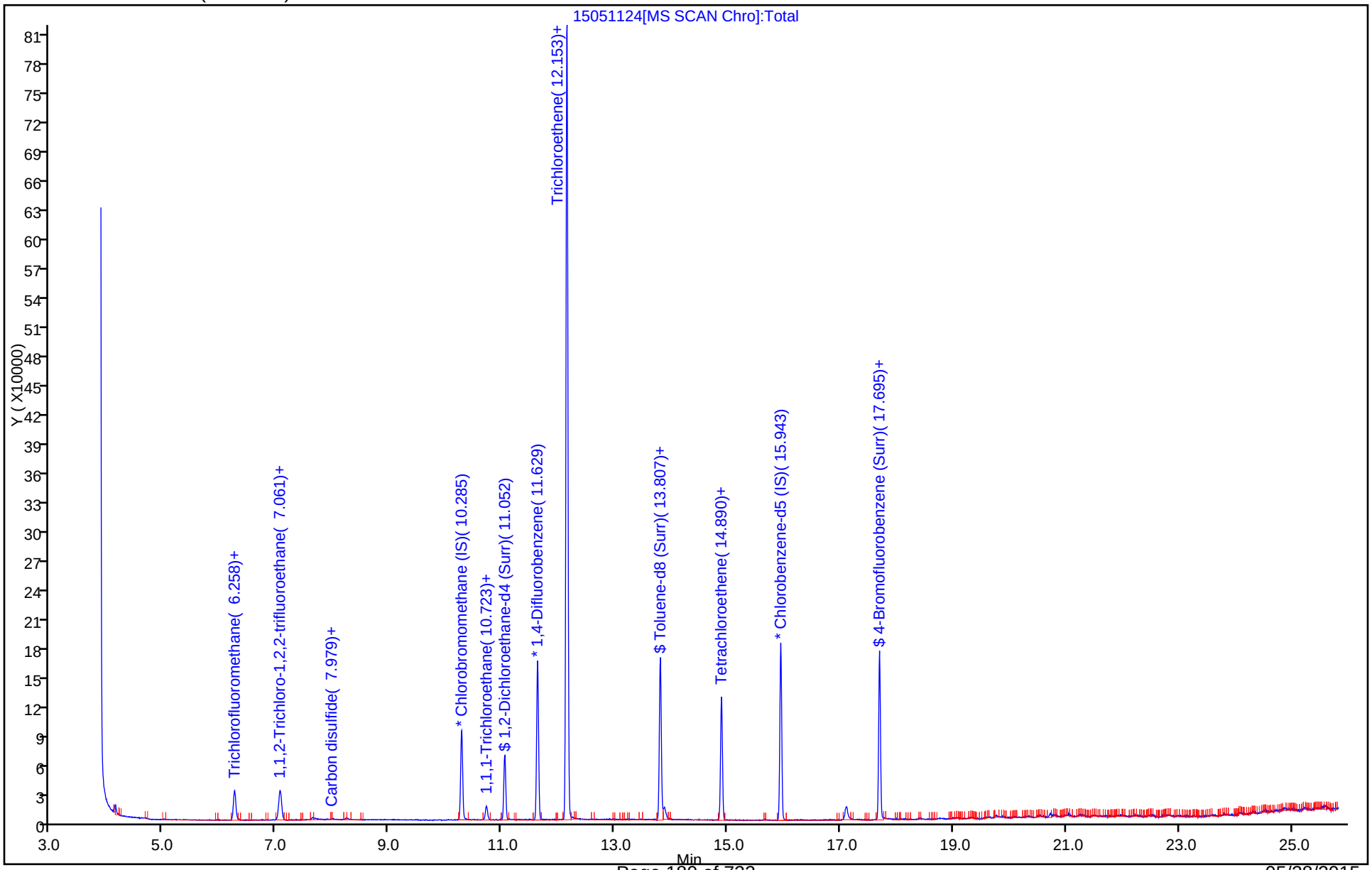
VASUISIM_00177 Amount Added: 50.00 Units: mL Run Reagent

Report Date: 12-May-2015 10:13:38 Chrom Revision: 2.2 05-May-2015 11:39:10

TestAmerica Sacramento

Data File:	\\SACCHROM\ChromData\ATMS2\20150511-21702.b\15051124.D				
Injection Date:	12-May-2015 08:52:30	Instrument ID:	ATMS2	Operator ID:	SRS
Lims ID:	320-12924-A-3	Lab Sample ID:	320-12924-3	Worklist Smp#:	42
Client ID:	J6038-SS7-050615				
Purge Vol:	250.000 mL	Dil. Factor:	18.0000	ALS Bottle#:	3
Method:	TO15_ATMS2N	Limit Group:	MSA - TO15 - ICAL		

Column: RTX Volatiles (0.32 mm)

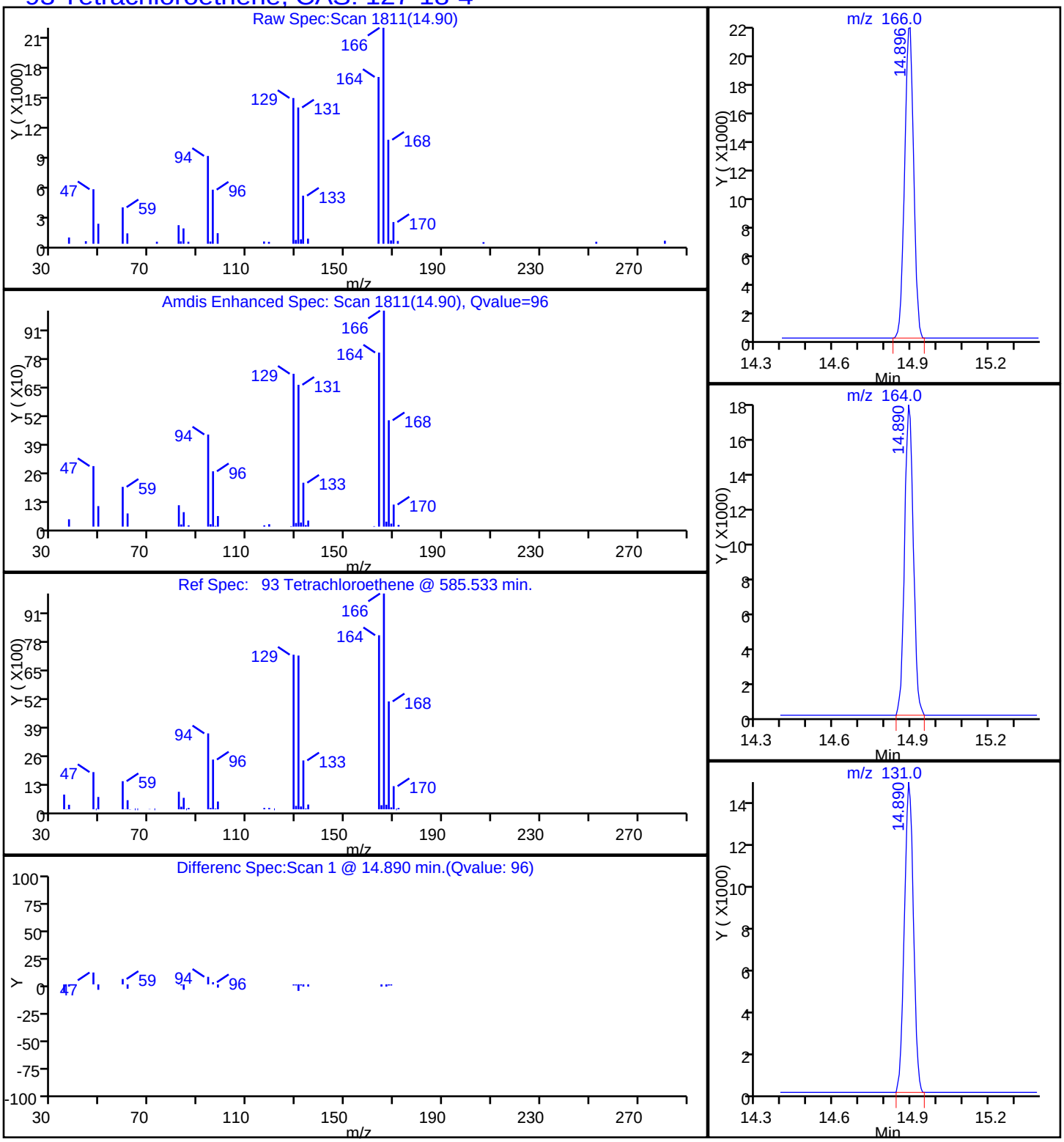


Report Date: 12-May-2015 10:13:38 Chrom Revision: 2.2 05-May-2015 11:39:10

TestAmerica Sacramento

Data File:	\\SACCHROM\ChromData\ATMS2\20150511-21702.b\15051124.D				
Injection Date:	12-May-2015 08:52:30	Instrument ID:	ATMS2		
Lims ID:	320-12924-A-3	Lab Sample ID:	320-12924-3		
Client ID:	J6038-SS7-050615				
Operator ID:	SRS	ALS Bottle#:	3	Worklist Smp#:	42
Purge Vol:	250.000 mL	Dil. Factor:	18.0000		
Method:	TO15_ATMS2N	Limit Group:	MSA - TO15 - ICAL		
Column:	RTX Volatiles (0.32 mm)	Detector	MS SCAN		

93 Tetrachloroethene, CAS: 127-18-4

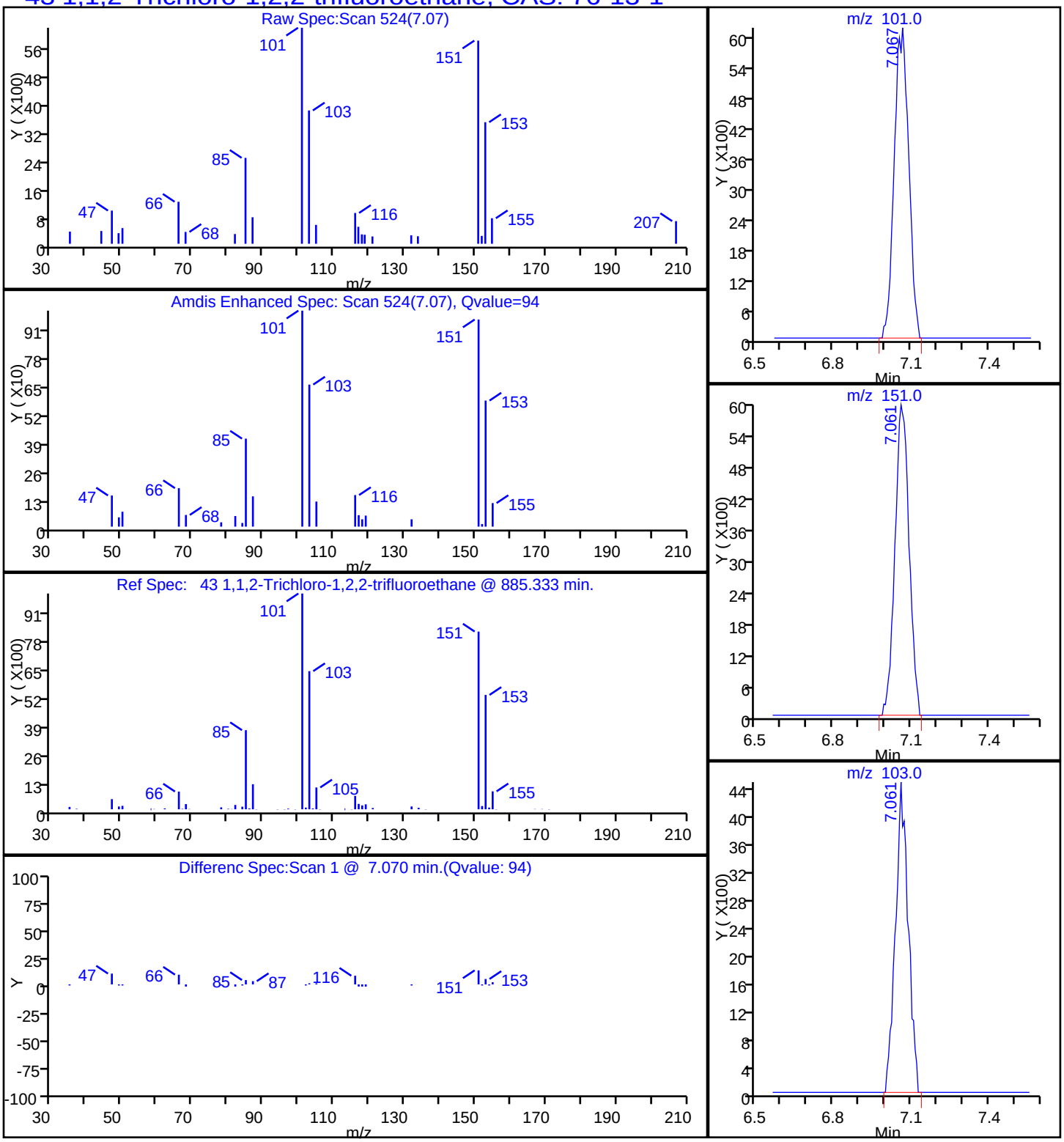


Report Date: 12-May-2015 10:13:38 Chrom Revision: 2.2 05-May-2015 11:39:10

TestAmerica Sacramento

Data File:	\\SACCHROM\ChromData\ATMS2\20150511-21702.b\15051124.D				
Injection Date:	12-May-2015 08:52:30	Instrument ID:	ATMS2		
Lims ID:	320-12924-A-3	Lab Sample ID:	320-12924-3		
Client ID:	J6038-SS7-050615				
Operator ID:	SRS	ALS Bottle#:	3	Worklist Smp#:	42
Purge Vol:	250.000 mL	Dil. Factor:	18.0000		
Method:	TO15_ATMS2N	Limit Group:	MSA - TO15 - ICAL		
Column:	RTX Volatiles (0.32 mm)	Detector	MS SCAN		

43 1,1,2-Trichloro-1,2,2-trifluoroethane, CAS: 76-13-1

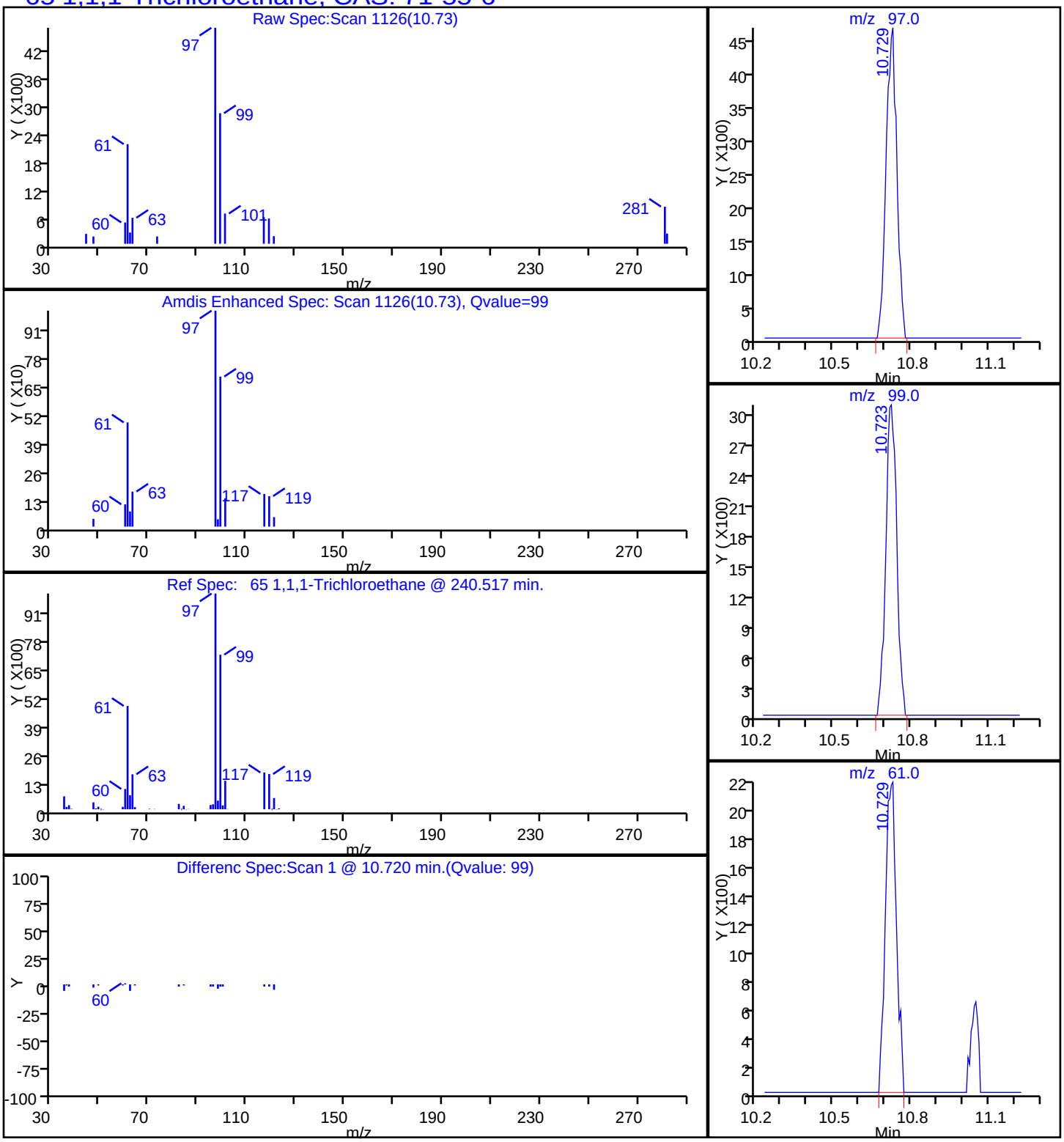


Report Date: 12-May-2015 10:13:38 Chrom Revision: 2.2 05-May-2015 11:39:10

TestAmerica Sacramento

Data File:	\\SACCHROM\ChromData\ATMS2\20150511-21702.b\15051124.D				
Injection Date:	12-May-2015 08:52:30	Instrument ID:	ATMS2		
Lims ID:	320-12924-A-3	Lab Sample ID:	320-12924-3		
Client ID:	J6038-SS7-050615				
Operator ID:	SRS	ALS Bottle#:	3	Worklist Smp#:	42
Purge Vol:	250.000 mL	Dil. Factor:	18.0000		
Method:	TO15_ATMS2N	Limit Group:	MSA - TO15 - ICAL		
Column:	RTX Volatiles (0.32 mm)	Detector	MS SCAN		

65 1,1,1-Trichloroethane, CAS: 71-55-6

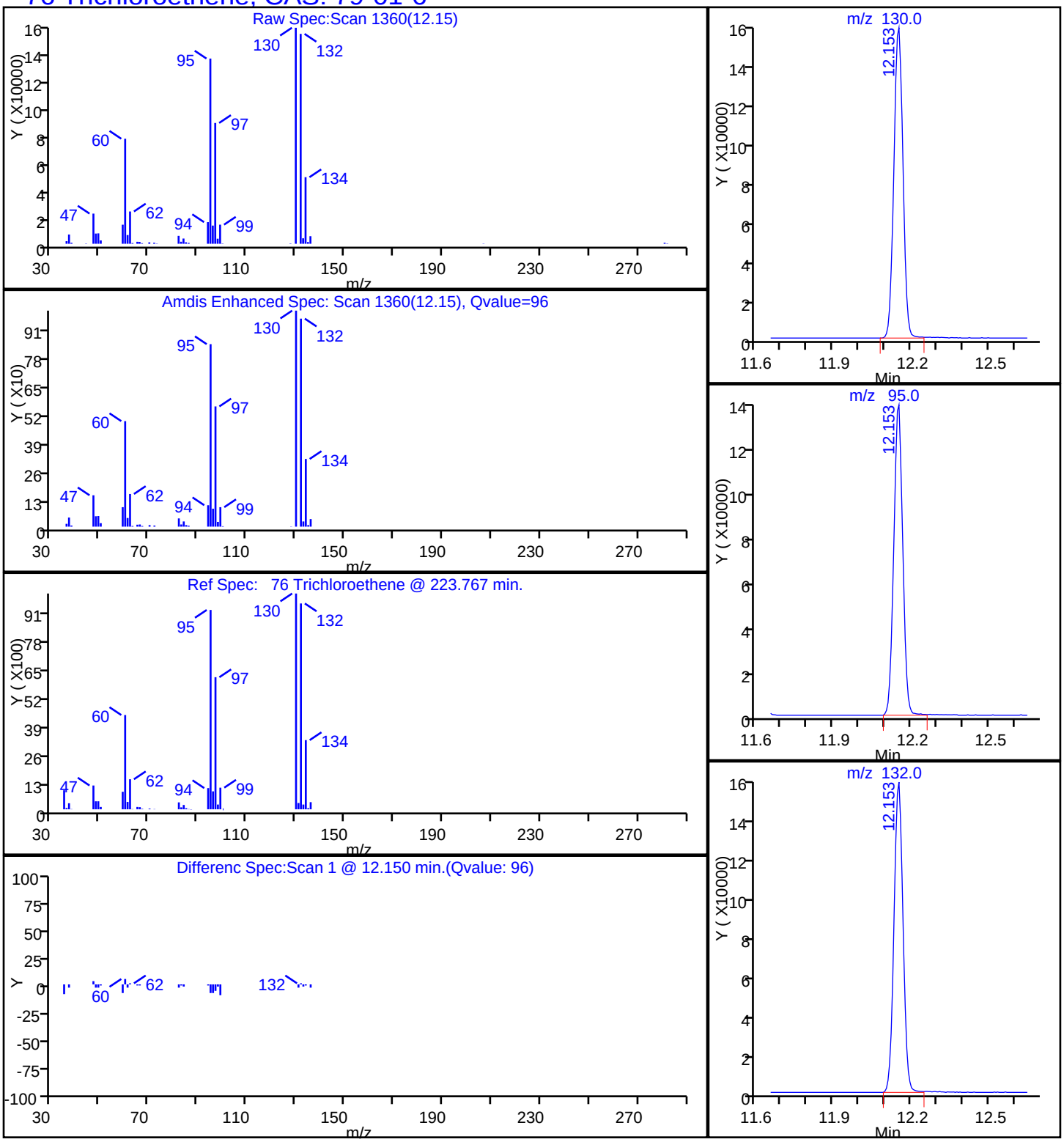


Report Date: 12-May-2015 10:13:38 Chrom Revision: 2.2 05-May-2015 11:39:10

TestAmerica Sacramento

Data File:	\\SACCHROM\ChromData\ATMS2\20150511-21702.b\15051124.D				
Injection Date:	12-May-2015 08:52:30	Instrument ID:	ATMS2		
Lims ID:	320-12924-A-3	Lab Sample ID:	320-12924-3		
Client ID:	J6038-SS7-050615				
Operator ID:	SRS	ALS Bottle#:	3	Worklist Smp#:	42
Purge Vol:	250.000 mL	Dil. Factor:	18.0000		
Method:	TO15_ATMS2N	Limit Group:	MSA - TO15 - ICAL		
Column:	RTX Volatiles (0.32 mm)	Detector	MS SCAN		

76 Trichloroethene, CAS: 79-01-6



FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento | Job No.: 320-12924-1

SDG No.:

Client Sample ID: J6038-SS11-050615 | Lab Sample ID: 320-12924-4

Matrix: Air | Lab File ID: 15051110.D

Analysis Method: TO-15 | Date Collected: 05/06/2015 13:50

Sample wt/vol: 437(mL) | Date Analyzed: 05/11/2015 20:47

Soil Aliquot Vol: | Dilution Factor: 1.01

Soil Extract Vol.: | GC Column: RTX-Volatiles ID: 0.32(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 73563 | Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
67-64-1	Acetone	58.08	2.4	J	5.1	0.18
71-43-2	Benzene	78.11	ND		0.40	0.080
100-44-7	Benzyl chloride	126.58	ND		0.81	0.16
75-27-4	Bromodichloromethane	163.83	ND		0.30	0.067
75-25-2	Bromoform	252.75	ND		0.40	0.071
74-83-9	Bromomethane	94.94	ND		0.81	0.34
78-93-3	2-Butanone (MEK)	72.11	ND		0.81	0.20
75-15-0	Carbon disulfide	76.14	ND		0.81	0.079
56-23-5	Carbon tetrachloride	153.81	0.091	J	0.81	0.065
108-90-7	Chlorobenzene	112.56	ND		0.30	0.065
75-00-3	Chloroethane	64.52	ND		0.81	0.31
67-66-3	Chloroform	119.38	ND		0.30	0.096
74-87-3	Chloromethane	50.49	ND		0.81	0.20
124-48-1	Dibromochloromethane	208.29	ND		0.40	0.080
106-93-4	1,2-Dibromoethane (EDB)	187.87	ND		0.81	0.076
76-14-2	1,2-Dichloro-1,1,2,2-tetrafluoroethane	170.92	ND		0.40	0.16
95-50-1	1,2-Dichlorobenzene	147.00	ND		0.40	0.13
541-73-1	1,3-Dichlorobenzene	147.00	ND		0.40	0.11
106-46-7	1,4-Dichlorobenzene	147.00	ND		0.40	0.15
75-71-8	Dichlorodifluoromethane	120.91	0.51		0.40	0.15
75-34-3	1,1-Dichloroethane	98.96	ND		0.30	0.073
107-06-2	1,2-Dichloroethane	98.96	ND		0.81	0.089
75-35-4	1,1-Dichloroethene	96.94	ND		0.81	0.13
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.40	0.090
156-60-5	trans-1,2-Dichloroethene	96.94	ND		0.40	0.10
78-87-5	1,2-Dichloropropane	112.99	ND		0.40	0.24
10061-01-5	cis-1,3-Dichloropropene	110.97	ND		0.40	0.11
10061-02-6	trans-1,3-Dichloropropene	110.97	ND		0.40	0.089
100-41-4	Ethylbenzene	106.17	ND		0.40	0.064
622-96-8	4-Ethyltoluene	120.20	ND		0.40	0.19
87-68-3	Hexachlorobutadiene	260.76	ND		2.0	0.44
591-78-6	2-Hexanone	100.20	ND		0.40	0.088
108-10-1	4-Methyl-2-pentanone (MIBK)	100.16	ND		0.40	0.14
75-09-2	Methylene Chloride	84.93	0.11	J	0.40	0.073

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento Job No.: 320-12924-1

SDG No.:

Client Sample ID: J6038-SS11-050615 Lab Sample ID: 320-12924-4

Matrix: Air Lab File ID: 15051110.D

Analysis Method: TO-15 Date Collected: 05/06/2015 13:50

Sample wt/vol: 437(mL) Date Analyzed: 05/11/2015 20:47

Soil Aliquot Vol: Dilution Factor: 1.01

Soil Extract Vol.: GC Column: RTX-Volatiles ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 73563 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
100-42-5	Styrene	104.15	ND		0.40	0.060
79-34-5	1,1,2,2-Tetrachloroethane	167.85	ND		0.40	0.070
127-18-4	Tetrachloroethene	165.83	1.1		0.40	0.052
108-88-3	Toluene	92.14	0.11	J	0.40	0.052
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	187.38	0.28	J	0.40	0.16
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		2.0	0.44
71-55-6	1,1,1-Trichloroethane	133.41	0.13	J	0.30	0.066
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.40	0.068
79-01-6	Trichloroethene	131.39	8.8		0.40	0.11
75-69-4	Trichlorofluoromethane	137.37	0.26	J	0.40	0.20
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		0.81	0.16
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		0.40	0.13
108-05-4	Vinyl acetate	86.09	ND		0.81	0.15
75-01-4	Vinyl chloride	62.50	ND		0.40	0.12
179601-23-1	m,p-Xylene	106.17	ND		0.81	0.10
95-47-6	o-Xylene	106.17	ND		0.40	0.055

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	98		70-130
17060-07-0	1,2-Dichloroethane-d4 (Surr)	113		70-130
2037-26-5	Toluene-d8 (Surr)	94		70-130

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento | Job No.: 320-12924-1

SDG No.:

Client Sample ID: J6038-SS11-050615 | Lab Sample ID: 320-12924-4

Matrix: Air | Lab File ID: 15051110.D

Analysis Method: TO-15 | Date Collected: 05/06/2015 13:50

Sample wt/vol: 437(mL) | Date Analyzed: 05/11/2015 20:47

Soil Aliquot Vol: | Dilution Factor: 1.01

Soil Extract Vol.: | GC Column: RTX-Volatiles ID: 0.32(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 73563 | Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
67-64-1	Acetone	58.08	5.8	J	12	0.43
71-43-2	Benzene	78.11	ND		1.3	0.25
100-44-7	Benzyl chloride	126.58	ND		4.2	0.85
75-27-4	Bromodichloromethane	163.83	ND		2.0	0.45
75-25-2	Bromoform	252.75	ND		4.2	0.73
74-83-9	Bromomethane	94.94	ND		3.1	1.3
78-93-3	2-Butanone (MEK)	72.11	ND		2.4	0.59
75-15-0	Carbon disulfide	76.14	ND		2.5	0.25
56-23-5	Carbon tetrachloride	153.81	0.57	J	5.1	0.41
108-90-7	Chlorobenzene	112.56	ND		1.4	0.30
75-00-3	Chloroethane	64.52	ND		2.1	0.82
67-66-3	Chloroform	119.38	ND		1.5	0.47
74-87-3	Chloromethane	50.49	ND		1.7	0.41
124-48-1	Dibromochloromethane	208.29	ND		3.4	0.68
106-93-4	1,2-Dibromoethane (EDB)	187.87	ND		6.2	0.58
76-14-2	1,2-Dichloro-1,1,2,2-tetrafluoroethane	170.92	ND		2.8	1.1
95-50-1	1,2-Dichlorobenzene	147.00	ND		2.4	0.79
541-73-1	1,3-Dichlorobenzene	147.00	ND		2.4	0.67
106-46-7	1,4-Dichlorobenzene	147.00	ND		2.4	0.90
75-71-8	Dichlorodifluoromethane	120.91	2.5		2.0	0.72
75-34-3	1,1-Dichloroethane	98.96	ND		1.2	0.29
107-06-2	1,2-Dichloroethane	98.96	ND		3.3	0.36
75-35-4	1,1-Dichloroethene	96.94	ND		3.2	0.52
156-59-2	cis-1,2-Dichloroethene	96.94	ND		1.6	0.36
156-60-5	trans-1,2-Dichloroethene	96.94	ND		1.6	0.40
78-87-5	1,2-Dichloropropane	112.99	ND		1.9	1.1
10061-01-5	cis-1,3-Dichloropropene	110.97	ND		1.8	0.48
10061-02-6	trans-1,3-Dichloropropene	110.97	ND		1.8	0.40
100-41-4	Ethylbenzene	106.17	ND		1.8	0.28
622-96-8	4-Ethyltoluene	120.20	ND		2.0	0.93
87-68-3	Hexachlorobutadiene	260.76	ND		22	4.7
591-78-6	2-Hexanone	100.20	ND		1.7	0.36
108-10-1	4-Methyl-2-pentanone (MIBK)	100.16	ND		1.7	0.56
75-09-2	Methylene Chloride	84.93	0.37	J	1.4	0.25

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento Job No.: 320-12924-1

SDG No.:

Client Sample ID: J6038-SS11-050615 Lab Sample ID: 320-12924-4

Matrix: Air Lab File ID: 15051110.D

Analysis Method: TO-15 Date Collected: 05/06/2015 13:50

Sample wt/vol: 437(mL) Date Analyzed: 05/11/2015 20:47

Soil Aliquot Vol: Dilution Factor: 1.01

Soil Extract Vol.: GC Column: RTX-Volatiles ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 73563 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
100-42-5	Styrene	104.15	ND		1.7	0.25
79-34-5	1,1,2,2-Tetrachloroethane	167.85	ND		2.8	0.48
127-18-4	Tetrachloroethene	165.83	7.3		2.7	0.35
108-88-3	Toluene	92.14	0.40	J	1.5	0.19
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	187.38	2.2	J	3.1	1.3
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		15	3.2
71-55-6	1,1,1-Trichloroethane	133.41	0.72	J	1.7	0.36
79-00-5	1,1,2-Trichloroethane	133.41	ND		2.2	0.37
79-01-6	Trichloroethene	131.39	47		2.2	0.57
75-69-4	Trichlorofluoromethane	137.37	1.4	J	2.3	1.1
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		4.0	0.80
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		2.0	0.62
108-05-4	Vinyl acetate	86.09	ND		2.8	0.52
75-01-4	Vinyl chloride	62.50	ND		1.0	0.31
179601-23-1	m,p-Xylene	106.17	ND		3.5	0.44
95-47-6	o-Xylene	106.17	ND		1.8	0.24

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	98		70-130
17060-07-0	1,2-Dichloroethane-d4 (Surr)	113		70-130
2037-26-5	Toluene-d8 (Surr)	94		70-130

TestAmerica Sacramento
Target Compound Quantitation Report

Data File:	\\SACCHROM\ChromData\ATMS2\20150511-21702.b\15051110.D				
Lims ID:	320-12924-A-4	Lab Sample ID:	320-12924-4		
Client ID:	J6038-SS11-050615				
Sample Type:	Client				
Inject. Date:	11-May-2015 20:47:30	ALS Bottle#:	4	Worklist Smp#:	31
Purge Vol:	250.000 mL	Dil. Factor:	1.0100		
Sample Info:	320-12924-A-4				
Misc. Info.:	442mL				
Operator ID:	SRS	Instrument ID:	ATMS2		
Method:	\\SACCHROM\ChromData\ATMS2\20150511-21702.b\TO15_ATMS2N.m				
Limit Group:	MSA - TO15 - ICAL				
Last Update:	12-May-2015 08:24:20	Calib Date:	18-Mar-2015 18:13:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\SACCHROM\ChromData\ATMS2\20150317-20264.b\15031726.D				
Column 1 :	RTX Volatiles (0.32 mm)		Det: MS SCAN		
Process Host:	XAWRK037				
First Level Reviewer: scottrs		Date:	12-May-2015 08:24:20		

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	130	10.285	10.285	0.000	98	48387	4.00	
* 2 1,4-Difluorobenzene	114	11.629	11.629	0.000	95	195086	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.943	15.949	-0.006	87	158805	4.00	
$ 4 1,2-Dichloroethane-d4 (Sur	65	11.045	11.051	-0.006	97	71792	4.53	
$ 5 Toluene-d8 (Surr)	100	13.807	13.807	0.000	98	108282	3.77	
$ 6 4-Bromofluorobenzene (Surr	174	17.695	17.695	0.000	96	90661	3.90	
15 Dichlorodifluoromethane	85	4.189	4.189	0.000	98	15002	0.5020	
28 Trichlorofluoromethane	101	6.276	6.276	0.000	97	9430	0.2531	
31 Acetone	43	6.963	6.939	0.024	97	42741	2.41	
43 1,1,2-Trichloro-1,2,2-trif	101	7.067	7.067	0.000	91	7802	0.2803	
47 Methylene Chloride	49	7.912	7.900	0.012	84	1872	0.1050	
61 Chloroform	83	10.090	10.102	-0.012	6	792	0.0306	
65 1,1,1-Trichloroethane	97	10.723	10.729	-0.006	91	3673	0.1313	
69 Carbon tetrachloride	117	11.118	11.112	0.006	88	2901	0.0898	
68 Benzene	78	11.289	11.283	0.006	10	2347	0.0593	
76 Trichloroethene	130	12.153	12.153	0.000	97	179387	8.70	
85 Toluene	91	13.917	13.923	-0.006	93	4796	0.1047	
93 Tetrachloroethene	166	14.896	14.896	0.000	95	28524	1.07	
97 Ethylbenzene	91	16.101	16.095	0.006	1	1085	0.0210	
117 1,3-Dichlorobenzene	146	19.392	19.392	0.000	77	735	0.0212	
120 1,4-Dichlorobenzene	146	19.538	19.532	0.006	82	829	0.0244	
122 1,2-Dichlorobenzene	146	20.086	20.092	-0.006	94	2667	0.0833	
126 1,2,4-Trichlorobenzene	180	22.908	22.902	0.006	43	1157	0.0582	
128 Hexachlorobutadiene	225	23.261	23.261	0.000	87	1471	0.0717	

Reagents:

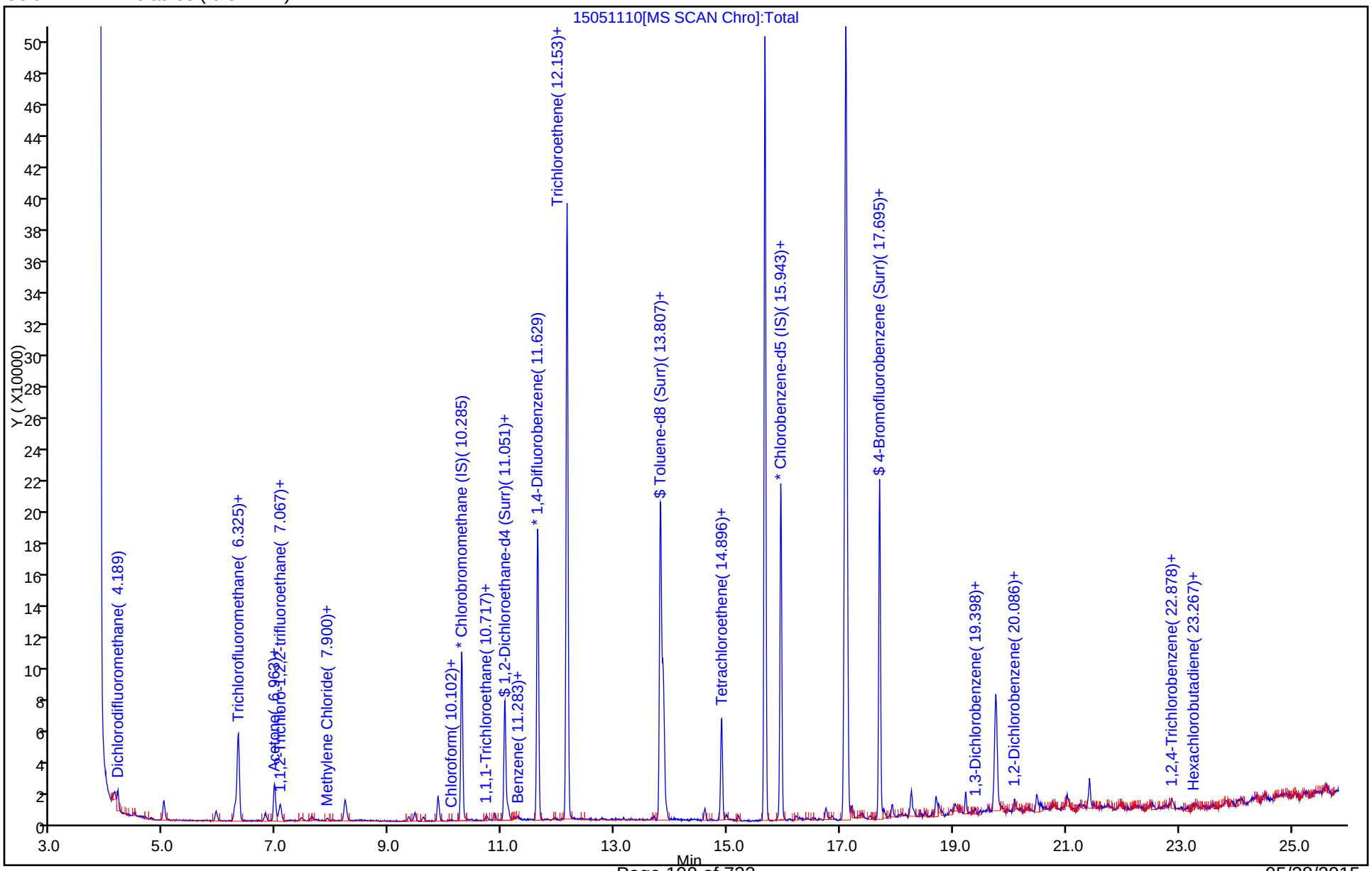
VASUISIM_00177 Amount Added: 50.00 Units: mL Run Reagent

Report Date: 12-May-2015 08:24:20 Chrom Revision: 2.2 05-May-2015 11:39:10

TestAmerica Sacramento

Data File:	\\SACCHROM\ChromData\ATMS2\20150511-21702.b\15051110.D				
Injection Date:	11-May-2015 20:47:30	Instrument ID:	ATMS2	Operator ID:	SRS
Lims ID:	320-12924-A-4	Lab Sample ID:	320-12924-4	Worklist Smp#:	31
Client ID:	J6038-SS11-050615				
Purge Vol:	250.000 mL	Dil. Factor:	1.0100	ALS Bottle#:	4
Method:	TO15_ATMS2N	Limit Group:	MSA - TO15 - ICAL		

Column: RTX Volatiles (0.32 mm)

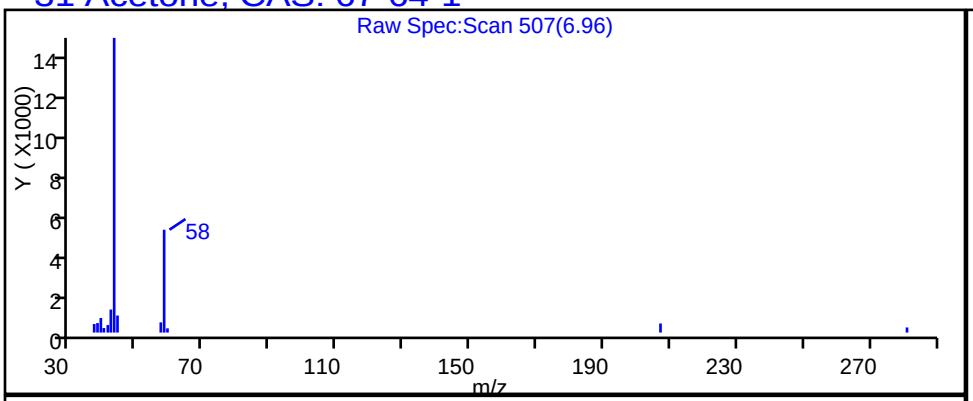


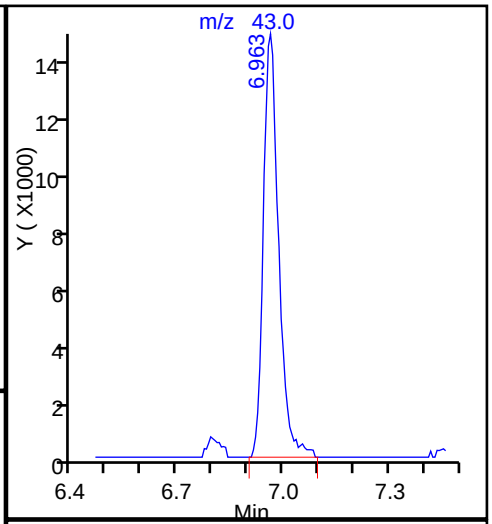
Report Date: 12-May-2015 08:24:20 Chrom Revision: 2.2 05-May-2015 11:39:10

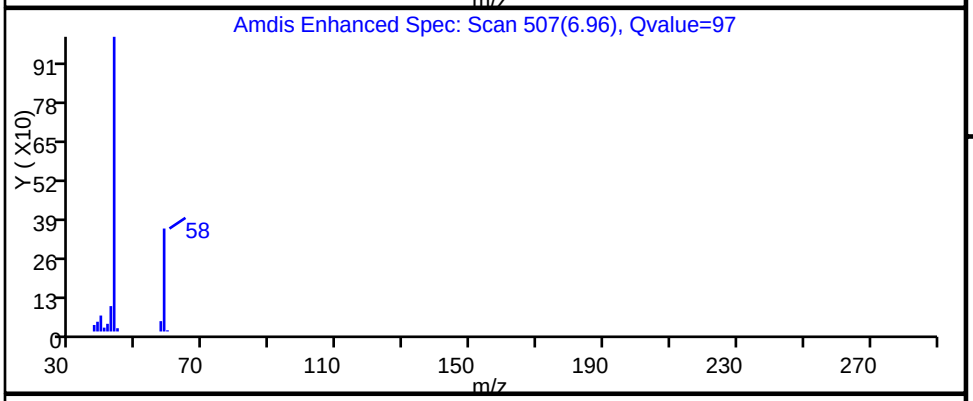
TestAmerica Sacramento

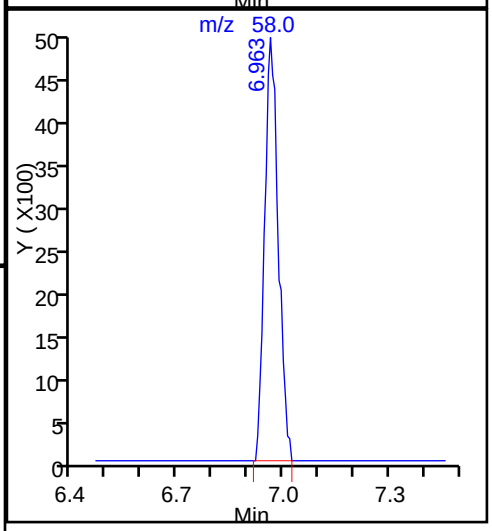
Data File:	\\SACCHROM\ChromData\ATMS2\20150511-21702.b\15051110.D				
Injection Date:	11-May-2015 20:47:30	Instrument ID:	ATMS2		
Lims ID:	320-12924-A-4	Lab Sample ID:	320-12924-4		
Client ID:	J6038-SS11-050615				
Operator ID:	SRS	ALS Bottle#:	4	Worklist Smp#:	31
Purge Vol:	250.000 mL	Dil. Factor:	1.0100		
Method:	TO15_ATMS2N	Limit Group:	MSA - TO15 - ICAL		
Column:	RTX Volatiles (0.32 mm)	Detector	MS SCAN		

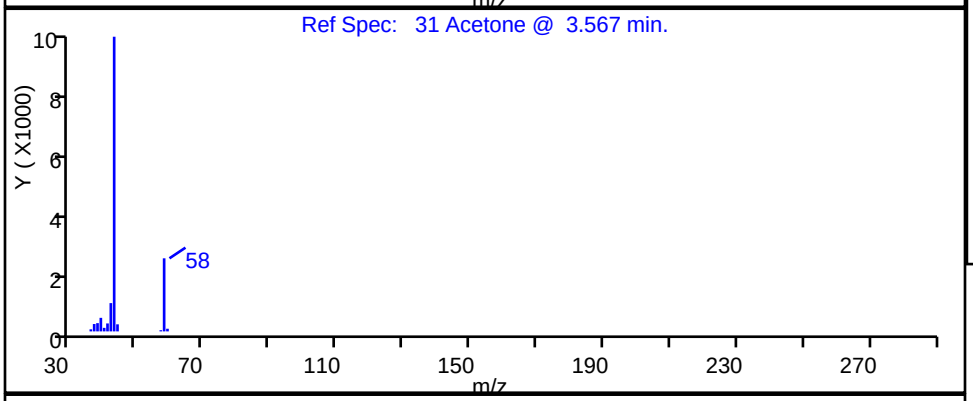
31 Acetone, CAS: 67-64-1

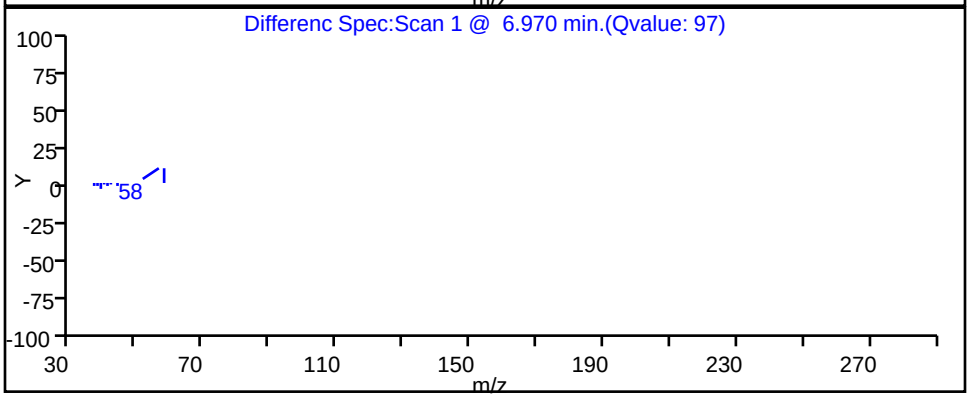










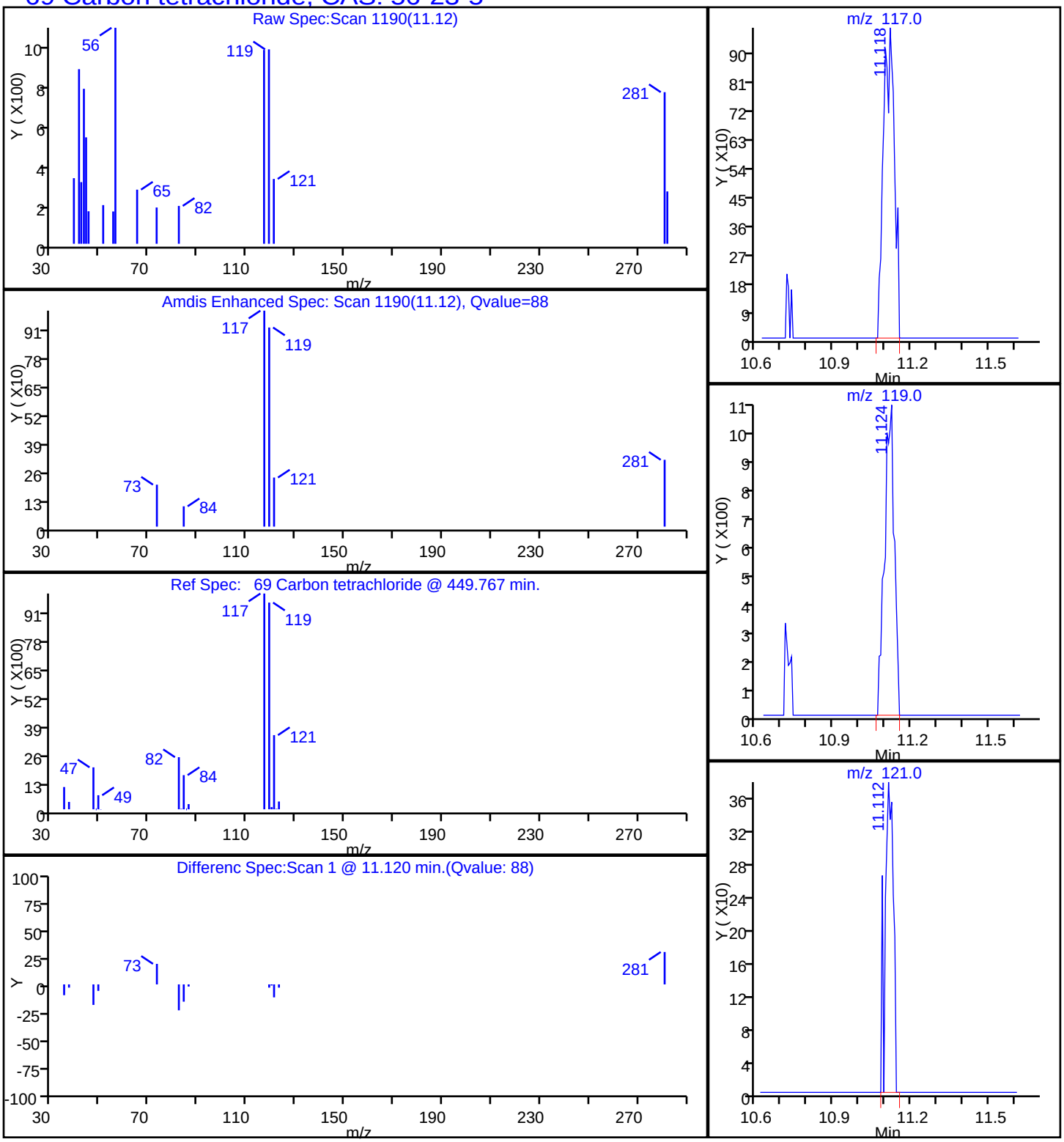


Report Date: 12-May-2015 08:24:20 Chrom Revision: 2.2 05-May-2015 11:39:10

TestAmerica Sacramento

Data File:	\\SACCHROM\ChromData\ATMS2\20150511-21702.b\15051110.D				
Injection Date:	11-May-2015 20:47:30	Instrument ID:	ATMS2		
Lims ID:	320-12924-A-4	Lab Sample ID:	320-12924-4		
Client ID:	J6038-SS11-050615				
Operator ID:	SRS	ALS Bottle#:	4	Worklist Smp#:	31
Purge Vol:	250.000 mL	Dil. Factor:	1.0100		
Method:	TO15_ATMS2N	Limit Group:	MSA - TO15 - ICAL		
Column:	RTX Volatiles (0.32 mm)	Detector	MS SCAN		

69 Carbon tetrachloride, CAS: 56-23-5

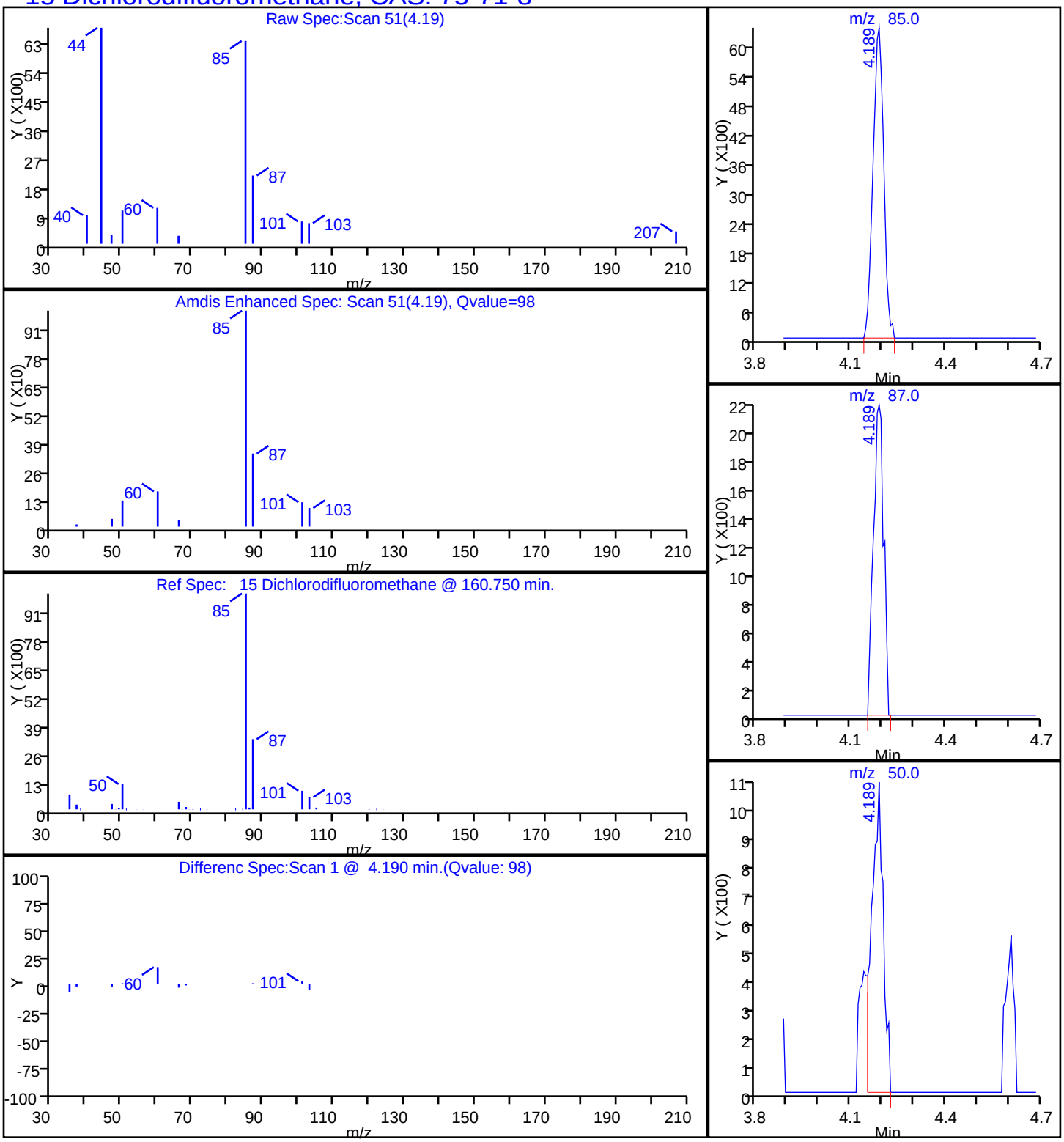


Report Date: 12-May-2015 08:24:20 Chrom Revision: 2.2 05-May-2015 11:39:10

TestAmerica Sacramento

Data File:	\\SACCHROM\ChromData\ATMS2\20150511-21702.b\15051110.D				
Injection Date:	11-May-2015 20:47:30	Instrument ID:	ATMS2		
Lims ID:	320-12924-A-4	Lab Sample ID:	320-12924-4		
Client ID:	J6038-SS11-050615				
Operator ID:	SRS	ALS Bottle#:	4	Worklist Smp#:	31
Purge Vol:	250.000 mL	Dil. Factor:	1.0100		
Method:	TO15_ATMS2N	Limit Group:	MSA - TO15 - ICAL		
Column:	RTX Volatiles (0.32 mm)	Detector	MS SCAN		

15 Dichlorodifluoromethane, CAS: 75-71-8

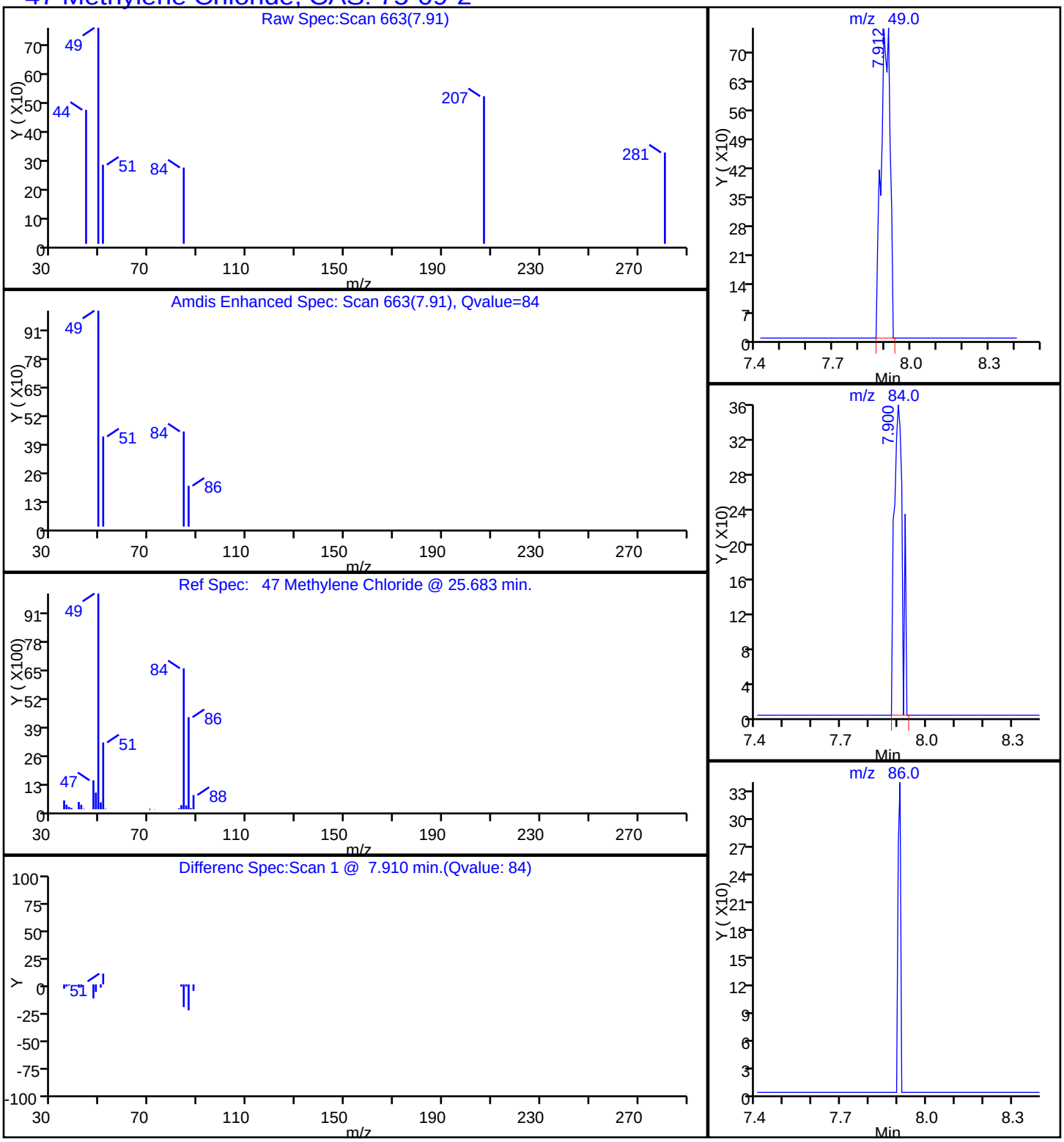


Report Date: 12-May-2015 08:24:20 Chrom Revision: 2.2 05-May-2015 11:39:10

TestAmerica Sacramento

Data File:	\\SACCHROM\ChromData\ATMS2\20150511-21702.b\15051110.D				
Injection Date:	11-May-2015 20:47:30	Instrument ID:	ATMS2		
Lims ID:	320-12924-A-4	Lab Sample ID:	320-12924-4		
Client ID:	J6038-SS11-050615				
Operator ID:	SRS	ALS Bottle#:	4	Worklist Smp#:	31
Purge Vol:	250.000 mL	Dil. Factor:	1.0100		
Method:	TO15_ATMS2N	Limit Group:	MSA - TO15 - ICAL		
Column:	RTX Volatiles (0.32 mm)	Detector	MS SCAN		

47 Methylene Chloride, CAS: 75-09-2

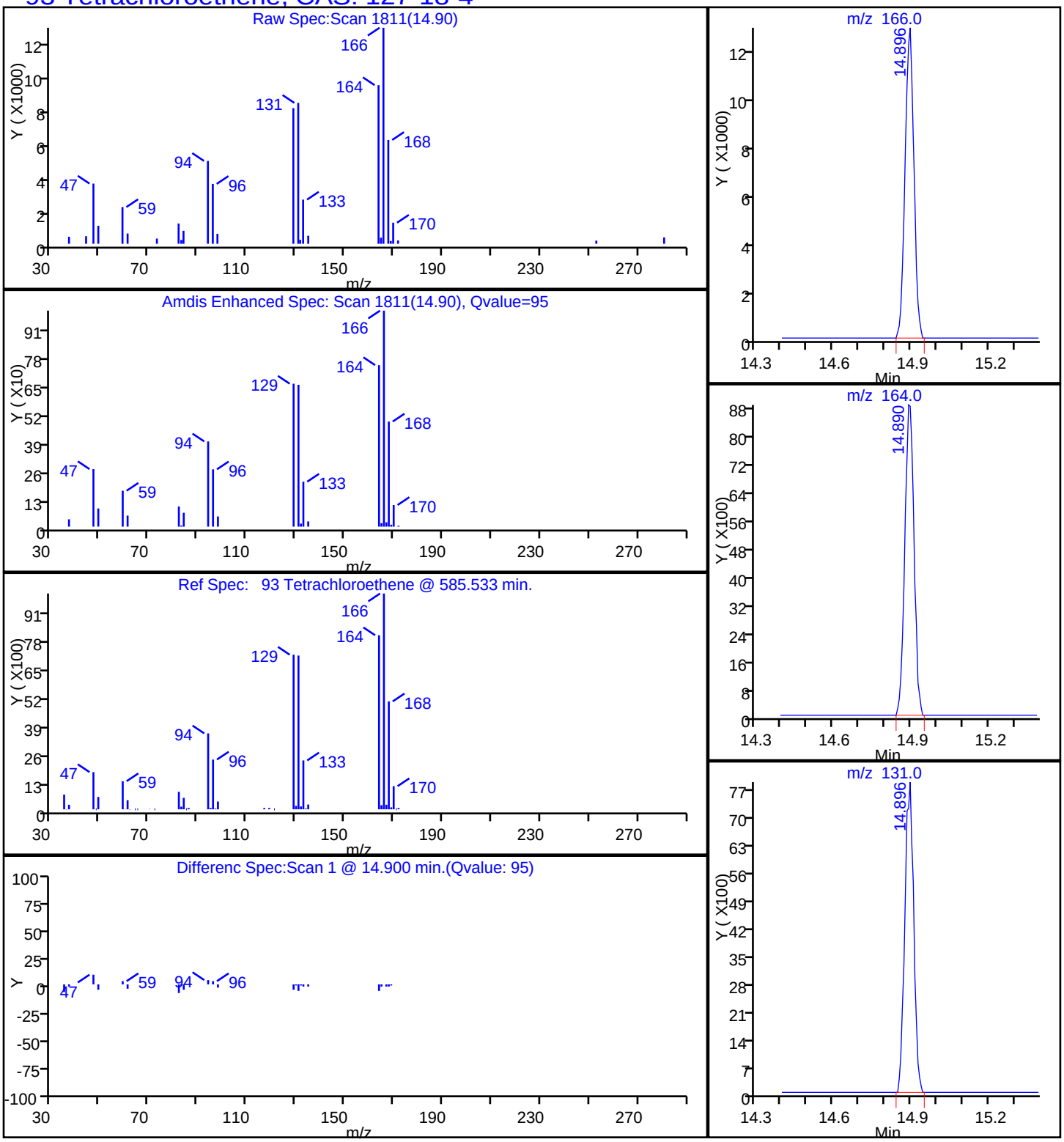


Report Date: 12-May-2015 08:24:21 Chrom Revision: 2.2 05-May-2015 11:39:10

TestAmerica Sacramento

Data File:	\\SACCHROM\ChromData\ATMS2\20150511-21702.b\15051110.D				
Injection Date:	11-May-2015 20:47:30	Instrument ID:	ATMS2		
Lims ID:	320-12924-A-4	Lab Sample ID:	320-12924-4		
Client ID:	J6038-SS11-050615				
Operator ID:	SRS	ALS Bottle#:	4	Worklist Smp#:	31
Purge Vol:	250.000 mL	Dil. Factor:	1.0100		
Method:	TO15_ATMS2N	Limit Group:	MSA - TO15 - ICAL		
Column:	RTX Volatiles (0.32 mm)	Detector	MS SCAN		

93 Tetrachloroethene, CAS: 127-18-4

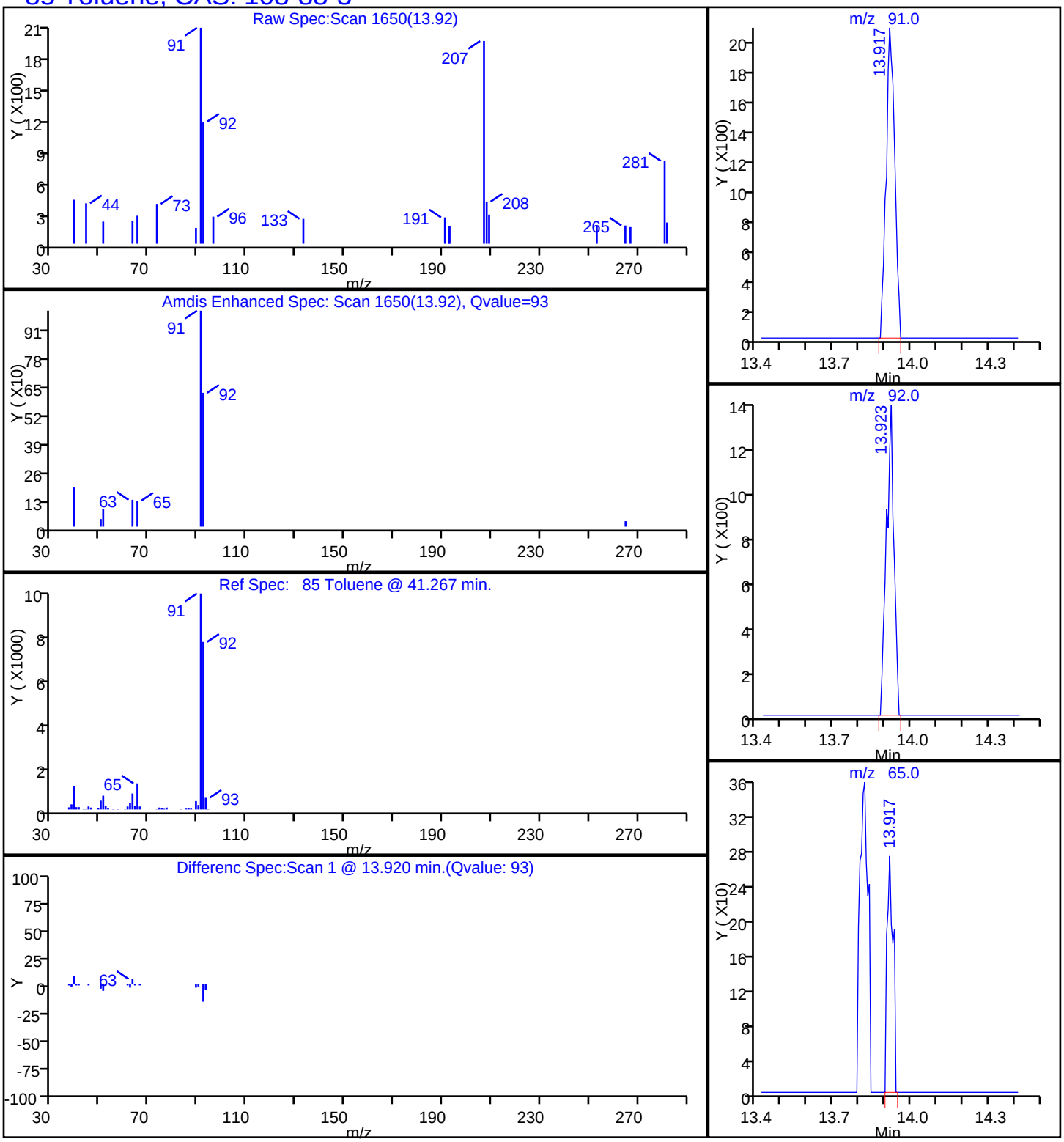


Report Date: 12-May-2015 08:24:21 Chrom Revision: 2.2 05-May-2015 11:39:10

TestAmerica Sacramento

Data File:	\\SACCHROM\ChromData\ATMS2\20150511-21702.b\15051110.D				
Injection Date:	11-May-2015 20:47:30	Instrument ID:	ATMS2		
Lims ID:	320-12924-A-4	Lab Sample ID:	320-12924-4		
Client ID:	J6038-SS11-050615				
Operator ID:	SRS	ALS Bottle#:	4	Worklist Smp#:	31
Purge Vol:	250.000 mL	Dil. Factor:	1.0100		
Method:	TO15_ATMS2N	Limit Group:	MSA - TO15 - ICAL		
Column:	RTX Volatiles (0.32 mm)	Detector	MS SCAN		

85 Toluene, CAS: 108-88-3

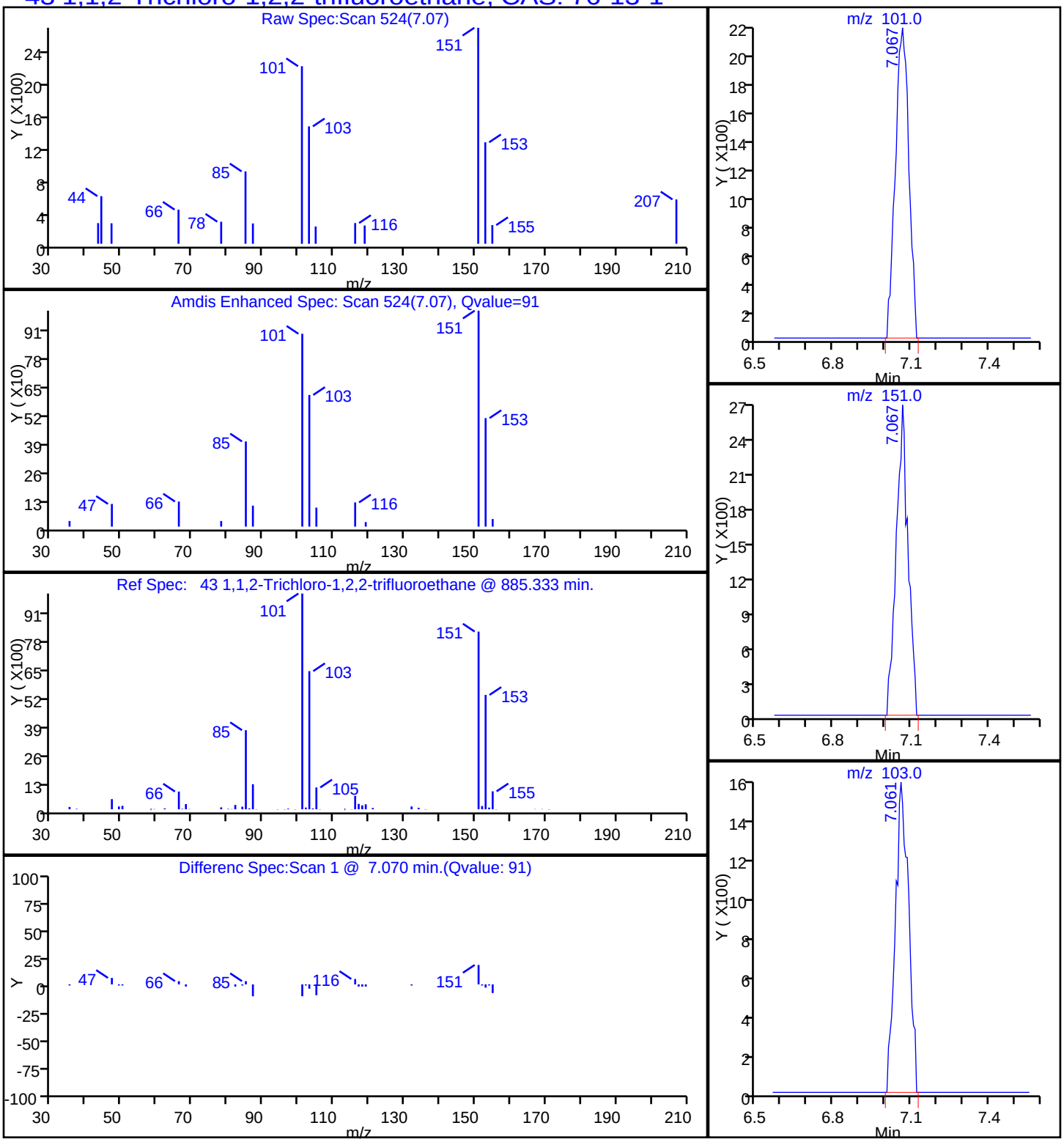


Report Date: 12-May-2015 08:24:20 Chrom Revision: 2.2 05-May-2015 11:39:10

TestAmerica Sacramento

Data File:	\\SACCHROM\ChromData\ATMS2\20150511-21702.b\15051110.D				
Injection Date:	11-May-2015 20:47:30	Instrument ID:	ATMS2		
Lims ID:	320-12924-A-4	Lab Sample ID:	320-12924-4		
Client ID:	J6038-SS11-050615				
Operator ID:	SRS	ALS Bottle#:	4	Worklist Smp#:	31
Purge Vol:	250.000 mL	Dil. Factor:	1.0100		
Method:	TO15_ATMS2N	Limit Group:	MSA - TO15 - ICAL		
Column:	RTX Volatiles (0.32 mm)	Detector	MS SCAN		

43 1,1,2-Trichloro-1,2,2-trifluoroethane, CAS: 76-13-1

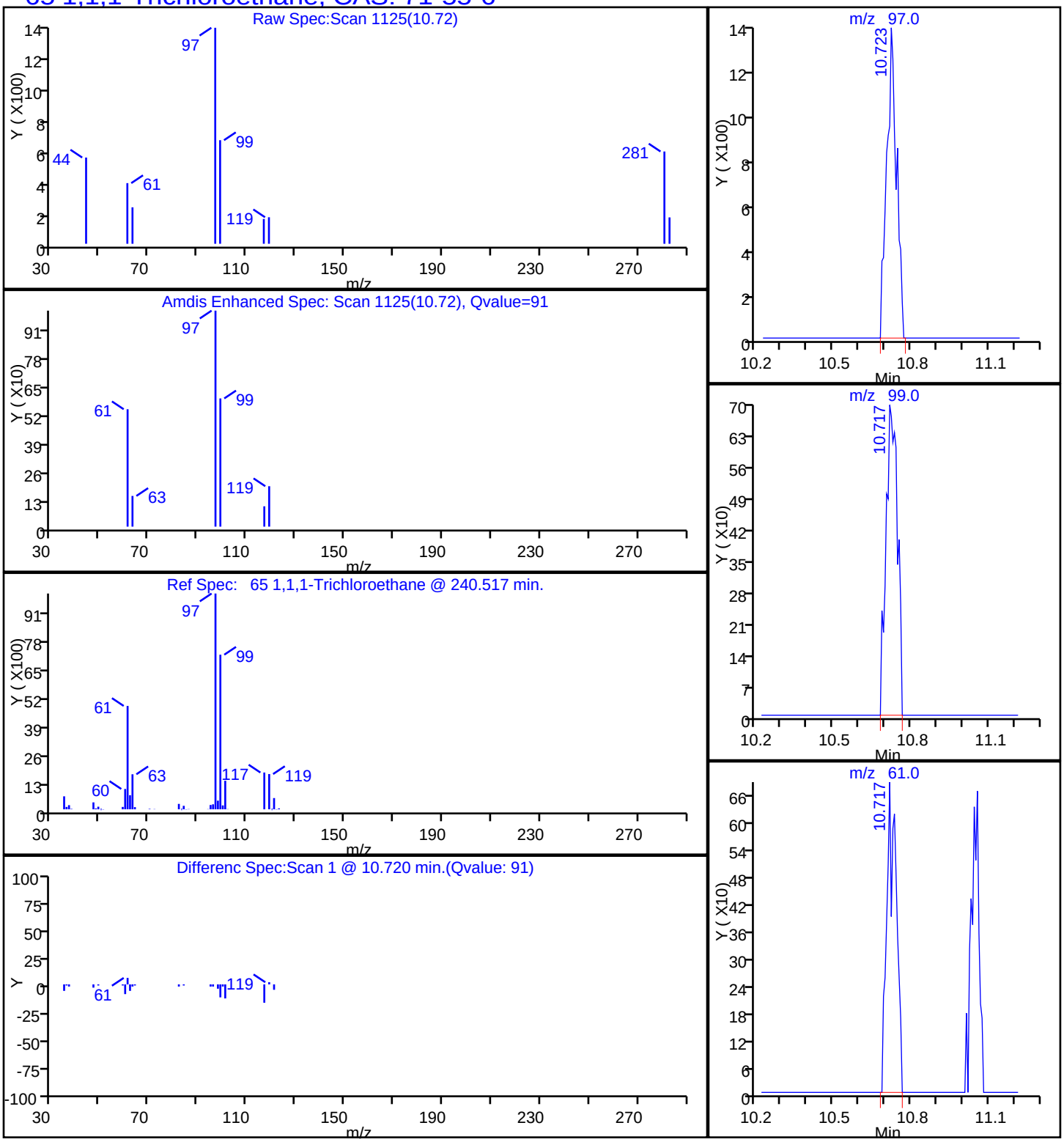


Report Date: 12-May-2015 08:24:20 Chrom Revision: 2.2 05-May-2015 11:39:10

TestAmerica Sacramento

Data File:	\\SACCHROM\ChromData\ATMS2\20150511-21702.b\15051110.D				
Injection Date:	11-May-2015 20:47:30	Instrument ID:	ATMS2		
Lims ID:	320-12924-A-4	Lab Sample ID:	320-12924-4		
Client ID:	J6038-SS11-050615				
Operator ID:	SRS	ALS Bottle#:	4	Worklist Smp#:	31
Purge Vol:	250.000 mL	Dil. Factor:	1.0100		
Method:	TO15_ATMS2N	Limit Group:	MSA - TO15 - ICAL		
Column:	RTX Volatiles (0.32 mm)	Detector	MS SCAN		

65 1,1,1-Trichloroethane, CAS: 71-55-6

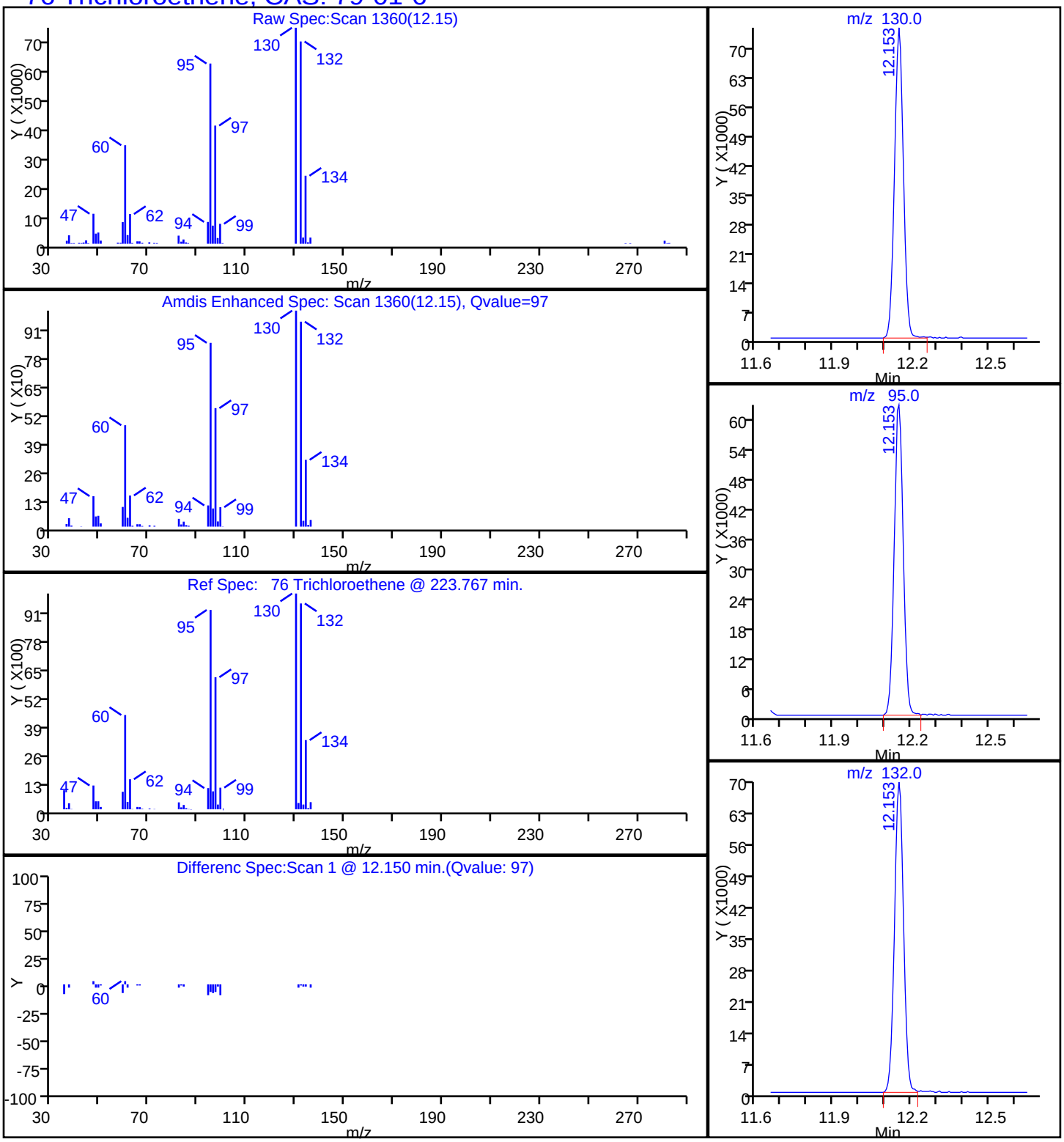


Report Date: 12-May-2015 08:24:21 Chrom Revision: 2.2 05-May-2015 11:39:10

TestAmerica Sacramento

Data File:	\\SACCHROM\ChromData\ATMS2\20150511-21702.b\15051110.D				
Injection Date:	11-May-2015 20:47:30	Instrument ID:	ATMS2		
Lims ID:	320-12924-A-4	Lab Sample ID:	320-12924-4		
Client ID:	J6038-SS11-050615				
Operator ID:	SRS	ALS Bottle#:	4	Worklist Smp#:	31
Purge Vol:	250.000 mL	Dil. Factor:	1.0100		
Method:	TO15_ATMS2N	Limit Group:	MSA - TO15 - ICAL		
Column:	RTX Volatiles (0.32 mm)	Detector	MS SCAN		

76 Trichloroethene, CAS: 79-01-6

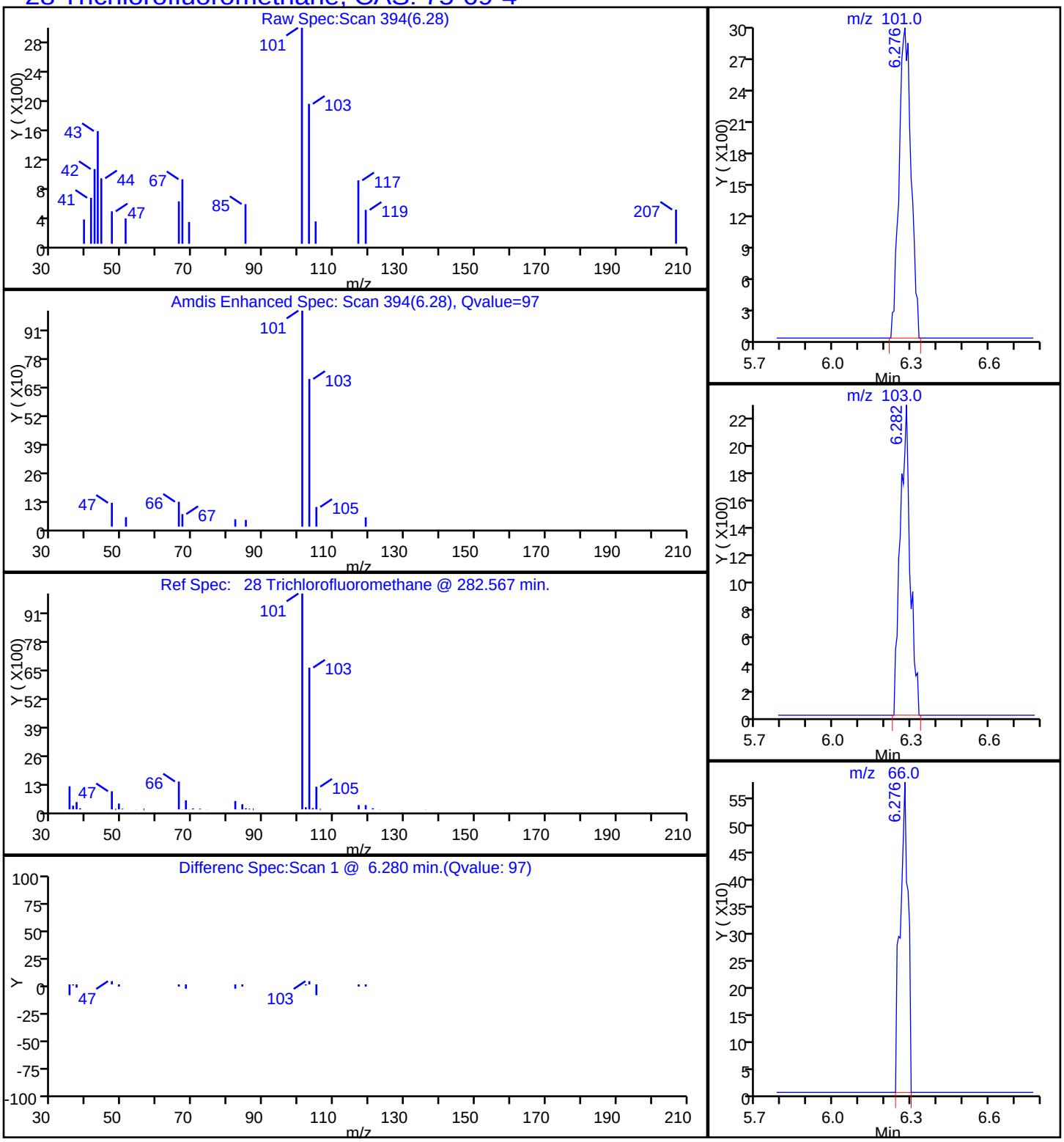


Report Date: 12-May-2015 08:24:20 Chrom Revision: 2.2 05-May-2015 11:39:10

TestAmerica Sacramento

Data File:	\\SACCHROM\ChromData\ATMS2\20150511-21702.b\15051110.D				
Injection Date:	11-May-2015 20:47:30	Instrument ID:	ATMS2		
Lims ID:	320-12924-A-4	Lab Sample ID:	320-12924-4		
Client ID:	J6038-SS11-050615				
Operator ID:	SRS	ALS Bottle#:	4	Worklist Smp#:	31
Purge Vol:	250.000 mL	Dil. Factor:	1.0100		
Method:	TO15_ATMS2N	Limit Group:	MSA - TO15 - ICAL		
Column:	RTX Volatiles (0.32 mm)	Detector	MS SCAN		

28 Trichlorofluoromethane, CAS: 75-69-4



FORM VI
AIR - GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Sacramento Job No.: 320-12924-1 Analy Batch No.: 68573

SDG No.:

Instrument ID: ATMS2 GC Column: RTX-Volatil ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/18/2015 02:43 Calibration End Date: 03/18/2015 09:04 Calibration ID: 12330

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 320-68573/5	15031704.D
Level 2	IC 320-68573/6	15031705.D
Level 3	IC 320-68573/7	15031706.D
Level 4	IC 320-68573/8	15031707.D
Level 5	IC 320-68573/9	15031708.D
Level 6	IC 320-68573/10	15031709.D
Level 7	IC 320-68573/11	15031710.D
Level 8	ICIS 320-68573/12	15031711.D
Level 9	IC 320-68573/13	15031712.D
Level 10	IC 320-68573/14	15031713.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10		B	M1	M2								
Propylene	+++++ 1.0436	1.2800 1.0703	1.2230 0.9754	1.1339 0.9132	1.0921 0.8662	Ave		1.0664				12.7		30.0			
Chlorodifluoromethane	+++++ 1.9547	2.1469 2.1068	2.1312 1.8738	2.0277 1.7438	2.0230 1.6517	Ave		1.9622				8.9		30.0			
Dichlorodifluoromethane	+++++ 2.5266	2.6007 2.6335	2.6808 2.3403	2.5858 2.2290	2.5862 2.0495	Ave		2.4703				8.7		30.0			
1,2-Dichloro-1,1,2,2-tetrafluoroethane	1.3598 1.3189	1.2054 1.1727	1.3053 0.9984	1.3371 1.1621	1.2790 0.8956	Ave		1.2034				12.7		30.0			
Chloromethane	+++++ 1.1077	1.2166 1.1855	1.2299 1.0476	1.1287 0.9769	1.1304 0.9284	Ave		1.1057				9.4		30.0			
n-Butane	+++++ 2.1820	2.4605 2.3509	2.3553 2.0989	2.2055 1.9577	2.2572 1.8540	Ave		2.1913				8.9		30.0			
Vinyl chloride	1.2279 1.1161	1.2197 1.1954	1.1987 1.0613	1.1336 0.9942	1.1450 0.9368	Ave		1.1229				8.8		30.0			
1,3-Butadiene	+++++ 1.0802	1.1548 1.1525	1.1962 1.0565	1.1208 0.9951	1.1102 0.9432	Ave		1.0899				7.4		30.0			
Bromomethane	1.0280 0.9338	1.0138 0.9841	0.9801 0.8930	0.9400 0.8322	0.9578 0.7864	Ave		0.9349				8.3		30.0			
Chloroethane	+++++ 0.5592	+++++ 0.5450	0.5565 0.5247	0.5616 0.5050	0.5715 0.4865	Ave		0.5388				5.6		30.0			
Vinyl bromide	1.2053 1.0960	1.1495 1.1149	1.1648 1.0305	1.1138 0.9727	1.1357 0.9227	Ave		1.0906				8.1		30.0			
Trichlorofluoromethane	3.5426 3.0852	3.3179 3.0446	3.4281 2.7886	3.2244 2.6401	3.2209 2.5020	Ave		3.0794				11.1		30.0			
n-Pentane	+++++ 2.6301	+++++ 2.5345	2.8256 2.3653	2.7190 2.3014	2.7104 2.2376	Ave		2.5405				8.5		30.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Sacramento Job No.: 320-12924-1 Analy Batch No.: 68573

SDG No.:

Instrument ID: ATMS2 GC Column: RTX-Volatil ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/18/2015 02:43 Calibration End Date: 03/18/2015 09:04 Calibration ID: 12330

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10		B	M1	M2								
2-Propanol	+++++ 2.7415	+++++ 2.2523	2.5596 2.2398	2.7036 2.3286	2.7073 2.3657	Ave		2.4873				8.6		30.0			
Ethyl ether	+++++ 0.5184	0.4308 0.4097	0.4489 0.4223	0.4977 0.4361	0.4979 0.4333	Ave		0.4550				8.6		30.0			
Acrolein	+++++ 0.3730	+++++ 0.2620	0.2889 0.2974	0.3331 0.3292	0.3307 0.3393	Ave		0.3192				10.9		30.0			
Acetone	+++++ 1.7258	+++++ 1.1784	1.5289 1.2433	1.6240 1.4054	1.5626 1.4507	Ave		1.4649				12.7		30.0			
1,1,2-Trichloro-1,2,2-trifluoroethane	2.7223 2.3469	2.5125 2.1453	2.4830 2.0382	2.4058 2.0106	2.3833 1.9645	Ave		2.3012				10.9		30.0			
Acetonitrile	+++++ 0.8900	+++++ 0.6113	0.7337 0.6838	0.8452 0.7861	0.7939 0.8280	Ave		0.7715				11.8		30.0			
1,1-Dichloroethene	2.2551 1.9280	2.0361 1.8578	2.1348 1.7419	1.9866 1.6847	2.0043 1.6340	Ave		1.9263				10.3		30.0			
tert-Butyl alcohol (TBA)	+++++ 2.4185	+++++ 1.9499	2.1677 1.9153	2.2428 1.9491	2.4604 1.9889	Ave		2.1366				10.3		30.0			
Allyl chloride	+++++ 1.7370	1.6979 1.5886	1.7176 1.5420	1.6802 1.5424	1.6961 1.5152	Ave		1.6352				5.3		30.0			
Methylene Chloride	+++++ 1.4989	1.6995 1.3972	1.6594 1.3319	1.5487 1.3179	1.5136 1.2983	Ave		1.4739				10.0		30.0			
Carbon disulfide	+++++ 3.1370	+++++ 3.2536	3.3399 2.9601	3.2062 2.7708	3.2554 2.6389	Ave		3.0702				8.3		30.0			
Acrylonitrile	+++++ 0.7792	0.5543 0.5459	0.5461 0.6356	0.6723 0.7140	0.6681 0.7473	Ave		0.6514				13.5		30.0			
Methyl-t-Butyl Ether (MTBE)	+++++ 2.8177	2.4874 2.1330	2.5616 2.2021	2.7683 2.3595	2.6401 2.3998	Ave		2.4855				9.5		30.0			
trans-1,2-Dichloroethene	1.7035 1.6566	1.6769 1.5398	1.6420 1.4932	1.6024 1.4996	1.6652 1.4651	Ave		1.5944				5.5		30.0			
C6 Range	8.9848 8.3782	8.9162 7.7011	8.5402 7.3868	8.3644 7.3766	8.2495 7.2334	Ave		8.1131				8.0		30.0			
Hexane	+++++ 1.6673	+++++ 1.5208	1.7473 1.4629	1.7013 1.4586	1.6346 1.4294	Ave		1.5778				7.9		30.0			
Vinyl acetate	+++++ 3.0835	+++++ 2.0636	+++++ 2.3331	2.7367 2.7106	2.6621 2.8353	Ave		2.6322				12.7		30.0			
1,1-Dichloroethane	2.2111 2.0210	2.1271 1.8425	2.0680 1.7802	2.0302 1.7594	2.0625 1.7257	Ave		1.9628				8.7		30.0			
2-Butanone (MEK)	+++++ 0.4628	0.3446 0.3351	0.3535 0.3477	0.4267 0.3808	0.4288 0.3960	Ave		0.3862				11.7		30.0			
Ethyl acetate	+++++ 2.5791	2.1525 1.8583	2.1682 1.9214	2.3761 2.1322	2.3096 2.2608	Ave		2.1954				10.1		30.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Sacramento Job No.: 320-12924-1 Analy Batch No.: 68573

SDG No.:

Instrument ID: ATMS2 GC Column: RTX-Volatil ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/18/2015 02:43 Calibration End Date: 03/18/2015 09:04 Calibration ID: 12330

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10		B	M1	M2								
cis-1,2-Dichloroethene	1.1847 1.1170	1.1164 1.0462	1.1110 0.9994	1.1060 0.9886	1.0983 0.9611	Ave		1.0729				6.6		30.0			
Chloroform	2.3851 2.2200	2.3138 2.0065	2.3242 1.9241	2.2638 1.9107	2.2111 1.8612	Ave		2.1420				9.1		30.0			
Tetrahydrofuran	+++++ 1.5005	+++++ 1.0919	1.3405 1.1553	1.4524 1.2787	1.3904 1.3157	Ave		1.3157				10.6		30.0			
1,1,1-Trichloroethane	2.6381 2.4018	2.4756 2.1651	2.4826 2.0739	2.4428 2.0580	2.3873 1.9986	Ave		2.3124				9.5		30.0			
Cyclohexane	+++++ 0.3882	0.4078 0.3562	0.4091 0.3484	0.4019 0.3635	0.3988 0.3721	Ave		0.3829				6.1		30.0			
2,2,4-Trimethylpentane	+++++ 1.5580	1.6151 1.4183	1.5604 1.4155	1.5939 1.5144	1.5557 1.5692	Ave		1.5334				4.7		30.0			
n-Butanol	+++++ 1.0874	+++++ 0.8329	+++++ 0.8079	+++++ 0.8608	1.0585 0.9268	Ave		0.9290				12.8		30.0			
Carbon tetrachloride	0.7436 0.6653	0.7057 0.6080	0.6813 0.5988	0.6746 0.6282	0.6769 0.6428	Ave		0.6625				6.7		30.0			
1,2-Dichloroethane	0.3677 0.3751	0.3842 0.3422	0.3766 0.3432	0.3714 0.3632	0.3735 0.3717	Ave		0.3669				3.8		30.0			
Benzene	0.9179 0.8129	0.8447 0.7322	0.8470 0.7359	0.8182 0.7822	0.8217 0.8050	Ave		0.8118				6.7		30.0			
n-Heptane	+++++ 0.6676	+++++ 0.6096	0.6623 0.6112	0.6712 0.6609	0.6726 0.6885	Ave		0.6555				4.4		30.0			
Trichloroethene	0.4885 0.4206	0.4487 0.3962	0.4370 0.3850	0.4233 0.3990	0.4184 0.4098	Ave		0.4226				7.1		30.0			
1,2-Dichloropropane	0.1292 0.1283	0.1236 0.1134	0.1178 0.1144	0.1211 0.1199	0.1274 0.1220	Ave		0.1217				4.6		30.0			
Methyl methacrylate	+++++ 0.2490	+++++ 0.1779	+++++ 0.1956	0.2216 0.2289	0.2192 0.2532	Ave		0.2208				12.3		30.0			
Bromodichloromethane	0.3978 0.3990	0.3735 0.3571	0.3960 0.3607	0.3986 0.3806	0.3892 0.3901	Ave		0.3842				4.1		30.0			
1,4-Dioxane	+++++ 0.1834	+++++ 0.1263	0.1190 0.1353	0.1551 0.1490	0.1637 0.1609	Ave		0.1491				14.3		30.0			
Dibromomethane	0.3811 0.3733	0.3762 0.3417	0.3792 0.3439	0.3763 0.3623	0.3611 0.3757	Ave		0.3671				3.9		30.0			
4-Methyl-2-pentanone (MIBK)	0.5808 0.7666	0.5850 0.5229	0.6111 0.5666	0.6452 0.6351	0.7237 0.6900	Ave		0.6327				12.0		30.0			
cis-1,3-Dichloropropene	0.4607 0.4475	0.4491 0.4027	0.4495 0.4127	0.4495 0.4388	0.4340 0.4530	Ave		0.4397				4.2		30.0			
n-Octane	+++++ 1.0667	1.2207 0.9724	1.1689 0.9935	1.1594 1.0645	1.0778 1.1215	Ave		1.0939				7.5		30.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Sacramento Job No.: 320-12924-1 Analy Batch No.: 68573

SDG No.:

Instrument ID: ATMS2 GC Column: RTX-Volatil ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/18/2015 02:43 Calibration End Date: 03/18/2015 09:04 Calibration ID: 12330

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10		B	M1	M2								
Toluene Range	4.5377 2.4509	3.6341 2.0019	3.3480 2.1720	2.8223 2.3701	2.4286 2.4536	Ave		2.8219				28.0		30.0			
Toluene	0.9666 0.9685	0.9478 0.7995	0.9651 0.8713	0.9931 0.9514	0.9426 0.9857	Ave		0.9392				6.3		30.0			
trans-1,3-Dichloropropene	0.4912 0.5046	0.4755 0.4393	0.4817 0.4785	0.4996 0.5128	0.4909 0.5369	Ave		0.4911				5.3		30.0			
NMOC as Hexane	1643.6 738.15	1279.8 577.80	1152.4 574.10	903.66 606.80	738.34 592.28	Ave		8.1131				8.0		30.0			
Total VOC as Hexane (C6-C12)	1643.6 738.15	1279.8 577.80	1152.4 574.10	903.66 606.80	738.34 592.28	Ave		8.1131				8.0		30.0			
Total VOCs as Tetrachloroethene (PCE)	468.60 210.36	370.33 163.91	328.38 170.10	259.83 187.49	211.55 194.41	Ave		3.6576				7.4		30.0			
1,1,2-Trichloroethane	0.3946 0.3794	0.4088 0.3347	0.4082 0.3454	0.3977 0.3594	0.3699 0.3751	Ave		0.3773				6.8		30.0			
2-Hexanone	+++++ 0.4075	+++++ 0.2613	0.2897 0.2993	0.3511 0.3353	0.3738 0.3723	Ave		0.3363				14.7		30.0			
Tetrachloroethene	0.7864 0.6451	0.7307 0.5886	0.7279 0.5940	0.7149 0.6195	0.6625 0.6482	Ave		0.6718				9.8		30.0			
PCE Range	4.0298 3.6210	3.9400 3.2789	3.8866 3.2892	3.8968 3.4431	3.6049 3.5857	Ave		3.6576				7.4		30.0			
Dibromochloromethane	0.8229 0.7785	0.7875 0.7054	0.7862 0.7329	0.7954 0.7718	0.7598 0.8077	Ave		0.7748				4.5		30.0			
1,2-Dibromoethane (EDB)	0.6278 0.6077	0.6340 0.5280	0.6358 0.5639	0.6334 0.5947	0.5877 0.6240	Ave		0.6037				5.9		30.0			
n-Nonane	1.0340 1.1231	1.0819 0.9965	1.1116 1.0362	1.1544 1.1215	1.0892 1.1869	Ave		1.0935				5.4		30.0			
Chlorobenzene	1.0777 0.9565	1.0462 0.8424	0.9812 0.8772	1.0293 0.9260	0.9390 0.9738	Ave		0.9649				7.6		30.0			
Ethylbenzene	1.2740 1.3965	1.2622 1.0267	1.3213 1.1885	1.4419 1.3496	1.2849 1.4588	Ave		1.3004				9.8		30.0			
m,p-Xylene	0.9800 1.0760	0.9792 0.7693	0.9817 0.8939	1.1050 1.0337	0.9670 1.1342	Ave		0.9920				10.7		30.0			
o-Xylene	1.0045 1.1054	1.0152 0.7863	1.0148 0.9045	1.1260 1.0429	0.9984 1.1402	Ave		1.0138				10.5		30.0			
Styrene	0.7235 0.9130	0.7077 0.6108	0.7139 0.7350	0.8128 0.8539	0.8006 0.9432	Ave		0.7814				13.1		30.0			
Bromoform	0.8326 0.8286	0.8138 0.7333	0.8012 0.7738	0.8444 0.8251	0.7834 0.8696	Ave		0.8106				4.8		30.0			
Isopropylbenzene	0.3651 0.4598	0.3909 0.3301	0.3948 0.3769	0.4413 0.4349	0.4138 0.4765	Ave		0.4084				11.1		30.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Sacramento Job No.: 320-12924-1 Analy Batch No.: 68573

SDG No.:

Instrument ID: ATMS2 GC Column: RTX-Volatil ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/18/2015 02:43 Calibration End Date: 03/18/2015 09:04 Calibration ID: 12330

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10		B	M1	M2								
1,1,2,2-Tetrachloroethane	0.7197 0.7833	0.7129 0.5676	0.7229 0.6479	0.8003 0.7346	0.7128 0.8004	Ave		0.7202				9.9		30.0			
1,2,3-Trichloropropane	+++++ 0.2480	0.2326 0.1739	0.2166 0.1960	0.2440 0.2244	0.2218 0.2456	Ave		0.2225				11.1		30.0			
n-Decane	+++++ 0.9862	+++++ 0.7010	+++++ 0.8562	0.7896 0.9803	0.8323 1.0732	Ave		0.8884				14.6		30.0			
N-Propylbenzene	1.5224 1.8637	1.5680 1.3176	1.6174 1.5003	1.7850 1.7539	1.6649 1.9385	Ave		1.6532				11.3		30.0			
4-Ethyltoluene	0.4325 0.5095	0.4070 0.3636	0.4287 0.4281	0.4790 0.4942	0.4544 0.5387	Ave		0.4536				11.5		30.0			
1,3,5-Trimethylbenzene	0.5616 0.6831	0.5806 0.4625	0.5779 0.5462	0.6656 0.6620	0.6243 0.7159	Ave		0.6080				12.6		30.0			
2-Chlorotoluene	0.4341 0.4634	0.4168 0.3470	0.4266 0.3959	0.4808 0.4432	0.4314 0.4778	Ave		0.4317				9.3		30.0			
alpha-Methylstyrene	0.4602 0.7339	0.5039 0.4808	0.5038 0.5710	0.5936 0.6778	0.6118 0.7550	Ave		0.5892				17.9		30.0			
tert-Butylbenzene	+++++ 0.9776	+++++ 0.6818	0.8921 0.7679	0.9518 0.8937	0.8758 0.9829	Ave		0.8780				12.0		30.0			
1,2,4-Trimethylbenzene	0.4873 0.6507	0.5047 0.4579	0.4944 0.5928	0.6037 0.6147	0.6654 0.7035	Ave		0.5775				14.8		30.0			
sec-Butylbenzene	1.5160 1.9959	1.5392 1.3787	1.5789 1.5741	1.8029 1.8387	1.7428 2.0374	Ave		1.7005				12.8		30.0			
4-Isopropyltoluene	1.2338 1.6777	1.2756 1.1537	1.2982 1.3104	1.4712 1.5410	1.4846 1.7283	Ave		1.4174				13.6		30.0			
1,3-Dichlorobenzene	0.7839 0.9907	0.7793 0.7276	0.7975 0.8576	0.9160 0.9649	0.8891 1.0442	Ave		0.8751				11.9		30.0			
1,4-Dichlorobenzene	0.7514 0.9673	0.7706 0.7059	0.8008 0.8418	0.8851 0.9590	0.8496 1.0402	Ave		0.8572				12.4		30.0			
Benzyl chloride	+++++ 1.2807	+++++ 0.9800	1.0131 1.1714	1.1581 1.4042	1.0764 +++++	Ave		1.1548				13.0		30.0			
Undecane	+++++ 0.5902	+++++ 0.4642	0.3978 0.6589	0.5224 0.8647	0.4914 +++++	Ave		0.5699				27.2		30.0			
n-Butylbenzene	+++++ 0.7921	+++++ 0.5294	0.5144 0.6033	0.6303 0.7041	0.6717 +++++	Ave		0.6351				15.4		30.0			
1,2-Dichlorobenzene	0.7395 0.9255	0.7376 0.6474	0.7650 0.7626	0.8514 0.8727	0.8156 0.9478	Ave		0.8065				11.6		30.0			
Dodecane	+++++ 0.2548	0.2605 +++++	0.2697 +++++	0.2986 +++++	0.2107 +++++	Ave		0.2588				12.3		30.0			
1,2,4-Trichlorobenzene	+++++ 0.5642	+++++ 0.3768	0.4296 0.5265	0.4949 0.6470	0.4454 0.5218	Ave		0.5008				16.9		30.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Sacramento Job No.: 320-12924-1 Analy Batch No.: 68573

SDG No.:

Instrument ID: ATMS2 GC Column: RTX-Volatil ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/18/2015 02:43 Calibration End Date: 03/18/2015 09:04 Calibration ID: 12330

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10		B	M1	M2								
Hexachlorobutadiene	+++++ 0.6644	+++++ 0.4155	0.4542 0.5311	0.5566 +++++	0.5480 0.4465	Ave		0.5166				16.5		30.0			
Naphthalene	+++++ 1.0307	+++++ 0.7623	0.8977 1.1237	1.0684 +++++	0.8067 1.1179	Ave		0.9725				15.4		30.0			
1,2,3-Trichlorobenzene	+++++ 0.4754	0.4350 0.3244	0.4176 0.4539	0.4536 +++++	0.3727 0.3446	Ave		0.4097				13.6		30.0			
1,2-Dichloroethane-d4 (Surr)	1.2980 1.3107	1.2725 1.3164	1.3103 1.3047	1.2895 1.3423	1.2926 1.3529	Ave		1.3090				1.8		30.0			
Toluene-d8 (Surr)	0.5778 0.5892	0.5709 0.5912	0.5839 0.5941	0.5830 0.6073	0.5892 0.6068	Ave		0.5894				2.0		30.0			
4-Bromofluorobenzene (Surr)	0.5553 0.5915	0.5636 0.5822	0.5714 0.6006	0.5781 0.6057	0.5879 0.6159	Ave		0.5852				3.3		30.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Sacramento Job No.: 320-12924-1 Analy Batch No.: 68573

SDG No.:

Instrument ID: ATMS2 GC Column: RTX-Volatil ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/18/2015 02:43 Calibration End Date: 03/18/2015 09:04 Calibration ID: 12330

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 320-68573/5	15031704.D
Level 2	IC 320-68573/6	15031705.D
Level 3	IC 320-68573/7	15031706.D
Level 4	IC 320-68573/8	15031707.D
Level 5	IC 320-68573/9	15031708.D
Level 6	IC 320-68573/10	15031709.D
Level 7	IC 320-68573/11	15031710.D
Level 8	ICIS 320-68573/12	15031711.D
Level 9	IC 320-68573/13	15031712.D
Level 10	IC 320-68573/14	15031713.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10
Propylene	CBM	Ave	+++++ 55378	4992 115065	6244 281094	11722 573815	28432 880175	+++++ 4.00	0.300 8.00	0.400 20.0	0.800 40.0	2.00 60.0
Chlorodifluoromethane	CBM	Ave	+++++ 103728	8373 226508	10881 539988	20963 1095744	52665 1678277	+++++ 4.00	0.300 8.00	0.400 20.0	0.800 40.0	2.00 60.0
Dichlorodifluoromethane	CBM	Ave	+++++ 134079	10143 283128	13687 674407	26733 1400636	67328 2082554	+++++ 4.00	0.300 8.00	0.400 20.0	0.800 40.0	2.00 60.0
1,2-Dichloro-1,1,2,2-tetrafluoroeth ane	CBM	Ave	3557 69989	4701 126082	6664 287708	13823 730213	33296 909989	0.200 4.00	0.300 8.00	0.400 20.0	0.800 40.0	2.00 60.0
Chloromethane	CBM	Ave	+++++ 58781	4745 127451	6279 301889	11669 613889	29428 943378	+++++ 4.00	0.300 8.00	0.400 20.0	0.800 40.0	2.00 60.0
n-Butane	CBM	Ave	+++++ 115791	9596 252749	12025 604849	22801 1230198	58763 1883869	+++++ 4.00	0.300 8.00	0.400 20.0	0.800 40.0	2.00 60.0
Vinyl chloride	CBM	Ave	3212 59225	4757 128516	6120 305832	11719 624721	29808 951924	0.200 4.00	0.300 8.00	0.400 20.0	0.800 40.0	2.00 60.0
1,3-Butadiene	CBM	Ave	+++++ 57321	4504 123907	6107 304450	11587 625287	28902 958417	+++++ 4.00	0.300 8.00	0.400 20.0	0.800 40.0	2.00 60.0
Bromomethane	CBM	Ave	2689 49553	3954 105798	5004 257351	9718 522967	24934 799029	0.200 4.00	0.300 8.00	0.400 20.0	0.800 40.0	2.00 60.0
Chloroethane	CBM	Ave	+++++ 29677	+++++ 58599	2841 151213	5806 317319	14878 494335	+++++ 4.00	+++++ 8.00	0.400 20.0	0.800 40.0	2.00 60.0
Vinyl bromide	CBM	Ave	3153 58161	4483 119863	5947 296961	11515 611224	29566 937540	0.200 4.00	0.300 8.00	0.400 20.0	0.800 40.0	2.00 60.0
Trichlorofluoromethane	CBM	Ave	9267 163721	12940 327328	17502 803599	33334 1658968	83852 2542295	0.200 4.00	0.300 8.00	0.400 20.0	0.800 40.0	2.00 60.0
n-Pentane	CBM	Ave	+++++ 139569	+++++ 272490	14426 681630	28110 1446165	70560 2273630	+++++ 4.00	+++++ 8.00	0.400 20.0	0.800 40.0	2.00 60.0
2-Propanol	CBM	Ave	+++++ 145479	+++++ 242151	13068 645465	27950 1463233	70481 2403810	+++++ 4.00	+++++ 8.00	0.400 20.0	0.800 40.0	2.00 60.0

FORM VI
AIR - GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Sacramento Job No.: 320-12924-1 Analy Batch No.: 68573

SDG No.:

Instrument ID: ATMS2 GC Column: RTX-Volatil ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/18/2015 02:43 Calibration End Date: 03/18/2015 09:04 Calibration ID: 12330

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10
Ethyl ether	CBM	Ave	+++++ 27507	1680 44051	2292 121683	5145 274066	12962 440328	+++++ 4.00	0.300 8.00	0.400 20.0	0.800 40.0	2.00 60.0
Acrolein	CBM	Ave	+++++ 19795	+++++ 28164	1475 85701	3444 206890	8608 344764	+++++ 4.00	+++++ 8.00	0.400 20.0	0.800 40.0	2.00 60.0
Acetone	CBM	Ave	+++++ 91580	+++++ 126691	7806 358292	16789 883149	40681 1474077	+++++ 4.00	+++++ 8.00	0.400 20.0	0.800 40.0	2.00 60.0
1,1,2-Trichloro-1,2,2-trifluoroetha ne	CBM	Ave	7121 124539	9799 230644	12677 587347	24872 1263428	62045 1996162	0.200 4.00	0.300 8.00	0.400 20.0	0.800 40.0	2.00 60.0
Acetonitrile	CBM	Ave	+++++ 47230	+++++ 65724	3746 197062	8738 493971	20668 841389	+++++ 4.00	+++++ 8.00	0.400 20.0	0.800 40.0	2.00 60.0
1,1-Dichloroethene	CBM	Ave	5899 102310	7941 199732	10899 501964	20538 1058639	52180 1660354	0.200 4.00	0.300 8.00	0.400 20.0	0.800 40.0	2.00 60.0
tert-Butyl alcohol (TBA)	CBM	Ave	+++++ 128339	+++++ 209636	11067 551948	23186 1224777	64054 2020954	+++++ 4.00	+++++ 8.00	0.400 20.0	0.800 40.0	2.00 60.0
Allyl chloride	CBM	Ave	+++++ 92175	6622 170793	8769 444352	17370 969185	44156 1539623	+++++ 4.00	0.300 8.00	0.400 20.0	0.800 40.0	2.00 60.0
Methylene Chloride	CBM	Ave	+++++ 79538	6628 150215	8472 383806	16011 828150	39404 1319202	+++++ 4.00	0.300 8.00	0.400 20.0	0.800 40.0	2.00 60.0
Carbon disulfide	CBM	Ave	+++++ 166467	+++++ 349796	17052 853031	33146 1741120	84750 2681421	+++++ 4.00	+++++ 8.00	0.400 20.0	0.800 40.0	2.00 60.0
Acrylonitrile	CBM	Ave	+++++ 41349	2162 58689	2788 183154	6950 448654	17394 759305	+++++ 4.00	0.300 8.00	0.400 20.0	0.800 40.0	2.00 60.0
Methyl-t-Butyl Ether (MTBE)	CBM	Ave	+++++ 149524	9701 229325	13078 634592	28619 1482675	68731 2438458	+++++ 4.00	0.300 8.00	0.400 20.0	0.800 40.0	2.00 60.0
trans-1,2-Dichloroethene	CBM	Ave	4456 87909	6540 165550	8383 430301	16566 942341	43352 1488668	0.200 4.00	0.300 8.00	0.400 20.0	0.800 40.0	2.00 60.0
C6 Range	CBM	Ave	23503 444596	34774 827958	43602 2128695	86473 4635333	214764 7350000	0.200 4.00	0.300 8.00	0.400 20.0	0.800 40.0	2.00 60.0
Hexane	CBM	Ave	+++++ 88477	+++++ 163503	8921 421568	17588 916545	42554 1452438	+++++ 4.00	+++++ 8.00	0.400 20.0	0.800 40.0	2.00 60.0
Vinyl acetate	CBM	Ave	+++++ 163628	+++++ 221862	+++++ 672353	28293 1703289	69305 2881030	+++++ 4.00	+++++ 8.00	+++++ 20.0	0.800 40.0	2.00 60.0
1,1-Dichloroethane	CBM	Ave	5784 107245	8296 198094	10558 513017	20989 1105569	53694 1753481	0.200 4.00	0.300 8.00	0.400 20.0	0.800 40.0	2.00 60.0
2-Butanone (MEK)	CBM	Ave	+++++ 24560	1344 36031	1805 100206	4411 239309	11164 402398	+++++ 4.00	0.300 8.00	0.400 20.0	0.800 40.0	2.00 60.0
Ethyl acetate	CBM	Ave	+++++ 136865	8395 199791	11070 553707	24565 1339860	60126 2297191	+++++ 4.00	0.300 8.00	0.400 20.0	0.800 40.0	2.00 60.0
cis-1,2-Dichloroethene	CBM	Ave	3099 59274	4354 112474	5672 288013	11434 621244	28593 976554	0.200 4.00	0.300 8.00	0.400 20.0	0.800 40.0	2.00 60.0
Chloroform	CBM	Ave	6239 117804	9024 215718	11866 554468	23404 1200674	57562 1891242	0.200 4.00	0.300 8.00	0.400 20.0	0.800 40.0	2.00 60.0

FORM VI
AIR - GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Sacramento Job No.: 320-12924-1 Analy Batch No.: 68573

SDG No.:

Instrument ID: ATMS2 GC Column: RTX-Volatil ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/18/2015 02:43 Calibration End Date: 03/18/2015 09:04 Calibration ID: 12330

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10
Tetrahydrofuran	CBM	Ave	+++++ 79625	+++++ 117391	6844 332933	15015 803527	36196 1336923	+++++ 4.00	+++++ 8.00	0.400 20.0	0.800 40.0	2.00 60.0
1,1,1-Trichloroethane	CBM	Ave	6901 127455	9655 232777	12675 597658	25254 1293205	62150 2030820	0.200 4.00	0.300 8.00	0.400 20.0	0.800 40.0	2.00 60.0
Cyclohexane	DFB	Ave	+++++ 83945	6501 155893	8610 395256	17029 850189	41917 1342392	+++++ 4.00	0.300 8.00	0.400 20.0	0.800 40.0	2.00 60.0
2,2,4-Trimethylpentane	DFB	Ave	+++++ 336888	25749 620764	32838 1605950	67538 3541916	163515 5661533	+++++ 4.00	0.300 8.00	0.400 20.0	0.800 40.0	2.00 60.0
n-Butanol	CBM	Ave	+++++ 57705	+++++ 89545	+++++ 232814	+++++ 540893	27556 941722	+++++ 4.00	+++++ 8.00	+++++ 20.0	+++++ 40.0	2.00 60.0
Carbon tetrachloride	DFB	Ave	8042 143862	11251 266130	14338 679316	28586 1469243	71141 2319207	0.200 4.00	0.300 8.00	0.400 20.0	0.800 40.0	2.00 60.0
1,2-Dichloroethane	DFB	Ave	3977 81114	6125 149762	7925 389349	15739 849359	39262 1340985	0.200 4.00	0.300 8.00	0.400 20.0	0.800 40.0	2.00 60.0
Benzene	DFB	Ave	9927 175784	13467 320478	17825 834901	34671 1829550	86368 2904394	0.200 4.00	0.300 8.00	0.400 20.0	0.800 40.0	2.00 60.0
n-Heptane	DFB	Ave	+++++ 144348	+++++ 266822	13939 693429	28443 1545703	70692 2484192	+++++ 4.00	+++++ 8.00	0.400 20.0	0.800 40.0	2.00 60.0
Trichloroethene	DFB	Ave	5283 90948	7153 173390	9196 436747	17938 933272	43977 1478533	0.200 4.00	0.300 8.00	0.400 20.0	0.800 40.0	2.00 60.0
1,2-Dichloropropane	DFB	Ave	1397 27744	1971 49632	2479 129747	5131 280475	13390 440148	0.200 4.00	0.300 8.00	0.400 20.0	0.800 40.0	2.00 60.0
Methyl methacrylate	DFB	Ave	+++++ 53839	+++++ 77864	+++++ 221875	9391 535429	23038 913569	+++++ 4.00	+++++ 8.00	+++++ 20.0	0.800 40.0	2.00 60.0
Bromodichloromethane	DFB	Ave	4302 86268	5954 156309	8333 409185	16889 890140	40905 1407505	0.200 4.00	0.300 8.00	0.400 20.0	0.800 40.0	2.00 60.0
1,4-Dioxane	DFB	Ave	+++++ 39650	+++++ 55270	2504 153476	6571 348509	17205 580622	+++++ 4.00	+++++ 8.00	0.400 20.0	0.800 40.0	2.00 60.0
Dibromomethane	DFB	Ave	4122 80715	5998 149537	7981 390133	15945 847433	37958 1355583	0.200 4.00	0.300 8.00	0.400 20.0	0.800 40.0	2.00 60.0
4-Methyl-2-pentanone (MIBK)	DFB	Ave	6281 165757	9327 228851	12860 642806	27339 1485479	76063 2489475	0.200 4.00	0.300 8.00	0.400 20.0	0.800 40.0	2.00 60.0
cis-1,3-Dichloropropene	DFB	Ave	4982 96753	7159 176263	9459 468275	19049 1026361	45621 1634270	0.200 4.00	0.300 8.00	0.400 20.0	0.800 40.0	2.00 60.0
n-Octane	CBZ	Ave	+++++ 198616	16453 368530	20944 966314	41687 2164824	97932 3471981	+++++ 4.00	0.300 8.00	0.400 20.0	0.800 40.0	2.00 60.0
Toluene Range	DFB	Ave	49075 529956	57937 876187	70458 2464217	119593 5543344	255264 8852419	0.200 4.00	0.300 8.00	0.400 20.0	0.800 40.0	2.00 60.0
Toluene	DFB	Ave	10454 209414	15110 349936	20311 988527	42081 2225198	99068 3556246	0.200 4.00	0.300 8.00	0.400 20.0	0.800 40.0	2.00 60.0
trans-1,3-Dichloropropene	CBZ	Ave	4507 93961	6409 166492	8630 465405	17962 1042952	44602 1661981	0.200 4.00	0.300 8.00	0.400 20.0	0.800 40.0	2.00 60.0

FORM VI
AIR - GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Sacramento Job No.: 320-12924-1 Analy Batch No.: 68573

SDG No.:

Instrument ID: ATMS2 GC Column: RTX-Volatil ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/18/2015 02:43 Calibration End Date: 03/18/2015 09:04 Calibration ID: 12330

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10
NMOC as Hexane	CBM	Ave	4299377 39170530	4991310 62120280	5883796 165441928	9342186 381298596	19221561 601829531	0.200 4.00	0.300 8.00	0.400 20.0	0.800 40.0	2.00 60.0
Total VOC as Hexane (C6-C12)	CBM	Ave	4299377 39170530	4991310 62120280	5883796 165441928	9342186 381298596	19221561 601829531	0.200 4.00	0.300 8.00	0.400 20.0	0.800 40.0	2.00 60.0
Total VOCs as Tetrachloroethene (PCE)	CBZ	Ave	4299377 39170530	4991310 62120280	5883796 165441928	9342186 381298596	19221561 601829531	0.200 4.00	0.300 8.00	0.400 20.0	0.800 40.0	2.00 60.0
1,1,2-Trichloroethane	CBZ	Ave	3620 70637	5510 126856	7314 335963	14299 730956	33608 1161100	0.200 4.00	0.300 8.00	0.400 20.0	0.800 40.0	2.00 60.0
2-Hexanone	CBZ	Ave	+++++ 75881	+++++ 99027	5190 291074	12623 682005	33965 1152510	+++++ 4.00	+++++ 8.00	0.400 20.0	0.800 40.0	2.00 60.0
Tetrachloroethene	CBZ	Ave	7215 120121	9848 223082	13042 577745	25704 1259790	60194 2006479	0.200 4.00	0.300 8.00	0.400 20.0	0.800 40.0	2.00 60.0
PCE Range	CBZ	Ave	36973 674240	53103 1242690	69637 3199006	140111 7002397	327535 11100133	0.200 4.00	0.300 8.00	0.400 20.0	0.800 40.0	2.00 60.0
Dibromochloromethane	CBZ	Ave	7550 144953	10614 267340	14087 712802	28600 1569665	69036 2500410	0.200 4.00	0.300 8.00	0.400 20.0	0.800 40.0	2.00 60.0
1,2-Dibromoethane (EDB)	CBZ	Ave	5760 113158	8545 200103	11392 548463	22775 1209484	53400 1931838	0.200 4.00	0.300 8.00	0.400 20.0	0.800 40.0	2.00 60.0
n-Nonane	CBZ	Ave	9487 209134	14582 377656	19917 1007758	41506 2280727	98966 3674206	0.200 4.00	0.300 8.00	0.400 20.0	0.800 40.0	2.00 60.0
Chlorobenzene	CBZ	Ave	9888 178103	14101 319268	17581 853141	37007 1883201	85319 3014445	0.200 4.00	0.300 8.00	0.400 20.0	0.800 40.0	2.00 60.0
Ethylbenzene	CBZ	Ave	11689 260029	17012 389123	23675 1155884	51844 2744755	116743 4516032	0.200 4.00	0.300 8.00	0.400 20.0	0.800 40.0	2.00 60.0
m,p-Xylene	CBZ	Ave	17983 400727	26396 583083	35178 1738818	79464 4204690	175715 7022274	0.400 8.00	0.600 16.0	0.800 40.0	1.60 80.0	4.00 120
o-Xylene	CBZ	Ave	9216 205837	13683 297985	18182 879712	40485 2120914	90716 3529613	0.200 4.00	0.300 8.00	0.400 20.0	0.800 40.0	2.00 60.0
Styrene	CBZ	Ave	6638 170000	9539 231483	12791 714819	29225 1736572	72742 2919848	0.200 4.00	0.300 8.00	0.400 20.0	0.800 40.0	2.00 60.0
Bromoform	CBZ	Ave	7639 154295	10968 277900	14356 752587	30359 1678117	71179 2691956	0.200 4.00	0.300 8.00	0.400 20.0	0.800 40.0	2.00 60.0
Isopropylbenzene	CBZ	Ave	3350 85620	5269 125116	7074 366555	15867 884538	37595 1474954	0.200 4.00	0.300 8.00	0.400 20.0	0.800 40.0	2.00 60.0
1,1,2,2-Tetrachloroethane	CBZ	Ave	6603 145848	9608 215104	12953 630116	28776 1493969	64765 2477653	0.200 4.00	0.300 8.00	0.400 20.0	0.800 40.0	2.00 60.0
1,2,3-Trichloropropane	CBZ	Ave	+++++ 46174	3135 65902	3881 190676	8774 456342	20152 760181	+++++ 4.00	0.300 8.00	0.400 20.0	0.800 40.0	2.00 60.0
n-Decane	CBZ	Ave	+++++ 183642	+++++ 265692	+++++ 832763	28389 1993566	75618 3322182	+++++ 4.00	+++++ 8.00	+++++ 20.0	0.800 40.0	2.00 60.0
N-Propylbenzene	CBZ	Ave	13968 347035	21134 499359	28980 1459131	64181 3566892	151268 6000866	0.200 4.00	0.300 8.00	0.400 20.0	0.800 40.0	2.00 60.0

FORM VI
AIR - GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Sacramento Job No.: 320-12924-1 Analy Batch No.: 68573

SDG No.:

Instrument ID: ATMS2 GC Column: RTX-Volatil ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/18/2015 02:43 Calibration End Date: 03/18/2015 09:04 Calibration ID: 12330

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10
4-Ethyltoluene	CBZ	Ave	3968 94875	5486 137803	7682 416350	17223 1005155	41288 1667556	0.200 4.00	0.300 8.00	0.400 20.0	0.800 40.0	2.00 60.0
1,3,5-Trimethylbenzene	CBZ	Ave	5153 127192	7825 175273	10354 531202	23931 1346380	56721 2216061	0.200 4.00	0.300 8.00	0.400 20.0	0.800 40.0	2.00 60.0
2-Chlorotoluene	CBZ	Ave	3983 86291	5618 131527	7644 385063	17286 901261	39200 1479174	0.200 4.00	0.300 8.00	0.400 20.0	0.800 40.0	2.00 60.0
alpha-Methylstyrene	CBZ	Ave	4222 136647	6792 182203	9027 555308	21342 1378460	55588 2337149	0.200 4.00	0.300 8.00	0.400 20.0	0.800 40.0	2.00 60.0
tert-Butylbenzene	CBZ	Ave	+++++ 182031	+++++ 258394	15984 746880	34223 1817606	79578 3042805	+++++ 4.00	+++++ 8.00	0.400 20.0	0.800 40.0	2.00 60.0
1,2,4-Trimethylbenzene	CBZ	Ave	4471 121170	6803 173552	8859 576544	21707 1250084	60460 2177923	0.200 4.00	0.300 8.00	0.400 20.0	0.800 40.0	2.00 60.0
sec-Butylbenzene	CBZ	Ave	13909 371653	20746 522513	28290 1530944	64822 3739481	158349 6307127	0.200 4.00	0.300 8.00	0.400 20.0	0.800 40.0	2.00 60.0
4-Isopropyltoluene	CBZ	Ave	11320 312404	17192 437228	23261 1274476	52896 3134016	134889 5350256	0.200 4.00	0.300 8.00	0.400 20.0	0.800 40.0	2.00 60.0
1,3-Dichlorobenzene	CBZ	Ave	7192 184469	10504 275748	14289 834117	32936 1962383	80779 3232398	0.200 4.00	0.300 8.00	0.400 20.0	0.800 40.0	2.00 60.0
1,4-Dichlorobenzene	CBZ	Ave	6894 180113	10386 267525	14348 818758	31823 1950328	77191 3220284	0.200 4.00	0.300 8.00	0.400 20.0	0.800 40.0	2.00 60.0
Benzyl chloride	CBZ	Ave	+++++ 190784	+++++ 297131	14521 911455	33311 2284616	78242 +++++	+++++ 3.20	+++++ 6.40	0.320 16.0	0.640 32.0	1.60 +++++
Undecane	CBZ	Ave	+++++ 109907	+++++ 175924	7128 640803	18782 1758595	44651 +++++	+++++ 4.00	+++++ 8.00	0.400 20.0	0.800 40.0	2.00 +++++
n-Butylbenzene	CBZ	Ave	+++++ 147501	+++++ 200658	9216 586766	22661 1432018	61032 +++++	+++++ 4.00	+++++ 8.00	0.400 20.0	0.800 40.0	2.00 +++++
1,2-Dichlorobenzene	CBZ	Ave	6785 172342	9942 245364	13706 741669	30614 1774827	74105 2934104	0.200 4.00	0.300 8.00	0.400 20.0	0.800 40.0	2.00 60.0
Dodecane	CBZ	Ave	+++++ 47436	3511 +++++	4832 +++++	10735 +++++	19148 +++++	+++++ 4.00	0.300 +++++	0.400 +++++	0.800 +++++	2.00 +++++
1,2,4-Trichlorobenzene	CBZ	Ave	+++++ 105064	+++++ 142801	7698 512056	17795 1315844	40466 1615304	+++++ 4.00	+++++ 8.00	0.400 20.0	0.800 40.0	2.00 60.0
Hexachlorobutadiene	CBZ	Ave	+++++ 123720	+++++ 157476	8138 516566	20011 +++++	49791 1382109	+++++ 4.00	+++++ 8.00	0.400 20.0	0.800 +++++	2.00 60.0
Naphthalene	CBZ	Ave	+++++ 191926	+++++ 288904	16085 1092914	38414 +++++	73300 3460623	+++++ 4.00	+++++ 8.00	0.400 20.0	0.800 +++++	2.00 60.0
1,2,3-Trichlorobenzene	CBZ	Ave	+++++ 88529	5863 122941	7483 441411	16311 +++++	33863 1066699	+++++ 4.00	0.300 8.00	0.400 20.0	0.800 +++++	2.00 60.0
1,2-Dichloroethane-d4 (Surr)	CBM	Ave	67909 69553	66173 70765	66897 75198	66657 84346	67302 91645	4.00 4.00	4.00 4.00	4.00 4.00	4.00 4.00	4.00 4.00
Toluene-d8 (Surr)	DFB	Ave	124976 127393	121364 129381	122881 134814	123530 142044	123859 145956	4.00 4.00	4.00 4.00	4.00 4.00	4.00 4.00	4.00 4.00

FORM VI
AIR - GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Sacramento Job No.: 320-12924-1 Analy Batch No.: 68573

SDG No.:

Instrument ID: ATMS2 GC Column: RTX-Volatil ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/18/2015 02:43 Calibration End Date: 03/18/2015 09:04 Calibration ID: 12330

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10
4-Bromofluorobenzene (Surr)	CBZ	Ave	101902 110149	101277 110329	102384 116833	103924 123189	106825 127116	4.00 4.00	4.00 4.00	4.00 4.00	4.00 4.00	4.00 4.00

Curve Type Legend:
Ave = Average ISTD

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\SACCHROM\ChromData\ATMS2\20150317-20264.b\15031704.D
Lims ID: IC 0.2ppbv
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 18-Mar-2015 02:43:30 ALS Bottle#: 1 Worklist Smp#: 5
Purge Vol: 250.000 mL Dil. Factor: 1.0000
Sample Info: IC 0.2PPBV
Misc. Info.: 50mL
Operator ID: SRS Instrument ID: ATMS2
Sublist: chrom-TO15_ATMS2N*sub53

Method: \\SACCHROM\ChromData\ATMS2\20150317-20264.b\TO15_ATMS2N.m
Limit Group: MSA - TO15 - ICAL
Last Update: 24-Mar-2015 10:32:41 Calib Date: 18-Mar-2015 18:13:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\SACCHROM\ChromData\ATMS2\20150317-20264.b\15031726.D

Column 1 : RTX Volatiles (0.32 mm) Det: MS SCAN
Process Host: XAWRK047

First Level Reviewer: scottrs Date: 24-Mar-2015 09:36:01

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	130	10.328	10.328	0.000	97	52317	4.00	4.00	
* 2 1,4-Difluorobenzene	114	11.672	11.678	-0.006	94	216298	4.00	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.991	15.985	0.006	87	183499	4.00	4.00	
$ 4 1,2-Dichloroethane-d4 (Sur	65	11.094	11.094	0.000	99	67909	4.00	3.97	
$ 5 Toluene-d8 (Surr)	100	13.850	13.850	0.000	99	124976	4.00	3.92	
$ 6 4-Bromofluorobenzene (Surr	174	17.743	17.744	-0.001	94	101902	4.00	3.80	
14 Propene	41	4.128	4.129	0.000	39	3725	0.2000	0.2671	
13 Chlorodifluoromethane	51	4.141	4.141	0.000	95	5786	0.2000	0.2255	
15 Dichlorodifluoromethane	85	4.189	4.189	0.000	98	7616	0.2000	0.2357	
19 1,2-Dichloro-1,1,2,2-tetra	135	4.427	4.427	0.000	90	3557	0.2000	0.2260	
18 Chloromethane	50	4.615	4.615	0.000	96	3458	0.2000	0.2391	
22 Butane	43	4.816	4.816	0.000	97	6996	0.2000	0.2441	
20 Vinyl chloride	62	4.846	4.852	-0.006	95	3212	0.2000	0.2187	
21 Butadiene	39	4.931	4.925	0.006	94	3391	0.2000	0.2379	
25 Bromomethane	94	5.619	5.625	-0.006	93	2689	0.2000	0.2199	
27 Vinyl bromide	106	6.185	6.185	0.000	95	3153	0.2000	0.2210	
28 Trichlorofluoromethane	101	6.294	6.300	-0.006	97	9267	0.2000	0.2301	
38 Pentane	43	6.343	6.343	0.000	74	7835	0.2000	0.2358	
37 Isopropyl alcohol	45	6.836	6.781	0.055	49	6825	0.2000	0.2098	
39 Ethyl ether	74	6.830	6.793	0.037	96	924	0.2000	0.1553	
31 Acetone	43	7.006	6.963	0.043	90	4176	0.2000	0.2180	
43 1,1,2-Trichloro-1,2,2-trif	101	7.103	7.091	0.012	95	7121	0.2000	0.2366	
41 1,1-Dichloroethene	61	7.274	7.274	0.000	94	5899	0.2000	0.2341	
46 3-Chloro-1-propene	41	7.809	7.803	0.006	92	4605	0.2000	0.2153	
47 Methylene Chloride	49	7.937	7.937	0.000	98	4934	0.2000	0.2559	
48 Carbon disulfide	76	8.016	8.022	-0.006	99	9922	0.2000	0.2471	
42 Acrylonitrile	53	8.028	8.022	0.006	31	1149	0.2000	0.1349	
50 Methyl tert-butyl ether	73	8.399	8.332	0.067	91	6916	0.2000	0.2127	
49 trans-1,2-Dichloroethene	61	8.466	8.466	0.000	96	4456	0.2000	0.2137	
55 Hexane	41	8.740	8.740	0.000	90	5056	0.2000	0.2450	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
53 1,1-Dichloroethane	63	9.038	9.044	-0.006	89	5784	0.2000	0.2253	
54 2-Butanone (MEK)	72	9.646	9.604	0.042	96	818	0.2000	0.1619	
58 Ethyl acetate	43	9.914	9.877	0.037	71	5514	0.2000	0.1920	
57 cis-1,2-Dichloroethene	96	9.902	9.902	0.000	96	3099	0.2000	0.2208	
61 Chloroform	83	10.139	10.139	0.000	97	6239	0.2000	0.2227	
62 Tetrahydrofuran	42	10.498	10.449	0.049	93	3317	0.2000	0.1928	
65 1,1,1-Trichloroethane	97	10.766	10.766	0.000	96	6901	0.2000	0.2282	
70 Cyclohexane	84	10.906	10.906	0.000	93	4920	0.2000	0.2376	
74 Isooctane	57	11.052	11.058	-0.006	97	17760	0.2000	0.2142	
67 n-Butanol	56	11.155	11.088	0.067	8	3302	0.2000	0.2717	
69 Carbon tetrachloride	117	11.149	11.155	-0.006	96	8042	0.2000	0.2245	
66 1,2-Dichloroethane	62	11.216	11.216	0.000	94	3977	0.2000	0.2005	
68 Benzene	78	11.325	11.325	0.000	97	9927	0.2000	0.2261	
75 n-Heptane	43	11.374	11.374	0.000	98	7952	0.2000	0.2243	
76 Trichloroethene	130	12.189	12.195	-0.006	97	5283	0.2000	0.2312	
77 1,2-Dichloropropane	76	12.390	12.384	0.006	89	1397	0.2000	0.2123	
79 Methyl methacrylate	69	12.445	12.427	0.019	85	1871	0.2000	0.1567	
80 Dichlorobromomethane	85	12.682	12.682	0.000	97	4302	0.2000	0.2070	
78 Dibromomethane	174	12.731	12.731	0.000	92	4122	0.2000	0.2077	
81 4-Methyl-2-pentanone (MIBK	43	13.229	13.169	0.060	98	6281	0.2000	0.1836	
83 cis-1,3-Dichloropropene	75	13.424	13.424	0.000	96	4982	0.2000	0.2095	
88 n-Octane	43	13.807	13.807	0.000	97	12133	0.2000	0.2418	
85 Toluene	91	13.960	13.966	-0.006	94	10454	0.2000	0.2059	
84 trans-1,3-Dichloropropene	75	14.093	14.099	-0.006	96	4507	0.2000	0.2001	
86 1,1,2-Trichloroethane	97	14.331	14.337	-0.006	94	3620	0.2000	0.2091	
87 2-Hexanone	58	14.422	14.373	0.049	92	2349	0.2000	0.1523	
93 Tetrachloroethene	166	14.933	14.939	-0.006	96	7215	0.2000	0.2341	
92 Chlorodibromomethane	129	15.085	15.091	-0.006	96	7550	0.2000	0.2124	
94 Ethylene Dibromide	107	15.389	15.389	0.000	98	5760	0.2000	0.2080	
99 n-Nonane	43	15.985	15.985	0.000	39	9487	0.2000	0.1891	
96 Chlorobenzene	112	16.046	16.046	0.000	96	9888	0.2000	0.2234	
97 Ethylbenzene	91	16.144	16.137	0.007	97	11689	0.2000	0.1959	
98 m-Xylene & p-Xylene	91	16.259	16.259	0.000	98	17983	0.4000	0.3952	
101 o-Xylene	91	16.892	16.892	0.000	97	9216	0.2000	0.1982	
100 Styrene	104	16.904	16.904	0.000	95	6638	0.2000	0.1852	
102 Bromoform	173	17.342	17.342	0.000	97	7639	0.2000	0.2054	
104 Isopropylbenzene	120	17.421	17.421	0.000	96	3350	0.2000	0.1788	
103 1,1,2,2-Tetrachloroethane	83	17.555	17.555	0.000	98	6603	0.2000	0.1998	
105 1,2,3-Trichloropropane	110	17.774	17.774	0.000	88	1922	0.2000	0.1883	
113 n-Decane	57	17.956	17.956	0.000	87	5112	0.2000	0.1254	
107 N-Propylbenzene	91	18.023	18.023	0.000	99	13968	0.2000	0.1842	
110 4-Ethyltoluene	120	18.182	18.188	-0.006	97	3968	0.2000	0.1907	
111 1,3,5-Trimethylbenzene	120	18.248	18.255	-0.007	91	5153	0.2000	0.1848	
109 2-Chlorotoluene	126	18.273	18.273	0.000	97	3983	0.2000	0.2011	
112 Alpha Methyl Styrene	118	18.674	18.674	0.000	84	4222	0.2000	0.1562	
114 tert-Butylbenzene	91	18.790	18.796	-0.006	94	7339	0.2000	0.1822	
115 1,2,4-Trimethylbenzene	120	18.839	18.845	-0.006	94	4471	0.2000	0.1688	
116 sec-Butylbenzene	105	19.124	19.125	-0.001	98	13909	0.2000	0.1783	
121 4-Isopropyltoluene	119	19.313	19.319	-0.006	96	11320	0.2000	0.1741	
117 1,3-Dichlorobenzene	146	19.435	19.435	0.000	97	7192	0.2000	0.1792	
120 1,4-Dichlorobenzene	146	19.581	19.581	0.000	94	6894	0.2000	0.1753	
118 Benzyl chloride	91	19.690	19.696	-0.006	98	7368	0.1600	0.1391	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
124 Undecane	57	19.757	19.757	0.000	94	3344	0.2000	0.1279	
123 n-Butylbenzene	92	19.940	19.934	0.006	96	3781	0.2000	0.1298	
122 1,2-Dichlorobenzene	146	20.134	20.140	-0.006	96	6785	0.2000	0.1834	
125 Dodecane	57	21.461	21.461	0.000	91	2389	0.2000	0.2012	
126 1,2,4-Trichlorobenzene	180	22.969	22.963	0.006	89	4212	0.2000	0.1833	
128 Hexachlorobutadiene	225	23.322	23.322	0.000	92	3868	0.2000	0.1632	
127 Naphthalene	128	23.456	23.456	0.000	97	9521	0.2000	0.2134	
129 1,2,3-Trichlorobenzene	180	24.003	23.997	0.006	92	4042	0.2000	0.2151	
A 144 C6 Range	1	8.740	(8.640-8.840)		0	23503	0.2000	0.2215	
A 147 Toluene Range	1	13.960	(13.893-14.026)		0	49075	0.2000	0.3216	
A 150 Nonmethane Organic Compoun	1	14.322	(4.068-24.546)		0	4299377	0.2000	40.5	
A 151 Total VOCs as Tetrachloroe	1	14.322	(4.068-24.546)		0	4299377	0.2000	25.6	
A 154 Total VOC as Hexane	1	14.322	(4.068-24.546)		0	4299377	0.2000	40.5	
A 152 TVOC as Toluene	1	14.406	(4.356-24.456)		0	1760990	0.2000	11.5	
A 149 PCE Range	1	14.949	(14.879-15.019)		0	36973	0.2000	0.2204	
S 155 Xylenes, Total	91				0		0.6000	0.5933	
S 164 1,2-Dichloroethene, Total	1				0			0.4345	

Reagents:

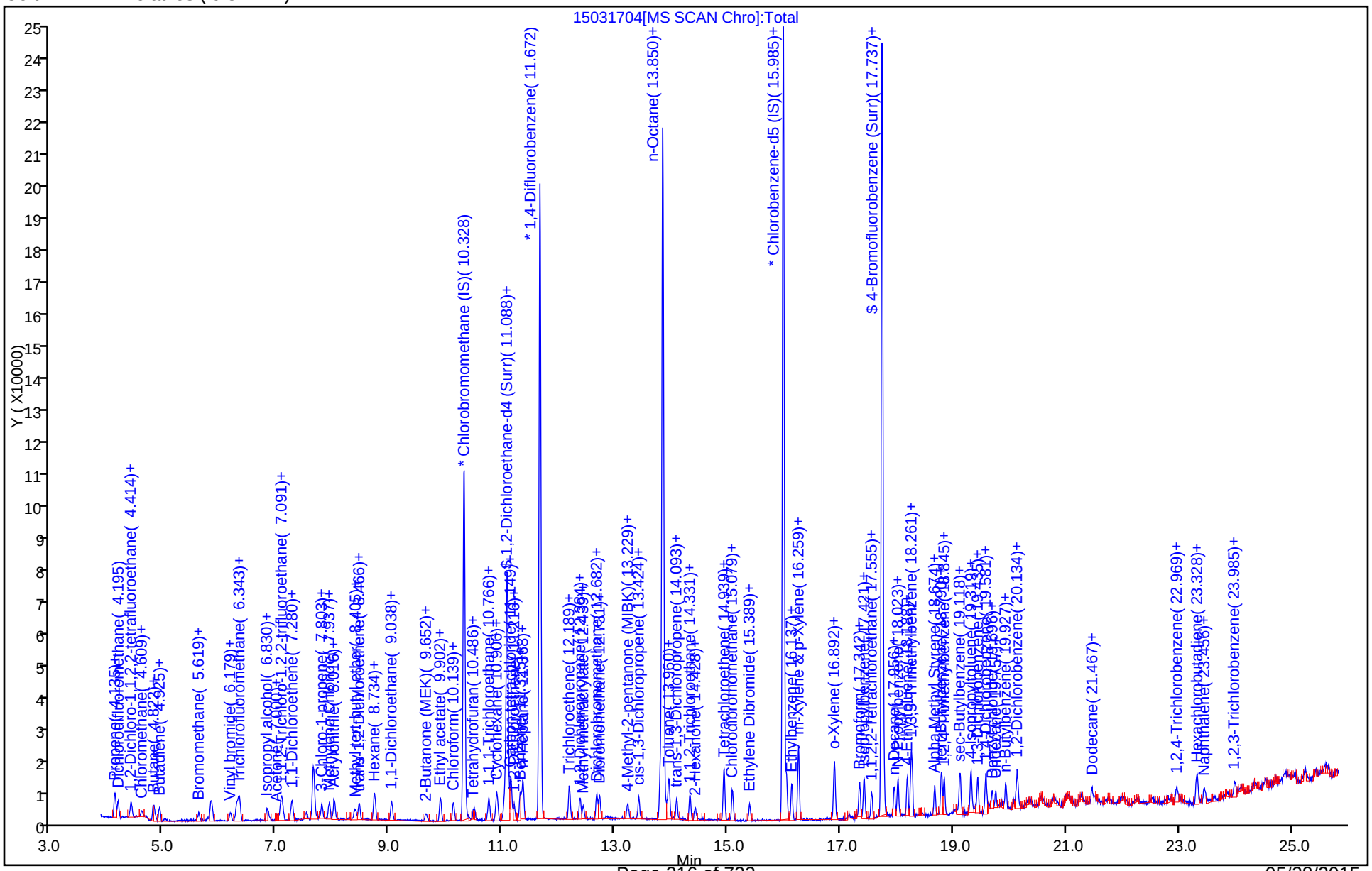
VACORPIC1.0_00008	Amount Added: 50.00	Units: mL	
VASUISIM_00160	Amount Added: 50.00	Units: mL	Run Reagent

Report Date: 24-Mar-2015 10:32:44 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Sacramento

Data File:	\\SACCHROM\ChromData\ATMS2\20150317-20264.b\15031704.D				
Injection Date:	18-Mar-2015 02:43:30	Instrument ID:	ATMS2	Operator ID:	SRS
Lims ID:	IC 0.2ppbv			Worklist Smp#:	5
Client ID:					
Purge Vol:	250.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	1
Method:	TO15_ATMS2N	Limit Group:	MSA - TO15 - ICAL		

Column: RTX Volatiles (0.32 mm)

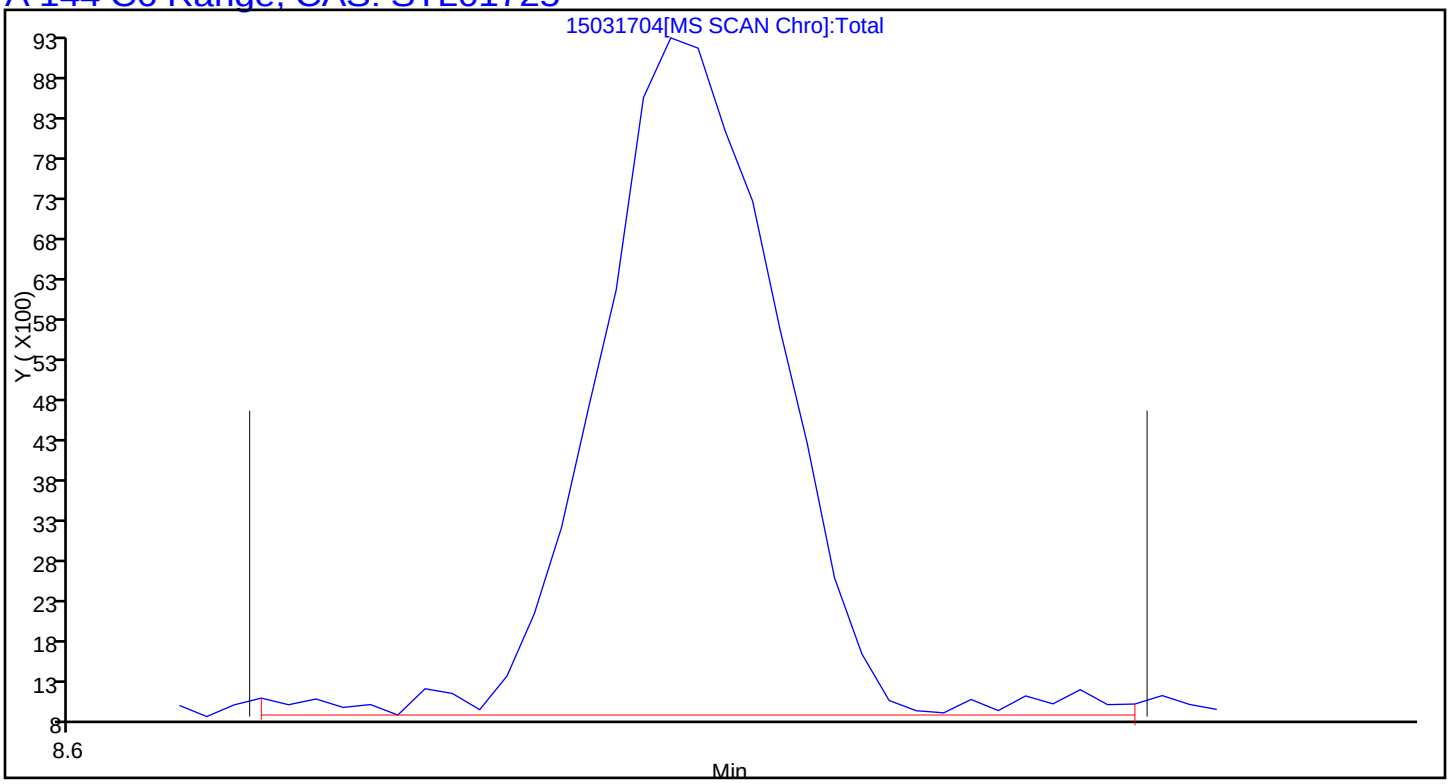


Report Date: 24-Mar-2015 10:32:44 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Sacramento

Data File:	\\SACCHROM\ChromData\ATMS2\20150317-20264.b\15031704.D				
Injection Date:	18-Mar-2015 02:43:30	Instrument ID:	ATMS2		
Lims ID:	IC 0.2ppbv				
Client ID:					
Operator ID:	SRS	ALS Bottle#:	1	Worklist Smp#:	5
Purge Vol:	250.000 mL	Dil. Factor:	1.0000		
Method:	TO15_ATMS2N	Limit Group:	MSA - TO15 - ICAL		
Column:	RTX Volatiles (0.32 mm)	Detector	MS SCAN		

A 144 C6 Range, CAS: STL01725

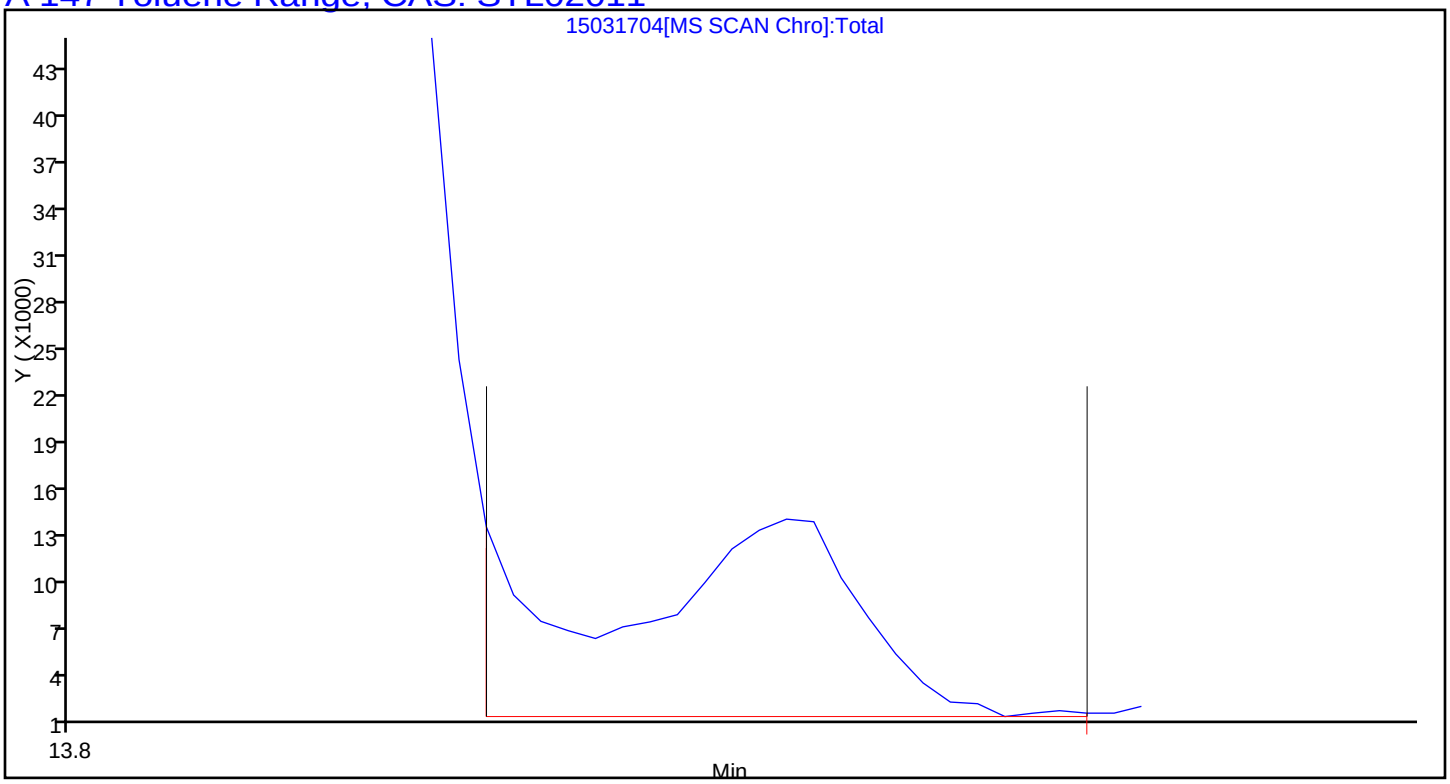


Report Date: 24-Mar-2015 10:32:44 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Sacramento

Data File:	\\SACCHROM\ChromData\ATMS2\20150317-20264.b\15031704.D				
Injection Date:	18-Mar-2015 02:43:30	Instrument ID:	ATMS2		
Lims ID:	IC 0.2ppbv				
Client ID:					
Operator ID:	SRS	ALS Bottle#:	1	Worklist Smp#:	5
Purge Vol:	250.000 mL	Dil. Factor:	1.0000		
Method:	TO15_ATMS2N	Limit Group:	MSA - TO15 - ICAL		
Column:	RTX Volatiles (0.32 mm)	Detector	MS SCAN		

A 147 Toluene Range, CAS: STL02011

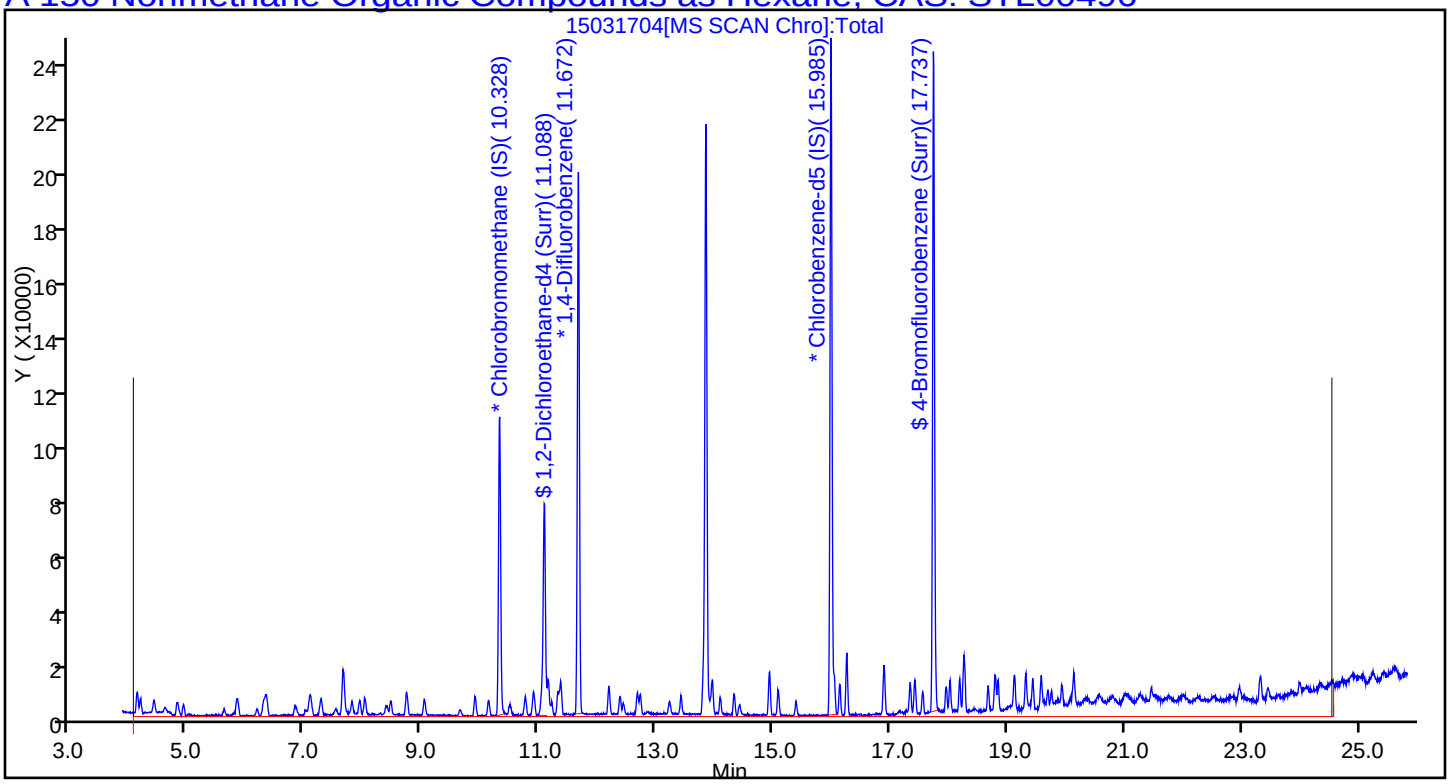


Report Date: 24-Mar-2015 10:32:44 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Sacramento

Data File:	\\SACCHROM\ChromData\ATMS2\20150317-20264.b\15031704.D				
Injection Date:	18-Mar-2015 02:43:30	Instrument ID:	ATMS2		
Lims ID:	IC 0.2ppbv				
Client ID:					
Operator ID:	SRS	ALS Bottle#:	1	Worklist Smp#:	5
Purge Vol:	250.000 mL	Dil. Factor:	1.0000		
Method:	TO15_ATMS2N	Limit Group:	MSA - TO15 - ICAL		
Column:	RTX Volatiles (0.32 mm)	Detector	MS SCAN		

A 150 Nonmethane Organic Compounds as Hexane, CAS: STL00496

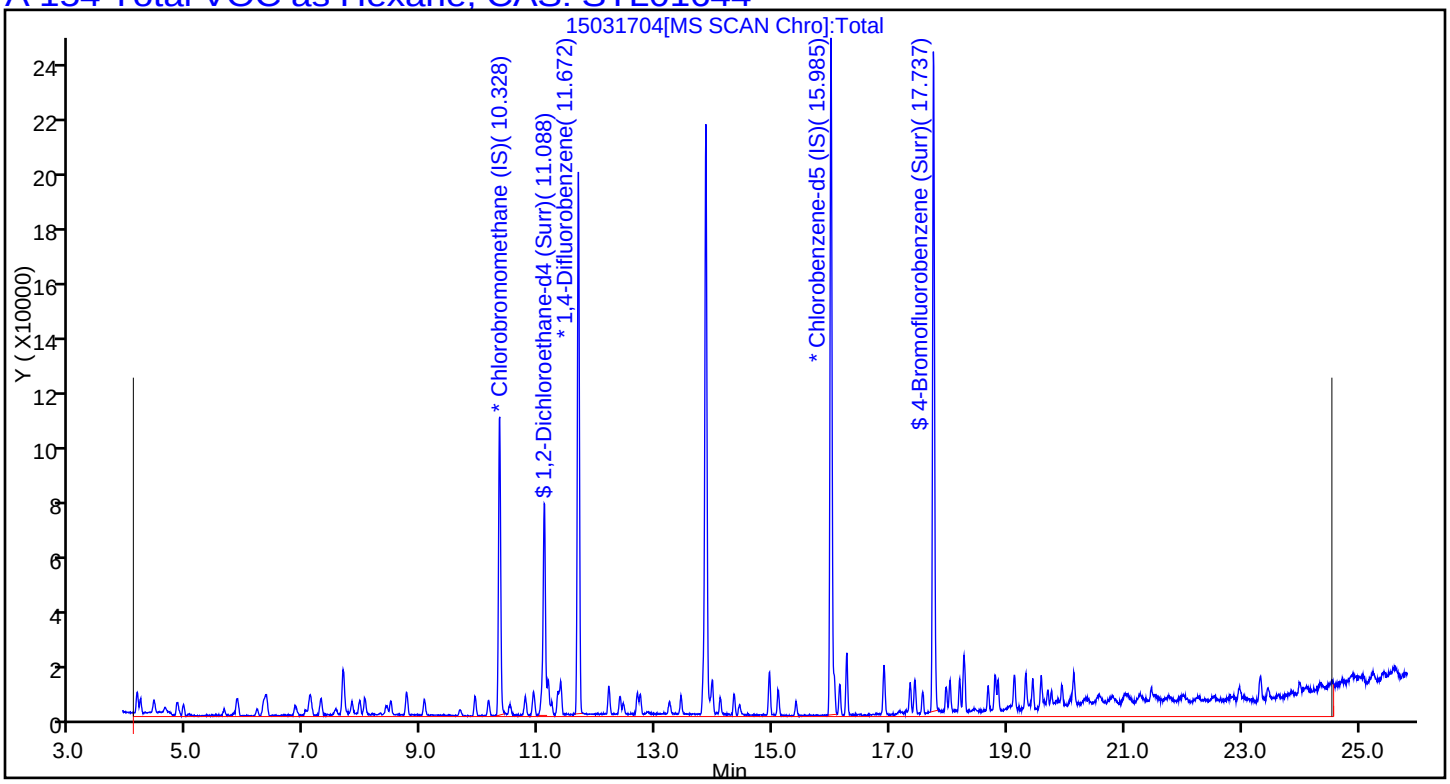


Report Date: 24-Mar-2015 10:32:44 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Sacramento

Data File:	\\SACCHROM\ChromData\ATMS2\20150317-20264.b\15031704.D				
Injection Date:	18-Mar-2015 02:43:30	Instrument ID:	ATMS2		
Lims ID:	IC 0.2ppbv				
Client ID:					
Operator ID:	SRS	ALS Bottle#:	1	Worklist Smp#:	5
Purge Vol:	250.000 mL	Dil. Factor:	1.0000		
Method:	TO15_ATMS2N	Limit Group:	MSA - TO15 - ICAL		
Column:	RTX Volatiles (0.32 mm)	Detector	MS SCAN		

A 154 Total VOC as Hexane, CAS: STL01644

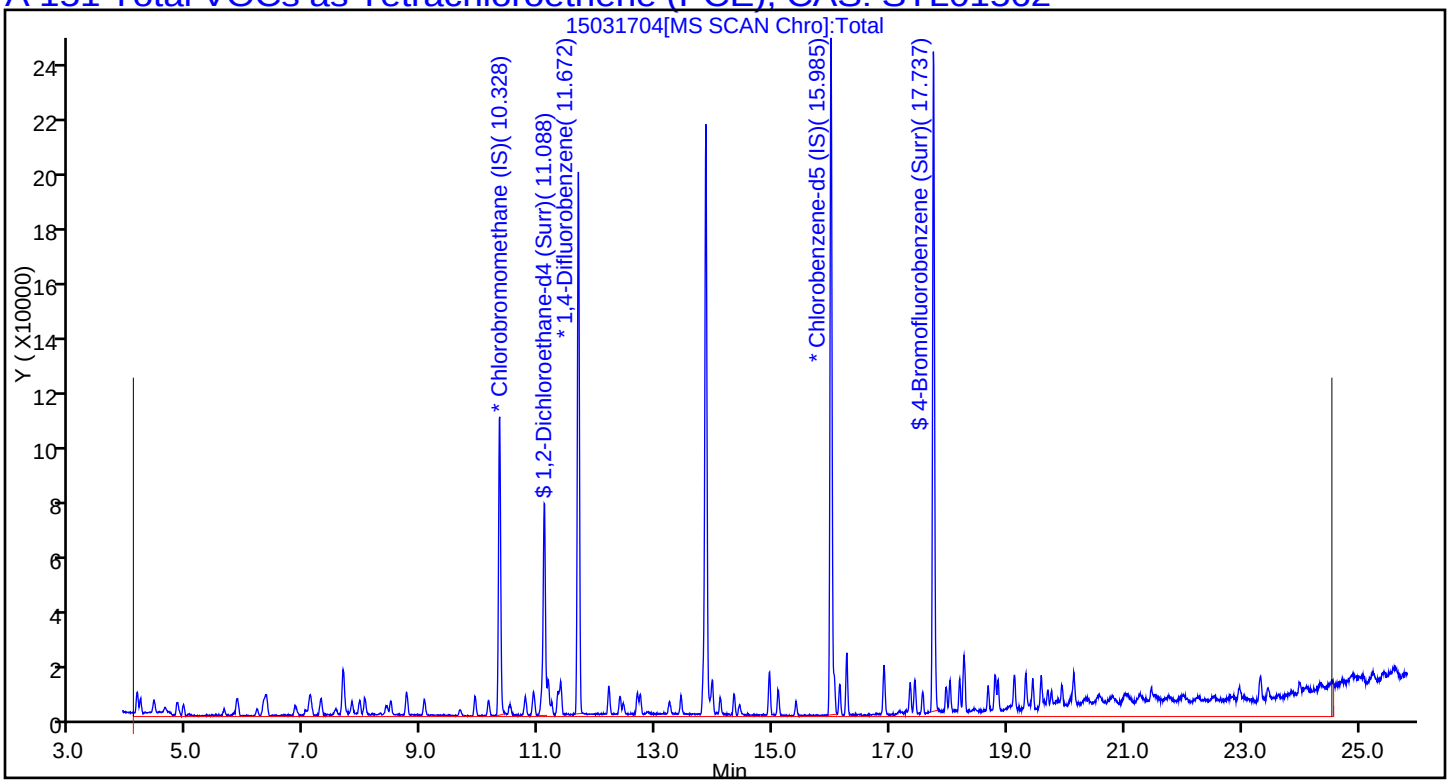


Report Date: 24-Mar-2015 10:32:44 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Sacramento

Data File:	\\SACCHROM\ChromData\ATMS2\20150317-20264.b\15031704.D				
Injection Date:	18-Mar-2015 02:43:30	Instrument ID:	ATMS2		
Lims ID:	IC 0.2ppbv				
Client ID:					
Operator ID:	SRS	ALS Bottle#:	1	Worklist Smp#:	5
Purge Vol:	250.000 mL	Dil. Factor:	1.0000		
Method:	TO15_ATMS2N	Limit Group:	MSA - TO15 - ICAL		
Column:	RTX Volatiles (0.32 mm)	Detector	MS SCAN		

A 151 Total VOCs as Tetrachloroethene (PCE), CAS: STL01562

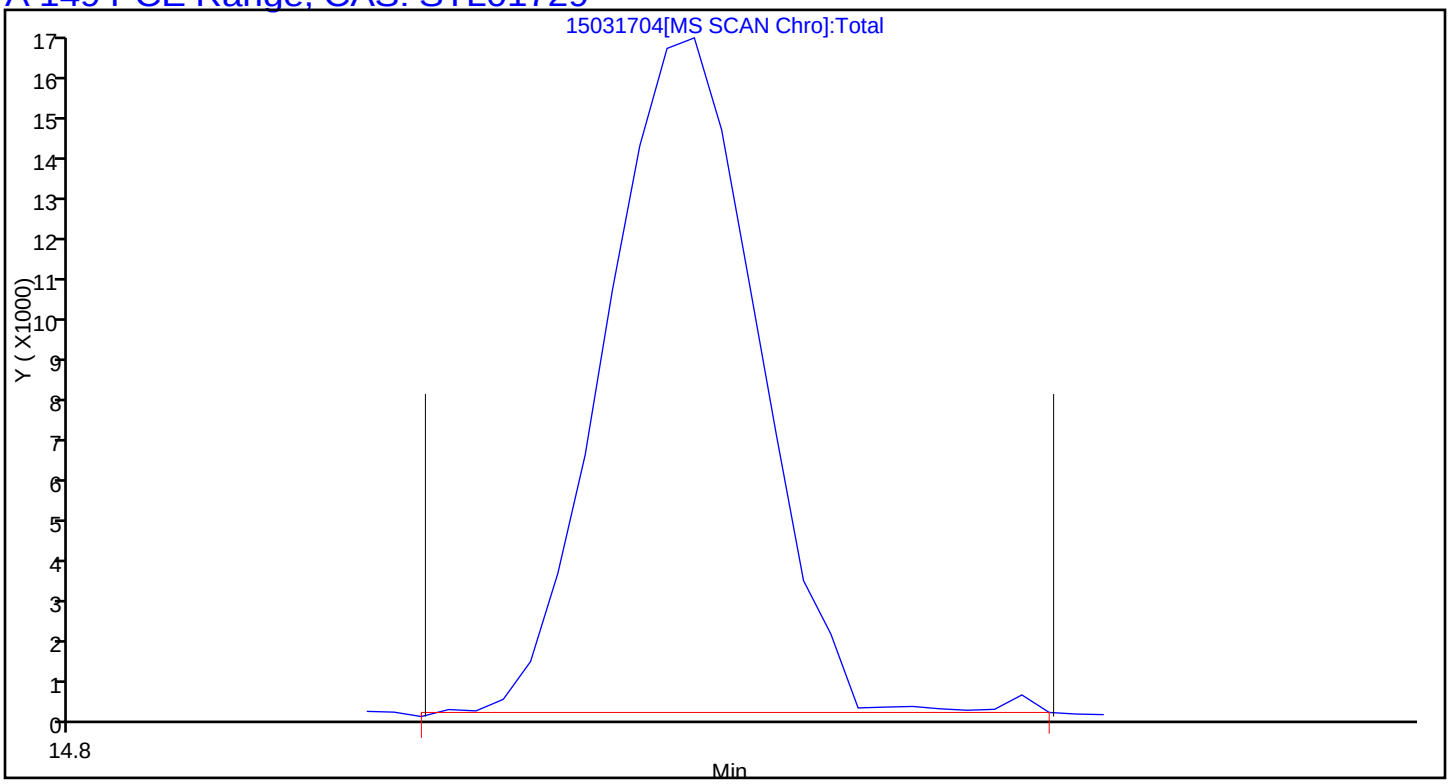


Report Date: 24-Mar-2015 10:32:44 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Sacramento

Data File:	\\SACCHROM\ChromData\ATMS2\20150317-20264.b\15031704.D				
Injection Date:	18-Mar-2015 02:43:30	Instrument ID:	ATMS2		
Lims ID:	IC 0.2ppbv				
Client ID:					
Operator ID:	SRS	ALS Bottle#:	1	Worklist Smp#:	5
Purge Vol:	250.000 mL	Dil. Factor:	1.0000		
Method:	TO15_ATMS2N	Limit Group:	MSA - TO15 - ICAL		
Column:	RTX Volatiles (0.32 mm)	Detector	MS SCAN		

A 149 PCE Range, CAS: STL01729



TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\SACCHROM\ChromData\ATMS2\20150317-20264.b\15031705.D
Lims ID: IC 0.3ppbv
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 18-Mar-2015 03:24:30 ALS Bottle#: 1 Worklist Smp#: 6
Purge Vol: 250.000 mL Dil. Factor: 1.0000
Sample Info: IC 0.3PPBV
Misc. Info.: 75mL
Operator ID: SRS Instrument ID: ATMS2
Sublist: chrom-TO15_ATMS2N*sub53

Method: \\SACCHROM\ChromData\ATMS2\20150317-20264.b\TO15_ATMS2N.m
Limit Group: MSA - TO15 - ICAL
Last Update: 24-Mar-2015 10:32:49 Calib Date: 18-Mar-2015 18:13:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\SACCHROM\ChromData\ATMS2\20150317-20264.b\15031726.D

Column 1 : RTX Volatiles (0.32 mm) Det: MS SCAN
Process Host: XAWRK047

First Level Reviewer: scottrs Date: 24-Mar-2015 09:35:38

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	130	10.328	10.328	0.000	97	52001	4.00	4.00	
* 2 1,4-Difluorobenzene	114	11.672	11.672	0.000	94	212566	4.00	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.992	15.991	0.001	86	179707	4.00	4.00	
$ 4 1,2-Dichloroethane-d4 (Sur	65	11.094	11.088	0.006	98	66173	4.00	3.89	
$ 5 Toluene-d8 (Surr)	100	13.850	13.850	0.000	99	121364	4.00	3.88	
$ 6 4-Bromofluorobenzene (Surr	174	17.744	17.744	0.000	95	101277	4.00	3.85	
14 Propene	41	4.135	4.129	0.007	42	4992	0.3000	0.3601	
13 Chlorodifluoromethane	51	4.141	4.141	0.000	96	8373	0.3000	0.3282	
15 Dichlorodifluoromethane	85	4.189	4.189	0.000	98	10143	0.3000	0.3158	
19 1,2-Dichloro-1,1,2,2-tetra	135	4.421	4.427	-0.006	91	4701	0.3000	0.3005	
18 Chloromethane	50	4.609	4.615	-0.006	94	4745	0.3000	0.3301	
22 Butane	43	4.810	4.816	-0.006	97	9596	0.3000	0.3368	
20 Vinyl chloride	62	4.852	4.852	0.000	95	4757	0.3000	0.3259	
21 Butadiene	39	4.925	4.925	0.000	96	4504	0.3000	0.3179	
25 Bromomethane	94	5.625	5.625	0.000	96	3954	0.3000	0.3253	
26 Chloroethane	64	5.777	5.783	-0.006	93	2061	0.3000	0.2943	
27 Vinyl bromide	106	6.185	6.185	0.000	96	4483	0.3000	0.3162	
28 Trichlorofluoromethane	101	6.300	6.300	0.000	96	12940	0.3000	0.3232	
38 Pentane	43	6.349	6.343	0.006	77	11231	0.3000	0.3401	
37 Isopropyl alcohol	45	6.836	6.781	0.055	52	10129	0.3000	0.3132	
39 Ethyl ether	74	6.824	6.793	0.031	96	1680	0.3000	0.2840	
29 Acrolein	56	6.860	6.842	0.018	89	1023	0.3000	0.2465	
31 Acetone	43	7.012	6.963	0.049	96	5836	0.3000	0.3064	
43 1,1,2-Trichloro-1,2,2-trif	101	7.091	7.091	0.000	96	9799	0.3000	0.3275	
41 1,1-Dichloroethene	61	7.274	7.274	0.000	95	7941	0.3000	0.3171	
46 3-Chloro-1-propene	41	7.803	7.803	0.000	95	6622	0.3000	0.3115	
47 Methylene Chloride	49	7.937	7.937	0.000	96	6628	0.3000	0.3459	
42 Acrylonitrile	53	8.028	8.022	0.006	80	2162	0.3000	0.2553	
48 Carbon disulfide	76	8.022	8.022	0.000	99	13702	0.3000	0.3433	
50 Methyl tert-butyl ether	73	8.381	8.332	0.049	94	9701	0.3000	0.3002	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
49 trans-1,2-Dichloroethene	61	8.472	8.466	0.006	96	6540	0.3000	0.3155	
55 Hexane	41	8.740	8.740	0.000	93	6696	0.3000	0.3265	
52 Vinyl acetate	43	9.038	9.026	0.012	100	9396	0.3000	0.2746	
53 1,1-Dichloroethane	63	9.044	9.044	0.000	91	8296	0.3000	0.3251	
54 2-Butanone (MEK)	72	9.640	9.604	0.036	97	1344	0.3000	0.2677	
58 Ethyl acetate	43	9.914	9.877	0.037	89	8395	0.3000	0.2941	
57 cis-1,2-Dichloroethene	96	9.902	9.902	0.000	93	4354	0.3000	0.3122	
61 Chloroform	83	10.139	10.139	0.000	97	9024	0.3000	0.3241	
62 Tetrahydrofuran	42	10.498	10.449	0.049	92	5213	0.3000	0.3048	
65 1,1,1-Trichloroethane	97	10.760	10.766	-0.006	98	9655	0.3000	0.3212	
70 Cyclohexane	84	10.900	10.906	-0.006	94	6501	0.3000	0.3195	
74 Isooctane	57	11.052	11.058	-0.006	97	25749	0.3000	0.3160	
67 n-Butanol	56	11.155	11.088	0.067	26	4800	0.3000	0.3974	
69 Carbon tetrachloride	117	11.155	11.155	0.000	98	11251	0.3000	0.3196	
66 1,2-Dichloroethane	62	11.216	11.216	0.000	95	6125	0.3000	0.3142	
68 Benzene	78	11.319	11.325	-0.006	98	13467	0.3000	0.3122	
75 n-Heptane	43	11.368	11.374	-0.006	97	11385	0.3000	0.3268	
76 Trichloroethene	130	12.195	12.195	0.000	98	7153	0.3000	0.3185	
77 1,2-Dichloropropane	76	12.390	12.384	0.006	88	1971	0.3000	0.3047	
79 Methyl methacrylate	69	12.439	12.427	0.013	91	3005	0.3000	0.2561	
80 Dichlorobromomethane	85	12.682	12.682	0.000	96	5954	0.3000	0.2916	
78 Dibromomethane	174	12.731	12.731	0.000	92	5998	0.3000	0.3075	
81 4-Methyl-2-pentanone (MIBK	43	13.217	13.169	0.048	98	9327	0.3000	0.2774	
83 cis-1,3-Dichloropropene	75	13.424	13.424	0.000	96	7159	0.3000	0.3063	
88 n-Octane	43	13.807	13.807	0.000	93	16453	0.3000	0.3348	
85 Toluene	91	13.960	13.966	-0.006	93	15110	0.3000	0.3028	
84 trans-1,3-Dichloropropene	75	14.093	14.099	-0.006	95	6409	0.3000	0.2905	
86 1,1,2-Trichloroethane	97	14.337	14.337	0.000	97	5510	0.3000	0.3250	
87 2-Hexanone	58	14.422	14.373	0.049	91	3494	0.3000	0.2313	
93 Tetrachloroethene	166	14.939	14.939	0.000	97	9848	0.3000	0.3263	
92 Chlorodibromomethane	129	15.085	15.091	-0.006	98	10614	0.3000	0.3049	
94 Ethylene Dibromide	107	15.389	15.389	0.000	94	8545	0.3000	0.3150	
99 n-Nonane	43	15.985	15.985	0.000	41	14582	0.3000	0.2968	
96 Chlorobenzene	112	16.040	16.046	-0.006	96	14101	0.3000	0.3253	
97 Ethylbenzene	91	16.144	16.137	0.007	98	17012	0.3000	0.2912	
98 m-Xylene & p-Xylene	91	16.253	16.259	-0.006	98	26396	0.6000	0.5923	
101 o-Xylene	91	16.892	16.892	0.000	97	13683	0.3000	0.3004	
100 Styrene	104	16.904	16.904	0.000	96	9539	0.3000	0.2717	
102 Bromoform	173	17.342	17.342	0.000	97	10968	0.3000	0.3012	
104 Isopropylbenzene	120	17.427	17.421	0.006	96	5269	0.3000	0.2872	
103 1,1,2,2-Tetrachloroethane	83	17.555	17.555	0.000	98	9608	0.3000	0.2969	
105 1,2,3-Trichloropropane	110	17.780	17.774	0.006	60	3135	0.3000	0.3136	
113 n-Decane	57	17.956	17.956	0.000	87	8076	0.3000	0.2023	
107 N-Propylbenzene	91	18.017	18.023	-0.006	99	21134	0.3000	0.2846	
110 4-Ethyltoluene	120	18.194	18.188	0.006	99	5486	0.3000	0.2692	
111 1,3,5-Trimethylbenzene	120	18.255	18.255	0.000	93	7825	0.3000	0.2865	
109 2-Chlorotoluene	126	18.267	18.273	-0.006	98	5618	0.3000	0.2897	
112 Alpha Methyl Styrene	118	18.674	18.674	0.000	90	6792	0.3000	0.2566	
114 tert-Butylbenzene	91	18.790	18.796	-0.006	93	12427	0.3000	0.3151	
115 1,2,4-Trimethylbenzene	120	18.845	18.845	0.000	95	6803	0.3000	0.2622	
116 sec-Butylbenzene	105	19.125	19.125	0.000	98	20746	0.3000	0.2716	
121 4-Isopropyltoluene	119	19.313	19.319	-0.006	97	17192	0.3000	0.2700	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
117 1,3-Dichlorobenzene	146	19.429	19.435	-0.006	97	10504	0.3000	0.2672	
120 1,4-Dichlorobenzene	146	19.581	19.581	0.000	95	10386	0.3000	0.2697	
118 Benzyl chloride	91	19.696	19.696	0.000	97	11155	0.2400	0.2150	
124 Undecane	57	19.751	19.757	-0.006	94	5222	0.3000	0.2039	
123 n-Butylbenzene	92	19.934	19.934	0.000	98	6563	0.3000	0.2300	
122 1,2-Dichlorobenzene	146	20.134	20.140	-0.006	95	9942	0.3000	0.2744	
125 Dodecane	57	21.461	21.461	0.000	91	3511	0.3000	0.3019	
126 1,2,4-Trichlorobenzene	180	22.969	22.963	0.006	91	5837	0.3000	0.2594	
128 Hexachlorobutadiene	225	23.322	23.322	0.000	96	5629	0.3000	0.2425	
127 Naphthalene	128	23.456	23.456	0.000	98	11490	0.3000	0.2630	
129 1,2,3-Trichlorobenzene	180	23.997	23.997	0.000	93	5863	0.3000	0.3186	
A 144 C6 Range	1	8.740	(8.640-8.840)		0	34774	0.3000	0.3297	
A 147 Toluene Range	1	13.960	(13.893-14.026)		0	57937	0.3000	0.3863	
A 154 Total VOC as Hexane	1	14.307	(4.068-24.546)		0	4991310	0.3000	47.3	
A 151 Total VOCs as Tetrachloroe	1	14.307	(4.068-24.546)		0	4991310	0.3000	30.4	
A 150 Nonmethane Organic Compoun	1	14.307	(4.068-24.546)		0	4991310	0.3000	47.3	
A 152 TVOC as Toluene	1	14.406	(4.356-24.456)		0	2447407	0.3000	16.3	
A 149 PCE Range	1	14.949	(14.879-15.019)		0	53103	0.3000	0.3232	
S 164 1,2-Dichloroethene, Total	1				0			0.6277	
S 155 Xylenes, Total	91				0		0.9000	0.8927	

Reagents:

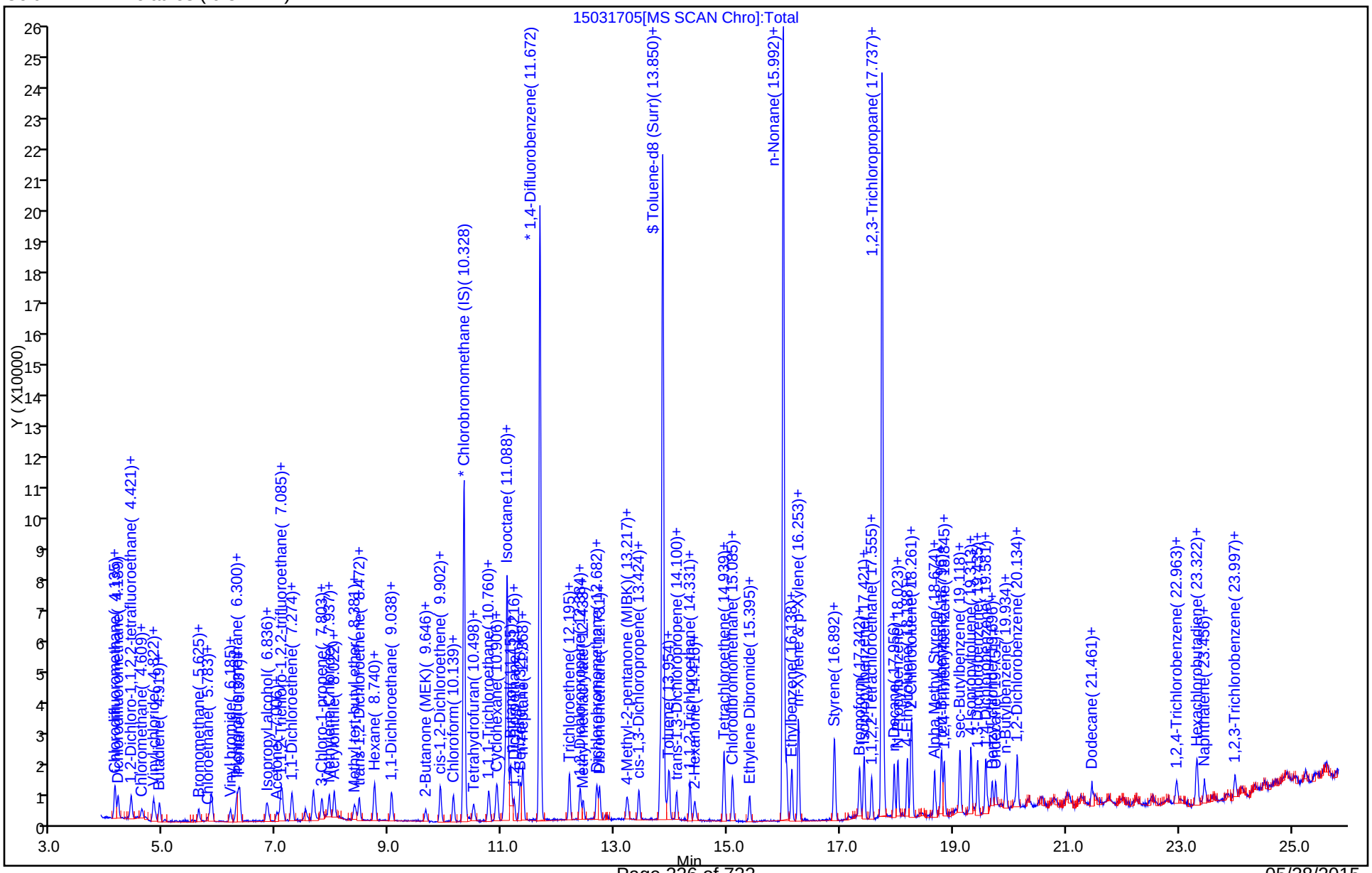
VACORPIC1.0_00008	Amount Added: 75.00	Units: mL	
VASUISIM_00160	Amount Added: 50.00	Units: mL	Run Reagent

Report Date: 24-Mar-2015 10:32:51 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Sacramento

Data File:	\\SACCHROM\ChromData\ATMS2\20150317-20264.b\15031705.D				
Injection Date:	18-Mar-2015 03:24:30	Instrument ID:	ATMS2	Operator ID:	SRS
Lims ID:	IC 0.3ppbv			Worklist Smp#:	6
Client ID:					
Purge Vol:	250.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	1
Method:	TO15_ATMS2N	Limit Group:	MSA - TO15 - ICAL		

Column: RTX Volatiles (0.32 mm)

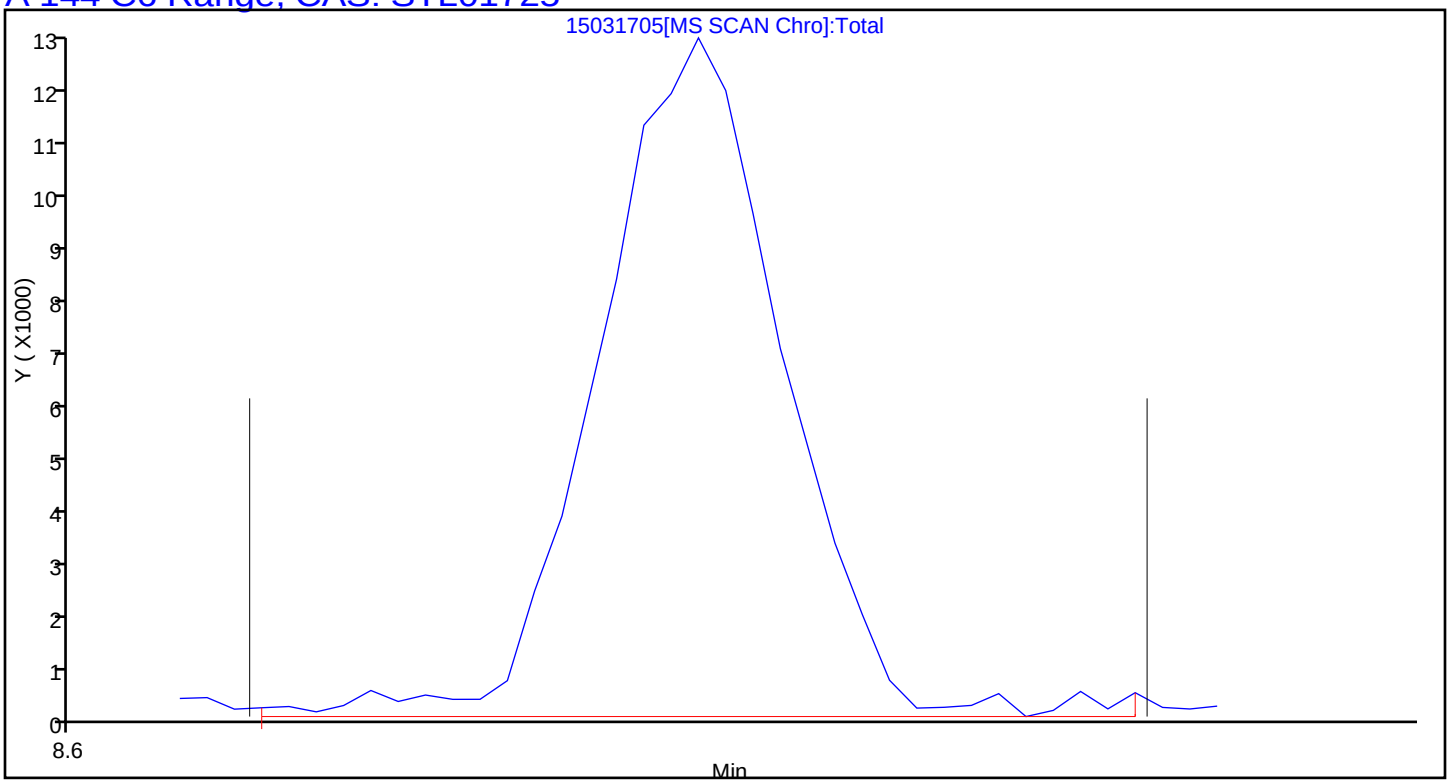


Report Date: 24-Mar-2015 10:32:51 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Sacramento

Data File:	\\SACCHROM\ChromData\ATMS2\20150317-20264.b\15031705.D				
Injection Date:	18-Mar-2015 03:24:30	Instrument ID:	ATMS2		
Lims ID:	IC 0.3ppbv				
Client ID:					
Operator ID:	SRS	ALS Bottle#:	1	Worklist Smp#:	6
Purge Vol:	250.000 mL	Dil. Factor:	1.0000		
Method:	TO15_ATMS2N	Limit Group:	MSA - TO15 - ICAL		
Column:	RTX Volatiles (0.32 mm)	Detector	MS SCAN		

A 144 C6 Range, CAS: STL01725

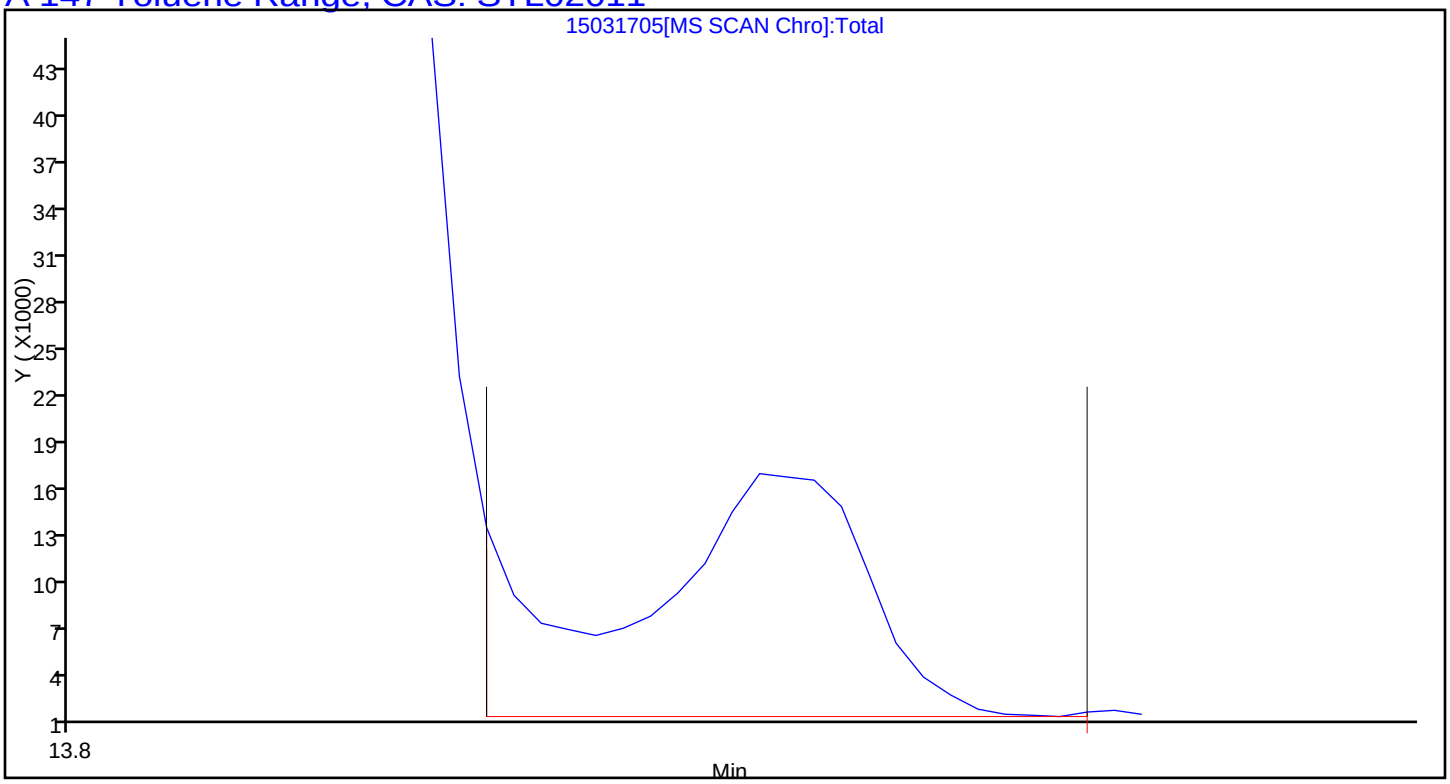


Report Date: 24-Mar-2015 10:32:51 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Sacramento

Data File:	\\SACCHROM\ChromData\ATMS2\20150317-20264.b\15031705.D				
Injection Date:	18-Mar-2015 03:24:30	Instrument ID:	ATMS2		
Lims ID:	IC 0.3ppbv				
Client ID:					
Operator ID:	SRS	ALS Bottle#:	1	Worklist Smp#:	6
Purge Vol:	250.000 mL	Dil. Factor:	1.0000		
Method:	TO15_ATMS2N	Limit Group:	MSA - TO15 - ICAL		
Column:	RTX Volatiles (0.32 mm)	Detector	MS SCAN		

A 147 Toluene Range, CAS: STL02011

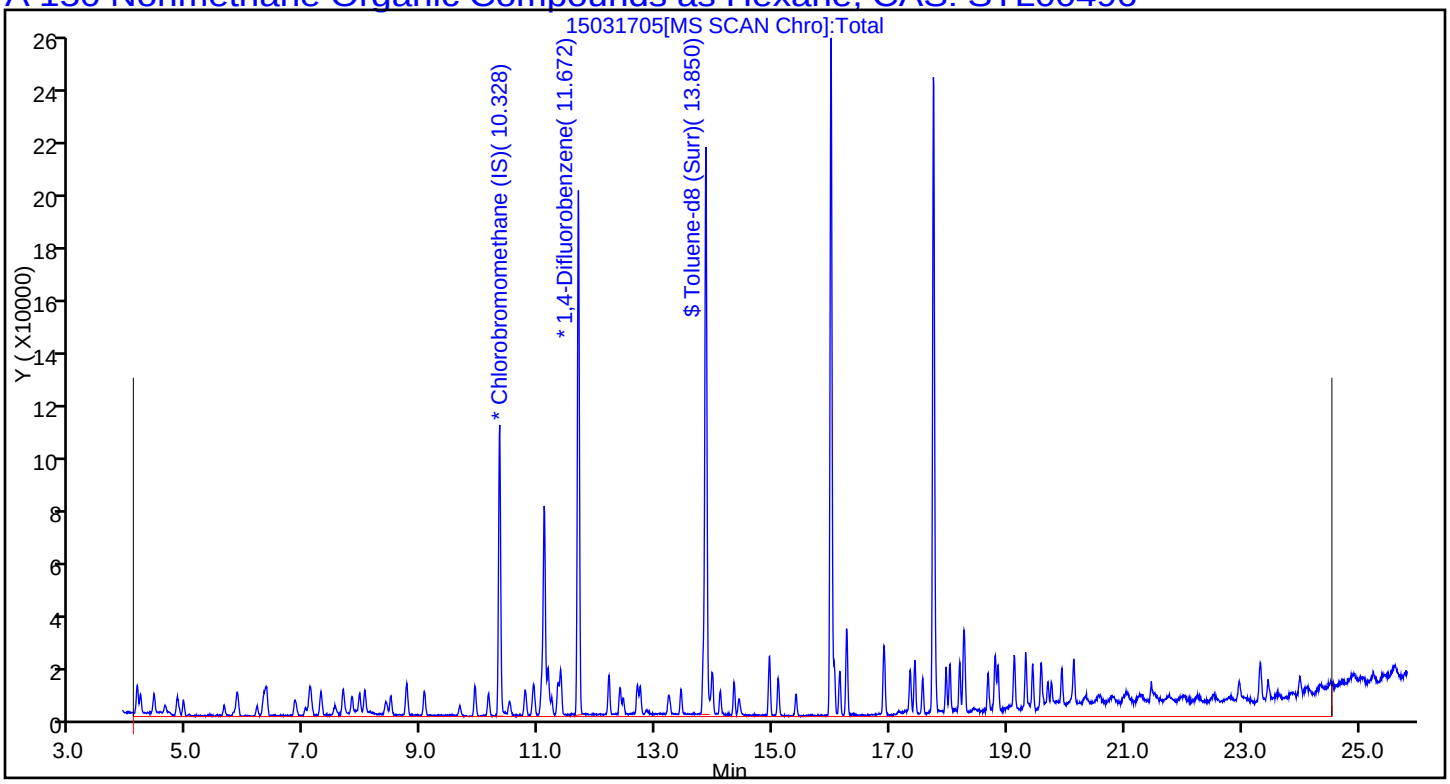


Report Date: 24-Mar-2015 10:32:52 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Sacramento

Data File:	\\SACCHROM\ChromData\ATMS2\20150317-20264.b\15031705.D				
Injection Date:	18-Mar-2015 03:24:30	Instrument ID:	ATMS2		
Lims ID:	IC 0.3ppbv				
Client ID:					
Operator ID:	SRS	ALS Bottle#:	1	Worklist Smp#:	6
Purge Vol:	250.000 mL	Dil. Factor:	1.0000		
Method:	TO15_ATMS2N	Limit Group:	MSA - TO15 - ICAL		
Column:	RTX Volatiles (0.32 mm)	Detector	MS SCAN		

A 150 Nonmethane Organic Compounds as Hexane, CAS: STL00496

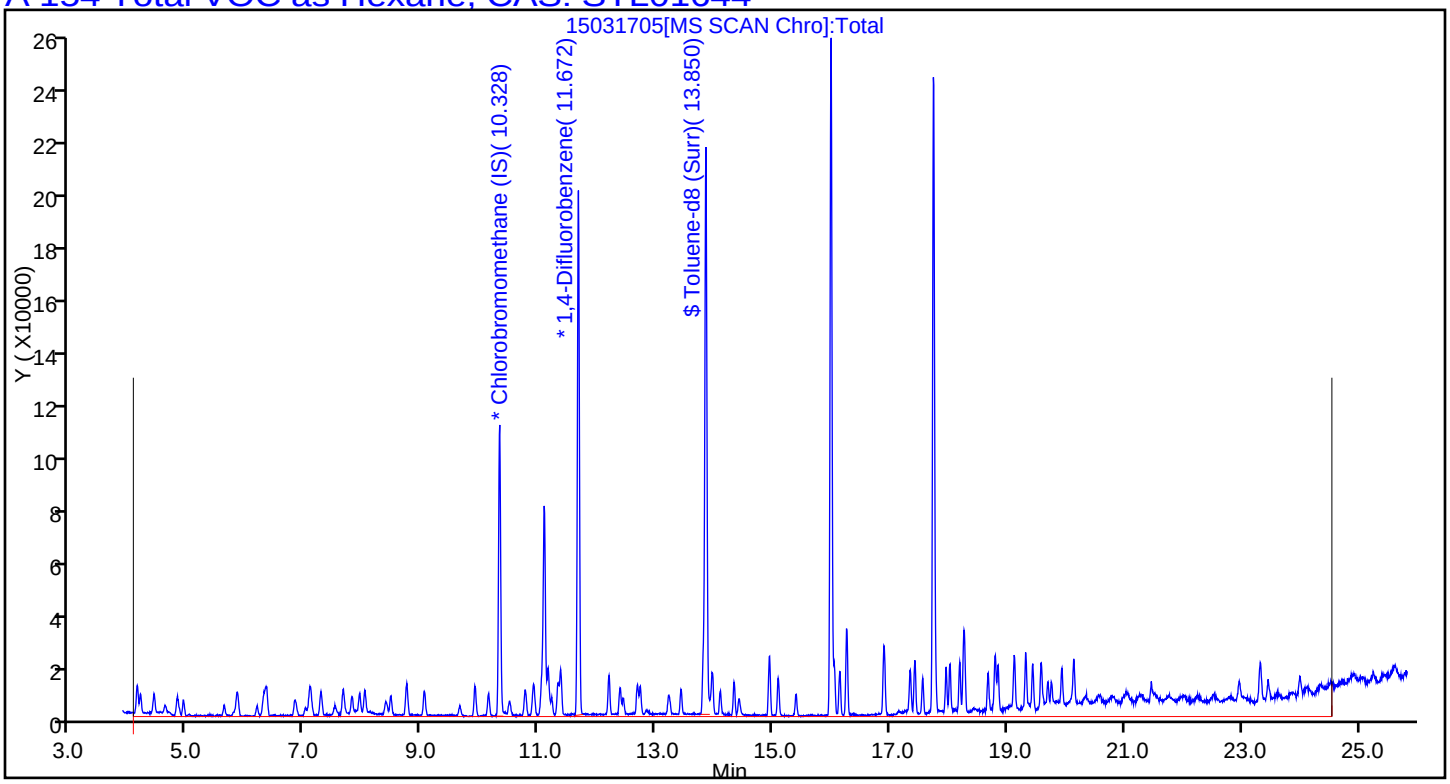


Report Date: 24-Mar-2015 10:32:51 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Sacramento

Data File:	\\SACCHROM\ChromData\ATMS2\20150317-20264.b\15031705.D				
Injection Date:	18-Mar-2015 03:24:30	Instrument ID:	ATMS2		
Lims ID:	IC 0.3ppbv				
Client ID:					
Operator ID:	SRS	ALS Bottle#:	1	Worklist Smp#:	6
Purge Vol:	250.000 mL	Dil. Factor:	1.0000		
Method:	TO15_ATMS2N	Limit Group:	MSA - TO15 - ICAL		
Column:	RTX Volatiles (0.32 mm)	Detector	MS SCAN		

A 154 Total VOC as Hexane, CAS: STL01644

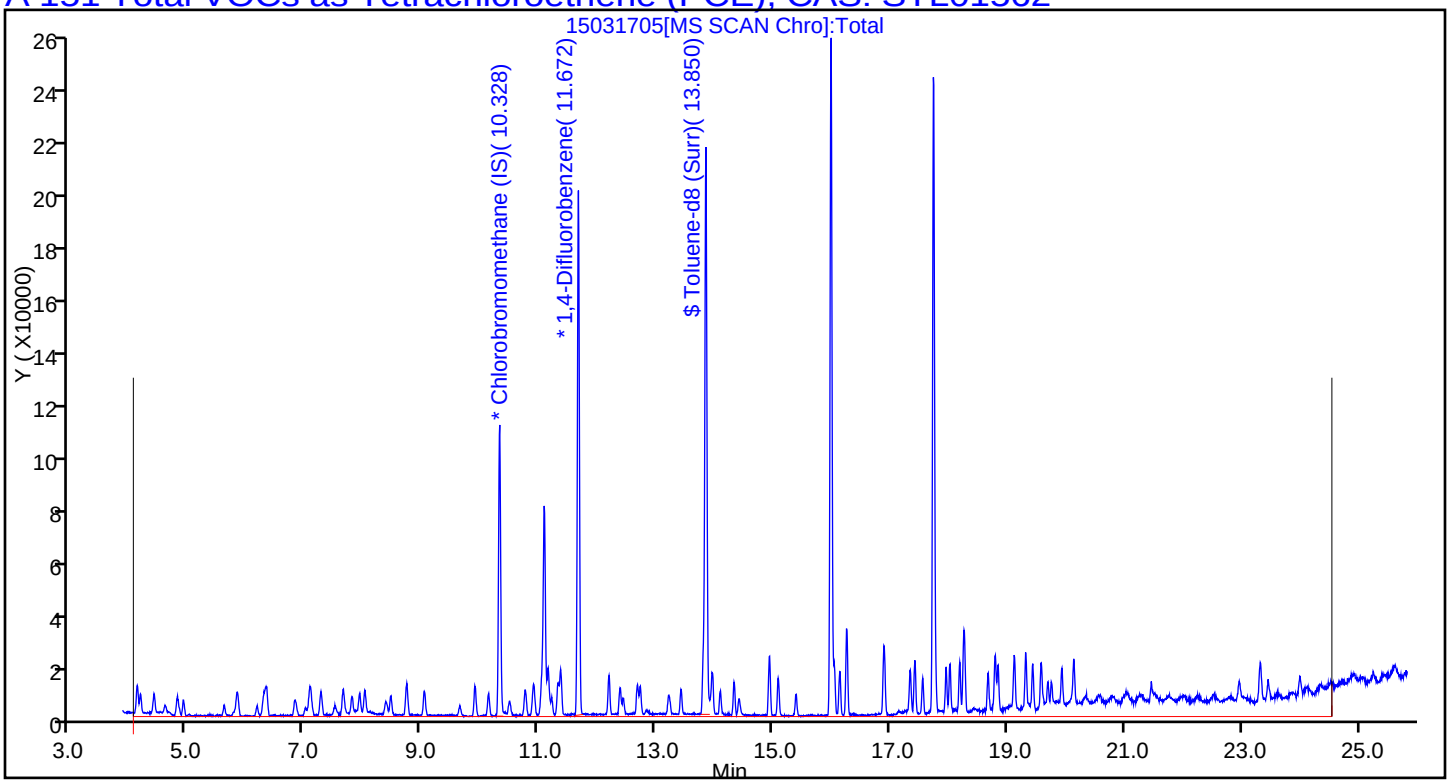


Report Date: 24-Mar-2015 10:32:52 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Sacramento

Data File:	\\SACCHROM\ChromData\ATMS2\20150317-20264.b\15031705.D				
Injection Date:	18-Mar-2015 03:24:30	Instrument ID:	ATMS2		
Lims ID:	IC 0.3ppbv				
Client ID:					
Operator ID:	SRS	ALS Bottle#:	1	Worklist Smp#:	6
Purge Vol:	250.000 mL	Dil. Factor:	1.0000		
Method:	TO15_ATMS2N	Limit Group:	MSA - TO15 - ICAL		
Column:	RTX Volatiles (0.32 mm)	Detector	MS SCAN		

A 151 Total VOCs as Tetrachloroethene (PCE), CAS: STL01562

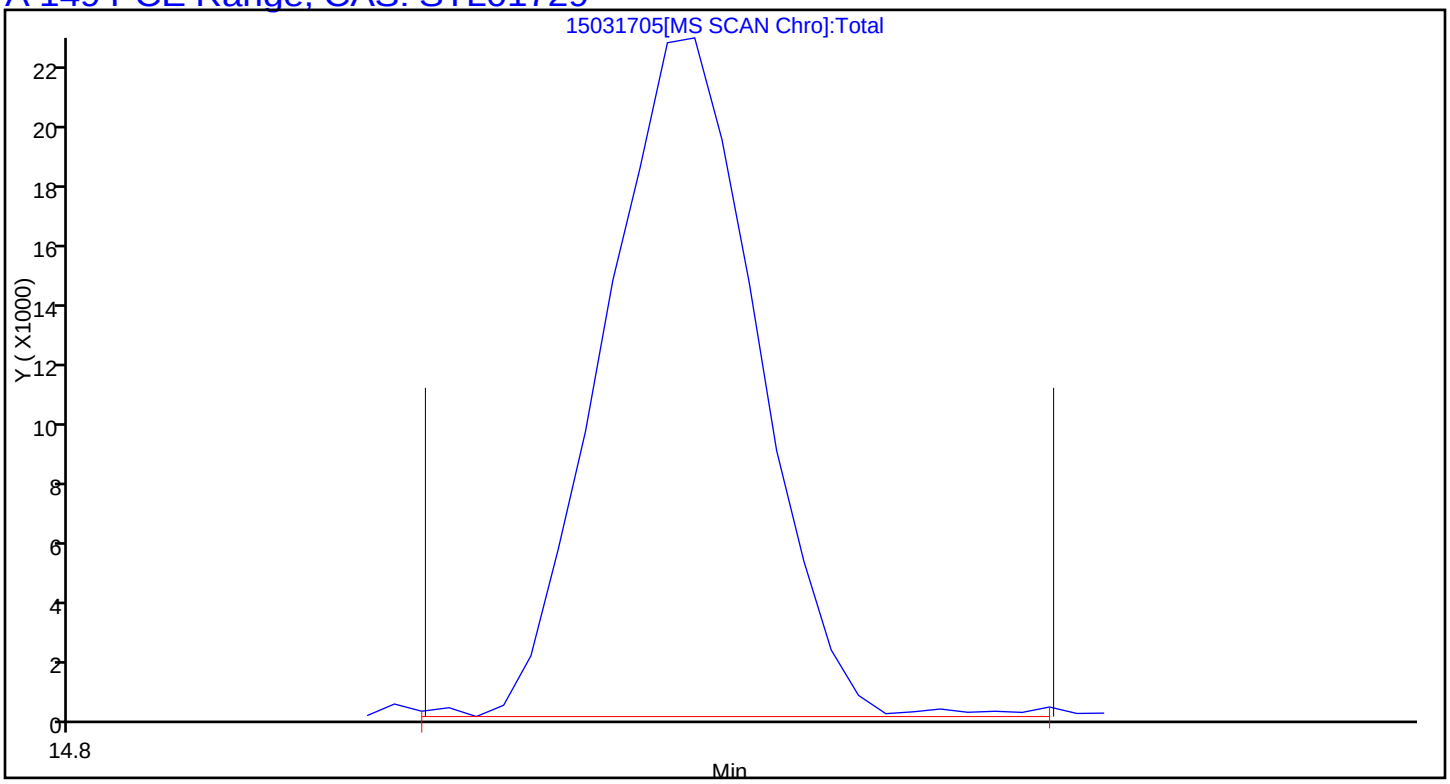


Report Date: 24-Mar-2015 10:32:52 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Sacramento

Data File:	\\SACCHROM\ChromData\ATMS2\20150317-20264.b\15031705.D				
Injection Date:	18-Mar-2015 03:24:30	Instrument ID:	ATMS2		
Lims ID:	IC 0.3ppbv				
Client ID:					
Operator ID:	SRS	ALS Bottle#:	1	Worklist Smp#:	6
Purge Vol:	250.000 mL	Dil. Factor:	1.0000		
Method:	TO15_ATMS2N	Limit Group:	MSA - TO15 - ICAL		
Column:	RTX Volatiles (0.32 mm)	Detector	MS SCAN		

A 149 PCE Range, CAS: STL01729



TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\SACCHROM\ChromData\ATMS2\20150317-20264.b\15031706.D
Lims ID: IC 0.4ppbv
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 18-Mar-2015 04:06:30 ALS Bottle#: 1 Worklist Smp#: 7
Purge Vol: 250.000 mL Dil. Factor: 1.0000
Sample Info: IC 0.4PPBV
Misc. Info.: 100mL
Operator ID: SRS Instrument ID: ATMS2
Sublist: chrom-TO15_ATMS2N*sub53

Method: \\SACCHROM\ChromData\ATMS2\20150317-20264.b\TO15_ATMS2N.m
Limit Group: MSA - TO15 - ICAL
Last Update: 24-Mar-2015 10:32:56 Calib Date: 18-Mar-2015 18:13:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\SACCHROM\ChromData\ATMS2\20150317-20264.b\15031726.D

Column 1 : RTX Volatiles (0.32 mm) Det: MS SCAN
Process Host: XAWRK047

First Level Reviewer: scottrs Date: 23-Mar-2015 15:45:39

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	130	10.328	10.328	0.000	97	51055	4.00	4.00	
* 2 1,4-Difluorobenzene	114	11.672	11.672	0.000	94	210449	4.00	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.991	15.991	0.000	87	179174	4.00	4.00	
$ 4 1,2-Dichloroethane-d4 (Sur	65	11.088	11.088	0.000	99	66897	4.00	4.00	
$ 5 Toluene-d8 (Surr)	100	13.850	13.850	0.000	99	122881	4.00	3.96	
$ 6 4-Bromofluorobenzene (Surr	174	17.743	17.744	-0.001	95	102384	4.00	3.91	
14 Propene	41	4.128	4.129	0.000	43	6244	0.4000	0.4587	
13 Chlorodifluoromethane	51	4.147	4.141	0.006	97	10881	0.4000	0.4345	
15 Dichlorodifluoromethane	85	4.189	4.189	0.000	99	13687	0.4000	0.4341	
19 1,2-Dichloro-1,1,2,2-tetra	135	4.420	4.427	-0.007	90	6664	0.4000	0.4339	
18 Chloromethane	50	4.609	4.615	-0.006	97	6279	0.4000	0.4449	
22 Butane	43	4.816	4.816	0.000	98	12025	0.4000	0.4299	
20 Vinyl chloride	62	4.852	4.852	0.000	95	6120	0.4000	0.4270	
21 Butadiene	39	4.925	4.925	0.000	92	6107	0.4000	0.4390	
25 Bromomethane	94	5.619	5.625	-0.006	97	5004	0.4000	0.4193	
26 Chloroethane	64	5.783	5.783	0.000	94	2841	0.4000	0.4131	
27 Vinyl bromide	106	6.179	6.185	-0.006	98	5947	0.4000	0.4272	
28 Trichlorofluoromethane	101	6.300	6.300	0.000	98	17502	0.4000	0.4453	
38 Pentane	43	6.337	6.343	-0.006	77	14426	0.4000	0.4449	
37 Isopropyl alcohol	45	6.836	6.781	0.055	52	13068	0.4000	0.4116	
39 Ethyl ether	74	6.823	6.793	0.030	96	2292	0.4000	0.3947	
29 Acrolein	56	6.866	6.842	0.024	91	1475	0.4000	0.3620	
31 Acetone	43	7.006	6.963	0.043	98	7806	0.4000	0.4175	
43 1,1,2-Trichloro-1,2,2-trif	101	7.091	7.091	0.000	98	12677	0.4000	0.4316	
30 Acetonitrile	41	7.274	7.262	0.012	51	3746	0.4000	0.3804	
41 1,1-Dichloroethene	61	7.274	7.274	0.000	96	10899	0.4000	0.4433	
44 2-Methyl-2-propanol	59	7.505	7.401	0.104	58	11067	0.4000	0.4058	
46 3-Chloro-1-propene	41	7.803	7.803	0.000	96	8769	0.4000	0.4201	
47 Methylene Chloride	49	7.937	7.937	0.000	98	8472	0.4000	0.4503	
42 Acrylonitrile	53	8.022	8.022	0.000	35	2788	0.4000	0.3353	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
48 Carbon disulfide	76	8.016	8.022	-0.006	99	17052	0.4000	0.4351	
50 Methyl tert-butyl ether	73	8.375	8.332	0.043	95	13078	0.4000	0.4122	
49 trans-1,2-Dichloroethene	61	8.466	8.466	0.000	96	8383	0.4000	0.4119	
55 Hexane	41	8.740	8.740	0.000	93	8921	0.4000	0.4430	
52 Vinyl acetate	43	9.038	9.026	0.012	100	12343	0.4000	0.3674	
53 1,1-Dichloroethane	63	9.044	9.044	0.000	87	10558	0.4000	0.4214	
54 2-Butanone (MEK)	72	9.646	9.604	0.042	97	1805	0.4000	0.3661	
58 Ethyl acetate	43	9.902	9.877	0.025	81	11070	0.4000	0.3951	
57 cis-1,2-Dichloroethene	96	9.902	9.902	0.000	94	5672	0.4000	0.4142	
61 Chloroform	83	10.139	10.139	0.000	96	11866	0.4000	0.4340	
62 Tetrahydrofuran	42	10.498	10.449	0.049	91	6844	0.4000	0.4076	
65 1,1,1-Trichloroethane	97	10.760	10.766	-0.006	99	12675	0.4000	0.4294	
70 Cyclohexane	84	10.899	10.906	-0.007	93	8610	0.4000	0.4274	
74 Isooctane	57	11.052	11.058	-0.006	97	32838	0.4000	0.4070	
67 n-Butanol	56	11.155	11.088	0.067	30	6116	0.4000	0.5158	
69 Carbon tetrachloride	117	11.155	11.155	0.000	96	14338	0.4000	0.4113	
66 1,2-Dichloroethane	62	11.216	11.216	0.000	96	7925	0.4000	0.4106	
68 Benzene	78	11.325	11.325	0.000	98	17825	0.4000	0.4174	
75 n-Heptane	43	11.368	11.374	-0.006	97	13939	0.4000	0.4042	
76 Trichloroethene	130	12.189	12.195	-0.006	99	9196	0.4000	0.4136	
77 1,2-Dichloropropane	76	12.384	12.384	0.000	92	2479	0.4000	0.3871	
79 Methyl methacrylate	69	12.439	12.427	0.013	94	4318	0.4000	0.3718	
72 1,4-Dioxane	88	12.822	12.682	0.140	28	2504	0.4000	0.3193	
80 Dichlorobromomethane	85	12.682	12.682	0.000	96	8333	0.4000	0.4122	
78 Dibromomethane	174	12.731	12.731	0.000	92	7981	0.4000	0.4132	
81 4-Methyl-2-pentanone (MIBK	43	13.205	13.169	0.036	98	12860	0.4000	0.3863	
83 cis-1,3-Dichloropropene	75	13.430	13.424	0.006	97	9459	0.4000	0.4088	
88 n-Octane	43	13.807	13.807	0.000	95	20944	0.4000	0.4274	
85 Toluene	91	13.959	13.966	-0.007	93	20311	0.4000	0.4111	
84 trans-1,3-Dichloropropene	75	14.093	14.099	-0.006	96	8630	0.4000	0.3923	
86 1,1,2-Trichloroethane	97	14.331	14.337	-0.006	97	7314	0.4000	0.4328	
87 2-Hexanone	58	14.416	14.373	0.043	91	5190	0.4000	0.3445	
93 Tetrachloroethene	166	14.939	14.939	0.000	96	13042	0.4000	0.4334	
92 Chlorodibromomethane	129	15.091	15.091	0.000	98	14087	0.4000	0.4059	
94 Ethylene Dibromide	107	15.389	15.389	0.000	97	11392	0.4000	0.4213	
99 n-Nonane	43	15.985	15.985	0.000	44	19917	0.4000	0.4066	
96 Chlorobenzene	112	16.046	16.046	0.000	94	17581	0.4000	0.4068	
97 Ethylbenzene	91	16.137	16.137	0.000	98	23675	0.4000	0.4064	
98 m-Xylene & p-Xylene	91	16.253	16.259	-0.006	99	35178	0.8000	0.7917	
101 o-Xylene	91	16.886	16.892	-0.006	98	18182	0.4000	0.4004	
100 Styrene	104	16.904	16.904	0.000	98	12791	0.4000	0.3654	
102 Bromoform	173	17.342	17.342	0.000	97	14356	0.4000	0.3954	
104 Isopropylbenzene	120	17.421	17.421	0.000	96	7074	0.4000	0.3867	
103 1,1,2,2-Tetrachloroethane	83	17.555	17.555	0.000	99	12953	0.4000	0.4015	
105 1,2,3-Trichloropropane	110	17.774	17.774	0.000	95	3881	0.4000	0.3893	
113 n-Decane	57	17.956	17.956	0.000	85	11313	0.4000	0.2843	
107 N-Propylbenzene	91	18.017	18.023	-0.006	99	28980	0.4000	0.3914	
110 4-Ethyltoluene	120	18.188	18.188	0.000	97	7682	0.4000	0.3781	
111 1,3,5-Trimethylbenzene	120	18.248	18.255	-0.007	92	10354	0.4000	0.3802	
109 2-Chlorotoluene	126	18.273	18.273	0.000	98	7644	0.4000	0.3953	
112 Alpha Methyl Styrene	118	18.668	18.674	-0.006	89	9027	0.4000	0.3421	
114 tert-Butylbenzene	91	18.790	18.796	-0.006	95	15984	0.4000	0.4064	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
115 1,2,4-Trimethylbenzene	120	18.845	18.845	0.000	95	8859	0.4000	0.3424	
116 sec-Butylbenzene	105	19.118	19.125	-0.007	98	28290	0.4000	0.3714	
121 4-Isopropyltoluene	119	19.319	19.319	0.000	97	23261	0.4000	0.3664	
117 1,3-Dichlorobenzene	146	19.435	19.435	0.000	97	14289	0.4000	0.3645	
120 1,4-Dichlorobenzene	146	19.581	19.581	0.000	94	14348	0.4000	0.3737	
118 Benzyl chloride	91	19.690	19.696	-0.006	98	14521	0.3200	0.2807	
124 Undecane	57	19.757	19.757	0.000	91	7128	0.4000	0.2792	
123 n-Butylbenzene	92	19.934	19.934	0.000	98	9216	0.4000	0.3240	
122 1,2-Dichlorobenzene	146	20.134	20.140	-0.006	96	13706	0.4000	0.3794	
125 Dodecane	57	21.461	21.461	0.000	92	4832	0.4000	0.4167	
126 1,2,4-Trichlorobenzene	180	22.969	22.963	0.006	93	7698	0.4000	0.3432	
128 Hexachlorobutadiene	225	23.322	23.322	0.000	97	8138	0.4000	0.3517	
127 Naphthalene	128	23.456	23.456	0.000	98	16085	0.4000	0.3692	
129 1,2,3-Trichlorobenzene	180	23.991	23.997	-0.006	95	7483	0.4000	0.4078	
A 144 C6 Range	1	8.740	(8.640-8.840)		0	43602	0.4000	0.4211	
A 147 Toluene Range	1	13.960	(13.893-14.026)		0	70458	0.4000	0.4746	
A 154 Total VOC as Hexane	1	14.307	(4.068-24.546)		0	5883796	0.4000	56.8	
A 151 Total VOCs as Tetrachloroe	1	14.307	(4.068-24.546)		0	5883796	0.4000	35.9	
A 150 Nonmethane Organic Compoun	1	14.307	(4.068-24.546)		0	5883796	0.4000	56.8	
A 152 TVOC as Toluene	1	14.406	(4.356-24.456)		0	3246561	0.4000	21.9	
A 149 PCE Range	1	14.949	(14.879-15.019)		0	69637	0.4000	0.4250	
S 164 1,2-Dichloroethene, Total	1				0			0.8261	
S 155 Xylenes, Total	91				0		1.20	1.19	

Reagents:

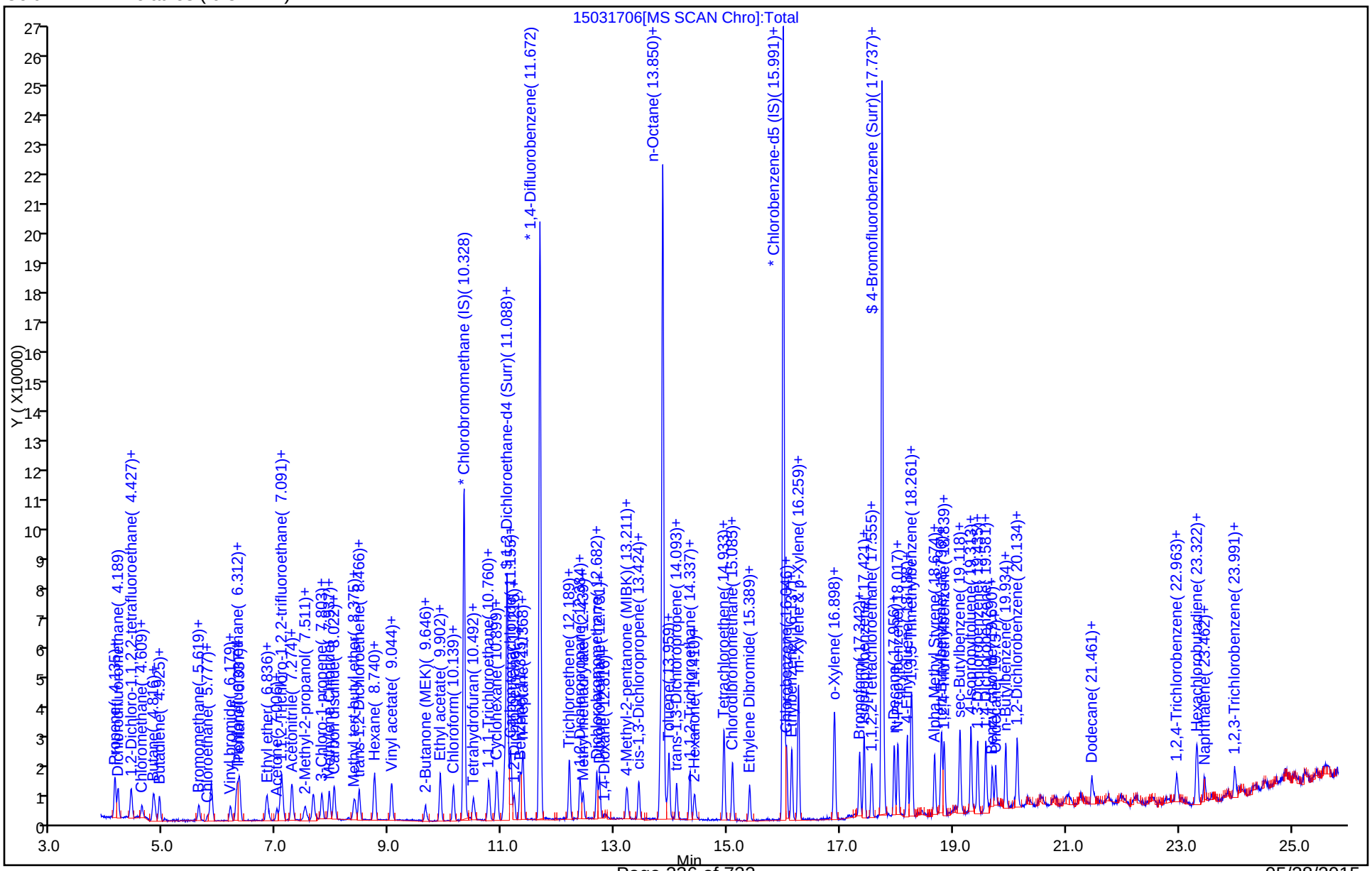
VACORPIC1.0_00008	Amount Added: 100.00	Units: mL	
VASUISIM_00160	Amount Added: 50.00	Units: mL	Run Reagent

Report Date: 24-Mar-2015 10:32:58 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Sacramento

Data File:	\\SACCHROM\ChromData\ATMS2\20150317-20264.b\15031706.D				
Injection Date:	18-Mar-2015 04:06:30	Instrument ID:	ATMS2	Operator ID:	SRS
Lims ID:	IC 0.4ppbv			Worklist Smp#:	7
Client ID:					
Purge Vol:	250.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	1
Method:	TO15_ATMS2N	Limit Group:	MSA - TO15 - ICAL		

Column: RTX Volatiles (0.32 mm)

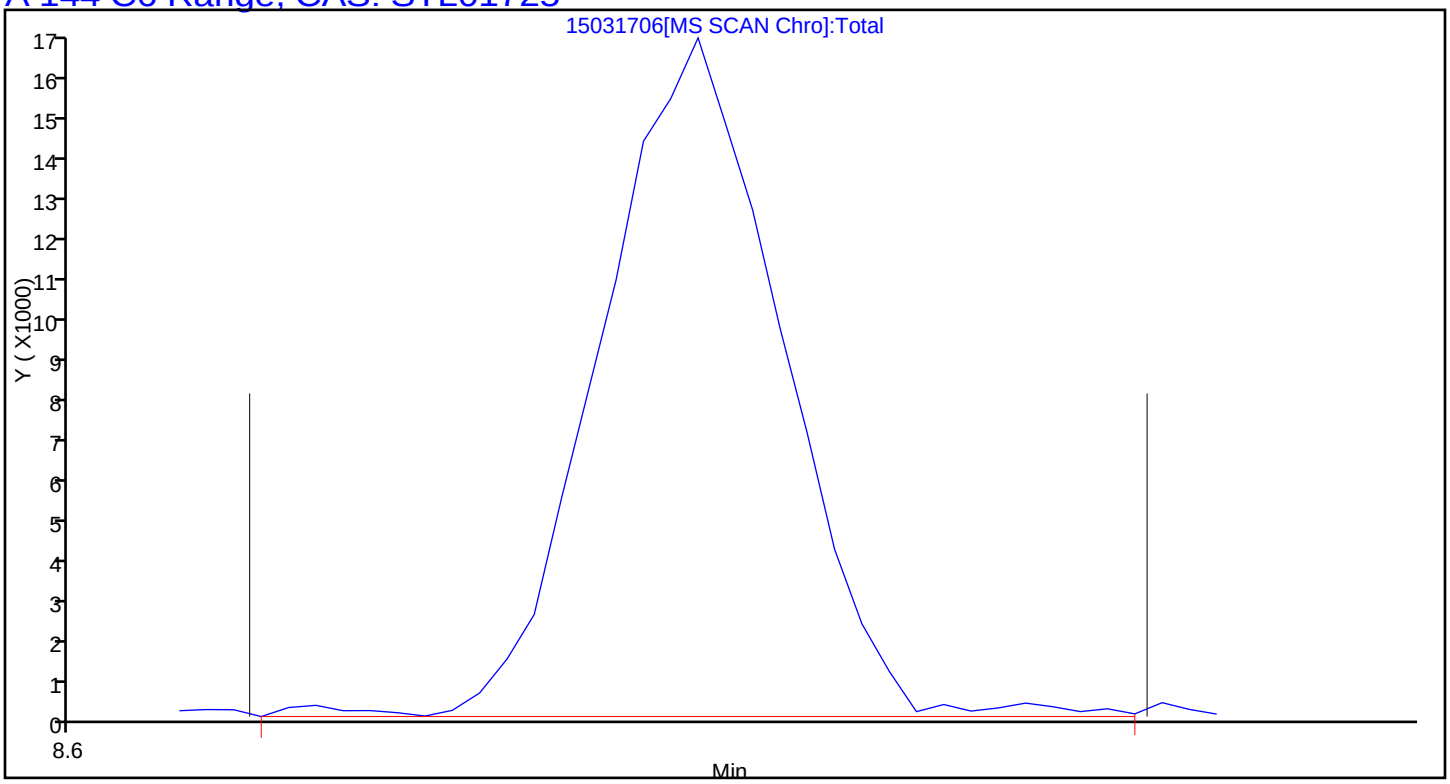


Report Date: 24-Mar-2015 10:32:58 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Sacramento

Data File:	\\SACCHROM\ChromData\ATMS2\20150317-20264.b\15031706.D				
Injection Date:	18-Mar-2015 04:06:30	Instrument ID:	ATMS2		
Lims ID:	IC 0.4ppbv				
Client ID:					
Operator ID:	SRS	ALS Bottle#:	1	Worklist Smp#:	7
Purge Vol:	250.000 mL	Dil. Factor:	1.0000		
Method:	TO15_ATMS2N	Limit Group:	MSA - TO15 - ICAL		
Column:	RTX Volatiles (0.32 mm)	Detector	MS SCAN		

A 144 C6 Range, CAS: STL01725

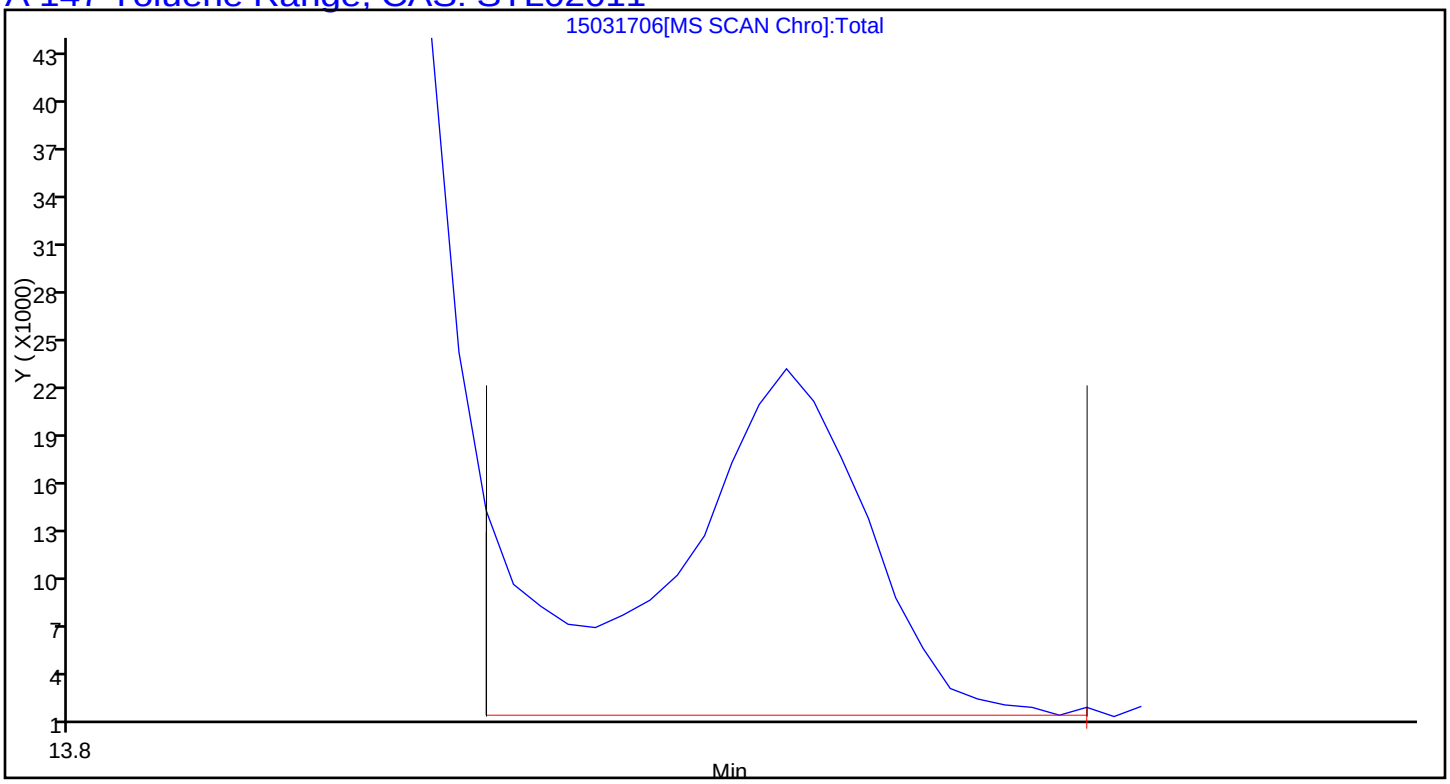


Report Date: 24-Mar-2015 10:32:59 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Sacramento

Data File:	\\SACCHROM\ChromData\ATMS2\20150317-20264.b\15031706.D				
Injection Date:	18-Mar-2015 04:06:30	Instrument ID:	ATMS2		
Lims ID:	IC 0.4ppbv				
Client ID:					
Operator ID:	SRS	ALS Bottle#:	1	Worklist Smp#:	7
Purge Vol:	250.000 mL	Dil. Factor:	1.0000		
Method:	TO15_ATMS2N	Limit Group:	MSA - TO15 - ICAL		
Column:	RTX Volatiles (0.32 mm)	Detector	MS SCAN		

A 147 Toluene Range, CAS: STL02011

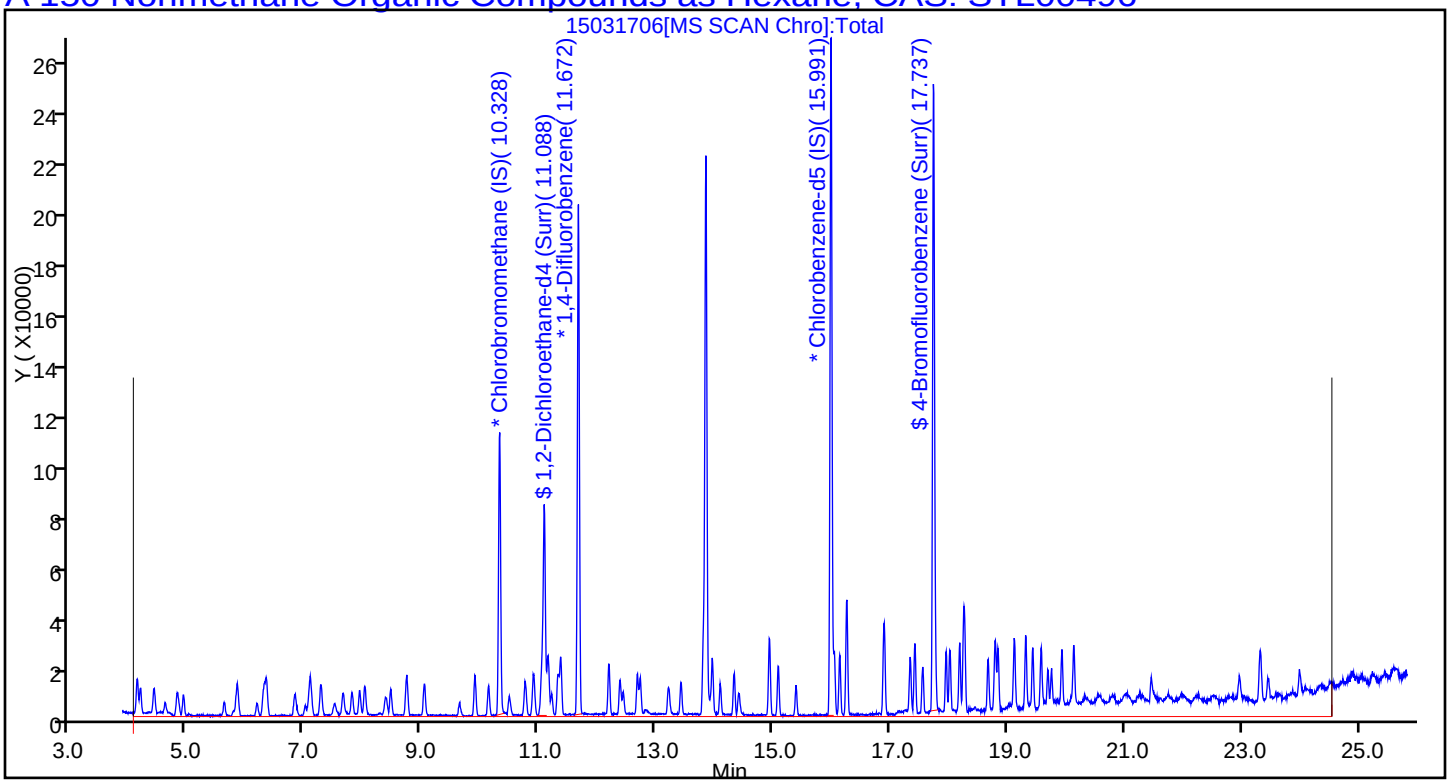


Report Date: 24-Mar-2015 10:32:59 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Sacramento

Data File:	\\SACCHROM\ChromData\ATMS2\20150317-20264.b\15031706.D				
Injection Date:	18-Mar-2015 04:06:30	Instrument ID:	ATMS2		
Lims ID:	IC 0.4ppbv				
Client ID:					
Operator ID:	SRS	ALS Bottle#:	1	Worklist Smp#:	7
Purge Vol:	250.000 mL	Dil. Factor:	1.0000		
Method:	TO15_ATMS2N	Limit Group:	MSA - TO15 - ICAL		
Column:	RTX Volatiles (0.32 mm)	Detector	MS SCAN		

A 150 Nonmethane Organic Compounds as Hexane, CAS: STL00496

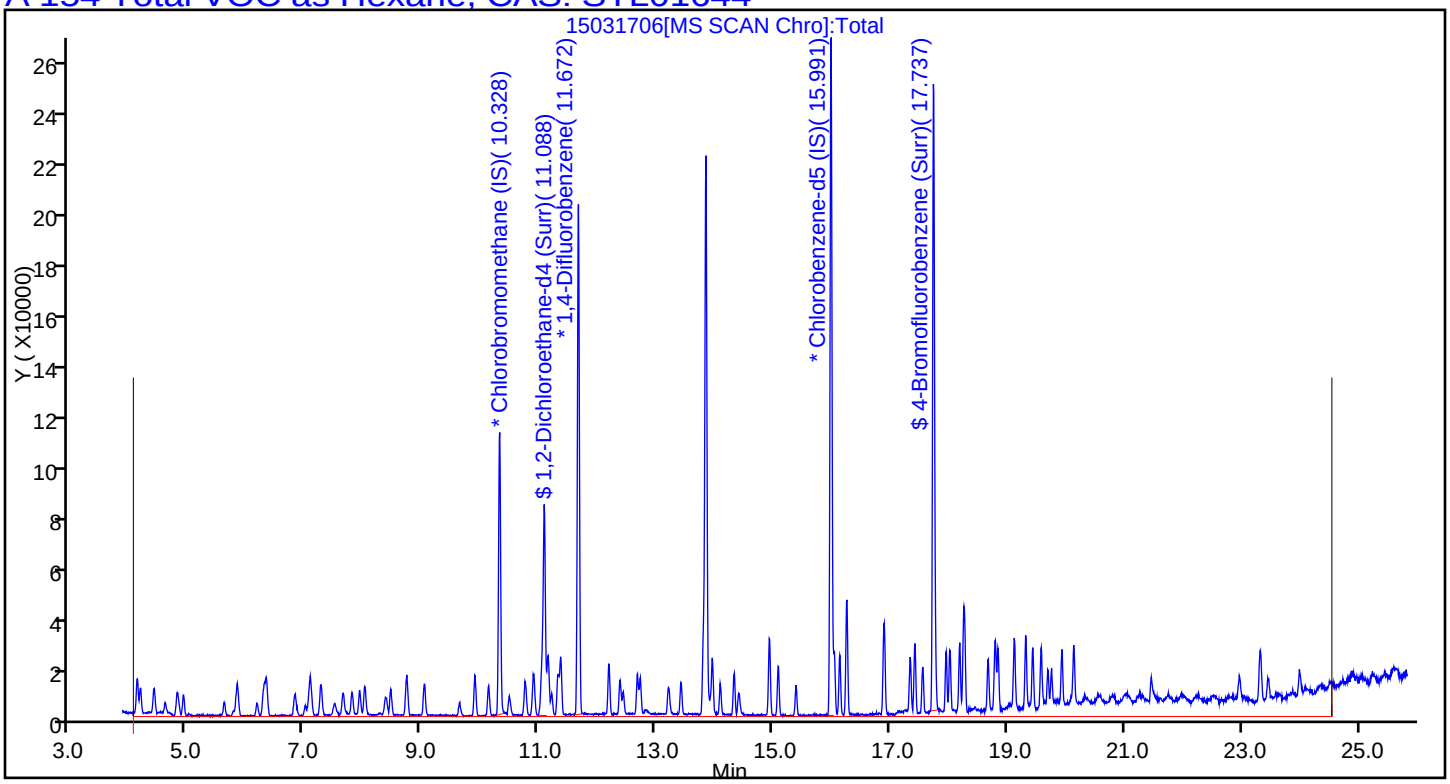


Report Date: 24-Mar-2015 10:32:59 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Sacramento

Data File:	\\SACCHROM\ChromData\ATMS2\20150317-20264.b\15031706.D				
Injection Date:	18-Mar-2015 04:06:30	Instrument ID:	ATMS2		
Lims ID:	IC 0.4ppbv				
Client ID:					
Operator ID:	SRS	ALS Bottle#:	1	Worklist Smp#:	7
Purge Vol:	250.000 mL	Dil. Factor:	1.0000		
Method:	TO15_ATMS2N	Limit Group:	MSA - TO15 - ICAL		
Column:	RTX Volatiles (0.32 mm)	Detector	MS SCAN		

A 154 Total VOC as Hexane, CAS: STL01644

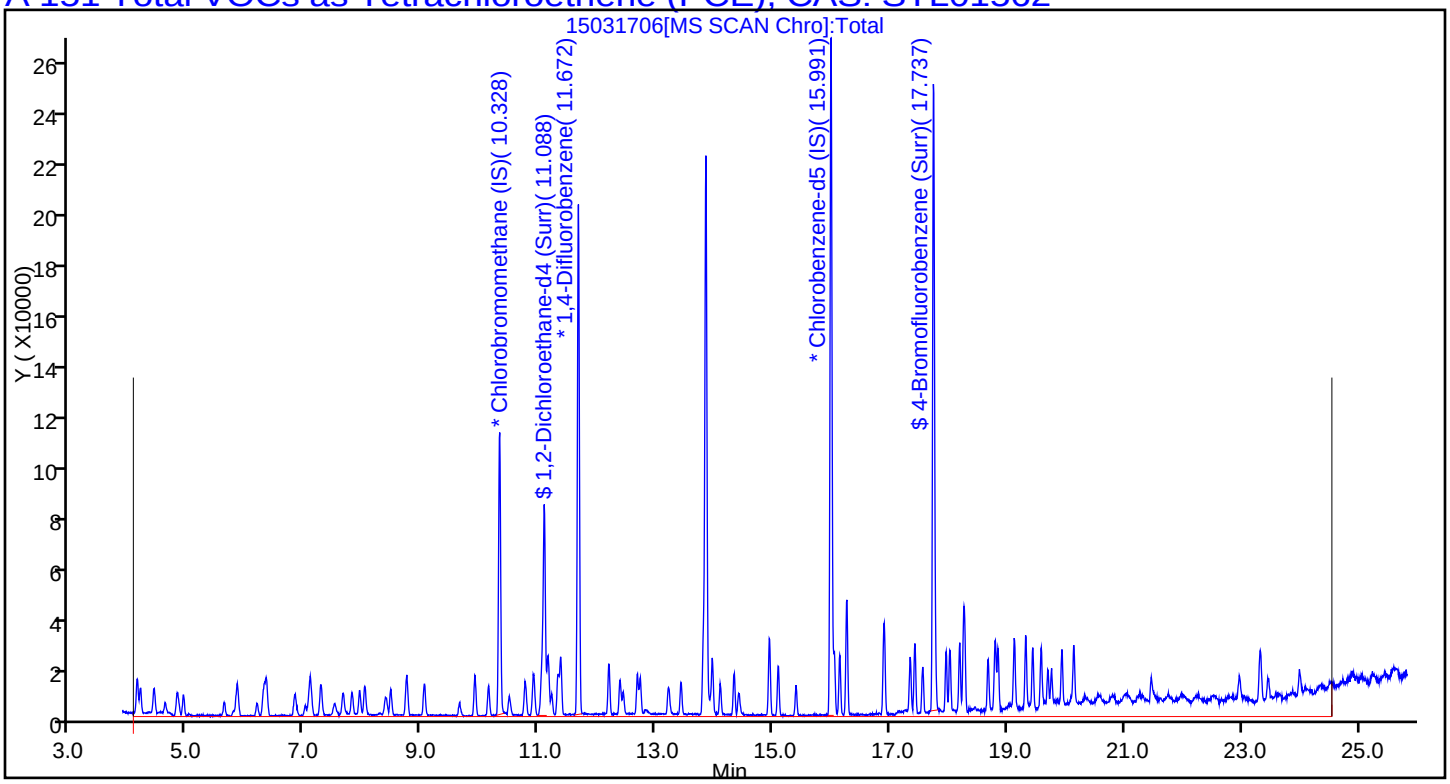


Report Date: 24-Mar-2015 10:32:59 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Sacramento

Data File:	\\SACCHROM\ChromData\ATMS2\20150317-20264.b\15031706.D				
Injection Date:	18-Mar-2015 04:06:30	Instrument ID:	ATMS2		
Lims ID:	IC 0.4ppbv				
Client ID:					
Operator ID:	SRS	ALS Bottle#:	1	Worklist Smp#:	7
Purge Vol:	250.000 mL	Dil. Factor:	1.0000		
Method:	TO15_ATMS2N	Limit Group:	MSA - TO15 - ICAL		
Column:	RTX Volatiles (0.32 mm)	Detector	MS SCAN		

A 151 Total VOCs as Tetrachloroethene (PCE), CAS: STL01562

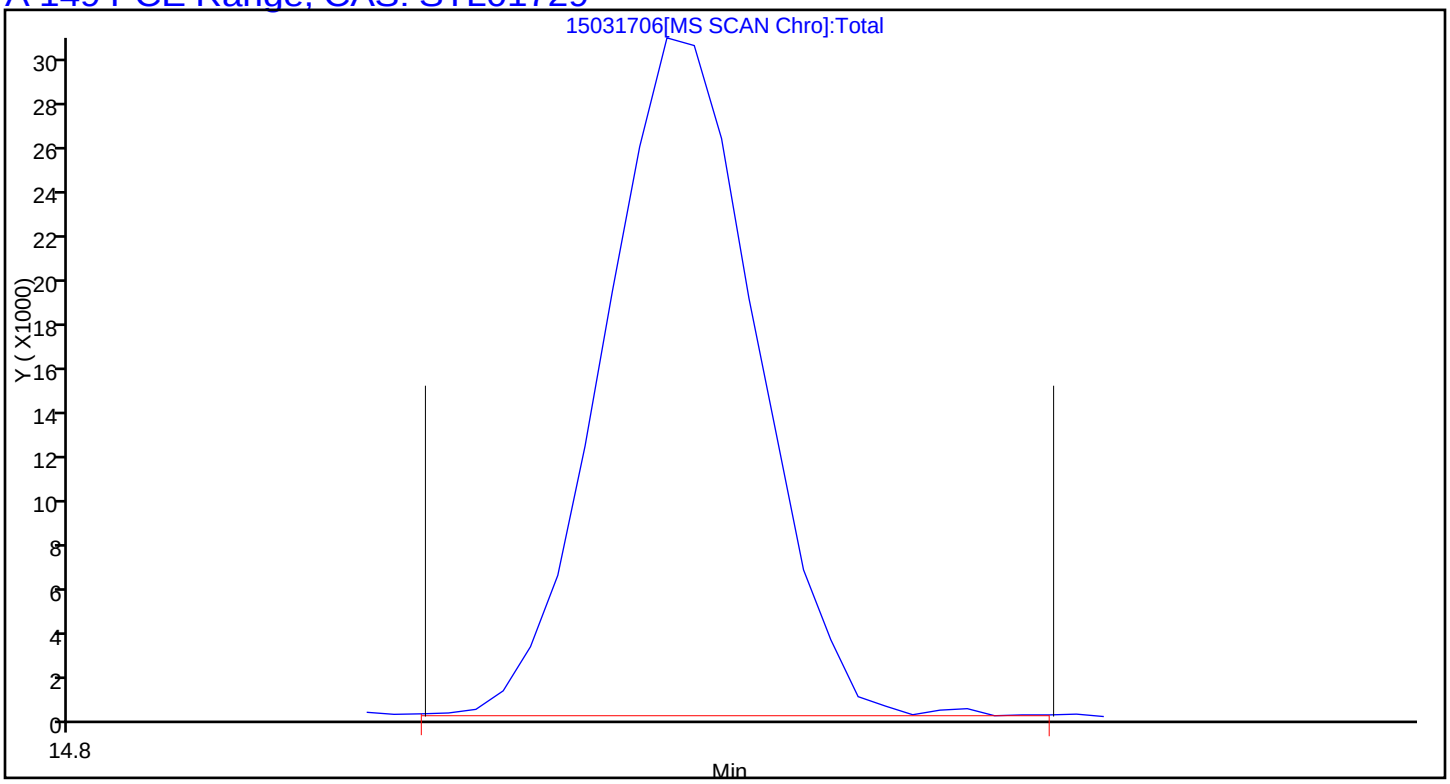


Report Date: 24-Mar-2015 10:32:59 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Sacramento

Data File:	\\SACCHROM\ChromData\ATMS2\20150317-20264.b\15031706.D				
Injection Date:	18-Mar-2015 04:06:30	Instrument ID:	ATMS2		
Lims ID:	IC 0.4ppbv				
Client ID:					
Operator ID:	SRS	ALS Bottle#:	1	Worklist Smp#:	7
Purge Vol:	250.000 mL	Dil. Factor:	1.0000		
Method:	TO15_ATMS2N	Limit Group:	MSA - TO15 - ICAL		
Column:	RTX Volatiles (0.32 mm)	Detector	MS SCAN		

A 149 PCE Range, CAS: STL01729



TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\SACCHROM\ChromData\ATMS2\20150317-20264.b\15031707.D
Lims ID: IC 0.8ppbv
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 18-Mar-2015 04:48:30 ALS Bottle#: 1 Worklist Smp#: 8
Purge Vol: 250.000 mL Dil. Factor: 1.0000
Sample Info: IC 0.8PPBV
Misc. Info.: 200mL
Operator ID: SRS Instrument ID: ATMS2
Sublist: chrom-TO15_ATMS2N*sub53

Method: \\SACCHROM\ChromData\ATMS2\20150317-20264.b\TO15_ATMS2N.m
Limit Group: MSA - TO15 - ICAL
Last Update: 24-Mar-2015 10:33:00 Calib Date: 18-Mar-2015 18:13:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\SACCHROM\ChromData\ATMS2\20150317-20264.b\15031726.D

Column 1 : RTX Volatiles (0.32 mm) Det: MS SCAN
Process Host: XAWRK047

First Level Reviewer: scottrs Date: 23-Mar-2015 15:45:55

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	130	10.328	10.328	0.000	97	51691	4.00	4.00	
* 2 1,4-Difluorobenzene	114	11.672	11.672	0.000	94	211869	4.00	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.991	15.991	0.000	87	179776	4.00	4.00	
$ 4 1,2-Dichloroethane-d4 (Sur	65	11.094	11.088	0.006	99	66657	4.00	3.94	
$ 5 Toluene-d8 (Surr)	100	13.850	13.850	0.000	99	123530	4.00	3.96	
$ 6 4-Bromofluorobenzene (Surr	174	17.737	17.744	-0.007	95	103924	4.00	3.95	
14 Propene	41	4.129	4.129	0.001	42	11722	0.8000	0.8506	
13 Chlorodifluoromethane	51	4.141	4.141	0.000	97	20963	0.8000	0.8267	
15 Dichlorodifluoromethane	85	4.195	4.189	0.006	99	26733	0.8000	0.8374	
19 1,2-Dichloro-1,1,2,2-tetra	135	4.421	4.427	-0.006	91	13823	0.8000	0.8889	
18 Chloromethane	50	4.615	4.615	0.000	97	11669	0.8000	0.8166	
22 Butane	43	4.822	4.816	0.006	98	22801	0.8000	0.8052	
20 Vinyl chloride	62	4.852	4.852	0.000	97	11719	0.8000	0.8076	
21 Butadiene	39	4.925	4.925	0.000	96	11587	0.8000	0.8226	
25 Bromomethane	94	5.619	5.625	-0.006	98	9718	0.8000	0.8044	
26 Chloroethane	64	5.783	5.783	0.000	96	5806	0.8000	0.8339	
27 Vinyl bromide	106	6.185	6.185	0.000	98	11515	0.8000	0.8170	
28 Trichlorofluoromethane	101	6.300	6.300	0.000	98	33334	0.8000	0.8376	
38 Pentane	43	6.343	6.343	0.000	87	28110	0.8000	0.8562	
37 Isopropyl alcohol	45	6.817	6.781	0.036	52	27950	0.8000	0.8696	
39 Ethyl ether	74	6.817	6.793	0.024	97	5145	0.8000	0.8750	
29 Acrolein	56	6.866	6.842	0.024	90	3444	0.8000	0.8349	
31 Acetone	43	6.994	6.963	0.031	98	16789	0.8000	0.8869	
43 1,1,2-Trichloro-1,2,2-trif	101	7.091	7.091	0.000	96	24872	0.8000	0.8364	
30 Acetonitrile	41	7.280	7.262	0.018	58	8738	0.8000	0.8764	
41 1,1-Dichloroethene	61	7.274	7.274	0.000	96	20538	0.8000	0.8250	
44 2-Methyl-2-propanol	59	7.481	7.401	0.080	96	23186	0.8000	0.8398	
46 3-Chloro-1-propene	41	7.809	7.803	0.006	94	17370	0.8000	0.8220	
47 Methylene Chloride	49	7.937	7.937	0.000	98	16011	0.8000	0.8406	
42 Acrylonitrile	53	8.028	8.022	0.006	37	6950	0.8000	0.8256	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
48 Carbon disulfide	76	8.022	8.022	0.000	100	33146	0.8000	0.8354	
50 Methyl tert-butyl ether	73	8.375	8.332	0.043	97	28619	0.8000	0.8910	
49 trans-1,2-Dichloroethene	61	8.466	8.466	0.000	97	16566	0.8000	0.8040	
55 Hexane	41	8.740	8.740	0.000	93	17588	0.8000	0.8626	
52 Vinyl acetate	43	9.038	9.026	0.012	100	28293	0.8000	0.8318	
53 1,1-Dichloroethane	63	9.050	9.044	0.006	99	20989	0.8000	0.8275	
54 2-Butanone (MEK)	72	9.628	9.604	0.024	98	4411	0.8000	0.8837	
58 Ethyl acetate	43	9.896	9.877	0.019	84	24565	0.8000	0.8659	
57 cis-1,2-Dichloroethene	96	9.902	9.902	0.000	89	11434	0.8000	0.8247	
61 Chloroform	83	10.133	10.139	-0.006	96	23404	0.8000	0.8455	
62 Tetrahydrofuran	42	10.480	10.449	0.031	95	15015	0.8000	0.8831	
65 1,1,1-Trichloroethane	97	10.766	10.766	0.000	97	25254	0.8000	0.8451	
70 Cyclohexane	84	10.912	10.906	0.006	94	17029	0.8000	0.8397	
74 Isooctane	57	11.058	11.058	0.000	97	67538	0.8000	0.8316	
67 n-Butanol	56	11.143	11.088	0.055	40	12725	0.8000	1.06	
69 Carbon tetrachloride	117	11.155	11.155	0.000	98	28586	0.8000	0.8146	
66 1,2-Dichloroethane	62	11.216	11.216	0.000	97	15739	0.8000	0.8099	
68 Benzene	78	11.325	11.325	0.000	97	34671	0.8000	0.8063	
75 n-Heptane	43	11.374	11.374	0.000	98	28443	0.8000	0.8192	
76 Trichloroethene	130	12.195	12.195	0.000	98	17938	0.8000	0.8013	
77 1,2-Dichloropropane	76	12.384	12.384	0.000	93	5131	0.8000	0.7959	
79 Methyl methacrylate	69	12.439	12.427	0.013	93	9391	0.8000	0.8031	
72 1,4-Dioxane	88	12.779	12.682	0.097	70	6571	0.8000	0.8322	
80 Dichlorobromomethane	85	12.676	12.682	-0.006	97	16889	0.8000	0.8298	
78 Dibromomethane	174	12.731	12.731	0.000	92	15945	0.8000	0.8201	
81 4-Methyl-2-pentanone (MIBK	43	13.193	13.169	0.024	99	27339	0.8000	0.8158	
83 cis-1,3-Dichloropropene	75	13.424	13.424	0.000	97	19049	0.8000	0.8178	
88 n-Octane	43	13.807	13.807	0.000	97	41687	0.8000	0.8479	
85 Toluene	91	13.960	13.966	-0.006	94	42081	0.8000	0.8459	
84 trans-1,3-Dichloropropene	75	14.100	14.099	0.001	97	17962	0.8000	0.8138	
86 1,1,2-Trichloroethane	97	14.331	14.337	-0.006	98	14299	0.8000	0.8432	
87 2-Hexanone	58	14.404	14.373	0.031	91	12623	0.8000	0.8352	
93 Tetrachloroethene	166	14.939	14.939	0.000	97	25704	0.8000	0.8514	
92 Chlorodibromomethane	129	15.091	15.091	0.000	98	28600	0.8000	0.8213	
94 Ethylene Dibromide	107	15.389	15.389	0.000	98	22775	0.8000	0.8394	
99 n-Nonane	43	15.985	15.985	0.000	52	41506	0.8000	0.8445	
96 Chlorobenzene	112	16.046	16.046	0.000	95	37007	0.8000	0.8533	
97 Ethylbenzene	91	16.138	16.137	0.001	98	51844	0.8000	0.8870	
98 m-Xylene & p-Xylene	91	16.259	16.259	0.000	99	79464	1.60	1.78	
101 o-Xylene	91	16.892	16.892	0.000	97	40485	0.8000	0.8885	
100 Styrene	104	16.904	16.904	0.000	98	29225	0.8000	0.8321	
102 Bromoform	173	17.342	17.342	0.000	98	30359	0.8000	0.8333	
104 Isopropylbenzene	120	17.421	17.421	0.000	96	15867	0.8000	0.8644	
103 1,1,2,2-Tetrachloroethane	83	17.555	17.555	0.000	99	28776	0.8000	0.8890	
105 1,2,3-Trichloropropane	110	17.774	17.774	0.000	91	8774	0.8000	0.8772	
113 n-Decane	57	17.956	17.956	0.000	87	28389	0.8000	0.7110	
107 N-Propylbenzene	91	18.023	18.023	0.000	99	64181	0.8000	0.8638	
110 4-Ethyltoluene	120	18.188	18.188	0.000	99	17223	0.8000	0.8449	
111 1,3,5-Trimethylbenzene	120	18.249	18.255	-0.007	92	23931	0.8000	0.8758	
109 2-Chlorotoluene	126	18.273	18.273	0.000	98	17286	0.8000	0.8909	
112 Alpha Methyl Styrene	118	18.674	18.674	0.000	87	21342	0.8000	0.8060	
114 tert-Butylbenzene	91	18.790	18.796	-0.006	95	34223	0.8000	0.8673	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
115 1,2,4-Trimethylbenzene	120	18.845	18.845	0.000	95	21707	0.8000	0.8363	
116 sec-Butylbenzene	105	19.118	19.125	-0.007	98	64822	0.8000	0.8482	
121 4-Isopropyltoluene	119	19.313	19.319	-0.006	97	52896	0.8000	0.8303	
117 1,3-Dichlorobenzene	146	19.435	19.435	0.000	97	32936	0.8000	0.8374	
120 1,4-Dichlorobenzene	146	19.581	19.581	0.000	95	31823	0.8000	0.8260	
118 Benzyl chloride	91	19.690	19.696	-0.006	99	33311	0.6400	0.6418	
124 Undecane	57	19.751	19.757	-0.006	93	18782	0.8000	0.7332	
123 n-Butylbenzene	92	19.928	19.934	-0.006	98	22661	0.8000	0.7940	
122 1,2-Dichlorobenzene	146	20.134	20.140	-0.006	96	30614	0.8000	0.8446	
125 Dodecane	57	21.461	21.461	0.000	92	10735	0.8000	0.9228	
126 1,2,4-Trichlorobenzene	180	22.963	22.963	0.000	94	17795	0.8000	0.7906	
128 Hexachlorobutadiene	225	23.322	23.322	0.000	98	20011	0.8000	0.8619	
127 Naphthalene	128	23.456	23.456	0.000	99	38414	0.8000	0.8789	
129 1,2,3-Trichlorobenzene	180	23.997	23.997	0.000	95	16311	0.8000	0.8859	
A 144 C6 Range	1	8.740	(8.640-8.840)		0	86473	0.8000	0.8248	
A 147 Toluene Range	1	13.960	(13.893-14.026)		0	119593	0.8000	0.8001	
A 154 Total VOC as Hexane	1	14.307	(4.068-24.546)		0	9342186	0.8000	89.1	
A 151 Total VOCs as Tetrachloroe	1	14.307	(4.068-24.546)		0	9342186	0.8000	56.8	
A 150 Nonmethane Organic Compoun	1	14.307	(4.068-24.546)		0	9342186	0.8000	89.1	
A 152 TVOC as Toluene	1	14.406	(4.356-24.456)		0	6708833	0.8000	44.9	
A 149 PCE Range	1	14.949	(14.879-15.019)		0	140111	0.8000	0.8523	
S 164 1,2-Dichloroethene, Total	1				0			1.63	
S 155 Xylenes, Total	91				0		2.40	2.67	

Reagents:

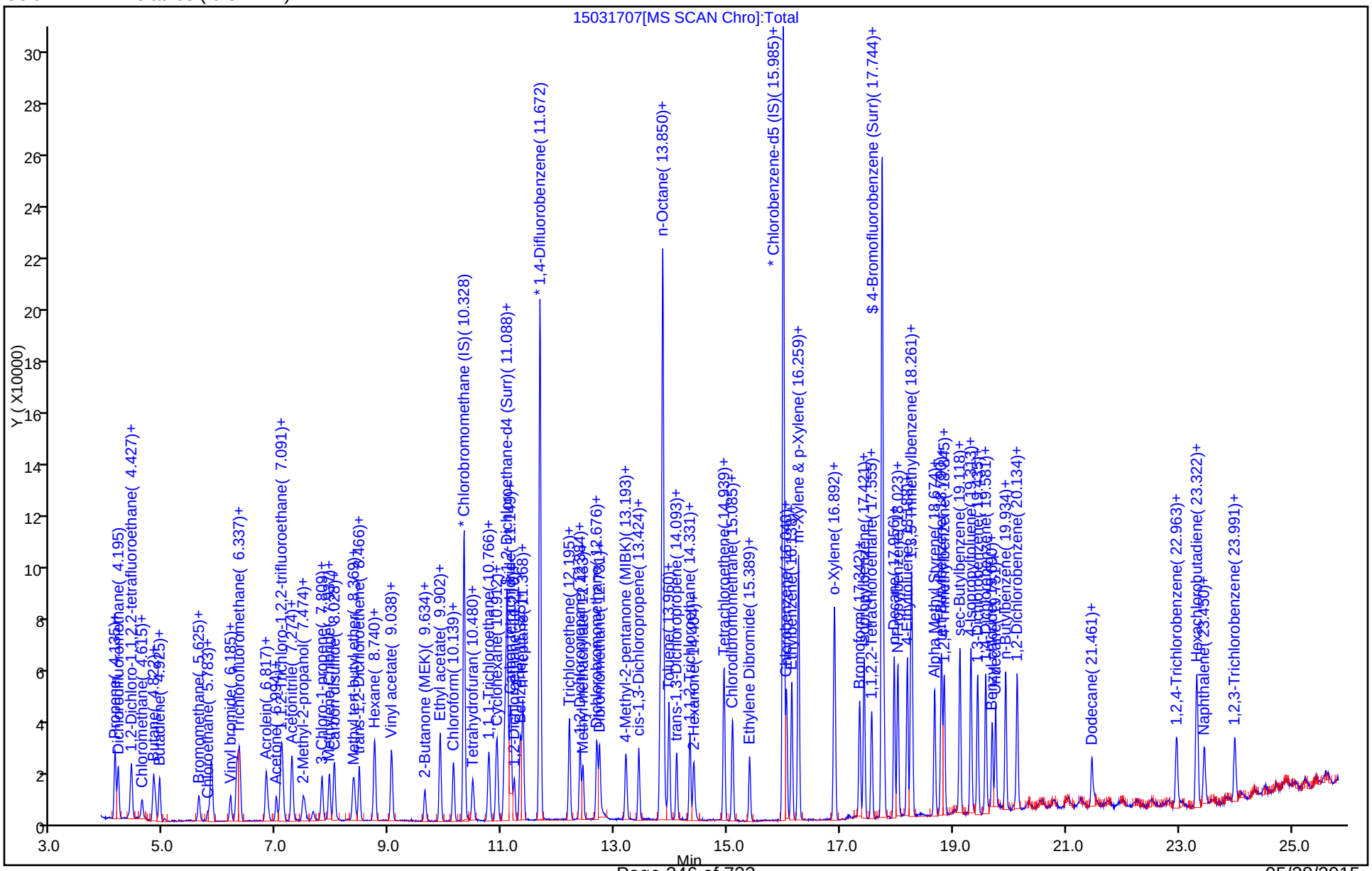
VACORPIC1.0_00008	Amount Added: 200.00	Units: mL	
VASUISIM_00160	Amount Added: 50.00	Units: mL	Run Reagent

Report Date: 24-Mar-2015 10:33:03 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Sacramento

Data File:	\\SACCHROM\ChromData\ATMS2\20150317-20264.b\15031707.D				
Injection Date:	18-Mar-2015 04:48:30	Instrument ID:	ATMS2	Operator ID:	SRS
Lims ID:	IC 0.8ppbv			Worklist Smp#:	8
Client ID:					
Purge Vol:	250.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	1
Method:	TO15_ATMS2N	Limit Group:	MSA - TO15 - ICAL		

Column: RTX Volatiles (0.32 mm)

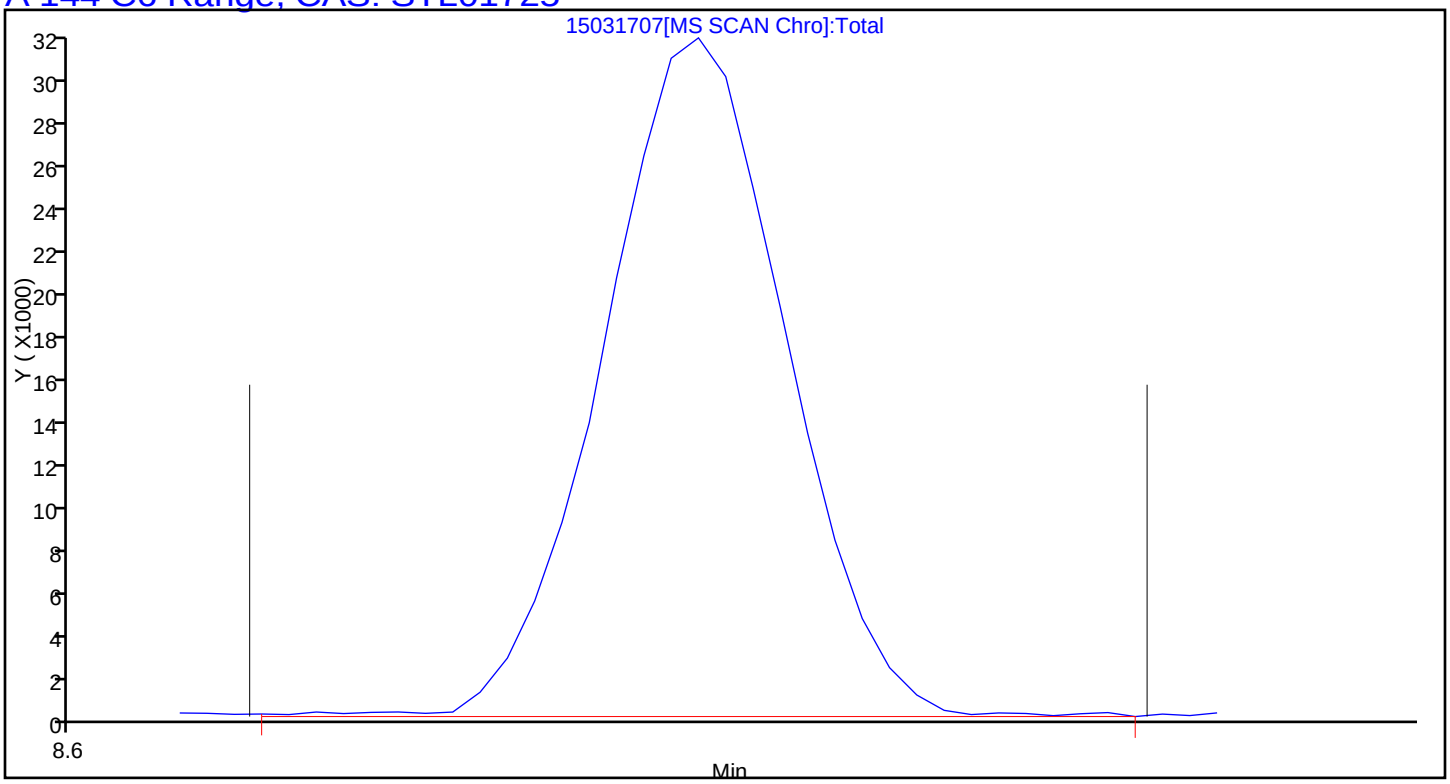


Report Date: 24-Mar-2015 10:33:03 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Sacramento

Data File:	\\SACCHROM\ChromData\ATMS2\20150317-20264.b\15031707.D				
Injection Date:	18-Mar-2015 04:48:30	Instrument ID:	ATMS2		
Lims ID:	IC 0.8ppbv				
Client ID:					
Operator ID:	SRS	ALS Bottle#:	1	Worklist Smp#:	8
Purge Vol:	250.000 mL	Dil. Factor:	1.0000		
Method:	TO15_ATMS2N	Limit Group:	MSA - TO15 - ICAL		
Column:	RTX Volatiles (0.32 mm)	Detector	MS SCAN		

A 144 C6 Range, CAS: STL01725

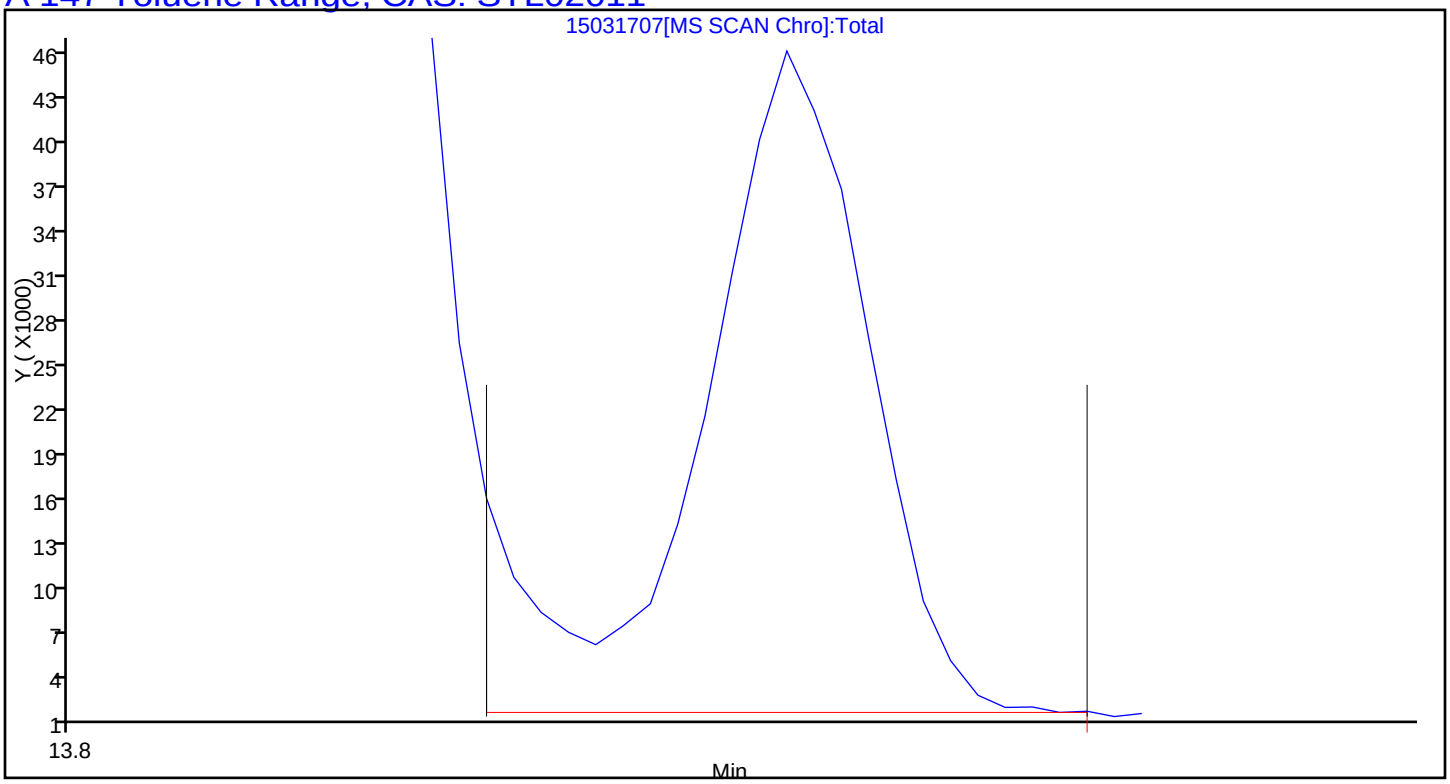


Report Date: 24-Mar-2015 10:33:03 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Sacramento

Data File:	\\SACCHROM\ChromData\ATMS2\20150317-20264.b\15031707.D				
Injection Date:	18-Mar-2015 04:48:30	Instrument ID:	ATMS2		
Lims ID:	IC 0.8ppbv				
Client ID:					
Operator ID:	SRS	ALS Bottle#:	1	Worklist Smp#:	8
Purge Vol:	250.000 mL	Dil. Factor:	1.0000		
Method:	TO15_ATMS2N	Limit Group:	MSA - TO15 - ICAL		
Column:	RTX Volatiles (0.32 mm)	Detector	MS SCAN		

A 147 Toluene Range, CAS: STL02011

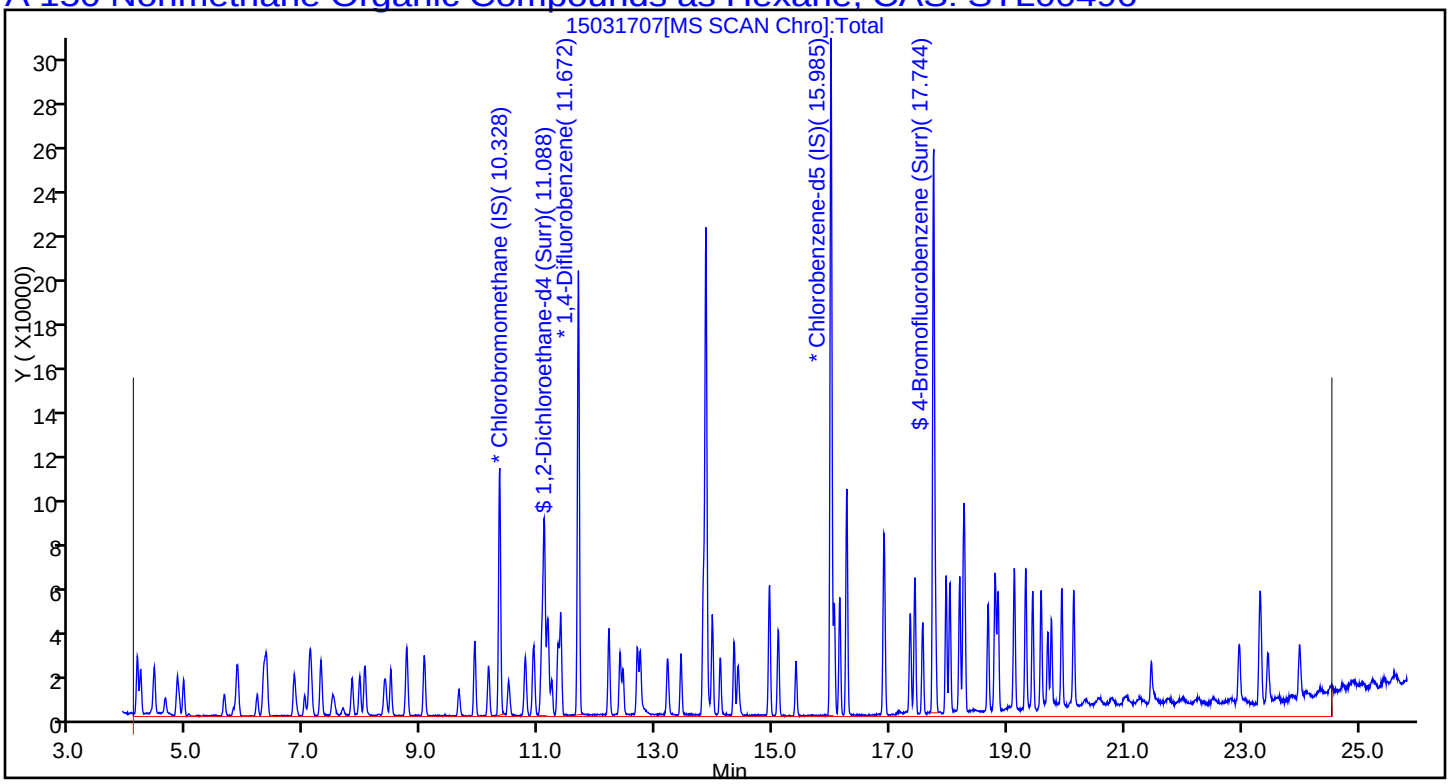


Report Date: 24-Mar-2015 10:33:03 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Sacramento

Data File:	\\SACCHROM\ChromData\ATMS2\20150317-20264.b\15031707.D				
Injection Date:	18-Mar-2015 04:48:30	Instrument ID:	ATMS2		
Lims ID:	IC 0.8ppbv				
Client ID:					
Operator ID:	SRS	ALS Bottle#:	1	Worklist Smp#:	8
Purge Vol:	250.000 mL	Dil. Factor:	1.0000		
Method:	TO15_ATMS2N	Limit Group:	MSA - TO15 - ICAL		
Column:	RTX Volatiles (0.32 mm)	Detector	MS SCAN		

A 150 Nonmethane Organic Compounds as Hexane, CAS: STL00496

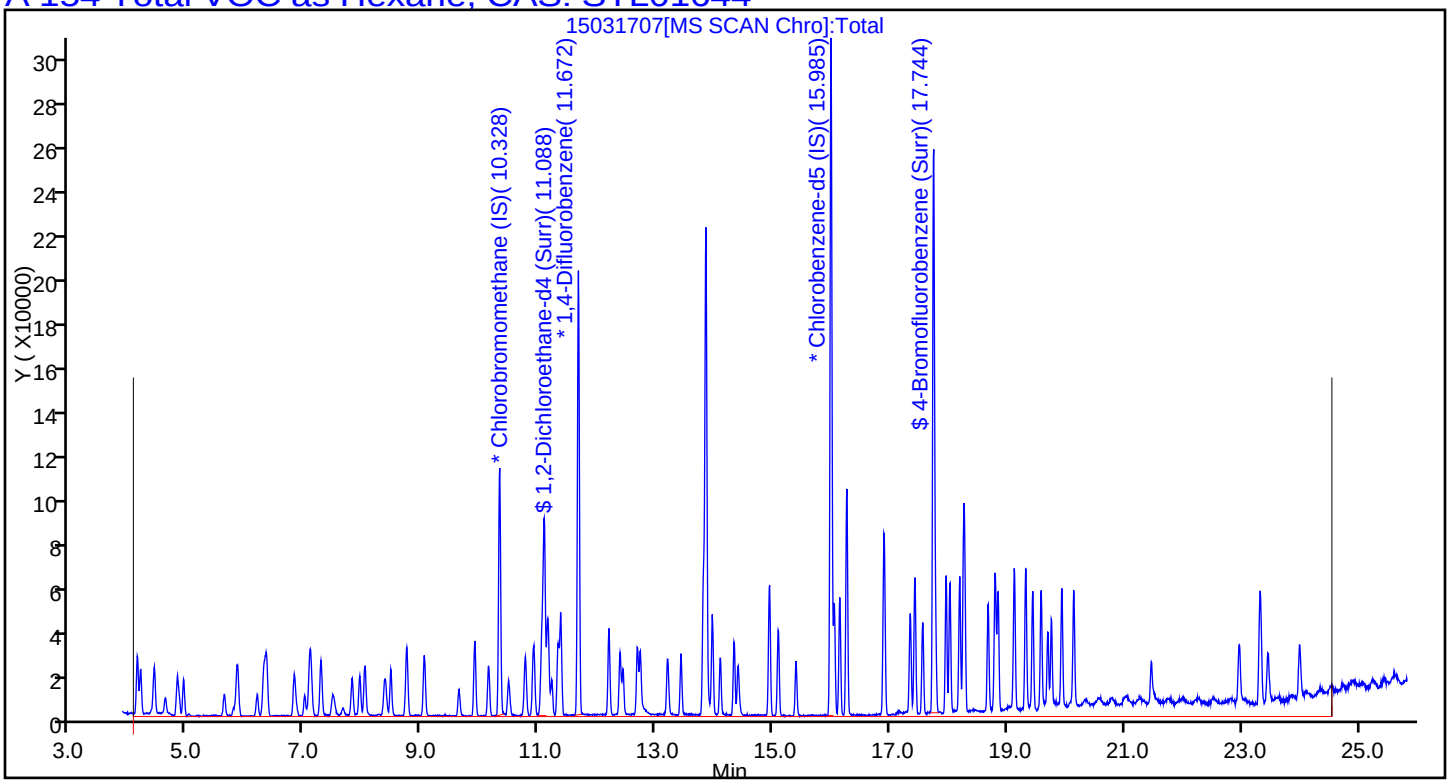


Report Date: 24-Mar-2015 10:33:03 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Sacramento

Data File:	\\SACCHROM\ChromData\ATMS2\20150317-20264.b\15031707.D				
Injection Date:	18-Mar-2015 04:48:30	Instrument ID:	ATMS2		
Lims ID:	IC 0.8ppbv				
Client ID:					
Operator ID:	SRS	ALS Bottle#:	1	Worklist Smp#:	8
Purge Vol:	250.000 mL	Dil. Factor:	1.0000		
Method:	TO15_ATMS2N	Limit Group:	MSA - TO15 - ICAL		
Column:	RTX Volatiles (0.32 mm)	Detector	MS SCAN		

A 154 Total VOC as Hexane, CAS: STL01644

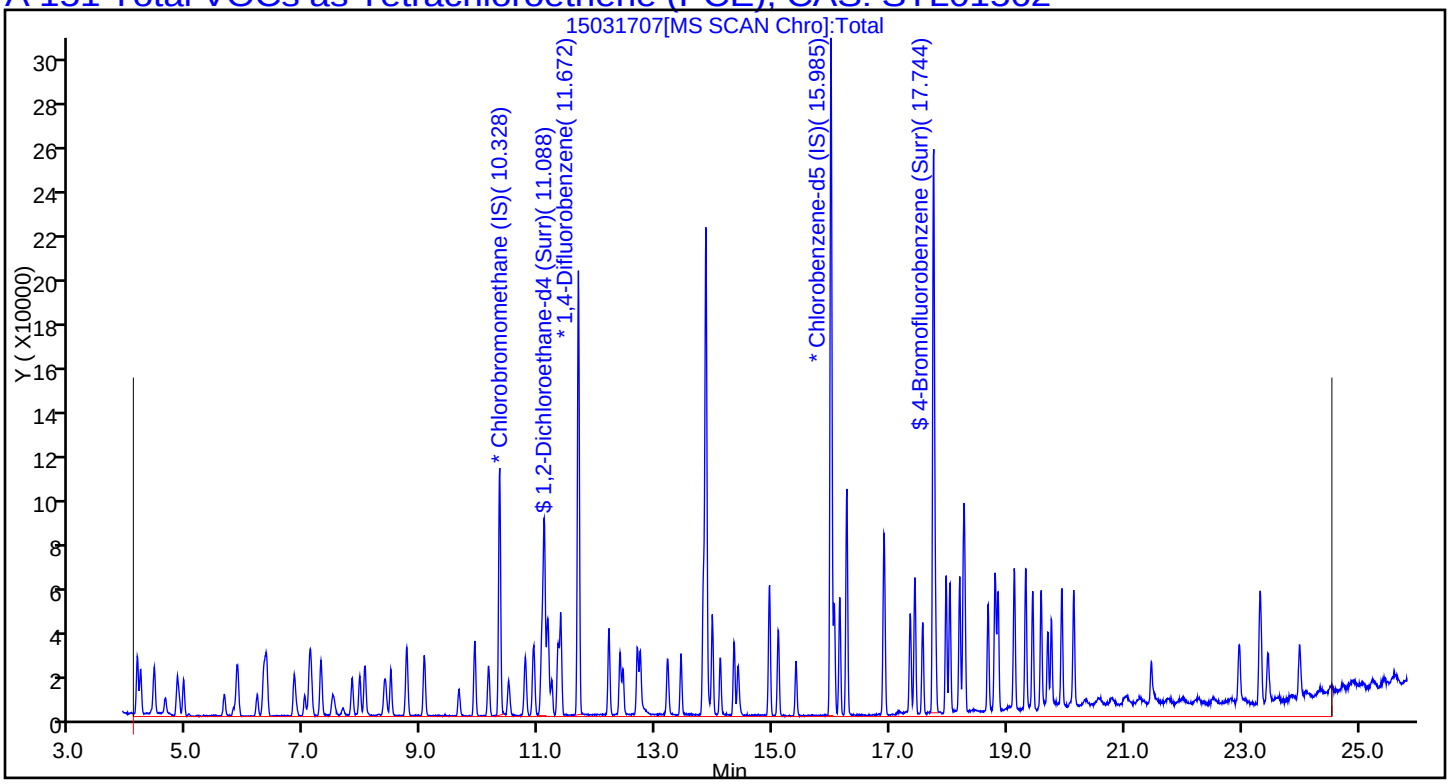


Report Date: 24-Mar-2015 10:33:03 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Sacramento

Data File:	\\SACCHROM\ChromData\ATMS2\20150317-20264.b\15031707.D				
Injection Date:	18-Mar-2015 04:48:30	Instrument ID:	ATMS2		
Lims ID:	IC 0.8ppbv				
Client ID:					
Operator ID:	SRS	ALS Bottle#:	1	Worklist Smp#:	8
Purge Vol:	250.000 mL	Dil. Factor:	1.0000		
Method:	TO15_ATMS2N	Limit Group:	MSA - TO15 - ICAL		
Column:	RTX Volatiles (0.32 mm)	Detector	MS SCAN		

A 151 Total VOCs as Tetrachloroethene (PCE), CAS: STL01562

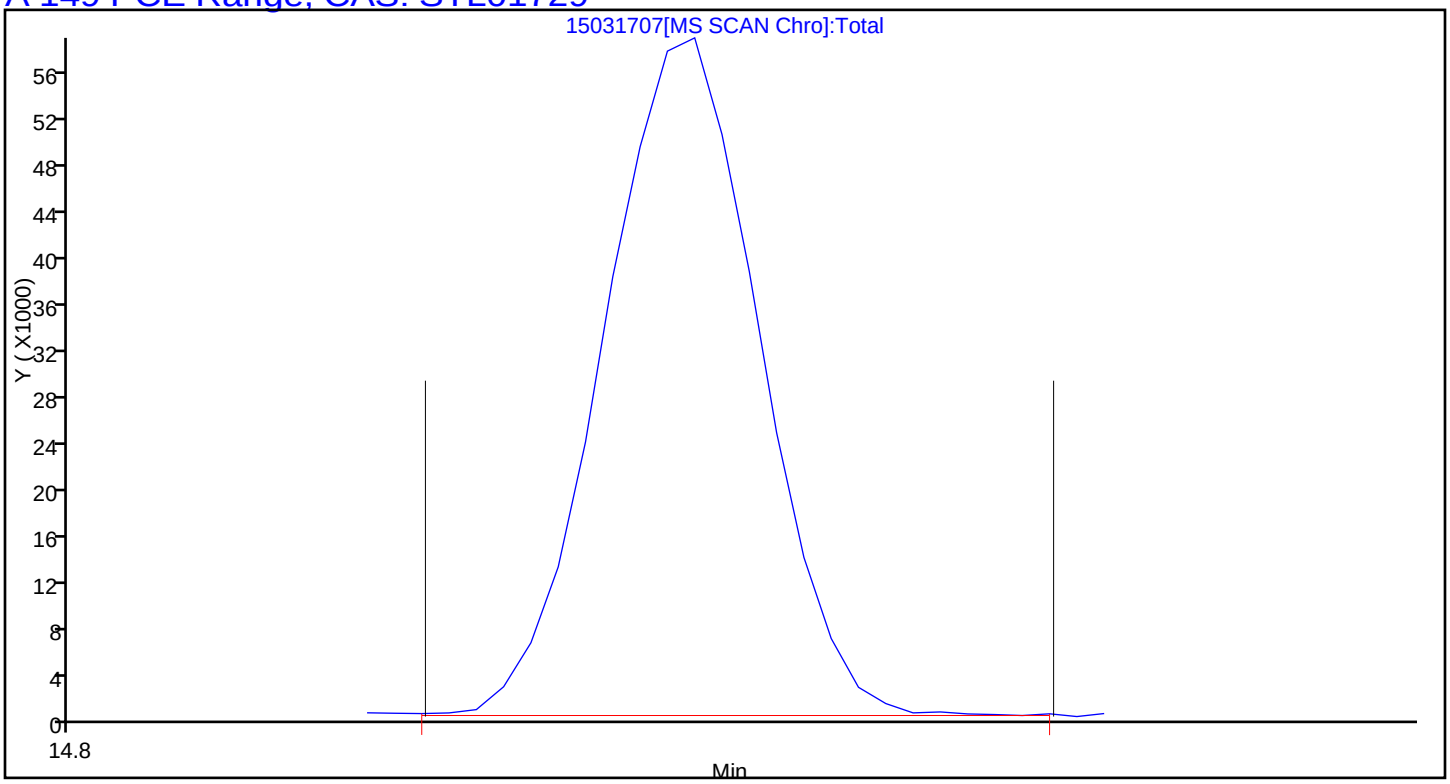


Report Date: 24-Mar-2015 10:33:03 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Sacramento

Data File:	\\SACCHROM\ChromData\ATMS2\20150317-20264.b\15031707.D				
Injection Date:	18-Mar-2015 04:48:30	Instrument ID:	ATMS2		
Lims ID:	IC 0.8ppbv				
Client ID:					
Operator ID:	SRS	ALS Bottle#:	1	Worklist Smp#:	8
Purge Vol:	250.000 mL	Dil. Factor:	1.0000		
Method:	TO15_ATMS2N	Limit Group:	MSA - TO15 - ICAL		
Column:	RTX Volatiles (0.32 mm)	Detector	MS SCAN		

A 149 PCE Range, CAS: STL01729



TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\SACCHROM\ChromData\ATMS2\20150317-20264.b\15031708.D
Lims ID: IC 2.0ppbv
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 18-Mar-2015 05:30:30 ALS Bottle#: 2 Worklist Smp#: 9
Purge Vol: 250.000 mL Dil. Factor: 1.0000
Sample Info: IC 2.0PPBV
Misc. Info.: 125mL
Operator ID: SRS Instrument ID: ATMS2
Sublist: chrom-TO15_ATMS2N*sub53

Method: \\SACCHROM\ChromData\ATMS2\20150317-20264.b\TO15_ATMS2N.m
Limit Group: MSA - TO15 - ICAL
Last Update: 24-Mar-2015 10:33:05 Calib Date: 18-Mar-2015 18:13:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\SACCHROM\ChromData\ATMS2\20150317-20264.b\15031726.D

Column 1 : RTX Volatiles (0.32 mm) Det: MS SCAN
Process Host: XAWRK047

First Level Reviewer: scottrs Date: 23-Mar-2015 15:46:32

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	130	10.328	10.328	0.000	96	52067	4.00	4.00	
* 2 1,4-Difluorobenzene	114	11.672	11.672	0.000	94	210212	4.00	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.992	15.991	0.001	86	181719	4.00	4.00	
$ 4 1,2-Dichloroethane-d4 (Sur	65	11.088	11.088	0.000	98	67302	4.00	3.95	
$ 5 Toluene-d8 (Surr)	100	13.850	13.850	0.000	99	123859	4.00	4.00	
$ 6 4-Bromofluorobenzene (Surr	174	17.738	17.744	-0.006	96	106825	4.00	4.02	
14 Propene	41	4.129	4.129	0.001	42	28432	2.00	2.05	
13 Chlorodifluoromethane	51	4.141	4.141	0.000	97	52665	2.00	2.06	
15 Dichlorodifluoromethane	85	4.189	4.189	0.000	99	67328	2.00	2.09	
19 1,2-Dichloro-1,1,2,2-tetra	135	4.421	4.427	-0.006	91	33296	2.00	2.13	
18 Chloromethane	50	4.609	4.615	-0.006	99	29428	2.00	2.04	
22 Butane	43	4.816	4.816	0.000	98	58763	2.00	2.06	
20 Vinyl chloride	62	4.846	4.852	-0.006	98	29808	2.00	2.04	
21 Butadiene	39	4.926	4.925	0.001	96	28902	2.00	2.04	
25 Bromomethane	94	5.619	5.625	-0.006	99	24934	2.00	2.05	
26 Chloroethane	64	5.777	5.783	-0.006	99	14878	2.00	2.12	
27 Vinyl bromide	106	6.185	6.185	0.000	99	29566	2.00	2.08	
28 Trichlorofluoromethane	101	6.300	6.300	0.000	98	83852	2.00	2.09	
38 Pentane	43	6.343	6.343	0.000	93	70560	2.00	2.13	
37 Isopropyl alcohol	45	6.805	6.781	0.024	51	70481	2.00	2.18	
39 Ethyl ether	74	6.799	6.793	0.006	97	12962	2.00	2.19	
29 Acrolein	56	6.854	6.842	0.012	94	8608	2.00	2.07	
31 Acetone	43	6.982	6.963	0.019	99	40681	2.00	2.13	
43 1,1,2-Trichloro-1,2,2-trif	101	7.091	7.091	0.000	97	62045	2.00	2.07	
30 Acetonitrile	41	7.268	7.262	0.006	50	20668	2.00	2.06	
41 1,1-Dichloroethene	61	7.268	7.274	-0.006	95	52180	2.00	2.08	
44 2-Methyl-2-propanol	59	7.444	7.401	0.043	95	64054	2.00	2.30	
46 3-Chloro-1-propene	41	7.803	7.803	0.000	94	44156	2.00	2.07	
47 Methylene Chloride	49	7.937	7.937	0.000	98	39404	2.00	2.05	
42 Acrylonitrile	53	8.022	8.022	0.000	37	17394	2.00	2.05	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
48 Carbon disulfide	76	8.022	8.022	0.000	100	84750	2.00	2.12	
50 Methyl tert-butyl ether	73	8.357	8.332	0.025	97	68731	2.00	2.12	
49 trans-1,2-Dichloroethene	61	8.466	8.466	0.000	97	43352	2.00	2.09	
55 Hexane	41	8.740	8.740	0.000	95	42554	2.00	2.07	
52 Vinyl acetate	43	9.032	9.026	0.006	100	69305	2.00	2.02	
53 1,1-Dichloroethane	63	9.044	9.044	0.000	99	53694	2.00	2.10	
54 2-Butanone (MEK)	72	9.622	9.604	0.018	99	11164	2.00	2.22	
58 Ethyl acetate	43	9.890	9.877	0.013	97	60126	2.00	2.10	
57 cis-1,2-Dichloroethene	96	9.902	9.902	0.000	97	28593	2.00	2.05	
61 Chloroform	83	10.139	10.139	0.000	96	57562	2.00	2.06	
62 Tetrahydrofuran	42	10.468	10.449	0.019	94	36196	2.00	2.11	
65 1,1,1-Trichloroethane	97	10.766	10.766	0.000	96	62150	2.00	2.06	
70 Cyclohexane	84	10.906	10.906	0.000	94	41917	2.00	2.08	
74 Isooctane	57	11.058	11.058	0.000	98	163515	2.00	2.03	
67 n-Butanol	56	11.125	11.088	0.037	54	27556	2.00	2.28	
69 Carbon tetrachloride	117	11.155	11.155	0.000	97	71141	2.00	2.04	
66 1,2-Dichloroethane	62	11.216	11.216	0.000	97	39262	2.00	2.04	
68 Benzene	78	11.325	11.325	0.000	98	86368	2.00	2.02	
75 n-Heptane	43	11.368	11.374	-0.006	97	70692	2.00	2.05	
76 Trichloroethene	130	12.195	12.195	0.000	99	43977	2.00	1.98	
77 1,2-Dichloropropane	76	12.384	12.384	0.000	91	13390	2.00	2.09	
79 Methyl methacrylate	69	12.427	12.427	0.001	89	23038	2.00	1.99	
72 1,4-Dioxane	88	12.712	12.682	0.030	98	17205	2.00	2.20	
80 Dichlorobromomethane	85	12.682	12.682	0.000	98	40905	2.00	2.03	
78 Dibromomethane	174	12.731	12.731	0.000	95	37958	2.00	1.97	
81 4-Methyl-2-pentanone (MIBK	43	13.181	13.169	0.012	99	76063	2.00	2.29	
83 cis-1,3-Dichloropropene	75	13.424	13.424	0.000	97	45621	2.00	1.97	
88 n-Octane	43	13.808	13.807	0.001	98	97932	2.00	1.97	
85 Toluene	91	13.960	13.966	-0.006	93	99068	2.00	2.01	
84 trans-1,3-Dichloropropene	75	14.100	14.099	0.001	98	44602	2.00	2.00	
86 1,1,2-Trichloroethane	97	14.331	14.337	-0.006	99	33608	2.00	1.96	
87 2-Hexanone	58	14.392	14.373	0.019	90	33965	2.00	2.22	
93 Tetrachloroethene	166	14.939	14.939	0.000	97	60194	2.00	1.97	
92 Chlorodibromomethane	129	15.085	15.091	-0.006	99	69036	2.00	1.96	
94 Ethylene Dibromide	107	15.395	15.389	0.006	98	53400	2.00	1.95	
99 n-Nonane	43	15.985	15.985	0.000	76	98966	2.00	1.99	
96 Chlorobenzene	112	16.046	16.046	0.000	95	85319	2.00	1.95	
97 Ethylbenzene	91	16.138	16.137	0.001	98	116743	2.00	1.98	
98 m-Xylene & p-Xylene	91	16.259	16.259	0.000	98	175715	4.00	3.90	
101 o-Xylene	91	16.886	16.892	-0.006	98	90716	2.00	1.97	
100 Styrene	104	16.904	16.904	0.000	95	72742	2.00	2.05	
102 Bromoform	173	17.342	17.342	0.000	98	71179	2.00	1.93	
104 Isopropylbenzene	120	17.421	17.421	0.000	96	37595	2.00	2.03	
103 1,1,2,2-Tetrachloroethane	83	17.555	17.555	0.000	100	64765	2.00	1.98	
105 1,2,3-Trichloropropane	110	17.768	17.774	-0.006	96	20152	2.00	1.99	
113 n-Decane	57	17.957	17.956	0.001	86	75618	2.00	1.87	
107 N-Propylbenzene	91	18.017	18.023	-0.006	99	151268	2.00	2.01	
110 4-Ethyltoluene	120	18.188	18.188	0.000	99	41288	2.00	2.00	
111 1,3,5-Trimethylbenzene	120	18.249	18.255	-0.006	92	56721	2.00	2.05	
109 2-Chlorotoluene	126	18.273	18.273	0.000	98	39200	2.00	2.00	
112 Alpha Methyl Styrene	118	18.674	18.674	0.000	89	55588	2.00	2.08	
114 tert-Butylbenzene	91	18.790	18.796	-0.006	95	79578	2.00	2.00	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
115 1,2,4-Trimethylbenzene	120	18.845	18.845	0.000	96	60460	2.00	2.30	
116 sec-Butylbenzene	105	19.118	19.125	-0.007	99	158349	2.00	2.05	
121 4-Isopropyltoluene	119	19.313	19.319	-0.006	97	134889	2.00	2.09	
117 1,3-Dichlorobenzene	146	19.435	19.435	0.000	98	80779	2.00	2.03	
120 1,4-Dichlorobenzene	146	19.581	19.581	0.000	95	77191	2.00	1.98	
118 Benzyl chloride	91	19.690	19.696	-0.006	99	78242	1.60	1.49	
124 Undecane	57	19.757	19.757	0.000	94	44651	2.00	1.72	
123 n-Butylbenzene	92	19.934	19.934	0.000	98	61032	2.00	2.12	
122 1,2-Dichlorobenzene	146	20.141	20.140	0.001	96	74105	2.00	2.02	
125 Dodecane	57	21.455	21.461	-0.006	92	19148	2.00	1.63	
126 1,2,4-Trichlorobenzene	180	22.963	22.963	0.000	94	40466	2.00	1.78	
128 Hexachlorobutadiene	225	23.322	23.322	0.000	98	49791	2.00	2.12	
127 Naphthalene	128	23.456	23.456	0.000	99	73300	2.00	1.66	
129 1,2,3-Trichlorobenzene	180	23.998	23.997	0.001	96	33863	2.00	1.82	
A 144 C6 Range	1	8.740	(8.640-8.840)		0	214764	2.00	2.03	
A 147 Toluene Range	1	13.960	(13.893-14.026)		0	255264	2.00	1.72	
A 154 Total VOC as Hexane	1	14.307	(4.068-24.546)		0	19221561	2.00	182.0	
A 151 Total VOCs as Tetrachloroe	1	14.307	(4.068-24.546)		0	19221561	2.00	115.7	
A 150 Nonmethane Organic Compoun	1	14.307	(4.068-24.546)		0	19221561	2.00	182.0	
A 152 TVOC as Toluene	1	14.421	(4.356-24.456)		0	16297459	2.00	109.9	
A 149 PCE Range	1	14.949	(14.879-15.019)		0	327535	2.00	1.97	
S 164 1,2-Dichloroethene, Total	1				0			4.14	
S 155 Xylenes, Total	91				0		6.00	5.87	

Reagents:

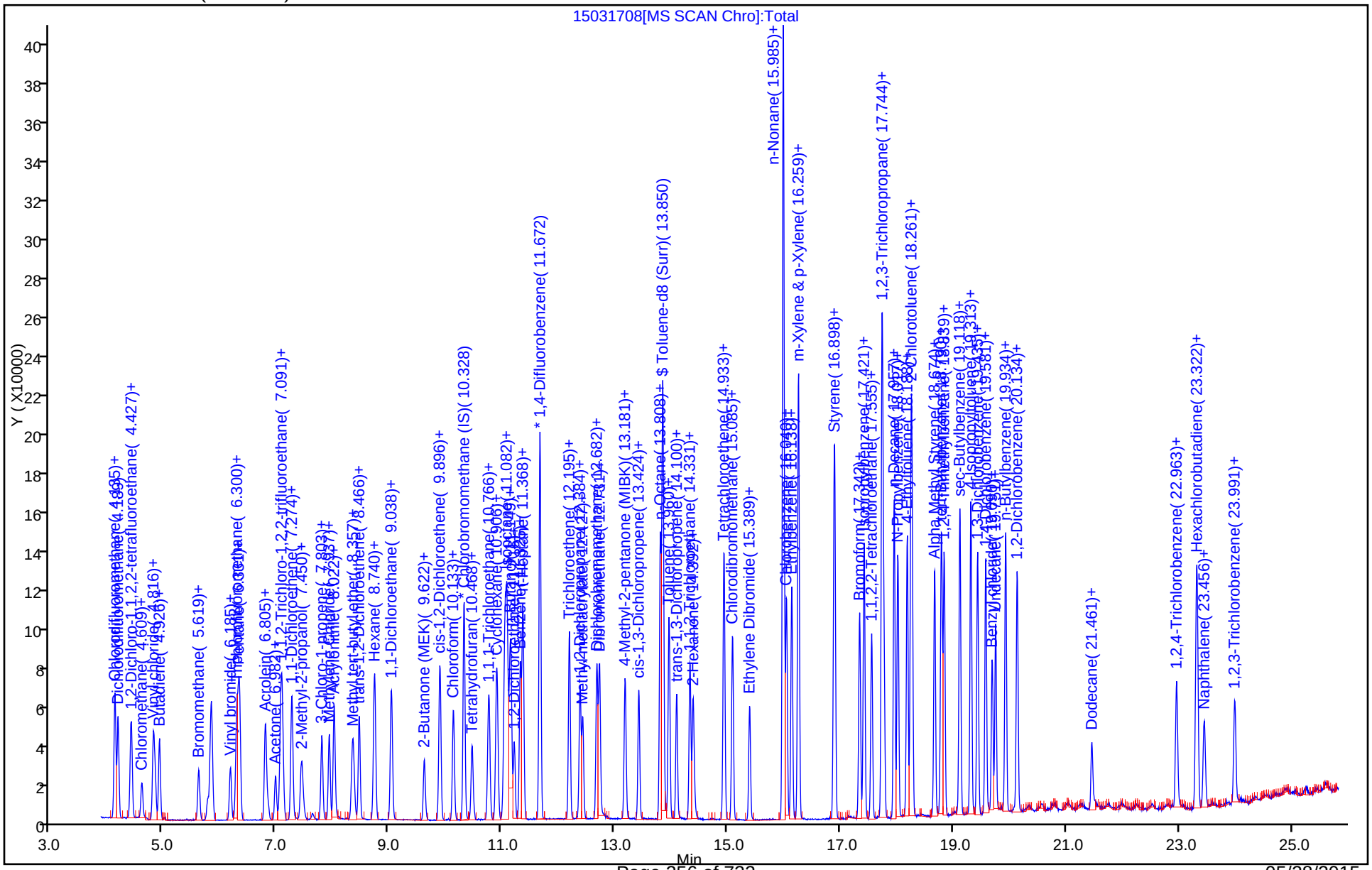
VACORPIC4.0_00004	Amount Added: 125.00	Units: mL	
VASUISIM_00160	Amount Added: 50.00	Units: mL	Run Reagent

Report Date: 24-Mar-2015 10:33:07 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Sacramento

Data File:	\\SACCHROM\ChromData\ATMS2\20150317-20264.b\15031708.D				
Injection Date:	18-Mar-2015 05:30:30	Instrument ID:	ATMS2	Operator ID:	SRS
Lims ID:	IC 2.0ppbv			Worklist Smp#:	9
Client ID:					
Purge Vol:	250.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	2
Method:	TO15_ATMS2N	Limit Group:	MSA - TO15 - ICAL		

Column: RTX Volatiles (0.32 mm)

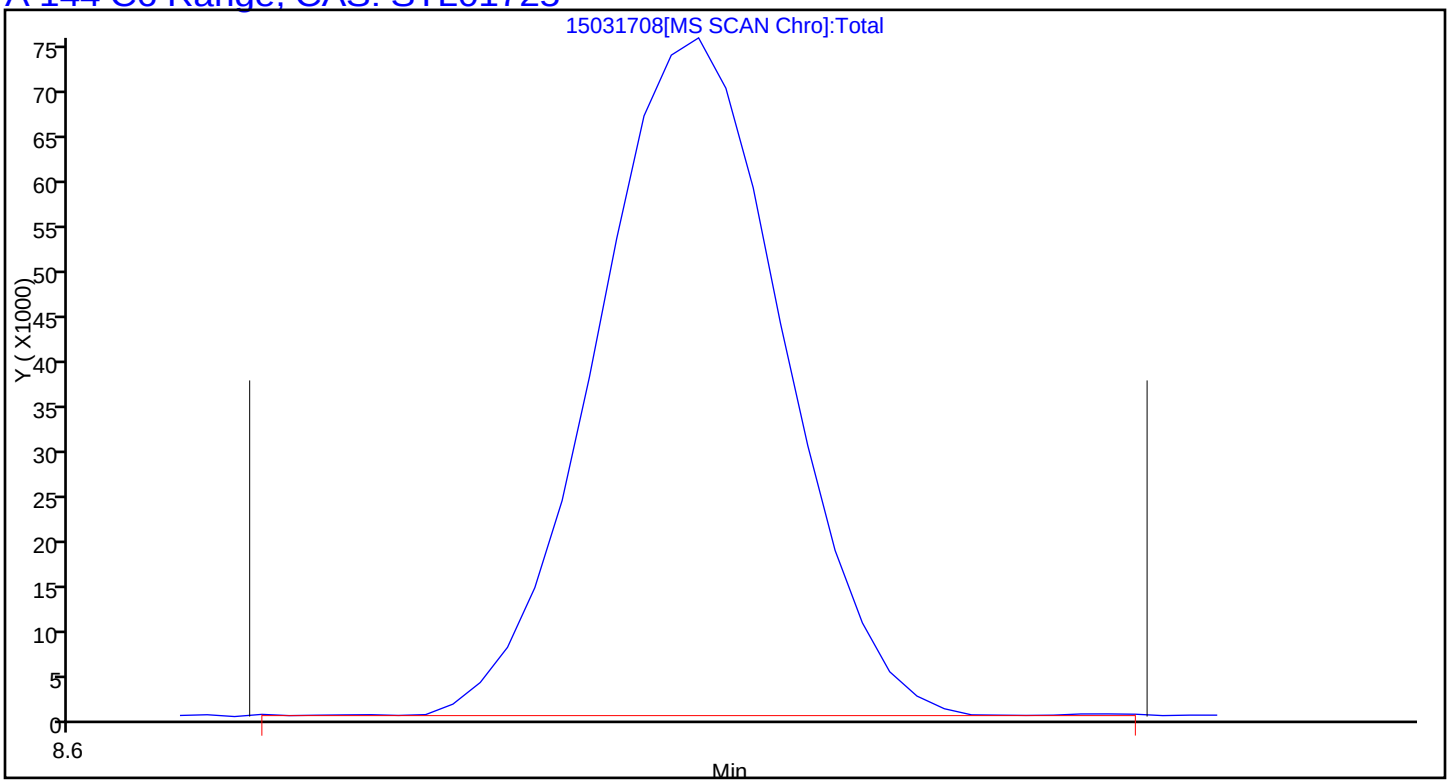


Report Date: 24-Mar-2015 10:33:07 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Sacramento

Data File:	\\SACCHROM\ChromData\ATMS2\20150317-20264.b\15031708.D				
Injection Date:	18-Mar-2015 05:30:30	Instrument ID:	ATMS2		
Lims ID:	IC 2.0ppbv				
Client ID:					
Operator ID:	SRS	ALS Bottle#:	2	Worklist Smp#:	9
Purge Vol:	250.000 mL	Dil. Factor:	1.0000		
Method:	TO15_ATMS2N	Limit Group:	MSA - TO15 - ICAL		
Column:	RTX Volatiles (0.32 mm)	Detector	MS SCAN		

A 144 C6 Range, CAS: STL01725

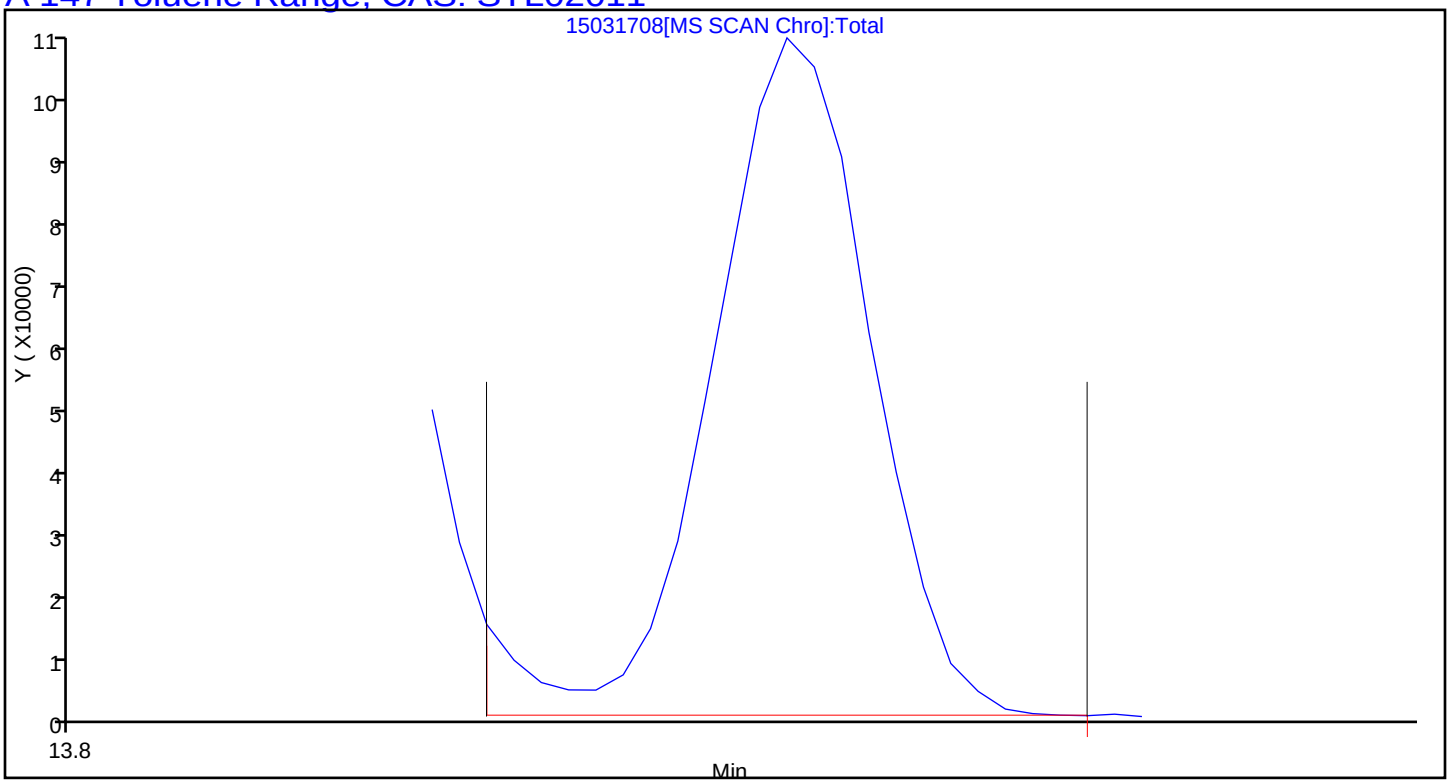


Report Date: 24-Mar-2015 10:33:07 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Sacramento

Data File:	\\SACCHROM\ChromData\ATMS2\20150317-20264.b\15031708.D				
Injection Date:	18-Mar-2015 05:30:30	Instrument ID:	ATMS2		
Lims ID:	IC 2.0ppbv				
Client ID:					
Operator ID:	SRS	ALS Bottle#:	2	Worklist Smp#:	9
Purge Vol:	250.000 mL	Dil. Factor:	1.0000		
Method:	TO15_ATMS2N	Limit Group:	MSA - TO15 - ICAL		
Column:	RTX Volatiles (0.32 mm)	Detector	MS SCAN		

A 147 Toluene Range, CAS: STL02011

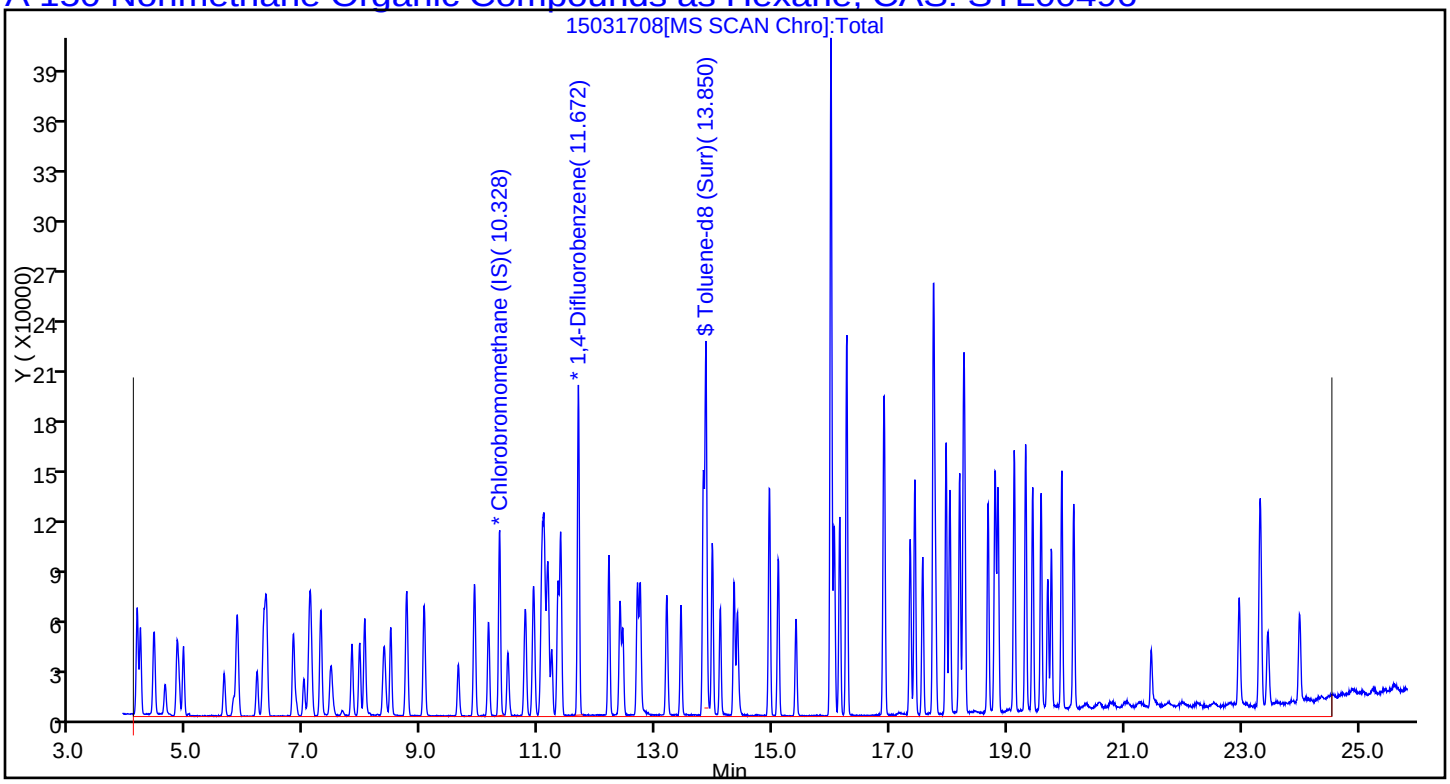


Report Date: 24-Mar-2015 10:33:07 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Sacramento

Data File:	\\SACCHROM\ChromData\ATMS2\20150317-20264.b\15031708.D				
Injection Date:	18-Mar-2015 05:30:30	Instrument ID:	ATMS2		
Lims ID:	IC 2.0ppbv				
Client ID:					
Operator ID:	SRS	ALS Bottle#:	2	Worklist Smp#:	9
Purge Vol:	250.000 mL	Dil. Factor:	1.0000		
Method:	TO15_ATMS2N	Limit Group:	MSA - TO15 - ICAL		
Column:	RTX Volatiles (0.32 mm)	Detector	MS SCAN		

A 150 Nonmethane Organic Compounds as Hexane, CAS: STL00496

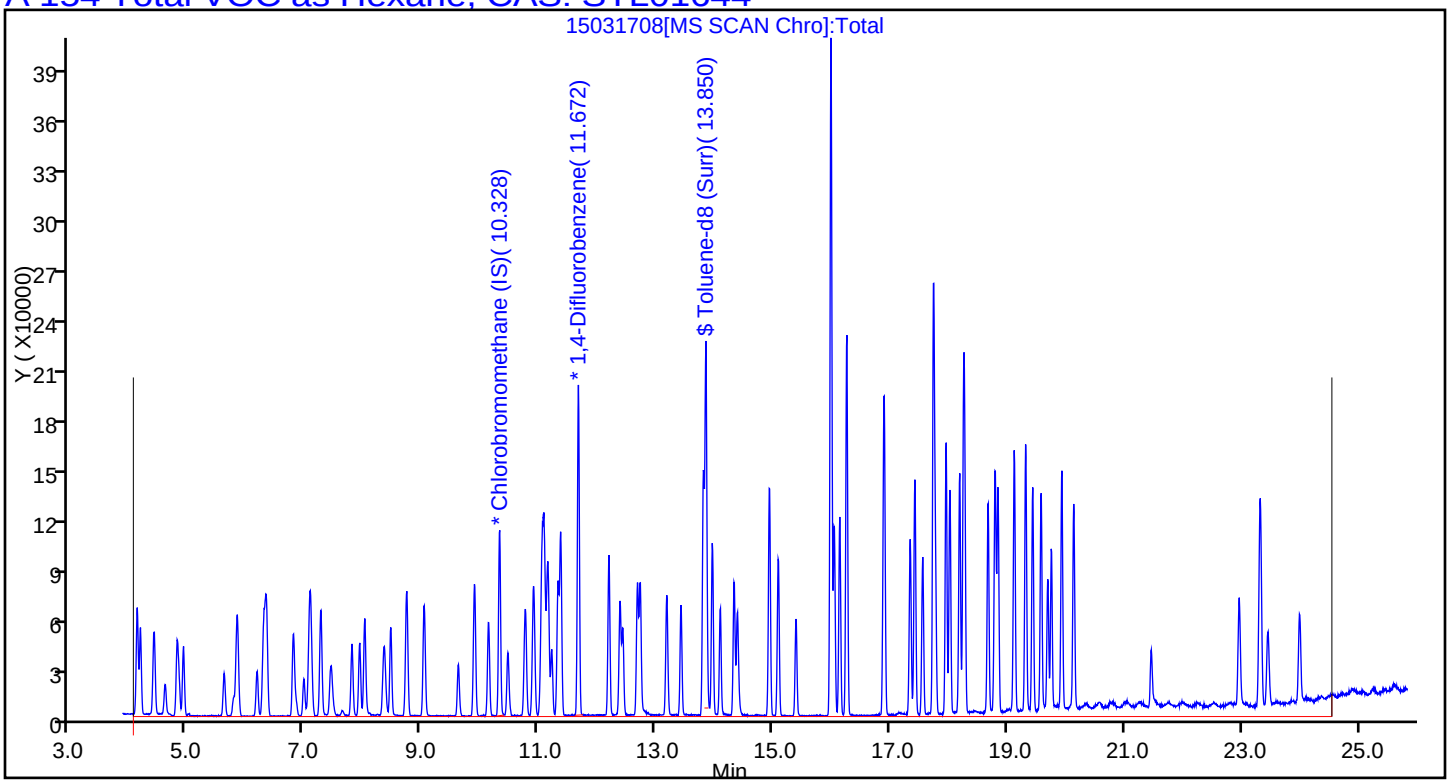


Report Date: 24-Mar-2015 10:33:07 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Sacramento

Data File:	\\SACCHROM\ChromData\ATMS2\20150317-20264.b\15031708.D				
Injection Date:	18-Mar-2015 05:30:30	Instrument ID:	ATMS2		
Lims ID:	IC 2.0ppbv				
Client ID:					
Operator ID:	SRS	ALS Bottle#:	2	Worklist Smp#:	9
Purge Vol:	250.000 mL	Dil. Factor:	1.0000		
Method:	TO15_ATMS2N	Limit Group:	MSA - TO15 - ICAL		
Column:	RTX Volatiles (0.32 mm)	Detector	MS SCAN		

A 154 Total VOC as Hexane, CAS: STL01644

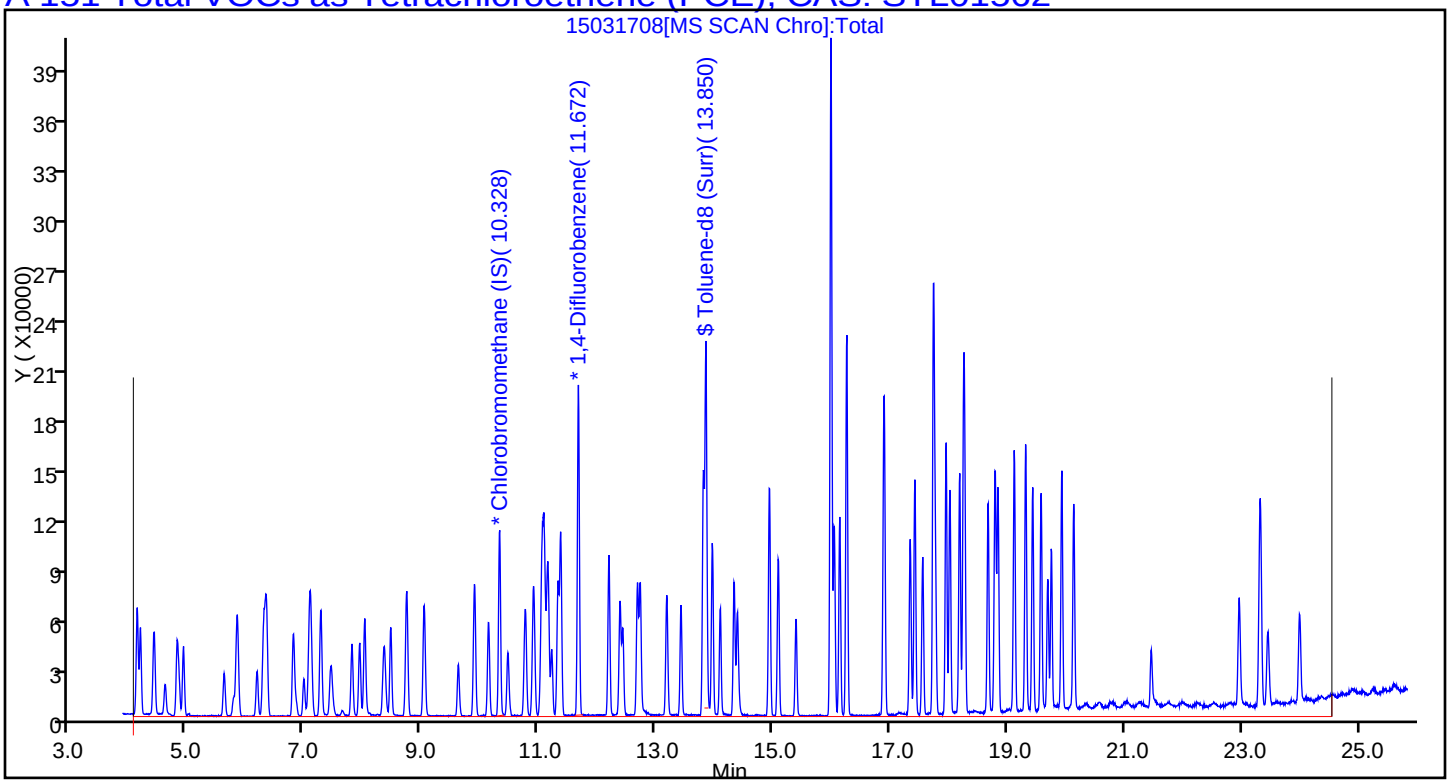


Report Date: 24-Mar-2015 10:33:07 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Sacramento

Data File:	\\SACCHROM\ChromData\ATMS2\20150317-20264.b\15031708.D				
Injection Date:	18-Mar-2015 05:30:30	Instrument ID:	ATMS2		
Lims ID:	IC 2.0ppbv				
Client ID:					
Operator ID:	SRS	ALS Bottle#:	2	Worklist Smp#:	9
Purge Vol:	250.000 mL	Dil. Factor:	1.0000		
Method:	TO15_ATMS2N	Limit Group:	MSA - TO15 - ICAL		
Column:	RTX Volatiles (0.32 mm)	Detector	MS SCAN		

A 151 Total VOCs as Tetrachloroethene (PCE), CAS: STL01562

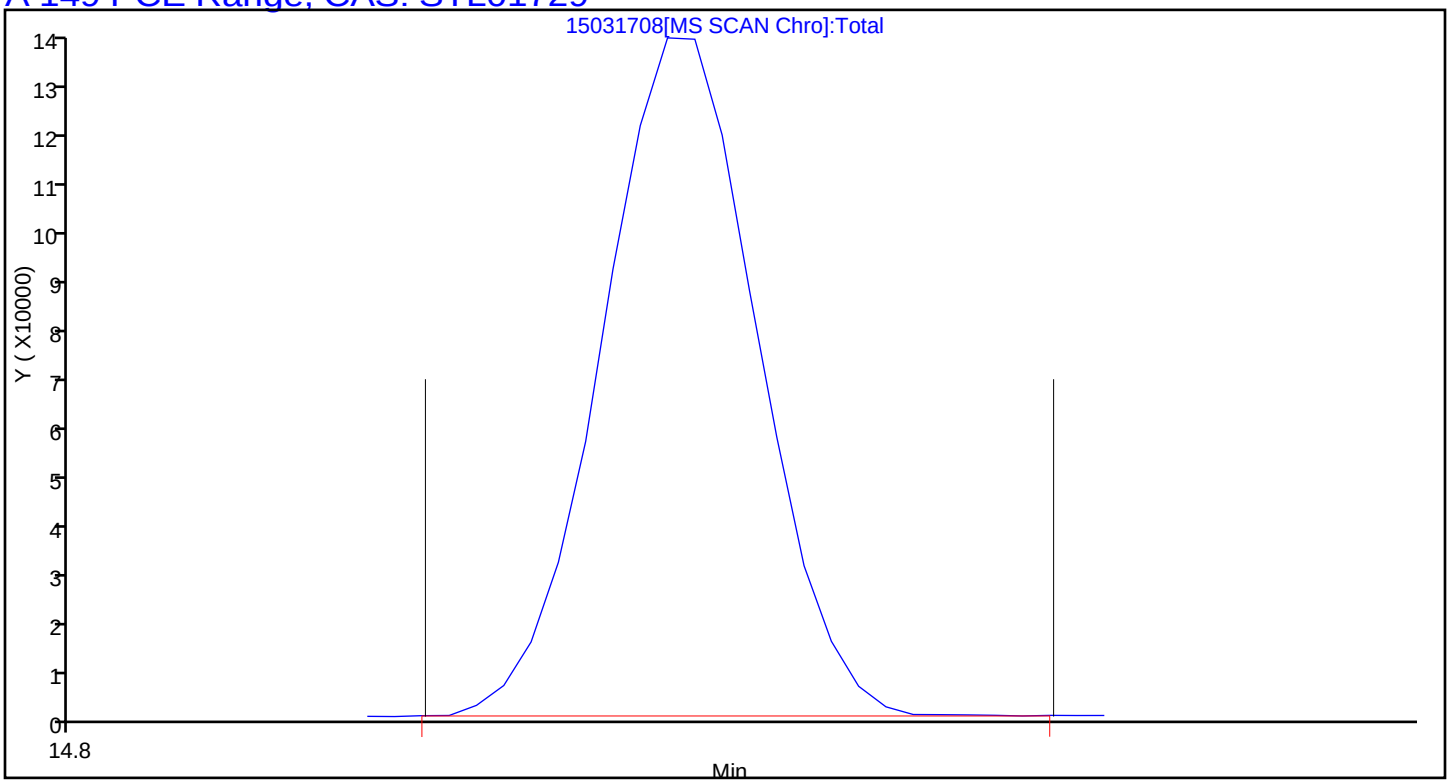


Report Date: 24-Mar-2015 10:33:07 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Sacramento

Data File:	\\SACCHROM\ChromData\ATMS2\20150317-20264.b\15031708.D				
Injection Date:	18-Mar-2015 05:30:30	Instrument ID:	ATMS2		
Lims ID:	IC 2.0ppbv				
Client ID:					
Operator ID:	SRS	ALS Bottle#:	2	Worklist Smp#:	9
Purge Vol:	250.000 mL	Dil. Factor:	1.0000		
Method:	TO15_ATMS2N	Limit Group:	MSA - TO15 - ICAL		
Column:	RTX Volatiles (0.32 mm)	Detector	MS SCAN		

A 149 PCE Range, CAS: STL01729



TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\SACCHROM\ChromData\ATMS2\20150317-20264.b\15031709.D
Lims ID: IC 4.0ppbv
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 18-Mar-2015 06:14:30 ALS Bottle#: 2 Worklist Smp#: 10
Purge Vol: 250.000 mL Dil. Factor: 1.0000
Sample Info: IC 4.0PPBV
Misc. Info.: 250mL
Operator ID: SRS Instrument ID: ATMS2
Sublist: chrom-TO15_ATMS2N*sub53

Method: \\SACCHROM\ChromData\ATMS2\20150317-20264.b\TO15_ATMS2N.m
Limit Group: MSA - TO15 - ICAL
Last Update: 24-Mar-2015 10:33:08 Calib Date: 18-Mar-2015 18:13:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\SACCHROM\ChromData\ATMS2\20150317-20264.b\15031726.D

Column 1 : RTX Volatiles (0.32 mm) Det: MS SCAN
Process Host: XAWRK047

First Level Reviewer: scottrs Date: 23-Mar-2015 15:46:54

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	130	10.328	10.328	0.000	96	53066	4.00	4.00	
* 2 1,4-Difluorobenzene	114	11.672	11.672	0.000	94	216231	4.00	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.985	15.991	-0.006	78	186205	4.00	4.00	
$ 4 1,2-Dichloroethane-d4 (Sur	65	11.088	11.088	0.000	98	69553	4.00	4.01	
$ 5 Toluene-d8 (Surr)	100	13.850	13.850	0.000	99	127393	4.00	4.00	
$ 6 4-Bromofluorobenzene (Surr	174	17.737	17.744	-0.007	92	110149	4.00	4.04	
14 Propene	41	4.135	4.129	0.007	41	55378	4.00	3.91	
13 Chlorodifluoromethane	51	4.141	4.141	0.000	97	103728	4.00	3.98	
15 Dichlorodifluoromethane	85	4.189	4.189	0.000	99	134079	4.00	4.09	
19 1,2-Dichloro-1,1,2,2-tetra	135	4.427	4.427	0.000	91	69989	4.00	4.38	
18 Chloromethane	50	4.615	4.615	0.000	99	58781	4.00	4.01	
22 Butane	43	4.822	4.816	0.006	98	115791	4.00	3.98	
20 Vinyl chloride	62	4.852	4.852	0.000	98	59225	4.00	3.98	
21 Butadiene	39	4.925	4.925	0.000	95	57321	4.00	3.96	
25 Bromomethane	94	5.625	5.625	0.000	99	49553	4.00	4.00	
26 Chloroethane	64	5.777	5.783	-0.006	98	29677	4.00	4.15	
27 Vinyl bromide	106	6.179	6.185	-0.006	99	58161	4.00	4.02	
28 Trichlorofluoromethane	101	6.300	6.300	0.000	98	163721	4.00	4.01	
38 Pentane	43	6.343	6.343	0.000	96	139569	4.00	4.14	
37 Isopropyl alcohol	45	6.793	6.781	0.012	78	145479	4.00	4.41	
39 Ethyl ether	74	6.799	6.793	0.006	99	27507	4.00	4.56	
29 Acrolein	56	6.848	6.842	0.006	95	19795	4.00	4.67	
31 Acetone	43	6.976	6.963	0.013	99	91580	4.00	4.71	
43 1,1,2-Trichloro-1,2,2-trif	101	7.091	7.091	0.000	97	124539	4.00	4.08	
30 Acetonitrile	41	7.268	7.262	0.006	59	47230	4.00	4.61	
41 1,1-Dichloroethene	61	7.274	7.274	0.000	96	102310	4.00	4.00	
44 2-Methyl-2-propanol	59	7.426	7.401	0.025	95	128339	4.00	4.53	
46 3-Chloro-1-propene	41	7.803	7.803	0.000	94	92175	4.00	4.25	
47 Methylene Chloride	49	7.931	7.937	-0.006	99	79538	4.00	4.07	
42 Acrylonitrile	53	8.022	8.022	0.000	41	41349	4.00	4.78	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
48 Carbon disulfide	76	8.022	8.022	0.000	100	166467	4.00	4.09	
50 Methyl tert-butyl ether	73	8.344	8.332	0.012	97	149524	4.00	4.53	
49 trans-1,2-Dichloroethene	61	8.466	8.466	0.000	97	87909	4.00	4.16	
55 Hexane	41	8.740	8.740	0.000	95	88477	4.00	4.23	
52 Vinyl acetate	43	9.032	9.026	0.006	100	163628	4.00	4.69	
53 1,1-Dichloroethane	63	9.044	9.044	0.000	100	107245	4.00	4.12	
54 2-Butanone (MEK)	72	9.616	9.604	0.012	98	24560	4.00	4.79	
58 Ethyl acetate	43	9.884	9.877	0.007	97	136865	4.00	4.70	
57 cis-1,2-Dichloroethene	96	9.902	9.902	0.000	97	59274	4.00	4.16	
61 Chloroform	83	10.139	10.139	0.000	97	117804	4.00	4.15	
62 Tetrahydrofuran	42	10.455	10.449	0.006	93	79625	4.00	4.56	
65 1,1,1-Trichloroethane	97	10.766	10.766	0.000	96	127455	4.00	4.15	
70 Cyclohexane	84	10.906	10.906	0.000	94	83945	4.00	4.06	
74 Isooctane	57	11.058	11.058	0.000	97	336888	4.00	4.06	
67 n-Butanol	56	11.119	11.088	0.031	28	57705	4.00	4.68	
69 Carbon tetrachloride	117	11.155	11.155	0.000	98	143862	4.00	4.02	
66 1,2-Dichloroethane	62	11.216	11.216	0.000	97	81114	4.00	4.09	
68 Benzene	78	11.325	11.325	0.000	97	175784	4.00	4.01	
75 n-Heptane	43	11.368	11.374	-0.006	97	144348	4.00	4.07	
76 Trichloroethene	130	12.195	12.195	0.000	98	90948	4.00	3.98	
77 1,2-Dichloropropane	76	12.384	12.384	0.000	91	27744	4.00	4.22	
79 Methyl methacrylate	69	12.427	12.427	0.000	95	53839	4.00	4.51	
72 1,4-Dioxane	88	12.694	12.682	0.012	97	39650	4.00	4.92	
80 Dichlorobromomethane	85	12.682	12.682	0.000	99	86268	4.00	4.15	
78 Dibromomethane	174	12.731	12.731	0.000	93	80715	4.00	4.07	
81 4-Methyl-2-pentanone (MIBK	43	13.175	13.169	0.006	99	165757	4.00	4.85	
83 cis-1,3-Dichloropropene	75	13.424	13.424	0.000	98	96753	4.00	4.07	
88 n-Octane	43	13.807	13.807	0.000	98	198616	4.00	3.90	
85 Toluene	91	13.960	13.966	-0.006	93	209414	4.00	4.12	
84 trans-1,3-Dichloropropene	75	14.099	14.099	0.000	98	93961	4.00	4.11	
86 1,1,2-Trichloroethane	97	14.331	14.337	-0.006	98	70637	4.00	4.02	
87 2-Hexanone	58	14.379	14.373	0.006	91	75881	4.00	4.85	
93 Tetrachloroethene	166	14.939	14.939	0.000	97	120121	4.00	3.84	
92 Chlorodibromomethane	129	15.085	15.091	-0.006	99	144953	4.00	4.02	
94 Ethylene Dibromide	107	15.389	15.389	0.000	99	113158	4.00	4.03	
99 n-Nonane	43	15.985	15.985	0.000	96	209134	4.00	4.11	
96 Chlorobenzene	112	16.046	16.046	0.000	95	178103	4.00	3.97	
97 Ethylbenzene	91	16.137	16.137	0.000	98	260029	4.00	4.30	
98 m-Xylene & p-Xylene	91	16.259	16.259	0.000	98	400727	8.00	8.68	
101 o-Xylene	91	16.886	16.892	-0.006	99	205837	4.00	4.36	
100 Styrene	104	16.904	16.904	0.000	98	170000	4.00	4.67	
102 Bromoform	173	17.342	17.342	0.000	98	154295	4.00	4.09	
104 Isopropylbenzene	120	17.421	17.421	0.000	96	85620	4.00	4.50	
103 1,1,2,2-Tetrachloroethane	83	17.555	17.555	0.000	99	145848	4.00	4.35	
105 1,2,3-Trichloropropane	110	17.774	17.774	0.000	93	46174	4.00	4.46	
113 n-Decane	57	17.956	17.956	0.000	87	183642	4.00	4.44	
107 N-Propylbenzene	91	18.017	18.023	-0.006	99	347035	4.00	4.51	
110 4-Ethyltoluene	120	18.188	18.188	0.000	99	94875	4.00	4.49	
111 1,3,5-Trimethylbenzene	120	18.255	18.255	0.000	92	127192	4.00	4.49	
109 2-Chlorotoluene	126	18.273	18.273	0.000	98	86291	4.00	4.29	
112 Alpha Methyl Styrene	118	18.674	18.674	0.000	90	136647	4.00	4.98	
114 tert-Butylbenzene	91	18.796	18.796	0.000	95	182031	4.00	4.45	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
115 1,2,4-Trimethylbenzene	120	18.845	18.845	0.000	95	121170	4.00	4.51	
116 sec-Butylbenzene	105	19.118	19.125	-0.007	99	371653	4.00	4.70	
121 4-Isopropyltoluene	119	19.313	19.319	-0.006	97	312404	4.00	4.73	
117 1,3-Dichlorobenzene	146	19.435	19.435	0.000	97	184469	4.00	4.53	
120 1,4-Dichlorobenzene	146	19.581	19.581	0.000	95	180113	4.00	4.51	
118 Benzyl chloride	91	19.690	19.696	-0.006	99	190784	3.20	3.55	
124 Undecane	57	19.751	19.757	-0.006	94	109907	4.00	4.14	
123 n-Butylbenzene	92	19.934	19.934	0.000	98	147501	4.00	4.99	
122 1,2-Dichlorobenzene	146	20.134	20.140	-0.006	97	172342	4.00	4.59	
125 Dodecane	57	21.461	21.461	0.000	93	47436	4.00	3.94	
126 1,2,4-Trichlorobenzene	180	22.963	22.963	0.000	94	105064	4.00	4.51	
128 Hexachlorobutadiene	225	23.322	23.322	0.000	98	123720	4.00	5.14	
127 Naphthalene	128	23.456	23.456	0.000	99	191926	4.00	4.24	
129 1,2,3-Trichlorobenzene	180	23.997	23.997	0.000	95	88529	4.00	4.64	
A 144 C6 Range	1	8.740	(8.640-8.840)		0	444596	4.00	4.13	
A 147 Toluene Range	1	13.960	(13.893-14.026)		0	529956	4.00	3.47	
A 154 Total VOC as Hexane	1	14.307	(4.068-24.546)		0	39170530	4.00	363.9	
A 151 Total VOCs as Tetrachloroe	1	14.307	(4.068-24.546)		0	39170530	4.00	230.1	
A 150 Nonmethane Organic Compoun	1	14.307	(4.068-24.546)		0	39170530	4.00	363.9	
A 152 TVOC as Toluene	1	14.421	(4.356-24.456)		0	35998566	4.00	236.0	
A 149 PCE Range	1	14.949	(14.879-15.019)		0	674240	4.00	3.96	
S 164 1,2-Dichloroethene, Total	1				0			8.32	
S 155 Xylenes, Total	91				0		12.0	13.0	

Reagents:

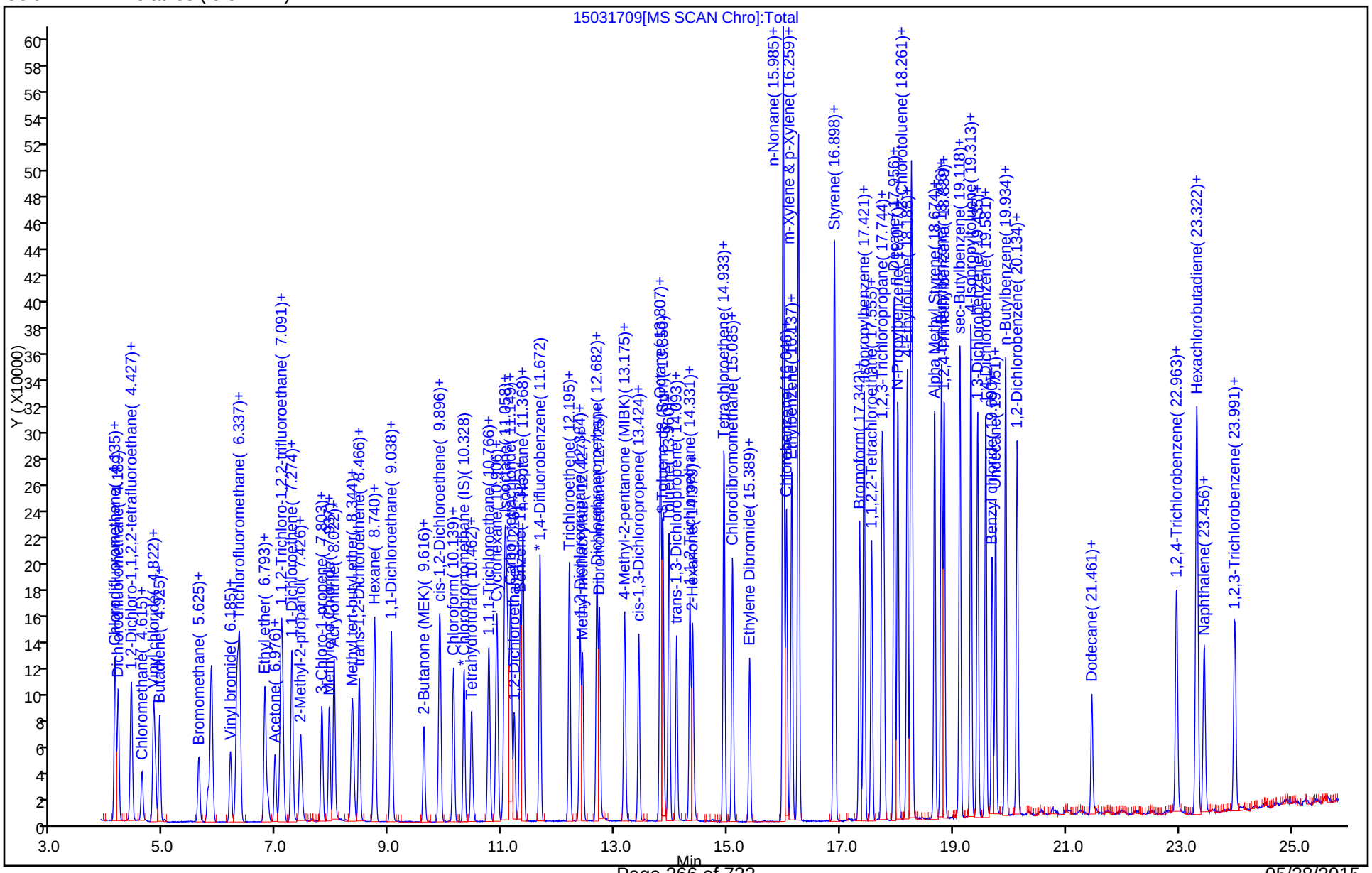
VACORPIC4.0_00004	Amount Added: 250.00	Units: mL	
VASUISIM_00160	Amount Added: 50.00	Units: mL	Run Reagent

Report Date: 24-Mar-2015 10:33:11 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Sacramento

Data File:	\\SACCHROM\ChromData\ATMS2\20150317-20264.b\15031709.D				
Injection Date:	18-Mar-2015 06:14:30	Instrument ID:	ATMS2	Operator ID:	SRS
Lims ID:	IC 4.0ppbv			Worklist Smp#:	10
Client ID:					
Purge Vol:	250.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	2
Method:	TO15_ATMS2N	Limit Group:	MSA - TO15 - ICAL		

Column: RTX Volatiles (0.32 mm)

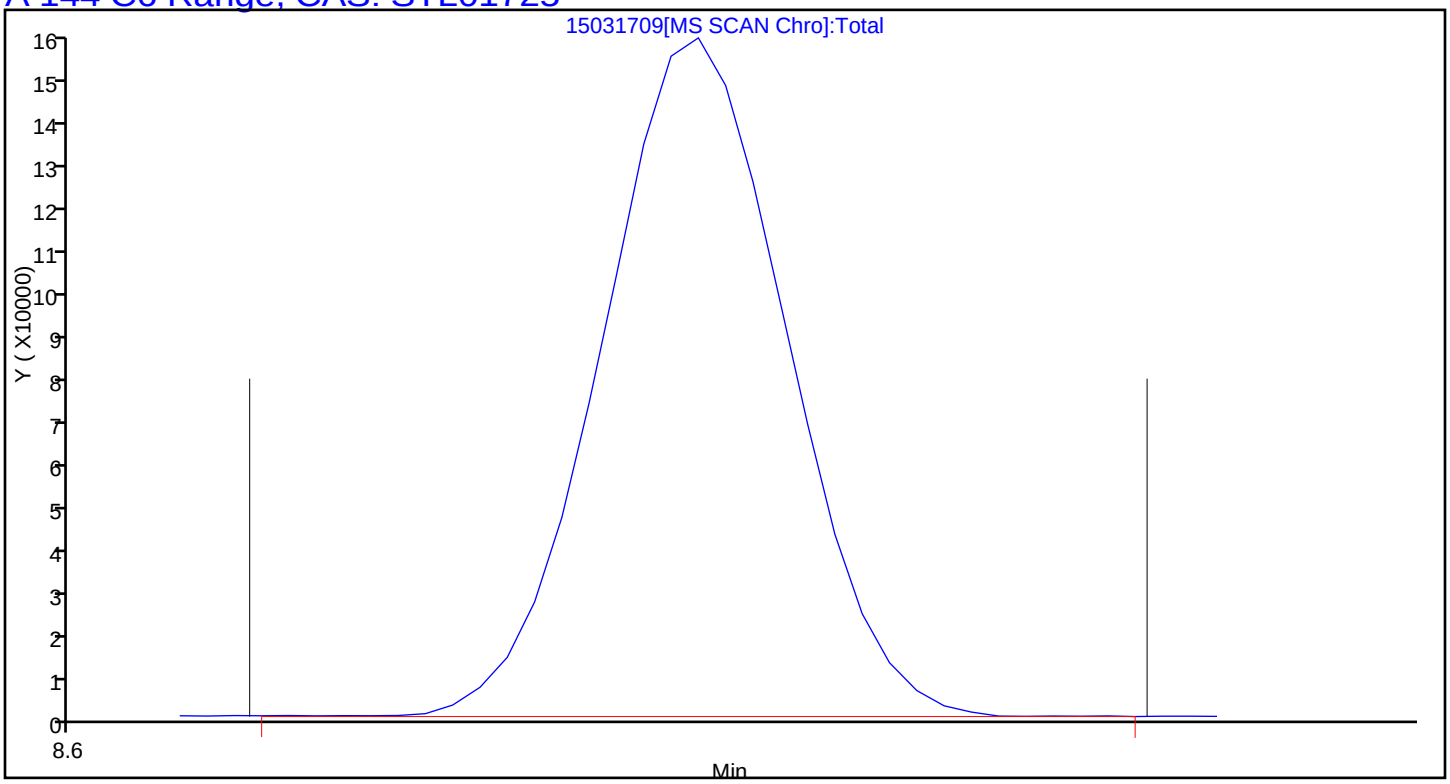


Report Date: 24-Mar-2015 10:33:11 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Sacramento

Data File:	\\SACCHROM\ChromData\ATMS2\20150317-20264.b\15031709.D				
Injection Date:	18-Mar-2015 06:14:30	Instrument ID:	ATMS2		
Lims ID:	IC 4.0ppbv				
Client ID:					
Operator ID:	SRS	ALS Bottle#:	2	Worklist Smp#:	10
Purge Vol:	250.000 mL	Dil. Factor:	1.0000		
Method:	TO15_ATMS2N	Limit Group:	MSA - TO15 - ICAL		
Column:	RTX Volatiles (0.32 mm)	Detector	MS SCAN		

A 144 C6 Range, CAS: STL01725

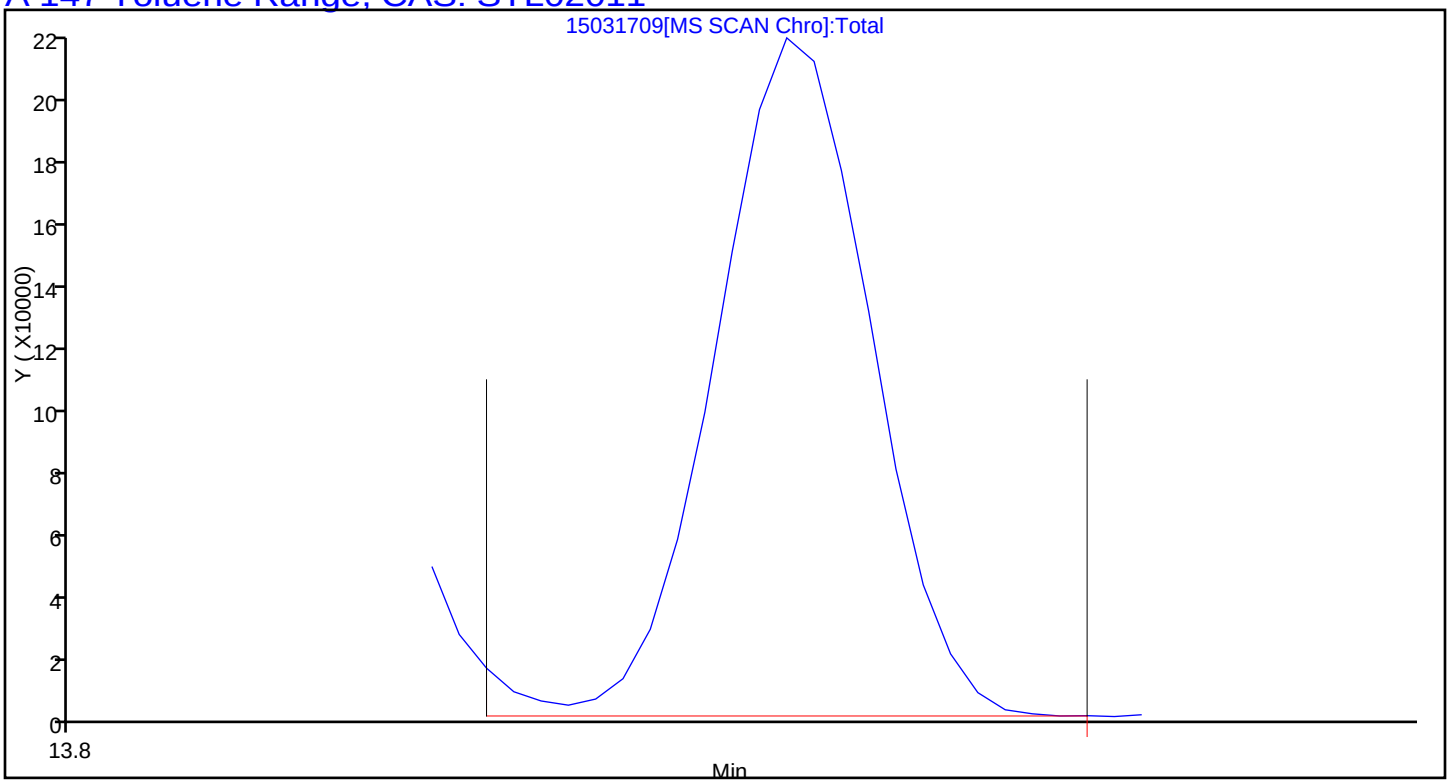


Report Date: 24-Mar-2015 10:33:11 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Sacramento

Data File:	\\SACCHROM\ChromData\ATMS2\20150317-20264.b\15031709.D				
Injection Date:	18-Mar-2015 06:14:30	Instrument ID:	ATMS2		
Lims ID:	IC 4.0ppbv				
Client ID:					
Operator ID:	SRS	ALS Bottle#:	2	Worklist Smp#:	10
Purge Vol:	250.000 mL	Dil. Factor:	1.0000		
Method:	TO15_ATMS2N	Limit Group:	MSA - TO15 - ICAL		
Column:	RTX Volatiles (0.32 mm)	Detector	MS SCAN		

A 147 Toluene Range, CAS: STL02011

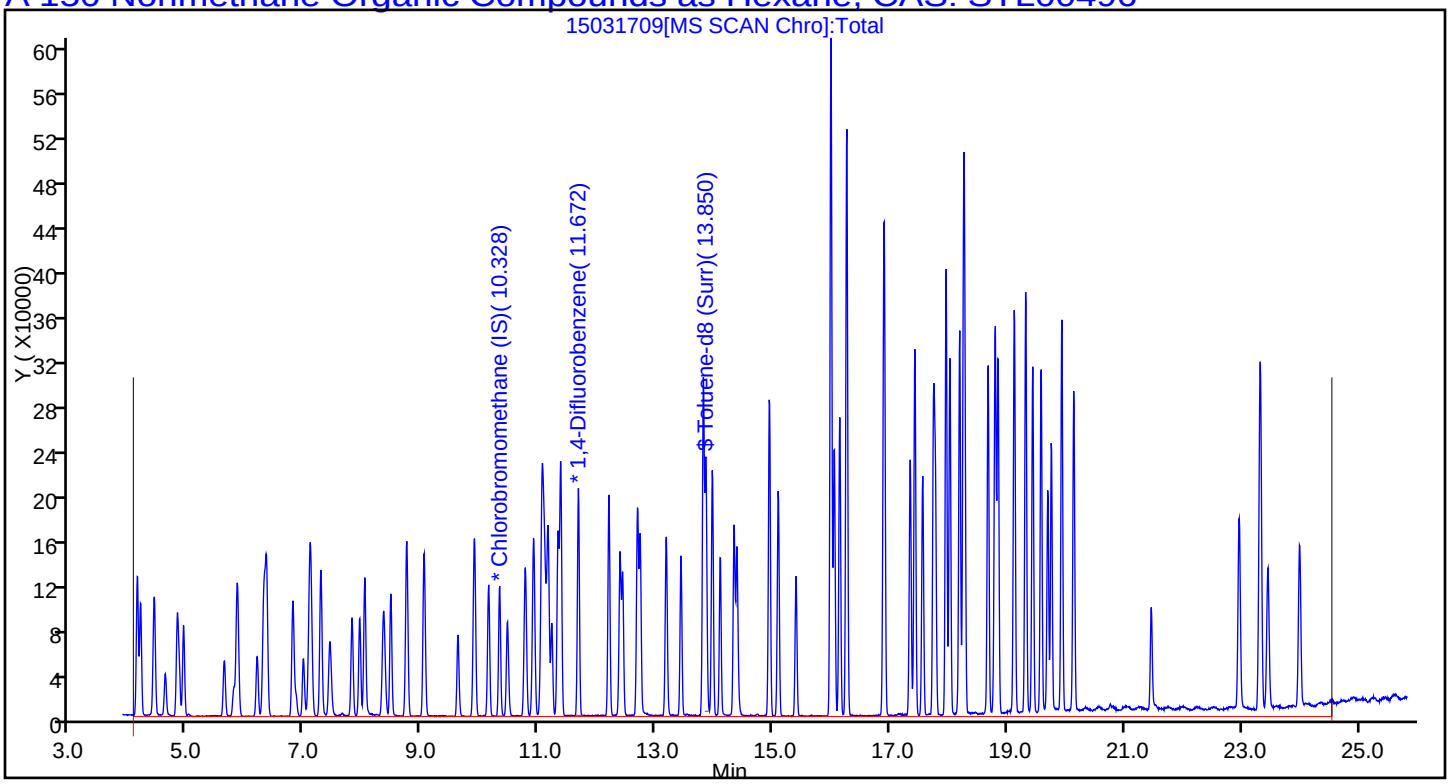


Report Date: 24-Mar-2015 10:33:11 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Sacramento

Data File:	\\SACCHROM\ChromData\ATMS2\20150317-20264.b\15031709.D				
Injection Date:	18-Mar-2015 06:14:30	Instrument ID:	ATMS2		
Lims ID:	IC 4.0ppbv				
Client ID:					
Operator ID:	SRS	ALS Bottle#:	2	Worklist Smp#:	10
Purge Vol:	250.000 mL	Dil. Factor:	1.0000		
Method:	TO15_ATMS2N	Limit Group:	MSA - TO15 - ICAL		
Column:	RTX Volatiles (0.32 mm)	Detector	MS SCAN		

A 150 Nonmethane Organic Compounds as Hexane, CAS: STL00496

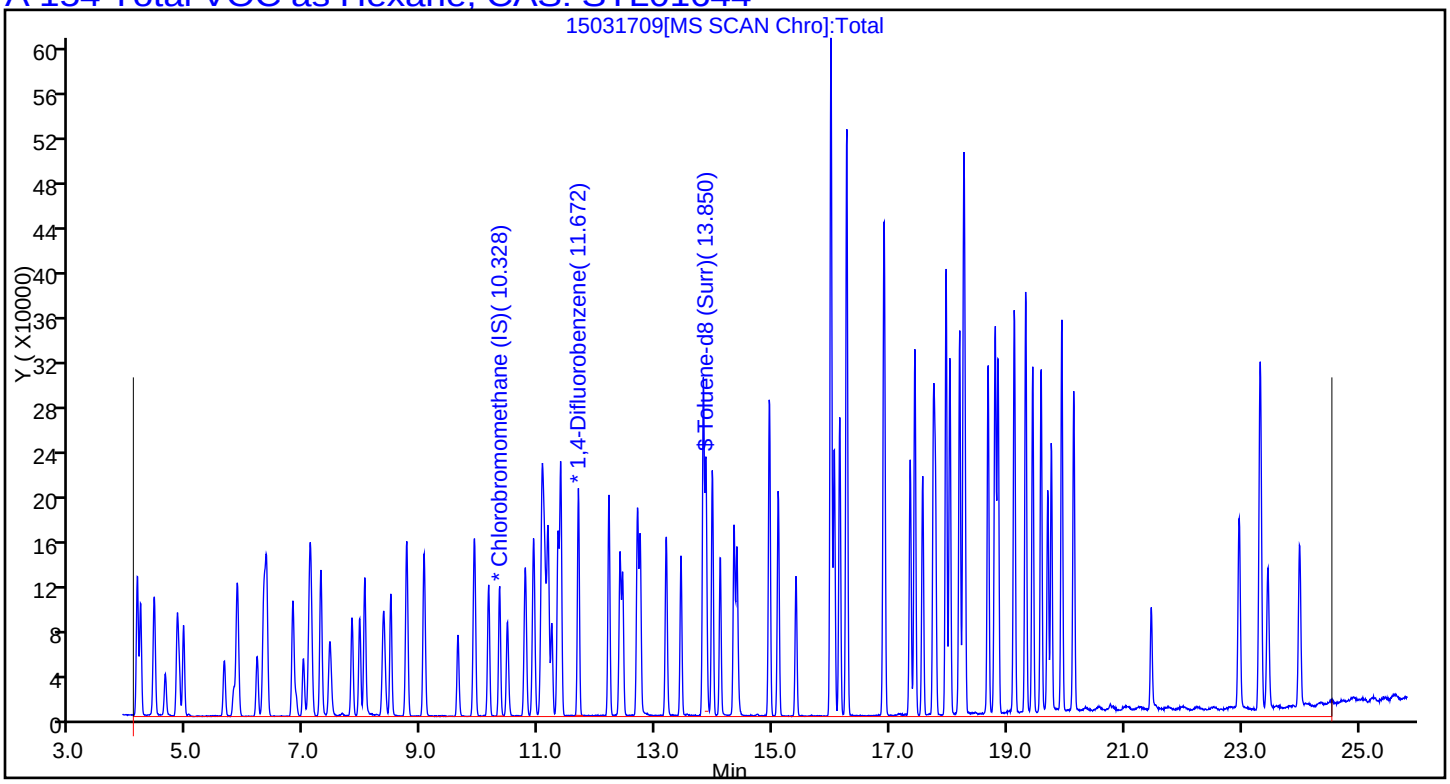


Report Date: 24-Mar-2015 10:33:11 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Sacramento

Data File:	\\SACCHROM\ChromData\ATMS2\20150317-20264.b\15031709.D				
Injection Date:	18-Mar-2015 06:14:30	Instrument ID:	ATMS2		
Lims ID:	IC 4.0ppbv				
Client ID:					
Operator ID:	SRS	ALS Bottle#:	2	Worklist Smp#:	10
Purge Vol:	250.000 mL	Dil. Factor:	1.0000		
Method:	TO15_ATMS2N	Limit Group:	MSA - TO15 - ICAL		
Column:	RTX Volatiles (0.32 mm)	Detector	MS SCAN		

A 154 Total VOC as Hexane, CAS: STL01644

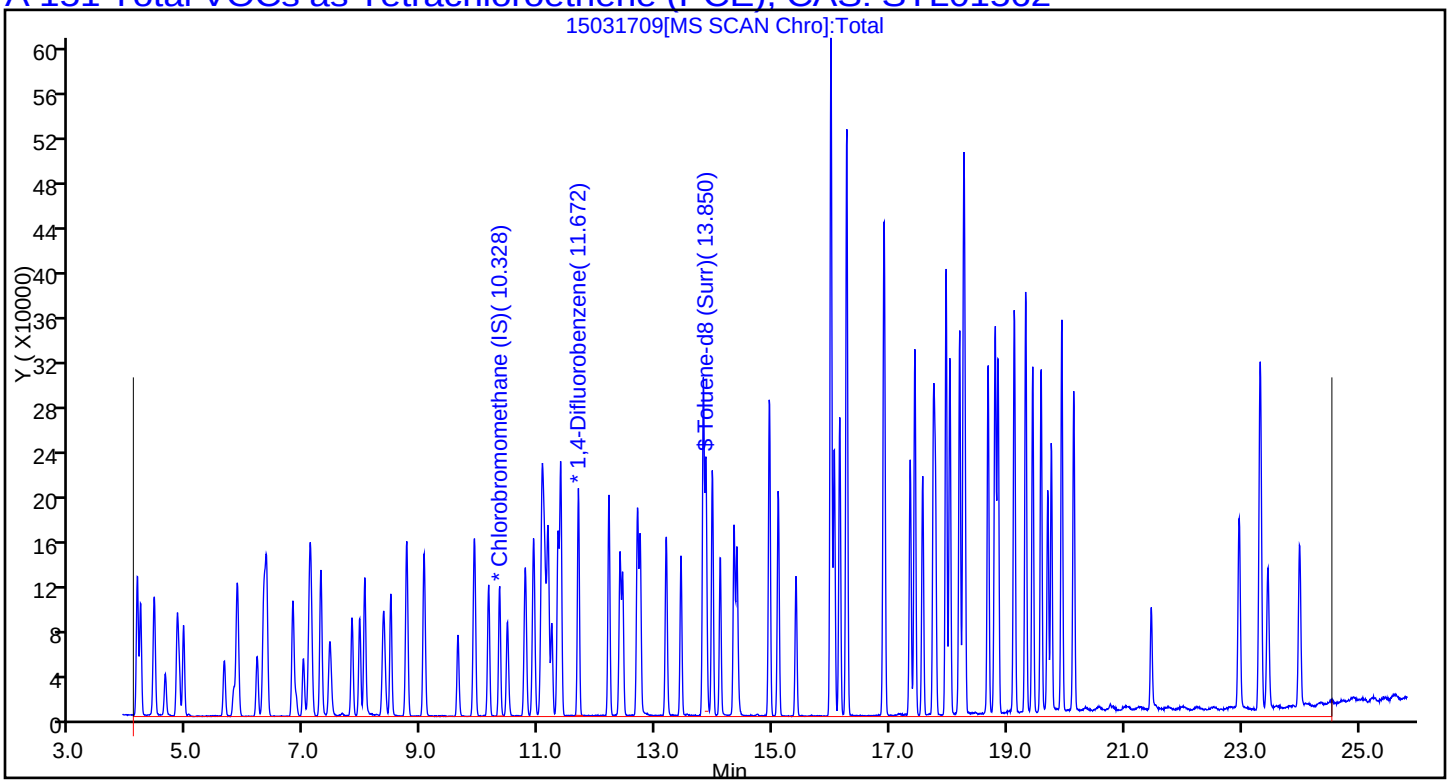


Report Date: 24-Mar-2015 10:33:11 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Sacramento

Data File:	\\SACCHROM\ChromData\ATMS2\20150317-20264.b\15031709.D				
Injection Date:	18-Mar-2015 06:14:30	Instrument ID:	ATMS2		
Lims ID:	IC 4.0ppbv				
Client ID:					
Operator ID:	SRS	ALS Bottle#:	2	Worklist Smp#:	10
Purge Vol:	250.000 mL	Dil. Factor:	1.0000		
Method:	TO15_ATMS2N	Limit Group:	MSA - TO15 - ICAL		
Column:	RTX Volatiles (0.32 mm)	Detector	MS SCAN		

A 151 Total VOCs as Tetrachloroethene (PCE), CAS: STL01562

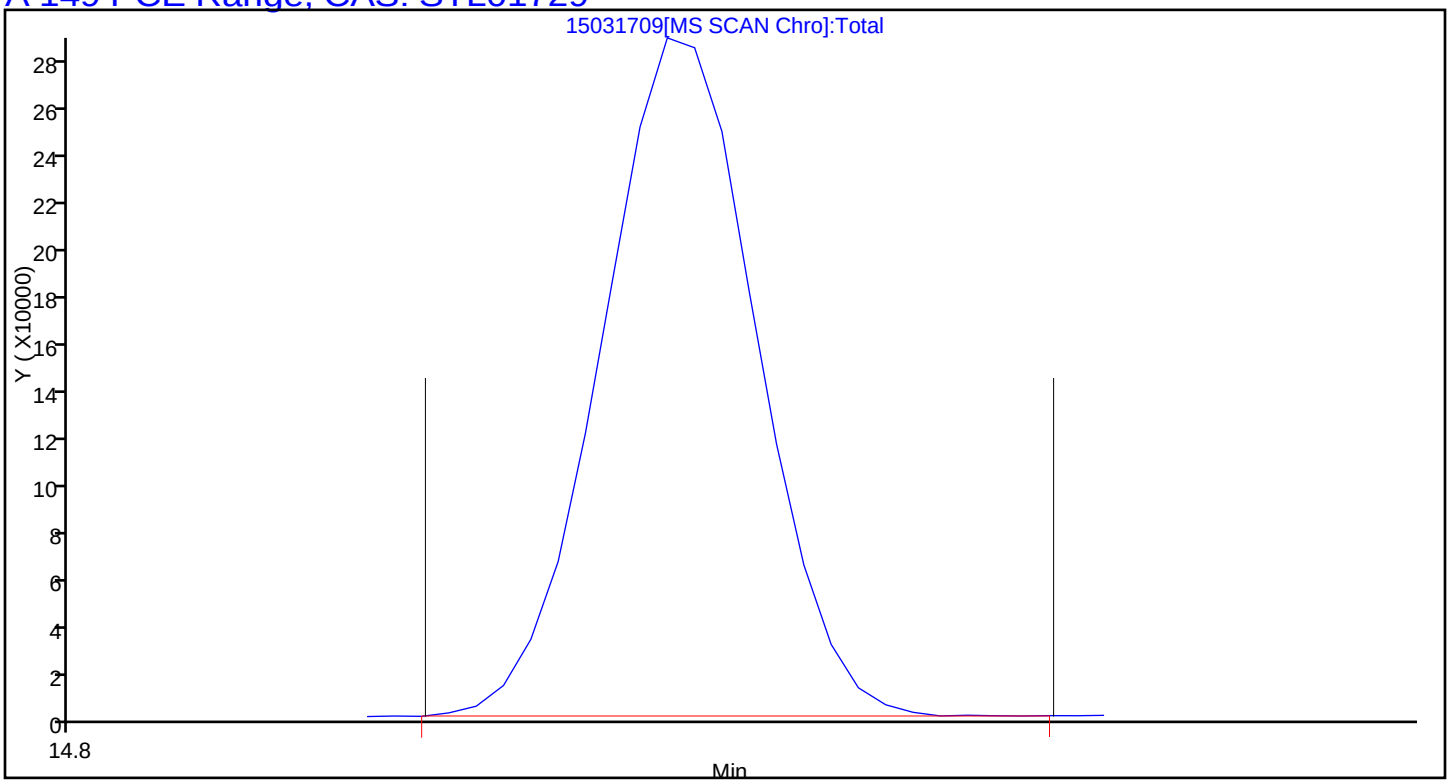


Report Date: 24-Mar-2015 10:33:11 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Sacramento

Data File:	\\SACCHROM\ChromData\ATMS2\20150317-20264.b\15031709.D				
Injection Date:	18-Mar-2015 06:14:30	Instrument ID:	ATMS2		
Lims ID:	IC 4.0ppbv				
Client ID:					
Operator ID:	SRS	ALS Bottle#:	2	Worklist Smp#:	10
Purge Vol:	250.000 mL	Dil. Factor:	1.0000		
Method:	TO15_ATMS2N	Limit Group:	MSA - TO15 - ICAL		
Column:	RTX Volatiles (0.32 mm)	Detector	MS SCAN		

A 149 PCE Range, CAS: STL01729



TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\SACCHROM\ChromData\ATMS2\20150317-20264.b\15031710.D
Lims ID: IC 8.0ppbv
Client ID:
Sample Type: IC Calib Level: 7
Inject. Date: 18-Mar-2015 06:55:30 ALS Bottle#: 3 Worklist Smp#: 11
Purge Vol: 250.000 mL Dil. Factor: 1.0000
Sample Info: IC 8.0PPBV
Misc. Info.: 50mL
Operator ID: SRS Instrument ID: ATMS2
Sublist: chrom-TO15_ATMS2N*sub53

Method: \\SACCHROM\ChromData\ATMS2\20150317-20264.b\TO15_ATMS2N.m
Limit Group: MSA - TO15 - ICAL
Last Update: 24-Mar-2015 10:33:12 Calib Date: 18-Mar-2015 18:13:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\SACCHROM\ChromData\ATMS2\20150317-20264.b\15031726.D

Column 1 : RTX Volatiles (0.32 mm) Det: MS SCAN
Process Host: XAWRK047

First Level Reviewer: scottrs Date: 23-Mar-2015 15:47:11

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	130	10.328	10.328	0.000	97	53756	4.00	4.00	
* 2 1,4-Difluorobenzene	114	11.672	11.672	0.000	94	218841	4.00	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.992	15.992	0.000	60	189497	4.00	4.00	
$ 4 1,2-Dichloroethane-d4 (Sur	65	11.088	11.088	0.000	98	70765	4.00	4.02	
$ 5 Toluene-d8 (Surr)	100	13.850	13.850	0.000	98	129381	4.00	4.01	
$ 6 4-Bromofluorobenzene (Surr	174	17.744	17.744	0.000	91	110329	4.00	3.98	
14 Propene	41	4.129	4.129	0.000	41	115065	8.00	8.03	
13 Chlorodifluoromethane	51	4.141	4.141	0.000	97	226508	8.00	8.59	
15 Dichlorodifluoromethane	85	4.189	4.189	0.000	99	283128	8.00	8.53	
19 1,2-Dichloro-1,1,2,2-tetra	135	4.421	4.421	0.000	96	126082	8.00	7.80	
18 Chloromethane	50	4.609	4.609	0.000	99	127451	8.00	8.58	
22 Butane	43	4.816	4.816	0.000	98	252749	8.00	8.58	
20 Vinyl chloride	62	4.853	4.853	0.000	98	128516	8.00	8.52	
21 Butadiene	39	4.926	4.926	0.000	95	123907	8.00	8.46	
25 Bromomethane	94	5.619	5.619	0.000	99	105798	8.00	8.42	
26 Chloroethane	64	5.783	5.783	0.000	99	58599	8.00	8.09	
27 Vinyl bromide	106	6.179	6.179	0.000	98	119863	8.00	8.18	
28 Trichlorofluoromethane	101	6.300	6.300	0.000	99	327328	8.00	7.91	
38 Pentane	43	6.343	6.343	0.000	96	272490	8.00	7.98	
37 Isopropyl alcohol	45	6.787	6.787	0.000	80	242151	8.00	7.24	
39 Ethyl ether	74	6.793	6.793	0.000	100	44051	8.00	7.20	
29 Acrolein	56	6.848	6.848	0.000	95	28164	8.00	6.57	
31 Acetone	43	6.970	6.970	0.000	99	126691	8.00	6.44	
43 1,1,2-Trichloro-1,2,2-trif	101	7.091	7.091	0.000	96	230644	8.00	7.46	
30 Acetonitrile	41	7.268	7.268	0.000	98	65724	8.00	6.34	
41 1,1-Dichloroethene	61	7.274	7.274	0.000	98	199732	8.00	7.72	
44 2-Methyl-2-propanol	59	7.420	7.420	0.000	95	209636	8.00	7.30	
46 3-Chloro-1-propene	41	7.803	7.803	0.000	94	170793	8.00	7.77	
47 Methylene Chloride	49	7.931	7.931	0.000	98	150215	8.00	7.58	
42 Acrylonitrile	53	8.022	8.022	0.000	34	58689	8.00	6.70	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
48 Carbon disulfide	76	8.022	8.022	0.000	100	349796	8.00	8.48	
50 Methyl tert-butyl ether	73	8.338	8.338	0.000	97	229325	8.00	6.87	
49 trans-1,2-Dichloroethene	61	8.466	8.466	0.000	97	165550	8.00	7.73	
55 Hexane	41	8.740	8.740	0.000	95	163503	8.00	7.71	
52 Vinyl acetate	43	9.026	9.026	0.000	100	221862	8.00	6.27	
53 1,1-Dichloroethane	63	9.044	9.044	0.000	100	198094	8.00	7.51	
54 2-Butanone (MEK)	72	9.610	9.610	0.000	98	36031	8.00	6.94	
58 Ethyl acetate	43	9.884	9.884	0.000	99	199791	8.00	6.77	
57 cis-1,2-Dichloroethene	96	9.902	9.902	0.000	97	112474	8.00	7.80	
61 Chloroform	83	10.139	10.139	0.000	97	215718	8.00	7.49	
62 Tetrahydrofuran	42	10.455	10.455	0.000	93	117391	8.00	6.64	
65 1,1,1-Trichloroethane	97	10.766	10.766	0.000	97	232777	8.00	7.49	
70 Cyclohexane	84	10.906	10.906	0.000	94	155893	8.00	7.44	
74 Isooctane	57	11.052	11.052	0.000	97	620764	8.00	7.40	
67 n-Butanol	56	11.088	11.088	0.000	71	89545	8.00	7.17	M
69 Carbon tetrachloride	117	11.155	11.155	0.000	98	266130	8.00	7.34	
66 1,2-Dichloroethane	62	11.216	11.216	0.000	97	149762	8.00	7.46	
68 Benzene	78	11.325	11.325	0.000	97	320478	8.00	7.22	
75 n-Heptane	43	11.368	11.368	0.000	97	266822	8.00	7.44	
76 Trichloroethene	130	12.195	12.195	0.000	98	173390	8.00	7.50	
77 1,2-Dichloropropane	76	12.390	12.390	0.000	92	49632	8.00	7.45	
79 Methyl methacrylate	69	12.433	12.433	0.000	96	77864	8.00	6.45	
72 1,4-Dioxane	88	12.688	12.688	0.000	97	55270	8.00	6.78	
80 Dichlorobromomethane	85	12.682	12.682	0.000	99	156309	8.00	7.44	
78 Dibromomethane	174	12.731	12.731	0.000	93	149537	8.00	7.45	
81 4-Methyl-2-pentanone (MIBK	43	13.169	13.169	0.000	99	228851	8.00	6.61	
83 cis-1,3-Dichloropropene	75	13.424	13.424	0.000	97	176263	8.00	7.33	
88 n-Octane	43	13.808	13.808	0.000	98	368530	8.00	7.11	
85 Toluene	91	13.960	13.960	0.000	93	349936	8.00	6.81	
84 trans-1,3-Dichloropropene	75	14.093	14.093	0.000	98	166492	8.00	7.16	
86 1,1,2-Trichloroethane	97	14.331	14.331	0.000	97	126856	8.00	7.10	
87 2-Hexanone	58	14.379	14.379	0.000	91	99027	8.00	6.22	
93 Tetrachloroethene	166	14.939	14.939	0.000	97	223082	8.00	7.01	
92 Chlorodibromomethane	129	15.085	15.085	0.000	99	267340	8.00	7.28	
94 Ethylene Dibromide	107	15.389	15.389	0.000	99	200103	8.00	7.00	
99 n-Nonane	43	15.985	15.985	0.000	96	377656	8.00	7.29	
96 Chlorobenzene	112	16.046	16.046	0.000	95	319268	8.00	6.98	
97 Ethylbenzene	91	16.138	16.138	0.000	98	389123	8.00	6.32	
98 m-Xylene & p-Xylene	91	16.259	16.259	0.000	98	583083	16.0	12.4	
101 o-Xylene	91	16.892	16.892	0.000	99	297985	8.00	6.20	
100 Styrene	104	16.904	16.904	0.000	98	231483	8.00	6.25	
102 Bromoform	173	17.342	17.342	0.000	98	277900	8.00	7.24	
104 Isopropylbenzene	120	17.421	17.421	0.000	96	125116	8.00	6.47	
103 1,1,2,2-Tetrachloroethane	83	17.555	17.555	0.000	99	215104	8.00	6.30	
105 1,2,3-Trichloropropane	110	17.774	17.774	0.000	97	65902	8.00	6.25	
113 n-Decane	57	17.957	17.957	0.000	87	265692	8.00	6.31	
107 N-Propylbenzene	91	18.017	18.017	0.000	99	499359	8.00	6.38	
110 4-Ethyltoluene	120	18.188	18.188	0.000	99	137803	8.00	6.41	
111 1,3,5-Trimethylbenzene	120	18.255	18.255	0.000	93	175273	8.00	6.09	
109 2-Chlorotoluene	126	18.273	18.273	0.000	98	131527	8.00	6.43	
112 Alpha Methyl Styrene	118	18.674	18.674	0.000	89	182203	8.00	6.53	
114 tert-Butylbenzene	91	18.796	18.796	0.000	95	258394	8.00	6.21	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
115 1,2,4-Trimethylbenzene	120	18.845	18.845	0.000	95	173552	8.00	6.34	
116 sec-Butylbenzene	105	19.118	19.118	0.000	99	522513	8.00	6.49	
121 4-Isopropyltoluene	119	19.313	19.313	0.000	98	437228	8.00	6.51	
117 1,3-Dichlorobenzene	146	19.435	19.435	0.000	97	275748	8.00	6.65	
120 1,4-Dichlorobenzene	146	19.581	19.581	0.000	98	267525	8.00	6.59	
118 Benzyl chloride	91	19.690	19.690	0.000	99	297131	6.40	5.43	
124 Undecane	57	19.751	19.751	0.000	94	175924	8.00	6.52	
123 n-Butylbenzene	92	19.934	19.934	0.000	98	200658	8.00	6.67	
122 1,2-Dichlorobenzene	146	20.141	20.141	0.000	98	245364	8.00	6.42	
125 Dodecane	57	21.461	21.461	0.000	93	134724	8.00	11.0	
126 1,2,4-Trichlorobenzene	180	22.963	22.963	0.000	95	142801	8.00	6.02	
128 Hexachlorobutadiene	225	23.322	23.322	0.000	98	157476	8.00	6.43	
127 Naphthalene	128	23.456	23.456	0.000	99	288904	8.00	6.27	
129 1,2,3-Trichlorobenzene	180	23.998	23.998	0.000	95	122941	8.00	6.33	
A 144 C6 Range	1	8.740	(8.640-8.840)		0	827958	8.00	7.59	
A 147 Toluene Range	1	13.960	(13.893-14.027)		0	876187	8.00	5.68	
A 154 Total VOC as Hexane	1	14.331	(4.068-24.576)		0	62120280	8.00	569.7	
A 151 Total VOCs as Tetrachloroe	1	14.331	(4.068-24.576)		0	62120280	8.00	358.5	
A 150 Nonmethane Organic Compoun	1	14.331	(4.068-24.576)		0	62120280	8.00	569.7	
A 152 TVOC as Toluene	1	14.421	(4.356-24.486)		0	58330840	8.00	377.8	
A 149 PCE Range	1	14.949	(14.879-15.019)		0	1242690	8.00	7.17	
S 164 1,2-Dichloroethene, Total	1				0			15.5	
S 155 Xylenes, Total	91				0		24.0	18.6	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

VACORPIC40_00180 Amount Added: 50.00 Units: mL

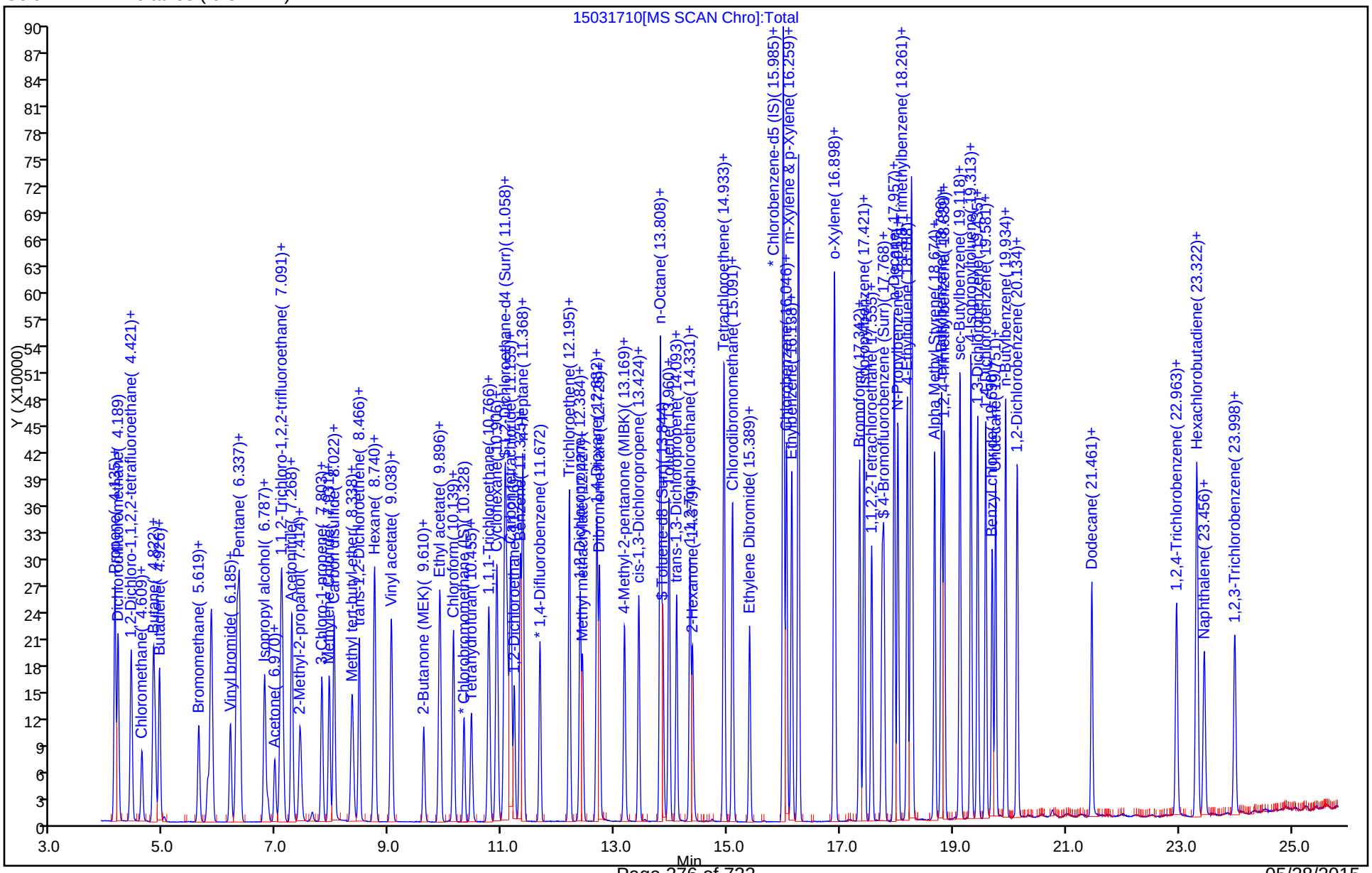
VASUISIM_00160 Amount Added: 50.00 Units: mL Run Reagent

Report Date: 24-Mar-2015 10:33:15 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Sacramento

Data File:	\\SACCHROM\ChromData\ATMS2\20150317-20264.b\15031710.D				
Injection Date:	18-Mar-2015 06:55:30	Instrument ID:	ATMS2	Operator ID:	SRS
Lims ID:	IC 8.0ppbv			Worklist Smp#:	11
Client ID:					
Purge Vol:	250.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	3
Method:	TO15_ATMS2N	Limit Group:	MSA - TO15 - ICAL		

Column: RTX Volatiles (0.32 mm)

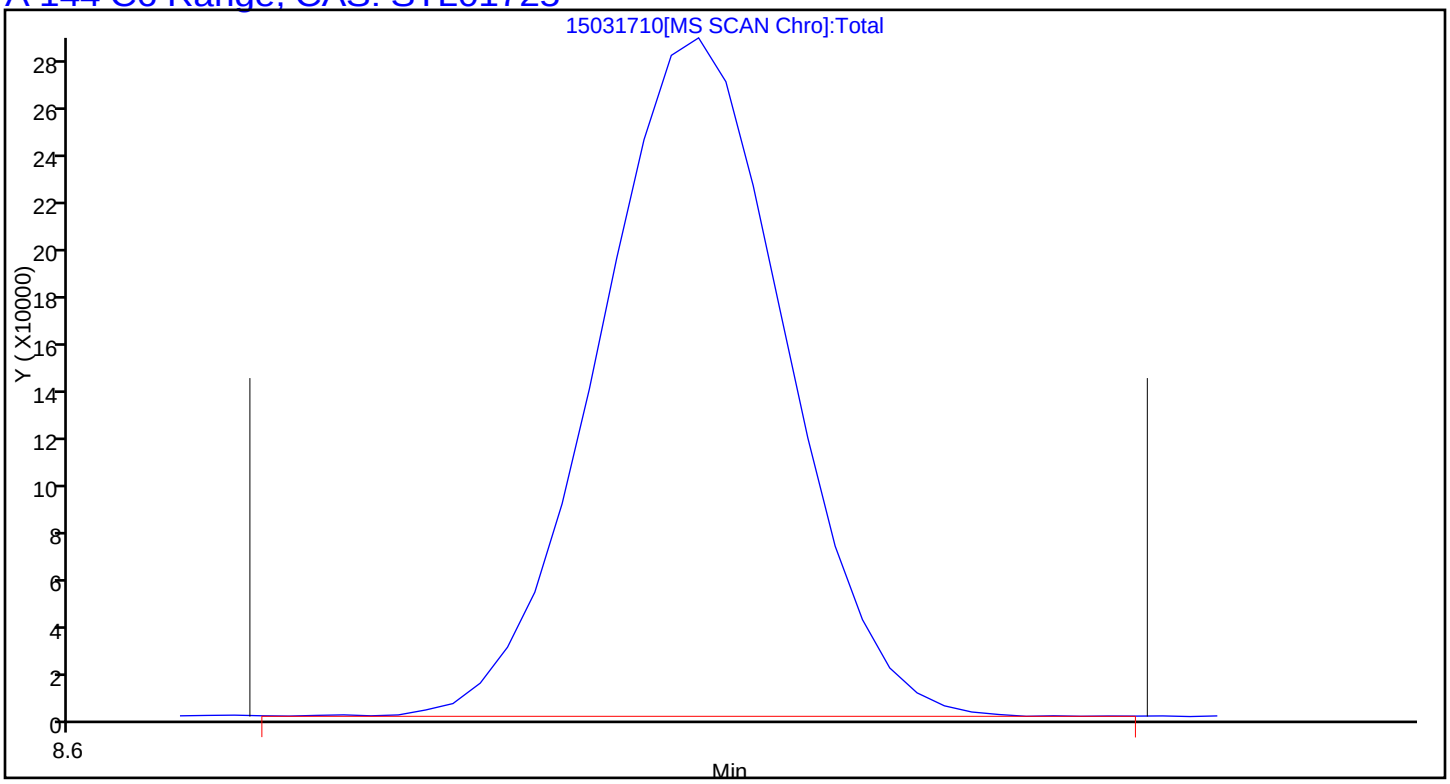


Report Date: 24-Mar-2015 10:33:15 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Sacramento

Data File:	\\SACCHROM\ChromData\ATMS2\20150317-20264.b\15031710.D				
Injection Date:	18-Mar-2015 06:55:30	Instrument ID:	ATMS2		
Lims ID:	IC 8.0ppbv				
Client ID:					
Operator ID:	SRS	ALS Bottle#:	3	Worklist Smp#:	11
Purge Vol:	250.000 mL	Dil. Factor:	1.0000		
Method:	TO15_ATMS2N	Limit Group:	MSA - TO15 - ICAL		
Column:	RTX Volatiles (0.32 mm)	Detector	MS SCAN		

A 144 C6 Range, CAS: STL01725

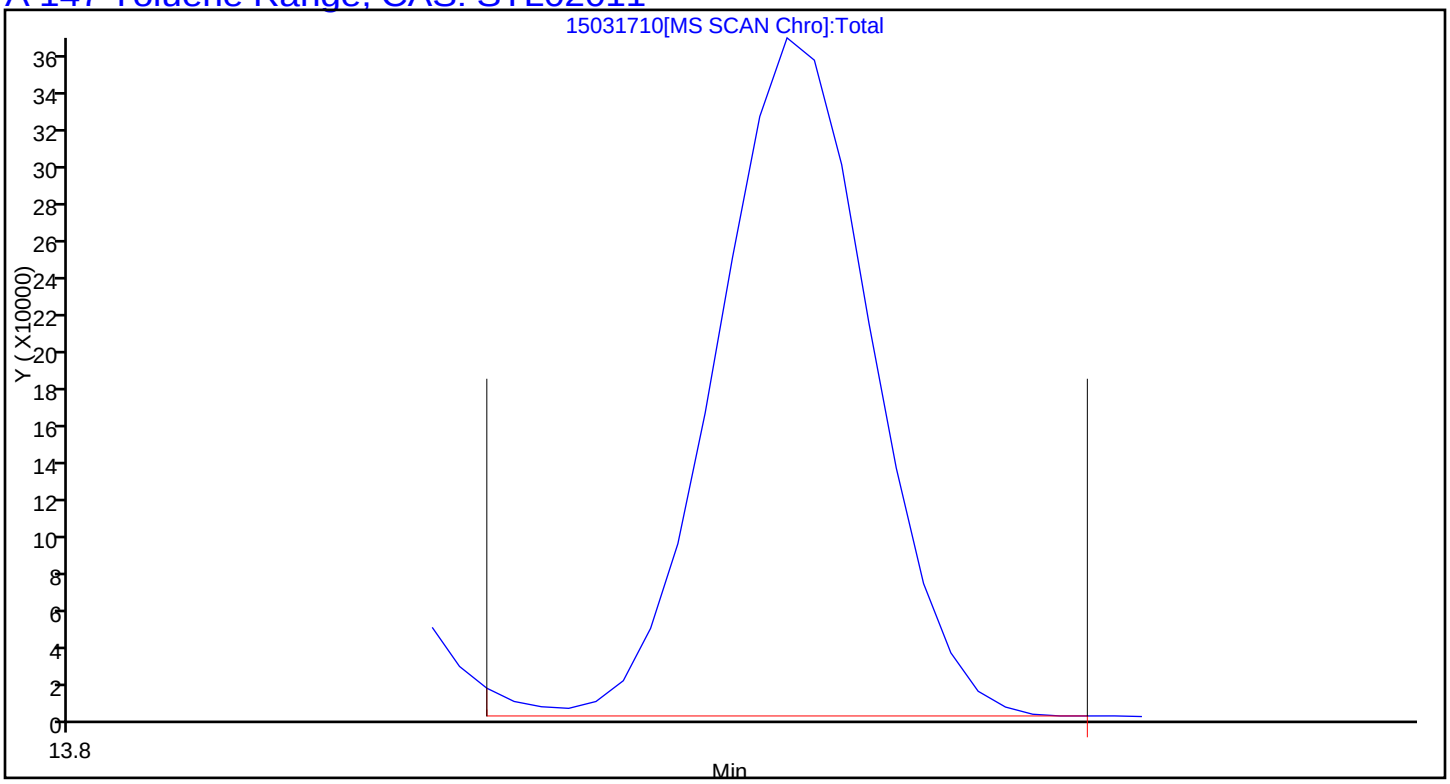


Report Date: 24-Mar-2015 10:33:15 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Sacramento

Data File:	\\SACCHROM\ChromData\ATMS2\20150317-20264.b\15031710.D				
Injection Date:	18-Mar-2015 06:55:30	Instrument ID:	ATMS2		
Lims ID:	IC 8.0ppbv				
Client ID:					
Operator ID:	SRS	ALS Bottle#:	3	Worklist Smp#:	11
Purge Vol:	250.000 mL	Dil. Factor:	1.0000		
Method:	TO15_ATMS2N	Limit Group:	MSA - TO15 - ICAL		
Column:	RTX Volatiles (0.32 mm)	Detector	MS SCAN		

A 147 Toluene Range, CAS: STL02011

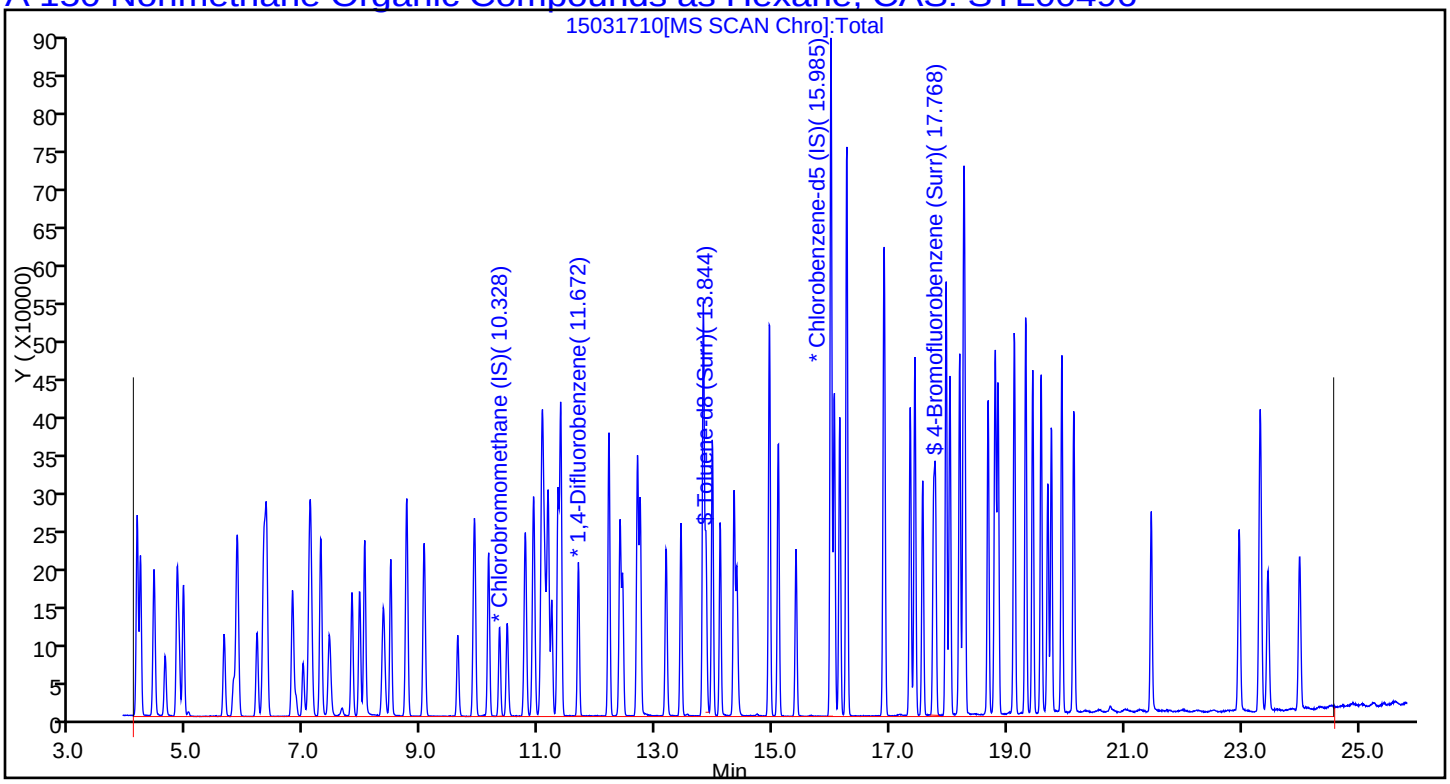


Report Date: 24-Mar-2015 10:33:15 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Sacramento

Data File:	\\SACCHROM\ChromData\ATMS2\20150317-20264.b\15031710.D				
Injection Date:	18-Mar-2015 06:55:30	Instrument ID:	ATMS2		
Lims ID:	IC 8.0ppbv				
Client ID:					
Operator ID:	SRS	ALS Bottle#:	3	Worklist Smp#:	11
Purge Vol:	250.000 mL	Dil. Factor:	1.0000		
Method:	TO15_ATMS2N	Limit Group:	MSA - TO15 - ICAL		
Column:	RTX Volatiles (0.32 mm)	Detector	MS SCAN		

A 150 Nonmethane Organic Compounds as Hexane, CAS: STL00496

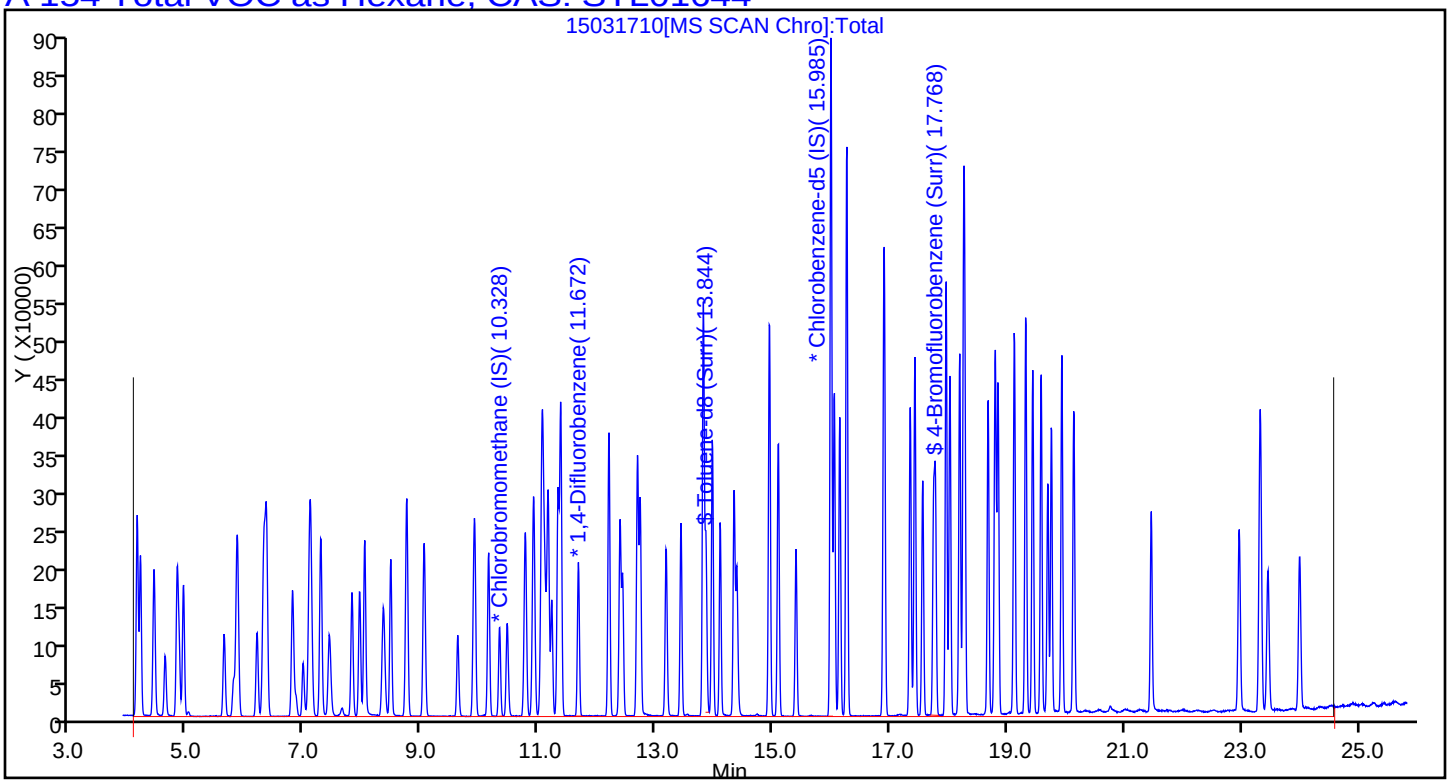


Report Date: 24-Mar-2015 10:33:15 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Sacramento

Data File:	\\SACCHROM\ChromData\ATMS2\20150317-20264.b\15031710.D				
Injection Date:	18-Mar-2015 06:55:30	Instrument ID:	ATMS2		
Lims ID:	IC 8.0ppbv				
Client ID:					
Operator ID:	SRS	ALS Bottle#:	3	Worklist Smp#:	11
Purge Vol:	250.000 mL	Dil. Factor:	1.0000		
Method:	TO15_ATMS2N	Limit Group:	MSA - TO15 - ICAL		
Column:	RTX Volatiles (0.32 mm)	Detector	MS SCAN		

A 154 Total VOC as Hexane, CAS: STL01644

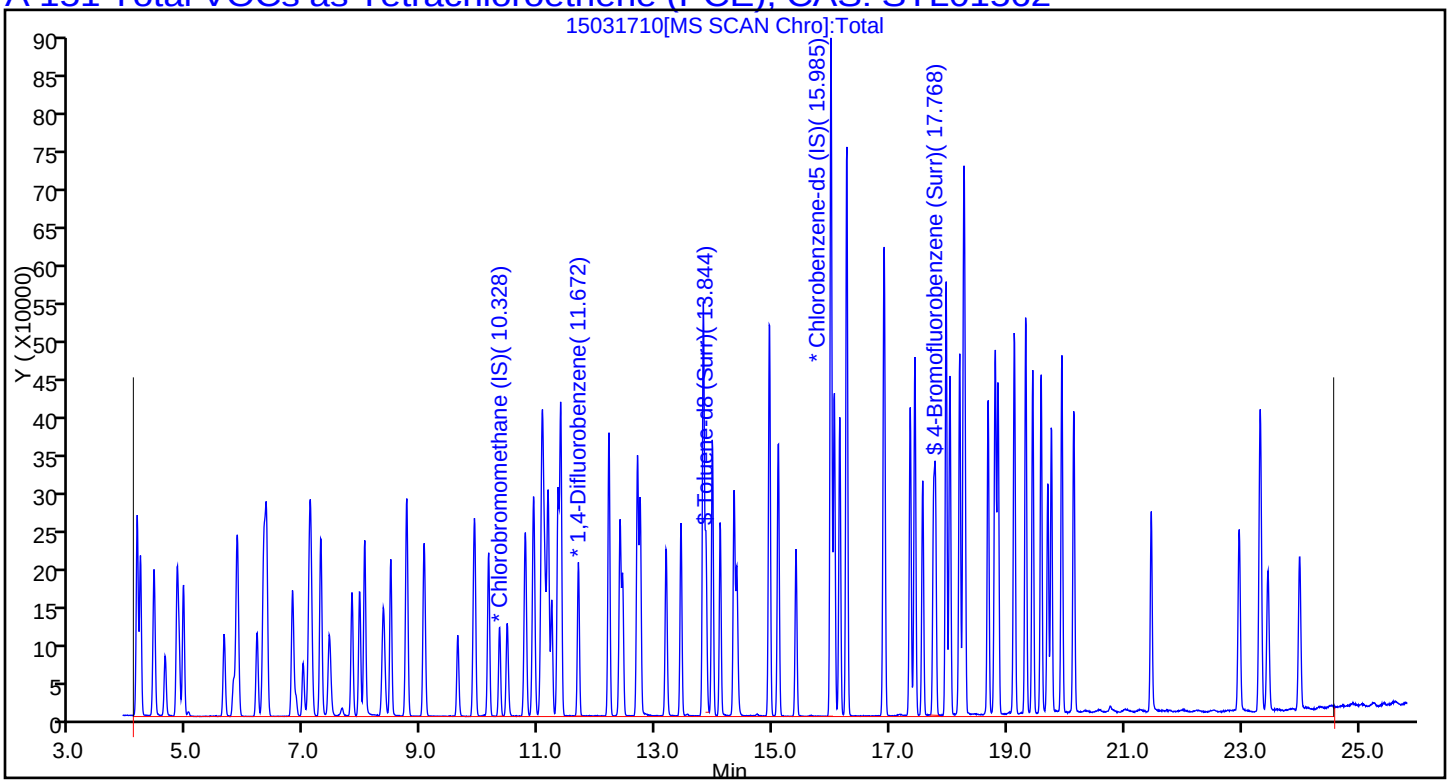


Report Date: 24-Mar-2015 10:33:15 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Sacramento

Data File:	\\SACCHROM\ChromData\ATMS2\20150317-20264.b\15031710.D				
Injection Date:	18-Mar-2015 06:55:30	Instrument ID:	ATMS2		
Lims ID:	IC 8.0ppbv				
Client ID:					
Operator ID:	SRS	ALS Bottle#:	3	Worklist Smp#:	11
Purge Vol:	250.000 mL	Dil. Factor:	1.0000		
Method:	TO15_ATMS2N	Limit Group:	MSA - TO15 - ICAL		
Column:	RTX Volatiles (0.32 mm)	Detector	MS SCAN		

A 151 Total VOCs as Tetrachloroethene (PCE), CAS: STL01562

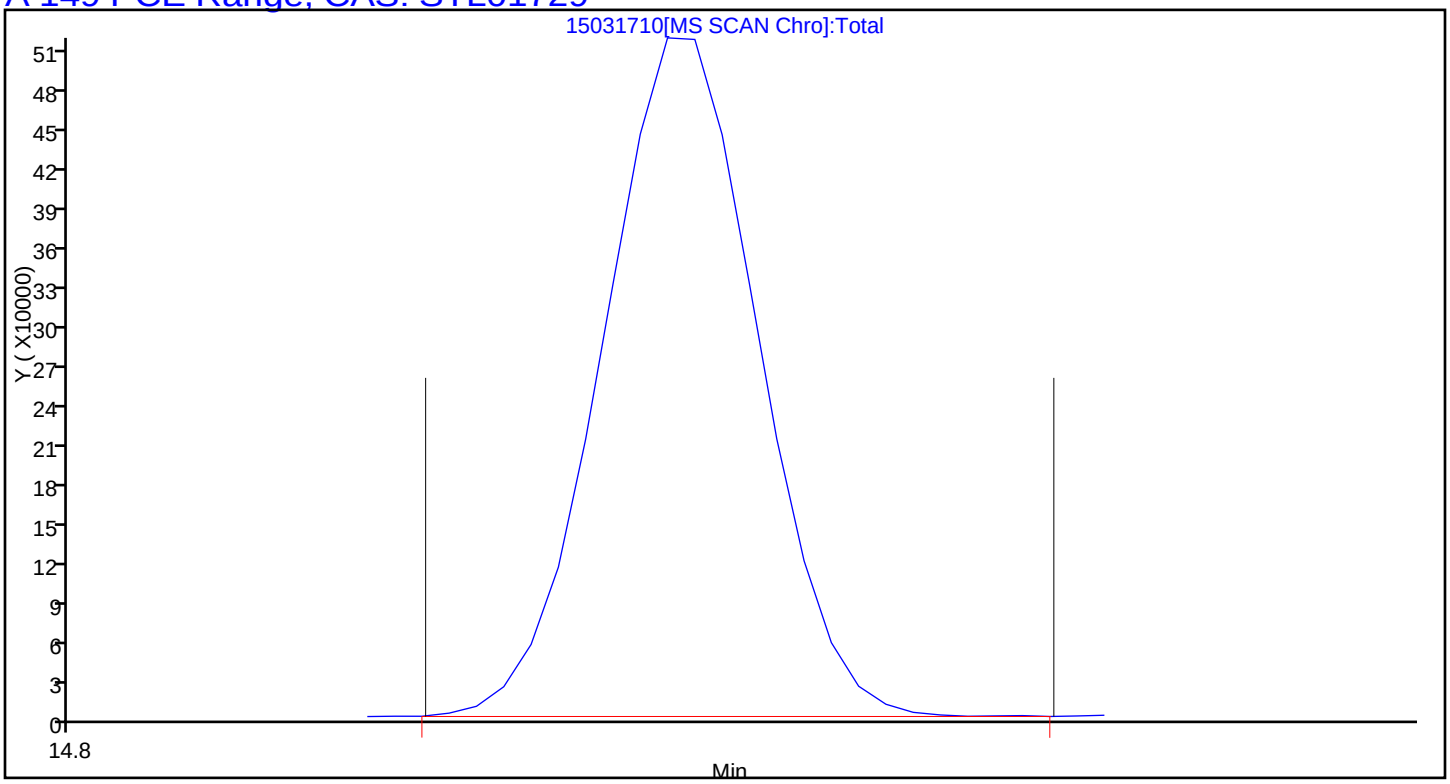


Report Date: 24-Mar-2015 10:33:15 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Sacramento

Data File:	\\SACCHROM\ChromData\ATMS2\20150317-20264.b\15031710.D				
Injection Date:	18-Mar-2015 06:55:30	Instrument ID:	ATMS2		
Lims ID:	IC 8.0ppbv				
Client ID:					
Operator ID:	SRS	ALS Bottle#:	3	Worklist Smp#:	11
Purge Vol:	250.000 mL	Dil. Factor:	1.0000		
Method:	TO15_ATMS2N	Limit Group:	MSA - TO15 - ICAL		
Column:	RTX Volatiles (0.32 mm)	Detector	MS SCAN		

A 149 PCE Range, CAS: STL01729



Manual Integration/User Assign Peak Report

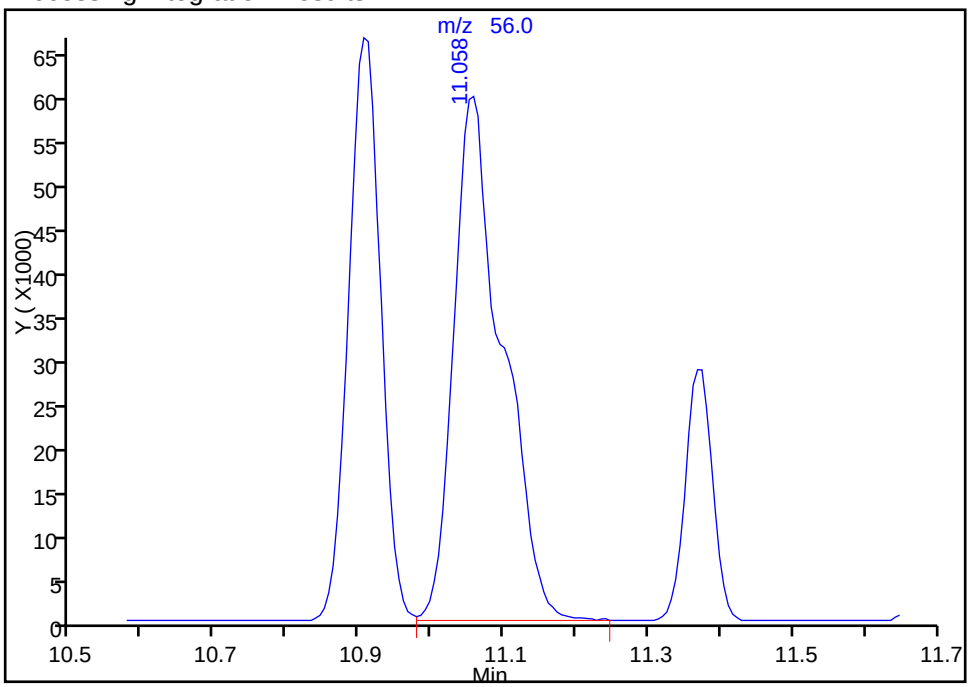
TestAmerica Sacramento

Data File:	\\SACCHROM\ChromData\ATMS2\20150317-20264.b\15031710.D				
Injection Date:	18-Mar-2015 06:55:30	Instrument ID:	ATMS2		
Lims ID:	IC 8.0ppbv				
Client ID:					
Operator ID:	SRS	ALS Bottle#:	3	Worklist Smp#:	11
Purge Vol:	250.000 mL	Dil. Factor:	1.0000		
Method:	TO15_ATMS2N	Limit Group:	MSA - TO15 - ICAL		
Column:	RTX Volatiles (0.32 mm)	Detector	MS SCAN		

67 n-Butanol, CAS: 71-36-3

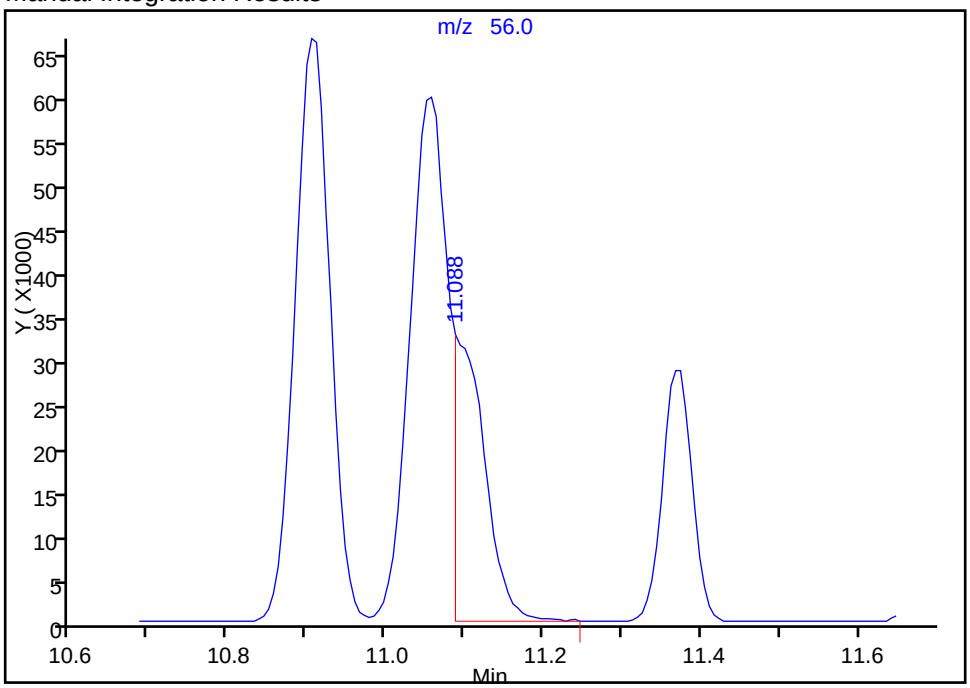
Processing Integration Results

RT: 11.06
Area: 281520
Amount: 9.038257
Amount Units: ppb v/v



Manual Integration Results

RT: 11.09
Area: 89545
Amount: 7.171999
Amount Units: ppb v/v



Reviewer: shardaa, 18-Mar-2015 11:41:59
Audit Action: Split an Integrated Peak
Audit Reason: Poor chromatography

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\SACCHROM\ChromData\ATMS2\20150317-20264.b\15031711.D
Lims ID: ICIS 20ppbv
Client ID:
Sample Type: ICIS Calib Level: 8
Inject. Date: 18-Mar-2015 07:37:30 ALS Bottle#: 3 Worklist Smp#: 12
Purge Vol: 250.000 mL Dil. Factor: 1.0000
Sample Info: ICIS 20PPBV
Misc. Info.: 125mL
Operator ID: SRS Instrument ID: ATMS2
Sublist: chrom-TO15_ATMS2N*sub53

Method: \\SACCHROM\ChromData\ATMS2\20150317-20264.b\TO15_ATMS2N.m
Limit Group: MSA - TO15 - ICAL
Last Update: 24-Mar-2015 10:33:16 Calib Date: 18-Mar-2015 18:13:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\SACCHROM\ChromData\ATMS2\20150317-20264.b\15031726.D

Column 1 : RTX Volatiles (0.32 mm) Det: MS SCAN
Process Host: XAWRK047

First Level Reviewer: scottrs Date: 23-Mar-2015 15:47:27

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	130	10.328	10.328	0.000	97	57635	4.00	4.00	
* 2 1,4-Difluorobenzene	114	11.678	11.678	0.000	94	226906	4.00	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.985	15.985	0.000	45	194518	4.00	4.00	
$ 4 1,2-Dichloroethane-d4 (Sur	65	11.094	11.094	0.000	99	75198	4.00	3.99	
$ 5 Toluene-d8 (Surr)	100	13.850	13.850	0.000	98	134814	4.00	4.03	
$ 6 4-Bromofluorobenzene (Surr	174	17.744	17.744	0.000	90	116833	4.00	4.11	
14 Propene	41	4.129	4.129	0.000	42	281094	20.0	18.3	
13 Chlorodifluoromethane	51	4.141	4.141	0.000	97	539988	20.0	19.1	
15 Dichlorodifluoromethane	85	4.189	4.189	0.000	99	674407	20.0	18.9	
19 1,2-Dichloro-1,1,2,2-tetra	135	4.427	4.427	0.000	97	287708	20.0	16.6	
18 Chloromethane	50	4.615	4.615	0.000	99	301889	20.0	18.9	
22 Butane	43	4.816	4.816	0.000	98	604849	20.0	19.2	
20 Vinyl chloride	62	4.852	4.852	0.000	98	305832	20.0	18.9	
21 Butadiene	39	4.925	4.925	0.000	95	304450	20.0	19.4	
25 Bromomethane	94	5.625	5.625	0.000	99	257351	20.0	19.1	
26 Chloroethane	64	5.783	5.783	0.000	99	151213	20.0	19.5	
27 Vinyl bromide	106	6.185	6.185	0.000	99	296961	20.0	18.9	
28 Trichlorofluoromethane	101	6.300	6.300	0.000	99	803599	20.0	18.1	
38 Pentane	43	6.343	6.343	0.000	97	681630	20.0	18.6	
37 Isopropyl alcohol	45	6.781	6.781	0.000	79	645465	20.0	18.0	
39 Ethyl ether	74	6.793	6.793	0.000	99	121683	20.0	18.6	
29 Acrolein	56	6.842	6.842	0.000	97	85701	20.0	18.6	
31 Acetone	43	6.963	6.963	0.000	99	358292	20.0	17.0	
43 1,1,2-Trichloro-1,2,2-trif	101	7.091	7.091	0.000	97	587347	20.0	17.7	
30 Acetonitrile	41	7.262	7.262	0.000	99	197062	20.0	17.7	
41 1,1-Dichloroethene	61	7.274	7.274	0.000	96	501964	20.0	18.1	
44 2-Methyl-2-propanol	59	7.401	7.401	0.000	95	551948	20.0	17.9	
46 3-Chloro-1-propene	41	7.803	7.803	0.000	93	444352	20.0	18.9	
47 Methylene Chloride	49	7.937	7.937	0.000	98	383806	20.0	18.1	
42 Acrylonitrile	53	8.022	8.022	0.000	36	183154	20.0	19.5	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
48 Carbon disulfide	76	8.022	8.022	0.000	100	853031	20.0	19.3	
50 Methyl tert-butyl ether	73	8.332	8.332	0.000	97	634592	20.0	17.7	
49 trans-1,2-Dichloroethene	61	8.466	8.466	0.000	97	430301	20.0	18.7	
55 Hexane	41	8.740	8.740	0.000	94	421568	20.0	18.5	
52 Vinyl acetate	43	9.026	9.026	0.000	100	672353	20.0	17.7	
53 1,1-Dichloroethane	63	9.044	9.044	0.000	99	513017	20.0	18.1	
54 2-Butanone (MEK)	72	9.604	9.604	0.000	98	100206	20.0	18.0	
58 Ethyl acetate	43	9.877	9.877	0.000	98	553707	20.0	17.5	
57 cis-1,2-Dichloroethene	96	9.902	9.902	0.000	96	288013	20.0	18.6	
61 Chloroform	83	10.139	10.139	0.000	97	554468	20.0	18.0	
62 Tetrahydrofuran	42	10.449	10.449	0.000	93	332933	20.0	17.6	
65 1,1,1-Trichloroethane	97	10.766	10.766	0.000	96	597658	20.0	17.9	
70 Cyclohexane	84	10.906	10.906	0.000	94	395256	20.0	18.2	
74 Isooctane	57	11.058	11.058	0.000	97	1605950	20.0	18.5	
67 n-Butanol	56	11.088	11.088	0.000	95	232814	20.0	17.4	M
69 Carbon tetrachloride	117	11.155	11.155	0.000	97	679316	20.0	18.1	
66 1,2-Dichloroethane	62	11.216	11.216	0.000	97	389349	20.0	18.7	
68 Benzene	78	11.325	11.325	0.000	97	834901	20.0	18.1	
75 n-Heptane	43	11.374	11.374	0.000	97	693429	20.0	18.6	
76 Trichloroethene	130	12.195	12.195	0.000	98	436747	20.0	18.2	
77 1,2-Dichloropropane	76	12.384	12.384	0.000	91	129747	20.0	18.8	
79 Methyl methacrylate	69	12.427	12.427	0.000	93	221875	20.0	17.7	
72 1,4-Dioxane	88	12.682	12.682	0.000	43	153476	20.0	18.1	
80 Dichlorobromomethane	85	12.682	12.682	0.000	97	409185	20.0	18.8	
78 Dibromomethane	174	12.731	12.731	0.000	93	390133	20.0	18.7	
81 4-Methyl-2-pentanone (MIBK	43	13.169	13.169	0.000	99	642806	20.0	17.9	
83 cis-1,3-Dichloropropene	75	13.424	13.424	0.000	98	468275	20.0	18.8	
88 n-Octane	43	13.807	13.807	0.000	98	966314	20.0	18.2	
85 Toluene	91	13.966	13.966	0.000	94	988527	20.0	18.6	
84 trans-1,3-Dichloropropene	75	14.099	14.099	0.000	98	465405	20.0	19.5	
86 1,1,2-Trichloroethane	97	14.337	14.337	0.000	97	335963	20.0	18.3	
87 2-Hexanone	58	14.373	14.373	0.000	91	291074	20.0	17.8	
93 Tetrachloroethene	166	14.939	14.939	0.000	97	577745	20.0	17.7	
92 Chlorodibromomethane	129	15.091	15.091	0.000	99	712802	20.0	18.9	
94 Ethylene Dibromide	107	15.389	15.389	0.000	98	548463	20.0	18.7	
99 n-Nonane	43	15.985	15.985	0.000	96	1007758	20.0	19.0	
96 Chlorobenzene	112	16.046	16.046	0.000	95	853141	20.0	18.2	
97 Ethylbenzene	91	16.137	16.137	0.000	98	1155884	20.0	18.3	
98 m-Xylene & p-Xylene	91	16.259	16.259	0.000	98	1738818	40.0	36.0	
101 o-Xylene	91	16.892	16.892	0.000	99	879712	20.0	17.8	
100 Styrene	104	16.904	16.904	0.000	99	714819	20.0	18.8	
102 Bromoform	173	17.342	17.342	0.000	98	752587	20.0	19.1	
104 Isopropylbenzene	120	17.421	17.421	0.000	96	366555	20.0	18.5	
103 1,1,2,2-Tetrachloroethane	83	17.555	17.555	0.000	100	630116	20.0	18.0	
105 1,2,3-Trichloropropane	110	17.774	17.774	0.000	95	190676	20.0	17.6	
113 n-Decane	57	17.956	17.956	0.000	86	832763	20.0	19.3	
107 N-Propylbenzene	91	18.023	18.023	0.000	99	1459131	20.0	18.2	
110 4-Ethyltoluene	120	18.188	18.188	0.000	99	416350	20.0	18.9	
111 1,3,5-Trimethylbenzene	120	18.255	18.255	0.000	93	531202	20.0	18.0	
109 2-Chlorotoluene	126	18.273	18.273	0.000	98	385063	20.0	18.3	
112 Alpha Methyl Styrene	118	18.674	18.674	0.000	89	555308	20.0	19.4	
114 tert-Butylbenzene	91	18.796	18.796	0.000	95	746880	20.0	17.5	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
115 1,2,4-Trimethylbenzene	120	18.845	18.845	0.000	97	576544	20.0	20.5	
116 sec-Butylbenzene	105	19.125	19.125	0.000	99	1530944	20.0	18.5	
121 4-Isopropyltoluene	119	19.319	19.319	0.000	98	1274476	20.0	18.5	
117 1,3-Dichlorobenzene	146	19.435	19.435	0.000	98	834117	20.0	19.6	
120 1,4-Dichlorobenzene	146	19.581	19.581	0.000	95	818758	20.0	19.6	
118 Benzyl chloride	91	19.696	19.696	0.000	99	911455	16.0	16.2	
124 Undecane	57	19.757	19.757	0.000	94	640803	20.0	23.1	
123 n-Butylbenzene	92	19.934	19.934	0.000	98	586766	20.0	19.0	
122 1,2-Dichlorobenzene	146	20.140	20.140	0.000	97	741669	20.0	18.9	
125 Dodecane	57	21.461	21.461	0.000	92	422735	20.0	33.6	
126 1,2,4-Trichlorobenzene	180	22.963	22.963	0.000	94	512056	20.0	21.0	
128 Hexachlorobutadiene	225	23.322	23.322	0.000	98	516566	20.0	20.6	
127 Naphthalene	128	23.456	23.456	0.000	99	1092914	20.0	23.1	
129 1,2,3-Trichlorobenzene	180	23.997	23.997	0.000	96	441411	20.0	22.2	
A 144 C6 Range	1	8.740	(8.640-8.840)		0	2128695	20.0	18.2	
A 147 Toluene Range	1	13.960	(13.893-14.026)		0	2464217	20.0	15.4	
A 154 Total VOC as Hexane	1	14.307	(4.068-24.546)		0	165441928	20.0	1415.2	
A 151 Total VOCs as Tetrachloroe	1	14.307	(4.068-24.546)		0	165441928	20.0	930.1	
A 150 Nonmethane Organic Compoun	1	14.307	(4.068-24.546)		0	165441928	20.0	1415.2	
A 152 TVOC as Toluene	1	14.406	(4.356-24.456)		0	160012108	20.0	999.6	
A 149 PCE Range	1	14.949	(14.879-15.019)		0	3199006	20.0	18.0	
S 155 Xylenes, Total	91				0		60.0	53.9	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

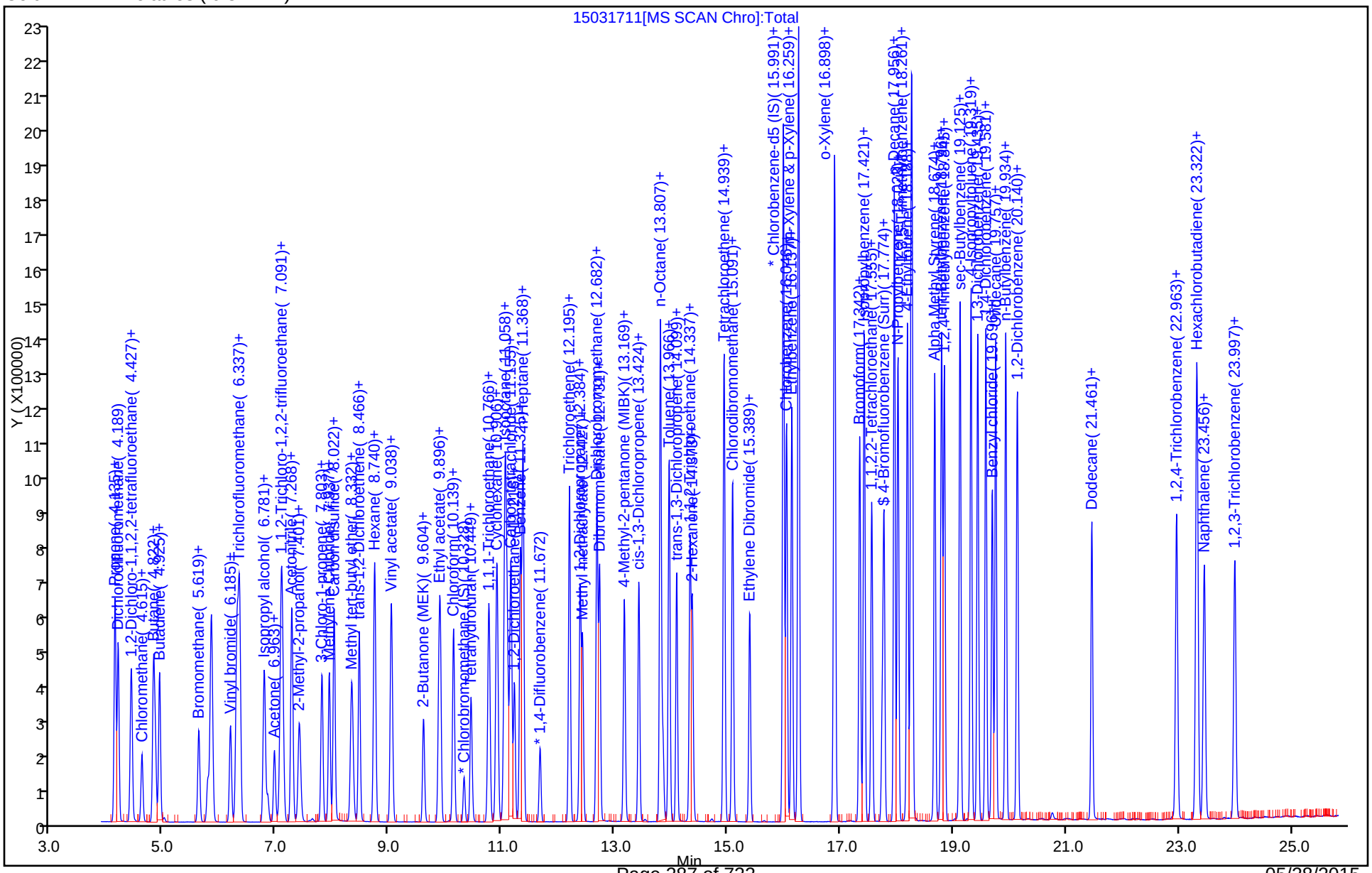
VACORPIC40_00180	Amount Added: 125.00	Units: mL	
VASUISIM_00160	Amount Added: 50.00	Units: mL	Run Reagent

Report Date: 24-Mar-2015 10:33:18 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Sacramento

Data File:	\\SACCHROM\ChromData\ATMS2\20150317-20264.b\15031711.D				
Injection Date:	18-Mar-2015 07:37:30	Instrument ID:	ATMS2	Operator ID:	SRS
Lims ID:	ICIS 20ppbv			Worklist Smp#:	12
Client ID:					
Purge Vol:	250.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	3
Method:	TO15_ATMS2N	Limit Group:	MSA - TO15 - ICAL		

Column: RTX Volatiles (0.32 mm)

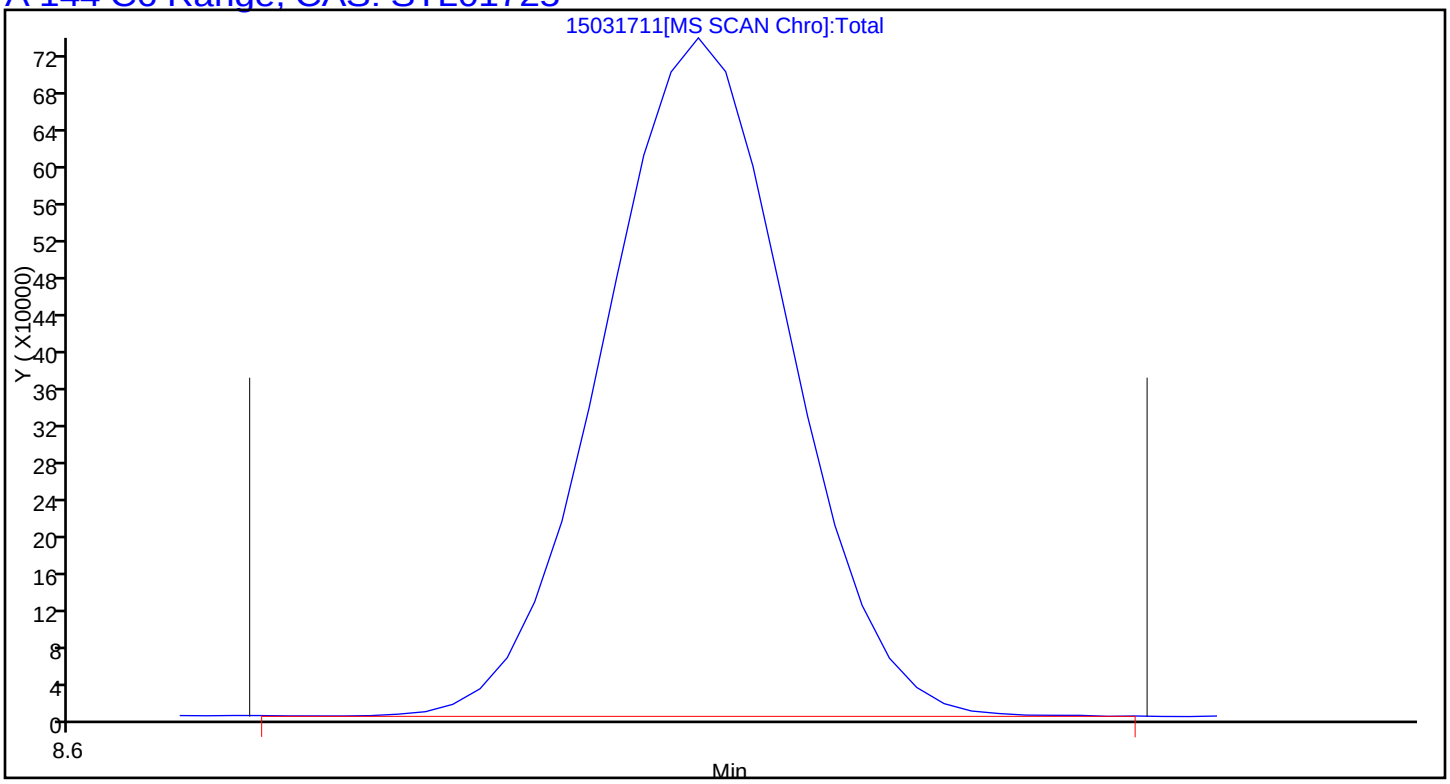


Report Date: 24-Mar-2015 10:33:18 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Sacramento

Data File:	\\SACCHROM\ChromData\ATMS2\20150317-20264.b\15031711.D				
Injection Date:	18-Mar-2015 07:37:30	Instrument ID:	ATMS2		
Lims ID:	ICIS 20ppbv				
Client ID:					
Operator ID:	SRS	ALS Bottle#:	3	Worklist Smp#:	12
Purge Vol:	250.000 mL	Dil. Factor:	1.0000		
Method:	TO15_ATMS2N	Limit Group:	MSA - TO15 - ICAL		
Column:	RTX Volatiles (0.32 mm)	Detector	MS SCAN		

A 144 C6 Range, CAS: STL01725

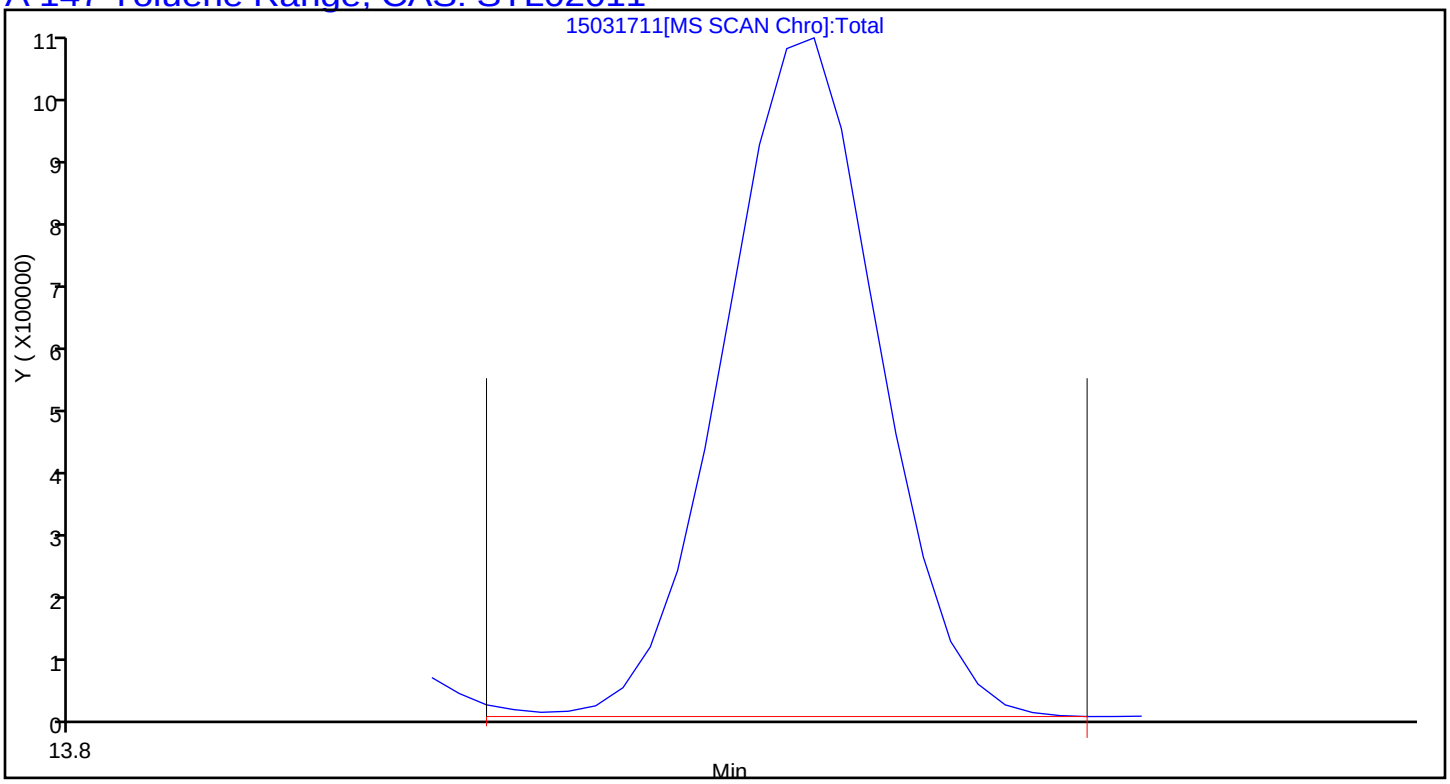


Report Date: 24-Mar-2015 10:33:18 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Sacramento

Data File:	\\SACCHROM\ChromData\ATMS2\20150317-20264.b\15031711.D				
Injection Date:	18-Mar-2015 07:37:30	Instrument ID:	ATMS2		
Lims ID:	ICIS 20ppbv				
Client ID:					
Operator ID:	SRS	ALS Bottle#:	3	Worklist Smp#:	12
Purge Vol:	250.000 mL	Dil. Factor:	1.0000		
Method:	TO15_ATMS2N	Limit Group:	MSA - TO15 - ICAL		
Column:	RTX Volatiles (0.32 mm)	Detector	MS SCAN		

A 147 Toluene Range, CAS: STL02011

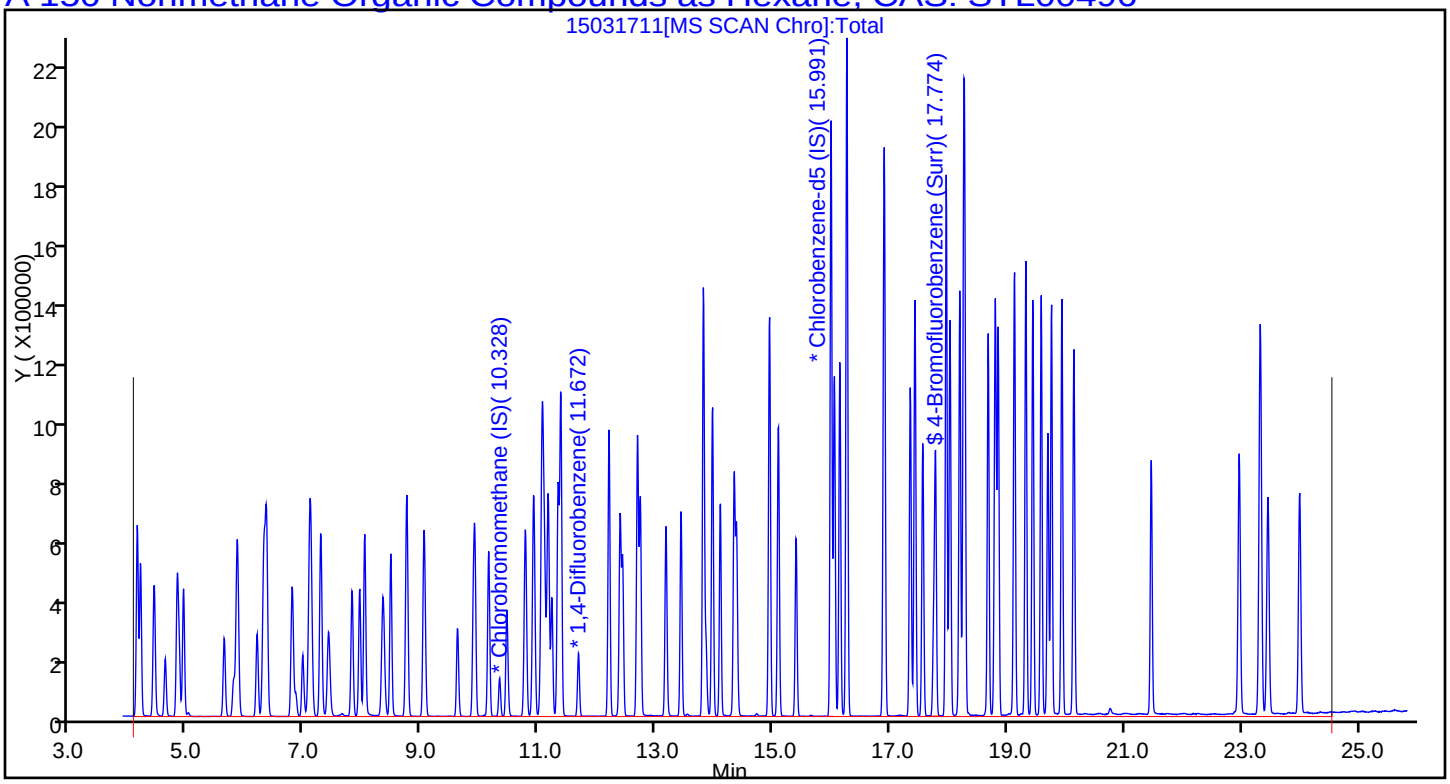


Report Date: 24-Mar-2015 10:33:18 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Sacramento

Data File:	\\SACCHROM\ChromData\ATMS2\20150317-20264.b\15031711.D				
Injection Date:	18-Mar-2015 07:37:30	Instrument ID:	ATMS2		
Lims ID:	ICIS 20ppbv				
Client ID:					
Operator ID:	SRS	ALS Bottle#:	3	Worklist Smp#:	12
Purge Vol:	250.000 mL	Dil. Factor:	1.0000		
Method:	TO15_ATMS2N	Limit Group:	MSA - TO15 - ICAL		
Column:	RTX Volatiles (0.32 mm)	Detector	MS SCAN		

A 150 Nonmethane Organic Compounds as Hexane, CAS: STL00496

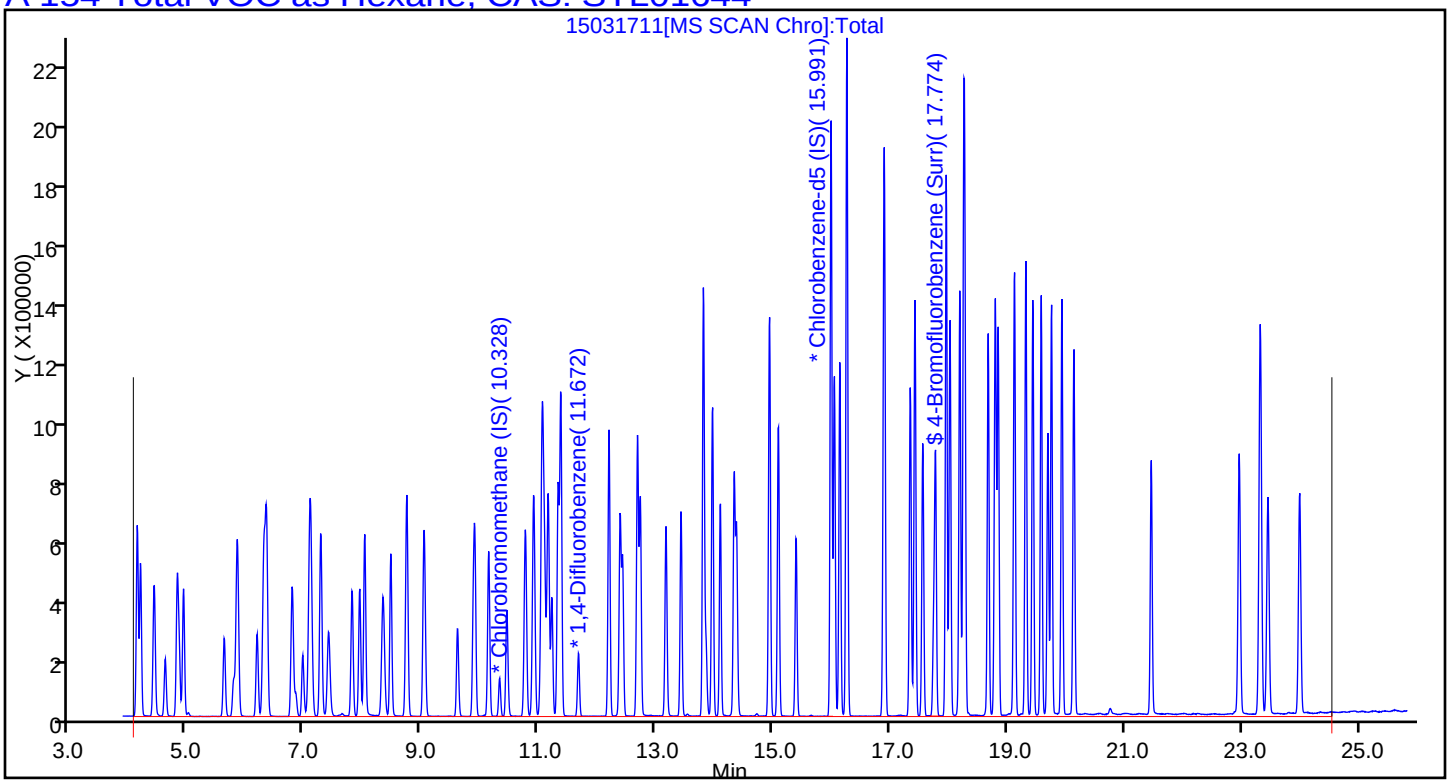


Report Date: 24-Mar-2015 10:33:18 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Sacramento

Data File:	\\SACCHROM\ChromData\ATMS2\20150317-20264.b\15031711.D				
Injection Date:	18-Mar-2015 07:37:30	Instrument ID:	ATMS2		
Lims ID:	ICIS 20ppbv				
Client ID:					
Operator ID:	SRS	ALS Bottle#:	3	Worklist Smp#:	12
Purge Vol:	250.000 mL	Dil. Factor:	1.0000		
Method:	TO15_ATMS2N	Limit Group:	MSA - TO15 - ICAL		
Column:	RTX Volatiles (0.32 mm)	Detector	MS SCAN		

A 154 Total VOC as Hexane, CAS: STL01644

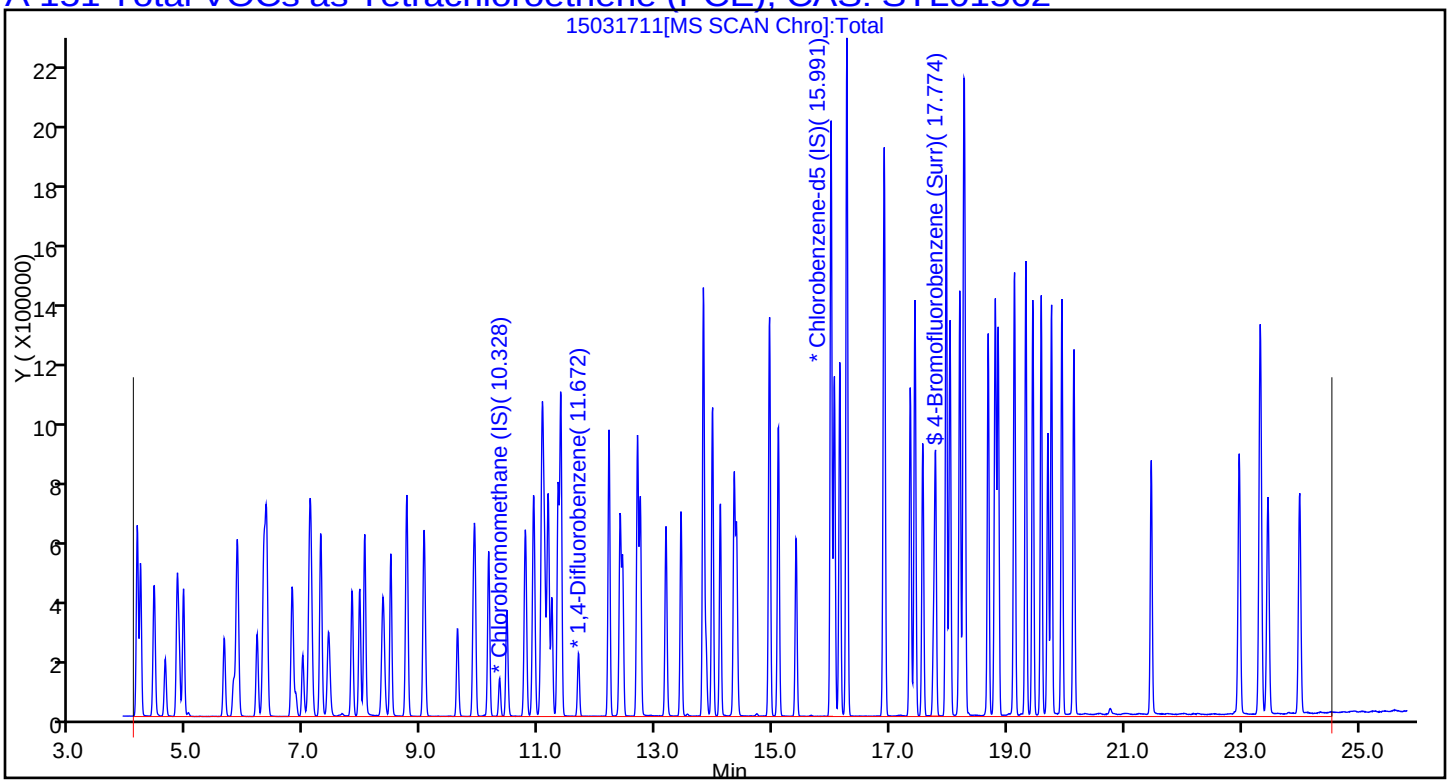


Report Date: 24-Mar-2015 10:33:18 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Sacramento

Data File:	\\SACCHROM\ChromData\ATMS2\20150317-20264.b\15031711.D				
Injection Date:	18-Mar-2015 07:37:30	Instrument ID:	ATMS2		
Lims ID:	ICIS 20ppbv				
Client ID:					
Operator ID:	SRS	ALS Bottle#:	3	Worklist Smp#:	12
Purge Vol:	250.000 mL	Dil. Factor:	1.0000		
Method:	TO15_ATMS2N	Limit Group:	MSA - TO15 - ICAL		
Column:	RTX Volatiles (0.32 mm)	Detector	MS SCAN		

A 151 Total VOCs as Tetrachloroethene (PCE), CAS: STL01562

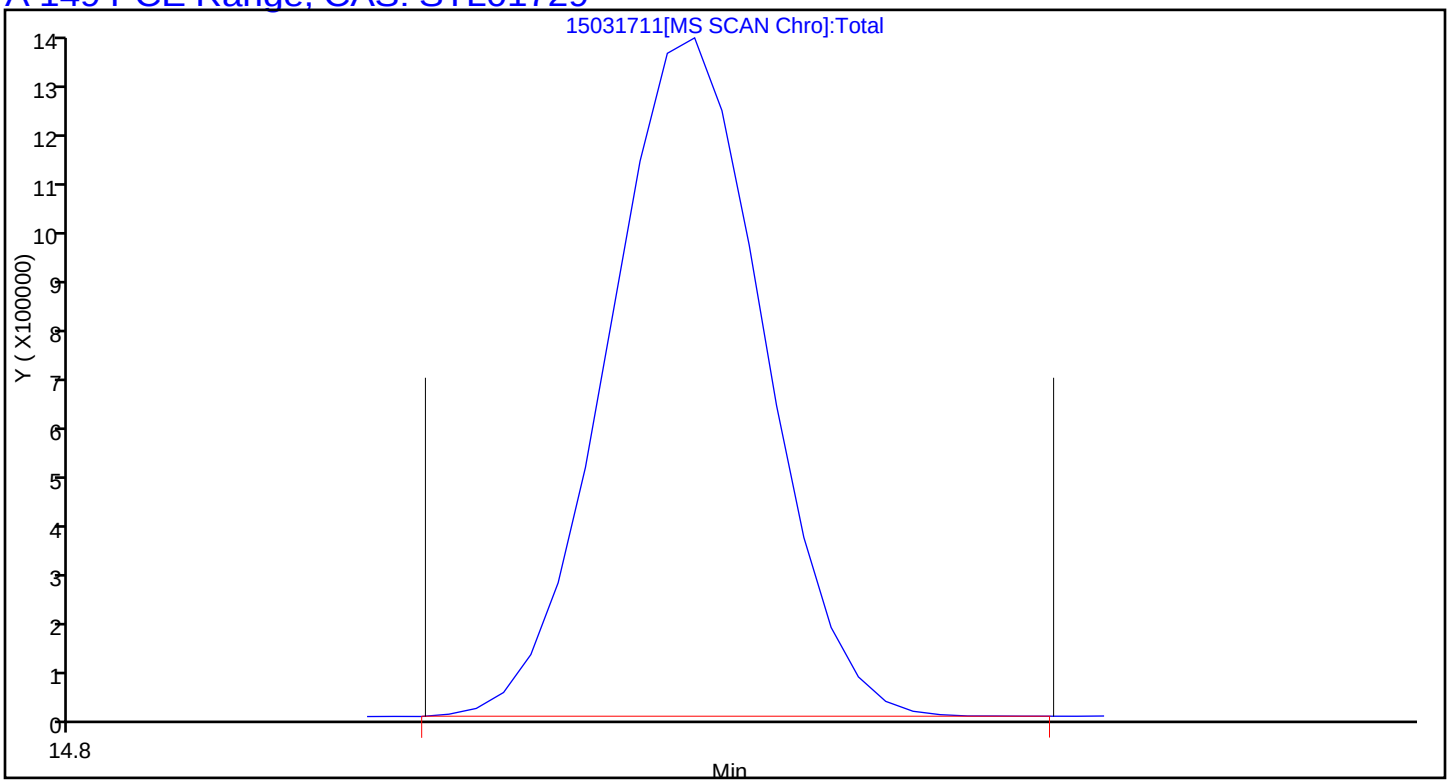


Report Date: 24-Mar-2015 10:33:18 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Sacramento

Data File:	\\SACCHROM\ChromData\ATMS2\20150317-20264.b\15031711.D				
Injection Date:	18-Mar-2015 07:37:30	Instrument ID:	ATMS2		
Lims ID:	ICIS 20ppbv				
Client ID:					
Operator ID:	SRS	ALS Bottle#:	3	Worklist Smp#:	12
Purge Vol:	250.000 mL	Dil. Factor:	1.0000		
Method:	TO15_ATMS2N	Limit Group:	MSA - TO15 - ICAL		
Column:	RTX Volatiles (0.32 mm)	Detector	MS SCAN		

A 149 PCE Range, CAS: STL01729



Manual Integration/User Assign Peak Report

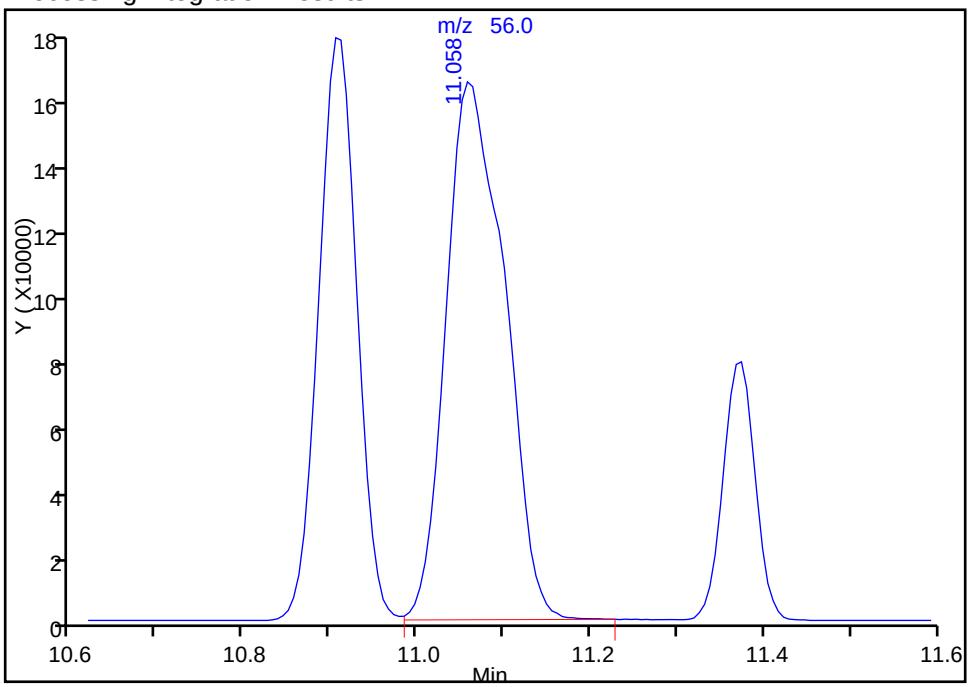
TestAmerica Sacramento

Data File:	\\SACCHROM\ChromData\ATMS2\20150317-20264.b\15031711.D				
Injection Date:	18-Mar-2015 07:37:30	Instrument ID:	ATMS2		
Lims ID:	ICIS 20ppbv				
Client ID:					
Operator ID:	SRS	ALS Bottle#:	3	Worklist Smp#:	12
Purge Vol:	250.000 mL	Dil. Factor:	1.0000		
Method:	TO15_ATMS2N	Limit Group:	MSA - TO15 - ICAL		
Column:	RTX Volatiles (0.32 mm)	Detector	MS SCAN		

67 n-Butanol, CAS: 71-36-3

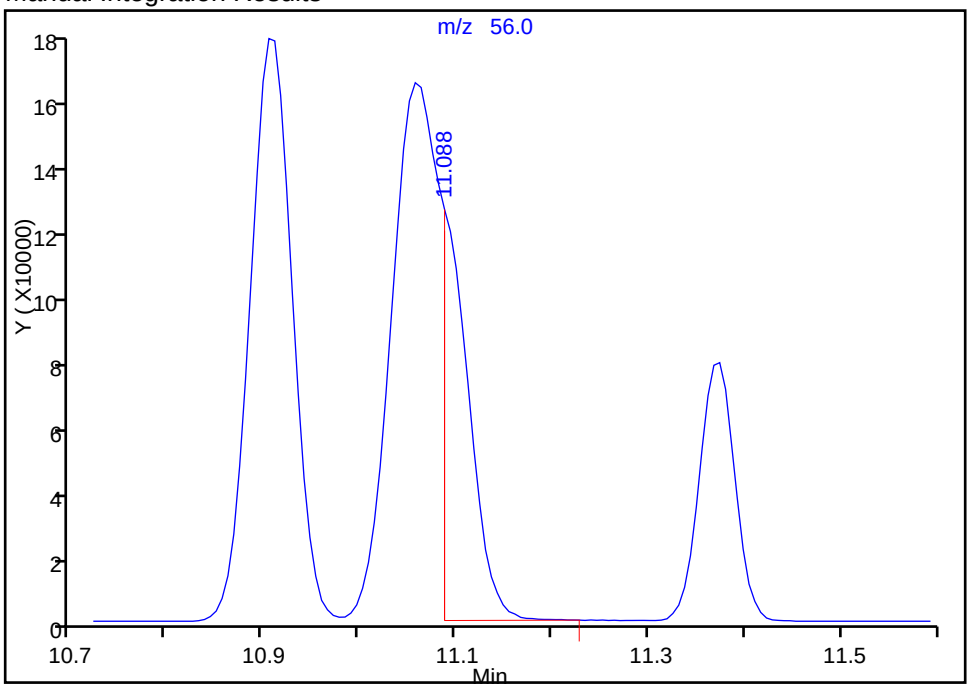
Processing Integration Results

RT: 11.06
Area: 747842
Amount: 21.130884
Amount Units: ppb v/v



Manual Integration Results

RT: 11.09
Area: 232814
Amount: 17.391963
Amount Units: ppb v/v



Reviewer: shardaa, 18-Mar-2015 11:44:08
Audit Action: Split an Integrated Peak
Audit Reason: Poor chromatography

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\SACCHROM\ChromData\ATMS2\20150317-20264.b\15031712.D
Lims ID: IC 40ppbv
Client ID:
Sample Type: IC Calib Level: 9
Inject. Date: 18-Mar-2015 08:20:30 ALS Bottle#: 3 Worklist Smp#: 13
Purge Vol: 250.000 mL Dil. Factor: 1.0000
Sample Info: IC 40PPBV
Misc. Info.: 250mL
Operator ID: SRS Instrument ID: ATMS2
Sublist: chrom-TO15_ATMS2N*sub53

Method: \\SACCHROM\ChromData\ATMS2\20150317-20264.b\TO15_ATMS2N.m
Limit Group: MSA - TO15 - ICAL
Last Update: 24-Mar-2015 10:33:20 Calib Date: 18-Mar-2015 18:13:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\SACCHROM\ChromData\ATMS2\20150317-20264.b\15031726.D

Column 1 : RTX Volatiles (0.32 mm) Det: MS SCAN
Process Host: XAWRK047

First Level Reviewer: scottrs Date: 23-Mar-2015 15:47:41

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	130	10.328	10.328	0.000	97	62838	4.00	4.00	
* 2 1,4-Difluorobenzene	114	11.678	11.678	0.000	94	233886	4.00	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.991	15.985	0.006	41	203372	4.00	4.00	
$ 4 1,2-Dichloroethane-d4 (Sur	65	11.094	11.094	0.000	96	84346	4.00	4.10	
$ 5 Toluene-d8 (Surr)	100	13.850	13.850	0.000	97	142044	4.00	4.12	
$ 6 4-Bromofluorobenzene (Surr	174	17.744	17.744	0.000	92	123189	4.00	4.14	
14 Propene	41	4.129	4.129	0.001	41	573815	40.0	34.3	
13 Chlorodifluoromethane	51	4.141	4.141	0.000	97	1095744	40.0	35.5	
15 Dichlorodifluoromethane	85	4.189	4.189	0.000	99	1400636	40.0	36.1	
19 1,2-Dichloro-1,1,2,2-tetra	135	4.427	4.427	0.000	91	730213	40.0	38.6	
18 Chloromethane	50	4.615	4.615	0.000	99	613889	40.0	35.3	
22 Butane	43	4.816	4.816	0.000	98	1230198	40.0	35.7	
20 Vinyl chloride	62	4.852	4.852	0.000	98	624721	40.0	35.4	
21 Butadiene	39	4.925	4.925	0.000	95	625287	40.0	36.5	
25 Bromomethane	94	5.619	5.625	-0.006	99	522967	40.0	35.6	
26 Chloroethane	64	5.777	5.783	-0.006	99	317319	40.0	37.5	
27 Vinyl bromide	106	6.185	6.185	0.000	99	611224	40.0	35.7	
28 Trichlorofluoromethane	101	6.300	6.300	0.000	98	1658968	40.0	34.3	
38 Pentane	43	6.343	6.343	0.000	96	1446165	40.0	36.2	
37 Isopropyl alcohol	45	6.775	6.781	-0.006	78	1463233	40.0	37.4	
39 Ethyl ether	74	6.787	6.793	-0.006	100	274066	40.0	38.3	
29 Acrolein	56	6.848	6.842	0.006	97	206890	40.0	41.3	
31 Acetone	43	6.957	6.963	-0.006	99	883149	40.0	38.4	
43 1,1,2-Trichloro-1,2,2-trif	101	7.091	7.091	0.000	97	1263428	40.0	34.9	
30 Acetonitrile	41	7.262	7.262	0.000	99	493971	40.0	40.8	
41 1,1-Dichloroethene	61	7.274	7.274	0.000	95	1058639	40.0	35.0	
44 2-Methyl-2-propanol	59	7.401	7.401	0.000	95	1224777	40.0	36.5	
46 3-Chloro-1-propene	41	7.803	7.803	0.000	93	969185	40.0	37.7	
47 Methylene Chloride	49	7.937	7.937	0.000	97	828150	40.0	35.8	
42 Acrylonitrile	53	8.022	8.022	0.000	42	448654	40.0	43.8	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
48 Carbon disulfide	76	8.022	8.022	0.000	100	1741120	40.0	36.1	
50 Methyl tert-butyl ether	73	8.332	8.332	0.000	97	1482675	40.0	38.0	
49 trans-1,2-Dichloroethene	61	8.466	8.466	0.000	96	942341	40.0	37.6	
55 Hexane	41	8.740	8.740	0.000	95	916545	40.0	37.0	
52 Vinyl acetate	43	9.032	9.026	0.006	100	1703289	40.0	41.2	
53 1,1-Dichloroethane	63	9.044	9.044	0.000	99	1105569	40.0	35.9	
54 2-Butanone (MEK)	72	9.610	9.604	0.006	98	239309	40.0	39.4	
58 Ethyl acetate	43	9.878	9.877	0.001	98	1339860	40.0	38.8	
57 cis-1,2-Dichloroethene	96	9.908	9.902	0.006	96	621244	40.0	36.9	
61 Chloroform	83	10.139	10.139	0.000	96	1200674	40.0	35.7	
62 Tetrahydrofuran	42	10.449	10.449	0.000	93	803527	40.0	38.9	
65 1,1,1-Trichloroethane	97	10.766	10.766	0.000	96	1293205	40.0	35.6	
70 Cyclohexane	84	10.912	10.906	0.006	93	850189	40.0	38.0	
74 Isooctane	57	11.058	11.058	0.000	98	3541916	40.0	39.5	
67 n-Butanol	56	11.088	11.088	0.000	93	540893	40.0	37.1	M
69 Carbon tetrachloride	117	11.155	11.155	0.000	97	1469243	40.0	37.9	
66 1,2-Dichloroethane	62	11.222	11.216	0.006	97	849359	40.0	39.6	
68 Benzene	78	11.325	11.325	0.000	97	1829550	40.0	38.5	
75 n-Heptane	43	11.374	11.374	0.000	97	1545703	40.0	40.3	
76 Trichloroethene	130	12.195	12.195	0.000	98	933272	40.0	37.8	
77 1,2-Dichloropropane	76	12.390	12.384	0.006	90	280475	40.0	39.4	
79 Methyl methacrylate	69	12.427	12.427	0.001	91	535429	40.0	41.5	
80 Dichlorobromomethane	85	12.682	12.682	0.000	98	890140	40.0	39.6	
72 1,4-Dioxane	88	12.682	12.682	0.000	98	348509	40.0	40.0	
78 Dibromomethane	174	12.731	12.731	0.000	93	847433	40.0	39.5	
81 4-Methyl-2-pentanone (MIBK	43	13.169	13.169	0.000	99	1485479	40.0	40.2	
83 cis-1,3-Dichloropropene	75	13.430	13.424	0.006	98	1026361	40.0	39.9	
88 n-Octane	43	13.807	13.807	0.000	99	2164824	40.0	38.9	
85 Toluene	91	13.966	13.966	0.000	94	2225198	40.0	40.5	
84 trans-1,3-Dichloropropene	75	14.100	14.099	0.001	98	1042952	40.0	41.8	
86 1,1,2-Trichloroethane	97	14.337	14.337	0.000	97	730956	40.0	38.1	
87 2-Hexanone	58	14.373	14.373	0.000	90	682005	40.0	39.9	
93 Tetrachloroethene	166	14.939	14.939	0.000	98	1259790	40.0	36.9	
92 Chlorodibromomethane	129	15.091	15.091	0.000	99	1569665	40.0	39.8	
94 Ethylene Dibromide	107	15.395	15.389	0.006	99	1209484	40.0	39.4	
99 n-Nonane	43	15.991	15.985	0.006	96	2280727	40.0	41.0	
96 Chlorobenzene	112	16.046	16.046	0.000	95	1883201	40.0	38.4	
97 Ethylbenzene	91	16.144	16.137	0.007	98	2744755	40.0	41.5	
98 m-Xylene & p-Xylene	91	16.259	16.259	0.000	98	4204690	80.0	83.4	
101 o-Xylene	91	16.892	16.892	0.000	96	2120914	40.0	41.1	
100 Styrene	104	16.904	16.904	0.000	95	1736572	40.0	43.7	
102 Bromoform	173	17.342	17.342	0.000	98	1678117	40.0	40.7	
104 Isopropylbenzene	120	17.427	17.421	0.006	96	884538	40.0	42.6	
103 1,1,2,2-Tetrachloroethane	83	17.555	17.555	0.000	99	1493969	40.0	40.8	
105 1,2,3-Trichloropropane	110	17.774	17.774	0.000	95	456342	40.0	40.3	
113 n-Decane	57	17.963	17.956	0.007	85	1993566	40.0	44.1	
107 N-Propylbenzene	91	18.023	18.023	0.000	99	3566892	40.0	42.4	
110 4-Ethyltoluene	120	18.194	18.188	0.006	99	1005155	40.0	43.6	
111 1,3,5-Trimethylbenzene	120	18.255	18.255	0.000	93	1346380	40.0	43.6	
109 2-Chlorotoluene	126	18.273	18.273	0.000	98	901261	40.0	41.1	
112 Alpha Methyl Styrene	118	18.674	18.674	0.000	90	1378460	40.0	46.0	
114 tert-Butylbenzene	91	18.796	18.796	0.000	95	1817606	40.0	40.7	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
115 1,2,4-Trimethylbenzene	120	18.845	18.845	0.000	95	1250084	40.0	42.6	
116 sec-Butylbenzene	105	19.125	19.125	0.000	99	3739481	40.0	43.3	
121 4-Isopropyltoluene	119	19.319	19.319	0.000	98	3134016	40.0	43.5	
117 1,3-Dichlorobenzene	146	19.441	19.435	0.006	98	1962383	40.0	44.1	
120 1,4-Dichlorobenzene	146	19.581	19.581	0.000	95	1950328	40.0	44.8	
118 Benzyl chloride	91	19.696	19.696	0.000	99	2284616	32.0	38.9	
124 Undecane	57	19.757	19.757	0.000	93	1758595	40.0	60.7	
123 n-Butylbenzene	92	19.934	19.934	0.000	98	1432018	40.0	44.4	
122 1,2-Dichlorobenzene	146	20.140	20.140	0.000	97	1774827	40.0	43.3	
125 Dodecane	57	21.461	21.461	0.000	92	1196008	40.0	90.9	
126 1,2,4-Trichlorobenzene	180	22.963	22.963	0.000	94	1315844	40.0	51.7	
128 Hexachlorobutadiene	225	23.328	23.322	0.006	98	1266369	40.0	48.2	
127 Naphthalene	128	23.456	23.456	0.000	99	2820881	40.0	57.1	
129 1,2,3-Trichlorobenzene	180	23.997	23.997	0.000	95	1147287	40.0	55.1	
A 144 C6 Range	1	8.740	(8.640-8.840)		0	4635333	40.0	36.4	
A 147 Toluene Range	1	13.960	(13.893-14.026)		0	5543344	40.0	33.6	
A 154 Total VOC as Hexane	1	14.322	(4.068-24.546)		0	381298596	40.0	2991.7	
A 151 Total VOCs as Tetrachloroe	1	14.322	(4.068-24.546)		0	381298596	40.0	2050.4	
A 150 Nonmethane Organic Compoun	1	14.322	(4.068-24.546)		0	381298596	40.0	2991.7	
A 152 TVOC as Toluene	1	14.406	(4.356-24.456)		0	372767699	40.0	2259.2	
A 149 PCE Range	1	14.949	(14.879-15.019)		0	7002397	40.0	37.7	
S 164 1,2-Dichloroethene, Total	1				0			74.5	
S 155 Xylenes, Total	91				0		120.0	124.5	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

VACORPIC40_00180 Amount Added: 250.00 Units: mL

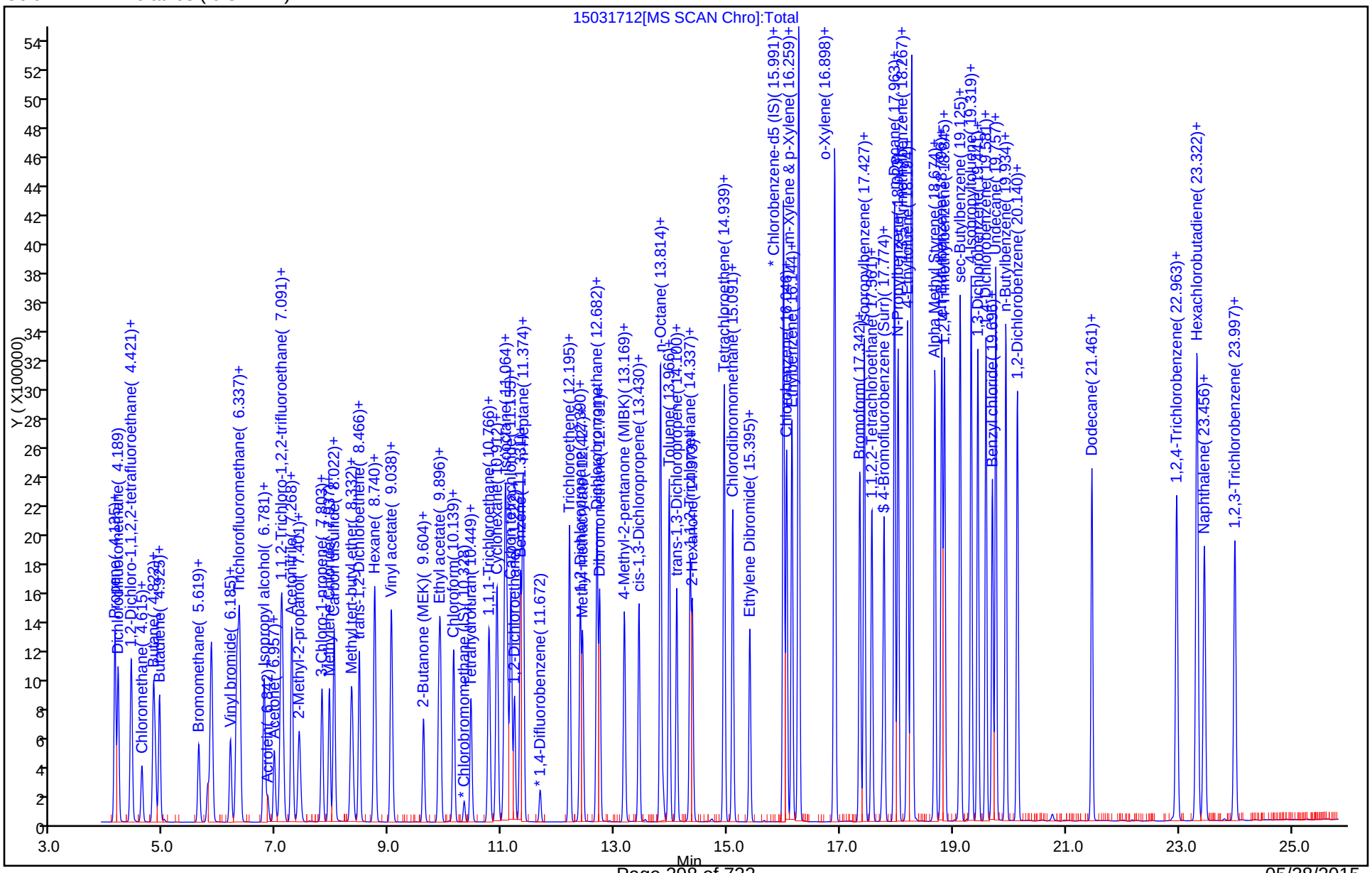
VASUISIM_00160 Amount Added: 50.00 Units: mL Run Reagent

Report Date: 24-Mar-2015 10:33:23 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Sacramento

Data File:	\\SACCHROM\ChromData\ATMS2\20150317-20264.b\15031712.D				
Injection Date:	18-Mar-2015 08:20:30	Instrument ID:	ATMS2	Operator ID:	SRS
Lims ID:	IC 40ppbv			Worklist Smp#:	13
Client ID:					
Purge Vol:	250.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	3
Method:	TO15_ATMS2N	Limit Group:	MSA - TO15 - ICAL		

Column: RTX Volatiles (0.32 mm)

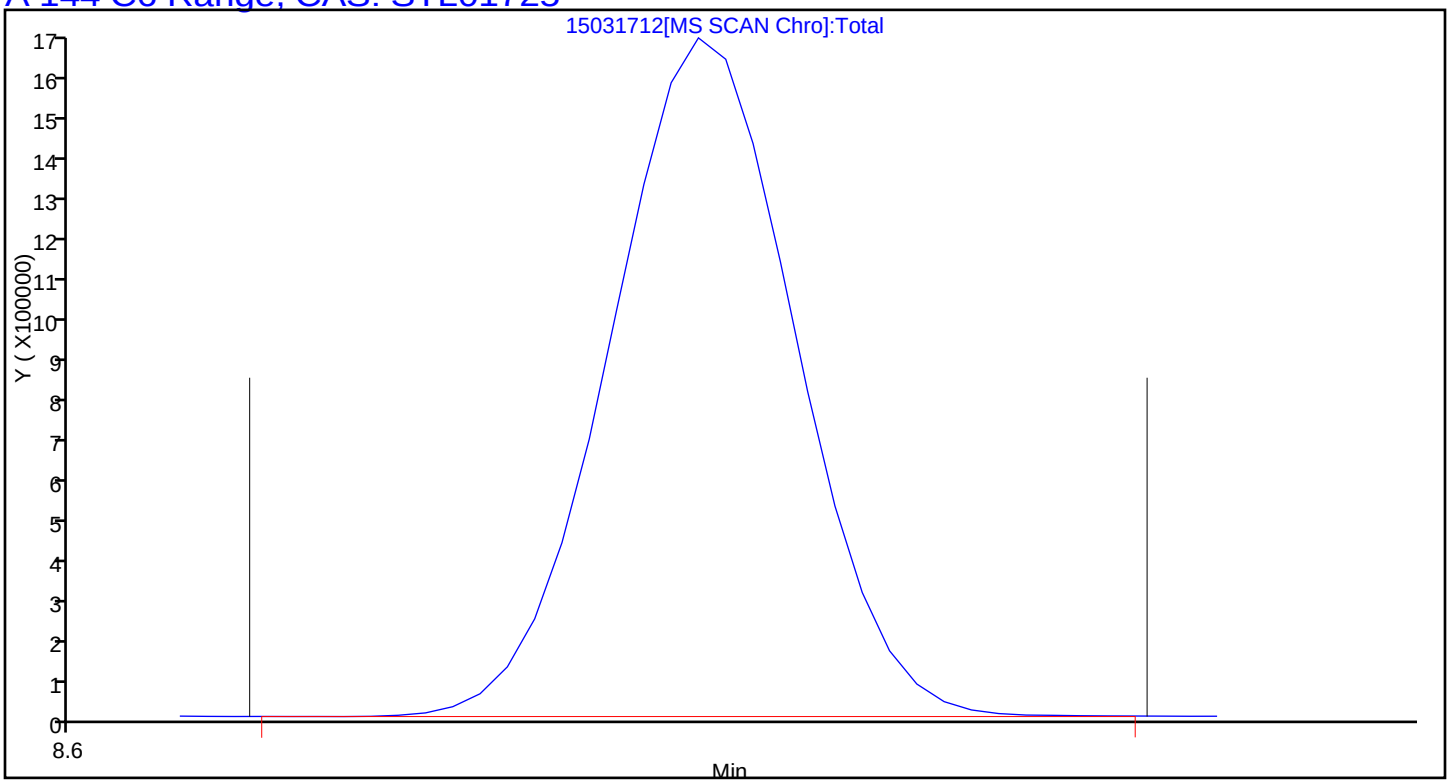


Report Date: 24-Mar-2015 10:33:23 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Sacramento

Data File:	\\SACCHROM\ChromData\ATMS2\20150317-20264.b\15031712.D				
Injection Date:	18-Mar-2015 08:20:30	Instrument ID:	ATMS2		
Lims ID:	IC 40ppbv				
Client ID:					
Operator ID:	SRS	ALS Bottle#:	3	Worklist Smp#:	13
Purge Vol:	250.000 mL	Dil. Factor:	1.0000		
Method:	TO15_ATMS2N	Limit Group:	MSA - TO15 - ICAL		
Column:	RTX Volatiles (0.32 mm)	Detector	MS SCAN		

A 144 C6 Range, CAS: STL01725

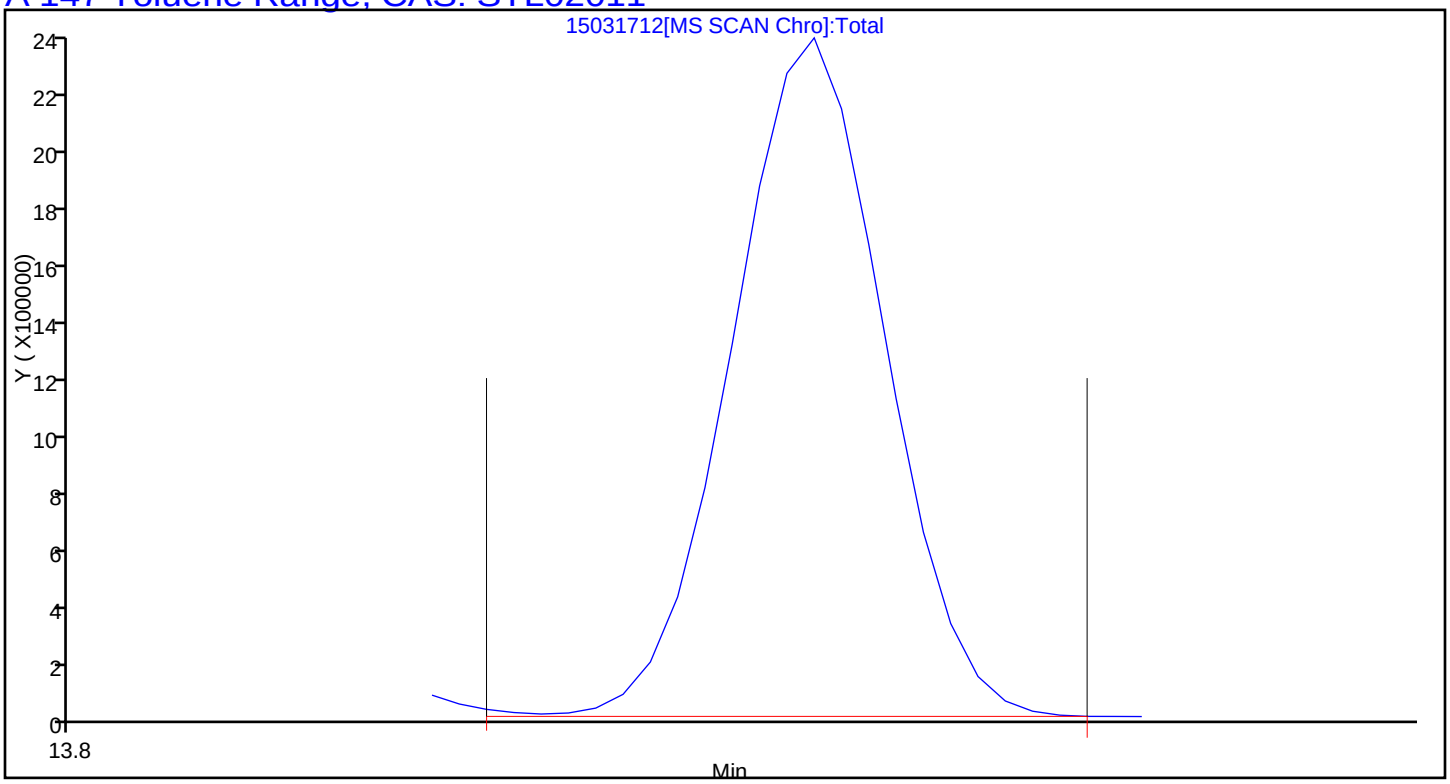


Report Date: 24-Mar-2015 10:33:23 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Sacramento

Data File:	\\SACCHROM\ChromData\ATMS2\20150317-20264.b\15031712.D				
Injection Date:	18-Mar-2015 08:20:30	Instrument ID:	ATMS2		
Lims ID:	IC 40ppbv				
Client ID:					
Operator ID:	SRS	ALS Bottle#:	3	Worklist Smp#:	13
Purge Vol:	250.000 mL	Dil. Factor:	1.0000		
Method:	TO15_ATMS2N	Limit Group:	MSA - TO15 - ICAL		
Column:	RTX Volatiles (0.32 mm)	Detector	MS SCAN		

A 147 Toluene Range, CAS: STL02011

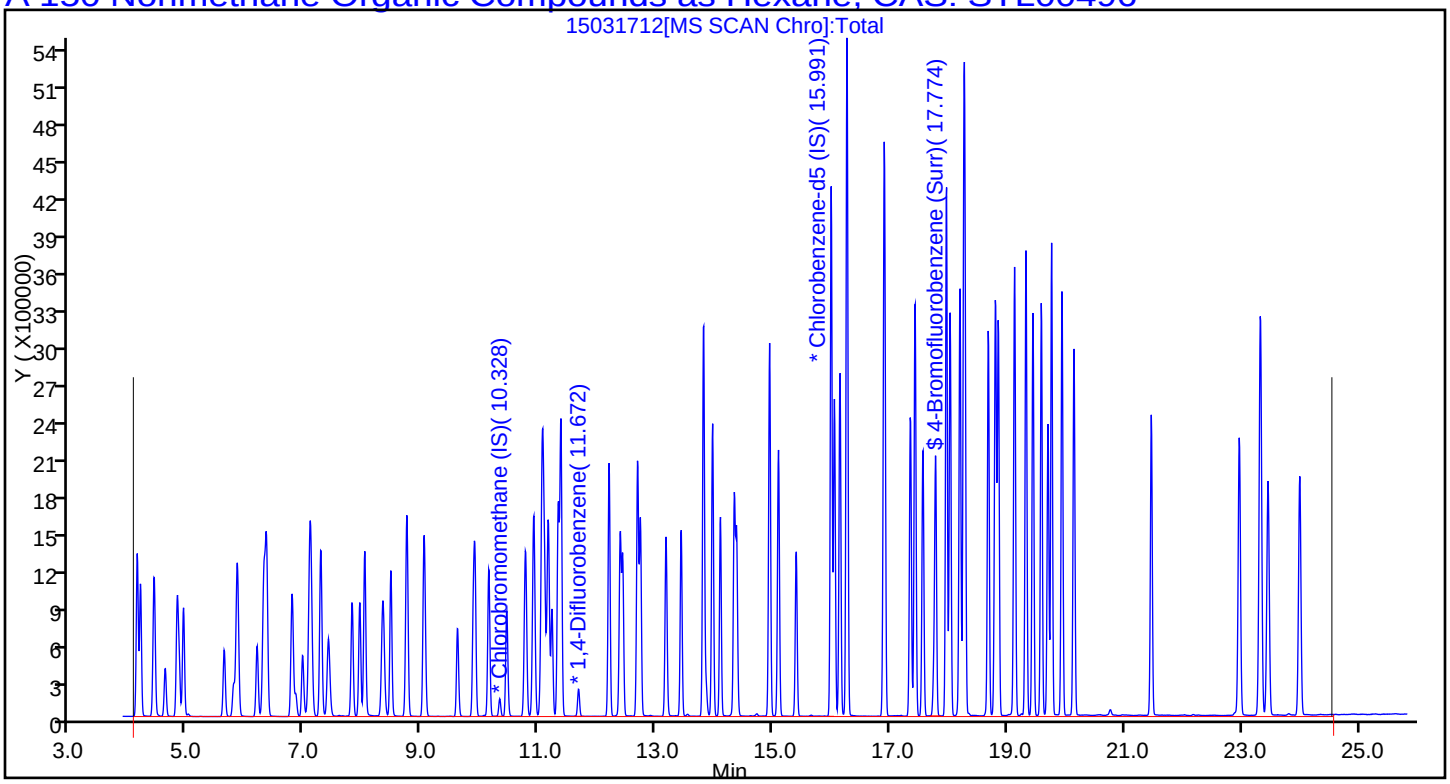


Report Date: 24-Mar-2015 10:33:23 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Sacramento

Data File:	\\SACCHROM\ChromData\ATMS2\20150317-20264.b\15031712.D				
Injection Date:	18-Mar-2015 08:20:30	Instrument ID:	ATMS2		
Lims ID:	IC 40ppbv				
Client ID:					
Operator ID:	SRS	ALS Bottle#:	3	Worklist Smp#:	13
Purge Vol:	250.000 mL	Dil. Factor:	1.0000		
Method:	TO15_ATMS2N	Limit Group:	MSA - TO15 - ICAL		
Column:	RTX Volatiles (0.32 mm)	Detector	MS SCAN		

A 150 Nonmethane Organic Compounds as Hexane, CAS: STL00496

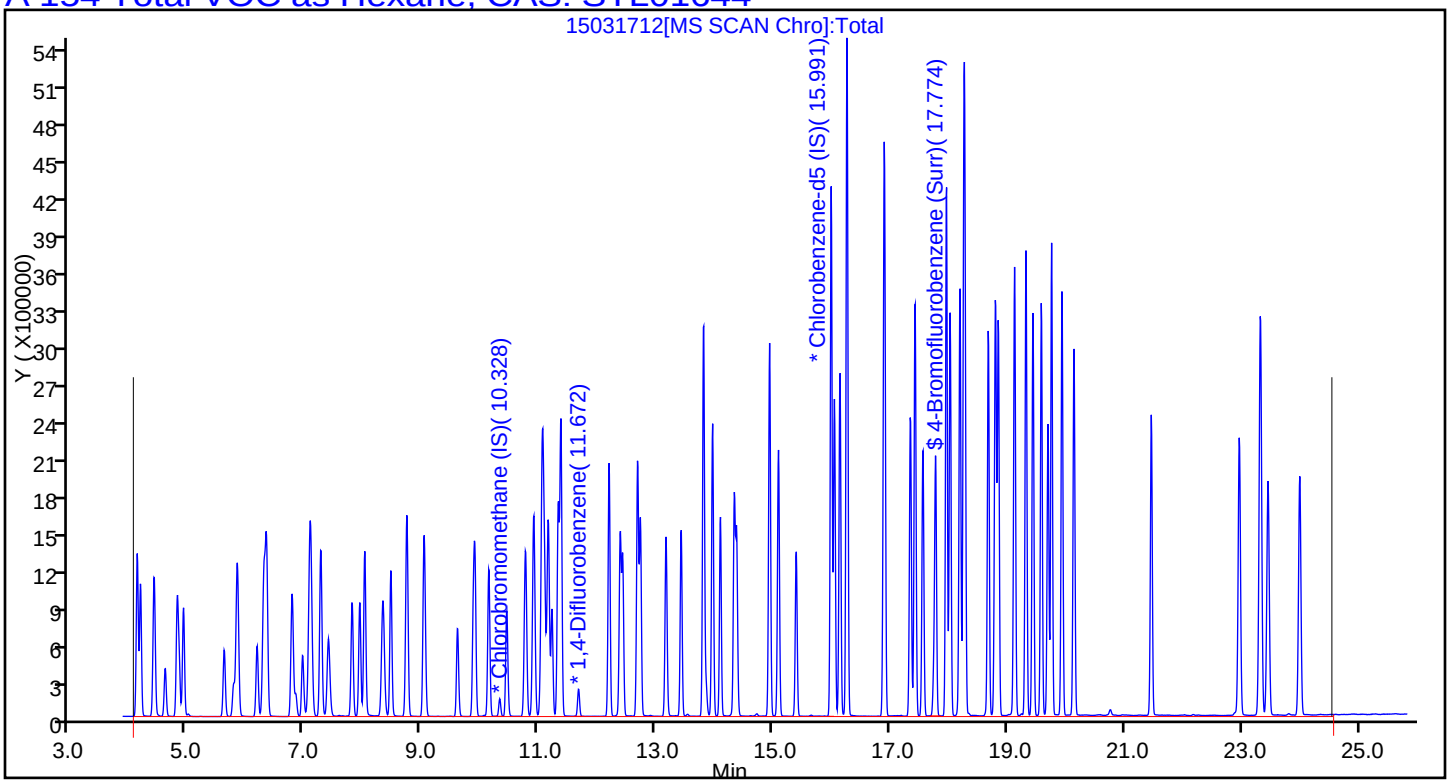


Report Date: 24-Mar-2015 10:33:23 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Sacramento

Data File:	\\SACCHROM\ChromData\ATMS2\20150317-20264.b\15031712.D				
Injection Date:	18-Mar-2015 08:20:30	Instrument ID:	ATMS2		
Lims ID:	IC 40ppbv				
Client ID:					
Operator ID:	SRS	ALS Bottle#:	3	Worklist Smp#:	13
Purge Vol:	250.000 mL	Dil. Factor:	1.0000		
Method:	TO15_ATMS2N	Limit Group:	MSA - TO15 - ICAL		
Column:	RTX Volatiles (0.32 mm)	Detector	MS SCAN		

A 154 Total VOC as Hexane, CAS: STL01644

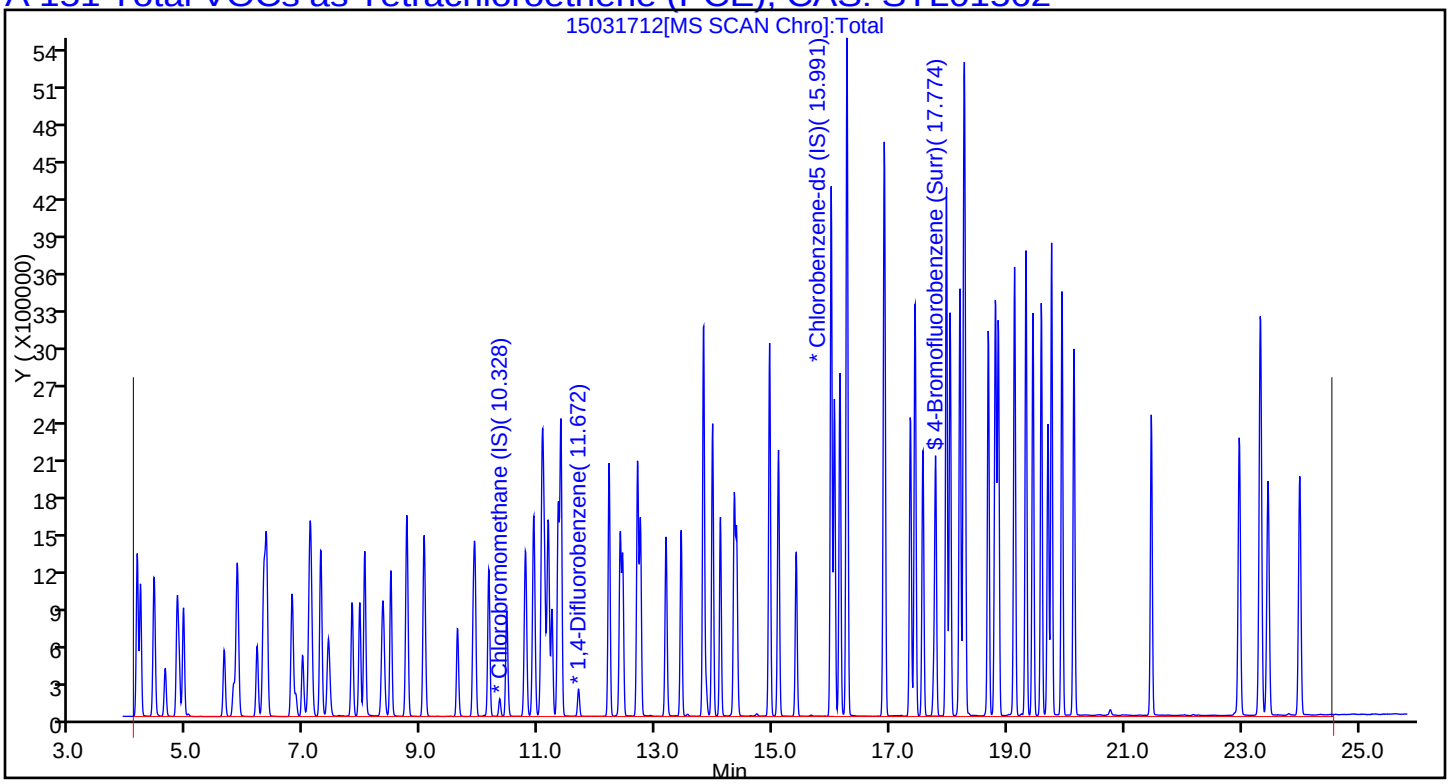


Report Date: 24-Mar-2015 10:33:23 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Sacramento

Data File:	\\SACCHROM\ChromData\ATMS2\20150317-20264.b\15031712.D				
Injection Date:	18-Mar-2015 08:20:30	Instrument ID:	ATMS2		
Lims ID:	IC 40ppbv				
Client ID:					
Operator ID:	SRS	ALS Bottle#:	3	Worklist Smp#:	13
Purge Vol:	250.000 mL	Dil. Factor:	1.0000		
Method:	TO15_ATMS2N	Limit Group:	MSA - TO15 - ICAL		
Column:	RTX Volatiles (0.32 mm)	Detector	MS SCAN		

A 151 Total VOCs as Tetrachloroethene (PCE), CAS: STL01562

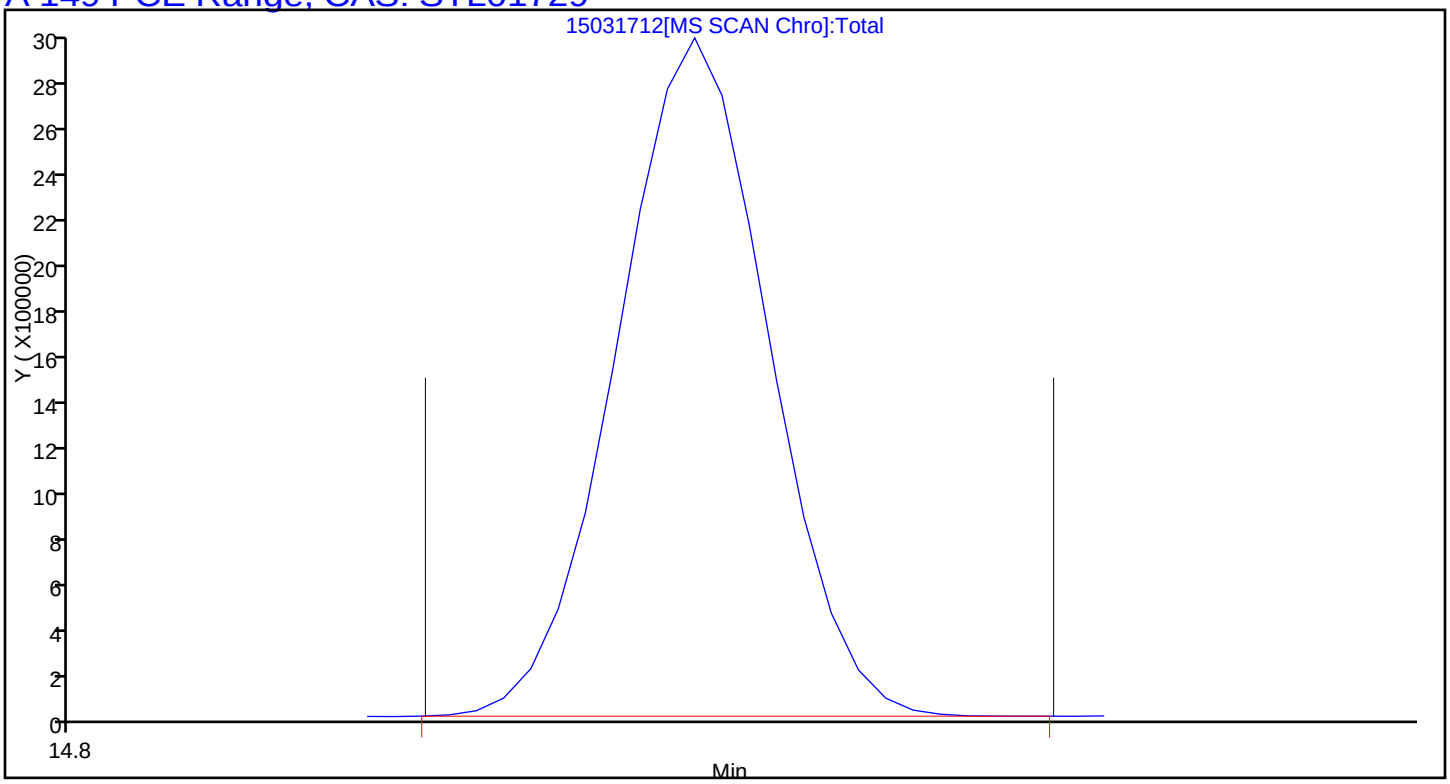


Report Date: 24-Mar-2015 10:33:23 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Sacramento

Data File:	\\SACCHROM\ChromData\ATMS2\20150317-20264.b\15031712.D				
Injection Date:	18-Mar-2015 08:20:30	Instrument ID:	ATMS2		
Lims ID:	IC 40ppbv				
Client ID:					
Operator ID:	SRS	ALS Bottle#:	3	Worklist Smp#:	13
Purge Vol:	250.000 mL	Dil. Factor:	1.0000		
Method:	TO15_ATMS2N	Limit Group:	MSA - TO15 - ICAL		
Column:	RTX Volatiles (0.32 mm)	Detector	MS SCAN		

A 149 PCE Range, CAS: STL01729



Manual Integration/User Assign Peak Report

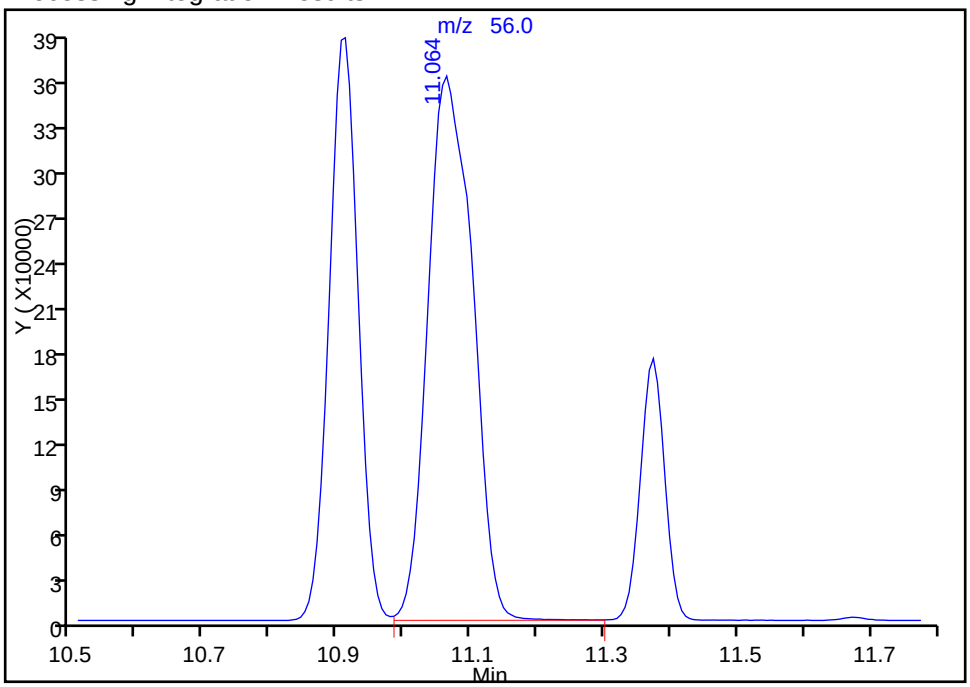
TestAmerica Sacramento

Data File:	\\SACCHROM\ChromData\ATMS2\20150317-20264.b\15031712.D				
Injection Date:	18-Mar-2015 08:20:30	Instrument ID:	ATMS2		
Lims ID:	IC 40ppbv				
Client ID:					
Operator ID:	SRS	ALS Bottle#:	3	Worklist Smp#:	13
Purge Vol:	250.000 mL	Dil. Factor:	1.0000		
Method:	TO15_ATMS2N	Limit Group:	MSA - TO15 - ICAL		
Column:	RTX Volatiles (0.32 mm)	Detector	MS SCAN		

67 n-Butanol, CAS: 71-36-3

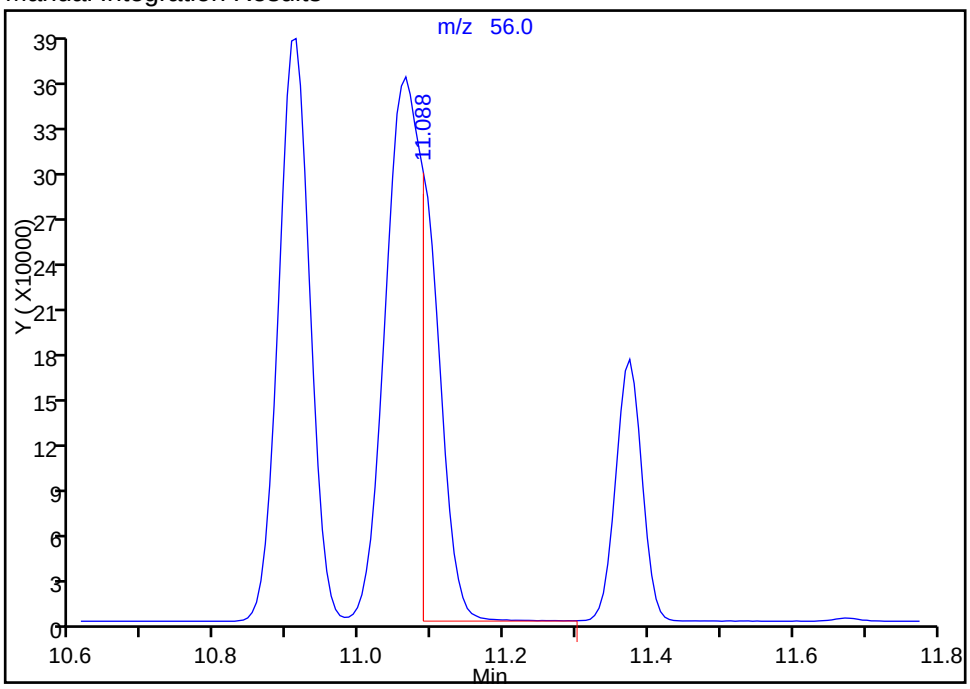
Processing Integration Results

RT: 11.06
Area: 1669098
Amount: 69.921744
Amount Units: ppb v/v



Manual Integration Results

RT: 11.09
Area: 540893
Amount: 37.060801
Amount Units: ppb v/v



Reviewer: shardaa, 18-Mar-2015 11:44:37
Audit Action: Split an Integrated Peak
Audit Reason: Poor chromatography

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\SACCHROM\ChromData\ATMS2\20150317-20264.b\15031713.D
Lims ID: IC 60ppbv
Client ID:
Sample Type: IC Calib Level: 10
Inject. Date: 18-Mar-2015 09:04:30 ALS Bottle#: 3 Worklist Smp#: 14
Purge Vol: 250.000 mL Dil. Factor: 1.0000
Sample Info: IC 60PPBV
Misc. Info.: 375mL
Operator ID: SRS Instrument ID: ATMS2
Sublist: chrom-TO15_ATMS2N*sub53

Method: \\SACCHROM\ChromData\ATMS2\20150317-20264.b\TO15_ATMS2N.m
Limit Group: MSA - TO15 - ICAL
Last Update: 24-Mar-2015 10:33:24 Calib Date: 18-Mar-2015 18:13:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\SACCHROM\ChromData\ATMS2\20150317-20264.b\15031726.D

Column 1 : RTX Volatiles (0.32 mm) Det: MS SCAN
Process Host: XAWRK047

First Level Reviewer: scottrs Date: 23-Mar-2015 15:48:16

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	130	10.328	10.328	0.000	95	67741	4.00	4.00	
* 2 1,4-Difluorobenzene	114	11.678	11.678	0.000	94	240532	4.00	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.991	15.985	0.006	38	206380	4.00	4.00	
$ 4 1,2-Dichloroethane-d4 (Sur	65	11.094	11.094	0.000	32	91645	4.00	4.13	
$ 5 Toluene-d8 (Surr)	100	13.850	13.850	0.000	93	145956	4.00	4.12	
$ 6 4-Bromofluorobenzene (Surr	174	17.743	17.744	-0.001	63	127116	4.00	4.21	
14 Propene	41	4.128	4.129	0.000	40	880175	60.0	48.7	
13 Chlorodifluoromethane	51	4.141	4.141	0.000	79	1678277	60.0	50.5	
15 Dichlorodifluoromethane	85	4.189	4.189	0.000	88	2082554	60.0	49.8	
19 1,2-Dichloro-1,1,2,2-tetra	135	4.426	4.427	-0.001	89	909989	60.0	44.7	
18 Chloromethane	50	4.609	4.615	-0.006	89	943378	60.0	50.4	
22 Butane	43	4.816	4.816	0.000	98	1883869	60.0	50.8	
20 Vinyl chloride	62	4.852	4.852	0.000	84	951924	60.0	50.1	
21 Butadiene	39	4.925	4.925	0.000	95	958417	60.0	51.9	
25 Bromomethane	94	5.619	5.625	-0.006	99	799029	60.0	50.5	
26 Chloroethane	64	5.777	5.783	-0.006	96	494335	60.0	54.2	
27 Vinyl bromide	106	6.185	6.185	0.000	98	937540	60.0	50.8	
28 Trichlorofluoromethane	101	6.300	6.300	0.000	87	2542295	60.0	48.7	
38 Pentane	43	6.343	6.343	0.000	97	2273630	60.0	52.8	
37 Isopropyl alcohol	45	6.775	6.781	-0.006	48	2403810	60.0	57.1	
39 Ethyl ether	74	6.787	6.793	-0.006	97	440328	60.0	57.1	
29 Acrolein	56	6.842	6.842	0.000	78	344764	60.0	63.8	
31 Acetone	43	6.957	6.963	-0.006	99	1474077	60.0	59.4	
43 1,1,2-Trichloro-1,2,2-trif	101	7.091	7.091	0.000	96	1996162	60.0	51.2	
30 Acetonitrile	41	7.267	7.262	0.005	65	841389	60.0	64.4	
41 1,1-Dichloroethene	61	7.274	7.274	0.000	87	1660354	60.0	50.9	
44 2-Methyl-2-propanol	59	7.401	7.401	0.000	92	2020954	60.0	55.9	
46 3-Chloro-1-propene	41	7.809	7.803	0.006	91	1539623	60.0	55.6	
47 Methylene Chloride	49	7.937	7.937	0.000	92	1319202	60.0	52.9	
42 Acrylonitrile	53	8.022	8.022	0.000	23	759305	60.0	68.8	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
48 Carbon disulfide	76	8.022	8.022	0.000	100	2681421	60.0	51.6	
50 Methyl tert-butyl ether	73	8.332	8.332	0.000	97	2438458	60.0	57.9	
49 trans-1,2-Dichloroethene	61	8.466	8.466	0.000	90	1488668	60.0	55.1	
55 Hexane	41	8.740	8.740	0.000	95	1452438	60.0	54.4	
52 Vinyl acetate	43	9.032	9.026	0.006	100	2881030	60.0	64.6	
53 1,1-Dichloroethane	63	9.044	9.044	0.000	80	1753481	60.0	52.8	
54 2-Butanone (MEK)	72	9.610	9.604	0.006	98	402398	60.0	61.5	
58 Ethyl acetate	43	9.877	9.877	0.000	97	2297191	60.0	61.8	
57 cis-1,2-Dichloroethene	96	9.908	9.902	0.006	93	976554	60.0	53.7	
61 Chloroform	83	10.145	10.139	0.006	88	1891242	60.0	52.1	
62 Tetrahydrofuran	42	10.449	10.449	0.000	93	1336923	60.0	60.0	
65 1,1,1-Trichloroethane	97	10.772	10.766	0.006	91	2030820	60.0	51.9	
70 Cyclohexane	84	10.912	10.906	0.006	93	1342392	60.0	58.3	
74 Isooctane	57	11.058	11.058	0.000	97	5661533	60.0	61.4	
67 n-Butanol	56	11.088	11.088	0.000	41	941722	60.0	59.9	M
69 Carbon tetrachloride	117	11.161	11.155	0.006	90	2319207	60.0	58.2	
66 1,2-Dichloroethane	62	11.222	11.216	0.006	86	1340985	60.0	60.8	
68 Benzene	78	11.325	11.325	0.000	96	2904394	60.0	59.5	
75 n-Heptane	43	11.374	11.374	0.000	96	2484192	60.0	63.0	
76 Trichloroethene	130	12.195	12.195	0.000	94	1478533	60.0	58.2	
77 1,2-Dichloropropane	76	12.390	12.384	0.006	85	440148	60.0	60.1	
79 Methyl methacrylate	69	12.432	12.427	0.006	91	913569	60.0	68.8	
80 Dichlorobromomethane	85	12.688	12.682	0.006	93	1407505	60.0	60.9	
72 1,4-Dioxane	88	12.682	12.682	0.000	46	580622	60.0	64.8	
78 Dibromomethane	174	12.737	12.731	0.006	91	1355583	60.0	61.4	
81 4-Methyl-2-pentanone (MIBK	43	13.169	13.169	0.000	99	2489475	60.0	65.4	
83 cis-1,3-Dichloropropene	75	13.430	13.424	0.006	93	1634270	60.0	61.8	
88 n-Octane	43	13.813	13.807	0.006	98	3471981	60.0	61.5	
85 Toluene	91	13.966	13.966	0.000	93	3556246	60.0	63.0	
84 trans-1,3-Dichloropropene	75	14.099	14.099	0.000	94	1661981	60.0	65.6	
86 1,1,2-Trichloroethane	97	14.337	14.337	0.000	95	1161100	60.0	59.6	
87 2-Hexanone	58	14.379	14.373	0.006	90	1152510	60.0	66.4	
93 Tetrachloroethene	166	14.939	14.939	0.000	94	2006479	60.0	57.9	
92 Chlorodibromomethane	129	15.091	15.091	0.000	97	2500410	60.0	62.5	
94 Ethylene Dibromide	107	15.395	15.389	0.006	99	1931838	60.0	62.0	
99 n-Nonane	43	15.991	15.985	0.006	96	3674206	60.0	65.1	
96 Chlorobenzene	112	16.046	16.046	0.000	84	3014445	60.0	60.5	
97 Ethylbenzene	91	16.143	16.137	0.006	77	4516032	60.0	67.3	
98 m-Xylene & p-Xylene	91	16.265	16.259	0.006	98	7022274	120.0	137.2	
101 o-Xylene	91	16.892	16.892	0.000	92	3529613	60.0	67.5	
100 Styrene	104	16.910	16.904	0.006	94	2919848	60.0	72.4	
102 Bromoform	173	17.348	17.342	0.006	98	2691956	60.0	64.4	
104 Isopropylbenzene	120	17.427	17.421	0.006	87	1474954	60.0	70.0	
103 1,1,2,2-Tetrachloroethane	83	17.561	17.555	0.006	95	2477653	60.0	66.7	
105 1,2,3-Trichloropropane	110	17.780	17.774	0.006	95	760181	60.0	66.2	
113 n-Decane	57	17.962	17.956	0.006	85	3322182	60.0	72.5	
107 N-Propylbenzene	91	18.029	18.023	0.006	89	6000866	60.0	70.4	
110 4-Ethyltoluene	120	18.194	18.188	0.006	98	1667556	60.0	71.3	
111 1,3,5-Trimethylbenzene	120	18.261	18.255	0.005	88	2216061	60.0	70.6	
109 2-Chlorotoluene	126	18.279	18.273	0.006	96	1479174	60.0	66.4	
112 Alpha Methyl Styrene	118	18.680	18.674	0.006	87	2337149	60.0	76.9	
114 tert-Butylbenzene	91	18.802	18.796	0.006	92	3042805	60.0	67.2	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
115 1,2,4-Trimethylbenzene	120	18.851	18.845	0.006	16	2177923	60.0	73.1	
116 sec-Butylbenzene	105	19.130	19.125	0.005	99	6307127	60.0	71.9	
121 4-Isopropyltoluene	119	19.325	19.319	0.006	92	5350256	60.0	73.2	
117 1,3-Dichlorobenzene	146	19.441	19.435	0.006	97	3232398	60.0	71.6	
120 1,4-Dichlorobenzene	146	19.587	19.581	0.006	95	3220284	60.0	72.8	
118 Benzyl chloride	91	19.696	19.696	0.000	99	3900273	48.0	65.5	
124 Undecane	57	19.763	19.757	0.006	88	3118628	60.0	106.1	
123 n-Butylbenzene	92	19.940	19.934	0.006	97	2441235	60.0	74.5	
122 1,2-Dichlorobenzene	146	20.140	20.140	0.000	96	2934104	60.0	70.5	
125 Dodecane	57	21.460	21.461	-0.001	92	1017626	60.0	76.2	
126 1,2,4-Trichlorobenzene	180	22.969	22.963	0.006	90	1615304	60.0	62.5	
128 Hexachlorobutadiene	225	23.328	23.322	0.006	96	1382109	60.0	51.9	
127 Naphthalene	128	23.456	23.456	0.000	99	3460623	60.0	69.0	
129 1,2,3-Trichlorobenzene	180	23.997	23.997	0.000	93	1066699	60.0	50.5	
A 144 C6 Range	1	8.740	(8.640-8.840)		0	7350000	60.0	53.5	
A 147 Toluene Range	1	13.960	(13.893-14.026)		0	8852419	60.0	52.2	
A 154 Total VOC as Hexane	1	14.322	(4.068-24.546)		0	601829531	60.0	4380.2	
A 151 Total VOCs as Tetrachloroe	1	14.322	(4.068-24.546)		0	601829531	60.0	3189.1	
A 150 Nonmethane Organic Compoun	1	14.322	(4.068-24.546)		0	601829531	60.0	4380.2	
A 152 TVOC as Toluene	1	14.421	(4.356-24.456)		0	590289890	60.0	3478.6	
A 149 PCE Range	1	14.949	(14.879-15.019)		0	11100133	60.0	58.8	
S 164 1,2-Dichloroethene, Total	1				0			108.9	
S 155 Xylenes, Total	91				0		180.0	204.7	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

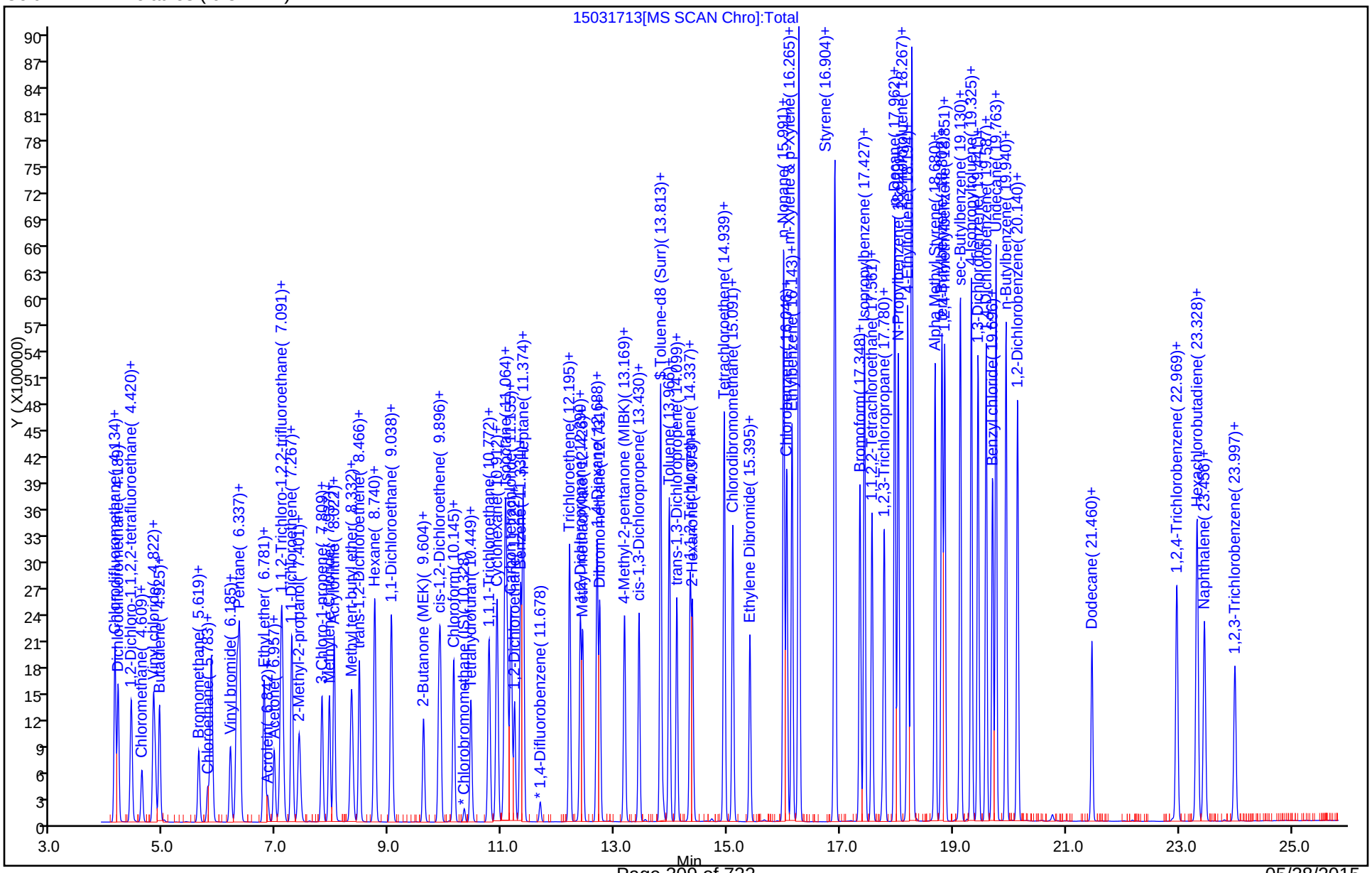
VACORPIC40_00180	Amount Added: 375.00	Units: mL	
VASUISIM_00160	Amount Added: 50.00	Units: mL	Run Reagent

Report Date: 24-Mar-2015 10:33:26 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Sacramento

Data File:	\\SACCHROM\ChromData\ATMS2\20150317-20264.b\15031713.D				
Injection Date:	18-Mar-2015 09:04:30	Instrument ID:	ATMS2	Operator ID:	SRS
Lims ID:	IC 60ppbv			Worklist Smp#:	14
Client ID:					
Purge Vol:	250.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	3
Method:	TO15_ATMS2N	Limit Group:	MSA - TO15 - ICAL		

Column: RTX Volatiles (0.32 mm)

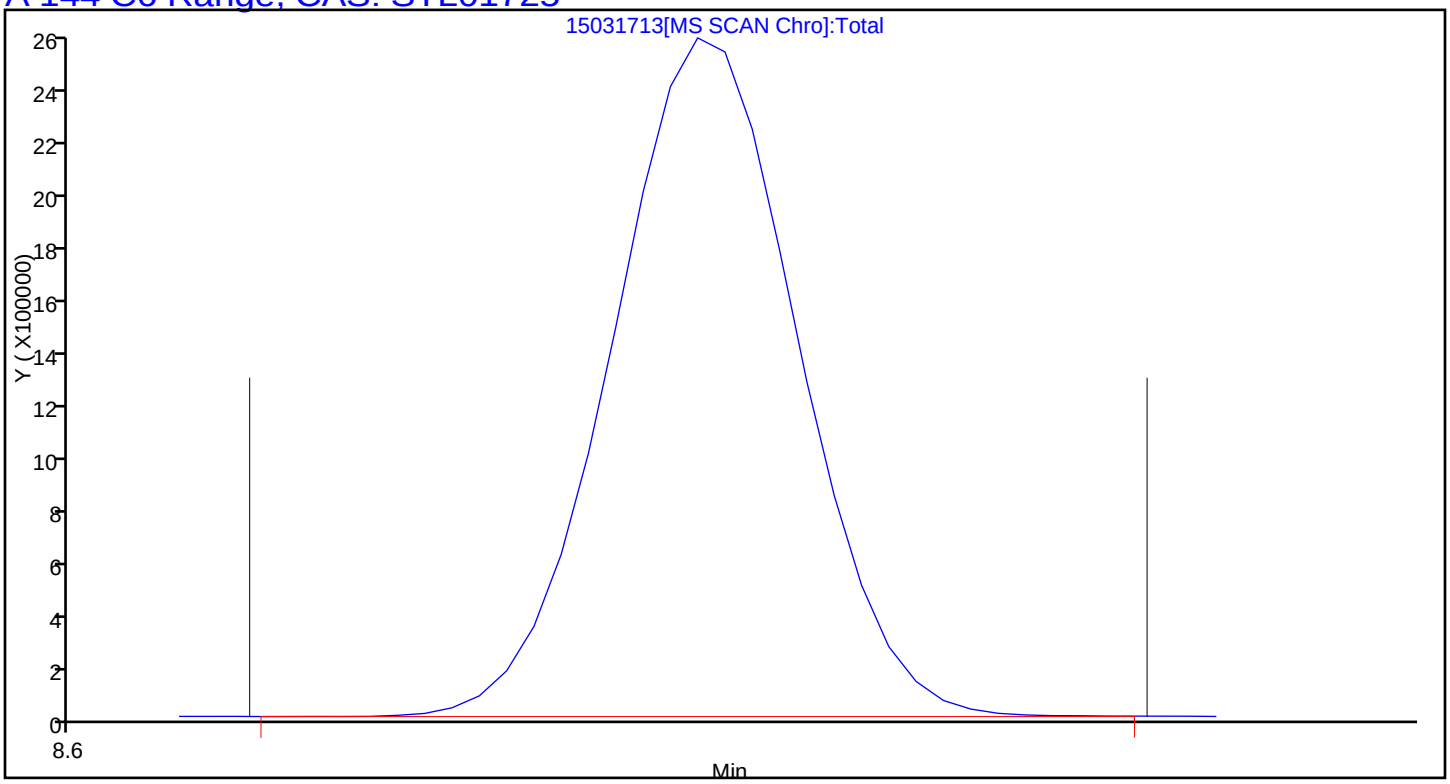


Report Date: 24-Mar-2015 10:33:26 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Sacramento

Data File:	\\SACCHROM\ChromData\ATMS2\20150317-20264.b\15031713.D				
Injection Date:	18-Mar-2015 09:04:30	Instrument ID:	ATMS2		
Lims ID:	IC 60ppbv				
Client ID:					
Operator ID:	SRS	ALS Bottle#:	3	Worklist Smp#:	14
Purge Vol:	250.000 mL	Dil. Factor:	1.0000		
Method:	TO15_ATMS2N	Limit Group:	MSA - TO15 - ICAL		
Column:	RTX Volatiles (0.32 mm)	Detector	MS SCAN		

A 144 C6 Range, CAS: STL01725

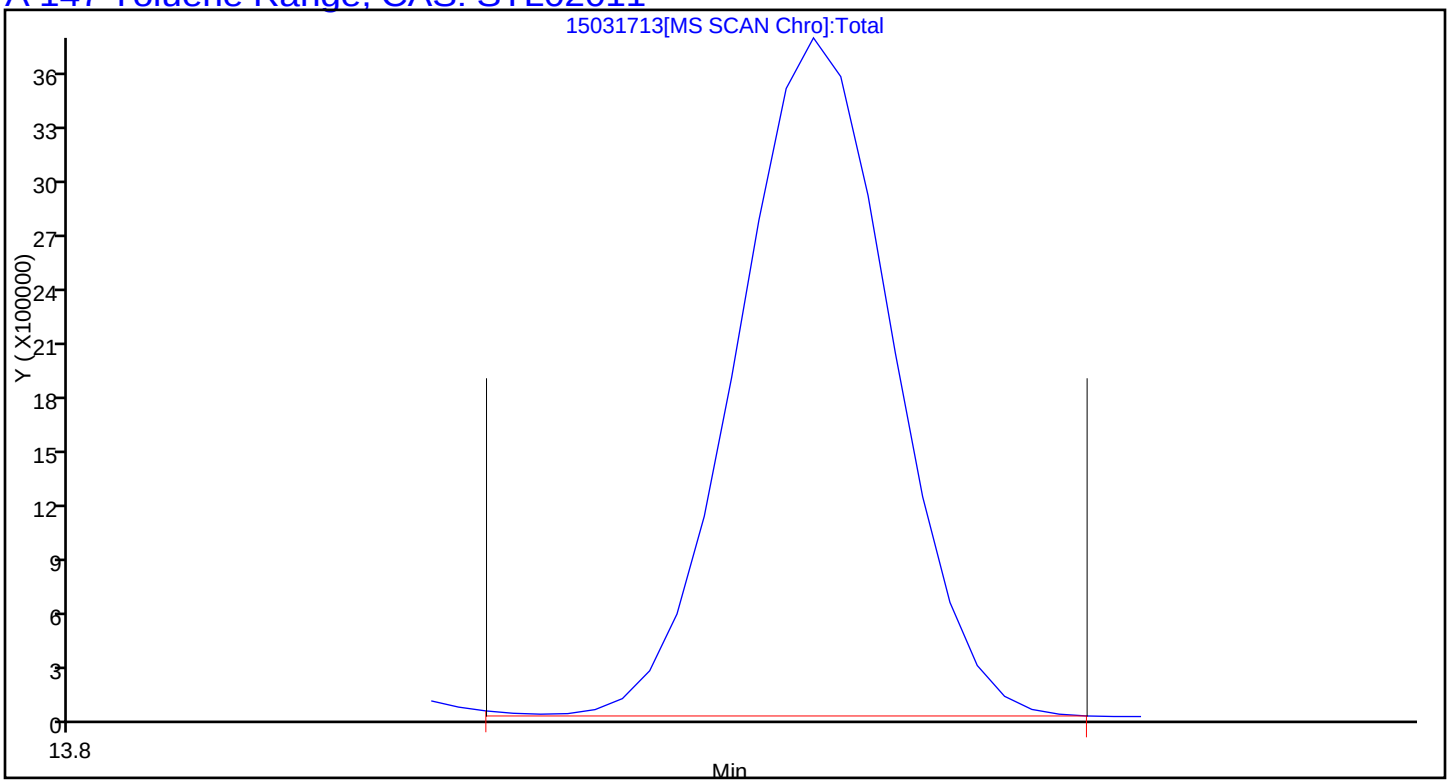


Report Date: 24-Mar-2015 10:33:26 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Sacramento

Data File:	\\SACCHROM\ChromData\ATMS2\20150317-20264.b\15031713.D				
Injection Date:	18-Mar-2015 09:04:30	Instrument ID:	ATMS2		
Lims ID:	IC 60ppbv				
Client ID:					
Operator ID:	SRS	ALS Bottle#:	3	Worklist Smp#:	14
Purge Vol:	250.000 mL	Dil. Factor:	1.0000		
Method:	TO15_ATMS2N	Limit Group:	MSA - TO15 - ICAL		
Column:	RTX Volatiles (0.32 mm)	Detector	MS SCAN		

A 147 Toluene Range, CAS: STL02011

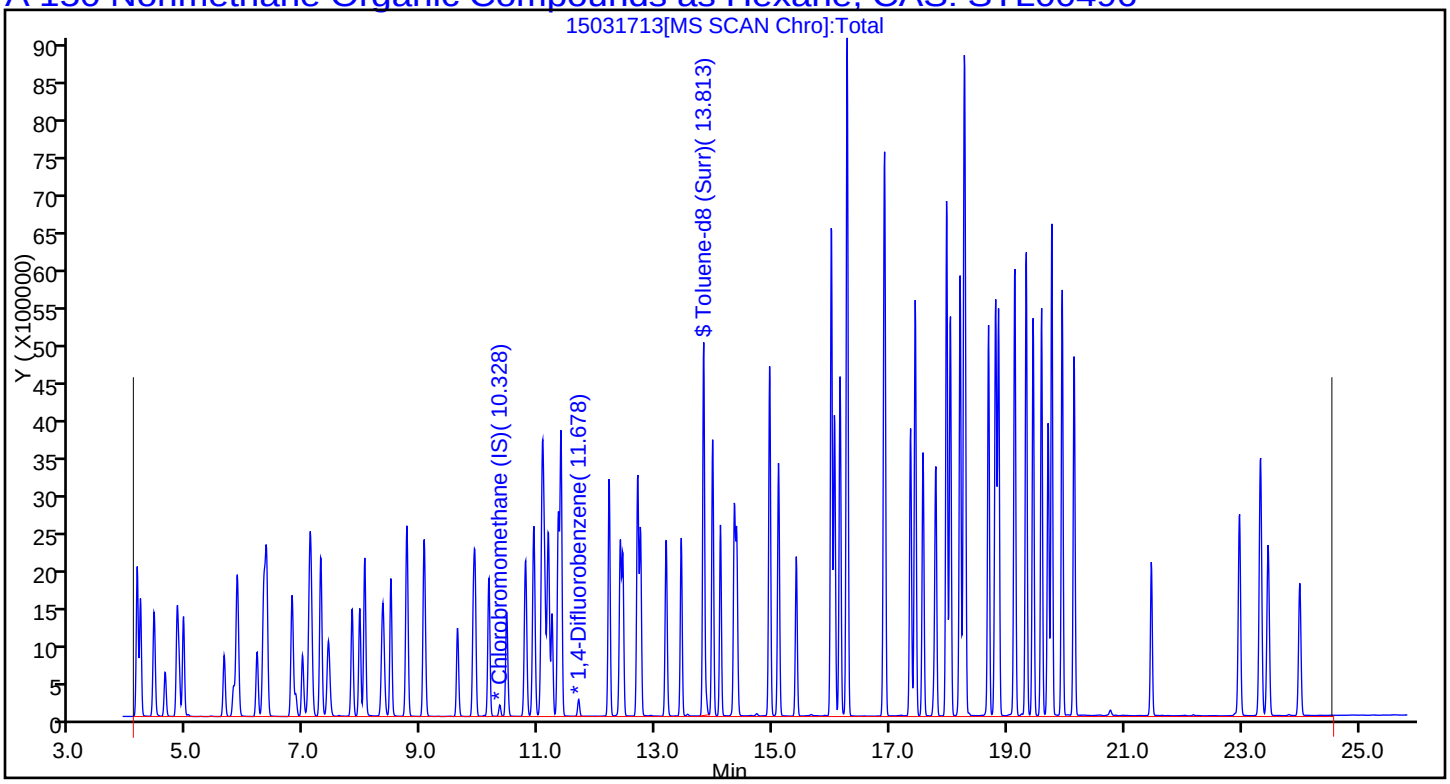


Report Date: 24-Mar-2015 10:33:26 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Sacramento

Data File:	\\SACCHROM\ChromData\ATMS2\20150317-20264.b\15031713.D				
Injection Date:	18-Mar-2015 09:04:30	Instrument ID:	ATMS2		
Lims ID:	IC 60ppbv				
Client ID:					
Operator ID:	SRS	ALS Bottle#:	3	Worklist Smp#:	14
Purge Vol:	250.000 mL	Dil. Factor:	1.0000		
Method:	TO15_ATMS2N	Limit Group:	MSA - TO15 - ICAL		
Column:	RTX Volatiles (0.32 mm)	Detector	MS SCAN		

A 150 Nonmethane Organic Compounds as Hexane, CAS: STL00496

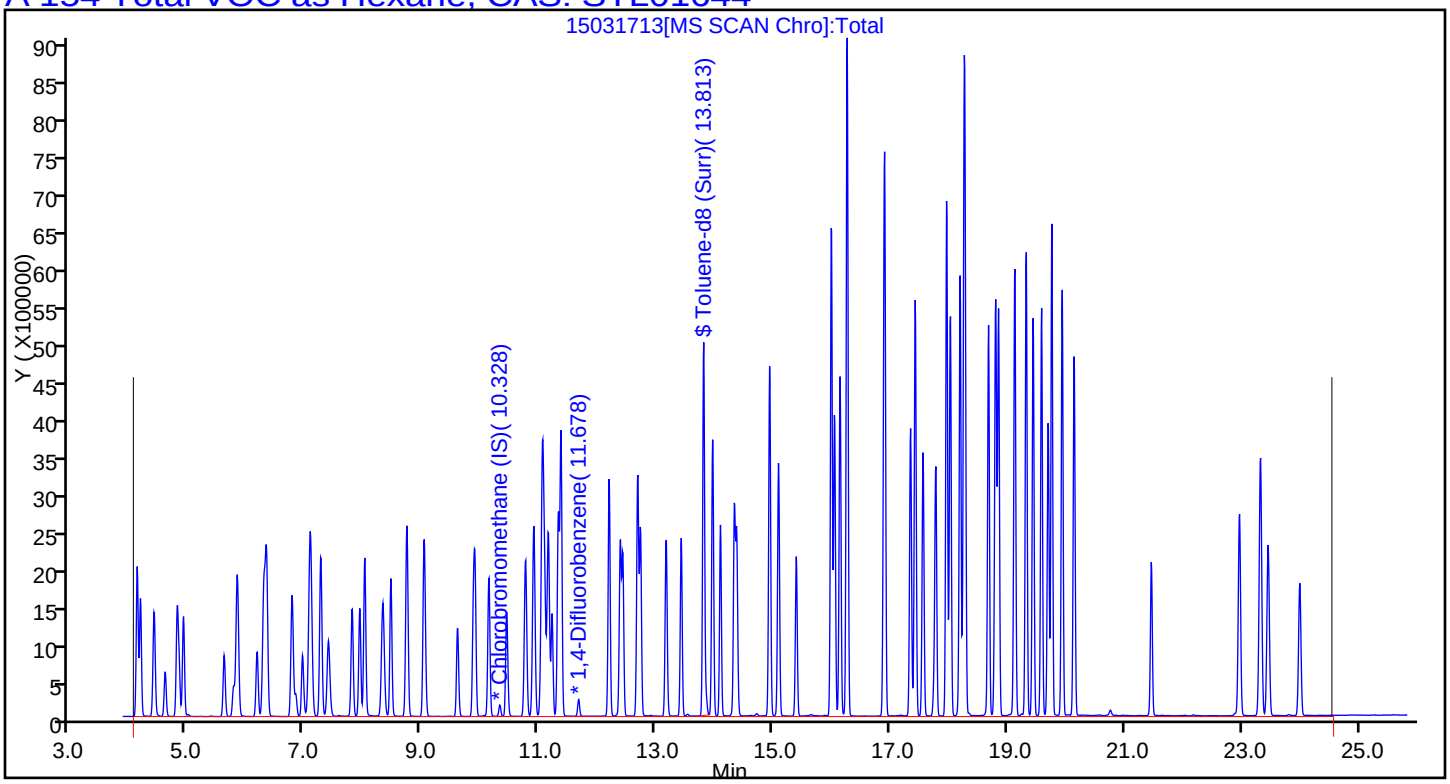


Report Date: 24-Mar-2015 10:33:26 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Sacramento

Data File:	\\SACCHROM\ChromData\ATMS2\20150317-20264.b\15031713.D				
Injection Date:	18-Mar-2015 09:04:30	Instrument ID:	ATMS2		
Lims ID:	IC 60ppbv				
Client ID:					
Operator ID:	SRS	ALS Bottle#:	3	Worklist Smp#:	14
Purge Vol:	250.000 mL	Dil. Factor:	1.0000		
Method:	TO15_ATMS2N	Limit Group:	MSA - TO15 - ICAL		
Column:	RTX Volatiles (0.32 mm)	Detector	MS SCAN		

A 154 Total VOC as Hexane, CAS: STL01644

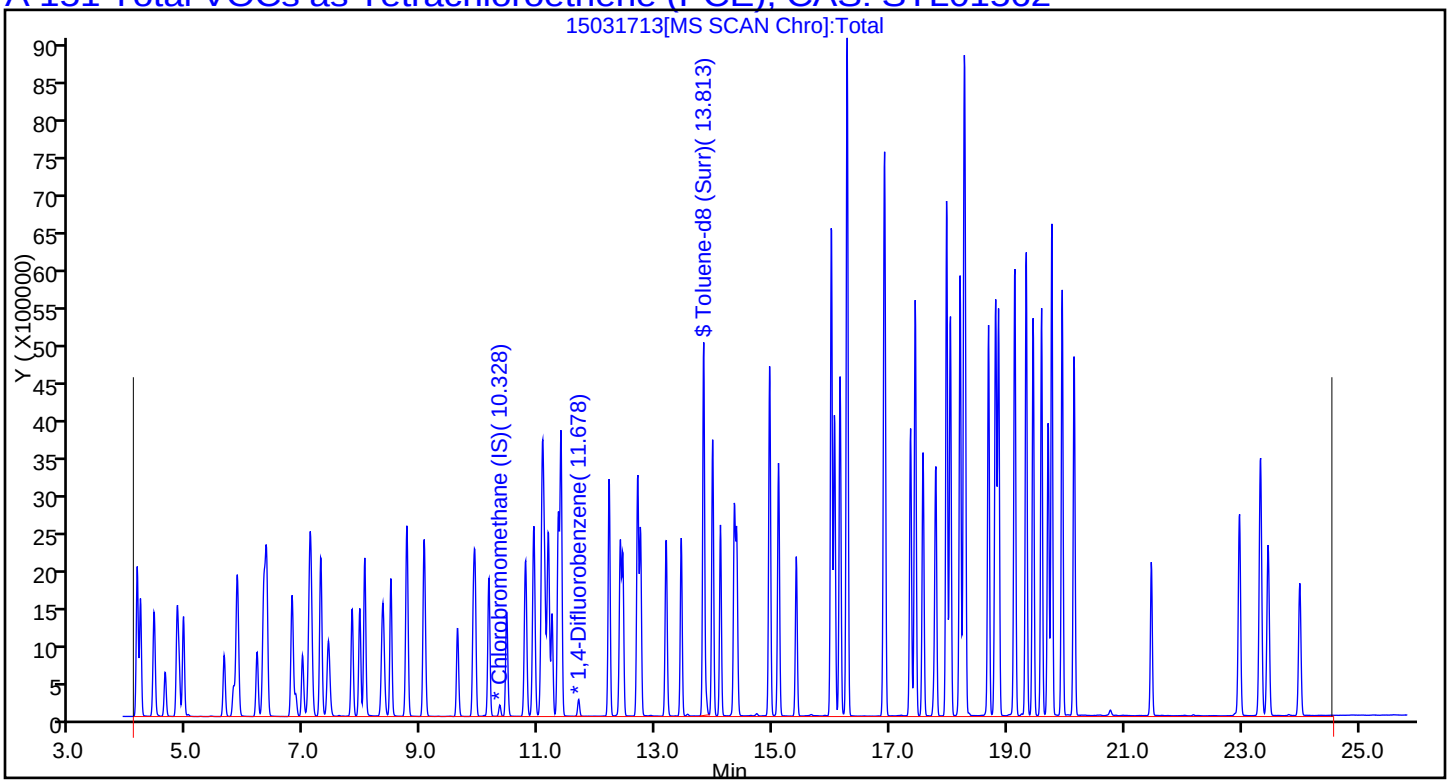


Report Date: 24-Mar-2015 10:33:26 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Sacramento

Data File:	\\SACCHROM\ChromData\ATMS2\20150317-20264.b\15031713.D				
Injection Date:	18-Mar-2015 09:04:30	Instrument ID:	ATMS2		
Lims ID:	IC 60ppbv				
Client ID:					
Operator ID:	SRS	ALS Bottle#:	3	Worklist Smp#:	14
Purge Vol:	250.000 mL	Dil. Factor:	1.0000		
Method:	TO15_ATMS2N	Limit Group:	MSA - TO15 - ICAL		
Column:	RTX Volatiles (0.32 mm)	Detector	MS SCAN		

A 151 Total VOCs as Tetrachloroethene (PCE), CAS: STL01562

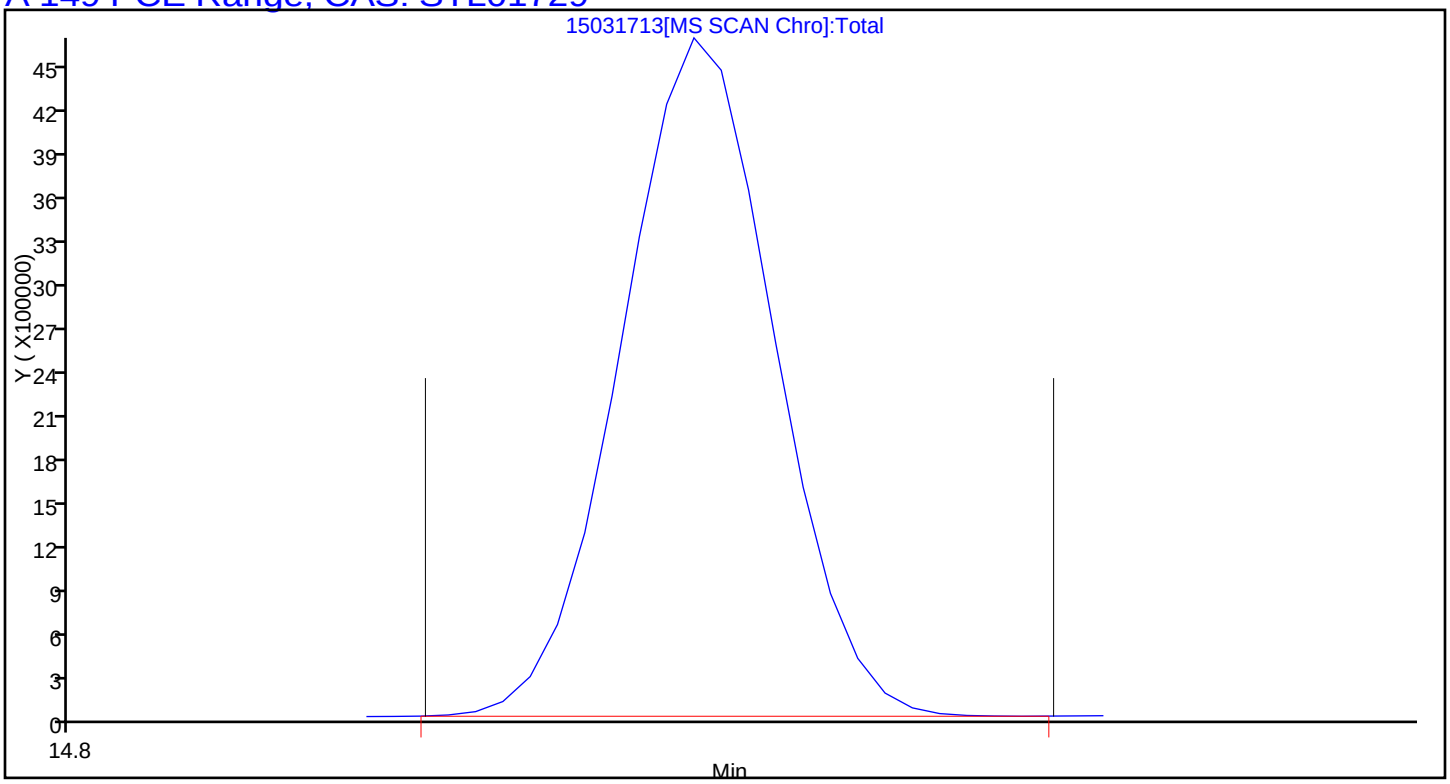


Report Date: 24-Mar-2015 10:33:26 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Sacramento

Data File:	\\SACCHROM\ChromData\ATMS2\20150317-20264.b\15031713.D				
Injection Date:	18-Mar-2015 09:04:30	Instrument ID:	ATMS2		
Lims ID:	IC 60ppbv				
Client ID:					
Operator ID:	SRS	ALS Bottle#:	3	Worklist Smp#:	14
Purge Vol:	250.000 mL	Dil. Factor:	1.0000		
Method:	TO15_ATMS2N	Limit Group:	MSA - TO15 - ICAL		
Column:	RTX Volatiles (0.32 mm)	Detector	MS SCAN		

A 149 PCE Range, CAS: STL01729



Manual Integration/User Assign Peak Report

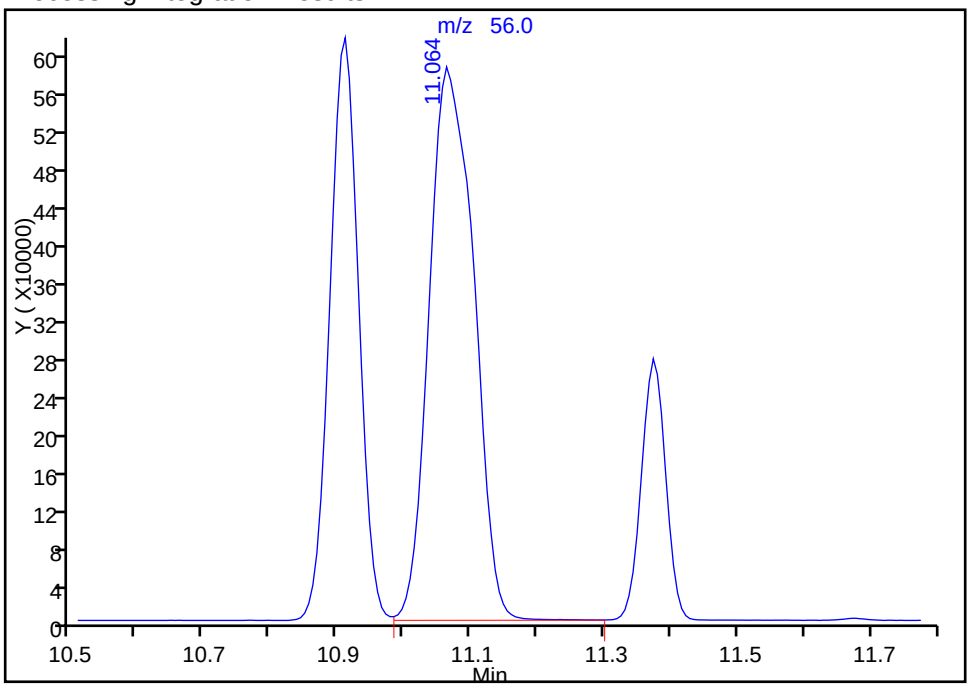
TestAmerica Sacramento

Data File:	\\SACCHROM\ChromData\ATMS2\20150317-20264.b\15031713.D				
Injection Date:	18-Mar-2015 09:04:30	Instrument ID:	ATMS2		
Lims ID:	IC 60ppbv				
Client ID:					
Operator ID:	SRS	ALS Bottle#:	3	Worklist Smp#:	14
Purge Vol:	250.000 mL	Dil. Factor:	1.0000		
Method:	TO15_ATMS2N	Limit Group:	MSA - TO15 - ICAL		
Column:	RTX Volatiles (0.32 mm)	Detector	MS SCAN		

67 n-Butanol, CAS: 71-36-3

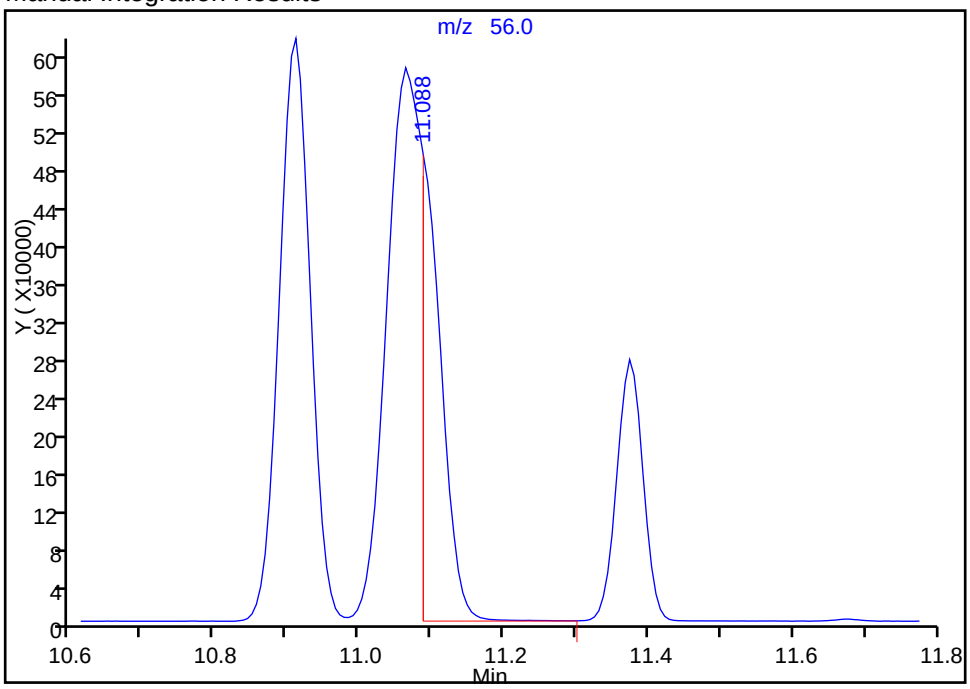
Processing Integration Results

RT: 11.06
Area: 2717364
Amount: 131.4905
Amount Units: ppb v/v



Manual Integration Results

RT: 11.09
Area: 941722
Amount: 59.854515
Amount Units: ppb v/v



Reviewer: shardaa, 18-Mar-2015 11:46:25
Audit Action: Split an Integrated Peak
Audit Reason: Poor chromatography

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Sacramento Job No.: 320-12924-1

SDG No.:

Lab Sample ID: ICV 320-68573/16 Calibration Date: 03/18/2015 10:29

Instrument ID: ATMS2 Calib Start Date: 01/23/2015 20:45

GC Column: RTX-Volatiles ID: 0.32(mm) Calib End Date: 01/24/2015 00:20

Lab File ID: 15031715.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
GRO (C3-C10)	Ave	1.646	93.61		1140	20.0	5588.6*	30.0
TPH (as Gasoline)	Ave	1.965	140.0		1430	20.0	7026.6*	30.0
GRO (C4 - C12)	Ave	1.960	136.0		1390	20.0	6838.5*	30.0
Gasoline Range Organics (C6-C12)	Ave	1.465	114.2		1560	20.0	7699.0*	30.0

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\SACCHROM\ChromData\ATMS2\20150317-20264.b\15031715.D
Lims ID: ICV 20ppbv
Client ID:
Sample Type: ICV
Inject. Date: 18-Mar-2015 10:29:30 ALS Bottle#: 4 Worklist Smp#: 16
Purge Vol: 250.000 mL Dil. Factor: 1.0000
Sample Info: ICV 20ppbv
Misc. Info.: 125mL
Operator ID: SRS Instrument ID: ATMS2
Sublist:

Method: \\SACCHROM\ChromData\ATMS2\20150317-20264.b\TO15_ATMS2N.m
Limit Group: MSA - TO15 - ICAL
Last Update: 24-Mar-2015 10:33:24 Calib Date: 18-Mar-2015 18:13:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\SACCHROM\ChromData\ATMS2\20150317-20264.b\15031726.D

Column 1 : RTX Volatiles (0.32 mm) Det: MS SCAN
Process Host: XAWRK047

First Level Reviewer: scottrs Date: 24-Mar-2015 09:27:18

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	130	10.328	10.328	0.000	97	60755	4.00	4.00	
* 2 1,4-Difluorobenzene	114	11.672	11.678	-0.006	94	238453	4.00	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.991	15.985	0.006	45	204500	4.00	4.00	
$ 4 1,2-Dichloroethane-d4 (Sur	65	11.088	11.094	-0.006	99	78407	4.00	3.94	
$ 5 Toluene-d8 (Surr)	100	13.850	13.850	0.000	99	142023	4.00	4.04	
$ 6 4-Bromofluorobenzene (Surr	174	17.744	17.744	0.000	91	123873	4.00	4.14	
14 Propene	41	4.128	4.129	0.000	39	312357	20.0	19.3	
13 Chlorodifluoromethane	51	4.141	4.141	0.000	97	549315	20.0	18.4	
15 Dichlorodifluoromethane	85	4.189	4.189	0.000	99	716422	20.0	19.1	
19 1,2-Dichloro-1,1,2,2-tetra	135	4.420	4.427	-0.007	97	294604	20.0	16.1	
18 Chloromethane	50	4.609	4.615	-0.006	99	333517	20.0	19.9	
22 Butane	43	4.816	4.816	0.000	99	632708	20.0	19.0	
20 Vinyl chloride	62	4.852	4.852	0.000	98	334597	20.0	19.6	
21 Butadiene	39	4.925	4.925	0.000	95	319427	20.0	19.3	
25 Bromomethane	94	5.619	5.625	-0.006	99	282127	20.0	19.9	
26 Chloroethane	64	5.777	5.783	-0.006	99	168505	20.0	20.6	
27 Vinyl bromide	106	6.179	6.185	-0.006	99	301898	20.0	18.2	
28 Trichlorofluoromethane	101	6.300	6.300	0.000	98	870737	20.0	18.6	
38 Pentane	43	6.343	6.343	0.000	97	697469	20.0	18.1	
37 Isopropyl alcohol	45	6.775	6.781	-0.006	79	740296	20.0	19.6	
39 Ethyl ether	74	6.787	6.793	-0.006	99	128511	20.0	18.6	
29 Acrolein	56	6.842	6.842	0.000	96	93813	20.0	19.3	
31 Acetone	43	6.957	6.963	-0.006	99	391574	20.0	17.6	
43 1,1,2-Trichloro-1,2,2-trif	101	7.091	7.091	0.000	97	579363	20.0	16.6	
30 Acetonitrile	41	7.262	7.262	0.000	98	214404	20.0	18.3	
41 1,1-Dichloroethene	61	7.268	7.274	-0.006	96	479252	20.0	16.4	
44 2-Methyl-2-propanol	59	7.401	7.401	0.000	95	609972	20.0	18.8	
46 3-Chloro-1-propene	41	7.803	7.803	0.000	93	499304	20.0	20.1	
47 Methylene Chloride	49	7.937	7.937	0.000	97	381993	20.0	17.1	
42 Acrylonitrile	53	8.016	8.022	-0.006	93	192914	20.0	19.5	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
48 Carbon disulfide	76	8.022	8.022	0.000	100	835562	20.0	17.9	
50 Methyl tert-butyl ether	73	8.332	8.332	0.000	97	691249	20.0	18.3	
49 trans-1,2-Dichloroethene	61	8.466	8.466	0.000	97	453203	20.0	18.7	
55 Hexane	41	8.740	8.740	0.000	95	416961	20.0	17.4	
52 Vinyl acetate	43	9.026	9.026	0.000	100	817288	20.0	20.4	
53 1,1-Dichloroethane	63	9.044	9.044	0.000	99	539862	20.0	18.1	
54 2-Butanone (MEK)	72	9.604	9.604	0.000	98	106699	20.0	18.2	
58 Ethyl acetate	43	9.877	9.877	0.000	98	604814	20.0	18.1	
57 cis-1,2-Dichloroethene	96	9.902	9.902	0.000	96	306065	20.0	18.8	
61 Chloroform	83	10.139	10.139	0.000	97	595460	20.0	18.3	
62 Tetrahydrofuran	42	10.449	10.449	0.000	93	357103	20.0	17.9	
65 1,1,1-Trichloroethane	97	10.766	10.766	0.000	96	643306	20.0	18.3	
70 Cyclohexane	84	10.906	10.906	0.000	94	409947	20.0	18.0	
74 Isooctane	57	11.058	11.058	0.000	97	1723319	20.0	18.9	
67 n-Butanol	56	11.058	11.088	-0.030	94	816764	20.0	57.9	
69 Carbon tetrachloride	117	11.155	11.155	0.000	97	733018	20.0	18.6	
66 1,2-Dichloroethane	62	11.216	11.216	0.000	96	415956	20.0	19.0	
68 Benzene	78	11.325	11.325	0.000	97	894653	20.0	18.5	
75 n-Heptane	43	11.368	11.374	-0.006	97	743033	20.0	19.0	
76 Trichloroethene	130	12.195	12.195	0.000	98	469725	20.0	18.6	
77 1,2-Dichloropropane	76	12.384	12.384	0.000	87	142261	20.0	19.6	
79 Methyl methacrylate	69	12.426	12.427	0.000	91	244026	20.0	18.5	
80 Dichlorobromomethane	85	12.682	12.682	0.000	97	427921	20.0	18.7	
72 1,4-Dioxane	88	12.682	12.682	0.000	45	172837	20.0	19.4	
78 Dibromomethane	174	12.731	12.731	0.000	93	420607	20.0	19.2	
81 4-Methyl-2-pentanone (MIBK	43	13.169	13.169	0.000	99	697697	20.0	18.5	
83 cis-1,3-Dichloropropene	75	13.424	13.424	0.000	98	542382	20.0	20.7	
88 n-Octane	43	13.807	13.807	0.000	98	1050224	20.0	18.8	
85 Toluene	91	13.966	13.966	0.000	93	1083599	20.0	19.4	
84 trans-1,3-Dichloropropene	75	14.099	14.099	0.000	98	466239	20.0	18.6	
86 1,1,2-Trichloroethane	97	14.337	14.337	0.000	97	380357	20.0	19.7	
87 2-Hexanone	58	14.373	14.373	0.000	91	322407	20.0	18.8	
93 Tetrachloroethene	166	14.939	14.939	0.000	97	637227	20.0	18.6	
92 Chlorodibromomethane	129	15.091	15.091	0.000	99	767802	20.0	19.4	
94 Ethylene Dibromide	107	15.389	15.389	0.000	99	607918	20.0	19.7	
99 n-Nonane	43	15.985	15.985	0.000	96	1094632	20.0	19.6	
96 Chlorobenzene	112	16.046	16.046	0.000	95	958699	20.0	19.4	
97 Ethylbenzene	91	16.137	16.137	0.000	98	1310718	20.0	19.7	
98 m-Xylene & p-Xylene	91	16.259	16.259	0.000	98	2004742	40.0	39.5	
101 o-Xylene	91	16.892	16.892	0.000	99	1024275	20.0	19.8	
100 Styrene	104	16.904	16.904	0.000	98	832179	20.0	20.8	
102 Bromoform	173	17.342	17.342	0.000	98	816210	20.0	19.7	
104 Isopropylbenzene	120	17.421	17.421	0.000	96	416984	20.0	20.0	
103 1,1,2,2-Tetrachloroethane	83	17.555	17.555	0.000	99	728015	20.0	19.8	
105 1,2,3-Trichloropropane	110	17.774	17.774	0.000	95	215443	20.0	18.9	
113 n-Decane	57	17.956	17.956	0.000	86	918225	20.0	20.2	
107 N-Propylbenzene	91	18.023	18.023	0.000	99	1656079	20.0	19.6	
110 4-Ethyltoluene	120	18.188	18.188	0.000	99	434684	20.0	18.7	
111 1,3,5-Trimethylbenzene	120	18.255	18.255	0.000	93	593747	20.0	19.1	
109 2-Chlorotoluene	126	18.273	18.273	0.000	98	420647	20.0	19.1	
112 Alpha Methyl Styrene	118	18.674	18.674	0.000	89	627021	20.0	20.8	
114 tert-Butylbenzene	91	18.796	18.796	0.000	95	835700	20.0	18.6	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
115 1,2,4-Trimethylbenzene	120	18.845	18.845	0.000	93	591494	20.0	20.0	
116 sec-Butylbenzene	105	19.125	19.125	-0.001	99	1721384	20.0	19.8	
121 4-Isopropyltoluene	119	19.319	19.319	0.000	98	1410552	20.0	19.5	
117 1,3-Dichlorobenzene	146	19.435	19.435	0.000	97	943970	20.0	21.1	
120 1,4-Dichlorobenzene	146	19.581	19.581	0.000	96	925416	20.0	21.1	
118 Benzyl chloride	91	19.690	19.696	-0.006	99	1041391	20.0	17.6	
124 Undecane	57	19.757	19.757	0.000	94	672809	20.0	23.1	
123 n-Butylbenzene	92	19.934	19.934	0.000	98	639793	20.0	19.7	
122 1,2-Dichlorobenzene	146	20.140	20.140	0.000	97	859790	20.0	20.9	
125 Dodecane	57	21.461	21.461	0.000	93	426402	20.0	32.2	E
126 1,2,4-Trichlorobenzene	180	22.963	22.963	0.000	94	542648	20.0	21.2	
128 Hexachlorobutadiene	225	23.322	23.322	0.000	98	532290	20.0	20.2	
127 Naphthalene	128	23.456	23.456	0.000	99	1142271	20.0	23.0	
129 1,2,3-Trichlorobenzene	180	23.997	23.997	0.000	96	456304	20.0	21.8	
A 144 C6 Range	1	8.740	(8.640-8.840)		0	2112318	20.0	17.1	
A 145 C3-C10	1	11.012	(4.068-17.956)		0	111607772	20.0	1137.7	
A 146 GRO	1	12.807	(3.968-21.646)		0	166931106	20.0	1425.3	
A 148 C4-C12	1	13.172	(4.649-21.646)		0	162145267	20.0	1387.7	
A 147 Toluene Range	1	13.960	(13.893-14.026)		0	2697795	20.0	16.0	
A 154 Total VOC as Hexane	1	14.307	(4.068-24.546)		0	179918828	20.0	1460.0	E
A 151 Total VOCs as Tetrachloroe	1	14.307	(4.068-24.546)		0	179918828	20.0	962.2	E
A 150 Nonmethane Organic Compoun	1	14.307	(4.068-24.546)		0	179918828	20.0	1460.0	E
A 152 TVOC as Toluene	1	14.406	(4.356-24.456)		0	174182399	20.0	1035.4	E
A 149 PCE Range	1	14.949	(14.879-15.019)		0	3535413	20.0	18.9	
A 153 C6-C12	1	15.116	(8.555-21.646)		0	136181748	20.0	1559.8	
S 155 Xylenes, Total	91				0		60.0	59.3	

QC Flag Legend

Processing Flags

E - Exceeded Maximum Amount

Reagents:

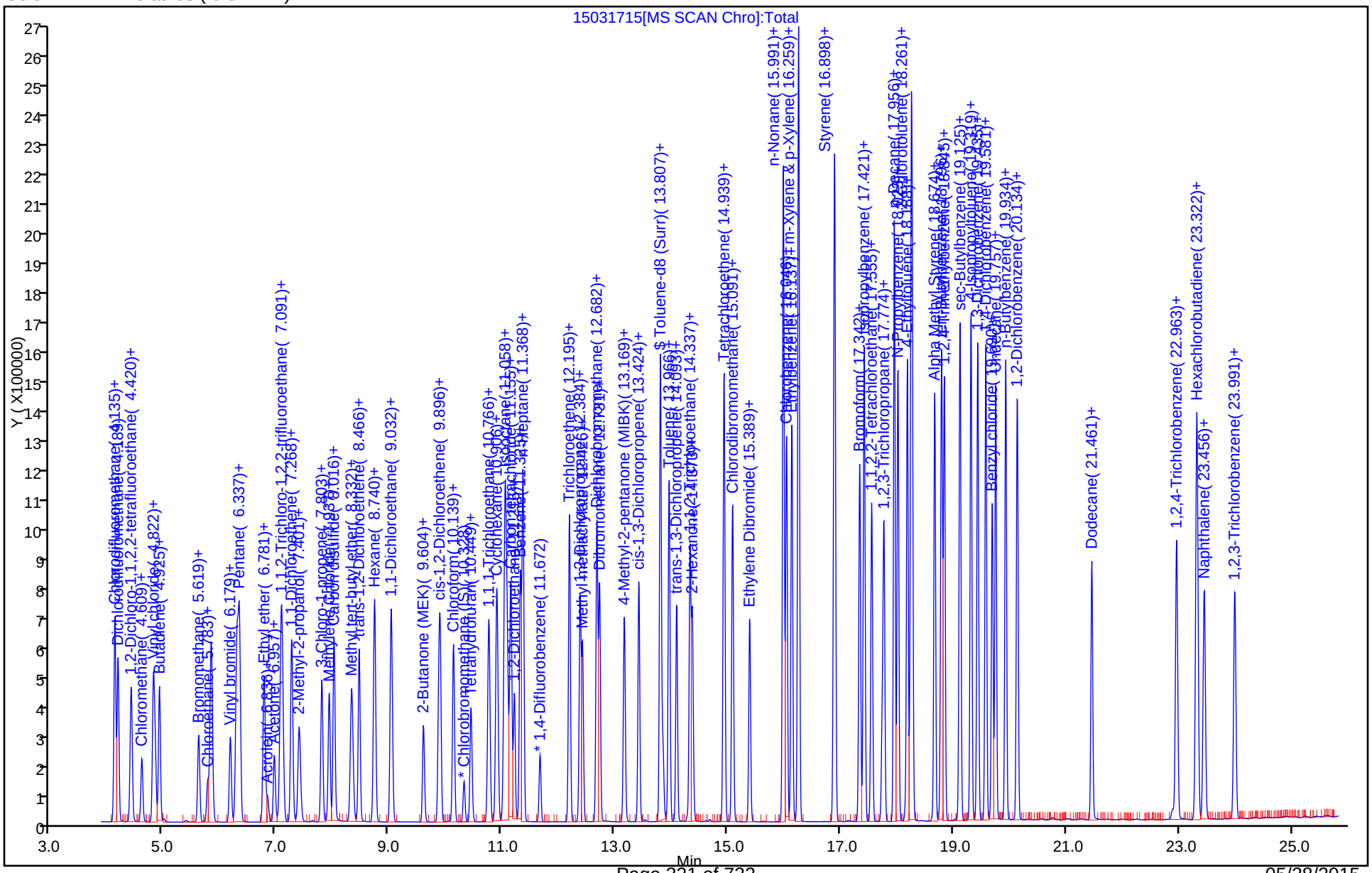
VACORPLC40_00135	Amount Added: 125.00	Units: mL	
VASUISIM_00160	Amount Added: 50.00	Units: mL	Run Reagent

Report Date: 24-Mar-2015 10:33:30 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Sacramento

Data File:	\\SACCHROM\ChromData\ATMS2\20150317-20264.b\15031715.D				
Injection Date:	18-Mar-2015 10:29:30	Instrument ID:	ATMS2	Operator ID:	SRS
Lims ID:	ICV 20ppbv			Worklist Smp#:	16
Client ID:					
Purge Vol:	250.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	4
Method:	TO15_ATMS2N	Limit Group:	MSA - TO15 - ICAL		

Column: RTX Volatiles (0.32 mm)

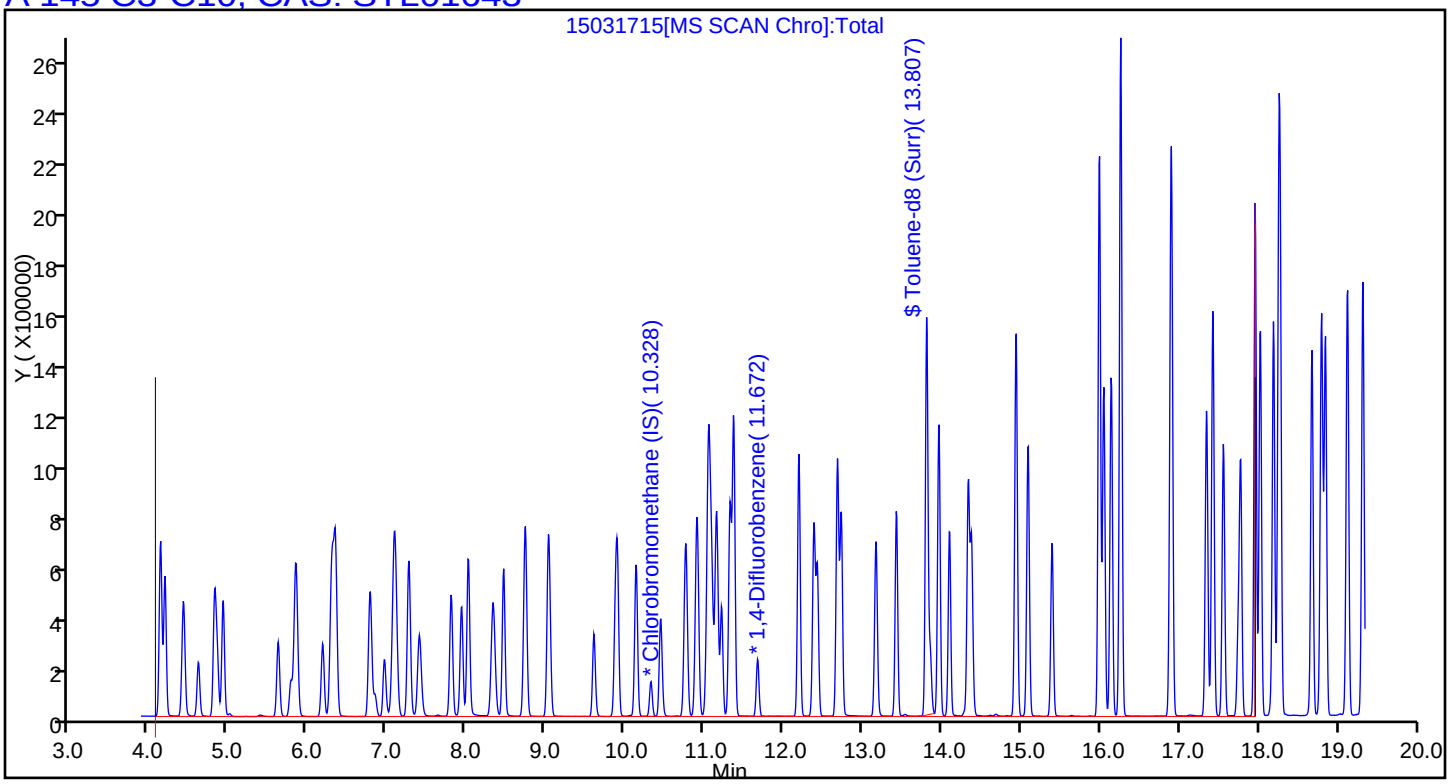


Report Date: 24-Mar-2015 10:33:30 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Sacramento

Data File:	\\SACCHROM\ChromData\ATMS2\20150317-20264.b\15031715.D				
Injection Date:	18-Mar-2015 10:29:30	Instrument ID:	ATMS2		
Lims ID:	ICV 20ppbv				
Client ID:					
Operator ID:	SRS	ALS Bottle#:	4	Worklist Smp#:	16
Purge Vol:	250.000 mL	Dil. Factor:	1.0000		
Method:	TO15_ATMS2N	Limit Group:	MSA - TO15 - ICAL		
Column:	RTX Volatiles (0.32 mm)	Detector	MS SCAN		

A 145 C3-C10, CAS: STL01643

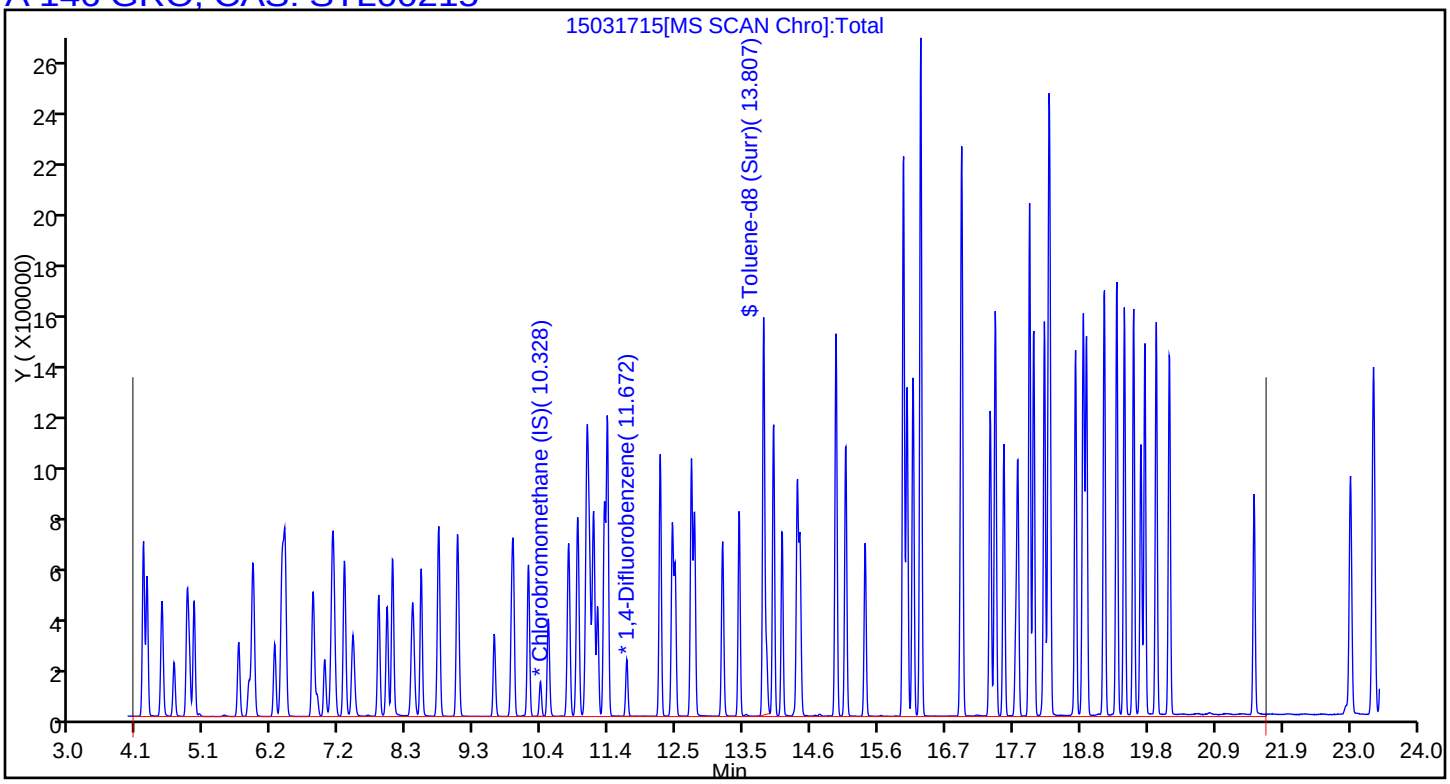


Report Date: 24-Mar-2015 10:33:30 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Sacramento

Data File:	\\SACCHROM\ChromData\ATMS2\20150317-20264.b\15031715.D				
Injection Date:	18-Mar-2015 10:29:30	Instrument ID:	ATMS2		
Lims ID:	ICV 20ppbv				
Client ID:					
Operator ID:	SRS	ALS Bottle#:	4	Worklist Smp#:	16
Purge Vol:	250.000 mL	Dil. Factor:	1.0000		
Method:	TO15_ATMS2N	Limit Group:	MSA - TO15 - ICAL		
Column:	RTX Volatiles (0.32 mm)	Detector	MS SCAN		

A 146 GRO, CAS: STL00215

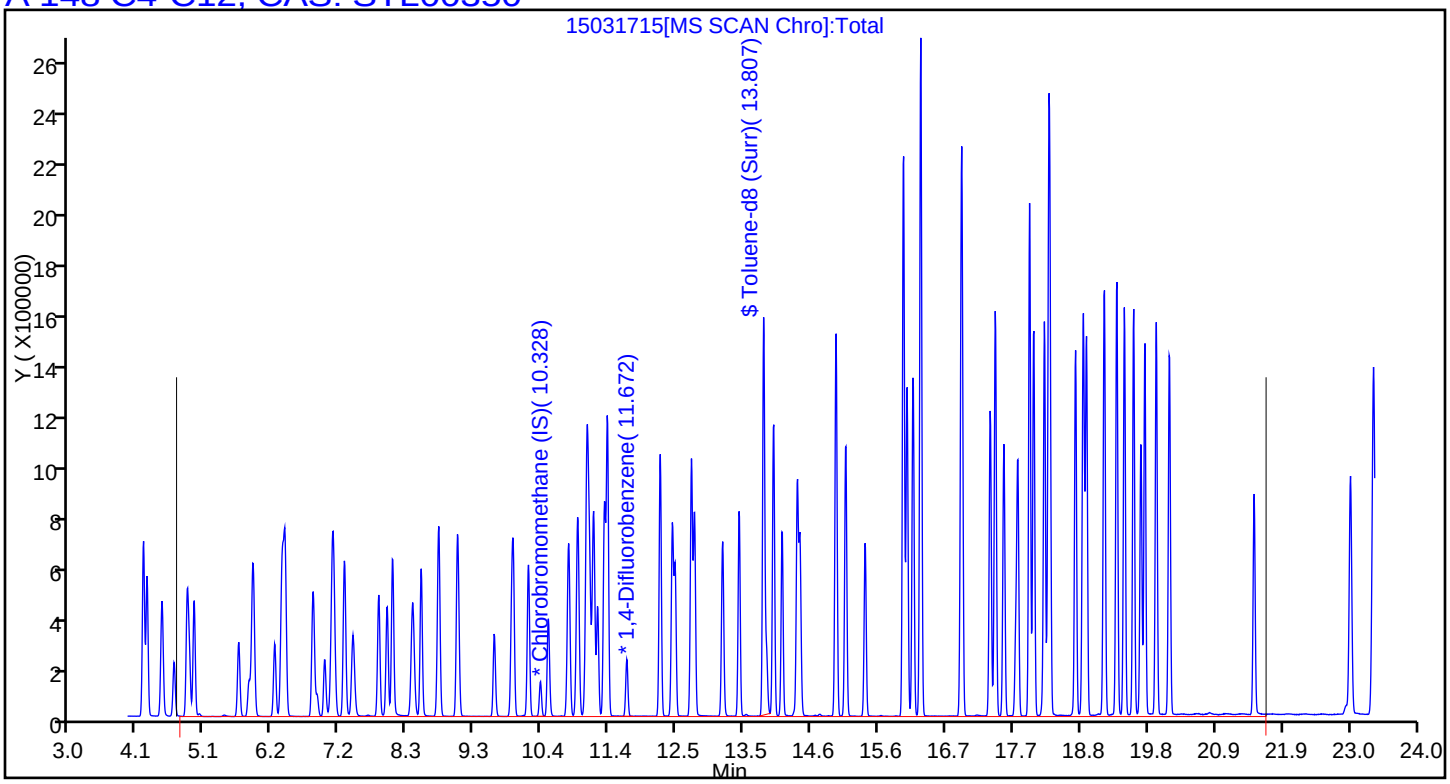


Report Date: 24-Mar-2015 10:33:30 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Sacramento

Data File:	\\SACCHROM\ChromData\ATMS2\20150317-20264.b\15031715.D				
Injection Date:	18-Mar-2015 10:29:30	Instrument ID:	ATMS2		
Lims ID:	ICV 20ppbv				
Client ID:					
Operator ID:	SRS	ALS Bottle#:	4	Worklist Smp#:	16
Purge Vol:	250.000 mL	Dil. Factor:	1.0000		
Method:	TO15_ATMS2N	Limit Group:	MSA - TO15 - ICAL		
Column:	RTX Volatiles (0.32 mm)	Detector	MS SCAN		

A 148 C4-C12, CAS: STL00350

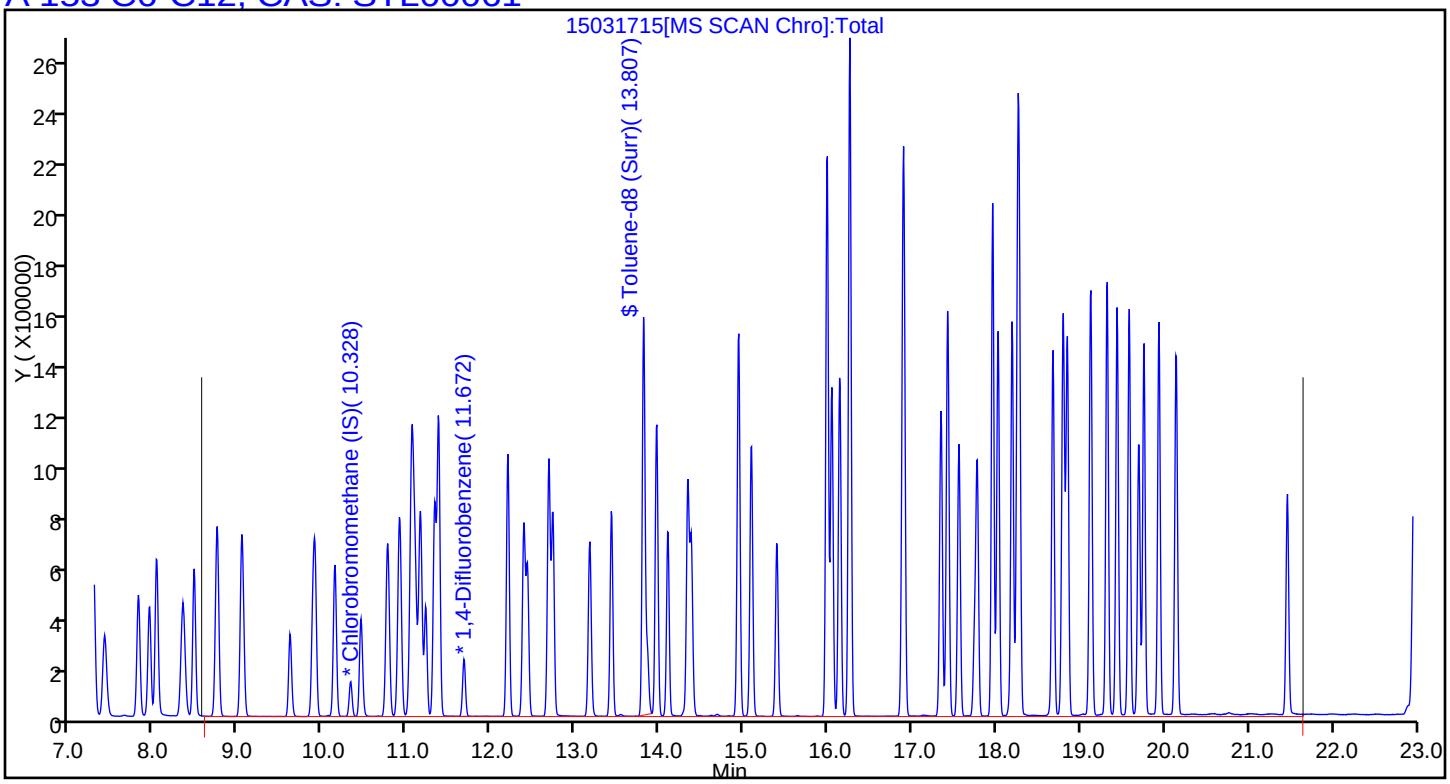


Report Date: 24-Mar-2015 10:33:30 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Sacramento

Data File:	\\SACCHROM\ChromData\ATMS2\20150317-20264.b\15031715.D				
Injection Date:	18-Mar-2015 10:29:30	Instrument ID:	ATMS2		
Lims ID:	ICV 20ppbv				
Client ID:					
Operator ID:	SRS	ALS Bottle#:	4	Worklist Smp#:	16
Purge Vol:	250.000 mL	Dil. Factor:	1.0000		
Method:	TO15_ATMS2N	Limit Group:	MSA - TO15 - ICAL		
Column:	RTX Volatiles (0.32 mm)	Detector	MS SCAN		

A 153 C6-C12, CAS: STL00061



FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Sacramento Job No.: 320-12924-1

SDG No.:

Lab Sample ID: ICV 320-68573/16 Calibration Date: 03/18/2015 10:29

Instrument ID: ATMS2 Calib Start Date: 03/18/2015 02:43

GC Column: RTX-Volatiles ID: 0.32(mm) Calib End Date: 03/18/2015 09:04

Lab File ID: 15031715.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Propylene	Ave	1.066	1.028		19.3	20.0	-3.6	30.0
Chlorodifluoromethane	Ave	1.962	1.808		18.4	20.0	-7.8	30.0
Dichlorodifluoromethane	Ave	2.470	2.358		19.1	20.0	-4.5	30.0
1,2-Dichloro-1,1,2,2-tetrafluoroethane	Ave	1.203	0.9698		16.1	20.0	-19.4	30.0
Chloromethane	Ave	1.106	1.098		19.9	20.0	-0.7	30.0
n-Butane	Ave	2.191	2.083		19.0	20.0	-5.0	30.0
Vinyl chloride	Ave	1.123	1.101		19.6	20.0	-1.9	30.0
1,3-Butadiene	Ave	1.090	1.052		19.3	20.0	-3.5	30.0
Bromomethane	Ave	0.9349	0.9287		19.9	20.0	-0.7	30.0
Chloroethane	Ave	0.5388	0.5547		20.6	20.0	3.0	30.0
Vinyl bromide	Ave	1.091	0.9938		18.2	20.0	-8.9	30.0
Trichlorofluoromethane	Ave	3.079	2.866		18.6	20.0	-6.9	30.0
n-Pentane	Ave	2.540	2.296		18.1	20.0	-9.6	30.0
2-Propanol	Ave	2.487	2.437		19.6	20.0	-2.0	30.0
Ethyl ether	Ave	0.4550	0.4231		18.6	20.0	-7.0	30.0
Acrolein	Ave	0.3192	0.3088		19.3	20.0	-3.3	30.0
Acetone	Ave	1.465	1.289		17.6	20.0	-12.0	30.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	2.301	1.907		16.6	20.0	-17.1	30.0
Acetonitrile	Ave	0.7715	0.7058		18.3	20.0	-8.5	30.0
1,1-Dichloroethene	Ave	1.926	1.578		16.4	20.0	-18.1	30.0
tert-Butyl alcohol (TBA)	Ave	2.137	2.008		18.8	20.0	-6.0	30.0
Allyl chloride	Ave	1.635	1.644		20.1	20.0	0.5	30.0
Methylene Chloride	Ave	1.474	1.257		17.1	20.0	-14.7	30.0
Acrylonitrile	Ave	0.6514	0.6351		19.5	20.0	-2.5	30.0
Carbon disulfide	Ave	3.070	2.751		17.9	20.0	-10.4	30.0
Methyl-t-Butyl Ether (MTBE)	Ave	2.485	2.276		18.3	20.0	-8.4	30.0
trans-1,2-Dichloroethene	Ave	1.594	1.492		18.7	20.0	-6.4	30.0
Hexane	Ave	1.578	1.373		17.4	20.0	-13.0	30.0
Vinyl acetate	Ave	2.632	2.690		20.4	20.0	2.2	30.0
1,1-Dichloroethane	Ave	1.963	1.777		18.1	20.0	-9.5	30.0
2-Butanone (MEK)	Ave	0.3862	0.3512		18.2	20.0	-9.1	30.0
Ethyl acetate	Ave	2.195	1.991		18.1	20.0	-9.3	30.0
cis-1,2-Dichloroethene	Ave	1.073	1.008		18.8	20.0	-6.1	30.0
Chloroform	Ave	2.142	1.960		18.3	20.0	-8.5	30.0
Tetrahydrofuran	Ave	1.316	1.176		17.9	20.0	-10.7	30.0
1,1,1-Trichloroethane	Ave	2.312	2.118		18.3	20.0	-8.4	30.0
Cyclohexane	Ave	0.3829	0.3438		18.0	20.0	-10.2	30.0
2,2,4-Trimethylpentane	Ave	1.533	1.445		18.9	20.0	-5.7	30.0
n-Butanol	Ave	0.9290	2.689		57.9	20.0	189.4*	30.0
Carbon tetrachloride	Ave	0.6625	0.6148		18.6	20.0	-7.2	30.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Sacramento Job No.: 320-12924-1

SDG No.:

Lab Sample ID: ICV 320-68573/16 Calibration Date: 03/18/2015 10:29

Instrument ID: ATMS2 Calib Start Date: 03/18/2015 02:43

GC Column: RTX-Volatiles ID: 0.32(mm) Calib End Date: 03/18/2015 09:04

Lab File ID: 15031715.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,2-Dichloroethane	Ave	0.3669	0.3489		19.0	20.0	-4.9	30.0
Benzene	Ave	0.8118	0.7504		18.5	20.0	-7.6	30.0
n-Heptane	Ave	0.6555	0.6232		19.0	20.0	-4.9	30.0
Trichloroethene	Ave	0.4226	0.3940		18.6	20.0	-6.8	30.0
1,2-Dichloropropane	Ave	0.1217	0.1193		19.6	20.0	-2.0	30.0
Methyl methacrylate	Ave	0.2208	0.2047		18.5	20.0	-7.3	30.0
1,4-Dioxane	Ave	0.1491	0.1450		19.4	20.0	-2.8	30.0
Bromodichloromethane	Ave	0.3842	0.3589		18.7	20.0	-6.6	30.0
Dibromomethane	Ave	0.3671	0.3528		19.2	20.0	-3.9	30.0
4-Methyl-2-pentanone (MIBK)	Ave	0.6327	0.5852		18.5	20.0	-7.5	30.0
cis-1,3-Dichloropropene	Ave	0.4397	0.4549		20.7	20.0	3.5	30.0
n-Octane	Ave	1.094	1.027		18.8	20.0	-6.1	30.0
Toluene	Ave	0.9392	0.9089		19.4	20.0	-3.2	30.0
trans-1,3-Dichloropropene	Ave	0.4911	0.4560		18.6	20.0	-7.2	30.0
NMOC as Hexane	Ave	880.7	592.3		1460	20.0	-32.7*	30.0
Total VOC as Hexane (C6-C12)	Ave	880.7	592.3		1460	20.0	-32.7*	30.0
1,1,2-Trichloroethane	Ave	0.3773	0.3720		19.7	20.0	-1.4	30.0
2-Hexanone	Ave	0.3363	0.3153		18.8	20.0	-6.2	30.0
Tetrachloroethene	Ave	0.6718	0.6232		18.6	20.0	-7.2	30.0
Dibromochloromethane	Ave	0.7748	0.7509		19.4	20.0	-3.1	30.0
1,2-Dibromoethane (EDB)	Ave	0.6037	0.5945		19.7	20.0	-1.5	30.0
n-Nonane	Ave	1.094	1.071		19.6	20.0	-2.1	30.0
Chlorobenzene	Ave	0.9649	0.9376		19.4	20.0	-2.8	30.0
Ethylbenzene	Ave	1.300	1.282		19.7	20.0	-1.4	30.0
m,p-Xylene	Ave	0.9920	0.9803		39.5	40.0	-1.2	30.0
o-Xylene	Ave	1.014	1.002		19.8	20.0	-1.2	30.0
Styrene	Ave	0.7814	0.8139		20.8	20.0	4.2	30.0
Bromoform	Ave	0.8106	0.7983		19.7	20.0	-1.5	30.0
Isopropylbenzene	Ave	0.4084	0.4078		20.0	20.0	-0.1	30.0
1,1,2,2-Tetrachloroethane	Ave	0.7202	0.7120		19.8	20.0	-1.1	30.0
1,2,3-Trichloropropane	Ave	0.2225	0.2107		18.9	20.0	-5.3	30.0
N-Propylbenzene	Ave	1.653	1.620		19.6	20.0	-2.0	30.0
4-Ethyltoluene	Ave	0.4536	0.4251		18.7	20.0	-6.3	30.0
1,3,5-Trimethylbenzene	Ave	0.6080	0.5807		19.1	20.0	-4.5	30.0
2-Chlorotoluene	Ave	0.4317	0.4114		19.1	20.0	-4.7	30.0
alpha-Methylstyrene	Ave	0.5892	0.6132		20.8	20.0	4.1	30.0
tert-Butylbenzene	Ave	0.8780	0.8173		18.6	20.0	-6.9	30.0
1,2,4-Trimethylbenzene	Ave	0.5775	0.5785		20.0	20.0	0.2	30.0
sec-Butylbenzene	Ave	1.700	1.684		19.8	20.0	-1.0	30.0
4-Isopropyltoluene	Ave	1.417	1.380		19.5	20.0	-2.7	30.0
1,3-Dichlorobenzene	Ave	0.8751	0.9232		21.1	20.0	5.5	30.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Sacramento Job No.: 320-12924-1

SDG No.:

Lab Sample ID: ICV 320-68573/16 Calibration Date: 03/18/2015 10:29

Instrument ID: ATMS2 Calib Start Date: 03/18/2015 02:43

GC Column: RTX-Volatiles ID: 0.32(mm) Calib End Date: 03/18/2015 09:04

Lab File ID: 15031715.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,4-Dichlorobenzene	Ave	0.8572	0.9051		21.1	20.0	5.6	30.0
Benzyl chloride	Ave	1.155	1.018		17.6	20.0	-11.8	30.0
n-Butylbenzene	Ave	0.6351	0.6257		19.7	20.0	-1.5	30.0
1,2-Dichlorobenzene	Ave	0.8065	0.8409		20.9	20.0	4.3	30.0
1,2,4-Trichlorobenzene	Ave	0.5008	0.5307		21.2	20.0	6.0	30.0
Hexachlorobutadiene	Ave	0.5166	0.5206		20.2	20.0	0.8	30.0
Naphthalene	Ave	0.9725	1.117		23.0	20.0	14.9	30.0
1,2,3-Trichlorobenzene	Ave	0.4097	0.4463		21.8	20.0	8.9	30.0
1,2-Dichloroethane-d4 (Surr)	Ave	1.309	1.291		3.94	4.00	-1.4	30.0
Toluene-d8 (Surr)	Ave	0.5894	0.5956		4.04	4.00	1.1	30.0
4-Bromofluorobenzene (Surr)	Ave	0.5852	0.6057		4.14	4.00	3.5	30.0

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\SACCHROM\ChromData\ATMS2\20150317-20264.b\15031715.D
Lims ID: ICV 20ppbv
Client ID:
Sample Type: ICV
Inject. Date: 18-Mar-2015 10:29:30 ALS Bottle#: 4 Worklist Smp#: 16
Purge Vol: 250.000 mL Dil. Factor: 1.0000
Sample Info: ICV 20ppbv
Misc. Info.: 125mL
Operator ID: SRS Instrument ID: ATMS2
Sublist:

Method: \\SACCHROM\ChromData\ATMS2\20150317-20264.b\TO15_ATMS2N.m
Limit Group: MSA - TO15 - ICAL
Last Update: 24-Mar-2015 10:33:24 Calib Date: 18-Mar-2015 18:13:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\SACCHROM\ChromData\ATMS2\20150317-20264.b\15031726.D

Column 1 : RTX Volatiles (0.32 mm) Det: MS SCAN
Process Host: XAWRK047

First Level Reviewer: scottrs Date: 24-Mar-2015 09:27:18

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	130	10.328	10.328	0.000	97	60755	4.00	4.00	
* 2 1,4-Difluorobenzene	114	11.672	11.678	-0.006	94	238453	4.00	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.991	15.985	0.006	45	204500	4.00	4.00	
$ 4 1,2-Dichloroethane-d4 (Sur	65	11.088	11.094	-0.006	99	78407	4.00	3.94	
$ 5 Toluene-d8 (Surr)	100	13.850	13.850	0.000	99	142023	4.00	4.04	
$ 6 4-Bromofluorobenzene (Surr	174	17.744	17.744	0.000	91	123873	4.00	4.14	
14 Propene	41	4.128	4.129	0.000	39	312357	20.0	19.3	
13 Chlorodifluoromethane	51	4.141	4.141	0.000	97	549315	20.0	18.4	
15 Dichlorodifluoromethane	85	4.189	4.189	0.000	99	716422	20.0	19.1	
19 1,2-Dichloro-1,1,2,2-tetra	135	4.420	4.427	-0.007	97	294604	20.0	16.1	
18 Chloromethane	50	4.609	4.615	-0.006	99	333517	20.0	19.9	
22 Butane	43	4.816	4.816	0.000	99	632708	20.0	19.0	
20 Vinyl chloride	62	4.852	4.852	0.000	98	334597	20.0	19.6	
21 Butadiene	39	4.925	4.925	0.000	95	319427	20.0	19.3	
25 Bromomethane	94	5.619	5.625	-0.006	99	282127	20.0	19.9	
26 Chloroethane	64	5.777	5.783	-0.006	99	168505	20.0	20.6	
27 Vinyl bromide	106	6.179	6.185	-0.006	99	301898	20.0	18.2	
28 Trichlorofluoromethane	101	6.300	6.300	0.000	98	870737	20.0	18.6	
38 Pentane	43	6.343	6.343	0.000	97	697469	20.0	18.1	
37 Isopropyl alcohol	45	6.775	6.781	-0.006	79	740296	20.0	19.6	
39 Ethyl ether	74	6.787	6.793	-0.006	99	128511	20.0	18.6	
29 Acrolein	56	6.842	6.842	0.000	96	93813	20.0	19.3	
31 Acetone	43	6.957	6.963	-0.006	99	391574	20.0	17.6	
43 1,1,2-Trichloro-1,2,2-trif	101	7.091	7.091	0.000	97	579363	20.0	16.6	
30 Acetonitrile	41	7.262	7.262	0.000	98	214404	20.0	18.3	
41 1,1-Dichloroethene	61	7.268	7.274	-0.006	96	479252	20.0	16.4	
44 2-Methyl-2-propanol	59	7.401	7.401	0.000	95	609972	20.0	18.8	
46 3-Chloro-1-propene	41	7.803	7.803	0.000	93	499304	20.0	20.1	
47 Methylene Chloride	49	7.937	7.937	0.000	97	381993	20.0	17.1	
42 Acrylonitrile	53	8.016	8.022	-0.006	93	192914	20.0	19.5	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
48 Carbon disulfide	76	8.022	8.022	0.000	100	835562	20.0	17.9	
50 Methyl tert-butyl ether	73	8.332	8.332	0.000	97	691249	20.0	18.3	
49 trans-1,2-Dichloroethene	61	8.466	8.466	0.000	97	453203	20.0	18.7	
55 Hexane	41	8.740	8.740	0.000	95	416961	20.0	17.4	
52 Vinyl acetate	43	9.026	9.026	0.000	100	817288	20.0	20.4	
53 1,1-Dichloroethane	63	9.044	9.044	0.000	99	539862	20.0	18.1	
54 2-Butanone (MEK)	72	9.604	9.604	0.000	98	106699	20.0	18.2	
58 Ethyl acetate	43	9.877	9.877	0.000	98	604814	20.0	18.1	
57 cis-1,2-Dichloroethene	96	9.902	9.902	0.000	96	306065	20.0	18.8	
61 Chloroform	83	10.139	10.139	0.000	97	595460	20.0	18.3	
62 Tetrahydrofuran	42	10.449	10.449	0.000	93	357103	20.0	17.9	
65 1,1,1-Trichloroethane	97	10.766	10.766	0.000	96	643306	20.0	18.3	
70 Cyclohexane	84	10.906	10.906	0.000	94	409947	20.0	18.0	
74 Isooctane	57	11.058	11.058	0.000	97	1723319	20.0	18.9	
67 n-Butanol	56	11.058	11.088	-0.030	94	816764	20.0	57.9	
69 Carbon tetrachloride	117	11.155	11.155	0.000	97	733018	20.0	18.6	
66 1,2-Dichloroethane	62	11.216	11.216	0.000	96	415956	20.0	19.0	
68 Benzene	78	11.325	11.325	0.000	97	894653	20.0	18.5	
75 n-Heptane	43	11.368	11.374	-0.006	97	743033	20.0	19.0	
76 Trichloroethene	130	12.195	12.195	0.000	98	469725	20.0	18.6	
77 1,2-Dichloropropane	76	12.384	12.384	0.000	87	142261	20.0	19.6	
79 Methyl methacrylate	69	12.426	12.427	0.000	91	244026	20.0	18.5	
80 Dichlorobromomethane	85	12.682	12.682	0.000	97	427921	20.0	18.7	
72 1,4-Dioxane	88	12.682	12.682	0.000	45	172837	20.0	19.4	
78 Dibromomethane	174	12.731	12.731	0.000	93	420607	20.0	19.2	
81 4-Methyl-2-pentanone (MIBK	43	13.169	13.169	0.000	99	697697	20.0	18.5	
83 cis-1,3-Dichloropropene	75	13.424	13.424	0.000	98	542382	20.0	20.7	
88 n-Octane	43	13.807	13.807	0.000	98	1050224	20.0	18.8	
85 Toluene	91	13.966	13.966	0.000	93	1083599	20.0	19.4	
84 trans-1,3-Dichloropropene	75	14.099	14.099	0.000	98	466239	20.0	18.6	
86 1,1,2-Trichloroethane	97	14.337	14.337	0.000	97	380357	20.0	19.7	
87 2-Hexanone	58	14.373	14.373	0.000	91	322407	20.0	18.8	
93 Tetrachloroethene	166	14.939	14.939	0.000	97	637227	20.0	18.6	
92 Chlorodibromomethane	129	15.091	15.091	0.000	99	767802	20.0	19.4	
94 Ethylene Dibromide	107	15.389	15.389	0.000	99	607918	20.0	19.7	
99 n-Nonane	43	15.985	15.985	0.000	96	1094632	20.0	19.6	
96 Chlorobenzene	112	16.046	16.046	0.000	95	958699	20.0	19.4	
97 Ethylbenzene	91	16.137	16.137	0.000	98	1310718	20.0	19.7	
98 m-Xylene & p-Xylene	91	16.259	16.259	0.000	98	2004742	40.0	39.5	
101 o-Xylene	91	16.892	16.892	0.000	99	1024275	20.0	19.8	
100 Styrene	104	16.904	16.904	0.000	98	832179	20.0	20.8	
102 Bromoform	173	17.342	17.342	0.000	98	816210	20.0	19.7	
104 Isopropylbenzene	120	17.421	17.421	0.000	96	416984	20.0	20.0	
103 1,1,2,2-Tetrachloroethane	83	17.555	17.555	0.000	99	728015	20.0	19.8	
105 1,2,3-Trichloropropane	110	17.774	17.774	0.000	95	215443	20.0	18.9	
113 n-Decane	57	17.956	17.956	0.000	86	918225	20.0	20.2	
107 N-Propylbenzene	91	18.023	18.023	0.000	99	1656079	20.0	19.6	
110 4-Ethyltoluene	120	18.188	18.188	0.000	99	434684	20.0	18.7	
111 1,3,5-Trimethylbenzene	120	18.255	18.255	0.000	93	593747	20.0	19.1	
109 2-Chlorotoluene	126	18.273	18.273	0.000	98	420647	20.0	19.1	
112 Alpha Methyl Styrene	118	18.674	18.674	0.000	89	627021	20.0	20.8	
114 tert-Butylbenzene	91	18.796	18.796	0.000	95	835700	20.0	18.6	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
115 1,2,4-Trimethylbenzene	120	18.845	18.845	0.000	93	591494	20.0	20.0	
116 sec-Butylbenzene	105	19.125	19.125	-0.001	99	1721384	20.0	19.8	
121 4-Isopropyltoluene	119	19.319	19.319	0.000	98	1410552	20.0	19.5	
117 1,3-Dichlorobenzene	146	19.435	19.435	0.000	97	943970	20.0	21.1	
120 1,4-Dichlorobenzene	146	19.581	19.581	0.000	96	925416	20.0	21.1	
118 Benzyl chloride	91	19.690	19.696	-0.006	99	1041391	20.0	17.6	
124 Undecane	57	19.757	19.757	0.000	94	672809	20.0	23.1	
123 n-Butylbenzene	92	19.934	19.934	0.000	98	639793	20.0	19.7	
122 1,2-Dichlorobenzene	146	20.140	20.140	0.000	97	859790	20.0	20.9	
125 Dodecane	57	21.461	21.461	0.000	93	426402	20.0	32.2	E
126 1,2,4-Trichlorobenzene	180	22.963	22.963	0.000	94	542648	20.0	21.2	
128 Hexachlorobutadiene	225	23.322	23.322	0.000	98	532290	20.0	20.2	
127 Naphthalene	128	23.456	23.456	0.000	99	1142271	20.0	23.0	
129 1,2,3-Trichlorobenzene	180	23.997	23.997	0.000	96	456304	20.0	21.8	
A 144 C6 Range	1	8.740	(8.640-8.840)		0	2112318	20.0	17.1	
A 145 C3-C10	1	11.012	(4.068-17.956)		0	111607772	20.0	1137.7	
A 146 GRO	1	12.807	(3.968-21.646)		0	166931106	20.0	1425.3	
A 148 C4-C12	1	13.172	(4.649-21.646)		0	162145267	20.0	1387.7	
A 147 Toluene Range	1	13.960	(13.893-14.026)		0	2697795	20.0	16.0	
A 154 Total VOC as Hexane	1	14.307	(4.068-24.546)		0	179918828	20.0	1460.0	E
A 151 Total VOCs as Tetrachloroe	1	14.307	(4.068-24.546)		0	179918828	20.0	962.2	E
A 150 Nonmethane Organic Compoun	1	14.307	(4.068-24.546)		0	179918828	20.0	1460.0	E
A 152 TVOC as Toluene	1	14.406	(4.356-24.456)		0	174182399	20.0	1035.4	E
A 149 PCE Range	1	14.949	(14.879-15.019)		0	3535413	20.0	18.9	
A 153 C6-C12	1	15.116	(8.555-21.646)		0	136181748	20.0	1559.8	
S 155 Xylenes, Total	91				0		60.0	59.3	

QC Flag Legend

Processing Flags

E - Exceeded Maximum Amount

Reagents:

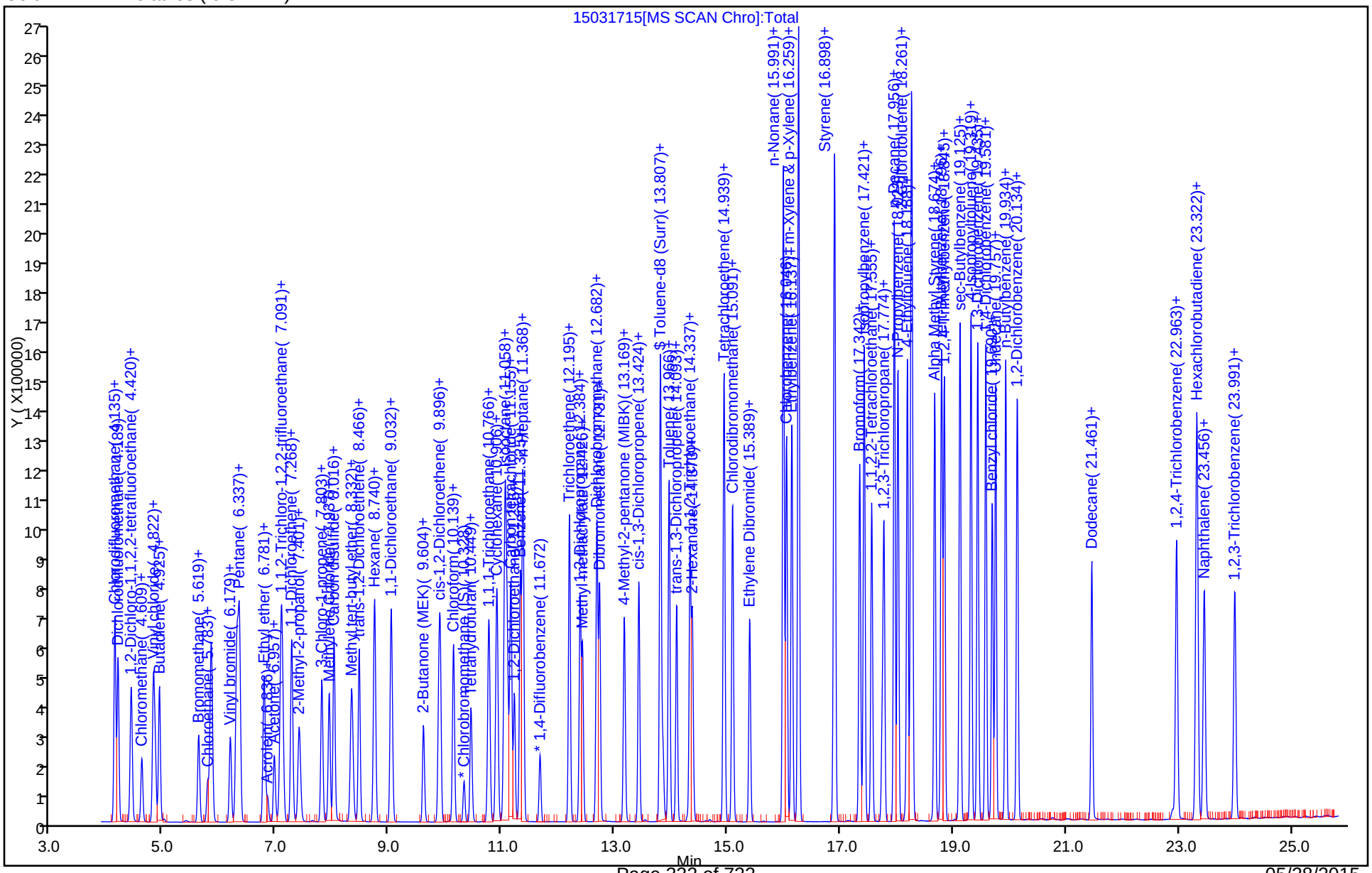
VACORPLC40_00135	Amount Added: 125.00	Units: mL	
VASUISIM_00160	Amount Added: 50.00	Units: mL	Run Reagent

Report Date: 24-Mar-2015 10:33:30 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Sacramento

Data File:	\\SACCHROM\ChromData\ATMS2\20150317-20264.b\15031715.D				
Injection Date:	18-Mar-2015 10:29:30	Instrument ID:	ATMS2	Operator ID:	SRS
Lims ID:	ICV 20ppbv			Worklist Smp#:	16
Client ID:					
Purge Vol:	250.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	4
Method:	TO15_ATMS2N	Limit Group:	MSA - TO15 - ICAL		

Column: RTX Volatiles (0.32 mm)

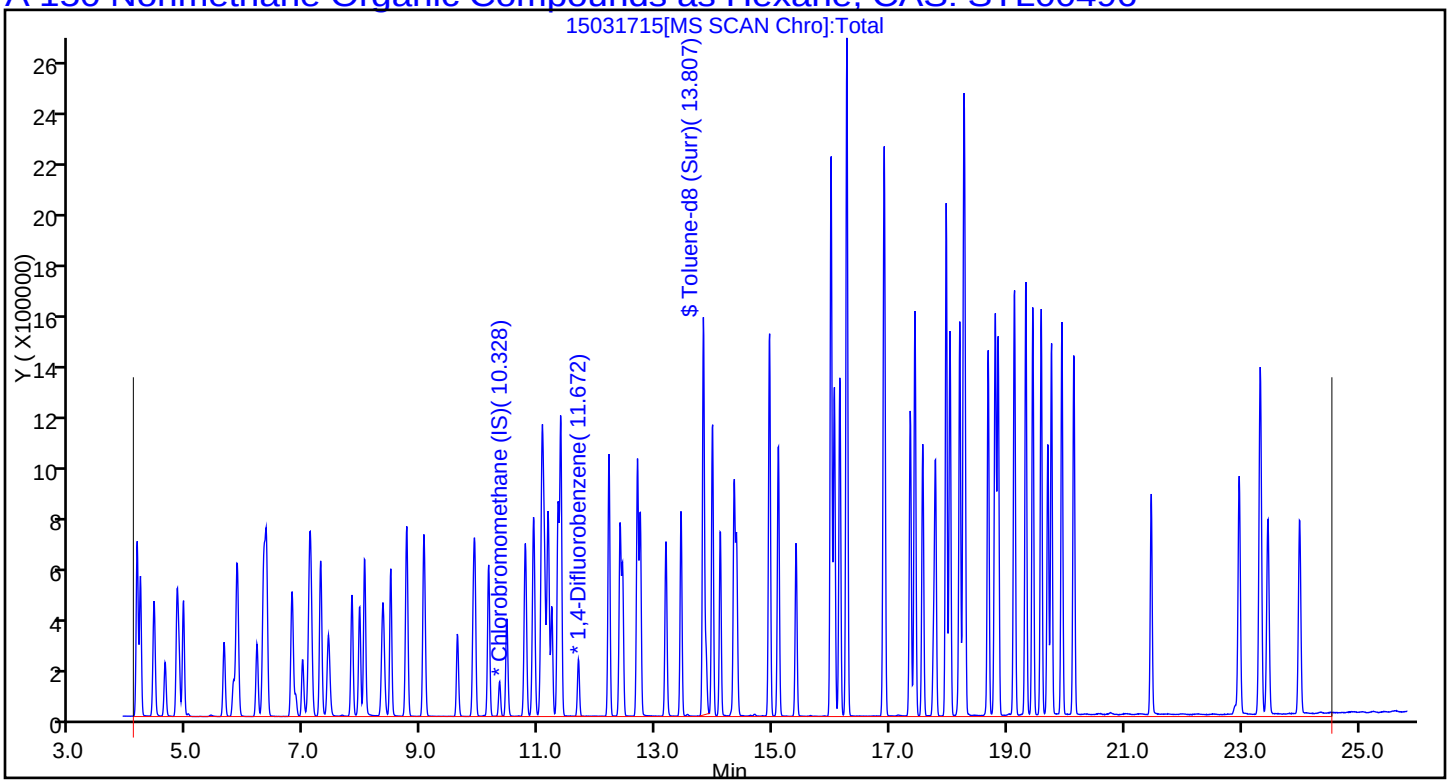


Report Date: 24-Mar-2015 10:33:30 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Sacramento

Data File:	\\SACCHROM\ChromData\ATMS2\20150317-20264.b\15031715.D				
Injection Date:	18-Mar-2015 10:29:30	Instrument ID:	ATMS2		
Lims ID:	ICV 20ppbv				
Client ID:					
Operator ID:	SRS	ALS Bottle#:	4	Worklist Smp#:	16
Purge Vol:	250.000 mL	Dil. Factor:	1.0000		
Method:	TO15_ATMS2N	Limit Group:	MSA - TO15 - ICAL		
Column:	RTX Volatiles (0.32 mm)	Detector	MS SCAN		

A 150 Nonmethane Organic Compounds as Hexane, CAS: STL00496

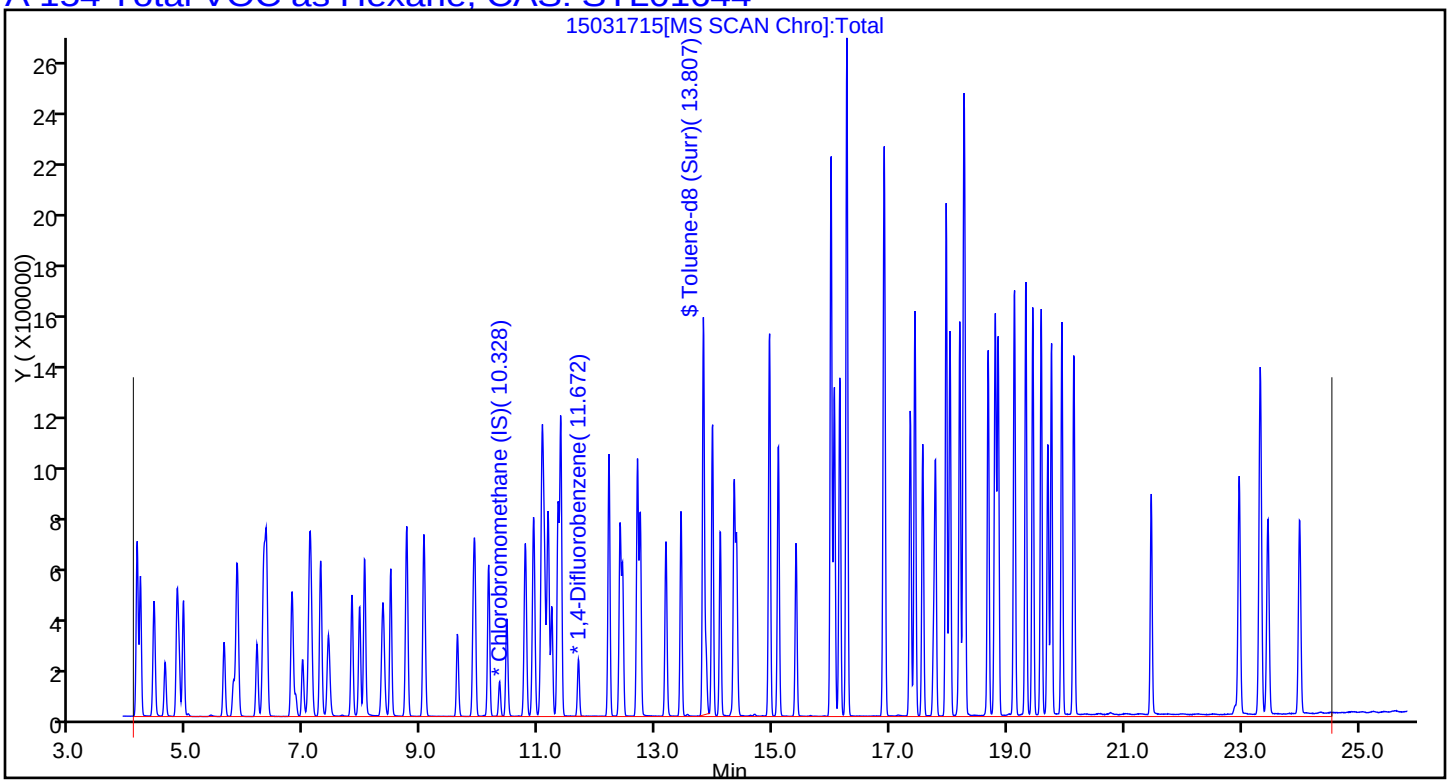


Report Date: 24-Mar-2015 10:33:30 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Sacramento

Data File:	\\SACCHROM\ChromData\ATMS2\20150317-20264.b\15031715.D				
Injection Date:	18-Mar-2015 10:29:30	Instrument ID:	ATMS2		
Lims ID:	ICV 20ppbv				
Client ID:					
Operator ID:	SRS	ALS Bottle#:	4	Worklist Smp#:	16
Purge Vol:	250.000 mL	Dil. Factor:	1.0000		
Method:	TO15_ATMS2N	Limit Group:	MSA - TO15 - ICAL		
Column:	RTX Volatiles (0.32 mm)	Detector	MS SCAN		

A 154 Total VOC as Hexane, CAS: STL01644



FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Sacramento Job No.: 320-12924-1

SDG No.:

Lab Sample ID: CCVIS 320-73563/2 Calibration Date: 05/11/2015 13:38

Instrument ID: ATMS2 Calib Start Date: 01/23/2015 20:45

GC Column: RTX-Volatiles ID: 0.32(mm) Calib End Date: 01/24/2015 00:20

Lab File ID: 15051102.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
GRO (C3-C10)	Ave	1.646	99.8		1210	20.0	5965.9*	30.0
TPH (as Gasoline)	Ave	1.965	149.9		1530	20.0	7530.2*	30.0
GRO (C4 - C12)	Ave	1.960	145.5		1480	20.0	7322.9*	30.0
Gasoline Range Organics (C6-C12)	Ave	1.465	121.9		1660	20.0	8222.4*	30.0

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\SACCHROM\ChromData\ATMS2\20150511-21702.b\15051102.D
Lims ID: CCVIS 20ppbv
Client ID:
Sample Type: CCVIS
Inject. Date: 11-May-2015 13:38:30 ALS Bottle#: 1 Worklist Smp#: 2
Purge Vol: 250.000 mL Dil. Factor: 1.0000
Sample Info: CCVIS 20ppbv
Misc. Info.: 125mL
Operator ID: SRS Instrument ID: ATMS2
Sublist: chrom-TO15_ATMS2N*sub53

Method: \\SACCHROM\ChromData\ATMS2\20150511-21702.b\TO15_ATMS2N.m
Limit Group: MSA - TO15 - ICAL
Last Update: 11-May-2015 17:55:46 Calib Date: 18-Mar-2015 18:13:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\SACCHROM\ChromData\ATMS2\20150317-20264.b\15031726.D

Column 1 : RTX Volatiles (0.32 mm) Det: MS SCAN
Process Host: XAWRK023

First Level Reviewer: scottrs Date: 11-May-2015 17:55:46

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	130	10.285	10.285	0.000	97	51315	4.00	4.00	
* 2 1,4-Difluorobenzene	114	11.629	11.629	0.000	95	191392	4.00	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.949	15.949	0.000	88	167698	4.00	4.00	
$ 4 1,2-Dichloroethane-d4 (Sur	65	11.051	11.051	0.000	98	77048	4.00	4.59	
$ 5 Toluene-d8 (Surr)	100	13.807	13.807	0.000	96	112484	4.00	3.99	
$ 6 4-Bromofluorobenzene (Surr	174	17.695	17.695	0.000	92	106665	4.00	4.35	
14 Propene	41	4.128	4.128	0.000	43	234807	20.0	17.2	
13 Chlorodifluoromethane	51	4.141	4.141	0.000	97	542372	20.0	21.5	
15 Dichlorodifluoromethane	85	4.189	4.189	0.000	99	635984	20.0	20.1	
19 1,2-Dichloro-1,1,2,2-tetra	135	4.420	4.420	0.000	88	264233	20.0	17.1	
18 Chloromethane	50	4.603	4.603	0.000	99	283727	20.0	20.0	
22 Butane	43	4.810	4.810	0.000	97	522857	20.0	18.6	
20 Vinyl chloride	62	4.840	4.840	0.000	98	252776	20.0	17.5	
21 Butadiene	39	4.913	4.913	0.000	97	259264	20.0	18.5	
25 Bromomethane	94	5.601	5.601	0.000	98	209873	20.0	17.5	
26 Chloroethane	64	5.759	5.759	0.000	96	116693	20.0	16.9	
27 Vinyl bromide	106	6.160	6.160	0.000	98	247172	20.0	17.7	
28 Trichlorofluoromethane	101	6.276	6.276	0.000	98	825481	20.0	20.9	
38 Pentane	43	6.325	6.325	0.000	97	562986	20.0	17.3	
37 Isopropyl alcohol	45	6.756	6.756	0.000	77	583872	20.0	18.3	
39 Ethyl ether	74	6.769	6.769	0.000	100	93172	20.0	16.0	
29 Acrolein	56	6.817	6.817	0.000	96	76877	20.0	18.8	
31 Acetone	43	6.939	6.939	0.000	100	363151	20.0	19.3	
43 1,1,2-Trichloro-1,2,2-trif	101	7.067	7.067	0.000	93	517695	20.0	17.5	
30 Acetonitrile	41	7.237	7.237	0.000	53	170320	20.0	17.2	
41 1,1-Dichloroethene	61	7.243	7.243	0.000	93	461778	20.0	18.7	
44 2-Methyl-2-propanol	59	7.377	7.377	0.000	96	518903	20.0	18.9	
46 3-Chloro-1-propene	41	7.772	7.772	0.000	95	375784	20.0	17.9	
47 Methylene Chloride	49	7.900	7.900	0.000	92	357643	20.0	18.9	
48 Carbon disulfide	76	7.985	7.985	0.000	99	631305	20.0	16.0	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
42 Acrylonitrile	53	7.985	7.985	0.000	44	174573	20.0	20.9	
50 Methyl tert-butyl ether	73	8.308	8.308	0.000	96	572612	20.0	18.0	
49 trans-1,2-Dichloroethene	61	8.429	8.429	0.000	94	383357	20.0	18.7	
55 Hexane	41	8.709	8.709	0.000	92	380756	20.0	18.8	
52 Vinyl acetate	43	8.995	8.995	0.000	100	645939	20.0	19.1	
53 1,1-Dichloroethane	63	9.007	9.007	0.000	99	443003	20.0	17.6	
54 2-Butanone (MEK)	72	9.573	9.573	0.000	97	76779	20.0	15.5	
58 Ethyl acetate	43	9.841	9.841	0.000	98	513065	20.0	18.2	
57 cis-1,2-Dichloroethene	96	9.865	9.865	0.000	98	233437	20.0	17.0	
61 Chloroform	83	10.102	10.102	0.000	96	505674	20.0	18.4	
62 Tetrahydrofuran	42	10.413	10.413	0.000	90	290567	20.0	17.2	
65 1,1,1-Trichloroethane	97	10.729	10.729	0.000	96	612258	20.0	20.6	
70 Cyclohexane	84	10.869	10.869	0.000	92	309082	20.0	16.9	
74 Isooctane	57	11.021	11.021	0.000	97	1405989	20.0	19.2	
67 n-Butanol	56	11.051	11.051	0.000	90	176676	20.0	14.8	M
69 Carbon tetrachloride	117	11.112	11.112	0.000	97	729484	20.0	23.0	
66 1,2-Dichloroethane	62	11.173	11.173	0.000	97	419361	20.0	23.9	
68 Benzene	78	11.283	11.283	0.000	96	643888	20.0	16.6	
75 n-Heptane	43	11.331	11.331	0.000	96	593789	20.0	18.9	
76 Trichloroethene	130	12.153	12.153	0.000	96	392312	20.0	19.4	
77 1,2-Dichloropropane	76	12.347	12.347	0.000	87	128277	20.0	22.0	
79 Methyl methacrylate	69	12.390	12.390	0.000	92	173045	20.0	16.4	
80 Dichlorobromomethane	85	12.639	12.639	0.000	98	383917	20.0	20.9	
72 1,4-Dioxane	88	12.645	12.645	0.000	96	121897	20.0	17.1	
78 Dibromomethane	174	12.688	12.688	0.000	89	375643	20.0	21.4	
81 4-Methyl-2-pentanone (MIBK	43	13.132	13.132	0.000	100	577909	20.0	19.1	
83 cis-1,3-Dichloropropene	75	13.381	13.381	0.000	95	384249	20.0	18.3	
88 n-Octane	43	13.771	13.771	0.000	97	836959	20.0	18.2	
85 Toluene	91	13.923	13.923	0.000	94	846566	20.0	18.8	
84 trans-1,3-Dichloropropene	75	14.057	14.057	0.000	95	414791	20.0	20.1	
86 1,1,2-Trichloroethane	97	14.288	14.288	0.000	95	280236	20.0	17.7	
87 2-Hexanone	58	14.337	14.337	0.000	91	255425	20.0	18.1	
93 Tetrachloroethene	166	14.896	14.896	0.000	96	564457	20.0	20.0	
92 Chlorodibromomethane	129	15.042	15.042	0.000	99	709535	20.0	21.8	
94 Ethylene Dibromide	107	15.346	15.346	0.000	99	489232	20.0	19.3	
99 n-Nonane	43	15.949	15.949	0.000	95	880291	20.0	19.2	
96 Chlorobenzene	112	15.997	15.997	0.000	94	757538	20.0	18.7	
97 Ethylbenzene	91	16.095	16.095	0.000	98	1055816	20.0	19.4	
98 m-Xylene & p-Xylene	91	16.216	16.216	0.000	98	1642868	40.0	39.5	
101 o-Xylene	91	16.843	16.843	0.000	99	825343	20.0	19.4	
100 Styrene	104	16.861	16.861	0.000	98	657438	20.0	20.1	
102 Bromoform	173	17.293	17.293	0.000	98	759538	20.0	22.4	
104 Isopropylbenzene	120	17.378	17.378	0.000	96	350475	20.0	20.5	
103 1,1,2,2-Tetrachloroethane	83	17.512	17.512	0.000	98	504353	20.0	16.7	
105 1,2,3-Trichloropropane	110	17.731	17.731	0.000	91	191271	20.0	20.5	
113 n-Decane	57	17.920	17.920	0.000	87	781946	20.0	21.0	
107 N-Propylbenzene	91	17.981	17.981	0.000	99	1312327	20.0	18.9	
110 4-Ethyltoluene	120	18.145	18.145	0.000	99	373768	20.0	19.7	
111 1,3,5-Trimethylbenzene	120	18.212	18.212	0.000	93	488433	20.0	19.2	
109 2-Chlorotoluene	126	18.230	18.230	0.000	99	363986	20.0	20.1	
112 Alpha Methyl Styrene	118	18.632	18.632	0.000	88	510813	20.0	20.7	
114 tert-Butylbenzene	91	18.753	18.753	0.000	94	742580	20.0	20.2	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
115 1,2,4-Trimethylbenzene	120	18.802	18.802	0.000	94	477099	20.0	19.7	
116 sec-Butylbenzene	105	19.076	19.076	0.000	98	1440859	20.0	20.2	
121 4-Isopropyltoluene	119	19.276	19.276	0.000	98	1247001	20.0	21.0	
117 1,3-Dichlorobenzene	146	19.392	19.392	0.000	98	798510	20.0	21.8	
120 1,4-Dichlorobenzene	146	19.532	19.532	0.000	95	787869	20.0	21.9	
118 Benzyl chloride	91	19.648	19.648	0.000	99	814860	16.0	16.8	
124 Undecane	57	19.714	19.714	0.000	92	620542	20.0	26.0	
123 n-Butylbenzene	92	19.891	19.891	0.000	97	509763	20.0	19.1	
122 1,2-Dichlorobenzene	146	20.092	20.092	0.000	96	708352	20.0	20.9	
125 Dodecane	57	21.418	21.418	0.000	90	385114	20.0	35.5	E
126 1,2,4-Trichlorobenzene	180	22.902	22.902	0.000	95	493457	20.0	23.5	
128 Hexachlorobutadiene	225	23.261	23.261	0.000	98	557420	20.0	25.7	
127 Naphthalene	128	23.383	23.383	0.000	99	943793	20.0	23.1	
129 1,2,3-Trichlorobenzene	180	23.930	23.930	0.000	96	418337	20.0	24.4	
A 144 C6 Range	1	8.709	(8.609-8.809)		0	1866647	20.0	17.9	
A 145 C3-C10	1	10.994	(4.068-17.920)		0	95522392	20.0	1213.2	
A 146 GRO	1	12.794	(3.968-21.621)		0	143454557	20.0	1526.0	
A 148 C4-C12	1	13.166	(4.637-21.621)		0	139229415	20.0	1484.6	
A 147 Toluene Range	1	13.917	(13.850-13.984)		0	2218010	20.0	16.4	
A 154 Total VOC as Hexane	1	14.294	(4.068-24.521)		0	155556989	20.0	1494.6	E
A 151 Total VOCs as Tetrachloroe	1	14.294	(4.068-24.521)		0	155556989	20.0	1014.4	E
A 150 Nonmethane Organic Compoun	1	14.294	(4.068-24.521)		0	155556989	20.0	1494.6	E
A 152 TVOC as Toluene	1	14.393	(4.356-24.431)		0	150289504	20.0	1113.1	E
A 149 PCE Range	1	14.906	(14.836-14.976)		0	3140207	20.0	20.5	
A 153 C6-C12	1	15.073	(8.524-21.621)		0	116640639	20.0	1664.5	
S 155 Xylenes, Total	91				0		60.0	58.9	

QC Flag Legend

Processing Flags

E - Exceeded Maximum Amount

Review Flags

M - Manually Integrated

Reagents:

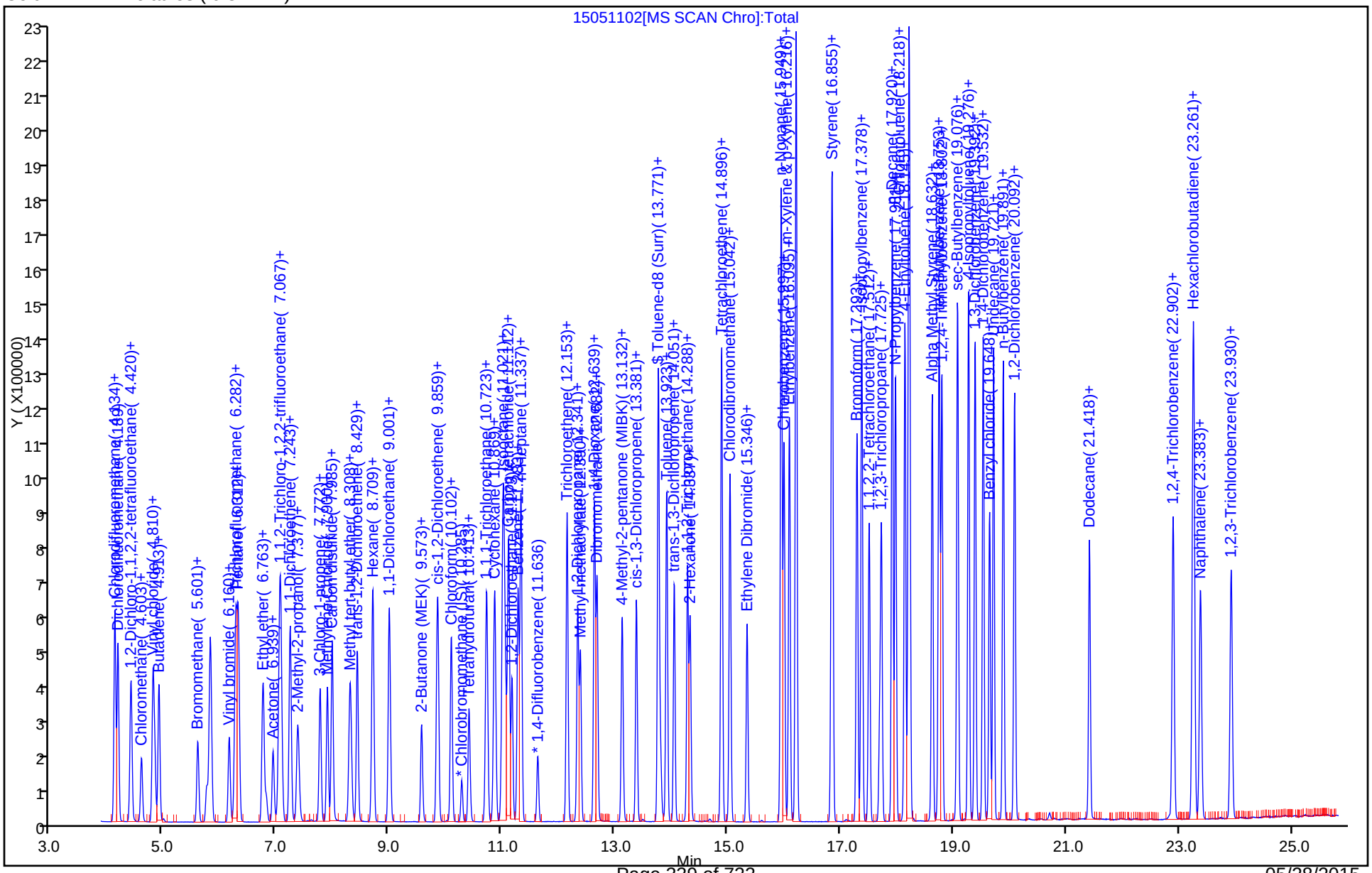
VACORPIC40_00188	Amount Added: 125.00	Units: mL	
VASUISIM_00177	Amount Added: 50.00	Units: mL	Run Reagent

Report Date: 11-May-2015 17:55:48 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Sacramento

Data File:	\\SACCHROM\ChromData\ATMS2\20150511-21702.b\15051102.D				
Injection Date:	11-May-2015 13:38:30	Instrument ID:	ATMS2	Operator ID:	SRS
Lims ID:	CCVIS 20ppbv			Worklist Smp#:	2
Client ID:					
Purge Vol:	250.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	1
Method:	TO15_ATMS2N	Limit Group:	MSA - TO15 - ICAL		

Column: RTX Volatiles (0.32 mm)

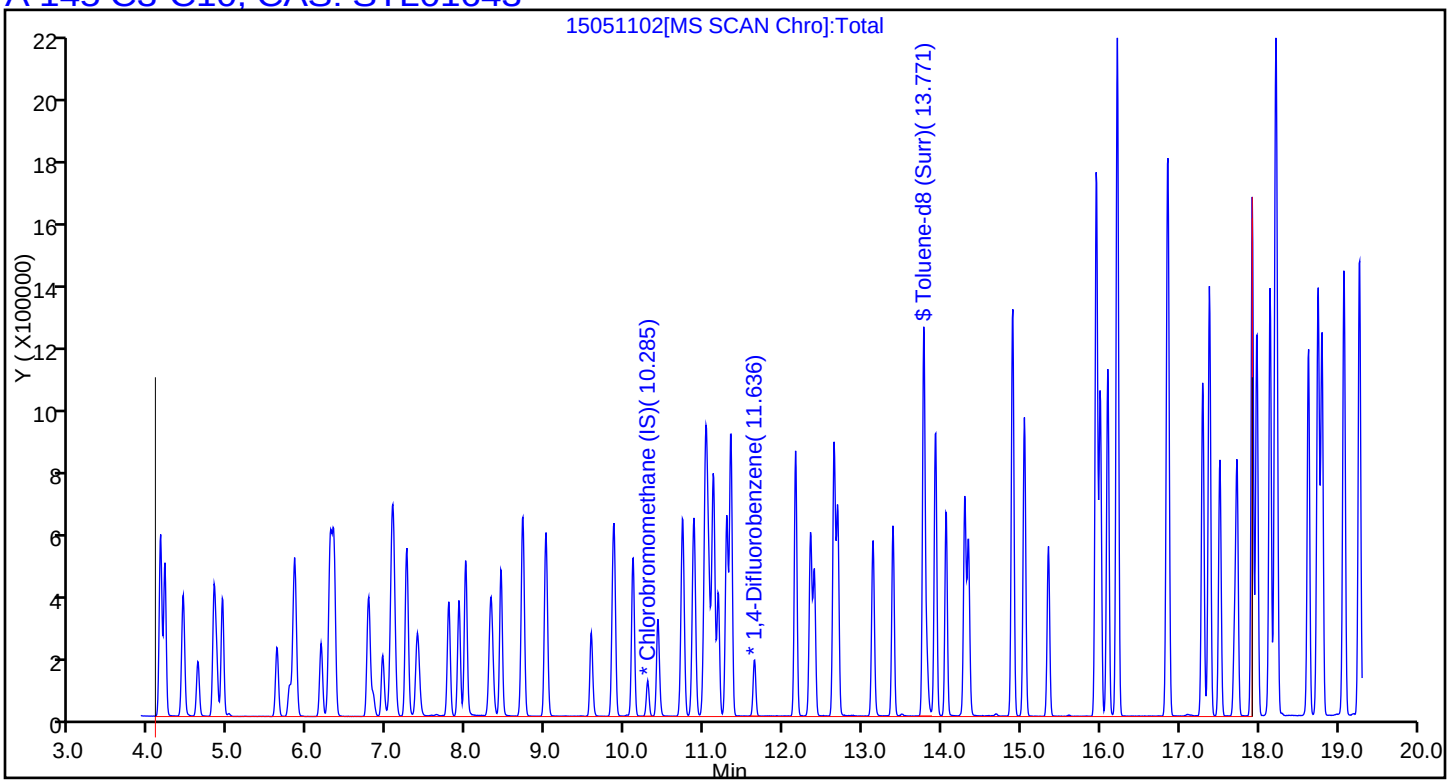


Report Date: 11-May-2015 17:55:48 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Sacramento

Data File:	\\SACCHROM\ChromData\ATMS2\20150511-21702.b\15051102.D				
Injection Date:	11-May-2015 13:38:30	Instrument ID:	ATMS2		
Lims ID:	CCVIS 20ppbv				
Client ID:					
Operator ID:	SRS	ALS Bottle#:	1	Worklist Smp#:	2
Purge Vol:	250.000 mL	Dil. Factor:	1.0000		
Method:	TO15_ATMS2N	Limit Group:	MSA - TO15 - ICAL		
Column:	RTX Volatiles (0.32 mm)	Detector	MS SCAN		

A 145 C3-C10, CAS: STL01643

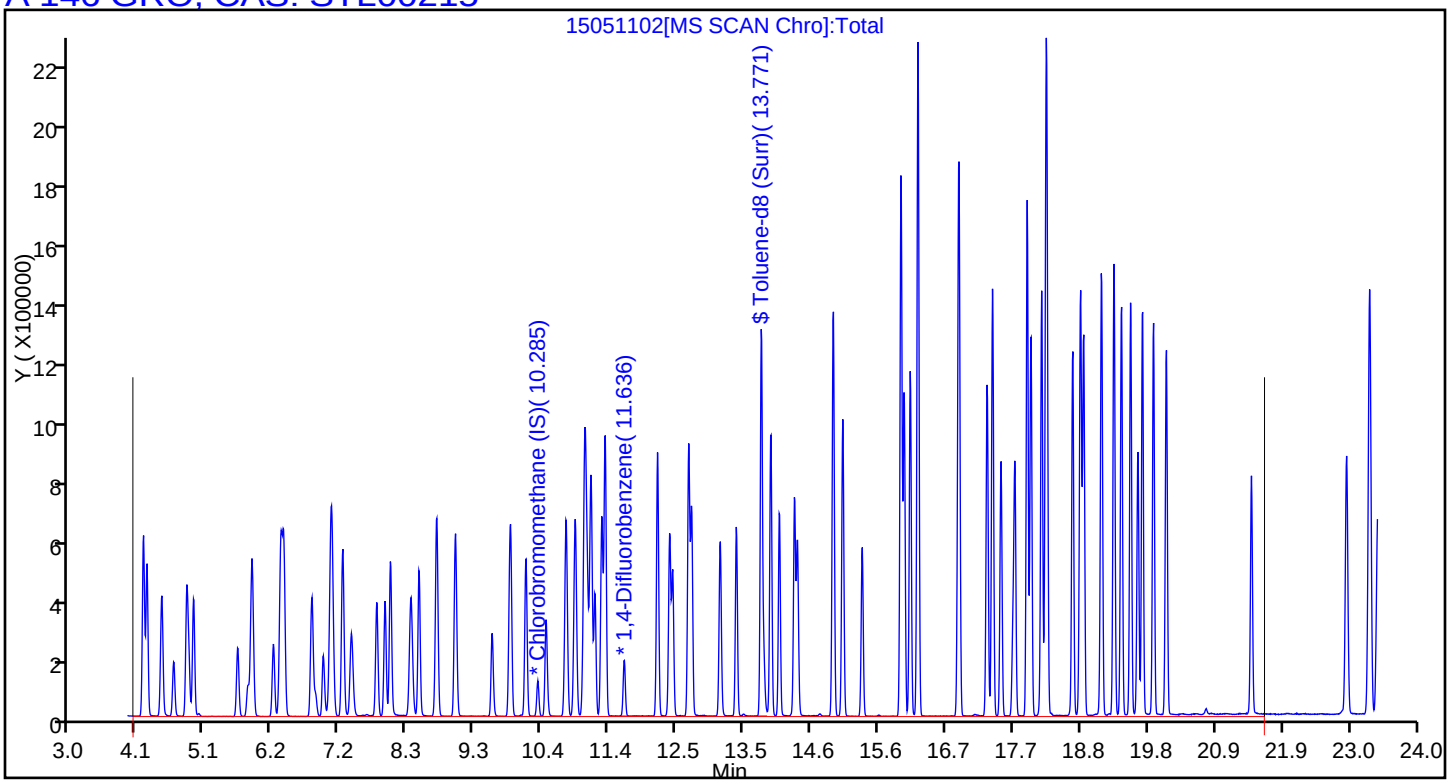


Report Date: 11-May-2015 17:55:48 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Sacramento

Data File:	\\SACCHROM\ChromData\ATMS2\20150511-21702.b\15051102.D				
Injection Date:	11-May-2015 13:38:30	Instrument ID:	ATMS2		
Lims ID:	CCVIS 20ppbv				
Client ID:					
Operator ID:	SRS	ALS Bottle#:	1	Worklist Smp#:	2
Purge Vol:	250.000 mL	Dil. Factor:	1.0000		
Method:	TO15_ATMS2N	Limit Group:	MSA - TO15 - ICAL		
Column:	RTX Volatiles (0.32 mm)	Detector	MS SCAN		

A 146 GRO, CAS: STL00215

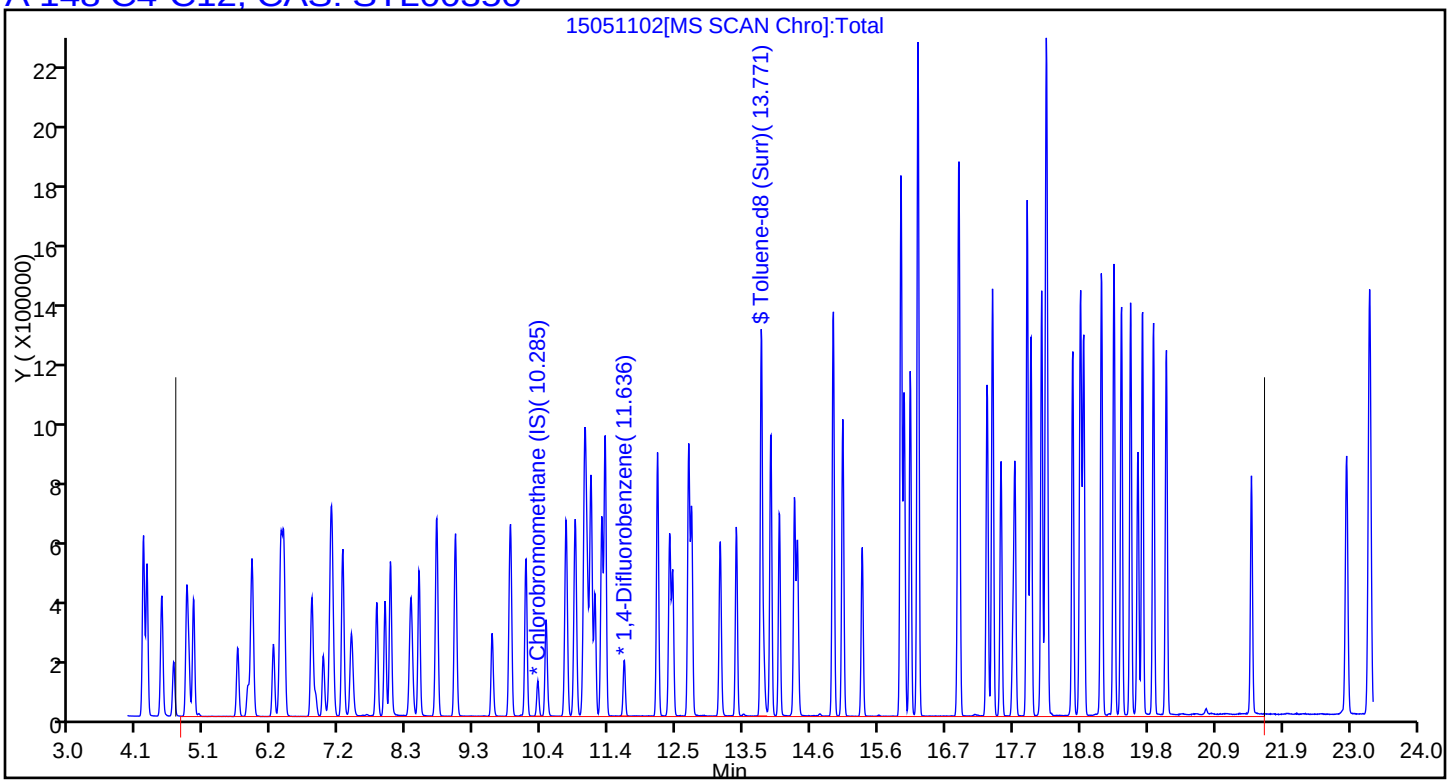


Report Date: 11-May-2015 17:55:48 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Sacramento

Data File:	\\SACCHROM\ChromData\ATMS2\20150511-21702.b\15051102.D				
Injection Date:	11-May-2015 13:38:30	Instrument ID:	ATMS2		
Lims ID:	CCVIS 20ppbv				
Client ID:					
Operator ID:	SRS	ALS Bottle#:	1	Worklist Smp#:	2
Purge Vol:	250.000 mL	Dil. Factor:	1.0000		
Method:	TO15_ATMS2N	Limit Group:	MSA - TO15 - ICAL		
Column:	RTX Volatiles (0.32 mm)	Detector	MS SCAN		

A 148 C4-C12, CAS: STL00350

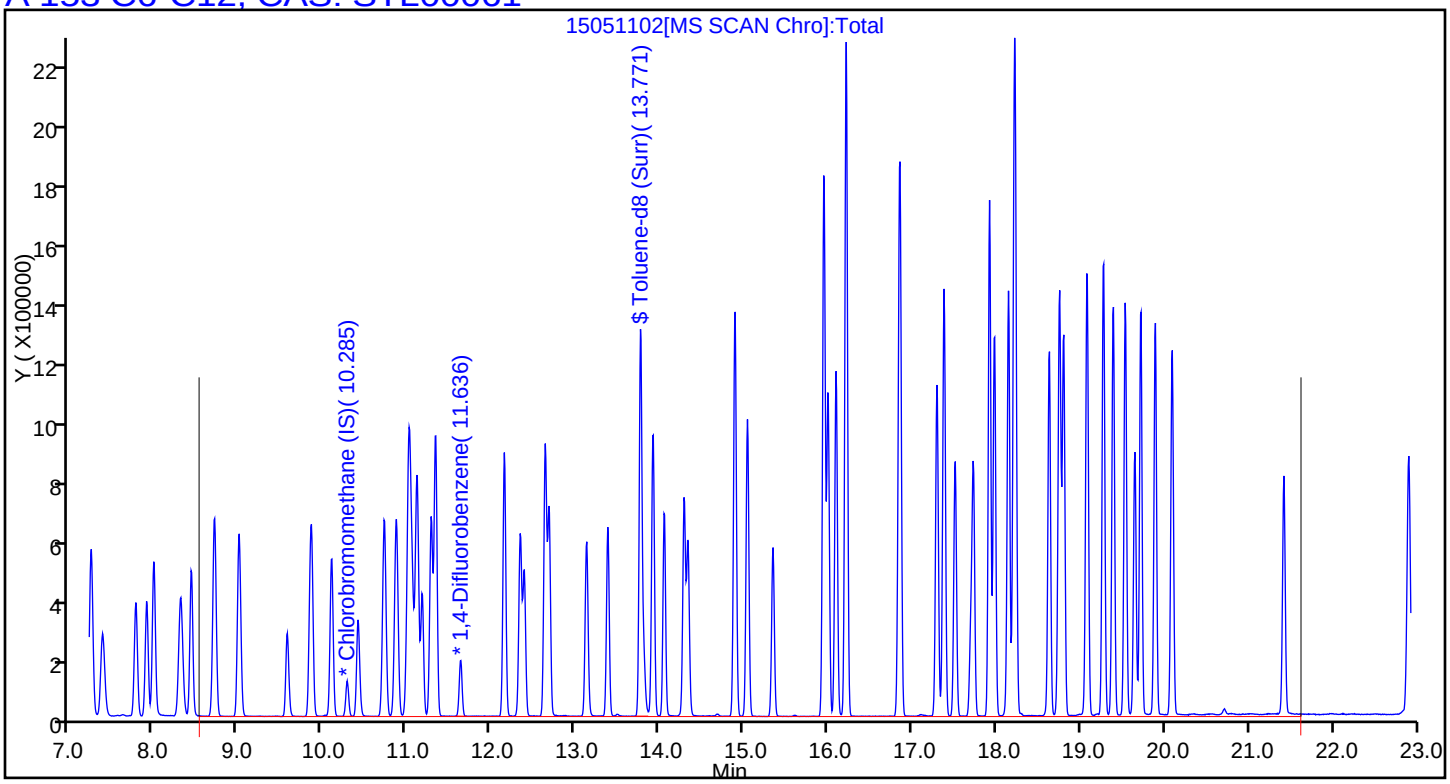


Report Date: 11-May-2015 17:55:49 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Sacramento

Data File:	\\SACCHROM\ChromData\ATMS2\20150511-21702.b\15051102.D				
Injection Date:	11-May-2015 13:38:30	Instrument ID:	ATMS2		
Lims ID:	CCVIS 20ppbv				
Client ID:					
Operator ID:	SRS	ALS Bottle#:	1	Worklist Smp#:	2
Purge Vol:	250.000 mL	Dil. Factor:	1.0000		
Method:	TO15_ATMS2N	Limit Group:	MSA - TO15 - ICAL		
Column:	RTX Volatiles (0.32 mm)	Detector	MS SCAN		

A 153 C6-C12, CAS: STL00061



FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Sacramento Job No.: 320-12924-1

SDG No.:

Lab Sample ID: CCVIS 320-73563/2 Calibration Date: 05/11/2015 13:38

Instrument ID: ATMS2 Calib Start Date: 03/18/2015 02:43

GC Column: RTX-Volatiles ID: 0.32(mm) Calib End Date: 03/18/2015 09:04

Lab File ID: 15051102.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Propylene	Ave	1.066	0.9152		17.2	20.0	-14.2	30.0
Chlorodifluoromethane	Ave	1.962	2.114		21.5	20.0	7.7	30.0
Dichlorodifluoromethane	Ave	2.470	2.479		20.1	20.0	0.3	30.0
1,2-Dichloro-1,1,2,2-tetrafluoroethane	Ave	1.203	1.030		17.1	20.0	-14.4	30.0
Chloromethane	Ave	1.106	1.106		20.0	20.0	0.0	30.0
n-Butane	Ave	2.191	2.038		18.6	20.0	-7.0	30.0
Vinyl chloride	Ave	1.123	0.9852		17.5	20.0	-12.3	30.0
1,3-Butadiene	Ave	1.090	1.010		18.5	20.0	-7.3	30.0
Bromomethane	Ave	0.9349	0.8180		17.5	20.0	-12.5	30.0
Chloroethane	Ave	0.5388	0.4548		16.9	20.0	-15.6	30.0
Vinyl bromide	Ave	1.091	0.9634		17.7	20.0	-11.7	30.0
Trichlorofluoromethane	Ave	3.079	3.217		20.9	20.0	4.5	30.0
n-Pentane	Ave	2.540	2.194		17.3	20.0	-13.6	30.0
2-Propanol	Ave	2.487	2.276		18.3	20.0	-8.5	30.0
Ethyl ether	Ave	0.4550	0.3631		16.0	20.0	-20.2	30.0
Acrolein	Ave	0.3192	0.2996		18.8	20.0	-6.1	30.0
Acetone	Ave	1.465	1.415		19.3	20.0	-3.4	30.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	2.301	2.018		17.5	20.0	-12.3	30.0
Acetonitrile	Ave	0.7715	0.6638		17.2	20.0	-14.0	30.0
1,1-Dichloroethene	Ave	1.926	1.800		18.7	20.0	-6.6	30.0
tert-Butyl alcohol (TBA)	Ave	2.137	2.022		18.9	20.0	-5.3	30.0
Allyl chloride	Ave	1.635	1.465		17.9	20.0	-10.4	30.0
Methylene Chloride	Ave	1.474	1.394		18.9	20.0	-5.4	30.0
Acrylonitrile	Ave	0.6514	0.6804		20.9	20.0	4.4	30.0
Carbon disulfide	Ave	3.070	2.461		16.0	20.0	-19.9	30.0
Methyl-t-Butyl Ether (MTBE)	Ave	2.485	2.232		18.0	20.0	-10.2	30.0
trans-1,2-Dichloroethene	Ave	1.594	1.494		18.7	20.0	-6.3	30.0
Hexane	Ave	1.578	1.484		18.8	20.0	-5.9	30.0
Vinyl acetate	Ave	2.632	2.518		19.1	20.0	-4.4	30.0
1,1-Dichloroethane	Ave	1.963	1.727		17.6	20.0	-12.0	30.0
2-Butanone (MEK)	Ave	0.3862	0.2993		15.5	20.0	-22.5	30.0
Ethyl acetate	Ave	2.195	2.000		18.2	20.0	-8.9	30.0
cis-1,2-Dichloroethene	Ave	1.073	0.9098		17.0	20.0	-15.2	30.0
Chloroform	Ave	2.142	1.971		18.4	20.0	-8.0	30.0
Tetrahydrofuran	Ave	1.316	1.132		17.2	20.0	-13.9	30.0
1,1,1-Trichloroethane	Ave	2.312	2.386		20.6	20.0	3.2	30.0
Cyclohexane	Ave	0.3829	0.3230		16.9	20.0	-15.6	30.0
2,2,4-Trimethylpentane	Ave	1.533	1.469		19.2	20.0	-4.2	30.0
n-Butanol	Ave	0.9290	0.6886		14.8	20.0	-25.9	30.0
Carbon tetrachloride	Ave	0.6625	0.7623		23.0	20.0	15.1	30.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Sacramento Job No.: 320-12924-1

SDG No.:

Lab Sample ID: CCVIS 320-73563/2 Calibration Date: 05/11/2015 13:38

Instrument ID: ATMS2 Calib Start Date: 03/18/2015 02:43

GC Column: RTX-Volatiles ID: 0.32(mm) Calib End Date: 03/18/2015 09:04

Lab File ID: 15051102.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,2-Dichloroethane	Ave	0.3669	0.4382		23.9	20.0	19.4	30.0
Benzene	Ave	0.8118	0.6729		16.6	20.0	-17.1	30.0
n-Heptane	Ave	0.6555	0.6205		18.9	20.0	-5.3	30.0
Trichloroethene	Ave	0.4226	0.4100		19.4	20.0	-3.0	30.0
1,2-Dichloropropane	Ave	0.1217	0.1341		22.0	20.0	10.1	30.0
Methyl methacrylate	Ave	0.2208	0.1808		16.4	20.0	-18.1	30.0
Bromodichloromethane	Ave	0.3842	0.4012		20.9	20.0	4.4	30.0
1,4-Dioxane	Ave	0.1491	0.1274		17.1	20.0	-14.6	30.0
Dibromomethane	Ave	0.3671	0.3925		21.4	20.0	6.9	30.0
4-Methyl-2-pentanone (MIBK)	Ave	0.6327	0.6039		19.1	20.0	-4.6	30.0
cis-1,3-Dichloropropene	Ave	0.4397	0.4015		18.3	20.0	-8.7	30.0
n-Octane	Ave	1.094	0.998		18.2	20.0	-8.8	30.0
Toluene	Ave	0.9392	0.8846		18.8	20.0	-5.8	30.0
trans-1,3-Dichloropropene	Ave	0.4911	0.4947		20.1	20.0	0.7	30.0
1,1,2-Trichloroethane	Ave	0.3773	0.3342		17.7	20.0	-11.4	30.0
NMOC as Hexane	Ave	880.7	606.3		1490	20.0	-31.2*	30.0
Total VOC as Hexane (C6-C12)	Ave	880.7	606.3		1490	20.0	-31.2*	30.0
2-Hexanone	Ave	0.3363	0.3046		18.1	20.0	-9.4	30.0
Tetrachloroethene	Ave	0.6718	0.6732		20.0	20.0	0.2	30.0
Dibromochloromethane	Ave	0.7748	0.8462		21.8	20.0	9.2	30.0
1,2-Dibromoethane (EDB)	Ave	0.6037	0.5835		19.3	20.0	-3.4	30.0
n-Nonane	Ave	1.094	1.050		19.2	20.0	-4.0	30.0
Chlorobenzene	Ave	0.9649	0.9035		18.7	20.0	-6.4	30.0
Ethylbenzene	Ave	1.300	1.259		19.4	20.0	-3.2	30.0
m,p-Xylene	Ave	0.9920	0.9797		39.5	40.0	-1.2	30.0
o-Xylene	Ave	1.014	0.9843		19.4	20.0	-2.9	30.0
Styrene	Ave	0.7814	0.7841		20.1	20.0	0.3	30.0
Bromoform	Ave	0.8106	0.9058		22.4	20.0	11.8	30.0
Isopropylbenzene	Ave	0.4084	0.4180		20.5	20.0	2.3	30.0
1,1,2,2-Tetrachloroethane	Ave	0.7202	0.6015		16.7	20.0	-16.5	30.0
1,2,3-Trichloropropane	Ave	0.2225	0.2281		20.5	20.0	2.5	30.0
N-Propylbenzene	Ave	1.653	1.565		18.9	20.0	-5.3	30.0
4-Ethyltoluene	Ave	0.4536	0.4458		19.7	20.0	-1.7	30.0
1,3,5-Trimethylbenzene	Ave	0.6080	0.5825		19.2	20.0	-4.2	30.0
2-Chlorotoluene	Ave	0.4317	0.4341		20.1	20.0	0.6	30.0
alpha-Methylstyrene	Ave	0.5892	0.6092		20.7	20.0	3.4	30.0
tert-Butylbenzene	Ave	0.8780	0.8856		20.2	20.0	0.9	30.0
1,2,4-Trimethylbenzene	Ave	0.5775	0.5690		19.7	20.0	-1.5	30.0
sec-Butylbenzene	Ave	1.700	1.718		20.2	20.0	1.1	30.0
4-Isopropyltoluene	Ave	1.417	1.487		21.0	20.0	4.9	30.0
1,3-Dichlorobenzene	Ave	0.8751	0.9523		21.8	20.0	8.8	30.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Sacramento Job No.: 320-12924-1

SDG No.:

Lab Sample ID: CCVIS 320-73563/2 Calibration Date: 05/11/2015 13:38

Instrument ID: ATMS2 Calib Start Date: 03/18/2015 02:43

GC Column: RTX-Volatiles ID: 0.32(mm) Calib End Date: 03/18/2015 09:04

Lab File ID: 15051102.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,4-Dichlorobenzene	Ave	0.8572	0.9396		21.9	20.0	9.6	30.0
Benzyl chloride	Ave	1.155	1.215		16.8	16.0	5.2	30.0
n-Butylbenzene	Ave	0.6351	0.6080		19.1	20.0	-4.3	30.0
1,2-Dichlorobenzene	Ave	0.8065	0.8448		20.9	20.0	4.7	30.0
1,2,4-Trichlorobenzene	Ave	0.5008	0.5885		23.5	20.0	17.5	30.0
Hexachlorobutadiene	Ave	0.5166	0.6648		25.7	20.0	28.7	30.0
Naphthalene	Ave	0.9725	1.126		23.1	20.0	15.7	30.0
1,2,3-Trichlorobenzene	Ave	0.4097	0.4989		24.4	20.0	21.8	30.0
1,2-Dichloroethane-d4 (Surr)	Ave	1.309	1.501		4.59	4.00	14.7	30.0
Toluene-d8 (Surr)	Ave	0.5894	0.5877		3.99	4.00	-0.3	30.0
4-Bromofluorobenzene (Surr)	Ave	0.5852	0.6361		4.35	4.00	8.7	30.0

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\SACCHROM\ChromData\ATMS2\20150511-21702.b\15051102.D
Lims ID: CCVIS 20ppbv
Client ID:
Sample Type: CCVIS
Inject. Date: 11-May-2015 13:38:30 ALS Bottle#: 1 Worklist Smp#: 2
Purge Vol: 250.000 mL Dil. Factor: 1.0000
Sample Info: CCVIS 20ppbv
Misc. Info.: 125mL
Operator ID: SRS Instrument ID: ATMS2
Sublist: chrom-TO15_ATMS2N*sub53

Method: \\SACCHROM\ChromData\ATMS2\20150511-21702.b\TO15_ATMS2N.m
Limit Group: MSA - TO15 - ICAL
Last Update: 11-May-2015 17:55:46 Calib Date: 18-Mar-2015 18:13:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\SACCHROM\ChromData\ATMS2\20150317-20264.b\15031726.D

Column 1 : RTX Volatiles (0.32 mm) Det: MS SCAN
Process Host: XAWRK023

First Level Reviewer: scottrs Date: 11-May-2015 17:55:46

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	130	10.285	10.285	0.000	97	51315	4.00	4.00	
* 2 1,4-Difluorobenzene	114	11.629	11.629	0.000	95	191392	4.00	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.949	15.949	0.000	88	167698	4.00	4.00	
$ 4 1,2-Dichloroethane-d4 (Sur	65	11.051	11.051	0.000	98	77048	4.00	4.59	
$ 5 Toluene-d8 (Surr)	100	13.807	13.807	0.000	96	112484	4.00	3.99	
$ 6 4-Bromofluorobenzene (Surr	174	17.695	17.695	0.000	92	106665	4.00	4.35	
14 Propene	41	4.128	4.128	0.000	43	234807	20.0	17.2	
13 Chlorodifluoromethane	51	4.141	4.141	0.000	97	542372	20.0	21.5	
15 Dichlorodifluoromethane	85	4.189	4.189	0.000	99	635984	20.0	20.1	
19 1,2-Dichloro-1,1,2,2-tetra	135	4.420	4.420	0.000	88	264233	20.0	17.1	
18 Chloromethane	50	4.603	4.603	0.000	99	283727	20.0	20.0	
22 Butane	43	4.810	4.810	0.000	97	522857	20.0	18.6	
20 Vinyl chloride	62	4.840	4.840	0.000	98	252776	20.0	17.5	
21 Butadiene	39	4.913	4.913	0.000	97	259264	20.0	18.5	
25 Bromomethane	94	5.601	5.601	0.000	98	209873	20.0	17.5	
26 Chloroethane	64	5.759	5.759	0.000	96	116693	20.0	16.9	
27 Vinyl bromide	106	6.160	6.160	0.000	98	247172	20.0	17.7	
28 Trichlorofluoromethane	101	6.276	6.276	0.000	98	825481	20.0	20.9	
38 Pentane	43	6.325	6.325	0.000	97	562986	20.0	17.3	
37 Isopropyl alcohol	45	6.756	6.756	0.000	77	583872	20.0	18.3	
39 Ethyl ether	74	6.769	6.769	0.000	100	93172	20.0	16.0	
29 Acrolein	56	6.817	6.817	0.000	96	76877	20.0	18.8	
31 Acetone	43	6.939	6.939	0.000	100	363151	20.0	19.3	
43 1,1,2-Trichloro-1,2,2-trif	101	7.067	7.067	0.000	93	517695	20.0	17.5	
30 Acetonitrile	41	7.237	7.237	0.000	53	170320	20.0	17.2	
41 1,1-Dichloroethene	61	7.243	7.243	0.000	93	461778	20.0	18.7	
44 2-Methyl-2-propanol	59	7.377	7.377	0.000	96	518903	20.0	18.9	
46 3-Chloro-1-propene	41	7.772	7.772	0.000	95	375784	20.0	17.9	
47 Methylene Chloride	49	7.900	7.900	0.000	92	357643	20.0	18.9	
48 Carbon disulfide	76	7.985	7.985	0.000	99	631305	20.0	16.0	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
42 Acrylonitrile	53	7.985	7.985	0.000	44	174573	20.0	20.9	
50 Methyl tert-butyl ether	73	8.308	8.308	0.000	96	572612	20.0	18.0	
49 trans-1,2-Dichloroethene	61	8.429	8.429	0.000	94	383357	20.0	18.7	
55 Hexane	41	8.709	8.709	0.000	92	380756	20.0	18.8	
52 Vinyl acetate	43	8.995	8.995	0.000	100	645939	20.0	19.1	
53 1,1-Dichloroethane	63	9.007	9.007	0.000	99	443003	20.0	17.6	
54 2-Butanone (MEK)	72	9.573	9.573	0.000	97	76779	20.0	15.5	
58 Ethyl acetate	43	9.841	9.841	0.000	98	513065	20.0	18.2	
57 cis-1,2-Dichloroethene	96	9.865	9.865	0.000	98	233437	20.0	17.0	
61 Chloroform	83	10.102	10.102	0.000	96	505674	20.0	18.4	
62 Tetrahydrofuran	42	10.413	10.413	0.000	90	290567	20.0	17.2	
65 1,1,1-Trichloroethane	97	10.729	10.729	0.000	96	612258	20.0	20.6	
70 Cyclohexane	84	10.869	10.869	0.000	92	309082	20.0	16.9	
74 Isooctane	57	11.021	11.021	0.000	97	1405989	20.0	19.2	
67 n-Butanol	56	11.051	11.051	0.000	90	176676	20.0	14.8	M
69 Carbon tetrachloride	117	11.112	11.112	0.000	97	729484	20.0	23.0	
66 1,2-Dichloroethane	62	11.173	11.173	0.000	97	419361	20.0	23.9	
68 Benzene	78	11.283	11.283	0.000	96	643888	20.0	16.6	
75 n-Heptane	43	11.331	11.331	0.000	96	593789	20.0	18.9	
76 Trichloroethene	130	12.153	12.153	0.000	96	392312	20.0	19.4	
77 1,2-Dichloropropane	76	12.347	12.347	0.000	87	128277	20.0	22.0	
79 Methyl methacrylate	69	12.390	12.390	0.000	92	173045	20.0	16.4	
80 Dichlorobromomethane	85	12.639	12.639	0.000	98	383917	20.0	20.9	
72 1,4-Dioxane	88	12.645	12.645	0.000	96	121897	20.0	17.1	
78 Dibromomethane	174	12.688	12.688	0.000	89	375643	20.0	21.4	
81 4-Methyl-2-pentanone (MIBK	43	13.132	13.132	0.000	100	577909	20.0	19.1	
83 cis-1,3-Dichloropropene	75	13.381	13.381	0.000	95	384249	20.0	18.3	
88 n-Octane	43	13.771	13.771	0.000	97	836959	20.0	18.2	
85 Toluene	91	13.923	13.923	0.000	94	846566	20.0	18.8	
84 trans-1,3-Dichloropropene	75	14.057	14.057	0.000	95	414791	20.0	20.1	
86 1,1,2-Trichloroethane	97	14.288	14.288	0.000	95	280236	20.0	17.7	
87 2-Hexanone	58	14.337	14.337	0.000	91	255425	20.0	18.1	
93 Tetrachloroethene	166	14.896	14.896	0.000	96	564457	20.0	20.0	
92 Chlorodibromomethane	129	15.042	15.042	0.000	99	709535	20.0	21.8	
94 Ethylene Dibromide	107	15.346	15.346	0.000	99	489232	20.0	19.3	
99 n-Nonane	43	15.949	15.949	0.000	95	880291	20.0	19.2	
96 Chlorobenzene	112	15.997	15.997	0.000	94	757538	20.0	18.7	
97 Ethylbenzene	91	16.095	16.095	0.000	98	1055816	20.0	19.4	
98 m-Xylene & p-Xylene	91	16.216	16.216	0.000	98	1642868	40.0	39.5	
101 o-Xylene	91	16.843	16.843	0.000	99	825343	20.0	19.4	
100 Styrene	104	16.861	16.861	0.000	98	657438	20.0	20.1	
102 Bromoform	173	17.293	17.293	0.000	98	759538	20.0	22.4	
104 Isopropylbenzene	120	17.378	17.378	0.000	96	350475	20.0	20.5	
103 1,1,2,2-Tetrachloroethane	83	17.512	17.512	0.000	98	504353	20.0	16.7	
105 1,2,3-Trichloropropane	110	17.731	17.731	0.000	91	191271	20.0	20.5	
113 n-Decane	57	17.920	17.920	0.000	87	781946	20.0	21.0	
107 N-Propylbenzene	91	17.981	17.981	0.000	99	1312327	20.0	18.9	
110 4-Ethyltoluene	120	18.145	18.145	0.000	99	373768	20.0	19.7	
111 1,3,5-Trimethylbenzene	120	18.212	18.212	0.000	93	488433	20.0	19.2	
109 2-Chlorotoluene	126	18.230	18.230	0.000	99	363986	20.0	20.1	
112 Alpha Methyl Styrene	118	18.632	18.632	0.000	88	510813	20.0	20.7	
114 tert-Butylbenzene	91	18.753	18.753	0.000	94	742580	20.0	20.2	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
115 1,2,4-Trimethylbenzene	120	18.802	18.802	0.000	94	477099	20.0	19.7	
116 sec-Butylbenzene	105	19.076	19.076	0.000	98	1440859	20.0	20.2	
121 4-Isopropyltoluene	119	19.276	19.276	0.000	98	1247001	20.0	21.0	
117 1,3-Dichlorobenzene	146	19.392	19.392	0.000	98	798510	20.0	21.8	
120 1,4-Dichlorobenzene	146	19.532	19.532	0.000	95	787869	20.0	21.9	
118 Benzyl chloride	91	19.648	19.648	0.000	99	814860	16.0	16.8	
124 Undecane	57	19.714	19.714	0.000	92	620542	20.0	26.0	
123 n-Butylbenzene	92	19.891	19.891	0.000	97	509763	20.0	19.1	
122 1,2-Dichlorobenzene	146	20.092	20.092	0.000	96	708352	20.0	20.9	
125 Dodecane	57	21.418	21.418	0.000	90	385114	20.0	35.5	E
126 1,2,4-Trichlorobenzene	180	22.902	22.902	0.000	95	493457	20.0	23.5	
128 Hexachlorobutadiene	225	23.261	23.261	0.000	98	557420	20.0	25.7	
127 Naphthalene	128	23.383	23.383	0.000	99	943793	20.0	23.1	
129 1,2,3-Trichlorobenzene	180	23.930	23.930	0.000	96	418337	20.0	24.4	
A 144 C6 Range	1	8.709	(8.609-8.809)		0	1866647	20.0	17.9	
A 145 C3-C10	1	10.994	(4.068-17.920)		0	95522392	20.0	1213.2	
A 146 GRO	1	12.794	(3.968-21.621)		0	143454557	20.0	1526.0	
A 148 C4-C12	1	13.166	(4.637-21.621)		0	139229415	20.0	1484.6	
A 147 Toluene Range	1	13.917	(13.850-13.984)		0	2218010	20.0	16.4	
A 154 Total VOC as Hexane	1	14.294	(4.068-24.521)		0	155556989	20.0	1494.6	E
A 151 Total VOCs as Tetrachloroe	1	14.294	(4.068-24.521)		0	155556989	20.0	1014.4	E
A 150 Nonmethane Organic Compoun	1	14.294	(4.068-24.521)		0	155556989	20.0	1494.6	E
A 152 TVOC as Toluene	1	14.393	(4.356-24.431)		0	150289504	20.0	1113.1	E
A 149 PCE Range	1	14.906	(14.836-14.976)		0	3140207	20.0	20.5	
A 153 C6-C12	1	15.073	(8.524-21.621)		0	116640639	20.0	1664.5	
S 155 Xylenes, Total	91				0		60.0	58.9	

QC Flag Legend

Processing Flags

E - Exceeded Maximum Amount

Review Flags

M - Manually Integrated

Reagents:

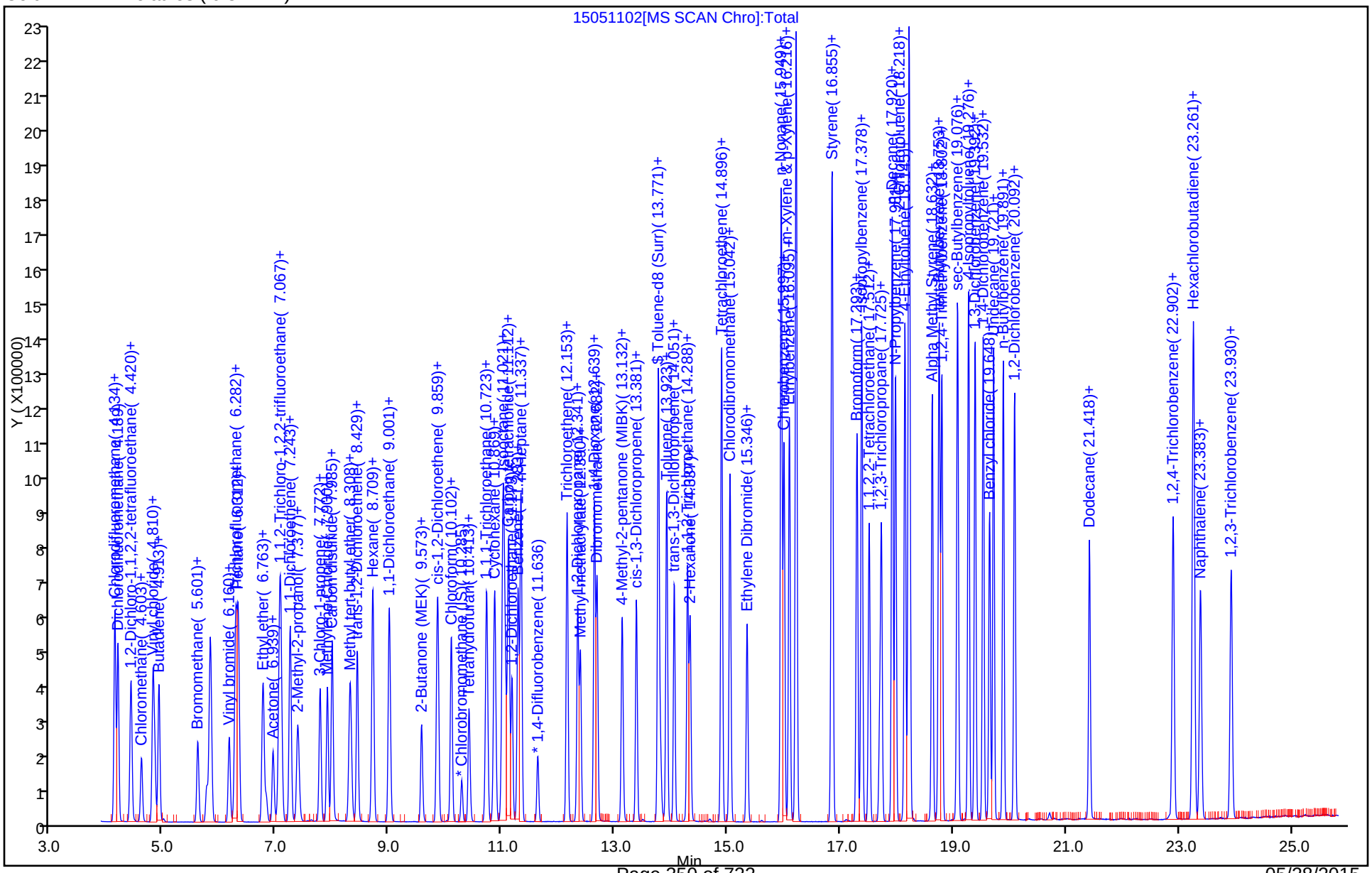
VACORPIC40_00188	Amount Added: 125.00	Units: mL	
VASUISIM_00177	Amount Added: 50.00	Units: mL	Run Reagent

Report Date: 11-May-2015 17:55:48 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Sacramento

Data File:	\\SACCHROM\ChromData\ATMS2\20150511-21702.b\15051102.D				
Injection Date:	11-May-2015 13:38:30	Instrument ID:	ATMS2	Operator ID:	SRS
Lims ID:	CCVIS 20ppbv			Worklist Smp#:	2
Client ID:					
Purge Vol:	250.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	1
Method:	TO15_ATMS2N	Limit Group:	MSA - TO15 - ICAL		

Column: RTX Volatiles (0.32 mm)

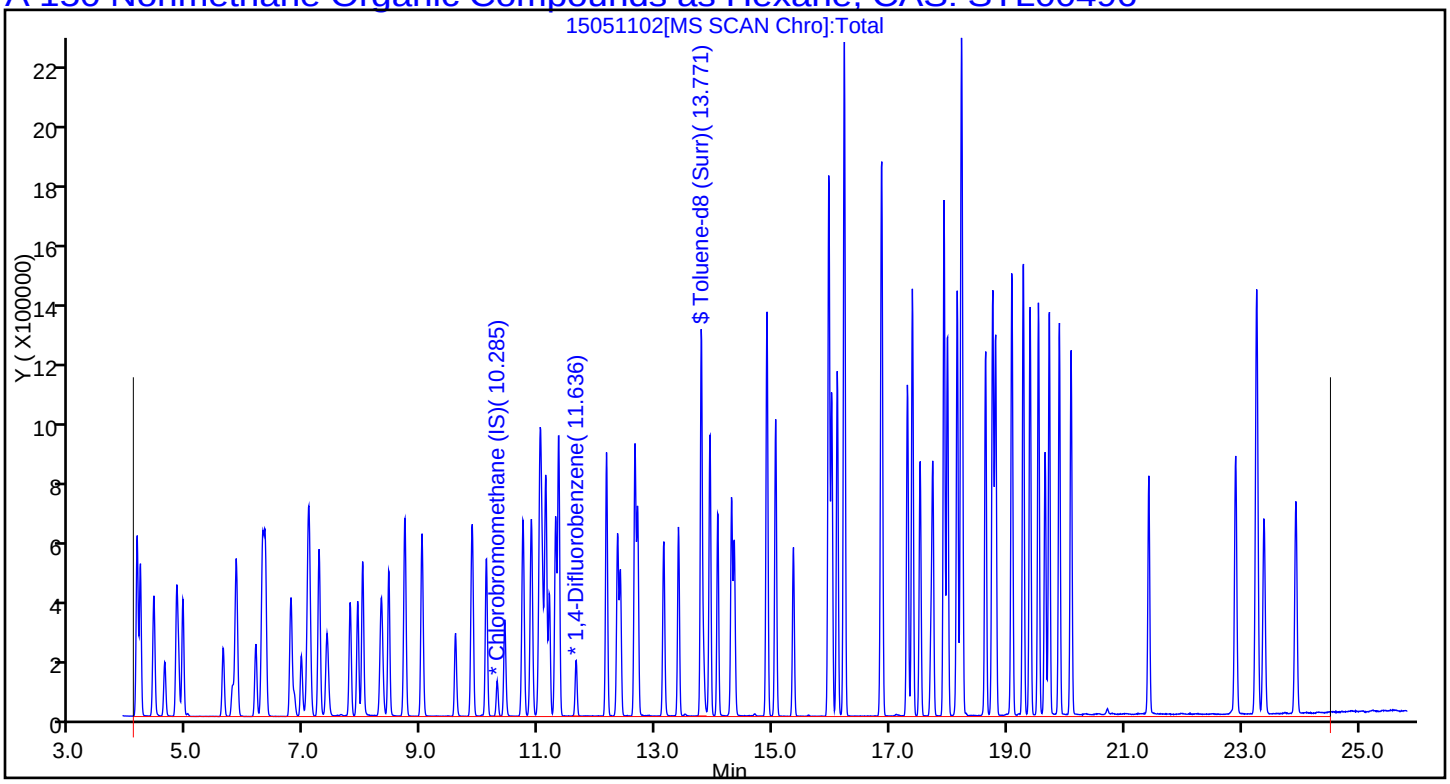


Report Date: 11-May-2015 17:55:48 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Sacramento

Data File:	\\SACCHROM\ChromData\ATMS2\20150511-21702.b\15051102.D				
Injection Date:	11-May-2015 13:38:30	Instrument ID:	ATMS2		
Lims ID:	CCVIS 20ppbv				
Client ID:					
Operator ID:	SRS	ALS Bottle#:	1	Worklist Smp#:	2
Purge Vol:	250.000 mL	Dil. Factor:	1.0000		
Method:	TO15_ATMS2N	Limit Group:	MSA - TO15 - ICAL		
Column:	RTX Volatiles (0.32 mm)	Detector	MS SCAN		

A 150 Nonmethane Organic Compounds as Hexane, CAS: STL00496

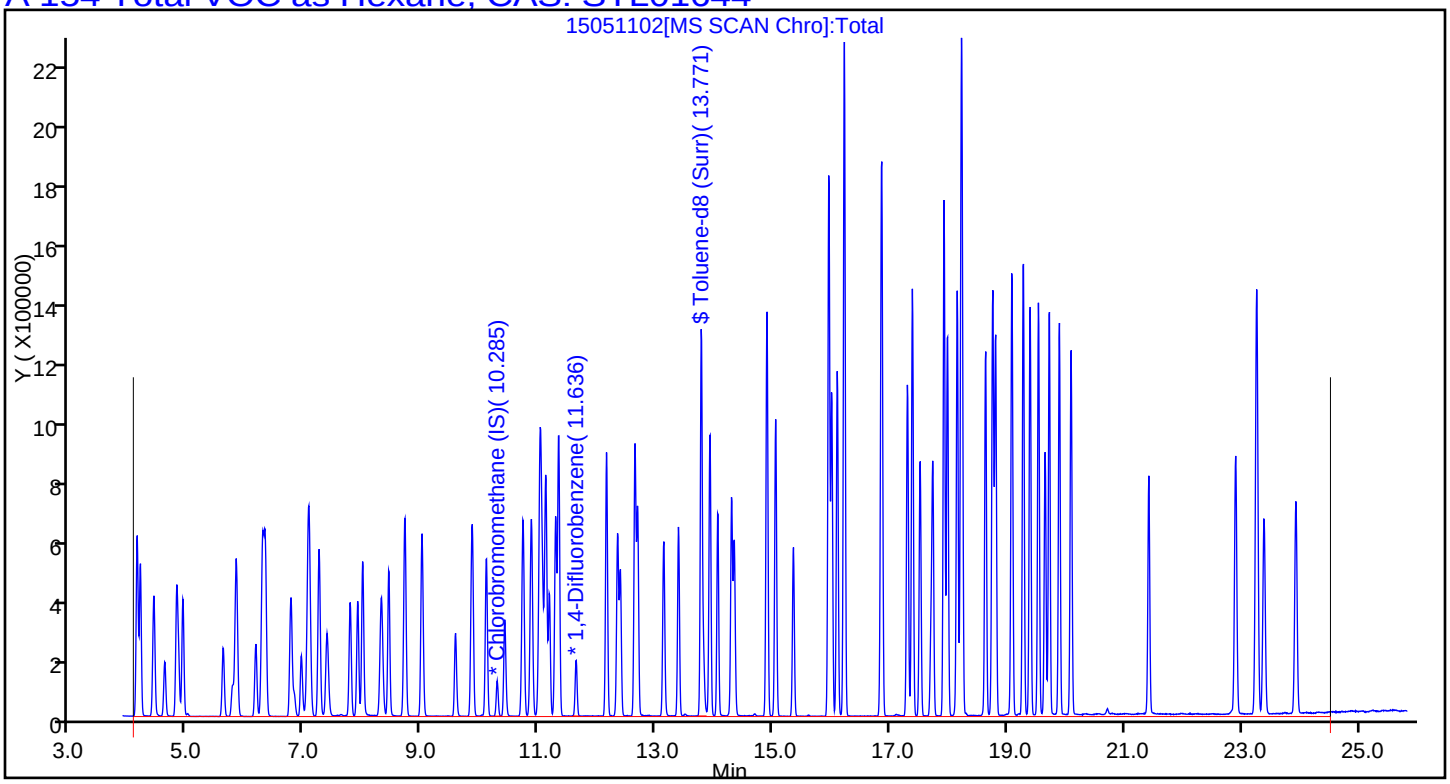


Report Date: 11-May-2015 17:55:48 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Sacramento

Data File:	\\SACCHROM\ChromData\ATMS2\20150511-21702.b\15051102.D				
Injection Date:	11-May-2015 13:38:30	Instrument ID:	ATMS2		
Lims ID:	CCVIS 20ppbv				
Client ID:					
Operator ID:	SRS	ALS Bottle#:	1	Worklist Smp#:	2
Purge Vol:	250.000 mL	Dil. Factor:	1.0000		
Method:	TO15_ATMS2N	Limit Group:	MSA - TO15 - ICAL		
Column:	RTX Volatiles (0.32 mm)	Detector	MS SCAN		

A 154 Total VOC as Hexane, CAS: STL01644



Manual Integration/User Assign Peak Report

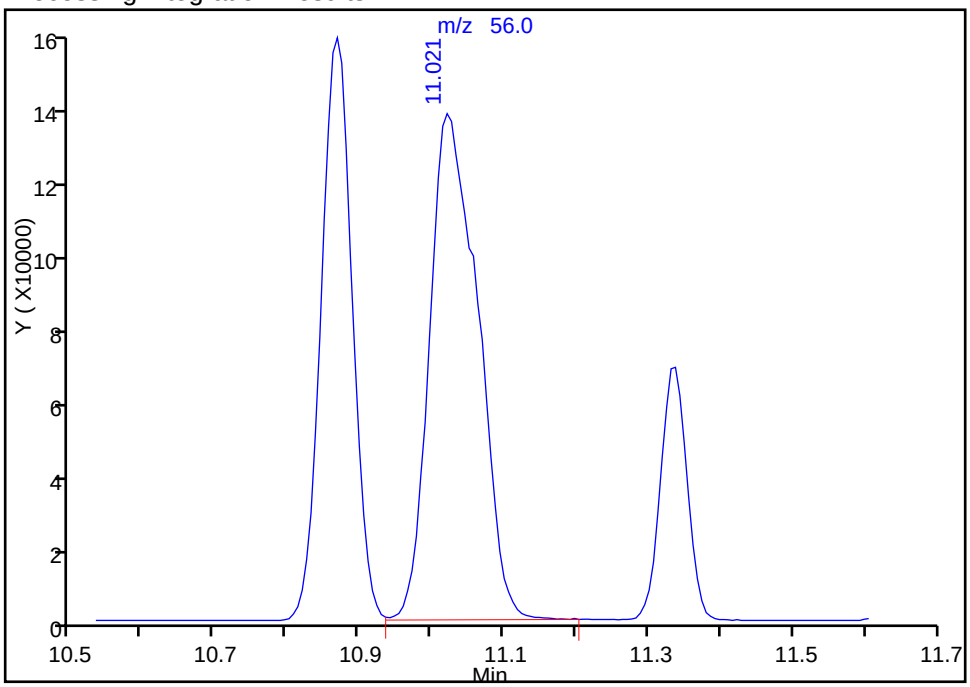
TestAmerica Sacramento

Data File:	\\SACCHROM\ChromData\ATMS2\20150511-21702.b\15051102.D				
Injection Date:	11-May-2015 13:38:30	Instrument ID:	ATMS2		
Lims ID:	CCVIS 20ppbv				
Client ID:					
Operator ID:	SRS	ALS Bottle#:	1	Worklist Smp#:	2
Purge Vol:	250.000 mL	Dil. Factor:	1.0000		
Method:	TO15_ATMS2N	Limit Group:	MSA - TO15 - ICAL		
Column:	RTX Volatiles (0.32 mm)	Detector	MS SCAN		

67 n-Butanol, CAS: 71-36-3

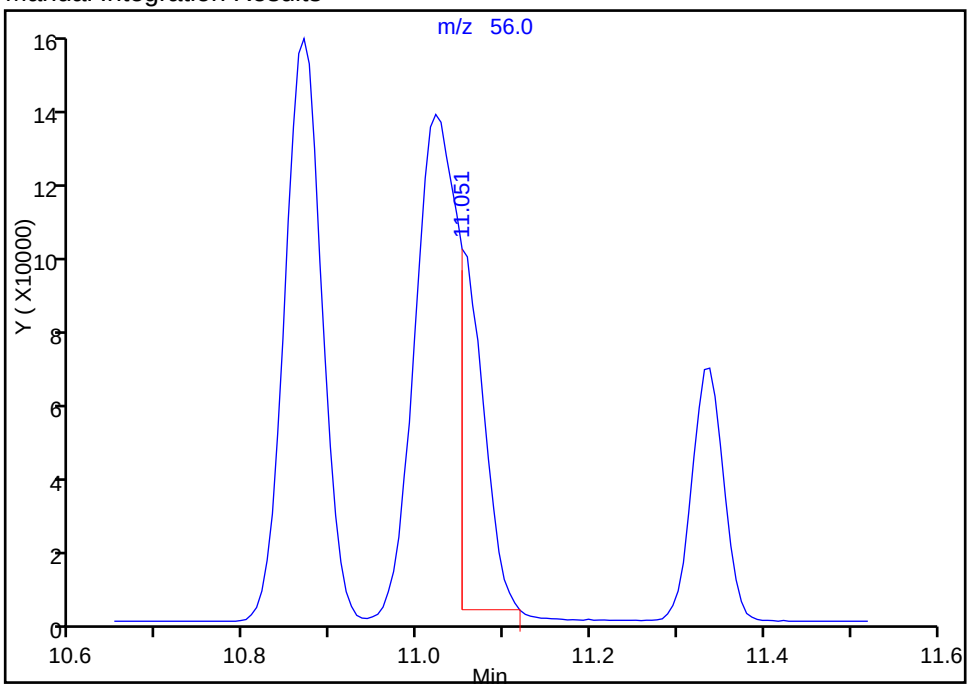
Processing Integration Results

RT: 11.02
Area: 612732
Amount: 51.410524
Amount Units: ppb v/v



Manual Integration Results

RT: 11.05
Area: 176676
Amount: 14.823782
Amount Units: ppb v/v



Reviewer: leeh, 11-May-2015 14:54:37
Audit Action: Manually Integrated
Audit Reason: Split Peak

TestAmerica Sacramento
Target Compound Quantitation Report

Data File:	\\SACCHROM\ChromData\ATMS2\20150317-20264.b\15031701.D				
Lims ID:	BFB				
Client ID:					
Sample Type:	BFB				
Inject. Date:	18-Mar-2015 00:38:30	ALS Bottle#:	16	Worklist Smp#:	2
Injection Vol:	250.0 mL	Dil. Factor:	1.0000		
Sample Info:	IC 0.2PPBV				
Misc. Info.:	50mL				
Operator ID:	SRS	Instrument ID:	ATMS2		
Method:	\\SACCHROM\ChromData\ATMS2\20150317-20264.b\TO15_ATMS2N.m				
Limit Group:	MSA - TO15 - ICAL				
Last Update:	24-Mar-2015 10:32:46	Calib Date:	18-Mar-2015 18:13:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\SACCHROM\ChromData\ATMS2\20150317-20264.b\15031726.D				
Column 1 :	RTX Volatiles (0.32 mm)		Det: MS SCAN		
Process Host:	XAWRK047				

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	130	10.328	10.328	0.000	97	367299	4.00	4.00	s
* 2 1,4-Difluorobenzene	114	11.672	11.672	0.000	94	1568011	4.00	4.00	s
* 3 Chlorobenzene-d5 (IS)	117	15.991	15.991	0.000	87	1409085	4.00	4.00	s
$ 4 1,2-Dichloroethane-d4 (Sur	65	11.088	11.088	0.000	99	491320	4.00	4.09	
$ 5 Toluene-d8 (Surr)	100	13.850	13.850	0.000	99	912354	4.00	3.95	
$ 6 4-Bromofluorobenzene (Surr	174	17.744	17.744	0.000	95	884019	4.00	4.29	
$ 7 BFB									

QC Flag Legend

Processing Flags

s - Failed ISTD Recovery Test

Reagents:

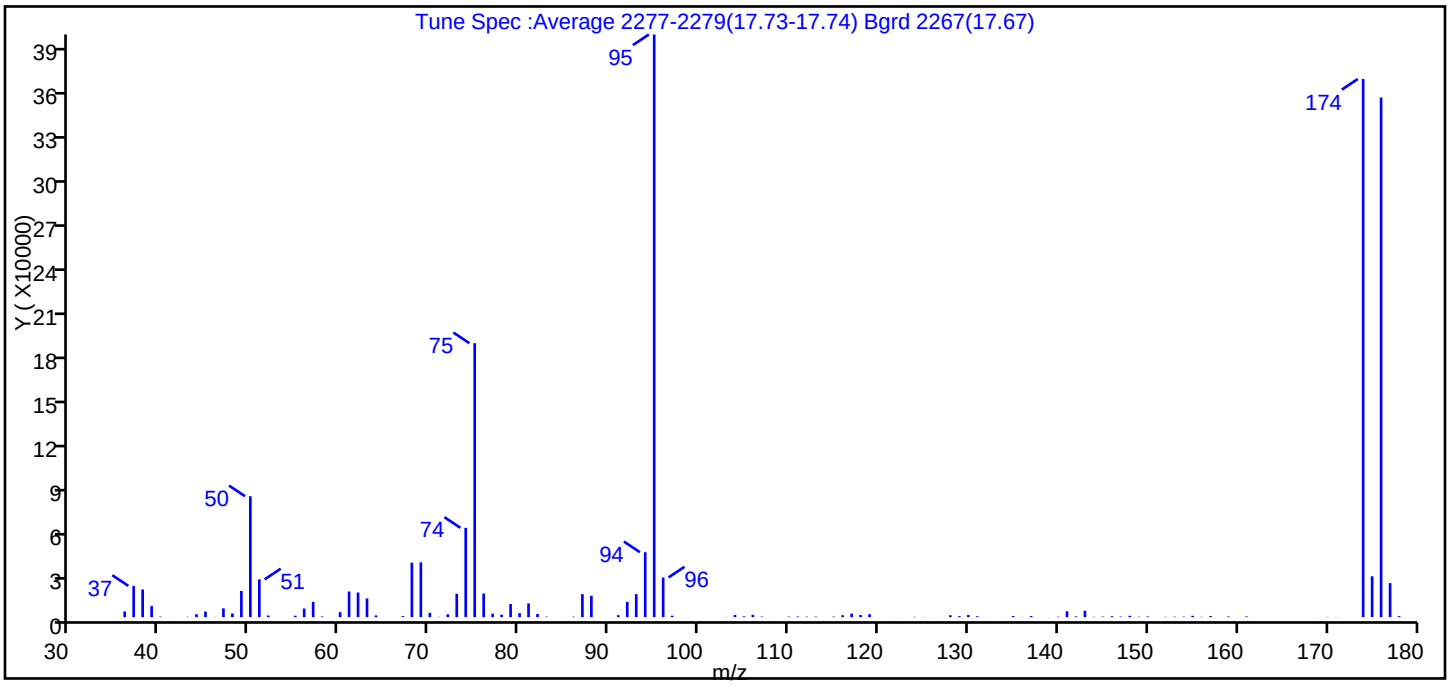
**VAMBFB_00017	Amount Added: 24.00	Units: mL	
VASUISIM_00160	Amount Added: 50.00	Units: mL	Run Reagent

MS Tune Report

TestAmerica Sacramento

Data File:	\\SACCHROM\ChromData\ATMS2\20150317-20264.b\15031701.D				
Injection Date:	18-Mar-2015 00:38:30	Instrument ID:	ATMS2		
Lims ID:	BFB				
Client ID:					
Operator ID:	SRS	ALS Bottle#:	16	Worklist Smp#:	2
Injection Vol:	250.0 mL	Dil. Factor:	1.0000		
Method:	TO15_ATMS2N	Limit Group:	MSA - TO15 - ICAL		
Tune Method:	BFB Method TO-15				

$ 7 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base Peak, 100 Percent Relative Abundance	100.0
50	8.0 to 40.0 Percent of m/e 95	20.8
75	30.0 to 66.0 Percent of m/e 95	47.0
96	5.0 to 9.0 Percent of m/e 95	6.8
173	Less than 2.0 Percent of m/e 174	0.0 (0.0)
174	50.0 to 120.0 Percent of m/e 95	92.4
175	4.0 to 9.0 Percent of m/e 174	7.0 (7.6)
176	93.0 to 101.0 Percent of m/e 174	89.2 (96.6)
177	5.0 to 9.0 Percent of m/e 176	5.8 (6.5)

Data File: \\SACCHROM\ChromData\ATMS2\20150317-20264.b\15031701.D\TO15_ATMS2N.rslt\spectra.d
Injection Date: 18-Mar-2015 00:38:30
Spectrum: Tune Spec :Average 2277-2279(17.73-17.74) Bgrd 2267(17.67)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 105

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	3850	70.00	2900	106.00	1549	143.00	4320
37.00	21128	71.00	173	107.00	377	144.00	222
38.00	18712	72.00	1908	110.00	352	145.00	367
39.00	7478	73.00	15836	111.00	399	146.00	607
40.00	335	74.00	60384	112.00	315	147.00	342
43.00	252	75.00	185216	113.00	352	148.00	920
44.00	1985	76.00	15960	115.00	363	149.00	277
45.00	3807	77.00	2357	116.00	1289	150.00	439
46.00	156	78.00	1650	117.00	2410	152.00	188
47.00	5935	79.00	8848	118.00	1420	153.00	296
48.00	2482	80.00	2696	119.00	1986	154.00	298
49.00	17744	81.00	9296	122.00	51	155.00	933
50.00	81744	82.00	2141	124.00	223	156.00	198
51.00	25536	83.00	300	125.00	104	157.00	715
52.00	1080	86.00	300	126.00	61	159.00	419
55.00	974	87.00	15544	127.00	56	161.00	473
56.00	5816	88.00	14445	128.00	1279	169.00	52
57.00	10327	91.00	1307	129.00	665	170.00	176
58.00	426	92.00	10294	130.00	1406	171.00	107
60.00	3373	93.00	15545	131.00	590	174.00	363840
61.00	17312	94.00	43904	135.00	730	175.00	27624
62.00	16664	95.00	393920	136.00	111	176.00	351296
63.00	12643	96.00	26824	137.00	753	177.00	22992
64.00	1188	97.00	978	139.00	54	178.00	672
67.00	677	103.00	141	140.00	293		
68.00	36840	104.00	1514	141.00	3969		
69.00	37032	105.00	529	142.00	506		

Report Date: 24-Mar-2015 10:32:47 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Sacramento

Data File: \\SACCHROM\ChromData\ATMS2\20150317-20264.b\15031701.D

Injection Date: 18-Mar-2015 00:38:30 Instrument ID: ATMS2 Operator ID: SRS

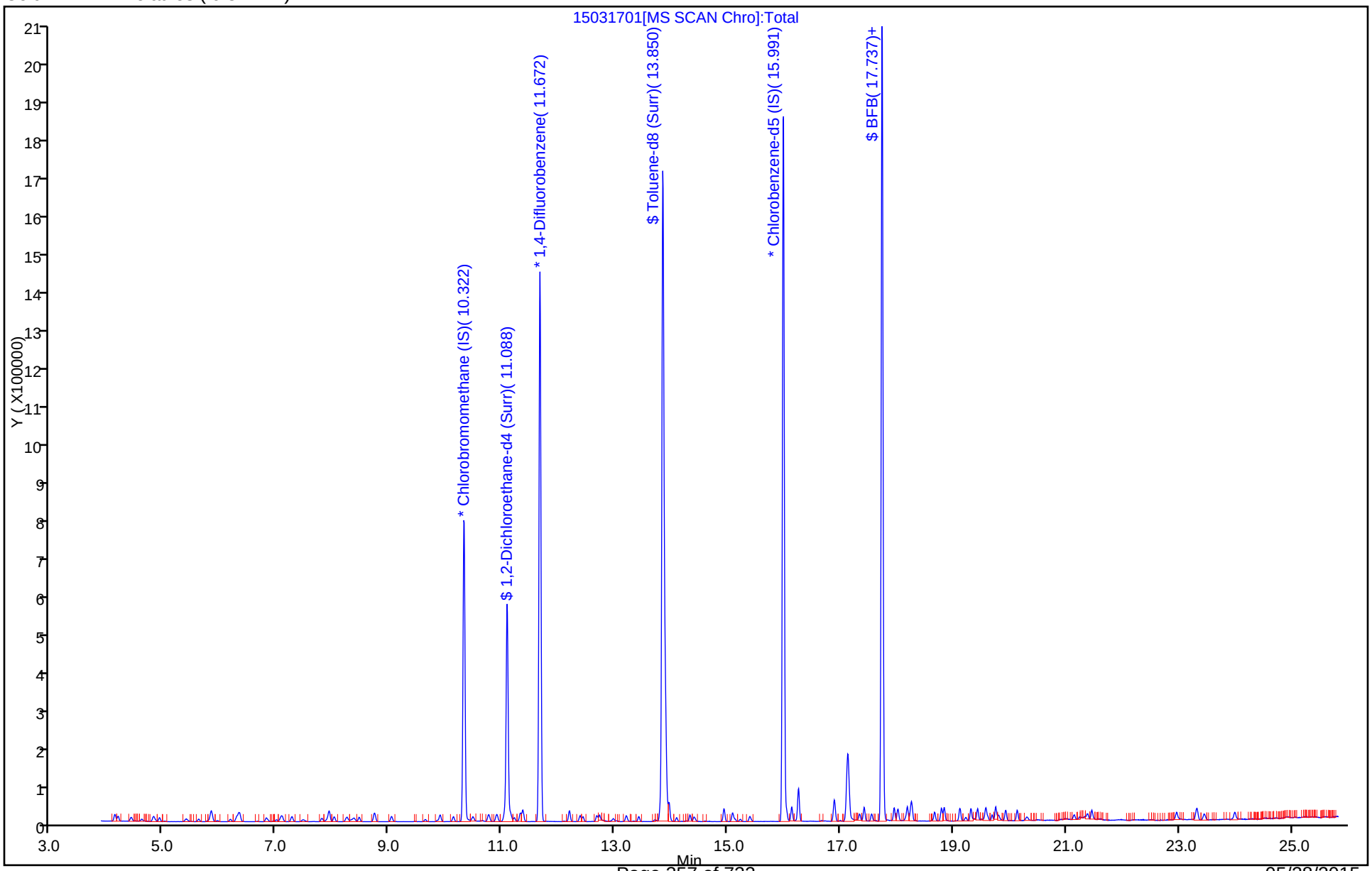
Lims ID: BFB Worklist Smp#: 2

Client ID:

Injection Vol: 250.0 mL Dil. Factor: 1.0000 ALS Bottle#: 16

Method: TO15_ATMS2N Limit Group: MSA - TO15 - ICAL

Column: RTX Volatiles (0.32 mm)



TestAmerica Sacramento
Target Compound Quantitation Report

Data File:	\\SACCHROM\ChromData\ATMS2\20150511-21702.b\15051101.D				
Lims ID:	BFB				
Client ID:					
Sample Type:	BFB				
Inject. Date:	11-May-2015 12:56:30	ALS Bottle#:	16	Worklist Smp#:	1
Injection Vol:	250.0 mL	Dil. Factor:	1.0000		
Sample Info:	BFB				
Misc. Info.:	24mL				
Operator ID:	SRS	Instrument ID:	ATMS2		
Method:	\\SACCHROM\ChromData\ATMS2\20150511-21702.b\TO15_ATMS2N.m				
Limit Group:	MSA - TO15 - ICAL				
Last Update:	11-May-2015 17:54:54	Calib Date:	18-Mar-2015 18:13:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\SACCHROM\ChromData\ATMS2\20150317-20264.b\15031726.D				
Column 1 :	RTX Volatiles (0.32 mm)		Det: MS SCAN		
Process Host:	XAWRK023				

First Level Reviewer: scottrs Date: 11-May-2015 17:54:54

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	130	10.285	10.285	0.000	98	215631	4.00	4.00	s
* 2 1,4-Difluorobenzene	114	11.629	11.629	0.000	95	899741	4.00	4.00	s
* 3 Chlorobenzene-d5 (IS)	117	15.943	15.943	0.000	87	1009837	4.00	4.00	s
$ 4 1,2-Dichloroethane-d4 (Sur	65	11.045	11.045	0.000	98	351147	4.00	4.98	
$ 5 Toluene-d8 (Surr)	100	13.807	13.807	0.000	98	603543	4.00	4.55	
$ 6 4-Bromofluorobenzene (Surr	174	17.695	17.695	0.000	96	909879	4.00	6.16	
$ 7 BFB									

QC Flag Legend

Processing Flags

s - Failed ISTD Recovery Test

Reagents:

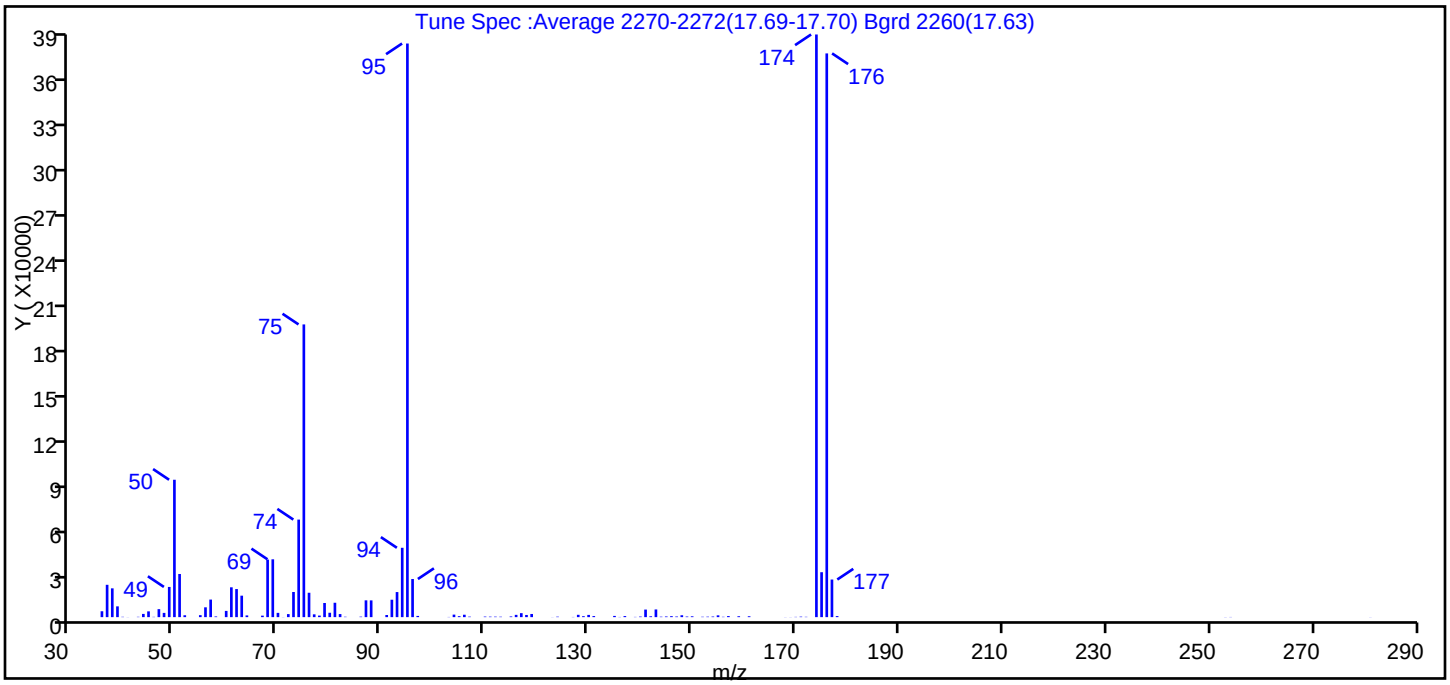
**VAMBFB_00017	Amount Added: 24.00	Units: mL	
VASUISIM_00177	Amount Added: 50.00	Units: mL	Run Reagent

MS Tune Report

TestAmerica Sacramento

Data File:	\\SACCHROM\ChromData\ATMS2\20150511-21702.b\15051101.D				
Injection Date:	11-May-2015 12:56:30	Instrument ID:	ATMS2		
Lims ID:	BFB				
Client ID:					
Operator ID:	SRS	ALS Bottle#:	16	Worklist Smp#:	1
Injection Vol:	250.0 mL	Dil. Factor:	1.0000		
Method:	TO15_ATMS2N	Limit Group:	MSA - TO15 - ICAL		
Tune Method:	BFB Method TO-15				

$ 7 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base Peak, 100 Percent Relative Abundance	100.0
50	8.0 to 40.0 Percent of m/e 95	24.0
75	30.0 to 66.0 Percent of m/e 95	51.0
96	5.0 to 9.0 Percent of m/e 95	6.6
173	Less than 2.0 Percent of m/e 174	0.0 (0.0)
174	50.0 to 120.0 Percent of m/e 95	101.6
175	4.0 to 9.0 Percent of m/e 174	7.8 (7.7)
176	93.0 to 101.0 Percent of m/e 174	98.3 (96.7)
177	5.0 to 9.0 Percent of m/e 176	6.6 (6.7)

Data File: \\SACCHROM\ChromData\ATMS2\20150511-21702.b\15051101.D\TO15_ATMS2N.rslt\spectra.d
Injection Date: 11-May-2015 12:56:30
Spectrum: Tune Spec :Average 2270-2272(17.69-17.70) Bgrd 2260(17.63)
Base Peak: 174.00
Minimum % Base Peak: 0
Number of Points: 109

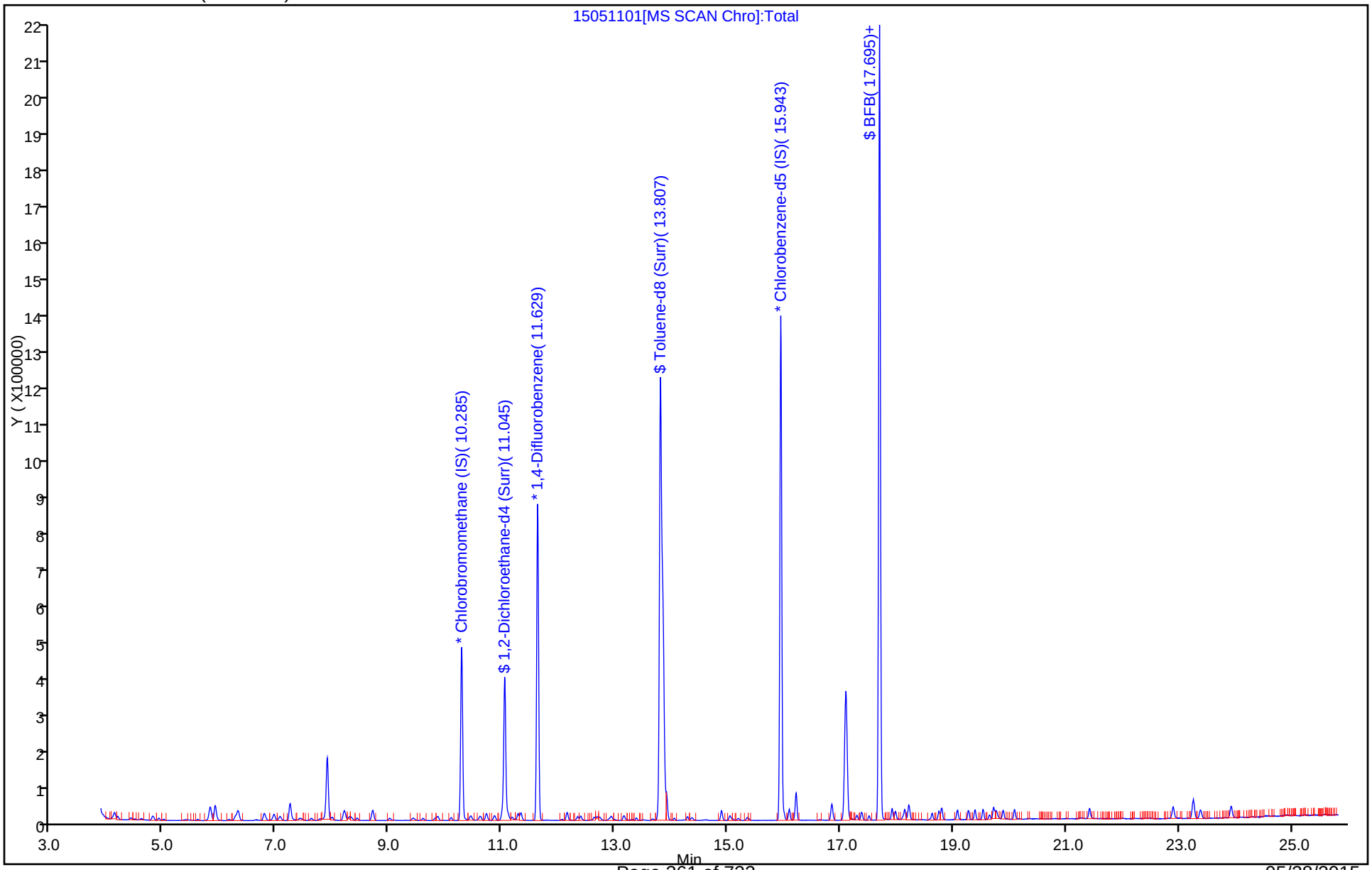
m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	3930	70.00	2845	107.00	335	147.00	419
37.00	21528	71.00	73	110.00	372	148.00	1258
38.00	19176	72.00	2020	111.00	334	149.00	399
39.00	7181	73.00	16736	112.00	332	150.00	550
40.00	218	74.00	64944	113.00	290	152.00	258
41.00	59	75.00	194880	115.00	461	153.00	314
43.00	221	76.00	16241	116.00	1517	154.00	402
44.00	2152	77.00	1871	117.00	2653	155.00	1202
45.00	3849	78.00	1041	118.00	1448	156.00	231
46.00	188	79.00	9416	119.00	2109	157.00	707
47.00	5315	80.00	2921	123.00	59	159.00	596
48.00	2829	81.00	9579	124.00	311	161.00	578
49.00	20112	82.00	2040	127.00	125	168.00	66
50.00	91472	83.00	259	128.00	1553	169.00	67
51.00	28728	86.00	332	129.00	624	170.00	176
52.00	1253	87.00	11188	130.00	1492	171.00	335
55.00	1310	88.00	11157	131.00	709	172.00	220
56.00	6540	91.00	1420	135.00	817	174.00	387904
57.00	11697	92.00	11601	136.00	124	175.00	29912
58.00	458	93.00	16696	137.00	709	176.00	375296
60.00	4152	94.00	46176	139.00	161	177.00	25040
61.00	19864	95.00	381888	140.00	381	178.00	696
62.00	18696	96.00	25384	141.00	5045	253.00	82
63.00	14296	97.00	813	142.00	573	254.00	122
64.00	1150	103.00	130	143.00	5118	281.00	62
67.00	995	104.00	1684	144.00	306		
68.00	38320	105.00	629	145.00	447		
69.00	38504	106.00	1609	146.00	646		

Report Date: 11-May-2015 17:54:55 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Sacramento

Data File:	\\SACCHROM\ChromData\ATMS2\20150511-21702.b\15051101.D				
Injection Date:	11-May-2015 12:56:30	Instrument ID:	ATMS2	Operator ID:	SRS
Lims ID:	BFB			Worklist Smp#:	1
Client ID:					
Injection Vol:	250.0 mL	Dil. Factor:	1.0000	ALS Bottle#:	16
Method:	TO15_ATMS2N	Limit Group:	MSA - TO15 - ICAL		

Column: RTX Volatiles (0.32 mm)



FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento | Job No.: 320-12924-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 320-73563/6

Matrix: Air | Lab File ID: 15051106.D

Analysis Method: TO-15 | Date Collected:

Sample wt/vol: 250(mL) | Date Analyzed: 05/11/2015 16:43

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: RTX-Volatiles ID: 0.32(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 73563 | Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
67-64-1	Acetone	58.08	ND		5.0	0.18
71-43-2	Benzene	78.11	ND		0.40	0.079
100-44-7	Benzyl chloride	126.58	ND		0.80	0.16
75-27-4	Bromodichloromethane	163.83	ND		0.30	0.066
75-25-2	Bromoform	252.75	ND		0.40	0.070
74-83-9	Bromomethane	94.94	ND		0.80	0.34
78-93-3	2-Butanone (MEK)	72.11	ND		0.80	0.20
75-15-0	Carbon disulfide	76.14	ND		0.80	0.078
56-23-5	Carbon tetrachloride	153.81	ND		0.80	0.064
108-90-7	Chlorobenzene	112.56	ND		0.30	0.064
75-00-3	Chloroethane	64.52	ND		0.80	0.31
67-66-3	Chloroform	119.38	ND		0.30	0.095
74-87-3	Chloromethane	50.49	ND		0.80	0.20
124-48-1	Dibromochloromethane	208.29	ND		0.40	0.079
106-93-4	1,2-Dibromoethane (EDB)	187.87	ND		0.80	0.075
76-14-2	1,2-Dichloro-1,1,2,2-tetrafluoroethane	170.92	ND		0.40	0.16
95-50-1	1,2-Dichlorobenzene	147.00	ND		0.40	0.13
541-73-1	1,3-Dichlorobenzene	147.00	ND		0.40	0.11
106-46-7	1,4-Dichlorobenzene	147.00	ND		0.40	0.15
75-71-8	Dichlorodifluoromethane	120.91	ND		0.40	0.15
75-34-3	1,1-Dichloroethane	98.96	ND		0.30	0.072
107-06-2	1,2-Dichloroethane	98.96	ND		0.80	0.088
75-35-4	1,1-Dichloroethene	96.94	ND		0.80	0.13
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.40	0.089
156-60-5	trans-1,2-Dichloroethene	96.94	ND		0.40	0.10
78-87-5	1,2-Dichloropropane	112.99	ND		0.40	0.24
10061-01-5	cis-1,3-Dichloropropene	110.97	ND		0.40	0.10
10061-02-6	trans-1,3-Dichloropropene	110.97	ND		0.40	0.088
100-41-4	Ethylbenzene	106.17	ND		0.40	0.063
622-96-8	4-Ethyltoluene	120.20	ND		0.40	0.19
87-68-3	Hexachlorobutadiene	260.76	ND		2.0	0.43
591-78-6	2-Hexanone	100.20	ND		0.40	0.087
108-10-1	4-Methyl-2-pentanone (MIBK)	100.16	ND		0.40	0.14
75-09-2	Methylene Chloride	84.93	ND		0.40	0.072

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento | Job No.: 320-12924-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 320-73563/6

Matrix: Air | Lab File ID: 15051106.D

Analysis Method: TO-15 | Date Collected:

Sample wt/vol: 250(mL) | Date Analyzed: 05/11/2015 16:43

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: RTX-Volatiles ID: 0.32(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 73563 | Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
100-42-5	Styrene	104.15	ND		0.40	0.059
79-34-5	1,1,2,2-Tetrachloroethane	167.85	ND		0.40	0.069
127-18-4	Tetrachloroethene	165.83	ND		0.40	0.051
108-88-3	Toluene	92.14	ND		0.40	0.051
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	187.38	ND		0.40	0.16
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		2.0	0.43
71-55-6	1,1,1-Trichloroethane	133.41	ND		0.30	0.065
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.40	0.067
79-01-6	Trichloroethene	131.39	ND		0.40	0.11
75-69-4	Trichlorofluoromethane	137.37	ND		0.40	0.20
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		0.80	0.16
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		0.40	0.13
108-05-4	Vinyl acetate	86.09	ND		0.80	0.15
75-01-4	Vinyl chloride	62.50	ND		0.40	0.12
179601-23-1	m,p-Xylene	106.17	ND		0.80	0.10
95-47-6	o-Xylene	106.17	ND		0.40	0.054

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	94		70-130
17060-07-0	1,2-Dichloroethane-d4 (Surr)	113		70-130
2037-26-5	Toluene-d8 (Surr)	94		70-130

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento
Job No.: 320-12924-1
SDG No.:
Client Sample ID:
Lab Sample ID: MB 320-73563/6
Matrix: Air
Lab File ID: 15051106.D
Analysis Method: TO-15
Date Collected:
Sample wt/vol: 250(mL)
Date Analyzed: 05/11/2015 16:43
Soil Aliquot Vol:
Dilution Factor: 1
Soil Extract Vol.:
GC Column: RTX-Volatiles ID: 0.32(mm)
% Moisture:
Level: (low/med) Low
Analysis Batch No.: 73563
Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
67-64-1	Acetone	58.08	ND		12	0.42
71-43-2	Benzene	78.11	ND		1.3	0.25
100-44-7	Benzyl chloride	126.58	ND		4.1	0.84
75-27-4	Bromodichloromethane	163.83	ND		2.0	0.44
75-25-2	Bromoform	252.75	ND		4.1	0.72
74-83-9	Bromomethane	94.94	ND		3.1	1.3
78-93-3	2-Butanone (MEK)	72.11	ND		2.4	0.59
75-15-0	Carbon disulfide	76.14	ND		2.5	0.24
56-23-5	Carbon tetrachloride	153.81	ND		5.0	0.40
108-90-7	Chlorobenzene	112.56	ND		1.4	0.29
75-00-3	Chloroethane	64.52	ND		2.1	0.81
67-66-3	Chloroform	119.38	ND		1.5	0.46
74-87-3	Chloromethane	50.49	ND		1.7	0.41
124-48-1	Dibromochloromethane	208.29	ND		3.4	0.67
106-93-4	1,2-Dibromoethane (EDB)	187.87	ND		6.1	0.58
76-14-2	1,2-Dichloro-1,1,2,2-tetrafluoroethane	170.92	ND		2.8	1.1
95-50-1	1,2-Dichlorobenzene	147.00	ND		2.4	0.78
541-73-1	1,3-Dichlorobenzene	147.00	ND		2.4	0.66
106-46-7	1,4-Dichlorobenzene	147.00	ND		2.4	0.90
75-71-8	Dichlorodifluoromethane	120.91	ND		2.0	0.72
75-34-3	1,1-Dichloroethane	98.96	ND		1.2	0.29
107-06-2	1,2-Dichloroethane	98.96	ND		3.2	0.36
75-35-4	1,1-Dichloroethene	96.94	ND		3.2	0.51
156-59-2	cis-1,2-Dichloroethene	96.94	ND		1.6	0.35
156-60-5	trans-1,2-Dichloroethene	96.94	ND		1.6	0.40
78-87-5	1,2-Dichloropropane	112.99	ND		1.8	1.1
10061-01-5	cis-1,3-Dichloropropene	110.97	ND		1.8	0.47
10061-02-6	trans-1,3-Dichloropropene	110.97	ND		1.8	0.40
100-41-4	Ethylbenzene	106.17	ND		1.7	0.27
622-96-8	4-Ethyltoluene	120.20	ND		2.0	0.92
87-68-3	Hexachlorobutadiene	260.76	ND		21	4.6
591-78-6	2-Hexanone	100.20	ND		1.6	0.36
108-10-1	4-Methyl-2-pentanone (MIBK)	100.16	ND		1.6	0.55
75-09-2	Methylene Chloride	84.93	ND		1.4	0.25

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento | Job No.: 320-12924-1
SDG No.:
Client Sample ID: | Lab Sample ID: MB 320-73563/6
Matrix: Air | Lab File ID: 15051106.D
Analysis Method: TO-15 | Date Collected:
Sample wt/vol: 250(mL) | Date Analyzed: 05/11/2015 16:43
Soil Aliquot Vol: | Dilution Factor: 1
Soil Extract Vol.: | GC Column: RTX-Volatiles ID: 0.32(mm)
% Moisture: | Level: (low/med) Low
Analysis Batch No.: 73563 | Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
100-42-5	Styrene	104.15	ND		1.7	0.25
79-34-5	1,1,2,2-Tetrachloroethane	167.85	ND		2.7	0.47
127-18-4	Tetrachloroethene	165.83	ND		2.7	0.35
108-88-3	Toluene	92.14	ND		1.5	0.19
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	187.38	ND		3.1	1.2
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		15	3.2
71-55-6	1,1,1-Trichloroethane	133.41	ND		1.6	0.35
79-00-5	1,1,2-Trichloroethane	133.41	ND		2.2	0.37
79-01-6	Trichloroethene	131.39	ND		2.1	0.56
75-69-4	Trichlorofluoromethane	137.37	ND		2.2	1.1
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		3.9	0.80
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		2.0	0.61
108-05-4	Vinyl acetate	86.09	ND		2.8	0.51
75-01-4	Vinyl chloride	62.50	ND		1.0	0.31
179601-23-1	m,p-Xylene	106.17	ND		3.5	0.43
95-47-6	o-Xylene	106.17	ND		1.7	0.23

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	94		70-130
17060-07-0	1,2-Dichloroethane-d4 (Surr)	113		70-130
2037-26-5	Toluene-d8 (Surr)	94		70-130

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\SACCHROM\ChromData\ATMS2\20150511-21702.b\15051106.D
Lims ID: MB
Client ID:
Sample Type: MB
Inject. Date: 11-May-2015 16:43:30 ALS Bottle#: 16 Worklist Smp#: 6
Purge Vol: 250.000 mL Dil. Factor: 1.0000
Sample Info: MB
Misc. Info.: 250mL
Operator ID: SRS Instrument ID: ATMS2

Method: \\SACCHROM\ChromData\ATMS2\20150511-21702.b\TO15_ATMS2N.m
Limit Group: MSA - TO15 - ICAL
Last Update: 11-May-2015 17:23:07 Calib Date: 18-Mar-2015 18:13:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\SACCHROM\ChromData\ATMS2\20150317-20264.b\15031726.D

Column 1 : RTX Volatiles (0.32 mm) Det: MS SCAN
Process Host: XAWRK023

First Level Reviewer: scottrs Date: 11-May-2015 17:23:07

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	130	10.291	10.285	0.006	97	46021	4.00	4.00	
* 2 1,4-Difluorobenzene	114	11.630	11.629	0.001	95	180514	4.00	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.943	15.949	-0.006	87	146930	4.00	4.00	
$ 4 1,2-Dichloroethane-d4 (Sur	65	11.046	11.051	-0.005	98	67843	4.00	4.50	
$ 5 Toluene-d8 (Surr)	100	13.808	13.807	0.001	99	100317	4.00	3.77	
$ 6 4-Bromofluorobenzene (Surr	174	17.695	17.695	0.000	95	80845	4.00	3.76	
$ 7 BFB									
140 Dimethyl disulfide TIC	94	17.695	17.816	-0.121	41	9570		0.2121	
117 1,3-Dichlorobenzene	146	19.392	19.392	0.000	86	1184		0.0368	
120 1,4-Dichlorobenzene	146	19.532	19.532	0.000	27	1530		0.0486	
134 Methyl mercaptan TIC	47	17.689	19.775	-2.086	16	809		0.0179	
122 1,2-Dichlorobenzene	146	20.086	20.092	-0.006	88	1403		0.0474	
126 1,2,4-Trichlorobenzene	180	22.909	22.902	0.007	81	2643		0.1437	
128 Hexachlorobutadiene	225	23.267	23.261	0.006	86	1916		0.1010	
129 1,2,3-Trichlorobenzene	180	23.943	23.930	0.013	86	2855		0.1897	
A 144 C6 Range	1	8.709	(8.609-8.809)		0	5957		0.0638	
A 145 C3-C10	1	10.994	(4.068-17.920)		0	1021022		13.7	
A 161 C4-C10	1	11.346	(4.637-18.056)		0	991401		NC	
A 146 GRO	1	12.794	(3.968-21.621)		0	2297203		25.9	
A 148 C4-C12	1	13.129	(4.637-21.621)		0	2236549		25.3	
A 162 C6-C10	1	13.290	(8.524-18.056)		0	641845		12.2	
A 173 C5-C12	1	13.681	(5.880-21.481)		0	2014305		24.9	
A 147 Toluene Range	1	13.917	(13.850-13.984)		0	25788		0.2025	
A 154 Total VOC as Hexane	1	14.294	(4.068-24.521)		0	3886602		41.6	
A 151 Total VOCs as Tetrachloroe	1	14.294	(4.068-24.521)		0	3886602		28.9	
A 150 Nonmethane Organic Compoun	1	14.294	(4.068-24.521)		0	3886602		41.6	
A 152 TVOC as Toluene	1	14.393	(4.356-24.431)		0	625440		4.91	
A 149 PCE Range	1	14.906	(14.836-14.976)		0	3017		0.0225	
A 153 C6-C12	1	15.928	(10.234-21.621)		0	1345827		20.4	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Reagents:

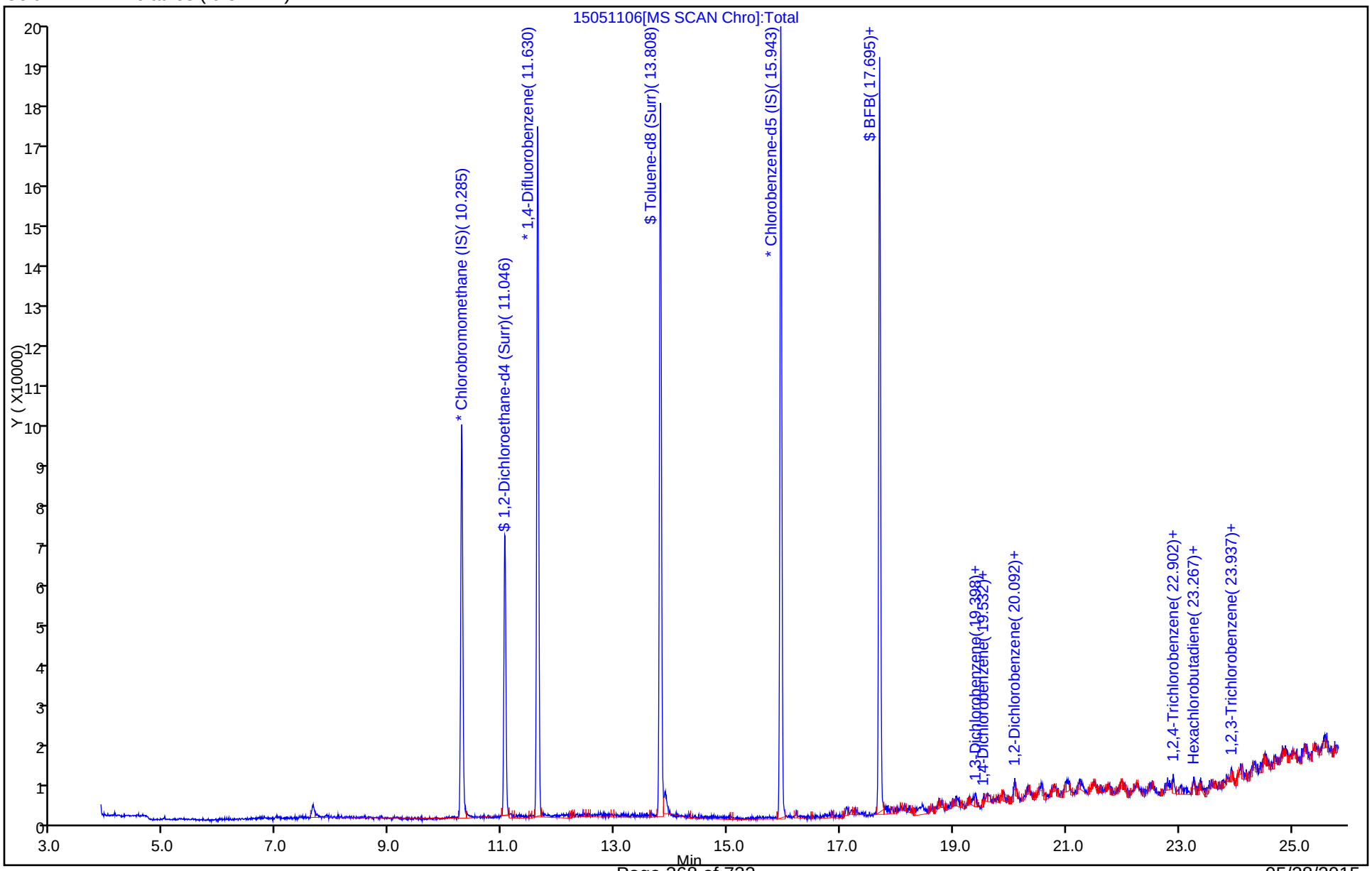
VASUISIM_00177	Amount Added: 50.00	Units: mL	Run Reagent

Report Date: 11-May-2015 17:23:11 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Sacramento

Data File:	\\SACCHROM\ChromData\ATMS2\20150511-21702.b\15051106.D				
Injection Date:	11-May-2015 16:43:30	Instrument ID:	ATMS2	Operator ID:	SRS
Lims ID:	MB			Worklist Smp#:	6
Client ID:					
Purge Vol:	250.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	16
Method:	TO15_ATMS2N	Limit Group:	MSA - TO15 - ICAL		

Column: RTX Volatiles (0.32 mm)



FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento | Job No.: 320-12924-1
SDG No.:
Client Sample ID: | Lab Sample ID: LCS 320-73563/3
Matrix: Air | Lab File ID: 15051103.D
Analysis Method: TO-15 | Date Collected:
Sample wt/vol: 250(mL) | Date Analyzed: 05/11/2015 14:21
Soil Aliquot Vol: | Dilution Factor: 1
Soil Extract Vol.: | GC Column: RTX-Volatiles ID: 0.32(mm)
% Moisture: | Level: (low/med) Low
Analysis Batch No.: 73563 | Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
67-64-1	Acetone	58.08	18.9		5.0	0.18
71-43-2	Benzene	78.11	16.7		0.40	0.079
100-44-7	Benzyl chloride	126.58	18.8		0.80	0.16
75-27-4	Bromodichloromethane	163.83	20.5		0.30	0.066
75-25-2	Bromoform	252.75	23.4		0.40	0.070
74-83-9	Bromomethane	94.94	18.8		0.80	0.34
78-93-3	2-Butanone (MEK)	72.11	15.3		0.80	0.20
75-15-0	Carbon disulfide	76.14	15.6		0.80	0.078
56-23-5	Carbon tetrachloride	153.81	22.9		0.80	0.064
108-90-7	Chlorobenzene	112.56	20.3		0.30	0.064
75-00-3	Chloroethane	64.52	18.3		0.80	0.31
67-66-3	Chloroform	119.38	18.4		0.30	0.095
74-87-3	Chloromethane	50.49	20.8		0.80	0.20
124-48-1	Dibromochloromethane	208.29	22.5		0.40	0.079
106-93-4	1,2-Dibromoethane (EDB)	187.87	20.8		0.80	0.075
76-14-2	1,2-Dichloro-1,1,2,2-tetrafluoroethane	170.92	17.9		0.40	0.16
95-50-1	1,2-Dichlorobenzene	147.00	23.7		0.40	0.13
541-73-1	1,3-Dichlorobenzene	147.00	23.9		0.40	0.11
106-46-7	1,4-Dichlorobenzene	147.00	24.1		0.40	0.15
75-71-8	Dichlorodifluoromethane	120.91	20.5		0.40	0.15
75-34-3	1,1-Dichloroethane	98.96	17.5		0.30	0.072
107-06-2	1,2-Dichloroethane	98.96	23.6		0.80	0.088
75-35-4	1,1-Dichloroethene	96.94	17.0		0.80	0.13
156-59-2	cis-1,2-Dichloroethene	96.94	17.0		0.40	0.089
156-60-5	trans-1,2-Dichloroethene	96.94	18.6		0.40	0.10
78-87-5	1,2-Dichloropropane	112.99	22.0		0.40	0.24
10061-01-5	cis-1,3-Dichloropropene	110.97	20.0		0.40	0.10
10061-02-6	trans-1,3-Dichloropropene	110.97	19.2		0.40	0.088
100-41-4	Ethylbenzene	106.17	20.9		0.40	0.063
622-96-8	4-Ethyltoluene	120.20	20.9		0.40	0.19
87-68-3	Hexachlorobutadiene	260.76	26.4		2.0	0.43
591-78-6	2-Hexanone	100.20	19.3		0.40	0.087
108-10-1	4-Methyl-2-pentanone (MIBK)	100.16	19.5		0.40	0.14
75-09-2	Methylene Chloride	84.93	17.9		0.40	0.072

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento | Job No.: 320-12924-1
SDG No.:
Client Sample ID: | Lab Sample ID: LCS 320-73563/3
Matrix: Air | Lab File ID: 15051103.D
Analysis Method: TO-15 | Date Collected:
Sample wt/vol: 250(mL) | Date Analyzed: 05/11/2015 14:21
Soil Aliquot Vol: | Dilution Factor: 1
Soil Extract Vol.: | GC Column: RTX-Volatiles ID: 0.32(mm)
% Moisture: | Level: (low/med) Low
Analysis Batch No.: 73563 | Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
100-42-5	Styrene	104.15	22.0		0.40	0.059
79-34-5	1,1,2,2-Tetrachloroethane	167.85	19.0		0.40	0.069
127-18-4	Tetrachloroethene	165.83	21.1		0.40	0.051
108-88-3	Toluene	92.14	19.5		0.40	0.051
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	187.38	16.3		0.40	0.16
120-82-1	1,2,4-Trichlorobenzene	181.45	25.5		2.0	0.43
71-55-6	1,1,1-Trichloroethane	133.41	20.4		0.30	0.065
79-00-5	1,1,2-Trichloroethane	133.41	19.6		0.40	0.067
79-01-6	Trichloroethene	131.39	19.7		0.40	0.11
75-69-4	Trichlorofluoromethane	137.37	21.4		0.40	0.20
95-63-6	1,2,4-Trimethylbenzene	120.20	21.0		0.80	0.16
108-67-8	1,3,5-Trimethylbenzene	120.20	21.1		0.40	0.13
108-05-4	Vinyl acetate	86.09	21.0		0.80	0.15
75-01-4	Vinyl chloride	62.50	18.4		0.40	0.12
179601-23-1	m,p-Xylene	106.17	42.9		0.80	0.10
95-47-6	o-Xylene	106.17	21.4		0.40	0.054

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	106		70-130
17060-07-0	1,2-Dichloroethane-d4 (Surr)	109		70-130
2037-26-5	Toluene-d8 (Surr)	100		70-130

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\SACCHROM\ChromData\ATMS2\20150511-21702.b\15051103.D
Lims ID: LCS 20ppbv
Client ID:
Sample Type: LCS
Inject. Date: 11-May-2015 14:21:30 ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 250.000 mL Dil. Factor: 1.0000
Sample Info: LCS 20ppbv
Misc. Info.: 125mL
Operator ID: SRS Instrument ID: ATMS2

Method: \\SACCHROM\ChromData\ATMS2\20150511-21702.b\TO15_ATMS2N.m
Limit Group: MSA - TO15 - ICAL
Last Update: 11-May-2015 17:55:46 Calib Date: 18-Mar-2015 18:13:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\SACCHROM\ChromData\ATMS2\20150317-20264.b\15031726.D

Column 1 : RTX Volatiles (0.32 mm) Det: MS SCAN
Process Host: XAWRK023

First Level Reviewer: scottrs Date: 11-May-2015 17:56:47

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	130	10.285	10.285	0.000	98	55565	4.00	4.00	
* 2 1,4-Difluorobenzene	114	11.636	11.629	0.007	95	205267	4.00	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.949	15.949	0.000	88	176277	4.00	4.00	
$ 4 1,2-Dichloroethane-d4 (Sur	65	11.052	11.051	0.001	98	79031	4.00	4.35	
$ 5 Toluene-d8 (Surr)	100	13.808	13.807	0.001	97	121034	4.00	4.00	
$ 6 4-Bromofluorobenzene (Surr	174	17.701	17.695	0.006	93	109060	4.00	4.23	
14 Propene	41	4.129	4.128	0.001	42	275176	20.0	18.6	
13 Chlorodifluoromethane	51	4.141	4.141	0.000	97	571379	20.0	21.0	
15 Dichlorodifluoromethane	85	4.189	4.189	0.000	99	701942	20.0	20.5	
19 1,2-Dichloro-1,1,2,2-tetra	135	4.421	4.420	0.001	85	299408	20.0	17.9	
18 Chloromethane	50	4.603	4.603	0.000	99	319943	20.0	20.8	
22 Butane	43	4.810	4.810	0.000	98	568192	20.0	18.7	
20 Vinyl chloride	62	4.840	4.840	0.000	98	287444	20.0	18.4	
21 Butadiene	39	4.913	4.913	0.000	97	282821	20.0	18.7	
25 Bromomethane	94	5.607	5.601	0.006	99	244537	20.0	18.8	
26 Chloroethane	64	5.765	5.759	0.006	97	136777	20.0	18.3	
27 Vinyl bromide	106	6.160	6.160	0.000	98	263725	20.0	17.4	
28 Trichlorofluoromethane	101	6.276	6.276	0.000	98	917470	20.0	21.4	
38 Pentane	43	6.325	6.325	0.000	97	604989	20.0	17.1	
37 Isopropyl alcohol	45	6.757	6.756	0.001	78	683026	20.0	19.8	
39 Ethyl ether	74	6.769	6.769	0.000	100	100675	20.0	15.9	
29 Acrolein	56	6.817	6.817	0.000	96	83857	20.0	18.9	
31 Acetone	43	6.939	6.939	0.000	100	385420	20.0	18.9	
43 1,1,2-Trichloro-1,2,2-trif	101	7.067	7.067	0.000	94	520012	20.0	16.3	
30 Acetonitrile	41	7.237	7.237	0.000	99	182105	20.0	17.0	
41 1,1-Dichloroethene	61	7.243	7.243	0.000	92	455010	20.0	17.0	
44 2-Methyl-2-propanol	59	7.377	7.377	0.000	95	584115	20.0	19.7	
46 3-Chloro-1-propene	41	7.773	7.772	0.001	94	432894	20.0	19.1	
47 Methylene Chloride	49	7.900	7.900	0.000	93	365651	20.0	17.9	
48 Carbon disulfide	76	7.986	7.985	0.001	99	666758	20.0	15.6	
42 Acrylonitrile	53	7.986	7.985	0.001	43	183226	20.0	20.2	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
50 Methyl tert-butyl ether	73	8.302	8.308	-0.006	95	614382	20.0	17.8	
49 trans-1,2-Dichloroethene	61	8.436	8.429	0.007	94	412340	20.0	18.6	
55 Hexane	41	8.709	8.709	0.000	93	384151	20.0	17.5	
52 Vinyl acetate	43	8.995	8.995	0.000	100	766081	20.0	21.0	
53 1,1-Dichloroethane	63	9.008	9.007	0.001	99	476158	20.0	17.5	
54 2-Butanone (MEK)	72	9.573	9.573	0.000	97	81948	20.0	15.3	
58 Ethyl acetate	43	9.841	9.841	0.000	97	564527	20.0	18.5	
57 cis-1,2-Dichloroethene	96	9.865	9.865	0.000	98	253620	20.0	17.0	
61 Chloroform	83	10.103	10.102	0.001	96	546851	20.0	18.4	
62 Tetrahydrofuran	42	10.419	10.413	0.006	90	308818	20.0	16.9	
65 1,1,1-Trichloroethane	97	10.723	10.729	-0.006	96	654673	20.0	20.4	
70 Cyclohexane	84	10.869	10.869	0.000	92	330189	20.0	16.8	
74 Isooctane	57	11.021	11.021	0.000	97	1547710	20.0	19.7	
67 n-Butanol	56	11.052	11.051	0.001	93	231467	20.0	17.9	M
69 Carbon tetrachloride	117	11.119	11.112	0.007	97	779187	20.0	22.9	
66 1,2-Dichloroethane	62	11.179	11.173	0.006	97	443403	20.0	23.6	
68 Benzene	78	11.283	11.283	0.000	96	696587	20.0	16.7	
75 n-Heptane	43	11.338	11.331	0.007	96	649141	20.0	19.3	
76 Trichloroethene	130	12.153	12.153	0.000	97	426679	20.0	19.7	
77 1,2-Dichloropropane	76	12.341	12.347	-0.006	88	137453	20.0	22.0	
79 Methyl methacrylate	69	12.390	12.390	0.000	91	190485	20.0	16.8	
80 Dichlorobromomethane	85	12.639	12.639	0.000	98	404582	20.0	20.5	
72 1,4-Dioxane	88	12.646	12.645	0.001	98	138575	20.0	18.1	
78 Dibromomethane	174	12.688	12.688	0.000	89	413969	20.0	22.0	
81 4-Methyl-2-pentanone (MIBK	43	13.132	13.132	0.000	100	633488	20.0	19.5	
83 cis-1,3-Dichloropropene	75	13.382	13.381	0.001	96	451004	20.0	20.0	
88 n-Octane	43	13.771	13.771	0.000	97	925755	20.0	19.2	
85 Toluene	91	13.923	13.923	0.000	93	940650	20.0	19.5	
84 trans-1,3-Dichloropropene	75	14.057	14.057	0.000	96	416444	20.0	19.2	
86 1,1,2-Trichloroethane	97	14.288	14.288	0.000	96	325345	20.0	19.6	
87 2-Hexanone	58	14.337	14.337	0.000	90	285381	20.0	19.3	
93 Tetrachloroethene	166	14.896	14.896	0.000	97	624339	20.0	21.1	
92 Chlorodibromomethane	129	15.042	15.042	0.000	99	766934	20.0	22.5	
94 Ethylene Dibromide	107	15.347	15.346	0.001	99	553929	20.0	20.8	
99 n-Nonane	43	15.955	15.949	0.006	95	977862	20.0	20.3	
96 Chlorobenzene	112	16.004	15.997	0.007	94	864966	20.0	20.3	
97 Ethylbenzene	91	16.095	16.095	0.000	98	1198061	20.0	20.9	
98 m-Xylene & p-Xylene	91	16.217	16.216	0.001	98	1875933	40.0	42.9	
101 o-Xylene	91	16.849	16.843	0.006	94	955811	20.0	21.4	
100 Styrene	104	16.861	16.861	0.000	94	759263	20.0	22.0	
102 Bromoform	173	17.293	17.293	0.000	99	837569	20.0	23.4	
104 Isopropylbenzene	120	17.379	17.378	0.001	96	389060	20.0	21.6	
103 1,1,2,2-Tetrachloroethane	83	17.512	17.512	0.000	98	601950	20.0	19.0	
105 1,2,3-Trichloropropane	110	17.725	17.731	-0.006	92	215916	20.0	22.0	
113 n-Decane	57	17.920	17.920	0.000	86	868936	20.0	22.2	
107 N-Propylbenzene	91	17.981	17.981	0.000	99	1470446	20.0	20.2	
110 4-Ethyltoluene	120	18.145	18.145	0.000	99	417646	20.0	20.9	
111 1,3,5-Trimethylbenzene	120	18.212	18.212	0.000	96	565265	20.0	21.1	
109 2-Chlorotoluene	126	18.230	18.230	0.000	98	396011	20.0	20.8	
112 Alpha Methyl Styrene	118	18.632	18.632	0.000	89	580936	20.0	22.4	
114 tert-Butylbenzene	91	18.753	18.753	0.000	95	820077	20.0	21.2	
115 1,2,4-Trimethylbenzene	120	18.802	18.802	0.000	94	533258	20.0	21.0	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
116 sec-Butylbenzene	105	19.082	19.076	0.006	98	1612280	20.0	21.5	
121 4-Isopropyltoluene	119	19.277	19.276	0.001	98	1370789	20.0	21.9	
117 1,3-Dichlorobenzene	146	19.392	19.392	0.000	98	920095	20.0	23.9	
120 1,4-Dichlorobenzene	146	19.532	19.532	0.000	95	909334	20.0	24.1	
118 Benzyl chloride	91	19.648	19.648	0.000	99	955190	20.0	18.8	
124 Undecane	57	19.721	19.714	0.007	92	666171	20.0	26.5	
123 n-Butylbenzene	92	19.891	19.891	0.000	98	567797	20.0	20.3	
122 1,2-Dichlorobenzene	146	20.092	20.092	0.000	97	840853	20.0	23.7	
125 Dodecane	57	21.418	21.418	0.000	90	425150	20.0	37.3	E
126 1,2,4-Trichlorobenzene	180	22.902	22.902	0.000	95	562434	20.0	25.5	
128 Hexachlorobutadiene	225	23.261	23.261	0.000	98	600057	20.0	26.4	
127 Naphthalene	128	23.389	23.383	0.006	99	1099274	20.0	25.6	
129 1,2,3-Trichlorobenzene	180	23.937	23.930	0.007	93	472069	20.0	26.1	
A 144 C6 Range	1	8.709	(8.609-8.809)		0	1893827	20.0	16.8	
A 145 C3-C10	1	10.994	(4.068-17.920)		0	105015886	20.0	1243.6	
A 146 GRO	1	12.779	(3.968-21.621)		0	159209580	20.0	1579.2	
A 148 C4-C12	1	13.135	(4.637-21.621)		0	154513056	20.0	1536.2	
A 147 Toluene Range	1	13.917	(13.850-13.984)		0	2446168	20.0	16.9	
A 150 Nonmethane Organic Compoun	1	14.294	(4.068-24.521)		0	173355746	20.0	1538.2	E
A 151 Total VOCs as Tetrachloroe	1	14.294	(4.068-24.521)		0	173355746	20.0	1075.5	E
A 154 Total VOC as Hexane	1	14.294	(4.068-24.521)		0	173355746	20.0	1538.2	E
A 152 TVOC as Toluene	1	14.393	(4.356-24.431)		0	166018849	20.0	1146.4	E
A 149 PCE Range	1	14.906	(14.836-14.976)		0	3471598	20.0	21.5	
A 153 C6-C12	1	15.057	(8.524-21.621)		0	130421835	20.0	1735.3	
S 155 Xylenes, Total	91				0		60.0	64.3	

QC Flag Legend

Processing Flags

E - Exceeded Maximum Amount

Review Flags

M - Manually Integrated

Reagents:

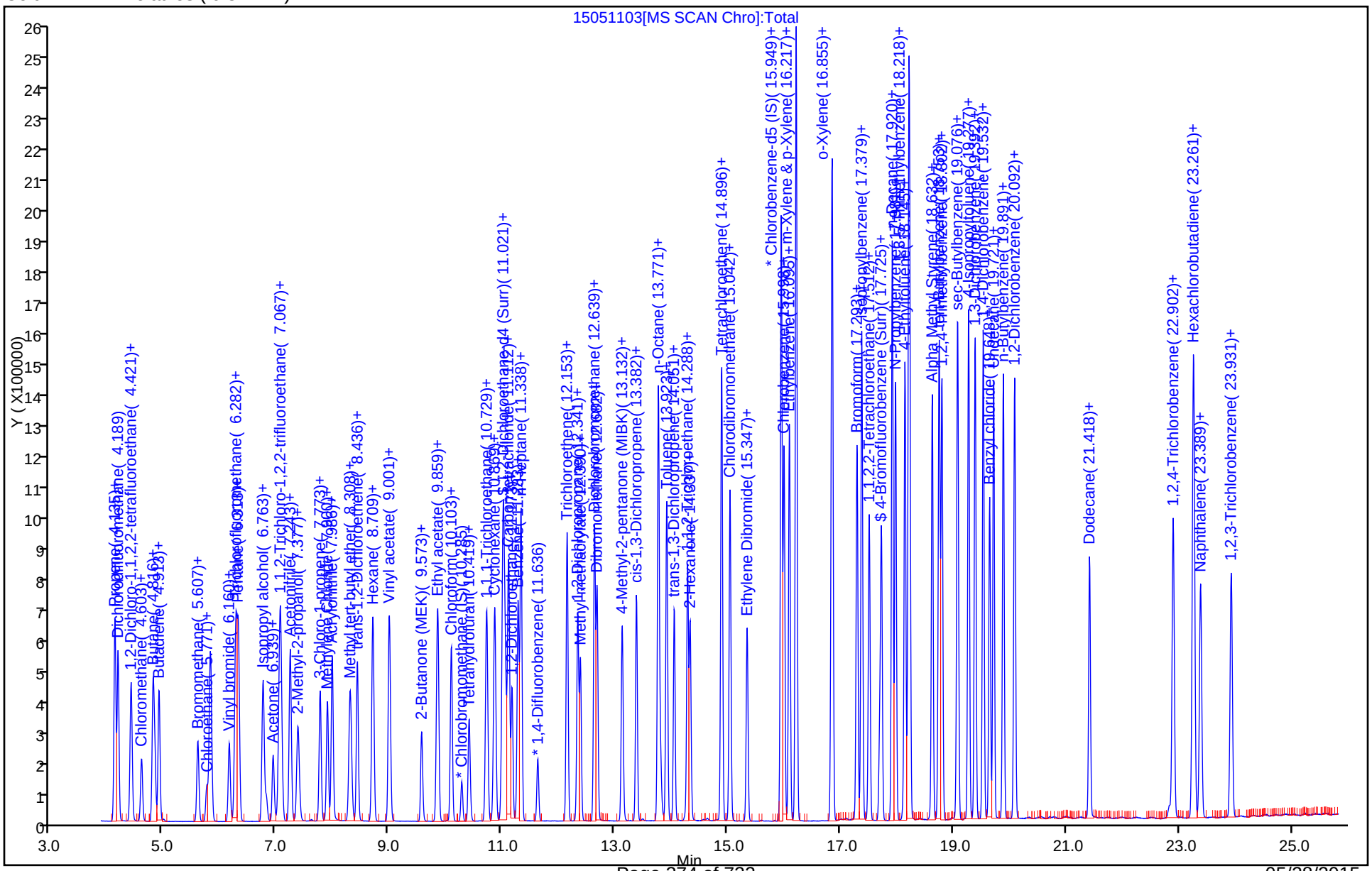
VACORPLC40_00142	Amount Added: 125.00	Units: mL	
VASUISIM_00177	Amount Added: 50.00	Units: mL	Run Reagent

Report Date: 11-May-2015 17:56:50 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Sacramento

Data File:	\\SACCHROM\ChromData\ATMS2\20150511-21702.b\15051103.D				
Injection Date:	11-May-2015 14:21:30	Instrument ID:	ATMS2	Operator ID:	SRS
Lims ID:	LCS 20ppbv			Worklist Smp#:	3
Client ID:					
Purge Vol:	250.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	2
Method:	TO15_ATMS2N	Limit Group:	MSA - TO15 - ICAL		

Column: RTX Volatiles (0.32 mm)



FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento | Job No.: 320-12924-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCSD 320-73563/27

Matrix: Air | Lab File ID: 15051104.D

Analysis Method: TO-15 | Date Collected:

Sample wt/vol: 250(mL) | Date Analyzed: 05/11/2015 15:16

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: RTX-Volatiles ID: 0.32(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 73563 | Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
67-64-1	Acetone	58.08	18.6		5.0	0.18
71-43-2	Benzene	78.11	16.4		0.40	0.079
100-44-7	Benzyl chloride	126.58	18.5		0.80	0.16
75-27-4	Bromodichloromethane	163.83	19.8		0.30	0.066
75-25-2	Bromoform	252.75	23.0		0.40	0.070
74-83-9	Bromomethane	94.94	18.3		0.80	0.34
78-93-3	2-Butanone (MEK)	72.11	15.1		0.80	0.20
75-15-0	Carbon disulfide	76.14	15.3		0.80	0.078
56-23-5	Carbon tetrachloride	153.81	22.0		0.80	0.064
108-90-7	Chlorobenzene	112.56	19.8		0.30	0.064
75-00-3	Chloroethane	64.52	17.9		0.80	0.31
67-66-3	Chloroform	119.38	18.0		0.30	0.095
74-87-3	Chloromethane	50.49	20.1		0.80	0.20
124-48-1	Dibromochloromethane	208.29	22.0		0.40	0.079
106-93-4	1,2-Dibromoethane (EDB)	187.87	20.5		0.80	0.075
76-14-2	1,2-Dichloro-1,1,2,2-tetrafluoroethane	170.92	18.1		0.40	0.16
95-50-1	1,2-Dichlorobenzene	147.00	23.3		0.40	0.13
541-73-1	1,3-Dichlorobenzene	147.00	23.6		0.40	0.11
106-46-7	1,4-Dichlorobenzene	147.00	23.8		0.40	0.15
75-71-8	Dichlorodifluoromethane	120.91	19.5		0.40	0.15
75-34-3	1,1-Dichloroethane	98.96	17.3		0.30	0.072
107-06-2	1,2-Dichloroethane	98.96	22.6		0.80	0.088
75-35-4	1,1-Dichloroethene	96.94	16.7		0.80	0.13
156-59-2	cis-1,2-Dichloroethene	96.94	16.7		0.40	0.089
156-60-5	trans-1,2-Dichloroethene	96.94	18.4		0.40	0.10
78-87-5	1,2-Dichloropropane	112.99	21.5		0.40	0.24
10061-01-5	cis-1,3-Dichloropropene	110.97	19.3		0.40	0.10
10061-02-6	trans-1,3-Dichloropropene	110.97	19.2		0.40	0.088
100-41-4	Ethylbenzene	106.17	20.6		0.40	0.063
622-96-8	4-Ethyltoluene	120.20	20.4		0.40	0.19
87-68-3	Hexachlorobutadiene	260.76	26.9		2.0	0.43
591-78-6	2-Hexanone	100.20	18.8		0.40	0.087
108-10-1	4-Methyl-2-pentanone (MIBK)	100.16	18.7		0.40	0.14
75-09-2	Methylene Chloride	84.93	17.7		0.40	0.072

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento | Job No.: 320-12924-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCSD 320-73563/27

Matrix: Air | Lab File ID: 15051104.D

Analysis Method: TO-15 | Date Collected:

Sample wt/vol: 250(mL) | Date Analyzed: 05/11/2015 15:16

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: RTX-Volatiles ID: 0.32(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 73563 | Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
100-42-5	Styrene	104.15	22.0		0.40	0.059
79-34-5	1,1,2,2-Tetrachloroethane	167.85	18.7		0.40	0.069
127-18-4	Tetrachloroethene	165.83	20.8		0.40	0.051
108-88-3	Toluene	92.14	18.8		0.40	0.051
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	187.38	16.0		0.40	0.16
120-82-1	1,2,4-Trichlorobenzene	181.45	25.1		2.0	0.43
71-55-6	1,1,1-Trichloroethane	133.41	19.9		0.30	0.065
79-00-5	1,1,2-Trichloroethane	133.41	19.3		0.40	0.067
79-01-6	Trichloroethene	131.39	19.0		0.40	0.11
75-69-4	Trichlorofluoromethane	137.37	20.9		0.40	0.20
95-63-6	1,2,4-Trimethylbenzene	120.20	23.9		0.80	0.16
108-67-8	1,3,5-Trimethylbenzene	120.20	20.9		0.40	0.13
108-05-4	Vinyl acetate	86.09	21.0		0.80	0.15
75-01-4	Vinyl chloride	62.50	17.9		0.40	0.12
179601-23-1	m,p-Xylene	106.17	42.6		0.80	0.10
95-47-6	o-Xylene	106.17	21.1		0.40	0.054

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	106		70-130
17060-07-0	1,2-Dichloroethane-d4 (Surr)	108		70-130
2037-26-5	Toluene-d8 (Surr)	98		70-130

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\SACCHROM\ChromData\ATMS2\20150511-21702.b\15051104.D
Lims ID: LCSD 20ppbv
Client ID:
Sample Type: LCSD
Inject. Date: 11-May-2015 15:16:30 ALS Bottle#: 2 Worklist Smp#: 27
Purge Vol: 250.000 mL Dil. Factor: 1.0000
Sample Info: LCS 20ppbv
Misc. Info.: 125mL
Operator ID: SRS Instrument ID: ATMS2

Method: \\SACCHROM\ChromData\ATMS2\20150511-21702.b\TO15_ATMS2N.m
Limit Group: MSA - TO15 - ICAL
Last Update: 11-May-2015 17:55:46 Calib Date: 18-Mar-2015 18:13:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\SACCHROM\ChromData\ATMS2\20150317-20264.b\15031726.D

Column 1 : RTX Volatiles (0.32 mm) Det: MS SCAN
Process Host: XAWRK023

First Level Reviewer: scottrs Date: 11-May-2015 17:57:29

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	130	10.285	10.285	0.000	98	58480	4.00	4.00	
* 2 1,4-Difluorobenzene	114	11.636	11.629	0.007	95	218339	4.00	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.943	15.949	-0.006	88	182190	4.00	4.00	
$ 4 1,2-Dichloroethane-d4 (Sur	65	11.052	11.051	0.001	98	82645	4.00	4.32	
$ 5 Toluene-d8 (Surr)	100	13.807	13.807	0.000	99	126222	4.00	3.92	
$ 6 4-Bromofluorobenzene (Surr	174	17.701	17.695	0.006	92	112779	4.00	4.23	
14 Propene	41	4.128	4.128	0.000	42	280807	20.0	18.0	
13 Chlorodifluoromethane	51	4.135	4.141	-0.006	97	575487	20.0	20.1	
15 Dichlorodifluoromethane	85	4.183	4.189	-0.006	99	705185	20.0	19.5	
19 1,2-Dichloro-1,1,2,2-tetra	135	4.421	4.420	0.000	92	319058	20.0	18.1	
18 Chloromethane	50	4.603	4.603	0.000	99	324920	20.0	20.1	
22 Butane	43	4.810	4.810	0.000	98	583059	20.0	18.2	
20 Vinyl chloride	62	4.840	4.840	0.000	98	294153	20.0	17.9	
21 Butadiene	39	4.913	4.913	0.000	97	293007	20.0	18.4	
25 Bromomethane	94	5.601	5.601	0.000	98	250738	20.0	18.3	
26 Chloroethane	64	5.759	5.759	0.000	97	141001	20.0	17.9	
27 Vinyl bromide	106	6.160	6.160	0.000	98	273863	20.0	17.2	
28 Trichlorofluoromethane	101	6.276	6.276	0.000	98	941874	20.0	20.9	
38 Pentane	43	6.325	6.325	0.000	97	638328	20.0	17.2	
37 Isopropyl alcohol	45	6.757	6.756	0.001	77	709886	20.0	19.5	
39 Ethyl ether	74	6.769	6.769	0.000	99	104971	20.0	15.8	
29 Acrolein	56	6.817	6.817	0.000	95	90227	20.0	19.3	
31 Acetone	43	6.939	6.939	0.000	100	398368	20.0	18.6	
43 1,1,2-Trichloro-1,2,2-trif	101	7.061	7.067	-0.006	94	537560	20.0	16.0	
30 Acetonitrile	41	7.237	7.237	0.000	99	194165	20.0	17.2	
41 1,1-Dichloroethene	61	7.243	7.243	0.000	94	470870	20.0	16.7	
44 2-Methyl-2-propanol	59	7.377	7.377	0.000	95	603684	20.0	19.3	
46 3-Chloro-1-propene	41	7.773	7.772	0.001	94	448889	20.0	18.8	
47 Methylene Chloride	49	7.900	7.900	0.000	93	381321	20.0	17.7	
48 Carbon disulfide	76	7.985	7.985	0.000	99	688569	20.0	15.3	
42 Acrylonitrile	53	7.985	7.985	0.000	98	192752	20.0	20.2	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
50 Methyl tert-butyl ether	73	8.308	8.308	0.000	95	641424	20.0	17.7	
49 trans-1,2-Dichloroethene	61	8.430	8.429	0.001	94	428253	20.0	18.4	
55 Hexane	41	8.709	8.709	0.000	93	397712	20.0	17.2	
52 Vinyl acetate	43	8.995	8.995	0.000	100	809396	20.0	21.0	
53 1,1-Dichloroethane	63	9.008	9.007	0.001	99	496662	20.0	17.3	
54 2-Butanone (MEK)	72	9.573	9.573	0.000	97	85342	20.0	15.1	
58 Ethyl acetate	43	9.841	9.841	0.000	98	579847	20.0	18.1	
57 cis-1,2-Dichloroethene	96	9.865	9.865	0.000	98	262348	20.0	16.7	
61 Chloroform	83	10.103	10.102	0.001	95	562304	20.0	18.0	
62 Tetrahydrofuran	42	10.413	10.413	0.000	90	319415	20.0	16.6	
65 1,1,1-Trichloroethane	97	10.723	10.729	-0.006	96	674040	20.0	19.9	
70 Cyclohexane	84	10.869	10.869	0.000	92	339679	20.0	16.3	
74 Isooctane	57	11.021	11.021	0.000	97	1590125	20.0	19.0	
67 n-Butanol	56	11.052	11.051	0.001	95	237996	20.0	17.5	M
69 Carbon tetrachloride	117	11.112	11.112	0.000	97	796735	20.0	22.0	
66 1,2-Dichloroethane	62	11.179	11.173	0.006	97	452769	20.0	22.6	
68 Benzene	78	11.283	11.283	0.000	96	725044	20.0	16.4	
75 n-Heptane	43	11.338	11.331	0.007	96	669811	20.0	18.7	
76 Trichloroethene	130	12.153	12.153	0.000	97	437941	20.0	19.0	
77 1,2-Dichloropropane	76	12.347	12.347	0.000	88	142662	20.0	21.5	
79 Methyl methacrylate	69	12.390	12.390	0.000	90	199487	20.0	16.6	
80 Dichlorobromomethane	85	12.639	12.639	0.000	98	415083	20.0	19.8	
72 1,4-Dioxane	88	12.639	12.645	-0.006	97	141703	20.0	17.4	
78 Dibromomethane	174	12.688	12.688	0.000	89	422355	20.0	21.1	
81 4-Methyl-2-pentanone (MIBK	43	13.132	13.132	0.000	100	646381	20.0	18.7	
83 cis-1,3-Dichloropropene	75	13.382	13.381	0.001	96	463863	20.0	19.3	
88 n-Octane	43	13.771	13.771	0.000	98	940245	20.0	18.9	
85 Toluene	91	13.923	13.923	0.000	93	961200	20.0	18.8	
84 trans-1,3-Dichloropropene	75	14.057	14.057	0.000	96	430392	20.0	19.2	
86 1,1,2-Trichloroethane	97	14.288	14.288	0.000	96	332418	20.0	19.3	
87 2-Hexanone	58	14.337	14.337	0.000	90	288212	20.0	18.8	
93 Tetrachloroethene	166	14.896	14.896	0.000	97	635164	20.0	20.8	
92 Chlorodibromomethane	129	15.042	15.042	0.000	99	777006	20.0	22.0	
94 Ethylene Dibromide	107	15.347	15.346	0.001	99	563717	20.0	20.5	
99 n-Nonane	43	15.955	15.949	0.006	95	971763	20.0	19.5	
96 Chlorobenzene	112	16.004	15.997	0.007	94	871422	20.0	19.8	
97 Ethylbenzene	91	16.095	16.095	0.000	98	1222078	20.0	20.6	
98 m-Xylene & p-Xylene	91	16.217	16.216	0.001	98	1924297	40.0	42.6	
101 o-Xylene	91	16.849	16.843	0.006	99	974325	20.0	21.1	
100 Styrene	104	16.861	16.861	0.000	97	782090	20.0	22.0	
102 Bromoform	173	17.299	17.293	0.006	99	847310	20.0	23.0	
104 Isopropylbenzene	120	17.379	17.378	0.001	96	395729	20.0	21.3	
103 1,1,2,2-Tetrachloroethane	83	17.512	17.512	0.000	98	612090	20.0	18.7	
105 1,2,3-Trichloropropane	110	17.731	17.731	0.000	92	217964	20.0	21.5	
113 n-Decane	57	17.920	17.920	0.000	86	881378	20.0	21.8	
107 N-Propylbenzene	91	17.981	17.981	0.000	99	1500050	20.0	19.9	
110 4-Ethyltoluene	120	18.145	18.145	0.000	99	421369	20.0	20.4	
111 1,3,5-Trimethylbenzene	120	18.212	18.212	0.000	92	580098	20.0	20.9	
109 2-Chlorotoluene	126	18.230	18.230	0.000	99	406252	20.0	20.7	
112 Alpha Methyl Styrene	118	18.632	18.632	0.000	88	591837	20.0	22.1	
114 tert-Butylbenzene	91	18.753	18.753	0.000	95	833938	20.0	20.9	
115 1,2,4-Trimethylbenzene	120	18.802	18.802	0.000	98	628152	20.0	23.9	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
116 sec-Butylbenzene	105	19.082	19.076	0.006	98	1645923	20.0	21.3	
121 4-Isopropyltoluene	119	19.277	19.276	0.001	98	1391400	20.0	21.6	
117 1,3-Dichlorobenzene	146	19.392	19.392	0.000	98	939308	20.0	23.6	
120 1,4-Dichlorobenzene	146	19.532	19.532	0.000	96	927444	20.0	23.8	
118 Benzyl chloride	91	19.648	19.648	0.000	99	972471	20.0	18.5	
124 Undecane	57	19.721	19.714	0.007	92	678500	20.0	26.1	
123 n-Butylbenzene	92	19.891	19.891	0.000	98	573757	20.0	19.8	
122 1,2-Dichlorobenzene	146	20.092	20.092	0.000	97	854531	20.0	23.3	
125 Dodecane	57	21.418	21.418	0.000	90	453560	20.0	38.5	E
126 1,2,4-Trichlorobenzene	180	22.902	22.902	0.000	95	572450	20.0	25.1	
128 Hexachlorobutadiene	225	23.267	23.261	0.006	98	632219	20.0	26.9	
127 Naphthalene	128	23.389	23.383	0.006	99	1114380	20.0	25.2	
129 1,2,3-Trichlorobenzene	180	23.937	23.930	0.007	96	485966	20.0	26.0	
A 144 C6 Range	1	8.709	(8.609-8.809)		0	1969736	20.0	16.6	
A 145 C3-C10	1	10.994	(4.068-17.920)		0	106830085	20.0	1189.3	
A 146 GRO	1	12.794	(3.968-21.621)		0	161630093	20.0	1507.2	
A 148 C4-C12	1	13.163	(4.637-21.621)		0	156804787	20.0	1465.6	
A 147 Toluene Range	1	13.917	(13.850-13.984)		0	2501638	20.0	16.2	
A 150 Nonmethane Organic Compoun	1	14.294	(4.068-24.521)		0	176037082	20.0	1484.1	E
A 151 Total VOCs as Tetrachloroe	1	14.294	(4.068-24.521)		0	176037082	20.0	1056.7	E
A 154 Total VOC as Hexane	1	14.294	(4.068-24.521)		0	176037082	20.0	1484.1	E
A 152 TVOC as Toluene	1	14.393	(4.356-24.431)		0	169891053	20.0	1102.9	E
A 149 PCE Range	1	14.906	(14.836-14.976)		0	3492801	20.0	21.0	
A 153 C6-C12	1	15.082	(8.524-21.621)		0	131988485	20.0	1651.0	
S 155 Xylenes, Total	91				0		60.0	63.7	

QC Flag Legend

Processing Flags

E - Exceeded Maximum Amount

Review Flags

M - Manually Integrated

Reagents:

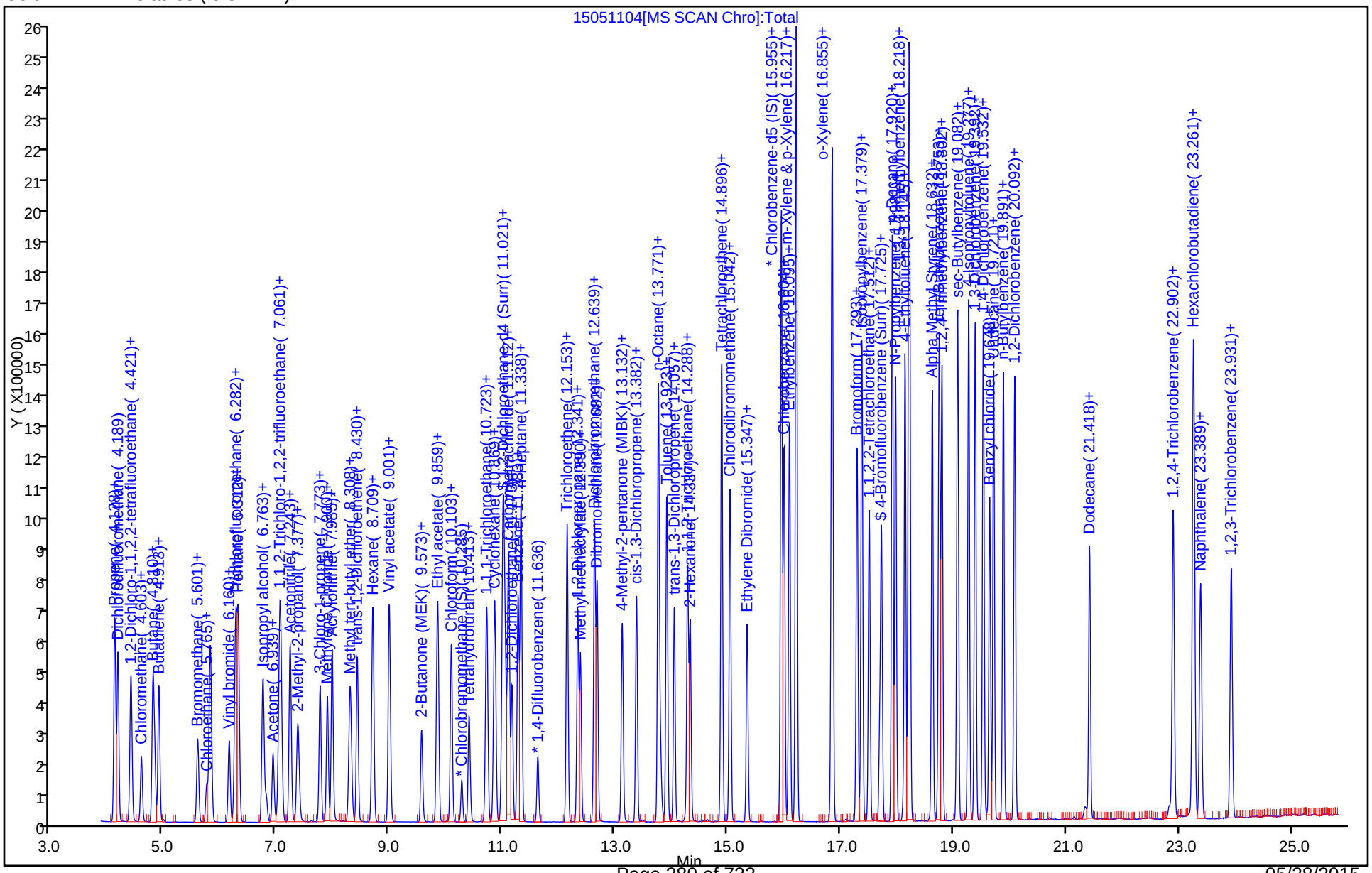
VACORPLC40_00142	Amount Added: 125.00	Units: mL	
VASUISIM_00177	Amount Added: 50.00	Units: mL	Run Reagent

Report Date: 11-May-2015 17:57:31 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Sacramento

Data File:	\\SACCHROM\ChromData\ATMS2\20150511-21702.b\15051104.D				
Injection Date:	11-May-2015 15:16:30	Instrument ID:	ATMS2	Operator ID:	SRS
Lims ID:	LCSD 20ppbv			Worklist Smp#:	27
Client ID:					
Purge Vol:	250.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	2
Method:	TO15_ATMS2N	Limit Group:	MSA - TO15 - ICAL		

Column: RTX Volatiles (0.32 mm)



AIR - GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Sacramento Job No.: 320-12924-1

SDG No.:

Instrument ID: ATMS2 Start Date: 03/18/2015 00:38

Analysis Batch Number: 68573 End Date: 03/18/2015 21:12

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 320-68573/2		03/18/2015 00:38	1	15031701.D	RTX-Volatiles 0.32(mm)
ZZZZZ		03/18/2015 02:02	1		RTX-Volatiles 0.32(mm)
IC 320-68573/5		03/18/2015 02:43	1	15031704.D	RTX-Volatiles 0.32(mm)
IC 320-68573/6		03/18/2015 03:24	1	15031705.D	RTX-Volatiles 0.32(mm)
IC 320-68573/7		03/18/2015 04:06	1	15031706.D	RTX-Volatiles 0.32(mm)
IC 320-68573/8		03/18/2015 04:48	1	15031707.D	RTX-Volatiles 0.32(mm)
IC 320-68573/9		03/18/2015 05:30	1	15031708.D	RTX-Volatiles 0.32(mm)
IC 320-68573/10		03/18/2015 06:14	1	15031709.D	RTX-Volatiles 0.32(mm)
IC 320-68573/11		03/18/2015 06:55	1	15031710.D	RTX-Volatiles 0.32(mm)
ICIS 320-68573/12		03/18/2015 07:37	1	15031711.D	RTX-Volatiles 0.32(mm)
IC 320-68573/13		03/18/2015 08:20	1	15031712.D	RTX-Volatiles 0.32(mm)
IC 320-68573/14		03/18/2015 09:04	1	15031713.D	RTX-Volatiles 0.32(mm)
ICV 320-68573/16		03/18/2015 10:29	1	15031715.D	RTX-Volatiles 0.32(mm)
IC 320-68573/18		03/18/2015 11:54	1		RTX-Volatiles 0.32(mm)
IC 320-68573/30		03/18/2015 12:35	1		RTX-Volatiles 0.32(mm)
IC 320-68573/19		03/18/2015 13:16	1		RTX-Volatiles 0.32(mm)
IC 320-68573/20		03/18/2015 13:58	1		RTX-Volatiles 0.32(mm)
IC 320-68573/21		03/18/2015 14:40	1		RTX-Volatiles 0.32(mm)
IC 320-68573/22		03/18/2015 15:22	1		RTX-Volatiles 0.32(mm)
IC 320-68573/23		03/18/2015 16:03	1		RTX-Volatiles 0.32(mm)
IC 320-68573/24		03/18/2015 16:45	1		RTX-Volatiles 0.32(mm)
IC 320-68573/25		03/18/2015 17:29	1		RTX-Volatiles 0.32(mm)
IC 320-68573/26		03/18/2015 18:13	1		RTX-Volatiles 0.32(mm)
ICV 320-68573/32		03/18/2015 21:12	1		RTX-Volatiles 0.32(mm)

TO-15

AIR - GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Sacramento Job No.: 320-12924-1

SDG No.:

Instrument ID: ATMS2 Start Date: 05/11/2015 12:56

Analysis Batch Number: 73563 End Date: 05/12/2015 11:28

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 320-73563/1		05/11/2015 12:56	1	15051101.D	RTX-Volatiles 0.32(mm)
CCVIS 320-73563/2		05/11/2015 13:38	1	15051102.D	RTX-Volatiles 0.32(mm)
LCS 320-73563/3		05/11/2015 14:21	1	15051103.D	RTX-Volatiles 0.32(mm)
LCSD 320-73563/27		05/11/2015 15:16	1	15051104.D	RTX-Volatiles 0.32(mm)
MB 320-73563/6		05/11/2015 16:43	1	15051106.D	RTX-Volatiles 0.32(mm)
320-12924-4	J6038-SS11-050615	05/11/2015 20:47	1.01	15051110.D	RTX-Volatiles 0.32(mm)
ZZZZZ		05/11/2015 21:32	1		RTX-Volatiles 0.32(mm)
ZZZZZ		05/11/2015 23:42	0.99		RTX-Volatiles 0.32(mm)
ZZZZZ		05/12/2015 00:27	1		RTX-Volatiles 0.32(mm)
ZZZZZ		05/12/2015 01:13	1		RTX-Volatiles 0.32(mm)
ZZZZZ		05/12/2015 01:58	1		RTX-Volatiles 0.32(mm)
ZZZZZ		05/12/2015 02:43	1		RTX-Volatiles 0.32(mm)
ZZZZZ		05/12/2015 03:28	1		RTX-Volatiles 0.32(mm)
ZZZZZ		05/12/2015 04:13	1		RTX-Volatiles 0.32(mm)
ZZZZZ		05/12/2015 04:58	1		RTX-Volatiles 0.32(mm)
320-12924-1	J6038-SS5-050615-1	05/12/2015 05:41	1.75	15051122.D	RTX-Volatiles 0.32(mm)
320-12924-2	J6038-SS5-050615-2	05/12/2015 08:11	3.57	15051123.D	RTX-Volatiles 0.32(mm)
320-12924-3	J6038-SS7-050615	05/12/2015 08:52	18	15051124.D	RTX-Volatiles 0.32(mm)
ZZZZZ		05/12/2015 09:37	1		RTX-Volatiles 0.32(mm)
ZZZZZ		05/12/2015 10:22	1		RTX-Volatiles 0.32(mm)
ZZZZZ		05/12/2015 11:28	1		RTX-Volatiles 0.32(mm)

TO-15

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

Sacramento

MS VOA AIR Data Review Checklist

Job(s): 320-12986, 600-111029, 320-12908, 440-109578, 320-12989

Instrument ID: ATMS7 / 21872

☑TO-14A ☐TO-14A MOD ☑TO-15 ☐TO-15 MOD ☐TO-15 SIM

ICAL Batch: 73873, 73875 TALS Batch: 74152, 74154

Review Items	Level 1 Yes	Level 1 No	Level 2	NA
Initial Calibration				
1. Is ICAL locked in Chrom & TALS?	✓		✓	
2. Is ICV properly linked in TALS for L3/L4 jobs?	✓		✓	
Continuing Calibration				
1. BFB tune documentation meets criteria? The PFTBA Tune Documentation is attached in TALS (SIM methods only)?	✓		✓	
2. All internal Standards within 50-200% of ICAL mid-point (TO-14A/TO-14A MOD) or 60-140% (TO-15/ TO-15 MOD?	✓		✓	
3. Does the %D meet:30%D for standard program..and 20%D for DoD?	✓		✓	
4. Isomeric pairs checked for correct peak assignment? • Dichlorodifluoromethane / 1,2-Ddichlorofluoroethane • Trichlorofluoromethane / 1,1,2-Trichlorofluoroethane • 2-Methyl butane / Acrolein • 1,1-Dichloroethene / cis-1,2-Dichloroethene / trans-1,2-Dichloroethene • Hexane / Vinyl acetate • 1,2-Dichloroethane / Benzene • cis-1,3-Dichloropropane / trans-1,3-Dichloropropane • Ethylbenzene / m/p-Xylene / o-Xylene • 4-Ethyl toluene / 1,3,5-Trimethylbenzene / 1,2,4-Trimethylbenzene • tert-Butylbenzene / 4-isopropyltoluene • 1,3-Dichlorobenzene / 1,4-Dichlorobenzene / 1,2-Dichlorobenzene • 1,2,4,5-tetramethylbenzne / 1,2,3,4-tetramethylbenzene • 1,2,4-Trichlorobenzene / 1,2,3-Trichlorobenzene	✓		✓	
Client Samples & QC Sample Results				
1. Was analysis done within holding times?	✓		✓	
2. Are Chromatograms reviewed and spectra verified?	✓		✓	
3. Are positive results within calibration range?	✓		✓	
4. Are all positive results within RT windows?	✓		✓	
5. All target cpds in MB < RL (< ½ RL for DoD)? Requires NCM if "no."	✓		✓	
6. Are surrogate recoveries for MB and LCS/LCSD within control limits?	✓		✓	
7. Are target constituents in LCS/LCSD within control limits?		✓	NCM	
8. Are all Chrom graphics uploaded?	✓		✓	
9. Are all QC samples properly linked in TALS?	✓		✓	
10. Do the Internal Standards meet criteria +/-50% to +/-200% (TO-14A / TO-14A MOD), +/-60% to +/- 140% (TO-15/TO-15 MOD)?	✓		✓	
11. Do results (e.g., dilutions) make sense?	✓		✓	
12. Have all flags been reviewed for appropriateness?	✓		✓	
13. All manual integrations appropriate and documented?	✓		✓	
14. Are non-conformances documented as NCMs? 33484, 33482	✓		✓	
15. Are client sample surrogate failures flagged and NCM written?				✓
16. Dilutions due to target cpds? ____ Dilutions due to non-targets? ____				✓
17. Has QC checker been run?	✓		✓	

1st Level Reviewer / Date: Hosenglee 5/19/2015 2nd Level Reviewer / Date: MKWay 5/20/2015

Comments: Chloroethane RPD 26%

TestAmerica Laboratories
Worklist Run Log Report

Worklist Name: 150515 Worklist Num: 21872
Instrument: ATMS7 Method: TO15_ATMS7N
Batch Directory: \\SACCHROM\ChromData\ATMS7\20150515-21872.b
Anaylysis Type: VOA Creator: Lee, Hoseung
Inj Volume: 5.00 Inj Vol Units: mL
Run Reagents:
VASUISIM_00169, Amount Added: 50.00 , Units: mL

Lab ID	Worklist ID	Sample Type	Inj Date/Time	File Name	Vial	Dil Factor	Client ID	Fract
BFB	320-0021872-001	BFB	15-May-2015 13:41:30	MS7051501.d	1	1.0		air
CCVIS 20ppbv	320-0021872-002	CCVIS	15-May-2015 14:35:30	MS7051502.d	1	1.0		air
LCS 20ppbv	320-0021872-003	LCS	15-May-2015 15:29:30	MS7051503.d	2	1.0		air
LCSD 20ppbv	320-0021872-004	LCSD	15-May-2015 16:23:30	MS7051504.d	2	1.0		air
COB	320-0021872-005	EB	15-May-2015 17:18:30	MS7051505.d	16	1.0		air
MB	320-0021872-006	MB	15-May-2015 18:14:30	MS7051506.d	16	1.0		air
320-12986-A-2	320-0021872-007	Client	15-May-2015 19:08:30	MS7051507.d	3	90.6	RECEIVING	air
320-12986-A-3	320-0021872-008	Client	15-May-2015 20:02:30	MS7051508.d	4	156.	MACHINE SHOP	air
320-12986-A-4	320-0021872-009	Client	15-May-2015 20:56:30	MS7051509.d	5	3.6	OFFICE	air
600-111029-A-3	320-0021872-010	Client	15-May-2015 21:50:30	MS7051510.d	6	2.7	TEDLAR SAMPLE BAG	air
320-12908-A-1	320-0021872-011	Client	15-May-2015 22:45:30	MS7051511.d	7	2.9	AIR20150507	air
440-109578-A-1	320-0021872-012	Client	15-May-2015 23:42:30	MS7051512.d	8	1.0	P-4A	air
320-12945-A-11	320-0021872-013	Client	16-May-2015 00:40:30	MS7051513.d	9	1.0	8408	air
320-12946-A-10	320-0021872-014	Client	16-May-2015 01:38:30	MS7051514.d	10	1.0	8435	air
320-12988-A-7	320-0021872-015	Client	16-May-2015 02:37:30	MS7051515.d	11	1.0	34000781	air
320-12989-A-11	320-0021872-016	Client	16-May-2015 03:31:30	MS7051516.d	12	1.0	097784-011/CAMUVZMSBH	air
320-12989-A-12	320-0021872-017	Client	16-May-2015 04:25:30	MS7051517.d	13	1.0	097784-012/CAMUVZMSBH	air
320-12989-A-13	320-0021872-018	Client	16-May-2015 05:20:30	MS7051518.d	14	1.0	097784-013/CAMUVZMSBH	air
320-12989-A-14	320-0021872-019	Client	16-May-2015 06:15:30	MS7051519.d	15	1.0	097784-014/CAMUVZMSBH	air
320-12989-A-15	320-0021872-020	Client	16-May-2015 07:10:30	MS7051520.d	16	1.0	097784-015/CAMUVZMSBH	air

TestAmerica Laboratories
Worklist QC Batch Report

Worklist Name: 150515 Worklist Number: 21872
Instrument Name: ATMS7 Chrom Method: TO15_ATMS7N
Data Directory: \\SACCHROM\ChromData\ATMS7\20150515-21872.b
QC Batching: Disabled Limit Group Batching: Enabled

QC Batch: 1	MSA - TO15_MOD - ICAL Raw Batch: 74151	MSA - TO15 - ICAL Raw Batch: 74152	MSA - TO14A_LOW - ICAL Raw Batch: 74153	MSA - TO14 - ICAL Raw Batch: 74154	MSA - TO15 _PREC - ICAL Raw Batch: 74155
# 1 BFB	# 1 BFB	# 1 BFB	# 1 BFB	# 1 BFB	# 1 BFB
# 2 CCVIS 20ppbv	# 2 CCVIS 20ppbv	# 2 CCVIS 20ppbv	# 2 CCVIS 20ppbv	# 2 CCVIS 20ppbv	# 2 CCVIS 20ppbv
# 3 LCS 20ppbv	# 3 LCS 20ppbv	# 3 LCS 20ppbv	# 3 LCS 20ppbv	# 3 LCS 20ppbv	# 3 LCS 20ppbv
# 4 LCSD 20ppbv	# 4 LCSD 20ppbv	# 4 LCSD 20ppbv	# 4 LCSD 20ppbv	# 4 LCSD 20ppbv	# 4 LCSD 20ppbv
# 5 COB	# 5 COB	# 5 COB	# 5 COB	# 5 COB	# 5 COB
# 6 MB	# 6 MB	# 6 MB	# 6 MB	# 6 MB	# 6 MB
# 7 320-12986-A-2		# 7 320-12986-A-2			
# 8 320-12986-A-3		# 8 320-12986-A-3			
# 9 320-12986-A-4		# 9 320-12986-A-4			
#10 600-111029-A-3		#10 600-111029-A-3			
#11 320-12908-A-1		#11 320-12908-A-1			
#12 440-109578-A-1		#12 440-109578-A-1			
#13 320-12945-A-11		#13 320-12945-A-11			
#14 320-12946-A-10		#14 320-12946-A-10			
#15 320-12988-A-7		#15 320-12988-A-7			
#16 320-12989-A-11				#16 320-12989-A-11	
#17 320-12989-A-12				#17 320-12989-A-12	
#18 320-12989-A-13				#18 320-12989-A-13	
#19 320-12989-A-14				#19 320-12989-A-14	
#20 320-12989-A-15				#20 320-12989-A-15	

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THE LEADER IN ENVIRONMENTAL TESTING

Sacramento

ICAL Review Checklist
Volatile Air GCMS

Method & Instrument ID: TO-15 / ATMS7 ICAL Date: 5/13/2015

Chrom Worklist #: 21789 Calibration ID: 13575, 6, 7, 8, 9 / 13530, 1, 2, 3 TALS Analysis Batch: 73872 - TO15_MOD, 73873 - TO-15, 73874 - TO-14A_low, 73875 - TO-14, 73876 - TO-15 PAGE

Method (Check the applicable box)

☐ TO-14A / TO-15 Modified SCAN ☐ TO-15 Scan ☐ TO-15 SIM ☐ TO-15 SIM (Special Project)

Acceptance criteria are found in the applicable laboratory SOP or in TALS. If item is No, create an NCM.

Review Items	Level 1 Yes	Level 1 No	N/A	Level 2
General Criteria				
Standards analyzed within 24 hour tune time.	✓			✓
Chrom Peak Review calibration reports (F8) reviewed for error flags	✓			✓
Retention time correct for isomers/coeluters and all other analytes				
• Dichlorodifluoromethane / 1,2-Dichlorofluoroethane				
• Trichlorofluoromethane / 1,1,2-Trichlorofluoroethane				
• Hexane / Vinyl acetate				
• 2-Methyl butane / Acrolein				
• 1,1-Dichloroethene / cis-1,2-Dichloroethene / trans-1,2-Dichloroethene				
• 1,2-Dichloroethane / Benzene	✓			
• ~~cis-1,3-Dichloropropane / trans-1,3-Dichloropropene~~				✓
• Ethylbenzene / m/p-Xylene / o-Xylene				
• 4-Ethyl toluene / 1,3,5-Trimethylbenzene / 1,2,4-Trimethylbenzene				
• tert-Butylbenzene / 4-isopropyltoluene				
• 1,3-Dichlorobenzene / 1,4-Dichlorobenzene / 1,2-Dichlorobenzene				
• 1,2,4,5-tetramethylbenzene / 1,2,3,4-tetramethylbenzene				
• 1,2,4-Trichlorobenzene / 1,2,3-Trichlorobenzene				
Curve reviewed in Chrom. for all analytes and all appropriate levels are included/excluded	✓			✓
Uploaded all calibration levels to TALS after any changes were made in Peak Review	✓			✓
Method for this worklist set as Most Recent Method	✓			
ICAL locked in Chrom and in TALS	✓			✓
ICV passes -See criteria below	✓			✓
Manual integrations clearly identified, initiated, dated and reason given.			✓	
SIM Criteria				
PFTBA tune documentation present in Chrom & TALS and meets criteria			NA	
RSD < 30% (≤ 40% for up to 2 analytes.				
Linear regressions >0.995 and intercept <+/- ½ RL amount, (minimum of 5 points curve).				
All internal standards are within 60-140% of ICAL midpoint.				
ICV (Second Source) meets 70-130% criteria (60-140%) for up to 2 analytes.				
Scan Criteria				
BFB Tune documentation present in Chrom & TALS and meets criteria	✓			✓
For GRO: WS-GRO report (F8) reviewed to ensure IS/Surrogate subtraction from area sum.			✓	
RSD < 30% (≤ 40% for up to 2 analytes, and ≤ 55% for up to 4 poor performers defined in SOP)	✓			✓
Linear regressions >0.995 and intercept <+/- ½ RL amount, (minimum of 6 points curve).	✓			✓
All internal standards are within 60-140% of ICAL midpoint (for TO-15 / TO-15 Modified) or within 50-200% of ICAL midpoint (for TO-14A)	✓			✓
ICV (Second Source) meets 70-130% criteria (60-140% for up to 2 analytes, and 45-155% for up to 4 poor performers defined in SOP)	✓			✓

ICAL compounds outside RSD criteria (write compound and %RSD

Dodecane - linear

Repeat Failure from Prev ICAL: Yes ☐ No ☐

ICV (second source) compounds outside RSD criteria (write compound and %D.

Yes ☐ No ☐

1st Level Reviewer: Hoseung Lee Date: 5/14/2015

2nd Level Reviewer: [illegible] Date: 5/15/2015

Comments:

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

Sacramento

MS VOA AIR Data Review Checklist

Job(s): 320-12984, 320-12989

Instrument ID: ATMS7 / WL 21899

☑TO-14A ☐TO-14A MOD ☑TO-15 ☐TO-15 MOD ☐TO-15 SIM

ICAL Batch: 73873, 73875 TALS Batch: 74271, 74273

Review Items	Level 1 Yes	Level 1 No	Level 2	NA
Initial Calibration				
1. Is ICAL locked in Chrom & TALS?	✓		✓	
2. Is ICV properly linked in TALS for L3/L4 jobs?	✓		✓	
Continuing Calibration				
1. BFB tune documentation meets criteria? The PFTBA Tune Documentation is attached in TALS (SIM methods only)?	✓		✓	
2. All Internal Standards within 50-200% of ICAL mid-point (TO-14A/TO-14A MOD) or 60-140% (TO-15/ TO-15 MOD?	✓		✓	
3. Does the %D meet:30%D for standard program, and 20%D for DoD?	✓		✓	
4. Isomeric pairs checked for correct peak assignment? • Dichlorodifluoromethane / 1,2-Ddichlorofluoroethane • Trichlorofluoromethane / 1,1,2-Trichlorofluoroethane • 2-Methyl butane / Acrolein • 1,1-Dichloroethene / cis-1,2-Dichloroethene / trans-1,2-Dichloroethene • Hexane / Vinyl acetate • 1,2-Dichloroethane / Benzene • cis-1,3-Dichloropropane / trans-1,3-Dichloropropane • Ethylbenzene / m/p-Xylene / o-Xylene • 4-Ethyl toluene / 1,3,5-Trimethylbenzene / 1,2,4-Trimethylbenzene • tert-Butylbenzene / 4-isopropyltoluene • 1,3-Dichlorobenzene / 1,4-Dichlorobenzene / 1,2-Dichlorobenzene • 1,2,4,5-tetramethylbenzene / 1,2,3,4-tetramethylbenzene • 1,2,4-Trichlorobenzene / 1,2,3-Trichlorobenzene	✓		✓	
Client Samples & QC Sample Results				
1. Was analysis done within holding times?	✓		✓	
2. Are Chromatograms reviewed and spectra verified?	✓		✓	
3. Are positive results within calibration range?	✓		✓	
4. Are all positive results within RT windows?	✓		✓	
5. All target cpds in MB < RL (< ½ RL for DoD)? Requires NCM if "no."	✓		✓	
6. Are surrogate recoveries for MB and LCS/LCSD within control limits?	✓		✓	
7. Are target constituents in LCS/LCSD within control limits?	✓		✓	
8. Are all Chrom graphics uploaded?	✓		✓	
9. Are all QC samples properly linked in TALS?	✓		✓	
10. Do the Internal Standards meet criteria +/-50% to +/-200% (TO-14A / TO-14A MOD), +/-60% to +/- 140% (TO-15/TO-15 MOD)?	✓		✓	
11. Do results (e.g., dilutions) make sense?	✓		✓	
12. Have all flags been reviewed for appropriateness?	✓		✓	
13. All manual integrations appropriate and documented?				✓
14. Are non-conformances documented as NCMs?				✓
15. Are client sample surrogate failures flagged and NCM written?				✓
16. Dilutions due to target cpds? ____ Dilutions due to non-targets? ____				✓
17. Has QC checker been run?	✓		✓	

1st Level Reviewer / Date: Haeung Lee 5/19/2015 2nd Level Reviewer / Date: MWay 5/20/2015

Comments: _____

TestAmerica Laboratories
Worklist Run Log Report

Worklist Name: 150518 Worklist Num: 21899
Instrument: ATMS7 Method: TO15_ATMS7N
Batch Directory: \\SACCHROM\ChromData\ATMS7\20150518-21899.b
Anaylysis Type: VOA Creator: Lee, Hoseung
Inj Volume: 5.00 Inj Vol Units: mL
Run Reagents:
VASUISIM_00169, Amount Added: 50.00 , Units: mL

Lab ID	Worklist ID	Sample Type	Inj Date/Time	File Name	Vial	Dil Factor	Client ID	Fract
BFB	320-0021899-001	BFB	18-May-2015 13:06:30	MS7051801.d	1	1.0		air
CCVIS 20ppbv	320-0021899-002	CCVIS	18-May-2015 14:00:30	MS7051802.d	1	1.0		air
LCS 20ppbv	320-0021899-003	LCS	18-May-2015 14:53:30	MS7051803.d	2	1.0		air
LCSD 20ppbv	320-0021899-004	LCSD	18-May-2015 15:47:30	MS7051804.d	2	1.0		air
COB	320-0021899-005	EB	18-May-2015 17:26:30	MS7051805.d	16	1.0		air
MB	320-0021899-006	MB	18-May-2015 18:22:30	MS7051806.d	16	1.0		air
320-12989-A-16	320-0021899-007	Client	18-May-2015 19:16:30	MS7051807.d	3	1.0	097784-016/CAMUVZMSBH	air
320-12989-A-17	320-0021899-008	Client	18-May-2015 20:10:30	MS7051808.d	4	1.0	097784-017/CAMUVZMSBH	air
320-12989-A-18	320-0021899-009	Client	18-May-2015 21:04:30	MS7051809.d	5	1.0	097784-018/CAMUVZMSBH	air
320-12989-A-19	320-0021899-010	Client	18-May-2015 21:59:30	MS7051810.d	6	1.0	097784-019/CAMUVZMSBH	air
320-12989-A-20	320-0021899-011	Client	18-May-2015 22:53:30	MS7051811.d	7	1.0	097784-020/CAMUVZMSBH	air
320-12989-A-21	320-0021899-012	Client	18-May-2015 23:47:30	MS7051812.d	8	1.0	097784-021/CAMUVZMSBH	air
320-12989-A-22	320-0021899-013	Client	19-May-2015 00:42:30	MS7051813.d	9	1.0	097784-022/CAMUVZMSBH	air
320-12989-A-23	320-0021899-014	Client	19-May-2015 01:36:30	MS7051814.d	10	1.0	097784-023/CAMUVZMSBH	air
320-12989-A-24	320-0021899-015	Client	19-May-2015 02:30:30	MS7051815.d	11	1.0	097784-024/CAMUVZMSBH	air
320-12989-A-25	320-0021899-016	Client	19-May-2015 03:25:30	MS7051816.d	12	1.0	097784-025/CAMUVZMSBH	air
320-12989-A-26	320-0021899-017	Client	19-May-2015 04:19:30	MS7051817.d	13	1.0	097784-026/CAMUVZMSBH	air
320-12989-A-27	320-0021899-018	Client	19-May-2015 05:14:30	MS7051818.d	14	1.0	097784-027/CAMUVZMSBH	air
320-12989-A-28	320-0021899-019	Client	19-May-2015 06:08:30	MS7051819.d	15	1.0	097784-028/CAMUVZMSBH	air
COB - 102	320-0021899-023	Client	19-May-2015 07:03:30	MS7051820.d	1	1.0		air
COB - EXT	320-0021899-024	Client	19-May-2015 07:58:30	MS7051821.d	2	1.0		air
320-12984-A-1	320-0021899-025	Client	19-May-2015 08:51:30	MS7051822.d	5	905.	SV-1	air
320-12984-A-1 DU	320-0021899-026	DU	19-May-2015 09:45:30	MS7051823.d	5	905.		air
320-12989-A-29	320-0021899-020	Client	19-May-2015 10:39:30	MS7051824.d	6	1.0	097784-029/CAMUCSSBH6	air
320-12989-A-30	320-0021899-021	Client	19-May-2015 11:33:30	MS7051825.d	7	1.0	097784-030/CAMUVZMSBH	air
320-12989-A-31	320-0021899-022	Client	19-May-2015 12:27:30	MS7051826.d	8	1.0	097784-031/CAMUVZMS-B	air

TestAmerica Laboratories
Worklist QC Batch Report

Worklist Name: 150518 Worklist Number: 21899
Instrument Name: ATMS7 Chrom Method: TO15_ATMS7N
Data Directory: \\SACCHROM\ChromData\ATMS7\20150518-21899.b
QC Batching: Disabled Limit Group Batching: Enabled

QC Batch: 1	MSA - TO15_MOD - ICAL Raw Batch: 74270	MSA - TO15 - ICAL Raw Batch: 74271	MSA - TO14A_LOW - ICAL Raw Batch: 74272	MSA - TO14 - ICAL Raw Batch: 74273	MSA - TO15 _PREC - ICAL Raw Batch: 74274
# 1 BFB	# 1 BFB	# 1 BFB	# 1 BFB	# 1 BFB	# 1 BFB
# 2 CCVIS 20ppbv	# 2 CCVIS 20ppbv	# 2 CCVIS 20ppbv	# 2 CCVIS 20ppbv	# 2 CCVIS 20ppbv	# 2 CCVIS 20ppbv
# 3 LCS 20ppbv	# 3 LCS 20ppbv	# 3 LCS 20ppbv	# 3 LCS 20ppbv	# 3 LCS 20ppbv	# 3 LCS 20ppbv
# 4 LCSD 20ppbv	# 4 LCSD 20ppbv	# 4 LCSD 20ppbv	# 4 LCSD 20ppbv	# 4 LCSD 20ppbv	# 4 LCSD 20ppbv
# 5 COB	# 5 COB	# 5 COB	# 5 COB	# 5 COB	# 5 COB
# 6 MB	# 6 MB	# 6 MB	# 6 MB	# 6 MB	# 6 MB
# 7 320-12989-A-16				# 7 320-12989-A-16	
# 8 320-12989-A-17				# 8 320-12989-A-17	
# 9 320-12989-A-18				# 9 320-12989-A-18	
#10 320-12989-A-19				#10 320-12989-A-19	
#11 320-12989-A-20				#11 320-12989-A-20	
#12 320-12989-A-21				#12 320-12989-A-21	
#13 320-12989-A-22				#13 320-12989-A-22	
#14 320-12989-A-23				#14 320-12989-A-23	
#15 320-12989-A-24				#15 320-12989-A-24	
#16 320-12989-A-25				#16 320-12989-A-25	
#17 320-12989-A-26				#17 320-12989-A-26	
#18 320-12989-A-27				#18 320-12989-A-27	
#19 320-12989-A-28				#19 320-12989-A-28	
#23 COB - 102	#23 COB - 102	#23 COB - 102	#23 COB - 102	#23 COB - 102	#23 COB - 102
#24 COB - EXT	#24 COB - EXT	#24 COB - EXT	#24 COB - EXT	#24 COB - EXT	#24 COB - EXT
#25 320-12984-A-1		#25 320-12984-A-1			
#26 320-12984-A-1		#26 320-12984-A-1			
DU		DU		#20 320-12989-A-29	
#20 320-12989-A-29				#21 320-12989-A-30	
#21 320-12989-A-30				#22 320-12989-A-31	
#22 320-12989-A-31					

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

Sacramento

ICAL Review Checklist
Volatile Air GCMS

Method & Instrument ID: TO-15 / ACMS7 **ICAL Date:** 5/13/2015

Chrom Worklist # 21789 **Calibration ID:** 13575, 6, 7, 8, 9 **TALS Analysis Batch:** 73872 - TO15_mod

Method (Check the applicable box) 13570, 1, 2, 3

☐ TO-14A / TO-15 Modified SCAN ☑ TO-15 Scan ☐ TO-15 SIM ☐ TO-15 SIM (Special Project)

73873 - TO-15
73874 - TO-14A_low
73875 - TO-14
73876 - TO-15 PREC

Acceptance criteria are found in the applicable laboratory SOP or in TALS. If item is No, create an NCM.

Review Items	Level 1 Yes	Level 1 No	NA	Level 2
General Criteria				
Standards analyzed within 24 hour tune time.	✓			✓
Chrom Peak Review calibration reports (F8) reviewed for error flags	✓			✓
Retention time correct for isomers/coeluters and all other analytes				
• Dichlorodifluoromethane / 1,2-Dichlorofluoroethane				
• Trichlorofluoromethane / 1,1,2-Trichlorofluoroethane				
• Hexane / Vinyl acetate				
• 2-Methyl butane / Acrolein				
• 1,1-Dichloroethene / cis-1,2-Dichloroethene / trans-1,2-Dichloroethene				
• 1,2-Dichloroethane / Benzene	✓			
• ~~cis-1,3-Dichloropropane / trans-1,3-Dichloropropene~~				
• Ethylbenzene / m/p-Xylene / o-Xylene				✓
• 4-Ethyl toluene / 1,3,5-Trimethylbenzene / 1,2,4-Trimethylbenzene				
• tert-Butylbenzene / 4-Isopropyltoluene				
• 1,3-Dichlorobenzene / 1,4-Dichlorobenzene / 1,2-Dichlorobenzene				
• 1,2,4,5-tetramethylbenzene / 1,2,3,4-tetramethylbenzene				
• 1,2,4-Trichlorobenzene / 1,2,3-Trichlorobenzene				
Curve reviewed in Chrom for all analytes and all appropriate levels are included/excluded	✓			✓
Uploaded all calibration levels to TALS after any changes were made in Peak Review	✓			✓
Method for this worklist set as Most Recent Method	✓			
ICAL locked in Chrom and in TALS	✓			✓
ICV passes -See criteria below	✓			✓
Manual integrations clearly identified, initialed, dated and reason given.			✓	
SIM Criteria				
PFTBA tune documentation present in Chrom & TALS and meets criteria			NA	
RSD < 30% (≤ 40% for up to 2 analytes.				
Linear regressions >0.995 and intercept <+/- ½ RL amount, (minimum of 5 points curve).				
All internal standards are within 60-140% of ICAL midpoint.				
ICV (Second Source) meets 70-130% criteria (60-140%) for up to 2 analytes.				
Scan Criteria				
BFB Tune documentation present in Chrom & TALS and meets criteria	✓			✓
For GRO: WS-GRO report (F8) reviewed to ensure IS/Surrogate subtraction from area sum.			✓	
RSD < 30% (≤ 40% for up to 2 analytes, and ≤ 55% for up to 4 poor performers defined in SOP)	✓			✓
Linear regressions >0.995 and intercept <+/- ½ RL amount, (minimum of 6 points curve).	✓			✓
All internal standards are within 60-140% of ICAL midpoint (for TO-15 / TO-15 Modified) or within 50-200% of ICAL midpoint (for TO-14A)	✓			✓
ICV (Second Source) meets 70-130% criteria (60-140% for up to 2 analytes, and 45-155% for up to 4 poor performers defined in SOP)	✓			✓

ICAL compounds outside RSD criteria (write compound and %RSD: Dodecane - linear

Repeat Failure from Prev ICAL: Yes ☐ No ☐

ICV (second source) compounds outside RSD criteria (write compound and %D.

Yes ☐ No ☐

1st Level Reviewer: Hoseung Lee Date: 5/14/2015

2nd Level Reviewer: [illegible] Date: 5/15/2015

Comments:

TO15_SIM

Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS)

FORM II
AIR - GC/MS VOA SURROGATE RECOVERY

Lab Name: TestAmerica Sacramento Job No.: 320-12924-1

SDG No.:

Matrix: Air Level: Low

GC Column (1): RTX-Volatil ID: 0.32(mm)

Client Sample ID	Lab Sample ID	DCA #	TOL #	BFB #
J6038-IA1-050615-1	320-12924-5	97	100	104
J6038-IA1-050615-2	320-12924-6	96	101	105
J6038-IA2-050615	320-12924-7	95	100	103
J6038-IA3-050615	320-12924-8	95	100	105
J6038-IA4-050615	320-12924-9	96	100	104
J6038-IA5-050615	320-12924-10	94	100	102
J6038-OA1-050615-1	320-12924-11	94	100	101
J6038-OA1-050615-2	320-12924-12	96	100	102
	MB 320-73719/9	98	99	102
	LCS 320-73719/4	99	100	109
	LCSD 320-73719/5	97	100	107

	QC LIMITS
DCA = 1,2-Dichloroethane-d4 (Surr)	70-130
TOL = Toluene-d8 (Surr)	70-130
BFB = 4-Bromofluorobenzene (Surr)	70-130

Column to be used to flag recovery values

FORM II TO-15 SIM

FORM III
AIR - GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Sacramento Job No.: 320-12924-1

SDG No.:

Matrix: Air Level: Low Lab File ID: MS5051104.D

Lab ID: LCS 320-73719/4 Client ID:

COMPOUND	SPIKE ADDED (ppb v/v)	LCS CONCENTRATION (ppb v/v)	LCS % REC	QC LIMITS REC	#
1,1,1-Trichloroethane	1.20	1.33	111	75-135	
1,1,2-Trichloroethane	1.20	1.10	92	73-133	
1,1-Dichloroethane	1.20	1.18	99	75-137	
1,1-Dichloroethene	1.20	1.10	91	70-131	
1,2-Dichlorobenzene	1.20	1.13	94	56-137	
1,2-Dichloroethane	1.20	1.21	100	75-136	
1,4-Dichlorobenzene	1.20	1.18	98	57-142	
Chlorobenzene	1.20	1.11	93	69-129	
Chloroform	1.20	1.26	105	75-135	
cis-1,2-Dichloroethene	1.20	1.26	105	75-136	
Ethylbenzene	1.20	1.08	90	73-133	
Freon 11	1.20	1.33	110	75-139	
Freon 113	1.20	1.13	94	71-129	
Freon 12	1.20	1.56	130	75-144	
m,p-Xylene	2.40	2.18	91	75-136	
Methylene Chloride	1.20	1.07	89	72-130	
o-Xylene	1.20	1.10	91	75-135	
Tetrachloroethene	1.20	1.14	95	70-126	
Toluene	1.20	1.17	98	70-130	
trans-1,2-Dichloroethene	1.20	1.22	102	75-136	
Trichloroethene	1.20	1.22	102	70-130	
Vinyl chloride	1.20	1.07	89	66-142	

Column to be used to flag recovery and RPD values

FORM III TO-15 SIM

FORM III
AIR - GC/MS VOA LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: TestAmerica Sacramento Job No.: 320-12924-1

SDG No.:

Matrix: Air Level: Low Lab File ID: MS5051106.D

Lab ID: LCSD 320-73719/5 Client ID:

COMPOUND	SPIKE ADDED (ppb v/v)	LCSD CONCENTRATION (ppb v/v)	LCSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
1,1,1-Trichloroethane	1.20	1.09	91	20	25	75-135	
1,1,2-Trichloroethane	1.20	0.905	75	20	25	73-133	
1,1-Dichloroethane	1.20	0.975	81	19	25	75-137	
1,1-Dichloroethene	1.20	0.915	76	18	25	70-131	
1,2-Dichlorobenzene	1.20	0.955	80	17	25	56-137	
1,2-Dichloroethane	1.20	0.975	81	21	25	75-136	
1,4-Dichlorobenzene	1.20	0.976	81	19	25	57-142	
Chlorobenzene	1.20	0.931	78	18	25	69-129	
Chloroform	1.20	1.04	86	20	25	75-135	
cis-1,2-Dichloroethene	1.20	1.06	89	17	25	75-136	
Ethylbenzene	1.20	0.904	75	18	25	73-133	
Freon 11	1.20	1.10	92	18	25	75-139	
Freon 113	1.20	0.937	78	18	25	71-129	
Freon 12	1.20	1.27	106	21	25	75-144	
m,p-Xylene	2.40	1.83	76	17	25	75-136	
Methylene Chloride	1.20	0.871	73	21	25	72-130	
o-Xylene	1.20	0.913	76	18	25	75-135	
Tetrachloroethene	1.20	0.946	79	19	25	70-126	
Toluene	1.20	0.972	81	19	25	70-130	
trans-1,2-Dichloroethene	1.20	1.03	85	18	25	75-136	
Trichloroethene	1.20	1.01	84	19	25	70-130	
Vinyl chloride	1.20	1.00	83	7	25	66-142	

Column to be used to flag recovery and RPD values

FORM III TO-15 SIM

FORM IV
AIR - GC/MS VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Sacramento Job No.: 320-12924-1

SDG No.:

Lab File ID: MS5051110.D Lab Sample ID: MB 320-73719/9

Matrix: Air Heated Purge:(Y/N) N

Instrument ID: ATMS5 Date Analyzed: 05/11/2015 19:27

GC Column: RTX-Volatiles ID: 0.32(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 320-73719/4	MS5051104.D	05/11/2015 14:53
	LCSD 320-73719/5	MS5051106.D	05/11/2015 15:53
J6038-IA1-050615-1	320-12924-5	MS5051112.D	05/11/2015 21:47
J6038-IA1-050615-2	320-12924-6	MS5051113.D	05/11/2015 22:45
J6038-IA2-050615	320-12924-7	MS5051114.D	05/11/2015 23:44
J6038-IA3-050615	320-12924-8	MS5051115.D	05/12/2015 00:42
J6038-IA4-050615	320-12924-9	MS5051116.D	05/12/2015 01:40
J6038-IA5-050615	320-12924-10	MS5051117.D	05/12/2015 02:39
J6038-OA1-050615-1	320-12924-11	MS5051118.D	05/12/2015 03:39
J6038-OA1-050615-2	320-12924-12	MS5051119.D	05/12/2015 04:38

FORM VIII
AIR - GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Sacramento Job No.: 320-12924-1

SDG No.:

Sample No.: ICIS 320-69481/9 Date Analyzed: 03/26/2015 01:24

Instrument ID: ATMS5 GC Column: RTX-Volatiles ID: 0.32(mm)

Lab File ID (Standard): MS5032516.D Heated Purge: (Y/N) N

Calibration ID: 12528

		CBM		DFB		CBZ	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		42519	11.90	196414	14.00	168180	20.56
UPPER LIMIT		59527	12.23	274980	14.33	235452	20.89
LOWER LIMIT		25511	11.57	117848	13.67	100908	20.23
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 320-69481/15		40744	11.90	182440	13.99	160993	20.56
CCVIS 320-73719/2		32227	11.85	153766	13.94	143379	20.51

CBM = Chlorobromomethane (IS)
DFB = 1,4-Difluorobenzene
CBZ = Chlorobenzene-d5 (IS)

Area Limit = 60%-140% of internal standard area
RT Limit = ± 0.33 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII TO-15 SIM

FORM VIII
AIR - GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Sacramento Job No.: 320-12924-1

SDG No.:

Sample No.: CCVIS 320-73719/2 Date Analyzed: 05/11/2015 13:07

Instrument ID: ATMS5 GC Column: RTX-Volatiles ID: 0.32(mm)

Lab File ID (Standard): MS5051102.D Heated Purge: (Y/N) N

Calibration ID: 12528

		CBM		DFB		CBZ	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		32227	11.85	153766	13.94	143379	20.51
UPPER LIMIT		45118	12.18	215272	14.27	200731	20.84
LOWER LIMIT		19336	11.52	92260	13.61	86027	20.18
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 320-73719/4		35778	11.85	169688	13.94	155780	20.51
LCSD 320-73719/5		36577	11.85	174708	13.95	162115	20.51
MB 320-73719/9		33329	11.85	158857	13.95	142511	20.51
320-12924-5	J6038-IA1-050615-1	34882	11.85	167479	13.94	154279	20.51
320-12924-6	J6038-IA1-050615-2	34954	11.85	166941	13.94	154783	20.51
320-12924-7	J6038-IA2-050615	36439	11.85	173313	13.95	160482	20.51
320-12924-8	J6038-IA3-050615	37654	11.85	178369	13.95	165085	20.51
320-12924-9	J6038-IA4-050615	37547	11.85	178192	13.94	165274	20.51
320-12924-10	J6038-IA5-050615	36873	11.85	174364	13.94	161732	20.51
320-12924-11	J6038-OA1-050615-1	34927	11.85	163866	13.94	149538	20.51
320-12924-12	J6038-OA1-050615-2	37250	11.84	176618	13.94	162196	20.51

CBM = Chlorobromomethane (IS)
DFB = 1,4-Difluorobenzene
CBZ = Chlorobenzene-d5 (IS)

Area Limit = 60%-140% of internal standard area
RT Limit = ± 0.33 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII TO-15 SIM

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento | Job No.: 320-12924-1

SDG No.:

Client Sample ID: J6038-IA1-050615-1 | Lab Sample ID: 320-12924-5

Matrix: Air | Lab File ID: MS5051112.D

Analysis Method: TO-15 SIM | Date Collected: 05/06/2015 17:58

Sample wt/vol: 870(mL) | Date Analyzed: 05/11/2015 21:47

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: RTX-Volatiles ID: 0.32(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 73719 | Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	133.41	ND		0.020	0.0050
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.050	0.0050
75-34-3	1,1-Dichloroethane	98.96	ND		0.020	0.0050
75-35-4	1,1-Dichloroethene	96.94	ND		0.020	0.0050
95-50-1	1,2-Dichlorobenzene	147.00	0.016	J	0.050	0.010
107-06-2	1,2-Dichloroethane	98.96	0.015	J	0.020	0.0050
106-46-7	1,4-Dichlorobenzene	147.00	ND		0.10	0.010
108-90-7	Chlorobenzene	112.56	ND		0.020	0.010
67-66-3	Chloroform	119.38	0.024		0.020	0.0050
156-59-2	cis-1,2-Dichloroethene	96.94	0.0059	J	0.020	0.0050
100-41-4	Ethylbenzene	106.17	0.11		0.020	0.010
75-69-4	Freon 11	137.37	0.21		0.045	0.010
76-13-1	Freon 113	187.38	0.063		0.030	0.0050
75-71-8	Freon 12	120.91	0.46		0.020	0.0050
179601-23-1	m,p-Xylene	106.17	0.45		0.040	0.020
75-09-2	Methylene Chloride	84.93	1.0		0.20	0.10
95-47-6	o-Xylene	106.17	0.19		0.020	0.010
127-18-4	Tetrachloroethene	165.83	0.013	J	0.020	0.010
108-88-3	Toluene	92.14	1.3		0.020	0.010
156-60-5	trans-1,2-Dichloroethene	96.94	ND		0.020	0.0050
79-01-6	Trichloroethene	131.39	0.093		0.020	0.0050
75-01-4	Vinyl chloride	62.50	ND		0.020	0.010

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	104		70-130
17060-07-0	1,2-Dichloroethane-d4 (Surr)	97		70-130
2037-26-5	Toluene-d8 (Surr)	100		70-130

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento | Job No.: 320-12924-1

SDG No.:

Client Sample ID: J6038-IA1-050615-1 | Lab Sample ID: 320-12924-5

Matrix: Air | Lab File ID: MS5051112.D

Analysis Method: TO-15 SIM | Date Collected: 05/06/2015 17:58

Sample wt/vol: 870(mL) | Date Analyzed: 05/11/2015 21:47

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: RTX-Volatiles ID: 0.32(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 73719 | Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	133.41	ND		0.11	0.027
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.27	0.027
75-34-3	1,1-Dichloroethane	98.96	ND		0.081	0.020
75-35-4	1,1-Dichloroethene	96.94	ND		0.079	0.020
95-50-1	1,2-Dichlorobenzene	147.00	0.094	J	0.30	0.060
107-06-2	1,2-Dichloroethane	98.96	0.059	J	0.081	0.020
106-46-7	1,4-Dichlorobenzene	147.00	ND		0.60	0.060
108-90-7	Chlorobenzene	112.56	ND		0.092	0.046
67-66-3	Chloroform	119.38	0.12		0.098	0.024
156-59-2	cis-1,2-Dichloroethene	96.94	0.023	J	0.079	0.020
100-41-4	Ethylbenzene	106.17	0.49		0.087	0.043
75-69-4	Freon 11	137.37	1.2		0.25	0.056
76-13-1	Freon 113	187.38	0.48		0.23	0.038
75-71-8	Freon 12	120.91	2.3		0.099	0.025
179601-23-1	m,p-Xylene	106.17	2.0		0.17	0.087
75-09-2	Methylene Chloride	84.93	3.6		0.69	0.35
95-47-6	o-Xylene	106.17	0.81		0.087	0.043
127-18-4	Tetrachloroethene	165.83	0.090	J	0.14	0.068
108-88-3	Toluene	92.14	5.0		0.075	0.038
156-60-5	trans-1,2-Dichloroethene	96.94	ND		0.079	0.020
79-01-6	Trichloroethene	131.39	0.50		0.11	0.027
75-01-4	Vinyl chloride	62.50	ND		0.051	0.026

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	104		70-130
17060-07-0	1,2-Dichloroethane-d4 (Surr)	97		70-130
2037-26-5	Toluene-d8 (Surr)	100		70-130

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\SACCHROM\ChromData\ATMS5\20150512-21744.b\MS5051112.D
Lims ID: 320-12924-A-5 Lab Sample ID: 320-12924-5
Client ID: J6038-IA1-050615-1
Sample Type: Client
Inject. Date: 11-May-2015 21:47:30 ALS Bottle#: 6 Worklist Smp#: 11
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 320-12924-A-5
Misc. Info.: 870ML870ML
Operator ID: AO Instrument ID: ATMS5

Method: \\SACCHROM\ChromData\ATMS5\20150512-21744.b\TO15 SIM.m
Limit Group: MSA - TO-15_SIM_ICAL
Last Update: 12-May-2015 12:35:18 Calib Date: 26-Mar-2015 03:17:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\SACCHROM\ChromData\ATMS5\20150326-20538.b\MS5032518.D

Column 1 : Det: MS SCAN
Process Host: XAWRK010

First Level Reviewer: ortizam Date: 12-May-2015 12:36:08

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	130	11.850	11.850	0.000	97	34882	2.00	
* 2 1,4-Difluorobenzene	114	13.944	13.941	0.003	100	167479	2.00	
* 3 Chlorobenzene-d5 (IS)	117	20.508	20.508	0.000	100	154279	2.00	
$ 4 1,2-Dichloroethane-d4 (Sur	65	13.002	13.002	0.000	100	38198	1.93	
$ 5 Toluene-d8 (Surr)	100	17.275	17.266	0.009	100	115216	2.00	
$ 6 4-Bromofluorobenzene (Surr	95	23.040	23.040	0.000	100	89930	2.07	
8 Dichlorodifluoromethane	85	4.181	4.181	0.000	100	24298	0.4620	
11 Vinyl chloride	62	4.817	4.817	0.000	78	92	0.005024	
15 Trichlorofluoromethane	101	6.423	6.418	0.005	100	10344	0.2062	
19 1,1,2-Trichloro-1,2,2-trif	101	7.421	7.412	0.009	99	3051	0.0632	
22 Methylene Chloride	49	8.490	8.490	0.000	98	25252	1.05	
30 cis-1,2-Dichloroethene	96	11.251	11.240	0.011	44	159	0.005918	
32 Chloroform	83	11.589	11.589	0.000	94	1049	0.0237	
37 1,2-Dichloroethane	62	13.193	13.192	0.001	98	437	0.0146	
40 Trichloroethene	130	14.683	14.683	0.000	97	3664	0.0928	
46 Toluene	91	17.439	17.439	0.000	99	169503	1.34	
50 Tetrachloroethene	166	18.939	18.939	0.000	99	681	0.0132	
53 Chlorobenzene	112	20.591	20.584	0.007	1	676	0.006221	
54 Ethylbenzene	91	20.773	20.773	0.000	89	19772	0.1118	
55 m-Xylene & p-Xylene	91	20.955	20.955	0.000	56	60323	0.4507	
56 o-Xylene	91	21.846	21.846	0.000	39	25923	0.1854	
65 1,4-Dichlorobenzene	146	25.529	25.530	-0.001	98	545	0.005136	7
67 1,2-Dichlorobenzene	146	26.245	26.247	-0.002	1	1709	0.0156	

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

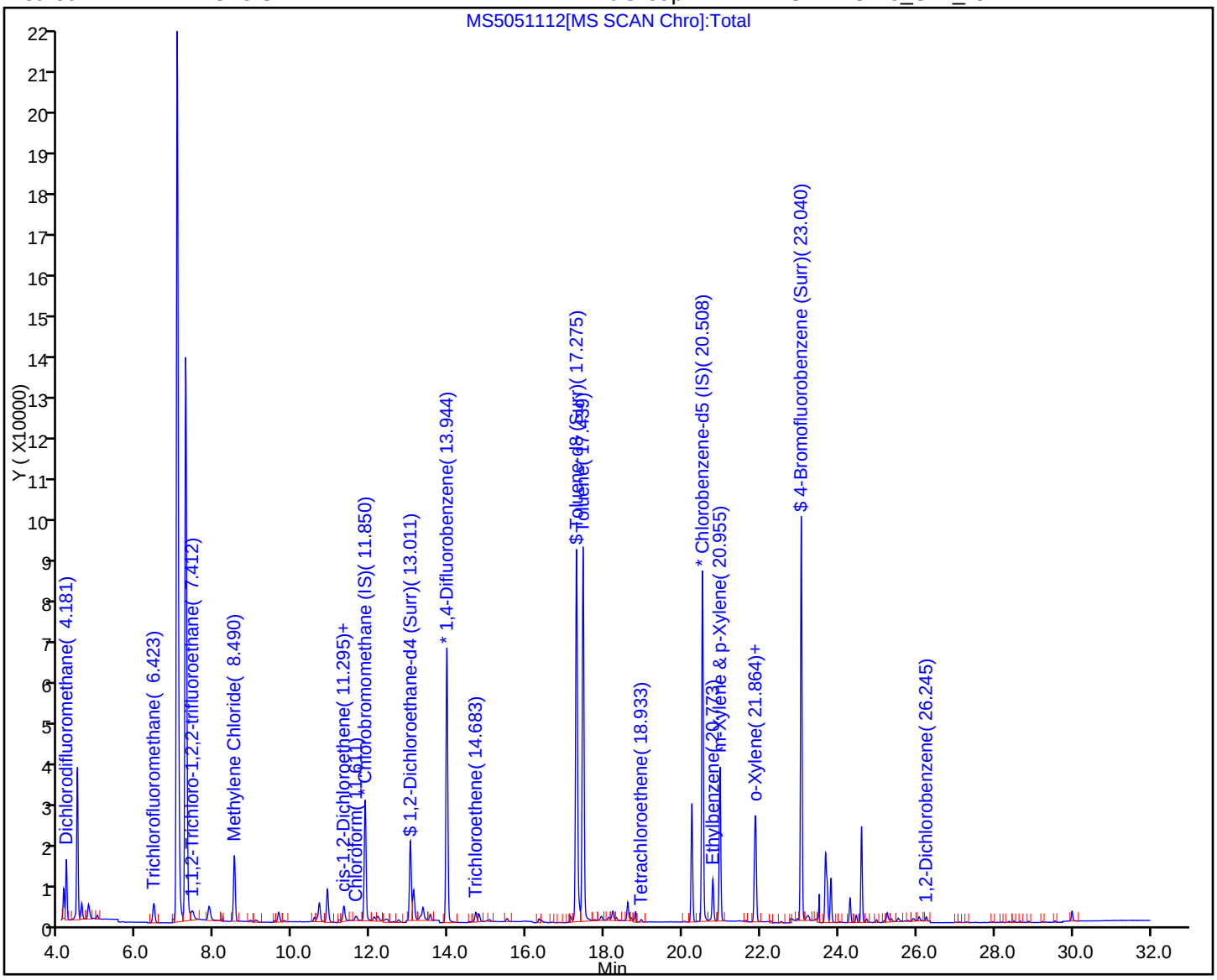
Reagents:

VASUISIM_00172	Amount Added: 50.00	Units: mL	Run Reagent

Report Date: 12-May-2015 12:36:08 Chrom Revision: 2.2 05-May-2015 11:39:10

TestAmerica Sacramento

Data File:	\\SACCHROM\ChromData\ATMS5\20150512-21744.b\MS5051112.D				
Injection Date:	11-May-2015 21:47:30	Instrument ID:	ATMS5		
Lims ID:	320-12924-A-5	Lab Sample ID:	320-12924-5		
Client ID:	J6038-IA1-050615-1				
Operator ID:	AO	ALS Bottle#:	6	Worklist Smp#:	11
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	TO15 SIM	Limit Group:	MSA - TO-15_SIM_ICAL		



Report Date: 12-May-2015 12:36:09 Chrom Revision: 2.2 05-May-2015 11:39:10

TestAmerica Sacramento

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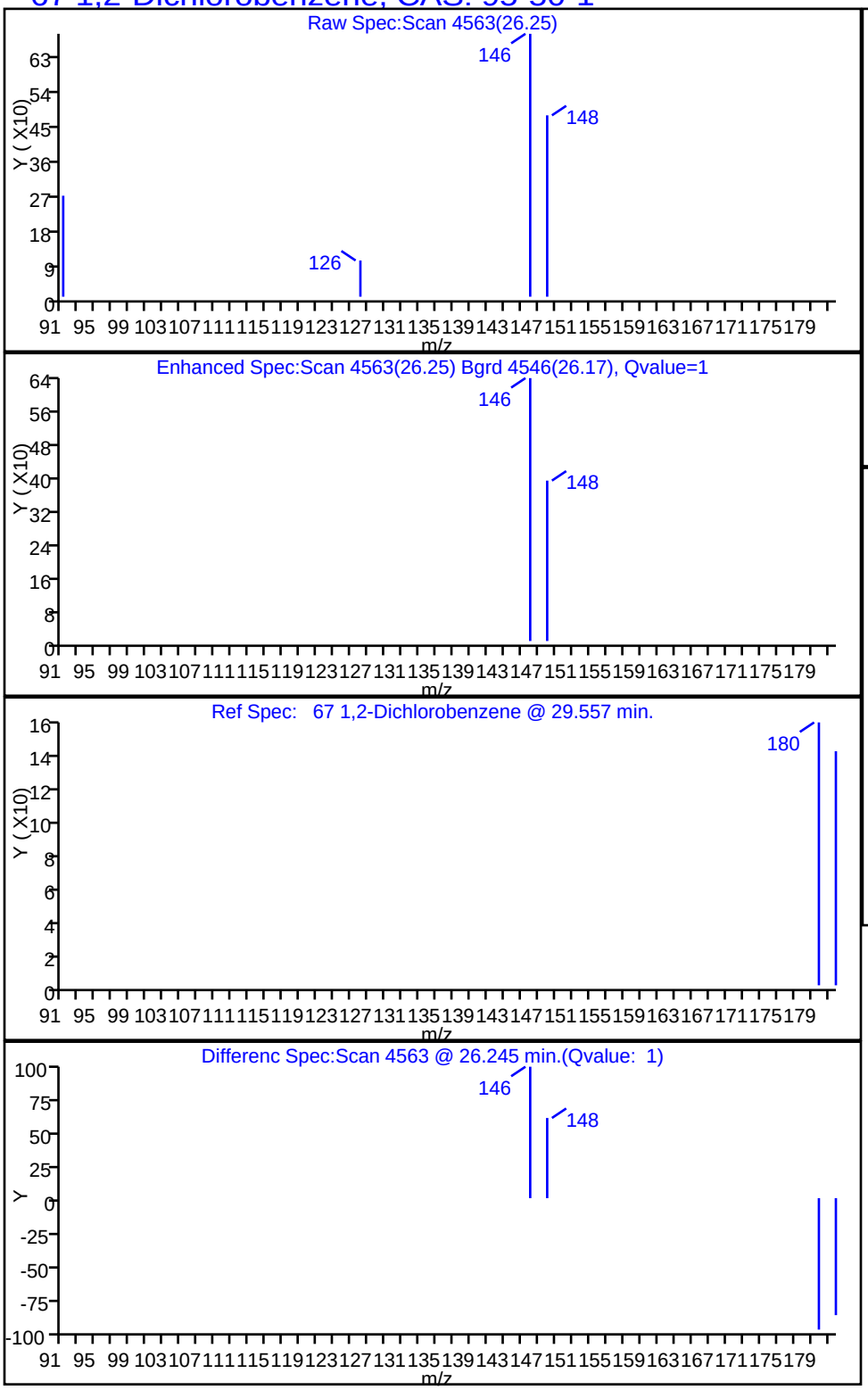
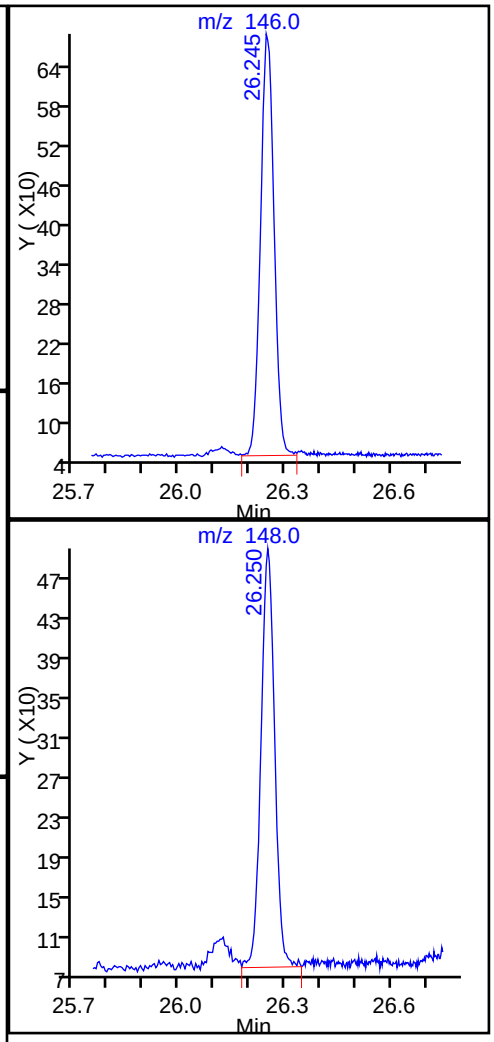
Client ID:	J6038-IA1-050615-1				
Operator ID:	AO	ALS Bottle#:	6	Worklist Smp#:	11
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	TO15 SIM	Limit Group:	MSA - TO-15_SIM_ICAL		
Column:		Detector	MS SCAN		

67 1,2-Dichlorobenzene, CAS: 95-50-1





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TestAmerica Sacramento

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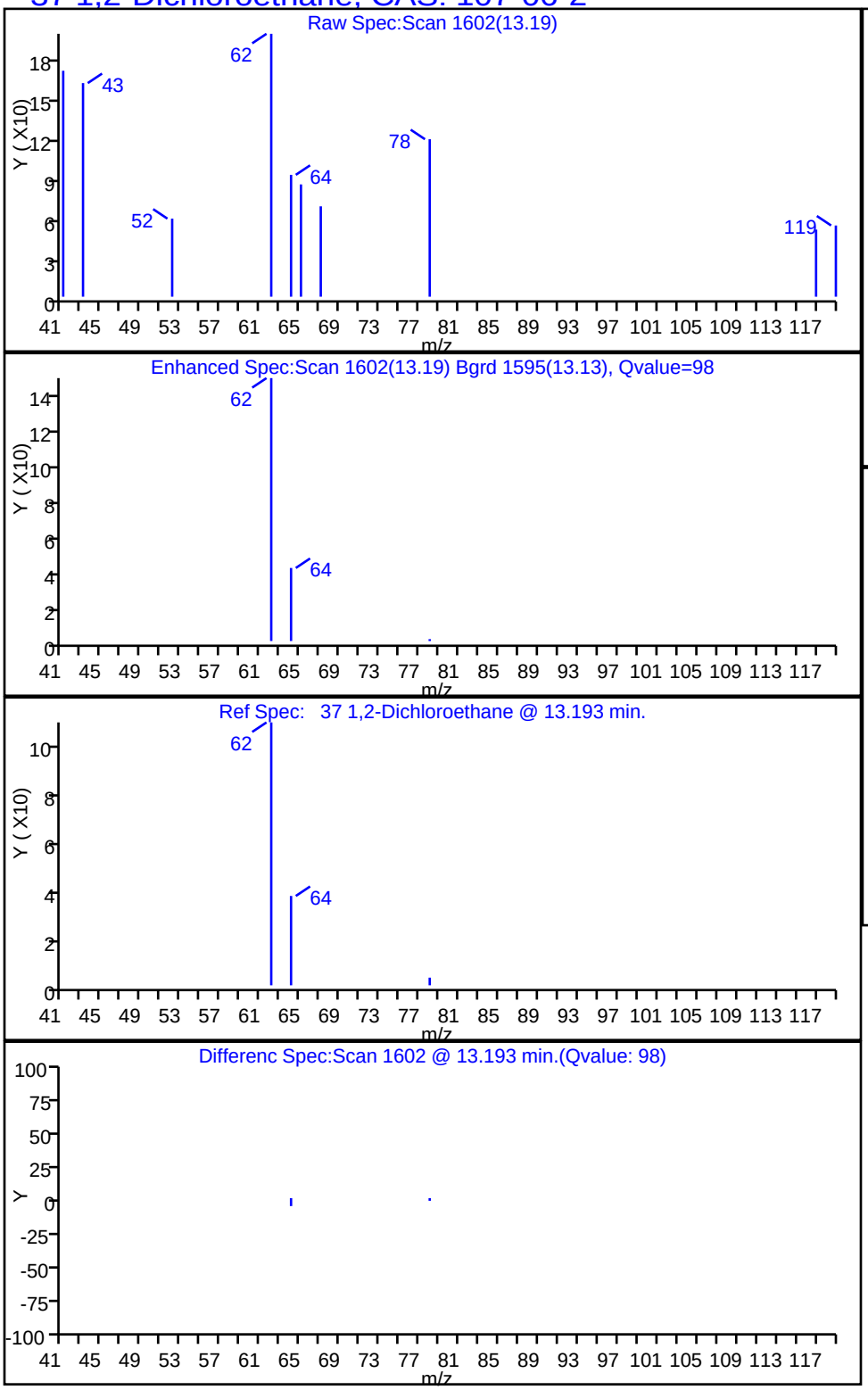
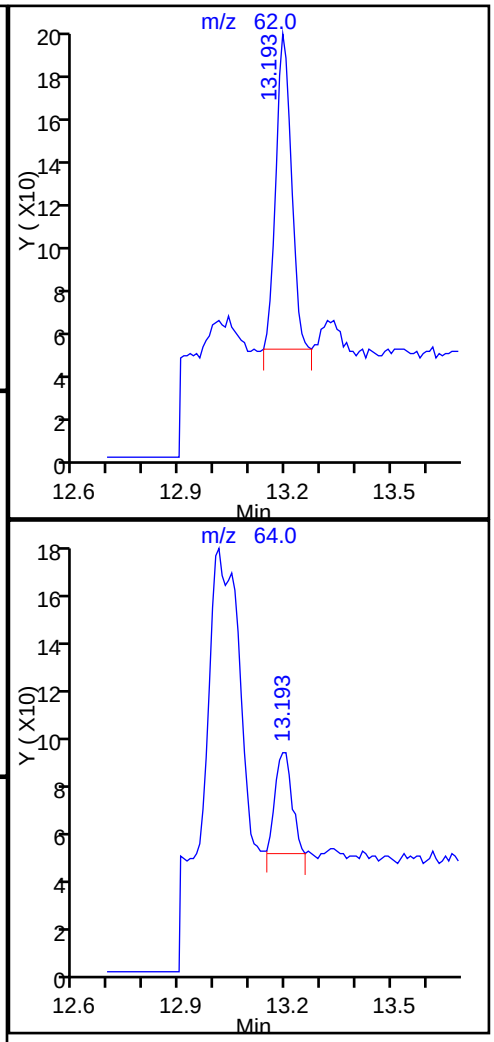
Client ID:	J6038-IA1-050615-1				
Operator ID:	AO	ALS Bottle#:	6	Worklist Smp#:	11
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	TO15 SIM	Limit Group:	MSA - TO-15_SIM_ICAL		
Column:		Detector	MS SCAN		

37 1,2-Dichloroethane, CAS: 107-06-2





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TestAmerica Sacramento

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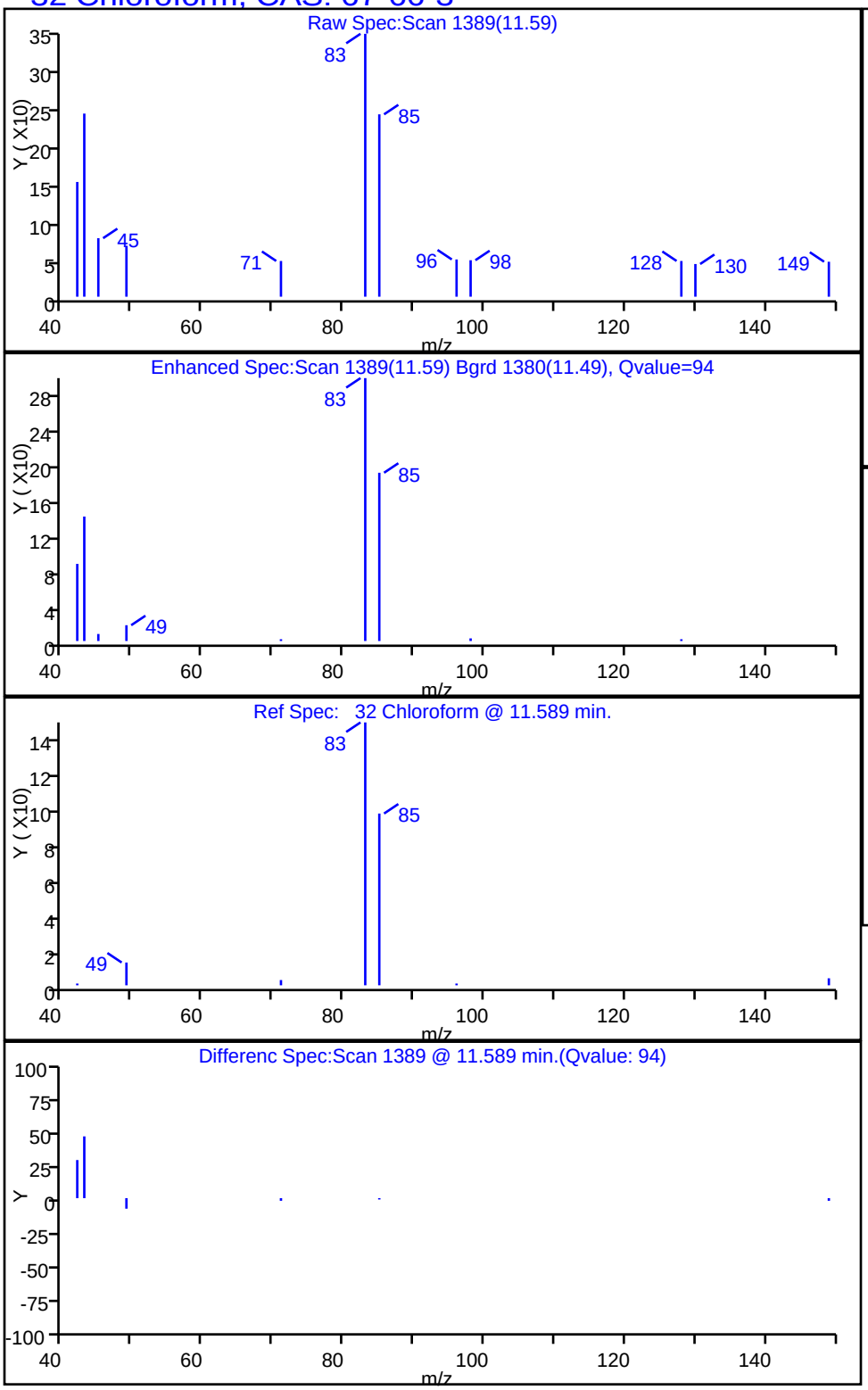
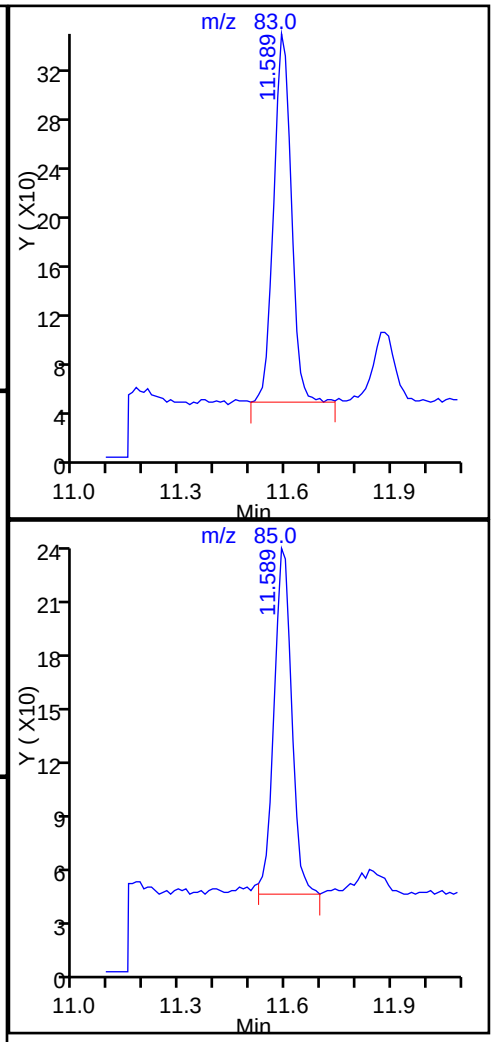
Client ID:	J6038-IA1-050615-1				
Operator ID:	AO	ALS Bottle#:	6	Worklist Smp#:	11
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	TO15 SIM	Limit Group:	MSA - TO-15_SIM_ICAL		
Column:		Detector	MS SCAN		

32 Chloroform, CAS: 67-66-3





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TestAmerica Sacramento

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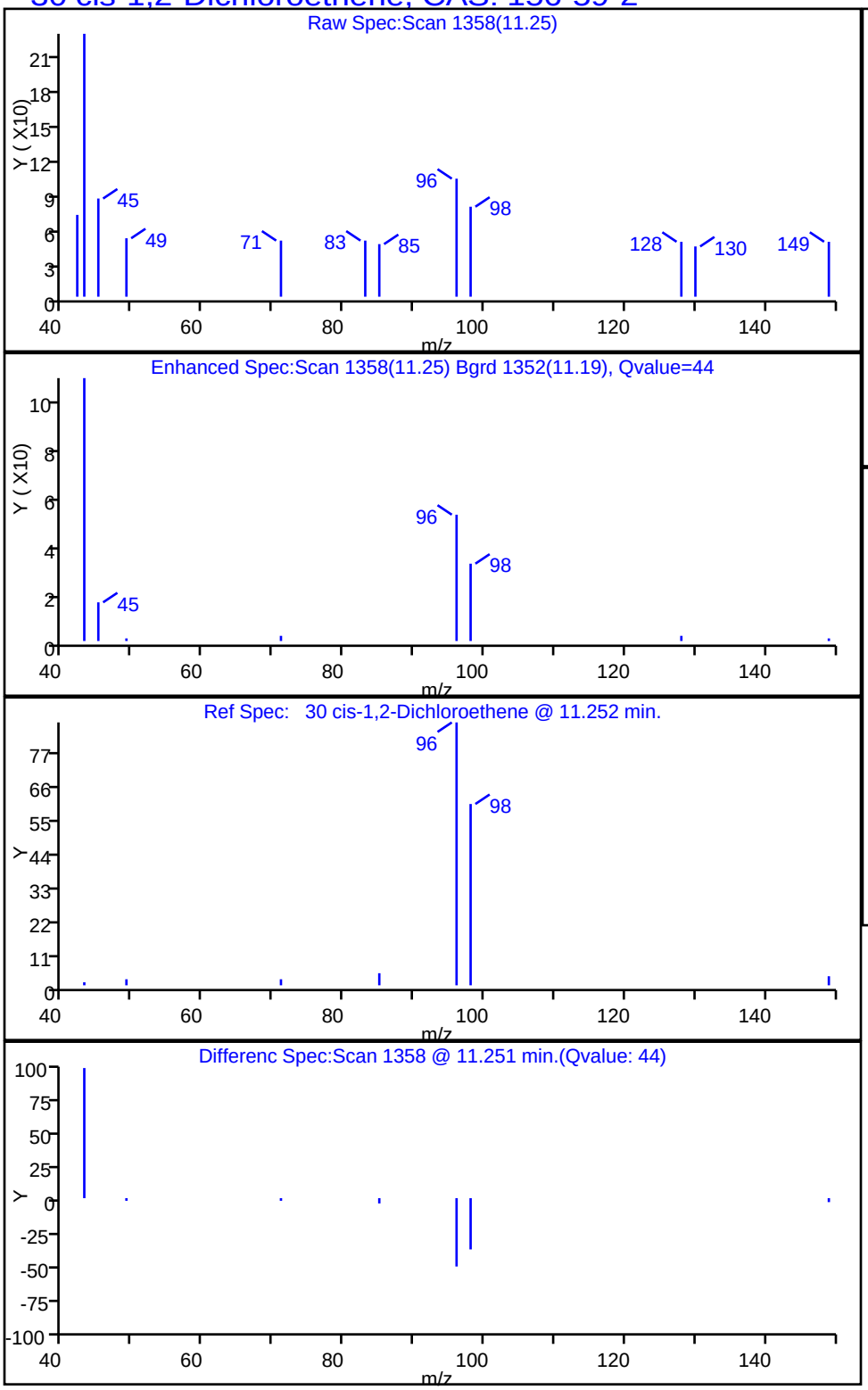
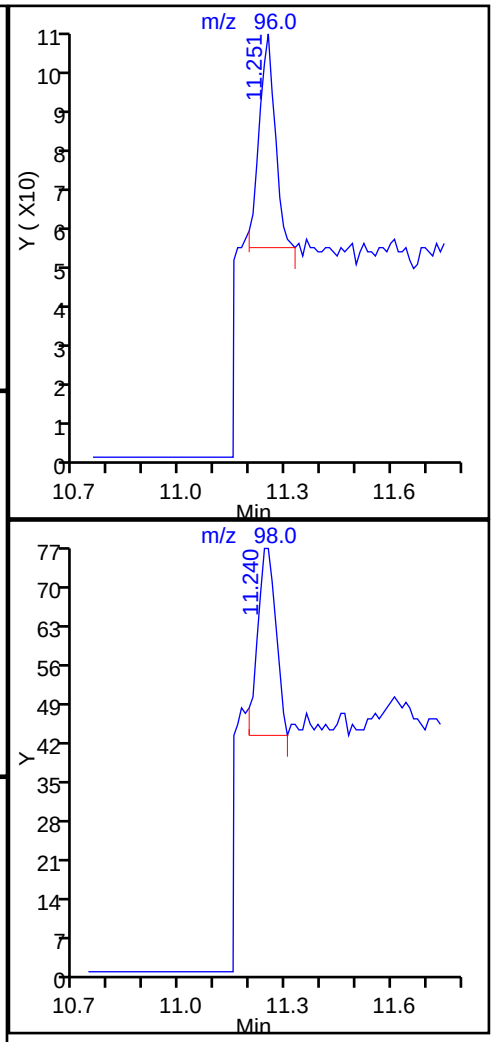
Client ID:	J6038-IA1-050615-1				
Operator ID:	AO	ALS Bottle#:	6	Worklist Smp#:	11
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	TO15 SIM	Limit Group:	MSA - TO-15_SIM_ICAL		
Column:		Detector	MS SCAN		

30 cis-1,2-Dichloroethene, CAS: 156-59-2





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TestAmerica Sacramento

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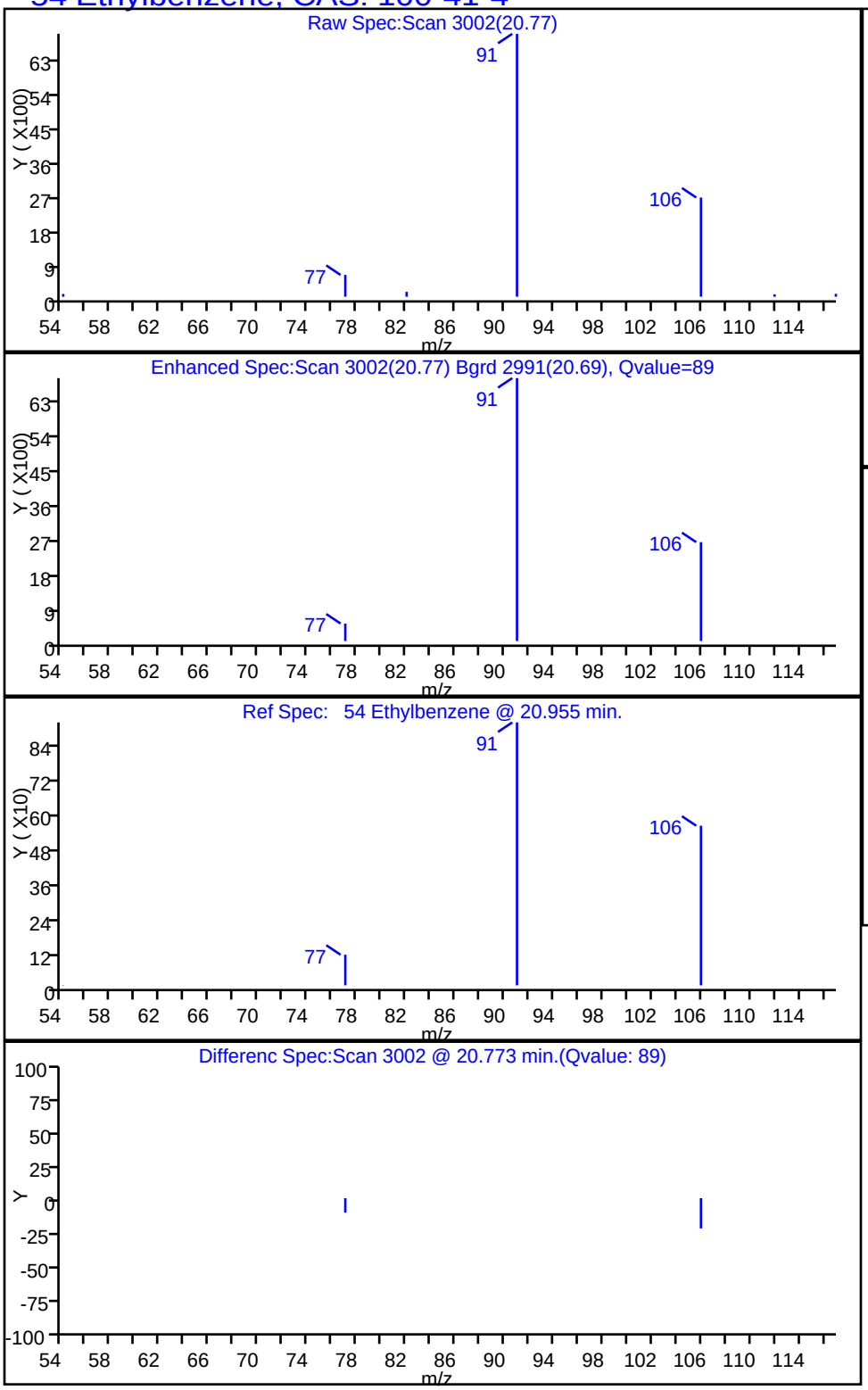
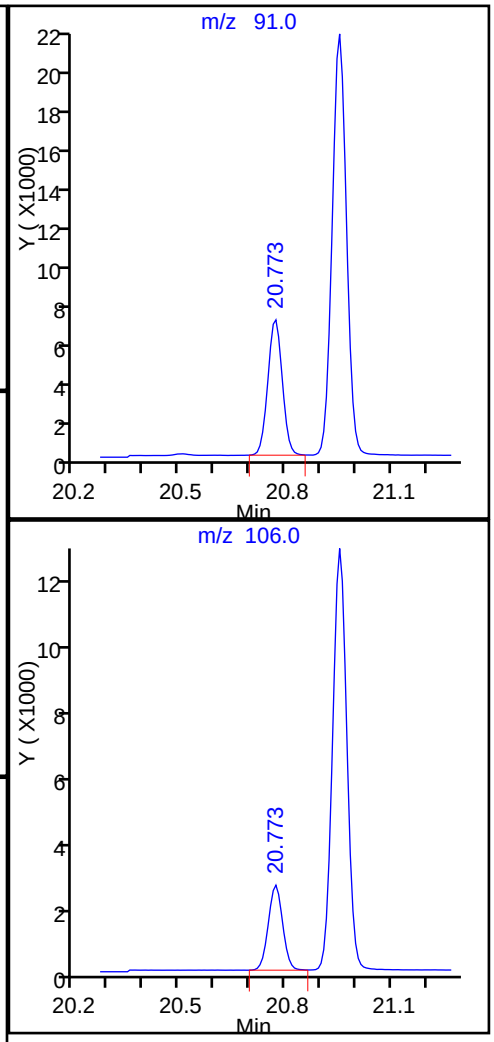
Client ID:	J6038-IA1-050615-1				
Operator ID:	AO	ALS Bottle#:	6	Worklist Smp#:	11
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	TO15 SIM	Limit Group:	MSA - TO-15_SIM_ICAL		
Column:		Detector	MS SCAN		

54 Ethylbenzene, CAS: 100-41-4





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TestAmerica Sacramento

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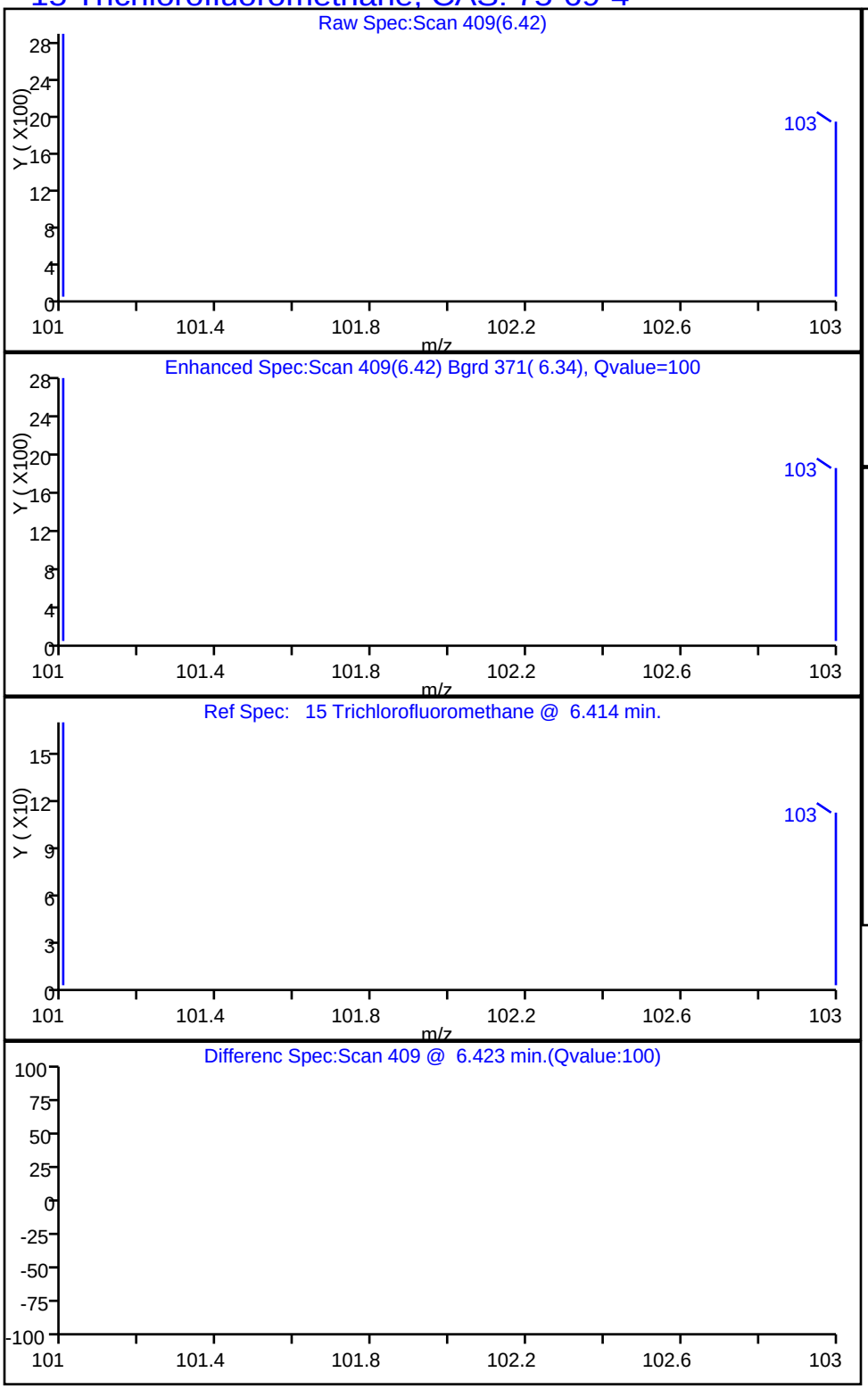
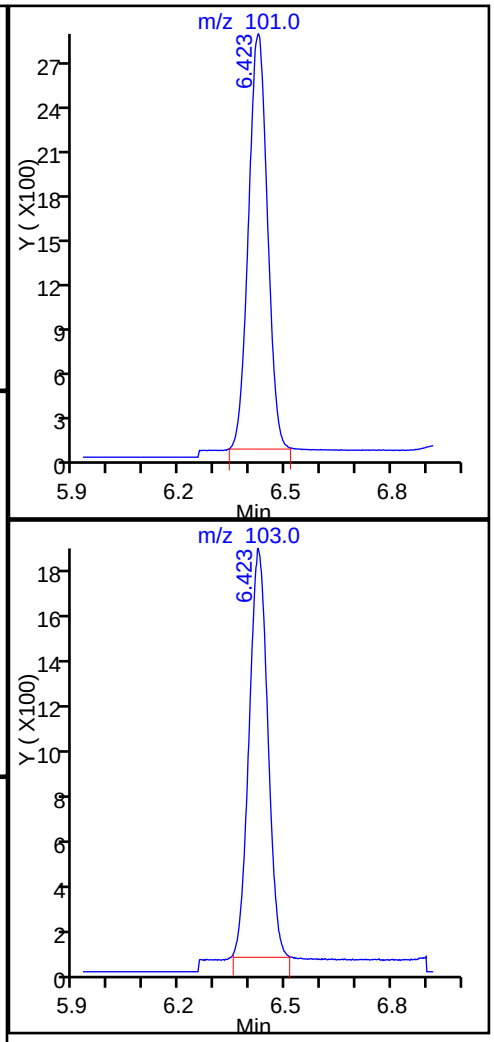
Client ID:	J6038-IA1-050615-1				
Operator ID:	AO	ALS Bottle#:	6	Worklist Smp#:	11
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	TO15 SIM	Limit Group:	MSA - TO-15_SIM_ICAL		
Column:		Detector	MS SCAN		

15 Trichlorofluoromethane, CAS: 75-69-4





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TestAmerica Sacramento

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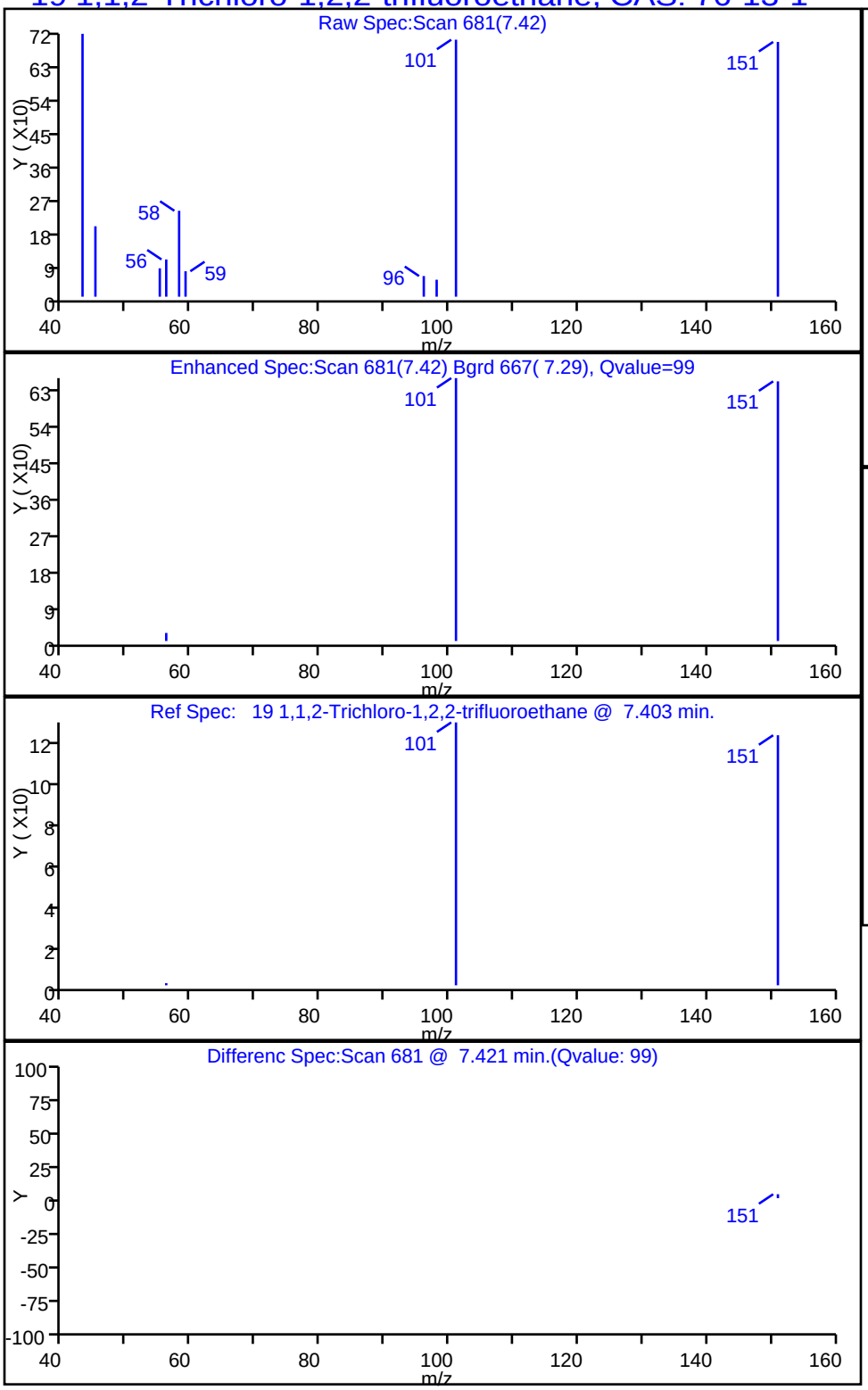
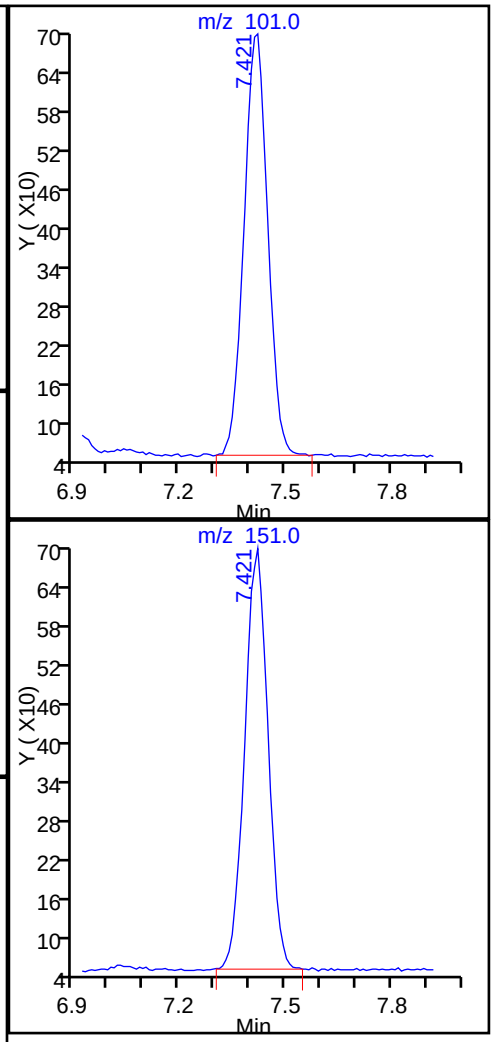
Client ID:	J6038-IA1-050615-1				
Operator ID:	AO	ALS Bottle#:	6	Worklist Smp#:	11
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	TO15 SIM	Limit Group:	MSA - TO-15_SIM_ICAL		
Column:		Detector	MS SCAN		

19 1,1,2-Trichloro-1,2,2-trifluoroethane, CAS: 76-13-1





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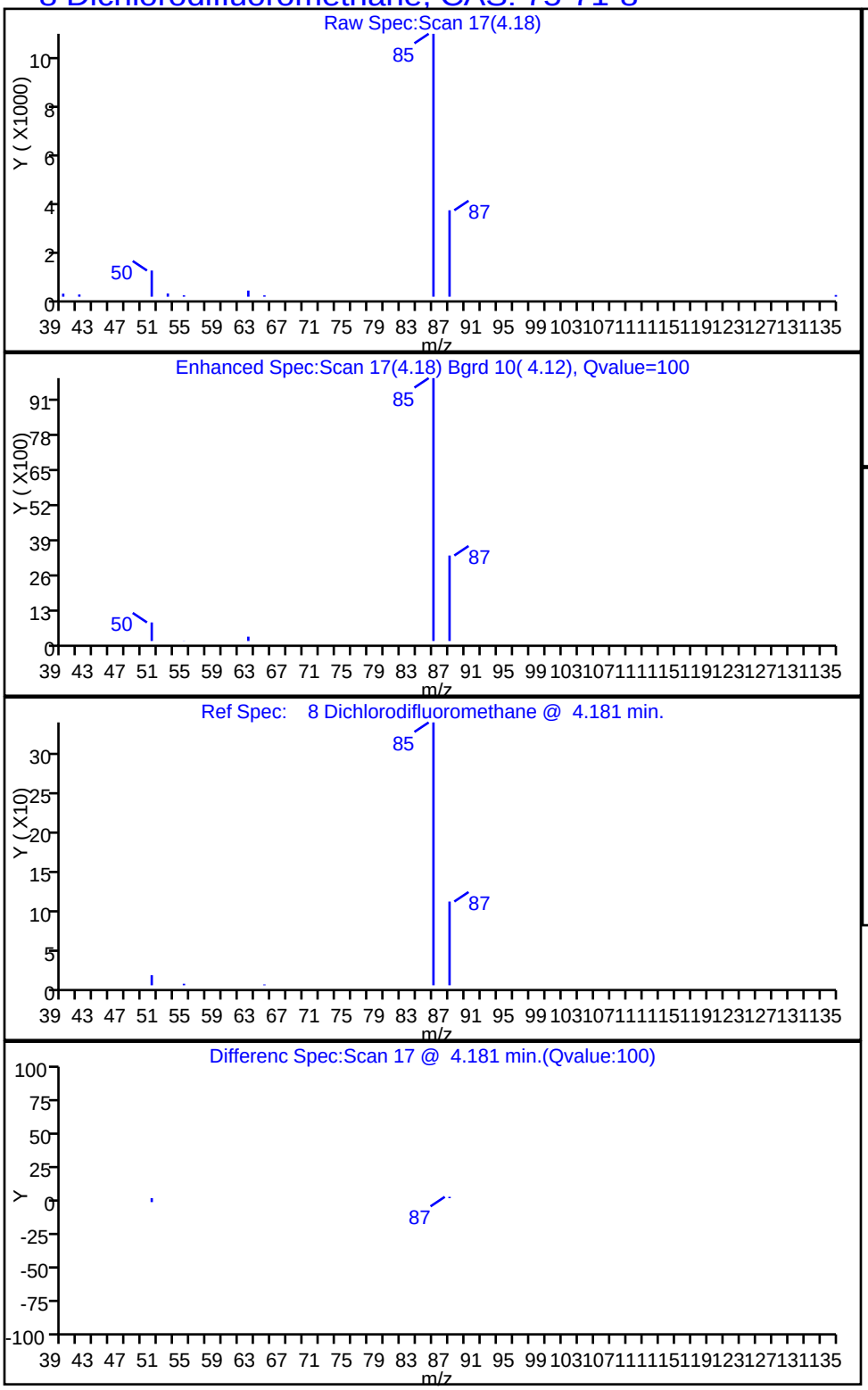
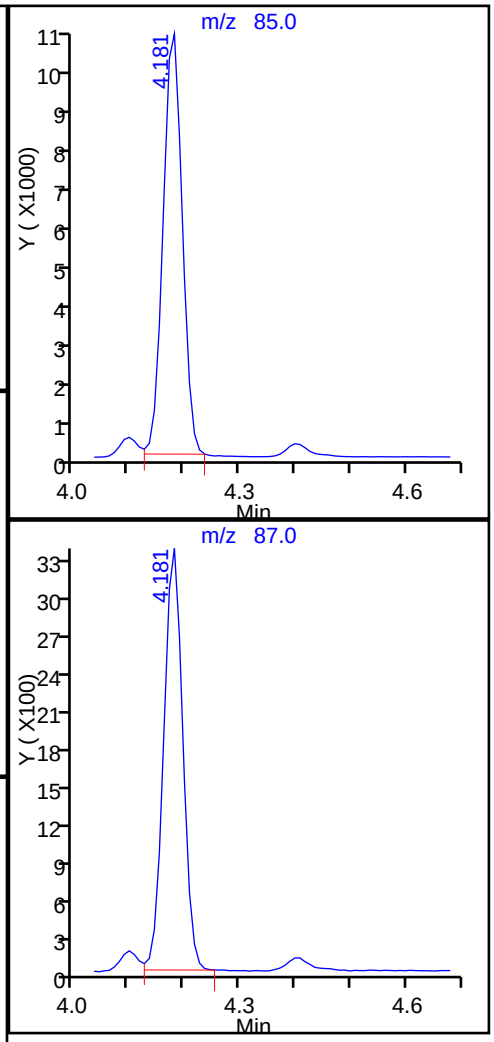
Operator ID:	AO	ALS Bottle#:	6	Worklist Smp#:	11
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	TO15 SIM	Limit Group:	MSA - TO-15_SIM_ICAL		
Column:		Detector	MS SCAN		

8 Dichlorodifluoromethane, CAS: 75-71-8





Report Date: 12-May-2015 12:36:09 Chrom Revision: 2.2 05-May-2015 11:39:10

TestAmerica Sacramento

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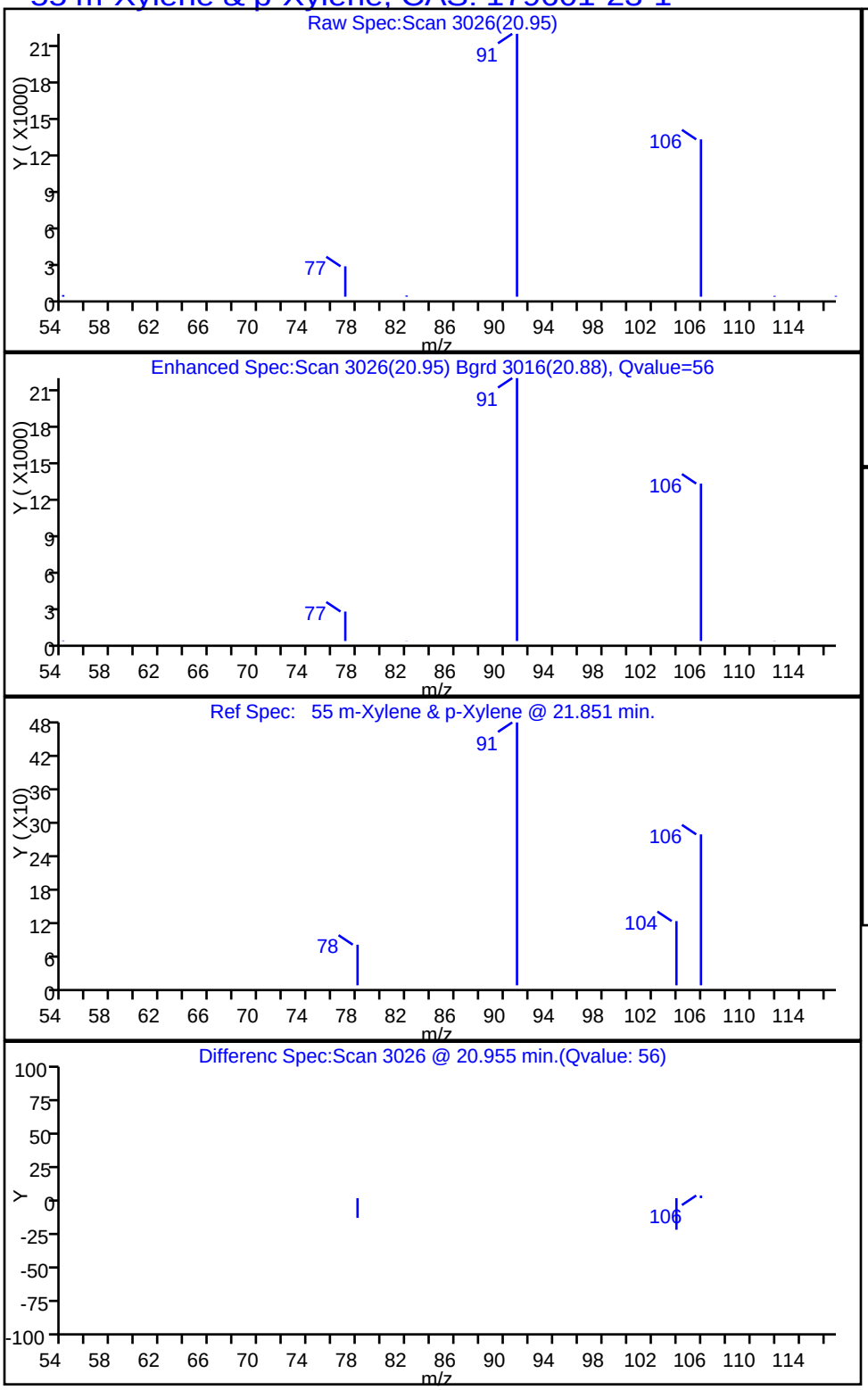
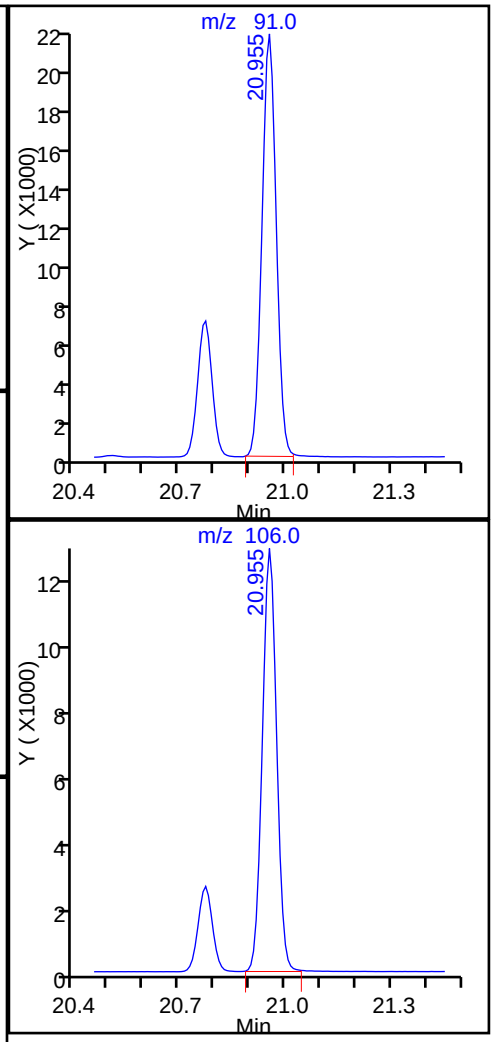
Client ID:	J6038-IA1-050615-1				
Operator ID:	AO	ALS Bottle#:	6	Worklist Smp#:	11
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	TO15 SIM	Limit Group:	MSA - TO-15_SIM_ICAL		
Column:		Detector	MS SCAN		

55 m-Xylene & p-Xylene, CAS: 179601-23-1





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TestAmerica Sacramento

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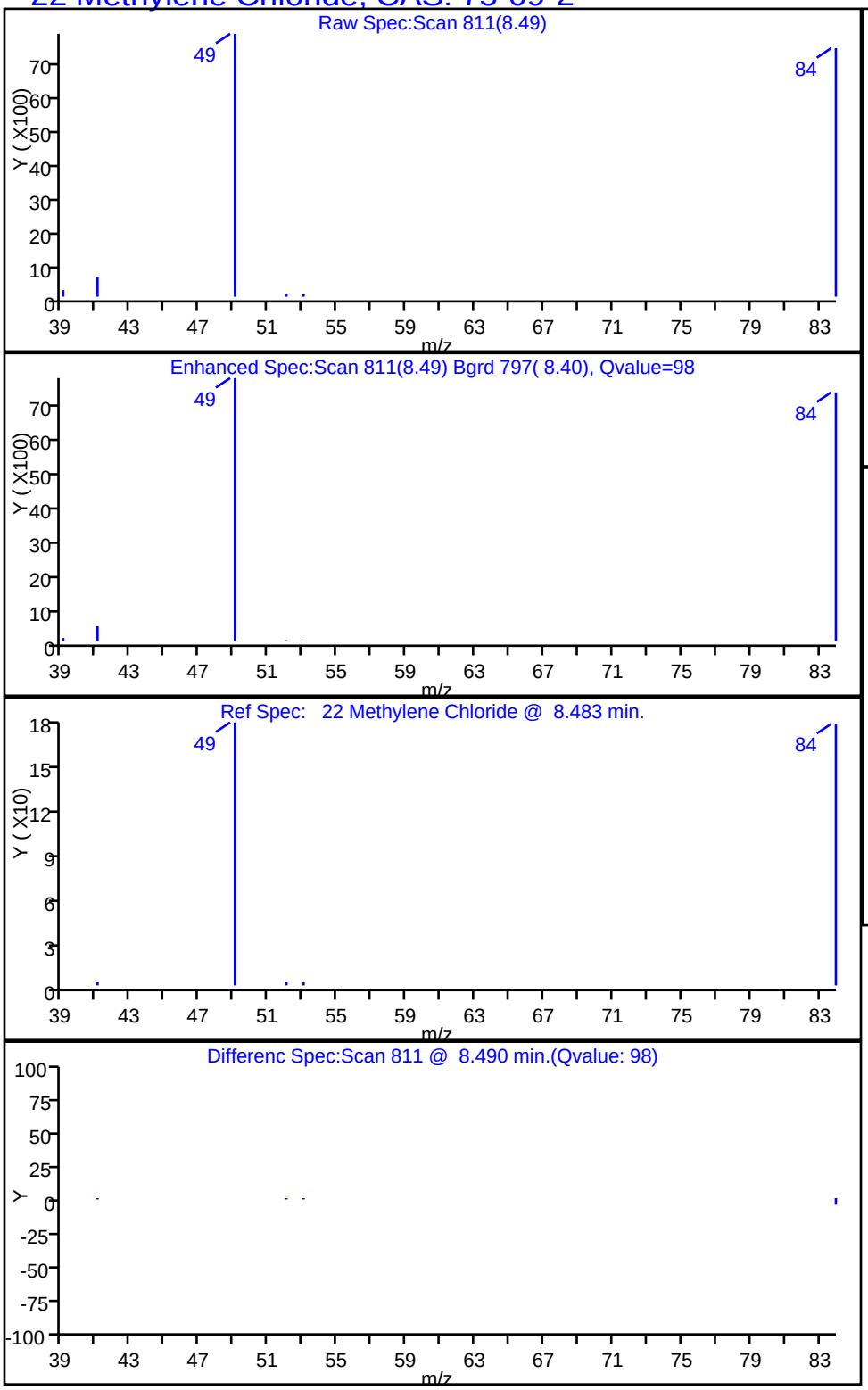
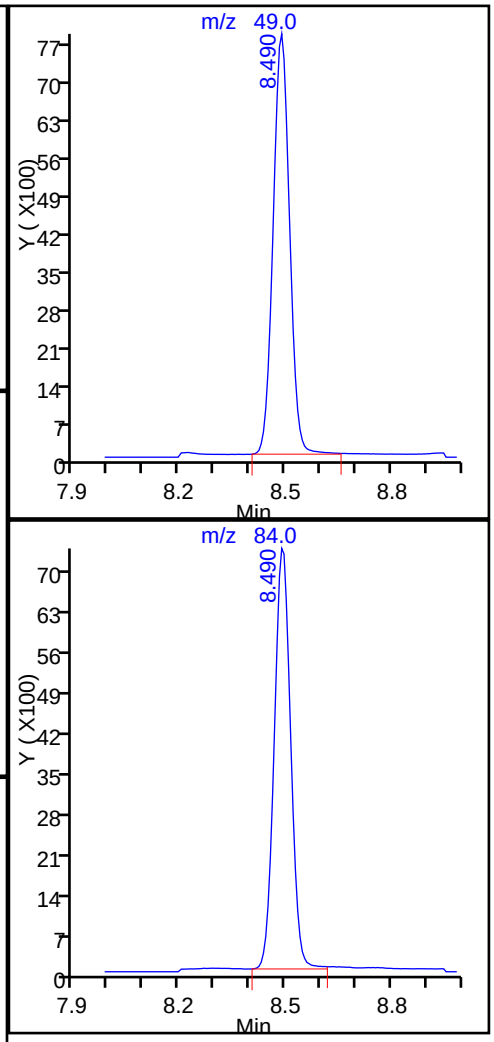
Client ID:	J6038-IA1-050615-1				
Operator ID:	AO	ALS Bottle#:	6	Worklist Smp#:	11
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	TO15 SIM	Limit Group:	MSA - TO-15_SIM_ICAL		
Column:		Detector	MS SCAN		

22 Methylene Chloride, CAS: 75-09-2





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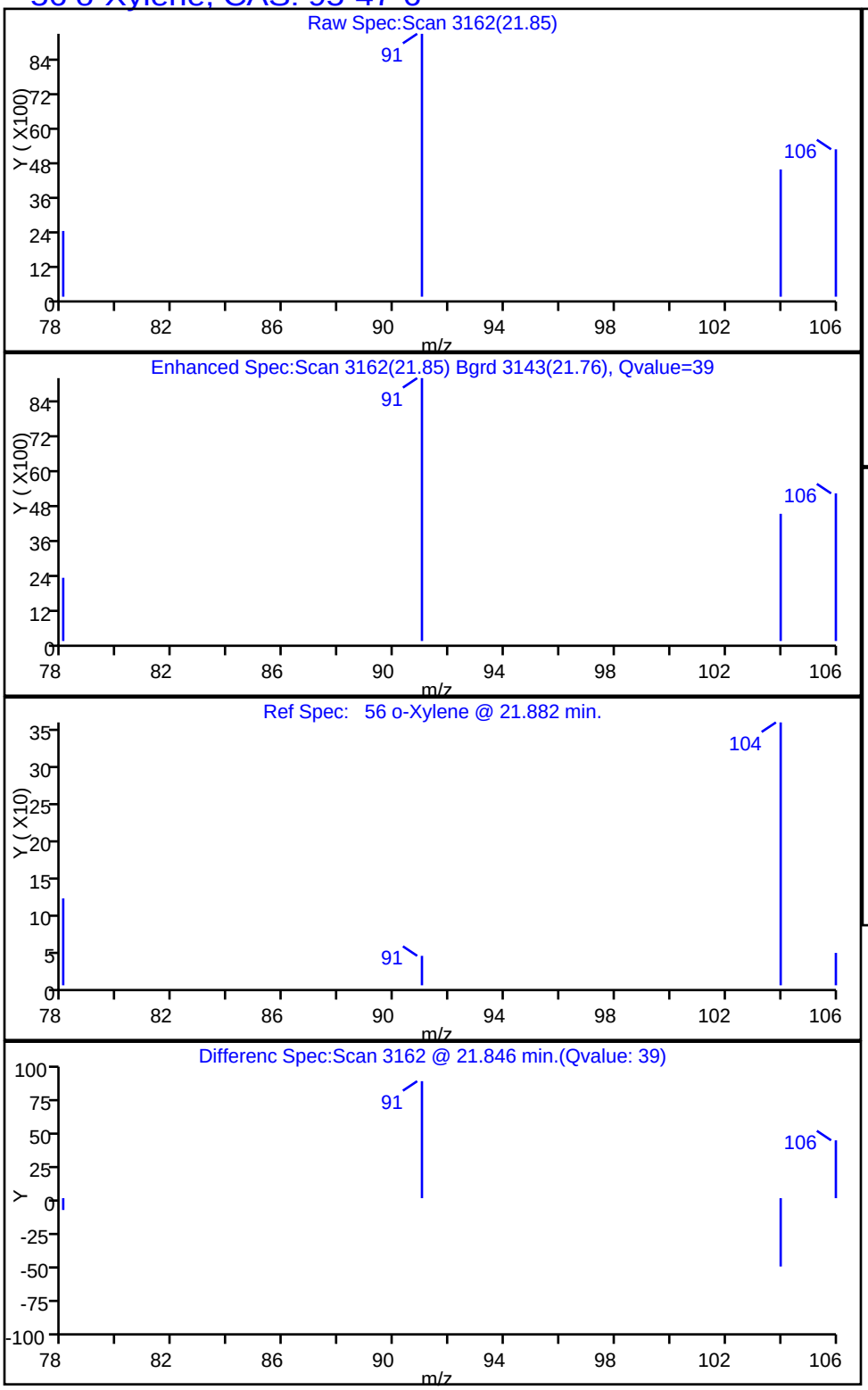
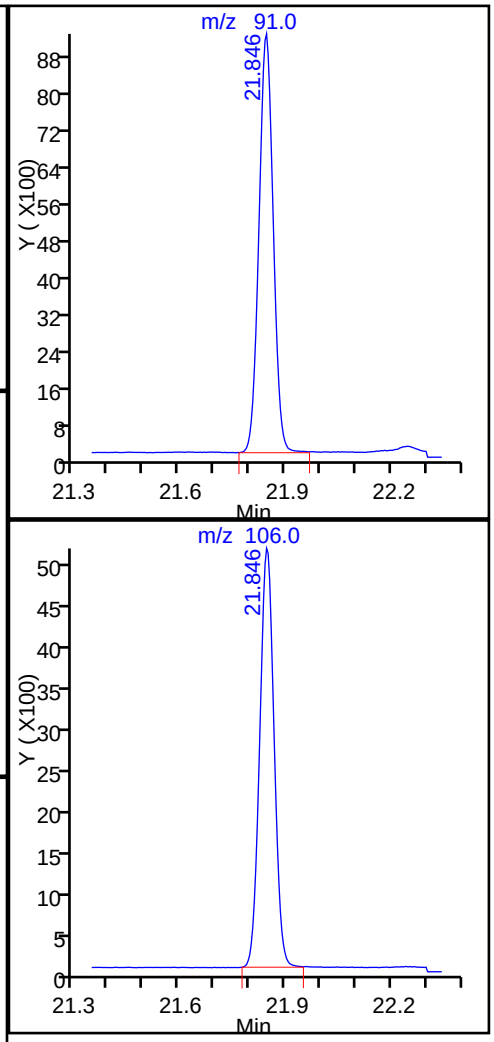
Operator ID:	AO	ALS Bottle#:	6	Worklist Smp#:	11
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	TO15 SIM	Limit Group:	MSA - TO-15_SIM_ICAL		
Column:		Detector	MS SCAN		

56 o-Xylene, CAS: 95-47-6





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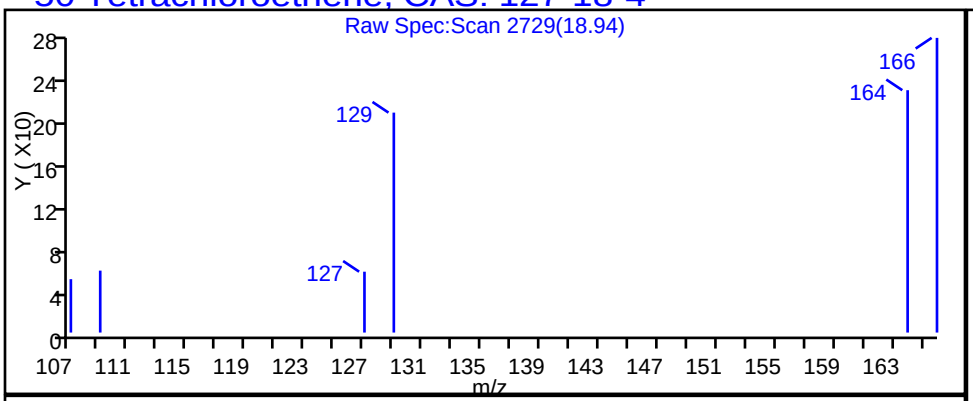
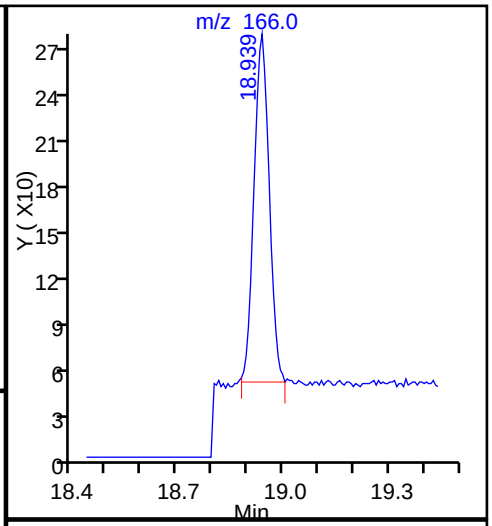
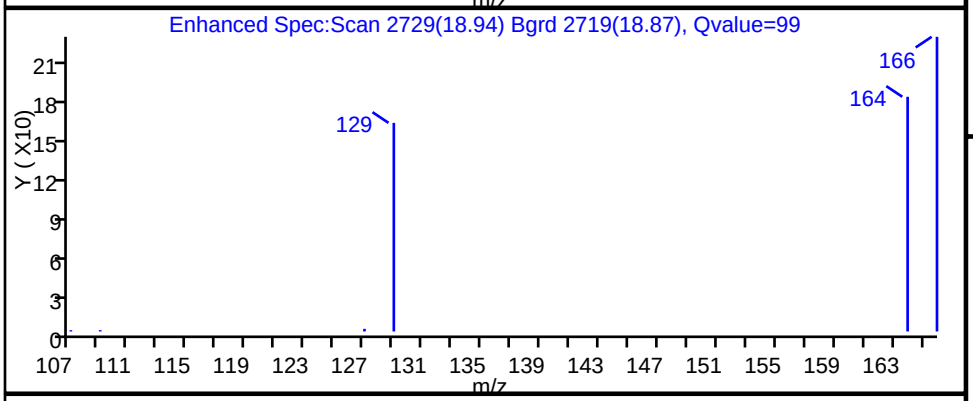
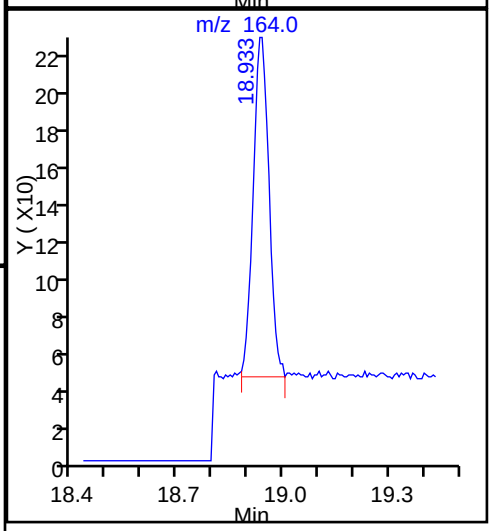
Client ID:	J6038-IA1-050615-1				
Operator ID:	AO	ALS Bottle#:	6	Worklist Smp#:	11
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	TO15 SIM	Limit Group:	MSA - TO-15_SIM_ICAL		
Column:		Detector	MS SCAN		

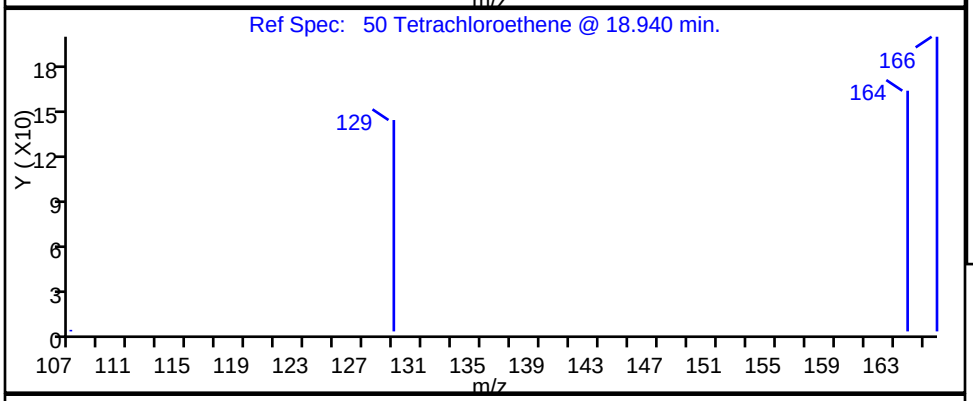
50 Tetrachloroethene, CAS: 127-18-4

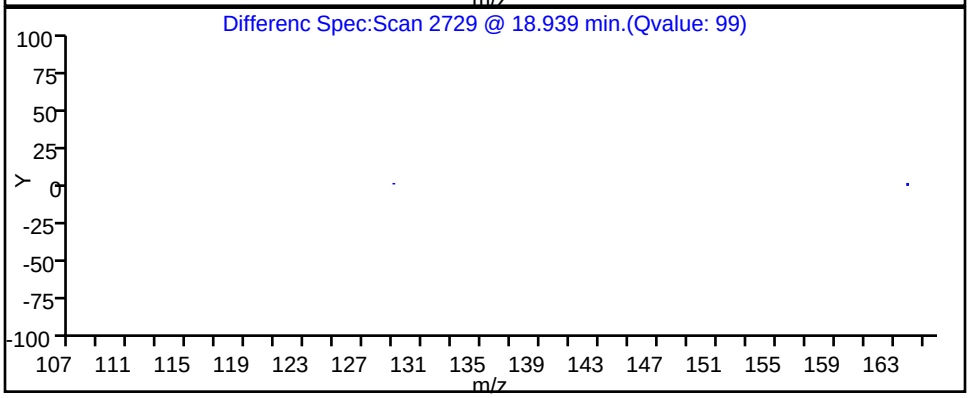












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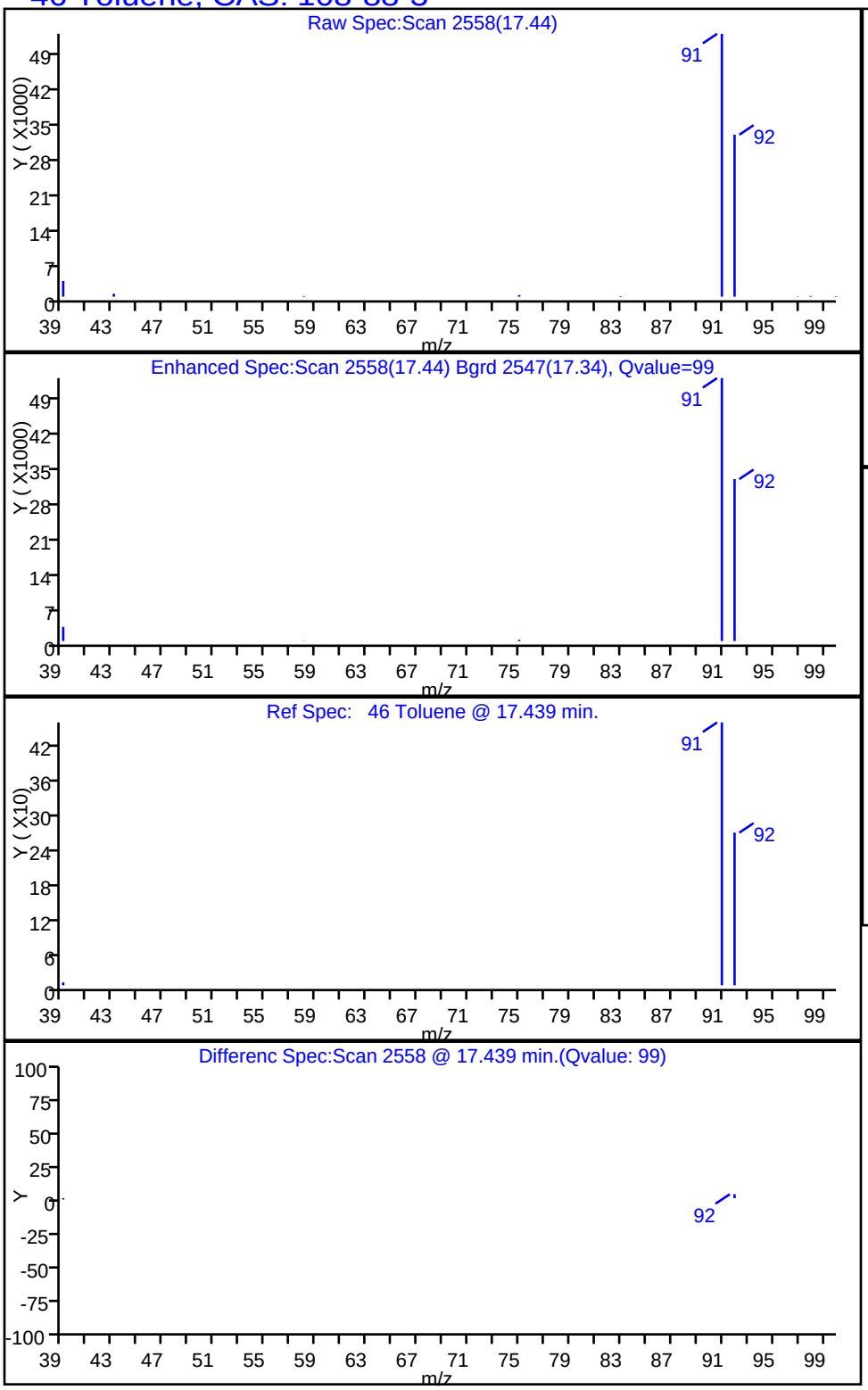
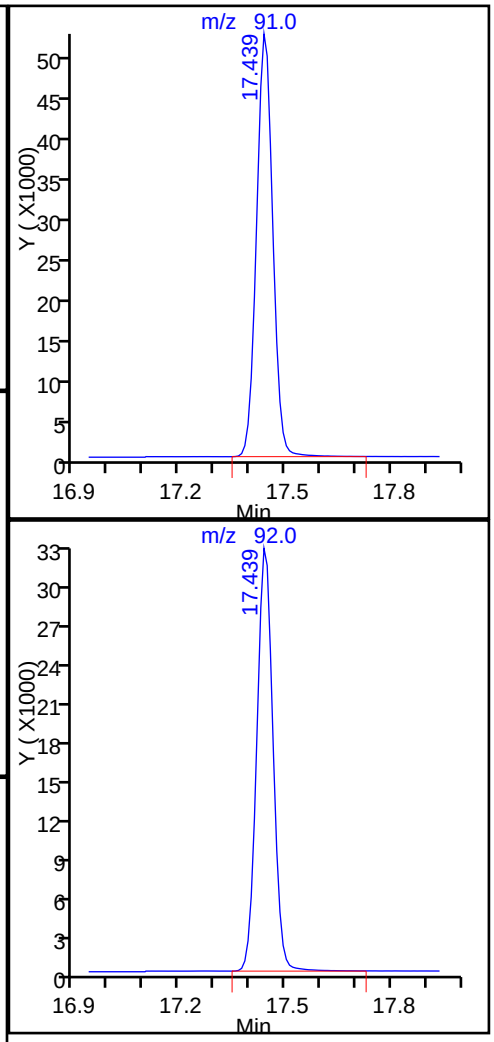
Lims ID:	320-12924-A-5	Lab Sample ID:	320-12924-5		
Client ID:	J6038-IA1-050615-1				
Operator ID:	AO	ALS Bottle#:	6	Worklist Smp#:	11
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	TO15 SIM	Limit Group:	MSA - TO-15_SIM_ICAL		
Column:		Detector	MS SCAN		

46 Toluene, CAS: 108-88-3





Report Date: 12-May-2015 12:36:08 Chrom Revision: 2.2 05-May-2015 11:39:10

TestAmerica Sacramento

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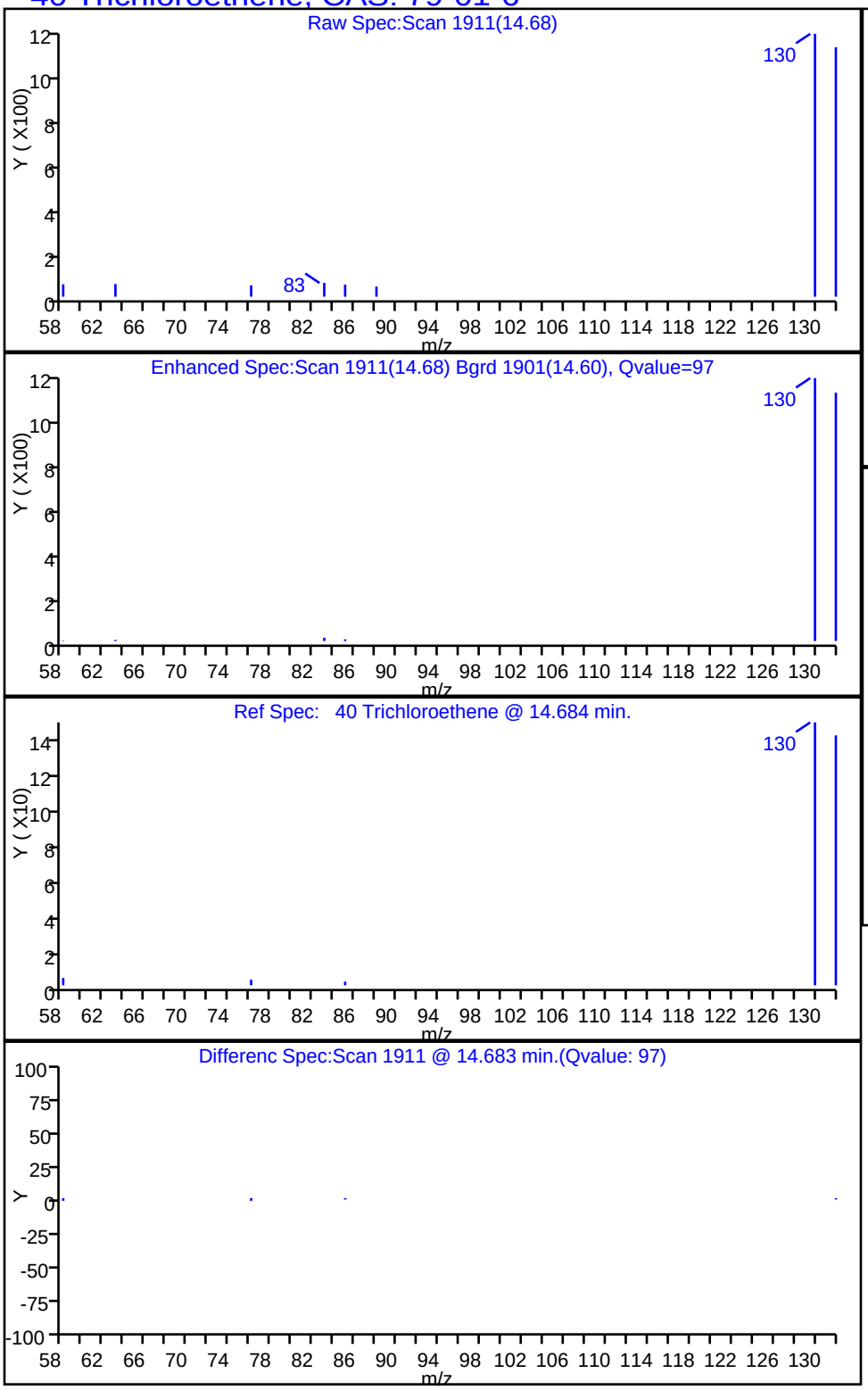
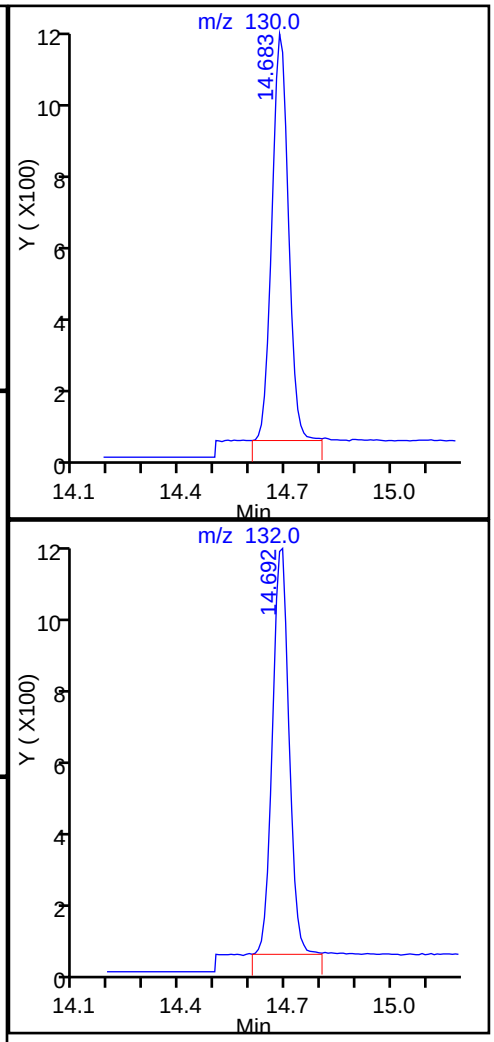
Injection Date:	11-May-2015 21:47:30	Instrument ID:	ATMS5		
Lims ID:	320-12924-A-5	Lab Sample ID:	320-12924-5		
Client ID:	J6038-IA1-050615-1				
Operator ID:	AO	ALS Bottle#:	6	Worklist Smp#:	11
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	TO15 SIM	Limit Group:	MSA - TO-15_SIM_ICAL		
Column:		Detector	MS SCAN		

40 Trichloroethene, CAS: 79-01-6





FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento | Job No.: 320-12924-1

SDG No.:

Client Sample ID: J6038-IA1-050615-2 | Lab Sample ID: 320-12924-6

Matrix: Air | Lab File ID: MS5051113.D

Analysis Method: TO-15 SIM | Date Collected: 05/06/2015 17:58

Sample wt/vol: 900(mL) | Date Analyzed: 05/11/2015 22:45

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: RTX-Volatiles ID: 0.32(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 73719 | Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	133.41	ND		0.020	0.0050
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.050	0.0050
75-34-3	1,1-Dichloroethane	98.96	ND		0.020	0.0050
75-35-4	1,1-Dichloroethene	96.94	ND		0.020	0.0050
95-50-1	1,2-Dichlorobenzene	147.00	0.016	J	0.050	0.010
107-06-2	1,2-Dichloroethane	98.96	0.016	J	0.020	0.0050
106-46-7	1,4-Dichlorobenzene	147.00	ND		0.10	0.010
108-90-7	Chlorobenzene	112.56	ND		0.020	0.010
67-66-3	Chloroform	119.38	0.024		0.020	0.0050
156-59-2	cis-1,2-Dichloroethene	96.94	0.0065	J	0.020	0.0050
100-41-4	Ethylbenzene	106.17	0.12		0.020	0.010
75-69-4	Freon 11	137.37	0.21		0.045	0.010
76-13-1	Freon 113	187.38	0.065		0.030	0.0050
75-71-8	Freon 12	120.91	0.42		0.020	0.0050
179601-23-1	m,p-Xylene	106.17	0.47		0.040	0.020
75-09-2	Methylene Chloride	84.93	1.1		0.20	0.10
95-47-6	o-Xylene	106.17	0.19		0.020	0.010
127-18-4	Tetrachloroethene	165.83	0.012	J	0.020	0.010
108-88-3	Toluene	92.14	1.4		0.020	0.010
156-60-5	trans-1,2-Dichloroethene	96.94	ND		0.020	0.0050
79-01-6	Trichloroethene	131.39	0.095		0.020	0.0050
75-01-4	Vinyl chloride	62.50	ND		0.020	0.010

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	105		70-130
17060-07-0	1,2-Dichloroethane-d4 (Surr)	96		70-130
2037-26-5	Toluene-d8 (Surr)	101		70-130

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento | Job No.: 320-12924-1

SDG No.:

Client Sample ID: J6038-IA1-050615-2 | Lab Sample ID: 320-12924-6

Matrix: Air | Lab File ID: MS5051113.D

Analysis Method: TO-15 SIM | Date Collected: 05/06/2015 17:58

Sample wt/vol: 900(mL) | Date Analyzed: 05/11/2015 22:45

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: RTX-Volatiles ID: 0.32(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 73719 | Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	133.41	ND		0.11	0.027
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.27	0.027
75-34-3	1,1-Dichloroethane	98.96	ND		0.081	0.020
75-35-4	1,1-Dichloroethene	96.94	ND		0.079	0.020
95-50-1	1,2-Dichlorobenzene	147.00	0.095	J	0.30	0.060
107-06-2	1,2-Dichloroethane	98.96	0.064	J	0.081	0.020
106-46-7	1,4-Dichlorobenzene	147.00	ND		0.60	0.060
108-90-7	Chlorobenzene	112.56	ND		0.092	0.046
67-66-3	Chloroform	119.38	0.12		0.098	0.024
156-59-2	cis-1,2-Dichloroethene	96.94	0.026	J	0.079	0.020
100-41-4	Ethylbenzene	106.17	0.51		0.087	0.043
75-69-4	Freon 11	137.37	1.2		0.25	0.056
76-13-1	Freon 113	187.38	0.50		0.23	0.038
75-71-8	Freon 12	120.91	2.1		0.099	0.025
179601-23-1	m,p-Xylene	106.17	2.0		0.17	0.087
75-09-2	Methylene Chloride	84.93	3.7		0.69	0.35
95-47-6	o-Xylene	106.17	0.84		0.087	0.043
127-18-4	Tetrachloroethene	165.83	0.080	J	0.14	0.068
108-88-3	Toluene	92.14	5.3		0.075	0.038
156-60-5	trans-1,2-Dichloroethene	96.94	ND		0.079	0.020
79-01-6	Trichloroethene	131.39	0.51		0.11	0.027
75-01-4	Vinyl chloride	62.50	ND		0.051	0.026

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	105		70-130
17060-07-0	1,2-Dichloroethane-d4 (Surr)	96		70-130
2037-26-5	Toluene-d8 (Surr)	101		70-130

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\SACCHROM\ChromData\ATMS5\20150512-21744.b\MS5051113.D
Lims ID: 320-12924-A-6 Lab Sample ID: 320-12924-6
Client ID: J6038-IA1-050615-2
Sample Type: Client
Inject. Date: 11-May-2015 22:45:30 ALS Bottle#: 7 Worklist Smp#: 12
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 320-12924-A-6
Misc. Info.: 900ML900ML
Operator ID: AO Instrument ID: ATMS5

Method: \\SACCHROM\ChromData\ATMS5\20150512-21744.b\TO15 SIM.m
Limit Group: MSA - TO-15_SIM_ICAL
Last Update: 12-May-2015 12:35:18 Calib Date: 26-Mar-2015 03:17:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\SACCHROM\ChromData\ATMS5\20150326-20538.b\MS5032518.D

Column 1 : Det: MS SCAN
Process Host: XAWRK010

First Level Reviewer: ortizam Date: 12-May-2015 12:36:30

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	130	11.850	11.850	0.000	99	34954	2.00	
* 2 1,4-Difluorobenzene	114	13.944	13.941	0.003	100	166941	2.00	
* 3 Chlorobenzene-d5 (IS)	117	20.508	20.508	0.000	100	154783	2.00	
$ 4 1,2-Dichloroethane-d4 (Sur	65	13.002	13.002	0.000	100	37766	1.92	
$ 5 Toluene-d8 (Surr)	100	17.266	17.266	0.000	100	115599	2.01	
$ 6 4-Bromofluorobenzene (Surr	95	23.040	23.040	0.000	100	91576	2.10	
8 Dichlorodifluoromethane	85	4.181	4.181	0.000	100	22021	0.4179	
11 Vinyl chloride	62	4.808	4.817	-0.009	67	82	0.004469	
15 Trichlorofluoromethane	101	6.418	6.418	0.000	100	10650	0.2118	
19 1,1,2-Trichloro-1,2,2-trif	101	7.412	7.412	0.000	99	3133	0.0648	
22 Methylene Chloride	49	8.483	8.490	-0.007	98	25839	1.07	
30 cis-1,2-Dichloroethene	96	11.240	11.240	0.000	78	176	0.006537	
32 Chloroform	83	11.589	11.589	0.000	95	1080	0.0243	
37 1,2-Dichloroethane	62	13.193	13.192	0.001	93	472	0.0158	
40 Trichloroethene	130	14.683	14.683	0.000	91	3721	0.0945	
46 Toluene	91	17.439	17.439	0.000	99	176524	1.40	
50 Tetrachloroethene	166	18.939	18.939	0.000	98	609	0.0118	
53 Chlorobenzene	112	20.591	20.584	0.007	1	691	0.006338	
54 Ethylbenzene	91	20.773	20.773	0.000	89	20725	0.1169	
55 m-Xylene & p-Xylene	91	20.955	20.955	0.000	56	63273	0.4712	
56 o-Xylene	91	21.846	21.846	0.000	40	27016	0.1926	
65 1,4-Dichlorobenzene	146	25.529	25.530	-0.001	97	469	0.004405	7
67 1,2-Dichlorobenzene	146	26.245	26.247	-0.002	1	1726	0.0158	

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

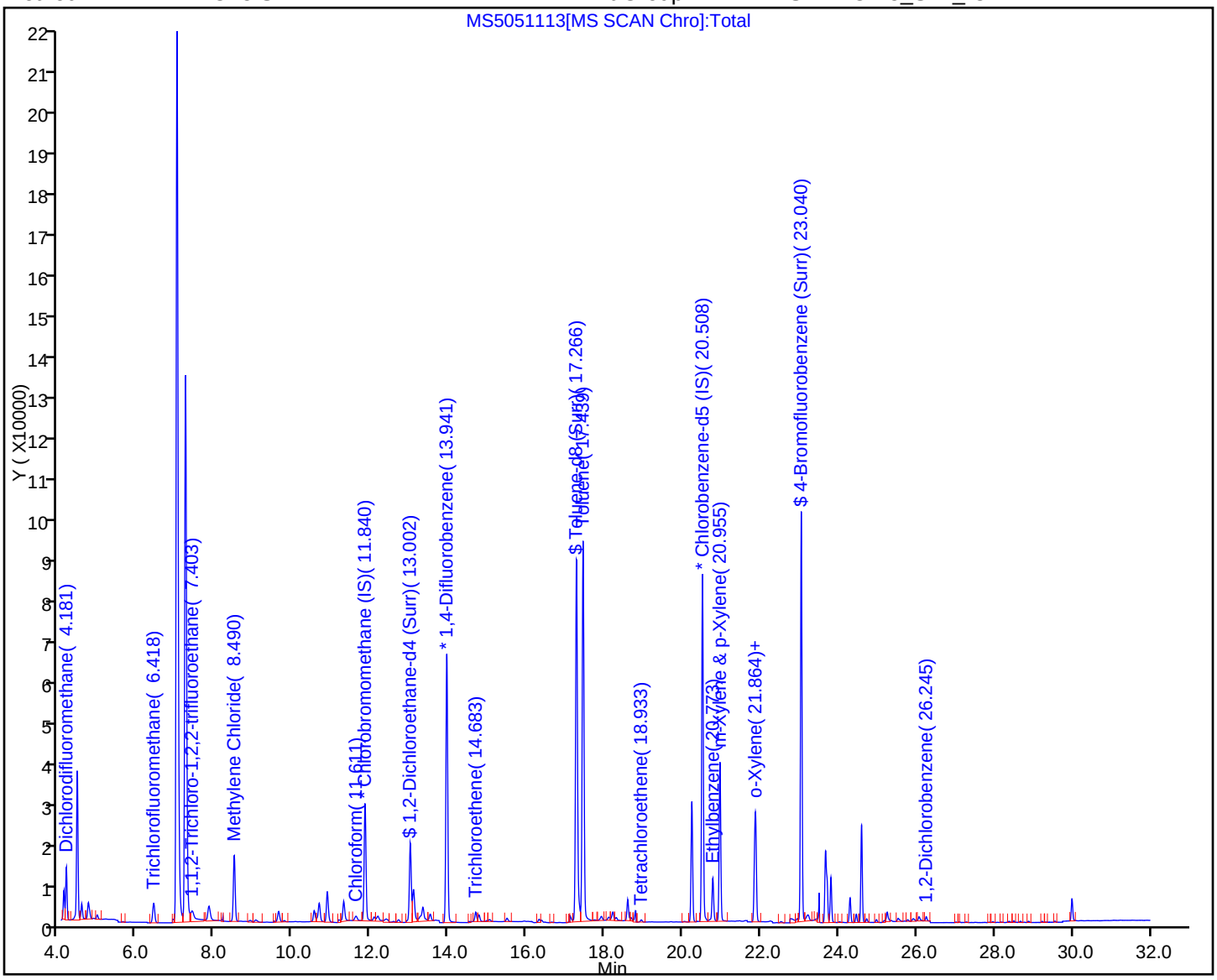
Reagents:

VASUISIM_00172	Amount Added: 50.00	Units: mL	Run Reagent

Report Date: 12-May-2015 12:36:31 Chrom Revision: 2.2 05-May-2015 11:39:10

TestAmerica Sacramento

Data File:	\\SACCHROM\ChromData\ATMS5\20150512-21744.b\MS5051113.D				
Injection Date:	11-May-2015 22:45:30	Instrument ID:	ATMS5		
Lims ID:	320-12924-A-6	Lab Sample ID:	320-12924-6		
Client ID:	J6038-IA1-050615-2				
Operator ID:	AO	ALS Bottle#:	7	Worklist Smp#:	12
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	TO15 SIM	Limit Group:	MSA - TO-15_SIM_ICAL		

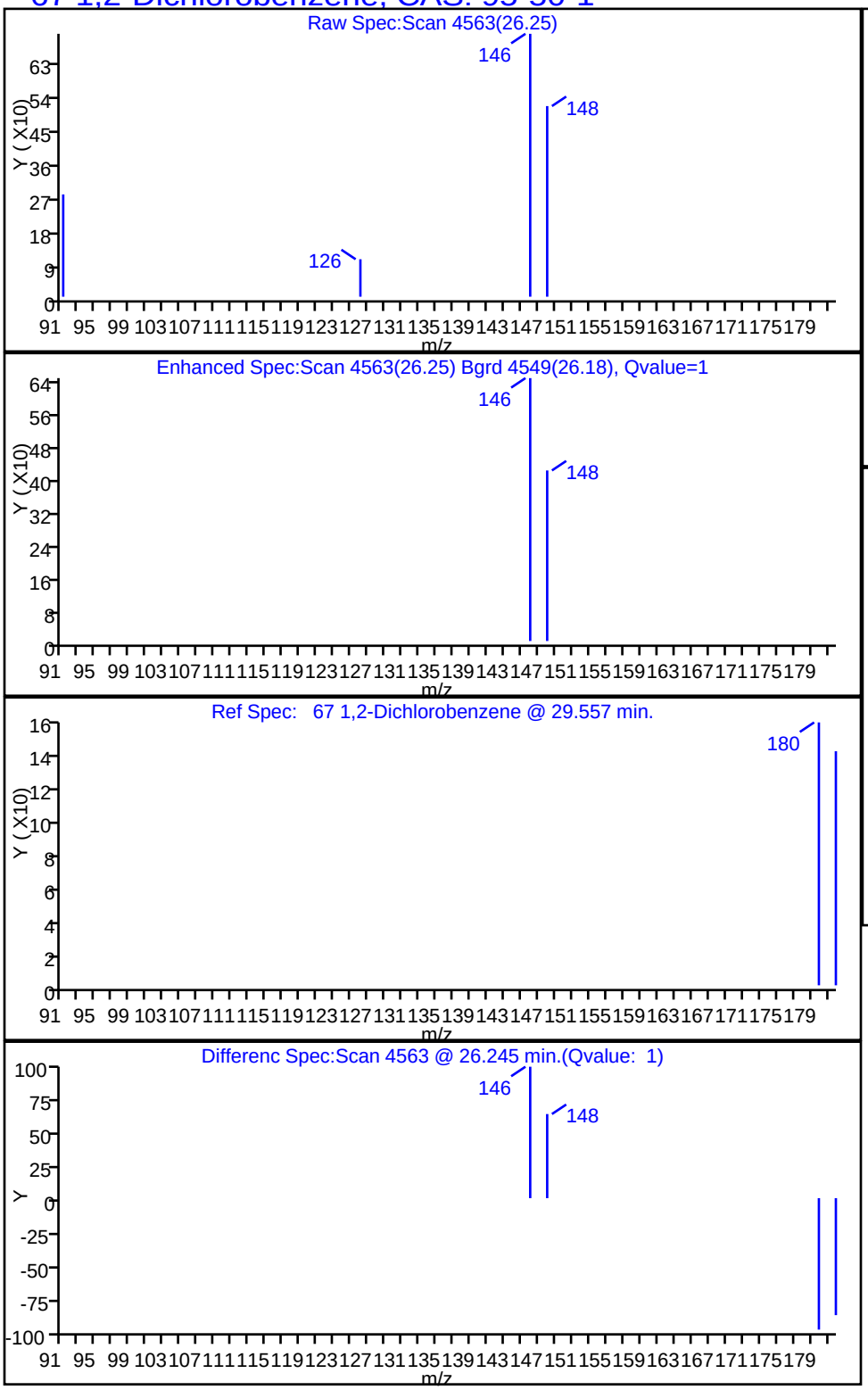


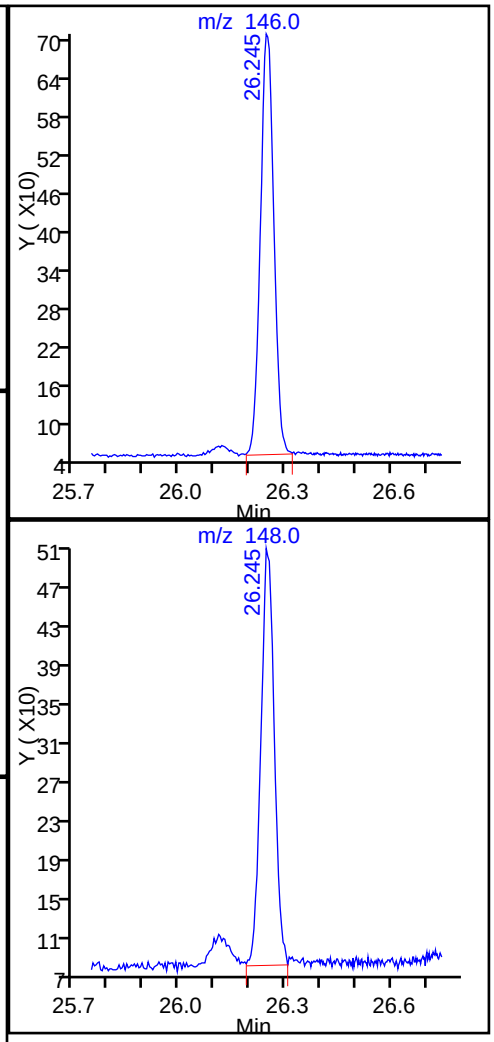
Report Date: 12-May-2015 12:36:31 Chrom Revision: 2.2 05-May-2015 11:39:10

TestAmerica Sacramento

Data File:	\\SACCHROM\ChromData\ATMS5\20150512-21744.b\MS5051113.D				
Injection Date:	11-May-2015 22:45:30	Instrument ID:	ATMS5		
Lims ID:	320-12924-A-6	Lab Sample ID:	320-12924-6		
Client ID:	J6038-IA1-050615-2				
Operator ID:	AO	ALS Bottle#:	7	Worklist Smp#:	12
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	TO15 SIM	Limit Group:	MSA - TO-15_SIM_ICAL		
Column:		Detector	MS SCAN		

67 1,2-Dichlorobenzene, CAS: 95-50-1





Report Date: 12-May-2015 12:36:31 Chrom Revision: 2.2 05-May-2015 11:39:10

TestAmerica Sacramento

Data File:	\\SACCHROM\ChromData\ATMS5\20150512-21744.b\MS5051113.D				
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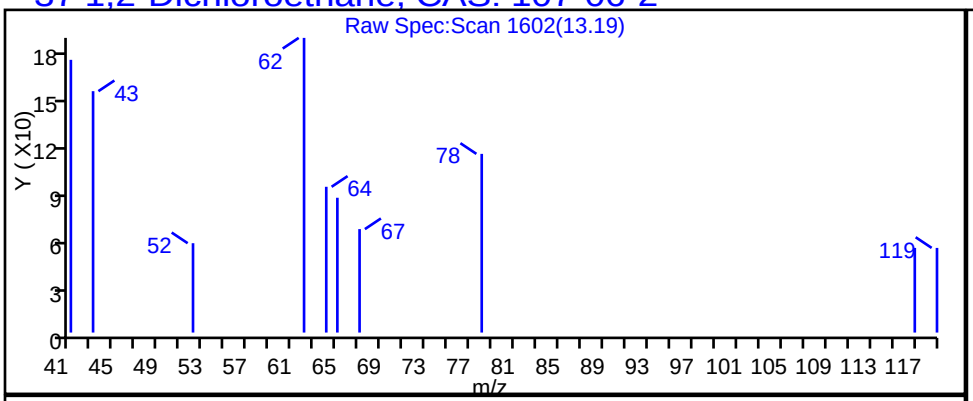
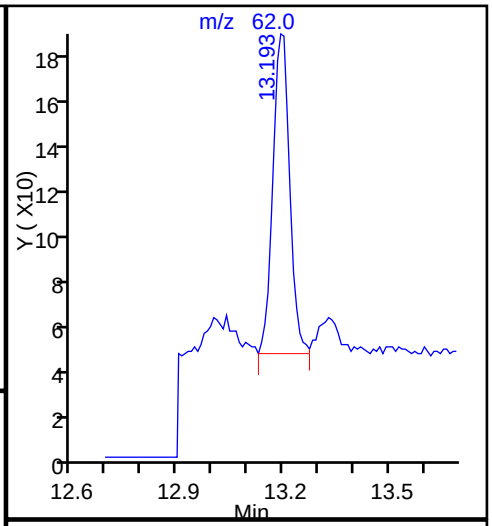
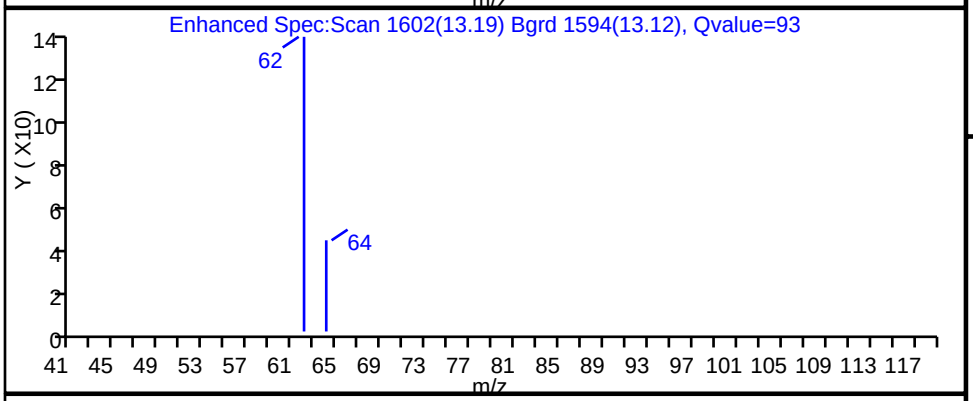
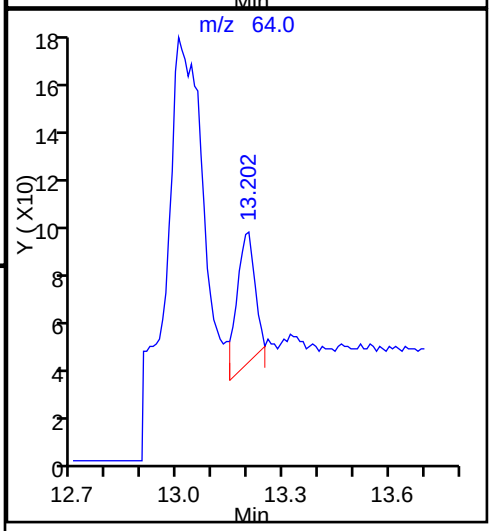
Lims ID:	320-12924-A-6	Lab Sample ID:	320-12924-6		
Client ID:	J6038-IA1-050615-2				
Operator ID:	AO	ALS Bottle#:	7	Worklist Smp#:	12
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	TO15 SIM	Limit Group:	MSA - TO-15_SIM_ICAL		
Column:		Detector	MS SCAN		

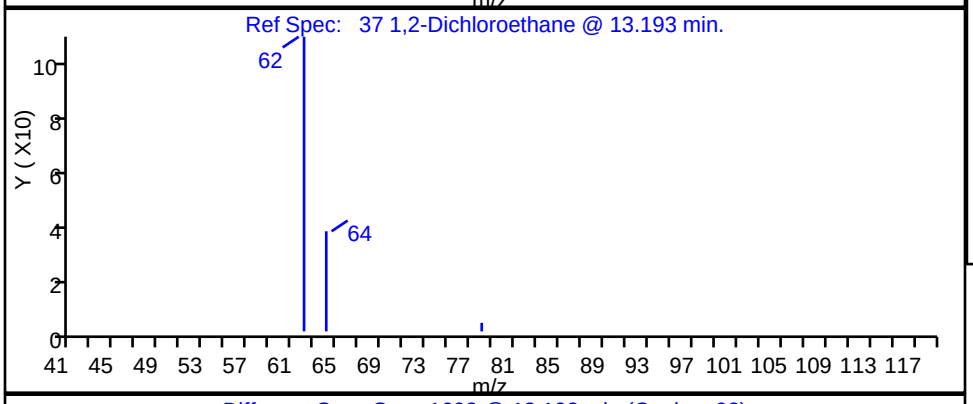
37 1,2-Dichloroethane, CAS: 107-06-2

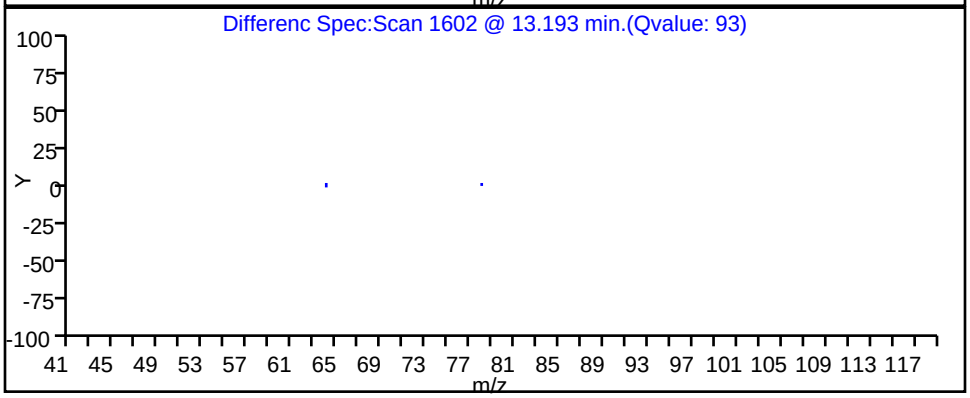












Report Date: 12-May-2015 12:36:31 Chrom Revision: 2.2 05-May-2015 11:39:10

TestAmerica Sacramento

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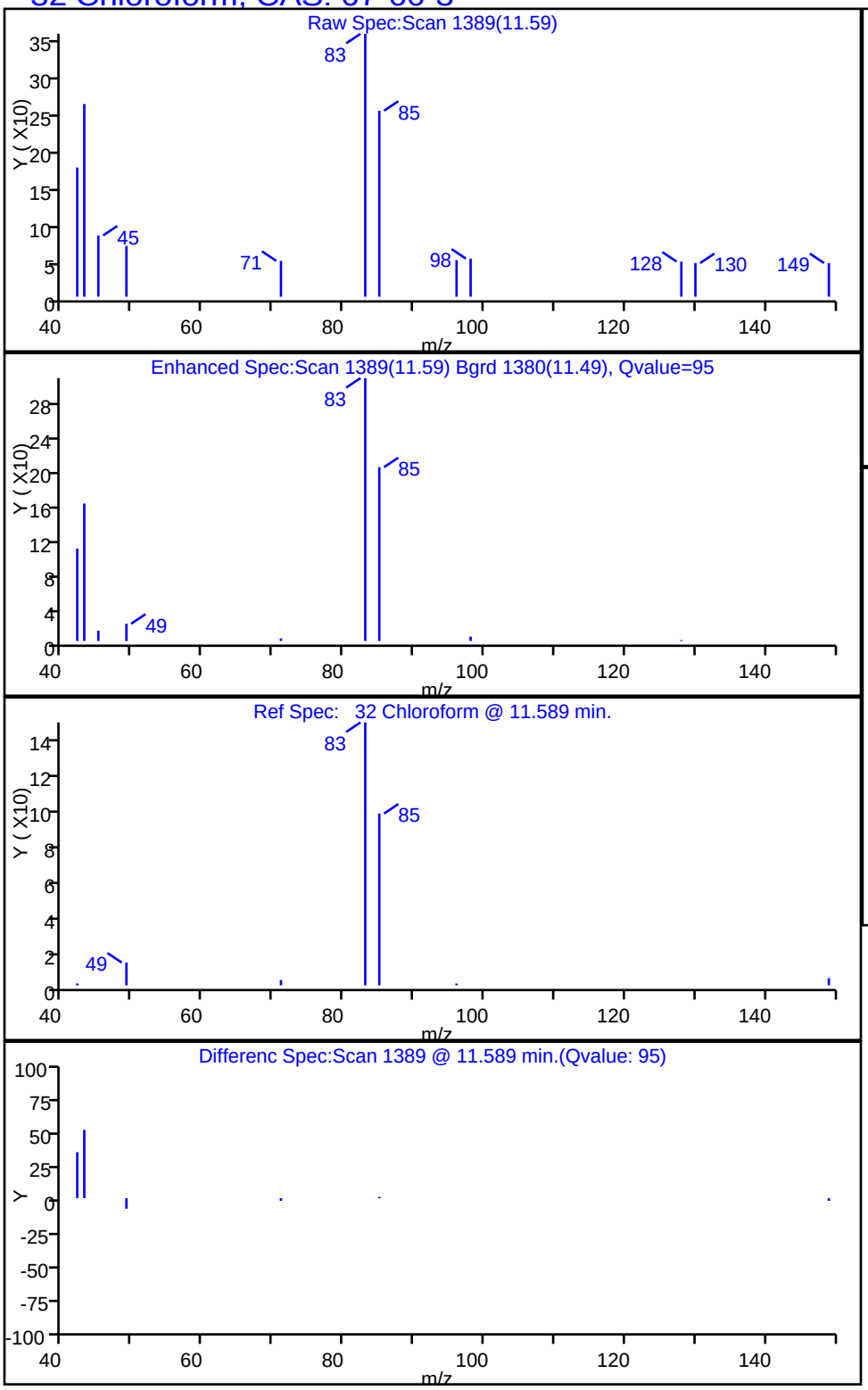
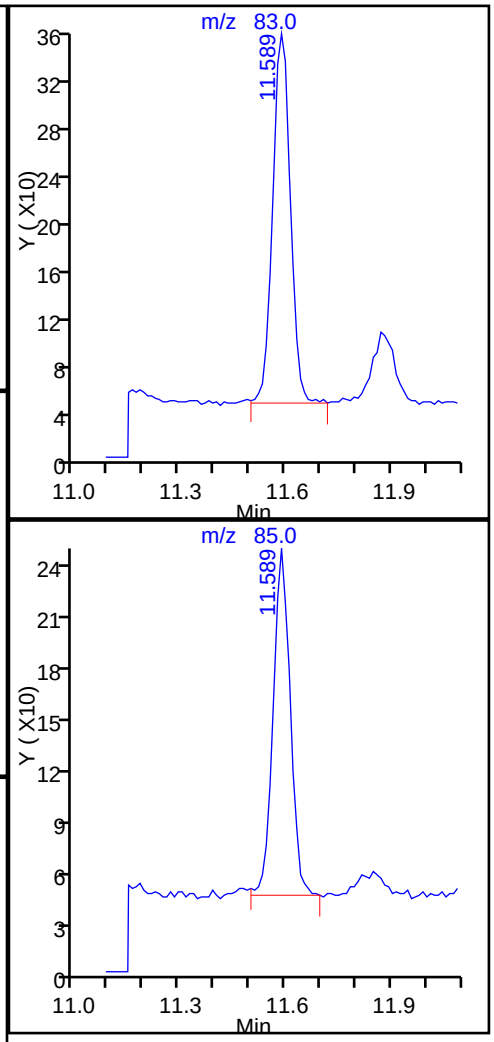
Lims ID:	320-12924-A-6	Lab Sample ID:	320-12924-6		
Client ID:	J6038-IA1-050615-2				
Operator ID:	AO	ALS Bottle#:	7	Worklist Smp#:	12
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	TO15 SIM	Limit Group:	MSA - TO-15_SIM_ICAL		
Column:		Detector	MS SCAN		

32 Chloroform, CAS: 67-66-3



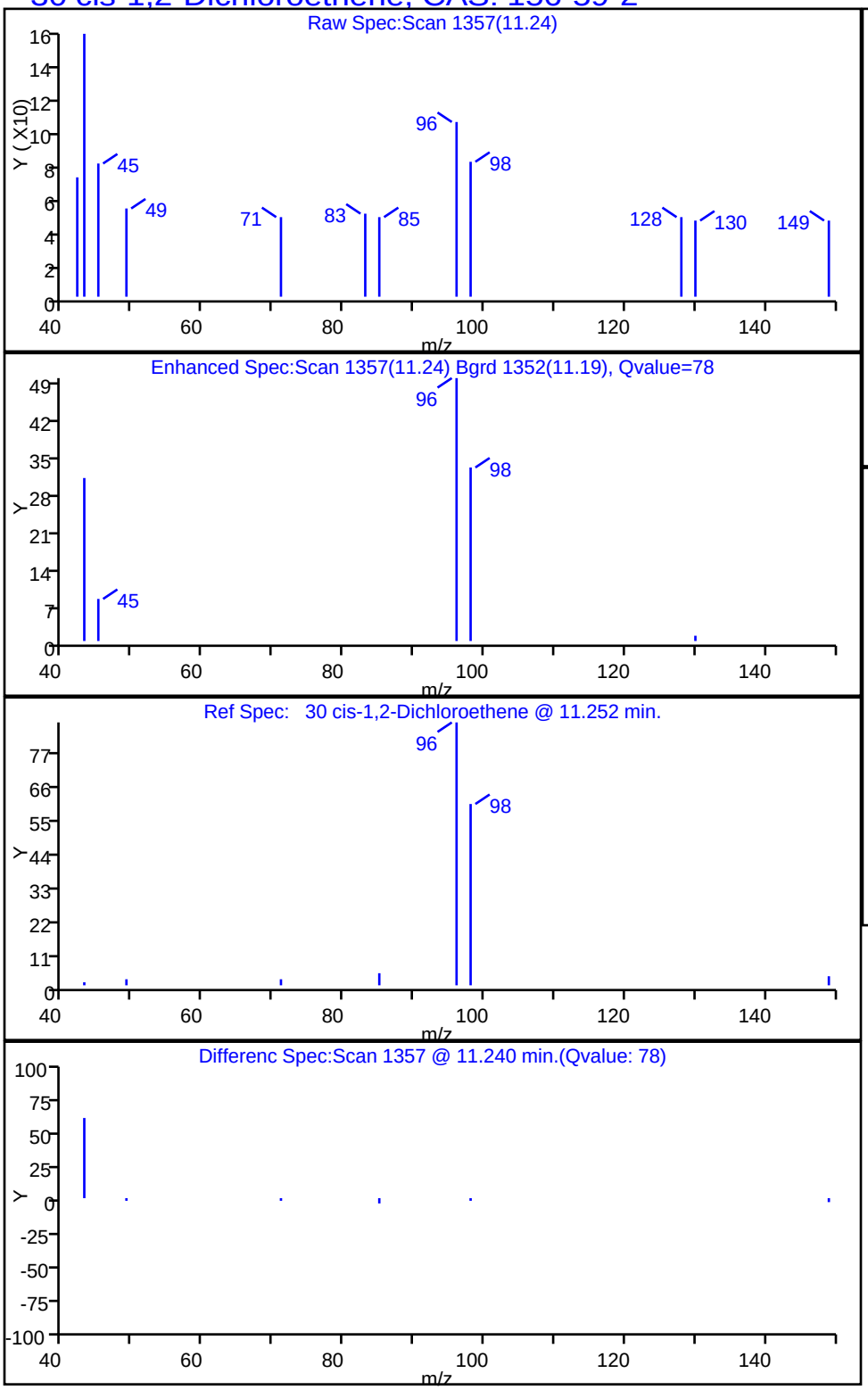


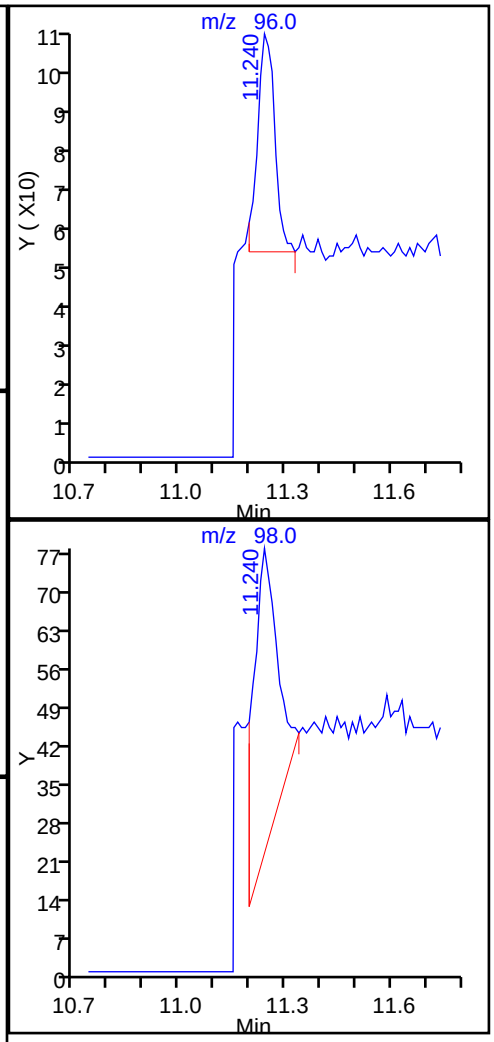
Report Date: 12-May-2015 12:36:31 Chrom Revision: 2.2 05-May-2015 11:39:10

TestAmerica Sacramento

Data File:	\\SACCHROM\ChromData\ATMS5\20150512-21744.b\MS5051113.D				
Injection Date:	11-May-2015 22:45:30	Instrument ID:	ATMS5		
Lims ID:	320-12924-A-6	Lab Sample ID:	320-12924-6		
Client ID:	J6038-IA1-050615-2				
Operator ID:	AO	ALS Bottle#:	7	Worklist Smp#:	12
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	TO15 SIM	Limit Group:	MSA - TO-15_SIM_ICAL		
Column:		Detector	MS SCAN		

30 cis-1,2-Dichloroethene, CAS: 156-59-2



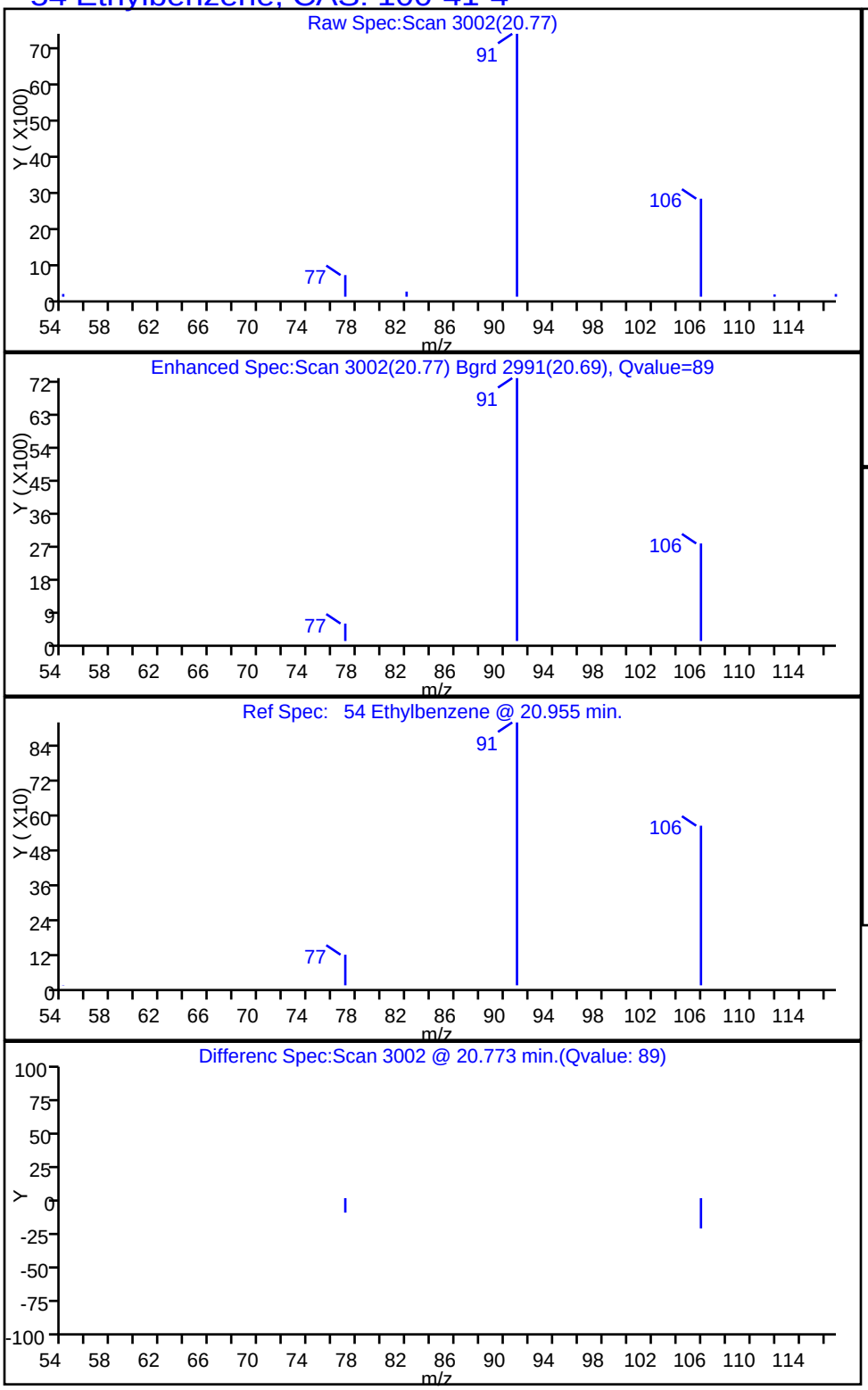


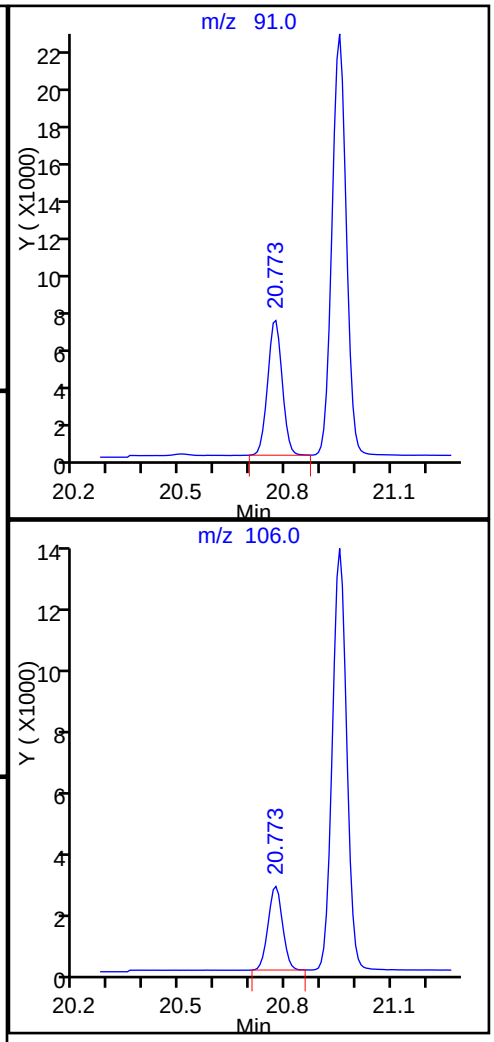
Report Date: 12-May-2015 12:36:31 Chrom Revision: 2.2 05-May-2015 11:39:10

TestAmerica Sacramento

Data File:	\\SACCHROM\ChromData\ATMS5\20150512-21744.b\MS5051113.D				
Injection Date:	11-May-2015 22:45:30	Instrument ID:	ATMS5		
Lims ID:	320-12924-A-6	Lab Sample ID:	320-12924-6		
Client ID:	J6038-IA1-050615-2				
Operator ID:	AO	ALS Bottle#:	7	Worklist Smp#:	12
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	TO15 SIM	Limit Group:	MSA - TO-15_SIM_ICAL		
Column:		Detector	MS SCAN		

54 Ethylbenzene, CAS: 100-41-4



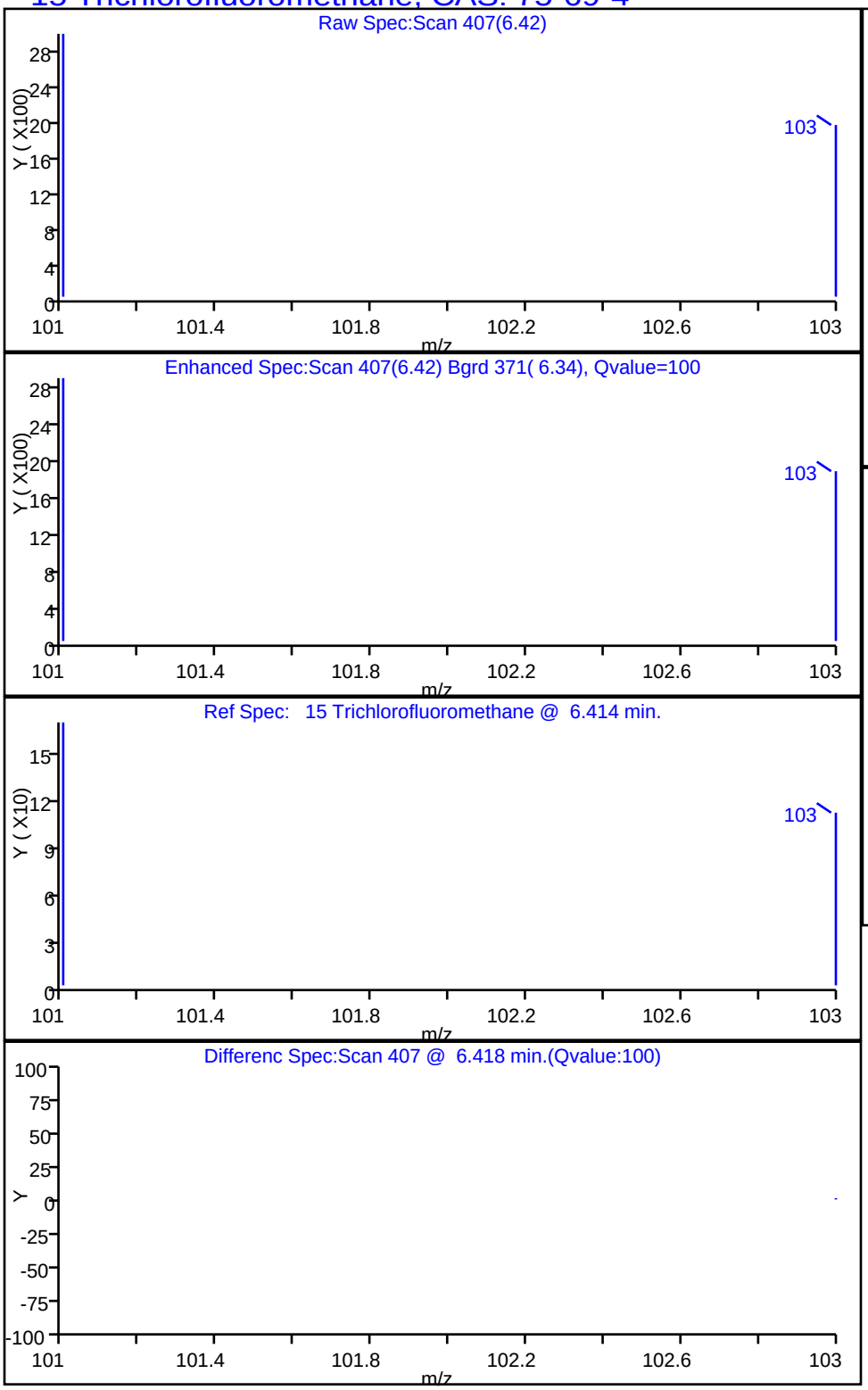


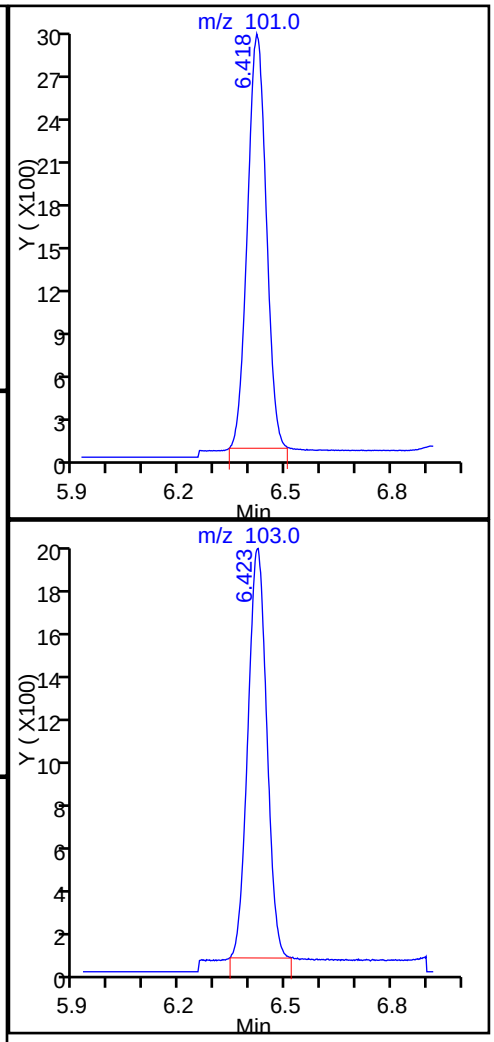
Report Date: 12-May-2015 12:36:31 Chrom Revision: 2.2 05-May-2015 11:39:10

TestAmerica Sacramento

Data File:	\\SACCHROM\ChromData\ATMS5\20150512-21744.b\MS5051113.D				
Injection Date:	11-May-2015 22:45:30	Instrument ID:	ATMS5		
Lims ID:	320-12924-A-6	Lab Sample ID:	320-12924-6		
Client ID:	J6038-IA1-050615-2				
Operator ID:	AO	ALS Bottle#:	7	Worklist Smp#:	12
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	TO15 SIM	Limit Group:	MSA - TO-15_SIM_ICAL		
Column:		Detector	MS SCAN		

15 Trichlorofluoromethane, CAS: 75-69-4



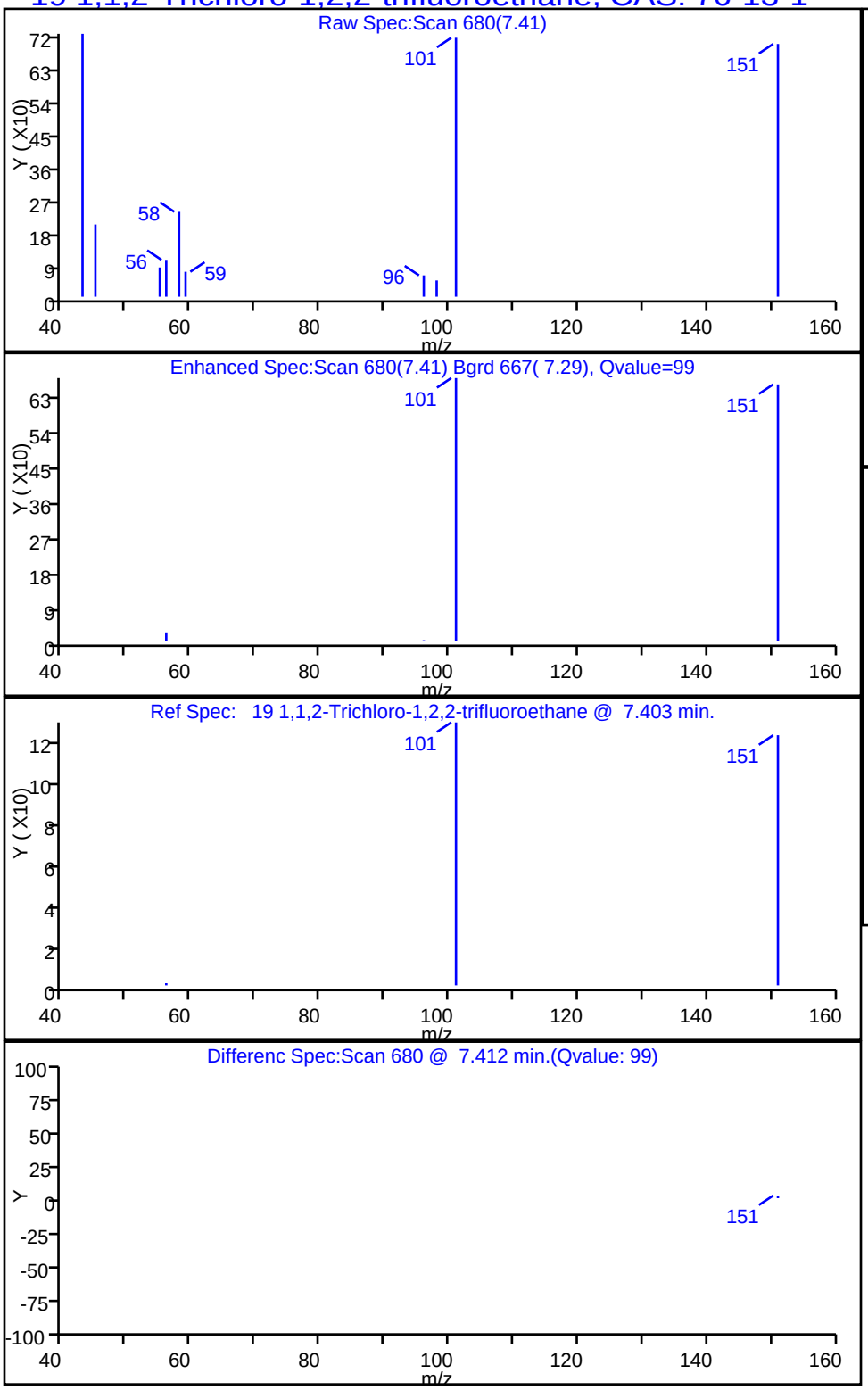


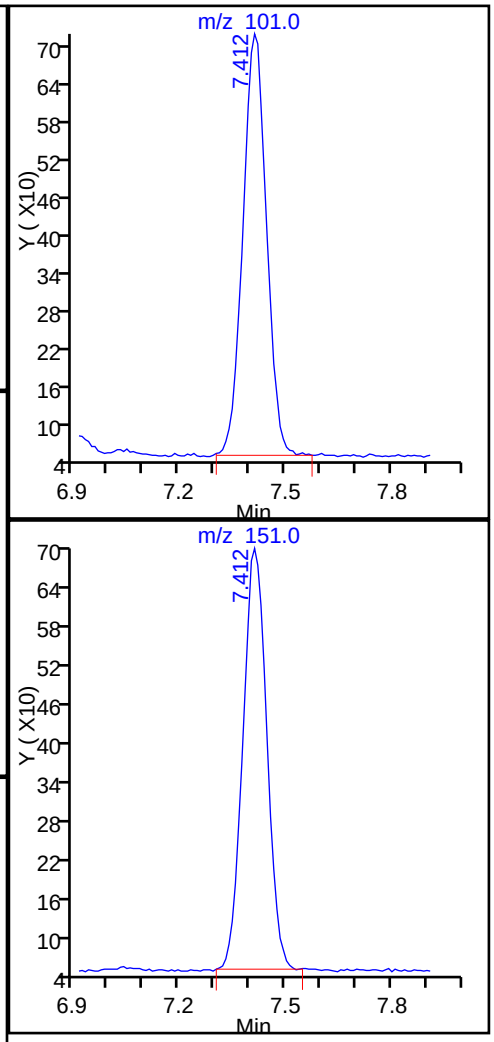
Report Date: 12-May-2015 12:36:31 Chrom Revision: 2.2 05-May-2015 11:39:10

TestAmerica Sacramento

Data File:	\\SACCHROM\ChromData\ATMS5\20150512-21744.b\MS5051113.D				
Injection Date:	11-May-2015 22:45:30	Instrument ID:	ATMS5		
Lims ID:	320-12924-A-6	Lab Sample ID:	320-12924-6		
Client ID:	J6038-IA1-050615-2				
Operator ID:	AO	ALS Bottle#:	7	Worklist Smp#:	12
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	TO15 SIM	Limit Group:	MSA - TO-15_SIM_ICAL		
Column:		Detector	MS SCAN		

19 1,1,2-Trichloro-1,2,2-trifluoroethane, CAS: 76-13-1



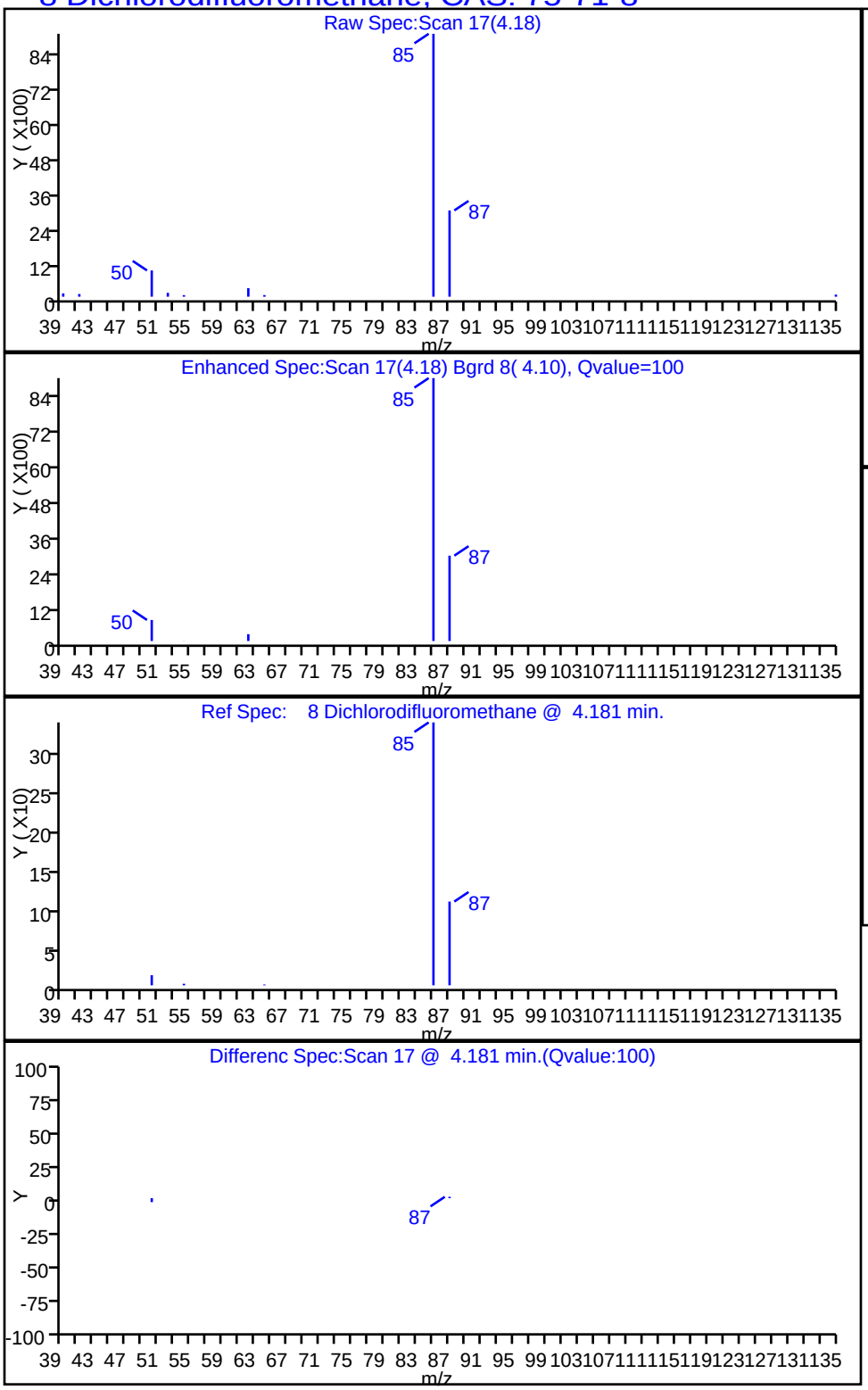


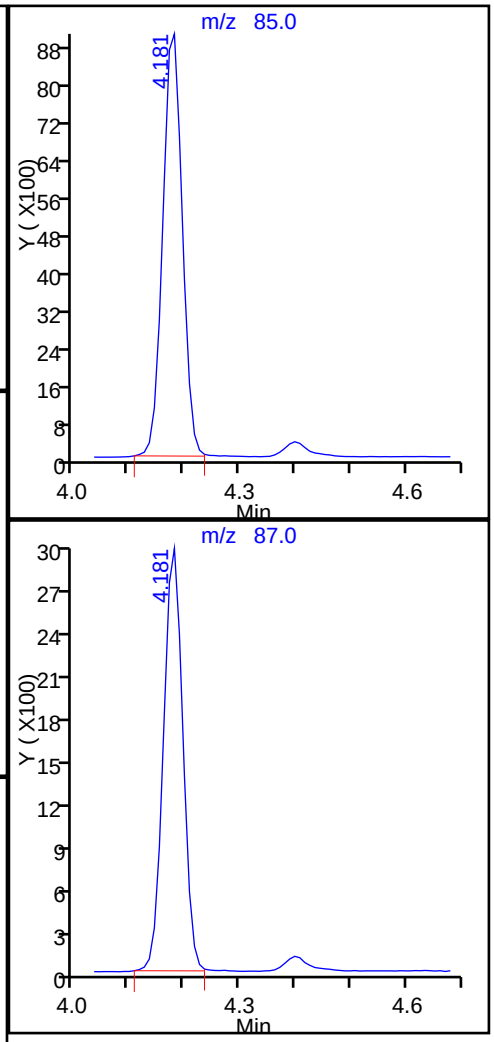
Report Date: 12-May-2015 12:36:31 Chrom Revision: 2.2 05-May-2015 11:39:10

TestAmerica Sacramento

Data File:	\\SACCHROM\ChromData\ATMS5\20150512-21744.b\MS5051113.D				
Injection Date:	11-May-2015 22:45:30	Instrument ID:	ATMS5		
Lims ID:	320-12924-A-6	Lab Sample ID:	320-12924-6		
Client ID:	J6038-IA1-050615-2				
Operator ID:	AO	ALS Bottle#:	7	Worklist Smp#:	12
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	TO15 SIM	Limit Group:	MSA - TO-15_SIM_ICAL		
Column:		Detector	MS SCAN		

8 Dichlorodifluoromethane, CAS: 75-71-8



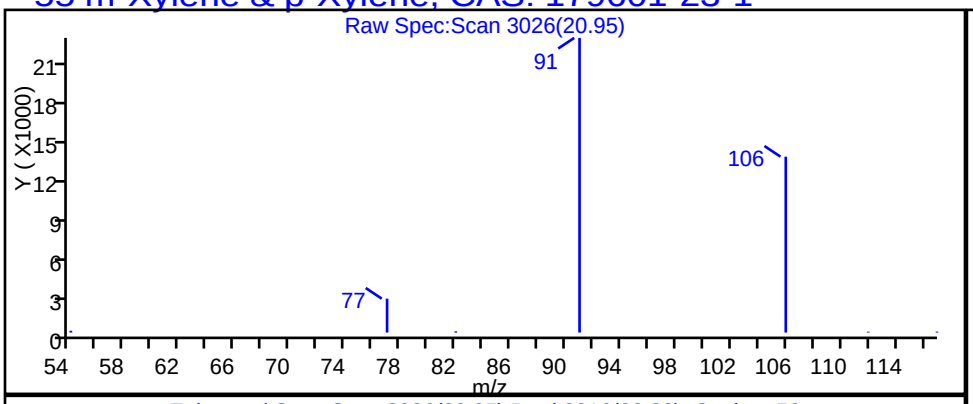


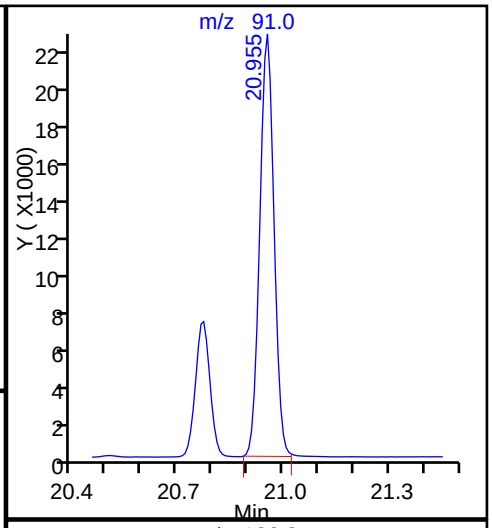
Report Date: 12-May-2015 12:36:31 Chrom Revision: 2.2 05-May-2015 11:39:10

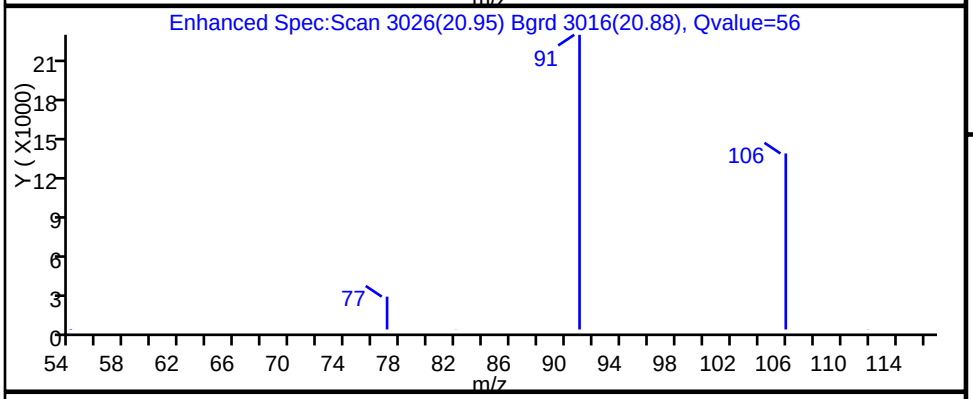
TestAmerica Sacramento

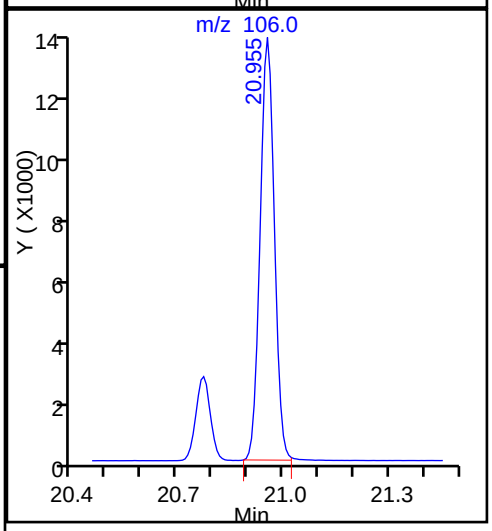
Data File:	\\SACCHROM\ChromData\ATMS5\20150512-21744.b\MS5051113.D				
Injection Date:	11-May-2015 22:45:30	Instrument ID:	ATMS5		
Lims ID:	320-12924-A-6	Lab Sample ID:	320-12924-6		
Client ID:	J6038-IA1-050615-2				
Operator ID:	AO	ALS Bottle#:	7	Worklist Smp#:	12
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	TO15 SIM	Limit Group:	MSA - TO-15_SIM_ICAL		
Column:		Detector	MS SCAN		

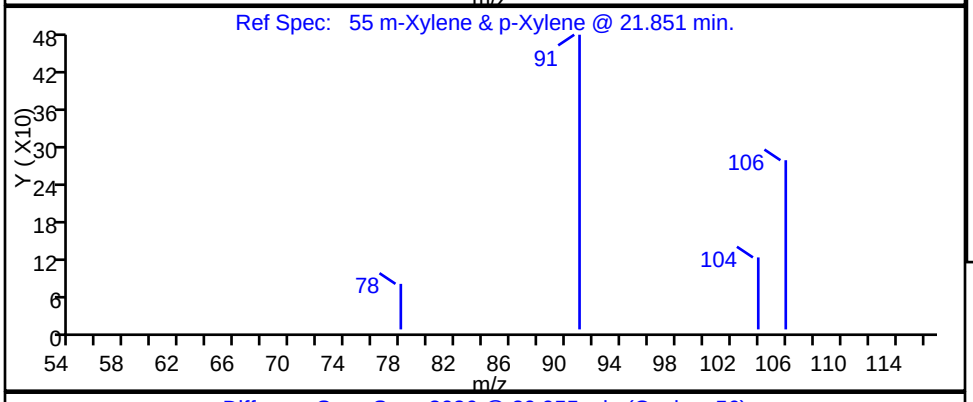
55 m-Xylene & p-Xylene, CAS: 179601-23-1

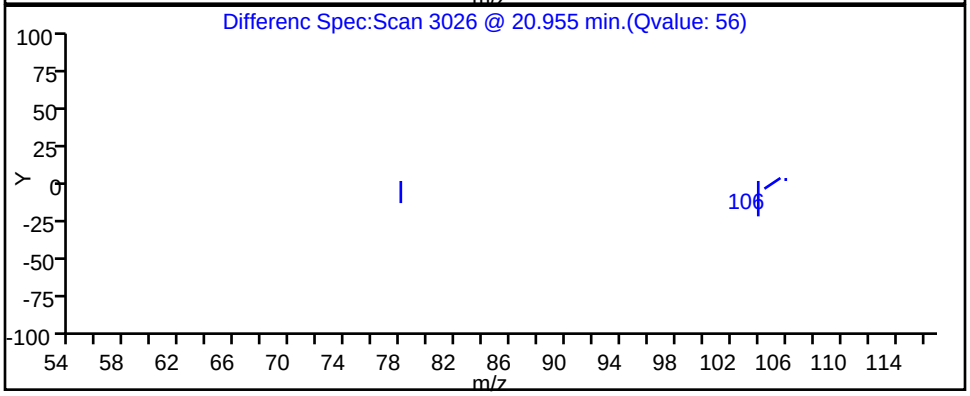










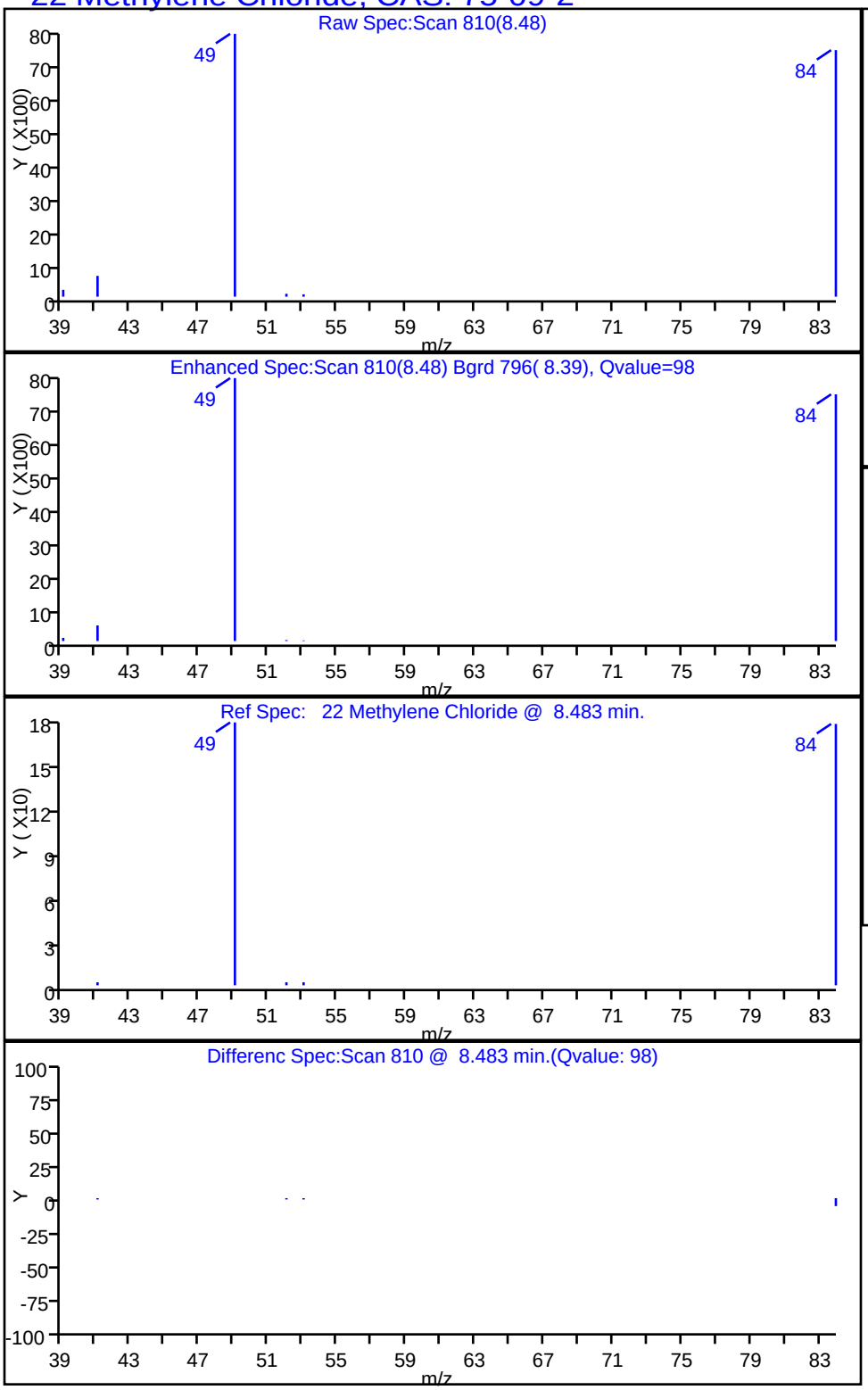


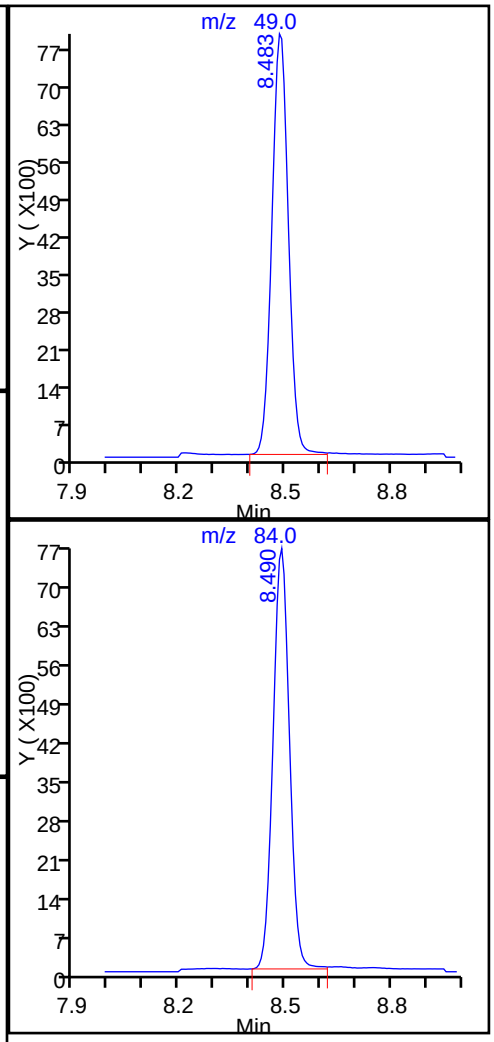
Report Date: 12-May-2015 12:36:31 Chrom Revision: 2.2 05-May-2015 11:39:10

TestAmerica Sacramento

Data File:	\\SACCHROM\ChromData\ATMS5\20150512-21744.b\MS5051113.D				
Injection Date:	11-May-2015 22:45:30	Instrument ID:	ATMS5		
Lims ID:	320-12924-A-6	Lab Sample ID:	320-12924-6		
Client ID:	J6038-IA1-050615-2				
Operator ID:	AO	ALS Bottle#:	7	Worklist Smp#:	12
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	TO15 SIM	Limit Group:	MSA - TO-15_SIM_ICAL		
Column:		Detector	MS SCAN		

22 Methylene Chloride, CAS: 75-09-2



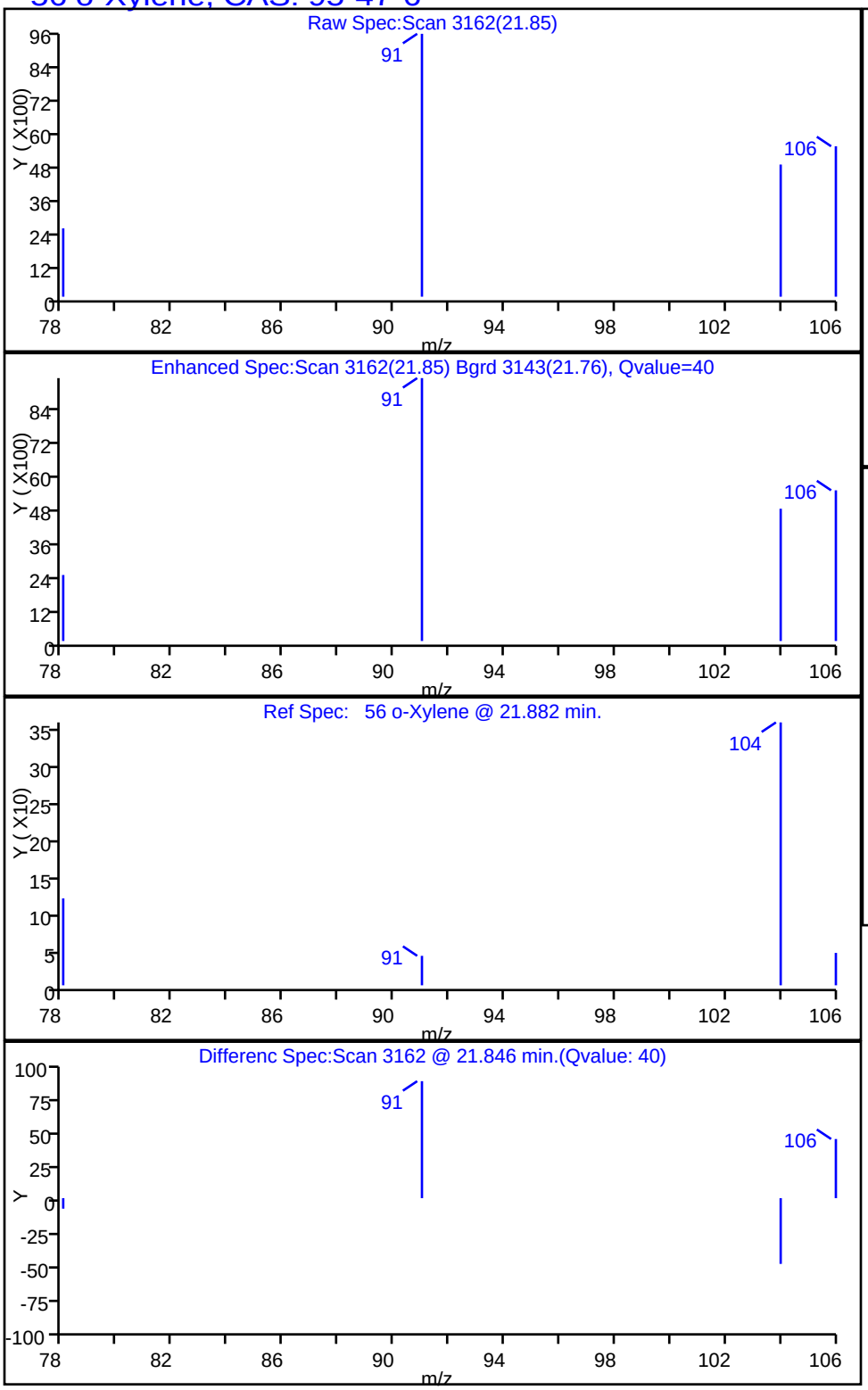


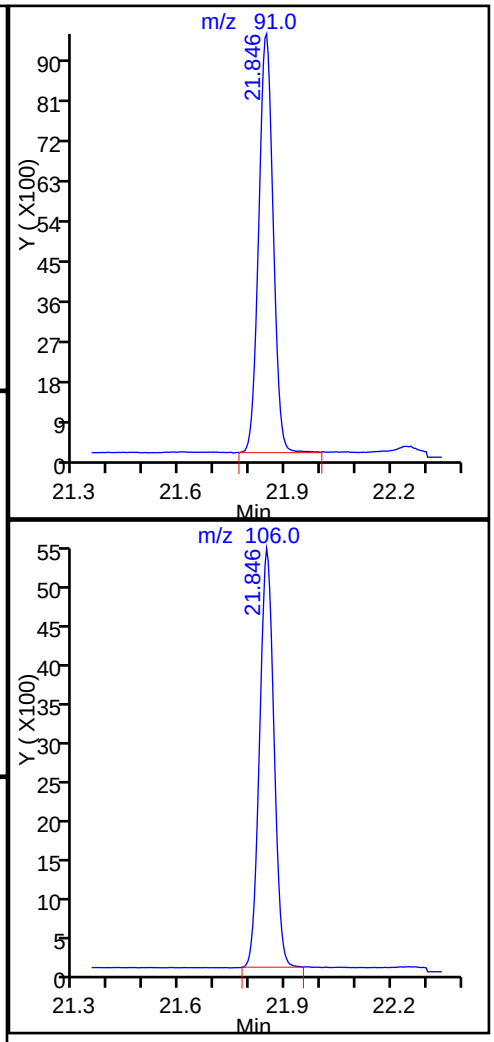
Report Date: 12-May-2015 12:36:31 Chrom Revision: 2.2 05-May-2015 11:39:10

TestAmerica Sacramento

Data File:	\\SACCHROM\ChromData\ATMS5\20150512-21744.b\MS5051113.D				
Injection Date:	11-May-2015 22:45:30	Instrument ID:	ATMS5		
Lims ID:	320-12924-A-6	Lab Sample ID:	320-12924-6		
Client ID:	J6038-IA1-050615-2				
Operator ID:	AO	ALS Bottle#:	7	Worklist Smp#:	12
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	TO15 SIM	Limit Group:	MSA - TO-15_SIM_ICAL		
Column:		Detector	MS SCAN		

56 o-Xylene, CAS: 95-47-6



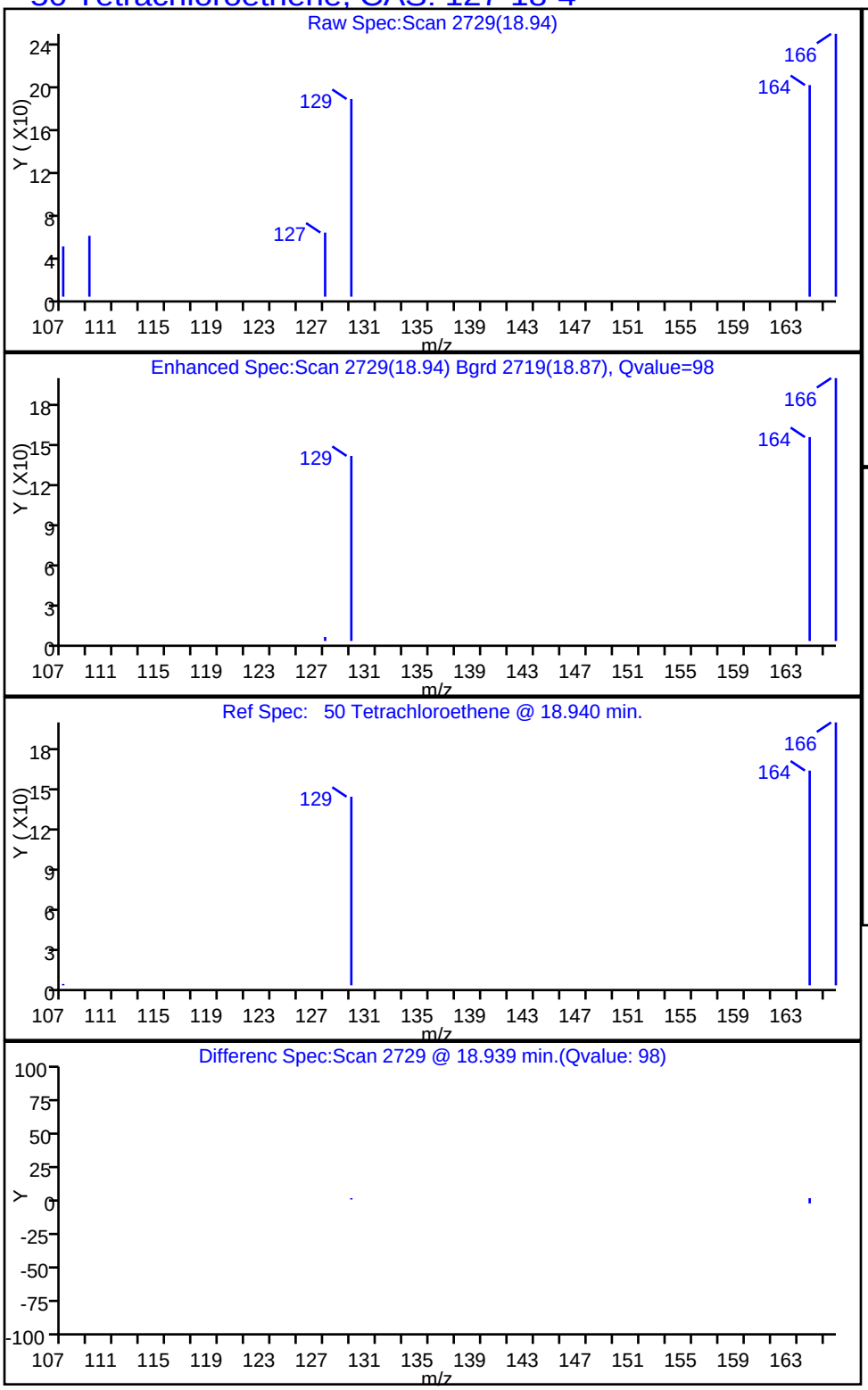


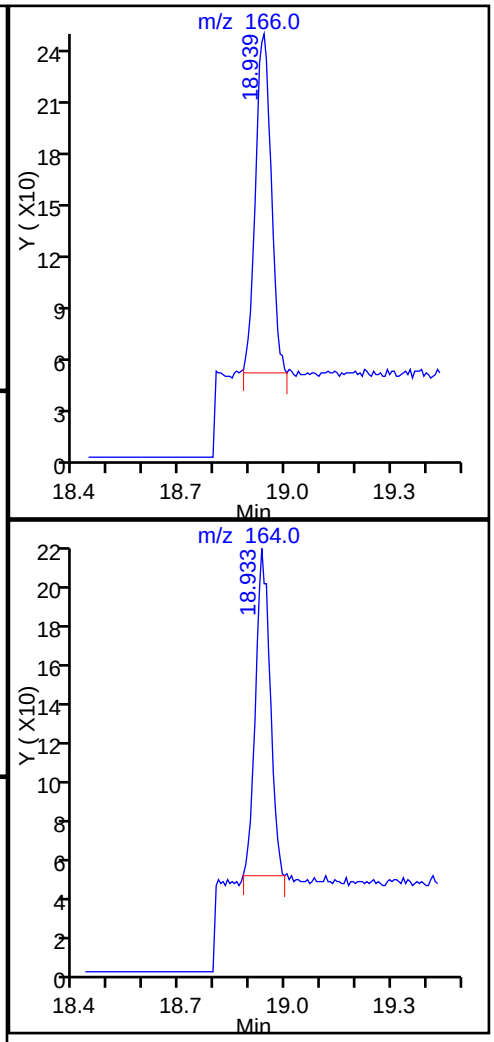
Report Date: 12-May-2015 12:36:31 Chrom Revision: 2.2 05-May-2015 11:39:10

TestAmerica Sacramento

Data File:	\\SACCHROM\ChromData\ATMS5\20150512-21744.b\MS5051113.D				
Injection Date:	11-May-2015 22:45:30	Instrument ID:	ATMS5		
Lims ID:	320-12924-A-6	Lab Sample ID:	320-12924-6		
Client ID:	J6038-IA1-050615-2				
Operator ID:	AO	ALS Bottle#:	7	Worklist Smp#:	12
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	TO15 SIM	Limit Group:	MSA - TO-15_SIM_ICAL		
Column:		Detector	MS SCAN		

50 Tetrachloroethene, CAS: 127-18-4



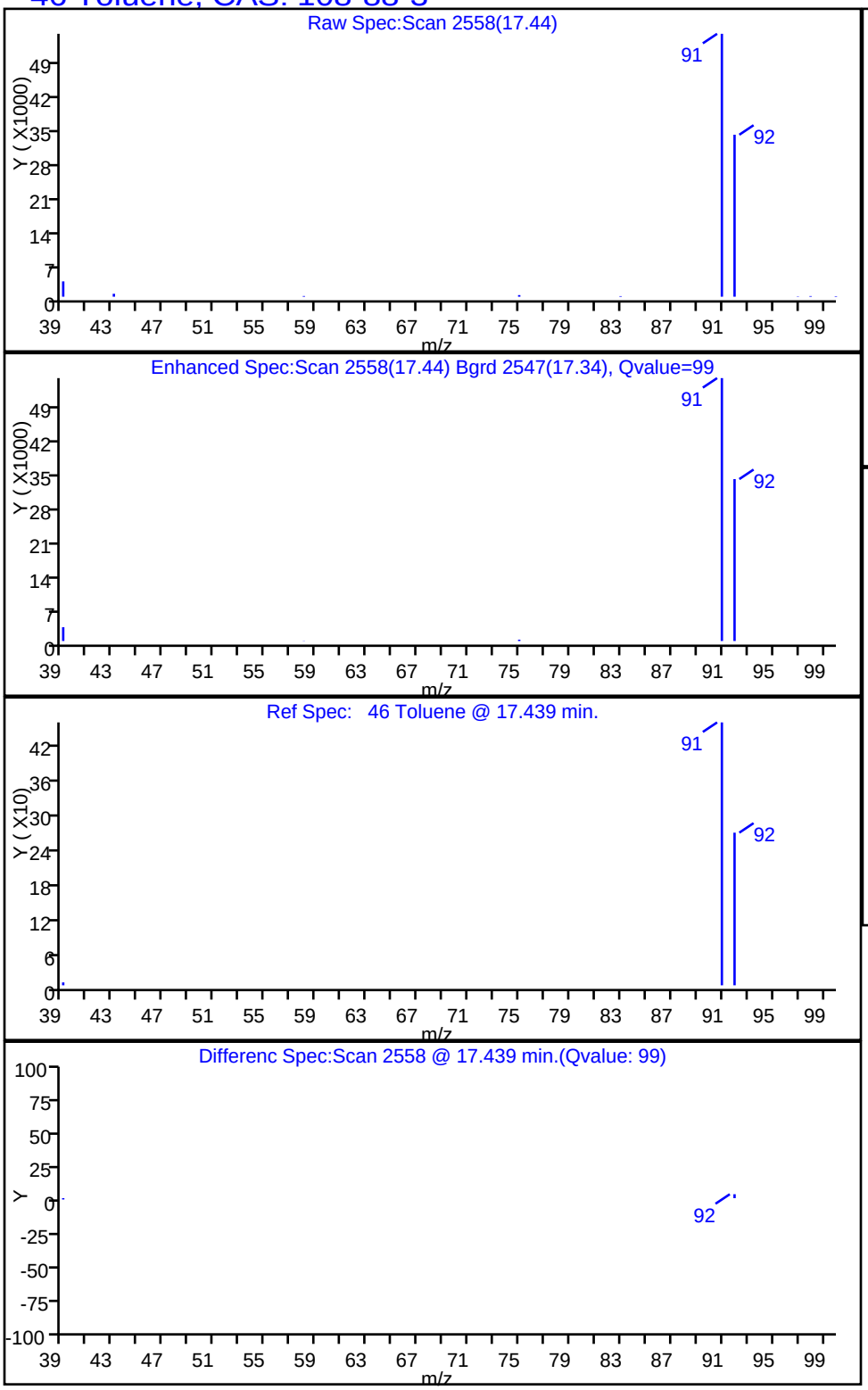


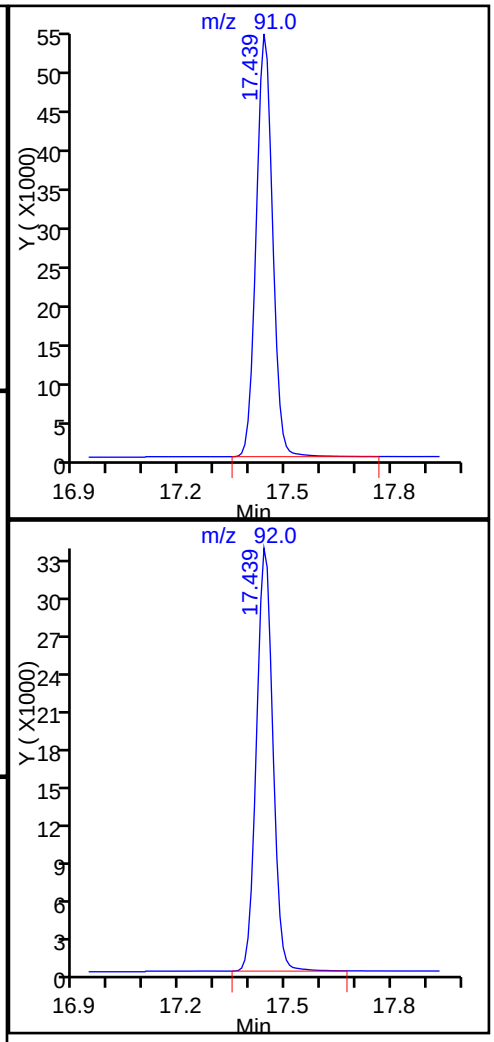
Report Date: 12-May-2015 12:36:31 Chrom Revision: 2.2 05-May-2015 11:39:10

TestAmerica Sacramento

Data File:	\\SACCHROM\ChromData\ATMS5\20150512-21744.b\MS5051113.D				
Injection Date:	11-May-2015 22:45:30	Instrument ID:	ATMS5		
Lims ID:	320-12924-A-6	Lab Sample ID:	320-12924-6		
Client ID:	J6038-IA1-050615-2				
Operator ID:	AO	ALS Bottle#:	7	Worklist Smp#:	12
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	TO15 SIM	Limit Group:	MSA - TO-15_SIM_ICAL		
Column:		Detector	MS SCAN		

46 Toluene, CAS: 108-88-3



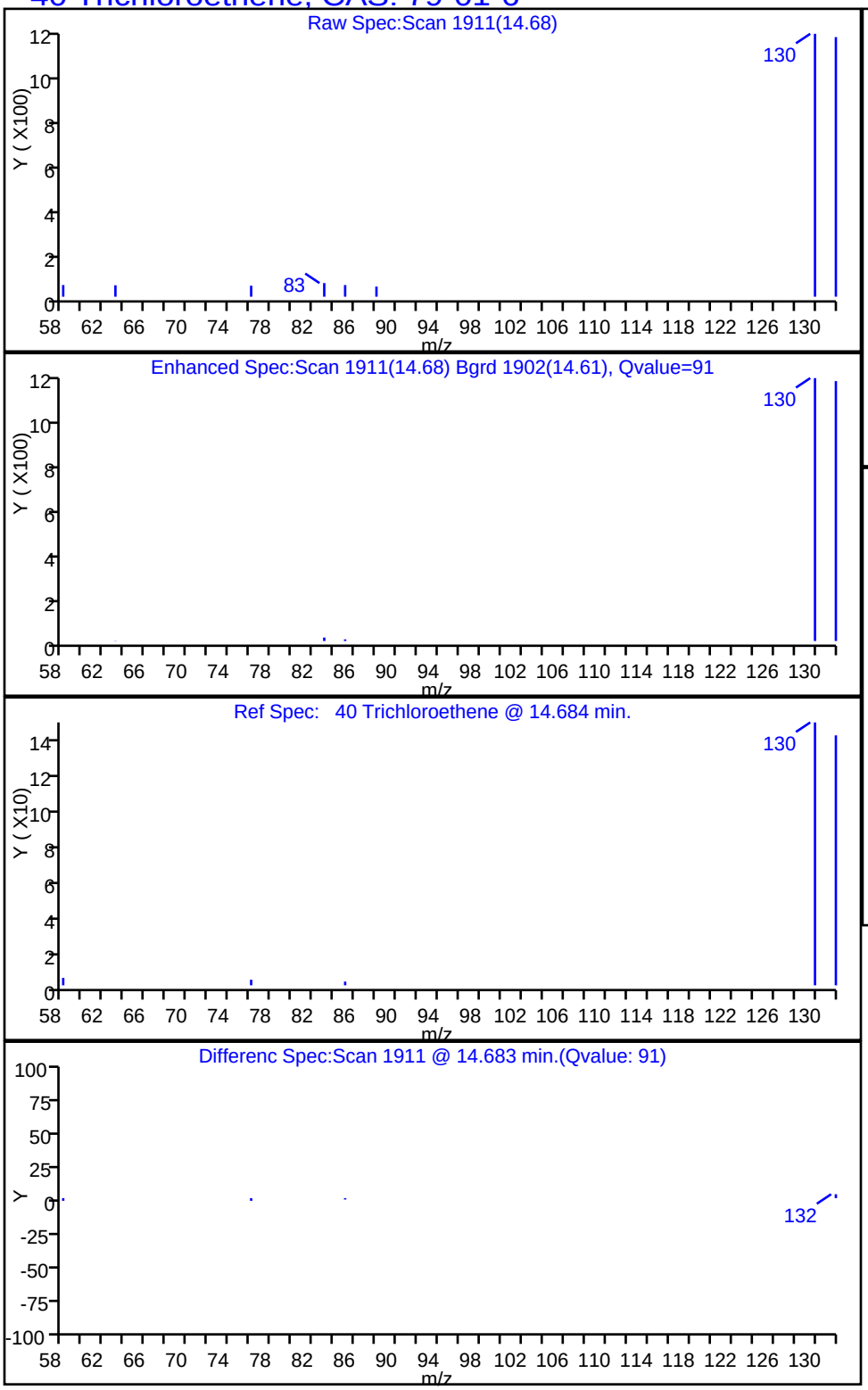


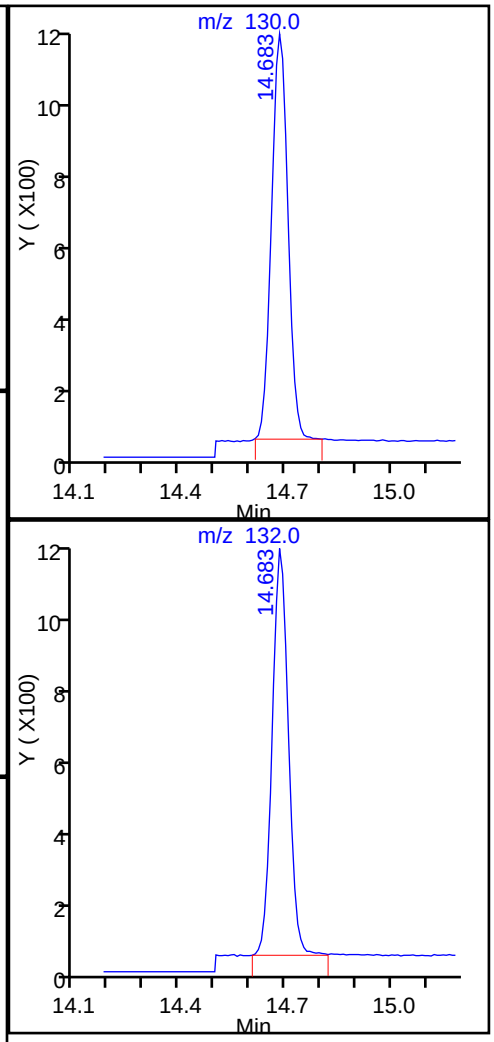
Report Date: 12-May-2015 12:36:31 Chrom Revision: 2.2 05-May-2015 11:39:10

TestAmerica Sacramento

Data File:	\\SACCHROM\ChromData\ATMS5\20150512-21744.b\MS5051113.D				
Injection Date:	11-May-2015 22:45:30	Instrument ID:	ATMS5		
Lims ID:	320-12924-A-6	Lab Sample ID:	320-12924-6		
Client ID:	J6038-IA1-050615-2				
Operator ID:	AO	ALS Bottle#:	7	Worklist Smp#:	12
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	TO15 SIM	Limit Group:	MSA - TO-15_SIM_ICAL		
Column:		Detector	MS SCAN		

40 Trichloroethene, CAS: 79-01-6





FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento | Job No.: 320-12924-1

SDG No.:

Client Sample ID: J6038-IA2-050615 | Lab Sample ID: 320-12924-7

Matrix: Air | Lab File ID: MS5051114.D

Analysis Method: TO-15 SIM | Date Collected: 05/06/2015 18:16

Sample wt/vol: 885(mL) | Date Analyzed: 05/11/2015 23:44

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: RTX-Volatiles ID: 0.32(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 73719 | Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	133.41	ND		0.020	0.0050
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.050	0.0050
75-34-3	1,1-Dichloroethane	98.96	ND		0.020	0.0050
75-35-4	1,1-Dichloroethene	96.94	ND		0.020	0.0050
95-50-1	1,2-Dichlorobenzene	147.00	0.016	J	0.050	0.010
107-06-2	1,2-Dichloroethane	98.96	0.014	J	0.020	0.0050
106-46-7	1,4-Dichlorobenzene	147.00	ND		0.10	0.010
108-90-7	Chlorobenzene	112.56	ND		0.020	0.010
67-66-3	Chloroform	119.38	0.024		0.020	0.0050
156-59-2	cis-1,2-Dichloroethene	96.94	0.0062	J	0.020	0.0050
100-41-4	Ethylbenzene	106.17	0.10		0.020	0.010
75-69-4	Freon 11	137.37	0.21		0.045	0.010
76-13-1	Freon 113	187.38	0.064		0.030	0.0050
75-71-8	Freon 12	120.91	0.45		0.020	0.0050
179601-23-1	m,p-Xylene	106.17	0.41		0.040	0.020
75-09-2	Methylene Chloride	84.93	0.64		0.20	0.10
95-47-6	o-Xylene	106.17	0.17		0.020	0.010
127-18-4	Tetrachloroethene	165.83	0.012	J	0.020	0.010
108-88-3	Toluene	92.14	1.5		0.020	0.010
156-60-5	trans-1,2-Dichloroethene	96.94	ND		0.020	0.0050
79-01-6	Trichloroethene	131.39	0.092		0.020	0.0050
75-01-4	Vinyl chloride	62.50	ND		0.020	0.010

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	103		70-130
17060-07-0	1,2-Dichloroethane-d4 (Surr)	95		70-130
2037-26-5	Toluene-d8 (Surr)	100		70-130

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento | Job No.: 320-12924-1

SDG No.:

Client Sample ID: J6038-IA2-050615 | Lab Sample ID: 320-12924-7

Matrix: Air | Lab File ID: MS5051114.D

Analysis Method: TO-15 SIM | Date Collected: 05/06/2015 18:16

Sample wt/vol: 885(mL) | Date Analyzed: 05/11/2015 23:44

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: RTX-Volatiles ID: 0.32(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 73719 | Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	133.41	ND		0.11	0.027
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.27	0.027
75-34-3	1,1-Dichloroethane	98.96	ND		0.081	0.020
75-35-4	1,1-Dichloroethene	96.94	ND		0.079	0.020
95-50-1	1,2-Dichlorobenzene	147.00	0.095	J	0.30	0.060
107-06-2	1,2-Dichloroethane	98.96	0.058	J	0.081	0.020
106-46-7	1,4-Dichlorobenzene	147.00	ND		0.60	0.060
108-90-7	Chlorobenzene	112.56	ND		0.092	0.046
67-66-3	Chloroform	119.38	0.12		0.098	0.024
156-59-2	cis-1,2-Dichloroethene	96.94	0.024	J	0.079	0.020
100-41-4	Ethylbenzene	106.17	0.45		0.087	0.043
75-69-4	Freon 11	137.37	1.2		0.25	0.056
76-13-1	Freon 113	187.38	0.49		0.23	0.038
75-71-8	Freon 12	120.91	2.2		0.099	0.025
179601-23-1	m,p-Xylene	106.17	1.8		0.17	0.087
75-09-2	Methylene Chloride	84.93	2.2		0.69	0.35
95-47-6	o-Xylene	106.17	0.74		0.087	0.043
127-18-4	Tetrachloroethene	165.83	0.082	J	0.14	0.068
108-88-3	Toluene	92.14	5.6		0.075	0.038
156-60-5	trans-1,2-Dichloroethene	96.94	ND		0.079	0.020
79-01-6	Trichloroethene	131.39	0.50		0.11	0.027
75-01-4	Vinyl chloride	62.50	ND		0.051	0.026

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	103		70-130
17060-07-0	1,2-Dichloroethane-d4 (Surr)	95		70-130
2037-26-5	Toluene-d8 (Surr)	100		70-130

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\SACCHROM\ChromData\ATMS5\20150512-21744.b\MS5051114.D
Lims ID: 320-12924-A-7 Lab Sample ID: 320-12924-7
Client ID: J6038-IA2-050615
Sample Type: Client
Inject. Date: 11-May-2015 23:44:30 ALS Bottle#: 8 Worklist Smp#: 13
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 320-12924-A-7
Misc. Info.: 885ML885ML
Operator ID: AO Instrument ID: ATMS5

Method: \\SACCHROM\ChromData\ATMS5\20150512-21744.b\TO15 SIM.m
Limit Group: MSA - TO-15_SIM_ICAL
Last Update: 13-May-2015 16:54:38 Calib Date: 26-Mar-2015 03:17:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\SACCHROM\ChromData\ATMS5\20150326-20538.b\MS5032518.D

Column 1 : Det: MS SCAN
Process Host: XAWRK050

First Level Reviewer: ortizam Date: 12-May-2015 12:38:22

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	130	11.851	11.850	0.001	99	36439	2.00	
* 2 1,4-Difluorobenzene	114	13.945	13.941	0.004	100	173313	2.00	
* 3 Chlorobenzene-d5 (IS)	117	20.508	20.508	0.000	100	160482	2.00	
$ 4 1,2-Dichloroethane-d4 (Sur	65	13.002	13.002	0.000	100	38917	1.90	
$ 5 Toluene-d8 (Surr)	100	17.276	17.266	0.010	100	119197	2.00	
$ 6 4-Bromofluorobenzene (Surr	95	23.040	23.040	0.000	100	93099	2.06	
8 Dichlorodifluoromethane	85	4.163	4.181	-0.018	100	24926	0.4537	
11 Vinyl chloride	62	4.808	4.817	-0.009	64	66	0.003450	7
15 Trichlorofluoromethane	101	6.421	6.418	0.003	100	11041	0.2107	
19 1,1,2-Trichloro-1,2,2-trif	101	7.412	7.412	0.000	100	3233	0.0641	
22 Methylene Chloride	49	8.490	8.490	0.000	100	16221	0.6448	
30 cis-1,2-Dichloroethene	96	11.251	11.240	0.011	20	173	0.006164	M
32 Chloroform	83	11.589	11.589	0.000	91	1126	0.0243	
34 1,1,1-Trichloroethane	97	12.513	12.508	0.005	79	177	0.003715	M
37 1,2-Dichloroethane	62	13.193	13.192	0.001	92	441	0.0143	
40 Trichloroethene	130	14.684	14.683	0.001	97	3767	0.0922	
46 Toluene	91	17.439	17.439	0.000	99	195176	1.49	
50 Tetrachloroethene	166	18.933	18.939	-0.006	99	650	0.0121	
53 Chlorobenzene	112	20.584	20.584	0.000	1	749	0.006626	
54 Ethylbenzene	91	20.773	20.773	0.000	89	18910	0.1028	
55 m-Xylene & p-Xylene	91	20.955	20.955	0.000	56	56384	0.4050	
56 o-Xylene	91	21.847	21.846	0.001	43	24815	0.1706	
65 1,4-Dichlorobenzene	146	25.529	25.530	-0.001	94	426	0.003859	7
67 1,2-Dichlorobenzene	146	26.246	26.247	-0.001	1	1804	0.0159	

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Review Flags

M - Manually Integrated

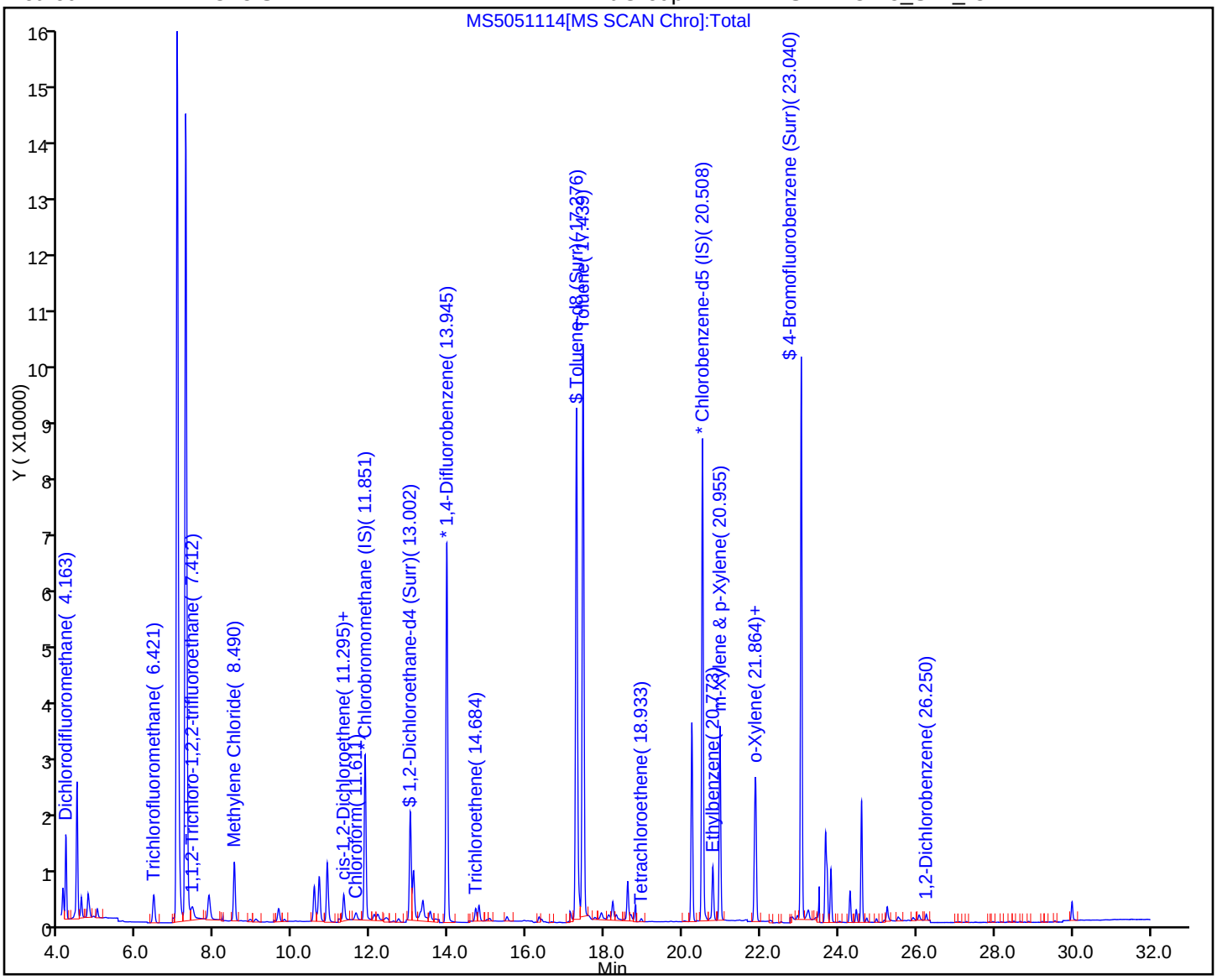
Reagents:

VASUISIM_00172	Amount Added: 50.00	Units: mL	Run Reagent

Report Date: 13-May-2015 16:54:55 Chrom Revision: 2.2 05-May-2015 11:39:10

TestAmerica Sacramento

Data File:	\\SACCHROM\ChromData\ATMS5\20150512-21744.b\MS5051114.D				
Injection Date:	11-May-2015 23:44:30	Instrument ID:	ATMS5		
Lims ID:	320-12924-A-7	Lab Sample ID:	320-12924-7		
Client ID:	J6038-IA2-050615				
Operator ID:	AO	ALS Bottle#:	8	Worklist Smp#:	13
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	TO15 SIM	Limit Group:	MSA - TO-15_SIM_ICAL		



Report Date: 13-May-2015 16:54:55 Chrom Revision: 2.2 05-May-2015 11:39:10

TestAmerica Sacramento

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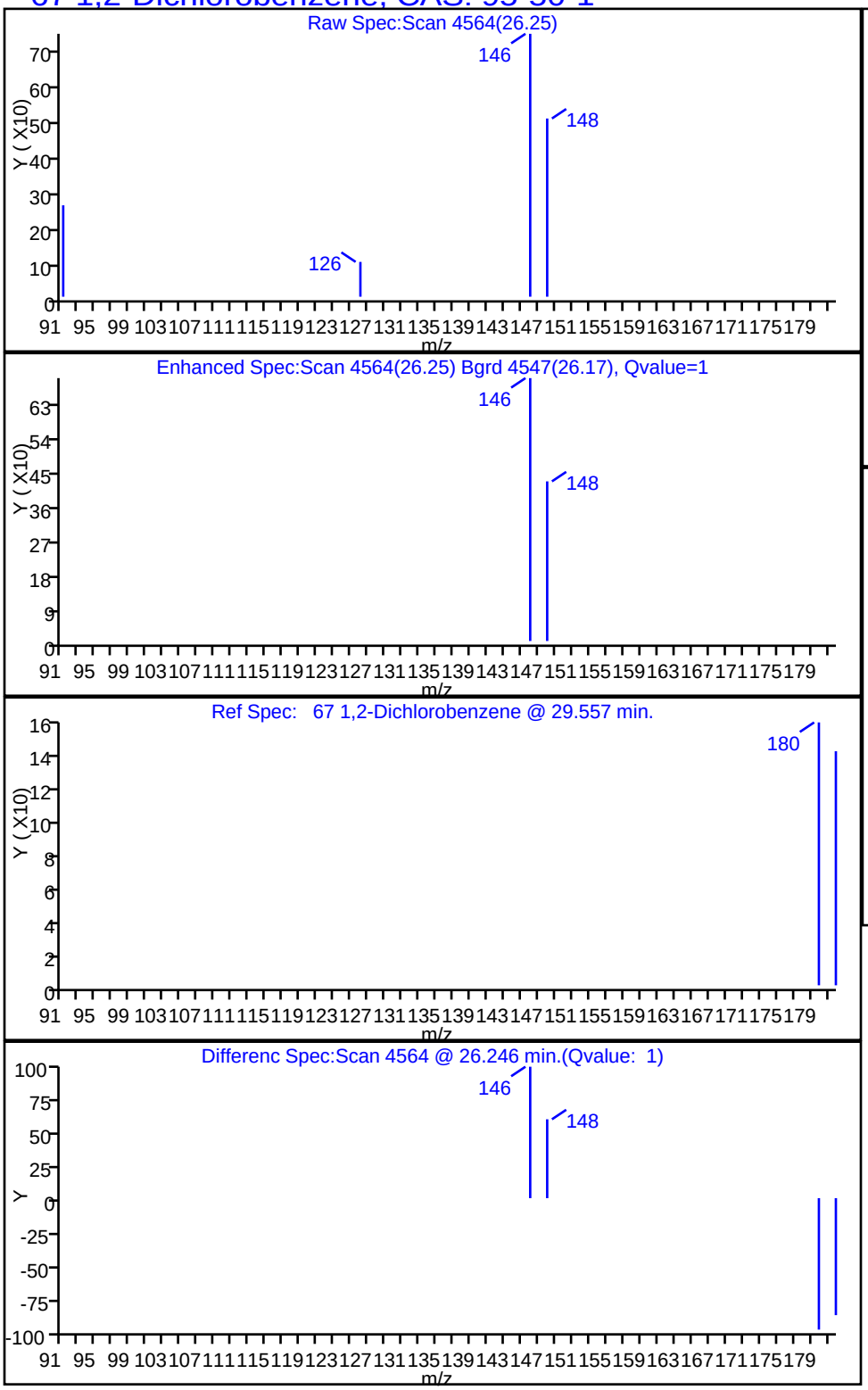
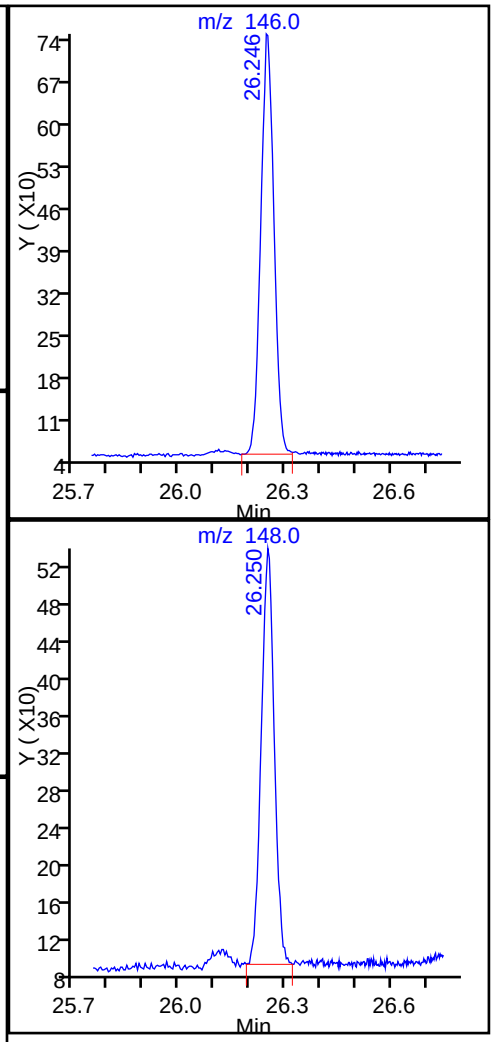
Lims ID:	320-12924-A-7	Lab Sample ID:	320-12924-7		
Client ID:	J6038-IA2-050615				
Operator ID:	AO	ALS Bottle#:	8	Worklist Smp#:	13
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	TO15 SIM	Limit Group:	MSA - TO-15_SIM_ICAL		
Column:		Detector	MS SCAN		

67 1,2-Dichlorobenzene, CAS: 95-50-1





Report Date: 13-May-2015 16:54:55 Chrom Revision: 2.2 05-May-2015 11:39:10

TestAmerica Sacramento

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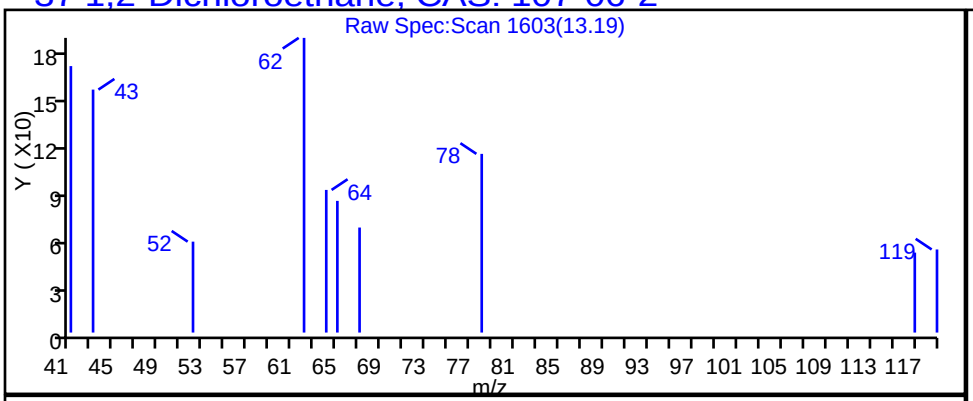
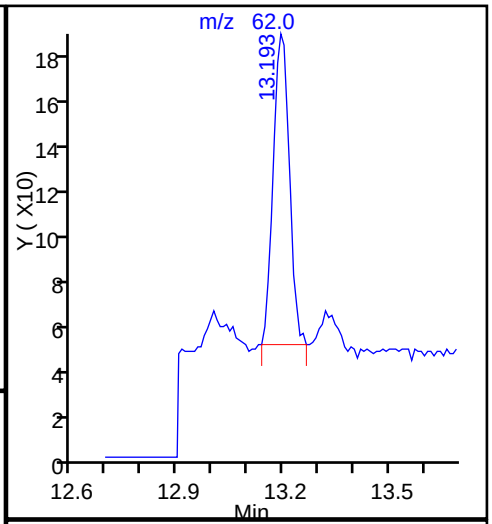
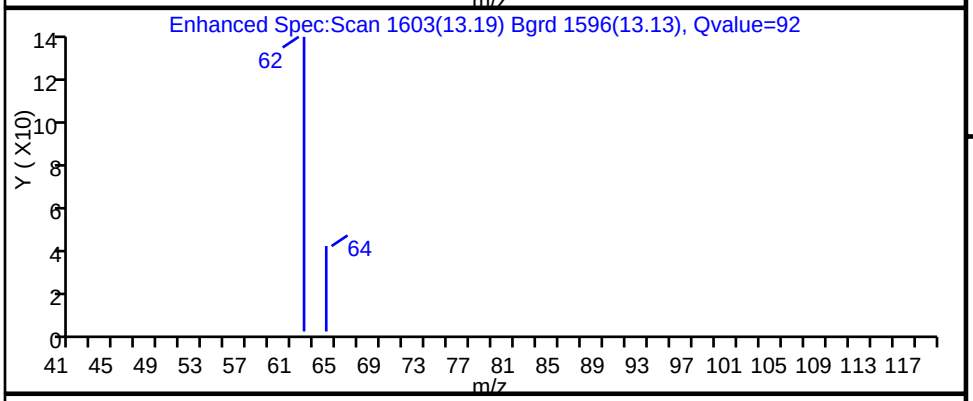
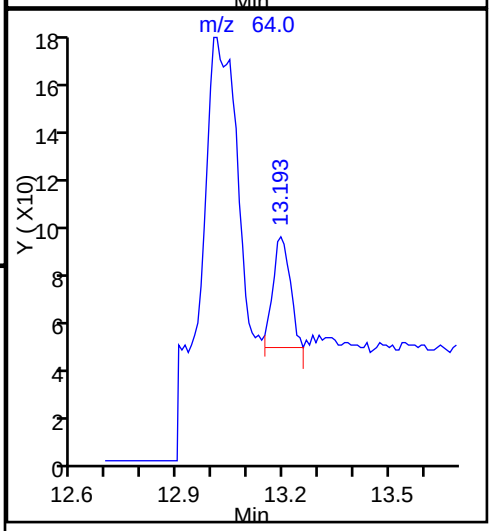
Lims ID:	320-12924-A-7	Lab Sample ID:	320-12924-7		
Client ID:	J6038-IA2-050615				
Operator ID:	AO	ALS Bottle#:	8	Worklist Smp#:	13
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	TO15 SIM	Limit Group:	MSA - TO-15_SIM_ICAL		
Column:		Detector	MS SCAN		

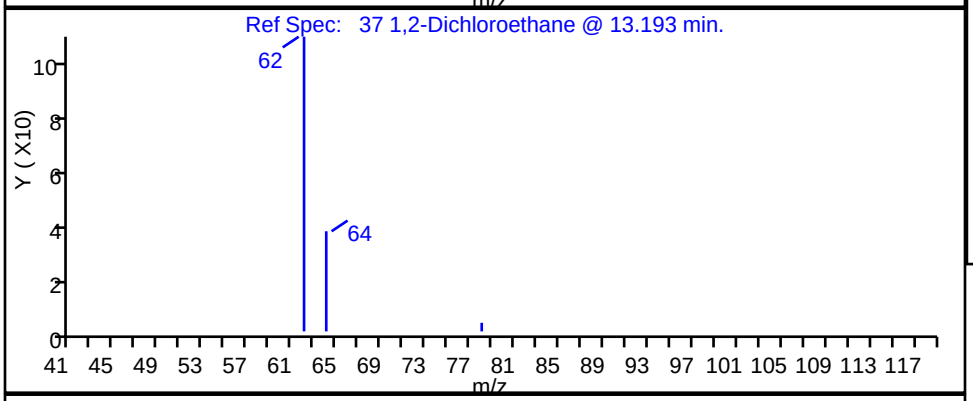
37 1,2-Dichloroethane, CAS: 107-06-2

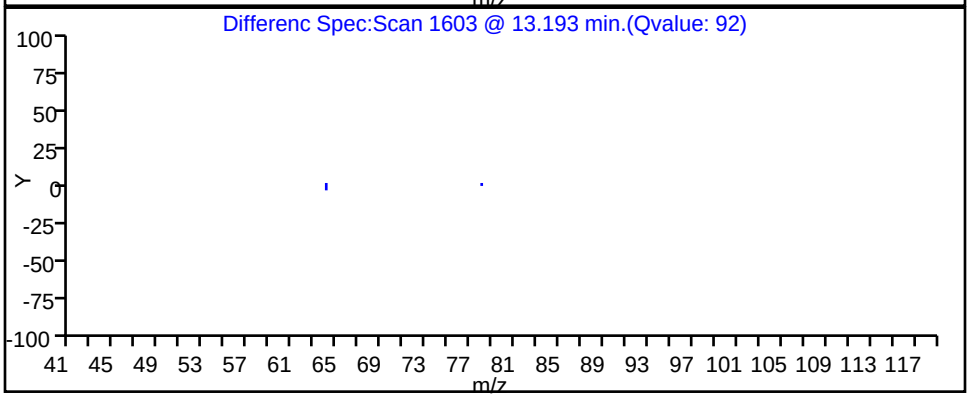












Report Date: 13-May-2015 16:54:55 Chrom Revision: 2.2 05-May-2015 11:39:10

TestAmerica Sacramento

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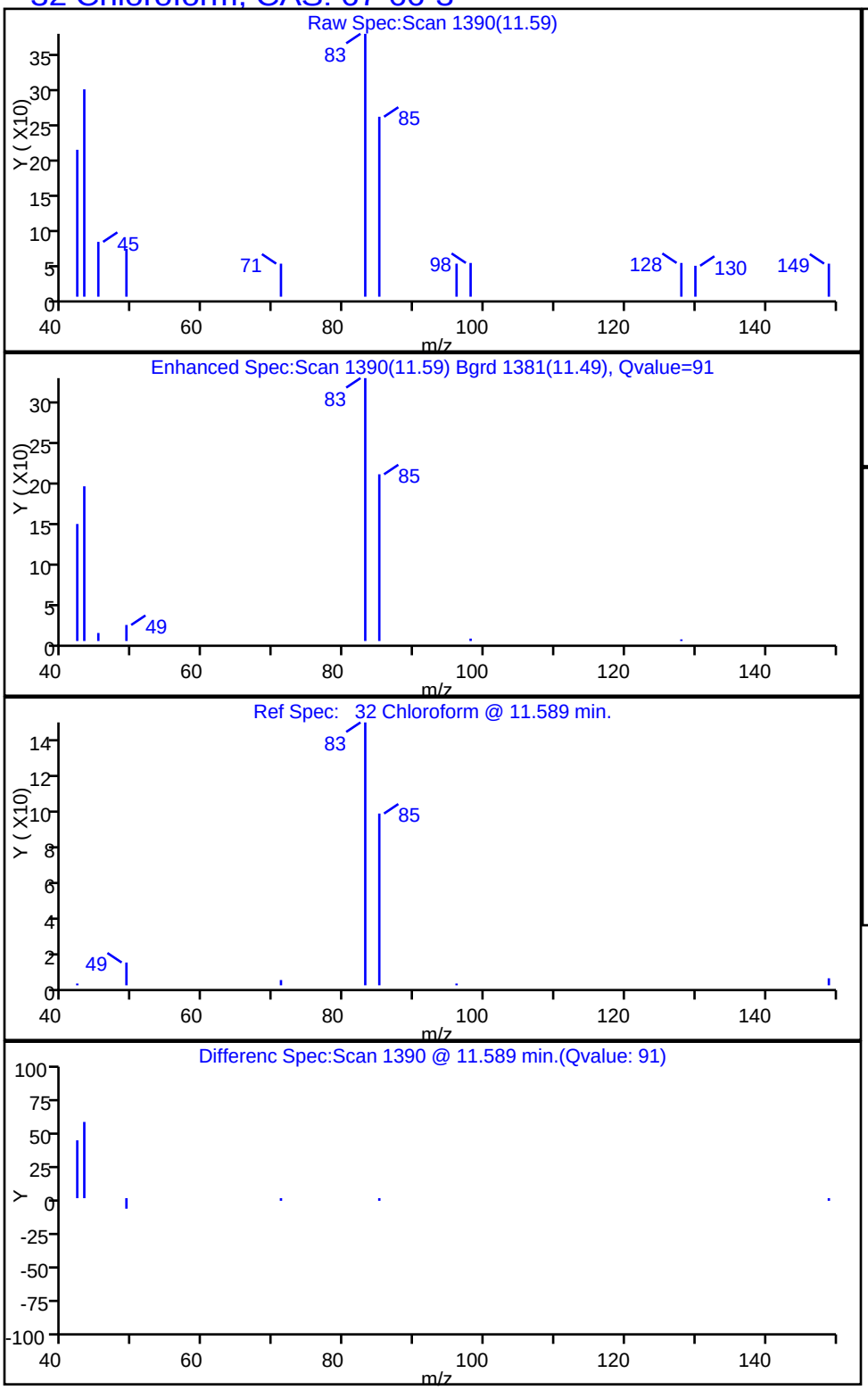
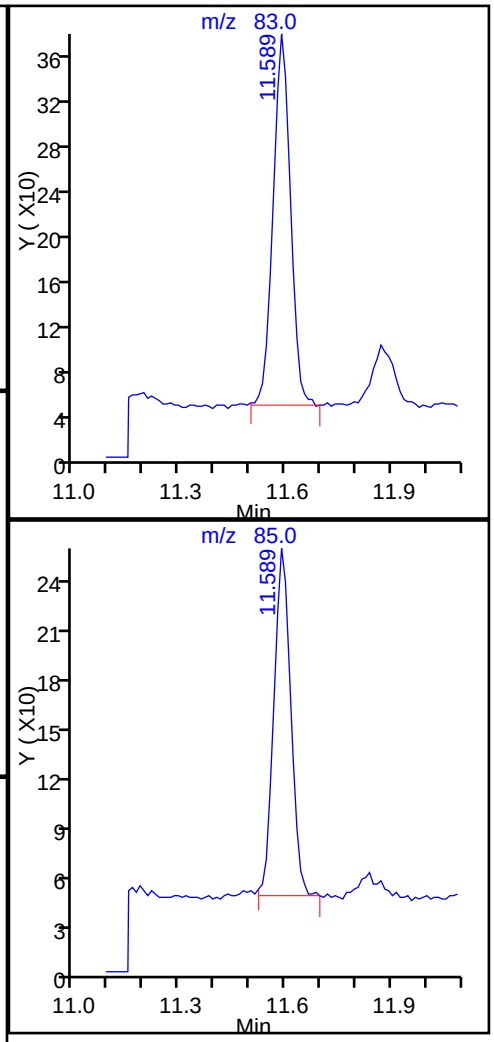
Lims ID:	320-12924-A-7	Lab Sample ID:	320-12924-7		
Client ID:	J6038-IA2-050615				
Operator ID:	AO	ALS Bottle#:	8	Worklist Smp#:	13
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	TO15 SIM	Limit Group:	MSA - TO-15_SIM_ICAL		
Column:		Detector	MS SCAN		

32 Chloroform, CAS: 67-66-3





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TestAmerica Sacramento

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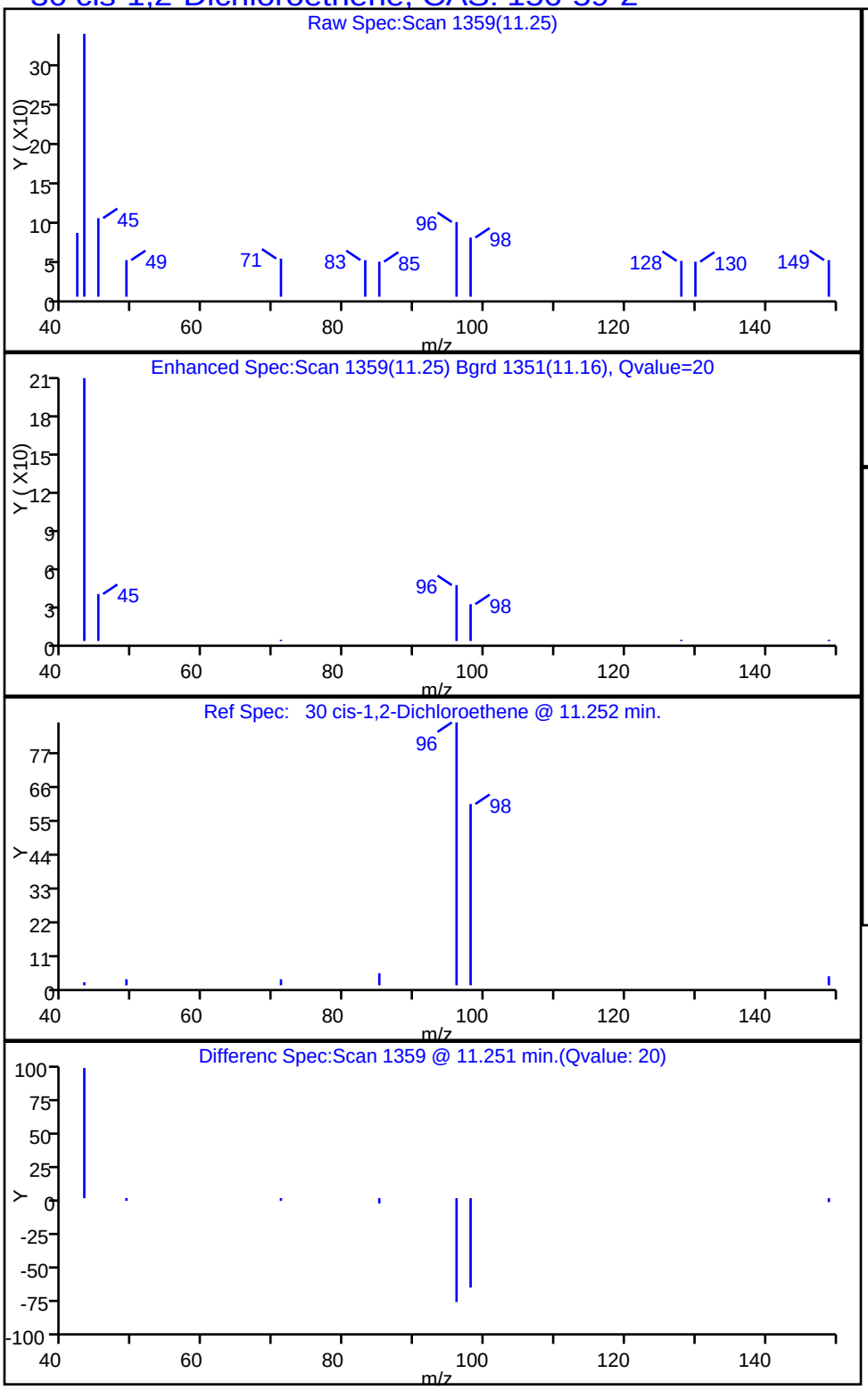
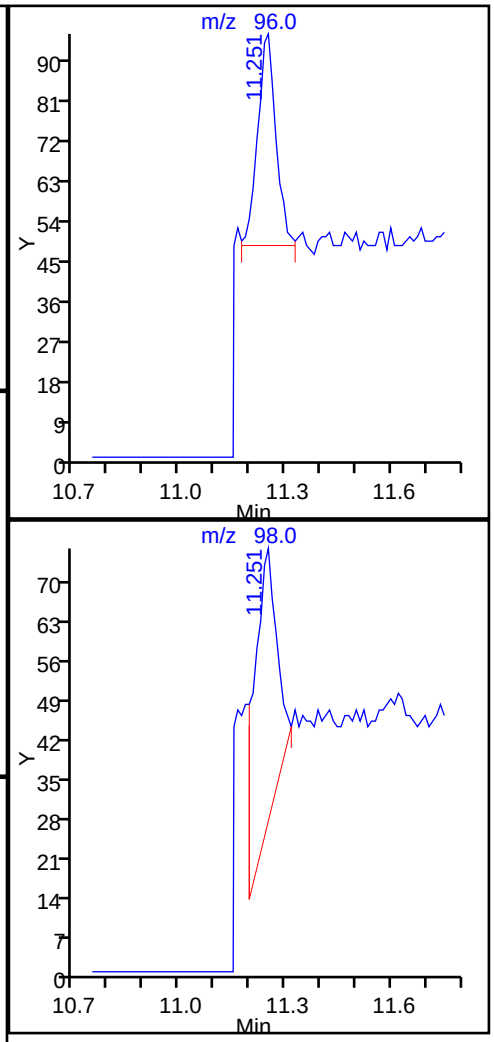
Client ID:	J6038-IA2-050615				
Operator ID:	AO	ALS Bottle#:	8	Worklist Smp#:	13
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	TO15 SIM	Limit Group:	MSA - TO-15_SIM_ICAL		
Column:		Detector	MS SCAN		

30 cis-1,2-Dichloroethene, CAS: 156-59-2





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TestAmerica Sacramento

Data File:	\\SACCHROM\ChromData\ATMS5\20150512-21744.b\MS5051114.D				
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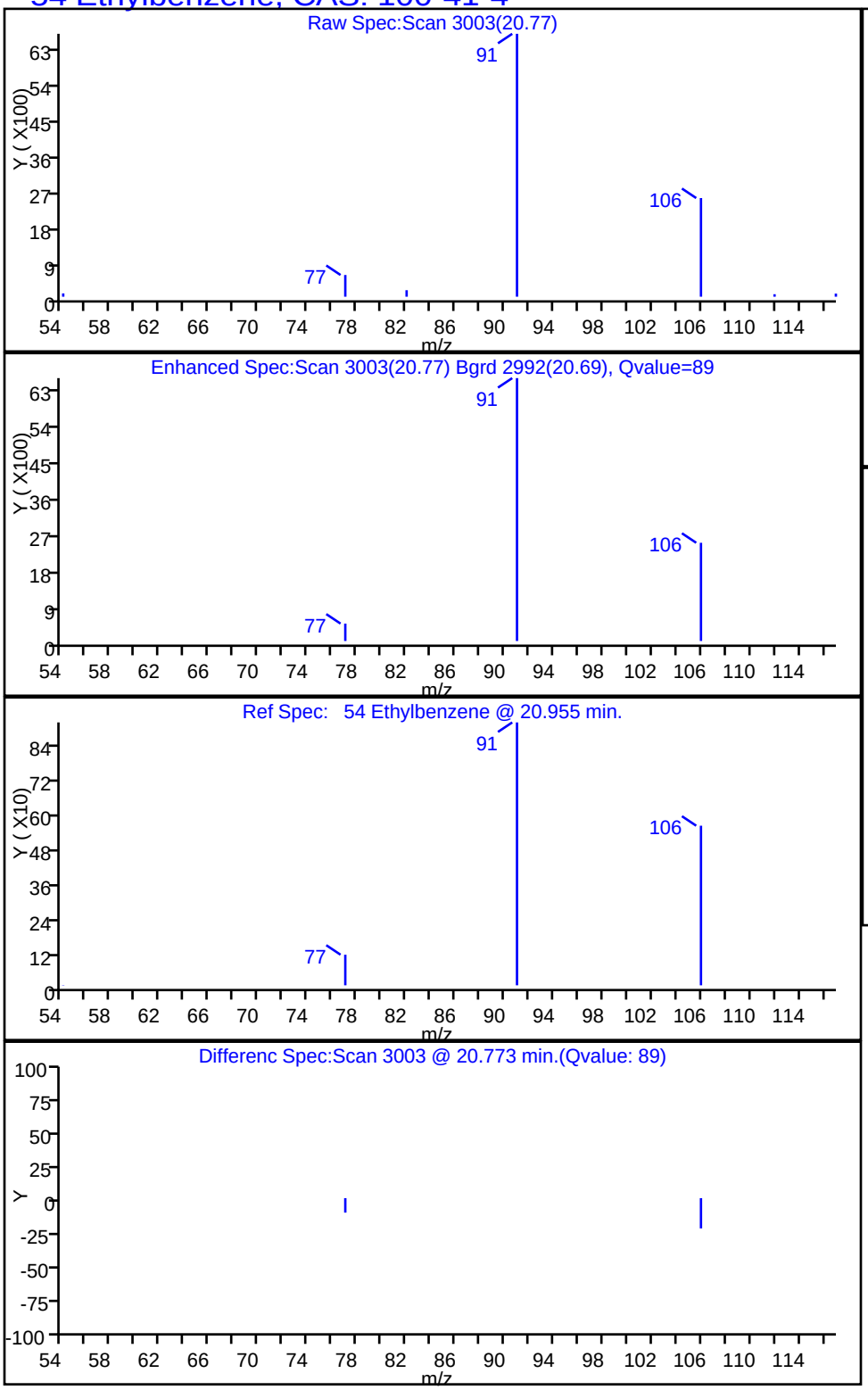
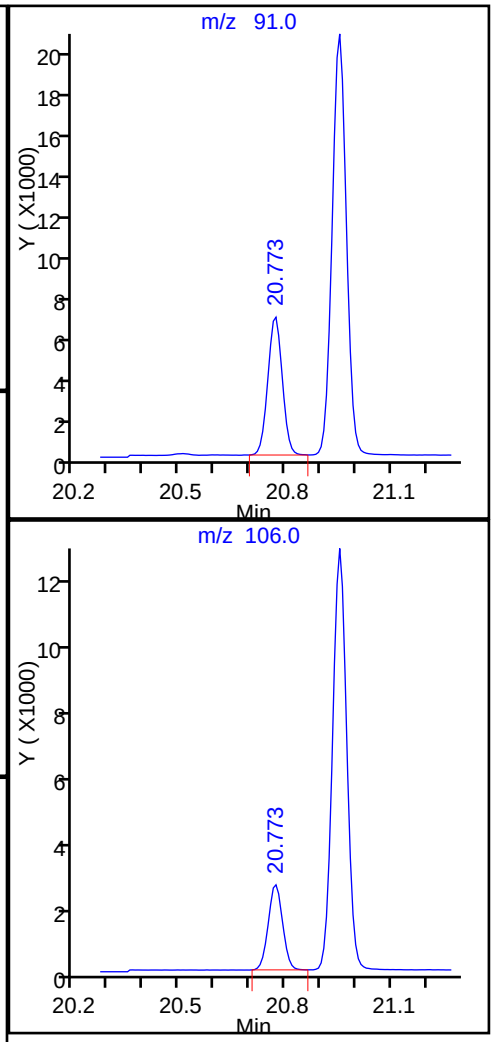
Lims ID:	320-12924-A-7	Lab Sample ID:	320-12924-7		
Client ID:	J6038-IA2-050615				
Operator ID:	AO	ALS Bottle#:	8	Worklist Smp#:	13
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	TO15 SIM	Limit Group:	MSA - TO-15_SIM_ICAL		
Column:		Detector	MS SCAN		

54 Ethylbenzene, CAS: 100-41-4





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TestAmerica Sacramento

Data File:	\\SACCHROM\ChromData\ATMS5\20150512-21744.b\MS5051114.D				
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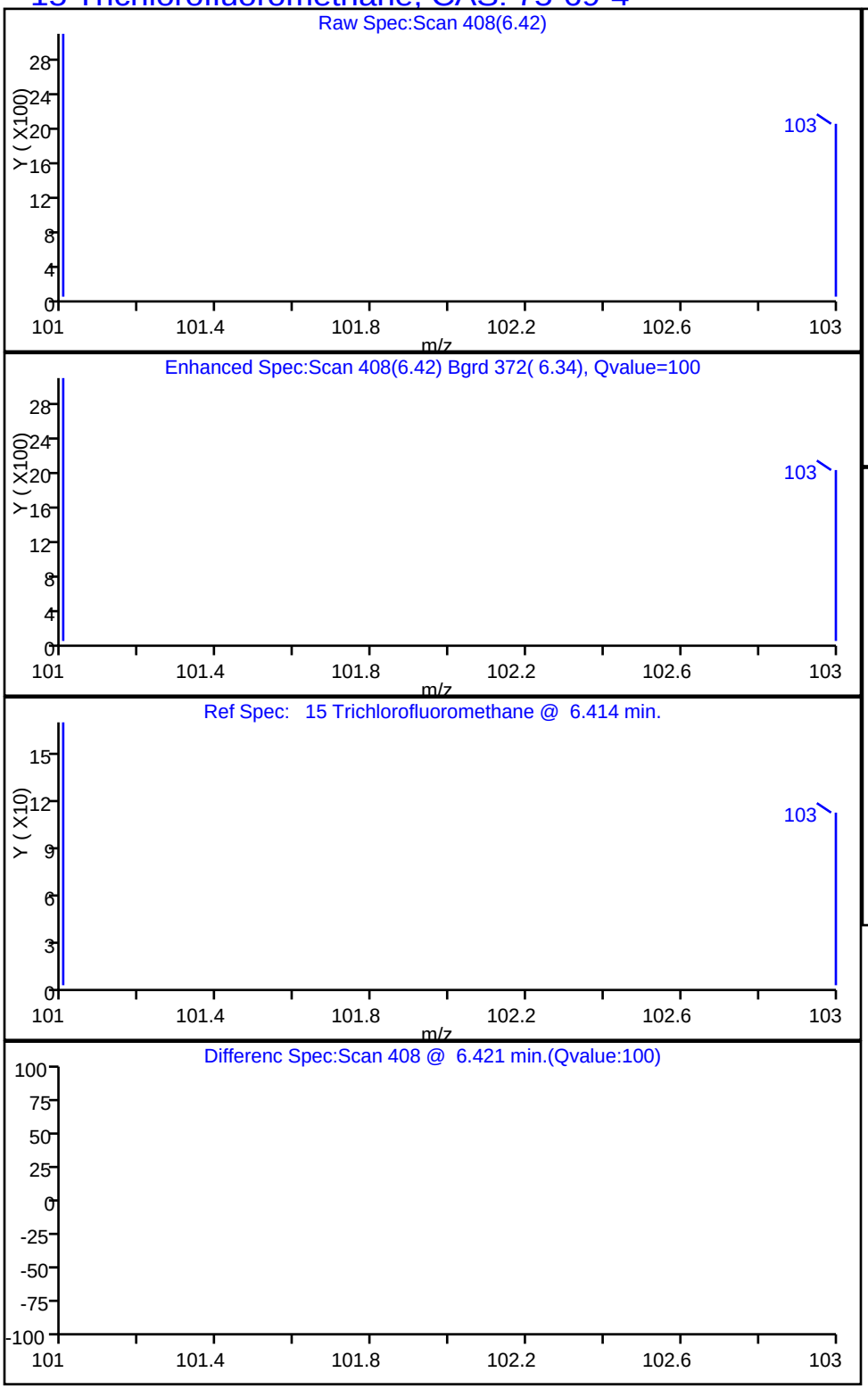
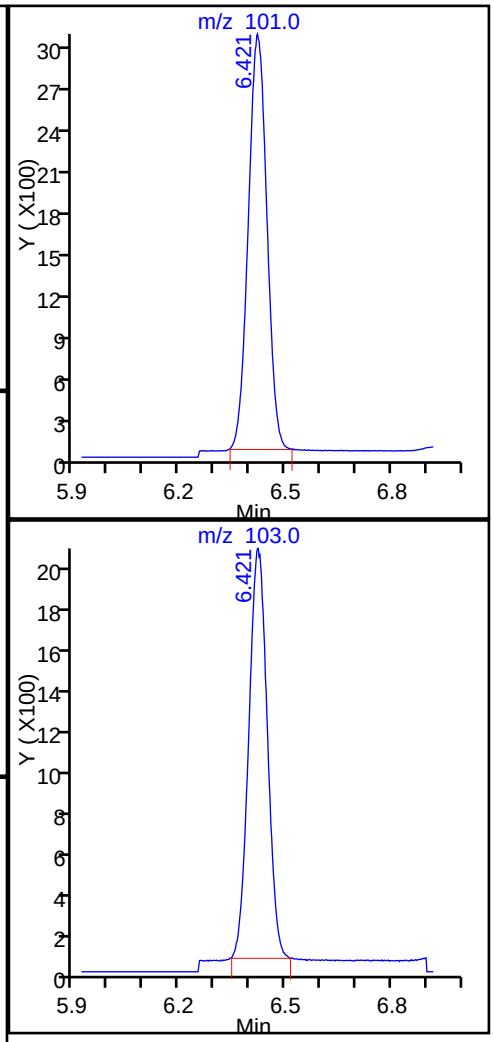
Client ID:	J6038-IA2-050615				
Operator ID:	AO	ALS Bottle#:	8	Worklist Smp#:	13
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	TO15 SIM	Limit Group:	MSA - TO-15_SIM_ICAL		
Column:		Detector	MS SCAN		

15 Trichlorofluoromethane, CAS: 75-69-4





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TestAmerica Sacramento

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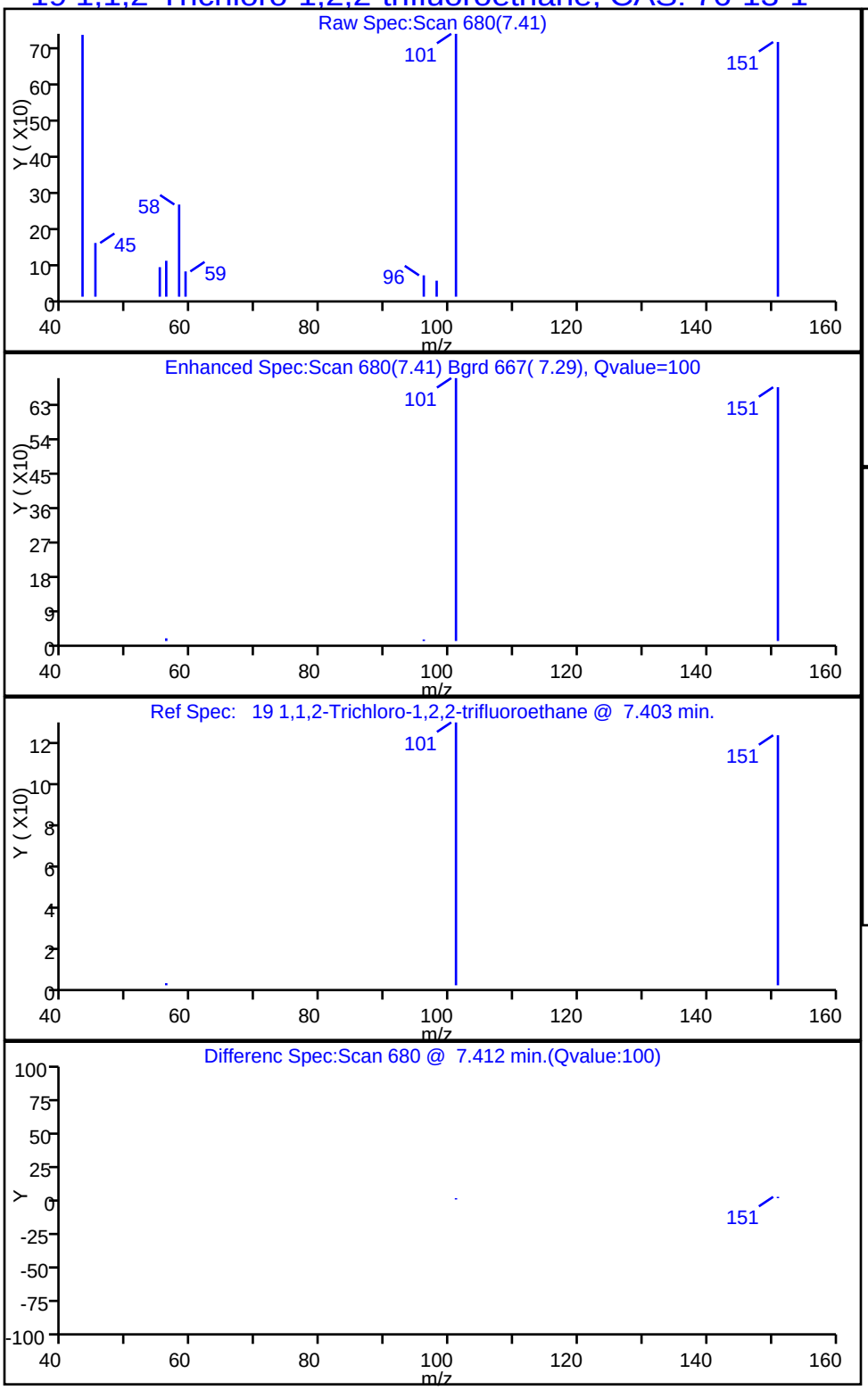
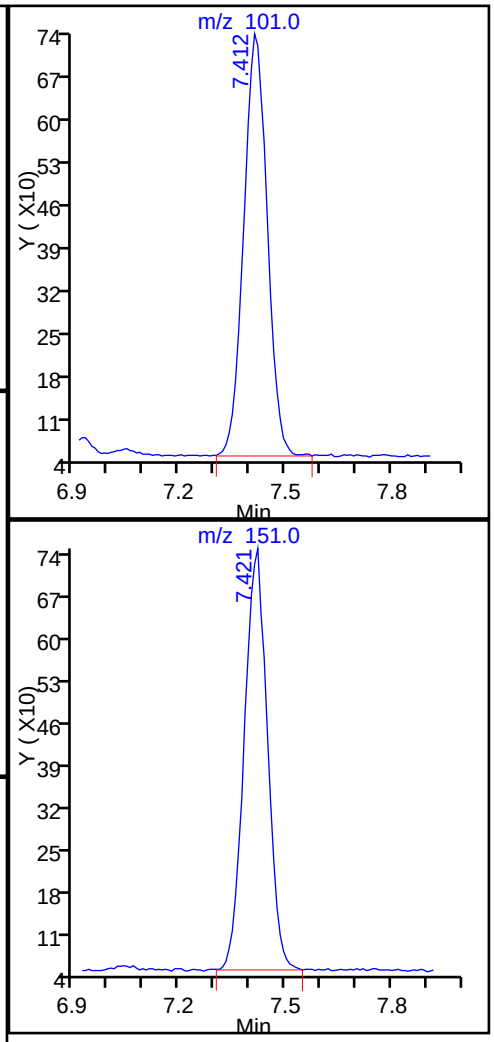
Client ID:	J6038-IA2-050615				
Operator ID:	AO	ALS Bottle#:	8	Worklist Smp#:	13
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	TO15 SIM	Limit Group:	MSA - TO-15_SIM_ICAL		
Column:		Detector	MS SCAN		

19 1,1,2-Trichloro-1,2,2-trifluoroethane, CAS: 76-13-1





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TestAmerica Sacramento

Data File:	\\SACCHROM\ChromData\ATMS5\20150512-21744.b\MS5051114.D				
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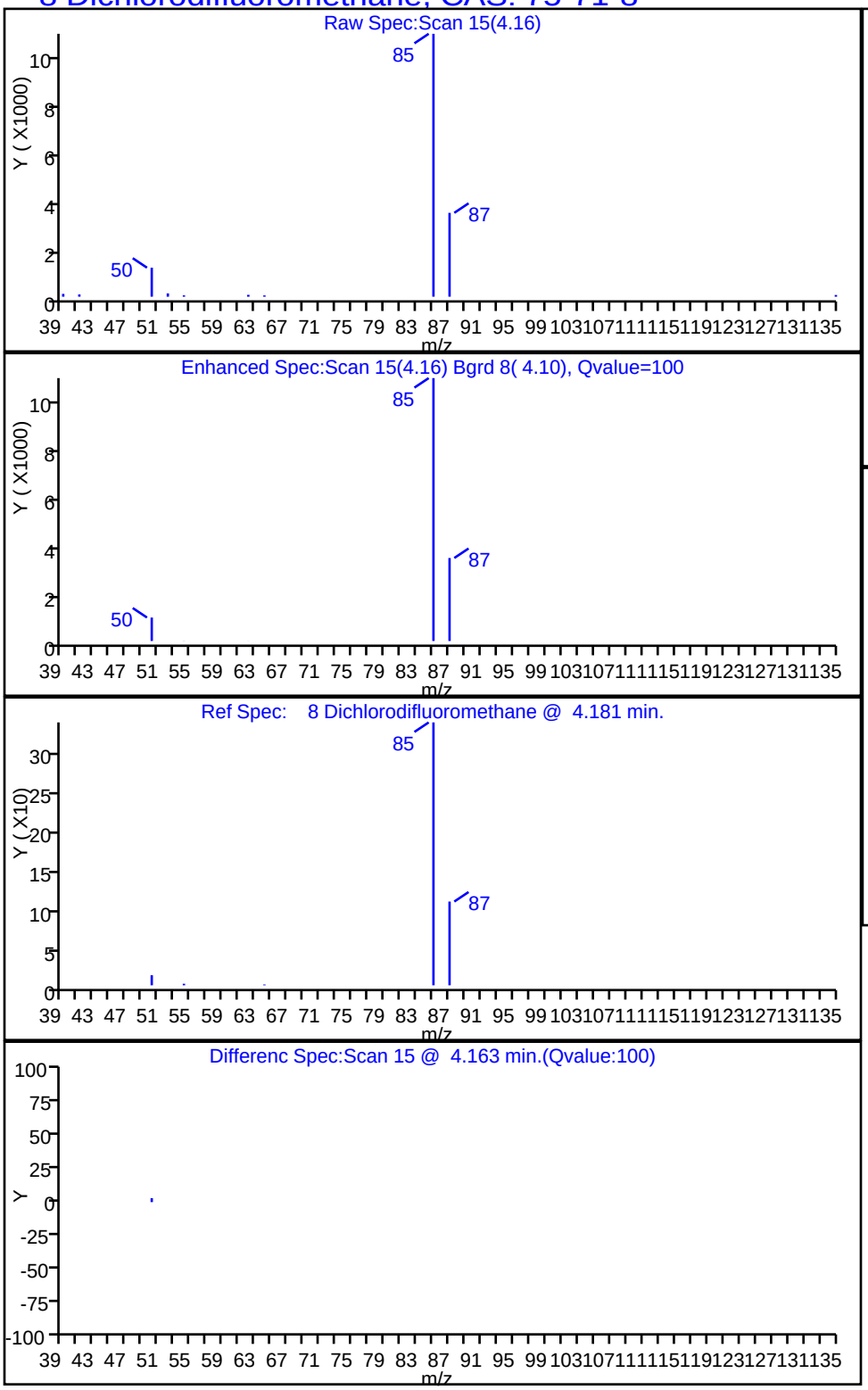
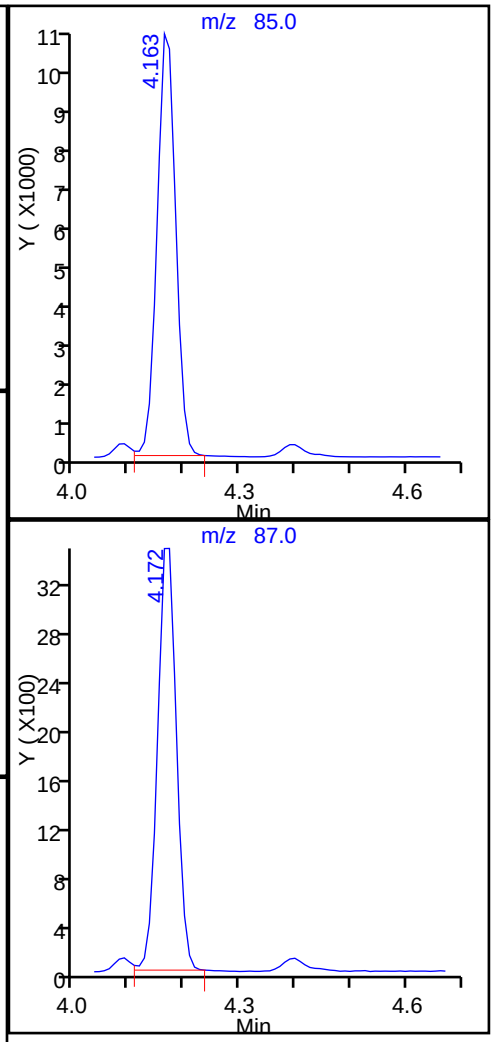
Lims ID:	320-12924-A-7	Lab Sample ID:	320-12924-7		
Client ID:	J6038-IA2-050615				
Operator ID:	AO	ALS Bottle#:	8	Worklist Smp#:	13
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	TO15 SIM	Limit Group:	MSA - TO-15_SIM_ICAL		
Column:		Detector	MS SCAN		

8 Dichlorodifluoromethane, CAS: 75-71-8





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TestAmerica Sacramento

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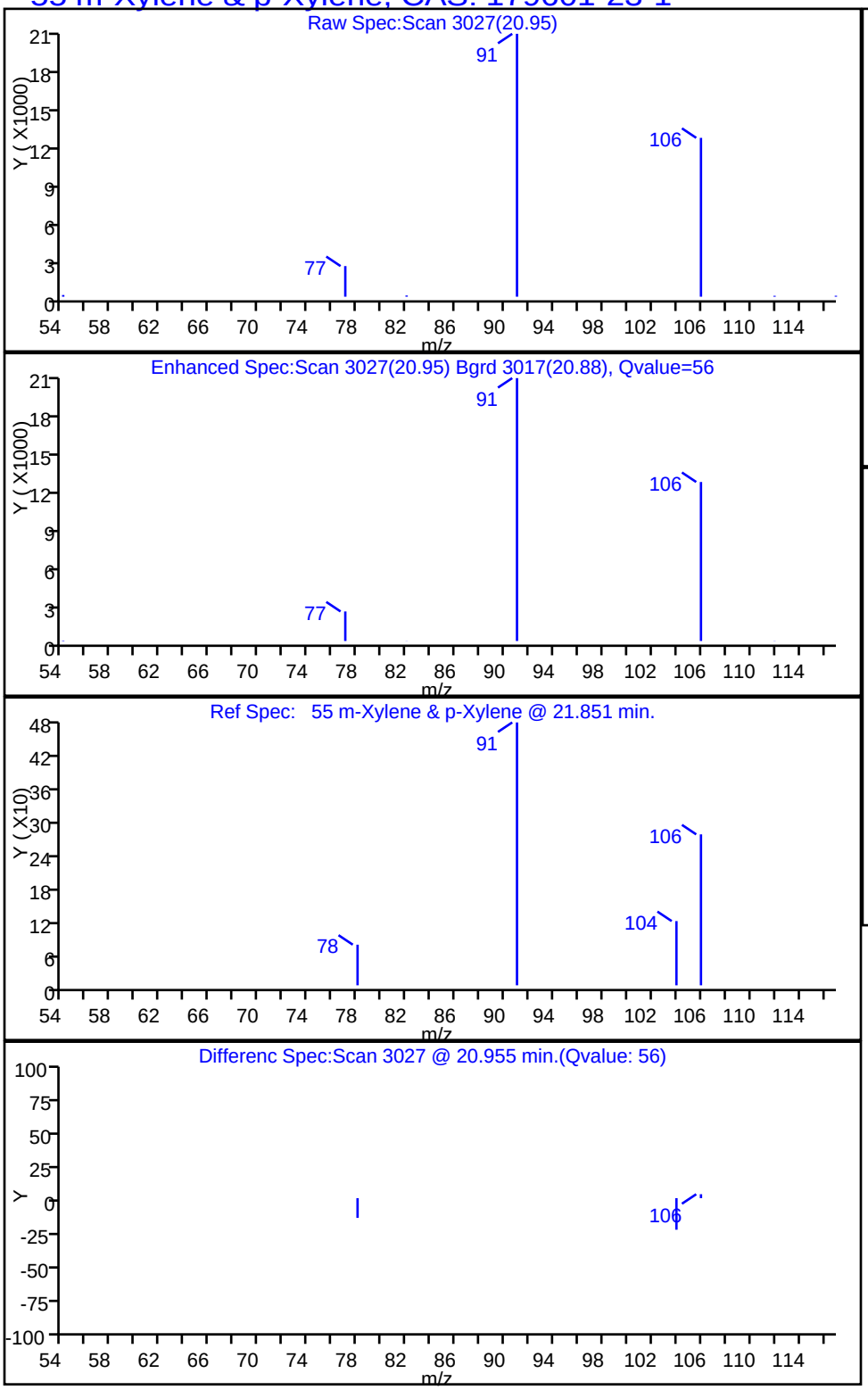
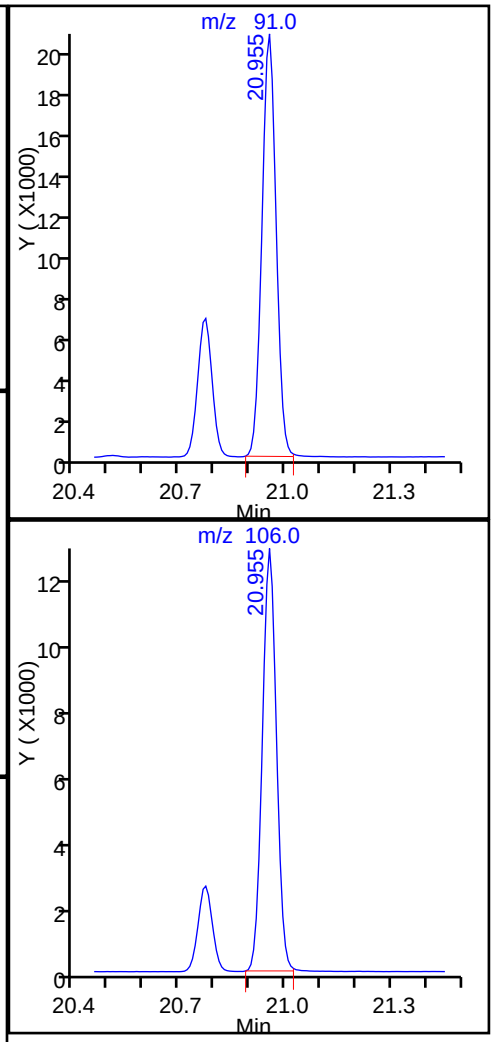
Client ID:	J6038-IA2-050615				
Operator ID:	AO	ALS Bottle#:	8	Worklist Smp#:	13
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	TO15 SIM	Limit Group:	MSA - TO-15_SIM_ICAL		
Column:		Detector	MS SCAN		

55 m-Xylene & p-Xylene, CAS: 179601-23-1





Report Date: 13-May-2015 16:54:55 Chrom Revision: 2.2 05-May-2015 11:39:10

TestAmerica Sacramento

Data File:	\\SACCHROM\ChromData\ATMS5\20150512-21744.b\MS5051114.D				
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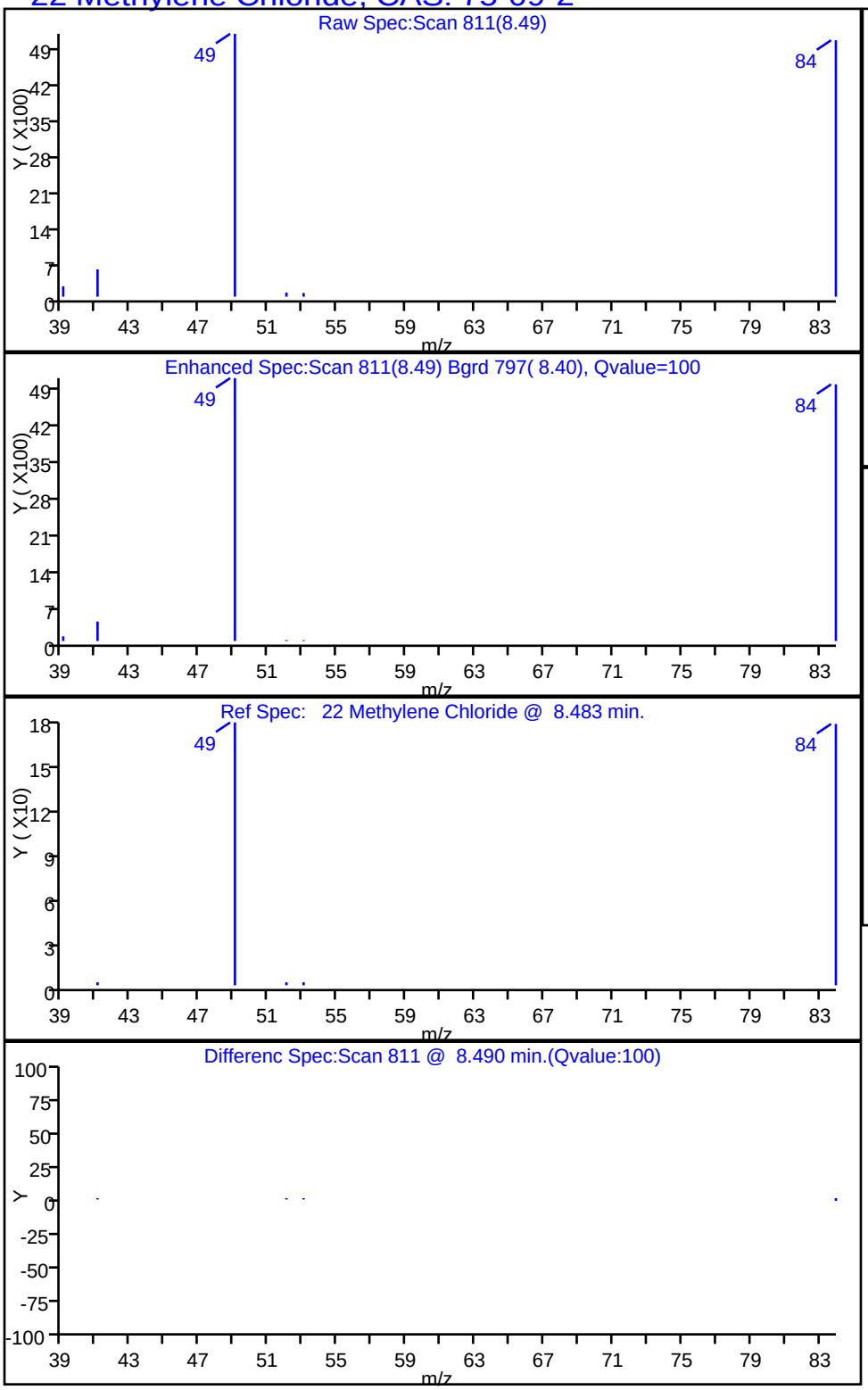
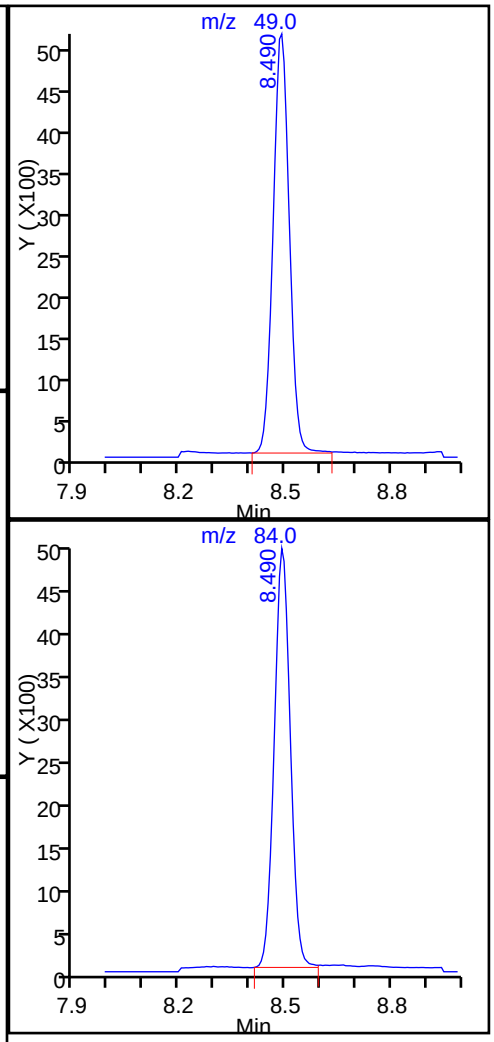
Lims ID:	320-12924-A-7	Lab Sample ID:	320-12924-7		
Client ID:	J6038-IA2-050615				
Operator ID:	AO	ALS Bottle#:	8	Worklist Smp#:	13
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	TO15 SIM	Limit Group:	MSA - TO-15_SIM_ICAL		
Column:		Detector	MS SCAN		

22 Methylene Chloride, CAS: 75-09-2





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TestAmerica Sacramento

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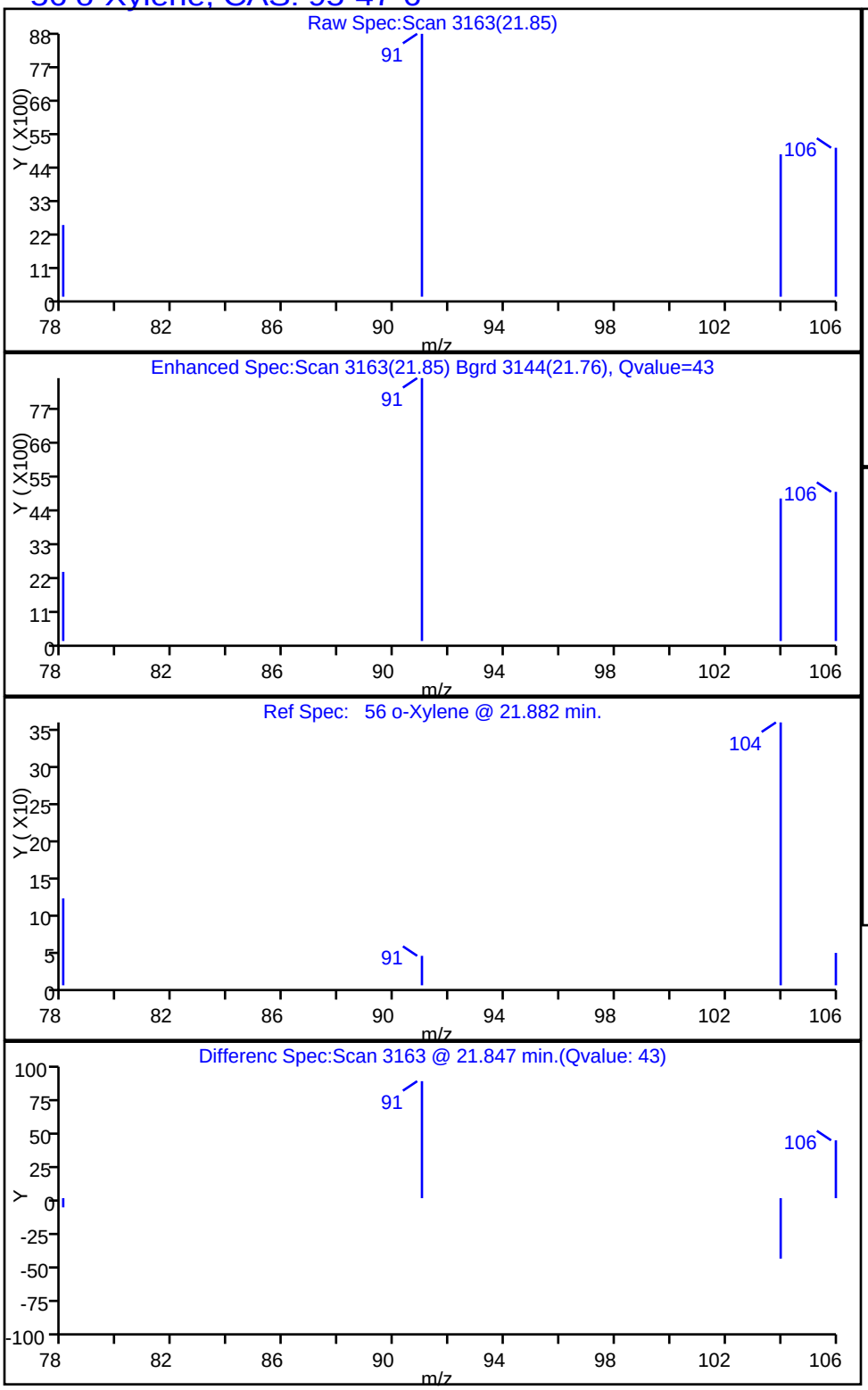
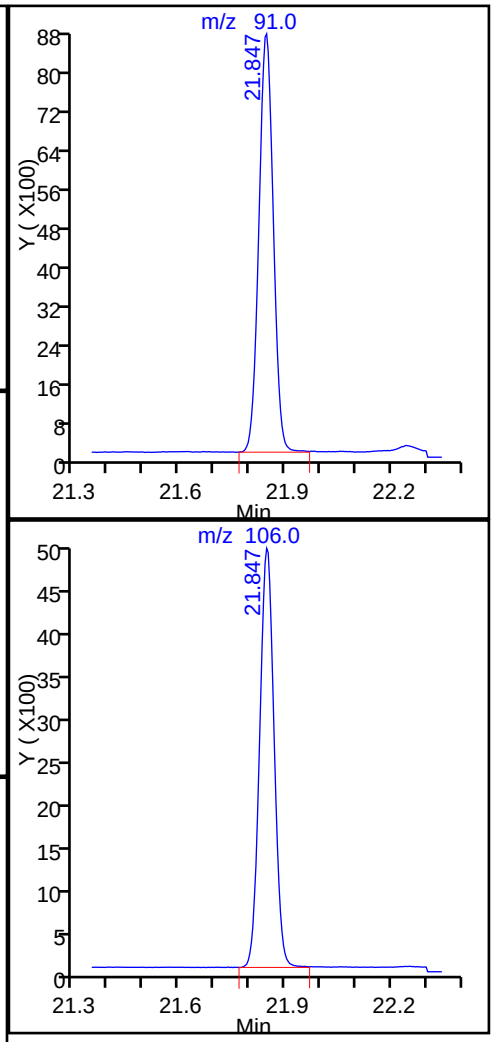
Client ID:	J6038-IA2-050615				
Operator ID:	AO	ALS Bottle#:	8	Worklist Smp#:	13
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	TO15 SIM	Limit Group:	MSA - TO-15_SIM_ICAL		
Column:		Detector	MS SCAN		

56 o-Xylene, CAS: 95-47-6





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TestAmerica Sacramento

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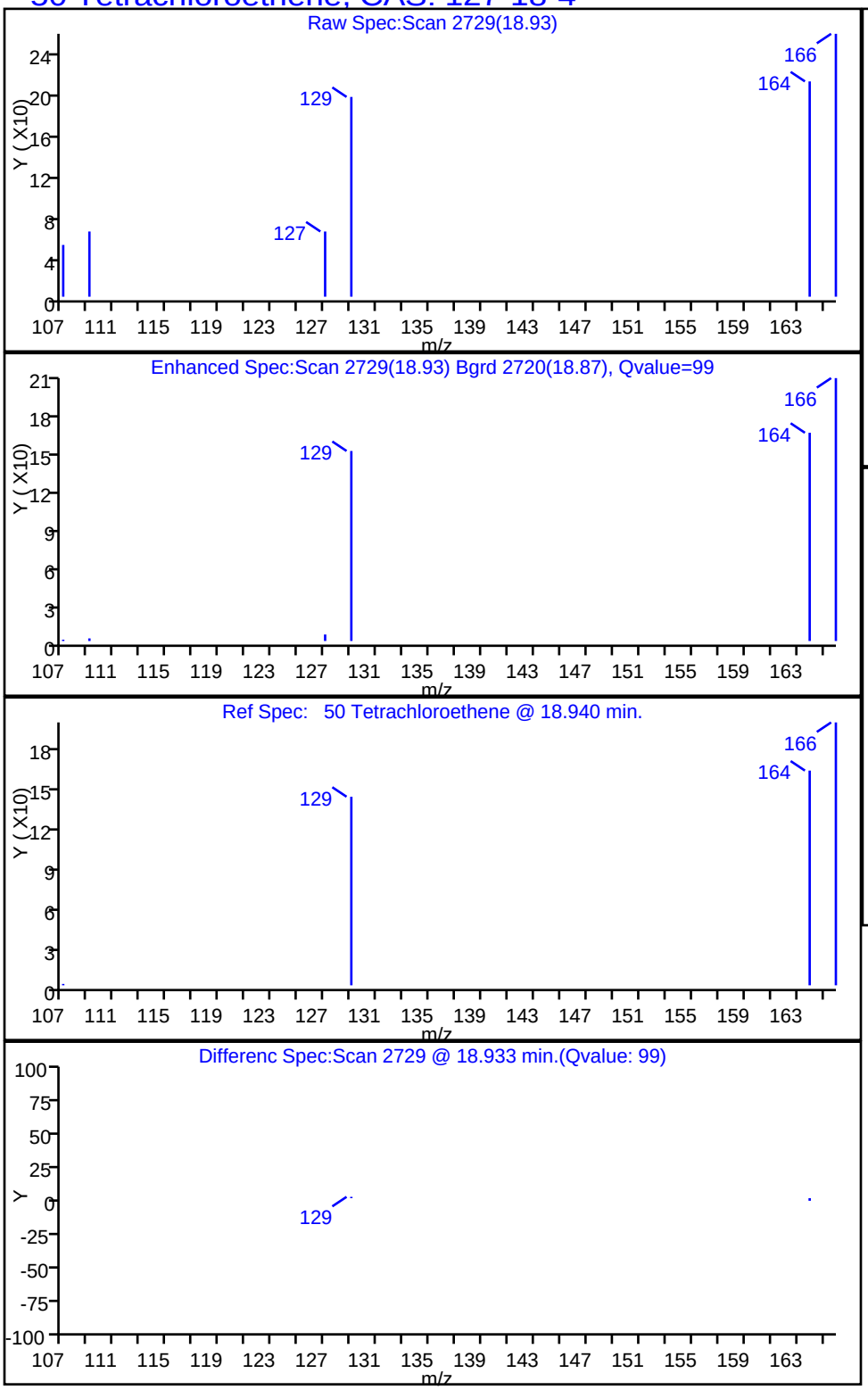
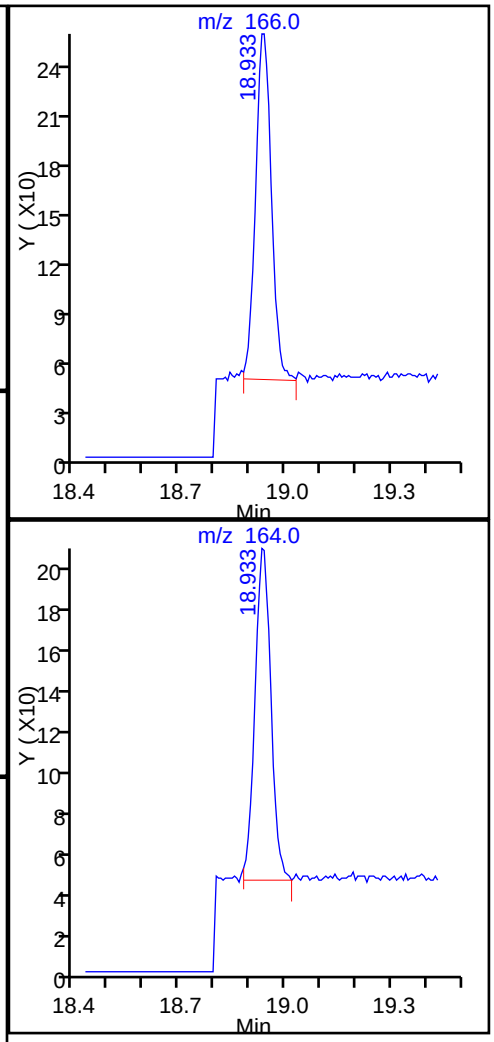
Injection Date:	11-May-2015 23:44:30	Instrument ID:	ATMS5		
Lims ID:	320-12924-A-7	Lab Sample ID:	320-12924-7		
Client ID:	J6038-IA2-050615				
Operator ID:	AO	ALS Bottle#:	8	Worklist Smp#:	13
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	TO15 SIM	Limit Group:	MSA - TO-15_SIM_ICAL		
Column:		Detector	MS SCAN		

50 Tetrachloroethene, CAS: 127-18-4



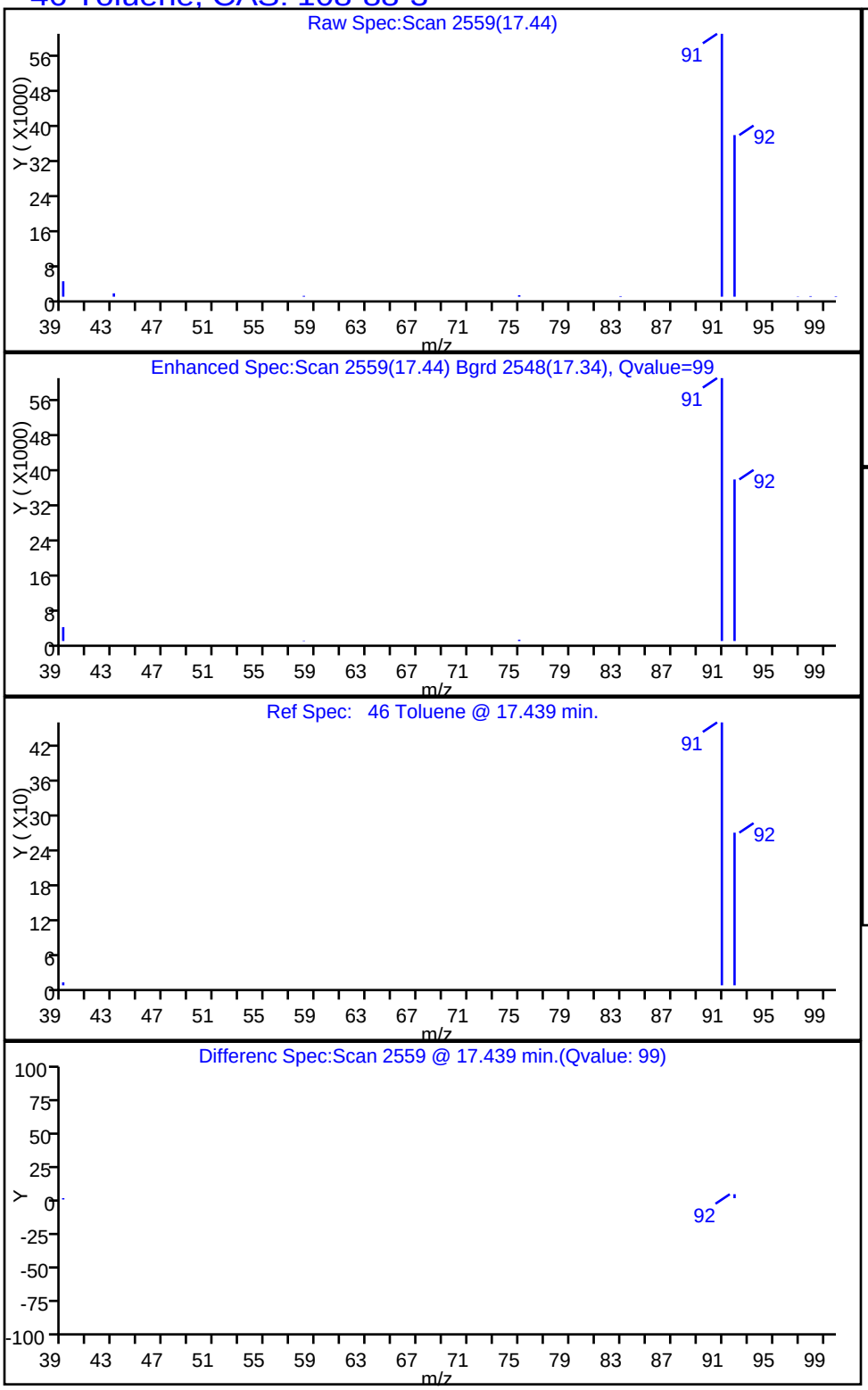


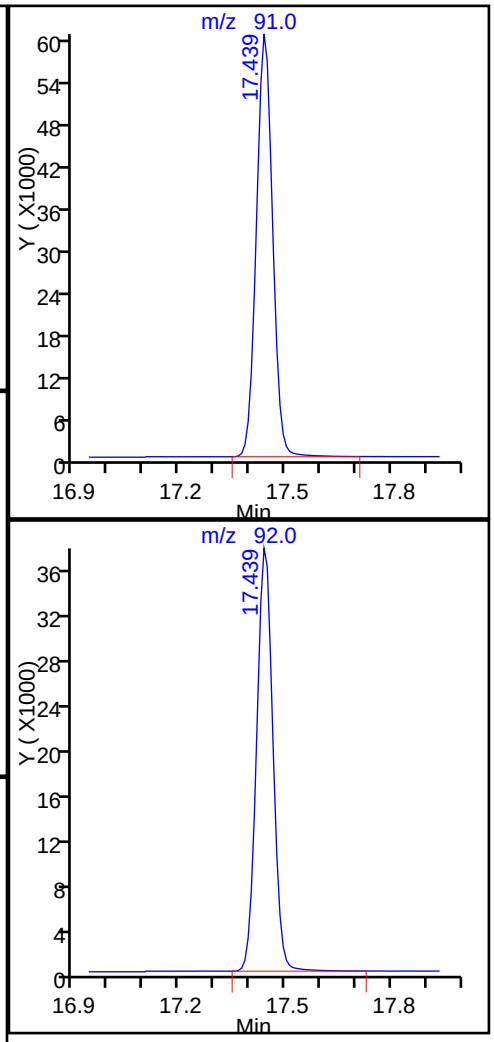
Report Date: 13-May-2015 16:54:55 Chrom Revision: 2.2 05-May-2015 11:39:10

TestAmerica Sacramento

Data File:	\\SACCHROM\ChromData\ATMS5\20150512-21744.b\MS5051114.D				
Injection Date:	11-May-2015 23:44:30	Instrument ID:	ATMS5		
Lims ID:	320-12924-A-7	Lab Sample ID:	320-12924-7		
Client ID:	J6038-IA2-050615				
Operator ID:	AO	ALS Bottle#:	8	Worklist Smp#:	13
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	TO15 SIM	Limit Group:	MSA - TO-15_SIM_ICAL		
Column:		Detector	MS SCAN		

46 Toluene, CAS: 108-88-3





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TestAmerica Sacramento

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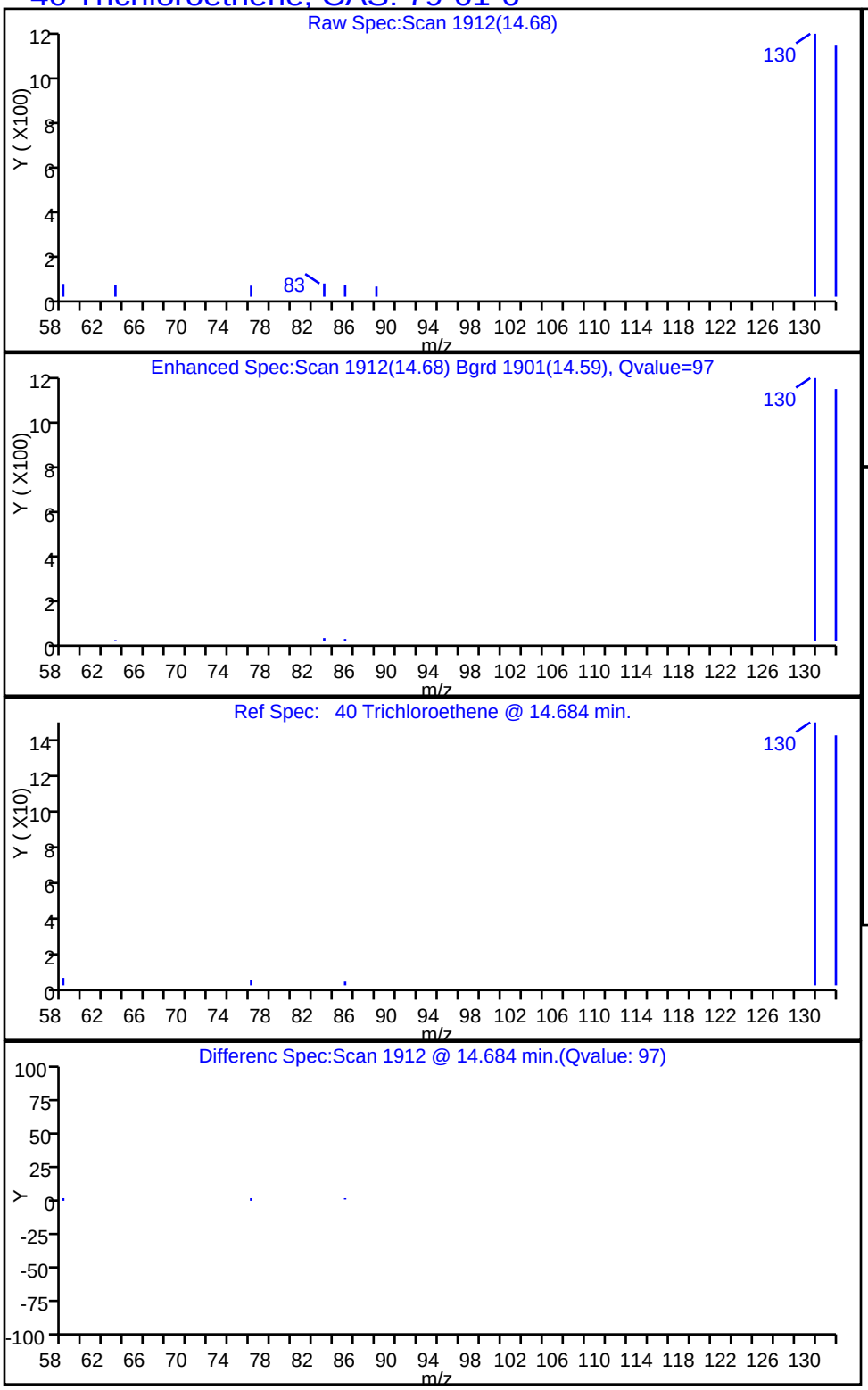
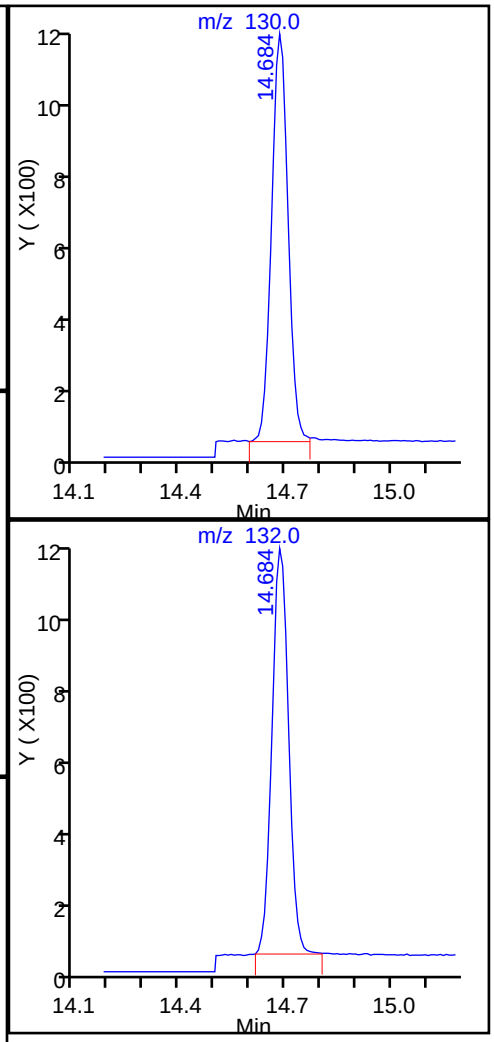
Injection Date:	11-May-2015 23:44:30	Instrument ID:	ATMS5		
Lims ID:	320-12924-A-7	Lab Sample ID:	320-12924-7		
Client ID:	J6038-IA2-050615				
Operator ID:	AO	ALS Bottle#:	8	Worklist Smp#:	13
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	TO15 SIM	Limit Group:	MSA - TO-15_SIM_ICAL		
Column:		Detector	MS SCAN		

40 Trichloroethene, CAS: 79-01-6





Manual Integration/User Assign Peak Report

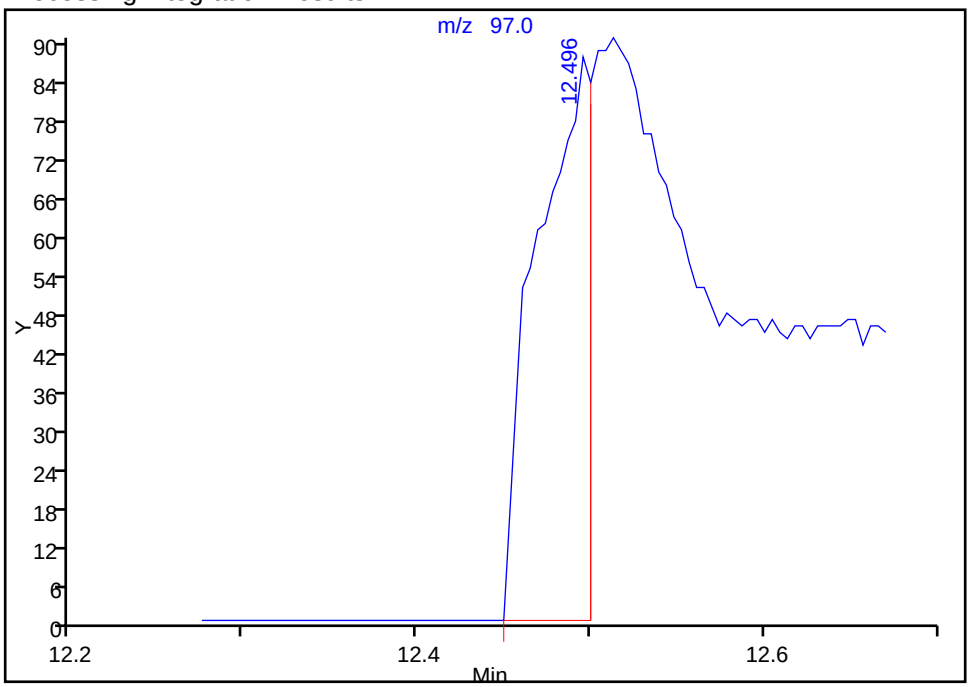
TestAmerica Sacramento

Data File:	\\SACCHROM\ChromData\ATMS5\20150512-21744.b\MS5051114.D				
Injection Date:	11-May-2015 23:44:30	Instrument ID:	ATMS5		
Lims ID:	320-12924-A-7	Lab Sample ID:	320-12924-7		
Client ID:	J6038-IA2-050615				
Operator ID:	AO	ALS Bottle#:	8	Worklist Smp#:	13
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	TO15 SIM	Limit Group:	MSA - TO-15_SIM_ICAL		
Column:		Detector	MS SCAN		

34 1,1,1-Trichloroethane, CAS: 71-55-6

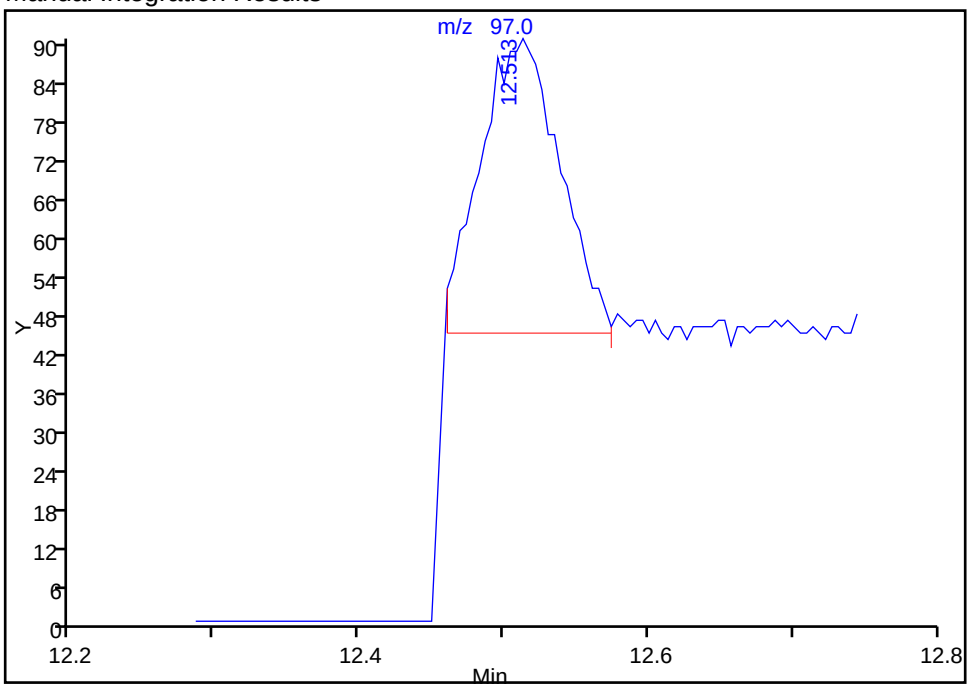
Processing Integration Results

RT: 12.50
Area: 180
Amount: 0.003778
Amount Units: ppb v/v



Manual Integration Results

RT: 12.51
Area: 177
Amount: 0.003715
Amount Units: ppb v/v



Reviewer: ortizam, 13-May-2015 16:52:24
Audit Action: Manually Integrated
Audit Reason: Baseline

Manual Integration/User Assign Peak Report

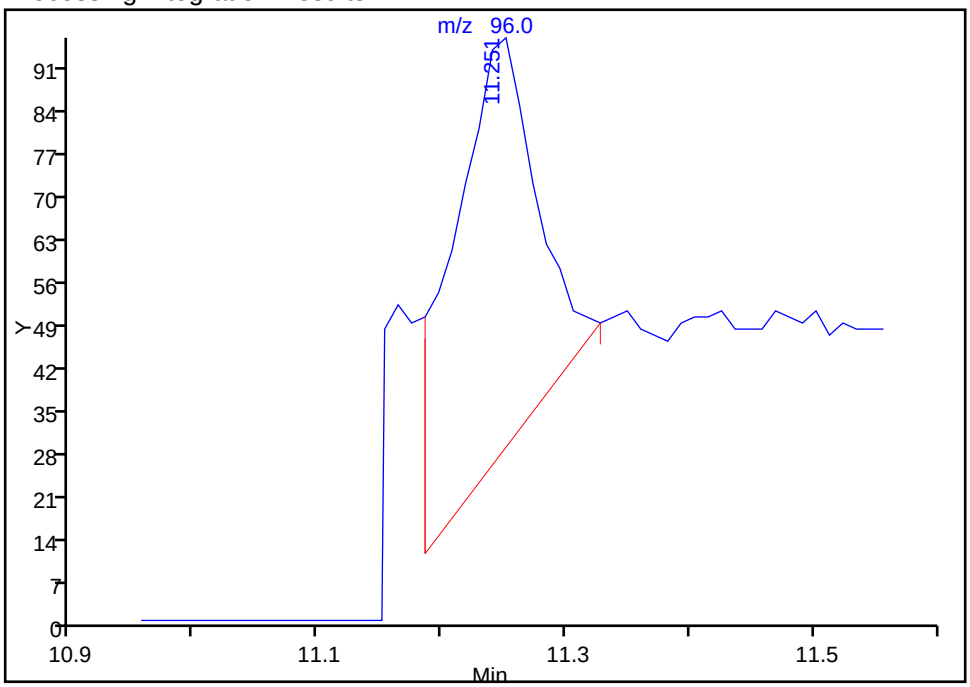
TestAmerica Sacramento

Data File:	\\SACCHROM\ChromData\ATMS5\20150512-21744.b\MS5051114.D				
Injection Date:	11-May-2015 23:44:30	Instrument ID:	ATMS5		
Lims ID:	320-12924-A-7	Lab Sample ID:	320-12924-7		
Client ID:	J6038-IA2-050615				
Operator ID:	AO	ALS Bottle#:	8	Worklist Smp#:	13
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	TO15 SIM	Limit Group:	MSA - TO-15_SIM_ICAL		
Column:		Detector	MS SCAN		

30 cis-1,2-Dichloroethene, CAS: 156-59-2

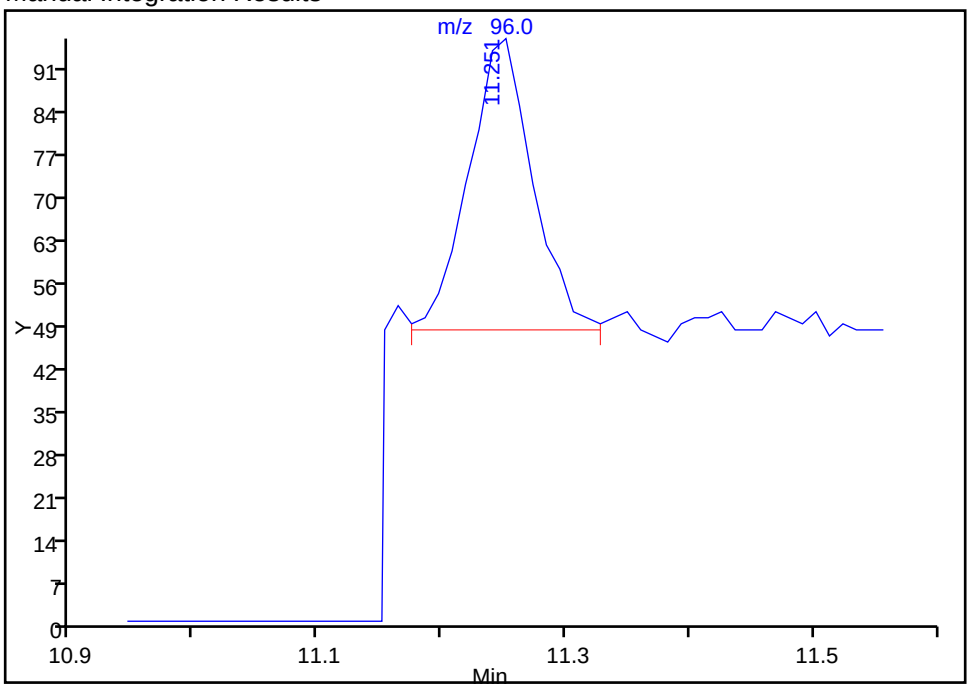
Processing Integration Results

RT: 11.25
Area: 337
Amount: 0.012006
Amount Units: ppb v/v



Manual Integration Results

RT: 11.25
Area: 173
Amount: 0.006164
Amount Units: ppb v/v



Reviewer: ortizam, 13-May-2015 16:52:24
Audit Action: Manually Integrated
Audit Reason: Baseline

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento | Job No.: 320-12924-1
SDG No.:
Client Sample ID: J6038-IA3-050615 | Lab Sample ID: 320-12924-8
Matrix: Air | Lab File ID: MS5051115.D
Analysis Method: TO-15 SIM | Date Collected: 05/06/2015 18:21
Sample wt/vol: 930(mL) | Date Analyzed: 05/12/2015 00:42
Soil Aliquot Vol: | Dilution Factor: 1
Soil Extract Vol.: | GC Column: RTX-Volatiles ID: 0.32(mm)
% Moisture: | Level: (low/med) Low
Analysis Batch No.: 73719 | Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	133.41	ND		0.020	0.0050
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.050	0.0050
75-34-3	1,1-Dichloroethane	98.96	ND		0.020	0.0050
75-35-4	1,1-Dichloroethene	96.94	ND		0.020	0.0050
95-50-1	1,2-Dichlorobenzene	147.00	ND		0.050	0.010
107-06-2	1,2-Dichloroethane	98.96	0.014	J	0.020	0.0050
106-46-7	1,4-Dichlorobenzene	147.00	ND		0.10	0.010
108-90-7	Chlorobenzene	112.56	ND		0.020	0.010
67-66-3	Chloroform	119.38	0.020		0.020	0.0050
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.020	0.0050
100-41-4	Ethylbenzene	106.17	0.092		0.020	0.010
75-69-4	Freon 11	137.37	0.21		0.045	0.010
76-13-1	Freon 113	187.38	0.059		0.030	0.0050
75-71-8	Freon 12	120.91	0.33		0.020	0.0050
179601-23-1	m,p-Xylene	106.17	0.35		0.040	0.020
75-09-2	Methylene Chloride	84.93	0.22		0.20	0.10
95-47-6	o-Xylene	106.17	0.15		0.020	0.010
127-18-4	Tetrachloroethene	165.83	ND		0.020	0.010
108-88-3	Toluene	92.14	2.1		0.020	0.010
156-60-5	trans-1,2-Dichloroethene	96.94	ND		0.020	0.0050
79-01-6	Trichloroethene	131.39	0.038		0.020	0.0050
75-01-4	Vinyl chloride	62.50	ND		0.020	0.010

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	105		70-130
17060-07-0	1,2-Dichloroethane-d4 (Surr)	95		70-130
2037-26-5	Toluene-d8 (Surr)	100		70-130

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento | Job No.: 320-12924-1
SDG No.:
Client Sample ID: J6038-IA3-050615 | Lab Sample ID: 320-12924-8
Matrix: Air | Lab File ID: MS5051115.D
Analysis Method: TO-15 SIM | Date Collected: 05/06/2015 18:21
Sample wt/vol: 930(mL) | Date Analyzed: 05/12/2015 00:42
Soil Aliquot Vol: | Dilution Factor: 1
Soil Extract Vol.: | GC Column: RTX-Volatiles ID: 0.32(mm)
% Moisture: | Level: (low/med) Low
Analysis Batch No.: 73719 | Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	133.41	ND		0.11	0.027
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.27	0.027
75-34-3	1,1-Dichloroethane	98.96	ND		0.081	0.020
75-35-4	1,1-Dichloroethene	96.94	ND		0.079	0.020
95-50-1	1,2-Dichlorobenzene	147.00	ND		0.30	0.060
107-06-2	1,2-Dichloroethane	98.96	0.056	J	0.081	0.020
106-46-7	1,4-Dichlorobenzene	147.00	ND		0.60	0.060
108-90-7	Chlorobenzene	112.56	ND		0.092	0.046
67-66-3	Chloroform	119.38	0.10		0.098	0.024
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.079	0.020
100-41-4	Ethylbenzene	106.17	0.40		0.087	0.043
75-69-4	Freon 11	137.37	1.2		0.25	0.056
76-13-1	Freon 113	187.38	0.45		0.23	0.038
75-71-8	Freon 12	120.91	1.6		0.099	0.025
179601-23-1	m,p-Xylene	106.17	1.5		0.17	0.087
75-09-2	Methylene Chloride	84.93	0.76		0.69	0.35
95-47-6	o-Xylene	106.17	0.66		0.087	0.043
127-18-4	Tetrachloroethene	165.83	ND		0.14	0.068
108-88-3	Toluene	92.14	7.9		0.075	0.038
156-60-5	trans-1,2-Dichloroethene	96.94	ND		0.079	0.020
79-01-6	Trichloroethene	131.39	0.20		0.11	0.027
75-01-4	Vinyl chloride	62.50	ND		0.051	0.026

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	105		70-130
17060-07-0	1,2-Dichloroethane-d4 (Surr)	95		70-130
2037-26-5	Toluene-d8 (Surr)	100		70-130

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\SACCHROM\ChromData\ATMS5\20150512-21744.b\MS5051115.D
Lims ID: 320-12924-A-8 Lab Sample ID: 320-12924-8
Client ID: J6038-IA3-050615
Sample Type: Client
Inject. Date: 12-May-2015 00:42:30 ALS Bottle#: 9 Worklist Smp#: 14
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 320-12924-A-8
Misc. Info.: 930ML930ML
Operator ID: AO Instrument ID: ATMS5

Method: \\SACCHROM\ChromData\ATMS5\20150512-21744.b\TO15 SIM.m
Limit Group: MSA - TO-15_SIM_ICAL
Last Update: 13-May-2015 16:54:38 Calib Date: 26-Mar-2015 03:17:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\SACCHROM\ChromData\ATMS5\20150326-20538.b\MS5032518.D

Column 1 : Det: MS SCAN
Process Host: XAWRK050

First Level Reviewer: ortizam Date: 12-May-2015 12:38:49

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	130	11.851	11.850	0.001	99	37654	2.00	
* 2 1,4-Difluorobenzene	114	13.945	13.941	0.004	100	178369	2.00	
* 3 Chlorobenzene-d5 (IS)	117	20.508	20.508	0.000	100	165085	2.00	
$ 4 1,2-Dichloroethane-d4 (Sur	65	13.002	13.002	0.000	100	39799	1.89	
$ 5 Toluene-d8 (Surr)	100	17.276	17.266	0.010	100	122974	2.00	
$ 6 4-Bromofluorobenzene (Surr	95	23.040	23.040	0.000	100	97194	2.09	
8 Dichlorodifluoromethane	85	4.181	4.181	0.000	99	18584	0.3274	
15 Trichlorofluoromethane	101	6.421	6.418	0.003	100	11182	0.2065	
19 1,1,2-Trichloro-1,2,2-trif	101	7.412	7.412	0.000	99	3066	0.0589	
22 Methylene Chloride	49	8.490	8.490	0.000	100	5701	0.2193	
30 cis-1,2-Dichloroethene	96	11.241	11.240	0.001	43	73	0.002517	M
32 Chloroform	83	11.589	11.589	0.000	92	976	0.0204	
34 1,1,1-Trichloroethane	97	12.513	12.508	0.005	70	161	0.003270	M
37 1,2-Dichloroethane	62	13.193	13.192	0.001	92	444	0.0140	
40 Trichloroethene	130	14.684	14.683	0.001	92	1588	0.0378	
46 Toluene	91	17.439	17.439	0.000	99	283255	2.10	
50 Tetrachloroethene	166	18.940	18.939	0.001	99	436	0.007913	7
53 Chlorobenzene	112	20.584	20.584	0.000	1	859	0.007387	
54 Ethylbenzene	91	20.773	20.773	0.000	89	17358	0.0918	
55 m-Xylene & p-Xylene	91	20.955	20.955	0.000	56	50615	0.3534	
56 o-Xylene	91	21.847	21.846	0.001	34	22781	0.1523	
65 1,4-Dichlorobenzene	146	25.529	25.530	-0.001	75	377	0.003320	7
67 1,2-Dichlorobenzene	146	26.250	26.247	0.003	1	896	0.007666	7

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Review Flags

M - Manually Integrated

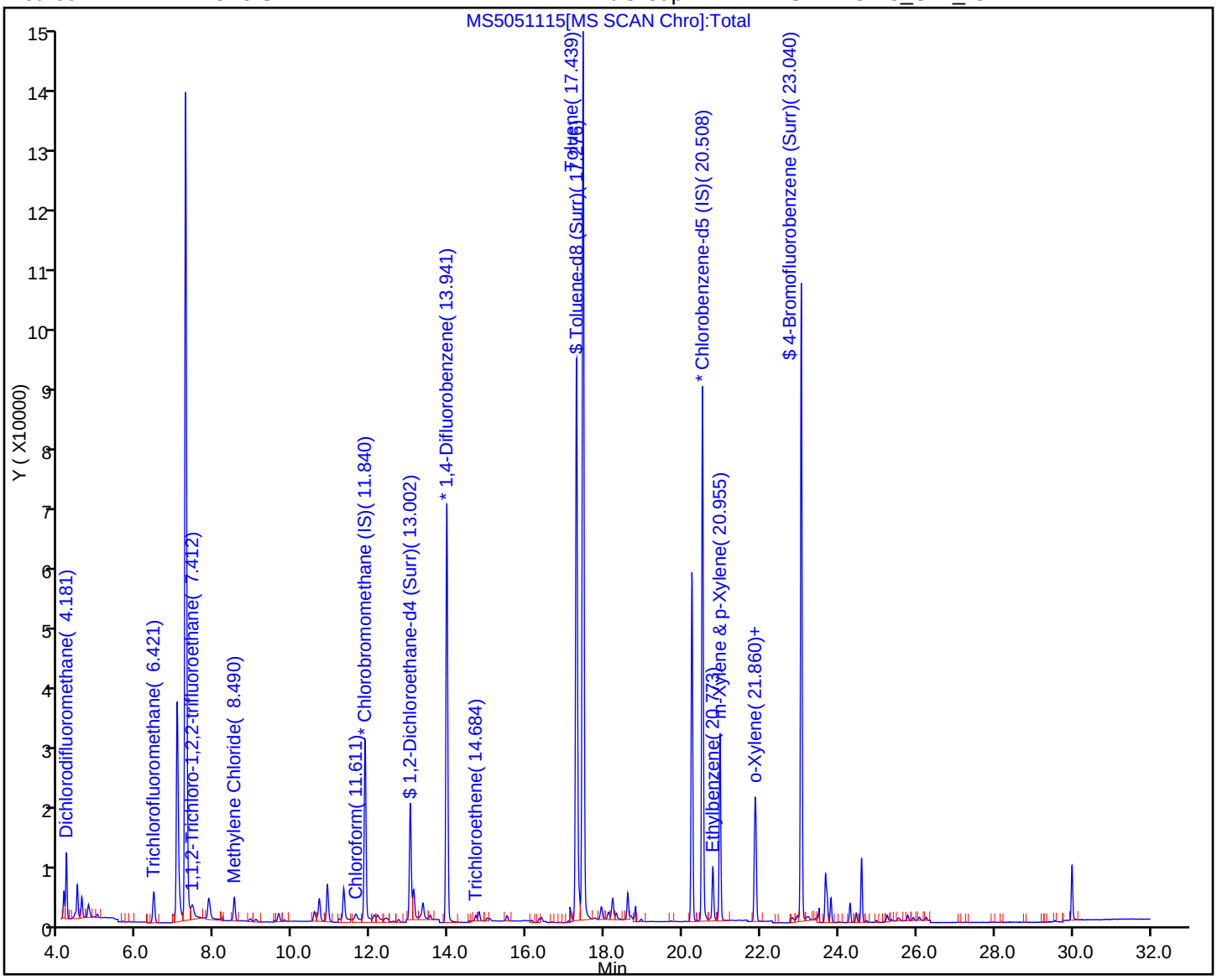
Reagents:

VASUISIM_00172	Amount Added: 50.00	Units: mL	Run Reagent

Report Date: 13-May-2015 16:55:29 Chrom Revision: 2.2 05-May-2015 11:39:10

TestAmerica Sacramento

Data File:	\\SACCHROM\ChromData\ATMS5\20150512-21744.b\MS5051115.D				
Injection Date:	12-May-2015 00:42:30	Instrument ID:	ATMS5		
Lims ID:	320-12924-A-8	Lab Sample ID:	320-12924-8		
Client ID:	J6038-IA3-050615				
Operator ID:	AO	ALS Bottle#:	9	Worklist Smp#:	14
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	TO15 SIM	Limit Group:	MSA - TO-15_SIM_ICAL		

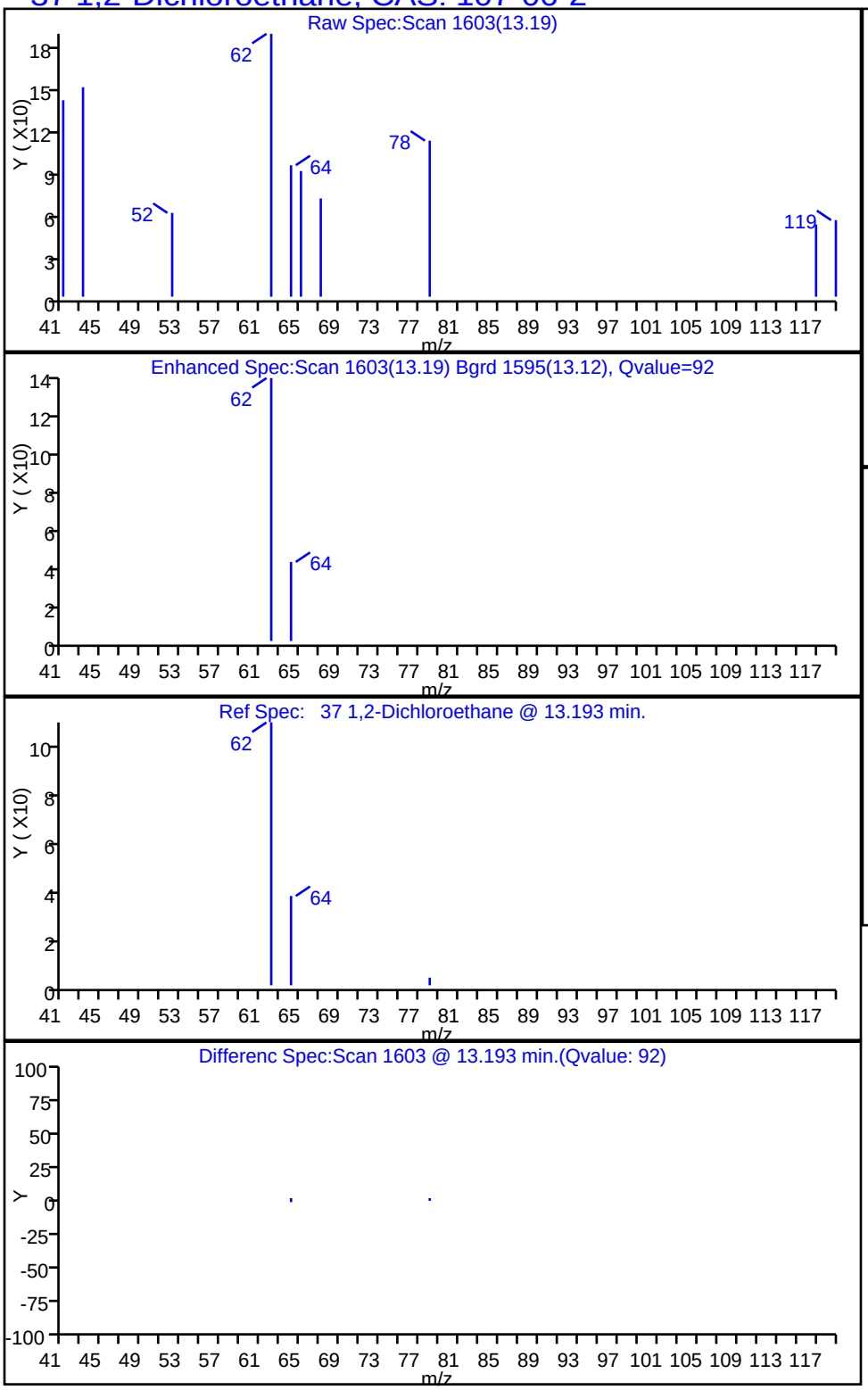


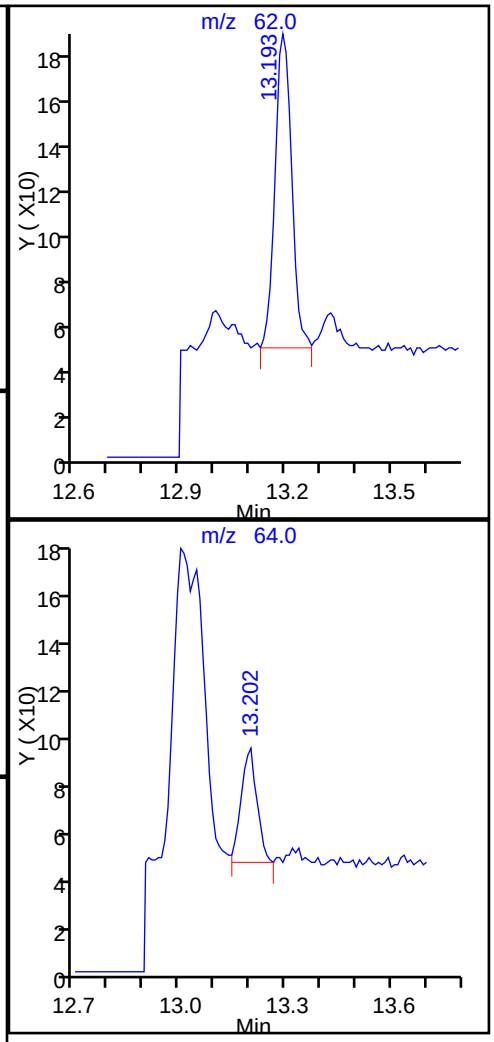
Report Date: 13-May-2015 16:55:29 Chrom Revision: 2.2 05-May-2015 11:39:10

TestAmerica Sacramento

Data File:	\\SACCHROM\ChromData\ATMS5\20150512-21744.b\MS5051115.D				
Injection Date:	12-May-2015 00:42:30	Instrument ID:	ATMS5		
Lims ID:	320-12924-A-8	Lab Sample ID:	320-12924-8		
Client ID:	J6038-IA3-050615				
Operator ID:	AO	ALS Bottle#:	9	Worklist Smp#:	14
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	TO15 SIM	Limit Group:	MSA - TO-15_SIM_ICAL		
Column:		Detector	MS SCAN		

37 1,2-Dichloroethane, CAS: 107-06-2



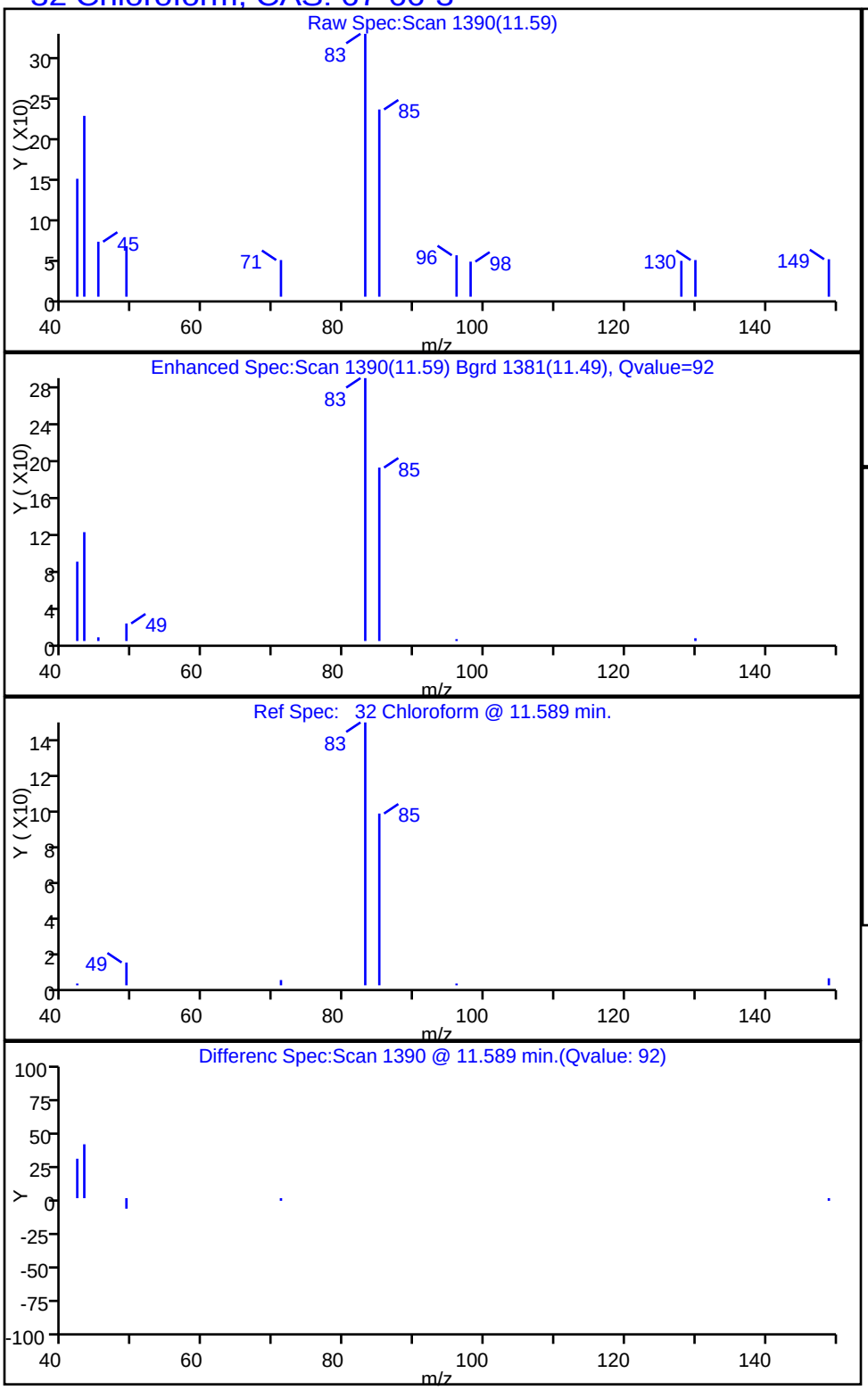


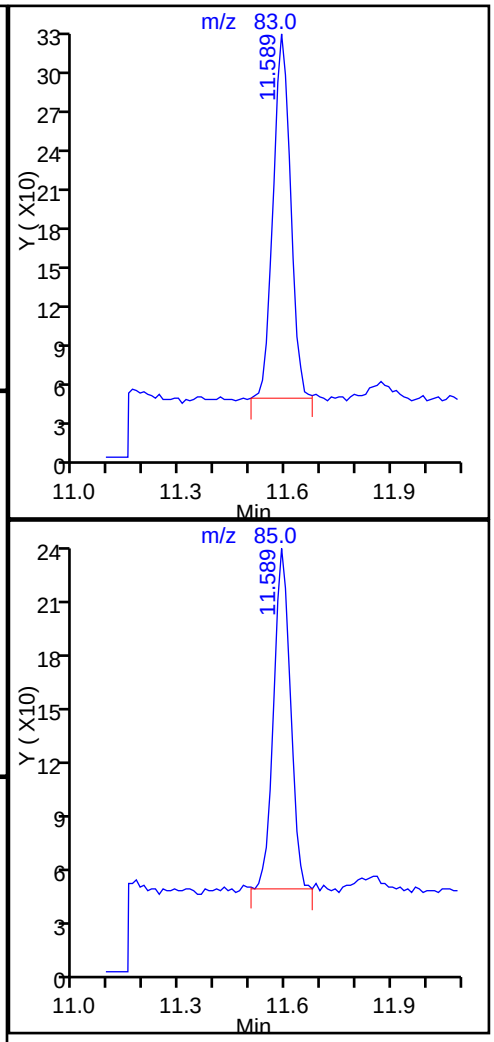
Report Date: 13-May-2015 16:55:29 Chrom Revision: 2.2 05-May-2015 11:39:10

TestAmerica Sacramento

Data File:	\\SACCHROM\ChromData\ATMS5\20150512-21744.b\MS5051115.D				
Injection Date:	12-May-2015 00:42:30	Instrument ID:	ATMS5		
Lims ID:	320-12924-A-8	Lab Sample ID:	320-12924-8		
Client ID:	J6038-IA3-050615				
Operator ID:	AO	ALS Bottle#:	9	Worklist Smp#:	14
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	TO15 SIM	Limit Group:	MSA - TO-15_SIM_ICAL		
Column:		Detector	MS SCAN		

32 Chloroform, CAS: 67-66-3



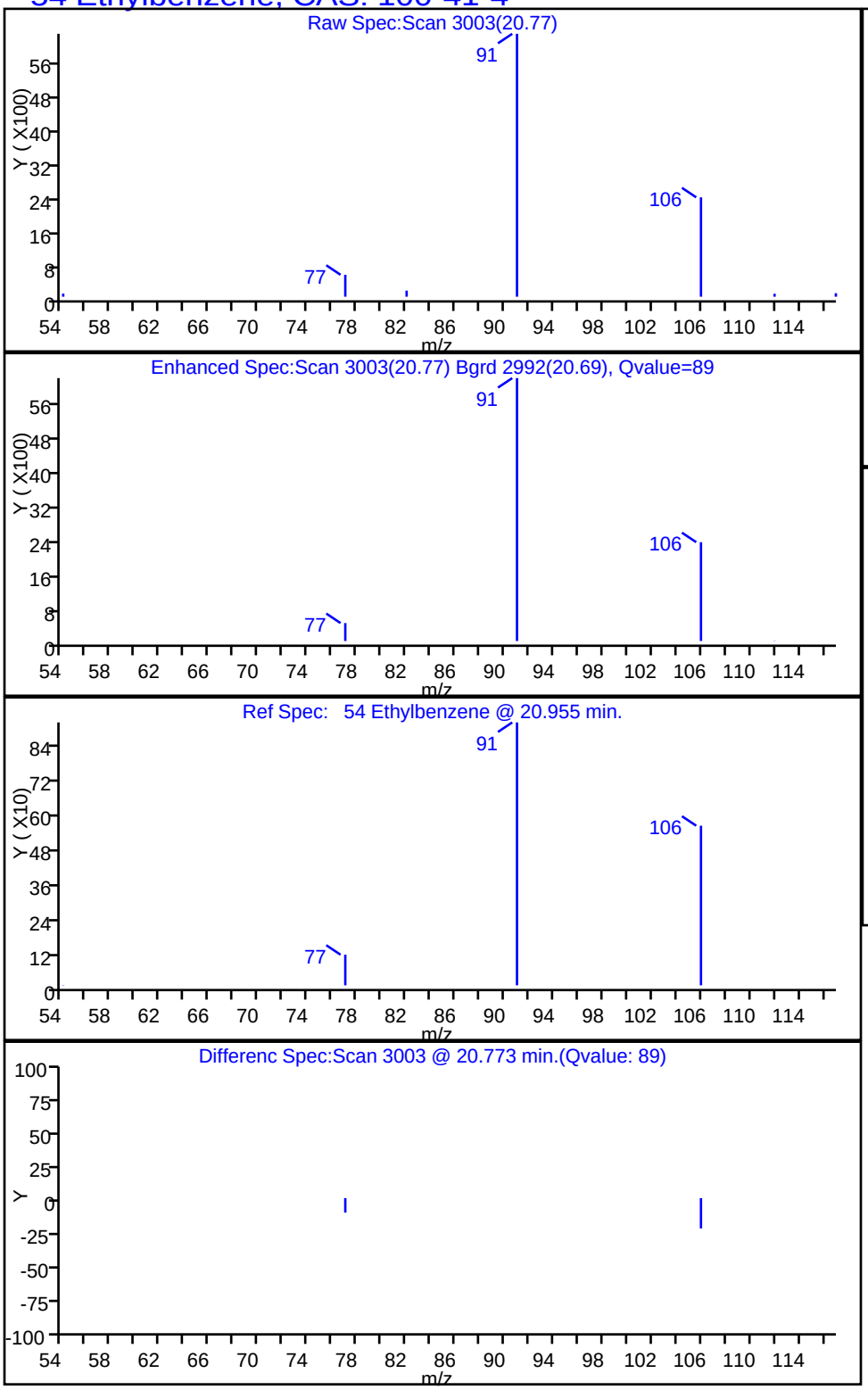


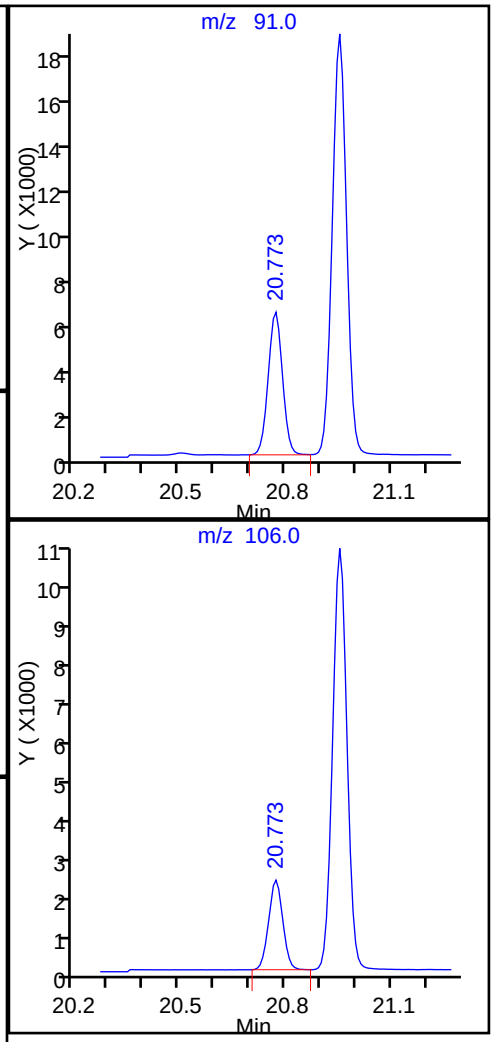
Report Date: 13-May-2015 16:55:30 Chrom Revision: 2.2 05-May-2015 11:39:10

TestAmerica Sacramento

Data File:	\\SACCHROM\ChromData\ATMS5\20150512-21744.b\MS5051115.D				
Injection Date:	12-May-2015 00:42:30	Instrument ID:	ATMS5		
Lims ID:	320-12924-A-8	Lab Sample ID:	320-12924-8		
Client ID:	J6038-IA3-050615				
Operator ID:	AO	ALS Bottle#:	9	Worklist Smp#:	14
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	TO15 SIM	Limit Group:	MSA - TO-15_SIM_ICAL		
Column:		Detector	MS SCAN		

54 Ethylbenzene, CAS: 100-41-4



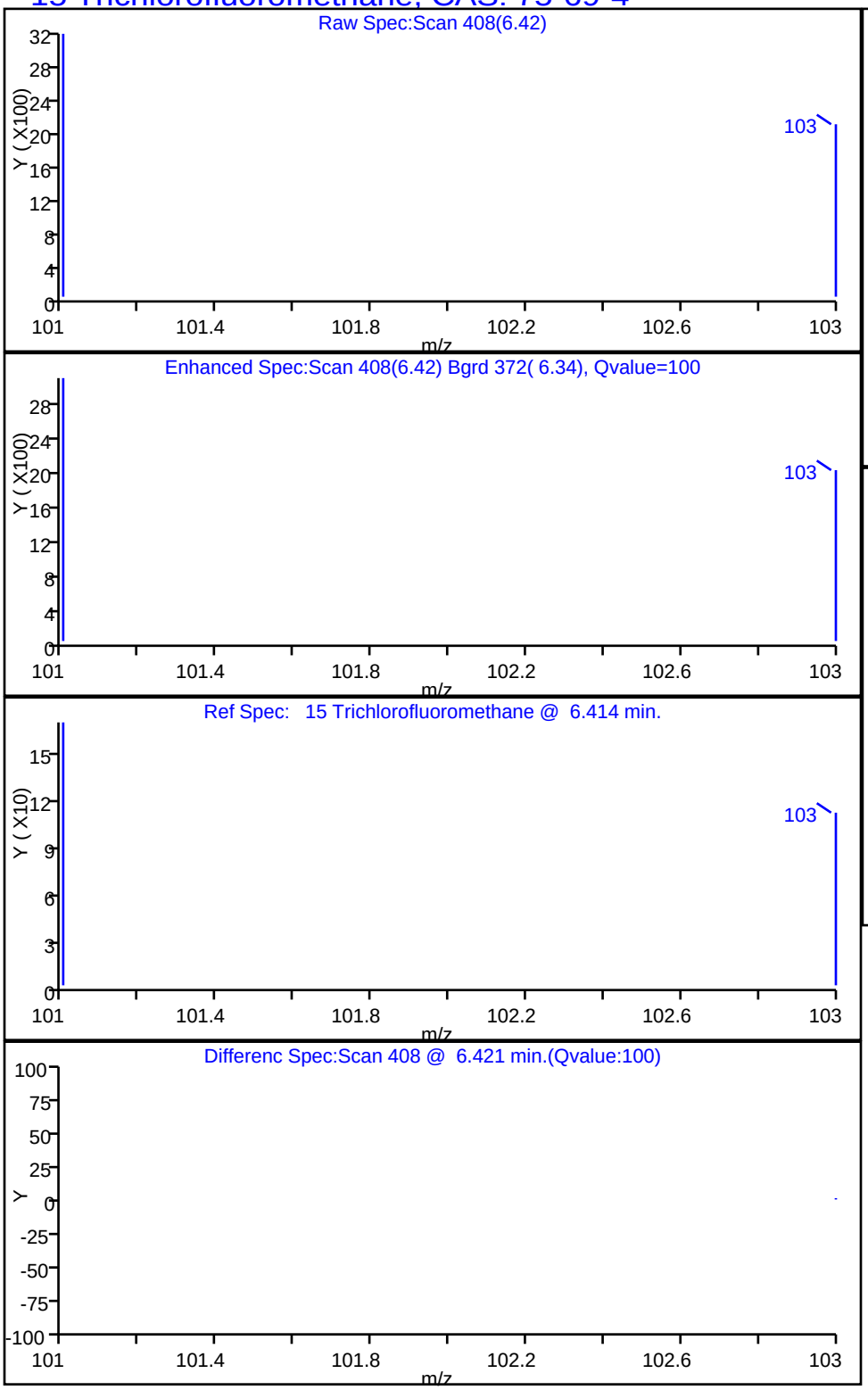


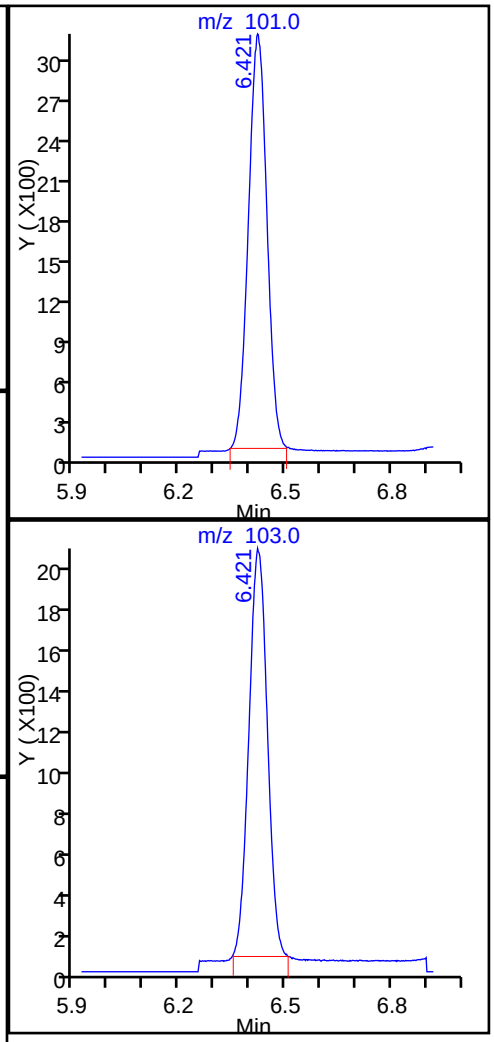
Report Date: 13-May-2015 16:55:29 Chrom Revision: 2.2 05-May-2015 11:39:10

TestAmerica Sacramento

Data File:	\\SACCHROM\ChromData\ATMS5\20150512-21744.b\MS5051115.D				
Injection Date:	12-May-2015 00:42:30	Instrument ID:	ATMS5		
Lims ID:	320-12924-A-8	Lab Sample ID:	320-12924-8		
Client ID:	J6038-IA3-050615				
Operator ID:	AO	ALS Bottle#:	9	Worklist Smp#:	14
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	TO15 SIM	Limit Group:	MSA - TO-15_SIM_ICAL		
Column:		Detector	MS SCAN		

15 Trichlorofluoromethane, CAS: 75-69-4



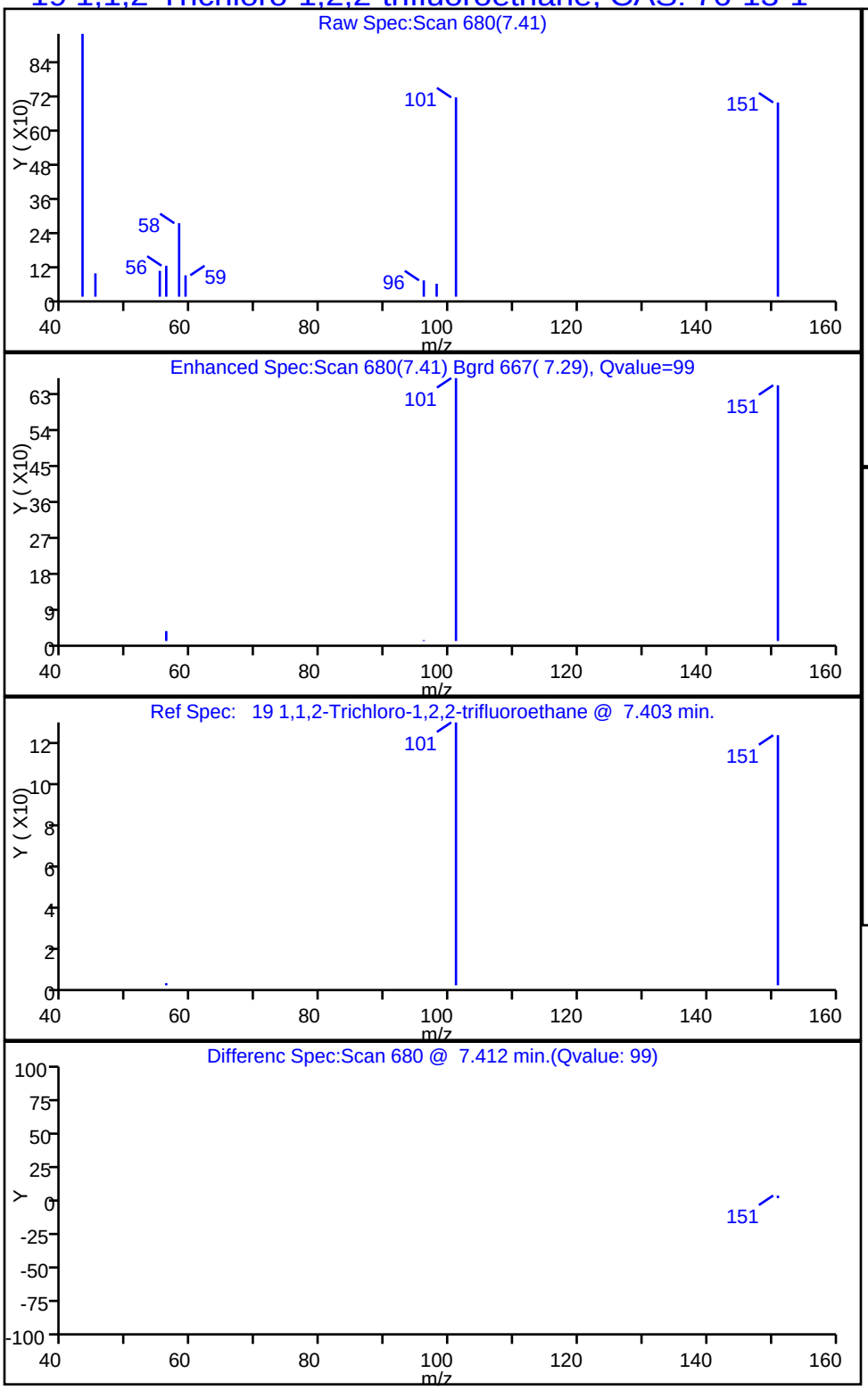


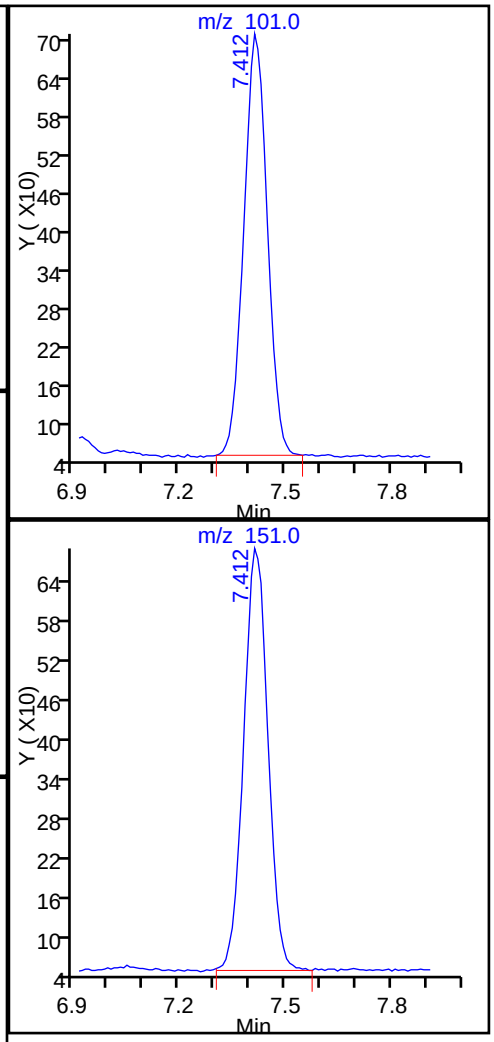
Report Date: 13-May-2015 16:55:29 Chrom Revision: 2.2 05-May-2015 11:39:10

TestAmerica Sacramento

Data File:	\\SACCHROM\ChromData\ATMS5\20150512-21744.b\MS5051115.D				
Injection Date:	12-May-2015 00:42:30	Instrument ID:	ATMS5		
Lims ID:	320-12924-A-8	Lab Sample ID:	320-12924-8		
Client ID:	J6038-IA3-050615				
Operator ID:	AO	ALS Bottle#:	9	Worklist Smp#:	14
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	TO15 SIM	Limit Group:	MSA - TO-15_SIM_ICAL		
Column:		Detector	MS SCAN		

19 1,1,2-Trichloro-1,2,2-trifluoroethane, CAS: 76-13-1



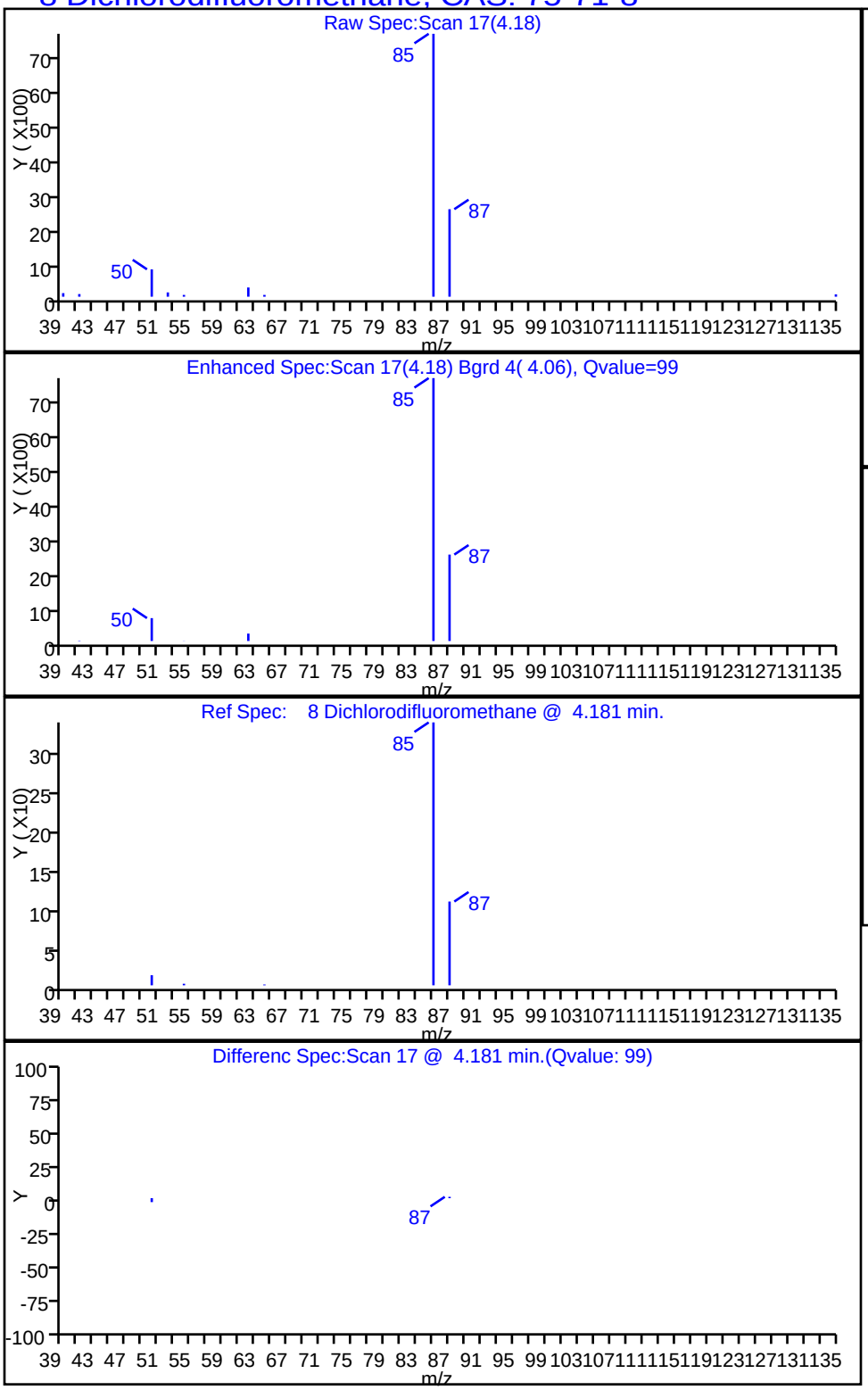


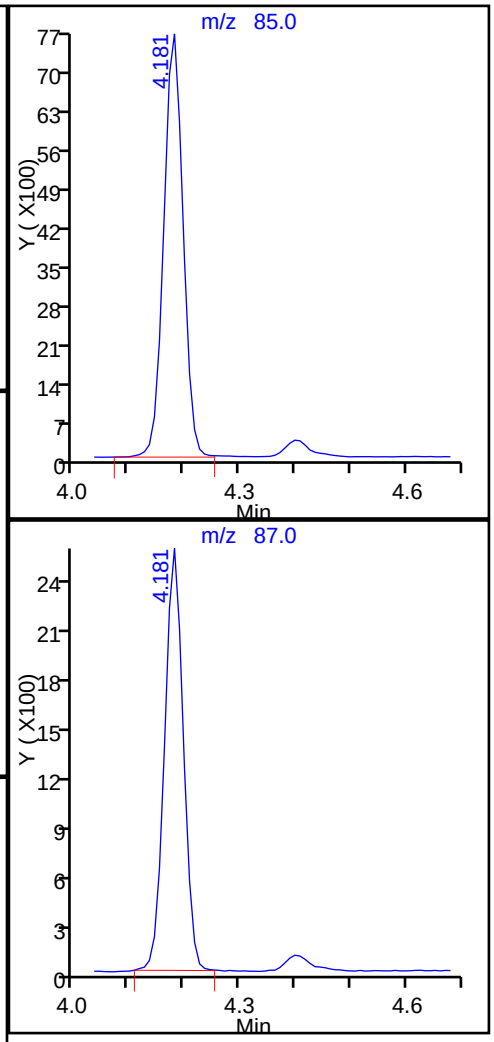
Report Date: 13-May-2015 16:55:29 Chrom Revision: 2.2 05-May-2015 11:39:10

TestAmerica Sacramento

Data File:	\\SACCHROM\ChromData\ATMS5\20150512-21744.b\MS5051115.D				
Injection Date:	12-May-2015 00:42:30	Instrument ID:	ATMS5		
Lims ID:	320-12924-A-8	Lab Sample ID:	320-12924-8		
Client ID:	J6038-IA3-050615				
Operator ID:	AO	ALS Bottle#:	9	Worklist Smp#:	14
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	TO15 SIM	Limit Group:	MSA - TO-15_SIM_ICAL		
Column:		Detector	MS SCAN		

8 Dichlorodifluoromethane, CAS: 75-71-8



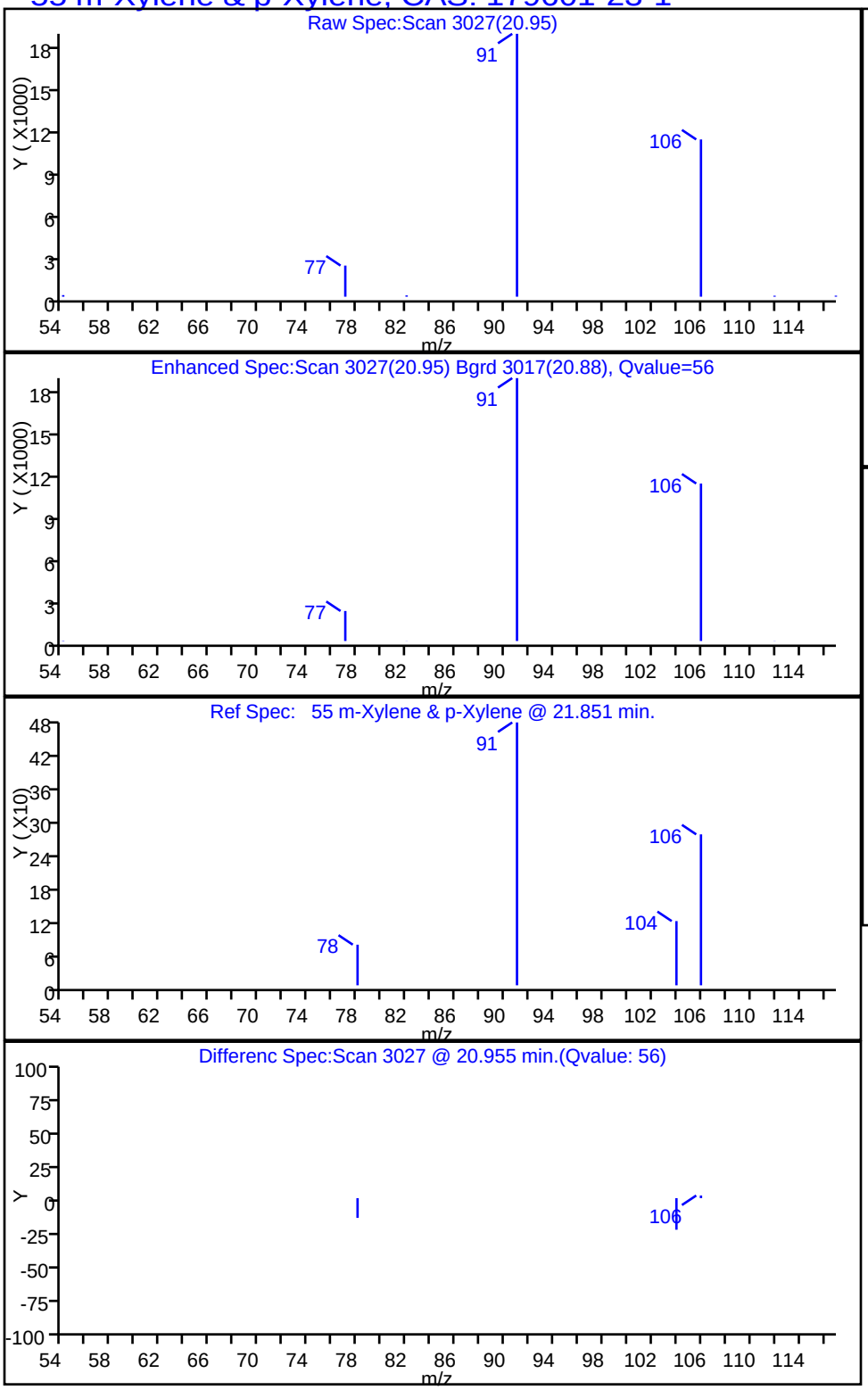


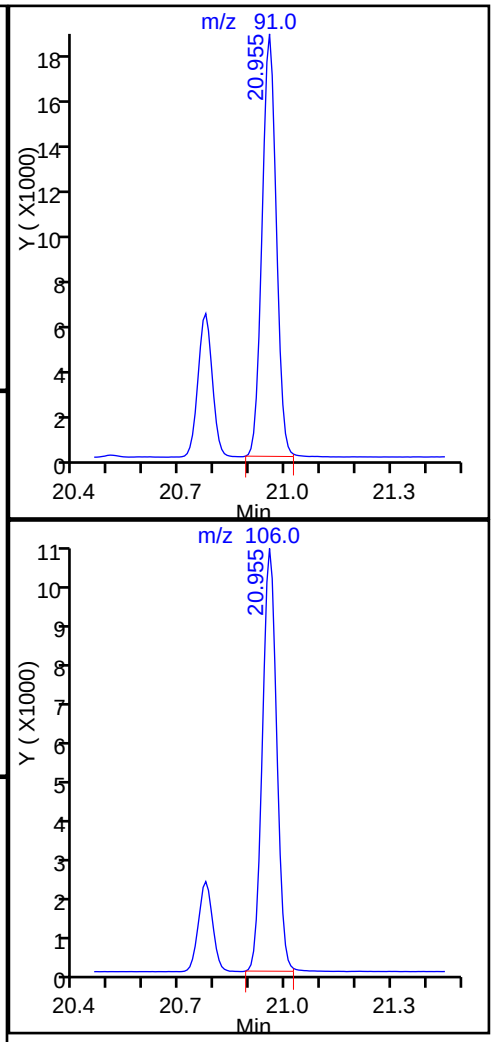
Report Date: 13-May-2015 16:55:30 Chrom Revision: 2.2 05-May-2015 11:39:10

TestAmerica Sacramento

Data File:	\\SACCHROM\ChromData\ATMS5\20150512-21744.b\MS5051115.D				
Injection Date:	12-May-2015 00:42:30	Instrument ID:	ATMS5		
Lims ID:	320-12924-A-8	Lab Sample ID:	320-12924-8		
Client ID:	J6038-IA3-050615				
Operator ID:	AO	ALS Bottle#:	9	Worklist Smp#:	14
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	TO15 SIM	Limit Group:	MSA - TO-15_SIM_ICAL		
Column:		Detector	MS SCAN		

55 m-Xylene & p-Xylene, CAS: 179601-23-1



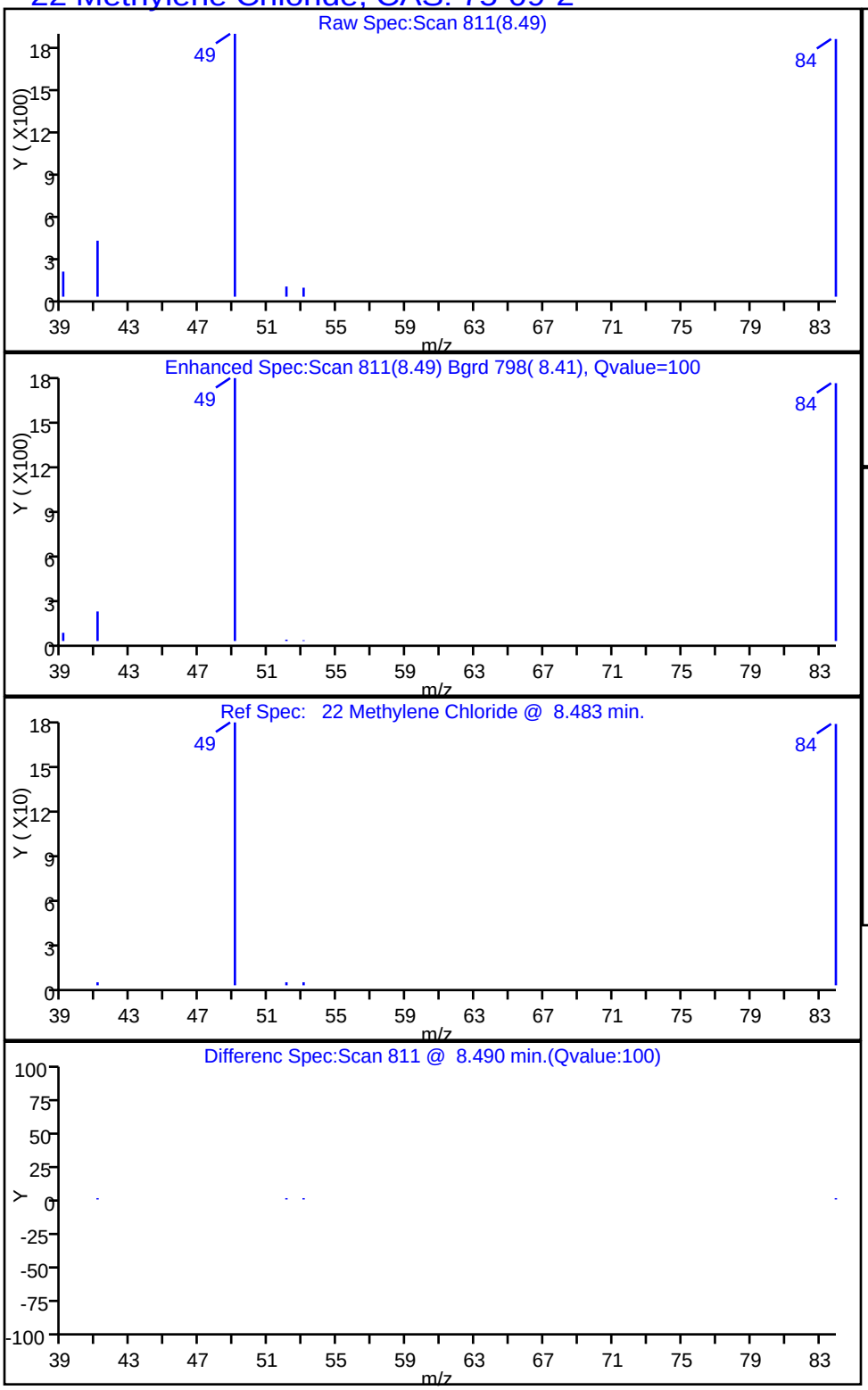


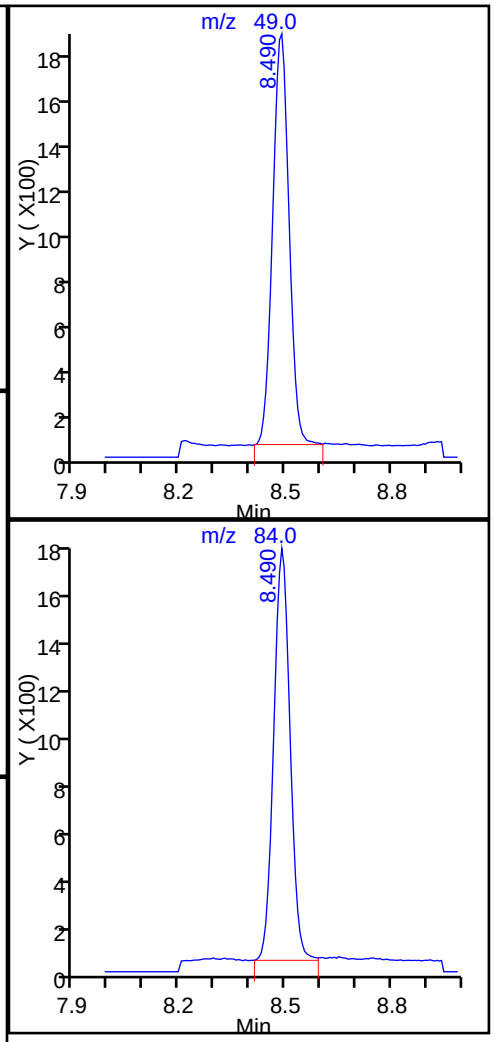
Report Date: 13-May-2015 16:55:29 Chrom Revision: 2.2 05-May-2015 11:39:10

TestAmerica Sacramento

Data File:	\\SACCHROM\ChromData\ATMS5\20150512-21744.b\MS5051115.D				
Injection Date:	12-May-2015 00:42:30	Instrument ID:	ATMS5		
Lims ID:	320-12924-A-8	Lab Sample ID:	320-12924-8		
Client ID:	J6038-IA3-050615				
Operator ID:	AO	ALS Bottle#:	9	Worklist Smp#:	14
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	TO15 SIM	Limit Group:	MSA - TO-15_SIM_ICAL		
Column:		Detector	MS SCAN		

22 Methylene Chloride, CAS: 75-09-2



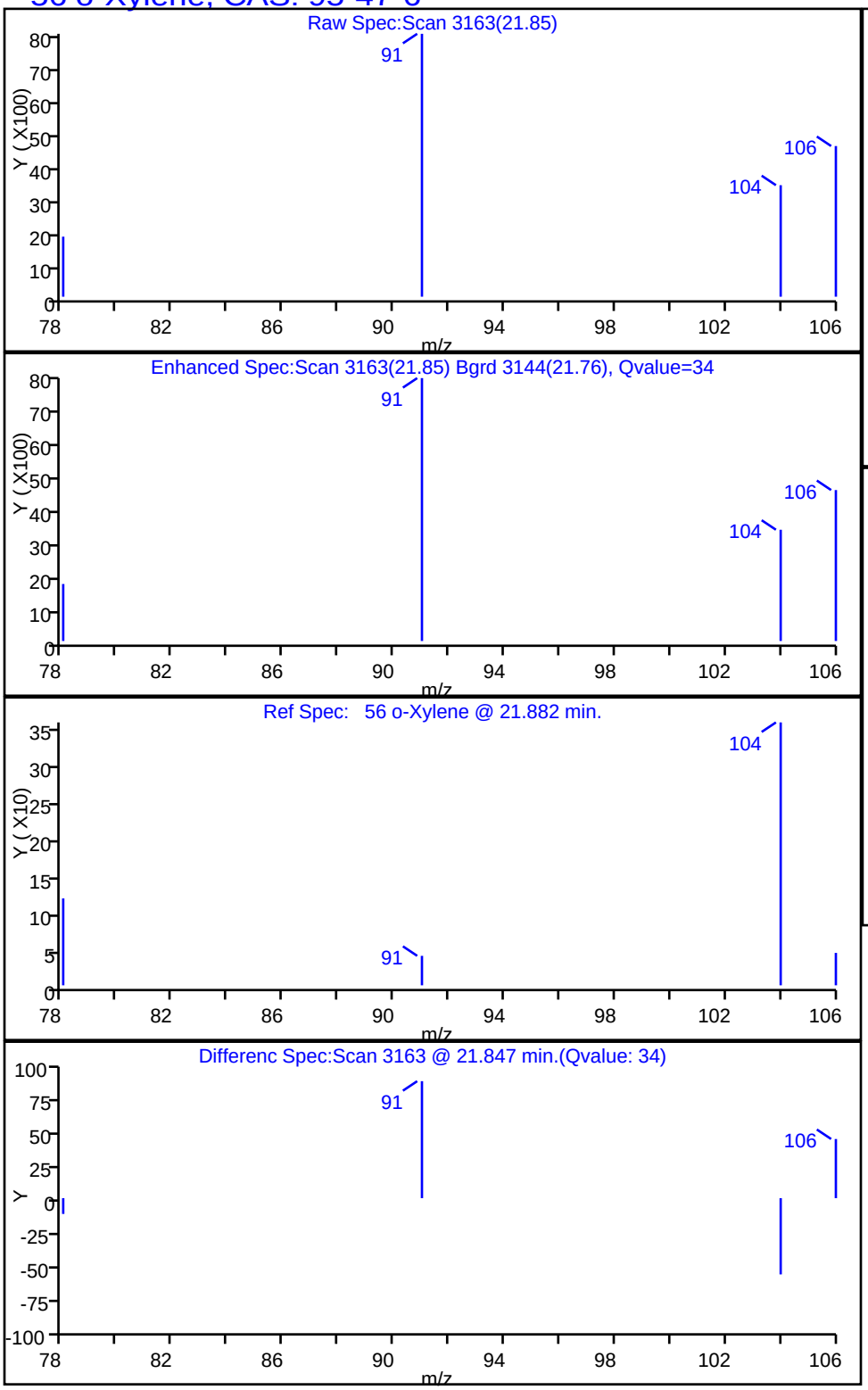


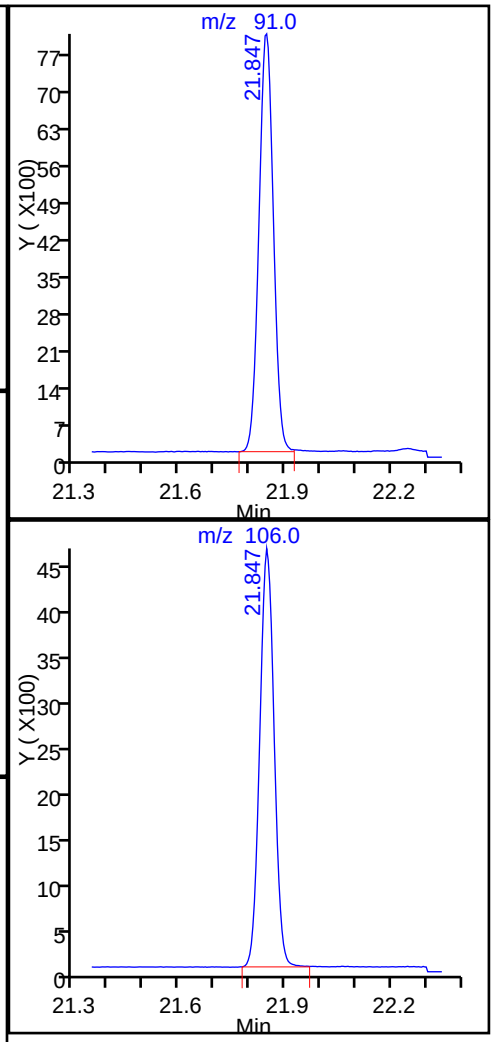
Report Date: 13-May-2015 16:55:30 Chrom Revision: 2.2 05-May-2015 11:39:10

TestAmerica Sacramento

Data File:	\\SACCHROM\ChromData\ATMS5\20150512-21744.b\MS5051115.D				
Injection Date:	12-May-2015 00:42:30	Instrument ID:	ATMS5		
Lims ID:	320-12924-A-8	Lab Sample ID:	320-12924-8		
Client ID:	J6038-IA3-050615				
Operator ID:	AO	ALS Bottle#:	9	Worklist Smp#:	14
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	TO15 SIM	Limit Group:	MSA - TO-15_SIM_ICAL		
Column:		Detector	MS SCAN		

56 o-Xylene, CAS: 95-47-6





Report Date: 13-May-2015 16:55:29 Chrom Revision: 2.2 05-May-2015 11:39:10

TestAmerica Sacramento

Data File:	\\SACCHROM\ChromData\ATMS5\20150512-21744.b\MS5051115.D				
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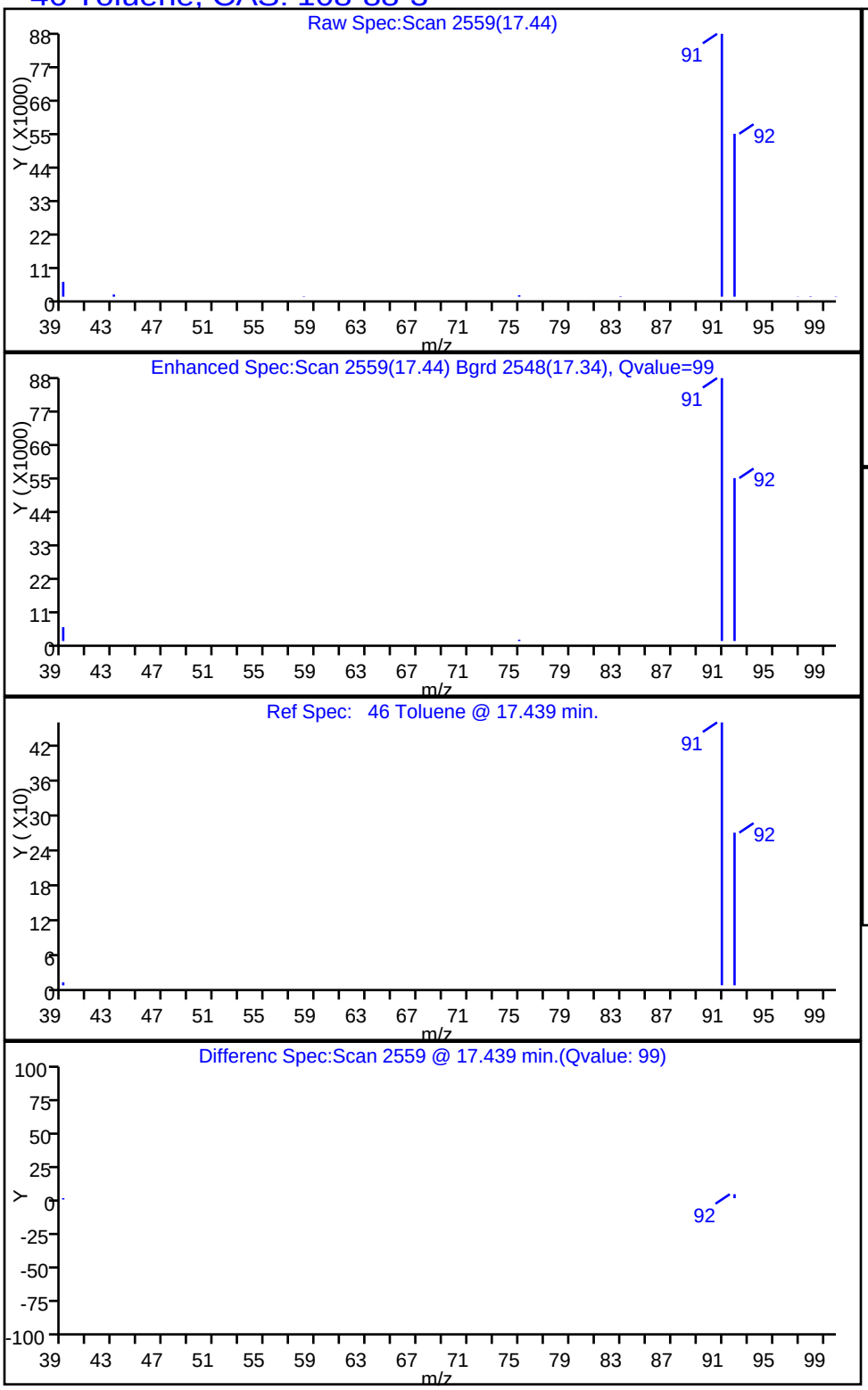
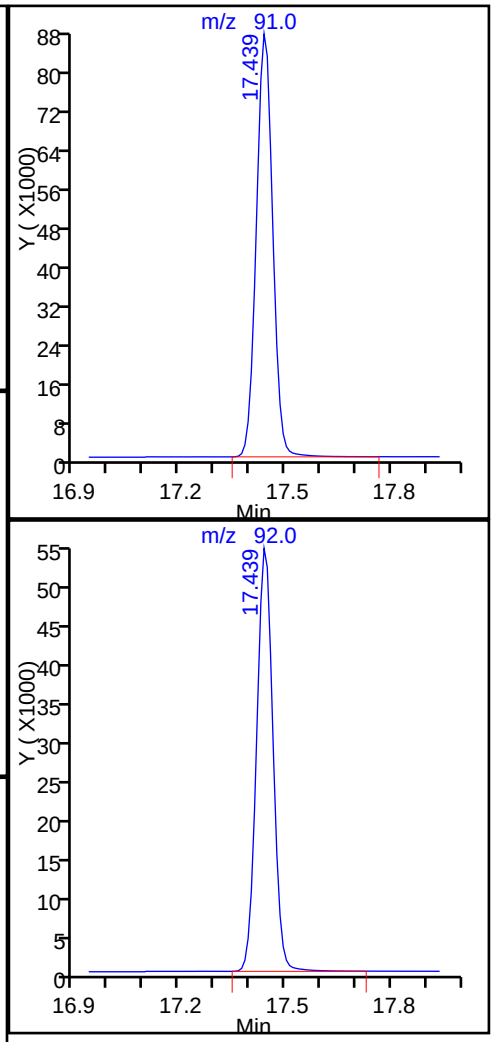
Lims ID:	320-12924-A-8	Lab Sample ID:	320-12924-8		
Client ID:	J6038-IA3-050615				
Operator ID:	AO	ALS Bottle#:	9	Worklist Smp#:	14
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	TO15 SIM	Limit Group:	MSA - TO-15_SIM_ICAL		
Column:		Detector	MS SCAN		

46 Toluene, CAS: 108-88-3



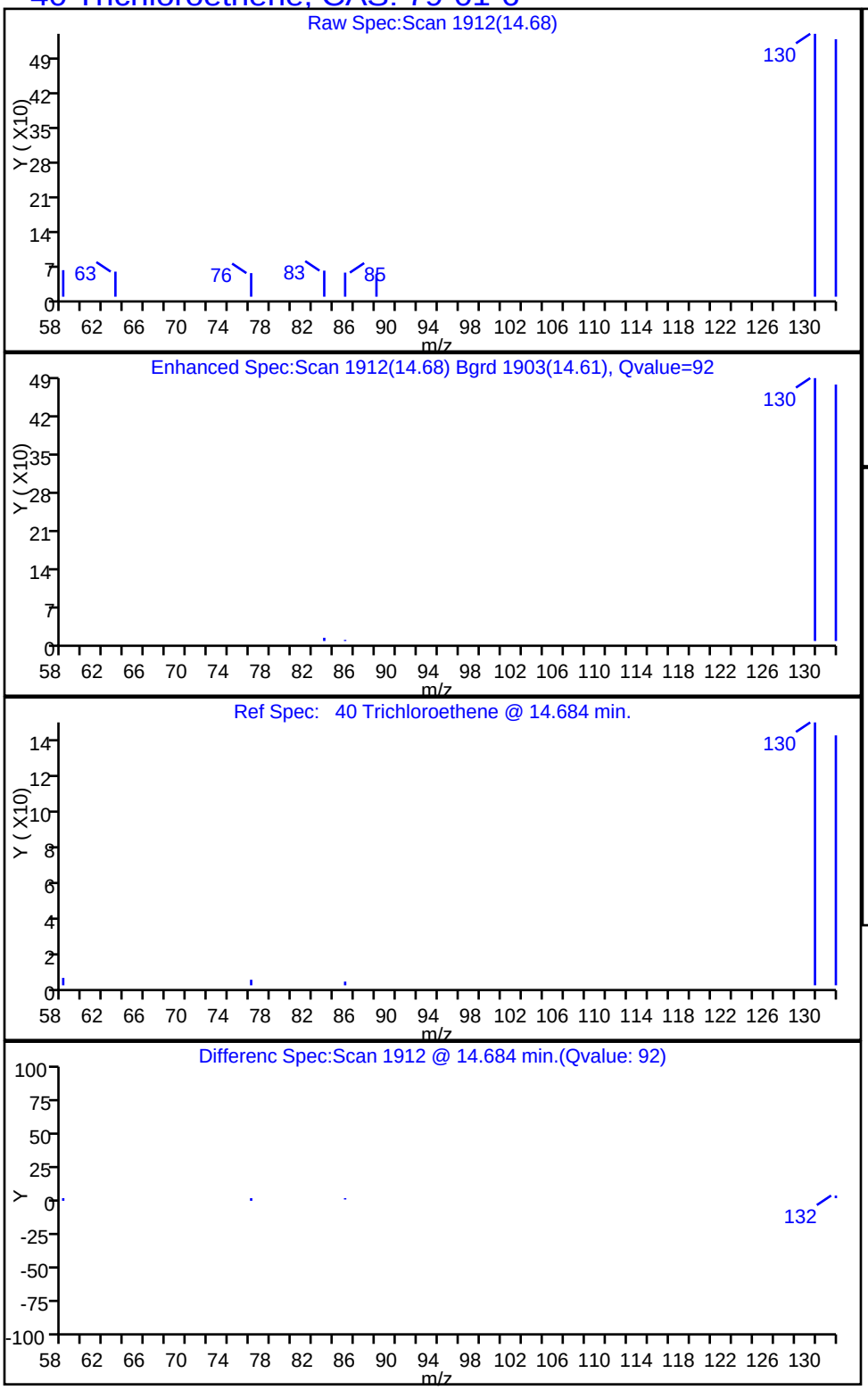


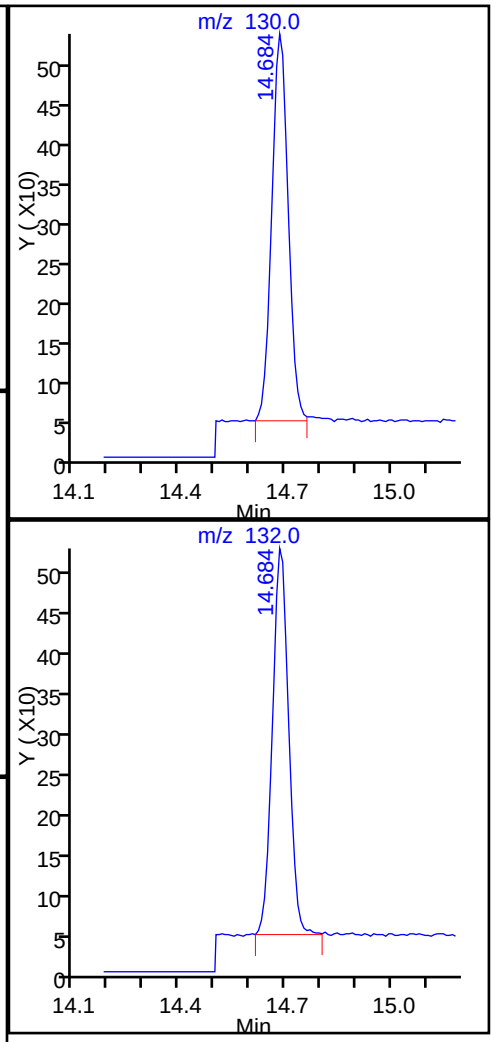
Report Date: 13-May-2015 16:55:29 Chrom Revision: 2.2 05-May-2015 11:39:10

TestAmerica Sacramento

Data File:	\\SACCHROM\ChromData\ATMS5\20150512-21744.b\MS5051115.D				
Injection Date:	12-May-2015 00:42:30	Instrument ID:	ATMS5		
Lims ID:	320-12924-A-8	Lab Sample ID:	320-12924-8		
Client ID:	J6038-IA3-050615				
Operator ID:	AO	ALS Bottle#:	9	Worklist Smp#:	14
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	TO15 SIM	Limit Group:	MSA - TO-15_SIM_ICAL		
Column:		Detector	MS SCAN		

40 Trichloroethene, CAS: 79-01-6





Manual Integration/User Assign Peak Report

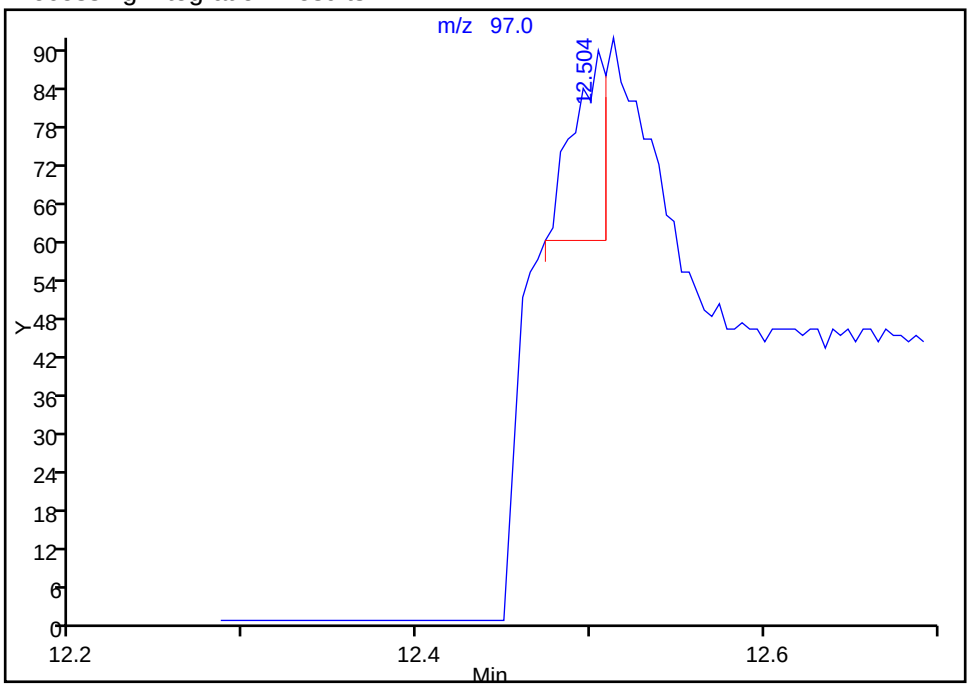
TestAmerica Sacramento

Data File:	\\SACCHROM\ChromData\ATMS5\20150512-21744.b\MS5051115.D				
Injection Date:	12-May-2015 00:42:30	Instrument ID:	ATMS5		
Lims ID:	320-12924-A-8	Lab Sample ID:	320-12924-8		
Client ID:	J6038-IA3-050615				
Operator ID:	AO	ALS Bottle#:	9	Worklist Smp#:	14
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	TO15 SIM	Limit Group:	MSA - TO-15_SIM_ICAL		
Column:		Detector	MS SCAN		

34 1,1,1-Trichloroethane, CAS: 71-55-6

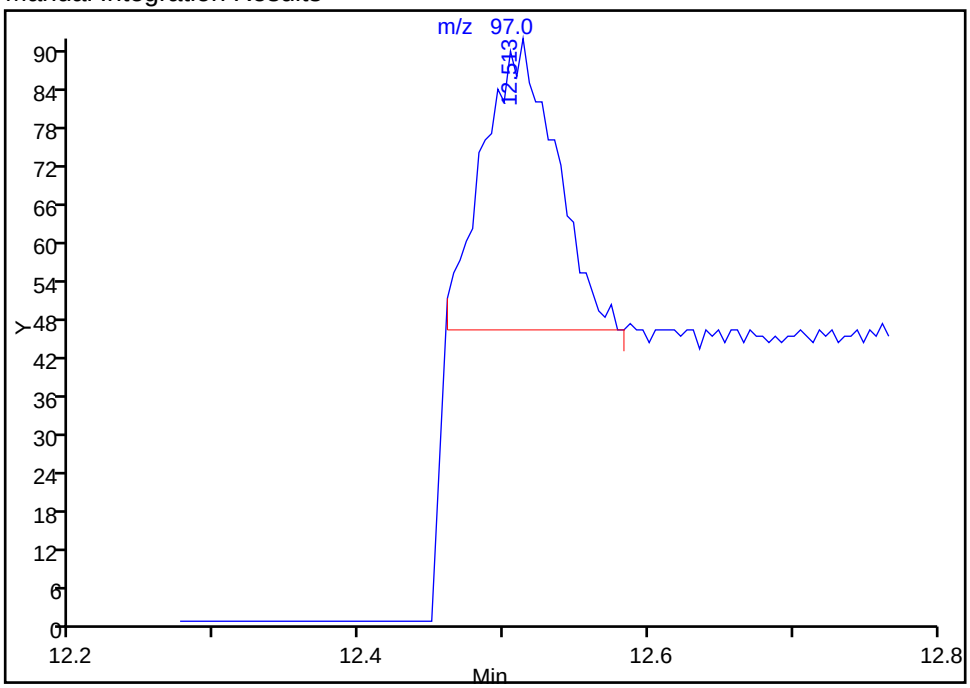
Processing Integration Results

RT: 12.50
Area: 40
Amount: 0.000812
Amount Units: ppb v/v



Manual Integration Results

RT: 12.51
Area: 161
Amount: 0.003270
Amount Units: ppb v/v



Reviewer: ortizam, 13-May-2015 16:54:05
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

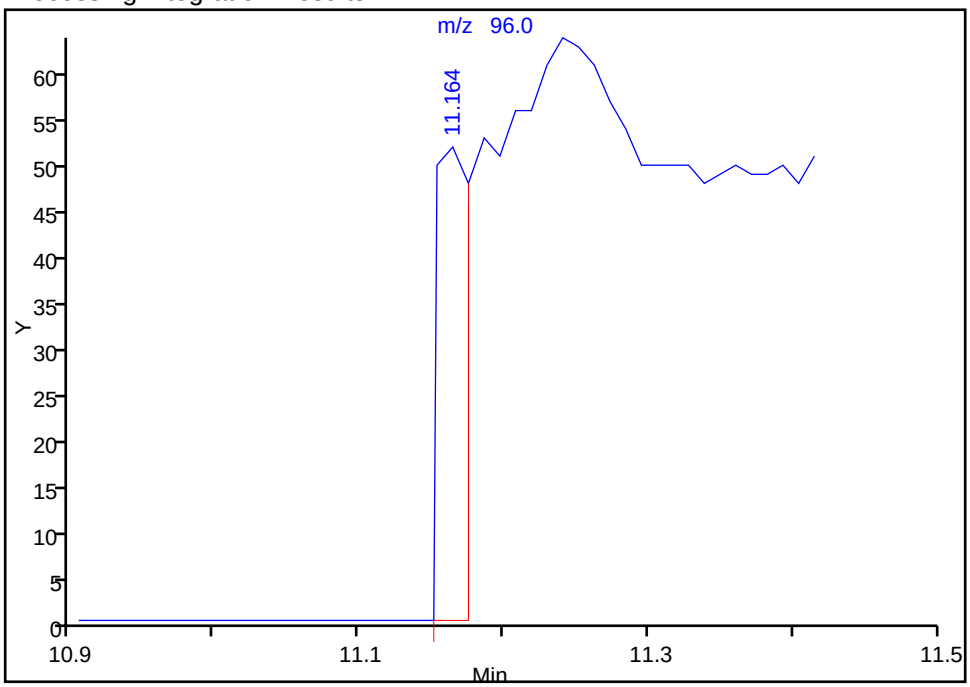
TestAmerica Sacramento

Data File:	\\SACCHROM\ChromData\ATMS5\20150512-21744.b\MS5051115.D				
Injection Date:	12-May-2015 00:42:30	Instrument ID:	ATMS5		
Lims ID:	320-12924-A-8	Lab Sample ID:	320-12924-8		
Client ID:	J6038-IA3-050615				
Operator ID:	AO	ALS Bottle#:	9	Worklist Smp#:	14
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	TO15 SIM	Limit Group:	MSA - TO-15_SIM_ICAL		
Column:		Detector	MS SCAN		

30 cis-1,2-Dichloroethene, CAS: 156-59-2

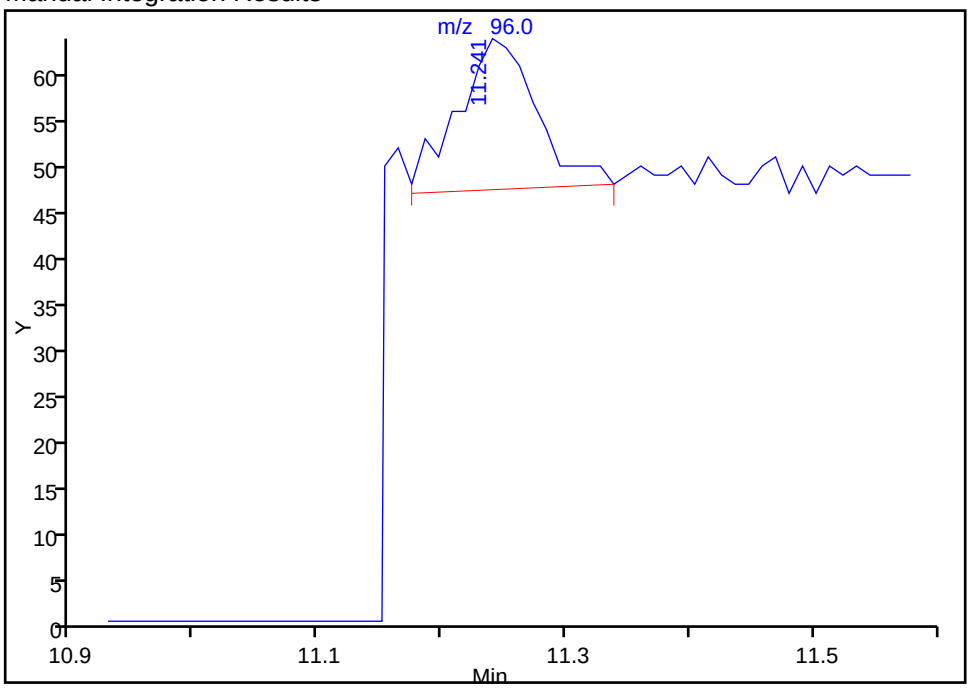
Processing Integration Results

RT: 11.16
Area: 69
Amount: 0.002379
Amount Units: ppb v/v



Manual Integration Results

RT: 11.24
Area: 73
Amount: 0.002517
Amount Units: ppb v/v



Reviewer: ortizam, 13-May-2015 16:54:05
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento | Job No.: 320-12924-1
SDG No.:
Client Sample ID: J6038-IA4-050615 | Lab Sample ID: 320-12924-9
Matrix: Air | Lab File ID: MS5051116.D
Analysis Method: TO-15 SIM | Date Collected: 05/06/2015 18:08
Sample wt/vol: 900(mL) | Date Analyzed: 05/12/2015 01:40
Soil Aliquot Vol: | Dilution Factor: 1
Soil Extract Vol.: | GC Column: RTX-Volatiles ID: 0.32(mm)
% Moisture: | Level: (low/med) Low
Analysis Batch No.: 73719 | Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	133.41	ND		0.020	0.0050
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.050	0.0050
75-34-3	1,1-Dichloroethane	98.96	ND		0.020	0.0050
75-35-4	1,1-Dichloroethene	96.94	ND		0.020	0.0050
95-50-1	1,2-Dichlorobenzene	147.00	0.015	J	0.050	0.010
107-06-2	1,2-Dichloroethane	98.96	0.014	J	0.020	0.0050
106-46-7	1,4-Dichlorobenzene	147.00	ND		0.10	0.010
108-90-7	Chlorobenzene	112.56	ND		0.020	0.010
67-66-3	Chloroform	119.38	0.023		0.020	0.0050
156-59-2	cis-1,2-Dichloroethene	96.94	0.0069	J	0.020	0.0050
100-41-4	Ethylbenzene	106.17	0.13		0.020	0.010
75-69-4	Freon 11	137.37	0.20		0.045	0.010
76-13-1	Freon 113	187.38	0.062		0.030	0.0050
75-71-8	Freon 12	120.91	0.43		0.020	0.0050
179601-23-1	m,p-Xylene	106.17	0.52		0.040	0.020
75-09-2	Methylene Chloride	84.93	1.3		0.20	0.10
95-47-6	o-Xylene	106.17	0.21		0.020	0.010
127-18-4	Tetrachloroethene	165.83	0.012	J	0.020	0.010
108-88-3	Toluene	92.14	1.4		0.020	0.010
156-60-5	trans-1,2-Dichloroethene	96.94	ND		0.020	0.0050
79-01-6	Trichloroethene	131.39	0.10		0.020	0.0050
75-01-4	Vinyl chloride	62.50	ND		0.020	0.010

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	104		70-130
17060-07-0	1,2-Dichloroethane-d4 (Surr)	96		70-130
2037-26-5	Toluene-d8 (Surr)	100		70-130

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento | Job No.: 320-12924-1

SDG No.:

Client Sample ID: J6038-IA4-050615 | Lab Sample ID: 320-12924-9

Matrix: Air | Lab File ID: MS5051116.D

Analysis Method: TO-15 SIM | Date Collected: 05/06/2015 18:08

Sample wt/vol: 900(mL) | Date Analyzed: 05/12/2015 01:40

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: RTX-Volatiles ID: 0.32(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 73719 | Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	133.41	ND		0.11	0.027
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.27	0.027
75-34-3	1,1-Dichloroethane	98.96	ND		0.081	0.020
75-35-4	1,1-Dichloroethene	96.94	ND		0.079	0.020
95-50-1	1,2-Dichlorobenzene	147.00	0.088	J	0.30	0.060
107-06-2	1,2-Dichloroethane	98.96	0.058	J	0.081	0.020
106-46-7	1,4-Dichlorobenzene	147.00	ND		0.60	0.060
108-90-7	Chlorobenzene	112.56	ND		0.092	0.046
67-66-3	Chloroform	119.38	0.11		0.098	0.024
156-59-2	cis-1,2-Dichloroethene	96.94	0.028	J	0.079	0.020
100-41-4	Ethylbenzene	106.17	0.56		0.087	0.043
75-69-4	Freon 11	137.37	1.1		0.25	0.056
76-13-1	Freon 113	187.38	0.47		0.23	0.038
75-71-8	Freon 12	120.91	2.1		0.099	0.025
179601-23-1	m,p-Xylene	106.17	2.3		0.17	0.087
75-09-2	Methylene Chloride	84.93	4.5		0.69	0.35
95-47-6	o-Xylene	106.17	0.90		0.087	0.043
127-18-4	Tetrachloroethene	165.83	0.080	J	0.14	0.068
108-88-3	Toluene	92.14	5.1		0.075	0.038
156-60-5	trans-1,2-Dichloroethene	96.94	ND		0.079	0.020
79-01-6	Trichloroethene	131.39	0.54		0.11	0.027
75-01-4	Vinyl chloride	62.50	ND		0.051	0.026

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	104		70-130
17060-07-0	1,2-Dichloroethane-d4 (Surr)	96		70-130
2037-26-5	Toluene-d8 (Surr)	100		70-130

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\SACCHROM\ChromData\ATMS5\20150512-21744.b\MS5051116.D
Lims ID: 320-12924-A-9 Lab Sample ID: 320-12924-9
Client ID: J6038-IA4-050615
Sample Type: Client
Inject. Date: 12-May-2015 01:40:30 ALS Bottle#: 10 Worklist Smp#: 15
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 320-12924-A-9
Misc. Info.: 900ML900ML
Operator ID: AO Instrument ID: ATMS5

Method: \\SACCHROM\ChromData\ATMS5\20150512-21744.b\TO15 SIM.m
Limit Group: MSA - TO-15_SIM_ICAL
Last Update: 12-May-2015 12:35:18 Calib Date: 26-Mar-2015 03:17:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\SACCHROM\ChromData\ATMS5\20150326-20538.b\MS5032518.D

Column 1 : Det: MS SCAN
Process Host: XAWRK010

First Level Reviewer: ortizam Date: 12-May-2015 12:39:25

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	130	11.851	11.850	0.001	100	37547	2.00	
* 2 1,4-Difluorobenzene	114	13.941	13.941	0.000	100	178192	2.00	
* 3 Chlorobenzene-d5 (IS)	117	20.508	20.508	0.000	100	165274	2.00	
$ 4 1,2-Dichloroethane-d4 (Sur	65	13.002	13.002	0.000	100	40172	1.91	
$ 5 Toluene-d8 (Surr)	100	17.266	17.266	0.000	100	122258	1.99	
$ 6 4-Bromofluorobenzene (Surr	95	23.040	23.040	0.000	99	96591	2.08	
8 Dichlorodifluoromethane	85	4.181	4.181	0.000	100	24063	0.4251	
11 Vinyl chloride	62	4.808	4.817	-0.009	89	111	0.005631	
15 Trichlorofluoromethane	101	6.418	6.418	0.000	100	10819	0.2003	
19 1,1,2-Trichloro-1,2,2-trif	101	7.412	7.412	0.000	98	3198	0.0616	
22 Methylene Chloride	49	8.483	8.490	-0.007	99	33944	1.31	
30 cis-1,2-Dichloroethene	96	11.241	11.240	0.001	56	201	0.006950	
32 Chloroform	83	11.589	11.589	0.000	97	1077	0.0226	
37 1,2-Dichloroethane	62	13.193	13.192	0.001	94	458	0.0144	
40 Trichloroethene	130	14.684	14.683	0.001	97	4236	0.1008	
46 Toluene	91	17.439	17.439	0.000	99	184296	1.37	
50 Tetrachloroethene	166	18.940	18.939	0.001	99	647	0.0117	
53 Chlorobenzene	112	20.591	20.584	0.007	1	680	0.005841	
54 Ethylbenzene	91	20.773	20.773	0.000	89	24235	0.1280	
55 m-Xylene & p-Xylene	91	20.955	20.955	0.000	55	74650	0.5207	
56 o-Xylene	91	21.842	21.846	-0.004	30	31075	0.2075	
65 1,4-Dichlorobenzene	146	25.529	25.530	-0.001	97	423	0.003721	7
67 1,2-Dichlorobenzene	146	26.246	26.247	-0.001	1	1717	0.0147	

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

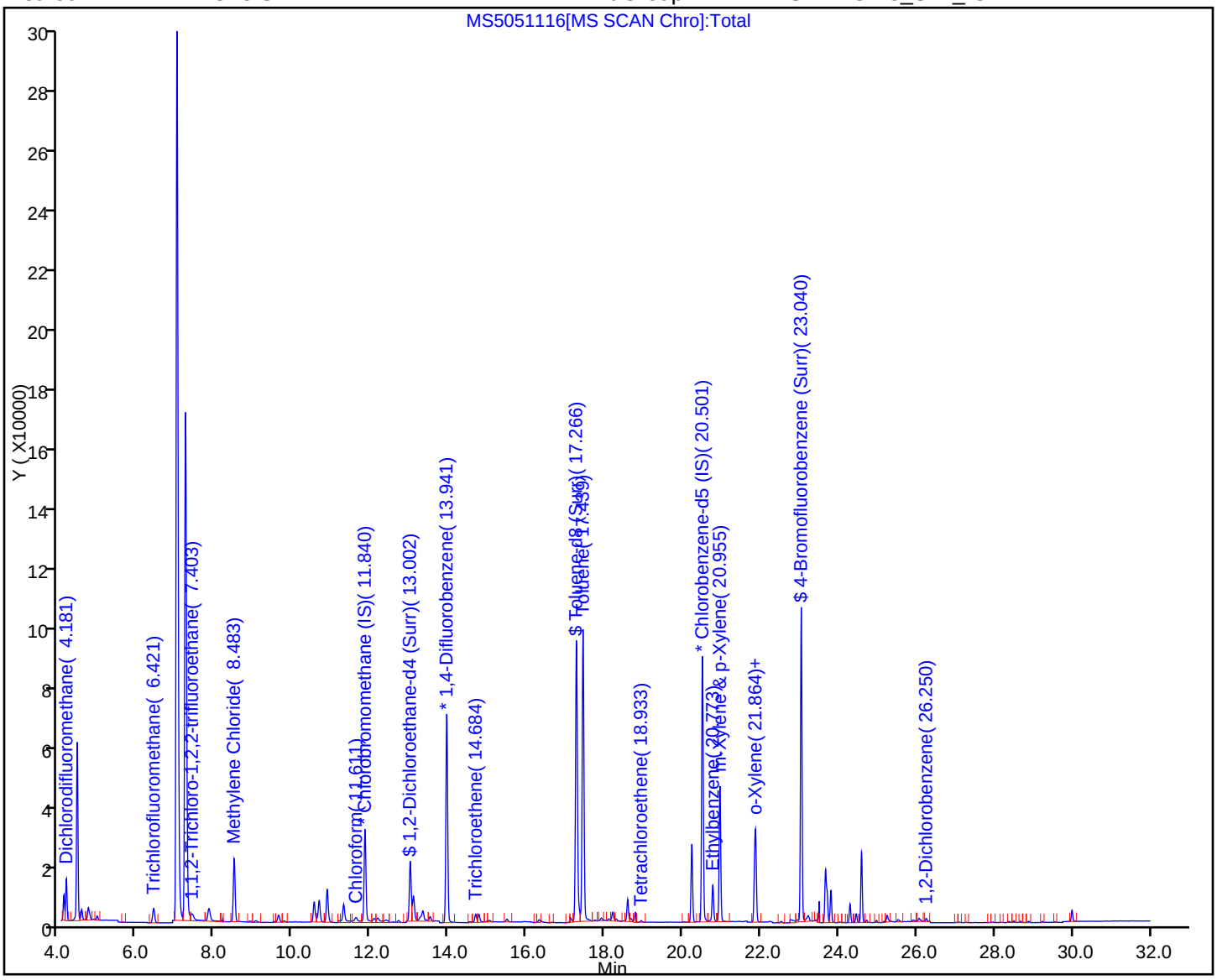
Reagents:

VASUISIM_00172	Amount Added: 50.00	Units: mL	Run Reagent

Report Date: 12-May-2015 12:39:25 Chrom Revision: 2.2 05-May-2015 11:39:10

TestAmerica Sacramento

Data File:	\\SACCHROM\ChromData\ATMS5\20150512-21744.b\MS5051116.D				
Injection Date:	12-May-2015 01:40:30	Instrument ID:	ATMS5		
Lims ID:	320-12924-A-9	Lab Sample ID:	320-12924-9		
Client ID:	J6038-IA4-050615				
Operator ID:	AO	ALS Bottle#:	10	Worklist Smp#:	15
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	TO15 SIM	Limit Group:	MSA - TO-15_SIM_ICAL		

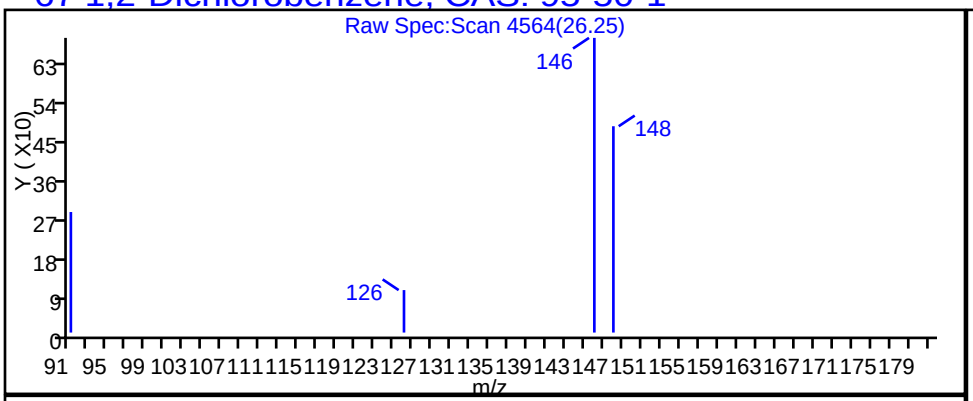


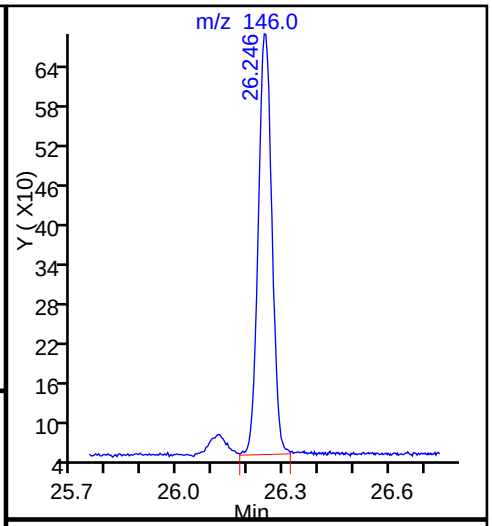
Report Date: 12-May-2015 12:39:26 Chrom Revision: 2.2 05-May-2015 11:39:10

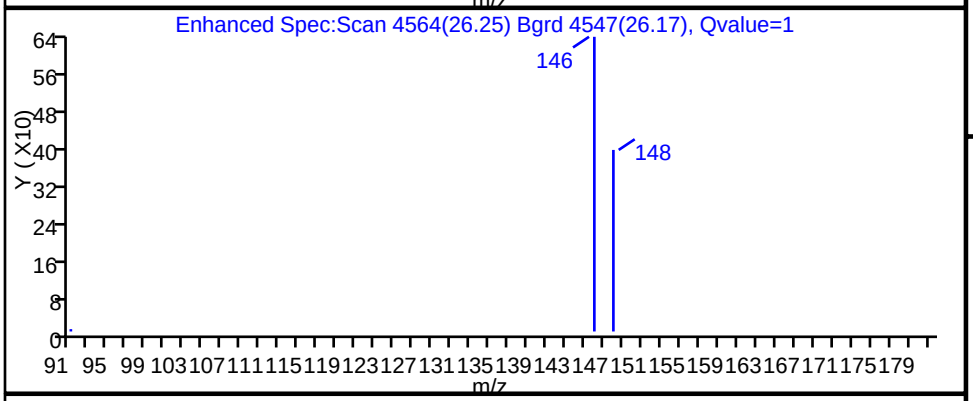
TestAmerica Sacramento

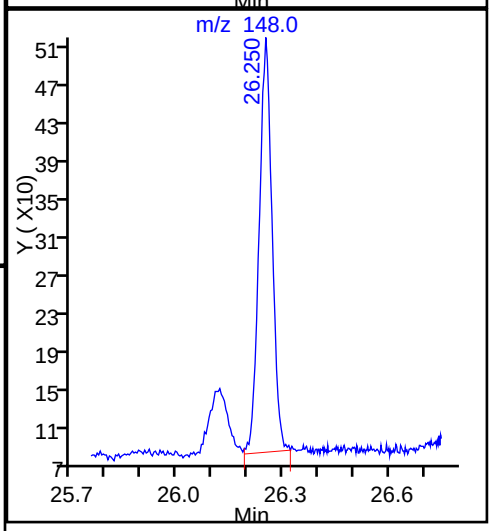
Data File:	\\SACCHROM\ChromData\ATMS5\20150512-21744.b\MS5051116.D				
Injection Date:	12-May-2015 01:40:30	Instrument ID:	ATMS5		
Lims ID:	320-12924-A-9	Lab Sample ID:	320-12924-9		
Client ID:	J6038-IA4-050615				
Operator ID:	AO	ALS Bottle#:	10	Worklist Smp#:	15
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	TO15 SIM	Limit Group:	MSA - TO-15_SIM_ICAL		
Column:		Detector	MS SCAN		

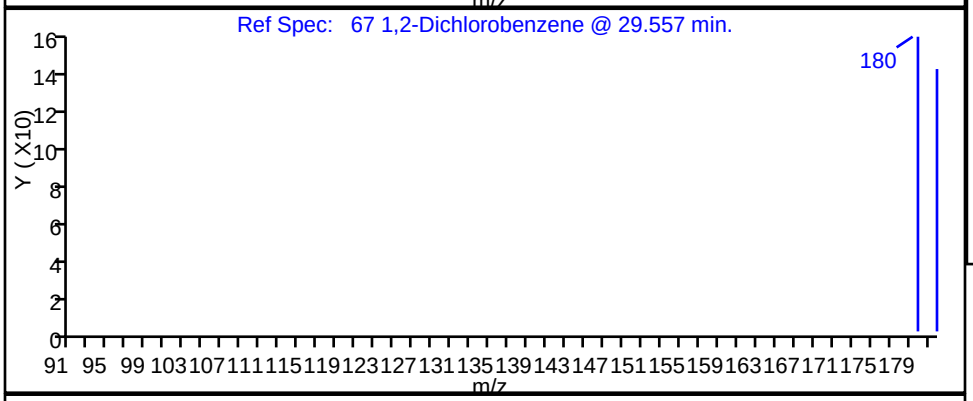
67 1,2-Dichlorobenzene, CAS: 95-50-1

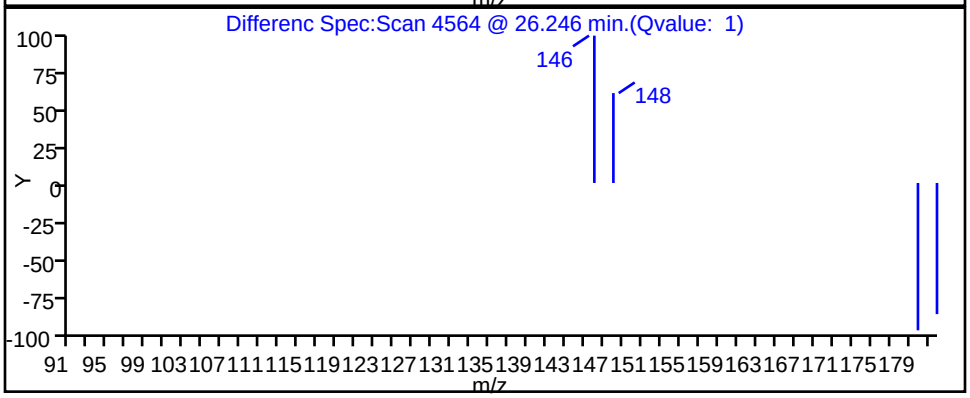










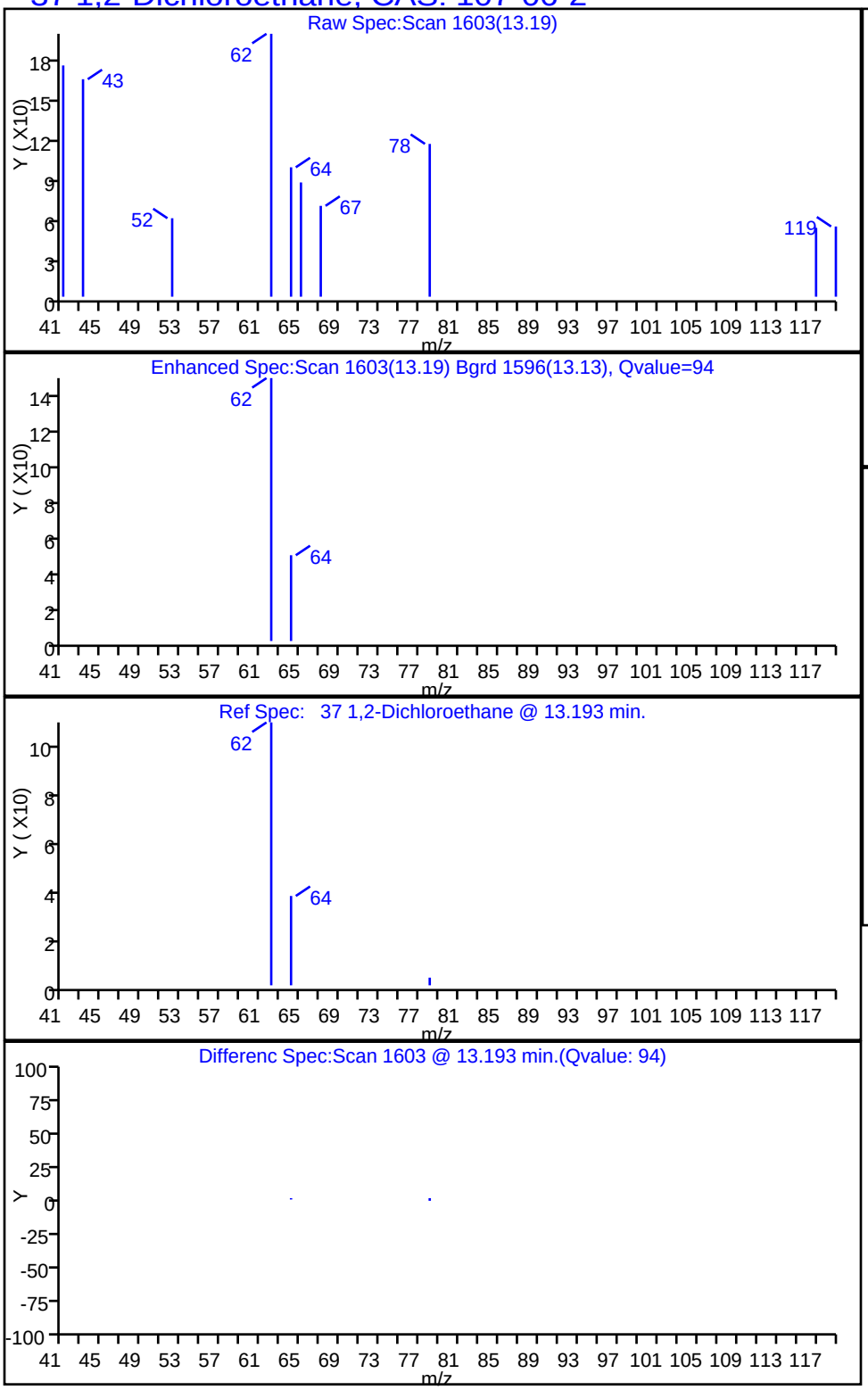


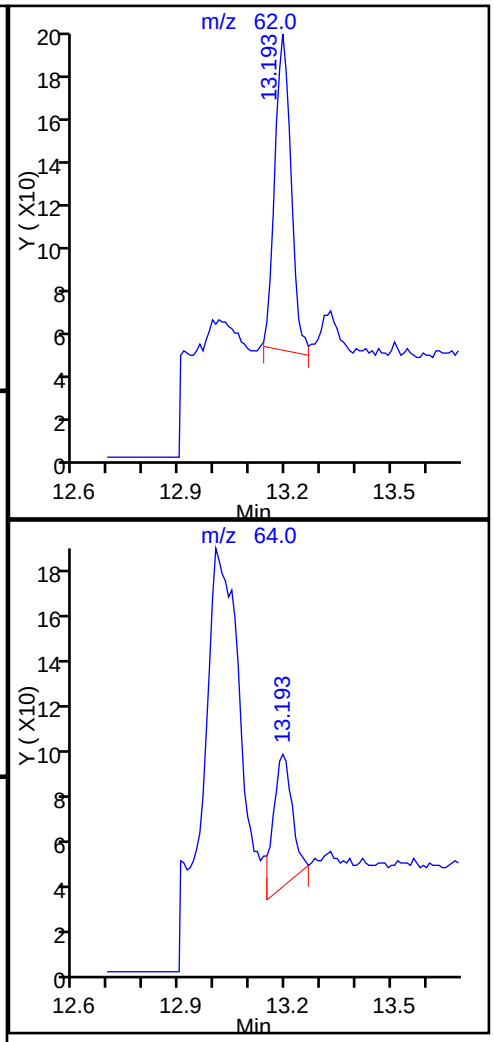
Report Date: 12-May-2015 12:39:26 Chrom Revision: 2.2 05-May-2015 11:39:10

TestAmerica Sacramento

Data File:	\\SACCHROM\ChromData\ATMS5\20150512-21744.b\MS5051116.D				
Injection Date:	12-May-2015 01:40:30	Instrument ID:	ATMS5		
Lims ID:	320-12924-A-9	Lab Sample ID:	320-12924-9		
Client ID:	J6038-IA4-050615				
Operator ID:	AO	ALS Bottle#:	10	Worklist Smp#:	15
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	TO15 SIM	Limit Group:	MSA - TO-15_SIM_ICAL		
Column:		Detector	MS SCAN		

37 1,2-Dichloroethane, CAS: 107-06-2



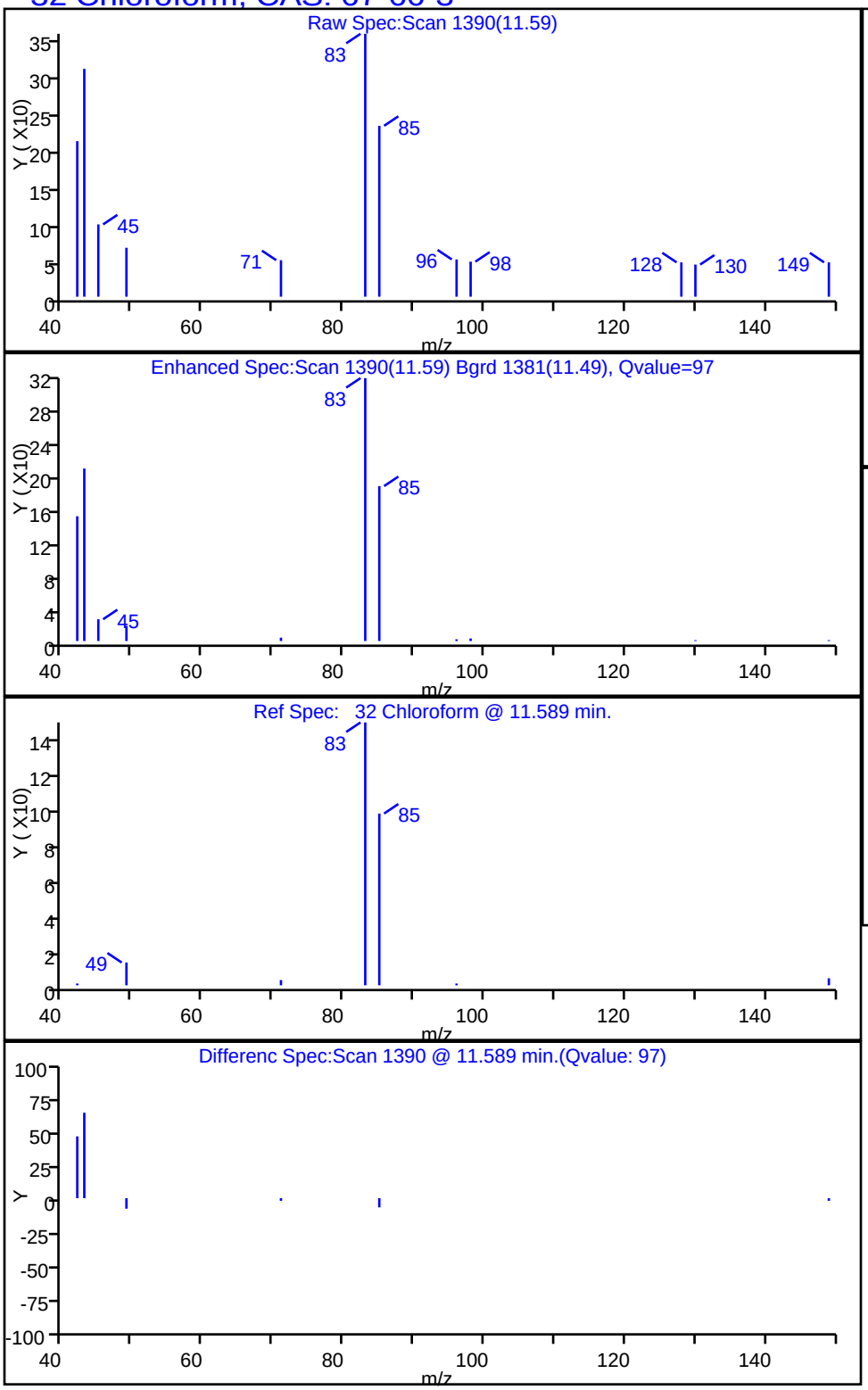


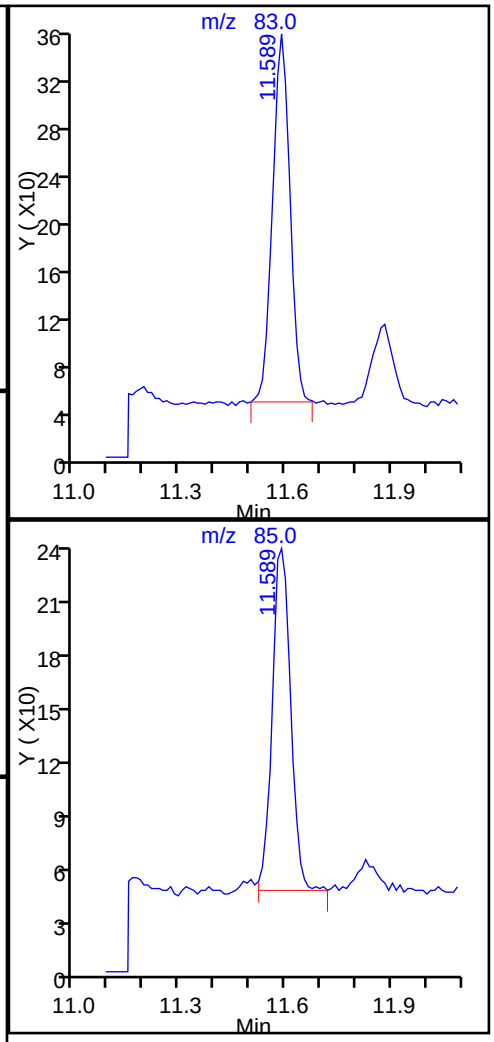
Report Date: 12-May-2015 12:39:25 Chrom Revision: 2.2 05-May-2015 11:39:10

TestAmerica Sacramento

Data File:	\\SACCHROM\ChromData\ATMS5\20150512-21744.b\MS5051116.D				
Injection Date:	12-May-2015 01:40:30	Instrument ID:	ATMS5		
Lims ID:	320-12924-A-9	Lab Sample ID:	320-12924-9		
Client ID:	J6038-IA4-050615				
Operator ID:	AO	ALS Bottle#:	10	Worklist Smp#:	15
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	TO15 SIM	Limit Group:	MSA - TO-15_SIM_ICAL		
Column:		Detector	MS SCAN		

32 Chloroform, CAS: 67-66-3



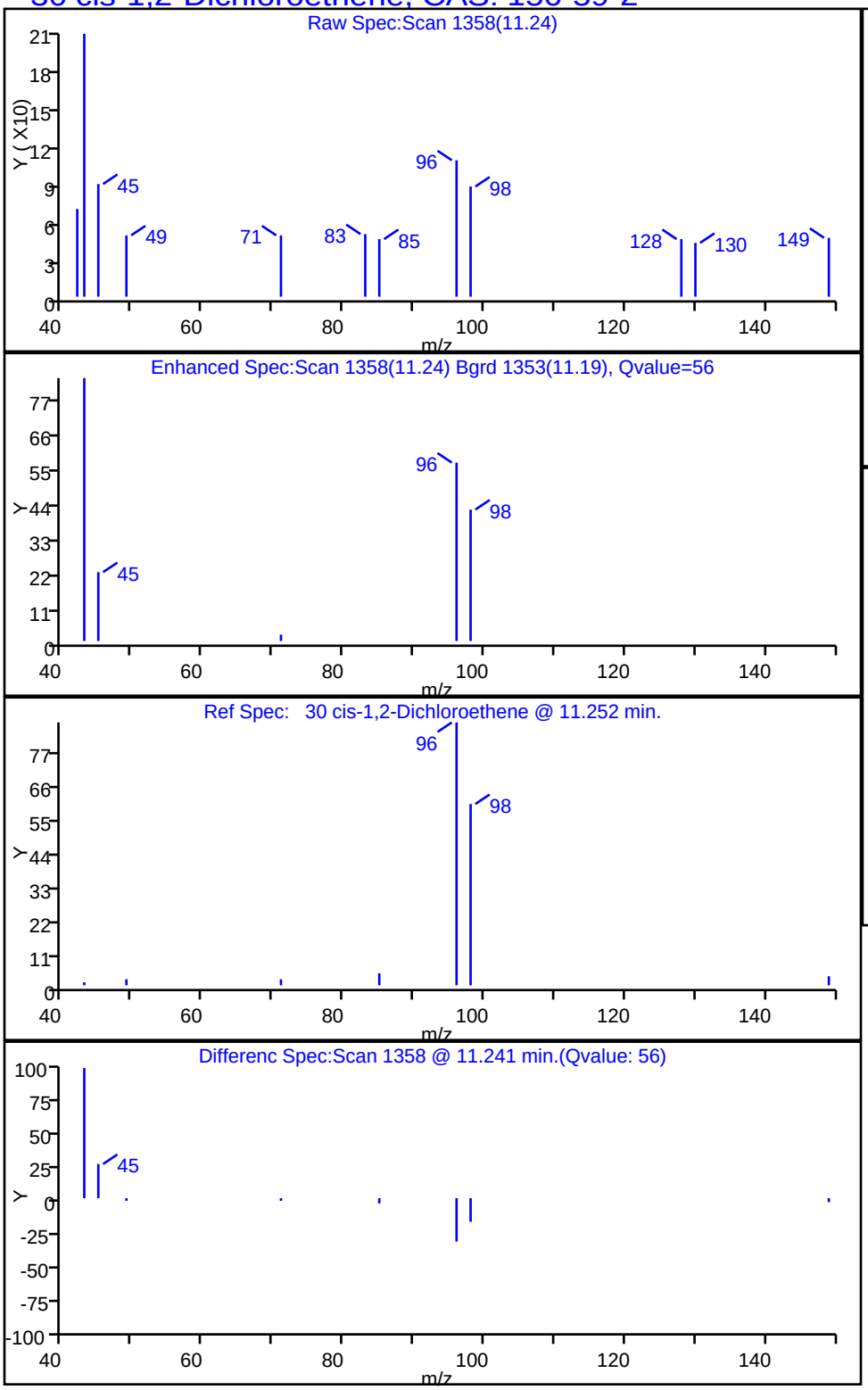


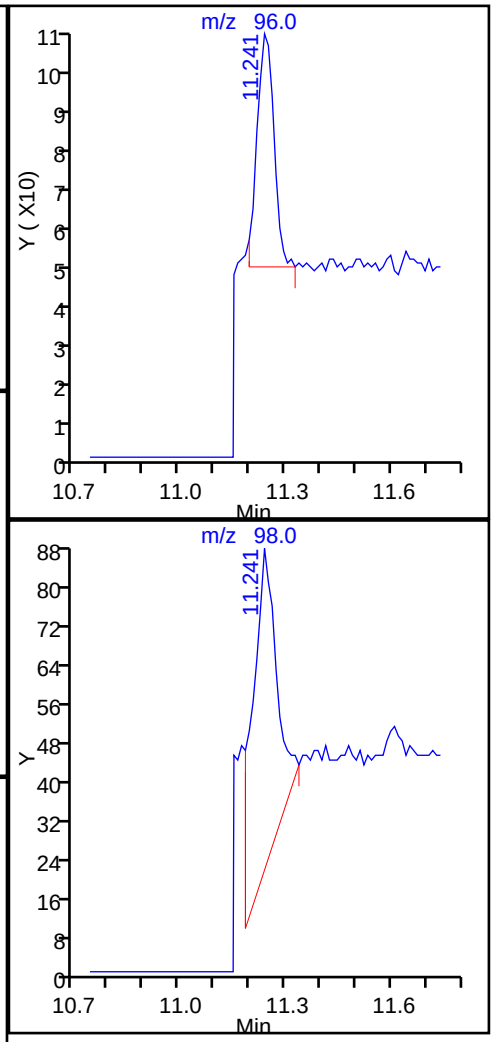
Report Date: 12-May-2015 12:39:25 Chrom Revision: 2.2 05-May-2015 11:39:10

TestAmerica Sacramento

Data File:	\\SACCHROM\ChromData\ATMS5\20150512-21744.b\MS5051116.D				
Injection Date:	12-May-2015 01:40:30	Instrument ID:	ATMS5		
Lims ID:	320-12924-A-9	Lab Sample ID:	320-12924-9		
Client ID:	J6038-IA4-050615				
Operator ID:	AO	ALS Bottle#:	10	Worklist Smp#:	15
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	TO15 SIM	Limit Group:	MSA - TO-15_SIM_ICAL		
Column:		Detector	MS SCAN		

30 cis-1,2-Dichloroethene, CAS: 156-59-2





Report Date: 12-May-2015 12:39:26 Chrom Revision: 2.2 05-May-2015 11:39:10

TestAmerica Sacramento

Data File:	\\SACCHROM\ChromData\ATMS5\20150512-21744.b\MS5051116.D				
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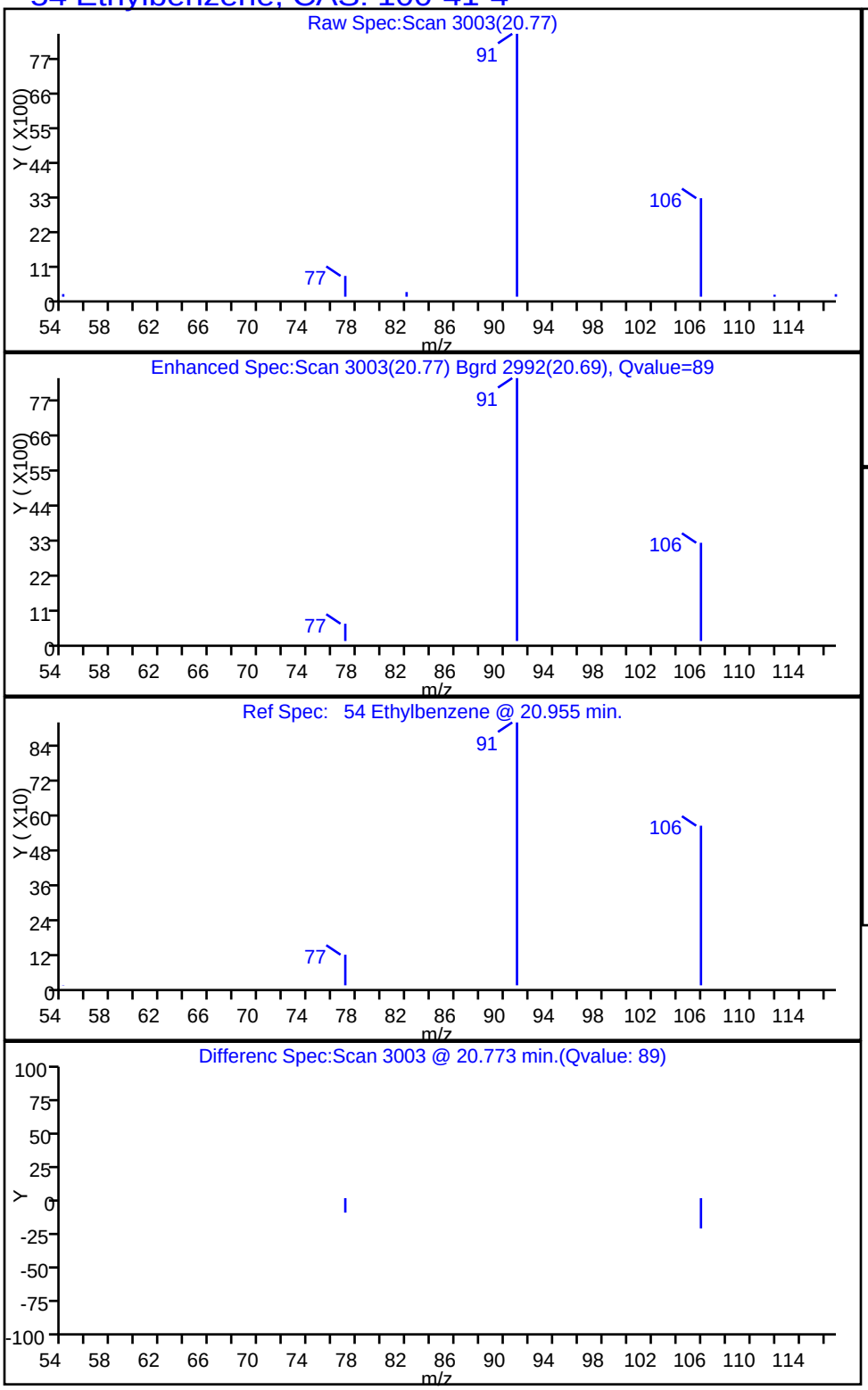
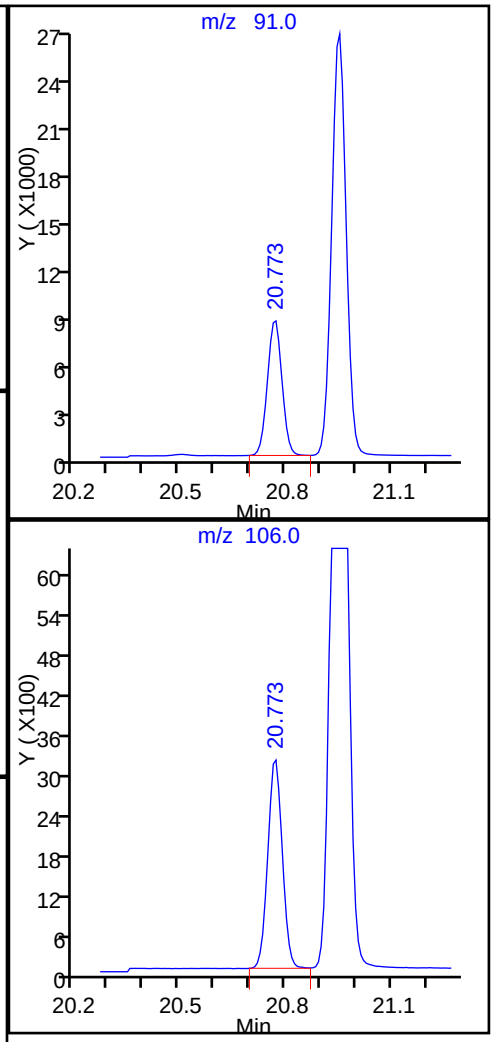
Lims ID:	320-12924-A-9	Lab Sample ID:	320-12924-9		
Client ID:	J6038-IA4-050615				
Operator ID:	AO	ALS Bottle#:	10	Worklist Smp#:	15
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	TO15 SIM	Limit Group:	MSA - TO-15_SIM_ICAL		
Column:		Detector	MS SCAN		

54 Ethylbenzene, CAS: 100-41-4





Report Date: 12-May-2015 12:39:25 Chrom Revision: 2.2 05-May-2015 11:39:10

TestAmerica Sacramento

Data File:	\\SACCHROM\ChromData\ATMS5\20150512-21744.b\MS5051116.D				
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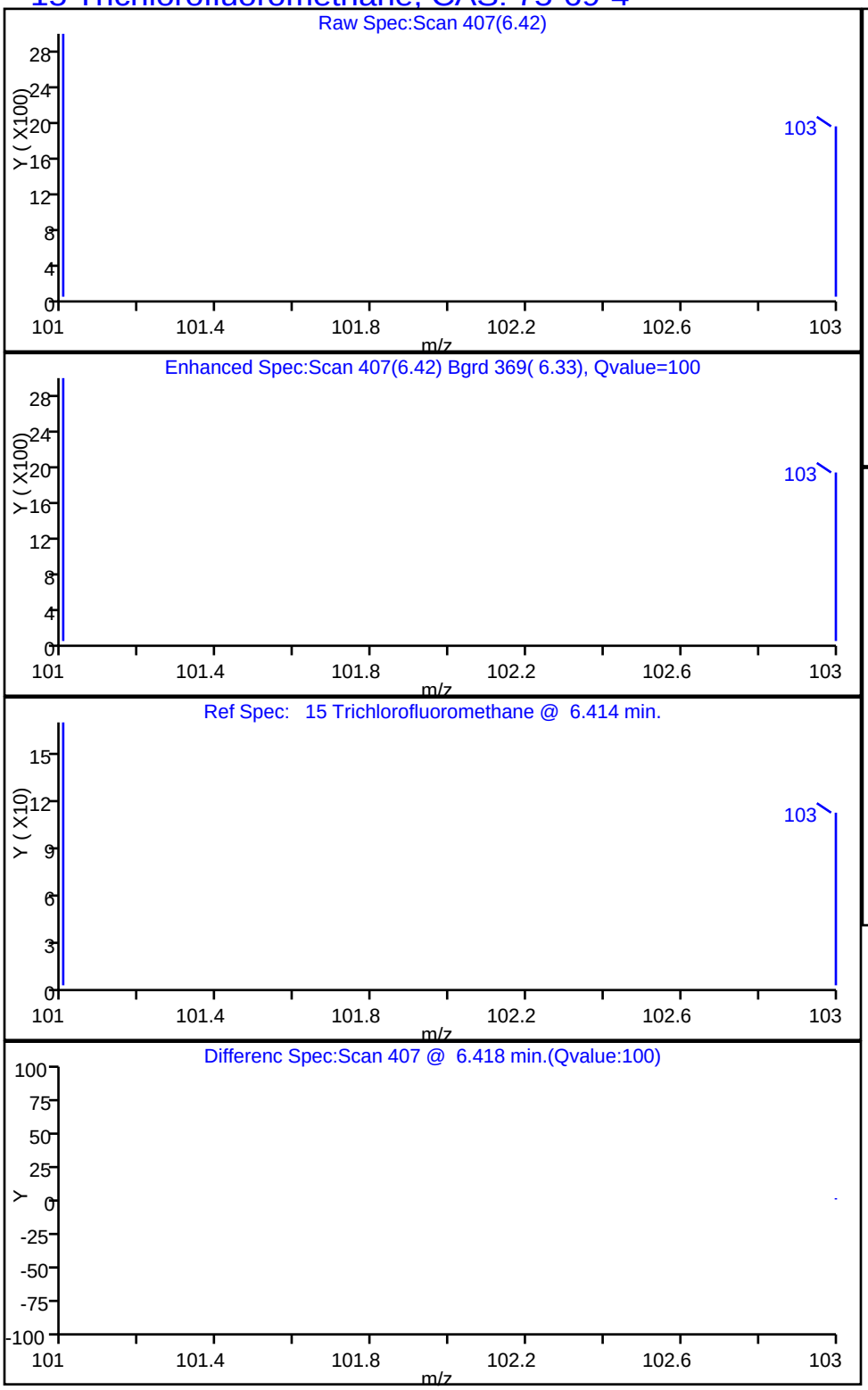
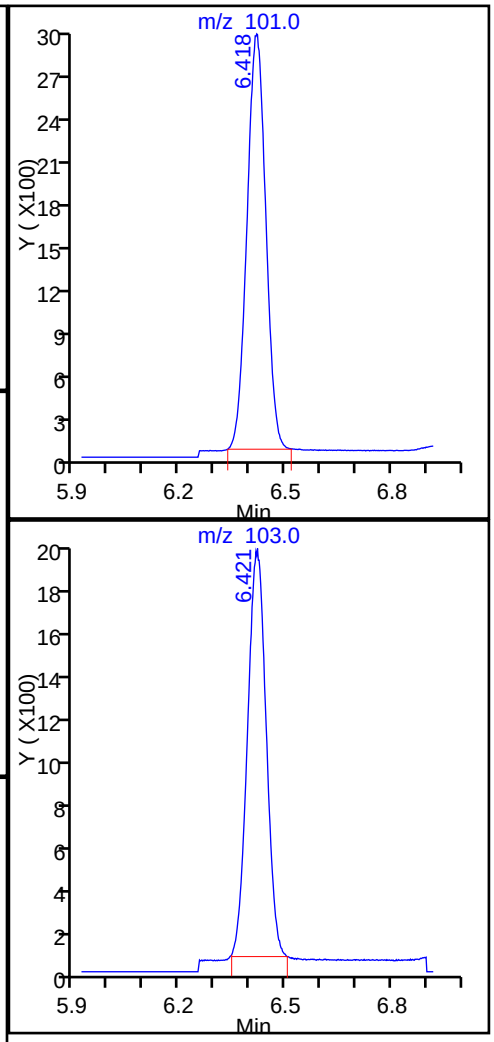
Lims ID:	320-12924-A-9	Lab Sample ID:	320-12924-9		
Client ID:	J6038-IA4-050615				
Operator ID:	AO	ALS Bottle#:	10	Worklist Smp#:	15
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	TO15 SIM	Limit Group:	MSA - TO-15_SIM_ICAL		
Column:		Detector	MS SCAN		

15 Trichlorofluoromethane, CAS: 75-69-4



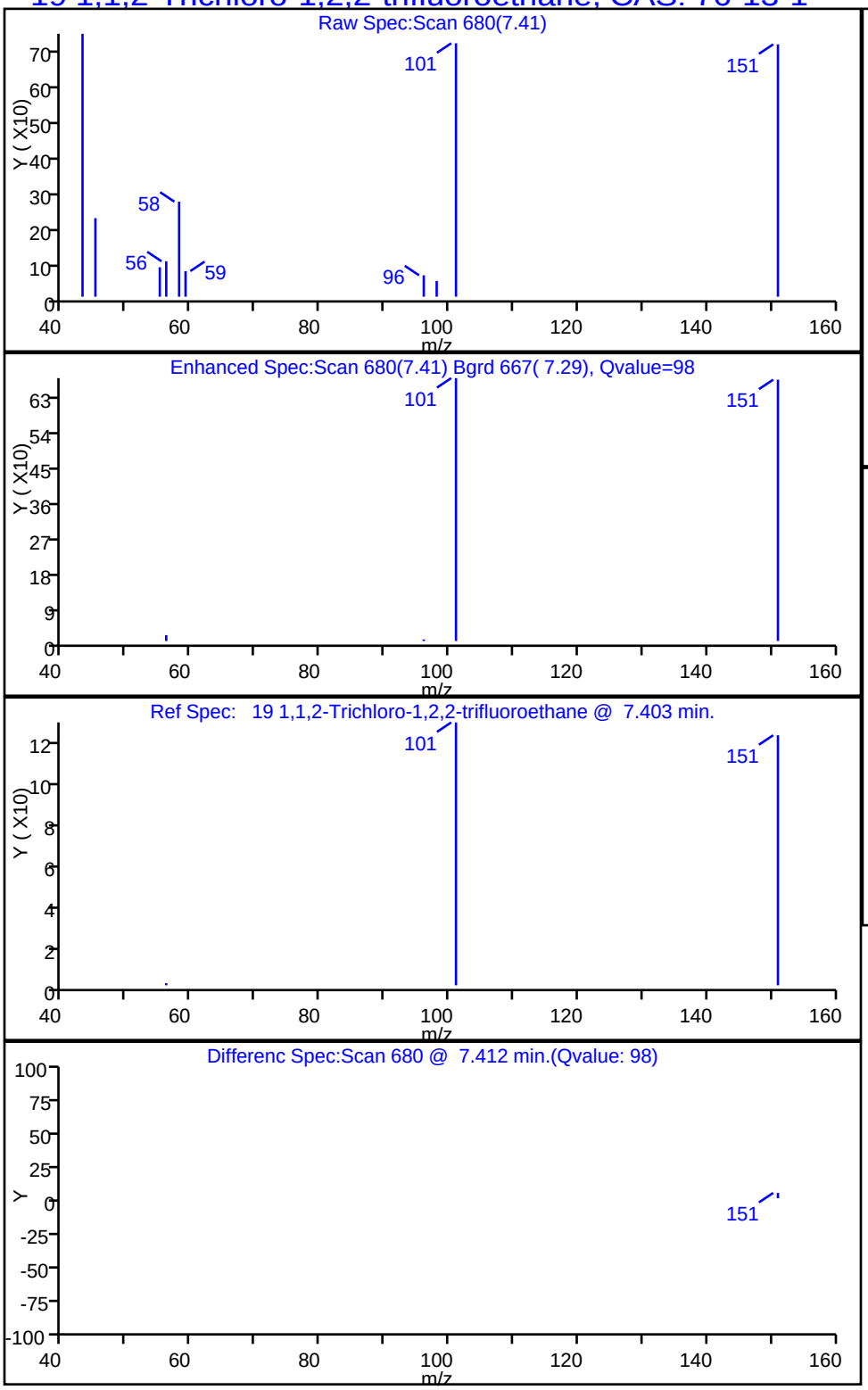


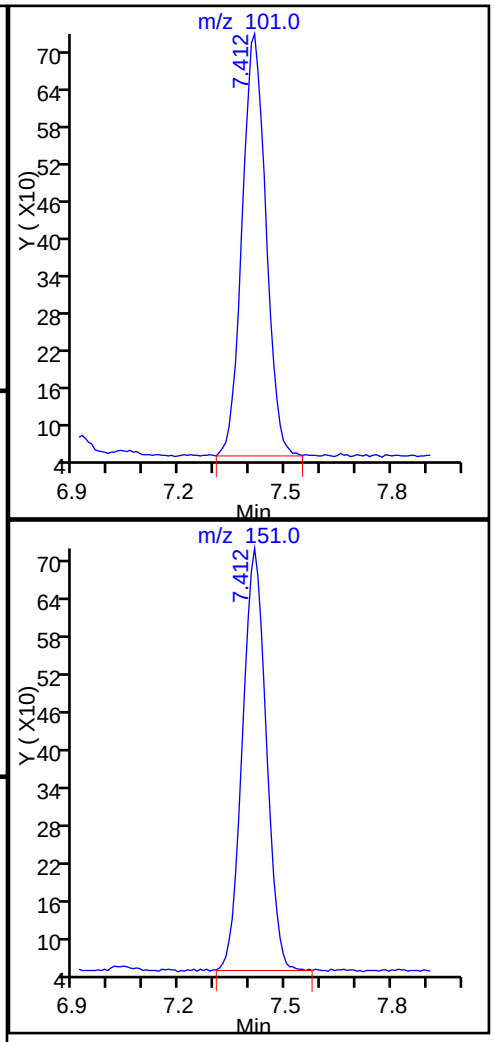
Report Date: 12-May-2015 12:39:25 Chrom Revision: 2.2 05-May-2015 11:39:10

TestAmerica Sacramento

Data File:	\\SACCHROM\ChromData\ATMS5\20150512-21744.b\MS5051116.D				
Injection Date:	12-May-2015 01:40:30	Instrument ID:	ATMS5		
Lims ID:	320-12924-A-9	Lab Sample ID:	320-12924-9		
Client ID:	J6038-IA4-050615				
Operator ID:	AO	ALS Bottle#:	10	Worklist Smp#:	15
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	TO15 SIM	Limit Group:	MSA - TO-15_SIM_ICAL		
Column:		Detector	MS SCAN		

19 1,1,2-Trichloro-1,2,2-trifluoroethane, CAS: 76-13-1



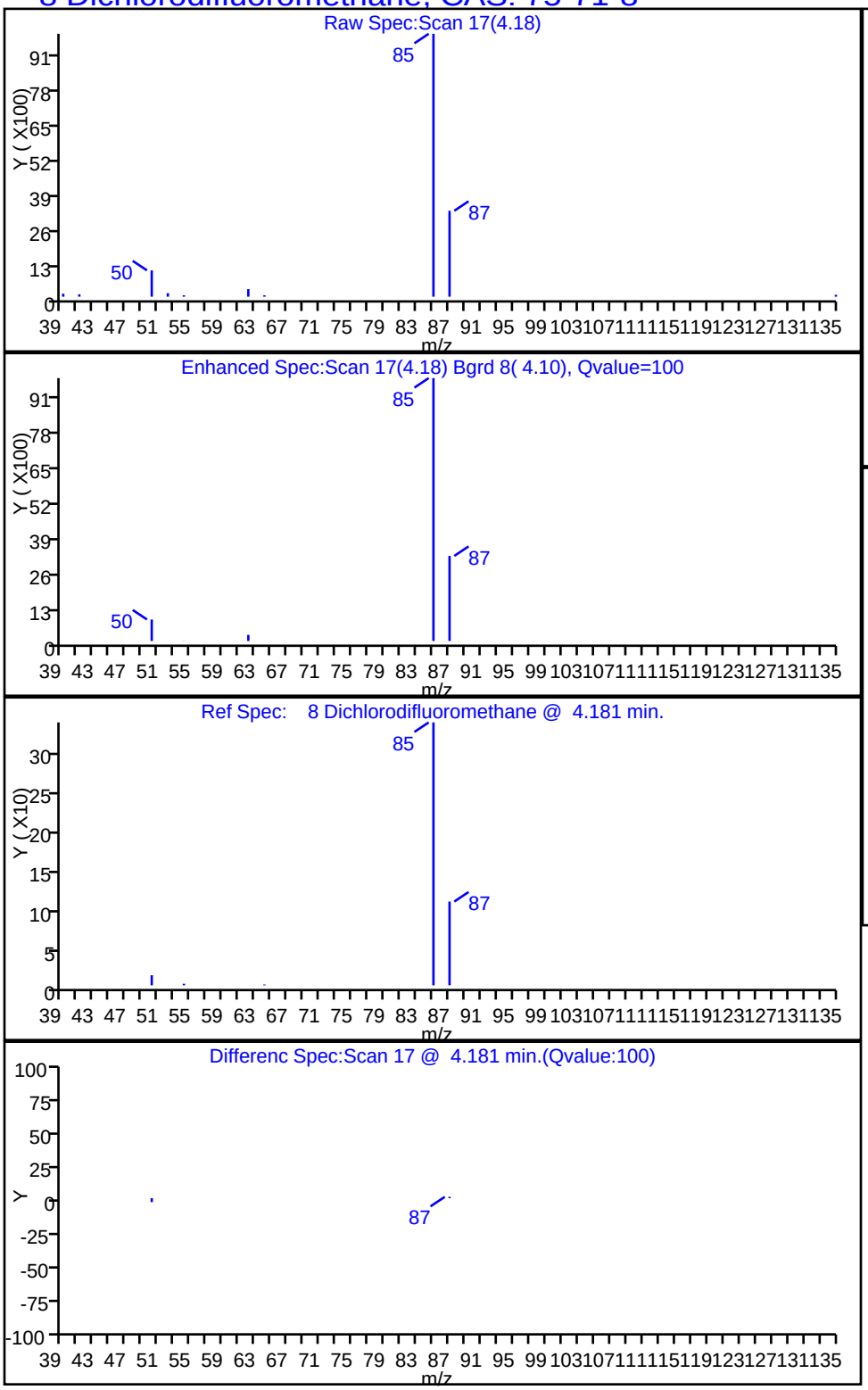


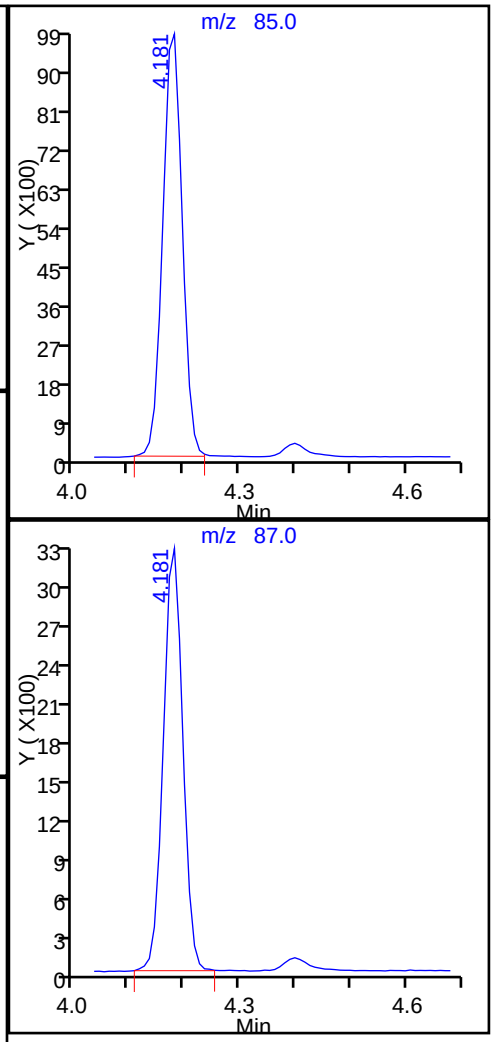
Report Date: 12-May-2015 12:39:25 Chrom Revision: 2.2 05-May-2015 11:39:10

TestAmerica Sacramento

Data File:	\\SACCHROM\ChromData\ATMS5\20150512-21744.b\MS5051116.D				
Injection Date:	12-May-2015 01:40:30	Instrument ID:	ATMS5		
Lims ID:	320-12924-A-9	Lab Sample ID:	320-12924-9		
Client ID:	J6038-IA4-050615				
Operator ID:	AO	ALS Bottle#:	10	Worklist Smp#:	15
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	TO15 SIM	Limit Group:	MSA - TO-15_SIM_ICAL		
Column:		Detector	MS SCAN		

8 Dichlorodifluoromethane, CAS: 75-71-8





Report Date: 12-May-2015 12:39:26 Chrom Revision: 2.2 05-May-2015 11:39:10

TestAmerica Sacramento

Data File:	\\SACCHROM\ChromData\ATMS5\20150512-21744.b\MS5051116.D				
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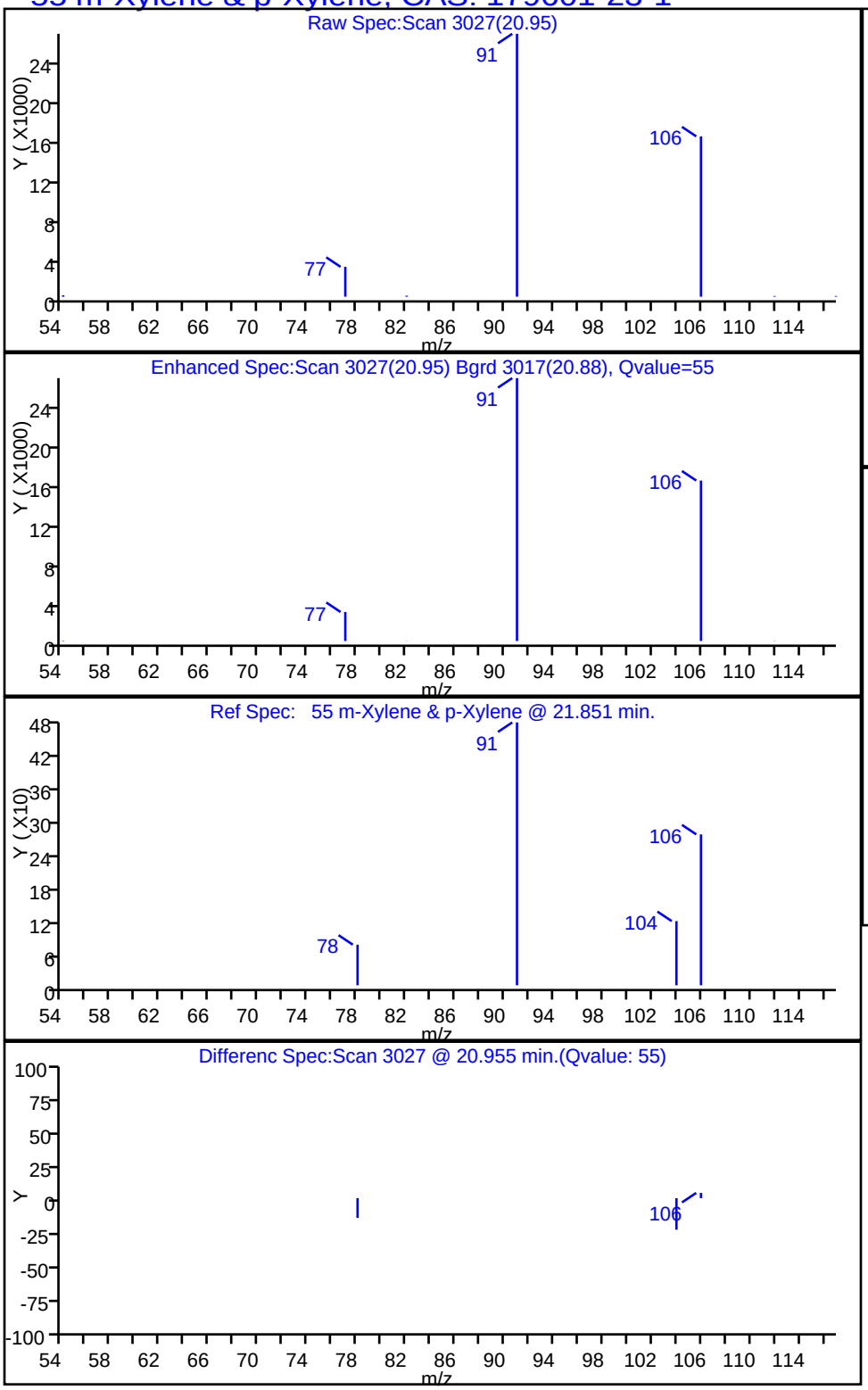
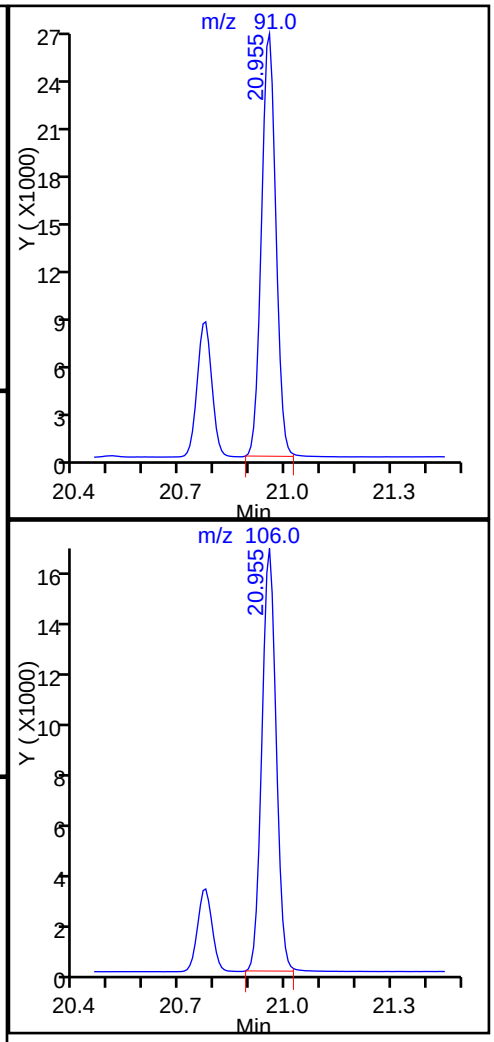
Lims ID:	320-12924-A-9	Lab Sample ID:	320-12924-9		
Client ID:	J6038-IA4-050615				
Operator ID:	AO	ALS Bottle#:	10	Worklist Smp#:	15
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	TO15 SIM	Limit Group:	MSA - TO-15_SIM_ICAL		
Column:		Detector	MS SCAN		

55 m-Xylene & p-Xylene, CAS: 179601-23-1



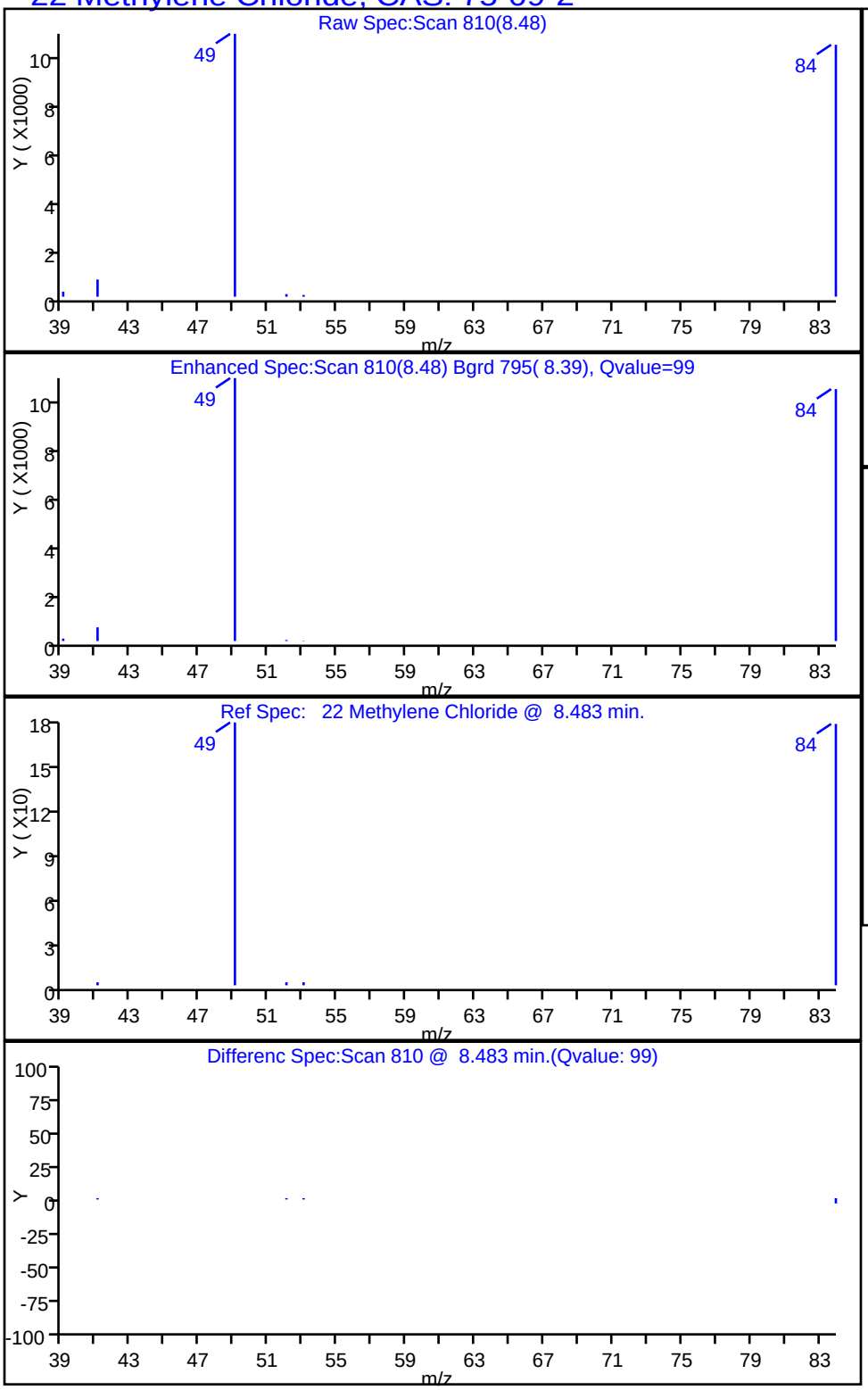


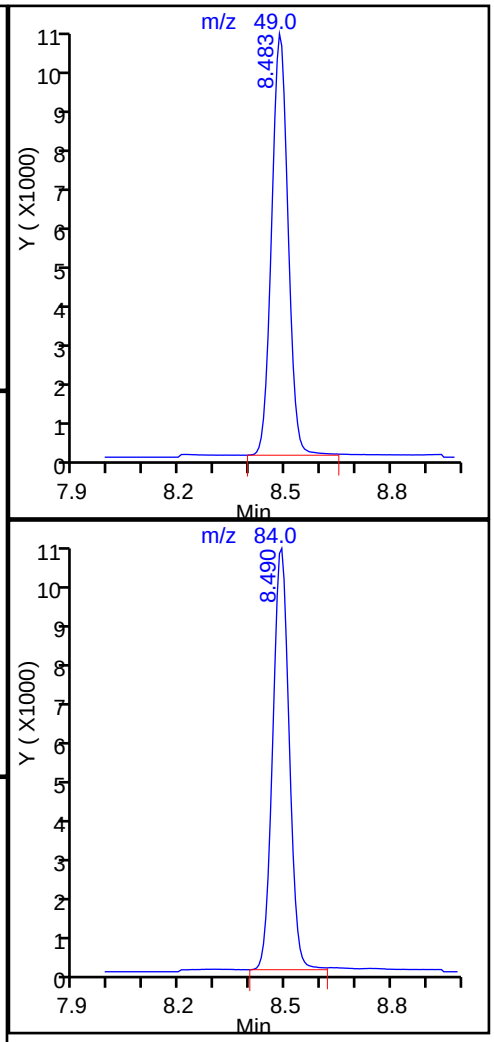
Report Date: 12-May-2015 12:39:25 Chrom Revision: 2.2 05-May-2015 11:39:10

TestAmerica Sacramento

Data File:	\\SACCHROM\ChromData\ATMS5\20150512-21744.b\MS5051116.D				
Injection Date:	12-May-2015 01:40:30	Instrument ID:	ATMS5		
Lims ID:	320-12924-A-9	Lab Sample ID:	320-12924-9		
Client ID:	J6038-IA4-050615				
Operator ID:	AO	ALS Bottle#:	10	Worklist Smp#:	15
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	TO15 SIM	Limit Group:	MSA - TO-15_SIM_ICAL		
Column:		Detector	MS SCAN		

22 Methylene Chloride, CAS: 75-09-2



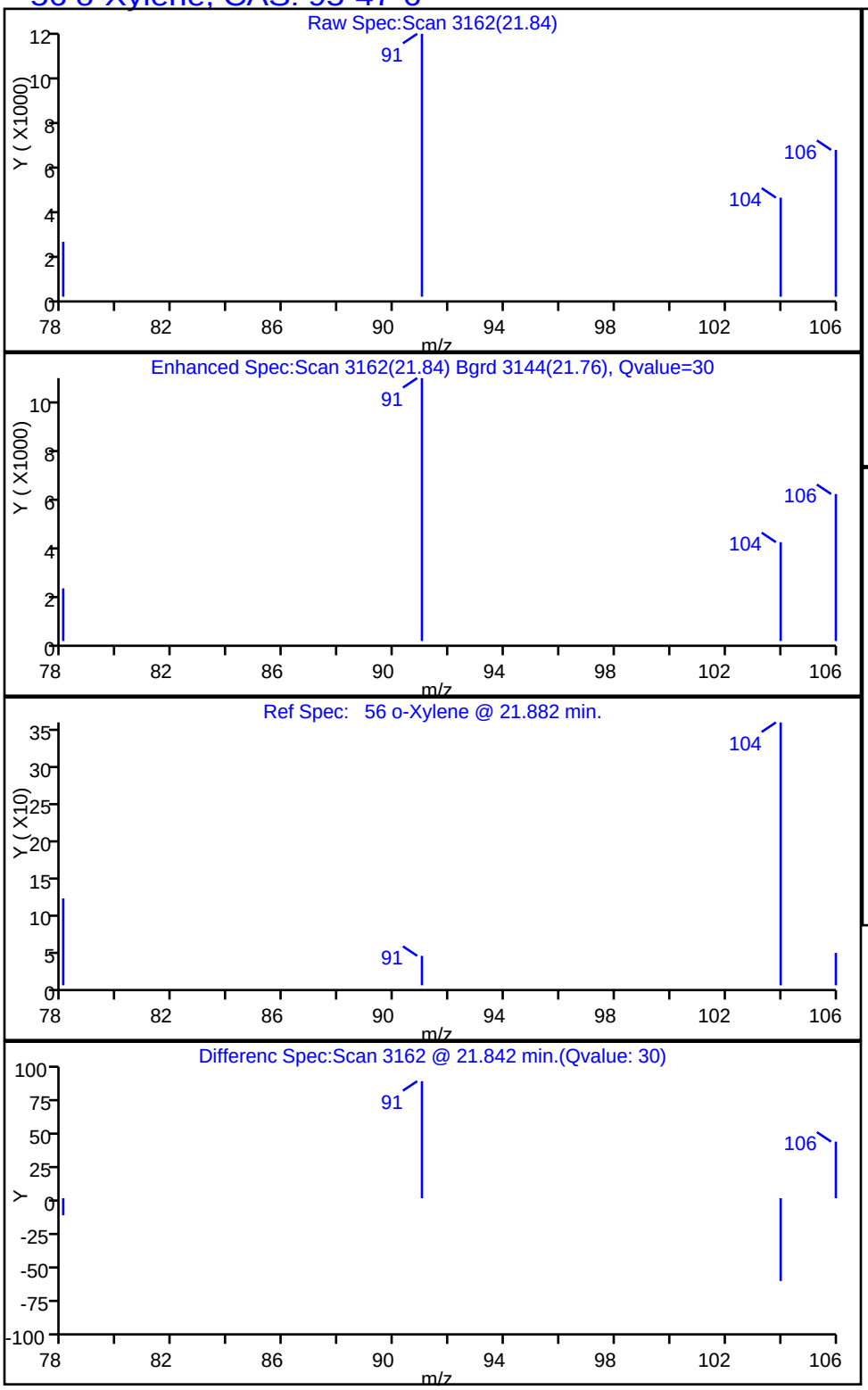


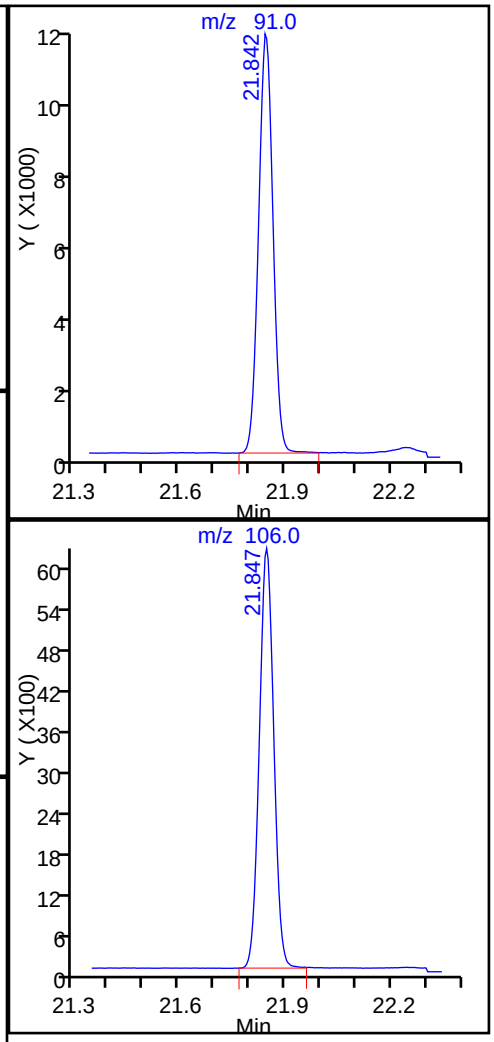
Report Date: 12-May-2015 12:39:26 Chrom Revision: 2.2 05-May-2015 11:39:10

TestAmerica Sacramento

Data File:	\\SACCHROM\ChromData\ATMS5\20150512-21744.b\MS5051116.D				
Injection Date:	12-May-2015 01:40:30	Instrument ID:	ATMS5		
Lims ID:	320-12924-A-9	Lab Sample ID:	320-12924-9		
Client ID:	J6038-IA4-050615				
Operator ID:	AO	ALS Bottle#:	10	Worklist Smp#:	15
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	TO15 SIM	Limit Group:	MSA - TO-15_SIM_ICAL		
Column:		Detector	MS SCAN		

56 o-Xylene, CAS: 95-47-6



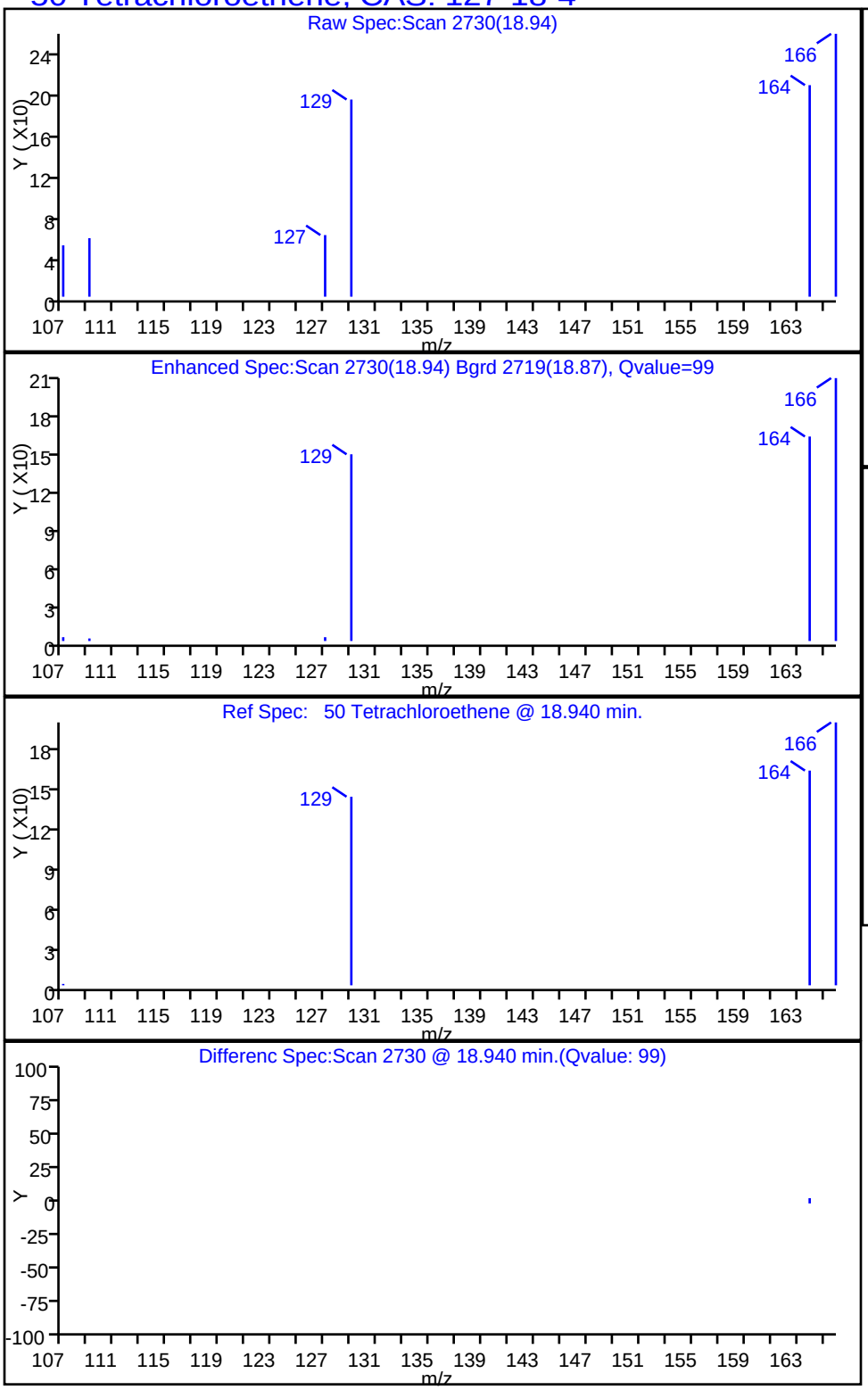


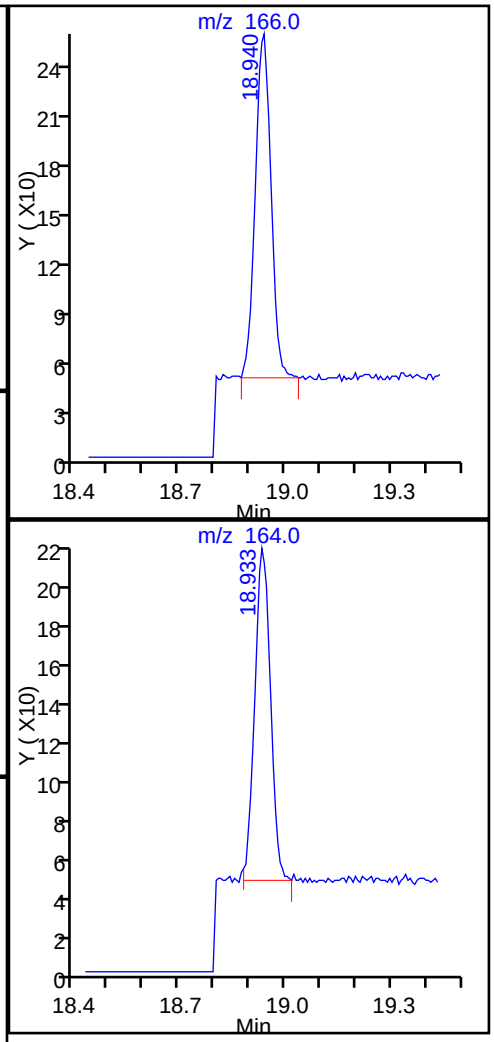
Report Date: 12-May-2015 12:39:26 Chrom Revision: 2.2 05-May-2015 11:39:10

TestAmerica Sacramento

Data File:	\\SACCHROM\ChromData\ATMS5\20150512-21744.b\MS5051116.D				
Injection Date:	12-May-2015 01:40:30	Instrument ID:	ATMS5		
Lims ID:	320-12924-A-9	Lab Sample ID:	320-12924-9		
Client ID:	J6038-IA4-050615				
Operator ID:	AO	ALS Bottle#:	10	Worklist Smp#:	15
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	TO15 SIM	Limit Group:	MSA - TO-15_SIM_ICAL		
Column:		Detector	MS SCAN		

50 Tetrachloroethene, CAS: 127-18-4



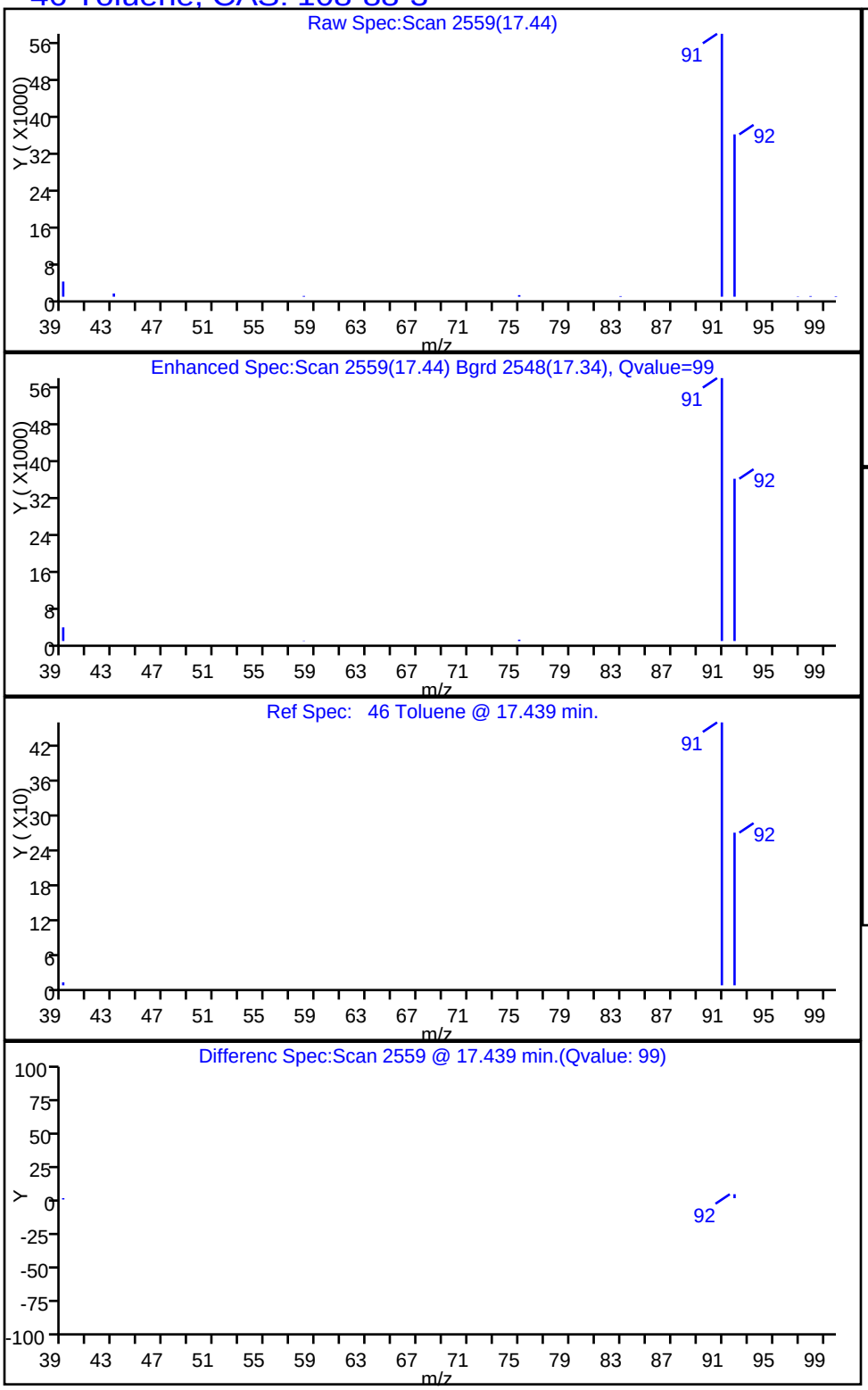


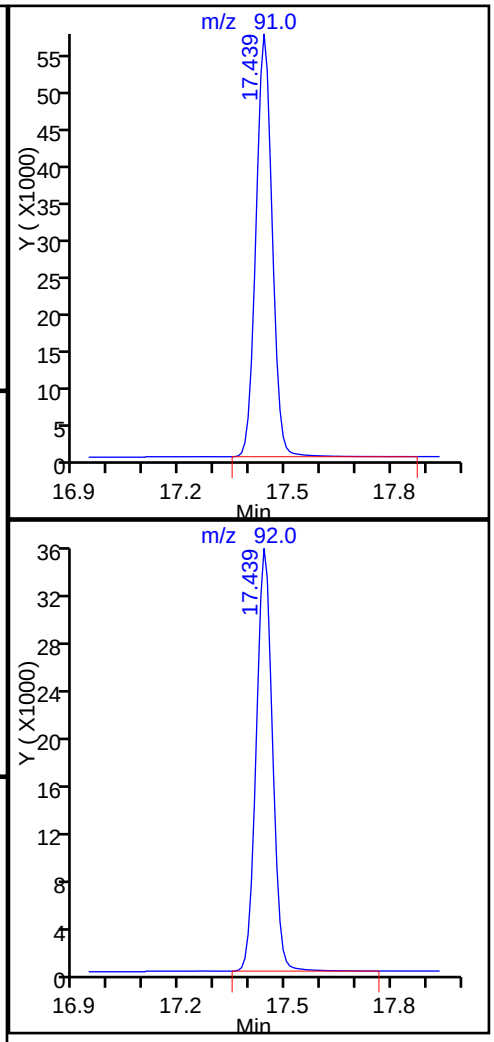
Report Date: 12-May-2015 12:39:26 Chrom Revision: 2.2 05-May-2015 11:39:10

TestAmerica Sacramento

Data File:	\\SACCHROM\ChromData\ATMS5\20150512-21744.b\MS5051116.D				
Injection Date:	12-May-2015 01:40:30	Instrument ID:	ATMS5		
Lims ID:	320-12924-A-9	Lab Sample ID:	320-12924-9		
Client ID:	J6038-IA4-050615				
Operator ID:	AO	ALS Bottle#:	10	Worklist Smp#:	15
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	TO15 SIM	Limit Group:	MSA - TO-15_SIM_ICAL		
Column:		Detector	MS SCAN		

46 Toluene, CAS: 108-88-3



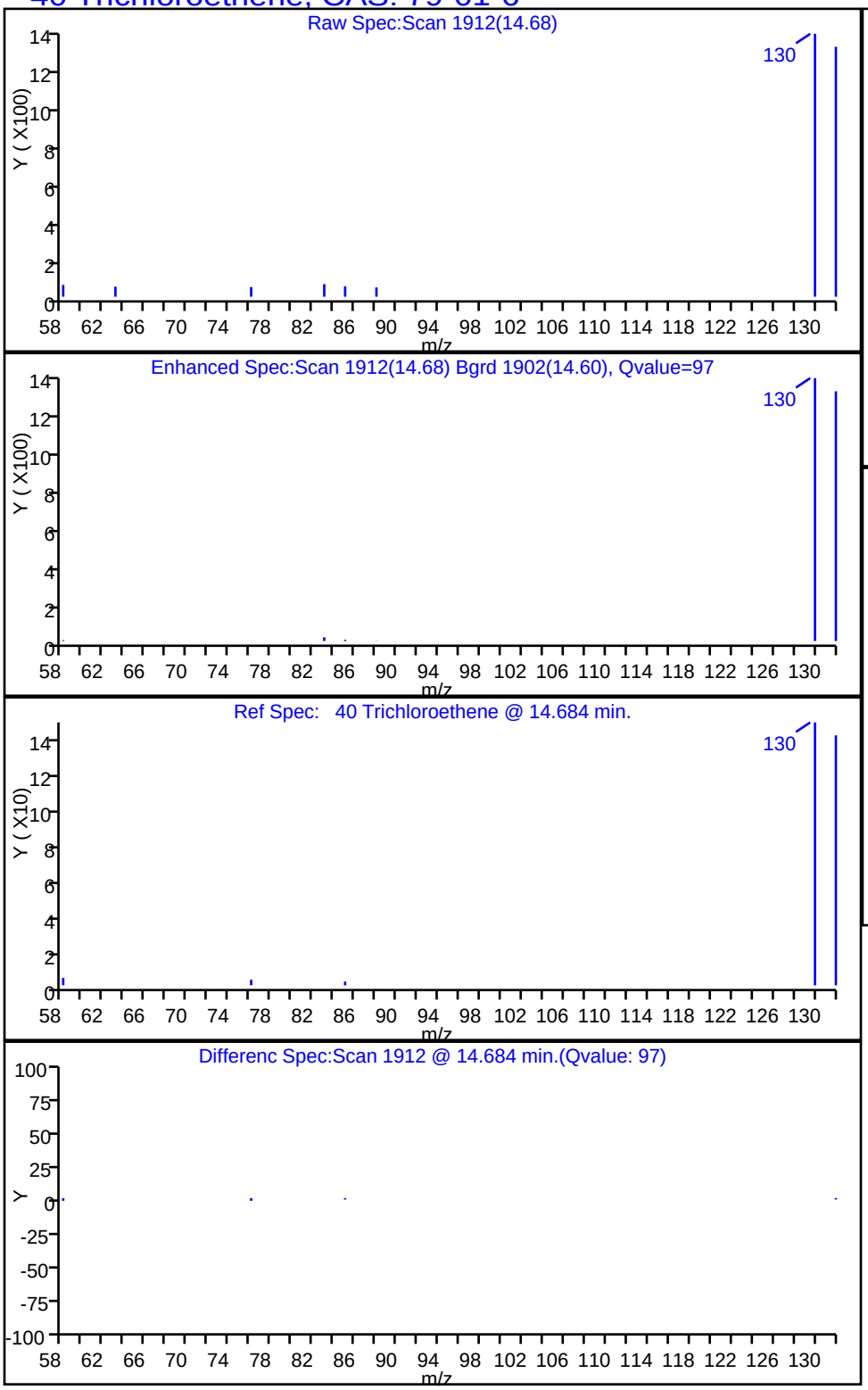


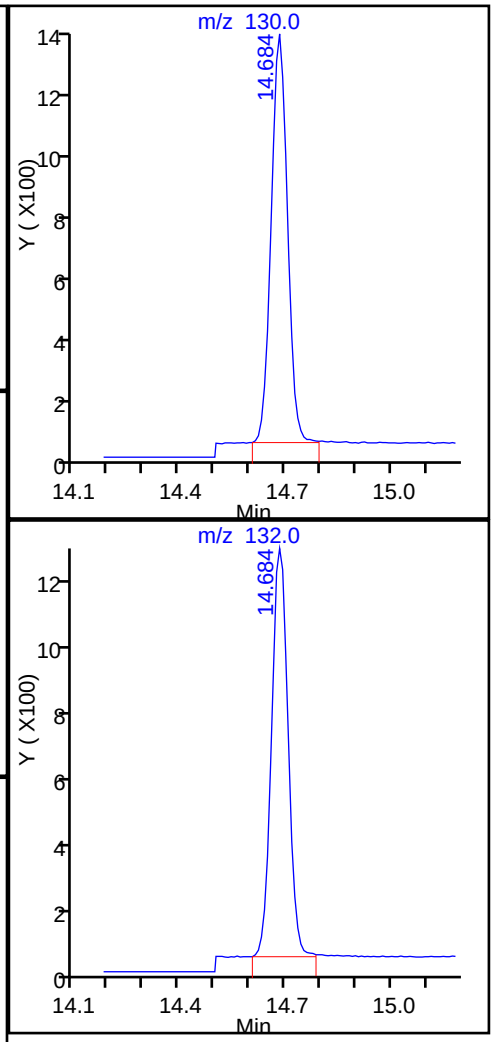
Report Date: 12-May-2015 12:39:26 Chrom Revision: 2.2 05-May-2015 11:39:10

TestAmerica Sacramento

Data File:	\\SACCHROM\ChromData\ATMS5\20150512-21744.b\MS5051116.D				
Injection Date:	12-May-2015 01:40:30	Instrument ID:	ATMS5		
Lims ID:	320-12924-A-9	Lab Sample ID:	320-12924-9		
Client ID:	J6038-IA4-050615				
Operator ID:	AO	ALS Bottle#:	10	Worklist Smp#:	15
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	TO15 SIM	Limit Group:	MSA - TO-15_SIM_ICAL		
Column:		Detector	MS SCAN		

40 Trichloroethene, CAS: 79-01-6





FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento | Job No.: 320-12924-1
SDG No.:
Client Sample ID: J6038-IA5-050615 | Lab Sample ID: 320-12924-10
Matrix: Air | Lab File ID: MS5051117.D
Analysis Method: TO-15 SIM | Date Collected: 05/06/2015 19:12
Sample wt/vol: 915(mL) | Date Analyzed: 05/12/2015 02:39
Soil Aliquot Vol: | Dilution Factor: 1
Soil Extract Vol.: | GC Column: RTX-Volatiles ID: 0.32(mm)
% Moisture: | Level: (low/med) Low
Analysis Batch No.: 73719 | Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	133.41	ND		0.020	0.0050
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.050	0.0050
75-34-3	1,1-Dichloroethane	98.96	ND		0.020	0.0050
75-35-4	1,1-Dichloroethene	96.94	ND		0.020	0.0050
95-50-1	1,2-Dichlorobenzene	147.00	0.017	J	0.050	0.010
107-06-2	1,2-Dichloroethane	98.96	0.014	J	0.020	0.0050
106-46-7	1,4-Dichlorobenzene	147.00	ND		0.10	0.010
108-90-7	Chlorobenzene	112.56	ND		0.020	0.010
67-66-3	Chloroform	119.38	0.023		0.020	0.0050
156-59-2	cis-1,2-Dichloroethene	96.94	0.0067	J	0.020	0.0050
100-41-4	Ethylbenzene	106.17	0.14		0.020	0.010
75-69-4	Freon 11	137.37	0.21		0.045	0.010
76-13-1	Freon 113	187.38	0.063		0.030	0.0050
75-71-8	Freon 12	120.91	0.45		0.020	0.0050
179601-23-1	m,p-Xylene	106.17	0.56		0.040	0.020
75-09-2	Methylene Chloride	84.93	1.4		0.20	0.10
95-47-6	o-Xylene	106.17	0.22		0.020	0.010
127-18-4	Tetrachloroethene	165.83	0.013	J	0.020	0.010
108-88-3	Toluene	92.14	1.3		0.020	0.010
156-60-5	trans-1,2-Dichloroethene	96.94	ND		0.020	0.0050
79-01-6	Trichloroethene	131.39	0.11		0.020	0.0050
75-01-4	Vinyl chloride	62.50	ND		0.020	0.010

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	102		70-130
17060-07-0	1,2-Dichloroethane-d4 (Surr)	94		70-130
2037-26-5	Toluene-d8 (Surr)	100		70-130

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento | Job No.: 320-12924-1
SDG No.:
Client Sample ID: J6038-IA5-050615 | Lab Sample ID: 320-12924-10
Matrix: Air | Lab File ID: MS5051117.D
Analysis Method: TO-15 SIM | Date Collected: 05/06/2015 19:12
Sample wt/vol: 915(mL) | Date Analyzed: 05/12/2015 02:39
Soil Aliquot Vol: | Dilution Factor: 1
Soil Extract Vol.: | GC Column: RTX-Volatiles ID: 0.32(mm)
% Moisture: | Level: (low/med) Low
Analysis Batch No.: 73719 | Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	133.41	ND		0.11	0.027
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.27	0.027
75-34-3	1,1-Dichloroethane	98.96	ND		0.081	0.020
75-35-4	1,1-Dichloroethene	96.94	ND		0.079	0.020
95-50-1	1,2-Dichlorobenzene	147.00	0.10	J	0.30	0.060
107-06-2	1,2-Dichloroethane	98.96	0.057	J	0.081	0.020
106-46-7	1,4-Dichlorobenzene	147.00	ND		0.60	0.060
108-90-7	Chlorobenzene	112.56	ND		0.092	0.046
67-66-3	Chloroform	119.38	0.11		0.098	0.024
156-59-2	cis-1,2-Dichloroethene	96.94	0.026	J	0.079	0.020
100-41-4	Ethylbenzene	106.17	0.59		0.087	0.043
75-69-4	Freon 11	137.37	1.2		0.25	0.056
76-13-1	Freon 113	187.38	0.48		0.23	0.038
75-71-8	Freon 12	120.91	2.2		0.099	0.025
179601-23-1	m,p-Xylene	106.17	2.4		0.17	0.087
75-09-2	Methylene Chloride	84.93	5.0		0.69	0.35
95-47-6	o-Xylene	106.17	0.97		0.087	0.043
127-18-4	Tetrachloroethene	165.83	0.086	J	0.14	0.068
108-88-3	Toluene	92.14	5.1		0.075	0.038
156-60-5	trans-1,2-Dichloroethene	96.94	ND		0.079	0.020
79-01-6	Trichloroethene	131.39	0.58		0.11	0.027
75-01-4	Vinyl chloride	62.50	ND		0.051	0.026

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	102		70-130
17060-07-0	1,2-Dichloroethane-d4 (Surr)	94		70-130
2037-26-5	Toluene-d8 (Surr)	100		70-130

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\SACCHROM\ChromData\ATMS5\20150512-21744.b\MS5051117.D
Lims ID: 320-12924-A-10 Lab Sample ID: 320-12924-10
Client ID: J6038-IA5-050615
Sample Type: Client
Inject. Date: 12-May-2015 02:39:30 ALS Bottle#: 11 Worklist Smp#: 16
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 320-12924-A-10
Misc. Info.: 915ML915ML
Operator ID: AO Instrument ID: ATMS5

Method: \\SACCHROM\ChromData\ATMS5\20150512-21744.b\TO15 SIM.m
Limit Group: MSA - TO-15_SIM_ICAL
Last Update: 12-May-2015 12:40:59 Calib Date: 26-Mar-2015 03:17:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\SACCHROM\ChromData\ATMS5\20150326-20538.b\MS5032518.D

Column 1 : Det: MS SCAN
Process Host: XAWRK010

First Level Reviewer: ortizam Date: 12-May-2015 12:40:59

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	130	11.851	11.850	0.001	100	36873	2.00	
* 2 1,4-Difluorobenzene	114	13.941	13.941	0.000	100	174364	2.00	
* 3 Chlorobenzene-d5 (IS)	117	20.508	20.508	0.000	100	161732	2.00	
$ 4 1,2-Dichloroethane-d4 (Sur	65	13.002	13.002	0.000	100	38770	1.88	
$ 5 Toluene-d8 (Surr)	100	17.266	17.266	0.000	100	119564	1.99	
$ 6 4-Bromofluorobenzene (Surr	95	23.040	23.040	0.000	100	92956	2.04	
8 Dichlorodifluoromethane	85	4.181	4.181	0.000	100	25036	0.4503	
11 Vinyl chloride	62	4.817	4.817	0.000	78	86	0.004443	
15 Trichlorofluoromethane	101	6.418	6.418	0.000	100	11093	0.2092	M
19 1,1,2-Trichloro-1,2,2-trif	101	7.412	7.412	0.000	98	3227	0.0633	
22 Methylene Chloride	49	8.483	8.490	-0.007	98	36574	1.44	
27 1,1-Dichloroethane	63	10.015	10.017	-0.002	9	53	0.001160	7
30 cis-1,2-Dichloroethene	96	11.241	11.241	0.001	51	189	0.006654	M
32 Chloroform	83	11.589	11.589	0.000	94	1075	0.0230	
37 1,2-Dichloroethane	62	13.193	13.192	0.001	93	437	0.0140	
40 Trichloroethene	130	14.684	14.683	0.001	100	4440	0.1080	
46 Toluene	91	17.439	17.439	0.000	98	177819	1.35	
50 Tetrachloroethene	166	18.940	18.939	0.001	98	685	0.0127	
53 Chlorobenzene	112	20.592	20.584	0.008	1	782	0.006865	
54 Ethylbenzene	91	20.773	20.773	0.000	89	25223	0.1361	
55 m-Xylene & p-Xylene	91	20.955	20.955	0.000	56	78569	0.5600	
56 o-Xylene	91	21.847	21.846	0.001	37	32803	0.2238	
65 1,4-Dichlorobenzene	146	25.529	25.530	-0.001	98	404	0.003632	7
67 1,2-Dichlorobenzene	146	26.250	26.247	0.003	1	1904	0.0166	

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Review Flags

M - Manually Integrated

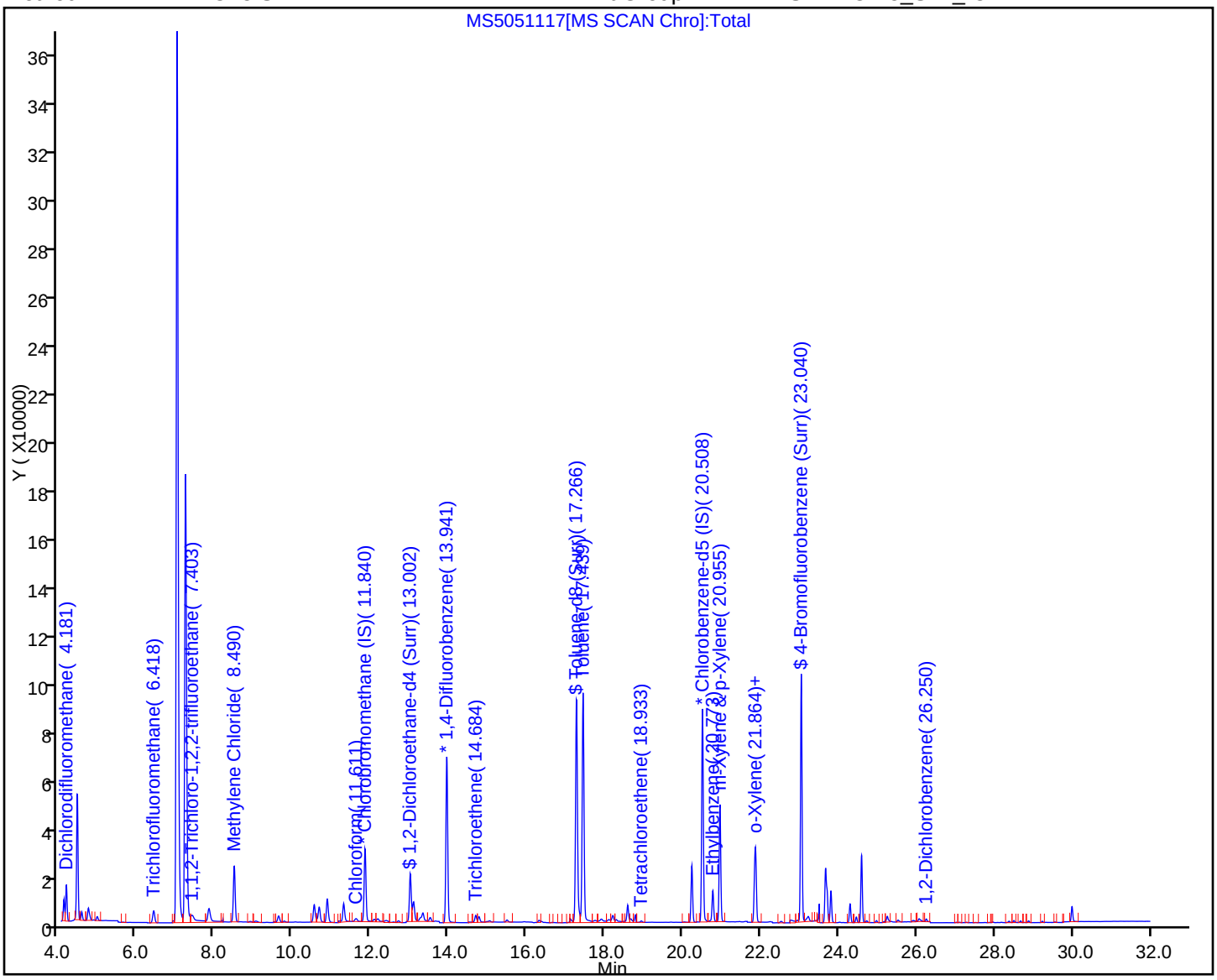
Reagents:

VASUISIM_00172	Amount Added: 50.00	Units: mL	Run Reagent

Report Date: 12-May-2015 12:40:59 Chrom Revision: 2.2 05-May-2015 11:39:10

TestAmerica Sacramento

Data File:	\\SACCHROM\ChromData\ATMS5\20150512-21744.b\MS5051117.D				
Injection Date:	12-May-2015 02:39:30	Instrument ID:	ATMS5		
Lims ID:	320-12924-A-10	Lab Sample ID:	320-12924-10		
Client ID:	J6038-IA5-050615				
Operator ID:	AO	ALS Bottle#:	11	Worklist Smp#:	16
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	TO15 SIM	Limit Group:	MSA - TO-15_SIM_ICAL		

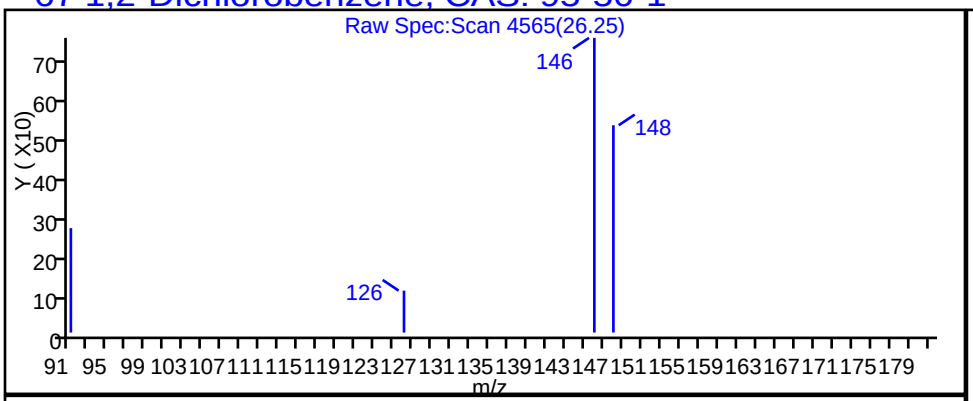


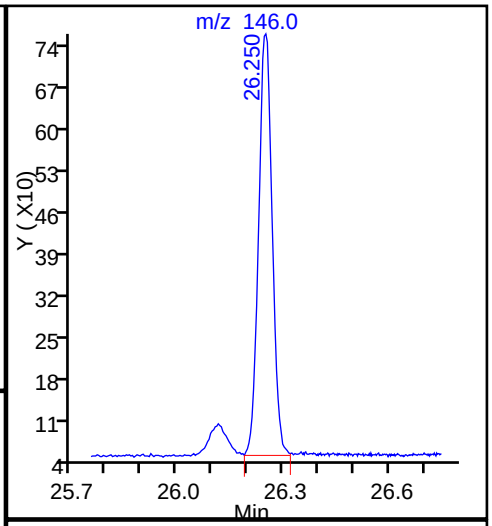
Report Date: 12-May-2015 12:40:59 Chrom Revision: 2.2 05-May-2015 11:39:10

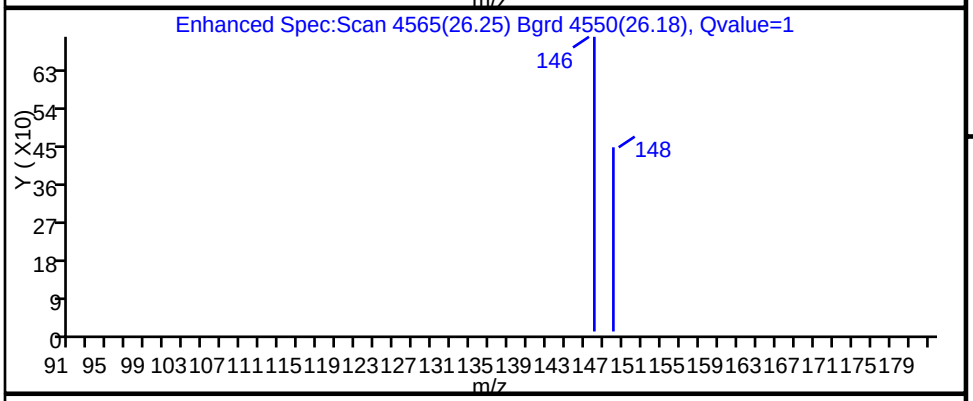
TestAmerica Sacramento

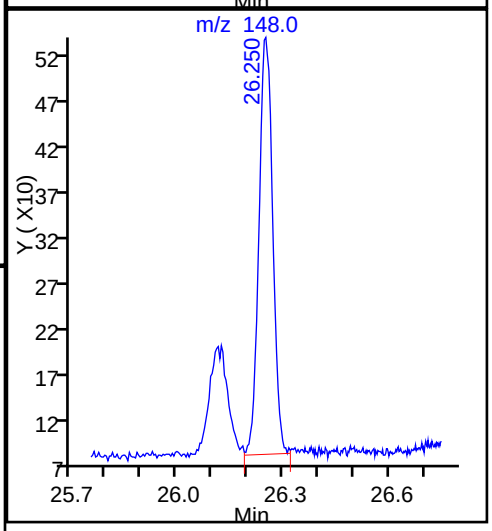
Data File:	\\SACCHROM\ChromData\ATMS5\20150512-21744.b\MS5051117.D				
Injection Date:	12-May-2015 02:39:30	Instrument ID:	ATMS5		
Lims ID:	320-12924-A-10	Lab Sample ID:	320-12924-10		
Client ID:	J6038-IA5-050615				
Operator ID:	AO	ALS Bottle#:	11	Worklist Smp#:	16
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	TO15 SIM	Limit Group:	MSA - TO-15_SIM_ICAL		
Column:		Detector	MS SCAN		

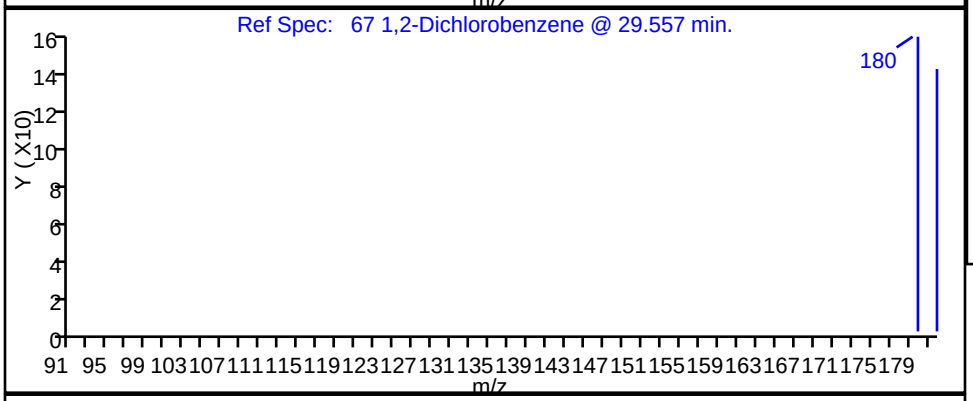
67 1,2-Dichlorobenzene, CAS: 95-50-1

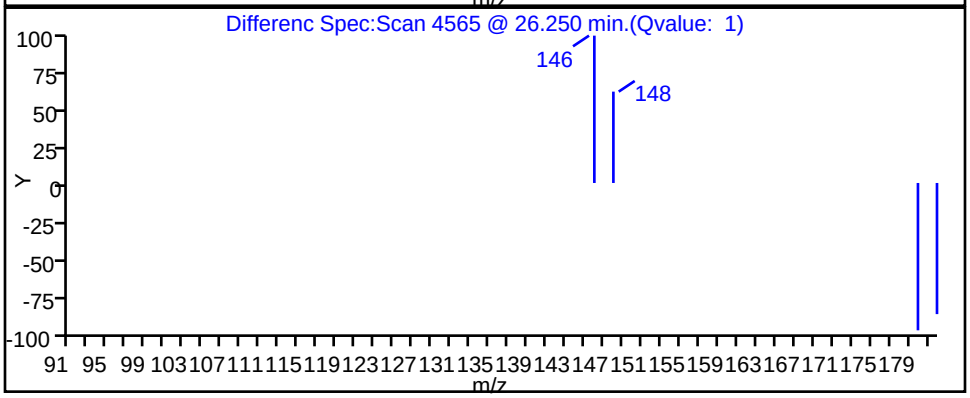












Report Date: 12-May-2015 12:40:59 Chrom Revision: 2.2 05-May-2015 11:39:10

TestAmerica Sacramento

Data File:	\\SACCHROM\ChromData\ATMS5\20150512-21744.b\MS5051117.D				
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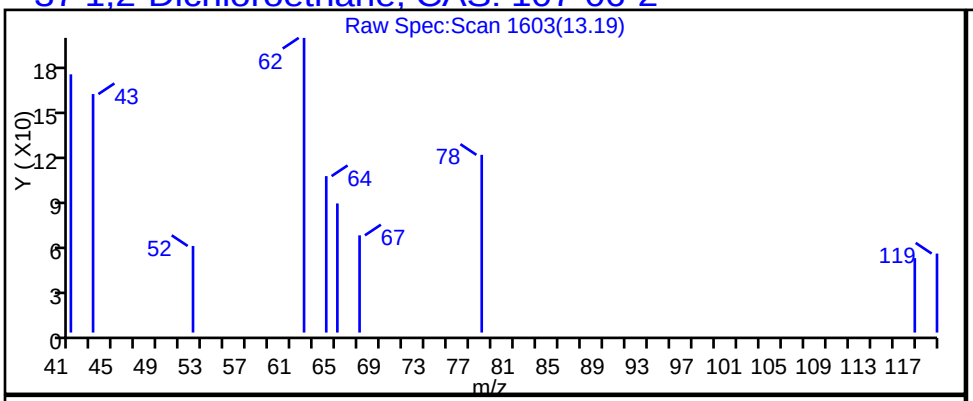
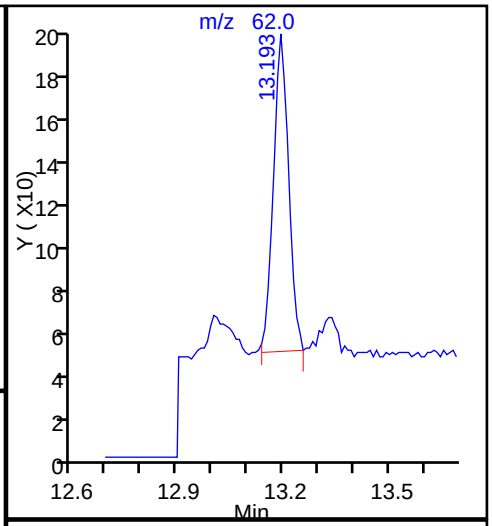
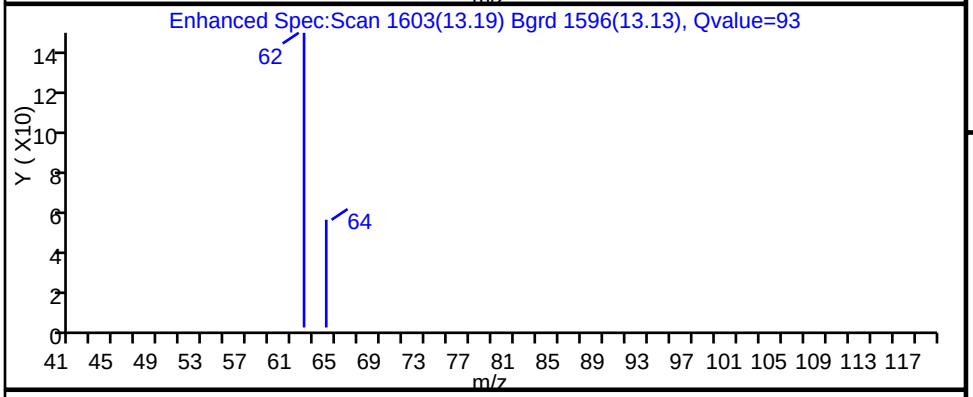
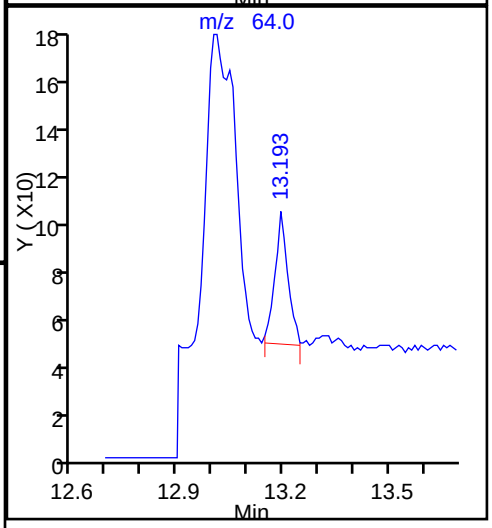
Lims ID:	320-12924-A-10	Lab Sample ID:	320-12924-10		
Client ID:	J6038-IA5-050615				
Operator ID:	AO	ALS Bottle#:	11	Worklist Smp#:	16
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	TO15 SIM	Limit Group:	MSA - TO-15_SIM_ICAL		
Column:		Detector	MS SCAN		

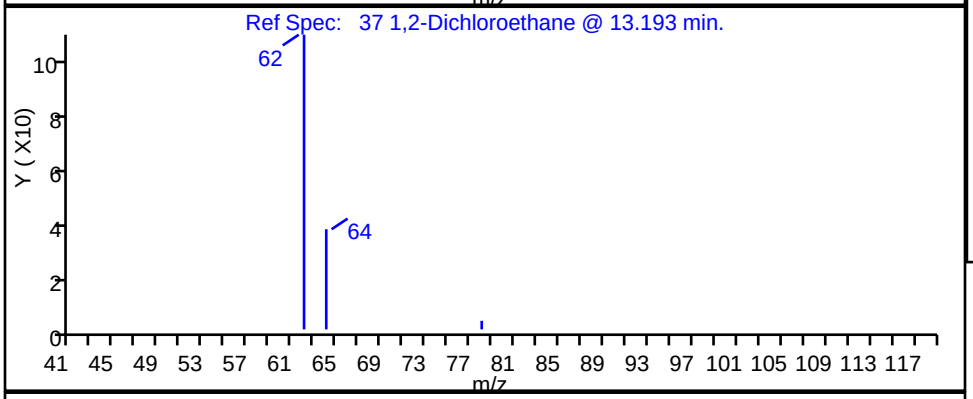
37 1,2-Dichloroethane, CAS: 107-06-2

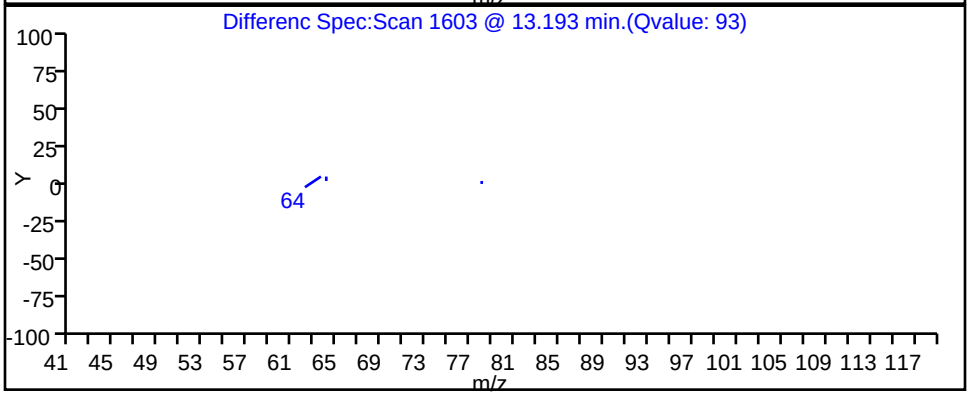












Report Date: 12-May-2015 12:40:59 Chrom Revision: 2.2 05-May-2015 11:39:10

TestAmerica Sacramento

Data File:	\\SACCHROM\ChromData\ATMS5\20150512-21744.b\MS5051117.D				
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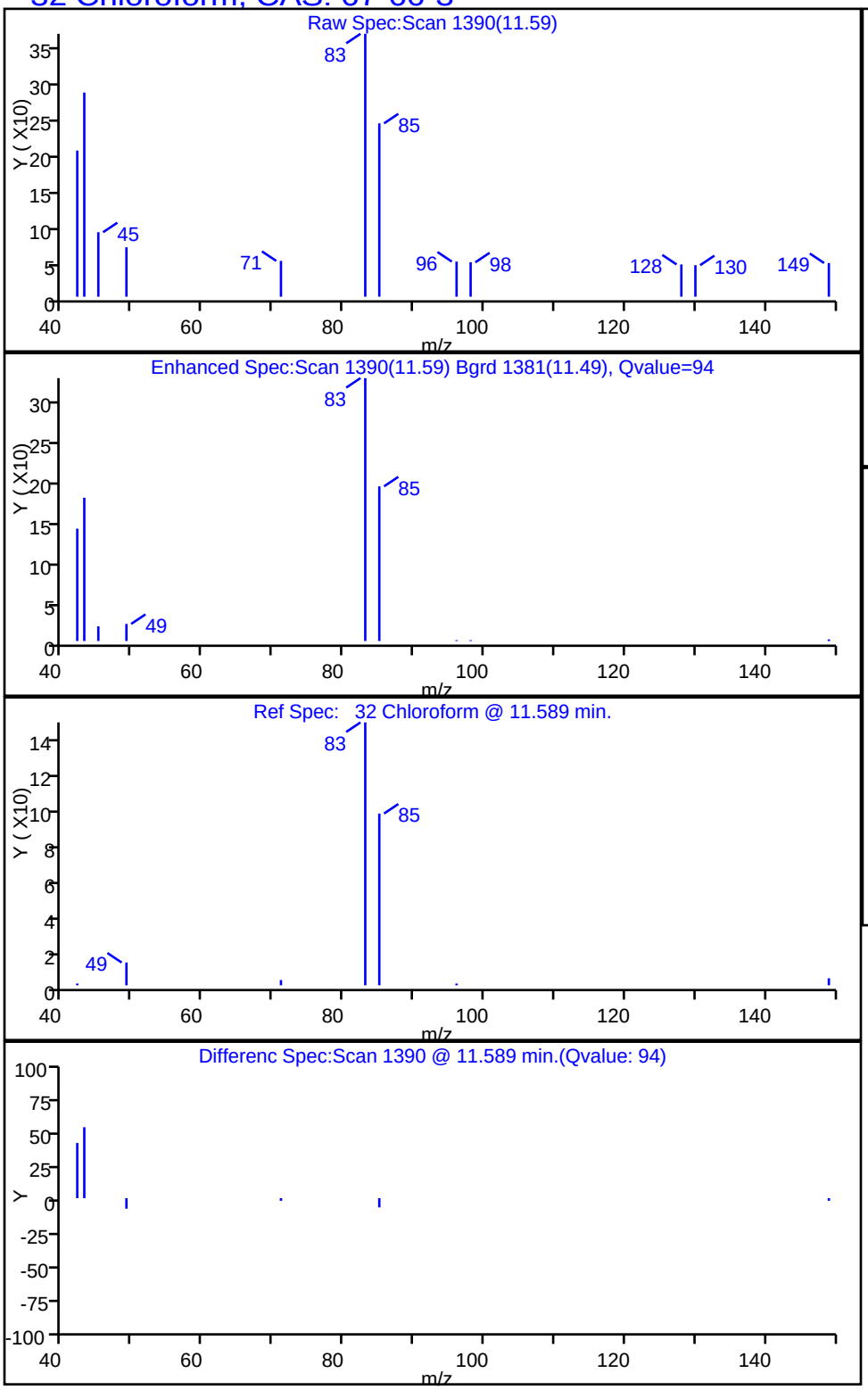
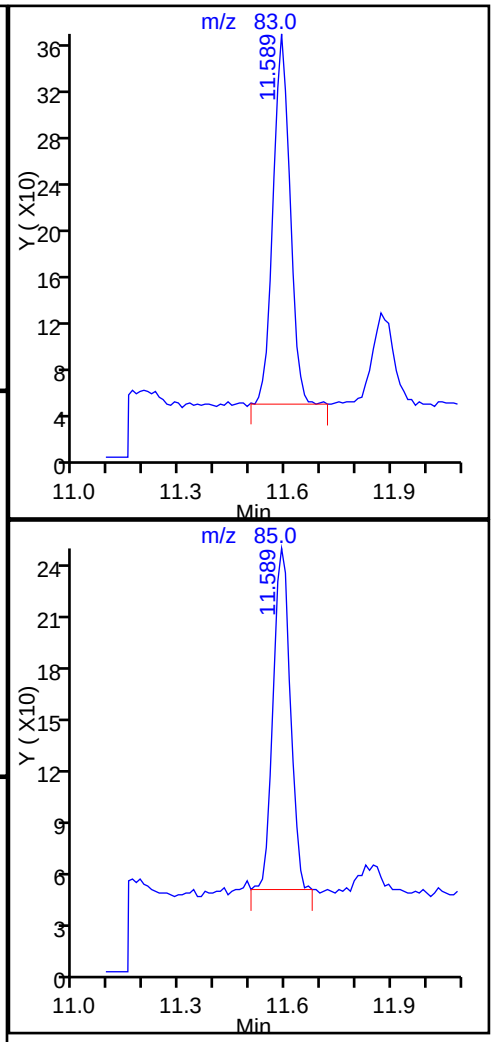
Lims ID:	320-12924-A-10	Lab Sample ID:	320-12924-10		
Client ID:	J6038-IA5-050615				
Operator ID:	AO	ALS Bottle#:	11	Worklist Smp#:	16
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	TO15 SIM	Limit Group:	MSA - TO-15_SIM_ICAL		
Column:		Detector	MS SCAN		

32 Chloroform, CAS: 67-66-3





Report Date: 12-May-2015 12:40:59 Chrom Revision: 2.2 05-May-2015 11:39:10

TestAmerica Sacramento

Data File:	\\SACCHROM\ChromData\ATMS5\20150512-21744.b\MS5051117.D				
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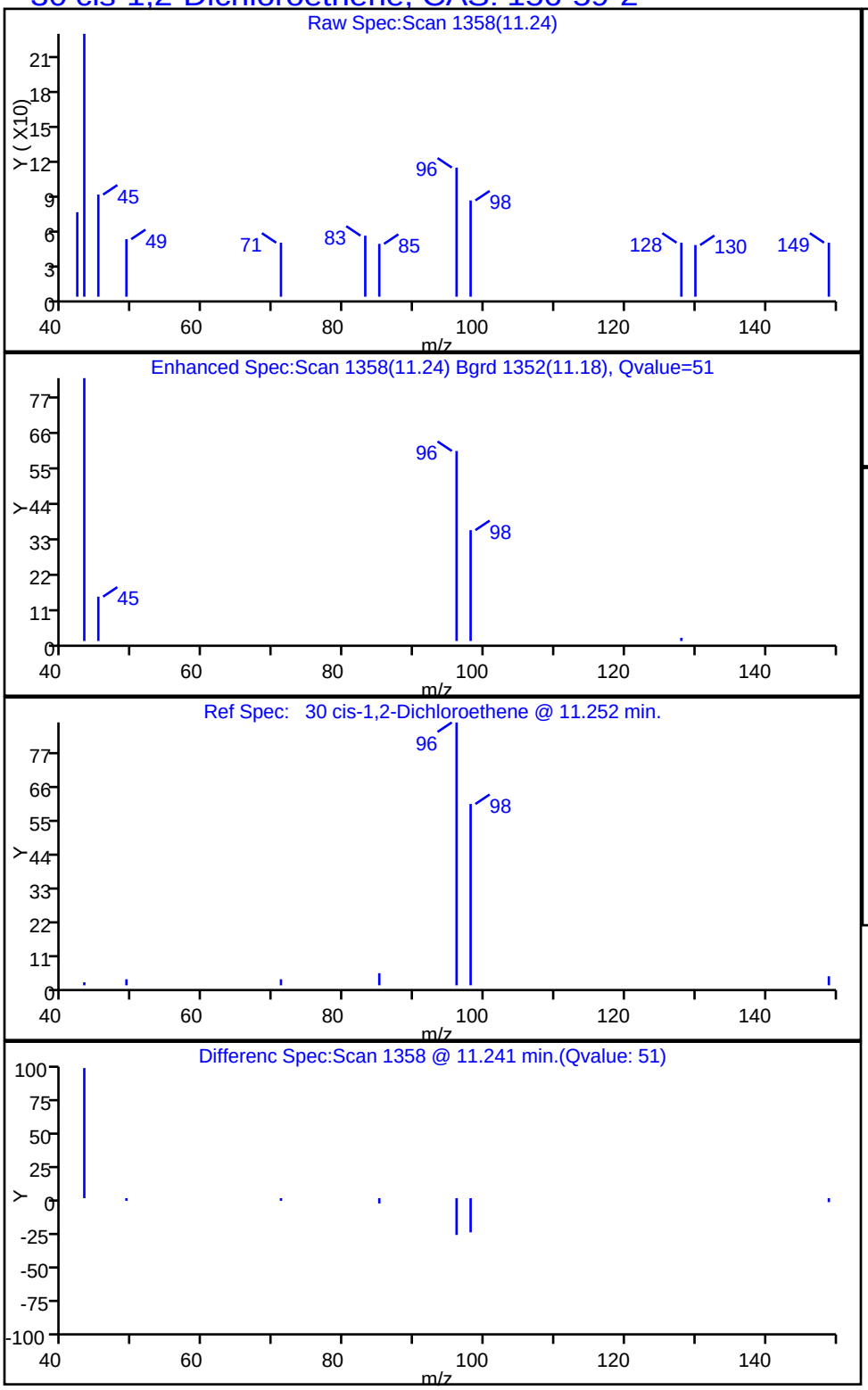
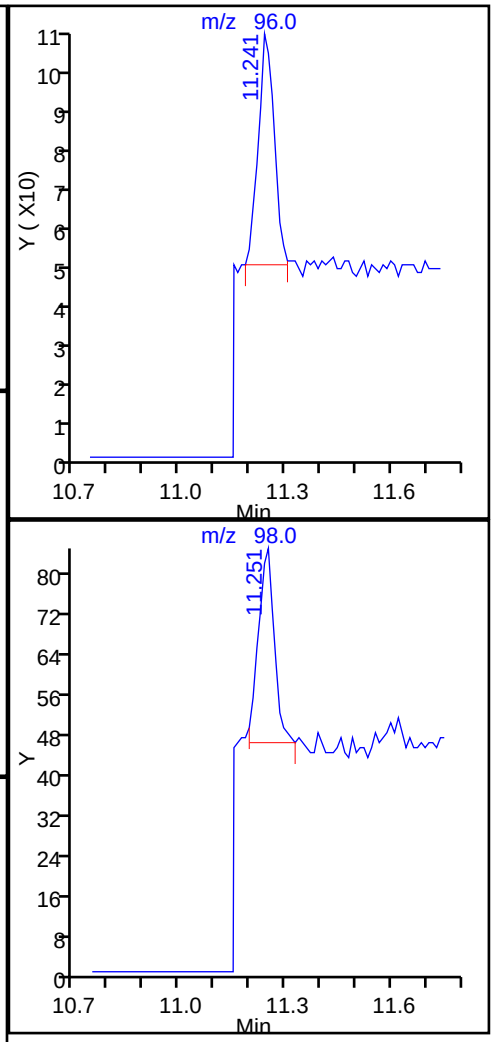
Lims ID:	320-12924-A-10	Lab Sample ID:	320-12924-10		
Client ID:	J6038-IA5-050615				
Operator ID:	AO	ALS Bottle#:	11	Worklist Smp#:	16
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	TO15 SIM	Limit Group:	MSA - TO-15_SIM_ICAL		
Column:		Detector	MS SCAN		

30 cis-1,2-Dichloroethene, CAS: 156-59-2





Report Date: 12-May-2015 12:40:59 Chrom Revision: 2.2 05-May-2015 11:39:10

TestAmerica Sacramento

Data File:	\\SACCHROM\ChromData\ATMS5\20150512-21744.b\MS5051117.D				
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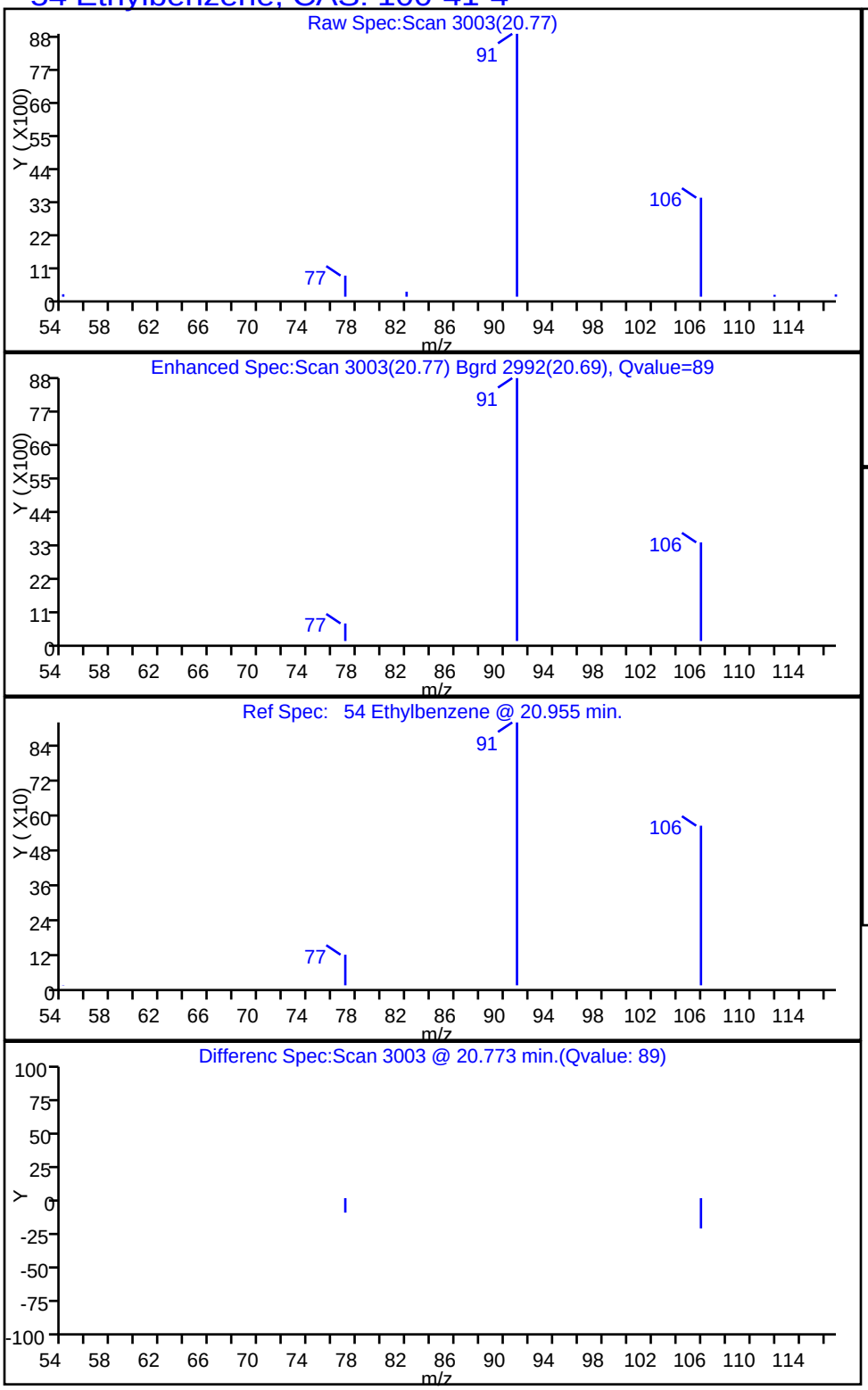
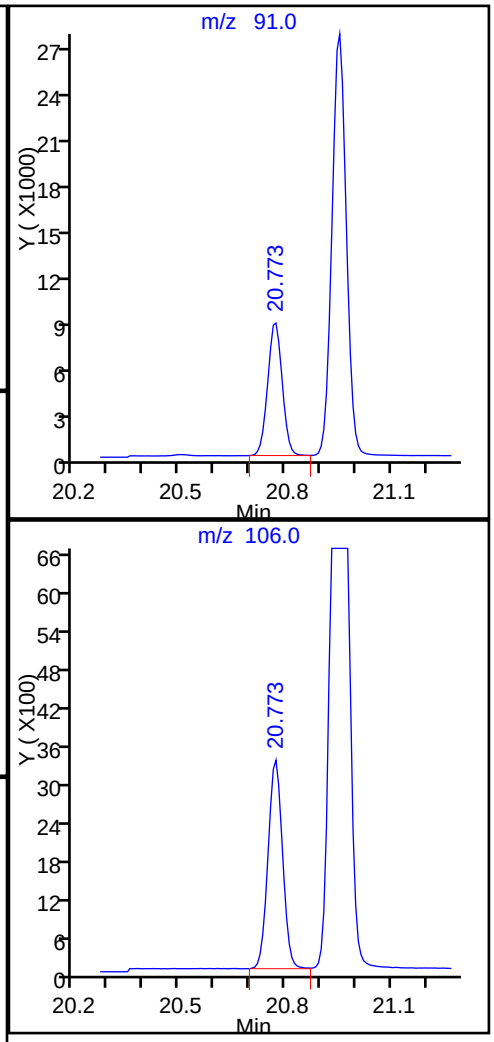
Lims ID:	320-12924-A-10	Lab Sample ID:	320-12924-10		
Client ID:	J6038-IA5-050615				
Operator ID:	AO	ALS Bottle#:	11	Worklist Smp#:	16
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	TO15 SIM	Limit Group:	MSA - TO-15_SIM_ICAL		
Column:		Detector	MS SCAN		

54 Ethylbenzene, CAS: 100-41-4





Report Date: 12-May-2015 12:40:59 Chrom Revision: 2.2 05-May-2015 11:39:10

TestAmerica Sacramento

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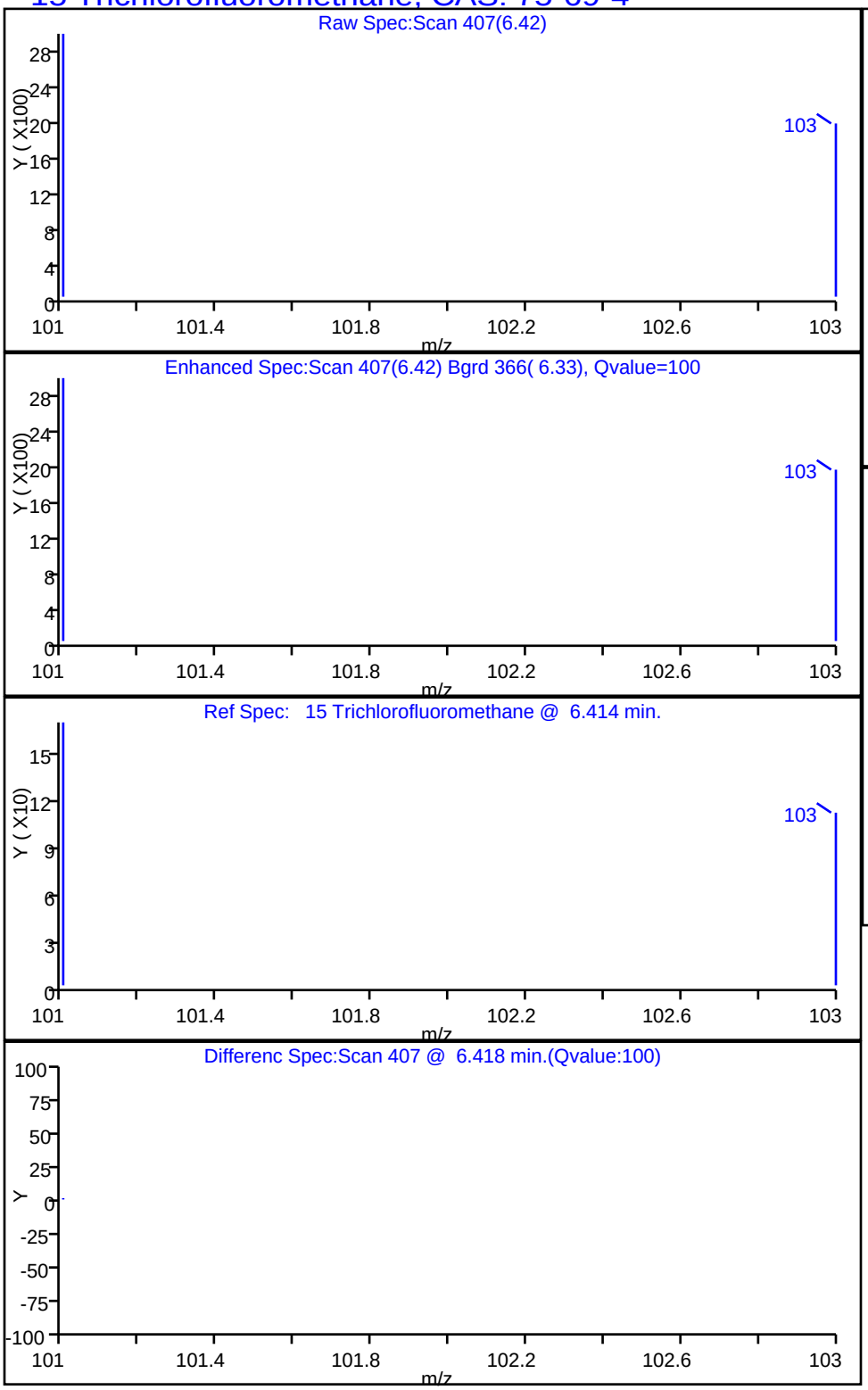
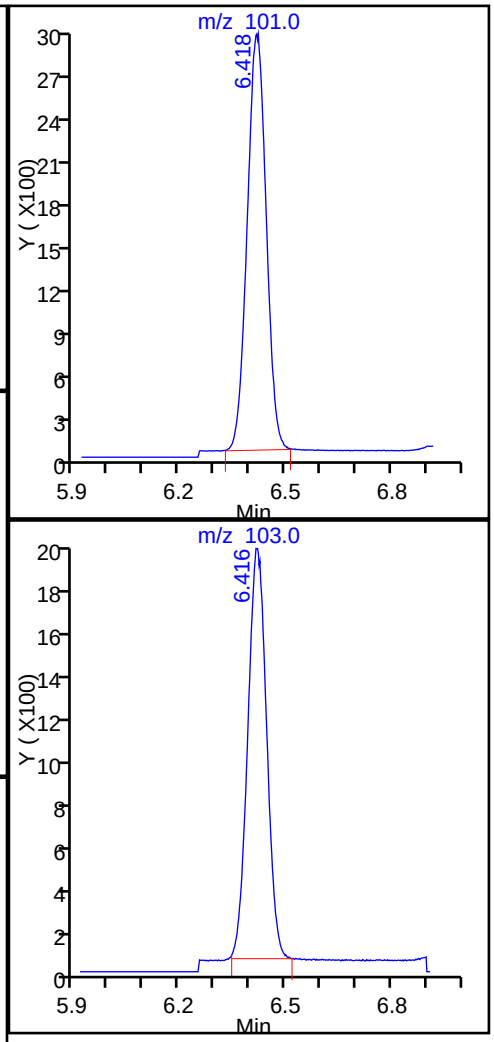
Lims ID:	320-12924-A-10	Lab Sample ID:	320-12924-10		
Client ID:	J6038-IA5-050615				
Operator ID:	AO	ALS Bottle#:	11	Worklist Smp#:	16
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	TO15 SIM	Limit Group:	MSA - TO-15_SIM_ICAL		
Column:		Detector	MS SCAN		

15 Trichlorofluoromethane, CAS: 75-69-4



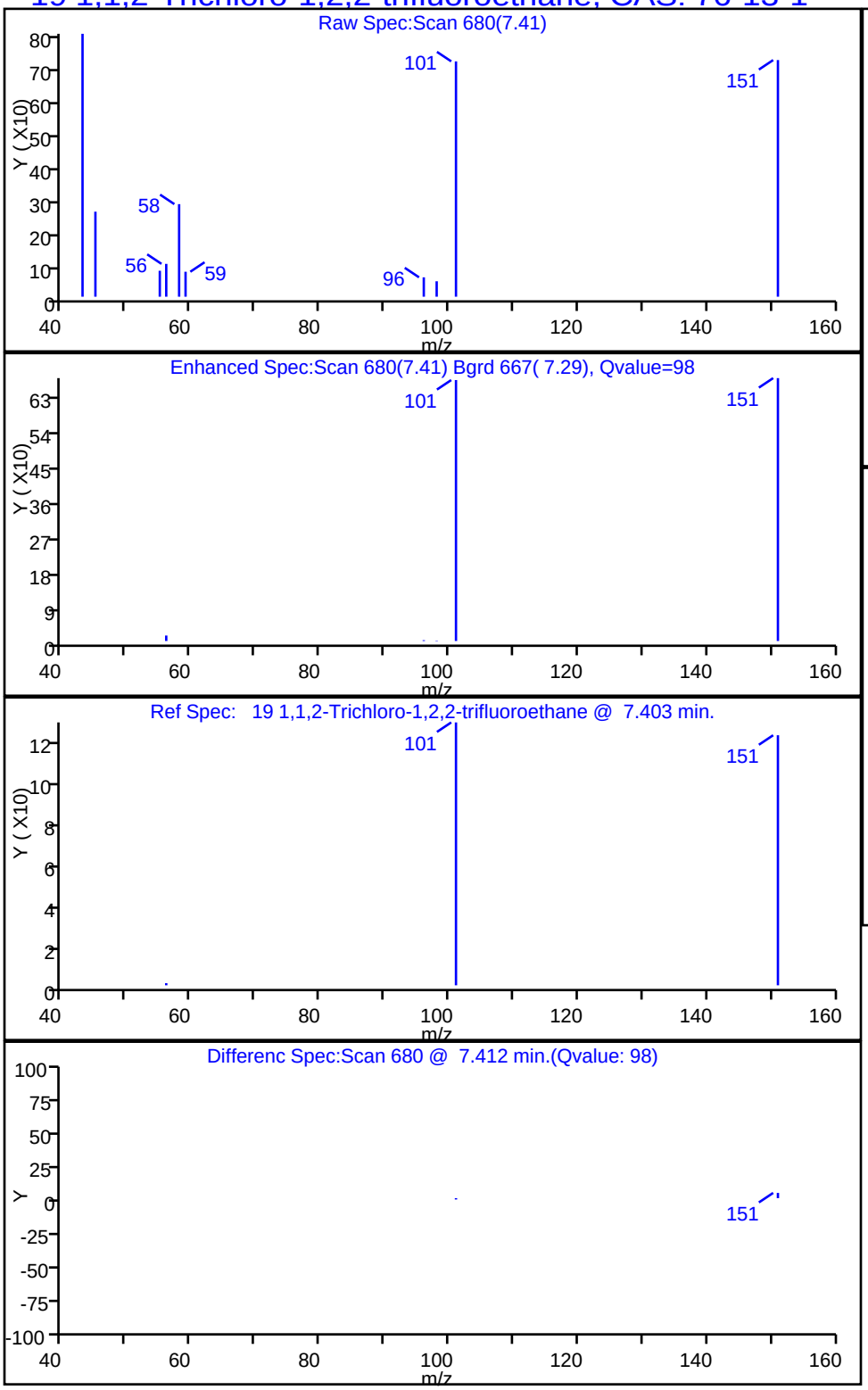


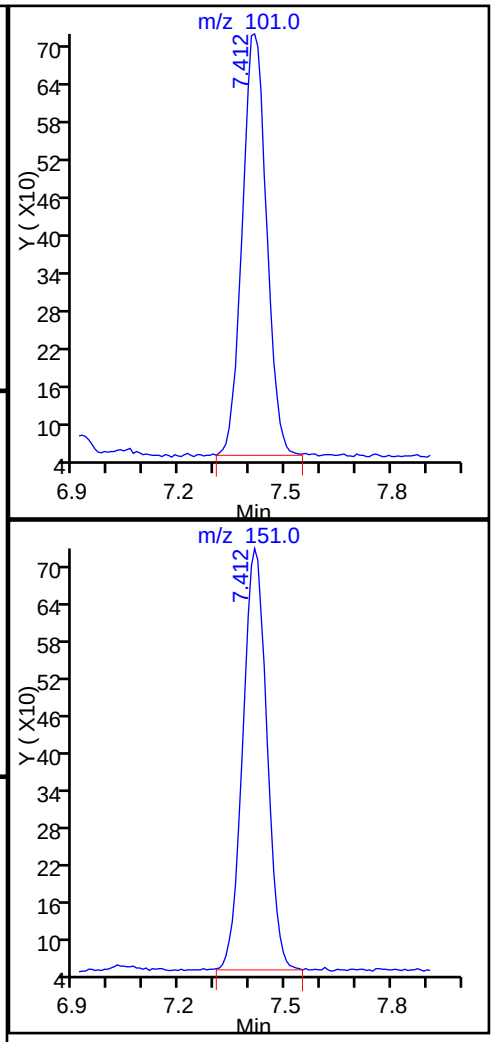
Report Date: 12-May-2015 12:40:59 Chrom Revision: 2.2 05-May-2015 11:39:10

TestAmerica Sacramento

Data File:	\\SACCHROM\ChromData\ATMS5\20150512-21744.b\MS5051117.D				
Injection Date:	12-May-2015 02:39:30	Instrument ID:	ATMS5		
Lims ID:	320-12924-A-10	Lab Sample ID:	320-12924-10		
Client ID:	J6038-IA5-050615				
Operator ID:	AO	ALS Bottle#:	11	Worklist Smp#:	16
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	TO15 SIM	Limit Group:	MSA - TO-15_SIM_ICAL		
Column:		Detector	MS SCAN		

19 1,1,2-Trichloro-1,2,2-trifluoroethane, CAS: 76-13-1



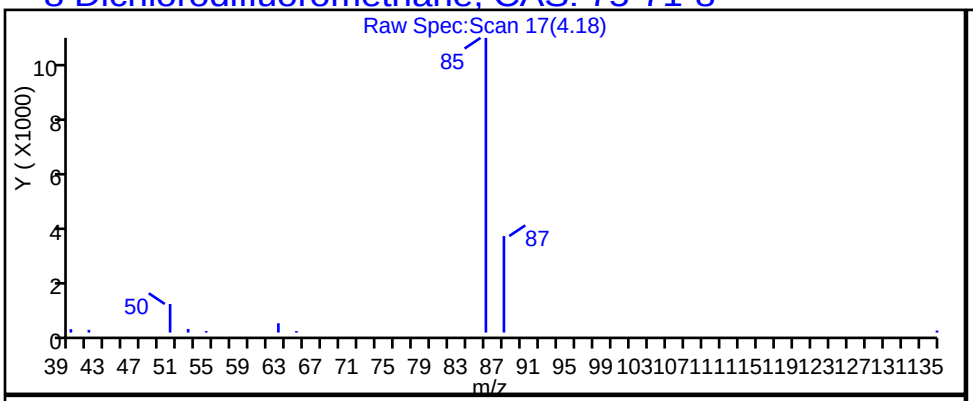


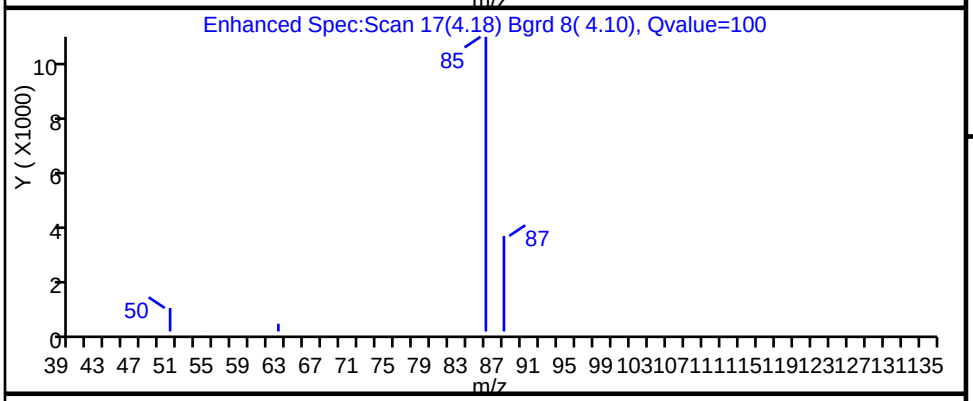
Report Date: 12-May-2015 12:40:59 Chrom Revision: 2.2 05-May-2015 11:39:10

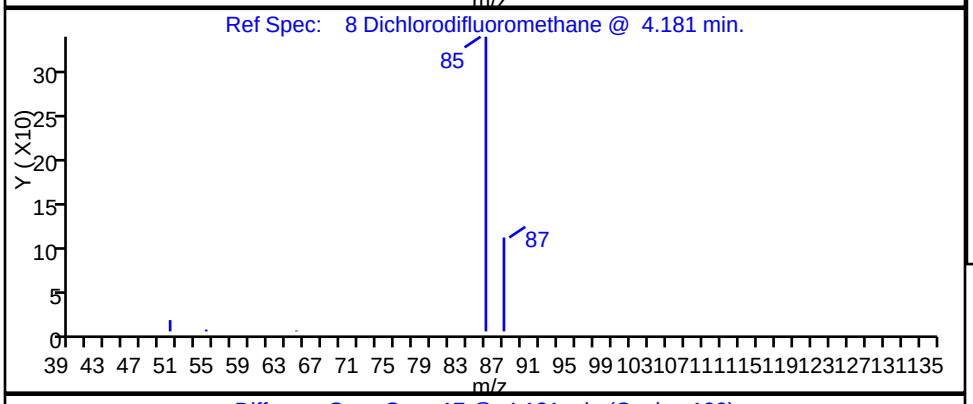
TestAmerica Sacramento

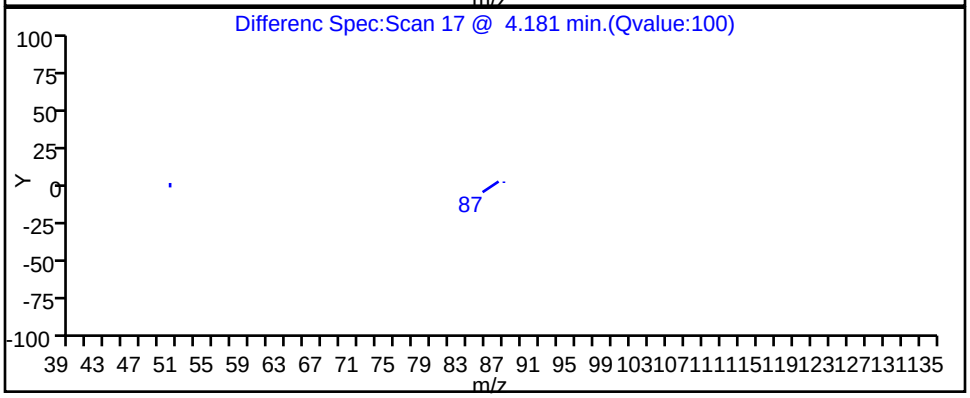
Data File:	\\SACCHROM\ChromData\ATMS5\20150512-21744.b\MS5051117.D				
Injection Date:	12-May-2015 02:39:30	Instrument ID:	ATMS5		
Lims ID:	320-12924-A-10	Lab Sample ID:	320-12924-10		
Client ID:	J6038-IA5-050615				
Operator ID:	AO	ALS Bottle#:	11	Worklist Smp#:	16
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	TO15 SIM	Limit Group:	MSA - TO-15_SIM_ICAL		
Column:		Detector	MS SCAN		

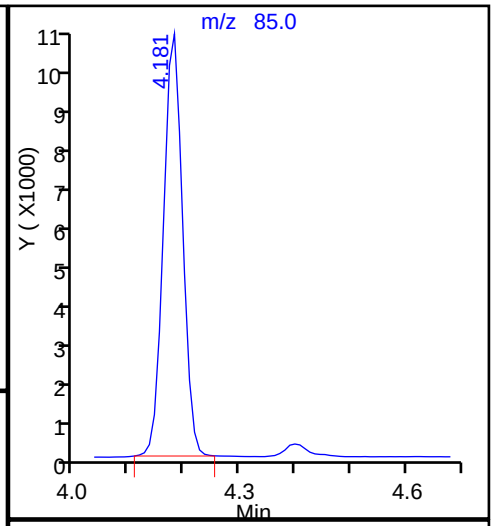
8 Dichlorodifluoromethane, CAS: 75-71-8

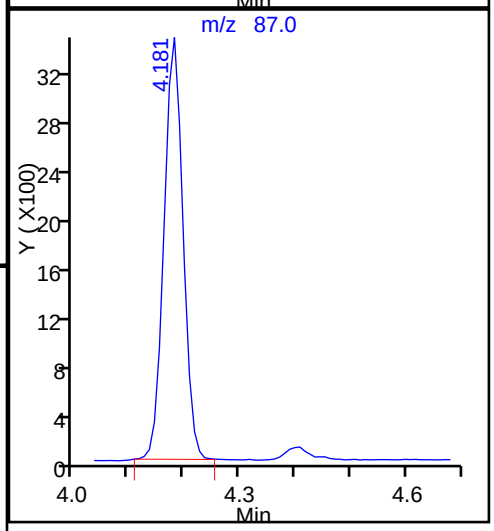












Report Date: 12-May-2015 12:40:59 Chrom Revision: 2.2 05-May-2015 11:39:10

TestAmerica Sacramento

Data File:	\\SACCHROM\ChromData\ATMS5\20150512-21744.b\MS5051117.D				
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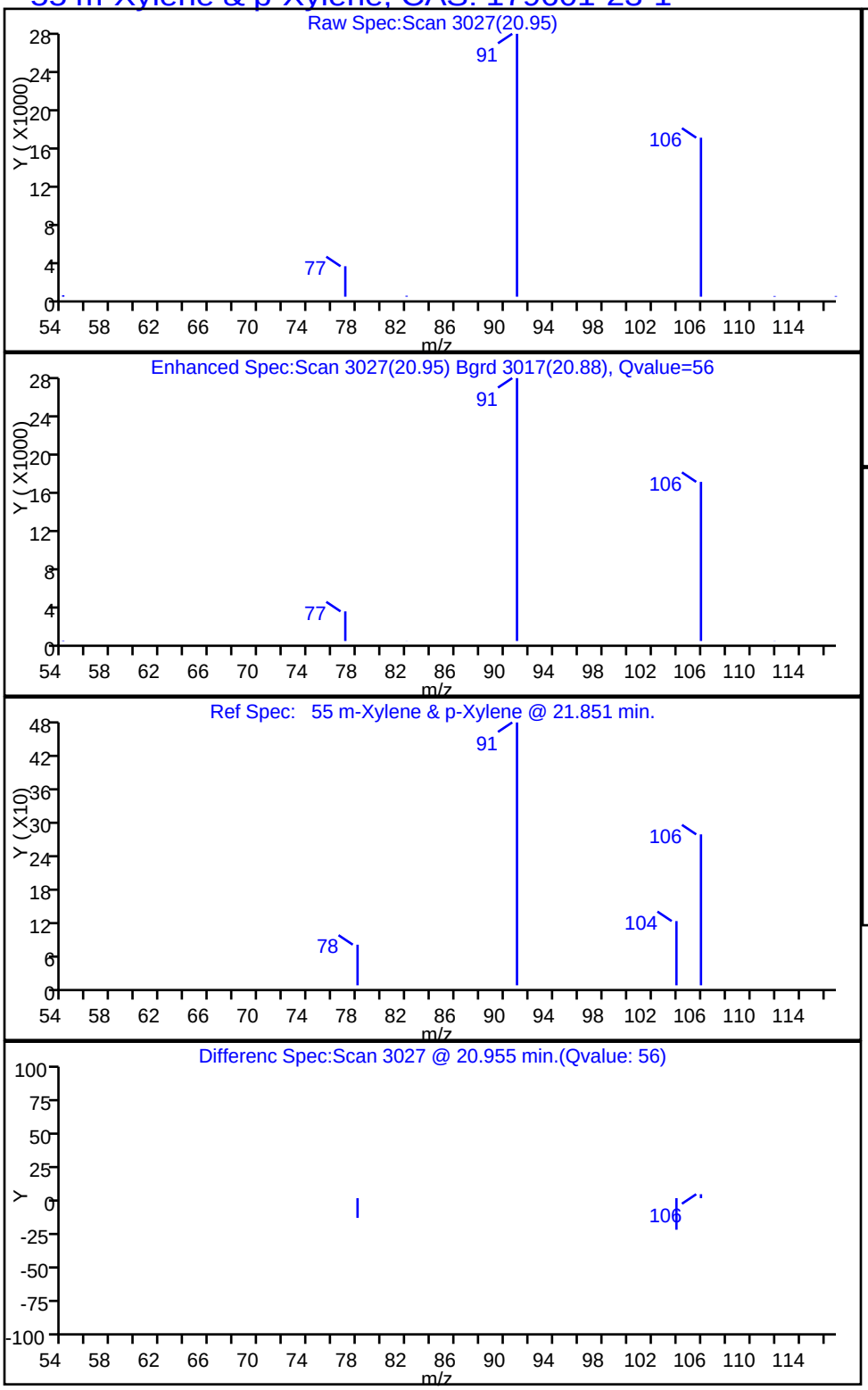
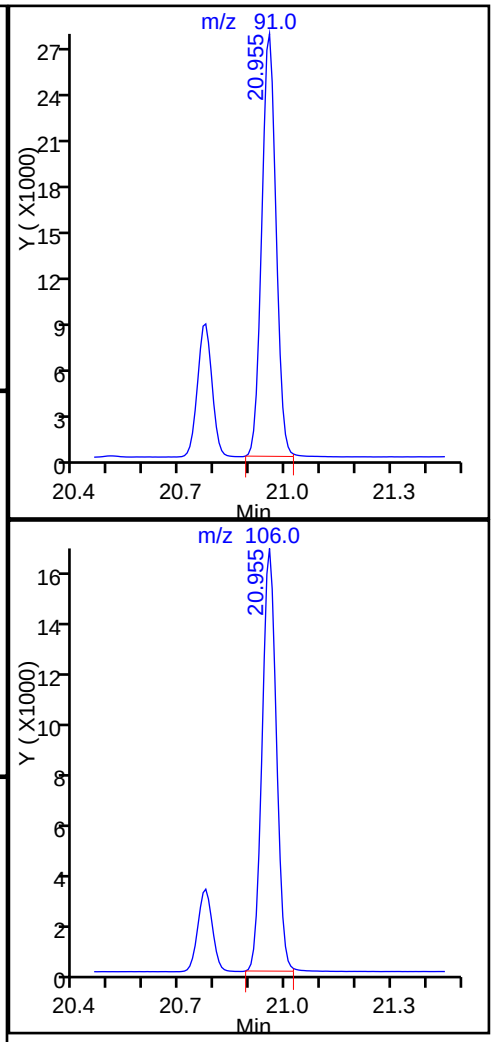
Lims ID:	320-12924-A-10	Lab Sample ID:	320-12924-10		
Client ID:	J6038-IA5-050615				
Operator ID:	AO	ALS Bottle#:	11	Worklist Smp#:	16
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	TO15 SIM	Limit Group:	MSA - TO-15_SIM_ICAL		
Column:		Detector	MS SCAN		

55 m-Xylene & p-Xylene, CAS: 179601-23-1





Report Date: 12-May-2015 12:40:59 Chrom Revision: 2.2 05-May-2015 11:39:10

TestAmerica Sacramento

Data File:	\\SACCHROM\ChromData\ATMS5\20150512-21744.b\MS5051117.D				
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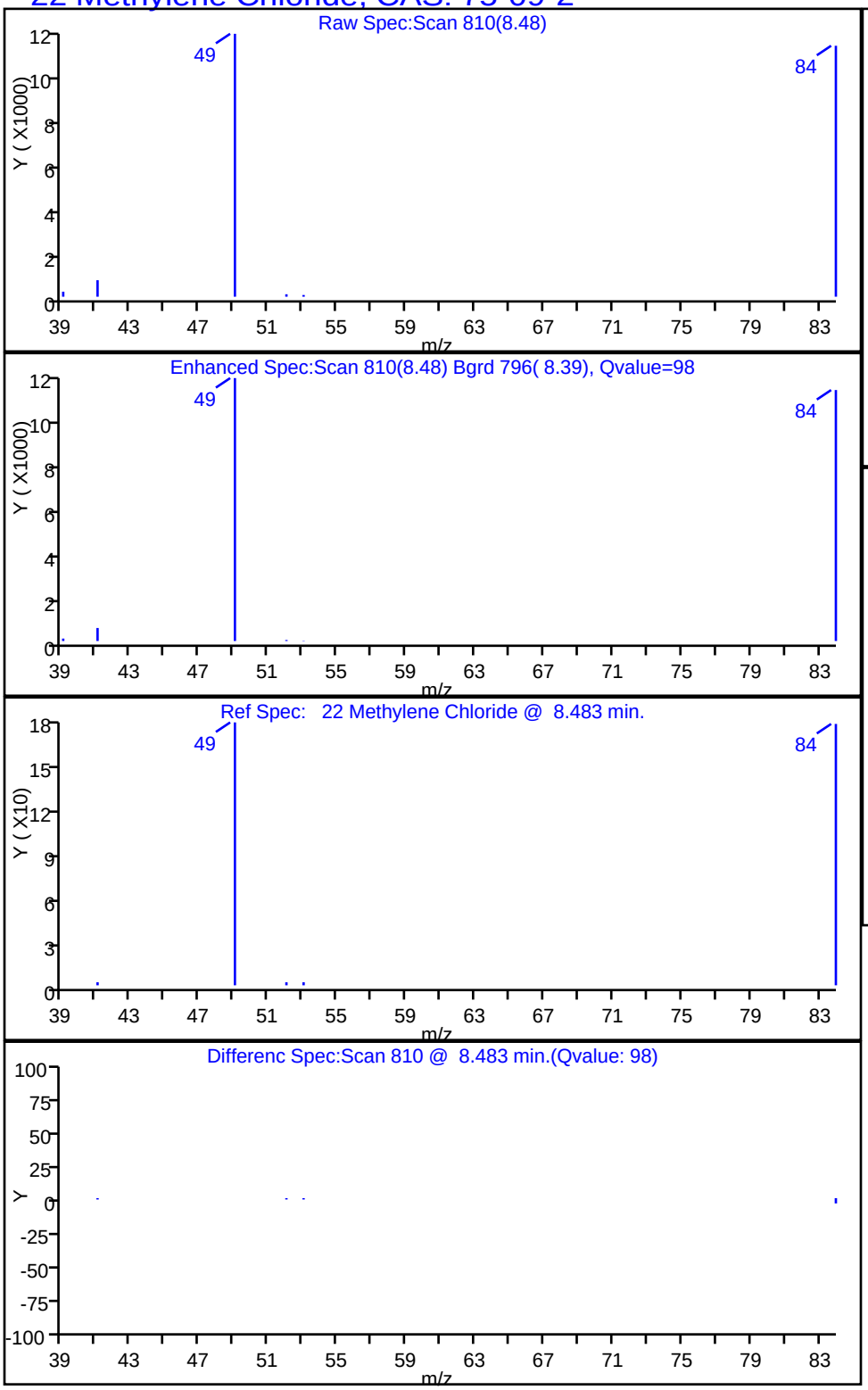
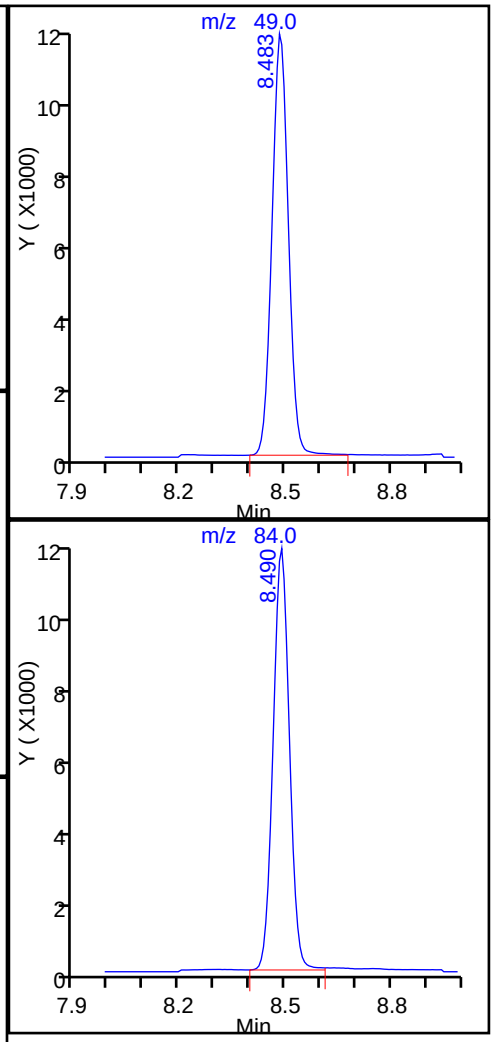
Lims ID:	320-12924-A-10	Lab Sample ID:	320-12924-10		
Client ID:	J6038-IA5-050615				
Operator ID:	AO	ALS Bottle#:	11	Worklist Smp#:	16
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	TO15 SIM	Limit Group:	MSA - TO-15_SIM_ICAL		
Column:		Detector	MS SCAN		

22 Methylene Chloride, CAS: 75-09-2



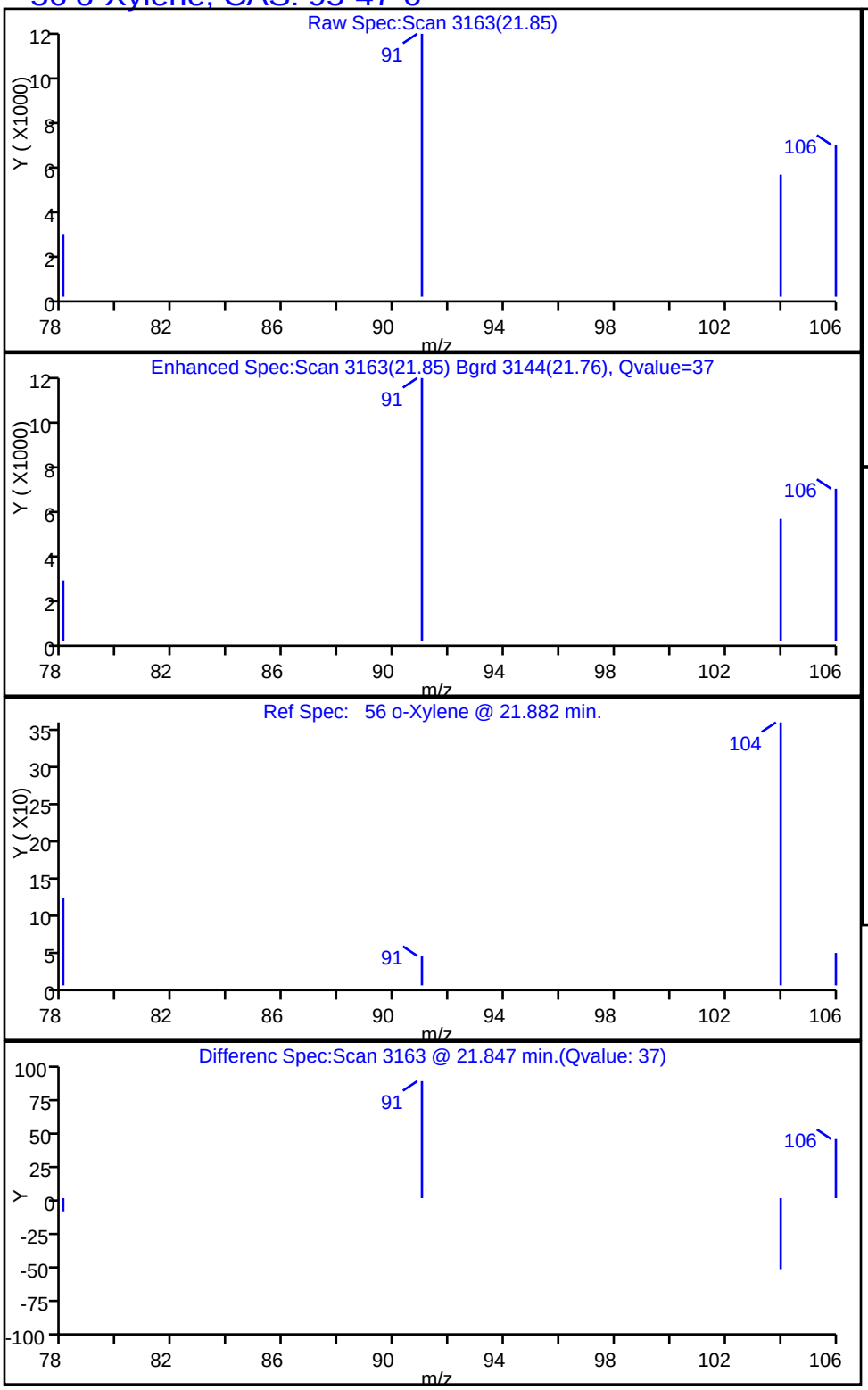


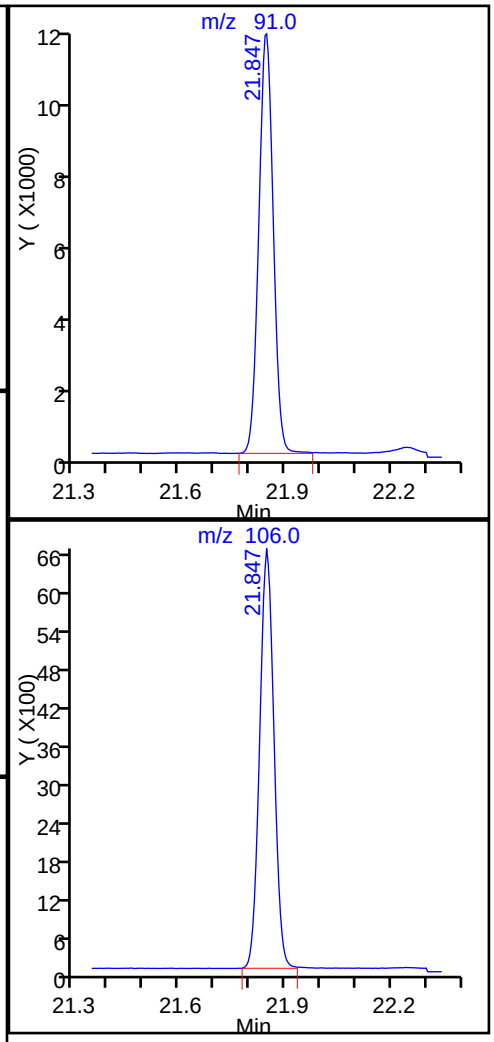
Report Date: 12-May-2015 12:40:59 Chrom Revision: 2.2 05-May-2015 11:39:10

TestAmerica Sacramento

Data File:	\\SACCHROM\ChromData\ATMS5\20150512-21744.b\MS5051117.D				
Injection Date:	12-May-2015 02:39:30	Instrument ID:	ATMS5		
Lims ID:	320-12924-A-10	Lab Sample ID:	320-12924-10		
Client ID:	J6038-IA5-050615				
Operator ID:	AO	ALS Bottle#:	11	Worklist Smp#:	16
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	TO15 SIM	Limit Group:	MSA - TO-15_SIM_ICAL		
Column:		Detector	MS SCAN		

56 o-Xylene, CAS: 95-47-6



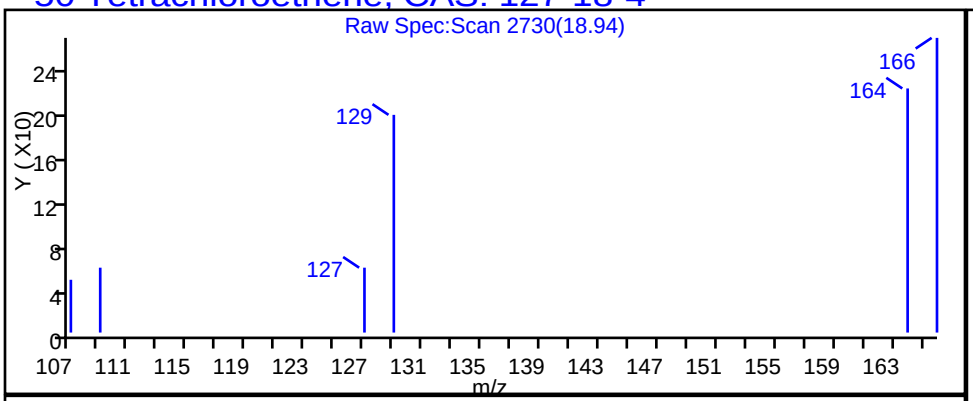


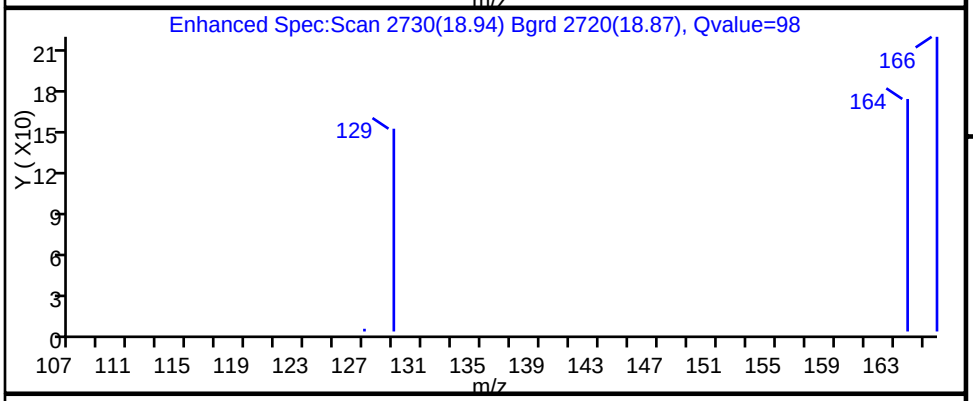
Report Date: 12-May-2015 12:40:59 Chrom Revision: 2.2 05-May-2015 11:39:10

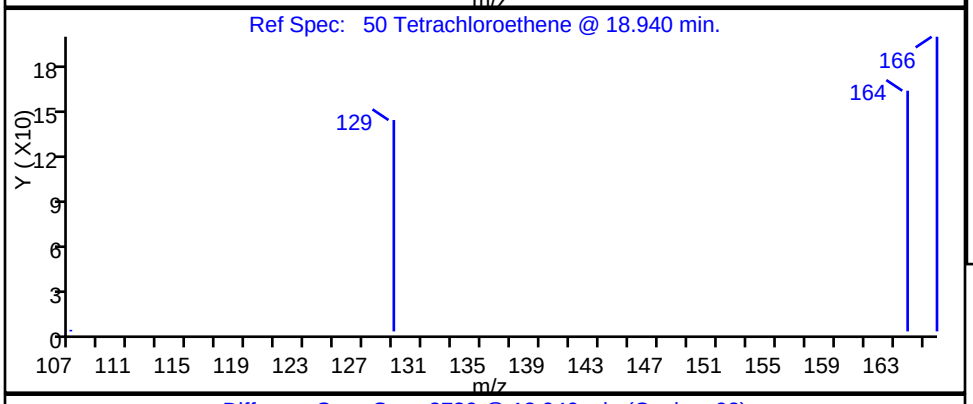
TestAmerica Sacramento

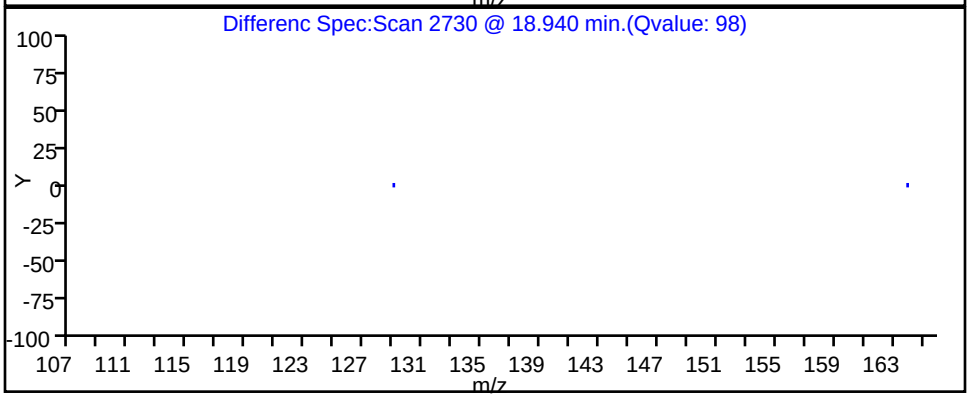
Data File:	\\SACCHROM\ChromData\ATMS5\20150512-21744.b\MS5051117.D				
Injection Date:	12-May-2015 02:39:30	Instrument ID:	ATMS5		
Lims ID:	320-12924-A-10	Lab Sample ID:	320-12924-10		
Client ID:	J6038-IA5-050615				
Operator ID:	AO	ALS Bottle#:	11	Worklist Smp#:	16
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	TO15 SIM	Limit Group:	MSA - TO-15_SIM_ICAL		
Column:		Detector	MS SCAN		

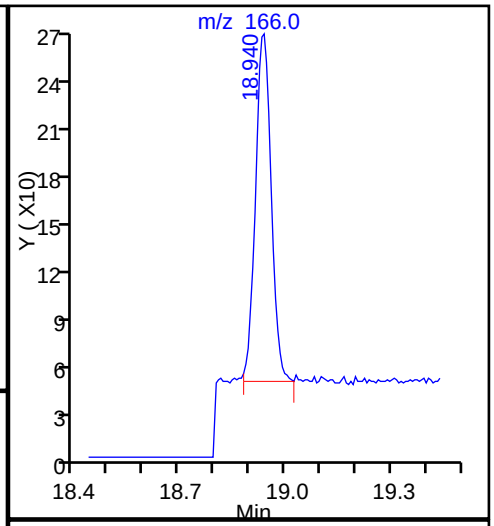
50 Tetrachloroethene, CAS: 127-18-4

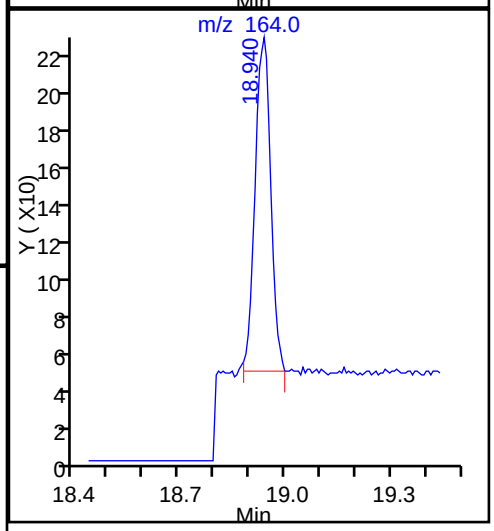










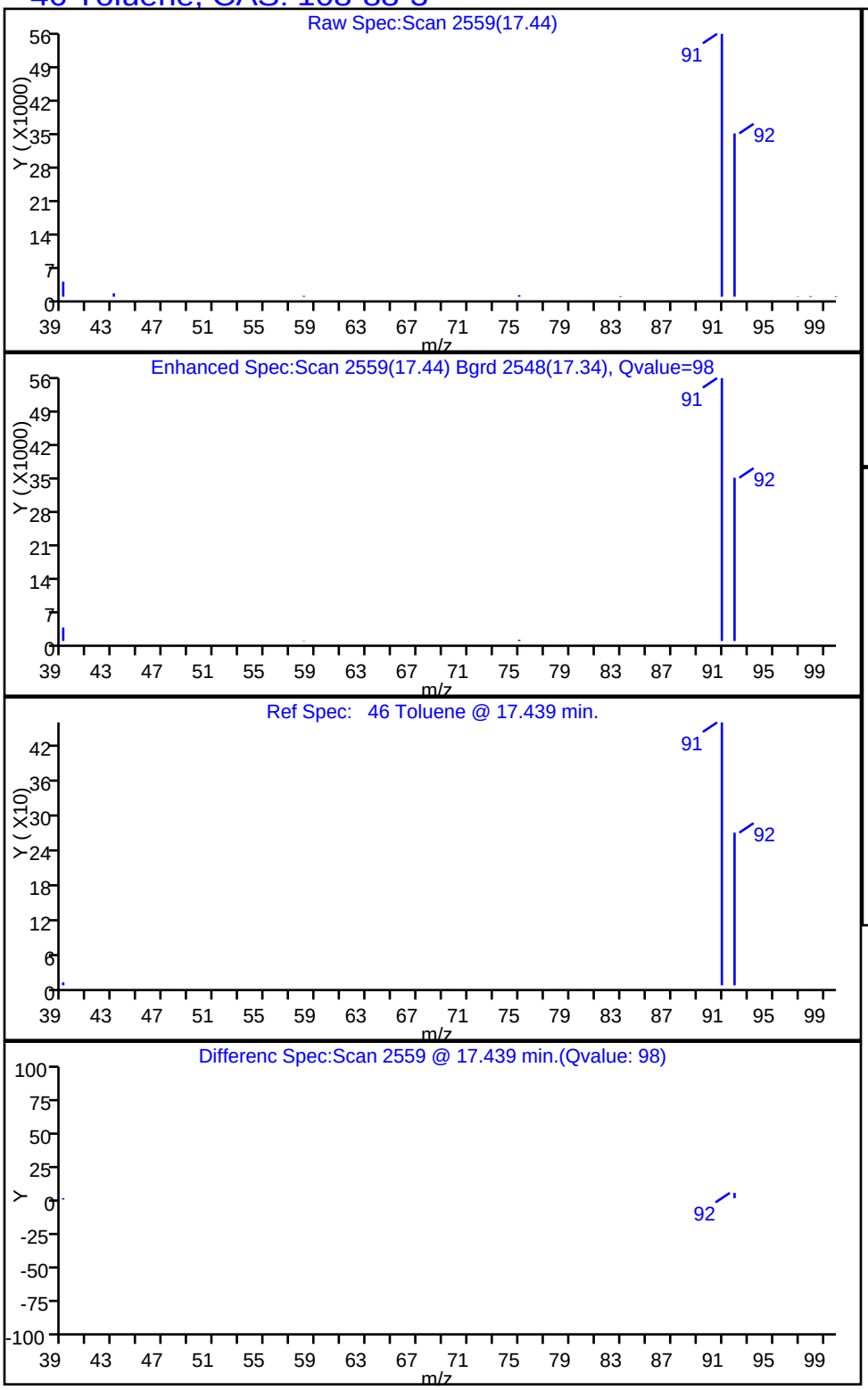


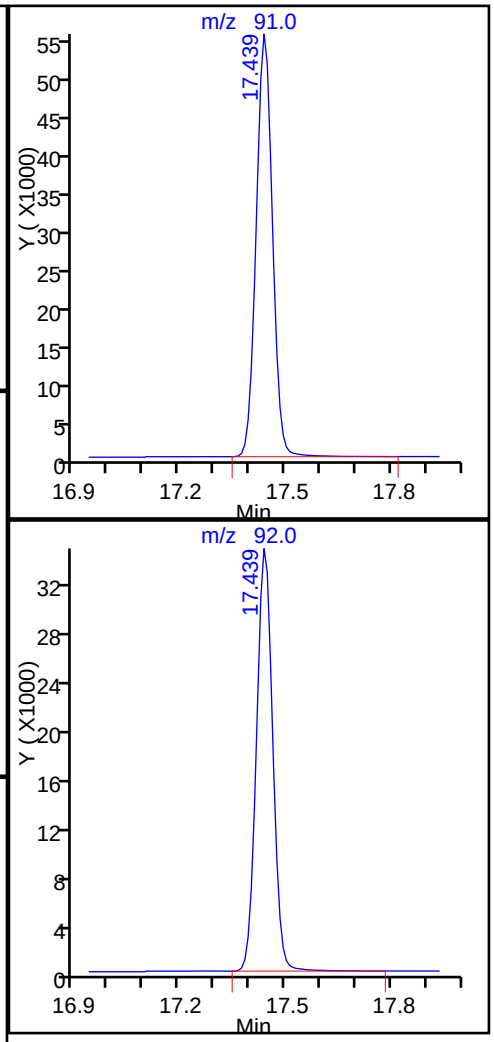
Report Date: 12-May-2015 12:40:59 Chrom Revision: 2.2 05-May-2015 11:39:10

TestAmerica Sacramento

Data File:	\\SACCHROM\ChromData\ATMS5\20150512-21744.b\MS5051117.D				
Injection Date:	12-May-2015 02:39:30	Instrument ID:	ATMS5		
Lims ID:	320-12924-A-10	Lab Sample ID:	320-12924-10		
Client ID:	J6038-IA5-050615				
Operator ID:	AO	ALS Bottle#:	11	Worklist Smp#:	16
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	TO15 SIM	Limit Group:	MSA - TO-15_SIM_ICAL		
Column:		Detector	MS SCAN		

46 Toluene, CAS: 108-88-3



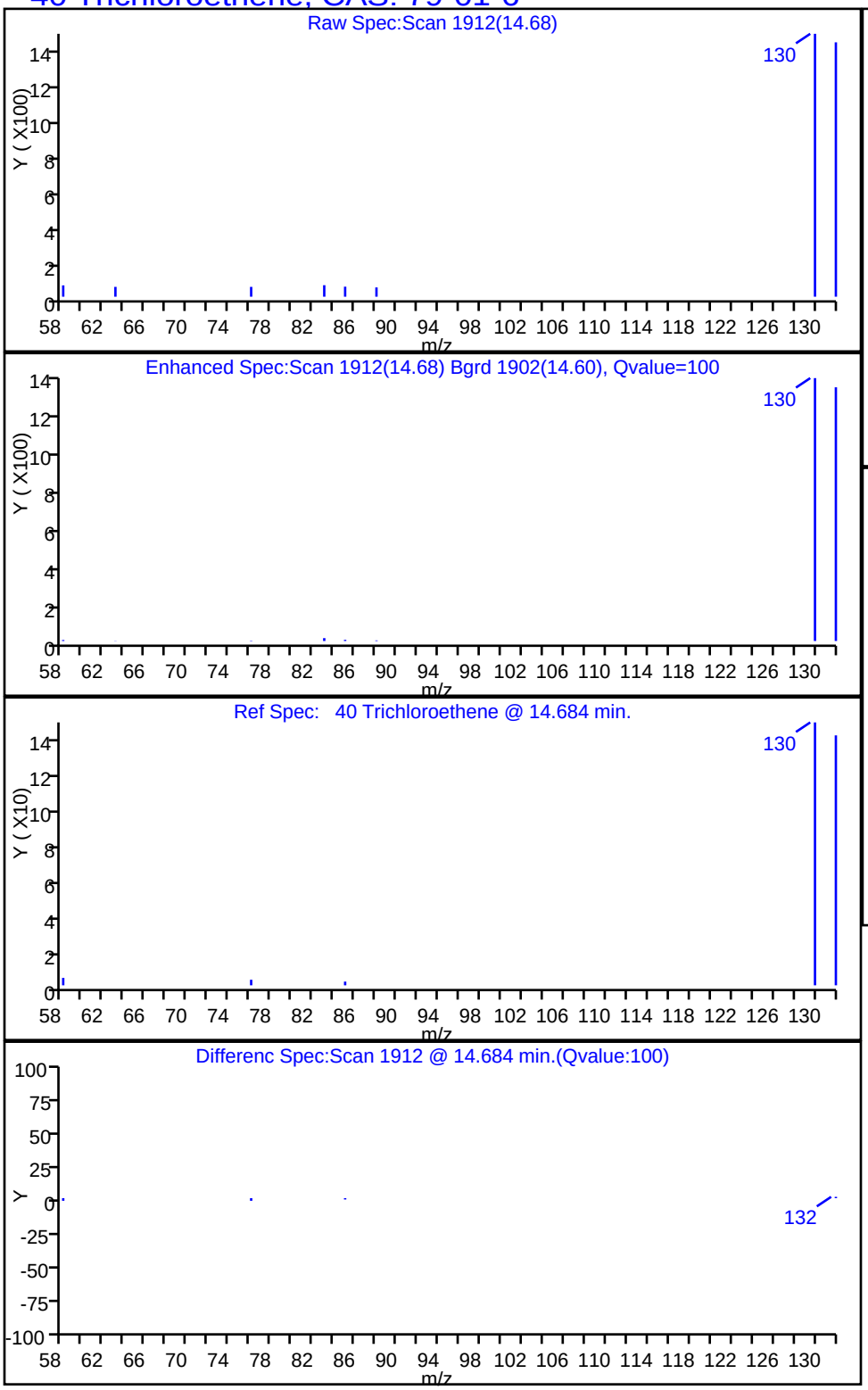


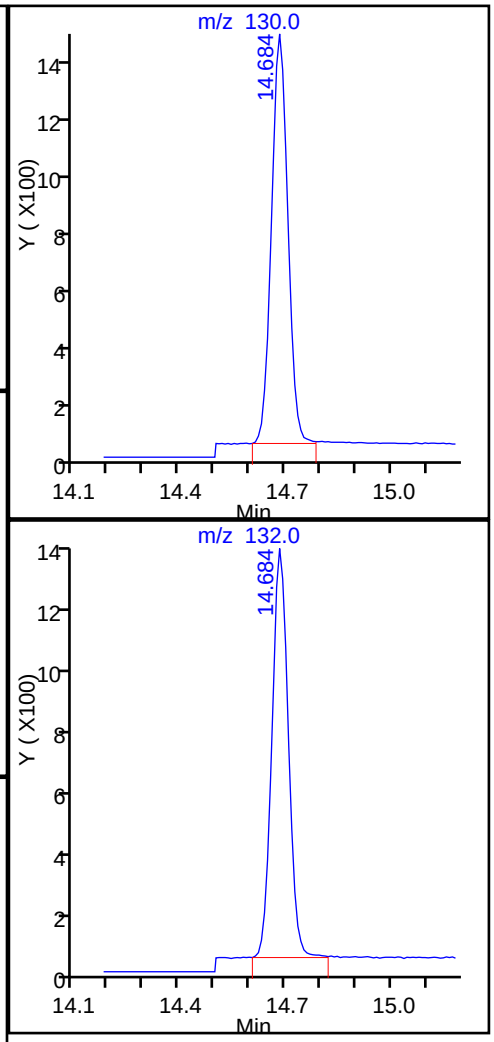
Report Date: 12-May-2015 12:40:59 Chrom Revision: 2.2 05-May-2015 11:39:10

TestAmerica Sacramento

Data File:	\\SACCHROM\ChromData\ATMS5\20150512-21744.b\MS5051117.D				
Injection Date:	12-May-2015 02:39:30	Instrument ID:	ATMS5		
Lims ID:	320-12924-A-10	Lab Sample ID:	320-12924-10		
Client ID:	J6038-IA5-050615				
Operator ID:	AO	ALS Bottle#:	11	Worklist Smp#:	16
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	TO15 SIM	Limit Group:	MSA - TO-15_SIM_ICAL		
Column:		Detector	MS SCAN		

40 Trichloroethene, CAS: 79-01-6





Manual Integration/User Assign Peak Report

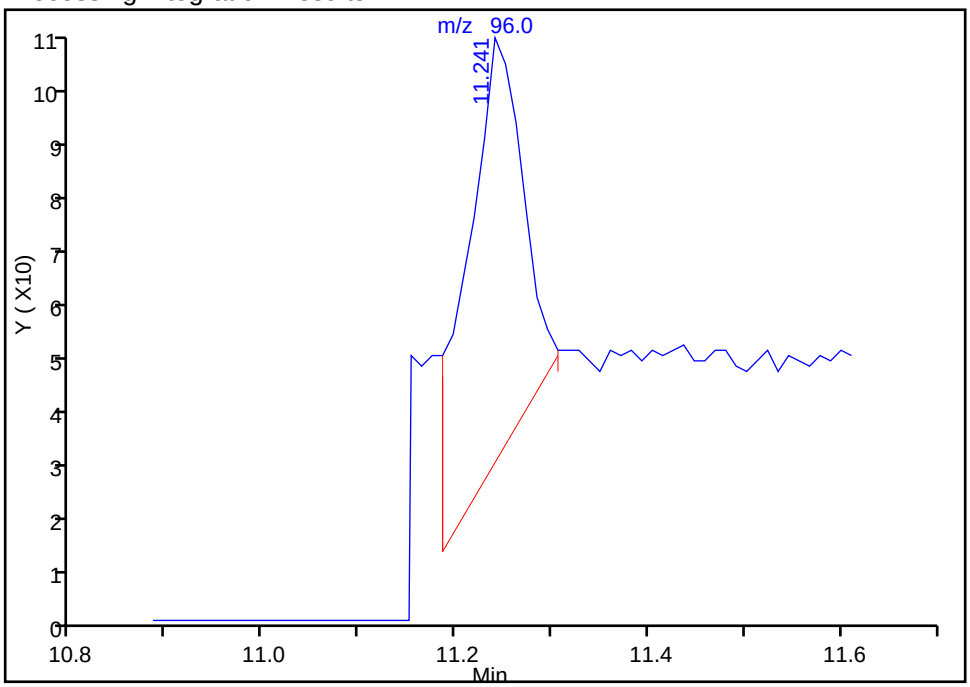
TestAmerica Sacramento

Data File:	\\SACCHROM\ChromData\ATMS5\20150512-21744.b\MS5051117.D				
Injection Date:	12-May-2015 02:39:30	Instrument ID:	ATMS5		
Lims ID:	320-12924-A-10	Lab Sample ID:	320-12924-10		
Client ID:	J6038-IA5-050615				
Operator ID:	AO	ALS Bottle#:	11	Worklist Smp#:	16
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	TO15 SIM	Limit Group:	MSA - TO-15_SIM_ICAL		
Column:		Detector	MS SCAN		

30 cis-1,2-Dichloroethene, CAS: 156-59-2

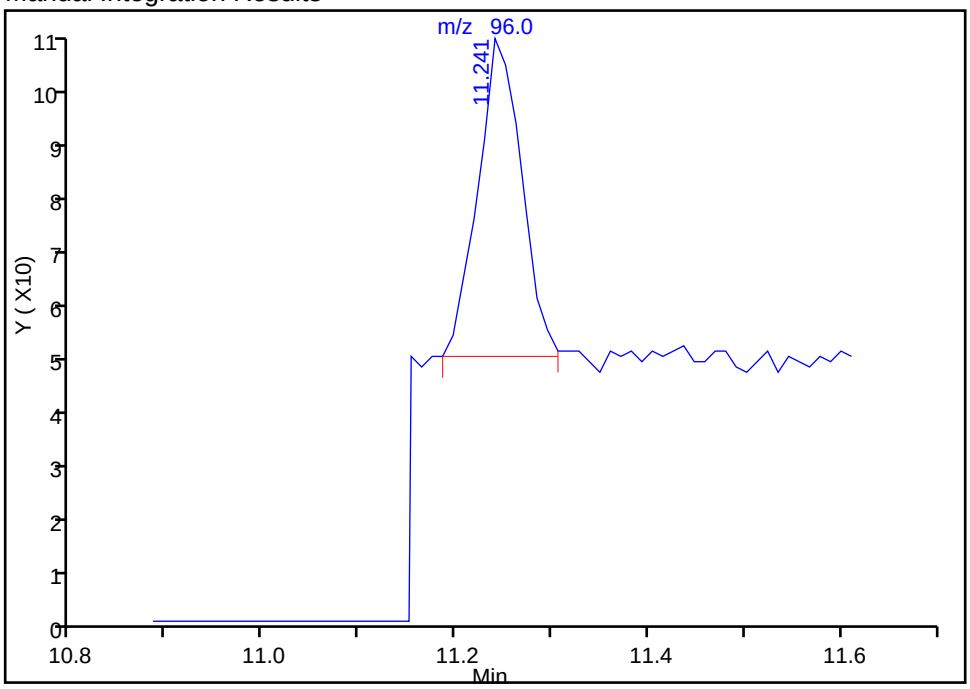
Processing Integration Results

RT: 11.24
Area: 334
Amount: 0.011759
Amount Units: ppb v/v



Manual Integration Results

RT: 11.24
Area: 189
Amount: 0.006654
Amount Units: ppb v/v



Reviewer: ortizam, 12-May-2015 12:40:59
Audit Action: Manually Integrated
Audit Reason: Baseline

Manual Integration/User Assign Peak Report

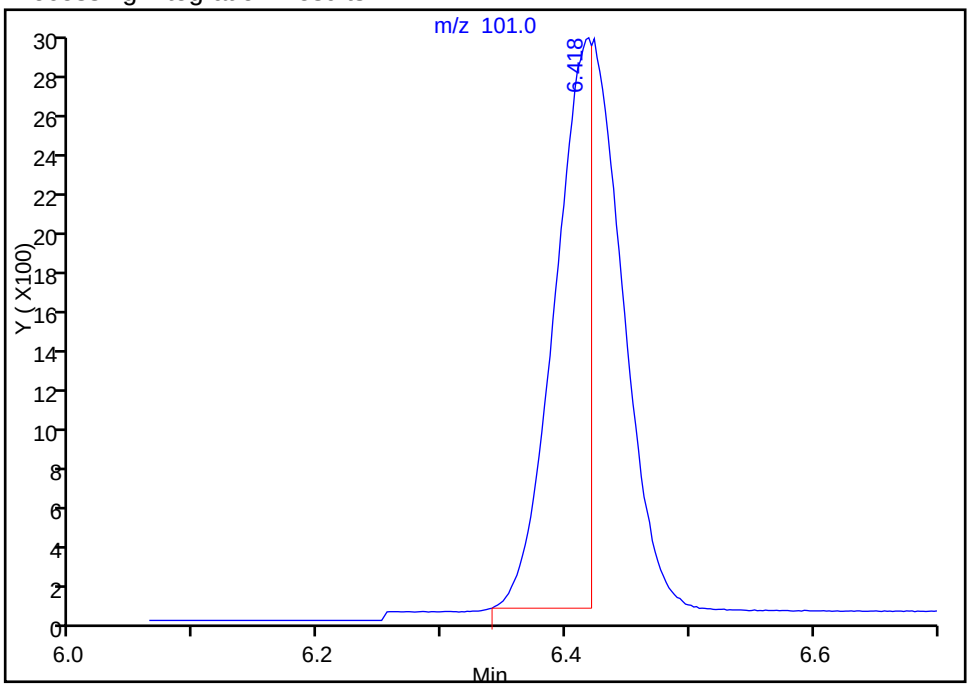
TestAmerica Sacramento

Data File:	\\SACCHROM\ChromData\ATMS5\20150512-21744.b\MS5051117.D				
Injection Date:	12-May-2015 02:39:30	Instrument ID:	ATMS5		
Lims ID:	320-12924-A-10	Lab Sample ID:	320-12924-10		
Client ID:	J6038-IA5-050615				
Operator ID:	AO	ALS Bottle#:	11	Worklist Smp#:	16
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	TO15 SIM	Limit Group:	MSA - TO-15_SIM_ICAL		
Column:		Detector	MS SCAN		

15 Trichlorofluoromethane, CAS: 75-69-4

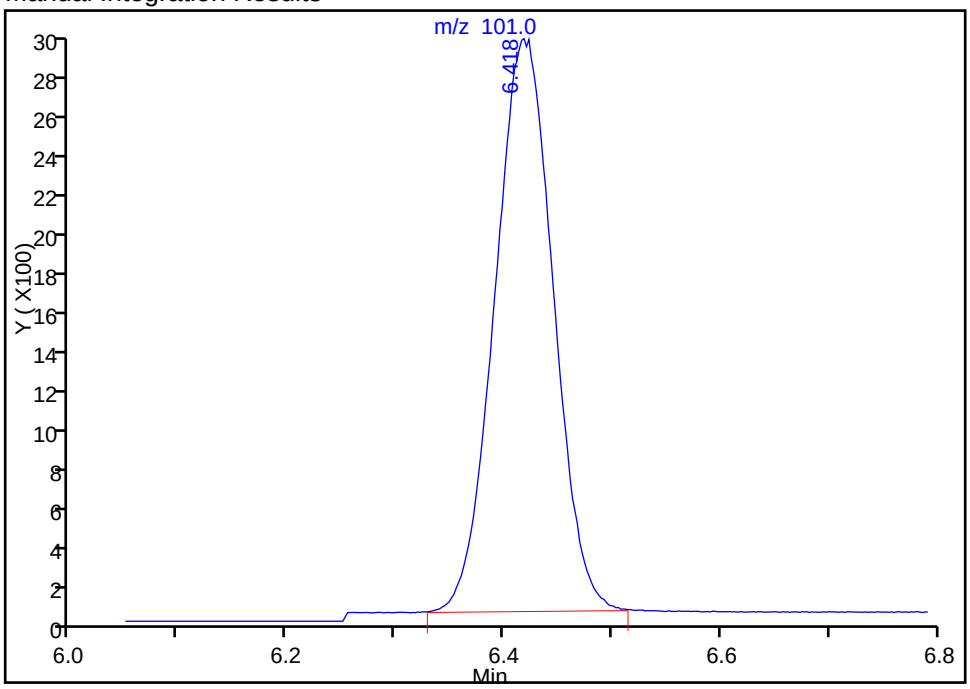
Processing Integration Results

RT: 6.42
Area: 5995
Amount: 0.113043
Amount Units: ppb v/v



Manual Integration Results

RT: 6.42
Area: 11093
Amount: 0.209173
Amount Units: ppb v/v



Reviewer: ortizam, 12-May-2015 12:40:59
Audit Action: Manually Integrated
Audit Reason: Split Peak

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento | Job No.: 320-12924-1

SDG No.:

Client Sample ID: J6038-OA1-050615-1 | Lab Sample ID: 320-12924-11

Matrix: Air | Lab File ID: MS5051118.D

Analysis Method: TO-15 SIM | Date Collected: 05/06/2015 19:03

Sample wt/vol: 905(mL) | Date Analyzed: 05/12/2015 03:39

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: RTX-Volatiles ID: 0.32(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 73719 | Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	133.41	ND		0.020	0.0050
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.050	0.0050
75-34-3	1,1-Dichloroethane	98.96	ND		0.020	0.0050
75-35-4	1,1-Dichloroethene	96.94	ND		0.020	0.0050
95-50-1	1,2-Dichlorobenzene	147.00	ND		0.050	0.010
107-06-2	1,2-Dichloroethane	98.96	0.014	J	0.020	0.0050
106-46-7	1,4-Dichlorobenzene	147.00	ND		0.10	0.010
108-90-7	Chlorobenzene	112.56	ND		0.020	0.010
67-66-3	Chloroform	119.38	0.018	J	0.020	0.0050
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.020	0.0050
100-41-4	Ethylbenzene	106.17	0.026		0.020	0.010
75-69-4	Freon 11	137.37	0.22		0.045	0.010
76-13-1	Freon 113	187.38	0.063		0.030	0.0050
75-71-8	Freon 12	120.91	0.49		0.020	0.0050
179601-23-1	m,p-Xylene	106.17	0.071		0.040	0.020
75-09-2	Methylene Chloride	84.93	0.12	J	0.20	0.10
95-47-6	o-Xylene	106.17	0.029		0.020	0.010
127-18-4	Tetrachloroethene	165.83	ND		0.020	0.010
108-88-3	Toluene	92.14	0.13		0.020	0.010
156-60-5	trans-1,2-Dichloroethene	96.94	ND		0.020	0.0050
79-01-6	Trichloroethene	131.39	ND		0.020	0.0050
75-01-4	Vinyl chloride	62.50	ND		0.020	0.010

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	101		70-130
17060-07-0	1,2-Dichloroethane-d4 (Surr)	94		70-130
2037-26-5	Toluene-d8 (Surr)	100		70-130

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento | Job No.: 320-12924-1

SDG No.:

Client Sample ID: J6038-OA1-050615-1 | Lab Sample ID: 320-12924-11

Matrix: Air | Lab File ID: MS5051118.D

Analysis Method: TO-15 SIM | Date Collected: 05/06/2015 19:03

Sample wt/vol: 905(mL) | Date Analyzed: 05/12/2015 03:39

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: RTX-Volatiles ID: 0.32(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 73719 | Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	133.41	ND		0.11	0.027
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.27	0.027
75-34-3	1,1-Dichloroethane	98.96	ND		0.081	0.020
75-35-4	1,1-Dichloroethene	96.94	ND		0.079	0.020
95-50-1	1,2-Dichlorobenzene	147.00	ND		0.30	0.060
107-06-2	1,2-Dichloroethane	98.96	0.056	J	0.081	0.020
106-46-7	1,4-Dichlorobenzene	147.00	ND		0.60	0.060
108-90-7	Chlorobenzene	112.56	ND		0.092	0.046
67-66-3	Chloroform	119.38	0.088	J	0.098	0.024
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.079	0.020
100-41-4	Ethylbenzene	106.17	0.11		0.087	0.043
75-69-4	Freon 11	137.37	1.2		0.25	0.056
76-13-1	Freon 113	187.38	0.49		0.23	0.038
75-71-8	Freon 12	120.91	2.4		0.099	0.025
179601-23-1	m,p-Xylene	106.17	0.31		0.17	0.087
75-09-2	Methylene Chloride	84.93	0.43	J	0.69	0.35
95-47-6	o-Xylene	106.17	0.12		0.087	0.043
127-18-4	Tetrachloroethene	165.83	ND		0.14	0.068
108-88-3	Toluene	92.14	0.48		0.075	0.038
156-60-5	trans-1,2-Dichloroethene	96.94	ND		0.079	0.020
79-01-6	Trichloroethene	131.39	ND		0.11	0.027
75-01-4	Vinyl chloride	62.50	ND		0.051	0.026

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	101		70-130
17060-07-0	1,2-Dichloroethane-d4 (Surr)	94		70-130
2037-26-5	Toluene-d8 (Surr)	100		70-130

TestAmerica Sacramento
Target Compound Quantitation Report

Data File:	\\SACCHROM\ChromData\ATMS5\20150512-21744.b\MS5051118.D				
Lims ID:	320-12924-A-11	Lab Sample ID:	320-12924-11		
Client ID:	J6038-OA1-050615-1				
Sample Type:	Client				
Inject. Date:	12-May-2015 03:39:30	ALS Bottle#:	12	Worklist Smp#:	17
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Sample Info:	320-12924-A-11				
Misc. Info.:	905ML905ML				
Operator ID:	AO	Instrument ID:	ATMS5		

Method:	\\SACCHROM\ChromData\ATMS5\20150512-21744.b\TO15 SIM.m		
Limit Group:	MSA - TO-15_SIM_ICAL		
Last Update:	12-May-2015 12:40:59	Calib Date:	26-Mar-2015 03:17:30
Integrator:	RTE	ID Type:	RT Order ID
Quant Method:	Internal Standard	Quant By:	Initial Calibration
Last ICal File:	\\SACCHROM\ChromData\ATMS5\20150326-20538.b\MS5032518.D		

Column 1 : Det: MS SCAN
Process Host: XAWRK010

First Level Reviewer: ortizam Date: 12-May-2015 12:41:23

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	130	11.850	11.850	0.000	100	34927	2.00	
* 2 1,4-Difluorobenzene	114	13.944	13.941	0.003	100	163866	2.00	
* 3 Chlorobenzene-d5 (IS)	117	20.508	20.508	0.000	100	149538	2.00	
$ 4 1,2-Dichloroethane-d4 (Sur	65	13.002	13.002	0.000	100	36281	1.88	
$ 5 Toluene-d8 (Surr)	100	17.275	17.266	0.009	100	112682	2.00	
$ 6 4-Bromofluorobenzene (Surr	95	23.040	23.040	0.000	99	84602	2.01	
8 Dichlorodifluoromethane	85	4.181	4.181	0.000	100	26030	0.4943	
15 Trichlorofluoromethane	101	6.427	6.418	0.009	100	10858	0.2161	
19 1,1,2-Trichloro-1,2,2-trif	101	7.421	7.412	0.009	98	3068	0.0635	
22 Methylene Chloride	49	8.490	8.490	0.000	99	2987	0.1239	
30 cis-1,2-Dichloroethene	96	11.153	11.240	-0.087	54	35	0.001301	7
32 Chloroform	83	11.589	11.589	0.000	90	801	0.0181	
37 1,2-Dichloroethane	62	13.192	13.192	0.000	99	404	0.0138	
40 Trichloroethene	130	14.683	14.683	0.000	94	174	0.004504	7
46 Toluene	91	17.439	17.439	0.000	98	15797	0.1274	
50 Tetrachloroethene	166	18.933	18.939	-0.006	97	197	0.003947	7
53 Chlorobenzene	112	20.584	20.584	0.000	1	114	0.001082	7
54 Ethylbenzene	91	20.773	20.773	0.000	89	4493	0.0262	
55 m-Xylene & p-Xylene	91	20.955	20.955	0.000	56	9210	0.0710	
56 o-Xylene	91	21.842	21.846	-0.004	8	3877	0.0286	
65 1,4-Dichlorobenzene	146	25.526	25.530	-0.004	46	393	0.003821	7
67 1,2-Dichlorobenzene	146	26.242	26.247	-0.005	1	145	0.001370	7

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

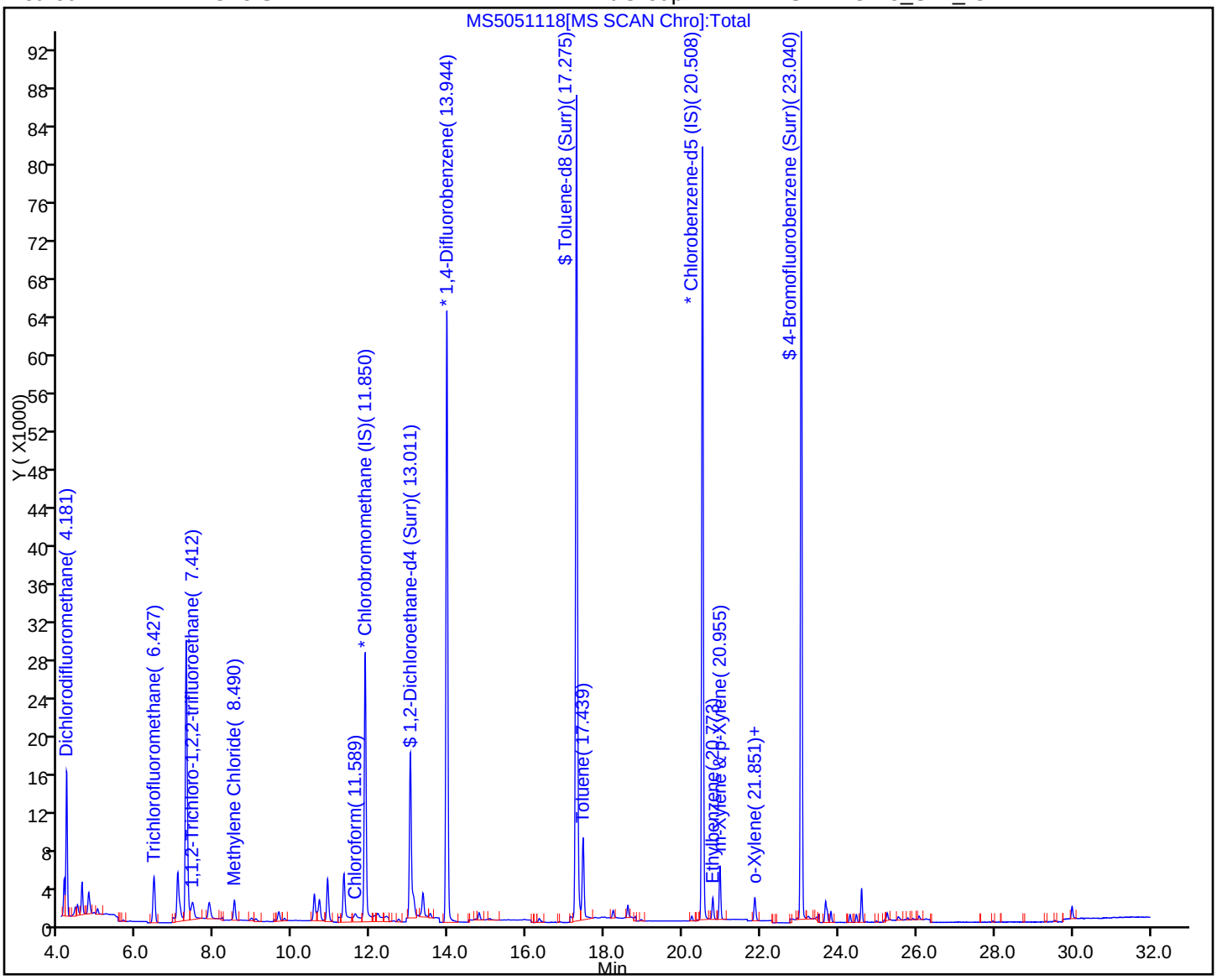
Reagents:

VASUISIM_00172 Amount Added: 50.00 Units: mL Run Reagent

Report Date: 12-May-2015 12:41:23 Chrom Revision: 2.2 05-May-2015 11:39:10

TestAmerica Sacramento

Data File:	\\SACCHROM\ChromData\ATMS5\20150512-21744.b\MS5051118.D				
Injection Date:	12-May-2015 03:39:30	Instrument ID:	ATMS5		
Lims ID:	320-12924-A-11	Lab Sample ID:	320-12924-11		
Client ID:	J6038-OA1-050615-1				
Operator ID:	AO	ALS Bottle#:	12	Worklist Smp#:	17
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	TO15 SIM	Limit Group:	MSA - TO-15_SIM_ICAL		

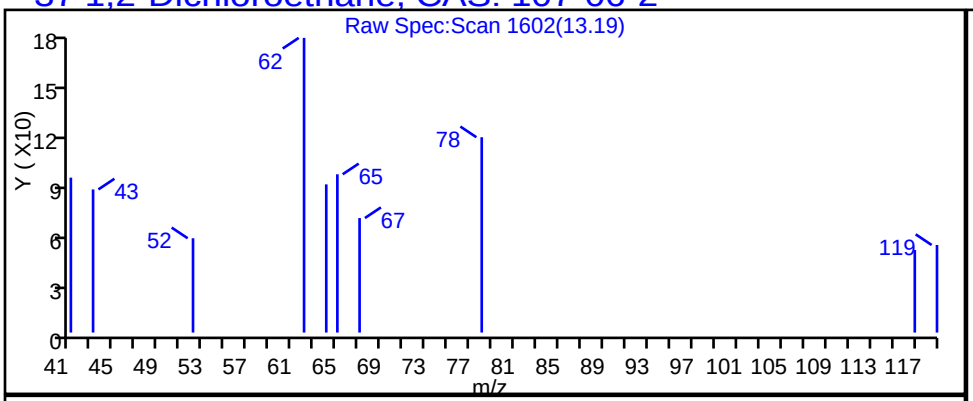


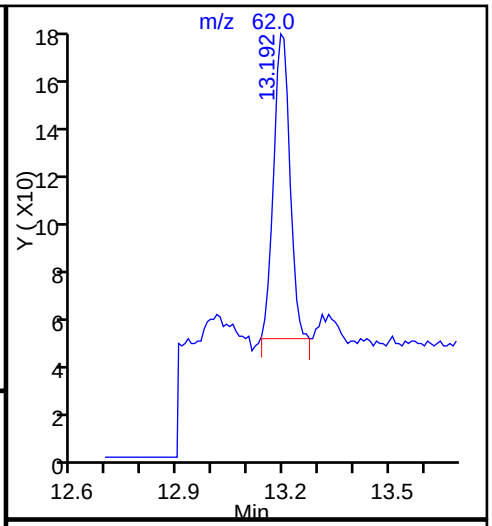
Report Date: 12-May-2015 12:41:23 Chrom Revision: 2.2 05-May-2015 11:39:10

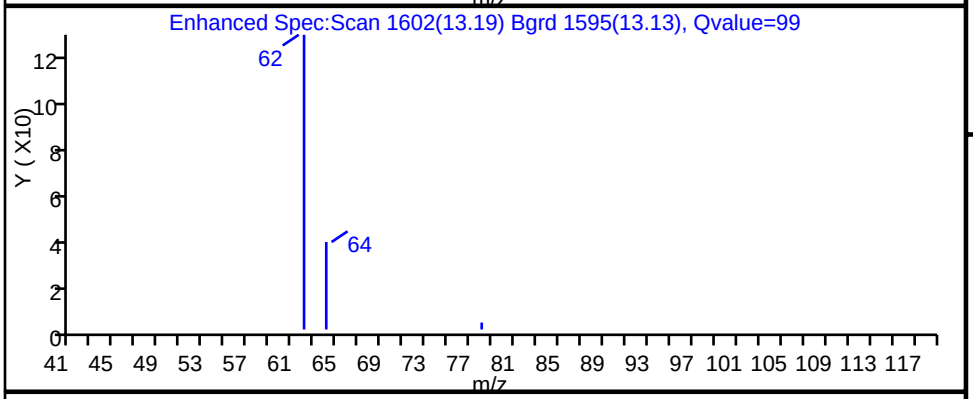
TestAmerica Sacramento

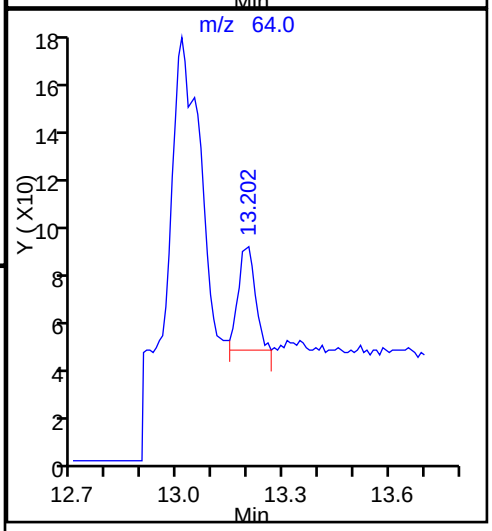
Data File:	\\SACCHROM\ChromData\ATMS5\20150512-21744.b\MS5051118.D				
Injection Date:	12-May-2015 03:39:30	Instrument ID:	ATMS5		
Lims ID:	320-12924-A-11	Lab Sample ID:	320-12924-11		
Client ID:	J6038-OA1-050615-1				
Operator ID:	AO	ALS Bottle#:	12	Worklist Smp#:	17
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	TO15 SIM	Limit Group:	MSA - TO-15_SIM_ICAL		
Column:		Detector	MS SCAN		

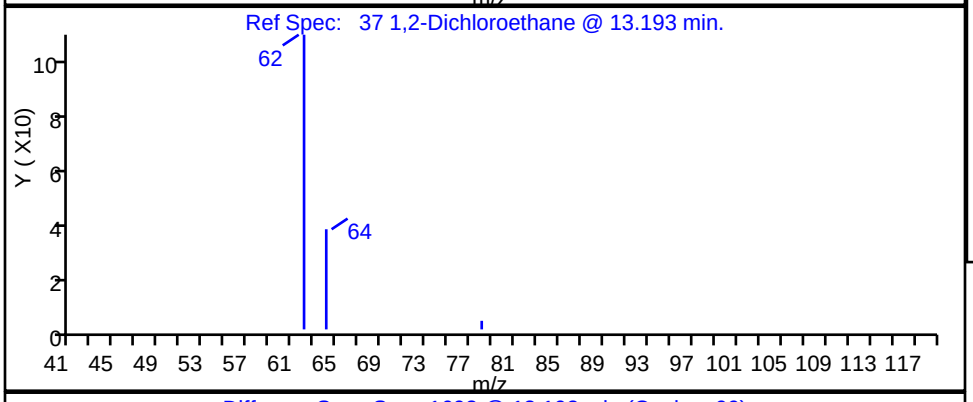
37 1,2-Dichloroethane, CAS: 107-06-2

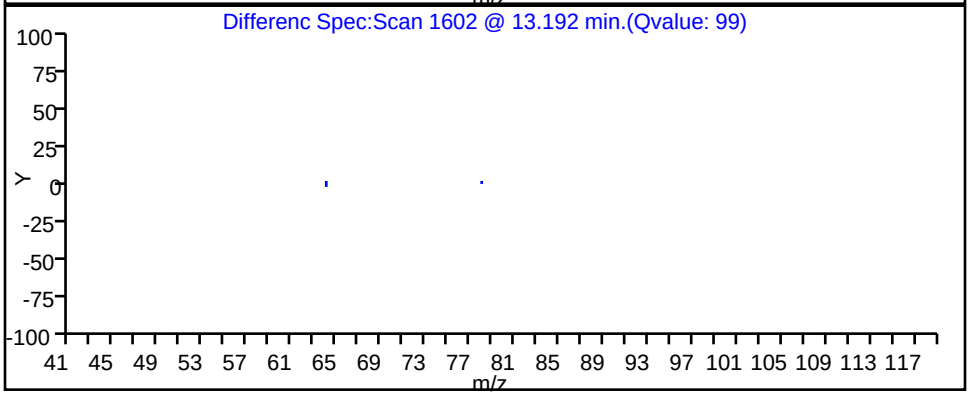










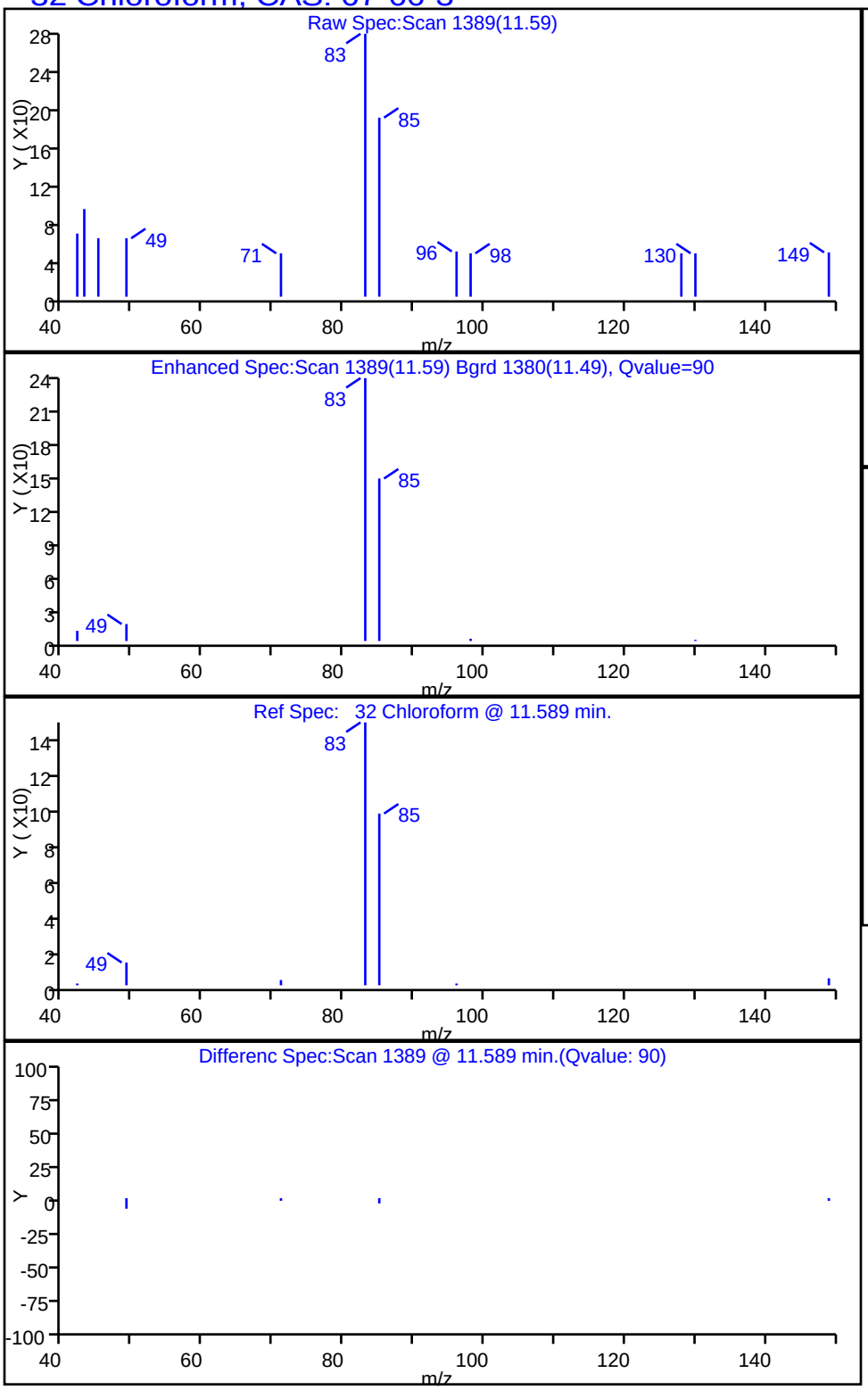


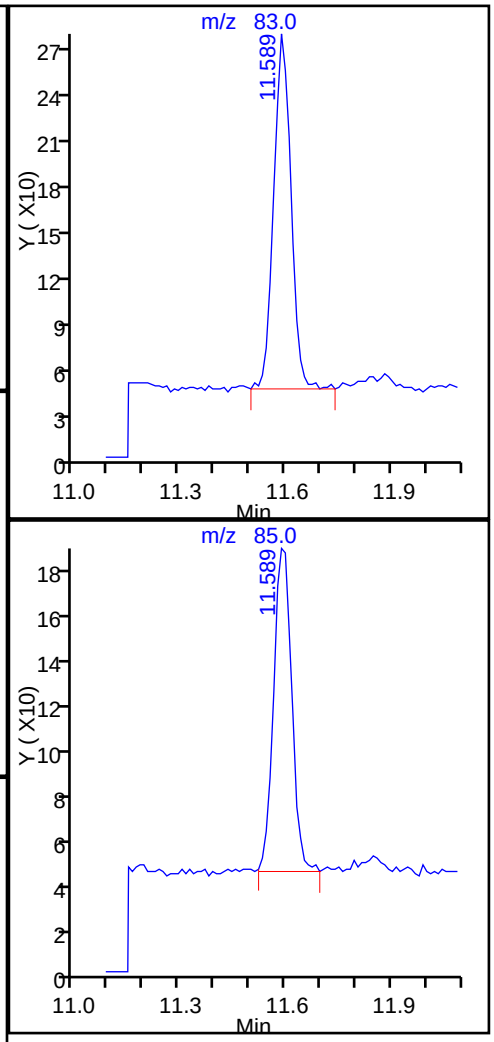
Report Date: 12-May-2015 12:41:23 Chrom Revision: 2.2 05-May-2015 11:39:10

TestAmerica Sacramento

Data File:	\\SACCHROM\ChromData\ATMS5\20150512-21744.b\MS5051118.D				
Injection Date:	12-May-2015 03:39:30	Instrument ID:	ATMS5		
Lims ID:	320-12924-A-11	Lab Sample ID:	320-12924-11		
Client ID:	J6038-OA1-050615-1				
Operator ID:	AO	ALS Bottle#:	12	Worklist Smp#:	17
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	TO15 SIM	Limit Group:	MSA - TO-15_SIM_ICAL		
Column:		Detector	MS SCAN		

32 Chloroform, CAS: 67-66-3





Report Date: 12-May-2015 12:41:23 Chrom Revision: 2.2 05-May-2015 11:39:10

TestAmerica Sacramento

Data File:	\\SACCHROM\ChromData\ATMS5\20150512-21744.b\MS5051118.D				
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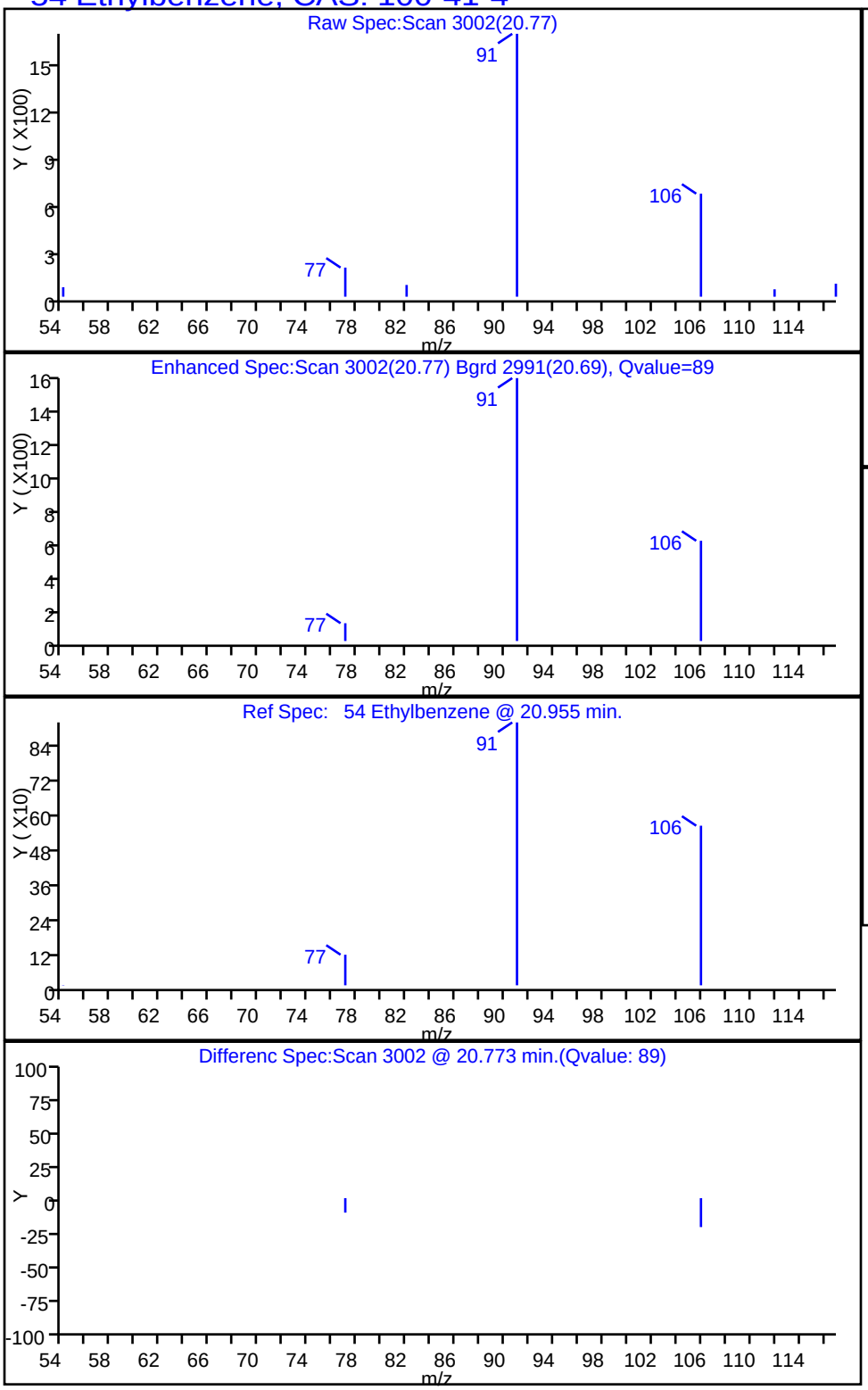
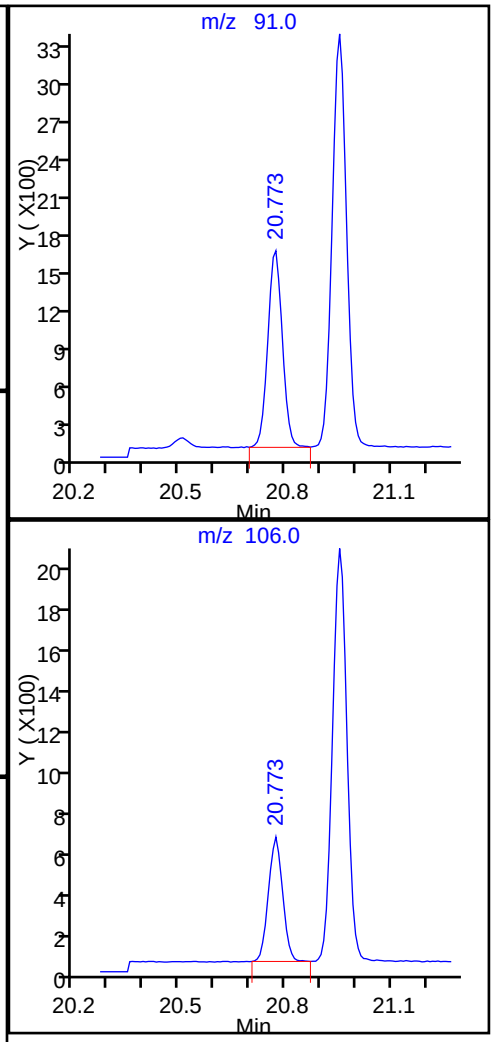
Lims ID:	320-12924-A-11	Lab Sample ID:	320-12924-11		
Client ID:	J6038-OA1-050615-1				
Operator ID:	AO	ALS Bottle#:	12	Worklist Smp#:	17
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	TO15 SIM	Limit Group:	MSA - TO-15_SIM_ICAL		
Column:		Detector	MS SCAN		

54 Ethylbenzene, CAS: 100-41-4



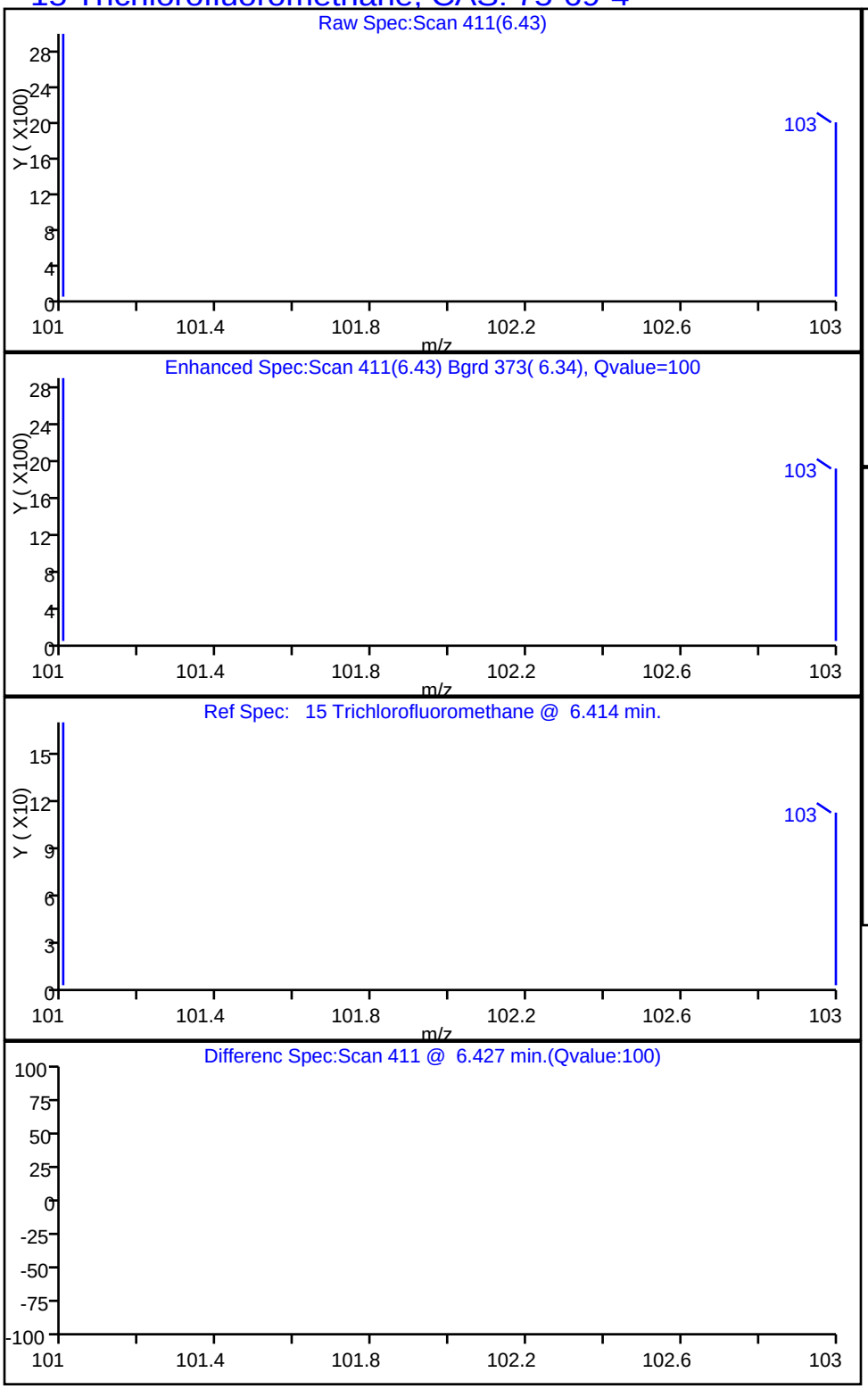


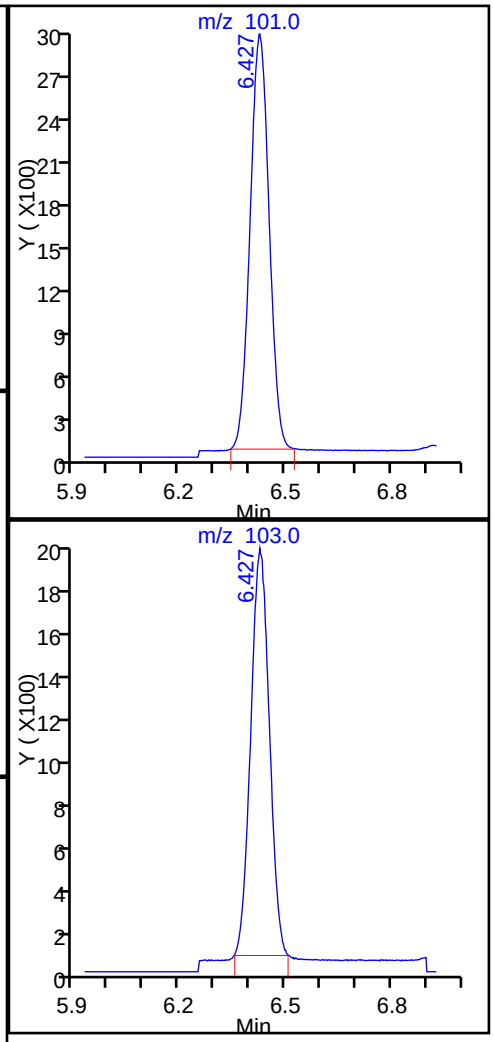
Report Date: 12-May-2015 12:41:23 Chrom Revision: 2.2 05-May-2015 11:39:10

TestAmerica Sacramento

Data File:	\\SACCHROM\ChromData\ATMS5\20150512-21744.b\MS5051118.D				
Injection Date:	12-May-2015 03:39:30	Instrument ID:	ATMS5		
Lims ID:	320-12924-A-11	Lab Sample ID:	320-12924-11		
Client ID:	J6038-OA1-050615-1				
Operator ID:	AO	ALS Bottle#:	12	Worklist Smp#:	17
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	TO15 SIM	Limit Group:	MSA - TO-15_SIM_ICAL		
Column:		Detector	MS SCAN		

15 Trichlorofluoromethane, CAS: 75-69-4



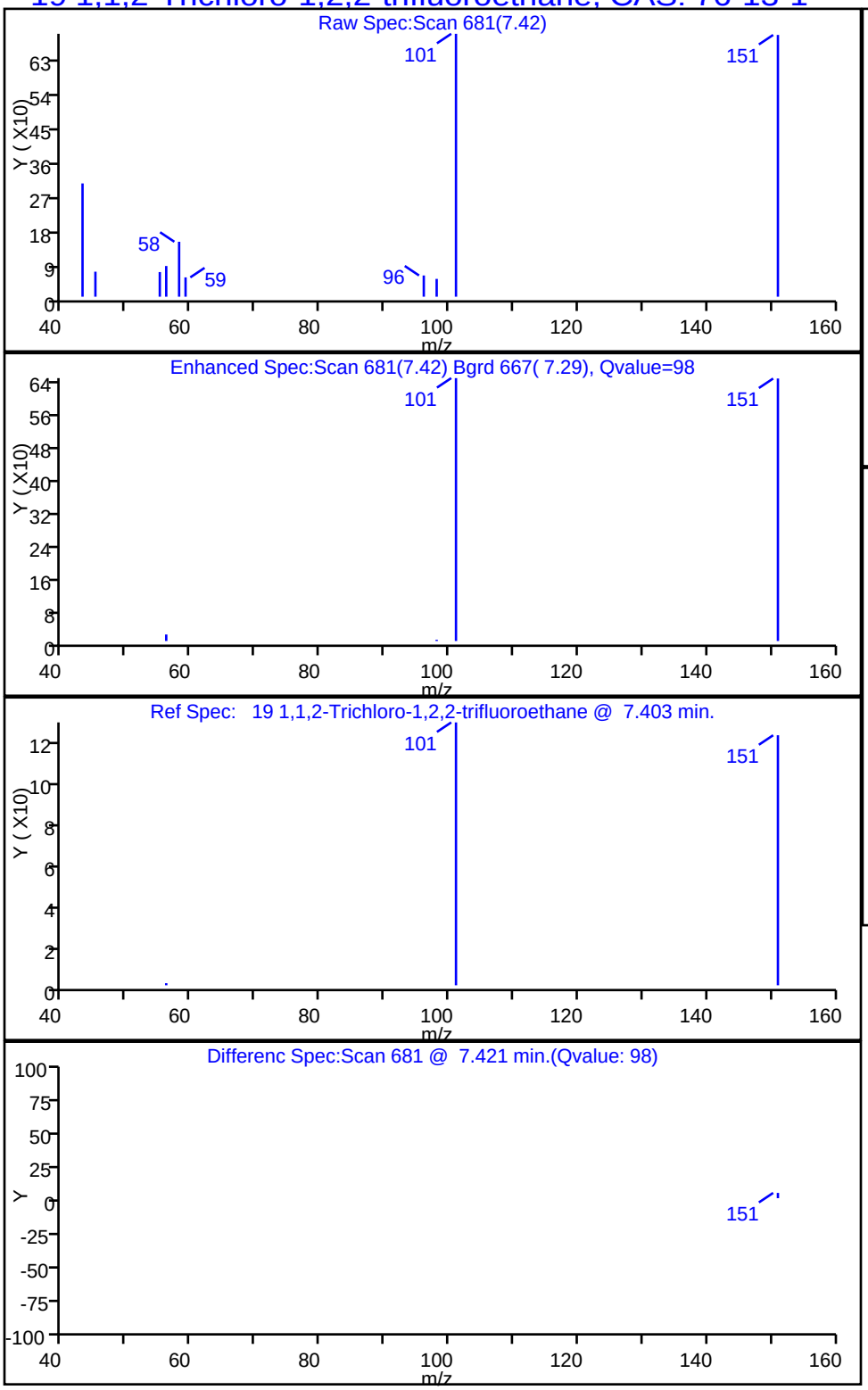


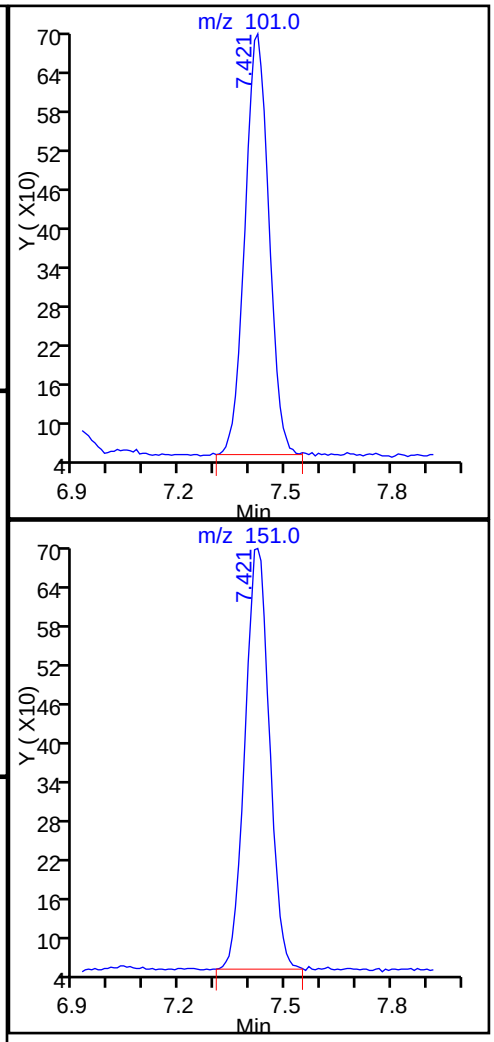
Report Date: 12-May-2015 12:41:23 Chrom Revision: 2.2 05-May-2015 11:39:10

TestAmerica Sacramento

Data File:	\\SACCHROM\ChromData\ATMS5\20150512-21744.b\MS5051118.D				
Injection Date:	12-May-2015 03:39:30	Instrument ID:	ATMS5		
Lims ID:	320-12924-A-11	Lab Sample ID:	320-12924-11		
Client ID:	J6038-OA1-050615-1				
Operator ID:	AO	ALS Bottle#:	12	Worklist Smp#:	17
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	TO15 SIM	Limit Group:	MSA - TO-15_SIM_ICAL		
Column:		Detector	MS SCAN		

19 1,1,2-Trichloro-1,2,2-trifluoroethane, CAS: 76-13-1



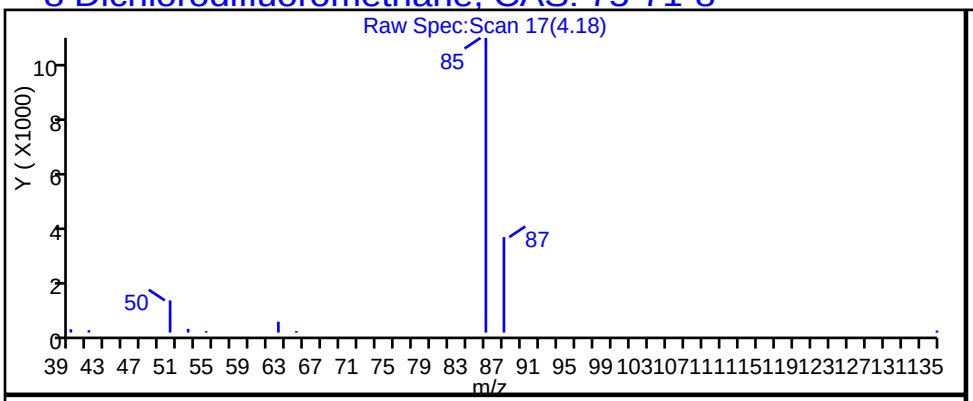


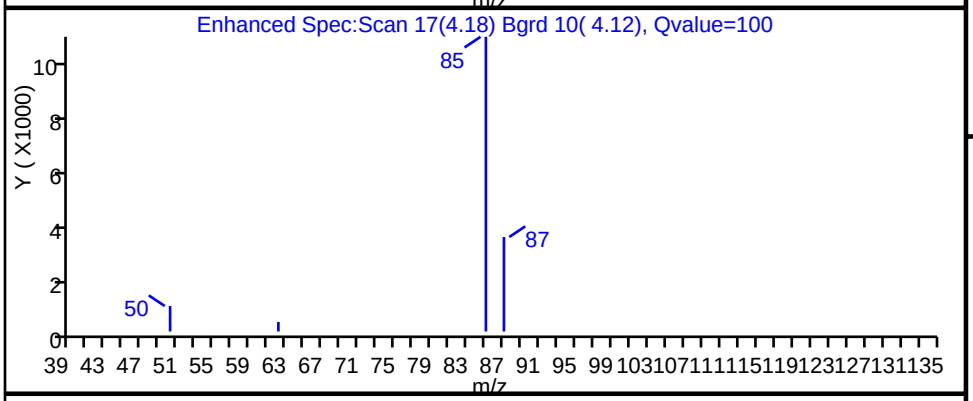
Report Date: 12-May-2015 12:41:23 Chrom Revision: 2.2 05-May-2015 11:39:10

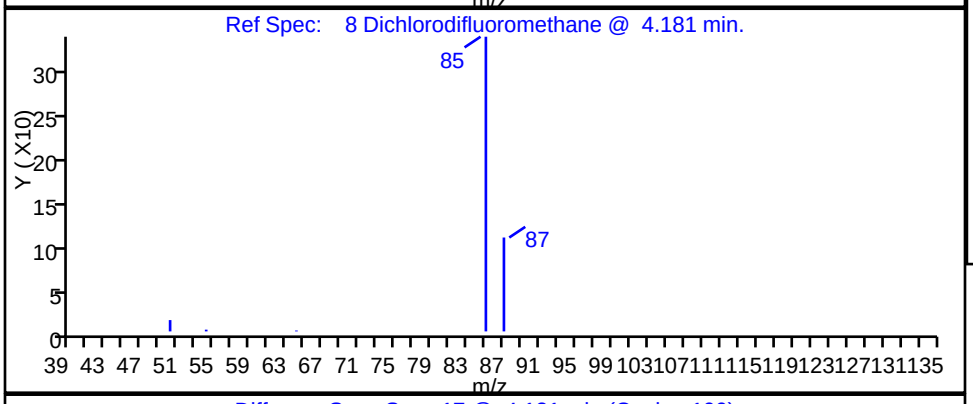
TestAmerica Sacramento

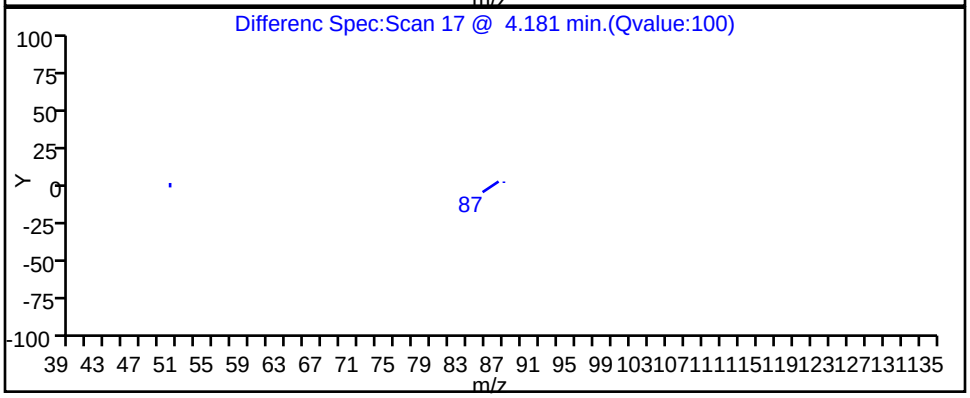
Data File:	\\SACCHROM\ChromData\ATMS5\20150512-21744.b\MS5051118.D				
Injection Date:	12-May-2015 03:39:30	Instrument ID:	ATMS5		
Lims ID:	320-12924-A-11	Lab Sample ID:	320-12924-11		
Client ID:	J6038-OA1-050615-1				
Operator ID:	AO	ALS Bottle#:	12	Worklist Smp#:	17
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	TO15 SIM	Limit Group:	MSA - TO-15_SIM_ICAL		
Column:		Detector	MS SCAN		

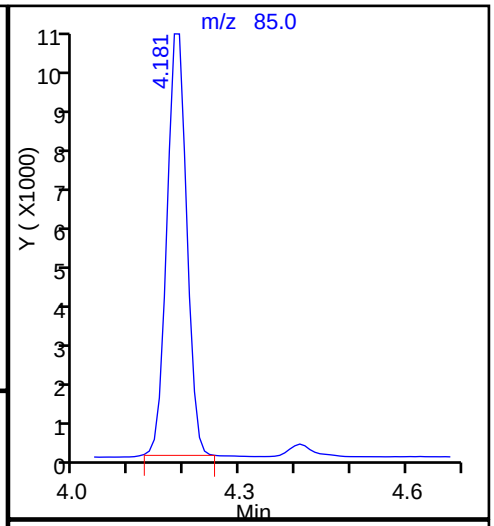
8 Dichlorodifluoromethane, CAS: 75-71-8

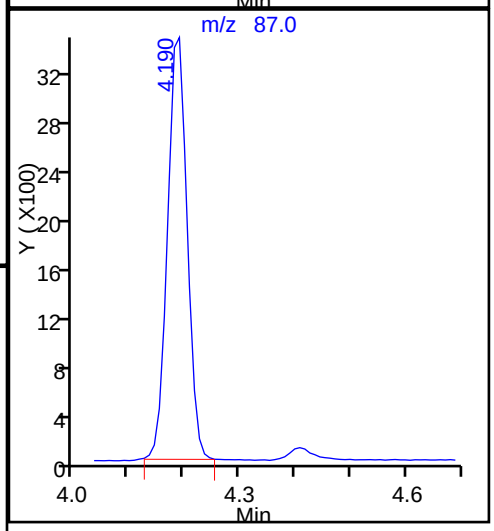










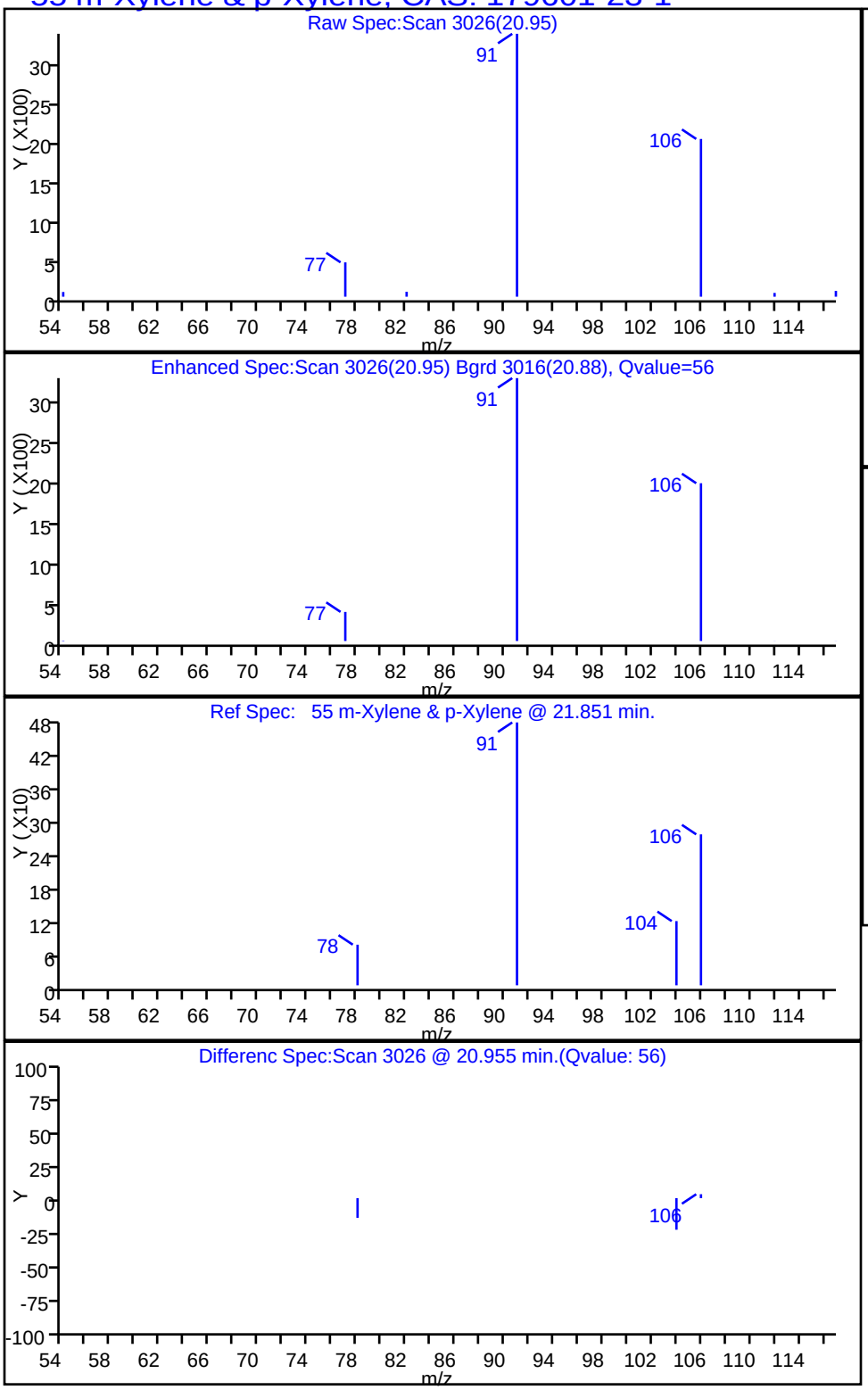


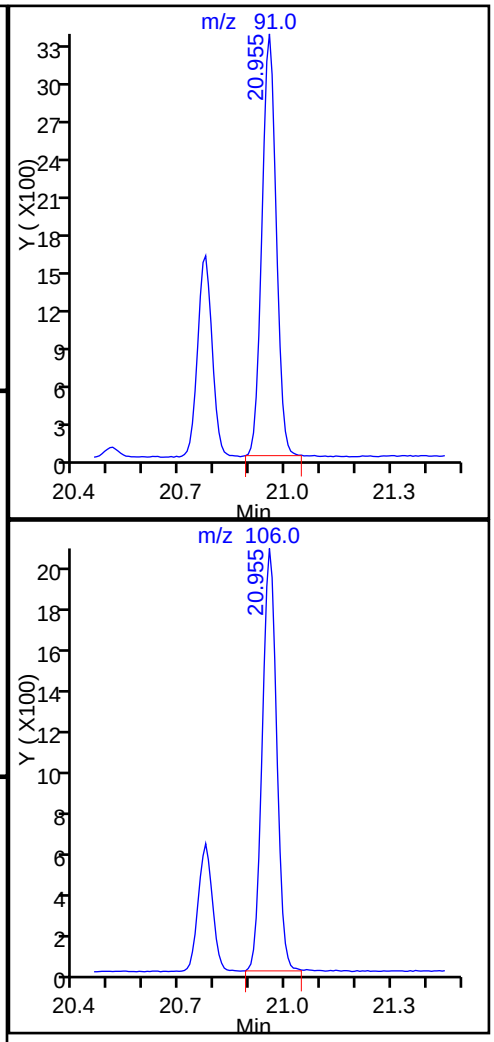
Report Date: 12-May-2015 12:41:23 Chrom Revision: 2.2 05-May-2015 11:39:10

TestAmerica Sacramento

Data File:	\\SACCHROM\ChromData\ATMS5\20150512-21744.b\MS5051118.D				
Injection Date:	12-May-2015 03:39:30	Instrument ID:	ATMS5		
Lims ID:	320-12924-A-11	Lab Sample ID:	320-12924-11		
Client ID:	J6038-OA1-050615-1				
Operator ID:	AO	ALS Bottle#:	12	Worklist Smp#:	17
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	TO15 SIM	Limit Group:	MSA - TO-15_SIM_ICAL		
Column:		Detector	MS SCAN		

55 m-Xylene & p-Xylene, CAS: 179601-23-1



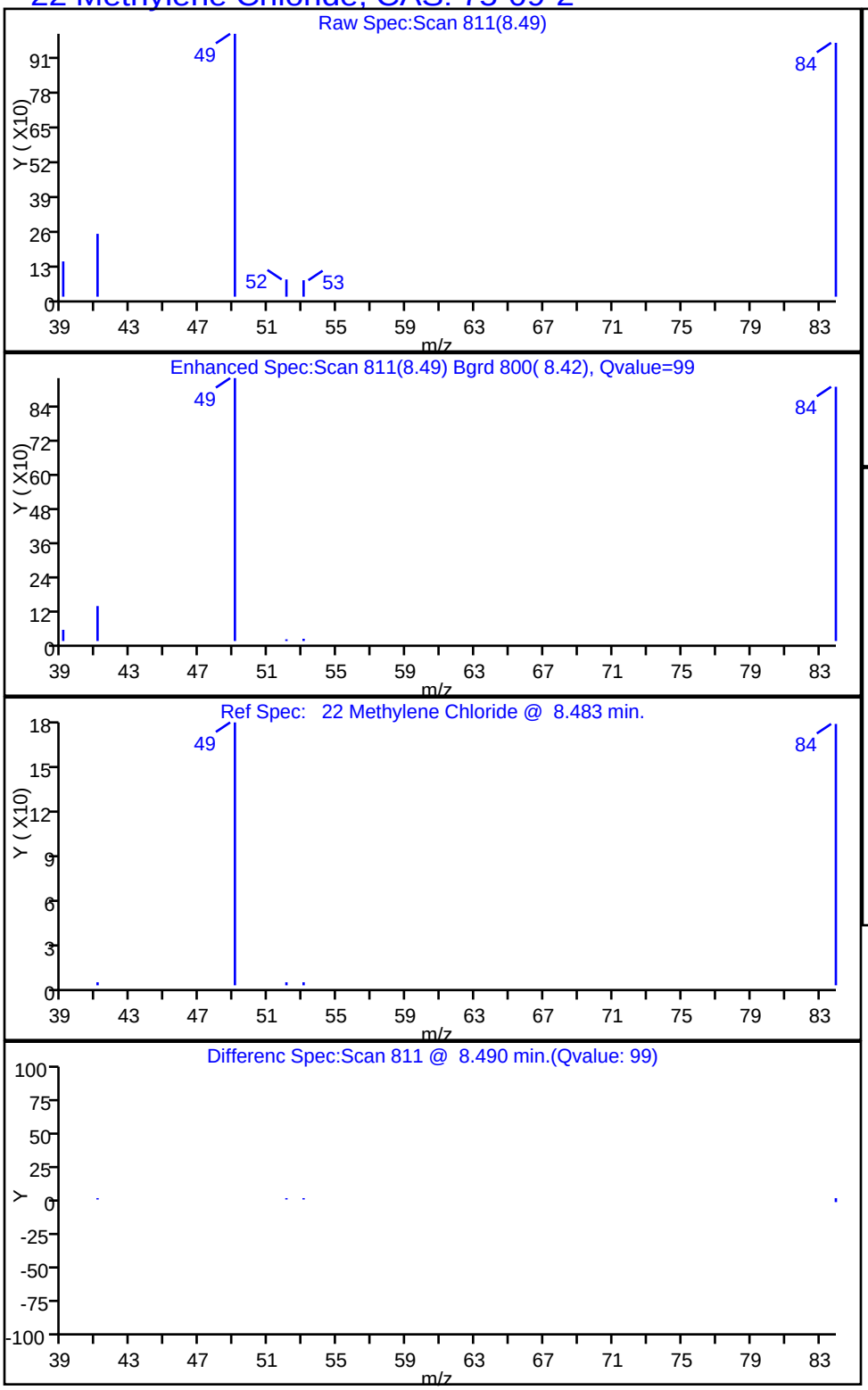


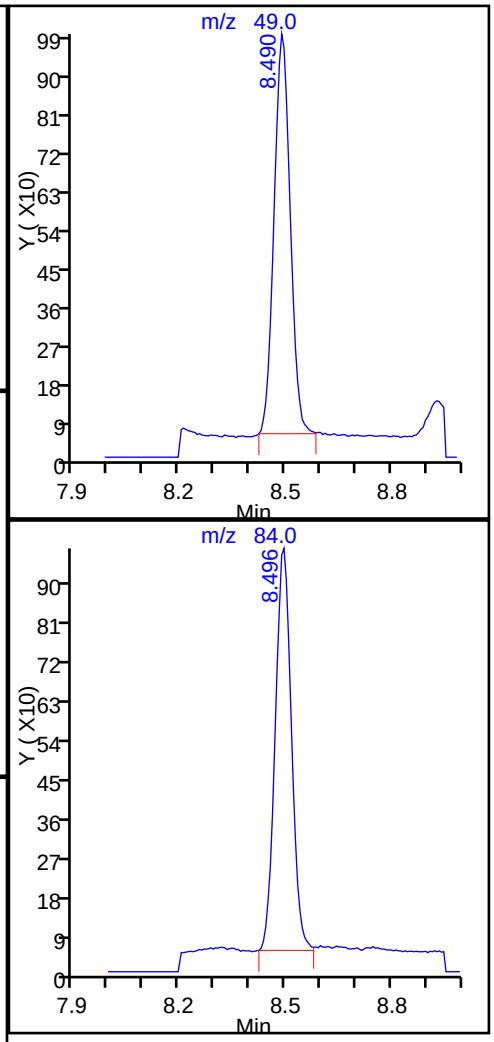
Report Date: 12-May-2015 12:41:23 Chrom Revision: 2.2 05-May-2015 11:39:10

TestAmerica Sacramento

Data File:	\\SACCHROM\ChromData\ATMS5\20150512-21744.b\MS5051118.D				
Injection Date:	12-May-2015 03:39:30	Instrument ID:	ATMS5		
Lims ID:	320-12924-A-11	Lab Sample ID:	320-12924-11		
Client ID:	J6038-OA1-050615-1				
Operator ID:	AO	ALS Bottle#:	12	Worklist Smp#:	17
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	TO15 SIM	Limit Group:	MSA - TO-15_SIM_ICAL		
Column:		Detector	MS SCAN		

22 Methylene Chloride, CAS: 75-09-2



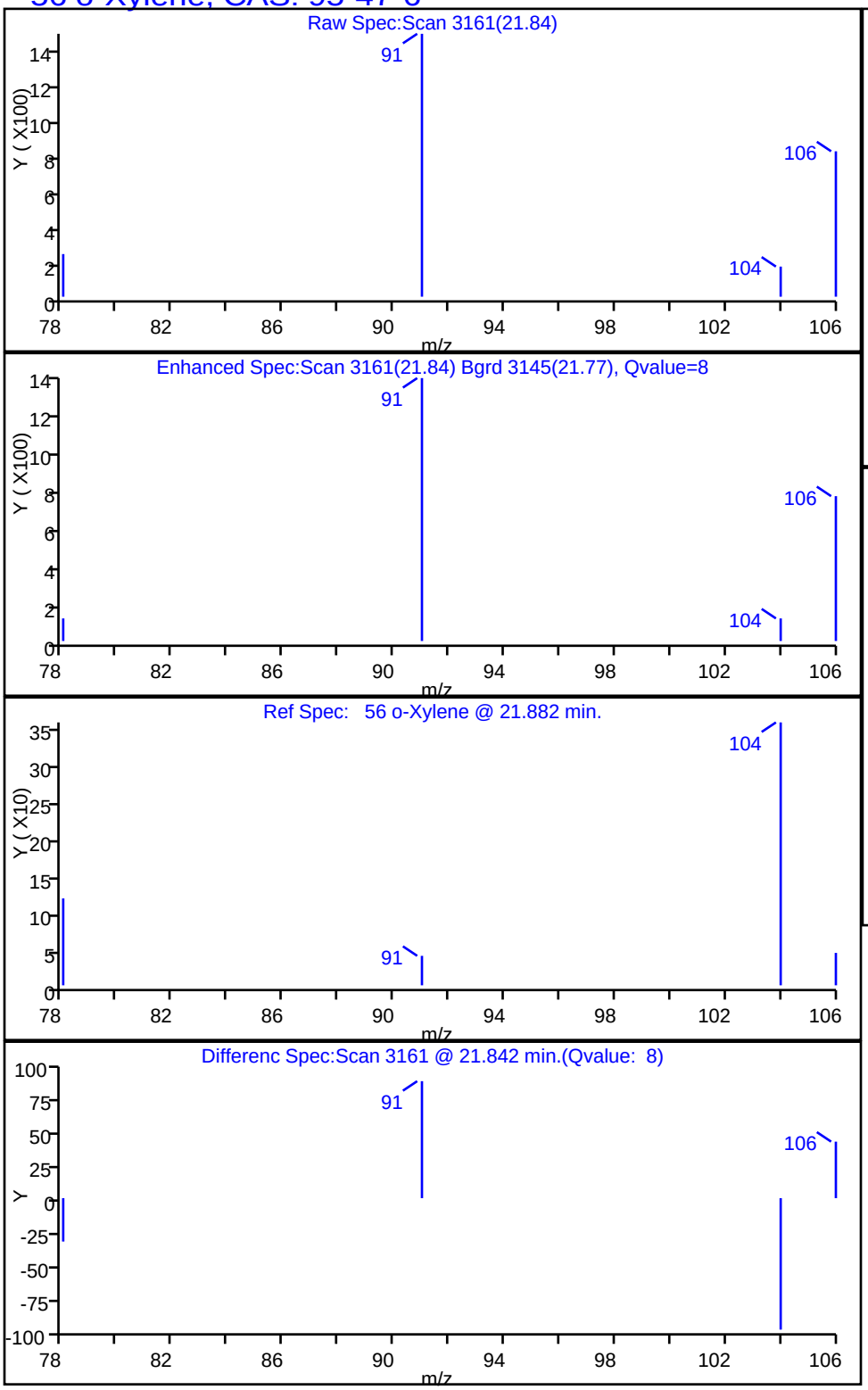


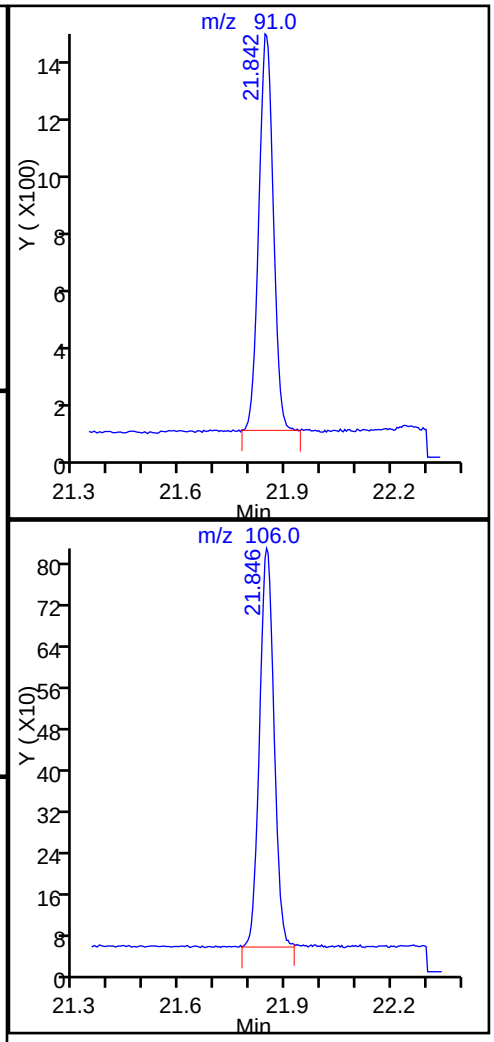
Report Date: 12-May-2015 12:41:23 Chrom Revision: 2.2 05-May-2015 11:39:10

TestAmerica Sacramento

Data File:	\\SACCHROM\ChromData\ATMS5\20150512-21744.b\MS5051118.D				
Injection Date:	12-May-2015 03:39:30	Instrument ID:	ATMS5		
Lims ID:	320-12924-A-11	Lab Sample ID:	320-12924-11		
Client ID:	J6038-OA1-050615-1				
Operator ID:	AO	ALS Bottle#:	12	Worklist Smp#:	17
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	TO15 SIM	Limit Group:	MSA - TO-15_SIM_ICAL		
Column:		Detector	MS SCAN		

56 o-Xylene, CAS: 95-47-6



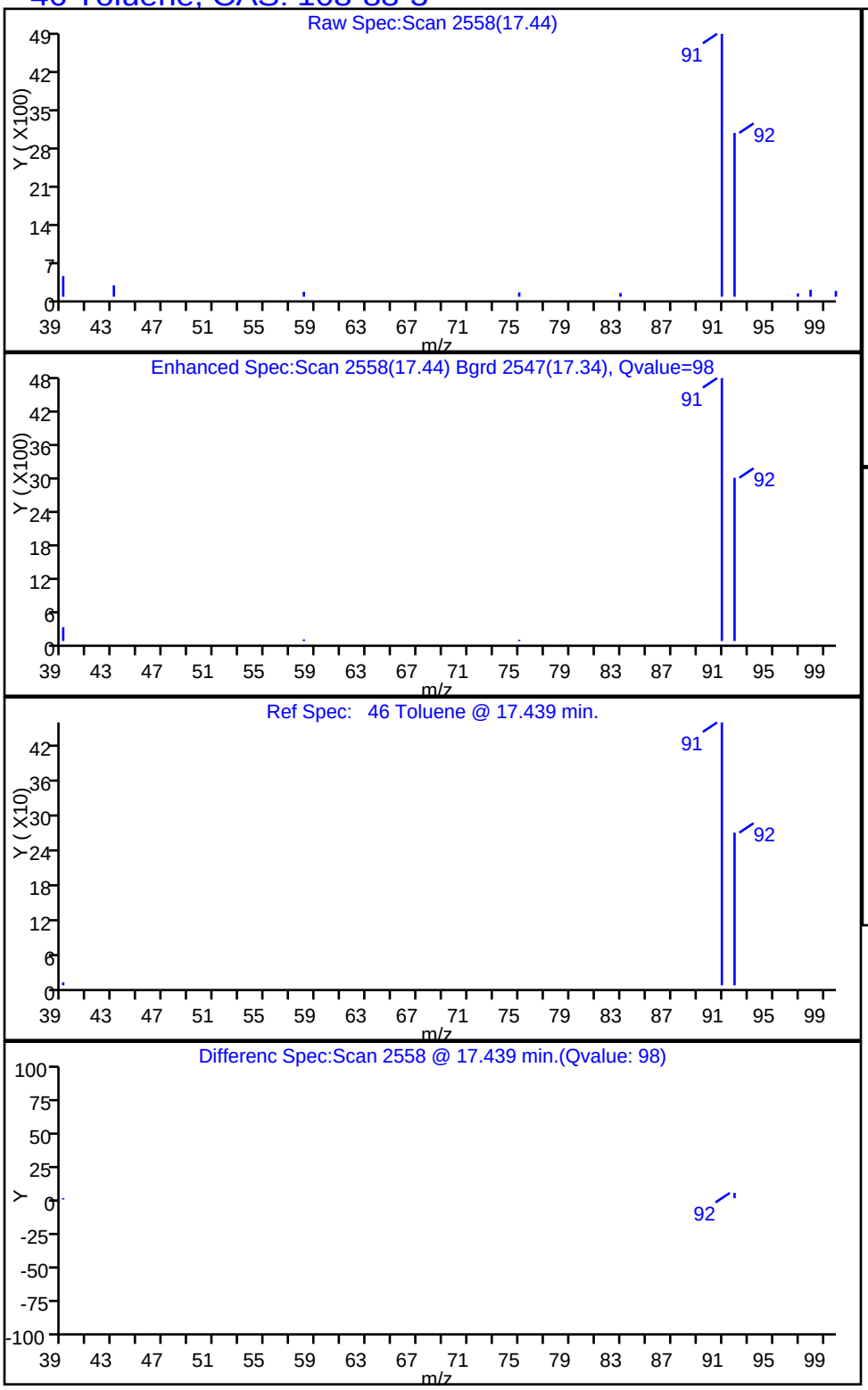


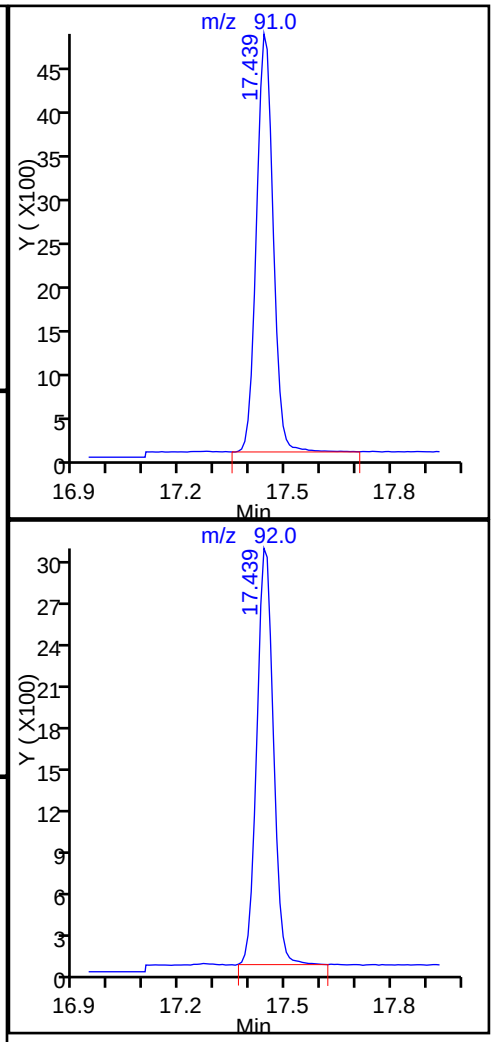
Report Date: 12-May-2015 12:41:23 Chrom Revision: 2.2 05-May-2015 11:39:10

TestAmerica Sacramento

Data File:	\\SACCHROM\ChromData\ATMS5\20150512-21744.b\MS5051118.D				
Injection Date:	12-May-2015 03:39:30	Instrument ID:	ATMS5		
Lims ID:	320-12924-A-11	Lab Sample ID:	320-12924-11		
Client ID:	J6038-OA1-050615-1				
Operator ID:	AO	ALS Bottle#:	12	Worklist Smp#:	17
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	TO15 SIM	Limit Group:	MSA - TO-15_SIM_ICAL		
Column:		Detector	MS SCAN		

46 Toluene, CAS: 108-88-3





FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento | Job No.: 320-12924-1

SDG No.:

Client Sample ID: J6038-OA1-050615-2 | Lab Sample ID: 320-12924-12

Matrix: Air | Lab File ID: MS5051119.D

Analysis Method: TO-15 SIM | Date Collected: 05/06/2015 19:03

Sample wt/vol: 915(mL) | Date Analyzed: 05/12/2015 04:38

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: RTX-Volatiles ID: 0.32(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 73719 | Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	133.41	ND		0.020	0.0050
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.050	0.0050
75-34-3	1,1-Dichloroethane	98.96	ND		0.020	0.0050
75-35-4	1,1-Dichloroethene	96.94	ND		0.020	0.0050
95-50-1	1,2-Dichlorobenzene	147.00	ND		0.050	0.010
107-06-2	1,2-Dichloroethane	98.96	0.013	J	0.020	0.0050
106-46-7	1,4-Dichlorobenzene	147.00	ND		0.10	0.010
108-90-7	Chlorobenzene	112.56	ND		0.020	0.010
67-66-3	Chloroform	119.38	0.016	J	0.020	0.0050
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.020	0.0050
100-41-4	Ethylbenzene	106.17	0.016	J	0.020	0.010
75-69-4	Freon 11	137.37	0.19		0.045	0.010
76-13-1	Freon 113	187.38	0.059		0.030	0.0050
75-71-8	Freon 12	120.91	0.34		0.020	0.0050
179601-23-1	m,p-Xylene	106.17	0.045		0.040	0.020
75-09-2	Methylene Chloride	84.93	ND		0.20	0.10
95-47-6	o-Xylene	106.17	0.018	J	0.020	0.010
127-18-4	Tetrachloroethene	165.83	ND		0.020	0.010
108-88-3	Toluene	92.14	0.25		0.020	0.010
156-60-5	trans-1,2-Dichloroethene	96.94	ND		0.020	0.0050
79-01-6	Trichloroethene	131.39	0.0073	J	0.020	0.0050
75-01-4	Vinyl chloride	62.50	ND		0.020	0.010

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	102		70-130
17060-07-0	1,2-Dichloroethane-d4 (Surr)	96		70-130
2037-26-5	Toluene-d8 (Surr)	100		70-130

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento | Job No.: 320-12924-1
SDG No.:
Client Sample ID: J6038-OA1-050615-2 | Lab Sample ID: 320-12924-12
Matrix: Air | Lab File ID: MS5051119.D
Analysis Method: TO-15 SIM | Date Collected: 05/06/2015 19:03
Sample wt/vol: 915(mL) | Date Analyzed: 05/12/2015 04:38
Soil Aliquot Vol: | Dilution Factor: 1
Soil Extract Vol.: | GC Column: RTX-Volatiles ID: 0.32(mm)
% Moisture: | Level: (low/med) Low
Analysis Batch No.: 73719 | Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	133.41	ND		0.11	0.027
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.27	0.027
75-34-3	1,1-Dichloroethane	98.96	ND		0.081	0.020
75-35-4	1,1-Dichloroethene	96.94	ND		0.079	0.020
95-50-1	1,2-Dichlorobenzene	147.00	ND		0.30	0.060
107-06-2	1,2-Dichloroethane	98.96	0.054	J	0.081	0.020
106-46-7	1,4-Dichlorobenzene	147.00	ND		0.60	0.060
108-90-7	Chlorobenzene	112.56	ND		0.092	0.046
67-66-3	Chloroform	119.38	0.079	J	0.098	0.024
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.079	0.020
100-41-4	Ethylbenzene	106.17	0.069	J	0.087	0.043
75-69-4	Freon 11	137.37	1.1		0.25	0.056
76-13-1	Freon 113	187.38	0.45		0.23	0.038
75-71-8	Freon 12	120.91	1.7		0.099	0.025
179601-23-1	m,p-Xylene	106.17	0.19		0.17	0.087
75-09-2	Methylene Chloride	84.93	ND		0.69	0.35
95-47-6	o-Xylene	106.17	0.078	J	0.087	0.043
127-18-4	Tetrachloroethene	165.83	ND		0.14	0.068
108-88-3	Toluene	92.14	0.93		0.075	0.038
156-60-5	trans-1,2-Dichloroethene	96.94	ND		0.079	0.020
79-01-6	Trichloroethene	131.39	0.039	J	0.11	0.027
75-01-4	Vinyl chloride	62.50	ND		0.051	0.026

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	102		70-130
17060-07-0	1,2-Dichloroethane-d4 (Surr)	96		70-130
2037-26-5	Toluene-d8 (Surr)	100		70-130

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\SACCHROM\ChromData\ATMS5\20150512-21744.b\MS5051119.D
Lims ID: 320-12924-A-12 Lab Sample ID: 320-12924-12
Client ID: J6038-OA1-050615-2
Sample Type: Client
Inject. Date: 12-May-2015 04:38:30 ALS Bottle#: 13 Worklist Smp#: 18
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 320-12924-A-12
Misc. Info.: 915ML915ML
Operator ID: AO Instrument ID: ATMS5

Method: \\SACCHROM\ChromData\ATMS5\20150512-21744.b\TO15 SIM.m
Limit Group: MSA - TO-15_SIM_ICAL
Last Update: 13-May-2015 16:54:38 Calib Date: 26-Mar-2015 03:17:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\SACCHROM\ChromData\ATMS5\20150326-20538.b\MS5032518.D

Column 1 : Det: MS SCAN
Process Host: XAWRK050

First Level Reviewer: ortizam Date: 13-May-2015 16:50:33

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	130	11.840	11.850	-0.010	97	37250	2.00	
* 2 1,4-Difluorobenzene	114	13.941	13.941	0.000	100	176618	2.00	
* 3 Chlorobenzene-d5 (IS)	117	20.508	20.508	0.000	100	162196	2.00	
$ 4 1,2-Dichloroethane-d4 (Sur	65	13.002	13.002	0.000	100	39987	1.92	
$ 5 Toluene-d8 (Surr)	100	17.267	17.266	0.001	100	121745	2.00	
$ 6 4-Bromofluorobenzene (Surr	95	23.040	23.040	0.000	99	93236	2.04	
8 Dichlorodifluoromethane	85	4.172	4.181	-0.009	100	18861	0.3358	
15 Trichlorofluoromethane	101	6.414	6.418	-0.004	100	10219	0.1907	
19 1,1,2-Trichloro-1,2,2-trif	101	7.412	7.412	0.000	97	3029	0.0588	
22 Methylene Chloride	49	8.483	8.490	-0.007	100	2534	0.0985	7
32 Chloroform	83	11.578	11.589	-0.011	97	766	0.0162	
34 1,1,1-Trichloroethane	97	12.518	12.508	0.010	62	154	0.003162	M
37 1,2-Dichloroethane	62	13.193	13.192	0.001	94	419	0.0133	
40 Trichloroethene	130	14.684	14.683	0.001	93	302	0.007252	
46 Toluene	91	17.439	17.439	0.000	99	33131	0.2478	
50 Tetrachloroethene	166	18.933	18.939	-0.006	97	263	0.004858	7
53 Chlorobenzene	112	20.584	20.584	0.000	1	122	0.001068	7
54 Ethylbenzene	91	20.773	20.773	0.000	89	2949	0.0159	
55 m-Xylene & p-Xylene	91	20.955	20.955	0.000	55	6287	0.0447	
56 o-Xylene	91	21.842	21.846	-0.004	7	2628	0.0179	
65 1,4-Dichlorobenzene	146	25.529	25.530	-0.001	23	218	0.001954	7
67 1,2-Dichlorobenzene	146	26.250	26.247	0.003	1	140	0.001219	7

QC Flag Legend

Processing Flags
7 - Failed Limit of Detection
Review Flags
M - Manually Integrated

Reagents:

VASUISIM_00172	Amount Added: 50.00	Units: mL	Run Reagent

Report Date: 13-May-2015 16:54:39 Chrom Revision: 2.2 05-May-2015 11:39:10

TestAmerica Sacramento

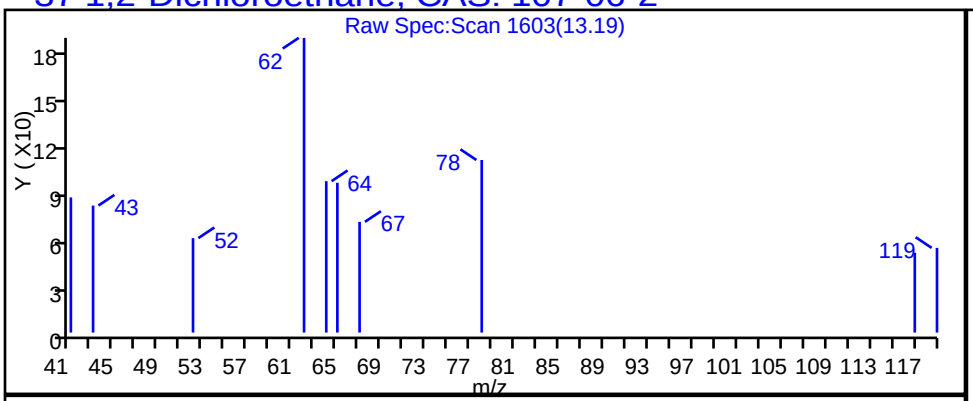
Data File:	\\SACCHROM\ChromData\ATMS5\20150512-21744.b\MS5051119.D				
Injection Date:	12-May-2015 04:38:30	Instrument ID:	ATMS5		
Lims ID:	320-12924-A-12	Lab Sample ID:	320-12924-12		
Client ID:	J6038-OA1-050615-2				
Operator ID:	AO	ALS Bottle#:	13	Worklist Smp#:	18
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	TO15 SIM	Limit Group:	MSA - TO-15_SIM_ICAL		

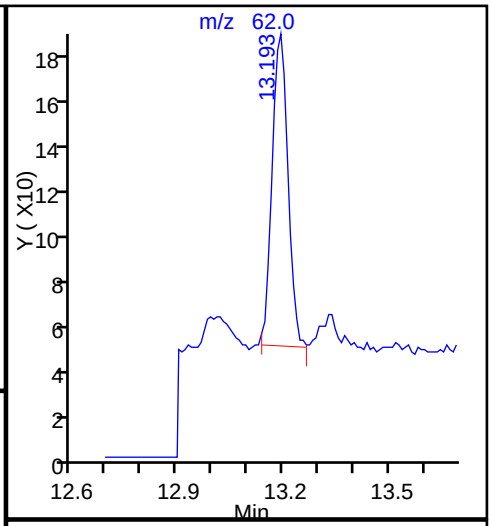
Report Date: 13-May-2015 16:54:39 Chrom Revision: 2.2 05-May-2015 11:39:10

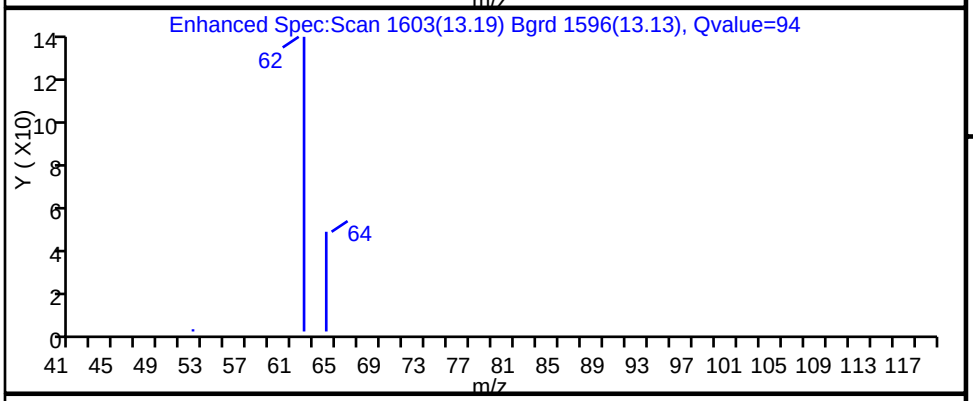
TestAmerica Sacramento

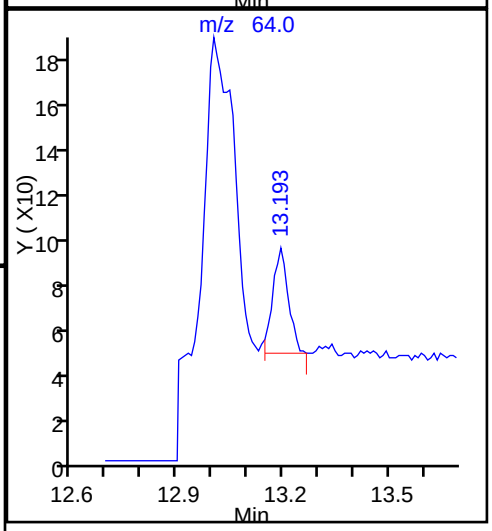
Data File:	\\SACCHROM\ChromData\ATMS5\20150512-21744.b\MS5051119.D				
Injection Date:	12-May-2015 04:38:30	Instrument ID:	ATMS5		
Lims ID:	320-12924-A-12	Lab Sample ID:	320-12924-12		
Client ID:	J6038-OA1-050615-2				
Operator ID:	AO	ALS Bottle#:	13	Worklist Smp#:	18
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	TO15 SIM	Limit Group:	MSA - TO-15_SIM_ICAL		
Column:		Detector	MS SCAN		

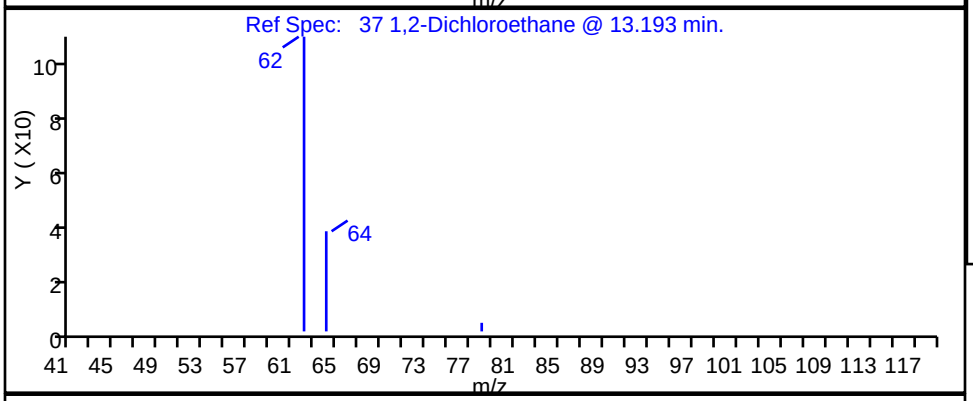
37 1,2-Dichloroethane, CAS: 107-06-2

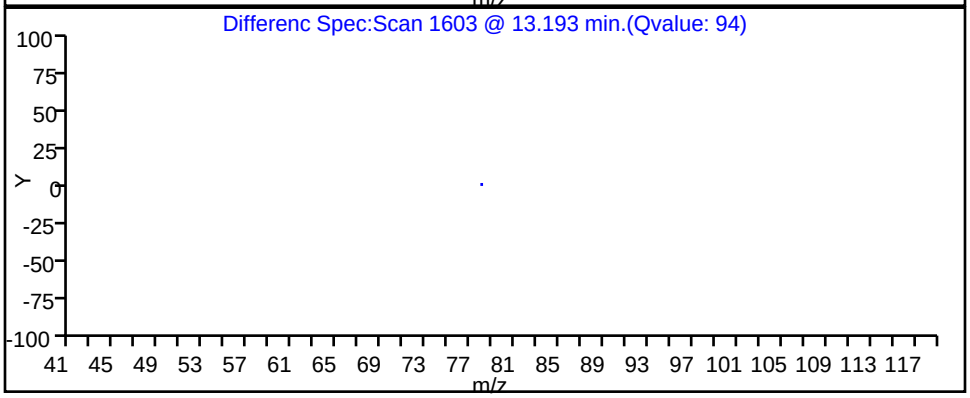












Report Date: 13-May-2015 16:54:39 Chrom Revision: 2.2 05-May-2015 11:39:10

TestAmerica Sacramento

Data File:	\\SACCHROM\ChromData\ATMS5\20150512-21744.b\MS5051119.D				
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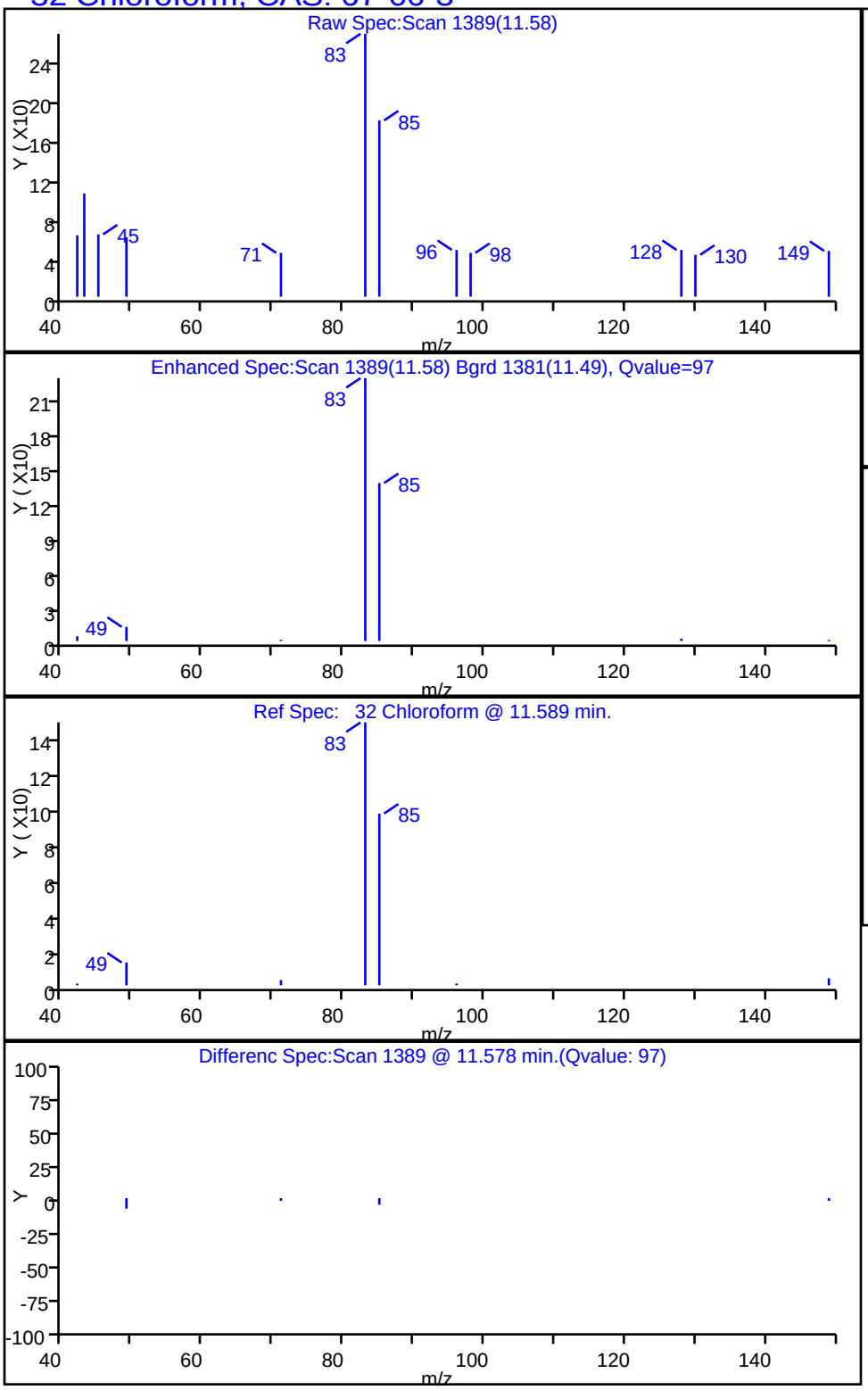
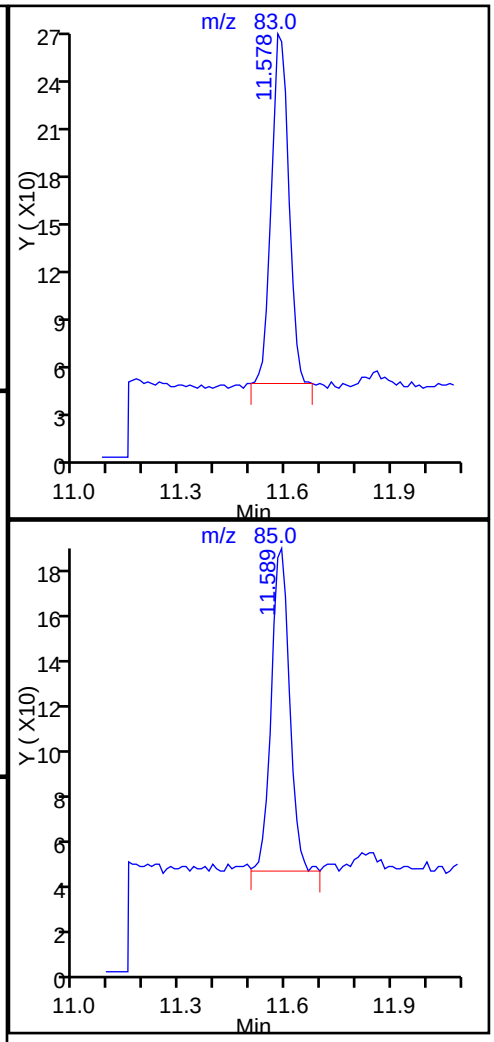
Lims ID:	320-12924-A-12	Lab Sample ID:	320-12924-12		
Client ID:	J6038-OA1-050615-2				
Operator ID:	AO	ALS Bottle#:	13	Worklist Smp#:	18
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	TO15 SIM	Limit Group:	MSA - TO-15_SIM_ICAL		
Column:		Detector	MS SCAN		

32 Chloroform, CAS: 67-66-3



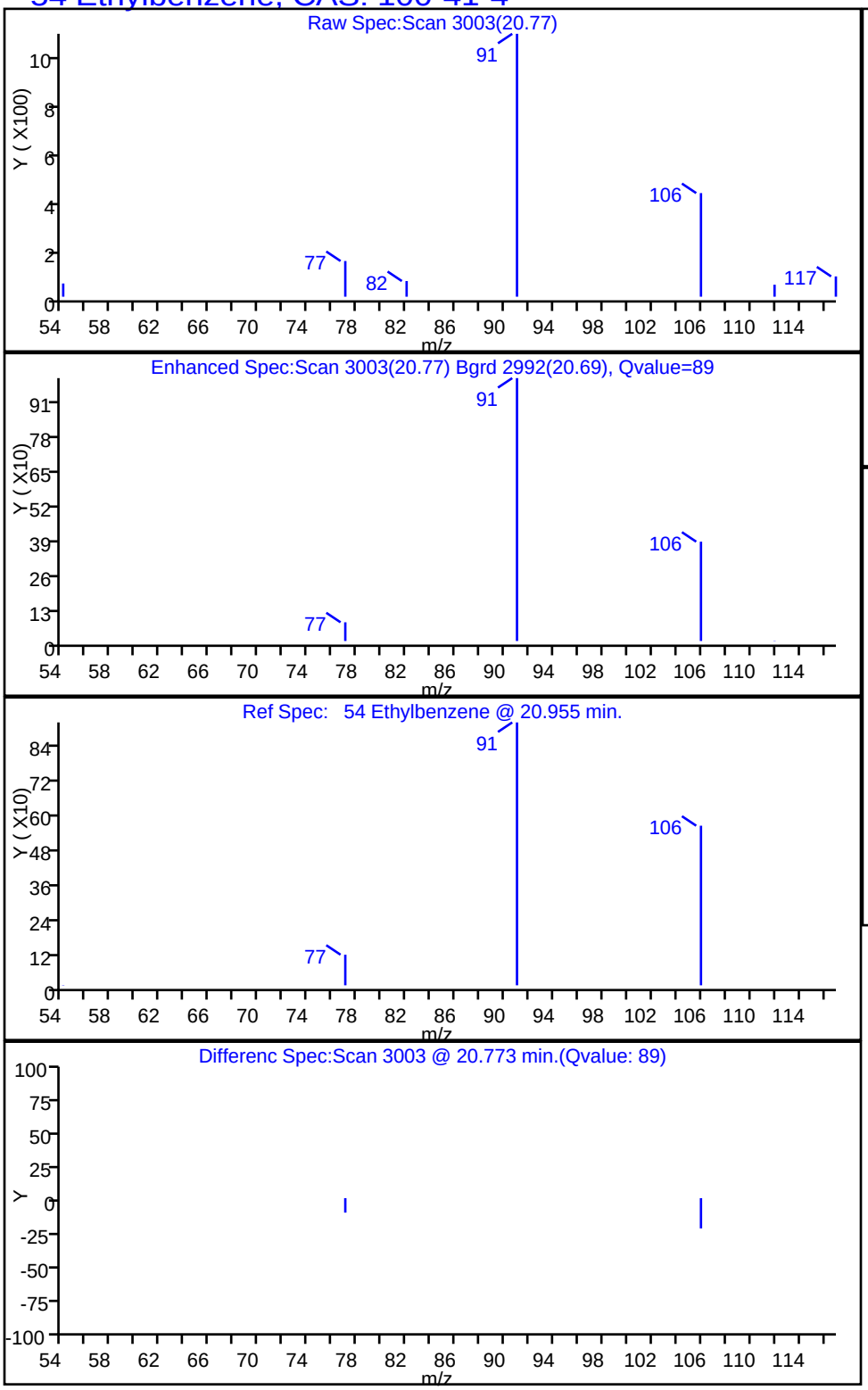


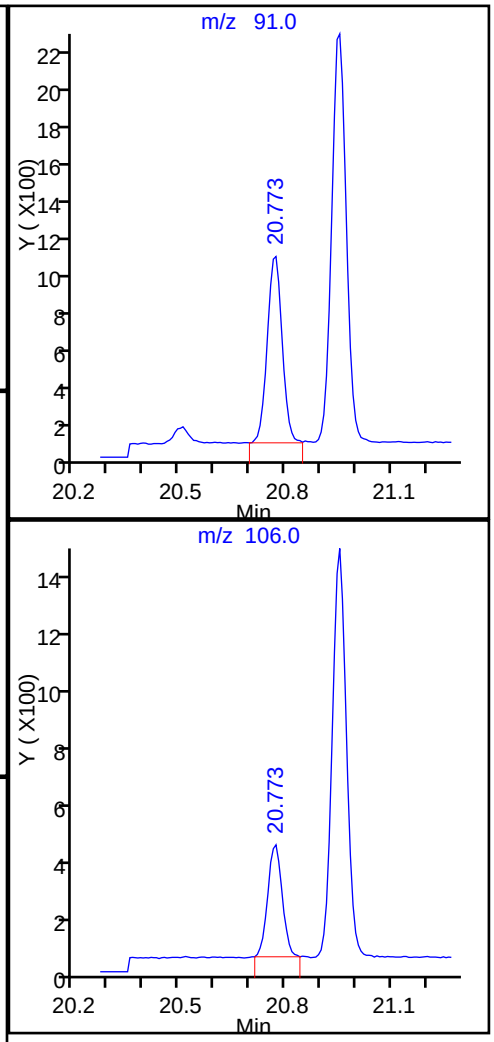
Report Date: 13-May-2015 16:54:39 Chrom Revision: 2.2 05-May-2015 11:39:10

TestAmerica Sacramento

Data File:	\\SACCHROM\ChromData\ATMS5\20150512-21744.b\MS5051119.D				
Injection Date:	12-May-2015 04:38:30	Instrument ID:	ATMS5		
Lims ID:	320-12924-A-12	Lab Sample ID:	320-12924-12		
Client ID:	J6038-OA1-050615-2				
Operator ID:	AO	ALS Bottle#:	13	Worklist Smp#:	18
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	TO15 SIM	Limit Group:	MSA - TO-15_SIM_ICAL		
Column:		Detector	MS SCAN		

54 Ethylbenzene, CAS: 100-41-4





Report Date: 13-May-2015 16:54:39 Chrom Revision: 2.2 05-May-2015 11:39:10

TestAmerica Sacramento

Data File:	\\SACCHROM\ChromData\ATMS5\20150512-21744.b\MS5051119.D				
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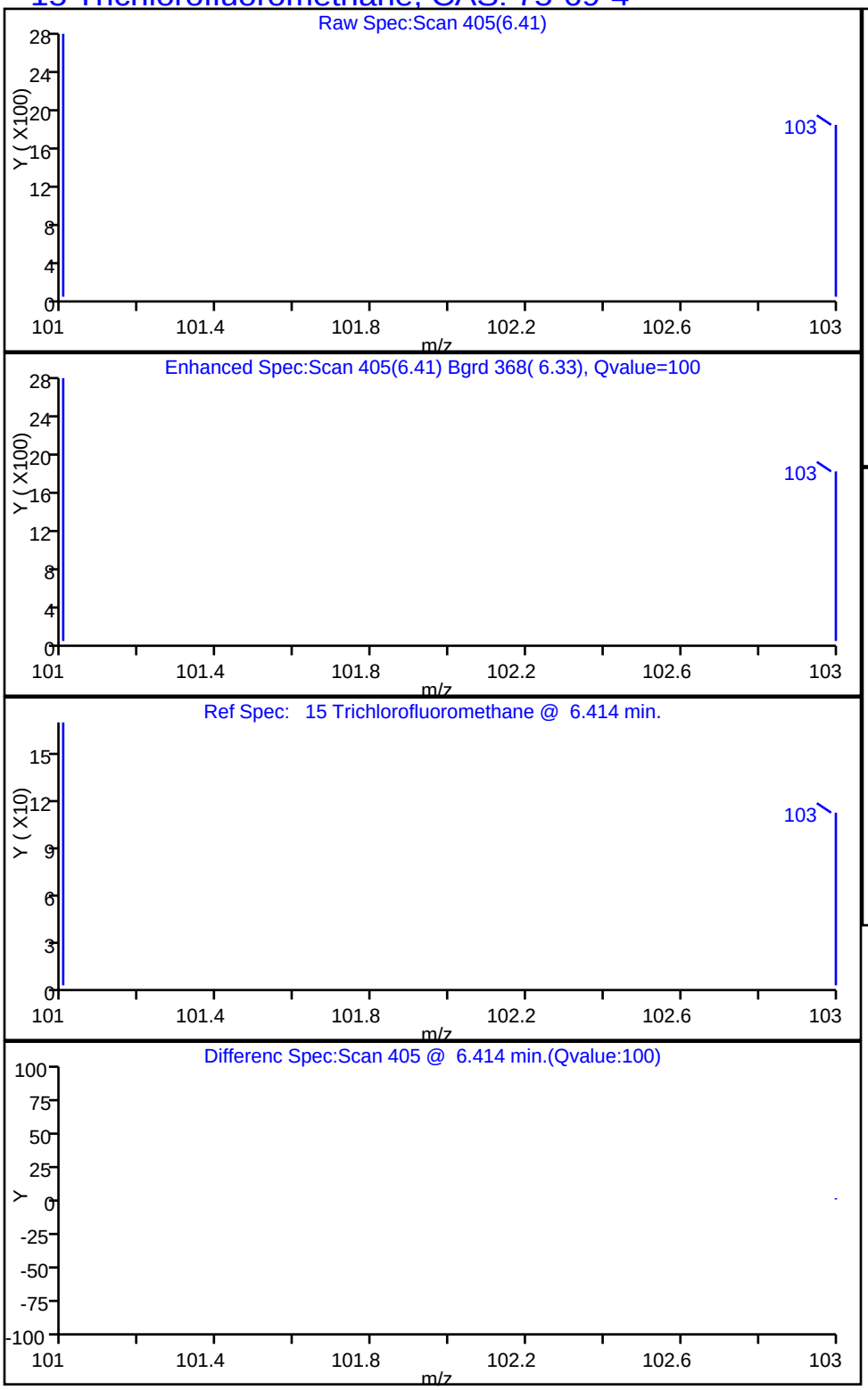
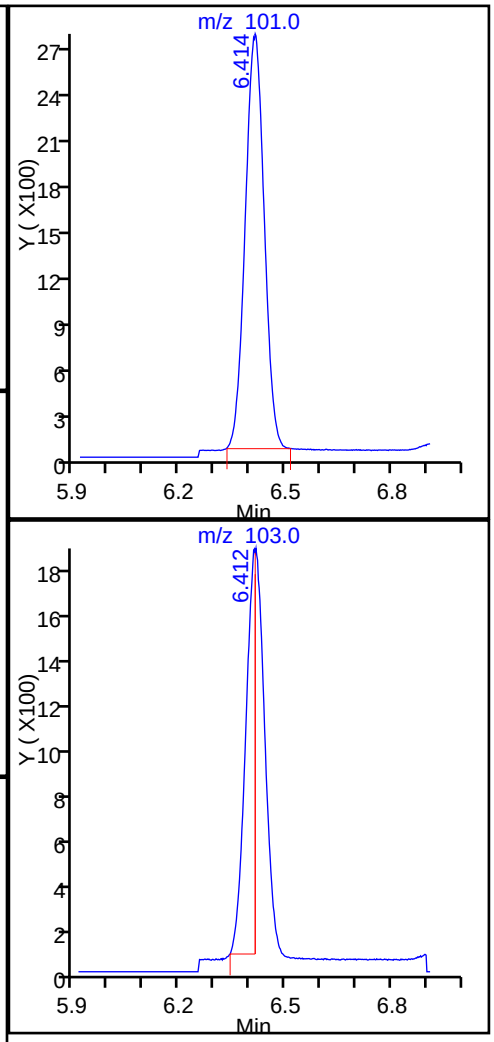
Client ID:	J6038-OA1-050615-2				
Operator ID:	AO	ALS Bottle#:	13	Worklist Smp#:	18
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	TO15 SIM	Limit Group:	MSA - TO-15_SIM_ICAL		
Column:		Detector	MS SCAN		

15 Trichlorofluoromethane, CAS: 75-69-4





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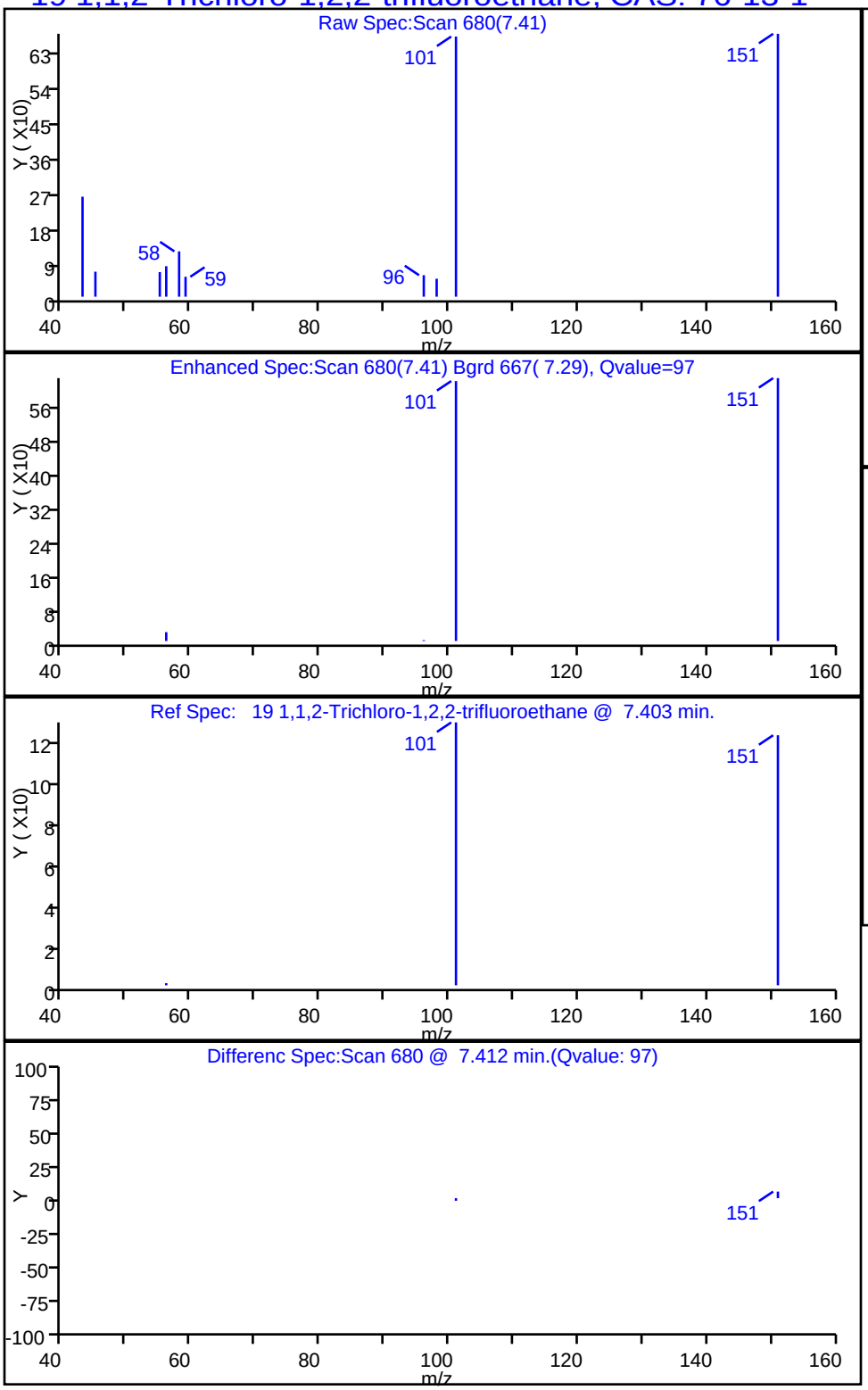
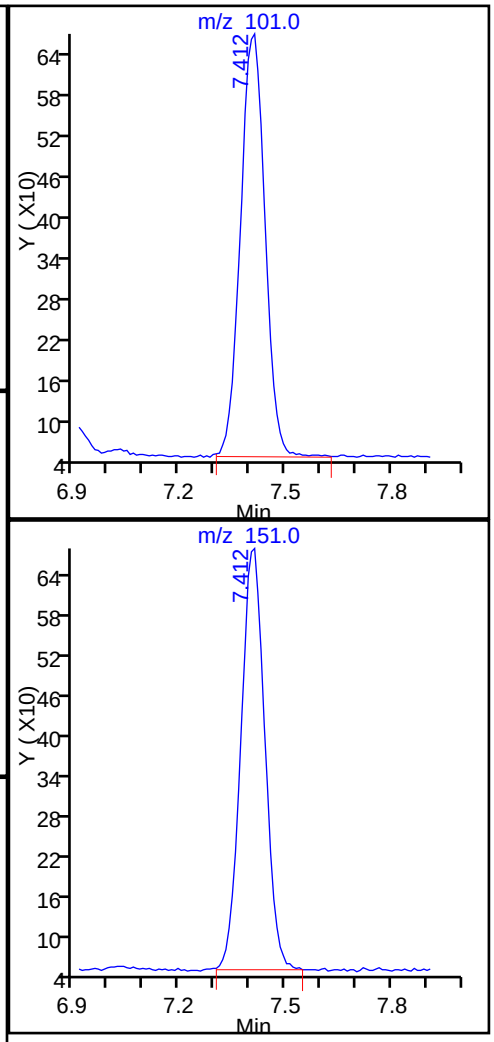
TestAmerica Sacramento

Data File:	\\SACCHROM\ChromData\ATMS5\20150512-21744.b\MS5051119.D				
Injection Date:	12-May-2015 04:38:30	Instrument ID:	ATMS5		
Lims ID:	320-12924-A-12	Lab Sample ID:	320-12924-12		
Client ID:	J6038-OA1-050615-2				
Operator ID:	AO	ALS Bottle#:	13	Worklist Smp#:	18
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	TO15 SIM	Limit Group:	MSA - TO-15_SIM_ICAL		
Column:		Detector	MS SCAN		

19 1,1,2-Trichloro-1,2,2-trifluoroethane, CAS: 76-13-1



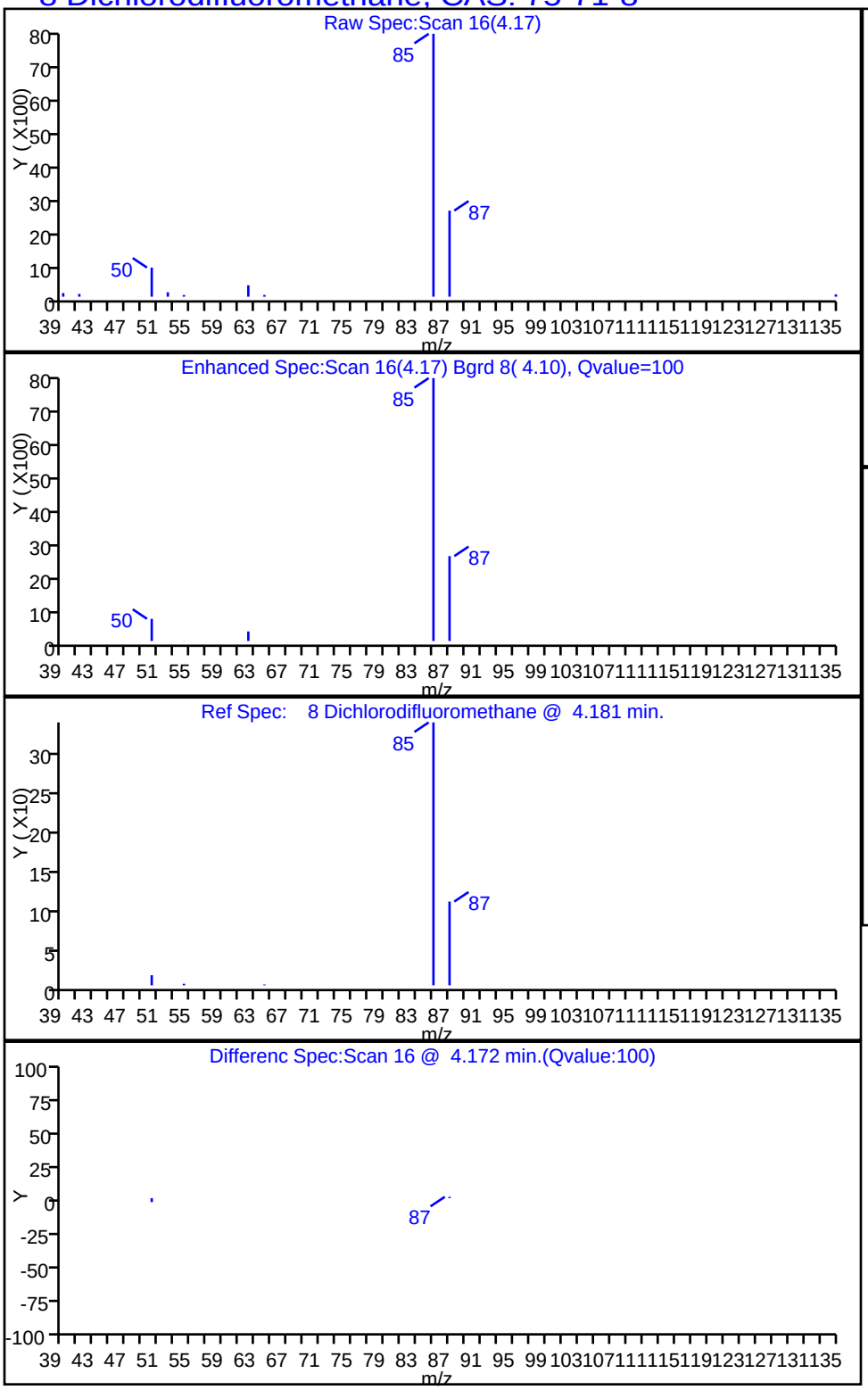


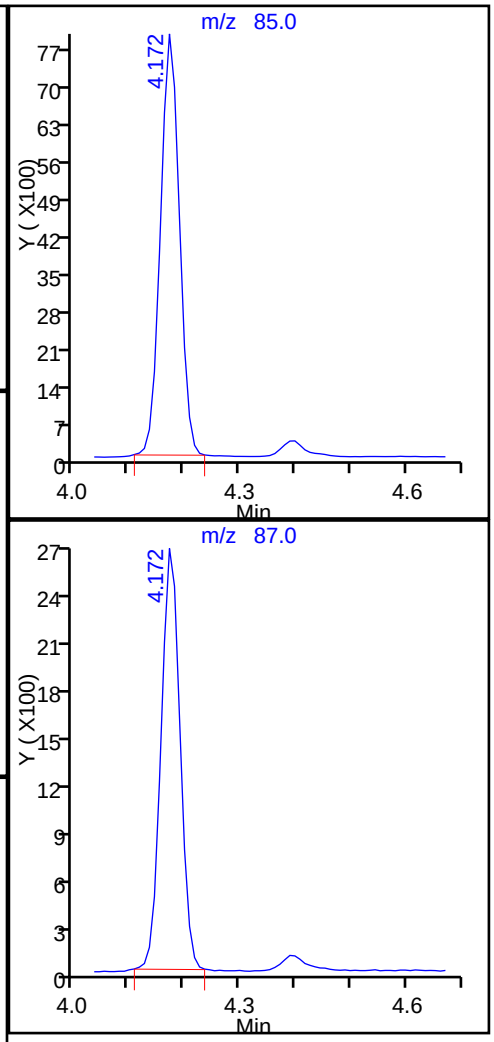
Report Date: 13-May-2015 16:54:39 Chrom Revision: 2.2 05-May-2015 11:39:10

TestAmerica Sacramento

Data File:	\\SACCHROM\ChromData\ATMS5\20150512-21744.b\MS5051119.D				
Injection Date:	12-May-2015 04:38:30	Instrument ID:	ATMS5		
Lims ID:	320-12924-A-12	Lab Sample ID:	320-12924-12		
Client ID:	J6038-OA1-050615-2				
Operator ID:	AO	ALS Bottle#:	13	Worklist Smp#:	18
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	TO15 SIM	Limit Group:	MSA - TO-15_SIM_ICAL		
Column:		Detector	MS SCAN		

8 Dichlorodifluoromethane, CAS: 75-71-8





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TestAmerica Sacramento

Data File:	\\SACCHROM\ChromData\ATMS5\20150512-21744.b\MS5051119.D				
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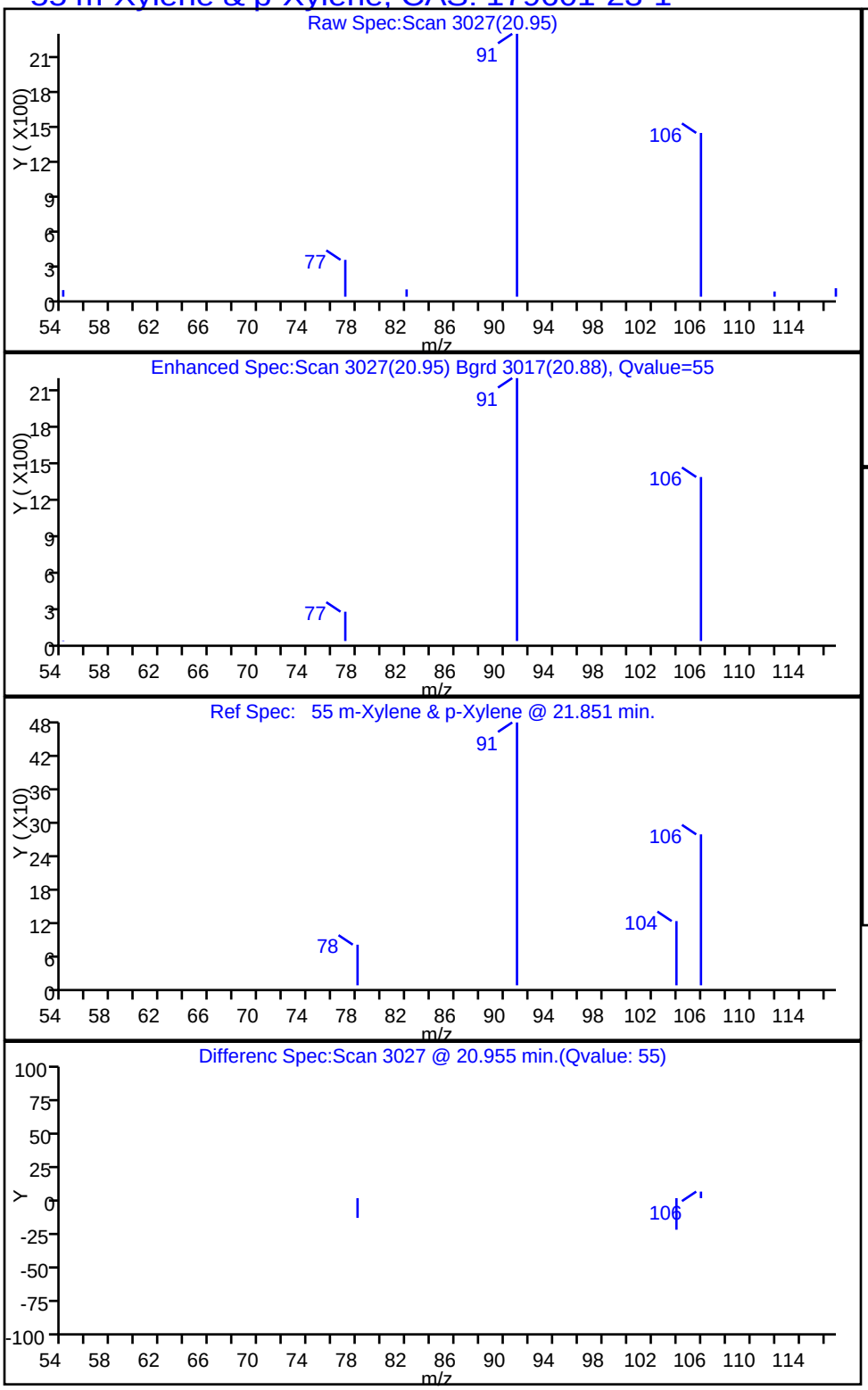
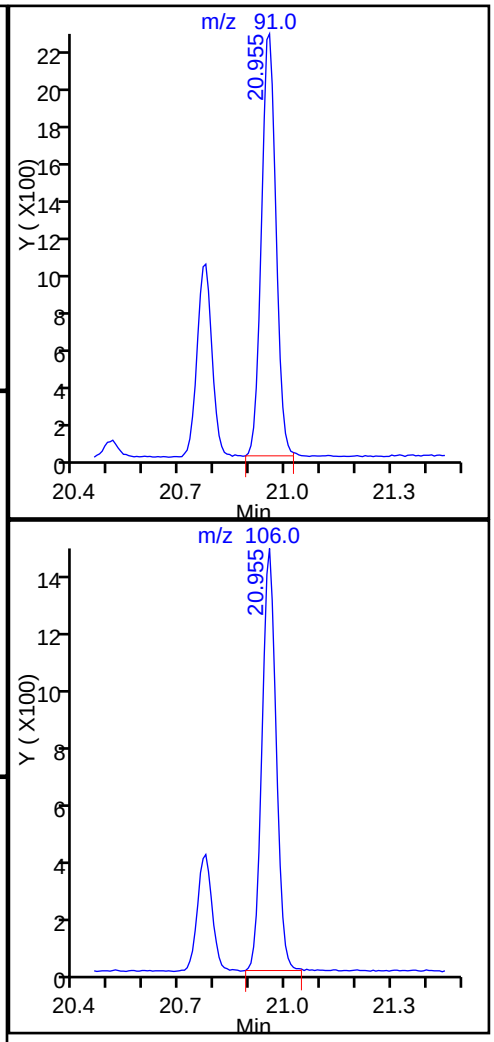
Client ID:	J6038-OA1-050615-2				
Operator ID:	AO	ALS Bottle#:	13	Worklist Smp#:	18
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	TO15 SIM	Limit Group:	MSA - TO-15_SIM_ICAL		
Column:		Detector	MS SCAN		

55 m-Xylene & p-Xylene, CAS: 179601-23-1



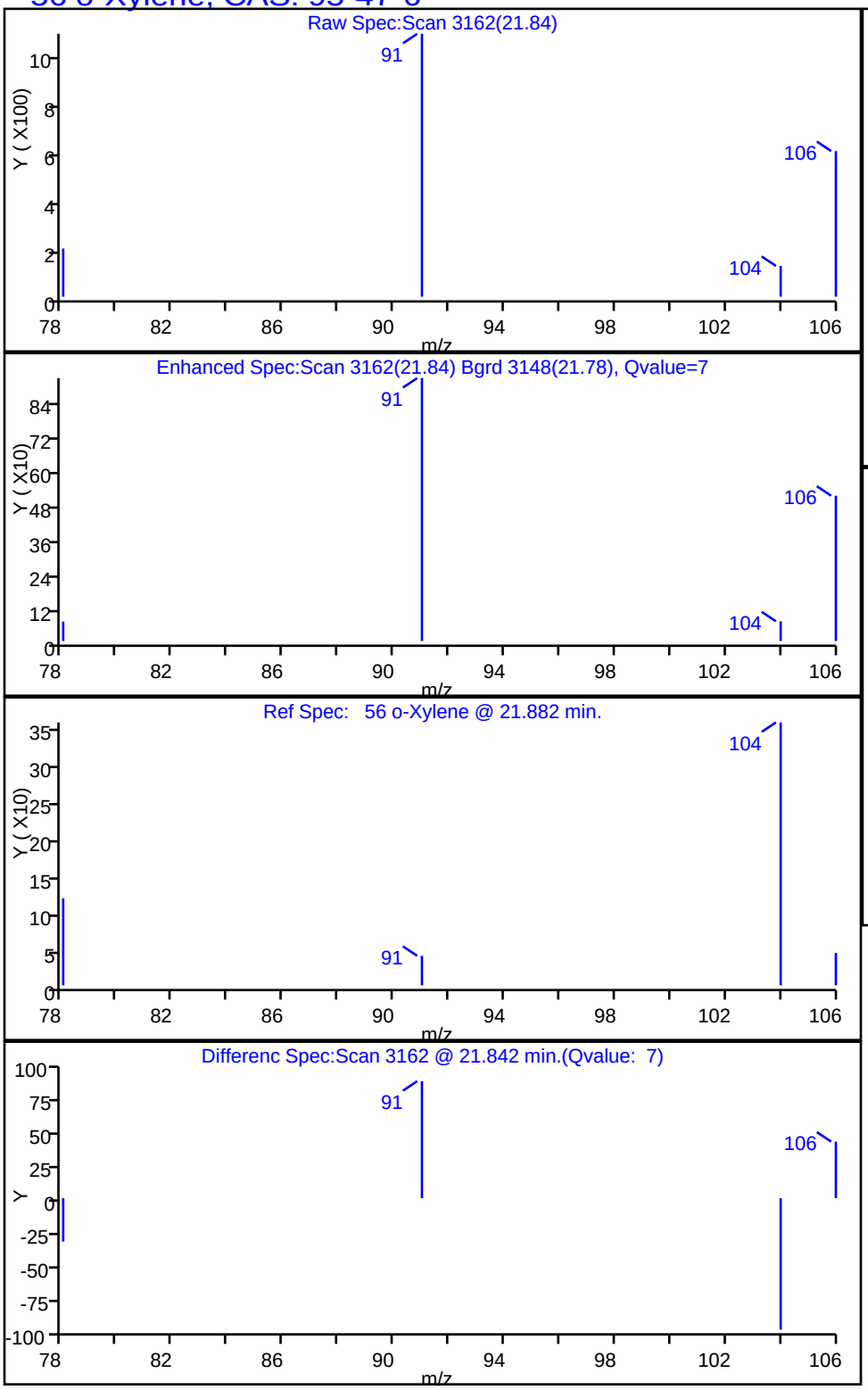


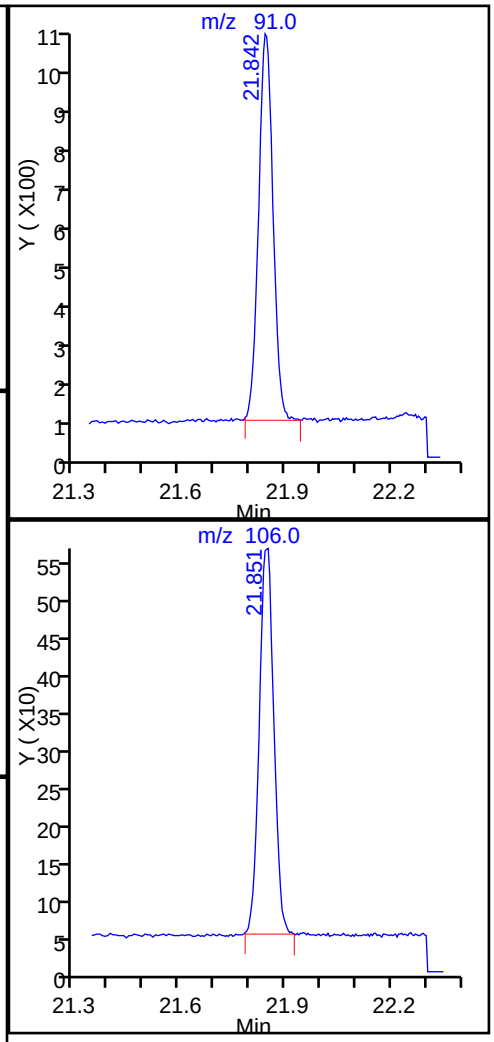
Report Date: 13-May-2015 16:54:39 Chrom Revision: 2.2 05-May-2015 11:39:10

TestAmerica Sacramento

Data File:	\\SACCHROM\ChromData\ATMS5\20150512-21744.b\MS5051119.D				
Injection Date:	12-May-2015 04:38:30	Instrument ID:	ATMS5		
Lims ID:	320-12924-A-12	Lab Sample ID:	320-12924-12		
Client ID:	J6038-OA1-050615-2				
Operator ID:	AO	ALS Bottle#:	13	Worklist Smp#:	18
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	TO15 SIM	Limit Group:	MSA - TO-15_SIM_ICAL		
Column:		Detector	MS SCAN		

56 o-Xylene, CAS: 95-47-6





Report Date: 13-May-2015 16:54:39 Chrom Revision: 2.2 05-May-2015 11:39:10

TestAmerica Sacramento

Data File:	\\SACCHROM\ChromData\ATMS5\20150512-21744.b\MS5051119.D				
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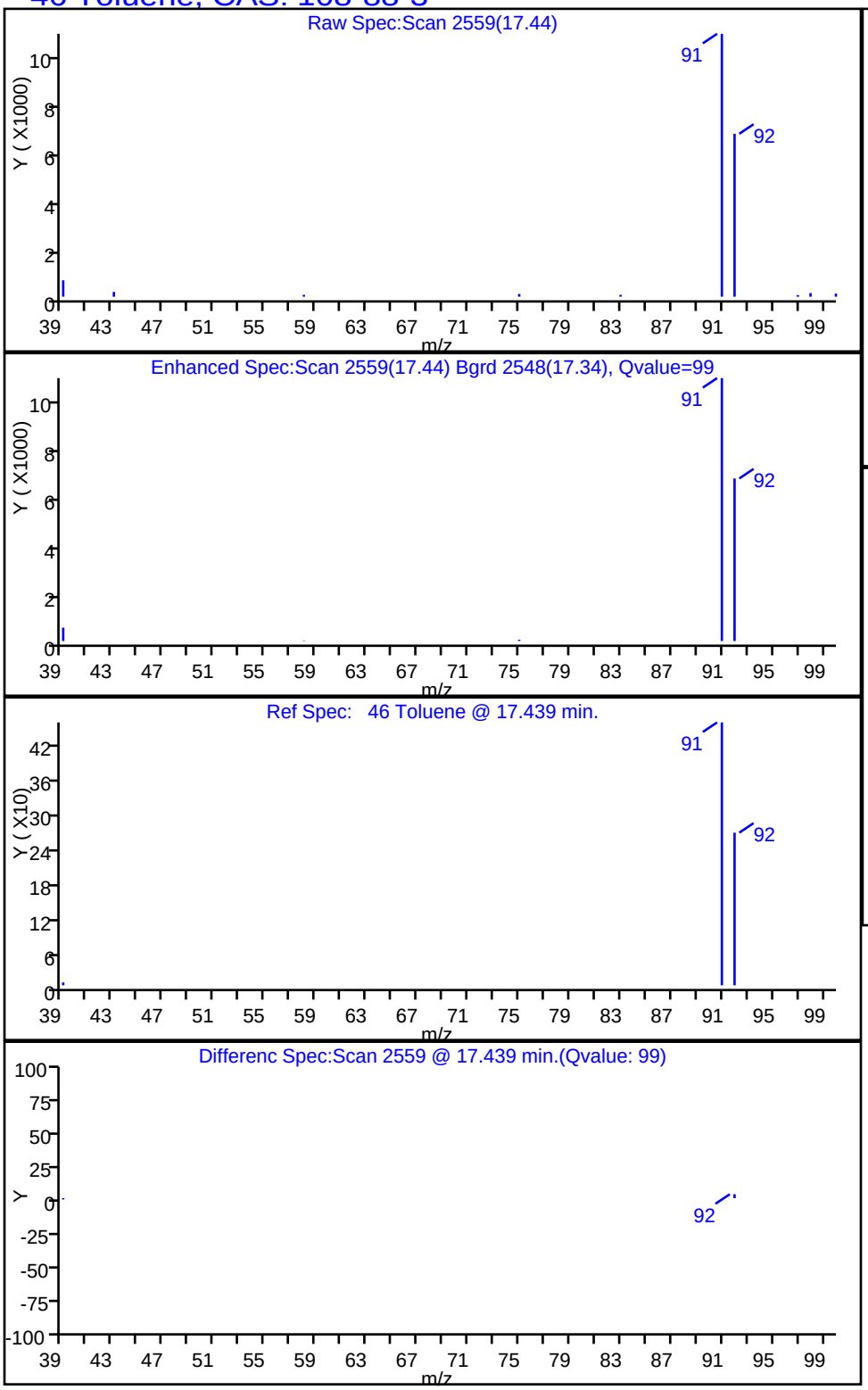
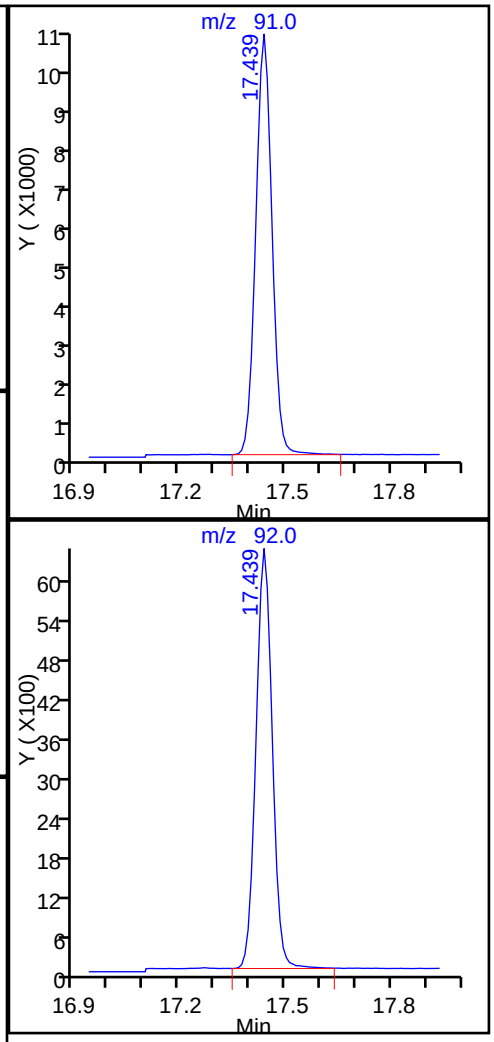
Client ID:	J6038-OA1-050615-2				
Operator ID:	AO	ALS Bottle#:	13	Worklist Smp#:	18
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	TO15 SIM	Limit Group:	MSA - TO-15_SIM_ICAL		
Column:		Detector	MS SCAN		

46 Toluene, CAS: 108-88-3





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TestAmerica Sacramento

Data File:	\\SACCHROM\ChromData\ATMS5\20150512-21744.b\MS5051119.D				
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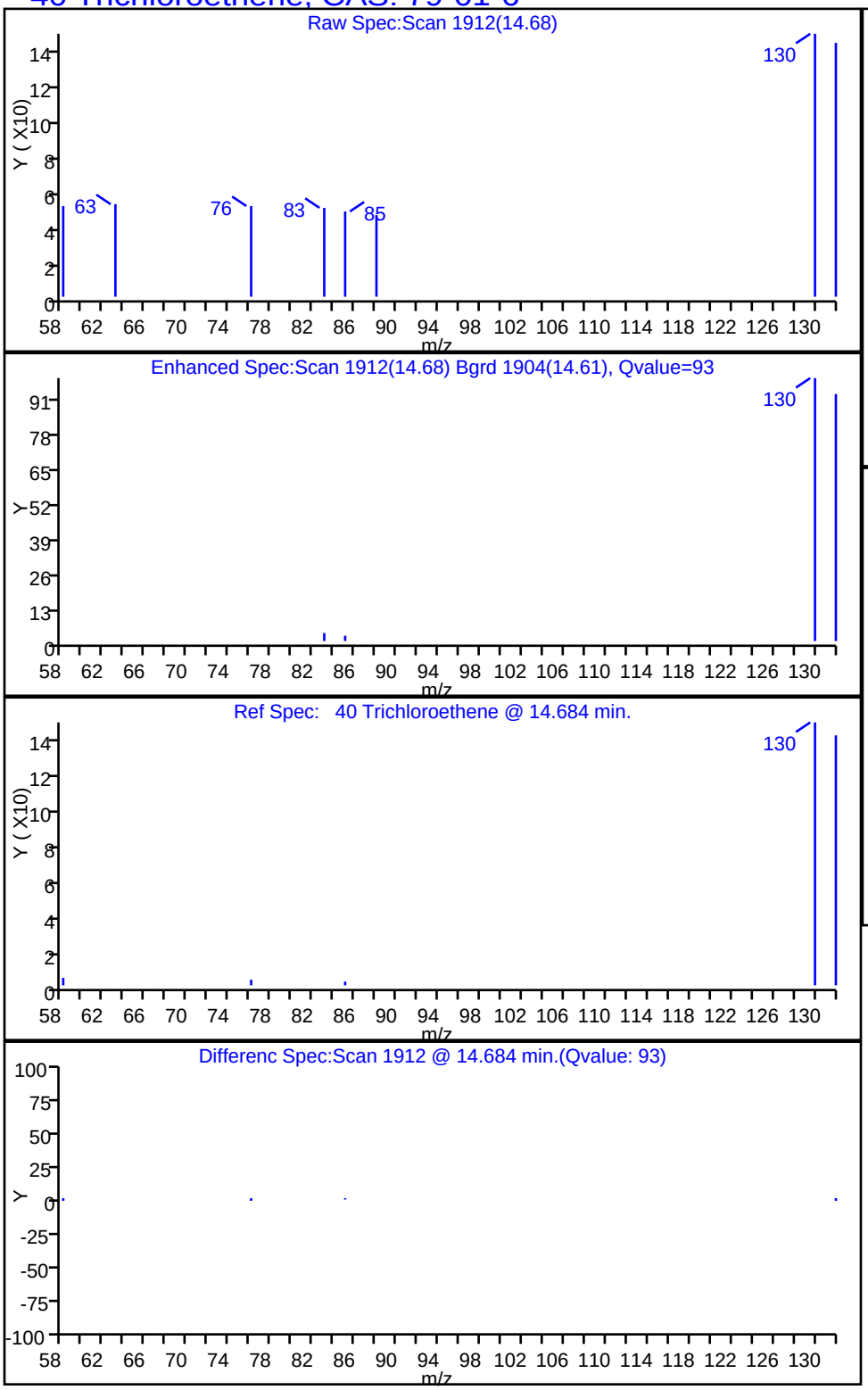
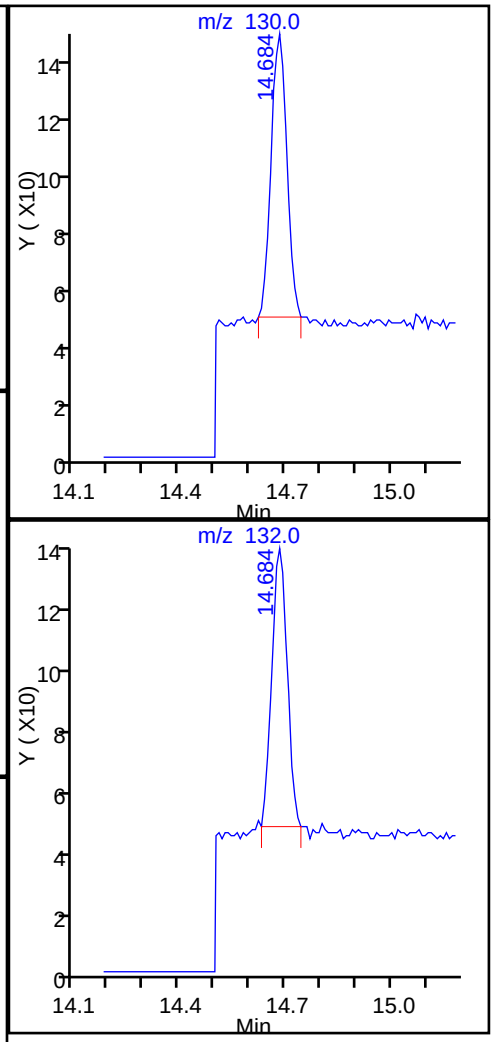
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	TO15 SIM	Limit Group:	MSA - TO-15_SIM_ICAL		
Column:		Detector	MS SCAN		

40 Trichloroethene, CAS: 79-01-6





Manual Integration/User Assign Peak Report

TestAmerica Sacramento

Data File:	\\SACCHROM\ChromData\ATMS5\20150512-21744.b\MS5051119.D				
Injection Date:	12-May-2015 04:38:30	Instrument ID:	ATMS5		
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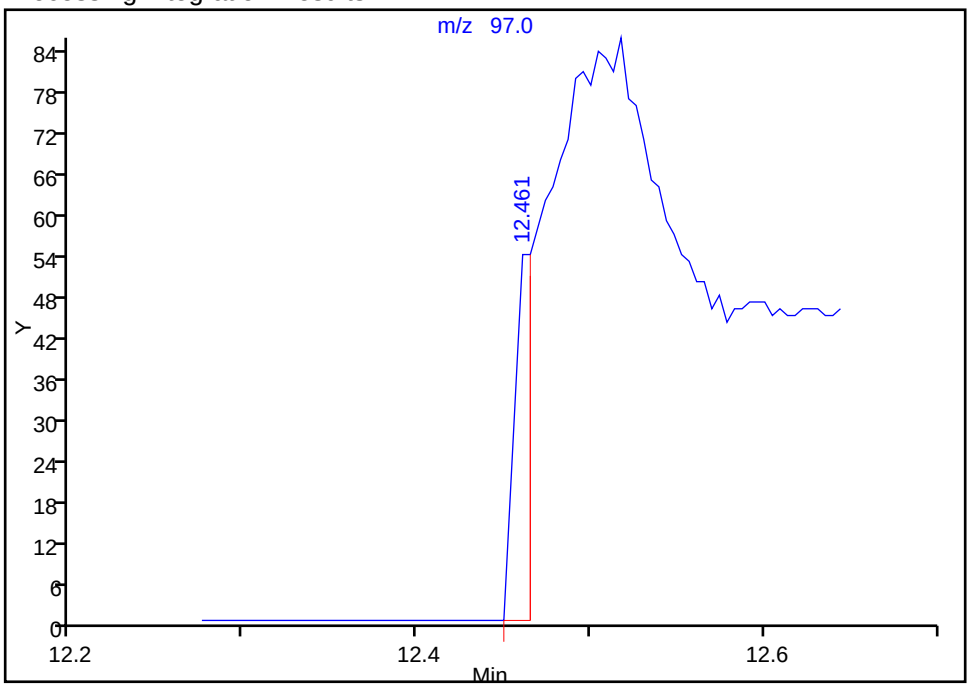
Client ID:	J6038-OA1-050615-2				
Operator ID:	AO	ALS Bottle#:	13	Worklist Smp#:	18
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	TO15 SIM	Limit Group:	MSA - TO-15_SIM_ICAL		
Column:		Detector	MS SCAN		

34 1,1,1-Trichloroethane, CAS: 71-55-6

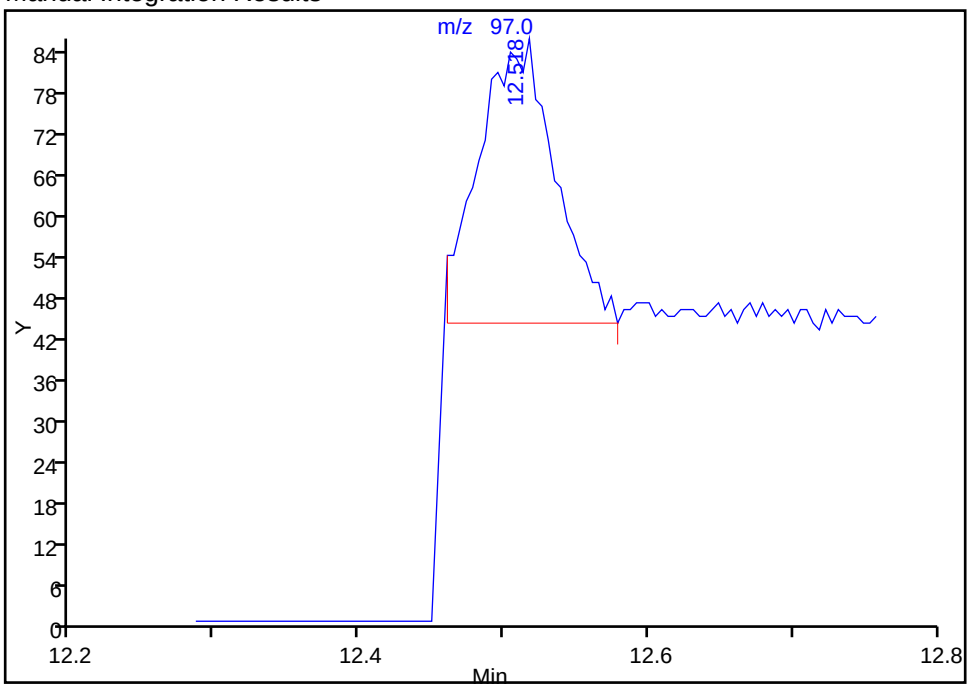
Processing Integration Results

RT: 12.46
Area: 31
Amount: 0.000636
Amount Units: ppb v/v



Manual Integration Results

RT: 12.52
Area: 154
Amount: 0.003162
Amount Units: ppb v/v



Reviewer: ortizam, 13-May-2015 16:50:33
Audit Action: Manually Integrated
Audit Reason: Baseline

FORM VI
AIR - GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Sacramento Job No.: 320-12924-1 Analy Batch No.: 69481

SDG No.:

Instrument ID: ATMS5 GC Column: RTX-Volatil ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/25/2015 20:20 Calibration End Date: 03/26/2015 03:17 Calibration ID: 12528

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 320-69481/3	MS5032510.D
Level 2	IC 320-69481/4	MS5032511.D
Level 3	IC 320-69481/5	MS5032512.D
Level 4	IC 320-69481/6	MS5032513.D
Level 5	IC 320-69481/7	MS5032514.D
Level 6	IC 320-69481/8	MS5032515.D
Level 7	ICIS 320-69481/9	MS5032516.D
Level 8	IC 320-69481/10	MS5032517.D
Level 9	IC 320-69481/11	MS5032518.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5		B	M1	M2								
Propene	+++++ 0.8925	+++++ 0.8644	1.2327 0.7776	1.0804 0.7768	1.0094	Ave		0.9477				17.8		30.0			
Freon 12	3.2979 2.8176	3.4575 2.8513	3.4697 2.6611	3.2163 2.2941	3.0727	Ave		3.0154				13.0		30.0			
1,2-Dichloro-1,1,2,2-tetrafluoroethane	2.6709 2.4655	3.3296 2.3704	3.1032 2.2063	2.8049 2.3049	2.5873	Ave		2.6492				14.1		30.0			
Chloromethane	+++++ 0.7061	1.0779 0.6611	1.0627 0.5910	0.9074 0.5882	0.8036	Ave		0.7997				24.8		30.0			
Vinyl chloride	1.1108 0.9899	1.2649 0.9267	1.2897 0.8356	1.1601 0.8174	1.0544	Ave		1.0499				16.4		30.0			
1,3-Butadiene	0.7455 0.6313	0.7850 0.5808	0.8154 0.5249	0.7662 0.5270	0.6468	Ave		0.6692				16.8		30.0			
Bromomethane	+++++ 1.1647	1.1591 1.1311	1.4419 1.0413	1.3536 1.0232	1.1770	Ave		1.1865				12.1		30.0			
Chloroethane	0.8689 0.7335	0.8490 0.6791	0.9321 0.5976	0.8385 0.5603	0.8009	Ave		0.7622				16.8		30.0			
Freon 11	3.1251 2.7656	3.2237 2.6833	3.1476 2.4646	3.0653 2.4886	2.9248	Ave		2.8765				10.0		30.0			
Isopropyl alcohol	+++++ 2.6301	3.4551 2.3847	3.4596 2.1233	3.1855 1.9723	2.9480	Ave		2.7698				21.0		30.0			
Acrolein	+++++ 0.4615	+++++ 0.4330	+++++ 0.4130	0.5820 0.3860	0.5304	Ave		0.4676				16.0		30.0			
Acetone	+++++ 1.7178	+++++ 1.5643	+++++ 1.4187	2.6309 1.3091	2.3350	Ave		1.8293				29.1		30.0			
Freon 113	2.9770 2.7006	3.0146 2.5514	3.1666 2.3581	2.9480 2.3232	2.8633	Ave		2.7670				10.9		30.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Sacramento Job No.: 320-12924-1 Analy Batch No.: 69481

SDG No.:

Instrument ID: ATMS5 GC Column: RTX-Volatil ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/25/2015 20:20 Calibration End Date: 03/26/2015 03:17 Calibration ID: 12528

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5		B	M1	M2								
1,1-Dichloroethene	1.5798 1.4376	1.7423 1.3358	1.6512 1.2104	1.5285 1.1727	1.4999	Ave		1.4620				13.2		30.0			
Acetonitrile	1.6983 1.4534	1.4741 1.3030	1.7272 1.1741	1.5368 1.0903	1.5523	Ave		1.4455				15.2		30.0			
Methylene Chloride	+++++ 1.3931	+++++ 1.2117	+++++ 1.0715	1.8901 0.9719	1.7462	Ave		1.3808				26.8		30.0			
Acrylonitrile	1.2441 1.0001	1.1000 0.9408	1.1794 0.8685	1.1918 0.7877	1.0805	Ave		1.0437				14.9		30.0			
Methyl-t-Butyl Ether (MTBE)	5.2480 4.3963	4.9783 4.1838	5.0245 3.8398	4.7585 3.6431	4.5422	Ave		4.5127				12.2		30.0			
trans-1,2-Dichloroethene	1.6243 1.5106	1.5996 1.4139	1.7615 1.3081	1.5226 1.2602	1.5386	Ave		1.5044				10.4		30.0			
Hexane	1.5848 1.3995	1.5208 1.2757	1.6854 1.1791	1.5735 1.0970	1.5188	Ave		1.4260				14.1		30.0			
1,1-Dichloroethane	2.8930 2.5045	2.4461 2.2487	2.8534 2.1069	2.6856 1.9359	2.6268	Ave		2.4779				13.3		30.0			
Vinyl acetate	3.3374 2.5385	3.0220 2.4596	3.0436 2.2106	3.0590 1.9529	2.8970	Ave		2.7245				16.8		30.0			
2-Butanone (MEK)	0.9627 0.8968	0.9597 0.8470	0.9422 0.7833	0.9436 0.7247	0.9266	Ave		0.8874				9.6		30.0			
cis-1,2-Dichloroethene	1.6934 1.5648	1.6045 1.4646	1.6524 1.4038	1.5969 1.3351	1.5497	Ave		1.5406				7.6		30.0			
Ethyl acetate	3.2386 2.7650	3.0859 2.5939	3.1349 2.3283	3.0335 2.0902	2.9260	Ave		2.7996				14.0		30.0			
Chloroform	2.9424 2.4983	2.4953 2.3475	2.7735 2.2882	2.6959 2.2001	2.6156	Ave		2.5396				9.5		30.0			
Tetrahydrofuran	2.0439 1.6070	1.8038 1.5009	1.8262 1.3282	1.7342 1.1748	1.6806	Ave		1.6333				16.3		30.0			
1,1,1-Trichloroethane	2.9720 2.5696	2.5421 2.4579	2.8470 2.4333	2.7115 2.3657	2.6376	Ave		2.6152				7.6		30.0			
Cyclohexane	2.8634 2.5393	2.4018 2.4083	2.7367 2.3752	2.6138 2.2382	2.5986	Ave		2.5306				7.7		30.0			
Carbon tetrachloride	0.5150 0.4737	0.4438 0.4634	0.5025 0.4857	0.5168 0.5149	0.5124	Ave		0.4920				5.4		30.0			
1,2-Dichloroethane	0.4139 0.3271	0.4049 0.3253	0.3773 0.3229	0.3640 0.3275	0.3479	Ave		0.3568				9.9		30.0			
Benzene	1.6111 1.1155	1.2661 1.0876	1.2853 1.0669	1.2180 1.0515	1.1722	Ave		1.2082				14.4		30.0			
n-Heptane	0.6587 0.5474	0.6252 0.5266	0.6190 0.4952	0.5948 0.4693	0.5754	Ave		0.5680				11.1		30.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Sacramento Job No.: 320-12924-1 Analy Batch No.: 69481

SDG No.:

Instrument ID: ATMS5 GC Column: RTX-Volatil ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/25/2015 20:20 Calibration End Date: 03/26/2015 03:17 Calibration ID: 12528

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5		B	M1	M2								
Trichloroethene	0.5512 0.4406	0.4816 0.4504	0.4757 0.4556	0.4620 0.4766	0.4501	Ave		0.4715				7.0		30.0			
1,2-Dichloropropane	0.1926 0.1328	0.1496 0.1335	0.1534 0.1309	0.1445 0.1313	0.1414	Ave		0.1455				13.4		30.0			
Bromodichloromethane	0.4703 0.3734	0.4352 0.3803	0.4077 0.3757	0.4078 0.3816	0.3880	Ave		0.4022				8.1		30.0			
1,4-Dioxane	0.3629 0.2736	0.3429 0.2794	0.3049 0.2604	0.2898 0.2588	0.2840	Ave		0.2952				12.2		30.0			
4-Methyl-2-pentanone (MIBK)	0.8588 0.6361	0.7953 0.6320	0.7902 0.5821	0.7629 0.5567	0.7694	Ave		0.7093				15.2		30.0			
cis-1,3-Dichloropropene	0.6683 0.5180	0.5939 0.5480	0.5586 0.5280	0.5490 0.5257	0.5286	Ave		0.5576				8.5		30.0			
Toluene	1.9240 1.3645	1.6435 1.4277	1.5065 1.4208	1.4765 1.4558	1.4044	Ave		1.5138				11.4		30.0			
trans-1,3-Dichloropropene	0.8211 0.6360	0.7330 0.6331	0.6800 0.5925	0.6801 0.5688	0.6394	Ave		0.6649				11.5		30.0			
1,1,2-Trichloroethane	0.6314 0.4684	0.5672 0.4663	0.5349 0.4386	0.5019 0.4278	0.4737	Ave		0.5011				13.2		30.0			
2-Hexanone	0.5365 0.4586	0.5194 0.4606	0.4994 0.4148	0.4937 0.3965	0.4838	Ave		0.4737				9.7		30.0			
Tetrachloroethene	0.7678 0.6446	0.7237 0.6465	0.6790 0.6261	0.6505 0.6448	0.6248	Ave		0.6675				7.2		30.0			
Dibromochloromethane	1.0120 0.7746	0.9049 0.7964	0.8524 0.7724	0.8316 0.7970	0.7785	Ave		0.8355				9.5		30.0			
1,2-Dibromoethane (EDB)	0.9185 0.7202	0.8737 0.7274	0.8162 0.6926	0.7731 0.6925	0.7281	Ave		0.7714				10.5		30.0			
Chlorobenzene	1.7577 1.3319	1.5556 1.3225	1.4574 1.2607	1.4163 1.2585	1.3177	Ave		1.4087				11.6		30.0			
Ethylbenzene	2.7892 2.1705	2.5507 2.1799	2.3740 2.0778	2.2586 2.0894	2.1357	Ave		2.2918				10.5		30.0			
m,p-Xylene	2.1527 1.6450	1.9039 1.6564	1.7762 1.5770	1.6894 1.6095	1.6051	Ave		1.7350				10.8		30.0			
o-Xylene	2.3021 1.7071	2.0081 1.7182	1.8598 1.6312	1.7679 1.6439	1.6744	Ave		1.8125				12.1		30.0			
Styrene	1.7097 1.4394	1.6180 1.4782	1.4973 1.4254	1.4683 1.4709	1.3894	Ave		1.4996				6.7		30.0			
Bromoform	0.5937 0.5029	0.5718 0.5107	0.5268 0.4939	0.4922 0.5240	0.5014	Ave		0.5242				6.8		30.0			
1,1,2,2-Tetrachloroethane	1.4018 1.1402	1.2909 1.1237	1.2273 1.0339	1.1855 1.0028	1.1098	Ave		1.1684				10.7		30.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Sacramento Job No.: 320-12924-1 Analy Batch No.: 69481

SDG No.:

Instrument ID: ATMS5 GC Column: RTX-Volatil ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/25/2015 20:20 Calibration End Date: 03/26/2015 03:17 Calibration ID: 12528

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5		B	M1	M2								
1,2,3-Trichloropropane	0.4495 0.3409	0.4053 0.3390	0.3745 0.3161	0.3494 0.3138	0.3304	Ave		0.3577				12.5		30.0			
4-Ethyltoluene	1.0835 0.9801	1.0302 0.9905	0.9531 0.9483	0.9276 0.9627	0.9057	Ave		0.9757				5.6		30.0			
1,3,5-Trimethylbenzene	1.6512 1.3363	1.4561 1.3519	1.3874 1.2863	1.3123 1.3151	1.2625	Ave		1.3732				8.7		30.0			
1,2,4-Trimethylbenzene	1.4901 1.2150	1.1039 1.2389	1.2522 1.1791	1.1863 1.1985	1.1525	Ave		1.2241				8.9		30.0			
1,3-Dichlorobenzene	1.6421 1.4247	1.5643 1.4637	1.4563 1.4060	1.4077 1.3873	1.3598	Ave		1.4569				6.2		30.0			
1,4-Dichlorobenzene	1.4979 1.3556	1.4800 1.4227	1.3764 1.3629	1.2775 1.3531	1.2549	Ave		1.3757				5.9		30.0			
Benzyl chloride	2.0591 2.3882	2.3376 2.4924	2.3154 2.3744	2.2096 2.2650	2.1622	Ave		2.2893				5.7		30.0			
1,2-Dichlorobenzene	1.6629 1.3832	1.5596 1.4144	1.4406 1.3402	1.3371 1.2957	1.3097	Ave		1.4159				8.7		30.0			
1,2,4-Trichlorobenzene	0.6742 0.8849	0.8909 0.9626	0.9364 0.9485	0.8610 1.0700	0.8593	Ave		0.8986				11.9		30.0			
Hexachlorobutadiene	0.7093 0.6392	0.6939 0.6222	0.6582 0.5742	0.6037 0.6244	0.5685	Ave		0.6326				7.7		30.0			
Naphthalene	2.6035 2.5479	3.2280 2.6329	3.2680 2.5469	2.8121 2.7941	2.7516	Ave		2.7983				9.8		30.0			
1,2-Dichloroethane-d4 (Surr)	0.2401 0.2304	0.2402 0.2306	0.2412 0.2289	0.2373 0.2363	0.2386	Ave		0.2360				2.0		30.0			
Toluene-d8 (Surr)	0.6757 0.6852	0.6678 0.7048	0.6854 0.7014	0.6795 0.7123	0.6858	Ave		0.6887				2.1		30.0			
4-Bromofluorobenzene (Surr)	0.5490 0.5614	0.5590 0.5755	0.5523 0.5743	0.5530 0.5912	0.5445	Ave		0.5622				2.7		30.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Sacramento Job No.: 320-12924-1 Analy Batch No.: 69481

SDG No.:

Instrument ID: ATMS5 GC Column: RTX-Volatil ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/25/2015 20:20 Calibration End Date: 03/26/2015 03:17 Calibration ID: 12528

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 320-69481/3	MS5032510.D
Level 2	IC 320-69481/4	MS5032511.D
Level 3	IC 320-69481/5	MS5032512.D
Level 4	IC 320-69481/6	MS5032513.D
Level 5	IC 320-69481/7	MS5032514.D
Level 6	IC 320-69481/8	MS5032515.D
Level 7	ICIS 320-69481/9	MS5032516.D
Level 8	IC 320-69481/10	MS5032517.D
Level 9	IC 320-69481/11	MS5032518.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5
Propene	CBM	Ave	+++++ 11290	+++++ 22053	972 42856	2211 81825	4217	+++++ 0.600	+++++ 1.20	0.0400 2.50	0.100 5.00	0.200
Freon 12	CBM	Ave	668 35641	1405 72741	2736 146665	6582 241640	12837	0.0100 0.600	0.0200 1.20	0.0400 2.50	0.100 5.00	0.200
1,2-Dichloro-1,1,2,2-tetrafluoroethane	CBM	Ave	541 31187	1353 60471	2447 121596	5740 242776	10809	0.0100 0.600	0.0200 1.20	0.0400 2.50	0.100 5.00	0.200
Chloromethane	CBM	Ave	+++++ 8931	438 16866	838 32572	1857 61957	3357	+++++ 0.600	0.0200 1.20	0.0400 2.50	0.100 5.00	0.200
Vinyl chloride	CBM	Ave	225 12522	514 23641	1017 46051	2374 86093	4405	0.0100 0.600	0.0200 1.20	0.0400 2.50	0.100 5.00	0.200
1,3-Butadiene	CBM	Ave	151 7985	319 14818	643 28927	1568 55514	2702	0.0100 0.600	0.0200 1.20	0.0400 2.50	0.100 5.00	0.200
Bromomethane	CBM	Ave	+++++ 14732	471 28856	1137 57391	2770 107769	4917	+++++ 0.600	0.0200 1.20	0.0400 2.50	0.100 5.00	0.200
Chloroethane	CBM	Ave	176 9278	345 17324	735 32938	1716 59013	3346	0.0100 0.600	0.0200 1.20	0.0400 2.50	0.100 5.00	0.200
Freon 11	CBM	Ave	633 34982	1310 68454	2482 135831	6273 262129	12219	0.0100 0.600	0.0200 1.20	0.0400 2.50	0.100 5.00	0.200
Isopropyl alcohol	CBM	Ave	+++++ 33269	1404 60838	2728 117023	6519 207741	12316	+++++ 0.600	0.0200 1.20	0.0400 2.50	0.100 5.00	0.200
Acrolein	CBM	Ave	+++++ 5837	+++++ 11046	+++++ 22763	1191 40653	2216	+++++ 0.600	+++++ 1.20	+++++ 2.50	0.100 5.00	0.200
Acetone	CBM	Ave	+++++ 21729	+++++ 39907	+++++ 78188	5384 137886	9755	+++++ 0.600	+++++ 1.20	+++++ 2.50	0.100 5.00	0.200
Freon 113	CBM	Ave	603 34161	1225 65091	2497 129961	6033 244698	11962	0.0100 0.600	0.0200 1.20	0.0400 2.50	0.100 5.00	0.200
1,1-Dichloroethene	CBM	Ave	320 18185	708 34078	1302 66711	3128 123519	6266	0.0100 0.600	0.0200 1.20	0.0400 2.50	0.100 5.00	0.200

FORM VI
AIR - GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Sacramento Job No.: 320-12924-1 Analy Batch No.: 69481

SDG No.:

Instrument ID: ATMS5 GC Column: RTX-Volatil ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/25/2015 20:20 Calibration End Date: 03/26/2015 03:17 Calibration ID: 12528

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5
Acetonitrile	CBM	Ave	344 18384	599 33242	1362 64709	3145 114840	6485	0.0100 0.600	0.0200 1.20	0.0400 2.50	0.100 5.00	0.200
Methylene Chloride	CBM	Ave	+++++ 17622	+++++ 30913	+++++ 59054	3868 102372	7295	+++++ 0.600	+++++ 1.20	+++++ 2.50	0.100 5.00	0.200
Acrylonitrile	CBM	Ave	252 12651	447 24001	930 47868	2439 82969	4514	0.0100 0.600	0.0200 1.20	0.0400 2.50	0.100 5.00	0.200
Methyl-t-Butyl Ether (MTBE)	CBM	Ave	1063 55610	2023 106734	3962 211626	9738 383729	18976	0.0100 0.600	0.0200 1.20	0.0400 2.50	0.100 5.00	0.200
trans-1,2-Dichloroethene	CBM	Ave	329 19108	650 36071	1389 72095	3116 132736	6428	0.0100 0.600	0.0200 1.20	0.0400 2.50	0.100 5.00	0.200
Hexane	CBM	Ave	321 17702	618 32544	1329 64982	3220 115549	6345	0.0100 0.600	0.0200 1.20	0.0400 2.50	0.100 5.00	0.200
1,1-Dichloroethane	CBM	Ave	586 31680	994 57368	2250 116121	5496 203909	10974	0.0100 0.600	0.0200 1.20	0.0400 2.50	0.100 5.00	0.200
Vinyl acetate	CBM	Ave	676 32110	1228 62748	2400 121832	6260 205696	12103	0.0100 0.600	0.0200 1.20	0.0400 2.50	0.100 5.00	0.200
2-Butanone (MEK)	CBM	Ave	195 11344	390 21609	743 43171	1931 76336	3871	0.0100 0.600	0.0200 1.20	0.0400 2.50	0.100 5.00	0.200
cis-1,2-Dichloroethene	CBM	Ave	343 19793	652 37363	1303 77371	3268 140627	6474	0.0100 0.600	0.0200 1.20	0.0400 2.50	0.100 5.00	0.200
Ethyl acetate	CBM	Ave	656 34975	1254 66174	2472 128320	6208 220156	12224	0.0100 0.600	0.0200 1.20	0.0400 2.50	0.100 5.00	0.200
Chloroform	CBM	Ave	596 31601	1014 59889	2187 126110	5517 231735	10927	0.0100 0.600	0.0200 1.20	0.0400 2.50	0.100 5.00	0.200
Tetrahydrofuran	CBM	Ave	414 20327	733 38289	1440 73202	3549 123742	7021	0.0100 0.600	0.0200 1.20	0.0400 2.50	0.100 5.00	0.200
1,1,1-Trichloroethane	CBM	Ave	602 32504	1033 62704	2245 134106	5549 249183	11019	0.0100 0.600	0.0200 1.20	0.0400 2.50	0.100 5.00	0.200
Cyclohexane	CBM	Ave	580 32120	976 61438	2158 130904	5349 235751	10856	0.0100 0.600	0.0200 1.20	0.0400 2.50	0.100 5.00	0.200
Carbon tetrachloride	DFB	Ave	484 28414	822 54612	1838 123289	4937 237256	9913	0.0100 0.600	0.0200 1.20	0.0400 2.50	0.100 5.00	0.200
1,2-Dichloroethane	DFB	Ave	389 19620	750 38340	1380 81957	3477 150913	6731	0.0100 0.600	0.0200 1.20	0.0400 2.50	0.100 5.00	0.200
Benzene	DFB	Ave	1514 66907	2345 128175	4701 270810	11635 484461	22676	0.0100 0.600	0.0200 1.20	0.0400 2.50	0.100 5.00	0.200
n-Heptane	DFB	Ave	619 32834	1158 62064	2264 125684	5682 216215	11132	0.0100 0.600	0.0200 1.20	0.0400 2.50	0.100 5.00	0.200
Trichloroethene	DFB	Ave	518 26427	892 53080	1740 115630	4413 219585	8708	0.0100 0.600	0.0200 1.20	0.0400 2.50	0.100 5.00	0.200
1,2-Dichloropropane	DFB	Ave	181 7965	277 15738	561 33225	1380 60481	2735	0.0100 0.600	0.0200 1.20	0.0400 2.50	0.100 5.00	0.200

FORM VI
AIR - GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Sacramento Job No.: 320-12924-1 Analy Batch No.: 69481

SDG No.:

Instrument ID: ATMS5 GC Column: RTX-Volatil ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/25/2015 20:20 Calibration End Date: 03/26/2015 03:17 Calibration ID: 12528

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5
Bromodichloromethane	DFB	Ave	442 22399	806 44814	1491 95355	3895 175834	7506	0.0100 0.600	0.0200 1.20	0.0400 2.50	0.100 5.00	0.200
1,4-Dioxane	DFB	Ave	341 16408	635 32932	1115 66095	2768 119248	5494	0.0100 0.600	0.0200 1.20	0.0400 2.50	0.100 5.00	0.200
4-Methyl-2-pentanone (MIBK)	DFB	Ave	807 38155	1473 74478	2890 147760	7287 256515	14885	0.0100 0.600	0.0200 1.20	0.0400 2.50	0.100 5.00	0.200
cis-1,3-Dichloropropene	DFB	Ave	628 31072	1100 64576	2043 134007	5244 242240	10225	0.0100 0.600	0.0200 1.20	0.0400 2.50	0.100 5.00	0.200
Toluene	DFB	Ave	1808 81842	3044 168256	5510 360637	14104 670779	27169	0.0100 0.600	0.0200 1.20	0.0400 2.50	0.100 5.00	0.200
trans-1,3-Dichloropropene	CBZ	Ave	632 30966	1105 63883	1992 134287	5294 241625	10233	0.0100 0.600	0.0200 1.20	0.0400 2.50	0.100 5.00	0.200
1,1,2-Trichloroethane	CBZ	Ave	486 22808	855 47049	1567 99397	3907 181708	7582	0.0100 0.600	0.0200 1.20	0.0400 2.50	0.100 5.00	0.200
2-Hexanone	CBZ	Ave	413 22332	783 46479	1463 94013	3843 168416	7744	0.0100 0.600	0.0200 1.20	0.0400 2.50	0.100 5.00	0.200
Tetrachloroethene	CBZ	Ave	591 31389	1091 65239	1989 141906	5063 273903	10000	0.0100 0.600	0.0200 1.20	0.0400 2.50	0.100 5.00	0.200
Dibromochloromethane	CBZ	Ave	779 37719	1364 80362	2497 175058	6473 338552	12460	0.0100 0.600	0.0200 1.20	0.0400 2.50	0.100 5.00	0.200
1,2-Dibromoethane (EDB)	CBZ	Ave	707 35066	1317 73402	2391 156973	6018 294166	11653	0.0100 0.600	0.0200 1.20	0.0400 2.50	0.100 5.00	0.200
Chlorobenzene	CBZ	Ave	1353 64851	2345 133450	4269 285730	11024 534583	21090	0.0100 0.600	0.0200 1.20	0.0400 2.50	0.100 5.00	0.200
Ethylbenzene	CBZ	Ave	2147 105687	3845 219970	6954 470906	17580 887514	34182	0.0100 0.600	0.0200 1.20	0.0400 2.50	0.100 5.00	0.200
m,p-Xylene	CBZ	Ave	3314 160197	5740 334278	10406 714810	26300 1367338	51378	0.0200 1.20	0.0400 2.40	0.0800 5.00	0.200 10.0	0.400
o-Xylene	CBZ	Ave	1772 83124	3027 173385	5448 369687	13761 698261	26799	0.0100 0.600	0.0200 1.20	0.0400 2.50	0.100 5.00	0.200
Styrene	CBZ	Ave	1316 70087	2439 149159	4386 323061	11429 624787	22237	0.0100 0.600	0.0200 1.20	0.0400 2.50	0.100 5.00	0.200
Bromoform	CBZ	Ave	457 24487	862 51529	1543 111948	3831 222578	8025	0.0100 0.600	0.0200 1.20	0.0400 2.50	0.100 5.00	0.200
1,1,2,2-Tetrachloroethane	CBZ	Ave	1079 55518	1946 113392	3595 234325	9228 425951	17762	0.0100 0.600	0.0200 1.20	0.0400 2.50	0.100 5.00	0.200
1,2,3-Trichloropropane	CBZ	Ave	346 16601	611 34206	1097 71634	2720 133298	5288	0.0100 0.600	0.0200 1.20	0.0400 2.50	0.100 5.00	0.200
4-Ethyltoluene	CBZ	Ave	834 47723	1553 99948	2792 214929	7220 408932	14495	0.0100 0.600	0.0200 1.20	0.0400 2.50	0.100 5.00	0.200
1,3,5-Trimethylbenzene	CBZ	Ave	1271 65066	2195 136414	4064 291517	10215 558599	20207	0.0100 0.600	0.0200 1.20	0.0400 2.50	0.100 5.00	0.200

FORM VI
AIR - GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Sacramento Job No.: 320-12924-1 Analy Batch No.: 69481

SDG No.:

Instrument ID: ATMS5 GC Column: RTX-Volatil ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/25/2015 20:20 Calibration End Date: 03/26/2015 03:17 Calibration ID: 12528

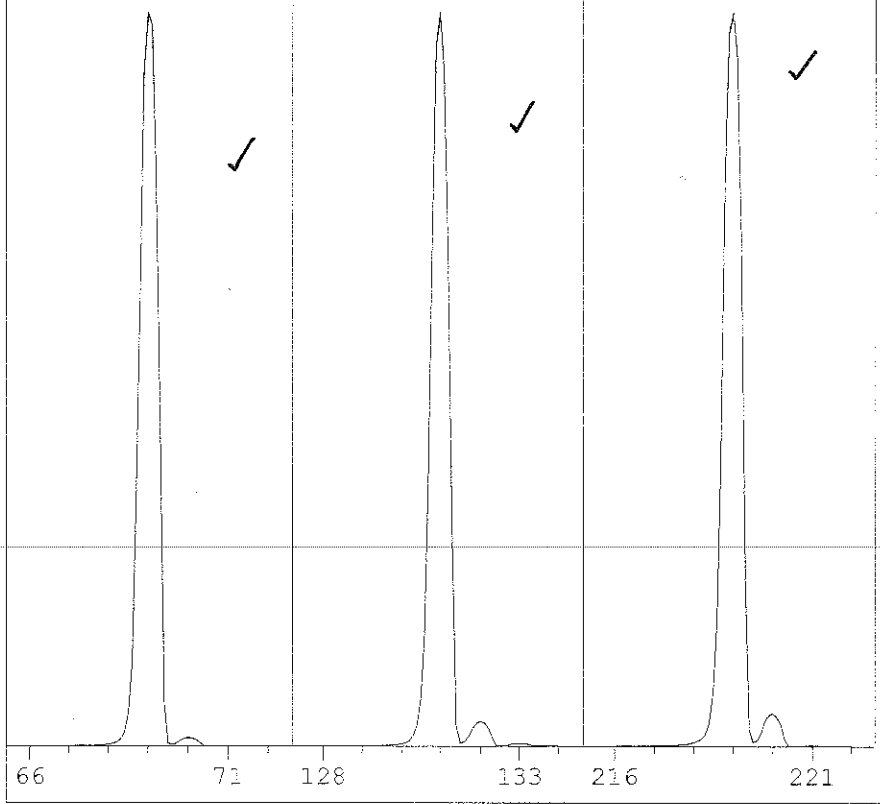
ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5
1,2,4-Trimethylbenzene	CBZ	Ave	1147 59163	1664 125016	3668 267225	9234 509100	18446	0.0100 0.600	0.0200 1.20	0.0400 2.50	0.100 5.00	0.200
1,3-Dichlorobenzene	CBZ	Ave	1264 69374	2358 147703	4266 318665	10957 589294	21763	0.0100 0.600	0.0200 1.20	0.0400 2.50	0.100 5.00	0.200
1,4-Dichlorobenzene	CBZ	Ave	1153 66007	2231 143560	4032 308891	9944 574735	20084	0.0100 0.600	0.0200 1.20	0.0400 2.50	0.100 5.00	0.200
Benzyl chloride	CBZ	Ave	1268 93028	2819 201204	5426 430510	13759 769691	27685	0.00800 0.480	0.0160 0.960	0.0320 2.00	0.0800 4.00	0.160
1,2-Dichlorobenzene	CBZ	Ave	1280 67350	2351 142726	4220 303749	10408 550375	20961	0.0100 0.600	0.0200 1.20	0.0400 2.50	0.100 5.00	0.200
1,2,4-Trichlorobenzene	CBZ	Ave	519 43087	1343 97131	2743 214964	6702 454498	13753	0.0100 0.600	0.0200 1.20	0.0400 2.50	0.100 5.00	0.200
Hexachlorobutadiene	CBZ	Ave	546 31125	1046 62788	1928 130139	4699 265236	9099	0.0100 0.600	0.0200 1.20	0.0400 2.50	0.100 5.00	0.200
Naphthalene	CBZ	Ave	2004 124065	4866 265679	9573 577224	21889 1186840	44040	0.0100 0.600	0.0200 1.20	0.0400 2.50	0.100 5.00	0.200
1,2-Dichloroethane-d4 (Surr)	DFB	Ave	45128 46064	44488 45298	44115 46485	45329 43551	46155	2.00 2.00	2.00 2.00	2.00 2.00	2.00 2.00	2.00
Toluene-d8 (Surr)	DFB	Ave	127004 137002	123684 138438	125345 142423	129808 131273	132668	2.00 2.00	2.00 2.00	2.00 2.00	2.00 2.00	2.00
4-Bromofluorobenzene (Surr)	CBZ	Ave	84521 91125	84268 96781	80895 104124	86083 100441	87152	2.00 2.00	2.00 2.00	2.00 2.00	2.00 2.00	2.00

Curve Type Legend:
Ave = Average ISTD

Wed Mar 25 18:20:32 2015
C:\MSDCHEM\1\5973N\BFB.U

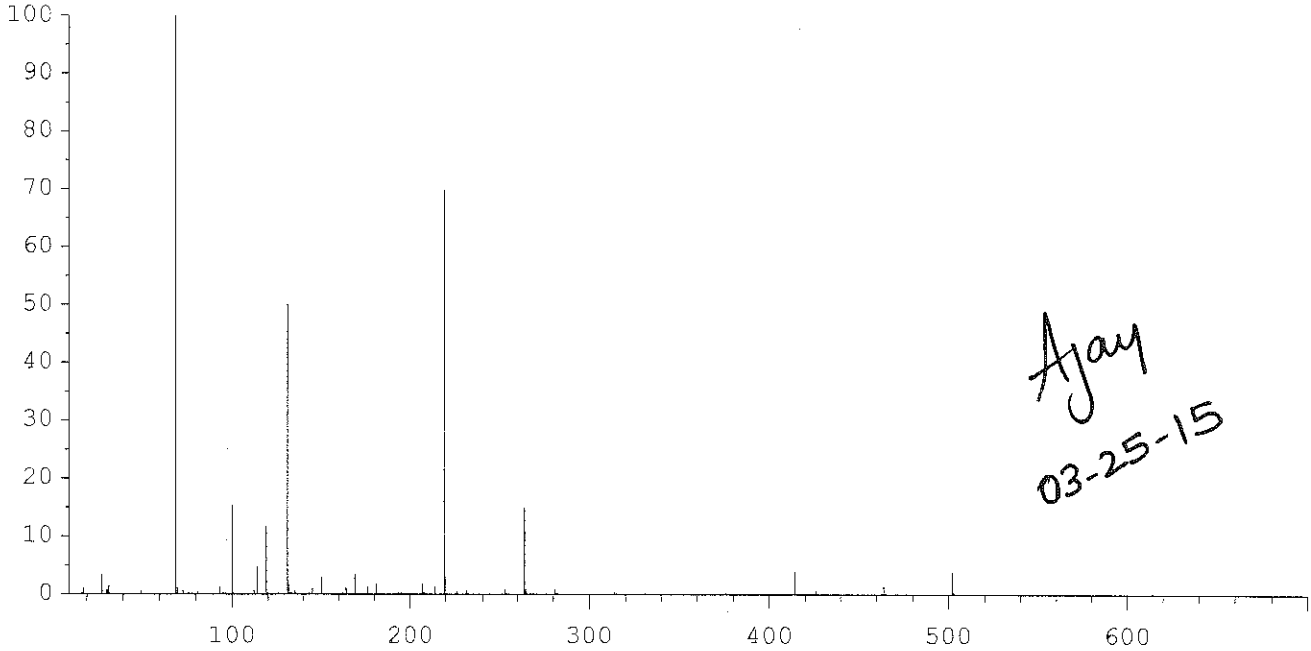
Instrument: ATMS5

Mass	69.00	Mass	131.00	Mass	219.00
Ab	1250616	Ab	603797	Ab	795213
Pw50	0.52	Pw50	0.51	Pw50	0.51



Ion Pol	POS	MassGain	154
		MassOffs	-15
Emission	34.6	AmuGain	2151
ElEnrgy	69.9	AmuOffs	133
Filament	1	Wid219	-0.032
		DC Pol	POS
Repeller	24.76		
IonFcus	78.8	HEDEnab	ON
EntLens	21.0	EMVolts	1353
EntOffs	18.57		
		Samples	8
PFTBA	OPEN	Averages	3
		Stepsize	0.10
Stepsize	0.10		
MS Source	230	TurboSpd	100
MS Quad	150		

Scan: 10.00 - 700.00 Samples: 8 Thresh: 100 Step: 0.10
309 peaks Base: 69.00 Abundance: 928768



Ajay
03-25-15

Mass	Abund	Rel Abund	Iso Mass	Iso Abund	Iso Ratio
69.00	928768	100.00	70.00	10120	1.09 ✓
131.00	464384	50.00	132.00	15408	3.32 ✓
219.00	648064	69.78	220.00	28288	4.37 ✓

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\SACCHROM\ChromData\ATMS5\20150326-20538.b\MS5032510.D
Lims ID: IC 0.01ppbv
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 25-Mar-2015 20:20:30 ALS Bottle#: 1 Worklist Smp#: 3
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: IC 0.01ppbv
Operator ID: AJS Instrument ID: ATMS5
Sublist: chrom-TO15 SIM*sub2

Method: \\SACCHROM\ChromData\ATMS5\20150326-20538.b\TO15 SIM.m
Limit Group: MSA - TO-15_SIM_ICAL
Last Update: 26-Mar-2015 14:41:11 Calib Date: 26-Mar-2015 03:17:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\SACCHROM\ChromData\ATMS5\20150326-20538.b\MS5032518.D

Column 1 : Det: MS SCAN
Process Host: XAWRK051

First Level Reviewer: shardaa Date: 26-Mar-2015 13:36:10

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	130	11.900	11.900	0.000	94	40511	2.00	2.00	
* 2 1,4-Difluorobenzene	114	13.998	13.998	0.000	100	187946	2.00	2.00	
* 3 Chlorobenzene-d5 (IS)	117	20.559	20.559	0.000	100	153949	2.00	2.00	
$ 4 1,2-Dichloroethane-d4 (Sur	65	13.067	13.067	0.000	76	45128	2.00	2.04	
$ 5 Toluene-d8 (Surr)	100	17.325	17.325	0.000	100	127004	2.00	1.96	
$ 6 4-Bromofluorobenzene (Surr	95	23.094	23.094	0.000	100	84521	2.00	1.95	
7 Propene	41	4.135	4.135	0.000	96	316	0.0100	0.0165	
8 Dichlorodifluoromethane	85	4.190	4.190	0.000	99	668	0.0100	0.0109	
9 1,2-Dichloro-1,1,2,2-tetra	135	4.417	4.417	0.000	92	541	0.0100	0.0101	M
11 Vinyl chloride	62	4.835	4.835	0.000	81	225	0.0100	0.0106	
12 Butadiene	39	4.899	4.899	0.000	69	151	0.0100	0.0111	
14 Chloroethane	64	5.845	5.845	0.000	96	176	0.0100	0.0114	
15 Trichlorofluoromethane	101	6.456	6.456	0.000	1	633	0.0100	0.0109	M
16 Isopropyl alcohol	45	7.103	7.103	0.000	98	791	0.0100	0.0141	
17 Acrolein	56	7.139	7.139	0.000	99	173	0.0100	0.0183	
18 Acetone	43	7.330	7.330	0.000	93	995	0.0100	0.0269	
19 1,1,2-Trichloro-1,2,2-trif	101	7.439	7.439	0.000	95	603	0.0100	0.0108	
20 1,1-Dichloroethene	96	7.649	7.649	0.000	97	320	0.0100	0.0108	
21 Acetonitrile	41	8.366	8.366	0.000	91	344	0.0100	0.0117	
22 Methylene Chloride	49	8.535	8.535	0.000	100	756	0.0100	0.0270	
23 Acrylonitrile	53	8.691	8.691	0.000	95	252	0.0100	0.0119	
24 Methyl tert-butyl ether	73	9.154	9.154	0.000	100	1063	0.0100	0.0116	
25 trans-1,2-Dichloroethene	96	9.255	9.255	0.000	98	329	0.0100	0.0108	
26 Hexane	41	9.673	9.673	0.000	97	321	0.0100	0.0111	
27 1,1-Dichloroethane	63	10.069	10.069	0.000	99	586	0.0100	0.0117	
28 Vinyl acetate	43	10.115	10.115	0.000	56	676	0.0100	0.0122	
29 2-Butanone (MEK)	72	10.972	10.972	0.000	100	195	0.0100	0.0108	
30 cis-1,2-Dichloroethene	96	11.300	11.300	0.000	90	343	0.0100	0.0110	M
31 Ethyl acetate	43	11.388	11.388	0.000	99	656	0.0100	0.0116	
32 Chloroform	83	11.649	11.649	0.000	99	596	0.0100	0.0116	
33 Tetrahydrofuran	42	12.172	12.172	0.000	97	414	0.0100	0.0125	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
34 1,1,1-Trichloroethane	97	12.566	12.566	0.000	98	602	0.0100	0.0114	
35 Cyclohexane	84	12.754	12.754	0.000	100	580	0.0100	0.0113	
36 Carbon tetrachloride	117	13.131	13.131	0.000	99	484	0.0100	0.0105	M
37 1,2-Dichloroethane	62	13.249	13.249	0.000	90	389	0.0100	0.0116	
38 Benzene	78	13.385	13.385	0.000	100	1514	0.0100	0.0133	
39 n-Heptane	43	13.567	13.567	0.000	99	619	0.0100	0.0116	
40 Trichloroethene	130	14.743	14.743	0.000	98	518	0.0100	0.0117	
41 1,2-Dichloropropane	76	15.037	15.037	0.000	100	181	0.0100	0.0132	
42 Dichlorobromomethane	85	15.486	15.486	0.000	99	442	0.0100	0.0117	
43 1,4-Dioxane	88	15.581	15.581	0.000	97	341	0.0100	0.0123	
44 4-Methyl-2-pentanone (MIBK	43	16.388	16.388	0.000	99	807	0.0100	0.0121	
45 cis-1,3-Dichloropropene	75	16.696	16.696	0.000	100	628	0.0100	0.0120	M
46 Toluene	91	17.498	17.498	0.000	100	1808	0.0100	0.0127	
47 trans-1,3-Dichloropropene	75	17.770	17.770	0.000	100	632	0.0100	0.0123	
48 1,1,2-Trichloroethane	97	18.107	18.107	0.000	97	486	0.0100	0.0126	
49 2-Hexanone	58	18.289	18.289	0.000	98	413	0.0100	0.0113	
50 Tetrachloroethene	166	18.998	18.998	0.000	98	591	0.0100	0.0115	
51 Chlorodibromomethane	129	19.200	19.200	0.000	99	779	0.0100	0.0121	
52 Ethylene Dibromide	107	19.642	19.642	0.000	99	707	0.0100	0.0119	
53 Chlorobenzene	112	20.643	20.643	0.000	75	1353	0.0100	0.0125	
54 Ethylbenzene	91	20.824	20.824	0.000	100	2147	0.0100	0.0122	
55 m-Xylene & p-Xylene	91	21.006	21.006	0.000	100	3314	0.0200	0.0248	
56 o-Xylene	91	21.896	21.896	0.000	96	1772	0.0100	0.0127	
57 Styrene	104	21.926	21.926	0.000	99	1316	0.0100	0.0114	M
58 Bromoform	173	22.470	22.470	0.000	100	457	0.0100	0.0113	
59 1,1,2,2-Tetrachloroethane	83	22.867	22.867	0.000	100	1079	0.0100	0.0120	
60 1,2,3-Trichloropropane	110	23.162	23.162	0.000	62	346	0.0100	0.0126	
61 4-Ethyltoluene	120	23.757	23.757	0.000	100	834	0.0100	0.0111	
62 1,3,5-Trimethylbenzene	120	23.856	23.856	0.000	89	1271	0.0100	0.0120	
63 1,2,4-Trimethylbenzene	120	24.643	24.643	0.000	98	1147	0.0100	0.0122	
64 1,3-Dichlorobenzene	146	25.385	25.385	0.000	100	1264	0.0100	0.0113	
65 1,4-Dichlorobenzene	146	25.582	25.582	0.000	100	1153	0.0100	0.0109	
66 Benzyl chloride	91	25.752	25.752	0.000	100	1268	0.008000	0.007196	
67 1,2-Dichlorobenzene	146	26.302	26.302	0.000	100	1280	0.0100	0.0117	
68 1,2,4-Trichlorobenzene	180	29.611	29.611	0.000	97	519	0.0100	0.007503	
69 Hexachlorobutadiene	225	29.975	29.975	0.000	95	546	0.0100	0.0112	M
70 Naphthalene	128	30.050	30.050	0.000	100	2004	0.0100	0.009304	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

VACORPIC0.20_00014 Amount Added: 25.00 Units: mL

VASUISIM_00160 Amount Added: 50.00 Units: mL Run Reagent

Report Date: 26-Mar-2015 14:41:12 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Sacramento

Data File: \\SACCHROM\ChromData\ATMS5\20150326-20538.b\MS5032510.D

Injection Date: 25-Mar-2015 20:20:30 Instrument ID: ATMS5

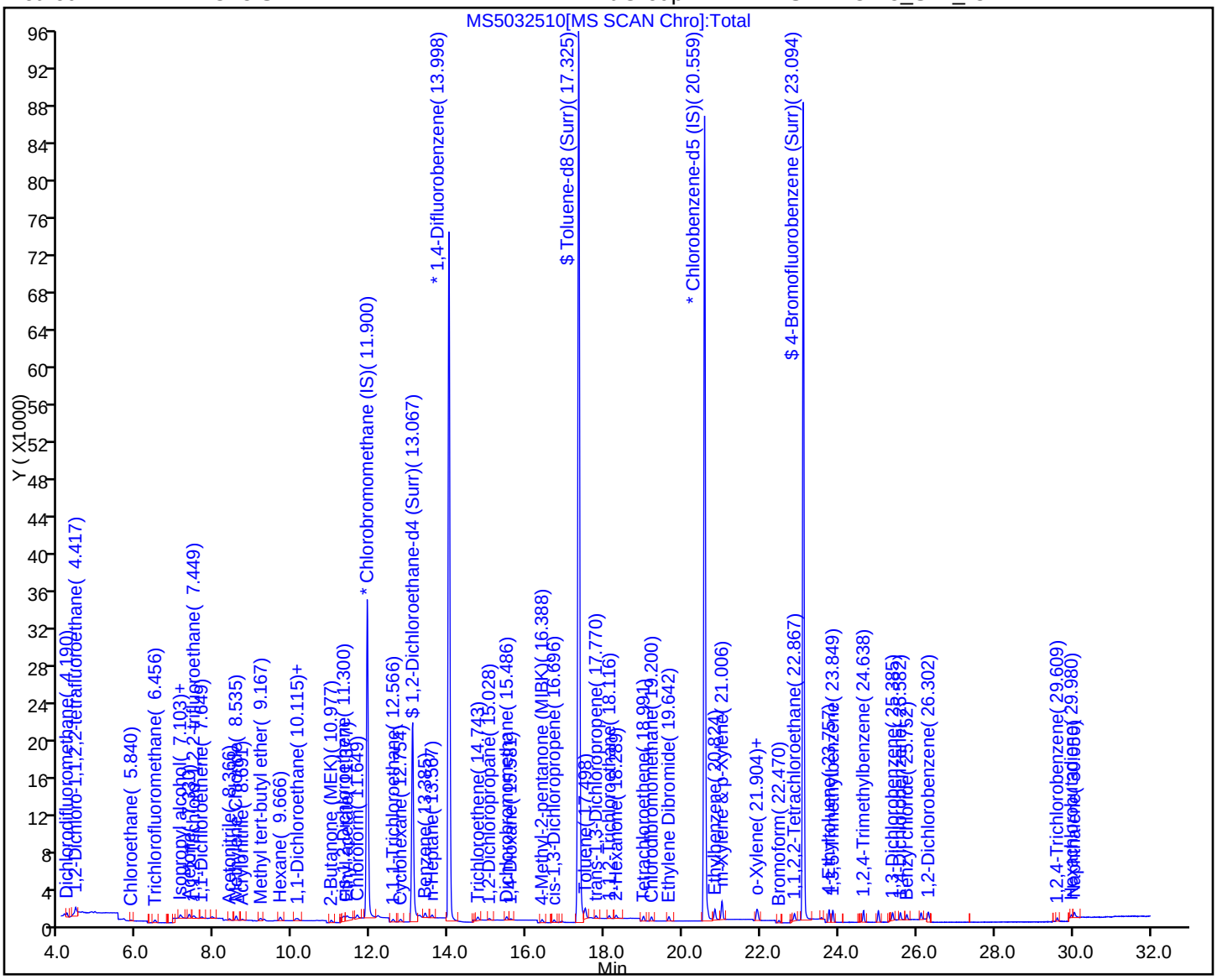
Lims ID: IC 0.01ppbv

Client ID:

Operator ID: AJS ALS Bottle#: 1 Worklist Smp#: 3

Purge Vol: 500.000 mL Dil. Factor: 1.0000

Method: TO15 SIM Limit Group: MSA - TO-15_SIM_ICAL



Manual Integration/User Assign Peak Report

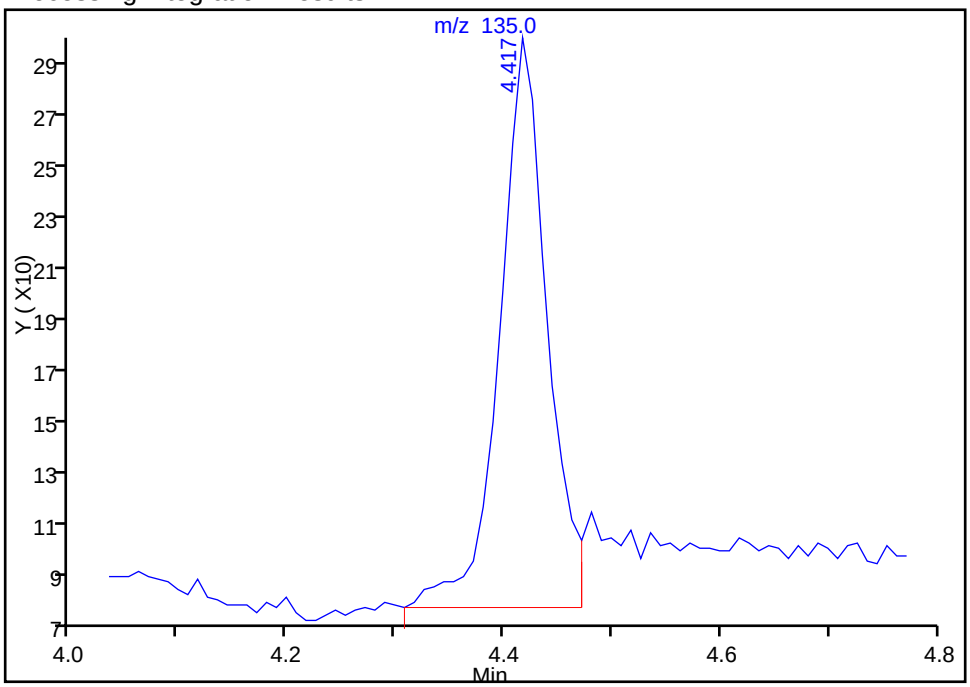
TestAmerica Sacramento

Data File:	\\SACCHROM\ChromData\ATMS5\20150326-20538.b\MS5032510.D				
Injection Date:	25-Mar-2015 20:20:30	Instrument ID:	ATMS5		
Lims ID:	IC 0.01ppbv				
Client ID:					
Operator ID:	AJS	ALS Bottle#:	1	Worklist Smp#:	3
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	TO15 SIM	Limit Group:	MSA - TO-15_SIM_ICAL		
Column:		Detector	MS SCAN		

9 1,2-Dichloro-1,1,2,2-tetrafluoroethane, CAS: 76-14-2

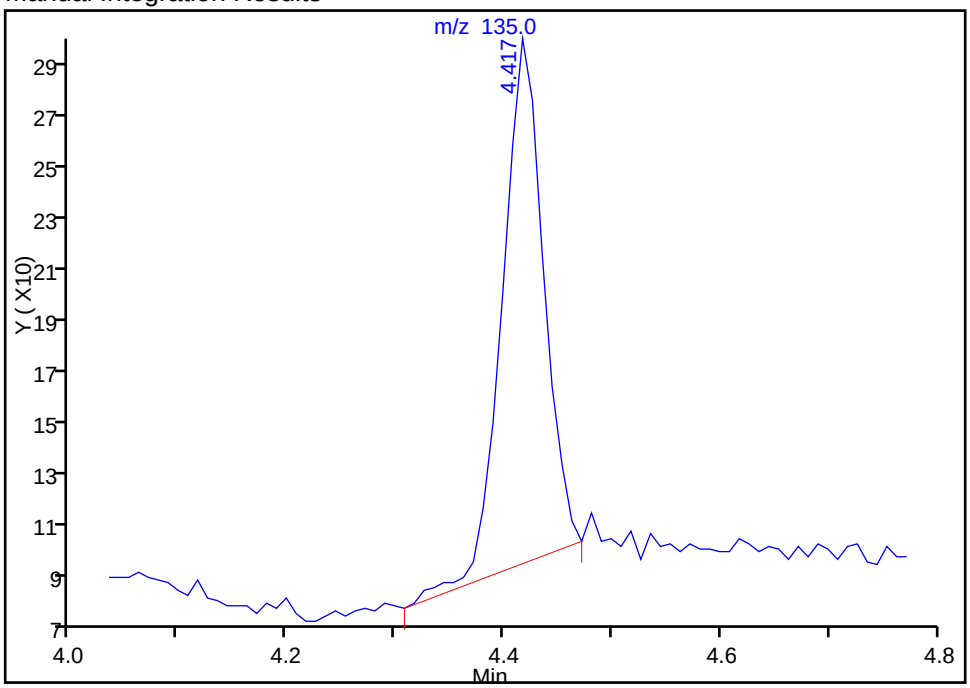
Processing Integration Results

RT: 4.42
Area: 676
Amount: 0.012610
Amount Units: ppb v/v



Manual Integration Results

RT: 4.42
Area: 541
Amount: 0.010082
Amount Units: ppb v/v



Reviewer: shardaa, 26-Mar-2015 13:36:10
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

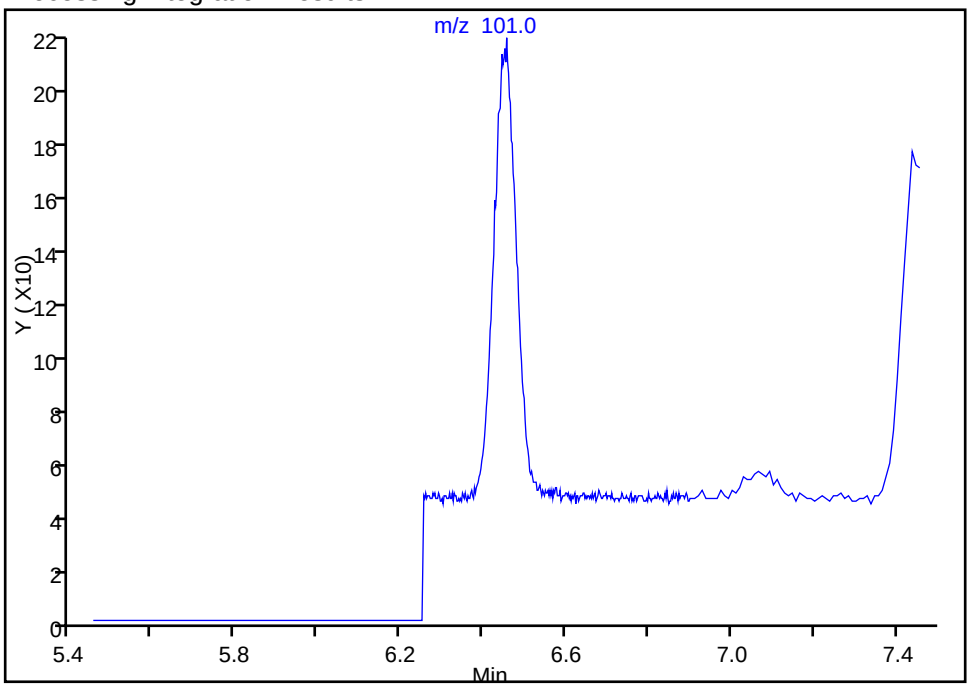
TestAmerica Sacramento

Data File:	\\SACCHROM\ChromData\ATMS5\20150326-20538.b\MS5032510.D				
Injection Date:	25-Mar-2015 20:20:30	Instrument ID:	ATMS5		
Lims ID:	IC 0.01ppbv				
Client ID:					
Operator ID:	AJS	ALS Bottle#:	1	Worklist Smp#:	3
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	TO15 SIM	Limit Group:	MSA - TO-15_SIM_ICAL		
Column:		Detector	MS SCAN		

15 Trichlorofluoromethane, CAS: 75-69-4

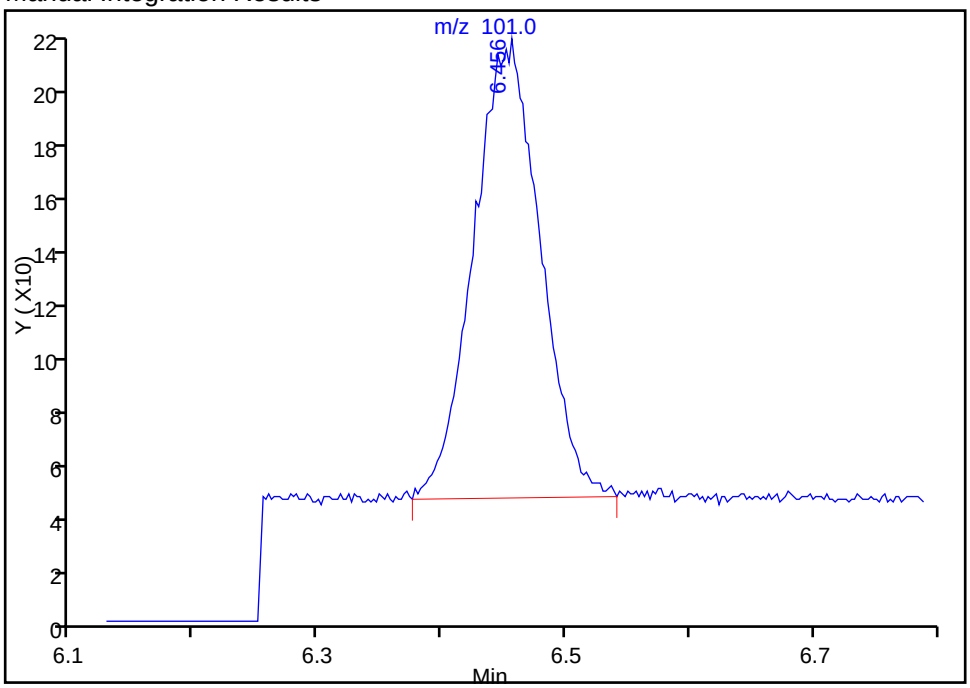
Not Detected
Expected RT: 6.46

Processing Integration Results



RT: 6.46
Area: 633
Amount: 0.010864
Amount Units: ppb v/v

Manual Integration Results



Reviewer: shardaa, 26-Mar-2015 13:36:10
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

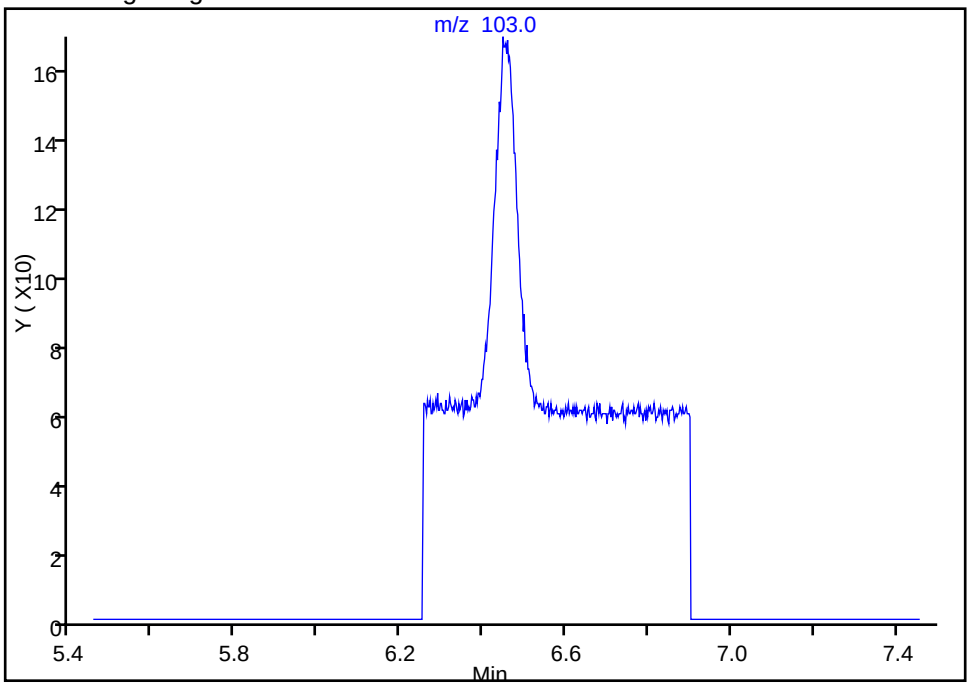
TestAmerica Sacramento

Data File:	\\SACCHROM\ChromData\ATMS5\20150326-20538.b\MS5032510.D				
Injection Date:	25-Mar-2015 20:20:30	Instrument ID:	ATMS5		
Lims ID:	IC 0.01ppbv				
Client ID:					
Operator ID:	AJS	ALS Bottle#:	1	Worklist Smp#:	3
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	TO15 SIM	Limit Group:	MSA - TO-15_SIM_ICAL		
Column:		Detector	MS SCAN		

15 Trichlorofluoromethane, CAS: 75-69-4

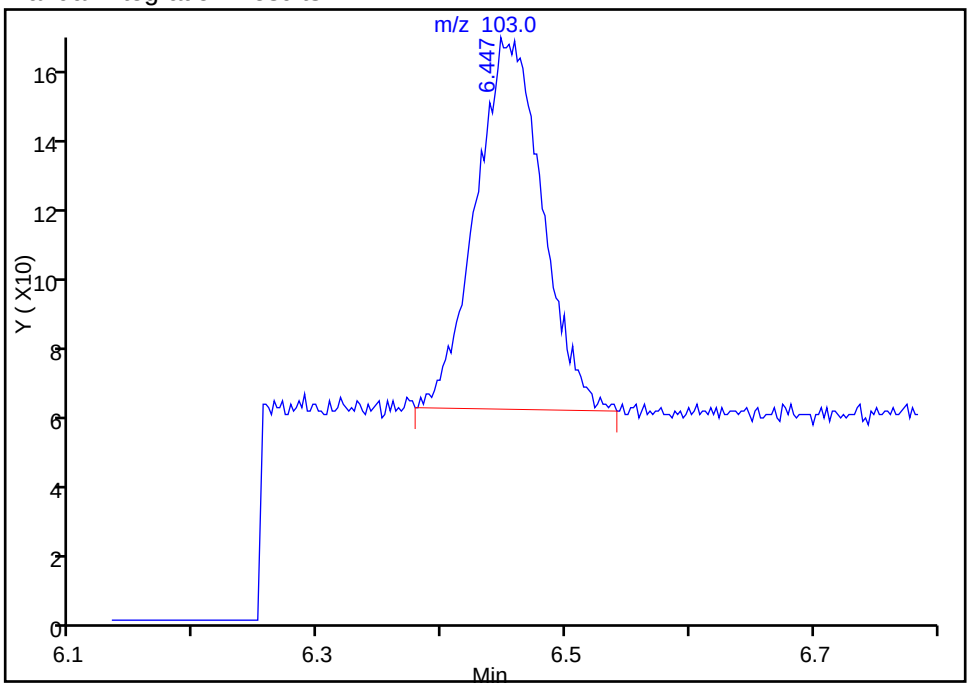
Not Detected
Expected RT: 6.46

Processing Integration Results



Manual Integration Results

RT: 6.45
Area: 404
Amount: 0.010864
Amount Units: ppb v/v



Reviewer: shardaa, 26-Mar-2015 13:36:10
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

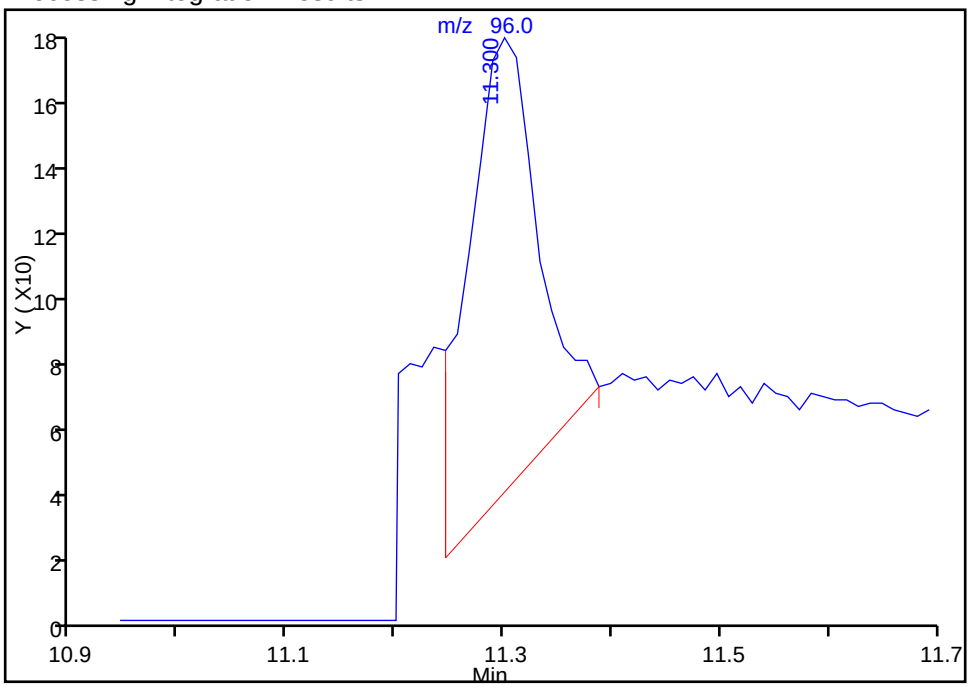
TestAmerica Sacramento

Data File:	\\SACCHROM\ChromData\ATMS5\20150326-20538.b\MS5032510.D				
Injection Date:	25-Mar-2015 20:20:30	Instrument ID:	ATMS5		
Lims ID:	IC 0.01ppbv				
Client ID:					
Operator ID:	AJS	ALS Bottle#:	1	Worklist Smp#:	3
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	TO15 SIM	Limit Group:	MSA - TO-15_SIM_ICAL		
Column:		Detector	MS SCAN		

30 cis-1,2-Dichloroethene, CAS: 156-59-2

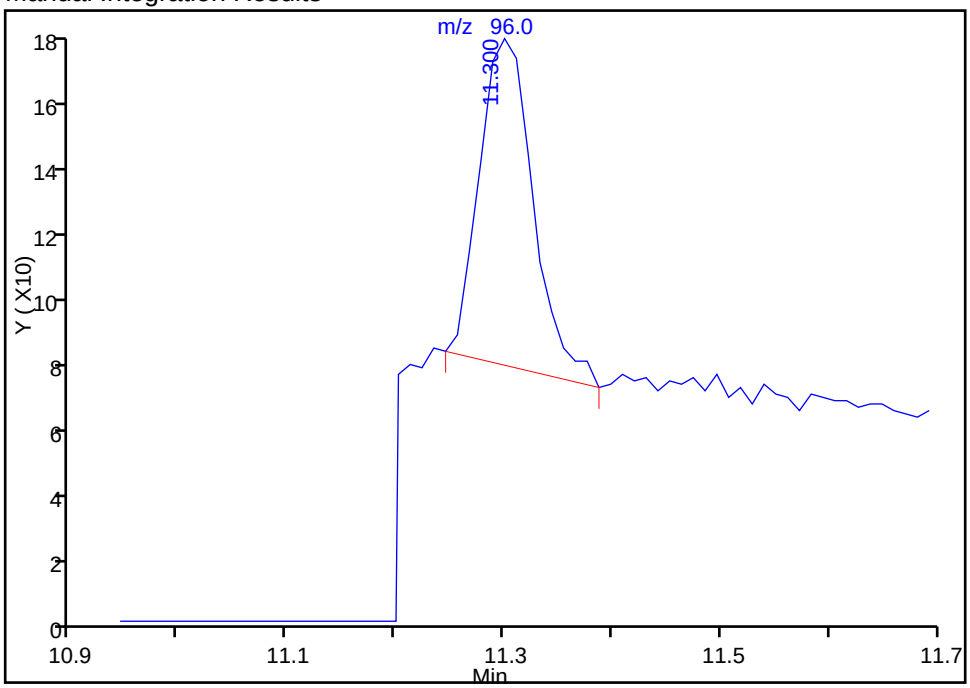
Processing Integration Results

RT: 11.30
Area: 631
Amount: 0.020475
Amount Units: ppb v/v



Manual Integration Results

RT: 11.30
Area: 343
Amount: 0.010992
Amount Units: ppb v/v



Reviewer: shardaa, 26-Mar-2015 13:36:10
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

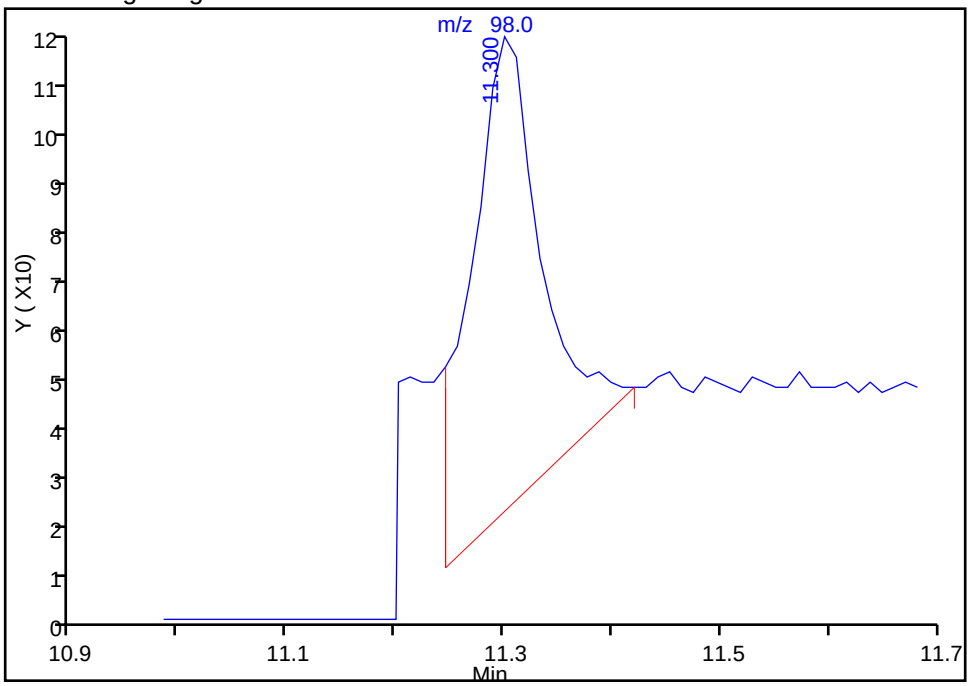
TestAmerica Sacramento

Data File:	\\SACCHROM\ChromData\ATMS5\20150326-20538.b\MS5032510.D				
Injection Date:	25-Mar-2015 20:20:30	Instrument ID:	ATMS5		
Lims ID:	IC 0.01ppbv				
Client ID:					
Operator ID:	AJS	ALS Bottle#:	1	Worklist Smp#:	3
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	TO15 SIM	Limit Group:	MSA - TO-15_SIM_ICAL		
Column:		Detector	MS SCAN		

30 cis-1,2-Dichloroethene, CAS: 156-59-2

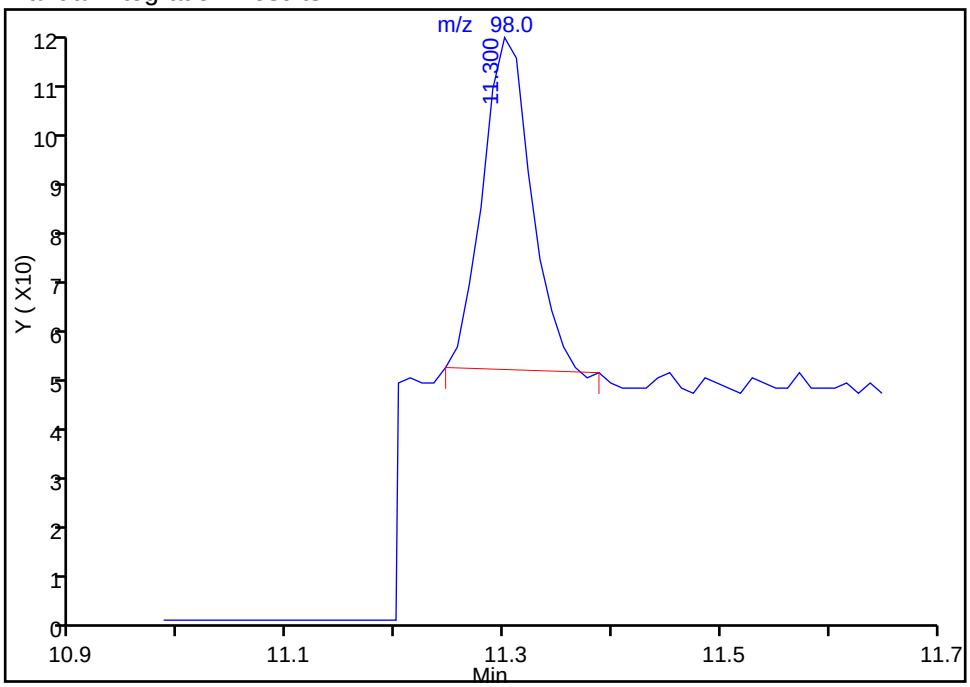
Processing Integration Results

RT: 11.30
Area: 428
Amount: 0.020475
Amount Units: ppb v/v



Manual Integration Results

RT: 11.30
Area: 201
Amount: 0.010992
Amount Units: ppb v/v



Reviewer: shardaa, 26-Mar-2015 13:36:10
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

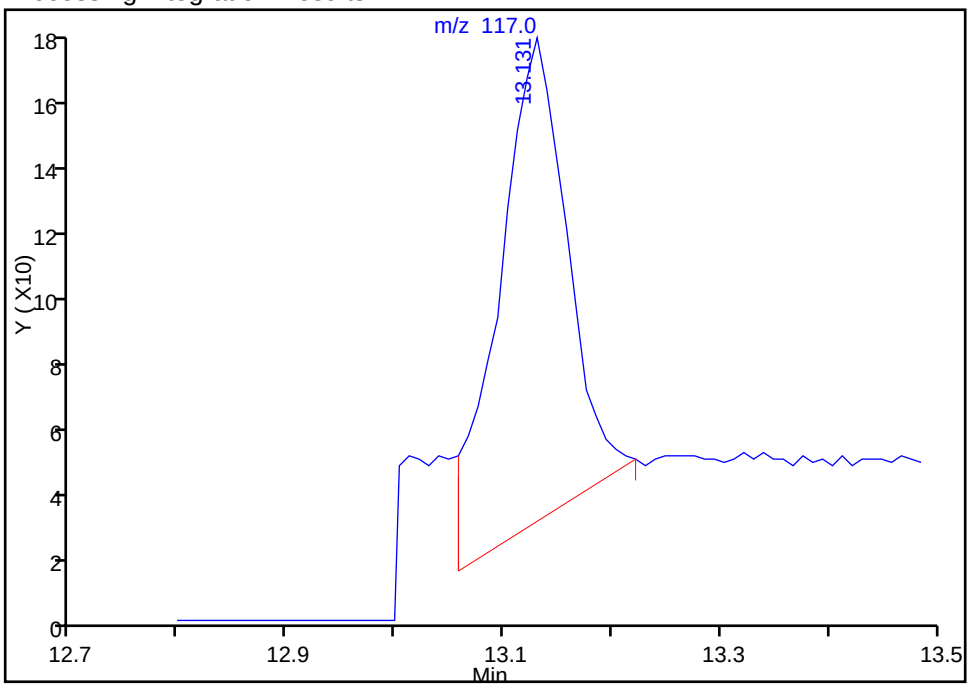
TestAmerica Sacramento

Data File:	\\SACCHROM\ChromData\ATMS5\20150326-20538.b\MS5032510.D				
Injection Date:	25-Mar-2015 20:20:30	Instrument ID:	ATMS5		
Lims ID:	IC 0.01ppbv				
Client ID:					
Operator ID:	AJS	ALS Bottle#:	1	Worklist Smp#:	3
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	TO15 SIM	Limit Group:	MSA - TO-15_SIM_ICAL		
Column:		Detector	MS SCAN		

36 Carbon tetrachloride, CAS: 56-23-5

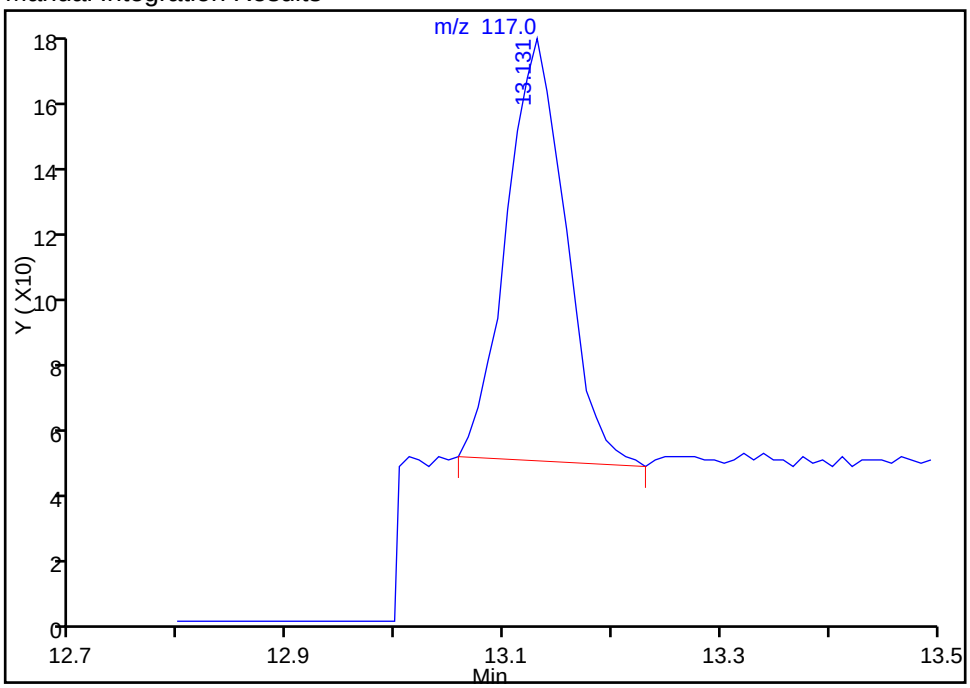
Processing Integration Results

RT: 13.13
Area: 656
Amount: 0.013624
Amount Units: ppb v/v



Manual Integration Results

RT: 13.13
Area: 484
Amount: 0.010467
Amount Units: ppb v/v



Reviewer: shardaa, 26-Mar-2015 13:36:10
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

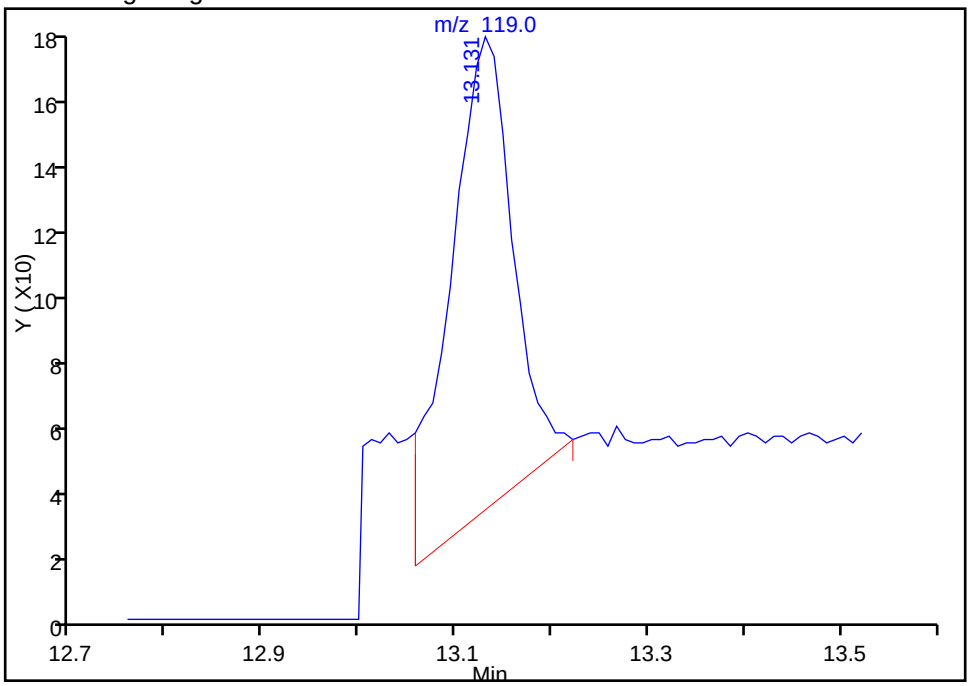
TestAmerica Sacramento

Data File:	\\SACCHROM\ChromData\ATMS5\20150326-20538.b\MS5032510.D				
Injection Date:	25-Mar-2015 20:20:30	Instrument ID:	ATMS5		
Lims ID:	IC 0.01ppbv				
Client ID:					
Operator ID:	AJS	ALS Bottle#:	1	Worklist Smp#:	3
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	TO15 SIM	Limit Group:	MSA - TO-15_SIM_ICAL		
Column:		Detector	MS SCAN		

36 Carbon tetrachloride, CAS: 56-23-5

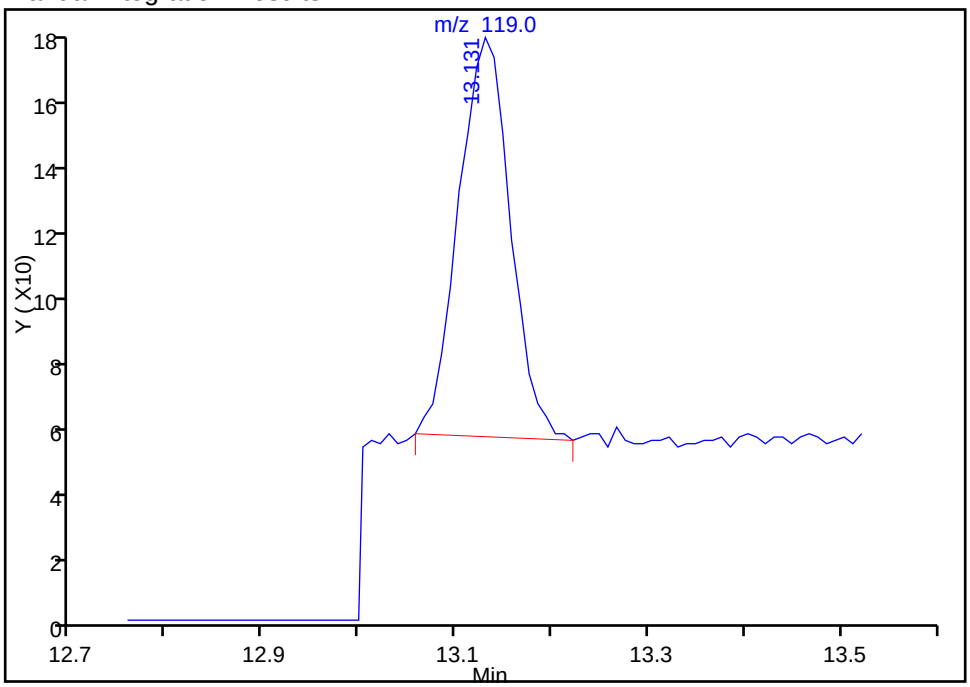
Processing Integration Results

RT: 13.13
Area: 656
Amount: 0.013624
Amount Units: ppb v/v



Manual Integration Results

RT: 13.13
Area: 449
Amount: 0.010467
Amount Units: ppb v/v



Reviewer: shardaa, 26-Mar-2015 13:36:10
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

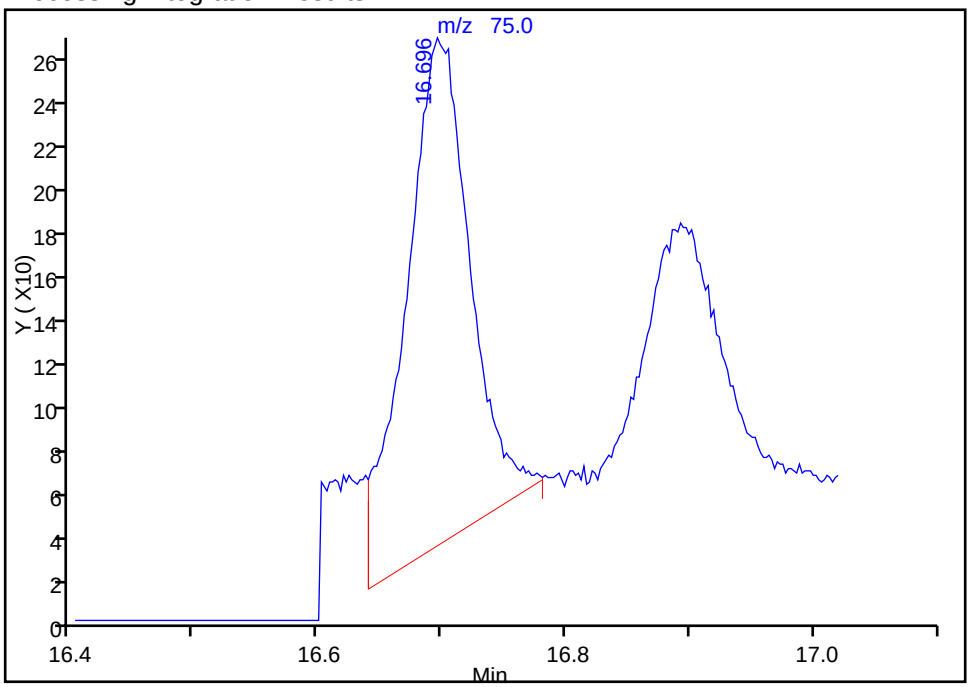
TestAmerica Sacramento

Data File:	\\SACCHROM\ChromData\ATMS5\20150326-20538.b\MS5032510.D				
Injection Date:	25-Mar-2015 20:20:30	Instrument ID:	ATMS5		
Lims ID:	IC 0.01ppbv				
Client ID:					
Operator ID:	AJS	ALS Bottle#:	1	Worklist Smp#:	3
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	TO15 SIM	Limit Group:	MSA - TO-15_SIM_ICAL		
Column:		Detector	MS SCAN		

45 cis-1,3-Dichloropropene, CAS: 10061-01-5

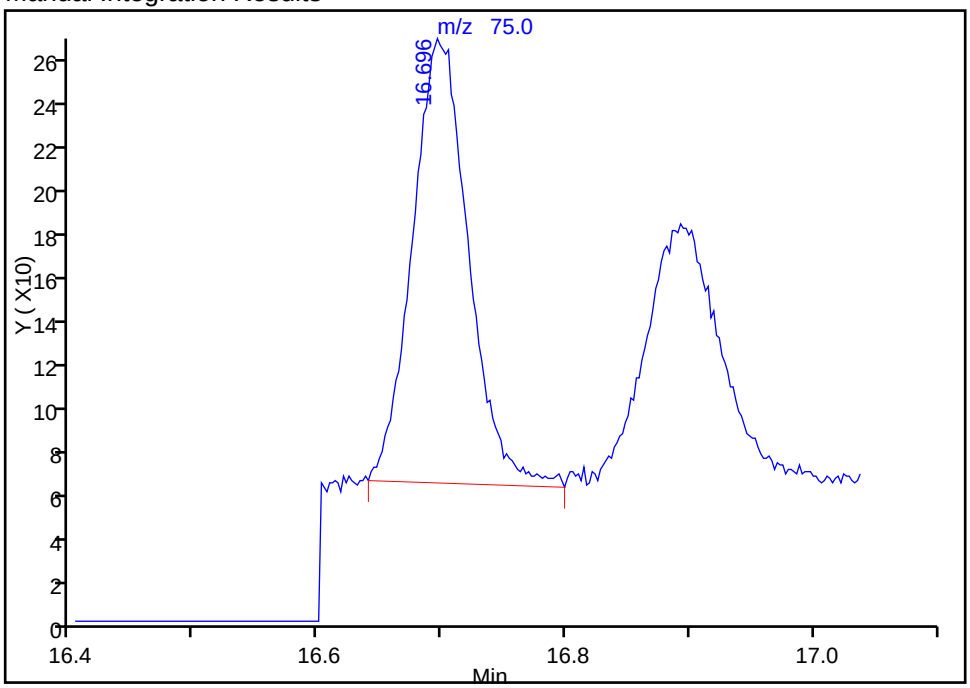
Processing Integration Results

RT: 16.70
Area: 823
Amount: 0.015084
Amount Units: ppb v/v



Manual Integration Results

RT: 16.70
Area: 628
Amount: 0.011986
Amount Units: ppb v/v



Reviewer: shardaa, 26-Mar-2015 13:36:10
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

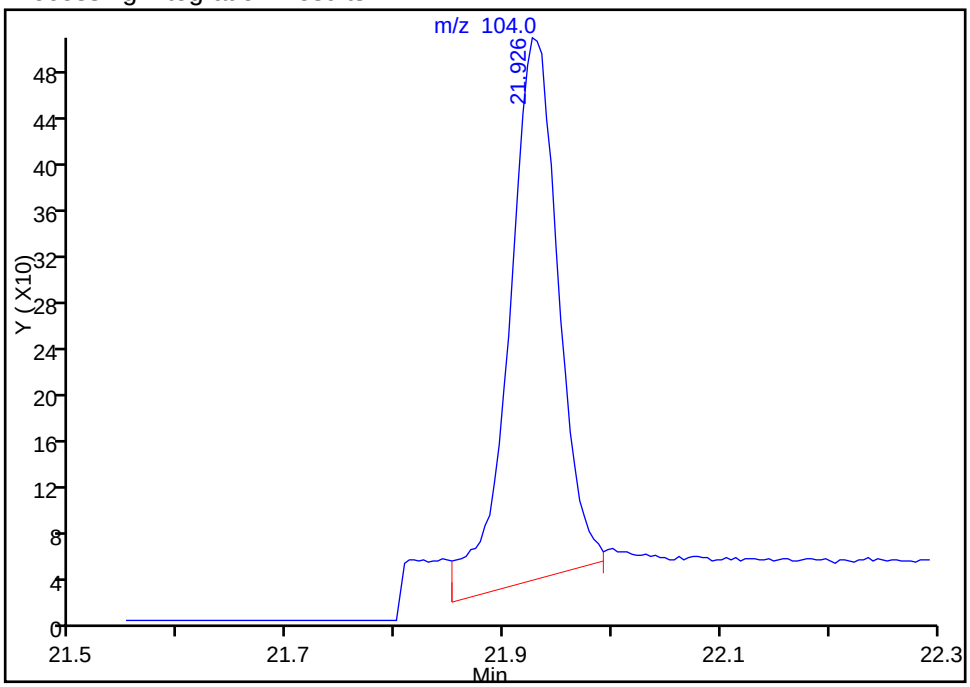
TestAmerica Sacramento

Data File:	\\SACCHROM\ChromData\ATMS5\20150326-20538.b\MS5032510.D				
Injection Date:	25-Mar-2015 20:20:30	Instrument ID:	ATMS5		
Lims ID:	IC 0.01ppbv				
Client ID:					
Operator ID:	AJS	ALS Bottle#:	1	Worklist Smp#:	3
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	TO15 SIM	Limit Group:	MSA - TO-15_SIM_ICAL		
Column:		Detector	MS SCAN		

57 Styrene, CAS: 100-42-5

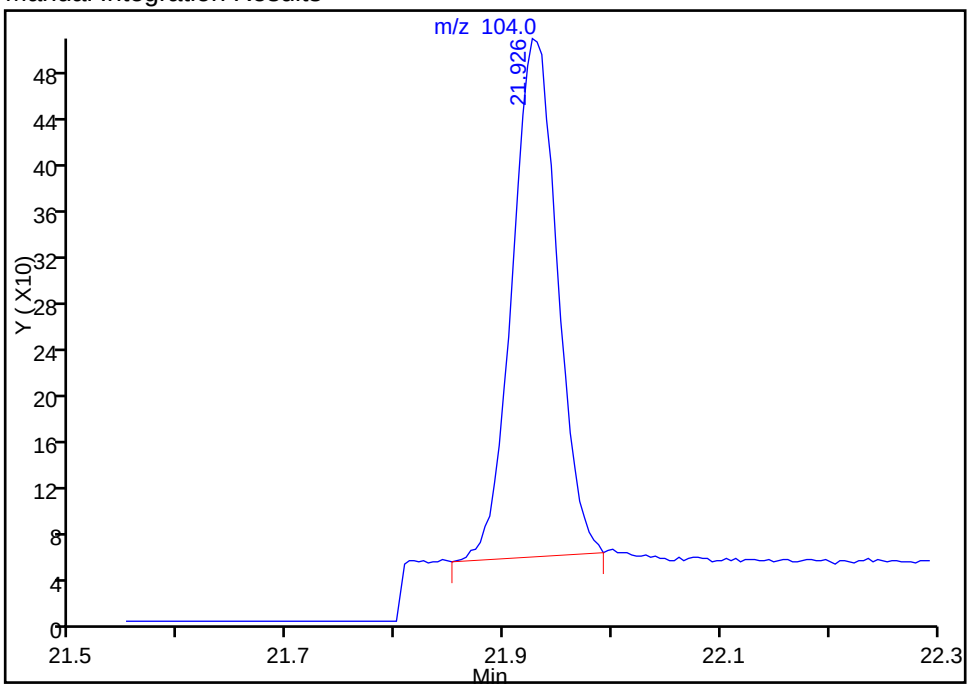
Processing Integration Results

RT: 21.93
Area: 1506
Amount: 0.012812
Amount Units: ppb v/v



Manual Integration Results

RT: 21.93
Area: 1316
Amount: 0.011401
Amount Units: ppb v/v



Reviewer: shardaa, 26-Mar-2015 13:36:10
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

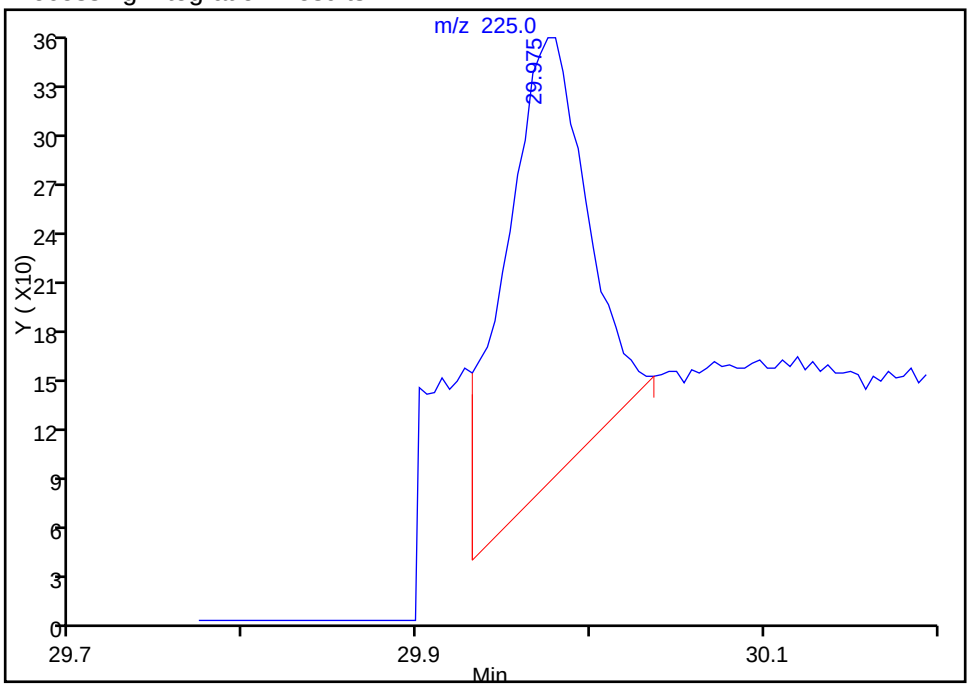
TestAmerica Sacramento

Data File:	\\SACCHROM\ChromData\ATMS5\20150326-20538.b\MS5032510.D				
Injection Date:	25-Mar-2015 20:20:30	Instrument ID:	ATMS5		
Lims ID:	IC 0.01ppbv				
Client ID:					
Operator ID:	AJS	ALS Bottle#:	1	Worklist Smp#:	3
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	TO15 SIM	Limit Group:	MSA - TO-15_SIM_ICAL		
Column:		Detector	MS SCAN		

69 Hexachlorobutadiene, CAS: 87-68-3

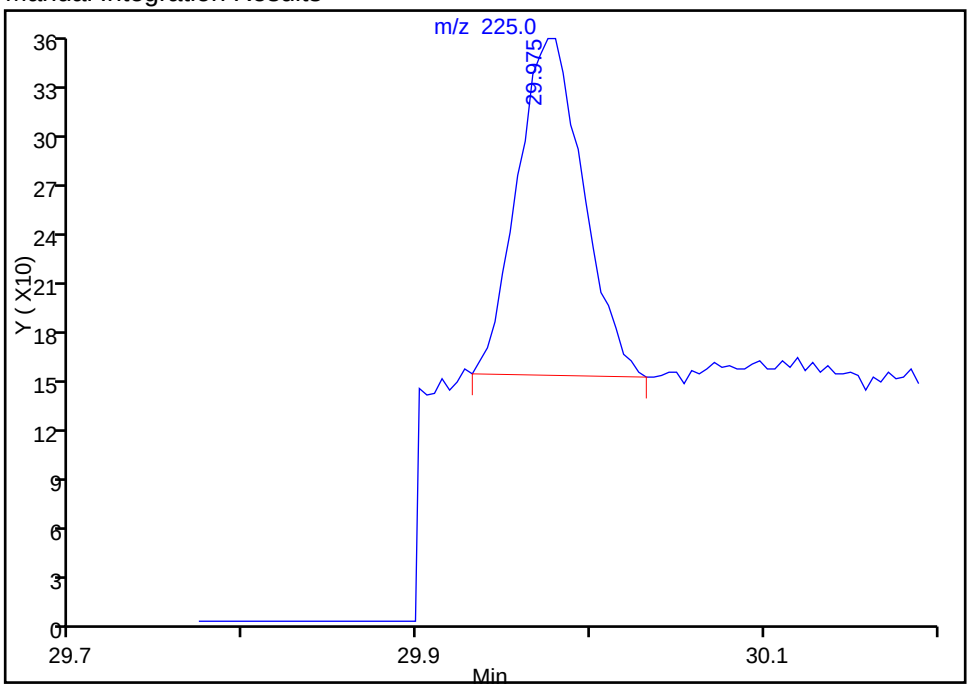
Processing Integration Results

RT: 29.98
Area: 923
Amount: 0.017453
Amount Units: ppb v/v



Manual Integration Results

RT: 29.98
Area: 546
Amount: 0.011212
Amount Units: ppb v/v



Reviewer: shardaa, 26-Mar-2015 13:36:10
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\SACCHROM\ChromData\ATMS5\20150326-20538.b\MS5032511.D
Lims ID: IC 0.02ppbv
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 25-Mar-2015 21:08:30 ALS Bottle#: 1 Worklist Smp#: 4
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: IC 0.02ppbv
Operator ID: AJS Instrument ID: ATMS5
Sublist: chrom-TO15 SIM*sub2

Method: \\SACCHROM\ChromData\ATMS5\20150326-20538.b\TO15 SIM.m
Limit Group: MSA - TO-15_SIM_ICAL
Last Update: 26-Mar-2015 14:41:12 Calib Date: 26-Mar-2015 03:17:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\SACCHROM\ChromData\ATMS5\20150326-20538.b\MS5032518.D

Column 1 : Det: MS SCAN
Process Host: XAWRK051

First Level Reviewer: shardaa Date: 26-Mar-2015 13:32:17

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	130	11.900	11.900	0.000	94	40636	2.00	2.00	
* 2 1,4-Difluorobenzene	114	13.997	13.997	0.000	100	185210	2.00	2.00	
* 3 Chlorobenzene-d5 (IS)	117	20.559	20.559	0.000	100	150743	2.00	2.00	
$ 4 1,2-Dichloroethane-d4 (Sur	65	13.058	13.058	0.000	76	44488	2.00	2.04	
$ 5 Toluene-d8 (Surr)	100	17.325	17.325	0.000	100	123684	2.00	1.94	
$ 6 4-Bromofluorobenzene (Surr	95	23.094	23.094	0.000	100	84268	2.00	1.99	
7 Propene	41	4.126	4.126	0.000	93	580	0.0200	0.0301	
8 Dichlorodifluoromethane	85	4.190	4.190	0.000	99	1405	0.0200	0.0229	
9 1,2-Dichloro-1,1,2,2-tetra	135	4.417	4.417	0.000	97	1353	0.0200	0.0251	
10 Chloromethane	50	4.581	4.581	0.000	99	438	0.0200	0.0270	M
11 Vinyl chloride	62	4.826	4.826	0.000	80	514	0.0200	0.0241	
12 Butadiene	39	4.908	4.908	0.000	98	319	0.0200	0.0235	
13 Bromomethane	94	5.653	5.653	0.000	93	471	0.0200	0.0195	M
14 Chloroethane	64	5.840	5.840	0.000	98	345	0.0200	0.0223	
15 Trichlorofluoromethane	101	6.450	6.450	0.000	100	1310	0.0200	0.0224	
16 Isopropyl alcohol	45	7.094	7.094	0.000	99	1404	0.0200	0.0249	
17 Acrolein	56	7.148	7.148	0.000	93	283	0.0200	0.0298	
18 Acetone	43	7.321	7.321	0.000	94	1434	0.0200	0.0386	
19 1,1,2-Trichloro-1,2,2-trif	101	7.449	7.449	0.000	100	1225	0.0200	0.0218	
20 1,1-Dichloroethene	96	7.658	7.658	0.000	100	708	0.0200	0.0238	
21 Acetonitrile	41	8.366	8.366	0.000	93	599	0.0200	0.0204	
22 Methylene Chloride	49	8.535	8.535	0.000	98	1097	0.0200	0.0391	
23 Acrylonitrile	53	8.691	8.691	0.000	99	447	0.0200	0.0211	
24 Methyl tert-butyl ether	73	9.159	9.159	0.000	100	2023	0.0200	0.0221	
25 trans-1,2-Dichloroethene	96	9.259	9.259	0.000	99	650	0.0200	0.0213	
26 Hexane	41	9.666	9.666	0.000	100	618	0.0200	0.0213	
27 1,1-Dichloroethane	63	10.063	10.063	0.000	98	994	0.0200	0.0197	
28 Vinyl acetate	43	10.115	10.115	0.000	56	1228	0.0200	0.0222	
29 2-Butanone (MEK)	72	10.970	10.970	0.000	100	390	0.0200	0.0216	
30 cis-1,2-Dichloroethene	96	11.300	11.300	0.000	94	652	0.0200	0.0208	M
31 Ethyl acetate	43	11.377	11.377	0.000	100	1254	0.0200	0.0220	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
32 Chloroform	83	11.649	11.649	0.000	98	1014	0.0200	0.0197	
33 Tetrahydrofuran	42	12.172	12.172	0.000	99	733	0.0200	0.0221	
34 1,1,1-Trichloroethane	97	12.566	12.566	0.000	99	1033	0.0200	0.0194	M
35 Cyclohexane	84	12.750	12.750	0.000	99	976	0.0200	0.0190	
36 Carbon tetrachloride	117	13.121	13.121	0.000	99	822	0.0200	0.0180	M
37 1,2-Dichloroethane	62	13.249	13.249	0.000	90	750	0.0200	0.0227	
38 Benzene	78	13.385	13.385	0.000	100	2345	0.0200	0.0210	
39 n-Heptane	43	13.567	13.567	0.000	99	1158	0.0200	0.0220	
40 Trichloroethene	130	14.743	14.743	0.000	100	892	0.0200	0.0204	
41 1,2-Dichloropropane	76	15.037	15.037	0.000	98	277	0.0200	0.0206	
42 Dichlorobromomethane	85	15.486	15.486	0.000	100	806	0.0200	0.0216	
43 1,4-Dioxane	88	15.581	15.581	0.000	99	635	0.0200	0.0232	
44 4-Methyl-2-pentanone (MIBK	43	16.383	16.383	0.000	100	1473	0.0200	0.0224	
45 cis-1,3-Dichloropropene	75	16.698	16.698	0.000	100	1100	0.0200	0.0213	
46 Toluene	91	17.498	17.498	0.000	100	3044	0.0200	0.0217	
47 trans-1,3-Dichloropropene	75	17.770	17.770	0.000	100	1105	0.0200	0.0220	
48 1,1,2-Trichloroethane	97	18.107	18.107	0.000	99	855	0.0200	0.0226	
49 2-Hexanone	58	18.280	18.280	0.000	100	783	0.0200	0.0219	
50 Tetrachloroethene	166	18.991	18.991	0.000	99	1091	0.0200	0.0217	M
51 Chlorodibromomethane	129	19.200	19.200	0.000	100	1364	0.0200	0.0217	
52 Ethylene Dibromide	107	19.642	19.642	0.000	99	1317	0.0200	0.0227	
53 Chlorobenzene	112	20.643	20.643	0.000	82	2345	0.0200	0.0221	
54 Ethylbenzene	91	20.824	20.824	0.000	100	3845	0.0200	0.0223	
55 m-Xylene & p-Xylene	91	21.006	21.006	0.000	100	5740	0.0400	0.0439	
56 o-Xylene	91	21.900	21.900	0.000	100	3027	0.0200	0.0222	
57 Styrene	104	21.926	21.926	0.000	98	2439	0.0200	0.0216	
58 Bromoform	173	22.465	22.465	0.000	99	862	0.0200	0.0218	
59 1,1,2,2-Tetrachloroethane	83	22.867	22.867	0.000	100	1946	0.0200	0.0221	M
60 1,2,3-Trichloropropane	110	23.162	23.162	0.000	81	611	0.0200	0.0227	
61 4-Ethyltoluene	120	23.756	23.756	0.000	100	1553	0.0200	0.0211	
62 1,3,5-Trimethylbenzene	120	23.852	23.852	0.000	89	2195	0.0200	0.0212	
63 1,2,4-Trimethylbenzene	120	24.635	24.635	0.000	100	1664	0.0200	0.0180	M
64 1,3-Dichlorobenzene	146	25.382	25.382	0.000	100	2358	0.0200	0.0215	M
65 1,4-Dichlorobenzene	146	25.583	25.583	0.000	100	2231	0.0200	0.0215	
66 Benzyl chloride	91	25.749	25.749	0.000	100	2819	0.0160	0.0163	
67 1,2-Dichlorobenzene	146	26.299	26.299	0.000	100	2351	0.0200	0.0220	
68 1,2,4-Trichlorobenzene	180	29.607	29.607	0.000	99	1343	0.0200	0.0198	
69 Hexachlorobutadiene	225	29.976	29.976	0.000	95	1046	0.0200	0.0219	M
70 Naphthalene	128	30.046	30.046	0.000	100	4866	0.0200	0.0231	

QC Flag Legend

Review Flags

M - Manually Integrated

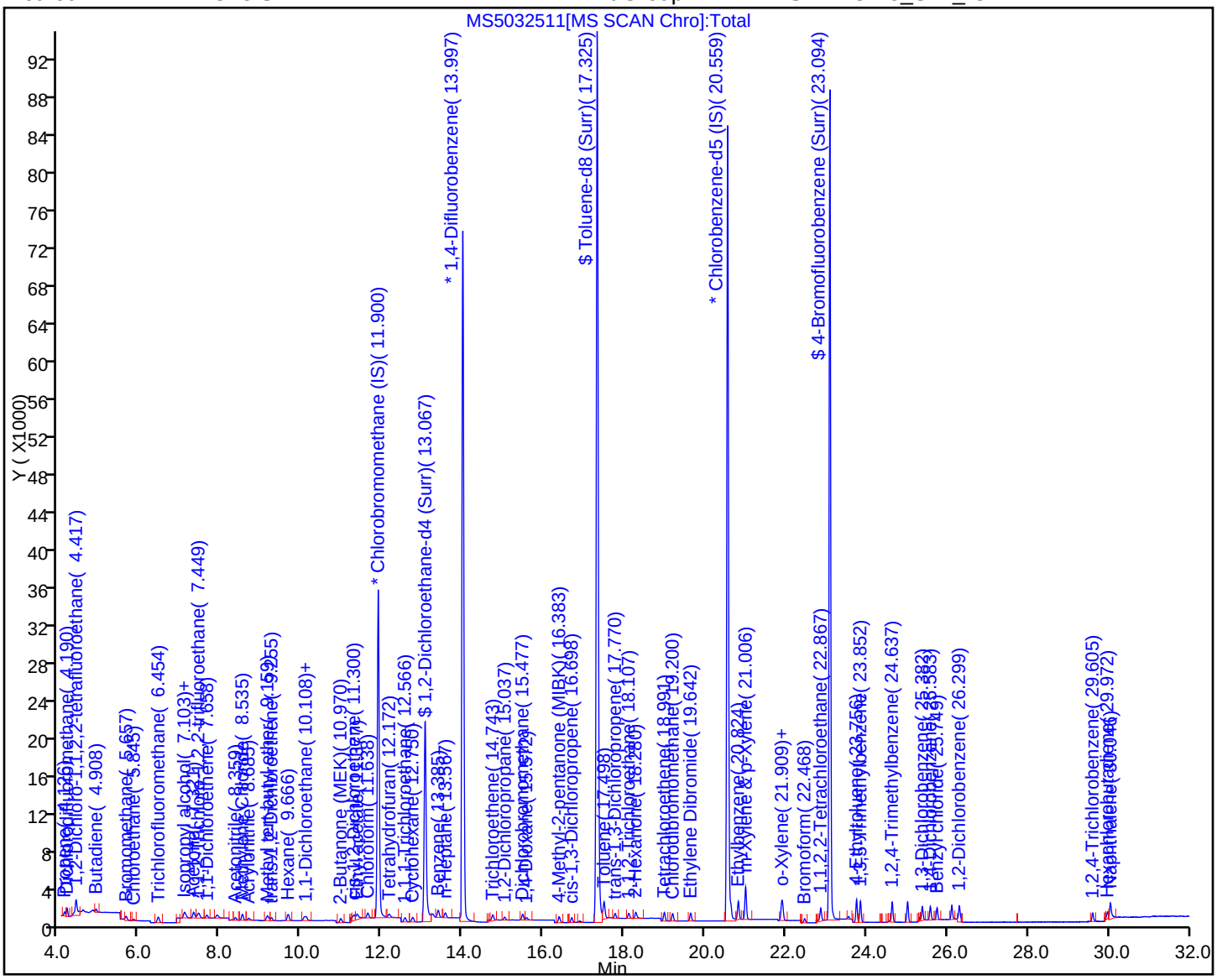
Reagents:

VACORPIC0.20_00014	Amount Added: 50.00	Units: mL	
VASUISIM_00160	Amount Added: 50.00	Units: mL	Run Reagent

Report Date: 26-Mar-2015 14:41:12 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Sacramento

Data File:	\\SACCHROM\ChromData\ATMS5\20150326-20538.b\MS5032511.D				
Injection Date:	25-Mar-2015 21:08:30	Instrument ID:	ATMS5		
Lims ID:	IC 0.02ppbv				
Client ID:					
Operator ID:	AJS	ALS Bottle#:	1	Worklist Smp#:	4
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	TO15 SIM	Limit Group:	MSA - TO-15_SIM_ICAL		



Manual Integration/User Assign Peak Report

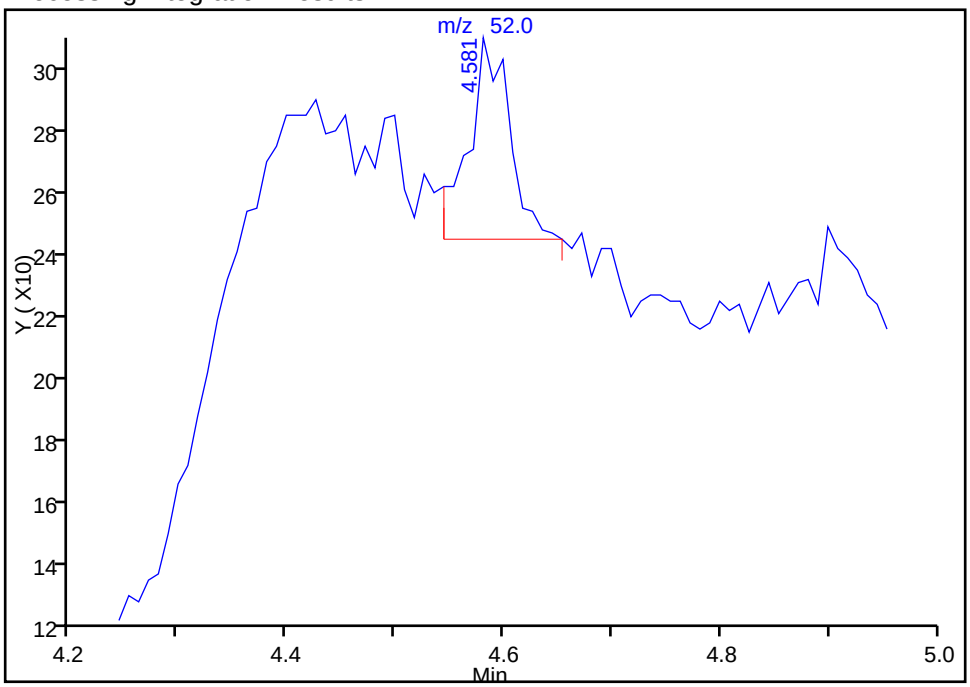
TestAmerica Sacramento

Data File:	\\SACCHROM\ChromData\ATMS5\20150326-20538.b\MS5032511.D				
Injection Date:	25-Mar-2015 21:08:30	Instrument ID:	ATMS5		
Lims ID:	IC 0.02ppbv				
Client ID:					
Operator ID:	AJS	ALS Bottle#:	1	Worklist Smp#:	4
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	TO15 SIM	Limit Group:	MSA - TO-15_SIM_ICAL		
Column:		Detector	MS SCAN		

10 Chloromethane, CAS: 74-87-3

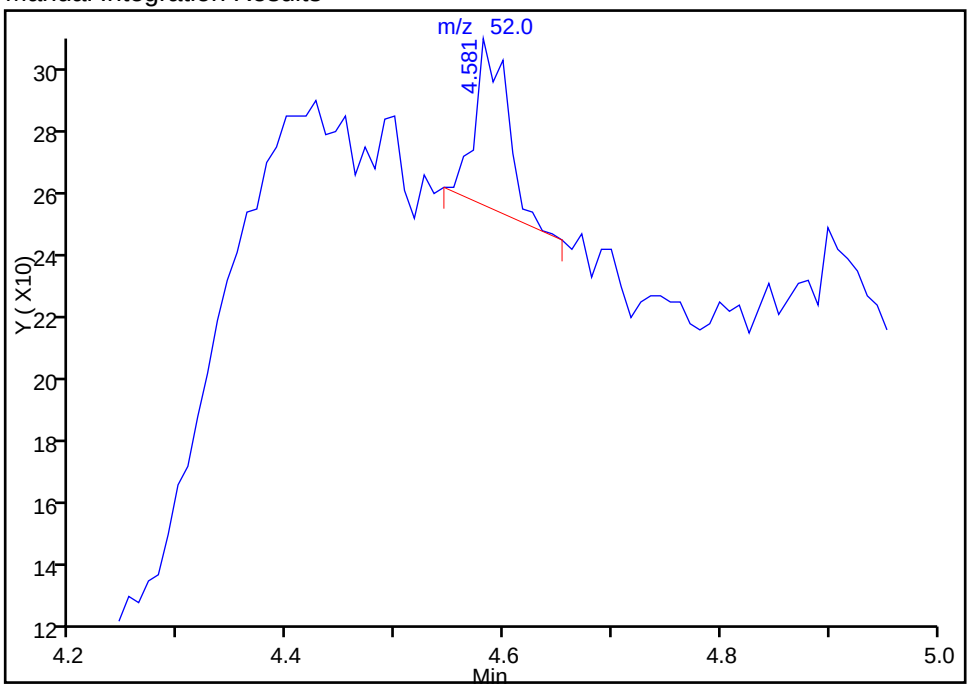
Processing Integration Results

RT: 4.58
Area: 172
Amount: 0.049248
Amount Units: ppb v/v



Manual Integration Results

RT: 4.58
Area: 112
Amount: 0.026955
Amount Units: ppb v/v



Reviewer: shardaa, 26-Mar-2015 13:32:17
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

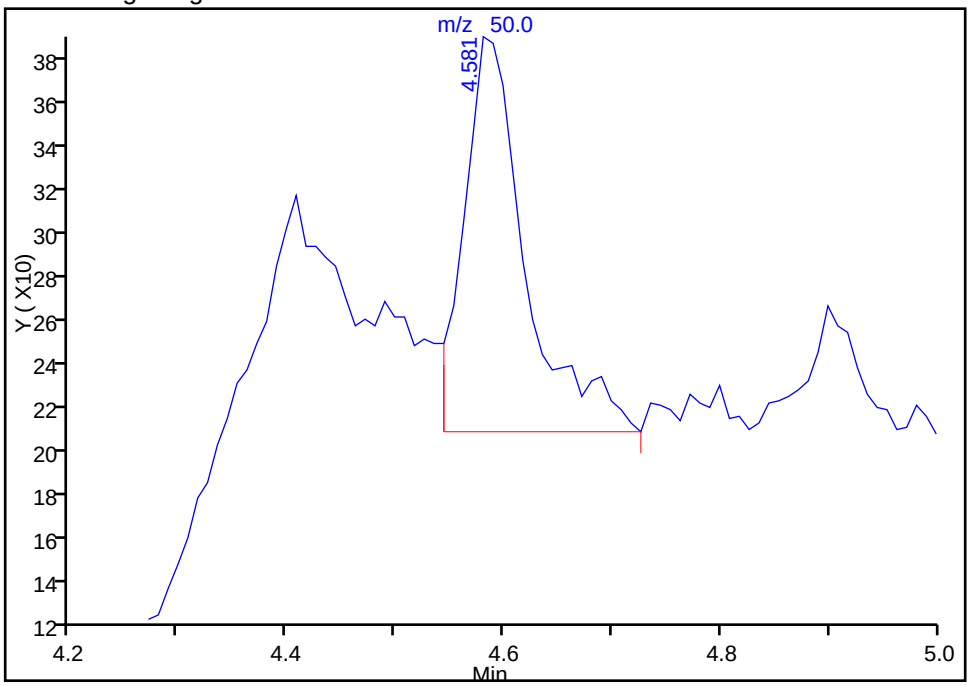
TestAmerica Sacramento

Data File:	\\SACCHROM\ChromData\ATMS5\20150326-20538.b\MS5032511.D				
Injection Date:	25-Mar-2015 21:08:30	Instrument ID:	ATMS5		
Lims ID:	IC 0.02ppbv				
Client ID:					
Operator ID:	AJS	ALS Bottle#:	1	Worklist Smp#:	4
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	TO15 SIM	Limit Group:	MSA - TO-15_SIM_ICAL		
Column:		Detector	MS SCAN		

10 Chloromethane, CAS: 74-87-3

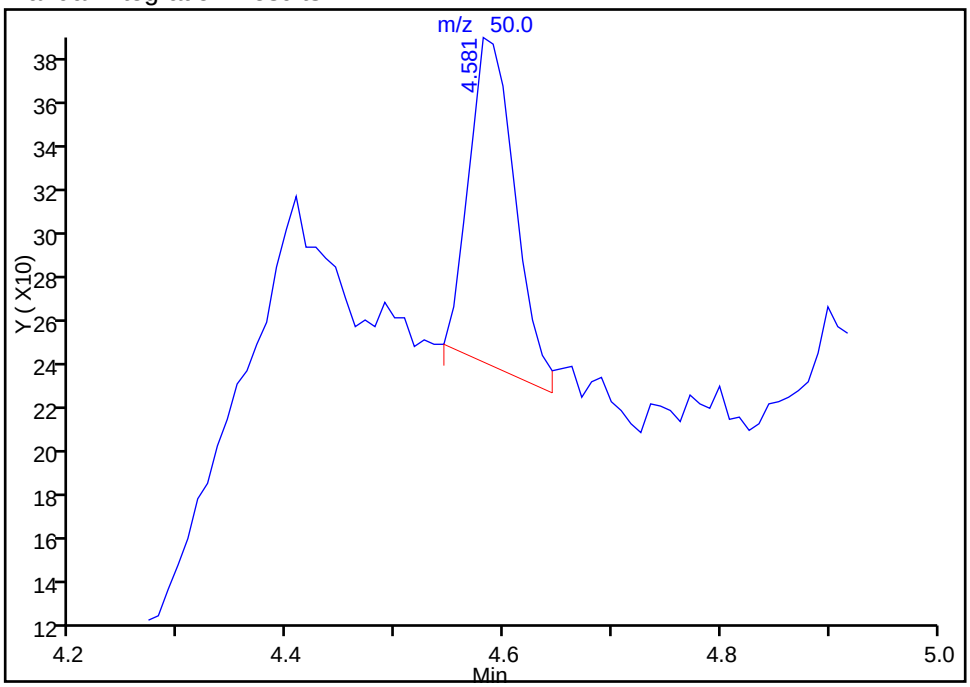
Processing Integration Results

RT: 4.58
Area: 710
Amount: 0.049248
Amount Units: ppb v/v



Manual Integration Results

RT: 4.58
Area: 438
Amount: 0.026955
Amount Units: ppb v/v



Reviewer: shardaa, 26-Mar-2015 13:32:17
Audit Action: Split an Integrated Peak
Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

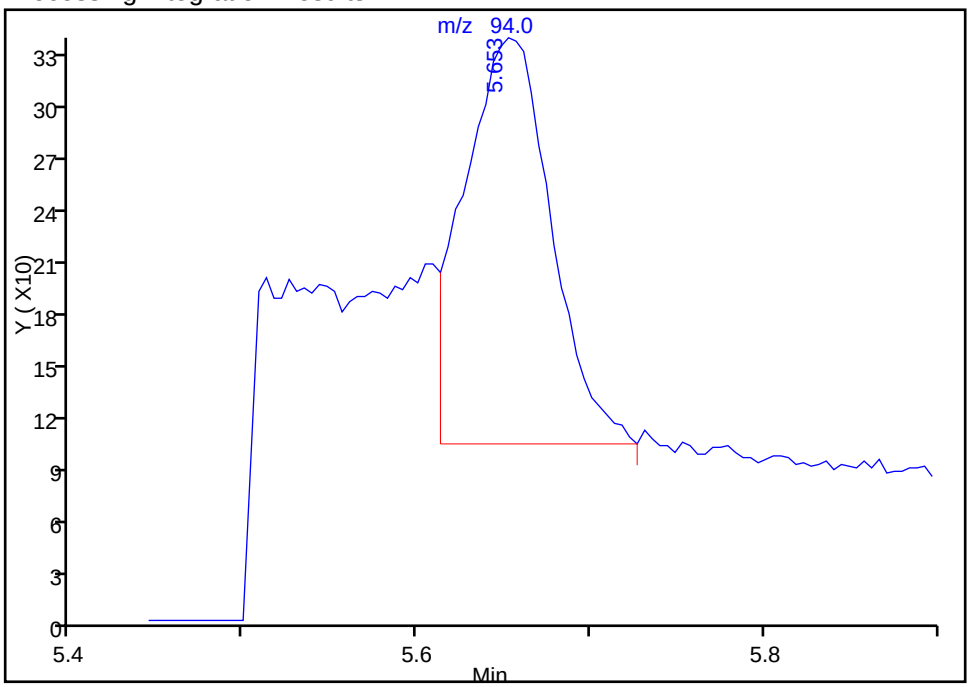
TestAmerica Sacramento

Data File:	\\SACCHROM\ChromData\ATMS5\20150326-20538.b\MS5032511.D				
Injection Date:	25-Mar-2015 21:08:30	Instrument ID:	ATMS5		
Lims ID:	IC 0.02ppbv				
Client ID:					
Operator ID:	AJS	ALS Bottle#:	1	Worklist Smp#:	4
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	TO15 SIM	Limit Group:	MSA - TO-15_SIM_ICAL		
Column:		Detector	MS SCAN		

13 Bromomethane, CAS: 74-83-9

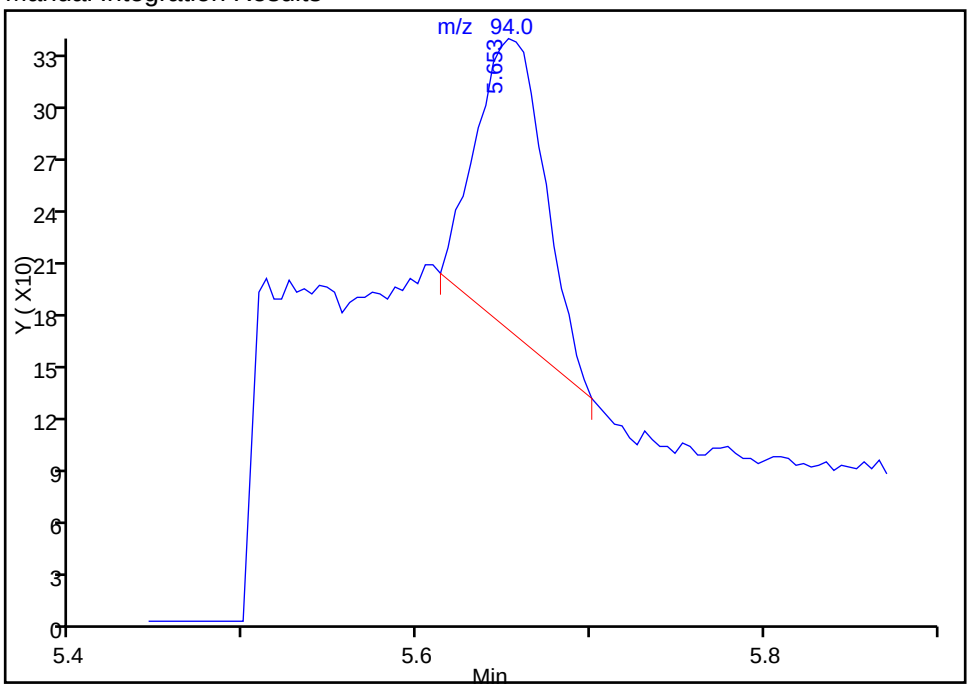
Processing Integration Results

RT: 5.65
Area: 838
Amount: 0.031742
Amount Units: ppb v/v



Manual Integration Results

RT: 5.65
Area: 471
Amount: 0.019538
Amount Units: ppb v/v



Reviewer: shardaa, 26-Mar-2015 13:32:17
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

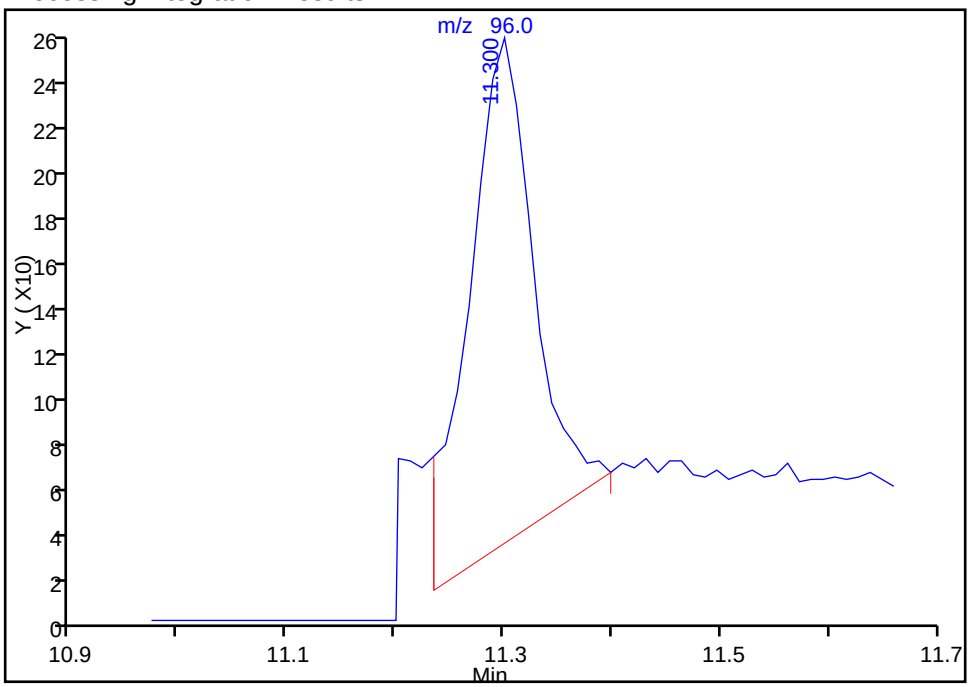
TestAmerica Sacramento

Data File:	\\SACCHROM\ChromData\ATMS5\20150326-20538.b\MS5032511.D				
Injection Date:	25-Mar-2015 21:08:30	Instrument ID:	ATMS5		
Lims ID:	IC 0.02ppbv				
Client ID:					
Operator ID:	AJS	ALS Bottle#:	1	Worklist Smp#:	4
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	TO15 SIM	Limit Group:	MSA - TO-15_SIM_ICAL		
Column:		Detector	MS SCAN		

30 cis-1,2-Dichloroethene, CAS: 156-59-2

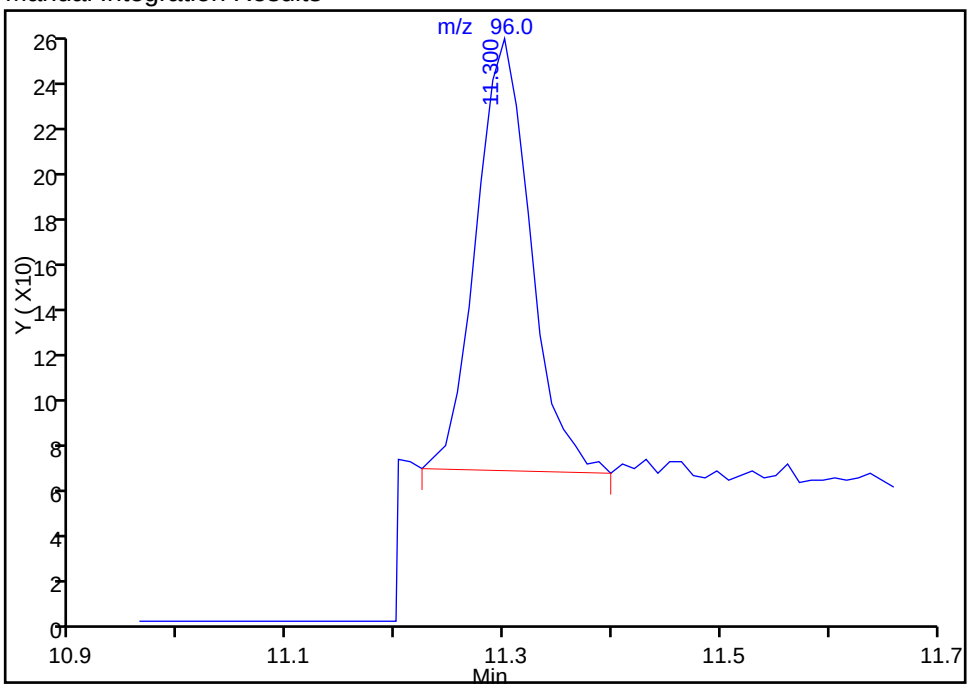
Processing Integration Results

RT: 11.30
Area: 928
Amount: 0.028433
Amount Units: ppb v/v



Manual Integration Results

RT: 11.30
Area: 652
Amount: 0.020830
Amount Units: ppb v/v



Reviewer: shardaa, 26-Mar-2015 13:32:17
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

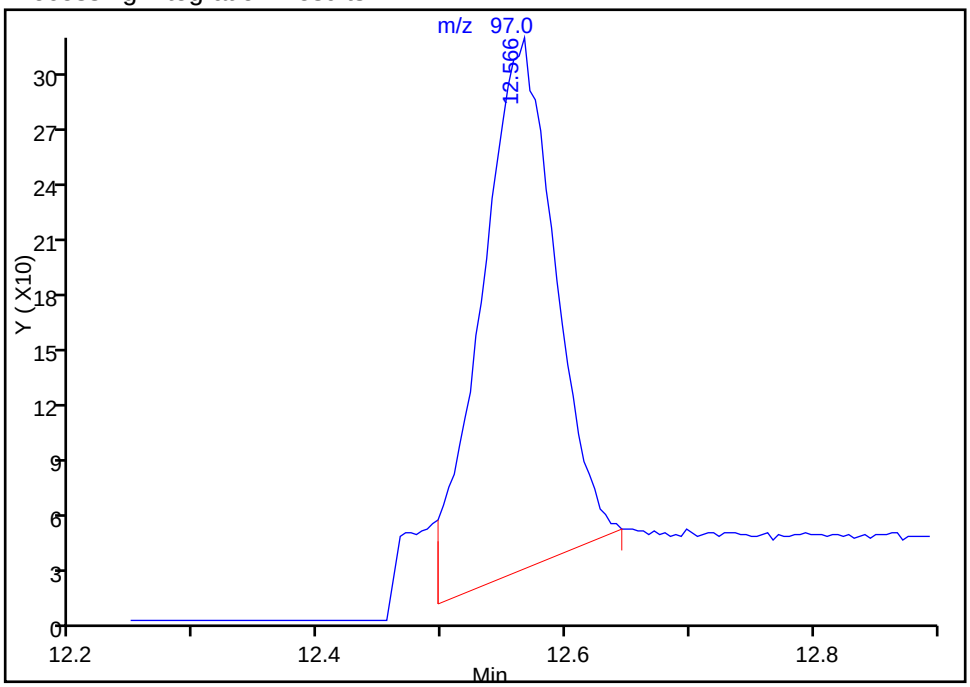
TestAmerica Sacramento

Data File:	\\SACCHROM\ChromData\ATMS5\20150326-20538.b\MS5032511.D				
Injection Date:	25-Mar-2015 21:08:30	Instrument ID:	ATMS5		
Lims ID:	IC 0.02ppbv				
Client ID:					
Operator ID:	AJS	ALS Bottle#:	1	Worklist Smp#:	4
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	TO15 SIM	Limit Group:	MSA - TO-15_SIM_ICAL		
Column:		Detector	MS SCAN		

34 1,1,1-Trichloroethane, CAS: 71-55-6

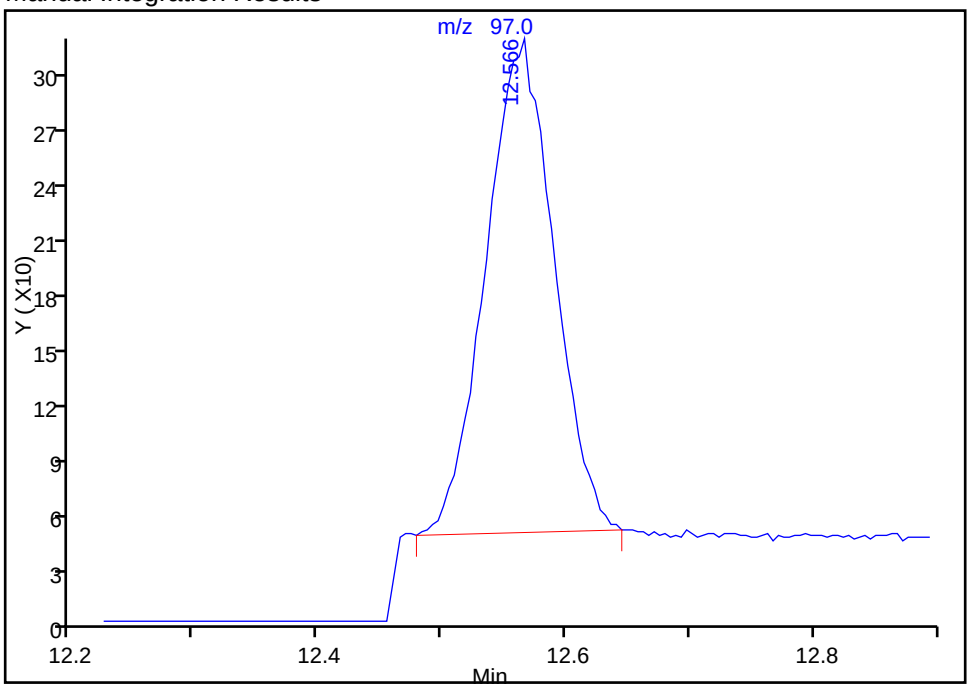
Processing Integration Results

RT: 12.57
Area: 1206
Amount: 0.022293
Amount Units: ppb v/v



Manual Integration Results

RT: 12.57
Area: 1033
Amount: 0.019441
Amount Units: ppb v/v



Reviewer: shardaa, 26-Mar-2015 13:32:17
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

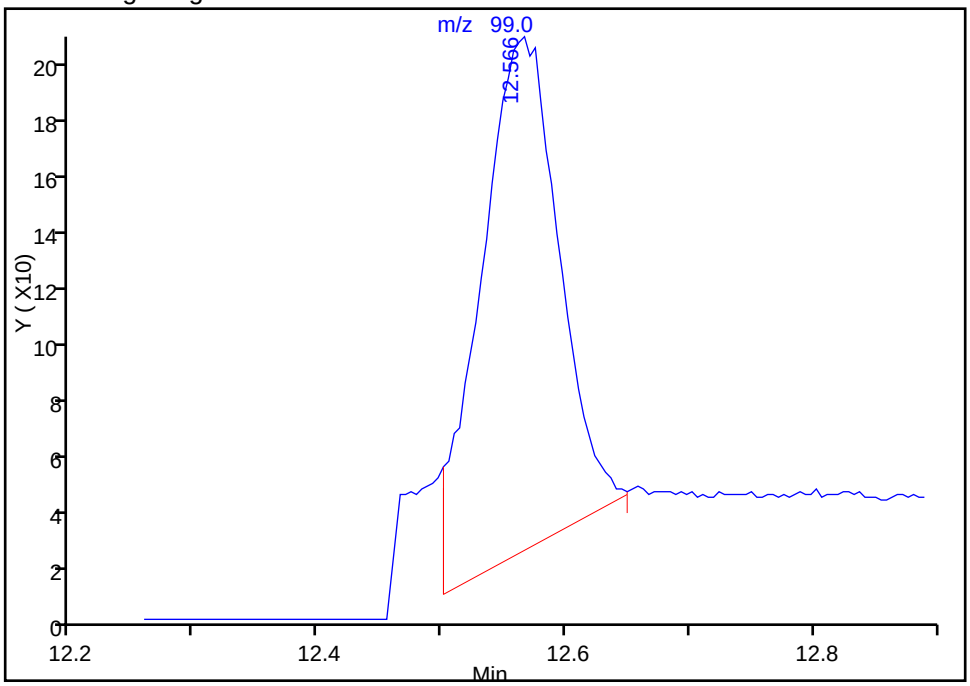
TestAmerica Sacramento

Data File:	\\SACCHROM\ChromData\ATMS5\20150326-20538.b\MS5032511.D				
Injection Date:	25-Mar-2015 21:08:30	Instrument ID:	ATMS5		
Lims ID:	IC 0.02ppbv				
Client ID:					
Operator ID:	AJS	ALS Bottle#:	1	Worklist Smp#:	4
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	TO15 SIM	Limit Group:	MSA - TO-15_SIM_ICAL		
Column:		Detector	MS SCAN		

34 1,1,1-Trichloroethane, CAS: 71-55-6

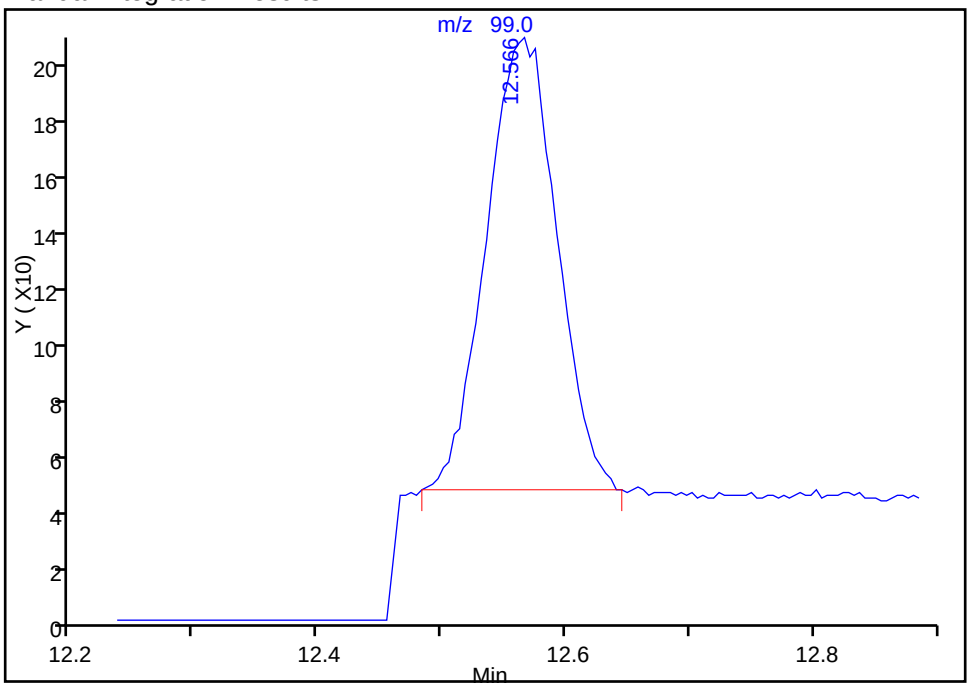
Processing Integration Results

RT: 12.57
Area: 827
Amount: 0.022293
Amount Units: ppb v/v



Manual Integration Results

RT: 12.57
Area: 646
Amount: 0.019441
Amount Units: ppb v/v



Reviewer: shardaa, 26-Mar-2015 13:32:17
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

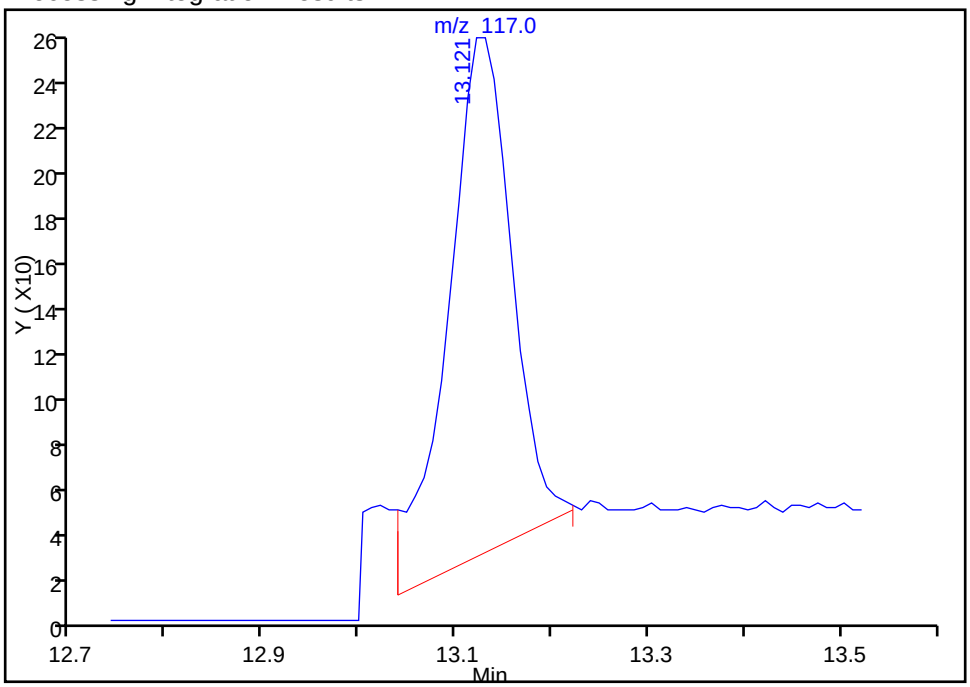
TestAmerica Sacramento

Data File:	\\SACCHROM\ChromData\ATMS5\20150326-20538.b\MS5032511.D				
Injection Date:	25-Mar-2015 21:08:30	Instrument ID:	ATMS5		
Lims ID:	IC 0.02ppbv				
Client ID:					
Operator ID:	AJS	ALS Bottle#:	1	Worklist Smp#:	4
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	TO15 SIM	Limit Group:	MSA - TO-15_SIM_ICAL		
Column:		Detector	MS SCAN		

36 Carbon tetrachloride, CAS: 56-23-5

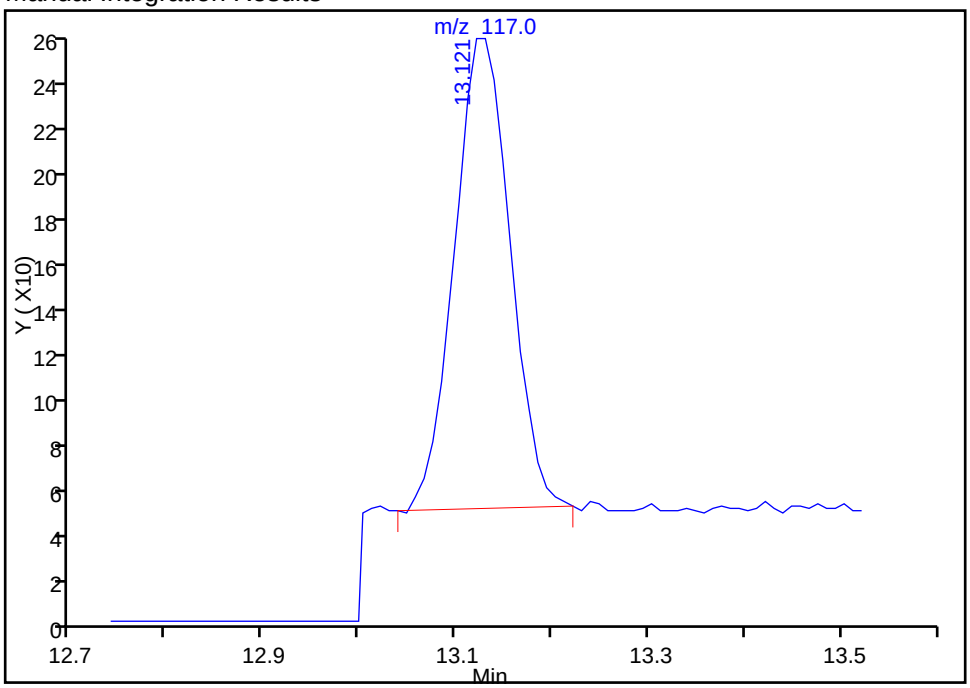
Processing Integration Results

RT: 13.12
Area: 1045
Amount: 0.021463
Amount Units: ppb v/v



Manual Integration Results

RT: 13.12
Area: 822
Amount: 0.018040
Amount Units: ppb v/v



Reviewer: shardaa, 26-Mar-2015 13:32:17
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

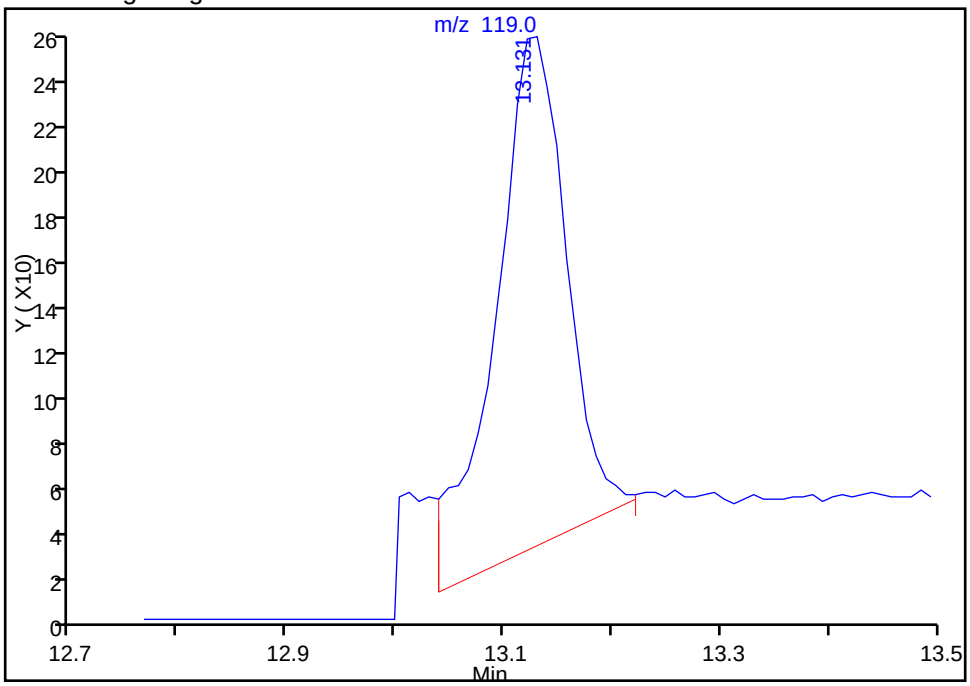
TestAmerica Sacramento

Data File:	\\SACCHROM\ChromData\ATMS5\20150326-20538.b\MS5032511.D				
Injection Date:	25-Mar-2015 21:08:30	Instrument ID:	ATMS5		
Lims ID:	IC 0.02ppbv				
Client ID:					
Operator ID:	AJS	ALS Bottle#:	1	Worklist Smp#:	4
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	TO15 SIM	Limit Group:	MSA - TO-15_SIM_ICAL		
Column:		Detector	MS SCAN		

36 Carbon tetrachloride, CAS: 56-23-5

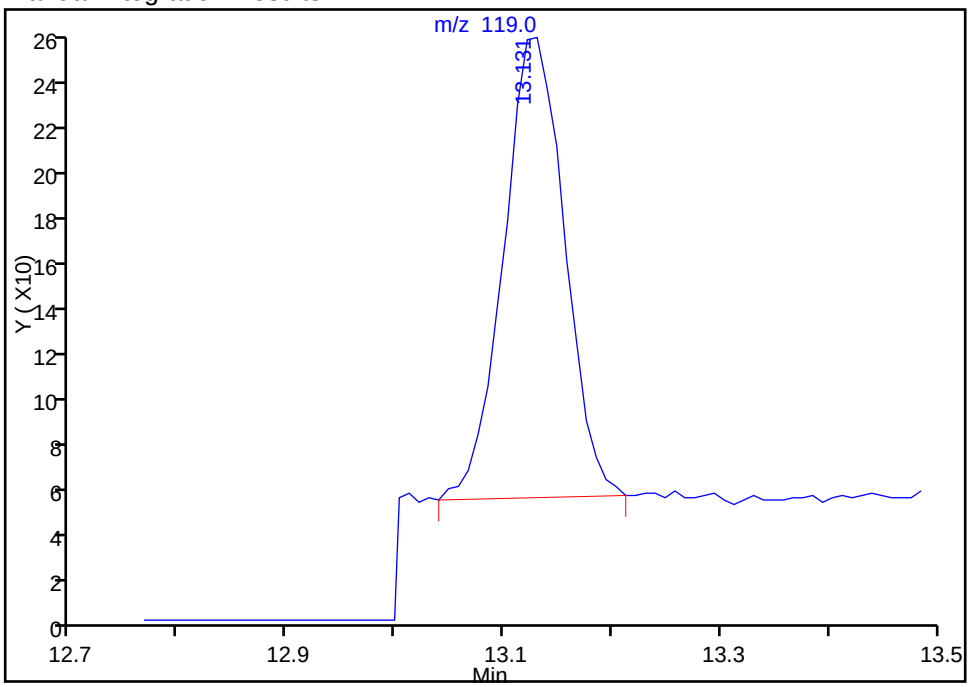
Processing Integration Results

RT: 13.13
Area: 1043
Amount: 0.021463
Amount Units: ppb v/v



Manual Integration Results

RT: 13.13
Area: 796
Amount: 0.018040
Amount Units: ppb v/v



Reviewer: shardaa, 26-Mar-2015 13:32:17
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

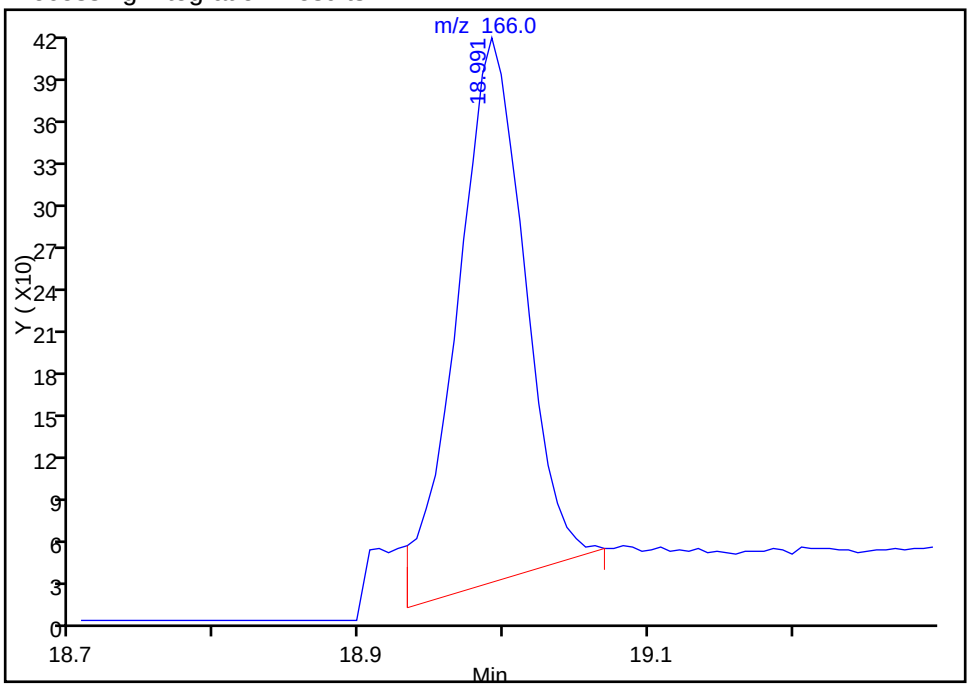
TestAmerica Sacramento

Data File:	\\SACCHROM\ChromData\ATMS5\20150326-20538.b\MS5032511.D				
Injection Date:	25-Mar-2015 21:08:30	Instrument ID:	ATMS5		
Lims ID:	IC 0.02ppbv				
Client ID:					
Operator ID:	AJS	ALS Bottle#:	1	Worklist Smp#:	4
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	TO15 SIM	Limit Group:	MSA - TO-15_SIM_ICAL		
Column:		Detector	MS SCAN		

50 Tetrachloroethene, CAS: 127-18-4

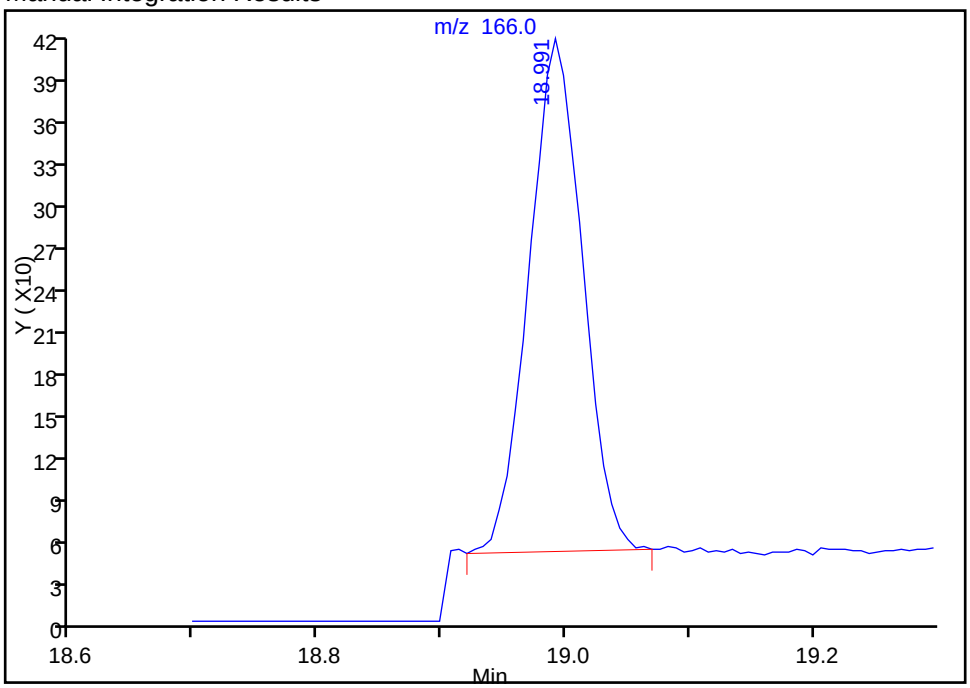
Processing Integration Results

RT: 18.99
Area: 1258
Amount: 0.024550
Amount Units: ppb v/v



Manual Integration Results

RT: 18.99
Area: 1091
Amount: 0.021684
Amount Units: ppb v/v



Reviewer: shardaa, 26-Mar-2015 13:32:17
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

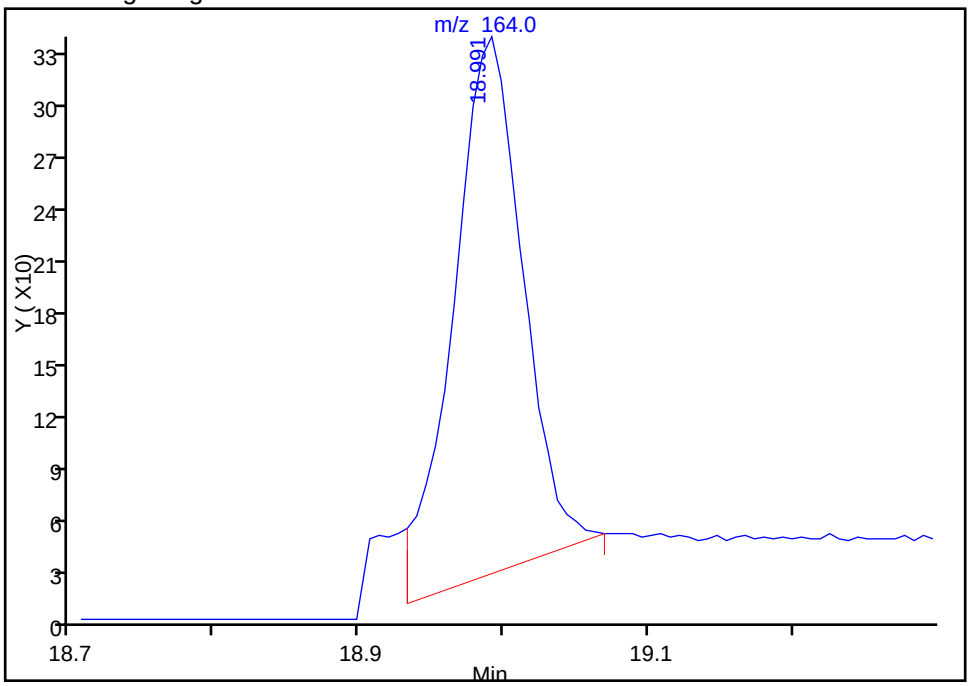
TestAmerica Sacramento

Data File:	\\SACCHROM\ChromData\ATMS5\20150326-20538.b\MS5032511.D				
Injection Date:	25-Mar-2015 21:08:30	Instrument ID:	ATMS5		
Lims ID:	IC 0.02ppbv				
Client ID:					
Operator ID:	AJS	ALS Bottle#:	1	Worklist Smp#:	4
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	TO15 SIM	Limit Group:	MSA - TO-15_SIM_ICAL		
Column:		Detector	MS SCAN		

50 Tetrachloroethene, CAS: 127-18-4

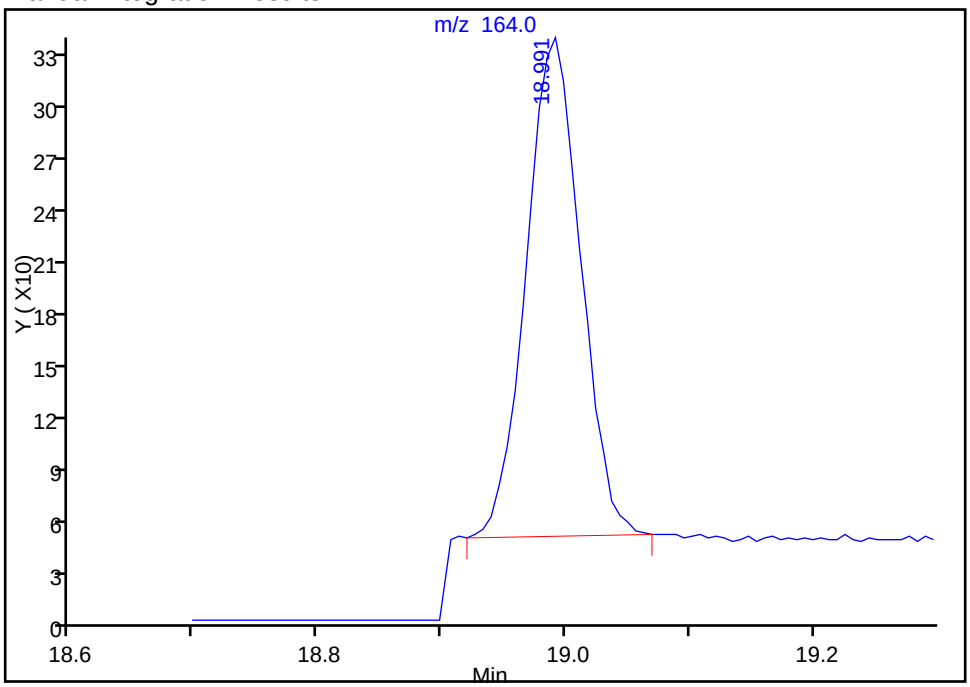
Processing Integration Results

RT: 18.99
Area: 1034
Amount: 0.024550
Amount Units: ppb v/v



Manual Integration Results

RT: 18.99
Area: 871
Amount: 0.021684
Amount Units: ppb v/v



Reviewer: shardaa, 26-Mar-2015 13:32:17
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

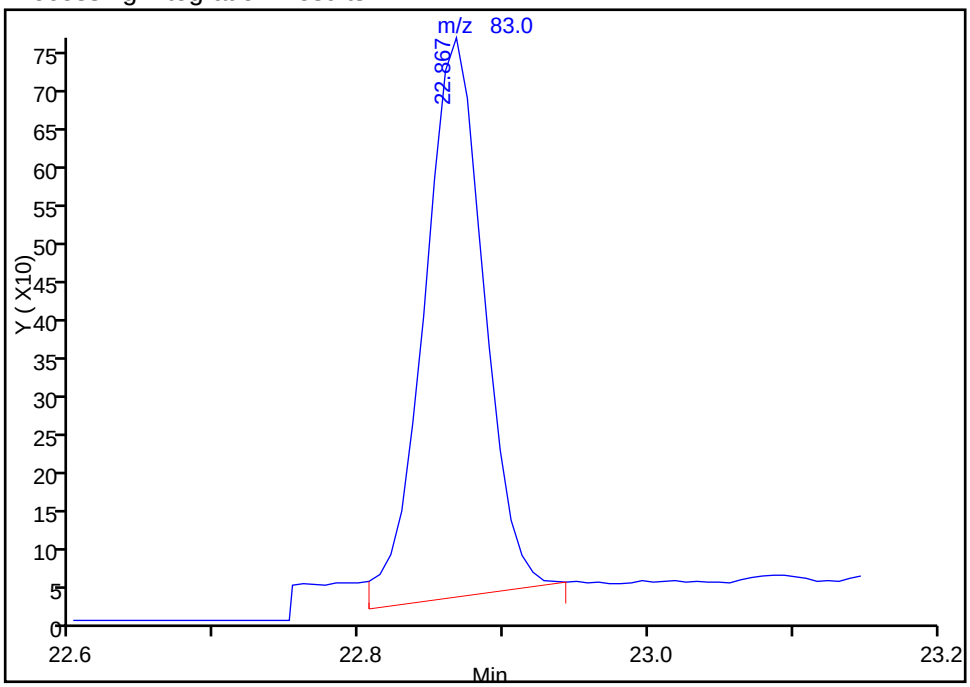
TestAmerica Sacramento

Data File:	\\SACCHROM\ChromData\ATMS5\20150326-20538.b\MS5032511.D				
Injection Date:	25-Mar-2015 21:08:30	Instrument ID:	ATMS5		
Lims ID:	IC 0.02ppbv				
Client ID:					
Operator ID:	AJS	ALS Bottle#:	1	Worklist Smp#:	4
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	TO15 SIM	Limit Group:	MSA - TO-15_SIM_ICAL		
Column:		Detector	MS SCAN		

59 1,1,2,2-Tetrachloroethane, CAS: 79-34-5

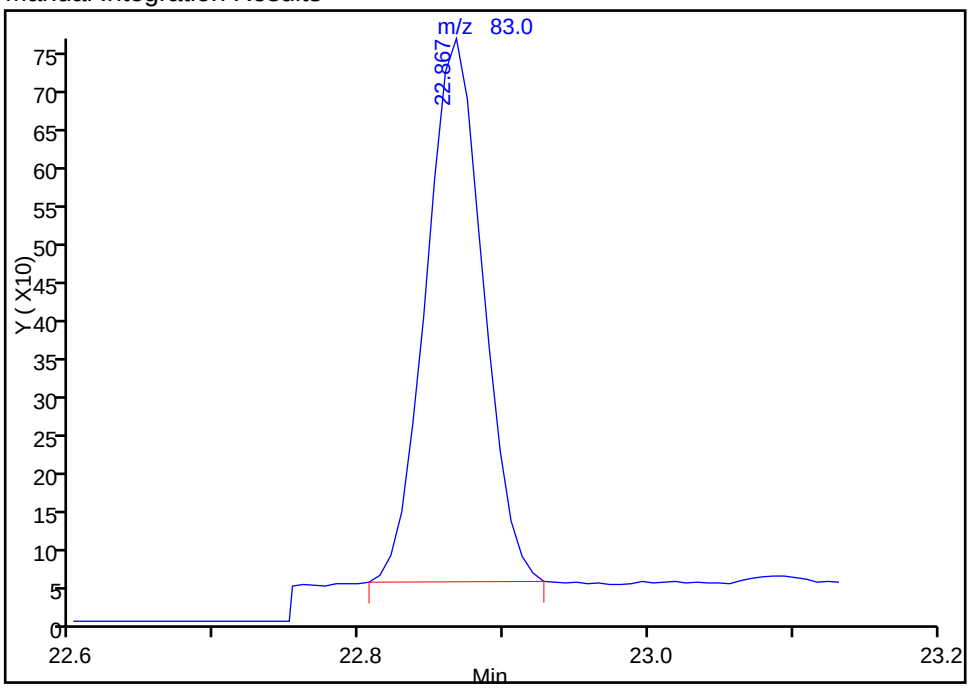
Processing Integration Results

RT: 22.87
Area: 2109
Amount: 0.023704
Amount Units: ppb v/v



Manual Integration Results

RT: 22.87
Area: 1946
Amount: 0.022097
Amount Units: ppb v/v



Reviewer: shardaa, 26-Mar-2015 13:32:17
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

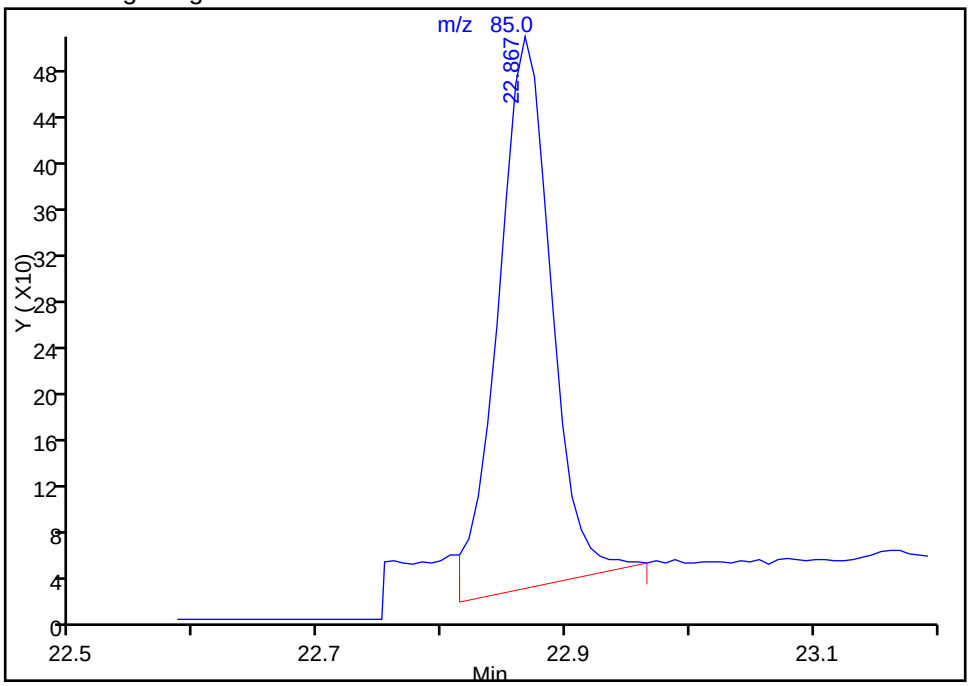
TestAmerica Sacramento

Data File:	\\SACCHROM\ChromData\ATMS5\20150326-20538.b\MS5032511.D				
Injection Date:	25-Mar-2015 21:08:30	Instrument ID:	ATMS5		
Lims ID:	IC 0.02ppbv				
Client ID:					
Operator ID:	AJS	ALS Bottle#:	1	Worklist Smp#:	4
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	TO15 SIM	Limit Group:	MSA - TO-15_SIM_ICAL		
Column:		Detector	MS SCAN		

59 1,1,2,2-Tetrachloroethane, CAS: 79-34-5

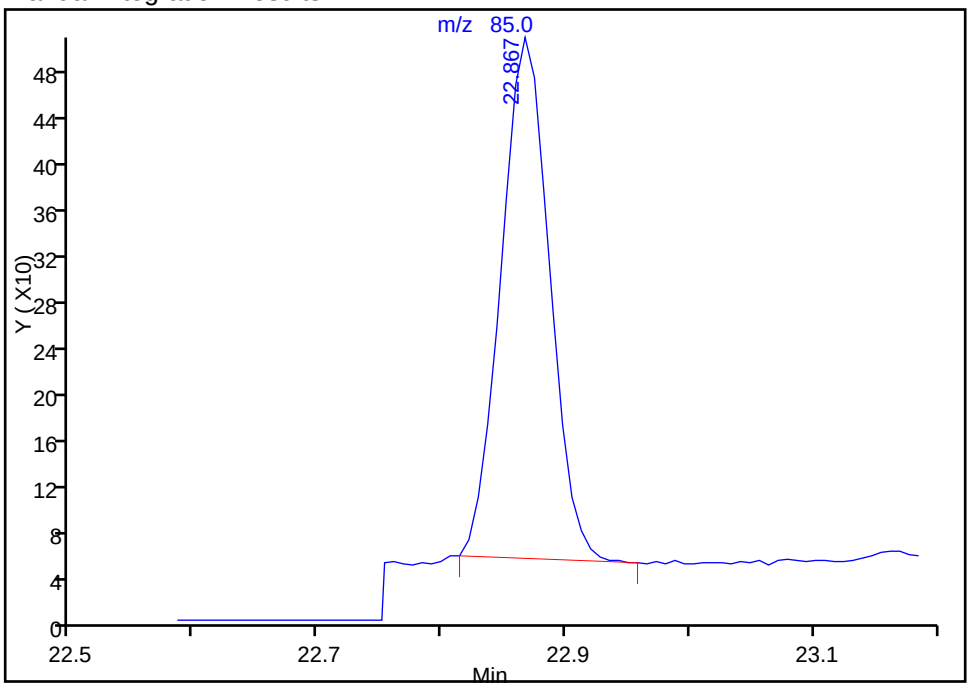
Processing Integration Results

RT: 22.87
Area: 1437
Amount: 0.023704
Amount Units: ppb v/v



Manual Integration Results

RT: 22.87
Area: 1239
Amount: 0.022097
Amount Units: ppb v/v



Reviewer: shardaa, 26-Mar-2015 13:32:17
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

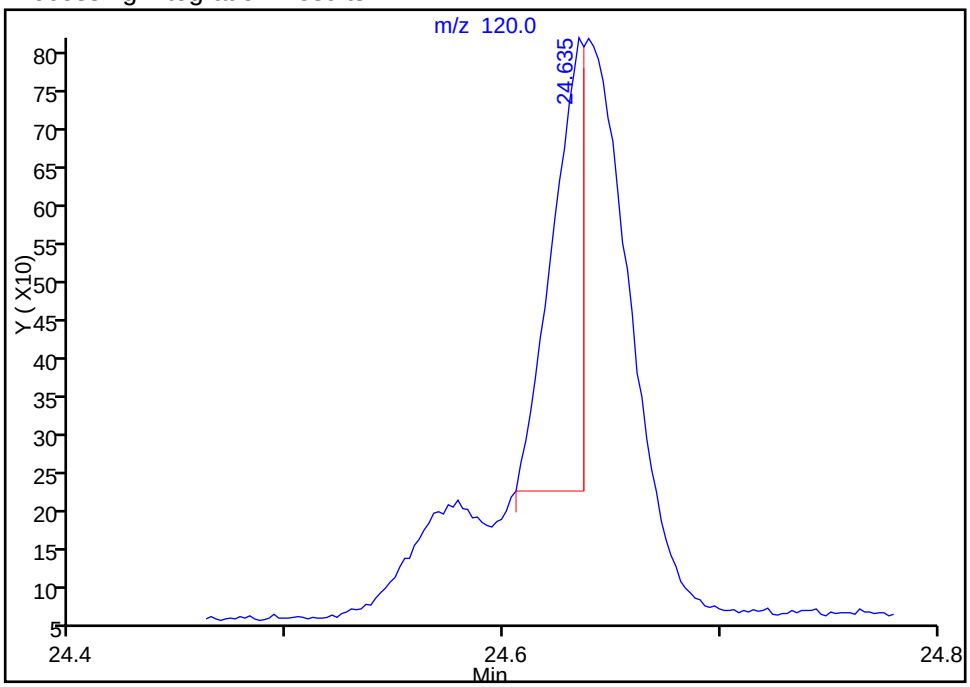
TestAmerica Sacramento

Data File:	\\SACCHROM\ChromData\ATMS5\20150326-20538.b\MS5032511.D				
Injection Date:	25-Mar-2015 21:08:30	Instrument ID:	ATMS5		
Lims ID:	IC 0.02ppbv				
Client ID:					
Operator ID:	AJS	ALS Bottle#:	1	Worklist Smp#:	4
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	TO15 SIM	Limit Group:	MSA - TO-15_SIM_ICAL		
Column:		Detector	MS SCAN		

63 1,2,4-Trimethylbenzene, CAS: 95-63-6

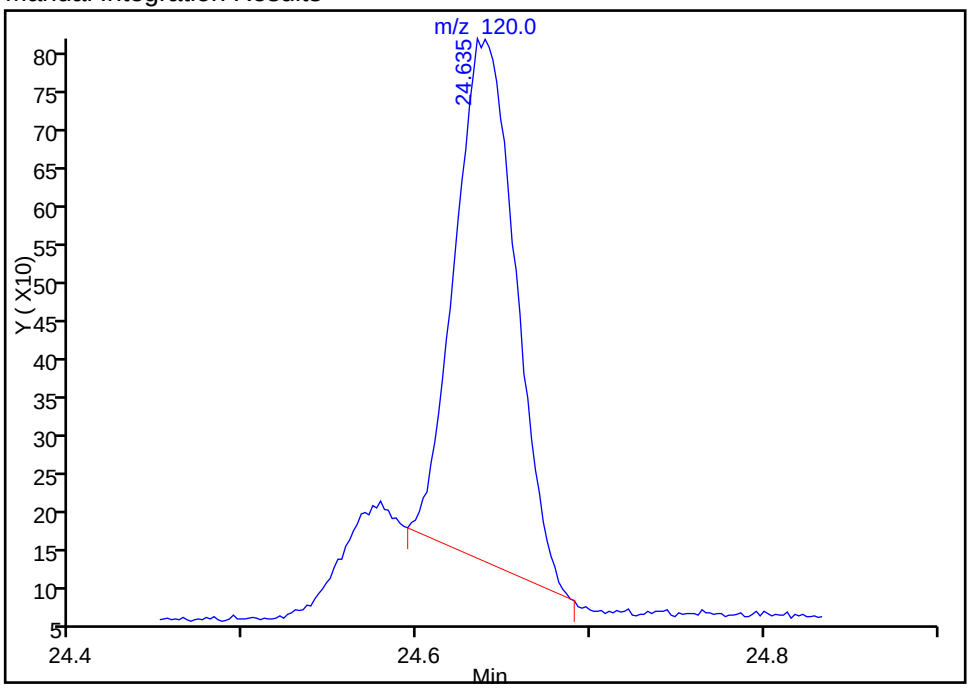
Processing Integration Results

RT: 24.63
Area: 607
Amount: 0.007300
Amount Units: ppb v/v



Manual Integration Results

RT: 24.63
Area: 1664
Amount: 0.018036
Amount Units: ppb v/v



Reviewer: shardaa, 26-Mar-2015 13:32:17
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

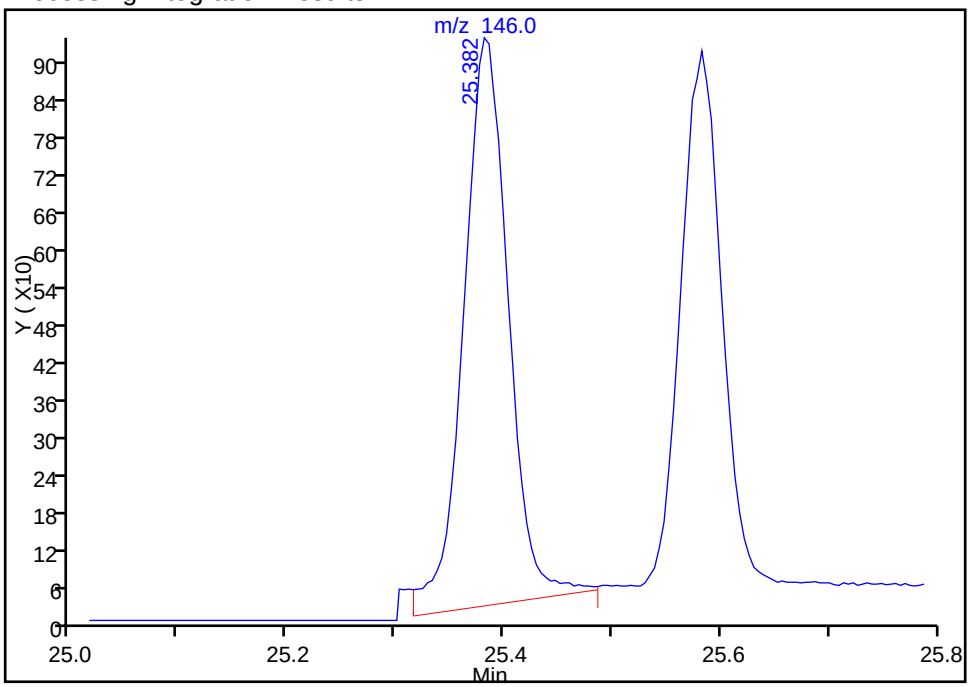
TestAmerica Sacramento

Data File:	\\SACCHROM\ChromData\ATMS5\20150326-20538.b\MS5032511.D				
Injection Date:	25-Mar-2015 21:08:30	Instrument ID:	ATMS5		
Lims ID:	IC 0.02ppbv				
Client ID:					
Operator ID:	AJS	ALS Bottle#:	1	Worklist Smp#:	4
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	TO15 SIM	Limit Group:	MSA - TO-15_SIM_ICAL		
Column:		Detector	MS SCAN		

64 1,3-Dichlorobenzene, CAS: 541-73-1

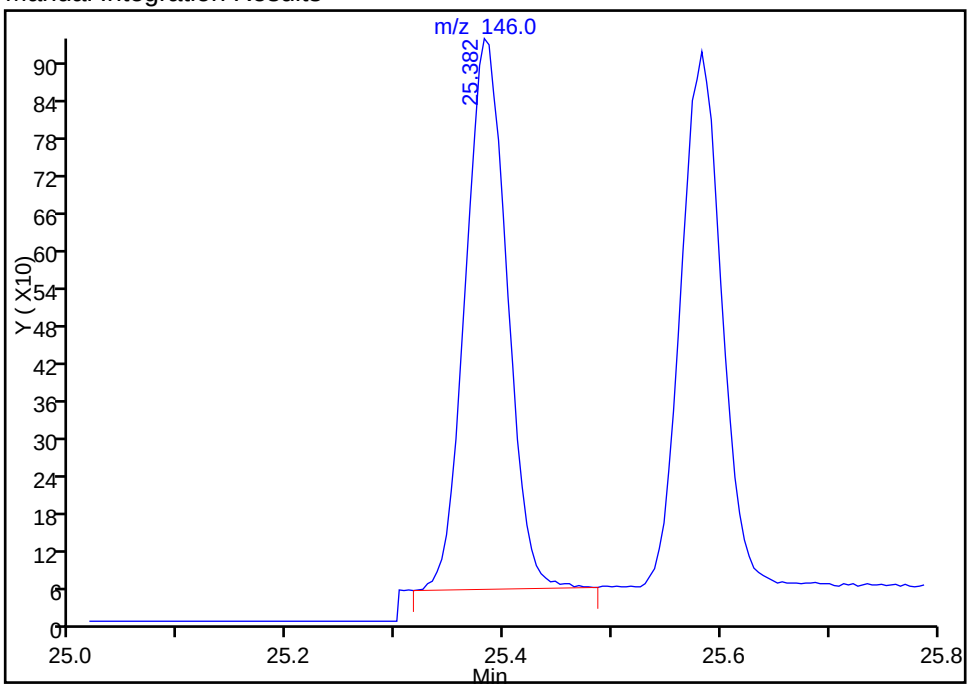
Processing Integration Results

RT: 25.38
Area: 2605
Amount: 0.023430
Amount Units: ppb v/v



Manual Integration Results

RT: 25.38
Area: 2358
Amount: 0.021474
Amount Units: ppb v/v



Reviewer: shardaa, 26-Mar-2015 13:32:17
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

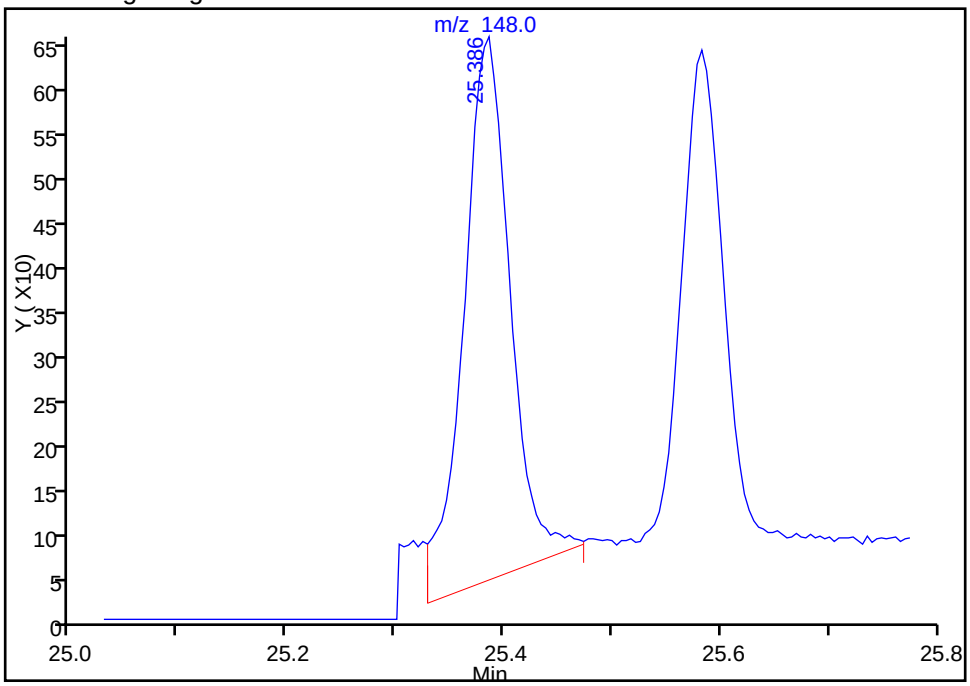
TestAmerica Sacramento

Data File:	\\SACCHROM\ChromData\ATMS5\20150326-20538.b\MS5032511.D				
Injection Date:	25-Mar-2015 21:08:30	Instrument ID:	ATMS5		
Lims ID:	IC 0.02ppbv				
Client ID:					
Operator ID:	AJS	ALS Bottle#:	1	Worklist Smp#:	4
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	TO15 SIM	Limit Group:	MSA - TO-15_SIM_ICAL		
Column:		Detector	MS SCAN		

64 1,3-Dichlorobenzene, CAS: 541-73-1

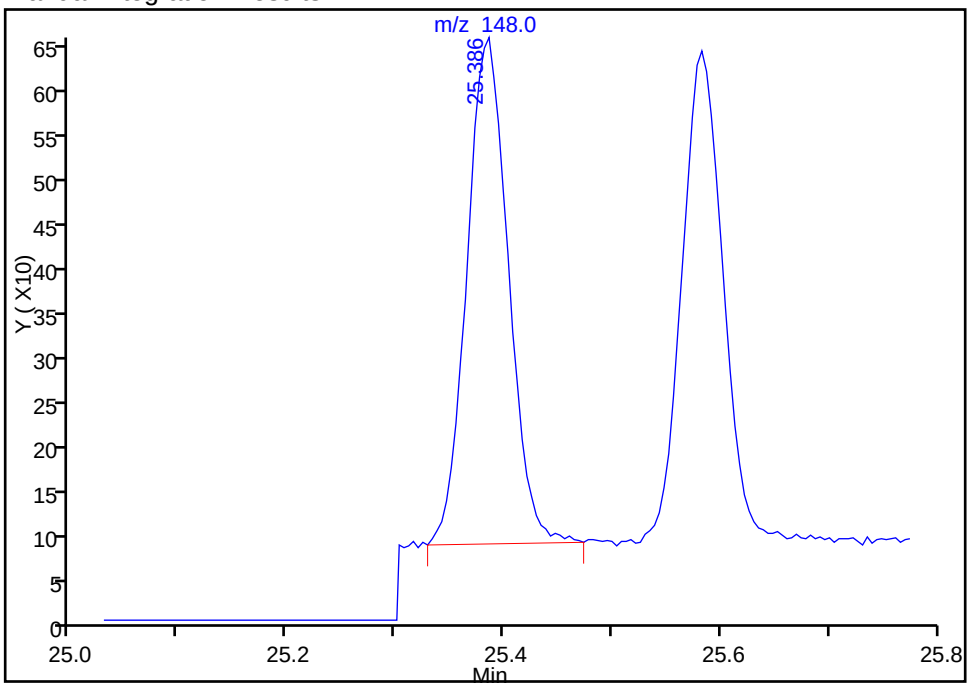
Processing Integration Results

RT: 25.39
Area: 1815
Amount: 0.023430
Amount Units: ppb v/v



Manual Integration Results

RT: 25.39
Area: 1507
Amount: 0.021474
Amount Units: ppb v/v



Reviewer: shardaa, 26-Mar-2015 13:32:17
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

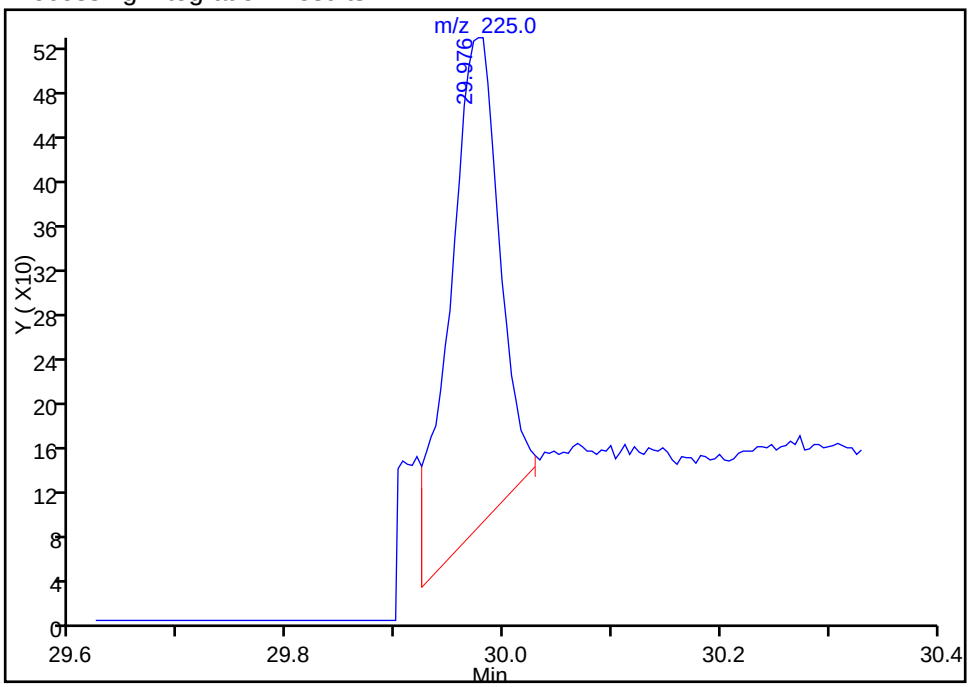
TestAmerica Sacramento

Data File:	\\SACCHROM\ChromData\ATMS5\20150326-20538.b\MS5032511.D				
Injection Date:	25-Mar-2015 21:08:30	Instrument ID:	ATMS5		
Lims ID:	IC 0.02ppbv				
Client ID:					
Operator ID:	AJS	ALS Bottle#:	1	Worklist Smp#:	4
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	TO15 SIM	Limit Group:	MSA - TO-15_SIM_ICAL		
Column:		Detector	MS SCAN		

69 Hexachlorobutadiene, CAS: 87-68-3

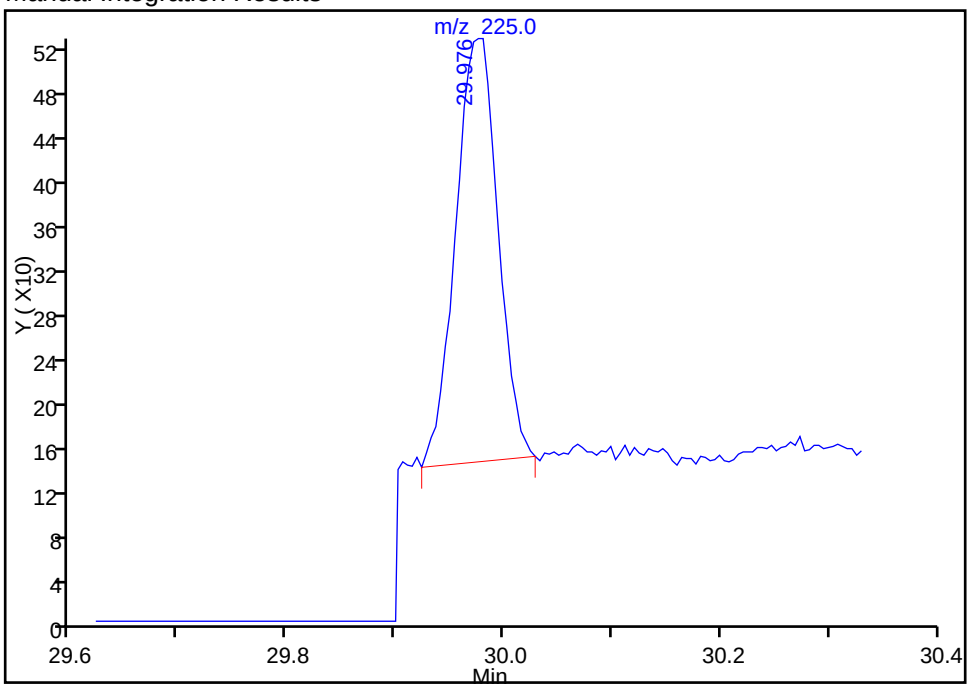
Processing Integration Results

RT: 29.98
Area: 1439
Amount: 0.026664
Amount Units: ppb v/v



Manual Integration Results

RT: 29.98
Area: 1046
Amount: 0.021937
Amount Units: ppb v/v



Reviewer: shardaa, 26-Mar-2015 13:32:17
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\SACCHROM\ChromData\ATMS5\20150326-20538.b\MS5032512.D
Lims ID: IC 0.04ppbv
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 25-Mar-2015 21:58:30 ALS Bottle#: 1 Worklist Smp#: 5
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: IC 0.04ppbv
Operator ID: AJS Instrument ID: ATMS5
Sublist: chrom-TO15 SIM*sub2

Method: \\SACCHROM\ChromData\ATMS5\20150326-20538.b\TO15 SIM.m
Limit Group: MSA - TO-15_SIM_ICAL
Last Update: 26-Mar-2015 14:41:13 Calib Date: 26-Mar-2015 03:17:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\SACCHROM\ChromData\ATMS5\20150326-20538.b\MS5032518.D

Column 1 : Det: MS SCAN
Process Host: XAWRK051

First Level Reviewer: shardaa Date: 26-Mar-2015 13:27:16

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	130	11.900	11.900	0.000	95	39427	2.00	2.00	
* 2 1,4-Difluorobenzene	114	13.996	13.996	0.000	100	182873	2.00	2.00	
* 3 Chlorobenzene-d5 (IS)	117	20.560	20.560	0.000	100	146464	2.00	2.00	
$ 4 1,2-Dichloroethane-d4 (Sur	65	13.056	13.056	0.000	76	44115	2.00	2.04	
$ 5 Toluene-d8 (Surr)	100	17.325	17.325	0.000	100	125345	2.00	1.99	
$ 6 4-Bromofluorobenzene (Surr	95	23.092	23.092	0.000	100	80895	2.00	1.96	
7 Propene	41	4.117	4.117	0.000	99	972	0.0400	0.0520	
8 Dichlorodifluoromethane	85	4.181	4.181	0.000	100	2736	0.0400	0.0460	
9 1,2-Dichloro-1,1,2,2-tetra	135	4.408	4.408	0.000	97	2447	0.0400	0.0469	
10 Chloromethane	50	4.581	4.581	0.000	100	838	0.0400	0.0532	
11 Vinyl chloride	62	4.827	4.827	0.000	80	1017	0.0400	0.0491	
12 Butadiene	39	4.890	4.890	0.000	96	643	0.0400	0.0487	
13 Bromomethane	94	5.648	5.648	0.000	99	1137	0.0400	0.0486	M
14 Chloroethane	64	5.832	5.832	0.000	99	735	0.0400	0.0489	
15 Trichlorofluoromethane	101	6.443	6.443	0.000	100	2482	0.0400	0.0438	
16 Isopropyl alcohol	45	7.085	7.085	0.000	99	2728	0.0400	0.0500	
17 Acrolein	56	7.140	7.140	0.000	95	525	0.0400	0.0569	
18 Acetone	43	7.312	7.312	0.000	97	2417	0.0400	0.0670	
19 1,1,2-Trichloro-1,2,2-trif	101	7.440	7.440	0.000	98	2497	0.0400	0.0458	
20 1,1-Dichloroethene	96	7.649	7.649	0.000	100	1302	0.0400	0.0452	
21 Acetonitrile	41	8.353	8.353	0.000	92	1362	0.0400	0.0478	
22 Methylene Chloride	49	8.529	8.529	0.000	97	1901	0.0400	0.0698	
23 Acrylonitrile	53	8.685	8.685	0.000	99	930	0.0400	0.0452	
24 Methyl tert-butyl ether	73	9.148	9.148	0.000	100	3962	0.0400	0.0445	
25 trans-1,2-Dichloroethene	96	9.248	9.248	0.000	100	1389	0.0400	0.0468	
26 Hexane	41	9.658	9.658	0.000	98	1329	0.0400	0.0473	
27 1,1-Dichloroethane	63	10.061	10.061	0.000	98	2250	0.0400	0.0461	
28 Vinyl acetate	43	10.106	10.106	0.000	56	2400	0.0400	0.0447	
29 2-Butanone (MEK)	72	10.961	10.961	0.000	100	743	0.0400	0.0425	M
30 cis-1,2-Dichloroethene	96	11.301	11.301	0.000	96	1303	0.0400	0.0429	M
31 Ethyl acetate	43	11.377	11.377	0.000	100	2472	0.0400	0.0448	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
32 Chloroform	83	11.638	11.638	0.000	100	2187	0.0400	0.0437	
33 Tetrahydrofuran	42	12.161	12.161	0.000	97	1440	0.0400	0.0447	
34 1,1,1-Trichloroethane	97	12.560	12.560	0.000	100	2245	0.0400	0.0435	
35 Cyclohexane	84	12.752	12.752	0.000	98	2158	0.0400	0.0433	
36 Carbon tetrachloride	117	13.129	13.129	0.000	100	1838	0.0400	0.0409	M
37 1,2-Dichloroethane	62	13.247	13.247	0.000	91	1380	0.0400	0.0423	
38 Benzene	78	13.383	13.383	0.000	100	4701	0.0400	0.0426	
39 n-Heptane	43	13.565	13.565	0.000	99	2264	0.0400	0.0436	
40 Trichloroethene	130	14.741	14.741	0.000	99	1740	0.0400	0.0404	
41 1,2-Dichloropropane	76	15.026	15.026	0.000	100	561	0.0400	0.0422	
42 Dichlorobromomethane	85	15.475	15.475	0.000	100	1491	0.0400	0.0405	
43 1,4-Dioxane	88	15.570	15.570	0.000	99	1115	0.0400	0.0413	
44 4-Methyl-2-pentanone (MIBK	43	16.379	16.379	0.000	100	2890	0.0400	0.0446	
45 cis-1,3-Dichloropropene	75	16.694	16.694	0.000	99	2043	0.0400	0.0401	
46 Toluene	91	17.498	17.498	0.000	100	5510	0.0400	0.0398	
47 trans-1,3-Dichloropropene	75	17.771	17.771	0.000	99	1992	0.0400	0.0409	
48 1,1,2-Trichloroethane	97	18.107	18.107	0.000	99	1567	0.0400	0.0427	
49 2-Hexanone	58	18.280	18.280	0.000	100	1463	0.0400	0.0422	
50 Tetrachloroethene	166	18.992	18.992	0.000	100	1989	0.0400	0.0407	
51 Chlorodibromomethane	129	19.193	19.193	0.000	100	2497	0.0400	0.0408	
52 Ethylene Dibromide	107	19.642	19.642	0.000	99	2391	0.0400	0.0423	
53 Chlorobenzene	112	20.635	20.635	0.000	91	4269	0.0400	0.0414	
54 Ethylbenzene	91	20.825	20.825	0.000	100	6954	0.0400	0.0414	
55 m-Xylene & p-Xylene	91	21.006	21.006	0.000	100	10406	0.0800	0.0819	
56 o-Xylene	91	21.896	21.896	0.000	98	5448	0.0400	0.0410	
57 Styrene	104	21.926	21.926	0.000	95	4386	0.0400	0.0399	
58 Bromoform	173	22.468	22.468	0.000	100	1543	0.0400	0.0402	M
59 1,1,2,2-Tetrachloroethane	83	22.865	22.865	0.000	100	3595	0.0400	0.0420	M
60 1,2,3-Trichloropropane	110	23.168	23.168	0.000	83	1097	0.0400	0.0419	
61 4-Ethyltoluene	120	23.754	23.754	0.000	100	2792	0.0400	0.0391	
62 1,3,5-Trimethylbenzene	120	23.850	23.850	0.000	89	4064	0.0400	0.0404	
63 1,2,4-Trimethylbenzene	120	24.639	24.639	0.000	100	3668	0.0400	0.0409	
64 1,3-Dichlorobenzene	146	25.384	25.384	0.000	100	4266	0.0400	0.0400	M
65 1,4-Dichlorobenzene	146	25.581	25.581	0.000	100	4032	0.0400	0.0400	
66 Benzyl chloride	91	25.751	25.751	0.000	100	5426	0.0320	0.0324	
67 1,2-Dichlorobenzene	146	26.301	26.301	0.000	100	4220	0.0400	0.0407	
68 1,2,4-Trichlorobenzene	180	29.605	29.605	0.000	100	2743	0.0400	0.0417	
69 Hexachlorobutadiene	225	29.977	29.977	0.000	98	1928	0.0400	0.0416	M
70 Naphthalene	128	30.046	30.046	0.000	100	9573	0.0400	0.0467	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

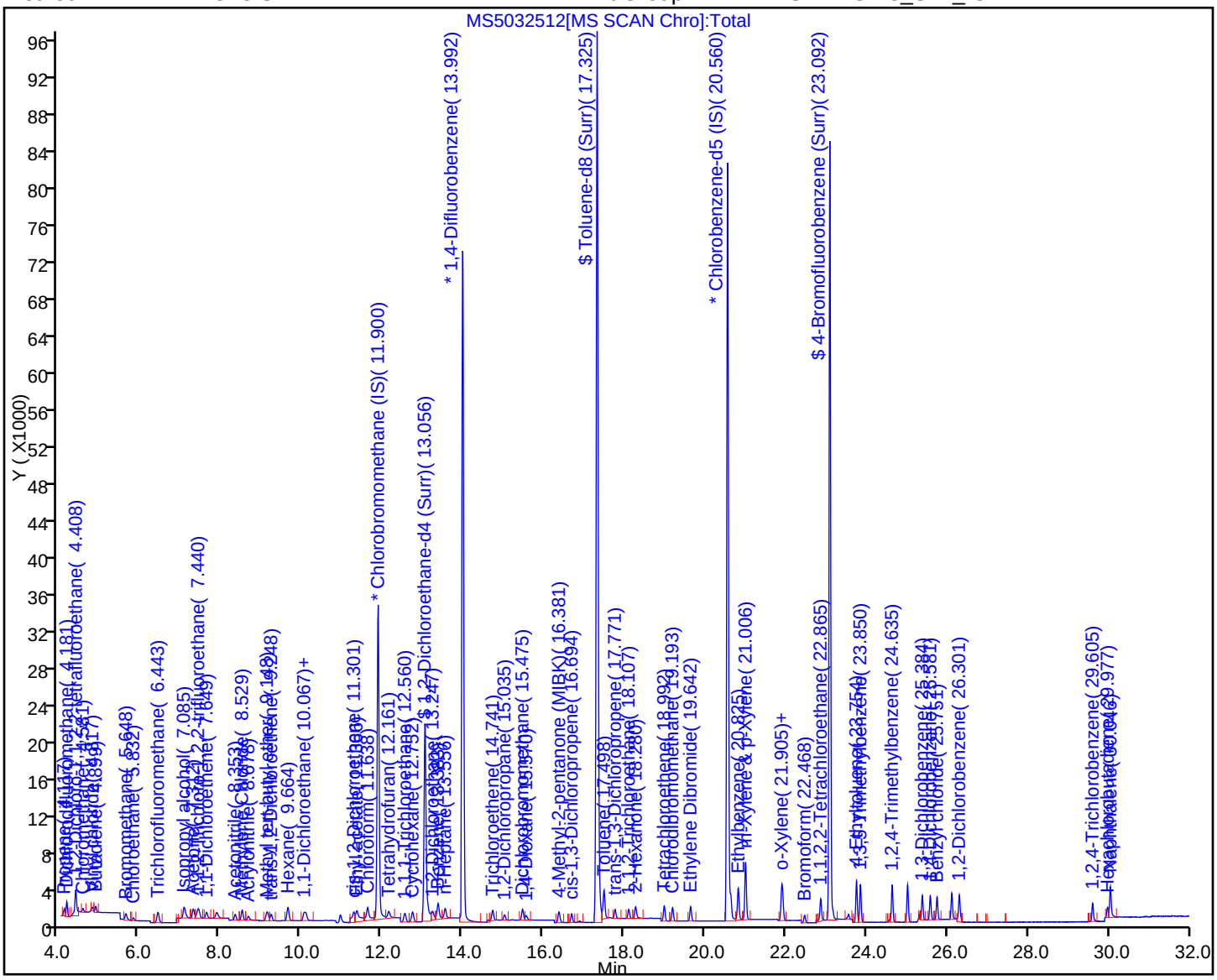
VACORPIC0.20_00014 Amount Added: 100.00 Units: mL

VASUISIM_00160 Amount Added: 50.00 Units: mL Run Reagent

Report Date: 26-Mar-2015 14:41:13 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Sacramento

Data File:	\\SACCHROM\ChromData\ATMS5\20150326-20538.b\MS5032512.D				
Injection Date:	25-Mar-2015 21:58:30	Instrument ID:	ATMS5		
Lims ID:	IC 0.04ppbv				
Client ID:					
Operator ID:	AJS	ALS Bottle#:	1	Worklist Smp#:	5
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	TO15 SIM	Limit Group:	MSA - TO-15_SIM_ICAL		



Manual Integration/User Assign Peak Report

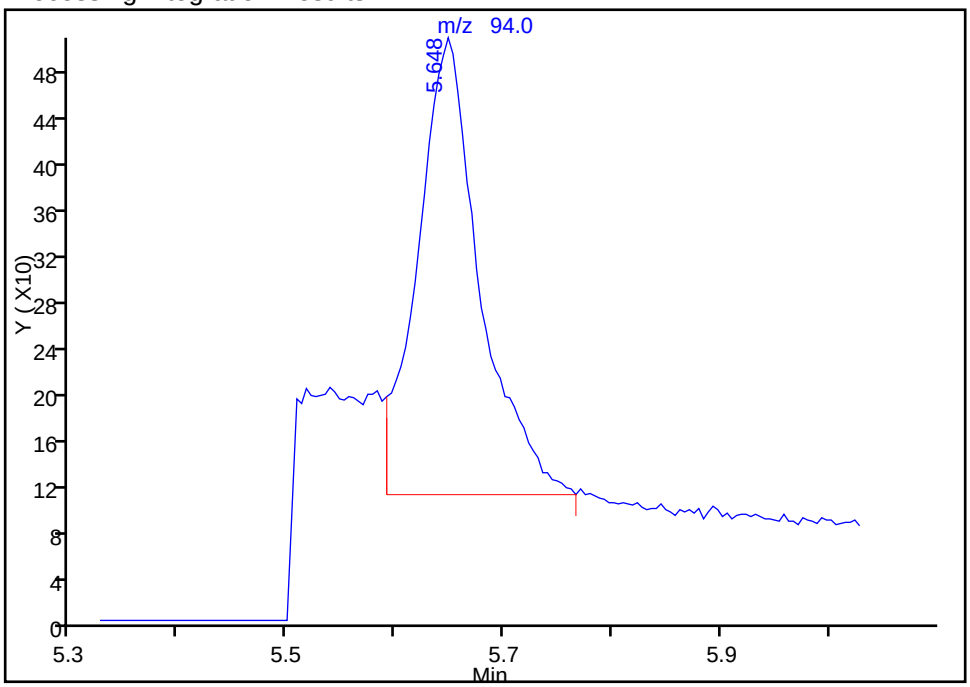
TestAmerica Sacramento

Data File:	\\SACCHROM\ChromData\ATMS5\20150326-20538.b\MS5032512.D				
Injection Date:	25-Mar-2015 21:58:30	Instrument ID:	ATMS5		
Lims ID:	IC 0.04ppbv				
Client ID:					
Operator ID:	AJS	ALS Bottle#:	1	Worklist Smp#:	5
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	TO15 SIM	Limit Group:	MSA - TO-15_SIM_ICAL		
Column:		Detector	MS SCAN		

13 Bromomethane, CAS: 74-83-9

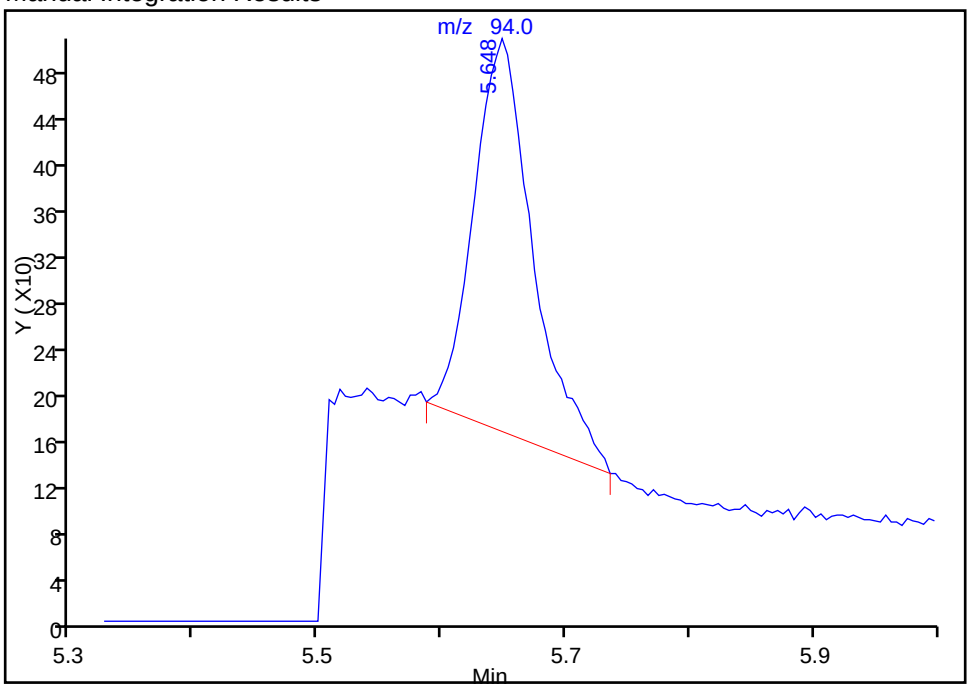
Processing Integration Results

RT: 5.65
Area: 1591
Amount: 0.075928
Amount Units: ppb v/v



Manual Integration Results

RT: 5.65
Area: 1137
Amount: 0.048612
Amount Units: ppb v/v



Reviewer: shardaa, 26-Mar-2015 13:27:16
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

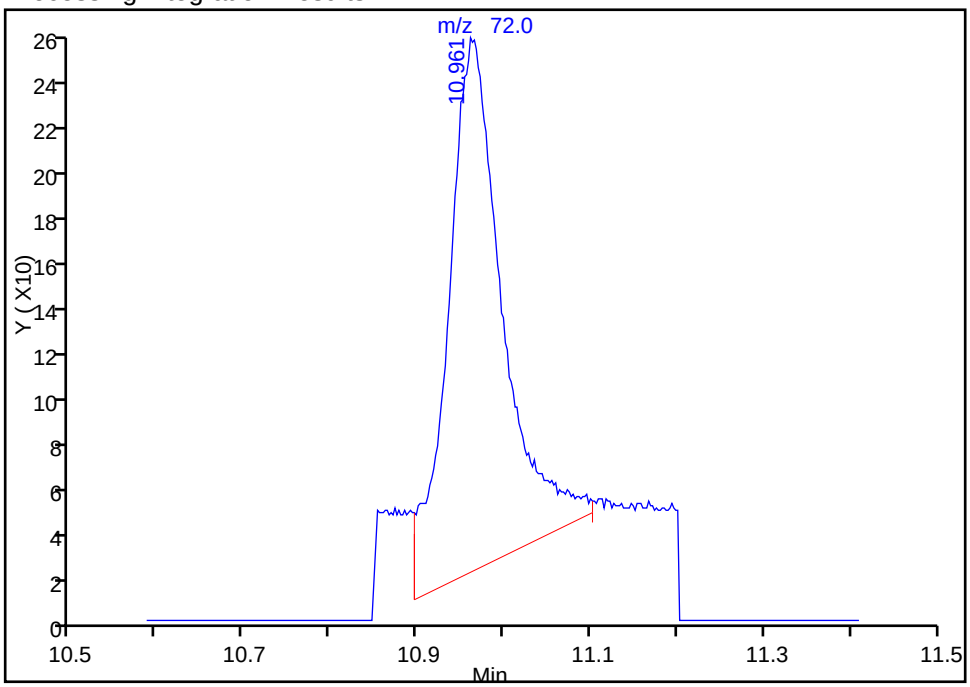
TestAmerica Sacramento

Data File:	\\SACCHROM\ChromData\ATMS5\20150326-20538.b\MS5032512.D				
Injection Date:	25-Mar-2015 21:58:30	Instrument ID:	ATMS5		
Lims ID:	IC 0.04ppbv				
Client ID:					
Operator ID:	AJS	ALS Bottle#:	1	Worklist Smp#:	5
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	TO15 SIM	Limit Group:	MSA - TO-15_SIM_ICAL		
Column:		Detector	MS SCAN		

29 2-Butanone (MEK), CAS: 78-93-3

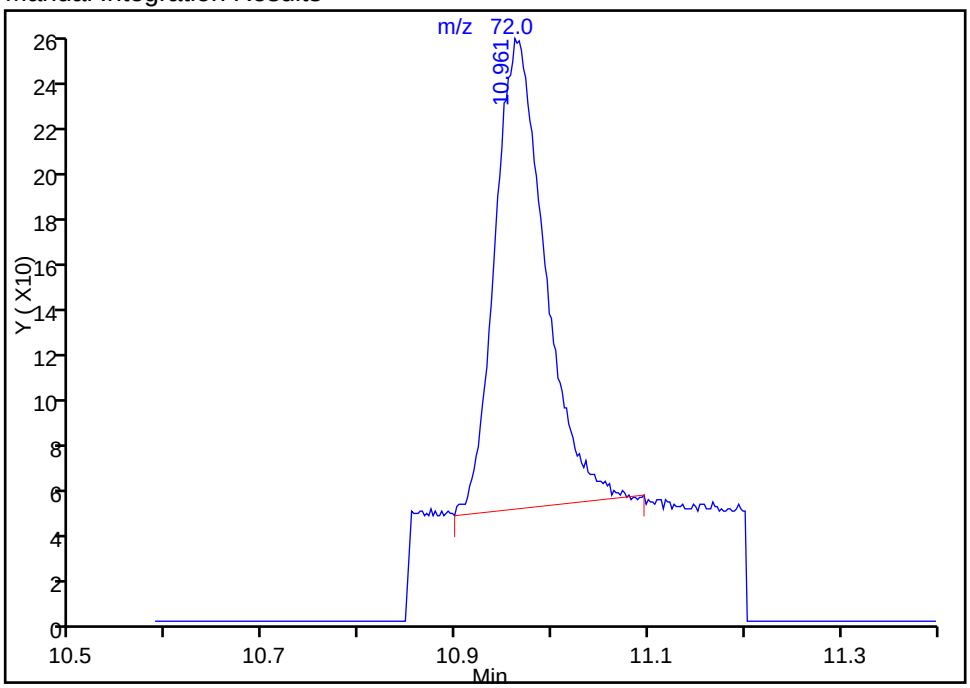
Processing Integration Results

RT: 10.96
Area: 1023
Amount: 0.056237
Amount Units: ppb v/v



Manual Integration Results

RT: 10.96
Area: 743
Amount: 0.042471
Amount Units: ppb v/v



Reviewer: shardaa, 26-Mar-2015 13:27:16
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

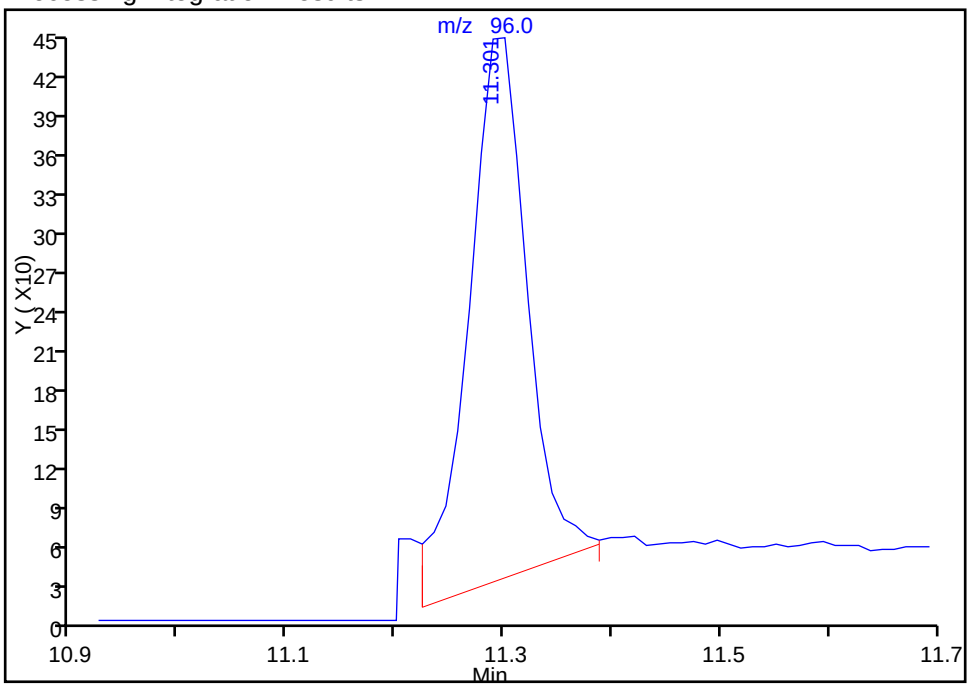
TestAmerica Sacramento

Data File:	\\SACCHROM\ChromData\ATMS5\20150326-20538.b\MS5032512.D				
Injection Date:	25-Mar-2015 21:58:30	Instrument ID:	ATMS5		
Lims ID:	IC 0.04ppbv				
Client ID:					
Operator ID:	AJS	ALS Bottle#:	1	Worklist Smp#:	5
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	TO15 SIM	Limit Group:	MSA - TO-15_SIM_ICAL		
Column:		Detector	MS SCAN		

30 cis-1,2-Dichloroethene, CAS: 156-59-2

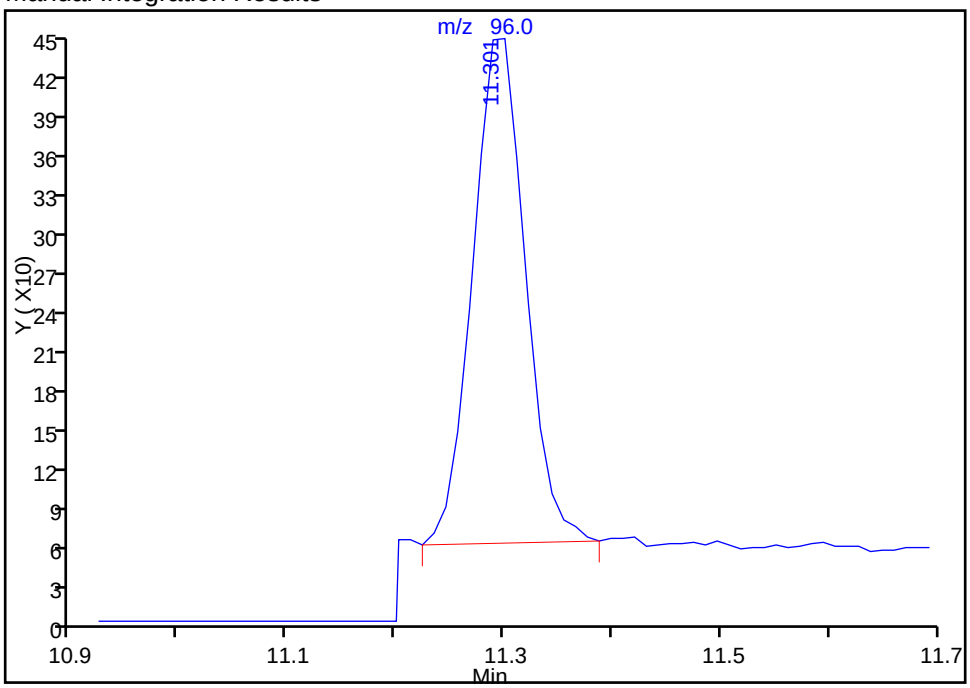
Processing Integration Results

RT: 11.30
Area: 1569
Amount: 0.048279
Amount Units: ppb v/v



Manual Integration Results

RT: 11.30
Area: 1303
Amount: 0.042904
Amount Units: ppb v/v



Reviewer: shardaa, 26-Mar-2015 13:27:16
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

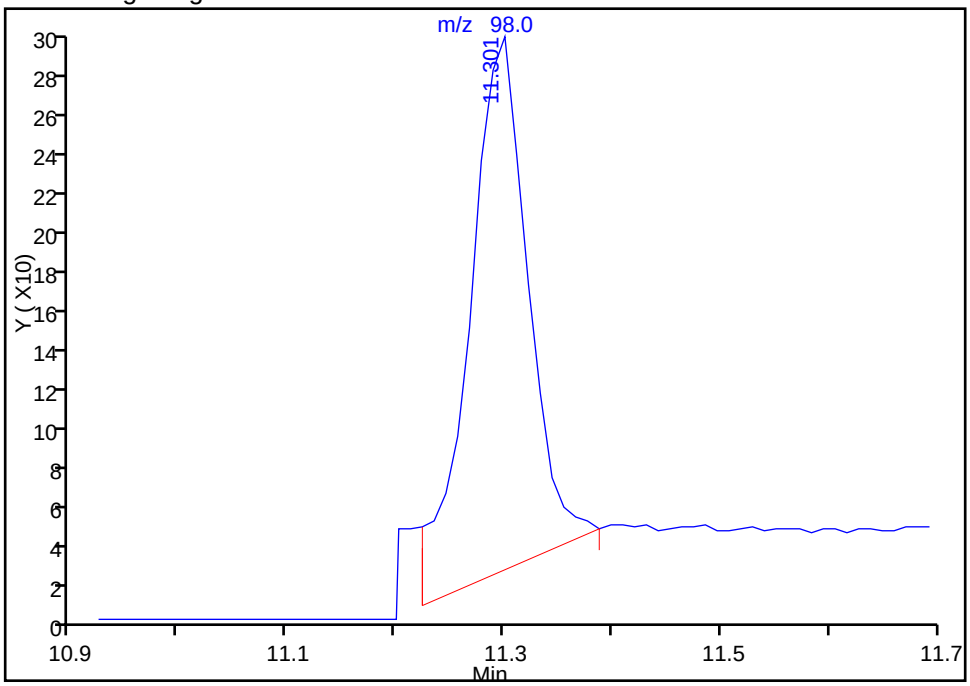
TestAmerica Sacramento

Data File:	\\SACCHROM\ChromData\ATMS5\20150326-20538.b\MS5032512.D				
Injection Date:	25-Mar-2015 21:58:30	Instrument ID:	ATMS5		
Lims ID:	IC 0.04ppbv				
Client ID:					
Operator ID:	AJS	ALS Bottle#:	1	Worklist Smp#:	5
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	TO15 SIM	Limit Group:	MSA - TO-15_SIM_ICAL		
Column:		Detector	MS SCAN		

30 cis-1,2-Dichloroethene, CAS: 156-59-2

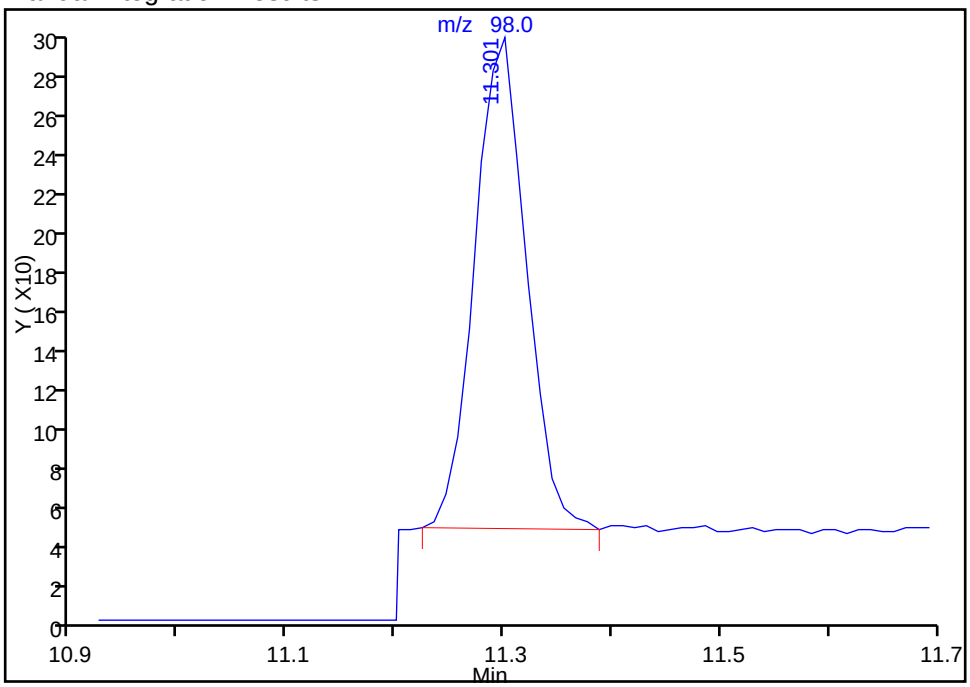
Processing Integration Results

RT: 11.30
Area: 1035
Amount: 0.048279
Amount Units: ppb v/v



Manual Integration Results

RT: 11.30
Area: 826
Amount: 0.042904
Amount Units: ppb v/v



Reviewer: shardaa, 26-Mar-2015 13:27:16
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

TestAmerica Sacramento

Data File:	\\SACCHROM\ChromData\ATMS5\20150326-20538.b\MS5032512.D				
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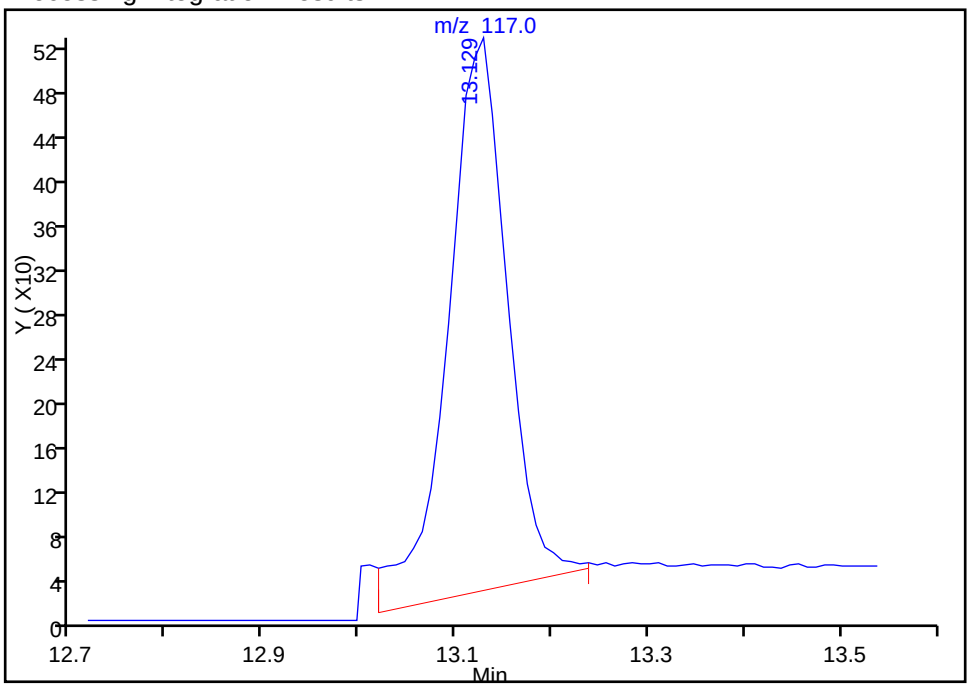
Lims ID:	IC 0.04ppbv				
Client ID:					
Operator ID:	AJS	ALS Bottle#:	1	Worklist Smp#:	5
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	TO15 SIM	Limit Group:	MSA - TO-15_SIM_ICAL		
Column:		Detector	MS SCAN		

36 Carbon tetrachloride, CAS: 56-23-5

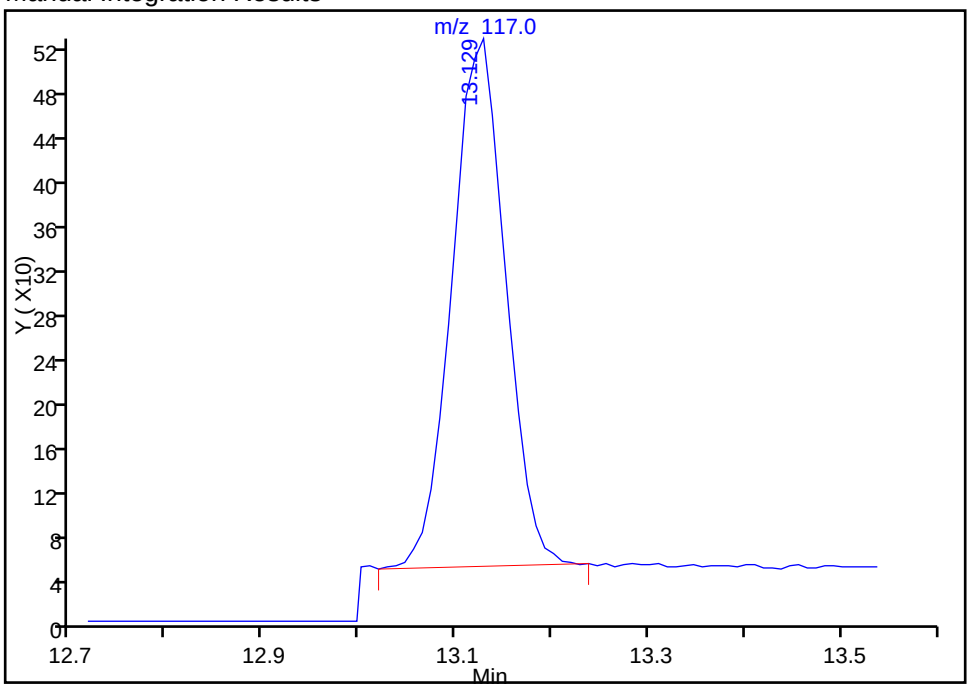
Processing Integration Results

RT: 13.13
Area: 2144
Amount: 0.043823
Amount Units: ppb v/v



Manual Integration Results

RT: 13.13
Area: 1838
Amount: 0.040852
Amount Units: ppb v/v



Reviewer: shardaa, 26-Mar-2015 13:27:16
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

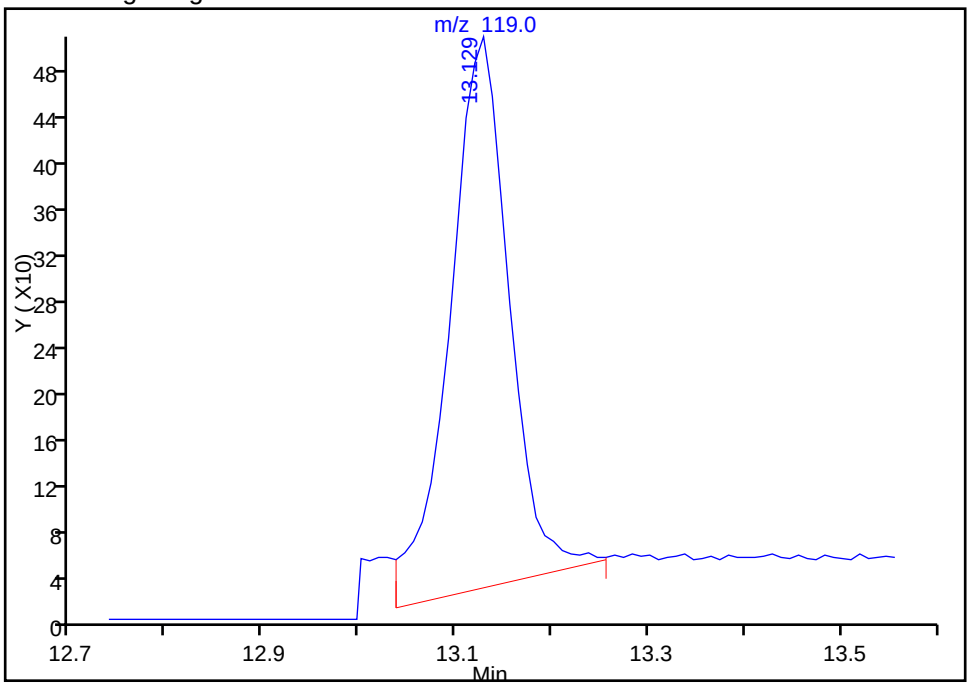
TestAmerica Sacramento

Data File:	\\SACCHROM\ChromData\ATMS5\20150326-20538.b\MS5032512.D				
Injection Date:	25-Mar-2015 21:58:30	Instrument ID:	ATMS5		
Lims ID:	IC 0.04ppbv				
Client ID:					
Operator ID:	AJS	ALS Bottle#:	1	Worklist Smp#:	5
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	TO15 SIM	Limit Group:	MSA - TO-15_SIM_ICAL		
Column:		Detector	MS SCAN		

36 Carbon tetrachloride, CAS: 56-23-5

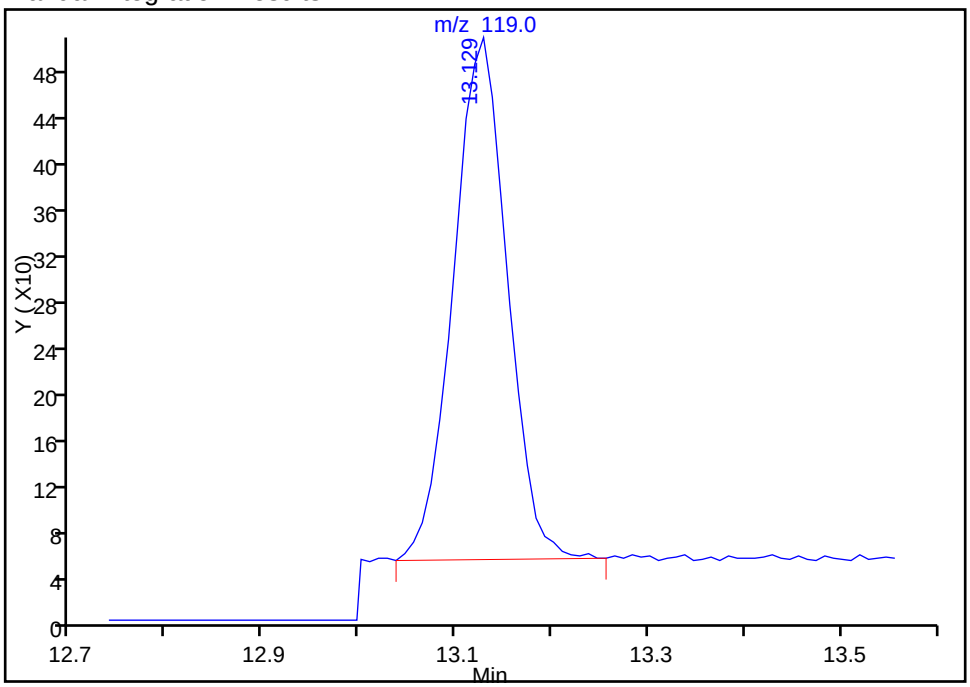
Processing Integration Results

RT: 13.13
Area: 2071
Amount: 0.043823
Amount Units: ppb v/v



Manual Integration Results

RT: 13.13
Area: 1771
Amount: 0.040852
Amount Units: ppb v/v



Reviewer: shardaa, 26-Mar-2015 13:27:16
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

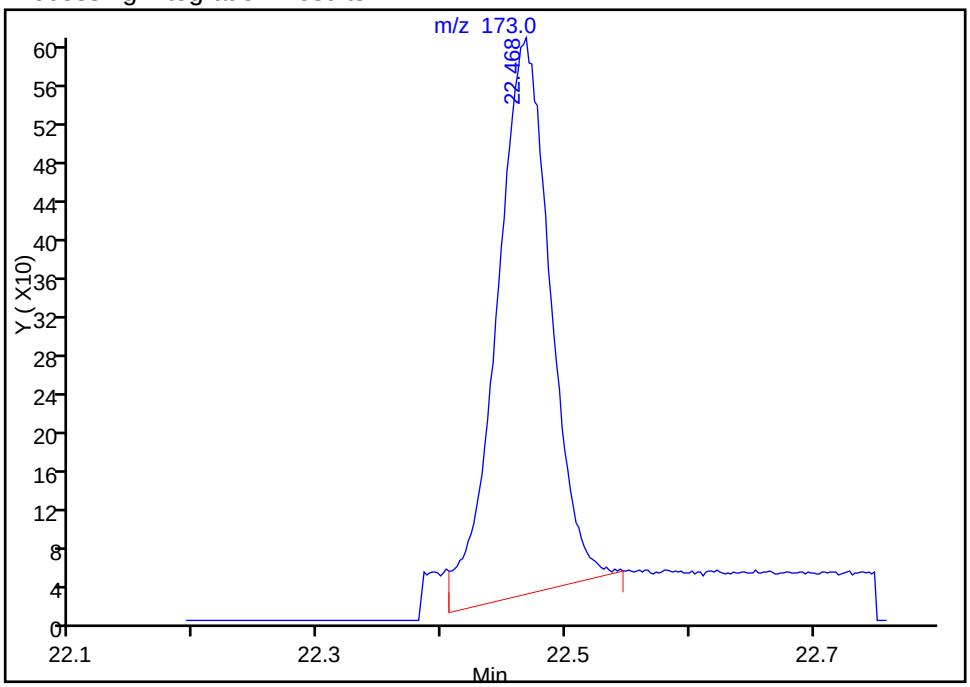
TestAmerica Sacramento

Data File:	\\SACCHROM\ChromData\ATMS5\20150326-20538.b\MS5032512.D				
Injection Date:	25-Mar-2015 21:58:30	Instrument ID:	ATMS5		
Lims ID:	IC 0.04ppbv				
Client ID:					
Operator ID:	AJS	ALS Bottle#:	1	Worklist Smp#:	5
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	TO15 SIM	Limit Group:	MSA - TO-15_SIM_ICAL		
Column:		Detector	MS SCAN		

58 Bromoform, CAS: 75-25-2

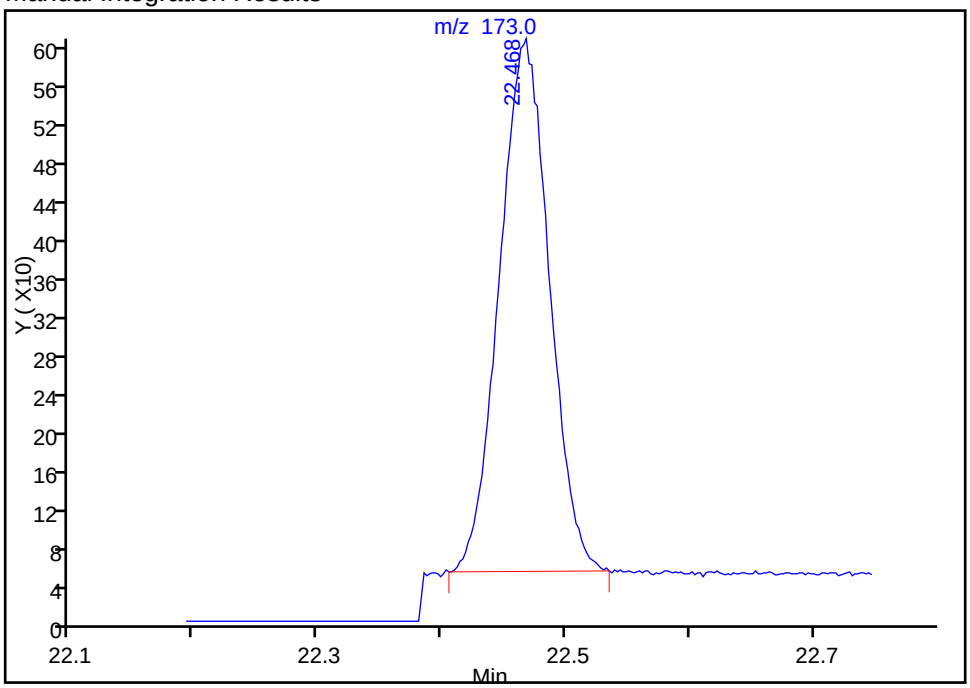
Processing Integration Results

RT: 22.47
Area: 1732
Amount: 0.044513
Amount Units: ppb v/v



Manual Integration Results

RT: 22.47
Area: 1543
Amount: 0.040198
Amount Units: ppb v/v



Reviewer: shardaa, 26-Mar-2015 13:27:16
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

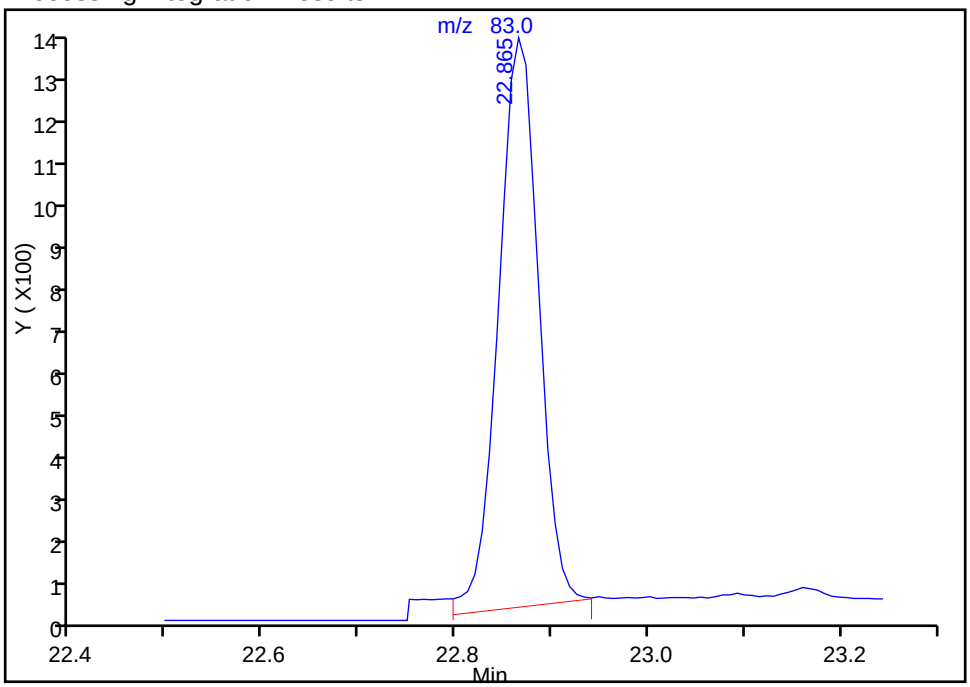
TestAmerica Sacramento

Data File:	\\SACCHROM\ChromData\ATMS5\20150326-20538.b\MS5032512.D				
Injection Date:	25-Mar-2015 21:58:30	Instrument ID:	ATMS5		
Lims ID:	IC 0.04ppbv				
Client ID:					
Operator ID:	AJS	ALS Bottle#:	1	Worklist Smp#:	5
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	TO15 SIM	Limit Group:	MSA - TO-15_SIM_ICAL		
Column:		Detector	MS SCAN		

59 1,1,2,2-Tetrachloroethane, CAS: 79-34-5

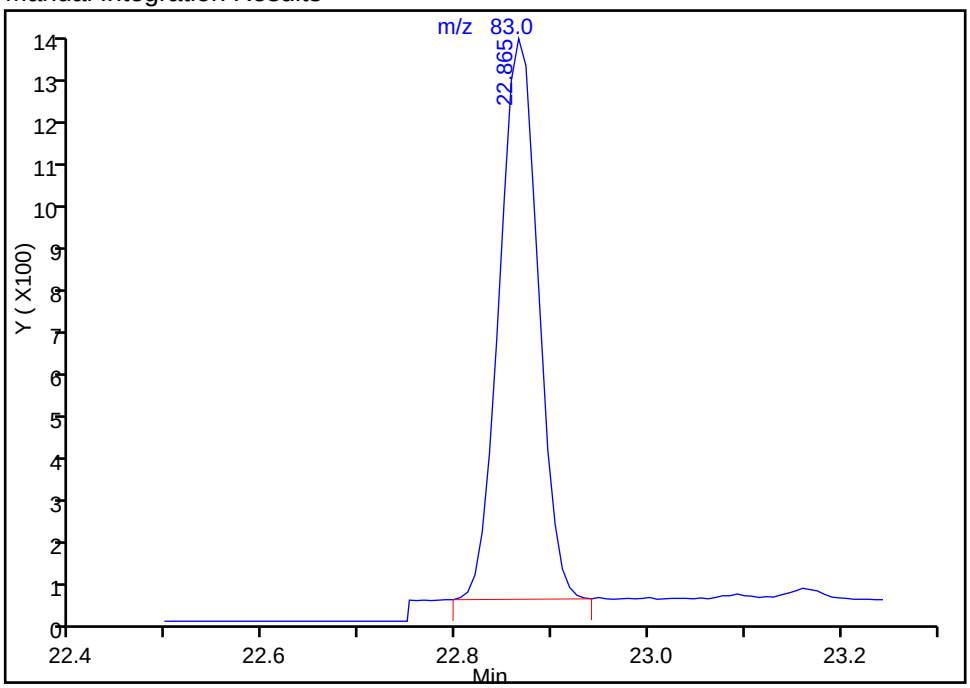
Processing Integration Results

RT: 22.87
Area: 3768
Amount: 0.043347
Amount Units: ppb v/v



Manual Integration Results

RT: 22.87
Area: 3595
Amount: 0.042014
Amount Units: ppb v/v



Reviewer: shardaa, 26-Mar-2015 13:27:16
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

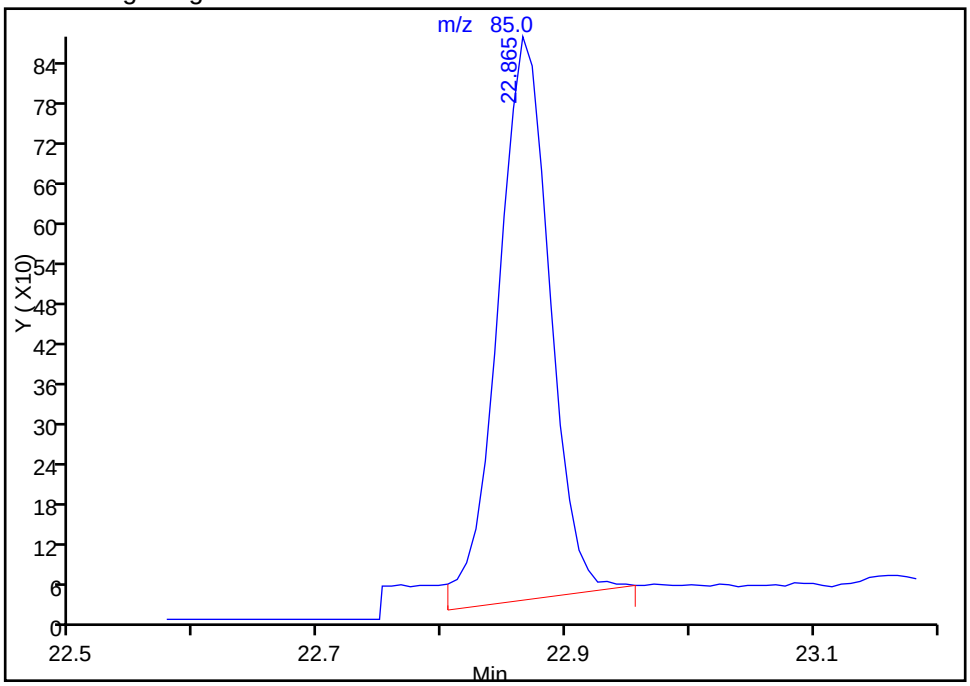
TestAmerica Sacramento

Data File:	\\SACCHROM\ChromData\ATMS5\20150326-20538.b\MS5032512.D				
Injection Date:	25-Mar-2015 21:58:30	Instrument ID:	ATMS5		
Lims ID:	IC 0.04ppbv				
Client ID:					
Operator ID:	AJS	ALS Bottle#:	1	Worklist Smp#:	5
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	TO15 SIM	Limit Group:	MSA - TO-15_SIM_ICAL		
Column:		Detector	MS SCAN		

59 1,1,2,2-Tetrachloroethane, CAS: 79-34-5

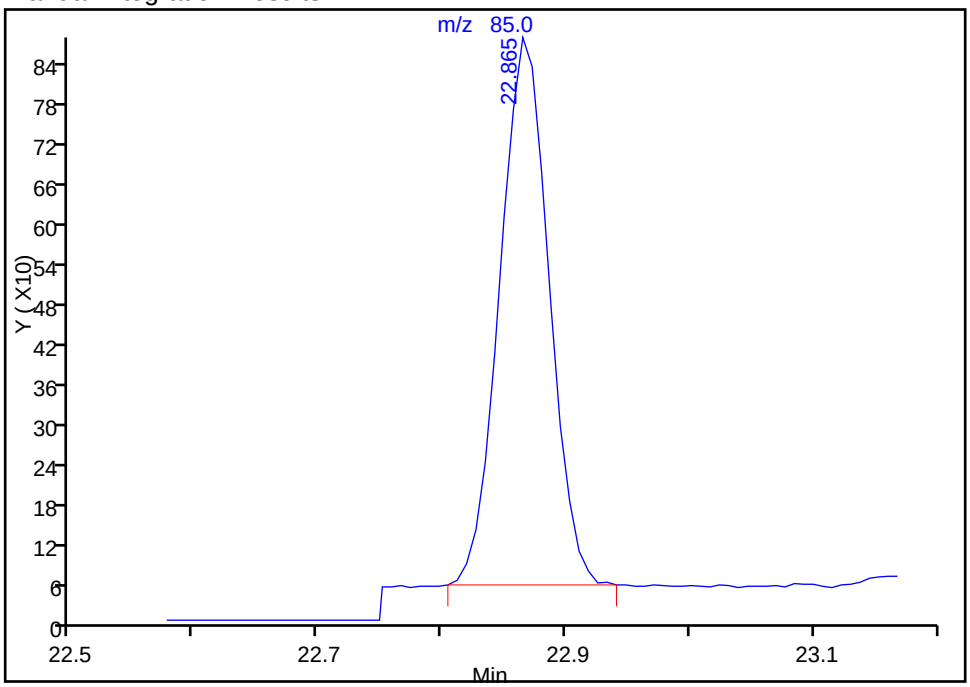
Processing Integration Results

RT: 22.87
Area: 2471
Amount: 0.043347
Amount Units: ppb v/v



Manual Integration Results

RT: 22.87
Area: 2276
Amount: 0.042014
Amount Units: ppb v/v



Reviewer: shardaa, 26-Mar-2015 13:27:16
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

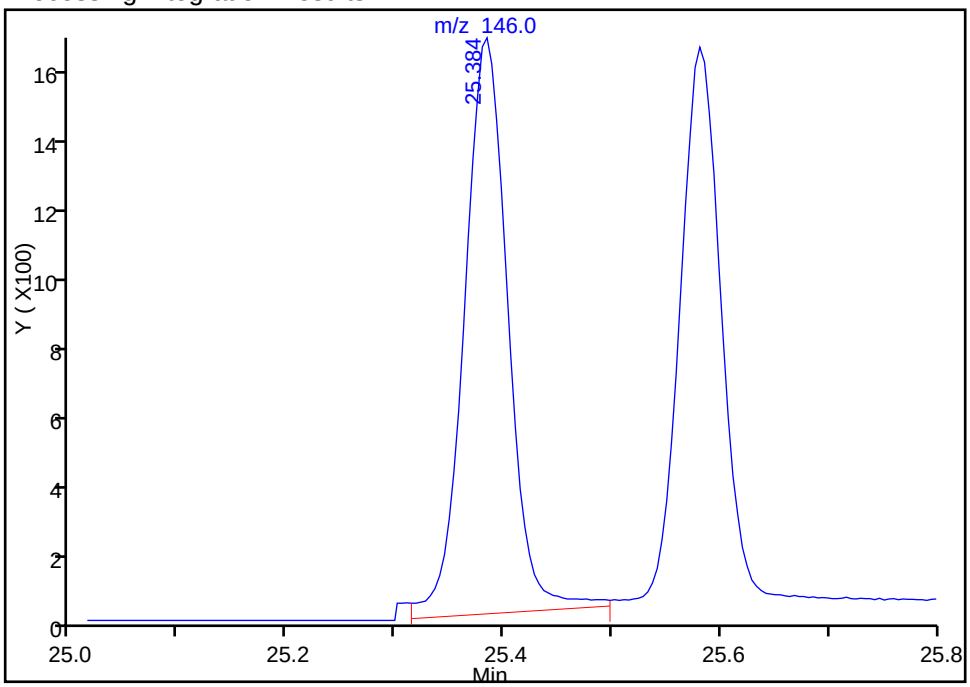
TestAmerica Sacramento

Data File:	\\SACCHROM\ChromData\ATMS5\20150326-20538.b\MS5032512.D				
Injection Date:	25-Mar-2015 21:58:30	Instrument ID:	ATMS5		
Lims ID:	IC 0.04ppbv				
Client ID:					
Operator ID:	AJS	ALS Bottle#:	1	Worklist Smp#:	5
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	TO15 SIM	Limit Group:	MSA - TO-15_SIM_ICAL		
Column:		Detector	MS SCAN		

64 1,3-Dichlorobenzene, CAS: 541-73-1

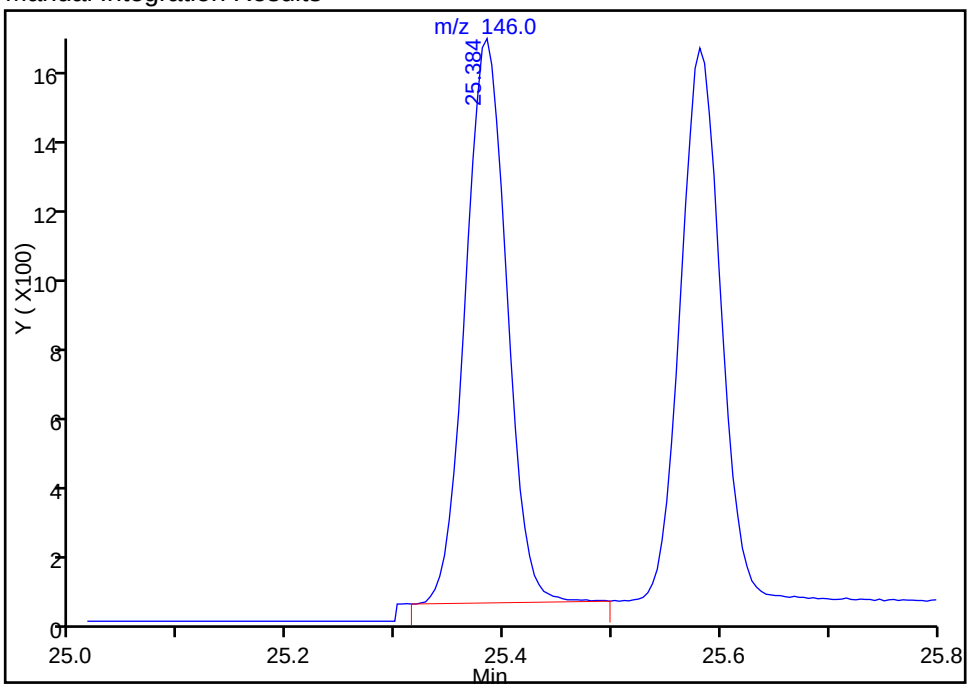
Processing Integration Results

RT: 25.38
Area: 4604
Amount: 0.042253
Amount Units: ppb v/v



Manual Integration Results

RT: 25.38
Area: 4266
Amount: 0.039985
Amount Units: ppb v/v



Reviewer: shardaa, 26-Mar-2015 13:27:16
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

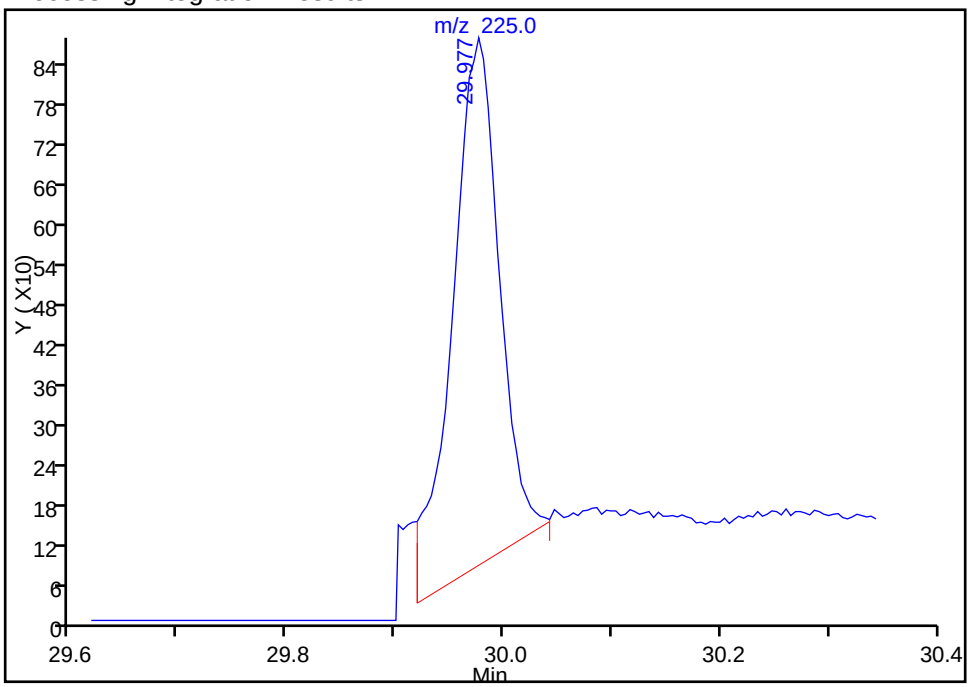
TestAmerica Sacramento

Data File:	\\SACCHROM\ChromData\ATMS5\20150326-20538.b\MS5032512.D				
Injection Date:	25-Mar-2015 21:58:30	Instrument ID:	ATMS5		
Lims ID:	IC 0.04ppbv				
Client ID:					
Operator ID:	AJS	ALS Bottle#:	1	Worklist Smp#:	5
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	TO15 SIM	Limit Group:	MSA - TO-15_SIM_ICAL		
Column:		Detector	MS SCAN		

69 Hexachlorobutadiene, CAS: 87-68-3

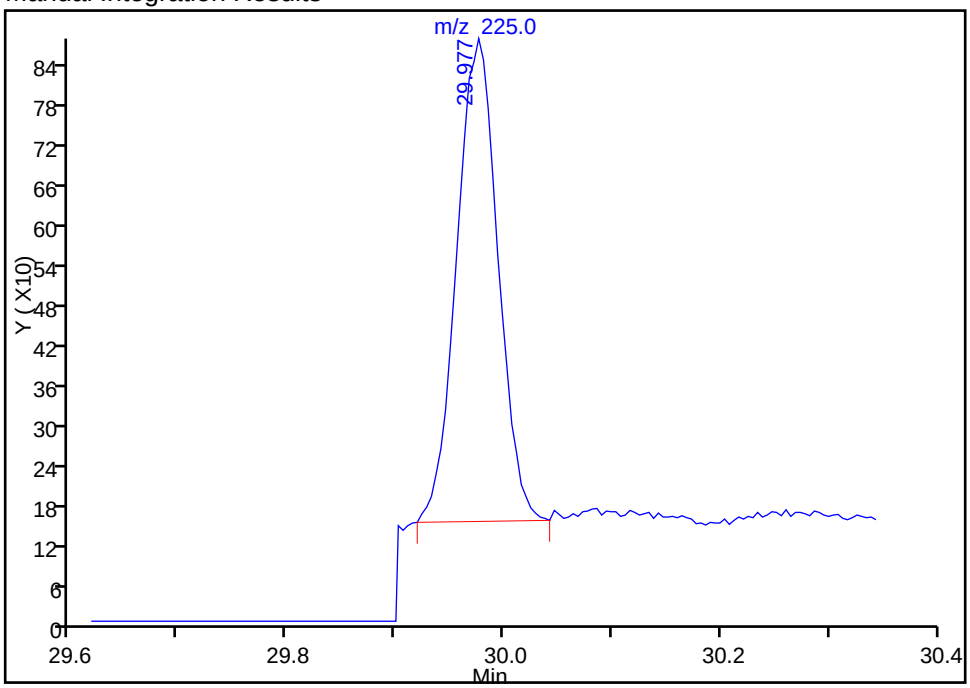
Processing Integration Results

RT: 29.98
Area: 2407
Amount: 0.044768
Amount Units: ppb v/v



Manual Integration Results

RT: 29.98
Area: 1928
Amount: 0.041615
Amount Units: ppb v/v



Reviewer: shardaa, 26-Mar-2015 13:27:16
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

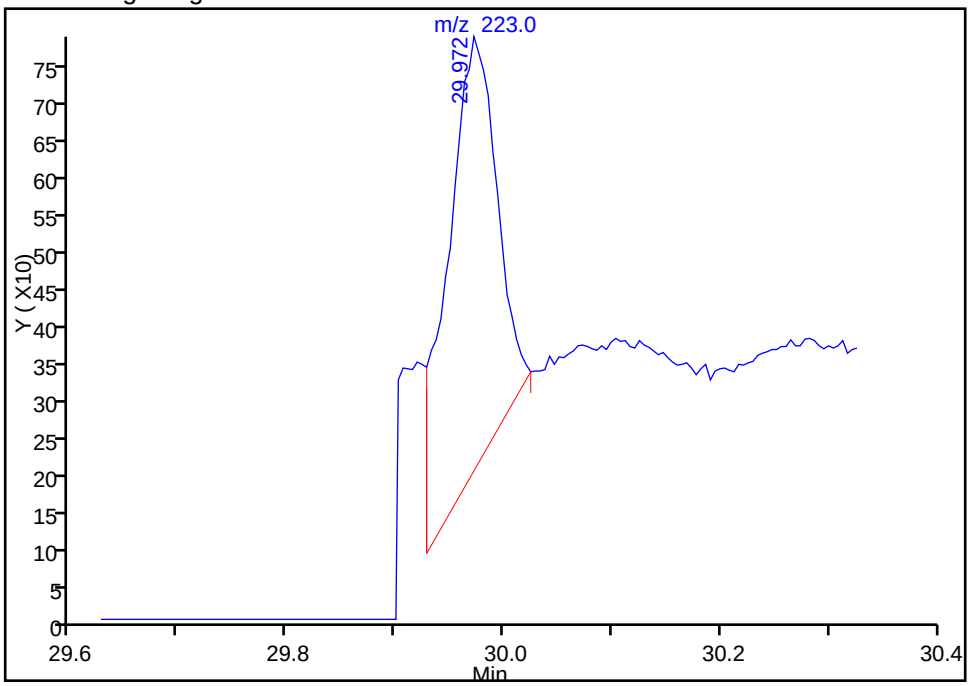
TestAmerica Sacramento

Data File:	\\SACCHROM\ChromData\ATMS5\20150326-20538.b\MS5032512.D				
Injection Date:	25-Mar-2015 21:58:30	Instrument ID:	ATMS5		
Lims ID:	IC 0.04ppbv				
Client ID:					
Operator ID:	AJS	ALS Bottle#:	1	Worklist Smp#:	5
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	TO15 SIM	Limit Group:	MSA - TO-15_SIM_ICAL		
Column:		Detector	MS SCAN		

69 Hexachlorobutadiene, CAS: 87-68-3

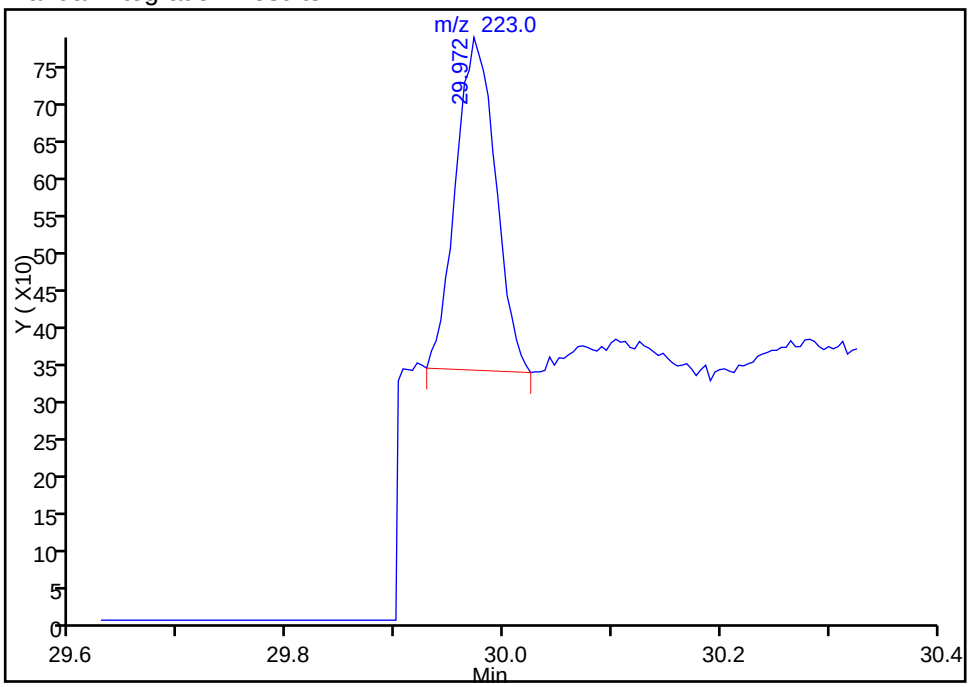
Processing Integration Results

RT: 29.97
Area: 1902
Amount: 0.044768
Amount Units: ppb v/v



Manual Integration Results

RT: 29.97
Area: 1145
Amount: 0.041615
Amount Units: ppb v/v



Reviewer: shardaa, 26-Mar-2015 13:27:16
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\SACCHROM\ChromData\ATMS5\20150326-20538.b\MS5032513.D
Lims ID: IC 0.1ppbv
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 25-Mar-2015 22:49:30 ALS Bottle#: 1 Worklist Smp#: 6
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: IC 0.1ppbv
Operator ID: AJS Instrument ID: ATMS5
Sublist: chrom-TO15 SIM*sub2

Method: \\SACCHROM\ChromData\ATMS5\20150326-20538.b\TO15 SIM.m
Limit Group: MSA - TO-15_SIM_ICAL
Last Update: 26-Mar-2015 14:41:14 Calib Date: 26-Mar-2015 03:17:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\SACCHROM\ChromData\ATMS5\20150326-20538.b\MS5032518.D

Column 1 : Det: MS SCAN
Process Host: XAWRK051

First Level Reviewer: shardaa Date: 26-Mar-2015 13:23:45

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	130	11.900	11.900	0.000	91	40929	2.00	2.00	
* 2 1,4-Difluorobenzene	114	13.998	13.998	0.000	100	191045	2.00	2.00	
* 3 Chlorobenzene-d5 (IS)	117	20.559	20.559	0.000	100	155675	2.00	2.00	
$ 4 1,2-Dichloroethane-d4 (Sur	65	13.067	13.067	0.000	78	45329	2.00	2.01	
$ 5 Toluene-d8 (Surr)	100	17.325	17.325	0.000	100	129808	2.00	1.97	
$ 6 4-Bromofluorobenzene (Surr	95	23.094	23.094	0.000	100	86083	2.00	1.97	
7 Propene	41	4.126	4.126	0.000	99	2211	0.1000	0.1140	
8 Dichlorodifluoromethane	85	4.190	4.190	0.000	100	6582	0.1000	0.1067	
9 1,2-Dichloro-1,1,2,2-tetra	135	4.417	4.417	0.000	99	5740	0.1000	0.1059	
10 Chloromethane	50	4.590	4.590	0.000	100	1857	0.1000	0.1135	M
11 Vinyl chloride	62	4.835	4.835	0.000	81	2374	0.1000	0.1105	
12 Butadiene	39	4.908	4.908	0.000	99	1568	0.1000	0.1145	
13 Bromomethane	94	5.657	5.657	0.000	100	2770	0.1000	0.1141	
14 Chloroethane	64	5.840	5.840	0.000	100	1716	0.1000	0.1100	
15 Trichlorofluoromethane	101	6.452	6.452	0.000	100	6273	0.1000	0.1066	
16 Isopropyl alcohol	45	7.094	7.094	0.000	100	6519	0.1000	0.1150	
17 Acrolein	56	7.148	7.148	0.000	95	1191	0.1000	0.1245	
18 Acetone	43	7.321	7.321	0.000	99	5384	0.1000	0.1438	
19 1,1,2-Trichloro-1,2,2-trif	101	7.449	7.449	0.000	98	6033	0.1000	0.1065	
20 1,1-Dichloroethene	96	7.658	7.658	0.000	100	3128	0.1000	0.1045	
21 Acetonitrile	41	8.366	8.366	0.000	99	3145	0.1000	0.1063	
22 Methylene Chloride	49	8.535	8.535	0.000	98	3868	0.1000	0.1369	
23 Acrylonitrile	53	8.685	8.685	0.000	100	2439	0.1000	0.1142	
24 Methyl tert-butyl ether	73	9.150	9.150	0.000	100	9738	0.1000	0.1054	
25 trans-1,2-Dichloroethene	96	9.259	9.259	0.000	99	3116	0.1000	0.1012	
26 Hexane	41	9.673	9.673	0.000	100	3220	0.1000	0.1103	
27 1,1-Dichloroethane	63	10.069	10.069	0.000	99	5496	0.1000	0.1084	
28 Vinyl acetate	43	10.115	10.115	0.000	70	6260	0.1000	0.1123	
29 2-Butanone (MEK)	72	10.961	10.961	0.000	100	1931	0.1000	0.1063	
30 cis-1,2-Dichloroethene	96	11.300	11.300	0.000	92	3268	0.1000	0.1037	M
31 Ethyl acetate	43	11.377	11.377	0.000	100	6208	0.1000	0.1084	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
32 Chloroform	83	11.649	11.649	0.000	100	5517	0.1000	0.1062	
33 Tetrahydrofuran	42	12.161	12.161	0.000	100	3549	0.1000	0.1062	
34 1,1,1-Trichloroethane	97	12.566	12.566	0.000	100	5549	0.1000	0.1037	
35 Cyclohexane	84	12.754	12.754	0.000	98	5349	0.1000	0.1033	
36 Carbon tetrachloride	117	13.131	13.131	0.000	99	4937	0.1000	0.1050	
37 1,2-Dichloroethane	62	13.249	13.249	0.000	91	3477	0.1000	0.1020	
38 Benzene	78	13.385	13.385	0.000	100	11635	0.1000	0.1008	
39 n-Heptane	43	13.567	13.567	0.000	100	5682	0.1000	0.1047	
40 Trichloroethene	130	14.743	14.743	0.000	100	4413	0.1000	0.0980	
41 1,2-Dichloropropane	76	15.037	15.037	0.000	100	1380	0.1000	0.0993	
42 Dichlorobromomethane	85	15.486	15.486	0.000	100	3895	0.1000	0.1014	
43 1,4-Dioxane	88	15.563	15.563	0.000	98	2768	0.1000	0.0982	
44 4-Methyl-2-pentanone (MIBK	43	16.379	16.379	0.000	99	7287	0.1000	0.1076	
45 cis-1,3-Dichloropropene	75	16.696	16.696	0.000	99	5244	0.1000	0.0985	M
46 Toluene	91	17.498	17.498	0.000	100	14104	0.1000	0.0975	
47 trans-1,3-Dichloropropene	75	17.770	17.770	0.000	99	5294	0.1000	0.1023	
48 1,1,2-Trichloroethane	97	18.116	18.116	0.000	99	3907	0.1000	0.1002	
49 2-Hexanone	58	18.271	18.271	0.000	99	3843	0.1000	0.1042	
50 Tetrachloroethene	166	18.991	18.991	0.000	100	5063	0.1000	0.0974	
51 Chlorodibromomethane	129	19.200	19.200	0.000	100	6473	0.1000	0.0995	
52 Ethylene Dibromide	107	19.642	19.642	0.000	100	6018	0.1000	0.1002	
53 Chlorobenzene	112	20.643	20.643	0.000	95	11024	0.1000	0.1005	
54 Ethylbenzene	91	20.824	20.824	0.000	100	17580	0.1000	0.0986	
55 m-Xylene & p-Xylene	91	21.006	21.006	0.000	100	26300	0.2000	0.1947	
56 o-Xylene	91	21.895	21.895	0.000	97	13761	0.1000	0.0975	
57 Styrene	104	21.926	21.926	0.000	99	11429	0.1000	0.0979	
58 Bromoform	173	22.465	22.465	0.000	100	3831	0.1000	0.0939	M
59 1,1,2,2-Tetrachloroethane	83	22.867	22.867	0.000	100	9228	0.1000	0.1015	
60 1,2,3-Trichloropropane	110	23.170	23.170	0.000	89	2720	0.1000	0.0977	
61 4-Ethyltoluene	120	23.756	23.756	0.000	100	7220	0.1000	0.0951	
62 1,3,5-Trimethylbenzene	120	23.850	23.850	0.000	90	10215	0.1000	0.0956	
63 1,2,4-Trimethylbenzene	120	24.637	24.637	0.000	100	9234	0.1000	0.0969	
64 1,3-Dichlorobenzene	146	25.382	25.382	0.000	100	10957	0.1000	0.0966	
65 1,4-Dichlorobenzene	146	25.583	25.583	0.000	100	9944	0.1000	0.0929	
66 Benzyl chloride	91	25.749	25.749	0.000	100	13759	0.0800	0.0772	
67 1,2-Dichlorobenzene	146	26.299	26.299	0.000	100	10408	0.1000	0.0944	
68 1,2,4-Trichlorobenzene	180	29.603	29.603	0.000	100	6702	0.1000	0.0958	
69 Hexachlorobutadiene	225	29.976	29.976	0.000	100	4699	0.1000	0.0954	
70 Naphthalene	128	30.042	30.042	0.000	100	21889	0.1000	0.1005	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

VACORPIC0.20_00014	Amount Added: 250.00	Units: mL	
VASUISIM_00160	Amount Added: 50.00	Units: mL	Run Reagent

Report Date: 26-Mar-2015 14:41:14 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Sacramento

Data File: \\SACCHROM\ChromData\ATMS5\20150326-20538.b\MS5032513.D

Injection Date: 25-Mar-2015 22:49:30 Instrument ID: ATMS5

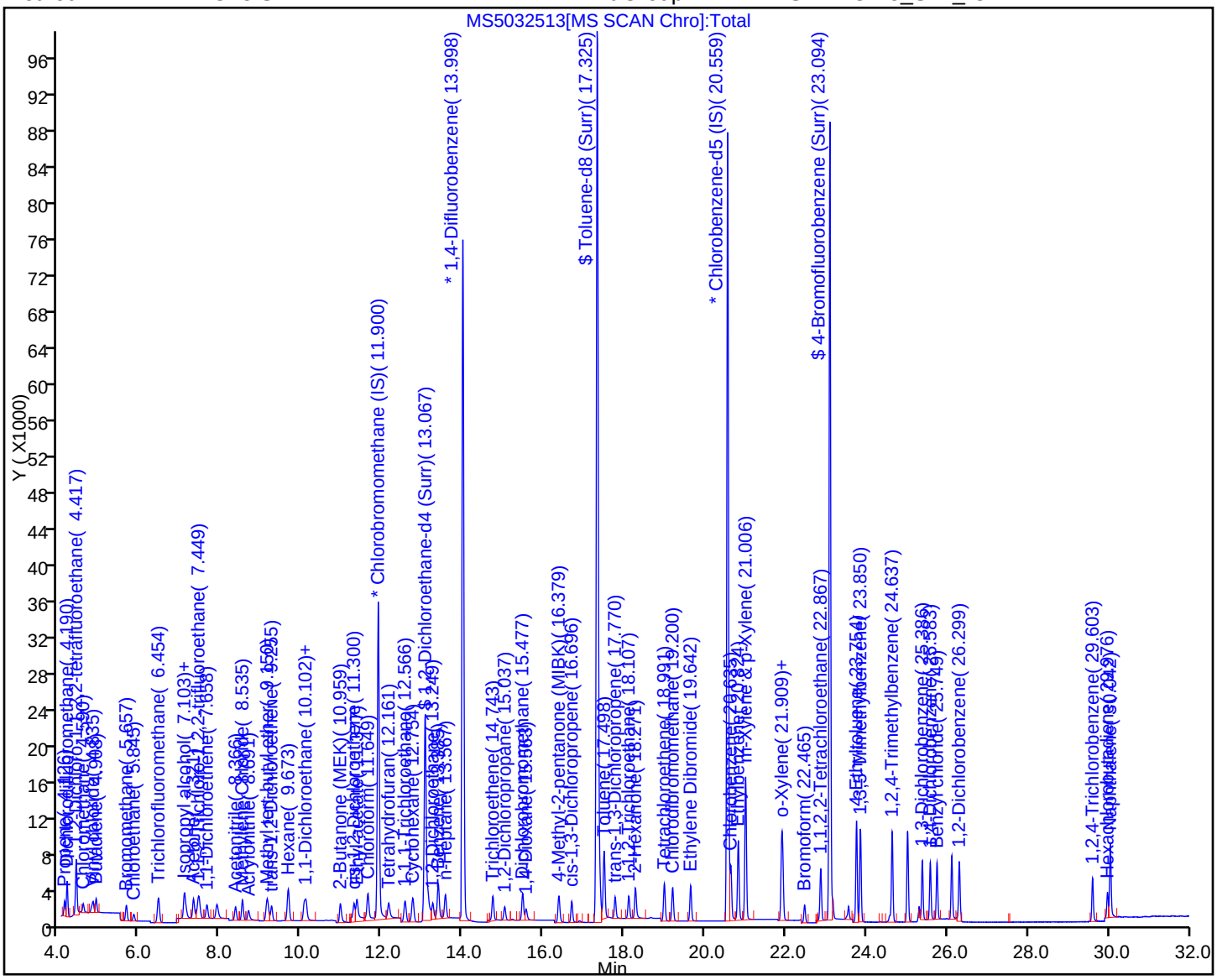
Lims ID: IC 0.1ppbv

Client ID:

Operator ID: AJS ALS Bottle#: 1 Worklist Smp#: 6

Purge Vol: 500.000 mL Dil. Factor: 1.0000

Method: TO15 SIM Limit Group: MSA - TO-15_SIM_ICAL



Manual Integration/User Assign Peak Report

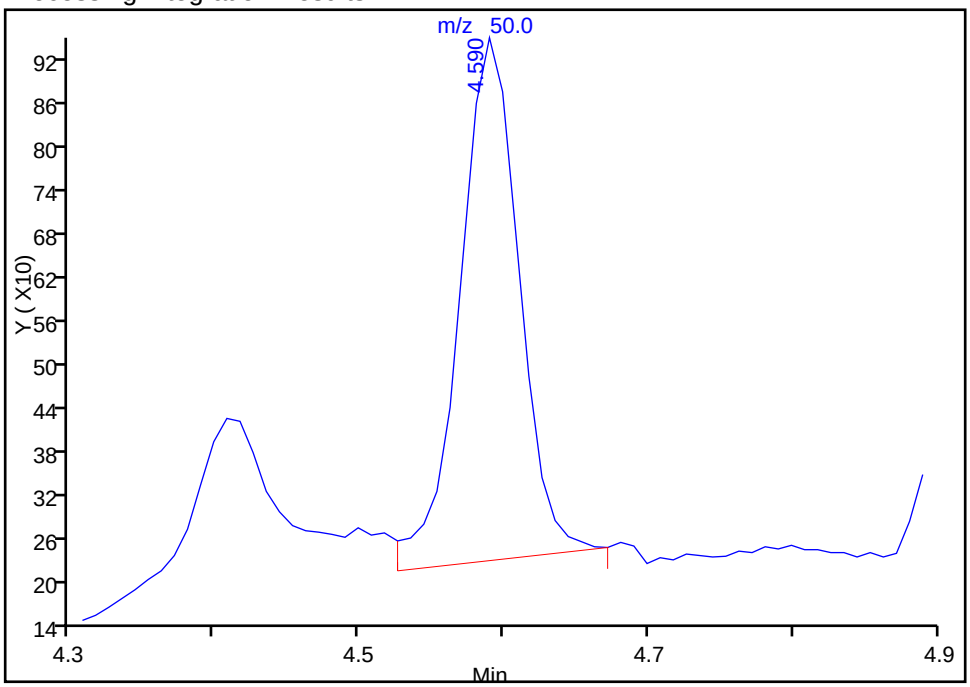
TestAmerica Sacramento

Data File:	\\SACCHROM\ChromData\ATMS5\20150326-20538.b\MS5032513.D				
Injection Date:	25-Mar-2015 22:49:30	Instrument ID:	ATMS5		
Lims ID:	IC 0.1ppbv				
Client ID:					
Operator ID:	AJS	ALS Bottle#:	1	Worklist Smp#:	6
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	TO15 SIM	Limit Group:	MSA - TO-15_SIM_ICAL		
Column:		Detector	MS SCAN		

10 Chloromethane, CAS: 74-87-3

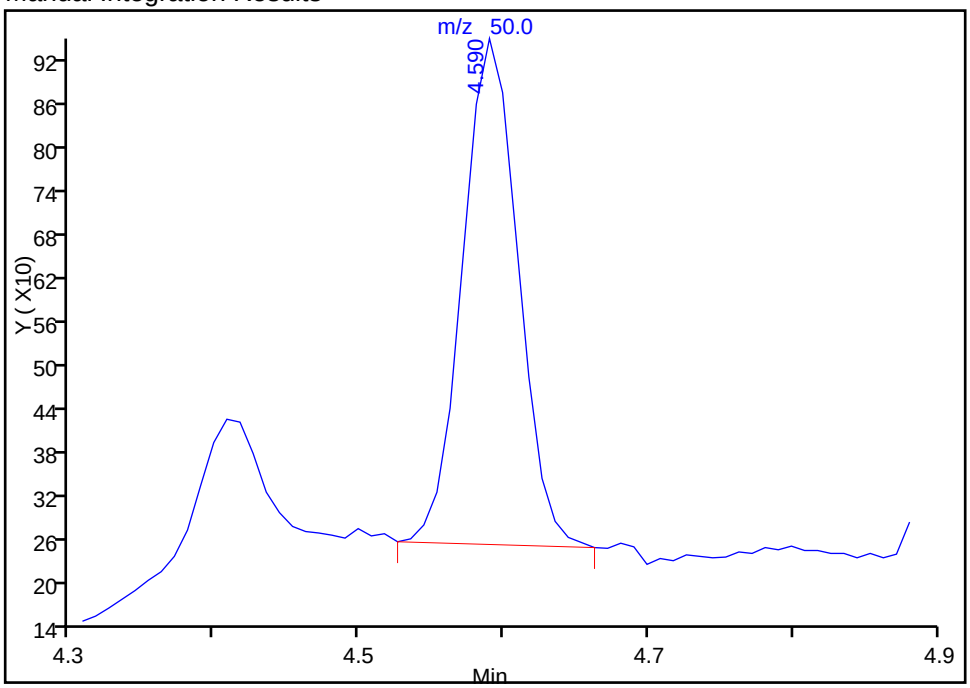
Processing Integration Results

RT: 4.59
Area: 2049
Amount: 0.138065
Amount Units: ppb v/v



Manual Integration Results

RT: 4.59
Area: 1857
Amount: 0.113465
Amount Units: ppb v/v



Reviewer: shardaa, 26-Mar-2015 13:23:45
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

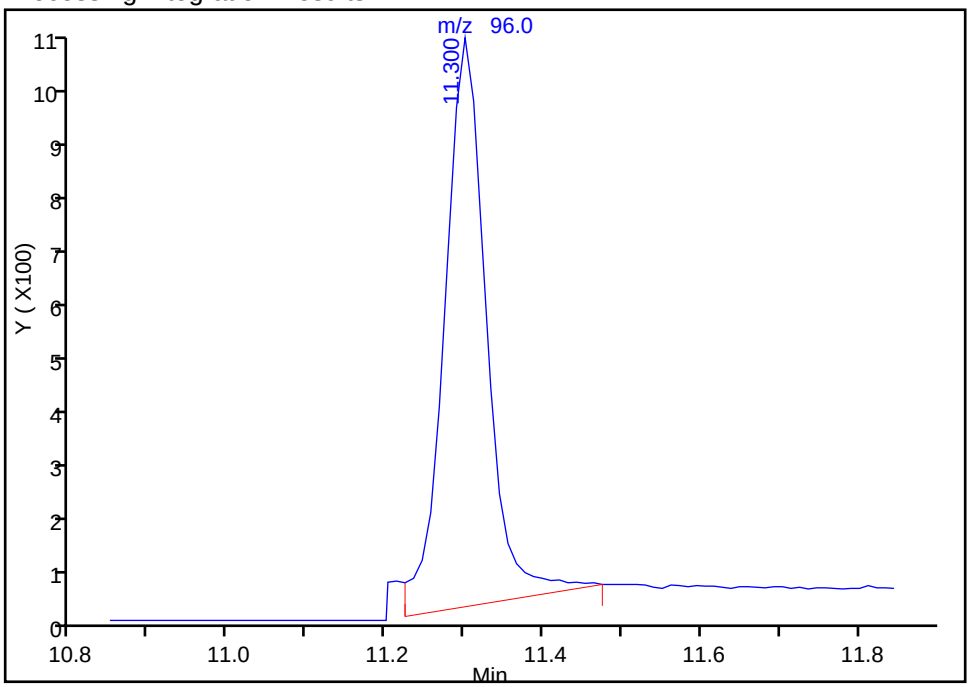
TestAmerica Sacramento

Data File:	\\SACCHROM\ChromData\ATMS5\20150326-20538.b\MS5032513.D				
Injection Date:	25-Mar-2015 22:49:30	Instrument ID:	ATMS5		
Lims ID:	IC 0.1ppbv				
Client ID:					
Operator ID:	AJS	ALS Bottle#:	1	Worklist Smp#:	6
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	TO15 SIM	Limit Group:	MSA - TO-15_SIM_ICAL		
Column:		Detector	MS SCAN		

30 cis-1,2-Dichloroethene, CAS: 156-59-2

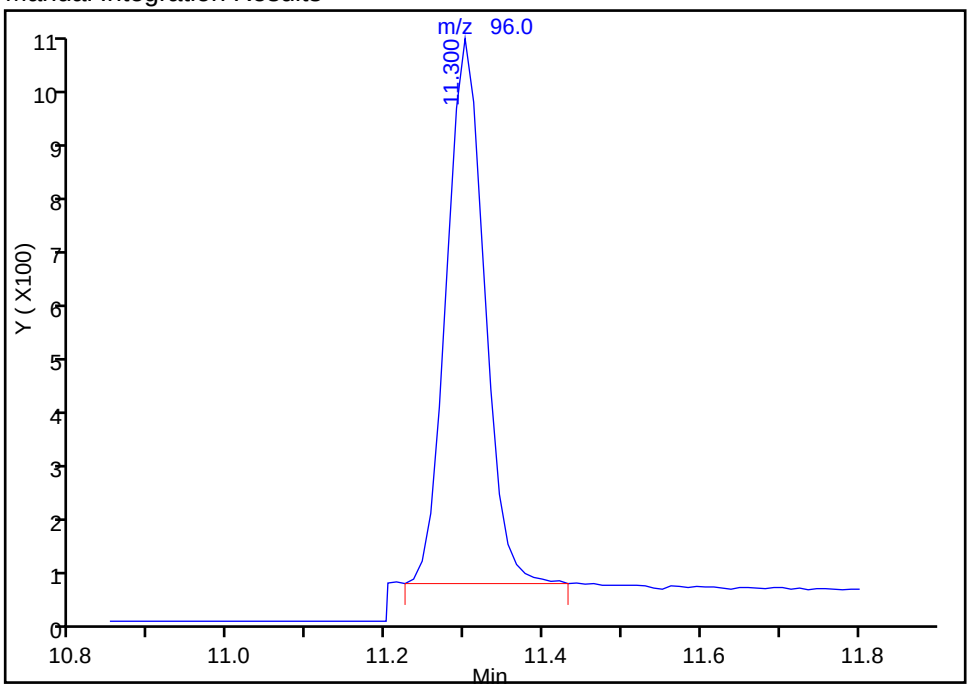
Processing Integration Results

RT: 11.30
Area: 3760
Amount: 0.109457
Amount Units: ppb v/v



Manual Integration Results

RT: 11.30
Area: 3268
Amount: 0.103657
Amount Units: ppb v/v



Reviewer: shardaa, 26-Mar-2015 13:23:45
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

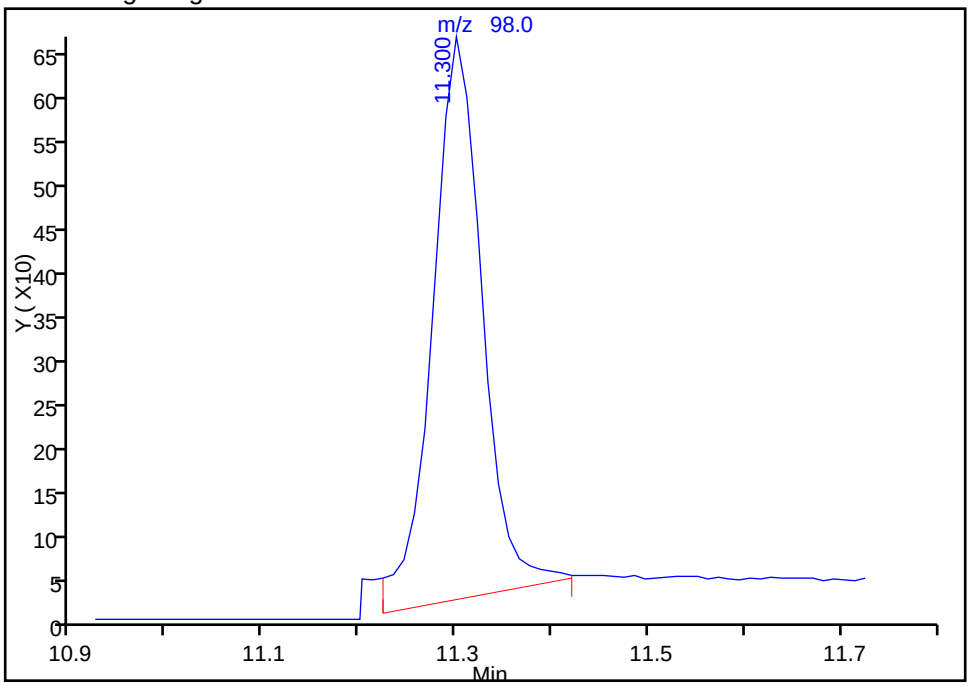
TestAmerica Sacramento

Data File:	\\SACCHROM\ChromData\ATMS5\20150326-20538.b\MS5032513.D				
Injection Date:	25-Mar-2015 22:49:30	Instrument ID:	ATMS5		
Lims ID:	IC 0.1ppbv				
Client ID:					
Operator ID:	AJS	ALS Bottle#:	1	Worklist Smp#:	6
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	TO15 SIM	Limit Group:	MSA - TO-15_SIM_ICAL		
Column:		Detector	MS SCAN		

30 cis-1,2-Dichloroethene, CAS: 156-59-2

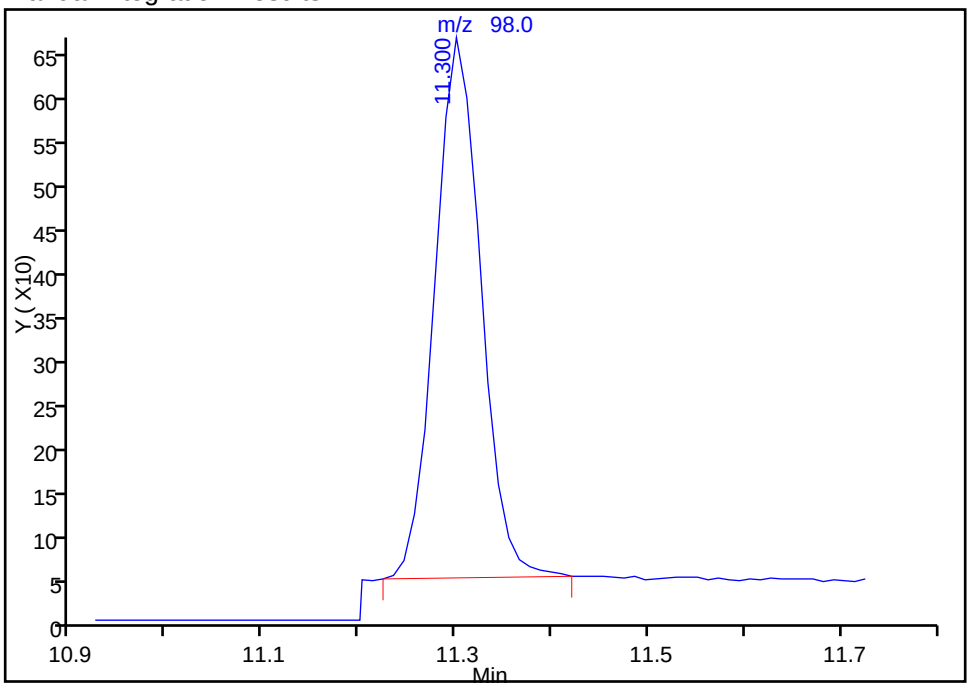
Processing Integration Results

RT: 11.30
Area: 2311
Amount: 0.109457
Amount Units: ppb v/v



Manual Integration Results

RT: 11.30
Area: 2044
Amount: 0.103657
Amount Units: ppb v/v



Reviewer: shardaa, 26-Mar-2015 13:23:45
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

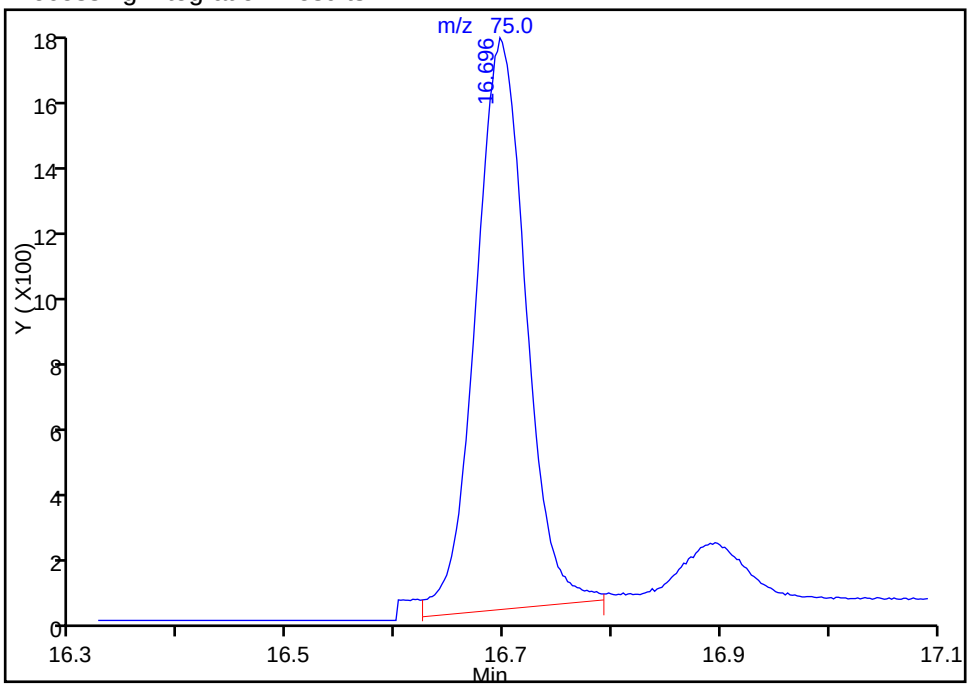
TestAmerica Sacramento

Data File:	\\SACCHROM\ChromData\ATMS5\20150326-20538.b\MS5032513.D				
Injection Date:	25-Mar-2015 22:49:30	Instrument ID:	ATMS5		
Lims ID:	IC 0.1ppbv				
Client ID:					
Operator ID:	AJS	ALS Bottle#:	1	Worklist Smp#:	6
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	TO15 SIM	Limit Group:	MSA - TO-15_SIM_ICAL		
Column:		Detector	MS SCAN		

45 cis-1,3-Dichloropropene, CAS: 10061-01-5

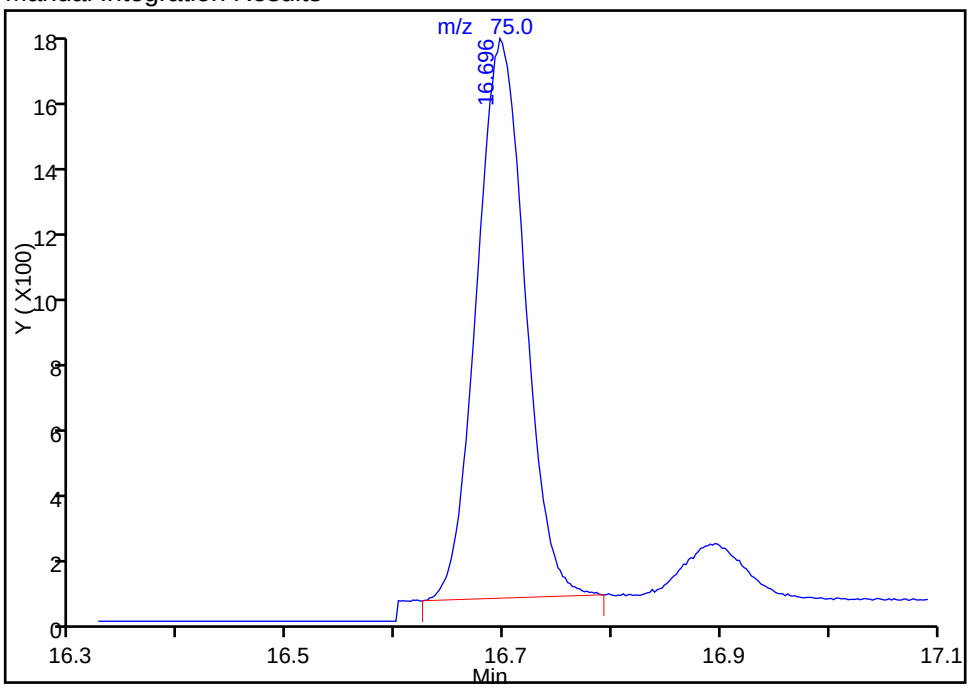
Processing Integration Results

RT: 16.70
Area: 5595
Amount: 0.100176
Amount Units: ppb v/v



Manual Integration Results

RT: 16.70
Area: 5244
Amount: 0.098462
Amount Units: ppb v/v



Reviewer: shardaa, 26-Mar-2015 13:23:45
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

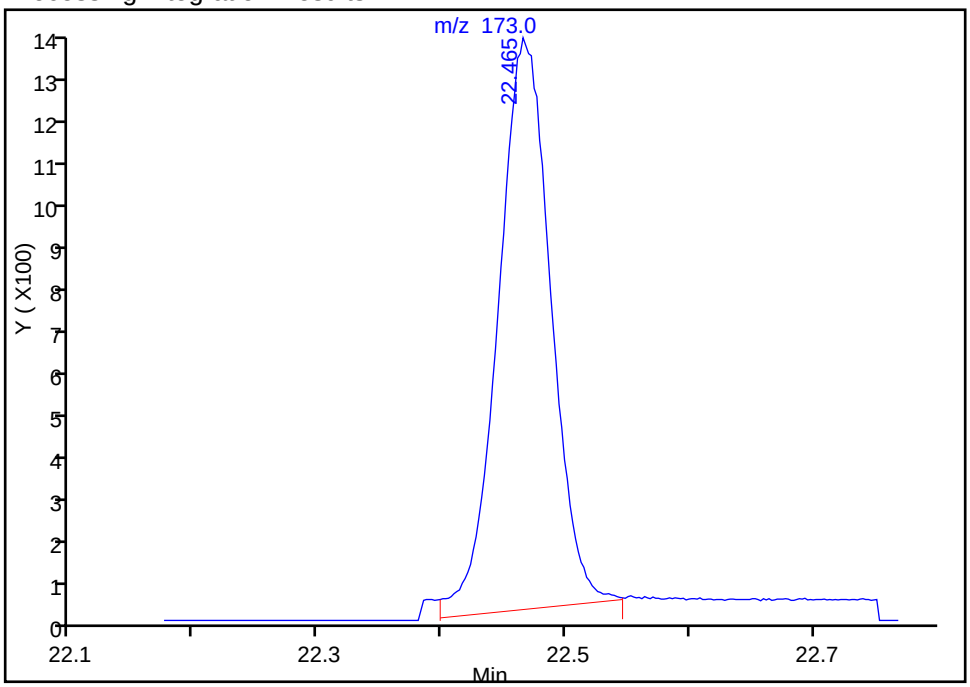
TestAmerica Sacramento

Data File:	\\SACCHROM\ChromData\ATMS5\20150326-20538.b\MS5032513.D				
Injection Date:	25-Mar-2015 22:49:30	Instrument ID:	ATMS5		
Lims ID:	IC 0.1ppbv				
Client ID:					
Operator ID:	AJS	ALS Bottle#:	1	Worklist Smp#:	6
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	TO15 SIM	Limit Group:	MSA - TO-15_SIM_ICAL		
Column:		Detector	MS SCAN		

58 Bromoform, CAS: 75-25-2

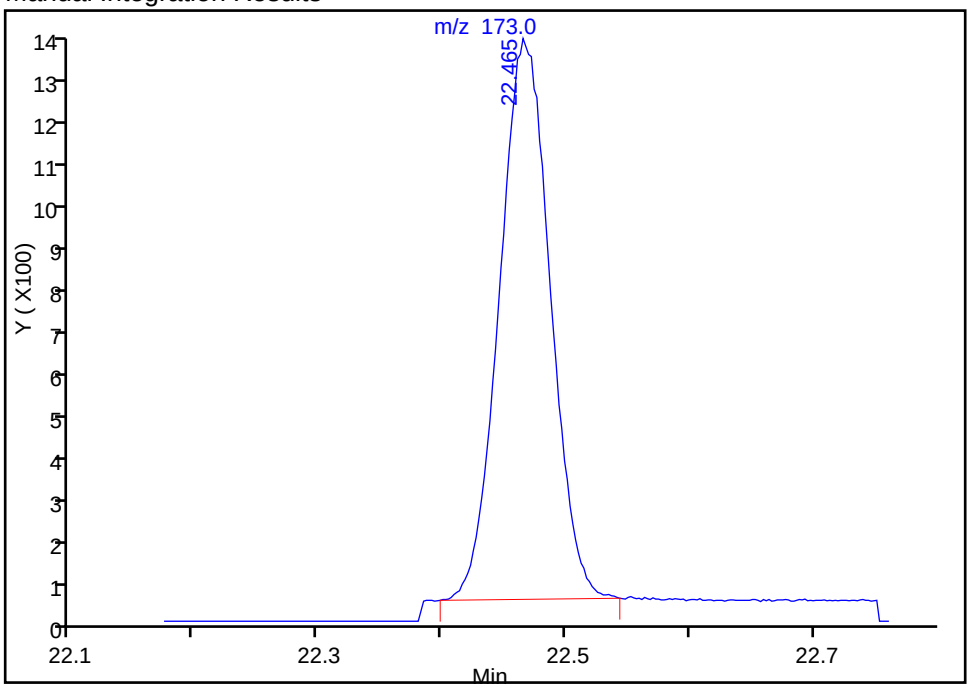
Processing Integration Results

RT: 22.47
Area: 4051
Amount: 0.097377
Amount Units: ppb v/v



Manual Integration Results

RT: 22.47
Area: 3831
Amount: 0.093900
Amount Units: ppb v/v



Reviewer: shardaa, 26-Mar-2015 13:23:45
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\SACCHROM\ChromData\ATMS5\20150326-20538.b\MS5032514.D
Lims ID: IC 0.2ppbv
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 25-Mar-2015 23:42:30 ALS Bottle#: 1 Worklist Smp#: 7
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: IC 0.2ppbv
Operator ID: AJS Instrument ID: ATMS5
Sublist: chrom-TO15 SIM*sub2

Method: \\SACCHROM\ChromData\ATMS5\20150326-20538.b\TO15 SIM.m
Limit Group: MSA - TO-15_SIM_ICAL
Last Update: 26-Mar-2015 14:41:15 Calib Date: 26-Mar-2015 03:17:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\SACCHROM\ChromData\ATMS5\20150326-20538.b\MS5032518.D

Column 1 : Det: MS SCAN
Process Host: XAWRK051

First Level Reviewer: shardaa Date: 26-Mar-2015 13:21:52

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	130	11.900	11.900	0.000	94	41777	2.00	2.00	
* 2 1,4-Difluorobenzene	114	13.997	13.997	0.000	100	193453	2.00	2.00	
* 3 Chlorobenzene-d5 (IS)	117	20.558	20.558	0.000	99	160050	2.00	2.00	
$ 4 1,2-Dichloroethane-d4 (Sur	65	13.060	13.060	0.000	80	46155	2.00	2.02	
$ 5 Toluene-d8 (Surr)	100	17.324	17.324	0.000	100	132668	2.00	1.99	
$ 6 4-Bromofluorobenzene (Surr	95	23.093	23.093	0.000	100	87152	2.00	1.94	
7 Propene	41	4.126	4.126	0.000	99	4217	0.2000	0.2130	
8 Dichlorodifluoromethane	85	4.190	4.190	0.000	100	12837	0.2000	0.2038	
9 1,2-Dichloro-1,1,2,2-tetra	135	4.417	4.417	0.000	99	10809	0.2000	0.1953	
10 Chloromethane	50	4.590	4.590	0.000	100	3357	0.2000	0.2010	
11 Vinyl chloride	62	4.836	4.836	0.000	81	4405	0.2000	0.2009	
12 Butadiene	39	4.908	4.908	0.000	99	2702	0.2000	0.1933	
13 Bromomethane	94	5.657	5.657	0.000	99	4917	0.2000	0.1984	M
14 Chloroethane	64	5.841	5.841	0.000	100	3346	0.2000	0.2102	
15 Trichlorofluoromethane	101	6.450	6.450	0.000	100	12219	0.2000	0.2034	
16 Isopropyl alcohol	45	7.085	7.085	0.000	100	12316	0.2000	0.2129	
17 Acrolein	56	7.139	7.139	0.000	100	2216	0.2000	0.2269	
18 Acetone	43	7.312	7.312	0.000	99	9755	0.2000	0.2553	
19 1,1,2-Trichloro-1,2,2-trif	101	7.449	7.449	0.000	99	11962	0.2000	0.2070	
20 1,1-Dichloroethene	96	7.649	7.649	0.000	100	6266	0.2000	0.2052	
21 Acetonitrile	41	8.360	8.360	0.000	100	6485	0.2000	0.2148	
22 Methylene Chloride	49	8.535	8.535	0.000	99	7295	0.2000	0.2529	
23 Acrylonitrile	53	8.685	8.685	0.000	100	4514	0.2000	0.2071	
24 Methyl tert-butyl ether	73	9.139	9.139	0.000	100	18976	0.2000	0.2013	
25 trans-1,2-Dichloroethene	96	9.253	9.253	0.000	100	6428	0.2000	0.2046	
26 Hexane	41	9.664	9.664	0.000	99	6345	0.2000	0.2130	
27 1,1-Dichloroethane	63	10.067	10.067	0.000	100	10974	0.2000	0.2120	
28 Vinyl acetate	43	10.106	10.106	0.000	95	12103	0.2000	0.2127	
29 2-Butanone (MEK)	72	10.954	10.954	0.000	100	3871	0.2000	0.2088	
30 cis-1,2-Dichloroethene	96	11.301	11.301	0.000	96	6474	0.2000	0.2012	M
31 Ethyl acetate	43	11.366	11.366	0.000	100	12224	0.2000	0.2090	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
32 Chloroform	83	11.638	11.638	0.000	100	10927	0.2000	0.2060	
33 Tetrahydrofuran	42	12.150	12.150	0.000	100	7021	0.2000	0.2058	
34 1,1,1-Trichloroethane	97	12.565	12.565	0.000	100	11019	0.2000	0.2017	
35 Cyclohexane	84	12.752	12.752	0.000	99	10856	0.2000	0.2054	
36 Carbon tetrachloride	117	13.124	13.124	0.000	100	9913	0.2000	0.2083	
37 1,2-Dichloroethane	62	13.251	13.251	0.000	100	6731	0.2000	0.1950	
38 Benzene	78	13.388	13.388	0.000	100	22676	0.2000	0.1940	
39 n-Heptane	43	13.560	13.560	0.000	100	11132	0.2000	0.2026	
40 Trichloroethene	130	14.742	14.742	0.000	100	8708	0.2000	0.1909	
41 1,2-Dichloropropane	76	15.036	15.036	0.000	100	2735	0.2000	0.1943	
42 Dichlorobromomethane	85	15.476	15.476	0.000	100	7506	0.2000	0.1929	
43 1,4-Dioxane	88	15.562	15.562	0.000	100	5494	0.2000	0.1924	
44 4-Methyl-2-pentanone (MIBK	43	16.369	16.369	0.000	100	14885	0.2000	0.2170	
45 cis-1,3-Dichloropropene	75	16.695	16.695	0.000	100	10225	0.2000	0.1896	
46 Toluene	91	17.497	17.497	0.000	100	27169	0.2000	0.1856	
47 trans-1,3-Dichloropropene	75	17.770	17.770	0.000	100	10233	0.2000	0.1923	
48 1,1,2-Trichloroethane	97	18.106	18.106	0.000	100	7582	0.2000	0.1891	
49 2-Hexanone	58	18.270	18.270	0.000	99	7744	0.2000	0.2043	
50 Tetrachloroethene	166	18.991	18.991	0.000	100	10000	0.2000	0.1872	
51 Chlorodibromomethane	129	19.199	19.199	0.000	100	12460	0.2000	0.1863	
52 Ethylene Dibromide	107	19.641	19.641	0.000	99	11653	0.2000	0.1888	
53 Chlorobenzene	112	20.642	20.642	0.000	97	21090	0.2000	0.1871	
54 Ethylbenzene	91	20.823	20.823	0.000	100	34182	0.2000	0.1864	
55 m-Xylene & p-Xylene	91	21.005	21.005	0.000	100	51378	0.4000	0.3700	
56 o-Xylene	91	21.895	21.895	0.000	97	26799	0.2000	0.1848	
57 Styrene	104	21.925	21.925	0.000	100	22237	0.2000	0.1853	
58 Bromoform	173	22.467	22.467	0.000	100	8025	0.2000	0.1913	
59 1,1,2,2-Tetrachloroethane	83	22.866	22.866	0.000	100	17762	0.2000	0.1900	
60 1,2,3-Trichloropropane	110	23.161	23.161	0.000	98	5288	0.2000	0.1848	
61 4-Ethyltoluene	120	23.754	23.754	0.000	100	14495	0.2000	0.1856	
62 1,3,5-Trimethylbenzene	120	23.852	23.852	0.000	89	20207	0.2000	0.1839	
63 1,2,4-Trimethylbenzene	120	24.637	24.637	0.000	100	18446	0.2000	0.1883	
64 1,3-Dichlorobenzene	146	25.384	25.384	0.000	100	21763	0.2000	0.1867	
65 1,4-Dichlorobenzene	146	25.581	25.581	0.000	100	20084	0.2000	0.1824	
66 Benzyl chloride	91	25.747	25.747	0.000	100	27685	0.1600	0.1511	
67 1,2-Dichlorobenzene	146	26.301	26.301	0.000	100	20961	0.2000	0.1850	
68 1,2,4-Trichlorobenzene	180	29.601	29.601	0.000	100	13753	0.2000	0.1912	
69 Hexachlorobutadiene	225	29.977	29.977	0.000	98	9099	0.2000	0.1797	M
70 Naphthalene	128	30.042	30.042	0.000	100	44040	0.2000	0.1967	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

VACORPIC0.20_00014	Amount Added: 500.00	Units: mL	
VASUISIM_00160	Amount Added: 50.00	Units: mL	Run Reagent

Report Date: 26-Mar-2015 14:41:15 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Sacramento

Data File: \\SACCHROM\ChromData\ATMS5\20150326-20538.b\MS5032514.D

Injection Date: 25-Mar-2015 23:42:30 Instrument ID: ATMS5

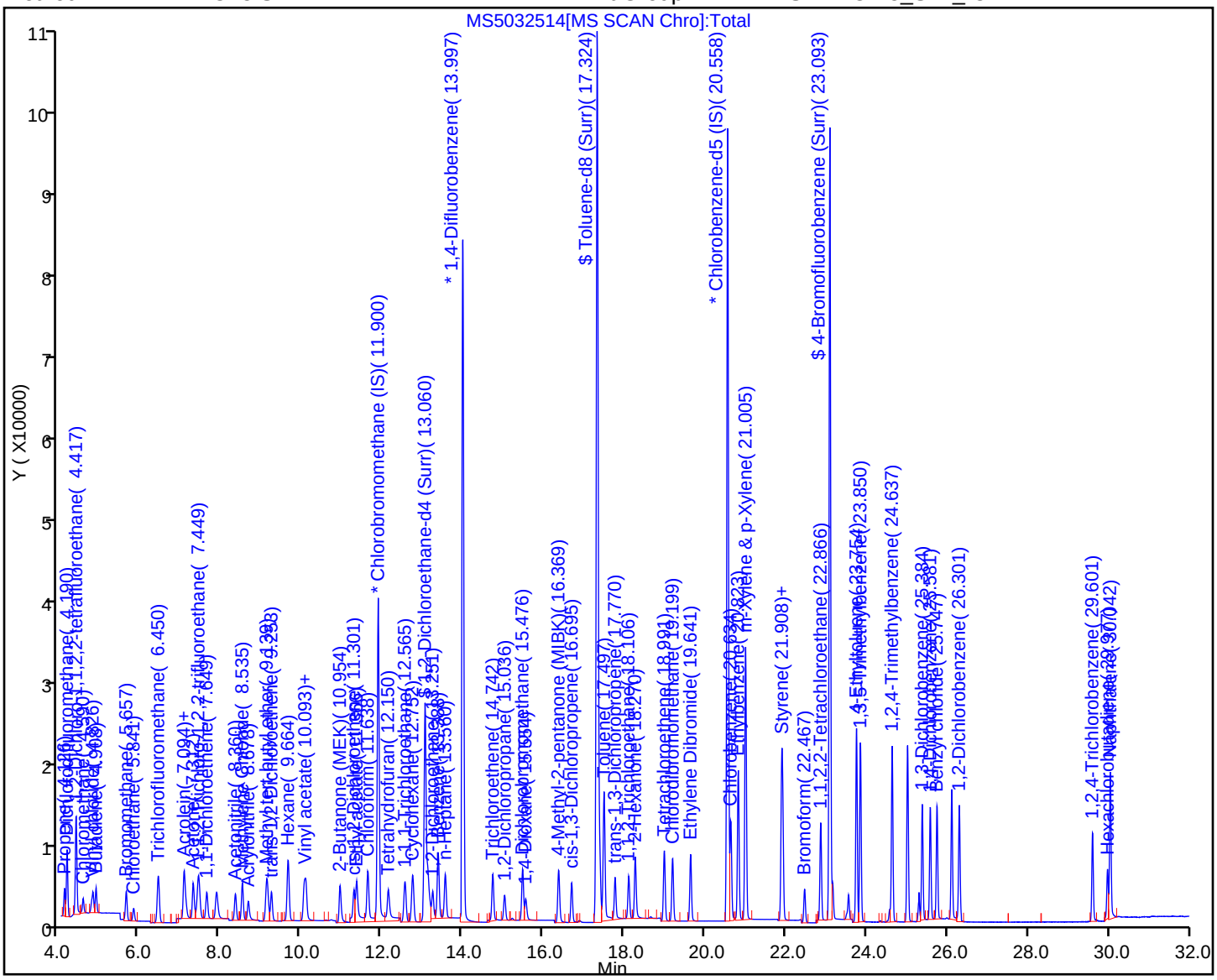
Lims ID: IC 0.2ppbv

Client ID:

Operator ID: AJS ALS Bottle#: 1 Worklist Smp#: 7

Purge Vol: 500.000 mL Dil. Factor: 1.0000

Method: TO15 SIM Limit Group: MSA - TO-15_SIM_ICAL



Manual Integration/User Assign Peak Report

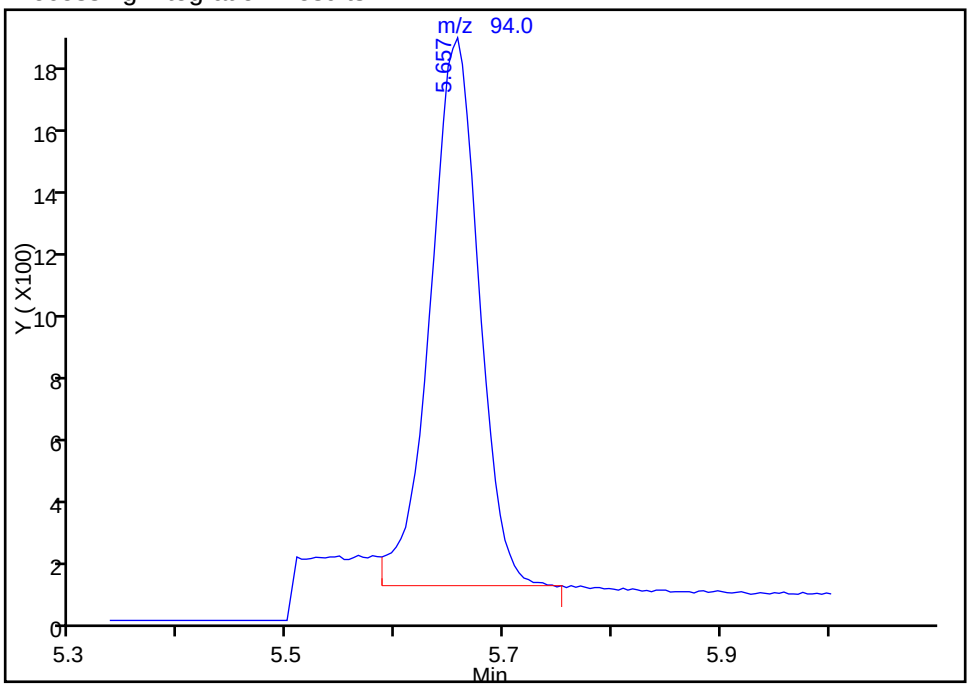
TestAmerica Sacramento

Data File:	\\SACCHROM\ChromData\ATMS5\20150326-20538.b\MS5032514.D				
Injection Date:	25-Mar-2015 23:42:30	Instrument ID:	ATMS5		
Lims ID:	IC 0.2ppbv				
Client ID:					
Operator ID:	AJS	ALS Bottle#:	1	Worklist Smp#:	7
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	TO15 SIM	Limit Group:	MSA - TO-15_SIM_ICAL		
Column:		Detector	MS SCAN		

13 Bromomethane, CAS: 74-83-9

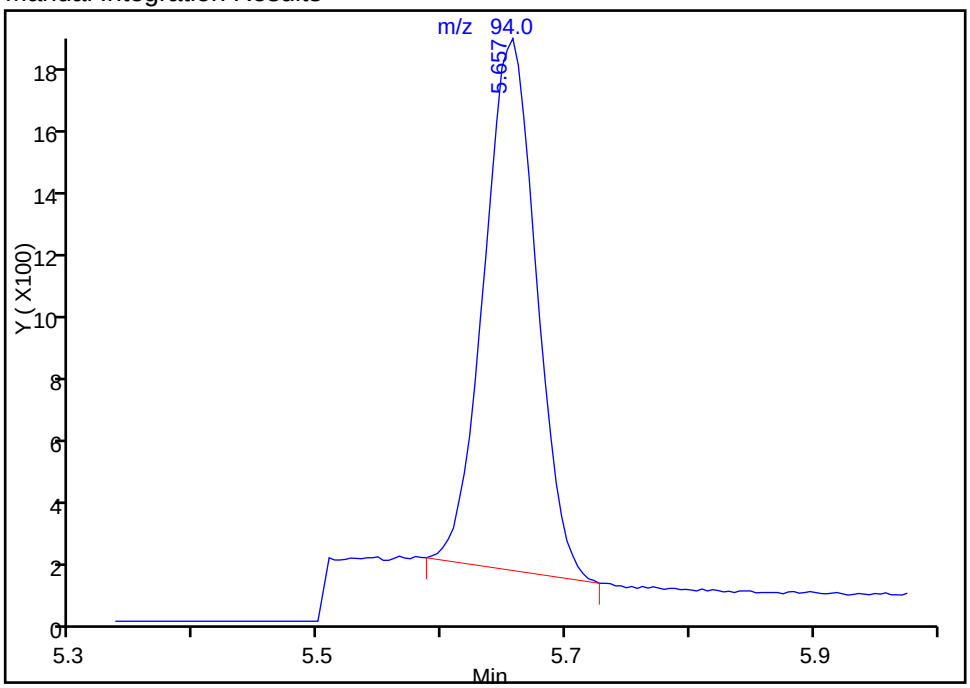
Processing Integration Results

RT: 5.66
Area: 5354
Amount: 0.185143
Amount Units: ppb v/v



Manual Integration Results

RT: 5.66
Area: 4917
Amount: 0.198398
Amount Units: ppb v/v



Reviewer: shardaa, 26-Mar-2015 13:21:46
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

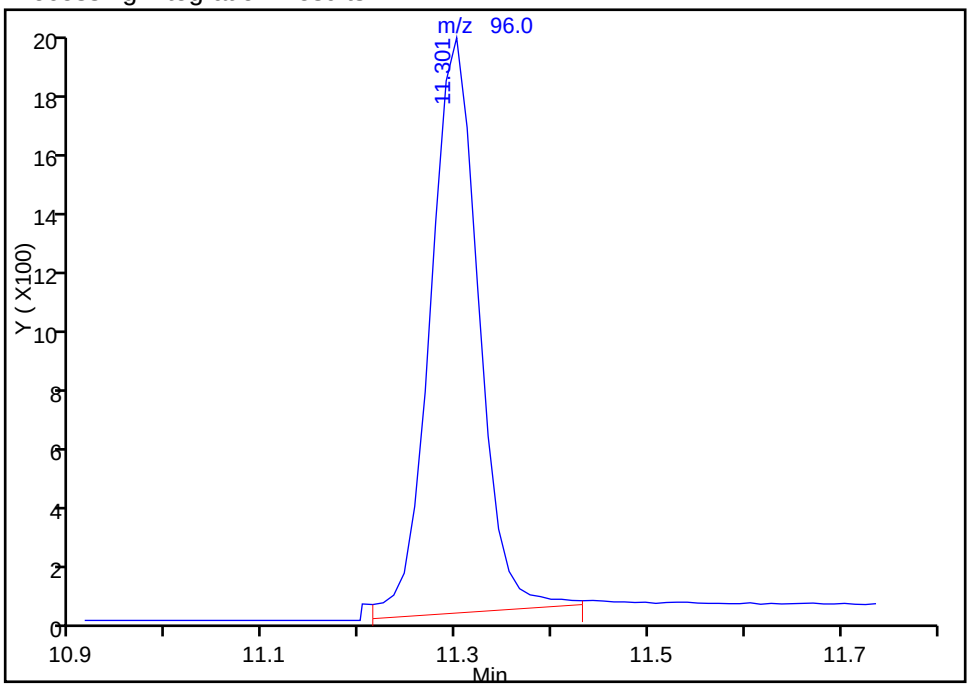
TestAmerica Sacramento

Data File:	\\SACCHROM\ChromData\ATMS5\20150326-20538.b\MS5032514.D				
Injection Date:	25-Mar-2015 23:42:30	Instrument ID:	ATMS5		
Lims ID:	IC 0.2ppbv				
Client ID:					
Operator ID:	AJS	ALS Bottle#:	1	Worklist Smp#:	7
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	TO15 SIM	Limit Group:	MSA - TO-15_SIM_ICAL		
Column:		Detector	MS SCAN		

30 cis-1,2-Dichloroethene, CAS: 156-59-2

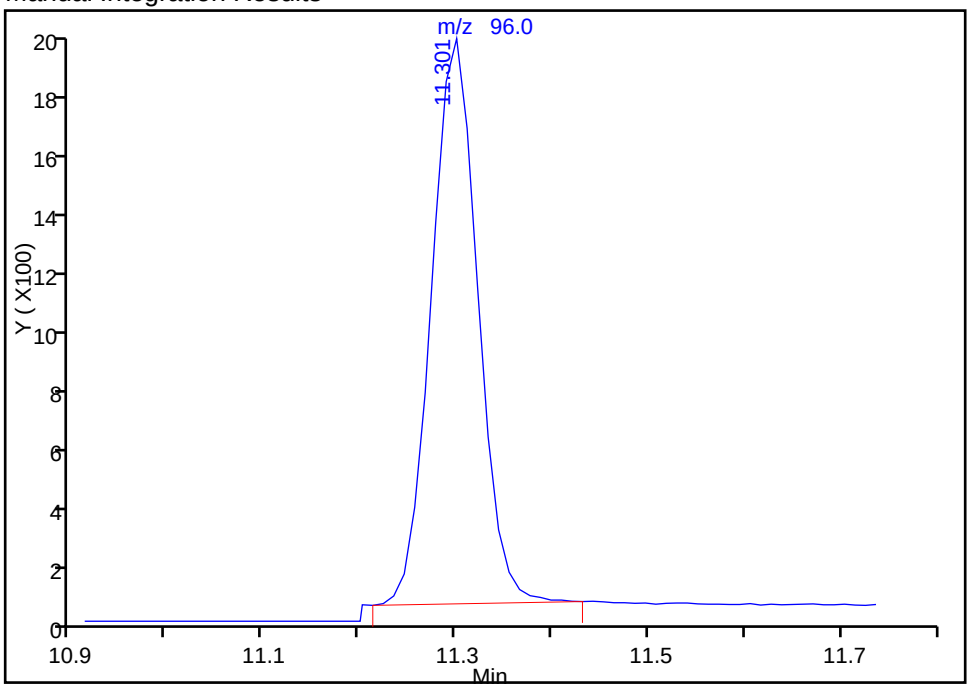
Processing Integration Results

RT: 11.30
Area: 6892
Amount: 0.195106
Amount Units: ppb v/v



Manual Integration Results

RT: 11.30
Area: 6474
Amount: 0.201180
Amount Units: ppb v/v



Reviewer: shardaa, 26-Mar-2015 13:21:46
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

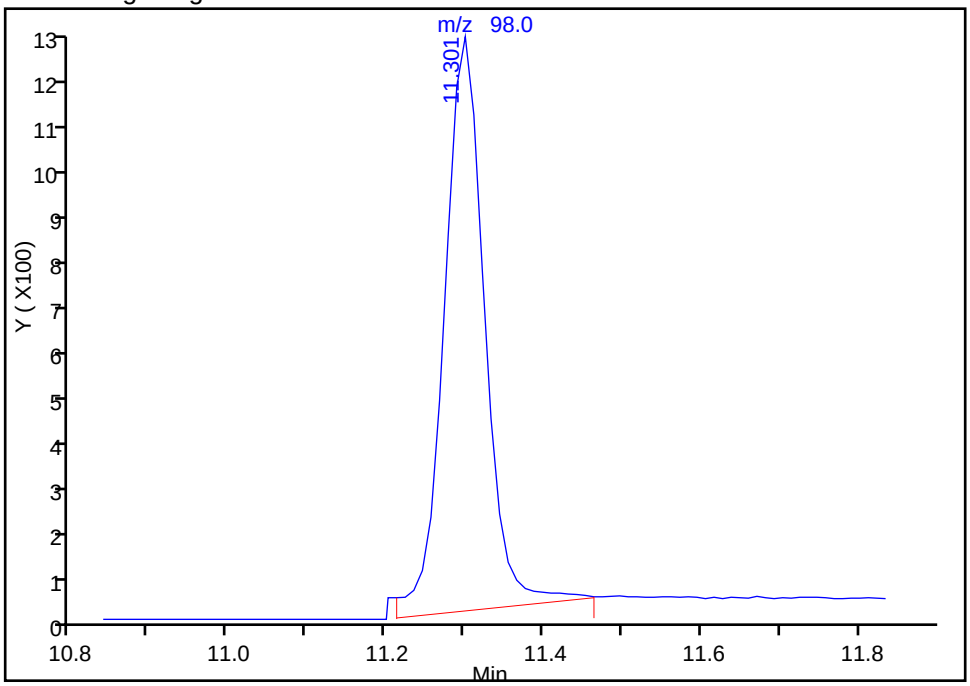
TestAmerica Sacramento

Data File:	\\SACCHROM\ChromData\ATMS5\20150326-20538.b\MS5032514.D				
Injection Date:	25-Mar-2015 23:42:30	Instrument ID:	ATMS5		
Lims ID:	IC 0.2ppbv				
Client ID:					
Operator ID:	AJS	ALS Bottle#:	1	Worklist Smp#:	7
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	TO15 SIM	Limit Group:	MSA - TO-15_SIM_ICAL		
Column:		Detector	MS SCAN		

30 cis-1,2-Dichloroethene, CAS: 156-59-2

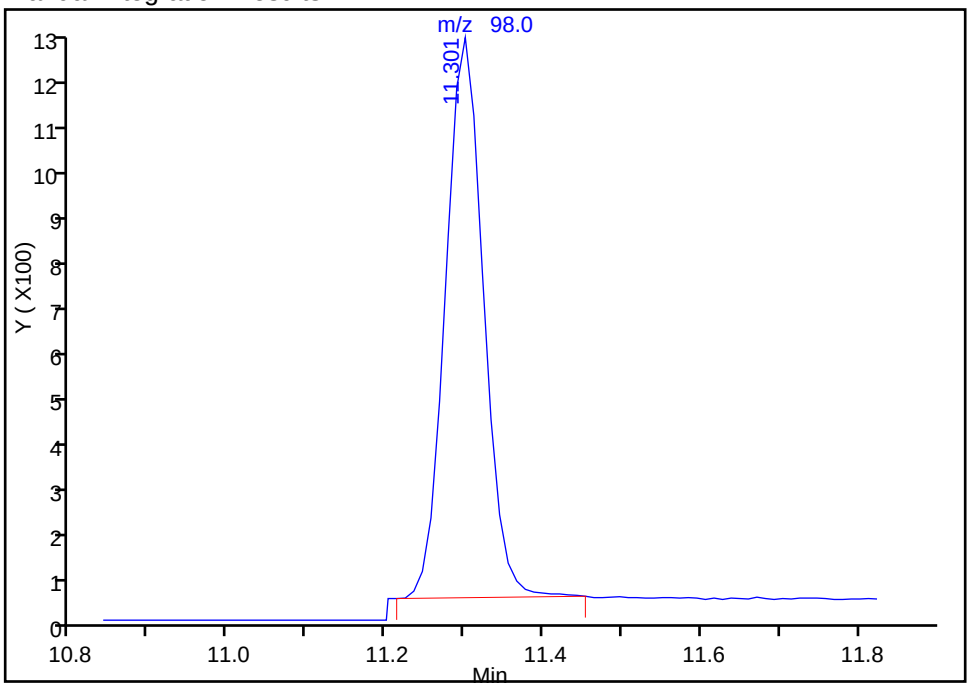
Processing Integration Results

RT: 11.30
Area: 4477
Amount: 0.195106
Amount Units: ppb v/v



Manual Integration Results

RT: 11.30
Area: 4092
Amount: 0.201180
Amount Units: ppb v/v



Reviewer: shardaa, 26-Mar-2015 13:21:46
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

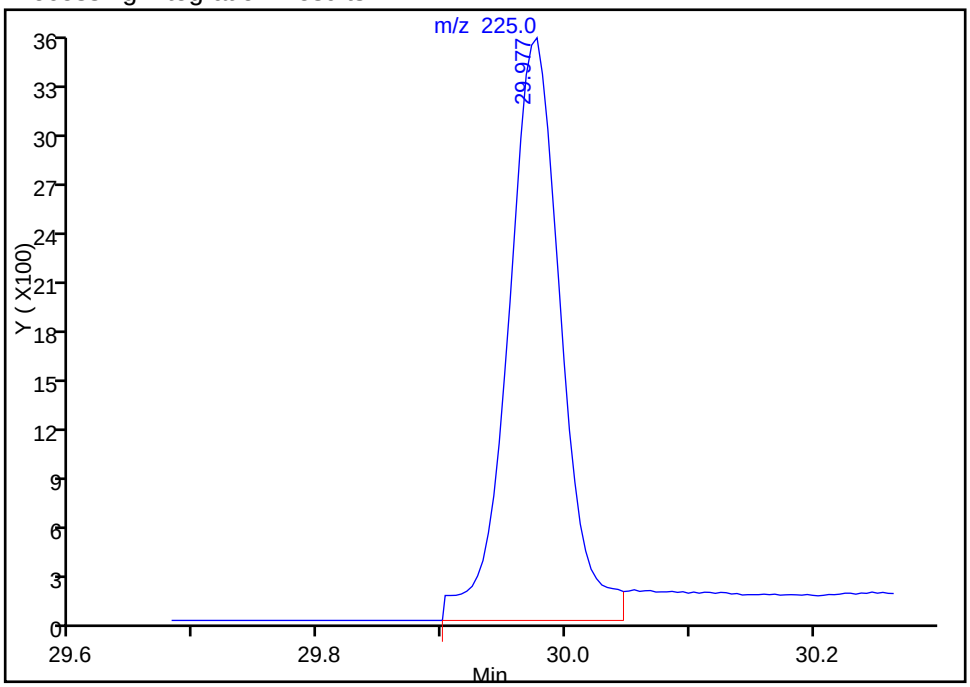
TestAmerica Sacramento

Data File:	\\SACCHROM\ChromData\ATMS5\20150326-20538.b\MS5032514.D				
Injection Date:	25-Mar-2015 23:42:30	Instrument ID:	ATMS5		
Lims ID:	IC 0.2ppbv				
Client ID:					
Operator ID:	AJS	ALS Bottle#:	1	Worklist Smp#:	7
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	TO15 SIM	Limit Group:	MSA - TO-15_SIM_ICAL		
Column:		Detector	MS SCAN		

69 Hexachlorobutadiene, CAS: 87-68-3

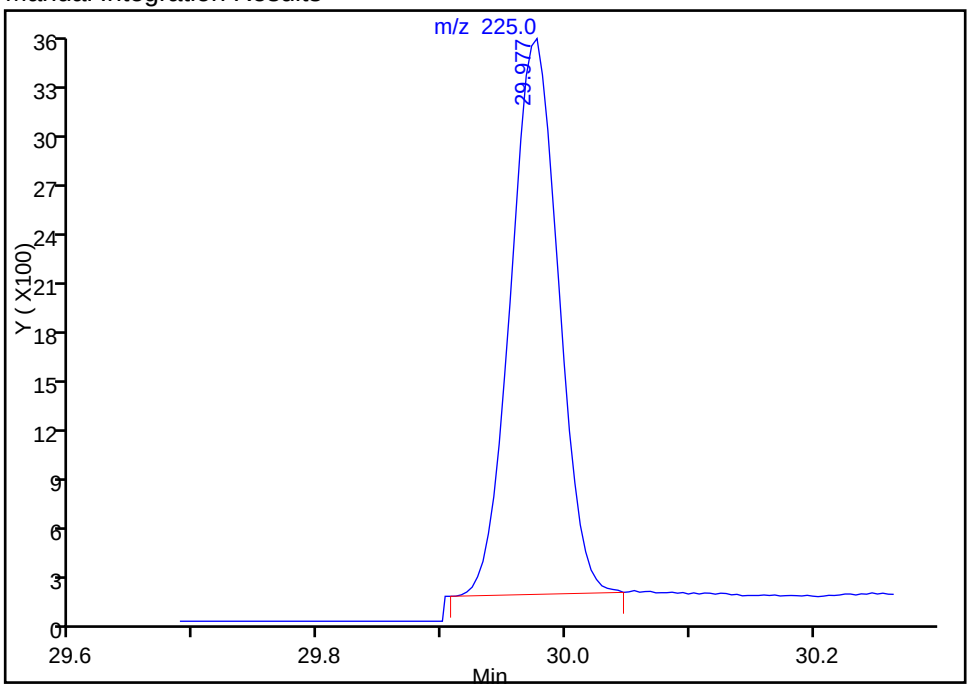
Processing Integration Results

RT: 29.98
Area: 10525
Amount: 0.176755
Amount Units: ppb v/v



Manual Integration Results

RT: 29.98
Area: 9099
Amount: 0.179728
Amount Units: ppb v/v



Reviewer: shardaa, 26-Mar-2015 13:21:46
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

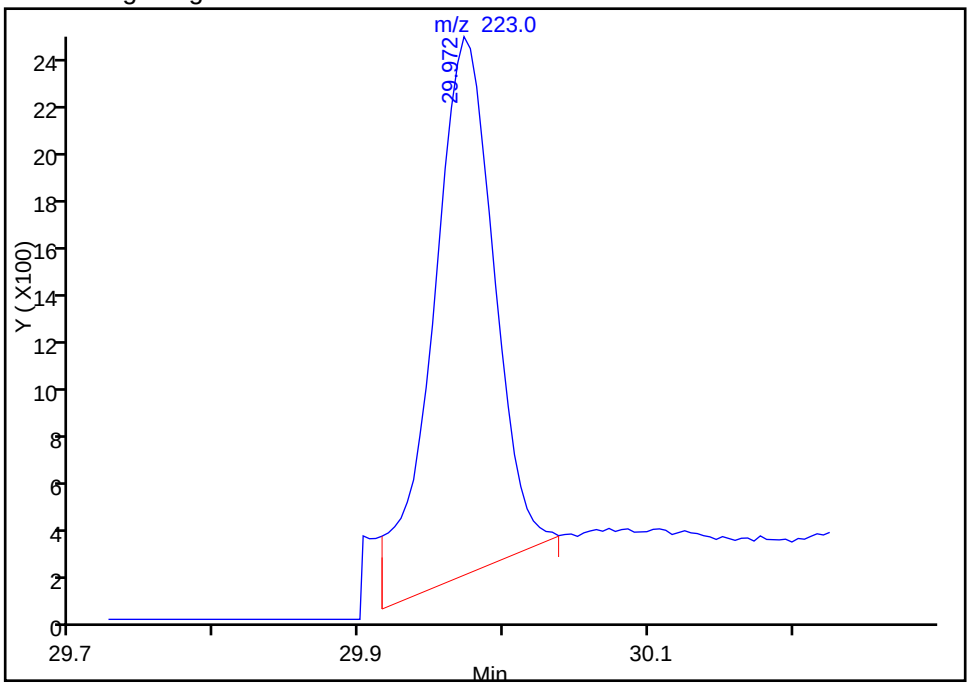
TestAmerica Sacramento

Data File:	\\SACCHROM\ChromData\ATMS5\20150326-20538.b\MS5032514.D				
Injection Date:	25-Mar-2015 23:42:30	Instrument ID:	ATMS5		
Lims ID:	IC 0.2ppbv				
Client ID:					
Operator ID:	AJS	ALS Bottle#:	1	Worklist Smp#:	7
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	TO15 SIM	Limit Group:	MSA - TO-15_SIM_ICAL		
Column:		Detector	MS SCAN		

69 Hexachlorobutadiene, CAS: 87-68-3

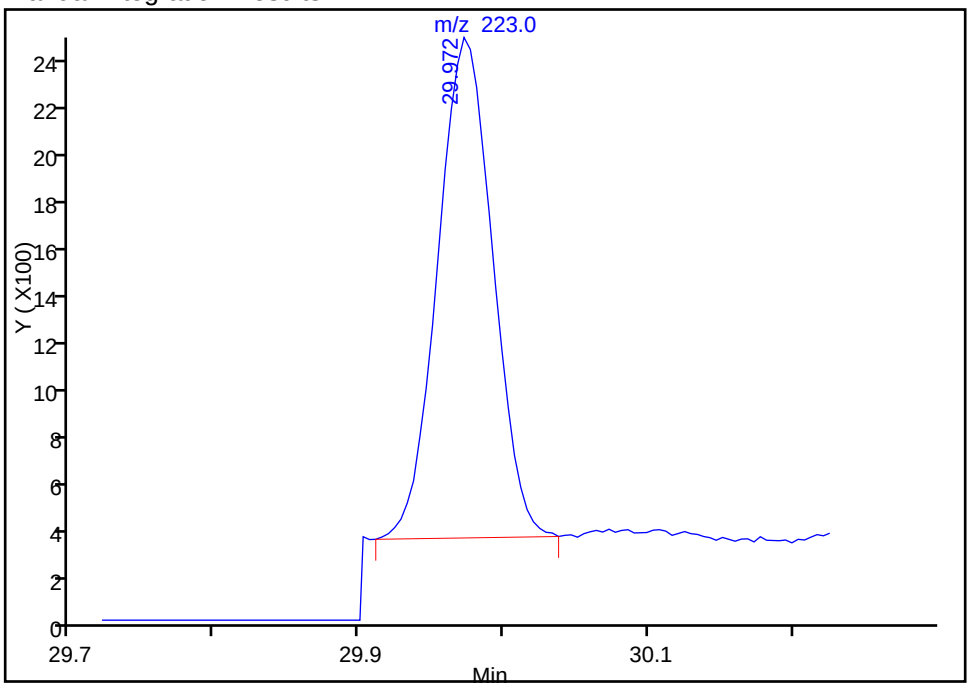
Processing Integration Results

RT: 29.97
Area: 6823
Amount: 0.176755
Amount Units: ppb v/v



Manual Integration Results

RT: 29.97
Area: 5670
Amount: 0.179728
Amount Units: ppb v/v



Reviewer: shardaa, 26-Mar-2015 13:21:46
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\SACCHROM\ChromData\ATMS5\20150326-20538.b\MS5032515.D
Lims ID: IC 0.6ppbv
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 26-Mar-2015 00:33:30 ALS Bottle#: 2 Worklist Smp#: 8
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: IC 0.6ppbv
Operator ID: AJS Instrument ID: ATMS5
Sublist: chrom-TO15 SIM*sub2

Method: \\SACCHROM\ChromData\ATMS5\20150326-20538.b\TO15 SIM.m
Limit Group: MSA - TO-15_SIM_ICAL
Last Update: 26-Mar-2015 14:41:15 Calib Date: 26-Mar-2015 03:17:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\SACCHROM\ChromData\ATMS5\20150326-20538.b\MS5032518.D

Column 1 : Det: MS SCAN
Process Host: XAWRK051

First Level Reviewer: shardaa Date: 26-Mar-2015 13:14:56

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	130	11.900	11.900	0.000	95	42164	2.00	2.00	
* 2 1,4-Difluorobenzene	114	13.999	13.999	0.000	100	199936	2.00	2.00	
* 3 Chlorobenzene-d5 (IS)	117	20.560	20.560	0.000	100	162308	2.00	2.00	
$ 4 1,2-Dichloroethane-d4 (Sur	65	13.065	13.065	0.000	89	46064	2.00	1.95	
$ 5 Toluene-d8 (Surr)	100	17.325	17.325	0.000	100	137002	2.00	1.99	
$ 6 4-Bromofluorobenzene (Surr	95	23.092	23.092	0.000	100	91125	2.00	2.00	
7 Propene	41	4.126	4.126	0.000	100	11290	0.6000	0.5651	
8 Dichlorodifluoromethane	85	4.190	4.190	0.000	100	35641	0.6000	0.5607	
9 1,2-Dichloro-1,1,2,2-tetra	135	4.417	4.417	0.000	100	31187	0.6000	0.5584	
10 Chloromethane	50	4.590	4.590	0.000	100	8931	0.6000	0.5297	
11 Vinyl chloride	62	4.836	4.836	0.000	100	12522	0.6000	0.5657	
12 Butadiene	39	4.908	4.908	0.000	99	7985	0.6000	0.5660	
13 Bromomethane	94	5.657	5.657	0.000	100	14732	0.6000	0.5890	
14 Chloroethane	64	5.841	5.841	0.000	100	9278	0.6000	0.5774	
15 Trichlorofluoromethane	101	6.454	6.454	0.000	100	34982	0.6000	0.5769	
16 Isopropyl alcohol	45	7.085	7.085	0.000	100	33269	0.6000	0.5697	
17 Acrolein	56	7.140	7.140	0.000	99	5837	0.6000	0.5921	
18 Acetone	43	7.312	7.312	0.000	100	21729	0.6000	0.5634	
19 1,1,2-Trichloro-1,2,2-trif	101	7.449	7.449	0.000	100	34161	0.6000	0.5856	
20 1,1-Dichloroethene	96	7.658	7.658	0.000	100	18185	0.6000	0.5900	
21 Acetonitrile	41	8.360	8.360	0.000	100	18384	0.6000	0.6033	
22 Methylene Chloride	49	8.535	8.535	0.000	100	17622	0.6000	0.6054	
23 Acrylonitrile	53	8.678	8.678	0.000	100	12651	0.6000	0.5750	
24 Methyl tert-butyl ether	73	9.135	9.135	0.000	100	55610	0.6000	0.5845	
25 trans-1,2-Dichloroethene	96	9.257	9.257	0.000	100	19108	0.6000	0.6025	
26 Hexane	41	9.671	9.671	0.000	100	17702	0.6000	0.5888	
27 1,1-Dichloroethane	63	10.067	10.067	0.000	100	31680	0.6000	0.6064	
28 Vinyl acetate	43	10.106	10.106	0.000	97	32110	0.6000	0.5590	
29 2-Butanone (MEK)	72	10.950	10.950	0.000	100	11344	0.6000	0.6064	
30 cis-1,2-Dichloroethene	96	11.301	11.301	0.000	99	19793	0.6000	0.6094	
31 Ethyl acetate	43	11.366	11.366	0.000	100	34975	0.6000	0.5926	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
32 Chloroform	83	11.638	11.638	0.000	100	31601	0.6000	0.5902	
33 Tetrahydrofuran	42	12.140	12.140	0.000	100	20327	0.6000	0.5903	
34 1,1,1-Trichloroethane	97	12.565	12.565	0.000	100	32504	0.6000	0.5895	
35 Cyclohexane	84	12.757	12.757	0.000	100	32120	0.6000	0.6021	
36 Carbon tetrachloride	117	13.129	13.129	0.000	100	28414	0.6000	0.5776	
37 1,2-Dichloroethane	62	13.247	13.247	0.000	100	19620	0.6000	0.5501	
38 Benzene	78	13.392	13.392	0.000	100	66907	0.6000	0.5539	
39 n-Heptane	43	13.565	13.565	0.000	100	32834	0.6000	0.5783	
40 Trichloroethene	130	14.741	14.741	0.000	100	26427	0.6000	0.5606	
41 1,2-Dichloropropane	76	15.035	15.035	0.000	100	7965	0.6000	0.5474	
42 Dichlorobromomethane	85	15.484	15.484	0.000	100	22399	0.6000	0.5571	
43 1,4-Dioxane	88	15.553	15.553	0.000	100	16408	0.6000	0.5561	
44 4-Methyl-2-pentanone (MIBK	43	16.366	16.366	0.000	100	38155	0.6000	0.5381	
45 cis-1,3-Dichloropropene	75	16.697	16.697	0.000	100	31072	0.6000	0.5575	
46 Toluene	91	17.498	17.498	0.000	100	81842	0.6000	0.5408	
47 trans-1,3-Dichloropropene	75	17.771	17.771	0.000	100	30966	0.6000	0.5739	
48 1,1,2-Trichloroethane	97	18.107	18.107	0.000	100	22808	0.6000	0.5608	
49 2-Hexanone	58	18.262	18.262	0.000	99	22332	0.6000	0.5809	
50 Tetrachloroethene	166	18.992	18.992	0.000	100	31389	0.6000	0.5794	
51 Chlorodibromomethane	129	19.193	19.193	0.000	100	37719	0.6000	0.5563	
52 Ethylene Dibromide	107	19.642	19.642	0.000	100	35066	0.6000	0.5602	
53 Chlorobenzene	112	20.643	20.643	0.000	98	64851	0.6000	0.5673	
54 Ethylbenzene	91	20.825	20.825	0.000	100	105687	0.6000	0.5683	
55 m-Xylene & p-Xylene	91	21.006	21.006	0.000	100	160197	1.20	1.14	
56 o-Xylene	91	21.896	21.896	0.000	98	83124	0.6000	0.5651	
57 Styrene	104	21.927	21.927	0.000	98	70087	0.6000	0.5759	
58 Bromoform	173	22.468	22.468	0.000	100	24487	0.6000	0.5757	
59 1,1,2,2-Tetrachloroethane	83	22.865	22.865	0.000	100	55518	0.6000	0.5855	
60 1,2,3-Trichloropropane	110	23.168	23.168	0.000	97	16601	0.6000	0.5719	
61 4-Ethyltoluene	120	23.754	23.754	0.000	100	47723	0.6000	0.6027	
62 1,3,5-Trimethylbenzene	120	23.850	23.850	0.000	89	65066	0.6000	0.5839	
63 1,2,4-Trimethylbenzene	120	24.637	24.637	0.000	100	59163	0.6000	0.5956	
64 1,3-Dichlorobenzene	146	25.384	25.384	0.000	100	69374	0.6000	0.5868	
65 1,4-Dichlorobenzene	146	25.581	25.581	0.000	100	66007	0.6000	0.5912	
66 Benzyl chloride	91	25.747	25.747	0.000	100	93028	0.4800	0.5007	
67 1,2-Dichlorobenzene	146	26.301	26.301	0.000	100	67350	0.6000	0.5861	
68 1,2,4-Trichlorobenzene	180	29.601	29.601	0.000	100	43087	0.6000	0.5908	
69 Hexachlorobutadiene	225	29.977	29.977	0.000	100	31125	0.6000	0.6062	
70 Naphthalene	128	30.042	30.042	0.000	100	124065	0.6000	0.5463	

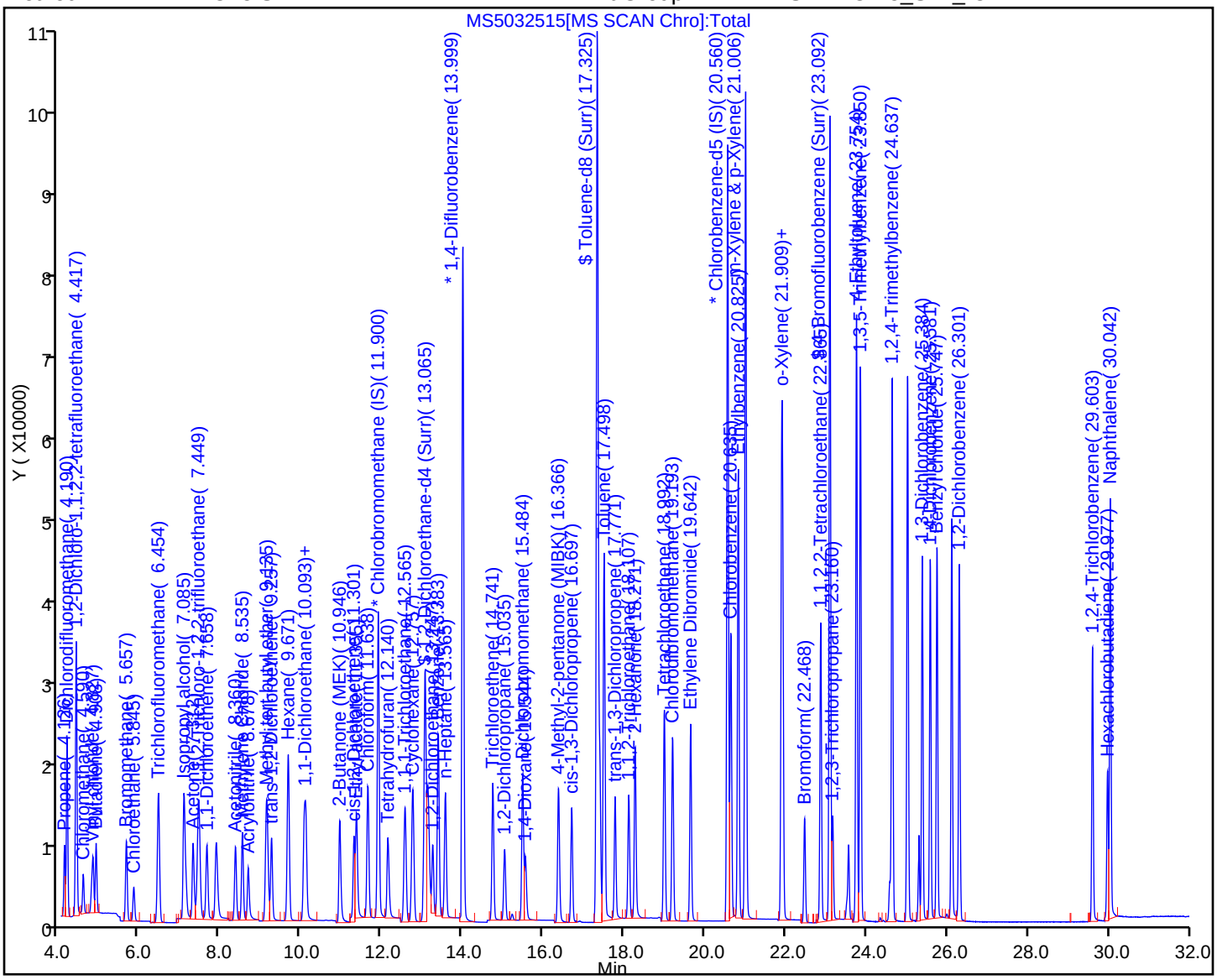
Reagents:

VACORPIC2.5_00149 Amount Added: 120.00 Units: mL
VASUISIM_00160 Amount Added: 50.00 Units: mL Run Reagent

Report Date: 26-Mar-2015 14:41:16 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Sacramento

Data File:	\\SACCHROM\ChromData\ATMS5\20150326-20538.b\MS5032515.D				
Injection Date:	26-Mar-2015 00:33:30	Instrument ID:	ATMS5		
Lims ID:	IC 0.6ppbv				
Client ID:					
Operator ID:	AJS	ALS Bottle#:	2	Worklist Smp#:	8
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	TO15 SIM	Limit Group:	MSA - TO-15_SIM_ICAL		



TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\SACCHROM\ChromData\ATMS5\20150326-20538.b\MS5032516.D
Lims ID: ICIS 1.2ppbv
Client ID:
Sample Type: ICIS Calib Level: 7
Inject. Date: 26-Mar-2015 01:24:30 ALS Bottle#: 2 Worklist Smp#: 9
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: IC 1.2ppbv
Operator ID: AJS Instrument ID: ATMS5
Sublist: chrom-TO15 SIM*sub2

Method: \\SACCHROM\ChromData\ATMS5\20150326-20538.b\TO15 SIM.m
Limit Group: MSA - TO-15_SIM_ICAL
Last Update: 26-Mar-2015 14:41:16 Calib Date: 26-Mar-2015 03:17:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\SACCHROM\ChromData\ATMS5\20150326-20538.b\MS5032518.D

Column 1 : Det: MS SCAN
Process Host: XAWRK051

First Level Reviewer: shardaa Date: 26-Mar-2015 11:39:57

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	130	11.900	11.900	0.000	100	42519	2.00	2.00	
* 2 1,4-Difluorobenzene	114	13.996	13.996	0.000	100	196414	2.00	2.00	
* 3 Chlorobenzene-d5 (IS)	117	20.560	20.560	0.000	100	168180	2.00	2.00	
$ 4 1,2-Dichloroethane-d4 (Sur	65	13.060	13.060	0.000	100	45298	2.00	1.95	
$ 5 Toluene-d8 (Surr)	100	17.326	17.326	0.000	100	138438	2.00	2.05	
$ 6 4-Bromofluorobenzene (Surr	95	23.094	23.094	0.000	100	96781	2.00	2.05	
7 Propene	41	4.126	4.126	0.000	100	22053	1.20	1.09	
8 Dichlorodifluoromethane	85	4.190	4.190	0.000	100	72741	1.20	1.13	
9 1,2-Dichloro-1,1,2,2-tetra	135	4.408	4.408	0.000	100	60471	1.20	1.07	
10 Chloromethane	50	4.581	4.581	0.000	100	16866	1.20	0.99	
11 Vinyl chloride	62	4.826	4.826	0.000	100	23641	1.20	1.06	
12 Butadiene	39	4.899	4.899	0.000	100	14818	1.20	1.04	
13 Bromomethane	94	5.653	5.653	0.000	100	28856	1.20	1.14	
14 Chloroethane	64	5.836	5.836	0.000	100	17324	1.20	1.07	
15 Trichlorofluoromethane	101	6.447	6.447	0.000	100	68454	1.20	1.12	
16 Isopropyl alcohol	45	7.076	7.076	0.000	100	60838	1.20	1.03	
17 Acrolein	56	7.130	7.130	0.000	100	11046	1.20	1.11	
18 Acetone	43	7.303	7.303	0.000	100	39907	1.20	1.03	
19 1,1,2-Trichloro-1,2,2-trif	101	7.449	7.449	0.000	100	65091	1.20	1.11	
20 1,1-Dichloroethene	96	7.649	7.649	0.000	100	34078	1.20	1.10	
21 Acetonitrile	41	8.360	8.360	0.000	100	33242	1.20	1.08	
22 Methylene Chloride	49	8.529	8.529	0.000	100	30913	1.20	1.05	
23 Acrylonitrile	53	8.672	8.672	0.000	100	24001	1.20	1.08	
24 Methyl tert-butyl ether	73	9.128	9.128	0.000	100	106734	1.20	1.11	
25 trans-1,2-Dichloroethene	96	9.255	9.255	0.000	100	36071	1.20	1.13	
26 Hexane	41	9.666	9.666	0.000	100	32544	1.20	1.07	
27 1,1-Dichloroethane	63	10.063	10.063	0.000	100	57368	1.20	1.09	
28 Vinyl acetate	43	10.102	10.102	0.000	100	62748	1.20	1.08	
29 2-Butanone (MEK)	72	10.939	10.939	0.000	100	21609	1.20	1.15	
30 cis-1,2-Dichloroethene	96	11.300	11.300	0.000	100	37363	1.20	1.14	
31 Ethyl acetate	43	11.355	11.355	0.000	100	66174	1.20	1.11	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
32 Chloroform	83	11.638	11.638	0.000	100	59889	1.20	1.11	
33 Tetrahydrofuran	42	12.128	12.128	0.000	100	38289	1.20	1.10	
34 1,1,1-Trichloroethane	97	12.560	12.560	0.000	100	62704	1.20	1.13	
35 Cyclohexane	84	12.752	12.752	0.000	100	61438	1.20	1.14	
36 Carbon tetrachloride	117	13.124	13.124	0.000	100	54612	1.20	1.13	
37 1,2-Dichloroethane	62	13.251	13.251	0.000	100	38340	1.20	1.09	
38 Benzene	78	13.387	13.387	0.000	100	128175	1.20	1.08	
39 n-Heptane	43	13.560	13.560	0.000	100	62064	1.20	1.11	
40 Trichloroethene	130	14.742	14.742	0.000	100	53080	1.20	1.15	
41 1,2-Dichloropropane	76	15.035	15.035	0.000	100	15738	1.20	1.10	
42 Dichlorobromomethane	85	15.476	15.476	0.000	100	44814	1.20	1.13	
43 1,4-Dioxane	88	15.545	15.545	0.000	100	32932	1.20	1.14	
44 4-Methyl-2-pentanone (MIBK	43	16.364	16.364	0.000	100	74478	1.20	1.07	
45 cis-1,3-Dichloropropene	75	16.693	16.693	0.000	100	64576	1.20	1.18	
46 Toluene	91	17.499	17.499	0.000	100	168256	1.20	1.13	
47 trans-1,3-Dichloropropene	75	17.772	17.772	0.000	100	63883	1.20	1.14	
48 1,1,2-Trichloroethane	97	18.108	18.108	0.000	100	47049	1.20	1.12	
49 2-Hexanone	58	18.263	18.263	0.000	100	46479	1.20	1.17	
50 Tetrachloroethene	166	18.993	18.993	0.000	100	65239	1.20	1.16	
51 Chlorodibromomethane	129	19.194	19.194	0.000	100	80362	1.20	1.14	
52 Ethylene Dibromide	107	19.643	19.643	0.000	100	73402	1.20	1.13	
53 Chlorobenzene	112	20.636	20.636	0.000	100	133450	1.20	1.13	
54 Ethylbenzene	91	20.825	20.825	0.000	100	219970	1.20	1.14	
55 m-Xylene & p-Xylene	91	21.007	21.007	0.000	100	334278	2.40	2.29	
56 o-Xylene	91	21.898	21.898	0.000	100	173385	1.20	1.14	
57 Styrene	104	21.924	21.924	0.000	100	149159	1.20	1.18	
58 Bromoform	173	22.468	22.468	0.000	100	51529	1.20	1.17	
59 1,1,2,2-Tetrachloroethane	83	22.867	22.867	0.000	100	113392	1.20	1.15	
60 1,2,3-Trichloropropane	110	23.162	23.162	0.000	100	34206	1.20	1.14	
61 4-Ethyltoluene	120	23.754	23.754	0.000	100	99948	1.20	1.22	
62 1,3,5-Trimethylbenzene	120	23.852	23.852	0.000	89	136414	1.20	1.18	
63 1,2,4-Trimethylbenzene	120	24.637	24.637	0.000	100	125016	1.20	1.21	
64 1,3-Dichlorobenzene	146	25.382	25.382	0.000	100	147703	1.20	1.21	
65 1,4-Dichlorobenzene	146	25.578	25.578	0.000	100	143560	1.20	1.24	
66 Benzyl chloride	91	25.749	25.749	0.000	100	201204	0.9600	1.05	
67 1,2-Dichlorobenzene	146	26.299	26.299	0.000	100	142726	1.20	1.20	
68 1,2,4-Trichlorobenzene	180	29.603	29.603	0.000	100	97131	1.20	1.29	
69 Hexachlorobutadiene	225	29.976	29.976	0.000	100	62788	1.20	1.18	
70 Naphthalene	128	30.042	30.042	0.000	100	265679	1.20	1.13	

Reagents:

VACORPIC2.5_00149 Amount Added: 240.00 Units: mL
VASUISIM_00160 Amount Added: 50.00 Units: mL Run Reagent

Report Date: 26-Mar-2015 14:41:16 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Sacramento

Data File: \\SACCHROM\ChromData\ATMS5\20150326-20538.b\MS5032516.D

Injection Date: 26-Mar-2015 01:24:30 Instrument ID: ATMS5

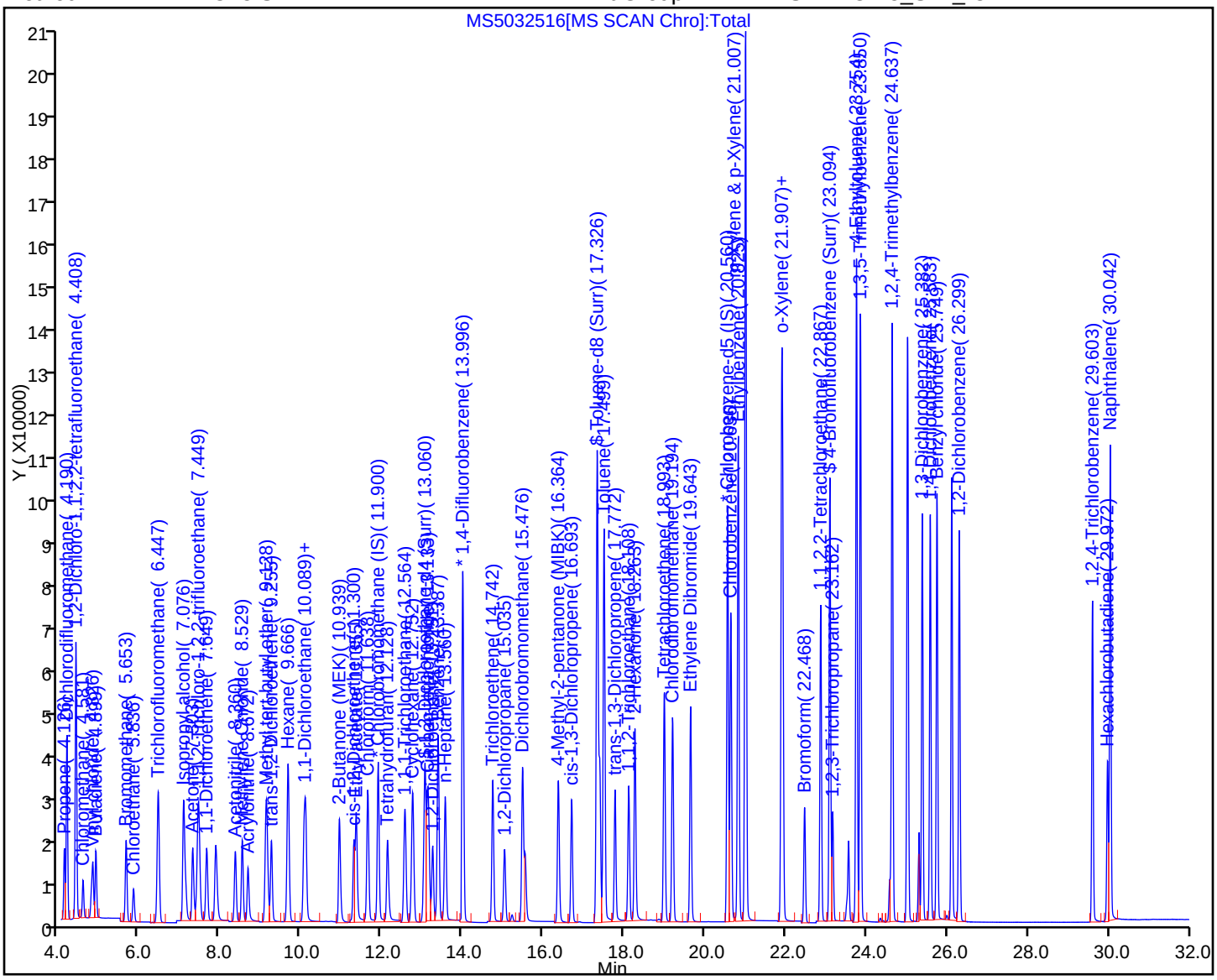
Lims ID: ICIS 1.2ppbv

Client ID:

Operator ID: AJS ALS Bottle#: 2 Worklist Smp#: 9

Purge Vol: 500.000 mL Dil. Factor: 1.0000

Method: TO15 SIM Limit Group: MSA - TO-15_SIM_ICAL



TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\SACCHROM\ChromData\ATMS5\20150326-20538.b\MS5032517.D
Lims ID: IC 2.5ppbv
Client ID:
Sample Type: IC Calib Level: 8
Inject. Date: 26-Mar-2015 02:16:30 ALS Bottle#: 2 Worklist Smp#: 10
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: IC 2.5ppbv
Operator ID: AJS Instrument ID: ATMS5
Sublist: chrom-TO15 SIM*sub2

Method: \\SACCHROM\ChromData\ATMS5\20150326-20538.b\TO15 SIM.m
Limit Group: MSA - TO-15_SIM_ICAL
Last Update: 26-Mar-2015 14:41:17 Calib Date: 26-Mar-2015 03:17:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\SACCHROM\ChromData\ATMS5\20150326-20538.b\MS5032518.D

Column 1 : Det: MS SCAN
Process Host: XAWRK051

First Level Reviewer: shardaa Date: 26-Mar-2015 13:13:36

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	130	11.900	11.900	0.000	98	44091	2.00	2.00	
* 2 1,4-Difluorobenzene	114	13.999	13.999	0.000	100	203059	2.00	2.00	
* 3 Chlorobenzene-d5 (IS)	117	20.560	20.560	0.000	100	181312	2.00	2.00	
$ 4 1,2-Dichloroethane-d4 (Sur	65	13.065	13.065	0.000	77	46485	2.00	1.94	
$ 5 Toluene-d8 (Surr)	100	17.325	17.325	0.000	100	142423	2.00	2.04	
$ 6 4-Bromofluorobenzene (Surr	95	23.092	23.092	0.000	100	104124	2.00	2.04	
7 Propene	41	4.126	4.126	0.000	100	42856	2.50	2.05	
8 Dichlorodifluoromethane	85	4.190	4.190	0.000	100	146665	2.50	2.21	
9 1,2-Dichloro-1,1,2,2-tetra	135	4.417	4.417	0.000	99	121596	2.50	2.08	
10 Chloromethane	50	4.590	4.590	0.000	100	32572	2.50	1.85	
11 Vinyl chloride	62	4.836	4.836	0.000	100	46051	2.50	1.99	
12 Butadiene	39	4.908	4.908	0.000	100	28927	2.50	1.96	
13 Bromomethane	94	5.657	5.657	0.000	100	57391	2.50	2.19	
14 Chloroethane	64	5.841	5.841	0.000	100	32938	2.50	1.96	
15 Trichlorofluoromethane	101	6.452	6.452	0.000	100	135831	2.50	2.14	
16 Isopropyl alcohol	45	7.076	7.076	0.000	100	117023	2.50	1.92	
17 Acrolein	56	7.130	7.130	0.000	100	22763	2.50	2.21	
18 Acetone	43	7.303	7.303	0.000	100	78188	2.50	1.94	
19 1,1,2-Trichloro-1,2,2-trif	101	7.449	7.449	0.000	100	129961	2.50	2.13	
20 1,1-Dichloroethene	96	7.649	7.649	0.000	100	66711	2.50	2.07	
21 Acetonitrile	41	8.360	8.360	0.000	100	64709	2.50	2.03	
22 Methylene Chloride	49	8.535	8.535	0.000	98	59054	2.50	1.94	
23 Acrylonitrile	53	8.672	8.672	0.000	100	47868	2.50	2.08	
24 Methyl tert-butyl ether	73	9.126	9.126	0.000	100	211626	2.50	2.13	
25 trans-1,2-Dichloroethene	96	9.257	9.257	0.000	100	72095	2.50	2.17	
26 Hexane	41	9.664	9.664	0.000	100	64982	2.50	2.07	
27 1,1-Dichloroethane	63	10.067	10.067	0.000	99	116121	2.50	2.13	
28 Vinyl acetate	43	10.106	10.106	0.000	99	121832	2.50	2.03	
29 2-Butanone (MEK)	72	10.934	10.934	0.000	100	43171	2.50	2.21	
30 cis-1,2-Dichloroethene	96	11.301	11.301	0.000	100	77371	2.50	2.28	
31 Ethyl acetate	43	11.355	11.355	0.000	100	128320	2.50	2.08	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
32 Chloroform	83	11.638	11.638	0.000	100	126110	2.50	2.25	
33 Tetrahydrofuran	42	12.129	12.129	0.000	99	73202	2.50	2.03	
34 1,1,1-Trichloroethane	97	12.565	12.565	0.000	100	134106	2.50	2.33	
35 Cyclohexane	84	12.757	12.757	0.000	99	130904	2.50	2.35	
36 Carbon tetrachloride	117	13.129	13.129	0.000	100	123289	2.50	2.47	
37 1,2-Dichloroethane	62	13.247	13.247	0.000	100	81957	2.50	2.26	
38 Benzene	78	13.383	13.383	0.000	100	270810	2.50	2.21	
39 n-Heptane	43	13.565	13.565	0.000	100	125684	2.50	2.18	
40 Trichloroethene	130	14.741	14.741	0.000	100	115630	2.50	2.42	
41 1,2-Dichloropropane	76	15.035	15.035	0.000	100	33225	2.50	2.25	
42 Dichlorobromomethane	85	15.484	15.484	0.000	100	95355	2.50	2.34	
43 1,4-Dioxane	88	15.544	15.544	0.000	100	66095	2.50	2.21	
44 4-Methyl-2-pentanone (MIBK	43	16.361	16.361	0.000	100	147760	2.50	2.05	
45 cis-1,3-Dichloropropene	75	16.697	16.697	0.000	100	134007	2.50	2.37	
46 Toluene	91	17.498	17.498	0.000	100	360637	2.50	2.35	
47 trans-1,3-Dichloropropene	75	17.771	17.771	0.000	100	134287	2.50	2.23	
48 1,1,2-Trichloroethane	97	18.107	18.107	0.000	100	99397	2.50	2.19	
49 2-Hexanone	58	18.262	18.262	0.000	100	94013	2.50	2.19	
50 Tetrachloroethene	166	18.992	18.992	0.000	100	141906	2.50	2.34	
51 Chlorodibromomethane	129	19.200	19.200	0.000	100	175058	2.50	2.31	
52 Ethylene Dibromide	107	19.642	19.642	0.000	100	156973	2.50	2.24	
53 Chlorobenzene	112	20.643	20.643	0.000	98	285730	2.50	2.24	
54 Ethylbenzene	91	20.825	20.825	0.000	100	470906	2.50	2.27	
55 m-Xylene & p-Xylene	91	21.006	21.006	0.000	100	714810	5.00	4.54	
56 o-Xylene	91	21.896	21.896	0.000	99	369687	2.50	2.25	
57 Styrene	104	21.926	21.926	0.000	97	323061	2.50	2.38	
58 Bromoform	173	22.466	22.466	0.000	100	111948	2.50	2.36	
59 1,1,2,2-Tetrachloroethane	83	22.865	22.865	0.000	100	234325	2.50	2.21	
60 1,2,3-Trichloropropane	110	23.168	23.168	0.000	97	71634	2.50	2.21	
61 4-Ethyltoluene	120	23.754	23.754	0.000	100	214929	2.50	2.43	
62 1,3,5-Trimethylbenzene	120	23.852	23.852	0.000	89	291517	2.50	2.34	
63 1,2,4-Trimethylbenzene	120	24.637	24.637	0.000	100	267225	2.50	2.41	
64 1,3-Dichlorobenzene	146	25.384	25.384	0.000	99	318665	2.50	2.41	
65 1,4-Dichlorobenzene	146	25.581	25.581	0.000	100	308891	2.50	2.48	
66 Benzyl chloride	91	25.747	25.747	0.000	100	430510	2.00	2.07	
67 1,2-Dichlorobenzene	146	26.301	26.301	0.000	100	303749	2.50	2.37	
68 1,2,4-Trichlorobenzene	180	29.601	29.601	0.000	100	214964	2.50	2.64	
69 Hexachlorobutadiene	225	29.977	29.977	0.000	100	130139	2.50	2.27	
70 Naphthalene	128	30.042	30.042	0.000	100	577224	2.50	2.28	

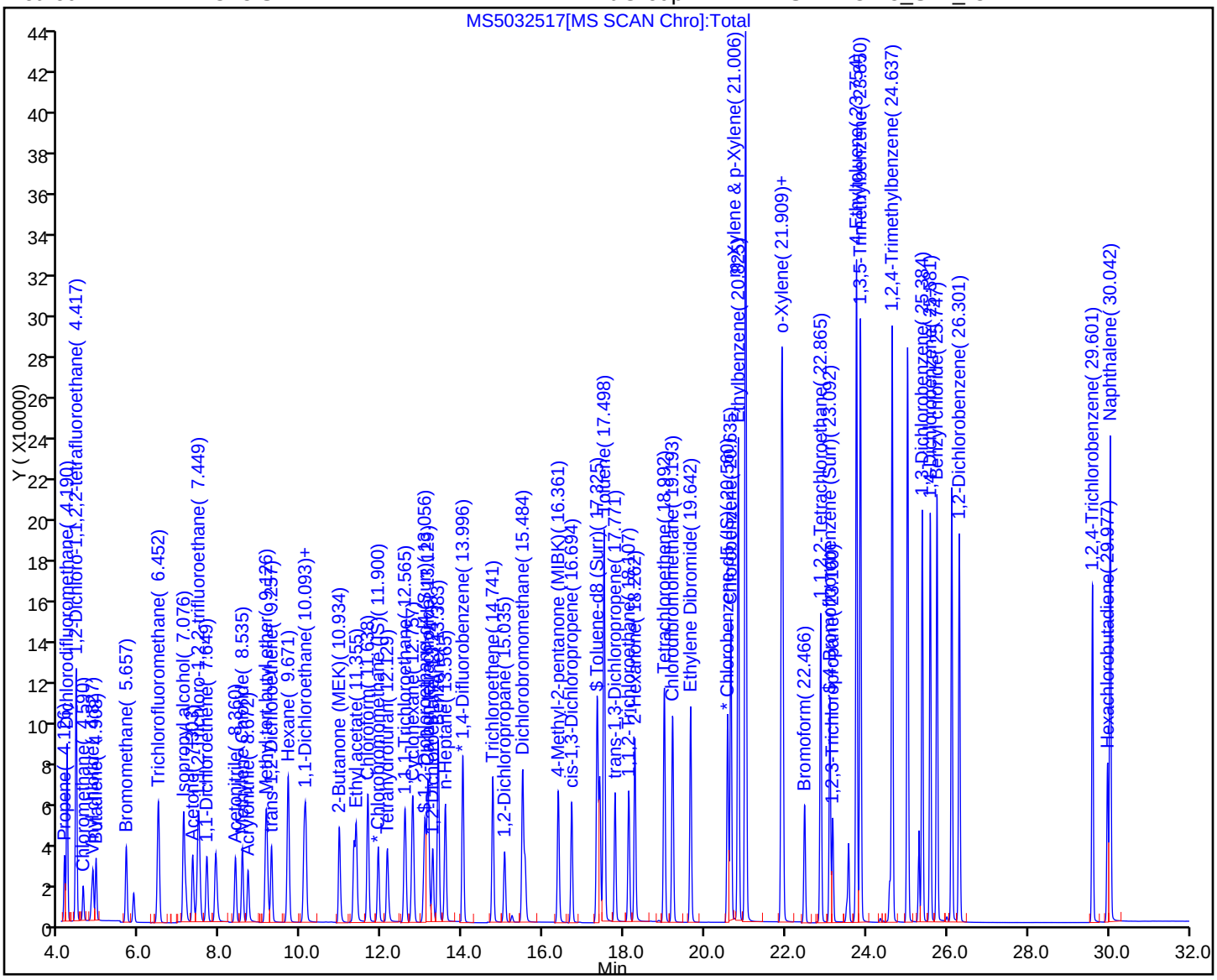
Reagents:

VACORPIC2.5_00149 Amount Added: 500.00 Units: mL
VASUISIM_00160 Amount Added: 50.00 Units: mL Run Reagent

Report Date: 26-Mar-2015 14:41:17 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Sacramento

Data File:	\\SACCHROM\ChromData\ATMS5\20150326-20538.b\MS5032517.D				
Injection Date:	26-Mar-2015 02:16:30	Instrument ID:	ATMS5		
Lims ID:	IC 2.5ppbv				
Client ID:					
Operator ID:	AJS	ALS Bottle#:	2	Worklist Smp#:	10
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	TO15 SIM	Limit Group:	MSA - TO-15_SIM_ICAL		



TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\SACCHROM\ChromData\ATMS5\20150326-20538.b\MS5032518.D
Lims ID: IC 5ppbv
Client ID:
Sample Type: IC Calib Level: 9
Inject. Date: 26-Mar-2015 03:17:30 ALS Bottle#: 2 Worklist Smp#: 11
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: IC 5ppbv
Operator ID: AJS Instrument ID: ATMS5
Sublist: chrom-TO15 SIM*sub2

Method: \\SACCHROM\ChromData\ATMS5\20150326-20538.b\TO15 SIM.m
Limit Group: MSA - TO-15_SIM_ICAL
Last Update: 26-Mar-2015 14:41:17 Calib Date: 26-Mar-2015 03:17:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\SACCHROM\ChromData\ATMS5\20150326-20538.b\MS5032518.D

Column 1 : Det: MS SCAN
Process Host: XAWRK051

First Level Reviewer: shardaa Date: 26-Mar-2015 13:13:00

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	130	11.900	11.900	0.000	94	42132	2.00	2.00	
* 2 1,4-Difluorobenzene	114	13.996	13.996	0.000	100	184301	2.00	2.00	
* 3 Chlorobenzene-d5 (IS)	117	20.560	20.560	0.000	100	169906	2.00	2.00	
$ 4 1,2-Dichloroethane-d4 (Sur	65	13.065	13.065	0.000	53	43551	2.00	2.00	
$ 5 Toluene-d8 (Surr)	100	17.325	17.325	0.000	100	131273	2.00	2.07	
$ 6 4-Bromofluorobenzene (Surr	95	23.092	23.092	0.000	99	100441	2.00	2.10	
7 Propene	41	4.126	4.126	0.000	99	81825	5.00	4.10	
8 Dichlorodifluoromethane	85	4.190	4.190	0.000	100	241640	5.00	3.80	
9 1,2-Dichloro-1,1,2,2-tetra	135	4.417	4.417	0.000	99	242776	5.00	4.35	
10 Chloromethane	50	4.590	4.590	0.000	100	61957	5.00	3.68	
11 Vinyl chloride	62	4.836	4.836	0.000	100	86093	5.00	3.89	
12 Butadiene	39	4.908	4.908	0.000	100	55514	5.00	3.94	
13 Bromomethane	94	5.657	5.657	0.000	100	107769	5.00	4.31	
14 Chloroethane	64	5.841	5.841	0.000	100	59013	5.00	3.68	
15 Trichlorofluoromethane	101	6.450	6.450	0.000	100	262129	5.00	4.33	
16 Isopropyl alcohol	45	7.067	7.067	0.000	99	207741	5.00	3.56	
17 Acrolein	56	7.130	7.130	0.000	95	40653	5.00	4.13	
18 Acetone	43	7.294	7.294	0.000	99	137886	5.00	3.58	
19 1,1,2-Trichloro-1,2,2-trif	101	7.449	7.449	0.000	99	244698	5.00	4.20	
20 1,1-Dichloroethene	96	7.649	7.649	0.000	100	123519	5.00	4.01	
21 Acetonitrile	41	8.360	8.360	0.000	99	114840	5.00	3.77	
22 Methylene Chloride	49	8.529	8.529	0.000	97	102372	5.00	3.52	
23 Acrylonitrile	53	8.672	8.672	0.000	100	82969	5.00	3.77	
24 Methyl tert-butyl ether	73	9.122	9.122	0.000	100	383729	5.00	4.04	
25 trans-1,2-Dichloroethene	96	9.253	9.253	0.000	100	132736	5.00	4.19	
26 Hexane	41	9.664	9.664	0.000	99	115549	5.00	3.85	
27 1,1-Dichloroethane	63	10.067	10.067	0.000	98	203909	5.00	3.91	
28 Vinyl acetate	43	10.100	10.100	0.000	97	205696	5.00	3.58	
29 2-Butanone (MEK)	72	10.930	10.930	0.000	99	76336	5.00	4.08	
30 cis-1,2-Dichloroethene	96	11.301	11.301	0.000	100	140627	5.00	4.33	
31 Ethyl acetate	43	11.344	11.344	0.000	100	220156	5.00	3.73	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
32 Chloroform	83	11.638	11.638	0.000	100	231735	5.00	4.33	
33 Tetrahydrofuran	42	12.118	12.118	0.000	98	123742	5.00	3.60	
34 1,1,1-Trichloroethane	97	12.560	12.560	0.000	100	249183	5.00	4.52	
35 Cyclohexane	84	12.752	12.752	0.000	97	235751	5.00	4.42	
36 Carbon tetrachloride	117	13.129	13.129	0.000	100	237256	5.00	5.23	
37 1,2-Dichloroethane	62	13.247	13.247	0.000	100	150913	5.00	4.59	
38 Benzene	78	13.383	13.383	0.000	100	484461	5.00	4.35	
39 n-Heptane	43	13.565	13.565	0.000	100	216215	5.00	4.13	
40 Trichloroethene	130	14.741	14.741	0.000	100	219585	5.00	5.05	
41 1,2-Dichloropropane	76	15.035	15.035	0.000	99	60481	5.00	4.51	
42 Dichlorobromomethane	85	15.484	15.484	0.000	99	175834	5.00	4.74	
43 1,4-Dioxane	88	15.536	15.536	0.000	99	119248	5.00	4.38	
44 4-Methyl-2-pentanone (MIBK	43	16.359	16.359	0.000	100	256515	5.00	3.92	
45 cis-1,3-Dichloropropene	75	16.694	16.694	0.000	100	242240	5.00	4.71	
46 Toluene	91	17.498	17.498	0.000	100	670779	5.00	4.81	
47 trans-1,3-Dichloropropene	75	17.771	17.771	0.000	100	241625	5.00	4.28	
48 1,1,2-Trichloroethane	97	18.107	18.107	0.000	100	181708	5.00	4.27	
49 2-Hexanone	58	18.262	18.262	0.000	99	168416	5.00	4.18	
50 Tetrachloroethene	166	18.992	18.992	0.000	100	273903	5.00	4.83	
51 Chlorodibromomethane	129	19.193	19.193	0.000	100	338552	5.00	4.77	
52 Ethylene Dibromide	107	19.642	19.642	0.000	100	294166	5.00	4.49	
53 Chlorobenzene	112	20.643	20.643	0.000	98	534583	5.00	4.47	
54 Ethylbenzene	91	20.825	20.825	0.000	100	887514	5.00	4.56	
55 m-Xylene & p-Xylene	91	21.006	21.006	0.000	100	1367338	10.0	9.28	
56 o-Xylene	91	21.896	21.896	0.000	99	698261	5.00	4.53	
57 Styrene	104	21.926	21.926	0.000	96	624787	5.00	4.90	
58 Bromoform	173	22.466	22.466	0.000	100	222578	5.00	5.00	
59 1,1,2,2-Tetrachloroethane	83	22.865	22.865	0.000	100	425951	5.00	4.29	
60 1,2,3-Trichloropropane	110	23.168	23.168	0.000	96	133298	5.00	4.39	
61 4-Ethyltoluene	120	23.755	23.755	0.000	100	408932	5.00	4.93	
62 1,3,5-Trimethylbenzene	120	23.852	23.852	0.000	89	558599	5.00	4.79	
63 1,2,4-Trimethylbenzene	120	24.639	24.639	0.000	100	509100	5.00	4.90	
64 1,3-Dichlorobenzene	146	25.381	25.381	0.000	100	589294	5.00	4.76	
65 1,4-Dichlorobenzene	146	25.582	25.582	0.000	100	574735	5.00	4.92	
66 Benzyl chloride	91	25.748	25.748	0.000	100	769691	4.00	3.96	
67 1,2-Dichlorobenzene	146	26.303	26.303	0.000	100	550375	5.00	4.58	
68 1,2,4-Trichlorobenzene	180	29.602	29.602	0.000	100	454498	5.00	5.95	
69 Hexachlorobutadiene	225	29.976	29.976	0.000	100	265236	5.00	4.94	
70 Naphthalene	128	30.041	30.041	0.000	100	1186840	5.00	4.99	

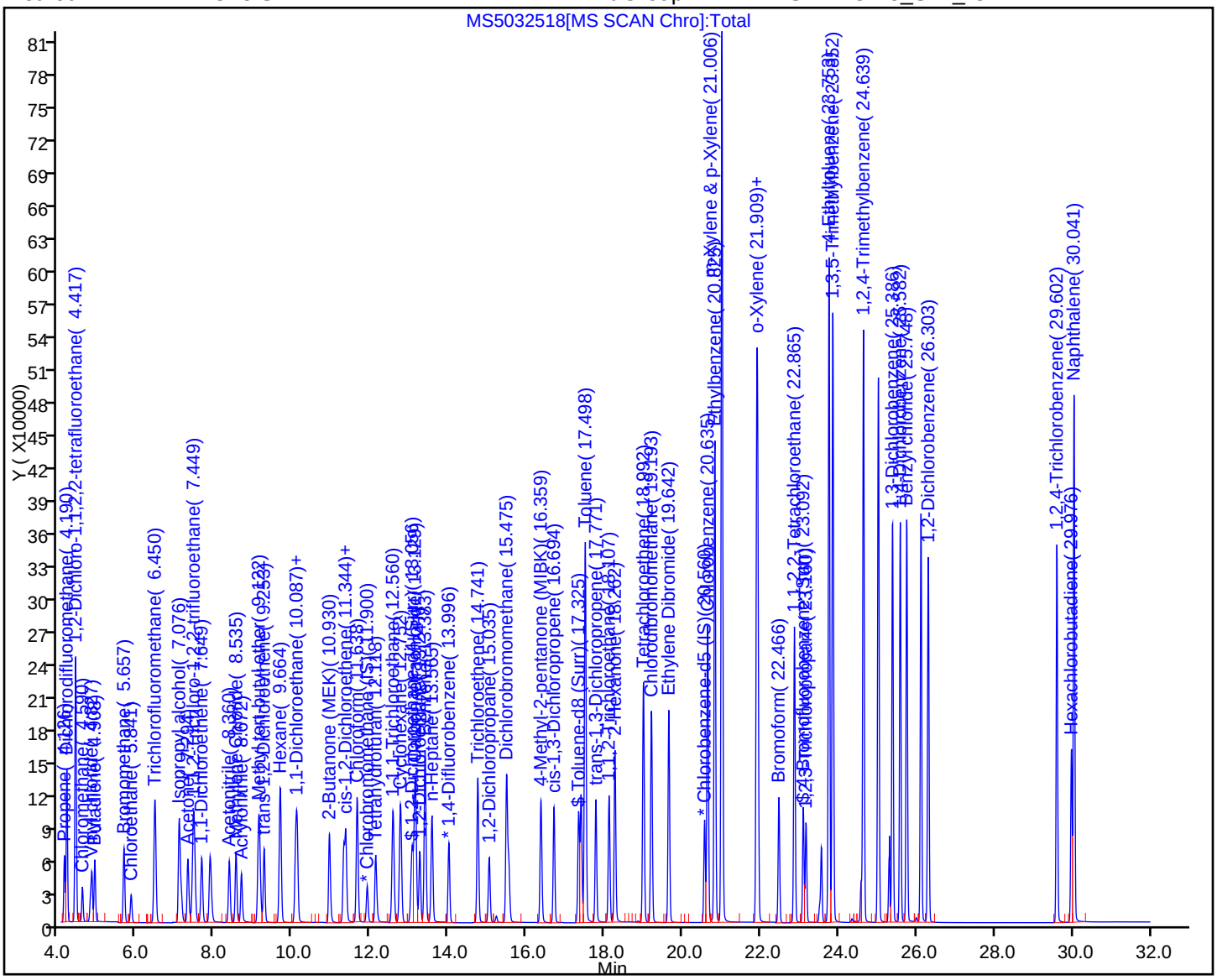
Reagents:

VACORPIC2.5_00149	Amount Added: 1000.00	Units: mL	
VASUISIM_00160	Amount Added: 50.00	Units: mL	Run Reagent

Report Date: 26-Mar-2015 14:41:18 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Sacramento

Data File:	\\SACCHROM\ChromData\ATMS5\20150326-20538.b\MS5032518.D				
Injection Date:	26-Mar-2015 03:17:30	Instrument ID:	ATMS5		
Lims ID:	IC 5ppbv				
Client ID:					
Operator ID:	AJS	ALS Bottle#:	2	Worklist Smp#:	11
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	TO15 SIM	Limit Group:	MSA - TO-15_SIM_ICAL		



FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Sacramento Job No.: 320-12924-1

SDG No.:

Lab Sample ID: ICV 320-69481/15 Calibration Date: 03/26/2015 06:58

Instrument ID: ATMS5 Calib Start Date: 03/25/2015 20:20

GC Column: RTX-Volatiles ID: 0.32(mm) Calib End Date: 03/26/2015 03:17

Lab File ID: MS5032522.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Propene	Ave	0.9477	0.8454		1.07	1.20	-10.8	30.0
Freon 12	Ave	3.015	2.896		1.15	1.20	-4.0	30.0
1,2-Dichloro-1,1,2,2-tetrafluoroethane	Ave	2.649	2.346		1.06	1.20	-11.5	30.0
Chloromethane	Ave	0.7997	0.6543		0.982	1.20	-18.2	30.0
Vinyl chloride	Ave	1.050	0.9103		1.04	1.20	-13.3	30.0
1,3-Butadiene	Ave	0.6692	0.5802		1.04	1.20	-13.3	30.0
Bromomethane	Ave	1.186	0.9868		0.998	1.20	-16.8	30.0
Chloroethane	Ave	0.7622	0.6666		1.05	1.20	-12.5	30.0
Freon 11	Ave	2.877	2.826		1.18	1.20	-1.8	30.0
Isopropyl alcohol	Ave	2.770	2.561		1.11	1.20	-7.5	30.0
Acrolein	Ave	0.4676	0.4763		1.22	1.20	1.8	30.0
Acetone	Ave	1.829	1.591		1.04	1.20	-13.0	30.0
Freon 113	Ave	2.767	2.709		1.17	1.20	-2.1	30.0
1,1-Dichloroethene	Ave	1.462	1.416		1.16	1.20	-3.2	30.0
Acetonitrile	Ave	1.445	1.437		1.19	1.20	-0.6	30.0
Methylene Chloride	Ave	1.381	1.321		1.15	1.20	-4.3	30.0
Acrylonitrile	Ave	1.044	0.995		1.14	1.20	-4.6	30.0
Methyl-t-Butyl Ether (MTBE)	Ave	4.513	4.213		1.12	1.20	-6.6	30.0
trans-1,2-Dichloroethene	Ave	1.504	1.514		1.21	1.20	0.7	30.0
Hexane	Ave	1.426	1.361		1.14	1.20	-4.6	30.0
1,1-Dichloroethane	Ave	2.478	2.459		1.19	1.20	-0.8	30.0
Vinyl acetate	Ave	2.724	2.852		1.26	1.20	4.7	30.0
2-Butanone (MEK)	Ave	0.8874	0.8692		1.18	1.20	-2.1	30.0
cis-1,2-Dichloroethene	Ave	1.541	1.587		1.24	1.20	3.0	30.0
Ethyl acetate	Ave	2.800	2.575		1.10	1.20	-8.0	30.0
Chloroform	Ave	2.540	2.548		1.20	1.20	0.3	30.0
Tetrahydrofuran	Ave	1.633	1.488		1.09	1.20	-8.9	30.0
1,1,1-Trichloroethane	Ave	2.615	2.666		1.22	1.20	1.9	30.0
Cyclohexane	Ave	2.531	2.583		1.22	1.20	2.1	30.0
Carbon tetrachloride	Ave	0.4920	0.5631		1.37	1.20	14.4	30.0
1,2-Dichloroethane	Ave	0.3568	0.3569		1.20	1.20	0.0	30.0
Benzene	Ave	1.208	1.183		1.17	1.20	-2.1	30.0
n-Heptane	Ave	0.5680	0.5540		1.17	1.20	-2.5	30.0
Trichloroethene	Ave	0.4715	0.4855		1.24	1.20	3.0	30.0
1,2-Dichloropropane	Ave	0.1455	0.1444		1.19	1.20	-0.8	30.0
Bromodichloromethane	Ave	0.4022	0.4053		1.21	1.20	0.8	30.0
1,4-Dioxane	Ave	0.2952	0.2547		1.04	1.20	-13.7	30.0
4-Methyl-2-pentanone (MIBK)	Ave	0.7093	0.6266		1.06	1.20	-11.7	30.0
cis-1,3-Dichloropropene	Ave	0.5576	0.5574		1.20	1.20	-0.0	30.0
Toluene	Ave	1.514	1.462		1.16	1.20	-3.4	30.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Sacramento Job No.: 320-12924-1

SDG No.:

Lab Sample ID: ICV 320-69481/15 Calibration Date: 03/26/2015 06:58

Instrument ID: ATMS5 Calib Start Date: 03/25/2015 20:20

GC Column: RTX-Volatiles ID: 0.32(mm) Calib End Date: 03/26/2015 03:17

Lab File ID: MS5032522.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
trans-1,3-Dichloropropene	Ave	0.6649	0.6167		1.11	1.20	-7.2	30.0
1,1,2-Trichloroethane	Ave	0.5011	0.4619		1.11	1.20	-7.8	30.0
2-Hexanone	Ave	0.4737	0.3892		0.986	1.20	-17.8	30.0
Tetrachloroethene	Ave	0.6675	0.6419		1.15	1.20	-3.8	30.0
Dibromochloromethane	Ave	0.8355	0.8027		1.15	1.20	-3.9	30.0
1,2-Dibromoethane (EDB)	Ave	0.7714	0.7206		1.12	1.20	-6.6	30.0
Chlorobenzene	Ave	1.409	1.289		1.10	1.20	-8.5	30.0
Ethylbenzene	Ave	2.292	2.085		1.09	1.20	-9.0	30.0
m,p-Xylene	Ave	1.735	1.570		2.17	2.40	-9.5	30.0
o-Xylene	Ave	1.813	1.611		1.07	1.20	-11.1	30.0
Styrene	Ave	1.500	1.398		1.12	1.20	-6.8	30.0
Bromoform	Ave	0.5242	0.4959		1.14	1.20	-5.4	30.0
1,1,2,2-Tetrachloroethane	Ave	1.168	1.000		1.03	1.20	-14.4	30.0
1,2,3-Trichloropropane	Ave	0.3577	0.3108		1.04	1.20	-13.1	30.0
4-Ethyltoluene	Ave	0.9757	0.9058		1.11	1.20	-7.2	30.0
1,3,5-Trimethylbenzene	Ave	1.373	1.242		1.09	1.20	-9.5	30.0
1,2,4-Trimethylbenzene	Ave	1.224	1.163		1.14	1.20	-5.0	30.0
1,3-Dichlorobenzene	Ave	1.457	1.326		1.09	1.20	-9.0	30.0
1,4-Dichlorobenzene	Ave	1.376	1.292		1.13	1.20	-6.0	30.0
Benzyl chloride	Ave	2.289	1.742		0.913	1.20	-23.9	30.0
1,2-Dichlorobenzene	Ave	1.416	1.282		1.09	1.20	-9.4	30.0
1,2,4-Trichlorobenzene	Ave	0.8986	0.8706		1.16	1.20	-3.1	30.0
Hexachlorobutadiene	Ave	0.6326	0.5434		1.03	1.20	-14.1	30.0
Naphthalene	Ave	2.798	2.079		0.891	1.20	-25.7	30.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.2360	0.2367		2.01	2.00	0.3	30.0
Toluene-d8 (Surr)	Ave	0.6887	0.7064		2.05	2.00	2.6	30.0
4-Bromofluorobenzene (Surr)	Ave	0.5622	0.5589		1.99	2.00	-0.6	30.0

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\SACCHROM\ChromData\ATMS5\20150326-20538.b\MS5032522.D
Lims ID: ICV 1.2ppbv
Client ID:
Sample Type: ICV
Inject. Date: 26-Mar-2015 06:58:30 ALS Bottle#: 3 Worklist Smp#: 15
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: ICV 1.2ppbv/2.5ppbv
Misc. Info.: 240ML240ML
Operator ID: AJS Instrument ID: ATMS5
Sublist: chrom-TO15 SIM*sub3

Method: \\SACCHROM\ChromData\ATMS5\20150326-20538.b\TO15 SIM.m
Limit Group: MSA - TO-15_SIM_ICAL
Last Update: 26-Mar-2015 14:41:17 Calib Date: 26-Mar-2015 03:17:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\SACCHROM\ChromData\ATMS5\20150326-20538.b\MS5032518.D

Column 1 : Det: MS SCAN
Process Host: XAWRK051

First Level Reviewer: shardaa Date: 26-Mar-2015 14:41:00

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	130	11.900	11.900	0.000	97	40744	2.00	2.00	
* 2 1,4-Difluorobenzene	114	13.993	13.996	-0.003	100	182440	2.00	2.00	
* 3 Chlorobenzene-d5 (IS)	117	20.561	20.560	0.001	100	160993	2.00	2.00	
$ 4 1,2-Dichloroethane-d4 (Sur	65	13.060	13.065	-0.005	99	43183	2.00	2.01	
$ 5 Toluene-d8 (Surr)	100	17.326	17.325	0.001	100	128874	2.00	2.05	
$ 6 4-Bromofluorobenzene (Surr	95	23.092	23.092	0.000	100	89979	2.00	1.99	
7 Propene	41	4.117	4.126	-0.009	100	20668	1.20	1.07	
8 Dichlorodifluoromethane	85	4.181	4.190	-0.009	100	70795	1.20	1.15	
9 1,2-Dichloro-1,1,2,2-tetra	135	4.399	4.417	-0.018	100	57345	1.20	1.06	
10 Chloromethane	50	4.572	4.590	-0.018	100	15994	1.20	0.9817	
11 Vinyl chloride	62	4.817	4.836	-0.019	100	22254	1.20	1.04	
12 Butadiene	39	4.890	4.908	-0.018	99	14184	1.20	1.04	
13 Bromomethane	94	5.644	5.657	-0.013	100	24123	1.20	1.00	
14 Chloroethane	64	5.827	5.841	-0.014	100	16297	1.20	1.05	
15 Trichlorofluoromethane	101	6.436	6.450	-0.014	100	69078	1.20	1.18	
16 Isopropyl alcohol	45	7.067	7.067	0.000	99	62615	1.20	1.11	
17 Acrolein	56	7.130	7.130	0.000	95	11643	1.20	1.22	
18 Acetone	43	7.294	7.294	0.000	100	38903	1.20	1.04	
19 1,1,2-Trichloro-1,2,2-trif	101	7.440	7.449	-0.009	100	66225	1.20	1.17	
20 1,1-Dichloroethene	96	7.640	7.649	-0.009	100	34608	1.20	1.16	
21 Acetonitrile	41	8.353	8.360	-0.007	100	35138	1.20	1.19	
22 Methylene Chloride	49	8.522	8.529	-0.007	100	32292	1.20	1.15	
23 Acrylonitrile	53	8.665	8.672	-0.007	100	24333	1.20	1.14	
24 Methyl tert-butyl ether	73	9.122	9.122	0.000	100	102991	1.20	1.12	
25 trans-1,2-Dichloroethene	96	9.244	9.253	-0.009	100	37019	1.20	1.21	
26 Hexane	41	9.658	9.664	-0.006	100	33263	1.20	1.14	
27 1,1-Dichloroethane	63	10.054	10.067	-0.013	100	60120	1.20	1.19	
28 Vinyl acetate	43	10.100	10.100	0.000	98	69710	1.20	1.26	
29 2-Butanone (MEK)	72	10.934	10.930	0.004	100	21249	1.20	1.18	
30 cis-1,2-Dichloroethene	96	11.290	11.301	-0.011	100	38800	1.20	1.24	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
31 Ethyl acetate	43	11.355	11.344	0.011	100	62940	1.20	1.10	
32 Chloroform	83	11.638	11.638	0.000	100	62281	1.20	1.20	
33 Tetrahydrofuran	42	12.129	12.118	0.011	100	36388	1.20	1.09	
34 1,1,1-Trichloroethane	97	12.556	12.560	-0.004	100	65176	1.20	1.22	
35 Cyclohexane	84	12.748	12.752	-0.004	100	63136	1.20	1.22	
36 Carbon tetrachloride	117	13.124	13.129	-0.005	100	61636	1.20	1.37	
37 1,2-Dichloroethane	62	13.242	13.247	-0.005	100	39064	1.20	1.20	
38 Benzene	78	13.378	13.383	-0.005	100	129460	1.20	1.17	
39 n-Heptane	43	13.560	13.565	-0.005	100	60643	1.20	1.17	
40 Trichloroethene	130	14.733	14.741	-0.008	100	53142	1.20	1.24	
41 1,2-Dichloropropane	76	15.027	15.035	-0.008	100	15802	1.20	1.19	
42 Dichlorobromomethane	85	15.476	15.484	-0.008	100	44360	1.20	1.21	
43 1,4-Dioxane	88	15.545	15.536	0.009	100	27880	1.20	1.04	
44 4-Methyl-2-pentanone (MIBK	43	16.362	16.359	0.003	100	68591	1.20	1.06	
45 cis-1,3-Dichloropropene	75	16.691	16.694	-0.003	100	61013	1.20	1.20	
46 Toluene	91	17.490	17.498	-0.008	100	160020	1.20	1.16	
47 trans-1,3-Dichloropropene	75	17.772	17.771	0.001	100	59572	1.20	1.11	
48 1,1,2-Trichloroethane	97	18.108	18.107	0.001	99	44614	1.20	1.11	
49 2-Hexanone	58	18.263	18.262	0.001	100	37598	1.20	0.9860	
50 Tetrachloroethene	166	18.986	18.992	-0.006	99	62003	1.20	1.15	
51 Chlorodibromomethane	129	19.194	19.193	0.001	100	77540	1.20	1.15	
52 Ethylene Dibromide	107	19.636	19.642	-0.006	99	69609	1.20	1.12	
53 Chlorobenzene	112	20.636	20.643	-0.007	100	124528	1.20	1.10	
54 Ethylbenzene	91	20.818	20.825	-0.007	100	201445	1.20	1.09	
55 m-Xylene & p-Xylene	91	21.000	21.006	-0.006	100	303288	2.40	2.17	
56 o-Xylene	91	21.898	21.896	0.002	99	155587	1.20	1.07	
57 Styrene	104	21.924	21.926	-0.002	98	135066	1.20	1.12	
58 Bromoform	173	22.463	22.466	-0.003	100	47901	1.20	1.14	
59 1,1,2,2-Tetrachloroethane	83	22.865	22.865	0.000	100	96624	1.20	1.03	
60 1,2,3-Trichloropropane	110	23.160	23.168	-0.008	100	30017	1.20	1.04	
61 4-Ethyltoluene	120	23.754	23.755	-0.001	100	87493	1.20	1.11	
62 1,3,5-Trimethylbenzene	120	23.850	23.852	-0.002	100	120004	1.20	1.09	
63 1,2,4-Trimethylbenzene	120	24.637	24.639	-0.002	100	112350	1.20	1.14	
64 1,3-Dichlorobenzene	146	25.384	25.381	0.003	99	128066	1.20	1.09	
65 1,4-Dichlorobenzene	146	25.581	25.582	-0.001	100	124846	1.20	1.13	
66 Benzyl chloride	91	25.747	25.748	-0.001	100	168270	1.20	0.9131	
67 1,2-Dichlorobenzene	146	26.301	26.303	-0.002	100	123876	1.20	1.09	
68 1,2,4-Trichlorobenzene	180	29.603	29.602	0.001	100	84099	1.20	1.16	
69 Hexachlorobutadiene	225	29.976	29.976	0.000	100	52485	1.20	1.03	
70 Naphthalene	128	30.042	30.041	0.001	100	200792	1.20	0.8914	

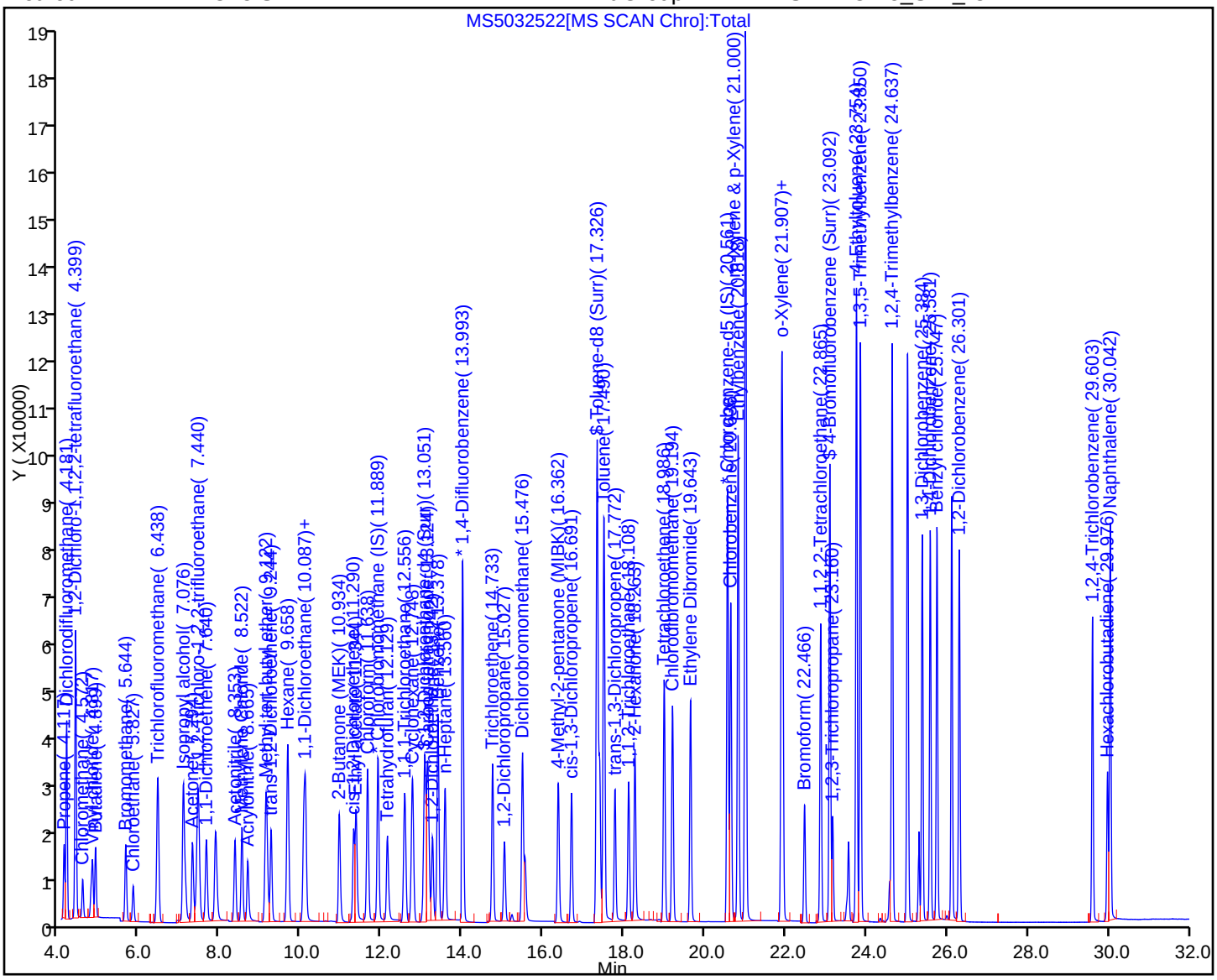
Reagents:

VACORPLC2.5_00063	Amount Added: 240.00	Units: mL	
VASUISIM_00160	Amount Added: 50.00	Units: mL	Run Reagent

Report Date: 26-Mar-2015 14:41:18 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Sacramento

Data File:	\\SACCHROM\ChromData\ATMS5\20150326-20538.b\MS5032522.D				
Injection Date:	26-Mar-2015 06:58:30	Instrument ID:	ATMS5		
Lims ID:	ICV 1.2ppbv				
Client ID:					
Operator ID:	AJS	ALS Bottle#:	3	Worklist Smp#:	15
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	TO15 SIM	Limit Group:	MSA - TO-15_SIM_ICAL		



FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Sacramento Job No.: 320-12924-1

SDG No.:

Lab Sample ID: CCVIS 320-73719/2 Calibration Date: 05/11/2015 13:07

Instrument ID: ATMS5 Calib Start Date: 03/25/2015 20:20

GC Column: RTX-Volatiles ID: 0.32(mm) Calib End Date: 03/26/2015 03:17

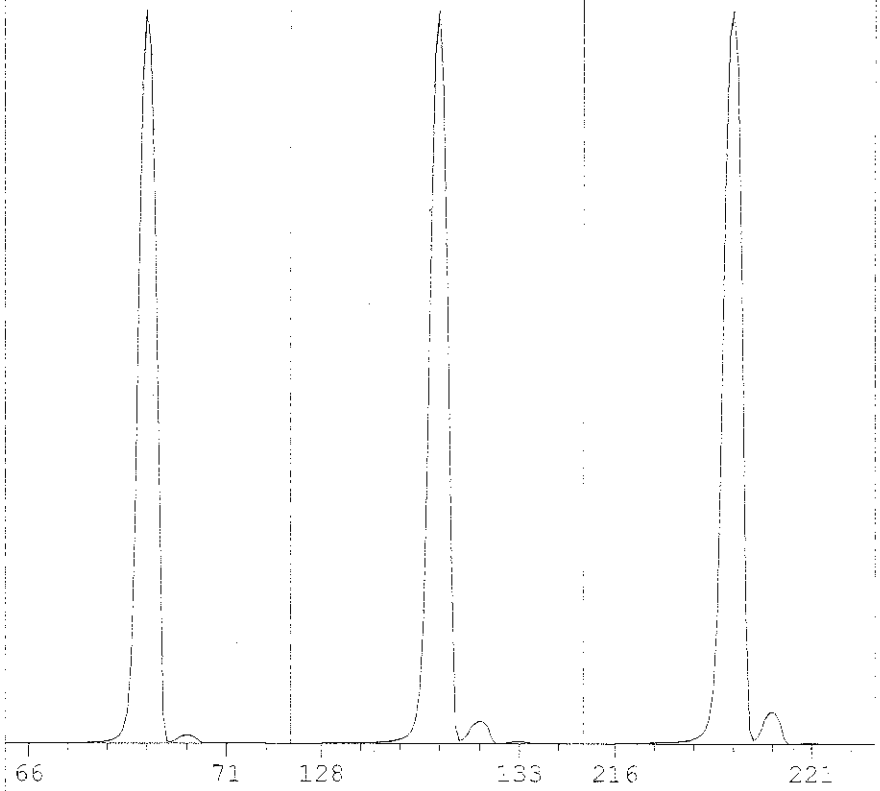
Lab File ID: MS5051102.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Freon 12	Ave	3.015	3.210		1.28	1.20	6.5	30.0
Vinyl chloride	Ave	1.050	0.8652		0.991	1.20	-17.6	30.0
Chloroethane	Ave	0.7622	0.6639		1.05	1.20	-12.9	30.0
Freon 11	Ave	2.877	2.932		1.23	1.20	1.9	30.0
Freon 113	Ave	2.767	2.689		1.17	1.20	-2.8	30.0
1,1-Dichloroethene	Ave	1.462	1.394		1.15	1.20	-4.6	30.0
Methylene Chloride	Ave	1.381	1.260		1.10	1.20	-8.7	30.0
trans-1,2-Dichloroethene	Ave	1.504	1.467		1.17	1.20	-2.5	30.0
1,1-Dichloroethane	Ave	2.478	2.347		1.14	1.20	-5.3	30.0
cis-1,2-Dichloroethene	Ave	1.541	1.553		1.21	1.20	0.8	30.0
Chloroform	Ave	2.540	2.512		1.19	1.20	-1.1	30.0
1,1,1-Trichloroethane	Ave	2.615	2.717		1.25	1.20	3.9	30.0
1,2-Dichloroethane	Ave	0.3568	0.3360		1.13	1.20	-5.8	30.0
Benzene	Ave	1.208	1.045		1.04	1.20	-13.5	30.0
Trichloroethene	Ave	0.4715	0.4516		1.15	1.20	-4.2	30.0
Toluene	Ave	1.514	1.356		1.08	1.20	-10.4	30.0
1,1,2-Trichloroethane	Ave	0.5011	0.4027		0.966	1.20	-19.7	30.0
Tetrachloroethene	Ave	0.6675	0.5748		1.04	1.20	-13.9	30.0
Chlorobenzene	Ave	1.409	1.166		0.995	1.20	-17.2	30.0
Ethylbenzene	Ave	2.292	1.869		0.981	1.20	-18.4	30.0
m,p-Xylene	Ave	1.735	1.419		1.97	2.40	-18.2	30.0
o-Xylene	Ave	1.813	1.468		0.974	1.20	-19.0	30.0
1,4-Dichlorobenzene	Ave	1.376	1.191		1.04	1.20	-13.4	30.0
1,2-Dichlorobenzene	Ave	1.416	1.158		0.983	1.20	-18.2	30.0
Naphthalene	Ave	2.798	3.182		1.37	1.20	13.7	30.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.2360	0.2348		1.99	2.00	-0.5	30.0
Toluene-d8 (Surr)	Ave	0.6887	0.6905		2.01	2.00	0.3	30.0
4-Bromofluorobenzene (Surr)	Ave	0.5622	0.6097		2.17	2.00	8.4	30.0

Mon May 11 12:02:17 2015
C:\MSDCHEM\1\5973N\BFB.U

Instrument: ATMS5

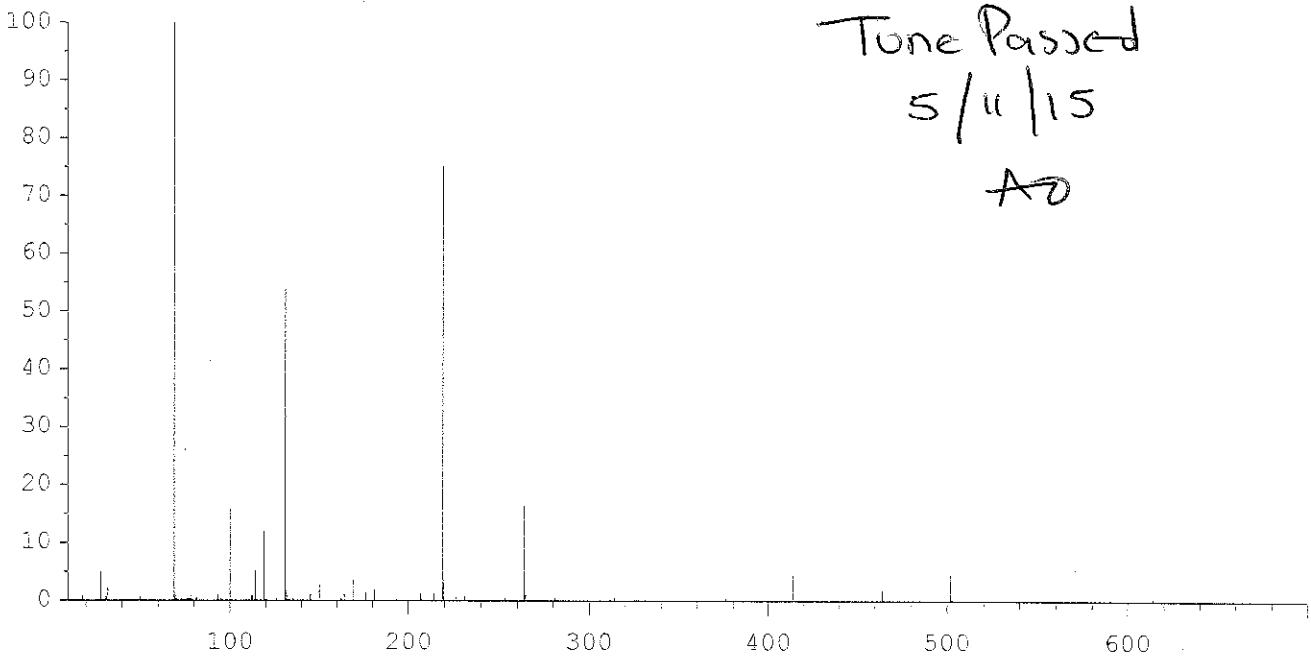
Mass	69.00	Mass	131.00	Mass	219.00
Ab	545478	Ab	304459	Ab	414543
Pw50	0.51	Pw50	0.50	Pw50	0.51



Ion Pol	POS	MassGain	154
		MassOffs	-15
Emission	34.6	AmuGain	2151
ElEnrgy	69.9	AmuOffs	133
Filament	1	Wid219	-0.032
		DC Pol	POS
Repeller	24.76		
IonFcus	78.8	HEDEnab	ON
EntLens	21.0	EMVolts	1353
EntOffs	18.57		
		Samples	8
PFTBA	OPEN	Averages	3
		Stepsize	0.10
Stepsize	0.10		
MS Source	230	TurboSpd	100
MS Quad	150		

Scan: 10.00 - 700.00 Samples: 8 Thresh: 100 Step: 0.10
226 peaks Base: 69.00 Abundance: 462912

Tune Passed
5/11/15
AO



Mass	Abund	Rel Abund	Iso Mass	Iso Abund	Iso Ratio
69.00	462912	100.00	70.00	4838	1.05
131.00	249280	53.85	132.00	7799	3.13
219.00	347968	75.17	220.00	15128	4.35

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\SACCHROM\ChromData\ATMS5\20150512-21744.b\MS5051102.D
Lims ID: CCVIS 1.2ppbv
Client ID:
Sample Type: CCVIS
Inject. Date: 11-May-2015 13:07:30 ALS Bottle#: 3 Worklist Smp#: 2
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: CCV MS1 1.2PPBV
Misc. Info.: 240ML240ML
Operator ID: AO Instrument ID: ATMS5
Sublist: chrom-TO15 SIM*sub2

Method: \\SACCHROM\ChromData\ATMS5\20150512-21744.b\TO15 SIM.m
Limit Group: MSA - TO-15_SIM_ICAL
Last Update: 12-May-2015 14:35:50 Calib Date: 26-Mar-2015 03:17:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\SACCHROM\ChromData\ATMS5\20150326-20538.b\MS5032518.D

Column 1 : Det: MS SCAN
Process Host: XAWRK010

First Level Reviewer: ortizam Date: 12-May-2015 14:11:54

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	130	11.850	11.850	0.000	98	32227	2.00	2.00	
* 2 1,4-Difluorobenzene	114	13.941	13.941	0.000	100	153766	2.00	2.00	
* 3 Chlorobenzene-d5 (IS)	117	20.508	20.508	0.000	100	143379	2.00	2.00	
$ 4 1,2-Dichloroethane-d4 (Sur	65	13.002	13.002	0.000	100	36109	2.00	1.99	
$ 5 Toluene-d8 (Surr)	100	17.266	17.266	0.000	100	106167	2.00	2.01	
$ 6 4-Bromofluorobenzene (Surr	95	23.040	23.040	0.000	99	87418	2.00	2.17	
7 Propene	41	4.108	4.108	0.000	95	16223	1.20	1.06	
8 Dichlorodifluoromethane	85	4.181	4.181	0.000	99	62192	1.20	1.28	
9 1,2-Dichloro-1,1,2,2-tetra	135	4.399	4.399	0.000	89	49615	1.20	1.16	
10 Chloromethane	50	4.572	4.572	0.000	95	11869	1.20	0.9210	
11 Vinyl chloride	62	4.817	4.817	0.000	68	16763	1.20	0.99	
12 Butadiene	39	4.890	4.890	0.000	79	10760	1.20	1.00	
13 Bromomethane	94	5.626	5.626	0.000	87	17257	1.20	0.9027	
14 Chloroethane	64	5.810	5.810	0.000	96	12863	1.20	1.05	
15 Trichlorofluoromethane	101	6.418	6.418	0.000	100	56810	1.20	1.23	
16 Isopropyl alcohol	45	7.030	7.030	0.000	98	54851	1.20	1.23	
17 Acrolein	56	7.094	7.094	0.000	77	8879	1.20	1.18	
18 Acetone	43	7.248	7.248	0.000	88	32169	1.20	1.09	
19 1,1,2-Trichloro-1,2,2-trif	101	7.412	7.412	0.000	98	52102	1.20	1.17	
20 1,1-Dichloroethene	96	7.612	7.612	0.000	100	27017	1.20	1.15	
21 Acetonitrile	41	8.314	8.314	0.000	98	24692	1.20	1.06	
22 Methylene Chloride	49	8.490	8.490	0.000	98	24413	1.20	1.10	
23 Acrylonitrile	53	8.620	8.620	0.000	97	18962	1.20	1.13	
24 Methyl tert-butyl ether	73	9.067	9.067	0.000	99	83951	1.20	1.15	
25 trans-1,2-Dichloroethene	96	9.207	9.207	0.000	100	28415	1.20	1.17	
26 Hexane	41	9.621	9.621	0.000	97	25825	1.20	1.12	
27 1,1-Dichloroethane	63	10.017	10.017	0.000	23	45478	1.20	1.14	
28 Vinyl acetate	43	9.627	9.627	0.000	9	24407	1.20	0.5560	
29 2-Butanone (MEK)	72	10.869	10.869	0.000	82	14514	1.20	1.02	
30 cis-1,2-Dichloroethene	96	11.240	11.240	0.000	97	30094	1.20	1.21	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
31 Ethyl acetate	43	11.295	11.295	0.000	94	50641	1.20	1.12	
32 Chloroform	83	11.589	11.589	0.000	95	48670	1.20	1.19	
33 Tetrahydrofuran	42	12.046	12.046	0.000	92	28202	1.20	1.07	
34 1,1,1-Trichloroethane	97	12.508	12.508	0.000	89	52643	1.20	1.25	
35 Cyclohexane	84	12.705	12.705	0.000	100	47809	1.20	1.17	
36 Carbon tetrachloride	117	13.074	13.074	0.000	99	26655	1.20	0.7046	
37 1,2-Dichloroethane	62	13.192	13.192	0.000	100	31066	1.20	1.13	
38 Benzene	78	13.329	13.329	0.000	99	96647	1.20	1.04	
39 n-Heptane	43	13.520	13.520	0.000	99	43176	1.20	0.9888	
40 Trichloroethene	130	14.683	14.683	0.000	100	41751	1.20	1.15	
41 1,2-Dichloropropane	76	14.977	14.977	0.000	99	12602	1.20	1.13	
42 Dichlorobromomethane	85	15.417	15.417	0.000	98	32418	1.20	1.05	
43 1,4-Dioxane	88	15.469	15.469	0.000	95	29184	1.20	1.29	
44 4-Methyl-2-pentanone (MIBK	43	16.292	16.292	0.000	99	68104	1.20	1.25	
45 cis-1,3-Dichloropropene	75	16.636	16.636	0.000	99	46224	1.20	1.08	
46 Toluene	91	17.439	17.439	0.000	99	125359	1.20	1.08	
47 trans-1,3-Dichloropropene	75	17.712	17.712	0.000	98	44902	1.20	0.9420	
48 1,1,2-Trichloroethane	97	18.048	18.048	0.000	92	34709	1.20	0.9661	
49 2-Hexanone	58	18.194	18.194	0.000	92	45389	1.20	1.34	
50 Tetrachloroethene	166	18.939	18.939	0.000	100	49545	1.20	1.04	
51 Chlorodibromomethane	129	19.134	19.134	0.000	99	51784	1.20	0.8645	
52 Ethylene Dibromide	107	19.583	19.583	0.000	99	55107	1.20	1.00	
53 Chlorobenzene	112	20.584	20.584	0.000	1	100531	1.20	1.00	
54 Ethylbenzene	91	20.773	20.773	0.000	89	161118	1.20	0.9807	
55 m-Xylene & p-Xylene	91	20.955	20.955	0.000	56	244634	2.40	1.97	
56 o-Xylene	91	21.846	21.846	0.000	26	126571	1.20	0.9741	
57 Styrene	104	21.873	21.873	0.000	1	118831	1.20	1.11	
58 Bromoform	173	22.412	22.412	0.000	1	27398	1.20	0.7291	
59 1,1,2,2-Tetrachloroethane	83	22.812	22.812	0.000	4	72202	1.20	0.8620	
60 1,2,3-Trichloropropane	110	23.108	23.108	0.000	1	25017	1.20	0.9757	
61 4-Ethyltoluene	120	23.705	23.705	0.000	86	75462	1.20	1.08	
62 1,3,5-Trimethylbenzene	120	23.803	23.803	0.000	95	103144	1.20	1.05	
63 1,2,4-Trimethylbenzene	120	24.588	24.588	0.000	1	98286	1.20	1.12	
64 1,3-Dichlorobenzene	146	25.330	25.330	0.000	84	104645	1.20	1.00	
65 1,4-Dichlorobenzene	146	25.530	25.530	0.000	10	102678	1.20	1.04	
66 Benzyl chloride	91	25.696	25.696	0.000	1	115861	0.9619	0.7059	
67 1,2-Dichlorobenzene	146	26.247	26.247	0.000	1	99816	1.20	0.9833	
68 1,2,4-Trichlorobenzene	180	29.549	29.549	0.000	1	81704	1.20	1.27	
69 Hexachlorobutadiene	225	29.927	29.927	0.000	7	49015	1.20	1.08	
70 Naphthalene	128	29.988	29.988	0.000	0	274321	1.20	1.37	

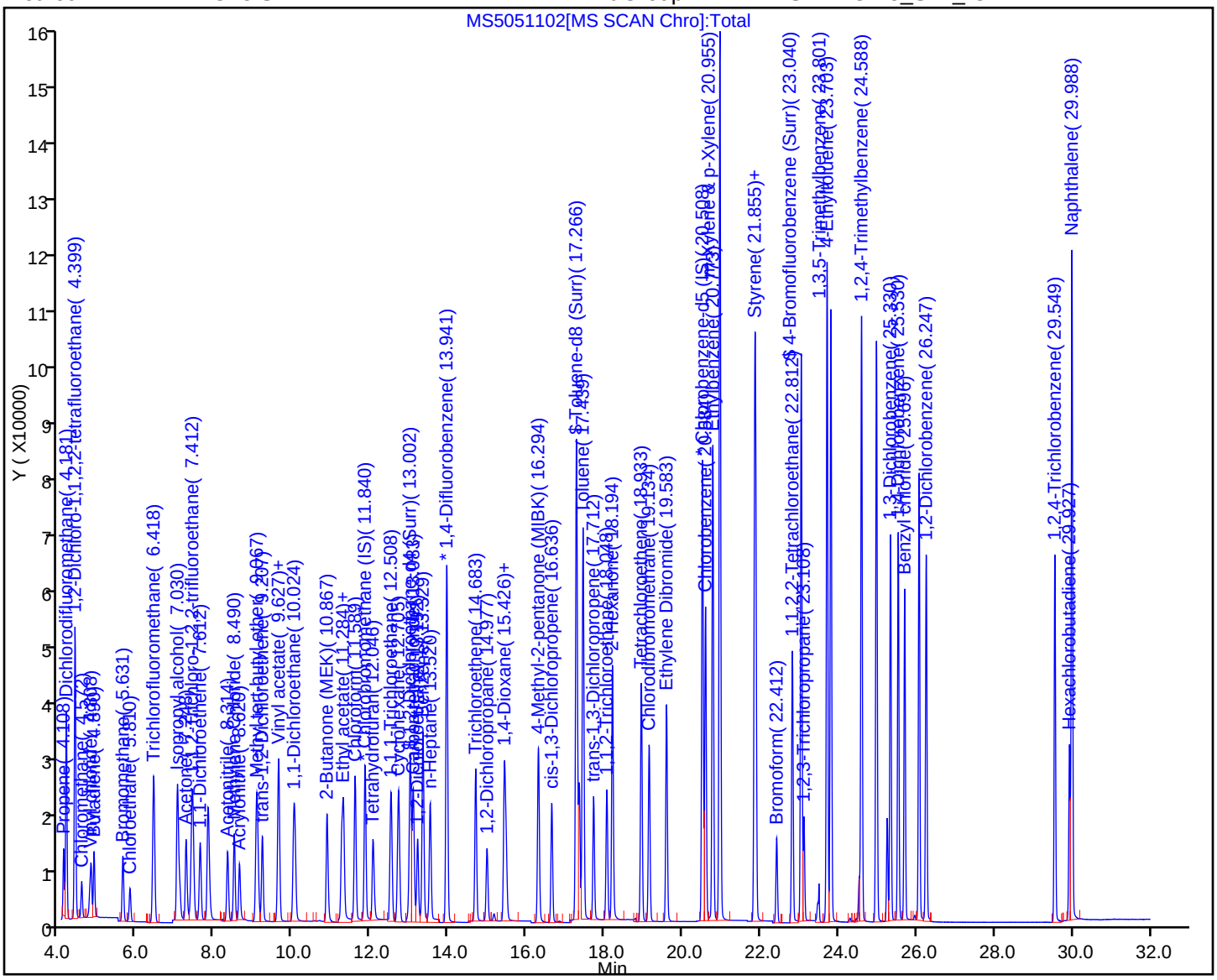
Reagents:

VACORPIC2.5_00154	Amount Added: 240.00	Units: mL	
VASUISIM_00172	Amount Added: 50.00	Units: mL	Run Reagent

Report Date: 12-May-2015 14:35:50 Chrom Revision: 2.2 05-May-2015 11:39:10

TestAmerica Sacramento

Data File:	\\SACCHROM\ChromData\ATMS5\20150512-21744.b\MS5051102.D				
Injection Date:	11-May-2015 13:07:30	Instrument ID:	ATMS5		
Lims ID:	CCVIS 1.2ppbv				
Client ID:					
Operator ID:	AO	ALS Bottle#:	3	Worklist Smp#:	2
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	TO15 SIM	Limit Group:	MSA - TO-15_SIM_ICAL		



FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Sacramento Job No.: 320-12924-1

SDG No.:

Lab Sample ID: CCVIS 320-73719/2 Calibration Date: 05/11/2015 13:07

Instrument ID: ATMS5 Calib Start Date: 05/09/2015 03:46

GC Column: RTX-Volatiles ID: 0.32(mm) Calib End Date: 05/09/2015 03:46

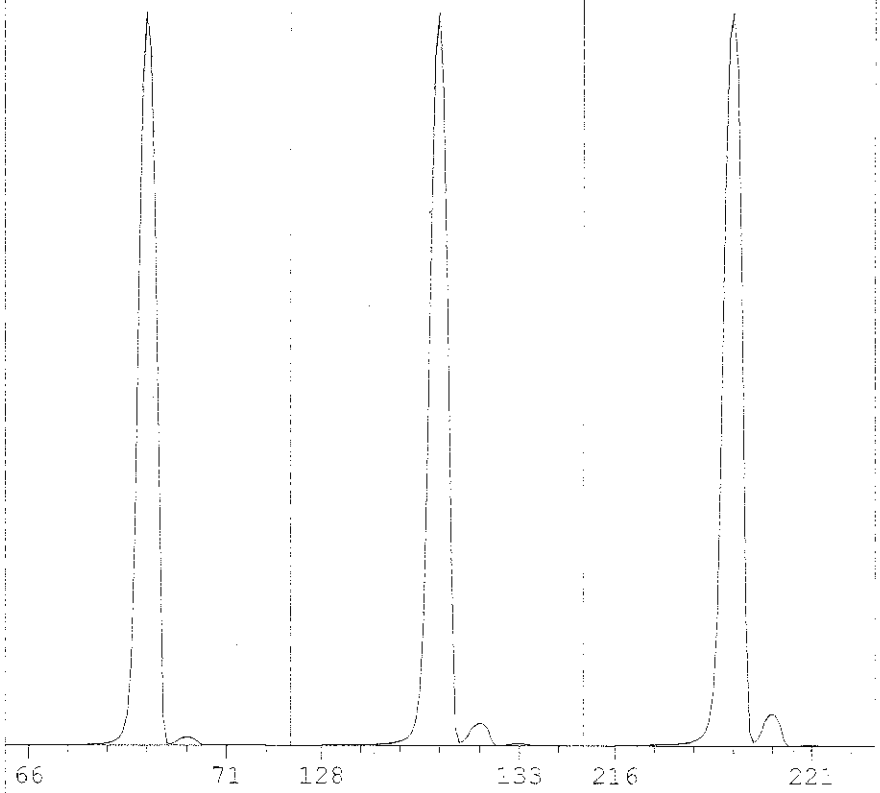
Lab File ID: MS5051102.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Propene	Ave	0.8853	0.8373		1.06	1.20	-5.4	30.0
1,2-Dichloro-1,1,2,2-tetrafluoroethane	Ave	1.937	2.561		1.16	1.20	32.2*	30.0
Chloromethane	Ave	0.5384	0.6126		0.921	1.20	13.8	30.0
1,3-Butadiene	Ave	0.3164	0.5554		0.998	1.20	75.5*	30.0
Bromomethane	Ave	0.7049	0.8907		0.903	1.20	26.3	30.0
Isopropyl alcohol	Ave	1.513	2.831		1.23	1.20	87.2*	30.0
Acrolein	Ave	0.2526	0.4583		1.18	1.20	81.4*	30.0
Acetone	Ave	2.181	1.660		1.09	1.20	-23.9	30.0
Acetonitrile	Ave	0.6356	1.274		1.06	1.20	100.5*	30.0
Acrylonitrile	Ave	0.3775	0.9787		1.13	1.20	159.3*	30.0
Methyl-t-Butyl Ether (MTBE)	Ave	2.276	4.333		1.15	1.20	90.4*	30.0
Hexane	Ave	0.7854	1.333		1.12	1.20	69.7*	30.0
Vinyl acetate	Ave	0.7632	1.260		0.556	1.20	65.0*	30.0
2-Butanone (MEK)	Ave	0.4968	0.7491		1.02	1.20	50.8*	30.0
Ethyl acetate	Ave	1.338	2.614		1.12	1.20	95.4*	30.0
Tetrahydrofuran	Ave	0.7077	1.456		1.07	1.20	105.7*	30.0
Cyclohexane	Ave	1.471	2.468		1.17	1.20	67.7*	30.0
Carbon tetrachloride	Ave	0.2152	0.2883		0.705	1.20	34.0*	30.0
n-Heptane	Ave	0.2739	0.4670		0.989	1.20	70.5*	30.0
1,2-Dichloropropane	Ave	0.0884	0.1363		1.13	1.20	54.2*	30.0
Bromodichloromethane	Ave	0.2175	0.3507		1.05	1.20	61.2*	30.0
1,4-Dioxane	Ave	0.1710	0.3157		1.29	1.20	84.6*	30.0
4-Methyl-2-pentanone (MIBK)	Ave	0.2867	0.7367		1.25	1.20	156.9*	30.0
cis-1,3-Dichloropropene	Ave	0.2786	0.5000		1.08	1.20	79.5*	30.0
trans-1,3-Dichloropropene	Ave	0.3089	0.5209		0.942	1.20	68.6*	30.0
2-Hexanone	Ave	0.1704	0.5266		1.34	1.20	209.1*	30.0
Dibromochloromethane	Ave	0.4024	0.6007		0.865	1.20	49.3*	30.0
1,2-Dibromoethane (EDB)	Ave	0.3719	0.6393		0.997	1.20	71.9*	30.0
Styrene	Ave	0.6548	1.379		1.11	1.20	110.5*	30.0
Bromoform	Ave	0.1971	0.3178		0.729	1.20	61.3*	30.0
1,1,2,2-Tetrachloroethane	Ave	0.4640	0.8376		0.862	1.20	80.5*	30.0
1,2,3-Trichloropropane	Ave	0.1646	0.2902		0.976	1.20	76.3*	30.0
4-Ethyltoluene	Ave	0.4081	0.8754		1.08	1.20	114.5*	30.0
1,3,5-Trimethylbenzene	Ave	0.6433	1.197		1.05	1.20	86.0*	30.0
1,2,4-Trimethylbenzene	Ave	0.5823	1.140		1.12	1.20	95.8*	30.0
1,3-Dichlorobenzene	Ave	0.6471	1.214		1.00	1.20	87.6*	30.0
Benzyl chloride	Ave	0.6087	1.680		0.706	0.962	176.0*	30.0
1,2,4-Trichlorobenzene	Ave	0.3026	0.9478		1.27	1.20	213.2*	30.0
Hexachlorobutadiene	Ave	0.2498	0.5686		1.08	1.20	127.6*	30.0

Mon May 11 12:02:17 2015
C:\MSDCHEM\1\5973N\BFB.U

Instrument: ATMS5

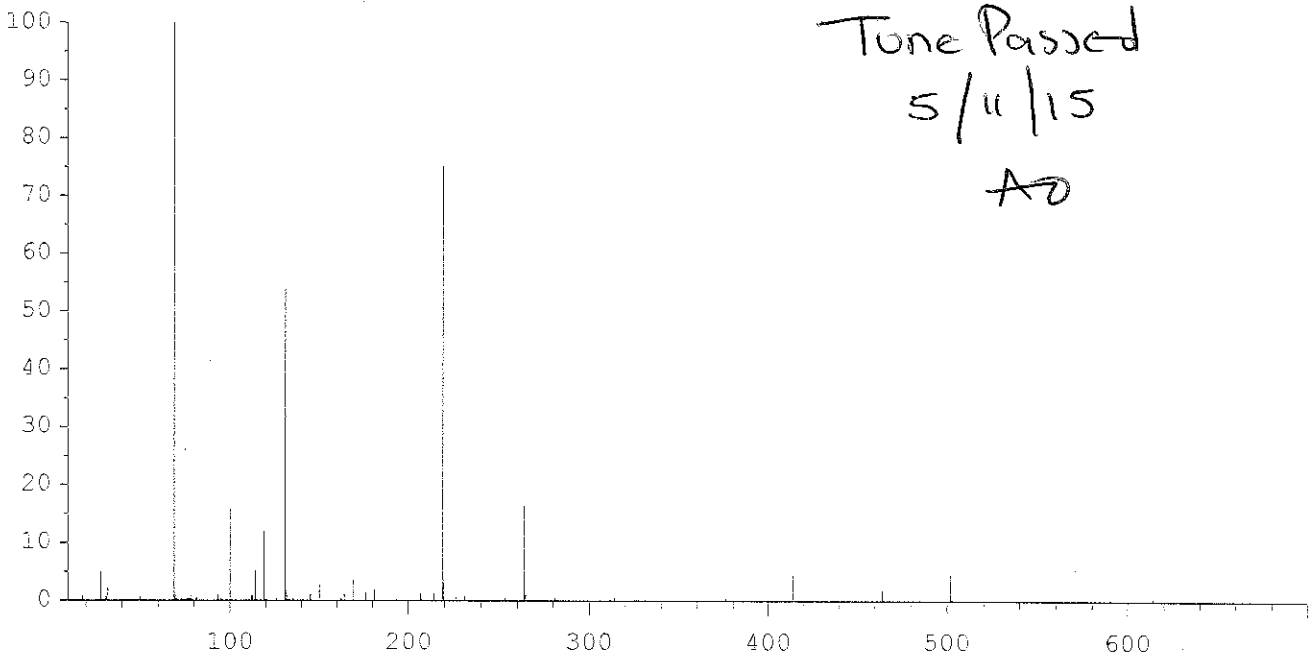
Mass	69.00	Mass	131.00	Mass	219.00
Ab	545478	Ab	304459	Ab	414543
Pw50	0.51	Pw50	0.50	Pw50	0.51



Ion Pol	POS	MassGain	154
		MassOffs	-15
Emission	34.6	AmuGain	2151
ElEnrgy	69.9	AmuOffs	133
Filament	1	Wid219	-0.032
		DC Pol	POS
Repeller	24.76		
IonFcus	78.8	HEDEnab	ON
EntLens	21.0	EMVolts	1353
EntOffs	18.57		
		Samples	8
PFTBA	OPEN	Averages	3
		Stepsize	0.10
Stepsize	0.10		
MS Source	230	TurboSpd	100
MS Quad	150		

Scan: 10.00 - 700.00 Samples: 8 Thresh: 100 Step: 0.10
226 peaks Base: 69.00 Abundance: 462912

Tune Passed
5/11/15
AO



Mass	Abund	Rel Abund	Iso Mass	Iso Abund	Iso Ratio
69.00	462912	100.00	70.00	4838	1.05
131.00	249280	53.85	132.00	7799	3.13
219.00	347968	75.17	220.00	15128	4.35

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\SACCHROM\ChromData\ATMS5\20150512-21744.b\MS5051102.D
Lims ID: CCVIS 1.2ppbv
Client ID:
Sample Type: CCVIS
Inject. Date: 11-May-2015 13:07:30 ALS Bottle#: 3 Worklist Smp#: 2
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: CCV MS1 1.2PPBV
Misc. Info.: 240ML240ML
Operator ID: AO Instrument ID: ATMS5
Sublist: chrom-TO15 SIM*sub2

Method: \\SACCHROM\ChromData\ATMS5\20150512-21744.b\TO15 SIM.m
Limit Group: MSA - TO-15_SIM_ICAL
Last Update: 12-May-2015 14:35:50 Calib Date: 26-Mar-2015 03:17:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\SACCHROM\ChromData\ATMS5\20150326-20538.b\MS5032518.D

Column 1 : Det: MS SCAN
Process Host: XAWRK010

First Level Reviewer: ortizam Date: 12-May-2015 14:11:54

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	130	11.850	11.850	0.000	98	32227	2.00	2.00	
* 2 1,4-Difluorobenzene	114	13.941	13.941	0.000	100	153766	2.00	2.00	
* 3 Chlorobenzene-d5 (IS)	117	20.508	20.508	0.000	100	143379	2.00	2.00	
$ 4 1,2-Dichloroethane-d4 (Sur	65	13.002	13.002	0.000	100	36109	2.00	1.99	
$ 5 Toluene-d8 (Surr)	100	17.266	17.266	0.000	100	106167	2.00	2.01	
$ 6 4-Bromofluorobenzene (Surr	95	23.040	23.040	0.000	99	87418	2.00	2.17	
7 Propene	41	4.108	4.108	0.000	95	16223	1.20	1.06	
8 Dichlorodifluoromethane	85	4.181	4.181	0.000	99	62192	1.20	1.28	
9 1,2-Dichloro-1,1,2,2-tetra	135	4.399	4.399	0.000	89	49615	1.20	1.16	
10 Chloromethane	50	4.572	4.572	0.000	95	11869	1.20	0.9210	
11 Vinyl chloride	62	4.817	4.817	0.000	68	16763	1.20	0.99	
12 Butadiene	39	4.890	4.890	0.000	79	10760	1.20	1.00	
13 Bromomethane	94	5.626	5.626	0.000	87	17257	1.20	0.9027	
14 Chloroethane	64	5.810	5.810	0.000	96	12863	1.20	1.05	
15 Trichlorofluoromethane	101	6.418	6.418	0.000	100	56810	1.20	1.23	
16 Isopropyl alcohol	45	7.030	7.030	0.000	98	54851	1.20	1.23	
17 Acrolein	56	7.094	7.094	0.000	77	8879	1.20	1.18	
18 Acetone	43	7.248	7.248	0.000	88	32169	1.20	1.09	
19 1,1,2-Trichloro-1,2,2-trif	101	7.412	7.412	0.000	98	52102	1.20	1.17	
20 1,1-Dichloroethene	96	7.612	7.612	0.000	100	27017	1.20	1.15	
21 Acetonitrile	41	8.314	8.314	0.000	98	24692	1.20	1.06	
22 Methylene Chloride	49	8.490	8.490	0.000	98	24413	1.20	1.10	
23 Acrylonitrile	53	8.620	8.620	0.000	97	18962	1.20	1.13	
24 Methyl tert-butyl ether	73	9.067	9.067	0.000	99	83951	1.20	1.15	
25 trans-1,2-Dichloroethene	96	9.207	9.207	0.000	100	28415	1.20	1.17	
26 Hexane	41	9.621	9.621	0.000	97	25825	1.20	1.12	
27 1,1-Dichloroethane	63	10.017	10.017	0.000	23	45478	1.20	1.14	
28 Vinyl acetate	43	9.627	9.627	0.000	9	24407	1.20	0.5560	
29 2-Butanone (MEK)	72	10.869	10.869	0.000	82	14514	1.20	1.02	
30 cis-1,2-Dichloroethene	96	11.240	11.240	0.000	97	30094	1.20	1.21	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
31 Ethyl acetate	43	11.295	11.295	0.000	94	50641	1.20	1.12	
32 Chloroform	83	11.589	11.589	0.000	95	48670	1.20	1.19	
33 Tetrahydrofuran	42	12.046	12.046	0.000	92	28202	1.20	1.07	
34 1,1,1-Trichloroethane	97	12.508	12.508	0.000	89	52643	1.20	1.25	
35 Cyclohexane	84	12.705	12.705	0.000	100	47809	1.20	1.17	
36 Carbon tetrachloride	117	13.074	13.074	0.000	99	26655	1.20	0.7046	
37 1,2-Dichloroethane	62	13.192	13.192	0.000	100	31066	1.20	1.13	
38 Benzene	78	13.329	13.329	0.000	99	96647	1.20	1.04	
39 n-Heptane	43	13.520	13.520	0.000	99	43176	1.20	0.9888	
40 Trichloroethene	130	14.683	14.683	0.000	100	41751	1.20	1.15	
41 1,2-Dichloropropane	76	14.977	14.977	0.000	99	12602	1.20	1.13	
42 Dichlorobromomethane	85	15.417	15.417	0.000	98	32418	1.20	1.05	
43 1,4-Dioxane	88	15.469	15.469	0.000	95	29184	1.20	1.29	
44 4-Methyl-2-pentanone (MIBK	43	16.292	16.292	0.000	99	68104	1.20	1.25	
45 cis-1,3-Dichloropropene	75	16.636	16.636	0.000	99	46224	1.20	1.08	
46 Toluene	91	17.439	17.439	0.000	99	125359	1.20	1.08	
47 trans-1,3-Dichloropropene	75	17.712	17.712	0.000	98	44902	1.20	0.9420	
48 1,1,2-Trichloroethane	97	18.048	18.048	0.000	92	34709	1.20	0.9661	
49 2-Hexanone	58	18.194	18.194	0.000	92	45389	1.20	1.34	
50 Tetrachloroethene	166	18.939	18.939	0.000	100	49545	1.20	1.04	
51 Chlorodibromomethane	129	19.134	19.134	0.000	99	51784	1.20	0.8645	
52 Ethylene Dibromide	107	19.583	19.583	0.000	99	55107	1.20	1.00	
53 Chlorobenzene	112	20.584	20.584	0.000	1	100531	1.20	1.00	
54 Ethylbenzene	91	20.773	20.773	0.000	89	161118	1.20	0.9807	
55 m-Xylene & p-Xylene	91	20.955	20.955	0.000	56	244634	2.40	1.97	
56 o-Xylene	91	21.846	21.846	0.000	26	126571	1.20	0.9741	
57 Styrene	104	21.873	21.873	0.000	1	118831	1.20	1.11	
58 Bromoform	173	22.412	22.412	0.000	1	27398	1.20	0.7291	
59 1,1,2,2-Tetrachloroethane	83	22.812	22.812	0.000	4	72202	1.20	0.8620	
60 1,2,3-Trichloropropane	110	23.108	23.108	0.000	1	25017	1.20	0.9757	
61 4-Ethyltoluene	120	23.705	23.705	0.000	86	75462	1.20	1.08	
62 1,3,5-Trimethylbenzene	120	23.803	23.803	0.000	95	103144	1.20	1.05	
63 1,2,4-Trimethylbenzene	120	24.588	24.588	0.000	1	98286	1.20	1.12	
64 1,3-Dichlorobenzene	146	25.330	25.330	0.000	84	104645	1.20	1.00	
65 1,4-Dichlorobenzene	146	25.530	25.530	0.000	10	102678	1.20	1.04	
66 Benzyl chloride	91	25.696	25.696	0.000	1	115861	0.9619	0.7059	
67 1,2-Dichlorobenzene	146	26.247	26.247	0.000	1	99816	1.20	0.9833	
68 1,2,4-Trichlorobenzene	180	29.549	29.549	0.000	1	81704	1.20	1.27	
69 Hexachlorobutadiene	225	29.927	29.927	0.000	7	49015	1.20	1.08	
70 Naphthalene	128	29.988	29.988	0.000	0	274321	1.20	1.37	

Reagents:

VACORPIC2.5_00154 Amount Added: 240.00 Units: mL
VASUISIM_00172 Amount Added: 50.00 Units: mL Run Reagent

Report Date: 12-May-2015 14:35:50 Chrom Revision: 2.2 05-May-2015 11:39:10

TestAmerica Sacramento

Data File: \\SACCHROM\ChromData\ATMS5\20150512-21744.b\MS5051102.D

Injection Date: 11-May-2015 13:07:30 Instrument ID: ATMS5

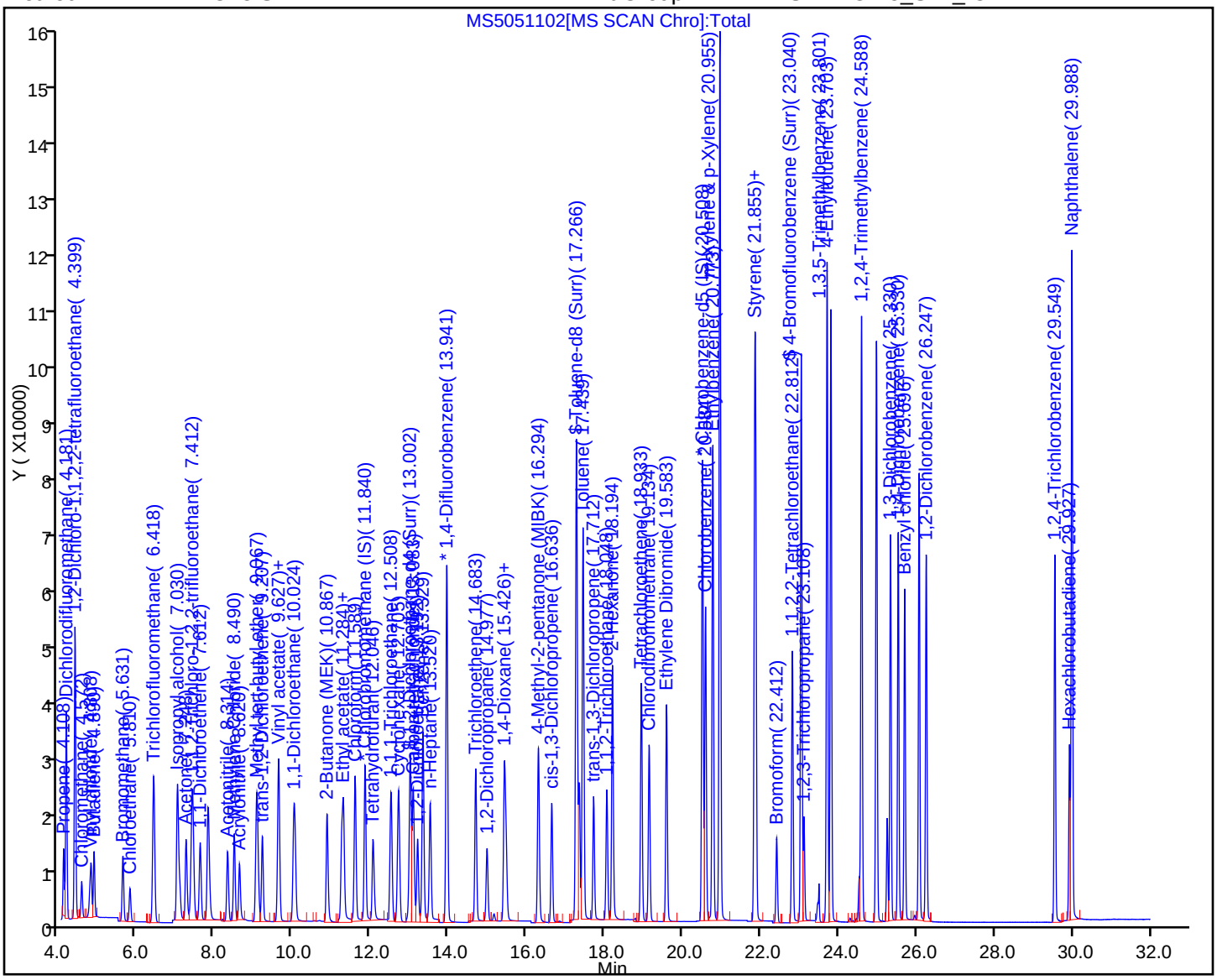
Lims ID: CCVIS 1.2ppbv

Client ID:

Operator ID: AO ALS Bottle#: 3 Worklist Smp#: 2

Purge Vol: 500.000 mL Dil. Factor: 1.0000

Method: TO15 SIM Limit Group: MSA - TO-15_SIM_ICAL



FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento
Job No.: 320-12924-1
SDG No.:
Client Sample ID:
Lab Sample ID: MB 320-73719/9
Matrix: Air
Lab File ID: MS5051110.D
Analysis Method: TO-15 SIM
Date Collected:
Sample wt/vol: 500(mL)
Date Analyzed: 05/11/2015 19:27
Soil Aliquot Vol:
Dilution Factor: 1
Soil Extract Vol.:
GC Column: RTX-Volatiles ID: 0.32(mm)
% Moisture:
Level: (low/med) Low
Analysis Batch No.: 73719
Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	133.41	ND		0.020	0.0050
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.050	0.0050
75-34-3	1,1-Dichloroethane	98.96	ND		0.020	0.0050
75-35-4	1,1-Dichloroethene	96.94	ND		0.020	0.0050
95-50-1	1,2-Dichlorobenzene	147.00	ND		0.050	0.010
107-06-2	1,2-Dichloroethane	98.96	ND		0.020	0.0050
106-46-7	1,4-Dichlorobenzene	147.00	ND		0.10	0.010
108-90-7	Chlorobenzene	112.56	ND		0.020	0.010
67-66-3	Chloroform	119.38	ND		0.020	0.0050
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.020	0.0050
100-41-4	Ethylbenzene	106.17	ND		0.020	0.010
75-69-4	Freon 11	137.37	ND		0.045	0.010
76-13-1	Freon 113	187.38	ND		0.030	0.0050
75-71-8	Freon 12	120.91	ND		0.020	0.0050
179601-23-1	m,p-Xylene	106.17	ND		0.040	0.020
75-09-2	Methylene Chloride	84.93	ND		0.20	0.10
95-47-6	o-Xylene	106.17	ND		0.020	0.010
127-18-4	Tetrachloroethene	165.83	ND		0.020	0.010
108-88-3	Toluene	92.14	ND		0.020	0.010
156-60-5	trans-1,2-Dichloroethene	96.94	ND		0.020	0.0050
79-01-6	Trichloroethene	131.39	ND		0.020	0.0050
75-01-4	Vinyl chloride	62.50	ND		0.020	0.010

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	102		70-130
17060-07-0	1,2-Dichloroethane-d4 (Surr)	98		70-130
2037-26-5	Toluene-d8 (Surr)	99		70-130

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento
Job No.: 320-12924-1
SDG No.:
Client Sample ID:
Lab Sample ID: MB 320-73719/9
Matrix: Air
Lab File ID: MS5051110.D
Analysis Method: TO-15 SIM
Date Collected:
Sample wt/vol: 500(mL)
Date Analyzed: 05/11/2015 19:27
Soil Aliquot Vol:
Dilution Factor: 1
Soil Extract Vol.:
GC Column: RTX-Volatiles ID: 0.32(mm)
% Moisture:
Level: (low/med) Low
Analysis Batch No.: 73719
Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	133.41	ND		0.11	0.027
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.27	0.027
75-34-3	1,1-Dichloroethane	98.96	ND		0.081	0.020
75-35-4	1,1-Dichloroethene	96.94	ND		0.079	0.020
95-50-1	1,2-Dichlorobenzene	147.00	ND		0.30	0.060
107-06-2	1,2-Dichloroethane	98.96	ND		0.081	0.020
106-46-7	1,4-Dichlorobenzene	147.00	ND		0.60	0.060
108-90-7	Chlorobenzene	112.56	ND		0.092	0.046
67-66-3	Chloroform	119.38	ND		0.098	0.024
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.079	0.020
100-41-4	Ethylbenzene	106.17	ND		0.087	0.043
75-69-4	Freon 11	137.37	ND		0.25	0.056
76-13-1	Freon 113	187.38	ND		0.23	0.038
75-71-8	Freon 12	120.91	ND		0.099	0.025
179601-23-1	m,p-Xylene	106.17	ND		0.17	0.087
75-09-2	Methylene Chloride	84.93	ND		0.69	0.35
95-47-6	o-Xylene	106.17	ND		0.087	0.043
127-18-4	Tetrachloroethene	165.83	ND		0.14	0.068
108-88-3	Toluene	92.14	ND		0.075	0.038
156-60-5	trans-1,2-Dichloroethene	96.94	ND		0.079	0.020
79-01-6	Trichloroethene	131.39	ND		0.11	0.027
75-01-4	Vinyl chloride	62.50	ND		0.051	0.026

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	102		70-130
17060-07-0	1,2-Dichloroethane-d4 (Surr)	98		70-130
2037-26-5	Toluene-d8 (Surr)	99		70-130

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\SACCHROM\ChromData\ATMS5\20150512-21744.b\MS5051110.D
Lims ID: MB
Client ID:
Sample Type: MB
Inject. Date: 11-May-2015 19:27:30 ALS Bottle#: 4 Worklist Smp#: 9
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: MB
Misc. Info.: 500ML500ML
Operator ID: AO Instrument ID: ATMS5

Method: \\SACCHROM\ChromData\ATMS5\20150512-21744.b\TO15 SIM.m
Limit Group: MSA - TO-15_SIM_ICAL
Last Update: 12-May-2015 12:35:18 Calib Date: 26-Mar-2015 03:17:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\SACCHROM\ChromData\ATMS5\20150326-20538.b\MS5032518.D

Column 1 : Det: MS SCAN
Process Host: XAWRK010

First Level Reviewer: ortizam Date: 12-May-2015 12:35:18

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	130	11.851	11.850	0.001	96	33329	2.00	2.00	
* 2 1,4-Difluorobenzene	114	13.948	13.941	0.007	100	158857	2.00	2.00	
* 3 Chlorobenzene-d5 (IS)	117	20.508	20.508	0.000	100	142511	2.00	2.00	
$ 4 1,2-Dichloroethane-d4 (Sur	65	13.011	13.002	0.009	100	36887	2.00	1.97	
$ 5 Toluene-d8 (Surr)	100	17.276	17.266	0.010	100	108374	2.00	1.98	
$ 6 4-Bromofluorobenzene (Surr	95	23.040	23.040	0.000	100	81340	2.00	2.03	
7 Propene	41	4.126	4.108	0.018	50	295		0.0187	
8 Dichlorodifluoromethane	85	4.190	4.181	0.009	87	86		0.001711	7
9 1,2-Dichloro-1,1,2,2-tetra	135	4.408	4.399	0.009	33	20		0.000453	7
17 Acrolein	56	7.112	7.094	0.018	80	306		0.0393	
18 Acetone	43	7.267	7.248	0.019	96	9757		0.3201	
22 Methylene Chloride	49	8.496	8.490	0.006	97	337		0.0146	7
29 2-Butanone (MEK)	72	10.901	10.901	0.032	98	754		0.0510	M
38 Benzene	78	13.338	13.329	0.009	99	196		0.002042	7
46 Toluene	91	17.439	17.439	0.000	97	169		0.001406	7
49 2-Hexanone	58	18.221	18.194	0.027	87	144		0.004266	
53 Chlorobenzene	112	20.576	20.584	-0.008	5	86		0.000857	7
54 Ethylbenzene	91	20.773	20.773	0.000	87	101		0.000618	7
55 m-Xylene & p-Xylene	91	20.955	20.955	0.000	55	198		0.001602	7
56 o-Xylene	91	21.842	21.846	-0.004	25	106		0.000821	7
63 1,2,4-Trimethylbenzene	120	24.591	24.588	0.003	1	98		0.001124	
66 Benzyl chloride	91	25.700	25.696	0.004	1	219		0.001343	7
67 1,2-Dichlorobenzene	146	26.250	26.247	0.003	1	203		0.002012	7

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Review Flags

M - Manually Integrated

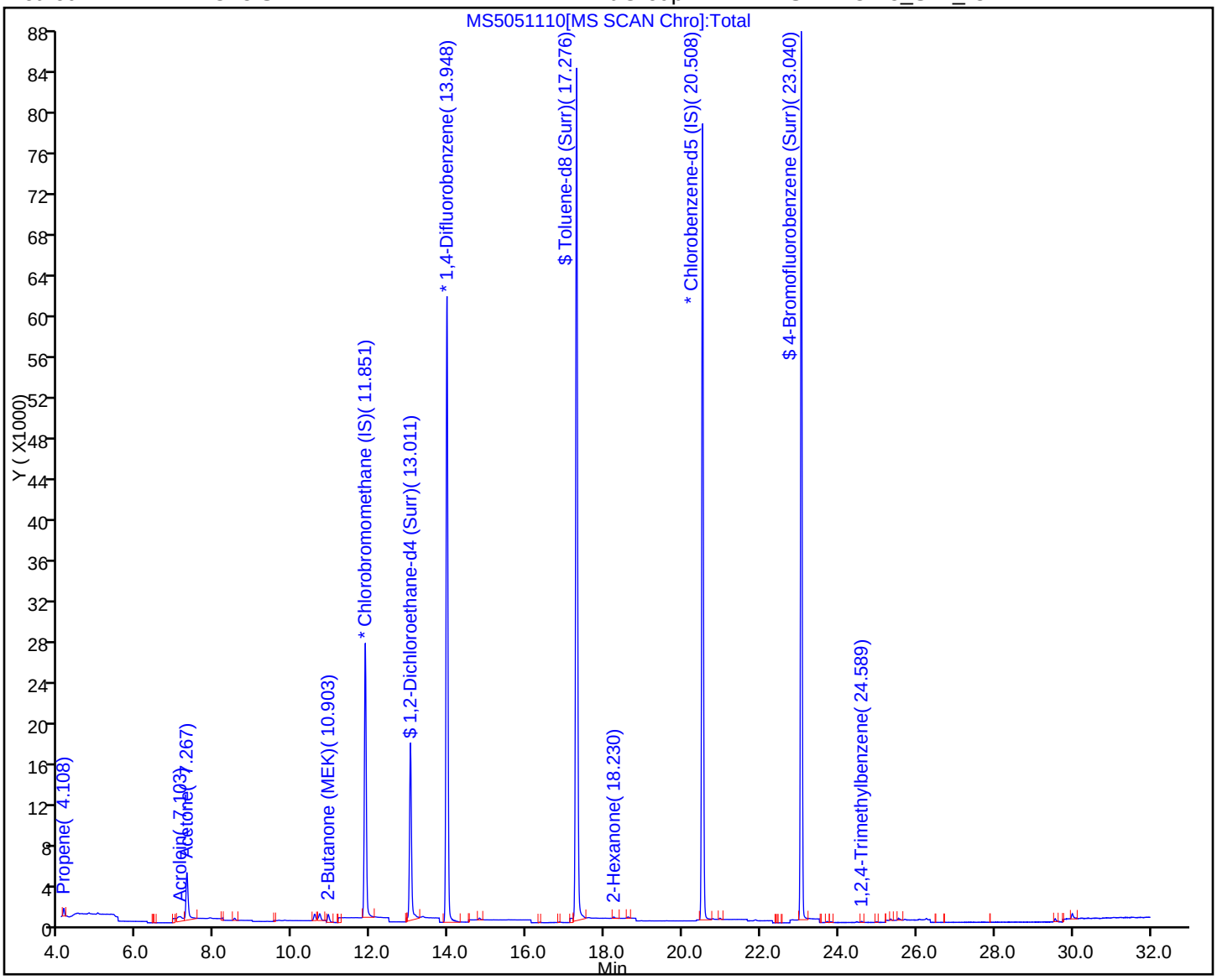
Reagents:

VASUISIM_00172	Amount Added: 50.00	Units: mL	Run Reagent

Report Date: 12-May-2015 12:35:18 Chrom Revision: 2.2 05-May-2015 11:39:10

TestAmerica Sacramento

Data File:	\\SACCHROM\ChromData\ATMS5\20150512-21744.b\MS5051110.D				
Injection Date:	11-May-2015 19:27:30	Instrument ID:	ATMS5		
Lims ID:	MB				
Client ID:					
Operator ID:	AO	ALS Bottle#:	4	Worklist Smp#:	9
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	TO15 SIM	Limit Group:	MSA - TO-15_SIM_ICAL		



FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento | Job No.: 320-12924-1
SDG No.:
Client Sample ID: | Lab Sample ID: LCS 320-73719/4
Matrix: Air | Lab File ID: MS5051104.D
Analysis Method: TO-15 SIM | Date Collected:
Sample wt/vol: 500(mL) | Date Analyzed: 05/11/2015 14:53
Soil Aliquot Vol: | Dilution Factor: 1
Soil Extract Vol.: | GC Column: RTX-Volatiles ID: 0.32(mm)
% Moisture: | Level: (low/med) Low
Analysis Batch No.: 73719 | Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	133.41	1.33		0.020	0.0050
79-00-5	1,1,2-Trichloroethane	133.41	1.10		0.050	0.0050
75-34-3	1,1-Dichloroethane	98.96	1.18		0.020	0.0050
75-35-4	1,1-Dichloroethene	96.94	1.10		0.020	0.0050
95-50-1	1,2-Dichlorobenzene	147.00	1.13		0.050	0.010
107-06-2	1,2-Dichloroethane	98.96	1.21		0.020	0.0050
106-46-7	1,4-Dichlorobenzene	147.00	1.18		0.10	0.010
108-90-7	Chlorobenzene	112.56	1.11		0.020	0.010
67-66-3	Chloroform	119.38	1.26		0.020	0.0050
156-59-2	cis-1,2-Dichloroethene	96.94	1.26		0.020	0.0050
100-41-4	Ethylbenzene	106.17	1.08		0.020	0.010
75-69-4	Freon 11	137.37	1.33		0.045	0.010
76-13-1	Freon 113	187.38	1.13		0.030	0.0050
75-71-8	Freon 12	120.91	1.56		0.020	0.0050
179601-23-1	m,p-Xylene	106.17	2.18		0.040	0.020
75-09-2	Methylene Chloride	84.93	1.07		0.20	0.10
95-47-6	o-Xylene	106.17	1.10		0.020	0.010
127-18-4	Tetrachloroethene	165.83	1.14		0.020	0.010
108-88-3	Toluene	92.14	1.17		0.020	0.010
156-60-5	trans-1,2-Dichloroethene	96.94	1.22		0.020	0.0050
79-01-6	Trichloroethene	131.39	1.22		0.020	0.0050
75-01-4	Vinyl chloride	62.50	1.07		0.020	0.010

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	109		70-130
17060-07-0	1,2-Dichloroethane-d4 (Surr)	99		70-130
2037-26-5	Toluene-d8 (Surr)	100		70-130

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\SACCHROM\ChromData\ATMS5\20150512-21744.b\MS5051104.D
Lims ID: LCS 1.2ppbv
Client ID:
Sample Type: LCS
Inject. Date: 11-May-2015 14:53:30 ALS Bottle#: 4 Worklist Smp#: 4
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: LCSD MS1 1.2PPBV
Misc. Info.: 240ML240ML
Operator ID: AO Instrument ID: ATMS5

Method: \\SACCHROM\ChromData\ATMS5\20150512-21744.b\TO15 SIM.m
Limit Group: MSA - TO-15_SIM_ICAL
Last Update: 12-May-2015 12:31:46 Calib Date: 26-Mar-2015 03:17:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\SACCHROM\ChromData\ATMS5\20150326-20538.b\MS5032518.D

Column 1 : Det: MS SCAN
Process Host: XAWRK010

First Level Reviewer: ortizam Date: 12-May-2015 12:31:57

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	130	11.851	11.850	0.001	99	35778	2.00	2.00	
* 2 1,4-Difluorobenzene	114	13.944	13.941	0.003	100	169688	2.00	2.00	
* 3 Chlorobenzene-d5 (IS)	117	20.508	20.508	0.000	100	155780	2.00	2.00	
$ 4 1,2-Dichloroethane-d4 (Sur	65	13.002	13.002	0.000	99	39817	2.00	1.99	
$ 5 Toluene-d8 (Surr)	100	17.276	17.266	0.010	100	116856	2.00	2.00	
$ 6 4-Bromofluorobenzene (Surr	95	23.040	23.040	0.000	100	95342	2.00	2.18	
7 Propene	41	4.117	4.108	0.009	95	24776	1.20	1.46	
8 Dichlorodifluoromethane	85	4.181	4.181	0.000	100	84212	1.20	1.56	
9 1,2-Dichloro-1,1,2,2-tetra	135	4.408	4.399	0.009	88	65417	1.20	1.38	
10 Chloromethane	50	4.572	4.572	0.000	95	15562	1.20	1.09	
11 Vinyl chloride	62	4.817	4.817	0.000	76	20076	1.20	1.07	
12 Butadiene	39	4.890	4.890	0.000	80	12102	1.20	1.01	
13 Bromomethane	94	5.631	5.626	0.005	93	20928	1.20	0.9860	
14 Chloroethane	64	5.814	5.810	0.004	96	15684	1.20	1.15	
15 Trichlorofluoromethane	101	6.421	6.418	0.003	100	68202	1.20	1.33	
16 Isopropyl alcohol	45	7.030	7.030	0.000	96	61785	1.20	1.25	
17 Acrolein	56	7.094	7.094	0.000	92	10596	1.20	1.27	
18 Acetone	43	7.249	7.248	0.001	91	43473	1.20	1.33	
19 1,1,2-Trichloro-1,2,2-trif	101	7.412	7.412	0.000	98	55796	1.20	1.13	
20 1,1-Dichloroethene	96	7.612	7.612	0.000	98	28694	1.20	1.10	
21 Acetonitrile	41	8.321	8.314	0.007	99	31141	1.20	1.20	
22 Methylene Chloride	49	8.490	8.490	0.000	99	26518	1.20	1.07	
23 Acrylonitrile	53	8.626	8.620	0.006	97	21434	1.20	1.15	
24 Methyl tert-butyl ether	73	9.069	9.067	0.002	100	97665	1.20	1.21	
25 trans-1,2-Dichloroethene	96	9.209	9.207	0.002	100	32946	1.20	1.22	
26 Hexane	41	9.625	9.621	0.004	98	27554	1.20	1.08	
28 Vinyl acetate	43	9.625	9.627	-0.002	9	25936	1.20	0.5321	
27 1,1-Dichloroethane	63	10.015	10.017	-0.002	28	52503	1.20	1.18	
29 2-Butanone (MEK)	72	10.872	10.869	0.003	88	15540	1.20	0.9789	
30 cis-1,2-Dichloroethene	96	11.251	11.240	0.011	98	34831	1.20	1.26	
31 Ethyl acetate	43	11.295	11.295	0.000	99	51840	1.20	1.04	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
32 Chloroform	83	11.589	11.589	0.000	99	57396	1.20	1.26	
33 Tetrahydrofuran	42	12.047	12.046	0.001	92	30137	1.20	1.03	
34 1,1,1-Trichloroethane	97	12.513	12.508	0.005	89	62234	1.20	1.33	
35 Cyclohexane	84	12.705	12.705	0.000	100	54918	1.20	1.21	
36 Carbon tetrachloride	117	13.074	13.074	0.000	96	50267	1.20	1.20	
37 1,2-Dichloroethane	62	13.193	13.192	0.001	93	36504	1.20	1.21	
38 Benzene	78	13.329	13.329	0.000	99	113619	1.20	1.11	
39 n-Heptane	43	13.520	13.520	0.000	99	50128	1.20	1.04	
40 Trichloroethene	130	14.684	14.683	0.001	100	48921	1.20	1.22	
41 1,2-Dichloropropane	76	14.977	14.977	0.000	98	15181	1.20	1.23	
42 Dichlorobromomethane	85	15.426	15.417	0.009	99	39888	1.20	1.17	
43 1,4-Dioxane	88	15.469	15.469	0.000	92	23208	1.20	0.9267	
44 4-Methyl-2-pentanone (MIBK	43	16.296	16.292	0.004	99	49930	1.20	0.8297	
45 cis-1,3-Dichloropropene	75	16.638	16.636	0.002	100	58824	1.20	1.24	
46 Toluene	91	17.439	17.439	0.000	99	150637	1.20	1.17	
47 trans-1,3-Dichloropropene	75	17.712	17.712	0.000	98	49938	1.20	0.9643	
48 1,1,2-Trichloroethane	97	18.048	18.048	0.000	97	43106	1.20	1.10	
49 2-Hexanone	58	18.194	18.194	0.000	92	28002	1.20	0.7589	
50 Tetrachloroethene	166	18.940	18.939	0.001	100	59489	1.20	1.14	
51 Chlorodibromomethane	129	19.141	19.134	0.007	98	72804	1.20	1.12	
52 Ethylene Dibromide	107	19.583	19.583	0.000	99	67042	1.20	1.12	
53 Chlorobenzene	112	20.584	20.584	0.000	9	121970	1.20	1.11	
54 Ethylbenzene	91	20.773	20.773	0.000	89	192423	1.20	1.08	
55 m-Xylene & p-Xylene	91	20.955	20.955	0.000	56	294092	2.40	2.18	
56 o-Xylene	91	21.847	21.846	0.001	23	154785	1.20	1.10	
57 Styrene	104	21.873	21.873	0.000	1	131653	1.20	1.13	
58 Bromoform	173	22.408	22.412	-0.004	1	45680	1.20	1.12	
59 1,1,2,2-Tetrachloroethane	83	22.813	22.812	0.001	4	88682	1.20	0.9744	
60 1,2,3-Trichloropropane	110	23.115	23.108	0.007	1	28803	1.20	1.03	
61 4-Ethyltoluene	120	23.706	23.705	0.001	86	82962	1.20	1.09	
62 1,3,5-Trimethylbenzene	120	23.804	23.803	0.001	95	118774	1.20	1.11	
63 1,2,4-Trimethylbenzene	120	24.589	24.588	0.001	1	112419	1.20	1.18	
64 1,3-Dichlorobenzene	146	25.333	25.330	0.003	84	129960	1.20	1.15	
65 1,4-Dichlorobenzene	146	25.529	25.530	-0.001	10	126642	1.20	1.18	
66 Benzyl chloride	91	25.695	25.696	-0.001	1	153715	1.20	0.8620	
67 1,2-Dichlorobenzene	146	26.250	26.247	0.003	1	124789	1.20	1.13	
68 1,2,4-Trichlorobenzene	180	29.550	29.549	0.001	1	91024	1.20	1.30	
69 Hexachlorobutadiene	225	29.926	29.927	-0.001	6	57867	1.20	1.17	
70 Naphthalene	128	29.987	29.988	-0.001	0	271355	1.20	1.24	

Reagents:

VACORPLC2.5_00065 Amount Added: 240.00 Units: mL
VASUISIM_00172 Amount Added: 50.00 Units: mL Run Reagent

Report Date: 12-May-2015 12:31:57 Chrom Revision: 2.2 05-May-2015 11:39:10

TestAmerica Sacramento

Data File: \\SACCHROM\ChromData\ATMS5\20150512-21744.b\MS5051104.D

Injection Date: 11-May-2015 14:53:30 Instrument ID: ATMS5

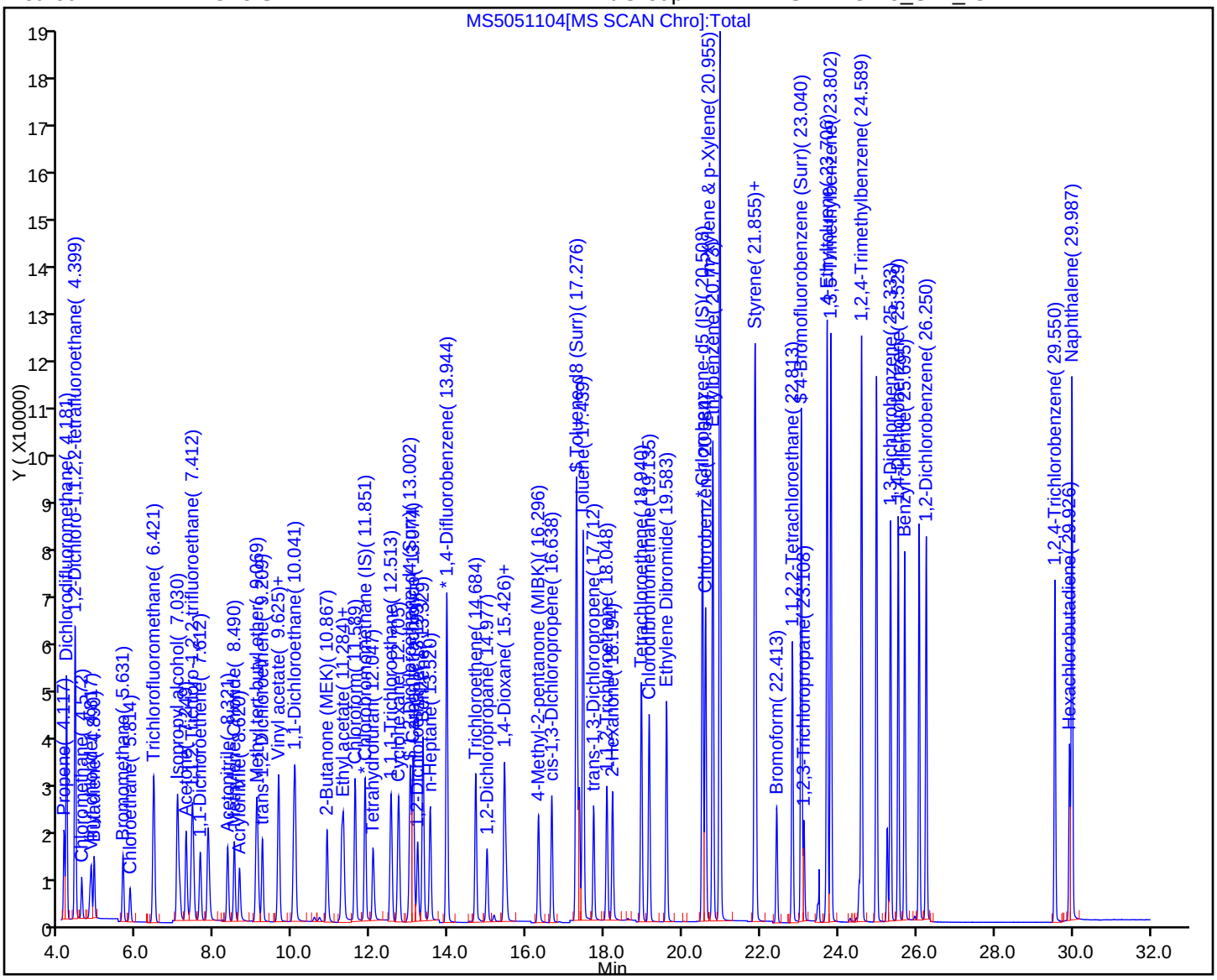
Lims ID: LCS 1.2ppbv

Client ID:

Operator ID: AO ALS Bottle#: 4 Worklist Smp#: 4

Purge Vol: 500.000 mL Dil. Factor: 1.0000

Method: TO15 SIM Limit Group: MSA - TO-15_SIM_ICAL



FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento | Job No.: 320-12924-1
SDG No.:
Client Sample ID: | Lab Sample ID: LCSD 320-73719/5
Matrix: Air | Lab File ID: MS5051106.D
Analysis Method: TO-15 SIM | Date Collected:
Sample wt/vol: 500(mL) | Date Analyzed: 05/11/2015 15:53
Soil Aliquot Vol: | Dilution Factor: 1
Soil Extract Vol.: | GC Column: RTX-Volatiles ID: 0.32(mm)
% Moisture: | Level: (low/med) Low
Analysis Batch No.: 73719 | Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	133.41	1.09		0.020	0.0050
79-00-5	1,1,2-Trichloroethane	133.41	0.905		0.050	0.0050
75-34-3	1,1-Dichloroethane	98.96	0.975		0.020	0.0050
75-35-4	1,1-Dichloroethene	96.94	0.915		0.020	0.0050
95-50-1	1,2-Dichlorobenzene	147.00	0.955		0.050	0.010
107-06-2	1,2-Dichloroethane	98.96	0.975		0.020	0.0050
106-46-7	1,4-Dichlorobenzene	147.00	0.976		0.10	0.010
108-90-7	Chlorobenzene	112.56	0.931		0.020	0.010
67-66-3	Chloroform	119.38	1.04		0.020	0.0050
156-59-2	cis-1,2-Dichloroethene	96.94	1.06		0.020	0.0050
100-41-4	Ethylbenzene	106.17	0.904		0.020	0.010
75-69-4	Freon 11	137.37	1.10		0.045	0.010
76-13-1	Freon 113	187.38	0.937		0.030	0.0050
75-71-8	Freon 12	120.91	1.27		0.020	0.0050
179601-23-1	m,p-Xylene	106.17	1.83		0.040	0.020
75-09-2	Methylene Chloride	84.93	0.871		0.20	0.10
95-47-6	o-Xylene	106.17	0.913		0.020	0.010
127-18-4	Tetrachloroethene	165.83	0.946		0.020	0.010
108-88-3	Toluene	92.14	0.972		0.020	0.010
156-60-5	trans-1,2-Dichloroethene	96.94	1.03		0.020	0.0050
79-01-6	Trichloroethene	131.39	1.01		0.020	0.0050
75-01-4	Vinyl chloride	62.50	1.00		0.020	0.010

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	107		70-130
17060-07-0	1,2-Dichloroethane-d4 (Surr)	97		70-130
2037-26-5	Toluene-d8 (Surr)	100		70-130

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\SACCHROM\ChromData\ATMS5\20150512-21744.b\MS5051106.D
Lims ID: LCSD 1.2ppbv
Client ID:
Sample Type: LCSD
Inject. Date: 11-May-2015 15:53:30 ALS Bottle#: 4 Worklist Smp#: 5
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: LCSD MS1 1.2PPBV
Misc. Info.: 240ML240ML
Operator ID: AO Instrument ID: ATMS5

Method: \\SACCHROM\ChromData\ATMS5\20150512-21744.b\TO15 SIM.m
Limit Group: MSA - TO-15_SIM_ICAL
Last Update: 12-May-2015 12:33:37 Calib Date: 26-Mar-2015 03:17:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\SACCHROM\ChromData\ATMS5\20150326-20538.b\MS5032518.D

Column 1 : Det: MS SCAN
Process Host: XAWRK010

First Level Reviewer: ortizam Date: 12-May-2015 12:33:37

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	130	11.851	11.850	0.001	99	36577	2.00	2.00	
* 2 1,4-Difluorobenzene	114	13.945	13.941	0.004	100	174708	2.00	2.00	
* 3 Chlorobenzene-d5 (IS)	117	20.508	20.508	0.000	100	162115	2.00	2.00	
$ 4 1,2-Dichloroethane-d4 (Sur	65	13.011	13.002	0.009	99	39822	2.00	1.93	
$ 5 Toluene-d8 (Surr)	100	17.276	17.266	0.010	100	120120	2.00	2.00	
$ 6 4-Bromofluorobenzene (Surr	95	23.040	23.040	0.000	100	97207	2.00	2.13	
7 Propene	41	4.117	4.108	0.009	96	19519	1.20	1.13	
8 Dichlorodifluoromethane	85	4.181	4.181	0.000	100	69977	1.20	1.27	
9 1,2-Dichloro-1,1,2,2-tetra	135	4.408	4.399	0.009	87	54822	1.20	1.13	
10 Chloromethane	50	4.572	4.572	0.000	95	13939	1.20	0.9530	
11 Vinyl chloride	62	4.817	4.817	0.000	73	19209	1.20	1.00	
12 Butadiene	39	4.890	4.890	0.000	78	11381	1.20	0.9299	
13 Bromomethane	94	5.631	5.626	0.005	87	22655	1.20	1.04	
14 Chloroethane	64	5.814	5.810	0.004	96	13701	1.20	0.9829	
15 Trichlorofluoromethane	101	6.421	6.418	0.003	100	58056	1.20	1.10	
16 Isopropyl alcohol	45	7.030	7.030	0.000	99	51763	1.20	1.02	
17 Acrolein	56	7.094	7.094	0.000	77	9016	1.20	1.05	
18 Acetone	43	7.249	7.248	0.001	85	31832	1.20	0.9515	
19 1,1,2-Trichloro-1,2,2-trif	101	7.412	7.412	0.000	98	47421	1.20	0.9371	
20 1,1-Dichloroethene	96	7.612	7.612	0.000	98	24456	1.20	0.9146	
21 Acetonitrile	41	8.321	8.314	0.007	99	25834	1.20	0.9772	
22 Methylene Chloride	49	8.490	8.490	0.000	99	22007	1.20	0.8715	
23 Acrylonitrile	53	8.626	8.620	0.006	96	17421	1.20	0.9127	
24 Methyl tert-butyl ether	73	9.069	9.067	0.002	100	82057	1.20	0.99	
25 trans-1,2-Dichloroethene	96	9.209	9.207	0.002	100	28210	1.20	1.03	
26 Hexane	41	9.625	9.621	0.004	98	22970	1.20	0.8807	
28 Vinyl acetate	43	9.632	9.627	0.005	9	21738	1.20	0.4363	
27 1,1-Dichloroethane	63	10.015	10.017	-0.002	26	44167	1.20	0.9746	
29 2-Butanone (MEK)	72	10.874	10.869	0.005	90	14509	1.20	0.8940	
30 cis-1,2-Dichloroethene	96	11.251	11.240	0.011	98	29941	1.20	1.06	
31 Ethyl acetate	43	11.295	11.295	0.000	100	46211	1.20	0.9026	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
32 Chloroform	83	11.589	11.589	0.000	99	48173	1.20	1.04	
33 Tetrahydrofuran	42	12.047	12.046	0.001	92	25510	1.20	0.8540	
34 1,1,1-Trichloroethane	97	12.513	12.508	0.005	89	52239	1.20	1.09	
35 Cyclohexane	84	12.705	12.705	0.000	100	46643	1.20	1.01	
36 Carbon tetrachloride	117	13.075	13.074	0.000	96	42221	1.20	0.9823	
37 1,2-Dichloroethane	62	13.193	13.192	0.001	93	30384	1.20	0.9749	
38 Benzene	78	13.329	13.329	0.000	99	96357	1.20	0.9129	
39 n-Heptane	43	13.520	13.520	0.000	99	41982	1.20	0.8462	
40 Trichloroethene	130	14.684	14.683	0.001	100	41757	1.20	1.01	
41 1,2-Dichloropropane	76	14.977	14.977	0.000	98	12778	1.20	1.01	
42 Dichlorobromomethane	85	15.426	15.417	0.009	99	33757	1.20	0.9608	
43 1,4-Dioxane	88	15.469	15.469	0.000	91	20004	1.20	0.7758	
44 4-Methyl-2-pentanone (MIBK	43	16.296	16.292	0.004	99	47644	1.20	0.7690	
45 cis-1,3-Dichloropropene	75	16.641	16.636	0.005	100	49909	1.20	1.02	
46 Toluene	91	17.439	17.439	0.000	99	128594	1.20	0.9725	
47 trans-1,3-Dichloropropene	75	17.712	17.712	0.000	98	42610	1.20	0.7906	
48 1,1,2-Trichloroethane	97	18.057	18.048	0.009	94	36750	1.20	0.9047	
49 2-Hexanone	58	18.203	18.194	0.009	92	22606	1.20	0.5887	
50 Tetrachloroethene	166	18.940	18.939	0.001	99	51195	1.20	0.9461	
51 Chlorodibromomethane	129	19.141	19.134	0.007	98	61699	1.20	0.9110	
52 Ethylene Dibromide	107	19.583	19.583	0.000	98	57468	1.20	0.9191	
53 Chlorobenzene	112	20.584	20.584	0.000	1	106296	1.20	0.9309	
54 Ethylbenzene	91	20.773	20.773	0.000	89	167906	1.20	0.9039	
55 m-Xylene & p-Xylene	91	20.955	20.955	0.000	56	257112	2.40	1.83	
56 o-Xylene	91	21.847	21.846	0.001	22	134144	1.20	0.9131	
57 Styrene	104	21.873	21.873	0.000	1	116307	1.20	0.9568	
58 Bromoform	173	22.408	22.412	-0.004	1	39765	1.20	0.9359	
59 1,1,2,2-Tetrachloroethane	83	22.813	22.812	0.001	4	76802	1.20	0.8109	
60 1,2,3-Trichloropropane	110	23.115	23.108	0.007	1	25289	1.20	0.8723	
61 4-Ethyltoluene	120	23.706	23.705	0.001	86	71644	1.20	0.9058	
62 1,3,5-Trimethylbenzene	120	23.804	23.803	0.001	95	103152	1.20	0.9267	
63 1,2,4-Trimethylbenzene	120	24.589	24.588	0.001	1	97914	1.20	0.9868	
64 1,3-Dichlorobenzene	146	25.333	25.330	0.003	84	111960	1.20	0.9481	
65 1,4-Dichlorobenzene	146	25.529	25.530	-0.001	10	108812	1.20	0.9758	
66 Benzyl chloride	91	25.695	25.696	-0.001	1	135382	1.20	0.7296	
67 1,2-Dichlorobenzene	146	26.250	26.247	0.003	1	109616	1.20	0.9551	
68 1,2,4-Trichlorobenzene	180	29.550	29.549	0.001	1	83216	1.20	1.14	
69 Hexachlorobutadiene	225	29.926	29.927	-0.001	6	45616	1.20	0.8896	
70 Naphthalene	128	29.987	29.988	-0.001	0	226911	1.20	1.00	

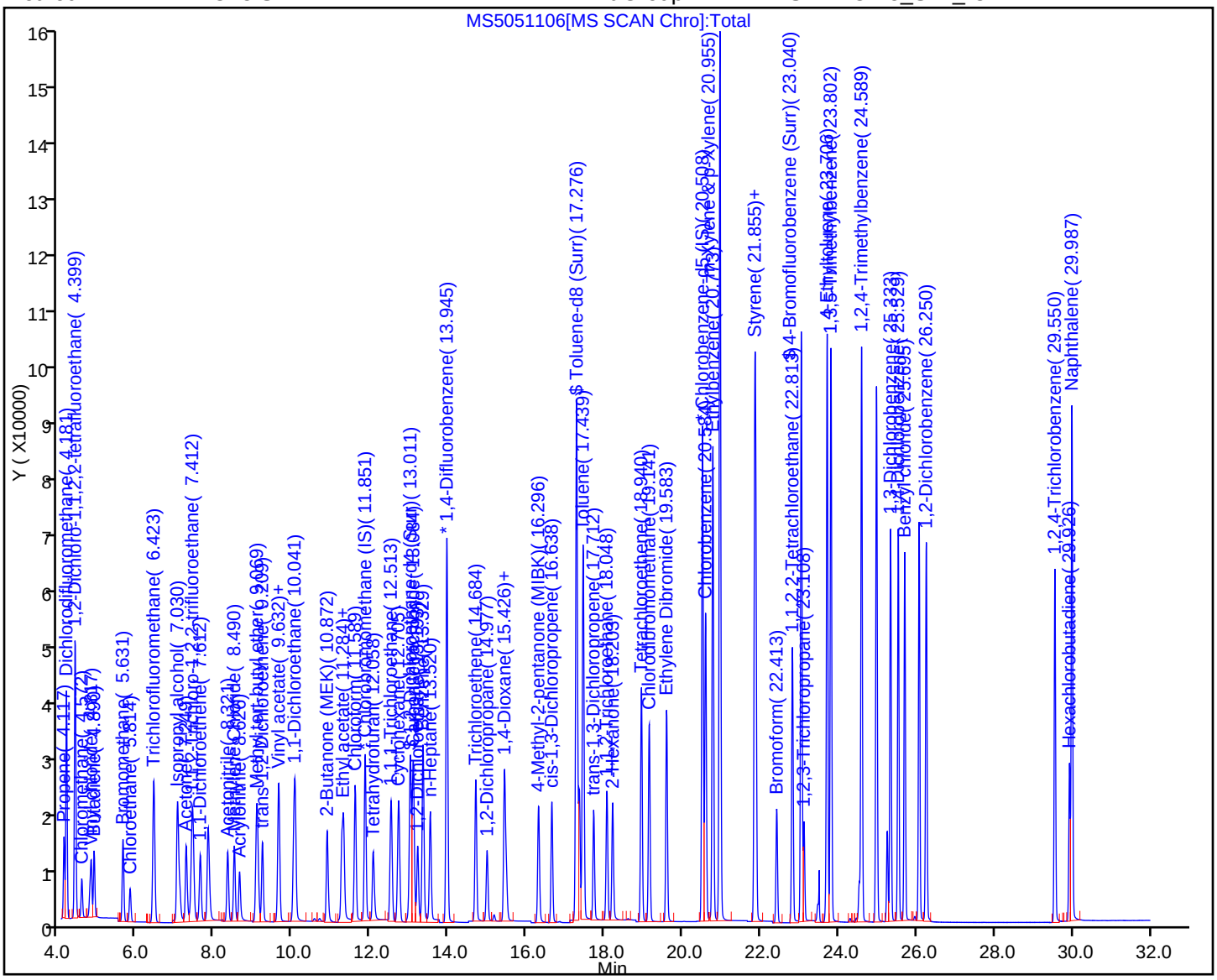
Reagents:

VACORPLC2.5_00065	Amount Added: 240.00	Units: mL	
VASUISIM_00172	Amount Added: 50.00	Units: mL	Run Reagent

Report Date: 12-May-2015 12:33:37 Chrom Revision: 2.2 05-May-2015 11:39:10

TestAmerica Sacramento

Data File:	\\SACCHROM\ChromData\ATMS5\20150512-21744.b\MS5051106.D				
Injection Date:	11-May-2015 15:53:30	Instrument ID:	ATMS5		
Lims ID:	LCSD 1.2ppbv				
Client ID:					
Operator ID:	AO	ALS Bottle#:	4	Worklist Smp#:	5
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	TO15 SIM	Limit Group:	MSA - TO-15_SIM_ICAL		



AIR - GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Sacramento Job No.: 320-12924-1

SDG No.:

Instrument ID: ATMS5 Start Date: 03/25/2015 20:20

Analysis Batch Number: 69481 End Date: 03/26/2015 06:58

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
IC 320-69481/3		03/25/2015 20:20	1	MS5032510.D	RTX-Volatiles 0.32(mm)
IC 320-69481/4		03/25/2015 21:08	1	MS5032511.D	RTX-Volatiles 0.32(mm)
IC 320-69481/5		03/25/2015 21:58	1	MS5032512.D	RTX-Volatiles 0.32(mm)
IC 320-69481/6		03/25/2015 22:49	1	MS5032513.D	RTX-Volatiles 0.32(mm)
IC 320-69481/7		03/25/2015 23:42	1	MS5032514.D	RTX-Volatiles 0.32(mm)
IC 320-69481/8		03/26/2015 00:33	1	MS5032515.D	RTX-Volatiles 0.32(mm)
ICIS 320-69481/9		03/26/2015 01:24	1	MS5032516.D	RTX-Volatiles 0.32(mm)
IC 320-69481/10		03/26/2015 02:16	1	MS5032517.D	RTX-Volatiles 0.32(mm)
IC 320-69481/11		03/26/2015 03:17	1	MS5032518.D	RTX-Volatiles 0.32(mm)
ICV 320-69481/15		03/26/2015 06:58	1	MS5032522.D	RTX-Volatiles 0.32(mm)

AIR - GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Sacramento Job No.: 320-12924-1

SDG No.:

Instrument ID: ATMS5 Start Date: 05/11/2015 13:07

Analysis Batch Number: 73719 End Date: 05/12/2015 09:31

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
CCVIS 320-73719/2		05/11/2015 13:07	1	MS5051102.D	RTX-Volatiles 0.32(mm)
LCS 320-73719/4		05/11/2015 14:53	1	MS5051104.D	RTX-Volatiles 0.32(mm)
LCSD 320-73719/5		05/11/2015 15:53	1	MS5051106.D	RTX-Volatiles 0.32(mm)
MB 320-73719/9		05/11/2015 19:27	1	MS5051110.D	RTX-Volatiles 0.32(mm)
ZZZZZ		05/11/2015 20:50	1		RTX-Volatiles 0.32(mm)
320-12924-5	J6038-IA1-050615-1	05/11/2015 21:47	1	MS5051112.D	RTX-Volatiles 0.32(mm)
320-12924-6	J6038-IA1-050615-2	05/11/2015 22:45	1	MS5051113.D	RTX-Volatiles 0.32(mm)
320-12924-7	J6038-IA2-050615	05/11/2015 23:44	1	MS5051114.D	RTX-Volatiles 0.32(mm)
320-12924-8	J6038-IA3-050615	05/12/2015 00:42	1	MS5051115.D	RTX-Volatiles 0.32(mm)
320-12924-9	J6038-IA4-050615	05/12/2015 01:40	1	MS5051116.D	RTX-Volatiles 0.32(mm)
320-12924-10	J6038-IA5-050615	05/12/2015 02:39	1	MS5051117.D	RTX-Volatiles 0.32(mm)
320-12924-11	J6038-OA1-050615-1	05/12/2015 03:39	1	MS5051118.D	RTX-Volatiles 0.32(mm)
320-12924-12	J6038-OA1-050615-2	05/12/2015 04:38	1	MS5051119.D	RTX-Volatiles 0.32(mm)
ZZZZZ		05/12/2015 06:32	1		RTX-Volatiles 0.32(mm)
ZZZZZ		05/12/2015 07:32	1		RTX-Volatiles 0.32(mm)
ZZZZZ		05/12/2015 08:32	1		RTX-Volatiles 0.32(mm)
ZZZZZ		05/12/2015 09:31	1		RTX-Volatiles 0.32(mm)

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

CANISTER FIELD DATA RECORD

Sacramento

JOB # 320-12924
Sample # 1

Client/Project:		VFR ID:		
Canister Serial #:	34000992	Duration:		☐ Hrs ☐ Min
Cleaning Job:		Flow:		mL/min
Client ID:		Initials:		
Site Location:				

FIELD

READING	TIME	PRESS.	DATE	INITIALS
INITIAL FIELD VACUUM				
FINAL FIELD READING				

LABORATORY

READING	PRESS.	DATE	INITIALS
INITIAL VACUUM CHECK (INCHES Hg)	29.8		JMT
☐ Helium Pre-dilution - Final Pressure (INCHES Hg)			
INITIAL PRESSURE (PSIA)	13.77	05/11/15	KY
FINAL PRESSURE (PSIA)	24.06	05/11/15	KY
Pressurization Gas: ☐ N2 ☐ He	SCREENED ☐	SCRN DIL. VS 250mLs:	
Initial Canister Dilution Factor = 1.75			

CANISTER REPRESSURIZATION

Date	Pi (PSIA)	Pf (PSIA)	Initial DF	Initials	NEW DF
			1.75		#DIV/0!
			#DIV/0!		#DIV/0!
			#DIV/0!		#DIV/0!

Analytical Dilution Factors

Date	Instr.	File #
5/11/2015	ATMS2	

Canister DF = 1.75 X Load DF = 0.5924171 (LVf (mLs) 250, LVi (mLs) 422) X Bag DF = 1 (BVf (mLs), Bvi (mLs)) = FINAL DF 1.035116522

Date	Instr.	File #
5/12/2015	ATMS2	

Canister DF = 1.75 X Load DF = 1 (LVf (mLs) 250, LVi (mLs) 250) X Bag DF = 1 (BVf (mLs), Bvi (mLs)) = FINAL DF 1.747276688

Date	Instr.	File #

Canister DF = 1.75 X Load DF = #DIV/0! (LVf (mLs), LVi (mLs)) X Bag DF = 1 (BVf (mLs), Bvi (mLs)) = FINAL DF #DIV/0!

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

CANISTER FIELD DATA RECORD

Sacramento

JOB # 320-12924
Sample # 2

Client/Project:		VFR ID:		
Canister Serial #:	34000963	Duration:		☐ Hrs ☐ Min
Cleaning Job:		Flow:		mL/min
Client ID:		Initials:		
Site Location:				

FIELD				
READING	TIME	PRESS.	DATE	INITIALS
INITIAL FIELD VACUUM				
FINAL FIELD READING				

LABORATORY			
READING	PRESS.	DATE	INITIALS
INITIAL VACUUM CHECK (INCHES Hg)	29.8		JMT
☐ Helium Pre-dilution - Final Pressure (INCHES Hg)			
INITIAL PRESSURE (PSIA)	13.47	05/11/15	KY
FINAL PRESSURE (PSIA)	24.08	05/11/15	KY
Pressurization Gas: ☐ N2 ☐ He	SCREENED ☐	SCRN DIL. VS 250mLs:	
Initial Canister Dilution Factor = 1.79			

CANISTER REPRESSURIZATION

Date	Pi (PSIA)	Pf (PSIA)	Initial DF	Initials	NEW DF
			1.79		#DIV/0!
			#DIV/0!		#DIV/0!
			#DIV/0!		#DIV/0!

Analytical Dilution Factors

Canister DF		Load DF		Bag DF	Date	Instr.	File #	FINAL DF
					5/11/2015	ATMS2		
1.79	X	0.6067961	X	1			=	1.084755047
		LVf (mLs) 250		BVf (mLs)				
		LVi (mLs) 412		Bvi (mLs)				
					5/12/2015	ATMS2		
1.79	X	2	X	1			=	3.575352635
		LVf (mLs) 250		BVf (mLs)				
		LVi (mLs) 125		Bvi (mLs)				
1.79	X	#DIV/0!	X	1			=	#DIV/0!
		LVf (mLs)		BVf (mLs)				
		LVi (mLs)		Bvi (mLs)				

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

CANISTER FIELD DATA RECORD

Sacramento

JOB # 320-12924
Sample # 3

Client/Project:		VFR ID:		
Canister Serial #:	8288	Duration:		☐ Hrs ☐ Min
Cleaning Job:		Flow:		mL/min
Client ID:		Initials:		
Site Location:				

FIELD				
READING	TIME	PRESS.	DATE	INITIALS
INITIAL FIELD VACUUM				
FINAL FIELD READING				

LABORATORY			
READING	PRESS.	DATE	INITIALS
INITIAL VACUUM CHECK (INCHES Hg)	29.8		JMT
☐ Helium Pre-dilution - Final Pressure (INCHES Hg)			
INITIAL PRESSURE (PSIA)	13.31	05/11/15	KY
FINAL PRESSURE (PSIA)	23.92	05/11/15	KY
Pressurization Gas: ☐ N2 ☐ He	SCREENED ☐	SCRN DIL. VS 250mLs:	
Initial Canister Dilution Factor = 1.80			

CANISTER REPRESSURIZATION

Date	Pi (PSIA)	Pf (PSIA)	Initial DF	Initials	NEW DF
			1.80		#DIV/0!
			#DIV/0!		#DIV/0!
			#DIV/0!		#DIV/0!

Analytical Dilution Factors

							Date	Instr.	File #		
							5/11/2015	ATMS2			
Canister DF =	1.80	X	Load DF =	0.5882353	X	Bag DF =	1	=	FINAL DF 1.05714412		
			LVf (mLs)	250		BVf (mLs)					
			LVi (mLs)	425		Bvi (mLs)					
							Date	Instr.	File #		
							5/12/2015	ATMS2			
Canister DF =	1.80	X	Load DF =	10	X	Bag DF =	1	=	FINAL DF 17.97145004		
			LVf (mLs)	250		BVf (mLs)					
			LVi (mLs)	25		Bvi (mLs)					
							Date	Instr.	File #		
Canister DF =	1.80	X	Load DF =	#DIV/0!	X	Bag DF =	1	=	FINAL DF #DIV/0!		
			LVf (mLs)			BVf (mLs)					
			LVi (mLs)			Bvi (mLs)					

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

CANISTER FIELD DATA RECORD

Sacramento

JOB # 320-12924
Sample # 4

Client/Project:		VFR ID:		
Canister Serial #:	34001950	Duration:		☐ Hrs ☐ Min
Cleaning Job:		Flow:		mL/min
Client ID:		Initials:		
Site Location:				

FIELD				
READING	TIME	PRESS.	DATE	INITIALS
INITIAL FIELD VACUUM				
FINAL FIELD READING				

LABORATORY			
READING	PRESS.	DATE	INITIALS
INITIAL VACUUM CHECK (INCHES Hg)	29.8		JMT
☐ Helium Pre-dilution - Final Pressure (INCHES Hg)			
INITIAL PRESSURE (PSIA)	13.58	05/11/15	KY
FINAL PRESSURE (PSIA)	24.03	05/11/15	KY
Pressurization Gas: ☐ N2 ☐ He	SCREENED ☐	SCRN DIL. VS 250mLs:	
Initial Canister Dilution Factor = 1.77			

CANISTER REPRESSURIZATION

Date	Pi (PSIA)	Pf (PSIA)	Initial DF	Initials	NEW DF
			1.77		#DIV/0!
			#DIV/0!		#DIV/0!
			#DIV/0!		#DIV/0!

Analytical Dilution Factors

							Date	Instr.	File #		
							5/11/2015	ATMS2			
Canister DF =	1.77	X	Load DF =	0.5720824	X	Bag DF =	1	=	FINAL DF 1.012307775		
			LVf (mLs)	250		BVf (mLs)					
			LVi (mLs)	437		Bvi (mLs)					
							Date	Instr.	File #		
							5/12/2015	ATMS2			
Canister DF =	1.77	X	Load DF =	#DIV/0!	X	Bag DF =	1	=	FINAL DF #DIV/0!		
			LVf (mLs)			BVf (mLs)					
			LVi (mLs)			Bvi (mLs)					
							Date	Instr.	File #		
Canister DF =	1.77	X	Load DF =	#DIV/0!	X	Bag DF =	1	=	FINAL DF #DIV/0!		
			LVf (mLs)			BVf (mLs)					
			LVi (mLs)			Bvi (mLs)					

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

CANISTER FIELD DATA RECORD

Sacramento

JOB # 320-12924
Sample # 5

Client/Project:		VFR ID:		
Canister Serial #:	34000014	Duration:		☐ Hrs ☐ Min
Cleaning Job:		Flow:		mL/min
Client ID:		Initials:		
Site Location:				

FIELD

READING	TIME	PRESS.	DATE	INITIALS
INITIAL FIELD VACUUM				
FINAL FIELD READING				

LABORATORY

READING	PRESS.	DATE	INITIALS
INITIAL VACUUM CHECK (INCHES Hg)	29.8		JMT
☐ Helium Pre-dilution - Final Pressure (INCHES Hg)			
INITIAL PRESSURE (PSIA)	13.56	05/11/15	KY
FINAL PRESSURE (PSIA)	23.69	05/11/15	KY
Pressurization Gas: ☐ N2 ☐ He	SCREENED ☐	SCRN DIL. VS 250mLs:	
Initial Canister Dilution Factor = 1.75			

CANISTER REPRESSURIZATION

Date	Pi (PSIA)	Pf (PSIA)	Initial DF	Initials	NEW DF
			1.75		#DIV/0!
			#DIV/0!		#DIV/0!
			#DIV/0!		#DIV/0!

Analytical Dilution Factors

								Date	Instr.	File #	
								5/11/2015	MS5		
Canister DF =	1.75	X	Load DF =	0.5747126	X	Bag DF =	1	=		FINAL DF	1.004051809
			LVf (mLs)	500		BVf (mLs)					
			LVi (mLs)	870		Bvi (mLs)					
								Date	Instr.	File #	
Canister DF =	1.75	X	Load DF =	#DIV/0!	X	Bag DF =	1	=		FINAL DF	#DIV/0!
			LVf (mLs)			BVf (mLs)					
			LVi (mLs)			Bvi (mLs)					
								Date	Instr.	File #	
Canister DF =	1.75	X	Load DF =	#DIV/0!	X	Bag DF =	1	=		FINAL DF	#DIV/0!
			LVf (mLs)			BVf (mLs)					
			LVi (mLs)			Bvi (mLs)					

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

CANISTER FIELD DATA RECORD

Sacramento

JOB # 320-12924
Sample # 6

Client/Project:		VFR ID:		
Canister Serial #:	8205	Duration:		☐ Hrs ☐ Min
Cleaning Job:		Flow:		mL/min
Client ID:		Initials:		
Site Location:				

FIELD				
READING	TIME	PRESS.	DATE	INITIALS
INITIAL FIELD VACUUM				
FINAL FIELD READING				

LABORATORY			
READING	PRESS.	DATE	INITIALS
INITIAL VACUUM CHECK (INCHES Hg)	29.8		JMT
☐ Helium Pre-dilution - Final Pressure (INCHES Hg)			
INITIAL PRESSURE (PSIA)	13.27	05/11/15	KY
FINAL PRESSURE (PSIA)	23.98	05/11/15	KY
Pressurization Gas: ☐ N2 ☐ He	SCREENED ☐	SCRN DIL. VS 250mLs:	
Initial Canister Dilution Factor = 1.81			

CANISTER REPRESSURIZATION

Date	Pi (PSIA)	Pf (PSIA)	Initial DF	Initials	NEW DF
			1.81		#DIV/0!
			#DIV/0!		#DIV/0!
			#DIV/0!		#DIV/0!

Analytical Dilution Factors

							Date	Instr.	File #		
							5/11/2015	MS5			
Canister DF =	1.81	X	Load DF =	0.5555556	X	Bag DF =	1	=	FINAL DF 1.00393536		
			LVf (mLs)	500		BVf (mLs)					
			LVi (mLs)	900		Bvi (mLs)					
							Date	Instr.	File #		
Canister DF =	1.81	X	Load DF =	#DIV/0!	X	Bag DF =	1	=	FINAL DF #DIV/0!		
			LVf (mLs)			BVf (mLs)					
			LVi (mLs)			Bvi (mLs)					
							Date	Instr.	File #		
Canister DF =	1.81	X	Load DF =	#DIV/0!	X	Bag DF =	1	=	FINAL DF #DIV/0!		
			LVf (mLs)			BVf (mLs)					
			LVi (mLs)			Bvi (mLs)					

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

CANISTER FIELD DATA RECORD

Sacramento

JOB # 320-12924
Sample # 7

Client/Project:		VFR ID:		
Canister Serial #:	34000113	Duration:		☐ Hrs ☐ Min
Cleaning Job:		Flow:		mL/min
Client ID:		Initials:		
Site Location:				

FIELD

READING	TIME	PRESS.	DATE	INITIALS
INITIAL FIELD VACUUM				
FINAL FIELD READING				

LABORATORY

READING	PRESS.	DATE	INITIALS
INITIAL VACUUM CHECK (INCHES Hg)	29.8		JMT
☐ Helium Pre-dilution - Final Pressure (INCHES Hg)			
INITIAL PRESSURE (PSIA)	13.42	05/11/15	KY
FINAL PRESSURE (PSIA)	23.85	05/11/15	KY
Pressurization Gas: ☐ N2 ☐ He	SCREENED ☐	SCRN DIL. VS 250mLs:	
Initial Canister Dilution Factor = 1.78			

CANISTER REPRESSURIZATION

Date	Pi (PSIA)	Pf (PSIA)	Initial DF	Initials	NEW DF
			1.78		#DIV/0!
			#DIV/0!		#DIV/0!
			#DIV/0!		#DIV/0!

Analytical Dilution Factors

							Date	Instr.	File #		
							5/11/2015	MS5			
Canister DF =	1.78	X	Load DF =	0.5649718	X	Bag DF =	1	=	FINAL DF 1.004066786		
			LVf (mLs)	500		BVf (mLs)					
			LVi (mLs)	885		Bvi (mLs)					
							Date	Instr.	File #		
Canister DF =	1.78	X	Load DF =	#DIV/0!	X	Bag DF =	1	=	FINAL DF #DIV/0!		
			LVf (mLs)			BVf (mLs)					
			LVi (mLs)			Bvi (mLs)					
							Date	Instr.	File #		
Canister DF =	1.78	X	Load DF =	#DIV/0!	X	Bag DF =	1	=	FINAL DF #DIV/0!		
			LVf (mLs)			BVf (mLs)					
			LVi (mLs)			Bvi (mLs)					

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

CANISTER FIELD DATA RECORD

Sacramento

JOB # 320-12924
Sample # 8

Client/Project:		VFR ID:		
Canister Serial #:	34000500	Duration:		☐ Hrs ☐ Min
Cleaning Job:		Flow:		mL/min
Client ID:		Initials:		
Site Location:				

FIELD

READING	TIME	PRESS.	DATE	INITIALS
INITIAL FIELD VACUUM				
FINAL FIELD READING				

LABORATORY

READING	PRESS.	DATE	INITIALS
INITIAL VACUUM CHECK (INCHES Hg)	29.8		JMT
☐ Helium Pre-dilution - Final Pressure (INCHES Hg)			
INITIAL PRESSURE (PSIA)	12.78	05/11/15	KY
FINAL PRESSURE (PSIA)	23.80	05/11/15	KY
Pressurization Gas: ☐ N2 ☐ He	SCREENED ☐	SCRN DIL. VS 250mLs:	
Initial Canister Dilution Factor =	1.86		

CANISTER REPRESSURIZATION

Date	Pi (PSIA)	Pf (PSIA)	Initial DF	Initials	NEW DF
			1.86		#DIV/0!
			#DIV/0!		#DIV/0!
			#DIV/0!		#DIV/0!

Analytical Dilution Factors

								Date	Instr.	File #	
								5/11/2015	MS5		
Canister DF =	1.86	X	Load DF =	0.5376344	X	Bag DF =	1	=		FINAL DF	1.001228398
			LVf (mLs)	500		BVf (mLs)					
			LVi (mLs)	930		Bvi (mLs)					
								Date	Instr.	File #	
Canister DF =	1.86	X	Load DF =	#DIV/0!	X	Bag DF =	1	=		FINAL DF	#DIV/0!
			LVf (mLs)			BVf (mLs)					
			LVi (mLs)			Bvi (mLs)					
								Date	Instr.	File #	
Canister DF =	1.86	X	Load DF =	#DIV/0!	X	Bag DF =	1	=		FINAL DF	#DIV/0!
			LVf (mLs)			BVf (mLs)					
			LVi (mLs)			Bvi (mLs)					

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

CANISTER FIELD DATA RECORD

Sacramento

JOB # 320-12924
Sample # 9

Client/Project:		VFR ID:		
Canister Serial #:	34001141	Duration:		☐ Hrs ☐ Min
Cleaning Job:		Flow:		mL/min
Client ID:		Initials:		
Site Location:				

FIELD

READING	TIME	PRESS.	DATE	INITIALS
INITIAL FIELD VACUUM				
FINAL FIELD READING				

LABORATORY

READING	PRESS.	DATE	INITIALS
INITIAL VACUUM CHECK (INCHES Hg)	29.8		JMT
☐ Helium Pre-dilution - Final Pressure (INCHES Hg)			
INITIAL PRESSURE (PSIA)	13.20	05/11/15	KY
FINAL PRESSURE (PSIA)	23.79	05/11/15	KY
Pressurization Gas: ☐ N2 ☐ He	SCREENED ☐	SCRN DIL. VS 250mLs:	
Initial Canister Dilution Factor = 1.80			

CANISTER REPRESSURIZATION

Date	Pi (PSIA)	Pf (PSIA)	Initial DF	Initials	NEW DF
			1.80		#DIV/0!
			#DIV/0!		#DIV/0!
			#DIV/0!		#DIV/0!

Analytical Dilution Factors

								Date	Instr.	File #	
								5/11/2015	MS5		
Canister DF =	1.80	X	Load DF =	0.5555556	X	Bag DF =	1	=		FINAL DF	1.001262626
			LVf (mLs)	500		BVf (mLs)					
			LVi (mLs)	900		Bvi (mLs)					
								Date	Instr.	File #	
Canister DF =	1.80	X	Load DF =	#DIV/0!	X	Bag DF =	1	=		FINAL DF	#DIV/0!
			LVf (mLs)			BVf (mLs)					
			LVi (mLs)			Bvi (mLs)					
								Date	Instr.	File #	
Canister DF =	1.80	X	Load DF =	#DIV/0!	X	Bag DF =	1	=		FINAL DF	#DIV/0!
			LVf (mLs)			BVf (mLs)					
			LVi (mLs)			Bvi (mLs)					

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

CANISTER FIELD DATA RECORD

Sacramento

JOB # 320-12924
Sample # 10

Client/Project:		VFR ID:		
Canister Serial #:	34000100	Duration:		☐ Hrs ☐ Min
Cleaning Job:		Flow:		mL/min
Client ID:		Initials:		
Site Location:				

FIELD

READING	TIME	PRESS.	DATE	INITIALS
INITIAL FIELD VACUUM				
FINAL FIELD READING				

LABORATORY

READING	PRESS.	DATE	INITIALS
INITIAL VACUUM CHECK (INCHES Hg)	29.8		JMT
☐ Helium Pre-dilution - Final Pressure (INCHES Hg)			
INITIAL PRESSURE (PSIA)	13.00	05/11/15	KY
FINAL PRESSURE (PSIA)	23.79	05/11/15	KY
Pressurization Gas: ☐ N2 ☐ He	SCREENED ☐	SCRN DIL. VS 250mLs:	
Initial Canister Dilution Factor = 1.83			

CANISTER REPRESSURIZATION

Date	Pi (PSIA)	Pf (PSIA)	Initial DF	Initials	NEW DF
			1.83		#DIV/0!
			#DIV/0!		#DIV/0!
			#DIV/0!		#DIV/0!

Analytical Dilution Factors

							Date	Instr.	File #		
							5/11/2015	MS5			
Canister DF =	1.83	X	Load DF =	0.5464481	X	Bag DF =	1	=	FINAL DF 1		
			LVf (mLs)	500		BVf (mLs)					
			LVi (mLs)	915		Bvi (mLs)					
							Date	Instr.	File #		
Canister DF =	1.83	X	Load DF =	#DIV/0!	X	Bag DF =	1	=	FINAL DF #DIV/0!		
			LVf (mLs)			BVf (mLs)					
			LVi (mLs)			Bvi (mLs)					
							Date	Instr.	File #		
Canister DF =	1.83	X	Load DF =	#DIV/0!	X	Bag DF =	1	=	FINAL DF #DIV/0!		
			LVf (mLs)			BVf (mLs)					
			LVi (mLs)			Bvi (mLs)					

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

CANISTER FIELD DATA RECORD

Sacramento

JOB # 320-12924
Sample # 11

Client/Project:		VFR ID:		
Canister Serial #:	34000132	Duration:		☐ Hrs ☐ Min
Cleaning Job:		Flow:		mL/min
Client ID:		Initials:		
Site Location:				

FIELD

READING	TIME	PRESS.	DATE	INITIALS
INITIAL FIELD VACUUM				
FINAL FIELD READING				

LABORATORY

READING	PRESS.	DATE	INITIALS
INITIAL VACUUM CHECK (INCHES Hg)	29.8		JMT
☐ Helium Pre-dilution - Final Pressure (INCHES Hg)			
INITIAL PRESSURE (PSIA)	13.08	05/11/15	KY
FINAL PRESSURE (PSIA)	23.72	05/11/15	KY
Pressurization Gas: ☐ N2 ☐ He	SCREENED ☐	SCRN DIL. VS 250mLs:	
Initial Canister Dilution Factor = 1.81			

CANISTER REPRESSURIZATION

Date	Pi (PSIA)	Pf (PSIA)	Initial DF	Initials	NEW DF
			1.81		#DIV/0!
			#DIV/0!		#DIV/0!
			#DIV/0!		#DIV/0!

Analytical Dilution Factors

							Date	Instr.	File #		
							5/11/2015	MS5			
Canister DF =	1.81	X	Load DF =	0.5524862	X	Bag DF =	1	=	FINAL DF 1.001909203		
			LVf (mLs)	500		BVf (mLs)					
			LVi (mLs)	905		Bvi (mLs)					
							Date	Instr.	File #		
Canister DF =	1.81	X	Load DF =	#DIV/0!	X	Bag DF =	1	=	FINAL DF #DIV/0!		
			LVf (mLs)			BVf (mLs)					
			LVi (mLs)			Bvi (mLs)					
							Date	Instr.	File #		
Canister DF =	1.81	X	Load DF =	#DIV/0!	X	Bag DF =	1	=	FINAL DF #DIV/0!		
			LVf (mLs)			BVf (mLs)					
			LVi (mLs)			Bvi (mLs)					

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

CANISTER FIELD DATA RECORD

Sacramento

JOB # 320-12924
Sample # 12

Client/Project:		VFR ID:		
Canister Serial #:	7531	Duration:		☐ Hrs ☐ Min
Cleaning Job:		Flow:		mL/min
Client ID:		Initials:		
Site Location:				

FIELD				
READING	TIME	PRESS.	DATE	INITIALS
INITIAL FIELD VACUUM				
FINAL FIELD READING				

LABORATORY			
READING	PRESS.	DATE	INITIALS
INITIAL VACUUM CHECK (INCHES Hg)	29.8		JMT
☐ Helium Pre-dilution - Final Pressure (INCHES Hg)			
INITIAL PRESSURE (PSIA)	13.04	05/11/15	KY
FINAL PRESSURE (PSIA)	23.97	05/11/15	KY
Pressurization Gas: ☐ N2 ☐ He	SCREENED ☐	SCRN DIL. VS 250mLs:	
Initial Canister Dilution Factor = 1.84			

CANISTER REPRESSURIZATION

Date	Pi (PSIA)	Pf (PSIA)	Initial DF	Initials	NEW DF
			1.84		#DIV/0!
			#DIV/0!		#DIV/0!
			#DIV/0!		#DIV/0!

Analytical Dilution Factors

							Date	Instr.	File #		
							5/11/2015	MS5			
Canister DF =	1.84	X	Load DF =	0.5464481	X	Bag DF =	1	=	FINAL DF 1.00447551		
			LVf (mLs)	500		BVf (mLs)					
			LVi (mLs)	915		Bvi (mLs)					
							Date	Instr.	File #		
Canister DF =	1.84	X	Load DF =	#DIV/0!	X	Bag DF =	1	=	FINAL DF #DIV/0!		
			LVf (mLs)			BVf (mLs)					
			LVi (mLs)			Bvi (mLs)					
							Date	Instr.	File #		
Canister DF =	1.84	X	Load DF =	#DIV/0!	X	Bag DF =	1	=	FINAL DF #DIV/0!		
			LVf (mLs)			BVf (mLs)					
			LVi (mLs)			Bvi (mLs)					

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Sacramento
Canister QC Certification
Individual Certification

Certification Type: TO-15 SIM

Date Cleaned/Batch ID: 4/2/15 320-12384

Date of QC: 4/4/15

320-12384 Chain of Custody

70344

Canister ID	Filename	Canister ID	Filename
34000100	MS1040405		
1126	—		
0113	MS1040407		
1141	08		
0132	09		
1193	—		
0500	MS1040411		
1318	12		
0014	13		
1590	14		
7531	15		
8205	16		

The above canisters were cleaned as a batch. This certifies this batch contains no target analyte concentration greater than or equal to the method criteria for the "*Certification Type*" indicated above.

1st level Reviewed By: _____ Date: 4/6/15

2nd level Reviewed By: _____ Date: 4/15/15

Q:\FORMS\QA-821 IND CAN QC 20130729.DOC
QA-821

ERS 7/29/2013

320-12705 Chain of Custody

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

Canister QC Certification

Certification Type: TO-15 SCAN

Date Cleaned/Batch ID: 4/21/15 320-12705

Date of QC: 4/30/15

Data File Number: MS7042722

CANISTER ID NUMBERS

34000906	34001051	
0992	8317	
1950	8320	
0865	8288 *	
0682		
1003		
0963		
1106		

The above canisters were cleaned as a batch. This certifies this batch contains no target analyte concentration greater than or equal to the method criteria for the "*Certification Type*" indicated above.

"*" INDICATES THE CAN OR CANS WHICH WERE SCREENED.

for TD — 4/30/15

1st level Reviewed By: — Date:

5/5/15

2nd level Reviewed By: — Date:

Q:\FORMS\QA-814 CAN QC CERT 20130729.DOC
QA-814

ERS 7/29/2013

FORM I

AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento | Job No.: 320-12384-1

SDG No.:

Client Sample ID: 34000100 | Lab Sample ID: 320-12384-1

Matrix: Air | Lab File ID: MS1040405.d

Analysis Method: TO-15 SIM | Date Collected: 04/02/2015 00:00

Sample wt/vol: 500(mL) | Date Analyzed: 04/04/2015 17:29

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: RTX-Volatiles ID: 0.32(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 70344 | Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-43-2	Benzene	ND		0.020	0.010
75-27-4	Bromodichloromethane	ND		0.012	0.0019
56-23-5	Carbon tetrachloride	ND		0.010	0.0050
108-90-7	Chlorobenzene	ND		0.020	0.0050
75-00-3	Chloroethane	ND		0.045	0.020
67-66-3	Chloroform	ND		0.020	0.0050
74-87-3	Chloromethane	ND		0.20	0.030
124-48-1	Dibromochloromethane	ND		0.010	0.0050
106-93-4	1,2-Dibromoethane (EDB)	ND		0.010	0.0023
95-50-1	1,2-Dichlorobenzene	ND		0.050	0.010
541-73-1	1,3-Dichlorobenzene	ND		0.10	0.010
106-46-7	1,4-Dichlorobenzene	ND		0.10	0.010
75-71-8	Dichlorodifluoromethane	ND		0.020	0.0050
75-34-3	1,1-Dichloroethane	ND		0.020	0.0050
107-06-2	1,2-Dichloroethane	ND		0.020	0.0043
75-35-4	1,1-Dichloroethene	ND		0.020	0.0050
156-59-2	cis-1,2-Dichloroethene	ND		0.020	0.0023
156-60-5	trans-1,2-Dichloroethene	ND		0.020	0.0050
78-87-5	1,2-Dichloropropane	ND		0.040	0.020
10061-01-5	cis-1,3-Dichloropropene	ND		0.020	0.0042
10061-02-6	trans-1,3-Dichloropropene	ND		0.020	0.0050
123-91-1	1,4-Dioxane	ND		0.10	0.010
100-41-4	Ethylbenzene	ND		0.020	0.010
87-68-3	Hexachlorobutadiene	ND		0.020	0.010
1634-04-4	Methyl-t-Butyl Ether (MTBE)	ND		0.025	0.010
75-09-2	Methylene Chloride	ND		0.20	0.10
91-20-3	Naphthalene	ND		0.013	0.010
100-42-5	Styrene	ND		0.030	0.0050
79-34-5	1,1,2,2-Tetrachloroethane	ND		0.020	0.010
127-18-4	Tetrachloroethene	ND		0.020	0.010
108-88-3	Toluene	ND		0.020	0.010
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.030	0.0050
120-82-1	1,2,4-Trichlorobenzene	ND		0.050	0.020
71-55-6	1,1,1-Trichloroethane	ND		0.020	0.0018
79-00-5	1,1,2-Trichloroethane	ND		0.050	0.0050

FORM I

AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento Job No.: 320-12384-1

SDG No.:

Client Sample ID: 34000100 Lab Sample ID: 320-12384-1

Matrix: Air Lab File ID: MS1040405.d

Analysis Method: TO-15 SIM Date Collected: 04/02/2015 00:00

Sample wt/vol: 500(mL) Date Analyzed: 04/04/2015 17:29

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-Volatiles ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 70344 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
79-01-6	Trichloroethene	ND		0.020	0.0050
75-69-4	Trichlorofluoromethane	ND		0.045	0.010
75-01-4	Vinyl chloride	ND		0.020	0.0040
179601-23-1	m,p-Xylene	ND		0.040	0.020
95-47-6	o-Xylene	ND		0.020	0.010

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	87		70-130
17060-07-0	1,2-Dichloroethane-d4 (Surr)	104		70-130
2037-26-5	Toluene-d8 (Surr)	97		70-130

TestAmerica Sacramento
Target Compound Quantitation Report

Data File:	\\SACCHROM\ChromData\ATMS1\20150404-20786.b\MS1040405.d				
Lims ID:	320-12384-A-1	Lab Sample ID:	320-12384-1		
Client ID:	34000100				
Sample Type:	Client				
Inject. Date:	04-Apr-2015 17:29:30	ALS Bottle#:	1	Worklist Smp#:	5
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Sample Info:	320-12384-A-1				
Misc. Info.:	1000mL				
Operator ID:	AO	Instrument ID:	ATMS1		
Method:	\\SACCHROM\ChromData\ATMS1\20150404-20786.b\TO-15 SIM SIM.m				
Limit Group:	MSA - TO-15_SIM_ICAL				
Last Update:	06-Apr-2015 09:38:59	Calib Date:	21-Mar-2015 07:24:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\SACCHROM\ChromData\ATMS1\20150320-20385.b\MS1032011.d				
Column 1 :			Det: MS SCAN		
Process Host:	XAWRK021				
First Level Reviewer: ortizam		Date:	06-Apr-2015 09:39:28		

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	130	11.790	11.790	0.000	100	36899	2.00	
* 2 1,4-Difluorobenzene	114	13.904	13.904	0.000	100	116727	2.00	
* 3 Chlorobenzene-d5 (IS)	117	20.592	20.592	0.000	99	97108	2.00	
$ 4 1,2-Dichloroethane-d4 (Sur	65	12.958	12.958	0.000	61	53114	2.07	
$ 5 Toluene-d8 (Surr)	100	17.305	17.305	0.000	100	57339	1.94	
$ 6 4-Bromofluorobenzene (Surr	174	23.154	23.154	0.000	100	57159	1.74	
118 Benzyl chloride	91	26.193	26.193	0.000	100	90	0.0229	

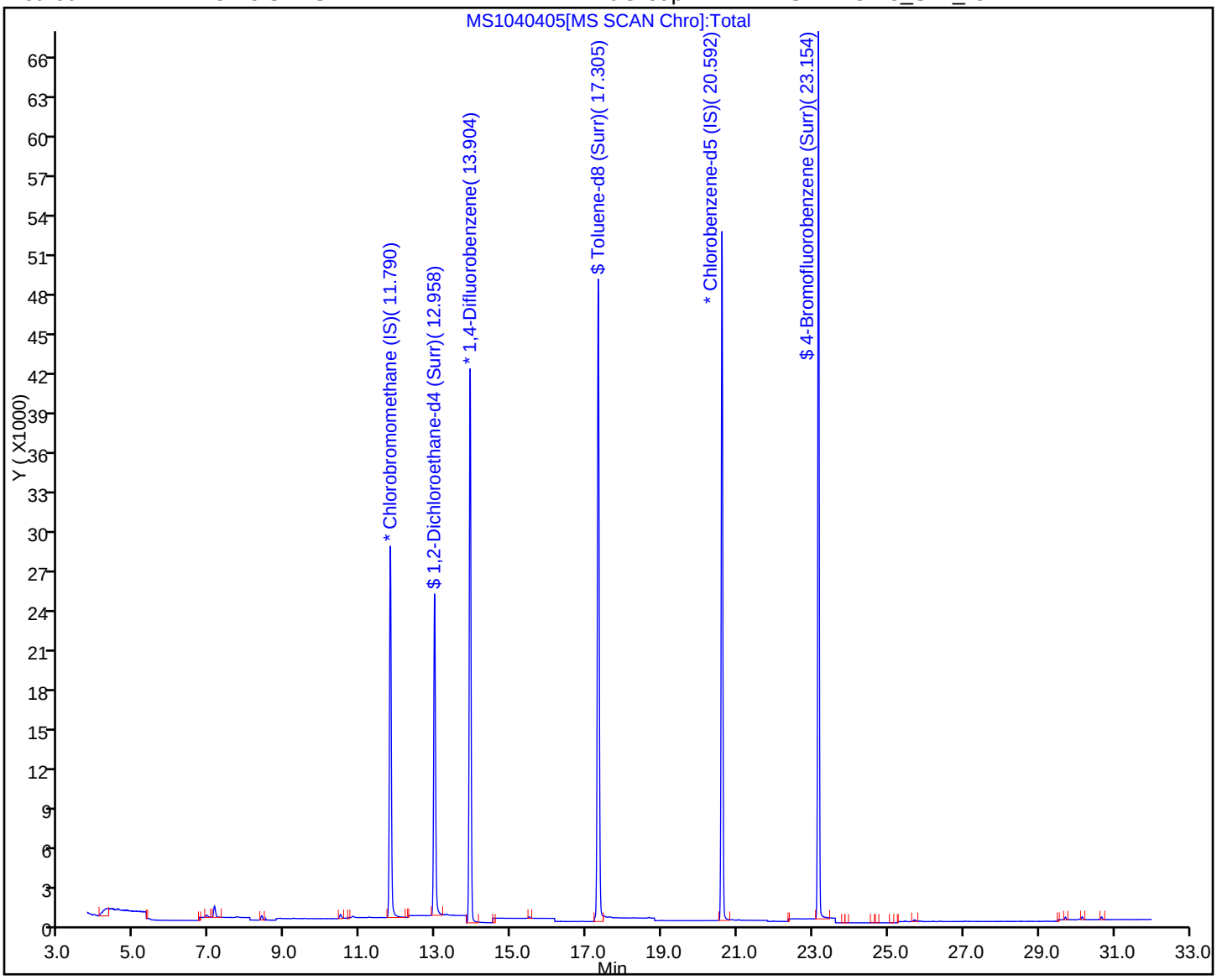
Reagents:

VASUISIM_00156 Amount Added: 50.00 Units: mL Run Reagent

Report Date: 06-Apr-2015 09:39:28 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Sacramento

Data File:	\\SACCHROM\ChromData\ATMS1\20150404-20786.b\MS1040405.d				
Injection Date:	04-Apr-2015 17:29:30	Instrument ID:	ATMS1		
Lims ID:	320-12384-A-1	Lab Sample ID:	320-12384-1		
Client ID:	34000100				
Operator ID:	AO	ALS Bottle#:	1	Worklist Smp#:	5
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	TO-15 SIM SIM	Limit Group:	MSA - TO-15_SIM_ICAL		



FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento | Job No.: 320-12384-1

SDG No.:

Client Sample ID: 34000113 | Lab Sample ID: 320-12384-3

Matrix: Air | Lab File ID: MS1040407.d

Analysis Method: TO-15 SIM | Date Collected: 04/02/2015 00:00

Sample wt/vol: 500(mL) | Date Analyzed: 04/04/2015 19:41

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: RTX-Volatiles ID: 0.32(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 70344 | Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-43-2	Benzene	ND		0.020	0.010
75-27-4	Bromodichloromethane	ND		0.012	0.0019
56-23-5	Carbon tetrachloride	ND		0.010	0.0050
108-90-7	Chlorobenzene	ND		0.020	0.0050
75-00-3	Chloroethane	ND		0.045	0.020
67-66-3	Chloroform	ND		0.020	0.0050
74-87-3	Chloromethane	ND		0.20	0.030
124-48-1	Dibromochloromethane	ND		0.010	0.0050
106-93-4	1,2-Dibromoethane (EDB)	ND		0.010	0.0023
95-50-1	1,2-Dichlorobenzene	ND		0.050	0.010
541-73-1	1,3-Dichlorobenzene	ND		0.10	0.010
106-46-7	1,4-Dichlorobenzene	ND		0.10	0.010
75-71-8	Dichlorodifluoromethane	ND		0.020	0.0050
75-34-3	1,1-Dichloroethane	ND		0.020	0.0050
107-06-2	1,2-Dichloroethane	ND		0.020	0.0043
75-35-4	1,1-Dichloroethene	ND		0.020	0.0050
156-59-2	cis-1,2-Dichloroethene	ND		0.020	0.0023
156-60-5	trans-1,2-Dichloroethene	ND		0.020	0.0050
78-87-5	1,2-Dichloropropane	ND		0.040	0.020
10061-01-5	cis-1,3-Dichloropropene	ND		0.020	0.0042
10061-02-6	trans-1,3-Dichloropropene	ND		0.020	0.0050
100-41-4	Ethylbenzene	ND		0.020	0.010
87-68-3	Hexachlorobutadiene	ND		0.020	0.010
1634-04-4	Methyl-t-Butyl Ether (MTBE)	ND		0.025	0.010
75-09-2	Methylene Chloride	ND		0.20	0.10
91-20-3	Naphthalene	ND		0.013	0.010
100-42-5	Styrene	ND		0.030	0.0050
79-34-5	1,1,2,2-Tetrachloroethane	ND		0.020	0.010
127-18-4	Tetrachloroethene	ND		0.020	0.010
108-88-3	Toluene	ND		0.020	0.010
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.030	0.0050
120-82-1	1,2,4-Trichlorobenzene	ND		0.050	0.020
71-55-6	1,1,1-Trichloroethane	ND		0.020	0.0018
79-00-5	1,1,2-Trichloroethane	ND		0.050	0.0050
79-01-6	Trichloroethene	ND		0.020	0.0050

FORM I

AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento Job No.: 320-12384-1

SDG No.:

Client Sample ID: 34000113 Lab Sample ID: 320-12384-3

Matrix: Air Lab File ID: MS1040407.d

Analysis Method: TO-15 SIM Date Collected: 04/02/2015 00:00

Sample wt/vol: 500(mL) Date Analyzed: 04/04/2015 19:41

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-Volatiles ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 70344 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-69-4	Trichlorofluoromethane	ND		0.045	0.010
75-01-4	Vinyl chloride	ND		0.020	0.0040
179601-23-1	m,p-Xylene	ND		0.040	0.020
95-47-6	o-Xylene	ND		0.020	0.010

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	87		70-130
17060-07-0	1,2-Dichloroethane-d4 (Surr)	107		70-130
2037-26-5	Toluene-d8 (Surr)	97		70-130

TestAmerica Sacramento
Target Compound Quantitation Report

Data File:	\\SACCHROM\ChromData\ATMS1\20150404-20786.b\MS1040407.d				
Lims ID:	320-12384-A-3	Lab Sample ID:	320-12384-3		
Client ID:	34000113				
Sample Type:	Client				
Inject. Date:	04-Apr-2015 19:41:30	ALS Bottle#:	4	Worklist Smp#:	7
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Sample Info:	320-12384-A-3				
Misc. Info.:	1000mL				
Operator ID:	AO	Instrument ID:	ATMS1		
Method:	\\SACCHROM\ChromData\ATMS1\20150404-20786.b\TO-15 SIM SIM.m				
Limit Group:	MSA - TO-15_SIM_ICAL				
Last Update:	06-Apr-2015 09:38:59	Calib Date:	21-Mar-2015 07:24:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\SACCHROM\ChromData\ATMS1\20150320-20385.b\MS1032011.d				
Column 1 :			Det: MS SCAN		
Process Host:	XAWRK021				
First Level Reviewer: ortizam		Date:	06-Apr-2015 09:46:27		

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	130	11.790	11.790	0.000	99	36665	2.00	
* 2 1,4-Difluorobenzene	114	13.904	13.904	0.000	100	112346	2.00	
* 3 Chlorobenzene-d5 (IS)	117	20.592	20.592	0.000	99	94794	2.00	
$ 4 1,2-Dichloroethane-d4 (Sur	65	12.958	12.958	0.000	58	52745	2.14	
$ 5 Toluene-d8 (Surr)	100	17.305	17.305	0.000	100	55123	1.94	
$ 6 4-Bromofluorobenzene (Surr	174	23.156	23.154	0.002	100	55776	1.74	
72 1,4-Dioxane	88	15.462	15.440	0.022	33	161	0.0114	
118 Benzyl chloride	91	26.184	26.193	-0.009	100	61	0.0227	

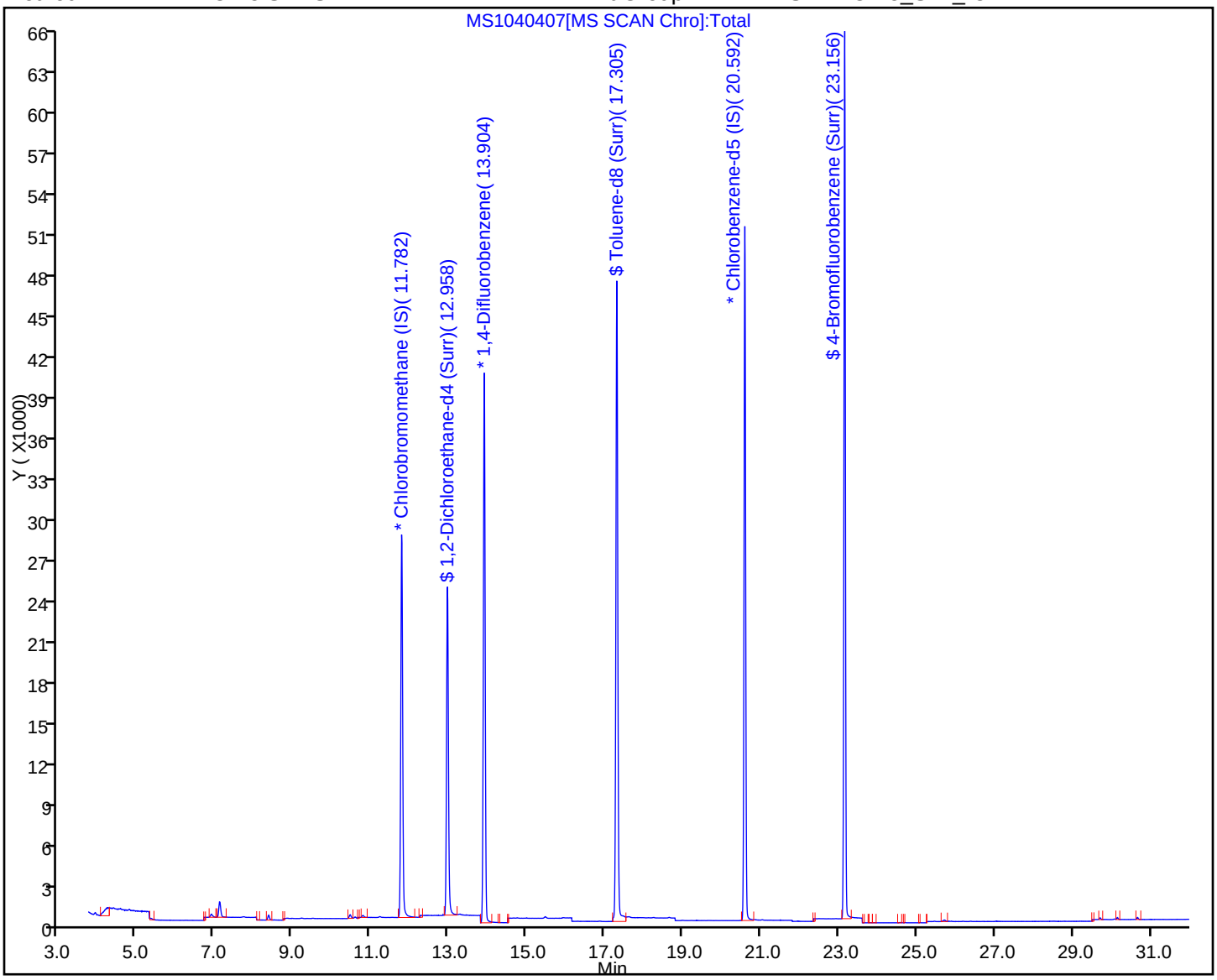
Reagents:

VASUISIM_00156 Amount Added: 50.00 Units: mL Run Reagent

Report Date: 06-Apr-2015 09:46:27 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Sacramento

Data File:	\\SACCHROM\ChromData\ATMS1\20150404-20786.b\MS1040407.d				
Injection Date:	04-Apr-2015 19:41:30	Instrument ID:	ATMS1		
Lims ID:	320-12384-A-3	Lab Sample ID:	320-12384-3		
Client ID:	34000113				
Operator ID:	AO	ALS Bottle#:	4	Worklist Smp#:	7
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	TO-15 SIM SIM	Limit Group:	MSA - TO-15_SIM_ICAL		



FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento | Job No.: 320-12384-1

SDG No.:

Client Sample ID: 34001141 | Lab Sample ID: 320-12384-4

Matrix: Air | Lab File ID: MS1040408.d

Analysis Method: TO-15 SIM | Date Collected: 04/02/2015 00:00

Sample wt/vol: 500(mL) | Date Analyzed: 04/04/2015 20:40

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: RTX-Volatiles ID: 0.32(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 70344 | Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-43-2	Benzene	ND		0.020	0.010
75-27-4	Bromodichloromethane	ND		0.012	0.0019
56-23-5	Carbon tetrachloride	ND		0.010	0.0050
108-90-7	Chlorobenzene	ND		0.020	0.0050
75-00-3	Chloroethane	ND		0.045	0.020
67-66-3	Chloroform	ND		0.020	0.0050
74-87-3	Chloromethane	ND		0.20	0.030
124-48-1	Dibromochloromethane	ND		0.010	0.0050
106-93-4	1,2-Dibromoethane (EDB)	ND		0.010	0.0023
95-50-1	1,2-Dichlorobenzene	ND		0.050	0.010
541-73-1	1,3-Dichlorobenzene	ND		0.10	0.010
106-46-7	1,4-Dichlorobenzene	ND		0.10	0.010
75-71-8	Dichlorodifluoromethane	ND		0.020	0.0050
75-34-3	1,1-Dichloroethane	ND		0.020	0.0050
107-06-2	1,2-Dichloroethane	ND		0.020	0.0043
75-35-4	1,1-Dichloroethene	ND		0.020	0.0050
156-59-2	cis-1,2-Dichloroethene	ND		0.020	0.0023
156-60-5	trans-1,2-Dichloroethene	ND		0.020	0.0050
78-87-5	1,2-Dichloropropane	ND		0.040	0.020
10061-01-5	cis-1,3-Dichloropropene	ND		0.020	0.0042
10061-02-6	trans-1,3-Dichloropropene	ND		0.020	0.0050
123-91-1	1,4-Dioxane	ND		0.10	0.010
100-41-4	Ethylbenzene	ND		0.020	0.010
87-68-3	Hexachlorobutadiene	ND		0.020	0.010
1634-04-4	Methyl-t-Butyl Ether (MTBE)	ND		0.025	0.010
75-09-2	Methylene Chloride	ND		0.20	0.10
91-20-3	Naphthalene	ND		0.013	0.010
100-42-5	Styrene	ND		0.030	0.0050
79-34-5	1,1,2,2-Tetrachloroethane	ND		0.020	0.010
127-18-4	Tetrachloroethene	ND		0.020	0.010
108-88-3	Toluene	ND		0.020	0.010
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.030	0.0050
120-82-1	1,2,4-Trichlorobenzene	ND		0.050	0.020
71-55-6	1,1,1-Trichloroethane	ND		0.020	0.0018
79-00-5	1,1,2-Trichloroethane	ND		0.050	0.0050

FORM I

AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento Job No.: 320-12384-1

SDG No.:

Client Sample ID: 34001141 Lab Sample ID: 320-12384-4

Matrix: Air Lab File ID: MS1040408.d

Analysis Method: TO-15 SIM Date Collected: 04/02/2015 00:00

Sample wt/vol: 500(mL) Date Analyzed: 04/04/2015 20:40

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-Volatiles ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 70344 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
79-01-6	Trichloroethene	ND		0.020	0.0050
75-69-4	Trichlorofluoromethane	ND		0.045	0.010
75-01-4	Vinyl chloride	ND		0.020	0.0040
179601-23-1	m,p-Xylene	ND		0.040	0.020
95-47-6	o-Xylene	ND		0.020	0.010

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	87		70-130
17060-07-0	1,2-Dichloroethane-d4 (Surr)	107		70-130
2037-26-5	Toluene-d8 (Surr)	97		70-130

TestAmerica Sacramento
Target Compound Quantitation Report

Data File:	\\SACCHROM\ChromData\ATMS1\20150404-20786.b\MS1040408.d				
Lims ID:	320-12384-A-4	Lab Sample ID:	320-12384-4		
Client ID:	34001141				
Sample Type:	Client				
Inject. Date:	04-Apr-2015 20:40:30	ALS Bottle#:	5	Worklist Smp#:	8
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Sample Info:	320-12384-A-4				
Misc. Info.:	1000mL				
Operator ID:	AO	Instrument ID:	ATMS1		
Method:	\\SACCHROM\ChromData\ATMS1\20150404-20786.b\TO-15 SIM SIM.m				
Limit Group:	MSA - TO-15_SIM_ICAL				
Last Update:	06-Apr-2015 09:38:59	Calib Date:	21-Mar-2015 07:24:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\SACCHROM\ChromData\ATMS1\20150320-20385.b\MS1032011.d				
Column 1 :			Det: MS SCAN		
Process Host:	XAWRK021				
First Level Reviewer: ortizam		Date:	06-Apr-2015 09:40:09		

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	130	11.790	11.790	0.000	99	36001	2.00	
* 2 1,4-Difluorobenzene	114	13.904	13.904	0.000	100	110467	2.00	
* 3 Chlorobenzene-d5 (IS)	117	20.592	20.592	0.000	99	92936	2.00	
$ 4 1,2-Dichloroethane-d4 (Sur	65	12.958	12.958	0.000	62	51944	2.14	
$ 5 Toluene-d8 (Surr)	100	17.305	17.305	0.000	100	54430	1.95	
$ 6 4-Bromofluorobenzene (Surr	174	23.154	23.154	0.000	100	54629	1.74	
118 Benzyl chloride	91	26.186	26.193	-0.007	100	63	0.0228	

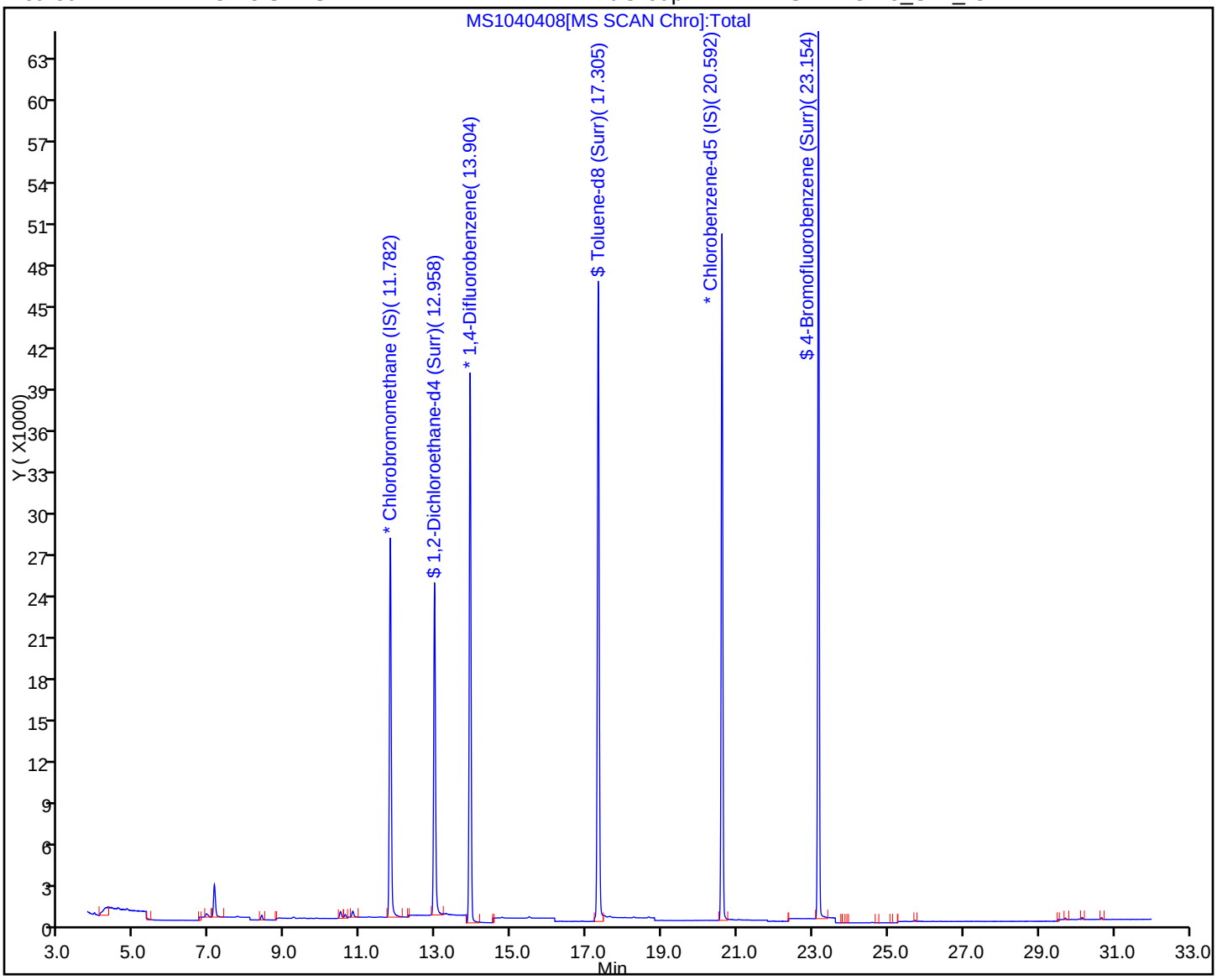
Reagents:

VASUISIM_00156 Amount Added: 50.00 Units: mL Run Reagent

Report Date: 06-Apr-2015 09:40:09 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Sacramento

Data File:	\\SACCHROM\ChromData\ATMS1\20150404-20786.b\MS1040408.d				
Injection Date:	04-Apr-2015 20:40:30	Instrument ID:	ATMS1		
Lims ID:	320-12384-A-4	Lab Sample ID:	320-12384-4		
Client ID:	34001141				
Operator ID:	AO	ALS Bottle#:	5	Worklist Smp#:	8
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	TO-15 SIM SIM	Limit Group:	MSA - TO-15_SIM_ICAL		



FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento | Job No.: 320-12384-1

SDG No.:

Client Sample ID: 34000132 | Lab Sample ID: 320-12384-5

Matrix: Air | Lab File ID: MS1040409.d

Analysis Method: TO-15 SIM | Date Collected: 04/02/2015 00:00

Sample wt/vol: 500(mL) | Date Analyzed: 04/04/2015 21:38

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: RTX-Volatiles ID: 0.32(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 70344 | Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-43-2	Benzene	ND		0.020	0.010
100-44-7	Benzyl chloride	ND		0.10	0.010
75-27-4	Bromodichloromethane	ND		0.012	0.0019
56-23-5	Carbon tetrachloride	ND		0.010	0.0050
108-90-7	Chlorobenzene	ND		0.020	0.0050
75-00-3	Chloroethane	ND		0.045	0.020
67-66-3	Chloroform	ND		0.020	0.0050
74-87-3	Chloromethane	ND		0.20	0.030
124-48-1	Dibromochloromethane	ND		0.010	0.0050
106-93-4	1,2-Dibromoethane (EDB)	ND		0.010	0.0023
95-50-1	1,2-Dichlorobenzene	ND		0.050	0.010
541-73-1	1,3-Dichlorobenzene	ND		0.10	0.010
106-46-7	1,4-Dichlorobenzene	ND		0.10	0.010
75-71-8	Dichlorodifluoromethane	ND		0.020	0.0050
75-34-3	1,1-Dichloroethane	ND		0.020	0.0050
107-06-2	1,2-Dichloroethane	ND		0.020	0.0043
75-35-4	1,1-Dichloroethene	ND		0.020	0.0050
156-59-2	cis-1,2-Dichloroethene	ND		0.020	0.0023
156-60-5	trans-1,2-Dichloroethene	ND		0.020	0.0050
78-87-5	1,2-Dichloropropane	ND		0.040	0.020
10061-01-5	cis-1,3-Dichloropropene	ND		0.020	0.0042
10061-02-6	trans-1,3-Dichloropropene	ND		0.020	0.0050
123-91-1	1,4-Dioxane	ND		0.10	0.010
100-41-4	Ethylbenzene	ND		0.020	0.010
87-68-3	Hexachlorobutadiene	ND		0.020	0.010
1634-04-4	Methyl-t-Butyl Ether (MTBE)	ND		0.025	0.010
75-09-2	Methylene Chloride	ND		0.20	0.10
91-20-3	Naphthalene	ND		0.013	0.010
100-42-5	Styrene	ND		0.030	0.0050
79-34-5	1,1,2,2-Tetrachloroethane	ND		0.020	0.010
127-18-4	Tetrachloroethene	ND		0.020	0.010
108-88-3	Toluene	ND		0.020	0.010
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.030	0.0050
120-82-1	1,2,4-Trichlorobenzene	ND		0.050	0.020
71-55-6	1,1,1-Trichloroethane	ND		0.020	0.0018

FORM I

AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento Job No.: 320-12384-1

SDG No.:

Client Sample ID: 34000132 Lab Sample ID: 320-12384-5

Matrix: Air Lab File ID: MS1040409.d

Analysis Method: TO-15 SIM Date Collected: 04/02/2015 00:00

Sample wt/vol: 500(mL) Date Analyzed: 04/04/2015 21:38

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-Volatiles ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 70344 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
79-00-5	1,1,2-Trichloroethane	ND		0.050	0.0050
79-01-6	Trichloroethene	ND		0.020	0.0050
75-69-4	Trichlorofluoromethane	ND		0.045	0.010
75-01-4	Vinyl chloride	ND		0.020	0.0040
179601-23-1	m,p-Xylene	ND		0.040	0.020
95-47-6	o-Xylene	ND		0.020	0.010

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	99		70-130
17060-07-0	1,2-Dichloroethane-d4 (Surr)	108		70-130
2037-26-5	Toluene-d8 (Surr)	97		70-130

TestAmerica Sacramento
Target Compound Quantitation Report

Data File:	\\SACCHROM\ChromData\ATMS1\20150404-20786.b\MS1040409.d				
Lims ID:	320-12384-A-5	Lab Sample ID:	320-12384-5		
Client ID:	34000132				
Sample Type:	Client				
Inject. Date:	04-Apr-2015 21:38:30	ALS Bottle#:	6	Worklist Smp#:	9
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Sample Info:	320-12384-A-5				
Misc. Info.:	1000mL				
Operator ID:	AO	Instrument ID:	ATMS1		
Method:	\\SACCHROM\ChromData\ATMS1\20150404-20786.b\TO-15 SIM SIM.m				
Limit Group:	MSA - TO-15_SIM_ICAL				
Last Update:	06-Apr-2015 09:38:59	Calib Date:	21-Mar-2015 07:24:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\SACCHROM\ChromData\ATMS1\20150320-20385.b\MS1032011.d				
Column 1 :			Det: MS SCAN		
Process Host:	XAWRK021				
First Level Reviewer: ortizam		Date:	06-Apr-2015 09:40:15		

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	130	11.790	11.790	0.000	98	36020	2.00	
* 2 1,4-Difluorobenzene	114	13.904	13.904	0.000	100	108763	2.00	
* 3 Chlorobenzene-d5 (IS)	117	20.592	20.592	0.000	99	92473	2.00	
$ 4 1,2-Dichloroethane-d4 (Sur	65	12.958	12.958	0.000	61	51487	2.16	
$ 5 Toluene-d8 (Surr)	100	17.305	17.305	0.000	100	53184	1.93	
$ 6 4-Bromofluorobenzene (Surr	174	23.156	23.154	0.002	99	61943	1.98	

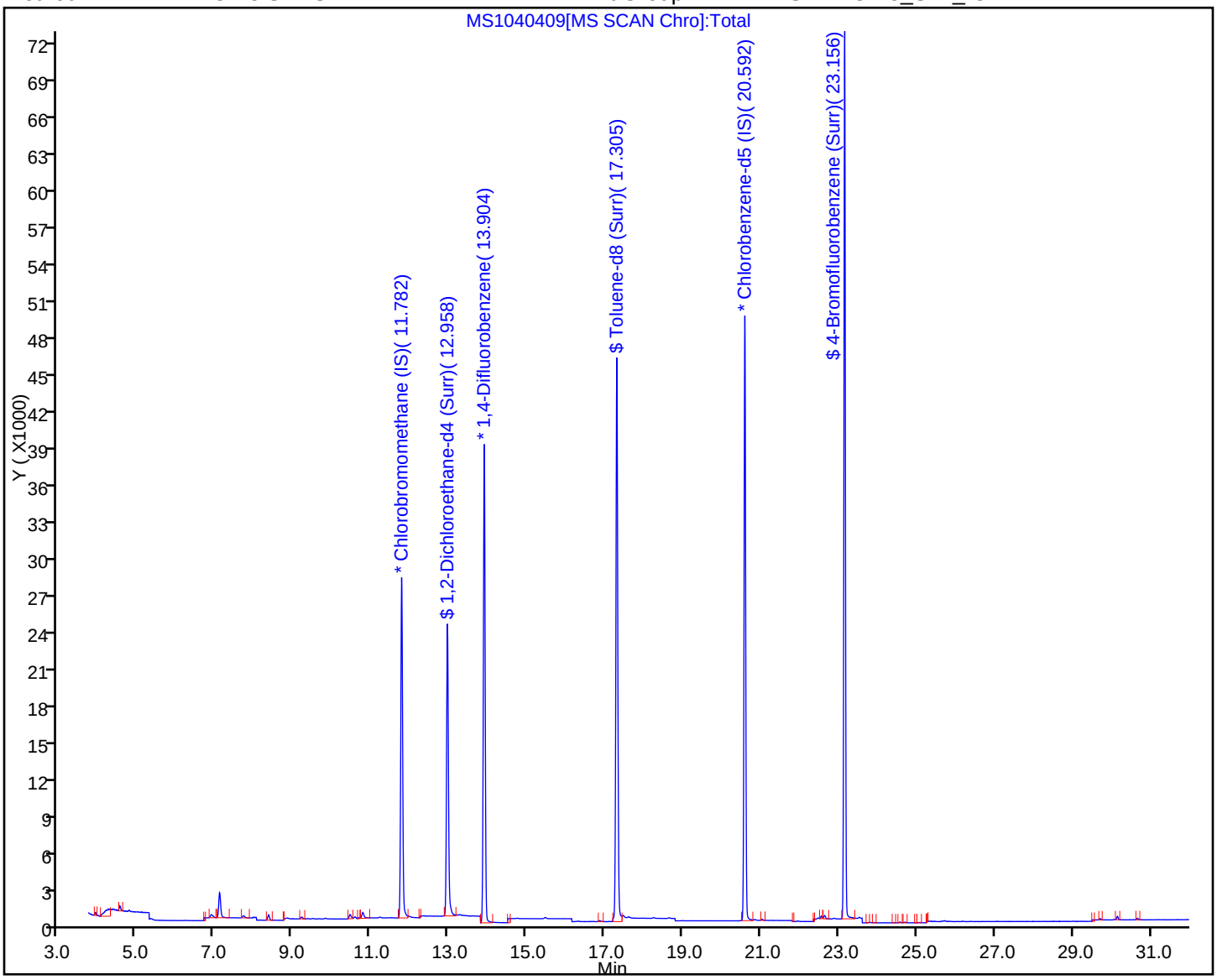
Reagents:

VASUISIM_00156 Amount Added: 50.00 Units: mL Run Reagent

Report Date: 06-Apr-2015 09:40:15 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Sacramento

Data File:	\\SACCHROM\ChromData\ATMS1\20150404-20786.b\MS1040409.d				
Injection Date:	04-Apr-2015 21:38:30	Instrument ID:	ATMS1		
Lims ID:	320-12384-A-5	Lab Sample ID:	320-12384-5		
Client ID:	34000132				
Operator ID:	AO	ALS Bottle#:	6	Worklist Smp#:	9
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	TO-15 SIM SIM	Limit Group:	MSA - TO-15_SIM_ICAL		



FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento | Job No.: 320-12384-1

SDG No.:

Client Sample ID: 34000500 | Lab Sample ID: 320-12384-7

Matrix: Air | Lab File ID: MS1040411.d

Analysis Method: TO-15 SIM | Date Collected: 04/02/2015 00:00

Sample wt/vol: 500(mL) | Date Analyzed: 04/04/2015 23:50

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: RTX-Volatiles ID: 0.32(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 70344 | Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-43-2	Benzene	ND		0.020	0.010
100-44-7	Benzyl chloride	ND		0.10	0.010
75-27-4	Bromodichloromethane	ND		0.012	0.0019
56-23-5	Carbon tetrachloride	ND		0.010	0.0050
108-90-7	Chlorobenzene	ND		0.020	0.0050
75-00-3	Chloroethane	ND		0.045	0.020
67-66-3	Chloroform	ND		0.020	0.0050
74-87-3	Chloromethane	ND		0.20	0.030
124-48-1	Dibromochloromethane	ND		0.010	0.0050
106-93-4	1,2-Dibromoethane (EDB)	ND		0.010	0.0023
95-50-1	1,2-Dichlorobenzene	ND		0.050	0.010
541-73-1	1,3-Dichlorobenzene	ND		0.10	0.010
106-46-7	1,4-Dichlorobenzene	ND		0.10	0.010
75-71-8	Dichlorodifluoromethane	ND		0.020	0.0050
75-34-3	1,1-Dichloroethane	ND		0.020	0.0050
107-06-2	1,2-Dichloroethane	ND		0.020	0.0043
75-35-4	1,1-Dichloroethene	ND		0.020	0.0050
156-59-2	cis-1,2-Dichloroethene	ND		0.020	0.0023
156-60-5	trans-1,2-Dichloroethene	ND		0.020	0.0050
78-87-5	1,2-Dichloropropane	ND		0.040	0.020
10061-01-5	cis-1,3-Dichloropropene	ND		0.020	0.0042
10061-02-6	trans-1,3-Dichloropropene	ND		0.020	0.0050
123-91-1	1,4-Dioxane	ND		0.10	0.010
100-41-4	Ethylbenzene	ND		0.020	0.010
87-68-3	Hexachlorobutadiene	ND		0.020	0.010
1634-04-4	Methyl-t-Butyl Ether (MTBE)	ND		0.025	0.010
75-09-2	Methylene Chloride	ND		0.20	0.10
91-20-3	Naphthalene	ND		0.013	0.010
100-42-5	Styrene	ND		0.030	0.0050
79-34-5	1,1,2,2-Tetrachloroethane	ND		0.020	0.010
127-18-4	Tetrachloroethene	ND		0.020	0.010
108-88-3	Toluene	ND		0.020	0.010
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.030	0.0050
120-82-1	1,2,4-Trichlorobenzene	ND		0.050	0.020
71-55-6	1,1,1-Trichloroethane	ND		0.020	0.0018

FORM I

AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento Job No.: 320-12384-1

SDG No.:

Client Sample ID: 34000500 Lab Sample ID: 320-12384-7

Matrix: Air Lab File ID: MS1040411.d

Analysis Method: TO-15 SIM Date Collected: 04/02/2015 00:00

Sample wt/vol: 500(mL) Date Analyzed: 04/04/2015 23:50

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-Volatiles ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 70344 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
79-00-5	1,1,2-Trichloroethane	ND		0.050	0.0050
79-01-6	Trichloroethene	ND		0.020	0.0050
75-69-4	Trichlorofluoromethane	ND		0.045	0.010
75-01-4	Vinyl chloride	ND		0.020	0.0040
179601-23-1	m,p-Xylene	ND		0.040	0.020
95-47-6	o-Xylene	ND		0.020	0.010

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	85		70-130
17060-07-0	1,2-Dichloroethane-d4 (Surr)	108		70-130
2037-26-5	Toluene-d8 (Surr)	96		70-130

TestAmerica Sacramento
Target Compound Quantitation Report

Data File:	\\SACCHROM\ChromData\ATMS1\20150404-20786.b\MS1040411.d				
Lims ID:	320-12384-A-7	Lab Sample ID:	320-12384-7		
Client ID:	34000500				
Sample Type:	Client				
Inject. Date:	04-Apr-2015 23:50:30	ALS Bottle#:	9	Worklist Smp#:	11
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Sample Info:	320-12384-A-7				
Misc. Info.:	1000mL				
Operator ID:	AO	Instrument ID:	ATMS1		
Method:	\\SACCHROM\ChromData\ATMS1\20150404-20786.b\TO-15 SIM SIM.m				
Limit Group:	MSA - TO-15_SIM_ICAL				
Last Update:	06-Apr-2015 09:38:59	Calib Date:	21-Mar-2015 07:24:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\SACCHROM\ChromData\ATMS1\20150320-20385.b\MS1032011.d				
Column 1 :			Det: MS SCAN		
Process Host:	XAWRK021				
First Level Reviewer: ortizam		Date:	06-Apr-2015 09:40:32		

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	130	11.790	11.790	0.000	99	36845	2.00	
* 2 1,4-Difluorobenzene	114	13.904	13.904	0.000	100	110674	2.00	
* 3 Chlorobenzene-d5 (IS)	117	20.592	20.592	0.000	99	92793	2.00	
$ 4 1,2-Dichloroethane-d4 (Sur	65	12.958	12.958	0.000	57	52624	2.17	
$ 5 Toluene-d8 (Surr)	100	17.305	17.305	0.000	100	53864	1.93	
$ 6 4-Bromofluorobenzene (Surr	174	23.154	23.154	0.000	100	53555	1.71	

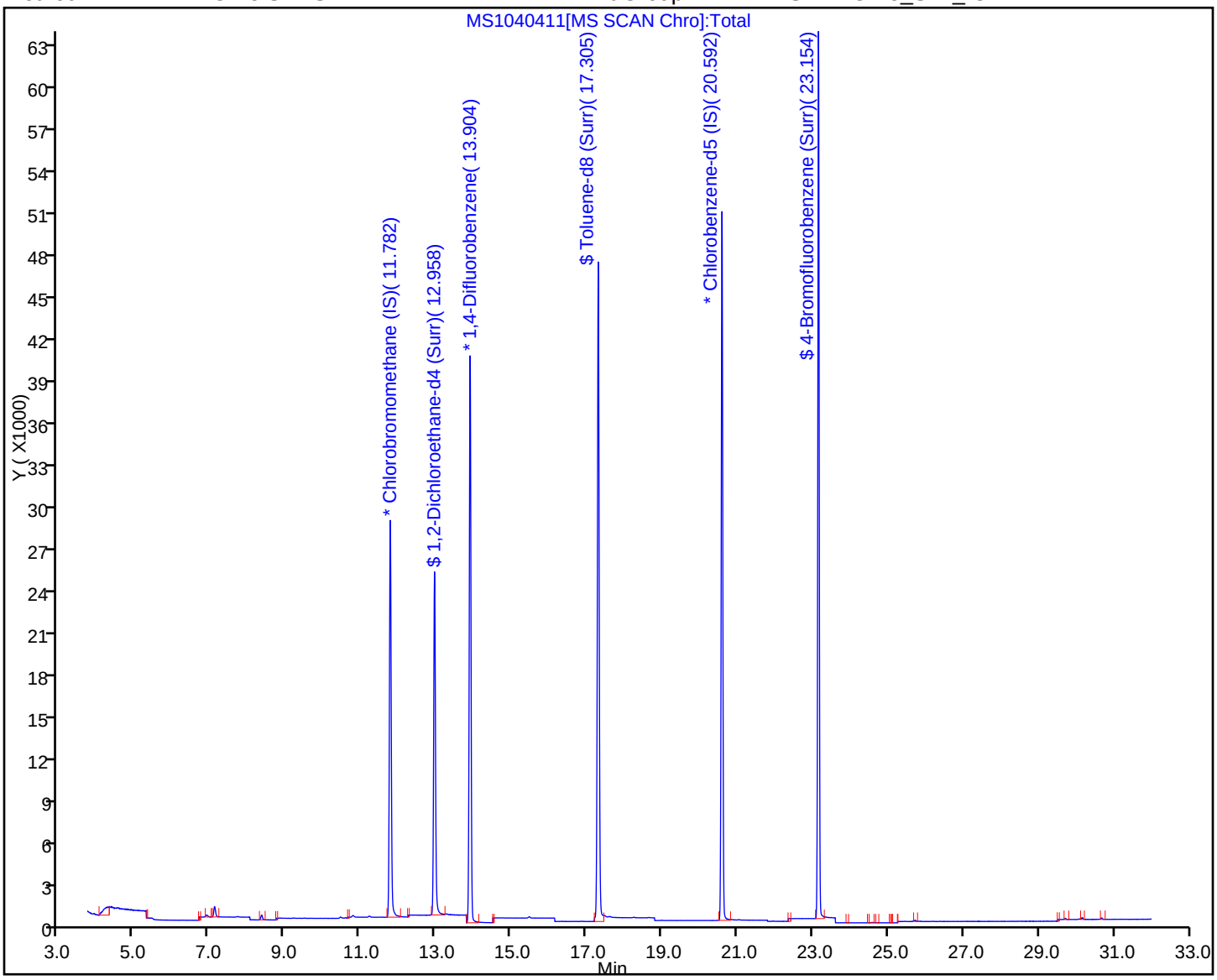
Reagents:

VASUISIM_00156 Amount Added: 50.00 Units: mL Run Reagent

Report Date: 06-Apr-2015 09:40:32 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Sacramento

Data File:	\\SACCHROM\ChromData\ATMS1\20150404-20786.b\MS1040411.d				
Injection Date:	04-Apr-2015 23:50:30	Instrument ID:	ATMS1		
Lims ID:	320-12384-A-7	Lab Sample ID:	320-12384-7		
Client ID:	34000500				
Operator ID:	AO	ALS Bottle#:	9	Worklist Smp#:	11
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	TO-15 SIM SIM	Limit Group:	MSA - TO-15_SIM_ICAL		



FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento | Job No.: 320-12384-1

SDG No.:

Client Sample ID: 34001318 | Lab Sample ID: 320-12384-8

Matrix: Air | Lab File ID: MS1040412.d

Analysis Method: TO-15 SIM | Date Collected: 04/02/2015 00:00

Sample wt/vol: 500(mL) | Date Analyzed: 04/05/2015 00:47

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: RTX-Volatiles ID: 0.32(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 70344 | Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-43-2	Benzene	ND		0.020	0.010
100-44-7	Benzyl chloride	ND		0.10	0.010
75-27-4	Bromodichloromethane	ND		0.012	0.0019
56-23-5	Carbon tetrachloride	ND		0.010	0.0050
108-90-7	Chlorobenzene	ND		0.020	0.0050
75-00-3	Chloroethane	ND		0.045	0.020
67-66-3	Chloroform	ND		0.020	0.0050
74-87-3	Chloromethane	ND		0.20	0.030
124-48-1	Dibromochloromethane	ND		0.010	0.0050
106-93-4	1,2-Dibromoethane (EDB)	ND		0.010	0.0023
95-50-1	1,2-Dichlorobenzene	ND		0.050	0.010
541-73-1	1,3-Dichlorobenzene	ND		0.10	0.010
106-46-7	1,4-Dichlorobenzene	ND		0.10	0.010
75-34-3	1,1-Dichloroethane	ND		0.020	0.0050
107-06-2	1,2-Dichloroethane	ND		0.020	0.0043
75-35-4	1,1-Dichloroethene	ND		0.020	0.0050
156-59-2	cis-1,2-Dichloroethene	ND		0.020	0.0023
156-60-5	trans-1,2-Dichloroethene	ND		0.020	0.0050
78-87-5	1,2-Dichloropropane	ND		0.040	0.020
10061-01-5	cis-1,3-Dichloropropene	ND		0.020	0.0042
10061-02-6	trans-1,3-Dichloropropene	ND		0.020	0.0050
123-91-1	1,4-Dioxane	ND		0.10	0.010
100-41-4	Ethylbenzene	ND		0.020	0.010
87-68-3	Hexachlorobutadiene	ND		0.020	0.010
1634-04-4	Methyl-t-Butyl Ether (MTBE)	ND		0.025	0.010
75-09-2	Methylene Chloride	ND		0.20	0.10
91-20-3	Naphthalene	ND		0.013	0.010
100-42-5	Styrene	ND		0.030	0.0050
79-34-5	1,1,2,2-Tetrachloroethane	ND		0.020	0.010
127-18-4	Tetrachloroethene	ND		0.020	0.010
108-88-3	Toluene	ND		0.020	0.010
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.030	0.0050
120-82-1	1,2,4-Trichlorobenzene	ND		0.050	0.020
71-55-6	1,1,1-Trichloroethane	ND		0.020	0.0018
79-00-5	1,1,2-Trichloroethane	ND		0.050	0.0050

FORM I

AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento Job No.: 320-12384-1

SDG No.:

Client Sample ID: 34001318 Lab Sample ID: 320-12384-8

Matrix: Air Lab File ID: MS1040412.d

Analysis Method: TO-15 SIM Date Collected: 04/02/2015 00:00

Sample wt/vol: 500(mL) Date Analyzed: 04/05/2015 00:47

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-Volatiles ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 70344 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
79-01-6	Trichloroethene	ND		0.020	0.0050
75-69-4	Trichlorofluoromethane	ND		0.045	0.010
75-01-4	Vinyl chloride	ND		0.020	0.0040
179601-23-1	m,p-Xylene	ND		0.040	0.020
95-47-6	o-Xylene	ND		0.020	0.010

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	86		70-130
17060-07-0	1,2-Dichloroethane-d4 (Surr)	109		70-130
2037-26-5	Toluene-d8 (Surr)	96		70-130

TestAmerica Sacramento
Target Compound Quantitation Report

Data File:	\\SACCHROM\ChromData\ATMS1\20150404-20786.b\MS1040412.d				
Lims ID:	320-12384-A-8	Lab Sample ID:	320-12384-8		
Client ID:	34001318				
Sample Type:	Client				
Inject. Date:	05-Apr-2015 00:47:30	ALS Bottle#:	10	Worklist Smp#:	12
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Sample Info:	320-12384-A-8				
Misc. Info.:	1000mL				
Operator ID:	AO	Instrument ID:	ATMS1		
Method:	\\SACCHROM\ChromData\ATMS1\20150404-20786.b\TO-15 SIM SIM.m				
Limit Group:	MSA - TO-15_SIM_ICAL				
Last Update:	06-Apr-2015 09:38:59	Calib Date:	21-Mar-2015 07:24:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\SACCHROM\ChromData\ATMS1\20150320-20385.b\MS1032011.d				
Column 1 :			Det: MS SCAN		
Process Host:	XAWRK021				
First Level Reviewer: ortizam		Date:	06-Apr-2015 09:40:42		

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	130	11.790	11.790	0.000	99	36248	2.00	
* 2 1,4-Difluorobenzene	114	13.904	13.904	0.000	100	108740	2.00	
* 3 Chlorobenzene-d5 (IS)	117	20.592	20.592	0.000	100	91434	2.00	
$ 4 1,2-Dichloroethane-d4 (Sur	65	12.958	12.958	0.000	49	52079	2.18	
$ 5 Toluene-d8 (Surr)	100	17.305	17.305	0.000	100	52938	1.93	
$ 6 4-Bromofluorobenzene (Surr	174	23.154	23.154	0.000	100	53242	1.72	
15 Dichlorodifluoromethane	85	3.908	3.987	-0.079	97	360	0.005063	

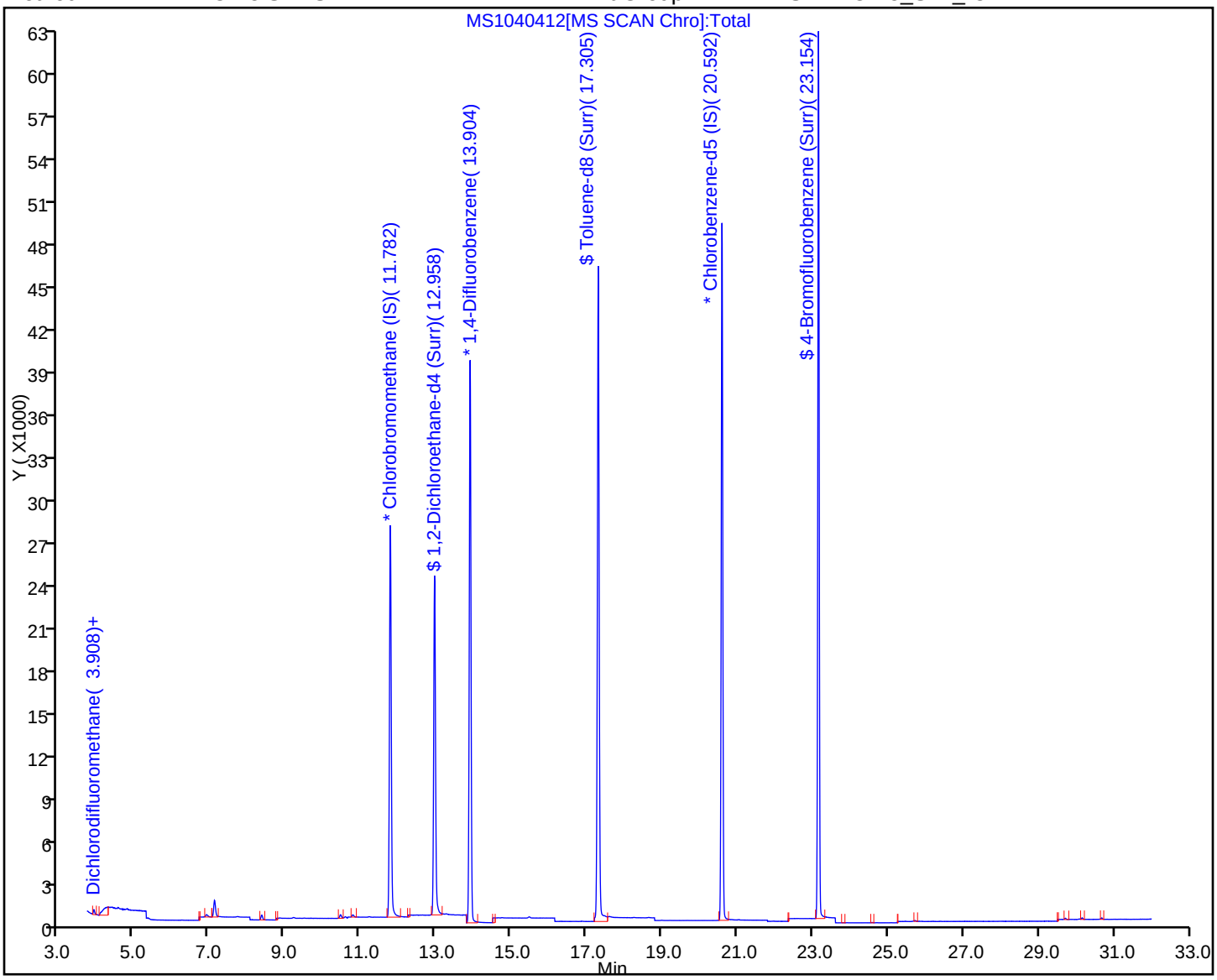
Reagents:

VASUISIM_00156 Amount Added: 50.00 Units: mL Run Reagent

Report Date: 06-Apr-2015 09:40:42 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Sacramento

Data File:	\\SACCHROM\ChromData\ATMS1\20150404-20786.b\MS1040412.d				
Injection Date:	05-Apr-2015 00:47:30	Instrument ID:	ATMS1		
Lims ID:	320-12384-A-8	Lab Sample ID:	320-12384-8		
Client ID:	34001318				
Operator ID:	AO	ALS Bottle#:	10	Worklist Smp#:	12
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	TO-15 SIM SIM	Limit Group:	MSA - TO-15_SIM_ICAL		



FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento | Job No.: 320-12384-1

SDG No.:

Client Sample ID: 34000014 | Lab Sample ID: 320-12384-9

Matrix: Air | Lab File ID: MS1040413.d

Analysis Method: TO-15 SIM | Date Collected: 04/02/2015 00:00

Sample wt/vol: 500(mL) | Date Analyzed: 04/05/2015 01:46

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: RTX-Volatiles ID: 0.32(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 70344 | Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-43-2	Benzene	ND		0.020	0.010
75-27-4	Bromodichloromethane	ND		0.012	0.0019
56-23-5	Carbon tetrachloride	ND		0.010	0.0050
108-90-7	Chlorobenzene	ND		0.020	0.0050
75-00-3	Chloroethane	ND		0.045	0.020
67-66-3	Chloroform	ND		0.020	0.0050
74-87-3	Chloromethane	ND		0.20	0.030
124-48-1	Dibromochloromethane	ND		0.010	0.0050
106-93-4	1,2-Dibromoethane (EDB)	ND		0.010	0.0023
95-50-1	1,2-Dichlorobenzene	ND		0.050	0.010
541-73-1	1,3-Dichlorobenzene	ND		0.10	0.010
106-46-7	1,4-Dichlorobenzene	ND		0.10	0.010
75-71-8	Dichlorodifluoromethane	ND		0.020	0.0050
75-34-3	1,1-Dichloroethane	ND		0.020	0.0050
107-06-2	1,2-Dichloroethane	ND		0.020	0.0043
75-35-4	1,1-Dichloroethene	ND		0.020	0.0050
156-59-2	cis-1,2-Dichloroethene	ND		0.020	0.0023
156-60-5	trans-1,2-Dichloroethene	ND		0.020	0.0050
78-87-5	1,2-Dichloropropane	ND		0.040	0.020
10061-01-5	cis-1,3-Dichloropropene	ND		0.020	0.0042
10061-02-6	trans-1,3-Dichloropropene	ND		0.020	0.0050
123-91-1	1,4-Dioxane	ND		0.10	0.010
100-41-4	Ethylbenzene	ND		0.020	0.010
87-68-3	Hexachlorobutadiene	ND		0.020	0.010
1634-04-4	Methyl-t-Butyl Ether (MTBE)	ND		0.025	0.010
75-09-2	Methylene Chloride	ND		0.20	0.10
91-20-3	Naphthalene	ND		0.013	0.010
100-42-5	Styrene	ND		0.030	0.0050
79-34-5	1,1,2,2-Tetrachloroethane	ND		0.020	0.010
127-18-4	Tetrachloroethene	ND		0.020	0.010
108-88-3	Toluene	ND		0.020	0.010
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.030	0.0050
120-82-1	1,2,4-Trichlorobenzene	ND		0.050	0.020
71-55-6	1,1,1-Trichloroethane	ND		0.020	0.0018
79-00-5	1,1,2-Trichloroethane	ND		0.050	0.0050

FORM I

AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento Job No.: 320-12384-1

SDG No.:

Client Sample ID: 34000014 Lab Sample ID: 320-12384-9

Matrix: Air Lab File ID: MS1040413.d

Analysis Method: TO-15 SIM Date Collected: 04/02/2015 00:00

Sample wt/vol: 500(mL) Date Analyzed: 04/05/2015 01:46

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-Volatiles ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 70344 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
79-01-6	Trichloroethene	ND		0.020	0.0050
75-69-4	Trichlorofluoromethane	ND		0.045	0.010
75-01-4	Vinyl chloride	ND		0.020	0.0040
179601-23-1	m,p-Xylene	ND		0.040	0.020
95-47-6	o-Xylene	ND		0.020	0.010

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	87		70-130
17060-07-0	1,2-Dichloroethane-d4 (Surr)	109		70-130
2037-26-5	Toluene-d8 (Surr)	95		70-130

TestAmerica Sacramento
Target Compound Quantitation Report

Data File:	\\SACCHROM\ChromData\ATMS1\20150404-20786.b\MS1040413.d				
Lims ID:	320-12384-A-9	Lab Sample ID:	320-12384-9		
Client ID:	34000014				
Sample Type:	Client				
Inject. Date:	05-Apr-2015 01:46:30	ALS Bottle#:	11	Worklist Smp#:	13
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Sample Info:	320-12384-A-9				
Misc. Info.:	1000mL				
Operator ID:	AO	Instrument ID:	ATMS1		
Method:	\\SACCHROM\ChromData\ATMS1\20150404-20786.b\TO-15 SIM SIM.m				
Limit Group:	MSA - TO-15_SIM_ICAL				
Last Update:	06-Apr-2015 09:38:59	Calib Date:	21-Mar-2015 07:24:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\SACCHROM\ChromData\ATMS1\20150320-20385.b\MS1032011.d				
Column 1 :			Det: MS SCAN		
Process Host:	XAWRK021				
First Level Reviewer: ortizam		Date:	06-Apr-2015 09:40:49		

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	130	11.790	11.790	0.000	100	35728	2.00	
* 2 1,4-Difluorobenzene	114	13.908	13.904	0.004	100	107444	2.00	
* 3 Chlorobenzene-d5 (IS)	117	20.592	20.592	0.000	99	89510	2.00	
$ 4 1,2-Dichloroethane-d4 (Sur	65	12.966	12.958	0.008	47	51294	2.18	
$ 5 Toluene-d8 (Surr)	100	17.305	17.305	0.000	100	51792	1.91	
$ 6 4-Bromofluorobenzene (Surr	174	23.156	23.154	0.002	100	52508	1.74	
118 Benzyl chloride	91	26.187	26.193	-0.006	100	41	0.0226	

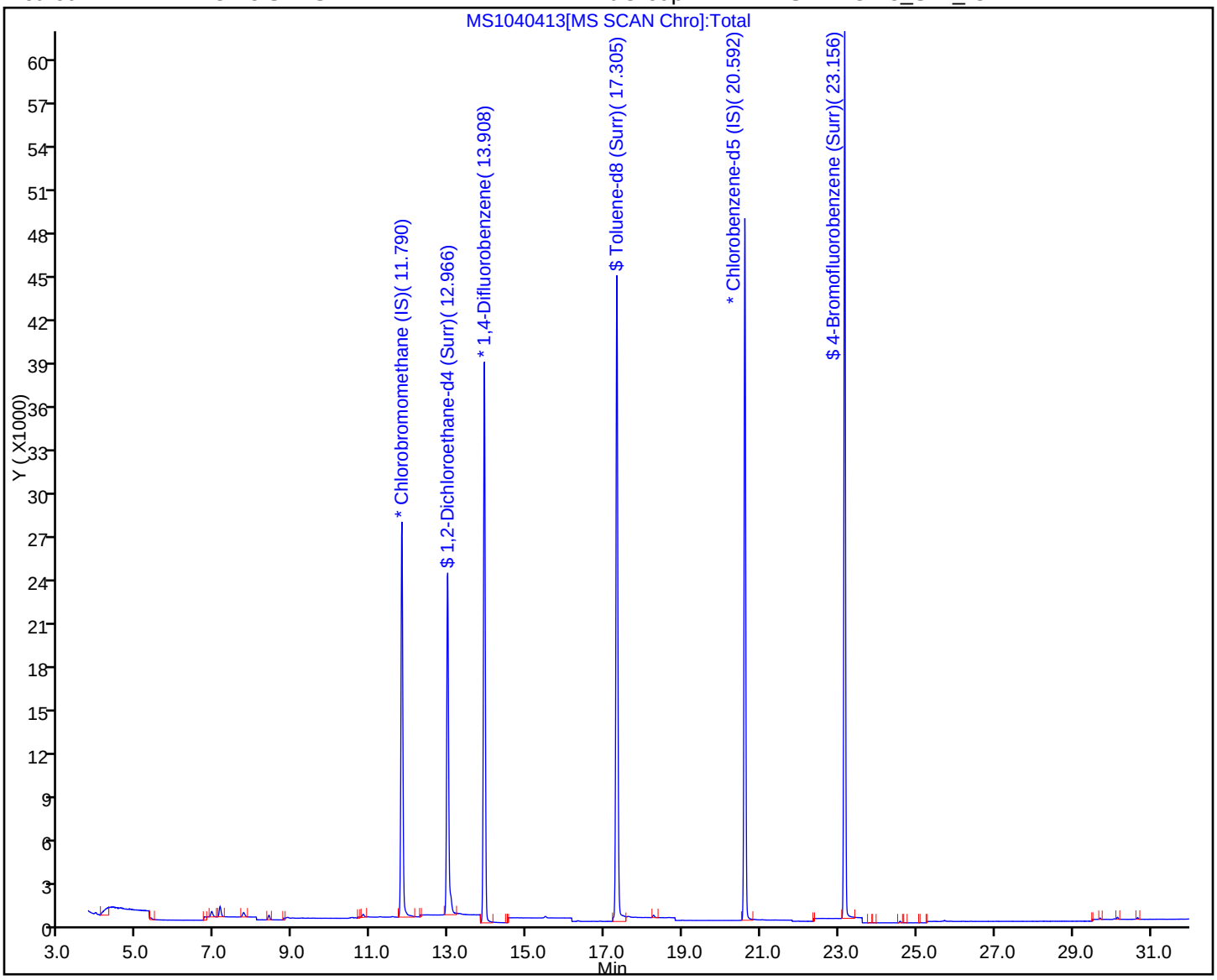
Reagents:

VASUISIM_00156 Amount Added: 50.00 Units: mL Run Reagent

Report Date: 06-Apr-2015 09:40:49 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Sacramento

Data File:	\\SACCHROM\ChromData\ATMS1\20150404-20786.b\MS1040413.d				
Injection Date:	05-Apr-2015 01:46:30	Instrument ID:	ATMS1		
Lims ID:	320-12384-A-9	Lab Sample ID:	320-12384-9		
Client ID:	34000014				
Operator ID:	AO	ALS Bottle#:	11	Worklist Smp#:	13
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	TO-15 SIM SIM	Limit Group:	MSA - TO-15_SIM_ICAL		



FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento Job No.: 320-12384-1

SDG No.:

Client Sample ID: 34001590 Lab Sample ID: 320-12384-10

Matrix: Air Lab File ID: MS1040414.d

Analysis Method: TO-15 SIM Date Collected: 04/02/2015 00:00

Sample wt/vol: 500(mL) Date Analyzed: 04/05/2015 02:45

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-Volatiles ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 70344 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-43-2	Benzene	ND		0.020	0.010
75-27-4	Bromodichloromethane	ND		0.012	0.0019
56-23-5	Carbon tetrachloride	ND		0.010	0.0050
108-90-7	Chlorobenzene	ND		0.020	0.0050
75-00-3	Chloroethane	ND		0.045	0.020
67-66-3	Chloroform	ND		0.020	0.0050
74-87-3	Chloromethane	ND		0.20	0.030
124-48-1	Dibromochloromethane	ND		0.010	0.0050
106-93-4	1,2-Dibromoethane (EDB)	ND		0.010	0.0023
95-50-1	1,2-Dichlorobenzene	ND		0.050	0.010
541-73-1	1,3-Dichlorobenzene	ND		0.10	0.010
106-46-7	1,4-Dichlorobenzene	ND		0.10	0.010
75-71-8	Dichlorodifluoromethane	ND		0.020	0.0050
75-34-3	1,1-Dichloroethane	ND		0.020	0.0050
107-06-2	1,2-Dichloroethane	ND		0.020	0.0043
75-35-4	1,1-Dichloroethene	ND		0.020	0.0050
156-59-2	cis-1,2-Dichloroethene	ND		0.020	0.0023
156-60-5	trans-1,2-Dichloroethene	ND		0.020	0.0050
78-87-5	1,2-Dichloropropane	ND		0.040	0.020
10061-01-5	cis-1,3-Dichloropropene	ND		0.020	0.0042
10061-02-6	trans-1,3-Dichloropropene	ND		0.020	0.0050
123-91-1	1,4-Dioxane	ND		0.10	0.010
100-41-4	Ethylbenzene	ND		0.020	0.010
87-68-3	Hexachlorobutadiene	ND		0.020	0.010
1634-04-4	Methyl-t-Butyl Ether (MTBE)	ND		0.025	0.010
75-09-2	Methylene Chloride	ND		0.20	0.10
100-42-5	Styrene	ND		0.030	0.0050
79-34-5	1,1,2,2-Tetrachloroethane	ND		0.020	0.010
127-18-4	Tetrachloroethene	ND		0.020	0.010
108-88-3	Toluene	ND		0.020	0.010
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.030	0.0050
120-82-1	1,2,4-Trichlorobenzene	ND		0.050	0.020
71-55-6	1,1,1-Trichloroethane	ND		0.020	0.0018
79-00-5	1,1,2-Trichloroethane	ND		0.050	0.0050
79-01-6	Trichloroethene	ND		0.020	0.0050

FORM I

AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento Job No.: 320-12384-1

SDG No.:

Client Sample ID: 34001590 Lab Sample ID: 320-12384-10

Matrix: Air Lab File ID: MS1040414.d

Analysis Method: TO-15 SIM Date Collected: 04/02/2015 00:00

Sample wt/vol: 500(mL) Date Analyzed: 04/05/2015 02:45

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-Volatiles ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 70344 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-69-4	Trichlorofluoromethane	ND		0.045	0.010
75-01-4	Vinyl chloride	ND		0.020	0.0040
179601-23-1	m,p-Xylene	ND		0.040	0.020
95-47-6	o-Xylene	ND		0.020	0.010

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	98		70-130
17060-07-0	1,2-Dichloroethane-d4 (Surr)	106		70-130
2037-26-5	Toluene-d8 (Surr)	98		70-130

TestAmerica Sacramento
Target Compound Quantitation Report

Data File:	\\SACCHROM\ChromData\ATMS1\20150404-20786.b\MS1040414.d				
Lims ID:	320-12384-A-10	Lab Sample ID:	320-12384-10		
Client ID:	34001590				
Sample Type:	Client				
Inject. Date:	05-Apr-2015 02:45:30	ALS Bottle#:	12	Worklist Smp#:	14
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Sample Info:	320-12384-A-10				
Misc. Info.:	1000mL				
Operator ID:	AO	Instrument ID:	ATMS1		
Method:	\\SACCHROM\ChromData\ATMS1\20150404-20786.b\TO-15 SIM SIM.m				
Limit Group:	MSA - TO-15_SIM_ICAL				
Last Update:	06-Apr-2015 09:38:59	Calib Date:	21-Mar-2015 07:24:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\SACCHROM\ChromData\ATMS1\20150320-20385.b\MS1032011.d				
Column 1 :			Det: MS SCAN		
Process Host:	XAWRK021				
First Level Reviewer: ortizam		Date:	06-Apr-2015 09:40:55		

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	130	11.790	11.790	0.000	100	35985	2.00	
* 2 1,4-Difluorobenzene	114	13.908	13.904	0.004	100	111104	2.00	
* 3 Chlorobenzene-d5 (IS)	117	20.598	20.592	0.006	100	100394	2.00	
$ 4 1,2-Dichloroethane-d4 (Sur	65	12.959	12.958	0.000	61	51581	2.12	
$ 5 Toluene-d8 (Surr)	100	17.305	17.305	0.000	100	54783	1.95	
$ 6 4-Bromofluorobenzene (Surr	174	23.154	23.154	0.000	100	66529	1.96	
118 Benzyl chloride	91	26.182	26.193	-0.011	100	923	0.0283	
127 Naphthalene	128	30.158	30.158	0.000	100	12282	0.0922	

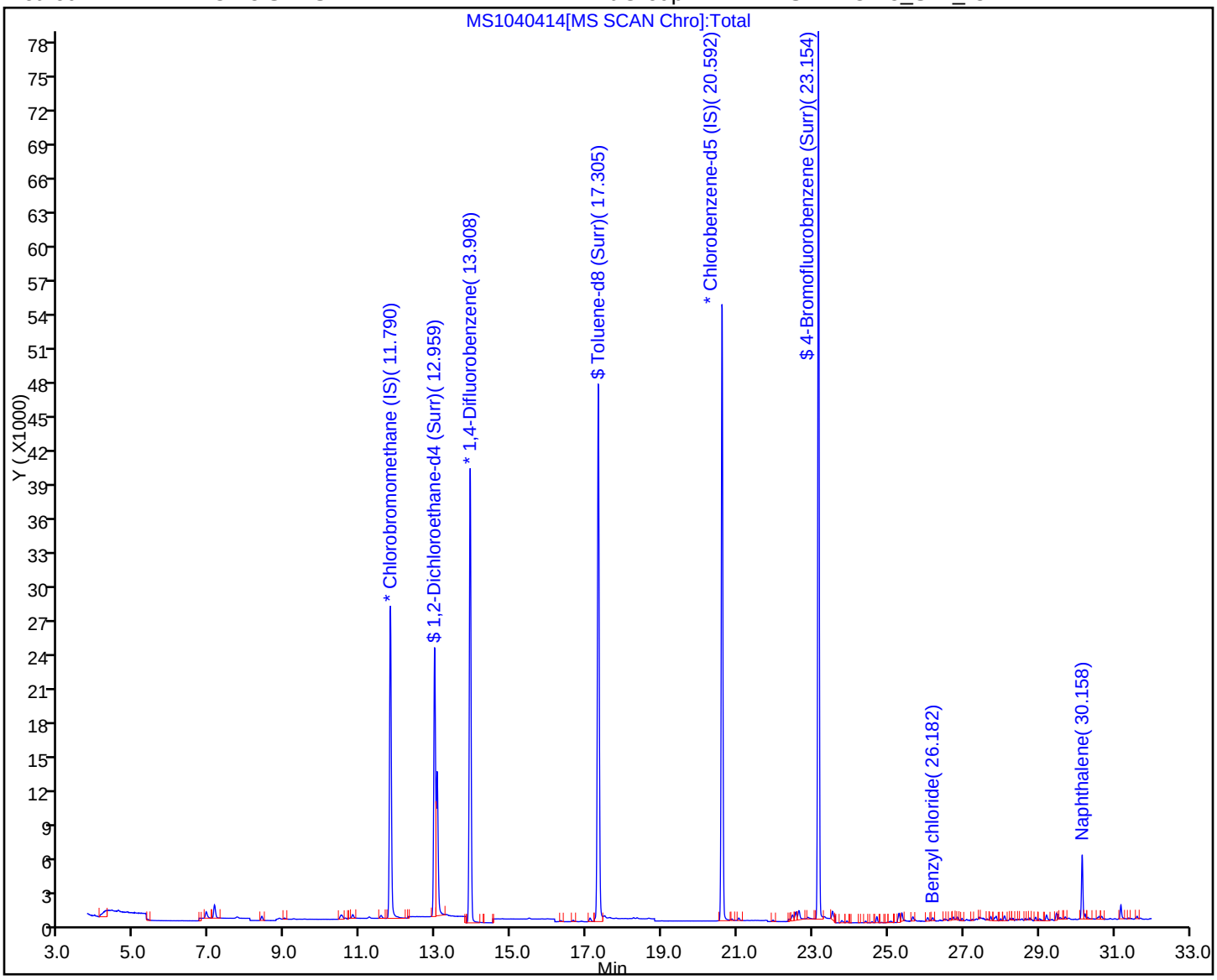
Reagents:

VASUISIM_00156 Amount Added: 50.00 Units: mL Run Reagent

Report Date: 06-Apr-2015 09:40:56 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Sacramento

Data File:	\\SACCHROM\ChromData\ATMS1\20150404-20786.b\MS1040414.d				
Injection Date:	05-Apr-2015 02:45:30	Instrument ID:	ATMS1		
Lims ID:	320-12384-A-10	Lab Sample ID:	320-12384-10		
Client ID:	34001590				
Operator ID:	AO	ALS Bottle#:	12	Worklist Smp#:	14
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	TO-15 SIM SIM	Limit Group:	MSA - TO-15_SIM_ICAL		



FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento | Job No.: 320-12384-1

SDG No.:

Client Sample ID: 7531 | Lab Sample ID: 320-12384-11

Matrix: Air | Lab File ID: MS1040415.d

Analysis Method: TO-15 SIM | Date Collected: 04/02/2015 00:00

Sample wt/vol: 500(mL) | Date Analyzed: 04/05/2015 03:43

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: RTX-Volatiles ID: 0.32(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 70344 | Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-43-2	Benzene	ND		0.020	0.010
100-44-7	Benzyl chloride	ND		0.10	0.010
75-27-4	Bromodichloromethane	ND		0.012	0.0019
56-23-5	Carbon tetrachloride	ND		0.010	0.0050
108-90-7	Chlorobenzene	ND		0.020	0.0050
75-00-3	Chloroethane	ND		0.045	0.020
67-66-3	Chloroform	ND		0.020	0.0050
74-87-3	Chloromethane	ND		0.20	0.030
124-48-1	Dibromochloromethane	ND		0.010	0.0050
106-93-4	1,2-Dibromoethane (EDB)	ND		0.010	0.0023
95-50-1	1,2-Dichlorobenzene	ND		0.050	0.010
541-73-1	1,3-Dichlorobenzene	ND		0.10	0.010
106-46-7	1,4-Dichlorobenzene	ND		0.10	0.010
75-71-8	Dichlorodifluoromethane	ND		0.020	0.0050
75-34-3	1,1-Dichloroethane	ND		0.020	0.0050
107-06-2	1,2-Dichloroethane	ND		0.020	0.0043
75-35-4	1,1-Dichloroethene	ND		0.020	0.0050
156-59-2	cis-1,2-Dichloroethene	ND		0.020	0.0023
156-60-5	trans-1,2-Dichloroethene	ND		0.020	0.0050
78-87-5	1,2-Dichloropropane	ND		0.040	0.020
10061-01-5	cis-1,3-Dichloropropene	ND		0.020	0.0042
10061-02-6	trans-1,3-Dichloropropene	ND		0.020	0.0050
123-91-1	1,4-Dioxane	ND		0.10	0.010
100-41-4	Ethylbenzene	ND		0.020	0.010
87-68-3	Hexachlorobutadiene	ND		0.020	0.010
1634-04-4	Methyl-t-Butyl Ether (MTBE)	ND		0.025	0.010
75-09-2	Methylene Chloride	ND		0.20	0.10
91-20-3	Naphthalene	ND		0.013	0.010
100-42-5	Styrene	ND		0.030	0.0050
79-34-5	1,1,2,2-Tetrachloroethane	ND		0.020	0.010
127-18-4	Tetrachloroethene	ND		0.020	0.010
108-88-3	Toluene	ND		0.020	0.010
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.030	0.0050
120-82-1	1,2,4-Trichlorobenzene	ND		0.050	0.020
71-55-6	1,1,1-Trichloroethane	ND		0.020	0.0018

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento
Job No.: 320-12384-1
SDG No.:
Client Sample ID: 7531
Lab Sample ID: 320-12384-11
Matrix: Air
Lab File ID: MS1040415.d
Analysis Method: TO-15 SIM
Date Collected: 04/02/2015 00:00
Sample wt/vol: 500(mL)
Date Analyzed: 04/05/2015 03:43
Soil Aliquot Vol:
Dilution Factor: 1
Soil Extract Vol.:
GC Column: RTX-Volatiles ID: 0.32(mm)
% Moisture:
Level: (low/med) Low
Analysis Batch No.: 70344
Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
79-00-5	1,1,2-Trichloroethane	ND		0.050	0.0050
79-01-6	Trichloroethene	ND		0.020	0.0050
75-69-4	Trichlorofluoromethane	ND		0.045	0.010
75-01-4	Vinyl chloride	ND		0.020	0.0040
179601-23-1	m,p-Xylene	ND		0.040	0.020
95-47-6	o-Xylene	ND		0.020	0.010

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	88		70-130
17060-07-0	1,2-Dichloroethane-d4 (Surr)	105		70-130
2037-26-5	Toluene-d8 (Surr)	95		70-130

TestAmerica Sacramento
Target Compound Quantitation Report

Data File:	\\SACCHROM\ChromData\ATMS1\20150404-20786.b\MS1040415.d				
Lims ID:	320-12384-A-11	Lab Sample ID:	320-12384-11		
Client ID:	7531				
Sample Type:	Client				
Inject. Date:	05-Apr-2015 03:43:30	ALS Bottle#:	13	Worklist Smp#:	15
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Sample Info:	320-12384-A-11				
Misc. Info.:	1000mL				
Operator ID:	AO	Instrument ID:	ATMS1		
Method:	\\SACCHROM\ChromData\ATMS1\20150404-20786.b\TO-15 SIM SIM.m				
Limit Group:	MSA - TO-15_SIM_ICAL				
Last Update:	06-Apr-2015 09:38:59	Calib Date:	21-Mar-2015 07:24:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\SACCHROM\ChromData\ATMS1\20150320-20385.b\MS1032011.d				
Column 1 :			Det: MS SCAN		
Process Host:	XAWRK021				
First Level Reviewer: ortizam		Date:	06-Apr-2015 09:41:43		

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	130	11.790	11.790	0.000	99	39021	2.00	
* 2 1,4-Difluorobenzene	114	13.904	13.904	0.000	100	120258	2.00	
* 3 Chlorobenzene-d5 (IS)	117	20.592	20.592	0.000	100	99682	2.00	
$ 4 1,2-Dichloroethane-d4 (Sur	65	12.958	12.958	0.000	61	55395	2.10	
$ 5 Toluene-d8 (Surr)	100	17.305	17.305	0.000	100	57608	1.90	
$ 6 4-Bromofluorobenzene (Surr	174	23.156	23.154	0.002	99	59571	1.77	

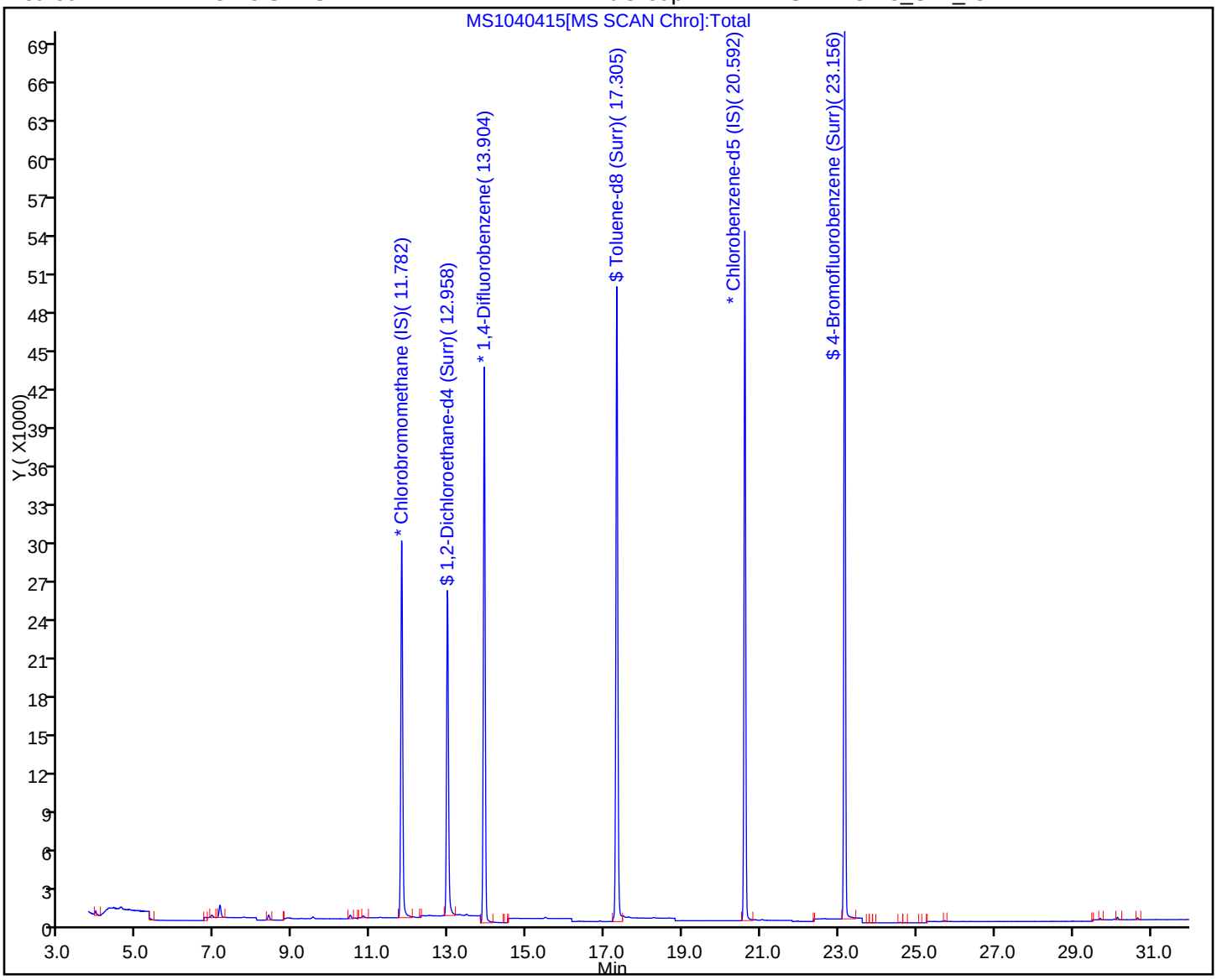
Reagents:

VASUISIM_00156 Amount Added: 50.00 Units: mL Run Reagent

Report Date: 06-Apr-2015 09:41:43 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Sacramento

Data File:	\\SACCHROM\ChromData\ATMS1\20150404-20786.b\MS1040415.d				
Injection Date:	05-Apr-2015 03:43:30	Instrument ID:	ATMS1		
Lims ID:	320-12384-A-11	Lab Sample ID:	320-12384-11		
Client ID:	7531				
Operator ID:	AO	ALS Bottle#:	13	Worklist Smp#:	15
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	TO-15 SIM SIM	Limit Group:	MSA - TO-15_SIM_ICAL		



FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento | Job No.: 320-12384-1

SDG No.:

Client Sample ID: 8205 | Lab Sample ID: 320-12384-12

Matrix: Air | Lab File ID: MS1040416.d

Analysis Method: TO-15 SIM | Date Collected: 04/02/2015 00:00

Sample wt/vol: 500(mL) | Date Analyzed: 04/05/2015 04:42

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: RTX-Volatiles ID: 0.32(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 70344 | Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-43-2	Benzene	ND		0.020	0.010
100-44-7	Benzyl chloride	ND		0.10	0.010
75-27-4	Bromodichloromethane	ND		0.012	0.0019
56-23-5	Carbon tetrachloride	ND		0.010	0.0050
108-90-7	Chlorobenzene	ND		0.020	0.0050
75-00-3	Chloroethane	ND		0.045	0.020
67-66-3	Chloroform	ND		0.020	0.0050
74-87-3	Chloromethane	ND		0.20	0.030
124-48-1	Dibromochloromethane	ND		0.010	0.0050
106-93-4	1,2-Dibromoethane (EDB)	ND		0.010	0.0023
95-50-1	1,2-Dichlorobenzene	ND		0.050	0.010
541-73-1	1,3-Dichlorobenzene	ND		0.10	0.010
106-46-7	1,4-Dichlorobenzene	ND		0.10	0.010
75-71-8	Dichlorodifluoromethane	ND		0.020	0.0050
75-34-3	1,1-Dichloroethane	ND		0.020	0.0050
107-06-2	1,2-Dichloroethane	ND		0.020	0.0043
75-35-4	1,1-Dichloroethene	ND		0.020	0.0050
156-59-2	cis-1,2-Dichloroethene	ND		0.020	0.0023
156-60-5	trans-1,2-Dichloroethene	ND		0.020	0.0050
78-87-5	1,2-Dichloropropane	ND		0.040	0.020
10061-01-5	cis-1,3-Dichloropropene	ND		0.020	0.0042
10061-02-6	trans-1,3-Dichloropropene	ND		0.020	0.0050
100-41-4	Ethylbenzene	ND		0.020	0.010
87-68-3	Hexachlorobutadiene	ND		0.020	0.010
1634-04-4	Methyl-t-Butyl Ether (MTBE)	ND		0.025	0.010
75-09-2	Methylene Chloride	ND		0.20	0.10
91-20-3	Naphthalene	ND		0.013	0.010
100-42-5	Styrene	ND		0.030	0.0050
79-34-5	1,1,2,2-Tetrachloroethane	ND		0.020	0.010
127-18-4	Tetrachloroethene	ND		0.020	0.010
108-88-3	Toluene	ND		0.020	0.010
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.030	0.0050
120-82-1	1,2,4-Trichlorobenzene	ND		0.050	0.020
71-55-6	1,1,1-Trichloroethane	ND		0.020	0.0018
79-00-5	1,1,2-Trichloroethane	ND		0.050	0.0050

FORM I

AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento Job No.: 320-12384-1

SDG No.:

Client Sample ID: 8205 Lab Sample ID: 320-12384-12

Matrix: Air Lab File ID: MS1040416.d

Analysis Method: TO-15 SIM Date Collected: 04/02/2015 00:00

Sample wt/vol: 500(mL) Date Analyzed: 04/05/2015 04:42

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-Volatiles ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 70344 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
79-01-6	Trichloroethene	ND		0.020	0.0050
75-69-4	Trichlorofluoromethane	ND		0.045	0.010
75-01-4	Vinyl chloride	ND		0.020	0.0040
179601-23-1	m,p-Xylene	ND		0.040	0.020
95-47-6	o-Xylene	ND		0.020	0.010

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	86		70-130
17060-07-0	1,2-Dichloroethane-d4 (Surr)	106		70-130
2037-26-5	Toluene-d8 (Surr)	95		70-130

TestAmerica Sacramento
Target Compound Quantitation Report

Data File:	\\SACCHROM\ChromData\ATMS1\20150404-20786.b\MS1040416.d				
Lims ID:	320-12384-A-12	Lab Sample ID:	320-12384-12		
Client ID:	8205				
Sample Type:	Client				
Inject. Date:	05-Apr-2015 04:42:30	ALS Bottle#:	14	Worklist Smp#:	16
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Sample Info:	320-12384-A-12				
Misc. Info.:	1000mL				
Operator ID:	AO	Instrument ID:	ATMS1		
Method:	\\SACCHROM\ChromData\ATMS1\20150404-20786.b\TO-15 SIM SIM.m				
Limit Group:	MSA - TO-15_SIM_ICAL				
Last Update:	06-Apr-2015 09:38:59	Calib Date:	21-Mar-2015 07:24:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\SACCHROM\ChromData\ATMS1\20150320-20385.b\MS1032011.d				
Column 1 :			Det: MS SCAN		
Process Host:	XAWRK021				
First Level Reviewer: ortizam		Date:	06-Apr-2015 09:41:59		

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	130	11.790	11.790	0.000	99	39453	2.00	
* 2 1,4-Difluorobenzene	114	13.908	13.904	0.004	100	121704	2.00	
* 3 Chlorobenzene-d5 (IS)	117	20.598	20.592	0.006	100	103144	2.00	
$ 4 1,2-Dichloroethane-d4 (Sur	65	12.958	12.958	0.000	49	56587	2.12	
$ 5 Toluene-d8 (Surr)	100	17.312	17.305	0.007	100	58614	1.91	
$ 6 4-Bromofluorobenzene (Surr	174	23.154	23.154	0.000	100	60076	1.73	
72 1,4-Dioxane	88	15.469	15.440	0.029	19	262	0.0172	

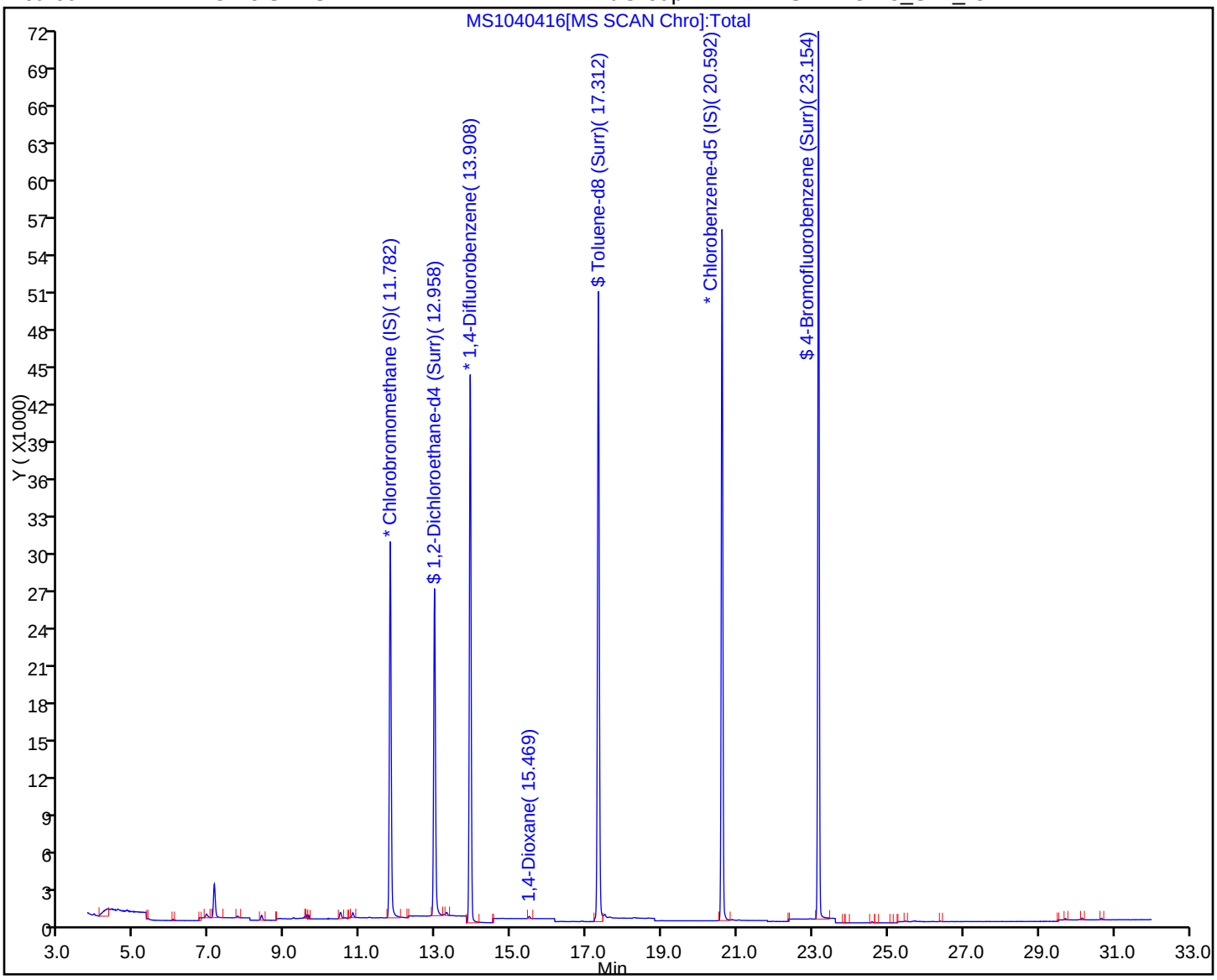
Reagents:

VASUISIM_00156 Amount Added: 50.00 Units: mL Run Reagent

Report Date: 06-Apr-2015 09:41:59 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Sacramento

Data File:	\\SACCHROM\ChromData\ATMS1\20150404-20786.b\MS1040416.d				
Injection Date:	05-Apr-2015 04:42:30	Instrument ID:	ATMS1		
Lims ID:	320-12384-A-12	Lab Sample ID:	320-12384-12		
Client ID:	8205				
Operator ID:	AO	ALS Bottle#:	14	Worklist Smp#:	16
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	TO-15 SIM SIM	Limit Group:	MSA - TO-15_SIM_ICAL		



FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento | Job No.: 320-12705-1

SDG No.: 1L SCAN Batch

Client Sample ID: 8288 | Lab Sample ID: 320-12705-12

Matrix: Air | Lab File ID: MS7042722.d

Analysis Method: TO-15 | Date Collected: 04/21/2015 00:00

Sample wt/vol: 500(mL) | Date Analyzed: 04/28/2015 05:41

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: RTX-Volatiles ID: 0.32(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 72197 | Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-64-1	Acetone	0.27	J	5.0	0.18
107-02-8	Acrolein	ND		2.0	0.22
107-13-1	Acrylonitrile	ND		2.0	0.19
107-05-1	Allyl chloride	ND		0.80	0.11
71-43-2	Benzene	ND		0.40	0.079
100-44-7	Benzyl chloride	ND		0.80	0.16
75-27-4	Bromodichloromethane	ND		0.30	0.066
75-25-2	Bromoform	ND		0.40	0.070
74-83-9	Bromomethane	ND		0.80	0.34
106-99-0	1,3-Butadiene	ND		0.80	0.15
106-97-8	n-Butane	ND		0.40	0.15
78-93-3	2-Butanone (MEK)	ND		0.80	0.20
75-65-0	tert-Butyl alcohol (TBA)	ND		2.0	0.11
104-51-8	n-Butylbenzene	ND		0.40	0.18
135-98-8	sec-Butylbenzene	ND		0.40	0.070
98-06-6	tert-Butylbenzene	ND		0.80	0.068
75-15-0	Carbon disulfide	ND		0.80	0.078
56-23-5	Carbon tetrachloride	ND		0.80	0.064
108-90-7	Chlorobenzene	ND		0.30	0.064
75-45-6	Chlorodifluoromethane	ND		0.80	0.11
75-00-3	Chloroethane	ND		0.80	0.31
67-66-3	Chloroform	ND		0.30	0.095
74-87-3	Chloromethane	ND		0.80	0.20
95-49-8	2-Chlorotoluene	ND		0.40	0.080
110-82-7	Cyclohexane	ND		0.40	0.084
124-48-1	Dibromochloromethane	ND		0.40	0.079
106-93-4	1,2-Dibromoethane (EDB)	ND		0.80	0.075
74-95-3	Dibromomethane	ND		0.40	0.057
76-14-2	1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND		0.40	0.16
95-50-1	1,2-Dichlorobenzene	ND		0.40	0.13
541-73-1	1,3-Dichlorobenzene	ND		0.40	0.11
106-46-7	1,4-Dichlorobenzene	ND		0.40	0.15
75-71-8	Dichlorodifluoromethane	ND		0.40	0.15
75-34-3	1,1-Dichloroethane	ND		0.30	0.072
107-06-2	1,2-Dichloroethane	ND		0.80	0.088

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento | Job No.: 320-12705-1

SDG No.: 1L SCAN Batch

Client Sample ID: 8288 | Lab Sample ID: 320-12705-12

Matrix: Air | Lab File ID: MS7042722.d

Analysis Method: TO-15 | Date Collected: 04/21/2015 00:00

Sample wt/vol: 500(mL) | Date Analyzed: 04/28/2015 05:41

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: RTX-Volatiles ID: 0.32(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 72197 | Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-35-4	1,1-Dichloroethene	ND		0.80	0.13
156-59-2	cis-1,2-Dichloroethene	ND		0.40	0.089
156-60-5	trans-1,2-Dichloroethene	ND		0.40	0.10
78-87-5	1,2-Dichloropropane	ND		0.40	0.24
10061-01-5	cis-1,3-Dichloropropene	ND		0.40	0.10
10061-02-6	trans-1,3-Dichloropropene	ND		0.40	0.088
123-91-1	1,4-Dioxane	ND		0.80	0.10
141-78-6	Ethyl acetate	ND		0.30	0.18
100-41-4	Ethylbenzene	ND		0.40	0.063
622-96-8	4-Ethyltoluene	ND		0.40	0.19
142-82-5	n-Heptane	ND		0.80	0.063
87-68-3	Hexachlorobutadiene	ND		2.0	0.43
110-54-3	n-Hexane	ND		0.80	0.075
591-78-6	2-Hexanone	ND		0.40	0.087
98-82-8	Isopropylbenzene	ND		0.80	0.10
99-87-6	4-Isopropyltoluene	ND		0.80	0.12
1634-04-4	Methyl-t-Butyl Ether (MTBE)	ND		0.80	0.050
80-62-6	Methyl methacrylate	ND		0.80	0.16
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		0.40	0.14
75-09-2	Methylene Chloride	ND		0.40	0.072
98-83-9	alpha-Methylstyrene	ND		0.40	0.065
91-20-3	Naphthalene	ND		0.80	0.56
111-65-9	n-Octane	ND		0.40	0.055
109-66-0	n-Pentane	ND		0.80	0.26
115-07-1	Propylene	ND		0.40	0.099
103-65-1	N-Propylbenzene	ND		0.40	0.059
100-42-5	Styrene	ND		0.40	0.059
79-34-5	1,1,2,2-Tetrachloroethane	ND		0.40	0.069
127-18-4	Tetrachloroethene	ND		0.40	0.051
109-99-9	Tetrahydrofuran	ND		0.80	0.079
108-88-3	Toluene	ND		0.40	0.051
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.40	0.16
120-82-1	1,2,4-Trichlorobenzene	ND		2.0	0.43
71-55-6	1,1,1-Trichloroethane	ND		0.30	0.065
79-00-5	1,1,2-Trichloroethane	ND		0.40	0.067

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento | Job No.: 320-12705-1

SDG No.: 1L SCAN Batch

Client Sample ID: 8288 | Lab Sample ID: 320-12705-12

Matrix: Air | Lab File ID: MS7042722.d

Analysis Method: TO-15 | Date Collected: 04/21/2015 00:00

Sample wt/vol: 500(mL) | Date Analyzed: 04/28/2015 05:41

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: RTX-Volatiles ID: 0.32(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 72197 | Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
79-01-6	Trichloroethene	ND		0.40	0.11
75-69-4	Trichlorofluoromethane	ND		0.40	0.20
96-18-4	1,2,3-Trichloropropane	ND		0.40	0.17
95-63-6	1,2,4-Trimethylbenzene	ND		0.80	0.16
108-67-8	1,3,5-Trimethylbenzene	ND		0.40	0.13
540-84-1	2,2,4-Trimethylpentane	ND		0.40	0.071
108-05-4	Vinyl acetate	ND		0.80	0.15
593-60-2	Vinyl bromide	ND		0.80	0.26
75-01-4	Vinyl chloride	ND		0.40	0.12
179601-23-1	m,p-Xylene	ND		0.80	0.10
95-47-6	o-Xylene	ND		0.40	0.054

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	94		70-130
17060-07-0	1,2-Dichloroethane-d4 (Surr)	95		70-130
2037-26-5	Toluene-d8 (Surr)	105		70-130

TestAmerica Sacramento
Target Compound Quantitation Report

Data File:	\\SACCHROM\ChromData\ATMS7\20150427-21330.b\MS7042722.d				
Lims ID:	320-12705-A-12	Lab Sample ID:	320-12705-12		
Client ID:	8288				
Sample Type:	Client				
Inject. Date:	28-Apr-2015 05:41:30	ALS Bottle#:	16	Worklist Smp#:	11
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Sample Info:	320-12705-A-12				
Misc. Info.:	500mL cancert				
Operator ID:	GG	Instrument ID:	ATMS7		
Method:	\\SACCHROM\ChromData\ATMS7\20150427-21330.b\TO15_ATMS7N.m				
Limit Group:	MSA - TO15 - ICAL				
Last Update:	28-Apr-2015 07:03:16	Calib Date:	11-Apr-2015 17:25:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\SACCHROM\ChromData\ATMS7\20150410-20958.b\MS7041028.d				
Column 1 :	RTX Volatiles (0.32 mm)		Det: MS SCAN		
Process Host:	XAWRK021				
First Level Reviewer: duncant		Date:	28-Apr-2015 07:03:16		

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	130	12.402	12.421	-0.019	92	22298	4.00	
* 2 1,4-Difluorobenzene	114	14.556	14.568	-0.012	96	102700	4.00	
* 3 Chlorobenzene-d5 (IS)	117	21.242	21.248	-0.006	91	106456	4.00	
$ 4 1,2-Dichloroethane-d4 (Sur	65	13.601	13.619	-0.018	94	37124	3.78	
$ 5 Toluene-d8 (Surr)	100	17.969	17.981	-0.012	97	73668	4.22	
$ 6 4-Bromofluorobenzene (Surr	95	23.785	23.797	-0.012	88	68980	3.76	
32 Acetone	43	7.475	7.432	0.043	95	5114	0.2683	
99 N-Propylbenzene	91	24.198	24.192	0.006	98	1762	0.0264	

Reagents:

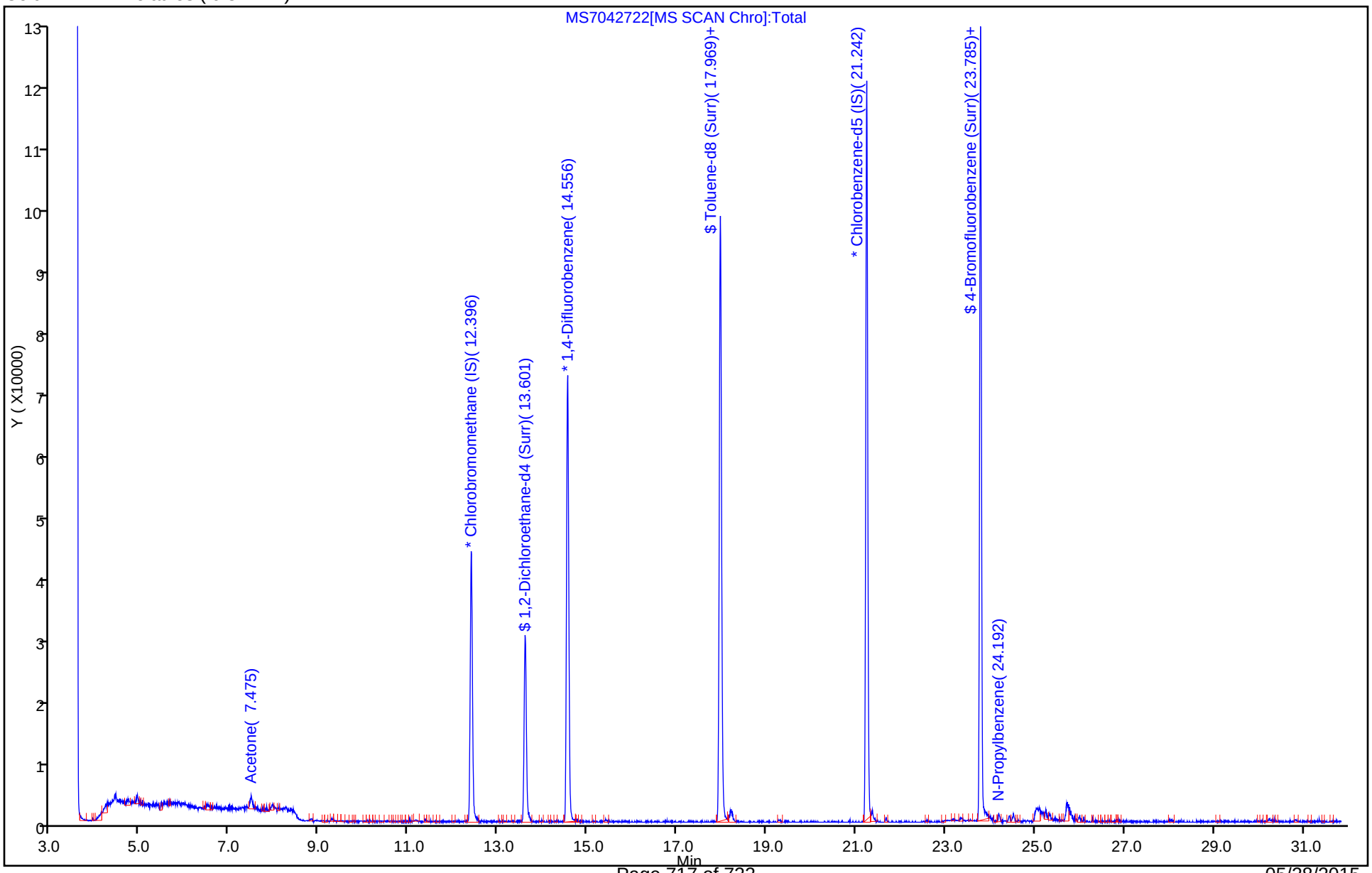
VASUISIM_00169 Amount Added: 50.00 Units: mL Run Reagent

Report Date: 28-Apr-2015 07:03:16 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Sacramento

Data File:	\\SACCHROM\ChromData\ATMS7\20150427-21330.b\MS7042722.d				
Injection Date:	28-Apr-2015 05:41:30	Instrument ID:	ATMS7	Operator ID:	GG
Lims ID:	320-12705-A-12	Lab Sample ID:	320-12705-12	Worklist Smp#:	11
Client ID:	8288				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	16
Method:	TO15_ATMS7N	Limit Group:	MSA - TO15 - ICAL		

Column: RTX Volatiles (0.32 mm)

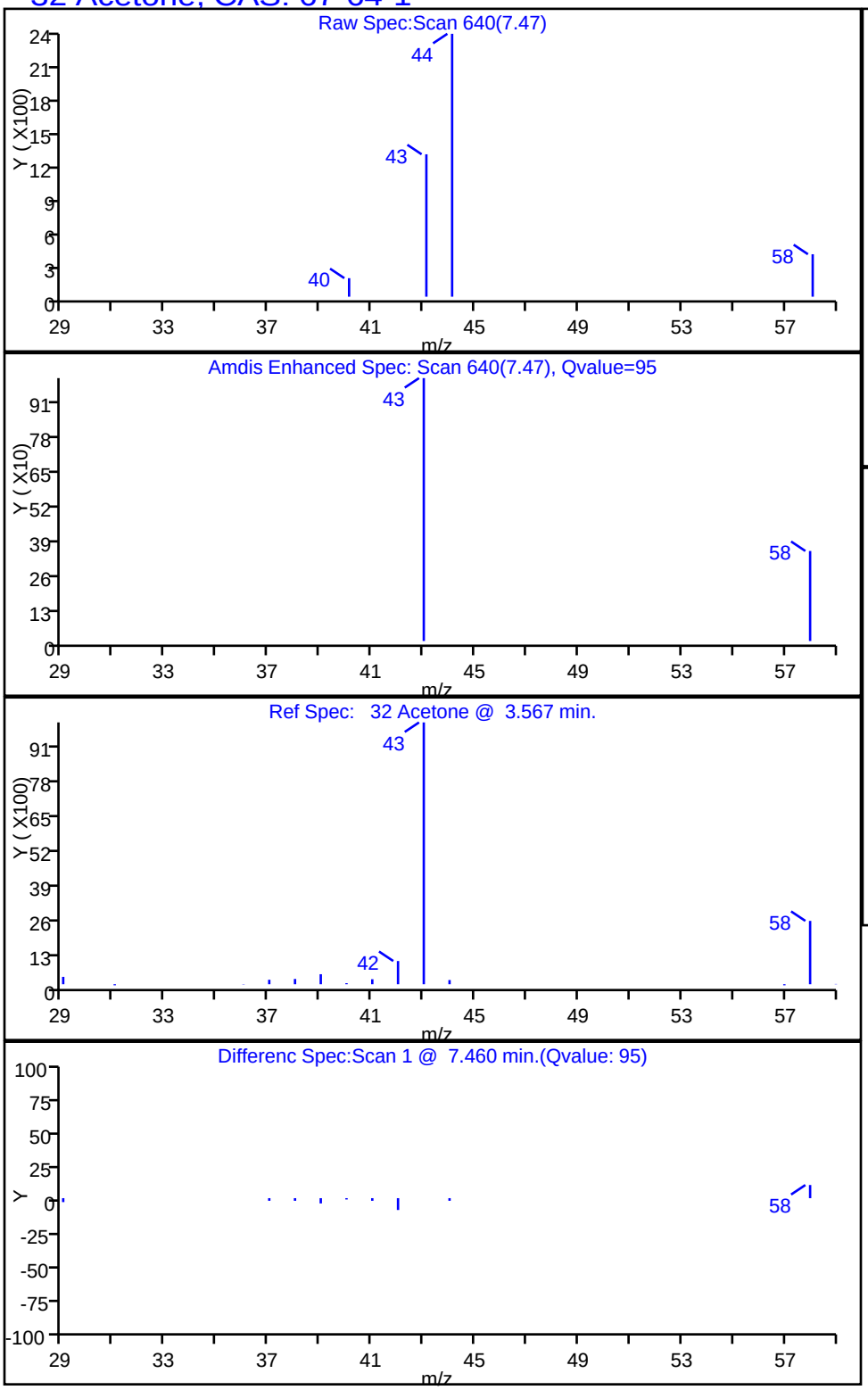


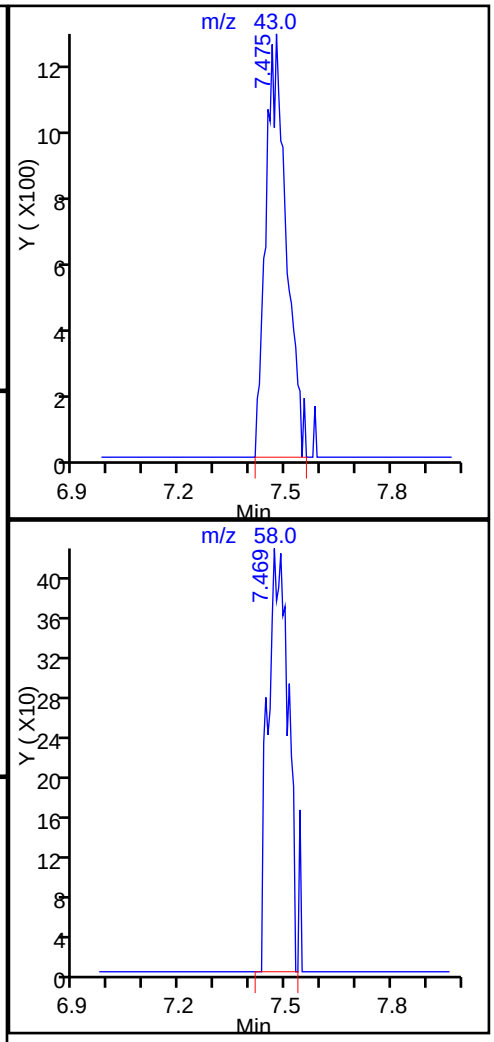
Report Date: 28-Apr-2015 07:03:16 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Sacramento

Data File:	\\SACCHROM\ChromData\ATMS7\20150427-21330.b\MS7042722.d				
Injection Date:	28-Apr-2015 05:41:30	Instrument ID:	ATMS7		
Lims ID:	320-12705-A-12	Lab Sample ID:	320-12705-12		
Client ID:	8288				
Operator ID:	GG	ALS Bottle#:	16	Worklist Smp#:	11
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	TO15_ATMS7N	Limit Group:	MSA - TO15 - ICAL		
Column:	RTX Volatiles (0.32 mm)	Detector	MS SCAN		

32 Acetone, CAS: 67-64-1





Shipping and Receiving Documents

TestAmerica Sacramento
880 Riverside Parkway

West Sacramento, CA 95605
phone 916.374.4378 fax 916.372.1059

Canister Samples Chain of Custody Record

TestAmerica Laboratories, Inc. assumes no liability with respect to the collection and shipment of these samples

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratories, Inc.

Client Contact Information	Project Manager: Rebecca Mora	Samples Collected By: Jeremy Quick	COC No:
Company Name: AECOM	Phone: 714-689-7254		1 of 2 COCs
Address: 999 W. Town and Country Rd.	Email: rebecca.mora@aecom.com		
City/State/Zip Orange/CA/92868			For Lab Use Only:
Phone: 714-567-2400	Site Contact: Jeremy Quick 510-708-5410		Walk-in Client:
FAX: 714-689-7351	TA Contact: Laura Turpen		Lab Sampling:
Project Name: TRW Microwave	Anaylsis Turnaround Time		
Site/Location: Sunnyvale, CA	Standard (Specific): X (14)		Job / SDG No.:
PO# 60238660.B3f	Rush (Specifiy):		(See below for Add'l Items)

Sample Identification	Sample Date(s)	Time Start	Time Stop	Canister Vacuum in Field, 'Hg (Start)'	Canister Vacuum in Field, 'Hg (Stop)'	Flow Controller ID	Canister ID	TO-15 (Med Std / Low / SIM)	MA-APH	EPA 3C	EPA 25C / 25.3	ASTM D-1946 / 1945 / 3588	EPA 15/16	TO-3	Other (Please specify in notes section)	Sample Type	Indoor Air	Ambient Air	Soil Gas	Landfill Gas	Other (Please specify in notes section)	Sample Specific Notes:
J6038-SS5-050615-1	5-6-15	1137	1144	30+	3	7321	3400 0963	X													X	sub-slab
J6038-SS5-050615-2	5-6-15	1137	1144	30	3	7665	3400 0963	X													X	sub-slab
J6038-SS7-050615	5-6-15	1245	1252	30	3.5	7467	8288	X													X	sub-slab
J6038-SS11-050615	5-6-15	1343	1350	30	3	7126	3400 1950	X													X	sub-slab

320-12924 Chain of Custody

Temperature (Fahrenheit)			
Start	Interior	Ambient	
Stop			

Temperature (Fahrenheit)			
Start	Interior	Ambient	
Stop			

Special Instructions/QC Requirements & Comments:

Samples Shipped by:	Date / Time:	Samples Received by:
Samples Relinquished by: Jeremy Quick	Date / Time: 5-7-15/1033	Received by: 5-7-15/1033
Relinquished by:	Date / Time: 5-7-15 1710	Received by:

Lab Use Only: Shipper Name: Opened by: Condition:

5-8-15 1247 RCVD: 5/8/15 1247
AMJT 5/8/15 1450 5/8/15 1450

Form No. CA-C-WI-003, Rev. 1, dated 05/10/2013

05/28/2015

TestAmerica Sacramento
880 Riverside Parkway
West Sacramento, CA 95605
phone 916.374.4378 fax 916.372.1059

Canister Samples Chain of Custody Record

TestAmerica Laboratories, Inc. assumes no liability with respect to the collection and shipment of these samples.

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TestAmerica Laboratories, Inc.

Client Contact Information	Project Manager: Rebecca Mora	Samples Collected By: Jeremy Quick	COC No:
Company Name: AECOM	Phone: 714-689-7254		2 of 2 COCs
Address: 999 W. Town and Country Rd.	Email: rebecca.mora@aecom.com		
City/State/Zip Orange/CA/92868			For Lab Use Only:
Phone: 714-367-2400	Site Contact: Jeremy Quick 510-709-5411		Walk-in Client:
FAX: 714-689-7351	TA Contact: Laura Turpen		Lab Sampling:
Project Name: TRW Microwave	Anaylsis Turnaround Time		
Site/Location: Sunnyvale, CA	Standard (Specific): X (14)		Job / SDG No.:
PO # 60238660.83f	Rush (Specifiy):		(See below for Add'l Items)

Sample Identification	Sample Date(s)	Time Start	Time Stop	Canister Vacuum in Field, 'Hg (Start)'	Canister Vacuum in Field, 'Hg (Stop)'	Flow Controller ID	Canister ID	TO-15 (Med / Std / Low / Silt)	MA-APH	EPA 3C	EPA 25C / 25.3	ASTM D-1946 / 1945 / 3588	EPA 15/16	TO-3	Other (Please specify in notes section)	Sample Type	Indoor Air	Ambient Air	Soil Gas	Landfill Gas	Other (Please specify in notes section)	Sample Specific Notes:
J6038-IA1-050615-1	5-6-15	0758	1758	30	2	7254	34000014	X									X					
J6038-IA1-050615-2	5-6-15	0758	1758	30+	3	~~7277~~ 7644	8205	X									X					Flow controller 7644
J6038-IA2-050615	5-6-15	0816	1816	30	2	~~7250~~ 7277	34000113	X									X					Flow controller 7277
J6038-IA3-050615	5-6-15	0821	1821	29	4	7250	34000500	X									X					
J6038-IA4-050615	5-6-15	0808	1808	30	2.5	7300	34001141	X									X					
J6038-IA5-050615	5-6-15	0912	1912	30+	4	7191	34000100	X									X					
J6038-OA1-050615-1	5-6-15	0903	1903	30	4	7304	34000132	X										X				
J6038-OA1-050615-2	5-6-15	0903	1903	30+	4	7298	7531	X										X				

	Temperature (Fahrenheit)		
Start	Interior	Ambient	
Stop			

	Temperature (Fahrenheit)		
Start	Interior	Ambient	
Stop			

Special Instructions/QC Requirements & Comments:

Samples Shipped by:	Date / Time:	Samples Received by:
Samples Relinquished by: Jeremy Quick	Date / Time: 5-7-15 / 1033	Received by: 5-7-15 1033
Relinquished by:	Date / Time: 5-7-15 1710	Received by:

For Lab Use Only:	Shipper Name:	Opened by:	Condition:

5-8-15 1247 5/8/15 1247 Form No. CA-C-WI-003, Rev. 1, dated 05/10/2013

AMNT 5/8/15 1450 5/8/15 1450

05/28/2015

Login Sample Receipt Checklist

Client: AECOM, Inc.

Job Number: 320-12924-1

Login Number: 12924
List Number: 1
Creator: Sadler, Jeremy

List Source: TestAmerica Sacramento

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	N/A	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	N/A	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

APPENDIX F

Quality Assurance/Data Validation Report

CONESTOGA-ROVERS & ASSOCIATES

2055 Niagara Falls Blvd.
Niagara Falls, New York 14304
Telephone: (716) 297-6150 Fax: (716) 297-2265
www.CRAworld.com

MEMORANDUM

TO:	Linda Niemeyer [laniemeyer@roadrunner.com]	REF. NO.:	056995-J6038
FROM:	Susan Scrocchi/adh/195 SCS	DATE:	June 4, 2015
CC:	Holly Holbrook [holly.holbrook@aecom.com]		
RE:	**Analytical Results and Full Validation Vapor Intrusion Monitoring Northrop Grumman Corporation Sunnyvale, California May 2015**		

1.0 Introduction

The following document details a validation of analytical results for vapor samples collected in support of the vapor intrusion monitoring program at the Northrop Grumman Corporation (NGC) Microwave Site in Sunnyvale, California during May 2015. Samples were submitted to TestAmerica Laboratory (TA), located in West Sacramento, California. A sample collection and analysis summary is presented in Table 1. The validated analytical results are summarized in Table 2. A summary of the analytical methodology is presented in Table 3.

Full Contract Laboratory Program (CLP) equivalent raw data deliverables were provided by the laboratory. Evaluation of the data was based on information obtained from the finished data sheets, raw data, chain of custody form, calibration data, blank data, laboratory control samples (LCS), and field quality assurance/quality control (QA/QC) samples. The assessment of analytical and in-house data included checks for: data consistency (by observing comparability of duplicate analyses), adherence to accuracy and precision criteria, and transmittal errors.

The QA/QC criteria by which these data have been assessed are outlined in the analytical methods referenced in Table 3 and applicable guidance from the document entitled "USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review", United States Environmental Protection Agency (USEPA) 540-R-08-01, June 2008.

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REGISTERED COMPANY FOR ISO 9001 ENGINEERING DESIGN

2.0 Sample Holding Time and Preservation

The sample holding time criteria for the analyses are summarized in Table 3. Sample chain of custody documents and analytical reports were used to determine sample holding times. All samples were analyzed within the required holding times.

All samples were properly received and stored by the laboratory.

3.0 Gas Chromatography/Mass Spectrometer (GC/MS) – Tuning and Mass Calibration (Instrument Performance Check)

Prior to volatile organic compound (VOC) analysis, GC/MS instrumentation is tuned to ensure optimization over the mass range of interest. To evaluate instrument tuning, the method requires the analysis of the specific tuning compound bromofluorobenzene (BFB). The resulting spectra must meet the criteria cited in the method before analysis is initiated. Analysis of the tuning compound must then be repeated every 24 hours throughout sample analysis to ensure the continued optimization of the instrument.

The tuning compound was analyzed at the required frequency throughout the VOC analysis periods. All tuning criteria were met, indicating that proper optimization of the instrumentation was achieved.

4.0 Initial Calibration - Organic Analyses

GC/MS

To quantify compounds of interest in samples, calibration of the GC/MS over a specific concentration range must be performed. Initially, a minimum five-point calibration curve containing all compounds of interest is analyzed to characterize instrument response for each analyte over a specific concentration range. Linearity of the calibration curve and instrument sensitivity are evaluated against the following criteria:

i) All relative response factors (RRFs) must be greater than or equal to 0.05
ii) The percent relative standard deviation (RSD) values must not exceed 30.0 percent or a minimum correlation coefficient (R) of 0.99 and minimum coefficient of determination (R^2) of 0.99 if linear and quadratic equation calibration curves, respectively, are used

The initial calibration data for VOCs were reviewed. All compounds met the above criteria for sensitivity and linearity.

5.0 Continuing Calibration - Organic Analyses

To ensure that instrument calibration for VOC analyses is acceptable throughout the sample analysis period, continuing calibration standards must be analyzed and compared to the initial calibration curve every 24 hours.

The following criteria were employed to evaluate continuing calibration data:

i) All RRF values must be greater than or equal to 0.05
ii) Percent difference (%D) values must not exceed 30 percent

Calibration standards were analyzed at the required frequency, and the results met the above criteria for instrument sensitivity and stability.

6.0 Laboratory Blank Analyses

Method blanks are prepared from a purified matrix and analyzed with investigative samples to determine the existence and magnitude of sample contamination introduced during the analytical procedures.

For this study, laboratory method blanks were analyzed at a minimum frequency of 1 per 20 investigative samples and/or 1 per analytical batch.

All method blank results were non-detect, indicating that laboratory contamination was not a factor for this investigation.

7.0 Surrogate Spike Recoveries - Organic Analyses

In accordance with the methods employed, all samples, blanks, and QC samples analyzed for organics are spiked with surrogate compounds prior to sample extraction and/or analysis. Surrogate recoveries provide a means to evaluate the effects of laboratory performance on individual sample matrices.

All samples submitted for volatile determinations were spiked with the appropriate number of surrogate compounds prior to sample analysis.

Surrogate recoveries were assessed against laboratory control limits. All surrogate recoveries met the above criteria.

8.0 Internal Standards (IS) Analyses

To ensure that changes in the GC/MS sensitivity and response do not affect sample analysis results, IS compounds are added to each sample prior to analysis. All results are then calculated as a ratio of the IS responses.

The sample IS results were evaluated against the following criteria:

i) The retention time of the IS must not vary more than ±30 seconds from the associated calibration standard
ii) IS area counts must not vary by more than ±40 percent from the associated calibration standard

All organic IS recoveries and retention times met the above criteria.

9.0 Laboratory Control Sample Analyses

LCS and/or laboratory control sample duplicates (LCSD) are prepared and analyzed as samples to assess the analytical efficiencies of the methods employed, independent of sample matrix effects. The relative percent difference (RPD) of the LCS/LCSD recoveries is used to evaluate analytical precision.

For this study, LCS/LCSD were analyzed at a minimum frequency of 1 per 20 investigative samples and/or 1 per analytical batch.

The LCS/LCSD contained all compounds of interest. All LCS recoveries and RPDs were within the laboratory control limits, demonstrating acceptable analytical accuracy and precision.

10.0 Matrix Spike/Matrix Spike Duplicate (MS/MSD) Analyses

To evaluate the effects of sample matrices on the extraction or digestion process, measurement procedures, and accuracy of a particular analysis, samples are spiked with a known concentration of the analyte of concern and analyzed as MS/MSD samples. The RPD between the MS and MSD is used to assess analytical precision.

MS/MSD analyses were not requested with this set of investigative samples.

11.0 Field QA/QC Samples

The field QA/QC consisted of three field duplicate sample sets.

Field Duplicate Sample Analysis

To assess the analytical and sampling protocol precision, two field duplicate samples were collected and submitted "blind" to the laboratory, as specified in Table 1. The RPDs associated with these duplicate samples must be less than 25 percent. If the reported concentration in either the investigative sample or its duplicate is less than five times the practical quantitation limit (PQL), the evaluation criteria is one times the PQL value.

Some variability was observed between VOC concentrations, and the results were qualified as estimated. A summary of the qualified results is presented in Table 4.

12.0 Analyte Reporting

The laboratory reported detected results down to the laboratory's method detection limit (MDL) for each analyte. Positive analyte detections less than the PQL but greater than the MDL were qualified as estimated (J) in Table 2 unless qualified otherwise in this memorandum. Non-detect results were presented as non-detect at the PQL in Table 2.

13.0 Target Compound Identification

To minimize erroneous compound identification during organic analyses, qualitative criteria including compound retention time and mass spectra (if applicable) were evaluated according to the identification criteria established by the methods. The organic compounds reported adhered to the specified identification criteria.

14.0 Conclusion

Based on the assessment detailed in the foregoing, the data summarized in Table 3 are acceptable with the qualifications noted.

TABLE 1

SAMPLE COLLECTION AND ANALYSIS SUMMARY
VAPOR INTRUSION MONITORING
NORTHROP GRUMMAN CORPORATION
SUNNYVALE, CALIFORNIA
MAY 2015

Sample Identification	*Location*	*Matrix*	*Collection Date (mm/dd/yyyy)*	*Collection Time (hr:min)*	*Analysis/ Parameters*	*Comments*
					Volatiles	
J6038-OA1-050615-1	OA-1	Outdoor Air	05/06/2015	19:03	X	
J6038-OA1-050615-2	OA-1	Outdoor Air	05/06/2015	19:03	X	FD(J6038-OA1-050615-1)
J6038-SS5-050615-1	SS-5	Sub-slab	05/06/2015	11:44	X	
J6038-SS5-050615-2	SS-5	Sub-slab	05/06/2015	11:44	X	FD(J6038-SS5-050615-1)
J6038-SS7-050615	SS-7	Sub-slab	05/06/2015	12:52	X	
J6038-SS11-050615	SS-11	Sub-slab	05/06/2015	13:50	X	
J6038-IA1-050615-1	IA-1	Indoor Air	05/06/2015	17:58	X	
J6038-IA1-050615-2	IA-1	Indoor Air	05/06/2015	17:58	X	FD(J6038-IA1-050615-1)
J6038-IA2-050615	IA-2	Indoor Air	05/06/2015	18:16	X	
J6038-IA3-050615	IA-3	Indoor Air	05/06/2015	18:21	X	
J6038-IA4-050615	IA-4	Indoor Air	05/06/2015	18:08	X	
J6038-IA5-050615	IA-5	Indoor Air	05/06/2015	19:12	X	

Notes:

FD - Field Duplicate sample of sample in parenthesis

TABLE 2

ANALYTICAL RESULTS SUMMARY
VAPOR INTRUSION MONITORING
NORTHROP GRUMMAN CORPORATION
SUNNYVALE, CALIFORNIA
MAY 2015

	Location ID:	***IA-1***	***IA-1***	***IA-2***	***IA-3***	***IA-4***	***IA-5***
	Sample Name:	***J6038-IA1-050615-1***	***J6038-IA1-050615-2***	***J6038-IA2-050615***	***J6038-IA3-050615***	***J6038-IA4-050615***	***J6038-IA5-050615***
	Sample Date:	***05/06/2015***	***05/06/2015***	***05/06/2015***	***05/06/2015***	***05/06/2015***	***05/06/2015***
			Duplicate				
Parameter	***Unit***						
Volatile Organic Compounds							
1,1,1-Trichloroethane	ppbv	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020
1,1,2,2-Tetrachloroethane	ppbv	--	--	--	--	--	--
1,1,2-Trichloroethane	ppbv	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
1,1-Dichloroethane	ppbv	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020
1,1-Dichloroethene	ppbv	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020
1,2,4-Trichlorobenzene	ppbv	--	--	--	--	--	--
1,2,4-Trimethylbenzene	ppbv	--	--	--	--	--	--
1,2-Dibromoethane (Ethylene dibromide)	ppbv	--	--	--	--	--	--
1,2-Dichlorobenzene	ppbv	0.016 J	0.016 J	0.016 J	<0.050	0.015 J	0.017 J
1,2-Dichloroethane	ppbv	0.015 J	0.016 J	0.014 J	0.014 J	0.014 J	0.014 J
1,2-Dichloropropane	ppbv	--	--	--	--	--	--
1,2-Dichlorotetrafluoroethane (CFC 114)	ppbv	--	--	--	--	--	--
1,3,5-Trimethylbenzene	ppbv	--	--	--	--	--	--
1,3-Dichlorobenzene	ppbv	--	--	--	--	--	--
1,4-Dichlorobenzene	ppbv	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
2-Butanone (Methyl ethyl ketone) (MEK)	ppbv	--	--	--	--	--	--
2-Hexanone	ppbv	--	--	--	--	--	--
4-Ethyl toluene	ppbv	--	--	--	--	--	--
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	ppbv	--	--	--	--	--	--
Acetone	ppbv	--	--	--	--	--	--
Benzene	ppbv	--	--	--	--	--	--
Benzyl chloride	ppbv	--	--	--	--	--	--
Bromodichloromethane	ppbv	--	--	--	--	--	--
Bromoform	ppbv	--	--	--	--	--	--
Bromomethane (Methyl bromide)	ppbv	--	--	--	--	--	--
Carbon disulfide	ppbv	--	--	--	--	--	--
Carbon tetrachloride	ppbv	--	--	--	--	--	--
Chlorobenzene	ppbv	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020
Chloroethane	ppbv	--	--	--	--	--	--
Chloroform (Trichloromethane)	ppbv	0.024	0.024	0.024	0.020	0.023	0.023
Chloromethane (Methyl chloride)	ppbv	--	--	--	--	--	--
Dibromochloromethane	ppbv	--	--	--	--	--	--
Dichlorodifluoromethane (CFC-12)	ppbv	0.46	0.42	0.45	0.33	0.43	0.45
Ethylbenzene	ppbv	0.11	0.12	0.10	0.092	0.13	0.14
Hexachlorobutadiene	ppbv	--	--	--	--	--	--
Methylene chloride	ppbv	1.0	1.1	0.64	0.22	1.3	1.4
Styrene	ppbv	--	--	--	--	--	--

TABLE 2

ANALYTICAL RESULTS SUMMARY
VAPOR INTRUSION MONITORING
NORTHROP GRUMMAN CORPORATION
SUNNYVALE, CALIFORNIA
MAY 2015

	Location ID:	***IA-1***	***IA-1***	***IA-2***	***IA-3***	***IA-4***	***IA-5***
	Sample Name:	***J6038-IA1-050615-1***	***J6038-IA1-050615-2***	***J6038-IA2-050615***	***J6038-IA3-050615***	***J6038-IA4-050615***	***J6038-IA5-050615***
	Sample Date:	***05/06/2015***	***05/06/2015***	***05/06/2015***	***05/06/2015***	***05/06/2015***	***05/06/2015***
			Duplicate				
Parameter	***Unit***						
Volatile Organic Compounds							
Tetrachloroethene	ppbv	0.013 J	0.012 J	0.012 J	<0.020	0.012 J	0.013 J
Toluene	ppbv	1.3	1.4	1.5	2.1	1.4	1.3
Trichloroethene	ppbv	0.093	0.095	0.092	0.038	0.10	0.11
Trichlorofluoromethane (CFC-11)	ppbv	0.21	0.21	0.21	0.21	0.20	0.21
Trifluorotrichloroethane (Freon 113)	ppbv	0.063	0.065	0.064	0.059	0.062	0.063
Vinyl acetate	ppbv	--	--	--	--	--	--
Vinyl chloride	ppbv	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020
cis-1,2-Dichloroethene	ppbv	0.0059 J	0.0065 J	0.0062 J	<0.020	0.0069 J	0.0067 J
cis-1,3-Dichloropropene	ppbv	--	--	--	--	--	--
m&p-Xylenes	ppbv	0.45	0.47	0.41	0.35	0.52	0.56
o-Xylene	ppbv	0.19	0.19	0.17	0.15	0.21	0.22
trans-1,2-Dichloroethene	ppbv	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020
trans-1,3-Dichloropropene	ppbv	--	--	--	--	--	--
1,1,1-Trichloroethane	µg/m3	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11
1,1,2,2-Tetrachloroethane	µg/m3	--	--	--	--	--	--
1,1,2-Trichloroethane	µg/m3	<0.27	<0.27	<0.27	<0.27	<0.27	<0.27
1,1-Dichloroethane	µg/m3	<0.081	<0.081	<0.081	<0.081	<0.081	<0.081
1,1-Dichloroethene	µg/m3	<0.079	<0.079	<0.079	<0.079	<0.079	<0.079
1,2,4-Trichlorobenzene	µg/m3	--	--	--	--	--	--
1,2,4-Trimethylbenzene	µg/m3	--	--	--	--	--	--
1,2-Dibromoethane (Ethylene dibromide)	µg/m3	--	--	--	--	--	--
1,2-Dichlorobenzene	µg/m3	0.094 J	0.095 J	0.095 J	<0.30	0.088 J	0.10 J
1,2-Dichloroethane	µg/m3	0.059 J	0.064 J	0.058 J	0.056 J	0.058 J	0.057 J
1,2-Dichloropropane	µg/m3	--	--	--	--	--	--
1,2-Dichlorotetrafluoroethane (CFC 114)	µg/m3	--	--	--	--	--	--
1,3,5-Trimethylbenzene	µg/m3	--	--	--	--	--	--
1,3-Dichlorobenzene	µg/m3	--	--	--	--	--	--
1,4-Dichlorobenzene	µg/m3	<0.60	<0.60	<0.60	<0.60	<0.60	<0.60
2-Butanone (Methyl ethyl ketone) (MEK)	µg/m3	--	--	--	--	--	--
2-Hexanone	µg/m3	--	--	--	--	--	--
4-Ethyl toluene	µg/m3	--	--	--	--	--	--
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	µg/m3	--	--	--	--	--	--
Acetone	µg/m3	--	--	--	--	--	--
Benzene	µg/m3	--	--	--	--	--	--
Benzyl chloride	µg/m3	--	--	--	--	--	--
Bromodichloromethane	µg/m3	--	--	--	--	--	--
Bromoform	µg/m3	--	--	--	--	--	--

TABLE 2

ANALYTICAL RESULTS SUMMARY
VAPOR INTRUSION MONITORING
NORTHROP GRUMMAN CORPORATION
SUNNYVALE, CALIFORNIA
MAY 2015

	Location ID:	***IA-1***	***IA-1***	***IA-2***	***IA-3***	***IA-4***	***IA-5***
	Sample Name:	***J6038-IA1-050615-1***	***J6038-IA1-050615-2***	***J6038-IA2-050615***	***J6038-IA3-050615***	***J6038-IA4-050615***	***J6038-IA5-050615***
	Sample Date:	***05/06/2015***	***05/06/2015***	***05/06/2015***	***05/06/2015***	***05/06/2015***	***05/06/2015***
			Duplicate				
Parameter	***Unit***						
Volatile Organic Compounds							
Bromomethane (Methyl bromide)	µg/m3	--	--	--	--	--	--
Carbon disulfide	µg/m3	--	--	--	--	--	--
Carbon tetrachloride	µg/m3	--	--	--	--	--	--
Chlorobenzene	µg/m3	<0.092	<0.092	<0.092	<0.092	<0.092	<0.092
Chloroethane	µg/m3	--	--	--	--	--	--
Chloroform (Trichloromethane)	µg/m3	0.12	0.12	0.12	0.10	0.11	0.11
Chloromethane (Methyl chloride)	µg/m3	--	--	--	--	--	--
Dibromochloromethane	µg/m3	--	--	--	--	--	--
Dichlorodifluoromethane (CFC-12)	µg/m3	2.3	2.1	2.2	1.6	2.1	2.2
Ethylbenzene	µg/m3	0.49	0.51	0.45	0.40	0.56	0.59
Hexachlorobutadiene	µg/m3	--	--	--	--	--	--
Methylene chloride	µg/m3	3.6	3.7	2.2	0.76	4.5	5.0
Styrene	µg/m3	--	--	--	--	--	--
Tetrachloroethene	µg/m3	0.090 J	0.080 J	0.082 J	<0.14	0.080 J	0.086 J
Toluene	µg/m3	5.0	5.3	5.6	7.9	5.1	5.1
Trichloroethene	µg/m3	0.50	0.51	0.50	0.20	0.54	0.58
Trichlorofluoromethane (CFC-11)	µg/m3	1.2	1.2	1.2	1.2	1.1	1.2
Trifluorotrichloroethane (Freon 113)	µg/m3	0.48	0.50	0.49	0.45	0.47	0.48
Vinyl acetate	µg/m3	--	--	--	--	--	--
Vinyl chloride	µg/m3	<0.051	<0.051	<0.051	<0.051	<0.051	<0.051
cis-1,2-Dichloroethene	µg/m3	0.023 J	0.026 J	0.024 J	<0.079	0.028 J	0.026 J
cis-1,3-Dichloropropene	µg/m3	--	--	--	--	--	--
m&p-Xylenes	µg/m3	2.0	2.0	1.8	1.5	2.3	2.4
o-Xylene	µg/m3	0.81	0.84	0.74	0.66	0.90	0.97
trans-1,2-Dichloroethene	µg/m3	<0.079	<0.079	<0.079	<0.079	<0.079	<0.079
trans-1,3-Dichloropropene	µg/m3	--	--	--	--	--	--

TABLE 2

ANALYTICAL RESULTS SUMMARY
VAPOR INTRUSION MONITORING
NORTHROP GRUMMAN CORPORATION
SUNNYVALE, CALIFORNIA
MAY 2015

	Location ID:	*OA-1*	*OA-1*	*SS-5*	*SS-5*	*SS-7*	*SS-11*
	Sample Name:	*J6038-OA1-050615-1*	*J6038-OA1-050615-2*	*J6038-SS5-050615-1*	*J6038-SS5-050615-2*	*J6038-SS7-050615*	*J6038-SS11-050615*
	Sample Date:	*05/06/2015*	*05/06/2015*	*05/06/2015*	*05/06/2015*	*05/06/2015*	*05/06/2015*
			Duplicate		*Duplicate*		
Parameter	***Unit***						
Volatile Organic Compounds							
1,1,1-Trichloroethane	ppbv	<0.020	<0.020	0.39 J	0.33 J	9.7	0.13 J
1,1,2,2-Tetrachloroethane	ppbv	--	--	<0.70	<1.4	<7.2	<0.40
1,1,2-Trichloroethane	ppbv	<0.050	<0.050	<0.70	<1.4	<7.2	<0.40
1,1-Dichloroethane	ppbv	<0.020	<0.020	<0.53	<1.1	<5.4	<0.30
1,1-Dichloroethene	ppbv	<0.020	<0.020	<1.4	<2.9	<14	<0.81
1,2,4-Trichlorobenzene	ppbv	--	--	<3.5	<7.1	<36	<2.0
1,2,4-Trimethylbenzene	ppbv	--	--	0.31 J	<2.9	<14	<0.81
1,2-Dibromoethane (Ethylene dibromide)	ppbv	--	--	<1.4	<2.9	<14	<0.81
1,2-Dichlorobenzene	ppbv	<0.050	<0.050	<0.70	<1.4	<7.2	<0.40
1,2-Dichloroethane	ppbv	0.014 J	0.013 J	<1.4	<2.9	<14	<0.81
1,2-Dichloropropane	ppbv	--	--	<0.70	<1.4	<7.2	<0.40
1,2-Dichlorotetrafluoroethane (CFC 114)	ppbv	--	--	<0.70	<1.4	<7.2	<0.40
1,3,5-Trimethylbenzene	ppbv	--	--	<0.70	<1.4	<7.2	<0.40
1,3-Dichlorobenzene	ppbv	--	--	<0.70	<1.4	<7.2	<0.40
1,4-Dichlorobenzene	ppbv	<0.10	<0.10	<0.70	<1.4	<7.2	<0.40
2-Butanone (Methyl ethyl ketone) (MEK)	ppbv	--	--	3.9 J	5.9 J	<14	<0.81
2-Hexanone	ppbv	--	--	<0.70 J	6.6 J	<7.2	<0.40
4-Ethyl toluene	ppbv	--	--	<0.70	<1.4	<7.2	<0.40
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	ppbv	--	--	<0.70	<1.4	<7.2	<0.40
Acetone	ppbv	--	--	81	71	<90	2.4 J
Benzene	ppbv	--	--	0.87	0.78 J	<7.2	<0.40
Benzyl chloride	ppbv	--	--	<1.4	<2.9	<14	<0.81
Bromodichloromethane	ppbv	--	--	<0.53	<1.1	<5.4	<0.30
Bromoform	ppbv	--	--	<0.70	<1.4	<7.2	<0.40
Bromomethane (Methyl bromide)	ppbv	--	--	<1.4	<2.9	<14	<0.81
Carbon disulfide	ppbv	--	--	0.19 J	0.70 J	<14	<0.81
Carbon tetrachloride	ppbv	--	--	<1.4	<2.9	<14	0.091 J
Chlorobenzene	ppbv	<0.020	<0.020	<0.53	<1.1	<5.4	<0.30
Chloroethane	ppbv	--	--	<1.4	<2.9	<14	<0.81
Chloroform (Trichloromethane)	ppbv	0.018 J	0.016 J	0.61	0.53 J	<5.4	<0.30
Chloromethane (Methyl chloride)	ppbv	--	--	<1.4	<2.9	<14	<0.81
Dibromochloromethane	ppbv	--	--	<0.70	<1.4	<7.2	<0.40
Dichlorodifluoromethane (CFC-12)	ppbv	0.49 J	0.34 J	0.55 J	<1.4	<7.2	0.51
Ethylbenzene	ppbv	0.026 J	0.016 J	1.8	1.6	<7.2	<0.40
Hexachlorobutadiene	ppbv	--	--	<3.5	<7.1	<36	<2.0
Methylene chloride	ppbv	0.12 J	<0.20	3.2	2.9	<7.2	0.11 J
Styrene	ppbv	--	--	0.12 J	<1.4	<7.2	<0.40

TABLE 2

ANALYTICAL RESULTS SUMMARY
VAPOR INTRUSION MONITORING
NORTHROP GRUMMAN CORPORATION
SUNNYVALE, CALIFORNIA
MAY 2015

	Location ID:	*OA-1*	*OA-1*	*SS-5*	*SS-5*	*SS-7*	*SS-11*
	Sample Name:	*J6038-OA1-050615-1*	*J6038-OA1-050615-2*	*J6038-SS5-050615-1*	*J6038-SS5-050615-2*	*J6038-SS7-050615*	*J6038-SS11-050615*
	Sample Date:	*05/06/2015*	*05/06/2015*	*05/06/2015*	*05/06/2015*	*05/06/2015*	*05/06/2015*
			Duplicate		*Duplicate*		
Parameter	***Unit***						
Volatile Organic Compounds							
Tetrachloroethene	ppbv	<0.020	<0.020	3.3	2.9	43	1.1
Toluene	ppbv	0.13 J	0.25 J	2.5	2.3	<7.2	0.11 J
Trichloroethene	ppbv	<0.020	0.0073 J	46	39	380	8.8
Trichlorofluoromethane (CFC-11)	ppbv	0.22	0.19	0.36 J	<1.4	<7.2	0.26 J
Trifluorotrichloroethane (Freon 113)	ppbv	0.063	0.059	1.8	1.6	17	0.28 J
Vinyl acetate	ppbv	--	--	<1.4	0.73 J	<14	<0.81
Vinyl chloride	ppbv	<0.020	<0.020	<0.70	<1.4	<7.2	<0.40
cis-1,2-Dichloroethene	ppbv	<0.020	<0.020	1.1	<1.4	<7.2	<0.40
cis-1,3-Dichloropropene	ppbv	--	--	<0.70	<1.4	<7.2	<0.40
m&p-Xylenes	ppbv	0.071 J	0.045 J	7.1	5.8	<14	<0.81
o-Xylene	ppbv	0.029 J	0.018 J	2.5	2.0	<7.2	<0.40
trans-1,2-Dichloroethene	ppbv	<0.020	<0.020	0.40 J	<1.4	<7.2	<0.40
trans-1,3-Dichloropropene	ppbv	--	--	<0.70	<1.4	<7.2	<0.40
1,1,1-Trichloroethane	µg/m3	<0.11	<0.11	2.1 J	1.8 J	53	0.72 J
1,1,2,2-Tetrachloroethane	µg/m3	--	--	<4.8	<9.8	<49	<2.8
1,1,2-Trichloroethane	µg/m3	<0.27	<0.27	<3.8	<7.8	<39	<2.2
1,1-Dichloroethane	µg/m3	<0.081	<0.081	<2.1	<4.3	<22	<1.2
1,1-Dichloroethene	µg/m3	<0.079	<0.079	<5.6	<11	<57	<3.2
1,2,4-Trichlorobenzene	µg/m3	--	--	<26	<53	<270	<15
1,2,4-Trimethylbenzene	µg/m3	--	--	1.5 J	<14	<71	<4.0
1,2-Dibromoethane (Ethylene dibromide)	µg/m3	--	--	<11	<22	<110	<6.2
1,2-Dichlorobenzene	µg/m3	<0.30	<0.30	<4.2	<8.6	<43	<2.4
1,2-Dichloroethane	µg/m3	0.056 J	0.054 J	<5.7	<12	<58	<3.3
1,2-Dichloropropane	µg/m3	--	--	<3.2	<6.6	<33	<1.9
1,2-Dichlorotetrafluoroethane (CFC 114)	µg/m3	--	--	<4.9	<10	<50	<2.8
1,3,5-Trimethylbenzene	µg/m3	--	--	<3.4	<7.0	<35	<2.0
1,3-Dichlorobenzene	µg/m3	--	--	<4.2	<8.6	<43	<2.4
1,4-Dichlorobenzene	µg/m3	<0.60	<0.60	<4.2	<8.6	<43	<2.4
2-Butanone (Methyl ethyl ketone) (MEK)	µg/m3	--	--	12 J	17 J	<42	<2.4
2-Hexanone	µg/m3	--	--	<2.9 J	27 J	<30	<1.7
4-Ethyl toluene	µg/m3	--	--	<3.4	<7.0	<35	<2.0
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	µg/m3	--	--	<2.9	<5.8	<29	<1.7
Acetone	µg/m3	--	--	190	170	<210	5.8 J
Benzene	µg/m3	--	--	2.8	2.5 J	<23	<1.3
Benzyl chloride	µg/m3	--	--	<7.2	<15	<75	<4.2
Bromodichloromethane	µg/m3	--	--	<3.5	<7.2	<36	<2.0
Bromoform	µg/m3	--	--	<7.2	<15	<74	<4.2

TABLE 2

ANALYTICAL RESULTS SUMMARY
VAPOR INTRUSION MONITORING
NORTHROP GRUMMAN CORPORATION
SUNNYVALE, CALIFORNIA
MAY 2015

	Location ID:	***OA-1***	***OA-1***	***SS-5***	***SS-5***	***SS-7***	***SS-11***
	Sample Name:	***J6038-OA1-050615-1***	***J6038-OA1-050615-2***	***J6038-SS5-050615-1***	***J6038-SS5-050615-2***	***J6038-SS7-050615***	***J6038-SS11-050615***
	Sample Date:	***05/06/2015***	***05/06/2015***	***05/06/2015***	***05/06/2015***	***05/06/2015***	***05/06/2015***
			Duplicate		***Duplicate***		
Parameter	***Unit***						
Volatile Organic Compounds							
Bromomethane (Methyl bromide)	µg/m3	--	--	<5.4	<11	<56	<3.1
Carbon disulfide	µg/m3	--	--	0.59 J	2.2 J	<45	<2.5
Carbon tetrachloride	µg/m3	--	--	<8.8	<18	<91	0.57 J
Chlorobenzene	µg/m3	<0.092	<0.092	<2.4	<4.9	<25	<1.4
Chloroethane	µg/m3	--	--	<3.7	<7.5	<38	<2.1
Chloroform (Trichloromethane)	µg/m3	0.088 J	0.079 J	3.0	2.6 J	<26	<1.5
Chloromethane (Methyl chloride)	µg/m3	--	--	<2.9	<5.9	<30	<1.7
Dibromochloromethane	µg/m3	--	--	<6.0	<12	<61	<3.4
Dichlorodifluoromethane (CFC-12)	µg/m3	2.4 J	1.7 J	2.7 J	<7.1	<36	2.5
Ethylbenzene	µg/m3	0.11 J	0.069 J	7.8	6.8	<31	<1.8
Hexachlorobutadiene	µg/m3	--	--	<37	<76	<380	<22
Methylene chloride	µg/m3	0.43 J	<0.69	11	10	<25	0.37 J
Styrene	µg/m3	--	--	0.51 J	<6.1	<31	<1.7
Tetrachloroethene	µg/m3	<0.14	<0.14	23	20	290	7.3
Toluene	µg/m3	0.48 J	0.93 J	9.4	8.8	<27	0.40 J
Trichloroethene	µg/m3	<0.11	0.039 J	250	210	2100	47
Trichlorofluoromethane (CFC-11)	µg/m3	1.2	1.1	2.0 J	<8.0	<40	1.4 J
Trifluorotrichloroethane (Freon 113)	µg/m3	0.49	0.45	14	12	130	2.2 J
Vinyl acetate	µg/m3	--	--	<4.9	2.6 J	<51	<2.8
Vinyl chloride	µg/m3	<0.051	<0.051	<1.8	<3.7	<18	<1.0
cis-1,2-Dichloroethene	µg/m3	<0.079	<0.079	4.3	<5.7	<29	<1.6
cis-1,3-Dichloropropene	µg/m3	--	--	<3.2	<6.5	<33	<1.8
m&p-Xylenes	µg/m3	0.31 J	0.19 J	31	25	<63	<3.5
o-Xylene	µg/m3	0.12 J	0.078 J	11	8.6	<31	<1.8
trans-1,2-Dichloroethene	µg/m3	<0.079	<0.079	1.6 J	<5.7	<29	<1.6
trans-1,3-Dichloropropene	µg/m3	--	--	<3.2	<6.5	<33	<1.8

Notes:

< - Not detected at the associated limit
J - Estimated concentration

TABLE 3

ANALYTICAL METHODS
VAPOR INTRUSION MONITORING
NORTHROP GRUMMAN CORPORATION
SUNNYVALE, CALIFORNIA
MAY 2015

Parameter	*Method*	*Matrix*	*Holding Time Collection to Analysis (Days)*
Volatile Organic Compounds	TO-15[(1)]	Air	30

Notes:

(1) - EPA Method TO-15 - "Compendium of Methods for the Determination of Toxic Organic Compounds in Ambient Air", EPA-625/R-96/010b, January 1999

TABLE 4

QUALIFIED SAMPLE DATA DUE TO VARIABILITY IN FIELD DUPLICATE RESULTS
VAPOR INTRUSION MONITORING
NORTHROP GRUMMAN CORPORATION
SUNNYVALE, CALIFORNIA
MAY 2015

Parameter	*Analyte*	*RPD*	*Sample ID*	*Qualified Result*	*Field Duplicate Sample ID*	*Qualified Result*	*Units*
VOC	2-Butanone	41	J6038-SS5-050615-1	3.9 J	J6038-SS5-050615-2	5.9 J	ppbv
			J6038-SS5-050615-1	12 J	J6038-SS5-050615-2	17 J	µg/m3
VOC	2-Hexanone	NA	J6038-SS5-050615-1	0.70 UJ	J6038-SS5-050615-2	6.6 J	ppbv
			J6038-SS5-050615-1	2.9 UJ	J6038-SS5-050615-2	27 J	µg/m3
VOC	Dichlorodifluoromethane	36	J6038-OA1-050615-1	0.49 J	J6038-OA1-050615-2	0.34 J	ppbv
			J6038-OA1-050615-1	2.4 J	J6038-OA1-050615-2	1.7 J	µg/m3
VOC	Ethylbenzene	48	J6038-OA1-050615-1	0.11 J	J6038-OA1-050615-2	0.069 J	µg/m3
			J6038-OA1-050615-1	0.026 J	J6038-OA1-050615-2	0.016 J	ppbv
VOC	m&p-Xylenes	45	J6038-OA1-050615-1	0.31 J	J6038-OA1-050615-2	0.19 J	µg/m3
			J6038-OA1-050615-1	0.071 J	J6038-OA1-050615-2	0.045 J	ppbv
VOC	o-Xylene	47	J6038-OA1-050615-1	0.12 J	J6038-OA1-050615-2	0.078 J	µg/m3
			J6038-OA1-050615-1	0.029 J	J6038-OA1-050615-2	0.018 J	ppbv
VOC	Toluene	63	J6038-OA1-050615-1	0.48 J	J6038-OA1-050615-2	0.93 J	µg/m3
			J6038-OA1-050615-1	0.13 J	J6038-OA1-050615-2	0.25 J	ppbv

Notes:

VOC - Volatile Organic Compound
RPD - Relative Percent Difference
J - Estimated concentration
UJ - Not detected; associated reporting limit is estimated