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Appendix B Discrete WC and IDW Data Validation Memo
 Discrete WC and IDW Analytical Laboratory Reports

Technical Memorandum

April 18, 2022

To	Meagan Willis	Tel	860 747-8298
From	Kathy Shaw/Marisa Oriaku/eew/1-NF	Ref. No.	11215131
Subject	Analytical Results and Reduced Validation Investigation-Derived Waste (IDW) and Waste Characterization Sampling San Jacinto Supplemental Design Investigation Channelview, Harris County, Texas November 2021 - December 2021		

1. Introduction

This document details a reduced validation of analytical results for soil and water samples collected in support of the Investigation-Derived Waste (IDW) and Waste Characterization Sampling at the San Jacinto Supplemental Design Investigation site during November 2021 – December 2021. Samples were submitted to SGS Laboratory located in Dayton, New Jersey and Wilmington, North Carolina. A sample collection and analysis summary is presented in Table 1. The validated analytical results are summarized in Tables 2a, 2b & 2c. A summary of the analytical methodology is presented in Table 3.

Standard GHD report deliverables were submitted by the laboratory. The results and supporting quality assurance/quality control (QA/QC) data were assessed. Evaluation of the data was based on information obtained from the chain of custody forms, finished report forms, method blank data, duplicate data, recovery data from surrogate spikes/laboratory control samples (LCS) and matrix spikes (MS).

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 documents entitled:

- i) "USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review", United States Environmental Protection Agency (USEPA) 540-R-2016-002, September 2016
- ii) "USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Data Review", United States Environmental Protection Agency (USEPA) 540-R-2016-001, September 2016
- iii) "National Functional Guidelines for High Resolution Superfund Methods Data Review", OLEM 9200.3 115, EPA 542 B 16 001, April 2016
- iv) Quality Assurance Project Plan, Final Second Phase Pre-Design Investigation", San Jacinto River Waste Pits Site, Harris County, Texas, Report No 6, June 3, 2019

These items will subsequently be referred to as the "Guidelines" in this Memorandum.

2. Sample Holding Time and Preservation

The sample holding time criteria and sample preservation requirements for the analyses are summarized in Table 3. Sample chain of custody documents and analytical reports were used to determine sample holding

times. The samples summarized in Table 4 were qualified due to sample holding time period exceedances. The remaining samples were prepared and/or analyzed within the specified holding time periods.

All samples were properly preserved, delivered on ice, and stored by the laboratory at the required temperature (0-6°C).

3. 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, the laboratory method, and laboratory leachate blanks were analyzed were analyzed at a minimum frequency of 1 per 20 investigative samples and/or 1 per analytical batch.

Organic Method Blank Analyses

Most method blank results were non-detect with the exception of low concentrations of polychlorinated dibenzodioxins/polychlorinated dibenzo-p-furans (PCDDs/PCDFs) detected in one method blank. The associated sample result with similar concentrations to those found in the method blank was qualified as non-detect in Table 5.

Organic Leachate Blank Analyses

Leachate blanks are prepared from a purified matrix for Toxicity Characteristic Leaching Procedure (TCLP) analysis and are analyzed with investigative samples to determine the existence and magnitude of sample contamination introduced during the analytical procedures.

For this study, laboratory leachate blanks were analyzed at a minimum frequency of 1 per 20 investigative samples and/or 1 per analytical batch.

Most leachate blank results were non-detect indicating that laboratory contamination was not a factor for this investigation. A low-level concentration of gamma BHC was detected in a leachate blank, all of the associated sample results were non-detect and were not impacted by the laboratory contamination.

Low concentrations of chloroform and ethylene glycol were detected in the leachate blanks indicating a potential for laboratory contamination. The associated samples containing similar concentrations of chloroform and ethylene glycol were assumed to reflect laboratory contamination and were qualified non-detect (U) in Table 5.

The dioxin/furan leachate blank contained low concentrations of PCDDs/PCDFs. All associated samples with similar concentrations were qualified as non-detect in Table 5.

Inorganic Analyses

All method blank results were non-detect, indicating that laboratory contamination was not a factor for this investigation.

4. 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 semi-volatile organic compounds (SVOC), volatile organic compounds (VOC), pesticides, herbicides, methomyl, nonhalogenated organic compounds, total petroleum hydrocarbons (TPH)

and polychlorinated biphenyls (PCB) determinations were spiked with the appropriate number of surrogate compounds prior to sample extraction and/or analysis.

Each individual surrogate compound is expected to meet the laboratory control limits with the exception of SVOC analyses. According to the "Guidelines" for SVOC analyses, up to one outlying surrogate in the base/neutral or acid fractions is acceptable as long as the recovery is at least 10 percent.

Surrogate recoveries were assessed against laboratory control limits. Most surrogate recoveries met the laboratory criteria with the exception of low surrogate recoveries for the methomyl analysis. The results associated with low recoveries were qualified as estimated in Table 6.

5. Spiked C 13 Labeled PCDDs/PCDFs - Organic Analyses

In accordance with the method employed, all samples, blanks, and QC samples analyzed for PCDDs/PCDFs are spiked with labeled congeners prior to extraction. The labeled congeners are an internal standard for the quantitation of native congeners and serve as surrogates for the assessment of method performance in the sample matrix.

All samples submitted for PCDD/PCDF determinations were spiked with the appropriate number of labeled compounds prior to sample extraction and analysis.

Labeled congener recoveries were assessed against method control limits. All labeled PCDD/PCDF recoveries were within the method acceptance ranges.

6. 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.

Organic Analyses

The LCS/LCSD contained all compounds of interest. Most LCS recoveries and RPDs were within the laboratory control limits, demonstrating acceptable analytical accuracy and precision.

Samples associated with outlying recoveries were qualified in Table 7 as follows:

- i) Positive sample results associated with outlying LCS recoveries were qualified as estimated and estimated biased high
- ii) Non-detect results associated with high LCS recoveries were not qualified. The indicated high bias would not impact the data
- iii) Non-detect results associated with low LCS recoveries greater than ten percent were qualified as estimated
- iv) Non-detect results associated with LCS recoveries less than ten percent were rejected due to the demonstrated poor analytical efficiency

Inorganic Analyses

The LCS contained all analytes of interest. LCS recoveries were assessed per the "Guidelines". Most LCS recoveries were within the control limits, demonstrating acceptable analytical accuracy.

Non-detect results associated with low LCS recoveries greater than ten percent were qualified as estimated in Table 7.

7. Matrix Spike/Matrix Spike Duplicate (MS/MSD) Analyses

To evaluate the effects of sample matrices on the preparation 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. If the original sample concentration is significantly greater than the spike concentration, the recovery is not assessed. If only the MS or MSD recovery was outside of control limits, no qualification of the data was performed based on the acceptable recovery of the companion spike and the acceptable RPD.

MS/MSD analyses were performed as specified in Table 1.

Organic Analyses

The MS/MSD samples were spiked with all compounds of interest. Most percent recoveries and RPD values were within the laboratory control limits, demonstrating acceptable analytical accuracy and precision.

Samples associated with outlying recoveries were qualified in Table 8 as follows:

- i) Non-detect results associated with high MS/MSD recoveries or RPDs were not qualified. The indicated high bias would not impact the data
- ii) Non-detect results associated with low MS/MSD recoveries greater than ten percent were qualified as estimated
- iii) Non-detect results associated with MS or MSD recoveries less than ten percent were rejected due to the demonstrated poor analytical efficiency

8. Matrix Spike Analyses

To evaluate the effects of sample matrices on the preparation, measurement procedures, and accuracy of a particular analysis, samples are spiked with a known concentration of the analyte of concern and analyzed as MS samples. For this study, MS samples were prepared and analyzed by the laboratory as specified in Table 1.

The MS results were evaluated per the "Guidelines". In accordance with the "Guidelines", MS recoveries for samples with analyte concentrations significantly greater than the spike concentrations could not be assessed.

Most MS recoveries were acceptable with the exception of low percent recovery values reported for cyanide. Associated sample results were qualified as estimated and estimated biased low in Table 9.

9. Duplicate Sample Analyses – Inorganic Analyses

Analytical precision is evaluated based on the analysis of laboratory duplicate samples. For this study, duplicate samples were prepared and analyzed by the laboratory for inorganic analyses as specified in Table 1. The duplicate results were evaluated per the "Guidelines". All duplicate analyses performed were acceptable, demonstrating acceptable analytical precision.

10. Target Compound Identification

To minimize erroneous compound identification during PCDD/PCDF analyses, qualitative criteria including compound retention time, ion abundance ratio, and chromatography were evaluated according to the identification criteria established by the methods.

Most compounds reported adhered to the method-specified identification criteria. Some sample results were reported as positive hits although the ion abundance ratio was not met. The associated results were qualified as the estimated maximum possible concentration. A summary of these qualified data is presented in Table 10.

11. 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 RL but greater than the MDL were reported as estimated (J) in Tables 2a, 2b, & 2c unless qualified otherwise in this memorandum. Non-detect results were presented as non-detect at the MDL in Tables 2a, 2b, & 2c.

All soil results were reported on a dry weight basis.

12. Conclusion

Based on the assessment detailed in the foregoing, the data summarized in Tables 2a, 2b, & 2c are acceptable with the specific exceptions and qualifications noted herein.

Regards



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Table 1

Sample Collection and Analysis Summary
 Investigation-Derived Waste (IDW) Sampling
 San Jacinto Supplemental Design Investigation
 Channelview, Harris County, Texas
 November 2021 - December 2021

Sample Delivery Group	Sample Identification	Location	Matrix	Initial Sample Depth (ft. bgs.)	Final Sample Depth (ft. bgs.)	Collection Date (mm/dd/yyyy)	Collection Time (hr:min)	Analysis/Parameters													Comments			
								Sulfide	TCLP Metals	Ignitability	Reactive Cyanide/Sulfide	TCLP NOC	TCLP Pesticides	PCB	TCLP Methomyl	TCLP Herbicides	TCLP VOC	TCLP SVOC	TCLP Acrylamide	TCLP PCDDs/PCDFs		Cyanide Total	pH	Paint Filter
21120694	11215131-120121-IDW-SPS-NE DECON	Decon Water Drums	Water	--	--	12/01/2021	15:50											X						MS/MSD
21120694	11215131-120121-IDW-SS-NE	NE Soil Cutting Drums	Soil	--	--	12/01/2021	15:25											X						MS
21120912	11215131-120721-IDW-SS-DECON2	Decon Water Drums	Water	--	--	12/07/2021	14:30											X						MS
21120912	11215131-120721-IDW-SS-SC	SC Soil Cutting Drums	Soil	--	--	12/07/2021	14:20											X						MS
21121101	11215131-120821-IDW-SS-SW	SW Soil Cutting Drums	Soil	--	--	12/08/2021	15:30											X						MS
21122389	11215131-121421-IDW-BN-NC	NC Soil Cutting Drums	Soil	--	--	12/14/2021	11:30											X						MS
21122389	11215131-122021-IDW-SS-PURGE	SS Purge	Water	--	--	12/20/2021	11:15											X						MS/MSD
JD35488	11215131-120121-IDW-SS-NE	NE Soil Cutting Drums	Soil	--	--	12/01/2021	15:30											X	X	X				MS/MSD
JD35488	11215131-120121-IDW-SPS-NE DECON	Decon Water Drums	Water	--	--	12/01/2021	15:50	X	X	X	X							X	X	X				MS/MSD
JD35488	11215131-120721-IDW-SS-DECON2	Decon Water Drums	Water	--	--	12/07/2021	14:20	X	X	X	X							X	X	X				MS/MSD
JD35488	11215131-120721-IDW-SS-SC	SC Soil Cutting Drums	Soil	--	--	12/07/2021	14:20	X	X	X	X							X	X	X				MS/MSD
JD35488	11215131-120821-IDW-SS-SW	SW Soil Cutting Drums	Soil	--	--	12/08/2021	15:30	X	X	X	X							X	X	X				MS/MSD
JD35488	11215131-121421-IDW-BN-NC	NC Soil Cutting Drums	Soil	--	--	12/14/2021	13:30	X	X	X	X							X	X	X				MS/MSD/DUP
JD35488	11215131-122021-IDW-SS-PURGE	SS Purge	Water	--	--	12/20/2021	11:15	X	X	X	X							X	X	X				MS/MSD
JD35488FL	11215131-120121-IDW-SPS-NE DECON	Decon Water Drums	Water	--	--	12/01/2021	15:50																X	MS/MSD
JD35488FL	11215131-120121-IDW-SS-NE	NE Soil Cutting Drums	Water	--	--	12/01/2021	15:25																X	MS/MSD
JD35488FL	11215131-120721-IDW-SS-DECON2	Decon Water Drums	Water	--	--	12/07/2021	14:20																X	MS/MSD
JD35488FL	11215131-120721-IDW-SS-SC	SC Soil Cutting Drums	Soil	--	--	12/07/2021	14:20																X	MS/MSD
JD35488FL	11215131-120821-IDW-SS-SW	SW Soil Cutting Drums	Soil	--	--	12/08/2021	15:30																X	MS/MSD
JD35488FL	11215131-121421-IDW-BN-NC	NC Soil Cutting Drums	Soil	--	--	12/14/2021	13:30																X	MS/MSD
JD35488FL	11215131-122021-IDW-SS-PURGE	SS Purge	Water	--	--	12/20/2021	11:15																X	MS/MSD
JD35488TX	11215131-120121-IDW-SPS-NE DECON	Decon Water Drums	Water	--	--	12/01/2021	15:50																X	MS/MSD
JD35488TX	11215131-120121-IDW-SS-NE	NE Soil Cutting Drums	Water	--	--	12/01/2021	15:25																X	MS/MSD
JD35488TX	11215131-120721-IDW-SS-DECON2	Decon Water Drums	Water	--	--	12/07/2021	14:20																X	MS/MSD
JD35488TX	11215131-120721-IDW-SS-SC	SC Soil Cutting Drums	Soil	--	--	12/07/2021	14:20																X	MS/MSD
JD35488TX	11215131-120821-IDW-SS-SW	SW Soil Cutting Drums	Soil	--	--	12/08/2021	15:30																X	MS/MSD
JD35488TX	11215131-121421-IDW-BN-NC	NC Soil Cutting Drums	Soil	--	--	12/14/2021	13:30																X	MS/MSD
JD35488TX	11215131-122021-IDW-SS-PURGE	SS Purge	Water	--	--	12/20/2021	11:15																X	MS/MSD
B6004	11215131-120121-IDW-SS-NE	NE Soil Cutting Drums	Soil	--	--	12/01/2021	15:25																X	MS/MSD
B6004	11215131-120121-IDW-SPS-NE DECON	Decon Water Drums	Water	--	--	12/01/2021	15:50																X	MS/MSD
B6013	11215131-120721-IDW-SS-SC	SC Soil Cutting Drums	Soil	--	--	12/07/2021	14:20																X	MS/MSD
B6013	11215131-120721-IDW-SS-DECON2	Decon Water Drums	Water	--	--	12/07/2021	14:20																X	MS/MSD
B6081	11215131-120821-IDW-SS-SW	SW Soil Cutting Drums	Soil	--	--	12/08/2021	15:30																X	MS/MSD

Table 1

**Sample Collection and Analysis Summary
Investigation-Derived Waste (IDW) Sampling
San Jacinto Supplemental Design Investigation
Channelview, Harris County, Texas
November 2021 - December 2021**

Analysis/Parameters

Sample Delivery Group	Sample Identification	Location	Matrix	Initial Sample Depth (ft. bgs.)	Final Sample Depth (ft. bgs.)	Collection Date (mm/dd/yyyy)	Collection Time (hr:min)	Sulfide	TCLP Metals	Ignitability	Reactive Cyanide/Sulfide	TCLP NOC	TCLP Pesticides	PCB	TCLP Methomyl	TCLP Herbicides	TCLP VOC	TCLP SVOC	TCLP Acrylamide	TCLP PCDDs/PCDFs	Cyanide Total	pH	Paint Filter	TX TPH	Comments
								X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
B6105	11215131-121421-IDW-BN-NC	NC Soil Cutting Drums	Soil	--	--	12/14/2021	13:30														X				
B6118	11215131-122021-IDW-SS-PURGE	SS Purge	Water	--	--	12/20/2021	11:15														X				
JD35487	11215131-113021-WC-SPS-NE-D1(6-8)	NE-D1	Soil	6	8	11/30/2021	15:25	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	MS/MSD
JD35487	11215131-120121-WC-JC-NE-G4(4-6)	NE-G4	Soil	4	6	12/01/2021	14:30	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	MS/MSD
JD35487	11215131-120221-WC-JC-SW-B4(2-4)	SW-B4	Soil	2	4	12/02/2021	14:20	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
JD35487	11215131-120621-WC-SS-SC-B4(2-4)	SC-B4	Soil	2	4	12/06/2021	08:40	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	MS/MSD
JD35487	11215131-121321-WC-SS-NC-E2(8-10)	NC-E2	Soil	8	10	12/13/2021	14:10	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	MS/MSD
JD35487	11215131-121321-WC-SS-NC-Y2(6-8)	NC-Y2	Soil	6	8	12/13/2021	09:30	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	MS/MSD

Notes:

- ft. bgs. - Feet below ground surface
- DUP - Duplicate
- MS - Matrix Spike
- MS/MSD - Matrix Spike/Matrix Spike Duplicate
- NOC - Nonhalogenated Organic Compounds - 2-Ethoxyethanol, Ethylene glycol, 2-methoxyethanol
- PCB - Polychlorinated biphenyls
- PCDDs - Polychlorinated Dibenzodioxins
- PCDFs - Polychlorinated Dibenzofurans
- SVOC - Semi-volatile Organic Compounds
- TCLP - Toxicity Characteristic Leaching Procedure
- TX TPH - Total Petroleum Hydrocarbons - Texas

Table 2a

Analytical Results Summary
Investigation-Derived Waste (IDW) Sampling
San Jacinto Supplemental Design Investigation
Channelview, Harris County, Texas
December 2021 – January 2022

	Location ID:	Decon Water Drums	NE Soil Cutting Drums	Decon Water Drums	SC Soil Cutting Drums
	Sample Name:	11215131-120121-IDW-SPS-NE DECON	11215131-120121-IDW-SS-NE	11215131-120721-IDW-SS-DECON2	11215131-120721-IDW-SS-SC
	Sample Date:	12/01/2021	12/01/2021	12/07/2021	12/07/2021
Parameters	Unit				
Total Petroleum Hydrocarbons					
Total Petroleum Hydrocarbons (>C12-C28)	mg/kg	--	12 UJ	--	31.6 J
Total Petroleum Hydrocarbons (>C28-C35)	mg/kg	--	12 UJ	--	68.5 J
Total Petroleum Hydrocarbons (C6-C12)	mg/kg	--	17 UJ	--	23 U
Total Petroleum Hydrocarbons (C6-C35)	mg/kg	--	12 UJ	--	100 J
Total Petroleum Hydrocarbons (>C12-C28)	mg/L	2.78	--	1.37 J	--
Total Petroleum Hydrocarbons (>C28-C35)	mg/L	2.05 J	--	0.61 U	--
Total Petroleum Hydrocarbons (C6-C12)	mg/L	0.907 J	--	1.02 J	--
Total Petroleum Hydrocarbons (C6-C35)	mg/L	5.74	--	2.39 J	--
General Chemistry					
Percent solids	%	--	74.4	--	79.4
Ignitability	Deg F	200 U	200 U	200 U	200 U
Reactive cyanide	mg/kg	--	9.2 U	--	9.1 U
Reactive sulfide	mg/kg	--	73 U	--	72 U
Reactive cyanide	mg/L	10 U	--	10 U	--
Reactive sulfide	mg/L	42 U	--	43 U	--

Table 2a

Analytical Results Summary
Investigation-Derived Waste (IDW) Sampling
San Jacinto Supplemental Design Investigation
Channelview, Harris County, Texas
December 2021 – January 2022

	Location ID:	SW Soil Cutting Drums	NC Soil Cutting Drums	SS Purge
	Sample Name:	11215131-120821-IDW-SS-SW	11215131-121421-IDW-BN-NC	11215131-122021-IDW-SS-PURGE
	Sample Date:	12/08/2021	12/14/2021	12/20/2021
Parameters	Unit			
Total Petroleum Hydrocarbons				
Total Petroleum Hydrocarbons (>C12-C28)	mg/kg	7.0 U	13.1 J	--
Total Petroleum Hydrocarbons (>C28-C35)	mg/kg	7.0 U	27.2 J	--
Total Petroleum Hydrocarbons (C6-C12)	mg/kg	9.7 U	12 U	--
Total Petroleum Hydrocarbons (C6-C35)	mg/kg	7.0 U	40.3 J	--
Total Petroleum Hydrocarbons (>C12-C28)	mg/L	--	--	0.56 UJ
Total Petroleum Hydrocarbons (>C28-C35)	mg/L	--	--	0.56 UJ
Total Petroleum Hydrocarbons (C6-C12)	mg/L	--	--	0.73 UJ
Total Petroleum Hydrocarbons (C6-C35)	mg/L	--	--	0.56 UJ
General Chemistry				
Percent solids	%	78.0	76.8	--
Ignitability	Deg F	200 U	200 U	200 U
Reactive cyanide	mg/kg	8.9 U	9.6 UJ	--
Reactive sulfide	mg/kg	70 U	76 UJ	--
Reactive cyanide	mg/L	--	--	10 UJ
Reactive sulfide	mg/L	--	--	43 UJ

Notes:

"--" - Not analyzed

J - Estimated concentration

U - Not detected at the associated reporting limit

UJ - Not detected; associated reporting limit is estimated

Table 2b

**Analytical Results Summary
Waste Characterization (WC)
San Jacinto Supplemental Design Investigation
Channelview, Harris County, Texas
December 2021 – January 2022**

Location ID:	NE-D1	NE-G4	SW-B4
Sample Name:	11215131-113021-WC-SPS-NE-D1(6-8)	11215131-120121-WC-JC-NE-G4(4-6)	11215131-120221-WC-JC-SW-B4(2-4)
Sample Date:	11/30/2021	12/01/2021	12/02/2021
Depth:	6-8 ft BGS	4-6 ft BGS	2-4 ft BGS
Parameters	Unit		
PCBs			
Aroclor-1016 (PCB-1016)	mg/kg	0.023 U	0.020 U
Aroclor-1221 (PCB-1221)	mg/kg	0.031 U	0.027 U
Aroclor-1232 (PCB-1232)	mg/kg	0.032 U	0.027 U
Aroclor-1242 (PCB-1242)	mg/kg	0.020 U	0.018 U
Aroclor-1248 (PCB-1248)	mg/kg	0.044 U	0.038 U
Aroclor-1254 (PCB-1254)	mg/kg	0.027 U	0.0448
Aroclor-1260 (PCB-1260)	mg/kg	0.021 U	0.018 U
General Chemistry			
Moisture content (dry weight)	%	50.6	37.8
Ignitability	Deg F	200 U	200 U
Cyanide (total)	mg/kg	0.23 U	0.19 U
Reactive cyanide	mg/kg	11 U	9.6 U
Reactive sulfide	mg/kg	85 U	81 U
Sulfide	mg/kg	193	16.4
Paint filter	mL/100g	0.25 U	0.25 U
pH corrosivity	s.u.	7.54 J	7.31 J
			7.43 J

**Analytical Results Summary
Waste Characterization (WC)
San Jacinto Supplemental Design Investigation
Channelview, Harris County, Texas
December 2021 – January 2022**

Location ID:	SC-B4	NC-Y2	NC-E2
Sample Name:	11215131-120621-WC-SS-SC-B4(2-4)	11215131-121321-WC-SS-NC-Y2(6-8)	11215131-121321-WC-SS-NC-E2(8-10)
Sample Date:	12/06/2021	12/13/2021	12/13/2021
Depth:	2-4 ft BGS	6-8 ft BGS	8-10 ft BGS
Parameters	Unit		
PCBs			
Aroclor-1016 (PCB-1016)	mg/kg	0.018 U	0.037 U
Aroclor-1221 (PCB-1221)	mg/kg	0.024 U	0.049 U
Aroclor-1232 (PCB-1232)	mg/kg	0.024 U	0.050 U
Aroclor-1242 (PCB-1242)	mg/kg	0.016 U	0.032 U
Aroclor-1248 (PCB-1248)	mg/kg	0.303	0.070 U
Aroclor-1254 (PCB-1254)	mg/kg	0.552	0.042 U
Aroclor-1260 (PCB-1260)	mg/kg	0.210	0.034 U
General Chemistry			
Moisture content (dry weight)	%	22.3	139
Ignitability	Deg F	200 U	200 U
Cyanide (total)	mg/kg	0.17 UJ	0.36 UJ
Reactive cyanide	mg/kg	8.9 UJ	16 U
Reactive sulfide	mg/kg	70 U	130 U
Sulfide	mg/kg	4.3 U	8.5 U
Paint filter	mL/100g	0.25 U	0.25 U
pH corrosivity	s.u.	7.38 J	11.03 J

Notes:

- ft BGS - Feet Below Ground Surface
- J - Estimated concentration
- J- - Estimated concentration; implied low bias
- PCBs - Polychlorinated Biphenyls
- U - Not detected at the associated reporting limit
- UJ - Not detected; associated reporting limit is estimated

Table 2c

Analytical Results Summary
Toxicity Characteristic Leaching Procedure (TCLP)
San Jacinto Supplemental Design Investigation
Channelview, Harris County, Texas
December 2021 – January 2022

Location ID:	NE-D1	NE-G4	Decon Water Drums	NE Soil Cutting Drums	SW-B4
Sample Name:	11215131-113021-WC-SPS-NE-D1(6-8)	11215131-120121-WC-JC-NE-G4(4-6)	11215131-120121-IDW-SPS-NE DECON	11215131-120121-IDW-SS-NE	11215131-120221-WC-JC-SW-B4(2-4)
Sample Date:	11/30/2021	12/01/2021	12/01/2021	12/01/2021	12/02/2021
Depth:	6-8 ft BGS	4-6 ft BGS	--	--	2-4 ft BGS
Parameters	Unit				
Volatile Organic Compounds, TCLP					
1,1,1,2-Tetrachloroethane	mg/L	0.0028 U	0.0028 U	0.0028 U	0.0028 U
1,1,1-Trichloroethane	mg/L	0.0027 U	0.0027 U	0.0027 U	0.0027 U
1,1,2,2-Tetrachloroethane	mg/L	0.0033 U	0.0033 U	0.0033 U	0.0033 U
1,1,2-Trichloroethane	mg/L	0.0027 U	0.0027 U	0.0027 U	0.0027 U
1,1-Dichloroethane	mg/L	0.0030 U	0.0030 U	0.0030 U	0.0030 U
1,2,3-Trichloropropane	mg/L	0.0035 U	0.0035 U	0.0035 U	0.0035 U
1,2-Dibromoethane (Ethylene dibromide)	mg/L	0.0024 U	0.0024 U	0.0024 U	0.0024 U
1,2-Dichloroethane	mg/L	0.0030 U	0.0030 U	0.0030 U	0.0030 U
1,3-Dichloropropene	mg/L	0.0022 U	0.0022 U	0.0022 U	0.0022 U
1,4-Dichlorobenzene	mg/L	0.0025 U	0.0025 U	0.0025 U	0.0025 U
2-Butanone (Methyl ethyl ketone) (MEK)	mg/L	0.034 U	0.034 U	0.034 U	0.034 U
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	mg/L	0.0093 U	0.0093 U	0.0093 U	0.0093 U
Acetone	mg/L	0.030 U	0.030 U	0.177 J+	0.030 U
Acetonitrile	mg/L	0.037 U	0.037 U	0.037 U	0.037 U
Acrylamide	mg/L	--	--	0.013 U	--
Acrylonitrile	mg/L	0.0052 U	0.0052 U	0.0052 U	0.0052 U
Benzene	mg/L	0.0021 U	0.0021 U	0.0021 U	0.0021 U
Bromodichloromethane	mg/L	0.0029 U	0.0029 U	0.0029 U	0.0029 U
Bromoform	mg/L	0.0032 U	0.0032 U	0.0032 U	0.0032 U
Bromomethane (Methyl bromide)	mg/L	0.0082 U	0.0082 U	0.0082 U	0.0082 U
Carbon disulfide	mg/L	0.0048 U	0.0048 U	0.0048 U	0.0048 U
Carbon tetrachloride	mg/L	0.0028 U	0.0028 U	0.0028 U	0.0028 U
Chlorobenzene	mg/L	0.0028 U	0.0028 U	0.0028 U	0.0028 U
Chloroform (Trichloromethane)	mg/L	0.0073 U	0.0109 U	0.0025 U	0.0102 U
Dichlorodifluoromethane (CFC-12)	mg/L	0.0068 U	0.0068 U	0.0068 U	0.0068 U
Ethylbenzene	mg/L	0.0030 U	0.0030 U	0.0030 U	0.0030 U
Hexachlorobutadiene	mg/L	0.0028 U	0.0028 U	0.0028 U	0.0028 U
Isobutanol (isobutyl alcohol)	mg/L	0.061 U	0.061 U	0.061 U	0.061 U
m&p-Xylenes	mg/L	0.0039 U	0.0039 U	0.0039 U	0.0039 U
Methyl acrylonitrile	mg/L	0.0050 U	0.0050 U	0.0050 U	0.0050 U
Methylene chloride	mg/L	0.0024 J	0.00050 U	0.0021 J	0.0016 J
o-Xylene	mg/L	0.0030 U	0.0030 U	0.0030 U	0.0030 U

Table 2c

Analytical Results Summary
Toxicity Characteristic Leaching Procedure (TCLP)
San Jacinto Supplemental Design Investigation
Channelview, Harris County, Texas
December 2021 – January 2022

Location ID:	NE-D1	NE-G4	Decon Water Drums	NE Soil Cutting Drums	SW-B4
Sample Name:	11215131-113021-WC-SPS-NE-D1(6-8)	11215131-120121-WC-JC-NE-G4(4-6)	11215131-120121-IDW-SPS-NE DECON	11215131-120121-IDW-SS-NE	11215131-120221-WC-JC-SW-B4(2-4)
Sample Date:	11/30/2021	12/01/2021	12/01/2021	12/01/2021	12/02/2021
Depth:	6-8 ft BGS	4-6 ft BGS	--	--	2-4 ft BGS
Parameters	Unit				
Volatile Organic Compounds, TCLP (Continued)					
Styrene	mg/L	0.0035 U	0.0035 U	0.0035 U	0.0035 U
Tetrachloroethene	mg/L	0.0045 U	0.0045 U	0.0045 U	0.0045 U
Toluene	mg/L	0.0027 U	0.0027 U	0.0027 U	0.0027 U
trans-1,3-Dichloropropene	mg/L	0.0022 U	0.0022 U	0.0022 U	0.0022 U
Trichloroethene	mg/L	0.0026 U	0.0026 U	0.0026 U	0.0026 U
Trichlorofluoromethane (CFC-11)	mg/L	0.0042 U	0.0042 U	0.0042 U	0.0042 U
Vinyl chloride	mg/L	0.0039 U	0.0039 U	0.0039 U	0.0039 U
Xylenes (total)	mg/L	0.0039 U	0.0039 U	0.0039 U	0.0039 U
Semi-volatile Organic Compounds, TCLP					
1,2,4-Trichlorobenzene	mg/L	--	--	0.0025 U	0.0025 U
1,2-Diphenylhydrazine	mg/L	--	--	0.0019 U	0.0019 U
1,3-Dinitrobenzene	mg/L	--	--	0.015 U	0.015 U
1,4-Dichlorobenzene	mg/L	0.0017 U	0.0017 U	--	0.0017 U
1,4-Dioxane	mg/L	--	--	0.0066 U	0.0066 U
2,3,4,6-Tetrachlorophenol	mg/L	--	--	0.015 U	0.015 U
2,4,5-Trichlorophenol	mg/L	0.013 U	0.013 U	0.013 U	0.013 U
2,4,6-Trichlorophenol	mg/L	0.0092 U	0.0092 U	0.0092 U	0.0092 U
2,4-Dichlorophenol	mg/L	--	--	0.013 U	0.013 U
2,4-Dimethylphenol	mg/L	--	--	0.024 U	0.024 U
2,4-Dinitrophenol	mg/L	--	--	0.016 U	0.016 U
2,4-Dinitrotoluene	mg/L	0.0055 U	0.0055 U	0.0055 U	0.0055 U
2,6-Dinitrotoluene	mg/L	--	--	0.0048 U	0.0048 U
2-Chlorophenol	mg/L	--	--	0.0082 U	0.0082 U
2-Methylphenol	mg/L	0.0089 U	0.0089 U	0.0089 U	0.0089 U
3&4-Methylphenol	mg/L	0.0088 U	0.0088 U	0.0088 U	0.0088 U
3,3'-Dichlorobenzidine	mg/L	--	--	0.0051 U	0.0051 U
4-Chloro-3-methylphenol	mg/L	--	--	0.0089 U	0.0089 U
Acenaphthene	mg/L	--	--	0.0019 U	0.0019 U
Acetophenone	mg/L	--	--	0.0021 U	0.0021 U
Aniline	mg/L	--	--	R	0.0032 U
Anthracene	mg/L	--	--	0.0021 U	0.0021 U

Table 2c

Analytical Results Summary
Toxicity Characteristic Leaching Procedure (TCLP)
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Channelview, Harris County, Texas
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Location ID:	NE-D1	NE-G4	Decon Water Drums	NE Soil Cutting Drums	SW-B4
Sample Name:	11215131-113021-WC-SPS-NE-D1(6-8)	11215131-120121-WC-JC-NE-G4(4-6)	11215131-120121-IDW-SPS-NE DECON	11215131-120121-IDW-SS-NE	11215131-120221-WC-JC-SW-B4(2-4)
Sample Date:	11/30/2021	12/01/2021	12/01/2021	12/01/2021	12/02/2021
Depth:	6-8 ft BGS	4-6 ft BGS	--	--	2-4 ft BGS

Parameters	Unit				
Semi-volatile Organic Compounds, TCLP (Continued)					
Benzidine	mg/L	--	--	R	R
bis(2-Chloroethyl)ether	mg/L	--	--	0.0025 U	0.0025 U
bis(2-Ethylhexyl)phthalate (DEHP)	mg/L	--	--	0.017 U	0.017 U
Butyl benzylphthalate (BBP)	mg/L	--	--	0.0046 U	0.0046 U
Diethyl phthalate	mg/L	--	--	0.0026 U	0.0026 U
Dimethoate	mg/L	--	--	0.0024 U	0.0024 U
Dimethyl phthalate	mg/L	--	--	0.0022 U	0.0022 U
Diphenylamine	mg/L	--	--	0.0058 U	0.0058 U
Disulfoton	mg/L	--	--	0.0047 U	0.0047 U
Ethyl parathion	mg/L	--	--	0.0051 U	0.0051 U
Fluoranthene	mg/L	--	--	0.0017 U	0.0017 U
Fluorene	mg/L	--	--	0.0017 U	0.0017 U
Hexachlorobenzene	mg/L	0.0033 U	0.0033 U	0.0033 U	0.0033 U
Hexachlorobutadiene	mg/L	0.0049 U	0.0049 U	--	0.0049 U
Hexachlorocyclopentadiene	mg/L	--	--	0.028 U	0.028 U
Hexachloroethane	mg/L	0.0039 U	0.0039 U	0.0039 U	0.0039 U
Hexachlorophene (HCP)	mg/L	--	--	0.50 U	0.50 U
Isophorone	mg/L	--	--	0.0028 U	0.0028 U
Methyl parathion	mg/L	--	--	0.0040 U	0.0040 U
N-Nitrosodi-n-butylamine	mg/L	--	--	0.0060 U	0.0060 U
N-Nitrosodi-n-propylamine	mg/L	--	--	0.0048 U	0.0048 U
N-Nitrosodimethylamine	mg/L	--	--	0.0082 U	0.0082 U
N-Nitrosomethylethylamine	mg/L	--	--	0.014 U	0.014 U
N-Nitrosopyrrolidine	mg/L	--	--	0.0073 U	0.0073 U
Nitrobenzene	mg/L	0.0064 U	0.0064 U	0.0064 U	0.0064 U
p-Phenylenediamine	mg/L	--	--	0.0020 U	0.0020 U
Pentachlorobenzene	mg/L	--	--	0.0024 U	0.0024 U
Pentachloronitrobenzene	mg/L	--	--	0.023 U	0.023 U
Pentachlorophenol	mg/L	0.014 U	0.014 U	0.014 U	0.014 U
Phenol	mg/L	--	--	0.0039 U	0.0039 U
Pronamide	mg/L	--	--	0.0025 U	0.0025 U
Pyrene	mg/L	--	--	0.0022 U	0.0022 U

Table 2c

**Analytical Results Summary
Toxicity Characteristic Leaching Procedure (TCLP)
San Jacinto Supplemental Design Investigation
Channelview, Harris County, Texas
December 2021 – January 2022**

Location ID:	NE-D1	NE-G4	Decon Water Drums	NE Soil Cutting Drums	SW-B4
Sample Name:	11215131-113021-WC-SPS-NE-D1(6-8)	11215131-120121-WC-JC-NE-G4(4-6)	11215131-120121-IDW-SPS-NE DECON	11215131-120121-IDW-SS-NE	11215131-120221-WC-JC-SW-B4(2-4)
Sample Date:	11/30/2021	12/01/2021	12/01/2021	12/01/2021	12/02/2021
Depth:	6-8 ft BGS	4-6 ft BGS	--	--	2-4 ft BGS
Parameters	Unit				
Semi-volatile Organic Compounds, TCLP (Continued)					
Pyridine	mg/L	0.0039 U	0.0039 U	0.0039 U	0.0039 U
Total cresol (reported not calculated)	mg/L	--	--	--	--
Herbicides, TCLP					
2,4,5-TP (Silvex)	mg/L	0.00020 U	0.00020 U	0.00039 J	0.00020 U
2,4-Dichlorophenoxyacetic acid (2,4-D)	mg/L	0.00098 U	0.00098 U	0.00098 U	0.00098 U
Dinoseb	mg/L	0.0013 U	0.0013 U	0.0013 U	0.0013 U
Pesticides, TCLP					
4,4'-DDD	mg/L	0.000038 U	0.000038 U	0.000038 U	0.000038 U
4,4'-DDE	mg/L	0.000034 U	0.000034 U	0.000034 U	0.000034 U
4,4'-DDT	mg/L	0.000046 U	0.000046 U	0.000046 U	0.000046 U
Chlordane, technical	mg/L	--	0.0014 U	0.0014 U	0.0014 U
Dieldrin	mg/L	0.000051 U	0.000051 U	0.000051 U	0.000051 U
Endosulfan I	mg/L	0.000035 U	0.000035 U	0.000035 U	0.000035 U
Endosulfan II	mg/L	0.000033 U	0.000033 U	0.000033 U	0.000033 U
Endrin	mg/L	0.000040 U	0.000040 U	0.000040 U	0.000040 U
gamma-BHC (lindane)	mg/L	0.000040 U	0.000040 U	0.000040 U	0.000040 U
Heptachlor	mg/L	0.000030 U	0.000030 U	0.000030 U	0.000030 U
Heptachlor epoxide	mg/L	0.000040 U	0.000040 U	0.000040 U	0.000040 U
Methomyl	mg/L	--	--	0.01 U	--
Methoxychlor	mg/L	0.000045 U	0.000045 U	0.000045 U	0.000045 U
Mirex	mg/L	0.000031 U	0.000031 U	0.000031 U	0.000031 U
Toxaphene	mg/L	0.0011 U	0.0011 U	0.0011 U	0.0011 U
Metals, TCLP					
Antimony	mg/L	0.0053 J	0.016 J	0.0047 U	0.0053
Arsenic	mg/L	0.014 J	0.011 J	0.0042	0.012
Barium	mg/L	1.1	0.98	0.057	1.2
Beryllium	mg/L	0.00050 U	0.00050 U	0.00050 U	0.00050 U
Cadmium	mg/L	0.0010 U	0.0023 J	0.0010 U	0.0026
Chromium	mg/L	0.0020 U	0.0068 J	0.0020 U	0.0087 J

Table 2c

Analytical Results Summary
Toxicity Characteristic Leaching Procedure (TCLP)
San Jacinto Supplemental Design Investigation
Channelview, Harris County, Texas
December 2021 – January 2022

Location ID:	NE-D1	NE-G4	Decon Water Drums	NE Soil Cutting Drums	SW-B4	
Sample Name:	11215131-113021-WC-SPS-NE-D1(6-8)	11215131-120121-WC-JC-NE-G4(4-6)	11215131-120121-IDW-SPS-NE DECON	11215131-120121-IDW-SS-NE	11215131-120221-WC-JC-SW-B4(2-4)	
Sample Date:	11/30/2021	12/01/2021	12/01/2021	12/01/2021	12/02/2021	
Depth:	6-8 ft BGS	4-6 ft BGS	--	--	2-4 ft BGS	
Parameters	Unit					
Metals, TCLP (Continued)						
Lead	mg/L	0.0052 J	0.013 J	0.0026	0.0093	0.011 J
Mercury	mg/L	0.00037	0.000095 U	0.000095 U	0.000095 U	0.000095 U
Nickel	mg/L	0.067	0.086	0.0045	0.050	0.035
Selenium	mg/L	0.0049 U	0.0049 U	0.0049 U	0.0049 U	0.0049 U
Silver	mg/L	0.0056 J	0.0069 J	0.0019 U	0.0049	0.0072 J
Vanadium	mg/L	0.0018 U	0.0062 J	0.0030	0.0029	0.011 J
Nonhalogenated Organic Compounds - TCLP						
2-Ethoxyethanol	mg/L	--	--	1.0 U	1.0 U	--
Ethylene glycol	mg/L	--	--	5.2 U	4.8 U	--
Ethylene glycol monomethyl ether (2-methoxyethanol)	mg/L	--	--	1.0 U	1.0 U	--
Dioxins/Furans, TCLP						
1,2,3,4,6,7,8,9-Octachlorodibenzofuran (OCDF)	pg/L	--	--	11.1 J	4.86 J	--
1,2,3,4,6,7,8,9-Octachlorodibenzo-p-dioxin (OCDD)	pg/L	--	--	153	25.9 U	--
1,2,3,4,6,7,8-Heptachlorodibenzofuran (HpCDF)	pg/L	--	--	2.75 U	1.47 U	--
1,2,3,4,6,7,8-Heptachlorodibenzo-p-dioxin (HpCDD)	pg/L	--	--	7.89 J	2.23 J	--
1,2,3,4,7,8-Heptachlorodibenzofuran (HpCDF)	pg/L	--	--	1.43 U	1.01 U	--
1,2,3,4,7,8-Hexachlorodibenzofuran (HxCDF)	pg/L	--	--	0.859 U	1.06 U	--
1,2,3,4,7,8-Hexachlorodibenzo-p-dioxin (HxCDD)	pg/L	--	--	1.04 U	1.3 U	--
1,2,3,6,7,8-Hexachlorodibenzofuran (HxCDF)	pg/L	--	--	0.811 U	1.08 U	--
1,2,3,6,7,8-Hexachlorodibenzo-p-dioxin (HxCDD)	pg/L	--	--	1.05 U	1.26 U	--
1,2,3,7,8,9-Hexachlorodibenzofuran (HxCDF)	pg/L	--	--	0.838 U	1.07 U	--
1,2,3,7,8,9-Hexachlorodibenzo-p-dioxin (HxCDD)	pg/L	--	--	0.969 U	1.33 J	--
1,2,3,7,8-Pentachlorodibenzofuran (PeCDF)	pg/L	--	--	0.919 U	1.25 U	--
1,2,3,7,8-Pentachlorodibenzo-p-dioxin (PeCDD)	pg/L	--	--	1.42 U	2.31 U	--
2,3,4,6,7,8-Hexachlorodibenzofuran (HxCDF)	pg/L	--	--	0.84 U	1.03 U	--
2,3,4,7,8-Pentachlorodibenzofuran (PeCDF)	pg/L	--	--	0.945 U	1.32 U	--
2,3,7,8-Tetrachlorodibenzofuran (TCDF)	pg/L	--	--	6.57 J	9.8	--
2,3,7,8-Tetrachlorodibenzo-p-dioxin (TCDD)	pg/L	--	--	2.9 J	1.43 U	--
Total heptachlorodibenzofuran (HpCDF)	pg/L	--	--	5.71 J	1.32 J	--
Total heptachlorodibenzo-p-dioxin (HpCDD)	pg/L	--	--	16.8 J	4.84 J	--

Table 2c

**Analytical Results Summary
Toxicity Characteristic Leaching Procedure (TCLP)
San Jacinto Supplemental Design Investigation
Channelview, Harris County, Texas
December 2021 – January 2022**

Location ID:	NE-D1	NE-G4	Decon Water Drums	NE Soil Cutting Drums	SW-B4	
Sample Name:	11215131-113021-WC-SPS-NE-D1(6-8)	11215131-120121-WC-JC-NE-G4(4-6)	11215131-120121-IDW-SPS-NE DECON	11215131-120121-IDW-SS-NE	11215131-120221-WC-JC-SW-B4(2-4)	
Sample Date:	11/30/2021	12/01/2021	12/01/2021	12/01/2021	12/02/2021	
Depth:	6-8 ft BGS	4-6 ft BGS	--	--	2-4 ft BGS	
Parameters	Unit					
Dioxins/Furans, TCLP (Continued)						
Total hexachlorodibenzofuran (HxCDF)	pg/L	--	--	0.835 U	1.06 U	--
Total hexachlorodibenzo-p-dioxin (HxCDD)	pg/L	--	--	1.69 J	1.33 J	--
Total pentachlorodibenzofuran (PeCDF)	pg/L	--	--	0.932 U	1.29 U	--
Total pentachlorodibenzo-p-dioxin (PeCDD)	pg/L	--	--	1.42 U	2.31 U	--
Total tetrachlorodibenzofuran (TCDF)	pg/L	--	--	10.4 J	15.8 J	--
Total tetrachlorodibenzo-p-dioxin (TCDD)	pg/L	--	--	2.9 J	1.43 U	--
Total WHO Dioxin TEQ						
Total WHO Dioxin TEQ(Human/Mammal)(ND=0)	pg/L	--	--	3.69 J	1.14 J	--
Total WHO Dioxin TEQ(Human/Mammal)(ND=0.5)	pg/L	--	--	4.89 J	3.58 J	--

Table 2c

**Analytical Results Summary
Toxicity Characteristic Leaching Procedure (TCLP)
San Jacinto Supplemental Design Investigation
Channelview, Harris County, Texas
December 2021 – January 2022**

	Location ID:	SC-B4	Decon Water Drums	SC Soil Cutting Drums	SW Soil Cutting Drums
	Sample Name:	11215131-120621-WC-SS-SC-B4(2-4)	11215131-120721-IDW-SS-DECON2	11215131-120721-IDW-SS-SC	11215131-120821-IDW-SS-SW
	Sample Date:	12/06/2021	12/07/2021	12/07/2021	12/08/2021
	Depth:	2-4 ft BGS	--	--	--
Parameters	Unit				
Volatile Organic Compounds, TCLP					
1,1,1,2-Tetrachloroethane	mg/L	0.0028 U	0.0028 U	0.0028 U	0.0028 U
1,1,1-Trichloroethane	mg/L	0.0027 U	0.0027 U	0.0027 U	0.0027 U
1,1,2,2-Tetrachloroethane	mg/L	0.0033 U	0.0033 U	0.0033 U	0.0033 U
1,1,2-Trichloroethane	mg/L	0.0027 U	0.0027 U	0.0027 U	0.0027 U
1,1-Dichloroethane	mg/L	0.0030 U	0.0030 U	0.0030 U	0.0030 U
1,2,3-Trichloropropane	mg/L	0.0035 U	0.0035 U	0.0035 U	0.0035 U
1,2-Dibromoethane (Ethylene dibromide)	mg/L	0.0024 U	0.0024 U	0.0024 U	0.0024 U
1,2-Dichloroethane	mg/L	0.0030 U	0.0030 U	0.0030 U	0.0030 U
1,3-Dichloropropene	mg/L	0.0022 U	0.0022 U	0.0022 U	0.0022 U
1,4-Dichlorobenzene	mg/L	0.0025 U	0.0025 U	0.0025 U	0.0025 U
2-Butanone (Methyl ethyl ketone) (MEK)	mg/L	0.034 U	0.034 U	0.034 U	0.034 U
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	mg/L	0.0093 U	0.0093 U	0.0093 U	0.0093 U
Acetone	mg/L	0.030 U	0.0564	0.030 U	0.030 U
Acetonitrile	mg/L	0.037 U	0.037 U	0.037 U	0.037 U
Acrylamide	mg/L	--	0.013 U	0.013 U	0.013 U
Acrylonitrile	mg/L	0.0052 U	0.0345 J	0.0052 U	0.0052 U
Benzene	mg/L	0.0021 U	0.0021 U	0.0021 U	0.0021 U
Bromodichloromethane	mg/L	0.0029 U	0.0029 U	0.0029 U	0.0029 U
Bromoform	mg/L	0.0032 U	0.0032 U	0.0032 U	0.0032 U
Bromomethane (Methyl bromide)	mg/L	0.0082 U	0.0082 U	0.0082 U	0.0082 U
Carbon disulfide	mg/L	0.0048 U	0.0048 U	0.0048 U	0.0048 U
Carbon tetrachloride	mg/L	0.0028 U	0.0028 U	0.0028 U	0.0028 U
Chlorobenzene	mg/L	0.0028 U	0.0028 U	0.0028 U	0.0028 U
Chloroform (Trichloromethane)	mg/L	0.0084 U	0.0025 U	0.0058 U	0.0070 U
Dichlorodifluoromethane (CFC-12)	mg/L	0.0068 U	0.0068 U	0.0068 U	0.0068 U
Ethylbenzene	mg/L	0.0030 U	0.0030 U	0.0030 U	0.0030 U
Hexachlorobutadiene	mg/L	0.0028 U	0.0028 U	0.0028 U	0.0028 U
Isobutanol (isobutyl alcohol)	mg/L	0.061 U	0.061 U	0.061 U	0.061 U
m&p-Xylenes	mg/L	0.0039 U	0.0039 U	0.0039 U	0.0039 U
Methyl acrylonitrile	mg/L	0.0050 U	0.0050 U	0.0050 U	0.0050 U
Methylene chloride	mg/L	0.00050 U	0.00050 U	0.00050 U	0.00050 U
o-Xylene	mg/L	0.0030 U	0.0030 U	0.0030 U	0.0030 U

Table 2c

Analytical Results Summary
Toxicity Characteristic Leaching Procedure (TCLP)
San Jacinto Supplemental Design Investigation
Channelview, Harris County, Texas
December 2021 – January 2022

Location ID:	SC-B4	Decon Water Drums	SC Soil Cutting Drums	SW Soil Cutting Drums
Sample Name:	11215131-120621-WC-SS-SC-B4(2-4)	11215131-120721-IDW-SS-DECON2	11215131-120721-IDW-SS-SC	11215131-120821-IDW-SS-SW
Sample Date:	12/06/2021	12/07/2021	12/07/2021	12/08/2021
Depth:	2-4 ft BGS	--	--	--
Parameters	Unit			
Volatile Organic Compounds, TCLP (Continued)				
Styrene	mg/L	0.0035 U	0.0035 U	0.0035 U
Tetrachloroethene	mg/L	0.0045 U	0.0045 U	0.0045 U
Toluene	mg/L	0.0027 U	0.0043 J	0.0027 U
trans-1,3-Dichloropropene	mg/L	0.0022 U	0.0022 U	0.0022 U
Trichloroethene	mg/L	0.0026 U	0.0026 U	0.0026 U
Trichlorofluoromethane (CFC-11)	mg/L	0.0042 U	0.0042 U	0.0042 U
Vinyl chloride	mg/L	0.0039 U	0.0039 U	0.0039 U
Xylenes (total)	mg/L	0.0039 U	0.0039 U	0.0039 U
Semi-volatile Organic Compounds, TCLP				
1,2,4-Trichlorobenzene	mg/L	--	0.0025 U	0.0025 U
1,2-Diphenylhydrazine	mg/L	--	0.0019 U	0.0019 U
1,3-Dinitrobenzene	mg/L	--	0.015 U	0.015 U
1,4-Dichlorobenzene	mg/L	0.0017 U	--	--
1,4-Dioxane	mg/L	--	0.0066 U	0.0066 U
2,3,4,6-Tetrachlorophenol	mg/L	--	0.015 U	0.015 U
2,4,5-Trichlorophenol	mg/L	0.013 U	0.013 U	0.013 U
2,4,6-Trichlorophenol	mg/L	0.0092 U	0.0092 U	0.0092 U
2,4-Dichlorophenol	mg/L	--	0.013 U	0.013 U
2,4-Dimethylphenol	mg/L	--	0.024 U	0.024 U
2,4-Dinitrophenol	mg/L	--	0.016 U	0.016 U
2,4-Dinitrotoluene	mg/L	0.0055 U	0.0055 U	0.0055 U
2,6-Dinitrotoluene	mg/L	--	0.0048 U	0.0048 U
2-Chlorophenol	mg/L	--	0.0082 U	0.0082 U
2-Methylphenol	mg/L	0.0089 U	0.0089 U	0.0089 U
3&4-Methylphenol	mg/L	0.0088 U	0.0088 U	0.0088 U
3,3'-Dichlorobenzidine	mg/L	--	0.0051 U	0.0051 U
4-Chloro-3-methylphenol	mg/L	--	0.0089 U	0.0089 U
Acenaphthene	mg/L	--	0.0019 U	0.0019 U
Acetophenone	mg/L	--	0.0021 U	0.0021 U
Aniline	mg/L	--	0.0032 U	0.0032 U
Anthracene	mg/L	--	0.0021 U	0.0021 U

Table 2c

Analytical Results Summary
Toxicity Characteristic Leaching Procedure (TCLP)
San Jacinto Supplemental Design Investigation
Channelview, Harris County, Texas
December 2021 – January 2022

	Location ID:	SC-B4	Decon Water Drums	SC Soil Cutting Drums	SW Soil Cutting Drums
	Sample Name:	11215131-120621-WC-SS-SC-B4(2-4)	11215131-120721-IDW-SS-DECON2	11215131-120721-IDW-SS-SC	11215131-120821-IDW-SS-SW
	Sample Date:	12/06/2021	12/07/2021	12/07/2021	12/08/2021
	Depth:	2-4 ft BGS	--	--	--
Parameters	Unit				
Semi-volatile Organic Compounds, TCLP (Continued)					
Benzidine	mg/L	--	R	R	R
bis(2-Chloroethyl)ether	mg/L	--	0.0025 U	0.0025 U	0.0025 U
bis(2-Ethylhexyl)phthalate (DEHP)	mg/L	--	0.017 U	0.017 U	0.017 U
Butyl benzylphthalate (BBP)	mg/L	--	0.0046 U	0.0046 U	0.0046 U
Diethyl phthalate	mg/L	--	0.0026 U	0.0026 U	0.0026 U
Dimethoate	mg/L	--	0.0024 U	0.0024 U	0.0024 U
Dimethyl phthalate	mg/L	--	0.0022 U	0.0022 U	0.0022 U
Diphenylamine	mg/L	--	0.0058 U	0.0058 U	0.0058 U
Disulfoton	mg/L	--	0.0047 U	0.0047 U	0.0047 U
Ethyl parathion	mg/L	--	0.0051 U	0.0051 U	0.0051 U
Fluoranthene	mg/L	--	0.0017 U	0.0017 U	0.0017 U
Fluorene	mg/L	--	0.0017 U	0.0017 U	0.0017 U
Hexachlorobenzene	mg/L	0.0033 U	0.0033 U	0.0033 U	0.0033 U
Hexachlorobutadiene	mg/L	0.0049 U	--	--	--
Hexachlorocyclopentadiene	mg/L	--	0.028 U	0.028 U	0.028 U
Hexachloroethane	mg/L	0.0039 U	0.0039 U	0.0039 U	0.0039 U
Hexachlorophene (HCP)	mg/L	--	0.50 U	0.50 U	0.50 U
Isophorone	mg/L	--	0.0028 U	0.0028 U	0.0028 U
Methyl parathion	mg/L	--	0.0040 U	0.0040 U	0.0040 U
N-Nitrosodi-n-butylamine	mg/L	--	0.0060 U	0.0060 U	0.0060 U
N-Nitrosodi-n-propylamine	mg/L	--	0.0048 U	0.0048 U	0.0048 U
N-Nitrosodimethylamine	mg/L	--	0.0082 U	0.0082 U	0.0082 U
N-Nitrosomethylethylamine	mg/L	--	0.014 U	0.014 U	0.014 U
N-Nitrosopyrrolidine	mg/L	--	0.0073 U	0.0073 U	0.0073 U
Nitrobenzene	mg/L	0.0064 U	0.0064 U	0.0064 U	0.0064 U
p-Phenylenediamine	mg/L	--	0.0020 U	0.0020 U	0.0020 U
Pentachlorobenzene	mg/L	--	0.0024 U	0.0024 U	0.0024 U
Pentachloronitrobenzene	mg/L	--	0.023 U	0.023 U	0.023 U
Pentachlorophenol	mg/L	0.014 U	0.014 U	0.014 U	0.014 U
Phenol	mg/L	--	0.0039 U	0.0039 U	0.0039 U
Pronamide	mg/L	--	0.0025 U	0.0025 U	0.0025 U
Pyrene	mg/L	--	0.0022 U	0.0022 U	0.0022 U

Table 2c

Analytical Results Summary
Toxicity Characteristic Leaching Procedure (TCLP)
San Jacinto Supplemental Design Investigation
Channelview, Harris County, Texas
December 2021 – January 2022

Location ID:	SC-B4	Decon Water Drums	SC Soil Cutting Drums	SW Soil Cutting Drums
Sample Name:	11215131-120621-WC-SS-SC-B4(2-4)	11215131-120721-IDW-SS-DECON2	11215131-120721-IDW-SS-SC	11215131-120821-IDW-SS-SW
Sample Date:	12/06/2021	12/07/2021	12/07/2021	12/08/2021
Depth:	2-4 ft BGS	--	--	--
Parameters	Unit			
Semi-volatile Organic Compounds, TCLP (Continued)				
Pyridine	mg/L	R	0.0039 U	0.0039 U
Total cresol (reported not calculated)	mg/L	--	--	--
Herbicides, TCLP				
2,4,5-TP (Silvex)	mg/L	0.00020 U	0.00020 U	0.00020 U
2,4-Dichlorophenoxyacetic acid (2,4-D)	mg/L	0.00098 U	0.00098 U	0.00098 U
Dinoseb	mg/L	0.0013 U	0.0013 U	0.0013 U
Pesticides, TCLP				
4,4'-DDD	mg/L	0.000038 U	0.000038 U	0.000038 U
4,4'-DDE	mg/L	0.000034 U	0.000034 U	0.000034 U
4,4'-DDT	mg/L	0.000046 U	0.000046 U	0.000046 U
Chlordane, technical	mg/L	0.0014 U	0.0014 U	0.0014 U
Dieldrin	mg/L	0.000051 U	0.000051 U	0.000051 U
Endosulfan I	mg/L	0.000035 U	0.000035 U	0.000035 U
Endosulfan II	mg/L	0.000033 U	0.000033 UJ	0.000033 UJ
Endrin	mg/L	0.000040 U	0.000040 U	0.000040 U
gamma-BHC (lindane)	mg/L	0.000040 U	0.000040 U	0.000040 U
Heptachlor	mg/L	0.000030 U	0.000030 U	0.000030 U
Heptachlor epoxide	mg/L	0.000040 U	0.000040 U	0.000040 U
Methomyl	mg/L	--	0.025 UJ	0.025 U
Methoxychlor	mg/L	0.000045 U	0.000045 U	0.000045 U
Mirex	mg/L	0.000031 U	0.000031 U	0.000031 U
Toxaphene	mg/L	0.0011 U	0.0011 U	0.0011 U
Metals, TCLP				
Antimony	mg/L	0.0052 J	0.0047 U	0.0047 U
Arsenic	mg/L	0.0028 U	0.0028 U	0.0028 U
Barium	mg/L	1.2	0.10	0.60
Beryllium	mg/L	0.00050 U	0.00050 U	0.00050 U
Cadmium	mg/L	0.010	0.0010 U	0.0043
Chromium	mg/L	0.0032 J	0.0020 U	0.0020 U

Table 2c

Analytical Results Summary
Toxicity Characteristic Leaching Procedure (TCLP)
San Jacinto Supplemental Design Investigation
Channelview, Harris County, Texas
December 2021 – January 2022

	Location ID:	SC-B4	Decon Water Drums	SC Soil Cutting Drums	SW Soil Cutting Drums
	Sample Name:	11215131-120621-WC-SS-SC-B4(2-4)	11215131-120721-IDW-SS-DECON2	11215131-120721-IDW-SS-SC	11215131-120821-IDW-SS-SW
	Sample Date:	12/06/2021	12/07/2021	12/07/2021	12/08/2021
	Depth:	2-4 ft BGS	--	--	--
Parameters	Unit				
Metals, TCLP (Continued)					
Lead	mg/L	0.0018 U	0.0018 U	0.0018 U	0.0018 U
Mercury	mg/L	0.00011 J	0.000095 U	0.000095 U	0.000095 U
Nickel	mg/L	0.032	0.0035	0.044	0.018
Selenium	mg/L	0.0070 J	0.0049 U	0.0055	0.0065
Silver	mg/L	0.0034 J	0.0019 U	0.0019 U	0.0019 U
Vanadium	mg/L	0.0018 U	0.0018 U	0.011	0.0055
Nonhalogenated Organic Compounds - TCLP					
2-Ethoxyethanol	mg/L	--	--	--	--
Ethylene glycol	mg/L	--	--	--	--
Ethylene glycol monomethyl ether (2-methoxyethanol)	mg/L	--	--	--	--
Dioxins/Furans, TCLP					
1,2,3,4,6,7,8,9-Octachlorodibenzofuran (OCDF)	pg/L	--	5.84 U	4.43 U	10.7 U
1,2,3,4,6,7,8,9-Octachlorodibenzo-p-dioxin (OCDD)	pg/L	--	8.17 U	11.1 U	11.5 U
1,2,3,4,6,7,8-Heptachlorodibenzofuran (HpCDF)	pg/L	--	1.62 J	3.03 J	4.36 U
1,2,3,4,6,7,8-Heptachlorodibenzo-p-dioxin (HpCDD)	pg/L	--	2.06 U	3.93 J	5.96 U
1,2,3,4,7,8-Heptachlorodibenzofuran (HpCDF)	pg/L	--	1.66 U	2.17 U	4.95 U
1,2,3,4,7,8-Hexachlorodibenzofuran (HxCDF)	pg/L	--	1.04 U	1.97 J	5.04 U
1,2,3,4,7,8-Hexachlorodibenzo-p-dioxin (HxCDD)	pg/L	--	1.52 U	2.53 U	7.01 U
1,2,3,6,7,8-Hexachlorodibenzofuran (HxCDF)	pg/L	--	0.994 U	2.34 J	5.25 U
1,2,3,6,7,8-Hexachlorodibenzo-p-dioxin (HxCDD)	pg/L	--	1.36 U	2.21 U	6.34 U
1,2,3,7,8,9-Hexachlorodibenzofuran (HxCDF)	pg/L	--	1.13 U	1.94 J	6.28 U
1,2,3,7,8,9-Hexachlorodibenzo-p-dioxin (HxCDD)	pg/L	--	1.39 U	2.76 J	6.63 U
1,2,3,7,8-Pentachlorodibenzofuran (PeCDF)	pg/L	--	0.902 U	2.57 J	6.3 U
1,2,3,7,8-Pentachlorodibenzo-p-dioxin (PeCDD)	pg/L	--	1.39 U	1.59 U	7.3 U
2,3,4,6,7,8-Hexachlorodibenzofuran (HxCDF)	pg/L	--	1.24 U	2.05 J	5.82 U
2,3,4,7,8-Pentachlorodibenzofuran (PeCDF)	pg/L	--	0.92 U	2.03 J	6.27 U
2,3,7,8-Tetrachlorodibenzofuran (TCDF)	pg/L	--	6.55 J	3.83 J	52.1
2,3,7,8-Tetrachlorodibenzo-p-dioxin (TCDD)	pg/L	--	2.09 U	2.48 U	14.2 J
Total heptachlorodibenzofuran (HpCDF)	pg/L	--	1.62 J	3.03 J	4.64 U
Total heptachlorodibenzo-p-dioxin (HpCDD)	pg/L	--	2.06 U	3.93 J	5.96 U

Table 2c

**Analytical Results Summary
Toxicity Characteristic Leaching Procedure (TCLP)
San Jacinto Supplemental Design Investigation
Channelview, Harris County, Texas
December 2021 – January 2022**

	Location ID:	SC-B4	Decon Water Drums	SC Soil Cutting Drums	SW Soil Cutting Drums
	Sample Name:	11215131-120621-WC-SS-SC-B4(2-4)	11215131-120721-IDW-SS-DECON2	11215131-120721-IDW-SS-SC	11215131-120821-IDW-SS-SW
	Sample Date:	12/06/2021	12/07/2021	12/07/2021	12/08/2021
	Depth:	2-4 ft BGS	--	--	--
Parameters	Unit				
Dioxins/Furans, TCLP (Continued)					
Total hexachlorodibenzofuran (HxCDF)	pg/L	--	1.09 U	12.8 J	5.56 U
Total hexachlorodibenzo-p-dioxin (HxCDD)	pg/L	--	1.42 U	2.76 J	6.65 U
Total pentachlorodibenzofuran (PeCDF)	pg/L	--	0.911 U	4.6 J	6.29 U
Total pentachlorodibenzo-p-dioxin (PeCDD)	pg/L	--	1.39 U	1.59 U	7.3 U
Total tetrachlorodibenzofuran (TCDF)	pg/L	--	10.2 J	6.48 J	77 J
Total tetrachlorodibenzo-p-dioxin (TCDD)	pg/L	--	2.09 U	2.48 U	14.2 J
Total WHO Dioxin TEQ					
Total WHO Dioxin TEQ(Human/Mammal)(ND=0)	pg/L	--	0.671 J	2.25 J	19.4 J
Total WHO Dioxin TEQ(Human/Mammal)(ND=0.5)	pg/L	--	3.02 J	4.53 J	26.3 J

Table 2c

**Analytical Results Summary
Toxicity Characteristic Leaching Procedure (TCLP)
San Jacinto Supplemental Design Investigation
Channelview, Harris County, Texas
December 2021 – January 2022**

	Location ID:	NC-Y2	NC-E2	NC Soil Cutting Drums	SS Purge
	Sample Name:	11215131-121321-WC-SS-NC-Y2(6-8)	11215131-121321-WC-SS-NC-E2(8-10)	11215131-121421-IDW-BN-NC	11215131-122021-IDW-SS-PURGE
	Sample Date:	12/13/2021	12/13/2021	12/14/2021	12/20/2021
	Depth:	6-8 ft BGS	8-10 ft BGS	--	--
Parameters	Unit				
Volatile Organic Compounds, TCLP					
1,1,1,2-Tetrachloroethane	mg/L	0.0028 U	0.0028 U	0.0028 U	0.0028 U
1,1,1-Trichloroethane	mg/L	0.0027 U	0.0027 U	0.0027 U	0.0027 U
1,1,2,2-Tetrachloroethane	mg/L	0.0033 U	0.0033 U	0.0033 U	0.0033 U
1,1,2-Trichloroethane	mg/L	0.0027 U	0.0027 U	0.0027 U	0.0027 U
1,1-Dichloroethane	mg/L	0.0030 U	0.0030 U	0.0030 U	0.0030 U
1,2,3-Trichloropropane	mg/L	0.0035 U	0.0035 U	0.0035 U	0.0035 U
1,2-Dibromoethane (Ethylene dibromide)	mg/L	0.0024 U	0.0024 U	0.0024 U	0.0024 U
1,2-Dichloroethane	mg/L	0.0030 U	0.0030 U	0.0030 U	0.0030 U
1,3-Dichloropropene	mg/L	0.0022 U	0.0022 U	0.0022 U	0.0022 U
1,4-Dichlorobenzene	mg/L	0.0025 U	0.0025 U	0.0025 U	0.0025 U
2-Butanone (Methyl ethyl ketone) (MEK)	mg/L	0.034 U	0.034 U	0.034 U	0.034 U
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	mg/L	0.0093 U	0.0093 U	0.0093 U	0.0093 U
Acetone	mg/L	0.030 U	0.030 U	0.030 U	0.030 U
Acetonitrile	mg/L	0.037 U	0.037 U	0.037 U	0.037 U
Acrylamide	mg/L	--	--	0.013 UJ	0.013 U
Acrylonitrile	mg/L	0.0052 U	0.0052 U	R	0.0052 U
Benzene	mg/L	0.0021 U	0.0021 U	0.0052	0.0021 U
Bromodichloromethane	mg/L	0.0029 U	0.0029 U	0.0029 U	0.0029 U
Bromoform	mg/L	0.0032 U	0.0032 U	0.0032 U	0.0032 U
Bromomethane (Methyl bromide)	mg/L	0.0082 U	0.0082 U	0.0082 U	0.0082 UJ
Carbon disulfide	mg/L	0.0048 U	0.0048 U	0.0048 U	0.0048 U
Carbon tetrachloride	mg/L	0.0028 U	0.0028 U	0.0028 U	0.0028 U
Chlorobenzene	mg/L	0.0028 U	0.0028 U	0.0028 U	0.0028 U
Chloroform (Trichloromethane)	mg/L	0.0102 U	0.0095 U	0.0080 U	0.0025 U
Dichlorodifluoromethane (CFC-12)	mg/L	0.0068 U	0.0068 U	0.0068 U	0.0068 U
Ethylbenzene	mg/L	0.0030 U	0.0030 U	0.0044 J	0.0030 U
Hexachlorobutadiene	mg/L	0.0028 U	0.0028 U	0.0028 U	0.0028 U
Isobutanol (isobutyl alcohol)	mg/L	0.061 U	0.061 U	0.061 U	0.061 U
m&p-Xylenes	mg/L	0.0039 U	0.0039 U	0.0168	0.0039 U
Methyl acrylonitrile	mg/L	0.0050 U	0.0050 U	0.0050 U	0.0050 U
Methylene chloride	mg/L	0.00050 U	0.00050 U	0.00050 U	0.00050 U
o-Xylene	mg/L	0.0030 U	0.0030 U	0.0070	0.0030 U

Table 2c

Analytical Results Summary
Toxicity Characteristic Leaching Procedure (TCLP)
San Jacinto Supplemental Design Investigation
Channelview, Harris County, Texas
December 2021 – January 2022

Location ID:	NC-Y2	NC-E2	NC Soil Cutting Drums	SS Purge
Sample Name:	11215131-121321-WC-SS-NC-Y2(6-8)	11215131-121321-WC-SS-NC-E2(8-10)	11215131-121421-IDW-BN-NC	11215131-122021-IDW-SS-PURGE
Sample Date:	12/13/2021	12/13/2021	12/14/2021	12/20/2021
Depth:	6-8 ft BGS	8-10 ft BGS	--	--
Parameters	Unit			
Volatile Organic Compounds, TCLP (Continued)				
Styrene	mg/L	0.0035 U	0.0035 U	0.0035 U
Tetrachloroethene	mg/L	0.0045 U	0.0045 U	0.0045 U
Toluene	mg/L	0.0027 U	0.0027 U	0.0279
trans-1,3-Dichloropropene	mg/L	0.0022 U	0.0022 U	0.0022 U
Trichloroethene	mg/L	0.0026 U	0.0026 U	0.0026 U
Trichlorofluoromethane (CFC-11)	mg/L	0.0042 U	0.0042 U	0.0042 U
Vinyl chloride	mg/L	0.0039 U	0.0039 U	0.0039 U
Xylenes (total)	mg/L	0.0039 U	0.0039 U	0.0238
Semi-volatile Organic Compounds, TCLP				
1,2,4-Trichlorobenzene	mg/L	--	--	0.0025 U
1,2-Diphenylhydrazine	mg/L	--	--	0.0019 U
1,3-Dinitrobenzene	mg/L	--	--	0.015 U
1,4-Dichlorobenzene	mg/L	0.0017 U	0.0017 U	--
1,4-Dioxane	mg/L	--	--	0.0066 U
2,3,4,6-Tetrachlorophenol	mg/L	--	--	0.015 U
2,4,5-Trichlorophenol	mg/L	0.013 U	0.013 U	0.013 U
2,4,6-Trichlorophenol	mg/L	0.0092 U	0.0092 U	0.0092 U
2,4-Dichlorophenol	mg/L	--	--	0.013 UJ
2,4-Dimethylphenol	mg/L	--	--	0.024 UJ
2,4-Dinitrophenol	mg/L	--	--	0.016 U
2,4-Dinitrotoluene	mg/L	0.0055 U	0.0055 U	0.0055 U
2,6-Dinitrotoluene	mg/L	--	--	0.0048 U
2-Chlorophenol	mg/L	--	--	0.0082 UJ
2-Methylphenol	mg/L	0.0089 U	0.0089 U	0.0089 U
3&4-Methylphenol	mg/L	0.0088 U	0.0088 U	0.0088 U
3,3'-Dichlorobenzidine	mg/L	--	--	0.0051 U
4-Chloro-3-methylphenol	mg/L	--	--	0.0089 UJ
Acenaphthene	mg/L	--	--	0.0019 U
Acetophenone	mg/L	--	--	0.0021 UJ
Aniline	mg/L	--	--	0.0032 U
Anthracene	mg/L	--	--	0.0021 U

Table 2c

Analytical Results Summary
Toxicity Characteristic Leaching Procedure (TCLP)
San Jacinto Supplemental Design Investigation
Channelview, Harris County, Texas
December 2021 – January 2022

Location ID:	NC-Y2	NC-E2	NC Soil Cutting Drums	SS Purge
Sample Name:	11215131-121321-WC-SS-NC-Y2(6-8)	11215131-121321-WC-SS-NC-E2(8-10)	11215131-121421-IDW-BN-NC	11215131-122021-IDW-SS-PURGE
Sample Date:	12/13/2021	12/13/2021	12/14/2021	12/20/2021
Depth:	6-8 ft BGS	8-10 ft BGS	--	--
Parameters	Unit			
Semi-volatile Organic Compounds, TCLP (Continued)				
Benzidine	mg/L	--	--	R
bis(2-Chloroethyl)ether	mg/L	--	--	0.0025 U
bis(2-Ethylhexyl)phthalate (DEHP)	mg/L	--	--	0.017 U
Butyl benzylphthalate (BBP)	mg/L	--	--	0.0046 U
Diethyl phthalate	mg/L	--	--	0.0026 U
Dimethoate	mg/L	--	--	0.0024 U
Dimethyl phthalate	mg/L	--	--	0.0022 U
Diphenylamine	mg/L	--	--	0.0058 U
Disulfoton	mg/L	--	--	0.0047 U
Ethyl parathion	mg/L	--	--	0.0051 U
Fluoranthene	mg/L	--	--	0.0017 U
Fluorene	mg/L	--	--	0.0017 U
Hexachlorobenzene	mg/L	0.0033 U	0.0033 U	0.0033 U
Hexachlorobutadiene	mg/L	0.0049 U	0.0049 U	--
Hexachlorocyclopentadiene	mg/L	--	--	0.028 U
Hexachloroethane	mg/L	0.0039 U	0.0039 U	0.0039 U
Hexachlorophene (HCP)	mg/L	--	--	0.50 U
Isophorone	mg/L	--	--	0.0028 UJ
Methyl parathion	mg/L	--	--	0.0040 U
N-Nitrosodi-n-butylamine	mg/L	--	--	0.0060 U
N-Nitrosodi-n-propylamine	mg/L	--	--	0.0048 U
N-Nitrosodimethylamine	mg/L	--	--	0.0082 U
N-Nitrosomethylethylamine	mg/L	--	--	0.014 U
N-Nitrosopyrrolidine	mg/L	--	--	0.0073 U
Nitrobenzene	mg/L	0.0064 U	0.0064 U	0.0064 U
p-Phenylenediamine	mg/L	--	--	0.0020 U
Pentachlorobenzene	mg/L	--	--	0.0024 U
Pentachloronitrobenzene	mg/L	--	--	0.023 U
Pentachlorophenol	mg/L	0.014 U	0.014 U	0.014 U
Phenol	mg/L	--	--	0.0039 U
Pronamide	mg/L	--	--	0.0025 U
Pyrene	mg/L	--	--	0.0023 J

Table 2c

**Analytical Results Summary
Toxicity Characteristic Leaching Procedure (TCLP)
San Jacinto Supplemental Design Investigation
Channelview, Harris County, Texas
December 2021 – January 2022**

Location ID:	NC-Y2	NC-E2	NC Soil Cutting Drums	SS Purge
Sample Name:	11215131-121321-WC-SS-NC-Y2(6-8)	11215131-121321-WC-SS-NC-E2(8-10)	11215131-121421-IDW-BN-NC	11215131-122021-IDW-SS-PURGE
Sample Date:	12/13/2021	12/13/2021	12/14/2021	12/20/2021
Depth:	6-8 ft BGS	8-10 ft BGS	--	--
Parameters	Unit			
Semi-volatile Organic Compounds, TCLP (Continued)				
Pyridine	mg/L	0.0039 U	0.0039 U	0.0039 U
Total cresol (reported not calculated)	mg/L	--	0.0088 U	--
Herbicides, TCLP				
2,4,5-TP (Silvex)	mg/L	0.00020 U	0.00020 U	0.00020 U
2,4-Dichlorophenoxyacetic acid (2,4-D)	mg/L	0.00098 U	0.00098 U	0.00098 U
Dinoseb	mg/L	0.0013 U	0.0013 U	0.0013 U
Pesticides, TCLP				
4,4'-DDD	mg/L	0.000038 U	0.000038 U	0.000038 U
4,4'-DDE	mg/L	0.000034 U	0.000034 U	0.000034 U
4,4'-DDT	mg/L	0.000046 U	0.000046 U	0.000046 U
Chlordane, technical	mg/L	0.0014 U	0.0014 U	0.0014 U
Dieldrin	mg/L	0.000051 U	0.000051 U	0.000051 U
Endosulfan I	mg/L	0.000035 U	0.000035 U	0.000035 U
Endosulfan II	mg/L	0.000033 U	0.000033 U	0.000033 U
Endrin	mg/L	0.000040 U	0.000040 U	0.000040 U
gamma-BHC (lindane)	mg/L	0.000040 U	0.000040 U	0.000040 U
Heptachlor	mg/L	0.000030 U	0.000030 U	0.000030 U
Heptachlor epoxide	mg/L	0.000040 U	0.000040 U	0.000040 U
Methomyl	mg/L	--	0.05 U	0.05 U
Methoxychlor	mg/L	0.000045 U	0.000045 U	0.000045 U
Mirex	mg/L	0.000031 U	0.000031 U	0.000031 U
Toxaphene	mg/L	0.0011 U	0.0011 U	0.0011 U
Metals, TCLP				
Antimony	mg/L	0.046 J	0.0047 U	0.0047 U
Arsenic	mg/L	0.0028 U	0.034 J	0.0028 U
Barium	mg/L	0.31	2.7	0.40
Beryllium	mg/L	0.010 U	0.0023	0.00050 U
Cadmium	mg/L	0.0076	0.016	0.0011
Chromium	mg/L	0.095	0.0020 U	0.0020 U

Table 2c

**Analytical Results Summary
Toxicity Characteristic Leaching Procedure (TCLP)
San Jacinto Supplemental Design Investigation
Channelview, Harris County, Texas
December 2021 – January 2022**

	Location ID:	NC-Y2	NC-E2	NC Soil Cutting Drums	SS Purge
	Sample Name:	11215131-121321-WC-SS-NC-Y2(6-8)	11215131-121321-WC-SS-NC-E2(8-10)	11215131-121421-IDW-BN-NC	11215131-122021-IDW-SS-PURGE
	Sample Date:	12/13/2021	12/13/2021	12/14/2021	12/20/2021
	Depth:	6-8 ft BGS	8-10 ft BGS	--	--
Parameters	Unit				
Metals, TCLP (Continued)					
Lead	mg/L	0.0018 U	0.27	0.0053	0.0040
Mercury	mg/L	0.000095 U	0.000095 U	0.000095 U	0.000095 U
Nickel	mg/L	0.067	0.099	0.020	0.0022
Selenium	mg/L	0.042 J	0.0049 U	0.0049 U	0.0049 U
Silver	mg/L	0.013	0.0019 U	0.0019 U	0.0040
Vanadium	mg/L	0.015 J	0.040 J	0.0018 U	0.0018 U
Nonhalogenated Organic Compounds - TCLP					
2-Ethoxyethanol	mg/L	--	--	1.0 U	1.0 U
Ethylene glycol	mg/L	--	--	24.1	12.7
Ethylene glycol monomethyl ether (2-methoxyethanol)	mg/L	--	--	1.0 U	1.0 U
Dioxins/Furans, TCLP					
1,2,3,4,6,7,8,9-Octachlorodibenzofuran (OCDF)	pg/L	--	--	86.5	5.06 U
1,2,3,4,6,7,8,9-Octachlorodibenzo-p-dioxin (OCDD)	pg/L	--	--	199	39.9 J
1,2,3,4,6,7,8-Heptachlorodibenzofuran (HpCDF)	pg/L	--	--	8.32 J	8.31 U
1,2,3,4,6,7,8-Heptachlorodibenzo-p-dioxin (HpCDD)	pg/L	--	--	14.2 J	3.74 U
1,2,3,4,7,8-Heptachlorodibenzofuran (HpCDF)	pg/L	--	--	3.98 U	2.72 U
1,2,3,4,7,8-Hexachlorodibenzofuran (HxCDF)	pg/L	--	--	3.43 U	2.64 U
1,2,3,4,7,8-Hexachlorodibenzo-p-dioxin (HxCDD)	pg/L	--	--	4.52 U	3.25 U
1,2,3,6,7,8-Hexachlorodibenzofuran (HxCDF)	pg/L	--	--	2.99 U	2.79 U
1,2,3,6,7,8-Hexachlorodibenzo-p-dioxin (HxCDD)	pg/L	--	--	4.93 U	3.21 U
1,2,3,7,8,9-Hexachlorodibenzofuran (HxCDF)	pg/L	--	--	4.26 U	3.53 U
1,2,3,7,8,9-Hexachlorodibenzo-p-dioxin (HxCDD)	pg/L	--	--	5.16 U	3.04 U
1,2,3,7,8-Pentachlorodibenzofuran (PeCDF)	pg/L	--	--	3.35 U	3.26 U
1,2,3,7,8-Pentachlorodibenzo-p-dioxin (PeCDD)	pg/L	--	--	3.87 U	2.88 U
2,3,4,6,7,8-Hexachlorodibenzofuran (HxCDF)	pg/L	--	--	3.01 U	4.49 U
2,3,4,7,8-Pentachlorodibenzofuran (PeCDF)	pg/L	--	--	3.67 U	3.42 U
2,3,7,8-Tetrachlorodibenzofuran (TCDF)	pg/L	--	--	58.2	77.2 U
2,3,7,8-Tetrachlorodibenzo-p-dioxin (TCDD)	pg/L	--	--	13.4	21.6 U
Total heptachlorodibenzofuran (HpCDF)	pg/L	--	--	15.1 J	5.55 J
Total heptachlorodibenzo-p-dioxin (HpCDD)	pg/L	--	--	35.7 J	3.74 U

Table 2c

**Analytical Results Summary
Toxicity Characteristic Leaching Procedure (TCLP)
San Jacinto Supplemental Design Investigation
Channelview, Harris County, Texas
December 2021 – January 2022**

	NC-Y2	NC-E2	NC Soil Cutting Drums	SS Purge	
Location ID:					
Sample Name:	11215131-121321-WC-SS-NC-Y2(6-8)	11215131-121321-WC-SS-NC-E2(8-10)	11215131-121421-IDW-BN-NC	11215131-122021-IDW-SS-PURGE	
Sample Date:	12/13/2021	12/13/2021	12/14/2021	12/20/2021	
Depth:	6-8 ft BGS	8-10 ft BGS	--	--	
Parameters	Unit				
Dioxins/Furans, TCLP (Continued)					
Total hexachlorodibenzofuran (HxCDF)	pg/L	--	--	3.35 U	3.22 U
Total hexachlorodibenzo-p-dioxin (HxCDD)	pg/L	--	--	4.87 U	3.16 U
Total pentachlorodibenzofuran (PeCDF)	pg/L	--	--	3.51 U	3.34 U
Total pentachlorodibenzo-p-dioxin (PeCDD)	pg/L	--	--	3.87 U	2.88 U
Total tetrachlorodibenzofuran (TCDF)	pg/L	--	--	86.3 J	126 J
Total tetrachlorodibenzo-p-dioxin (TCDD)	pg/L	--	--	13.4 J	21.6 J
Total WHO Dioxin TEQ					
Total WHO Dioxin TEQ(Human/Mammal)(ND=0)	pg/L	--	--	19.5 J	0.012 J
Total WHO Dioxin TEQ(Human/Mammal)(ND=0.5)	pg/L	--	--	23.5 J	17.9 J

Notes:

- "--" - Not analyzed
- ft BGS - Feet Below Ground Surface
- J - Estimated concentration
- J+ Estimated concentration; implied high bias
- R - Rejected
- TCLP - Toxicity Characteristic Leaching Procedure
- U - Not detected at the associated reporting limit
- UJ - Not detected; associated reporting limit is estimated
- WHO - World Health Organization
- TEQ - Toxic Equivalent

Table 3

Analytical Methods
Investigation-Derived Waste (IDW) Sampling
San Jacinto Supplemental Design Investigation
Channelview, Harris County, Texas
November 2021 - December 2021

Parameter	Method	Matrix	Preservation	Holding Time	
				Collection to Extraction (Days)	Collection or Extraction to Analysis (Days)
Volatile Organic Compounds - TCLP	SW-846 8260B	Leachate	Iced, 0-6° C	-	14
Semi-Volatile Organic Compounds - TCLP	SW-846 8270D	Leachate	Iced, 0-6° C	7	40
Total Petroleum Hydrocarbons	TX1005	Soil	Iced, 0-6° C	14	40
Polychlorinated Biphenyls	SW-846 8082A	Soil	Iced, 0-6° C	14	40
Nonhalogenated Organic Compounds - TCLP 2-Ethoxyethanol, Ethylene Glycol, 2-Methoxyethanol	SW-846 8015	Leachate	Iced, 0-6° C	14	7
Methomyl - TCLP	SW-846 8141	Leachate	Iced, 0-6° C	14	7
Acrylamide - TCLP	SW-846 8316	Leachate	Iced, 0-6° C	14	7
Organochlorine Pesticides - TCLP	SW-846 8081B	Leachate	Iced, 0-6° C	7	40
Chlorinated Herbicides - TCLP	SW-846 8151A	Leachate	Iced, 0-6° C	7	40
Metals - TCLP	SW-846 6010B	Leachate	Iced, 0-6° C	-	180

Table 3

Analytical Methods
Investigation-Derived Waste (IDW) Sampling
San Jacinto Supplemental Design Investigation
Channelview, Harris County, Texas
November 2021 - December 2021

Parameter	Method	Matrix	Preservation	Holding Time	
				Collection to Extraction (Days)	Collection or Extraction to Analysis (Days)
Mercury - TCLP	SW-846 7470A	Leachate	Iced, 0-6° C	-	28
Cyanide Total	SW-846 9012	Water	pH > 12 and Iced, 0-6° C	-	14
pH corrosivity	SW-846 9045	Water	Iced, 0-6° C	-	15 minutes
Sulfide	SM 4500 S2	Water	pH > 9 and Iced, 0-6° C	-	7
Reactive Cyanide	SW-846 7.3.3.2	Soil	Iced, 0-6° C	-	14
Reactive Sulfide	SW-846 7.3.4.2	Soil	Iced, 0-6° C	-	14
Moisture	SM 2540 G	Soil	Iced, 0-6° C	-	7
Ignitability	SW-846 7.1.2	Soil	Iced, 0-6° C	-	28
Paint Filter	SW-846 9095	Soil	Iced, 0-6° C	-	7
Volatile Leaching Procedure	SW-846 1311	Soil	Iced, 0-6° C	14	7

Table 3

Analytical Methods
Investigation-Derived Waste (IDW) Sampling
San Jacinto Supplemental Design Investigation
Channelview, Harris County, Texas
November 2021 - December 2021

Parameter	Method	Matrix	Preservation	Holding Time	
				Collection to Extraction (Days)	Collection or Extraction to Analysis (Days)
Non-volatile Leaching Procedure	SW-846 1311	Soil	Iced, 0-6° C	14	7
PCDDs/PCDFs - TCLP	EPA 1613B	Leachate	Iced, 0-6° C	365	365

Notes:

- PCDDs - Polychlorinated Dibenzodioxins
PCDFs - Polychlorinated Dibenzofurans
TCLP - Toxicity Characteristic Leaching Procedure

Method References:

- EPA - U.S. Environmental Protection Agency. Analytical Methodology (October 1994)
SM - "Standard Methods for the Examination of Water and Wastewater", 18th Edition, 1992, with subsequent revisions
SW-846 - "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", SW-846, Third Edition, 1986, with subsequent revisions
TX1005 - Method 1005 - Total Petroleum Hydrocarbons, Revision 03, June 1, 2001, Austin, TX

Table 4

**Qualified Sample Results Due to Holding Time Exceedance
Investigation-Derived Waste (IDW) Sampling
San Jacinto Supplemental Design Investigation
Channelview, Harris County, Texas
November 2021 - December 2021**

Parameter	Sample ID	Holding Time (days)	Holding Time Criteria (days)	Analyte	Qualified Sample Results	Units
Petroleum Products	11215131-120121-IDW-SS-NE	15	14	Total Petroleum Hydrocarbons (>C12-C28)	12 UJ	mg/kg
				Total Petroleum Hydrocarbons (>C28-C35)	12 UJ	mg/kg
				Total Petroleum Hydrocarbons (C6-C12)	17 UJ	mg/kg
				Total Petroleum Hydrocarbons (C6-C35)	12 UJ	mg/kg
Petroleum Products	11215131-122021-IDW-SS-PURGE	15	14	Total Petroleum Hydrocarbons (>C12-C28)	0.56 UJ	mg/L
				Total Petroleum Hydrocarbons (>C28-C35)	0.56 UJ	mg/L
				Total Petroleum Hydrocarbons (C6-C12)	0.73 UJ	mg/L
				Total Petroleum Hydrocarbons (C6-C35)	0.56 UJ	mg/L
VOC - TCLP	11215131-121421-IDW-BN-NC	27	14	Acrylamide	0.013 UJ	mg/L
General Chemistry	11215131-121421-IDW-BN-NC	16	14	Reactive cyanide	9.6 UJ	mg/kg
		16	14	Reactive sulfide	76 UJ	mg/kg
General Chemistry	11215131-122021-IDW-SS-PURGE	17	14	Reactive cyanide	10 UJ	mg/L
		10	7	Reactive sulfide	43 UJ	mg/L

Table 4

**Qualified Sample Results Due to Holding Time Exceedance
Investigation-Derived Waste (IDW) Sampling
San Jacinto Supplemental Design Investigation
Channelview, Harris County, Texas
November 2021 - December 2021**

Parameter	Sample ID	Holding Time (days)	Holding Time Criteria (days)	Analyte	Qualified Sample Results	Units
General Chemistry	11215131-113021-WC-SPS-NE-D1(6-8)	3	15 minutes	pH	7.54 J	s.u.
	11215131-120121-WC-JC-NE-G4(4-6)	5	15 minutes		7.31 J	s.u.
	11215131-120221-WC-JC-SW-B4(2-4)	4	15 minutes		7.43 J	s.u.
	11215131-120621-WC-SS-SC-B4(2-4)	3	15 minutes		7.38 J	s.u.
	11215131-121321-WC-SS-NC-Y2(6-8)	2	15 minutes		11.03 J	s.u.
	11215131-121321-WC-SS-NC-E2(8-10)	4	15 minutes		7.02 J	s.u.

Notes:

- J - Estimated concentration
- TCLP - Toxicity Characteristic Leaching Procedure
- UJ - Not detected; associated reporting limit is estimated
- VOC - Volatile Organic Compounds

Table 5

Qualified Sample Results Due to Analyte Concentrations in the Method/TCLP Leachate Blanks
Investigation-Derived Waste (IDW) Sampling
San Jacinto Supplemental Design Investigation
Channelview, Harris County, Texas
November 2021 - December 2021

Parameter	Analyte	Analysis Date (mm/dd/yyyy)	Blank Result	Sample ID	Original Result	Qualified Result	Units
VOC - TCLP	Chloroform	12/28/2021	0.0106	11215131-121421-IDW-BN-NC	0.0080	0.0080 U	mg/L
VOC - TCLP	Chloroform	12/09/2021	0.0094	11215131-120121-IDW-SS-NE	0.0102	0.0102 U	mg/L
VOC - TCLP	Chloroform	12/15/2021	0.0162	11215131-120121-IDW-SPS-NE DECON	0.0028J J	0.0025 U	mg/L
VOC - TCLP	Chloroform	12/15/2021	0.0075	11215131-120721-IDW-SS-SC	0.0058	0.0058 U	mg/L
VOC - TCLP	Chloroform	12/15/2021	0.0068	11215131-120821-IDW-SS-SW	0.0070	0.0070 U	mg/L
Glycols - TCLP	Ethylene glycol	12/15/2021	3.3	11215131-120121-IDW-SS-NE	4.8 J	4.8 U	mg/L
				11215131-120121-IDW-SPS-NE DECON	5.2 J	5.2 U	mg/L
VOC - TCLP	Chloroform	12/15/2021	0.0084	11215131-120621-WC-SS-SC-B4(2-4)	0.0068	0.0084 U	mg/L
VOC - TCLP	Chloroform	12/28/2021	0.0099	11215131-121321-WC-SS-NC-Y2(6-8)	0.0102	0.0102 U	mg/L
VOC - TCLP	Chloroform	12/28/2021	0.0097	11215131-121321-WC-SS-NC-E2(8-10)	0.0079	0.0095 U	mg/L
VOC - TCLP	Chloroform	12/09/2021	0.0073	11215131-113021-WC-SPS-NE-D1(6-8)	0.0068	0.0073 U	mg/L

Table 5

**Qualified Sample Results Due to Analyte Concentrations in the Method/TCLP Leachate Blanks
Investigation-Derived Waste (IDW) Sampling
San Jacinto Supplemental Design Investigation
Channelview, Harris County, Texas
November 2021 - December 2021**

Parameter	Analyte	Analysis Date (mm/dd/yyyy)	Blank Result	Sample ID	Original Result	Qualified Result	Units
VOC - TCLP	Chloroform	12/09/2021	0.0094	11215131-120121-WC-JC-NE-G4(4-6)	0.0109	0.0109 U	mg/L
				11215131-120221-WC-JC-SW-B4(2-4)	0.0108	0.0108 U	mg/L
Dioxins/Furans - TCLP	1,2,3,4,6,7,8,9-Octachlorodibenzo-p-dioxin (OCDD)	12/08/2021	17.8J	11215131-120121-IDW-SS-NE	25.9 J	25.9 U	pg/L
	1,2,3,4,6,7,8-Heptachlorodibenzofuran (HpCDF)	12/08/2021	1.47J	11215131-120121-IDW-SS-NE	1.32 J	1.47 U	pg/L
	1,2,3,4,6,7,8-Heptachlorodibenzofuran (HpCDF)	12/23/2021	8.31J	11215131-122021-IDW-SS-PURGE	5.55 J	8.31 U	pg/L
	2,3,7,8-Tetrachlorodibenzofuran (TCDF)	12/23/2021	23.8	11215131-122021-IDW-SS-PURGE	77.2	77.2 U	pg/L
	2,3,7,8-Tetrachlorodibenzo-p-dioxin (TCDD)	12/23/2021	11.1	11215131-122021-IDW-SS-PURGE	21.6	21.6 U	pg/L
Dioxins/Furans	1,2,3,4,6,7,8-Heptachlorodibenzofuran (HpCDF)	12/13/2021	1.13J	11215131-120121-IDW-SPS-NE DECON	2.75 J	2.75 U	pg/L

Notes:

- J - Estimated concentration
- TCLP - Toxicity Characteristic Leaching Procedure
- U - Not detected at the associated reporting limit
- VOC - Volatile Organic Compounds

Table 6

Qualified Sample Data Due to Outlying of Surrogate Recoveries
Investigation-Derived Waste (IDW) Sampling
San Jacinto Supplemental Design Investigation
Channelview, Harris County, Texas
November 2021 - December 2021

Parameter	Sample ID	Surrogate	Surrogate	<u>Control Limits</u>	Analyte	Qualified Result	Units
			% Recovery	% Recovery			
Methomyl - TCLP	11215131-120721-IDW-SS-SC	4-Chloro-3-Nitro-Benzene	43.4	50-130	Methomyl	0.01 UJ	mg/L
	11215131-120721-IDW-SS-DECON2	4-Chloro-3-Nitro-Benzene	47.6	50-130	Methomyl	0.025 UJ	mg/L

Notes:

TCLP - Toxicity Characteristic Leaching Procedure

UJ - Not detected; associated reporting limit is estimated

Table 7

**Qualified Sample Results Due to Outlying LCS/LCSD Results
Investigation-Derived Waste (IDW) Sampling
San Jacinto Supplemental Design Investigation
Channelview, Harris County, Texas
November 2021 - December 2021**

Parameter	Analyte	LCS Date (mm/dd/yyyy)	LCS % Recovery	LCSD % Recovery	RPD (percent)	Control Limits		Associated Sample ID	Qualified Result	Units
						% Recovery	RPD			
VOC - TCLP	Acetone	12/15/2021	172	--	--	44-157	--	11215131-120121-IDW-SS-NE DECON	0.177 J+	mg/L
VOC - TCLP	Acrylonitrile	12/28/2021	6	--	--	54-135	--	11215131-121421-IDW-BN-NC	R	
VOC - TCLP	Bromomethane	12/28/2021	36	--	--	44-150	--	11215131-122021-IDW-SS-PURGE	0.0082 UJ	mg/L
SVOC - TCLP	Benzidine	12/11/2021	9	--	--	10-56	--	11215131-120121-IDW-SS-NE	R	
	Dimethoate		54	--	--	58-114	--		0.0024 UJ	mg/L
SVOC - TCLP	Benzidine	12/16/2021	0	--	--	50-150	--	11215131-120121-IDW-SS-NE DECON	R	
SVOC - TCLP	Benzidine	12/16/2021	0	--	--	10-150	--	11215131-120721-IDW-SS-SC	R	
								11215131-120721-IDW-SS-DECON2	R	
								11215131-120821-IDW-SS-SW	R	
SVOC - TCLP	2,4-Dichlorophenol	12/28/2021	38	76	65	45-111	31	11215131-121421-IDW-BN-NC	0.013 UJ	mg/L
	2,4-Dimethylphenol		35	66	61	39-124	30		0.024 UJ	mg/L
	2-Chlorophenol		32	65	67	33-102	34		0.0082 UJ	mg/L
	4-Chloro-3-methylphenol		38	71	61	46-113	28		0.0089 UJ	mg/L
	Acetophenone		43	82	62	44-110	30		0.0021 UJ	mg/L
	Benzidine		0	0	NC	10-56	63		R	
	Isophorone		46	89	64	47-119	28		0.0028 UJ	mg/L
	Pyrene		55	101	60	51-113	28		0.0023 J	mg/L
SVOC - TCLP	Benzidine	12/29/2021	0	--	--	10-56	--	11215131-122021-IDW-SS-PURGE	R	

Table 7

**Qualified Sample Results Due to Outlying LCS/LCSD Results
Investigation-Derived Waste (IDW) Sampling
San Jacinto Supplemental Design Investigation
Channelview, Harris County, Texas
November 2021 - December 2021**

Parameter	Analyte	LCS Date (mm/dd/yyyy)	LCS % Recovery	LCSD % Recovery	RPD (percent)	Control Limits		Associated Sample ID	Qualified Result	Units
						% Recovery	RPD			
Pesticides - TCLP	Endosulfan II	12/17/2021	35	--	--	42-159	--	11215131-120121-IDW-SS-NE	0.000033 UJ	mg/L
								11215131-120721-IDW-SS-SC	0.000033 UJ	mg/L
								11215131-120721-IDW-SS-DECON2	0.000033 UJ	mg/L
								11215131-120821-IDW-SS-SW	0.000033 UJ	mg/L
General Chemistry	Reactive cyanide	12/15/2021	50.5	--	--	0.25-27	--	11215131-120621-WC-SS-SC-B4(2-4)	8.9 UJ	mg/kg
General Chemistry	Cyanide (total)	12/20/2021	74	--	--	90-110	--	11215131-121321-WC-SS-NC-Y2(6-8)	0.36 UJ	mg/kg
			87	--	--	90-110	--	11215131-121321-WC-SS-NC-E2(8-10)	0.19 UJ	mg/kg

Notes:

- "--" - Not Applicable
- J - Estimated concentration
- J+ - Estimated concentration; implied high bias
- LCS - Laboratory Control Sample
- LCSD - Laboratory Control Sample Duplicate
- NC - Not calculable
- R - Rejected
- RPD - Relative Percent Difference
- SVOC - Semi-volatile Organic Compounds
- TCLP - Toxicity Characteristic Leaching Procedure
- UJ - Not detected; associated reporting limit is estimated
- VOC - Volatile Organic Compounds

Table 8

**Qualified Sample Results Due to Outlying MS/MSD Results
Investigation-Derived Waste (IDW) Sampling
San Jacinto Supplemental Design Investigation
Channelview, Harris County, Texas
November 2021 - December 2021**

Parameter	Sample ID	Analyte	MS	MSD	RPD	Control Limits		Qualified Result	Units
			% Recovery	% Recovery		% Recovery	RPD		
SVOC - TCLP	11215131-120621-WC-SS-SC-B4(2-4)	Pyridine	23	8	95	10-94	49	R	
SVOC - TCLP	11215131-120121-IDW-SS-NE DECON	Aniline	0	24	200	10-118	53	R	
		Benzidine	0	0	NC	10-84	53	R	
VOC - TCLP	11215131-122021-IDW-SS-PURGE	Bromomethane	36	42	13	44-150	18	0.0082 UJ	mg/L

Notes:

- MS - Matrix Spike
- MSD - Matrix Spike Duplicate
- R - Rejected
- RPD - Relative Percent Difference
- SVOC - Semi-volatile Organic Compounds
- TCLP - Toxicity Characteristic Leaching Procedure
- UJ - Not detected; associated reporting limit is estimated
- VOC - Volatile Organic Compounds

Table 9

Qualified Sample Data Due to Outlying Matrix Spike Recoveries
Investigation-Derived Waste (IDW) Sampling
San Jacinto Supplemental Design Investigation
Channelview, Harris County, Texas
November 2021 - December 2021

Parameter	Spiked Sample ID	Analyte	MS	<u>Control Limits</u>	Associated Sample IDs	Qualified	Units
			% Recovery	% Recovery		Result	
General Chemistry	11215131-120221-WC-JC-SW-B4(2-4)	Cyanide (total)	65.7	75-125%	11215131-120221-WC-JC-SW-B4(2-4)	0.17 J-	mg/kg
General Chemistry	11215131-120621-WC-SS-SC-B4(2-4)	Cyanide (total)	33.5	75-125	11215131-120621-WC-SS-SC-B4(2-4)	0.17 UJ	mg/kg
General Chemistry	11215131-121321-WC-SS-NC-Y2(6-8)	Cyanide (total)	69.9	75-125	11215131-121321-WC-SS-NC-Y2(6-8)	0.36 UJ	mg/kg
General Chemistry	11215131-121321-WC-SS-NC-E2(8-10)	Cyanide (total)	65.3	75-125	11215131-121321-WC-SS-NC-E2(8-10)	0.19 UJ	mg/kg

Notes:

- MS - Matrix Spike
J- - Estimated concentration; implied low bias
UJ - Not detected; associated reporting limit is estimated

Table 10

Qualified Sample Results Due to Outlying Identification Criteria
Investigation-Derived Waste (IDW) Sampling
San Jacinto Supplemental Design Investigation
Channelview, Harris County, Texas
November 2021 - December 2021

Parameter	Sample ID	Analyte	Qualified Result	Units
Dioxins/Furans	11215131-120121-IDW-SS-NE	1,2,3,4,6,7,8,9-Octachlorodibenzofuran (OCDF)	4.86 J	pg/L
	11215131-120121-IDW-SS-NE	1,2,3,4,6,7,8-Heptachlorodibenzo-p-dioxin (HpCDD)	2.23 J	pg/L
	11215131-120121-IDW-SS-NE	1,2,3,7,8,9-Hexachlorodibenzo-p-dioxin (HxCDD)	1.33 J	pg/L
	11215131-120121-IDW-SS-NE DECON	1,2,3,4,6,7,8,9-Octachlorodibenzofuran (OCDF)	11.1 J	pg/L
	11215131-120121-IDW-SS-NE DECON	1,2,3,4,6,7,8-Heptachlorodibenzo-p-dioxin (HpCDD)	7.89 J	pg/L
	11215131-120721-IDW-SS-SC	1,2,3,4,6,7,8-Heptachlorodibenzofuran (HpCDF)	3.03 J	pg/L
	11215131-120721-IDW-SS-SC	1,2,3,4,7,8-Hexachlorodibenzofuran (HxCDF)	1.97 J	pg/L
	11215131-120721-IDW-SS-SC	1,2,3,7,8,9-Hexachlorodibenzo-p-dioxin (HxCDD)	2.76 J	pg/L
	11215131-120721-IDW-SS-SC	1,2,3,7,8,9-Hexachlorodibenzofuran (HxCDF)	1.94 J	pg/L
	11215131-120721-IDW-SS-SC	2,3,4,6,7,8-Hexachlorodibenzofuran (HxCDF)	2.05 J	pg/L
	11215131-120721-IDW-SS-SC	2,3,4,7,8-Pentachlorodibenzofuran (PeCDF)	2.03 J	pg/L
	11215131-120721-IDW-SS-SC	2,3,7,8-Tetrachlorodibenzofuran (TCDF)	3.83 J	pg/L
	11215131-120721-IDW-SS-DECON2	2,3,7,8-Tetrachlorodibenzofuran (TCDF)	6.55 J	pg/L
	11215131-120821-IDW-SS-SW	2,3,7,8-Tetrachlorodibenzo-p-dioxin (TCDD)	14.2 J	pg/L
	11215131-121421-IDW-BN-NC	1,2,3,4,6,7,8-Heptachlorodibenzo-p-dioxin (HpCDD)	14.2 J	pg/L
	11215131-122021-IDW-SS-PURGE	1,2,3,4,6,7,8,9-Octachlorodibenzo-p-dioxin (OCDD)	39.9 J	pg/L
	11215131-120121-IDW-SS-NE DECON	2,3,7,8-Tetrachlorodibenzofuran (TCDF)	6.57 J	pg/L

Notes:

J - Estimated concentration

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

e-Hardcopy 2.0
Automated Report

Technical Report for

GHD Services Inc.

SJRWP - PCFSE, Harris County, TX

SSOW:11215131 2021-001 / PO#340-002625

SGS Job Number: JD35487

Sampling Dates: 11/30/21 - 12/13/21

Report to:

GHD Services Inc.
11451 Katy Freeway Suite 400
Houston, TX 77079
Nate.Reece@ghd.com; Meagan.Willis@ghd.com;
Kathleen.Shaw@GHD.com; Marisa.Oriaku@GHD.com
ATTN: Meagan Willis

Total number of pages in report: **345**



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

A handwritten signature in black ink, appearing to read "Mike Earp".

Mike Earp
General Manager

Client Service contact: Kelly Ramos 732-329-0200

Certifications: NJ(12129), NY(10983), CA, CT, FL, IL, IN, KS, KY, LA, MA, MD, ME, MN, NC, OH VAP (CL0056), AK (UST-103), AZ (AZ0786), PA, RI, SC, TX, UT, VA, WV, DoD ELAP (ANAB L2248)

This report shall not be reproduced, except in its entirety, without the written approval of SGS.
Test results relate only to samples analyzed.



January 25, 2022

**Ms. Meagan Willis
GHD Services Inc.
11451 Katy Freeway Suite 400
Houston, TX 77079**

RE: SGS – Dayton, Job # JD35487 - Reissues

Dear Ms. Willis,

The final report for SGS job number JD35487 has been edited to reflect corrections to the results. These edits have been incorporated into the revised report which is attached.

Specifically, the Chlordane has been reported for TCLP Pesticide's sample JD35487-1 as original chain requested. The revised report incorporates these revisions.

SGS apologizes for this occurrence and for any inconvenience this situation may have caused. Please contact me if I can be of further assistance in this matter.

Sincerely,

Report Department

SGS North America Inc.

SGS North America Inc. | Mid-Atlantic 2235 US Highway 130 Dayton, NJ 08810, USA t +1 (0)732 329 0200 www.sgs.com

Member of the SGS Group (SGS SA)



February 21, 2022

**Mr. Meagan Willis
GHD Services Inc.
11451 Katy Freeway Suite 400
Houston, TX 77079**

RE: SGS – Dayton, Job # JD35487 - Reissues #2

Dear Mr. Willis,

The final report for SGS job number JD35487 has been edited to reflect corrections to the results. These edits have been incorporated into the revised report which is attached.

Specifically, this report has been revised COMMBN as per client's request. The attached revised report incorporates these revisions.

SGS apologizes for this occurrence and for any inconvenience this situation may have caused. Please contact me if I can be of further assistance in this matter.

Sincerely,

Report Department

SGS North America Inc.

SGS North America Inc. | Mid-Atlantic 2235 US Highway 130 Dayton, NJ 08810, USA t +1 (0)732 329 0200 www.sgs.com

Member of the SGS Group (SGS SA)

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Sample Summary

GHD Services Inc.

Job No: JD35487

SJRWP - PCFSE, Harris County, TX

Project No: SSOW:11215131 2021-001 / PO#340-002625

Sample Number	Collected Date	Time By	Received	Matrix Code	Type	Client Sample ID
---------------	----------------	---------	----------	-------------	------	------------------

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

JD35487-1	11/30/21	15:25	SPS	12/02/21	SO	Soil	11215131-113021-WC-SPS-NE-D1(6-8)
JD35487-2	12/01/21	14:30	JC/BN	12/03/21	SO	Soil	11215131-120121-WC-JC-NE-G4(4-6)
JD35487-3	12/02/21	14:20	JC/BN	12/03/21	SO	Soil	11215131-120221-WC-JC-SW-B4(2-4)
JD35487-4	12/06/21	08:40	SS	12/07/21	SO	Soil	11215131-120621-WC-SS-SC-B4(2-4)
JD35487-5	12/13/21	09:30	SS	12/13/21	SO	Soil	11215131-121321-WC-SS-NC-Y2(6-8)
JD35487-6	12/13/21	14:10	SPS	12/14/21	SO	Soil	11215131-121321-WC-SS-NC-E2(8-10)

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

CASE NARRATIVE / CONFORMANCE SUMMARY

2

Client: GHD Services Inc.

Job No: JD35487

Site: SJRWP - PCFSE, Harris County, TX

Report Date 1/17/2022 11:20:19 A

Between 12/02/2021 and 12/14/2021, 6 Sample(s), 0 Trip Blank(s) and 0 Field Blank(s) were received at SGS North America Inc. at a maximum corrected temperature of 3.7 C. Samples were intact and chemically preserved, unless noted below. A SGS North America Inc. Job Number of JD35487 was assigned to the project. Laboratory sample ID, client sample ID and dates of sample collection are detailed in the report's Results Summary Section. Specified quality control criteria were achieved for this job except as noted below. For more information, please refer to the analytical results and QC summary pages.

Please refer to certification exceptions summary for additional certification information.

Compounds qualified as out of range in the continuing calibration summary report are acceptable as per method requirements when there is a high bias but the sample result is non-detect.

MS Volatiles By Method SW846 8260D

Matrix: LEACHATE **Batch ID:** V1A9391

- GP37639-LS23 for Acrylonitrile: Outside control limits.
- GP37615-LS21 for Acrylonitrile: Outside control limits.

Matrix: LEACHATE **Batch ID:** V2B8530

- All samples were analyzed within the recommended method holding time.
- Sample(s) JD35487-1LS, JD35487-1MS, JD35487-1MSD were used as the QC samples indicated.
- Sample(s) JD35487-1 have compound(s) reported with a "B" qualifier, indicating analyte is found in the associated method blank. Indicates analyte found in associated leachate blank.
- RPD(s) for MS/MSD for Isobutyl alcohol are outside control limits. Analytical precision exceeds in-house control limits.
- JD35487-1 for Acetone: Associated CCV outside of control limits low. A sensitivity check was analyzed to demonstrate system suitability to detect affected analyte. Sample was ND.
- JD35487-1 for 2-Butanone (MEK): Associated CCV outside of control limits low. A sensitivity check was analyzed to demonstrate system suitability to detect affected analyte. Sample was ND.
- JD35487-1 for Bromomethane: Associated CCV outside of control limits low. A sensitivity check was analyzed to demonstrate system suitability to detect affected analyte. Sample was ND.
- JD35487-1 for Vinyl chloride: Associated CCV outside of control limits low. A sensitivity check was analyzed to demonstrate system suitability to detect affected analyte. Sample was ND.

Matrix: LEACHATE **Batch ID:** V2B8531

- All samples were analyzed within the recommended method holding time.
- Sample(s) JD35487-2LS, JD35487-2MS, JD35487-2MSD were used as the QC samples indicated.
- Sample(s) JD35487-2, JD35487-3 have compound(s) reported with a "B" qualifier, indicating analyte is found in the associated method blank. Indicates analyte found in associated leachate blank.
- JD35487-2 for Acetone: Associated CCV outside of control limits high, sample was ND.
- JD35487-3 for Acetone: Associated CCV outside of control limits high, sample was ND.

Matrix: LEACHATE **Batch ID:** V3D7311

- Sample(s) JD35488-7MS, JD35488-7MSD were used as the QC samples indicated.
- The following samples were run outside of holding time for method SW846 8260D: JD35487-5, JD35487-6
- Sample(s) JD35487-5, JD35487-6 have compound(s) reported with a "B" qualifier, indicating analyte is found in the associated method blank. Indicates analyte found in associated leachate blank.
- Matrix Spike Recovery(s) for Bromomethane are outside control limits. Outside control limits due to matrix interference.
- Matrix Spike Duplicate Recovery(s) for Bromomethane are outside control limits. Outside control limits due to matrix interference.
- V3D7311-BS for Acrylonitrile: High percent recovery and no associated positive reported in the QC batch.

Monday, January 17, 2022

Page 1 of 11

MS Volatiles By Method SW846 8260D

Matrix: LEACHATE	Batch ID: V3D7311
-------------------------	--------------------------

- JD35487-5 for Acrylonitrile: Associated CCV outside of control limits high, sample was ND. This compound in blank spike is outside in house QC limits bias high.
- JD35487-6 for Acrylonitrile: Associated CCV outside of control limits high, sample was ND. This compound in blank spike is outside in house QC limits bias high.
- JD35487-6 for 4-Methyl-2-pentanone(MIBK): Associated CCV outside of control limits high, sample was ND.
- JD35487-5 for 4-Methyl-2-pentanone(MIBK): Associated CCV outside of control limits high, sample was ND.

Matrix: LEACHATE	Batch ID: VL10104
-------------------------	--------------------------

- All samples were analyzed within the recommended method holding time.
- Sample(s) JD35487-4LS, JD35487-4MS, JD35487-4MSD were used as the QC samples indicated.
- Sample(s) JD35487-4 have compound(s) reported with a "B" qualifier, indicating analyte is found in the associated method blank. Indicates analyte found in associated leachate blank.
- JD35487-4 for Isobutyl alcohol: Associated CCV outside of control limits high, sample was ND.
- JD35487-4 for Acetonitrile: Associated CCV outside of control limits high, sample was ND.
- JD35487-4 for 4-Methyl-2-pentanone(MIBK): Associated CCV outside of control limits high, sample was ND.
- VL10104-BS for 2-Butanone (MEK): High percent recovery and no associated positive reported in the QC batch.
- JD35487-4 for Acetone: Associated CCV outside of control limits low. A sensitivity check was analyzed to demonstrate system suitability to detect affected analyte. Sample was ND.
- VL10104-BS for Isobutyl alcohol: Outside control limits. This compound is not reported in associated samples.
- JD35487-4 for 2-Butanone (MEK): This compound in blank spike is outside in house QC limits bias high.

MS Semi-volatiles By Method SW846 8270E

Matrix: LEACHATE	Batch ID: OP37049
-------------------------	--------------------------

- All samples were extracted within the recommended method holding time.
- Sample(s) JD35487-1LS, JD35487-1MS, JD35487-1MSD were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.

Matrix: LEACHATE	Batch ID: OP37159
-------------------------	--------------------------

- All samples were extracted within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JD35487-4LS, JD35487-4MS, JD35487-4MSD were used as the QC samples indicated.
- Matrix Spike Duplicate Recovery(s) for Pyridine are outside in house control limits.
- RPD(s) for MS/MSD for Pyridine are outside in house control limits.

Matrix: LEACHATE	Batch ID: OP37242
-------------------------	--------------------------

- All samples were extracted within the recommended method holding time.
- Sample(s) JD35533-9RLS, JD35533-9RMS, JD35533-9RMSD were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.

Matrix: LEACHATE	Batch ID: OP37273
-------------------------	--------------------------

- All samples were extracted within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JD36724-1ALS, JD36724-1AMS, JD36724-1AMSD were used as the QC samples indicated.
- Matrix Spike Recovery(s) for Pyridine are outside in house control limits.
- RPD(s) for MS/MSD for Pyridine are outside in house control limits.

GC/LC Semi-volatiles By Method SW846 8081B

Matrix: LEACHATE **Batch ID:** OP37053

- All samples were extracted within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JD36176-1ALS, JD36176-1AMS, JD36176-1AMSD were used as the QC samples indicated.

Matrix: LEACHATE **Batch ID:** OP37162

- All samples were extracted within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JD35487-4LS, JD35487-4MS, JD35487-4MSD were used as the QC samples indicated.
- Matrix Spike Recovery(s) for Endosulfan-I, Endosulfan-II are outside in house control limits.
- Matrix Spike Duplicate Recovery(s) for Endosulfan-I are outside in house control limits.
- RPD(s) for MS/MSD for Mirex are outside control limits. Analytical precision exceeds in-house control limits.
- OP37162-LS13 for Endosulfan-II: Outside of in house control limits.
- OP37162-LS13 for Endosulfan-I: Outside of in house control limits.

Matrix: LEACHATE **Batch ID:** OP37246

- All samples were extracted within the recommended method holding time.
- Sample(s) JD35533-9RLS, JD35533-9RMS, JD35533-9RMSD were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.
- JD35487-6 for Decachlorobiphenyl: High percent recoveries and no positive found in the sample.

GC/LC Semi-volatiles By Method SW846 8082A

Matrix: SO

Batch ID: OP36964

- All samples were extracted within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JD36039-1MS, JD36039-1MSD were used as the QC samples indicated.
- OP36964-BS1 for Aroclor 1260: Reported from the 2nd signal. The %D of the CCV on the 1st signal exceeds the method criteria of 20%, so it being used for confirmation only.
- OP36964-BS1 for Aroclor 1016: Reported from the 2nd signal. The %D of the CCV on the 1st signal exceeds the method criteria of 20%, so it being used for confirmation only.

Matrix: SO

Batch ID: OP36975

- All samples were extracted within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JD36105-2MS, JD36105-2MSD were used as the QC samples indicated.
- OP36975-BSD for Aroclor 1260: Reported from the 2nd signal. The %D of the CCV on the 1st signal exceeds the method criteria of 20%, so it being used for confirmation only.
- OP36975-BS1 for Aroclor 1260: Reported from the 2nd signal. The %D of the CCV on the 1st signal exceeds the method criteria of 20%, so it being used for confirmation only.
- JD35487-2 for Aroclor 1254: Reported from the 2nd signal. The %D of the CCV on the 1st signal exceeds the method criteria of 20%, so it being used for confirmation only.

Matrix: SO

Batch ID: OP37070

- All samples were extracted within the recommended method holding time.
- Sample(s) JD36245-1MS, JD36245-1MSD were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.

Matrix: SO

Batch ID: OP37170

- All samples were extracted within the recommended method holding time.
- Sample(s) JD36618-19MS, JD36618-19MSD were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.

Matrix: SO

Batch ID: OP37488

- All samples were extracted within the recommended method holding time.
- Sample(s) JD37617-6MS, JD37617-6MSD were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.
- OP37488-BS1: Had TBA cleanup.
- OP37488-MB1: Had TBA cleanup.
- JD35487-6: Confirmation run.
- JD35487-6 for Decachlorobiphenyl: Outside control limits due to matrix interference.
- JD35487-6 for Tetrachloro-m-xylene: Outside control limits due to matrix interference.
- JD35487-6 for Decachlorobiphenyl: Outside control limits due to matrix interference.
- JD35487-6 for Aroclor 1260: Associated CCV outside of control limits low.

GC/LC Semi-volatiles By Method SW846 8151A

Matrix: LEACHATE **Batch ID:** OP37051

- All samples were extracted within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JD36176-1ALS, JD36176-1AMS, JD36176-1AMSD were used as the QC samples indicated.
- Matrix Spike Recovery(s) for Dinoseb are outside in house control limits.
- Matrix Spike Duplicate Recovery(s) for Dinoseb are outside in house control limits.
- OP37051-BS1 for 2,4-D: Reported from the 1st signal. The %D of the CCV on the 2nd signal exceeds the method criteria of 20%, so it being used for confirmation only.

Matrix: LEACHATE **Batch ID:** OP37163

- All samples were extracted within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JD35487-4LS, JD35487-4MS, JD35487-4MSD were used as the QC samples indicated.
- Matrix Spike Recovery(s) for Dinoseb are outside control limits. Outside control limits due to matrix interference.
- Matrix Spike Duplicate Recovery(s) for Dinoseb are outside control limits. Outside control limits due to matrix interference.
- OP37163-BS1 for Dinoseb: Reported from the 2nd signal. The %D of the CCV on the 1st signal exceeds the method criteria of 20%, so it being used for confirmation only.

Matrix: LEACHATE **Batch ID:** OP37244

- All samples were extracted within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JD35533-9RLS, JD35533-9RMS, JD35533-9RMSD were used as the QC samples indicated.
- Matrix Spike Recovery(s) for Dinoseb are outside in house control limits.
- Matrix Spike Duplicate Recovery(s) for Dinoseb are outside in house control limits.
- JD35487-5 for Dinoseb: Associated CCV outside of control limits high, sample was ND.

Matrix: LEACHATE **Batch ID:** OP37275

- All samples were extracted within the recommended method holding time.
- Sample(s) JD36795-1ALS, JD36795-1AMS, JD36795-1AMSD were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.
- Matrix Spike Recovery(s) for Dinoseb are outside in house control limits.
- Matrix Spike Duplicate Recovery(s) for Dinoseb are outside in house control limits.
- OP37275-MB1 for Dinoseb: This compound outside control limits biased high in the associated CCV.
- OP37275-BS1 for Dinoseb: This compound outside control limits biased high in the associated CCV.
- JD35487-6 for Dinoseb: Associated CCV outside of control limits high, sample was ND.

Metals Analysis By Method SW846 6010D

Matrix: LEACHATE **Batch ID:** MP30188

- All samples were digested within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JD35487-1MS, JD35487-1MSD, JD35487-1SDL were used as the QC samples for metals.
- RPD(s) for Serial Dilution for Antimony, Arsenic, Cadmium, Chromium, Lead, Silver are outside control limits. Percent difference acceptable due to low initial sample concentration (< 50 times IDL).

Matrix: LEACHATE **Batch ID:** MP30255

- All samples were digested within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JD35487-2MS, JD35487-2MSD, JD35487-2SDL were used as the QC samples for metals.
- RPD(s) for Serial Dilution for Antimony, Arsenic, Cadmium, Chromium, Lead, Silver are outside control limits. Percent difference acceptable due to low initial sample concentration (< 50 times IDL).
- MP30255-MB1 for Chromium: All reported results <RL or >10x MB value.

Matrix: LEACHATE **Batch ID:** MP30324

- All samples were digested within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JD35487-4MS, JD35487-4MSD, JD35487-4SDL were used as the QC samples for metals.
- RPD(s) for Serial Dilution for Antimony, Chromium, Selenium, Silver, Vanadium are outside control limits. Percent difference acceptable due to low initial sample concentration (< 50 times IDL).

Matrix: LEACHATE **Batch ID:** MP30409

- All samples were digested within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JD35487-5MS, JD35487-5MSD, JD35487-5SDL were used as the QC samples for metals.
- RPD(s) for Serial Dilution for Antimony, Cadmium, Selenium, Silver are outside control limits. Percent difference acceptable due to low initial sample concentration (< 50 times IDL).
- JD35487-5 for Beryllium: Elevated detection limit due to dilution required for high interfering element.
- MP30409-SD for Chromium Serial dilution indicates possible matrix interference.

Matrix: LEACHATE **Batch ID:** MP30469

- All samples were digested within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JD35487-6MS, JD35487-6MSD, JD35487-6SDL were used as the QC samples for metals.
- RPD(s) for Serial Dilution for Vanadium are outside control limits. Serial dilution indicates possible matrix interference.

Metals Analysis By Method SW846 7470A

Matrix: LEACHATE **Batch ID:** MP30216

- All samples were digested within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JD35487-1MS, JD35487-1MSD were used as the QC samples for metals.

Matrix: LEACHATE **Batch ID:** MP30275

- All samples were digested within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JD35487-2MS, JD35487-2MSD were used as the QC samples for metals.

Matrix: LEACHATE **Batch ID:** MP30341

- All samples were digested within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JD35487-4MS, JD35487-4MSD were used as the QC samples for metals.

Matrix: LEACHATE **Batch ID:** MP30424

- All samples were digested within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JD35487-5MS, JD35487-5MSD were used as the QC samples for metals.

Matrix: LEACHATE **Batch ID:** MP30484

- All samples were digested within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JD35487-6MS, JD35487-6MSD were used as the QC samples for metals.

General Chemistry By Method ASTM 2216-92

Matrix: SO **Batch ID:** GN24499

- The data for ASTM 2216-92 meets quality control requirements.

Matrix: SO **Batch ID:** GN24595

- The data for ASTM 2216-92 meets quality control requirements.

Matrix: SO **Batch ID:** GN24752

- The data for ASTM 2216-92 meets quality control requirements.

Matrix: SO **Batch ID:** GN24898

- The data for ASTM 2216-92 meets quality control requirements.

General Chemistry By Method SW846 1010B/ASTM D93

Matrix: SO **Batch ID:** GN24454

- Sample(s) JD35992-1DUP were used as the QC samples for Ignitability (Flashpoint).

Matrix: SO **Batch ID:** GN24504

- Sample(s) JD35487-2DUP were used as the QC samples for Ignitability (Flashpoint).

Matrix: SO **Batch ID:** GN24741

- Sample(s) JD35488-3DUP were used as the QC samples for Ignitability (Flashpoint).

Matrix: SO **Batch ID:** GN24855

- Sample(s) JD36690-1DUP were used as the QC samples for Ignitability (Flashpoint).

General Chemistry By Method SW846 9012B/LACHAT

Matrix: SO **Batch ID:** GP37404

- All samples were prepared within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JD36084-1DUP, JD36084-1MS were used as the QC samples for Cyanide.

Matrix: SO **Batch ID:** GP37418

- All samples were prepared within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JD36103-1DUP, JD36103-1MS were used as the QC samples for Cyanide.
- Matrix Spike Recovery(s) for Cyanide are outside control limits. Spike recovery indicates possible matrix interference and/or sample nonhomogeneity.
- RPD(s) for Duplicate for Cyanide are outside control limits. High RPD due to possible sample nonhomogeneity.

Matrix: SO **Batch ID:** GP37440

- All samples were prepared within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JD35487-3DUP, JD35487-3MS were used as the QC samples for Cyanide.
- Matrix Spike Recovery(s) for Cyanide are outside control limits. Spike recovery indicates possible matrix interference and/or sample nonhomogeneity.
- RPD(s) for Duplicate for Cyanide are outside control limits. RPD acceptable due to low duplicate and sample concentrations.

Matrix: SO **Batch ID:** GP37501

- All samples were prepared within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JD35487-4DUP, JD35487-4MS were used as the QC samples for Cyanide.
- Matrix Spike Recovery(s) for Cyanide are outside control limits. Spike recovery indicates possible matrix interference.

Matrix: SO **Batch ID:** GP37607

- All samples were prepared within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JD35487-5DUP, JD35487-5MS were used as the QC samples for Cyanide.
- Blank Spike Recovery(s) for Cyanide are outside control limits.
- Matrix Spike Recovery(s) for Cyanide are outside control limits. Spike recovery indicates possible matrix interference.
- RPD(s) for Duplicate for Cyanide are outside control limits. RPD acceptable due to low duplicate and sample concentrations.
- GP37607-B1 for Cyanide: Spike blank recovery is outside laboratory limit, data are qualified and reported.

Matrix: SO **Batch ID:** GP37660

- All samples were prepared within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JD35487-6DUP, JD35487-6MS were used as the QC samples for Cyanide.
- Matrix Spike Recovery(s) for Cyanide are outside control limits. Spike recovery indicates possible matrix interference.
- GP37660-B1 for Cyanide: Spike blank recovery is outside laboratory limit, data are qualified and reported.

General Chemistry By Method SW846 9034 M

Matrix: SO **Batch ID:** GP37402

- All samples were prepared within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JD35487-1DUP, JD35487-1MS were used as the QC samples for Sulfide, Neutral Extraction.

Matrix: SO **Batch ID:** GP37435

- All samples were prepared within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JD35487-2DUP, JD35487-2MS were used as the QC samples for Sulfide, Neutral Extraction.

Matrix: SO **Batch ID:** GP37556

- All samples were prepared within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JD36450-1DUP, JD36450-1MS were used as the QC samples for Sulfide, Neutral Extraction.

Matrix: SO **Batch ID:** GP37678

- All samples were prepared within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JD35487-5DUP, JD35487-5MS were used as the QC samples for Sulfide, Neutral Extraction.

General Chemistry By Method SW846 9045D

Matrix: SO **Batch ID:** GN24453

- Sample(s) JD36039-1DUP were used as the QC samples for Corrosivity as pH.
- RPD(s) for Duplicate for Corrosivity as pH are outside control limits. High RPD due to possible sample nonhomogeneity.

Matrix: SO **Batch ID:** GN24494

- Sample(s) JD36144-5DUP were used as the QC samples for Corrosivity as pH.

Matrix: SO **Batch ID:** GN24600

- Sample(s) JD36144-20DUP were used as the QC samples for Corrosivity as pH.

Matrix: SO **Batch ID:** GN24771

- Sample(s) JD35487-5DUP were used as the QC samples for Corrosivity as pH.

Matrix: SO **Batch ID:** GN24840

- Sample(s) JD36872-1DUP were used as the QC samples for Corrosivity as pH.

General Chemistry By Method SW846 9095/9095B

Matrix: SO **Batch ID:** GN24520

- Sample(s) JD35487-1DUP were used as the QC samples for Paint Filter Test.
- JD35487-3 for Paint Filter Test: No free liquids.
- JD35487-1 for Paint Filter Test: No free liquids.
- JD35487-2 for Paint Filter Test: No free liquids.

Matrix: SO **Batch ID:** GN24707

- Sample(s) JD35487-4DUP were used as the QC samples for Paint Filter Test.
- JD35487-4 for Paint Filter Test: No free liquids.

Matrix: SO **Batch ID:** GN24835

- Sample(s) JD35487-5DUP were used as the QC samples for Paint Filter Test.
- JD35487-6 for Paint Filter Test: No free liquids.
- JD35487-5 for Paint Filter Test: No free liquids.

General Chemistry By Method SW846 CHAP7/9012 B

Matrix: SO **Batch ID:** GP37390

- All samples were prepared within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JD35639-12DUP were used as the QC samples for Cyanide Reactivity.

Matrix: SO **Batch ID:** GP37421

- All samples were prepared within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JD36103-1DUP were used as the QC samples for Cyanide Reactivity.

Matrix: SO **Batch ID:** GP37505

- All samples were prepared within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JD36144-10DUP were used as the QC samples for Cyanide Reactivity.
- GP37505-B1 for Cyanide Reactivity: Spike blank indicates possible high bias, but all associated samples < DL.

Matrix: SO **Batch ID:** GP37664

- All samples were prepared within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JD36724-1DUP were used as the QC samples for Cyanide Reactivity.
- Blank Spike Recovery(s) for Cyanide Reactivity are outside control limits.

General Chemistry By Method SW846 CHAP7/9012B

Matrix: AQ **Batch ID:** GP37438

- All samples were prepared within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.

General Chemistry By Method SW846 CHAP7/9034

Matrix: AQ **Batch ID:** GP37437

- All samples were prepared within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.

Matrix: SO **Batch ID:** GP37389

- All samples were prepared within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JD35639-12DUP, JD35639-12MS were used as the QC samples for Sulfide Reactivity.

Matrix: SO **Batch ID:** GP37420

- All samples were prepared within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JD36103-1DUP, JD36103-1MS were used as the QC samples for Sulfide Reactivity.

Matrix: SO **Batch ID:** GP37437

- Sample(s) JD36144-5DUP, JD36144-5MS were used as the QC samples for Sulfide Reactivity.

Matrix: SO **Batch ID:** GP37504

- All samples were prepared within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JD36144-10DUP, JD36144-10MS were used as the QC samples for Sulfide Reactivity.

Matrix: SO **Batch ID:** GP37663

- All samples were prepared within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JD36724-1DUP, JD36724-1MS were used as the QC samples for Sulfide Reactivity.

SGS North America Inc. certifies that data reported for samples received, listed on the associated custody chain or analytical task order, were produced to specifications meeting the Quality System precision, accuracy and completeness objectives except as noted.

Estimated non-standard method measurement uncertainty data is available on request, based on quality control bias and implicit for standard methods. Acceptable uncertainty requires tested parameter quality control data to meet method criteria.

SGS North America Inc. is not responsible for data quality assumptions if partial reports are used and recommends that this report be used in its entirety. Data release is authorized by SGS North America Inc indicated via signature on the report cover

Summary of Hits

Job Number: JD35487
Account: GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX
Collected: 11/30/21 thru 12/13/21



Lab Sample ID	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
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JD35487-1 11215131-113021-WC-SPS-NE-D1(6-8)

Corrosivity as pH	7.54 NC				su	SW846 9045D
Ignitability (Flashpoint)	> 200				Deg. F	SW846 1010B/ASTM D93
Moisture (Dry Weight Basis)	50.6				%	ASTM 2216-92
Sulfide, Neutral Extraction	193	6.0	5.3		mg/kg	SW846 9034 M
Chloroform ^a	0.0068 B	0.0050	0.0025		mg/l	SW846 8260D
Methylene chloride	0.0024 J	0.010	0.00050		mg/l	SW846 8260D
Antimony	0.0053 J	0.10	0.0047		mg/l	SW846 6010D
Arsenic	0.014 J	0.10	0.0028		mg/l	SW846 6010D
Barium	1.1	0.20	0.013		mg/l	SW846 6010D
Lead	0.0052 J	0.10	0.0018		mg/l	SW846 6010D
Mercury	0.00037	0.00020	0.000095		mg/l	SW846 7470A
Nickel	0.067	0.010	0.0017		mg/l	SW846 6010D
Silver	0.0056 J	0.010	0.0019		mg/l	SW846 6010D

JD35487-2 11215131-120121-WC-JC-NE-G4(4-6)

Aroclor 1254 ^b	0.0448	0.043	0.023		mg/kg	SW846 8082A
Corrosivity as pH	7.31 NC				su	SW846 9045D
Ignitability (Flashpoint)	> 200				Deg. F	SW846 1010B/ASTM D93
Moisture (Dry Weight Basis)	37.8				%	ASTM 2216-92
Sulfide, Neutral Extraction	16.4	5.5	4.9		mg/kg	SW846 9034 M
Chloroform ^a	0.0109 B	0.0050	0.0025		mg/l	SW846 8260D
Antimony	0.016 J	0.10	0.0047		mg/l	SW846 6010D
Arsenic	0.011 J	0.10	0.0028		mg/l	SW846 6010D
Barium	0.98	0.20	0.013		mg/l	SW846 6010D
Cadmium	0.0023 J	0.0040	0.0010		mg/l	SW846 6010D
Chromium	0.0068 J	0.010	0.0020		mg/l	SW846 6010D
Lead	0.013 J	0.10	0.0018		mg/l	SW846 6010D
Nickel	0.086	0.020	0.0017		mg/l	SW846 6010D
Silver	0.0069 J	0.010	0.0019		mg/l	SW846 6010D
Vanadium	0.0062 J	0.050	0.0018		mg/l	SW846 6010D

JD35487-3 11215131-120221-WC-JC-SW-B4(2-4)

Corrosivity as pH	7.43 NC				su	SW846 9045D
Cyanide	0.17 J	0.34	0.17		mg/kg	SW846 9012B/LACHAT
Ignitability (Flashpoint)	> 200				Deg. F	SW846 1010B/ASTM D93
Moisture (Dry Weight Basis)	26.2				%	ASTM 2216-92
Chloroform ^a	0.0108 B	0.0050	0.0025		mg/l	SW846 8260D
Methylene chloride	0.0024 J	0.010	0.00050		mg/l	SW846 8260D
Arsenic	0.0091 J	0.10	0.0028		mg/l	SW846 6010D
Barium	0.91	0.20	0.013		mg/l	SW846 6010D
Beryllium	0.00070 J	0.0020	0.00050		mg/l	SW846 6010D

Summary of Hits

Job Number: JD35487
Account: GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX
Collected: 11/30/21 thru 12/13/21



Lab Sample ID	Client Sample ID	Result/ Analyte	RL	MDL	Units	Method
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		Cadmium	0.0039 J	0.0040	0.0010	mg/l	SW846 6010D
		Chromium	0.0087 J	0.010	0.0020	mg/l	SW846 6010D
		Lead	0.011 J	0.10	0.0018	mg/l	SW846 6010D
		Nickel	0.035	0.020	0.0017	mg/l	SW846 6010D
		Silver	0.0072 J	0.010	0.0019	mg/l	SW846 6010D
		Vanadium	0.011 J	0.050	0.0018	mg/l	SW846 6010D

JD35487-4 11215131-120621-WC-SS-SC-B-4(2-4)

		Aroclor 1248	0.303	0.038	0.034	mg/kg	SW846 8082A
		Aroclor 1254	0.552	0.038	0.020	mg/kg	SW846 8082A
		Aroclor 1260	0.210	0.038	0.016	mg/kg	SW846 8082A
		Corrosivity as pH	7.38 NC			su	SW846 9045D
		Ignitability (Flashpoint)	> 200			Deg. F	SW846 1010B/ASTM D93
		Moisture (Dry Weight Basis)	22.3			%	ASTM 2216-92
		Chloroform ^a	0.0068 B	0.0050	0.0025	mg/l	SW846 8260D
		Antimony	0.0052 J	0.10	0.0047	mg/l	SW846 6010D
		Barium	1.2	0.20	0.013	mg/l	SW846 6010D
		Cadmium	0.010	0.0040	0.0010	mg/l	SW846 6010D
		Chromium	0.0032 J	0.020	0.0020	mg/l	SW846 6010D
		Mercury	0.00011 J	0.00020	0.000095	mg/l	SW846 7470A
		Nickel	0.032	0.010	0.0017	mg/l	SW846 6010D
		Selenium	0.0070 J	0.10	0.0049	mg/l	SW846 6010D
		Silver	0.0034 J	0.010	0.0019	mg/l	SW846 6010D

JD35487-5 11215131-121321-WC-SS-NC-Y2(6-8)

		Corrosivity as pH	11.03 NC			su	SW846 9045D
		Ignitability (Flashpoint)	> 200			Deg. F	SW846 1010B/ASTM D93
		Moisture (Dry Weight Basis)	139			%	ASTM 2216-92
		Chloroform ^c	0.0102 B	0.0050	0.0025	mg/l	SW846 8260D
		Antimony	0.046 J	0.10	0.0047	mg/l	SW846 6010D
		Barium	0.31	0.20	0.013	mg/l	SW846 6010D
		Cadmium	0.0076	0.0040	0.0010	mg/l	SW846 6010D
		Chromium	0.095	0.010	0.0020	mg/l	SW846 6010D
		Nickel	0.067	0.010	0.0017	mg/l	SW846 6010D
		Selenium	0.042 J	0.10	0.0049	mg/l	SW846 6010D
		Silver	0.013	0.010	0.0019	mg/l	SW846 6010D
		Vanadium	0.015 J	0.050	0.0018	mg/l	SW846 6010D

JD35487-6 11215131-121321-WC-SS-NC-E2(8-10)

		Corrosivity as pH	7.02 NC			su	SW846 9045D
		Ignitability (Flashpoint)	> 200			Deg. F	SW846 1010B/ASTM D93
		Moisture (Dry Weight Basis)	88.6			%	ASTM 2216-92

Summary of Hits

Job Number: JD35487
Account: GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX
Collected: 11/30/21 thru 12/13/21

Lab Sample ID	Client Sample ID	Result/ Qual	RL	MDL	Units	Method	
		Chloroform ^c	0.0079 B	0.0050	0.0025	mg/l	SW846 8260D
		Arsenic	0.034 J	0.10	0.0028	mg/l	SW846 6010D
		Barium	2.7	0.20	0.013	mg/l	SW846 6010D
		Beryllium	0.0023	0.0020	0.00050	mg/l	SW846 6010D
		Cadmium	0.016	0.0040	0.0010	mg/l	SW846 6010D
		Lead	0.27	0.10	0.0018	mg/l	SW846 6010D
		Nickel	0.099	0.010	0.0017	mg/l	SW846 6010D
		Vanadium	0.040 J	0.050	0.0018	mg/l	SW846 6010D

- (a) Indicates analyte found in associated leachate blank.
- (b) Reported from the 2nd signal. The %D of the CCV on the 1st signal exceeds the method criteria of 20%, so it being used for confirmation only.
- (c) Sample analyzed outside the holding time. Indicates analyte found in associated leachate blank.

Sample Results

Report of Analysis

Report of Analysis

Client Sample ID: 11215131-113021-WC-SPS-NE-D1(6-8)	Date Sampled: 11/30/21
Lab Sample ID: JD35487-1	Date Received: 12/02/21
Matrix: SO - Soil	Percent Solids: 66.4
Method: SW846 8260D SW846 1311	
Project: SJRWP - PCFSE, Harris County, TX	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2B187863.D	5	12/09/21 02:43	JS	12/03/21 16:00	GP37411	V2B8530
Run #2							

Run #	Purge Volume
Run #1	5.0 ml
Run #2	

VOA Special List

TCLP Leachate method SW846 1311

CAS No.	Compound	Result	HW#	MCL	RL	MDL	Units	Q
67-64-1	Acetone ^a	ND			0.050	0.030	mg/l	
75-05-8	Acetonitrile	ND			0.50	0.037	mg/l	
107-13-1	Acrylonitrile	ND			0.25	0.0052	mg/l	
71-43-2	Benzene	ND	D018	0.50	0.0025	0.0021	mg/l	
75-27-4	Bromodichloromethane	ND			0.0050	0.0029	mg/l	
75-25-2	Bromoform	ND			0.020	0.0032	mg/l	
74-83-9	Bromomethane ^a	ND			0.010	0.0082	mg/l	
78-93-3	2-Butanone (MEK) ^a	ND	D035	200	0.10	0.034	mg/l	
75-15-0	Carbon disulfide	ND			0.010	0.0048	mg/l	
56-23-5	Carbon tetrachloride	ND	D019	0.50	0.0050	0.0028	mg/l	
108-90-7	Chlorobenzene	ND	D021	100	0.0050	0.0028	mg/l	
67-66-3	Chloroform ^b	0.0068	D022	6.0	0.0050	0.0025	mg/l	B
106-93-4	1,2-Dibromoethane	ND			0.010	0.0024	mg/l	
106-46-7	1,4-Dichlorobenzene	ND	D027	7.5	0.0050	0.0025	mg/l	
75-71-8	Dichlorodifluoromethane	ND			0.010	0.0068	mg/l	
107-06-2	1,2-Dichloroethane	ND	D028	0.50	0.0050	0.0030	mg/l	
75-35-4	1,1-Dichloroethene	ND	D029	0.70	0.0050	0.0030	mg/l	
542-75-6	1,3-Dichloropropene (total)	ND			0.0050	0.0022	mg/l	
10061-02-6	trans-1,3-Dichloropropene	ND			0.0050	0.0022	mg/l	
100-41-4	Ethylbenzene	ND			0.0050	0.0030	mg/l	
87-68-3	Hexachlorobutadiene	ND	D033	0.50	0.025	0.0028	mg/l	
78-83-1	Isobutyl alcohol	ND			0.25	0.061	mg/l	
126-98-7	Methacrylonitrile	ND			0.050	0.0050	mg/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND			0.025	0.0093	mg/l	
75-09-2	Methylene chloride	0.0024			0.010	0.00050	mg/l	J
100-42-5	Styrene	ND			0.025	0.0035	mg/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND			0.025	0.0028	mg/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND			0.010	0.0033	mg/l	
127-18-4	Tetrachloroethene	ND	D039	0.70	0.0050	0.0045	mg/l	
108-88-3	Toluene	ND			0.0050	0.0027	mg/l	
71-55-6	1,1,1-Trichloroethane	ND			0.0050	0.0027	mg/l	
79-00-5	1,1,2-Trichloroethane	ND			0.0050	0.0027	mg/l	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
MCL = Maximum Contamination Level (40 CFR 261 7/1/11) B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

4.1
4

Report of Analysis

Client Sample ID: 11215131-113021-WC-SPS-NE-D1(6-8)	Date Sampled: 11/30/21
Lab Sample ID: JD35487-1	Date Received: 12/02/21
Matrix: SO - Soil	Percent Solids: 66.4
Method: SW846 8260D SW846 1311	
Project: SJRWP - PCFSE, Harris County, TX	

VOA Special List

TCLP Leachate method SW846 1311

CAS No.	Compound	Result	HW#	MCL	RL	MDL	Units	Q
79-01-6	Trichloroethene	ND	D040	0.50	0.0050	0.0026	mg/l	
75-69-4	Trichlorofluoromethane	ND			0.025	0.0042	mg/l	
96-18-4	1,2,3-Trichloropropane	ND			0.025	0.0035	mg/l	
75-01-4	Vinyl chloride ^a	ND	D043	0.20	0.0050	0.0039	mg/l	
	m,p-Xylene	ND			0.0050	0.0039	mg/l	
95-47-6	o-Xylene	ND			0.0050	0.0030	mg/l	
1330-20-7	Xylene (total)	ND			0.0050	0.0039	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	100%		76-120%
17060-07-0	1,2-Dichloroethane-D4	94%		64-135%
2037-26-5	Toluene-D8	94%		76-117%
460-00-4	4-Bromofluorobenzene	102%		72-122%

(a) Associated CCV outside of control limits low. A sensitivity check was analyzed to demonstrate system suitability to detect affected analyte. Sample was ND.

(b) Indicates analyte found in associated leachate blank.

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
MCL = Maximum Contamination Level (40 CFR 261 7/1/11) B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

4.1
4

Report of Analysis

Client Sample ID: 11215131-113021-WC-SPS-NE-D1(6-8)	Date Sampled: 11/30/21
Lab Sample ID: JD35487-1	Date Received: 12/02/21
Matrix: SO - Soil	Percent Solids: 66.4
Method: SW846 8270E SW846 3510C	
Project: SJRWP - PCFSE, Harris County, TX	

Run #1	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	F204190.D	1	12/11/21 05:31	CS	12/09/21 16:15	OP37049	EF8949
Run #2							

Run #1	Initial Volume	Final Volume
Run #1	100 ml	1.0 ml
Run #2		

ABN TCLP Leachate

TCLP Leachate method SW846 1311

CAS No.	Compound	Result	HW#	MCL	RL	MDL	Units	Q
95-48-7	2-Methylphenol	ND	D023	200	0.020	0.0089	mg/l	
	3&4-Methylphenol	ND	D024	200	0.020	0.0088	mg/l	
87-86-5	Pentachlorophenol	ND	D037	100	0.10	0.014	mg/l	
95-95-4	2,4,5-Trichlorophenol	ND	D041	400	0.050	0.013	mg/l	
88-06-2	2,4,6-Trichlorophenol	ND	D042	2.0	0.050	0.0092	mg/l	
106-46-7	1,4-Dichlorobenzene	ND	D027	7.5	0.020	0.0017	mg/l	
121-14-2	2,4-Dinitrotoluene	ND	D030	0.13	0.020	0.0055	mg/l	
118-74-1	Hexachlorobenzene	ND	D032	0.13	0.020	0.0033	mg/l	
87-68-3	Hexachlorobutadiene	ND	D033	0.50	0.010	0.0049	mg/l	
67-72-1	Hexachloroethane	ND	D034	3.0	0.050	0.0039	mg/l	
98-95-3	Nitrobenzene	ND	D036	2.0	0.020	0.0064	mg/l	
110-86-1	Pyridine	ND	D038	5.0	0.020	0.0039	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	20%		10-73%
4165-62-2	Phenol-d5	14%		10-64%
118-79-6	2,4,6-Tribromophenol	68%		31-130%
4165-60-0	Nitrobenzene-d5	51%		28-126%
321-60-8	2-Fluorobiphenyl	57%		26-114%
1718-51-0	Terphenyl-d14	51%		16-122%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
MCL = Maximum Contamination Level (40 CFR 261 7/1/11) B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

4.1
4

Report of Analysis

Client Sample ID: 11215131-113021-WC-SPS-NE-D1(6-8)	Date Sampled: 11/30/21
Lab Sample ID: JD35487-1	Date Received: 12/02/21
Matrix: SO - Soil	Percent Solids: 66.4
Method: SW846 8151A SW846 3510C	
Project: SJRWP - PCFSE, Harris County, TX	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	OA155565.D	1	12/13/21 01:19	CP	12/09/21 20:10	OP37051	GOA5501
Run #2							

Run #	Initial Volume	Final Volume
Run #1	30.0 ml	2.0 ml
Run #2		

Herbicide TCLP Leachate

TCLP Leachate method SW846 1311

CAS No.	Compound	Result	HW#	MCL	RL	MDL	Units	Q
94-75-7	2,4-D	ND	D016	10	0.0033	0.00098	mg/l	
93-72-1	2,4,5-TP (Silvex)	ND	D017	1.0	0.0010	0.00020	mg/l	
88-85-7	Dinoseb	ND			0.0033	0.0013	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
19719-28-9	2,4-DCAA	109%		13-169%
19719-28-9	2,4-DCAA	93%		13-169%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
 MCL = Maximum Contamination Level (40 CFR 261 7/1/11) B = Indicates analyte found in associated method blank
 E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: 11215131-113021-WC-SPS-NE-D1(6-8)	Date Sampled: 11/30/21
Lab Sample ID: JD35487-1	Date Received: 12/02/21
Matrix: SO - Soil	Percent Solids: 66.4
Method: SW846 8081B SW846 3510C	
Project: SJRWP - PCFSE, Harris County, TX	

Run #1	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	6G81247.D	1	12/17/21 04:26	CP	12/15/21 21:23	OP37053	G6G2873
Run #2							

Run #1	Initial Volume	Final Volume
Run #1	30.0 ml	2.0 ml
Run #2		

Pesticide TCLP Leachate Special List

TCLP Leachate method SW846 1311

CAS No.	Compound	Result	HW#	MCL	RL	MDL	Units	Q
58-89-9	gamma-BHC (Lindane)	ND	D013	0.40	0.000067	0.000040	mg/l	
12789-03-6	Chlordane	ND	D020	0.030	0.0033	0.0014	mg/l	
60-57-1	Dieldrin	ND			0.000067	0.000051	mg/l	
72-54-8	4,4'-DDD	ND			0.000067	0.000038	mg/l	
72-55-9	4,4'-DDE	ND			0.000067	0.000034	mg/l	
50-29-3	4,4'-DDT	ND			0.000067	0.000046	mg/l	
72-20-8	Endrin	ND	D012	0.020	0.000067	0.000040	mg/l	
959-98-8	Endosulfan-I	ND			0.000067	0.000035	mg/l	
33213-65-9	Endosulfan-II	ND			0.000067	0.000033	mg/l	
76-44-8	Heptachlor	ND	D031	0.0080	0.000067	0.000030	mg/l	
1024-57-3	Heptachlor epoxide	ND	D031	0.0080	0.000067	0.000040	mg/l	
72-43-5	Methoxychlor	ND	D014	10	0.00013	0.000045	mg/l	
2385-85-5	Mirex	ND			0.00033	0.000031	mg/l	
8001-35-2	Toxaphene	ND	D015	0.50	0.0017	0.0011	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	69%		30-137%
877-09-8	Tetrachloro-m-xylene	63%		30-137%
2051-24-3	Decachlorobiphenyl	50%		10-137%
2051-24-3	Decachlorobiphenyl	63%		10-137%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
MCL = Maximum Contamination Level (40 CFR 261 7/1/11) B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: 11215131-113021-WC-SPS-NE-D1(6-8)	Date Sampled: 11/30/21
Lab Sample ID: JD35487-1	Date Received: 12/02/21
Matrix: SO - Soil	Percent Solids: 66.4
Method: SW846 8082A SW846 3546	
Project: SJRWP - PCFSE, Harris County, TX	

Run #1	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	RK7150.D	1	12/09/21 17:10	TL	12/04/21 10:35	OP36964	GRK185
Run #2							

Run #1	Initial Weight	Final Volume
Run #1	15.2 g	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	0.050	0.023	mg/kg	
11104-28-2	Aroclor 1221	ND	0.050	0.031	mg/kg	
11141-16-5	Aroclor 1232	ND	0.050	0.032	mg/kg	
53469-21-9	Aroclor 1242	ND	0.050	0.020	mg/kg	
12672-29-6	Aroclor 1248	ND	0.050	0.044	mg/kg	
11097-69-1	Aroclor 1254	ND	0.050	0.027	mg/kg	
11096-82-5	Aroclor 1260	ND	0.050	0.021	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	84%		24-152%
877-09-8	Tetrachloro-m-xylene	114%		24-152%
2051-24-3	Decachlorobiphenyl	60%		10-172%
2051-24-3	Decachlorobiphenyl	107%		10-172%

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

Report of Analysis

Client Sample ID: 11215131-113021-WC-SPS-NE-D1(6-8)	Date Sampled: 11/30/21
Lab Sample ID: JD35487-1	Date Received: 12/02/21
Matrix: SO - Soil	Percent Solids: 66.4
Project: SJRWP - PCFSE, Harris County, TX	

Metals Analysis, TCLP Leachate SW846 1311

Analyte	Result	HW#	MCL	RL	MDL	Units	DF	Prep	Analyzed By	Method
Antimony	0.0053 J			0.10	0.0047	mg/l	1	12/06/21	12/07/21	ND SW846 6010D ²
Arsenic	0.014 J	D004	5.0	0.10	0.0028	mg/l	1	12/06/21	12/07/21	ND SW846 6010D ²
Barium	1.1	D005	100	0.20	0.013	mg/l	1	12/06/21	12/07/21	ND SW846 6010D ²
Beryllium	0.00050 U			0.0020	0.00050	mg/l	1	12/06/21	12/07/21	ND SW846 6010D ²
Cadmium	0.0010 U	D006	1.0	0.0040	0.0010	mg/l	1	12/06/21	12/07/21	ND SW846 6010D ²
Chromium	0.0020 U	D007	5.0	0.010	0.0020	mg/l	1	12/06/21	12/07/21	ND SW846 6010D ²
Lead	0.0052 J	D008	5.0	0.10	0.0018	mg/l	1	12/06/21	12/07/21	ND SW846 6010D ²
Mercury	0.00037	D009	0.20	0.00020	0.000095	mg/l	1	12/07/21	12/07/21	SB SW846 7470A ¹
Nickel	0.067			0.010	0.0017	mg/l	1	12/06/21	12/07/21	ND SW846 6010D ²
Selenium	0.0049 U	D010	1.0	0.10	0.0049	mg/l	1	12/06/21	12/07/21	ND SW846 6010D ²
Silver	0.0056 J	D011	5.0	0.010	0.0019	mg/l	1	12/06/21	12/07/21	ND SW846 6010D ²
Vanadium	0.0018 U			0.050	0.0018	mg/l	1	12/06/21	12/07/21	ND SW846 6010D ²

- (1) Instrument QC Batch: MA51549
- (2) Instrument QC Batch: MA51562
- (3) Prep QC Batch: MP30188
- (4) Prep QC Batch: MP30216

RL = Reporting Limit MDL = Method Detection Limit U = Indicates a result < MDL
 MCL = Maximum Contamination Level (40 CFR 261 7/1/11) J = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID: 11215131-113021-WC-SPS-NE-D1(6-8)	Date Sampled: 11/30/21
Lab Sample ID: JD35487-1	Date Received: 12/02/21
Matrix: SO - Soil	Percent Solids: 66.4
Project: SJRWP - PCFSE, Harris County, TX	

General Chemistry

Analyte	Result	RL	MDL	Units	DF	Analyzed	By	Method
Corrosivity as pH	7.54 NC			su	1	12/03/21 11:33 MM	SW846	9045D
Cyanide	0.23 U	0.45	0.23	mg/kg	1	12/09/21 03:08 EB	SW846	9012B/LACHAT
Cyanide Reactivity	11 U	14	11	mg/kg	1	12/09/21 08:31 EB	SW846	CHAP7/9012 B
Ignitability (Flashpoint)	> 200			Deg. F	1	12/03/21 13:45 MM	SW846	1010B/ASTM D93
Moisture (Dry Weight Basis)	50.6			%	1	12/06/21 17:00 BG	ASTM	2216-92
Paint Filter Test ^a	0.25 U	0.50	0.25	ml/100g	1	12/07/21 09:30 MM	SW846	9095/9095B
Sulfide Reactivity	85 U	140	85	mg/kg	1	12/04/21 15:02 JOO	SW846	CHAP7/9034
Sulfide, Neutral Extraction	193	6.0	5.3	mg/kg	1	12/03/21 13:40 MP	SW846	9034 M

(a) No free liquids.

RL = Reporting Limit
 MDL = Method Detection Limit

U = Indicates a result < MDL
 J = Indicates a result > = MDL but < RL

4.1
4

Report of Analysis

Client Sample ID:	11215131-120121-WC-JC-NE-G4(4-6)	Date Sampled:	12/01/21
Lab Sample ID:	JD35487-2	Date Received:	12/03/21
Matrix:	SO - Soil	Percent Solids:	72.6
Method:	SW846 8260D SW846 1311		
Project:	SJRWP - PCFSE, Harris County, TX		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2B187883.D	5	12/09/21 12:59	ED	12/06/21 16:00	GP37443	V2B8531
Run #2							

Run #	Purge Volume
Run #1	5.0 ml
Run #2	

VOA Special List

TCLP Leachate method SW846 1311

CAS No.	Compound	Result	HW#	MCL	RL	MDL	Units	Q
67-64-1	Acetone ^a	ND			0.050	0.030	mg/l	
75-05-8	Acetonitrile	ND			0.50	0.037	mg/l	
107-13-1	Acrylonitrile	ND			0.25	0.0052	mg/l	
71-43-2	Benzene	ND	D018	0.50	0.0025	0.0021	mg/l	
75-27-4	Bromodichloromethane	ND			0.0050	0.0029	mg/l	
75-25-2	Bromoform	ND			0.020	0.0032	mg/l	
74-83-9	Bromomethane	ND			0.010	0.0082	mg/l	
78-93-3	2-Butanone (MEK)	ND	D035	200	0.10	0.034	mg/l	
75-15-0	Carbon disulfide	ND			0.010	0.0048	mg/l	
56-23-5	Carbon tetrachloride	ND	D019	0.50	0.0050	0.0028	mg/l	
108-90-7	Chlorobenzene	ND	D021	100	0.0050	0.0028	mg/l	
67-66-3	Chloroform ^b	0.0109	D022	6.0	0.0050	0.0025	mg/l	B
106-93-4	1,2-Dibromoethane	ND			0.010	0.0024	mg/l	
106-46-7	1,4-Dichlorobenzene	ND	D027	7.5	0.0050	0.0025	mg/l	
75-71-8	Dichlorodifluoromethane	ND			0.010	0.0068	mg/l	
107-06-2	1,2-Dichloroethane	ND	D028	0.50	0.0050	0.0030	mg/l	
75-35-4	1,1-Dichloroethene	ND	D029	0.70	0.0050	0.0030	mg/l	
542-75-6	1,3-Dichloropropene (total)	ND			0.0050	0.0022	mg/l	
10061-02-6	trans-1,3-Dichloropropene	ND			0.0050	0.0022	mg/l	
100-41-4	Ethylbenzene	ND			0.0050	0.0030	mg/l	
87-68-3	Hexachlorobutadiene	ND	D033	0.50	0.025	0.0028	mg/l	
78-83-1	Isobutyl alcohol	ND			0.25	0.061	mg/l	
126-98-7	Methacrylonitrile	ND			0.050	0.0050	mg/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND			0.025	0.0093	mg/l	
75-09-2	Methylene chloride	ND			0.010	0.00050	mg/l	
100-42-5	Styrene	ND			0.025	0.0035	mg/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND			0.025	0.0028	mg/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND			0.010	0.0033	mg/l	
127-18-4	Tetrachloroethene	ND	D039	0.70	0.0050	0.0045	mg/l	
108-88-3	Toluene	ND			0.0050	0.0027	mg/l	
71-55-6	1,1,1-Trichloroethane	ND			0.0050	0.0027	mg/l	
79-00-5	1,1,2-Trichloroethane	ND			0.0050	0.0027	mg/l	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
MCL = Maximum Contamination Level (40 CFR 261 7/1/11) B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

4.2
4

Report of Analysis

Client Sample ID: 11215131-120121-WC-JC-NE-G4(4-6)	Date Sampled: 12/01/21
Lab Sample ID: JD35487-2	Date Received: 12/03/21
Matrix: SO - Soil	Percent Solids: 72.6
Method: SW846 8260D SW846 1311	
Project: SJRWP - PCFSE, Harris County, TX	

VOA Special List

TCLP Leachate method SW846 1311

CAS No.	Compound	Result	HW#	MCL	RL	MDL	Units	Q
79-01-6	Trichloroethene	ND	D040	0.50	0.0050	0.0026	mg/l	
75-69-4	Trichlorofluoromethane	ND			0.025	0.0042	mg/l	
96-18-4	1,2,3-Trichloropropane	ND			0.025	0.0035	mg/l	
75-01-4	Vinyl chloride	ND	D043	0.20	0.0050	0.0039	mg/l	
	m,p-Xylene	ND			0.0050	0.0039	mg/l	
95-47-6	o-Xylene	ND			0.0050	0.0030	mg/l	
1330-20-7	Xylene (total)	ND			0.0050	0.0039	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	99%		76-120%
17060-07-0	1,2-Dichloroethane-D4	94%		64-135%
2037-26-5	Toluene-D8	95%		76-117%
460-00-4	4-Bromofluorobenzene	103%		72-122%

- (a) Associated CCV outside of control limits high, sample was ND.
- (b) Indicates analyte found in associated leachate blank.

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
 MCL = Maximum Contamination Level (40 CFR 261 7/1/11) B = Indicates analyte found in associated method blank
 E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

4.2
4

Report of Analysis

Client Sample ID: 11215131-120121-WC-JC-NE-G4(4-6)	Date Sampled: 12/01/21
Lab Sample ID: JD35487-2	Date Received: 12/03/21
Matrix: SO - Soil	Percent Solids: 72.6
Method: SW846 8270E SW846 3510C	
Project: SJRWP - PCFSE, Harris County, TX	

Run #1	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	6P503037.D	1	12/10/21 17:07	KLS	12/09/21 16:15	OP37049	E6P3571
Run #2							

Run #1	Initial Volume	Final Volume
Run #1	100 ml	1.0 ml
Run #2		

ABN TCLP Leachate

TCLP Leachate method SW846 1311

CAS No.	Compound	Result	HW#	MCL	RL	MDL	Units	Q
95-48-7	2-Methylphenol	ND	D023	200	0.020	0.0089	mg/l	
	3&4-Methylphenol	ND	D024	200	0.020	0.0088	mg/l	
87-86-5	Pentachlorophenol	ND	D037	100	0.10	0.014	mg/l	
95-95-4	2,4,5-Trichlorophenol	ND	D041	400	0.050	0.013	mg/l	
88-06-2	2,4,6-Trichlorophenol	ND	D042	2.0	0.050	0.0092	mg/l	
106-46-7	1,4-Dichlorobenzene	ND	D027	7.5	0.020	0.0017	mg/l	
121-14-2	2,4-Dinitrotoluene	ND	D030	0.13	0.020	0.0055	mg/l	
118-74-1	Hexachlorobenzene	ND	D032	0.13	0.020	0.0033	mg/l	
87-68-3	Hexachlorobutadiene	ND	D033	0.50	0.010	0.0049	mg/l	
67-72-1	Hexachloroethane	ND	D034	3.0	0.050	0.0039	mg/l	
98-95-3	Nitrobenzene	ND	D036	2.0	0.020	0.0064	mg/l	
110-86-1	Pyridine	ND	D038	5.0	0.020	0.0039	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	29%		10-73%
4165-62-2	Phenol-d5	21%		10-64%
118-79-6	2,4,6-Tribromophenol	81%		31-130%
4165-60-0	Nitrobenzene-d5	76%		28-126%
321-60-8	2-Fluorobiphenyl	70%		26-114%
1718-51-0	Terphenyl-d14	66%		16-122%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
MCL = Maximum Contamination Level (40 CFR 261 7/1/11) B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

4.2
4

Report of Analysis

Client Sample ID: 11215131-120121-WC-JC-NE-G4(4-6)	Date Sampled: 12/01/21
Lab Sample ID: JD35487-2	Date Received: 12/03/21
Matrix: SO - Soil	Percent Solids: 72.6
Method: SW846 8151A SW846 3510C	
Project: SJRWP - PCFSE, Harris County, TX	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	OA155566.D	1	12/13/21 01:46	CP	12/09/21 20:10	OP37051	GOA5501
Run #2							

Run #	Initial Volume	Final Volume
Run #1	30.0 ml	2.0 ml
Run #2		

Herbicide TCLP Leachate

TCLP Leachate method SW846 1311

CAS No.	Compound	Result	HW#	MCL	RL	MDL	Units	Q
94-75-7	2,4-D	ND	D016	10	0.0033	0.00098	mg/l	
93-72-1	2,4,5-TP (Silvex)	ND	D017	1.0	0.0010	0.00020	mg/l	
88-85-7	Dinoseb	ND			0.0033	0.0013	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
19719-28-9	2,4-DCAA	82%		13-169%
19719-28-9	2,4-DCAA	72%		13-169%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
 MCL = Maximum Contamination Level (40 CFR 261 7/1/11) B = Indicates analyte found in associated method blank
 E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

4.2
4

Report of Analysis

Client Sample ID: 11215131-120121-WC-JC-NE-G4(4-6)	Date Sampled: 12/01/21
Lab Sample ID: JD35487-2	Date Received: 12/03/21
Matrix: SO - Soil	Percent Solids: 72.6
Method: SW846 8081B SW846 3510C	
Project: SJRWP - PCFSE, Harris County, TX	

Run #1	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	6G81248.D	1	12/17/21 04:44	CP	12/15/21 21:23	OP37053	G6G2873
Run #2							

Run #1	Initial Volume	Final Volume
Run #1	30.0 ml	2.0 ml
Run #2		

Pesticide TCLP Leachate Special List

TCLP Leachate method SW846 1311

CAS No.	Compound	Result	HW#	MCL	RL	MDL	Units	Q
58-89-9	gamma-BHC (Lindane)	ND	D013	0.40	0.000067	0.000040	mg/l	
12789-03-6	Chlordane	ND	D020	0.030	0.0033	0.0014	mg/l	
60-57-1	Dieldrin	ND			0.000067	0.000051	mg/l	
72-54-8	4,4'-DDD	ND			0.000067	0.000038	mg/l	
72-55-9	4,4'-DDE	ND			0.000067	0.000034	mg/l	
50-29-3	4,4'-DDT	ND			0.000067	0.000046	mg/l	
72-20-8	Endrin	ND	D012	0.020	0.000067	0.000040	mg/l	
959-98-8	Endosulfan-I	ND			0.000067	0.000035	mg/l	
33213-65-9	Endosulfan-II	ND			0.000067	0.000033	mg/l	
76-44-8	Heptachlor	ND	D031	0.0080	0.000067	0.000030	mg/l	
1024-57-3	Heptachlor epoxide	ND	D031	0.0080	0.000067	0.000040	mg/l	
72-43-5	Methoxychlor	ND	D014	10	0.00013	0.000045	mg/l	
2385-85-5	Mirex	ND			0.00033	0.000031	mg/l	
8001-35-2	Toxaphene	ND	D015	0.50	0.0017	0.0011	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	70%		30-137%
877-09-8	Tetrachloro-m-xylene	67%		30-137%
2051-24-3	Decachlorobiphenyl	52%		10-137%
2051-24-3	Decachlorobiphenyl	85%		10-137%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
MCL = Maximum Contamination Level (40 CFR 261 7/1/11) B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

4.2
4

Report of Analysis

Client Sample ID: 11215131-120121-WC-JC-NE-G4(4-6)	Date Sampled: 12/01/21
Lab Sample ID: JD35487-2	Date Received: 12/03/21
Matrix: SO - Soil	Percent Solids: 72.6
Method: SW846 8082A SW846 3546	
Project: SJRWP - PCFSE, Harris County, TX	

Run #1	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	RK7213.D	1	12/10/21 12:50	RK	12/08/21 10:25	OP36975	GRK186
Run #2							

Run #1	Initial Weight	Final Volume
Run #1	16.1 g	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	0.043	0.020	mg/kg	
11104-28-2	Aroclor 1221	ND	0.043	0.027	mg/kg	
11141-16-5	Aroclor 1232	ND	0.043	0.027	mg/kg	
53469-21-9	Aroclor 1242	ND	0.043	0.018	mg/kg	
12672-29-6	Aroclor 1248	ND	0.043	0.038	mg/kg	
11097-69-1	Aroclor 1254 ^a	0.0448	0.043	0.023	mg/kg	
11096-82-5	Aroclor 1260	ND	0.043	0.018	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	76%		10-163%
877-09-8	Tetrachloro-m-xylene	94%		10-163%
2051-24-3	Decachlorobiphenyl	60%		10-215%
2051-24-3	Decachlorobiphenyl	92%		10-215%

(a) Reported from the 2nd signal. The % D of the CCV on the 1st signal exceeds the method criteria of 20%, so it is used for confirmation only.

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

4.2
4

Report of Analysis

Client Sample ID: 11215131-120121-WC-JC-NE-G4(4-6)	Date Sampled: 12/01/21
Lab Sample ID: JD35487-2	Date Received: 12/03/21
Matrix: SO - Soil	Percent Solids: 72.6
Project: SJRWP - PCFSE, Harris County, TX	

Metals Analysis, TCLP Leachate SW846 1311

Analyte	Result	HW#	MCL	RL	MDL	Units	DF	Prep	Analyzed By	Method
Antimony	0.016 J			0.10	0.0047	mg/l	1	12/09/21	12/11/21	ND SW846 6010D ²
Arsenic	0.011 J	D004	5.0	0.10	0.0028	mg/l	1	12/09/21	12/11/21	ND SW846 6010D ²
Barium	0.98	D005	100	0.20	0.013	mg/l	1	12/09/21	12/11/21	ND SW846 6010D ²
Beryllium	0.00050 U			0.0020	0.00050	mg/l	1	12/09/21	12/11/21	ND SW846 6010D ²
Cadmium	0.0023 J	D006	1.0	0.0040	0.0010	mg/l	1	12/09/21	12/11/21	ND SW846 6010D ²
Chromium	0.0068 J	D007	5.0	0.010	0.0020	mg/l	1	12/09/21	12/11/21	ND SW846 6010D ²
Lead	0.013 J	D008	5.0	0.10	0.0018	mg/l	1	12/09/21	12/11/21	ND SW846 6010D ²
Mercury	0.000095 U	D009	0.20	0.00020	0.000095	mg/l	1	12/09/21	12/09/21	SB SW846 7470A ¹
Nickel	0.086			0.020	0.0017	mg/l	1	12/09/21	12/11/21	ND SW846 6010D ²
Selenium	0.0049 U	D010	1.0	0.10	0.0049	mg/l	1	12/09/21	12/11/21	ND SW846 6010D ²
Silver	0.0069 J	D011	5.0	0.010	0.0019	mg/l	1	12/09/21	12/11/21	ND SW846 6010D ²
Vanadium	0.0062 J			0.050	0.0018	mg/l	1	12/09/21	12/11/21	ND SW846 6010D ²

- (1) Instrument QC Batch: MA51566
- (2) Instrument QC Batch: MA51586
- (3) Prep QC Batch: MP30255
- (4) Prep QC Batch: MP30275

RL = Reporting Limit MDL = Method Detection Limit U = Indicates a result < MDL
 MCL = Maximum Contamination Level (40 CFR 261 7/1/11) J = Indicates a result > = MDL but < RL

4.2
4

Report of Analysis

Client Sample ID: 11215131-120121-WC-JC-NE-G4(4-6)	Date Sampled: 12/01/21
Lab Sample ID: JD35487-2	Date Received: 12/03/21
Matrix: SO - Soil	Percent Solids: 72.6
Project: SJRWP - PCFSE, Harris County, TX	

General Chemistry

Analyte	Result	RL	MDL	Units	DF	Analyzed	By	Method
Corrosivity as pH	7.31 NC			su	1	12/06/21 14:18 MM	SW846	9045D
Cyanide	0.19 U	0.38	0.19	mg/kg	1	12/09/21 03:46 EB	SW846	9012B/LACHAT
Cyanide Reactivity	9.6 U	13	9.6	mg/kg	1	12/09/21 07:58 EB	SW846	CHAP7/9012 B
Ignitability (Flashpoint)	> 200			Deg. F	1	12/06/21 14:30 MM	SW846	1010B/ASTM D93
Moisture (Dry Weight Basis)	37.8			%	1	12/06/21 17:00 BG	ASTM	2216-92
Paint Filter Test ^a	0.25 U	0.50	0.25	ml/100g	1	12/07/21 09:30 MM	SW846	9095/9095B
Sulfide Reactivity	81 U	140	81	mg/kg	1	12/06/21 13:08 MP	SW846	CHAP7/9034
Sulfide, Neutral Extraction	16.4	5.5	4.9	mg/kg	1	12/06/21 15:50 MP	SW846	9034 M

(a) No free liquids.

RL = Reporting Limit
 MDL = Method Detection Limit

U = Indicates a result < MDL
 J = Indicates a result > = MDL but < RL

4.2
4

Report of Analysis

Client Sample ID: 11215131-120221-WC-JC-SW-B4(2-4)	Date Sampled: 12/02/21
Lab Sample ID: JD35487-3	Date Received: 12/03/21
Matrix: SO - Soil	Percent Solids: 79.2
Method: SW846 8260D SW846 1311	
Project: SJRWP - PCFSE, Harris County, TX	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2B187885.D	5	12/09/21 13:58	ED	12/06/21 16:00	GP37443	V2B8531
Run #2							

Run #	Purge Volume
Run #1	5.0 ml
Run #2	

VOA Special List

TCLP Leachate method SW846 1311

CAS No.	Compound	Result	HW#	MCL	RL	MDL	Units	Q
67-64-1	Acetone ^a	ND			0.050	0.030	mg/l	
75-05-8	Acetonitrile	ND			0.50	0.037	mg/l	
107-13-1	Acrylonitrile	ND			0.25	0.0052	mg/l	
71-43-2	Benzene	ND	D018	0.50	0.0025	0.0021	mg/l	
75-27-4	Bromodichloromethane	ND			0.0050	0.0029	mg/l	
75-25-2	Bromoform	ND			0.020	0.0032	mg/l	
74-83-9	Bromomethane	ND			0.010	0.0082	mg/l	
78-93-3	2-Butanone (MEK)	ND	D035	200	0.10	0.034	mg/l	
75-15-0	Carbon disulfide	ND			0.010	0.0048	mg/l	
56-23-5	Carbon tetrachloride	ND	D019	0.50	0.0050	0.0028	mg/l	
108-90-7	Chlorobenzene	ND	D021	100	0.0050	0.0028	mg/l	
67-66-3	Chloroform ^b	0.0108	D022	6.0	0.0050	0.0025	mg/l	B
106-93-4	1,2-Dibromoethane	ND			0.010	0.0024	mg/l	
106-46-7	1,4-Dichlorobenzene	ND	D027	7.5	0.0050	0.0025	mg/l	
75-71-8	Dichlorodifluoromethane	ND			0.010	0.0068	mg/l	
107-06-2	1,2-Dichloroethane	ND	D028	0.50	0.0050	0.0030	mg/l	
75-35-4	1,1-Dichloroethene	ND	D029	0.70	0.0050	0.0030	mg/l	
542-75-6	1,3-Dichloropropene (total)	ND			0.0050	0.0022	mg/l	
10061-02-6	trans-1,3-Dichloropropene	ND			0.0050	0.0022	mg/l	
100-41-4	Ethylbenzene	ND			0.0050	0.0030	mg/l	
87-68-3	Hexachlorobutadiene	ND	D033	0.50	0.025	0.0028	mg/l	
78-83-1	Isobutyl alcohol	ND			0.25	0.061	mg/l	
126-98-7	Methacrylonitrile	ND			0.050	0.0050	mg/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND			0.025	0.0093	mg/l	
75-09-2	Methylene chloride	0.0024			0.010	0.00050	mg/l	J
100-42-5	Styrene	ND			0.025	0.0035	mg/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND			0.025	0.0028	mg/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND			0.010	0.0033	mg/l	
127-18-4	Tetrachloroethene	ND	D039	0.70	0.0050	0.0045	mg/l	
108-88-3	Toluene	ND			0.0050	0.0027	mg/l	
71-55-6	1,1,1-Trichloroethane	ND			0.0050	0.0027	mg/l	
79-00-5	1,1,2-Trichloroethane	ND			0.0050	0.0027	mg/l	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
MCL = Maximum Contamination Level (40 CFR 261 7/1/11) B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

4.3
4

Report of Analysis

Client Sample ID: 11215131-120221-WC-JC-SW-B4(2-4)	Date Sampled: 12/02/21
Lab Sample ID: JD35487-3	Date Received: 12/03/21
Matrix: SO - Soil	Percent Solids: 79.2
Method: SW846 8260D SW846 1311	
Project: SJRWP - PCFSE, Harris County, TX	

VOA Special List

TCLP Leachate method SW846 1311

CAS No.	Compound	Result	HW#	MCL	RL	MDL	Units	Q
79-01-6	Trichloroethene	ND	D040	0.50	0.0050	0.0026	mg/l	
75-69-4	Trichlorofluoromethane	ND			0.025	0.0042	mg/l	
96-18-4	1,2,3-Trichloropropane	ND			0.025	0.0035	mg/l	
75-01-4	Vinyl chloride	ND	D043	0.20	0.0050	0.0039	mg/l	
	m,p-Xylene	ND			0.0050	0.0039	mg/l	
95-47-6	o-Xylene	ND			0.0050	0.0030	mg/l	
1330-20-7	Xylene (total)	ND			0.0050	0.0039	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	99%		76-120%
17060-07-0	1,2-Dichloroethane-D4	95%		64-135%
2037-26-5	Toluene-D8	94%		76-117%
460-00-4	4-Bromofluorobenzene	103%		72-122%

- (a) Associated CCV outside of control limits high, sample was ND.
- (b) Indicates analyte found in associated leachate blank.

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
 MCL = Maximum Contamination Level (40 CFR 261 7/1/11) B = Indicates analyte found in associated method blank
 E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

4.3
4

Report of Analysis

Client Sample ID: 11215131-120221-WC-JC-SW-B4(2-4)	Date Sampled: 12/02/21
Lab Sample ID: JD35487-3	Date Received: 12/03/21
Matrix: SO - Soil	Percent Solids: 79.2
Method: SW846 8270E SW846 3510C	
Project: SJRWP - PCFSE, Harris County, TX	

Run #1	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	6P503038.D	1	12/10/21 17:30	KLS	12/09/21 16:15	OP37049	E6P3571
Run #2							

Run #1	Initial Volume	Final Volume
Run #1	100 ml	1.0 ml
Run #2		

ABN TCLP Leachate

TCLP Leachate method SW846 1311

CAS No.	Compound	Result	HW#	MCL	RL	MDL	Units	Q
95-48-7	2-Methylphenol	ND	D023	200	0.020	0.0089	mg/l	
	3&4-Methylphenol	ND	D024	200	0.020	0.0088	mg/l	
87-86-5	Pentachlorophenol	ND	D037	100	0.10	0.014	mg/l	
95-95-4	2,4,5-Trichlorophenol	ND	D041	400	0.050	0.013	mg/l	
88-06-2	2,4,6-Trichlorophenol	ND	D042	2.0	0.050	0.0092	mg/l	
106-46-7	1,4-Dichlorobenzene	ND	D027	7.5	0.020	0.0017	mg/l	
121-14-2	2,4-Dinitrotoluene	ND	D030	0.13	0.020	0.0055	mg/l	
118-74-1	Hexachlorobenzene	ND	D032	0.13	0.020	0.0033	mg/l	
87-68-3	Hexachlorobutadiene	ND	D033	0.50	0.010	0.0049	mg/l	
67-72-1	Hexachloroethane	ND	D034	3.0	0.050	0.0039	mg/l	
98-95-3	Nitrobenzene	ND	D036	2.0	0.020	0.0064	mg/l	
110-86-1	Pyridine	ND	D038	5.0	0.020	0.0039	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	24%		10-73%
4165-62-2	Phenol-d5	18%		10-64%
118-79-6	2,4,6-Tribromophenol	75%		31-130%
4165-60-0	Nitrobenzene-d5	76%		28-126%
321-60-8	2-Fluorobiphenyl	62%		26-114%
1718-51-0	Terphenyl-d14	27%		16-122%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
MCL = Maximum Contamination Level (40 CFR 261 7/1/11) B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

4.3
4

Report of Analysis

Client Sample ID: 11215131-120221-WC-JC-SW-B4(2-4)	Date Sampled: 12/02/21
Lab Sample ID: JD35487-3	Date Received: 12/03/21
Matrix: SO - Soil	Percent Solids: 79.2
Method: SW846 8151A SW846 3510C	
Project: SJRWP - PCFSE, Harris County, TX	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	OA155567.D	1	12/13/21 02:14	CP	12/09/21 20:10	OP37051	GOA5501
Run #2							

Run #	Initial Volume	Final Volume
Run #1	30.0 ml	2.0 ml
Run #2		

Herbicide TCLP Leachate

TCLP Leachate method SW846 1311

CAS No.	Compound	Result	HW#	MCL	RL	MDL	Units	Q
94-75-7	2,4-D	ND	D016	10	0.0033	0.00098	mg/l	
93-72-1	2,4,5-TP (Silvex)	ND	D017	1.0	0.0010	0.00020	mg/l	
88-85-7	Dinoseb	ND			0.0033	0.0013	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
19719-28-9	2,4-DCAA	90%		13-169%
19719-28-9	2,4-DCAA	81%		13-169%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
 MCL = Maximum Contamination Level (40 CFR 261 7/1/11) B = Indicates analyte found in associated method blank
 E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

4.3
4

Report of Analysis

Client Sample ID: 11215131-120221-WC-JC-SW-B4(2-4)	Date Sampled: 12/02/21
Lab Sample ID: JD35487-3	Date Received: 12/03/21
Matrix: SO - Soil	Percent Solids: 79.2
Method: SW846 8081B SW846 3510C	
Project: SJRWP - PCFSE, Harris County, TX	

Run #1	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	6G81249.D	1	12/17/21 05:02	CP	12/15/21 21:23	OP37053	G6G2873
Run #2							

Run #1	Initial Volume	Final Volume
Run #1	30.0 ml	2.0 ml
Run #2		

Pesticide TCLP Leachate Special List

TCLP Leachate method SW846 1311

CAS No.	Compound	Result	HW#	MCL	RL	MDL	Units	Q
58-89-9	gamma-BHC (Lindane)	ND	D013	0.40	0.000067	0.000040	mg/l	
12789-03-6	Chlordane	ND	D020	0.030	0.0033	0.0014	mg/l	
60-57-1	Dieldrin	ND			0.000067	0.000051	mg/l	
72-54-8	4,4'-DDD	ND			0.000067	0.000038	mg/l	
72-55-9	4,4'-DDE	ND			0.000067	0.000034	mg/l	
50-29-3	4,4'-DDT	ND			0.000067	0.000046	mg/l	
72-20-8	Endrin	ND	D012	0.020	0.000067	0.000040	mg/l	
959-98-8	Endosulfan-I	ND			0.000067	0.000035	mg/l	
33213-65-9	Endosulfan-II	ND			0.000067	0.000033	mg/l	
76-44-8	Heptachlor	ND	D031	0.0080	0.000067	0.000030	mg/l	
1024-57-3	Heptachlor epoxide	ND	D031	0.0080	0.000067	0.000040	mg/l	
72-43-5	Methoxychlor	ND	D014	10	0.00013	0.000045	mg/l	
2385-85-5	Mirex	ND			0.00033	0.000031	mg/l	
8001-35-2	Toxaphene	ND	D015	0.50	0.0017	0.0011	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	62%		30-137%
877-09-8	Tetrachloro-m-xylene	58%		30-137%
2051-24-3	Decachlorobiphenyl	39%		10-137%
2051-24-3	Decachlorobiphenyl	63%		10-137%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
 MCL = Maximum Contamination Level (40 CFR 261 7/1/11) B = Indicates analyte found in associated method blank
 E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

4.3
4

Report of Analysis

Client Sample ID: 11215131-120221-WC-JC-SW-B4(2-4)	Date Sampled: 12/02/21
Lab Sample ID: JD35487-3	Date Received: 12/03/21
Matrix: SO - Soil	Percent Solids: 79.2
Method: SW846 8082A SW846 3546	
Project: SJRWP - PCFSE, Harris County, TX	

Run #1	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	RK7214.D	1	12/10/21 13:07	RK	12/08/21 10:25	OP36975	GRK186
Run #2							

Run #1	Initial Weight	Final Volume
Run #1	16.8 g	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	0.038	0.018	mg/kg	
11104-28-2	Aroclor 1221	ND	0.038	0.023	mg/kg	
11141-16-5	Aroclor 1232	ND	0.038	0.024	mg/kg	
53469-21-9	Aroclor 1242	ND	0.038	0.015	mg/kg	
12672-29-6	Aroclor 1248	ND	0.038	0.034	mg/kg	
11097-69-1	Aroclor 1254	ND	0.038	0.020	mg/kg	
11096-82-5	Aroclor 1260	ND	0.038	0.016	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	84%		10-163%
877-09-8	Tetrachloro-m-xylene	132%		10-163%
2051-24-3	Decachlorobiphenyl	65%		10-215%
2051-24-3	Decachlorobiphenyl	128%		10-215%

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

4.3
4

Report of Analysis

Client Sample ID: 11215131-120221-WC-JC-SW-B4(2-4)	Date Sampled: 12/02/21
Lab Sample ID: JD35487-3	Date Received: 12/03/21
Matrix: SO - Soil	Percent Solids: 79.2
Project: SJRWP - PCFSE, Harris County, TX	

Metals Analysis, TCLP Leachate SW846 1311

Analyte	Result	HW#	MCL	RL	MDL	Units	DF	Prep	Analyzed By	Method
Antimony	0.0047 U			0.10	0.0047	mg/l	1	12/09/21	12/11/21	ND SW846 6010D ²
Arsenic	0.0091 J	D004	5.0	0.10	0.0028	mg/l	1	12/09/21	12/11/21	ND SW846 6010D ²
Barium	0.91	D005	100	0.20	0.013	mg/l	1	12/09/21	12/11/21	ND SW846 6010D ²
Beryllium	0.00070 J			0.0020	0.00050	mg/l	1	12/09/21	12/11/21	ND SW846 6010D ²
Cadmium	0.0039 J	D006	1.0	0.0040	0.0010	mg/l	1	12/09/21	12/11/21	ND SW846 6010D ²
Chromium	0.0087 J	D007	5.0	0.010	0.0020	mg/l	1	12/09/21	12/11/21	ND SW846 6010D ²
Lead	0.011 J	D008	5.0	0.10	0.0018	mg/l	1	12/09/21	12/11/21	ND SW846 6010D ²
Mercury	0.000095 U	D009	0.20	0.00020	0.000095	mg/l	1	12/09/21	12/09/21	SB SW846 7470A ¹
Nickel	0.035			0.020	0.0017	mg/l	1	12/09/21	12/11/21	ND SW846 6010D ²
Selenium	0.0049 U	D010	1.0	0.10	0.0049	mg/l	1	12/09/21	12/11/21	ND SW846 6010D ²
Silver	0.0072 J	D011	5.0	0.010	0.0019	mg/l	1	12/09/21	12/11/21	ND SW846 6010D ²
Vanadium	0.011 J			0.050	0.0018	mg/l	1	12/09/21	12/11/21	ND SW846 6010D ²

- (1) Instrument QC Batch: MA51566
- (2) Instrument QC Batch: MA51586
- (3) Prep QC Batch: MP30255
- (4) Prep QC Batch: MP30275

RL = Reporting Limit MDL = Method Detection Limit U = Indicates a result < MDL
MCL = Maximum Contamination Level (40 CFR 261 7/1/11) J = Indicates a result > = MDL but < RL

4.3
4

Report of Analysis

Client Sample ID: 11215131-120221-WC-JC-SW-B4(2-4)	Date Sampled: 12/02/21
Lab Sample ID: JD35487-3	Date Received: 12/03/21
Matrix: SO - Soil	Percent Solids: 79.2
Project: SJRWP - PCFSE, Harris County, TX	

General Chemistry

Analyte	Result	RL	MDL	Units	DF	Analyzed	By	Method
Corrosivity as pH	7.43 NC			su	1	12/06/21 14:20 MM	SW846	9045D
Cyanide	0.17 J	0.34	0.17	mg/kg	1	12/09/21 03:57 EB	SW846	9012B/LACHAT
Cyanide Reactivity	9.2 U	12	9.2	mg/kg	1	12/09/21 08:56 EB	SW846	CHAP7/9012 B
Ignitability (Flashpoint)	> 200			Deg. F	1	12/06/21 14:30 MM	SW846	1010B/ASTM D93
Moisture (Dry Weight Basis)	26.2			%	1	12/06/21 17:00 BG	ASTM	2216-92
Paint Filter Test ^a	0.25 U	0.50	0.25	ml/100g	1	12/07/21 09:30 MM	SW846	9095/9095B
Sulfide Reactivity	72 U	120	72	mg/kg	1	12/08/21 14:20 MP	SW846	CHAP7/9034
Sulfide, Neutral Extraction	4.5 U	5.0	4.5	mg/kg	1	12/06/21 15:50 MP	SW846	9034 M

(a) No free liquids.

RL = Reporting Limit
 MDL = Method Detection Limit

U = Indicates a result < MDL
 J = Indicates a result > = MDL but < RL

4.3
4

Report of Analysis

Client Sample ID:	11215131-120621-WC-SS-SC-B-4(2-4)	Date Sampled:	12/06/21
Lab Sample ID:	JD35487-4	Date Received:	12/07/21
Matrix:	SO - Soil	Percent Solids:	81.8
Method:	SW846 8260D SW846 1311		
Project:	SJRWP - PCFSE, Harris County, TX		

Run #1	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	L335977.D	5	12/15/21 04:06	NW	12/09/21 15:00	GP37492	VL10104
Run #2							

Run #1	Purge Volume
Run #1	5.0 ml
Run #2	

VOA Special List

TCLP Leachate method SW846 1311

CAS No.	Compound	Result	HW#	MCL	RL	MDL	Units	Q
67-64-1	Acetone ^a	ND			0.050	0.030	mg/l	
75-05-8	Acetonitrile ^b	ND			0.50	0.037	mg/l	
107-13-1	Acrylonitrile	ND			0.25	0.0052	mg/l	
71-43-2	Benzene	ND	D018	0.50	0.0025	0.0021	mg/l	
75-27-4	Bromodichloromethane	ND			0.0050	0.0029	mg/l	
75-25-2	Bromoform	ND			0.020	0.0032	mg/l	
74-83-9	Bromomethane	ND			0.010	0.0082	mg/l	
78-93-3	2-Butanone (MEK) ^c	ND	D035	200	0.10	0.034	mg/l	
75-15-0	Carbon disulfide	ND			0.010	0.0048	mg/l	
56-23-5	Carbon tetrachloride	ND	D019	0.50	0.0050	0.0028	mg/l	
108-90-7	Chlorobenzene	ND	D021	100	0.0050	0.0028	mg/l	
67-66-3	Chloroform ^d	0.0068	D022	6.0	0.0050	0.0025	mg/l	B
106-93-4	1,2-Dibromoethane	ND			0.010	0.0024	mg/l	
106-46-7	1,4-Dichlorobenzene	ND	D027	7.5	0.0050	0.0025	mg/l	
75-71-8	Dichlorodifluoromethane	ND			0.010	0.0068	mg/l	
107-06-2	1,2-Dichloroethane	ND	D028	0.50	0.0050	0.0030	mg/l	
75-35-4	1,1-Dichloroethene	ND	D029	0.70	0.0050	0.0030	mg/l	
542-75-6	1,3-Dichloropropene (total)	ND			0.0050	0.0022	mg/l	
10061-02-6	trans-1,3-Dichloropropene	ND			0.0050	0.0022	mg/l	
100-41-4	Ethylbenzene	ND			0.0050	0.0030	mg/l	
87-68-3	Hexachlorobutadiene	ND	D033	0.50	0.025	0.0028	mg/l	
78-83-1	Isobutyl alcohol ^b	ND			0.25	0.061	mg/l	
126-98-7	Methacrylonitrile	ND			0.050	0.0050	mg/l	
108-10-1	4-Methyl-2-pentanone(MIBK) ^b	ND			0.025	0.0093	mg/l	
75-09-2	Methylene chloride	ND			0.010	0.00050	mg/l	
100-42-5	Styrene	ND			0.025	0.0035	mg/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND			0.025	0.0028	mg/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND			0.010	0.0033	mg/l	
127-18-4	Tetrachloroethene	ND	D039	0.70	0.0050	0.0045	mg/l	
108-88-3	Toluene	ND			0.0050	0.0027	mg/l	
71-55-6	1,1,1-Trichloroethane	ND			0.0050	0.0027	mg/l	
79-00-5	1,1,2-Trichloroethane	ND			0.0050	0.0027	mg/l	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
MCL = Maximum Contamination Level (40 CFR 261 7/1/11) B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

4.4
4

Report of Analysis

Client Sample ID: 11215131-120621-WC-SS-SC-B-4(2-4)	Date Sampled: 12/06/21
Lab Sample ID: JD35487-4	Date Received: 12/07/21
Matrix: SO - Soil	Percent Solids: 81.8
Method: SW846 8260D SW846 1311	
Project: SJRWP - PCFSE, Harris County, TX	

VOA Special List

TCLP Leachate method SW846 1311

CAS No.	Compound	Result	HW#	MCL	RL	MDL	Units	Q
79-01-6	Trichloroethene	ND	D040	0.50	0.0050	0.0026	mg/l	
75-69-4	Trichlorofluoromethane	ND			0.025	0.0042	mg/l	
96-18-4	1,2,3-Trichloropropane	ND			0.025	0.0035	mg/l	
75-01-4	Vinyl chloride	ND	D043	0.20	0.0050	0.0039	mg/l	
	m,p-Xylene	ND			0.0050	0.0039	mg/l	
95-47-6	o-Xylene	ND			0.0050	0.0030	mg/l	
1330-20-7	Xylene (total)	ND			0.0050	0.0039	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	107%		76-120%
17060-07-0	1,2-Dichloroethane-D4	116%		64-135%
2037-26-5	Toluene-D8	99%		76-117%
460-00-4	4-Bromofluorobenzene	108%		72-122%

- (a) Associated CCV outside of control limits low. A sensitivity check was analyzed to demonstrate system suitability to detect affected analyte. Sample was ND.
- (b) Associated CCV outside of control limits high, sample was ND.
- (c) This compound in blank spike is outside in house QC limits bias high.
- (d) Indicates analyte found in associated leachate blank.

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
 MCL = Maximum Contamination Level (40 CFR 261 7/1/11) B = Indicates analyte found in associated method blank
 E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: 11215131-120621-WC-SS-SC-B-4(2-4)	Date Sampled: 12/06/21
Lab Sample ID: JD35487-4	Date Received: 12/07/21
Matrix: SO - Soil	Percent Solids: 81.8
Method: SW846 8270E SW846 3510C	
Project: SJRWP - PCFSE, Harris County, TX	

Run #1	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	F204321.D	1	12/16/21 12:18	CS	12/15/21 11:00	OP37159	EF8956
Run #2							

Run #1	Initial Volume	Final Volume
Run #1	100 ml	1.0 ml
Run #2		

ABN TCLP Leachate

TCLP Leachate method SW846 1311

CAS No.	Compound	Result	HW#	MCL	RL	MDL	Units	Q
95-48-7	2-Methylphenol	ND	D023	200	0.020	0.0089	mg/l	
	3&4-Methylphenol	ND	D024	200	0.020	0.0088	mg/l	
87-86-5	Pentachlorophenol	ND	D037	100	0.10	0.014	mg/l	
95-95-4	2,4,5-Trichlorophenol	ND	D041	400	0.050	0.013	mg/l	
88-06-2	2,4,6-Trichlorophenol	ND	D042	2.0	0.050	0.0092	mg/l	
106-46-7	1,4-Dichlorobenzene	ND	D027	7.5	0.020	0.0017	mg/l	
121-14-2	2,4-Dinitrotoluene	ND	D030	0.13	0.020	0.0055	mg/l	
118-74-1	Hexachlorobenzene	ND	D032	0.13	0.020	0.0033	mg/l	
87-68-3	Hexachlorobutadiene	ND	D033	0.50	0.010	0.0049	mg/l	
67-72-1	Hexachloroethane	ND	D034	3.0	0.050	0.0039	mg/l	
98-95-3	Nitrobenzene	ND	D036	2.0	0.020	0.0064	mg/l	
110-86-1	Pyridine	ND	D038	5.0	0.020	0.0039	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	36%		10-73%
4165-62-2	Phenol-d5	24%		10-64%
118-79-6	2,4,6-Tribromophenol	83%		31-130%
4165-60-0	Nitrobenzene-d5	68%		28-126%
321-60-8	2-Fluorobiphenyl	76%		26-114%
1718-51-0	Terphenyl-d14	74%		16-122%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
MCL = Maximum Contamination Level (40 CFR 261 7/1/11) B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

4.4
4

Report of Analysis

Client Sample ID: 11215131-120621-WC-SS-SC-B-4(2-4)	Date Sampled: 12/06/21
Lab Sample ID: JD35487-4	Date Received: 12/07/21
Matrix: SO - Soil	Percent Solids: 81.8
Method: SW846 8151A SW846 3510C	
Project: SJRWP - PCFSE, Harris County, TX	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3G134643.D	1	12/20/21 00:28	CP	12/15/21 22:20	OP37163	G3G4913
Run #2							

Run #	Initial Volume	Final Volume
Run #1	30.0 ml	2.0 ml
Run #2		

Herbicide TCLP Leachate

TCLP Leachate method SW846 1311

CAS No.	Compound	Result	HW#	MCL	RL	MDL	Units	Q
94-75-7	2,4-D	ND	D016	10	0.0033	0.00098	mg/l	
93-72-1	2,4,5-TP (Silvex)	ND	D017	1.0	0.0010	0.00020	mg/l	
88-85-7	Dinoseb	ND			0.0033	0.0013	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
19719-28-9	2,4-DCAA	70%		13-169%
19719-28-9	2,4-DCAA	54%		13-169%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
 MCL = Maximum Contamination Level (40 CFR 261 7/1/11) B = Indicates analyte found in associated method blank
 E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: 11215131-120621-WC-SS-SC-B-4(2-4)	Date Sampled: 12/06/21
Lab Sample ID: JD35487-4	Date Received: 12/07/21
Matrix: SO - Soil	Percent Solids: 81.8
Method: SW846 8081B SW846 3510C	
Project: SJRWP - PCFSE, Harris County, TX	

Run #1	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	6G81250.D	1	12/17/21 05:19	CP	12/15/21 21:23	OP37162	G6G2873
Run #2							

Run #1	Initial Volume	Final Volume
Run #1	30.0 ml	2.0 ml
Run #2		

Pesticide TCLP Leachate Special List

TCLP Leachate method SW846 1311

CAS No.	Compound	Result	HW#	MCL	RL	MDL	Units	Q
58-89-9	gamma-BHC (Lindane)	ND	D013	0.40	0.000067	0.000040	mg/l	
12789-03-6	Chlordane	ND	D020	0.030	0.0033	0.0014	mg/l	
60-57-1	Dieldrin	ND			0.000067	0.000051	mg/l	
72-54-8	4,4'-DDD	ND			0.000067	0.000038	mg/l	
72-55-9	4,4'-DDE	ND			0.000067	0.000034	mg/l	
50-29-3	4,4'-DDT	ND			0.000067	0.000046	mg/l	
72-20-8	Endrin	ND	D012	0.020	0.000067	0.000040	mg/l	
959-98-8	Endosulfan-I	ND			0.000067	0.000035	mg/l	
33213-65-9	Endosulfan-II	ND			0.000067	0.000033	mg/l	
76-44-8	Heptachlor	ND	D031	0.0080	0.000067	0.000030	mg/l	
1024-57-3	Heptachlor epoxide	ND	D031	0.0080	0.000067	0.000040	mg/l	
72-43-5	Methoxychlor	ND	D014	10	0.00013	0.000045	mg/l	
2385-85-5	Mirex	ND			0.00033	0.000031	mg/l	
8001-35-2	Toxaphene	ND	D015	0.50	0.0017	0.0011	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	70%		30-137%
877-09-8	Tetrachloro-m-xylene	68%		30-137%
2051-24-3	Decachlorobiphenyl	45%		10-137%
2051-24-3	Decachlorobiphenyl	63%		10-137%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
MCL = Maximum Contamination Level (40 CFR 261 7/1/11) B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

4.4
4

Report of Analysis

Client Sample ID: 11215131-120621-WC-SS-SC-B-4(2-4)	Date Sampled: 12/06/21
Lab Sample ID: JD35487-4	Date Received: 12/07/21
Matrix: SO - Soil	Percent Solids: 81.8
Method: SW846 8082A SW846 3546	
Project: SJRWP - PCFSE, Harris County, TX	

Run #1	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	XX2475708.D	1	12/13/21 22:27	TL	12/10/21 10:30	OP37070	GXX7682
Run #2							

Run #1	Initial Weight	Final Volume
Run #1	16.1 g	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	0.038	0.018	mg/kg	
11104-28-2	Aroclor 1221	ND	0.038	0.024	mg/kg	
11141-16-5	Aroclor 1232	ND	0.038	0.024	mg/kg	
53469-21-9	Aroclor 1242	ND	0.038	0.016	mg/kg	
12672-29-6	Aroclor 1248	0.303	0.038	0.034	mg/kg	
11097-69-1	Aroclor 1254	0.552	0.038	0.020	mg/kg	
11096-82-5	Aroclor 1260	0.210	0.038	0.016	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	62%		10-163%
877-09-8	Tetrachloro-m-xylene	66%		10-163%
2051-24-3	Decachlorobiphenyl	65%		10-215%
2051-24-3	Decachlorobiphenyl	69%		10-215%

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

4.4
4

Report of Analysis

Client Sample ID: 11215131-120621-WC-SS-SC-B-4(2-4)	Date Sampled: 12/06/21
Lab Sample ID: JD35487-4	Date Received: 12/07/21
Matrix: SO - Soil	Percent Solids: 81.8
Project: SJRWP - PCFSE, Harris County, TX	

Metals Analysis, TCLP Leachate SW846 1311

Analyte	Result	HW#	MCL	RL	MDL	Units	DF	Prep	Analyzed By	Method
Antimony	0.0052 J			0.10	0.0047	mg/l	1	12/11/21	12/13/21	ND SW846 6010D ²
Arsenic	0.0028 U	D004	5.0	0.10	0.0028	mg/l	1	12/11/21	12/13/21	ND SW846 6010D ²
Barium	1.2	D005	100	0.20	0.013	mg/l	1	12/11/21	12/13/21	ND SW846 6010D ²
Beryllium	0.00050 U			0.0020	0.00050	mg/l	1	12/11/21	12/13/21	ND SW846 6010D ²
Cadmium	0.010	D006	1.0	0.0040	0.0010	mg/l	1	12/11/21	12/13/21	ND SW846 6010D ²
Chromium	0.0032 J	D007	5.0	0.020	0.0020	mg/l	1	12/11/21	12/13/21	ND SW846 6010D ²
Lead	0.0018 U	D008	5.0	0.10	0.0018	mg/l	1	12/11/21	12/13/21	ND SW846 6010D ²
Mercury	0.00011 J	D009	0.20	0.00020	0.000095	mg/l	1	12/13/21	12/13/21	SB SW846 7470A ¹
Nickel	0.032			0.010	0.0017	mg/l	1	12/11/21	12/13/21	ND SW846 6010D ²
Selenium	0.0070 J	D010	1.0	0.10	0.0049	mg/l	1	12/11/21	12/13/21	ND SW846 6010D ²
Silver	0.0034 J	D011	5.0	0.010	0.0019	mg/l	1	12/11/21	12/13/21	ND SW846 6010D ²
Vanadium	0.0018 U			0.050	0.0018	mg/l	1	12/11/21	12/13/21	ND SW846 6010D ²

- (1) Instrument QC Batch: MA51583
- (2) Instrument QC Batch: MA51594
- (3) Prep QC Batch: MP30324
- (4) Prep QC Batch: MP30341

RL = Reporting Limit MDL = Method Detection Limit U = Indicates a result < MDL
 MCL = Maximum Contamination Level (40 CFR 261 7/1/11) J = Indicates a result > = MDL but < RL

4.4
4

Report of Analysis

Client Sample ID: 11215131-120621-WC-SS-SC-B-4(2-4)	Date Sampled: 12/06/21
Lab Sample ID: JD35487-4	Date Received: 12/07/21
Matrix: SO - Soil	Percent Solids: 81.8
Project: SJRWP - PCFSE, Harris County, TX	

General Chemistry

Analyte	Result	RL	MDL	Units	DF	Analyzed	By	Method
Corrosivity as pH	7.38 NC			su	1	12/09/21 12:02 MM	SW846	9045D
Cyanide	0.17 U	0.33	0.17	mg/kg	1	12/15/21 06:36 EB	SW846	9012B/LACHAT
Cyanide Reactivity	8.9 U	12	8.9	mg/kg	1	12/15/21 05:50 EB	SW846	CHAP7/9012 B
Ignitability (Flashpoint)	> 200			Deg. F	1	12/14/21 16:59 DB	SW846	1010B/ASTM D93
Moisture (Dry Weight Basis)	22.3			%	1	12/09/21 15:50 BG	ASTM	2216-92
Paint Filter Test ^a	0.25 U	0.50	0.25	ml/100g	1	12/14/21 10:00 MM	SW846	9095/9095B
Sulfide Reactivity	70 U	120	70	mg/kg	1	12/11/21 18:36 JOO	SW846	CHAP7/9034
Sulfide, Neutral Extraction	4.3 U	4.8	4.3	mg/kg	1	12/13/21 16:32 MP	SW846	9034 M

(a) No free liquids.

RL = Reporting Limit
 MDL = Method Detection Limit

U = Indicates a result < MDL
 J = Indicates a result > = MDL but < RL

4.4
4

Report of Analysis

Client Sample ID:	11215131-121321-WC-SS-NC-Y2(6-8)	Date Sampled:	12/13/21
Lab Sample ID:	JD35487-5	Date Received:	12/13/21
Matrix:	SO - Soil	Percent Solids:	41.8
Method:	SW846 8260D SW846 1311		
Project:	SJRWP - PCFSE, Harris County, TX		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	3D172314.D	5	12/28/21 17:52	NH	12/16/21 16:00	GP37615	V3D7311
Run #2							

Run #	Purge Volume
Run #1	5.0 ml
Run #2	

VOA Special List

TCLP Leachate method SW846 1311

CAS No.	Compound	Result	HW#	MCL	RL	MDL	Units	Q
67-64-1	Acetone	ND			0.050	0.030	mg/l	
75-05-8	Acetonitrile	ND			0.50	0.037	mg/l	
107-13-1	Acrylonitrile ^b	ND			0.25	0.0052	mg/l	
71-43-2	Benzene	ND	D018	0.50	0.0025	0.0021	mg/l	
75-27-4	Bromodichloromethane	ND			0.0050	0.0029	mg/l	
75-25-2	Bromoform	ND			0.020	0.0032	mg/l	
74-83-9	Bromomethane	ND			0.010	0.0082	mg/l	
78-93-3	2-Butanone (MEK)	ND	D035	200	0.10	0.034	mg/l	
75-15-0	Carbon disulfide	ND			0.010	0.0048	mg/l	
56-23-5	Carbon tetrachloride	ND	D019	0.50	0.0050	0.0028	mg/l	
108-90-7	Chlorobenzene	ND	D021	100	0.0050	0.0028	mg/l	
67-66-3	Chloroform ^c	0.0102	D022	6.0	0.0050	0.0025	mg/l	B
106-93-4	1,2-Dibromoethane	ND			0.010	0.0024	mg/l	
106-46-7	1,4-Dichlorobenzene	ND	D027	7.5	0.0050	0.0025	mg/l	
75-71-8	Dichlorodifluoromethane	ND			0.010	0.0068	mg/l	
107-06-2	1,2-Dichloroethane	ND	D028	0.50	0.0050	0.0030	mg/l	
75-35-4	1,1-Dichloroethene	ND	D029	0.70	0.0050	0.0030	mg/l	
542-75-6	1,3-Dichloropropene (total)	ND			0.0050	0.0022	mg/l	
10061-02-6	trans-1,3-Dichloropropene	ND			0.0050	0.0022	mg/l	
100-41-4	Ethylbenzene	ND			0.0050	0.0030	mg/l	
87-68-3	Hexachlorobutadiene	ND	D033	0.50	0.025	0.0028	mg/l	
78-83-1	Isobutyl alcohol	ND			0.25	0.061	mg/l	
126-98-7	Methacrylonitrile	ND			0.050	0.0050	mg/l	
108-10-1	4-Methyl-2-pentanone(MIBK ^d	ND			0.025	0.0093	mg/l	
75-09-2	Methylene chloride	ND			0.010	0.00050	mg/l	
100-42-5	Styrene	ND			0.025	0.0035	mg/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND			0.025	0.0028	mg/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND			0.010	0.0033	mg/l	
127-18-4	Tetrachloroethene	ND	D039	0.70	0.0050	0.0045	mg/l	
108-88-3	Toluene	ND			0.0050	0.0027	mg/l	
71-55-6	1,1,1-Trichloroethane	ND			0.0050	0.0027	mg/l	
79-00-5	1,1,2-Trichloroethane	ND			0.0050	0.0027	mg/l	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
MCL = Maximum Contamination Level (40 CFR 261 7/1/11) B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

4.5
4

Report of Analysis

Client Sample ID: 11215131-121321-WC-SS-NC-Y2(6-8)	Date Sampled: 12/13/21
Lab Sample ID: JD35487-5	Date Received: 12/13/21
Matrix: SO - Soil	Percent Solids: 41.8
Method: SW846 8260D SW846 1311	
Project: SJRWP - PCFSE, Harris County, TX	

VOA Special List

TCLP Leachate method SW846 1311

CAS No.	Compound	Result	HW#	MCL	RL	MDL	Units	Q
79-01-6	Trichloroethene	ND	D040	0.50	0.0050	0.0026	mg/l	
75-69-4	Trichlorofluoromethane	ND			0.025	0.0042	mg/l	
96-18-4	1,2,3-Trichloropropane	ND			0.025	0.0035	mg/l	
75-01-4	Vinyl chloride	ND	D043	0.20	0.0050	0.0039	mg/l	
	m,p-Xylene	ND			0.0050	0.0039	mg/l	
95-47-6	o-Xylene	ND			0.0050	0.0030	mg/l	
1330-20-7	Xylene (total)	ND			0.0050	0.0039	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	86%		76-120%
17060-07-0	1,2-Dichloroethane-D4	104%		64-135%
2037-26-5	Toluene-D8	102%		76-117%
460-00-4	4-Bromofluorobenzene	99%		72-122%

- (a) Sample analyzed outside the holding time.
- (b) Associated CCV outside of control limits high, sample was ND. This compound in blank spike is outside in house QC limits bias high.
- (c) Indicates analyte found in associated leachate blank.
- (d) Associated CCV outside of control limits high, sample was ND.

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
 MCL = Maximum Contamination Level (40 CFR 261 7/1/11) B = Indicates analyte found in associated method blank
 E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

4.5
4

Report of Analysis

Client Sample ID: 11215131-121321-WC-SS-NC-Y2(6-8)	Date Sampled: 12/13/21
Lab Sample ID: JD35487-5	Date Received: 12/13/21
Matrix: SO - Soil	Percent Solids: 41.8
Method: SW846 8270E SW846 3510C	
Project: SJRWP - PCFSE, Harris County, TX	

Run #1	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	6P503135.D	1	12/21/21 15:28	CS	12/20/21 15:10	OP37242	E6P3577
Run #2							

Run #1	Initial Volume	Final Volume
Run #1	100 ml	1.0 ml
Run #2		

ABN TCLP Leachate

TCLP Leachate method SW846 1311

CAS No.	Compound	Result	HW#	MCL	RL	MDL	Units	Q
95-48-7	2-Methylphenol	ND	D023	200	0.020	0.0089	mg/l	
	3&4-Methylphenol	ND	D024	200	0.020	0.0088	mg/l	
87-86-5	Pentachlorophenol	ND	D037	100	0.10	0.014	mg/l	
95-95-4	2,4,5-Trichlorophenol	ND	D041	400	0.050	0.013	mg/l	
88-06-2	2,4,6-Trichlorophenol	ND	D042	2.0	0.050	0.0092	mg/l	
106-46-7	1,4-Dichlorobenzene	ND	D027	7.5	0.020	0.0017	mg/l	
121-14-2	2,4-Dinitrotoluene	ND	D030	0.13	0.020	0.0055	mg/l	
118-74-1	Hexachlorobenzene	ND	D032	0.13	0.020	0.0033	mg/l	
87-68-3	Hexachlorobutadiene	ND	D033	0.50	0.010	0.0049	mg/l	
67-72-1	Hexachloroethane	ND	D034	3.0	0.050	0.0039	mg/l	
98-95-3	Nitrobenzene	ND	D036	2.0	0.020	0.0064	mg/l	
110-86-1	Pyridine	ND	D038	5.0	0.020	0.0039	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	32%		10-73%
4165-62-2	Phenol-d5	20%		10-64%
118-79-6	2,4,6-Tribromophenol	83%		31-130%
4165-60-0	Nitrobenzene-d5	80%		28-126%
321-60-8	2-Fluorobiphenyl	83%		26-114%
1718-51-0	Terphenyl-d14	79%		16-122%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
MCL = Maximum Contamination Level (40 CFR 261 7/1/11) B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

4.5
4

Report of Analysis

Client Sample ID: 11215131-121321-WC-SS-NC-Y2(6-8)	Date Sampled: 12/13/21
Lab Sample ID: JD35487-5	Date Received: 12/13/21
Matrix: SO - Soil	Percent Solids: 41.8
Method: SW846 8151A SW846 3510C	
Project: SJRWP - PCFSE, Harris County, TX	

Run #1	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	OA155798.D	1	12/28/21 17:33	CP	12/20/21 18:50	OP37244	GOA5510
Run #2							

Run #1	Initial Volume	Final Volume
Run #1	30.0 ml	2.0 ml
Run #2		

Herbicide TCLP Leachate

TCLP Leachate method SW846 1311

CAS No.	Compound	Result	HW#	MCL	RL	MDL	Units	Q
94-75-7	2,4-D	ND	D016	10	0.0033	0.00098	mg/l	
93-72-1	2,4,5-TP (Silvex)	ND	D017	1.0	0.0010	0.00020	mg/l	
88-85-7	Dinoseb ^a	ND			0.0033	0.0013	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
19719-28-9	2,4-DCAA	60%		13-169%
19719-28-9	2,4-DCAA	47%		13-169%

(a) Associated CCV outside of control limits high, sample was ND.

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
MCL = Maximum Contamination Level (40 CFR 261 7/1/11) B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

4.5
4

Report of Analysis

Client Sample ID: 11215131-121321-WC-SS-NC-Y2(6-8)	Date Sampled: 12/13/21
Lab Sample ID: JD35487-5	Date Received: 12/13/21
Matrix: SO - Soil	Percent Solids: 41.8
Method: SW846 8081B SW846 3510C	
Project: SJRWP - PCFSE, Harris County, TX	

Run #1	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1G172723.D	1	01/10/22 05:14	CP	12/27/21 17:29	OP37246	G1G5965
Run #2							

Run #1	Initial Volume	Final Volume
Run #1	30.0 ml	2.0 ml
Run #2		

Pesticide TCLP Leachate Special List

TCLP Leachate method SW846 1311

CAS No.	Compound	Result	HW#	MCL	RL	MDL	Units	Q
58-89-9	gamma-BHC (Lindane)	ND	D013	0.40	0.000067	0.000040	mg/l	
12789-03-6	Chlordane	ND	D020	0.030	0.0033	0.0014	mg/l	
60-57-1	Dieldrin	ND			0.000067	0.000051	mg/l	
72-54-8	4,4'-DDD	ND			0.000067	0.000038	mg/l	
72-55-9	4,4'-DDE	ND			0.000067	0.000034	mg/l	
50-29-3	4,4'-DDT	ND			0.000067	0.000046	mg/l	
72-20-8	Endrin	ND	D012	0.020	0.000067	0.000040	mg/l	
959-98-8	Endosulfan-I	ND			0.000067	0.000035	mg/l	
33213-65-9	Endosulfan-II	ND			0.000067	0.000033	mg/l	
76-44-8	Heptachlor	ND	D031	0.0080	0.000067	0.000030	mg/l	
1024-57-3	Heptachlor epoxide	ND	D031	0.0080	0.000067	0.000040	mg/l	
72-43-5	Methoxychlor	ND	D014	10	0.00013	0.000045	mg/l	
2385-85-5	Mirex	ND			0.00033	0.000031	mg/l	
8001-35-2	Toxaphene	ND	D015	0.50	0.0017	0.0011	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	79%		30-137%
877-09-8	Tetrachloro-m-xylene	75%		30-137%
2051-24-3	Decachlorobiphenyl	110%		10-137%
2051-24-3	Decachlorobiphenyl	76%		10-137%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
MCL = Maximum Contamination Level (40 CFR 261 7/1/11) B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

4.5
4

Report of Analysis

Client Sample ID: 11215131-121321-WC-SS-NC-Y2(6-8)	Date Sampled: 12/13/21
Lab Sample ID: JD35487-5	Date Received: 12/13/21
Matrix: SO - Soil	Percent Solids: 41.8
Method: SW846 8082A SW846 3546	
Project: SJRWP - PCFSE, Harris County, TX	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	5G113064.D	1	12/27/21 23:20	RK	12/16/21 11:05	OP37170	G5G2877
Run #2							

Run #	Initial Weight	Final Volume
Run #1	15.2 g	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	0.079	0.037	mg/kg	
11104-28-2	Aroclor 1221	ND	0.079	0.049	mg/kg	
11141-16-5	Aroclor 1232	ND	0.079	0.050	mg/kg	
53469-21-9	Aroclor 1242	ND	0.079	0.032	mg/kg	
12672-29-6	Aroclor 1248	ND	0.079	0.070	mg/kg	
11097-69-1	Aroclor 1254	ND	0.079	0.042	mg/kg	
11096-82-5	Aroclor 1260	ND	0.079	0.034	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	83%		10-163%
877-09-8	Tetrachloro-m-xylene	96%		10-163%
2051-24-3	Decachlorobiphenyl	77%		10-215%
2051-24-3	Decachlorobiphenyl	83%		10-215%

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

4.5
4

Report of Analysis

Client Sample ID: 11215131-121321-WC-SS-NC-Y2(6-8)	Date Sampled: 12/13/21
Lab Sample ID: JD35487-5	Date Received: 12/13/21
Matrix: SO - Soil	Percent Solids: 41.8
Project: SJRWP - PCFSE, Harris County, TX	

Metals Analysis, TCLP Leachate SW846 1311

Analyte	Result	HW#	MCL	RL	MDL	Units	DF	Prep	Analyzed By	Method
Antimony	0.046 J			0.10	0.0047	mg/l	1	12/16/21	12/17/21	ND SW846 6010D ²
Arsenic	0.0028 U	D004	5.0	0.10	0.0028	mg/l	1	12/16/21	12/17/21	ND SW846 6010D ²
Barium	0.31	D005	100	0.20	0.013	mg/l	1	12/16/21	12/17/21	ND SW846 6010D ²
Beryllium ^a	0.010 U			0.040	0.010	mg/l	20	12/16/21	12/17/21	ND SW846 6010D ³
Cadmium	0.0076	D006	1.0	0.0040	0.0010	mg/l	1	12/16/21	12/17/21	ND SW846 6010D ²
Chromium	0.095	D007	5.0	0.010	0.0020	mg/l	1	12/16/21	12/17/21	ND SW846 6010D ²
Lead	0.0018 U	D008	5.0	0.10	0.0018	mg/l	1	12/16/21	12/17/21	ND SW846 6010D ²
Mercury	0.000095 U	D009	0.20	0.00020	0.000095	mg/l	1	12/17/21	12/17/21	SB SW846 7470A ¹
Nickel	0.067			0.010	0.0017	mg/l	1	12/16/21	12/17/21	ND SW846 6010D ²
Selenium	0.042 J	D010	1.0	0.10	0.0049	mg/l	1	12/16/21	12/17/21	ND SW846 6010D ²
Silver	0.013	D011	5.0	0.010	0.0019	mg/l	1	12/16/21	12/17/21	ND SW846 6010D ²
Vanadium	0.015 J			0.050	0.0018	mg/l	1	12/16/21	12/17/21	ND SW846 6010D ²

- (1) Instrument QC Batch: MA51616
- (2) Instrument QC Batch: MA51617
- (3) Instrument QC Batch: MA51625
- (4) Prep QC Batch: MP30409
- (5) Prep QC Batch: MP30424

(a) Elevated detection limit due to dilution required for high interfering element.

RL = Reporting Limit MDL = Method Detection Limit U = Indicates a result < MDL
MCL = Maximum Contamination Level (40 CFR 261 7/1/11) J = Indicates a result > = MDL but < RL

4.5
4

Report of Analysis

Client Sample ID: 11215131-121321-WC-SS-NC-Y2(6-8)	Date Sampled: 12/13/21
Lab Sample ID: JD35487-5	Date Received: 12/13/21
Matrix: SO - Soil	Percent Solids: 41.8
Project: SJRWP - PCFSE, Harris County, TX	

4.5
4

General Chemistry

Analyte	Result	RL	MDL	Units	DF	Analyzed	By	Method
Corrosivity as pH	11.03 NC			su	1	12/15/21 15:32 JG	SW846	9045D
Cyanide	0.36 U	0.72	0.36	mg/kg	1	12/20/21 18:44 MM	SW846	9012B/LACHAT
Cyanide Reactivity	16 U	22	16	mg/kg	1	12/27/21 16:44 MM	SW846	CHAP7/9012 B
Ignitability (Flashpoint)	> 200			Deg. F	1	12/17/21 15:25 DB	SW846	1010B/ASTM D93
Moisture (Dry Weight Basis)	139			%	1	12/15/21 15:45 BG	ASTM	2216-92
Paint Filter Test ^a	0.25 U	0.50	0.25	ml/100g	1	12/17/21 10:45 DB	SW846	9095/9095B
Sulfide Reactivity	130 U	220	130	mg/kg	1	12/20/21 09:21 MP	SW846	CHAP7/9034
Sulfide, Neutral Extraction	8.5 U	9.5	8.5	mg/kg	1	12/20/21 11:21 MP	SW846	9034 M

(a) No free liquids.

RL = Reporting Limit
MDL = Method Detection Limit

U = Indicates a result < MDL
J = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID:	11215131-121321-WC-SS-NC-E2(8-10)	Date Sampled:	12/13/21
Lab Sample ID:	JD35487-6	Date Received:	12/14/21
Matrix:	SO - Soil	Percent Solids:	53.0
Method:	SW846 8260D SW846 1311		
Project:	SJRWP - PCFSE, Harris County, TX		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	3D172307.D	5	12/28/21 14:42	NH	12/17/21 18:00	GP37639	V3D7311
Run #2							

Run #	Purge Volume
Run #1	5.0 ml
Run #2	

VOA Special List

TCLP Leachate method SW846 1311

CAS No.	Compound	Result	HW#	MCL	RL	MDL	Units	Q
67-64-1	Acetone	ND			0.050	0.030	mg/l	
75-05-8	Acetonitrile	ND			0.50	0.037	mg/l	
107-13-1	Acrylonitrile ^b	ND			0.25	0.0052	mg/l	
71-43-2	Benzene	ND	D018	0.50	0.0025	0.0021	mg/l	
75-27-4	Bromodichloromethane	ND			0.0050	0.0029	mg/l	
75-25-2	Bromoform	ND			0.020	0.0032	mg/l	
74-83-9	Bromomethane	ND			0.010	0.0082	mg/l	
78-93-3	2-Butanone (MEK)	ND	D035	200	0.10	0.034	mg/l	
75-15-0	Carbon disulfide	ND			0.010	0.0048	mg/l	
56-23-5	Carbon tetrachloride	ND	D019	0.50	0.0050	0.0028	mg/l	
108-90-7	Chlorobenzene	ND	D021	100	0.0050	0.0028	mg/l	
67-66-3	Chloroform ^c	0.0079	D022	6.0	0.0050	0.0025	mg/l	B
106-93-4	1,2-Dibromoethane	ND			0.010	0.0024	mg/l	
106-46-7	1,4-Dichlorobenzene	ND	D027	7.5	0.0050	0.0025	mg/l	
75-71-8	Dichlorodifluoromethane	ND			0.010	0.0068	mg/l	
107-06-2	1,2-Dichloroethane	ND	D028	0.50	0.0050	0.0030	mg/l	
75-35-4	1,1-Dichloroethene	ND	D029	0.70	0.0050	0.0030	mg/l	
542-75-6	1,3-Dichloropropene (total)	ND			0.0050	0.0022	mg/l	
10061-02-6	trans-1,3-Dichloropropene	ND			0.0050	0.0022	mg/l	
100-41-4	Ethylbenzene	ND			0.0050	0.0030	mg/l	
87-68-3	Hexachlorobutadiene	ND	D033	0.50	0.025	0.0028	mg/l	
78-83-1	Isobutyl alcohol	ND			0.25	0.061	mg/l	
126-98-7	Methacrylonitrile	ND			0.050	0.0050	mg/l	
108-10-1	4-Methyl-2-pentanone(MIBK ^d	ND			0.025	0.0093	mg/l	
75-09-2	Methylene chloride	ND			0.010	0.00050	mg/l	
100-42-5	Styrene	ND			0.025	0.0035	mg/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND			0.025	0.0028	mg/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND			0.010	0.0033	mg/l	
127-18-4	Tetrachloroethene	ND	D039	0.70	0.0050	0.0045	mg/l	
108-88-3	Toluene	ND			0.0050	0.0027	mg/l	
71-55-6	1,1,1-Trichloroethane	ND			0.0050	0.0027	mg/l	
79-00-5	1,1,2-Trichloroethane	ND			0.0050	0.0027	mg/l	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
MCL = Maximum Contamination Level (40 CFR 261 7/1/11) B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

4.6
4

Report of Analysis

Client Sample ID: 11215131-121321-WC-SS-NC-E2(8-10)	Date Sampled: 12/13/21
Lab Sample ID: JD35487-6	Date Received: 12/14/21
Matrix: SO - Soil	Percent Solids: 53.0
Method: SW846 8260D SW846 1311	
Project: SJRWP - PCFSE, Harris County, TX	

VOA Special List

TCLP Leachate method SW846 1311

CAS No.	Compound	Result	HW#	MCL	RL	MDL	Units	Q
79-01-6	Trichloroethene	ND	D040	0.50	0.0050	0.0026	mg/l	
75-69-4	Trichlorofluoromethane	ND			0.025	0.0042	mg/l	
96-18-4	1,2,3-Trichloropropane	ND			0.025	0.0035	mg/l	
75-01-4	Vinyl chloride	ND	D043	0.20	0.0050	0.0039	mg/l	
	m,p-Xylene	ND			0.0050	0.0039	mg/l	
95-47-6	o-Xylene	ND			0.0050	0.0030	mg/l	
1330-20-7	Xylene (total)	ND			0.0050	0.0039	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	84%		76-120%
17060-07-0	1,2-Dichloroethane-D4	102%		64-135%
2037-26-5	Toluene-D8	103%		76-117%
460-00-4	4-Bromofluorobenzene	97%		72-122%

- (a) Sample analyzed outside the holding time.
- (b) Associated CCV outside of control limits high, sample was ND. This compound in blank spike is outside in house QC limits bias high.
- (c) Indicates analyte found in associated leachate blank.
- (d) Associated CCV outside of control limits high, sample was ND.

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
 MCL = Maximum Contamination Level (40 CFR 261 7/1/11) B = Indicates analyte found in associated method blank
 E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

4.6
4

Report of Analysis

Client Sample ID: 11215131-121321-WC-SS-NC-E2(8-10)	Date Sampled: 12/13/21
Lab Sample ID: JD35487-6	Date Received: 12/14/21
Matrix: SO - Soil	Percent Solids: 53.0
Method: SW846 8270E SW846 3510C	
Project: SJRWP - PCFSE, Harris County, TX	

Run #1	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	6P503149.D	1	12/22/21 06:55	CS	12/21/21 13:55	OP37273	E6P3578
Run #2							

Run #1	Initial Volume	Final Volume
Run #1	100 ml	1.0 ml
Run #2		

ABN TCLP Leachate

TCLP Leachate method SW846 1311

CAS No.	Compound	Result	HW#	MCL	RL	MDL	Units	Q
95-48-7	2-Methylphenol	ND	D023	200	0.020	0.0089	mg/l	
	3&4-Methylphenol	ND	D024	200	0.020	0.0088	mg/l	
87-86-5	Pentachlorophenol	ND	D037	100	0.10	0.014	mg/l	
95-95-4	2,4,5-Trichlorophenol	ND	D041	400	0.050	0.013	mg/l	
88-06-2	2,4,6-Trichlorophenol	ND	D042	2.0	0.050	0.0092	mg/l	
106-46-7	1,4-Dichlorobenzene	ND	D027	7.5	0.020	0.0017	mg/l	
121-14-2	2,4-Dinitrotoluene	ND	D030	0.13	0.020	0.0055	mg/l	
118-74-1	Hexachlorobenzene	ND	D032	0.13	0.020	0.0033	mg/l	
87-68-3	Hexachlorobutadiene	ND	D033	0.50	0.010	0.0049	mg/l	
67-72-1	Hexachloroethane	ND	D034	3.0	0.050	0.0039	mg/l	
98-95-3	Nitrobenzene	ND	D036	2.0	0.020	0.0064	mg/l	
110-86-1	Pyridine	ND	D038	5.0	0.020	0.0039	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	26%		10-73%
4165-62-2	Phenol-d5	18%		10-64%
118-79-6	2,4,6-Tribromophenol	75%		31-130%
4165-60-0	Nitrobenzene-d5	65%		28-126%
321-60-8	2-Fluorobiphenyl	72%		26-114%
1718-51-0	Terphenyl-d14	59%		16-122%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
MCL = Maximum Contamination Level (40 CFR 261 7/1/11) B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

4.6
4

Report of Analysis

Client Sample ID: 11215131-121321-WC-SS-NC-E2(8-10)	Date Sampled: 12/13/21
Lab Sample ID: JD35487-6	Date Received: 12/14/21
Matrix: SO - Soil	Percent Solids: 53.0
Method: SW846 8151A SW846 3510C	
Project: SJRWP - PCFSE, Harris County, TX	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3G134701.D	1	12/23/21 02:29	CP	12/21/21 20:10	OP37275	G3G4915
Run #2							

Run #	Initial Volume	Final Volume
Run #1	30.0 ml	2.0 ml
Run #2		

Herbicide TCLP Leachate

TCLP Leachate method SW846 1311

CAS No.	Compound	Result	HW#	MCL	RL	MDL	Units	Q
94-75-7	2,4-D	ND	D016	10	0.0033	0.00098	mg/l	
93-72-1	2,4,5-TP (Silvex)	ND	D017	1.0	0.0010	0.00020	mg/l	
88-85-7	Dinoseb ^a	ND			0.0033	0.0013	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
19719-28-9	2,4-DCAA	60%		13-169%
19719-28-9	2,4-DCAA	45%		13-169%

(a) Associated CCV outside of control limits high, sample was ND.

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
MCL = Maximum Contamination Level (40 CFR 261 7/1/11) B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

4.6
4

Report of Analysis

Client Sample ID: 11215131-121321-WC-SS-NC-E2(8-10)	Date Sampled: 12/13/21
Lab Sample ID: JD35487-6	Date Received: 12/14/21
Matrix: SO - Soil	Percent Solids: 53.0
Method: SW846 8081B SW846 3510C	
Project: SJRWP - PCFSE, Harris County, TX	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1G172724.D	1	01/10/22 05:33	CP	12/27/21 17:29	OP37246	G1G5965
Run #2							

Run #	Initial Volume	Final Volume
Run #1	30.0 ml	2.0 ml
Run #2		

Pesticide TCLP Leachate Special List

TCLP Leachate method SW846 1311

CAS No.	Compound	Result	HW#	MCL	RL	MDL	Units	Q
58-89-9	gamma-BHC (Lindane)	ND	D013	0.40	0.000067	0.000040	mg/l	
12789-03-6	Chlordane	ND	D020	0.030	0.0033	0.0014	mg/l	
60-57-1	Dieldrin	ND			0.000067	0.000051	mg/l	
72-54-8	4,4'-DDD	ND			0.000067	0.000038	mg/l	
72-55-9	4,4'-DDE	ND			0.000067	0.000034	mg/l	
50-29-3	4,4'-DDT	ND			0.000067	0.000046	mg/l	
72-20-8	Endrin	ND	D012	0.020	0.000067	0.000040	mg/l	
959-98-8	Endosulfan-I	ND			0.000067	0.000035	mg/l	
33213-65-9	Endosulfan-II	ND			0.000067	0.000033	mg/l	
76-44-8	Heptachlor	ND	D031	0.0080	0.000067	0.000030	mg/l	
1024-57-3	Heptachlor epoxide	ND	D031	0.0080	0.000067	0.000040	mg/l	
72-43-5	Methoxychlor	ND	D014	10	0.00013	0.000045	mg/l	
2385-85-5	Mirex	ND			0.00033	0.000031	mg/l	
8001-35-2	Toxaphene	ND	D015	0.50	0.0017	0.0011	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	118%		30-137%
877-09-8	Tetrachloro-m-xylene	86%		30-137%
2051-24-3	Decachlorobiphenyl	184% ^a		10-137%
2051-24-3	Decachlorobiphenyl	88%		10-137%

(a) High percent recoveries and no positive found in the sample.

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
MCL = Maximum Contamination Level (40 CFR 261 7/1/11) B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

4.6
4

Report of Analysis

Client Sample ID: 11215131-121321-WC-SS-NC-E2(8-10)	Date Sampled: 12/13/21
Lab Sample ID: JD35487-6	Date Received: 12/14/21
Matrix: SO - Soil	Percent Solids: 53.0
Method: SW846 8082A SW846 3546	
Project: SJRWP - PCFSE, Harris County, TX	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2G211964.D	1	01/13/22 11:38	RK	01/06/22 10:20	OP37488	G2G5566
Run #2 ^a	2G212021.D	1	01/14/22 10:33	RK	01/06/22 10:20	OP37488	G2G5567

Run #	Initial Weight	Final Volume
Run #1	15.7 g	10.0 ml
Run #2	15.7 g	10.0 ml

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	0.060	0.028	mg/kg	
11104-28-2	Aroclor 1221	ND	0.060	0.037	mg/kg	
11141-16-5	Aroclor 1232	ND	0.060	0.038	mg/kg	
53469-21-9	Aroclor 1242	ND	0.060	0.025	mg/kg	
12672-29-6	Aroclor 1248	ND	0.060	0.054	mg/kg	
11097-69-1	Aroclor 1254	ND	0.060	0.032	mg/kg	
11096-82-5	Aroclor 1260 ^b	ND	0.060	0.026	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	278% ^c	295% ^c	10-163%
877-09-8	Tetrachloro-m-xylene	232% ^c	205% ^c	10-163%
2051-24-3	Decachlorobiphenyl	116%	114%	10-215%
2051-24-3	Decachlorobiphenyl	294% ^c	248% ^c	10-215%

- (a) Confirmation run.
- (b) Associated CCV outside of control limits low.
- (c) Outside control limits due to matrix interference.

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

4.6
4

Report of Analysis

Client Sample ID: 11215131-121321-WC-SS-NC-E2(8-10)	Date Sampled: 12/13/21
Lab Sample ID: JD35487-6	Date Received: 12/14/21
Matrix: SO - Soil	Percent Solids: 53.0
Project: SJRWP - PCFSE, Harris County, TX	

Metals Analysis, TCLP Leachate SW846 1311

Analyte	Result	HW#	MCL	RL	MDL	Units	DF	Prep	Analyzed By	Method
Antimony	0.0047 U			0.10	0.0047	mg/l	1	12/21/21	12/21/21	ND SW846 6010D ²
Arsenic	0.034 J	D004	5.0	0.10	0.0028	mg/l	1	12/21/21	12/21/21	ND SW846 6010D ²
Barium	2.7	D005	100	0.20	0.013	mg/l	1	12/21/21	12/21/21	ND SW846 6010D ²
Beryllium	0.0023			0.0020	0.00050	mg/l	1	12/21/21	12/21/21	ND SW846 6010D ²
Cadmium	0.016	D006	1.0	0.0040	0.0010	mg/l	1	12/21/21	12/21/21	ND SW846 6010D ²
Chromium	0.0020 U	D007	5.0	0.010	0.0020	mg/l	1	12/21/21	12/21/21	ND SW846 6010D ²
Lead	0.27	D008	5.0	0.10	0.0018	mg/l	1	12/21/21	12/21/21	ND SW846 6010D ²
Mercury	0.000095 U	D009	0.20	0.00020	0.000095	mg/l	1	12/21/21	12/21/21	LM SW846 7470A ¹
Nickel	0.099			0.010	0.0017	mg/l	1	12/21/21	12/21/21	ND SW846 6010D ²
Selenium	0.0049 U	D010	1.0	0.10	0.0049	mg/l	1	12/21/21	12/21/21	ND SW846 6010D ²
Silver	0.0019 U	D011	5.0	0.010	0.0019	mg/l	1	12/21/21	12/21/21	ND SW846 6010D ²
Vanadium	0.040 J			0.050	0.0018	mg/l	1	12/21/21	12/21/21	ND SW846 6010D ²

- (1) Instrument QC Batch: MA51634
- (2) Instrument QC Batch: MA51638
- (3) Prep QC Batch: MP30469
- (4) Prep QC Batch: MP30484

RL = Reporting Limit MDL = Method Detection Limit U = Indicates a result < MDL
 MCL = Maximum Contamination Level (40 CFR 261 7/1/11) J = Indicates a result > = MDL but < RL

4.6
4

Report of Analysis

Client Sample ID: 11215131-121321-WC-SS-NC-E2(8-10)	Date Sampled: 12/13/21
Lab Sample ID: JD35487-6	Date Received: 12/14/21
Matrix: SO - Soil	Percent Solids: 53.0
Project: SJRWP - PCFSE, Harris County, TX	

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General Chemistry

Analyte	Result	RL	MDL	Units	DF	Analyzed	By	Method
Corrosivity as pH	7.02 NC			su	1	12/17/21 14:05 JG	SW846	9045D
Cyanide	0.19 U	0.38	0.19	mg/kg	1	12/20/21 17:20 MM	SW846	9012B/LACHAT
Cyanide Reactivity	14 U	18	14	mg/kg	1	12/27/21 16:46 MM	SW846	CHAP7/9012 B
Ignitability (Flashpoint)	> 200			Deg. F	1	12/17/21 15:25 DB	SW846	1010B/ASTM D93
Moisture (Dry Weight Basis)	88.6			%	1	12/20/21 16:50 BG	ASTM	2216-92
Paint Filter Test ^a	0.25 U	0.50	0.25	ml/100g	1	12/17/21 10:45 DB	SW846	9095/9095B
Sulfide Reactivity	110 U	180	110	mg/kg	1	12/20/21 09:21 MP	SW846	CHAP7/9034
Sulfide, Neutral Extraction	6.7 U	7.5	6.7	mg/kg	1	12/20/21 11:21 MP	SW846	9034 M

(a) No free liquids.

RL = Reporting Limit
MDL = Method Detection Limit

U = Indicates a result < MDL
J = Indicates a result > = MDL but < RL

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Certification Exceptions
- Chain of Custody

Parameter Certification Exceptions

Job Number: JD35487
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

The following parameters included in this report are exceptions to NELAC certification. The certification status of each is indicated below.

Parameter	CAS#	Method	Mat	Certification Status
Cyanide Reactivity		SW846 CHAP7/9012 B	SO	SGS is not certified for this parameter. ^a
Moisture (Dry Weight Basis)		ASTM 2216-92	SO	SGS is not certified for this parameter. ^b
Sulfide Reactivity		SW846 CHAP7/9034	SO	SGS is not certified for this parameter. ^a
Sulfide, Neutral Extraction	18496-25-8	SW846 9034 M	SO	SGS is not certified for this parameter. ^c

- (a) Reactivity analyzed following SW846 Chapter 7 is no longer recognized by regulatory agencies. Use of results should be verified through the program to which the data is being submitted.
- (b) Lab cert for analyte not supported by NJDEP, OQA. Only methods/analytes required for reporting by the State of NJ can be certified in NJ. Use of this analyte for compliance must be verified through the appropriate regulatory office.
- (c) Lab is not certified for extraction using method SW846 9030B. Data analyzed by SW846 9034 used for regulatory programs must be verified through the appropriate regulatory office.

Certification exceptions shown are based on the New Jersey DEP certifications. Applicability in other states may vary. Please contact your laboratory representative if additional information is required for a specific regulatory program.

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CHAIN OF CUSTODY

SGS North America Inc. - Dayton
 2235 Route 130, Dayton, NJ 08810
 TEL. 732-328-0200 FAX 732-329-3499
 www.sgs.com/enhsusa

ED Ex Tracking # **4905-2704-1775** Bottle Order Control # **102-11821-57**
 SGS Quote # _____ SGS Job # **JD35487**

Client/Reporting Information		Project Information:		Requested Analysis (See TEST CODE sheet)												Matrix Codes																																																																																												
Company Name GHD		Project Name SJRWP - PCFSE (Soil Waste Characterization)		<table border="1"> <tr><td>TCLP VOC (V6280TCLPFL)</td><td>X</td></tr> <tr><td>TCLP SVOC (A84270TCLPFL)</td><td>X</td></tr> <tr><td>TCLP Pest (P6081TCLPFL)</td><td>X</td></tr> <tr><td>TCLP Metals (H8181TCLP, HGG-DINQSEB)</td><td>X</td></tr> <tr><td>TCLP Metals (TCLP-M, EVA, ENI, EBR, ESS)</td><td>X</td></tr> <tr><td>Total Cyanide (CN), total Sulfide (S)</td><td>X</td></tr> <tr><td>(Ignitability, Reactive cyanide, reactive sulfide, pH (RCA/CLAS))</td><td>X</td></tr> <tr><td>Pesticides (PNTPL)</td><td>X</td></tr> <tr><td>PCBs (P8092PCB)</td><td>X</td></tr> <tr><td>ASTM/MOIST</td><td>X</td></tr> </table>												TCLP VOC (V6280TCLPFL)	X	TCLP SVOC (A84270TCLPFL)	X	TCLP Pest (P6081TCLPFL)	X	TCLP Metals (H8181TCLP, HGG-DINQSEB)	X	TCLP Metals (TCLP-M, EVA, ENI, EBR, ESS)	X	Total Cyanide (CN), total Sulfide (S)	X	(Ignitability, Reactive cyanide, reactive sulfide, pH (RCA/CLAS))	X	Pesticides (PNTPL)	X	PCBs (P8092PCB)	X	ASTM/MOIST	X	DW - Drinking Water GW - Ground Water WW - Water SW - Surface Water SO - Soil SL - Sludge SED - Sediment OI - Oil LIQ - Other Liquid AIR - Air SOL - Other Solid WP - Waste EB - Field Blank EB - Equipment Blank RB - Rinse Blank TB - Trip Blank																																																																								
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City State Zip Houston TX 77079		City State Harris County TX																																																																																																										
Billing Information (if different from report to)		Company Name																																																																																																										
Project Contact Meagan Willis Meagan.willis@ghd.com		Project # 11215131 SGS # CRATXH90499		<table border="1"> <tr> <th colspan="2">Collection</th> <th colspan="10">Number of preserved bottles</th> </tr> <tr> <th>Field ID / Point of Collection</th> <th>MECH/DI Vial #</th> <th>Date</th> <th>Time</th> <th>Sampled by</th> <th>Matrix</th> <th># of bottles</th> <th>HCl</th> <th>NH3</th> <th>NHOS</th> <th>H2SO4</th> <th>NO3</th> <th>DI Water</th> <th>MICH</th> <th>EN/CHE</th> <th>TCLP VOC</th> <th>TCLP SVOC</th> <th>TCLP Pest</th> <th>TCLP Metals (H8181TCLP, HGG-DINQSEB)</th> <th>TCLP Metals (TCLP-M, EVA, ENI, EBR, ESS)</th> <th>Total Cyanide (CN), total Sulfide (S)</th> <th>(Ignitability, Reactive cyanide, reactive sulfide, pH (RCA/CLAS))</th> <th>Pesticides (PNTPL)</th> <th>PCBs (P8092PCB)</th> <th>ASTM/MOIST</th> <th>LAB USE ONLY</th> </tr> <tr> <td>11215131-113021-WC-SRS-NE-DI(68)</td> <td>-</td> <td>11/30/21</td> <td>1525</td> <td>SPS</td> <td>WC</td> <td>3</td> <td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td> <td>X</td><td>X</td><td>X</td><td>X</td><td>X</td><td>X</td><td>X</td><td>X</td><td>X</td><td>X</td><td>X</td><td>D4</td> </tr> <tr> <td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td> <td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>P33</td> </tr> </table>												Collection		Number of preserved bottles										Field ID / Point of Collection	MECH/DI Vial #	Date	Time	Sampled by	Matrix	# of bottles	HCl	NH3	NHOS	H2SO4	NO3	DI Water	MICH	EN/CHE	TCLP VOC	TCLP SVOC	TCLP Pest	TCLP Metals (H8181TCLP, HGG-DINQSEB)	TCLP Metals (TCLP-M, EVA, ENI, EBR, ESS)	Total Cyanide (CN), total Sulfide (S)	(Ignitability, Reactive cyanide, reactive sulfide, pH (RCA/CLAS))	Pesticides (PNTPL)	PCBs (P8092PCB)	ASTM/MOIST	LAB USE ONLY	11215131-113021-WC-SRS-NE-DI(68)	-	11/30/21	1525	SPS	WC	3									X	X	X	X	X	X	X	X	X	X	X	D4																												P33
Collection		Number of preserved bottles																																																																																																										
Field ID / Point of Collection	MECH/DI Vial #	Date	Time	Sampled by	Matrix	# of bottles	HCl	NH3	NHOS	H2SO4	NO3	DI Water	MICH	EN/CHE	TCLP VOC	TCLP SVOC	TCLP Pest	TCLP Metals (H8181TCLP, HGG-DINQSEB)	TCLP Metals (TCLP-M, EVA, ENI, EBR, ESS)	Total Cyanide (CN), total Sulfide (S)	(Ignitability, Reactive cyanide, reactive sulfide, pH (RCA/CLAS))	Pesticides (PNTPL)	PCBs (P8092PCB)	ASTM/MOIST	LAB USE ONLY																																																																																			
11215131-113021-WC-SRS-NE-DI(68)	-	11/30/21	1525	SPS	WC	3									X	X	X	X	X	X	X	X	X	X	X	D4																																																																																		
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Project Contact Meagan Willis Meagan.willis@ghd.com		Project # 11215131 SGS # CRATXH90499																																																																																																										
Phone # 713-907-3710		Client Purchase Order #																																																																																																										
Sampler(s) Name(s) Stephen Seheri		Project Manager																																																																																																										
Phone # 572-2251567		Attention:																																																																																																										
Turnaround Time (Business days)		Data Deliverable Information		Comments / Special Instructions																																																																																																								
<input checked="" type="checkbox"/> Std. 10 Business Days <input type="checkbox"/> 5 Day RUSH <input type="checkbox"/> 3 Day RUSH <input type="checkbox"/> 2 Day RUSH <input type="checkbox"/> 1 Day RUSH <input type="checkbox"/> other _____		Approved by (SGS Project Manager)/Date: _____		<input type="checkbox"/> Commercial "A" (Level 1) <input type="checkbox"/> NYASP Category A <input type="checkbox"/> Commercial "B" (Level 2) <input type="checkbox"/> NYASP Category B <input checked="" type="checkbox"/> FULLT1 (Level 3+4) <input type="checkbox"/> State Forms <input type="checkbox"/> NJ Reduced <input type="checkbox"/> EDD Format <input type="checkbox"/> Commercial "C" <input type="checkbox"/> Other _____ <input type="checkbox"/> NJ Data of Known Quality Protocol Reporting Commercial "A" = Results Only, Commercial "B" = Results + QC Summary NJ Reduced = Results + QC Summary + Partial Raw data												Log In under JD35487 Initial Assessment 12/21 Label Verification																																																																																												
Emergency & Rush TIA data available via LabLink		Sample inventory is verified upon receipt in the Laboratory																																																																																																										
Relinquished by Sampler Stephen Seheri Date Time: 11/1/21 1530		Received By: Eddie Castro Date Time: 11/1/21 1608		Sample Custody must be documented below each time samples change possession, including courier delivery.																																																																																																								
Relinquished by Sampler Meagan Willis Date Time: 11/1/21 1608		Received By: Felix Date Time: 11/1/21 1608		Relinquished by: Eddie Castro Date Time: 11/1/21 1608 Received By: Meagan Willis Date Time: 11/1/21 1608																																																																																																								
Relinquished by: Meagan Willis Date Time: 11/1/21 1608		Received By: Felix Date Time: 11/1/21 1608		Relinquished by: Felix Date Time: 11/1/21 1608 Received By: Meagan Willis Date Time: 11/1/21 1608																																																																																																								
Custody Seal #		Preserved where applicable		<input type="checkbox"/> Intact <input type="checkbox"/> Cooler Temp <input type="checkbox"/> Not intact <input type="checkbox"/> _____																																																																																																								



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CHAIN OF CUSTODY

SGS North America Inc. - Dayton
2235 Route 130, Dayton, NJ 08810
TEL 732-329-0200 FAX 732-329-3499
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FED-EX Tracking # _____ Bottle Order Control # LR-111821-57
 SGS Chain # _____ SGS Job # JD35487

Client Reporting Information		Project Information		Requested Analysis (See IES (CODE SHEET))															Matrix Codes				
Company Name GHD		Project Name SJRWP - PCFSE (Soil Waste Characterization)																	DW - Drinking Water GW - Ground Water WW - Water SW - Surface Water SO - Soil SL - Sludge SED - Sediment CI - Oil LIQ - Other Liquid AIR - Air SOL - Other Solid WP - Wipe FB - Field Blank EB - Equipment Blank RB - Rinse Blank TB - Trip Blank				
Street Address 11451 Katy Freeway Suite 400		Street Channelview																					
City Houston TX 77079		City State Harris County TX																					
Project Contact Meagan Willis Meagan.willis@ghd.com		Project # 11215131																					
Phone # 713-907-3710		Client Purchase Order # SGS # CRATXH90499																					
Sampler(s) Name(s) Breanna North/JC Lahaye		Project Manager																					
Lab Sample #		NEOHI Vis #																					
Field ID / Point of Collection		Date		Time		Sampled by		Matrix		# of bottles		Number of preserved bottles										LAB USE ONLY	
11215131-12021-WC-JC-NE-44 (4)		12-1-21		1430		JC		WC Soil		3		<input checked="" type="checkbox"/> TCLP VOC (VOC) (TCLP) <input checked="" type="checkbox"/> TCLP SVOC (SVOC) (TCLP) <input checked="" type="checkbox"/> TCLP PAH (PAH) (TCLP) <input checked="" type="checkbox"/> TCLP Hexa (Hexa) (TCLP) <input checked="" type="checkbox"/> TCLP Metals (Metals) (TCLP) <input checked="" type="checkbox"/> Total Cyanide (CN) <input checked="" type="checkbox"/> Ignitability (Ignitability) <input checked="" type="checkbox"/> Reactivity (Reactivity) <input checked="" type="checkbox"/> pH (pH) <input checked="" type="checkbox"/> PCBs (PCBs) <input checked="" type="checkbox"/> ASTM D1551										BB POA PS-4	
Turnaround Time (Business days)		Approved by (SGS Project Manager) Date:		Data Deliverable Information															Comments / Special Instructions				
<input checked="" type="checkbox"/> Std. 10 Business Days <input type="checkbox"/> 5 Day RUSH <input type="checkbox"/> 3 Day RUSH <input type="checkbox"/> 2 Day RUSH <input type="checkbox"/> 1 Day RUSH <input type="checkbox"/> Other				<input type="checkbox"/> Commercial "A" (Level 1) <input type="checkbox"/> Commercial "B" (Level 2) <input checked="" type="checkbox"/> FULLY (Level 3+4) <input type="checkbox"/> NJ Reduced <input type="checkbox"/> Commercial "C" <input type="checkbox"/> NYASP Category A <input type="checkbox"/> NYASP Category B <input type="checkbox"/> State Forms <input type="checkbox"/> EDD Format <input type="checkbox"/> Other															Log in under JD35487 Initial Assignment <u>AB Ein</u> Label Verification <u>EW</u> Sample inventory is verified upon receipt in the Laboratory				
Emergency & Rush TIA data available via LabLink		Sample Custody must be documented below each time samples change possession, including courier delivery.																					
1 Requisitioned by: <u>Breanna North</u>		Date Time: <u>12-2-21 1345</u>		Received By: <u>[Signature]</u>		Date Time: <u>12/2/21 1524</u>		Received By: <u>[Signature]</u>		Date Time: <u>12/2/21 1524</u>		Received By: <u>[Signature]</u>		Date Time: <u>12/2/21 1524</u>		Received By: <u>[Signature]</u>							
3 Requisitioned by: <u>[Signature]</u>		Date Time:		Received By:		Date Time:		Received By:		Date Time:		Received By:		Date Time:		Received By:							
5 Requisitioned by:		Date Time:		Received By:		Date Time:		Received By:		Date Time:		Received By:		Date Time:		Received By:							

Form:SM088-03C (revised 2/12/18)

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

JD35487: Chain of Custody

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CHAIN OF CUSTODY

SGS North America Inc. - Dayton
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JD 35487

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Form containing Client Reporting Information, Project Information, Requested Analysis, Matrix Codes, and Turnaround Time. Includes handwritten details like 'GHD', '11451 Katy Freeway Suite 400', and 'Stephen Salter'.

Table with columns for Lab Sample #, Field ID / Point of Collection, MEQ/IDI Vial #, Date, Time, Sampled by, Matrix, # of bottles, and various chemical analysis parameters (HCl, NH4, HNO3, H2SO4, etc.).



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PAGE 1 OF 1

Client/Reporting Information		Project Information				Requested Analysis (see TEST CODE sheet)											Matrix Codes										
Company Name GHD		Project Name SJRW - PCFSE (Soll Waste Characterization)															DW - Drinking Water GW - Ground Water WW - Water SW - Surface Water SO - Soil SL - Sludge SCD - Sediment OI - Oil LIQ - Other Liquid AIR - Air SOL - Other Solid WF - Wipe FB - Field Blank EB - Equipment Blank RB - Rinse Blank TB - Trip Blank										
Street Address 11451 Katy Freeway Suite 400		City Channelview		State TX																							
City Houston TX 77079		County Harris County		State TX																							
Project Contact Meagan Willis		E-mail Meagan.willis@ghd.com		Project # 11215131		SGS # CRATX190499																					
Phone # 713-907-3710		Fax #		Client Purchase Order #		City 		State 		Zip 																	
Sampler(s) Name(s) Stefan S. [Signature]		Phone # 832-278-1968		Project Manager 		Attention 																					
Lab Sample #	Field ID / Point of Collection	MEOH/DI Vial #	Date	Time	Sampled by	Matrix	# of bottles	Number of preserved bottles											LAB USE ONLY								
								HCl	NaOH	HNO3	H2SO4	NONE	Distilled	MEOH	ENCORE	TCLP VOC (V0280TCLP/PSL)	TCLP SVOC (A028270TCLP/PSL)	TCLP Pest (P0081TCLP/PSL)		TCLP Metals (H0151TCLP - HGC-DINOC/EE)	TCLP Metals (TCLP/PM, EVA, ENI, EPE, ESE)	Total Cyanide (CN), total Sulfide (S)	Ignitability, Reactive cyanide, reactive sulfide, pH (PCRACLAS)	Pesticides (P0171L)	PCBs (P0022PCB)	ASTM/MOIST	
5	11215131-12421-WC-SS-NC-72(6)		12/13/21	930	SS	S	3																				
Turnaround Time (Business days)		Approved by (SGS Project Manager) (Date):				Data Deliverable Information				Comments / Special Instructions																	
<input checked="" type="checkbox"/> Std. 10 Business Days <input type="checkbox"/> 5 Day RUSH <input type="checkbox"/> 3 Day RUSH <input type="checkbox"/> 2 Day RUSH <input type="checkbox"/> 1 Day RUSH <input type="checkbox"/> other						<input type="checkbox"/> Commercial "A" (Level 1) <input type="checkbox"/> Commercial "B" (Level 2) <input checked="" type="checkbox"/> FULLT1 (Level 3+4) <input type="checkbox"/> NJ Reduced <input type="checkbox"/> Commercial "C" <input type="checkbox"/> NJ Data of Known Quality Protocol Reporting Commercial "A" = Results Only; Commercial "B" = Results + QC Summary NJ Reduced = Results + QC Summary + Partial Raw data				<input type="checkbox"/> NYASP Category A <input type="checkbox"/> NYASP Category B <input type="checkbox"/> State Forms <input type="checkbox"/> EDD Format <input type="checkbox"/> Other						Log in under JD35487											
Emergency & Rush T/A data available via LabLink		Sample Custody must be documented every each time samples change position, including courier delivery.				Sample inventory is verified upon receipt in the Laboratory																					
Relinquished by Sampler: [Signature]	Date Time: 12/13/21	Received By: [Signature]	Date Time: 12/13/21	Relinquished By: [Signature]	Date Time: 12/13/21	Received By: [Signature]	Date Time: 12/13/21	Relinquished By: [Signature]	Date Time: 12/13/21	Received By: [Signature]	Date Time: 12/13/21	Relinquished By: [Signature]	Date Time: 12/13/21	Received By: [Signature]	Date Time: 12/13/21	Relinquished By: [Signature]	Date Time: 12/13/21	Received By: [Signature]	Date Time: 12/13/21	Relinquished By: [Signature]	Date Time: 12/13/21	Received By: [Signature]	Date Time: 12/13/21	Relinquished By: [Signature]	Date Time: 12/13/21	Received By: [Signature]	Date Time: 12/13/21
Custody Seal #		Intact <input type="checkbox"/> Intact <input type="checkbox"/> Not intact		Preserved where applicable		On Ice <input type="checkbox"/>		Cooler Temp. 2.6																			

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CHAIN OF CUSTODY

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SGS North America Inc. - Dayton
2235 Route 130, Dayton, NJ 08810
TEL 732-329-0200 FAX 732-321-3499
www.sgs.com/enhsusa

FED-EX Tracking #
Bottle Order Control #
SGS Quote #
SGS Job # JD:5487

Client / Reporting Information, Project Information, Requested Analysis (see TEST CODE sheet), Matrix Codes, Lab Sample #, Field ID / Point of Collection, Date, Time, Sampled by, Matrix, # of bottles, Number of preserved bottles, Data Deliverable Information, Comments / Special Instructions, Sample Custody must be documented below each time samples change possession, including courier delivery.

Form: SM088-03C (revised 2/12/18)

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

JD35487: Chain of Custody

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SGS Sample Receipt Summary

Job Number: JD35487

Client: GHD SERVICES INC.

Project: SJRWP - PCFSE, HARRIS COUNTY, TX

Date / Time Received: 12/4/2021 9:30:00 AM

Delivery Method:

Airbill #'s:

Cooler Temps (Raw Measured) °C: Cooler 3: (3.5);

Cooler Temps (Corrected) °C: Cooler 3: (2.1);

<u>Cooler Security</u>	<u>Y or N</u>			<u>Y or N</u>	
1. Custody Seals Present:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	3. COC Present:	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2. Custody Seals Intact:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	4. Smpl Dates/Time OK	<input checked="" type="checkbox"/>	<input type="checkbox"/>

<u>Cooler Temperature</u>	<u>Y or N</u>	
1. Temp criteria achieved:	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2. Cooler temp verification:	IR Gun	
3. Cooler media:	Ice (Bag)	
4. No. Coolers:	1	

<u>Quality Control Preservation</u>	<u>Y</u>	<u>or</u>	<u>N</u>	<u>N/A</u>
1. Trip Blank present / cooler:	<input type="checkbox"/>		<input type="checkbox"/>	<input checked="" type="checkbox"/>
2. Trip Blank listed on COC:	<input type="checkbox"/>		<input type="checkbox"/>	<input checked="" type="checkbox"/>
3. Samples preserved properly:	<input checked="" type="checkbox"/>		<input type="checkbox"/>	
4. VOCs headspace free:	<input type="checkbox"/>		<input type="checkbox"/>	<input checked="" type="checkbox"/>

<u>Sample Integrity - Documentation</u>	<u>Y</u>	<u>or</u>	<u>N</u>
1. Sample labels present on bottles:	<input checked="" type="checkbox"/>		<input type="checkbox"/>
2. Container labeling complete:	<input checked="" type="checkbox"/>		<input type="checkbox"/>
3. Sample container label / COC agree:	<input checked="" type="checkbox"/>		<input type="checkbox"/>

<u>Sample Integrity - Condition</u>	<u>Y</u>	<u>or</u>	<u>N</u>
1. Sample recvd within HT:	<input checked="" type="checkbox"/>		<input type="checkbox"/>
2. All containers accounted for:	<input checked="" type="checkbox"/>		<input type="checkbox"/>
3. Condition of sample:	Intact		

<u>Sample Integrity - Instructions</u>	<u>Y</u>	<u>or</u>	<u>N</u>	<u>N/A</u>
1. Analysis requested is clear:	<input checked="" type="checkbox"/>		<input type="checkbox"/>	
2. Bottles received for unspecified tests	<input type="checkbox"/>		<input checked="" type="checkbox"/>	
3. Sufficient volume recvd for analysis:	<input checked="" type="checkbox"/>		<input type="checkbox"/>	
4. Compositing instructions clear:	<input type="checkbox"/>		<input type="checkbox"/>	<input checked="" type="checkbox"/>
5. Filtering instructions clear:	<input type="checkbox"/>		<input type="checkbox"/>	<input checked="" type="checkbox"/>

Test Strip Lot #s: pH 1-12: 231619 pH 12+: 203117A Other: (Specify) _____

Comments

SM089-03
Rev. Date 12/7/17

JD35487: Chain of Custody

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SGS Sample Receipt Summary

Job Number: JD35487

Client: GHD

Project: SJRWP

Date / Time Received: 12/7/2021 2:30:00 PM

Delivery Method: _____

Airbill #'s: _____

Cooler Temps (Raw Measured) °C: Cooler 4: (0.5);

Cooler Temps (Corrected) °C: Cooler 4: (-0.9);

Cooler Security

Y or N

Y or N

- | | | | | | |
|---------------------------|-------------------------------------|--------------------------|-----------------------|-------------------------------------|--------------------------|
| 1. Custody Seals Present: | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 3. COC Present: | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 2. Custody Seals Intact: | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 4. Smpl Dates/Time OK | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

Cooler Temperature

Y or N

- | | | |
|------------------------------|-------------------------------------|--------------------------|
| 1. Temp criteria achieved: | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 2. Cooler temp verification: | IR Gun | |
| 3. Cooler media: | Ice (Bag) | |
| 4. No. Coolers: | 1 | |

Quality Control Preservation

Y or N

N/A

- | | | | |
|---------------------------------|-------------------------------------|--------------------------|-------------------------------------|
| 1. Trip Blank present / cooler: | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 2. Trip Blank listed on COC: | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 3. Samples preserved properly: | <input checked="" type="checkbox"/> | <input type="checkbox"/> | |
| 4. VOCs headspace free: | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

Sample Integrity - Documentation

Y or N

- | | | |
|--|-------------------------------------|--------------------------|
| 1. Sample labels present on bottles: | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 2. Container labeling complete: | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 3. Sample container label / COC agree: | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

Sample Integrity - Condition

Y or N

- | | | |
|----------------------------------|-------------------------------------|--------------------------|
| 1. Sample recvd within HT: | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 2. All containers accounted for: | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 3. Condition of sample: | Intact | |

Sample Integrity - Instructions

Y or N N/A

- | | | | |
|---|-------------------------------------|-------------------------------------|-------------------------------------|
| 1. Analysis requested is clear: | <input checked="" type="checkbox"/> | <input type="checkbox"/> | |
| 2. Bottles received for unspecified tests | <input type="checkbox"/> | <input checked="" type="checkbox"/> | |
| 3. Sufficient volume recvd for analysis: | <input checked="" type="checkbox"/> | <input type="checkbox"/> | |
| 4. Compositing instructions clear: | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 5. Filtering instructions clear: | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

Test Strip Lot #s:	pH 1-12: 231619	pH 12+: 203117A	Other: (Specify) _____
--------------------	-----------------	-----------------	------------------------

Comments

SM089-03
Rev. Date 12/7/17

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SGS Sample Receipt Summary

Job Number: JD35487

Client: GHD SERVICES INC.

Project: SJRWP - PCFSE, HARRIS COUNTY, TX

Date / Time Received: 12/2/2021 11:08:00 AM

Delivery Method: _____

Airbill #'s: _____

Cooler Temps (Raw Measured) °C: Cooler 2: (5.1);

Cooler Temps (Corrected) °C: Cooler 2: (3.6);

Cooler Security

Y or N

Y or N

- | | | | | | |
|---------------------------|-------------------------------------|--------------------------|-----------------------|-------------------------------------|--------------------------|
| 1. Custody Seals Present: | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 3. COC Present: | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 2. Custody Seals Intact: | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 4. Smpl Dates/Time OK | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

Cooler Temperature

Y or N

- | | | |
|------------------------------|-------------------------------------|--------------------------|
| 1. Temp criteria achieved: | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 2. Cooler temp verification: | IR Gun | |
| 3. Cooler media: | Ice (Bag) | |
| 4. No. Coolers: | 1 | |

Quality Control Preservation

Y or N

N/A

- | | | | |
|---------------------------------|-------------------------------------|--------------------------|-------------------------------------|
| 1. Trip Blank present / cooler: | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 2. Trip Blank listed on COC: | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 3. Samples preserved properly: | <input checked="" type="checkbox"/> | <input type="checkbox"/> | |
| 4. VOCs headspace free: | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

Sample Integrity - Documentation

Y or N

- | | | |
|--|-------------------------------------|--------------------------|
| 1. Sample labels present on bottles: | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 2. Container labeling complete: | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 3. Sample container label / COC agree: | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

Sample Integrity - Condition

Y or N

- | | | |
|----------------------------------|-------------------------------------|--------------------------|
| 1. Sample recvd within HT: | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 2. All containers accounted for: | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 3. Condition of sample: | Intact | |

Sample Integrity - Instructions

Y or N N/A

- | | | | |
|---|-------------------------------------|-------------------------------------|-------------------------------------|
| 1. Analysis requested is clear: | <input checked="" type="checkbox"/> | <input type="checkbox"/> | |
| 2. Bottles received for unspecified tests | <input type="checkbox"/> | <input checked="" type="checkbox"/> | |
| 3. Sufficient volume recvd for analysis: | <input checked="" type="checkbox"/> | <input type="checkbox"/> | |
| 4. Compositing instructions clear: | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 5. Filtering instructions clear: | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

Test Strip Lot #s: pH 1-12: 231619 pH 12+: 203117A Other: (Specify) _____

Comments

SM089-03
Rev. Date 12/7/17

JD35487: Chain of Custody

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SGS Sample Receipt Summary

Job Number: JD35487

Client: GHD SERVICES INC.

Project: SJRWP - PCFSE, HARRIS COUNTY, TX

Date / Time Received: 12/15/2021 11:00:00 AM

Delivery Method: _____

Airbill #'s: _____

Cooler Temps (Raw Measured) °C: Cooler 6: (3.1);

Cooler Temps (Corrected) °C: Cooler 6: (1.7);

Cooler Security

- | | |
|--|---|
| Y or N | Y or N |
| 1. Custody Seals Present: <input checked="" type="checkbox"/> <input type="checkbox"/> | 3. COC Present: <input checked="" type="checkbox"/> <input type="checkbox"/> |
| 2. Custody Seals Intact: <input checked="" type="checkbox"/> <input type="checkbox"/> | 4. Smpl Dates/Time OK: <input checked="" type="checkbox"/> <input type="checkbox"/> |

Cooler Temperature

- | | |
|---|-----------|
| Y or N | |
| 1. Temp criteria achieved: <input checked="" type="checkbox"/> <input type="checkbox"/> | |
| 2. Cooler temp verification: _____ | IR Gun |
| 3. Cooler media: _____ | Ice (Bag) |
| 4. No. Coolers: _____ | 1 |

Quality Control Preservation

- | | | | | |
|---------------------------------|-------------------------------------|--------------------------|-------------------------------------|------------|
| | Y | or | N | N/A |
| 1. Trip Blank present / cooler: | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | |
| 2. Trip Blank listed on COC: | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | |
| 3. Samples preserved properly: | <input checked="" type="checkbox"/> | <input type="checkbox"/> | | |
| 4. VOCs headspace free: | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | |

Sample Integrity - Documentation

- | | | | |
|--|-------------------------------------|-----------|--------------------------|
| | Y | or | N |
| 1. Sample labels present on bottles: | <input checked="" type="checkbox"/> | | <input type="checkbox"/> |
| 2. Container labeling complete: | <input checked="" type="checkbox"/> | | <input type="checkbox"/> |
| 3. Sample container label / COC agree: | <input checked="" type="checkbox"/> | | <input type="checkbox"/> |

Sample Integrity - Condition

- | | | | |
|----------------------------------|-------------------------------------|-----------|--------------------------|
| | Y | or | N |
| 1. Sample recvd within HT: | <input checked="" type="checkbox"/> | | <input type="checkbox"/> |
| 2. All containers accounted for: | <input checked="" type="checkbox"/> | | <input type="checkbox"/> |
| 3. Condition of sample: | Intact | | |

Sample Integrity - Instructions

- | | | | | |
|--|-------------------------------------|-----------|-------------------------------------|-------------------------------------|
| | Y | or | N | N/A |
| 1. Analysis requested is clear: | <input checked="" type="checkbox"/> | | <input type="checkbox"/> | |
| 2. Bottles received for unspecified tests: | <input type="checkbox"/> | | <input checked="" type="checkbox"/> | |
| 3. Sufficient volume recvd for analysis: | <input checked="" type="checkbox"/> | | <input type="checkbox"/> | |
| 4. Compositing instructions clear: | <input type="checkbox"/> | | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 5. Filtering instructions clear: | <input type="checkbox"/> | | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

Test Strip Lot #s:	pH 1-12: 231619	pH 12+: 203117A	Other: (Specify) _____
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Comments

SM089-03
Rev. Date 12/7/17

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5

SGS Sample Receipt Summary

Job Number: JD35487

Client: GHD SERVICES INC.

Project: SJRWP - PCFSE, HARRIS COUNTY, TX

Date / Time Received: 12/14/2021 3:20:00 PM

Delivery Method: _____

Airbill #'s: _____

Cooler Temps (Raw Measured) °C: Cooler 5: (2.6);

Cooler Temps (Corrected) °C: Cooler 5: (1.2);

<u>Cooler Security</u>	<u>Y or N</u>			<u>Y or N</u>	
1. Custody Seals Present:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	3. COC Present:	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2. Custody Seals Intact:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	4. Smpl Dates/Time OK	<input checked="" type="checkbox"/>	<input type="checkbox"/>

<u>Cooler Temperature</u>	<u>Y or N</u>	
1. Temp criteria achieved:	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2. Cooler temp verification:	<u>IR Gun</u>	
3. Cooler media:	<u>Ice (Bag)</u>	
4. No. Coolers:	<u>1</u>	

<u>Quality Control Preservation</u>	<u>Y or N</u>		<u>N/A</u>
1. Trip Blank present / cooler:	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
2. Trip Blank listed on COC:	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
3. Samples preserved properly:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
4. VOCs headspace free:	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

<u>Sample Integrity - Documentation</u>	<u>Y or N</u>	
1. Sample labels present on bottles:	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2. Container labeling complete:	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3. Sample container label / COC agree:	<input checked="" type="checkbox"/>	<input type="checkbox"/>

<u>Sample Integrity - Condition</u>	<u>Y or N</u>	
1. Sample recvd within HT:	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2. All containers accounted for:	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3. Condition of sample:	<u>Intact</u>	

<u>Sample Integrity - Instructions</u>	<u>Y or N</u>		<u>N/A</u>
1. Analysis requested is clear:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
2. Bottles received for unspecified tests	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
3. Sufficient volume recvd for analysis:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
4. Compositing instructions clear:	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
5. Filtering instructions clear:	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Test Strip Lot #s:	pH 1-12: <u>231619</u>	pH 12+: <u>203117A</u>	Other: (Specify) _____
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Comments

SM089-03
Rev. Date 12/7/17

JD35487: Chain of Custody

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Job Change Order: JD35487

Requested Date:	2/21/2022	Received Date:	12/2/2021
Account Name:	GHD Services Inc.	Due Date:	2/21/2022
Project Description:	SJRWP - PCFSE, Harris County, TX	Deliverable:	FULT1
C/O Initiated By:	KELLY.RAM	PM:	KR
		TAT (Days):	1

=====
Sample #: JD35487-ALL **Change:**
Dept: Please revise to COMMBN and reissue report
TAT: 1
=====

Above Changes Per: Kathy Shaw

Date/Time: 2/21/2022

To Client: This Change Order is confirmation of the revisions, previously discussed with the Client Service Representative.

MS Volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Instrument Performance Checks (BFB)
- Surrogate Recovery Summaries

Method Blank Summary

Job Number: JD35487
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V2B8530-MB	2B187860.D	1	12/09/21	JS	n/a	n/a	V2B8530

The QC reported here applies to the following samples:

Method: SW846 8260D

JD35487-1

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	6.0	ug/l	
75-05-8	Acetonitrile	ND	100	7.4	ug/l	
107-13-1	Acrylonitrile	ND	10	1.0	ug/l	
71-43-2	Benzene	ND	0.50	0.43	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.58	ug/l	
75-25-2	Bromoform	ND	1.0	0.63	ug/l	
74-83-9	Bromomethane	ND	2.0	1.6	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	6.9	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.95	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.55	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.56	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.48	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.51	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	1.4	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.60	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.59	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.43	ug/l	
542-75-6	1,3-Dichloropropene (total)	ND	1.0	0.43	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.60	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.56	ug/l	
78-83-1	Isobutyl alcohol	ND	50	12	ug/l	
126-98-7	Methacrylonitrile	ND	10	1.0	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.9	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.61	ug/l	
100-42-5	Styrene	ND	1.0	0.70	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.60	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.65	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.90	ug/l	
108-88-3	Toluene	ND	1.0	0.53	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.54	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.53	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.53	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.84	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.70	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.79	ug/l	

Method Blank Summary

Job Number: JD35487
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V2B8530-MB	2B187860.D	1	12/09/21	JS	n/a	n/a	V2B8530

The QC reported here applies to the following samples:

Method: SW846 8260D

JD35487-1

CAS No.	Compound	Result	RL	MDL	Units	Q
	m,p-Xylene	ND	1.0	0.78	ug/l	
95-47-6	o-Xylene	ND	1.0	0.59	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.59	ug/l	

CAS No.	Surrogate Recoveries	Limits
1868-53-7	Dibromofluoromethane	99% 76-120%
17060-07-0	1,2-Dichloroethane-D4	93% 64-135%
2037-26-5	Toluene-D8	94% 76-117%
460-00-4	4-Bromofluorobenzene	103% 72-122%

6.1.1
6

Method Blank Summary

Job Number: JD35487
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V2B8531-MB	2B187880.D	1	12/09/21	ED	n/a	n/a	V2B8531

The QC reported here applies to the following samples:

Method: SW846 8260D

JD35487-2, JD35487-3

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	6.0	ug/l	
75-05-8	Acetonitrile	ND	100	7.4	ug/l	
107-13-1	Acrylonitrile	ND	10	1.0	ug/l	
71-43-2	Benzene	ND	0.50	0.43	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.58	ug/l	
75-25-2	Bromoform	ND	1.0	0.63	ug/l	
74-83-9	Bromomethane	ND	2.0	1.6	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	6.9	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.95	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.55	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.56	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.48	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.51	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	1.4	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.60	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.59	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.43	ug/l	
542-75-6	1,3-Dichloropropene (total)	ND	1.0	0.43	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.60	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.56	ug/l	
78-83-1	Isobutyl alcohol	ND	50	12	ug/l	
126-98-7	Methacrylonitrile	ND	10	1.0	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.9	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.61	ug/l	
100-42-5	Styrene	ND	1.0	0.70	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.60	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.65	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.90	ug/l	
108-88-3	Toluene	ND	1.0	0.53	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.54	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.53	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.53	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.84	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.70	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.79	ug/l	

6.1.2
6

Method Blank Summary

Job Number: JD35487
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V2B8531-MB	2B187880.D	1	12/09/21	ED	n/a	n/a	V2B8531

The QC reported here applies to the following samples:

Method: SW846 8260D

JD35487-2, JD35487-3

CAS No.	Compound	Result	RL	MDL	Units	Q
	m,p-Xylene	ND	1.0	0.78	ug/l	
95-47-6	o-Xylene	ND	1.0	0.59	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.59	ug/l	

CAS No.	Surrogate Recoveries	Limits
1868-53-7	Dibromofluoromethane	99% 76-120%
17060-07-0	1,2-Dichloroethane-D4	92% 64-135%
2037-26-5	Toluene-D8	94% 76-117%
460-00-4	4-Bromofluorobenzene	104% 72-122%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

6.12
6

Method Blank Summary

Job Number: JD35487
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VL10104-MB	L335964.D	1	12/14/21	NW	n/a	n/a	VL10104

The QC reported here applies to the following samples:

Method: SW846 8260D

JD35487-4

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	6.0	ug/l	
75-05-8	Acetonitrile	ND	100	7.4	ug/l	
107-13-1	Acrylonitrile	ND	10	1.0	ug/l	
71-43-2	Benzene	ND	0.50	0.43	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.58	ug/l	
75-25-2	Bromoform	ND	1.0	0.63	ug/l	
74-83-9	Bromomethane	ND	2.0	1.6	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	6.9	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.95	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.55	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.56	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.48	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.51	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	1.4	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.60	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.59	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.43	ug/l	
542-75-6	1,3-Dichloropropene (total)	ND	1.0	0.43	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.60	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.56	ug/l	
78-83-1	Isobutyl alcohol	ND	50	12	ug/l	
126-98-7	Methacrylonitrile	ND	10	1.0	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.9	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.61	ug/l	
100-42-5	Styrene	ND	1.0	0.70	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.60	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.65	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.90	ug/l	
108-88-3	Toluene	ND	1.0	0.53	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.54	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.53	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.53	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.84	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.70	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.79	ug/l	

Method Blank Summary

Job Number: JD35487
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VL10104-MB	L335964.D	1	12/14/21	NW	n/a	n/a	VL10104

The QC reported here applies to the following samples:

Method: SW846 8260D

JD35487-4

CAS No.	Compound	Result	RL	MDL	Units	Q
	m,p-Xylene	ND	1.0	0.78	ug/l	
95-47-6	o-Xylene	ND	1.0	0.59	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.59	ug/l	

CAS No.	Surrogate Recoveries	Limits	
1868-53-7	Dibromofluoromethane	107%	76-120%
17060-07-0	1,2-Dichloroethane-D4	115%	64-135%
2037-26-5	Toluene-D8	98%	76-117%
460-00-4	4-Bromofluorobenzene	107%	72-122%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

Method Blank Summary

Job Number: JD35487
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V3D7311-MB	3D172302.D	1	12/28/21	NH	n/a	n/a	V3D7311

The QC reported here applies to the following samples:

Method: SW846 8260D

JD35487-5, JD35487-6

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	6.0	ug/l	
75-05-8	Acetonitrile	ND	100	7.4	ug/l	
107-13-1	Acrylonitrile	ND	10	1.0	ug/l	
71-43-2	Benzene	ND	0.50	0.43	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.58	ug/l	
75-25-2	Bromoform	ND	1.0	0.63	ug/l	
74-83-9	Bromomethane	ND	2.0	1.6	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	6.9	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.95	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.55	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.56	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.48	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.51	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	1.4	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.60	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.59	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.43	ug/l	
542-75-6	1,3-Dichloropropene (total)	ND	1.0	0.43	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.60	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.56	ug/l	
78-83-1	Isobutyl alcohol	ND	50	12	ug/l	
126-98-7	Methacrylonitrile	ND	10	1.0	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.9	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.61	ug/l	
100-42-5	Styrene	ND	1.0	0.70	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.60	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.65	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.90	ug/l	
108-88-3	Toluene	ND	1.0	0.53	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.54	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.53	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.53	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.84	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.70	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.79	ug/l	

Method Blank Summary

Job Number: JD35487
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V3D7311-MB	3D172302.D	1	12/28/21	NH	n/a	n/a	V3D7311

The QC reported here applies to the following samples:

Method: SW846 8260D

JD35487-5, JD35487-6

CAS No.	Compound	Result	RL	MDL	Units	Q
	m,p-Xylene	ND	1.0	0.78	ug/l	
95-47-6	o-Xylene	ND	1.0	0.59	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.59	ug/l	

CAS No.	Surrogate Recoveries	Limits	
1868-53-7	Dibromofluoromethane	83%	76-120%
17060-07-0	1,2-Dichloroethane-D4	101%	64-135%
2037-26-5	Toluene-D8	102%	76-117%
460-00-4	4-Bromofluorobenzene	98%	72-122%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

6.1.4
6

Method Blank Summary

Job Number: JD35487
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V1A9391-MB	1A218101.D	1	12/20/21	ED	n/a	n/a	V1A9391

The QC reported here applies to the following samples:

Method: SW846 8260D

GP37615-LS21, GP37639-LS23

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	6.0	ug/l	
75-05-8	Acetonitrile	ND	100	7.4	ug/l	
107-13-1	Acrylonitrile	ND	10	1.0	ug/l	
71-43-2	Benzene	ND	0.50	0.43	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.58	ug/l	
75-25-2	Bromoform	ND	1.0	0.63	ug/l	
74-83-9	Bromomethane	ND	2.0	1.6	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	6.9	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.95	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.55	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.56	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.48	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.51	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	1.4	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.60	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.59	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.43	ug/l	
542-75-6	1,3-Dichloropropene (total)	ND	1.0	0.43	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.60	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.56	ug/l	
78-83-1	Isobutyl alcohol	ND	50	12	ug/l	
126-98-7	Methacrylonitrile	ND	10	1.0	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.9	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.61	ug/l	
100-42-5	Styrene	ND	1.0	0.70	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.60	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.65	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.90	ug/l	
108-88-3	Toluene	ND	1.0	0.53	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.54	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.53	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.53	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.84	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.70	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.79	ug/l	

Method Blank Summary

Job Number: JD35487
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V1A9391-MB	1A218101.D	1	12/20/21	ED	n/a	n/a	V1A9391

The QC reported here applies to the following samples:

Method: SW846 8260D

GP37615-LS21, GP37639-LS23

CAS No.	Compound	Result	RL	MDL	Units	Q
	m,p-Xylene	ND	1.0	0.78	ug/l	
95-47-6	o-Xylene	ND	1.0	0.59	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.59	ug/l	

CAS No.	Surrogate Recoveries	Limits	
1868-53-7	Dibromofluoromethane	92%	76-120%
17060-07-0	1,2-Dichloroethane-D4	112%	64-135%
2037-26-5	Toluene-D8	116%	76-117%
460-00-4	4-Bromofluorobenzene	106%	72-122%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

6.1.5
6

Method Blank Summary

Job Number: JD35487
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V1A9393-MB	1A218146.D	1	12/21/21	ED	n/a	n/a	V1A9393

The QC reported here applies to the following samples:

Method: SW846 8260D

GP37615-LB21

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	6.0	ug/l	
75-05-8	Acetonitrile	ND	100	7.4	ug/l	
107-13-1	Acrylonitrile	ND	10	1.0	ug/l	
71-43-2	Benzene	ND	0.50	0.43	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.58	ug/l	
75-25-2	Bromoform	ND	1.0	0.63	ug/l	
74-83-9	Bromomethane	ND	2.0	1.6	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	6.9	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.95	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.55	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.56	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.48	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.51	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	1.4	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.60	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.59	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.43	ug/l	
542-75-6	1,3-Dichloropropene (total)	ND	1.0	0.43	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.60	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.56	ug/l	
78-83-1	Isobutyl alcohol	ND	50	12	ug/l	
126-98-7	Methacrylonitrile	ND	10	1.0	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.9	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.61	ug/l	
100-42-5	Styrene	ND	1.0	0.70	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.60	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.65	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.90	ug/l	
108-88-3	Toluene	ND	1.0	0.53	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.54	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.53	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.53	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.84	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.70	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.79	ug/l	

Method Blank Summary

Job Number: JD35487
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V1A9393-MB	1A218146.D	1	12/21/21	ED	n/a	n/a	V1A9393

The QC reported here applies to the following samples:

Method: SW846 8260D

GP37615-LB21

CAS No.	Compound	Result	RL	MDL	Units	Q
	m,p-Xylene	ND	1.0	0.78	ug/l	
95-47-6	o-Xylene	ND	1.0	0.59	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.59	ug/l	

CAS No.	Surrogate Recoveries	Limits	
1868-53-7	Dibromofluoromethane	89%	76-120%
17060-07-0	1,2-Dichloroethane-D4	103%	64-135%
2037-26-5	Toluene-D8	117%	76-117%
460-00-4	4-Bromofluorobenzene	100%	72-122%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

6.1.6
6

Method Blank Summary

Job Number: JD35487

Account: CRATXH GHD Services Inc.

Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V1A9404-MB	1A218427.D	1	12/29/21	ED	n/a	n/a	V1A9404

The QC reported here applies to the following samples:

Method: SW846 8260D

GP37639-LB23

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	6.0	ug/l	
75-05-8	Acetonitrile	ND	100	7.4	ug/l	
107-13-1	Acrylonitrile	ND	10	1.0	ug/l	
71-43-2	Benzene	ND	0.50	0.43	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.58	ug/l	
75-25-2	Bromoform	ND	1.0	0.63	ug/l	
74-83-9	Bromomethane	2.1	2.0	1.6	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	6.9	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.95	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.55	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.56	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.48	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.51	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	1.4	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.60	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.59	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.43	ug/l	
542-75-6	1,3-Dichloropropene (total)	ND	1.0	0.43	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.60	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.56	ug/l	
78-83-1	Isobutyl alcohol	ND	50	12	ug/l	
126-98-7	Methacrylonitrile	ND	10	1.0	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.9	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.61	ug/l	
100-42-5	Styrene	ND	1.0	0.70	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.60	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.65	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.90	ug/l	
108-88-3	Toluene	ND	1.0	0.53	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.54	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.53	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.53	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.84	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.70	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.79	ug/l	

Method Blank Summary

Job Number: JD35487
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V1A9404-MB	1A218427.D	1	12/29/21	ED	n/a	n/a	V1A9404

The QC reported here applies to the following samples:

Method: SW846 8260D

GP37639-LB23

CAS No.	Compound	Result	RL	MDL	Units	Q
	m,p-Xylene	ND	1.0	0.78	ug/l	
95-47-6	o-Xylene	ND	1.0	0.59	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.59	ug/l	

CAS No.	Surrogate Recoveries	Limits	
1868-53-7	Dibromofluoromethane	99%	76-120%
17060-07-0	1,2-Dichloroethane-D4	110%	64-135%
2037-26-5	Toluene-D8	118% * a	76-117%
460-00-4	4-Bromofluorobenzene	111%	72-122%

(a) Outside of in house control limits, but within reasonable method recovery limits.

Leachate Blank Summary

Job Number: JD35487
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GP37411-LB8	2B187861.D	5	12/09/21	JS	12/03/21	GP37411	V2B8530

The QC reported here applies to the following samples:

Method: SW846 8260D

JD35487-1

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	50	30	ug/l	
75-05-8	Acetonitrile	ND	500	37	ug/l	
107-13-1	Acrylonitrile	ND	50	5.2	ug/l	
71-43-2	Benzene	ND	2.5	2.1	ug/l	
75-27-4	Bromodichloromethane	ND	5.0	2.9	ug/l	
75-25-2	Bromoform	ND	5.0	3.2	ug/l	
74-83-9	Bromomethane	ND	10	8.2	ug/l	
78-93-3	2-Butanone (MEK)	ND	50	34	ug/l	
75-15-0	Carbon disulfide	ND	10	4.8	ug/l	
56-23-5	Carbon tetrachloride	ND	5.0	2.8	ug/l	
108-90-7	Chlorobenzene	ND	5.0	2.8	ug/l	
67-66-3	Chloroform	7.3	5.0	2.5	ug/l	
106-93-4	1,2-Dibromoethane	ND	5.0	2.4	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	5.0	2.5	ug/l	
75-71-8	Dichlorodifluoromethane	ND	10	6.8	ug/l	
107-06-2	1,2-Dichloroethane	ND	5.0	3.0	ug/l	
75-35-4	1,1-Dichloroethene	ND	5.0	3.0	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	5.0	2.2	ug/l	
542-75-6	1,3-Dichloropropene (total)	ND	5.0	2.2	ug/l	
100-41-4	Ethylbenzene	ND	5.0	3.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	10	2.8	ug/l	
78-83-1	Isobutyl alcohol	ND	250	61	ug/l	
126-98-7	Methacrylonitrile	ND	50	5.0	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	25	9.3	ug/l	
75-09-2	Methylene chloride	ND	10	3.0	ug/l	
100-42-5	Styrene	ND	5.0	3.5	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	5.0	3.0	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.0	3.3	ug/l	
127-18-4	Tetrachloroethene	ND	5.0	4.5	ug/l	
108-88-3	Toluene	ND	5.0	2.7	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	5.0	2.7	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	5.0	2.7	ug/l	
79-01-6	Trichloroethene	ND	5.0	2.6	ug/l	
75-69-4	Trichlorofluoromethane	ND	10	4.2	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	10	3.5	ug/l	
75-01-4	Vinyl chloride	ND	5.0	3.9	ug/l	

Leachate Blank Summary

Job Number: JD35487
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GP37411-LB8	2B187861.D	5	12/09/21	JS	12/03/21	GP37411	V2B8530

The QC reported here applies to the following samples:

Method: SW846 8260D

JD35487-1

CAS No.	Compound	Result	RL	MDL	Units	Q
	m,p-Xylene	ND	5.0	3.9	ug/l	
95-47-6	o-Xylene	ND	5.0	3.0	ug/l	
1330-20-7	Xylene (total)	ND	5.0	3.0	ug/l	

CAS No.	Surrogate Recoveries	Limits
1868-53-7	Dibromofluoromethane	100% 76-120%
17060-07-0	1,2-Dichloroethane-D4	94% 64-135%
2037-26-5	Toluene-D8	94% 76-117%
460-00-4	4-Bromofluorobenzene	102% 72-122%

6.2.1
6

Leachate Blank Summary

Job Number: JD35487
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GP37443-LB10	2B187881.D	5	12/09/21	ED	12/06/21	GP37443	V2B8531

The QC reported here applies to the following samples:

Method: SW846 8260D

JD35487-2, JD35487-3

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	50	30	ug/l	
75-05-8	Acetonitrile	ND	500	37	ug/l	
107-13-1	Acrylonitrile	ND	50	5.2	ug/l	
71-43-2	Benzene	ND	2.5	2.1	ug/l	
75-27-4	Bromodichloromethane	ND	5.0	2.9	ug/l	
75-25-2	Bromoform	ND	5.0	3.2	ug/l	
74-83-9	Bromomethane	ND	10	8.2	ug/l	
78-93-3	2-Butanone (MEK)	ND	50	34	ug/l	
75-15-0	Carbon disulfide	ND	10	4.8	ug/l	
56-23-5	Carbon tetrachloride	ND	5.0	2.8	ug/l	
108-90-7	Chlorobenzene	ND	5.0	2.8	ug/l	
67-66-3	Chloroform	9.4	5.0	2.5	ug/l	
106-93-4	1,2-Dibromoethane	ND	5.0	2.4	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	5.0	2.5	ug/l	
75-71-8	Dichlorodifluoromethane	ND	10	6.8	ug/l	
107-06-2	1,2-Dichloroethane	ND	5.0	3.0	ug/l	
75-35-4	1,1-Dichloroethene	ND	5.0	3.0	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	5.0	2.2	ug/l	
542-75-6	1,3-Dichloropropene (total)	ND	5.0	2.2	ug/l	
100-41-4	Ethylbenzene	ND	5.0	3.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	10	2.8	ug/l	
78-83-1	Isobutyl alcohol	ND	250	61	ug/l	
126-98-7	Methacrylonitrile	ND	50	5.0	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	25	9.3	ug/l	
75-09-2	Methylene chloride	ND	10	3.0	ug/l	
100-42-5	Styrene	ND	5.0	3.5	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	5.0	3.0	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.0	3.3	ug/l	
127-18-4	Tetrachloroethene	ND	5.0	4.5	ug/l	
108-88-3	Toluene	ND	5.0	2.7	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	5.0	2.7	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	5.0	2.7	ug/l	
79-01-6	Trichloroethene	ND	5.0	2.6	ug/l	
75-69-4	Trichlorofluoromethane	ND	10	4.2	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	10	3.5	ug/l	
75-01-4	Vinyl chloride	ND	5.0	3.9	ug/l	

Leachate Blank Summary

Job Number: JD35487
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GP37443-LB10	2B187881.D	5	12/09/21	ED	12/06/21	GP37443	V2B8531

The QC reported here applies to the following samples:

Method: SW846 8260D

JD35487-2, JD35487-3

CAS No.	Compound	Result	RL	MDL	Units	Q
	m,p-Xylene	ND	5.0	3.9	ug/l	
95-47-6	o-Xylene	ND	5.0	3.0	ug/l	
1330-20-7	Xylene (total)	ND	5.0	3.0	ug/l	

CAS No.	Surrogate Recoveries	Limits
1868-53-7	Dibromofluoromethane	100% 76-120%
17060-07-0	1,2-Dichloroethane-D4	93% 64-135%
2037-26-5	Toluene-D8	94% 76-117%
460-00-4	4-Bromofluorobenzene	103% 72-122%

6.2.2
6

Leachate Blank Summary

Job Number: JD35487
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GP37492-LB14	L335966.D	5	12/15/21	NW	12/09/21	GP37492	VL10104

The QC reported here applies to the following samples:

Method: SW846 8260D

JD35487-4

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	50	30	ug/l	
75-05-8	Acetonitrile	ND	500	37	ug/l	
107-13-1	Acrylonitrile	ND	50	5.2	ug/l	
71-43-2	Benzene	ND	2.5	2.1	ug/l	
75-27-4	Bromodichloromethane	ND	5.0	2.9	ug/l	
75-25-2	Bromoform	ND	5.0	3.2	ug/l	
74-83-9	Bromomethane	ND	10	8.2	ug/l	
78-93-3	2-Butanone (MEK)	ND	50	34	ug/l	
75-15-0	Carbon disulfide	ND	10	4.8	ug/l	
56-23-5	Carbon tetrachloride	ND	5.0	2.8	ug/l	
108-90-7	Chlorobenzene	ND	5.0	2.8	ug/l	
67-66-3	Chloroform	8.4	5.0	2.5	ug/l	
106-93-4	1,2-Dibromoethane	ND	5.0	2.4	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	5.0	2.5	ug/l	
75-71-8	Dichlorodifluoromethane	ND	10	6.8	ug/l	
107-06-2	1,2-Dichloroethane	ND	5.0	3.0	ug/l	
75-35-4	1,1-Dichloroethene	ND	5.0	3.0	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	5.0	2.2	ug/l	
542-75-6	1,3-Dichloropropene (total)	ND	5.0	2.2	ug/l	
100-41-4	Ethylbenzene	ND	5.0	3.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	10	2.8	ug/l	
78-83-1	Isobutyl alcohol	ND	250	61	ug/l	
126-98-7	Methacrylonitrile	ND	50	5.0	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	25	9.3	ug/l	
75-09-2	Methylene chloride	ND	10	3.0	ug/l	
100-42-5	Styrene	ND	5.0	3.5	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	5.0	3.0	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.0	3.3	ug/l	
127-18-4	Tetrachloroethene	ND	5.0	4.5	ug/l	
108-88-3	Toluene	ND	5.0	2.7	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	5.0	2.7	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	5.0	2.7	ug/l	
79-01-6	Trichloroethene	68.3	5.0	2.6	ug/l	
75-69-4	Trichlorofluoromethane	ND	10	4.2	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	10	3.5	ug/l	
75-01-4	Vinyl chloride	ND	5.0	3.9	ug/l	

Leachate Blank Summary

Job Number: JD35487
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GP37492-LB14	L335966.D	5	12/15/21	NW	12/09/21	GP37492	VL10104

The QC reported here applies to the following samples:

Method: SW846 8260D

JD35487-4

CAS No.	Compound	Result	RL	MDL	Units	Q
	m,p-Xylene	ND	5.0	3.9	ug/l	
95-47-6	o-Xylene	ND	5.0	3.0	ug/l	
1330-20-7	Xylene (total)	ND	5.0	3.0	ug/l	

CAS No.	Surrogate Recoveries	Limits
1868-53-7	Dibromofluoromethane	106% 76-120%
17060-07-0	1,2-Dichloroethane-D4	118% 64-135%
2037-26-5	Toluene-D8	98% 76-117%
460-00-4	4-Bromofluorobenzene	106% 72-122%

6.2.3

6

Leachate Blank Summary

Job Number: JD35487
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GP37615-LB21	1A218154.D	5	12/21/21	ED	12/15/21	GP37615	V1A9393

The QC reported here applies to the following samples:

Method: SW846 8260D

JD35487-5

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	50	30	ug/l	
75-05-8	Acetonitrile	ND	500	37	ug/l	
107-13-1	Acrylonitrile	ND	50	5.2	ug/l	
71-43-2	Benzene	ND	2.5	2.1	ug/l	
75-27-4	Bromodichloromethane	ND	5.0	2.9	ug/l	
75-25-2	Bromoform	ND	5.0	3.2	ug/l	
74-83-9	Bromomethane	ND	10	8.2	ug/l	
78-93-3	2-Butanone (MEK)	ND	50	34	ug/l	
75-15-0	Carbon disulfide	ND	10	4.8	ug/l	
56-23-5	Carbon tetrachloride	ND	5.0	2.8	ug/l	
108-90-7	Chlorobenzene	ND	5.0	2.8	ug/l	
67-66-3	Chloroform	9.9	5.0	2.5	ug/l	
106-93-4	1,2-Dibromoethane	ND	5.0	2.4	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	5.0	2.5	ug/l	
75-71-8	Dichlorodifluoromethane	ND	10	6.8	ug/l	
107-06-2	1,2-Dichloroethane	ND	5.0	3.0	ug/l	
75-35-4	1,1-Dichloroethene	ND	5.0	3.0	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	5.0	2.2	ug/l	
542-75-6	1,3-Dichloropropene (total)	ND	5.0	2.2	ug/l	
100-41-4	Ethylbenzene	ND	5.0	3.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	10	2.8	ug/l	
78-83-1	Isobutyl alcohol	341	250	61	ug/l	
126-98-7	Methacrylonitrile	ND	50	5.0	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	25	9.3	ug/l	
75-09-2	Methylene chloride	ND	10	3.0	ug/l	
100-42-5	Styrene	ND	5.0	3.5	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	5.0	3.0	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.0	3.3	ug/l	
127-18-4	Tetrachloroethene	ND	5.0	4.5	ug/l	
108-88-3	Toluene	ND	5.0	2.7	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	5.0	2.7	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	5.0	2.7	ug/l	
79-01-6	Trichloroethene	ND	5.0	2.6	ug/l	
75-69-4	Trichlorofluoromethane	ND	10	4.2	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	10	3.5	ug/l	
75-01-4	Vinyl chloride	ND	5.0	3.9	ug/l	

Leachate Blank Summary

Job Number: JD35487
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GP37615-LB21	1A218154.D	5	12/21/21	ED	12/15/21	GP37615	V1A9393

The QC reported here applies to the following samples:

Method: SW846 8260D

JD35487-5

CAS No.	Compound	Result	RL	MDL	Units	Q
	m,p-Xylene	ND	5.0	3.9	ug/l	
95-47-6	o-Xylene	ND	5.0	3.0	ug/l	
1330-20-7	Xylene (total)	ND	5.0	3.0	ug/l	

CAS No.	Surrogate Recoveries	Limits	
1868-53-7	Dibromofluoromethane	90%	76-120%
17060-07-0	1,2-Dichloroethane-D4	103%	64-135%
2037-26-5	Toluene-D8	117%	76-117%
460-00-4	4-Bromofluorobenzene	104%	72-122%

6.2.4
6

Leachate Blank Summary

Job Number: JD35487
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GP37639-LB23	1A218433.D	5	12/29/21	ED	12/16/21	GP37639	V1A9404

The QC reported here applies to the following samples:

Method: SW846 8260D

JD35487-6

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	50	30	ug/l	
75-05-8	Acetonitrile	ND	500	37	ug/l	
107-13-1	Acrylonitrile	ND	50	5.2	ug/l	
71-43-2	Benzene	ND	2.5	2.1	ug/l	
75-27-4	Bromodichloromethane	ND	5.0	2.9	ug/l	
75-25-2	Bromoform	ND	5.0	3.2	ug/l	
74-83-9	Bromomethane	9.5	10	8.2	ug/l	J
78-93-3	2-Butanone (MEK)	ND	50	34	ug/l	
75-15-0	Carbon disulfide	ND	10	4.8	ug/l	
56-23-5	Carbon tetrachloride	ND	5.0	2.8	ug/l	
108-90-7	Chlorobenzene	ND	5.0	2.8	ug/l	
67-66-3	Chloroform	9.7	5.0	2.5	ug/l	
106-93-4	1,2-Dibromoethane	ND	5.0	2.4	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	5.0	2.5	ug/l	
75-71-8	Dichlorodifluoromethane	ND	10	6.8	ug/l	
107-06-2	1,2-Dichloroethane	ND	5.0	3.0	ug/l	
75-35-4	1,1-Dichloroethene	ND	5.0	3.0	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	5.0	2.2	ug/l	
542-75-6	1,3-Dichloropropene (total)	ND	5.0	2.2	ug/l	
100-41-4	Ethylbenzene	ND	5.0	3.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	10	2.8	ug/l	
78-83-1	Isobutyl alcohol	444	250	61	ug/l	
126-98-7	Methacrylonitrile	ND	50	5.0	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	25	9.3	ug/l	
75-09-2	Methylene chloride	ND	10	3.0	ug/l	
100-42-5	Styrene	ND	5.0	3.5	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	5.0	3.0	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.0	3.3	ug/l	
127-18-4	Tetrachloroethene	ND	5.0	4.5	ug/l	
108-88-3	Toluene	ND	5.0	2.7	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	5.0	2.7	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	5.0	2.7	ug/l	
79-01-6	Trichloroethene	ND	5.0	2.6	ug/l	
75-69-4	Trichlorofluoromethane	ND	10	4.2	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	10	3.5	ug/l	
75-01-4	Vinyl chloride	ND	5.0	3.9	ug/l	

Leachate Blank Summary

Job Number: JD35487
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GP37639-LB23	1A218433.D	5	12/29/21	ED	12/16/21	GP37639	V1A9404

The QC reported here applies to the following samples:

Method: SW846 8260D

JD35487-6

CAS No.	Compound	Result	RL	MDL	Units	Q
	m,p-Xylene	ND	5.0	3.9	ug/l	
95-47-6	o-Xylene	ND	5.0	3.0	ug/l	
1330-20-7	Xylene (total)	ND	5.0	3.0	ug/l	

CAS No.	Surrogate Recoveries	Limits
1868-53-7	Dibromofluoromethane	99% 76-120%
17060-07-0	1,2-Dichloroethane-D4	110% 64-135%
2037-26-5	Toluene-D8	116% 76-117%
460-00-4	4-Bromofluorobenzene	110% 72-122%

Blank Spike Summary

Job Number: JD35487
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V2B8530-BS	2B187858.D	1	12/09/21	JS	n/a	n/a	V2B8530

The QC reported here applies to the following samples:

Method: SW846 8260D

JD35487-1

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
67-64-1	Acetone	200	228	114	51-151
75-05-8	Acetonitrile	500	517	103	53-136
107-13-1	Acrylonitrile	50	46.8	94	61-131
71-43-2	Benzene	50	47.4	95	75-122
75-27-4	Bromodichloromethane	50	45.3	91	77-128
75-25-2	Bromoform	50	44.4	89	67-141
74-83-9	Bromomethane	50	34.0	68	53-152
78-93-3	2-Butanone (MEK)	200	204	102	64-130
75-15-0	Carbon disulfide	50	44.5	89	59-140
56-23-5	Carbon tetrachloride	50	46.7	93	75-148
108-90-7	Chlorobenzene	50	45.5	91	76-124
67-66-3	Chloroform	50	41.4	83	77-124
106-93-4	1,2-Dibromoethane	50	43.5	87	75-130
106-46-7	1,4-Dichlorobenzene	50	52.1	104	71-123
75-71-8	Dichlorodifluoromethane	50	42.1	84	42-152
107-06-2	1,2-Dichloroethane	50	41.8	84	66-150
75-35-4	1,1-Dichloroethene	50	46.7	93	61-132
10061-02-6	trans-1,3-Dichloropropene	50	43.0	86	75-132
542-75-6	1,3-Dichloropropene (total)	100	89.8	90	76-127
100-41-4	Ethylbenzene	50	42.3	85	77-124
87-68-3	Hexachlorobutadiene	50	50.0	100	66-144
78-83-1	Isobutyl alcohol	500	512	102	59-142
126-98-7	Methacrylonitrile	50	43.7	87	54-135
108-10-1	4-Methyl-2-pentanone(MIBK)	200	221	111	63-135
75-09-2	Methylene chloride	50	43.5	87	69-122
100-42-5	Styrene	50	41.1	82	78-126
630-20-6	1,1,1,2-Tetrachloroethane	50	47.0	94	78-133
79-34-5	1,1,2,2-Tetrachloroethane	50	47.4	95	66-125
127-18-4	Tetrachloroethene	50	46.1	92	70-136
108-88-3	Toluene	50	44.2	88	76-126
71-55-6	1,1,1-Trichloroethane	50	46.5	93	77-136
79-00-5	1,1,2-Trichloroethane	50	42.3	85	75-123
79-01-6	Trichloroethene	50	53.7	107	79-126
75-69-4	Trichlorofluoromethane	50	41.6	83	56-154
96-18-4	1,2,3-Trichloropropane	50	49.5	99	64-121
75-01-4	Vinyl chloride	50	37.8	76	56-146

* = Outside of Control Limits.

Blank Spike Summary

Job Number: JD35487
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V2B8530-BS	2B187858.D	1	12/09/21	JS	n/a	n/a	V2B8530

The QC reported here applies to the following samples:

Method: SW846 8260D

JD35487-1

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
	m,p-Xylene	100	90.6	91	77-125
95-47-6	o-Xylene	50	44.7	89	76-126
1330-20-7	Xylene (total)	150	135	90	77-125

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	95%	76-120%
17060-07-0	1,2-Dichloroethane-D4	87%	64-135%
2037-26-5	Toluene-D8	91%	76-117%
460-00-4	4-Bromofluorobenzene	99%	72-122%

* = Outside of Control Limits.

Blank Spike Summary

Job Number: JD35487
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V2B8531-BS	2B187878.D	1	12/09/21	ED	n/a	n/a	V2B8531

The QC reported here applies to the following samples:

Method: SW846 8260D

JD35487-2, JD35487-3

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
67-64-1	Acetone	200	220	110	51-151
75-05-8	Acetonitrile	500	535	107	53-136
107-13-1	Acrylonitrile	50	43.6	87	61-131
71-43-2	Benzene	50	47.4	95	75-122
75-27-4	Bromodichloromethane	50	45.1	90	77-128
75-25-2	Bromoform	50	44.1	88	67-141
74-83-9	Bromomethane	50	35.5	71	53-152
78-93-3	2-Butanone (MEK)	200	188	94	64-130
75-15-0	Carbon disulfide	50	44.4	89	59-140
56-23-5	Carbon tetrachloride	50	46.2	92	75-148
108-90-7	Chlorobenzene	50	45.1	90	76-124
67-66-3	Chloroform	50	42.4	85	77-124
106-93-4	1,2-Dibromoethane	50	43.0	86	75-130
106-46-7	1,4-Dichlorobenzene	50	51.5	103	71-123
75-71-8	Dichlorodifluoromethane	50	47.7	95	42-152
107-06-2	1,2-Dichloroethane	50	41.4	83	66-150
75-35-4	1,1-Dichloroethene	50	46.0	92	61-132
10061-02-6	trans-1,3-Dichloropropene	50	43.1	86	75-132
542-75-6	1,3-Dichloropropene (total)	100	91.3	91	76-127
100-41-4	Ethylbenzene	50	42.1	84	77-124
87-68-3	Hexachlorobutadiene	50	51.5	103	66-144
78-83-1	Isobutyl alcohol	500	507	101	59-142
126-98-7	Methacrylonitrile	50	45.9	92	54-135
108-10-1	4-Methyl-2-pentanone(MIBK)	200	225	113	63-135
75-09-2	Methylene chloride	50	44.1	88	69-122
100-42-5	Styrene	50	42.9	86	78-126
630-20-6	1,1,1,2-Tetrachloroethane	50	46.2	92	78-133
79-34-5	1,1,2,2-Tetrachloroethane	50	49.7	99	66-125
127-18-4	Tetrachloroethene	50	46.1	92	70-136
108-88-3	Toluene	50	44.1	88	76-126
71-55-6	1,1,1-Trichloroethane	50	45.6	91	77-136
79-00-5	1,1,2-Trichloroethane	50	42.6	85	75-123
79-01-6	Trichloroethene	50	52.1	104	79-126
75-69-4	Trichlorofluoromethane	50	43.1	86	56-154
96-18-4	1,2,3-Trichloropropane	50	48.4	97	64-121
75-01-4	Vinyl chloride	50	41.2	82	56-146

* = Outside of Control Limits.

Blank Spike Summary

Job Number: JD35487
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V2B8531-BS	2B187878.D	1	12/09/21	ED	n/a	n/a	V2B8531

The QC reported here applies to the following samples:

Method: SW846 8260D

JD35487-2, JD35487-3

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
	m,p-Xylene	100	89.8	90	77-125
95-47-6	o-Xylene	50	44.7	89	76-126
1330-20-7	Xylene (total)	150	135	90	77-125

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	96%	76-120%
17060-07-0	1,2-Dichloroethane-D4	87%	64-135%
2037-26-5	Toluene-D8	91%	76-117%
460-00-4	4-Bromofluorobenzene	98%	72-122%

* = Outside of Control Limits.

Blank Spike Summary

Job Number: JD35487
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VL10104-BS	L335962.D	1	12/14/21	NW	n/a	n/a	VL10104

The QC reported here applies to the following samples:

Method: SW846 8260D

JD35487-4

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
67-64-1	Acetone	200	284	142	51-151
75-05-8	Acetonitrile	500	665	133	53-136
107-13-1	Acrylonitrile	50	56.2	112	61-131
71-43-2	Benzene	50	48.6	97	75-122
75-27-4	Bromodichloromethane	50	51.2	102	77-128
75-25-2	Bromoform	50	50.4	101	67-141
74-83-9	Bromomethane	50	53.1	106	53-152
78-93-3	2-Butanone (MEK)	200	303	152* a	64-130
75-15-0	Carbon disulfide	50	51.9	104	59-140
56-23-5	Carbon tetrachloride	50	52.0	104	75-148
108-90-7	Chlorobenzene	50	42.6	85	76-124
67-66-3	Chloroform	50	56.3	113	77-124
106-93-4	1,2-Dibromoethane	50	48.7	97	75-130
106-46-7	1,4-Dichlorobenzene	50	47.7	95	71-123
75-71-8	Dichlorodifluoromethane	50	42.5	85	42-152
107-06-2	1,2-Dichloroethane	50	50.3	101	66-150
75-35-4	1,1-Dichloroethene	50	51.9	104	61-132
10061-02-6	trans-1,3-Dichloropropene	50	47.5	95	75-132
542-75-6	1,3-Dichloropropene (total)	100	97.2	97	76-127
100-41-4	Ethylbenzene	50	42.4	85	77-124
87-68-3	Hexachlorobutadiene	50	46.0	92	66-144
78-83-1	Isobutyl alcohol	500	737	147* b	59-142
126-98-7	Methacrylonitrile	50	62.5	125	54-135
108-10-1	4-Methyl-2-pentanone(MIBK)	200	258	129	63-135
75-09-2	Methylene chloride	50	51.1	102	69-122
100-42-5	Styrene	50	43.0	86	78-126
630-20-6	1,1,1,2-Tetrachloroethane	50	45.4	91	78-133
79-34-5	1,1,2,2-Tetrachloroethane	50	57.6	115	66-125
127-18-4	Tetrachloroethene	50	42.1	84	70-136
108-88-3	Toluene	50	41.2	82	76-126
71-55-6	1,1,1-Trichloroethane	50	49.9	100	77-136
79-00-5	1,1,2-Trichloroethane	50	48.3	97	75-123
79-01-6	Trichloroethene	50	52.1	104	79-126
75-69-4	Trichlorofluoromethane	50	49.0	98	56-154
96-18-4	1,2,3-Trichloropropane	50	57.9	116	64-121
75-01-4	Vinyl chloride	50	42.7	85	56-146

* = Outside of Control Limits.

Blank Spike Summary

Job Number: JD35487
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VL10104-BS	L335962.D	1	12/14/21	NW	n/a	n/a	VL10104

The QC reported here applies to the following samples:

Method: SW846 8260D

JD35487-4

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
	m,p-Xylene	100	83.5	84	77-125
95-47-6	o-Xylene	50	42.8	86	76-126
1330-20-7	Xylene (total)	150	126	84	77-125

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	108%	76-120%
17060-07-0	1,2-Dichloroethane-D4	111%	64-135%
2037-26-5	Toluene-D8	91%	76-117%
460-00-4	4-Bromofluorobenzene	111%	72-122%

- (a) High percent recovery and no associated positive reported in the QC batch.
- (b) Outside control limits. This compound is not reported in associated samples.

* = Outside of Control Limits.

6.3.3
6

Blank Spike Summary

Job Number: JD35487
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V3D7311-BS	3D172300.D	1	12/28/21	NH	n/a	n/a	V3D7311

The QC reported here applies to the following samples:

Method: SW846 8260D

JD35487-5, JD35487-6

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
67-64-1	Acetone	200	239	120	51-151
75-05-8	Acetonitrile	500	547	109	53-136
107-13-1	Acrylonitrile	50	68.5	137* a	61-131
71-43-2	Benzene	50	54.2	108	75-122
75-27-4	Bromodichloromethane	50	49.2	98	77-128
75-25-2	Bromoform	50	48.0	96	67-141
74-83-9	Bromomethane	50	32.0	64	53-152
78-93-3	2-Butanone (MEK)	200	218	109	64-130
75-15-0	Carbon disulfide	50	51.9	104	59-140
56-23-5	Carbon tetrachloride	50	44.8	90	75-148
108-90-7	Chlorobenzene	50	50.3	101	76-124
67-66-3	Chloroform	50	44.7	89	77-124
106-93-4	1,2-Dibromoethane	50	50.0	100	75-130
106-46-7	1,4-Dichlorobenzene	50	51.0	102	71-123
75-71-8	Dichlorodifluoromethane	50	41.2	82	42-152
107-06-2	1,2-Dichloroethane	50	47.4	95	66-150
75-35-4	1,1-Dichloroethene	50	49.9	100	61-132
10061-02-6	trans-1,3-Dichloropropene	50	52.0	104	75-132
542-75-6	1,3-Dichloropropene (total)	100	105	105	76-127
100-41-4	Ethylbenzene	50	50.6	101	77-124
87-68-3	Hexachlorobutadiene	50	59.5	119	66-144
78-83-1	Isobutyl alcohol	500	481	96	59-142
126-98-7	Methacrylonitrile	50	47.3	95	54-135
108-10-1	4-Methyl-2-pentanone(MIBK)	200	239	120	63-135
75-09-2	Methylene chloride	50	47.6	95	69-122
100-42-5	Styrene	50	50.4	101	78-126
630-20-6	1,1,1,2-Tetrachloroethane	50	47.7	95	78-133
79-34-5	1,1,2,2-Tetrachloroethane	50	56.6	113	66-125
127-18-4	Tetrachloroethene	50	53.4	107	70-136
108-88-3	Toluene	50	50.2	100	76-126
71-55-6	1,1,1-Trichloroethane	50	46.0	92	77-136
79-00-5	1,1,2-Trichloroethane	50	53.1	106	75-123
79-01-6	Trichloroethene	50	51.8	104	79-126
75-69-4	Trichlorofluoromethane	50	45.3	91	56-154
96-18-4	1,2,3-Trichloropropane	50	52.9	106	64-121
75-01-4	Vinyl chloride	50	42.3	85	56-146

* = Outside of Control Limits.

Blank Spike Summary

Job Number: JD35487
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V3D7311-BS	3D172300.D	1	12/28/21	NH	n/a	n/a	V3D7311

The QC reported here applies to the following samples:

Method: SW846 8260D

JD35487-5, JD35487-6

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
	m,p-Xylene	100	100	100	77-125
95-47-6	o-Xylene	50	50.7	101	76-126
1330-20-7	Xylene (total)	150	151	101	77-125

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	85%	76-120%
17060-07-0	1,2-Dichloroethane-D4	93%	64-135%
2037-26-5	Toluene-D8	97%	76-117%
460-00-4	4-Bromofluorobenzene	102%	72-122%

(a) High percent recovery and no associated positive reported in the QC batch.

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JD35487
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JD35487-1MS	2B187866.D	5	12/09/21	JS	n/a	n/a	V2B8530
JD35487-1MSD	2B187867.D	5	12/09/21	JS	n/a	n/a	V2B8530
JD35487-1	2B187863.D	5	12/09/21	JS	12/03/21	GP37411	V2B8530

The QC reported here applies to the following samples:

Method: SW846 8260D

JD35487-1

CAS No.	Compound	JD35487-1		Spike ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
		ug/l	Q								
67-64-1	Acetone	ND		1000	595	60	1000	588	59	1	44-157/20
75-05-8	Acetonitrile	ND		2500	2640	106	2500	2570	103	3	45-141/18
107-13-1	Acrylonitrile	ND		250	251	100	250	255	102	2	54-135/14
71-43-2	Benzene	ND		250	244	98	250	242	97	1	38-139/13
75-27-4	Bromodichloromethane	ND		250	231	92	250	230	92	0	70-135/13
75-25-2	Bromoform	ND		250	227	91	250	222	89	2	53-139/13
74-83-9	Bromomethane	ND		250	170	68	250	173	69	2	44-150/18
78-93-3	2-Butanone (MEK)	ND		1000	760	76	1000	752	75	1	58-140/14
75-15-0	Carbon disulfide	ND		250	236	94	250	232	93	2	34-136/21
56-23-5	Carbon tetrachloride	ND		250	244	98	250	238	95	2	50-161/18
108-90-7	Chlorobenzene	ND		250	230	92	250	229	92	0	65-128/12
67-66-3	Chloroform	6.8	B	250	218	84	250	214	83	2	66-132/14
106-93-4	1,2-Dibromoethane	ND		250	220	88	250	218	87	1	69-130/11
106-46-7	1,4-Dichlorobenzene	ND		250	262	105	250	259	104	1	63-126/13
75-71-8	Dichlorodifluoromethane	ND		250	194	78	250	195	78	1	24-170/24
107-06-2	1,2-Dichloroethane	ND		250	211	84	250	208	83	1	59-153/15
75-35-4	1,1-Dichloroethene	ND		250	246	98	250	241	96	2	41-144/17
10061-02-6	trans-1,3-Dichloropropene	ND		250	216	86	250	212	85	2	68-134/13
542-75-6	1,3-Dichloropropene (total)	ND		500	452	90	500	442	88	2	69-129/11
100-41-4	Ethylbenzene	ND		250	219	88	250	217	87	1	37-143/13
87-68-3	Hexachlorobutadiene	ND		250	254	102	250	253	101	0	47-144/16
78-83-1	Isobutyl alcohol	ND		2500	3180	127	2500	2490	100	24* a	49-152/15
126-98-7	Methacrylonitrile	ND		250	225	90	250	226	90	0	47-137/18
108-10-1	4-Methyl-2-pentanone(MIBK)	ND		1000	1130	113	1000	1090	109	4	57-141/14
75-09-2	Methylene chloride	2.4	J	250	229	91	250	224	89	2	59-129/12
100-42-5	Styrene	ND		250	210	84	250	210	84	0	60-135/13
630-20-6	1,1,1,2-Tetrachloroethane	ND		250	240	96	250	238	95	1	69-136/12
79-34-5	1,1,2,2-Tetrachloroethane	ND		250	251	100	250	245	98	2	62-126/13
127-18-4	Tetrachloroethene	ND		250	235	94	250	234	94	0	48-145/15
108-88-3	Toluene	ND		250	229	92	250	227	91	1	44-141/14
71-55-6	1,1,1-Trichloroethane	ND		250	241	96	250	236	94	2	55-149/18
79-00-5	1,1,2-Trichloroethane	ND		250	219	88	250	217	87	1	70-127/12
79-01-6	Trichloroethene	ND		250	266	106	250	268	107	1	53-141/15
75-69-4	Trichlorofluoromethane	ND		250	214	86	250	212	85	1	35-169/23
96-18-4	1,2,3-Trichloropropane	ND		250	249	100	250	240	96	4	65-130/12
75-01-4	Vinyl chloride	ND		250	192	77	250	194	78	1	34-151/20

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JD35487
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JD35487-1MS	2B187866.D	5	12/09/21	JS	n/a	n/a	V2B8530
JD35487-1MSD	2B187867.D	5	12/09/21	JS	n/a	n/a	V2B8530
JD35487-1	2B187863.D	5	12/09/21	JS	12/03/21	GP37411	V2B8530

The QC reported here applies to the following samples:

Method: SW846 8260D

JD35487-1

CAS No.	Compound	JD35487-1 ug/l	Spike Q ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
	m,p-Xylene	ND	500	465	93	500	463	93	0	32-146/13
95-47-6	o-Xylene	ND	250	230	92	250	229	92	0	46-141/12
1330-20-7	Xylene (total)	ND	750	695	93	750	692	92	0	36-144/13

CAS No.	Surrogate Recoveries	MS	MSD	JD35487-1	Limits
1868-53-7	Dibromofluoromethane	95%	96%	100%	76-120%
17060-07-0	1,2-Dichloroethane-D4	87%	87%	94%	64-135%
2037-26-5	Toluene-D8	91%	91%	94%	76-117%
460-00-4	4-Bromofluorobenzene	100%	99%	102%	72-122%

(a) Analytical precision exceeds in-house control limits.

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JD35487
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JD35487-2MS	2B187887.D	5	12/09/21	ED	n/a	n/a	V2B8531
JD35487-2MSD	2B187888.D	5	12/09/21	ED	n/a	n/a	V2B8531
JD35487-2	2B187883.D	5	12/09/21	ED	12/06/21	GP37443	V2B8531

The QC reported here applies to the following samples:

Method: SW846 8260D

JD35487-2, JD35487-3

CAS No.	Compound	JD35487-2		MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD	
		ug/l	Q								
67-64-1	Acetone	ND		1000	1170	117	1000	1040	104	12	44-157/20
75-05-8	Acetonitrile	ND		2500	2480	99	2500	2460	98	1	45-141/18
107-13-1	Acrylonitrile	ND		250	252	101	250	249	100	1	54-135/14
71-43-2	Benzene	ND		250	240	96	250	244	98	2	38-139/13
75-27-4	Bromodichloromethane	ND		250	230	92	250	231	92	0	70-135/13
75-25-2	Bromoform	ND		250	223	89	250	223	89	0	53-139/13
74-83-9	Bromomethane	ND		250	165	66	250	168	67	2	44-150/18
78-93-3	2-Butanone (MEK)	ND		1000	1040	104	1000	974	97	7	58-140/14
75-15-0	Carbon disulfide	ND		250	226	90	250	229	92	1	34-136/21
56-23-5	Carbon tetrachloride	ND		250	241	96	250	241	96	0	50-161/18
108-90-7	Chlorobenzene	ND		250	229	92	250	233	93	2	65-128/12
67-66-3	Chloroform	10.9	B	250	218	83	250	217	82	0	66-132/14
106-93-4	1,2-Dibromoethane	ND		250	213	85	250	219	88	3	69-130/11
106-46-7	1,4-Dichlorobenzene	ND		250	263	105	250	271	108	3	63-126/13
75-71-8	Dichlorodifluoromethane	ND		250	185	74	250	192	77	4	24-170/24
107-06-2	1,2-Dichloroethane	ND		250	206	82	250	209	84	1	59-153/15
75-35-4	1,1-Dichloroethene	ND		250	232	93	250	239	96	3	41-144/17
10061-02-6	trans-1,3-Dichloropropene	ND		250	215	86	250	221	88	3	68-134/13
542-75-6	1,3-Dichloropropene (total)	ND		500	454	91	500	467	93	3	69-129/11
100-41-4	Ethylbenzene	ND		250	217	87	250	220	88	1	37-143/13
87-68-3	Hexachlorobutadiene	ND		250	278	111	250	282	113	1	47-144/16
78-83-1	Isobutyl alcohol	ND		2500	2380	95	2500	2460	98	3	49-152/15
126-98-7	Methacrylonitrile	ND		250	221	88	250	219	88	1	47-137/18
108-10-1	4-Methyl-2-pentanone(MIBK)	ND		1000	1080	108	1000	1100	110	2	57-141/14
75-09-2	Methylene chloride	ND		250	221	88	250	221	88	0	59-129/12
100-42-5	Styrene	ND		250	219	88	250	221	88	1	60-135/13
630-20-6	1,1,1,2-Tetrachloroethane	ND		250	237	95	250	240	96	1	69-136/12
79-34-5	1,1,2,2-Tetrachloroethane	ND		250	243	97	250	254	102	4	62-126/13
127-18-4	Tetrachloroethene	ND		250	235	94	250	240	96	2	48-145/15
108-88-3	Toluene	ND		250	224	90	250	230	92	3	44-141/14
71-55-6	1,1,1-Trichloroethane	ND		250	237	95	250	236	94	0	55-149/18
79-00-5	1,1,2-Trichloroethane	ND		250	212	85	250	217	87	2	70-127/12
79-01-6	Trichloroethene	ND		250	265	106	250	271	108	2	53-141/15
75-69-4	Trichlorofluoromethane	ND		250	208	83	250	211	84	1	35-169/23
96-18-4	1,2,3-Trichloropropane	ND		250	240	96	250	252	101	5	65-130/12
75-01-4	Vinyl chloride	ND		250	178	71	250	186	74	4	34-151/20

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JD35487
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JD35487-2MS	2B187887.D	5	12/09/21	ED	n/a	n/a	V2B8531
JD35487-2MSD	2B187888.D	5	12/09/21	ED	n/a	n/a	V2B8531
JD35487-2	2B187883.D	5	12/09/21	ED	12/06/21	GP37443	V2B8531

The QC reported here applies to the following samples:

Method: SW846 8260D

JD35487-2, JD35487-3

CAS No.	Compound	JD35487-2 ug/l	Spike Q ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
	m,p-Xylene	ND	500	462	92	500	469	94	2	32-146/13
95-47-6	o-Xylene	ND	250	229	92	250	232	93	1	46-141/12
1330-20-7	Xylene (total)	ND	750	692	92	750	700	93	1	36-144/13

CAS No.	Surrogate Recoveries	MS	MSD	JD35487-2	Limits
1868-53-7	Dibromofluoromethane	97%	96%	99%	76-120%
17060-07-0	1,2-Dichloroethane-D4	87%	86%	94%	64-135%
2037-26-5	Toluene-D8	90%	91%	95%	76-117%
460-00-4	4-Bromofluorobenzene	98%	100%	103%	72-122%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JD35487
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JD35487-4MS	L335980.D	5	12/15/21	NW	n/a	n/a	VL10104
JD35487-4MSD	L335981.D	5	12/15/21	NW	n/a	n/a	VL10104
JD35487-4	L335977.D	5	12/15/21	NW	12/09/21	GP37492	VL10104

The QC reported here applies to the following samples:

Method: SW846 8260D

JD35487-4

CAS No.	Compound	JD35487-4		Spike ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
		ug/l	Q								
67-64-1	Acetone	ND		1000	815	82	1000	836	84	3	44-157/20
75-05-8	Acetonitrile	ND		2500	3230	129	2500	3360	134	4	45-141/18
107-13-1	Acrylonitrile	ND		250	271	108	250	279	112	3	54-135/14
71-43-2	Benzene	ND		250	250	100	250	246	98	2	38-139/13
75-27-4	Bromodichloromethane	ND		250	260	104	250	257	103	1	70-135/13
75-25-2	Bromoform	ND		250	253	101	250	253	101	0	53-139/13
74-83-9	Bromomethane	ND		250	230	92	250	270	108	16	44-150/18
78-93-3	2-Butanone (MEK)	ND		1000	1180	118	1000	1200	120	2	58-140/14
75-15-0	Carbon disulfide	ND		250	261	104	250	261	104	0	34-136/21
56-23-5	Carbon tetrachloride	ND		250	257	103	250	265	106	3	50-161/18
108-90-7	Chlorobenzene	ND		250	215	86	250	218	87	1	65-128/12
67-66-3	Chloroform	6.8	B	250	281	110	250	289	113	3	66-132/14
106-93-4	1,2-Dibromoethane	ND		250	239	96	250	245	98	2	69-130/11
106-46-7	1,4-Dichlorobenzene	ND		250	237	95	250	246	98	4	63-126/13
75-71-8	Dichlorodifluoromethane	ND		250	189	76	250	198	79	5	24-170/24
107-06-2	1,2-Dichloroethane	ND		250	253	101	250	251	100	1	59-153/15
75-35-4	1,1-Dichloroethene	ND		250	262	105	250	264	106	1	41-144/17
10061-02-6	trans-1,3-Dichloropropene	ND		250	228	91	250	241	96	6	68-134/13
542-75-6	1,3-Dichloropropene (total)	ND		500	479	96	500	494	99	3	69-129/11
100-41-4	Ethylbenzene	ND		250	215	86	250	221	88	3	37-143/13
87-68-3	Hexachlorobutadiene	ND		250	236	94	250	265	106	12	47-144/16
78-83-1	Isobutyl alcohol	ND		2500	3510	140	2500	3580	143	2	49-152/15
126-98-7	Methacrylonitrile	ND		250	308	123	250	309	124	0	47-137/18
108-10-1	4-Methyl-2-pentanone(MIBK)	ND		1000	1240	124	1000	1260	126	2	57-141/14
75-09-2	Methylene chloride	ND		250	251	100	250	251	100	0	59-129/12
100-42-5	Styrene	ND		250	213	85	250	218	87	2	60-135/13
630-20-6	1,1,1,2-Tetrachloroethane	ND		250	229	92	250	238	95	4	69-136/12
79-34-5	1,1,2,2-Tetrachloroethane	ND		250	286	114	250	299	120	4	62-126/13
127-18-4	Tetrachloroethene	ND		250	205	82	250	215	86	5	48-145/15
108-88-3	Toluene	ND		250	208	83	250	216	86	4	44-141/14
71-55-6	1,1,1-Trichloroethane	ND		250	256	102	250	256	102	0	55-149/18
79-00-5	1,1,2-Trichloroethane	ND		250	239	96	250	245	98	2	70-127/12
79-01-6	Trichloroethene	ND		250	265	106	250	261	104	2	53-141/15
75-69-4	Trichlorofluoromethane	ND		250	236	94	250	243	97	3	35-169/23
96-18-4	1,2,3-Trichloropropane	ND		250	275	110	250	285	114	4	65-130/12
75-01-4	Vinyl chloride	ND		250	197	79	250	202	81	3	34-151/20

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JD35487
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JD35487-4MS	L335980.D	5	12/15/21	NW	n/a	n/a	VL10104
JD35487-4MSD	L335981.D	5	12/15/21	NW	n/a	n/a	VL10104
JD35487-4	L335977.D	5	12/15/21	NW	12/09/21	GP37492	VL10104

The QC reported here applies to the following samples:

Method: SW846 8260D

JD35487-4

CAS No.	Compound	JD35487-4 ug/l	Spike Q ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
	m,p-Xylene	ND	500	418	84	500	424	85	1	32-146/13
95-47-6	o-Xylene	ND	250	216	86	250	221	88	2	46-141/12
1330-20-7	Xylene (total)	ND	750	634	85	750	646	86	2	36-144/13

CAS No.	Surrogate Recoveries	MS	MSD	JD35487-4	Limits
1868-53-7	Dibromofluoromethane	106%	106%	107%	76-120%
17060-07-0	1,2-Dichloroethane-D4	108%	110%	116%	64-135%
2037-26-5	Toluene-D8	90%	93%	99%	76-117%
460-00-4	4-Bromofluorobenzene	113%	112%	108%	72-122%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JD35487
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JD35488-7MS	3D172309.D	5	12/28/21	NH	n/a	n/a	V3D7311
JD35488-7MSD	3D172310.D	5	12/28/21	NH	n/a	n/a	V3D7311
JD35488-7	3D172305.D	5	12/28/21	NH	12/23/21	GP37747	V3D7311

The QC reported here applies to the following samples:

Method: SW846 8260D

JD35487-5, JD35487-6

CAS No.	Compound	JD35488-7		MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
		ug/l	Q							
67-64-1	Acetone	ND		1000	155	1000	1520	152	2	44-157/20
75-05-8	Acetonitrile	ND		2500	106	2500	2580	103	2	45-141/18
107-13-1	Acrylonitrile	ND		250	132	250	324	130	2	54-135/14
71-43-2	Benzene	ND		250	101	250	259	104	2	38-139/13
75-27-4	Bromodichloromethane	ND		250	93	250	236	94	2	70-135/13
75-25-2	Bromoform	ND		250	88	250	228	91	3	53-139/13
74-83-9	Bromomethane	ND		250	91.2	36* a	104	42* a	13	44-150/18
78-93-3	2-Butanone (MEK)	ND		1000	121	1000	1190	119	2	58-140/14
75-15-0	Carbon disulfide	ND		250	96	250	243	97	2	34-136/21
56-23-5	Carbon tetrachloride	ND		250	84	250	212	85	1	50-161/18
108-90-7	Chlorobenzene	ND		250	95	250	241	96	1	65-128/12
67-66-3	Chloroform	ND		250	84	250	210	84	0	66-132/14
106-93-4	1,2-Dibromoethane	ND		250	94	250	238	95	1	69-130/11
106-46-7	1,4-Dichlorobenzene	ND		250	95	250	246	98	3	63-126/13
75-71-8	Dichlorodifluoromethane	ND		250	72	250	174	70	3	24-170/24
107-06-2	1,2-Dichloroethane	ND		250	90	250	227	91	1	59-153/15
75-35-4	1,1-Dichloroethene	ND		250	92	250	236	94	3	41-144/17
10061-02-6	trans-1,3-Dichloropropene	ND		250	97	250	249	100	3	68-134/13
542-75-6	1,3-Dichloropropene (total)	ND		500	99	500	501	100	2	69-129/11
100-41-4	Ethylbenzene	ND		250	96	250	242	97	1	37-143/13
87-68-3	Hexachlorobutadiene	ND		250	105	250	275	110	4	47-144/16
78-83-1	Isobutyl alcohol	ND		2500	98	2500	2420	97	2	49-152/15
126-98-7	Methacrylonitrile	ND		250	91	250	227	91	0	47-137/18
108-10-1	4-Methyl-2-pentanone(MIBK)	ND		1000	116	1000	1150	115	1	57-141/14
75-09-2	Methylene chloride	ND		250	90	250	230	92	3	59-129/12
100-42-5	Styrene	ND		250	96	250	245	98	2	60-135/13
630-20-6	1,1,1,2-Tetrachloroethane	ND		250	91	250	234	94	3	69-136/12
79-34-5	1,1,2,2-Tetrachloroethane	ND		250	106	250	275	110	4	62-126/13
127-18-4	Tetrachloroethene	ND		250	100	250	257	103	3	48-145/15
108-88-3	Toluene	ND		250	93	250	240	96	3	44-141/14
71-55-6	1,1,1-Trichloroethane	ND		250	86	250	220	88	2	55-149/18
79-00-5	1,1,2-Trichloroethane	ND		250	102	250	260	104	2	70-127/12
79-01-6	Trichloroethene	ND		250	100	250	247	99	1	53-141/15
75-69-4	Trichlorofluoromethane	ND		250	84	250	215	86	3	35-169/23
96-18-4	1,2,3-Trichloropropane	ND		250	98	250	259	104	5	65-130/12
75-01-4	Vinyl chloride	ND		250	76	250	186	74	2	34-151/20

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JD35487
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JD35488-7MS	3D172309.D	5	12/28/21	NH	n/a	n/a	V3D7311
JD35488-7MSD	3D172310.D	5	12/28/21	NH	n/a	n/a	V3D7311
JD35488-7	3D172305.D	5	12/28/21	NH	12/23/21	GP37747	V3D7311

The QC reported here applies to the following samples:

Method: SW846 8260D

JD35487-5, JD35487-6

CAS No.	Compound	JD35488-7 ug/l	Spike Q ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
	m,p-Xylene	ND	500	469	94	500	475	95	1	32-146/13
95-47-6	o-Xylene	ND	250	238	95	250	247	99	4	46-141/12
1330-20-7	Xylene (total)	ND	750	707	94	750	723	96	2	36-144/13

CAS No.	Surrogate Recoveries	MS	MSD	JD35488-7	Limits
1868-53-7	Dibromofluoromethane	87%	86%	85%	76-120%
17060-07-0	1,2-Dichloroethane-D4	95%	93%	100%	64-135%
2037-26-5	Toluene-D8	97%	96%	102%	76-117%
460-00-4	4-Bromofluorobenzene	101%	102%	98%	72-122%

(a) Outside control limits due to matrix interference.

* = Outside of Control Limits.

Leachate Spike Summary

Job Number: JD35487
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GP37411-LS8	2B187866A.D	5	12/09/21	JS	12/03/21	GP37411	V2B8530
JD35487-1	2B187863.D	5	12/09/21	JS	12/03/21	GP37411	V2B8530

The QC reported here applies to the following samples:

Method: SW846 8260D

JD35487-1

CAS No.	Compound	JD35487-1 ug/l	Spike Q	LS ug/l	LS %	Limits	
67-64-1	Acetone	ND		1000	595	60	44-157
75-05-8	Acetonitrile	ND		2500	2640	106	45-141
107-13-1	Acrylonitrile	ND		250	251	100	54-135
71-43-2	Benzene	ND		250	244	98	38-139
75-27-4	Bromodichloromethane	ND		250	231	92	70-135
75-25-2	Bromoform	ND		250	227	91	53-139
74-83-9	Bromomethane	ND		250	170	68	44-150
78-93-3	2-Butanone (MEK)	ND		1000	760	76	58-140
75-15-0	Carbon disulfide	ND		250	236	94	34-136
56-23-5	Carbon tetrachloride	ND		250	244	98	50-161
108-90-7	Chlorobenzene	ND		250	230	92	65-128
67-66-3	Chloroform	6.8	B	250	218	84	66-132
106-93-4	1,2-Dibromoethane	ND		250	220	88	69-130
106-46-7	1,4-Dichlorobenzene	ND		250	262	105	63-126
75-71-8	Dichlorodifluoromethane	ND		250	194	78	24-170
107-06-2	1,2-Dichloroethane	ND		250	211	84	59-153
75-35-4	1,1-Dichloroethene	ND		250	246	98	41-144
10061-02-6	trans-1,3-Dichloropropene	ND		250	216	86	68-134
542-75-6	1,3-Dichloropropene (total)	ND		500	452	90	69-129
100-41-4	Ethylbenzene	ND		250	219	88	37-143
87-68-3	Hexachlorobutadiene	ND		250	254	102	47-144
78-83-1	Isobutyl alcohol	ND		2500	3180	127	49-152
126-98-7	Methacrylonitrile	ND		250	225	90	47-137
108-10-1	4-Methyl-2-pentanone(MIBK)	ND		1000	1130	113	57-141
75-09-2	Methylene chloride	2.4	J	250	229	91	59-129
100-42-5	Styrene	ND		250	210	84	60-135
630-20-6	1,1,1,2-Tetrachloroethane	ND		250	240	96	69-136
79-34-5	1,1,2,2-Tetrachloroethane	ND		250	251	100	62-126
127-18-4	Tetrachloroethene	ND		250	235	94	48-145
108-88-3	Toluene	ND		250	229	92	44-141
71-55-6	1,1,1-Trichloroethane	ND		250	241	96	55-149
79-00-5	1,1,2-Trichloroethane	ND		250	219	88	70-127
79-01-6	Trichloroethene	ND		250	266	106	53-141
75-69-4	Trichlorofluoromethane	ND		250	214	86	35-169
96-18-4	1,2,3-Trichloropropane	ND		250	249	100	65-130
75-01-4	Vinyl chloride	ND		250	192	77	34-151

* = Outside of Control Limits.

Leachate Spike Summary

Job Number: JD35487
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GP37411-LS8	2B187866A.D	5	12/09/21	JS	12/03/21	GP37411	V2B8530
JD35487-1	2B187863.D	5	12/09/21	JS	12/03/21	GP37411	V2B8530

The QC reported here applies to the following samples:

Method: SW846 8260D

JD35487-1

CAS No.	Compound	JD35487-1 ug/l	Spike Q	ug/l	LS ug/l	LS %	Limits
	m,p-Xylene	ND		500	465	93	32-146
95-47-6	o-Xylene	ND		250	230	92	46-141
1330-20-7	Xylene (total)	ND		750	695	93	36-144

CAS No.	Surrogate Recoveries	LS	JD35487-1	Limits
1868-53-7	Dibromofluoromethane	95%	100%	76-120%
17060-07-0	1,2-Dichloroethane-D4	87%	94%	64-135%
2037-26-5	Toluene-D8	91%	94%	76-117%
460-00-4	4-Bromofluorobenzene	100%	102%	72-122%

* = Outside of Control Limits.

Leachate Spike Summary

Job Number: JD35487
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GP37443-LS10	2B187887A.D	5	12/09/21	ED	12/06/21	GP37443	V2B8531
JD35487-2	2B187883.D	5	12/09/21	ED	12/06/21	GP37443	V2B8531

The QC reported here applies to the following samples:

Method: SW846 8260D

JD35487-2, JD35487-3

CAS No.	Compound	JD35487-2 ug/l	Spike Q	LS ug/l	LS %	Limits	
67-64-1	Acetone	ND		1000	117	44-157	
75-05-8	Acetonitrile	ND		2500	99	45-141	
107-13-1	Acrylonitrile	ND		250	252	54-135	
71-43-2	Benzene	ND		250	240	38-139	
75-27-4	Bromodichloromethane	ND		250	230	92	70-135
75-25-2	Bromoform	ND		250	223	89	53-139
74-83-9	Bromomethane	ND		250	165	66	44-150
78-93-3	2-Butanone (MEK)	ND		1000	1040	104	58-140
75-15-0	Carbon disulfide	ND		250	226	90	34-136
56-23-5	Carbon tetrachloride	ND		250	241	96	50-161
108-90-7	Chlorobenzene	ND		250	229	92	65-128
67-66-3	Chloroform	10.9	B	250	218	83	66-132
106-93-4	1,2-Dibromoethane	ND		250	213	85	69-130
106-46-7	1,4-Dichlorobenzene	ND		250	263	105	63-126
75-71-8	Dichlorodifluoromethane	ND		250	185	74	24-170
107-06-2	1,2-Dichloroethane	ND		250	206	82	59-153
75-35-4	1,1-Dichloroethene	ND		250	232	93	41-144
10061-02-6	trans-1,3-Dichloropropene	ND		250	215	86	68-134
542-75-6	1,3-Dichloropropene (total)	ND		500	454	91	69-129
100-41-4	Ethylbenzene	ND		250	217	87	37-143
87-68-3	Hexachlorobutadiene	ND		250	278	111	47-144
78-83-1	Isobutyl alcohol	ND		2500	2380	95	49-152
126-98-7	Methacrylonitrile	ND		250	221	88	47-137
108-10-1	4-Methyl-2-pentanone(MIBK)	ND		1000	1080	108	57-141
75-09-2	Methylene chloride	ND		250	221	88	59-129
100-42-5	Styrene	ND		250	219	88	60-135
630-20-6	1,1,1,2-Tetrachloroethane	ND		250	237	95	69-136
79-34-5	1,1,2,2-Tetrachloroethane	ND		250	243	97	62-126
127-18-4	Tetrachloroethene	ND		250	235	94	48-145
108-88-3	Toluene	ND		250	224	90	44-141
71-55-6	1,1,1-Trichloroethane	ND		250	237	95	55-149
79-00-5	1,1,2-Trichloroethane	ND		250	212	85	70-127
79-01-6	Trichloroethene	ND		250	265	106	53-141
75-69-4	Trichlorofluoromethane	ND		250	208	83	35-169
96-18-4	1,2,3-Trichloropropane	ND		250	240	96	65-130
75-01-4	Vinyl chloride	ND		250	178	71	34-151

* = Outside of Control Limits.

Leachate Spike Summary

Job Number: JD35487
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GP37443-LS10	2B187887A.D	5	12/09/21	ED	12/06/21	GP37443	V2B8531
JD35487-2	2B187883.D	5	12/09/21	ED	12/06/21	GP37443	V2B8531

The QC reported here applies to the following samples:

Method: SW846 8260D

JD35487-2, JD35487-3

CAS No.	Compound	JD35487-2 ug/l	Spike Q	ug/l	LS ug/l	LS %	Limits
	m,p-Xylene	ND		500	462	92	32-146
95-47-6	o-Xylene	ND		250	229	92	46-141
1330-20-7	Xylene (total)	ND		750	692	92	36-144

CAS No.	Surrogate Recoveries	LS	JD35487-2	Limits
1868-53-7	Dibromofluoromethane	97%	99%	76-120%
17060-07-0	1,2-Dichloroethane-D4	87%	94%	64-135%
2037-26-5	Toluene-D8	90%	95%	76-117%
460-00-4	4-Bromofluorobenzene	98%	103%	72-122%

* = Outside of Control Limits.

Leachate Spike Summary

Job Number: JD35487
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GP37492-LS14	L335980A.D	5	12/15/21	NW	12/09/21	GP37492	VL10104
JD35487-4	L335977.D	5	12/15/21	NW	12/09/21	GP37492	VL10104

The QC reported here applies to the following samples:

Method: SW846 8260D

JD35487-4

CAS No.	Compound	JD35487-4 ug/l	Spike Q	LS ug/l	LS %	Limits
67-64-1	Acetone	ND		1000	815	44-157
75-05-8	Acetonitrile	ND		2500	3230	45-141
107-13-1	Acrylonitrile	ND		250	271	54-135
71-43-2	Benzene	ND		250	250	38-139
75-27-4	Bromodichloromethane	ND		250	260	70-135
75-25-2	Bromoform	ND		250	253	53-139
74-83-9	Bromomethane	ND		250	230	44-150
78-93-3	2-Butanone (MEK)	ND		1000	1180	58-140
75-15-0	Carbon disulfide	ND		250	261	34-136
56-23-5	Carbon tetrachloride	ND		250	257	50-161
108-90-7	Chlorobenzene	ND		250	215	65-128
67-66-3	Chloroform	6.8	B	250	281	66-132
106-93-4	1,2-Dibromoethane	ND		250	239	69-130
106-46-7	1,4-Dichlorobenzene	ND		250	237	63-126
75-71-8	Dichlorodifluoromethane	ND		250	189	24-170
107-06-2	1,2-Dichloroethane	ND		250	253	59-153
75-35-4	1,1-Dichloroethene	ND		250	262	41-144
10061-02-6	trans-1,3-Dichloropropene	ND		250	228	68-134
542-75-6	1,3-Dichloropropene (total)	ND		500	479	69-129
100-41-4	Ethylbenzene	ND		250	215	37-143
87-68-3	Hexachlorobutadiene	ND		250	236	47-144
78-83-1	Isobutyl alcohol	ND		2500	3510	49-152
126-98-7	Methacrylonitrile	ND		250	308	47-137
108-10-1	4-Methyl-2-pentanone(MIBK)	ND		1000	1240	57-141
75-09-2	Methylene chloride	ND		250	251	59-129
100-42-5	Styrene	ND		250	213	60-135
630-20-6	1,1,1,2-Tetrachloroethane	ND		250	229	69-136
79-34-5	1,1,2,2-Tetrachloroethane	ND		250	286	62-126
127-18-4	Tetrachloroethene	ND		250	205	48-145
108-88-3	Toluene	ND		250	208	44-141
71-55-6	1,1,1-Trichloroethane	ND		250	256	55-149
79-00-5	1,1,2-Trichloroethane	ND		250	239	70-127
79-01-6	Trichloroethene	ND		250	265	53-141
75-69-4	Trichlorofluoromethane	ND		250	236	35-169
96-18-4	1,2,3-Trichloropropane	ND		250	275	65-130
75-01-4	Vinyl chloride	ND		250	197	34-151

* = Outside of Control Limits.

Leachate Spike Summary

Job Number: JD35487
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GP37492-LS14	L335980A.D	5	12/15/21	NW	12/09/21	GP37492	VL10104
JD35487-4	L335977.D	5	12/15/21	NW	12/09/21	GP37492	VL10104

The QC reported here applies to the following samples:

Method: SW846 8260D

JD35487-4

CAS No.	Compound	JD35487-4 ug/l	Spike Q	ug/l	LS ug/l	LS %	Limits
	m,p-Xylene	ND		500	418	84	32-146
95-47-6	o-Xylene	ND		250	216	86	46-141
1330-20-7	Xylene (total)	ND		750	634	85	36-144

CAS No.	Surrogate Recoveries	LS	JD35487-4	Limits
1868-53-7	Dibromofluoromethane	106%	107%	76-120%
17060-07-0	1,2-Dichloroethane-D4	108%	116%	64-135%
2037-26-5	Toluene-D8	90%	99%	76-117%
460-00-4	4-Bromofluorobenzene	113%	108%	72-122%

* = Outside of Control Limits.

Leachate Spike Summary

Job Number: JD35487
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GP37615-LS21	1A218106A.D	5	12/20/21	ED	12/15/21	GP37615	V1A9391
JD35533-9R ^a	1A218104.D	5	12/20/21	ED	12/15/21	GP37615	V1A9391
JD35533-9R	1A218157.D	5	12/21/21	ED	12/15/21	GP37615	V1A9393

The QC reported here applies to the following samples:

Method: SW846 8260D

JD35487-5

CAS No.	Compound	JD35533-9R Spike		LS	LS	Limits
		ug/l	Q ug/l	ug/l	%	
67-64-1	Acetone	ND ^b		1000	515	44-157
75-05-8	Acetonitrile	ND ^b		2500	2020	45-141
107-13-1	Acrylonitrile	ND ^b		250	11.5	54-135
71-43-2	Benzene	ND ^b		250	242	38-139
75-27-4	Bromodichloromethane	ND ^b		250	235	70-135
75-25-2	Bromoform	ND ^b		250	260	53-139
74-83-9	Bromomethane	ND ^b		250	162	44-150
78-93-3	2-Butanone (MEK)	ND ^b		1000	773	58-140
75-15-0	Carbon disulfide	ND ^b		250	212	34-136
56-23-5	Carbon tetrachloride	ND ^b		250	215	50-161
108-90-7	Chlorobenzene	ND ^b		250	249	65-128
67-66-3	Chloroform	7.3 ^b	B	250	205	66-132
106-93-4	1,2-Dibromoethane	ND ^b		250	244	69-130
106-46-7	1,4-Dichlorobenzene	ND ^b		250	234	63-126
75-71-8	Dichlorodifluoromethane	ND ^b		250	168	24-170
107-06-2	1,2-Dichloroethane	ND ^b		250	223	59-153
75-35-4	1,1-Dichloroethene	ND ^b		250	210	41-144
10061-02-6	trans-1,3-Dichloropropene	ND ^b		250	300	68-134
542-75-6	1,3-Dichloropropene (total)	ND ^b		500	560	69-129
100-41-4	Ethylbenzene	ND ^b		250	260	37-143
87-68-3	Hexachlorobutadiene	ND ^b		250	284	47-144
78-83-1	Isobutyl alcohol	ND ^b		2500	2270	49-152
126-98-7	Methacrylonitrile	ND ^b		250	227	47-137
108-10-1	4-Methyl-2-pentanone(MIBK)	ND ^b		1000	975	57-141
75-09-2	Methylene chloride	ND ^b		250	213	59-129
100-42-5	Styrene	ND ^b		250	265	60-135
630-20-6	1,1,1,2-Tetrachloroethane	ND ^b		250	237	69-136
79-34-5	1,1,2,2-Tetrachloroethane	ND ^b		250	282	62-126
127-18-4	Tetrachloroethene	ND ^b		250	215	48-145
108-88-3	Toluene	ND ^b		250	260	44-141
71-55-6	1,1,1-Trichloroethane	ND ^b		250	205	55-149
79-00-5	1,1,2-Trichloroethane	ND ^b		250	268	70-127
79-01-6	Trichloroethene	ND ^b		250	233	53-141
75-69-4	Trichlorofluoromethane	ND ^b		250	187	35-169
96-18-4	1,2,3-Trichloropropane	ND ^b		250	245	65-130
75-01-4	Vinyl chloride	ND ^b		250	193	34-151

* = Outside of Control Limits.

Leachate Spike Summary

Job Number: JD35487
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GP37615-LS21	1A218106A.D	5	12/20/21	ED	12/15/21	GP37615	V1A9391
JD35533-9R ^a	1A218104.D	5	12/20/21	ED	12/15/21	GP37615	V1A9391
JD35533-9R	1A218157.D	5	12/21/21	ED	12/15/21	GP37615	V1A9393

The QC reported here applies to the following samples:

Method: SW846 8260D

JD35487-5

CAS No.	Compound	JD35533-9R Spike ug/l	Q	LS ug/l	LS %	Limits	
	m,p-Xylene	ND ^b		500	484	97	32-146
95-47-6	o-Xylene	ND ^b		250	239	96	46-141
1330-20-7	Xylene (total)	ND ^b		750	722	96	36-144

CAS No.	Surrogate Recoveries	LS	JD35533-9R	JD35533-9R	Limits
1868-53-7	Dibromofluoromethane	89%		89%	76-120%
17060-07-0	1,2-Dichloroethane-D4	104%		102%	64-135%
2037-26-5	Toluene-D8	108%		115%	76-117%
460-00-4	4-Bromofluorobenzene	105%		100%	72-122%

- (a) Sample used for QC purposes only.
- (b) Result is from Run #2.
- (c) Outside control limits.

* = Outside of Control Limits.

Leachate Spike Summary

Job Number: JD35487
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GP37639-LS23	1A218108.D	5	12/20/21	ED	12/16/21	GP37639	V1A9391
JD36763-1 ^a	1A218105.D	5	12/20/21	ED	12/16/21	GP37639	V1A9391
JD36763-1	1A218441.D	5	12/29/21	ED	12/16/21	GP37639	V1A9404

The QC reported here applies to the following samples:

Method: SW846 8260D

JD35487-6

CAS No.	Compound	JD36763-1 ug/l	Spike Q	LS ug/l	LS %	Limits
67-64-1	Acetone	ND ^b		1000	545	55 44-157
75-05-8	Acetonitrile	ND ^b		2500	2100	84 45-141
107-13-1	Acrylonitrile	ND ^b		250	12.2	5* ^c 54-135
71-43-2	Benzene	2.4 ^b	J	250	250	99 38-139
75-27-4	Bromodichloromethane	ND ^b		250	232	93 70-135
75-25-2	Bromoform	ND ^b		250	263	105 53-139
74-83-9	Bromomethane	ND ^b		250	183	73 44-150
78-93-3	2-Butanone (MEK)	ND ^b		1000	780	78 58-140
75-15-0	Carbon disulfide	ND ^b		250	218	87 34-136
56-23-5	Carbon tetrachloride	ND ^b		250	220	88 50-161
108-90-7	Chlorobenzene	ND ^b		250	251	100 65-128
67-66-3	Chloroform	8.4 ^b	B	250	208	80 66-132
106-93-4	1,2-Dibromoethane	ND ^b		250	245	98 69-130
106-46-7	1,4-Dichlorobenzene	ND ^b		250	245	98 63-126
75-71-8	Dichlorodifluoromethane	ND ^b		250	168	67 24-170
107-06-2	1,2-Dichloroethane	ND ^b		250	228	91 59-153
75-35-4	1,1-Dichloroethene	ND ^b		250	216	86 41-144
10061-02-6	trans-1,3-Dichloropropene	ND ^b		250	308	123 68-134
542-75-6	1,3-Dichloropropene (total)	ND ^b		500	568	114 69-129
100-41-4	Ethylbenzene	ND ^b		250	267	107 37-143
87-68-3	Hexachlorobutadiene	ND ^b		250	284	114 47-144
78-83-1	Isobutyl alcohol	ND ^b		2500	2370	95 49-152
126-98-7	Methacrylonitrile	ND ^b		250	232	93 47-137
108-10-1	4-Methyl-2-pentanone(MIBK)	ND ^b		1000	997	100 57-141
75-09-2	Methylene chloride	ND ^b		250	221	88 59-129
100-42-5	Styrene	ND ^b		250	270	108 60-135
630-20-6	1,1,1,2-Tetrachloroethane	ND ^b		250	243	97 69-136
79-34-5	1,1,2,2-Tetrachloroethane	ND ^b		250	300	120 62-126
127-18-4	Tetrachloroethene	ND ^b		250	212	85 48-145
108-88-3	Toluene	ND ^b		250	310	124 44-141
71-55-6	1,1,1-Trichloroethane	ND ^b		250	212	85 55-149
79-00-5	1,1,2-Trichloroethane	ND ^b		250	275	110 70-127
79-01-6	Trichloroethene	ND ^b		250	231	92 53-141
75-69-4	Trichlorofluoromethane	ND ^b		250	187	75 35-169
96-18-4	1,2,3-Trichloropropane	ND ^b		250	269	108 65-130
75-01-4	Vinyl chloride	ND ^b		250	193	77 34-151

* = Outside of Control Limits.

Leachate Spike Summary

Job Number: JD35487
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GP37639-LS23	1A218108.D	5	12/20/21	ED	12/16/21	GP37639	V1A9391
JD36763-1 ^a	1A218105.D	5	12/20/21	ED	12/16/21	GP37639	V1A9391
JD36763-1	1A218441.D	5	12/29/21	ED	12/16/21	GP37639	V1A9404

The QC reported here applies to the following samples:

Method: SW846 8260D

JD35487-6

CAS No.	Compound	JD36763-1 ug/l	Spike Q	ug/l	LS ug/l	LS %	Limits
	m,p-Xylene	ND ^b		500	503	101	32-146
95-47-6	o-Xylene	ND ^b		250	251	100	46-141
1330-20-7	Xylene (total)	ND ^b		750	754	101	36-144

CAS No.	Surrogate Recoveries	LS	JD36763-1	JD36763-1	Limits
1868-53-7	Dibromofluoromethane	93%		96%	76-120%
17060-07-0	1,2-Dichloroethane-D4	106%		110%	64-135%
2037-26-5	Toluene-D8	110%		117%	76-117%
460-00-4	4-Bromofluorobenzene	109%		102%	72-122%

- (a) Sample used for QC purposes only.
- (b) Result is from Run #2.
- (c) Outside control limits.

* = Outside of Control Limits.

Instrument Performance Check (BFB)

Job Number: JD35487
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample: V1A9258-BFB	Injection Date: 09/26/21
Lab File ID: 1A214394.D	Injection Time: 23:53
Instrument ID: GCMS1A	

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
50	15.0 - 40.0% of mass 95	25210	21.0	Pass
75	30.0 - 60.0% of mass 95	58968	49.2	Pass
95	Base peak, 100% relative abundance	119837	100.0	Pass
96	5.0 - 9.0% of mass 95	8107	6.77	Pass
173	Less than 2.0% of mass 174	0	0.00 (0.00) ^a	Pass
174	50.0 - 120.0% of mass 95	105720	88.2	Pass
175	5.0 - 9.0% of mass 174	8408	7.02 (7.95) ^a	Pass
176	95.0 - 101.0% of mass 174	103672	86.5 (98.1) ^a	Pass
177	5.0 - 9.0% of mass 176	6471	5.40 (6.24) ^b	Pass

(a) Value is % of mass 174
(b) Value is % of mass 176

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

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
V1A9258-IC9258	1A214395.D	09/27/21	00:12	00:19	Initial cal 0.2
V1A9258-IC9258	1A214396.D	09/27/21	00:32	00:39	Initial cal 0.5
V1A9258-IC9258	1A214397.D	09/27/21	00:51	00:58	Initial cal 1
V1A9258-IC9258	1A214398.D	09/27/21	01:10	01:17	Initial cal 2
V1A9258-IC9258	1A214399.D	09/27/21	01:29	01:36	Initial cal 4
V1A9258-IC9258	1A214400.D	09/27/21	01:48	01:55	Initial cal 8
V1A9258-IC9258	1A214401.D	09/27/21	02:08	02:15	Initial cal 20
V1A9258-ICC9258	1A214402.D	09/27/21	02:27	02:34	Initial cal 50
V1A9258-IC9258	1A214403.D	09/27/21	02:46	02:53	Initial cal 100
V1A9258-IC9258	1A214404.D	09/27/21	03:05	03:12	Initial cal 200
V1A9258-ICV9258	1A214407.D	09/27/21	04:03	04:10	Initial cal verification 50
V1A9258-ICV9258	1A214408.D	09/27/21	04:22	04:29	Initial cal verification 50

6.6.1
6

Instrument Performance Check (BFB)

Job Number: JD35487
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample: V1A9391-BFB	Injection Date: 12/20/21
Lab File ID: 1A218096.D	Injection Time: 18:47
Instrument ID: GCMS1A	

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
50	15.0 - 40.0% of mass 95	18873	20.8	Pass
75	30.0 - 60.0% of mass 95	48885	53.9	Pass
95	Base peak, 100% relative abundance	90771	100.0	Pass
96	5.0 - 9.0% of mass 95	6116	6.74	Pass
173	Less than 2.0% of mass 174	0	0.00 (0.00) ^a	Pass
174	50.0 - 120.0% of mass 95	85627	94.3	Pass
175	5.0 - 9.0% of mass 174	6414	7.07 (7.49) ^a	Pass
176	95.0 - 101.0% of mass 174	81776	90.1 (95.5) ^a	Pass
177	5.0 - 9.0% of mass 176	5217	5.75 (6.38) ^b	Pass

(a) Value is % of mass 174

(b) Value is % of mass 176

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

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
V1A9391-CC9258	1A218096.D	12/20/21	18:47	00:00	Continuing cal 50
V1A9391-BS	1A218098.D	12/20/21	19:26	00:39	Blank Spike
V1A9391-BSD	1A218099.D	12/20/21	19:45	00:58	Blank Spike Duplicate
V1A9391-MB	1A218101.D	12/20/21	20:23	01:36	Method Blank
JD35533-9R	1A218104.D	12/20/21	21:22	02:35	(used for QC only; not part of job JD35487)
ZZZZZZ	1A218105.D	12/20/21	21:41	02:54	(unrelated sample)
JD35533-9RMS	1A218106.D	12/20/21	22:00	03:13	Matrix Spike
GP37615-LS21	1A218106A.D	12/20/21	22:00	03:13	Leachate Spike
JD35533-9RMSD	1A218107.D	12/20/21	22:20	03:33	Matrix Spike Duplicate
GP37639-LS23	1A218108.D	12/20/21	22:39	03:52	Leachate Spike
ZZZZZZ	1A218116.D	12/21/21	01:15	06:28	(unrelated sample)
ZZZZZZ	1A218125.D	12/21/21	04:11	09:24	(unrelated sample)
ZZZZZZ	1A218126.D	12/21/21	04:30	09:43	(unrelated sample)
ZZZZZZ	1A218127.D	12/21/21	04:49	10:02	(unrelated sample)

6.6.2
6

Instrument Performance Check (BFB)

Job Number: JD35487
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample: V1A9392-BFB	Injection Date: 12/21/21
Lab File ID: 1A218130.D	Injection Time: 08:02
Instrument ID: GCMS1A	

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
50	15.0 - 40.0% of mass 95	19093	22.2	Pass
75	30.0 - 60.0% of mass 95	45053	52.3	Pass
95	Base peak, 100% relative abundance	86120	100.0	Pass
96	5.0 - 9.0% of mass 95	6037	7.01	Pass
173	Less than 2.0% of mass 174	0	0.00 (0.00) ^a	Pass
174	50.0 - 120.0% of mass 95	79629	92.5	Pass
175	5.0 - 9.0% of mass 174	6759	7.85 (8.49) ^a	Pass
176	95.0 - 101.0% of mass 174	78467	91.1 (98.5) ^a	Pass
177	5.0 - 9.0% of mass 176	5189	6.03 (6.61) ^b	Pass

(a) Value is % of mass 174

(b) Value is % of mass 176

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

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
V1A9392-CC9258	1A218130.D	12/21/21	08:02	00:00	Continuing cal 20
V1A9392-BS	1A218132.D	12/21/21	08:56	00:54	Blank Spike
V1A9392-MB	1A218134.D	12/21/21	09:35	01:33	Method Blank
GP37523-LB15	1A218135.D	12/21/21	10:02	02:00	Leachate Blank
GP37566-LB19	1A218136.D	12/21/21	10:22	02:20	Leachate Blank
JD36458-1	1A218137.D	12/21/21	10:41	02:39	(used for QC only; not part of job JD35487)
ZZZZZZ	1A218138.D	12/21/21	11:01	02:59	(unrelated sample)
JD36458-1MS	1A218139.D	12/21/21	11:21	03:19	Matrix Spike
GP37566-LS20	1A218139A.D	12/21/21	11:21	03:19	Leachate Spike
JD36458-1MSD	1A218140.D	12/21/21	11:40	03:38	Matrix Spike Duplicate
GP37523-LS15	1A218141.D	12/21/21	11:59	03:57	Leachate Spike
V1A9393-BS	1A218144.D	12/21/21	12:57	04:55	Blank Spike
V1A9393-MB	1A218146.D	12/21/21	13:36	05:34	Method Blank
JD35531-11R	1A218147.D	12/21/21	14:03	06:01	(used for QC only; not part of job JD35487)
ZZZZZZ	1A218148.D	12/21/21	14:22	06:20	(unrelated sample)
ZZZZZZ	1A218149.D	12/21/21	14:42	06:40	(unrelated sample)
JD35531-11RMS	1A218150.D	12/21/21	15:01	06:59	Matrix Spike
JD35531-11RMSD	1A218151.D	12/21/21	15:20	07:18	Matrix Spike Duplicate
GP37676-LS25	1A218152.D	12/21/21	16:07	08:05	Leachate Spike
GP37615-LB21	1A218154.D	12/21/21	16:46	08:44	Leachate Blank
GP37676-LB25	1A218155.D	12/21/21	17:05	09:03	Leachate Blank
ZZZZZZ	1A218156.D	12/21/21	17:25	09:23	(unrelated sample)
ZZZZZZ	1A218157.D	12/21/21	17:44	09:42	(unrelated sample)
ZZZZZZ	1A218158.D	12/21/21	18:04	10:02	(unrelated sample)

6.6.3
6

Instrument Performance Check (BFB)

Job Number: JD35487
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample: V1A9392-BFB	Injection Date: 12/21/21
Lab File ID: 1A218130.D	Injection Time: 08:02
Instrument ID: GCMS1A	

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
ZZZZZZ	1A218159.D	12/21/21	18:23	10:21	(unrelated sample)
ZZZZZZ	1A218160.D	12/21/21	18:43	10:41	(unrelated sample)
ZZZZZZ	1A218161.D	12/21/21	19:02	11:00	(unrelated sample)
ZZZZZZ	1A218162.D	12/21/21	19:22	11:20	(unrelated sample)
ZZZZZZ	1A218163.D	12/21/21	19:41	11:39	(unrelated sample)
ZZZZZZ	1A218164.D	12/21/21	20:00	11:58	(unrelated sample)

6.6.3

6

Instrument Performance Check (BFB)

Job Number: JD35487
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample: V1A9403-BFB	Injection Date: 12/29/21
Lab File ID: 1A218411.D	Injection Time: 07:28
Instrument ID: GCMS1A	

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
50	15.0 - 40.0% of mass 95	15059	25.1	Pass
75	30.0 - 60.0% of mass 95	33453	55.8	Pass
95	Base peak, 100% relative abundance	59997	100.0	Pass
96	5.0 - 9.0% of mass 95	3625	6.04	Pass
173	Less than 2.0% of mass 174	0	0.00 (0.00) ^a	Pass
174	50.0 - 120.0% of mass 95	56606	94.3	Pass
175	5.0 - 9.0% of mass 174	4741	7.90 (8.38) ^a	Pass
176	95.0 - 101.0% of mass 174	54909	91.5 (97.0) ^a	Pass
177	5.0 - 9.0% of mass 176	2774	4.62 (5.05) ^b	Pass

(a) Value is % of mass 174

(b) Value is % of mass 176

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

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
V1A9403-CC9258	1A218412.D	12/29/21	07:47	00:19	Continuing cal 20
V1A9403-BS	1A218413.D	12/29/21	08:25	00:57	Blank Spike
V1A9403-MB	1A218415.D	12/29/21	09:03	01:35	Method Blank
GP37687-LB28	1A218416.D	12/29/21	09:31	02:03	Leachate Blank
GP37746-LB7	1A218417.D	12/29/21	09:51	02:23	Leachate Blank
JD36629-4	1A218418.D	12/29/21	10:10	02:42	(used for QC only; not part of job JD35487)
ZZZZZZ	1A218419.D	12/29/21	10:38	03:10	(unrelated sample)
GP37687-LS28	1A218420.D	12/29/21	10:58	03:30	Leachate Spike
JD36629-4MS	1A218420.D	12/29/21	10:58	03:30	Matrix Spike
JD36629-4MSD	1A218421.D	12/29/21	11:17	03:49	Matrix Spike Duplicate
GP37746-LS7	1A218422.D	12/29/21	11:36	04:08	Leachate Spike
V1A9404-BS	1A218424.D	12/29/21	12:15	04:47	Blank Spike
V1A9404-BSD	1A218425.D	12/29/21	12:34	05:06	Blank Spike Duplicate
V1A9404-MB	1A218427.D	12/29/21	13:13	05:45	Method Blank
ZZZZZZ	1A218428.D	12/29/21	13:42	06:14	(unrelated sample)
ZZZZZZ	1A218429.D	12/29/21	14:01	06:33	(unrelated sample)
JD36795-1AMS	1A218430.D	12/29/21	14:20	06:52	Matrix Spike
JD36795-1AMSD	1A218431.D	12/29/21	14:40	07:12	Matrix Spike Duplicate
GP37639-LB23	1A218433.D	12/29/21	15:19	07:51	Leachate Blank
JD36795-1A	1A218434.D	12/29/21	15:38	08:10	(used for QC only; not part of job JD35487)
ZZZZZZ	1A218435.D	12/29/21	15:57	08:29	(unrelated sample)
ZZZZZZ	1A218436.D	12/29/21	16:17	08:49	(unrelated sample)
ZZZZZZ	1A218437.D	12/29/21	16:37	09:09	(unrelated sample)
ZZZZZZ	1A218438.D	12/29/21	16:56	09:28	(unrelated sample)

Instrument Performance Check (BFB)

Job Number: JD35487
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample: V1A9403-BFB	Injection Date: 12/29/21
Lab File ID: 1A218411.D	Injection Time: 07:28
Instrument ID: GCMS1A	

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
ZZZZZZ	1A218439.D	12/29/21	17:16	09:48	(unrelated sample)
ZZZZZZ	1A218440.D	12/29/21	17:36	10:08	(unrelated sample)
ZZZZZZ	1A218441.D	12/29/21	17:55	10:27	(unrelated sample)

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Instrument Performance Check (BFB)

Job Number: JD35487
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample: V2B8475-BFB	Injection Date: 10/29/21
Lab File ID: 2B186581.D	Injection Time: 15:44
Instrument ID: GCMS2B	

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
50	14.99 - 40.0% of mass 95	25744	18.5	Pass
75	30.0 - 60.0% of mass 95	69010	49.5	Pass
95	Base peak, 100% relative abundance	139288	100.0	Pass
96	5.0 - 9.0% of mass 95	9395	6.75	Pass
173	Less than 2.0% of mass 174	1321	0.95 (1.03) ^a	Pass
174	50.0 - 120.0% of mass 95	128720	92.4	Pass
175	5.0 - 9.0% of mass 174	9993	7.17 (7.76) ^a	Pass
176	95.0 - 101.0% of mass 174	124810	89.6 (97.0) ^a	Pass
177	5.0 - 9.0% of mass 176	8452	6.07 (6.77) ^b	Pass

(a) Value is % of mass 174

(b) Value is % of mass 176

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

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
V2B8475-IC8475	2B186582.D	10/29/21	16:13	00:29	Initial cal 0.2
V2B8475-IC8475	2B186583.D	10/29/21	16:43	00:59	Initial cal 0.5
V2B8475-IC8475	2B186584.D	10/29/21	17:12	01:28	Initial cal 1
V2B8475-IC8475	2B186585.D	10/29/21	17:42	01:58	Initial cal 2
V2B8475-IC8475	2B186586.D	10/29/21	18:11	02:27	Initial cal 4
V2B8475-IC8475	2B186587.D	10/29/21	18:40	02:56	Initial cal 8
V2B8475-IC8475	2B186588.D	10/29/21	19:10	03:26	Initial cal 20
V2B8475-ICC8475	2B186589.D	10/29/21	19:39	03:55	Initial cal 50
V2B8475-IC8475	2B186590.D	10/29/21	20:08	04:24	Initial cal 100
V2B8475-IC8475	2B186591.D	10/29/21	20:37	04:53	Initial cal 200
V2B8475-ICV8475	2B186594.D	10/29/21	22:05	06:21	Initial cal verification 50
V2B8475-ICV8475	2B186595.D	10/29/21	22:34	06:50	Initial cal verification 50
V2B8475-ICV8475	2B186596.D	10/29/21	23:04	07:20	Initial cal verification 50

Instrument Performance Check (BFB)

Job Number: JD35487
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample: V2B8530-BFB	Injection Date: 12/08/21
Lab File ID: 2B187856.D	Injection Time: 23:19
Instrument ID: GCMS2B	

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
50	14.99 - 40.0% of mass 95	32941	18.9	Pass
75	30.0 - 60.0% of mass 95	79435	45.6	Pass
95	Base peak, 100% relative abundance	174229	100.0	Pass
96	5.0 - 9.0% of mass 95	11479	6.59	Pass
173	Less than 2.0% of mass 174	1494	0.86 (0.91) ^a	Pass
174	50.0 - 120.0% of mass 95	165077	94.7	Pass
175	5.0 - 9.0% of mass 174	11897	6.83 (7.21) ^a	Pass
176	95.0 - 101.0% of mass 174	158725	91.1 (96.2) ^a	Pass
177	5.0 - 9.0% of mass 176	10928	6.27 (6.88) ^b	Pass

(a) Value is % of mass 174

(b) Value is % of mass 176

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

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
V2B8530-CC8475	2B187856.D	12/08/21	23:19	00:00	Continuing cal 50
V2B8530-BS	2B187858.D	12/09/21	00:17	00:58	Blank Spike
V2B8530-MB	2B187860.D	12/09/21	01:15	01:56	Method Blank
GP37411-LB8	2B187861.D	12/09/21	01:45	02:26	Leachate Blank
GP37434-LB9	2B187862.D	12/09/21	02:14	02:55	Leachate Blank
JD35487-1	2B187863.D	12/09/21	02:43	03:24	11215131-113021-WC-SPS-NE-D1(6-8)
ZZZZZZ	2B187864.D	12/09/21	03:13	03:54	(unrelated sample)
GP37434-LS9	2B187865.D	12/09/21	03:42	04:23	Leachate Spike
GP37411-LS8	2B187866A.D	12/09/21	04:11	04:52	Leachate Spike
JD35487-1MS	2B187866.D	12/09/21	04:11	04:52	Matrix Spike
JD35487-1MSD	2B187867.D	12/09/21	04:40	05:21	Matrix Spike Duplicate
ZZZZZZ	2B187869.D	12/09/21	05:39	06:20	(unrelated sample)
ZZZZZZ	2B187870.D	12/09/21	06:08	06:49	(unrelated sample)
ZZZZZZ	2B187871.D	12/09/21	06:37	07:18	(unrelated sample)
ZZZZZZ	2B187873.D	12/09/21	07:35	08:16	(unrelated sample)
ZZZZZZ	2B187874.D	12/09/21	08:04	08:45	(unrelated sample)

Instrument Performance Check (BFB)

Job Number: JD35487
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample: V2B8531-BFB	Injection Date: 12/09/21
Lab File ID: 2B187877.D	Injection Time: 09:43
Instrument ID: GCMS2B	

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
50	14.99 - 40.0% of mass 95	29384	19.0	Pass
75	30.0 - 60.0% of mass 95	70059	45.2	Pass
95	Base peak, 100% relative abundance	154901	100.0	Pass
96	5.0 - 9.0% of mass 95	10228	6.60	Pass
173	Less than 2.0% of mass 174	1553	1.00 (1.01) ^a	Pass
174	50.0 - 120.0% of mass 95	154432	99.7	Pass
175	5.0 - 9.0% of mass 174	11307	7.30 (7.32) ^a	Pass
176	95.0 - 101.0% of mass 174	152725	98.6 (98.9) ^a	Pass
177	5.0 - 9.0% of mass 176	10117	6.53 (6.62) ^b	Pass

(a) Value is % of mass 174

(b) Value is % of mass 176

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

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
V2B8531-CC8475	2B187877.D	12/09/21	09:43	00:00	Continuing cal 20
V2B8531-BS	2B187878.D	12/09/21	10:24	00:41	Blank Spike
V2B8531-MB	2B187880.D	12/09/21	11:22	01:39	Method Blank
GP37443-LB10	2B187881.D	12/09/21	12:00	02:17	Leachate Blank
GP37457-LB11	2B187882.D	12/09/21	12:30	02:47	Leachate Blank
JD35487-2	2B187883.D	12/09/21	12:59	03:16	11215131-120121-WC-JC-NE-G4(4-6)
JD35487-3	2B187885.D	12/09/21	13:58	04:15	11215131-120221-WC-JC-SW-B4(2-4)
ZZZZZZ	2B187886.D	12/09/21	14:27	04:44	(unrelated sample)
GP37443-LS10	2B187887A.D	12/09/21	14:56	05:13	Leachate Spike
JD35487-2MS	2B187887.D	12/09/21	14:56	05:13	Matrix Spike
JD35487-2MSD	2B187888.D	12/09/21	15:26	05:43	Matrix Spike Duplicate
ZZZZZZ	2B187890.D	12/09/21	16:24	06:41	(unrelated sample)
ZZZZZZ	2B187891.D	12/09/21	16:54	07:11	(unrelated sample)

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Instrument Performance Check (BFB)

Job Number: JD35487
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample: V3D7187-BFB	Injection Date: 10/03/21
Lab File ID: 3D169267.D	Injection Time: 20:52
Instrument ID: GCMS3D	

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
50	14.99 - 40.0% of mass 95	35970	18.9	Pass
75	30.0 - 60.0% of mass 95	93648	49.2	Pass
95	Base peak, 100% relative abundance	190442	100.0	Pass
96	5.0 - 9.0% of mass 95	12636	6.64	Pass
173	Less than 2.0% of mass 174	869	0.46 (0.54) ^a	Pass
174	50.0 - 120.0% of mass 95	160384	84.2	Pass
175	5.0 - 9.0% of mass 174	12144	6.38 (7.57) ^a	Pass
176	95.0 - 101.0% of mass 174	157034	82.5 (97.9) ^a	Pass
177	5.0 - 9.0% of mass 176	10984	5.77 (6.99) ^b	Pass

(a) Value is % of mass 174

(b) Value is % of mass 176

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

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
V3D7187-IC7187	3D169268.D	10/03/21	21:24	00:32	Initial cal 0.2
V3D7187-IC7187	3D169269.D	10/03/21	21:52	01:00	Initial cal 0.5
V3D7187-IC7187	3D169270.D	10/03/21	22:19	01:27	Initial cal 1
V3D7187-IC7187	3D169271.D	10/03/21	22:46	01:54	Initial cal 2
V3D7187-IC7187	3D169272.D	10/03/21	23:14	02:22	Initial cal 4
V3D7187-IC7187	3D169273.D	10/03/21	23:41	02:49	Initial cal 8
V3D7187-IC7187	3D169274.D	10/04/21	00:08	03:16	Initial cal 20
V3D7187-ICC7187	3D169275.D	10/04/21	00:36	03:44	Initial cal 50
V3D7187-IC7187	3D169276.D	10/04/21	01:03	04:11	Initial cal 100
V3D7187-IC7187	3D169277.D	10/04/21	01:30	04:38	Initial cal 200
V3D7187-ICV7187	3D169280.D	10/04/21	02:52	06:00	Initial cal verification 50
V3D7187-ICV7187	3D169281.D	10/04/21	03:19	06:27	Initial cal verification 50

Instrument Performance Check (BFB)

Job Number: JD35487
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample: V3D7311-BFB	Injection Date: 12/28/21
Lab File ID: 3D172298.D	Injection Time: 10:10
Instrument ID: GCMS3D	

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
50	14.99 - 40.0% of mass 95	35493	20.5	Pass
75	30.0 - 60.0% of mass 95	85547	49.4	Pass
95	Base peak, 100% relative abundance	173163	100.0	Pass
96	5.0 - 9.0% of mass 95	11219	6.48	Pass
173	Less than 2.0% of mass 174	1270	0.73 (0.88) ^a	Pass
174	50.0 - 120.0% of mass 95	144685	83.6	Pass
175	5.0 - 9.0% of mass 174	10901	6.30 (7.53) ^a	Pass
176	95.0 - 101.0% of mass 174	138667	80.1 (95.8) ^a	Pass
177	5.0 - 9.0% of mass 176	9500	5.49 (6.85) ^b	Pass

(a) Value is % of mass 174

(b) Value is % of mass 176

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

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
V3D7311-CC7187	3D172298.D	12/28/21	10:10	00:00	Continuing cal 20
V3D7311-BS	3D172300.D	12/28/21	11:25	01:15	Blank Spike
V3D7311-MB	3D172302.D	12/28/21	12:19	02:09	Method Blank
GP37638-LB22	3D172303.D	12/28/21	12:52	02:42	Leachate Blank
GP37747-LB8	3D172304.D	12/28/21	13:19	03:09	Leachate Blank
JD35488-7	3D172305.D	12/28/21	13:47	03:37	(used for QC only; not part of job JD35487)
ZZZZZ	3D172306.D	12/28/21	14:14	04:04	(unrelated sample)
JD35487-6	3D172307.D	12/28/21	14:42	04:32	11215131-121321-WC-SS-NC-E2(8-10)
ZZZZZ	3D172308.D	12/28/21	15:09	04:59	(unrelated sample)
GP37747-LS8	3D172309A.D	12/28/21	15:36	05:26	Leachate Spike
JD35488-7MS	3D172309.D	12/28/21	15:36	05:26	Matrix Spike
JD35488-7MSD	3D172310.D	12/28/21	16:03	05:53	Matrix Spike Duplicate
GP37638-LS22	3D172311.D	12/28/21	16:30	06:20	Leachate Spike
ZZZZZ	3D172313.D	12/28/21	17:25	07:15	(unrelated sample)
JD35487-5	3D172314.D	12/28/21	17:52	07:42	11215131-121321-WC-SS-NC-Y2(6-8)

Instrument Performance Check (BFB)

Job Number: JD35487
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample: VL10004-BFB	Injection Date: 10/05/21
Lab File ID: L333150.D	Injection Time: 18:43
Instrument ID: GCMSL	

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
50	15.0 - 40.0% of mass 95	25427	18.8	Pass
75	30.0 - 60.0% of mass 95	70245	52.0	Pass
95	Base peak, 100% relative abundance	135176	100.0	Pass
96	5.0 - 9.0% of mass 95	8845	6.54	Pass
173	Less than 2.0% of mass 174	430	0.32 (0.40) ^a	Pass
174	50.0 - 120.0% of mass 95	108003	79.9	Pass
175	5.0 - 9.0% of mass 174	7964	5.89 (7.37) ^a	Pass
176	95.0 - 101.0% of mass 174	105403	78.0 (97.6) ^a	Pass
177	5.0 - 9.0% of mass 176	7285	5.39 (6.91) ^b	Pass

(a) Value is % of mass 174

(b) Value is % of mass 176

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

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
VL10004-IC10004	L333151.D	10/05/21	19:12	00:29	Initial cal 0.2
VL10004-IC10004	L333152.D	10/05/21	19:33	00:50	Initial cal 0.5
VL10004-IC10004	L333153.D	10/05/21	19:54	01:11	Initial cal 1
VL10004-IC10004	L333154.D	10/05/21	20:15	01:32	Initial cal 2
VL10004-IC10004	L333155.D	10/05/21	20:36	01:53	Initial cal 4
VL10004-IC10004	L333156.D	10/05/21	20:57	02:14	Initial cal 8
VL10004-IC10004	L333157.D	10/05/21	21:18	02:35	Initial cal 20
VL10004-ICC10004	L333158.D	10/05/21	21:39	02:56	Initial cal 50
VL10004-IC10004	L333159.D	10/05/21	22:00	03:17	Initial cal 100
VL10004-IC10004	L333160.D	10/05/21	22:21	03:38	Initial cal 200
VL10004-ICV10004	L333163.D	10/05/21	23:24	04:41	Initial cal verification 50
VL10004-ICV10004	L333164.D	10/05/21	23:45	05:02	Initial cal verification 50

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Instrument Performance Check (BFB)

Job Number: JD35487
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample: VL10004-BFB2	Injection Date: 10/06/21
Lab File ID: L333167.D	Injection Time: 15:12
Instrument ID: GCMSL	

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
50	15.0 - 40.0% of mass 95	24885	19.2	Pass
75	30.0 - 60.0% of mass 95	71893	55.6	Pass
95	Base peak, 100% relative abundance	129304	100.0	Pass
96	5.0 - 9.0% of mass 95	8996	6.96	Pass
173	Less than 2.0% of mass 174	0	0.00 (0.00) ^a	Pass
174	50.0 - 120.0% of mass 95	109248	84.5	Pass
175	5.0 - 9.0% of mass 174	8699	6.73 (7.96) ^a	Pass
176	95.0 - 101.0% of mass 174	104085	80.5 (95.3) ^a	Pass
177	5.0 - 9.0% of mass 176	6724	5.20 (6.46) ^b	Pass

(a) Value is % of mass 174

(b) Value is % of mass 176

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

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
VL10004-ICV10004	L333168.D	10/06/21	16:01	00:49	Initial cal verification 50

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Instrument Performance Check (BFB)

Job Number: JD35487
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample: VL10104-BFB	Injection Date: 12/14/21
Lab File ID: L335960.D	Injection Time: 22:10
Instrument ID: GCMSL	

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
50	15.0 - 40.0% of mass 95	25965	18.8	Pass
75	30.0 - 60.0% of mass 95	76109	55.1	Pass
95	Base peak, 100% relative abundance	138030	100.0	Pass
96	5.0 - 9.0% of mass 95	10061	7.29	Pass
173	Less than 2.0% of mass 174	394	0.29 (0.35) ^a	Pass
174	50.0 - 120.0% of mass 95	113488	82.2	Pass
175	5.0 - 9.0% of mass 174	9029	6.54 (7.96) ^a	Pass
176	95.0 - 101.0% of mass 174	107814	78.1 (95.0) ^a	Pass
177	5.0 - 9.0% of mass 176	7573	5.49 (7.02) ^b	Pass

(a) Value is % of mass 174

(b) Value is % of mass 176

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

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
VL10104-CC10004	L335960.D	12/14/21	22:10	00:00	Continuing cal 50
VL10104-BS	L335962.D	12/14/21	22:52	00:42	Blank Spike
VL10104-MB	L335964.D	12/14/21	23:34	01:24	Method Blank
GP37478-LB13	L335965.D	12/14/21	23:55	01:45	Leachate Blank
GP37492-LB14	L335966.D	12/15/21	00:16	02:06	Leachate Blank
GP37525-LB16	L335967.D	12/15/21	00:37	02:27	Leachate Blank
GP37528-LB17	L335968.D	12/15/21	00:58	02:48	Leachate Blank
ZZZZZZ	L335969.D	12/15/21	01:19	03:09	(unrelated sample)
ZZZZZZ	L335970.D	12/15/21	01:40	03:30	(unrelated sample)
ZZZZZZ	L335971.D	12/15/21	02:01	03:51	(unrelated sample)
ZZZZZZ	L335972.D	12/15/21	02:22	04:12	(unrelated sample)
ZZZZZZ	L335973.D	12/15/21	02:43	04:33	(unrelated sample)
ZZZZZZ	L335974.D	12/15/21	03:04	04:54	(unrelated sample)
ZZZZZZ	L335975.D	12/15/21	03:25	05:15	(unrelated sample)
ZZZZZZ	L335976.D	12/15/21	03:45	05:35	(unrelated sample)
JD35487-4	L335977.D	12/15/21	04:06	05:56	11215131-120621-WC-SS-SC-B-4(2-4)
ZZZZZZ	L335978.D	12/15/21	04:27	06:17	(unrelated sample)
ZZZZZZ	L335979.D	12/15/21	04:48	06:38	(unrelated sample)
JD35487-4MS	L335980.D	12/15/21	05:09	06:59	Matrix Spike
GP37492-LS14	L335980A.D	12/15/21	05:09	06:59	Leachate Spike
JD35487-4MSD	L335981.D	12/15/21	05:30	07:20	Matrix Spike Duplicate
GP37525-LS16	L335982.D	12/15/21	05:50	07:40	Leachate Spike
GP37528-LS17	L335983.D	12/15/21	06:11	08:01	Leachate Spike
ZZZZZZ	L335985.D	12/15/21	06:53	08:43	(unrelated sample)

6.6.12

6

Instrument Performance Check (BFB)

Job Number: JD35487
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample: VL10104-BFB	Injection Date: 12/14/21
Lab File ID: L335960.D	Injection Time: 22:10
Instrument ID: GCMSL	

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
ZZZZZZ	L335986.D	12/15/21	07:14	09:04	(unrelated sample)
ZZZZZZ	L335987.D	12/15/21	07:35	09:25	(unrelated sample)
ZZZZZZ	L335988.D	12/15/21	07:55	09:45	(unrelated sample)
ZZZZZZ	L335990.D	12/15/21	08:37	10:27	(unrelated sample)
ZZZZZZ	L335991.D	12/15/21	08:58	10:48	(unrelated sample)
ZZZZZZ	L335992.D	12/15/21	09:19	11:09	(unrelated sample)
ZZZZZZ	L335993.D	12/15/21	09:40	11:30	(unrelated sample)

6.6.12

6

Surrogate Recovery Summary

Job Number: JD35487
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Method: SW846 8260D	Matrix: LEACHATE
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Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1	S2	S3	S4
JD35487-1	2B187863.D	100	94	94	102
JD35487-2	2B187883.D	99	94	95	103
JD35487-3	2B187885.D	99	95	94	103
JD35487-4	L335977.D	107	116	99	108
JD35487-5	3D172314.D	86	104	102	99
JD35487-6	3D172307.D	84	102	103	97
GP37411-LB8	2B187861.D	100	94	94	102
GP37411-LS8	2B187866A.D	95	87	91	100
GP37443-LB10	2B187881.D	100	93	94	103
GP37443-LS10	2B187887A.D	97	87	90	98
GP37492-LB14	L335966.D	106	118	98	106
GP37492-LS14	L335980A.D	106	108	90	113
GP37615-LB21	1A218154.D	90	103	117	104
GP37615-LS21	1A218106A.D	89	104	108	105
GP37639-LB23	1A218433.D	99	110	116	110
GP37639-LS23	1A218108.D	93	106	110	109
JD35487-1MS	2B187866.D	95	87	91	100
JD35487-1MSD	2B187867.D	96	87	91	99
JD35487-2MS	2B187887.D	97	87	90	98
JD35487-2MSD	2B187888.D	96	86	91	100
JD35487-4MS	L335980.D	106	108	90	113
JD35487-4MSD	L335981.D	106	110	93	112
JD35488-7MS	3D172309.D	87	95	97	101
JD35488-7MSD	3D172310.D	86	93	96	102
V2B8530-BS	2B187858.D	95	87	91	99
V2B8530-MB	2B187860.D	99	93	94	103
V2B8531-BS	2B187878.D	96	87	91	98
V2B8531-MB	2B187880.D	99	92	94	104
V3D7311-BS	3D172300.D	85	93	97	102
V3D7311-MB	3D172302.D	83	101	102	98
VL10104-BS	L335962.D	108	111	91	111
VL10104-MB	L335964.D	107	115	98	107
V1A9391-MB	1A218101.D	92	112	116	106
V1A9393-MB	1A218146.D	89	103	117	100
V1A9404-MB	1A218427.D	99	110	118* a	111

Surrogate Compounds

Recovery Limits

S1 = Dibromofluoromethane 76-120%

6.7.1
6

Surrogate Recovery Summary

Job Number: JD35487

Account: CRATXH GHD Services Inc.

Project: SJRWP - PCFSE, Harris County, TX

Method: SW846 8260D

Matrix: LEACHATE

Samples and QC shown here apply to the above method

Surrogate Compounds	Recovery Limits
S2 = 1,2-Dichloroethane-D4	64-135%
S3 = Toluene-D8	76-117%
S4 = 4-Bromofluorobenzene	72-122%

(a) Outside of in house control limits, but within reasonable method recovery limits.

MS Semi-volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Instrument Performance Checks (DFTPP)
- Surrogate Recovery Summaries

Method Blank Summary

Job Number: JD35487
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP37049-MB1	6P503032.D	1	12/10/21	KLS	12/09/21	OP37049	E6P3571

The QC reported here applies to the following samples:

Method: SW846 8270E

JD35487-1, JD35487-2, JD35487-3

CAS No.	Compound	Result	RL	MDL	Units	Q
95-48-7	2-Methylphenol	ND	2.0	0.89	ug/l	
	3&4-Methylphenol	ND	2.0	0.88	ug/l	
87-86-5	Pentachlorophenol	ND	10	1.4	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	5.0	1.3	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	5.0	0.92	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	2.0	0.17	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	2.0	0.55	ug/l	
118-74-1	Hexachlorobenzene	ND	2.0	0.33	ug/l	
87-68-3	Hexachlorobutadiene	ND	1.0	0.49	ug/l	
67-72-1	Hexachloroethane	ND	5.0	0.39	ug/l	
98-95-3	Nitrobenzene	ND	2.0	0.64	ug/l	
110-86-1	Pyridine	ND	2.0	0.39	ug/l	

CAS No.	Surrogate Recoveries	Limits	
367-12-4	2-Fluorophenol	37%	10-73%
4165-62-2	Phenol-d5	24%	10-64%
118-79-6	2,4,6-Tribromophenol	69%	31-130%
4165-60-0	Nitrobenzene-d5	67%	28-126%
321-60-8	2-Fluorobiphenyl	61%	26-114%
1718-51-0	Terphenyl-d14	78%	16-122%

7.1.1
7

Method Blank Summary

Job Number: JD35487
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP37049-MB1	F204184.D	1	12/11/21	CS	12/09/21	OP37049	EF8949

The QC reported here applies to the following samples:

Method: SW846 8270E

JD35487-1, JD35487-2, JD35487-3

CAS No.	Compound	Result	RL	MDL	Units	Q
95-48-7	2-Methylphenol	ND	2.0	0.89	ug/l	
	3&4-Methylphenol	ND	2.0	0.88	ug/l	
87-86-5	Pentachlorophenol	ND	10	1.4	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	5.0	1.3	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	5.0	0.92	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	2.0	0.17	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	2.0	0.55	ug/l	
118-74-1	Hexachlorobenzene	ND	2.0	0.33	ug/l	
87-68-3	Hexachlorobutadiene	ND	1.0	0.49	ug/l	
67-72-1	Hexachloroethane	ND	5.0	0.39	ug/l	
98-95-3	Nitrobenzene	ND	2.0	0.64	ug/l	
110-86-1	Pyridine	ND	2.0	0.39	ug/l	

CAS No.	Surrogate Recoveries	Limits
367-12-4	2-Fluorophenol	35% 10-73%
4165-62-2	Phenol-d5	24% 10-64%
118-79-6	2,4,6-Tribromophenol	66% 31-130%
4165-60-0	Nitrobenzene-d5	53% 28-126%
321-60-8	2-Fluorobiphenyl	56% 26-114%
1718-51-0	Terphenyl-d14	77% 16-122%

Method Blank Summary

Job Number: JD35487
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP37159-MB1	6P503067.D	1	12/16/21	CS	12/15/21	OP37159	E6P3574

The QC reported here applies to the following samples:

Method: SW846 8270E

JD35487-4

CAS No.	Compound	Result	RL	MDL	Units	Q
95-48-7	2-Methylphenol	ND	2.0	0.89	ug/l	
	3&4-Methylphenol	ND	2.0	0.88	ug/l	
87-86-5	Pentachlorophenol	ND	10	1.4	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	5.0	1.3	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	5.0	0.92	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	2.0	0.17	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	2.0	0.55	ug/l	
118-74-1	Hexachlorobenzene	ND	2.0	0.33	ug/l	
87-68-3	Hexachlorobutadiene	ND	1.0	0.49	ug/l	
67-72-1	Hexachloroethane	ND	5.0	0.39	ug/l	
98-95-3	Nitrobenzene	ND	2.0	0.64	ug/l	
110-86-1	Pyridine	ND	2.0	0.39	ug/l	

CAS No.	Surrogate Recoveries	Limits
367-12-4	2-Fluorophenol	26% 10-73%
4165-62-2	Phenol-d5	19% 10-64%
118-79-6	2,4,6-Tribromophenol	66% 31-130%
4165-60-0	Nitrobenzene-d5	65% 28-126%
321-60-8	2-Fluorobiphenyl	70% 26-114%
1718-51-0	Terphenyl-d14	56% 16-122%

Method Blank Summary

Job Number: JD35487
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP37159-MB1	F204307.D	1	12/16/21	CS	12/15/21	OP37159	EF8956

The QC reported here applies to the following samples:

Method: SW846 8270E

JD35487-4

CAS No.	Compound	Result	RL	MDL	Units	Q
95-48-7	2-Methylphenol	ND	2.0	0.89	ug/l	
	3&4-Methylphenol	ND	2.0	0.88	ug/l	
87-86-5	Pentachlorophenol	ND	10	1.4	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	5.0	1.3	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	5.0	0.92	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	2.0	0.17	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	2.0	0.55	ug/l	
118-74-1	Hexachlorobenzene	ND	2.0	0.33	ug/l	
87-68-3	Hexachlorobutadiene	ND	1.0	0.49	ug/l	
67-72-1	Hexachloroethane	ND	5.0	0.39	ug/l	
98-95-3	Nitrobenzene	ND	2.0	0.64	ug/l	
110-86-1	Pyridine	ND	2.0	0.39	ug/l	

CAS No.	Surrogate Recoveries	Limits
367-12-4	2-Fluorophenol	25% 10-73%
4165-62-2	Phenol-d5	17% 10-64%
118-79-6	2,4,6-Tribromophenol	66% 31-130%
4165-60-0	Nitrobenzene-d5	60% 28-126%
321-60-8	2-Fluorobiphenyl	68% 26-114%
1718-51-0	Terphenyl-d14	57% 16-122%

7.1.4

7

Method Blank Summary

Job Number: JD35487
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP37242-MB1	6P503116.D	1	12/21/21	CS	12/20/21	OP37242	E6P3577

The QC reported here applies to the following samples:

Method: SW846 8270E

JD35487-5

CAS No.	Compound	Result	RL	MDL	Units	Q
95-48-7	2-Methylphenol	ND	2.0	0.89	ug/l	
	3&4-Methylphenol	ND	2.0	0.88	ug/l	
87-86-5	Pentachlorophenol	ND	10	1.4	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	5.0	1.3	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	5.0	0.92	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	2.0	0.17	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	2.0	0.55	ug/l	
118-74-1	Hexachlorobenzene	ND	2.0	0.33	ug/l	
87-68-3	Hexachlorobutadiene	ND	1.0	0.49	ug/l	
67-72-1	Hexachloroethane	ND	5.0	0.39	ug/l	
98-95-3	Nitrobenzene	ND	2.0	0.64	ug/l	
110-86-1	Pyridine	ND	2.0	0.39	ug/l	

CAS No.	Surrogate Recoveries	Limits
367-12-4	2-Fluorophenol	28% 10-73%
4165-62-2	Phenol-d5	18% 10-64%
118-79-6	2,4,6-Tribromophenol	70% 31-130%
4165-60-0	Nitrobenzene-d5	65% 28-126%
321-60-8	2-Fluorobiphenyl	66% 26-114%
1718-51-0	Terphenyl-d14	68% 16-122%

Method Blank Summary

Job Number: JD35487
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP37273-MB1	6P503141.D	1	12/22/21	CS	12/21/21	OP37273	E6P3578

The QC reported here applies to the following samples:

Method: SW846 8270E

JD35487-6

CAS No.	Compound	Result	RL	MDL	Units	Q
95-48-7	2-Methylphenol	ND	2.0	0.89	ug/l	
	3&4-Methylphenol	ND	2.0	0.88	ug/l	
87-86-5	Pentachlorophenol	ND	10	1.4	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	5.0	1.3	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	5.0	0.92	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	2.0	0.17	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	2.0	0.55	ug/l	
118-74-1	Hexachlorobenzene	ND	2.0	0.33	ug/l	
87-68-3	Hexachlorobutadiene	ND	1.0	0.49	ug/l	
67-72-1	Hexachloroethane	ND	5.0	0.39	ug/l	
98-95-3	Nitrobenzene	ND	2.0	0.64	ug/l	
110-86-1	Pyridine	ND	2.0	0.39	ug/l	

CAS No.	Surrogate Recoveries	Limits
367-12-4	2-Fluorophenol	21% 10-73%
4165-62-2	Phenol-d5	14% 10-64%
118-79-6	2,4,6-Tribromophenol	53% 31-130%
4165-60-0	Nitrobenzene-d5	58% 28-126%
321-60-8	2-Fluorobiphenyl	63% 26-114%
1718-51-0	Terphenyl-d14	78% 16-122%

Leachate Blank Summary

Job Number: JD35487
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP37049-LB5	6P503033.D	1	12/10/21	KLS	12/09/21	OP37049	E6P3571

The QC reported here applies to the following samples:

Method: SW846 8270E

JD35487-1, JD35487-2, JD35487-3

CAS No.	Compound	Result	RL	MDL	Units	Q
95-48-7	2-Methylphenol	ND	20	8.9	ug/l	
	3&4-Methylphenol	ND	20	8.8	ug/l	
87-86-5	Pentachlorophenol	ND	100	14	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	50	13	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	50	9.2	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	20	1.7	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	20	5.5	ug/l	
118-74-1	Hexachlorobenzene	ND	20	3.3	ug/l	
87-68-3	Hexachlorobutadiene	ND	10	4.9	ug/l	
67-72-1	Hexachloroethane	ND	50	3.9	ug/l	
98-95-3	Nitrobenzene	ND	20	6.4	ug/l	
110-86-1	Pyridine	ND	20	3.9	ug/l	

CAS No.	Surrogate Recoveries	Limits
367-12-4	2-Fluorophenol	24% 10-73%
4165-62-2	Phenol-d5	17% 10-64%
118-79-6	2,4,6-Tribromophenol	78% 31-130%
4165-60-0	Nitrobenzene-d5	78% 28-126%
321-60-8	2-Fluorobiphenyl	74% 26-114%
1718-51-0	Terphenyl-d14	73% 16-122%

7.2.1
7

Leachate Blank Summary

Job Number: JD35487
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP37049-LB8	6P503034.D	1	12/10/21	KLS	12/09/21	OP37049	E6P3571

The QC reported here applies to the following samples:

Method: SW846 8270E

JD35487-1, JD35487-2, JD35487-3

CAS No.	Compound	Result	RL	MDL	Units	Q
95-48-7	2-Methylphenol	ND	20	8.9	ug/l	
	3&4-Methylphenol	ND	20	8.8	ug/l	
87-86-5	Pentachlorophenol	ND	100	14	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	50	13	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	50	9.2	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	20	1.7	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	20	5.5	ug/l	
118-74-1	Hexachlorobenzene	ND	20	3.3	ug/l	
87-68-3	Hexachlorobutadiene	ND	10	4.9	ug/l	
67-72-1	Hexachloroethane	ND	50	3.9	ug/l	
98-95-3	Nitrobenzene	ND	20	6.4	ug/l	
110-86-1	Pyridine	ND	20	3.9	ug/l	

CAS No.	Surrogate Recoveries	Limits
367-12-4	2-Fluorophenol	28% 10-73%
4165-62-2	Phenol-d5	20% 10-64%
118-79-6	2,4,6-Tribromophenol	81% 31-130%
4165-60-0	Nitrobenzene-d5	74% 28-126%
321-60-8	2-Fluorobiphenyl	70% 26-114%
1718-51-0	Terphenyl-d14	77% 16-122%

7.2.2

7

Leachate Blank Summary

Job Number: JD35487
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP37049-LB5	F204185.D	1	12/11/21	CS	12/09/21	OP37049	EF8949

The QC reported here applies to the following samples:

Method: SW846 8270E

JD35487-1, JD35487-2, JD35487-3

CAS No.	Compound	Result	RL	MDL	Units	Q
95-48-7	2-Methylphenol	ND	20	8.9	ug/l	
	3&4-Methylphenol	ND	20	8.8	ug/l	
87-86-5	Pentachlorophenol	ND	100	14	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	50	13	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	50	9.2	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	20	1.7	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	20	5.5	ug/l	
118-74-1	Hexachlorobenzene	ND	20	3.3	ug/l	
87-68-3	Hexachlorobutadiene	ND	10	4.9	ug/l	
67-72-1	Hexachloroethane	ND	50	3.9	ug/l	
98-95-3	Nitrobenzene	ND	20	6.4	ug/l	
110-86-1	Pyridine	ND	20	3.9	ug/l	

CAS No.	Surrogate Recoveries	Limits
367-12-4	2-Fluorophenol	22% 10-73%
4165-62-2	Phenol-d5	16% 10-64%
118-79-6	2,4,6-Tribromophenol	72% 31-130%
4165-60-0	Nitrobenzene-d5	63% 28-126%
321-60-8	2-Fluorobiphenyl	69% 26-114%
1718-51-0	Terphenyl-d14	70% 16-122%

7.2.3

7

Leachate Blank Summary

Job Number: JD35487
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP37049-LB8	F204186.D	1	12/11/21	CS	12/09/21	OP37049	EF8949

The QC reported here applies to the following samples:

Method: SW846 8270E

JD35487-1, JD35487-2, JD35487-3

CAS No.	Compound	Result	RL	MDL	Units	Q
95-48-7	2-Methylphenol	ND	20	8.9	ug/l	
	3&4-Methylphenol	ND	20	8.8	ug/l	
87-86-5	Pentachlorophenol	ND	100	14	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	50	13	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	50	9.2	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	20	1.7	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	20	5.5	ug/l	
118-74-1	Hexachlorobenzene	ND	20	3.3	ug/l	
87-68-3	Hexachlorobutadiene	ND	10	4.9	ug/l	
67-72-1	Hexachloroethane	ND	50	3.9	ug/l	
98-95-3	Nitrobenzene	ND	20	6.4	ug/l	
110-86-1	Pyridine	ND	20	3.9	ug/l	

CAS No.	Surrogate Recoveries	Limits
367-12-4	2-Fluorophenol	28% 10-73%
4165-62-2	Phenol-d5	21% 10-64%
118-79-6	2,4,6-Tribromophenol	76% 31-130%
4165-60-0	Nitrobenzene-d5	59% 28-126%
321-60-8	2-Fluorobiphenyl	65% 26-114%
1718-51-0	Terphenyl-d14	78% 16-122%

7.2.4

7

Leachate Blank Summary

Job Number: JD35487
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP37159-LB13	6P503068A.D	1	12/16/21	CS	12/15/21	OP37159	E6P3574

The QC reported here applies to the following samples:

Method: SW846 8270E

JD35487-4

CAS No.	Compound	Result	RL	MDL	Units	Q
95-48-7	2-Methylphenol	ND	20	8.9	ug/l	
	3&4-Methylphenol	ND	20	8.8	ug/l	
87-86-5	Pentachlorophenol	ND	100	14	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	50	13	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	50	9.2	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	20	1.7	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	20	5.5	ug/l	
118-74-1	Hexachlorobenzene	ND	20	3.3	ug/l	
87-68-3	Hexachlorobutadiene	ND	10	4.9	ug/l	
67-72-1	Hexachloroethane	ND	50	3.9	ug/l	
98-95-3	Nitrobenzene	ND	20	6.4	ug/l	
110-86-1	Pyridine	ND	20	3.9	ug/l	

CAS No.	Surrogate Recoveries	Limits
367-12-4	2-Fluorophenol	26% 10-73%
4165-62-2	Phenol-d5	18% 10-64%
118-79-6	2,4,6-Tribromophenol	66% 31-130%
4165-60-0	Nitrobenzene-d5	73% 28-126%
321-60-8	2-Fluorobiphenyl	78% 26-114%
1718-51-0	Terphenyl-d14	89% 16-122%

7.2.5

7

Leachate Blank Summary

Job Number: JD35487
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP37159-LB16	6P503069.D	1	12/16/21	CS	12/15/21	OP37159	E6P3574

The QC reported here applies to the following samples:

Method: SW846 8270E

JD35487-4

CAS No.	Compound	Result	RL	MDL	Units	Q
95-48-7	2-Methylphenol	ND	20	8.9	ug/l	
	3&4-Methylphenol	ND	20	8.8	ug/l	
87-86-5	Pentachlorophenol	ND	100	14	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	50	13	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	50	9.2	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	20	1.7	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	20	5.5	ug/l	
118-74-1	Hexachlorobenzene	ND	20	3.3	ug/l	
87-68-3	Hexachlorobutadiene	ND	10	4.9	ug/l	
67-72-1	Hexachloroethane	ND	50	3.9	ug/l	
98-95-3	Nitrobenzene	ND	20	6.4	ug/l	
110-86-1	Pyridine	ND	20	3.9	ug/l	

CAS No.	Surrogate Recoveries	Limits
367-12-4	2-Fluorophenol	44% 10-73%
4165-62-2	Phenol-d5	28% 10-64%
118-79-6	2,4,6-Tribromophenol	81% 31-130%
4165-60-0	Nitrobenzene-d5	77% 28-126%
321-60-8	2-Fluorobiphenyl	84% 26-114%
1718-51-0	Terphenyl-d14	86% 16-122%

7.2.6

7

Leachate Blank Summary

Job Number: JD35487
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP37159-LB13	F204308.D	1	12/16/21	CS	12/15/21	OP37159	EF8956

The QC reported here applies to the following samples:

Method: SW846 8270E

JD35487-4

CAS No.	Compound	Result	RL	MDL	Units	Q
95-48-7	2-Methylphenol	ND	20	8.9	ug/l	
	3&4-Methylphenol	ND	20	8.8	ug/l	
87-86-5	Pentachlorophenol	ND	100	14	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	50	13	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	50	9.2	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	20	1.7	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	20	5.5	ug/l	
118-74-1	Hexachlorobenzene	ND	20	3.3	ug/l	
87-68-3	Hexachlorobutadiene	ND	10	4.9	ug/l	
67-72-1	Hexachloroethane	ND	50	3.9	ug/l	
98-95-3	Nitrobenzene	ND	20	6.4	ug/l	
110-86-1	Pyridine	ND	20	3.9	ug/l	

CAS No.	Surrogate Recoveries	Limits
367-12-4	2-Fluorophenol	26% 10-73%
4165-62-2	Phenol-d5	17% 10-64%
118-79-6	2,4,6-Tribromophenol	69% 31-130%
4165-60-0	Nitrobenzene-d5	69% 28-126%
321-60-8	2-Fluorobiphenyl	74% 26-114%
1718-51-0	Terphenyl-d14	89% 16-122%

7.27

7

Leachate Blank Summary

Job Number: JD35487
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP37159-LB16	F204309.D	1	12/16/21	CS	12/15/21	OP37159	EF8956

The QC reported here applies to the following samples:

Method: SW846 8270E

JD35487-4

CAS No.	Compound	Result	RL	MDL	Units	Q
95-48-7	2-Methylphenol	ND	20	8.9	ug/l	
	3&4-Methylphenol	ND	20	8.8	ug/l	
87-86-5	Pentachlorophenol	ND	100	14	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	50	13	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	50	9.2	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	20	1.7	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	20	5.5	ug/l	
118-74-1	Hexachlorobenzene	ND	20	3.3	ug/l	
87-68-3	Hexachlorobutadiene	ND	10	4.9	ug/l	
67-72-1	Hexachloroethane	ND	50	3.9	ug/l	
98-95-3	Nitrobenzene	ND	20	6.4	ug/l	
110-86-1	Pyridine	ND	20	3.9	ug/l	

CAS No.	Surrogate Recoveries	Limits	
367-12-4	2-Fluorophenol	43%	10-73%
4165-62-2	Phenol-d5	27%	10-64%
118-79-6	2,4,6-Tribromophenol	85%	31-130%
4165-60-0	Nitrobenzene-d5	74%	28-126%
321-60-8	2-Fluorobiphenyl	80%	26-114%
1718-51-0	Terphenyl-d14	87%	16-122%

Leachate Blank Summary

Job Number: JD35487
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP37242-LB19	6P503118.D	1	12/21/21	CS	12/20/21	OP37242	E6P3577

The QC reported here applies to the following samples:

Method: SW846 8270E

JD35487-5

CAS No.	Compound	Result	RL	MDL	Units	Q
95-48-7	2-Methylphenol	ND	20	8.9	ug/l	
	3&4-Methylphenol	ND	20	8.8	ug/l	
87-86-5	Pentachlorophenol	ND	100	14	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	50	13	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	50	9.2	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	20	1.7	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	20	5.5	ug/l	
118-74-1	Hexachlorobenzene	ND	20	3.3	ug/l	
87-68-3	Hexachlorobutadiene	ND	10	4.9	ug/l	
67-72-1	Hexachloroethane	ND	50	3.9	ug/l	
98-95-3	Nitrobenzene	ND	20	6.4	ug/l	
110-86-1	Pyridine	ND	20	3.9	ug/l	

CAS No.	Surrogate Recoveries	Limits	
367-12-4	2-Fluorophenol	26%	10-73%
4165-62-2	Phenol-d5	17%	10-64%
118-79-6	2,4,6-Tribromophenol	71%	31-130%
4165-60-0	Nitrobenzene-d5	61%	28-126%
321-60-8	2-Fluorobiphenyl	66%	26-114%
1718-51-0	Terphenyl-d14	74%	16-122%

Leachate Blank Summary

Job Number: JD35487
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP37242-LB24	6P503119.D	1	12/21/21	CS	12/20/21	OP37242	E6P3577

The QC reported here applies to the following samples:

Method: SW846 8270E

JD35487-5

CAS No.	Compound	Result	RL	MDL	Units	Q
95-48-7	2-Methylphenol	ND	20	8.9	ug/l	
	3&4-Methylphenol	ND	20	8.8	ug/l	
87-86-5	Pentachlorophenol	ND	100	14	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	50	13	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	50	9.2	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	20	1.7	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	20	5.5	ug/l	
118-74-1	Hexachlorobenzene	ND	20	3.3	ug/l	
87-68-3	Hexachlorobutadiene	ND	10	4.9	ug/l	
67-72-1	Hexachloroethane	ND	50	3.9	ug/l	
98-95-3	Nitrobenzene	ND	20	6.4	ug/l	
110-86-1	Pyridine	ND	20	3.9	ug/l	

CAS No.	Surrogate Recoveries	Limits	
367-12-4	2-Fluorophenol	31%	10-73%
4165-62-2	Phenol-d5	18%	10-64%
118-79-6	2,4,6-Tribromophenol	68%	31-130%
4165-60-0	Nitrobenzene-d5	57%	28-126%
321-60-8	2-Fluorobiphenyl	63%	26-114%
1718-51-0	Terphenyl-d14	76%	16-122%

7.2.10

7

Leachate Blank Summary

Job Number: JD35487
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP37273-LB16	6P503142.D	1	12/22/21	CS	12/21/21	OP37273	E6P3578

The QC reported here applies to the following samples:

Method: SW846 8270E

JD35487-6

CAS No.	Compound	Result	RL	MDL	Units	Q
95-48-7	2-Methylphenol	ND	20	8.9	ug/l	
	3&4-Methylphenol	ND	20	8.8	ug/l	
87-86-5	Pentachlorophenol	ND	100	14	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	50	13	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	50	9.2	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	20	1.7	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	20	5.5	ug/l	
118-74-1	Hexachlorobenzene	ND	20	3.3	ug/l	
87-68-3	Hexachlorobutadiene	ND	10	4.9	ug/l	
67-72-1	Hexachloroethane	ND	50	3.9	ug/l	
98-95-3	Nitrobenzene	ND	20	6.4	ug/l	
110-86-1	Pyridine	ND	20	3.9	ug/l	

CAS No.	Surrogate Recoveries	Limits
367-12-4	2-Fluorophenol	25% 10-73%
4165-62-2	Phenol-d5	16% 10-64%
118-79-6	2,4,6-Tribromophenol	65% 31-130%
4165-60-0	Nitrobenzene-d5	60% 28-126%
321-60-8	2-Fluorobiphenyl	69% 26-114%
1718-51-0	Terphenyl-d14	67% 16-122%

7.2.11

7

Leachate Blank Summary

Job Number: JD35487
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP37273-LB25	6P503143.D	1	12/22/21	CS	12/21/21	OP37273	E6P3578

The QC reported here applies to the following samples:

Method: SW846 8270E

JD35487-6

CAS No.	Compound	Result	RL	MDL	Units	Q
95-48-7	2-Methylphenol	ND	20	8.9	ug/l	
	3&4-Methylphenol	ND	20	8.8	ug/l	
87-86-5	Pentachlorophenol	ND	100	14	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	50	13	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	50	9.2	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	20	1.7	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	20	5.5	ug/l	
118-74-1	Hexachlorobenzene	ND	20	3.3	ug/l	
87-68-3	Hexachlorobutadiene	ND	10	4.9	ug/l	
67-72-1	Hexachloroethane	ND	50	3.9	ug/l	
98-95-3	Nitrobenzene	ND	20	6.4	ug/l	
110-86-1	Pyridine	ND	20	3.9	ug/l	

CAS No.	Surrogate Recoveries	Limits
367-12-4	2-Fluorophenol	27% 10-73%
4165-62-2	Phenol-d5	18% 10-64%
118-79-6	2,4,6-Tribromophenol	66% 31-130%
4165-60-0	Nitrobenzene-d5	60% 28-126%
321-60-8	2-Fluorobiphenyl	69% 26-114%
1718-51-0	Terphenyl-d14	95% 16-122%

7.2.12

7

Leachate Blank Summary

Job Number: JD35487
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP37273-LB27	6P503144.D	1	12/22/21	CS	12/21/21	OP37273	E6P3578

The QC reported here applies to the following samples:

Method: SW846 8270E

JD35487-6

CAS No.	Compound	Result	RL	MDL	Units	Q
95-48-7	2-Methylphenol	ND	20	8.9	ug/l	
	3&4-Methylphenol	ND	20	8.8	ug/l	
87-86-5	Pentachlorophenol	ND	100	14	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	50	13	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	50	9.2	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	20	1.7	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	20	5.5	ug/l	
118-74-1	Hexachlorobenzene	ND	20	3.3	ug/l	
87-68-3	Hexachlorobutadiene	ND	10	4.9	ug/l	
67-72-1	Hexachloroethane	ND	50	3.9	ug/l	
98-95-3	Nitrobenzene	ND	20	6.4	ug/l	
110-86-1	Pyridine	ND	20	3.9	ug/l	

CAS No.	Surrogate Recoveries	Limits
367-12-4	2-Fluorophenol	42% 10-73%
4165-62-2	Phenol-d5	28% 10-64%
118-79-6	2,4,6-Tribromophenol	71% 31-130%
4165-60-0	Nitrobenzene-d5	63% 28-126%
321-60-8	2-Fluorobiphenyl	70% 26-114%
1718-51-0	Terphenyl-d14	93% 16-122%

7.2.13

7

Blank Spike Summary

Job Number: JD35487
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP37049-BS1	6P503035.D	1	12/10/21	KLS	12/09/21	OP37049	E6P3571

The QC reported here applies to the following samples:

Method: SW846 8270E

JD35487-1, JD35487-2, JD35487-3

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
95-48-7	2-Methylphenol	50	26.7	53	26-101
	3&4-Methylphenol	100	50.2	50	23-98
87-86-5	Pentachlorophenol	100	81.8	82	37-147
95-95-4	2,4,5-Trichlorophenol	50	39.5	79	39-125
88-06-2	2,4,6-Trichlorophenol	50	37.1	74	40-127
106-46-7	1,4-Dichlorobenzene	50	27.4	55	25-101
121-14-2	2,4-Dinitrotoluene	50	41.4	83	47-128
118-74-1	Hexachlorobenzene	50	39.3	79	46-113
87-68-3	Hexachlorobutadiene	50	27.7	55	17-111
67-72-1	Hexachloroethane	50	26.4	53	18-101
98-95-3	Nitrobenzene	50	36.1	72	36-120
110-86-1	Pyridine	50	18.7	37	10-78

CAS No.	Surrogate Recoveries	BSP	Limits
367-12-4	2-Fluorophenol	40%	10-73%
4165-62-2	Phenol-d5	28%	10-64%
118-79-6	2,4,6-Tribromophenol	93%	31-130%
4165-60-0	Nitrobenzene-d5	78%	28-126%
321-60-8	2-Fluorobiphenyl	75%	26-114%
1718-51-0	Terphenyl-d14	82%	16-122%

* = Outside of Control Limits.

7.3.1
7

Blank Spike Summary

Job Number: JD35487
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP37049-BS13	F204187.D	1	12/11/21	CS	12/09/21	OP37049	EF8949

The QC reported here applies to the following samples:

Method: SW846 8270E

JD35487-1, JD35487-2, JD35487-3

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
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CAS No.	Surrogate Recoveries	BSP	Limits
367-12-4	2-Fluorophenol	24%	10-73%
4165-62-2	Phenol-d5	17%	10-64%
118-79-6	2,4,6-Tribromophenol	61%	31-130%
4165-60-0	Nitrobenzene-d5	51%	28-126%
321-60-8	2-Fluorobiphenyl	57%	26-114%
1718-51-0	Terphenyl-d14	63%	16-122%

* = Outside of Control Limits.

7.3.2
7

Blank Spike Summary

Job Number: JD35487
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP37159-BS1	6P503070.D	1	12/16/21	CS	12/15/21	OP37159	E6P3574

The QC reported here applies to the following samples:

Method: SW846 8270E

JD35487-4

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
95-48-7	2-Methylphenol	50	30.4	61	26-101
	3&4-Methylphenol	100	57.6	58	23-98
87-86-5	Pentachlorophenol	100	88.4	88	37-147
95-95-4	2,4,5-Trichlorophenol	50	40.9	82	39-125
88-06-2	2,4,6-Trichlorophenol	50	40.7	81	40-127
106-46-7	1,4-Dichlorobenzene	50	33.4	67	25-101
121-14-2	2,4-Dinitrotoluene	50	44.3	89	47-128
118-74-1	Hexachlorobenzene	50	43.7	87	46-113
87-68-3	Hexachlorobutadiene	50	31.5	63	17-111
67-72-1	Hexachloroethane	50	32.3	65	18-101
98-95-3	Nitrobenzene	50	41.3	83	36-120
110-86-1	Pyridine	50	6.4	13	10-78

CAS No.	Surrogate Recoveries	BSP	Limits
367-12-4	2-Fluorophenol	46%	10-73%
4165-62-2	Phenol-d5	34%	10-64%
118-79-6	2,4,6-Tribromophenol	90%	31-130%
4165-60-0	Nitrobenzene-d5	82%	28-126%
321-60-8	2-Fluorobiphenyl	88%	26-114%
1718-51-0	Terphenyl-d14	85%	16-122%

* = Outside of Control Limits.

Blank Spike Summary

Job Number: JD35487
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP37159-BS1	F204310.D	1	12/16/21	CS	12/15/21	OP37159	EF8956

The QC reported here applies to the following samples:

Method: SW846 8270E

JD35487-4

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
95-48-7	2-Methylphenol	50	30.1	60	26-101
	3&4-Methylphenol	100	57.7	58	23-98
87-86-5	Pentachlorophenol	100	83.0	83	37-147
95-95-4	2,4,5-Trichlorophenol	50	39.3	79	39-125
88-06-2	2,4,6-Trichlorophenol	50	38.3	77	40-127
106-46-7	1,4-Dichlorobenzene	50	32.3	65	25-101
121-14-2	2,4-Dinitrotoluene	50	45.5	91	47-128
118-74-1	Hexachlorobenzene	50	42.3	85	46-113
87-68-3	Hexachlorobutadiene	50	31.0	62	17-111
67-72-1	Hexachloroethane	50	30.6	61	18-101
98-95-3	Nitrobenzene	50	37.1	74	36-120
110-86-1	Pyridine	50	5.8	12	10-78

CAS No.	Surrogate Recoveries	BSP	Limits
367-12-4	2-Fluorophenol	45%	10-73%
4165-62-2	Phenol-d5	33%	10-64%
118-79-6	2,4,6-Tribromophenol	85%	31-130%
4165-60-0	Nitrobenzene-d5	76%	28-126%
321-60-8	2-Fluorobiphenyl	84%	26-114%
1718-51-0	Terphenyl-d14	85%	16-122%

* = Outside of Control Limits.

Blank Spike Summary

Job Number: JD35487
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP37159-BS13	F204311.D	1	12/16/21	CS	12/15/21	OP37159	EF8956

The QC reported here applies to the following samples:

Method: SW846 8270E

JD35487-4

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
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CAS No.	Surrogate Recoveries	BSP	Limits
367-12-4	2-Fluorophenol	30%	10-73%
4165-62-2	Phenol-d5	21%	10-64%
118-79-6	2,4,6-Tribromophenol	77%	31-130%
4165-60-0	Nitrobenzene-d5	67%	28-126%
321-60-8	2-Fluorobiphenyl	73%	26-114%
1718-51-0	Terphenyl-d14	83%	16-122%

* = Outside of Control Limits.

Blank Spike Summary

Job Number: JD35487
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP37273-BS1	6P503145.D	1	12/22/21	CS	12/21/21	OP37273	E6P3578

The QC reported here applies to the following samples:

Method: SW846 8270E

JD35487-6

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
95-48-7	2-Methylphenol	50	30.5	61	26-101
	3&4-Methylphenol	100	57.2	57	23-98
87-86-5	Pentachlorophenol	100	95.9	96	37-147
95-95-4	2,4,5-Trichlorophenol	50	45.5	91	39-125
88-06-2	2,4,6-Trichlorophenol	50	44.5	89	40-127
106-46-7	1,4-Dichlorobenzene	50	34.7	69	25-101
121-14-2	2,4-Dinitrotoluene	50	48.8	98	47-128
118-74-1	Hexachlorobenzene	50	46.7	93	46-113
87-68-3	Hexachlorobutadiene	50	31.9	64	17-111
67-72-1	Hexachloroethane	50	32.9	66	18-101
98-95-3	Nitrobenzene	50	38.0	76	36-120
110-86-1	Pyridine	50	7.7	15	10-78

CAS No.	Surrogate Recoveries	BSP	Limits
367-12-4	2-Fluorophenol	39%	10-73%
4165-62-2	Phenol-d5	28%	10-64%
118-79-6	2,4,6-Tribromophenol	94%	31-130%
4165-60-0	Nitrobenzene-d5	73%	28-126%
321-60-8	2-Fluorobiphenyl	87%	26-114%
1718-51-0	Terphenyl-d14	84%	16-122%

* = Outside of Control Limits.

7.3.6
7

Blank Spike/Blank Spike Duplicate Summary

Job Number: JD35487
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP37242-BS1	6P503120.D	1	12/21/21	CS	12/20/21	OP37242	E6P3577
OP37242-BSD	6P503121.D	1	12/21/21	CS	12/20/21	OP37242	E6P3577

The QC reported here applies to the following samples:

Method: SW846 8270E

JD35487-5

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	BSD ug/l	BSD %	RPD	Limits Rec/RPD
95-48-7	2-Methylphenol	50	20.9	42	21.0	42	0	26-101/32
	3&4-Methylphenol	100	38.2	38	38.1	38	0	23-98/32
87-86-5	Pentachlorophenol	100	77.2	77	74.5	75	4	37-147/31
95-95-4	2,4,5-Trichlorophenol	50	37.0	74	34.8	70	6	39-125/28
88-06-2	2,4,6-Trichlorophenol	50	36.5	73	35.8	72	2	40-127/28
106-46-7	1,4-Dichlorobenzene	50	27.9	56	27.8	56	0	25-101/34
121-14-2	2,4-Dinitrotoluene	50	37.8	76	36.4	73	4	47-128/27
118-74-1	Hexachlorobenzene	50	38.2	76	35.9	72	6	46-113/29
87-68-3	Hexachlorobutadiene	50	27.5	55	27.0	54	2	17-111/37
67-72-1	Hexachloroethane	50	27.0	54	26.7	53	1	18-101/38
98-95-3	Nitrobenzene	50	33.8	68	33.5	67	1	36-120/29
110-86-1	Pyridine	50	16.8	34	13.1	26	25	10-78/57

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
367-12-4	2-Fluorophenol	28%	28%	10-73%
4165-62-2	Phenol-d5	19%	19%	10-64%
118-79-6	2,4,6-Tribromophenol	79%	76%	31-130%
4165-60-0	Nitrobenzene-d5	68%	68%	28-126%
321-60-8	2-Fluorobiphenyl	77%	74%	26-114%
1718-51-0	Terphenyl-d14	81%	75%	16-122%

* = Outside of Control Limits.

7.4.1
7

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JD35487
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP37049-MS	F204188.D	1	12/11/21	CS	12/09/21	OP37049	EF8949
OP37049-MSD	F204189.D	1	12/11/21	CS	12/09/21	OP37049	EF8949
JD35487-1	F204190.D	1	12/11/21	CS	12/09/21	OP37049	EF8949

The QC reported here applies to the following samples:

Method: SW846 8270E

JD35487-1, JD35487-2, JD35487-3

CAS No.	Compound	JD35487-1 ug/l	Spike Q ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
95-48-7	2-Methylphenol	ND	500	223	45	500	189	38	17	10-130/32
	3&4-Methylphenol	ND	1000	403	40	1000	343	34	16	10-128/36
87-86-5	Pentachlorophenol	ND	1000	619	62	1000	613	61	1	29-154/32
95-95-4	2,4,5-Trichlorophenol	ND	500	294	59	500	293	59	0	33-130/22
88-06-2	2,4,6-Trichlorophenol	ND	500	277	55	500	276	55	0	35-129/26
106-46-7	1,4-Dichlorobenzene	ND	500	226	45	500	216	43	5	10-155/26
121-14-2	2,4-Dinitrotoluene	ND	500	325	65	500	321	64	1	21-160/23
118-74-1	Hexachlorobenzene	ND	500	300	60	500	299	60	0	40-120/21
87-68-3	Hexachlorobutadiene	ND	500	205	41	500	201	40	2	10-129/24
67-72-1	Hexachloroethane	ND	500	214	43	500	201	40	6	10-120/26
98-95-3	Nitrobenzene	ND	500	238	48	500	233	47	2	26-138/26
110-86-1	Pyridine	ND	500	128	26	500	135	27	5	10-94/49

CAS No.	Surrogate Recoveries	MS	MSD	JD35487-1	Limits
367-12-4	2-Fluorophenol	29%	23%	20%	10-73%
4165-62-2	Phenol-d5	21%	17%	14%	10-64%
118-79-6	2,4,6-Tribromophenol	65%	67%	68%	31-130%
4165-60-0	Nitrobenzene-d5	48%	49%	51%	28-126%
321-60-8	2-Fluorobiphenyl	53%	55%	57%	26-114%
1718-51-0	Terphenyl-d14	62%	65%	51%	16-122%

* = Outside of Control Limits.

7.5.1
7

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JD35487
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP37159-MS	F204319.D	1	12/16/21	CS	12/15/21	OP37159	EF8956
OP37159-MSD	F204320.D	1	12/16/21	CS	12/15/21	OP37159	EF8956
JD35487-4	F204321.D	1	12/16/21	CS	12/15/21	OP37159	EF8956

The QC reported here applies to the following samples:

Method: SW846 8270E

JD35487-4

CAS No.	Compound	JD35487-4 ug/l	Spike Q ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
95-48-7	2-Methylphenol	ND	500	246	49	500	277	55	12	10-130/32
	3&4-Methylphenol	ND	1000	467	47	1000	538	54	14	10-128/36
87-86-5	Pentachlorophenol	ND	1000	796	80	1000	847	85	6	29-154/32
95-95-4	2,4,5-Trichlorophenol	ND	500	369	74	500	427	85	15	33-130/22
88-06-2	2,4,6-Trichlorophenol	ND	500	358	72	500	412	82	14	35-129/26
106-46-7	1,4-Dichlorobenzene	ND	500	316	63	500	323	65	2	10-155/26
121-14-2	2,4-Dinitrotoluene	ND	500	441	88	500	457	91	4	21-160/23
118-74-1	Hexachlorobenzene	ND	500	408	82	500	406	81	0	40-120/21
87-68-3	Hexachlorobutadiene	ND	500	288	58	500	281	56	2	10-129/24
67-72-1	Hexachloroethane	ND	500	292	58	500	295	59	1	10-120/26
98-95-3	Nitrobenzene	ND	500	348	70	500	354	71	2	26-138/26
110-86-1	Pyridine	ND	500	113	23	500	40.4	8* a	95* a	10-94/49

CAS No.	Surrogate Recoveries	MS	MSD	JD35487-4	Limits
367-12-4	2-Fluorophenol	36%	41%	36%	10-73%
4165-62-2	Phenol-d5	26%	29%	24%	10-64%
118-79-6	2,4,6-Tribromophenol	81%	89%	83%	31-130%
4165-60-0	Nitrobenzene-d5	71%	71%	68%	28-126%
321-60-8	2-Fluorobiphenyl	80%	85%	76%	26-114%
1718-51-0	Terphenyl-d14	75%	76%	74%	16-122%

(a) Outside of in house control limits.

* = Outside of Control Limits.

7.5.2
7

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JD35487
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP37242-MS	6P503123.D	1	12/21/21	CS	12/20/21	OP37242	E6P3577
OP37242-MSD	6P503124.D	1	12/21/21	CS	12/20/21	OP37242	E6P3577
JD35533-9R	6P503125.D	1	12/21/21	CS	12/20/21	OP37242	E6P3577

The QC reported here applies to the following samples:

Method: SW846 8270E

JD35487-5

CAS No.	Compound	JD35533-9R ug/l	Spike Q	ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
95-48-7	2-Methylphenol	ND	500	227	45	500	216	43	5	10-130/32	
	3&4-Methylphenol	ND	1000	406	41	1000	388	39	5	10-128/36	
87-86-5	Pentachlorophenol	ND	1000	853	85	1000	839	84	2	29-154/32	
95-95-4	2,4,5-Trichlorophenol	ND	500	393	79	500	389	78	1	33-130/22	
88-06-2	2,4,6-Trichlorophenol	ND	500	404	81	500	401	80	1	35-129/26	
106-46-7	1,4-Dichlorobenzene	ND	500	290	58	500	286	57	1	10-155/26	
121-14-2	2,4-Dinitrotoluene	ND	500	390	78	500	400	80	3	21-160/23	
118-74-1	Hexachlorobenzene	ND	500	401	80	500	402	80	0	40-120/21	
87-68-3	Hexachlorobutadiene	ND	500	294	59	500	282	56	4	10-129/24	
67-72-1	Hexachloroethane	ND	500	275	55	500	273	55	1	10-120/26	
98-95-3	Nitrobenzene	ND	500	359	72	500	350	70	3	26-138/26	
110-86-1	Pyridine	ND	500	138	28	500	126	25	9	10-94/49	

CAS No.	Surrogate Recoveries	MS	MSD	JD35533-9R	Limits
367-12-4	2-Fluorophenol	30%	29%	37%	10-73%
4165-62-2	Phenol-d5	20%	20%	23%	10-64%
118-79-6	2,4,6-Tribromophenol	87%	88%	80%	31-130%
4165-60-0	Nitrobenzene-d5	72%	70%	68%	28-126%
321-60-8	2-Fluorobiphenyl	80%	78%	73%	26-114%
1718-51-0	Terphenyl-d14	76%	75%	78%	16-122%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JD35487
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP37273-MS	6P503146.D	1	12/22/21	CS	12/21/21	OP37273	E6P3578
OP37273-MSD	6P503147.D	1	12/22/21	CS	12/21/21	OP37273	E6P3578
JD36724-1A	6P503148.D	1	12/22/21	CS	12/21/21	OP37273	E6P3578

The QC reported here applies to the following samples:

Method: SW846 8270E

JD35487-6

CAS No.	Compound	JD36724-1A		MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
		ug/l	Q							
95-48-7	2-Methylphenol	ND	500	306	61	500	328	66	7	10-130/32
	3&4-Methylphenol	ND	1000	591	59	1000	624	62	5	10-128/36
87-86-5	Pentachlorophenol	ND	1000	923	92	1000	901	90	2	29-154/32
95-95-4	2,4,5-Trichlorophenol	ND	500	452	90	500	411	82	10	33-130/22
88-06-2	2,4,6-Trichlorophenol	ND	500	431	86	500	408	82	5	35-129/26
106-46-7	1,4-Dichlorobenzene	ND	500	290	58	500	306	61	5	10-155/26
121-14-2	2,4-Dinitrotoluene	ND	500	488	98	500	473	95	3	21-160/23
118-74-1	Hexachlorobenzene	ND	500	441	88	500	425	85	4	40-120/21
87-68-3	Hexachlorobutadiene	ND	500	268	54	500	278	56	4	10-129/24
67-72-1	Hexachloroethane	ND	500	278	56	500	294	59	6	10-120/26
98-95-3	Nitrobenzene	ND	500	332	66	500	334	67	1	26-138/26
110-86-1	Pyridine	ND	500	15.6	3* a	500	110	22	150* a	10-94/49

CAS No.	Surrogate Recoveries	MS	MSD	JD36724-1A	Limits
367-12-4	2-Fluorophenol	42%	46%	23%	10-73%
4165-62-2	Phenol-d5	30%	34%	15%	10-64%
118-79-6	2,4,6-Tribromophenol	94%	92%	53%	31-130%
4165-60-0	Nitrobenzene-d5	64%	65%	64%	28-126%
321-60-8	2-Fluorobiphenyl	76%	73%	69%	26-114%
1718-51-0	Terphenyl-d14	94%	93%	40%	16-122%

(a) Outside of in house control limits.

* = Outside of Control Limits.

7.5.4

Leachate Spike Summary

Job Number: JD35487
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP37049-LS8	F204188.D	1	12/11/21	CS	12/09/21	OP37049	EF8949
JD35487-1	F204190.D	1	12/11/21	CS	12/09/21	OP37049	EF8949

The QC reported here applies to the following samples:

Method: SW846 8270E

JD35487-1, JD35487-2, JD35487-3

CAS No.	Compound	JD35487-1 ug/l	Spike Q	ug/l	LS ug/l	LS %	Limits
95-48-7	2-Methylphenol	ND		500	223	45	10-130
	3&4-Methylphenol	ND		1000	403	40	10-128
87-86-5	Pentachlorophenol	ND		1000	619	62	29-154
95-95-4	2,4,5-Trichlorophenol	ND		500	294	59	33-130
88-06-2	2,4,6-Trichlorophenol	ND		500	277	55	35-129
106-46-7	1,4-Dichlorobenzene	ND		500	226	45	10-155
121-14-2	2,4-Dinitrotoluene	ND		500	325	65	21-160
118-74-1	Hexachlorobenzene	ND		500	300	60	40-120
87-68-3	Hexachlorobutadiene	ND		500	205	41	10-129
67-72-1	Hexachloroethane	ND		500	214	43	10-120
98-95-3	Nitrobenzene	ND		500	238	48	26-138
110-86-1	Pyridine	ND		500	128	26	10-94

CAS No.	Surrogate Recoveries	LS	JD35487-1	Limits
367-12-4	2-Fluorophenol	29%	20%	10-73%
4165-62-2	Phenol-d5	21%	14%	10-64%
118-79-6	2,4,6-Tribromophenol	65%	68%	31-130%
4165-60-0	Nitrobenzene-d5	48%	51%	28-126%
321-60-8	2-Fluorobiphenyl	53%	57%	26-114%
1718-51-0	Terphenyl-d14	62%	51%	16-122%

* = Outside of Control Limits.

Leachate Spike Summary

Job Number: JD35487
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP37159-LS13	F204319.D	1	12/16/21	CS	12/15/21	OP37159	EF8956
JD35487-4	F204321.D	1	12/16/21	CS	12/15/21	OP37159	EF8956

The QC reported here applies to the following samples:

Method: SW846 8270E

JD35487-4

CAS No.	Compound	JD35487-4 ug/l	Spike Q	LS ug/l	LS %	Limits
95-48-7	2-Methylphenol	ND	500	246	49	10-130
	3&4-Methylphenol	ND	1000	467	47	10-128
87-86-5	Pentachlorophenol	ND	1000	796	80	29-154
95-95-4	2,4,5-Trichlorophenol	ND	500	369	74	33-130
88-06-2	2,4,6-Trichlorophenol	ND	500	358	72	35-129
106-46-7	1,4-Dichlorobenzene	ND	500	316	63	10-155
121-14-2	2,4-Dinitrotoluene	ND	500	441	88	21-160
118-74-1	Hexachlorobenzene	ND	500	408	82	40-120
87-68-3	Hexachlorobutadiene	ND	500	288	58	10-129
67-72-1	Hexachloroethane	ND	500	292	58	10-120
98-95-3	Nitrobenzene	ND	500	348	70	26-138
110-86-1	Pyridine	ND	500	113	23	10-94

CAS No.	Surrogate Recoveries	LS	JD35487-4	Limits
367-12-4	2-Fluorophenol	36%	36%	10-73%
4165-62-2	Phenol-d5	26%	24%	10-64%
118-79-6	2,4,6-Tribromophenol	81%	83%	31-130%
4165-60-0	Nitrobenzene-d5	71%	68%	28-126%
321-60-8	2-Fluorobiphenyl	80%	76%	26-114%
1718-51-0	Terphenyl-d14	75%	74%	16-122%

* = Outside of Control Limits.

Leachate Spike Summary

Job Number: JD35487
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP37242-LS19	6P503123.D	1	12/21/21	CS	12/20/21	OP37242	E6P3577
JD35533-9R	6P503125.D	1	12/21/21	CS	12/20/21	OP37242	E6P3577

The QC reported here applies to the following samples:

Method: SW846 8270E

JD35487-5

CAS No.	Compound	JD35533-9R Spike ug/l	Q	LS ug/l	LS %	Limits
95-48-7	2-Methylphenol	ND		500	227	45 10-130
	3&4-Methylphenol	ND		1000	406	41 10-128
87-86-5	Pentachlorophenol	ND		1000	853	85 29-154
95-95-4	2,4,5-Trichlorophenol	ND		500	393	79 33-130
88-06-2	2,4,6-Trichlorophenol	ND		500	404	81 35-129
106-46-7	1,4-Dichlorobenzene	ND		500	290	58 10-155
121-14-2	2,4-Dinitrotoluene	ND		500	390	78 21-160
118-74-1	Hexachlorobenzene	ND		500	401	80 40-120
87-68-3	Hexachlorobutadiene	ND		500	294	59 10-129
67-72-1	Hexachloroethane	ND		500	275	55 10-120
98-95-3	Nitrobenzene	ND		500	359	72 26-138
110-86-1	Pyridine	ND		500	138	28 10-94

CAS No.	Surrogate Recoveries	LS	JD35533-9R	Limits
367-12-4	2-Fluorophenol	30%	37%	10-73%
4165-62-2	Phenol-d5	20%	23%	10-64%
118-79-6	2,4,6-Tribromophenol	87%	80%	31-130%
4165-60-0	Nitrobenzene-d5	72%	68%	28-126%
321-60-8	2-Fluorobiphenyl	80%	73%	26-114%
1718-51-0	Terphenyl-d14	76%	78%	16-122%

* = Outside of Control Limits.

Leachate Spike Summary

Job Number: JD35487
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP37273-LS25	6P503146.D	1	12/22/21	CS	12/21/21	OP37273	E6P3578
JD36724-1A	6P503148.D	1	12/22/21	CS	12/21/21	OP37273	E6P3578

The QC reported here applies to the following samples:

Method: SW846 8270E

JD35487-6

CAS No.	Compound	JD36724-1A ug/l	Spike Q	ug/l	LS ug/l	LS %	Limits
95-48-7	2-Methylphenol	ND		500	306	61	10-130
	3&4-Methylphenol	ND		1000	591	59	10-128
87-86-5	Pentachlorophenol	ND		1000	923	92	29-154
95-95-4	2,4,5-Trichlorophenol	ND		500	452	90	33-130
88-06-2	2,4,6-Trichlorophenol	ND		500	431	86	35-129
106-46-7	1,4-Dichlorobenzene	ND		500	290	58	10-155
121-14-2	2,4-Dinitrotoluene	ND		500	488	98	21-160
118-74-1	Hexachlorobenzene	ND		500	441	88	40-120
87-68-3	Hexachlorobutadiene	ND		500	268	54	10-129
67-72-1	Hexachloroethane	ND		500	278	56	10-120
98-95-3	Nitrobenzene	ND		500	332	66	26-138
110-86-1	Pyridine	ND		500	15.6	3* a	10-94

CAS No.	Surrogate Recoveries	LS	JD36724-1A	Limits
367-12-4	2-Fluorophenol	42%	23%	10-73%
4165-62-2	Phenol-d5	30%	15%	10-64%
118-79-6	2,4,6-Tribromophenol	94%	53%	31-130%
4165-60-0	Nitrobenzene-d5	64%	64%	28-126%
321-60-8	2-Fluorobiphenyl	76%	69%	26-114%
1718-51-0	Terphenyl-d14	94%	40%	16-122%

(a) Outside of in house control limits.

* = Outside of Control Limits.

Instrument Performance Check (DFTPP)

Job Number: JD35487
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample: E6P3562-DFTPP	Injection Date: 11/29/21
Lab File ID: 6P502859.D	Injection Time: 16:21
Instrument ID: GCMS6P	

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
51	30.0 - 60.0% of mass 198	230626	33.0	Pass
68	Less than 2.0% of mass 69	3468	0.50 (1.07) ^a	Pass
69	Mass 69 relative abundance	322958	46.3	Pass
70	Less than 2.0% of mass 69	1951	0.28 (0.60) ^a	Pass
127	40.0 - 60.0% of mass 198	408277	58.5	Pass
197	Less than 1.0% of mass 198	3458	0.50	Pass
198	Base peak, 100% relative abundance	697962	100.0	Pass
199	5.0 - 9.0% of mass 198	47437	6.80	Pass
275	10.0 - 30.0% of mass 198	144461	20.7	Pass
365	1.0 - 100.0% of mass 198	20847	2.99	Pass
441	Present, but less than mass 443	61740	8.85 (74.1) ^b	Pass
442	40.0 - 100.0% of mass 198	451565	64.7	Pass
443	17.0 - 23.0% of mass 442	83334	11.9 (18.5) ^c	Pass

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

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

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
E6P3562-IC3562	6P502860.D	11/29/21	16:39	00:18	Initial cal 100
E6P3562-IC3562	6P502861.D	11/29/21	17:00	00:39	Initial cal 2
E6P3562-IC3562	6P502862.D	11/29/21	17:22	01:01	Initial cal 80
E6P3562-IC3562	6P502863.D	11/29/21	17:44	01:23	Initial cal 1
E6P3562-ICC3562	6P502864.D	11/29/21	18:06	01:45	Initial cal 50
E6P3562-IC3562	6P502865.D	11/29/21	18:28	02:07	Initial cal 5
E6P3562-IC3562	6P502866.D	11/29/21	18:50	02:29	Initial cal 25
E6P3562-IC3562	6P502867.D	11/29/21	19:12	02:51	Initial cal 10
E6P3562-ICV3562	6P502868.D	11/29/21	19:34	03:13	Initial cal verification 50
E6P3562-ICV3562	6P502869.D	11/29/21	19:56	03:35	Initial cal verification 50
E6P3562-ICV3562	6P502870.D	11/29/21	20:17	03:56	Initial cal verification 50
E6P3562-ICV3562	6P502871.D	11/29/21	20:39	04:18	Initial cal verification 50

7.7.1
7

Instrument Performance Check (DFTPP)

Job Number: JD35487
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample: E6P3571-DFTPP	Injection Date: 12/10/21
Lab File ID: 6P503030.D	Injection Time: 14:24
Instrument ID: GCMS6P	

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
51	30.0 - 60.0% of mass 198	199711	32.2	Pass
68	Less than 2.0% of mass 69	4247	0.68 (1.51) ^a	Pass
69	Mass 69 relative abundance	280843	45.3	Pass
70	Less than 2.0% of mass 69	2025	0.33 (0.72) ^a	Pass
127	40.0 - 60.0% of mass 198	342634	55.2	Pass
197	Less than 1.0% of mass 198	4312	0.70	Pass
198	Base peak, 100% relative abundance	620330	100.0	Pass
199	5.0 - 9.0% of mass 198	41000	6.61	Pass
275	10.0 - 30.0% of mass 198	136946	22.1	Pass
365	1.0 - 100.0% of mass 198	21426	3.45	Pass
441	Present, but less than mass 443	62934	10.1 (76.3) ^b	Pass
442	40.0 - 100.0% of mass 198	453245	73.1	Pass
443	17.0 - 23.0% of mass 442	82451	13.3 (18.2) ^c	Pass

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

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

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
E6P3571-CC3562	6P503031.D	12/10/21	14:40	00:16	Continuing cal 50
OP37049-MB1	6P503032.D	12/10/21	15:15	00:51	Method Blank
OP37049-LB5	6P503033.D	12/10/21	15:37	01:13	Leachate Blank
OP37049-LB8	6P503034.D	12/10/21	16:00	01:36	Leachate Blank
OP37049-BS1	6P503035.D	12/10/21	16:22	01:58	Blank Spike
ZZZZZZ	6P503036.D	12/10/21	16:45	02:21	(unrelated sample)
JD35487-2	6P503037.D	12/10/21	17:07	02:43	11215131-120121-WC-JC-NE-G4(4-6)
JD35487-3	6P503038.D	12/10/21	17:30	03:06	11215131-120221-WC-JC-SW-B4(2-4)
ZZZZZZ	6P503039.D	12/10/21	17:52	03:28	(unrelated sample)
ZZZZZZ	6P503040.D	12/10/21	18:15	03:51	(unrelated sample)
ZZZZZZ	6P503041.D	12/10/21	18:37	04:13	(unrelated sample)
ZZZZZZ	6P503042.D	12/10/21	19:00	04:36	(unrelated sample)
ZZZZZZ	6P503043.D	12/10/21	19:22	04:58	(unrelated sample)
ZZZZZZ	6P503044.D	12/10/21	19:44	05:20	(unrelated sample)
ZZZZZZ	6P503045.D	12/10/21	20:07	05:43	(unrelated sample)
ZZZZZZ	6P503046.D	12/10/21	20:29	06:05	(unrelated sample)
ZZZZZZ	6P503047.D	12/10/21	20:52	06:28	(unrelated sample)

7.7.2
7

Instrument Performance Check (DFTPP)

Job Number: JD35487
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample: E6P3572-DFTPP	Injection Date: 12/13/21
Lab File ID: 6P503049.D	Injection Time: 11:10
Instrument ID: GCMS6P	

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
51	30.0 - 60.0% of mass 198	206354	30.1	Pass
68	Less than 2.0% of mass 69	4206	0.61 (1.40) ^a	Pass
69	Mass 69 relative abundance	299373	43.7	Pass
70	Less than 2.0% of mass 69	1608	0.23 (0.54) ^a	Pass
127	40.0 - 60.0% of mass 198	374549	54.6	Pass
197	Less than 1.0% of mass 198	4936	0.72	Pass
198	Base peak, 100% relative abundance	685610	100.0	Pass
199	5.0 - 9.0% of mass 198	46490	6.78	Pass
275	10.0 - 30.0% of mass 198	160570	23.4	Pass
365	1.0 - 100.0% of mass 198	25671	3.74	Pass
441	Present, but less than mass 443	79661	11.6 (77.1) ^b	Pass
442	40.0 - 100.0% of mass 198	549504	80.1	Pass
443	17.0 - 23.0% of mass 442	103368	15.1 (18.8) ^c	Pass

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

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

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
E6P3572-IC3572	6P503050.D	12/13/21	11:42	00:32	Initial cal 100
E6P3572-IC3572	6P503051.D	12/13/21	12:05	00:55	Initial cal 1
E6P3572-IC3572	6P503052.D	12/13/21	12:27	01:17	Initial cal 80
E6P3572-IC3572	6P503053.D	12/13/21	12:49	01:39	Initial cal 2
E6P3572-ICC3572	6P503054.D	12/13/21	13:12	02:02	Initial cal 50
E6P3572-IC3572	6P503055.D	12/13/21	13:34	02:24	Initial cal 5
E6P3572-IC3572	6P503056.D	12/13/21	13:56	02:46	Initial cal 25
E6P3572-IC3572	6P503057.D	12/13/21	14:19	03:09	Initial cal 10
E6P3572-ICV3572	6P503058.D	12/13/21	15:29	04:19	Initial cal verification 50
E6P3572-ICV3572	6P503059.D	12/13/21	15:51	04:41	Initial cal verification 50
E6P3572-ICV3572	6P503060.D	12/13/21	16:14	05:04	Initial cal verification 50
E6P3572-ICV3572	6P503062.D	12/13/21	17:43	06:33	Initial cal verification 50

7.7.3
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Instrument Performance Check (DFTPP)

Job Number: JD35487
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample: E6P3574-DFTPP	Injection Date: 12/16/21
Lab File ID: 6P503065.D	Injection Time: 03:35
Instrument ID: GCMS6P	

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
51	30.0 - 60.0% of mass 198	216799	31.4	Pass
68	Less than 2.0% of mass 69	4476	0.65 (1.45) ^a	Pass
69	Mass 69 relative abundance	309333	44.8	Pass
70	Less than 2.0% of mass 69	1541	0.22 (0.50) ^a	Pass
127	40.0 - 60.0% of mass 198	388416	56.3	Pass
197	Less than 1.0% of mass 198	4783	0.69	Pass
198	Base peak, 100% relative abundance	689856	100.0	Pass
199	5.0 - 9.0% of mass 198	46277	6.71	Pass
275	10.0 - 30.0% of mass 198	154050	22.3	Pass
365	1.0 - 100.0% of mass 198	23336	3.38	Pass
441	Present, but less than mass 443	73167	10.6 (75.7) ^b	Pass
442	40.0 - 100.0% of mass 198	504144	73.1	Pass
443	17.0 - 23.0% of mass 442	96657	14.0 (19.2) ^c	Pass

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

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

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
E6P3574-CC3572	6P503066.D	12/16/21	03:48	00:13	Continuing cal 50
OP37159-MB1	6P503067.D	12/16/21	04:32	00:57	Method Blank
OP37159-LB13	6P503068A.D	12/16/21	05:26	01:51	Leachate Blank
OP37159-LB16	6P503069.D	12/16/21	05:49	02:14	Leachate Blank
OP37159-BS1	6P503070.D	12/16/21	06:11	02:36	Blank Spike
ZZZZZZ	6P503071.D	12/16/21	06:34	02:59	(unrelated sample)
ZZZZZZ	6P503072.D	12/16/21	06:57	03:22	(unrelated sample)
ZZZZZZ	6P503073.D	12/16/21	07:20	03:45	(unrelated sample)
ZZZZZZ	6P503074.D	12/16/21	07:43	04:08	(unrelated sample)
ZZZZZZ	6P503075.D	12/16/21	08:06	04:31	(unrelated sample)
ZZZZZZ	6P503076.D	12/16/21	08:28	04:53	(unrelated sample)
ZZZZZZ	6P503077.D	12/16/21	08:51	05:16	(unrelated sample)
ZZZZZZ	6P503078.D	12/16/21	09:14	05:39	(unrelated sample)
ZZZZZZ	6P503080.D	12/16/21	09:59	06:24	(unrelated sample)

7.7.4
7

Instrument Performance Check (DFTPP)

Job Number: JD35487
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample: E6P3577-DFTPP	Injection Date: 12/21/21
Lab File ID: 6P503114.D	Injection Time: 06:51
Instrument ID: GCMS6P	

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
51	30.0 - 60.0% of mass 198	258800	31.7	Pass
68	Less than 2.0% of mass 69	4373	0.54 (1.18) ^a	Pass
69	Mass 69 relative abundance	369757	45.3	Pass
70	Less than 2.0% of mass 69	2400	0.29 (0.65) ^a	Pass
127	40.0 - 60.0% of mass 198	461045	56.5	Pass
197	Less than 1.0% of mass 198	5726	0.70	Pass
198	Base peak, 100% relative abundance	816576	100.0	Pass
199	5.0 - 9.0% of mass 198	52995	6.49	Pass
275	10.0 - 30.0% of mass 198	185251	22.7	Pass
365	1.0 - 100.0% of mass 198	29520	3.62	Pass
441	Present, but less than mass 443	86834	10.6 (75.1) ^b	Pass
442	40.0 - 100.0% of mass 198	606840	74.3	Pass
443	17.0 - 23.0% of mass 442	115688	14.2 (19.1) ^c	Pass

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

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

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
E6P3577-CC3572	6P503115.D	12/21/21	07:02	00:11	Continuing cal 50
OP37241-MB1	6P503116.D	12/21/21	07:38	00:47	Method Blank
OP37242-MB1	6P503116.D	12/21/21	07:38	00:47	Method Blank
OP37241-LB18	6P503117.D	12/21/21	08:00	01:09	Leachate Blank
OP37242-LB19	6P503118.D	12/21/21	08:22	01:31	Leachate Blank
OP37242-LB24	6P503119.D	12/21/21	08:44	01:53	Leachate Blank
OP37241-BS1	6P503120.D	12/21/21	09:06	02:15	Blank Spike
OP37242-BS1	6P503120.D	12/21/21	09:06	02:15	Blank Spike
OP37242-BSD	6P503121.D	12/21/21	09:28	02:37	Blank Spike Duplicate
ZZZZZZ	6P503122.D	12/21/21	09:50	02:59	(unrelated sample)
OP37242-LS19	6P503123.D	12/21/21	10:12	03:21	Leachate Spike
OP37242-MS	6P503123.D	12/21/21	10:12	03:21	Matrix Spike
OP37242-MSD	6P503124.D	12/21/21	10:35	03:44	Matrix Spike Duplicate
JD35533-9R	6P503125.D	12/21/21	10:57	04:06	(used for QC only; not part of job JD35487)
ZZZZZZ	6P503126.D	12/21/21	11:19	04:28	(unrelated sample)
OP37241-MS	6P503127.D	12/21/21	11:41	04:50	Matrix Spike
OP37241-LS18	6P503127.D	12/21/21	11:41	04:50	Leachate Spike
OP37241-MSD	6P503128.D	12/21/21	12:04	05:13	Matrix Spike Duplicate
JD36629-1A	6P503129.D	12/21/21	12:26	05:35	(used for QC only; not part of job JD35487)

7.7.5
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Instrument Performance Check (DFTPP)

Job Number: JD35487
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample:	E6P3577-DFTPP	Injection Date:	12/21/21
Lab File ID:	6P503114.D	Injection Time:	06:51
Instrument ID:	GCMS6P		

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
ZZZZZZ	6P503130.D	12/21/21	12:48	05:57	(unrelated sample)
ZZZZZZ	6P503131.D	12/21/21	13:59	07:08	(unrelated sample)
ZZZZZZ	6P503132.D	12/21/21	14:21	07:30	(unrelated sample)
ZZZZZZ	6P503133.D	12/21/21	14:44	07:53	(unrelated sample)
ZZZZZZ	6P503134.D	12/21/21	15:06	08:15	(unrelated sample)
JD35487-5	6P503135.D	12/21/21	15:28	08:37	11215131-121321-WC-SS-NC-Y2(6-8)
ZZZZZZ	6P503136.D	12/21/21	15:51	09:00	(unrelated sample)
ZZZZZZ	6P503137.D	12/21/21	16:13	09:22	(unrelated sample)
ZZZZZZ	6P503138.D	12/21/21	16:35	09:44	(unrelated sample)

7.7.5
7

Instrument Performance Check (DFTPP)

Job Number: JD35487
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample: E6P3578-DFTPP	Injection Date: 12/22/21
Lab File ID: 6P503139.D	Injection Time: 03:06
Instrument ID: GCMS6P	

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
51	30.0 - 60.0% of mass 198	242793	30.7	Pass
68	Less than 2.0% of mass 69	5529	0.70 (1.59) ^a	Pass
69	Mass 69 relative abundance	348385	44.1	Pass
70	Less than 2.0% of mass 69	2361	0.30 (0.68) ^a	Pass
127	40.0 - 60.0% of mass 198	444544	56.3	Pass
197	Less than 1.0% of mass 198	5510	0.70	Pass
198	Base peak, 100% relative abundance	789717	100.0	Pass
199	5.0 - 9.0% of mass 198	51157	6.48	Pass
275	10.0 - 30.0% of mass 198	182413	23.1	Pass
365	1.0 - 100.0% of mass 198	28615	3.62	Pass
441	Present, but less than mass 443	92416	11.7 (77.7) ^b	Pass
442	40.0 - 100.0% of mass 198	636616	80.6	Pass
443	17.0 - 23.0% of mass 442	118891	15.1 (18.7) ^c	Pass

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

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

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
E6P3578-CC3572	6P503140.D	12/22/21	03:18	00:12	Continuing cal 25
OP37273-MB1	6P503141.D	12/22/21	03:57	00:51	Method Blank
OP37273-LB16	6P503142.D	12/22/21	04:19	01:13	Leachate Blank
OP37273-LB25	6P503143.D	12/22/21	04:41	01:35	Leachate Blank
OP37273-LB27	6P503144.D	12/22/21	05:03	01:57	Leachate Blank
OP37273-BS1	6P503145.D	12/22/21	05:26	02:20	Blank Spike
OP37273-MS	6P503146.D	12/22/21	05:48	02:42	Matrix Spike
OP37273-LS25	6P503146.D	12/22/21	05:48	02:42	Leachate Spike
OP37273-MSD	6P503147.D	12/22/21	06:10	03:04	Matrix Spike Duplicate
JD36724-1A	6P503148.D	12/22/21	06:32	03:26	(used for QC only; not part of job JD35487)
JD35487-6	6P503149.D	12/22/21	06:55	03:49	11215131-121321-WC-SS-NC-E2(8-10)
ZZZZZZ	6P503150.D	12/22/21	07:17	04:11	(unrelated sample)
ZZZZZZ	6P503151.D	12/22/21	07:39	04:33	(unrelated sample)

7.7.6
7

Instrument Performance Check (DFTPP)

Job Number: JD35487
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample: EF8913-DFTPP	Injection Date: 11/10/21
Lab File ID: F203410.D	Injection Time: 03:18
Instrument ID: GCMSF	

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
51	30.0 - 60.0% of mass 198	60680	39.9	Pass
68	Less than 2.0% of mass 69	0	0.00 (0.00) ^a	Pass
69	Mass 69 relative abundance	74819	49.2	Pass
70	Less than 2.0% of mass 69	267	0.18 (0.36) ^a	Pass
127	40.0 - 60.0% of mass 198	70330	46.3	Pass
197	Less than 1.0% of mass 198	0	0.00	Pass
198	Base peak, 100% relative abundance	151930	100.0	Pass
199	5.0 - 9.0% of mass 198	10548	6.94	Pass
275	10.0 - 30.0% of mass 198	43138	28.4	Pass
365	1.0 - 100.0% of mass 198	4638	3.05	Pass
441	Present, but less than mass 443	15889	10.5 (82.3) ^b	Pass
442	40.0 - 100.0% of mass 198	100954	66.4	Pass
443	17.0 - 23.0% of mass 442	19303	12.7 (19.1) ^c	Pass

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

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

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
EF8913-IC8913	F203411.D	11/10/21	03:41	00:23	Initial cal 1
EF8913-IC8913	F203412.D	11/10/21	04:09	00:51	Initial cal 2
EF8913-IC8913	F203413.D	11/10/21	04:37	01:19	Initial cal 5
EF8913-IC8913	F203414.D	11/10/21	05:04	01:46	Initial cal 10
EF8913-IC8913	F203415.D	11/10/21	05:32	02:14	Initial cal 25
EF8913-ICC8913	F203416.D	11/10/21	06:00	02:42	Initial cal 50
EF8913-IC8913	F203417.D	11/10/21	06:27	03:09	Initial cal 80
EF8913-IC8913	F203418.D	11/10/21	06:55	03:37	Initial cal 100
EF8913-ICV8913	F203419.D	11/10/21	07:22	04:04	Initial cal verification 50
EF8913-ICV8913	F203420.D	11/10/21	07:50	04:32	Initial cal verification 50
EF8913-ICV8913	F203421.D	11/10/21	08:17	04:59	Initial cal verification 50
EF8913-ICV8913	F203422.D	11/10/21	08:44	05:26	Initial cal verification 50

7.7.7
7

Instrument Performance Check (DFTPP)

Job Number: JD35487
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample: EF8914-DFTPP	Injection Date: 11/10/21
Lab File ID: F203423.D	Injection Time: 09:08
Instrument ID: GCMSF	

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
51	30.0 - 60.0% of mass 198	63540	40.8	Pass
68	Less than 2.0% of mass 69	0	0.00 (0.00) ^a	Pass
69	Mass 69 relative abundance	78744	50.6	Pass
70	Less than 2.0% of mass 69	687	0.44 (0.87) ^a	Pass
127	40.0 - 60.0% of mass 198	73872	47.5	Pass
197	Less than 1.0% of mass 198	0	0.00	Pass
198	Base peak, 100% relative abundance	155549	100.0	Pass
199	5.0 - 9.0% of mass 198	10181	6.55	Pass
275	10.0 - 30.0% of mass 198	44115	28.4	Pass
365	1.0 - 100.0% of mass 198	5329	3.43	Pass
441	Present, but less than mass 443	14302	9.19 (77.3) ^b	Pass
442	40.0 - 100.0% of mass 198	92789	59.7	Pass
443	17.0 - 23.0% of mass 442	18500	11.9 (19.9) ^c	Pass

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

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

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
EF8914-IC8914	F203424.D	11/10/21	09:20	00:12	Initial cal 80
EF8914-ICC8914	F203425.D	11/10/21	09:48	00:40	Initial cal 50
EF8914-IC8914	F203426.D	11/10/21	10:15	01:07	Initial cal 25
EF8914-IC8914	F203427.D	11/10/21	10:43	01:35	Initial cal 10
EF8914-IC8914	F203428.D	11/10/21	11:10	02:02	Initial cal 5
EF8914-IC8914	F203429.D	11/10/21	11:38	02:30	Initial cal 2
EF8914-IC8914	F203430.D	11/10/21	12:05	02:57	Initial cal 1
EF8914-IC8914	F203433.D	11/10/21	14:29	05:21	Initial cal 100
EF8914-ICV8914	F203434.D	11/10/21	14:57	05:49	Initial cal verification 50

7.7.8
7

Instrument Performance Check (DFTPP)

Job Number: JD35487
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample: EF8915-DFTPP	Injection Date: 11/10/21
Lab File ID: F203435.D	Injection Time: 22:06
Instrument ID: GCMSF	

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
51	30.0 - 60.0% of mass 198	64133	37.4	Pass
68	Less than 2.0% of mass 69	0	0.00 (0.00) ^a	Pass
69	Mass 69 relative abundance	80909	47.1	Pass
70	Less than 2.0% of mass 69	264	0.15 (0.33) ^a	Pass
127	40.0 - 60.0% of mass 198	79522	46.3	Pass
197	Less than 1.0% of mass 198	0	0.00	Pass
198	Base peak, 100% relative abundance	171602	100.0	Pass
199	5.0 - 9.0% of mass 198	11769	6.86	Pass
275	10.0 - 30.0% of mass 198	47634	27.8	Pass
365	1.0 - 100.0% of mass 198	5729	3.34	Pass
441	Present, but less than mass 443	16520	9.63 (77.5) ^b	Pass
442	40.0 - 100.0% of mass 198	113189	66.0	Pass
443	17.0 - 23.0% of mass 442	21307	12.4 (18.8) ^c	Pass

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

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

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
EF8915-IC8915	F203436.D	11/10/21	22:29	00:23	Initial cal 100
EF8915-IC8915	F203437.D	11/10/21	22:57	00:51	Initial cal 80
EF8915-ICC8915	F203438.D	11/10/21	23:24	01:18	Initial cal 50
EF8915-IC8915	F203439.D	11/10/21	23:51	01:45	Initial cal 25
EF8915-IC8915	F203440.D	11/11/21	00:18	02:12	Initial cal 10
EF8915-IC8915	F203441.D	11/11/21	00:46	02:40	Initial cal 5
EF8915-IC8915	F203442.D	11/11/21	01:13	03:07	Initial cal 2
EF8915-IC8915	F203443.D	11/11/21	01:40	03:34	Initial cal 1
EF8915-ICV8915	F203444.D	11/11/21	03:10	05:04	Initial cal verification 50
EF8915-ICV8915	F203445.D	11/11/21	04:04	05:58	Initial cal verification 50
EF8915-ICV8915	F203446.D	11/11/21	04:31	06:25	Initial cal verification 50
EF8915-ICV8915	F203447.D	11/11/21	04:58	06:52	Initial cal verification 50
EF8915-ICV8915	F203448.D	11/11/21	05:25	07:19	Initial cal verification 50

7.7.9
7

Instrument Performance Check (DFTPP)

Job Number: JD35487
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample: EF8949-DFTPP	Injection Date: 12/10/21
Lab File ID: F204174.D	Injection Time: 22:42
Instrument ID: GCMSF	

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
51	30.0 - 60.0% of mass 198	33837	32.2	Pass
68	Less than 2.0% of mass 69	0	0.00 (0.00) ^a	Pass
69	Mass 69 relative abundance	44472	42.3	Pass
70	Less than 2.0% of mass 69	206	0.20 (0.46) ^a	Pass
127	40.0 - 60.0% of mass 198	48096	45.7	Pass
197	Less than 1.0% of mass 198	0	0.00	Pass
198	Base peak, 100% relative abundance	105235	100.0	Pass
199	5.0 - 9.0% of mass 198	6723	6.39	Pass
275	10.0 - 30.0% of mass 198	27683	26.3	Pass
365	1.0 - 100.0% of mass 198	4027	3.83	Pass
441	Present, but less than mass 443	12695	12.1 (80.8) ^b	Pass
442	40.0 - 100.0% of mass 198	82829	78.7	Pass
443	17.0 - 23.0% of mass 442	15713	14.9 (19.0) ^c	Pass

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

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

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
EF8949-CC8913	F204175.D	12/10/21	23:16	00:34	Continuing cal 50
EF8949-CC8914	F204176.D	12/10/21	23:40	00:58	Continuing cal 50
EF8949-CC8915	F204177.D	12/11/21	00:05	01:23	Continuing cal 50
OP37021-MB1	F204180.D	12/11/21	01:21	02:39	Method Blank
OP37021-BS1	F204181.D	12/11/21	01:46	03:04	Blank Spike
OP37021-BSD	F204182.D	12/11/21	02:11	03:29	Blank Spike Duplicate
OP37021-BS13	F204183.D	12/11/21	02:36	03:54	Blank Spike
OP37049-MB1	F204184.D	12/11/21	03:01	04:19	Method Blank
OP37049-LB5	F204185.D	12/11/21	03:26	04:44	Leachate Blank
OP37049-LB8	F204186.D	12/11/21	03:51	05:09	Leachate Blank
OP37049-BS13	F204187.D	12/11/21	04:16	05:34	Blank Spike
OP37049-LS8	F204188.D	12/11/21	04:41	05:59	Leachate Spike
OP37049-MS	F204188.D	12/11/21	04:41	05:59	Matrix Spike
OP37049-MSD	F204189.D	12/11/21	05:06	06:24	Matrix Spike Duplicate
JD35487-1	F204190.D	12/11/21	05:31	06:49	11215131-113021-WC-SPS-NE-D1(6-8)
ZZZZZZ	F204191.D	12/11/21	05:55	07:13	(unrelated sample)
ZZZZZZ	F204192.D	12/11/21	06:20	07:38	(unrelated sample)
ZZZZZZ	F204193.D	12/11/21	06:45	08:03	(unrelated sample)
ZZZZZZ	F204194.D	12/11/21	07:10	08:28	(unrelated sample)

7.7.10
7

Instrument Performance Check (DFTPP)

Job Number: JD35487
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample: EF8949-DFTPP	Injection Date: 12/10/21
Lab File ID: F204174.D	Injection Time: 22:42
Instrument ID: GCMSF	

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
ZZZZZZ	F204195.D	12/11/21	07:35	08:53	(unrelated sample)
ZZZZZZ	F204196.D	12/11/21	08:00	09:18	(unrelated sample)
ZZZZZZ	F204197.D	12/11/21	08:25	09:43	(unrelated sample)
ZZZZZZ	F204198.D	12/11/21	08:50	10:08	(unrelated sample)
ZZZZZZ	F204199.D	12/11/21	09:15	10:33	(unrelated sample)
ZZZZZZ	F204200.D	12/11/21	09:40	10:58	(unrelated sample)
ZZZZZZ	F204201.D	12/11/21	10:05	11:23	(unrelated sample)
ZZZZZZ	F204202.D	12/11/21	10:30	11:48	(unrelated sample)

7.7.10
7

Instrument Performance Check (DFTPP)

Job Number: JD35487
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample: EF8956-DFTPP	Injection Date: 12/16/21
Lab File ID: F204301.D	Injection Time: 03:56
Instrument ID: GCMSF	

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
51	30.0 - 60.0% of mass 198	37432	37.8	Pass
68	Less than 2.0% of mass 69	0	0.00 (0.00) ^a	Pass
69	Mass 69 relative abundance	48389	48.8	Pass
70	Less than 2.0% of mass 69	50	0.05 (0.10) ^a	Pass
127	40.0 - 60.0% of mass 198	48160	48.6	Pass
197	Less than 1.0% of mass 198	0	0.00	Pass
198	Base peak, 100% relative abundance	99093	100.0	Pass
199	5.0 - 9.0% of mass 198	6512	6.57	Pass
275	10.0 - 30.0% of mass 198	26922	27.2	Pass
365	1.0 - 100.0% of mass 198	2753	2.78	Pass
441	Present, but less than mass 443	10936	11.0 (79.9) ^b	Pass
442	40.0 - 100.0% of mass 198	68384	69.0	Pass
443	17.0 - 23.0% of mass 442	13683	13.8 (20.0) ^c	Pass

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

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

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
EF8956-CC8913	F204302.D	12/16/21	04:09	00:13	Continuing cal 25
EF8956-CC8914	F204303.D	12/16/21	04:34	00:38	Continuing cal 25
EF8956-CC8915	F204304.D	12/16/21	05:00	01:04	Continuing cal 25
OP37159-MB1	F204307.D	12/16/21	06:26	02:30	Method Blank
OP37159-LB13	F204308.D	12/16/21	06:51	02:55	Leachate Blank
OP37159-LB16	F204309.D	12/16/21	07:17	03:21	Leachate Blank
OP37159-BS1	F204310.D	12/16/21	07:42	03:46	Blank Spike
OP37159-BS13	F204311.D	12/16/21	08:07	04:11	Blank Spike
OP37155-MB1	F204312.D	12/16/21	08:32	04:36	Method Blank
OP37155-LB7	F204313.D	12/16/21	08:57	05:01	Leachate Blank
OP37155-BS1	F204314.D	12/16/21	09:22	05:26	Blank Spike
OP37155-BS13	F204315.D	12/16/21	09:47	05:51	Blank Spike
OP37155-LS7	F204316.D	12/16/21	10:12	06:16	Leachate Spike
OP37155-MS	F204316.D	12/16/21	10:12	06:16	Matrix Spike
OP37155-MSD	F204317.D	12/16/21	10:37	06:41	Matrix Spike Duplicate
JD35488-2	F204318.D	12/16/21	11:02	07:06	(used for QC only; not part of job JD35487)
OP37159-LS13	F204319.D	12/16/21	11:27	07:31	Leachate Spike
OP37159-MS	F204319.D	12/16/21	11:27	07:31	Matrix Spike
OP37159-MSD	F204320.D	12/16/21	11:53	07:57	Matrix Spike Duplicate

7.7.11
7

Instrument Performance Check (DFTPP)

Job Number: JD35487
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample: EF8956-DFTPP	Injection Date: 12/16/21
Lab File ID: F204301.D	Injection Time: 03:56
Instrument ID: GCMSF	

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
JD35487-4	F204321.D	12/16/21	12:18	08:22	11215131-120621-WC-SS-SC-B-4(2-4)
ZZZZZZ	F204322.D	12/16/21	12:43	08:47	(unrelated sample)
ZZZZZZ	F204323.D	12/16/21	13:08	09:12	(unrelated sample)
ZZZZZZ	F204324.D	12/16/21	13:33	09:37	(unrelated sample)

7.7.11

7

Surrogate Recovery Summary

Job Number: JD35487
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Method: SW846 8270E	Matrix: LEACHATE
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Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1	S2	S3	S4	S5	S6
JD35487-1	F204190.D	20	14	68	51	57	51
JD35487-2	6P503037.D	29	21	81	76	70	66
JD35487-3	6P503038.D	24	18	75	76	62	27
JD35487-4	F204321.D	36	24	83	68	76	74
JD35487-5	6P503135.D	32	20	83	80	83	79
JD35487-6	6P503149.D	26	18	75	65	72	59
OP37049-BS1	6P503035.D	40	28	93	78	75	82
OP37049-BS13	F204187.D	24	17	61	51	57	63
OP37049-LB5	6P503033.D	24	17	78	78	74	73
OP37049-LB5	F204185.D	22	16	72	63	69	70
OP37049-LB8	6P503034.D	28	20	81	74	70	77
OP37049-LB8	F204186.D	28	21	76	59	65	78
OP37049-LS8	F204188.D	29	21	65	48	53	62
OP37049-MB1	6P503032.D	37	24	69	67	61	78
OP37049-MB1	F204184.D	35	24	66	53	56	77
OP37049-MS	F204188.D	29	21	65	48	53	62
OP37049-MSD	F204189.D	23	17	67	49	55	65
OP37159-BS1	F204310.D	45	33	85	76	84	85
OP37159-BS1	6P503070.D	46	34	90	82	88	85
OP37159-BS13	F204311.D	30	21	77	67	73	83
OP37159-LB13	F204308.D	26	17	69	69	74	89
OP37159-LB13	6P503068A.D	26	18	66	73	78	89
OP37159-LB16	F204309.D	43	27	85	74	80	87
OP37159-LB16	6P503069.D	44	28	81	77	84	86
OP37159-LS13	F204319.D	36	26	81	71	80	75
OP37159-MB1	F204307.D	25	17	66	60	68	57
OP37159-MB1	6P503067.D	26	19	66	65	70	56
OP37159-MS	F204319.D	36	26	81	71	80	75
OP37159-MSD	F204320.D	41	29	89	71	85	76
OP37242-BS1	6P503120.D	28	19	79	68	77	81
OP37242-BSD	6P503121.D	28	19	76	68	74	75
OP37242-LB19	6P503118.D	26	17	71	61	66	74
OP37242-LB24	6P503119.D	31	18	68	57	63	76
OP37242-LS19	6P503123.D	30	20	87	72	80	76
OP37242-MB1	6P503116.D	28	18	70	65	66	68
OP37242-MS	6P503123.D	30	20	87	72	80	76
OP37242-MSD	6P503124.D	29	20	88	70	78	75
OP37273-BS1	6P503145.D	39	28	94	73	87	84
OP37273-LB16	6P503142.D	25	16	65	60	69	67
OP37273-LB25	6P503143.D	27	18	66	60	69	95

7.8.1
7

Surrogate Recovery Summary

Job Number: JD35487
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Method: SW846 8270E	Matrix: LEACHATE
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Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1	S2	S3	S4	S5	S6
OP37273-LB27	6P503144.D	42	28	71	63	70	93
OP37273-LS25	6P503146.D	42	30	94	64	76	94
OP37273-MB1	6P503141.D	21	14	53	58	63	78
OP37273-MS	6P503146.D	42	30	94	64	76	94
OP37273-MSD	6P503147.D	46	34	92	65	73	93

Surrogate Compounds	Recovery Limits
S1 = 2-Fluorophenol	10-73%
S2 = Phenol-d5	10-64%
S3 = 2,4,6-Tribromophenol	31-130%
S4 = Nitrobenzene-d5	28-126%
S5 = 2-Fluorobiphenyl	26-114%
S6 = Terphenyl-d14	16-122%

7.8.1
7

GC/LC Semi-volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Surrogate Recovery Summaries

Method Blank Summary

Job Number: JD35487
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP37051-MB1	OA155562.D	1	12/12/21	CP	12/09/21	OP37051	GOA5501

The QC reported here applies to the following samples:

Method: SW846 8151A

JD35487-1, JD35487-2, JD35487-3

CAS No.	Compound	Result	RL	MDL	Units	Q
94-75-7	2,4-D	ND	0.33	0.098	ug/l	
93-72-1	2,4,5-TP (Silvex)	ND	0.10	0.020	ug/l	
88-85-7	Dinoseb	ND	0.33	0.13	ug/l	

CAS No.	Surrogate Recoveries	Limits
19719-28-9	2,4-DCAA	77% 13-169%
19719-28-9	2,4-DCAA	69% 13-169%

8.1.1

8

Method Blank Summary

Job Number: JD35487
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP37163-MB1	3G134641.D	1	12/19/21	CP	12/15/21	OP37163	G3G4913

The QC reported here applies to the following samples:

Method: SW846 8151A

JD35487-4

CAS No.	Compound	Result	RL	MDL	Units	Q
94-75-7	2,4-D	ND	0.33	0.098	ug/l	
93-72-1	2,4,5-TP (Silvex)	ND	0.10	0.020	ug/l	
88-85-7	Dinoseb	ND	0.33	0.13	ug/l	

CAS No.	Surrogate Recoveries	Limits
19719-28-9	2,4-DCAA	80% 13-169%
19719-28-9	2,4-DCAA	69% 13-169%

8.1.2
8

Method Blank Summary

Job Number: JD35487
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP37244-MB1	OA155777.D	1	12/28/21	CP	12/20/21	OP37244	GOA5510

The QC reported here applies to the following samples:

Method: SW846 8151A

JD35487-5

CAS No.	Compound	Result	RL	MDL	Units	Q
94-75-7	2,4-D	ND	0.33	0.098	ug/l	
93-72-1	2,4,5-TP (Silvex)	ND	0.10	0.020	ug/l	
88-85-7	Dinoseb	ND	0.33	0.13	ug/l	

CAS No.	Surrogate Recoveries	Limits
19719-28-9	2,4-DCAA	75% 13-169%
19719-28-9	2,4-DCAA	60% 13-169%

8.1.3
8

Method Blank Summary

Job Number: JD35487
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP37275-MB1	3G134696.D	1	12/23/21	CP	12/21/21	OP37275	G3G4915

The QC reported here applies to the following samples:

Method: SW846 8151A

JD35487-6

CAS No.	Compound	Result	RL	MDL	Units	Q
94-75-7	2,4-D	ND	0.33	0.098	ug/l	
93-72-1	2,4,5-TP (Silvex)	ND	0.10	0.020	ug/l	
88-85-7	Dinoseb ^a	ND	0.33	0.13	ug/l	

CAS No.	Surrogate Recoveries	Limits
19719-28-9	2,4-DCAA	68% 13-169%
19719-28-9	2,4-DCAA	66% 13-169%

(a) This compound outside control limits biased high in the associated CCV.

8.1.4
8

Method Blank Summary

Job Number: JD35487
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP37053-MB2	6G81244.D	1	12/17/21	CP	12/15/21	OP37053	G6G2873

The QC reported here applies to the following samples:

Method: SW846 8081B

JD35487-1, JD35487-2, JD35487-3

CAS No.	Compound	Result	RL	MDL	Units	Q
58-89-9	gamma-BHC (Lindane)	ND	0.020	0.012	ug/l	
12789-03-6	Chlordane	ND	1.0	0.43	ug/l	
60-57-1	Dieldrin	ND	0.020	0.015	ug/l	
72-54-8	4,4'-DDD	ND	0.020	0.011	ug/l	
72-55-9	4,4'-DDE	ND	0.020	0.010	ug/l	
50-29-3	4,4'-DDT	ND	0.020	0.014	ug/l	
72-20-8	Endrin	ND	0.020	0.012	ug/l	
959-98-8	Endosulfan-I	ND	0.020	0.011	ug/l	
33213-65-9	Endosulfan-II	ND	0.020	0.0098	ug/l	
76-44-8	Heptachlor	ND	0.020	0.0090	ug/l	
1024-57-3	Heptachlor epoxide	ND	0.020	0.012	ug/l	
72-43-5	Methoxychlor	ND	0.040	0.013	ug/l	
2385-85-5	Mirex	ND	0.10	0.0092	ug/l	
8001-35-2	Toxaphene	ND	0.50	0.32	ug/l	

CAS No.	Surrogate Recoveries	Limits
877-09-8	Tetrachloro-m-xylene	69% 30-137%
877-09-8	Tetrachloro-m-xylene	64% 30-137%
2051-24-3	Decachlorobiphenyl	47% 10-137%
2051-24-3	Decachlorobiphenyl	60% 10-137%

8.1.5
8

Method Blank Summary

Job Number: JD35487
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP37162-MB1	6G81244.D	1	12/17/21	CP	12/15/21	OP37162	G6G2873

The QC reported here applies to the following samples:

Method: SW846 8081B

JD35487-4

CAS No.	Compound	Result	RL	MDL	Units	Q
58-89-9	gamma-BHC (Lindane)	ND	0.020	0.012	ug/l	
12789-03-6	Chlordane	ND	1.0	0.43	ug/l	
60-57-1	Dieldrin	ND	0.020	0.015	ug/l	
72-54-8	4,4'-DDD	ND	0.020	0.011	ug/l	
72-55-9	4,4'-DDE	ND	0.020	0.010	ug/l	
50-29-3	4,4'-DDT	ND	0.020	0.014	ug/l	
72-20-8	Endrin	ND	0.020	0.012	ug/l	
959-98-8	Endosulfan-I	ND	0.020	0.011	ug/l	
33213-65-9	Endosulfan-II	ND	0.020	0.0098	ug/l	
76-44-8	Heptachlor	ND	0.020	0.0090	ug/l	
1024-57-3	Heptachlor epoxide	ND	0.020	0.012	ug/l	
72-43-5	Methoxychlor	ND	0.040	0.013	ug/l	
2385-85-5	Mirex	ND	0.10	0.0092	ug/l	
8001-35-2	Toxaphene	ND	0.50	0.32	ug/l	

CAS No.	Surrogate Recoveries	Limits
877-09-8	Tetrachloro-m-xylene	69% 30-137%
877-09-8	Tetrachloro-m-xylene	64% 30-137%
2051-24-3	Decachlorobiphenyl	47% 10-137%
2051-24-3	Decachlorobiphenyl	60% 10-137%

8.1.6
8

Method Blank Summary

Job Number: JD35487
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP37246-MB2	1G172709.D	1	01/10/22	CP	12/27/21	OP37246	G1G5965

The QC reported here applies to the following samples:

Method: SW846 8081B

JD35487-5, JD35487-6

CAS No.	Compound	Result	RL	MDL	Units	Q
58-89-9	gamma-BHC (Lindane)	ND	0.020	0.012	ug/l	
12789-03-6	Chlordane	ND	1.0	0.43	ug/l	
60-57-1	Dieldrin	ND	0.020	0.015	ug/l	
72-54-8	4,4'-DDD	ND	0.020	0.011	ug/l	
72-55-9	4,4'-DDE	ND	0.020	0.010	ug/l	
50-29-3	4,4'-DDT	ND	0.020	0.014	ug/l	
72-20-8	Endrin	ND	0.020	0.012	ug/l	
959-98-8	Endosulfan-I	ND	0.020	0.011	ug/l	
33213-65-9	Endosulfan-II	ND	0.020	0.0098	ug/l	
76-44-8	Heptachlor	ND	0.020	0.0090	ug/l	
1024-57-3	Heptachlor epoxide	ND	0.020	0.012	ug/l	
72-43-5	Methoxychlor	ND	0.040	0.013	ug/l	
2385-85-5	Mirex	ND	0.10	0.0092	ug/l	
8001-35-2	Toxaphene	ND	0.50	0.32	ug/l	

CAS No.	Surrogate Recoveries	Limits
877-09-8	Tetrachloro-m-xylene	104% 30-137%
877-09-8	Tetrachloro-m-xylene	83% 30-137%
2051-24-3	Decachlorobiphenyl	117% 10-137%
2051-24-3	Decachlorobiphenyl	68% 10-137%

8.1.7
8

Method Blank Summary

Job Number: JD35487
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP37053-MB1	4G9723487.D	1	12/13/21	TL	12/09/21	OP37053	G4G3681

The QC reported here applies to the following samples: **Method:** SW846 8081B

OP37053-LB5, OP37053-LB8, OP37053-LS8, OP37053-MS, OP37053-MSD

CAS No.	Compound	Result	RL	MDL	Units	Q
58-89-9	gamma-BHC (Lindane)	ND	0.020	0.012	ug/l	
12789-03-6	Chlordane	ND	1.0	0.43	ug/l	
60-57-1	Dieldrin	ND	0.020	0.015	ug/l	
72-54-8	4,4'-DDD	ND	0.020	0.011	ug/l	
72-55-9	4,4'-DDE	ND	0.020	0.010	ug/l	
50-29-3	4,4'-DDT	ND	0.020	0.014	ug/l	
72-20-8	Endrin	ND	0.020	0.012	ug/l	
959-98-8	Endosulfan-I	ND	0.020	0.011	ug/l	
33213-65-9	Endosulfan-II	ND	0.020	0.0098	ug/l	
76-44-8	Heptachlor	ND	0.020	0.0090	ug/l	
1024-57-3	Heptachlor epoxide	ND	0.020	0.012	ug/l	
72-43-5	Methoxychlor	ND	0.040	0.013	ug/l	
2385-85-5	Mirex	ND	0.10	0.0092	ug/l	
8001-35-2	Toxaphene	ND	0.50	0.32	ug/l	

CAS No.	Surrogate Recoveries	Limits
877-09-8	Tetrachloro-m-xylene	86% 30-137%
877-09-8	Tetrachloro-m-xylene	90% 30-137%
2051-24-3	Decachlorobiphenyl	73% 10-137%
2051-24-3	Decachlorobiphenyl	59% 10-137%

8.1.8
8

Method Blank Summary

Job Number: JD35487
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP37246-MB1	1G172275.D	1	12/22/21	CP	12/20/21	OP37246	G1G5946

The QC reported here applies to the following samples:

Method: SW846 8081B

OP37246-LB19, OP37246-LB24, OP37246-LS19, OP37246-MS, OP37246-MSD

CAS No.	Compound	Result	RL	MDL	Units	Q
58-89-9	gamma-BHC (Lindane)	ND	0.020	0.012	ug/l	
12789-03-6	Chlordane	ND	1.0	0.43	ug/l	
60-57-1	Dieldrin	ND	0.020	0.015	ug/l	
72-54-8	4,4'-DDD	ND	0.020	0.011	ug/l	
72-55-9	4,4'-DDE	ND	0.020	0.010	ug/l	
50-29-3	4,4'-DDT	ND	0.020	0.014	ug/l	
72-20-8	Endrin	ND	0.020	0.012	ug/l	
959-98-8	Endosulfan-I	ND	0.020	0.011	ug/l	
33213-65-9	Endosulfan-II	ND	0.020	0.0098	ug/l	
76-44-8	Heptachlor	ND	0.020	0.0090	ug/l	
1024-57-3	Heptachlor epoxide	ND	0.020	0.012	ug/l	
72-43-5	Methoxychlor	ND	0.040	0.013	ug/l	
2385-85-5	Mirex	ND	0.10	0.0092	ug/l	
8001-35-2	Toxaphene	ND	0.50	0.32	ug/l	

CAS No.	Surrogate Recoveries	Limits
877-09-8	Tetrachloro-m-xylene	65% 30-137%
877-09-8	Tetrachloro-m-xylene	61% 30-137%
2051-24-3	Decachlorobiphenyl	58% 10-137%
2051-24-3	Decachlorobiphenyl	49% 10-137%

8.1.9
8

Method Blank Summary

Job Number: JD35487
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP36964-MB1	RK7148.D	1	12/09/21	TL	12/04/21	OP36964	GRK185

The QC reported here applies to the following samples:

Method: SW846 8082A

JD35487-1

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	33	16	ug/kg	
11104-28-2	Aroclor 1221	ND	33	21	ug/kg	
11141-16-5	Aroclor 1232	ND	33	21	ug/kg	
53469-21-9	Aroclor 1242	ND	33	14	ug/kg	
12672-29-6	Aroclor 1248	ND	33	30	ug/kg	
11097-69-1	Aroclor 1254	ND	33	18	ug/kg	
11096-82-5	Aroclor 1260	ND	33	14	ug/kg	

CAS No.	Surrogate Recoveries	Limits	
877-09-8	Tetrachloro-m-xylene	90%	24-152%
877-09-8	Tetrachloro-m-xylene	95%	24-152%
2051-24-3	Decachlorobiphenyl	61%	10-172%
2051-24-3	Decachlorobiphenyl	80%	10-172%

8.1.10

8

Method Blank Summary

Job Number: JD35487
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP36975-MB1	RK7207.D	1	12/10/21	RK	12/08/21	OP36975	GRK186

The QC reported here applies to the following samples:

Method: SW846 8082A

JD35487-2, JD35487-3

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	33	16	ug/kg	
11104-28-2	Aroclor 1221	ND	33	21	ug/kg	
11141-16-5	Aroclor 1232	ND	33	21	ug/kg	
53469-21-9	Aroclor 1242	ND	33	14	ug/kg	
12672-29-6	Aroclor 1248	ND	33	30	ug/kg	
11097-69-1	Aroclor 1254	ND	33	18	ug/kg	
11096-82-5	Aroclor 1260	ND	33	14	ug/kg	

CAS No.	Surrogate Recoveries	Limits	
877-09-8	Tetrachloro-m-xylene	153%	10-163%
877-09-8	Tetrachloro-m-xylene	151%	10-163%
2051-24-3	Decachlorobiphenyl	93%	10-215%
2051-24-3	Decachlorobiphenyl	117%	10-215%

8.1.11

8

Method Blank Summary

Job Number: JD35487
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP37070-MB1	XX2475702.D	1	12/13/21	TL	12/10/21	OP37070	GXX7682

The QC reported here applies to the following samples:

Method: SW846 8082A

JD35487-4

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	33	16	ug/kg	
11104-28-2	Aroclor 1221	ND	33	21	ug/kg	
11141-16-5	Aroclor 1232	ND	33	21	ug/kg	
53469-21-9	Aroclor 1242	ND	33	14	ug/kg	
12672-29-6	Aroclor 1248	ND	33	30	ug/kg	
11097-69-1	Aroclor 1254	ND	33	18	ug/kg	
11096-82-5	Aroclor 1260	ND	33	14	ug/kg	

CAS No.	Surrogate Recoveries	Limits	
877-09-8	Tetrachloro-m-xylene	112%	10-163%
877-09-8	Tetrachloro-m-xylene	110%	10-163%
2051-24-3	Decachlorobiphenyl	118%	10-215%
2051-24-3	Decachlorobiphenyl	102%	10-215%

8.1.12

8

Method Blank Summary

Job Number: JD35487
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP37170-MB1	2G211266.D	1	12/20/21	CP	12/16/21	OP37170	G2G5547

The QC reported here applies to the following samples:

Method: SW846 8082A

JD35487-5

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	33	16	ug/kg	
11104-28-2	Aroclor 1221	ND	33	21	ug/kg	
11141-16-5	Aroclor 1232	ND	33	21	ug/kg	
53469-21-9	Aroclor 1242	ND	33	14	ug/kg	
12672-29-6	Aroclor 1248	ND	33	30	ug/kg	
11097-69-1	Aroclor 1254	ND	33	18	ug/kg	
11096-82-5	Aroclor 1260	ND	33	14	ug/kg	

CAS No.	Surrogate Recoveries	Result	Limits
877-09-8	Tetrachloro-m-xylene	100%	10-163%
877-09-8	Tetrachloro-m-xylene	104%	10-163%
2051-24-3	Decachlorobiphenyl	106%	10-215%
2051-24-3	Decachlorobiphenyl	104%	10-215%

8.1.13

8

Method Blank Summary

Job Number: JD35487
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP37488-MB1	2G211875.D	1	01/12/22	RK	01/06/22	OP37488	G2G5565

The QC reported here applies to the following samples:

Method: SW846 8082A

JD35487-6

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	33	16	ug/kg	
11104-28-2	Aroclor 1221	ND	33	21	ug/kg	
11141-16-5	Aroclor 1232	ND	33	21	ug/kg	
53469-21-9	Aroclor 1242	ND	33	14	ug/kg	
12672-29-6	Aroclor 1248	ND	33	30	ug/kg	
11097-69-1	Aroclor 1254	ND	33	18	ug/kg	
11096-82-5	Aroclor 1260	ND	33	14	ug/kg	

CAS No.	Surrogate Recoveries	Limits	
877-09-8	Tetrachloro-m-xylene	117%	10-163%
877-09-8	Tetrachloro-m-xylene	111%	10-163%
2051-24-3	Decachlorobiphenyl	94%	10-215%
2051-24-3	Decachlorobiphenyl	104%	10-215%

8.1.14

8

Method Blank Summary

Job Number: JD35487
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP37488-MB1 ^a	2G211966.D	1	01/13/22	RK	01/06/22	OP37488	G2G5566

The QC reported here applies to the following samples:

Method: SW846 8082A

JD35487-6

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	33	16	ug/kg	
11104-28-2	Aroclor 1221	ND	33	21	ug/kg	
11141-16-5	Aroclor 1232	ND	33	21	ug/kg	
53469-21-9	Aroclor 1242	ND	33	14	ug/kg	
12672-29-6	Aroclor 1248	ND	33	30	ug/kg	
11097-69-1	Aroclor 1254	ND	33	18	ug/kg	
11096-82-5	Aroclor 1260	ND	33	14	ug/kg	

CAS No.	Surrogate Recoveries	Limits	
877-09-8	Tetrachloro-m-xylene	109%	10-163%
877-09-8	Tetrachloro-m-xylene	100%	10-163%
2051-24-3	Decachlorobiphenyl	78%	10-215%
2051-24-3	Decachlorobiphenyl	130%	10-215%

(a) Had TBA cleanup.

8.1.15
8

Leachate Blank Summary

Job Number: JD35487
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP37051-LB5	OA155570.D	1	12/13/21	CP	12/09/21	OP37051	GOA5501

The QC reported here applies to the following samples:

Method: SW846 8151A

JD35487-1, JD35487-2, JD35487-3

CAS No.	Compound	Result	RL	MDL	Units	Q
94-75-7	2,4-D	ND	3.3	0.98	ug/l	
93-72-1	2,4,5-TP (Silvex)	ND	1.0	0.20	ug/l	
88-85-7	Dinoseb	ND	3.3	1.3	ug/l	

CAS No.	Surrogate Recoveries	Limits
19719-28-9	2,4-DCAA	87% 13-169%
19719-28-9	2,4-DCAA	95% 13-169%

8.2.1
8

Leachate Blank Summary

Job Number: JD35487
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP37051-LB8	OA155581.D	1	12/13/21	CP	12/09/21	OP37051	GOA5501

The QC reported here applies to the following samples:

Method: SW846 8151A

JD35487-1, JD35487-2, JD35487-3

CAS No.	Compound	Result	RL	MDL	Units	Q
94-75-7	2,4-D	ND	3.3	0.98	ug/l	
93-72-1	2,4,5-TP (Silvex)	ND	1.0	0.20	ug/l	
88-85-7	Dinoseb	ND	3.3	1.3	ug/l	

CAS No.	Surrogate Recoveries	Limits
19719-28-9	2,4-DCAA	74% 13-169%
19719-28-9	2,4-DCAA	59% 13-169%

8.2.2
8

Leachate Blank Summary

Job Number: JD35487
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP37163-LB13	3G134649.D	1	12/20/21	CP	12/15/21	OP37163	G3G4913

The QC reported here applies to the following samples:

Method: SW846 8151A

JD35487-4

CAS No.	Compound	Result	RL	MDL	Units	Q
94-75-7	2,4-D	ND	3.3	0.98	ug/l	
93-72-1	2,4,5-TP (Silvex)	ND	1.0	0.20	ug/l	
88-85-7	Dinoseb	ND	3.3	1.3	ug/l	

CAS No.	Surrogate Recoveries	Limits
19719-28-9	2,4-DCAA	92% 13-169%
19719-28-9	2,4-DCAA	62% 13-169%

Leachate Blank Summary

Job Number: JD35487
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP37163-LB16	3G134660.D	1	12/20/21	CP	12/15/21	OP37163	G3G4913

The QC reported here applies to the following samples:

Method: SW846 8151A

JD35487-4

CAS No.	Compound	Result	RL	MDL	Units	Q
94-75-7	2,4-D	ND	3.3	0.98	ug/l	
93-72-1	2,4,5-TP (Silvex)	ND	1.0	0.20	ug/l	
88-85-7	Dinoseb	ND	3.3	1.3	ug/l	

CAS No.	Surrogate Recoveries	Limits
19719-28-9	2,4-DCAA	82% 13-169%
19719-28-9	2,4-DCAA	62% 13-169%

Leachate Blank Summary

Job Number: JD35487
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP37244-LB19	OA155790.D	1	12/28/21	CP	12/20/21	OP37244	GOA5510

The QC reported here applies to the following samples:

Method: SW846 8151A

JD35487-5

CAS No.	Compound	Result	RL	MDL	Units	Q
94-75-7	2,4-D	ND	3.3	0.98	ug/l	
93-72-1	2,4,5-TP (Silvex)	ND	1.0	0.20	ug/l	
88-85-7	Dinoseb	ND	3.3	1.3	ug/l	

CAS No.	Surrogate Recoveries	Limits
19719-28-9	2,4-DCAA	74% 13-169%
19719-28-9	2,4-DCAA	84% 13-169%

Leachate Blank Summary

Job Number: JD35487
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP37244-LB24	OA155801.D	1	12/28/21	CP	12/20/21	OP37244	GOA5510

The QC reported here applies to the following samples:

Method: SW846 8151A

JD35487-5

CAS No.	Compound	Result	RL	MDL	Units	Q
94-75-7	2,4-D	ND	3.3	0.98	ug/l	
93-72-1	2,4,5-TP (Silvex)	ND	1.0	0.20	ug/l	
88-85-7	Dinoseb	ND	3.3	1.3	ug/l	

CAS No.	Surrogate Recoveries	Limits
19719-28-9	2,4-DCAA	77% 13-169%
19719-28-9	2,4-DCAA	63% 13-169%

Leachate Blank Summary

Job Number: JD35487
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP37275-LB25	3G134703.D	1	12/23/21	CP	12/21/21	OP37275	G3G4915

The QC reported here applies to the following samples:

Method: SW846 8151A

JD35487-6

CAS No.	Compound	Result	RL	MDL	Units	Q
94-75-7	2,4-D	ND	3.3	0.98	ug/l	
93-72-1	2,4,5-TP (Silvex)	ND	1.0	0.20	ug/l	
88-85-7	Dinoseb	ND	3.3	1.3	ug/l	

CAS No.	Surrogate Recoveries	Limits
19719-28-9	2,4-DCAA	62% 13-169%
19719-28-9	2,4-DCAA	55% 13-169%

8.2.7
8

Leachate Blank Summary

Job Number: JD35487
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP37275-LB27	3G134704.D	1	12/23/21	CP	12/21/21	OP37275	G3G4915

The QC reported here applies to the following samples:

Method: SW846 8151A

JD35487-6

CAS No.	Compound	Result	RL	MDL	Units	Q
94-75-7	2,4-D	ND	3.3	0.98	ug/l	
93-72-1	2,4,5-TP (Silvex)	ND	1.0	0.20	ug/l	
88-85-7	Dinoseb	ND	3.3	1.3	ug/l	

CAS No.	Surrogate Recoveries	Limits
19719-28-9	2,4-DCAA	49% 13-169%
19719-28-9	2,4-DCAA	34% 13-169%

Leachate Blank Summary

Job Number: JD35487
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP37053-LB5	4G9723489.D	1	12/13/21	TL	12/09/21	OP37053	G4G3681

The QC reported here applies to the following samples:

Method: SW846 8081B

JD35487-1, JD35487-2, JD35487-3

CAS No.	Compound	Result	RL	MDL	Units	Q
58-89-9	gamma-BHC (Lindane)	ND	0.067	0.040	ug/l	
12789-03-6	Chlordane	ND	3.3	1.4	ug/l	
60-57-1	Dieldrin	ND	0.067	0.051	ug/l	
72-54-8	4,4'-DDD	ND	0.067	0.038	ug/l	
72-55-9	4,4'-DDE	ND	0.067	0.034	ug/l	
50-29-3	4,4'-DDT	ND	0.067	0.046	ug/l	
72-20-8	Endrin	ND	0.067	0.040	ug/l	
959-98-8	Endosulfan-I	ND	0.067	0.035	ug/l	
33213-65-9	Endosulfan-II	ND	0.067	0.033	ug/l	
76-44-8	Heptachlor	ND	0.067	0.030	ug/l	
1024-57-3	Heptachlor epoxide	ND	0.067	0.040	ug/l	
72-43-5	Methoxychlor	ND	0.13	0.045	ug/l	
2385-85-5	Mirex	ND	0.33	0.031	ug/l	
8001-35-2	Toxaphene	ND	1.7	1.1	ug/l	

CAS No.	Surrogate Recoveries	Limits
877-09-8	Tetrachloro-m-xylene	62% 30-137%
877-09-8	Tetrachloro-m-xylene	67% 30-137%
2051-24-3	Decachlorobiphenyl	58% 10-137%
2051-24-3	Decachlorobiphenyl	56% 10-137%

8.2.9
8

Leachate Blank Summary

Job Number: JD35487
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP37053-LB8	4G9723490.D	1	12/13/21	TL	12/09/21	OP37053	G4G3681

The QC reported here applies to the following samples:

Method: SW846 8081B

JD35487-1, JD35487-2, JD35487-3

CAS No.	Compound	Result	RL	MDL	Units	Q
58-89-9	gamma-BHC (Lindane)	ND	0.067	0.040	ug/l	
12789-03-6	Chlordane	ND	3.3	1.4	ug/l	
60-57-1	Dieldrin	ND	0.067	0.051	ug/l	
72-54-8	4,4'-DDD	ND	0.067	0.038	ug/l	
72-55-9	4,4'-DDE	ND	0.067	0.034	ug/l	
50-29-3	4,4'-DDT	ND	0.067	0.046	ug/l	
72-20-8	Endrin	ND	0.067	0.040	ug/l	
959-98-8	Endosulfan-I	ND	0.067	0.035	ug/l	
33213-65-9	Endosulfan-II	ND	0.067	0.033	ug/l	
76-44-8	Heptachlor	ND	0.067	0.030	ug/l	
1024-57-3	Heptachlor epoxide	ND	0.067	0.040	ug/l	
72-43-5	Methoxychlor	ND	0.13	0.045	ug/l	
2385-85-5	Mirex	ND	0.33	0.031	ug/l	
8001-35-2	Toxaphene	ND	1.7	1.1	ug/l	

CAS No.	Surrogate Recoveries	Limits
877-09-8	Tetrachloro-m-xylene	79% 30-137%
877-09-8	Tetrachloro-m-xylene	81% 30-137%
2051-24-3	Decachlorobiphenyl	83% 10-137%
2051-24-3	Decachlorobiphenyl	79% 10-137%

8.2.10
8

Leachate Blank Summary

Job Number: JD35487
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP37162-LB13	6G81257.D	1	12/17/21	CP	12/15/21	OP37162	G6G2873

The QC reported here applies to the following samples:

Method: SW846 8081B

JD35487-4

CAS No.	Compound	Result	RL	MDL	Units	Q
58-89-9	gamma-BHC (Lindane)	ND	0.067	0.040	ug/l	
12789-03-6	Chlordane	ND	3.3	1.4	ug/l	
60-57-1	Dieldrin	ND	0.067	0.051	ug/l	
72-54-8	4,4'-DDD	ND	0.067	0.038	ug/l	
72-55-9	4,4'-DDE	ND	0.067	0.034	ug/l	
50-29-3	4,4'-DDT	ND	0.067	0.046	ug/l	
72-20-8	Endrin	ND	0.067	0.040	ug/l	
959-98-8	Endosulfan-I	ND	0.067	0.035	ug/l	
33213-65-9	Endosulfan-II	ND	0.067	0.033	ug/l	
76-44-8	Heptachlor	ND	0.067	0.030	ug/l	
1024-57-3	Heptachlor epoxide	ND	0.067	0.040	ug/l	
72-43-5	Methoxychlor	ND	0.13	0.045	ug/l	
2385-85-5	Mirex	ND	0.33	0.031	ug/l	
8001-35-2	Toxaphene	ND	1.7	1.1	ug/l	

CAS No.	Surrogate Recoveries	Limits
877-09-8	Tetrachloro-m-xylene	67% 30-137%
877-09-8	Tetrachloro-m-xylene	63% 30-137%
2051-24-3	Decachlorobiphenyl	53% 10-137%
2051-24-3	Decachlorobiphenyl	70% 10-137%

Leachate Blank Summary

Job Number: JD35487
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP37162-LB16	6G81258.D	1	12/17/21	CP	12/15/21	OP37162	G6G2873

The QC reported here applies to the following samples:

Method: SW846 8081B

JD35487-4

CAS No.	Compound	Result	RL	MDL	Units	Q
58-89-9	gamma-BHC (Lindane)	ND	0.067	0.040	ug/l	
12789-03-6	Chlordane	ND	3.3	1.4	ug/l	
60-57-1	Dieldrin	ND	0.067	0.051	ug/l	
72-54-8	4,4'-DDD	ND	0.067	0.038	ug/l	
72-55-9	4,4'-DDE	ND	0.067	0.034	ug/l	
50-29-3	4,4'-DDT	ND	0.067	0.046	ug/l	
72-20-8	Endrin	ND	0.067	0.040	ug/l	
959-98-8	Endosulfan-I	ND	0.067	0.035	ug/l	
33213-65-9	Endosulfan-II	ND	0.067	0.033	ug/l	
76-44-8	Heptachlor	ND	0.067	0.030	ug/l	
1024-57-3	Heptachlor epoxide	ND	0.067	0.040	ug/l	
72-43-5	Methoxychlor	ND	0.13	0.045	ug/l	
2385-85-5	Mirex	ND	0.33	0.031	ug/l	
8001-35-2	Toxaphene	ND	1.7	1.1	ug/l	

CAS No.	Surrogate Recoveries	Limits	
877-09-8	Tetrachloro-m-xylene	96%	30-137%
877-09-8	Tetrachloro-m-xylene	89%	30-137%
2051-24-3	Decachlorobiphenyl	83%	10-137%
2051-24-3	Decachlorobiphenyl	96%	10-137%

8.2.12
8

Leachate Blank Summary

Job Number: JD35487
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP37246-LB19	1G172292.D	1	12/22/21	CP	12/20/21	OP37246	G1G5946

The QC reported here applies to the following samples:

Method: SW846 8081B

JD35487-5, JD35487-6

CAS No.	Compound	Result	RL	MDL	Units	Q
58-89-9	gamma-BHC (Lindane)	ND	0.067	0.040	ug/l	
12789-03-6	Chlordane	ND	3.3	1.4	ug/l	
60-57-1	Dieldrin	ND	0.067	0.051	ug/l	
72-54-8	4,4'-DDD	ND	0.067	0.038	ug/l	
72-55-9	4,4'-DDE	ND	0.067	0.034	ug/l	
50-29-3	4,4'-DDT	ND	0.067	0.046	ug/l	
72-20-8	Endrin	ND	0.067	0.040	ug/l	
959-98-8	Endosulfan-I	ND	0.067	0.035	ug/l	
33213-65-9	Endosulfan-II	ND	0.067	0.033	ug/l	
76-44-8	Heptachlor	ND	0.067	0.030	ug/l	
1024-57-3	Heptachlor epoxide	ND	0.067	0.040	ug/l	
72-43-5	Methoxychlor	ND	0.13	0.045	ug/l	
2385-85-5	Mirex	ND	0.33	0.031	ug/l	
8001-35-2	Toxaphene	ND	1.7	1.1	ug/l	

CAS No.	Surrogate Recoveries	Limits
877-09-8	Tetrachloro-m-xylene	65% 30-137%
877-09-8	Tetrachloro-m-xylene	65% 30-137%
2051-24-3	Decachlorobiphenyl	88% 10-137%
2051-24-3	Decachlorobiphenyl	77% 10-137%

8.2.13

8

Leachate Blank Summary

Job Number: JD35487
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP37246-LB24	1G172293.D	1	12/22/21	CP	12/20/21	OP37246	G1G5946

The QC reported here applies to the following samples:

Method: SW846 8081B

JD35487-5, JD35487-6

CAS No.	Compound	Result	RL	MDL	Units	Q
58-89-9	gamma-BHC (Lindane)	0.082	0.067	0.040	ug/l	
12789-03-6	Chlordane	ND	3.3	1.4	ug/l	
60-57-1	Dieldrin	ND	0.067	0.051	ug/l	
72-54-8	4,4'-DDD	ND	0.067	0.038	ug/l	
72-55-9	4,4'-DDE	ND	0.067	0.034	ug/l	
50-29-3	4,4'-DDT	ND	0.067	0.046	ug/l	
72-20-8	Endrin	ND	0.067	0.040	ug/l	
959-98-8	Endosulfan-I	ND	0.067	0.035	ug/l	
33213-65-9	Endosulfan-II	ND	0.067	0.033	ug/l	
76-44-8	Heptachlor	ND	0.067	0.030	ug/l	
1024-57-3	Heptachlor epoxide	ND	0.067	0.040	ug/l	
72-43-5	Methoxychlor	ND	0.13	0.045	ug/l	
2385-85-5	Mirex	ND	0.33	0.031	ug/l	
8001-35-2	Toxaphene	ND	1.7	1.1	ug/l	

CAS No.	Surrogate Recoveries	Limits
877-09-8	Tetrachloro-m-xylene	75% 30-137%
877-09-8	Tetrachloro-m-xylene	74% 30-137%
2051-24-3	Decachlorobiphenyl	97% 10-137%
2051-24-3	Decachlorobiphenyl	84% 10-137%

Blank Spike Summary

Job Number: JD35487
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP37163-BS1	3G134642.D	1	12/20/21	CP	12/15/21	OP37163	G3G4913

The QC reported here applies to the following samples:

Method: SW846 8151A

JD35487-4

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
94-75-7	2,4-D	1.33	0.67	50	36-158
93-72-1	2,4,5-TP (Silvex)	0.267	0.12	45	44-158
88-85-7	Dinoseb	1.33	1.2	90 ^a	10-139

CAS No.	Surrogate Recoveries	BSP	Limits
19719-28-9	2,4-DCAA	64%	13-169%
19719-28-9	2,4-DCAA	64%	13-169%

(a) Reported from the 2nd signal. The %D of the CCV on the 1st signal exceeds the method criteria of 20%, so it being used for confirmation only.

* = Outside of Control Limits.

Blank Spike Summary

Job Number: JD35487
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP37244-BS1	OA155778.D	1	12/28/21	CP	12/20/21	OP37244	GOA5510

The QC reported here applies to the following samples:

Method: SW846 8151A

JD35487-5

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
94-75-7	2,4-D	1.33	1.1	82	36-158
93-72-1	2,4,5-TP (Silvex)	0.267	0.23	86	44-158
88-85-7	Dinoseb	1.33	1.5	112	10-139

CAS No.	Surrogate Recoveries	BSP	Limits
19719-28-9	2,4-DCAA	77%	13-169%
19719-28-9	2,4-DCAA	70%	13-169%

8.3.2
8

* = Outside of Control Limits.

Blank Spike Summary

Job Number: JD35487
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP37275-BS1	3G134697.D	1	12/23/21	CP	12/21/21	OP37275	G3G4915

The QC reported here applies to the following samples:

Method: SW846 8151A

JD35487-6

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
94-75-7	2,4-D	1.33	0.97	73	36-158
93-72-1	2,4,5-TP (Silvex)	0.267	0.15	56	44-158
88-85-7	Dinoseb	1.33	1.4	105 ^a	10-139

CAS No.	Surrogate Recoveries	BSP	Limits
19719-28-9	2,4-DCAA	75%	13-169%
19719-28-9	2,4-DCAA	69%	13-169%

(a) This compound outside control limits biased high in the associated CCV.

* = Outside of Control Limits.



Blank Spike Summary

Job Number: JD35487
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP37246-BS2	1G172710.D	1	01/10/22	CP	12/27/21	OP37246	G1G5965

The QC reported here applies to the following samples:

Method: SW846 8081B

JD35487-5, JD35487-6

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
58-89-9	gamma-BHC (Lindane)	0.5	0.37	74	37-178
60-57-1	Dieldrin	0.5	0.37	74	44-177
72-54-8	4,4'-DDD	0.5	0.35	70	42-183
72-55-9	4,4'-DDE	0.5	0.34	68	39-179
50-29-3	4,4'-DDT	0.5	0.37	74	39-190
72-20-8	Endrin	0.5	0.36	72	45-182
959-98-8	Endosulfan-I	0.5	0.38	76	40-172
33213-65-9	Endosulfan-II	0.5	0.38	76	41-174
76-44-8	Heptachlor	0.5	0.34	68	26-172
1024-57-3	Heptachlor epoxide	0.5	0.38	76	43-173
72-43-5	Methoxychlor	0.5	0.39	78	40-192
2385-85-5	Mirex	0.5	0.26	52	33-176

CAS No.	Surrogate Recoveries	BSP	Limits
877-09-8	Tetrachloro-m-xylene	68%	30-137%
877-09-8	Tetrachloro-m-xylene	62%	30-137%
2051-24-3	Decachlorobiphenyl	71%	10-137%
2051-24-3	Decachlorobiphenyl	50%	10-137%

* = Outside of Control Limits.

Blank Spike Summary

Job Number: JD35487
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP36964-BS1	RK7149.D	1	12/09/21	TL	12/04/21	OP36964	GRK185

The QC reported here applies to the following samples:

Method: SW846 8082A

JD35487-1

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
12674-11-2	Aroclor 1016	133	124	93 ^a	39-169
11104-28-2	Aroclor 1221		ND		50-150
11141-16-5	Aroclor 1232		ND		50-150
53469-21-9	Aroclor 1242		ND		50-150
12672-29-6	Aroclor 1248		ND		50-150
11097-69-1	Aroclor 1254		ND		50-150
11096-82-5	Aroclor 1260	133	112	84 ^a	41-171

CAS No.	Surrogate Recoveries	BSP	Limits
877-09-8	Tetrachloro-m-xylene	89%	24-152%
877-09-8	Tetrachloro-m-xylene	90%	24-152%
2051-24-3	Decachlorobiphenyl	64%	10-172%
2051-24-3	Decachlorobiphenyl	82%	10-172%

(a) Reported from the 2nd signal. The %D of the CCV on the 1st signal exceeds the method criteria of 20%, so it being used for confirmation only.

* = Outside of Control Limits.

Blank Spike Summary

Job Number: JD35487
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP37070-BS1	XX2475703.D	1	12/13/21	TL	12/10/21	OP37070	GXX7682

The QC reported here applies to the following samples:

Method: SW846 8082A

JD35487-4

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
12674-11-2	Aroclor 1016	133	145	109	53-157
11104-28-2	Aroclor 1221		ND		50-150
11141-16-5	Aroclor 1232		ND		50-150
53469-21-9	Aroclor 1242		ND		50-150
12672-29-6	Aroclor 1248		ND		50-150
11097-69-1	Aroclor 1254		ND		50-150
11096-82-5	Aroclor 1260	133	146	109	53-159

CAS No.	Surrogate Recoveries	BSP	Limits
877-09-8	Tetrachloro-m-xylene	106%	10-163%
877-09-8	Tetrachloro-m-xylene	108%	10-163%
2051-24-3	Decachlorobiphenyl	117%	10-215%
2051-24-3	Decachlorobiphenyl	102%	10-215%

8.3.6

8

* = Outside of Control Limits.

Blank Spike Summary

Job Number: JD35487
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP37488-BS1	2G211876.D	1	01/12/22	RK	01/06/22	OP37488	G2G5565

The QC reported here applies to the following samples:

Method: SW846 8082A

JD35487-6

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
12674-11-2	Aroclor 1016	133	151	113	53-157
11104-28-2	Aroclor 1221		ND		50-150
11141-16-5	Aroclor 1232		ND		50-150
53469-21-9	Aroclor 1242		ND		50-150
12672-29-6	Aroclor 1248		ND		50-150
11097-69-1	Aroclor 1254		ND		50-150
11096-82-5	Aroclor 1260	133	135	101	53-159

CAS No.	Surrogate Recoveries	BSP	Limits
877-09-8	Tetrachloro-m-xylene	131%	10-163%
877-09-8	Tetrachloro-m-xylene	120%	10-163%
2051-24-3	Decachlorobiphenyl	100%	10-215%
2051-24-3	Decachlorobiphenyl	106%	10-215%

* = Outside of Control Limits.

8.3.7
8

Blank Spike Summary

Job Number: JD35487
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP37488-BS1 ^a	2G211967.D	1	01/13/22	RK	01/06/22	OP37488	G2G5566

The QC reported here applies to the following samples:

Method: SW846 8082A

JD35487-6

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
12674-11-2	Aroclor 1016	133	122	91	53-157
11104-28-2	Aroclor 1221		ND		50-150
11141-16-5	Aroclor 1232		ND		50-150
53469-21-9	Aroclor 1242		ND		50-150
12672-29-6	Aroclor 1248		ND		50-150
11097-69-1	Aroclor 1254		ND		50-150
11096-82-5	Aroclor 1260	133	95.9	72	53-159

CAS No.	Surrogate Recoveries	BSP	Limits
877-09-8	Tetrachloro-m-xylene	121%	10-163%
877-09-8	Tetrachloro-m-xylene	127%	10-163%
2051-24-3	Decachlorobiphenyl	92%	10-215%
2051-24-3	Decachlorobiphenyl	141%	10-215%

(a) Had TBA cleanup.

* = Outside of Control Limits.



Blank Spike/Blank Spike Duplicate Summary

Job Number: JD35487
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP37051-BS1	OA155563.D	1	12/13/21	CP	12/09/21	OP37051	GOA5501
OP37051-BSD	OA155564.D	1	12/13/21	CP	12/09/21	OP37051	GOA5501

The QC reported here applies to the following samples:

Method: SW846 8151A

JD35487-1, JD35487-2, JD35487-3

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	BSD ug/l	BSD %	RPD	Limits Rec/RPD
94-75-7	2,4-D	1.33	1.4	105 ^a	1.5	112	7	36-158/47
93-72-1	2,4,5-TP (Silvex)	0.267	0.26	97	0.31	116	18	44-158/49
88-85-7	Dinoseb	1.33	1.5	112	1.8	135	18	10-139/97

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
19719-28-9	2,4-DCAA	85%	109%	13-169%
19719-28-9	2,4-DCAA	85%	100%	13-169%

(a) Reported from the 1st signal. The %D of the CCV on the 2nd signal exceeds the method criteria of 20%, so it being used for confirmation only.

* = Outside of Control Limits.

8.4.1
8

Blank Spike/Blank Spike Duplicate Summary

Job Number: JD35487
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP37053-BS2	6G81245.D	1	12/17/21	CP	12/15/21	OP37053	G6G2873
OP37053-BSD2	6G81246.D	1	12/17/21	CP	12/15/21	OP37053	G6G2873

The QC reported here applies to the following samples:

Method: SW846 8081B

JD35487-1, JD35487-2, JD35487-3

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	BSD ug/l	BSD %	RPD	Limits Rec/RPD
58-89-9	gamma-BHC (Lindane)	0.5	0.51	102	0.56	112	9	37-178/30
60-57-1	Dieldrin	0.5	0.52	104	0.52	104	0	44-177/30
72-54-8	4,4'-DDD	0.5	0.52	104	0.53	106	2	42-183/30
72-55-9	4,4'-DDE	0.5	0.49	98	0.52	104	6	39-179/30
50-29-3	4,4'-DDT	0.5	0.49	98	0.52	104	6	39-190/30
72-20-8	Endrin	0.5	0.55	110	0.56	112	2	45-182/30
959-98-8	Endosulfan-I	0.5	0.38	76	0.36	72	5	40-172/30
33213-65-9	Endosulfan-II	0.5	0.49	98	0.50	100	2	41-174/30
76-44-8	Heptachlor	0.5	0.51	102	0.50	100	2	26-172/30
1024-57-3	Heptachlor epoxide	0.5	0.53	106	0.52	104	2	43-173/30
72-43-5	Methoxychlor	0.5	0.55	110	0.58	116	5	40-192/30
2385-85-5	Mirex	0.5	0.35	70	0.45	90	14	33-176/30

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
877-09-8	Tetrachloro-m-xylene	75%	88%	30-137%
877-09-8	Tetrachloro-m-xylene	72%	74%	30-137%
2051-24-3	Decachlorobiphenyl	61%	72%	10-137%
2051-24-3	Decachlorobiphenyl	77%	80%	10-137%

* = Outside of Control Limits.

8.4.2
8

Blank Spike/Blank Spike Duplicate Summary

Job Number: JD35487
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP37162-BS1	6G81245.D	1	12/17/21	CP	12/15/21	OP37162	G6G2873
OP37162-BSD	6G81246.D	1	12/17/21	CP	12/15/21	OP37162	G6G2873

The QC reported here applies to the following samples:

Method: SW846 8081B

JD35487-4

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	BSD ug/l	BSD %	RPD	Limits Rec/RPD
58-89-9	gamma-BHC (Lindane)	0.5	0.51	102	0.56	112	9	37-178/30
60-57-1	Dieldrin	0.5	0.52	104	0.52	104	0	44-177/30
72-54-8	4,4'-DDD	0.5	0.52	104	0.53	106	2	42-183/30
72-55-9	4,4'-DDE	0.5	0.49	98	0.52	104	6	39-179/30
50-29-3	4,4'-DDT	0.5	0.49	98	0.52	104	6	39-190/30
72-20-8	Endrin	0.5	0.55	110	0.56	112	2	45-182/30
959-98-8	Endosulfan-I	0.5	0.38	76	0.36	72	5	40-172/30
33213-65-9	Endosulfan-II	0.5	0.49	98	0.50	100	2	41-174/30
76-44-8	Heptachlor	0.5	0.51	102	0.50	100	2	26-172/30
1024-57-3	Heptachlor epoxide	0.5	0.53	106	0.52	104	2	43-173/30
72-43-5	Methoxychlor	0.5	0.55	110	0.58	116	5	40-192/30
2385-85-5	Mirex	0.5	0.35	70	0.45	90	14	33-176/30

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
877-09-8	Tetrachloro-m-xylene	75%	88%	30-137%
877-09-8	Tetrachloro-m-xylene	72%	74%	30-137%
2051-24-3	Decachlorobiphenyl	61%	72%	10-137%
2051-24-3	Decachlorobiphenyl	77%	80%	10-137%

* = Outside of Control Limits.

Blank Spike/Blank Spike Duplicate Summary

Job Number: JD35487
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP36975-BS1	RK7208.D	1	12/10/21	RK	12/08/21	OP36975	GRK186
OP36975-BSD	RK7209.D	1	12/10/21	RK	12/08/21	OP36975	GRK186

The QC reported here applies to the following samples:

Method: SW846 8082A

JD35487-2, JD35487-3

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	BSD ug/kg	BSD %	RPD	Limits Rec/RPD
12674-11-2	Aroclor 1016	133	185	139	143	107	26	53-157/32
11104-28-2	Aroclor 1221		ND		ND		nc	50-150/30
11141-16-5	Aroclor 1232		ND		ND		nc	50-150/30
53469-21-9	Aroclor 1242		ND		ND		nc	50-150/30
12672-29-6	Aroclor 1248		ND		ND		nc	50-150/30
11097-69-1	Aroclor 1254		ND		ND		nc	50-150/30
11096-82-5	Aroclor 1260	133	169	127 ^a	132	99 ^a	25 ^a	53-159/45

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
877-09-8	Tetrachloro-m-xylene	149%	113%	10-163%
877-09-8	Tetrachloro-m-xylene	149%	113%	10-163%
2051-24-3	Decachlorobiphenyl	99%	76%	10-215%
2051-24-3	Decachlorobiphenyl	119%	92%	10-215%

(a) Reported from the 2nd signal. The %D of the CCV on the 1st signal exceeds the method criteria of 20%, so it being used for confirmation only.

* = Outside of Control Limits.

Blank Spike/Blank Spike Duplicate Summary

Job Number: JD35487
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP37170-BS1	2G211267.D	1	12/20/21	CP	12/16/21	OP37170	G2G5547
OP37170-BSD	2G211268.D	1	12/20/21	CP	12/16/21	OP37170	G2G5547

The QC reported here applies to the following samples:

Method: SW846 8082A

JD35487-5

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	BSD ug/kg	BSD %	RPD	Limits Rec/RPD
12674-11-2	Aroclor 1016	133	123	92	129	97	5	53-157/32
11104-28-2	Aroclor 1221		ND		ND		nc	50-150/30
11141-16-5	Aroclor 1232		ND		ND		nc	50-150/30
53469-21-9	Aroclor 1242		ND		ND		nc	50-150/30
12672-29-6	Aroclor 1248		ND		ND		nc	50-150/30
11097-69-1	Aroclor 1254		ND		ND		nc	50-150/30
11096-82-5	Aroclor 1260	133	116	87	127	95	9	53-159/45

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
877-09-8	Tetrachloro-m-xylene	94%	102%	10-163%
877-09-8	Tetrachloro-m-xylene	98%	108%	10-163%
2051-24-3	Decachlorobiphenyl	99%	107%	10-215%
2051-24-3	Decachlorobiphenyl	103%	106%	10-215%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JD35487
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP37051-MS	OA155573.D	1	12/13/21	CP	12/09/21	OP37051	GOA5501
OP37051-MSD	OA155574.D	1	12/13/21	CP	12/09/21	OP37051	GOA5501
JD36176-1A	OA155569.D	1	12/13/21	CP	12/09/21	OP37051	GOA5501

The QC reported here applies to the following samples:

Method: SW846 8151A

JD35487-1, JD35487-2, JD35487-3

CAS No.	Compound	JD36176-1A ug/l	Spike Q	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
94-75-7	2,4-D	ND	13.3	17.5	131	13.3	15.1	113	15	35-196/60
93-72-1	2,4,5-TP (Silvex)	ND	2.67	2.6	97	2.67	2.8	105	7	10-226/52
88-85-7	Dinoseb	ND	13.3	17.2	129* a	13.3	17.8	133* a	3	29-95/74

CAS No.	Surrogate Recoveries	MS	MSD	JD36176-1A	Limits
19719-28-9	2,4-DCAA	82%	97%	81%	13-169%
19719-28-9	2,4-DCAA	82%	118%	73%	13-169%

(a) Outside of in house control limits.

* = Outside of Control Limits.

8.5.1
8

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JD35487
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP37163-MS	3G134644.D	1	12/20/21	CP	12/15/21	OP37163	G3G4913
OP37163-MSD	3G134645.D	1	12/20/21	CP	12/15/21	OP37163	G3G4913
JD35487-4	3G134643.D	1	12/20/21	CP	12/15/21	OP37163	G3G4913

The QC reported here applies to the following samples:

Method: SW846 8151A

JD35487-4

CAS No.	Compound	JD35487-4 ug/l	Spike Q	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
94-75-7	2,4-D	ND	13.3	9.9	74	13.3	12.4	93	22	35-196/60
93-72-1	2,4,5-TP (Silvex)	ND	2.67	1.2	45	2.67	1.3	49	8	10-226/52
88-85-7	Dinoseb	ND	13.3	13.1	98* a	13.3	13.5	101* a	3	29-95/74

CAS No.	Surrogate Recoveries	MS	MSD	JD35487-4	Limits
19719-28-9	2,4-DCAA	63%	65%	70%	13-169%
19719-28-9	2,4-DCAA	61%	56%	54%	13-169%

(a) Outside control limits due to matrix interference.

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JD35487
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP37244-MS	OA155794.D	1	12/28/21	CP	12/20/21	OP37244	GOA5510
OP37244-MSD	OA155795.D	1	12/28/21	CP	12/20/21	OP37244	GOA5510
JD35533-9R	OA155793.D	1	12/28/21	CP	12/20/21	OP37244	GOA5510

The QC reported here applies to the following samples:

Method: SW846 8151A

JD35487-5

CAS No.	Compound	JD35533-9R Spike ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
94-75-7	2,4-D	ND	13.3	11.7	88	13.3	13.0	11	35-196/60
93-72-1	2,4,5-TP (Silvex)	ND	2.67	2.3	86	2.67	2.8	20	10-226/52
88-85-7	Dinoseb	ND	13.3	21.3	160* a	13.3	23.5	10	29-95/74

CAS No.	Surrogate Recoveries	MS	MSD	JD35533-9R Limits
19719-28-9	2,4-DCAA	74%	84%	70% 13-169%
19719-28-9	2,4-DCAA	55%	67%	58% 13-169%

(a) Outside of in house control limits.

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JD35487
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP37275-MS	3G134699.D	1	12/23/21	CP	12/21/21	OP37275	G3G4915
OP37275-MSD	3G134700.D	1	12/23/21	CP	12/21/21	OP37275	G3G4915
JD36795-1A	3G134702.D	1	12/23/21	CP	12/21/21	OP37275	G3G4915

The QC reported here applies to the following samples:

Method: SW846 8151A

JD35487-6

CAS No.	Compound	JD36795-1A Spike ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD	
94-75-7	2,4-D	ND	13.3	4.8	36	13.3	5.7	43	17	35-196/60
93-72-1	2,4,5-TP (Silvex)	ND	2.67	0.92	34	2.67	1.2	45	26	10-226/52
88-85-7	Dinoseb	ND	13.3	12.9	97* a	13.3	14.8	111* a	14	29-95/74

CAS No.	Surrogate Recoveries	MS	MSD	JD36795-1A Limits
19719-28-9	2,4-DCAA	43%	49%	237% * b
19719-28-9	2,4-DCAA	41%	56%	109%

- (a) Outside of in house control limits.
- (b) Outside control limits due to matrix interference.

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JD35487
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP37053-MS	4G9723492.D	1	12/13/21	TL	12/09/21	OP37053	G4G3681
OP37053-MSD	4G9723493.D	1	12/13/21	TL	12/09/21	OP37053	G4G3681
JD36176-1A	4G9723491.D	1	12/13/21	TL	12/09/21	OP37053	G4G3681

The QC reported here applies to the following samples:

Method: SW846 8081B

JD35487-1, JD35487-2, JD35487-3

CAS No.	Compound	JD36176-1A ug/l	Spike Q	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
58-89-9	gamma-BHC (Lindane)	ND	1.67	1.3	78	1.67	1.9	114	38	39-160/97
12789-03-6	Chlordane	ND		ND			ND		nc	81-123/10
60-57-1	Dieldrin	ND	1.67	1.4	84	1.67	2.0	120	35	41-161/94
72-54-8	4,4'-DDD	ND	1.67	1.2	72	1.67	1.6	96	29	39-167/97
72-55-9	4,4'-DDE	ND	1.67	1.1	66	1.67	1.5	90	31	37-156/94
50-29-3	4,4'-DDT	ND	1.67	1.1	66	1.67	1.6	96	37	34-172/99
72-20-8	Endrin	ND	1.67	1.4	84	1.67	1.7	102	19	43-169/95
959-98-8	Endosulfan-I	ND	1.67	1.5	90	1.67	2.2	132	38	42-154/95
33213-65-9	Endosulfan-II	ND	1.67	1.3	78	1.67	1.8	108	32	42-159/94
76-44-8	Heptachlor	ND	1.67	1.3	78	1.67	1.8	108	32	35-152/102
1024-57-3	Heptachlor epoxide	ND	1.67	1.4	84	1.67	2.0	120	35	42-159/96
72-43-5	Methoxychlor	ND	1.67	1.3	78	1.67	2.0	120	42	47-170/99
2385-85-5	Mirex	ND	1.67	ND	0*	1.67	ND	0*	nc	-/10
8001-35-2	Toxaphene	ND		ND			ND		nc	50-150/8

CAS No.	Surrogate Recoveries	MS	MSD	JD36176-1A	Limits
877-09-8	Tetrachloro-m-xylene	80%	65%	54%	30-137%
877-09-8	Tetrachloro-m-xylene	81%	66%	56%	30-137%
2051-24-3	Decachlorobiphenyl	72%	67%	55%	10-137%
2051-24-3	Decachlorobiphenyl	76%	68%	57%	10-137%

* = Outside of Control Limits.



Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JD35487
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP37162-MS	6G81251.D	1	12/17/21	CP	12/15/21	OP37162	G6G2873
OP37162-MSD	6G81252.D	1	12/17/21	CP	12/15/21	OP37162	G6G2873
JD35487-4	6G81250.D	1	12/17/21	CP	12/15/21	OP37162	G6G2873

The QC reported here applies to the following samples:

Method: SW846 8081B

JD35487-4

CAS No.	Compound	JD35487-4 ug/l	Spike Q ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
58-89-9	gamma-BHC (Lindane)	ND	1.67	2.2	132	1.67	2.1	126	5	39-160/97
12789-03-6	Chlordane	ND		ND			ND		nc	81-123/10
60-57-1	Dieldrin	ND	1.67	2.0	120	1.67	2.1	126	5	41-161/94
72-54-8	4,4'-DDD	ND	1.67	2.4	144	1.67	2.2	132	9	39-167/97
72-55-9	4,4'-DDE	ND	1.67	2.2	132	1.67	2.1	126	5	37-156/94
50-29-3	4,4'-DDT	ND	1.67	2.1	126	1.67	2.1	126	0	34-172/99
72-20-8	Endrin	ND	1.67	1.9	114	1.67	2.0	120	5	43-169/95
959-98-8	Endosulfan-I	ND	1.67	2.6	156* a	1.67	2.6	156* a	0	42-154/95
33213-65-9	Endosulfan-II	ND	1.67	0.58	35* a	1.67	0.78	47	29	42-159/94
76-44-8	Heptachlor	ND	1.67	2.2	132	1.67	2.4	144	9	35-152/102
1024-57-3	Heptachlor epoxide	ND	1.67	2.1	126	1.67	2.6	156	21	42-159/96
72-43-5	Methoxychlor	ND	1.67	2.4	144	1.67	2.4	144	0	47-170/99
2385-85-5	Mirex	ND	1.67	1.6	96	1.67	2.2	132	32* b	-/10
8001-35-2	Toxaphene	ND		ND			ND		nc	50-150/8

CAS No.	Surrogate Recoveries	MS	MSD	JD35487-4	Limits
877-09-8	Tetrachloro-m-xylene	80%	75%	70%	30-137%
877-09-8	Tetrachloro-m-xylene	63%	63%	68%	30-137%
2051-24-3	Decachlorobiphenyl	66%	66%	45%	10-137%
2051-24-3	Decachlorobiphenyl	88%	75%	63%	10-137%

(a) Outside of in house control limits.

(b) Analytical precision exceeds in-house control limits.

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JD35487
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP37246-MS	1G172286.D	1	12/22/21	CP	12/20/21	OP37246	G1G5946
OP37246-MSD	1G172287.D	1	12/22/21	CP	12/20/21	OP37246	G1G5946
JD35533-9R	1G172285.D	1	12/22/21	CP	12/20/21	OP37246	G1G5946

The QC reported here applies to the following samples:

Method: SW846 8081B

JD35487-5, JD35487-6

CAS No.	Compound	JD35533-9R ug/l	Spike Q	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
58-89-9	gamma-BHC (Lindane)	ND	1.67	1.7	102	1.67	1.7	102	0	39-160/97
12789-03-6	Chlordane	ND		ND			ND		nc	81-123/10
60-57-1	Dieldrin	ND	1.67	1.8	108	1.67	1.8	108	0	41-161/94
72-54-8	4,4'-DDD	ND	1.67	1.8	108	1.67	1.8	108	0	39-167/97
72-55-9	4,4'-DDE	ND	1.67	1.7	102	1.67	1.7	102	0	37-156/94
50-29-3	4,4'-DDT	ND	1.67	1.9	114	1.67	1.9	114	0	34-172/99
72-20-8	Endrin	ND	1.67	2.0	120	1.67	2.0	120	0	43-169/95
959-98-8	Endosulfan-I	ND	1.67	1.8	108	1.67	1.8	108	0	42-154/95
33213-65-9	Endosulfan-II	ND	1.67	1.8	108	1.67	1.8	108	0	42-159/94
76-44-8	Heptachlor	ND	1.67	1.7	102	1.67	1.7	102	0	35-152/102
1024-57-3	Heptachlor epoxide	ND	1.67	1.6	96	1.67	1.6	96	0	42-159/96
72-43-5	Methoxychlor	ND	1.67	1.9	114	1.67	1.8	108	5	47-170/99
2385-85-5	Mirex	ND	1.67	ND	0*	1.67	ND	0*	nc	-/10
8001-35-2	Toxaphene	ND		ND			ND		nc	50-150/8

CAS No.	Surrogate Recoveries	MS	MSD	JD35533-9R	Limits
877-09-8	Tetrachloro-m-xylene	76%	78%	84%	30-137%
877-09-8	Tetrachloro-m-xylene	69%	72%	78%	30-137%
2051-24-3	Decachlorobiphenyl	96%	95%	105%	10-137%
2051-24-3	Decachlorobiphenyl	78%	78%	88%	10-137%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JD35487
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP36964-MS	RK7152.D	1	12/09/21	TL	12/04/21	OP36964	GRK185
OP36964-MSD	RK7153.D	1	12/09/21	TL	12/04/21	OP36964	GRK185
JD36039-1	RK7151.D	1	12/09/21	TL	12/04/21	OP36964	GRK185

The QC reported here applies to the following samples:

Method: SW846 8082A

JD35487-1

CAS No.	Compound	JD36039-1 ug/kg	Spike Q ug/kg	MS ug/kg	MS %	Spike ug/kg	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
12674-11-2	Aroclor 1016	ND	141	103	73	137	109	80	6	14-200/59
11104-28-2	Aroclor 1221	ND		ND			ND		nc	50-150/30
11141-16-5	Aroclor 1232	ND		ND			ND		nc	50-150/30
53469-21-9	Aroclor 1242	ND		ND			ND		nc	50-150/11
12672-29-6	Aroclor 1248	ND		ND			ND		nc	50-150/25
11097-69-1	Aroclor 1254	ND		ND			ND		nc	50-150/37
11096-82-5	Aroclor 1260	ND	141	82.1	58	137	84.4	62	3	10-200/59

CAS No.	Surrogate Recoveries	MS	MSD	JD36039-1	Limits
877-09-8	Tetrachloro-m-xylene	91%	94%	74%	24-152%
877-09-8	Tetrachloro-m-xylene	89%	93%	75%	24-152%
2051-24-3	Decachlorobiphenyl	49%	52%	38%	10-172%
2051-24-3	Decachlorobiphenyl	75%	77%	75%	10-172%

* = Outside of Control Limits.



Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JD35487
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP36975-MS	RK7216.D	1	12/10/21	RK	12/08/21	OP36975	GRK186
OP36975-MSD	RK7217.D	1	12/10/21	RK	12/08/21	OP36975	GRK186
JD36105-2	RK7215.D	1	12/10/21	RK	12/08/21	OP36975	GRK186

The QC reported here applies to the following samples:

Method: SW846 8082A

JD35487-2, JD35487-3

CAS No.	Compound	JD36105-2 ug/kg	Spike Q ug/kg	MS ug/kg	MS %	Spike ug/kg	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
12674-11-2	Aroclor 1016	ND	139	112	81	136	105	77	6	10-243/69
11104-28-2	Aroclor 1221	ND		ND			ND		nc	50-150/30
11141-16-5	Aroclor 1232	ND		ND			ND		nc	50-150/30
53469-21-9	Aroclor 1242	ND		ND			ND		nc	50-150/11
12672-29-6	Aroclor 1248	ND		ND			ND		nc	50-150/19
11097-69-1	Aroclor 1254	ND		ND			ND		nc	50-150/67
11096-82-5	Aroclor 1260	ND	139	99.1	71	136	83.9	62	17	10-200/64

CAS No.	Surrogate Recoveries	MS	MSD	JD36105-2	Limits
877-09-8	Tetrachloro-m-xylene	97%	89%	117%	10-163%
877-09-8	Tetrachloro-m-xylene	95%	85%	115%	10-163%
2051-24-3	Decachlorobiphenyl	50%	43%	57%	10-215%
2051-24-3	Decachlorobiphenyl	104%	85%	110%	10-215%

* = Outside of Control Limits.



Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JD35487
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP37070-MS	XX2475714.D	1	12/14/21	TL	12/10/21	OP37070	GXX7682
OP37070-MSD	XX2475715.D	1	12/14/21	TL	12/10/21	OP37070	GXX7682
JD36245-1	XX2475713.D	1	12/13/21	TL	12/10/21	OP37070	GXX7682

The QC reported here applies to the following samples:

Method: SW846 8082A

JD35487-4

CAS No.	Compound	JD36245-1 ug/kg	Spike Q ug/kg	MS ug/kg	MS %	Spike ug/kg	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
12674-11-2	Aroclor 1016	ND	166	207	125	165	248	150	18	10-243/69
11104-28-2	Aroclor 1221	ND		ND			ND		nc	50-150/30
11141-16-5	Aroclor 1232	ND		ND			ND		nc	50-150/30
53469-21-9	Aroclor 1242	ND		ND			ND		nc	50-150/11
12672-29-6	Aroclor 1248	ND		ND			ND		nc	50-150/19
11097-69-1	Aroclor 1254	ND		ND			ND		nc	50-150/67
11096-82-5	Aroclor 1260	ND	166	210	127	165	245	149	15	10-200/64

CAS No.	Surrogate Recoveries	MS	MSD	JD36245-1	Limits
877-09-8	Tetrachloro-m-xylene	111%	122%	80%	10-163%
877-09-8	Tetrachloro-m-xylene	101%	123%	81%	10-163%
2051-24-3	Decachlorobiphenyl	104%	123%	84%	10-215%
2051-24-3	Decachlorobiphenyl	110%	125%	82%	10-215%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JD35487
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP37170-MS	2G211270.D	1	12/20/21	CP	12/16/21	OP37170	G2G5547
OP37170-MSD	2G211271.D	1	12/20/21	CP	12/16/21	OP37170	G2G5547
JD36618-19	2G211269.D	1	12/20/21	CP	12/16/21	OP37170	G2G5547

The QC reported here applies to the following samples:

Method: SW846 8082A

JD35487-5

CAS No.	Compound	JD36618-19 ug/kg	Spike Q ug/kg	MS ug/kg	MS %	Spike ug/kg	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
12674-11-2	Aroclor 1016	ND	143	137	96	141	99.0	70	32	10-243/69
11104-28-2	Aroclor 1221	ND		ND			ND		nc	50-150/30
11141-16-5	Aroclor 1232	ND		ND			ND		nc	50-150/30
53469-21-9	Aroclor 1242	ND		ND			ND		nc	50-150/11
12672-29-6	Aroclor 1248	ND		ND			ND		nc	50-150/19
11097-69-1	Aroclor 1254	ND		ND			ND		nc	50-150/67
11096-82-5	Aroclor 1260	ND	143	124	87	141	96.9	69	25	10-200/64

CAS No.	Surrogate Recoveries	MS	MSD	JD36618-19	Limits
877-09-8	Tetrachloro-m-xylene	95%	70%	108%	10-163%
877-09-8	Tetrachloro-m-xylene	100%	75%	114%	10-163%
2051-24-3	Decachlorobiphenyl	99%	81%	116%	10-215%
2051-24-3	Decachlorobiphenyl	106%	79%	118%	10-215%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JD35487
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP37488-MS	2G211917.D	1	01/12/22	RK	01/06/22	OP37488	G2G5566
OP37488-MSD	2G211918.D	1	01/12/22	RK	01/06/22	OP37488	G2G5566
JD37617-6	2G211906.D	1	01/12/22	RK	01/06/22	OP37488	G2G5566

The QC reported here applies to the following samples:

Method: SW846 8082A

JD35487-6

CAS No.	Compound	JD37617-6 ug/kg	Spike Q ug/kg	MS ug/kg	MS %	Spike ug/kg	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
12674-11-2	Aroclor 1016	ND	157	224	142	151	198	131	12	10-243/69
11104-28-2	Aroclor 1221	ND		ND			ND		nc	50-150/30
11141-16-5	Aroclor 1232	ND		ND			ND		nc	50-150/30
53469-21-9	Aroclor 1242	ND		ND			ND		nc	50-150/11
12672-29-6	Aroclor 1248	ND		ND			ND		nc	50-150/19
11097-69-1	Aroclor 1254	ND		ND			ND		nc	50-150/67
11096-82-5	Aroclor 1260	ND	157	177	112	151	159	106	11	10-200/64

CAS No.	Surrogate Recoveries	MS	MSD	JD37617-6	Limits
877-09-8	Tetrachloro-m-xylene	117%	113%	112%	10-163%
877-09-8	Tetrachloro-m-xylene	111%	111%	112%	10-163%
2051-24-3	Decachlorobiphenyl	110%	106%	90%	10-215%
2051-24-3	Decachlorobiphenyl	131%	123%	96%	10-215%

* = Outside of Control Limits.

8.5.12
8

Leachate Spike Summary

Job Number: JD35487
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP37051-LS8	OA155573.D	1	12/13/21	CP	12/09/21	OP37051	GOA5501
JD36176-1A	OA155569.D	1	12/13/21	CP	12/09/21	OP37051	GOA5501

The QC reported here applies to the following samples:

Method: SW846 8151A

JD35487-1, JD35487-2, JD35487-3

CAS No.	Compound	JD36176-1A ug/l	Spike Q ug/l	LS ug/l	LS %	Limits
94-75-7	2,4-D	ND	13.3	17.5	131	35-196
93-72-1	2,4,5-TP (Silvex)	ND	2.67	2.6	97	10-226
88-85-7	Dinoseb	ND	13.3	17.2	129* a	29-95

CAS No.	Surrogate Recoveries	LS	JD36176-1A	Limits
19719-28-9	2,4-DCAA	82%	81%	13-169%
19719-28-9	2,4-DCAA	82%	73%	13-169%

(a) Outside of in house control limits.

* = Outside of Control Limits.

Leachate Spike Summary

Job Number: JD35487
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP37163-LS13	3G134644.D	1	12/20/21	CP	12/15/21	OP37163	G3G4913
JD35487-4	3G134643.D	1	12/20/21	CP	12/15/21	OP37163	G3G4913

The QC reported here applies to the following samples:

Method: SW846 8151A

JD35487-4

CAS No.	Compound	JD35487-4 ug/l	Spike Q	ug/l	LS ug/l	LS %	Limits
94-75-7	2,4-D	ND		13.3	9.9	74	35-196
93-72-1	2,4,5-TP (Silvex)	ND		2.67	1.2	45	10-226
88-85-7	Dinoseb	ND		13.3	13.1	98* a	29-95

CAS No.	Surrogate Recoveries	LS	JD35487-4	Limits
19719-28-9	2,4-DCAA	63%	70%	13-169%
19719-28-9	2,4-DCAA	61%	54%	13-169%

(a) Outside control limits due to matrix interference.

8.6.2
8

* = Outside of Control Limits.

Leachate Spike Summary

Job Number: JD35487
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP37244-LS19	OA155794.D	1	12/28/21	CP	12/20/21	OP37244	GOA5510
JD35533-9R	OA155793.D	1	12/28/21	CP	12/20/21	OP37244	GOA5510

The QC reported here applies to the following samples:

Method: SW846 8151A

JD35487-5

CAS No.	Compound	JD35533-9R Spike ug/l	Q	LS ug/l	LS %	Limits
94-75-7	2,4-D	ND		13.3	11.7	88 35-196
93-72-1	2,4,5-TP (Silvex)	ND		2.67	2.3	86 10-226
88-85-7	Dinoseb	ND		13.3	21.3	160* ^a 29-95

CAS No.	Surrogate Recoveries	LS	JD35533-9R Limits
19719-28-9	2,4-DCAA	74%	70% 13-169%
19719-28-9	2,4-DCAA	55%	58% 13-169%

(a) Outside of in house control limits.

* = Outside of Control Limits.

8.6.3
8

Leachate Spike Summary

Job Number: JD35487
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP37275-LS25	3G134699.D	1	12/23/21	CP	12/21/21	OP37275	G3G4915
JD36795-1A	3G134702.D	1	12/23/21	CP	12/21/21	OP37275	G3G4915

The QC reported here applies to the following samples:

Method: SW846 8151A

JD35487-6

CAS No.	Compound	JD36795-1A ug/l	Spike Q ug/l	LS ug/l	LS %	Limits
94-75-7	2,4-D	ND	13.3	4.8	36	35-196
93-72-1	2,4,5-TP (Silvex)	ND	2.67	0.92	34	10-226
88-85-7	Dinoseb	ND	13.3	12.9	97* a	29-95

CAS No.	Surrogate Recoveries	LS	JD36795-1A	Limits
19719-28-9	2,4-DCAA	43%	237% * b	13-169%
19719-28-9	2,4-DCAA	41%	109%	13-169%

- (a) Outside of in house control limits.
- (b) Outside control limits due to matrix interference.

* = Outside of Control Limits.

8.6.4
8

Leachate Spike Summary

Job Number: JD35487
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP37053-LS8	4G9723492.D	1	12/13/21	TL	12/09/21	OP37053	G4G3681
JD36176-1A	4G9723491.D	1	12/13/21	TL	12/09/21	OP37053	G4G3681

The QC reported here applies to the following samples:

Method: SW846 8081B

JD35487-1, JD35487-2, JD35487-3

CAS No.	Compound	JD36176-1A ug/l	Spike Q	ug/l	LS ug/l	LS %	Limits
58-89-9	gamma-BHC (Lindane)	ND		1.67	1.3	78	39-160
12789-03-6	Chlordane	ND			ND		81-123
60-57-1	Dieldrin	ND		1.67	1.4	84	41-161
72-54-8	4,4'-DDD	ND		1.67	1.2	72	39-167
72-55-9	4,4'-DDE	ND		1.67	1.1	66	37-156
50-29-3	4,4'-DDT	ND		1.67	1.1	66	34-172
72-20-8	Endrin	ND		1.67	1.4	84	43-169
959-98-8	Endosulfan-I	ND		1.67	1.5	90	42-154
33213-65-9	Endosulfan-II	ND		1.67	1.3	78	42-159
76-44-8	Heptachlor	ND		1.67	1.3	78	35-152
1024-57-3	Heptachlor epoxide	ND		1.67	1.4	84	42-159
72-43-5	Methoxychlor	ND		1.67	1.3	78	47-170
2385-85-5	Mirex	ND		1.67	ND	0*	50-150 ^a
8001-35-2	Toxaphene	ND			ND		50-150

CAS No.	Surrogate Recoveries	LS	JD36176-1A	Limits
877-09-8	Tetrachloro-m-xylene	80%	54%	30-137%
877-09-8	Tetrachloro-m-xylene	81%	56%	30-137%
2051-24-3	Decachlorobiphenyl	72%	55%	10-137%
2051-24-3	Decachlorobiphenyl	76%	57%	10-137%

(a) Advisory control limits.

* = Outside of Control Limits.

Leachate Spike Summary

Job Number: JD35487
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP37162-LS13	6G81251.D	1	12/17/21	CP	12/15/21	OP37162	G6G2873
JD35487-4	6G81250.D	1	12/17/21	CP	12/15/21	OP37162	G6G2873

The QC reported here applies to the following samples:

Method: SW846 8081B

JD35487-4

CAS No.	Compound	JD35487-4 ug/l	Spike Q	LS ug/l	LS %	Limits
58-89-9	gamma-BHC (Lindane)	ND	1.67	2.2	132	39-160
12789-03-6	Chlordane	ND		ND		81-123
60-57-1	Dieldrin	ND	1.67	2.0	120	41-161
72-54-8	4,4'-DDD	ND	1.67	2.4	144	39-167
72-55-9	4,4'-DDE	ND	1.67	2.2	132	37-156
50-29-3	4,4'-DDT	ND	1.67	2.1	126	34-172
72-20-8	Endrin	ND	1.67	1.9	114	43-169
959-98-8	Endosulfan-I	ND	1.67	2.6	156* a	42-154
33213-65-9	Endosulfan-II	ND	1.67	0.58	35* a	42-159
76-44-8	Heptachlor	ND	1.67	2.2	132	35-152
1024-57-3	Heptachlor epoxide	ND	1.67	2.1	126	42-159
72-43-5	Methoxychlor	ND	1.67	2.4	144	47-170
2385-85-5	Mirex	ND	1.67	1.6	96	50-150 b
8001-35-2	Toxaphene	ND		ND		50-150

CAS No.	Surrogate Recoveries	LS	JD35487-4	Limits
877-09-8	Tetrachloro-m-xylene	80%	70%	30-137%
877-09-8	Tetrachloro-m-xylene	63%	68%	30-137%
2051-24-3	Decachlorobiphenyl	66%	45%	10-137%
2051-24-3	Decachlorobiphenyl	88%	63%	10-137%

(a) Outside of in house control limits.

(b) Advisory control limits.

* = Outside of Control Limits.

Leachate Spike Summary

Job Number: JD35487
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP37246-LS19	1G172286.D	1	12/22/21	CP	12/20/21	OP37246	G1G5946
JD35533-9R	1G172285.D	1	12/22/21	CP	12/20/21	OP37246	G1G5946

The QC reported here applies to the following samples:

Method: SW846 8081B

JD35487-5, JD35487-6

CAS No.	Compound	JD35533-9R Spike ug/l	Q	LS ug/l	LS %	Limits
58-89-9	gamma-BHC (Lindane)	ND	1.67	1.7	102	39-160
12789-03-6	Chlordane	ND		ND		81-123
60-57-1	Dieldrin	ND	1.67	1.8	108	41-161
72-54-8	4,4'-DDD	ND	1.67	1.8	108	39-167
72-55-9	4,4'-DDE	ND	1.67	1.7	102	37-156
50-29-3	4,4'-DDT	ND	1.67	1.9	114	34-172
72-20-8	Endrin	ND	1.67	2.0	120	43-169
959-98-8	Endosulfan-I	ND	1.67	1.8	108	42-154
33213-65-9	Endosulfan-II	ND	1.67	1.8	108	42-159
76-44-8	Heptachlor	ND	1.67	1.7	102	35-152
1024-57-3	Heptachlor epoxide	ND	1.67	1.6	96	42-159
72-43-5	Methoxychlor	ND	1.67	1.9	114	47-170
2385-85-5	Mirex	ND	1.67	ND	0*	50-150 ^a
8001-35-2	Toxaphene	ND		ND		50-150

CAS No.	Surrogate Recoveries	LS	JD35533-9R Limits
877-09-8	Tetrachloro-m-xylene	76%	84% 30-137%
877-09-8	Tetrachloro-m-xylene	69%	78% 30-137%
2051-24-3	Decachlorobiphenyl	96%	105% 10-137%
2051-24-3	Decachlorobiphenyl	78%	88% 10-137%

(a) Advisory control limits.

* = Outside of Control Limits.

8.6.7
8

Surrogate Recovery Summary

Job Number: JD35487
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Method: SW846 8151A	Matrix: LEACHATE
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Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1 ^a	S1 ^b
JD35487-1	OA155565.D	109	93
JD35487-2	OA155566.D	82	72
JD35487-3	OA155567.D	90	81
JD35487-4	3G134643.D	70	54
JD35487-5	OA155798.D	60	47
JD35487-6	3G134701.D	60	45
OP37051-BS1	OA155563.D	85	85
OP37051-BSD	OA155564.D	109	100
OP37051-LB5	OA155570.D	87	95
OP37051-LB8	OA155581.D	74	59
OP37051-LS8	OA155573.D	82	82
OP37051-MB1	OA155562.D	77	69
OP37051-MS	OA155573.D	82	82
OP37051-MSD	OA155574.D	97	118
OP37163-BS1	3G134642.D	64	64
OP37163-LB13	3G134649.D	92	62
OP37163-LB16	3G134660.D	82	62
OP37163-LS13	3G134644.D	63	61
OP37163-MB1	3G134641.D	80	69
OP37163-MS	3G134644.D	63	61
OP37163-MSD	3G134645.D	65	56
OP37244-BS1	OA155778.D	77	70
OP37244-LB19	OA155790.D	74	84
OP37244-LB24	OA155801.D	77	63
OP37244-LS19	OA155794.D	74	55
OP37244-MB1	OA155777.D	75	60
OP37244-MS	OA155794.D	74	55
OP37244-MSD	OA155795.D	84	67
OP37275-BS1	3G134697.D	75	69
OP37275-LB25	3G134703.D	62	55
OP37275-LB27	3G134704.D	49	34
OP37275-LS25	3G134699.D	43	41
OP37275-MB1	3G134696.D	68	66
OP37275-MS	3G134699.D	43	41
OP37275-MSD	3G134700.D	49	56

Surrogate Compounds

Recovery Limits

S1 = 2,4-DCAA

13-169%

8.7.1
8

Surrogate Recovery Summary

Job Number: JD35487

Account: CRATXH GHD Services Inc.

Project: SJRWP - PCFSE, Harris County, TX

Method: SW846 8151A	Matrix: LEACHATE
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Samples and QC shown here apply to the above method

Surrogate Compounds	Recovery Limits
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(a) Recovery from GC signal #2

(b) Recovery from GC signal #1

Surrogate Recovery Summary

Job Number: JD35487
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Method: SW846 8081B	Matrix: LEACHATE
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Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1 ^a	S1 ^b	S2 ^a	S2 ^b
JD35487-1	6G81247.D	69	63	50	63
JD35487-2	6G81248.D	70	67	52	85
JD35487-3	6G81249.D	62	58	39	63
JD35487-4	6G81250.D	70	68	45	63
JD35487-5	1G172723.D	79	75	110	76
JD35487-6	1G172724.D	118	86	184* ^c	88
OP37053-BS2	6G81245.D	75	72	61	77
OP37053-BSD2	6G81246.D	88	74	72	80
OP37053-LB5	4G9723489.D	62	67	58	56
OP37053-LB8	4G9723490.D	79	81	83	79
OP37053-LS8	4G9723492.D	80	81	72	76
OP37053-MB2	6G81244.D	69	64	47	60
OP37053-MS	4G9723492.D	80	81	72	76
OP37053-MSD	4G9723493.D	65	66	67	68
OP37162-BS1	6G81245.D	75	72	61	77
OP37162-BSD	6G81246.D	88	74	72	80
OP37162-LB13	6G81257.D	67	63	53	70
OP37162-LB16	6G81258.D	96	89	83	96
OP37162-LS13	6G81251.D	80	63	66	88
OP37162-MB1	6G81244.D	69	64	47	60
OP37162-MS	6G81251.D	80	63	66	88
OP37162-MSD	6G81252.D	75	63	66	75
OP37246-BS2	1G172710.D	68	62	71	50
OP37246-LB19	1G172292.D	65	65	88	77
OP37246-LB24	1G172293.D	75	74	97	84
OP37246-LS19	1G172286.D	76	69	96	78
OP37246-MB2	1G172709.D	104	83	117	68
OP37246-MS	1G172286.D	76	69	96	78
OP37246-MSD	1G172287.D	78	72	95	78
OP37053-MB1	4G9723487.D	86	90	73	59
OP37246-MB1	1G172275.D	65	61	58	49

Surrogate Compounds

Recovery Limits

S1 = Tetrachloro-m-xylene
 S2 = Decachlorobiphenyl

30-137%
 10-137%

(a) Recovery from GC signal #1
 (b) Recovery from GC signal #2

8.7.2
 8

Surrogate Recovery Summary

Job Number: JD35487

Account: CRATXH GHD Services Inc.

Project: SJRWP - PCFSE, Harris County, TX

Method: SW846 8081B

Matrix: LEACHATE

Samples and QC shown here apply to the above method

Surrogate Compounds	Recovery Limits
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(c) High percent recoveries and no positive found in the sample.

Surrogate Recovery Summary

Job Number: JD35487
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Method: SW846 8082A	Matrix: SO
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Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1 ^a	S1 ^b	S2 ^a	S2 ^b
JD35487-1	RK7150.D	84	114	60	107
JD35487-2	RK7213.D	76	94	60	92
JD35487-3	RK7214.D	84	132	65	128
JD35487-4	XX2475708.D	62	66	65	69
JD35487-5	5G113064.D	83	96	77	83
JD35487-6	2G211964.D	278* ^c	232* ^c	116	294* ^c
JD35487-6	2G212021.D	295* ^c	205* ^c	114	248* ^c
OP36964-BS1	RK7149.D	89	90	64	82
OP36964-MB1	RK7148.D	90	95	61	80
OP36964-MS	RK7152.D	91	89	49	75
OP36964-MSD	RK7153.D	94	93	52	77
OP36975-BS1	RK7208.D	149	149	99	119
OP36975-BSD	RK7209.D	113	113	76	92
OP36975-MB1	RK7207.D	153	151	93	117
OP36975-MS	RK7216.D	97	95	50	104
OP36975-MSD	RK7217.D	89	85	43	85
OP37070-BS1	XX2475703.D	106	108	117	102
OP37070-MB1	XX2475702.D	112	110	118	102
OP37070-MS	XX2475714.D	111	101	104	110
OP37070-MSD	XX2475715.D	122	123	123	125
OP37170-BS1	2G211267.D	94	98	99	103
OP37170-BSD	2G211268.D	102	108	107	106
OP37170-MB1	2G211266.D	100	104	106	104
OP37170-MS	2G211270.D	95	100	99	106
OP37170-MSD	2G211271.D	70	75	81	79
OP37488-BS1	2G211876.D	131	120	100	106
OP37488-BS1	2G211967.D	121	127	92	141
OP37488-MB1	2G211875.D	117	111	94	104
OP37488-MB1	2G211966.D	109	100	78	130
OP37488-MS	2G211917.D	117	111	110	131
OP37488-MSD	2G211918.D	113	111	106	123

Surrogate Compounds

Recovery Limits

S1 = Tetrachloro-m-xylene
 S2 = Decachlorobiphenyl

24-152%
 10-172%

(a) Recovery from GC signal #1
 (b) Recovery from GC signal #2

8.7.3
 8

Surrogate Recovery Summary

Job Number: JD35487

Account: CRATXH GHD Services Inc.

Project: SJRWP - PCFSE, Harris County, TX

Method: SW846 8082A	Matrix: SO
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Samples and QC shown here apply to the above method

Surrogate Compounds	Recovery Limits
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(c) Outside control limits due to matrix interference.

Metals Analysis

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Matrix Spike and Duplicate Summaries
- Blank Spike and Lab Control Sample Summaries
- Serial Dilution Summaries

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: JD35487
Account: CRATXH - GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

QC Batch ID: MP30188
Matrix Type: LEACHATE

Methods: SW846 6010D
Units: mg/l

Prep Date: 12/06/21

Metal	RL	IDL	MDL	MB raw	final
Aluminum	0.20	.016	.046		
Antimony	0.10	.0025	.0047	-0.00070	<0.10
Arsenic	0.10	.002	.0028	-0.0017	<0.10
Barium	0.20	.0004	.013	0.0075	<0.20
Beryllium	0.0020	.0001	.0005	0.00070	<0.0020
Bismuth	0.020	.0036	.004		
Boron	0.10	.0019	.063		
Cadmium	0.0040	.0004	.001	0.00080	<0.0040
Calcium	5.0	.0056	.099		
Chromium	0.010	.0005	.002	0.0022	<0.010
Cobalt	0.050	.0005	.0026		
Copper	0.010	.001	.0059		
Iron	0.10	.011	.032		
Lead	0.10	.0012	.0018	0.0040	<0.10
Lithium	0.050	.0023	.0073		
Magnesium	5.0	.065	.14		
Manganese	0.015	.0002	.0014		
Molybdenum	0.020	.0004	.0036		
Nickel	0.010	.0003	.0017	0.0019	<0.010
Potassium	10	.055	.2		
Selenium	0.10	.0035	.0049	-0.00090	<0.10
Silver	0.010	.0011	.0019	0.00050	<0.010
Thallium	0.10	.0025	.0018		
Tin	0.010	.001	.0037		
Titanium	0.010	.0004	.0025		
Tungsten	0.050	.0028	.04		
Vanadium	0.050	.0006	.0018	0.00080	<0.050
Zinc	0.060	.0001	.0069		
Zirconium	0.010	.0004	.0041		

Associated samples MP30188: JD35487-1

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

9.1.1
9

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: JD35487
 Account: CRATXH - GHD Services Inc.
 Project: SJRWP - PCFSE, Harris County, TX

QC Batch ID: MP30188
 Matrix Type: LEACHATE

Methods: SW846 6010D
 Units: mg/l

Prep Date: 12/06/21

Metal	JD35487-1 Original MS		SpikeLot MPSPK2	% Rec	QC Limits
Aluminum					
Antimony	0.0053	2.1	2.0	104.7	75-125
Arsenic	0.014	2.1	2.0	104.3	75-125
Barium	1.1	3.1	2.0	100.0	75-125
Beryllium	0.0	1.9	2.0	95.0	75-125
Bismuth					
Boron					
Cadmium	0.00070	2.0	2.0	100.0	75-125
Chromium	0.0015	1.9	2.0	94.9	75-125
Cobalt					
Copper	anr				
Iron					
Lead	0.0052	1.9	2.0	94.7	75-125
Lithium					
Magnesium					
Manganese					
Molybdenum					
Nickel	0.067	2.0	2.0	96.7	75-125
Phosphorus					
Potassium					
Selenium	0.0	2.1	2.0	105.0	75-125
Silicon					
Silver	0.0056	0.26	0.25	101.8	75-125
Strontium					
Sulfur					
Thallium					
Tin					
Titanium					
Tungsten					
Vanadium	0.0	1.9	2.0	95.0	75-125
Zinc					
Zirconium					

Associated samples MP30188: JD35487-1

9.1.2
9

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: JD35487
Account: CRATXH - GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

QC Batch ID: MP30188
Matrix Type: LEACHATE

Methods: SW846 6010D
Units: mg/l

Prep Date: 12/06/21

Metal	JD35487-1 Original MS	SpikeLot MPSPK2	% Rec	QC Limits
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Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: JD35487
 Account: CRATXH - GHD Services Inc.
 Project: SJRWP - PCFSE, Harris County, TX

QC Batch ID: MP30188
 Matrix Type: LEACHATE

Methods: SW846 6010D
 Units: mg/l

Prep Date: 12/06/21

Metal	JD35487-1 Original MSD		SpikeLot MPSPK2	% Rec	MSD RPD	QC Limit
Aluminum						
Antimony	0.0053	2.1	2.0	104.7	0.0	20
Arsenic	0.014	2.1	2.0	104.3	0.0	20
Barium	1.1	3.1	2.0	100.0	0.0	20
Beryllium	0.0	1.9	2.0	95.0	0.0	20
Bismuth						
Boron						
Cadmium	0.00070	2.1	2.0	105.0	4.9	20
Chromium	0.0015	1.9	2.0	94.9	0.0	20
Cobalt						
Copper	anr					
Iron						
Lead	0.0052	2.0	2.0	99.7	5.1	20
Lithium						
Magnesium						
Manganese						
Molybdenum						
Nickel	0.067	2.1	2.0	101.7	4.9	20
Phosphorus						
Potassium						
Selenium	0.0	2.1	2.0	105.0	0.0	20
Silicon						
Silver	0.0056	0.26	0.25	101.8	0.0	20
Strontium						
Sulfur						
Thallium						
Tin						
Titanium						
Tungsten						
Vanadium	0.0	1.9	2.0	95.0	0.0	20
Zinc						
Zirconium						

Associated samples MP30188: JD35487-1

9.1.2
9

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: JD35487
 Account: CRATXH - GHD Services Inc.
 Project: SJRWP - PCFSE, Harris County, TX

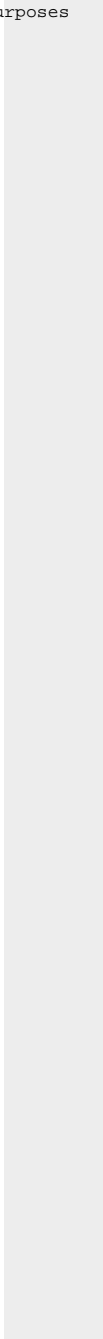
QC Batch ID: MP30188
 Matrix Type: LEACHATE

Methods: SW846 6010D
 Units: mg/l

Prep Date: 12/06/21

Metal	JD35487-1 Original MSD	SpikeLot MPSPK2	% Rec	MSD RPD	QC Limit
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Results < IDL are shown as zero for calculation purposes
 (*) Outside of QC limits
 (N) Matrix Spike Rec. outside of QC limits
 (anr) Analyte not requested



9.1.2
 9

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: JD35487
 Account: CRATXH - GHD Services Inc.
 Project: SJRWP - PCFSE, Harris County, TX

QC Batch ID: MP30188
 Matrix Type: LEACHATE

Methods: SW846 6010D
 Units: mg/l

Prep Date: 12/06/21

Metal	BSP Result	Spikelot MPSPK2	% Rec	QC Limits
Aluminum				
Antimony	2.0	2.0	100.0	80-120
Arsenic	2.1	2.0	105.0	80-120
Barium	1.9	2.0	95.0	80-120
Beryllium	1.9	2.0	95.0	80-120
Bismuth				
Boron				
Cadmium	2.0	2.0	100.0	80-120
Calcium				
Chromium	1.9	2.0	95.0	80-120
Cobalt				
Copper	anr			
Iron				
Lead	2.0	2.0	100.0	80-120
Lithium				
Magnesium				
Manganese				
Molybdenum				
Nickel	2.0	2.0	100.0	80-120
Phosphorus				
Potassium				
Selenium	2.1	2.0	105.0	80-120
Silicon				
Silver	0.25	0.25	100.0	80-120
Strontium				
Thallium				
Tin				
Titanium				
Tungsten				
Vanadium	1.9	2.0	95.0	80-120
Zinc	anr			
Zirconium				

Associated samples MP30188: JD35487-1

9.1.3
9

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: JD35487
Account: CRATXH - GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

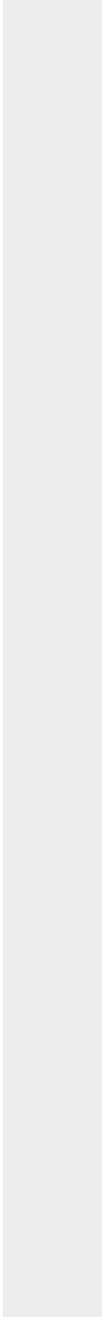
QC Batch ID: MP30188
Matrix Type: LEACHATE

Methods: SW846 6010D
Units: mg/l

Prep Date: 12/06/21

Metal	BSP Result	Spikelot MPSPK2	% Rec	QC Limits
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Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested



SERIAL DILUTION RESULTS SUMMARY

Login Number: JD35487
 Account: CRATXH - GHD Services Inc.
 Project: SJRWP - PCFSE, Harris County, TX

QC Batch ID: MP30188
 Matrix Type: LEACHATE

Methods: SW846 6010D
 Units: ug/l

Prep Date: 12/06/21

Metal	JD35487-1 Original	SDL 1:5	%DIF	QC Limits
Aluminum				
Antimony	5.30	0.00	100.0(a)	0-10
Arsenic	14.0	11.2	20.0 (a)	0-10
Barium	1080	1080	0.4	0-10
Beryllium	0.00	0.00	NC	0-10
Bismuth				
Boron				
Cadmium	0.700	0.00	100.0(a)	0-10
Calcium				
Chromium	1.50	2.70	80.0 (a)	0-10
Cobalt				
Copper	anr			
Iron				
Lead	5.20	0.00	100.0(a)	0-10
Lithium				
Magnesium				
Manganese				
Molybdenum				
Nickel	67.1	65.6	2.2	0-10
Phosphorus				
Potassium				
Selenium	0.00	0.00	NC	0-10
Silicon				
Silver	5.60	6.70	19.6 (a)	0-10
Strontium				
Sulfur				
Thallium				
Tin				
Titanium				
Tungsten				
Vanadium	0.00	0.00	NC	0-10
Zinc				
Zirconium				

9.1.4
9

SERIAL DILUTION RESULTS SUMMARY

Login Number: JD35487
Account: CRATXH - GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

QC Batch ID: MP30188
Matrix Type: LEACHATE

Methods: SW846 6010D
Units: ug/l

Prep Date: 12/06/21

	JD35487-1		QC
Metal	Original SDL 1:5	%DIF	Limits

Associated samples MP30188: JD35487-1

Results < IDL are shown as zero for calculation purposes

(*) Outside of QC limits

(anr) Analyte not requested

(a) Percent difference acceptable due to low initial sample concentration (< 50 times IDL).

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: JD35487
Account: CRATXH - GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

QC Batch ID: MP30216
Matrix Type: LEACHATE

Methods: SW846 7470A
Units: mg/l

Prep Date: 12/07/21

Metal	RL	IDL	MDL	MB	
				raw	final
Mercury	0.00020	.000034	.000095	-0.000020	<0.00020

Associated samples MP30216: JD35487-1

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: JD35487
 Account: CRATXH - GHD Services Inc.
 Project: SJRWP - PCFSE, Harris County, TX

QC Batch ID: MP30216
 Matrix Type: LEACHATE

Methods: SW846 7470A
 Units: mg/l

Prep Date: 12/07/21

Metal	JD35487-1 Original MS	SpikeLot HGPW3	% Rec	QC Limits
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Mercury 0.00037 0.0023 0.0020 96.5 75-125

Associated samples MP30216: JD35487-1

Results < IDL are shown as zero for calculation purposes
 (*) Outside of QC limits
 (N) Matrix Spike Rec. outside of QC limits
 (anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: JD35487
 Account: CRATXH - GHD Services Inc.
 Project: SJRWP - PCFSE, Harris County, TX

QC Batch ID: MP30216
 Matrix Type: LEACHATE

Methods: SW846 7470A
 Units: mg/l

Prep Date: 12/07/21

Metal	JD35487-1 Original MSD	Spike lot HGPW3	% Rec	MSD RPD	QC Limit
Mercury	0.00037	0.0022	0.0020	91.5	4.4 20

Associated samples MP30216: JD35487-1

Results < IDL are shown as zero for calculation purposes
 (*) Outside of QC limits
 (N) Matrix Spike Rec. outside of QC limits
 (anr) Analyte not requested

9.2.2
9

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: JD35487
Account: CRATXH - GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

QC Batch ID: MP30216
Matrix Type: LEACHATE

Methods: SW846 7470A
Units: mg/l

Prep Date: 12/07/21

Metal	BSP Result	Spikelot HGPW3	% Rec	QC Limits
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Mercury 0.0020 0.0020 100.0 80-120

Associated samples MP30216: JD35487-1

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: JD35487
Account: CRATXH - GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

QC Batch ID: MP30255
Matrix Type: LEACHATE

Methods: SW846 6010D
Units: mg/l

Prep Date: 12/09/21

Metal	RL	IDL	MDL	MB raw	final
Aluminum	0.20	.017	.046		
Antimony	0.10	.0017	.0047	-0.00030	<0.10
Arsenic	0.10	.0021	.0028	0.0014	<0.10
Barium	0.20	.0008	.013	0.0065	<0.20
Beryllium	0.0020	.0003	.0005	0.0	<0.0020
Bismuth	0.020	.0023	.004		
Boron	0.10	.0023	.063		
Cadmium	0.0040	.0003	.001	0.00030	<0.0040
Calcium	5.0	.0066	.099		
Chromium	0.010	.0003	.002	0.0069	<0.010(a)
Cobalt	0.050	.0004	.0026		
Copper	0.010	.0008	.0059		
Iron	0.10	.0053	.032		
Lead	0.10	.0011	.0018	0.0043	<0.10
Lithium	0.050	.0048	.0073		
Magnesium	5.0	.032	.14		
Manganese	0.015	.0001	.0014		
Molybdenum	0.020	.0006	.0036		
Nickel	0.020	.0004	.0017	0.0093	<0.020
Phosphorus	0.050	.0012	.018		
Potassium	10	.077	.2		
Selenium	0.10	.0032	.0049	0.0019	<0.10
Silicon	0.20	.0017	.1		
Silver	0.010	.001	.0019	-0.0014	<0.010
Strontium	0.010	.0003	.001		
Sulfur	0.050	.003	.045		
Thallium	0.10	.0018	.0018		
Tin	0.010	.0008	.0037		
Titanium	0.010	.0005	.0025		
Tungsten	0.050	.0026	.04		
Vanadium	0.050	.0006	.0018	0.00020	<0.050
Zinc	0.020	.0001	.0069		
Zirconium	0.010	.0003	.0041		

9.3.1
9

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: JD35487
Account: CRATXH - GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

QC Batch ID: MP30255
Matrix Type: LEACHATE

Methods: SW846 6010D
Units: mg/l

Prep Date: 12/09/21

Metal	RL	IDL	MDL	MB raw	final
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Associated samples MP30255: JD35487-2, JD35487-3

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested
(a) All reported results <RL or >10x MB value.

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: JD35487
 Account: CRATXH - GHD Services Inc.
 Project: SJRWP - PCFSE, Harris County, TX

QC Batch ID: MP30255
 Matrix Type: LEACHATE

Methods: SW846 6010D
 Units: mg/l

Prep Date: 12/09/21

Metal	JD35487-2 Original MS		Spike lot MPSPK2	% Rec	QC Limits
Aluminum					
Antimony	0.016	2.1	2.0	104.2	75-125
Arsenic	0.011	2.2	2.0	109.5	75-125
Barium	0.98	3.1	2.0	106.0	75-125
Beryllium	0.0	2.0	2.0	100.0	75-125
Bismuth					
Boron					
Cadmium	0.0023	2.2	2.0	109.9	75-125
Chromium	0.0068	2.0	2.0	99.7	75-125
Cobalt					
Copper					
Iron					
Lead	0.013	2.1	2.0	104.4	75-125
Lithium					
Magnesium					
Molybdenum					
Nickel	0.086	2.2	2.0	105.7	75-125
Phosphorus					
Potassium					
Selenium	0.0	2.2	2.0	110.0	75-125
Silicon					
Silver	0.0069	0.28	0.25	109.2	75-125
Strontium					
Sulfur					
Thallium					
Tin					
Titanium					
Tungsten					
Vanadium	0.0062	2.1	2.0	104.7	75-125
Zinc					
Zirconium					

Associated samples MP30255: JD35487-2, JD35487-3

Results < IDL are shown as zero for calculation purposes
 (*) Outside of QC limits

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: JD35487
Account: CRATXH - GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

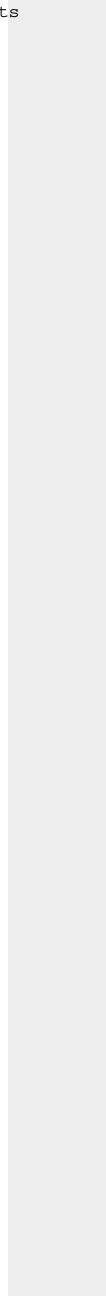
QC Batch ID: MP30255
Matrix Type: LEACHATE

Methods: SW846 6010D
Units: mg/l

Prep Date: 12/09/21

Metal	JD35487-2 Original MS	SpikeLot MPSPK2	% Rec	QC Limits
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(N) Matrix Spike Rec. outside of QC limits
(anr) Analyte not requested



MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: JD35487
 Account: CRATXH - GHD Services Inc.
 Project: SJRWP - PCFSE, Harris County, TX

QC Batch ID: MP30255
 Matrix Type: LEACHATE

Methods: SW846 6010D
 Units: mg/l

Prep Date: 12/09/21

Metal	JD35487-2 Original MSD		SpikeLot MPSPK2 % Rec		MSD RPD	QC Limit
Aluminum						
Antimony	0.016	2.1	2.0	104.2	0.0	20
Arsenic	0.011	2.2	2.0	109.5	0.0	20
Barium	0.98	3.1	2.0	106.0	0.0	20
Beryllium	0.0	2.0	2.0	100.0	0.0	20
Bismuth						
Boron						
Cadmium	0.0023	2.2	2.0	109.9	0.0	20
Chromium	0.0068	2.0	2.0	99.7	0.0	20
Cobalt						
Copper						
Iron						
Lead	0.013	2.1	2.0	104.4	0.0	20
Lithium						
Magnesium						
Molybdenum						
Nickel	0.086	2.2	2.0	105.7	0.0	20
Phosphorus						
Potassium						
Selenium	0.0	2.2	2.0	110.0	0.0	20
Silicon						
Silver	0.0069	0.28	0.25	109.2	0.0	20
Strontium						
Sulfur						
Thallium						
Tin						
Titanium						
Tungsten						
Vanadium	0.0062	2.1	2.0	104.7	0.0	20
Zinc						
Zirconium						

Associated samples MP30255: JD35487-2, JD35487-3

Results < IDL are shown as zero for calculation purposes
 (*) Outside of QC limits

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: JD35487
 Account: CRATXH - GHD Services Inc.
 Project: SJRWP - PCFSE, Harris County, TX

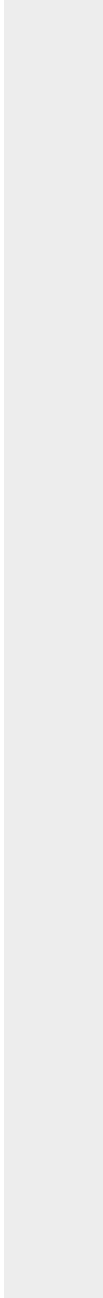
QC Batch ID: MP30255
 Matrix Type: LEACHATE

Methods: SW846 6010D
 Units: mg/l

Prep Date: 12/09/21

Metal	JD35487-2 Original MSD	SpikeLot MPSPK2	% Rec	MSD RPD	QC Limit
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(N) Matrix Spike Rec. outside of QC limits
 (anr) Analyte not requested



SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: JD35487
 Account: CRATXH - GHD Services Inc.
 Project: SJRWP - PCFSE, Harris County, TX

QC Batch ID: MP30255
 Matrix Type: LEACHATE

Methods: SW846 6010D
 Units: mg/l

Prep Date: 12/09/21

Metal	BSP Result	Spikelot MPSPK2	% Rec	QC Limits
Aluminum				
Antimony	2.0	2.0	100.0	80-120
Arsenic	2.1	2.0	105.0	80-120
Barium	2.0	2.0	100.0	80-120
Beryllium	2.0	2.0	100.0	80-120
Bismuth				
Boron				
Cadmium	2.1	2.0	105.0	80-120
Calcium				
Chromium	2.0	2.0	100.0	80-120
Cobalt				
Copper				
Iron				
Lead	2.1	2.0	105.0	80-120
Lithium				
Magnesium				
Manganese				
Molybdenum				
Nickel	2.1	2.0	105.0	80-120
Phosphorus				
Potassium				
Selenium	2.1	2.0	105.0	80-120
Silicon				
Silver	0.26	0.25	104.0	80-120
Strontium				
Sulfur				
Thallium				
Tin				
Titanium				
Tungsten				
Vanadium	2.1	2.0	105.0	80-120
Zinc				
Zirconium				

9.3.3
9

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: JD35487
Account: CRATXH - GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

QC Batch ID: MP30255
Matrix Type: LEACHATE

Methods: SW846 6010D
Units: mg/l

Prep Date: 12/09/21

Metal	BSP Result	Spikelot MPSPK2	% Rec	QC Limits
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Associated samples MP30255: JD35487-2, JD35487-3

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

SERIAL DILUTION RESULTS SUMMARY

Login Number: JD35487
 Account: CRATXH - GHD Services Inc.
 Project: SJRWP - PCFSE, Harris County, TX

QC Batch ID: MP30255
 Matrix Type: LEACHATE

Methods: SW846 6010D
 Units: ug/l

Prep Date: 12/09/21

Metal	JD35487-2 Original	SDL 1:5	%DIF	QC Limits
Aluminum				
Antimony	16.2	9.00	44.4 (a)	0-10
Arsenic	10.8	16.0	48.1 (a)	0-10
Barium	982	968	1.4	0-10
Beryllium	0.00	0.00	NC	0-10
Bismuth				
Boron				
Cadmium	2.30	3.50	52.2 (a)	0-10
Calcium				
Chromium	6.80	10.2	50.0 (a)	0-10
Cobalt				
Copper				
Iron				
Lead	13.0	15.4	18.5 (a)	0-10
Lithium				
Magnesium				
Manganese				
Molybdenum				
Nickel	85.6	88.8	3.7	0-10
Phosphorus				
Potassium				
Selenium	0.00	0.00	NC	0-10
Silicon				
Silver	6.90	0.00	100.0(a)	0-10
Strontium				
Sulfur				
Thallium				
Tin				
Titanium				
Tungsten				
Vanadium	6.20	6.20	0.0	0-10
Zinc				
Zirconium				

9.3.4
 9

SERIAL DILUTION RESULTS SUMMARY

Login Number: JD35487
Account: CRATXH - GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

QC Batch ID: MP30255
Matrix Type: LEACHATE

Methods: SW846 6010D
Units: ug/l

Prep Date: 12/09/21

	JD35487-2		QC
Metal	Original SDL 1:5	%DIF	Limits

Associated samples MP30255: JD35487-2, JD35487-3

Results < IDL are shown as zero for calculation purposes

(*) Outside of QC limits

(anr) Analyte not requested

(a) Percent difference acceptable due to low initial sample concentration (< 50 times IDL).

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: JD35487
Account: CRATXH - GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

QC Batch ID: MP30275
Matrix Type: LEACHATE

Methods: SW846 7470A
Units: mg/l

Prep Date: 12/09/21

Metal	RL	IDL	MDL	MB	
				raw	final
Mercury	0.00020	.000034	.000095	-0.000014	<0.00020

Associated samples MP30275: JD35487-2, JD35487-3

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: JD35487
Account: CRATXH - GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

QC Batch ID: MP30275
Matrix Type: LEACHATE

Methods: SW846 7470A
Units: mg/l

Prep Date: 12/09/21

Metal	JD35487-2 Original MS	SpikeLot HGPW3	% Rec	QC Limits
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Mercury 0.0 0.0018 0.0020 90.0 75-125

Associated samples MP30275: JD35487-2, JD35487-3

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: JD35487
 Account: CRATXH - GHD Services Inc.
 Project: SJRWP - PCFSE, Harris County, TX

QC Batch ID: MP30275
 Matrix Type: LEACHATE

Methods: SW846 7470A
 Units: mg/l

Prep Date: 12/09/21

Metal	JD35487-2 Original MSD	Spike lot HGPW3	% Rec	MSD RPD	QC Limit
Mercury	0.0	0.0019	0.0020	95.0	5.4 20

Associated samples MP30275: JD35487-2, JD35487-3

Results < IDL are shown as zero for calculation purposes
 (*) Outside of QC limits
 (N) Matrix Spike Rec. outside of QC limits
 (anr) Analyte not requested

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: JD35487
Account: CRATXH - GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

QC Batch ID: MP30275
Matrix Type: LEACHATE

Methods: SW846 7470A
Units: mg/l

Prep Date: 12/09/21

Metal	BSP Result	Spikelot HGPW3	% Rec	QC Limits
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Mercury 0.0018 0.0020 90.0 80-120

Associated samples MP30275: JD35487-2, JD35487-3

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: JD35487
Account: CRATXH - GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

QC Batch ID: MP30324
Matrix Type: LEACHATE

Methods: SW846 6010D
Units: mg/l

Prep Date: 12/11/21

Metal	RL	IDL	MDL	MB raw	final
Aluminum	0.20	.0092	.046		
Antimony	0.10	.0028	.0047	-0.0017	<0.10
Arsenic	0.10	.0026	.0028	-0.0014	<0.10
Barium	0.20	.0002	.013	0.011	<0.20
Beryllium	0.0020	.0002	.0005	0.0	<0.0020
Bismuth	0.020	.0025	.004		
Boron	0.10	.0018	.063		
Cadmium	0.0040	.0004	.001	0.00020	<0.0040
Calcium	5.0	.013	.099		
Chromium	0.020	.0007	.002	0.0071	<0.020
Cobalt	0.050	.0006	.0026		
Copper	0.010	.0007	.0059		
Iron	0.10	.0033	.032		
Lead	0.10	.002	.0018	0.0093	<0.10
Lithium	0.050	.0015	.0073		
Magnesium	5.0	.025	.14		
Manganese	0.015	.0001	.0014		
Molybdenum	0.020	.0006	.0036		
Nickel	0.010	.0008	.0017	0.0033	<0.010
Phosphorus	0.050	.007	.018		
Potassium	10	.035	.2		
Selenium	0.10	.0036	.0049	0.0038	<0.10
Silicon	0.20	.0022	.1		
Silver	0.010	.0006	.0019	-0.00080	<0.010
Strontium	0.010	.0001	.001		
Sulfur	0.050	.0037	.045		
Thallium	0.10	.0052	.0018		
Tin	0.010	.0014	.0037		
Titanium	0.010	.0008	.0025		
Tungsten	0.050	.0013	.04		
Vanadium	0.050	.0005	.0018	0.00040	<0.050
Zinc	0.020	.0003	.0069		
Zirconium	0.010	.0005	.0041		

9.5.1
9

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: JD35487
Account: CRATXH - GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

QC Batch ID: MP30324
Matrix Type: LEACHATE

Methods: SW846 6010D
Units: mg/l

Prep Date: 12/11/21

Metal	RL	IDL	MDL	MB raw	final
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Associated samples MP30324: JD35487-4

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: JD35487
 Account: CRATXH - GHD Services Inc.
 Project: SJRWP - PCFSE, Harris County, TX

QC Batch ID: MP30324
 Matrix Type: LEACHATE

Methods: SW846 6010D
 Units: mg/l

Prep Date: 12/11/21

Metal	JD35487-4 Original MS		SpikeLot MPSPK2	% Rec	QC Limits
Aluminum					
Antimony	0.0052	2.2	2.0	109.7	75-125
Arsenic	0.0	2.2	2.0	110.0	75-125
Barium	1.2	3.2	2.0	100.0	75-125
Beryllium	0.0	2.0	2.0	100.0	75-125
Bismuth					
Boron					
Cadmium	0.010	2.2	2.0	109.5	75-125
Chromium	0.0032	2.0	2.0	99.8	75-125
Cobalt					
Copper					
Iron					
Lead	0.0	2.0	2.0	100.0	75-125
Lithium					
Magnesium					
Manganese					
Molybdenum					
Nickel	0.032	2.1	2.0	103.4	75-125
Phosphorus					
Potassium					
Selenium	0.0070	2.3	2.0	114.7	75-125
Silicon					
Silver	0.0034	0.30	0.25	118.6	75-125
Strontium					
Sulfur					
Thallium					
Tin					
Titanium					
Tungsten					
Vanadium	0.00080	2.0	2.0	100.0	75-125
Zinc					
Zirconium					

Associated samples MP30324: JD35487-4

9.5.2
9

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: JD35487
Account: CRATXH - GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

QC Batch ID: MP30324
Matrix Type: LEACHATE

Methods: SW846 6010D
Units: mg/l

Prep Date: 12/11/21

Metal	JD35487-4 Original MS	SpikeLot MPSPK2	% Rec	QC Limits
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Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: JD35487
 Account: CRATXH - GHD Services Inc.
 Project: SJRWP - PCFSE, Harris County, TX

QC Batch ID: MP30324
 Matrix Type: LEACHATE

Methods: SW846 6010D
 Units: mg/l

Prep Date: 12/11/21

Metal	JD35487-4 Original MSD		SpikeLot MPSPK2 % Rec		MSD RPD	QC Limit
Aluminum						
Antimony	0.0052	2.2	2.0	109.7	0.0	20
Arsenic	0.0	2.2	2.0	110.0	0.0	20
Barium	1.2	3.2	2.0	100.0	0.0	20
Beryllium	0.0	2.0	2.0	100.0	0.0	20
Bismuth						
Boron						
Cadmium	0.010	2.2	2.0	109.5	0.0	20
Chromium	0.0032	2.0	2.0	99.8	0.0	20
Cobalt						
Copper						
Iron						
Lead	0.0	2.0	2.0	100.0	0.0	20
Lithium						
Magnesium						
Manganese						
Molybdenum						
Nickel	0.032	2.1	2.0	103.4	0.0	20
Phosphorus						
Potassium						
Selenium	0.0070	2.3	2.0	114.7	0.0	20
Silicon						
Silver	0.0034	0.30	0.25	118.6	0.0	20
Strontium						
Sulfur						
Thallium						
Tin						
Titanium						
Tungsten						
Vanadium	0.00080	2.0	2.0	100.0	0.0	20
Zinc						
Zirconium						

Associated samples MP30324: JD35487-4

9.5.2
9

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: JD35487
 Account: CRATXH - GHD Services Inc.
 Project: SJRWP - PCFSE, Harris County, TX

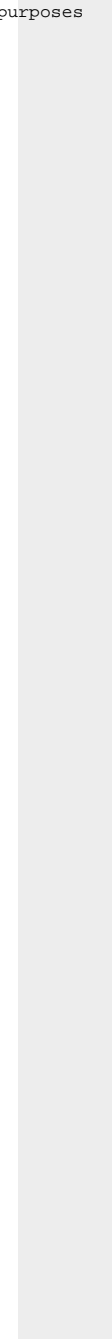
QC Batch ID: MP30324
 Matrix Type: LEACHATE

Methods: SW846 6010D
 Units: mg/l

Prep Date: 12/11/21

Metal	JD35487-4 Original MSD	SpikeLot MPSPK2	% Rec	MSD RPD	QC Limit
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Results < IDL are shown as zero for calculation purposes
 (*) Outside of QC limits
 (N) Matrix Spike Rec. outside of QC limits
 (anr) Analyte not requested



SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: JD35487
 Account: CRATXH - GHD Services Inc.
 Project: SJRWP - PCFSE, Harris County, TX

QC Batch ID: MP30324
 Matrix Type: LEACHATE

Methods: SW846 6010D
 Units: mg/l

Prep Date: 12/11/21

Metal	BSP Result	Spikelot MPSPK2	% Rec	QC Limits
Aluminum				
Antimony	2.1	2.0	105.0	80-120
Arsenic	2.1	2.0	105.0	80-120
Barium	2.0	2.0	100.0	80-120
Beryllium	2.0	2.0	100.0	80-120
Bismuth				
Boron				
Cadmium	2.1	2.0	105.0	80-120
Calcium				
Chromium	2.0	2.0	100.0	80-120
Cobalt				
Copper				
Iron				
Lead	2.1	2.0	105.0	80-120
Lithium				
Magnesium				
Manganese				
Molybdenum				
Nickel	2.1	2.0	105.0	80-120
Phosphorus				
Potassium				
Selenium	2.2	2.0	110.0	80-120
Silicon				
Silver	0.29	0.25	116.0	80-120
Strontium				
Sulfur				
Thallium				
Tin				
Titanium				
Tungsten				
Vanadium	2.0	2.0	100.0	80-120
Zinc				
Zirconium				

9.5.3
 9

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: JD35487
Account: CRATXH - GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

QC Batch ID: MP30324
Matrix Type: LEACHATE

Methods: SW846 6010D
Units: mg/l

Prep Date: 12/11/21

Metal	BSP Result	Spikelot MPSPK2	% Rec	QC Limits
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Associated samples MP30324: JD35487-4

Results < IDL are shown as zero for calculation purposes

(*) Outside of QC limits

(anr) Analyte not requested

SERIAL DILUTION RESULTS SUMMARY

Login Number: JD35487
 Account: CRATXH - GHD Services Inc.
 Project: SJRWP - PCFSE, Harris County, TX

QC Batch ID: MP30324
 Matrix Type: LEACHATE

Methods: SW846 6010D
 Units: ug/l

Prep Date: 12/11/21

Metal	JD35487-4 Original	SDL 1:5	%DIF	QC Limits
Aluminum				
Antimony	5.20	0.00	100.0(a)	0-10
Arsenic	0.00	0.00	NC	0-10
Barium	1160	1150	0.4	0-10
Beryllium	0.00	0.00	NC	0-10
Bismuth				
Boron				
Cadmium	10.2	10.6	3.9	0-10
Calcium				
Chromium	3.20	4.20	31.3 (a)	0-10
Cobalt				
Copper				
Iron				
Lead	0.00	0.00	NC	0-10
Lithium				
Magnesium				
Manganese				
Molybdenum				
Nickel	32.3	33.8	4.6	0-10
Phosphorus				
Potassium				
Selenium	7.00	0.00	100.0(a)	0-10
Silicon				
Silver	3.40	0.00	100.0(a)	0-10
Strontium				
Sulfur				
Thallium				
Tin				
Titanium				
Tungsten				
Vanadium	0.800	0.00	100.0(a)	0-10
Zinc				
Zirconium				

9.5.4
9

SERIAL DILUTION RESULTS SUMMARY

Login Number: JD35487
Account: CRATXH - GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

QC Batch ID: MP30324
Matrix Type: LEACHATE

Methods: SW846 6010D
Units: ug/l

Prep Date: 12/11/21

	JD35487-4		QC
Metal	Original SDL 1:5	%DIF	Limits

Associated samples MP30324: JD35487-4

Results < IDL are shown as zero for calculation purposes

(*) Outside of QC limits

(anr) Analyte not requested

(a) Percent difference acceptable due to low initial sample concentration (< 50 times IDL).

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: JD35487
Account: CRATXH - GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

QC Batch ID: MP30341
Matrix Type: LEACHATE

Methods: SW846 7470A
Units: mg/l

Prep Date: 12/13/21

Metal	RL	IDL	MDL	MB raw	final
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Mercury 0.00020 .000034 .000095 0.0000064<0.00020

Associated samples MP30341: JD35487-4

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: JD35487
Account: CRATXH - GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

QC Batch ID: MP30341
Matrix Type: LEACHATE

Methods: SW846 7470A
Units: mg/l

Prep Date: 12/13/21

Metal	JD35487-4 Original MS	SpikeLot HGPW3	% Rec	QC Limits
Mercury	0.00011	0.0020	94.5	75-125

Associated samples MP30341: JD35487-4

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: JD35487
 Account: CRATXH - GHD Services Inc.
 Project: SJRWP - PCFSE, Harris County, TX

QC Batch ID: MP30341
 Matrix Type: LEACHATE

Methods: SW846 7470A
 Units: mg/l

Prep Date: 12/13/21

Metal	JD35487-4 Original MSD	SpikeLot HGPW3	% Rec	MSD RPD	QC Limit
Mercury	0.00011	0.0020	0.0020	94.5	0.0 20

Associated samples MP30341: JD35487-4

Results < IDL are shown as zero for calculation purposes
 (*) Outside of QC limits
 (N) Matrix Spike Rec. outside of QC limits
 (anr) Analyte not requested

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: JD35487
Account: CRATXH - GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

QC Batch ID: MP30341
Matrix Type: LEACHATE

Methods: SW846 7470A
Units: mg/l

Prep Date: 12/13/21

Metal	BSP Result	Spikelot HGPW3	% Rec	QC Limits
Mercury	0.0019	0.0020	95.0	80-120

Associated samples MP30341: JD35487-4

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: JD35487
Account: CRATXH - GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

QC Batch ID: MP30409
Matrix Type: LEACHATE

Methods: SW846 6010D
Units: mg/l

Prep Date: 12/16/21

Metal	RL	IDL	MDL	MB raw	final
Aluminum	0.20	.0092	.046		
Antimony	0.10	.0028	.0047	0.0022	<0.10
Arsenic	0.10	.0026	.0028	0.00040	<0.10
Barium	0.20	.0002	.013	0.0026	<0.20
Beryllium	0.0020	.0002	.0005	0.00010	<0.0020
Bismuth	0.020	.0025	.004		
Boron	0.10	.0018	.063		
Cadmium	0.0040	.0004	.001	0.0	<0.0040
Calcium	5.0	.013	.099		
Chromium	0.010	.0007	.002	0.00070	<0.010
Cobalt	0.050	.0006	.0026		
Copper	0.010	.0007	.0059		
Iron	0.10	.0033	.032		
Lead	0.10	.002	.0018	0.0021	<0.10
Lithium	0.050	.0015	.0073		
Magnesium	5.0	.025	.14		
Manganese	0.015	.0001	.0014		
Molybdenum	0.020	.0006	.0036		
Nickel	0.010	.0008	.0017	0.00090	<0.010
Phosphorus	0.050	.007	.018		
Potassium	10	.035	.2		
Selenium	0.10	.0036	.0049	0.0093	<0.10
Silicon	0.20	.0022	.1		
Silver	0.010	.0006	.0019	0.0	<0.010
Sodium	10	.014	.57		
Strontium	0.010	.0001	.001		
Sulfur	0.050	.0037	.045		
Thallium	0.10	.0052	.0018		
Tin	0.010	.0014	.0037		
Titanium	0.010	.0008	.0025		
Tungsten	0.050	.0013	.04		
Vanadium	0.050	.0005	.0018	0.00010	<0.050
Zinc	0.020	.0003	.0069		

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: JD35487
Account: CRATXH - GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

QC Batch ID: MP30409
Matrix Type: LEACHATE

Methods: SW846 6010D
Units: mg/l

Prep Date: 12/16/21

Metal	RL	IDL	MDL	MB	
				raw	final

Zirconium 0.010 .0005 .0041

Associated samples MP30409: JD35487-5

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: JD35487
 Account: CRATXH - GHD Services Inc.
 Project: SJRWP - PCFSE, Harris County, TX

QC Batch ID: MP30409
 Matrix Type: LEACHATE

Methods: SW846 6010D
 Units: mg/l

Prep Date: 12/16/21

Metal	JD35487-5 Original MS		SpikeLot MPSPK2	% Rec	QC Limits
Aluminum					
Antimony	0.046	2.0	2.0	97.7	75-125
Arsenic	0.0	1.9	2.0	95.0	75-125
Barium	0.31	2.1	2.0	89.5	75-125
Beryllium	0.0	1.9	2.0	95.0	75-125
Bismuth					
Boron					
Cadmium	0.0	1.9	2.0	94.6	75-125
Chromium	0.11	1.6	2.0	75.3	75-125
Cobalt					
Copper					
Iron					
Lead	0.0	1.5	2.0	75.0	75-125
Lithium					
Magnesium					
Manganese					
Molybdenum					
Nickel	0.078	1.6	2.0	76.7	75-125
Phosphorus					
Potassium					
Selenium	0.0	2.1	2.0	102.9	75-125
Silicon					
Silver	0.013	0.27	0.25	102.8	75-125
Sodium					
Strontium					
Sulfur					
Thallium					
Tin					
Titanium					
Tungsten					
Vanadium	0.015	1.7	2.0	84.3	75-125
Zinc					
Zirconium					

9.7.2
 9

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: JD35487
Account: CRATXH - GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

QC Batch ID: MP30409
Matrix Type: LEACHATE

Methods: SW846 6010D
Units: mg/l

Prep Date: 12/16/21

Metal	JD35487-5 Original MS	Spikelet MPSPK2	% Rec	QC Limits
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Associated samples MP30409: JD35487-5

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: JD35487
 Account: CRATXH - GHD Services Inc.
 Project: SJRWP - PCFSE, Harris County, TX

QC Batch ID: MP30409
 Matrix Type: LEACHATE

Methods: SW846 6010D
 Units: mg/l

Prep Date: 12/16/21

Metal	JD35487-5 Original MSD		SpikeLot MPSPK2	% Rec	MSD RPD	QC Limit
Aluminum						
Antimony	0.046	2.0	2.0	97.7	0.0	20
Arsenic	0.0	2.0	2.0	100.0	5.1	20
Barium	0.31	2.1	2.0	89.5	0.0	20
Beryllium	0.0	2.0	2.0	100.0	5.1	20
Bismuth						
Boron						
Cadmium	0.0	2.0	2.0	99.6	5.1	20
Chromium	0.11	1.6	2.0	75.3	0.0	20
Cobalt						
Copper						
Iron						
Lead	0.0	1.6	2.0	80.0	6.5	20
Lithium						
Magnesium						
Manganese						
Molybdenum						
Nickel	0.078	1.7	2.0	81.7	6.1	20
Phosphorus						
Potassium						
Selenium	0.0	2.1	2.0	102.9	0.0	20
Silicon						
Silver	0.013	0.28	0.25	106.8	3.6	20
Sodium						
Strontium						
Sulfur						
Thallium						
Tin						
Titanium						
Tungsten						
Vanadium	0.015	1.7	2.0	84.3	0.0	20
Zinc						
Zirconium						

9.7.2
 9

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: JD35487
 Account: CRATXH - GHD Services Inc.
 Project: SJRWP - PCFSE, Harris County, TX

QC Batch ID: MP30409
 Matrix Type: LEACHATE

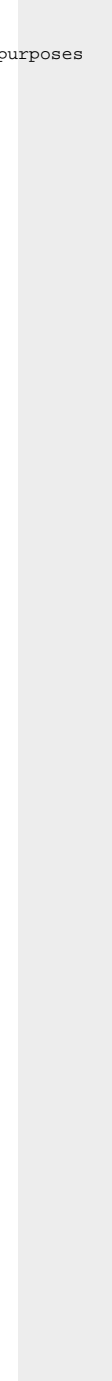
Methods: SW846 6010D
 Units: mg/l

Prep Date: 12/16/21

Metal	JD35487-5 Original MSD	SpikeLot MPSPK2	% Rec	MSD RPD	QC Limit
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Associated samples MP30409: JD35487-5

Results < IDL are shown as zero for calculation purposes
 (*) Outside of QC limits
 (N) Matrix Spike Rec. outside of QC limits
 (anr) Analyte not requested



SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: JD35487
 Account: CRATXH - GHD Services Inc.
 Project: SJRWP - PCFSE, Harris County, TX

QC Batch ID: MP30409
 Matrix Type: LEACHATE

Methods: SW846 6010D
 Units: mg/l

Prep Date: 12/16/21

Metal	BSP Result	Spikelot MPSPK2	% Rec	QC Limits
Aluminum				
Antimony	1.9	2.0	95.0	80-120
Arsenic	1.8	2.0	90.0	80-120
Barium	1.8	2.0	90.0	80-120
Beryllium	1.8	2.0	90.0	80-120
Bismuth				
Boron				
Cadmium	1.8	2.0	90.0	80-120
Calcium				
Chromium	1.8	2.0	90.0	80-120
Cobalt				
Copper				
Iron				
Lead	1.8	2.0	90.0	80-120
Lithium				
Magnesium				
Manganese				
Molybdenum				
Nickel	1.8	2.0	90.0	80-120
Phosphorus				
Potassium				
Selenium	1.9	2.0	95.0	80-120
Silicon				
Silver	0.23	0.25	92.0	80-120
Sodium				
Strontium				
Sulfur				
Thallium				
Tin				
Titanium				
Tungsten				
Vanadium	1.8	2.0	90.0	80-120
Zinc				

9.7.3
 9

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: JD35487
Account: CRATXH - GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

QC Batch ID: MP30409
Matrix Type: LEACHATE

Methods: SW846 6010D
Units: mg/l

Prep Date: 12/16/21

Metal	BSP Result	Spikelot MPSPK2	% Rec	QC Limits
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Zirconium

Associated samples MP30409: JD35487-5

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

SERIAL DILUTION RESULTS SUMMARY

Login Number: JD35487
 Account: CRATXH - GHD Services Inc.
 Project: SJRWP - PCFSE, Harris County, TX

QC Batch ID: MP30409
 Matrix Type: LEACHATE

Methods: SW846 6010D
 Units: ug/l

Prep Date: 12/16/21

Metal	JD35487-5 Original	SDL 1:5	%DIF	QC Limits
Aluminum				
Antimony	46.1	69.5	50.8 (a)	0-10
Arsenic	0.00	0.00	NC	0-10
Barium	310	311	0.2	0-10
Beryllium	0.00	0.00	NC	0-10
Bismuth				
Boron				
Cadmium	0.00	5.60	26.3 (a)	0-10
Calcium				
Chromium	114	105	10.1*(b)	0-10
Cobalt				
Copper				
Iron				
Lead	0.00	0.00	NC	0-10
Lithium				
Magnesium				
Manganese				
Molybdenum				
Nickel	78.1	72.9	9.3	0-10
Phosphorus				
Potassium				
Selenium	0.00	55.7	32.3 (a)	0-10
Silicon				
Silver	12.5	16.0	28.0 (a)	0-10
Sodium				
Strontium				
Sulfur				
Thallium				
Tin				
Titanium				
Tungsten				
Vanadium	15.0	15.5	3.3	0-10
Zinc				

9.7.4
 9

SERIAL DILUTION RESULTS SUMMARY

Login Number: JD35487
Account: CRATXH - GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

QC Batch ID: MP30409
Matrix Type: LEACHATE

Methods: SW846 6010D
Units: ug/l

Prep Date: 12/16/21

Metal	JD35487-5	QC
	Original SDL 1:5 %DIF	Limits

Zirconium

Associated samples MP30409: JD35487-5

Results < IDL are shown as zero for calculation purposes

(*) Outside of QC limits

(anr) Analyte not requested

(a) Percent difference acceptable due to low initial sample concentration (< 50 times IDL).

(b) Serial dilution indicates possible matrix interference.

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: JD35487
Account: CRATXH - GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

QC Batch ID: MP30424
Matrix Type: LEACHATE

Methods: SW846 7470A
Units: mg/l

Prep Date: 12/17/21

Metal	RL	IDL	MDL	MB	
				raw	final
Mercury	0.00020	.000034	.000095	-0.000017	<0.00020

Associated samples MP30424: JD35487-5

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: JD35487
 Account: CRATXH - GHD Services Inc.
 Project: SJRWP - PCFSE, Harris County, TX

QC Batch ID: MP30424
 Matrix Type: LEACHATE

Methods: SW846 7470A
 Units: mg/l

Prep Date: 12/17/21

Metal	JD35487-5 Original MS	SpikeLot HGPW3	% Rec	QC Limits
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Mercury	0.0	0.0022	0.0020	110.0	75-125
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Associated samples MP30424: JD35487-5

Results < IDL are shown as zero for calculation purposes
 (*) Outside of QC limits
 (N) Matrix Spike Rec. outside of QC limits
 (anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: JD35487
 Account: CRATXH - GHD Services Inc.
 Project: SJRWP - PCFSE, Harris County, TX

QC Batch ID: MP30424
 Matrix Type: LEACHATE

Methods: SW846 7470A
 Units: mg/l

Prep Date: 12/17/21

Metal	JD35487-5 Original MSD	Spike lot HGPW3	% Rec	MSD RPD	QC Limit
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Mercury	0.0	0.0023	0.0020	115.0	4.4	20
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Associated samples MP30424: JD35487-5

Results < IDL are shown as zero for calculation purposes
 (*) Outside of QC limits
 (N) Matrix Spike Rec. outside of QC limits
 (anr) Analyte not requested

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: JD35487
Account: CRATXH - GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

QC Batch ID: MP30424
Matrix Type: LEACHATE

Methods: SW846 7470A
Units: mg/l

Prep Date: 12/17/21

Metal	BSP Result	Spikelot HGPW3	% Rec	QC Limits
Mercury	0.0021	0.0020	105.0	80-120

Associated samples MP30424: JD35487-5

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: JD35487
Account: CRATXH - GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

QC Batch ID: MP30469
Matrix Type: LEACHATE

Methods: SW846 6010D
Units: mg/l

Prep Date: 12/21/21

Metal	RL	IDL	MDL	MB raw	final
Aluminum	0.20	.027	.046		
Antimony	0.10	.0022	.0047	0.0028	<0.10
Arsenic	0.10	.0013	.0028	-0.0040	<0.10
Barium	0.20	.001	.013	0.0052	<0.20
Beryllium	0.0020	.0002	.0005	0.0	<0.0020
Bismuth	0.020	.0021	.004		
Boron	0.10	.001	.063		
Cadmium	0.0040	.0002	.001	0.0	<0.0040
Calcium	5.0	.0077	.099		
Chromium	0.010	.0005	.002	0.00090	<0.010
Cobalt	0.050	.0004	.0026		
Copper	0.010	.0068	.0059		
Iron	0.10	.015	.032		
Lead	0.10	.0016	.0018	0.033	<0.10
Lithium	0.050	.0037	.0073		
Magnesium	5.0	.054	.14		
Manganese	0.015	.0001	.0014		
Molybdenum	0.020	.0005	.0036		
Nickel	0.010	.0003	.0017	0.00050	<0.010
Phosphorus	0.050	.0018	.018		
Potassium	10	.077	.2		
Selenium	0.10	.002	.0049	-0.00080	<0.10
Silicon	0.20	.0013	.1		
Silver	0.010	.0009	.0019	-0.0019	<0.010
Sodium	10	.023	.57		
Strontium	0.010	.0004	.001		
Sulfur	0.050	.0041	.045		
Thallium	0.10	.0016	.0018		
Tin	0.010	.0009	.0037		
Titanium	0.010	.0009	.0025		
Tungsten	0.050	.002	.04		
Vanadium	0.050	.0008	.0018	0.00060	<0.050
Zinc	0.020	.0002	.0069		

9.9.1
9

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: JD35487
Account: CRATXH - GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

QC Batch ID: MP30469
Matrix Type: LEACHATE

Methods: SW846 6010D
Units: mg/l

Prep Date: 12/21/21

Metal	RL	IDL	MDL	MB raw	final
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Zirconium 0.010 .0005 .0041

Associated samples MP30469: JD35487-6

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: JD35487
 Account: CRATXH - GHD Services Inc.
 Project: SJRWP - PCFSE, Harris County, TX

QC Batch ID: MP30469
 Matrix Type: LEACHATE

Methods: SW846 6010D
 Units: mg/l

Prep Date: 12/21/21

Metal	JD35487-6 Original MS		Spike lot MPSPK2	% Rec	QC Limits
Aluminum					
Antimony	0.0	2.2	2.0	110.0	75-125
Arsenic	0.034	2.3	2.0	113.3	75-125
Barium	2.7	4.7	2.0	100.0	75-125
Beryllium	0.0023	2.0	2.0	99.9	75-125
Bismuth					
Boron					
Cadmium	0.016	2.1	2.0	104.2	75-125
Chromium	0.0	1.9	2.0	95.0	75-125
Cobalt					
Copper					
Iron					
Lead	0.27	2.2	2.0	96.5	75-125
Lithium					
Magnesium					
Molybdenum					
Nickel	0.099	2.1	2.0	100.1	75-125
Phosphorus					
Potassium					
Selenium	0.0	2.2	2.0	110.0	75-125
Silicon					
Silver	0.0	0.28	0.25	112.0	75-125
Sodium					
Strontium					
Sulfur					
Thallium					
Tin					
Titanium					
Tungsten					
Vanadium	0.040	2.1	2.0	103.0	75-125
Zinc					
Zirconium					

Associated samples MP30469: JD35487-6

9.9.2
9

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: JD35487
Account: CRATXH - GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

QC Batch ID: MP30469
Matrix Type: LEACHATE

Methods: SW846 6010D
Units: mg/l

Prep Date: 12/21/21

Metal	JD35487-6 Original MS	SpikeLot MPSPK2	% Rec	QC Limits
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Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: JD35487
 Account: CRATXH - GHD Services Inc.
 Project: SJRWP - PCFSE, Harris County, TX

QC Batch ID: MP30469
 Matrix Type: LEACHATE

Methods: SW846 6010D
 Units: mg/l

Prep Date: 12/21/21

Metal	JD35487-6 Original MSD		SpikeLot MPSPK2	% Rec	MSD RPD	QC Limit
Aluminum						
Antimony	0.0	2.1	2.0	105.0	4.7	20
Arsenic	0.034	2.3	2.0	113.3	0.0	20
Barium	2.7	4.7	2.0	100.0	0.0	20
Beryllium	0.0023	2.0	2.0	99.9	0.0	20
Bismuth						
Boron						
Cadmium	0.016	2.0	2.0	99.2	4.9	20
Chromium	0.0	1.9	2.0	95.0	0.0	20
Cobalt						
Copper						
Iron						
Lead	0.27	2.2	2.0	96.5	0.0	20
Lithium						
Magnesium						
Molybdenum						
Nickel	0.099	2.1	2.0	100.1	0.0	20
Phosphorus						
Potassium						
Selenium	0.0	2.2	2.0	110.0	0.0	20
Silicon						
Silver	0.0	0.28	0.25	112.0	0.0	20
Sodium						
Strontium						
Sulfur						
Thallium						
Tin						
Titanium						
Tungsten						
Vanadium	0.040	2.1	2.0	103.0	0.0	20
Zinc						
Zirconium						

Associated samples MP30469: JD35487-6

9.9.2
9

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: JD35487
 Account: CRATXH - GHD Services Inc.
 Project: SJRWP - PCFSE, Harris County, TX

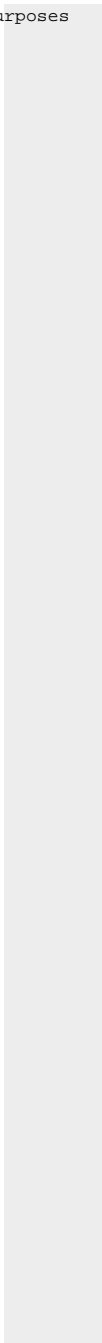
QC Batch ID: MP30469
 Matrix Type: LEACHATE

Methods: SW846 6010D
 Units: mg/l

Prep Date: 12/21/21

Metal	JD35487-6 Original MSD	SpikeLot MPSPK2	% Rec	MSD RPD	QC Limit
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Results < IDL are shown as zero for calculation purposes
 (*) Outside of QC limits
 (N) Matrix Spike Rec. outside of QC limits
 (anr) Analyte not requested



9.9.2
9

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: JD35487
 Account: CRATXH - GHD Services Inc.
 Project: SJRWP - PCFSE, Harris County, TX

QC Batch ID: MP30469
 Matrix Type: LEACHATE

Methods: SW846 6010D
 Units: mg/l

Prep Date: 12/21/21

Metal	BSP Result	Spikelot MPSPK2	% Rec	QC Limits
Aluminum				
Antimony	2.1	2.0	105.0	80-120
Arsenic	2.1	2.0	105.0	80-120
Barium	2.0	2.0	100.0	80-120
Beryllium	2.0	2.0	100.0	80-120
Bismuth				
Boron				
Cadmium	1.9	2.0	95.0	80-120
Calcium				
Chromium	2.0	2.0	100.0	80-120
Cobalt				
Copper				
Iron				
Lead	2.0	2.0	100.0	80-120
Lithium				
Magnesium				
Manganese				
Molybdenum				
Nickel	2.0	2.0	100.0	80-120
Phosphorus				
Potassium				
Selenium	2.1	2.0	105.0	80-120
Silicon				
Silver	0.26	0.25	104.0	80-120
Sodium				
Strontium				
Sulfur				
Thallium				
Tin				
Titanium				
Tungsten				
Vanadium	2.1	2.0	105.0	80-120
Zinc				

9.9.3
 9

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: JD35487
Account: CRATXH - GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

QC Batch ID: MP30469
Matrix Type: LEACHATE

Methods: SW846 6010D
Units: mg/l

Prep Date: 12/21/21

Metal	BSP Result	Spikelot MPSPK2	% Rec	QC Limits
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Zirconium

Associated samples MP30469: JD35487-6

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

SERIAL DILUTION RESULTS SUMMARY

Login Number: JD35487
 Account: CRATXH - GHD Services Inc.
 Project: SJRWP - PCFSE, Harris County, TX

QC Batch ID: MP30469
 Matrix Type: LEACHATE

Methods: SW846 6010D
 Units: ug/l

Prep Date: 12/21/21

Metal	JD35487-6 Original	SDL 1:5	%DIF	QC Limits
Aluminum				
Antimony	0.00	0.00	NC	0-10
Arsenic	34.1	36.6	7.3	0-10
Barium	2750	2740	0.1	0-10
Beryllium	2.30	2.20	4.3	0-10
Bismuth				
Boron				
Cadmium	15.7	15.6	0.6	0-10
Chromium	0.00	0.00	NC	0-10
Cobalt				
Copper				
Iron				
Lead	269	276	2.5	0-10
Lithium				
Magnesium				
Manganese				
Molybdenum				
Nickel	98.9	102	2.6	0-10
Phosphorus				
Potassium				
Selenium	0.00	0.00	NC	0-10
Silicon				
Silver	0.00	0.00	NC	0-10
Sodium				
Strontium				
Sulfur				
Thallium				
Tin				
Titanium				
Tungsten				
Vanadium	40.0	48.1	20.3*(a)	0-10
Zinc				
Zirconium				

9.9.4
9

SERIAL DILUTION RESULTS SUMMARY

Login Number: JD35487
Account: CRATXH - GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

QC Batch ID: MP30469
Matrix Type: LEACHATE

Methods: SW846 6010D
Units: ug/l

Prep Date: 12/21/21

Metal	JD35487-6	QC
	Original SDL 1:5 %DIF	Limits

Associated samples MP30469: JD35487-6

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested
(a) Serial dilution indicates possible matrix interference.

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: JD35487
Account: CRATXH - GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

QC Batch ID: MP30484
Matrix Type: LEACHATE

Methods: SW846 7470A
Units: mg/l

Prep Date: 12/21/21

Metal	RL	IDL	MDL	MB raw	final
-------	----	-----	-----	-----------	-------

Mercury 0.00020 .000034 .000095 0.0000011<0.00020

Associated samples MP30484: JD35487-6

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: JD35487
 Account: CRATXH - GHD Services Inc.
 Project: SJRWP - PCFSE, Harris County, TX

QC Batch ID: MP30484
 Matrix Type: LEACHATE

Methods: SW846 7470A
 Units: mg/l

Prep Date: 12/21/21

Metal	JD35487-6 Original MSD	Spike lot HGPW3	% Rec	MSD RPD	QC Limit
-------	---------------------------	-----------------------	-------	------------	-------------

Mercury	0.0	0.0019	0.0020	95.0	5.1	20
---------	-----	--------	--------	------	-----	----

Associated samples MP30484: JD35487-6

Results < IDL are shown as zero for calculation purposes
 (*) Outside of QC limits
 (N) Matrix Spike Rec. outside of QC limits
 (anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: JD35487
 Account: CRATXH - GHD Services Inc.
 Project: SJRWP - PCFSE, Harris County, TX

QC Batch ID: MP30484
 Matrix Type: LEACHATE

Methods: SW846 7470A
 Units: mg/l

Prep Date: 12/21/21

Metal	JD35487-6 Original MS	Spike HGPW3	lot % Rec	QC Limits
-------	--------------------------	----------------	--------------	--------------

Mercury	0.0	0.0020	0.0020	100.0	75-125
---------	-----	--------	--------	-------	--------

Associated samples MP30484: JD35487-6

Results < IDL are shown as zero for calculation purposes
 (*) Outside of QC limits
 (N) Matrix Spike Rec. outside of QC limits
 (anr) Analyte not requested

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: JD35487
Account: CRATXH - GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

QC Batch ID: MP30484
Matrix Type: LEACHATE

Methods: SW846 7470A
Units: mg/l

Prep Date: 12/21/21

Metal	BSP Result	Spikelot HGPW3	% Rec	QC Limits
Mercury	0.0017	0.0020	85.0	80-120

Associated samples MP30484: JD35487-6

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

General Chemistry

QC Data Summaries

Includes the following where applicable:

- Method Blank and Blank Spike Summaries
- Duplicate Summaries
- Matrix Spike Summaries

METHOD BLANK AND SPIKE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: JD35487
Account: CRATXH - GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Analyte	Batch ID	RL	MB Result	Units	Spike Amount	BSP Result	BSP %Recov	QC Limits
Cyanide	GP37404/GN24590	0.24	0.0	mg/kg	2	2.05	102.5	90-110%
Cyanide	GP37418/GN24590	0.24	0.0	mg/kg	2	1.81	90.5	90-110%
Cyanide	GP37440/GN24590	0.24	0.0	mg/kg	2	1.94	97.0	90-110%
Cyanide	GP37501/GN24733	0.24	0.0	mg/kg	2	2.11	105.5	90-110%
Cyanide	GP37607/GN24908	0.24	0.0	mg/kg	2	1.48	74.0 (a)	90-110%
Cyanide	GP37660/GN24908	0.24	0.0	mg/kg	2	1.74	87.0 (a)	90-110%
Cyanide Reactivity	GP37390/GN24591	10	0.0	mg/kg	100	21.2	21.2	.25-27%
Cyanide Reactivity	GP37421/GN24591	10	0.0	mg/kg	100	7.85	7.9	.25-27%
Cyanide Reactivity	GP37438/GN24591	10	0.0	mg/l	100	7.75	7.8	.25-27%
Cyanide Reactivity	GP37505/GN24735	10	0.0	mg/kg	100	50.5	50.5* (b)	.25-27%
Cyanide Reactivity	GP37664/GN25109	10	0.0	mg/kg	4.15	3.74	3.7	.25-27%
Sulfide Reactivity	GP37389/GN24476	100	0.0	mg/kg	665	524	78.8	42-107%
Sulfide Reactivity	GP37420/GN24497	100	0.0	mg/kg	400	250	62.5	42-107%
Sulfide Reactivity	GP37437/GN24577	100	0.0	mg/l	410	250	61.0	46-107%
Sulfide Reactivity	GP37504/GN24659	100	0.0	mg/kg	524	403	76.9	42-107%
Sulfide Reactivity	GP37663/GN24878	100	0.0	mg/kg	433	232	53.6	42-107%
Sulfide, Neutral Extraction	GP37402/GN24458	4.0	0.0	mg/kg	42.74	39.3	92.0	80-120%
Sulfide, Neutral Extraction	GP37435/GN24508	4.0	0.0	mg/kg	41.60	38.0	91.3	80-120%
Sulfide, Neutral Extraction	GP37556/GN24689	4.0	0.0	mg/kg	40.32	38.2	94.7	80-120%
Sulfide, Neutral Extraction	GP37678/GN24886	4.0	0.0	mg/kg	39.36	36.1	91.7	80-120%

Associated Samples:

Batch GP37389: JD35487-1
 Batch GP37390: JD35487-1
 Batch GP37402: JD35487-1
 Batch GP37404: JD35487-1
 Batch GP37418: JD35487-2
 Batch GP37420: JD35487-2
 Batch GP37421: JD35487-2
 Batch GP37435: JD35487-2, JD35487-3
 Batch GP37437: JD35487-3
 Batch GP37438: JD35487-3
 Batch GP37440: JD35487-3
 Batch GP37501: JD35487-4
 Batch GP37504: JD35487-4
 Batch GP37505: JD35487-4
 Batch GP37556: JD35487-4
 Batch GP37607: JD35487-5
 Batch GP37660: JD35487-6
 Batch GP37663: JD35487-5, JD35487-6
 Batch GP37664: JD35487-5, JD35487-6
 Batch GP37678: JD35487-5, JD35487-6

(*) Outside of QC limits

(a) Spike blank recovery is outside laboratory limit, data are qualified and reported.

(b) Spike blank indicates possible high bias, but all associated samples < DL.

10.1
10

DUPLICATE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: JD35487
Account: CRATXH - GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Analyte	Batch ID	QC Sample	Units	Original Result	DUP Result	RPD	QC Limits
Corrosivity as pH	GN24453	JD36039-1	su	5.9	6.43	8.6 (a)	0-5%
Corrosivity as pH	GN24494	JD36144-5	su	8.17	8.22	0.6	0-5%
Corrosivity as pH	GN24600	JD36144-20	su	8.14	8.13	0.1	0-5%
Corrosivity as pH	GN24771	JD35487-5	su	11.03	11.02	0.1	0-5%
Corrosivity as pH	GN24840	JD36872-1	su	8.41	8.52	1.3	0-5%
Cyanide	GP37404/GN24590	JD36084-1	mg/kg	0.20	0.15	28.6	0-49%
Cyanide	GP37418/GN24590	JD36103-1	mg/kg	0.84	2.6	102.3* (a)	0-49%
Cyanide	GP37440/GN24590	JD35487-3	mg/kg	0.17	0.0	200.0 (b)	0-49%
Cyanide	GP37501/GN24733	JD35487-4	mg/kg	0.17 U	0.0	0.0	0-49%
Cyanide	GP37607/GN24908	JD35487-5	mg/kg	0.36 U	0.36	200.0 (b)	0-49%
Cyanide	GP37660/GN24908	JD35487-6	mg/kg	0.19 U	0.0	0.0	0-49%
Cyanide Reactivity	GP37390/GN24591	JD35639-12	mg/kg	0.0	0.0	0.0	0-20%
Cyanide Reactivity	GP37421/GN24591	JD36103-1	mg/kg	12 U	0.0	0.0	0-20%
Cyanide Reactivity	GP37438/GN24591	JD36144-5	mg/l	0.0	0.0	0.0	0-20%
Cyanide Reactivity	GP37505/GN24735	JD36144-10	mg/kg	0.0	0.0	0.0	0-20%
Cyanide Reactivity	GP37664/GN25109	JD36724-1	mg/kg	0.0	0.0	0.0	0-20%
Ignitability (Flashpoint)	GN24454	JD35992-1	Deg. F	>200	>200	0.0	0-10%
Ignitability (Flashpoint)	GN24504	JD35487-2	Deg. F	>200	>200	0.0	0-10%
Ignitability (Flashpoint)	GN24741	JD35488-3	Deg. F	>200	>200	0.0	0-10%
Ignitability (Flashpoint)	GN24855	JD36690-1	Deg. F	>200	>200	0.0	0-10%
Paint Filter Test	GN24520	JD35487-1	ml/100g	0.25 U	0.0	0.0	0-10%
Paint Filter Test	GN24707	JD35487-4	ml/100g	0.25 U	0.0	0.0	0-10%
Paint Filter Test	GN24835	JD35487-5	ml/100g	0.25 U	0.0	0.0	0-10%
Solids, Percent	GN24499	JD36178-4	%	86.8	86.7	0.1	0-5%
Solids, Percent	GN24595	JD36265-3	%	83.1	84	1.1	0-5%
Solids, Percent	GN24752	JD35487-5	%	41.8	40.7	2.7	0-5%
Solids, Percent	GN24898	JD36931-1	%	80.9	81.2	0.4	0-5%
Sulfide Reactivity	GP37389/GN24476	JD35639-12	mg/kg	0.0	0.0	0.0	0-20%
Sulfide Reactivity	GP37420/GN24497	JD36103-1	mg/kg	100 U	0.00	0.0	0-20%
Sulfide Reactivity	GP37437/GN24577	JD36144-5	mg/l	0.00	0.00	0.0	0-19%
Sulfide Reactivity	GP37504/GN24659	JD36144-10	mg/kg	0.0	0.0	0.0	0-20%
Sulfide Reactivity	GP37663/GN24878	JD36724-1	mg/kg	0.00	0.00	0.0	0-20%
Sulfide, Neutral Extraction	GP37402/GN24458	JD35487-1	mg/kg	193	197	2.1	0-43%
Sulfide, Neutral Extraction	GP37435/GN24508	JD35487-2	mg/kg	16.4	16.4	0.0	0-43%
Sulfide, Neutral Extraction	GP37556/GN24689	JD36450-1	mg/kg	3.8 U	0.0	0.0	0-43%
Sulfide, Neutral Extraction	GP37678/GN24886	JD35487-5	mg/kg	8.5 U	0.0	0.0	0-43%

Associated Samples:

Batch GN24453: JD35487-1
 Batch GN24454: JD35487-1
 Batch GN24494: JD35487-2, JD35487-3
 Batch GN24499: JD35487-1, JD35487-2, JD35487-3
 Batch GN24504: JD35487-2, JD35487-3
 Batch GN24520: JD35487-1, JD35487-2, JD35487-3
 Batch GN24595: JD35487-4
 Batch GN24600: JD35487-4
 Batch GN24707: JD35487-4
 Batch GN24741: JD35487-4
 Batch GN24752: JD35487-5
 Batch GN24771: JD35487-5
 Batch GN24835: JD35487-5, JD35487-6
 Batch GN24840: JD35487-6
 Batch GN24855: JD35487-5, JD35487-6
 Batch GN24898: JD35487-6
 Batch GP37389: JD35487-1
 Batch GP37390: JD35487-1
 Batch GP37402: JD35487-1
 Batch GP37404: JD35487-1
 Batch GP37418: JD35487-2
 Batch GP37420: JD35487-2
 Batch GP37421: JD35487-2
 Batch GP37435: JD35487-2, JD35487-3
 Batch GP37437: JD35487-3
 Batch GP37438: JD35487-3
 Batch GP37440: JD35487-3
 Batch GP37501: JD35487-4
 Batch GP37504: JD35487-4

10.2
10

DUPLICATE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: JD35487
Account: CRATXH - GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Analyte	Batch ID	QC Sample	Units	Original Result	DUP Result	RPD	QC Limits
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Batch GP37505: JD35487-4
Batch GP37556: JD35487-4
Batch GP37607: JD35487-5
Batch GP37660: JD35487-6
Batch GP37663: JD35487-5, JD35487-6
Batch GP37664: JD35487-5, JD35487-6
Batch GP37678: JD35487-5, JD35487-6

(*) Outside of QC limits

(a) High RPD due to possible sample nonhomogeneity.

(b) RPD acceptable due to low duplicate and sample concentrations.

MATRIX SPIKE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: JD35487
Account: CRATXH - GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Analyte	Batch ID	QC Sample	Units	Original Result	Spike Amount	MS Result	%Rec	QC Limits
Cyanide	GP37404/GN24590	JD36084-1	mg/kg	0.20	2.05	2.0	88.0	75-125%
Cyanide	GP37418/GN24590	JD36103-1	mg/kg	0.84	3.15	5.1	135.1N(a)	75-125%
Cyanide	GP37440/GN24590	JD35487-3	mg/kg	0.17	2.18	1.6	65.7N(a)	75-125%
Cyanide	GP37501/GN24733	JD35487-4	mg/kg	0.17 U	2.18	0.73	33.5N(b)	75-125%
Cyanide	GP37607/GN24908	JD35487-5	mg/kg	0.36 U	5.43	3.8	69.9N(b)	75-125%
Cyanide	GP37660/GN24908	JD35487-6	mg/kg	0.19 U	4.29	2.8	65.3N(b)	75-125%
Sulfide Reactivity	GP37389/GN24476	JD35639-12	mg/kg	0.0	772	505	65.4	20-82%
Sulfide Reactivity	GP37420/GN24497	JD36103-1	mg/kg	100 U	681	307	45.1	20-82%
Sulfide Reactivity	GP37437/GN24577	JD36144-5	mg/l	0.00	410	154	37.6	10-104%
Sulfide Reactivity	GP37504/GN24659	JD36144-10	mg/kg	0.0	659	445	67.5	20-82%
Sulfide Reactivity	GP37663/GN24878	JD36724-1	mg/kg	0.00	454	162	35.7	20-82%
Sulfide, Neutral Extraction	GP37402/GN24458	JD35487-1	mg/kg	193	64.4	246	82.3	10-147%
Sulfide, Neutral Extraction	GP37435/GN24508	JD35487-2	mg/kg	16.4	57	68.5	91.4	10-147%
Sulfide, Neutral Extraction	GP37556/GN24689	JD36450-1	mg/kg	3.8 U	42.9	38.6	90.0	10-147%
Sulfide, Neutral Extraction	GP37678/GN24886	JD35487-5	mg/kg	8.5 U	94.1	81.6	86.7	10-147%

Associated Samples:

- Batch GP37389: JD35487-1
- Batch GP37402: JD35487-1
- Batch GP37404: JD35487-1
- Batch GP37418: JD35487-2
- Batch GP37420: JD35487-2
- Batch GP37435: JD35487-2, JD35487-3
- Batch GP37437: JD35487-3
- Batch GP37440: JD35487-3
- Batch GP37501: JD35487-4
- Batch GP37504: JD35487-4
- Batch GP37556: JD35487-4
- Batch GP37607: JD35487-5
- Batch GP37660: JD35487-6
- Batch GP37663: JD35487-5, JD35487-6
- Batch GP37678: JD35487-5, JD35487-6

(*) Outside of QC limits

(N) Matrix Spike Rec. outside of QC limits

(a) Spike recovery indicates possible matrix interference and/or sample nonhomogeneity.

(b) Spike recovery indicates possible matrix interference.

10.3
10

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

Technical Report for

GHD Services Inc.

SJRWP - PCFSE, Harris County, TX

SSOW:11215131 2021-001 / PO#340-002625

SGS Job Number: JD35488

Sampling Dates: 12/01/21 - 12/20/21



Report to:

GHD Services Inc.
11451 Katy Freeway Suite 400
Houston, TX 77079
Nate.Reece@ghd.com; Meagan.Willis@ghd.com;
Kathleen.Shaw@GHD.com; Marisa.Oriaku@GHD.com
ATTN: Meagan Willis

Total number of pages in report: **515**



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

Mike Earp
General Manager

Client Service contact: Kelly Ramos 732-329-0200

Certifications: NJ(12129), NY(10983), CA, CT, FL, IL, IN, KS, KY, LA, MA, MD, ME, MN, NC, OH VAP (CL0056), AK (UST-103), AZ (AZ0786), PA, RI, SC, TX, UT, VA, WV, DoD ELAP (ANAB L2248)

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Test results relate only to samples analyzed.



February 21, 2022

**Ms. Meagan Willis
GHD Services Inc.
11451 Katy Freeway Suite 400
Houston, TX 77079**

RE: SGS – Dayton, Job # JD35488- Reissues

Dear Ms. Willis,

The final report for SGS job number JD35488 has been edited to reflect corrections to the results. These edits have been incorporated into the revised report which is attached.

Specifically, this report has been revised COMMBN as per client's request. The attached revised report incorporates these revisions.

SGS apologizes for this occurrence and for any inconvenience this situation may have caused. Please contact me if I can be of further assistance in this matter.

Sincerely,

Report Department

SGS North America Inc.

SGS North America Inc. | Mid-Atlantic 2235 US Highway 130 Dayton, NJ 08810, USA t +1 (0)732 329 0200 www.sgs.com

Member of the SGS Group (SGS SA)



March 17, 2022

Ms. Kathleen Shaw
GHD Services Inc.
11451 Katy Freeway Suite 400
Houston, TX 77079

RE: SGS – Dayton, Job # JD35488 - Reissue #2

Dear Ms. Shaw

The final report for SGS job number JD35488 has been edited to reflect corrections to the reporting list. These edits have been incorporated into the revised report which is attached.

Specifically, the parameter list for the semi-volatiles has been revised to meet client's requirement.

SGS apologizes for this occurrence and for any inconvenience this situation may have caused. Please contact me if I can be of further assistance in this matter.

Sincerely,

A handwritten signature in cursive script that reads "Kelly F. Ramos".

Project Manager
SGS North America Inc.

SGS North America Inc. | Mid-Atlantic 2235 US Highway 130 Dayton, NJ 08810, USA t +1 (0)732 329 0200 www.sgs.com

Member of the SGS Group (SGS SA)



April 5, 2022

**Ms. Meagan Willis
GHD Services Inc.
11451 Katy Freeway Suite 400
Houston, TX 77079**

RE: SGS – Dayton, Job # JD35488 - Reissues #3

Dear Ms. Willis,

The final report for SGS job number JD35488 have been edited to reflect corrections to the results. These edits have been incorporated into the revised report which is attached.

Specifically, samples ID for JD35488-2, -2A, -2B, -2R have been revised per client's request. The attached revised report incorporates these revisions.

SGS apologizes for this occurrence and for any inconvenience this situation may have caused. Please contact me if I can be of further assistance in this matter.

Sincerely,

Report Department

SGS North America Inc.

SGS North America Inc. | Mid-Atlantic 2235 US Highway 130 Dayton, NJ 08810, USA t +1 (0)732 329 0200 www.sgs.com

Member of the SGS Group (SGS SA)

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Sample Summary

GHD Services Inc.

Job No: JD35488

SJRWP - PCFSE, Harris County, TX

Project No: SSOW:11215131 2021-001 / PO#340-002625

Sample Number	Collected Date	Time By	Received	Matrix Code	Type	Client Sample ID
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This report contains results reported as ND = Not detected. The following applies:
 Organics ND = Not detected above the MDL

JD35488-1	12/01/21	15:30	SPS	12/03/21	SO	Soil	11215131-120121-IDW-SS-NE
JD35488-1A	12/01/21	15:30	SPS	12/03/21	SO	Soil	11215131-120121-IDW-SS-NE
JD35488-1B	12/01/21	15:30	SPS	12/03/21	SO	Soil	11215131-120121-IDW-SS-NE
JD35488-1R	12/01/21	15:30	SPS	12/03/21	SO	Soil	11215131-120121-IDW-SS-NE
JD35488-2	12/01/21	15:50	SPS	12/03/21	AQ	Water	11215131-120121-IDW-SPS-NE DECON
JD35488-2A	12/01/21	15:50	SPS	12/03/21	AQ	Water	11215131-120121-IDW-SPS-NE DECON
JD35488-2B	12/01/21	15:50	SPS	12/03/21	AQ	Water	11215131-120121-IDW-SPS-NE DECON
JD35488-2R	12/01/21	15:50	SPS	12/03/21	AQ	Water	11215131-120121-IDW-SPS-NE DECON
JD35488-3	12/07/21	14:20	SPS	12/08/21	SO	Soil	11215131-120721-IDW-SS-SC
JD35488-3A	12/07/21	14:20	SPS	12/08/21	SO	Soil	11215131-120721-IDW-SS-SC
JD35488-3B	12/07/21	14:20	SPS	12/08/21	SO	Soil	11215131-120721-IDW-SS-SC
JD35488-3T	12/07/21	14:20	SPS	12/08/21	SO	Soil	11215131-120721-IDW-SS-SC

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



Sample Summary

(continued)

GHD Services Inc.

Job No: JD35488

SJRWP - PCFSE, Harris County, TX

Project No: SOW:11215131 2021-001 / PO#340-002625

Sample Number	Collected		Matrix Received	Code	Type	Client Sample ID
	Date	Time By				
JD35488-4	12/07/21	14:20 SPS	12/08/21	AQ	Water	11215131-120721-IDW-SS-DECON2
JD35488-4A	12/07/21	14:20 SPS	12/08/21	AQ	Water	11215131-120721-IDW-SS-DECON2
JD35488-4B	12/07/21	14:20 SPS	12/08/21	AQ	Water	11215131-120721-IDW-SS-DECON2
JD35488-4T	12/07/21	14:20 SPS	12/08/21	AQ	Water	11215131-120721-IDW-SS-DECON2
JD35488-5	12/08/21	15:30 SPS	12/09/21	SO	Soil	11215131-120821-IDW-SS-SW
JD35488-5A	12/08/21	15:30 SPS	12/09/21	SO	Soil	11215131-120821-IDW-SS-SW
JD35488-5B	12/08/21	15:30 SPS	12/09/21	SO	Soil	11215131-120821-IDW-SS-SW
JD35488-5U	12/08/21	15:30 SPS	12/09/21	SO	Soil	11215131-120821-IDW-SS-SW
JD35488-6	12/14/21	13:30 SPS	12/15/21	SO	Soil	11215131-121421-IDW-BN-NC
JD35488-6A	12/14/21	13:30 SPS	12/15/21	SO	Soil	11215131-121421-IDW-BN-NC
JD35488-6B	12/14/21	13:30 SPS	12/15/21	SO	Soil	11215131-121421-IDW-BN-NC
JD35488-6V	12/14/21	13:30 SPS	12/15/21	SO	Soil	11215131-121421-IDW-BN-NC
JD35488-7	12/20/21	11:15 SPS	12/21/21	AQ	Water	11215131-122021-IDW-SS-PURGE

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



Sample Summary

(continued)

GHD Services Inc.

Job No: JD35488

SJRWP - PCFSE, Harris County, TX

Project No: SSOW:11215131 2021-001 / PO#340-002625

Sample Number	Collected Date	Time By	Received	Matrix Code	Type	Client Sample ID
JD35488-7A	12/20/21	11:15	SPS	12/21/21	AQ Water	11215131-122021-IDW-SS-PURGE
JD35488-7B	12/20/21	11:15	SPS	12/21/21	AQ Water	11215131-122021-IDW-SS-PURGE
JD35488-7W	12/20/21	11:15	SPS	12/21/21	AQ Water	11215131-122021-IDW-SS-PURGE

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

CASE NARRATIVE / CONFORMANCE SUMMARY

Client: GHD Services Inc.

Job No: JD35488

Site: SJRWP - PCFSE, Harris County, TX

Report Date 3/17/2022 4:26:35 PM

Between 12/03/2021 and 12/21/2021, 7 Sample(s), 0 Trip Blank(s) and 0 Field Blank(s) were received at SGS North America Inc. at a maximum corrected temperature of 3.6 C. Samples were intact and chemically preserved, unless noted below. A SGS North America Inc. Job Number of JD35488 was assigned to the project. Laboratory sample ID, client sample ID and dates of sample collection are detailed in the report's Results Summary Section.

Specified quality control criteria were achieved for this job except as noted below. For more information, please refer to the analytical results and QC summary pages.

Compounds qualified as out of range in the continuing calibration summary report are acceptable as per method requirements when there is a high bias but the sample result is non-detect.

MS Volatiles By Method SW846 8260D

Matrix: LEACHATE **Batch ID:** V1A9396

- GP37684-LS27 for Acrylonitrile: Outside control limits.
- GP37684-LS27 for 1,1,2,2-Tetrachloroethane: Outside control limits.
- GP37684-LS27 for trans-1,3-Dichloropropene: Outside control limits.

Matrix: LEACHATE **Batch ID:** V2B8531

- All samples were analyzed within the recommended method holding time.
- Sample(s) JD35487-2LS, JD35487-2MS, JD35487-2MSD were used as the QC samples indicated.
- Sample(s) JD35488-1 have compound(s) reported with a "B" qualifier, indicating analyte is found in the associated method blank. Indicates analyte found in associated leachate blank.
- JD35488-1 for Acetone: Associated CCV outside of control limits high, sample was ND.

Matrix: LEACHATE **Batch ID:** V2V3448

- All samples were analyzed within the recommended method holding time.
- Sample(s) JD35488-2LS, JD35488-5LS, JD35488-5MS, JD35488-5MSD, JD35488-2LS were used as the QC samples indicated.
- Sample(s) JD35488-2, JD35488-5 have compound(s) reported with a "B" qualifier, indicating analyte is found in the associated method blank. Indicates analyte found in associated leachate blank.
- JD35488-5 for Dichlorodifluoromethane: Associated CCV outside of control limits high, sample was ND.
- JD35488-5 for 4-Methyl-2-pentanone(MIBK): Associated CCV outside of control limits high, sample was ND.
- JD35488-5 for Acrylonitrile: Associated CCV outside of control limits high, sample was ND.
- JD35488-5 for Hexachlorobutadiene: Associated CCV outside of control limits low. A sensitivity check was analyzed to demonstrate system suitability to detect affected analyte. Sample was ND.
- JD35488-2 for Isobutyl alcohol: Associated CCV outside of control limits high, sample was ND.
- JD35488-2 for Acrylonitrile: Associated CCV outside of control limits high, sample was ND.
- JD35488-2 for 4-Methyl-2-pentanone(MIBK): Associated CCV outside of control limits high, sample was ND.
- JD35488-2 for Hexachlorobutadiene: Associated CCV outside of control limits low. A sensitivity check was analyzed to demonstrate system suitability to detect affected analyte. Sample was ND.
- JD35488-2 for Dichlorodifluoromethane: Associated CCV outside of control limits high, sample was ND.
- JD35488-5 for Isobutyl alcohol: Associated CCV outside of control limits high, sample was ND.

Matrix: LEACHATE **Batch ID:** V3D7311

- All samples were analyzed within the recommended method holding time.
- Sample(s) JD35488-7LS, JD35488-7MS, JD35488-7MSD, JD35488-7LS were used as the QC samples indicated.
- Sample(s) JD35488-6 have compound(s) reported with a "B" qualifier, indicating analyte is found in the associated method blank. Indicates analyte found in associated leachate blank.

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MS Volatiles By Method SW846 8260D

Matrix: LEACHATE

Batch ID: V3D7311

- Matrix Spike / Matrix Spike Duplicate Recovery(s) for Bromomethane are outside control limits. Outside control limits due to matrix interference.
- JD35488-7 for 4-Methyl-2-pentanone(MIBK): Associated CCV outside of control limits high, sample was ND.
- JD35488-7 for Acrylonitrile: Associated CCV outside of control limits high, sample was ND. This compound in blank spike is outside in house QC limits bias high.
- JD35488-6 for 4-Methyl-2-pentanone(MIBK): Associated CCV outside of control limits high, sample was ND.
- V3D7311-BS for Acrylonitrile: High percent recovery and no associated positive reported in the QC batch.
- JD35488-6 for Acrylonitrile: Associated CCV outside of control limits high, sample was ND. This compound in blank spike is outside in house QC limits bias high.

Matrix: LEACHATE

Batch ID: VL10104

- All samples were analyzed within the recommended method holding time.
- Sample(s) JD35487-4MS, JD35487-4MSD, JD35488-3LS, JD35488-4LS were used as the QC samples indicated.
- Sample(s) JD35488-3 have compound(s) reported with a "B" qualifier, indicating analyte is found in the associated method blank. Indicates analyte found in associated leachate blank.
- VL10104-BS for Isobutyl alcohol: Outside control limits. This compound is not reported in associated samples.
- JD35488-4 for Acetonitrile: Associated CCV outside of control limits high, sample was ND.
- JD35488-4 for 2-Butanone (MEK): This compound in blank spike is outside in house QC limits bias high.
- JD35488-3 for Isobutyl alcohol: Associated CCV outside of control limits high, sample was ND.
- JD35488-3 for 4-Methyl-2-pentanone(MIBK): Associated CCV outside of control limits high, sample was ND.
- JD35488-4 for 4-Methyl-2-pentanone(MIBK): Associated CCV outside of control limits high, sample was ND.
- JD35488-3 for 2-Butanone (MEK): This compound in blank spike is outside in house QC limits bias high.
- JD35488-3 for Acetone: Associated CCV outside of control limits low. A sensitivity check was analyzed to demonstrate system suitability to detect affected analyte. Sample was ND.
- JD35488-4 for Isobutyl alcohol: Associated CCV outside of control limits high, sample was ND.
- VL10104-BS for 2-Butanone (MEK): High percent recovery and no associated positive reported in the QC batch.
- JD35488-3 for Acetonitrile: Associated CCV outside of control limits high, sample was ND.

MS Semi-volatiles By Method SW846 8270E

Matrix: LEACHATE **Batch ID:** OP37049

- All samples were extracted within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JD35487-1LS, JD35487-1MS, JD35487-1MSD were used as the QC samples indicated.
- Matrix Spike Duplicate Recovery(s) for Benzidine are outside control limits.
- RPD(s) for MSD for Benzidine are outside control limits for sample OP37049-MSD.
- JD35488-1 for p-Phenylenediamine: Associated CCV outside of control limits low.
- JD35488-1 for N-Nitrosopyrrolidine: Associated CCV outside of control limits high, sample was ND.
- JD35488-1 for Hexachlorophene: Associated CCV outside of control limits low.

Matrix: LEACHATE **Batch ID:** OP37155

- All samples were extracted within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JD35488-2LS, JD35488-2MS, JD35488-2MSD, JD35488-2LS were used as the QC samples indicated.
- Matrix Spike / Matrix Spike Duplicate Recovery(s) for Benzidine are outside control limits. Outside control limits due to matrix interference.
- RPD(s) for MSD for Aniline are outside control limits for sample OP37155-MSD. Outside control limits due to matrix interference.
- JD35488-2 for N-Nitrosopyrrolidine: Associated CCV outside of control limits high, sample was ND.
- OP37155-MS/MSD for Aniline: Outside of in house control limits.
- JD35488-2 for n-Nitrosodimethylamine: Associated CCV outside of control limits low. Low-level verification was analyzed to demonstrate system suitability to detect affected analytes. Sample was ND.

Matrix: LEACHATE **Batch ID:** OP37159

- All samples were extracted within the recommended method holding time.
- Sample(s) JD35487-4LS, JD35487-4MS, JD35487-4MSD, JD35487-4LS were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.
- Blank Spike Recovery(s) for Benzidine are outside control limits.
- Matrix Spike Recovery(s) for Benzidine are outside control limits. Probable cause due to matrix interference.
- Matrix Spike Duplicate Recovery(s) for Benzidine, Pyridine are outside control limits. Probable cause due to matrix interference.
- RPD(s) for MSD for Pyridine are outside control limits for sample OP37159-MSD. Probable cause due to sample homogeneity.
- JD35488-5 for n-Nitrosodimethylamine: Associated CCV outside of control limits low. Low-level verification was analyzed to demonstrate system suitability to detect affected analytes. Sample was ND.
- JD35488-5 for N-Nitrosopyrrolidine: Associated CCV outside of control limits high, sample was ND.
- JD35488-4 for n-Nitrosodimethylamine: Associated CCV outside of control limits low. Low-level verification was analyzed to demonstrate system suitability to detect affected analytes. Sample was ND.
- JD35488-3 for n-Nitrosodimethylamine: Associated CCV outside of control limits low. Low-level verification was analyzed to demonstrate system suitability to detect affected analytes. Sample was ND.
- JD35488-4 for N-Nitrosopyrrolidine: Associated CCV outside of control limits high, sample was ND.
- JD35488-3 for N-Nitrosopyrrolidine: Associated CCV outside of control limits high, sample was ND.

Matrix: LEACHATE **Batch ID:** OP37314

- All samples were extracted within the recommended method holding time.
- Sample(s) JD36933-1ALS, JD36933-1AMS, JD36933-1AMSD were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.
- Blank Spike Recovery(s) for 2,4-Dichlorophenol, 2,4-Dimethylphenol, 2-Chlorophenol, 4-Chloro-3-methyl phenol, Acetophenone, Benzidine, Dimethyl phthalate, Fluoranthene, Isophorone, N-Nitroso-di-n-propylamine, Hexachlorophene, p-Phenylenediamine are outside control limits.

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MS Semi-volatiles By Method SW846 8270E

Matrix: LEACHATE

Batch ID: OP37314

- Matrix Spike Recovery(s) for Benzidine are outside control limits. Probable cause due to matrix interference.
- Matrix Spike Duplicate Recovery(s) for Benzidine are outside control limits. Probable cause due to matrix interference.
- JD35488-6 for Hexachlorophene: Associated CCV outside of control limits low.
- OP37314-BSD for Pentachlorophenol: Analytical precision exceeds in-house control limits.
- OP37314-BSD for Hexachloroethane: Analytical precision exceeds in-house control limits.
- OP37314-BSD for 2,4-Dinitrotoluene: Analytical precision exceeds in-house control limits.
- OP37314-BSD for 2,4,5-Trichlorophenol: Analytical precision exceeds in-house control limits.
- OP37314-BSD for 2-Methylphenol: Analytical precision exceeds in-house control limits.
- OP37314-BSD for Hexachlorobenzene: Analytical precision exceeds in-house control limits.
- OP37314-BSD for 3&4-Methylphenol: Analytical precision exceeds in-house control limits.
- JD35488-6 for n-Nitrosodimethylamine: Associated CCV outside of control limits low. Low-level verification was analyzed to demonstrate system suitability to detect affected analytes. Sample was ND.
- JD35488-6 for N-Nitrosopyrrolidine: Associated CCV outside of control limits high, sample was ND.
- OP37314-BSD for Nitrobenzene: Analytical precision exceeds in-house control limits.
- JD35488-6 for 2,4-Dinitrophenol: Associated CCV outside of control limits high, sample was ND.
- OP37314-BS13 for p-Phenylenediamine: Outside of in house control limits.
- OP37314-BSD for 2,4,6-Trichlorophenol: Analytical precision exceeds in-house control limits.
- OP37314-BS13 for Hexachlorophene: Outside of in house control limits.
- JD35488-6 for p-Phenylenediamine: Associated CCV outside of control limits low.

Matrix: LEACHATE

Batch ID: OP37369

- All samples were extracted within the recommended method holding time.
- Sample(s) JD36990-1ALS, JD36990-1AMS, JD36990-1AMSD were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.
- Blank Spike Recovery(s) for Benzidine, Hexachlorophene, p-Phenylenediamine are outside control limits.
- Matrix Spike Recovery(s) for Benzidine are outside control limits. Probable cause due to matrix interference.
- Matrix Spike Duplicate Recovery(s) for Benzidine are outside control limits. Probable cause due to matrix interference.
- RPD(s) for MSD for Benzidine are outside control limits for sample OP37369-MSD. Probable cause due to sample homogeneity.
- OP37369-BS13 for p-Phenylenediamine: Outside of in house control limits.
- OP37369-BS13 for Hexachlorophene: Outside of in house control limits.
- JD35488-7 for Hexachlorophene: Associated CCV outside of control limits low. Low-level verification was analyzed to demonstrate system suitability to detect affected analytes. Sample was ND.
- JD35488-7 for N-Nitrosopyrrolidine: Associated CCV outside of control limits high, sample was ND.
- JD35488-7 for p-Phenylenediamine: Associated CCV outside of control limits low. Low-level verification was analyzed to demonstrate system suitability to detect affected analytes. Sample was ND.

GC Volatiles By Method SW846 8015C

Matrix: LEACHATE **Batch ID:** T:GRR2599

- The data for SW846 8015C meets quality control requirements.
- Sample(s) JD35488-1A, JD35488-2A have compound(s) reported with a “B” qualifier, indicating analyte is found in the associated method blank.
- JD35488-2A: Analysis performed at SGS Houston, TX.
- JD35488-1A: Analysis performed at SGS Houston, TX.

Matrix: LEACHATE **Batch ID:** T:GRR2606

- The data for SW846 8015C meets quality control requirements.
- Sample(s) JD35488-6A have compound(s) reported with a “B” qualifier, indicating analyte is found in the associated method blank.
- JD35488-7A: Analysis performed at SGS Houston, TX.
- JD35488-6A: Analysis performed at SGS Houston, TX.

GC/LC Semi-volatiles By Method SW846 8081B

Matrix: LEACHATE

Batch ID: OP37157

- All samples were extracted within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JD35488-2LS, JD35488-2MS, JD35488-2MSD, OP37157-MSMSD, JD35488-2LS were used as the QC samples indicated.
- Matrix Spike Recovery(s) for Methoxychlor are outside control limits. Outside control limits due to matrix interference.
- Matrix Spike Duplicate Recovery(s) for Endosulfan-I, gamma-BHC (Lindane), Methoxychlor are outside control limits. Probable cause due to matrix interference.
- RPD(s) for MSD for Mirex are outside control limits for sample OP37157-MSD. Probable cause due to sample homogeneity.
- OP37157-BSD for Heptachlor epoxide: Reported from the 2nd signal. The %D of the CCV on the 1st signal exceeds the method criteria of 20%, so it being used for confirmation only.
- OP37157-BS1 for Mirex: Reported from the 1st signal. The %D of the CCV on the 2nd signal exceeds the method criteria of 20%, so it being used for confirmation only.
- OP37157-BSD for Mirex: Reported from the 1st signal. The %D of the CCV on the 2nd signal exceeds the method criteria of 20%, so it being used for confirmation only.
- OP37157-BS1 for Heptachlor epoxide: Reported from the 2nd signal. The %D of the CCV on the 1st signal exceeds the method criteria of 20%, so it being used for confirmation only.
- OP37157-LS7 for Methoxychlor: Outside control limits due to matrix interference.

Matrix: LEACHATE

Batch ID: OP37162

- All samples were extracted within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JD35487-4LS, JD35487-4MS, JD35487-4MSD, OP37162-MSMSD, JD35487-4LS were used as the QC samples indicated.
- Matrix Spike Recovery(s) for Endosulfan-I, Endosulfan-II are outside control limits. Probable cause due to matrix interference.
- Matrix Spike Duplicate Recovery(s) for Endosulfan-I are outside control limits. Probable cause due to matrix interference.
- RPD(s) for MSD for Mirex are outside control limits for sample OP37162-MSD. Probable cause due to sample homogeneity.
- OP37162-MS for Endosulfan-I: Outside of in house control limits.
- OP37162-MS for Endosulfan-II: Outside of in house control limits.
- OP37162-LS13 for Endosulfan-II: Outside of in house control limits.
- OP37162-LS13 for Endosulfan-I: Outside of in house control limits.

Matrix: LEACHATE

Batch ID: OP37318

- All samples were extracted within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JD36933-1ALS, JD36933-1AMS, JD36933-1AMSD, OP37318-MSMSD were used as the QC samples indicated.

Matrix: LEACHATE

Batch ID: OP37424

- All samples were extracted within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JD37319-1ALS, JD37319-1AMS, JD37319-1AMSD, OP37424-MSMSD were used as the QC samples indicated.

GC/LC Semi-volatiles By Method SW846 8151A

Matrix: LEACHATE **Batch ID:** OP37051

- All samples were extracted within the recommended method holding time.
- Sample(s) JD36176-1ALS, JD36176-1AMS, JD36176-1AMSD, JD36176-1ALS were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.
- Matrix Spike Recovery(s) for Dinoseb are outside control limits. Probable cause due to matrix interference.
- Matrix Spike Duplicate Recovery(s) for Dinoseb are outside control limits. Probable cause due to matrix interference.
- OP37051-BS1 for 2,4-D: Reported from the 1st signal. The %D of the CCV on the 2nd signal exceeds the method criteria of 20%, so it being used for confirmation only.

Matrix: LEACHATE **Batch ID:** OP37156

- All samples were extracted within the recommended method holding time.
- Sample(s) JD35488-2LS, JD35488-2MS, JD35488-2MSD, JD35488-2LS were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.
- Matrix Spike Recovery(s) for Dinoseb are outside control limits. Probable cause due to matrix interference.
- Matrix Spike Duplicate Recovery(s) for Dinoseb are outside control limits. Probable cause due to matrix interference.
- OP37156-MB1 for Dinoseb: This compound outside control limits biased high in the associated CCV.
- OP37156-BS1 for 2,4,5-TP (Silvex): Reported from the 2nd signal. The %D of the CCV on the 1st signal exceeds the method criteria of 20%, so it being used for confirmation only.
- OP37156-BSD for 2,4,5-TP (Silvex): Reported from the 2nd signal. The %D of the CCV on the 1st signal exceeds the method criteria of 20%, so it being used for confirmation only.
- OP37156-LB7 for Dinoseb: This compound outside control limits biased high in the associated CCV.
- JD35488-2 for Dinoseb: Associated CCV outside of control limits high, sample was ND.
- OP37156-BS1 for Dinoseb: This compound outside control limits biased high in the associated CCV.

Matrix: LEACHATE **Batch ID:** OP37163

- All samples were extracted within the recommended method holding time.
- Sample(s) JD35487-4LS, JD35487-4MS, JD35487-4MSD, JD35487-4LS were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.
- Matrix Spike Recovery(s) for Dinoseb are outside control limits. Outside control limits due to matrix interference.
- Matrix Spike Duplicate Recovery(s) for Dinoseb are outside control limits. Probable cause due to matrix interference.
- JD35488-5 for Dinoseb: Associated CCV outside of control limits high, sample was ND.
- OP37163-BS1 for Dinoseb: Reported from the 2nd signal. The %D of the CCV on the 1st signal exceeds the method criteria of 20%, so it being used for confirmation only.

Matrix: LEACHATE **Batch ID:** OP37316

- All samples were extracted within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JD36933-1ALS, JD36933-1AMS, JD36933-1AMSD, JD36933-1ALS were used as the QC samples indicated.
- Blank Spike Recovery(s) for Dinoseb are outside control limits.
- Matrix Spike Recovery(s) for Dinoseb are outside control limits. Probable cause due to matrix interference.
- Matrix Spike Duplicate Recovery(s) for Dinoseb are outside control limits. Probable cause due to matrix interference.
- OP37316-BS1 for Dinoseb: Outside control limits. This compound outside control limits biased high in the associated CCV.
- JD35488-6 for Dinoseb: Associated CCV outside of control limits high, sample was ND.
- OP37316-MSD for Dinoseb: This compound outside control limits biased high in the associated CCV.
- OP37316-MB1 for Dinoseb: This compound outside control limits biased high in the associated CCV.

Matrix: LEACHATE **Batch ID:** OP37425

- All samples were extracted within the recommended method holding time.

Thursday, March 17, 2022

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GC/LC Semi-volatiles By Method SW846 8151A

Matrix: LEACHATE **Batch ID:** OP37425

- All method blanks for this batch meet method specific criteria.
- Sample(s) JD37319-1ALS, JD37319-1AMS, JD37319-1AMSD were used as the QC samples indicated.
- Matrix Spike Duplicate Recovery(s) for 2,4-D are outside control limits. Probable cause due to matrix interference.
- OP37425-BS1 for 2,4,5-TP (Silvex): Reported from the 1st signal. The %D of the CCV on the 2nd signal exceeds the method criteria of 20%, so it being used for confirmation only.

GC/LC Semi-volatiles By Method SW846 8316

Matrix: LEACHATE **Batch ID:** F:OP88794

- The data for SW846 8316 meets quality control requirements.
- JD35488-1R: Analysis performed at SGS Orlando, FL.
- JD35488-2R: Analysis performed at SGS Orlando, FL.

Matrix: LEACHATE **Batch ID:** F:OP88895

- The data for SW846 8316 meets quality control requirements.
- JD35488-5U: Analysis performed at SGS Orlando, FL.
- JD35488-4T: Analysis performed at SGS Orlando, FL.
- JD35488-3T: Analysis performed at SGS Orlando, FL.

Matrix: LEACHATE **Batch ID:** F:OP89084

- The data for SW846 8316 meets quality control requirements.
- JD35488-7W: Analysis performed at SGS Orlando, FL.

Matrix: LEACHATE **Batch ID:** F:OP89208

- The data for SW846 8316 meets quality control requirements.
- JD35488-6V: Sample analyzed beyond hold time. Analysis performed at SGS Orlando, FL.

GC/LC Semi-volatiles By Method TCEQ 1005

Matrix: AQ **Batch ID:** T:OP56278

- The data for TCEQ 1005 meets quality control requirements.
- JD35488-2A: Analysis performed at SGS Houston, TX.

Matrix: AQ **Batch ID:** T:OP56309

- The data for TCEQ 1005 meets quality control requirements.
- JD35488-4A: Analysis performed at SGS Houston, TX.

Matrix: AQ **Batch ID:** T:OP56438

- The data for TCEQ 1005 meets quality control requirements.
- JD35488-7A: Sample analyzed beyond hold time Analysis performed at SGS Houston, TX.

Matrix: SO **Batch ID:** T:OP56326

- The data for TCEQ 1005 meets quality control requirements.
- JD35488-1A: Sample analyzed beyond hold time per client request. Analysis performed at SGS Houston, TX.
- JD35488-3A: Analysis performed at SGS Houston, TX.

Matrix: SO **Batch ID:** T:OP56336

- The data for TCEQ 1005 meets quality control requirements.
- JD35488-5A: Sample collected in bulk. All results for nC6 to nC12 boiling point range are considered estimated values. Analysis performed at SGS Houston, TX.

Matrix: SO **Batch ID:** T:OP56389

- The data for TCEQ 1005 meets quality control requirements.
- JD35488-6A: Analysis performed at SGS Houston, TX.

Metals Analysis By Method SW846 6010D

Matrix: LEACHATE **Batch ID:** MP30254

- All samples were digested within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JD35488-2MS, JD35488-2MSD, JD35488-2SDL were used as the QC samples for metals.
- RPD(s) for Serial Dilution for Arsenic, Chromium, Lead, Nickel, Vanadium are outside control limits for sample MP30254-SD1. Percent difference acceptable due to low initial sample concentration (< 50 times IDL).

Matrix: LEACHATE **Batch ID:** MP30255

- All samples were digested within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JD35487-2MS, JD35487-2MSD, JD35487-2SDL were used as the QC samples for metals.
- RPD(s) for Serial Dilution for Antimony, Arsenic, Cadmium, Chromium, Lead, Silver are outside control limits for sample MP30255-SD1. Percent difference acceptable due to low initial sample concentration (< 50 times IDL).
- MP30255-MB1 for Chromium: All reported results <RL or >10x MB value.

Matrix: LEACHATE **Batch ID:** MP30329

- All samples were digested within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JD35488-4MS, JD35488-4MSD, JD35488-4SDL were used as the QC samples for metals.
- RPD(s) for Serial Dilution for Nickel are outside control limits for sample MP30329-SD1. Percent difference acceptable due to low initial sample concentration (< 50 times IDL).

Matrix: LEACHATE **Batch ID:** MP30365

- All samples were digested within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JD35488-3MS, JD35488-3MSD, JD35488-3SDL were used as the QC samples for metals.
- RPD(s) for Serial Dilution for Antimony, Arsenic, Selenium are outside control limits for sample MP30365-SD1. Percent difference acceptable due to low initial sample concentration (< 50 times IDL).

Matrix: LEACHATE **Batch ID:** MP30375

- All samples were digested within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JD35488-5MS, JD35488-5MSD, JD35488-5SDL were used as the QC samples for metals.
- RPD(s) for Serial Dilution for Cadmium, Chromium, Selenium, Vanadium are outside control limits for sample MP30375-SD1. Percent difference acceptable due to low initial sample concentration (< 50 times IDL).
- MP30375-MB1 for Nickel: All reported results <RL or >10x MB value.
- MP30375-MB1 for Chromium: All reported results <RL or >10x MB value.

Matrix: LEACHATE **Batch ID:** MP30491

- All samples were digested within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JD35488-6MS, JD35488-6MSD, JD35488-6SDL were used as the QC samples for metals.
- RPD(s) for Serial Dilution for Arsenic, Cadmium, Lead are outside control limits for sample MP30491-SD1. Percent difference acceptable due to low initial sample concentration (< 50 times IDL).

Matrix: LEACHATE **Batch ID:** MP30547

- All samples were digested within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JD35488-7MS, JD35488-7MSD, JD35488-7SDL were used as the QC samples for metals.
- RPD(s) for Serial Dilution for Antimony, Beryllium, Cadmium, Chromium, Lead, Nickel, Silver, Vanadium are outside control limits for sample MP30547-SD1. Percent difference acceptable due to low initial sample concentration (< 50 times IDL).

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Metals Analysis By Method SW846 7470A

Matrix: LEACHATE **Batch ID:** MP30274

- All samples were digested within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JD35488-2MS, JD35488-2MSD were used as the QC samples for metals.

Matrix: LEACHATE **Batch ID:** MP30275

- All samples were digested within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JD35487-2MS, JD35487-2MSD were used as the QC samples for metals.

Matrix: LEACHATE **Batch ID:** MP30355

- All samples were digested within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JD35488-4MS, JD35488-4MSD were used as the QC samples for metals.

Matrix: LEACHATE **Batch ID:** MP30383

- All samples were digested within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JD35488-3MS, JD35488-3MSD were used as the QC samples for metals.

Matrix: LEACHATE **Batch ID:** MP30384

- All samples were digested within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JD35488-5MS, JD35488-5MSD were used as the QC samples for metals.

Matrix: LEACHATE **Batch ID:** MP30528

- All samples were digested within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JD35488-6MS, JD35488-6MSD were used as the QC samples for metals.

Matrix: LEACHATE **Batch ID:** MP30574

- All samples were digested within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JD35488-7MS, JD35488-7MSD were used as the QC samples for metals.

General Chemistry By Method SM2540 G 18TH ED MOD

Matrix: SO **Batch ID:** GN24499

- Sample(s) JD36178-4DUP were used as the QC samples for Solids, Percent.

Matrix: SO **Batch ID:** GN24663

- Sample(s) JD35488-3DUP were used as the QC samples for Solids, Percent.

Matrix: SO **Batch ID:** GN24685

- Sample(s) JD36564-1DUP were used as the QC samples for Solids, Percent.

Matrix: SO **Batch ID:** GN24898

- Sample(s) JD36931-1DUP were used as the QC samples for Solids, Percent.

General Chemistry By Method SW846 1010B/ASTM D93

Matrix: AQ **Batch ID:** GN24609

- Sample(s) JD35488-2DUP were used as the QC samples for Ignitability (Flashpoint).

Matrix: AQ **Batch ID:** GN24776

- Sample(s) JD35488-4DUP were used as the QC samples for Ignitability (Flashpoint).

Matrix: AQ **Batch ID:** GN25118

- Sample(s) JD35488-7DUP were used as the QC samples for Ignitability (Flashpoint).

Matrix: SO **Batch ID:** GN24504

- Sample(s) JD35487-2DUP were used as the QC samples for Ignitability (Flashpoint).

Matrix: SO **Batch ID:** GN24741

- Sample(s) JD35488-3DUP were used as the QC samples for Ignitability (Flashpoint).

Matrix: SO **Batch ID:** GN24804

- Sample(s) JD35488-5DUP were used as the QC samples for Ignitability (Flashpoint).

Matrix: SO **Batch ID:** GN24958

- Sample(s) JD36629-4DUP were used as the QC samples for Ignitability (Flashpoint).

General Chemistry By Method SW846 CHAP7/9012 B

Matrix: SO **Batch ID:** GP37839

- All method blanks for this batch meet method specific criteria.
- Sample(s) JD35488-6DUP were used as the QC samples for Cyanide Reactivity.
- The following samples were prepared outside of holding time for method SW846 CHAP7/9012 B: JD35488-6 Analyzed outside the 14 day holding time applied by laboratory SOP. No regulatory holding time published for this method.

General Chemistry By Method SW846 CHAP7/9012B

Matrix: AQ

Batch ID: GP37438

- All samples were prepared within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JD36144-5DUP were used as the QC samples for Cyanide Reactivity.

Matrix: AQ

Batch ID: GP37560

- All samples were prepared within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- GP37560-B1 for Cyanide Reactivity: Spike blank indicates possible low bias. Since instrument QCs are with in control data are qualified and reported.

Matrix: AQ

Batch ID: GP37562

- All samples were prepared within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JD36629-3ADUP were used as the QC samples for Cyanide Reactivity.
- Blank Spike Recovery(s) for Cyanide Reactivity are outside control limits.
- GP37562-B1 for Cyanide Reactivity: Spike blank indicates possible low bias. Since instrument QCs are with in control data are qualified and reported.

Matrix: AQ

Batch ID: GP37842

- All samples were prepared within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JD37045-1DUP were used as the QC samples for Cyanide Reactivity.
- JD35488-7 for Cyanide Reactivity: Analyzed outside the 14 day holding time applied by laboratory SOP. No regulatory holding time published for this method.

General Chemistry By Method SW846 CHAP7/9034

Matrix: AQ **Batch ID:** GP37437

- All samples were prepared within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JD36144-5DUP, JD36144-5MS were used as the QC samples for Sulfide Reactivity.

Matrix: AQ **Batch ID:** GP37559

- All samples were prepared within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.

Matrix: AQ **Batch ID:** GP37561

- All samples were prepared within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JD36629-3ADUP, JD36629-3AMS were used as the QC samples for Sulfide Reactivity.

Matrix: AQ **Batch ID:** GP37841

- All samples were prepared within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JD37045-1DUP, JD37045-1MS were used as the QC samples for Sulfide Reactivity.
- JD35488-7 for Sulfide Reactivity: Analyzed outside the 14 day holding time applied by laboratory SOP. No regulatory holding time published for this method.

Matrix: SO **Batch ID:** GP37437

- Sample(s) JD36144-5DUP, JD36144-5MS were used as the QC samples for Sulfide Reactivity.

Matrix: SO **Batch ID:** GP37559

- Sample(s) JD36407-1DUP, JD36407-1MS were used as the QC samples for Sulfide Reactivity.

Matrix: SO **Batch ID:** GP37838

- All method blanks for this batch meet method specific criteria.
- Sample(s) JD35488-6DUP, JD35488-6MS were used as the QC samples for Sulfide Reactivity.
- The following samples were prepared outside of holding time for method SW846 CHAP7/9034: JD35488-6 Analyzed outside the 14 day holding time applied by laboratory SOP. No regulatory holding time published for this method.

SGS North America Inc. certifies that data reported for samples received, listed on the associated custody chain or analytical task order, were produced to specifications meeting the Quality System precision, accuracy and completeness objectives except as noted.

Estimated non-standard method measurement uncertainty data is available on request, based on quality control bias and implicit for standard methods. Acceptable uncertainty requires tested parameter quality control data to meet method criteria.

SGS North America Inc. is not responsible for data quality assumptions if partial reports are used and recommends that this report be used in its entirety. Data release is authorized by SGS North America Inc indicated via signature on the report cover

SAMPLE DELIVERY GROUP CASE NARRATIVE

Client: SGS Dayton, NJ

Job No: JD35488

Site: CRATXH: SJRWP - PCFSE, Harris County, TX (IDW)

Report Date 1/12/2022 10:42:04 A

7 Samples were collected on between 12/01/2021 and 12/20/2021 and received intact at SGS North America Inc (SGS) between 12/03/2021 and 12/21/2021 and properly preserved in 3 coolers at 2.1 Deg C. The samples received an SGS job number of JD35488. A listing of the Laboratory Sample ID, Client Sample ID and dates of collection are presented in the Results Summary Section of this report.

Except as noted below, all method specified calibrations and quality control performance criteria were met for this job. For more information, please refer to QC summary pages.

GC Volatiles By Method SW846 8015C

Matrix: LEACHATE

Batch ID: GRR2599

- Sample(s) JD35488-2AMS, JD35488-2AMSD were used as the QC samples indicated.
- Sample(s) JD35488-1A, JD35488-2A have compound(s) reported with a "B" qualifier, indicating analyte is found in the associated method blank.
- Matrix Spike Duplicate Recovery(s) for 2-Ethoxyethanol are outside control limits. Probable cause due to matrix interference.

Matrix: LEACHATE

Batch ID: GRR2606

- Sample(s) JD35488-7AMS, JD35488-7AMSD were used as the QC samples indicated.
- Sample(s) JD35488-6A have compound(s) reported with a "B" qualifier, indicating analyte is found in the associated method blank.

GC/LC Semi-volatiles By Method TCEQ 1005

Matrix: AQ **Batch ID:** OP56278

- All samples were extracted within the recommended method holding time.
- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- OP56278-BSD: Insufficient sample available for MS/MSD.

Matrix: AQ **Batch ID:** OP56309

- All samples were extracted within the recommended method holding time.
- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- OP56309-BSD: Insufficient sample available for MS/MSD.

Matrix: AQ **Batch ID:** OP56438

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- The following samples were extracted outside of holding time for method TCEQ 1005: JD35488-7A Sample analyzed beyond hold time
- JD35488-7A: Sample analyzed beyond hold time

Matrix: SO **Batch ID:** OP56326

- All samples were analyzed within the recommended method holding time.
- Sample(s) TD76663-1MS, TD76663-1MSD were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.
- The following samples were extracted outside of holding time for method TCEQ 1005: JD35488-1A Sample analyzed beyond hold time per client request.
- JD35488-1A: Sample analyzed beyond hold time per client request.

Matrix: SO **Batch ID:** OP56336

- All samples were extracted within the recommended method holding time.
- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- JD35488-5A: Sample collected in bulk. All results for nC6 to nC12 boiling point range are considered estimated values.

Matrix: SO **Batch ID:** OP56389

- All samples were extracted within the recommended method holding time.
- All samples were analyzed within the recommended method holding time.
- Sample(s) TD77024-1MS, TD77024-1MSD were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.
- Matrix Spike Recovery(s) for TPH (>C12-C28), TPH (C6-C35) are outside control limits. Probable cause due to matrix interference.
- Matrix Spike Duplicate Recovery(s) for TPH (>C12-C28), TPH (C6-C35) are outside control limits. Probable cause due to matrix interference.
- RPD(s) for MSD for TPH (>C12-C28), TPH (C6-C12), TPH (C6-C35) are outside control limits for sample OP56389-MSD. Probable cause due to sample non-homogeneity.

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

Wednesday, January 12, 2022

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SAMPLE DELIVERY GROUP CASE NARRATIVE

Client: SGS Dayton, NJ

Job No: JD35488

Site: CRATXH: SJRWP - PCFSE, Harris County, TX (IDW)

Report Date: 1/12/2022 3:29:39

Between 12/07/2021 and 12/15/21, 7 Sample(s), 0 Trip Blank(s) were received at SGS North America Inc. at a maximum corrected temperature of 2.6 C. Samples were intact and chemically preserved, unless noted below. A SGS North America Inc. Job Number of JD35488 was Assigned to the project. Laboratory sample ID, client sample ID and dates of sample collection are detailed in the report's Results Summary Section.

Specified quality control criteria were achieved for this job except as noted below. For more information, please refer to the analytical results and QC summary pages.

GC/LC Semi-volatiles By Method SW846 8316

Matrix: LEACHATE **Batch ID:** OP88794

Sample(s) JD35488-2RMS, JD35488-2RMSD were used as the QC samples indicated.

Matrix: LEACHATE **Batch ID:** OP88895

Sample(s) JD35488-5UMS, JD35488-5UMSD were used as the QC samples indicated.

Matrix: LEACHATE **Batch ID:** OP89084

Sample(s) JD35488-7WMS, JD35488-7WMSD were used as the QC samples indicated.

Matrix: LEACHATE **Batch ID:** OP89208

Sample(s) JD35488-6VMS, JD35488-6VMSD were used as the QC samples indicated.

JD35488-6V: Sample analyzed beyond hold time.

SGS North America Inc. certifies that data reported for samples received, listed on the associated custody chain or analytical task order, were produced to specifications meeting the Quality System precision, accuracy and completeness objectives except as noted. Estimated non-standard method measurement uncertainty data is available on request, based on quality control bias and implicit for standard methods. Acceptable uncertainty requires tested parameter quality control data to meet method criteria. SGS North America Inc. is not responsible for data quality assumptions if partial reports are used and recommends that this report be used in its entirety.

Narrative prepared by:

Kim Benham, Client Services (*Signature on File*)

Summary of Hits

Job Number: JD35488
Account: GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX
Collected: 12/01/21 thru 12/20/21



Lab Sample ID	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
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JD35488-1 11215131-120121-IDW-SS-NE

Ignitability (Flashpoint)	> 200				Deg. F	SW846 1010B/ASTM D93
Chloroform ^a	0.0102 B	0.0050	0.0025	mg/l		SW846 8260D
Methylene chloride	0.0016 J	0.010	0.00050	mg/l		SW846 8260D
Antimony	0.0053 B	0.10	0.0047	mg/l		SW846 6010D
Arsenic	0.012 B	0.10	0.0028	mg/l		SW846 6010D
Barium	1.2	0.20	0.013	mg/l		SW846 6010D
Cadmium	0.0026 B	0.0040	0.0010	mg/l		SW846 6010D
Lead	0.0093 B	0.10	0.0018	mg/l		SW846 6010D
Nickel	0.050	0.020	0.0017	mg/l		SW846 6010D
Silver	0.0049 B	0.010	0.0019	mg/l		SW846 6010D
Vanadium	0.0029 B	0.050	0.0018	mg/l		SW846 6010D

JD35488-1A 11215131-120121-IDW-SS-NE

Ethylene Glycol ^b	4.8 JB	10	1.0	mg/l		SW846 8015C
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JD35488-1R 11215131-120121-IDW-SS-NE

No hits reported in this sample.

JD35488-2 11215131-120121-IDW-SPS-NE DECON

Ignitability (Flashpoint)	> 200				Deg. F	SW846 1010B/ASTM D93
Acetone	0.177	0.050	0.030	mg/l		SW846 8260D
Chloroform ^a	0.0028 JB	0.0050	0.0025	mg/l		SW846 8260D
Methylene chloride	0.0021 J	0.010	0.00050	mg/l		SW846 8260D
2,4,5-TP (Silvex)	0.00039 J	0.0010	0.00020	mg/l		SW846 8151A
Arsenic	0.0042 B	0.10	0.0028	mg/l		SW846 6010D
Barium	0.057 B	0.20	0.013	mg/l		SW846 6010D
Lead	0.0026 B	0.10	0.0018	mg/l		SW846 6010D
Nickel	0.0045 B	0.010	0.0017	mg/l		SW846 6010D
Vanadium	0.0030 B	0.050	0.0018	mg/l		SW846 6010D

JD35488-2A 11215131-120121-IDW-SPS-NE DECON

TPH (C6-C12) ^b	0.907 J	2.4	0.80	mg/l		TCEQ 1005
TPH (> C12-C28) ^b	2.78	2.4	0.61	mg/l		TCEQ 1005
TPH (> C28-C35) ^b	2.05 J	2.4	0.61	mg/l		TCEQ 1005
TPH (C6-C35) ^b	5.74	2.4	0.61	mg/l		TCEQ 1005
Ethylene Glycol ^b	5.2 JB	10	1.0	mg/l		SW846 8015C

Summary of Hits

Job Number: JD35488
Account: GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX
Collected: 12/01/21 thru 12/20/21



Lab Sample ID	Client Sample ID	Result/ Analyte	RL	MDL	Units	Method
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JD35488-2R 11215131-120121-IDW-SPS-NE DECON

No hits reported in this sample.

JD35488-3 11215131-120721-IDW-SS-SC

Ignitability (Flashpoint)	> 200				Deg. F	SW846 1010B/ASTM D93
Chloroform ^a	0.0058 B	0.0050	0.0025		mg/l	SW846 8260D
Arsenic	0.0049 B	0.10	0.0028		mg/l	SW846 6010D
Barium	0.60	0.20	0.013		mg/l	SW846 6010D
Cadmium	0.0043	0.0040	0.0010		mg/l	SW846 6010D
Nickel	0.044	0.010	0.0017		mg/l	SW846 6010D
Selenium	0.0055 B	0.10	0.0049		mg/l	SW846 6010D
Vanadium	0.011 B	0.050	0.0018		mg/l	SW846 6010D

JD35488-3A 11215131-120721-IDW-SS-SC

TPH (> C12-C28) ^b	31.6 J	88	16		mg/kg	TCEQ 1005
TPH (> C28-C35) ^b	68.5 J	88	16		mg/kg	TCEQ 1005
TPH (C6-C35) ^b	100 J	88	16		mg/kg	TCEQ 1005

JD35488-3T 11215131-120721-IDW-SS-SC

No hits reported in this sample.

JD35488-4 11215131-120721-IDW-SS-DECON2

Ignitability (Flashpoint)	> 200				Deg. F	SW846 1010B/ASTM D93
Acetone	0.0564	0.050	0.030		mg/l	SW846 8260D
Acrylonitrile	0.0345 J	0.25	0.0052		mg/l	SW846 8260D
Toluene	0.0043 J	0.0050	0.0027		mg/l	SW846 8260D
Barium	0.10 B	0.20	0.013		mg/l	SW846 6010D
Nickel	0.0035 B	0.010	0.0017		mg/l	SW846 6010D

JD35488-4A 11215131-120721-IDW-SS-DECON2

TPH (C6-C12) ^b	1.02 J	2.4	0.80		mg/l	TCEQ 1005
TPH (> C12-C28) ^b	1.37 J	2.4	0.61		mg/l	TCEQ 1005
TPH (C6-C35) ^b	2.39 J	2.4	0.61		mg/l	TCEQ 1005

JD35488-4T 11215131-120721-IDW-SS-DECON2

No hits reported in this sample.

Summary of Hits

Job Number: JD35488
Account: GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX
Collected: 12/01/21 thru 12/20/21



Lab Sample ID	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
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JD35488-5 11215131-120821-IDW-SS-SW

Ignitability (Flashpoint)	> 200				Deg. F	SW846 1010B/ASTM D93
Chloroform ^a	0.0070 B	0.0050	0.0025	mg/l		SW846 8260D
Barium	1.1	0.20	0.013	mg/l		SW846 6010D
Cadmium	0.0010 B	0.0040	0.0010	mg/l		SW846 6010D
Nickel	0.018 B	0.020	0.0017	mg/l		SW846 6010D
Selenium	0.0065 B	0.10	0.0049	mg/l		SW846 6010D
Vanadium	0.0055 B	0.050	0.0018	mg/l		SW846 6010D

JD35488-5A 11215131-120821-IDW-SS-SW

No hits reported in this sample.

JD35488-5U 11215131-120821-IDW-SS-SW

No hits reported in this sample.

JD35488-6 11215131-121421-IDW-BN-NC

Ignitability (Flashpoint)	> 200				Deg. F	SW846 1010B/ASTM D93
Benzene	0.0052	0.0025	0.0021	mg/l		SW846 8260D
Chloroform ^a	0.0080 B	0.0050	0.0025	mg/l		SW846 8260D
Ethylbenzene	0.0044 J	0.0050	0.0030	mg/l		SW846 8260D
Toluene	0.0279	0.0050	0.0027	mg/l		SW846 8260D
m,p-Xylene	0.0168	0.0050	0.0039	mg/l		SW846 8260D
o-Xylene	0.0070	0.0050	0.0030	mg/l		SW846 8260D
Xylene (total)	0.0238	0.0050	0.0039	mg/l		SW846 8260D
Pyrene	0.0023 J	0.010	0.0022	mg/l		SW846 8270E
Barium	0.40	0.20	0.013	mg/l		SW846 6010D
Cadmium	0.0011 B	0.0040	0.0010	mg/l		SW846 6010D
Lead	0.0053 B	0.10	0.0018	mg/l		SW846 6010D
Nickel	0.020	0.010	0.0017	mg/l		SW846 6010D

JD35488-6A 11215131-121421-IDW-BN-NC

TPH (> C12-C28) ^b	13.1 J	48	8.9	mg/kg		TCEQ 1005
TPH (> C28-C35) ^b	27.2 J	48	8.9	mg/kg		TCEQ 1005
TPH (C6-C35) ^b	40.3 J	48	8.9	mg/kg		TCEQ 1005
Ethylene Glycol ^b	24.1 B	10	1.0	mg/l		SW846 8015C

JD35488-6V 11215131-121421-IDW-BN-NC

No hits reported in this sample.

Summary of Hits

Job Number: JD35488
Account: GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX
Collected: 12/01/21 thru 12/20/21



Lab Sample ID	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
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JD35488-7 11215131-122021-IDW-SS-PURGE

Ignitability (Flashpoint)	> 200				Deg. F	SW846 1010B/ASTM D93
Barium	0.21	0.20	0.013		mg/l	SW846 6010D
Cadmium	0.0019 B	0.0040	0.0010		mg/l	SW846 6010D
Lead	0.0040 B	0.10	0.0018		mg/l	SW846 6010D
Nickel	0.0022 B	0.010	0.0017		mg/l	SW846 6010D
Silver	0.0040 B	0.010	0.0019		mg/l	SW846 6010D

JD35488-7A 11215131-122021-IDW-SS-PURGE

Ethylene Glycol ^b	12.7	10	1.0		mg/l	SW846 8015C
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JD35488-7W 11215131-122021-IDW-SS-PURGE

No hits reported in this sample.

- (a) Indicates analyte found in associated leachate blank.
- (b) Analysis performed at SGS Houston, TX.

Sample Results

Report of Analysis

Report of Analysis

Client Sample ID: 11215131-120121-IDW-SS-NE	
Lab Sample ID: JD35488-1	Date Sampled: 12/01/21
Matrix: SO - Soil	Date Received: 12/03/21
Method: SW846 8260D SW846 1311	Percent Solids: 74.4
Project: SJRWP - PCFSE, Harris County, TX	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2B187886.D	5	12/09/21 14:27	ED	12/06/21 16:00	GP37443	V2B8531
Run #2							

Run #	Purge Volume
Run #1	5.0 ml
Run #2	

VOA Special List

TCLP Leachate method SW846 1311

CAS No.	Compound	Result	HW#	MCL	RL	MDL	Units	Q
67-64-1	Acetone ^a	ND			0.050	0.030	mg/l	
75-05-8	Acetonitrile	ND			0.50	0.037	mg/l	
107-13-1	Acrylonitrile	ND			0.25	0.0052	mg/l	
71-43-2	Benzene	ND	D018	0.50	0.0025	0.0021	mg/l	
75-27-4	Bromodichloromethane	ND			0.0050	0.0029	mg/l	
75-25-2	Bromoform	ND			0.020	0.0032	mg/l	
74-83-9	Bromomethane	ND			0.010	0.0082	mg/l	
78-93-3	2-Butanone (MEK)	ND	D035	200	0.10	0.034	mg/l	
75-15-0	Carbon disulfide	ND			0.010	0.0048	mg/l	
56-23-5	Carbon tetrachloride	ND	D019	0.50	0.0050	0.0028	mg/l	
108-90-7	Chlorobenzene	ND	D021	100	0.0050	0.0028	mg/l	
67-66-3	Chloroform ^b	0.0102	D022	6.0	0.0050	0.0025	mg/l	B
106-93-4	1,2-Dibromoethane	ND			0.010	0.0024	mg/l	
106-46-7	1,4-Dichlorobenzene	ND	D027	7.5	0.0050	0.0025	mg/l	
75-71-8	Dichlorodifluoromethane	ND			0.010	0.0068	mg/l	
107-06-2	1,2-Dichloroethane	ND	D028	0.50	0.0050	0.0030	mg/l	
75-35-4	1,1-Dichloroethene	ND	D029	0.70	0.0050	0.0030	mg/l	
542-75-6	1,3-Dichloropropene (total)	ND			0.0050	0.0022	mg/l	
10061-02-6	trans-1,3-Dichloropropene	ND			0.0050	0.0022	mg/l	
100-41-4	Ethylbenzene	ND			0.0050	0.0030	mg/l	
87-68-3	Hexachlorobutadiene	ND	D033	0.50	0.025	0.0028	mg/l	
78-83-1	Isobutyl alcohol	ND			0.25	0.061	mg/l	
126-98-7	Methacrylonitrile	ND			0.050	0.0050	mg/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND			0.025	0.0093	mg/l	
75-09-2	Methylene chloride	0.0016			0.010	0.00050	mg/l	J
100-42-5	Styrene	ND			0.025	0.0035	mg/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND			0.025	0.0028	mg/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND			0.010	0.0033	mg/l	
127-18-4	Tetrachloroethene	ND	D039	0.70	0.0050	0.0045	mg/l	
108-88-3	Toluene	ND			0.0050	0.0027	mg/l	
71-55-6	1,1,1-Trichloroethane	ND			0.0050	0.0027	mg/l	
79-00-5	1,1,2-Trichloroethane	ND			0.0050	0.0027	mg/l	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
MCL = Maximum Contamination Level (40 CFR 261 7/1/11) B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: 11215131-120121-IDW-SS-NE	Date Sampled: 12/01/21
Lab Sample ID: JD35488-1	Date Received: 12/03/21
Matrix: SO - Soil	Percent Solids: 74.4
Method: SW846 8260D SW846 1311	
Project: SJRWP - PCFSE, Harris County, TX	

VOA Special List

TCLP Leachate method SW846 1311

CAS No.	Compound	Result	HW#	MCL	RL	MDL	Units	Q
79-01-6	Trichloroethene	ND	D040	0.50	0.0050	0.0026	mg/l	
75-69-4	Trichlorofluoromethane	ND			0.025	0.0042	mg/l	
96-18-4	1,2,3-Trichloropropane	ND			0.025	0.0035	mg/l	
75-01-4	Vinyl chloride	ND	D043	0.20	0.0050	0.0039	mg/l	
	m,p-Xylene	ND			0.0050	0.0039	mg/l	
95-47-6	o-Xylene	ND			0.0050	0.0030	mg/l	
1330-20-7	Xylene (total)	ND			0.0050	0.0039	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	102%		76-120%
17060-07-0	1,2-Dichloroethane-D4	94%		64-135%
2037-26-5	Toluene-D8	94%		76-117%
460-00-4	4-Bromofluorobenzene	104%		72-122%

- (a) Associated CCV outside of control limits high, sample was ND.
- (b) Indicates analyte found in associated leachate blank.

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
 MCL = Maximum Contamination Level (40 CFR 261 7/1/11) B = Indicates analyte found in associated method blank
 E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	11215131-120121-IDW-SS-NE	Date Sampled:	12/01/21
Lab Sample ID:	JD35488-1	Date Received:	12/03/21
Matrix:	SO - Soil	Percent Solids:	74.4
Method:	SW846 8270E SW846 3510C		
Project:	SJRW - PCFSE, Harris County, TX		

Run #1	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	F204191.D	1	12/11/21 05:55	CS	12/09/21 16:15	OP37049	EF8949
Run #2							

Run #1	Initial Volume	Final Volume
Run #1	100 ml	1.0 ml
Run #2		

ABN TCLP Leachate

TCLP Leachate method SW846 1311

CAS No.	Compound	Result	HW#	MCL	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND			0.050	0.0082	mg/l	
59-50-7	4-Chloro-3-methyl phenol	ND			0.050	0.0089	mg/l	
120-83-2	2,4-Dichlorophenol	ND			0.050	0.013	mg/l	
105-67-9	2,4-Dimethylphenol	ND			0.050	0.024	mg/l	
51-28-5	2,4-Dinitrophenol	ND			0.20	0.016	mg/l	
95-48-7	2-Methylphenol	ND	D023	200	0.020	0.0089	mg/l	
	3&4-Methylphenol	ND	D024	200	0.020	0.0088	mg/l	
87-86-5	Pentachlorophenol	ND	D037	100	0.10	0.014	mg/l	
108-95-2	Phenol	ND			0.020	0.0039	mg/l	
58-90-2	2,3,4,6-Tetrachlorophenol	ND			0.050	0.015	mg/l	
95-95-4	2,4,5-Trichlorophenol	ND	D041	400	0.050	0.013	mg/l	
88-06-2	2,4,6-Trichlorophenol	ND	D042	2.0	0.050	0.0092	mg/l	
83-32-9	Acenaphthene	ND			0.010	0.0019	mg/l	
98-86-2	Acetophenone	ND			0.050	0.0021	mg/l	
62-53-3	Aniline	ND			0.020	0.0032	mg/l	
120-12-7	Anthracene	ND			0.010	0.0021	mg/l	
92-87-5	Benzidine	ND			0.20	0.0090	mg/l	
85-68-7	Butyl benzyl phthalate	ND			0.020	0.0046	mg/l	
111-44-4	bis(2-Chloroethyl)ether	ND			0.020	0.0025	mg/l	
122-66-7	1,2-Diphenylhydrazine	ND			0.020	0.0019	mg/l	
121-14-2	2,4-Dinitrotoluene	ND	D030	0.13	0.020	0.0055	mg/l	
606-20-2	2,6-Dinitrotoluene	ND			0.020	0.0048	mg/l	
91-94-1	3,3'-Dichlorobenzidine	ND			0.050	0.0051	mg/l	
123-91-1	1,4-Dioxane	ND			0.050	0.0066	mg/l	
60-51-5	Dimethoate	ND			0.050	0.0024	mg/l	
122-39-4	Diphenylamine	ND			0.050	0.0058	mg/l	
298-04-4	Disulfoton	ND			0.050	0.0047	mg/l	
99-65-0	m-Dinitrobenzene	ND			0.050	0.015	mg/l	
84-66-2	Diethyl phthalate	ND			0.020	0.0026	mg/l	
131-11-3	Dimethyl phthalate	ND			0.020	0.0022	mg/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND			0.020	0.017	mg/l	
206-44-0	Fluoranthene	ND			0.010	0.0017	mg/l	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
MCL = Maximum Contamination Level (40 CFR 261 7/1/11) B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

4.1
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Report of Analysis

Client Sample ID: 11215131-120121-IDW-SS-NE	
Lab Sample ID: JD35488-1	Date Sampled: 12/01/21
Matrix: SO - Soil	Date Received: 12/03/21
Method: SW846 8270E SW846 3510C	Percent Solids: 74.4
Project: SJRWP - PCFSE, Harris County, TX	

ABN TCLP Leachate

TCLP Leachate method SW846 1311

CAS No.	Compound	Result	HW#	MCL	RL	MDL	Units	Q
86-73-7	Fluorene	ND			0.010	0.0017	mg/l	
118-74-1	Hexachlorobenzene	ND	D032	0.13	0.020	0.0033	mg/l	
77-47-4	Hexachlorocyclopentadiene	ND			0.20	0.028	mg/l	
67-72-1	Hexachloroethane	ND	D034	3.0	0.050	0.0039	mg/l	
70-30-4	Hexachlorophene ^a	ND			0.50		mg/l	
78-59-1	Isophorone	ND			0.020	0.0028	mg/l	
298-00-0	Methyl parathion	ND			0.050	0.0040	mg/l	
98-95-3	Nitrobenzene	ND	D036	2.0	0.020	0.0064	mg/l	
62-75-9	n-Nitrosodimethylamine	ND			0.020	0.0082	mg/l	
621-64-7	N-Nitroso-di-n-propylamine	ND			0.020	0.0048	mg/l	
924-16-3	N-Nitrosodi-n-butylamine	ND			0.050	0.0060	mg/l	
10595-95-6	N-Nitrosomethylethylamine	ND			0.050	0.014	mg/l	
930-55-2	N-Nitrosopyrrolidine ^b	ND			0.050	0.0073	mg/l	
56-38-2	Parathion	ND			0.050	0.0051	mg/l	
608-93-5	Pentachlorobenzene	ND			0.050	0.0024	mg/l	
82-68-8	Pentachloronitrobenzene	ND			0.050	0.023	mg/l	
23950-58-5	Pronamide	ND			0.050	0.0025	mg/l	
129-00-0	Pyrene	ND			0.010	0.0022	mg/l	
110-86-1	Pyridine	ND	D038	5.0	0.020	0.0039	mg/l	
106-50-3	p-Phenylenediamine ^a	ND			0.050	0.0020	mg/l	
120-82-1	1,2,4-Trichlorobenzene	ND			0.020	0.0025	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	25%		10-73%
4165-62-2	Phenol-d5	18%		10-64%
118-79-6	2,4,6-Tribromophenol	66%		31-130%
4165-60-0	Nitrobenzene-d5	50%		28-126%
321-60-8	2-Fluorobiphenyl	57%		26-114%
1718-51-0	Terphenyl-d14	59%		16-122%

- (a) Associated CCV outside of control limits low.
- (b) Associated CCV outside of control limits high, sample was ND.

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
MCL = Maximum Contamination Level (40 CFR 261 7/1/11) B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: 11215131-120121-IDW-SS-NE	Date Sampled: 12/01/21
Lab Sample ID: JD35488-1	Date Received: 12/03/21
Matrix: SO - Soil	Percent Solids: 74.4
Method: SW846 8151A SW846 3510C	
Project: SJRWP - PCFSE, Harris County, TX	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	OA155568.D	1	12/13/21 02:42	CP	12/09/21 20:10	OP37051	GOA5501
Run #2							

Run #	Initial Volume	Final Volume
Run #1	30.0 ml	2.0 ml
Run #2		

Herbicide TCLP Leachate

TCLP Leachate method SW846 1311

CAS No.	Compound	Result	HW#	MCL	RL	MDL	Units	Q
94-75-7	2,4-D	ND	D016	10	0.0033	0.00098	mg/l	
93-72-1	2,4,5-TP (Silvex)	ND	D017	1.0	0.0010	0.00020	mg/l	
88-85-7	Dinoseb	ND			0.0033	0.0013	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
19719-28-9	2,4-DCAA	112%		13-169%
19719-28-9	2,4-DCAA	91%		13-169%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
 MCL = Maximum Contamination Level (40 CFR 261 7/1/11) B = Indicates analyte found in associated method blank
 E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: 11215131-120121-IDW-SS-NE	
Lab Sample ID: JD35488-1	Date Sampled: 12/01/21
Matrix: SO - Soil	Date Received: 12/03/21
Method: SW846 8081B SW846 3510C	Percent Solids: 74.4
Project: SJRWP - PCFSE, Harris County, TX	

Run #1	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	6G81253.D	1	12/17/21 06:13	CP	12/15/21 21:23	OP37162	G6G2873
Run #2							

Run #1	Initial Volume	Final Volume
Run #1	30.0 ml	2.0 ml
Run #2		

Pesticide Special List

TCLP Leachate method SW846 1311

CAS No.	Compound	Result	HW#	MCL	RL	MDL	Units	Q
58-89-9	gamma-BHC (Lindane)	ND	D013	0.40	0.000067	0.000040	mg/l	
12789-03-6	Chlordane	ND	D020	0.030	0.0033	0.0014	mg/l	
60-57-1	Dieldrin	ND			0.000067	0.000051	mg/l	
72-54-8	4,4'-DDD	ND			0.000067	0.000038	mg/l	
72-55-9	4,4'-DDE	ND			0.000067	0.000034	mg/l	
50-29-3	4,4'-DDT	ND			0.000067	0.000046	mg/l	
72-20-8	Endrin	ND	D012	0.020	0.000067	0.000040	mg/l	
959-98-8	Endosulfan-I	ND			0.000067	0.000035	mg/l	
33213-65-9	Endosulfan-II	ND			0.000067	0.000033	mg/l	
76-44-8	Heptachlor	ND	D031	0.0080	0.000067	0.000030	mg/l	
1024-57-3	Heptachlor epoxide	ND	D031	0.0080	0.000067	0.000040	mg/l	
72-43-5	Methoxychlor	ND	D014	10	0.00013	0.000045	mg/l	
2385-85-5	Mirex	ND			0.00033	0.000031	mg/l	
8001-35-2	Toxaphene	ND	D015	0.50	0.0017	0.0011	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	56%		30-137%
877-09-8	Tetrachloro-m-xylene	55%		30-137%
2051-24-3	Decachlorobiphenyl	36%		10-137%
2051-24-3	Decachlorobiphenyl	54%		10-137%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
MCL = Maximum Contamination Level (40 CFR 261 7/1/11) B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: 11215131-120121-IDW-SS-NE	Date Sampled: 12/01/21
Lab Sample ID: JD35488-1	Date Received: 12/03/21
Matrix: SO - Soil	Percent Solids: 74.4
Project: SJRWP - PCFSE, Harris County, TX	

Metals Analysis, TCLP Leachate SW846 1311

Analyte	Result	HW#	MCL	RL	MDL	Units	DF	Prep	Analyzed By	Method
Antimony	0.0053 B			0.10	0.0047	mg/l	1	12/09/21	12/11/21	ND SW846 6010D ²
Arsenic	0.012 B	D004	5.0	0.10	0.0028	mg/l	1	12/09/21	12/11/21	ND SW846 6010D ²
Barium	1.2	D005	100	0.20	0.013	mg/l	1	12/09/21	12/11/21	ND SW846 6010D ²
Beryllium	0.00050 U			0.0020	0.00050	mg/l	1	12/09/21	12/11/21	ND SW846 6010D ²
Cadmium	0.0026 B	D006	1.0	0.0040	0.0010	mg/l	1	12/09/21	12/11/21	ND SW846 6010D ²
Chromium	0.0020 U	D007	5.0	0.010	0.0020	mg/l	1	12/09/21	12/11/21	ND SW846 6010D ²
Lead	0.0093 B	D008	5.0	0.10	0.0018	mg/l	1	12/09/21	12/11/21	ND SW846 6010D ²
Mercury	0.000095 U	D009	0.20	0.00020	0.000095	mg/l	1	12/09/21	12/09/21	SB SW846 7470A ¹
Nickel	0.050			0.020	0.0017	mg/l	1	12/09/21	12/11/21	ND SW846 6010D ²
Selenium	0.0049 U	D010	1.0	0.10	0.0049	mg/l	1	12/09/21	12/11/21	ND SW846 6010D ²
Silver	0.0049 B	D011	5.0	0.010	0.0019	mg/l	1	12/09/21	12/11/21	ND SW846 6010D ²
Vanadium	0.0029 B			0.050	0.0018	mg/l	1	12/09/21	12/11/21	ND SW846 6010D ²

- (1) Instrument QC Batch: MA51566
- (2) Instrument QC Batch: MA51586
- (3) Prep QC Batch: MP30255
- (4) Prep QC Batch: MP30275

RL = Reporting Limit MDL = Method Detection Limit U = Indicates a result < MDL
 MCL = Maximum Contamination Level (40 CFR 261 7/1/11) B = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID: 11215131-120121-IDW-SS-NE	Date Sampled: 12/01/21
Lab Sample ID: JD35488-1	Date Received: 12/03/21
Matrix: SO - Soil	Percent Solids: 74.4
Project: SJRWP - PCFSE, Harris County, TX	

General Chemistry

Analyte	Result	RL	MDL	Units	DF	Analyzed	By	Method
Cyanide Reactivity	9.2 U	12	9.2	mg/kg	1	12/09/21 08:43 EB	SW846	CHAP7/9012 B
Ignitability (Flashpoint)	> 200			Deg. F	1	12/06/21 14:30 MM	SW846	1010B/ASTM D93
Solids, Percent	74.4			%	1	12/06/21 17:00 BG	SM2540 G	18TH ED MOD
Sulfide Reactivity	73 U	120	73	mg/kg	1	12/08/21 14:20 MP	SW846	CHAP7/9034

RL = Reporting Limit
 MDL = Method Detection Limit

U = Indicates a result < MDL
 B = Indicates a result > = MDL but < RL

4.1
4

Report of Analysis

Client Sample ID: 11215131-120121-IDW-SS-NE	Date Sampled: 12/01/21
Lab Sample ID: JD35488-1A	Date Received: 12/03/21
Matrix: SO - Soil	Percent Solids: 74.4
Method: SW846 8015C SW846 1311	
Project: SJRWP - PCFSE, Harris County, TX	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	RR0173969.D	1	12/15/21 16:54	ATX	12/09/21 06:34	T:OP56271	T:GRR2599
Run #2							

TCLP Leachate method SW846 1311

CAS No.	Compound	Result	HW#	MCL	RL	MDL	Units	Q
110-80-5	2-Ethoxyethanol	ND			10	1.0	mg/l	
109-86-4	2-Methoxyethanol	ND			10	1.0	mg/l	
107-21-1	Ethylene Glycol	4.8			10	1.0	mg/l	JB

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
78-83-1	Isobutanol	82%		41-154%

(a) Analysis performed at SGS Houston, TX.

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
 MCL = Maximum Contamination Level (40 CFR 261 7/1/11) B = Indicates analyte found in associated method blank
 E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

4.2
4

Report of Analysis

Client Sample ID: 11215131-120121-IDW-SS-NE	Date Sampled: 12/01/21
Lab Sample ID: JD35488-1A	Date Received: 12/03/21
Matrix: SO - Soil	Percent Solids: 74.4
Method: TCEQ 1005 TX1005	
Project: SJRWP - PCFSE, Harris County, TX	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	LF194486.D	1	12/16/21 18:38	ATX	12/16/21 07:50	T:OP56326	T:GLF3173
Run #2							

Run #	Initial Weight	Final Volume
Run #1	5.01 g	10.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C6-C12)	ND	67	17	mg/kg	
	TPH (> C12-C28)	ND	67	12	mg/kg	
	TPH (> C28-C35)	ND	67	12	mg/kg	
	TPH (C6-C35)	ND	67	12	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	103%		70-130%
98-08-8	aaa-Trifluorotoluene	93%		70-130%

(a) Sample analyzed beyond hold time per client request. Analysis performed at SGS Houston, TX.

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

4.2
4

Report of Analysis

Client Sample ID: 11215131-120121-IDW-SS-NE	Date Sampled: 12/01/21
Lab Sample ID: JD35488-1R	Date Received: 12/03/21
Matrix: SO - Soil	Percent Solids: 74.4
Method: SW846 8316 SW846 8316	
Project: SJRWP - PCFSE, Harris County, TX	

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	AA082367.D	1	12/13/21 12:01	AFL	12/13/21 10:00	F:OP88794	F:GAA3395
Run #2							

	Initial Volume	Final Volume
Run #1	1.0 ml	1.0 ml
Run #2		

TCLP Leachate method SW846 1311

CAS No.	Compound	Result	HW#	MCL	RL	MDL	Units	Q
79-06-1	Acrylamide	ND			0.050	0.013	mg/l	

(a) Analysis performed at SGS Orlando, FL.

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
 MCL = Maximum Contamination Level (40 CFR 261 7/1/11) B = Indicates analyte found in associated method blank
 E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

4.3
4

Report of Analysis

Client Sample ID: 11215131-120121-IDW-SPS-NE DECON	Date Sampled: 12/01/21
Lab Sample ID: JD35488-2	Date Received: 12/03/21
Matrix: AQ - Water	Percent Solids: n/a
Method: SW846 8260D SW846 1311	
Project: SJRWP - PCFSE, Harris County, TX	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2V83673.D	5	12/15/21 19:28	NW	12/07/21 14:00	GP37457	V2V3448
Run #2							

Run #	Purge Volume
Run #1	5.0 ml
Run #2	

VOA Special List

TCLP Leachate method SW846 1311

CAS No.	Compound	Result	HW#	MCL	RL	MDL	Units	Q
67-64-1	Acetone	0.177			0.050	0.030	mg/l	
75-05-8	Acetonitrile	ND			0.50	0.037	mg/l	
107-13-1	Acrylonitrile ^a	ND			0.25	0.0052	mg/l	
71-43-2	Benzene	ND	D018	0.50	0.0025	0.0021	mg/l	
75-27-4	Bromodichloromethane	ND			0.0050	0.0029	mg/l	
75-25-2	Bromoform	ND			0.020	0.0032	mg/l	
74-83-9	Bromomethane	ND			0.010	0.0082	mg/l	
78-93-3	2-Butanone (MEK)	ND	D035	200	0.10	0.034	mg/l	
75-15-0	Carbon disulfide	ND			0.010	0.0048	mg/l	
56-23-5	Carbon tetrachloride	ND	D019	0.50	0.0050	0.0028	mg/l	
108-90-7	Chlorobenzene	ND	D021	100	0.0050	0.0028	mg/l	
67-66-3	Chloroform ^b	0.0028	D022	6.0	0.0050	0.0025	mg/l	JB
106-93-4	1,2-Dibromoethane	ND			0.010	0.0024	mg/l	
106-46-7	1,4-Dichlorobenzene	ND	D027	7.5	0.0050	0.0025	mg/l	
75-71-8	Dichlorodifluoromethane ^a	ND			0.010	0.0068	mg/l	
107-06-2	1,2-Dichloroethane	ND	D028	0.50	0.0050	0.0030	mg/l	
75-35-4	1,1-Dichloroethene	ND	D029	0.70	0.0050	0.0030	mg/l	
542-75-6	1,3-Dichloropropene (total)	ND			0.0050	0.0022	mg/l	
10061-02-6	trans-1,3-Dichloropropene	ND			0.0050	0.0022	mg/l	
100-41-4	Ethylbenzene	ND			0.0050	0.0030	mg/l	
87-68-3	Hexachlorobutadiene ^c	ND	D033	0.50	0.025	0.0028	mg/l	
78-83-1	Isobutyl alcohol ^a	ND			0.25	0.061	mg/l	
126-98-7	Methacrylonitrile	ND			0.050	0.0050	mg/l	
108-10-1	4-Methyl-2-pentanone(MIBK) ^a	ND			0.025	0.0093	mg/l	
75-09-2	Methylene chloride	0.0021			0.010	0.00050	mg/l	J
100-42-5	Styrene	ND			0.025	0.0035	mg/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND			0.025	0.0028	mg/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND			0.010	0.0033	mg/l	
127-18-4	Tetrachloroethene	ND	D039	0.70	0.0050	0.0045	mg/l	
108-88-3	Toluene	ND			0.0050	0.0027	mg/l	
71-55-6	1,1,1-Trichloroethane	ND			0.0050	0.0027	mg/l	
79-00-5	1,1,2-Trichloroethane	ND			0.0050	0.0027	mg/l	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
MCL = Maximum Contamination Level (40 CFR 261 7/1/11) B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

4.4
4

Report of Analysis

Client Sample ID: 11215131-120121-IDW-SPS-NE DECON	Date Sampled: 12/01/21
Lab Sample ID: JD35488-2	Date Received: 12/03/21
Matrix: AQ - Water	Percent Solids: n/a
Method: SW846 8260D SW846 1311	
Project: SJRWP - PCFSE, Harris County, TX	

VOA Special List

TCLP Leachate method SW846 1311

CAS No.	Compound	Result	HW#	MCL	RL	MDL	Units	Q
79-01-6	Trichloroethene	ND	D040	0.50	0.0050	0.0026	mg/l	
75-69-4	Trichlorofluoromethane	ND			0.025	0.0042	mg/l	
96-18-4	1,2,3-Trichloropropane	ND			0.025	0.0035	mg/l	
75-01-4	Vinyl chloride	ND	D043	0.20	0.0050	0.0039	mg/l	
	m,p-Xylene	ND			0.0050	0.0039	mg/l	
95-47-6	o-Xylene	ND			0.0050	0.0030	mg/l	
1330-20-7	Xylene (total)	ND			0.0050	0.0039	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	95%		76-120%
17060-07-0	1,2-Dichloroethane-D4	110%		64-135%
2037-26-5	Toluene-D8	102%		76-117%
460-00-4	4-Bromofluorobenzene	93%		72-122%

- (a) Associated CCV outside of control limits high, sample was ND.
- (b) Indicates analyte found in associated leachate blank.
- (c) Associated CCV outside of control limits low. A sensitivity check was analyzed to demonstrate system suitability to detect affected analyte. Sample was ND.

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
 MCL = Maximum Contamination Level (40 CFR 261 7/1/11) B = Indicates analyte found in associated method blank
 E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

4.4
4

Report of Analysis

Client Sample ID:	11215131-120121-IDW-SPS-NE DECON	Date Sampled:	12/01/21
Lab Sample ID:	JD35488-2	Date Received:	12/03/21
Matrix:	AQ - Water	Percent Solids:	n/a
Method:	SW846 8270E SW846 3510C		
Project:	SJRWP - PCFSE, Harris County, TX		

Run #1	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	F204318.D	1	12/16/21 11:02	CS	12/14/21 23:10	OP37155	EF8956
Run #2							

Run #1	Initial Volume	Final Volume
Run #1	100 ml	1.0 ml
Run #2		

ABN TCLP Leachate

TCLP Leachate method SW846 1311

CAS No.	Compound	Result	HW#	MCL	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND			0.050	0.0082	mg/l	
59-50-7	4-Chloro-3-methyl phenol	ND			0.050	0.0089	mg/l	
120-83-2	2,4-Dichlorophenol	ND			0.050	0.013	mg/l	
105-67-9	2,4-Dimethylphenol	ND			0.050	0.024	mg/l	
51-28-5	2,4-Dinitrophenol	ND			0.20	0.016	mg/l	
95-48-7	2-Methylphenol	ND	D023	200	0.020	0.0089	mg/l	
	3&4-Methylphenol	ND	D024	200	0.020	0.0088	mg/l	
87-86-5	Pentachlorophenol	ND	D037	100	0.10	0.014	mg/l	
108-95-2	Phenol	ND			0.020	0.0039	mg/l	
58-90-2	2,3,4,6-Tetrachlorophenol	ND			0.050	0.015	mg/l	
95-95-4	2,4,5-Trichlorophenol	ND	D041	400	0.050	0.013	mg/l	
88-06-2	2,4,6-Trichlorophenol	ND	D042	2.0	0.050	0.0092	mg/l	
83-32-9	Acenaphthene	ND			0.010	0.0019	mg/l	
98-86-2	Acetophenone	ND			0.050	0.0021	mg/l	
62-53-3	Aniline	ND			0.020	0.0032	mg/l	
120-12-7	Anthracene	ND			0.010	0.0021	mg/l	
92-87-5	Benzidine	ND			0.20	0.0090	mg/l	
85-68-7	Butyl benzyl phthalate	ND			0.020	0.0046	mg/l	
111-44-4	bis(2-Chloroethyl)ether	ND			0.020	0.0025	mg/l	
122-66-7	1,2-Diphenylhydrazine	ND			0.020	0.0019	mg/l	
121-14-2	2,4-Dinitrotoluene	ND	D030	0.13	0.020	0.0055	mg/l	
606-20-2	2,6-Dinitrotoluene	ND			0.020	0.0048	mg/l	
91-94-1	3,3'-Dichlorobenzidine	ND			0.050	0.0051	mg/l	
123-91-1	1,4-Dioxane	ND			0.050	0.0066	mg/l	
60-51-5	Dimethoate	ND			0.050	0.0024	mg/l	
122-39-4	Diphenylamine	ND			0.050	0.0058	mg/l	
298-04-4	Disulfoton	ND			0.050	0.0047	mg/l	
99-65-0	m-Dinitrobenzene	ND			0.050	0.015	mg/l	
84-66-2	Diethyl phthalate	ND			0.020	0.0026	mg/l	
131-11-3	Dimethyl phthalate	ND			0.020	0.0022	mg/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND			0.020	0.017	mg/l	
206-44-0	Fluoranthene	ND			0.010	0.0017	mg/l	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
MCL = Maximum Contamination Level (40 CFR 261 7/1/11) B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

4.4
4

Report of Analysis

Client Sample ID: 11215131-120121-IDW-SPS-NE DECON	Date Sampled: 12/01/21
Lab Sample ID: JD35488-2	Date Received: 12/03/21
Matrix: AQ - Water	Percent Solids: n/a
Method: SW846 8270E SW846 3510C	
Project: SJRWP - PCFSE, Harris County, TX	

ABN TCLP Leachate

TCLP Leachate method SW846 1311

CAS No.	Compound	Result	HW#	MCL	RL	MDL	Units	Q
86-73-7	Fluorene	ND				0.010	0.0017	mg/l
118-74-1	Hexachlorobenzene	ND	D032	0.13	0.020	0.0033	mg/l	
77-47-4	Hexachlorocyclopentadiene	ND			0.20	0.028	mg/l	
67-72-1	Hexachloroethane	ND	D034	3.0	0.050	0.0039	mg/l	
70-30-4	Hexachlorophene	ND			0.50		mg/l	
78-59-1	Isophorone	ND			0.020	0.0028	mg/l	
298-00-0	Methyl parathion	ND			0.050	0.0040	mg/l	
98-95-3	Nitrobenzene	ND	D036	2.0	0.020	0.0064	mg/l	
62-75-9	n-Nitrosodimethylamine ^a	ND			0.020	0.0082	mg/l	
621-64-7	N-Nitroso-di-n-propylamine	ND			0.020	0.0048	mg/l	
924-16-3	N-Nitrosodi-n-butylamine	ND			0.050	0.0060	mg/l	
10595-95-6	N-Nitrosomethylethylamine	ND			0.050	0.014	mg/l	
930-55-2	N-Nitrosopyrrolidine ^b	ND			0.050	0.0073	mg/l	
56-38-2	Parathion	ND			0.050	0.0051	mg/l	
608-93-5	Pentachlorobenzene	ND			0.050	0.0024	mg/l	
82-68-8	Pentachloronitrobenzene	ND			0.050	0.023	mg/l	
23950-58-5	Pronamide	ND			0.050	0.0025	mg/l	
129-00-0	Pyrene	ND			0.010	0.0022	mg/l	
110-86-1	Pyridine	ND	D038	5.0	0.020	0.0039	mg/l	
106-50-3	p-Phenylenediamine	ND			0.050	0.0020	mg/l	
120-82-1	1,2,4-Trichlorobenzene	ND			0.020	0.0025	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	40%		10-73%
4165-62-2	Phenol-d5	27%		10-64%
118-79-6	2,4,6-Tribromophenol	93%		31-130%
4165-60-0	Nitrobenzene-d5	72%		28-126%
321-60-8	2-Fluorobiphenyl	81%		26-114%
1718-51-0	Terphenyl-d14	89%		16-122%

- (a) Associated CCV outside of control limits low. Low-level verification was analyzed to demonstrate system suitability to detect affected analytes. Sample was ND.
- (b) Associated CCV outside of control limits high, sample was ND.

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
MCL = Maximum Contamination Level (40 CFR 261 7/1/11) B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: 11215131-120121-IDW-SPS-NE DECON	Date Sampled: 12/01/21
Lab Sample ID: JD35488-2	Date Received: 12/03/21
Matrix: AQ - Water	Percent Solids: n/a
Method: SW846 8151A SW846 3510C	
Project: SJRWP - PCFSE, Harris County, TX	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3G134607.D	1	12/16/21 05:23	CP	12/14/21 23:10	OP37156	G3G4911
Run #2							

Run #	Initial Volume	Final Volume
Run #1	30.0 ml	2.0 ml
Run #2		

Herbicide TCLP Leachate

TCLP Leachate method SW846 1311

CAS No.	Compound	Result	HW#	MCL	RL	MDL	Units	Q
94-75-7	2,4-D	ND	D016	10	0.0033	0.00098	mg/l	
93-72-1	2,4,5-TP (Silvex)	0.00039	D017	1.0	0.0010	0.00020	mg/l	J
88-85-7	Dinoseb ^a	ND			0.0033	0.0013	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
19719-28-9	2,4-DCAA	68%		13-169%
19719-28-9	2,4-DCAA	84%		13-169%

(a) Associated CCV outside of control limits high, sample was ND.

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
MCL = Maximum Contamination Level (40 CFR 261 7/1/11) B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

4.4
4

Report of Analysis

Client Sample ID:	11215131-120121-IDW-SPS-NE DECON	Date Sampled:	12/01/21
Lab Sample ID:	JD35488-2	Date Received:	12/03/21
Matrix:	AQ - Water	Percent Solids:	n/a
Method:	SW846 8081B SW846 3510C		
Project:	SJRWP - PCFSE, Harris County, TX		

Run #1	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1G172103.D	1	12/16/21 00:45	CP	12/14/21 23:10	OP37157	G1G5938
Run #2							

Run #1	Initial Volume	Final Volume
Run #1	30.0 ml	2.0 ml
Run #2		

Pesticide Special List

TCLP Leachate method SW846 1311

CAS No.	Compound	Result	HW#	MCL	RL	MDL	Units	Q
58-89-9	gamma-BHC (Lindane)	ND	D013	0.40	0.000067	0.000040	mg/l	
12789-03-6	Chlordane	ND	D020	0.030	0.0033	0.0014	mg/l	
60-57-1	Dieldrin	ND			0.000067	0.000051	mg/l	
72-54-8	4,4'-DDD	ND			0.000067	0.000038	mg/l	
72-55-9	4,4'-DDE	ND			0.000067	0.000034	mg/l	
50-29-3	4,4'-DDT	ND			0.000067	0.000046	mg/l	
72-20-8	Endrin	ND	D012	0.020	0.000067	0.000040	mg/l	
959-98-8	Endosulfan-I	ND			0.000067	0.000035	mg/l	
33213-65-9	Endosulfan-II	ND			0.000067	0.000033	mg/l	
76-44-8	Heptachlor	ND	D031	0.0080	0.000067	0.000030	mg/l	
1024-57-3	Heptachlor epoxide	ND	D031	0.0080	0.000067	0.000040	mg/l	
72-43-5	Methoxychlor	ND	D014	10	0.00013	0.000045	mg/l	
2385-85-5	Mirex	ND			0.00033	0.000031	mg/l	
8001-35-2	Toxaphene	ND	D015	0.50	0.0017	0.0011	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	106%		30-137%
877-09-8	Tetrachloro-m-xylene	68%		30-137%
2051-24-3	Decachlorobiphenyl	63%		10-137%
2051-24-3	Decachlorobiphenyl	48%		10-137%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
MCL = Maximum Contamination Level (40 CFR 261 7/1/11) B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

4.4
4

Report of Analysis

Client Sample ID: 11215131-120121-IDW-SPS-NE DECON Lab Sample ID: JD35488-2 Matrix: AQ - Water Project: SJRWP - PCFSE, Harris County, TX	Date Sampled: 12/01/21 Date Received: 12/03/21 Percent Solids: n/a
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Metals Analysis, TCLP Leachate SW846 1311

Analyte	Result	HW#	MCL	RL	MDL	Units	DF	Prep	Analyzed By	Method
Antimony	0.0047 U			0.10	0.0047	mg/l	1	12/09/21	12/10/21	ND SW846 6010D ²
Arsenic	0.0042 B	D004	5.0	0.10	0.0028	mg/l	1	12/09/21	12/10/21	ND SW846 6010D ²
Barium	0.057 B	D005	100	0.20	0.013	mg/l	1	12/09/21	12/10/21	ND SW846 6010D ²
Beryllium	0.00050 U			0.0020	0.00050	mg/l	1	12/09/21	12/10/21	ND SW846 6010D ²
Cadmium	0.0010 U	D006	1.0	0.0040	0.0010	mg/l	1	12/09/21	12/10/21	ND SW846 6010D ²
Chromium	0.0020 U	D007	5.0	0.010	0.0020	mg/l	1	12/09/21	12/10/21	ND SW846 6010D ²
Lead	0.0026 B	D008	5.0	0.10	0.0018	mg/l	1	12/09/21	12/10/21	ND SW846 6010D ²
Mercury	0.000095 U	D009	0.20	0.00020	0.000095	mg/l	1	12/09/21	12/09/21	SB SW846 7470A ¹
Nickel	0.0045 B			0.010	0.0017	mg/l	1	12/09/21	12/10/21	ND SW846 6010D ²
Selenium	0.0049 U	D010	1.0	0.10	0.0049	mg/l	1	12/09/21	12/10/21	ND SW846 6010D ²
Silver	0.0019 U	D011	5.0	0.010	0.0019	mg/l	1	12/09/21	12/10/21	ND SW846 6010D ²
Vanadium	0.0030 B			0.050	0.0018	mg/l	1	12/09/21	12/10/21	ND SW846 6010D ²

- (1) Instrument QC Batch: MA51566
- (2) Instrument QC Batch: MA51576
- (3) Prep QC Batch: MP30254
- (4) Prep QC Batch: MP30274

RL = Reporting Limit MDL = Method Detection Limit U = Indicates a result < MDL
 MCL = Maximum Contamination Level (40 CFR 261 7/1/11) B = Indicates a result > = MDL but < RL

4.4
4

Report of Analysis

Client Sample ID: 11215131-120121-IDW-SPS-NE DECON	Date Sampled: 12/01/21
Lab Sample ID: JD35488-2	Date Received: 12/03/21
Matrix: AQ - Water	Percent Solids: n/a
Project: SJRWP - PCFSE, Harris County, TX	

General Chemistry

Analyte	Result	RL	MDL	Units	DF	Analyzed	By	Method
Cyanide Reactivity	10 U	10	10	mg/l	1	12/09/21 08:44 EB	SW846	CHAP7/9012B
Ignitability (Flashpoint)	> 200			Deg. F	1	12/09/21 10:00 MM	SW846	1010B/ASTM D93
Sulfide Reactivity	42 U	100	42	mg/l	1	12/08/21 14:20 MP	SW846	CHAP7/9034

RL = Reporting Limit
 MDL = Method Detection Limit

U = Indicates a result < MDL
 B = Indicates a result > = MDL but < RL

4.4
4

Report of Analysis

Client Sample ID: 11215131-120121-IDW-SPS-NE DECON	Date Sampled: 12/01/21
Lab Sample ID: JD35488-2A	Date Received: 12/03/21
Matrix: AQ - Water	Percent Solids: n/a
Method: SW846 8015C SW846 1311	
Project: SJRWP - PCFSE, Harris County, TX	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	RR0173970.D	1	12/15/21 17:06	ATX	12/08/21 12:00	T:OP56400	T:GRR2599
Run #2							

TCLP Leachate method SW846 1311

CAS No.	Compound	Result	HW#	MCL	RL	MDL	Units	Q
110-80-5	2-Ethoxyethanol	ND			10	1.0	mg/l	
109-86-4	2-Methoxyethanol	ND			10	1.0	mg/l	
107-21-1	Ethylene Glycol	5.2			10	1.0	mg/l	JB

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
78-83-1	Isobutanol	77%		41-154%

(a) Analysis performed at SGS Houston, TX.

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
 MCL = Maximum Contamination Level (40 CFR 261 7/1/11) B = Indicates analyte found in associated method blank
 E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

4.5
4

Report of Analysis

Client Sample ID: 11215131-120121-IDW-SPS-NE DECON	Date Sampled: 12/01/21
Lab Sample ID: JD35488-2A	Date Received: 12/03/21
Matrix: AQ - Water	Percent Solids: n/a
Method: TCEQ 1005 TX1005	
Project: SJRWP - PCFSE, Harris County, TX	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	JF117596.D	1	12/09/21 17:23	ATX	12/09/21 13:20	T:OP56278	T:GJF2255
Run #2							

Run #	Initial Volume	Final Volume
Run #1	31.4 ml	3.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C6-C12)	0.907	2.4	0.80	mg/l	J
	TPH (> C12-C28)	2.78	2.4	0.61	mg/l	
	TPH (> C28-C35)	2.05	2.4	0.61	mg/l	J
	TPH (C6-C35)	5.74	2.4	0.61	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	99%		70-130%
98-08-8	aaa-Trifluorotoluene	80%		70-130%

(a) Analysis performed at SGS Houston, TX.

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

4.5
4

Report of Analysis

Client Sample ID: 11215131-120121-IDW-SPS-NE DECON	Date Sampled: 12/01/21
Lab Sample ID: JD35488-2R	Date Received: 12/03/21
Matrix: AQ - Water	Percent Solids: n/a
Method: SW846 8316 SW846 8316	
Project: SJRWP - PCFSE, Harris County, TX	

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	AA082368.D	1	12/13/21 12:13	AFL	12/13/21 10:00	F:OP88794	F:GAA3395
Run #2							

	Initial Volume	Final Volume
Run #1	1.0 ml	1.0 ml
Run #2		

TCLP Leachate method SW846 1311

CAS No.	Compound	Result	HW#	MCL	RL	MDL	Units	Q
79-06-1	Acrylamide	ND			0.050	0.013	mg/l	

(a) Analysis performed at SGS Orlando, FL.

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
 MCL = Maximum Contamination Level (40 CFR 261 7/1/11) B = Indicates analyte found in associated method blank
 E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

4.6
4

Report of Analysis

Client Sample ID:	11215131-120721-IDW-SS-SC	Date Sampled:	12/07/21
Lab Sample ID:	JD35488-3	Date Received:	12/08/21
Matrix:	SO - Soil	Percent Solids:	79.4
Method:	SW846 8260D SW846 1311		
Project:	SJRWP - PCFSE, Harris County, TX		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	L335979.D	5	12/15/21 04:48	NW	12/10/21 14:00	GP37528	VL10104
Run #2							

Run #	Purge Volume
Run #1	5.0 ml
Run #2	

VOA Special List

TCLP Leachate method SW846 1311

CAS No.	Compound	Result	HW#	MCL	RL	MDL	Units	Q
67-64-1	Acetone ^a	ND			0.050	0.030	mg/l	
75-05-8	Acetonitrile ^b	ND			0.50	0.037	mg/l	
107-13-1	Acrylonitrile	ND			0.25	0.0052	mg/l	
71-43-2	Benzene	ND	D018	0.50	0.0025	0.0021	mg/l	
75-27-4	Bromodichloromethane	ND			0.0050	0.0029	mg/l	
75-25-2	Bromoform	ND			0.020	0.0032	mg/l	
74-83-9	Bromomethane	ND			0.010	0.0082	mg/l	
78-93-3	2-Butanone (MEK) ^c	ND	D035	200	0.10	0.034	mg/l	
75-15-0	Carbon disulfide	ND			0.010	0.0048	mg/l	
56-23-5	Carbon tetrachloride	ND	D019	0.50	0.0050	0.0028	mg/l	
108-90-7	Chlorobenzene	ND	D021	100	0.0050	0.0028	mg/l	
67-66-3	Chloroform ^d	0.0058	D022	6.0	0.0050	0.0025	mg/l	B
106-93-4	1,2-Dibromoethane	ND			0.010	0.0024	mg/l	
106-46-7	1,4-Dichlorobenzene	ND	D027	7.5	0.0050	0.0025	mg/l	
75-71-8	Dichlorodifluoromethane	ND			0.010	0.0068	mg/l	
107-06-2	1,2-Dichloroethane	ND	D028	0.50	0.0050	0.0030	mg/l	
75-35-4	1,1-Dichloroethene	ND	D029	0.70	0.0050	0.0030	mg/l	
542-75-6	1,3-Dichloropropene (total)	ND			0.0050	0.0022	mg/l	
10061-02-6	trans-1,3-Dichloropropene	ND			0.0050	0.0022	mg/l	
100-41-4	Ethylbenzene	ND			0.0050	0.0030	mg/l	
87-68-3	Hexachlorobutadiene	ND	D033	0.50	0.025	0.0028	mg/l	
78-83-1	Isobutyl alcohol ^b	ND			0.25	0.061	mg/l	
126-98-7	Methacrylonitrile	ND			0.050	0.0050	mg/l	
108-10-1	4-Methyl-2-pentanone(MIBK) ^b	ND			0.025	0.0093	mg/l	
75-09-2	Methylene chloride	ND			0.010	0.00050	mg/l	
100-42-5	Styrene	ND			0.025	0.0035	mg/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND			0.025	0.0028	mg/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND			0.010	0.0033	mg/l	
127-18-4	Tetrachloroethene	ND	D039	0.70	0.0050	0.0045	mg/l	
108-88-3	Toluene	ND			0.0050	0.0027	mg/l	
71-55-6	1,1,1-Trichloroethane	ND			0.0050	0.0027	mg/l	
79-00-5	1,1,2-Trichloroethane	ND			0.0050	0.0027	mg/l	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
MCL = Maximum Contamination Level (40 CFR 261 7/1/11) B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

4.7
4

Report of Analysis

Client Sample ID: 11215131-120721-IDW-SS-SC	Date Sampled: 12/07/21
Lab Sample ID: JD35488-3	Date Received: 12/08/21
Matrix: SO - Soil	Percent Solids: 79.4
Method: SW846 8260D SW846 1311	
Project: SJRWP - PCFSE, Harris County, TX	

VOA Special List

TCLP Leachate method SW846 1311

CAS No.	Compound	Result	HW#	MCL	RL	MDL	Units	Q
79-01-6	Trichloroethene	ND	D040	0.50	0.0050	0.0026	mg/l	
75-69-4	Trichlorofluoromethane	ND			0.025	0.0042	mg/l	
96-18-4	1,2,3-Trichloropropane	ND			0.025	0.0035	mg/l	
75-01-4	Vinyl chloride	ND	D043	0.20	0.0050	0.0039	mg/l	
	m,p-Xylene	ND			0.0050	0.0039	mg/l	
95-47-6	o-Xylene	ND			0.0050	0.0030	mg/l	
1330-20-7	Xylene (total)	ND			0.0050	0.0039	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	103%		76-120%
17060-07-0	1,2-Dichloroethane-D4	111%		64-135%
2037-26-5	Toluene-D8	99%		76-117%
460-00-4	4-Bromofluorobenzene	106%		72-122%

- (a) Associated CCV outside of control limits low. A sensitivity check was analyzed to demonstrate system suitability to detect affected analyte. Sample was ND.
- (b) Associated CCV outside of control limits high, sample was ND.
- (c) This compound in blank spike is outside in house QC limits bias high.
- (d) Indicates analyte found in associated leachate blank.

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
 MCL = Maximum Contamination Level (40 CFR 261 7/1/11) B = Indicates analyte found in associated method blank
 E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	11215131-120721-IDW-SS-SC	Date Sampled:	12/07/21
Lab Sample ID:	JD35488-3	Date Received:	12/08/21
Matrix:	SO - Soil	Percent Solids:	79.4
Method:	SW846 8270E SW846 3510C		
Project:	SJRWP - PCFSE, Harris County, TX		

Run #1	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	F204322.D	1	12/16/21 12:43	CS	12/15/21 11:00	OP37159	EF8956
Run #2							

Run #1	Initial Volume	Final Volume
Run #1	100 ml	1.0 ml
Run #2		

ABN TCLP Leachate

TCLP Leachate method SW846 1311

CAS No.	Compound	Result	HW#	MCL	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND			0.050	0.0082	mg/l	
59-50-7	4-Chloro-3-methyl phenol	ND			0.050	0.0089	mg/l	
120-83-2	2,4-Dichlorophenol	ND			0.050	0.013	mg/l	
105-67-9	2,4-Dimethylphenol	ND			0.050	0.024	mg/l	
51-28-5	2,4-Dinitrophenol	ND			0.20	0.016	mg/l	
95-48-7	2-Methylphenol	ND	D023	200	0.020	0.0089	mg/l	
	3&4-Methylphenol	ND	D024	200	0.020	0.0088	mg/l	
87-86-5	Pentachlorophenol	ND	D037	100	0.10	0.014	mg/l	
108-95-2	Phenol	ND			0.020	0.0039	mg/l	
58-90-2	2,3,4,6-Tetrachlorophenol	ND			0.050	0.015	mg/l	
95-95-4	2,4,5-Trichlorophenol	ND	D041	400	0.050	0.013	mg/l	
88-06-2	2,4,6-Trichlorophenol	ND	D042	2.0	0.050	0.0092	mg/l	
83-32-9	Acenaphthene	ND			0.010	0.0019	mg/l	
98-86-2	Acetophenone	ND			0.050	0.0021	mg/l	
62-53-3	Aniline	ND			0.020	0.0032	mg/l	
120-12-7	Anthracene	ND			0.010	0.0021	mg/l	
92-87-5	Benzidine	ND			0.20	0.0090	mg/l	
85-68-7	Butyl benzyl phthalate	ND			0.020	0.0046	mg/l	
111-44-4	bis(2-Chloroethyl)ether	ND			0.020	0.0025	mg/l	
122-66-7	1,2-Diphenylhydrazine	ND			0.020	0.0019	mg/l	
121-14-2	2,4-Dinitrotoluene	ND	D030	0.13	0.020	0.0055	mg/l	
606-20-2	2,6-Dinitrotoluene	ND			0.020	0.0048	mg/l	
91-94-1	3,3'-Dichlorobenzidine	ND			0.050	0.0051	mg/l	
123-91-1	1,4-Dioxane	ND			0.050	0.0066	mg/l	
60-51-5	Dimethoate	ND			0.050	0.0024	mg/l	
122-39-4	Diphenylamine	ND			0.050	0.0058	mg/l	
298-04-4	Disulfoton	ND			0.050	0.0047	mg/l	
99-65-0	m-Dinitrobenzene	ND			0.050	0.015	mg/l	
84-66-2	Diethyl phthalate	ND			0.020	0.0026	mg/l	
131-11-3	Dimethyl phthalate	ND			0.020	0.0022	mg/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND			0.020	0.017	mg/l	
206-44-0	Fluoranthene	ND			0.010	0.0017	mg/l	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
MCL = Maximum Contamination Level (40 CFR 261 7/1/11) B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

4.7
4

Report of Analysis

Client Sample ID: 11215131-120721-IDW-SS-SC	Date Sampled: 12/07/21
Lab Sample ID: JD35488-3	Date Received: 12/08/21
Matrix: SO - Soil	Percent Solids: 79.4
Method: SW846 8270E SW846 3510C	
Project: SJRWP - PCFSE, Harris County, TX	

ABN TCLP Leachate

TCLP Leachate method SW846 1311

CAS No.	Compound	Result	HW#	MCL	RL	MDL	Units	Q
86-73-7	Fluorene	ND				0.010	0.0017	mg/l
118-74-1	Hexachlorobenzene	ND	D032	0.13	0.020	0.0033	mg/l	
77-47-4	Hexachlorocyclopentadiene	ND			0.20	0.028	mg/l	
67-72-1	Hexachloroethane	ND	D034	3.0	0.050	0.0039	mg/l	
70-30-4	Hexachlorophene	ND			0.50		mg/l	
78-59-1	Isophorone	ND			0.020	0.0028	mg/l	
298-00-0	Methyl parathion	ND			0.050	0.0040	mg/l	
98-95-3	Nitrobenzene	ND	D036	2.0	0.020	0.0064	mg/l	
62-75-9	n-Nitrosodimethylamine ^a	ND			0.020	0.0082	mg/l	
621-64-7	N-Nitroso-di-n-propylamine	ND			0.020	0.0048	mg/l	
924-16-3	N-Nitrosodi-n-butylamine	ND			0.050	0.0060	mg/l	
10595-95-6	N-Nitrosomethylethylamine	ND			0.050	0.014	mg/l	
930-55-2	N-Nitrosopyrrolidine ^b	ND			0.050	0.0073	mg/l	
56-38-2	Parathion	ND			0.050	0.0051	mg/l	
608-93-5	Pentachlorobenzene	ND			0.050	0.0024	mg/l	
82-68-8	Pentachloronitrobenzene	ND			0.050	0.023	mg/l	
23950-58-5	Pronamide	ND			0.050	0.0025	mg/l	
129-00-0	Pyrene	ND			0.010	0.0022	mg/l	
110-86-1	Pyridine	ND	D038	5.0	0.020	0.0039	mg/l	
106-50-3	p-Phenylenediamine	ND			0.050	0.0020	mg/l	
120-82-1	1,2,4-Trichlorobenzene	ND			0.020	0.0025	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	25%		10-73%
4165-62-2	Phenol-d5	17%		10-64%
118-79-6	2,4,6-Tribromophenol	64%		31-130%
4165-60-0	Nitrobenzene-d5	60%		28-126%
321-60-8	2-Fluorobiphenyl	66%		26-114%
1718-51-0	Terphenyl-d14	42%		16-122%

- (a) Associated CCV outside of control limits low. Low-level verification was analyzed to demonstrate system suitability to detect affected analytes. Sample was ND.
- (b) Associated CCV outside of control limits high, sample was ND.

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
MCL = Maximum Contamination Level (40 CFR 261 7/1/11) B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

4.7
4

Report of Analysis

Client Sample ID:	11215131-120721-IDW-SS-SC	Date Sampled:	12/07/21
Lab Sample ID:	JD35488-3	Date Received:	12/08/21
Matrix:	SO - Soil	Percent Solids:	79.4
Method:	SW846 8151A SW846 3510C		
Project:	SJRWP - PCFSE, Harris County, TX		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3G134646.D	1	12/20/21 01:49	CP	12/15/21 22:20	OP37163	G3G4913
Run #2							

Run #	Initial Volume	Final Volume
Run #1	30.0 ml	2.0 ml
Run #2		

Herbicide TCLP Leachate

TCLP Leachate method SW846 1311

CAS No.	Compound	Result	HW#	MCL	RL	MDL	Units	Q
94-75-7	2,4-D	ND	D016	10	0.0033	0.00098	mg/l	
93-72-1	2,4,5-TP (Silvex)	ND	D017	1.0	0.0010	0.00020	mg/l	
88-85-7	Dinoseb	ND			0.0033	0.0013	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
19719-28-9	2,4-DCAA	62%		13-169%
19719-28-9	2,4-DCAA	54%		13-169%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
MCL = Maximum Contamination Level (40 CFR 261 7/1/11) B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

4.7
4

Report of Analysis

Client Sample ID: 11215131-120721-IDW-SS-SC	
Lab Sample ID: JD35488-3	Date Sampled: 12/07/21
Matrix: SO - Soil	Date Received: 12/08/21
Method: SW846 8081B SW846 3510C	Percent Solids: 79.4
Project: SJRWP - PCFSE, Harris County, TX	

Run #1	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	6G81254.D	1	12/17/21 06:31	CP	12/15/21 21:23	OP37162	G6G2873
Run #2							

Run #1	Initial Volume	Final Volume
Run #1	30.0 ml	2.0 ml
Run #2		

Pesticide Special List

TCLP Leachate method SW846 1311

CAS No.	Compound	Result	HW#	MCL	RL	MDL	Units	Q
58-89-9	gamma-BHC (Lindane)	ND	D013	0.40	0.000067	0.000040	mg/l	
12789-03-6	Chlordane	ND	D020	0.030	0.0033	0.0014	mg/l	
60-57-1	Dieldrin	ND			0.000067	0.000051	mg/l	
72-54-8	4,4'-DDD	ND			0.000067	0.000038	mg/l	
72-55-9	4,4'-DDE	ND			0.000067	0.000034	mg/l	
50-29-3	4,4'-DDT	ND			0.000067	0.000046	mg/l	
72-20-8	Endrin	ND	D012	0.020	0.000067	0.000040	mg/l	
959-98-8	Endosulfan-I	ND			0.000067	0.000035	mg/l	
33213-65-9	Endosulfan-II	ND			0.000067	0.000033	mg/l	
76-44-8	Heptachlor	ND	D031	0.0080	0.000067	0.000030	mg/l	
1024-57-3	Heptachlor epoxide	ND	D031	0.0080	0.000067	0.000040	mg/l	
72-43-5	Methoxychlor	ND	D014	10	0.00013	0.000045	mg/l	
2385-85-5	Mirex	ND			0.00033	0.000031	mg/l	
8001-35-2	Toxaphene	ND	D015	0.50	0.0017	0.0011	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	66%		30-137%
877-09-8	Tetrachloro-m-xylene	57%		30-137%
2051-24-3	Decachlorobiphenyl	75%		10-137%
2051-24-3	Decachlorobiphenyl	64%		10-137%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
MCL = Maximum Contamination Level (40 CFR 261 7/1/11) B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

4.7
4

Report of Analysis

Client Sample ID: 11215131-120721-IDW-SS-SC	Date Sampled: 12/07/21
Lab Sample ID: JD35488-3	Date Received: 12/08/21
Matrix: SO - Soil	Percent Solids: 79.4
Project: SJRWP - PCFSE, Harris County, TX	

Metals Analysis, TCLP Leachate SW846 1311

Analyte	Result	HW#	MCL	RL	MDL	Units	DF	Prep	Analyzed By	Method
Antimony	0.0047 U			0.10	0.0047	mg/l	1	12/15/21	12/15/21	ND SW846 6010D ²
Arsenic	0.0049 B	D004	5.0	0.10	0.0028	mg/l	1	12/15/21	12/15/21	ND SW846 6010D ²
Barium	0.60	D005	100	0.20	0.013	mg/l	1	12/15/21	12/15/21	ND SW846 6010D ²
Beryllium	0.00050 U			0.0020	0.00050	mg/l	1	12/15/21	12/15/21	ND SW846 6010D ²
Cadmium	0.0043	D006	1.0	0.0040	0.0010	mg/l	1	12/15/21	12/15/21	ND SW846 6010D ²
Chromium	0.0020 U	D007	5.0	0.010	0.0020	mg/l	1	12/15/21	12/15/21	ND SW846 6010D ²
Lead	0.0018 U	D008	5.0	0.10	0.0018	mg/l	1	12/15/21	12/15/21	ND SW846 6010D ²
Mercury	0.000095 U	D009	0.20	0.00020	0.000095	mg/l	1	12/15/21	12/15/21	SB SW846 7470A ¹
Nickel	0.044			0.010	0.0017	mg/l	1	12/15/21	12/15/21	ND SW846 6010D ²
Selenium	0.0055 B	D010	1.0	0.10	0.0049	mg/l	1	12/15/21	12/15/21	ND SW846 6010D ²
Silver	0.0019 U	D011	5.0	0.010	0.0019	mg/l	1	12/15/21	12/15/21	ND SW846 6010D ²
Vanadium	0.011 B			0.050	0.0018	mg/l	1	12/15/21	12/15/21	ND SW846 6010D ²

- (1) Instrument QC Batch: MA51602
- (2) Instrument QC Batch: MA51611
- (3) Prep QC Batch: MP30365
- (4) Prep QC Batch: MP30383

RL = Reporting Limit MDL = Method Detection Limit U = Indicates a result < MDL
 MCL = Maximum Contamination Level (40 CFR 261 7/1/11) B = Indicates a result > = MDL but < RL

4.7
4

Report of Analysis

Client Sample ID: 11215131-120721-IDW-SS-SC	Date Sampled: 12/07/21
Lab Sample ID: JD35488-3	Date Received: 12/08/21
Matrix: SO - Soil	Percent Solids: 79.4
Project: SJRWP - PCFSE, Harris County, TX	

General Chemistry

Analyte	Result	RL	MDL	Units	DF	Analyzed	By Method
Cyanide Reactivity	9.1 U	12	9.1	mg/kg	1	12/21/21 13:43 MM	SW846 CHAP7/9012 B
Ignitability (Flashpoint)	> 200			Deg. F	1	12/14/21 16:59 DB	SW846 1010B/ASTM D93
Solids, Percent	79.4			%	1	12/12/21 16:28 BG	SM2540 G 18TH ED MOD
Sulfide Reactivity	72 U	120	72	mg/kg	1	12/15/21 10:36 JOO	SW846 CHAP7/9034

RL = Reporting Limit
 MDL = Method Detection Limit

U = Indicates a result < MDL
 B = Indicates a result > = MDL but < RL

4.7
4

Report of Analysis

Client Sample ID: 11215131-120721-IDW-SS-SC	Date Sampled: 12/07/21
Lab Sample ID: JD35488-3A	Date Received: 12/08/21
Matrix: SO - Soil	Percent Solids: 79.4
Method: TCEQ 1005 TX1005	
Project: SJRWP - PCFSE, Harris County, TX	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	LB194487.D	1	12/16/21 19:05	ATX	12/16/21 07:50	T:OP56326	T:GLB3173
Run #2							

Run #	Initial Weight	Final Volume
Run #1	3.57 g	10.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C6-C12)	ND	88	23	mg/kg	
	TPH (> C12-C28)	31.6	88	16	mg/kg	J
	TPH (> C28-C35)	68.5	88	16	mg/kg	J
	TPH (C6-C35)	100	88	16	mg/kg	J

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	87%		70-130%
98-08-8	aaa-Trifluorotoluene	99%		70-130%

(a) Analysis performed at SGS Houston, TX.

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

4.8
4

Report of Analysis

Client Sample ID: 11215131-120721-IDW-SS-SC	Date Sampled: 12/07/21
Lab Sample ID: JD35488-3T	Date Received: 12/08/21
Matrix: SO - Soil	Percent Solids: 79.4
Method: SW846 8316 IN HOUSE	
Project: SJRWP - PCFSE, Harris County, TX	

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	AA082375.D	1	12/17/21 16:43	AFL	12/17/21 15:05	F:OP88895	F:GAA3396
Run #2							

	Initial Volume	Final Volume
Run #1	1.0 ml	1.0 ml
Run #2		

TCLP Leachate method SW846 1311

CAS No.	Compound	Result	HW#	MCL	RL	MDL	Units	Q
79-06-1	Acrylamide	ND			0.050	0.013	mg/l	

(a) Analysis performed at SGS Orlando, FL.

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
 MCL = Maximum Contamination Level (40 CFR 261 7/1/11) B = Indicates analyte found in associated method blank
 E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

4.9
4

Report of Analysis

Client Sample ID:	11215131-120721-IDW-SS-DECON2	Date Sampled:	12/07/21
Lab Sample ID:	JD35488-4	Date Received:	12/08/21
Matrix:	AQ - Water	Percent Solids:	n/a
Method:	SW846 8260D SW846 1311		
Project:	SJRWP - PCFSE, Harris County, TX		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	L335978.D	5	12/15/21 04:27	NW	12/10/21 12:00	GP37525	VL10104
Run #2	2V83672.D	5	12/15/21 19:03	NW	12/10/21 12:00	GP37525	V2V3448

Run #	Purge Volume
Run #1	5.0 ml
Run #2	5.0 ml

VOA Special List

TCLP Leachate method SW846 1311

CAS No.	Compound	Result	HW#	MCL	RL	MDL	Units	Q
67-64-1	Acetone	0.0564 ^a			0.050	0.030	mg/l	
75-05-8	Acetonitrile ^b	ND			0.50	0.037	mg/l	
107-13-1	Acrylonitrile	0.0345			0.25	0.0052	mg/l	J
71-43-2	Benzene	ND	D018	0.50	0.0025	0.0021	mg/l	
75-27-4	Bromodichloromethane	ND			0.0050	0.0029	mg/l	
75-25-2	Bromoform	ND			0.020	0.0032	mg/l	
74-83-9	Bromomethane	ND			0.010	0.0082	mg/l	
78-93-3	2-Butanone (MEK) ^c	ND	D035	200	0.10	0.034	mg/l	
75-15-0	Carbon disulfide	ND			0.010	0.0048	mg/l	
56-23-5	Carbon tetrachloride	ND	D019	0.50	0.0050	0.0028	mg/l	
108-90-7	Chlorobenzene	ND	D021	100	0.0050	0.0028	mg/l	
67-66-3	Chloroform	ND	D022	6.0	0.0050	0.0025	mg/l	
106-93-4	1,2-Dibromoethane	ND			0.010	0.0024	mg/l	
106-46-7	1,4-Dichlorobenzene	ND	D027	7.5	0.0050	0.0025	mg/l	
75-71-8	Dichlorodifluoromethane	ND			0.010	0.0068	mg/l	
107-06-2	1,2-Dichloroethane	ND	D028	0.50	0.0050	0.0030	mg/l	
75-35-4	1,1-Dichloroethene	ND	D029	0.70	0.0050	0.0030	mg/l	
542-75-6	1,3-Dichloropropene (total)	ND			0.0050	0.0022	mg/l	
10061-02-6	trans-1,3-Dichloropropene	ND			0.0050	0.0022	mg/l	
100-41-4	Ethylbenzene	ND			0.0050	0.0030	mg/l	
87-68-3	Hexachlorobutadiene	ND	D033	0.50	0.025	0.0028	mg/l	
78-83-1	Isobutyl alcohol ^b	ND			0.25	0.061	mg/l	
126-98-7	Methacrylonitrile	ND			0.050	0.0050	mg/l	
108-10-1	4-Methyl-2-pentanone(MIBK) ^b	ND			0.025	0.0093	mg/l	
75-09-2	Methylene chloride	ND			0.010	0.00050	mg/l	
100-42-5	Styrene	ND			0.025	0.0035	mg/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND			0.025	0.0028	mg/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND			0.010	0.0033	mg/l	
127-18-4	Tetrachloroethene	ND	D039	0.70	0.0050	0.0045	mg/l	
108-88-3	Toluene	0.0043			0.0050	0.0027	mg/l	J
71-55-6	1,1,1-Trichloroethane	ND			0.0050	0.0027	mg/l	
79-00-5	1,1,2-Trichloroethane	ND			0.0050	0.0027	mg/l	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
MCL = Maximum Contamination Level (40 CFR 261 7/1/11) B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

4.10
4

Report of Analysis

Client Sample ID: 11215131-120721-IDW-SS-DECON2	Date Sampled: 12/07/21
Lab Sample ID: JD35488-4	Date Received: 12/08/21
Matrix: AQ - Water	Percent Solids: n/a
Method: SW846 8260D SW846 1311	
Project: SJRWP - PCFSE, Harris County, TX	

VOA Special List

TCLP Leachate method SW846 1311

CAS No.	Compound	Result	HW#	MCL	RL	MDL	Units	Q
79-01-6	Trichloroethene	ND	D040	0.50	0.0050	0.0026	mg/l	
75-69-4	Trichlorofluoromethane	ND			0.025	0.0042	mg/l	
96-18-4	1,2,3-Trichloropropane	ND			0.025	0.0035	mg/l	
75-01-4	Vinyl chloride	ND	D043	0.20	0.0050	0.0039	mg/l	
	m,p-Xylene	ND			0.0050	0.0039	mg/l	
95-47-6	o-Xylene	ND			0.0050	0.0030	mg/l	
1330-20-7	Xylene (total)	ND			0.0050	0.0039	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	106%	94%	76-120%
17060-07-0	1,2-Dichloroethane-D4	115%	111%	64-135%
2037-26-5	Toluene-D8	97%	104%	76-117%
460-00-4	4-Bromofluorobenzene	108%	95%	72-122%

- (a) Result is from Run# 2
- (b) Associated CCV outside of control limits high, sample was ND.
- (c) This compound in blank spike is outside in house QC limits bias high.

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
 MCL = Maximum Contamination Level (40 CFR 261 7/1/11) B = Indicates analyte found in associated method blank
 E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

4.10
4

Report of Analysis

Client Sample ID:	11215131-120721-IDW-SS-DECON2	Date Sampled:	12/07/21
Lab Sample ID:	JD35488-4	Date Received:	12/08/21
Matrix:	AQ - Water	Percent Solids:	n/a
Method:	SW846 8270E SW846 3510C		
Project:	SJRWP - PCFSE, Harris County, TX		

Run #1	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	F204323.D	1	12/16/21 13:08	CS	12/15/21 11:00	OP37159	EF8956
Run #2							

Run #1	Initial Volume	Final Volume
Run #1	100 ml	1.0 ml
Run #2		

ABN TCLP Leachate

TCLP Leachate method SW846 1311

CAS No.	Compound	Result	HW#	MCL	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND			0.050	0.0082	mg/l	
59-50-7	4-Chloro-3-methyl phenol	ND			0.050	0.0089	mg/l	
120-83-2	2,4-Dichlorophenol	ND			0.050	0.013	mg/l	
105-67-9	2,4-Dimethylphenol	ND			0.050	0.024	mg/l	
51-28-5	2,4-Dinitrophenol	ND			0.20	0.016	mg/l	
95-48-7	2-Methylphenol	ND	D023	200	0.020	0.0089	mg/l	
	3&4-Methylphenol	ND	D024	200	0.020	0.0088	mg/l	
87-86-5	Pentachlorophenol	ND	D037	100	0.10	0.014	mg/l	
108-95-2	Phenol	ND			0.020	0.0039	mg/l	
58-90-2	2,3,4,6-Tetrachlorophenol	ND			0.050	0.015	mg/l	
95-95-4	2,4,5-Trichlorophenol	ND	D041	400	0.050	0.013	mg/l	
88-06-2	2,4,6-Trichlorophenol	ND	D042	2.0	0.050	0.0092	mg/l	
83-32-9	Acenaphthene	ND			0.010	0.0019	mg/l	
98-86-2	Acetophenone	ND			0.050	0.0021	mg/l	
62-53-3	Aniline	ND			0.020	0.0032	mg/l	
120-12-7	Anthracene	ND			0.010	0.0021	mg/l	
92-87-5	Benzidine	ND			0.20	0.0090	mg/l	
85-68-7	Butyl benzyl phthalate	ND			0.020	0.0046	mg/l	
111-44-4	bis(2-Chloroethyl)ether	ND			0.020	0.0025	mg/l	
122-66-7	1,2-Diphenylhydrazine	ND			0.020	0.0019	mg/l	
121-14-2	2,4-Dinitrotoluene	ND	D030	0.13	0.020	0.0055	mg/l	
606-20-2	2,6-Dinitrotoluene	ND			0.020	0.0048	mg/l	
91-94-1	3,3'-Dichlorobenzidine	ND			0.050	0.0051	mg/l	
123-91-1	1,4-Dioxane	ND			0.050	0.0066	mg/l	
60-51-5	Dimethoate	ND			0.050	0.0024	mg/l	
122-39-4	Diphenylamine	ND			0.050	0.0058	mg/l	
298-04-4	Disulfoton	ND			0.050	0.0047	mg/l	
99-65-0	m-Dinitrobenzene	ND			0.050	0.015	mg/l	
84-66-2	Diethyl phthalate	ND			0.020	0.0026	mg/l	
131-11-3	Dimethyl phthalate	ND			0.020	0.0022	mg/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND			0.020	0.017	mg/l	
206-44-0	Fluoranthene	ND			0.010	0.0017	mg/l	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
MCL = Maximum Contamination Level (40 CFR 261 7/1/11) B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

4.10
4

Report of Analysis

Client Sample ID: 11215131-120721-IDW-SS-DECON2	Date Sampled: 12/07/21
Lab Sample ID: JD35488-4	Date Received: 12/08/21
Matrix: AQ - Water	Percent Solids: n/a
Method: SW846 8270E SW846 3510C	
Project: SJRWP - PCFSE, Harris County, TX	

ABN TCLP Leachate

TCLP Leachate method SW846 1311

CAS No.	Compound	Result	HW#	MCL	RL	MDL	Units	Q
86-73-7	Fluorene	ND			0.010	0.0017	mg/l	
118-74-1	Hexachlorobenzene	ND	D032	0.13	0.020	0.0033	mg/l	
77-47-4	Hexachlorocyclopentadiene	ND			0.20	0.028	mg/l	
67-72-1	Hexachloroethane	ND	D034	3.0	0.050	0.0039	mg/l	
70-30-4	Hexachlorophene	ND			0.50		mg/l	
78-59-1	Isophorone	ND			0.020	0.0028	mg/l	
298-00-0	Methyl parathion	ND			0.050	0.0040	mg/l	
98-95-3	Nitrobenzene	ND	D036	2.0	0.020	0.0064	mg/l	
62-75-9	n-Nitrosodimethylamine ^a	ND			0.020	0.0082	mg/l	
621-64-7	N-Nitroso-di-n-propylamine	ND			0.020	0.0048	mg/l	
924-16-3	N-Nitrosodi-n-butylamine	ND			0.050	0.0060	mg/l	
10595-95-6	N-Nitrosomethylethylamine	ND			0.050	0.014	mg/l	
930-55-2	N-Nitrosopyrrolidine ^b	ND			0.050	0.0073	mg/l	
56-38-2	Parathion	ND			0.050	0.0051	mg/l	
608-93-5	Pentachlorobenzene	ND			0.050	0.0024	mg/l	
82-68-8	Pentachloronitrobenzene	ND			0.050	0.023	mg/l	
23950-58-5	Pronamide	ND			0.050	0.0025	mg/l	
129-00-0	Pyrene	ND			0.010	0.0022	mg/l	
110-86-1	Pyridine	ND	D038	5.0	0.020	0.0039	mg/l	
106-50-3	p-Phenylenediamine	ND			0.050	0.0020	mg/l	
120-82-1	1,2,4-Trichlorobenzene	ND			0.020	0.0025	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	23%		10-73%
4165-62-2	Phenol-d5	18%		10-64%
118-79-6	2,4,6-Tribromophenol	50%		31-130%
4165-60-0	Nitrobenzene-d5	65%		28-126%
321-60-8	2-Fluorobiphenyl	74%		26-114%
1718-51-0	Terphenyl-d14	34%		16-122%

- (a) Associated CCV outside of control limits low. Low-level verification was analyzed to demonstrate system suitability to detect affected analytes. Sample was ND.
- (b) Associated CCV outside of control limits high, sample was ND.

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
MCL = Maximum Contamination Level (40 CFR 261 7/1/11) B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

4.10
4

Report of Analysis

Client Sample ID: 11215131-120721-IDW-SS-DECON2	Date Sampled: 12/07/21
Lab Sample ID: JD35488-4	Date Received: 12/08/21
Matrix: AQ - Water	Percent Solids: n/a
Method: SW846 8151A SW846 3510C	
Project: SJRWP - PCFSE, Harris County, TX	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3G134647.D	1	12/20/21 02:16	CP	12/15/21 22:20	OP37163	G3G4913
Run #2							

Run #	Initial Volume	Final Volume
Run #1	30.0 ml	2.0 ml
Run #2		

Herbicide TCLP Leachate

TCLP Leachate method SW846 1311

CAS No.	Compound	Result	HW#	MCL	RL	MDL	Units	Q
94-75-7	2,4-D	ND	D016	10	0.0033	0.00098	mg/l	
93-72-1	2,4,5-TP (Silvex)	ND	D017	1.0	0.0010	0.00020	mg/l	
88-85-7	Dinoseb	ND			0.0033	0.0013	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
19719-28-9	2,4-DCAA	63%		13-169%
19719-28-9	2,4-DCAA	60%		13-169%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
 MCL = Maximum Contamination Level (40 CFR 261 7/1/11) B = Indicates analyte found in associated method blank
 E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

4.10
4

Report of Analysis

Client Sample ID: 11215131-120721-IDW-SS-DECON2	
Lab Sample ID: JD35488-4	Date Sampled: 12/07/21
Matrix: AQ - Water	Date Received: 12/08/21
Method: SW846 8081B SW846 3510C	Percent Solids: n/a
Project: SJRWP - PCFSE, Harris County, TX	

Run #1	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	6G81255.D	1	12/17/21 06:49	CP	12/15/21 21:23	OP37162	G6G2873
Run #2							

Run #1	Initial Volume	Final Volume
Run #1	30.0 ml	2.0 ml
Run #2		

Pesticide Special List

TCLP Leachate method SW846 1311

CAS No.	Compound	Result	HW#	MCL	RL	MDL	Units	Q
58-89-9	gamma-BHC (Lindane)	ND	D013	0.40	0.000067	0.000040	mg/l	
12789-03-6	Chlordane	ND	D020	0.030	0.0033	0.0014	mg/l	
60-57-1	Dieldrin	ND			0.000067	0.000051	mg/l	
72-54-8	4,4'-DDD	ND			0.000067	0.000038	mg/l	
72-55-9	4,4'-DDE	ND			0.000067	0.000034	mg/l	
50-29-3	4,4'-DDT	ND			0.000067	0.000046	mg/l	
72-20-8	Endrin	ND	D012	0.020	0.000067	0.000040	mg/l	
959-98-8	Endosulfan-I	ND			0.000067	0.000035	mg/l	
33213-65-9	Endosulfan-II	ND			0.000067	0.000033	mg/l	
76-44-8	Heptachlor	ND	D031	0.0080	0.000067	0.000030	mg/l	
1024-57-3	Heptachlor epoxide	ND	D031	0.0080	0.000067	0.000040	mg/l	
72-43-5	Methoxychlor	ND	D014	10	0.00013	0.000045	mg/l	
2385-85-5	Mirex	ND			0.00033	0.000031	mg/l	
8001-35-2	Toxaphene	ND	D015	0.50	0.0017	0.0011	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	68%		30-137%
877-09-8	Tetrachloro-m-xylene	67%		30-137%
2051-24-3	Decachlorobiphenyl	57%		10-137%
2051-24-3	Decachlorobiphenyl	52%		10-137%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
MCL = Maximum Contamination Level (40 CFR 261 7/1/11) B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

4.10
4

Report of Analysis

Client Sample ID: 11215131-120721-IDW-SS-DECON2	Date Sampled: 12/07/21
Lab Sample ID: JD35488-4	Date Received: 12/08/21
Matrix: AQ - Water	Percent Solids: n/a
Project: SJRWP - PCFSE, Harris County, TX	

Metals Analysis, TCLP Leachate SW846 1311

Analyte	Result	HW#	MCL	RL	MDL	Units	DF	Prep	Analyzed By	Method
Antimony	0.0047 U			0.10	0.0047	mg/l	1	12/11/21	12/13/21	ND SW846 6010D ¹
Arsenic	0.0028 U	D004	5.0	0.10	0.0028	mg/l	1	12/11/21	12/13/21	ND SW846 6010D ¹
Barium	0.10 B	D005	100	0.20	0.013	mg/l	1	12/11/21	12/13/21	ND SW846 6010D ¹
Beryllium	0.00050 U			0.0020	0.00050	mg/l	1	12/11/21	12/13/21	ND SW846 6010D ¹
Cadmium	0.0010 U	D006	1.0	0.0040	0.0010	mg/l	1	12/11/21	12/13/21	ND SW846 6010D ¹
Chromium	0.0020 U	D007	5.0	0.010	0.0020	mg/l	1	12/11/21	12/13/21	ND SW846 6010D ¹
Lead	0.0018 U	D008	5.0	0.10	0.0018	mg/l	1	12/11/21	12/13/21	ND SW846 6010D ¹
Mercury	0.000095 U	D009	0.20	0.00020	0.000095	mg/l	1	12/14/21	12/14/21	SB SW846 7470A ²
Nickel	0.0035 B			0.010	0.0017	mg/l	1	12/11/21	12/13/21	ND SW846 6010D ¹
Selenium	0.0049 U	D010	1.0	0.10	0.0049	mg/l	1	12/11/21	12/13/21	ND SW846 6010D ¹
Silver	0.0019 U	D011	5.0	0.010	0.0019	mg/l	1	12/11/21	12/13/21	ND SW846 6010D ¹
Vanadium	0.0018 U			0.050	0.0018	mg/l	1	12/11/21	12/13/21	ND SW846 6010D ¹

- (1) Instrument QC Batch: MA51594
- (2) Instrument QC Batch: MA51597
- (3) Prep QC Batch: MP30329
- (4) Prep QC Batch: MP30355

RL = Reporting Limit MDL = Method Detection Limit U = Indicates a result < MDL
 MCL = Maximum Contamination Level (40 CFR 261 7/1/11) B = Indicates a result > = MDL but < RL

4.10
4

Report of Analysis

Client Sample ID: 11215131-120721-IDW-SS-DECON2	Date Sampled: 12/07/21
Lab Sample ID: JD35488-4	Date Received: 12/08/21
Matrix: AQ - Water	Percent Solids: n/a
Project: SJRWP - PCFSE, Harris County, TX	

4.10
4

General Chemistry

Analyte	Result	RL	MDL	Units	DF	Analyzed By Method
Cyanide Reactivity	10 U	10	10	mg/l	1	12/21/21 13:36 MM SW846 CHAP7/9012B
Ignitability (Flashpoint)	> 200			Deg. F	1	12/15/21 18:24 DB SW846 1010B/ASTM D93
Sulfide Reactivity	43 U	100	43	mg/l	1	12/15/21 11:10 JOO SW846 CHAP7/9034

RL = Reporting Limit
 MDL = Method Detection Limit

U = Indicates a result < MDL
 B = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID: 11215131-120721-IDW-SS-DECON2	Date Sampled: 12/07/21
Lab Sample ID: JD35488-4A	Date Received: 12/08/21
Matrix: AQ - Water	Percent Solids: n/a
Method: TCEQ 1005 TX1005	
Project: SJRWP - PCFSE, Harris County, TX	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	LB194371.D	1	12/14/21 16:17	ATX	12/14/21 08:25	T:OP56309	T:GLB3171
Run #2							

Run #	Initial Volume	Final Volume
Run #1	31.6 ml	3.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C6-C12)	1.02	2.4	0.80	mg/l	J
	TPH (> C12-C28)	1.37	2.4	0.61	mg/l	J
	TPH (> C28-C35)	ND	2.4	0.61	mg/l	J
	TPH (C6-C35)	2.39	2.4	0.61	mg/l	J

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	103%		70-130%
98-08-8	aaa-Trifluorotoluene	105%		70-130%

(a) Analysis performed at SGS Houston, TX.

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

Report of Analysis

Client Sample ID: 11215131-120721-IDW-SS-DECON2	Date Sampled: 12/07/21
Lab Sample ID: JD35488-4T	Date Received: 12/08/21
Matrix: AQ - Water	Percent Solids: n/a
Method: SW846 8316 IN HOUSE	
Project: SJRWP - PCFSE, Harris County, TX	

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	AA082376.D	1	12/17/21 16:55	AFL	12/17/21 15:05	F:OP88895	F:GAA3396
Run #2							

	Initial Volume	Final Volume
Run #1	1.0 ml	1.0 ml
Run #2		

TCLP Leachate method SW846 1311

CAS No.	Compound	Result	HW#	MCL	RL	MDL	Units	Q
79-06-1	Acrylamide	ND			0.050	0.013	mg/l	

(a) Analysis performed at SGS Orlando, FL.

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
 MCL = Maximum Contamination Level (40 CFR 261 7/1/11) B = Indicates analyte found in associated method blank
 E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

4.12
4

Report of Analysis

Client Sample ID: 11215131-120821-IDW-SS-SW	
Lab Sample ID: JD35488-5	Date Sampled: 12/08/21
Matrix: SO - Soil	Date Received: 12/09/21
Method: SW846 8260D SW846 1311	Percent Solids: 78.0
Project: SJRWP - PCFSE, Harris County, TX	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2V83674.D	5	12/15/21 19:53	NW	12/13/21 12:00	GP37553	V2V3448
Run #2							

Run #	Purge Volume
Run #1	5.0 ml
Run #2	

VOA Special List

TCLP Leachate method SW846 1311

CAS No.	Compound	Result	HW#	MCL	RL	MDL	Units	Q
67-64-1	Acetone	ND			0.050	0.030	mg/l	
75-05-8	Acetonitrile	ND			0.50	0.037	mg/l	
107-13-1	Acrylonitrile ^a	ND			0.25	0.0052	mg/l	
71-43-2	Benzene	ND	D018	0.50	0.0025	0.0021	mg/l	
75-27-4	Bromodichloromethane	ND			0.0050	0.0029	mg/l	
75-25-2	Bromoform	ND			0.020	0.0032	mg/l	
74-83-9	Bromomethane	ND			0.010	0.0082	mg/l	
78-93-3	2-Butanone (MEK)	ND	D035	200	0.10	0.034	mg/l	
75-15-0	Carbon disulfide	ND			0.010	0.0048	mg/l	
56-23-5	Carbon tetrachloride	ND	D019	0.50	0.0050	0.0028	mg/l	
108-90-7	Chlorobenzene	ND	D021	100	0.0050	0.0028	mg/l	
67-66-3	Chloroform ^b	0.0070	D022	6.0	0.0050	0.0025	mg/l	B
106-93-4	1,2-Dibromoethane	ND			0.010	0.0024	mg/l	
106-46-7	1,4-Dichlorobenzene	ND	D027	7.5	0.0050	0.0025	mg/l	
75-71-8	Dichlorodifluoromethane ^a	ND			0.010	0.0068	mg/l	
107-06-2	1,2-Dichloroethane	ND	D028	0.50	0.0050	0.0030	mg/l	
75-35-4	1,1-Dichloroethene	ND	D029	0.70	0.0050	0.0030	mg/l	
542-75-6	1,3-Dichloropropene (total)	ND			0.0050	0.0022	mg/l	
10061-02-6	trans-1,3-Dichloropropene	ND			0.0050	0.0022	mg/l	
100-41-4	Ethylbenzene	ND			0.0050	0.0030	mg/l	
87-68-3	Hexachlorobutadiene ^c	ND	D033	0.50	0.025	0.0028	mg/l	
78-83-1	Isobutyl alcohol ^a	ND			0.25	0.061	mg/l	
126-98-7	Methacrylonitrile	ND			0.050	0.0050	mg/l	
108-10-1	4-Methyl-2-pentanone(MIBK) ^a	ND			0.025	0.0093	mg/l	
75-09-2	Methylene chloride	ND			0.010	0.00050	mg/l	
100-42-5	Styrene	ND			0.025	0.0035	mg/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND			0.025	0.0028	mg/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND			0.010	0.0033	mg/l	
127-18-4	Tetrachloroethene	ND	D039	0.70	0.0050	0.0045	mg/l	
108-88-3	Toluene	ND			0.0050	0.0027	mg/l	
71-55-6	1,1,1-Trichloroethane	ND			0.0050	0.0027	mg/l	
79-00-5	1,1,2-Trichloroethane	ND			0.0050	0.0027	mg/l	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
MCL = Maximum Contamination Level (40 CFR 261 7/1/11) B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

4.13
4

Report of Analysis

Client Sample ID: 11215131-120821-IDW-SS-SW	Date Sampled: 12/08/21
Lab Sample ID: JD35488-5	Date Received: 12/09/21
Matrix: SO - Soil	Percent Solids: 78.0
Method: SW846 8260D SW846 1311	
Project: SJRWP - PCFSE, Harris County, TX	

VOA Special List

TCLP Leachate method SW846 1311

CAS No.	Compound	Result	HW#	MCL	RL	MDL	Units	Q
79-01-6	Trichloroethene	ND	D040	0.50	0.0050	0.0026	mg/l	
75-69-4	Trichlorofluoromethane	ND			0.025	0.0042	mg/l	
96-18-4	1,2,3-Trichloropropane	ND			0.025	0.0035	mg/l	
75-01-4	Vinyl chloride	ND	D043	0.20	0.0050	0.0039	mg/l	
	m,p-Xylene	ND			0.0050	0.0039	mg/l	
95-47-6	o-Xylene	ND			0.0050	0.0030	mg/l	
1330-20-7	Xylene (total)	ND			0.0050	0.0039	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	96%		76-120%
17060-07-0	1,2-Dichloroethane-D4	111%		64-135%
2037-26-5	Toluene-D8	104%		76-117%
460-00-4	4-Bromofluorobenzene	95%		72-122%

- (a) Associated CCV outside of control limits high, sample was ND.
- (b) Indicates analyte found in associated leachate blank.
- (c) Associated CCV outside of control limits low. A sensitivity check was analyzed to demonstrate system suitability to detect affected analyte. Sample was ND.

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
 MCL = Maximum Contamination Level (40 CFR 261 7/1/11) B = Indicates analyte found in associated method blank
 E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	11215131-120821-IDW-SS-SW	Date Sampled:	12/08/21
Lab Sample ID:	JD35488-5	Date Received:	12/09/21
Matrix:	SO - Soil	Percent Solids:	78.0
Method:	SW846 8270E SW846 3510C		
Project:	SJRWP - PCFSE, Harris County, TX		

Run #1	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	F204324.D	1	12/16/21 13:33	CS	12/15/21 11:00	OP37159	EF8956
Run #2							

Run #1	Initial Volume	Final Volume
Run #1	100 ml	1.0 ml
Run #2		

ABN TCLP Leachate

TCLP Leachate method SW846 1311

CAS No.	Compound	Result	HW#	MCL	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND			0.050	0.0082	mg/l	
59-50-7	4-Chloro-3-methyl phenol	ND			0.050	0.0089	mg/l	
120-83-2	2,4-Dichlorophenol	ND			0.050	0.013	mg/l	
105-67-9	2,4-Dimethylphenol	ND			0.050	0.024	mg/l	
51-28-5	2,4-Dinitrophenol	ND			0.20	0.016	mg/l	
95-48-7	2-Methylphenol	ND	D023	200	0.020	0.0089	mg/l	
	3&4-Methylphenol	ND	D024	200	0.020	0.0088	mg/l	
87-86-5	Pentachlorophenol	ND	D037	100	0.10	0.014	mg/l	
108-95-2	Phenol	ND			0.020	0.0039	mg/l	
58-90-2	2,3,4,6-Tetrachlorophenol	ND			0.050	0.015	mg/l	
95-95-4	2,4,5-Trichlorophenol	ND	D041	400	0.050	0.013	mg/l	
88-06-2	2,4,6-Trichlorophenol	ND	D042	2.0	0.050	0.0092	mg/l	
83-32-9	Acenaphthene	ND			0.010	0.0019	mg/l	
98-86-2	Acetophenone	ND			0.050	0.0021	mg/l	
62-53-3	Aniline	ND			0.020	0.0032	mg/l	
120-12-7	Anthracene	ND			0.010	0.0021	mg/l	
92-87-5	Benzidine	ND			0.20	0.0090	mg/l	
85-68-7	Butyl benzyl phthalate	ND			0.020	0.0046	mg/l	
111-44-4	bis(2-Chloroethyl)ether	ND			0.020	0.0025	mg/l	
122-66-7	1,2-Diphenylhydrazine	ND			0.020	0.0019	mg/l	
121-14-2	2,4-Dinitrotoluene	ND	D030	0.13	0.020	0.0055	mg/l	
606-20-2	2,6-Dinitrotoluene	ND			0.020	0.0048	mg/l	
91-94-1	3,3'-Dichlorobenzidine	ND			0.050	0.0051	mg/l	
123-91-1	1,4-Dioxane	ND			0.050	0.0066	mg/l	
60-51-5	Dimethoate	ND			0.050	0.0024	mg/l	
122-39-4	Diphenylamine	ND			0.050	0.0058	mg/l	
298-04-4	Disulfoton	ND			0.050	0.0047	mg/l	
99-65-0	m-Dinitrobenzene	ND			0.050	0.015	mg/l	
84-66-2	Diethyl phthalate	ND			0.020	0.0026	mg/l	
131-11-3	Dimethyl phthalate	ND			0.020	0.0022	mg/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND			0.020	0.017	mg/l	
206-44-0	Fluoranthene	ND			0.010	0.0017	mg/l	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
MCL = Maximum Contamination Level (40 CFR 261 7/1/11) B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

4.13
4

Report of Analysis

Client Sample ID: 11215131-120821-IDW-SS-SW	
Lab Sample ID: JD35488-5	Date Sampled: 12/08/21
Matrix: SO - Soil	Date Received: 12/09/21
Method: SW846 8270E SW846 3510C	Percent Solids: 78.0
Project: SJRWP - PCFSE, Harris County, TX	

ABN TCLP Leachate

TCLP Leachate method SW846 1311

CAS No.	Compound	Result	HW#	MCL	RL	MDL	Units	Q
86-73-7	Fluorene	ND			0.010	0.0017	mg/l	
118-74-1	Hexachlorobenzene	ND	D032	0.13	0.020	0.0033	mg/l	
77-47-4	Hexachlorocyclopentadiene	ND			0.20	0.028	mg/l	
67-72-1	Hexachloroethane	ND	D034	3.0	0.050	0.0039	mg/l	
70-30-4	Hexachlorophene	ND			0.50		mg/l	
78-59-1	Isophorone	ND			0.020	0.0028	mg/l	
298-00-0	Methyl parathion	ND			0.050	0.0040	mg/l	
98-95-3	Nitrobenzene	ND	D036	2.0	0.020	0.0064	mg/l	
62-75-9	n-Nitrosodimethylamine ^a	ND			0.020	0.0082	mg/l	
621-64-7	N-Nitroso-di-n-propylamine	ND			0.020	0.0048	mg/l	
924-16-3	N-Nitrosodi-n-butylamine	ND			0.050	0.0060	mg/l	
10595-95-6	N-Nitrosomethylethylamine	ND			0.050	0.014	mg/l	
930-55-2	N-Nitrosopyrrolidine ^b	ND			0.050	0.0073	mg/l	
56-38-2	Parathion	ND			0.050	0.0051	mg/l	
608-93-5	Pentachlorobenzene	ND			0.050	0.0024	mg/l	
82-68-8	Pentachloronitrobenzene	ND			0.050	0.023	mg/l	
23950-58-5	Pronamide	ND			0.050	0.0025	mg/l	
129-00-0	Pyrene	ND			0.010	0.0022	mg/l	
110-86-1	Pyridine	ND	D038	5.0	0.020	0.0039	mg/l	
106-50-3	p-Phenylenediamine	ND			0.050	0.0020	mg/l	
120-82-1	1,2,4-Trichlorobenzene	ND			0.020	0.0025	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	26%		10-73%
4165-62-2	Phenol-d5	18%		10-64%
118-79-6	2,4,6-Tribromophenol	75%		31-130%
4165-60-0	Nitrobenzene-d5	68%		28-126%
321-60-8	2-Fluorobiphenyl	78%		26-114%
1718-51-0	Terphenyl-d14	48%		16-122%

(a) Associated CCV outside of control limits low. Low-level verification was analyzed to demonstrate system suitability to detect affected analytes. Sample was ND.

(b) Associated CCV outside of control limits high, sample was ND.

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
MCL = Maximum Contamination Level (40 CFR 261 7/1/11) B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

4.13
4

Report of Analysis

Client Sample ID: 11215131-120821-IDW-SS-SW	
Lab Sample ID: JD35488-5	Date Sampled: 12/08/21
Matrix: SO - Soil	Date Received: 12/09/21
Method: SW846 8151A SW846 3510C	Percent Solids: 78.0
Project: SJRWP - PCFSE, Harris County, TX	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3G134648.D	1	12/20/21 02:43	CP	12/15/21 22:20	OP37163	G3G4913
Run #2							

Run #	Initial Volume	Final Volume
Run #1	30.0 ml	2.0 ml
Run #2		

Herbicide TCLP Leachate

TCLP Leachate method SW846 1311

CAS No.	Compound	Result	HW#	MCL	RL	MDL	Units	Q
94-75-7	2,4-D	ND	D016	10	0.0033	0.00098	mg/l	
93-72-1	2,4,5-TP (Silvex)	ND	D017	1.0	0.0010	0.00020	mg/l	
88-85-7	Dinoseb ^a	ND			0.0033	0.0013	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
19719-28-9	2,4-DCAA	53%		13-169%
19719-28-9	2,4-DCAA	42%		13-169%

(a) Associated CCV outside of control limits high, sample was ND.

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
MCL = Maximum Contamination Level (40 CFR 261 7/1/11) B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

4.13
4

Report of Analysis

Client Sample ID: 11215131-120821-IDW-SS-SW	
Lab Sample ID: JD35488-5	Date Sampled: 12/08/21
Matrix: SO - Soil	Date Received: 12/09/21
Method: SW846 8081B SW846 3510C	Percent Solids: 78.0
Project: SJRWP - PCFSE, Harris County, TX	

Run #1	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	6G81256.D	1	12/17/21 07:06	CP	12/15/21 21:23	OP37162	G6G2873
Run #2							

Run #1	Initial Volume	Final Volume
Run #1	30.0 ml	2.0 ml
Run #2		

Pesticide Special List

TCLP Leachate method SW846 1311

CAS No.	Compound	Result	HW#	MCL	RL	MDL	Units	Q
58-89-9	gamma-BHC (Lindane)	ND	D013	0.40	0.000067	0.000040	mg/l	
12789-03-6	Chlordane	ND	D020	0.030	0.0033	0.0014	mg/l	
60-57-1	Dieldrin	ND			0.000067	0.000051	mg/l	
72-54-8	4,4'-DDD	ND			0.000067	0.000038	mg/l	
72-55-9	4,4'-DDE	ND			0.000067	0.000034	mg/l	
50-29-3	4,4'-DDT	ND			0.000067	0.000046	mg/l	
72-20-8	Endrin	ND	D012	0.020	0.000067	0.000040	mg/l	
959-98-8	Endosulfan-I	ND			0.000067	0.000035	mg/l	
33213-65-9	Endosulfan-II	ND			0.000067	0.000033	mg/l	
76-44-8	Heptachlor	ND	D031	0.0080	0.000067	0.000030	mg/l	
1024-57-3	Heptachlor epoxide	ND	D031	0.0080	0.000067	0.000040	mg/l	
72-43-5	Methoxychlor	ND	D014	10	0.00013	0.000045	mg/l	
2385-85-5	Mirex	ND			0.00033	0.000031	mg/l	
8001-35-2	Toxaphene	ND	D015	0.50	0.0017	0.0011	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	73%		30-137%
877-09-8	Tetrachloro-m-xylene	66%		30-137%
2051-24-3	Decachlorobiphenyl	77%		10-137%
2051-24-3	Decachlorobiphenyl	76%		10-137%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
MCL = Maximum Contamination Level (40 CFR 261 7/1/11) B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

4.13
4

Report of Analysis

Client Sample ID: 11215131-120821-IDW-SS-SW	Date Sampled: 12/08/21
Lab Sample ID: JD35488-5	Date Received: 12/09/21
Matrix: SO - Soil	Percent Solids: 78.0
Project: SJRWP - PCFSE, Harris County, TX	

Metals Analysis, TCLP Leachate SW846 1311

Analyte	Result	HW#	MCL	RL	MDL	Units	DF	Prep	Analyzed By	Method
Antimony	0.0047 U			0.10	0.0047	mg/l	1	12/15/21	12/15/21	ND SW846 6010D ²
Arsenic	0.0028 U	D004	5.0	0.10	0.0028	mg/l	1	12/15/21	12/15/21	ND SW846 6010D ²
Barium	1.1	D005	100	0.20	0.013	mg/l	1	12/15/21	12/15/21	ND SW846 6010D ²
Beryllium	0.00050 U			0.0020	0.00050	mg/l	1	12/15/21	12/15/21	ND SW846 6010D ²
Cadmium	0.0010 B	D006	1.0	0.0040	0.0010	mg/l	1	12/15/21	12/15/21	ND SW846 6010D ²
Chromium	0.0020 U	D007	5.0	0.020	0.0020	mg/l	1	12/15/21	12/15/21	ND SW846 6010D ²
Lead	0.0018 U	D008	5.0	0.10	0.0018	mg/l	1	12/15/21	12/15/21	ND SW846 6010D ²
Mercury	0.000095 U	D009	0.20	0.00020	0.000095	mg/l	1	12/15/21	12/15/21	SB SW846 7470A ¹
Nickel	0.018 B			0.020	0.0017	mg/l	1	12/15/21	12/15/21	ND SW846 6010D ²
Selenium	0.0065 B	D010	1.0	0.10	0.0049	mg/l	1	12/15/21	12/15/21	ND SW846 6010D ²
Silver	0.0019 U	D011	5.0	0.010	0.0019	mg/l	1	12/15/21	12/15/21	ND SW846 6010D ²
Vanadium	0.0055 B			0.050	0.0018	mg/l	1	12/15/21	12/15/21	ND SW846 6010D ²

- (1) Instrument QC Batch: MA51602
- (2) Instrument QC Batch: MA51611
- (3) Prep QC Batch: MP30375
- (4) Prep QC Batch: MP30384

RL = Reporting Limit MDL = Method Detection Limit U = Indicates a result < MDL
MCL = Maximum Contamination Level (40 CFR 261 7/1/11) B = Indicates a result > = MDL but < RL

4.13
4

Report of Analysis

Client Sample ID: 11215131-120821-IDW-SS-SW	Date Sampled: 12/08/21
Lab Sample ID: JD35488-5	Date Received: 12/09/21
Matrix: SO - Soil	Percent Solids: 78.0
Project: SJRWP - PCFSE, Harris County, TX	

4.13
4

General Chemistry

Analyte	Result	RL	MDL	Units	DF	Analyzed	By	Method
Cyanide Reactivity	8.9 U	12	8.9	mg/kg	1	12/21/21 14:12 MM	SW846	CHAP7/9012 B
Ignitability (Flashpoint)	> 200			Deg. F	1	12/16/21 16:03 DB	SW846	1010B/ASTM D93
Solids, Percent	78			%	1	12/13/21 16:38 BG	SM2540 G	18TH ED MOD
Sulfide Reactivity	70 U	120	70	mg/kg	1	12/15/21 10:36 JOO	SW846	CHAP7/9034

RL = Reporting Limit
 MDL = Method Detection Limit

U = Indicates a result < MDL
 B = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID: 11215131-120821-IDW-SS-SW	Date Sampled: 12/08/21
Lab Sample ID: JD35488-5A	Date Received: 12/09/21
Matrix: SO - Soil	Percent Solids: 78.0
Method: TCEQ 1005 TX1005	
Project: SJRWP - PCFSE, Harris County, TX	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	LB194547.D	1	12/18/21 03:32	ATX	12/17/21 12:30	T:OP56336	T:GLB3174
Run #2							

Run #	Initial Weight	Final Volume
Run #1	8.45 g	10.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C6-C12)	ND	38	9.7	mg/kg	
	TPH (> C12-C28)	ND	38	7.0	mg/kg	
	TPH (> C28-C35)	ND	38	7.0	mg/kg	
	TPH (C6-C35)	ND	38	7.0	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	81%		70-130%
98-08-8	aaa-Trifluorotoluene	93%		70-130%

(a) Sample collected in bulk. All results for nC6 to nC12 boiling point range are considered estimated values.
 Analysis performed at SGS Houston, TX.

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

4.14
4

Report of Analysis

Client Sample ID: 11215131-120821-IDW-SS-SW	Date Sampled: 12/08/21
Lab Sample ID: JD35488-5U	Date Received: 12/09/21
Matrix: SO - Soil	Percent Solids: 78.0
Method: SW846 8316 IN HOUSE	
Project: SJRWP - PCFSE, Harris County, TX	

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	AA082377.D	1	12/17/21 17:08	AFL	12/17/21 15:05	F:OP88895	F:GAA3396
Run #2							

	Initial Volume	Final Volume
Run #1	1.0 ml	1.0 ml
Run #2		

TCLP Leachate method SW846 1311

CAS No.	Compound	Result	HW#	MCL	RL	MDL	Units	Q
79-06-1	Acrylamide	ND			0.050	0.013	mg/l	

(a) Analysis performed at SGS Orlando, FL.

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
 MCL = Maximum Contamination Level (40 CFR 261 7/1/11) B = Indicates analyte found in associated method blank
 E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

4.15
4

Report of Analysis

Client Sample ID: 11215131-121421-IDW-BN-NC	
Lab Sample ID: JD35488-6	Date Sampled: 12/14/21
Matrix: SO - Soil	Date Received: 12/15/21
Method: SW846 8260D SW846 1311	Percent Solids: 76.8
Project: SJRWP - PCFSE, Harris County, TX	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3D172306.D	5	12/28/21 14:14	NH	12/20/21 17:00	GP37684	V3D7311
Run #2							

Run #	Purge Volume
Run #1	5.0 ml
Run #2	

VOA Special List

TCLP Leachate method SW846 1311

CAS No.	Compound	Result	HW#	MCL	RL	MDL	Units	Q
67-64-1	Acetone	ND			0.050	0.030	mg/l	
75-05-8	Acetonitrile	ND			0.50	0.037	mg/l	
107-13-1	Acrylonitrile ^a	ND			0.25	0.0052	mg/l	
71-43-2	Benzene	0.0052	D018	0.50	0.0025	0.0021	mg/l	
75-27-4	Bromodichloromethane	ND			0.0050	0.0029	mg/l	
75-25-2	Bromoform	ND			0.020	0.0032	mg/l	
74-83-9	Bromomethane	ND			0.010	0.0082	mg/l	
78-93-3	2-Butanone (MEK)	ND	D035	200	0.10	0.034	mg/l	
75-15-0	Carbon disulfide	ND			0.010	0.0048	mg/l	
56-23-5	Carbon tetrachloride	ND	D019	0.50	0.0050	0.0028	mg/l	
108-90-7	Chlorobenzene	ND	D021	100	0.0050	0.0028	mg/l	
67-66-3	Chloroform ^b	0.0080	D022	6.0	0.0050	0.0025	mg/l	B
106-93-4	1,2-Dibromoethane	ND			0.010	0.0024	mg/l	
106-46-7	1,4-Dichlorobenzene	ND	D027	7.5	0.0050	0.0025	mg/l	
75-71-8	Dichlorodifluoromethane	ND			0.010	0.0068	mg/l	
107-06-2	1,2-Dichloroethane	ND	D028	0.50	0.0050	0.0030	mg/l	
75-35-4	1,1-Dichloroethene	ND	D029	0.70	0.0050	0.0030	mg/l	
542-75-6	1,3-Dichloropropene (total)	ND			0.0050	0.0022	mg/l	
10061-02-6	trans-1,3-Dichloropropene	ND			0.0050	0.0022	mg/l	
100-41-4	Ethylbenzene	0.0044			0.0050	0.0030	mg/l	J
87-68-3	Hexachlorobutadiene	ND	D033	0.50	0.025	0.0028	mg/l	
78-83-1	Isobutyl alcohol	ND			0.25	0.061	mg/l	
126-98-7	Methacrylonitrile	ND			0.050	0.0050	mg/l	
108-10-1	4-Methyl-2-pentanone(MIBK) ^c	ND			0.025	0.0093	mg/l	
75-09-2	Methylene chloride	ND			0.010	0.00050	mg/l	
100-42-5	Styrene	ND			0.025	0.0035	mg/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND			0.025	0.0028	mg/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND			0.010	0.0033	mg/l	
127-18-4	Tetrachloroethene	ND	D039	0.70	0.0050	0.0045	mg/l	
108-88-3	Toluene	0.0279			0.0050	0.0027	mg/l	
71-55-6	1,1,1-Trichloroethane	ND			0.0050	0.0027	mg/l	
79-00-5	1,1,2-Trichloroethane	ND			0.0050	0.0027	mg/l	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
MCL = Maximum Contamination Level (40 CFR 261 7/1/11) B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

4.16
4

Report of Analysis

Client Sample ID: 11215131-121421-IDW-BN-NC		Date Sampled: 12/14/21
Lab Sample ID: JD35488-6		Date Received: 12/15/21
Matrix: SO - Soil		Percent Solids: 76.8
Method: SW846 8260D SW846 1311		
Project: SJRWP - PCFSE, Harris County, TX		

VOA Special List

TCLP Leachate method SW846 1311

CAS No.	Compound	Result	HW#	MCL	RL	MDL	Units	Q
79-01-6	Trichloroethene	ND	D040	0.50	0.0050	0.0026	mg/l	
75-69-4	Trichlorofluoromethane	ND			0.025	0.0042	mg/l	
96-18-4	1,2,3-Trichloropropane	ND			0.025	0.0035	mg/l	
75-01-4	Vinyl chloride	ND	D043	0.20	0.0050	0.0039	mg/l	
	m,p-Xylene	0.0168			0.0050	0.0039	mg/l	
95-47-6	o-Xylene	0.0070			0.0050	0.0030	mg/l	
1330-20-7	Xylene (total)	0.0238			0.0050	0.0039	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	82%		76-120%
17060-07-0	1,2-Dichloroethane-D4	100%		64-135%
2037-26-5	Toluene-D8	104%		76-117%
460-00-4	4-Bromofluorobenzene	98%		72-122%

- (a) Associated CCV outside of control limits high, sample was ND. This compound in blank spike is outside in house QC limits bias high.
- (b) Indicates analyte found in associated leachate blank.
- (c) Associated CCV outside of control limits high, sample was ND.

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
 MCL = Maximum Contamination Level (40 CFR 261 7/1/11) B = Indicates analyte found in associated method blank
 E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

4.16
4

Report of Analysis

Client Sample ID:	11215131-121421-IDW-BN-NC	Date Sampled:	12/14/21
Lab Sample ID:	JD35488-6	Date Received:	12/15/21
Matrix:	SO - Soil	Percent Solids:	76.8
Method:	SW846 8270E SW846 3510C		
Project:	SJRWP - PCFSE, Harris County, TX		

Run #1	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	F204612.D	1	12/28/21 16:12	KLS	12/23/21 14:05	OP37314	EF8970
Run #2							

Run #1	Initial Volume	Final Volume
Run #1	100 ml	1.0 ml
Run #2		

TCLP Leachate method SW846 1311

CAS No.	Compound	Result	HW#	MCL	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND			0.050	0.0082	mg/l	
59-50-7	4-Chloro-3-methyl phenol	ND			0.050	0.0089	mg/l	
120-83-2	2,4-Dichlorophenol	ND			0.050	0.013	mg/l	
105-67-9	2,4-Dimethylphenol	ND			0.050	0.024	mg/l	
51-28-5	2,4-Dinitrophenol ^a	ND			0.20	0.016	mg/l	
95-48-7	2-Methylphenol	ND	D023	200	0.020	0.0089	mg/l	
	Cresol, Total	ND	D026	200	0.050	0.0088	mg/l	
	3&4-Methylphenol	ND	D024	200	0.020	0.0088	mg/l	
87-86-5	Pentachlorophenol	ND	D037	100	0.10	0.014	mg/l	
108-95-2	Phenol	ND			0.020	0.0039	mg/l	
58-90-2	2,3,4,6-Tetrachlorophenol	ND			0.050	0.015	mg/l	
95-95-4	2,4,5-Trichlorophenol	ND	D041	400	0.050	0.013	mg/l	
88-06-2	2,4,6-Trichlorophenol	ND	D042	2.0	0.050	0.0092	mg/l	
83-32-9	Acenaphthene	ND			0.010	0.0019	mg/l	
98-86-2	Acetophenone	ND			0.050	0.0021	mg/l	
62-53-3	Aniline	ND			0.020	0.0032	mg/l	
120-12-7	Anthracene	ND			0.010	0.0021	mg/l	
92-87-5	Benzidine	ND			0.20	0.0090	mg/l	
85-68-7	Butyl benzyl phthalate	ND			0.020	0.0046	mg/l	
111-44-4	bis(2-Chloroethyl)ether	ND			0.020	0.0025	mg/l	
122-66-7	1,2-Diphenylhydrazine	ND			0.020	0.0019	mg/l	
121-14-2	2,4-Dinitrotoluene	ND	D030	0.13	0.020	0.0055	mg/l	
606-20-2	2,6-Dinitrotoluene	ND			0.020	0.0048	mg/l	
91-94-1	3,3' -Dichlorobenzidine	ND			0.050	0.0051	mg/l	
123-91-1	1,4-Dioxane	ND			0.050	0.0066	mg/l	
60-51-5	Dimethoate	ND			0.050	0.0024	mg/l	
122-39-4	Diphenylamine	ND			0.050	0.0058	mg/l	
298-04-4	Disulfoton	ND			0.050	0.0047	mg/l	
99-65-0	m-Dinitrobenzene	ND			0.050	0.015	mg/l	
84-66-2	Diethyl phthalate	ND			0.020	0.0026	mg/l	
131-11-3	Dimethyl phthalate	ND			0.020	0.0022	mg/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND			0.020	0.017	mg/l	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
MCL = Maximum Contamination Level (40 CFR 261 7/1/11) B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

4.16
4

Report of Analysis

Client Sample ID: 11215131-121421-IDW-BN-NC		Date Sampled: 12/14/21
Lab Sample ID: JD35488-6		Date Received: 12/15/21
Matrix: SO - Soil		Percent Solids: 76.8
Method: SW846 8270E SW846 3510C		
Project: SJRWP - PCFSE, Harris County, TX		

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TCLP Leachate method SW846 1311

CAS No.	Compound	Result	HW#	MCL	RL	MDL	Units	Q
206-44-0	Fluoranthene	ND			0.010	0.0017	mg/l	
86-73-7	Fluorene	ND			0.010	0.0017	mg/l	
118-74-1	Hexachlorobenzene	ND	D032	0.13	0.020	0.0033	mg/l	
77-47-4	Hexachlorocyclopentadiene	ND			0.20	0.028	mg/l	
67-72-1	Hexachloroethane	ND	D034	3.0	0.050	0.0039	mg/l	
70-30-4	Hexachlorophene ^b	ND			0.50		mg/l	
78-59-1	Isophorone	ND			0.020	0.0028	mg/l	
298-00-0	Methyl parathion	ND			0.050	0.0040	mg/l	
98-95-3	Nitrobenzene	ND	D036	2.0	0.020	0.0064	mg/l	
62-75-9	n-Nitrosodimethylamine ^c	ND			0.020	0.0082	mg/l	
621-64-7	N-Nitroso-di-n-propylamine	ND			0.020	0.0048	mg/l	
924-16-3	N-Nitrosodi-n-butylamine	ND			0.050	0.0060	mg/l	
10595-95-6	N-Nitrosomethylethylamine	ND			0.050	0.014	mg/l	
930-55-2	N-Nitrosopyrrolidine ^a	ND			0.050	0.0073	mg/l	
56-38-2	Parathion	ND			0.050	0.0051	mg/l	
608-93-5	Pentachlorobenzene	ND			0.050	0.0024	mg/l	
82-68-8	Pentachloronitrobenzene	ND			0.050	0.023	mg/l	
23950-58-5	Pronamide	ND			0.050	0.0025	mg/l	
129-00-0	Pyrene	0.0023			0.010	0.0022	mg/l	J
110-86-1	Pyridine	ND	D038	5.0	0.020	0.0039	mg/l	
106-50-3	p-Phenylenediamine ^b	ND			0.050	0.0020	mg/l	
120-82-1	1,2,4-Trichlorobenzene	ND			0.020	0.0025	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	30%		10-73%
4165-62-2	Phenol-d5	20%		10-64%
118-79-6	2,4,6-Tribromophenol	75%		31-130%
4165-60-0	Nitrobenzene-d5	69%		28-126%
321-60-8	2-Fluorobiphenyl	76%		26-114%
1718-51-0	Terphenyl-d14	58%		16-122%

- (a) Associated CCV outside of control limits high, sample was ND.
- (b) Associated CCV outside of control limits low.
- (c) Associated CCV outside of control limits low. Low-level verification was analyzed to demonstrate system suitability to detect affected analytes. Sample was ND.

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
MCL = Maximum Contamination Level (40 CFR 261 7/1/11) B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: 11215131-121421-IDW-BN-NC	Date Sampled: 12/14/21
Lab Sample ID: JD35488-6	Date Received: 12/15/21
Matrix: SO - Soil	Percent Solids: 76.8
Method: SW846 8151A SW846 3510C	
Project: SJRWP - PCFSE, Harris County, TX	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3G134715.D	1	12/28/21 02:30	CP	12/23/21 09:30	OP37316	G3G4916
Run #2							

Run #	Initial Volume	Final Volume
Run #1	30.0 ml	2.0 ml
Run #2		

Herbicide TCLP Leachate

TCLP Leachate method SW846 1311

CAS No.	Compound	Result	HW#	MCL	RL	MDL	Units	Q
94-75-7	2,4-D	ND	D016	10	0.0033	0.00098	mg/l	
93-72-1	2,4,5-TP (Silvex)	ND	D017	1.0	0.0010	0.00020	mg/l	
88-85-7	Dinoseb ^a	ND			0.0033	0.0013	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
19719-28-9	2,4-DCAA	100%		13-169%
19719-28-9	2,4-DCAA	67%		13-169%

(a) Associated CCV outside of control limits high, sample was ND.

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
MCL = Maximum Contamination Level (40 CFR 261 7/1/11) B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

4.16
4

Report of Analysis

Client Sample ID: 11215131-121421-IDW-BN-NC	Date Sampled: 12/14/21
Lab Sample ID: JD35488-6	Date Received: 12/15/21
Matrix: SO - Soil	Percent Solids: 76.8
Method: SW846 8081B SW846 3510C	
Project: SJRWP - PCFSE, Harris County, TX	

Run #1	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	6G81523.D	1	12/29/21 06:35	CP	12/23/21 13:50	OP37318	G6G2887
Run #2							

Run #1	Initial Volume	Final Volume
Run #1	30.0 ml	2.0 ml
Run #2		

Pesticide Special List

TCLP Leachate method SW846 1311

CAS No.	Compound	Result	HW#	MCL	RL	MDL	Units	Q
58-89-9	gamma-BHC (Lindane)	ND	D013	0.40	0.000067	0.000040	mg/l	
12789-03-6	Chlordane	ND	D020	0.030	0.0033	0.0014	mg/l	
60-57-1	Dieldrin	ND			0.000067	0.000051	mg/l	
72-54-8	4,4'-DDD	ND			0.000067	0.000038	mg/l	
72-55-9	4,4'-DDE	ND			0.000067	0.000034	mg/l	
50-29-3	4,4'-DDT	ND			0.000067	0.000046	mg/l	
72-20-8	Endrin	ND	D012	0.020	0.000067	0.000040	mg/l	
959-98-8	Endosulfan-I	ND			0.000067	0.000035	mg/l	
33213-65-9	Endosulfan-II	ND			0.000067	0.000033	mg/l	
76-44-8	Heptachlor	ND	D031	0.0080	0.000067	0.000030	mg/l	
1024-57-3	Heptachlor epoxide	ND	D031	0.0080	0.000067	0.000040	mg/l	
72-43-5	Methoxychlor	ND	D014	10	0.00013	0.000045	mg/l	
2385-85-5	Mirex	ND			0.00033	0.000031	mg/l	
8001-35-2	Toxaphene	ND	D015	0.50	0.0017	0.0011	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	91%		30-137%
877-09-8	Tetrachloro-m-xylene	88%		30-137%
2051-24-3	Decachlorobiphenyl	82%		10-137%
2051-24-3	Decachlorobiphenyl	88%		10-137%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
MCL = Maximum Contamination Level (40 CFR 261 7/1/11) B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

4.16
4

Report of Analysis

Client Sample ID: 11215131-121421-IDW-BN-NC	Date Sampled: 12/14/21
Lab Sample ID: JD35488-6	Date Received: 12/15/21
Matrix: SO - Soil	Percent Solids: 76.8
Project: SJRWP - PCFSE, Harris County, TX	

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Metals Analysis, TCLP Leachate SW846 1311

Analyte	Result	HW#	MCL	RL	MDL	Units	DF	Prep	Analyzed By	Method
Antimony	0.0047 U			0.10	0.0047	mg/l	1	12/22/21	01/05/22	FW SW846 6010D ²
Arsenic	0.0028 U	D004	5.0	0.10	0.0028	mg/l	1	12/22/21	01/05/22	FW SW846 6010D ²
Barium	0.40	D005	100	0.20	0.013	mg/l	1	12/22/21	01/05/22	FW SW846 6010D ²
Beryllium	0.00050 U			0.0020	0.00050	mg/l	1	12/22/21	01/05/22	FW SW846 6010D ²
Cadmium	0.0011 B	D006	1.0	0.0040	0.0010	mg/l	1	12/22/21	01/05/22	FW SW846 6010D ²
Chromium	0.0020 U	D007	5.0	0.020	0.0020	mg/l	1	12/22/21	01/05/22	FW SW846 6010D ²
Lead	0.0053 B	D008	5.0	0.10	0.0018	mg/l	1	12/22/21	01/05/22	FW SW846 6010D ²
Mercury	0.000095 U	D009	0.20	0.00020	0.000095	mg/l	1	12/23/21	12/23/21	SB SW846 7470A ¹
Nickel	0.020			0.010	0.0017	mg/l	1	12/22/21	01/05/22	FW SW846 6010D ²
Selenium	0.0049 U	D010	1.0	0.10	0.0049	mg/l	1	12/22/21	01/05/22	FW SW846 6010D ²
Silver	0.0019 U	D011	5.0	0.010	0.0019	mg/l	1	12/22/21	01/05/22	FW SW846 6010D ²
Vanadium	0.0018 U			0.050	0.0018	mg/l	1	12/22/21	01/05/22	FW SW846 6010D ²

- (1) Instrument QC Batch: MA51641
- (2) Instrument QC Batch: MA51686
- (3) Prep QC Batch: MP30491
- (4) Prep QC Batch: MP30528

RL = Reporting Limit MDL = Method Detection Limit U = Indicates a result < MDL
MCL = Maximum Contamination Level (40 CFR 261 7/1/11) B = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID: 11215131-121421-IDW-BN-NC Lab Sample ID: JD35488-6 Matrix: SO - Soil Project: SJRWP - PCFSE, Harris County, TX	Date Sampled: 12/14/21 Date Received: 12/15/21 Percent Solids: 76.8
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General Chemistry

Analyte	Result	RL	MDL	Units	DF	Analyzed	By	Method
Cyanide Reactivity ^a	9.6 U	13	9.6	mg/kg	1	01/06/22 15:36 MM	SW846	CHAP7/9012 B
Ignitability (Flashpoint)	> 200			Deg. F	1	12/21/21 16:50 DB	SW846	1010B/ASTM D93
Solids, Percent	76.8			%	1	12/20/21 16:50 BG	SM2540 G	18TH ED MOD
Sulfide Reactivity ^a	76 U	130	76	mg/kg	1	01/06/22 12:46 JOO	SW846	CHAP7/9034

(a) Analyzed outside the 14 day holding time applied by laboratory SOP. No regulatory holding time published for this method.

RL = Reporting Limit
 MDL = Method Detection Limit

U = Indicates a result < MDL
 B = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID: 11215131-121421-IDW-BN-NC	Date Sampled: 12/14/21
Lab Sample ID: JD35488-6A	Date Received: 12/15/21
Matrix: SO - Soil	Percent Solids: 76.8
Method: SW846 8015C SW846 1311	
Project: SJRWP - PCFSE, Harris County, TX	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	RR0174125.D	1	01/04/22 18:09	ATX	12/23/21 06:47	T:OP56382	T:GRR2606
Run #2							

TCLP Leachate method SW846 1311

CAS No.	Compound	Result	HW#	MCL	RL	MDL	Units	Q
110-80-5	2-Ethoxyethanol	ND			10	1.0	mg/l	
109-86-4	2-Methoxyethanol	ND			10	1.0	mg/l	
107-21-1	Ethylene Glycol	24.1			10	1.0	mg/l	B

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
78-83-1	Isobutanol	84%		41-154%

(a) Analysis performed at SGS Houston, TX.

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
 MCL = Maximum Contamination Level (40 CFR 261 7/1/11) B = Indicates analyte found in associated method blank
 E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

4.17
4

Report of Analysis

Client Sample ID: 11215131-121421-IDW-BN-NC	Date Sampled: 12/14/21
Lab Sample ID: JD35488-6A	Date Received: 12/15/21
Matrix: SO - Soil	Percent Solids: 76.8
Method: TCEQ 1005 TX1005	
Project: SJRWP - PCFSE, Harris County, TX	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	LF194860.D	1	12/28/21 18:26	ATX	12/23/21 13:37	T:OP56389	T:GLF3181
Run #2							

Run #	Initial Weight	Final Volume
Run #1	6.72 g	10.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C6-C12)	ND	48	12	mg/kg	
	TPH (> C12-C28)	13.1	48	8.9	mg/kg	J
	TPH (> C28-C35)	27.2	48	8.9	mg/kg	J
	TPH (C6-C35)	40.3	48	8.9	mg/kg	J

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	112%		70-130%
98-08-8	aaa-Trifluorotoluene	92%		70-130%

(a) Analysis performed at SGS Houston, TX.

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

4.17
 4

Report of Analysis

Client Sample ID: 11215131-121421-IDW-BN-NC	Date Sampled: 12/14/21
Lab Sample ID: JD35488-6V	Date Received: 12/15/21
Matrix: SO - Soil	Percent Solids: 76.8
Method: SW846 8316 IN HOUSE	
Project: SJRWP - PCFSE, Harris County, TX	

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	AA082413.D	1	01/12/22 11:16	AFL	01/12/22 10:10	F:OP89208	F:GAA3400
Run #2							

	Initial Volume	Final Volume
Run #1	1.0 ml	1.0 ml
Run #2		

TCLP Leachate method SW846 1311

CAS No.	Compound	Result	HW#	MCL	RL	MDL	Units	Q
79-06-1	Acrylamide	ND			0.050	0.013	mg/l	

(a) Sample analyzed beyond hold time. Analysis performed at SGS Orlando, FL.

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
 MCL = Maximum Contamination Level (40 CFR 261 7/1/11) B = Indicates analyte found in associated method blank
 E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

4.18
4

Report of Analysis

Client Sample ID:	11215131-122021-IDW-SS-PURGE	Date Sampled:	12/20/21
Lab Sample ID:	JD35488-7	Date Received:	12/21/21
Matrix:	AQ - Water	Percent Solids:	n/a
Method:	SW846 8260D SW846 1311		
Project:	SJRWP - PCFSE, Harris County, TX		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3D172305.D	5	12/28/21 13:47	NH	12/23/21 14:00	GP37747	V3D7311
Run #2							

Run #	Purge Volume
Run #1	5.0 ml
Run #2	

VOA Special List

TCLP Leachate method SW846 1311

CAS No.	Compound	Result	HW#	MCL	RL	MDL	Units	Q
67-64-1	Acetone	ND			0.050	0.030	mg/l	
75-05-8	Acetonitrile	ND			0.50	0.037	mg/l	
107-13-1	Acrylonitrile ^a	ND			0.25	0.0052	mg/l	
71-43-2	Benzene	ND	D018	0.50	0.0025	0.0021	mg/l	
75-27-4	Bromodichloromethane	ND			0.0050	0.0029	mg/l	
75-25-2	Bromoform	ND			0.020	0.0032	mg/l	
74-83-9	Bromomethane	ND			0.010	0.0082	mg/l	
78-93-3	2-Butanone (MEK)	ND	D035	200	0.10	0.034	mg/l	
75-15-0	Carbon disulfide	ND			0.010	0.0048	mg/l	
56-23-5	Carbon tetrachloride	ND	D019	0.50	0.0050	0.0028	mg/l	
108-90-7	Chlorobenzene	ND	D021	100	0.0050	0.0028	mg/l	
67-66-3	Chloroform	ND	D022	6.0	0.0050	0.0025	mg/l	
106-93-4	1,2-Dibromoethane	ND			0.010	0.0024	mg/l	
106-46-7	1,4-Dichlorobenzene	ND	D027	7.5	0.0050	0.0025	mg/l	
75-71-8	Dichlorodifluoromethane	ND			0.010	0.0068	mg/l	
107-06-2	1,2-Dichloroethane	ND	D028	0.50	0.0050	0.0030	mg/l	
75-35-4	1,1-Dichloroethene	ND	D029	0.70	0.0050	0.0030	mg/l	
542-75-6	1,3-Dichloropropene (total)	ND			0.0050	0.0022	mg/l	
10061-02-6	trans-1,3-Dichloropropene	ND			0.0050	0.0022	mg/l	
100-41-4	Ethylbenzene	ND			0.0050	0.0030	mg/l	
87-68-3	Hexachlorobutadiene	ND	D033	0.50	0.025	0.0028	mg/l	
78-83-1	Isobutyl alcohol	ND			0.25	0.061	mg/l	
126-98-7	Methacrylonitrile	ND			0.050	0.0050	mg/l	
108-10-1	4-Methyl-2-pentanone(MIBK) ^b	ND			0.025	0.0093	mg/l	
75-09-2	Methylene chloride	ND			0.010	0.00050	mg/l	
100-42-5	Styrene	ND			0.025	0.0035	mg/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND			0.025	0.0028	mg/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND			0.010	0.0033	mg/l	
127-18-4	Tetrachloroethene	ND	D039	0.70	0.0050	0.0045	mg/l	
108-88-3	Toluene	ND			0.0050	0.0027	mg/l	
71-55-6	1,1,1-Trichloroethane	ND			0.0050	0.0027	mg/l	
79-00-5	1,1,2-Trichloroethane	ND			0.0050	0.0027	mg/l	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
MCL = Maximum Contamination Level (40 CFR 261 7/1/11) B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

4.19
4

Report of Analysis

Client Sample ID: 11215131-122021-IDW-SS-PURGE	Date Sampled: 12/20/21
Lab Sample ID: JD35488-7	Date Received: 12/21/21
Matrix: AQ - Water	Percent Solids: n/a
Method: SW846 8260D SW846 1311	
Project: SJRWP - PCFSE, Harris County, TX	

VOA Special List

TCLP Leachate method SW846 1311

CAS No.	Compound	Result	HW#	MCL	RL	MDL	Units	Q
79-01-6	Trichloroethene	ND	D040	0.50	0.0050	0.0026	mg/l	
75-69-4	Trichlorofluoromethane	ND			0.025	0.0042	mg/l	
96-18-4	1,2,3-Trichloropropane	ND			0.025	0.0035	mg/l	
75-01-4	Vinyl chloride	ND	D043	0.20	0.0050	0.0039	mg/l	
	m,p-Xylene	ND			0.0050	0.0039	mg/l	
95-47-6	o-Xylene	ND			0.0050	0.0030	mg/l	
1330-20-7	Xylene (total)	ND			0.0050	0.0039	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	85%		76-120%
17060-07-0	1,2-Dichloroethane-D4	100%		64-135%
2037-26-5	Toluene-D8	102%		76-117%
460-00-4	4-Bromofluorobenzene	98%		72-122%

- (a) Associated CCV outside of control limits high, sample was ND. This compound in blank spike is outside in house QC limits bias high.
- (b) Associated CCV outside of control limits high, sample was ND.

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
 MCL = Maximum Contamination Level (40 CFR 261 7/1/11) B = Indicates analyte found in associated method blank
 E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

4.19
4

Report of Analysis

Client Sample ID: 11215131-122021-IDW-SS-PURGE	
Lab Sample ID: JD35488-7	Date Sampled: 12/20/21
Matrix: AQ - Water	Date Received: 12/21/21
Method: SW846 8270E SW846 3510C	Percent Solids: n/a
Project: SJRWP - PCFSE, Harris County, TX	

Run #1	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	F204640.D	1	12/29/21 17:05	KLS	12/27/21 12:20	OP37369	EF8971
Run #2							

Run #1	Initial Volume	Final Volume
Run #1	100 ml	1.0 ml
Run #2		

ABN TCLP Leachate

TCLP Leachate method SW846 1311

CAS No.	Compound	Result	HW#	MCL	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND			0.050	0.0082	mg/l	
59-50-7	4-Chloro-3-methyl phenol	ND			0.050	0.0089	mg/l	
120-83-2	2,4-Dichlorophenol	ND			0.050	0.013	mg/l	
105-67-9	2,4-Dimethylphenol	ND			0.050	0.024	mg/l	
51-28-5	2,4-Dinitrophenol	ND			0.20	0.016	mg/l	
95-48-7	2-Methylphenol	ND	D023	200	0.020	0.0089	mg/l	
	3&4-Methylphenol	ND	D024	200	0.020	0.0088	mg/l	
87-86-5	Pentachlorophenol	ND	D037	100	0.10	0.014	mg/l	
108-95-2	Phenol	ND			0.020	0.0039	mg/l	
58-90-2	2,3,4,6-Tetrachlorophenol	ND			0.050	0.015	mg/l	
95-95-4	2,4,5-Trichlorophenol	ND	D041	400	0.050	0.013	mg/l	
88-06-2	2,4,6-Trichlorophenol	ND	D042	2.0	0.050	0.0092	mg/l	
83-32-9	Acenaphthene	ND			0.010	0.0019	mg/l	
98-86-2	Acetophenone	ND			0.050	0.0021	mg/l	
62-53-3	Aniline	ND			0.020	0.0032	mg/l	
120-12-7	Anthracene	ND			0.010	0.0021	mg/l	
92-87-5	Benzidine	ND			0.20	0.0090	mg/l	
85-68-7	Butyl benzyl phthalate	ND			0.020	0.0046	mg/l	
111-44-4	bis(2-Chloroethyl)ether	ND			0.020	0.0025	mg/l	
122-66-7	1,2-Diphenylhydrazine	ND			0.020	0.0019	mg/l	
121-14-2	2,4-Dinitrotoluene	ND	D030	0.13	0.020	0.0055	mg/l	
606-20-2	2,6-Dinitrotoluene	ND			0.020	0.0048	mg/l	
91-94-1	3,3'-Dichlorobenzidine	ND			0.050	0.0051	mg/l	
123-91-1	1,4-Dioxane	ND			0.050	0.0066	mg/l	
60-51-5	Dimethoate	ND			0.050	0.0024	mg/l	
122-39-4	Diphenylamine	ND			0.050	0.0058	mg/l	
298-04-4	Disulfoton	ND			0.050	0.0047	mg/l	
99-65-0	m-Dinitrobenzene	ND			0.050	0.015	mg/l	
84-66-2	Diethyl phthalate	ND			0.020	0.0026	mg/l	
131-11-3	Dimethyl phthalate	ND			0.020	0.0022	mg/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND			0.020	0.017	mg/l	
206-44-0	Fluoranthene	ND			0.010	0.0017	mg/l	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
MCL = Maximum Contamination Level (40 CFR 261 7/1/11) B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

4.19
4

Report of Analysis

Client Sample ID: 11215131-122021-IDW-SS-PURGE	Date Sampled: 12/20/21
Lab Sample ID: JD35488-7	Date Received: 12/21/21
Matrix: AQ - Water	Percent Solids: n/a
Method: SW846 8270E SW846 3510C	
Project: SJRWP - PCFSE, Harris County, TX	

ABN TCLP Leachate

TCLP Leachate method SW846 1311

CAS No.	Compound	Result	HW#	MCL	RL	MDL	Units	Q
86-73-7	Fluorene	ND			0.010	0.0017	mg/l	
118-74-1	Hexachlorobenzene	ND	D032	0.13	0.020	0.0033	mg/l	
77-47-4	Hexachlorocyclopentadiene	ND			0.20	0.028	mg/l	
67-72-1	Hexachloroethane	ND	D034	3.0	0.050	0.0039	mg/l	
70-30-4	Hexachlorophene ^a	ND			0.50		mg/l	
78-59-1	Isophorone	ND			0.020	0.0028	mg/l	
298-00-0	Methyl parathion	ND			0.050	0.0040	mg/l	
98-95-3	Nitrobenzene	ND	D036	2.0	0.020	0.0064	mg/l	
62-75-9	n-Nitrosodimethylamine	ND			0.020	0.0082	mg/l	
621-64-7	N-Nitroso-di-n-propylamine	ND			0.020	0.0048	mg/l	
924-16-3	N-Nitrosodi-n-butylamine	ND			0.050	0.0060	mg/l	
10595-95-6	N-Nitrosomethylethylamine	ND			0.050	0.014	mg/l	
930-55-2	N-Nitrosopyrrolidine ^b	ND			0.050	0.0073	mg/l	
56-38-2	Parathion	ND			0.050	0.0051	mg/l	
608-93-5	Pentachlorobenzene	ND			0.050	0.0024	mg/l	
82-68-8	Pentachloronitrobenzene	ND			0.050	0.023	mg/l	
23950-58-5	Pronamide	ND			0.050	0.0025	mg/l	
129-00-0	Pyrene	ND			0.010	0.0022	mg/l	
110-86-1	Pyridine	ND	D038	5.0	0.020	0.0039	mg/l	
106-50-3	p-Phenylenediamine ^a	ND			0.050	0.0020	mg/l	
120-82-1	1,2,4-Trichlorobenzene	ND			0.020	0.0025	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	28%		10-73%
4165-62-2	Phenol-d5	19%		10-64%
118-79-6	2,4,6-Tribromophenol	86%		31-130%
4165-60-0	Nitrobenzene-d5	63%		28-126%
321-60-8	2-Fluorobiphenyl	72%		26-114%
1718-51-0	Terphenyl-d14	84%		16-122%

- (a) Associated CCV outside of control limits low. Low-level verification was analyzed to demonstrate system suitability to detect affected analytes. Sample was ND.
- (b) Associated CCV outside of control limits high, sample was ND.

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
MCL = Maximum Contamination Level (40 CFR 261 7/1/11) B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

4.19
4

Report of Analysis

Client Sample ID: 11215131-122021-IDW-SS-PURGE	Date Sampled: 12/20/21
Lab Sample ID: JD35488-7	Date Received: 12/21/21
Matrix: AQ - Water	Percent Solids: n/a
Method: SW846 8151A SW846 3510C	
Project: SJRWP - PCFSE, Harris County, TX	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3G134861.D	1	01/07/22 09:48	RK	12/29/21 20:39	OP37425	G3G4921
Run #2							

Run #	Initial Volume	Final Volume
Run #1	30.0 ml	2.0 ml
Run #2		

Herbicide TCLP Leachate

TCLP Leachate method SW846 1311

CAS No.	Compound	Result	HW#	MCL	RL	MDL	Units	Q
94-75-7	2,4-D	ND	D016	10	0.0033	0.00098	mg/l	
93-72-1	2,4,5-TP (Silvex)	ND	D017	1.0	0.0010	0.00020	mg/l	
88-85-7	Dinoseb	ND			0.0033	0.0013	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
19719-28-9	2,4-DCAA	139%		13-169%
19719-28-9	2,4-DCAA	146%		13-169%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
 MCL = Maximum Contamination Level (40 CFR 261 7/1/11) B = Indicates analyte found in associated method blank
 E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

4.19
4

Report of Analysis

Client Sample ID: 11215131-122021-IDW-SS-PURGE	
Lab Sample ID: JD35488-7	Date Sampled: 12/20/21
Matrix: AQ - Water	Date Received: 12/21/21
Method: SW846 8081B SW846 3510C	Percent Solids: n/a
Project: SJRWP - PCFSE, Harris County, TX	

Run #1	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	6G81815.D	1	01/09/22 21:04	TL	12/23/21 14:00	OP37424	G6G2898
Run #2							

Run #1	Initial Volume	Final Volume
Run #1	30.0 ml	2.0 ml
Run #2		

Pesticide Special List

TCLP Leachate method SW846 1311

CAS No.	Compound	Result	HW#	MCL	RL	MDL	Units	Q
58-89-9	gamma-BHC (Lindane)	ND	D013	0.40	0.000067	0.000040	mg/l	
12789-03-6	Chlordane	ND	D020	0.030	0.0033	0.0014	mg/l	
60-57-1	Dieldrin	ND			0.000067	0.000051	mg/l	
72-54-8	4,4'-DDD	ND			0.000067	0.000038	mg/l	
72-55-9	4,4'-DDE	ND			0.000067	0.000034	mg/l	
50-29-3	4,4'-DDT	ND			0.000067	0.000046	mg/l	
72-20-8	Endrin	ND	D012	0.020	0.000067	0.000040	mg/l	
959-98-8	Endosulfan-I	ND			0.000067	0.000035	mg/l	
33213-65-9	Endosulfan-II	ND			0.000067	0.000033	mg/l	
76-44-8	Heptachlor	ND	D031	0.0080	0.000067	0.000030	mg/l	
1024-57-3	Heptachlor epoxide	ND	D031	0.0080	0.000067	0.000040	mg/l	
72-43-5	Methoxychlor	ND	D014	10	0.00013	0.000045	mg/l	
2385-85-5	Mirex	ND			0.00033	0.000031	mg/l	
8001-35-2	Toxaphene	ND	D015	0.50	0.0017	0.0011	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	81%		30-137%
877-09-8	Tetrachloro-m-xylene	75%		30-137%
2051-24-3	Decachlorobiphenyl	95%		10-137%
2051-24-3	Decachlorobiphenyl	110%		10-137%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
MCL = Maximum Contamination Level (40 CFR 261 7/1/11) B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

4.19
4

Report of Analysis

Client Sample ID: 11215131-122021-IDW-SS-PURGE	Date Sampled: 12/20/21
Lab Sample ID: JD35488-7	Date Received: 12/21/21
Matrix: AQ - Water	Percent Solids: n/a
Project: SJRWP - PCFSE, Harris County, TX	

Metals Analysis, TCLP Leachate SW846 1311

Analyte	Result	HW#	MCL	RL	MDL	Units	DF	Prep	Analyzed By	Method
Antimony	0.0047 U			0.10	0.0047	mg/l	1	12/26/21	01/11/22	FW SW846 6010D ²
Arsenic	0.0028 U	D004	5.0	0.10	0.0028	mg/l	1	12/26/21	01/11/22	FW SW846 6010D ²
Barium	0.21	D005	100	0.20	0.013	mg/l	1	12/26/21	01/11/22	FW SW846 6010D ²
Beryllium	0.00050 U			0.0020	0.00050	mg/l	1	12/26/21	01/11/22	FW SW846 6010D ²
Cadmium	0.0019 B	D006	1.0	0.0040	0.0010	mg/l	1	12/26/21	01/11/22	FW SW846 6010D ²
Chromium	0.0020 U	D007	5.0	0.010	0.0020	mg/l	1	12/26/21	01/11/22	FW SW846 6010D ²
Lead	0.0040 B	D008	5.0	0.10	0.0018	mg/l	1	12/26/21	01/11/22	FW SW846 6010D ²
Mercury	0.000095 U	D009	0.20	0.00020	0.000095	mg/l	1	12/27/21	12/27/21	SB SW846 7470A ¹
Nickel	0.0022 B			0.010	0.0017	mg/l	1	12/26/21	01/11/22	FW SW846 6010D ²
Selenium	0.0049 U	D010	1.0	0.10	0.0049	mg/l	1	12/26/21	01/11/22	FW SW846 6010D ²
Silver	0.0040 B	D011	5.0	0.010	0.0019	mg/l	1	12/26/21	01/11/22	FW SW846 6010D ²
Vanadium	0.0018 U			0.050	0.0018	mg/l	1	12/26/21	01/11/22	FW SW846 6010D ²

- (1) Instrument QC Batch: MA51657
- (2) Instrument QC Batch: MA51711
- (3) Prep QC Batch: MP30547
- (4) Prep QC Batch: MP30574

RL = Reporting Limit MDL = Method Detection Limit U = Indicates a result < MDL
 MCL = Maximum Contamination Level (40 CFR 261 7/1/11) B = Indicates a result > = MDL but < RL

4.19
4

Report of Analysis

Client Sample ID: 11215131-122021-IDW-SS-PURGE	Date Sampled: 12/20/21
Lab Sample ID: JD35488-7	Date Received: 12/21/21
Matrix: AQ - Water	Percent Solids: n/a
Project: SJRWP - PCFSE, Harris County, TX	

4.19
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General Chemistry

Analyte	Result	RL	MDL	Units	DF	Analyzed	By Method
Cyanide Reactivity ^a	10 U	10	10	mg/l	1	01/06/22 16:11 MM SW846 CHAP7/9012B	
Ignitability (Flashpoint)	> 200			Deg. F	1	12/28/21 14:55 DB SW846 1010B/ASTM D93	
Sulfide Reactivity ^a	43 U	100	43	mg/l	1	01/06/22 13:12 JOO SW846 CHAP7/9034	

(a) Analyzed outside the 14 day holding time applied by laboratory SOP. No regulatory holding time published for this method.

RL = Reporting Limit
MDL = Method Detection Limit

U = Indicates a result < MDL
B = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID: 11215131-122021-IDW-SS-PURGE	Date Sampled: 12/20/21
Lab Sample ID: JD35488-7A	Date Received: 12/21/21
Matrix: AQ - Water	Percent Solids: n/a
Method: SW846 8015C SW846 1311	
Project: SJRWP - PCFSE, Harris County, TX	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	RR0174126.D	1	01/04/22 18:21	ATX	12/29/21 16:50	T:OP56412	T:GRR2606
Run #2							

TCLP Leachate method SW846 1311

CAS No.	Compound	Result	HW#	MCL	RL	MDL	Units	Q
110-80-5	2-Ethoxyethanol	ND			10	1.0	mg/l	
109-86-4	2-Methoxyethanol	ND			10	1.0	mg/l	
107-21-1	Ethylene Glycol	12.7			10	1.0	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
78-83-1	Isobutanol	80%		41-154%

(a) Analysis performed at SGS Houston, TX.

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
 MCL = Maximum Contamination Level (40 CFR 261 7/1/11) B = Indicates analyte found in associated method blank
 E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

4.20
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Report of Analysis

Client Sample ID: 11215131-122021-IDW-SS-PURGE	Date Sampled: 12/20/21
Lab Sample ID: JD35488-7A	Date Received: 12/21/21
Matrix: AQ - Water	Percent Solids: n/a
Method: TCEQ 1005 TX1005	
Project: SJRWP - PCFSE, Harris County, TX	

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	JF118102.D	1	01/04/22 21:01	ATX	01/04/22 18:05	T:OP56438	T:GJF2269
Run #2							

	Initial Volume	Final Volume
Run #1	34.6 ml	3.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C6-C12)	ND	2.2	0.73	mg/l	
	TPH (> C12-C28)	ND	2.2	0.56	mg/l	
	TPH (> C28-C35)	ND	2.2	0.56	mg/l	
	TPH (C6-C35)	ND	2.2	0.56	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	94%		70-130%
98-08-8	aaa-Trifluorotoluene	97%		70-130%

(a) Sample analyzed beyond hold time Analysis performed at SGS Houston, TX.

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

4.20
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Report of Analysis

Client Sample ID: 11215131-122021-IDW-SS-PURGE	Date Sampled: 12/20/21
Lab Sample ID: JD35488-7W	Date Received: 12/21/21
Matrix: AQ - Water	Percent Solids: n/a
Method: SW846 8316 IN HOUSE	
Project: SJRWP - PCFSE, Harris County, TX	

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	AA082395.D	1	12/31/21 12:41	AFL	12/31/21 12:00	F:OP89084	F:GAA3398
Run #2							

	Initial Volume	Final Volume
Run #1	1.0 ml	1.0 ml
Run #2		

TCLP Leachate method SW846 1311

CAS No.	Compound	Result	HW#	MCL	RL	MDL	Units	Q
79-06-1	Acrylamide	ND			0.050	0.013	mg/l	

(a) Analysis performed at SGS Orlando, FL.

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
 MCL = Maximum Contamination Level (40 CFR 261 7/1/11) B = Indicates analyte found in associated method blank
 E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

4.21
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Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Certification Exceptions
- Chain of Custody

Parameter Certification Exceptions

Job Number: JD35488
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

The following parameters included in this report are exceptions to NELAC certification. The certification status of each is indicated below.

Parameter	CAS#	Method	Mat	Certification Status
Cyanide Reactivity		SW846 CHAP7/9012B	AQ	SGS is not certified for this parameter. ^a
Cyanide Reactivity		SW846 CHAP7/9012 B	SO	SGS is not certified for this parameter. ^a
Sulfide Reactivity		SW846 CHAP7/9034	SO	SGS is not certified for this parameter. ^a
Sulfide Reactivity		SW846 CHAP7/9034	AQ	SGS is not certified for this parameter. ^a

(a) Reactivity analyzed following SW846 Chapter 7 is no longer recognized by regulatory agencies. Use of results should be verified through the program to which the data is being submitted.

Certification exceptions shown are based on the New Jersey DEP certifications. Applicability in other states may vary. Please contact your laboratory representative if additional information is required for a specific regulatory program.

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FED-EX Tracking #
SGS Quote #
Bottle Order Control # KR-111821-59
SGS Job # JD35488

Client / Reporting Information		Project Information				Requested Analysis (see TEST CODE sheet)										Matrix Codes			
Company Name GHD		Project Name SJRWP - PCFSE (IDW Composite Samples)				Matrix Codes: DW - Drinking Water GW - Ground Water WW - Water SW - Surface Water SO - Soil SL - Sludge SED - Sediment OI - Oil LIQ - Other Liquid AIR - Air SOL - Other Solid WP - Wipe FB - Field Blank EB - Equipment Blank RB - Rinse Blank TB - Trip Blank										LAB USE ONLY			
Street Address 11451 Katy Freeway Suite 400		City Houston TX 77079		State TX												Billing Information (If different from Report to)			
Project Contact Meagan Willis Meagan.willis@ghd.com		Project # 11215131		SGS # CRATXH90499		Street Address	TCLP - Herbs (H8151TCLP, HGC+DINOSEB)	ABB270TCLP/SL	TCLP.M, EVA, ESB, ENI, EBE	PB081TCLP/SL	VB260TCLP/SL	BTX1000TPHR3 (SGS Houston to analyze)	DB01STCLPEELY, DGC-ETHOXYE and DGC-METHOXYE (SGS Houston to analyze)	SR141TCLPMETHOMYL (sub to A&B Labs, TX)	TCLP Dioxin/Furans (Dayton teaching only)	CREAC, SREAC, IGN			
Phone # 713-907-3710		Client Purchase Order #		City		State		Zip		Number of preserved bottles	HCl	NaOH	HNO3	H2SO4	NONE	DI Water	MEOH	ENGORE	
Sampler(s) Name(s) Stephan Siler 832.227.106		Project Manager		Attention:		Collection	Date	Time	Sampled by	Matrix	# of bottles	9	1	1	1	1	1	1	
Lab Sample #		Field ID / Point of Collection		MEOH/DI Vial #		Date		Time		Sampled by		Matrix		# of bottles		9		1	
1		11215131-120121-IDW-SS-NE				12/1/21		1530		SPS		S		9				1	
Turnaround Time (Business days)		Data Deliverable Information				Comments / Special Instructions													
<input checked="" type="checkbox"/> Std. 10 Business Days <input type="checkbox"/> 5 Day RUSH <input type="checkbox"/> 3 Day RUSH <input type="checkbox"/> 2 Day RUSH <input type="checkbox"/> 1 Day RUSH <input type="checkbox"/> other		Approved by (SGS Project Manager)/Date: _____				<input type="checkbox"/> Commercial "A" (Level 1) <input type="checkbox"/> NYASP Category A <input type="checkbox"/> Commercial "B" (Level 2) <input type="checkbox"/> NYASP Category B <input checked="" type="checkbox"/> FULLT1 (Level 3+4) <input type="checkbox"/> State Forms <input type="checkbox"/> NJ Reduced <input type="checkbox"/> EDD Format <input type="checkbox"/> Commercial "C" <input type="checkbox"/> Other <input type="checkbox"/> NJ Data of Known Quality Protocol Reporting Commercial "A" = Results Only; Commercial "B" = Results + QC Summary NJ Reduced = Results + QC Summary + Partial Raw data													
Emergency & Rush T/A data available via LabLink		Sample Custody must be documented below each time samples change possession, including courier delivery.				Log in under JD35488 Please pack the dioxin/furan bottles in the Dayton cooler for the IDW analysis Initial Assessment 2/3/21 Label Verification 2/3/21 Sample inventory is verified upon receipt in the Laboratory 1/13/21													
Relinquished by Sampler		Date Time		Received By		Date Time		Received By		Date Time		Received By		Date Time		Received By		Date Time	
1		12/2/21 12:45		James Sun		12/2/21 12:45		James Sun		12/2/21 12:45		James Sun		12/2/21 12:45		James Sun		12/2/21 12:45	
Relinquished by Sampler		Date Time		Received By		Date Time		Received By		Date Time		Received By		Date Time		Received By		Date Time	
3		12/2/21 12:45		James Sun		12/2/21 12:45		James Sun		12/2/21 12:45		James Sun		12/2/21 12:45		James Sun		12/2/21 12:45	
Relinquished by:		Date Time		Received By		Date Time		Received By		Date Time		Received By		Date Time		Received By		Date Time	
5		12/2/21 12:45		James Sun		12/2/21 12:45		James Sun		12/2/21 12:45		James Sun		12/2/21 12:45		James Sun		12/2/21 12:45	
Custody Seal #		Intact		Not intact		Preserved where applicable		On Ice		Cooler Temp.									

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5.0°C CIP





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FED-EX Tracking #
Bottle Order Control # KR-111821-5
SGS Quote #
SGS Job # JD35488

Form containing Client/Reporting Information, Project Information, Requested Analysis, Matrix Codes, Lab Sample #, Field ID / Point of Collection, Turnaround Time, Data Deliverable Information, and Relinquished/Received by sections.

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Form:SM088-03C (revised 2/12/18)

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



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FED-EX Tracking #
SGS Quote # **JD35488**
Bottle Order Control # **KP-111821-59**

Client Reporting Information		Project Information				Requested Analysis (see TEST CODE sheet)												Matrix Codes										
Company Name GHD		Project Name SJRW - PCFSE (IDW Composite Samples)				TCLP Metals (H815)TCLP, HCC-DINUSEB AB8270TCLP TCLPM, EVA, ESB, ENI, EBE P808TCLP V8280TCLP BTX1005TPHR3 (SGS Houston to analyze) DB015TCLPEGLY, DGC-ETHOXYE and DGC-METHOXYE (SGS Houston to analyze) S814TCLPMETHOMYL (sub to A&B Labs, TX) TCLP Dioxin/Furans (Dayton leaching only) CREAM, SREAC, IGN												DW - Drinking Water GW - Ground Water WW - Water SW - Surface Water SO - Soil SL - Sludge SED - Sediment OI - Oil LIQ - Other Liquid AIR - Air SOL - Other Solid WP - Wipe FB - Field Blank EB - Equipment Blank RB - Rinse Blank TB - Trip Blank										
Street Address 11451 Katy Freeway Suite 400		Street Channelview																										
City State Zip Houston TX 77079		City State Harris County TX																										
Project Contact Meagan Willis Meagan.willis@ghd.com		Project # 11215131																										
Phone # 713-907-3710		Client Purchase Order # SGS # CRATX190499																										
Sampler(s) Name(s) Stephen Suller		Project Manager 832-247-1568																										
Lab Sample #		Field ID / Point of Collection		MEOH/DI Vial #		Date		Time		Sampled by		Matrix		# of bottles		Number of preserved bottles												LAB USE ONLY
3		11215131-120721-IDW-SS-5C				12/7/21		1420		SS		S		9		<input checked="" type="checkbox"/> HCC <input checked="" type="checkbox"/> H815 <input checked="" type="checkbox"/> H303 <input checked="" type="checkbox"/> H304 <input checked="" type="checkbox"/> NONE <input checked="" type="checkbox"/> DI Water <input checked="" type="checkbox"/> MESH <input checked="" type="checkbox"/> BICORR												D3 P39 SUB
Turnaround Time (Business days)		Data Deliverable Information				Comments / Special Instructions																						
<input checked="" type="checkbox"/> Std. 10 Business Days <input type="checkbox"/> 5 Day RUSH <input type="checkbox"/> 3 Day RUSH <input type="checkbox"/> 2 Day RUSH <input type="checkbox"/> 1 Day RUSH <input type="checkbox"/> other		Approved by (SGS Project Manager)/Date: [Signature] 1/4/22				<input type="checkbox"/> Commercial "A" (Level 1) <input type="checkbox"/> Commercial "B" (Level 2) <input checked="" type="checkbox"/> FULL T1 (Level 3+4) <input type="checkbox"/> NJ Reduced <input type="checkbox"/> Commercial "C" <input type="checkbox"/> NYASP Category A <input type="checkbox"/> NYASP Category B <input type="checkbox"/> State Forms <input type="checkbox"/> EDD Format <input type="checkbox"/> Other												Log in under JD35488 - OPEN SDG Please pack the dioxin/furan bottles in the Dayton cooler for the IDW analysis										
Emergency & Rush TIA data available via LabLink		Sample Custody must be documented below each time samples change possession, including courier delivery.				Sample inventory is verified upon receipt in the Laboratory																						
1 Requisitioned by: [Signature]		Date Time: 12/8/21		Received By: [Signature]		Date Time: 12/8/21		Requisitioned by: [Signature]		Date Time: 12/8/21		Received By: [Signature]		Date Time: 12/8/21		<input type="checkbox"/> Intact <input type="checkbox"/> Not intact <input type="checkbox"/> Preserved where applicable <input checked="" type="checkbox"/> On Ice Cooler Temp: 0.9 CIP												
3 Requisitioned by: [Signature]		Date Time: 12/8/21 1709		Received By: [Signature]		Date Time: 12/8/21 1709		Requisitioned by: [Signature]		Date Time: 12/8/21 1709		Received By: [Signature]		Date Time: 12/8/21 1709														
5 Requisitioned by: [Signature]		Date Time: 12/8/21 1709		Received By: [Signature]		Date Time: 12/8/21 1709		Requisitioned by: [Signature]		Date Time: 12/8/21 1709		Received By: [Signature]		Date Time: 12/8/21 1709														

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Client Reporting Information		Project Information				Requested Analysis (see TES CODE sheet)										Matrix Codes													
Company Name GHD		Project Name SJRWP - PCFSE (IDW Composite Samples)				FED-EX Tracking # SGS Quote # Bottle Order Control # KR-12221-125 SGS Job # JD35488										DW - Drinking Water GW - Ground Water WW - Water SW - Surface Water SO - Soil SL - Sludge SED - Sediment OI - Oil LIQ - Other Liquid AIR - Air SOL - Other Solid WP - Wipe FB - Field Blank EB - Equipment Blank RB - Rinse Blank TB - Trip Blank													
Street Address 11451 Katy Freeway Suite 400		Street Channelview		Billing Information (if different from Report to)		TCLP Metals (H816) TCLP, HCC-DINOSIB AB8270TCLP TCLP, EVA, ESB, ENI, EBE P808-TCLP V8260TCLP BTX1005TPHR3 (SGS Houston to analyze) DB016TCLPLEG, DGC-ETHOXYE and DGC-METHOXYE (SGS Houston to analyze) SB14TCLP METHOMYL (sub to A&B Labs TX) TCLP Dioxin/Furans (Dayton leaching only) CREAC, SREAC, IGN										LAB USE ONLY													
City Houston TX 77079		City Harris County		Company Name TX																									
Project Contact Meagan Willis		Project # 11215131		SGS # CRATXH90499																									
E-mail Meagan.willis@ghd.com		Client Purchase Order #		City		State		Zip																					
Phone # 713-907-3710		Fax #		Project Manager		Attention:																							
Sampler(s) Name(s) Stephen Sallee		Phone # 932245134																											
Lab Sample #		Field ID / Point of Collection		MECHDI Vial #		Date		Time		Sampled by		Matrix		# of bottles		Number of preserved bottles													
4		11215131-120721-IDW-SS-DEONZ		0		12/7/21		1430		SS		W		21		3												ES8 G17 V1007	
Turnaround Time (Business days)		Approved by (SGS Project Manager)/Date:				Data Deliverable Information										Comments / Special Instructions													
<input checked="" type="checkbox"/> Std. 10 Business Days <input type="checkbox"/> 5 Day RUSH <input type="checkbox"/> 3 Day RUSH <input type="checkbox"/> 2 Day RUSH <input type="checkbox"/> 1 Day RUSH <input type="checkbox"/> other		Initial Assessment IA-MV Label Verification AR				<input type="checkbox"/> Commercial "A" (Level 1) <input type="checkbox"/> Commercial "B" (Level 2) <input checked="" type="checkbox"/> FULLT1 (Level 3+4) <input type="checkbox"/> NJ Reduced <input type="checkbox"/> Commercial "C" <input type="checkbox"/> NJ Data of Known Quality Protocol Reporting Commercial "A" = Results Only; Commercial "B" = Results + QC Summary										<input type="checkbox"/> NYASP Category A <input type="checkbox"/> NYASP Category B <input type="checkbox"/> State Forms <input type="checkbox"/> EDD Format <input type="checkbox"/> Other													
Emergency & Rush TIA data available via LabLink																Log in under JD35488 - OPEN SDG Please pack the dioxin/furan bottles in the Dayton cooler for the IDW analysis 0UP7													
																Sample inventory is verified upon receipt in the Laboratory													
Relinquished by Sampler:		Date Time:		Received By:		Date Time:		Relinquished by:		Date Time:		Received By:		Date Time:		Received By:													
1		12/5/21		[Signature]		12/5/21		2		12/5/21		3		12/5/21		4													
3		12/21/21		[Signature]		1705		3		[Signature]		4		[Signature]		5													
Relinquished by:		Date Time:		Received By:		Date Time:		Custody Seal #		<input type="checkbox"/> Intact <input type="checkbox"/> Not Intact		Preserved where applicable		<input type="checkbox"/> On Ice <input checked="" type="checkbox"/> Cooler Temp.												1.7 CIP 1.2 CIP			

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FED-EX Tracking #
SGS Quote #
Bottle Order Control # **KR-111821-159**
SGS Job # **JD35488**

Client / Reporting Information		Project Information				Requested Analysis (see TEST CODE sheet)										Matrix Codes											
Company Name GHD		Project Name SJRWP - PCFSE (IDW Composite Samples)				HIGC-DINOSIEB TOLP Herbs (H815) TOLP, HIGC-DINOSIEB A8270TCLPSSL TOLP.M. EVA, ESB, ENI, EBE P809TCLPSSL V8260TCLPSSL BTX1005TPHR3 (SGS Houston to analyze) DB016TCLPECLY, DGC-ETHOXYE and DGC-METHOXYE (SGS Houston to analyze) SS141TCLPMETHOMYL (sub to AAB Lab, TX) TOLP Dioxin/Furans (Dayton leaching only) CREAM, SREAC, IGN										DW - Drinking Water GW - Ground Water WW - Water SW - Surface Water SO - Soil SL - Sludge SED - Sediment OI - Oil LIQ - Other Liquid AIR - Air SOL - Other Solid WP - Wipe FB-Field Blank EB-Equipment Blank RB- Rinse Blank TB-Trip Blank											
Street Address 11451 Katy Freeway Suite 400		Street Chanelview		Billing Information (if different from Report to) City State Harris County TX																							
City State Zip Houston TX 77079		City State Harris County TX		Company Name																							
Project Contact Meagan Willis Meagan.willis@ghd.com		Project # 11215131		SGS # CRATXH90499																							
Phone # 713-907-3710		E-mail Meagan.willis@ghd.com		Client Purchase Order #		City State Zip																					
Sample(s) Name(s) Stephen Siller		Phone # 832-228-1368		Project Manager		Attention:																					
Lab Sample #	Field ID / Point of Collection	MEOH/DI Vial #	Date	Time	Sampled by	Matrix	# of bottles	HIGC	MESH	H803	H2504	NONE	DI Water	MICH	ENCORE											LAB USE ONLY	
11215131	11215131	11215131	12/8/14	1530	SS	S	11	11	11	11	11	11	11	11	11	11											11
S	11215131-120821-IDW-SS-SW		12/8/14	1530	SS	S	11																				B25 F29 II B15
Turnaround Time (Business days)		Data Deliverable Information				Comments / Special Instructions																					
<input checked="" type="checkbox"/> Std. 10 Business Days <input type="checkbox"/> 5 Day RUSH <input type="checkbox"/> 3 Day RUSH <input type="checkbox"/> 2 Day RUSH <input type="checkbox"/> 1 Day RUSH <input type="checkbox"/> other _____		Approved by (SGS Project Manager)/Date: _____ Initial Approval AMW Label Verification JK				<input type="checkbox"/> Commercial "A" (Level 1) <input type="checkbox"/> Commercial "B" (Level 2) <input checked="" type="checkbox"/> FULLT1 (Level 3+4) <input type="checkbox"/> NJ Reduced <input type="checkbox"/> Commercial "C" <input type="checkbox"/> NJ Data of Known Quality Protocol Reporting Commercial "A" = Results Only; Commercial "B" = Results + QC Summary NJ Reduced = Results + QC Summary + Partial Raw data				<input type="checkbox"/> NYASP Category A <input type="checkbox"/> NYASP Category B <input type="checkbox"/> State Forms <input type="checkbox"/> EDD Format <input type="checkbox"/> Other _____				Log in under JD35488 Please pack the dioxin/furan bottles in the Dayton cooler for the IDW analysis Sample inventory is verified upon receipt in the Laboratory													
Emergency & Rush TIA data available via LabLink		Sample inventory must be documented below each time samples change possession, including courier delivery.																									
1 Relinquished by Sampler: Stephen Siller	Date Time: 12/12/14 1330	2 Relinquished by: Edde Carter	Date Time: 12/12/14 1401	3 Relinquished by: Edde Carter	Date Time: 12/12/14 1500	4 Relinquished by: Edde Carter	Date Time: 12/12/14 1500	5 Relinquished by: Edde Carter	Date Time: 12/12/14 1500	Custody Seal #	<input type="checkbox"/> Intact	<input type="checkbox"/> Not intact	Preserved where applicable	<input type="checkbox"/> On Ice	Cooler Temp. 3.2°C												

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CHAIN OF CUSTODY

SGS North America Inc. - Dayton
2235 Route 130, Dayton, NJ 09810
TEL. 732-329-0200 FAX 732-329-3499
www.sgs.com/ehsusa

FED-EX Tracking #	Botle Order Control #
SGS Quote #	SGS Job # JD35488

Client / Reporting Information		Project Information										Requested Analysis (see TEST CODE sheet)										Matrix Codes					
Company Name GHD		Project Name: SJRW - PCFSE (IDW Composite Samples)										TCPL Herbs (H8151TCLP, HGC-DINOSEB) AB8270TCLP/SL TCPLM, EVA, ESB, ENI, EBE P8081TCLP/SL V8260TCLP/SL BTX1005TPHR3 (SGS Houston to analyze) D8015TCLP/EGLY, DCC-ETHOXYE and DCC-METHOXYE (SGS Houston to analyze) S8141TCLP/METHOMYL (sub to A&B Labs, TX) TCPL Dioxin/Furans (Dayton teaching only) CREA.C, SREAC, IGN										DW - Drinking Water GW - Ground Water WW - Water SW - Surface Water SO - Soil SL - Sludge SED - Sediment OJ - Oil LIQ - Other Liquid AIR - Air SOL - Other Solid WP - Wipe FB - Field Blank EB - Equipment Blank RB - Rinse Blank TB - Trip Blank					
Street Address 11451 Katy Freeway Suite 400		Street Channelview																									
City State Zip Houston TX 77079		City State Harris County TX																									
Project Contact Meagan Willis Meagan.willis@ghd.com		Project # 11215131 SGS # CRATXH90499																									
Billing Information (If different from Report to)		Street Address																									
Phone # 713-907-3710		Client Purchase Order #																									
Sampler(s) Name(s) Breanna North 501-457-9966		Project Manager																									
Lab Sample #		Field ID / Point of Collection		MECH/DI Vial #		Date		Time		Sampled by		Matrix		# of bottles		Number of preserved bottles										LAB USE ONLY	
6		11215131-121421-IDW-BN-NC				12-14-21		1330		BN		S		11		<input checked="" type="checkbox"/> TCPL Herbs (H8151TCLP, HGC-DINOSEB) <input checked="" type="checkbox"/> AB8270TCLP/SL <input checked="" type="checkbox"/> TCPLM, EVA, ESB, ENI, EBE <input checked="" type="checkbox"/> P8081TCLP/SL <input checked="" type="checkbox"/> V8260TCLP/SL <input checked="" type="checkbox"/> BTX1005TPHR3 (SGS Houston to analyze) <input checked="" type="checkbox"/> D8015TCLP/EGLY, DCC-ETHOXYE and DCC-METHOXYE (SGS Houston to analyze) <input checked="" type="checkbox"/> S8141TCLP/METHOMYL (sub to A&B Labs, TX) <input checked="" type="checkbox"/> TCPL Dioxin/Furans (Dayton teaching only) <input checked="" type="checkbox"/> CREA.C, SREAC, IGN										SEE GSDW	
Turnaround Time (Business days)		Data Deliverable Information										Comments / Special Instructions															
<input checked="" type="checkbox"/> Std. 10 Business Days <input type="checkbox"/> 5 Day RUSH <input type="checkbox"/> 3 Day RUSH <input type="checkbox"/> 2 Day RUSH <input type="checkbox"/> 1 Day RUSH <input type="checkbox"/> other		Approved by (SGS Project Manager)/Date: _____ _____ _____ _____ _____										<input type="checkbox"/> Commercial "A" (Level 1) <input type="checkbox"/> NYASP Category A <input type="checkbox"/> Commercial "B" (Level 2) <input type="checkbox"/> NYASP Category B <input checked="" type="checkbox"/> FULLT1 (Level 3+4) <input type="checkbox"/> State Forms <input type="checkbox"/> NJ Reduced <input type="checkbox"/> EDD Format <input type="checkbox"/> Commercial "C" <input type="checkbox"/> Other <input type="checkbox"/> NJ Data of Known Quality Protocol Reporting Commercial "A" = Results Only; Commercial "B" = Results + QC Summary NJ Reduced = Results + QC Summary + Partial Raw data										Log in under JD35488 Please pack the dioxin/furan bottles in the Dayton cooler for the IDW analysis					
Emergency & Rush T/A data available via LabLink		Sample inventory is verified upon receipt in the Laboratory																									
1 Relinquished by Sampler: Breanna North		Date Time: 12-14-21 1400		Relinquished By: Edo Castro		Date Time: 12-15-21		Received By: Amir		Date Time: 12/15/21		Received By: Amir		Date Time: 12/15/21		Received By: Amir											
3 Relinquished by Sampler: Kolox		Date Time:		Received By:		Date Time:		Received By:		Date Time:		Received By:		Date Time:		Received By:											
5 Relinquished by:		Date Time:		Received By:		Date Time:		Received By:		Date Time:		Received By:		Date Time:		Received By:		Custody Seal # <input checked="" type="checkbox"/> Intact <input type="checkbox"/> Not intact Preserved where applicable <input type="checkbox"/> SK-4 On Ice <input checked="" type="checkbox"/> Cooler Temp. 1.30									

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CHAIN OF CUSTODY

SGS North America Inc. - Dayton
2235 Route 130, Dayton, NJ 08810
TEL 732-329-0200 FAX 732-329-3499
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Client Reporting Information, Project Information, Requested Analysis, Matrix Codes, Lab Sample #, Collection, Data Deliverable Information, Sample Inventory, Requisition/Receipt Log.

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Form: SM088-03C (revised 2/12/18)

Initial Assessment TS44

Label Verification

http://www.sgs.com/en/term s-and-conditions.

JD35488: Chain of Custody

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CHAIN OF CUSTODY

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2 of 2 coolers PAGE 2 OF 2

Field # Tracking # 27042885 Bottle Order Control #
SGS Code # JD35488

Client/Reporting Information, Project Information, Requested Analysis, Matrix Codes, Lab Sample #, Field ID / Point of Collection, Date, Time, Matrix, # of bottles, etc.

COPY of Pg 1 of 2

Turnaround Time, Data Deliverable Information, Comments / Special Instructions, Approved by (SGS Project Manager)/Date, etc.

JD35488: Chain of Custody

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SGS Sample Receipt Summary

Job Number: JD35488

Client: _____

Project: _____

Date / Time Received: 12/10/2021 2:04:00 PM

Delivery Method: _____

Airbill #'s: _____

Cooler Temps (Raw Measured) °C: Cooler 7: (3.2);

Cooler Temps (Corrected) °C: Cooler 7: (1.8);

Cooler Security

- | | | | | | | | |
|---------------------------|-------------------------------------|-----------|--------------------------|-----------------------|-------------------------------------|-----------|--------------------------|
| | <u>Y</u> | <u>or</u> | <u>N</u> | | <u>Y</u> | <u>or</u> | <u>N</u> |
| 1. Custody Seals Present: | <input checked="" type="checkbox"/> | | <input type="checkbox"/> | 3. COC Present: | <input checked="" type="checkbox"/> | | <input type="checkbox"/> |
| 2. Custody Seals Intact: | <input checked="" type="checkbox"/> | | <input type="checkbox"/> | 4. Smpl Dates/Time OK | <input checked="" type="checkbox"/> | | <input type="checkbox"/> |

Cooler Temperature

- | | | | |
|------------------------------|-------------------------------------|-----------|--------------------------|
| | <u>Y</u> | <u>or</u> | <u>N</u> |
| 1. Temp criteria achieved: | <input checked="" type="checkbox"/> | | <input type="checkbox"/> |
| 2. Cooler temp verification: | IR Gun | | |
| 3. Cooler media: | Ice (Bag) | | |
| 4. No. Coolers: | 1 | | |

Quality Control Preservation

- | | | | | |
|---------------------------------|-------------------------------------|-----------|-------------------------------------|-------------------------------------|
| | <u>Y</u> | <u>or</u> | <u>N</u> | <u>N/A</u> |
| 1. Trip Blank present / cooler: | <input type="checkbox"/> | | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 2. Trip Blank listed on COC: | <input type="checkbox"/> | | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 3. Samples preserved properly: | <input checked="" type="checkbox"/> | | <input type="checkbox"/> | |
| 4. VOCs headspace free: | <input type="checkbox"/> | | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

Sample Integrity - Documentation

- | | | | |
|--|-------------------------------------|-----------|--------------------------|
| | <u>Y</u> | <u>or</u> | <u>N</u> |
| 1. Sample labels present on bottles: | <input checked="" type="checkbox"/> | | <input type="checkbox"/> |
| 2. Container labeling complete: | <input checked="" type="checkbox"/> | | <input type="checkbox"/> |
| 3. Sample container label / COC agree: | <input checked="" type="checkbox"/> | | <input type="checkbox"/> |

Sample Integrity - Condition

- | | | | |
|----------------------------------|-------------------------------------|-----------|--------------------------|
| | <u>Y</u> | <u>or</u> | <u>N</u> |
| 1. Sample recvd within HT: | <input checked="" type="checkbox"/> | | <input type="checkbox"/> |
| 2. All containers accounted for: | <input checked="" type="checkbox"/> | | <input type="checkbox"/> |
| 3. Condition of sample: | Intact | | |

Sample Integrity - Instructions

- | | | | | |
|---|-------------------------------------|-----------|-------------------------------------|-------------------------------------|
| | <u>Y</u> | <u>or</u> | <u>N</u> | <u>N/A</u> |
| 1. Analysis requested is clear: | <input checked="" type="checkbox"/> | | <input type="checkbox"/> | |
| 2. Bottles received for unspecified tests | <input type="checkbox"/> | | <input checked="" type="checkbox"/> | |
| 3. Sufficient volume recvd for analysis: | <input checked="" type="checkbox"/> | | <input type="checkbox"/> | |
| 4. Compositing instructions clear: | <input type="checkbox"/> | | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 5. Filtering instructions clear: | <input type="checkbox"/> | | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

Test Strip Lot #s: pH 1-12: 231619 pH 12+: 203117A Other: (Specify) _____

Comments

SM089-03
Rev. Date 12/7/17

JD35488: Chain of Custody

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SGS Sample Receipt Summary

Job Number: JD35488

Client: GHD SERVICES INC.

Project: SJRWP - PCFSE, HARRIS COUNTY, TX (IDW B

Date / Time Received: 12/9/2021 5:05:00 PM

Delivery Method:

Airbill #s:

Cooler Temps (Raw Measured) °C: Cooler : (1.2); Cooler 5: (1.7);

Cooler Temps (Corrected) °C: Cooler : (-0.2); Cooler 5: (0.3);

Cooler Security

- | | | | | | |
|---------------------------|-------------------------------------|--------------------------|-----------------------|-------------------------------------|--------------------------|
| 1. Custody Seals Present: | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 3. COC Present: | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 2. Custody Seals Intact: | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 4. Smpl Dates/Time OK | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

Cooler Temperature

- | | | |
|------------------------------|-------------------------------------|--------------------------|
| 1. Temp criteria achieved: | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 2. Cooler temp verification: | IR Gun | |
| 3. Cooler media: | Ice (Bag) | |
| 4. No. Coolers: | 1 | |

Quality Control Preservation

- | | | | |
|---------------------------------|-------------------------------------|--------------------------|-------------------------------------|
| 1. Trip Blank present / cooler: | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 2. Trip Blank listed on COC: | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 3. Samples preserved properly: | <input checked="" type="checkbox"/> | <input type="checkbox"/> | |
| 4. VOCs headspace free: | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

Sample Integrity - Documentation

- | | | |
|--|-------------------------------------|--------------------------|
| 1. Sample labels present on bottles: | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 2. Container labeling complete: | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 3. Sample container label / COC agree: | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

Sample Integrity - Condition

- | | | |
|----------------------------------|-------------------------------------|--------------------------|
| 1. Sample recvd within HT: | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 2. All containers accounted for: | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 3. Condition of sample: | Intact | |

Sample Integrity - Instructions

- | | | | |
|---|-------------------------------------|-------------------------------------|-------------------------------------|
| 1. Analysis requested is clear: | <input checked="" type="checkbox"/> | <input type="checkbox"/> | |
| 2. Bottles received for unspecified tests | <input type="checkbox"/> | <input checked="" type="checkbox"/> | |
| 3. Sufficient volume recvd for analysis: | <input checked="" type="checkbox"/> | <input type="checkbox"/> | |
| 4. Compositing instructions clear: | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 5. Filtering instructions clear: | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

Test Strip Lot #s: pH 1-12: 231619 pH 12+: 203117A Other: (Specify)

Comments

SM089-03
Rev. Date 12/7/17

SGS Sample Receipt Summary

Job Number: JD35488

Client: GHD SERVICES INC.

Project: SJRWP - PCFSE, HARRIS COUNTY, TX (IDW B

Date / Time Received: 12/21/2021 11:00:00 AM

Delivery Method:

Airbill #'s:

Cooler Temps (Raw Measured) °C: Cooler 9: (3.2);

Cooler Temps (Corrected) °C: Cooler 9: (1.8);

Cooler Security

- | | <u>Y</u> | <u>or</u> | <u>N</u> | | <u>Y</u> | <u>or</u> | <u>N</u> |
|---------------------------|-------------------------------------|-----------|--------------------------|-----------------------|-------------------------------------|-----------|--------------------------|
| 1. Custody Seals Present: | <input checked="" type="checkbox"/> | | <input type="checkbox"/> | 3. COC Present: | <input checked="" type="checkbox"/> | | <input type="checkbox"/> |
| 2. Custody Seals Intact: | <input checked="" type="checkbox"/> | | <input type="checkbox"/> | 4. Smpl Dates/Time OK | <input checked="" type="checkbox"/> | | <input type="checkbox"/> |

Cooler Temperature

- | | <u>Y</u> | <u>or</u> | <u>N</u> |
|------------------------------|-------------------------------------|-----------|--------------------------|
| 1. Temp criteria achieved: | <input checked="" type="checkbox"/> | | <input type="checkbox"/> |
| 2. Cooler temp verification: | IR Gun | | |
| 3. Cooler media: | Ice (Bag) | | |
| 4. No. Coolers: | 1 | | |

Quality Control Preservation

- | | <u>Y</u> | <u>or</u> | <u>N</u> | <u>N/A</u> |
|---------------------------------|-------------------------------------|-----------|-------------------------------------|--------------------------|
| 1. Trip Blank present / cooler: | <input type="checkbox"/> | | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 2. Trip Blank listed on COC: | <input type="checkbox"/> | | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 3. Samples preserved properly: | <input checked="" type="checkbox"/> | | <input type="checkbox"/> | |
| 4. VOCs headspace free: | <input checked="" type="checkbox"/> | | <input type="checkbox"/> | <input type="checkbox"/> |

Sample Integrity - Documentation

- | | <u>Y</u> | <u>or</u> | <u>N</u> |
|--|-------------------------------------|-----------|--------------------------|
| 1. Sample labels present on bottles: | <input checked="" type="checkbox"/> | | <input type="checkbox"/> |
| 2. Container labeling complete: | <input checked="" type="checkbox"/> | | <input type="checkbox"/> |
| 3. Sample container label / COC agree: | <input checked="" type="checkbox"/> | | <input type="checkbox"/> |

Sample Integrity - Condition

- | | <u>Y</u> | <u>or</u> | <u>N</u> |
|----------------------------------|-------------------------------------|-----------|--------------------------|
| 1. Sample recvd within HT: | <input checked="" type="checkbox"/> | | <input type="checkbox"/> |
| 2. All containers accounted for: | <input checked="" type="checkbox"/> | | <input type="checkbox"/> |
| 3. Condition of sample: | Intact | | |

Sample Integrity - Instructions

- | | <u>Y</u> | <u>or</u> | <u>N</u> | <u>N/A</u> |
|---|-------------------------------------|-----------|-------------------------------------|-------------------------------------|
| 1. Analysis requested is clear: | <input checked="" type="checkbox"/> | | <input type="checkbox"/> | |
| 2. Bottles received for unspecified tests | <input type="checkbox"/> | | <input checked="" type="checkbox"/> | |
| 3. Sufficient volume recvd for analysis: | <input checked="" type="checkbox"/> | | <input type="checkbox"/> | |
| 4. Compositing instructions clear: | <input type="checkbox"/> | | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 5. Filtering instructions clear: | <input type="checkbox"/> | | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

Test Strip Lot #s:	pH 1-12: 231619	pH 12+: 203117A	Other: (Specify) _____
--------------------	-----------------	-----------------	------------------------

Comments

SM089-03
Rev. Date 12/7/17

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SGS Sample Receipt Summary

Job Number: JD35488

Client: GHD SERVICES INC.

Project: SJRWP - PCFSE, HARRIS COUNTY, TX (IDW B

Date / Time Received: 12/3/2021 3:25:00 PM

Delivery Method:

Airbill #s:

Cooler Temps (Raw Measured) °C: Cooler 2: (4.4); Cooler 3: (3.7);

Cooler Temps (Corrected) °C: Cooler 2: (3.0); Cooler 3: (2.3);

<u>Cooler Security</u>	<u>Y or N</u>		<u>Y or N</u>	
1. Custody Seals Present:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	3. COC Present:	<input checked="" type="checkbox"/> <input type="checkbox"/>
2. Custody Seals Intact:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	4. Smpl Dates/Time OK	<input checked="" type="checkbox"/> <input type="checkbox"/>

<u>Cooler Temperature</u>	<u>Y or N</u>	
1. Temp criteria achieved:	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2. Cooler temp verification:	IR Gun	
3. Cooler media:	Ice (Bag)	
4. No. Coolers:	2	

<u>Quality Control Preservation</u>	<u>Y</u>	<u>or</u>	<u>N</u>	<u>N/A</u>
1. Trip Blank present / cooler:	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
2. Trip Blank listed on COC:	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
3. Samples preserved properly:	<input checked="" type="checkbox"/>	<input type="checkbox"/>		
4. VOCs headspace free:	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	

<u>Sample Integrity - Documentation</u>	<u>Y or N</u>	
1. Sample labels present on bottles:	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2. Container labeling complete:	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3. Sample container label / COC agree:	<input checked="" type="checkbox"/>	<input type="checkbox"/>

<u>Sample Integrity - Condition</u>	<u>Y or N</u>	
1. Sample recvd within HT:	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2. All containers accounted for:	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3. Condition of sample:	Intact	

<u>Sample Integrity - Instructions</u>	<u>Y</u>	<u>or</u>	<u>N</u>	<u>N/A</u>
1. Analysis requested is clear:	<input checked="" type="checkbox"/>	<input type="checkbox"/>		
2. Bottles received for unspecified tests	<input type="checkbox"/>	<input checked="" type="checkbox"/>		
3. Sufficient volume recvd for analysis:	<input checked="" type="checkbox"/>	<input type="checkbox"/>		
4. Compositing instructions clear:	<input type="checkbox"/>	<input type="checkbox"/>		<input checked="" type="checkbox"/>
5. Filtering instructions clear:	<input type="checkbox"/>	<input type="checkbox"/>		<input checked="" type="checkbox"/>

Test Strip Lot #s:	pH 1-12: 231619	pH 12+: 203117A	Other: (Specify)
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Comments

SM089-03
Rev. Date 12/7/17

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SGS Sample Receipt Summary

Job Number: JD35488

Client: GHD

Project: SJRWP

Date / Time Received: 12/16/2021 11:00:00 AM

Delivery Method: FedEx

Airbill #s:

Cooler Temps (Raw Measured) °C: Cooler 8: (1.8);

Cooler Temps (Corrected) °C: Cooler 8: (0.4);

<u>Cooler Security</u>	<u>Y</u>	<u>or</u>	<u>N</u>		<u>Y</u>	<u>or</u>	<u>N</u>
1. Custody Seals Present:	<input checked="" type="checkbox"/>		<input type="checkbox"/>	3. COC Present:	<input checked="" type="checkbox"/>		<input type="checkbox"/>
2. Custody Seals Intact:	<input checked="" type="checkbox"/>		<input type="checkbox"/>	4. Smpl Dates/Time OK	<input checked="" type="checkbox"/>		<input type="checkbox"/>

<u>Cooler Temperature</u>	<u>Y</u>	<u>or</u>	<u>N</u>
1. Temp criteria achieved:	<input checked="" type="checkbox"/>		<input type="checkbox"/>
2. Cooler temp verification:	IR Gun		
3. Cooler media:	Ice (Bag)		
4. No. Coolers:	1		

<u>Quality Control Preservation</u>	<u>Y</u>	<u>or</u>	<u>N</u>	<u>N/A</u>
1. Trip Blank present / cooler:	<input type="checkbox"/>		<input checked="" type="checkbox"/>	<input type="checkbox"/>
2. Trip Blank listed on COC:	<input type="checkbox"/>		<input checked="" type="checkbox"/>	<input type="checkbox"/>
3. Samples preserved properly:	<input checked="" type="checkbox"/>		<input type="checkbox"/>	
4. VOCs headspace free:	<input type="checkbox"/>		<input type="checkbox"/>	<input checked="" type="checkbox"/>

<u>Sample Integrity - Documentation</u>	<u>Y</u>	<u>or</u>	<u>N</u>
1. Sample labels present on bottles:	<input checked="" type="checkbox"/>		<input type="checkbox"/>
2. Container labeling complete:	<input checked="" type="checkbox"/>		<input type="checkbox"/>
3. Sample container label / COC agree:	<input checked="" type="checkbox"/>		<input type="checkbox"/>

<u>Sample Integrity - Condition</u>	<u>Y</u>	<u>or</u>	<u>N</u>
1. Sample recvd within HT:	<input type="checkbox"/>		<input checked="" type="checkbox"/>
2. All containers accounted for:	<input checked="" type="checkbox"/>		<input type="checkbox"/>
3. Condition of sample:	Intact		

<u>Sample Integrity - Instructions</u>	<u>Y</u>	<u>or</u>	<u>N</u>	<u>N/A</u>
1. Analysis requested is clear:	<input checked="" type="checkbox"/>		<input type="checkbox"/>	
2. Bottles received for unspecified tests	<input type="checkbox"/>		<input checked="" type="checkbox"/>	
3. Sufficient volume recvd for analysis:	<input checked="" type="checkbox"/>		<input type="checkbox"/>	
4. Compositing instructions clear:	<input type="checkbox"/>		<input type="checkbox"/>	<input checked="" type="checkbox"/>
5. Filtering instructions clear:	<input type="checkbox"/>		<input type="checkbox"/>	<input checked="" type="checkbox"/>

Test Strip Lot #s:	pH 1-12: 231619	pH 12+: 203117A	Other: (Specify) _____
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Comments Sample -6: Soil volatiles not prepped to 5035 specifications. Lab to prep from intact volume for low level voc analysis outside of hold time.

SM089-03
Rev. Date 12/7/17

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Responded to by: CSR: N/A

Response Date: Response Date: 12/17/2021

Response:

Response: Proceed with analysis

Job Change Order: JD35488

Requested Date:	12/6/2021	Received Date:	12/3/2021
Account Name:	GHD Services Inc.	Due Date:	12/6/2021
Project Description:	SJRWP - PCFSE, Harris County, TX	Deliverable:	FULT1
C/O Initiated By:	KELLY.RAM	PM:	KR
		TAT (Days):	7

=====
Sample #: JD35488-1, -2 **Change:**
Dept: Please log in for B8316TCLPACRAMIDE and sub to ALSE
TAT: 7
=====

Above Changes Per: Meagan Willis

Date/Time: 12/6/2021

To Client: This Change Order is confirmation of the revisions, previously discussed with the Client Service Representative.

Job Change Order: JD35488

Requested Date:	12/10/2021	Received Date:	12/3/2021
Account Name:	GHD Services Inc.	Due Date:	12/10/2021
Project Description:	SJRWP - PCFSE, Harris County, TX (IDW)	Deliverable:	FULT1
C/O Initiated By:	KELLY.RAM	PM:	KR
		TAT (Days):	7

Sample #:	JD35488-3, 4	Change:	
Dept:			Please relog for B8316TCLPACRAMIDE and TCLPE
TAT:	7		

Above Changes Per: Kathy Shaw

Date/Time: 12/10/2021

To Client: This Change Order is confirmation of the revisions, previously discussed with the Client Service Representative.

Job Change Order: JD35488

Requested Date:	12/14/2021	Received Date:	12/3/2021
Account Name:	GHD Services Inc.	Due Date:	12/14/2021
Project Description:	SJRWP - PCFSE, Harris County, TX (IDW)	Deliverable:	FULT1
C/O Initiated By:	KELLY.RAM	PM:	KR
		TAT (Days):	7

Sample #:	JD35488-5	Change:	
Dept:			Please relog for TCLPE and B8316TCLPACRAMIDE and sub to ALSE
TAT:	7		

11215131-120821-IDW-SS-SW

Above Changes Per:

Date/Time: 12/14/2021

To Client: This Change Order is confirmation of the revisions, previously discussed with the Client Service Representative.

Page 1 of 1

JD35488: Chain of Custody
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Job Change Order: JD35488

Requested Date:	12/20/2021	Received Date:	12/3/2021
Account Name:	GHD Services Inc.	Due Date:	12/20/2021
Project Description:	SJRWP - PCFSE, Harris County, TX (IDW)	Deliverable:	FULT1
C/O Initiated By:	KELLY.RAM	PM:	KR
		TAT (Days):	7

Sample #:	JD35488-6	Change:	
Dept:			Please relog for TCLPE, B8316TCLPACRAMIDE and sub to ALSE
TAT:	7		

11215131-121421-IDW-BN-NS

Above Changes Per:

Date/Time: 12/20/2021

To Client: This Change Order is confirmation of the revisions, previously discussed with the Client Service Representative.

Job Change Order: JD35488

Requested Date:	12/23/2021	Received Date:	12/3/2021
Account Name:	GHD Services Inc.	Due Date:	12/23/2021
Project Description:	SJRWP - PCFSE, Harris County, TX (IDW)	Deliverable:	FULT1
C/O Initiated By:	KELLY.RAM	PM:	KR
		TAT (Days):	7

Sample #:	JD35488-7	Change:	
Dept:			Please relog for B8316TCLPACRAMIDE and TCLPE and sub to ALSE
TAT:	7		

11215131-122021-IDW-SS-PURGE

Above Changes Per:

Date/Time: 12/23/2021

To Client: This Change Order is confirmation of the revisions, previously discussed with the Client Service Representative.

Job Change Order: JD35488

Requested Date:	1/4/2022	Received Date:	12/3/2021
Account Name:	GHD Services Inc.	Due Date:	1/4/2022
Project Description:	SJRWP - PCFSE, Harris County, TX (IDW)	Deliverable:	FULT1
C/O Initiated By:	KELLY.RAM	PM:	KR
		TAT (Days):	7

Sample #:	JD35488-3, -4, -5	Change:	
Dept:			Please move to XB job for D8015TCLPEGLY, DGC+ETHOXYE, DGC+METHOXYE. Samples subbed to ALS
TAT:	7		

Above Changes Per:

Date/Time: 1/4/2022

To Client: This Change Order is confirmation of the revisions, previously discussed with the Client Service Representative.

Page 1 of 1

Job Change Order: JD35488

Requested Date:	2/21/2022	Received Date:	12/3/2021
Account Name:	GHD Services Inc.	Due Date:	2/21/2022
Project Description:	SJRWP - PCFSE, Harris County, TX	Deliverable:	FULT1
C/O Initiated By:	KELLY.RAM	PM:	KR
		TAT (Days):	1

=====
Sample #: JD35488-ALL **Change:**
Dept: Please revise to COMMBN and reissue report
TAT: 1
=====

Above Changes Per: Kathy Shaw

Date/Time: 2/21/2022

To Client: This Change Order is confirmation of the revisions, previously discussed with the Client Service Representative.

Job Change Order: JD35488

Requested Date:	4/4/2022	Received Date:	12/3/2021
Account Name:	GHD Services Inc.	Due Date:	4/4/2022
Project Description:	SJRWP - PCFSE, Harris County, TX	Deliverable:	COMMBN
C/O Initiated By:	KELLY.RAM	PM:	KR
		TAT (Days):	3

=====

Sample #:	JD35488-2, 2A, 2B, 2R	Change:	
Dept:			Please revise sample ID to 11215131-120121-IDW-SPS-NE DECON reissue report
TAT:	3		

=====

Above Changes Per: Kathy Shaw

Date/Time: 4/5/2022

To Client: This Change Order is confirmation of the revisions, previously discussed with the Client Service Representative.

MS Volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Instrument Performance Checks (BFB)
- Surrogate Recovery Summaries

Method Blank Summary

Job Number: JD35488

Account: CRATXH GHD Services Inc.

Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V2B8531-MB	2B187880.D	1	12/09/21	ED	n/a	n/a	V2B8531

The QC reported here applies to the following samples:

Method: SW846 8260D

JD35488-1

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	6.0	ug/l	
75-05-8	Acetonitrile	ND	100	7.4	ug/l	
107-13-1	Acrylonitrile	ND	10	1.0	ug/l	
71-43-2	Benzene	ND	0.50	0.43	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.58	ug/l	
75-25-2	Bromoform	ND	1.0	0.63	ug/l	
74-83-9	Bromomethane	ND	2.0	1.6	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	6.9	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.95	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.55	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.56	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.48	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.51	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	1.4	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.60	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.59	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.43	ug/l	
542-75-6	1,3-Dichloropropene (total)	ND	1.0	0.43	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.60	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.56	ug/l	
78-83-1	Isobutyl alcohol	ND	50	12	ug/l	
126-98-7	Methacrylonitrile	ND	10	1.0	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.9	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.61	ug/l	
100-42-5	Styrene	ND	1.0	0.70	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.60	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.65	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.90	ug/l	
108-88-3	Toluene	ND	1.0	0.53	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.54	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.53	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.53	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.84	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.70	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.79	ug/l	

Method Blank Summary

Job Number: JD35488
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V2B8531-MB	2B187880.D	1	12/09/21	ED	n/a	n/a	V2B8531

The QC reported here applies to the following samples:

Method: SW846 8260D

JD35488-1

CAS No.	Compound	Result	RL	MDL	Units	Q
	m,p-Xylene	ND	1.0	0.78	ug/l	
95-47-6	o-Xylene	ND	1.0	0.59	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.59	ug/l	

CAS No.	Surrogate Recoveries	Limits
1868-53-7	Dibromofluoromethane	99% 76-120%
17060-07-0	1,2-Dichloroethane-D4	92% 64-135%
2037-26-5	Toluene-D8	94% 76-117%
460-00-4	4-Bromofluorobenzene	104% 72-122%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

6.1.1
6

Method Blank Summary

Job Number: JD35488**Account:** CRATXH GHD Services Inc.**Project:** SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VL10104-MB	L335964.D	1	12/14/21	NW	n/a	n/a	VL10104

The QC reported here applies to the following samples:**Method:** SW846 8260D

JD35488-3, JD35488-4

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	6.0	ug/l	
75-05-8	Acetonitrile	ND	100	7.4	ug/l	
107-13-1	Acrylonitrile	ND	10	1.0	ug/l	
71-43-2	Benzene	ND	0.50	0.43	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.58	ug/l	
75-25-2	Bromoform	ND	1.0	0.63	ug/l	
74-83-9	Bromomethane	ND	2.0	1.6	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	6.9	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.95	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.55	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.56	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.48	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.51	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	1.4	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.60	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.59	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.43	ug/l	
542-75-6	1,3-Dichloropropene (total)	ND	1.0	0.43	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.60	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.56	ug/l	
78-83-1	Isobutyl alcohol	ND	50	12	ug/l	
126-98-7	Methacrylonitrile	ND	10	1.0	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.9	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.61	ug/l	
100-42-5	Styrene	ND	1.0	0.70	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.60	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.65	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.90	ug/l	
108-88-3	Toluene	ND	1.0	0.53	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.54	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.53	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.53	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.84	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.70	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.79	ug/l	

Method Blank Summary

Job Number: JD35488
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VL10104-MB	L335964.D	1	12/14/21	NW	n/a	n/a	VL10104

The QC reported here applies to the following samples:

Method: SW846 8260D

JD35488-3, JD35488-4

CAS No.	Compound	Result	RL	MDL	Units	Q
	m,p-Xylene	ND	1.0	0.78	ug/l	
95-47-6	o-Xylene	ND	1.0	0.59	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.59	ug/l	

CAS No.	Surrogate Recoveries	Limits
1868-53-7	Dibromofluoromethane	107% 76-120%
17060-07-0	1,2-Dichloroethane-D4	115% 64-135%
2037-26-5	Toluene-D8	98% 76-117%
460-00-4	4-Bromofluorobenzene	107% 72-122%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

6.12
6

Method Blank Summary

Job Number: JD35488
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V2V3448-MB	2V83658.D	1	12/15/21	NW	n/a	n/a	V2V3448

The QC reported here applies to the following samples:

Method: SW846 8260D

JD35488-2, JD35488-4, JD35488-5

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	6.0	ug/l	
75-05-8	Acetonitrile	ND	100	7.4	ug/l	
107-13-1	Acrylonitrile	ND	10	1.0	ug/l	
71-43-2	Benzene	ND	0.50	0.43	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.58	ug/l	
75-25-2	Bromoform	ND	1.0	0.63	ug/l	
74-83-9	Bromomethane	ND	2.0	1.6	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	6.9	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.95	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.55	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.56	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.48	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.51	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	1.4	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.60	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.59	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.43	ug/l	
542-75-6	1,3-Dichloropropene (total)	ND	1.0	0.43	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.60	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.56	ug/l	
78-83-1	Isobutyl alcohol	ND	50	12	ug/l	
126-98-7	Methacrylonitrile	ND	10	1.0	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.9	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.61	ug/l	
100-42-5	Styrene	ND	1.0	0.70	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.60	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.65	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.90	ug/l	
108-88-3	Toluene	ND	1.0	0.53	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.54	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.53	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.53	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.84	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.70	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.79	ug/l	

Method Blank Summary

Job Number: JD35488
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V2V3448-MB	2V83658.D	1	12/15/21	NW	n/a	n/a	V2V3448

The QC reported here applies to the following samples:

Method: SW846 8260D

JD35488-2, JD35488-4, JD35488-5

CAS No.	Compound	Result	RL	MDL	Units	Q
	m,p-Xylene	ND	1.0	0.78	ug/l	
95-47-6	o-Xylene	ND	1.0	0.59	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.59	ug/l	

CAS No.	Surrogate Recoveries	Limits	
1868-53-7	Dibromofluoromethane	93%	76-120%
17060-07-0	1,2-Dichloroethane-D4	107%	64-135%
2037-26-5	Toluene-D8	105%	76-117%
460-00-4	4-Bromofluorobenzene	95%	72-122%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

Method Blank Summary

Job Number: JD35488
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V3D7311-MB	3D172302.D	1	12/28/21	NH	n/a	n/a	V3D7311

The QC reported here applies to the following samples:

Method: SW846 8260D

JD35488-6, JD35488-7

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	6.0	ug/l	
75-05-8	Acetonitrile	ND	100	7.4	ug/l	
107-13-1	Acrylonitrile	ND	10	1.0	ug/l	
71-43-2	Benzene	ND	0.50	0.43	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.58	ug/l	
75-25-2	Bromoform	ND	1.0	0.63	ug/l	
74-83-9	Bromomethane	ND	2.0	1.6	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	6.9	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.95	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.55	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.56	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.48	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.51	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	1.4	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.60	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.59	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.43	ug/l	
542-75-6	1,3-Dichloropropene (total)	ND	1.0	0.43	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.60	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.56	ug/l	
78-83-1	Isobutyl alcohol	ND	50	12	ug/l	
126-98-7	Methacrylonitrile	ND	10	1.0	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.9	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.61	ug/l	
100-42-5	Styrene	ND	1.0	0.70	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.60	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.65	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.90	ug/l	
108-88-3	Toluene	ND	1.0	0.53	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.54	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.53	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.53	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.84	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.70	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.79	ug/l	

Method Blank Summary

Job Number: JD35488
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V3D7311-MB	3D172302.D	1	12/28/21	NH	n/a	n/a	V3D7311

The QC reported here applies to the following samples:

Method: SW846 8260D

JD35488-6, JD35488-7

CAS No.	Compound	Result	RL	MDL	Units	Q
	m,p-Xylene	ND	1.0	0.78	ug/l	
95-47-6	o-Xylene	ND	1.0	0.59	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.59	ug/l	

CAS No.	Surrogate Recoveries	Limits	
1868-53-7	Dibromofluoromethane	83%	76-120%
17060-07-0	1,2-Dichloroethane-D4	101%	64-135%
2037-26-5	Toluene-D8	102%	76-117%
460-00-4	4-Bromofluorobenzene	98%	72-122%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

6.1.4
6

Method Blank Summary

Job Number: JD35488**Account:** CRATXH GHD Services Inc.**Project:** SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V1A9385-MB	1A217933.D	1	12/16/21	ED	n/a	n/a	V1A9385

The QC reported here applies to the following samples:**Method:** SW846 8260D

GP37553-LB18

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	6.0	ug/l	
75-05-8	Acetonitrile	ND	100	7.4	ug/l	
107-13-1	Acrylonitrile	ND	10	1.0	ug/l	
71-43-2	Benzene	ND	0.50	0.43	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.58	ug/l	
75-25-2	Bromoform	ND	1.0	0.63	ug/l	
74-83-9	Bromomethane	ND	2.0	1.6	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	6.9	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.95	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.55	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.56	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.48	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.51	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	1.4	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.60	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.59	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.43	ug/l	
542-75-6	1,3-Dichloropropene (total)	ND	1.0	0.43	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.60	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.56	ug/l	
78-83-1	Isobutyl alcohol	ND	50	12	ug/l	
126-98-7	Methacrylonitrile	ND	10	1.0	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.9	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.61	ug/l	
100-42-5	Styrene	ND	1.0	0.70	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.60	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.65	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.90	ug/l	
108-88-3	Toluene	ND	1.0	0.53	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.54	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.53	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.53	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.84	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.70	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.79	ug/l	

Method Blank Summary

Job Number: JD35488
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V1A9385-MB	1A217933.D	1	12/16/21	ED	n/a	n/a	V1A9385

The QC reported here applies to the following samples:

Method: SW846 8260D

GP37553-LB18

CAS No.	Compound	Result	RL	MDL	Units	Q
	m,p-Xylene	ND	1.0	0.78	ug/l	
95-47-6	o-Xylene	ND	1.0	0.59	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.59	ug/l	

CAS No.	Surrogate Recoveries	Limits
1868-53-7	Dibromofluoromethane	92% 76-120%
17060-07-0	1,2-Dichloroethane-D4	117% 64-135%
2037-26-5	Toluene-D8	112% 76-117%
460-00-4	4-Bromofluorobenzene	111% 72-122%

Leachate Blank Summary

Job Number: JD35488
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GP37443-LB10	2B187881.D	5	12/09/21	ED	12/06/21	GP37443	V2B8531

The QC reported here applies to the following samples:

Method: SW846 8260D

JD35488-1

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	50	30	ug/l	
75-05-8	Acetonitrile	ND	500	37	ug/l	
107-13-1	Acrylonitrile	ND	50	5.2	ug/l	
71-43-2	Benzene	ND	2.5	2.1	ug/l	
75-27-4	Bromodichloromethane	ND	5.0	2.9	ug/l	
75-25-2	Bromoform	ND	5.0	3.2	ug/l	
74-83-9	Bromomethane	ND	10	8.2	ug/l	
78-93-3	2-Butanone (MEK)	ND	50	34	ug/l	
75-15-0	Carbon disulfide	ND	10	4.8	ug/l	
56-23-5	Carbon tetrachloride	ND	5.0	2.8	ug/l	
108-90-7	Chlorobenzene	ND	5.0	2.8	ug/l	
67-66-3	Chloroform	9.4	5.0	2.5	ug/l	
106-93-4	1,2-Dibromoethane	ND	5.0	2.4	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	5.0	2.5	ug/l	
75-71-8	Dichlorodifluoromethane	ND	10	6.8	ug/l	
107-06-2	1,2-Dichloroethane	ND	5.0	3.0	ug/l	
75-35-4	1,1-Dichloroethene	ND	5.0	3.0	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	5.0	2.2	ug/l	
542-75-6	1,3-Dichloropropene (total)	ND	5.0	2.2	ug/l	
100-41-4	Ethylbenzene	ND	5.0	3.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	10	2.8	ug/l	
78-83-1	Isobutyl alcohol	ND	250	61	ug/l	
126-98-7	Methacrylonitrile	ND	50	5.0	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	25	9.3	ug/l	
75-09-2	Methylene chloride	ND	10	3.0	ug/l	
100-42-5	Styrene	ND	5.0	3.5	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	5.0	3.0	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.0	3.3	ug/l	
127-18-4	Tetrachloroethene	ND	5.0	4.5	ug/l	
108-88-3	Toluene	ND	5.0	2.7	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	5.0	2.7	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	5.0	2.7	ug/l	
79-01-6	Trichloroethene	ND	5.0	2.6	ug/l	
75-69-4	Trichlorofluoromethane	ND	10	4.2	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	10	3.5	ug/l	
75-01-4	Vinyl chloride	ND	5.0	3.9	ug/l	

Leachate Blank Summary

Job Number: JD35488
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GP37443-LB10	2B187881.D	5	12/09/21	ED	12/06/21	GP37443	V2B8531

The QC reported here applies to the following samples:

Method: SW846 8260D

JD35488-1

CAS No.	Compound	Result	RL	MDL	Units	Q
	m,p-Xylene	ND	5.0	3.9	ug/l	
95-47-6	o-Xylene	ND	5.0	3.0	ug/l	
1330-20-7	Xylene (total)	ND	5.0	3.0	ug/l	

CAS No.	Surrogate Recoveries	Limits
1868-53-7	Dibromofluoromethane	100% 76-120%
17060-07-0	1,2-Dichloroethane-D4	93% 64-135%
2037-26-5	Toluene-D8	94% 76-117%
460-00-4	4-Bromofluorobenzene	103% 72-122%

6.2.1
6

Leachate Blank Summary

Job Number: JD35488
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GP37457-LB11	2B187882.D	5	12/09/21	ED	12/07/21	GP37457	V2B8531

The QC reported here applies to the following samples:

Method: SW846 8260D

JD35488-2

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	50	30	ug/l	
75-05-8	Acetonitrile	ND	500	37	ug/l	
107-13-1	Acrylonitrile	ND	50	5.2	ug/l	
71-43-2	Benzene	ND	2.5	2.1	ug/l	
75-27-4	Bromodichloromethane	ND	5.0	2.9	ug/l	
75-25-2	Bromoform	ND	5.0	3.2	ug/l	
74-83-9	Bromomethane	ND	10	8.2	ug/l	
78-93-3	2-Butanone (MEK)	ND	50	34	ug/l	
75-15-0	Carbon disulfide	ND	10	4.8	ug/l	
56-23-5	Carbon tetrachloride	ND	5.0	2.8	ug/l	
108-90-7	Chlorobenzene	ND	5.0	2.8	ug/l	
67-66-3	Chloroform	16.2	5.0	2.5	ug/l	
106-93-4	1,2-Dibromoethane	ND	5.0	2.4	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	5.0	2.5	ug/l	
75-71-8	Dichlorodifluoromethane	ND	10	6.8	ug/l	
107-06-2	1,2-Dichloroethane	ND	5.0	3.0	ug/l	
75-35-4	1,1-Dichloroethene	ND	5.0	3.0	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	5.0	2.2	ug/l	
542-75-6	1,3-Dichloropropene (total)	ND	5.0	2.2	ug/l	
100-41-4	Ethylbenzene	ND	5.0	3.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	10	2.8	ug/l	
78-83-1	Isobutyl alcohol	ND	250	61	ug/l	
126-98-7	Methacrylonitrile	ND	50	5.0	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	25	9.3	ug/l	
75-09-2	Methylene chloride	ND	10	3.0	ug/l	
100-42-5	Styrene	ND	5.0	3.5	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	5.0	3.0	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.0	3.3	ug/l	
127-18-4	Tetrachloroethene	ND	5.0	4.5	ug/l	
108-88-3	Toluene	ND	5.0	2.7	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	5.0	2.7	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	5.0	2.7	ug/l	
79-01-6	Trichloroethene	ND	5.0	2.6	ug/l	
75-69-4	Trichlorofluoromethane	ND	10	4.2	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	10	3.5	ug/l	
75-01-4	Vinyl chloride	ND	5.0	3.9	ug/l	

Leachate Blank Summary

Job Number: JD35488
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GP37457-LB11	2B187882.D	5	12/09/21	ED	12/07/21	GP37457	V2B8531

The QC reported here applies to the following samples:

Method: SW846 8260D

JD35488-2

CAS No.	Compound	Result	RL	MDL	Units	Q
	m,p-Xylene	ND	5.0	3.9	ug/l	
95-47-6	o-Xylene	ND	5.0	3.0	ug/l	
1330-20-7	Xylene (total)	ND	5.0	3.0	ug/l	

CAS No.	Surrogate Recoveries	Limits
1868-53-7	Dibromofluoromethane	99% 76-120%
17060-07-0	1,2-Dichloroethane-D4	92% 64-135%
2037-26-5	Toluene-D8	95% 76-117%
460-00-4	4-Bromofluorobenzene	103% 72-122%

6.2.2
6

Leachate Blank Summary

Job Number: JD35488
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GP37525-LB16	L335967.D	5	12/15/21	NW	12/10/21	GP37525	VL10104

The QC reported here applies to the following samples:

Method: SW846 8260D

JD35488-4

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	50	30	ug/l	
75-05-8	Acetonitrile	ND	500	37	ug/l	
107-13-1	Acrylonitrile	ND	50	5.2	ug/l	
71-43-2	Benzene	ND	2.5	2.1	ug/l	
75-27-4	Bromodichloromethane	ND	5.0	2.9	ug/l	
75-25-2	Bromoform	ND	5.0	3.2	ug/l	
74-83-9	Bromomethane	ND	10	8.2	ug/l	
78-93-3	2-Butanone (MEK)	ND	50	34	ug/l	
75-15-0	Carbon disulfide	ND	10	4.8	ug/l	
56-23-5	Carbon tetrachloride	ND	5.0	2.8	ug/l	
108-90-7	Chlorobenzene	ND	5.0	2.8	ug/l	
67-66-3	Chloroform	16.2	5.0	2.5	ug/l	
106-93-4	1,2-Dibromoethane	ND	5.0	2.4	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	5.0	2.5	ug/l	
75-71-8	Dichlorodifluoromethane	ND	10	6.8	ug/l	
107-06-2	1,2-Dichloroethane	ND	5.0	3.0	ug/l	
75-35-4	1,1-Dichloroethene	ND	5.0	3.0	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	5.0	2.2	ug/l	
542-75-6	1,3-Dichloropropene (total)	ND	5.0	2.2	ug/l	
100-41-4	Ethylbenzene	ND	5.0	3.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	10	2.8	ug/l	
78-83-1	Isobutyl alcohol	ND	250	61	ug/l	
126-98-7	Methacrylonitrile	ND	50	5.0	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	25	9.3	ug/l	
75-09-2	Methylene chloride	ND	10	3.0	ug/l	
100-42-5	Styrene	ND	5.0	3.5	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	5.0	3.0	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.0	3.3	ug/l	
127-18-4	Tetrachloroethene	ND	5.0	4.5	ug/l	
108-88-3	Toluene	ND	5.0	2.7	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	5.0	2.7	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	5.0	2.7	ug/l	
79-01-6	Trichloroethene	ND	5.0	2.6	ug/l	
75-69-4	Trichlorofluoromethane	ND	10	4.2	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	10	3.5	ug/l	
75-01-4	Vinyl chloride	ND	5.0	3.9	ug/l	

Leachate Blank Summary

Job Number: JD35488
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GP37525-LB16	L335967.D	5	12/15/21	NW	12/10/21	GP37525	VL10104

The QC reported here applies to the following samples:

Method: SW846 8260D

JD35488-4

CAS No.	Compound	Result	RL	MDL	Units	Q
	m,p-Xylene	ND	5.0	3.9	ug/l	
95-47-6	o-Xylene	ND	5.0	3.0	ug/l	
1330-20-7	Xylene (total)	ND	5.0	3.0	ug/l	

CAS No.	Surrogate Recoveries	Limits	
1868-53-7	Dibromofluoromethane	103%	76-120%
17060-07-0	1,2-Dichloroethane-D4	114%	64-135%
2037-26-5	Toluene-D8	98%	76-117%
460-00-4	4-Bromofluorobenzene	109%	72-122%

Leachate Blank Summary

Job Number: JD35488
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GP37528-LB17	L335968.D	5	12/15/21	NW	12/10/21	GP37528	VL10104

The QC reported here applies to the following samples:

Method: SW846 8260D

JD35488-3

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	50	30	ug/l	
75-05-8	Acetonitrile	ND	500	37	ug/l	
107-13-1	Acrylonitrile	ND	50	5.2	ug/l	
71-43-2	Benzene	ND	2.5	2.1	ug/l	
75-27-4	Bromodichloromethane	ND	5.0	2.9	ug/l	
75-25-2	Bromoform	ND	5.0	3.2	ug/l	
74-83-9	Bromomethane	ND	10	8.2	ug/l	
78-93-3	2-Butanone (MEK)	ND	50	34	ug/l	
75-15-0	Carbon disulfide	ND	10	4.8	ug/l	
56-23-5	Carbon tetrachloride	ND	5.0	2.8	ug/l	
108-90-7	Chlorobenzene	ND	5.0	2.8	ug/l	
67-66-3	Chloroform	7.5	5.0	2.5	ug/l	
106-93-4	1,2-Dibromoethane	ND	5.0	2.4	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	5.0	2.5	ug/l	
75-71-8	Dichlorodifluoromethane	ND	10	6.8	ug/l	
107-06-2	1,2-Dichloroethane	ND	5.0	3.0	ug/l	
75-35-4	1,1-Dichloroethene	ND	5.0	3.0	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	5.0	2.2	ug/l	
542-75-6	1,3-Dichloropropene (total)	ND	5.0	2.2	ug/l	
100-41-4	Ethylbenzene	ND	5.0	3.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	10	2.8	ug/l	
78-83-1	Isobutyl alcohol	ND	250	61	ug/l	
126-98-7	Methacrylonitrile	ND	50	5.0	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	25	9.3	ug/l	
75-09-2	Methylene chloride	ND	10	3.0	ug/l	
100-42-5	Styrene	ND	5.0	3.5	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	5.0	3.0	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.0	3.3	ug/l	
127-18-4	Tetrachloroethene	ND	5.0	4.5	ug/l	
108-88-3	Toluene	ND	5.0	2.7	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	5.0	2.7	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	5.0	2.7	ug/l	
79-01-6	Trichloroethene	ND	5.0	2.6	ug/l	
75-69-4	Trichlorofluoromethane	ND	10	4.2	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	10	3.5	ug/l	
75-01-4	Vinyl chloride	ND	5.0	3.9	ug/l	

Leachate Blank Summary

Job Number: JD35488
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GP37528-LB17	L335968.D	5	12/15/21	NW	12/10/21	GP37528	VL10104

The QC reported here applies to the following samples:

Method: SW846 8260D

JD35488-3

CAS No.	Compound	Result	RL	MDL	Units	Q
	m,p-Xylene	ND	5.0	3.9	ug/l	
95-47-6	o-Xylene	ND	5.0	3.0	ug/l	
1330-20-7	Xylene (total)	ND	5.0	3.0	ug/l	

CAS No.	Surrogate Recoveries	Limits	
1868-53-7	Dibromofluoromethane	105%	76-120%
17060-07-0	1,2-Dichloroethane-D4	117%	64-135%
2037-26-5	Toluene-D8	98%	76-117%
460-00-4	4-Bromofluorobenzene	107%	72-122%

Leachate Blank Summary

Job Number: JD35488
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GP37553-LB18	1A217935.D	5	12/16/21	ED	12/13/21	GP37553	V1A9385

The QC reported here applies to the following samples:

Method: SW846 8260D

JD35488-5

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	50	30	ug/l	
75-05-8	Acetonitrile	ND	500	37	ug/l	
107-13-1	Acrylonitrile	ND	50	5.2	ug/l	
71-43-2	Benzene	119	2.5	2.1	ug/l	
75-27-4	Bromodichloromethane	ND	5.0	2.9	ug/l	
75-25-2	Bromoform	ND	5.0	3.2	ug/l	
74-83-9	Bromomethane	ND	10	8.2	ug/l	
78-93-3	2-Butanone (MEK)	ND	50	34	ug/l	
75-15-0	Carbon disulfide	ND	10	4.8	ug/l	
56-23-5	Carbon tetrachloride	ND	5.0	2.8	ug/l	
108-90-7	Chlorobenzene	ND	5.0	2.8	ug/l	
67-66-3	Chloroform	6.8	5.0	2.5	ug/l	
106-93-4	1,2-Dibromoethane	ND	5.0	2.4	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	5.0	2.5	ug/l	
75-71-8	Dichlorodifluoromethane	ND	10	6.8	ug/l	
107-06-2	1,2-Dichloroethane	ND	5.0	3.0	ug/l	
75-35-4	1,1-Dichloroethene	ND	5.0	3.0	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	5.0	2.2	ug/l	
542-75-6	1,3-Dichloropropene (total)	ND	5.0	2.2	ug/l	
100-41-4	Ethylbenzene	180	5.0	3.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	10	2.8	ug/l	
78-83-1	Isobutyl alcohol	393	250	61	ug/l	
126-98-7	Methacrylonitrile	ND	50	5.0	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	25	9.3	ug/l	
75-09-2	Methylene chloride	ND	10	3.0	ug/l	
100-42-5	Styrene	ND	5.0	3.5	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	5.0	3.0	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.0	3.3	ug/l	
127-18-4	Tetrachloroethene	ND	5.0	4.5	ug/l	
108-88-3	Toluene	891	5.0	2.7	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	5.0	2.7	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	5.0	2.7	ug/l	
79-01-6	Trichloroethene	ND	5.0	2.6	ug/l	
75-69-4	Trichlorofluoromethane	ND	10	4.2	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	10	3.5	ug/l	
75-01-4	Vinyl chloride	ND	5.0	3.9	ug/l	

Leachate Blank Summary

Job Number: JD35488
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GP37553-LB18	1A217935.D	5	12/16/21	ED	12/13/21	GP37553	V1A9385

The QC reported here applies to the following samples:

Method: SW846 8260D

JD35488-5

CAS No.	Compound	Result	RL	MDL	Units	Q
	m,p-Xylene	642	5.0	3.9	ug/l	
95-47-6	o-Xylene	259	5.0	3.0	ug/l	
1330-20-7	Xylene (total)	901	5.0	3.0	ug/l	

CAS No.	Surrogate Recoveries	Limits
1868-53-7	Dibromofluoromethane	91% 76-120%
17060-07-0	1,2-Dichloroethane-D4	112% 64-135%
2037-26-5	Toluene-D8	113% 76-117%
460-00-4	4-Bromofluorobenzene	108% 72-122%

Leachate Blank Summary

Job Number: JD35488
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GP37684-LB27	1A218235.D	5	12/22/21	ED	12/20/21	GP37684	V1A9396

The QC reported here applies to the following samples:

Method: SW846 8260D

JD35488-6

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	50	30	ug/l	
75-05-8	Acetonitrile	ND	500	37	ug/l	
107-13-1	Acrylonitrile	ND	50	5.2	ug/l	
71-43-2	Benzene	ND	2.5	2.1	ug/l	
75-27-4	Bromodichloromethane	ND	5.0	2.9	ug/l	
75-25-2	Bromoform	ND	5.0	3.2	ug/l	
74-83-9	Bromomethane	ND	10	8.2	ug/l	
78-93-3	2-Butanone (MEK)	ND	50	34	ug/l	
75-15-0	Carbon disulfide	ND	10	4.8	ug/l	
56-23-5	Carbon tetrachloride	ND	5.0	2.8	ug/l	
108-90-7	Chlorobenzene	ND	5.0	2.8	ug/l	
67-66-3	Chloroform	10.6	5.0	2.5	ug/l	
106-93-4	1,2-Dibromoethane	ND	5.0	2.4	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	5.0	2.5	ug/l	
75-71-8	Dichlorodifluoromethane	ND	10	6.8	ug/l	
107-06-2	1,2-Dichloroethane	ND	5.0	3.0	ug/l	
75-35-4	1,1-Dichloroethene	ND	5.0	3.0	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	5.0	2.2	ug/l	
542-75-6	1,3-Dichloropropene (total)	ND	5.0	2.2	ug/l	
100-41-4	Ethylbenzene	ND	5.0	3.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	10	2.8	ug/l	
78-83-1	Isobutyl alcohol	482	250	61	ug/l	
126-98-7	Methacrylonitrile	ND	50	5.0	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	25	9.3	ug/l	
75-09-2	Methylene chloride	ND	10	3.0	ug/l	
100-42-5	Styrene	ND	5.0	3.5	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	5.0	3.0	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.0	3.3	ug/l	
127-18-4	Tetrachloroethene	ND	5.0	4.5	ug/l	
108-88-3	Toluene	ND	5.0	2.7	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	5.0	2.7	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	5.0	2.7	ug/l	
79-01-6	Trichloroethene	ND	5.0	2.6	ug/l	
75-69-4	Trichlorofluoromethane	ND	10	4.2	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	10	3.5	ug/l	
75-01-4	Vinyl chloride	ND	5.0	3.9	ug/l	

Leachate Blank Summary

Job Number: JD35488
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GP37684-LB27	1A218235.D	5	12/22/21	ED	12/20/21	GP37684	V1A9396

The QC reported here applies to the following samples:

Method: SW846 8260D

JD35488-6

CAS No.	Compound	Result	RL	MDL	Units	Q
	m,p-Xylene	ND	5.0	3.9	ug/l	
95-47-6	o-Xylene	ND	5.0	3.0	ug/l	
1330-20-7	Xylene (total)	ND	5.0	3.0	ug/l	

CAS No.	Surrogate Recoveries	Limits
1868-53-7	Dibromofluoromethane	95% 76-120%
17060-07-0	1,2-Dichloroethane-D4	118% 64-135%
2037-26-5	Toluene-D8	114% 76-117%
460-00-4	4-Bromofluorobenzene	111% 72-122%

6.2.6
6

Leachate Blank Summary

Job Number: JD35488
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GP37747-LB8	3D172304.D	5	12/28/21	NH	12/23/21	GP37747	V3D7311

The QC reported here applies to the following samples:

Method: SW846 8260D

JD35488-7

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	50	30	ug/l	
75-05-8	Acetonitrile	ND	500	37	ug/l	
107-13-1	Acrylonitrile	ND	50	5.2	ug/l	
71-43-2	Benzene	ND	2.5	2.1	ug/l	
75-27-4	Bromodichloromethane	ND	5.0	2.9	ug/l	
75-25-2	Bromoform	ND	5.0	3.2	ug/l	
74-83-9	Bromomethane	ND	10	8.2	ug/l	
78-93-3	2-Butanone (MEK)	ND	50	34	ug/l	
75-15-0	Carbon disulfide	ND	10	4.8	ug/l	
56-23-5	Carbon tetrachloride	ND	5.0	2.8	ug/l	
108-90-7	Chlorobenzene	ND	5.0	2.8	ug/l	
67-66-3	Chloroform	15.3	5.0	2.5	ug/l	
106-93-4	1,2-Dibromoethane	ND	5.0	2.4	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	5.0	2.5	ug/l	
75-71-8	Dichlorodifluoromethane	ND	10	6.8	ug/l	
107-06-2	1,2-Dichloroethane	ND	5.0	3.0	ug/l	
75-35-4	1,1-Dichloroethene	ND	5.0	3.0	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	5.0	2.2	ug/l	
542-75-6	1,3-Dichloropropene (total)	ND	5.0	2.2	ug/l	
100-41-4	Ethylbenzene	ND	5.0	3.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	10	2.8	ug/l	
78-83-1	Isobutyl alcohol	ND	250	61	ug/l	
126-98-7	Methacrylonitrile	ND	50	5.0	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	25	9.3	ug/l	
75-09-2	Methylene chloride	ND	10	3.0	ug/l	
100-42-5	Styrene	ND	5.0	3.5	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	5.0	3.0	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.0	3.3	ug/l	
127-18-4	Tetrachloroethene	ND	5.0	4.5	ug/l	
108-88-3	Toluene	ND	5.0	2.7	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	5.0	2.7	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	5.0	2.7	ug/l	
79-01-6	Trichloroethene	ND	5.0	2.6	ug/l	
75-69-4	Trichlorofluoromethane	ND	10	4.2	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	10	3.5	ug/l	
75-01-4	Vinyl chloride	ND	5.0	3.9	ug/l	

Leachate Blank Summary

Job Number: JD35488
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GP37747-LB8	3D172304.D	5	12/28/21	NH	12/23/21	GP37747	V3D7311

The QC reported here applies to the following samples:

Method: SW846 8260D

JD35488-7

CAS No.	Compound	Result	RL	MDL	Units	Q
	m,p-Xylene	ND	5.0	3.9	ug/l	
95-47-6	o-Xylene	ND	5.0	3.0	ug/l	
1330-20-7	Xylene (total)	ND	5.0	3.0	ug/l	

CAS No.	Surrogate Recoveries	Limits	
1868-53-7	Dibromofluoromethane	84%	76-120%
17060-07-0	1,2-Dichloroethane-D4	100%	64-135%
2037-26-5	Toluene-D8	103%	76-117%
460-00-4	4-Bromofluorobenzene	98%	72-122%

6.2.7
6

Blank Spike Summary

Job Number: JD35488
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V2B8531-BS	2B187878.D	1	12/09/21	ED	n/a	n/a	V2B8531

The QC reported here applies to the following samples:

Method: SW846 8260D

JD35488-1

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
67-64-1	Acetone	200	220	110	51-151
75-05-8	Acetonitrile	500	535	107	53-136
107-13-1	Acrylonitrile	50	43.6	87	61-131
71-43-2	Benzene	50	47.4	95	75-122
75-27-4	Bromodichloromethane	50	45.1	90	77-128
75-25-2	Bromoform	50	44.1	88	67-141
74-83-9	Bromomethane	50	35.5	71	53-152
78-93-3	2-Butanone (MEK)	200	188	94	64-130
75-15-0	Carbon disulfide	50	44.4	89	59-140
56-23-5	Carbon tetrachloride	50	46.2	92	75-148
108-90-7	Chlorobenzene	50	45.1	90	76-124
67-66-3	Chloroform	50	42.4	85	77-124
106-93-4	1,2-Dibromoethane	50	43.0	86	75-130
106-46-7	1,4-Dichlorobenzene	50	51.5	103	71-123
75-71-8	Dichlorodifluoromethane	50	47.7	95	42-152
107-06-2	1,2-Dichloroethane	50	41.4	83	66-150
75-35-4	1,1-Dichloroethene	50	46.0	92	61-132
10061-02-6	trans-1,3-Dichloropropene	50	43.1	86	75-132
542-75-6	1,3-Dichloropropene (total)	100	91.3	91	76-127
100-41-4	Ethylbenzene	50	42.1	84	77-124
87-68-3	Hexachlorobutadiene	50	51.5	103	66-144
78-83-1	Isobutyl alcohol	500	507	101	59-142
126-98-7	Methacrylonitrile	50	45.9	92	54-135
108-10-1	4-Methyl-2-pentanone(MIBK)	200	225	113	63-135
75-09-2	Methylene chloride	50	44.1	88	69-122
100-42-5	Styrene	50	42.9	86	78-126
630-20-6	1,1,1,2-Tetrachloroethane	50	46.2	92	78-133
79-34-5	1,1,2,2-Tetrachloroethane	50	49.7	99	66-125
127-18-4	Tetrachloroethene	50	46.1	92	70-136
108-88-3	Toluene	50	44.1	88	76-126
71-55-6	1,1,1-Trichloroethane	50	45.6	91	77-136
79-00-5	1,1,2-Trichloroethane	50	42.6	85	75-123
79-01-6	Trichloroethene	50	52.1	104	79-126
75-69-4	Trichlorofluoromethane	50	43.1	86	56-154
96-18-4	1,2,3-Trichloropropane	50	48.4	97	64-121
75-01-4	Vinyl chloride	50	41.2	82	56-146

* = Outside of Control Limits.

Blank Spike Summary

Job Number: JD35488
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V2B8531-BS	2B187878.D	1	12/09/21	ED	n/a	n/a	V2B8531

The QC reported here applies to the following samples:

Method: SW846 8260D

JD35488-1

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
	m,p-Xylene	100	89.8	90	77-125
95-47-6	o-Xylene	50	44.7	89	76-126
1330-20-7	Xylene (total)	150	135	90	77-125

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	96%	76-120%
17060-07-0	1,2-Dichloroethane-D4	87%	64-135%
2037-26-5	Toluene-D8	91%	76-117%
460-00-4	4-Bromofluorobenzene	98%	72-122%

* = Outside of Control Limits.

Blank Spike Summary

Job Number: JD35488
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VL10104-BS	L335962.D	1	12/14/21	NW	n/a	n/a	VL10104

The QC reported here applies to the following samples:

Method: SW846 8260D

JD35488-3, JD35488-4

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
67-64-1	Acetone	200	284	142	51-151
75-05-8	Acetonitrile	500	665	133	53-136
107-13-1	Acrylonitrile	50	56.2	112	61-131
71-43-2	Benzene	50	48.6	97	75-122
75-27-4	Bromodichloromethane	50	51.2	102	77-128
75-25-2	Bromoform	50	50.4	101	67-141
74-83-9	Bromomethane	50	53.1	106	53-152
78-93-3	2-Butanone (MEK)	200	303	152* a	64-130
75-15-0	Carbon disulfide	50	51.9	104	59-140
56-23-5	Carbon tetrachloride	50	52.0	104	75-148
108-90-7	Chlorobenzene	50	42.6	85	76-124
67-66-3	Chloroform	50	56.3	113	77-124
106-93-4	1,2-Dibromoethane	50	48.7	97	75-130
106-46-7	1,4-Dichlorobenzene	50	47.7	95	71-123
75-71-8	Dichlorodifluoromethane	50	42.5	85	42-152
107-06-2	1,2-Dichloroethane	50	50.3	101	66-150
75-35-4	1,1-Dichloroethene	50	51.9	104	61-132
10061-02-6	trans-1,3-Dichloropropene	50	47.5	95	75-132
542-75-6	1,3-Dichloropropene (total)	100	97.2	97	76-127
100-41-4	Ethylbenzene	50	42.4	85	77-124
87-68-3	Hexachlorobutadiene	50	46.0	92	66-144
78-83-1	Isobutyl alcohol	500	737	147* b	59-142
126-98-7	Methacrylonitrile	50	62.5	125	54-135
108-10-1	4-Methyl-2-pentanone(MIBK)	200	258	129	63-135
75-09-2	Methylene chloride	50	51.1	102	69-122
100-42-5	Styrene	50	43.0	86	78-126
630-20-6	1,1,1,2-Tetrachloroethane	50	45.4	91	78-133
79-34-5	1,1,2,2-Tetrachloroethane	50	57.6	115	66-125
127-18-4	Tetrachloroethene	50	42.1	84	70-136
108-88-3	Toluene	50	41.2	82	76-126
71-55-6	1,1,1-Trichloroethane	50	49.9	100	77-136
79-00-5	1,1,2-Trichloroethane	50	48.3	97	75-123
79-01-6	Trichloroethene	50	52.1	104	79-126
75-69-4	Trichlorofluoromethane	50	49.0	98	56-154
96-18-4	1,2,3-Trichloropropane	50	57.9	116	64-121
75-01-4	Vinyl chloride	50	42.7	85	56-146

* = Outside of Control Limits.

Blank Spike Summary

Job Number: JD35488
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VL10104-BS	L335962.D	1	12/14/21	NW	n/a	n/a	VL10104

The QC reported here applies to the following samples:

Method: SW846 8260D

JD35488-3, JD35488-4

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
	m,p-Xylene	100	83.5	84	77-125
95-47-6	o-Xylene	50	42.8	86	76-126
1330-20-7	Xylene (total)	150	126	84	77-125

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	108%	76-120%
17060-07-0	1,2-Dichloroethane-D4	111%	64-135%
2037-26-5	Toluene-D8	91%	76-117%
460-00-4	4-Bromofluorobenzene	111%	72-122%

- (a) High percent recovery and no associated positive reported in the QC batch.
- (b) Outside control limits. This compound is not reported in associated samples.

* = Outside of Control Limits.

Blank Spike Summary

Job Number: JD35488
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V2V3448-BS	2V83656.D	1	12/15/21	NW	n/a	n/a	V2V3448

The QC reported here applies to the following samples:

Method: SW846 8260D

JD35488-2, JD35488-4, JD35488-5

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
67-64-1	Acetone	200	228	114	51-151
75-05-8	Acetonitrile	500	610	122	53-136
107-13-1	Acrylonitrile	50	62.2	124	61-131
71-43-2	Benzene	50	48.8	98	75-122
75-27-4	Bromodichloromethane	50	50.4	101	77-128
75-25-2	Bromoform	50	54.4	109	67-141
74-83-9	Bromomethane	50	50.1	100	53-152
78-93-3	2-Butanone (MEK)	200	200	100	64-130
75-15-0	Carbon disulfide	50	47.1	94	59-140
56-23-5	Carbon tetrachloride	50	47.8	96	75-148
108-90-7	Chlorobenzene	50	54.4	109	76-124
67-66-3	Chloroform	50	48.8	98	77-124
106-93-4	1,2-Dibromoethane	50	57.7	115	75-130
106-46-7	1,4-Dichlorobenzene	50	47.0	94	71-123
75-71-8	Dichlorodifluoromethane	50	66.0	132	42-152
107-06-2	1,2-Dichloroethane	50	55.1	110	66-150
75-35-4	1,1-Dichloroethene	50	54.4	109	61-132
10061-02-6	trans-1,3-Dichloropropene	50	61.4	123	75-132
542-75-6	1,3-Dichloropropene (total)	100	113	113	76-127
100-41-4	Ethylbenzene	50	53.9	108	77-124
87-68-3	Hexachlorobutadiene	50	43.0	86	66-144
78-83-1	Isobutyl alcohol	500	602	120	59-142
126-98-7	Methacrylonitrile	50	50.9	102	54-135
108-10-1	4-Methyl-2-pentanone(MIBK)	200	252	126	63-135
75-09-2	Methylene chloride	50	43.9	88	69-122
100-42-5	Styrene	50	55.7	111	78-126
630-20-6	1,1,1,2-Tetrachloroethane	50	53.7	107	78-133
79-34-5	1,1,2,2-Tetrachloroethane	50	53.3	107	66-125
127-18-4	Tetrachloroethene	50	53.7	107	70-136
108-88-3	Toluene	50	52.8	106	76-126
71-55-6	1,1,1-Trichloroethane	50	49.2	98	77-136
79-00-5	1,1,2-Trichloroethane	50	57.7	115	75-123
79-01-6	Trichloroethene	50	48.6	97	79-126
75-69-4	Trichlorofluoromethane	50	55.7	111	56-154
96-18-4	1,2,3-Trichloropropane	50	53.2	106	64-121
75-01-4	Vinyl chloride	50	55.4	111	56-146

* = Outside of Control Limits.

Blank Spike Summary

Job Number: JD35488
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V2V3448-BS	2V83656.D	1	12/15/21	NW	n/a	n/a	V2V3448

The QC reported here applies to the following samples:

Method: SW846 8260D

JD35488-2, JD35488-4, JD35488-5

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
	m,p-Xylene	100	110	110	77-125
95-47-6	o-Xylene	50	54.3	109	76-126
1330-20-7	Xylene (total)	150	164	109	77-125

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	92%	76-120%
17060-07-0	1,2-Dichloroethane-D4	108%	64-135%
2037-26-5	Toluene-D8	101%	76-117%
460-00-4	4-Bromofluorobenzene	94%	72-122%

* = Outside of Control Limits.

Blank Spike Summary

Job Number: JD35488
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V3D7311-BS	3D172300.D	1	12/28/21	NH	n/a	n/a	V3D7311

The QC reported here applies to the following samples:

Method: SW846 8260D

JD35488-6, JD35488-7

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
67-64-1	Acetone	200	239	120	51-151
75-05-8	Acetonitrile	500	547	109	53-136
107-13-1	Acrylonitrile	50	68.5	137* a	61-131
71-43-2	Benzene	50	54.2	108	75-122
75-27-4	Bromodichloromethane	50	49.2	98	77-128
75-25-2	Bromoform	50	48.0	96	67-141
74-83-9	Bromomethane	50	32.0	64	53-152
78-93-3	2-Butanone (MEK)	200	218	109	64-130
75-15-0	Carbon disulfide	50	51.9	104	59-140
56-23-5	Carbon tetrachloride	50	44.8	90	75-148
108-90-7	Chlorobenzene	50	50.3	101	76-124
67-66-3	Chloroform	50	44.7	89	77-124
106-93-4	1,2-Dibromoethane	50	50.0	100	75-130
106-46-7	1,4-Dichlorobenzene	50	51.0	102	71-123
75-71-8	Dichlorodifluoromethane	50	41.2	82	42-152
107-06-2	1,2-Dichloroethane	50	47.4	95	66-150
75-35-4	1,1-Dichloroethene	50	49.9	100	61-132
10061-02-6	trans-1,3-Dichloropropene	50	52.0	104	75-132
542-75-6	1,3-Dichloropropene (total)	100	105	105	76-127
100-41-4	Ethylbenzene	50	50.6	101	77-124
87-68-3	Hexachlorobutadiene	50	59.5	119	66-144
78-83-1	Isobutyl alcohol	500	481	96	59-142
126-98-7	Methacrylonitrile	50	47.3	95	54-135
108-10-1	4-Methyl-2-pentanone(MIBK)	200	239	120	63-135
75-09-2	Methylene chloride	50	47.6	95	69-122
100-42-5	Styrene	50	50.4	101	78-126
630-20-6	1,1,1,2-Tetrachloroethane	50	47.7	95	78-133
79-34-5	1,1,2,2-Tetrachloroethane	50	56.6	113	66-125
127-18-4	Tetrachloroethene	50	53.4	107	70-136
108-88-3	Toluene	50	50.2	100	76-126
71-55-6	1,1,1-Trichloroethane	50	46.0	92	77-136
79-00-5	1,1,2-Trichloroethane	50	53.1	106	75-123
79-01-6	Trichloroethene	50	51.8	104	79-126
75-69-4	Trichlorofluoromethane	50	45.3	91	56-154
96-18-4	1,2,3-Trichloropropane	50	52.9	106	64-121
75-01-4	Vinyl chloride	50	42.3	85	56-146

* = Outside of Control Limits.

Blank Spike Summary

Job Number: JD35488
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V3D7311-BS	3D172300.D	1	12/28/21	NH	n/a	n/a	V3D7311

The QC reported here applies to the following samples:

Method: SW846 8260D

JD35488-6, JD35488-7

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
	m,p-Xylene	100	100	100	77-125
95-47-6	o-Xylene	50	50.7	101	76-126
1330-20-7	Xylene (total)	150	151	101	77-125

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	85%	76-120%
17060-07-0	1,2-Dichloroethane-D4	93%	64-135%
2037-26-5	Toluene-D8	97%	76-117%
460-00-4	4-Bromofluorobenzene	102%	72-122%

(a) High percent recovery and no associated positive reported in the QC batch.

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JD35488
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JD35487-2MS	2B187887.D	5	12/09/21	ED	n/a	n/a	V2B8531
JD35487-2MSD	2B187888.D	5	12/09/21	ED	n/a	n/a	V2B8531
JD35487-2	2B187883.D	5	12/09/21	ED	12/06/21	GP37443	V2B8531

The QC reported here applies to the following samples:

Method: SW846 8260D

JD35488-1

CAS No.	Compound	JD35487-2		MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD	
		ug/l	Q								
67-64-1	Acetone	ND		1000	1170	117	1000	1040	104	12	44-157/20
75-05-8	Acetonitrile	ND		2500	2480	99	2500	2460	98	1	45-141/18
107-13-1	Acrylonitrile	ND		250	252	101	250	249	100	1	54-135/14
71-43-2	Benzene	ND		250	240	96	250	244	98	2	38-139/13
75-27-4	Bromodichloromethane	ND		250	230	92	250	231	92	0	70-135/13
75-25-2	Bromoform	ND		250	223	89	250	223	89	0	53-139/13
74-83-9	Bromomethane	ND		250	165	66	250	168	67	2	44-150/18
78-93-3	2-Butanone (MEK)	ND		1000	1040	104	1000	974	97	7	58-140/14
75-15-0	Carbon disulfide	ND		250	226	90	250	229	92	1	34-136/21
56-23-5	Carbon tetrachloride	ND		250	241	96	250	241	96	0	50-161/18
108-90-7	Chlorobenzene	ND		250	229	92	250	233	93	2	65-128/12
67-66-3	Chloroform	10.9	B	250	218	83	250	217	82	0	66-132/14
106-93-4	1,2-Dibromoethane	ND		250	213	85	250	219	88	3	69-130/11
106-46-7	1,4-Dichlorobenzene	ND		250	263	105	250	271	108	3	63-126/13
75-71-8	Dichlorodifluoromethane	ND		250	185	74	250	192	77	4	24-170/24
107-06-2	1,2-Dichloroethane	ND		250	206	82	250	209	84	1	59-153/15
75-35-4	1,1-Dichloroethene	ND		250	232	93	250	239	96	3	41-144/17
10061-02-6	trans-1,3-Dichloropropene	ND		250	215	86	250	221	88	3	68-134/13
542-75-6	1,3-Dichloropropene (total)	ND		500	454	91	500	467	93	3	69-129/11
100-41-4	Ethylbenzene	ND		250	217	87	250	220	88	1	37-143/13
87-68-3	Hexachlorobutadiene	ND		250	278	111	250	282	113	1	47-144/16
78-83-1	Isobutyl alcohol	ND		2500	2380	95	2500	2460	98	3	49-152/15
126-98-7	Methacrylonitrile	ND		250	221	88	250	219	88	1	47-137/18
108-10-1	4-Methyl-2-pentanone(MIBK)	ND		1000	1080	108	1000	1100	110	2	57-141/14
75-09-2	Methylene chloride	ND		250	221	88	250	221	88	0	59-129/12
100-42-5	Styrene	ND		250	219	88	250	221	88	1	60-135/13
630-20-6	1,1,1,2-Tetrachloroethane	ND		250	237	95	250	240	96	1	69-136/12
79-34-5	1,1,2,2-Tetrachloroethane	ND		250	243	97	250	254	102	4	62-126/13
127-18-4	Tetrachloroethene	ND		250	235	94	250	240	96	2	48-145/15
108-88-3	Toluene	ND		250	224	90	250	230	92	3	44-141/14
71-55-6	1,1,1-Trichloroethane	ND		250	237	95	250	236	94	0	55-149/18
79-00-5	1,1,2-Trichloroethane	ND		250	212	85	250	217	87	2	70-127/12
79-01-6	Trichloroethene	ND		250	265	106	250	271	108	2	53-141/15
75-69-4	Trichlorofluoromethane	ND		250	208	83	250	211	84	1	35-169/23
96-18-4	1,2,3-Trichloropropane	ND		250	240	96	250	252	101	5	65-130/12
75-01-4	Vinyl chloride	ND		250	178	71	250	186	74	4	34-151/20

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JD35488
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JD35487-2MS	2B187887.D	5	12/09/21	ED	n/a	n/a	V2B8531
JD35487-2MSD	2B187888.D	5	12/09/21	ED	n/a	n/a	V2B8531
JD35487-2	2B187883.D	5	12/09/21	ED	12/06/21	GP37443	V2B8531

The QC reported here applies to the following samples:

Method: SW846 8260D

JD35488-1

CAS No.	Compound	JD35487-2 ug/l	Spike Q ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
	m,p-Xylene	ND	500	462	92	500	469	94	2	32-146/13
95-47-6	o-Xylene	ND	250	229	92	250	232	93	1	46-141/12
1330-20-7	Xylene (total)	ND	750	692	92	750	700	93	1	36-144/13

CAS No.	Surrogate Recoveries	MS	MSD	JD35487-2	Limits
1868-53-7	Dibromofluoromethane	97%	96%	99%	76-120%
17060-07-0	1,2-Dichloroethane-D4	87%	86%	94%	64-135%
2037-26-5	Toluene-D8	90%	91%	95%	76-117%
460-00-4	4-Bromofluorobenzene	98%	100%	103%	72-122%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JD35488
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JD35487-4MS	L335980.D	5	12/15/21	NW	n/a	n/a	VL10104
JD35487-4MSD	L335981.D	5	12/15/21	NW	n/a	n/a	VL10104
JD35487-4	L335977.D	5	12/15/21	NW	12/09/21	GP37492	VL10104

The QC reported here applies to the following samples:

Method: SW846 8260D

JD35488-3, JD35488-4

CAS No.	Compound	JD35487-4		MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD	
		ug/l	Q								
67-64-1	Acetone	ND		1000	815	82	1000	836	84	3	44-157/20
75-05-8	Acetonitrile	ND		2500	3230	129	2500	3360	134	4	45-141/18
107-13-1	Acrylonitrile	ND		250	271	108	250	279	112	3	54-135/14
71-43-2	Benzene	ND		250	250	100	250	246	98	2	38-139/13
75-27-4	Bromodichloromethane	ND		250	260	104	250	257	103	1	70-135/13
75-25-2	Bromoform	ND		250	253	101	250	253	101	0	53-139/13
74-83-9	Bromomethane	ND		250	230	92	250	270	108	16	44-150/18
78-93-3	2-Butanone (MEK)	ND		1000	1180	118	1000	1200	120	2	58-140/14
75-15-0	Carbon disulfide	ND		250	261	104	250	261	104	0	34-136/21
56-23-5	Carbon tetrachloride	ND		250	257	103	250	265	106	3	50-161/18
108-90-7	Chlorobenzene	ND		250	215	86	250	218	87	1	65-128/12
67-66-3	Chloroform	6.8	B	250	281	110	250	289	113	3	66-132/14
106-93-4	1,2-Dibromoethane	ND		250	239	96	250	245	98	2	69-130/11
106-46-7	1,4-Dichlorobenzene	ND		250	237	95	250	246	98	4	63-126/13
75-71-8	Dichlorodifluoromethane	ND		250	189	76	250	198	79	5	24-170/24
107-06-2	1,2-Dichloroethane	ND		250	253	101	250	251	100	1	59-153/15
75-35-4	1,1-Dichloroethene	ND		250	262	105	250	264	106	1	41-144/17
10061-02-6	trans-1,3-Dichloropropene	ND		250	228	91	250	241	96	6	68-134/13
542-75-6	1,3-Dichloropropene (total)	ND		500	479	96	500	494	99	3	69-129/11
100-41-4	Ethylbenzene	ND		250	215	86	250	221	88	3	37-143/13
87-68-3	Hexachlorobutadiene	ND		250	236	94	250	265	106	12	47-144/16
78-83-1	Isobutyl alcohol	ND		2500	3510	140	2500	3580	143	2	49-152/15
126-98-7	Methacrylonitrile	ND		250	308	123	250	309	124	0	47-137/18
108-10-1	4-Methyl-2-pentanone(MIBK)	ND		1000	1240	124	1000	1260	126	2	57-141/14
75-09-2	Methylene chloride	ND		250	251	100	250	251	100	0	59-129/12
100-42-5	Styrene	ND		250	213	85	250	218	87	2	60-135/13
630-20-6	1,1,1,2-Tetrachloroethane	ND		250	229	92	250	238	95	4	69-136/12
79-34-5	1,1,2,2-Tetrachloroethane	ND		250	286	114	250	299	120	4	62-126/13
127-18-4	Tetrachloroethene	ND		250	205	82	250	215	86	5	48-145/15
108-88-3	Toluene	ND		250	208	83	250	216	86	4	44-141/14
71-55-6	1,1,1-Trichloroethane	ND		250	256	102	250	256	102	0	55-149/18
79-00-5	1,1,2-Trichloroethane	ND		250	239	96	250	245	98	2	70-127/12
79-01-6	Trichloroethene	ND		250	265	106	250	261	104	2	53-141/15
75-69-4	Trichlorofluoromethane	ND		250	236	94	250	243	97	3	35-169/23
96-18-4	1,2,3-Trichloropropane	ND		250	275	110	250	285	114	4	65-130/12
75-01-4	Vinyl chloride	ND		250	197	79	250	202	81	3	34-151/20

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JD35488
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JD35487-4MS	L335980.D	5	12/15/21	NW	n/a	n/a	VL10104
JD35487-4MSD	L335981.D	5	12/15/21	NW	n/a	n/a	VL10104
JD35487-4	L335977.D	5	12/15/21	NW	12/09/21	GP37492	VL10104

The QC reported here applies to the following samples:

Method: SW846 8260D

JD35488-3, JD35488-4

CAS No.	Compound	JD35487-4 ug/l	Spike Q ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
	m,p-Xylene	ND	500	418	84	500	424	85	1	32-146/13
95-47-6	o-Xylene	ND	250	216	86	250	221	88	2	46-141/12
1330-20-7	Xylene (total)	ND	750	634	85	750	646	86	2	36-144/13

CAS No.	Surrogate Recoveries	MS	MSD	JD35487-4	Limits
1868-53-7	Dibromofluoromethane	106%	106%	107%	76-120%
17060-07-0	1,2-Dichloroethane-D4	108%	110%	116%	64-135%
2037-26-5	Toluene-D8	90%	93%	99%	76-117%
460-00-4	4-Bromofluorobenzene	113%	112%	108%	72-122%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JD35488
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JD35488-5MS	2V83675.D	5	12/15/21	NW	n/a	n/a	V2V3448
JD35488-5MSD	2V83676.D	5	12/15/21	NW	n/a	n/a	V2V3448
JD35488-5	2V83674.D	5	12/15/21	NW	12/13/21	GP37553	V2V3448

The QC reported here applies to the following samples:

Method: SW846 8260D

JD35488-2, JD35488-4, JD35488-5

CAS No.	Compound	JD35488-5		Spike ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
		ug/l	Q								
67-64-1	Acetone	ND		1000	855	86	1000	813	81	5	44-157/20
75-05-8	Acetonitrile	ND		2500	3140	126	2500	2950	118	6	45-141/18
107-13-1	Acrylonitrile	ND		250	285	114	250	269	108	6	54-135/14
71-43-2	Benzene	ND		250	247	99	250	244	98	1	38-139/13
75-27-4	Bromodichloromethane	ND		250	252	101	250	252	101	0	70-135/13
75-25-2	Bromoform	ND		250	260	104	250	257	103	1	53-139/13
74-83-9	Bromomethane	ND		250	208	83	250	232	93	11	44-150/18
78-93-3	2-Butanone (MEK)	ND		1000	905	91	1000	868	87	4	58-140/14
75-15-0	Carbon disulfide	ND		250	245	98	250	243	97	1	34-136/21
56-23-5	Carbon tetrachloride	ND		250	245	98	250	245	98	0	50-161/18
108-90-7	Chlorobenzene	ND		250	260	104	250	258	103	1	65-128/12
67-66-3	Chloroform	7.0	B	250	244	95	250	242	94	1	66-132/14
106-93-4	1,2-Dibromoethane	ND		250	278	111	250	270	108	3	69-130/11
106-46-7	1,4-Dichlorobenzene	ND		250	224	90	250	223	89	0	63-126/13
75-71-8	Dichlorodifluoromethane	ND		250	245	98	250	243	97	1	24-170/24
107-06-2	1,2-Dichloroethane	ND		250	274	110	250	268	107	2	59-153/15
75-35-4	1,1-Dichloroethene	ND		250	279	112	250	279	112	0	41-144/17
10061-02-6	trans-1,3-Dichloropropene	ND		250	292	117	250	287	115	2	68-134/13
542-75-6	1,3-Dichloropropene (total)	ND		500	545	109	500	536	107	2	69-129/11
100-41-4	Ethylbenzene	ND		250	259	104	250	258	103	0	37-143/13
87-68-3	Hexachlorobutadiene	ND		250	199	80	250	202	81	1	47-144/16
78-83-1	Isobutyl alcohol	ND		2500	2990	120	2500	2840	114	5	49-152/15
126-98-7	Methacrylonitrile	ND		250	260	104	250	248	99	5	47-137/18
108-10-1	4-Methyl-2-pentanone(MIBK)	ND		1000	1250	125	1000	1200	120	4	57-141/14
75-09-2	Methylene chloride	ND		250	228	91	250	223	89	2	59-129/12
100-42-5	Styrene	ND		250	269	108	250	266	106	1	60-135/13
630-20-6	1,1,1,2-Tetrachloroethane	ND		250	258	103	250	255	102	1	69-136/12
79-34-5	1,1,2,2-Tetrachloroethane	ND		250	249	100	250	244	98	2	62-126/13
127-18-4	Tetrachloroethene	ND		250	256	102	250	249	100	3	48-145/15
108-88-3	Toluene	ND		250	255	102	250	252	101	1	44-141/14
71-55-6	1,1,1-Trichloroethane	ND		250	250	100	250	244	98	2	55-149/18
79-00-5	1,1,2-Trichloroethane	ND		250	280	112	250	269	108	4	70-127/12
79-01-6	Trichloroethene	ND		250	241	96	250	237	95	2	53-141/15
75-69-4	Trichlorofluoromethane	ND		250	257	103	250	257	103	0	35-169/23
96-18-4	1,2,3-Trichloropropane	ND		250	256	102	250	250	100	2	65-130/12
75-01-4	Vinyl chloride	ND		250	240	96	250	241	96	0	34-151/20

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JD35488
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JD35488-5MS	2V83675.D	5	12/15/21	NW	n/a	n/a	V2V3448
JD35488-5MSD	2V83676.D	5	12/15/21	NW	n/a	n/a	V2V3448
JD35488-5	2V83674.D	5	12/15/21	NW	12/13/21	GP37553	V2V3448

The QC reported here applies to the following samples:

Method: SW846 8260D

JD35488-2, JD35488-4, JD35488-5

CAS No.	Compound	JD35488-5 ug/l	Spike Q ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
	m,p-Xylene	ND	500	531	106	500	522	104	2	32-146/13
95-47-6	o-Xylene	ND	250	260	104	250	255	102	2	46-141/12
1330-20-7	Xylene (total)	ND	750	790	105	750	777	104	2	36-144/13

CAS No.	Surrogate Recoveries	MS	MSD	JD35488-5	Limits
1868-53-7	Dibromofluoromethane	96%	95%	96%	76-120%
17060-07-0	1,2-Dichloroethane-D4	113%	111%	111%	64-135%
2037-26-5	Toluene-D8	99%	99%	104%	76-117%
460-00-4	4-Bromofluorobenzene	95%	96%	95%	72-122%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JD35488
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JD35488-7MS	3D172309.D	5	12/28/21	NH	n/a	n/a	V3D7311
JD35488-7MSD	3D172310.D	5	12/28/21	NH	n/a	n/a	V3D7311
JD35488-7	3D172305.D	5	12/28/21	NH	12/23/21	GP37747	V3D7311

The QC reported here applies to the following samples:

Method: SW846 8260D

JD35488-6, JD35488-7

CAS No.	Compound	JD35488-7		MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
		ug/l	Q							
67-64-1	Acetone	ND		1000	155	1000	1520	152	2	44-157/20
75-05-8	Acetonitrile	ND		2500	106	2500	2580	103	2	45-141/18
107-13-1	Acrylonitrile	ND		250	132	250	324	130	2	54-135/14
71-43-2	Benzene	ND		250	101	250	259	104	2	38-139/13
75-27-4	Bromodichloromethane	ND		250	93	250	236	94	2	70-135/13
75-25-2	Bromoform	ND		250	88	250	228	91	3	53-139/13
74-83-9	Bromomethane	ND		250	91.2	36* a	104	42* a	13	44-150/18
78-93-3	2-Butanone (MEK)	ND		1000	121	1000	1190	119	2	58-140/14
75-15-0	Carbon disulfide	ND		250	96	250	243	97	2	34-136/21
56-23-5	Carbon tetrachloride	ND		250	84	250	212	85	1	50-161/18
108-90-7	Chlorobenzene	ND		250	95	250	241	96	1	65-128/12
67-66-3	Chloroform	ND		250	84	250	210	84	0	66-132/14
106-93-4	1,2-Dibromoethane	ND		250	94	250	238	95	1	69-130/11
106-46-7	1,4-Dichlorobenzene	ND		250	95	250	246	98	3	63-126/13
75-71-8	Dichlorodifluoromethane	ND		250	72	250	174	70	3	24-170/24
107-06-2	1,2-Dichloroethane	ND		250	90	250	227	91	1	59-153/15
75-35-4	1,1-Dichloroethene	ND		250	92	250	236	94	3	41-144/17
10061-02-6	trans-1,3-Dichloropropene	ND		250	97	250	249	100	3	68-134/13
542-75-6	1,3-Dichloropropene (total)	ND		500	99	500	501	100	2	69-129/11
100-41-4	Ethylbenzene	ND		250	96	250	242	97	1	37-143/13
87-68-3	Hexachlorobutadiene	ND		250	105	250	275	110	4	47-144/16
78-83-1	Isobutyl alcohol	ND		2500	98	2500	2420	97	2	49-152/15
126-98-7	Methacrylonitrile	ND		250	91	250	227	91	0	47-137/18
108-10-1	4-Methyl-2-pentanone(MIBK)	ND		1000	116	1000	1150	115	1	57-141/14
75-09-2	Methylene chloride	ND		250	90	250	230	92	3	59-129/12
100-42-5	Styrene	ND		250	96	250	245	98	2	60-135/13
630-20-6	1,1,1,2-Tetrachloroethane	ND		250	91	250	234	94	3	69-136/12
79-34-5	1,1,2,2-Tetrachloroethane	ND		250	106	250	275	110	4	62-126/13
127-18-4	Tetrachloroethene	ND		250	100	250	257	103	3	48-145/15
108-88-3	Toluene	ND		250	93	250	240	96	3	44-141/14
71-55-6	1,1,1-Trichloroethane	ND		250	86	250	220	88	2	55-149/18
79-00-5	1,1,2-Trichloroethane	ND		250	102	250	260	104	2	70-127/12
79-01-6	Trichloroethene	ND		250	100	250	247	99	1	53-141/15
75-69-4	Trichlorofluoromethane	ND		250	84	250	215	86	3	35-169/23
96-18-4	1,2,3-Trichloropropane	ND		250	98	250	259	104	5	65-130/12
75-01-4	Vinyl chloride	ND		250	76	250	186	74	2	34-151/20

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JD35488
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JD35488-7MS	3D172309.D	5	12/28/21	NH	n/a	n/a	V3D7311
JD35488-7MSD	3D172310.D	5	12/28/21	NH	n/a	n/a	V3D7311
JD35488-7	3D172305.D	5	12/28/21	NH	12/23/21	GP37747	V3D7311

The QC reported here applies to the following samples:

Method: SW846 8260D

JD35488-6, JD35488-7

CAS No.	Compound	JD35488-7 ug/l	Spike Q ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
	m,p-Xylene	ND	500	469	94	500	475	95	1	32-146/13
95-47-6	o-Xylene	ND	250	238	95	250	247	99	4	46-141/12
1330-20-7	Xylene (total)	ND	750	707	94	750	723	96	2	36-144/13

CAS No.	Surrogate Recoveries	MS	MSD	JD35488-7	Limits
1868-53-7	Dibromofluoromethane	87%	86%	85%	76-120%
17060-07-0	1,2-Dichloroethane-D4	95%	93%	100%	64-135%
2037-26-5	Toluene-D8	97%	96%	102%	76-117%
460-00-4	4-Bromofluorobenzene	101%	102%	98%	72-122%

(a) Outside control limits due to matrix interference.

* = Outside of Control Limits.

Leachate Spike Summary

Job Number: JD35488
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GP37443-LS10	2B187887A.D	5	12/09/21	ED	12/06/21	GP37443	V2B8531
JD35487-2	2B187883.D	5	12/09/21	ED	12/06/21	GP37443	V2B8531

The QC reported here applies to the following samples:

Method: SW846 8260D

JD35488-1

CAS No.	Compound	JD35487-2 ug/l	Spike Q	LS ug/l	LS %	Limits
67-64-1	Acetone	ND		1000	1170	44-157
75-05-8	Acetonitrile	ND		2500	2480	45-141
107-13-1	Acrylonitrile	ND		250	252	54-135
71-43-2	Benzene	ND		250	240	38-139
75-27-4	Bromodichloromethane	ND		250	230	70-135
75-25-2	Bromoform	ND		250	223	53-139
74-83-9	Bromomethane	ND		250	165	44-150
78-93-3	2-Butanone (MEK)	ND		1000	1040	58-140
75-15-0	Carbon disulfide	ND		250	226	34-136
56-23-5	Carbon tetrachloride	ND		250	241	50-161
108-90-7	Chlorobenzene	ND		250	229	65-128
67-66-3	Chloroform	10.9	B	250	218	66-132
106-93-4	1,2-Dibromoethane	ND		250	213	69-130
106-46-7	1,4-Dichlorobenzene	ND		250	263	63-126
75-71-8	Dichlorodifluoromethane	ND		250	185	24-170
107-06-2	1,2-Dichloroethane	ND		250	206	59-153
75-35-4	1,1-Dichloroethene	ND		250	232	41-144
10061-02-6	trans-1,3-Dichloropropene	ND		250	215	68-134
542-75-6	1,3-Dichloropropene (total)	ND		500	454	69-129
100-41-4	Ethylbenzene	ND		250	217	37-143
87-68-3	Hexachlorobutadiene	ND		250	278	47-144
78-83-1	Isobutyl alcohol	ND		2500	2380	49-152
126-98-7	Methacrylonitrile	ND		250	221	47-137
108-10-1	4-Methyl-2-pentanone(MIBK)	ND		1000	1080	57-141
75-09-2	Methylene chloride	ND		250	221	59-129
100-42-5	Styrene	ND		250	219	60-135
630-20-6	1,1,1,2-Tetrachloroethane	ND		250	237	69-136
79-34-5	1,1,2,2-Tetrachloroethane	ND		250	243	62-126
127-18-4	Tetrachloroethene	ND		250	235	48-145
108-88-3	Toluene	ND		250	224	44-141
71-55-6	1,1,1-Trichloroethane	ND		250	237	55-149
79-00-5	1,1,2-Trichloroethane	ND		250	212	70-127
79-01-6	Trichloroethene	ND		250	265	53-141
75-69-4	Trichlorofluoromethane	ND		250	208	35-169
96-18-4	1,2,3-Trichloropropane	ND		250	240	65-130
75-01-4	Vinyl chloride	ND		250	178	34-151

* = Outside of Control Limits.

Leachate Spike Summary

Job Number: JD35488
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GP37443-LS10	2B187887A.D	5	12/09/21	ED	12/06/21	GP37443	V2B8531
JD35487-2	2B187883.D	5	12/09/21	ED	12/06/21	GP37443	V2B8531

The QC reported here applies to the following samples:

Method: SW846 8260D

JD35488-1

CAS No.	Compound	JD35487-2 ug/l	Spike Q	ug/l	LS ug/l	LS %	Limits
	m,p-Xylene	ND		500	462	92	32-146
95-47-6	o-Xylene	ND		250	229	92	46-141
1330-20-7	Xylene (total)	ND		750	692	92	36-144

CAS No.	Surrogate Recoveries	LS	JD35487-2	Limits
1868-53-7	Dibromofluoromethane	97%	99%	76-120%
17060-07-0	1,2-Dichloroethane-D4	87%	94%	64-135%
2037-26-5	Toluene-D8	90%	95%	76-117%
460-00-4	4-Bromofluorobenzene	98%	103%	72-122%

* = Outside of Control Limits.

Leachate Spike Summary

Job Number: JD35488
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GP37457-LS11	2V83677.D	5	12/15/21	NW	12/07/21	GP37457	V2V3448
JD35488-2	2V83673.D	5	12/15/21	NW	12/07/21	GP37457	V2V3448

The QC reported here applies to the following samples:

Method: SW846 8260D

JD35488-2

CAS No.	Compound	JD35488-2 ug/l	Spike Q	LS ug/l	LS %	Limits	
67-64-1	Acetone	177		1900	172* a	44-157	
75-05-8	Acetonitrile	ND		2500	120	45-141	
107-13-1	Acrylonitrile	ND		250	259	104	54-135
71-43-2	Benzene	ND		250	263	105	38-139
75-27-4	Bromodichloromethane	ND		250	268	107	70-135
75-25-2	Bromoform	ND		250	276	110	53-139
74-83-9	Bromomethane	ND		250	256	102	44-150
78-93-3	2-Butanone (MEK)	ND		1000	1260	126	58-140
75-15-0	Carbon disulfide	ND		250	261	104	34-136
56-23-5	Carbon tetrachloride	ND		250	260	104	50-161
108-90-7	Chlorobenzene	ND		250	280	112	65-128
67-66-3	Chloroform	2.8	JB	250	258	102	66-132
106-93-4	1,2-Dibromoethane	ND		250	295	118	69-130
106-46-7	1,4-Dichlorobenzene	ND		250	241	96	63-126
75-71-8	Dichlorodifluoromethane	ND		250	249	100	24-170
107-06-2	1,2-Dichloroethane	ND		250	288	115	59-153
75-35-4	1,1-Dichloroethene	ND		250	299	120	41-144
10061-02-6	trans-1,3-Dichloropropene	ND		250	315	126	68-134
542-75-6	1,3-Dichloropropene (total)	ND		500	584	117	69-129
100-41-4	Ethylbenzene	ND		250	281	112	37-143
87-68-3	Hexachlorobutadiene	ND		250	209	84	47-144
78-83-1	Isobutyl alcohol	ND		2500	2920	117	49-152
126-98-7	Methacrylonitrile	ND		250	188	75	47-137
108-10-1	4-Methyl-2-pentanone(MIBK)	ND		1000	1290	129	57-141
75-09-2	Methylene chloride	2.1	J	250	240	95	59-129
100-42-5	Styrene	ND		250	290	116	60-135
630-20-6	1,1,1,2-Tetrachloroethane	ND		250	276	110	69-136
79-34-5	1,1,2,2-Tetrachloroethane	ND		250	263	105	62-126
127-18-4	Tetrachloroethene	ND		250	274	110	48-145
108-88-3	Toluene	ND		250	277	111	44-141
71-55-6	1,1,1-Trichloroethane	ND		250	266	106	55-149
79-00-5	1,1,2-Trichloroethane	ND		250	294	118	70-127
79-01-6	Trichloroethene	ND		250	263	105	53-141
75-69-4	Trichlorofluoromethane	ND		250	266	106	35-169
96-18-4	1,2,3-Trichloropropane	ND		250	266	106	65-130
75-01-4	Vinyl chloride	ND		250	250	100	34-151

* = Outside of Control Limits.

Leachate Spike Summary

Job Number: JD35488
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GP37457-LS11	2V83677.D	5	12/15/21	NW	12/07/21	GP37457	V2V3448
JD35488-2	2V83673.D	5	12/15/21	NW	12/07/21	GP37457	V2V3448

The QC reported here applies to the following samples:

Method: SW846 8260D

JD35488-2

CAS No.	Compound	JD35488-2 ug/l	Spike Q	ug/l	LS ug/l	LS %	Limits
	m,p-Xylene	ND		500	574	115	32-146
95-47-6	o-Xylene	ND		250	280	112	46-141
1330-20-7	Xylene (total)	ND		750	854	114	36-144

CAS No.	Surrogate Recoveries	LS	JD35488-2	Limits
1868-53-7	Dibromofluoromethane	93%	95%	76-120%
17060-07-0	1,2-Dichloroethane-D4	109%	110%	64-135%
2037-26-5	Toluene-D8	100%	102%	76-117%
460-00-4	4-Bromofluorobenzene	95%	93%	72-122%

(a) Outside control limits due to matrix interference.

* = Outside of Control Limits.

Leachate Spike Summary

Job Number: JD35488
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GP37525-LS16	L335982.D	5	12/15/21	NW	12/10/21	GP37525	VL10104
JD35488-4	L335978.D	5	12/15/21	NW	12/10/21	GP37525	VL10104
JD35488-4	2V83672.D	5	12/15/21	NW	12/10/21	GP37525	V2V3448

The QC reported here applies to the following samples:

Method: SW846 8260D

JD35488-4

CAS No.	Compound	JD35488-4 ug/l	Spike Q	LS ug/l	LS %	Limits
67-64-1	Acetone	56.4 ^a		1000	1550	149 44-157
75-05-8	Acetonitrile	ND		2500	3250	130 45-141
107-13-1	Acrylonitrile	34.5	J	250	302	107 54-135
71-43-2	Benzene	ND		250	234	94 38-139
75-27-4	Bromodichloromethane	ND		250	247	99 70-135
75-25-2	Bromoform	ND		250	242	97 53-139
74-83-9	Bromomethane	ND		250	296	118 44-150
78-93-3	2-Butanone (MEK)	ND		1000	1500	150* ^b 58-140
75-15-0	Carbon disulfide	ND		250	254	102 34-136
56-23-5	Carbon tetrachloride	ND		250	257	103 50-161
108-90-7	Chlorobenzene	ND		250	208	83 65-128
67-66-3	Chloroform	ND		250	275	110 66-132
106-93-4	1,2-Dibromoethane	ND		250	234	94 69-130
106-46-7	1,4-Dichlorobenzene	ND		250	234	94 63-126
75-71-8	Dichlorodifluoromethane	ND		250	206	82 24-170
107-06-2	1,2-Dichloroethane	ND		250	239	96 59-153
75-35-4	1,1-Dichloroethene	ND		250	250	100 41-144
10061-02-6	trans-1,3-Dichloropropene	ND		250	226	90 68-134
542-75-6	1,3-Dichloropropene (total)	ND		500	465	93 69-129
100-41-4	Ethylbenzene	ND		250	208	83 37-143
87-68-3	Hexachlorobutadiene	ND		250	240	96 47-144
78-83-1	Isobutyl alcohol	ND		2500	3510	140 49-152
126-98-7	Methacrylonitrile	ND		250	290	116 47-137
108-10-1	4-Methyl-2-pentanone(MIBK)	ND		1000	1230	123 57-141
75-09-2	Methylene chloride	ND		250	245	98 59-129
100-42-5	Styrene	ND		250	210	84 60-135
630-20-6	1,1,1,2-Tetrachloroethane	ND		250	224	90 69-136
79-34-5	1,1,2,2-Tetrachloroethane	ND		250	277	111 62-126
127-18-4	Tetrachloroethene	ND		250	201	80 48-145
108-88-3	Toluene	4.3	J	250	207	81 44-141
71-55-6	1,1,1-Trichloroethane	ND		250	244	98 55-149
79-00-5	1,1,2-Trichloroethane	ND		250	235	94 70-127
79-01-6	Trichloroethene	ND		250	253	101 53-141
75-69-4	Trichlorofluoromethane	ND		250	244	98 35-169
96-18-4	1,2,3-Trichloropropane	ND		250	276	110 65-130
75-01-4	Vinyl chloride	ND		250	210	84 34-151

* = Outside of Control Limits.

Leachate Spike Summary

Job Number: JD35488
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GP37525-LS16	L335982.D	5	12/15/21	NW	12/10/21	GP37525	VL10104
JD35488-4	L335978.D	5	12/15/21	NW	12/10/21	GP37525	VL10104
JD35488-4	2V83672.D	5	12/15/21	NW	12/10/21	GP37525	V2V3448

The QC reported here applies to the following samples:

Method: SW846 8260D

JD35488-4

CAS No.	Compound	JD35488-4 ug/l	Spike Q	LS ug/l	LS %	Limits	
	m,p-Xylene	ND		500	405	81	32-146
95-47-6	o-Xylene	ND		250	212	85	46-141
1330-20-7	Xylene (total)	ND		750	617	82	36-144

CAS No.	Surrogate Recoveries	LS	JD35488-4	JD35488-4	Limits
1868-53-7	Dibromofluoromethane	105%	106%	94%	76-120%
17060-07-0	1,2-Dichloroethane-D4	108%	115%	111%	64-135%
2037-26-5	Toluene-D8	90%	97%	104%	76-117%
460-00-4	4-Bromofluorobenzene	114%	108%	95%	72-122%

- (a) Result is from Run #2.
- (b) Outside control limits.

* = Outside of Control Limits.

Leachate Spike Summary

Job Number: JD35488
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GP37528-LS17	L335983.D	5	12/15/21	NW	12/10/21	GP37528	VL10104
JD35488-3	L335979.D	5	12/15/21	NW	12/10/21	GP37528	VL10104

The QC reported here applies to the following samples:

Method: SW846 8260D

JD35488-3

CAS No.	Compound	JD35488-3 ug/l	Spike Q	LS ug/l	LS %	Limits
67-64-1	Acetone	ND		1000	791	44-157
75-05-8	Acetonitrile	ND		2500	3340	45-141
107-13-1	Acrylonitrile	ND		250	280	54-135
71-43-2	Benzene	ND		250	239	38-139
75-27-4	Bromodichloromethane	ND		250	252	70-135
75-25-2	Bromoform	ND		250	247	53-139
74-83-9	Bromomethane	ND		250	275	44-150
78-93-3	2-Butanone (MEK)	ND		1000	1170	58-140
75-15-0	Carbon disulfide	ND		250	255	34-136
56-23-5	Carbon tetrachloride	ND		250	258	50-161
108-90-7	Chlorobenzene	ND		250	210	65-128
67-66-3	Chloroform	5.8	B	250	276	66-132
106-93-4	1,2-Dibromoethane	ND		250	239	69-130
106-46-7	1,4-Dichlorobenzene	ND		250	239	63-126
75-71-8	Dichlorodifluoromethane	ND		250	192	24-170
107-06-2	1,2-Dichloroethane	ND		250	244	59-153
75-35-4	1,1-Dichloroethene	ND		250	249	41-144
10061-02-6	trans-1,3-Dichloropropene	ND		250	233	68-134
542-75-6	1,3-Dichloropropene (total)	ND		500	474	69-129
100-41-4	Ethylbenzene	ND		250	210	37-143
87-68-3	Hexachlorobutadiene	ND		250	235	47-144
78-83-1	Isobutyl alcohol	ND		2500	3480	49-152
126-98-7	Methacrylonitrile	ND		250	303	47-137
108-10-1	4-Methyl-2-pentanone(MIBK)	ND		1000	1250	57-141
75-09-2	Methylene chloride	ND		250	242	59-129
100-42-5	Styrene	ND		250	209	60-135
630-20-6	1,1,1,2-Tetrachloroethane	ND		250	227	69-136
79-34-5	1,1,2,2-Tetrachloroethane	ND		250	291	62-126
127-18-4	Tetrachloroethene	ND		250	204	48-145
108-88-3	Toluene	ND		250	202	44-141
71-55-6	1,1,1-Trichloroethane	ND		250	244	55-149
79-00-5	1,1,2-Trichloroethane	ND		250	236	70-127
79-01-6	Trichloroethene	ND		250	253	53-141
75-69-4	Trichlorofluoromethane	ND		250	239	35-169
96-18-4	1,2,3-Trichloropropane	ND		250	288	65-130
75-01-4	Vinyl chloride	ND		250	200	34-151

* = Outside of Control Limits.

Leachate Spike Summary

Job Number: JD35488
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GP37528-LS17	L335983.D	5	12/15/21	NW	12/10/21	GP37528	VL10104
JD35488-3	L335979.D	5	12/15/21	NW	12/10/21	GP37528	VL10104

The QC reported here applies to the following samples:

Method: SW846 8260D

JD35488-3

CAS No.	Compound	JD35488-3 ug/l	Spike Q	ug/l	LS ug/l	LS %	Limits
	m,p-Xylene	ND		500	404	81	32-146
95-47-6	o-Xylene	ND		250	209	84	46-141
1330-20-7	Xylene (total)	ND		750	612	82	36-144

CAS No.	Surrogate Recoveries	LS	JD35488-3	Limits
1868-53-7	Dibromofluoromethane	103%	103%	76-120%
17060-07-0	1,2-Dichloroethane-D4	109%	111%	64-135%
2037-26-5	Toluene-D8	91%	99%	76-117%
460-00-4	4-Bromofluorobenzene	115%	106%	72-122%

* = Outside of Control Limits.

Leachate Spike Summary

Job Number: JD35488
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GP37553-LS18	2V83675A.D	5	12/15/21	NW	12/13/21	GP37553	V2V3448
JD35488-5	2V83674.D	5	12/15/21	NW	12/13/21	GP37553	V2V3448

The QC reported here applies to the following samples:

Method: SW846 8260D

JD35488-5

CAS No.	Compound	JD35488-5 ug/l	Spike Q	LS ug/l	LS %	Limits
67-64-1	Acetone	ND		1000	855	44-157
75-05-8	Acetonitrile	ND		2500	3140	45-141
107-13-1	Acrylonitrile	ND		250	285	54-135
71-43-2	Benzene	ND		250	247	38-139
75-27-4	Bromodichloromethane	ND		250	252	70-135
75-25-2	Bromoform	ND		250	260	53-139
74-83-9	Bromomethane	ND		250	208	44-150
78-93-3	2-Butanone (MEK)	ND		1000	905	58-140
75-15-0	Carbon disulfide	ND		250	245	34-136
56-23-5	Carbon tetrachloride	ND		250	245	50-161
108-90-7	Chlorobenzene	ND		250	260	65-128
67-66-3	Chloroform	7.0	B	250	244	66-132
106-93-4	1,2-Dibromoethane	ND		250	278	69-130
106-46-7	1,4-Dichlorobenzene	ND		250	224	63-126
75-71-8	Dichlorodifluoromethane	ND		250	245	24-170
107-06-2	1,2-Dichloroethane	ND		250	274	59-153
75-35-4	1,1-Dichloroethene	ND		250	279	41-144
10061-02-6	trans-1,3-Dichloropropene	ND		250	292	68-134
542-75-6	1,3-Dichloropropene (total)	ND		500	545	69-129
100-41-4	Ethylbenzene	ND		250	259	37-143
87-68-3	Hexachlorobutadiene	ND		250	199	47-144
78-83-1	Isobutyl alcohol	ND		2500	2990	49-152
126-98-7	Methacrylonitrile	ND		250	260	47-137
108-10-1	4-Methyl-2-pentanone(MIBK)	ND		1000	1250	57-141
75-09-2	Methylene chloride	ND		250	228	59-129
100-42-5	Styrene	ND		250	269	60-135
630-20-6	1,1,1,2-Tetrachloroethane	ND		250	258	69-136
79-34-5	1,1,2,2-Tetrachloroethane	ND		250	249	62-126
127-18-4	Tetrachloroethene	ND		250	256	48-145
108-88-3	Toluene	ND		250	255	44-141
71-55-6	1,1,1-Trichloroethane	ND		250	250	55-149
79-00-5	1,1,2-Trichloroethane	ND		250	280	70-127
79-01-6	Trichloroethene	ND		250	241	53-141
75-69-4	Trichlorofluoromethane	ND		250	257	35-169
96-18-4	1,2,3-Trichloropropane	ND		250	256	65-130
75-01-4	Vinyl chloride	ND		250	240	34-151

* = Outside of Control Limits.

Leachate Spike Summary

Job Number: JD35488
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GP37553-LS18	2V83675A.D	5	12/15/21	NW	12/13/21	GP37553	V2V3448
JD35488-5	2V83674.D	5	12/15/21	NW	12/13/21	GP37553	V2V3448

The QC reported here applies to the following samples:

Method: SW846 8260D

JD35488-5

CAS No.	Compound	JD35488-5 ug/l	Spike Q	ug/l	LS ug/l	LS %	Limits
	m,p-Xylene	ND		500	531	106	32-146
95-47-6	o-Xylene	ND		250	260	104	46-141
1330-20-7	Xylene (total)	ND		750	790	105	36-144

CAS No.	Surrogate Recoveries	LS	JD35488-5	Limits
1868-53-7	Dibromofluoromethane	96%	96%	76-120%
17060-07-0	1,2-Dichloroethane-D4	113%	111%	64-135%
2037-26-5	Toluene-D8	99%	104%	76-117%
460-00-4	4-Bromofluorobenzene	95%	95%	72-122%

* = Outside of Control Limits.

Leachate Spike Summary

Job Number: JD35488
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GP37684-LS27	1A218250A.D	5	12/23/21	ED	12/20/21	GP37684	V1A9396
JD36923-7	1A218249.D	5	12/23/21	ED	12/20/21	GP37684	V1A9396

The QC reported here applies to the following samples:

Method: SW846 8260D

JD35488-6

CAS No.	Compound	JD36923-7 ug/l	Spike Q	LS ug/l	LS %	Limits	
67-64-1	Acetone	73.0		1000	674	60	44-157
75-05-8	Acetonitrile	ND		2500	2590	104	45-141
107-13-1	Acrylonitrile	ND		250	15.1	6* a	54-135
71-43-2	Benzene	ND		250	282	113	38-139
75-27-4	Bromodichloromethane	ND		250	274	110	70-135
75-25-2	Bromoform	ND		250	297	119	53-139
74-83-9	Bromomethane	ND		250	159	64	44-150
78-93-3	2-Butanone (MEK)	ND		1000	895	90	58-140
75-15-0	Carbon disulfide	ND		250	252	101	34-136
56-23-5	Carbon tetrachloride	ND		250	255	102	50-161
108-90-7	Chlorobenzene	ND		250	285	114	65-128
67-66-3	Chloroform	6.6	B	250	244	95	66-132
106-93-4	1,2-Dibromoethane	ND		250	283	113	69-130
106-46-7	1,4-Dichlorobenzene	ND		250	260	104	63-126
75-71-8	Dichlorodifluoromethane	ND		250	234	94	24-170
107-06-2	1,2-Dichloroethane	ND		250	279	112	59-153
75-35-4	1,1-Dichloroethene	ND		250	244	98	41-144
10061-02-6	trans-1,3-Dichloropropene	ND		250	353	141* a	68-134
542-75-6	1,3-Dichloropropene (total)	ND		500	638	128	69-129
100-41-4	Ethylbenzene	ND		250	304	122	37-143
87-68-3	Hexachlorobutadiene	ND		250	303	121	47-144
78-83-1	Isobutyl alcohol	457	B	2500	2870	97	49-152
126-98-7	Methacrylonitrile	ND		250	260	104	47-137
108-10-1	4-Methyl-2-pentanone(MIBK)	ND		1000	1150	115	57-141
75-09-2	Methylene chloride	1.7	J	250	255	101	59-129
100-42-5	Styrene	ND		250	303	121	60-135
630-20-6	1,1,1,2-Tetrachloroethane	ND		250	279	112	69-136
79-34-5	1,1,2,2-Tetrachloroethane	ND		250	329	132* a	62-126
127-18-4	Tetrachloroethene	ND		250	242	97	48-145
108-88-3	Toluene	4.6	J	250	308	121	44-141
71-55-6	1,1,1-Trichloroethane	ND		250	249	100	55-149
79-00-5	1,1,2-Trichloroethane	ND		250	311	124	70-127
79-01-6	Trichloroethene	ND		250	272	109	53-141
75-69-4	Trichlorofluoromethane	ND		250	239	96	35-169
96-18-4	1,2,3-Trichloropropane	ND		250	297	119	65-130
75-01-4	Vinyl chloride	ND		250	249	100	34-151

* = Outside of Control Limits.

Leachate Spike Summary

Job Number: JD35488
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GP37684-LS27	1A218250A.D	5	12/23/21	ED	12/20/21	GP37684	V1A9396
JD36923-7	1A218249.D	5	12/23/21	ED	12/20/21	GP37684	V1A9396

The QC reported here applies to the following samples:

Method: SW846 8260D

JD35488-6

CAS No.	Compound	JD36923-7 ug/l	Spike Q	ug/l	LS ug/l	LS %	Limits
	m,p-Xylene	ND		500	561	112	32-146
95-47-6	o-Xylene	ND		250	270	108	46-141
1330-20-7	Xylene (total)	ND		750	832	111	36-144

CAS No.	Surrogate Recoveries	LS	JD36923-7	Limits
1868-53-7	Dibromofluoromethane	91%	95%	76-120%
17060-07-0	1,2-Dichloroethane-D4	108%	118%	64-135%
2037-26-5	Toluene-D8	111%	115%	76-117%
460-00-4	4-Bromofluorobenzene	105%	106%	72-122%

(a) Outside control limits.

* = Outside of Control Limits.

Leachate Spike Summary

Job Number: JD35488
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GP37747-LS8	3D172309A.D	5	12/28/21	NH	12/23/21	GP37747	V3D7311
JD35488-7	3D172305.D	5	12/28/21	NH	12/23/21	GP37747	V3D7311

The QC reported here applies to the following samples:

Method: SW846 8260D

JD35488-7

CAS No.	Compound	JD35488-7 ug/l	Spike Q	LS ug/l	LS %	Limits
67-64-1	Acetone	ND	1000	1550	155	44-157
75-05-8	Acetonitrile	ND	2500	2640	106	45-141
107-13-1	Acrylonitrile	ND	250	329	132	54-135
71-43-2	Benzene	ND	250	253	101	38-139
75-27-4	Bromodichloromethane	ND	250	232	93	70-135
75-25-2	Bromoform	ND	250	221	88	53-139
74-83-9	Bromomethane	ND	250	91.2	36* a	44-150
78-93-3	2-Butanone (MEK)	ND	1000	1210	121	58-140
75-15-0	Carbon disulfide	ND	250	239	96	34-136
56-23-5	Carbon tetrachloride	ND	250	209	84	50-161
108-90-7	Chlorobenzene	ND	250	238	95	65-128
67-66-3	Chloroform	ND	250	210	84	66-132
106-93-4	1,2-Dibromoethane	ND	250	235	94	69-130
106-46-7	1,4-Dichlorobenzene	ND	250	238	95	63-126
75-71-8	Dichlorodifluoromethane	ND	250	180	72	24-170
107-06-2	1,2-Dichloroethane	ND	250	225	90	59-153
75-35-4	1,1-Dichloroethene	ND	250	230	92	41-144
10061-02-6	trans-1,3-Dichloropropene	ND	250	242	97	68-134
542-75-6	1,3-Dichloropropene (total)	ND	500	493	99	69-129
100-41-4	Ethylbenzene	ND	250	239	96	37-143
87-68-3	Hexachlorobutadiene	ND	250	263	105	47-144
78-83-1	Isobutyl alcohol	ND	2500	2460	98	49-152
126-98-7	Methacrylonitrile	ND	250	228	91	47-137
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	1000	1160	116	57-141
75-09-2	Methylene chloride	ND	250	224	90	59-129
100-42-5	Styrene	ND	250	241	96	60-135
630-20-6	1,1,1,2-Tetrachloroethane	ND	250	227	91	69-136
79-34-5	1,1,2,2-Tetrachloroethane	ND	250	265	106	62-126
127-18-4	Tetrachloroethene	ND	250	250	100	48-145
108-88-3	Toluene	ND	250	233	93	44-141
71-55-6	1,1,1-Trichloroethane	ND	250	216	86	55-149
79-00-5	1,1,2-Trichloroethane	ND	250	256	102	70-127
79-01-6	Trichloroethene	ND	250	249	100	53-141
75-69-4	Trichlorofluoromethane	ND	250	209	84	35-169
96-18-4	1,2,3-Trichloropropane	ND	250	246	98	65-130
75-01-4	Vinyl chloride	ND	250	190	76	34-151

* = Outside of Control Limits.

Leachate Spike Summary

Job Number: JD35488
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GP37747-LS8	3D172309A.D	5	12/28/21	NH	12/23/21	GP37747	V3D7311
JD35488-7	3D172305.D	5	12/28/21	NH	12/23/21	GP37747	V3D7311

The QC reported here applies to the following samples:

Method: SW846 8260D

JD35488-7

CAS No.	Compound	JD35488-7 ug/l	Spike Q	ug/l	LS ug/l	LS %	Limits
	m,p-Xylene	ND		500	469	94	32-146
95-47-6	o-Xylene	ND		250	238	95	46-141
1330-20-7	Xylene (total)	ND		750	707	94	36-144

CAS No.	Surrogate Recoveries	LS	JD35488-7	Limits
1868-53-7	Dibromofluoromethane	87%	85%	76-120%
17060-07-0	1,2-Dichloroethane-D4	95%	100%	64-135%
2037-26-5	Toluene-D8	97%	102%	76-117%
460-00-4	4-Bromofluorobenzene	101%	98%	72-122%

(a) Outside control limits due to matrix interference.

* = Outside of Control Limits.

Instrument Performance Check (BFB)

Job Number: JD35488
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample: V1A9258-BFB	Injection Date: 09/26/21
Lab File ID: 1A214394.D	Injection Time: 23:53
Instrument ID: GCMS1A	

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
50	15.0 - 40.0% of mass 95	25210	21.0	Pass
75	30.0 - 60.0% of mass 95	58968	49.2	Pass
95	Base peak, 100% relative abundance	119837	100.0	Pass
96	5.0 - 9.0% of mass 95	8107	6.77	Pass
173	Less than 2.0% of mass 174	0	0.00 (0.00) ^a	Pass
174	50.0 - 120.0% of mass 95	105720	88.2	Pass
175	5.0 - 9.0% of mass 174	8408	7.02 (7.95) ^a	Pass
176	95.0 - 101.0% of mass 174	103672	86.5 (98.1) ^a	Pass
177	5.0 - 9.0% of mass 176	6471	5.40 (6.24) ^b	Pass

(a) Value is % of mass 174

(b) Value is % of mass 176

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

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
V1A9258-IC9258	1A214395.D	09/27/21	00:12	00:19	Initial cal 0.2
V1A9258-IC9258	1A214396.D	09/27/21	00:32	00:39	Initial cal 0.5
V1A9258-IC9258	1A214397.D	09/27/21	00:51	00:58	Initial cal 1
V1A9258-IC9258	1A214398.D	09/27/21	01:10	01:17	Initial cal 2
V1A9258-IC9258	1A214399.D	09/27/21	01:29	01:36	Initial cal 4
V1A9258-IC9258	1A214400.D	09/27/21	01:48	01:55	Initial cal 8
V1A9258-IC9258	1A214401.D	09/27/21	02:08	02:15	Initial cal 20
V1A9258-ICC9258	1A214402.D	09/27/21	02:27	02:34	Initial cal 50
V1A9258-IC9258	1A214403.D	09/27/21	02:46	02:53	Initial cal 100
V1A9258-IC9258	1A214404.D	09/27/21	03:05	03:12	Initial cal 200
V1A9258-ICV9258	1A214407.D	09/27/21	04:03	04:10	Initial cal verification 50
V1A9258-ICV9258	1A214408.D	09/27/21	04:22	04:29	Initial cal verification 50

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Instrument Performance Check (BFB)

Job Number: JD35488
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample: V1A9385-BFB	Injection Date: 12/16/21
Lab File ID: 1A217929.D	Injection Time: 18:29
Instrument ID: GCMS1A	

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
50	15.0 - 40.0% of mass 95	26339	20.3	Pass
75	30.0 - 60.0% of mass 95	67269	52.0	Pass
95	Base peak, 100% relative abundance	129475	100.0	Pass
96	5.0 - 9.0% of mass 95	9007	6.96	Pass
173	Less than 2.0% of mass 174	0	0.00 (0.00) ^a	Pass
174	50.0 - 120.0% of mass 95	117317	90.6	Pass
175	5.0 - 9.0% of mass 174	8532	6.59 (7.27) ^a	Pass
176	95.0 - 101.0% of mass 174	112955	87.2 (96.3) ^a	Pass
177	5.0 - 9.0% of mass 176	7725	5.97 (6.84) ^b	Pass

(a) Value is % of mass 174

(b) Value is % of mass 176

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

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
V1A9385-CC9258	1A217929.D	12/16/21	18:29	00:00	Continuing cal 50
V1A9385-BS	1A217931.D	12/16/21	19:07	00:38	Blank Spike
V1A9385-MB	1A217933.D	12/16/21	19:46	01:17	Method Blank
GP37567-LB20	1A217934.D	12/16/21	20:05	01:36	Leachate Blank
GP37553-LB18	1A217935.D	12/16/21	20:25	01:56	Leachate Blank
JD36629-1A	1A217936.D	12/16/21	20:44	02:15	(used for QC only; not part of job JD35488)
ZZZZZZ	1A217937.D	12/16/21	21:04	02:35	(unrelated sample)
ZZZZZZ	1A217938.D	12/16/21	21:23	02:54	(unrelated sample)
GP37567-LS20	1A217939A.D	12/16/21	21:42	03:13	Leachate Spike
JD36629-1AMS	1A217939.D	12/16/21	21:42	03:13	Matrix Spike
JD36629-1AMSD	1A217940.D	12/16/21	22:01	03:32	Matrix Spike Duplicate
ZZZZZZ	1A217943.D	12/16/21	22:59	04:30	(unrelated sample)
ZZZZZZ	1A217944.D	12/16/21	23:18	04:49	(unrelated sample)
ZZZZZZ	1A217945.D	12/16/21	23:38	05:09	(unrelated sample)
ZZZZZZ	1A217946.D	12/16/21	23:58	05:29	(unrelated sample)
ZZZZZZ	1A217947.D	12/17/21	00:17	05:48	(unrelated sample)
ZZZZZZ	1A217948.D	12/17/21	00:37	06:08	(unrelated sample)
ZZZZZZ	1A217949.D	12/17/21	00:57	06:28	(unrelated sample)
ZZZZZZ	1A217950.D	12/17/21	01:16	06:47	(unrelated sample)
ZZZZZZ	1A217951.D	12/17/21	01:36	07:07	(unrelated sample)
ZZZZZZ	1A217952.D	12/17/21	01:55	07:26	(unrelated sample)
ZZZZZZ	1A217953.D	12/17/21	02:15	07:46	(unrelated sample)
ZZZZZZ	1A217954.D	12/17/21	02:34	08:05	(unrelated sample)
ZZZZZZ	1A217955.D	12/17/21	02:54	08:25	(unrelated sample)

Instrument Performance Check (BFB)

Job Number: JD35488
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample: V1A9385-BFB	Injection Date: 12/16/21
Lab File ID: 1A217929.D	Injection Time: 18:29
Instrument ID: GCMS1A	

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
ZZZZZZ	1A217956.D	12/17/21	03:14	08:45	(unrelated sample)
ZZZZZZ	1A217957.D	12/17/21	03:33	09:04	(unrelated sample)

6.6.2

6

Instrument Performance Check (BFB)

Job Number: JD35488
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample: V1A9396-BFB	Injection Date: 12/22/21
Lab File ID: 1A218230.D	Injection Time: 22:03
Instrument ID: GCMS1A	

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
50	15.0 - 40.0% of mass 95	17621	22.0	Pass
75	30.0 - 60.0% of mass 95	41264	51.5	Pass
95	Base peak, 100% relative abundance	80059	100.0	Pass
96	5.0 - 9.0% of mass 95	5237	6.54	Pass
173	Less than 2.0% of mass 174	0	0.00 (0.00) ^a	Pass
174	50.0 - 120.0% of mass 95	74779	93.4	Pass
175	5.0 - 9.0% of mass 174	6608	8.25 (8.84) ^a	Pass
176	95.0 - 101.0% of mass 174	71907	89.8 (96.2) ^a	Pass
177	5.0 - 9.0% of mass 176	4728	5.91 (6.58) ^b	Pass

(a) Value is % of mass 174

(b) Value is % of mass 176

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

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
V1A9396-CC9258	1A218230.D	12/22/21	22:03	00:00	Continuing cal 50
V1A9396-BS	1A218232.D	12/22/21	22:42	00:39	Blank Spike
V1A9396-MB	1A218234.D	12/22/21	23:21	01:18	Method Blank
GP37684-LB27	1A218235.D	12/22/21	23:41	01:38	Leachate Blank
ZZZZZZ	1A218236.D	12/23/21	00:01	01:58	(unrelated sample)
ZZZZZZ	1A218237.D	12/23/21	00:20	02:17	(unrelated sample)
ZZZZZZ	1A218238.D	12/23/21	00:40	02:37	(unrelated sample)
ZZZZZZ	1A218239.D	12/23/21	01:00	02:57	(unrelated sample)
ZZZZZZ	1A218240.D	12/23/21	01:20	03:17	(unrelated sample)
ZZZZZZ	1A218241.D	12/23/21	01:39	03:36	(unrelated sample)
ZZZZZZ	1A218242.D	12/23/21	01:59	03:56	(unrelated sample)
ZZZZZZ	1A218243.D	12/23/21	02:18	04:15	(unrelated sample)
ZZZZZZ	1A218244.D	12/23/21	02:38	04:35	(unrelated sample)
ZZZZZZ	1A218245.D	12/23/21	02:57	04:54	(unrelated sample)
ZZZZZZ	1A218246.D	12/23/21	03:17	05:14	(unrelated sample)
ZZZZZZ	1A218247.D	12/23/21	03:37	05:34	(unrelated sample)
ZZZZZZ	1A218248.D	12/23/21	03:56	05:53	(unrelated sample)
JD36923-7	1A218249.D	12/23/21	04:16	06:13	(used for QC only; not part of job JD35488)
GP37684-LS27	1A218250A.D	12/23/21	04:35	06:32	Leachate Spike
JD36923-7MS	1A218250.D	12/23/21	04:35	06:32	Matrix Spike
JD36923-7MSD	1A218251.D	12/23/21	04:55	06:52	Matrix Spike Duplicate

Instrument Performance Check (BFB)

Job Number: JD35488
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample: V2B8475-BFB	Injection Date: 10/29/21
Lab File ID: 2B186581.D	Injection Time: 15:44
Instrument ID: GCMS2B	

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
50	14.99 - 40.0% of mass 95	25744	18.5	Pass
75	30.0 - 60.0% of mass 95	69010	49.5	Pass
95	Base peak, 100% relative abundance	139288	100.0	Pass
96	5.0 - 9.0% of mass 95	9395	6.75	Pass
173	Less than 2.0% of mass 174	1321	0.95 (1.03) ^a	Pass
174	50.0 - 120.0% of mass 95	128720	92.4	Pass
175	5.0 - 9.0% of mass 174	9993	7.17 (7.76) ^a	Pass
176	95.0 - 101.0% of mass 174	124810	89.6 (97.0) ^a	Pass
177	5.0 - 9.0% of mass 176	8452	6.07 (6.77) ^b	Pass

(a) Value is % of mass 174

(b) Value is % of mass 176

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

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
V2B8475-IC8475	2B186582.D	10/29/21	16:13	00:29	Initial cal 0.2
V2B8475-IC8475	2B186583.D	10/29/21	16:43	00:59	Initial cal 0.5
V2B8475-IC8475	2B186584.D	10/29/21	17:12	01:28	Initial cal 1
V2B8475-IC8475	2B186585.D	10/29/21	17:42	01:58	Initial cal 2
V2B8475-IC8475	2B186586.D	10/29/21	18:11	02:27	Initial cal 4
V2B8475-IC8475	2B186587.D	10/29/21	18:40	02:56	Initial cal 8
V2B8475-IC8475	2B186588.D	10/29/21	19:10	03:26	Initial cal 20
V2B8475-ICC8475	2B186589.D	10/29/21	19:39	03:55	Initial cal 50
V2B8475-IC8475	2B186590.D	10/29/21	20:08	04:24	Initial cal 100
V2B8475-IC8475	2B186591.D	10/29/21	20:37	04:53	Initial cal 200
V2B8475-ICV8475	2B186594.D	10/29/21	22:05	06:21	Initial cal verification 50
V2B8475-ICV8475	2B186595.D	10/29/21	22:34	06:50	Initial cal verification 50
V2B8475-ICV8475	2B186596.D	10/29/21	23:04	07:20	Initial cal verification 50

6.6.4
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Instrument Performance Check (BFB)

Job Number: JD35488
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample: V2B8531-BFB	Injection Date: 12/09/21
Lab File ID: 2B187877.D	Injection Time: 09:43
Instrument ID: GCMS2B	

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
50	14.99 - 40.0% of mass 95	29384	19.0	Pass
75	30.0 - 60.0% of mass 95	70059	45.2	Pass
95	Base peak, 100% relative abundance	154901	100.0	Pass
96	5.0 - 9.0% of mass 95	10228	6.60	Pass
173	Less than 2.0% of mass 174	1553	1.00 (1.01) ^a	Pass
174	50.0 - 120.0% of mass 95	154432	99.7	Pass
175	5.0 - 9.0% of mass 174	11307	7.30 (7.32) ^a	Pass
176	95.0 - 101.0% of mass 174	152725	98.6 (98.9) ^a	Pass
177	5.0 - 9.0% of mass 176	10117	6.53 (6.62) ^b	Pass

(a) Value is % of mass 174

(b) Value is % of mass 176

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

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
V2B8531-CC8475	2B187877.D	12/09/21	09:43	00:00	Continuing cal 20
V2B8531-BS	2B187878.D	12/09/21	10:24	00:41	Blank Spike
V2B8531-MB	2B187880.D	12/09/21	11:22	01:39	Method Blank
GP37443-LB10	2B187881.D	12/09/21	12:00	02:17	Leachate Blank
GP37457-LB11	2B187882.D	12/09/21	12:30	02:47	Leachate Blank
JD35487-2	2B187883.D	12/09/21	12:59	03:16	(used for QC only; not part of job JD35488)
ZZZZZZ	2B187885.D	12/09/21	13:58	04:15	(unrelated sample)
JD35488-1	2B187886.D	12/09/21	14:27	04:44	11215131-120121-IDW-SS-NE
GP37443-LS10	2B187887A.D	12/09/21	14:56	05:13	Leachate Spike
JD35487-2MS	2B187887.D	12/09/21	14:56	05:13	Matrix Spike
JD35487-2MSD	2B187888.D	12/09/21	15:26	05:43	Matrix Spike Duplicate
ZZZZZZ	2B187890.D	12/09/21	16:24	06:41	(unrelated sample)
ZZZZZZ	2B187891.D	12/09/21	16:54	07:11	(unrelated sample)

Instrument Performance Check (BFB)

Job Number: JD35488
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample: V2V3410-BFB	Injection Date: 11/17/21
Lab File ID: 2V82658.D	Injection Time: 18:44
Instrument ID: GCMS2V	

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
50	15.0 - 40.0% of mass 95	16263	19.7	Pass
75	30.0 - 60.0% of mass 95	36856	44.6	Pass
95	Base peak, 100% relative abundance	82621	100.0	Pass
96	5.0 - 9.0% of mass 95	5234	6.33	Pass
173	Less than 2.0% of mass 174	452	0.55 (0.64) ^a	Pass
174	50.0 - 120.0% of mass 95	70272	85.1	Pass
175	5.0 - 9.0% of mass 174	5260	6.37 (7.49) ^a	Pass
176	95.0 - 101.0% of mass 174	70213	85.0 (99.9) ^a	Pass
177	5.0 - 9.0% of mass 176	4519	5.47 (6.44) ^b	Pass

(a) Value is % of mass 174

(b) Value is % of mass 176

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

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
V2V3410-IC3410	2V82659.D	11/17/21	19:09	00:25	Initial cal 0.2
V2V3410-IC3410	2V82660.D	11/17/21	19:35	00:51	Initial cal 0.5
V2V3410-IC3410	2V82661.D	11/17/21	20:00	01:16	Initial cal 1
V2V3410-IC3410	2V82662.D	11/17/21	20:26	01:42	Initial cal 2
V2V3410-IC3410	2V82663.D	11/17/21	20:51	02:07	Initial cal 4
V2V3410-IC3410	2V82664.D	11/17/21	21:17	02:33	Initial cal 8
V2V3410-IC3410	2V82665.D	11/17/21	21:43	02:59	Initial cal 20
V2V3410-ICC3410	2V82666.D	11/17/21	22:08	03:24	Initial cal 50
V2V3410-IC3410	2V82667.D	11/17/21	22:34	03:50	Initial cal 100
V2V3410-IC3410	2V82668.D	11/17/21	22:59	04:15	Initial cal 200
V2V3410-ICV3410	2V82671.D	11/18/21	00:15	05:31	Initial cal verification 50
V2V3410-ICV3410	2V82672.D	11/18/21	00:41	05:57	Initial cal verification 50

6.6.6
6

Instrument Performance Check (BFB)

Job Number: JD35488
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample: V2V3410-BFB2	Injection Date: 11/18/21
Lab File ID: 2V82677.D	Injection Time: 11:00
Instrument ID: GCMS2V	

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
50	15.0 - 40.0% of mass 95	16043	19.2	Pass
75	30.0 - 60.0% of mass 95	36659	43.9	Pass
95	Base peak, 100% relative abundance	83536	100.0	Pass
96	5.0 - 9.0% of mass 95	5523	6.61	Pass
173	Less than 2.0% of mass 174	710	0.85 (0.98) ^a	Pass
174	50.0 - 120.0% of mass 95	72229	86.5	Pass
175	5.0 - 9.0% of mass 174	5646	6.76 (7.82) ^a	Pass
176	95.0 - 101.0% of mass 174	72875	87.2 (100.9) ^a	Pass
177	5.0 - 9.0% of mass 176	4796	5.74 (6.58) ^b	Pass

(a) Value is % of mass 174

(b) Value is % of mass 176

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

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
V2V3410-ICV3410	2V82678.D	11/18/21	11:34	00:34	Initial cal verification 50
V2V3410-ICV3410	2V82679.D	11/18/21	11:59	00:59	Initial cal verification 50

6.6.7
6

Instrument Performance Check (BFB)

Job Number: JD35488
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample: V2V3448-BFB	Injection Date: 12/15/21
Lab File ID: 2V83654.D	Injection Time: 09:44
Instrument ID: GCMS2V	

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
50	15.0 - 40.0% of mass 95	28795	25.1	Pass
75	30.0 - 60.0% of mass 95	56435	49.2	Pass
95	Base peak, 100% relative abundance	114749	100.0	Pass
96	5.0 - 9.0% of mass 95	7413	6.46	Pass
173	Less than 2.0% of mass 174	943	0.82 (0.96) ^a	Pass
174	50.0 - 120.0% of mass 95	97763	85.2	Pass
175	5.0 - 9.0% of mass 174	7189	6.26 (7.35) ^a	Pass
176	95.0 - 101.0% of mass 174	94032	81.9 (96.2) ^a	Pass
177	5.0 - 9.0% of mass 176	6111	5.33 (6.50) ^b	Pass

(a) Value is % of mass 174

(b) Value is % of mass 176

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

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
V2V3448-CC3410	2V83654.D	12/15/21	09:44	00:00	Continuing cal 20
V2V3448-BS	2V83656.D	12/15/21	10:48	01:04	Blank Spike
V2V3448-MB	2V83658.D	12/15/21	12:58	03:14	Method Blank
ZZZZZZ	2V83659.D	12/15/21	13:31	03:47	(unrelated sample)
ZZZZZZ	2V83660.D	12/15/21	13:56	04:12	(unrelated sample)
ZZZZZZ	2V83661.D	12/15/21	14:22	04:38	(unrelated sample)
ZZZZZZ	2V83662.D	12/15/21	14:47	05:03	(unrelated sample)
ZZZZZZ	2V83663.D	12/15/21	15:13	05:29	(unrelated sample)
ZZZZZZ	2V83664.D	12/15/21	15:38	05:54	(unrelated sample)
ZZZZZZ	2V83665.D	12/15/21	16:04	06:20	(unrelated sample)
ZZZZZZ	2V83666.D	12/15/21	16:29	06:45	(unrelated sample)
ZZZZZZ	2V83667.D	12/15/21	16:55	07:11	(unrelated sample)
ZZZZZZ	2V83668.D	12/15/21	17:20	07:36	(unrelated sample)
ZZZZZZ	2V83669.D	12/15/21	17:46	08:02	(unrelated sample)
ZZZZZZ	2V83670.D	12/15/21	18:11	08:27	(unrelated sample)
ZZZZZZ	2V83671.D	12/15/21	18:37	08:53	(unrelated sample)
JD35488-4	2V83672.D	12/15/21	19:03	09:19	11215131-120721-IDW-SS-DECON2
JD35488-2	2V83673.D	12/15/21	19:28	09:44	11215131-120121-IDW-SPS-NE DECON
JD35488-5	2V83674.D	12/15/21	19:53	10:09	11215131-120821-IDW-SS-SW
JD35488-5MS	2V83675.D	12/15/21	20:19	10:35	Matrix Spike
GP37553-LS18	2V83675A.D	12/15/21	20:19	10:35	Leachate Spike
JD35488-5MSD	2V83676.D	12/15/21	20:44	11:00	Matrix Spike Duplicate
GP37457-LS11	2V83677.D	12/15/21	21:10	11:26	Leachate Spike
GP37478-LS13	2V83678.D	12/15/21	21:35	11:51	Leachate Spike

Instrument Performance Check (BFB)

Job Number: JD35488
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample: V3D7187-BFB	Injection Date: 10/03/21
Lab File ID: 3D169267.D	Injection Time: 20:52
Instrument ID: GCMS3D	

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
50	14.99 - 40.0% of mass 95	35970	18.9	Pass
75	30.0 - 60.0% of mass 95	93648	49.2	Pass
95	Base peak, 100% relative abundance	190442	100.0	Pass
96	5.0 - 9.0% of mass 95	12636	6.64	Pass
173	Less than 2.0% of mass 174	869	0.46 (0.54) ^a	Pass
174	50.0 - 120.0% of mass 95	160384	84.2	Pass
175	5.0 - 9.0% of mass 174	12144	6.38 (7.57) ^a	Pass
176	95.0 - 101.0% of mass 174	157034	82.5 (97.9) ^a	Pass
177	5.0 - 9.0% of mass 176	10984	5.77 (6.99) ^b	Pass

(a) Value is % of mass 174

(b) Value is % of mass 176

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

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
V3D7187-IC7187	3D169268.D	10/03/21	21:24	00:32	Initial cal 0.2
V3D7187-IC7187	3D169269.D	10/03/21	21:52	01:00	Initial cal 0.5
V3D7187-IC7187	3D169270.D	10/03/21	22:19	01:27	Initial cal 1
V3D7187-IC7187	3D169271.D	10/03/21	22:46	01:54	Initial cal 2
V3D7187-IC7187	3D169272.D	10/03/21	23:14	02:22	Initial cal 4
V3D7187-IC7187	3D169273.D	10/03/21	23:41	02:49	Initial cal 8
V3D7187-IC7187	3D169274.D	10/04/21	00:08	03:16	Initial cal 20
V3D7187-ICC7187	3D169275.D	10/04/21	00:36	03:44	Initial cal 50
V3D7187-IC7187	3D169276.D	10/04/21	01:03	04:11	Initial cal 100
V3D7187-IC7187	3D169277.D	10/04/21	01:30	04:38	Initial cal 200
V3D7187-ICV7187	3D169280.D	10/04/21	02:52	06:00	Initial cal verification 50
V3D7187-ICV7187	3D169281.D	10/04/21	03:19	06:27	Initial cal verification 50

Instrument Performance Check (BFB)

Job Number: JD35488
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample: V3D7311-BFB	Injection Date: 12/28/21
Lab File ID: 3D172298.D	Injection Time: 10:10
Instrument ID: GCMS3D	

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
50	14.99 - 40.0% of mass 95	35493	20.5	Pass
75	30.0 - 60.0% of mass 95	85547	49.4	Pass
95	Base peak, 100% relative abundance	173163	100.0	Pass
96	5.0 - 9.0% of mass 95	11219	6.48	Pass
173	Less than 2.0% of mass 174	1270	0.73 (0.88) ^a	Pass
174	50.0 - 120.0% of mass 95	144685	83.6	Pass
175	5.0 - 9.0% of mass 174	10901	6.30 (7.53) ^a	Pass
176	95.0 - 101.0% of mass 174	138667	80.1 (95.8) ^a	Pass
177	5.0 - 9.0% of mass 176	9500	5.49 (6.85) ^b	Pass

(a) Value is % of mass 174

(b) Value is % of mass 176

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

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
V3D7311-CC7187	3D172298.D	12/28/21	10:10	00:00	Continuing cal 20
V3D7311-BS	3D172300.D	12/28/21	11:25	01:15	Blank Spike
V3D7311-MB	3D172302.D	12/28/21	12:19	02:09	Method Blank
GP37638-LB22	3D172303.D	12/28/21	12:52	02:42	Leachate Blank
GP37747-LB8	3D172304.D	12/28/21	13:19	03:09	Leachate Blank
JD35488-7	3D172305.D	12/28/21	13:47	03:37	11215131-122021-IDW-SS-PURGE
JD35488-6	3D172306.D	12/28/21	14:14	04:04	11215131-121421-IDW-BN-NC
ZZZZZZ	3D172307.D	12/28/21	14:42	04:32	(unrelated sample)
ZZZZZZ	3D172308.D	12/28/21	15:09	04:59	(unrelated sample)
GP37747-LS8	3D172309A.D	12/28/21	15:36	05:26	Leachate Spike
JD35488-7MS	3D172309.D	12/28/21	15:36	05:26	Matrix Spike
JD35488-7MSD	3D172310.D	12/28/21	16:03	05:53	Matrix Spike Duplicate
GP37638-LS22	3D172311.D	12/28/21	16:30	06:20	Leachate Spike
ZZZZZZ	3D172313.D	12/28/21	17:25	07:15	(unrelated sample)
ZZZZZZ	3D172314.D	12/28/21	17:52	07:42	(unrelated sample)

6.6.10

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Instrument Performance Check (BFB)

Job Number: JD35488
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample: VL10004-BFB	Injection Date: 10/05/21
Lab File ID: L333150.D	Injection Time: 18:43
Instrument ID: GCMSL	

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
50	15.0 - 40.0% of mass 95	25427	18.8	Pass
75	30.0 - 60.0% of mass 95	70245	52.0	Pass
95	Base peak, 100% relative abundance	135176	100.0	Pass
96	5.0 - 9.0% of mass 95	8845	6.54	Pass
173	Less than 2.0% of mass 174	430	0.32 (0.40) ^a	Pass
174	50.0 - 120.0% of mass 95	108003	79.9	Pass
175	5.0 - 9.0% of mass 174	7964	5.89 (7.37) ^a	Pass
176	95.0 - 101.0% of mass 174	105403	78.0 (97.6) ^a	Pass
177	5.0 - 9.0% of mass 176	7285	5.39 (6.91) ^b	Pass

(a) Value is % of mass 174

(b) Value is % of mass 176

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

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
VL10004-IC10004	L333151.D	10/05/21	19:12	00:29	Initial cal 0.2
VL10004-IC10004	L333152.D	10/05/21	19:33	00:50	Initial cal 0.5
VL10004-IC10004	L333153.D	10/05/21	19:54	01:11	Initial cal 1
VL10004-IC10004	L333154.D	10/05/21	20:15	01:32	Initial cal 2
VL10004-IC10004	L333155.D	10/05/21	20:36	01:53	Initial cal 4
VL10004-IC10004	L333156.D	10/05/21	20:57	02:14	Initial cal 8
VL10004-IC10004	L333157.D	10/05/21	21:18	02:35	Initial cal 20
VL10004-ICC10004	L333158.D	10/05/21	21:39	02:56	Initial cal 50
VL10004-IC10004	L333159.D	10/05/21	22:00	03:17	Initial cal 100
VL10004-IC10004	L333160.D	10/05/21	22:21	03:38	Initial cal 200
VL10004-ICV10004	L333163.D	10/05/21	23:24	04:41	Initial cal verification 50
VL10004-ICV10004	L333164.D	10/05/21	23:45	05:02	Initial cal verification 50

Instrument Performance Check (BFB)

Job Number: JD35488
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample: VL10004-BFB2	Injection Date: 10/06/21
Lab File ID: L333167.D	Injection Time: 15:12
Instrument ID: GCMSL	

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
50	15.0 - 40.0% of mass 95	24885	19.2	Pass
75	30.0 - 60.0% of mass 95	71893	55.6	Pass
95	Base peak, 100% relative abundance	129304	100.0	Pass
96	5.0 - 9.0% of mass 95	8996	6.96	Pass
173	Less than 2.0% of mass 174	0	0.00 (0.00) ^a	Pass
174	50.0 - 120.0% of mass 95	109248	84.5	Pass
175	5.0 - 9.0% of mass 174	8699	6.73 (7.96) ^a	Pass
176	95.0 - 101.0% of mass 174	104085	80.5 (95.3) ^a	Pass
177	5.0 - 9.0% of mass 176	6724	5.20 (6.46) ^b	Pass

(a) Value is % of mass 174

(b) Value is % of mass 176

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

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
VL10004-ICV10004	L333168.D	10/06/21	16:01	00:49	Initial cal verification 50

6.6.12
6

Instrument Performance Check (BFB)

Job Number: JD35488
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample: VL10104-BFB	Injection Date: 12/14/21
Lab File ID: L335960.D	Injection Time: 22:10
Instrument ID: GCMSL	

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
50	15.0 - 40.0% of mass 95	25965	18.8	Pass
75	30.0 - 60.0% of mass 95	76109	55.1	Pass
95	Base peak, 100% relative abundance	138030	100.0	Pass
96	5.0 - 9.0% of mass 95	10061	7.29	Pass
173	Less than 2.0% of mass 174	394	0.29 (0.35) ^a	Pass
174	50.0 - 120.0% of mass 95	113488	82.2	Pass
175	5.0 - 9.0% of mass 174	9029	6.54 (7.96) ^a	Pass
176	95.0 - 101.0% of mass 174	107814	78.1 (95.0) ^a	Pass
177	5.0 - 9.0% of mass 176	7573	5.49 (7.02) ^b	Pass

(a) Value is % of mass 174

(b) Value is % of mass 176

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

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
VL10104-CC10004	L335960.D	12/14/21	22:10	00:00	Continuing cal 50
VL10104-BS	L335962.D	12/14/21	22:52	00:42	Blank Spike
VL10104-MB	L335964.D	12/14/21	23:34	01:24	Method Blank
GP37478-LB13	L335965.D	12/14/21	23:55	01:45	Leachate Blank
GP37492-LB14	L335966.D	12/15/21	00:16	02:06	Leachate Blank
GP37525-LB16	L335967.D	12/15/21	00:37	02:27	Leachate Blank
GP37528-LB17	L335968.D	12/15/21	00:58	02:48	Leachate Blank
ZZZZZZ	L335969.D	12/15/21	01:19	03:09	(unrelated sample)
ZZZZZZ	L335970.D	12/15/21	01:40	03:30	(unrelated sample)
ZZZZZZ	L335971.D	12/15/21	02:01	03:51	(unrelated sample)
ZZZZZZ	L335972.D	12/15/21	02:22	04:12	(unrelated sample)
ZZZZZZ	L335973.D	12/15/21	02:43	04:33	(unrelated sample)
ZZZZZZ	L335974.D	12/15/21	03:04	04:54	(unrelated sample)
ZZZZZZ	L335975.D	12/15/21	03:25	05:15	(unrelated sample)
ZZZZZZ	L335976.D	12/15/21	03:45	05:35	(unrelated sample)
JD35487-4	L335977.D	12/15/21	04:06	05:56	(used for QC only; not part of job JD35488)
JD35488-4	L335978.D	12/15/21	04:27	06:17	11215131-120721-IDW-SS-DECON2
JD35488-3	L335979.D	12/15/21	04:48	06:38	11215131-120721-IDW-SS-SC
JD35487-4MS	L335980.D	12/15/21	05:09	06:59	Matrix Spike
GP37492-LS14	L335980A.D	12/15/21	05:09	06:59	Leachate Spike
JD35487-4MSD	L335981.D	12/15/21	05:30	07:20	Matrix Spike Duplicate
GP37525-LS16	L335982.D	12/15/21	05:50	07:40	Leachate Spike
GP37528-LS17	L335983.D	12/15/21	06:11	08:01	Leachate Spike
ZZZZZZ	L335985.D	12/15/21	06:53	08:43	(unrelated sample)

6.6.13

6

Instrument Performance Check (BFB)

Job Number: JD35488
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample: VL10104-BFB	Injection Date: 12/14/21
Lab File ID: L335960.D	Injection Time: 22:10
Instrument ID: GCMSL	

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
ZZZZZZ	L335986.D	12/15/21	07:14	09:04	(unrelated sample)
ZZZZZZ	L335987.D	12/15/21	07:35	09:25	(unrelated sample)
ZZZZZZ	L335988.D	12/15/21	07:55	09:45	(unrelated sample)
ZZZZZZ	L335990.D	12/15/21	08:37	10:27	(unrelated sample)
ZZZZZZ	L335991.D	12/15/21	08:58	10:48	(unrelated sample)
ZZZZZZ	L335992.D	12/15/21	09:19	11:09	(unrelated sample)
ZZZZZZ	L335993.D	12/15/21	09:40	11:30	(unrelated sample)

6.6.13

6

Surrogate Recovery Summary

Job Number: JD35488
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Method: SW846 8260D	Matrix: LEACHATE
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Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1	S2	S3	S4
JD35488-1	2B187886.D	102	94	94	104
JD35488-2	2V83673.D	95	110	102	93
JD35488-3	L335979.D	103	111	99	106
JD35488-4	L335978.D	106	115	97	108
JD35488-4	2V83672.D	94	111	104	95
JD35488-5	2V83674.D	96	111	104	95
JD35488-6	3D172306.D	82	100	104	98
JD35488-7	3D172305.D	85	100	102	98
GP37443-LB10	2B187881.D	100	93	94	103
GP37443-LS10	2B187887A.D	97	87	90	98
GP37457-LB11	2B187882.D	99	92	95	103
GP37457-LS11	2V83677.D	93	109	100	95
GP37525-LB16	L335967.D	103	114	98	109
GP37525-LS16	L335982.D	105	108	90	114
GP37528-LB17	L335968.D	105	117	98	107
GP37528-LS17	L335983.D	103	109	91	115
GP37553-LB18	1A217935.D	91	112	113	108
GP37553-LS18	2V83675A.D	96	113	99	95
GP37684-LB27	1A218235.D	95	118	114	111
GP37684-LS27	1A218250A.D	91	108	111	105
GP37747-LB8	3D172304.D	84	100	103	98
GP37747-LS8	3D172309A.D	87	95	97	101
JD35487-2MS	2B187887.D	97	87	90	98
JD35487-2MSD	2B187888.D	96	86	91	100
JD35487-4MS	L335980.D	106	108	90	113
JD35487-4MSD	L335981.D	106	110	93	112
JD35488-5MS	2V83675.D	96	113	99	95
JD35488-5MSD	2V83676.D	95	111	99	96
JD35488-7MS	3D172309.D	87	95	97	101
JD35488-7MSD	3D172310.D	86	93	96	102
V2B8531-BS	2B187878.D	96	87	91	98
V2B8531-MB	2B187880.D	99	92	94	104
V2V3448-BS	2V83656.D	92	108	101	94
V2V3448-MB	2V83658.D	93	107	105	95
V3D7311-BS	3D172300.D	85	93	97	102
V3D7311-MB	3D172302.D	83	101	102	98
VL10104-BS	L335962.D	108	111	91	111
VL10104-MB	L335964.D	107	115	98	107
V1A9385-MB	1A217933.D	92	117	112	111

Surrogate Recovery Summary

Job Number: JD35488
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Method: SW846 8260D	Matrix: LEACHATE
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Samples and QC shown here apply to the above method

Surrogate Compounds	Recovery Limits
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Surrogate Compounds	Recovery Limits
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S1 = Dibromofluoromethane	76-120%
S2 = 1,2-Dichloroethane-D4	64-135%
S3 = Toluene-D8	76-117%
S4 = 4-Bromofluorobenzene	72-122%

6.7.1

6

MS Semi-volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Instrument Performance Checks (DFTPP)
- Surrogate Recovery Summaries

Method Blank Summary

Job Number: JD35488

Account: CRATXH GHD Services Inc.

Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP37049-MB1	6P503032.D	1	12/10/21	KLS	12/09/21	OP37049	E6P3571

The QC reported here applies to the following samples:

Method: SW846 8270E

JD35488-1

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	5.0	0.82	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	5.0	0.89	ug/l	
120-83-2	2,4-Dichlorophenol	ND	5.0	1.3	ug/l	
105-67-9	2,4-Dimethylphenol	ND	5.0	2.4	ug/l	
51-28-5	2,4-Dinitrophenol	ND	20	1.6	ug/l	
95-48-7	2-Methylphenol	ND	2.0	0.89	ug/l	
	3&4-Methylphenol	ND	2.0	0.88	ug/l	
87-86-5	Pentachlorophenol	ND	10	1.4	ug/l	
108-95-2	Phenol	ND	2.0	0.39	ug/l	
58-90-2	2,3,4,6-Tetrachlorophenol	ND	5.0	1.5	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	5.0	1.3	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	5.0	0.92	ug/l	
83-32-9	Acenaphthene	ND	1.0	0.19	ug/l	
98-86-2	Acetophenone	ND	5.0	0.21	ug/l	
62-53-3	Aniline	ND	2.0	0.32	ug/l	
120-12-7	Anthracene	ND	1.0	0.21	ug/l	
92-87-5	Benzidine	ND	20	0.90	ug/l	
85-68-7	Butyl benzyl phthalate	ND	2.0	0.46	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	2.0	0.25	ug/l	
122-66-7	1,2-Diphenylhydrazine	ND	2.0	0.19	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	2.0	0.55	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	2.0	0.48	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	5.0	0.51	ug/l	
123-91-1	1,4-Dioxane	ND	2.0	0.66	ug/l	
84-66-2	Diethyl phthalate	ND	2.0	0.26	ug/l	
131-11-3	Dimethyl phthalate	ND	2.0	0.22	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	2.0	1.7	ug/l	
206-44-0	Fluoranthene	ND	1.0	0.17	ug/l	
86-73-7	Fluorene	ND	1.0	0.17	ug/l	
118-74-1	Hexachlorobenzene	ND	2.0	0.33	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	20	2.8	ug/l	
67-72-1	Hexachloroethane	ND	5.0	0.39	ug/l	
78-59-1	Isophorone	ND	2.0	0.28	ug/l	
98-95-3	Nitrobenzene	ND	2.0	0.64	ug/l	
62-75-9	n-Nitrosodimethylamine	ND	2.0	0.82	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	2.0	0.48	ug/l	

Method Blank Summary

Job Number: JD35488
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP37049-MB1	6P503032.D	1	12/10/21	KLS	12/09/21	OP37049	E6P3571

The QC reported here applies to the following samples:

Method: SW846 8270E

JD35488-1

CAS No.	Compound	Result	RL	MDL	Units	Q
82-68-8	Pentachloronitrobenzene	ND	5.0	2.3	ug/l	
129-00-0	Pyrene	ND	1.0	0.22	ug/l	
110-86-1	Pyridine	ND	2.0	0.39	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	2.0	0.25	ug/l	

CAS No.	Surrogate Recoveries	Limits	
367-12-4	2-Fluorophenol	37%	10-73%
4165-62-2	Phenol-d5	24%	10-64%
118-79-6	2,4,6-Tribromophenol	69%	31-130%
4165-60-0	Nitrobenzene-d5	67%	28-126%
321-60-8	2-Fluorobiphenyl	61%	26-114%
1718-51-0	Terphenyl-d14	78%	16-122%

7.1.1
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Method Blank Summary

Job Number: JD35488
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP37049-MB1	F204184.D	1	12/11/21	CS	12/09/21	OP37049	EF8949

The QC reported here applies to the following samples:

Method: SW846 8270E

JD35488-1

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	5.0	0.82	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	5.0	0.89	ug/l	
120-83-2	2,4-Dichlorophenol	ND	5.0	1.3	ug/l	
105-67-9	2,4-Dimethylphenol	ND	5.0	2.4	ug/l	
51-28-5	2,4-Dinitrophenol	ND	20	1.6	ug/l	
95-48-7	2-Methylphenol	ND	2.0	0.89	ug/l	
	3&4-Methylphenol	ND	2.0	0.88	ug/l	
87-86-5	Pentachlorophenol	ND	10	1.4	ug/l	
108-95-2	Phenol	ND	2.0	0.39	ug/l	
58-90-2	2,3,4,6-Tetrachlorophenol	ND	5.0	1.5	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	5.0	1.3	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	5.0	0.92	ug/l	
83-32-9	Acenaphthene	ND	1.0	0.19	ug/l	
98-86-2	Acetophenone	ND	5.0	0.21	ug/l	
62-53-3	Aniline	ND	2.0	0.32	ug/l	
120-12-7	Anthracene	ND	1.0	0.21	ug/l	
92-87-5	Benzidine	ND	20	0.90	ug/l	
85-68-7	Butyl benzyl phthalate	ND	2.0	0.46	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	2.0	0.25	ug/l	
122-66-7	1,2-Diphenylhydrazine	ND	2.0	0.19	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	2.0	0.55	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	2.0	0.48	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	5.0	0.51	ug/l	
123-91-1	1,4-Dioxane	ND	2.0	0.66	ug/l	
60-51-5	Dimethoate	ND	5.0	0.24	ug/l	
122-39-4	Diphenylamine	ND	5.0	0.58	ug/l	
298-04-4	Disulfoton	ND	5.0	0.47	ug/l	
99-65-0	m-Dinitrobenzene	ND	5.0	1.5	ug/l	
84-66-2	Diethyl phthalate	ND	2.0	0.26	ug/l	
131-11-3	Dimethyl phthalate	ND	2.0	0.22	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	2.0	1.7	ug/l	
206-44-0	Fluoranthene	ND	1.0	0.17	ug/l	
86-73-7	Fluorene	ND	1.0	0.17	ug/l	
118-74-1	Hexachlorobenzene	ND	2.0	0.33	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	20	2.8	ug/l	
67-72-1	Hexachloroethane	ND	5.0	0.39	ug/l	

Method Blank Summary

Job Number: JD35488
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP37049-MB1	F204184.D	1	12/11/21	CS	12/09/21	OP37049	EF8949

The QC reported here applies to the following samples:

Method: SW846 8270E

JD35488-1

CAS No.	Compound	Result	RL	MDL	Units	Q
70-30-4	Hexachlorophene	ND	50		ug/l	
78-59-1	Isophorone	ND	2.0	0.28	ug/l	
298-00-0	Methyl parathion	ND	5.0	0.40	ug/l	
98-95-3	Nitrobenzene	ND	2.0	0.64	ug/l	
62-75-9	n-Nitrosodimethylamine	ND	2.0	0.82	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	2.0	0.48	ug/l	
924-16-3	N-Nitrosodi-n-butylamine	ND	5.0	0.60	ug/l	
10595-95-6	N-Nitrosomethylethylamine	ND	5.0	1.4	ug/l	
930-55-2	N-Nitrosopyrrolidine	ND	5.0	0.73	ug/l	
56-38-2	Parathion	ND	5.0	0.51	ug/l	
608-93-5	Pentachlorobenzene	ND	5.0	0.24	ug/l	
82-68-8	Pentachloronitrobenzene	ND	5.0	2.3	ug/l	
23950-58-5	Pronamide	ND	5.0	0.25	ug/l	
129-00-0	Pyrene	ND	1.0	0.22	ug/l	
110-86-1	Pyridine	ND	2.0	0.39	ug/l	
106-50-3	p-Phenylenediamine	ND	5.0	0.20	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	2.0	0.25	ug/l	

CAS No.	Surrogate Recoveries	Limits	
367-12-4	2-Fluorophenol	35%	10-73%
4165-62-2	Phenol-d5	24%	10-64%
118-79-6	2,4,6-Tribromophenol	66%	31-130%
4165-60-0	Nitrobenzene-d5	53%	28-126%
321-60-8	2-Fluorobiphenyl	56%	26-114%
1718-51-0	Terphenyl-d14	77%	16-122%

Method Blank Summary

Job Number: JD35488
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP37155-MB1	F204312.D	1	12/16/21	CS	12/14/21	OP37155	EF8956

The QC reported here applies to the following samples:

Method: SW846 8270E

JD35488-2

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	5.0	0.82	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	5.0	0.89	ug/l	
120-83-2	2,4-Dichlorophenol	ND	5.0	1.3	ug/l	
105-67-9	2,4-Dimethylphenol	ND	5.0	2.4	ug/l	
51-28-5	2,4-Dinitrophenol	ND	20	1.6	ug/l	
95-48-7	2-Methylphenol	ND	2.0	0.89	ug/l	
	3&4-Methylphenol	ND	2.0	0.88	ug/l	
87-86-5	Pentachlorophenol	ND	10	1.4	ug/l	
108-95-2	Phenol	ND	2.0	0.39	ug/l	
58-90-2	2,3,4,6-Tetrachlorophenol	ND	5.0	1.5	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	5.0	1.3	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	5.0	0.92	ug/l	
83-32-9	Acenaphthene	ND	1.0	0.19	ug/l	
98-86-2	Acetophenone	ND	5.0	0.21	ug/l	
62-53-3	Aniline	ND	2.0	0.32	ug/l	
120-12-7	Anthracene	ND	1.0	0.21	ug/l	
92-87-5	Benzidine	ND	20	0.90	ug/l	
85-68-7	Butyl benzyl phthalate	ND	2.0	0.46	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	2.0	0.25	ug/l	
122-66-7	1,2-Diphenylhydrazine	ND	2.0	0.19	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	2.0	0.55	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	2.0	0.48	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	5.0	0.51	ug/l	
123-91-1	1,4-Dioxane	ND	2.0	0.66	ug/l	
60-51-5	Dimethoate	ND	5.0	0.24	ug/l	
122-39-4	Diphenylamine	ND	5.0	0.58	ug/l	
298-04-4	Disulfoton	ND	5.0	0.47	ug/l	
99-65-0	m-Dinitrobenzene	ND	5.0	1.5	ug/l	
84-66-2	Diethyl phthalate	ND	2.0	0.26	ug/l	
131-11-3	Dimethyl phthalate	ND	2.0	0.22	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	2.0	1.7	ug/l	
206-44-0	Fluoranthene	ND	1.0	0.17	ug/l	
86-73-7	Fluorene	ND	1.0	0.17	ug/l	
118-74-1	Hexachlorobenzene	ND	2.0	0.33	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	20	2.8	ug/l	
67-72-1	Hexachloroethane	ND	5.0	0.39	ug/l	

Method Blank Summary

Job Number: JD35488
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP37155-MB1	F204312.D	1	12/16/21	CS	12/14/21	OP37155	EF8956

The QC reported here applies to the following samples:

Method: SW846 8270E

JD35488-2

CAS No.	Compound	Result	RL	MDL	Units	Q
70-30-4	Hexachlorophene	ND	50		ug/l	
78-59-1	Isophorone	ND	2.0	0.28	ug/l	
298-00-0	Methyl parathion	ND	5.0	0.40	ug/l	
98-95-3	Nitrobenzene	ND	2.0	0.64	ug/l	
62-75-9	n-Nitrosodimethylamine	ND	2.0	0.82	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	2.0	0.48	ug/l	
924-16-3	N-Nitrosodi-n-butylamine	ND	5.0	0.60	ug/l	
10595-95-6	N-Nitrosomethylethylamine	ND	5.0	1.4	ug/l	
930-55-2	N-Nitrosopyrrolidine	ND	5.0	0.73	ug/l	
56-38-2	Parathion	ND	5.0	0.51	ug/l	
608-93-5	Pentachlorobenzene	ND	5.0	0.24	ug/l	
82-68-8	Pentachloronitrobenzene	ND	5.0	2.3	ug/l	
23950-58-5	Pronamide	ND	5.0	0.25	ug/l	
129-00-0	Pyrene	ND	1.0	0.22	ug/l	
110-86-1	Pyridine	ND	2.0	0.39	ug/l	
106-50-3	p-Phenylenediamine	ND	5.0	0.20	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	2.0	0.25	ug/l	

CAS No.	Surrogate Recoveries	Limits	
367-12-4	2-Fluorophenol	37%	10-73%
4165-62-2	Phenol-d5	25%	10-64%
118-79-6	2,4,6-Tribromophenol	87%	31-130%
4165-60-0	Nitrobenzene-d5	76%	28-126%
321-60-8	2-Fluorobiphenyl	82%	26-114%
1718-51-0	Terphenyl-d14	86%	16-122%

Method Blank Summary

Job Number: JD35488

Account: CRATXH GHD Services Inc.

Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP37159-MB1	6P503067.D	1	12/16/21	CS	12/15/21	OP37159	E6P3574

The QC reported here applies to the following samples:

Method: SW846 8270E

JD35488-3, JD35488-4, JD35488-5

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	5.0	0.82	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	5.0	0.89	ug/l	
120-83-2	2,4-Dichlorophenol	ND	5.0	1.3	ug/l	
105-67-9	2,4-Dimethylphenol	ND	5.0	2.4	ug/l	
51-28-5	2,4-Dinitrophenol	ND	20	1.6	ug/l	
95-48-7	2-Methylphenol	ND	2.0	0.89	ug/l	
	3&4-Methylphenol	ND	2.0	0.88	ug/l	
87-86-5	Pentachlorophenol	ND	10	1.4	ug/l	
108-95-2	Phenol	ND	2.0	0.39	ug/l	
58-90-2	2,3,4,6-Tetrachlorophenol	ND	5.0	1.5	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	5.0	1.3	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	5.0	0.92	ug/l	
83-32-9	Acenaphthene	ND	1.0	0.19	ug/l	
98-86-2	Acetophenone	ND	5.0	0.21	ug/l	
62-53-3	Aniline	ND	2.0	0.32	ug/l	
120-12-7	Anthracene	ND	1.0	0.21	ug/l	
92-87-5	Benzidine	ND	20	0.90	ug/l	
85-68-7	Butyl benzyl phthalate	ND	2.0	0.46	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	2.0	0.25	ug/l	
122-66-7	1,2-Diphenylhydrazine	ND	2.0	0.19	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	2.0	0.55	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	2.0	0.48	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	5.0	0.51	ug/l	
123-91-1	1,4-Dioxane	ND	2.0	0.66	ug/l	
84-66-2	Diethyl phthalate	ND	2.0	0.26	ug/l	
131-11-3	Dimethyl phthalate	ND	2.0	0.22	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	2.0	1.7	ug/l	
206-44-0	Fluoranthene	ND	1.0	0.17	ug/l	
86-73-7	Fluorene	ND	1.0	0.17	ug/l	
118-74-1	Hexachlorobenzene	ND	2.0	0.33	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	20	2.8	ug/l	
67-72-1	Hexachloroethane	ND	5.0	0.39	ug/l	
78-59-1	Isophorone	ND	2.0	0.28	ug/l	
98-95-3	Nitrobenzene	ND	2.0	0.64	ug/l	
62-75-9	n-Nitrosodimethylamine	ND	2.0	0.82	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	2.0	0.48	ug/l	

Method Blank Summary

Job Number: JD35488
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP37159-MB1	6P503067.D	1	12/16/21	CS	12/15/21	OP37159	E6P3574

The QC reported here applies to the following samples:

Method: SW846 8270E

JD35488-3, JD35488-4, JD35488-5

CAS No.	Compound	Result	RL	MDL	Units	Q
82-68-8	Pentachloronitrobenzene	ND	5.0	2.3	ug/l	
129-00-0	Pyrene	ND	1.0	0.22	ug/l	
110-86-1	Pyridine	ND	2.0	0.39	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	2.0	0.25	ug/l	

CAS No.	Surrogate Recoveries	Limits	
367-12-4	2-Fluorophenol	26%	10-73%
4165-62-2	Phenol-d5	19%	10-64%
118-79-6	2,4,6-Tribromophenol	66%	31-130%
4165-60-0	Nitrobenzene-d5	65%	28-126%
321-60-8	2-Fluorobiphenyl	70%	26-114%
1718-51-0	Terphenyl-d14	56%	16-122%

Method Blank Summary

Job Number: JD35488
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP37159-MB1	F204307.D	1	12/16/21	CS	12/15/21	OP37159	EF8956

The QC reported here applies to the following samples:

Method: SW846 8270E

JD35488-3, JD35488-4, JD35488-5

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	5.0	0.82	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	5.0	0.89	ug/l	
120-83-2	2,4-Dichlorophenol	ND	5.0	1.3	ug/l	
105-67-9	2,4-Dimethylphenol	ND	5.0	2.4	ug/l	
51-28-5	2,4-Dinitrophenol	ND	20	1.6	ug/l	
95-48-7	2-Methylphenol	ND	2.0	0.89	ug/l	
	3&4-Methylphenol	ND	2.0	0.88	ug/l	
87-86-5	Pentachlorophenol	ND	10	1.4	ug/l	
108-95-2	Phenol	ND	2.0	0.39	ug/l	
58-90-2	2,3,4,6-Tetrachlorophenol	ND	5.0	1.5	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	5.0	1.3	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	5.0	0.92	ug/l	
83-32-9	Acenaphthene	ND	1.0	0.19	ug/l	
98-86-2	Acetophenone	ND	5.0	0.21	ug/l	
62-53-3	Aniline	ND	2.0	0.32	ug/l	
120-12-7	Anthracene	ND	1.0	0.21	ug/l	
92-87-5	Benzidine	ND	20	0.90	ug/l	
85-68-7	Butyl benzyl phthalate	ND	2.0	0.46	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	2.0	0.25	ug/l	
122-66-7	1,2-Diphenylhydrazine	ND	2.0	0.19	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	2.0	0.55	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	2.0	0.48	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	5.0	0.51	ug/l	
123-91-1	1,4-Dioxane	ND	2.0	0.66	ug/l	
84-66-2	Diethyl phthalate	ND	2.0	0.26	ug/l	
131-11-3	Dimethyl phthalate	ND	2.0	0.22	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	2.0	1.7	ug/l	
206-44-0	Fluoranthene	ND	1.0	0.17	ug/l	
86-73-7	Fluorene	ND	1.0	0.17	ug/l	
118-74-1	Hexachlorobenzene	ND	2.0	0.33	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	20	2.8	ug/l	
67-72-1	Hexachloroethane	ND	5.0	0.39	ug/l	
78-59-1	Isophorone	ND	2.0	0.28	ug/l	
98-95-3	Nitrobenzene	ND	2.0	0.64	ug/l	
62-75-9	n-Nitrosodimethylamine	ND	2.0	0.82	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	2.0	0.48	ug/l	

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Method Blank Summary

Job Number: JD35488
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP37159-MB1	F204307.D	1	12/16/21	CS	12/15/21	OP37159	EF8956

The QC reported here applies to the following samples:

Method: SW846 8270E

JD35488-3, JD35488-4, JD35488-5

CAS No.	Compound	Result	RL	MDL	Units	Q
129-00-0	Pyrene	ND	1.0	0.22	ug/l	
110-86-1	Pyridine	ND	2.0	0.39	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	2.0	0.25	ug/l	

CAS No.	Surrogate Recoveries	Limits	
367-12-4	2-Fluorophenol	25%	10-73%
4165-62-2	Phenol-d5	17%	10-64%
118-79-6	2,4,6-Tribromophenol	66%	31-130%
4165-60-0	Nitrobenzene-d5	60%	28-126%
321-60-8	2-Fluorobiphenyl	68%	26-114%
1718-51-0	Terphenyl-d14	57%	16-122%

Method Blank Summary

Job Number: JD35488
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP37314-MB1	6P503179.D	1	12/27/21	KLS	12/23/21	OP37314	E6P3580

The QC reported here applies to the following samples:

Method: SW846 8270E

JD35488-6

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	5.0	0.82	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	5.0	0.89	ug/l	
120-83-2	2,4-Dichlorophenol	ND	5.0	1.3	ug/l	
105-67-9	2,4-Dimethylphenol	ND	5.0	2.4	ug/l	
51-28-5	2,4-Dinitrophenol	ND	20	1.6	ug/l	
95-48-7	2-Methylphenol	ND	2.0	0.89	ug/l	
	Cresol, Total	ND	5.0	0.88	ug/l	
	3&4-Methylphenol	ND	2.0	0.88	ug/l	
87-86-5	Pentachlorophenol	ND	10	1.4	ug/l	
108-95-2	Phenol	ND	2.0	0.39	ug/l	
58-90-2	2,3,4,6-Tetrachlorophenol	ND	5.0	1.5	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	5.0	1.3	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	5.0	0.92	ug/l	
83-32-9	Acenaphthene	ND	1.0	0.19	ug/l	
98-86-2	Acetophenone	ND	5.0	0.21	ug/l	
62-53-3	Aniline	ND	2.0	0.32	ug/l	
120-12-7	Anthracene	ND	1.0	0.21	ug/l	
92-87-5	Benzidine	ND	20	0.90	ug/l	
85-68-7	Butyl benzyl phthalate	ND	2.0	0.46	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	2.0	0.25	ug/l	
122-66-7	1,2-Diphenylhydrazine	ND	2.0	0.19	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	2.0	0.55	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	2.0	0.48	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	5.0	0.51	ug/l	
123-91-1	1,4-Dioxane	ND	2.0	0.66	ug/l	
84-66-2	Diethyl phthalate	ND	2.0	0.26	ug/l	
131-11-3	Dimethyl phthalate	ND	2.0	0.22	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	2.0	1.7	ug/l	
206-44-0	Fluoranthene	ND	1.0	0.17	ug/l	
86-73-7	Fluorene	ND	1.0	0.17	ug/l	
118-74-1	Hexachlorobenzene	ND	2.0	0.33	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	20	2.8	ug/l	
67-72-1	Hexachloroethane	ND	5.0	0.39	ug/l	
78-59-1	Isophorone	ND	2.0	0.28	ug/l	
98-95-3	Nitrobenzene	ND	2.0	0.64	ug/l	
62-75-9	n-Nitrosodimethylamine	ND	2.0	0.82	ug/l	

Method Blank Summary

Job Number: JD35488
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP37314-MB1	6P503179.D	1	12/27/21	KLS	12/23/21	OP37314	E6P3580

The QC reported here applies to the following samples:

Method: SW846 8270E

JD35488-6

CAS No.	Compound	Result	RL	MDL	Units	Q
621-64-7	N-Nitroso-di-n-propylamine	ND	2.0	0.48	ug/l	
82-68-8	Pentachloronitrobenzene	ND	5.0	2.3	ug/l	
129-00-0	Pyrene	ND	1.0	0.22	ug/l	
110-86-1	Pyridine	ND	2.0	0.39	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	2.0	0.25	ug/l	

CAS No.	Surrogate Recoveries	Limits
367-12-4	2-Fluorophenol	42% 10-73%
4165-62-2	Phenol-d5	26% 10-64%
118-79-6	2,4,6-Tribromophenol	85% 31-130%
4165-60-0	Nitrobenzene-d5	74% 28-126%
321-60-8	2-Fluorobiphenyl	78% 26-114%
1718-51-0	Terphenyl-d14	97% 16-122%

Method Blank Summary

Job Number: JD35488
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP37314-MB1	F204608.D	1	12/28/21	KLS	12/23/21	OP37314	EF8970

The QC reported here applies to the following samples:

Method: SW846 8270E

JD35488-6

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	5.0	0.82	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	5.0	0.89	ug/l	
120-83-2	2,4-Dichlorophenol	ND	5.0	1.3	ug/l	
105-67-9	2,4-Dimethylphenol	ND	5.0	2.4	ug/l	
51-28-5	2,4-Dinitrophenol	ND	20	1.6	ug/l	
95-48-7	2-Methylphenol	ND	2.0	0.89	ug/l	
	Cresol, Total	ND	5.0	0.88	ug/l	
	3&4-Methylphenol	ND	2.0	0.88	ug/l	
87-86-5	Pentachlorophenol	ND	10	1.4	ug/l	
108-95-2	Phenol	ND	2.0	0.39	ug/l	
58-90-2	2,3,4,6-Tetrachlorophenol	ND	5.0	1.5	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	5.0	1.3	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	5.0	0.92	ug/l	
83-32-9	Acenaphthene	ND	1.0	0.19	ug/l	
98-86-2	Acetophenone	0.24	5.0	0.21	ug/l	J
62-53-3	Aniline	ND	2.0	0.32	ug/l	
120-12-7	Anthracene	ND	1.0	0.21	ug/l	
92-87-5	Benzidine	ND	20	0.90	ug/l	
85-68-7	Butyl benzyl phthalate	ND	2.0	0.46	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	2.0	0.25	ug/l	
122-66-7	1,2-Diphenylhydrazine	ND	2.0	0.19	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	2.0	0.55	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	2.0	0.48	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	5.0	0.51	ug/l	
123-91-1	1,4-Dioxane	ND	2.0	0.66	ug/l	
60-51-5	Dimethoate	ND	5.0	0.24	ug/l	
122-39-4	Diphenylamine	ND	5.0	0.58	ug/l	
298-04-4	Disulfoton	ND	5.0	0.47	ug/l	
99-65-0	m-Dinitrobenzene	ND	5.0	1.5	ug/l	
84-66-2	Diethyl phthalate	ND	2.0	0.26	ug/l	
131-11-3	Dimethyl phthalate	ND	2.0	0.22	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	2.0	1.7	ug/l	
206-44-0	Fluoranthene	ND	1.0	0.17	ug/l	
86-73-7	Fluorene	ND	1.0	0.17	ug/l	
118-74-1	Hexachlorobenzene	ND	2.0	0.33	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	20	2.8	ug/l	

Method Blank Summary

Job Number: JD35488
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP37314-MB1	F204608.D	1	12/28/21	KLS	12/23/21	OP37314	EF8970

The QC reported here applies to the following samples:

Method: SW846 8270E

JD35488-6

CAS No.	Compound	Result	RL	MDL	Units	Q
67-72-1	Hexachloroethane	ND	5.0	0.39	ug/l	
70-30-4	Hexachlorophene	ND	50		ug/l	
78-59-1	Isophorone	ND	2.0	0.28	ug/l	
298-00-0	Methyl parathion	ND	5.0	0.40	ug/l	
98-95-3	Nitrobenzene	ND	2.0	0.64	ug/l	
62-75-9	n-Nitrosodimethylamine	ND	2.0	0.82	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	2.0	0.48	ug/l	
924-16-3	N-Nitrosodi-n-butylamine	ND	5.0	0.60	ug/l	
10595-95-6	N-Nitrosomethylethylamine	ND	5.0	1.4	ug/l	
930-55-2	N-Nitrosopyrrolidine	ND	5.0	0.73	ug/l	
56-38-2	Parathion	ND	5.0	0.51	ug/l	
608-93-5	Pentachlorobenzene	ND	5.0	0.24	ug/l	
82-68-8	Pentachloronitrobenzene	ND	5.0	2.3	ug/l	
23950-58-5	Pronamide	ND	5.0	0.25	ug/l	
129-00-0	Pyrene	ND	1.0	0.22	ug/l	
110-86-1	Pyridine	ND	2.0	0.39	ug/l	
106-50-3	p-Phenylenediamine	ND	5.0	0.20	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	2.0	0.25	ug/l	

CAS No.	Surrogate Recoveries	Limits	
367-12-4	2-Fluorophenol	41%	10-73%
4165-62-2	Phenol-d5	25%	10-64%
118-79-6	2,4,6-Tribromophenol	83%	31-130%
4165-60-0	Nitrobenzene-d5	67%	28-126%
321-60-8	2-Fluorobiphenyl	73%	26-114%
1718-51-0	Terphenyl-d14	98%	16-122%

7.1.7
7

Method Blank Summary

Job Number: JD35488
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP37369-MB1	P146833.D	1	12/28/21	KLS	12/27/21	OP37369	EP6767

The QC reported here applies to the following samples:

Method: SW846 8270E

JD35488-7

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	5.0	0.82	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	5.0	0.89	ug/l	
120-83-2	2,4-Dichlorophenol	ND	5.0	1.3	ug/l	
105-67-9	2,4-Dimethylphenol	ND	5.0	2.4	ug/l	
51-28-5	2,4-Dinitrophenol	ND	20	1.6	ug/l	
95-48-7	2-Methylphenol	ND	2.0	0.89	ug/l	
	3&4-Methylphenol	ND	2.0	0.88	ug/l	
87-86-5	Pentachlorophenol	ND	10	1.4	ug/l	
108-95-2	Phenol	ND	2.0	0.39	ug/l	
58-90-2	2,3,4,6-Tetrachlorophenol	ND	5.0	1.5	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	5.0	1.3	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	5.0	0.92	ug/l	
83-32-9	Acenaphthene	ND	1.0	0.19	ug/l	
98-86-2	Acetophenone	ND	5.0	0.21	ug/l	
62-53-3	Aniline	ND	2.0	0.32	ug/l	
120-12-7	Anthracene	ND	1.0	0.21	ug/l	
92-87-5	Benzidine	ND	20	0.90	ug/l	
85-68-7	Butyl benzyl phthalate	ND	2.0	0.46	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	2.0	0.25	ug/l	
122-66-7	1,2-Diphenylhydrazine	ND	2.0	0.19	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	2.0	0.55	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	2.0	0.48	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	5.0	0.51	ug/l	
123-91-1	1,4-Dioxane	ND	2.0	0.66	ug/l	
84-66-2	Diethyl phthalate	ND	2.0	0.26	ug/l	
131-11-3	Dimethyl phthalate	ND	2.0	0.22	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	2.0	1.7	ug/l	
206-44-0	Fluoranthene	0.23	1.0	0.17	ug/l	J
86-73-7	Fluorene	ND	1.0	0.17	ug/l	
118-74-1	Hexachlorobenzene	ND	2.0	0.33	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	20	2.8	ug/l	
67-72-1	Hexachloroethane	ND	5.0	0.39	ug/l	
78-59-1	Isophorone	ND	2.0	0.28	ug/l	
98-95-3	Nitrobenzene	ND	2.0	0.64	ug/l	
62-75-9	n-Nitrosodimethylamine	ND	2.0	0.82	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	2.0	0.48	ug/l	

Method Blank Summary

Job Number: JD35488
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP37369-MB1	P146833.D	1	12/28/21	KLS	12/27/21	OP37369	EP6767

The QC reported here applies to the following samples:

Method: SW846 8270E

JD35488-7

CAS No.	Compound	Result	RL	MDL	Units	Q
129-00-0	Pyrene	ND	1.0	0.22	ug/l	
110-86-1	Pyridine	ND	2.0	0.39	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	2.0	0.25	ug/l	

CAS No.	Surrogate Recoveries	Limits	
367-12-4	2-Fluorophenol	51%	10-73%
4165-62-2	Phenol-d5	33%	10-64%
118-79-6	2,4,6-Tribromophenol	106%	31-130%
4165-60-0	Nitrobenzene-d5	85%	28-126%
321-60-8	2-Fluorobiphenyl	87%	26-114%
1718-51-0	Terphenyl-d14	104%	16-122%

Method Blank Summary

Job Number: JD35488

Account: CRATXH GHD Services Inc.

Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP37369-MB1	F204637.D	1	12/29/21	KLS	12/27/21	OP37369	EF8971

The QC reported here applies to the following samples:

Method: SW846 8270E

JD35488-7

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	5.0	0.82	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	5.0	0.89	ug/l	
120-83-2	2,4-Dichlorophenol	ND	5.0	1.3	ug/l	
105-67-9	2,4-Dimethylphenol	ND	5.0	2.4	ug/l	
51-28-5	2,4-Dinitrophenol	ND	20	1.6	ug/l	
95-48-7	2-Methylphenol	ND	2.0	0.89	ug/l	
	3&4-Methylphenol	ND	2.0	0.88	ug/l	
87-86-5	Pentachlorophenol	ND	10	1.4	ug/l	
108-95-2	Phenol	ND	2.0	0.39	ug/l	
58-90-2	2,3,4,6-Tetrachlorophenol	ND	5.0	1.5	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	5.0	1.3	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	5.0	0.92	ug/l	
83-32-9	Acenaphthene	ND	1.0	0.19	ug/l	
98-86-2	Acetophenone	ND	5.0	0.21	ug/l	
62-53-3	Aniline	ND	2.0	0.32	ug/l	
120-12-7	Anthracene	ND	1.0	0.21	ug/l	
92-87-5	Benzidine	ND	20	0.90	ug/l	
85-68-7	Butyl benzyl phthalate	ND	2.0	0.46	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	2.0	0.25	ug/l	
122-66-7	1,2-Diphenylhydrazine	ND	2.0	0.19	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	2.0	0.55	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	2.0	0.48	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	5.0	0.51	ug/l	
123-91-1	1,4-Dioxane	ND	2.0	0.66	ug/l	
60-51-5	Dimethoate	ND	5.0	0.24	ug/l	
122-39-4	Diphenylamine	ND	5.0	0.58	ug/l	
298-04-4	Disulfoton	ND	5.0	0.47	ug/l	
99-65-0	m-Dinitrobenzene	ND	5.0	1.5	ug/l	
84-66-2	Diethyl phthalate	ND	2.0	0.26	ug/l	
131-11-3	Dimethyl phthalate	ND	2.0	0.22	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	2.0	1.7	ug/l	
206-44-0	Fluoranthene	ND	1.0	0.17	ug/l	
86-73-7	Fluorene	ND	1.0	0.17	ug/l	
118-74-1	Hexachlorobenzene	ND	2.0	0.33	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	20	2.8	ug/l	
67-72-1	Hexachloroethane	ND	5.0	0.39	ug/l	

Method Blank Summary

Job Number: JD35488
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP37369-MB1	F204637.D	1	12/29/21	KLS	12/27/21	OP37369	EF8971

The QC reported here applies to the following samples:

Method: SW846 8270E

JD35488-7

CAS No.	Compound	Result	RL	MDL	Units	Q
70-30-4	Hexachlorophene	ND	50		ug/l	
78-59-1	Isophorone	ND	2.0	0.28	ug/l	
298-00-0	Methyl parathion	ND	5.0	0.40	ug/l	
98-95-3	Nitrobenzene	ND	2.0	0.64	ug/l	
62-75-9	n-Nitrosodimethylamine	ND	2.0	0.82	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	2.0	0.48	ug/l	
924-16-3	N-Nitrosodi-n-butylamine	ND	5.0	0.60	ug/l	
10595-95-6	N-Nitrosomethylethylamine	ND	5.0	1.4	ug/l	
930-55-2	N-Nitrosopyrrolidine	ND	5.0	0.73	ug/l	
56-38-2	Parathion	ND	5.0	0.51	ug/l	
608-93-5	Pentachlorobenzene	ND	5.0	0.24	ug/l	
82-68-8	Pentachloronitrobenzene	ND	5.0	2.3	ug/l	
23950-58-5	Pronamide	ND	5.0	0.25	ug/l	
129-00-0	Pyrene	ND	1.0	0.22	ug/l	
110-86-1	Pyridine	ND	2.0	0.39	ug/l	
106-50-3	p-Phenylenediamine	ND	5.0	0.20	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	2.0	0.25	ug/l	

CAS No.	Surrogate Recoveries	Limits	
367-12-4	2-Fluorophenol	49%	10-73%
4165-62-2	Phenol-d5	32%	10-64%
118-79-6	2,4,6-Tribromophenol	98%	31-130%
4165-60-0	Nitrobenzene-d5	80%	28-126%
321-60-8	2-Fluorobiphenyl	87%	26-114%
1718-51-0	Terphenyl-d14	106%	16-122%

7.1.9
7

Leachate Blank Summary

Job Number: JD35488
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP37049-LB5	6P503033.D	1	12/10/21	KLS	12/09/21	OP37049	E6P3571

The QC reported here applies to the following samples:

Method: SW846 8270E

JD35488-1

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	50	8.2	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	50	8.9	ug/l	
120-83-2	2,4-Dichlorophenol	ND	50	13	ug/l	
105-67-9	2,4-Dimethylphenol	ND	50	24	ug/l	
51-28-5	2,4-Dinitrophenol	ND	200	16	ug/l	
95-48-7	2-Methylphenol	ND	20	8.9	ug/l	
	3&4-Methylphenol	ND	20	8.8	ug/l	
87-86-5	Pentachlorophenol	ND	100	14	ug/l	
108-95-2	Phenol	ND	20	3.9	ug/l	
58-90-2	2,3,4,6-Tetrachlorophenol	ND	50	15	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	50	13	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	50	9.2	ug/l	
83-32-9	Acenaphthene	ND	10	1.9	ug/l	
98-86-2	Acetophenone	ND	50	2.1	ug/l	
62-53-3	Aniline	ND	20	3.2	ug/l	
120-12-7	Anthracene	ND	10	2.1	ug/l	
92-87-5	Benzidine	ND	200	9.0	ug/l	
85-68-7	Butyl benzyl phthalate	ND	20	4.6	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	20	2.5	ug/l	
122-66-7	1,2-Diphenylhydrazine	ND	20	1.9	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	20	5.5	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	20	4.8	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	50	5.1	ug/l	
123-91-1	1,4-Dioxane	ND	20	6.6	ug/l	
84-66-2	Diethyl phthalate	ND	20	2.6	ug/l	
131-11-3	Dimethyl phthalate	ND	20	2.2	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	20	17	ug/l	
206-44-0	Fluoranthene	ND	10	1.7	ug/l	
86-73-7	Fluorene	ND	10	1.7	ug/l	
118-74-1	Hexachlorobenzene	ND	20	3.3	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	200	28	ug/l	
67-72-1	Hexachloroethane	ND	50	3.9	ug/l	
78-59-1	Isophorone	ND	20	2.8	ug/l	
98-95-3	Nitrobenzene	ND	20	6.4	ug/l	
62-75-9	n-Nitrosodimethylamine	ND	20	8.2	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	20	4.8	ug/l	

7.2.1

7

Leachate Blank Summary

Job Number: JD35488
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP37049-LB5	6P503033.D	1	12/10/21	KLS	12/09/21	OP37049	E6P3571

The QC reported here applies to the following samples:

Method: SW846 8270E

JD35488-1

CAS No.	Compound	Result	RL	MDL	Units	Q
82-68-8	Pentachloronitrobenzene	ND	50	23	ug/l	
129-00-0	Pyrene	ND	10	2.2	ug/l	
110-86-1	Pyridine	ND	20	3.9	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	20	2.5	ug/l	

CAS No.	Surrogate Recoveries	Limits	
367-12-4	2-Fluorophenol	24%	10-73%
4165-62-2	Phenol-d5	17%	10-64%
118-79-6	2,4,6-Tribromophenol	78%	31-130%
4165-60-0	Nitrobenzene-d5	78%	28-126%
321-60-8	2-Fluorobiphenyl	74%	26-114%
1718-51-0	Terphenyl-d14	73%	16-122%

7.2.1

7

Leachate Blank Summary

Job Number: JD35488
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP37049-LB8	6P503034.D	1	12/10/21	KLS	12/09/21	OP37049	E6P3571

The QC reported here applies to the following samples:

Method: SW846 8270E

JD35488-1

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	50	8.2	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	50	8.9	ug/l	
120-83-2	2,4-Dichlorophenol	ND	50	13	ug/l	
105-67-9	2,4-Dimethylphenol	ND	50	24	ug/l	
51-28-5	2,4-Dinitrophenol	ND	200	16	ug/l	
95-48-7	2-Methylphenol	ND	20	8.9	ug/l	
	3&4-Methylphenol	ND	20	8.8	ug/l	
87-86-5	Pentachlorophenol	ND	100	14	ug/l	
108-95-2	Phenol	ND	20	3.9	ug/l	
58-90-2	2,3,4,6-Tetrachlorophenol	ND	50	15	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	50	13	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	50	9.2	ug/l	
83-32-9	Acenaphthene	ND	10	1.9	ug/l	
98-86-2	Acetophenone	ND	50	2.1	ug/l	
62-53-3	Aniline	ND	20	3.2	ug/l	
120-12-7	Anthracene	ND	10	2.1	ug/l	
92-87-5	Benzidine	ND	200	9.0	ug/l	
85-68-7	Butyl benzyl phthalate	ND	20	4.6	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	20	2.5	ug/l	
122-66-7	1,2-Diphenylhydrazine	ND	20	1.9	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	20	5.5	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	20	4.8	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	50	5.1	ug/l	
123-91-1	1,4-Dioxane	ND	20	6.6	ug/l	
84-66-2	Diethyl phthalate	ND	20	2.6	ug/l	
131-11-3	Dimethyl phthalate	ND	20	2.2	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	29.9	20	17	ug/l	
206-44-0	Fluoranthene	ND	10	1.7	ug/l	
86-73-7	Fluorene	ND	10	1.7	ug/l	
118-74-1	Hexachlorobenzene	ND	20	3.3	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	200	28	ug/l	
67-72-1	Hexachloroethane	ND	50	3.9	ug/l	
78-59-1	Isophorone	ND	20	2.8	ug/l	
98-95-3	Nitrobenzene	ND	20	6.4	ug/l	
62-75-9	n-Nitrosodimethylamine	ND	20	8.2	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	20	4.8	ug/l	

7.2.2

7

Leachate Blank Summary

Job Number: JD35488
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP37049-LB8	6P503034.D	1	12/10/21	KLS	12/09/21	OP37049	E6P3571

The QC reported here applies to the following samples:

Method: SW846 8270E

JD35488-1

CAS No.	Compound	Result	RL	MDL	Units	Q
82-68-8	Pentachloronitrobenzene	ND	50	23	ug/l	
129-00-0	Pyrene	ND	10	2.2	ug/l	
110-86-1	Pyridine	ND	20	3.9	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	20	2.5	ug/l	

CAS No.	Surrogate Recoveries	Limits	
367-12-4	2-Fluorophenol	28%	10-73%
4165-62-2	Phenol-d5	20%	10-64%
118-79-6	2,4,6-Tribromophenol	81%	31-130%
4165-60-0	Nitrobenzene-d5	74%	28-126%
321-60-8	2-Fluorobiphenyl	70%	26-114%
1718-51-0	Terphenyl-d14	77%	16-122%

7.2.2

7

Leachate Blank Summary

Job Number: JD35488
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP37049-LB5	F204185.D	1	12/11/21	CS	12/09/21	OP37049	EF8949

The QC reported here applies to the following samples:

Method: SW846 8270E

JD35488-1

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	50	8.2	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	50	8.9	ug/l	
120-83-2	2,4-Dichlorophenol	ND	50	13	ug/l	
105-67-9	2,4-Dimethylphenol	ND	50	24	ug/l	
51-28-5	2,4-Dinitrophenol	ND	200	16	ug/l	
95-48-7	2-Methylphenol	ND	20	8.9	ug/l	
	3&4-Methylphenol	ND	20	8.8	ug/l	
87-86-5	Pentachlorophenol	ND	100	14	ug/l	
108-95-2	Phenol	ND	20	3.9	ug/l	
58-90-2	2,3,4,6-Tetrachlorophenol	ND	50	15	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	50	13	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	50	9.2	ug/l	
83-32-9	Acenaphthene	ND	10	1.9	ug/l	
98-86-2	Acetophenone	ND	50	2.1	ug/l	
62-53-3	Aniline	ND	20	3.2	ug/l	
120-12-7	Anthracene	ND	10	2.1	ug/l	
92-87-5	Benzidine	ND	200	9.0	ug/l	
85-68-7	Butyl benzyl phthalate	ND	20	4.6	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	20	2.5	ug/l	
122-66-7	1,2-Diphenylhydrazine	ND	20	1.9	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	20	5.5	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	20	4.8	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	50	5.1	ug/l	
123-91-1	1,4-Dioxane	ND	20	6.6	ug/l	
60-51-5	Dimethoate	ND	50	2.4	ug/l	
122-39-4	Diphenylamine	ND	50	5.8	ug/l	
298-04-4	Disulfoton	ND	50	4.7	ug/l	
99-65-0	m-Dinitrobenzene	ND	50	15	ug/l	
84-66-2	Diethyl phthalate	ND	20	2.6	ug/l	
131-11-3	Dimethyl phthalate	ND	20	2.2	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	20	17	ug/l	
206-44-0	Fluoranthene	ND	10	1.7	ug/l	
86-73-7	Fluorene	ND	10	1.7	ug/l	
118-74-1	Hexachlorobenzene	ND	20	3.3	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	200	28	ug/l	
67-72-1	Hexachloroethane	ND	50	3.9	ug/l	

Leachate Blank Summary

Job Number: JD35488
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP37049-LB5	F204185.D	1	12/11/21	CS	12/09/21	OP37049	EF8949

The QC reported here applies to the following samples:

Method: SW846 8270E

JD35488-1

CAS No.	Compound	Result	RL	MDL	Units	Q
70-30-4	Hexachlorophene	ND	500		ug/l	
78-59-1	Isophorone	ND	20	2.8	ug/l	
298-00-0	Methyl parathion	ND	50	4.0	ug/l	
98-95-3	Nitrobenzene	ND	20	6.4	ug/l	
62-75-9	n-Nitrosodimethylamine	ND	20	8.2	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	20	4.8	ug/l	
924-16-3	N-Nitrosodi-n-butylamine	ND	50	6.0	ug/l	
10595-95-6	N-Nitrosomethylethylamine	ND	50	14	ug/l	
930-55-2	N-Nitrosopyrrolidine	ND	50	7.3	ug/l	
56-38-2	Parathion	ND	50	5.1	ug/l	
608-93-5	Pentachlorobenzene	ND	50	2.4	ug/l	
82-68-8	Pentachloronitrobenzene	ND	50	23	ug/l	
23950-58-5	Pronamide	ND	50	2.5	ug/l	
129-00-0	Pyrene	ND	10	2.2	ug/l	
110-86-1	Pyridine	ND	20	3.9	ug/l	
106-50-3	p-Phenylenediamine	ND	50	2.0	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	20	2.5	ug/l	

CAS No.	Surrogate Recoveries	Limits	
367-12-4	2-Fluorophenol	22%	10-73%
4165-62-2	Phenol-d5	16%	10-64%
118-79-6	2,4,6-Tribromophenol	72%	31-130%
4165-60-0	Nitrobenzene-d5	63%	28-126%
321-60-8	2-Fluorobiphenyl	69%	26-114%
1718-51-0	Terphenyl-d14	70%	16-122%

7.2.3

7

Leachate Blank Summary

Job Number: JD35488
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP37049-LB8	F204186.D	1	12/11/21	CS	12/09/21	OP37049	EF8949

The QC reported here applies to the following samples:

Method: SW846 8270E

JD35488-1

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	50	8.2	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	50	8.9	ug/l	
120-83-2	2,4-Dichlorophenol	ND	50	13	ug/l	
105-67-9	2,4-Dimethylphenol	ND	50	24	ug/l	
51-28-5	2,4-Dinitrophenol	ND	200	16	ug/l	
95-48-7	2-Methylphenol	ND	20	8.9	ug/l	
	3&4-Methylphenol	ND	20	8.8	ug/l	
87-86-5	Pentachlorophenol	ND	100	14	ug/l	
108-95-2	Phenol	ND	20	3.9	ug/l	
58-90-2	2,3,4,6-Tetrachlorophenol	ND	50	15	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	50	13	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	50	9.2	ug/l	
83-32-9	Acenaphthene	ND	10	1.9	ug/l	
98-86-2	Acetophenone	ND	50	2.1	ug/l	
62-53-3	Aniline	ND	20	3.2	ug/l	
120-12-7	Anthracene	ND	10	2.1	ug/l	
92-87-5	Benzidine	ND	200	9.0	ug/l	
85-68-7	Butyl benzyl phthalate	ND	20	4.6	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	20	2.5	ug/l	
122-66-7	1,2-Diphenylhydrazine	ND	20	1.9	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	20	5.5	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	20	4.8	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	50	5.1	ug/l	
123-91-1	1,4-Dioxane	ND	20	6.6	ug/l	
60-51-5	Dimethoate	ND	50	2.4	ug/l	
122-39-4	Diphenylamine	ND	50	5.8	ug/l	
298-04-4	Disulfoton	ND	50	4.7	ug/l	
99-65-0	m-Dinitrobenzene	ND	50	15	ug/l	
84-66-2	Diethyl phthalate	ND	20	2.6	ug/l	
131-11-3	Dimethyl phthalate	ND	20	2.2	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	32.9	20	17	ug/l	
206-44-0	Fluoranthene	ND	10	1.7	ug/l	
86-73-7	Fluorene	ND	10	1.7	ug/l	
118-74-1	Hexachlorobenzene	ND	20	3.3	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	200	28	ug/l	
67-72-1	Hexachloroethane	ND	50	3.9	ug/l	

7.2.4

7

Leachate Blank Summary

Job Number: JD35488
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP37049-LB8	F204186.D	1	12/11/21	CS	12/09/21	OP37049	EF8949

The QC reported here applies to the following samples:

Method: SW846 8270E

JD35488-1

CAS No.	Compound	Result	RL	MDL	Units	Q
70-30-4	Hexachlorophene	ND	500		ug/l	
78-59-1	Isophorone	ND	20	2.8	ug/l	
298-00-0	Methyl parathion	ND	50	4.0	ug/l	
98-95-3	Nitrobenzene	ND	20	6.4	ug/l	
62-75-9	n-Nitrosodimethylamine	ND	20	8.2	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	20	4.8	ug/l	
924-16-3	N-Nitrosodi-n-butylamine	ND	50	6.0	ug/l	
10595-95-6	N-Nitrosomethylethylamine	ND	50	14	ug/l	
930-55-2	N-Nitrosopyrrolidine	ND	50	7.3	ug/l	
56-38-2	Parathion	ND	50	5.1	ug/l	
608-93-5	Pentachlorobenzene	ND	50	2.4	ug/l	
82-68-8	Pentachloronitrobenzene	ND	50	23	ug/l	
23950-58-5	Pronamide	ND	50	2.5	ug/l	
129-00-0	Pyrene	ND	10	2.2	ug/l	
110-86-1	Pyridine	ND	20	3.9	ug/l	
106-50-3	p-Phenylenediamine	ND	50	2.0	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	20	2.5	ug/l	

CAS No.	Surrogate Recoveries	Limits	
367-12-4	2-Fluorophenol	28%	10-73%
4165-62-2	Phenol-d5	21%	10-64%
118-79-6	2,4,6-Tribromophenol	76%	31-130%
4165-60-0	Nitrobenzene-d5	59%	28-126%
321-60-8	2-Fluorobiphenyl	65%	26-114%
1718-51-0	Terphenyl-d14	78%	16-122%

7.2.4

7

Leachate Blank Summary

Job Number: JD35488
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP37155-LB7	F204313.D	1	12/16/21	CS	12/14/21	OP37155	EF8956

The QC reported here applies to the following samples:

Method: SW846 8270E

JD35488-2

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	50	8.2	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	50	8.9	ug/l	
120-83-2	2,4-Dichlorophenol	ND	50	13	ug/l	
105-67-9	2,4-Dimethylphenol	ND	50	24	ug/l	
51-28-5	2,4-Dinitrophenol	ND	200	16	ug/l	
95-48-7	2-Methylphenol	ND	20	8.9	ug/l	
	3&4-Methylphenol	ND	20	8.8	ug/l	
87-86-5	Pentachlorophenol	ND	100	14	ug/l	
108-95-2	Phenol	ND	20	3.9	ug/l	
58-90-2	2,3,4,6-Tetrachlorophenol	ND	50	15	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	50	13	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	50	9.2	ug/l	
83-32-9	Acenaphthene	ND	10	1.9	ug/l	
98-86-2	Acetophenone	ND	50	2.1	ug/l	
62-53-3	Aniline	ND	20	3.2	ug/l	
120-12-7	Anthracene	ND	10	2.1	ug/l	
92-87-5	Benzidine	ND	200	9.0	ug/l	
85-68-7	Butyl benzyl phthalate	ND	20	4.6	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	20	2.5	ug/l	
122-66-7	1,2-Diphenylhydrazine	ND	20	1.9	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	20	5.5	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	20	4.8	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	50	5.1	ug/l	
123-91-1	1,4-Dioxane	ND	20	6.6	ug/l	
60-51-5	Dimethoate	ND	50	2.4	ug/l	
122-39-4	Diphenylamine	ND	50	5.8	ug/l	
298-04-4	Disulfoton	ND	50	4.7	ug/l	
99-65-0	m-Dinitrobenzene	ND	50	15	ug/l	
84-66-2	Diethyl phthalate	ND	20	2.6	ug/l	
131-11-3	Dimethyl phthalate	ND	20	2.2	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	20	17	ug/l	
206-44-0	Fluoranthene	ND	10	1.7	ug/l	
86-73-7	Fluorene	ND	10	1.7	ug/l	
118-74-1	Hexachlorobenzene	ND	20	3.3	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	200	28	ug/l	
67-72-1	Hexachloroethane	ND	50	3.9	ug/l	

Leachate Blank Summary

Job Number: JD35488
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP37155-LB7	F204313.D	1	12/16/21	CS	12/14/21	OP37155	EF8956

The QC reported here applies to the following samples:

Method: SW846 8270E

JD35488-2

CAS No.	Compound	Result	RL	MDL	Units	Q
70-30-4	Hexachlorophene	ND	500		ug/l	
78-59-1	Isophorone	ND	20	2.8	ug/l	
298-00-0	Methyl parathion	ND	50	4.0	ug/l	
98-95-3	Nitrobenzene	ND	20	6.4	ug/l	
62-75-9	n-Nitrosodimethylamine	ND	20	8.2	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	20	4.8	ug/l	
924-16-3	N-Nitrosodi-n-butylamine	ND	50	6.0	ug/l	
10595-95-6	N-Nitrosomethylethylamine	ND	50	14	ug/l	
930-55-2	N-Nitrosopyrrolidine	ND	50	7.3	ug/l	
56-38-2	Parathion	ND	50	5.1	ug/l	
608-93-5	Pentachlorobenzene	ND	50	2.4	ug/l	
82-68-8	Pentachloronitrobenzene	ND	50	23	ug/l	
23950-58-5	Pronamide	ND	50	2.5	ug/l	
129-00-0	Pyrene	ND	10	2.2	ug/l	
110-86-1	Pyridine	ND	20	3.9	ug/l	
106-50-3	p-Phenylenediamine	ND	50	2.0	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	20	2.5	ug/l	

CAS No.	Surrogate Recoveries	Limits	
367-12-4	2-Fluorophenol	36%	10-73%
4165-62-2	Phenol-d5	25%	10-64%
118-79-6	2,4,6-Tribromophenol	83%	31-130%
4165-60-0	Nitrobenzene-d5	69%	28-126%
321-60-8	2-Fluorobiphenyl	77%	26-114%
1718-51-0	Terphenyl-d14	84%	16-122%

Leachate Blank Summary

Job Number: JD35488
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP37159-LB13	6P503068A.D	1	12/16/21	CS	12/15/21	OP37159	E6P3574

The QC reported here applies to the following samples:

Method: SW846 8270E

JD35488-3, JD35488-4, JD35488-5

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	50	8.2	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	50	8.9	ug/l	
120-83-2	2,4-Dichlorophenol	ND	50	13	ug/l	
105-67-9	2,4-Dimethylphenol	ND	50	24	ug/l	
51-28-5	2,4-Dinitrophenol	ND	200	16	ug/l	
95-48-7	2-Methylphenol	ND	20	8.9	ug/l	
	3&4-Methylphenol	ND	20	8.8	ug/l	
87-86-5	Pentachlorophenol	ND	100	14	ug/l	
108-95-2	Phenol	ND	20	3.9	ug/l	
58-90-2	2,3,4,6-Tetrachlorophenol	ND	50	15	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	50	13	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	50	9.2	ug/l	
83-32-9	Acenaphthene	ND	10	1.9	ug/l	
98-86-2	Acetophenone	ND	50	2.1	ug/l	
62-53-3	Aniline	ND	20	3.2	ug/l	
120-12-7	Anthracene	ND	10	2.1	ug/l	
92-87-5	Benzidine	ND	200	9.0	ug/l	
85-68-7	Butyl benzyl phthalate	ND	20	4.6	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	20	2.5	ug/l	
122-66-7	1,2-Diphenylhydrazine	ND	20	1.9	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	20	5.5	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	20	4.8	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	50	5.1	ug/l	
123-91-1	1,4-Dioxane	ND	20	6.6	ug/l	
84-66-2	Diethyl phthalate	ND	20	2.6	ug/l	
131-11-3	Dimethyl phthalate	ND	20	2.2	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	20	17	ug/l	
206-44-0	Fluoranthene	ND	10	1.7	ug/l	
86-73-7	Fluorene	ND	10	1.7	ug/l	
118-74-1	Hexachlorobenzene	ND	20	3.3	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	200	28	ug/l	
67-72-1	Hexachloroethane	ND	50	3.9	ug/l	
78-59-1	Isophorone	ND	20	2.8	ug/l	
98-95-3	Nitrobenzene	ND	20	6.4	ug/l	
62-75-9	n-Nitrosodimethylamine	ND	20	8.2	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	20	4.8	ug/l	

Leachate Blank Summary

Job Number: JD35488
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP37159-LB13	6P503068A.D	1	12/16/21	CS	12/15/21	OP37159	E6P3574

The QC reported here applies to the following samples:

Method: SW846 8270E

JD35488-3, JD35488-4, JD35488-5

CAS No.	Compound	Result	RL	MDL	Units	Q
82-68-8	Pentachloronitrobenzene	ND	50	23	ug/l	
129-00-0	Pyrene	ND	10	2.2	ug/l	
110-86-1	Pyridine	ND	20	3.9	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	20	2.5	ug/l	

CAS No.	Surrogate Recoveries	Limits	
367-12-4	2-Fluorophenol	26%	10-73%
4165-62-2	Phenol-d5	18%	10-64%
118-79-6	2,4,6-Tribromophenol	66%	31-130%
4165-60-0	Nitrobenzene-d5	73%	28-126%
321-60-8	2-Fluorobiphenyl	78%	26-114%
1718-51-0	Terphenyl-d14	89%	16-122%

7.2.6

7

Leachate Blank Summary

Job Number: JD35488
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP37159-LB16	6P503069.D	1	12/16/21	CS	12/15/21	OP37159	E6P3574

The QC reported here applies to the following samples:

Method: SW846 8270E

JD35488-3, JD35488-4, JD35488-5

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	50	8.2	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	50	8.9	ug/l	
120-83-2	2,4-Dichlorophenol	ND	50	13	ug/l	
105-67-9	2,4-Dimethylphenol	ND	50	24	ug/l	
51-28-5	2,4-Dinitrophenol	ND	200	16	ug/l	
95-48-7	2-Methylphenol	ND	20	8.9	ug/l	
	3&4-Methylphenol	ND	20	8.8	ug/l	
87-86-5	Pentachlorophenol	ND	100	14	ug/l	
108-95-2	Phenol	ND	20	3.9	ug/l	
58-90-2	2,3,4,6-Tetrachlorophenol	ND	50	15	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	50	13	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	50	9.2	ug/l	
83-32-9	Acenaphthene	ND	10	1.9	ug/l	
98-86-2	Acetophenone	ND	50	2.1	ug/l	
62-53-3	Aniline	ND	20	3.2	ug/l	
120-12-7	Anthracene	ND	10	2.1	ug/l	
92-87-5	Benzidine	ND	200	9.0	ug/l	
85-68-7	Butyl benzyl phthalate	ND	20	4.6	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	20	2.5	ug/l	
122-66-7	1,2-Diphenylhydrazine	ND	20	1.9	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	20	5.5	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	20	4.8	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	50	5.1	ug/l	
123-91-1	1,4-Dioxane	ND	20	6.6	ug/l	
84-66-2	Diethyl phthalate	ND	20	2.6	ug/l	
131-11-3	Dimethyl phthalate	ND	20	2.2	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	20	17	ug/l	
206-44-0	Fluoranthene	ND	10	1.7	ug/l	
86-73-7	Fluorene	ND	10	1.7	ug/l	
118-74-1	Hexachlorobenzene	ND	20	3.3	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	200	28	ug/l	
67-72-1	Hexachloroethane	ND	50	3.9	ug/l	
78-59-1	Isophorone	ND	20	2.8	ug/l	
98-95-3	Nitrobenzene	ND	20	6.4	ug/l	
62-75-9	n-Nitrosodimethylamine	ND	20	8.2	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	20	4.8	ug/l	

7.2.7
7

Leachate Blank Summary

Job Number: JD35488
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP37159-LB16	6P503069.D	1	12/16/21	CS	12/15/21	OP37159	E6P3574

The QC reported here applies to the following samples:

Method: SW846 8270E

JD35488-3, JD35488-4, JD35488-5

CAS No.	Compound	Result	RL	MDL	Units	Q
82-68-8	Pentachloronitrobenzene	ND	50	23	ug/l	
129-00-0	Pyrene	ND	10	2.2	ug/l	
110-86-1	Pyridine	ND	20	3.9	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	20	2.5	ug/l	

CAS No.	Surrogate Recoveries	Limits	
367-12-4	2-Fluorophenol	44%	10-73%
4165-62-2	Phenol-d5	28%	10-64%
118-79-6	2,4,6-Tribromophenol	81%	31-130%
4165-60-0	Nitrobenzene-d5	77%	28-126%
321-60-8	2-Fluorobiphenyl	84%	26-114%
1718-51-0	Terphenyl-d14	86%	16-122%

7.2.7
7

Leachate Blank Summary

Job Number: JD35488

Account: CRATXH GHD Services Inc.

Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP37159-LB13	F204308.D	1	12/16/21	CS	12/15/21	OP37159	EF8956

The QC reported here applies to the following samples:

Method: SW846 8270E

JD35488-3, JD35488-4, JD35488-5

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	50	8.2	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	50	8.9	ug/l	
120-83-2	2,4-Dichlorophenol	ND	50	13	ug/l	
105-67-9	2,4-Dimethylphenol	ND	50	24	ug/l	
51-28-5	2,4-Dinitrophenol	ND	200	16	ug/l	
95-48-7	2-Methylphenol	ND	20	8.9	ug/l	
	3&4-Methylphenol	ND	20	8.8	ug/l	
87-86-5	Pentachlorophenol	ND	100	14	ug/l	
108-95-2	Phenol	ND	20	3.9	ug/l	
58-90-2	2,3,4,6-Tetrachlorophenol	ND	50	15	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	50	13	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	50	9.2	ug/l	
83-32-9	Acenaphthene	ND	10	1.9	ug/l	
98-86-2	Acetophenone	ND	50	2.1	ug/l	
62-53-3	Aniline	ND	20	3.2	ug/l	
120-12-7	Anthracene	ND	10	2.1	ug/l	
92-87-5	Benzidine	ND	200	9.0	ug/l	
85-68-7	Butyl benzyl phthalate	ND	20	4.6	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	20	2.5	ug/l	
122-66-7	1,2-Diphenylhydrazine	ND	20	1.9	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	20	5.5	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	20	4.8	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	50	5.1	ug/l	
123-91-1	1,4-Dioxane	ND	20	6.6	ug/l	
84-66-2	Diethyl phthalate	ND	20	2.6	ug/l	
131-11-3	Dimethyl phthalate	ND	20	2.2	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	20	17	ug/l	
206-44-0	Fluoranthene	ND	10	1.7	ug/l	
86-73-7	Fluorene	ND	10	1.7	ug/l	
118-74-1	Hexachlorobenzene	ND	20	3.3	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	200	28	ug/l	
67-72-1	Hexachloroethane	ND	50	3.9	ug/l	
78-59-1	Isophorone	ND	20	2.8	ug/l	
98-95-3	Nitrobenzene	ND	20	6.4	ug/l	
62-75-9	n-Nitrosodimethylamine	ND	20	8.2	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	20	4.8	ug/l	

Leachate Blank Summary

Job Number: JD35488
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP37159-LB13	F204308.D	1	12/16/21	CS	12/15/21	OP37159	EF8956

The QC reported here applies to the following samples:

Method: SW846 8270E

JD35488-3, JD35488-4, JD35488-5

CAS No.	Compound	Result	RL	MDL	Units	Q
129-00-0	Pyrene	ND	10	2.2	ug/l	
110-86-1	Pyridine	ND	20	3.9	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	20	2.5	ug/l	

CAS No.	Surrogate Recoveries	Limits	
367-12-4	2-Fluorophenol	26%	10-73%
4165-62-2	Phenol-d5	17%	10-64%
118-79-6	2,4,6-Tribromophenol	69%	31-130%
4165-60-0	Nitrobenzene-d5	69%	28-126%
321-60-8	2-Fluorobiphenyl	74%	26-114%
1718-51-0	Terphenyl-d14	89%	16-122%

7.2.8

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Leachate Blank Summary

Job Number: JD35488
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP37159-LB16	F204309.D	1	12/16/21	CS	12/15/21	OP37159	EF8956

The QC reported here applies to the following samples:

Method: SW846 8270E

JD35488-3, JD35488-4, JD35488-5

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	50	8.2	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	50	8.9	ug/l	
120-83-2	2,4-Dichlorophenol	ND	50	13	ug/l	
105-67-9	2,4-Dimethylphenol	ND	50	24	ug/l	
51-28-5	2,4-Dinitrophenol	ND	200	16	ug/l	
95-48-7	2-Methylphenol	ND	20	8.9	ug/l	
	3&4-Methylphenol	ND	20	8.8	ug/l	
87-86-5	Pentachlorophenol	ND	100	14	ug/l	
108-95-2	Phenol	ND	20	3.9	ug/l	
58-90-2	2,3,4,6-Tetrachlorophenol	ND	50	15	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	50	13	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	50	9.2	ug/l	
83-32-9	Acenaphthene	ND	10	1.9	ug/l	
98-86-2	Acetophenone	ND	50	2.1	ug/l	
62-53-3	Aniline	ND	20	3.2	ug/l	
120-12-7	Anthracene	ND	10	2.1	ug/l	
92-87-5	Benzidine	ND	200	9.0	ug/l	
85-68-7	Butyl benzyl phthalate	ND	20	4.6	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	20	2.5	ug/l	
122-66-7	1,2-Diphenylhydrazine	ND	20	1.9	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	20	5.5	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	20	4.8	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	50	5.1	ug/l	
123-91-1	1,4-Dioxane	ND	20	6.6	ug/l	
84-66-2	Diethyl phthalate	ND	20	2.6	ug/l	
131-11-3	Dimethyl phthalate	ND	20	2.2	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	20	17	ug/l	
206-44-0	Fluoranthene	ND	10	1.7	ug/l	
86-73-7	Fluorene	ND	10	1.7	ug/l	
118-74-1	Hexachlorobenzene	ND	20	3.3	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	200	28	ug/l	
67-72-1	Hexachloroethane	ND	50	3.9	ug/l	
78-59-1	Isophorone	ND	20	2.8	ug/l	
98-95-3	Nitrobenzene	ND	20	6.4	ug/l	
62-75-9	n-Nitrosodimethylamine	ND	20	8.2	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	20	4.8	ug/l	

Leachate Blank Summary

Job Number: JD35488
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP37159-LB16	F204309.D	1	12/16/21	CS	12/15/21	OP37159	EF8956

The QC reported here applies to the following samples:

Method: SW846 8270E

JD35488-3, JD35488-4, JD35488-5

CAS No.	Compound	Result	RL	MDL	Units	Q
129-00-0	Pyrene	ND	10	2.2	ug/l	
110-86-1	Pyridine	ND	20	3.9	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	20	2.5	ug/l	

CAS No.	Surrogate Recoveries	Limits	
367-12-4	2-Fluorophenol	43%	10-73%
4165-62-2	Phenol-d5	27%	10-64%
118-79-6	2,4,6-Tribromophenol	85%	31-130%
4165-60-0	Nitrobenzene-d5	74%	28-126%
321-60-8	2-Fluorobiphenyl	80%	26-114%
1718-51-0	Terphenyl-d14	87%	16-122%

7.2.9

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Leachate Blank Summary

Job Number: JD35488
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP37314-LB29	6P503180.D	1	12/27/21	KLS	12/23/21	OP37314	E6P3580

The QC reported here applies to the following samples:

Method: SW846 8270E

JD35488-6

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	50	8.2	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	50	8.9	ug/l	
120-83-2	2,4-Dichlorophenol	ND	50	13	ug/l	
105-67-9	2,4-Dimethylphenol	ND	50	24	ug/l	
51-28-5	2,4-Dinitrophenol	ND	200	16	ug/l	
95-48-7	2-Methylphenol	ND	20	8.9	ug/l	
	Cresol, Total	ND	50	8.8	ug/l	
	3&4-Methylphenol	ND	20	8.8	ug/l	
87-86-5	Pentachlorophenol	ND	100	14	ug/l	
108-95-2	Phenol	ND	20	3.9	ug/l	
58-90-2	2,3,4,6-Tetrachlorophenol	ND	50	15	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	50	13	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	50	9.2	ug/l	
83-32-9	Acenaphthene	ND	10	1.9	ug/l	
98-86-2	Acetophenone	ND	50	2.1	ug/l	
62-53-3	Aniline	ND	20	3.2	ug/l	
120-12-7	Anthracene	ND	10	2.1	ug/l	
92-87-5	Benzidine	ND	200	9.0	ug/l	
85-68-7	Butyl benzyl phthalate	ND	20	4.6	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	20	2.5	ug/l	
122-66-7	1,2-Diphenylhydrazine	ND	20	1.9	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	20	5.5	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	20	4.8	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	50	5.1	ug/l	
123-91-1	1,4-Dioxane	ND	20	6.6	ug/l	
84-66-2	Diethyl phthalate	ND	20	2.6	ug/l	
131-11-3	Dimethyl phthalate	ND	20	2.2	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	20	17	ug/l	
206-44-0	Fluoranthene	ND	10	1.7	ug/l	
86-73-7	Fluorene	ND	10	1.7	ug/l	
118-74-1	Hexachlorobenzene	ND	20	3.3	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	200	28	ug/l	
67-72-1	Hexachloroethane	ND	50	3.9	ug/l	
78-59-1	Isophorone	ND	20	2.8	ug/l	
98-95-3	Nitrobenzene	ND	20	6.4	ug/l	
62-75-9	n-Nitrosodimethylamine	ND	20	8.2	ug/l	

Leachate Blank Summary

Job Number: JD35488
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP37314-LB29	6P503180.D	1	12/27/21	KLS	12/23/21	OP37314	E6P3580

The QC reported here applies to the following samples:

Method: SW846 8270E

JD35488-6

CAS No.	Compound	Result	RL	MDL	Units	Q
621-64-7	N-Nitroso-di-n-propylamine	ND	20	4.8	ug/l	
82-68-8	Pentachloronitrobenzene	ND	50	23	ug/l	
129-00-0	Pyrene	ND	10	2.2	ug/l	
110-86-1	Pyridine	ND	20	3.9	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	20	2.5	ug/l	

CAS No.	Surrogate Recoveries	Limits	
367-12-4	2-Fluorophenol	44%	10-73%
4165-62-2	Phenol-d5	27%	10-64%
118-79-6	2,4,6-Tribromophenol	90%	31-130%
4165-60-0	Nitrobenzene-d5	81%	28-126%
321-60-8	2-Fluorobiphenyl	86%	26-114%
1718-51-0	Terphenyl-d14	101%	16-122%

7.2.10
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Leachate Blank Summary

Job Number: JD35488
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP37314-LB29	F204609.D	1	12/28/21	KLS	12/23/21	OP37314	EF8970

The QC reported here applies to the following samples:

Method: SW846 8270E

JD35488-6

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	50	8.2	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	50	8.9	ug/l	
120-83-2	2,4-Dichlorophenol	ND	50	13	ug/l	
105-67-9	2,4-Dimethylphenol	ND	50	24	ug/l	
51-28-5	2,4-Dinitrophenol	ND	200	16	ug/l	
95-48-7	2-Methylphenol	ND	20	8.9	ug/l	
	Cresol, Total	ND	50	8.8	ug/l	
	3&4-Methylphenol	ND	20	8.8	ug/l	
87-86-5	Pentachlorophenol	ND	100	14	ug/l	
108-95-2	Phenol	ND	20	3.9	ug/l	
58-90-2	2,3,4,6-Tetrachlorophenol	ND	50	15	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	50	13	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	50	9.2	ug/l	
83-32-9	Acenaphthene	ND	10	1.9	ug/l	
98-86-2	Acetophenone	ND	50	2.1	ug/l	
62-53-3	Aniline	ND	20	3.2	ug/l	
120-12-7	Anthracene	ND	10	2.1	ug/l	
92-87-5	Benzidine	ND	200	9.0	ug/l	
85-68-7	Butyl benzyl phthalate	ND	20	4.6	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	20	2.5	ug/l	
122-66-7	1,2-Diphenylhydrazine	ND	20	1.9	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	20	5.5	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	20	4.8	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	50	5.1	ug/l	
123-91-1	1,4-Dioxane	ND	20	6.6	ug/l	
60-51-5	Dimethoate	ND	50	2.4	ug/l	
122-39-4	Diphenylamine	ND	50	5.8	ug/l	
298-04-4	Disulfoton	ND	50	4.7	ug/l	
99-65-0	m-Dinitrobenzene	ND	50	15	ug/l	
84-66-2	Diethyl phthalate	ND	20	2.6	ug/l	
131-11-3	Dimethyl phthalate	ND	20	2.2	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	20	17	ug/l	
206-44-0	Fluoranthene	ND	10	1.7	ug/l	
86-73-7	Fluorene	ND	10	1.7	ug/l	
118-74-1	Hexachlorobenzene	ND	20	3.3	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	200	28	ug/l	

7.2.11

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Leachate Blank Summary

Job Number: JD35488
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP37314-LB29	F204609.D	1	12/28/21	KLS	12/23/21	OP37314	EF8970

The QC reported here applies to the following samples:

Method: SW846 8270E

JD35488-6

CAS No.	Compound	Result	RL	MDL	Units	Q
67-72-1	Hexachloroethane	ND	50	3.9	ug/l	
70-30-4	Hexachlorophene	ND	500		ug/l	
78-59-1	Isophorone	ND	20	2.8	ug/l	
298-00-0	Methyl parathion	ND	50	4.0	ug/l	
98-95-3	Nitrobenzene	ND	20	6.4	ug/l	
62-75-9	n-Nitrosodimethylamine	ND	20	8.2	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	20	4.8	ug/l	
924-16-3	N-Nitrosodi-n-butylamine	ND	50	6.0	ug/l	
10595-95-6	N-Nitrosomethylethylamine	ND	50	14	ug/l	
930-55-2	N-Nitrosopyrrolidine	ND	50	7.3	ug/l	
56-38-2	Parathion	ND	50	5.1	ug/l	
608-93-5	Pentachlorobenzene	ND	50	2.4	ug/l	
82-68-8	Pentachloronitrobenzene	ND	50	23	ug/l	
23950-58-5	Pronamide	ND	50	2.5	ug/l	
129-00-0	Pyrene	ND	10	2.2	ug/l	
110-86-1	Pyridine	ND	20	3.9	ug/l	
106-50-3	p-Phenylenediamine	ND	50	2.0	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	20	2.5	ug/l	

CAS No.	Surrogate Recoveries	Limits	
367-12-4	2-Fluorophenol	42%	10-73%
4165-62-2	Phenol-d5	27%	10-64%
118-79-6	2,4,6-Tribromophenol	92%	31-130%
4165-60-0	Nitrobenzene-d5	74%	28-126%
321-60-8	2-Fluorobiphenyl	83%	26-114%
1718-51-0	Terphenyl-d14	101%	16-122%

7.2.11

7

Leachate Blank Summary

Job Number: JD35488

Account: CRATXH GHD Services Inc.

Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP37369-LB2	P146834.D	1	12/28/21	KLS	12/27/21	OP37369	EP6767

The QC reported here applies to the following samples:

Method: SW846 8270E

JD35488-7

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	50	8.2	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	50	8.9	ug/l	
120-83-2	2,4-Dichlorophenol	ND	50	13	ug/l	
105-67-9	2,4-Dimethylphenol	ND	50	24	ug/l	
51-28-5	2,4-Dinitrophenol	ND	200	16	ug/l	
95-48-7	2-Methylphenol	ND	20	8.9	ug/l	
	3&4-Methylphenol	ND	20	8.8	ug/l	
87-86-5	Pentachlorophenol	ND	100	14	ug/l	
108-95-2	Phenol	ND	20	3.9	ug/l	
58-90-2	2,3,4,6-Tetrachlorophenol	ND	50	15	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	50	13	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	50	9.2	ug/l	
83-32-9	Acenaphthene	ND	10	1.9	ug/l	
98-86-2	Acetophenone	ND	50	2.1	ug/l	
62-53-3	Aniline	ND	20	3.2	ug/l	
120-12-7	Anthracene	ND	10	2.1	ug/l	
92-87-5	Benzidine	ND	200	9.0	ug/l	
85-68-7	Butyl benzyl phthalate	ND	20	4.6	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	20	2.5	ug/l	
122-66-7	1,2-Diphenylhydrazine	ND	20	1.9	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	20	5.5	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	20	4.8	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	50	5.1	ug/l	
123-91-1	1,4-Dioxane	ND	20	6.6	ug/l	
84-66-2	Diethyl phthalate	ND	20	2.6	ug/l	
131-11-3	Dimethyl phthalate	ND	20	2.2	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	20	17	ug/l	
206-44-0	Fluoranthene	ND	10	1.7	ug/l	
86-73-7	Fluorene	ND	10	1.7	ug/l	
118-74-1	Hexachlorobenzene	ND	20	3.3	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	200	28	ug/l	
67-72-1	Hexachloroethane	ND	50	3.9	ug/l	
78-59-1	Isophorone	ND	20	2.8	ug/l	
98-95-3	Nitrobenzene	ND	20	6.4	ug/l	
62-75-9	n-Nitrosodimethylamine	ND	20	8.2	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	20	4.8	ug/l	

Leachate Blank Summary

Job Number: JD35488
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP37369-LB2	P146834.D	1	12/28/21	KLS	12/27/21	OP37369	EP6767

The QC reported here applies to the following samples:

Method: SW846 8270E

JD35488-7

CAS No.	Compound	Result	RL	MDL	Units	Q
129-00-0	Pyrene	ND	10	2.2	ug/l	
110-86-1	Pyridine	ND	20	3.9	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	20	2.5	ug/l	

CAS No.	Surrogate Recoveries	Limits	
367-12-4	2-Fluorophenol	53%	10-73%
4165-62-2	Phenol-d5	34%	10-64%
118-79-6	2,4,6-Tribromophenol	104%	31-130%
4165-60-0	Nitrobenzene-d5	85%	28-126%
321-60-8	2-Fluorobiphenyl	87%	26-114%
1718-51-0	Terphenyl-d14	101%	16-122%

7.2.12

7

Blank Spike Summary

Job Number: JD35488
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP37049-BS1	6P503035.D	1	12/10/21	KLS	12/09/21	OP37049	E6P3571

The QC reported here applies to the following samples:

Method: SW846 8270E

JD35488-1

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
95-57-8	2-Chlorophenol	50	29.9	60	33-102
59-50-7	4-Chloro-3-methyl phenol	50	37.7	75	46-113
120-83-2	2,4-Dichlorophenol	50	35.7	71	45-111
105-67-9	2,4-Dimethylphenol	50	33.6	67	39-124
51-28-5	2,4-Dinitrophenol	100	81.9	82	30-156
95-48-7	2-Methylphenol	50	26.7	53	26-101
	3&4-Methylphenol	100	50.2	50	23-98
87-86-5	Pentachlorophenol	100	81.8	82	37-147
108-95-2	Phenol	50	16.4	33	10-77
58-90-2	2,3,4,6-Tetrachlorophenol	50	42.1	84	41-131
95-95-4	2,4,5-Trichlorophenol	50	39.5	79	39-125
88-06-2	2,4,6-Trichlorophenol	50	37.1	74	40-127
83-32-9	Acenaphthene	50	37.5	75	36-112
98-86-2	Acetophenone	50	32.0	64	44-110
62-53-3	Aniline	50	25.9	52	10-109
120-12-7	Anthracene	50	39.8	80	50-110
92-87-5	Benzidine	100	8.8	9*	10-56
85-68-7	Butyl benzyl phthalate	50	45.5	91	49-121
111-44-4	bis(2-Chloroethyl)ether	50	30.6	61	38-116
122-66-7	1,2-Diphenylhydrazine	50	39.0	78	42-124
121-14-2	2,4-Dinitrotoluene	50	41.4	83	47-128
606-20-2	2,6-Dinitrotoluene	50	52.5	105	48-127
91-94-1	3,3'-Dichlorobenzidine	100	36.5	37	18-103
123-91-1	1,4-Dioxane	50	16.6	33	10-75
84-66-2	Diethyl phthalate	50	42.0	84	49-117
131-11-3	Dimethyl phthalate	50	41.3	83	49-114
117-81-7	bis(2-Ethylhexyl)phthalate	50	47.2	94	44-127
206-44-0	Fluoranthene	50	41.4	83	54-117
86-73-7	Fluorene	50	39.4	79	43-118
118-74-1	Hexachlorobenzene	50	39.3	79	46-113
77-47-4	Hexachlorocyclopentadiene	100	40.2	40	10-112
67-72-1	Hexachloroethane	50	26.4	53	18-101
78-59-1	Isophorone	50	35.6	71	47-119
98-95-3	Nitrobenzene	50	36.1	72	36-120
62-75-9	n-Nitrosodimethylamine	50	20.7	41	10-85
621-64-7	N-Nitroso-di-n-propylamine	50	33.7	67	41-118

* = Outside of Control Limits.

7.3.1
7

Blank Spike Summary

Job Number: JD35488
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP37049-BS1	6P503035.D	1	12/10/21	KLS	12/09/21	OP37049	E6P3571

The QC reported here applies to the following samples:

Method: SW846 8270E

JD35488-1

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
82-68-8	Pentachloronitrobenzene	50	44.1	88	43-126
129-00-0	Pyrene	50	39.5	79	51-113
110-86-1	Pyridine	50	18.7	37	10-78
120-82-1	1,2,4-Trichlorobenzene	50	28.8	58	24-104

CAS No.	Surrogate Recoveries	BSP	Limits
367-12-4	2-Fluorophenol	40%	10-73%
4165-62-2	Phenol-d5	28%	10-64%
118-79-6	2,4,6-Tribromophenol	93%	31-130%
4165-60-0	Nitrobenzene-d5	78%	28-126%
321-60-8	2-Fluorobiphenyl	75%	26-114%
1718-51-0	Terphenyl-d14	82%	16-122%

* = Outside of Control Limits.

Blank Spike Summary

Job Number: JD35488
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP37049-BS13	F204187.D	1	12/11/21	CS	12/09/21	OP37049	EF8949

The QC reported here applies to the following samples:

Method: SW846 8270E

JD35488-1

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
60-51-5	Dimethoate	50	26.8	54*	58-114
122-39-4	Diphenylamine	50	34.6	69	33-152
298-04-4	Disulfoton	50	33.5	67	50-150
99-65-0	m-Dinitrobenzene	50	32.1	64	50-150
298-00-0	Methyl parathion	50	26.3	53	50-150
924-16-3	N-Nitrosodi-n-butylamine	50	29.3	59	50-150
10595-95-6	N-Nitrosomethylethylamine	50	21.2	42	20-119
930-55-2	N-Nitrosopyrrolidine	50	22.3	45	24-158
56-38-2	Parathion	50	32.9	66	50-150
608-93-5	Pentachlorobenzene	50	26.8	54	35-117
82-68-8	Pentachloronitrobenzene	50	30.9	62	43-126
23950-58-5	Pronamide	50	31.6	63	40-142

CAS No.	Surrogate Recoveries	BSP	Limits
367-12-4	2-Fluorophenol	24%	10-73%
4165-62-2	Phenol-d5	17%	10-64%
118-79-6	2,4,6-Tribromophenol	61%	31-130%
4165-60-0	Nitrobenzene-d5	51%	28-126%
321-60-8	2-Fluorobiphenyl	57%	26-114%
1718-51-0	Terphenyl-d14	63%	16-122%

* = Outside of Control Limits.

7.3.2
7

Blank Spike Summary

Job Number: JD35488
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP37155-BS1	F204314.D	1	12/16/21	CS	12/14/21	OP37155	EF8956

The QC reported here applies to the following samples:

Method: SW846 8270E

JD35488-2

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
95-57-8	2-Chlorophenol	50	32.2	64	33-102
59-50-7	4-Chloro-3-methyl phenol	50	37.5	75	46-113
120-83-2	2,4-Dichlorophenol	50	37.5	75	45-111
105-67-9	2,4-Dimethylphenol	50	31.5	63	39-124
51-28-5	2,4-Dinitrophenol	100	95.9	96	30-156
95-48-7	2-Methylphenol	50	28.6	57	26-101
	3&4-Methylphenol	100	53.2	53	23-98
87-86-5	Pentachlorophenol	100	86.6	87	37-147
108-95-2	Phenol	50	16.3	33	10-77
58-90-2	2,3,4,6-Tetrachlorophenol	50	43.9	88	41-131
95-95-4	2,4,5-Trichlorophenol	50	43.0	86	39-125
88-06-2	2,4,6-Trichlorophenol	50	41.9	84	40-127
83-32-9	Acenaphthene	50	42.1	84	36-112
98-86-2	Acetophenone	50	39.3	79	44-110
62-53-3	Aniline	50	19.0	38	10-109
120-12-7	Anthracene	50	42.7	85	50-110
92-87-5	Benzidine	50	ND	0*	10-56
85-68-7	Butyl benzyl phthalate	50	46.6	93	49-121
111-44-4	bis(2-Chloroethyl)ether	50	36.9	74	38-116
122-66-7	1,2-Diphenylhydrazine	50	38.2	76	42-124
121-14-2	2,4-Dinitrotoluene	50	44.4	89	47-128
606-20-2	2,6-Dinitrotoluene	50	45.8	92	48-127
91-94-1	3,3'-Dichlorobenzidine	50	34.5	70	18-103
123-91-1	1,4-Dioxane	50	15.5	31	10-75
84-66-2	Diethyl phthalate	50	44.4	89	49-117
131-11-3	Dimethyl phthalate	50	43.8	88	49-114
117-81-7	bis(2-Ethylhexyl)phthalate	50	48.6	97	44-127
206-44-0	Fluoranthene	50	43.6	87	54-117
86-73-7	Fluorene	50	44.6	89	43-118
118-74-1	Hexachlorobenzene	50	41.9	84	46-113
77-47-4	Hexachlorocyclopentadiene	100	44.8	45	10-112
67-72-1	Hexachloroethane	50	30.1	60	18-101
78-59-1	Isophorone	50	38.1	76	47-119
98-95-3	Nitrobenzene	50	36.6	73	36-120
62-75-9	n-Nitrosodimethylamine	50	17.2	34	10-85
621-64-7	N-Nitroso-di-n-propylamine	50	38.6	77	41-118

* = Outside of Control Limits.

Blank Spike Summary

Job Number: JD35488
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP37155-BS1	F204314.D	1	12/16/21	CS	12/14/21	OP37155	EF8956

The QC reported here applies to the following samples:

Method: SW846 8270E

JD35488-2

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
129-00-0	Pyrene	50	43.5	87	51-113
110-86-1	Pyridine	50	8.6	17	10-78
120-82-1	1,2,4-Trichlorobenzene	50	33.6	67	24-104

CAS No.	Surrogate Recoveries	BSP	Limits
367-12-4	2-Fluorophenol	39%	10-73%
4165-62-2	Phenol-d5	29%	10-64%
118-79-6	2,4,6-Tribromophenol	92%	31-130%
4165-60-0	Nitrobenzene-d5	75%	28-126%
321-60-8	2-Fluorobiphenyl	86%	26-114%
1718-51-0	Terphenyl-d14	88%	16-122%

* = Outside of Control Limits.

Blank Spike Summary

Job Number: JD35488
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP37155-BS13	F204315.D	1	12/16/21	CS	12/14/21	OP37155	EF8956

The QC reported here applies to the following samples:

Method: SW846 8270E

JD35488-2

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
60-51-5	Dimethoate	50	41.2	82	58-114
122-39-4	Diphenylamine	50	52.9	106	33-152
298-04-4	Disulfoton	50	49.6	99	50-150
99-65-0	m-Dinitrobenzene	50	51.7	103	50-150
298-00-0	Methyl parathion	50	42.8	86	50-150
924-16-3	N-Nitrosodi-n-butylamine	50	43.1	86	50-150
10595-95-6	N-Nitrosomethylethylamine	50	29.0	58	20-119
930-55-2	N-Nitrosopyrrolidine	50	30.8	62	24-158
56-38-2	Parathion	50	48.4	97	50-150
608-93-5	Pentachlorobenzene	50	40.1	80	35-117
82-68-8	Pentachloronitrobenzene	50	46.1	92	43-126
23950-58-5	Pronamide	50	47.2	94	40-142

CAS No.	Surrogate Recoveries	BSP	Limits
367-12-4	2-Fluorophenol	43%	10-73%
4165-62-2	Phenol-d5	31%	10-64%
118-79-6	2,4,6-Tribromophenol	94%	31-130%
4165-60-0	Nitrobenzene-d5	76%	28-126%
321-60-8	2-Fluorobiphenyl	86%	26-114%
1718-51-0	Terphenyl-d14	89%	16-122%

* = Outside of Control Limits.

Blank Spike Summary

Job Number: JD35488
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP37159-BS1	6P503070.D	1	12/16/21	CS	12/15/21	OP37159	E6P3574

The QC reported here applies to the following samples:

Method: SW846 8270E

JD35488-3, JD35488-4, JD35488-5

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
95-57-8	2-Chlorophenol	50	32.8	66	33-102
59-50-7	4-Chloro-3-methyl phenol	50	36.2	72	46-113
120-83-2	2,4-Dichlorophenol	50	36.2	72	45-111
105-67-9	2,4-Dimethylphenol	50	31.9	64	39-124
51-28-5	2,4-Dinitrophenol	100	78.3	78	30-156
95-48-7	2-Methylphenol	50	30.4	61	26-101
	3&4-Methylphenol	100	57.6	58	23-98
87-86-5	Pentachlorophenol	100	88.4	88	37-147
108-95-2	Phenol	50	17.5	35	10-77
58-90-2	2,3,4,6-Tetrachlorophenol	50	44.1	88	41-131
95-95-4	2,4,5-Trichlorophenol	50	40.9	82	39-125
88-06-2	2,4,6-Trichlorophenol	50	40.7	81	40-127
83-32-9	Acenaphthene	50	44.6	89	36-112
98-86-2	Acetophenone	50	40.7	81	44-110
62-53-3	Aniline	50	15.8	32	10-109
120-12-7	Anthracene	50	46.2	92	50-110
92-87-5	Benzidine	100	ND	0*	10-56
85-68-7	Butyl benzyl phthalate	50	48.2	96	49-121
111-44-4	bis(2-Chloroethyl)ether	50	39.2	78	38-116
122-66-7	1,2-Diphenylhydrazine	50	46.3	93	42-124
121-14-2	2,4-Dinitrotoluene	50	44.3	89	47-128
606-20-2	2,6-Dinitrotoluene	50	43.8	88	48-127
91-94-1	3,3'-Dichlorobenzidine	100	32.3	32	18-103
123-91-1	1,4-Dioxane	50	17.1	34	10-75
84-66-2	Diethyl phthalate	50	47.6	95	49-117
131-11-3	Dimethyl phthalate	50	45.3	91	49-114
117-81-7	bis(2-Ethylhexyl)phthalate	50	48.6	97	44-127
206-44-0	Fluoranthene	50	49.3	99	54-117
86-73-7	Fluorene	50	46.0	92	43-118
118-74-1	Hexachlorobenzene	50	43.7	87	46-113
77-47-4	Hexachlorocyclopentadiene	100	35.4	35	10-112
67-72-1	Hexachloroethane	50	32.3	65	18-101
78-59-1	Isophorone	50	43.0	86	47-119
98-95-3	Nitrobenzene	50	41.3	83	36-120
62-75-9	n-Nitrosodimethylamine	50	21.1	42	10-85
621-64-7	N-Nitroso-di-n-propylamine	50	40.8	82	41-118

* = Outside of Control Limits.

Blank Spike Summary

Job Number: JD35488
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP37159-BS1	6P503070.D	1	12/16/21	CS	12/15/21	OP37159	E6P3574

The QC reported here applies to the following samples:

Method: SW846 8270E

JD35488-3, JD35488-4, JD35488-5

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
82-68-8	Pentachloronitrobenzene	50	46.8	94	43-126
129-00-0	Pyrene	50	45.4	91	51-113
110-86-1	Pyridine	50	6.4	13	10-78
120-82-1	1,2,4-Trichlorobenzene	50	34.5	69	24-104

CAS No.	Surrogate Recoveries	BSP	Limits
367-12-4	2-Fluorophenol	46%	10-73%
4165-62-2	Phenol-d5	34%	10-64%
118-79-6	2,4,6-Tribromophenol	90%	31-130%
4165-60-0	Nitrobenzene-d5	82%	28-126%
321-60-8	2-Fluorobiphenyl	88%	26-114%
1718-51-0	Terphenyl-d14	85%	16-122%

* = Outside of Control Limits.

Blank Spike Summary

Job Number: JD35488
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP37159-BS1	F204310.D	1	12/16/21	CS	12/15/21	OP37159	EF8956

The QC reported here applies to the following samples:

Method: SW846 8270E

JD35488-3, JD35488-4, JD35488-5

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
95-57-8	2-Chlorophenol	50	32.5	65	33-102
59-50-7	4-Chloro-3-methyl phenol	50	35.8	72	46-113
120-83-2	2,4-Dichlorophenol	50	36.3	73	45-111
105-67-9	2,4-Dimethylphenol	50	30.8	62	39-124
51-28-5	2,4-Dinitrophenol	100	90.0	90	30-156
95-48-7	2-Methylphenol	50	30.1	60	26-101
	3&4-Methylphenol	100	57.7	58	23-98
87-86-5	Pentachlorophenol	100	83.0	83	37-147
108-95-2	Phenol	50	18.0	36	10-77
58-90-2	2,3,4,6-Tetrachlorophenol	50	41.9	84	41-131
95-95-4	2,4,5-Trichlorophenol	50	39.3	79	39-125
88-06-2	2,4,6-Trichlorophenol	50	38.3	77	40-127
83-32-9	Acenaphthene	50	41.9	84	36-112
98-86-2	Acetophenone	50	39.6	79	44-110
62-53-3	Aniline	50	13.9	28	10-109
120-12-7	Anthracene	50	42.6	85	50-110
92-87-5	Benzidine	100	ND	0*	10-56
85-68-7	Butyl benzyl phthalate	50	47.1	94	49-121
111-44-4	bis(2-Chloroethyl)ether	50	37.8	76	38-116
122-66-7	1,2-Diphenylhydrazine	50	38.7	77	42-124
121-14-2	2,4-Dinitrotoluene	50	45.5	91	47-128
606-20-2	2,6-Dinitrotoluene	50	44.4	89	48-127
91-94-1	3,3'-Dichlorobenzidine	100	33.4	33	18-103
123-91-1	1,4-Dioxane	50	16.6	33	10-75
84-66-2	Diethyl phthalate	50	44.8	90	49-117
131-11-3	Dimethyl phthalate	50	42.7	85	49-114
117-81-7	bis(2-Ethylhexyl)phthalate	50	48.0	96	44-127
206-44-0	Fluoranthene	50	45.0	90	54-117
86-73-7	Fluorene	50	43.7	87	43-118
118-74-1	Hexachlorobenzene	50	42.3	85	46-113
77-47-4	Hexachlorocyclopentadiene	100	32.9	33	10-112
67-72-1	Hexachloroethane	50	30.6	61	18-101
78-59-1	Isophorone	50	38.3	77	47-119
98-95-3	Nitrobenzene	50	37.1	74	36-120
62-75-9	n-Nitrosodimethylamine	50	17.6	35	10-85
621-64-7	N-Nitroso-di-n-propylamine	50	39.5	79	41-118

* = Outside of Control Limits.

Blank Spike Summary

Job Number: JD35488
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP37159-BS1	F204310.D	1	12/16/21	CS	12/15/21	OP37159	EF8956

The QC reported here applies to the following samples:

Method: SW846 8270E

JD35488-3, JD35488-4, JD35488-5

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
129-00-0	Pyrene	50	43.8	88	51-113
110-86-1	Pyridine	50	5.8	12	10-78
120-82-1	1,2,4-Trichlorobenzene	50	34.7	69	24-104

CAS No.	Surrogate Recoveries	BSP	Limits
367-12-4	2-Fluorophenol	45%	10-73%
4165-62-2	Phenol-d5	33%	10-64%
118-79-6	2,4,6-Tribromophenol	85%	31-130%
4165-60-0	Nitrobenzene-d5	76%	28-126%
321-60-8	2-Fluorobiphenyl	84%	26-114%
1718-51-0	Terphenyl-d14	85%	16-122%

* = Outside of Control Limits.

Blank Spike Summary

Job Number: JD35488
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP37159-BS13	F204311.D	1	12/16/21	CS	12/15/21	OP37159	EF8956

The QC reported here applies to the following samples:

Method: SW846 8270E

JD35488-3, JD35488-4, JD35488-5

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
60-51-5	Dimethoate	50	40.7	81	58-114
122-39-4	Diphenylamine	50	47.9	96	33-152
298-04-4	Disulfoton	50	46.5	93	50-150
99-65-0	m-Dinitrobenzene	50	45.6	91	50-150
298-00-0	Methyl parathion	50	37.0	74	50-150
924-16-3	N-Nitrosodi-n-butylamine	50	39.4	79	50-150
10595-95-6	N-Nitrosomethylethylamine	50	26.9	54	20-119
930-55-2	N-Nitrosopyrrolidine	50	27.5	55	24-158
56-38-2	Parathion	50	42.6	85	50-150
608-93-5	Pentachlorobenzene	50	32.9	66	35-117
82-68-8	Pentachloronitrobenzene	50	39.7	79	43-126
23950-58-5	Pronamide	50	42.9	86	40-142

CAS No.	Surrogate Recoveries	BSP	Limits
367-12-4	2-Fluorophenol	30%	10-73%
4165-62-2	Phenol-d5	21%	10-64%
118-79-6	2,4,6-Tribromophenol	77%	31-130%
4165-60-0	Nitrobenzene-d5	67%	28-126%
321-60-8	2-Fluorobiphenyl	73%	26-114%
1718-51-0	Terphenyl-d14	83%	16-122%

* = Outside of Control Limits.

7.3.7
7

Blank Spike Summary

Job Number: JD35488
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP37369-BS1	P146837.D	1	12/28/21	KLS	12/27/21	OP37369	EP6767

The QC reported here applies to the following samples:

Method: SW846 8270E

JD35488-7

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
95-57-8	2-Chlorophenol	50	35.3	71	33-102
59-50-7	4-Chloro-3-methyl phenol	50	41.2	82	46-113
120-83-2	2,4-Dichlorophenol	50	42.9	86	45-111
105-67-9	2,4-Dimethylphenol	50	37.0	74	39-124
51-28-5	2,4-Dinitrophenol	100	91.5	92	30-156
95-48-7	2-Methylphenol	50	30.2	60	26-101
	3&4-Methylphenol	100	55.9	56	23-98
87-86-5	Pentachlorophenol	100	93.5	94	37-147
108-95-2	Phenol	50	14.9	30	10-77
58-90-2	2,3,4,6-Tetrachlorophenol	50	50.0	100	41-131
95-95-4	2,4,5-Trichlorophenol	50	48.2	96	39-125
88-06-2	2,4,6-Trichlorophenol	50	48.6	97	40-127
83-32-9	Acenaphthene	50	47.9	96	36-112
98-86-2	Acetophenone	50	46.0	92	44-110
62-53-3	Aniline	50	13.4	27	10-109
120-12-7	Anthracene	50	50.9	102	50-110
92-87-5	Benzidine	100	ND	0*	10-56
85-68-7	Butyl benzyl phthalate	50	54.4	109	49-121
111-44-4	bis(2-Chloroethyl)ether	50	43.0	86	38-116
122-66-7	1,2-Diphenylhydrazine	50	49.8	100	42-124
121-14-2	2,4-Dinitrotoluene	50	53.5	107	47-128
606-20-2	2,6-Dinitrotoluene	50	49.4	99	48-127
91-94-1	3,3'-Dichlorobenzidine	100	45.4	45	18-103
123-91-1	1,4-Dioxane	50	16.6	33	10-75
84-66-2	Diethyl phthalate	50	50.4	101	49-117
131-11-3	Dimethyl phthalate	50	49.5	99	49-114
117-81-7	bis(2-Ethylhexyl)phthalate	50	49.7	99	44-127
206-44-0	Fluoranthene	50	52.3	105	54-117
86-73-7	Fluorene	50	50.3	101	43-118
118-74-1	Hexachlorobenzene	50	50.5	101	46-113
77-47-4	Hexachlorocyclopentadiene	100	61.3	61	10-112
67-72-1	Hexachloroethane	50	33.7	67	18-101
78-59-1	Isophorone	50	46.9	94	47-119
98-95-3	Nitrobenzene	50	45.2	90	36-120
62-75-9	n-Nitrosodimethylamine	50	19.8	40	10-85
621-64-7	N-Nitroso-di-n-propylamine	50	45.9	92	41-118

* = Outside of Control Limits.

7.3.8
7

Blank Spike Summary

Job Number: JD35488
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP37369-BS1	P146837.D	1	12/28/21	KLS	12/27/21	OP37369	EP6767

The QC reported here applies to the following samples:

Method: SW846 8270E

JD35488-7

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
129-00-0	Pyrene	50	51.2	102	51-113
110-86-1	Pyridine	50	8.8	18	10-78
120-82-1	1,2,4-Trichlorobenzene	50	38.9	78	24-104

CAS No.	Surrogate Recoveries	BSP	Limits
367-12-4	2-Fluorophenol	41%	10-73%
4165-62-2	Phenol-d5	28%	10-64%
118-79-6	2,4,6-Tribromophenol	108%	31-130%
4165-60-0	Nitrobenzene-d5	87%	28-126%
321-60-8	2-Fluorobiphenyl	93%	26-114%
1718-51-0	Terphenyl-d14	91%	16-122%

* = Outside of Control Limits.

Blank Spike Summary

Job Number: JD35488
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP37369-BS13	F204638.D	1	12/29/21	KLS	12/27/21	OP37369	EF8971

The QC reported here applies to the following samples:

Method: SW846 8270E

JD35488-7

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
60-51-5	Dimethoate	50	43.7	87	58-114
122-39-4	Diphenylamine	50	56.6	113	33-152
298-04-4	Disulfoton	50	55.5	111	50-150
99-65-0	m-Dinitrobenzene	50	53.9	108	50-150
70-30-4	Hexachlorophene	50	ND	0* a	50-150
298-00-0	Methyl parathion	50	50.7	101	50-150
924-16-3	N-Nitrosodi-n-butylamine	50	44.6	89	50-150
10595-95-6	N-Nitrosomethylethylamine	50	29.0	58	20-119
930-55-2	N-Nitrosopyrrolidine	50	29.5	59	24-158
56-38-2	Parathion	50	48.2	96	50-150
608-93-5	Pentachlorobenzene	50	40.2	80	35-117
82-68-8	Pentachloronitrobenzene	50	48.6	97	43-126
23950-58-5	Pronamide	50	51.7	103	40-142
106-50-3	p-Phenylenediamine	50	ND	0* a	50-150

CAS No.	Surrogate Recoveries	BSP	Limits
367-12-4	2-Fluorophenol	48%	10-73%
4165-62-2	Phenol-d5	34%	10-64%
118-79-6	2,4,6-Tribromophenol	90%	31-130%
4165-60-0	Nitrobenzene-d5	76%	28-126%
321-60-8	2-Fluorobiphenyl	90%	26-114%
1718-51-0	Terphenyl-d14	101%	16-122%

(a) Outside of in house control limits.

* = Outside of Control Limits.

7.3.9
7

Blank Spike/Blank Spike Duplicate Summary

Job Number: JD35488

Account: CRATXH GHD Services Inc.

Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP37314-BS1	6P503181.D	1	12/27/21	KLS	12/23/21	OP37314	E6P3580
OP37314-BSD	6P503182.D	1	12/27/21	KLS	12/23/21	OP37314	E6P3580

The QC reported here applies to the following samples:

Method: SW846 8270E

JD35488-6

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	BSD ug/l	BSD %	RPD	Limits Rec/RPD
95-57-8	2-Chlorophenol	50	16.2	32*	32.7	65	67*	33-102/34
59-50-7	4-Chloro-3-methyl phenol	50	19.0	38*	35.7	71	61*	46-113/28
120-83-2	2,4-Dichlorophenol	50	19.2	38*	37.8	76	65*	45-111/31
105-67-9	2,4-Dimethylphenol	50	17.6	35*	33.0	66	61*	39-124/30
51-28-5	2,4-Dinitrophenol	100	43.3	43	83.5	84	63*	30-156/30
95-48-7	2-Methylphenol	50	14.6	29	28.0	56	63* a	26-101/32
	Cresol, Total	100	41.9	42	79.5	80	62*	25-99/32
	3&4-Methylphenol	100	27.3	27	51.5	52	61* a	23-98/32
87-86-5	Pentachlorophenol	100	49.6	50	93.5	94	61* a	37-147/31
108-95-2	Phenol	50	7.5	15	15.1	30	67*	10-77/35
58-90-2	2,3,4,6-Tetrachlorophenol	50	24.8	50	47.3	95	62*	41-131/29
95-95-4	2,4,5-Trichlorophenol	50	22.4	45	43.9	88	65* a	39-125/28
88-06-2	2,4,6-Trichlorophenol	50	23.3	47	43.7	87	61* a	40-127/28
83-32-9	Acenaphthene	50	24.4	49	47.5	95	64*	36-112/27
98-86-2	Acetophenone	50	21.6	43*	40.9	82	62*	44-110/30
62-53-3	Aniline	50	8.7	17	12.5	25	36	10-109/44
120-12-7	Anthracene	50	27.3	55	50.5	101	60*	50-110/27
92-87-5	Benzidine	100	ND	0*	ND	0*	nc	10-56/63
85-68-7	Butyl benzyl phthalate	50	26.9	54	53.7	107	67*	49-121/29
111-44-4	bis(2-Chloroethyl)ether	50	20.8	42	40.5	81	64*	38-116/32
122-66-7	1,2-Diphenylhydrazine	50	25.2	50	48.9	98	64*	42-124/27
121-14-2	2,4-Dinitrotoluene	50	25.4	51	47.7	95	61* a	47-128/27
606-20-2	2,6-Dinitrotoluene	50	24.0	48	48.3	97	67*	48-127/28
91-94-1	3,3'-Dichlorobenzidine	100	23.1	23	38.6	39	50*	18-103/38
123-91-1	1,4-Dioxane	50	9.9	20	17.7	35	57*	10-75/38
84-66-2	Diethyl phthalate	50	26.3	53	49.6	99	61*	49-117/28
131-11-3	Dimethyl phthalate	50	25.2	50	48.1	96	62*	49-114/28
117-81-7	bis(2-Ethylhexyl)phthalate	50	28.6	57	54.2	108	62*	44-127/29
206-44-0	Fluoranthene	50	28.1	56	51.2	102	58*	54-117/30
86-73-7	Fluorene	50	25.8	52	49.3	99	63*	43-118/27
118-74-1	Hexachlorobenzene	50	26.3	53	46.8	94	56* a	46-113/29
77-47-4	Hexachlorocyclopentadiene	100	26.8	27	56.3	56	71*	10-112/40
67-72-1	Hexachloroethane	50	17.7	35	36.2	72	69* a	18-101/38
78-59-1	Isophorone	50	22.9	46*	44.4	89	64*	47-119/28
98-95-3	Nitrobenzene	50	21.0	42	42.1	84	67* a	36-120/29
62-75-9	n-Nitrosodimethylamine	50	11.5	23	21.0	42	58*	10-85/37

* = Outside of Control Limits.

7.4.1
7

Blank Spike/Blank Spike Duplicate Summary

Job Number: JD35488
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP37314-BS1	6P503181.D	1	12/27/21	KLS	12/23/21	OP37314	E6P3580
OP37314-BSD	6P503182.D	1	12/27/21	KLS	12/23/21	OP37314	E6P3580

The QC reported here applies to the following samples:

Method: SW846 8270E

JD35488-6

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	BSD ug/l	BSD %	RPD	Limits Rec/RPD
621-64-7	N-Nitroso-di-n-propylamine	50	21.5	43	41.4	83	63*	41-118/30
82-68-8	Pentachloronitrobenzene	50	27.7	55	52.3	105	62*	43-126/28
129-00-0	Pyrene	50	27.3	55	50.6	101	60*	51-113/28
110-86-1	Pyridine	50	6.1	12	6.3	13	3	10-78/57
120-82-1	1,2,4-Trichlorobenzene	50	19.5	39	38.2	76	65*	24-104/33

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
367-12-4	2-Fluorophenol	21%	41%	10-73%
4165-62-2	Phenol-d5	15%	29%	10-64%
118-79-6	2,4,6-Tribromophenol	51%	95%	31-130%
4165-60-0	Nitrobenzene-d5	41%	84%	28-126%
321-60-8	2-Fluorobiphenyl	49%	94%	26-114%
1718-51-0	Terphenyl-d14	50%	82%	16-122%

(a) Analytical precision exceeds in-house control limits.

* = Outside of Control Limits.

7.4.1
7

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JD35488
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP37049-MS	F204188.D	1	12/11/21	CS	12/09/21	OP37049	EF8949
OP37049-MSD	F204189.D	1	12/11/21	CS	12/09/21	OP37049	EF8949
JD35487-1	F204190.D	1	12/11/21	CS	12/09/21	OP37049	EF8949

The QC reported here applies to the following samples:

Method: SW846 8270E

JD35488-1

CAS No.	Compound	JD35487-1 ug/l	Spike Q ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
95-57-8	2-Chlorophenol	ND	500	241	48	500	207	41	15	13-123/31
59-50-7	4-Chloro-3-methyl phenol	ND	500	271	54	500	246	49	10	12-152/29
120-83-2	2,4-Dichlorophenol	ND	500	262	52	500	254	51	3	29-126/29
105-67-9	2,4-Dimethylphenol	ND	500	225	45	500	219	44	3	10-154/32
51-28-5	2,4-Dinitrophenol	ND	1000	699	70	1000	679	68	3	10-157/31
95-48-7	2-Methylphenol	ND	500	223	45	500	189	38	17	10-130/32
	3&4-Methylphenol	ND	1000	403	40	1000	343	34	16	10-128/36
87-86-5	Pentachlorophenol	ND	1000	619	62	1000	613	61	1	29-154/32
108-95-2	Phenol	ND	500	127	25	500	105	21	19	10-132/34
58-90-2	2,3,4,6-Tetrachlorophenol	ND	500	327	65	500	314	63	4	34-133/22
95-95-4	2,4,5-Trichlorophenol	ND	500	294	59	500	293	59	0	33-130/22
88-06-2	2,4,6-Trichlorophenol	ND	500	277	55	500	276	55	0	35-129/26
83-32-9	Acenaphthene	ND	500	273	55	500	278	56	2	31-124/22
98-86-2	Acetophenone	ND	500	284	57	500	272	54	4	33-126/23
62-53-3	Aniline	ND	500	191	38	500	208	42	9	10-118/53
120-12-7	Anthracene	ND	500	303	61	500	301	60	1	39-125/22
92-87-5	Benzidine	ND	1000	135	14	1000	19.0	2*	151*	10-84/53
85-68-7	Butyl benzyl phthalate	ND	500	333	67	500	336	67	1	39-137/21
111-44-4	bis(2-Chloroethyl)ether	ND	500	260	52	500	253	51	3	11-151/30
122-66-7	1,2-Diphenylhydrazine	ND	500	257	51	500	259	52	1	34-137/24
121-14-2	2,4-Dinitrotoluene	ND	500	325	65	500	321	64	1	21-160/23
606-20-2	2,6-Dinitrotoluene	ND	500	320	64	500	313	63	2	40-141/20
91-94-1	3,3'-Dichlorobenzidine	ND	1000	236	24	1000	285	29	19	10-128/45
123-91-1	1,4-Dioxane	ND	500	95.3	19	500	104	21	9	10-114/32
84-66-2	Diethyl phthalate	ND	500	321	64	500	312	62	3	37-131/23
131-11-3	Dimethyl phthalate	ND	500	302	60	500	303	61	0	35-129/22
117-81-7	bis(2-Ethylhexyl)phthalate	ND	500	332	66	500	341	68	3	36-137/27
206-44-0	Fluoranthene	ND	500	334	67	500	317	63	5	37-137/25
86-73-7	Fluorene	ND	500	299	60	500	300	60	0	32-138/24
118-74-1	Hexachlorobenzene	ND	500	300	60	500	299	60	0	40-120/21
77-47-4	Hexachlorocyclopentadiene	ND	1000	265	27	1000	259	26	2	10-115/38
67-72-1	Hexachloroethane	ND	500	214	43	500	201	40	6	10-120/26
78-59-1	Isophorone	ND	500	251	50	500	252	50	0	36-133/25
98-95-3	Nitrobenzene	ND	500	238	48	500	233	47	2	26-138/26
62-75-9	n-Nitrosodimethylamine	ND	500	125	25	500	113	23	10	10-109/30
621-64-7	N-Nitroso-di-n-propylamine	ND	500	278	56	500	275	55	1	28-137/26

* = Outside of Control Limits.

7.5.1
7

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JD35488
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP37049-MS	F204188.D	1	12/11/21	CS	12/09/21	OP37049	EF8949
OP37049-MSD	F204189.D	1	12/11/21	CS	12/09/21	OP37049	EF8949
JD35487-1	F204190.D	1	12/11/21	CS	12/09/21	OP37049	EF8949

The QC reported here applies to the following samples:

Method: SW846 8270E

JD35488-1

CAS No.	Compound	JD35487-1 ug/l	Spike Q ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
129-00-0	Pyrene	ND	500	296	59	500	306	61	3	38-131/24
110-86-1	Pyridine	ND	500	128	26	500	135	27	5	10-94/49
120-82-1	1,2,4-Trichlorobenzene	ND	500	227	45	500	220	44	3	10-137/27

CAS No.	Surrogate Recoveries	MS	MSD	JD35487-1	Limits
367-12-4	2-Fluorophenol	29%	23%	20%	10-73%
4165-62-2	Phenol-d5	21%	17%	14%	10-64%
118-79-6	2,4,6-Tribromophenol	65%	67%	68%	31-130%
4165-60-0	Nitrobenzene-d5	48%	49%	51%	28-126%
321-60-8	2-Fluorobiphenyl	53%	55%	57%	26-114%
1718-51-0	Terphenyl-d14	62%	65%	51%	16-122%

* = Outside of Control Limits.

7.5.1
7

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JD35488
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP37155-MS	F204316.D	1	12/16/21	CS	12/14/21	OP37155	EF8956
OP37155-MSD	F204317.D	1	12/16/21	CS	12/14/21	OP37155	EF8956
JD35488-2	F204318.D	1	12/16/21	CS	12/14/21	OP37155	EF8956

The QC reported here applies to the following samples:

Method: SW846 8270E

JD35488-2

CAS No.	Compound	JD35488-2 ug/l	Spike Q ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
95-57-8	2-Chlorophenol	ND	500	305	61	500	268	54	13	13-123/31
59-50-7	4-Chloro-3-methyl phenol	ND	500	356	71	500	341	68	4	12-152/29
120-83-2	2,4-Dichlorophenol	ND	500	369	74	500	345	69	7	29-126/29
105-67-9	2,4-Dimethylphenol	ND	500	310	62	500	283	57	9	10-154/32
51-28-5	2,4-Dinitrophenol	ND	1000	995	100	1000	965	97	3	10-157/31
95-48-7	2-Methylphenol	ND	500	270	54	500	233	47	15	10-130/32
	3&4-Methylphenol	ND	1000	490	49	1000	422	42	15	10-128/36
87-86-5	Pentachlorophenol	ND	1000	870	87	1000	859	86	1	29-154/32
108-95-2	Phenol	ND	500	145	29	500	126	25	14	10-132/34
58-90-2	2,3,4,6-Tetrachlorophenol	ND	500	447	89	500	445	89	0	34-133/22
95-95-4	2,4,5-Trichlorophenol	ND	500	424	85	500	422	84	0	33-130/22
88-06-2	2,4,6-Trichlorophenol	ND	500	411	82	500	403	81	2	35-129/26
83-32-9	Acenaphthene	ND	500	406	81	500	400	80	1	31-124/22
98-86-2	Acetophenone	ND	500	375	75	500	365	73	3	33-126/23
62-53-3	Aniline	ND	500	ND	0* ^a	500	120	24	200* ^b	10-118/53
120-12-7	Anthracene	ND	500	406	81	500	413	83	2	39-125/22
92-87-5	Benzidine	ND	500	ND	0* ^a	500	ND	0*	nc	10-84/53
85-68-7	Butyl benzyl phthalate	ND	500	439	88	500	437	87	0	39-137/21
111-44-4	bis(2-Chloroethyl)ether	ND	500	369	74	500	355	71	4	11-151/30
122-66-7	1,2-Diphenylhydrazine	ND	500	365	73	500	360	72	1	34-137/24
121-14-2	2,4-Dinitrotoluene	ND	500	445	89	500	451	90	1	21-160/23
606-20-2	2,6-Dinitrotoluene	ND	500	454	91	500	457	91	1	40-141/20
91-94-1	3,3'-Dichlorobenzidine	ND	500	79.1	16	500	108	22	31	10-128/45
123-91-1	1,4-Dioxane	ND	500	147	29	500	129	26	13	10-114/32
84-66-2	Diethyl phthalate	ND	500	442	88	500	447	89	1	37-131/23
131-11-3	Dimethyl phthalate	ND	500	430	86	500	426	85	1	35-129/22
117-81-7	bis(2-Ethylhexyl)phthalate	ND	500	435	87	500	414	83	5	36-137/27
206-44-0	Fluoranthene	ND	500	422	84	500	419	84	1	37-137/25
86-73-7	Fluorene	ND	500	429	86	500	418	84	3	32-138/24
118-74-1	Hexachlorobenzene	ND	500	384	77	500	382	76	1	40-120/21
77-47-4	Hexachlorocyclopentadiene	ND	1000	443	44	1000	389	39	13	10-115/38
67-72-1	Hexachloroethane	ND	500	301	60	500	272	54	10	10-120/26
78-59-1	Isophorone	ND	500	365	73	500	351	70	4	36-133/25
98-95-3	Nitrobenzene	ND	500	350	70	500	335	67	4	26-138/26
62-75-9	n-Nitrosodimethylamine	ND	500	150	30	500	141	28	6	10-109/30
621-64-7	N-Nitroso-di-n-propylamine	ND	500	384	77	500	371	74	3	28-137/26

* = Outside of Control Limits.

7.5.2
7

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JD35488
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP37155-MS	F204316.D	1	12/16/21	CS	12/14/21	OP37155	EF8956
OP37155-MSD	F204317.D	1	12/16/21	CS	12/14/21	OP37155	EF8956
JD35488-2	F204318.D	1	12/16/21	CS	12/14/21	OP37155	EF8956

The QC reported here applies to the following samples:

Method: SW846 8270E

JD35488-2

CAS No.	Compound	JD35488-2 ug/l	Spike Q ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
82-68-8	Pentachloronitrobenzene	ND	500	418	84	500	433	87	4	10-103/23
129-00-0	Pyrene	ND	500	405	81	500	398	80	2	38-131/24
110-86-1	Pyridine	ND	500	104	21	500	129	26	21	10-94/49
120-82-1	1,2,4-Trichlorobenzene	ND	500	324	65	500	306	61	6	10-137/27

CAS No.	Surrogate Recoveries	MS	MSD	JD35488-2	Limits
367-12-4	2-Fluorophenol	37%	31%	40%	10-73%
4165-62-2	Phenol-d5	28%	23%	27%	10-64%
118-79-6	2,4,6-Tribromophenol	93%	92%	93%	31-130%
4165-60-0	Nitrobenzene-d5	73%	70%	72%	28-126%
321-60-8	2-Fluorobiphenyl	81%	78%	81%	26-114%
1718-51-0	Terphenyl-d14	64%	60%	89%	16-122%

- (a) Outside control limits due to matrix interference.
- (b) Outside of in house control limits.

* = Outside of Control Limits.

7.5.2
7

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JD35488
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP37159-MS	F204319.D	1	12/16/21	CS	12/15/21	OP37159	EF8956
OP37159-MSD	F204320.D	1	12/16/21	CS	12/15/21	OP37159	EF8956
JD35487-4	F204321.D	1	12/16/21	CS	12/15/21	OP37159	EF8956

The QC reported here applies to the following samples:

Method: SW846 8270E

JD35488-3, JD35488-4, JD35488-5

CAS No.	Compound	JD35487-4 ug/l	Spike Q ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
95-57-8	2-Chlorophenol	ND	500	273	55	500	313	63	14	13-123/31
59-50-7	4-Chloro-3-methyl phenol	ND	500	309	62	500	347	69	12	12-152/29
120-83-2	2,4-Dichlorophenol	ND	500	308	62	500	362	72	16	29-126/29
105-67-9	2,4-Dimethylphenol	ND	500	251	50	500	308	62	20	10-154/32
51-28-5	2,4-Dinitrophenol	ND	1000	841	84	1000	923	92	9	10-157/31
95-48-7	2-Methylphenol	ND	500	246	49	500	277	55	12	10-130/32
	3&4-Methylphenol	ND	1000	467	47	1000	538	54	14	10-128/36
87-86-5	Pentachlorophenol	ND	1000	796	80	1000	847	85	6	29-154/32
108-95-2	Phenol	ND	500	145	29	500	160	32	10	10-132/34
58-90-2	2,3,4,6-Tetrachlorophenol	ND	500	407	81	500	444	89	9	34-133/22
95-95-4	2,4,5-Trichlorophenol	ND	500	369	74	500	427	85	15	33-130/22
88-06-2	2,4,6-Trichlorophenol	ND	500	358	72	500	412	82	14	35-129/26
83-32-9	Acenaphthene	ND	500	402	80	500	423	85	5	31-124/22
98-86-2	Acetophenone	ND	500	376	75	500	382	76	2	33-126/23
62-53-3	Aniline	ND	500	154	31	500	118	24	26	10-118/53
120-12-7	Anthracene	ND	500	412	82	500	413	83	0	39-125/22
92-87-5	Benzidine	ND	1000	ND	0* a	1000	ND	0* a	nc	10-84/53
85-68-7	Butyl benzyl phthalate	ND	500	461	92	500	460	92	0	39-137/21
111-44-4	bis(2-Chloroethyl)ether	ND	500	364	73	500	367	73	1	11-151/30
122-66-7	1,2-Diphenylhydrazine	ND	500	372	74	500	375	75	1	34-137/24
121-14-2	2,4-Dinitrotoluene	ND	500	441	88	500	457	91	4	21-160/23
606-20-2	2,6-Dinitrotoluene	ND	500	444	89	500	465	93	5	40-141/20
91-94-1	3,3'-Dichlorobenzidine	ND	1000	306	31	1000	343	34	11	10-128/45
123-91-1	1,4-Dioxane	ND	500	152	30	500	169	34	11	10-114/32
84-66-2	Diethyl phthalate	ND	500	437	87	500	452	90	3	37-131/23
131-11-3	Dimethyl phthalate	ND	500	416	83	500	439	88	5	35-129/22
117-81-7	bis(2-Ethylhexyl)phthalate	ND	500	466	93	500	461	92	1	36-137/27
206-44-0	Fluoranthene	ND	500	429	86	500	434	87	1	37-137/25
86-73-7	Fluorene	ND	500	425	85	500	441	88	4	32-138/24
118-74-1	Hexachlorobenzene	ND	500	408	82	500	406	81	0	40-120/21
77-47-4	Hexachlorocyclopentadiene	ND	1000	326	33	1000	355	36	9	10-115/38
67-72-1	Hexachloroethane	ND	500	292	58	500	295	59	1	10-120/26
78-59-1	Isophorone	ND	500	360	72	500	373	75	4	36-133/25
98-95-3	Nitrobenzene	ND	500	348	70	500	354	71	2	26-138/26
62-75-9	n-Nitrosodimethylamine	ND	500	162	32	500	161	32	1	10-109/30
621-64-7	N-Nitroso-di-n-propylamine	ND	500	377	75	500	377	75	0	28-137/26

* = Outside of Control Limits.

7.5.3
7

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JD35488
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP37159-MS	F204319.D	1	12/16/21	CS	12/15/21	OP37159	EF8956
OP37159-MSD	F204320.D	1	12/16/21	CS	12/15/21	OP37159	EF8956
JD35487-4	F204321.D	1	12/16/21	CS	12/15/21	OP37159	EF8956

The QC reported here applies to the following samples:

Method: SW846 8270E

JD35488-3, JD35488-4, JD35488-5

CAS No.	Compound	JD35487-4 ug/l	Spike Q ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
82-68-8	Pentachloronitrobenzene	ND	500	453	91	500	437	87	4	10-103/23
129-00-0	Pyrene	ND	500	427	85	500	422	84	1	38-131/24
110-86-1	Pyridine	ND	500	113	23	500	40.4	8* a	95* a	10-94/49
120-82-1	1,2,4-Trichlorobenzene	ND	500	321	64	500	324	65	1	10-137/27

CAS No.	Surrogate Recoveries	MS	MSD	JD35487-4	Limits
367-12-4	2-Fluorophenol	36%	41%	36%	10-73%
4165-62-2	Phenol-d5	26%	29%	24%	10-64%
118-79-6	2,4,6-Tribromophenol	81%	89%	83%	31-130%
4165-60-0	Nitrobenzene-d5	71%	71%	68%	28-126%
321-60-8	2-Fluorobiphenyl	80%	85%	76%	26-114%
1718-51-0	Terphenyl-d14	75%	76%	74%	16-122%

(a) Outside of in house control limits.

* = Outside of Control Limits.

7.5.3
7

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JD35488
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP37314-MS	F204615.D	1	12/28/21	KLS	12/23/21	OP37314	EF8970
OP37314-MSD	F204616.D	1	12/28/21	KLS	12/23/21	OP37314	EF8970
JD36933-1A	F204614.D	1	12/28/21	KLS	12/23/21	OP37314	EF8970

The QC reported here applies to the following samples:

Method: SW846 8270E

JD35488-6

CAS No.	Compound	JD36933-1A		MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
		ug/l	Q							
95-57-8	2-Chlorophenol	ND	500	357	71	500	321	64	11	13-123/31
59-50-7	4-Chloro-3-methyl phenol	ND	500	395	79	500	380	76	4	12-152/29
120-83-2	2,4-Dichlorophenol	ND	500	428	86	500	387	77	10	29-126/29
105-67-9	2,4-Dimethylphenol	ND	500	359	72	500	350	70	3	10-154/32
51-28-5	2,4-Dinitrophenol	ND	1000	1000	100	1000	990	99	1	10-157/31
95-48-7	2-Methylphenol	ND	500	322	64	500	306	61	5	10-130/32
	Cresol, Total	ND	1000	906	91	1000	864	86	5	10-151/32
	3&4-Methylphenol	ND	1000	585	59	1000	557	56	5	10-128/36
87-86-5	Pentachlorophenol	ND	1000	902	90	1000	875	88	3	29-154/32
108-95-2	Phenol	ND	500	184	37	500	176	35	4	10-132/34
58-90-2	2,3,4,6-Tetrachlorophenol	ND	500	479	96	500	456	91	5	34-133/22
95-95-4	2,4,5-Trichlorophenol	ND	500	472	94	500	453	91	4	33-130/22
88-06-2	2,4,6-Trichlorophenol	ND	500	456	91	500	441	88	3	35-129/26
83-32-9	Acenaphthene	ND	500	478	96	500	464	93	3	31-124/22
98-86-2	Acetophenone	ND	500	436	87	500	395	79	10	33-126/23
62-53-3	Aniline	ND	500	183	37	500	169	34	8	10-118/53
120-12-7	Anthracene	ND	500	500	100	500	476	95	5	39-125/22
92-87-5	Benzidine	ND	500	15.5	4*	500	14.4	2*	7	10-84/53
85-68-7	Butyl benzyl phthalate	ND	500	522	104	500	513	103	2	39-137/21
111-44-4	bis(2-Chloroethyl)ether	ND	500	433	87	500	389	78	11	11-151/30
122-66-7	1,2-Diphenylhydrazine	ND	500	459	92	500	448	90	2	34-137/24
121-14-2	2,4-Dinitrotoluene	ND	500	487	97	500	474	95	3	21-160/23
606-20-2	2,6-Dinitrotoluene	ND	500	505	101	500	488	98	3	40-141/20
91-94-1	3,3'-Dichlorobenzidine	ND	1000	346	35	1000	342	34	1	10-128/45
123-91-1	1,4-Dioxane	ND	500	201	40	500	182	36	10	10-114/32
84-66-2	Diethyl phthalate	ND	500	486	97	500	474	95	3	37-131/23
131-11-3	Dimethyl phthalate	ND	500	487	97	500	466	93	4	35-129/22
117-81-7	bis(2-Ethylhexyl)phthalate	ND	500	531	106	500	509	102	4	36-137/27
206-44-0	Fluoranthene	ND	500	487	97	500	469	94	4	37-137/25
86-73-7	Fluorene	ND	500	488	98	500	477	95	2	32-138/24
118-74-1	Hexachlorobenzene	ND	500	494	99	500	464	93	6	40-120/21
77-47-4	Hexachlorocyclopentadiene	ND	1000	543	54	1000	490	49	10	10-115/38
67-72-1	Hexachloroethane	ND	500	353	71	500	316	63	11	10-120/26
78-59-1	Isophorone	ND	500	433	87	500	417	83	4	36-133/25
98-95-3	Nitrobenzene	ND	500	426	85	500	398	80	7	26-138/26
62-75-9	n-Nitrosodimethylamine	ND	500	197	39	500	175	35	12	10-109/30

* = Outside of Control Limits.

7.5.4

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JD35488
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP37314-MS	F204615.D	1	12/28/21	KLS	12/23/21	OP37314	EF8970
OP37314-MSD	F204616.D	1	12/28/21	KLS	12/23/21	OP37314	EF8970
JD36933-1A	F204614.D	1	12/28/21	KLS	12/23/21	OP37314	EF8970

The QC reported here applies to the following samples:

Method: SW846 8270E

JD35488-6

CAS No.	Compound	JD36933-1A ug/l	Spike Q	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
621-64-7	N-Nitroso-di-n-propylamine	ND	500	436	87	500	393	79	10	28-137/26
82-68-8	Pentachloronitrobenzene	ND	500	500	100	500	495	99	1	10-103/23
129-00-0	Pyrene	ND	500	504	101	500	490	98	3	38-131/24
110-86-1	Pyridine	ND	500	176	35	500	140	28	23	10-94/49
120-82-1	1,2,4-Trichlorobenzene	ND	500	394	79	500	359	72	9	10-137/27

CAS No.	Surrogate Recoveries	MS	MSD	JD36933-1A	Limits
367-12-4	2-Fluorophenol	46%	43%	39%	10-73%
4165-62-2	Phenol-d5	31%	30%	26%	10-64%
118-79-6	2,4,6-Tribromophenol	101%	98%	93%	31-130%
4165-60-0	Nitrobenzene-d5	83%	76%	80%	28-126%
321-60-8	2-Fluorobiphenyl	94%	90%	89%	26-114%
1718-51-0	Terphenyl-d14	97%	87%	70%	16-122%

* = Outside of Control Limits.

7.5.4
7

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JD35488
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP37369-MS	P146875.D	1	12/29/21	KLS	12/27/21	OP37369	EP6768
OP37369-MSD	P146876.D	1	12/29/21	KLS	12/27/21	OP37369	EP6768
JD36990-1A	P146845.D	1	12/28/21	KLS	12/27/21	OP37369	EP6767

The QC reported here applies to the following samples:

Method: SW846 8270E

JD35488-7

CAS No.	Compound	JD36990-1A ug/l	Spike Q	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
95-57-8	2-Chlorophenol	ND	500	320	64	500	373	75	15	13-123/31
59-50-7	4-Chloro-3-methyl phenol	ND	500	348	70	500	389	78	11	12-152/29
120-83-2	2,4-Dichlorophenol	ND	500	380	76	500	419	84	10	29-126/29
105-67-9	2,4-Dimethylphenol	ND	500	314	63	500	373	75	17	10-154/32
51-28-5	2,4-Dinitrophenol	ND	1000	317	32	1000	319	32	1	10-157/31
95-48-7	2-Methylphenol	ND	500	283	57	500	349	70	21	10-130/32
	3&4-Methylphenol	ND	1000	507	51	1000	651	65	25	10-128/36
87-86-5	Pentachlorophenol	ND	1000	380	38	1000	406	41	7	29-154/32
108-95-2	Phenol	ND	500	144	29	500	173	35	18	10-132/34
58-90-2	2,3,4,6-Tetrachlorophenol	ND	500	413	83	500	425	85	3	34-133/22
95-95-4	2,4,5-Trichlorophenol	ND	500	461	92	500	474	95	3	33-130/22
88-06-2	2,4,6-Trichlorophenol	ND	500	438	88	500	462	92	5	35-129/26
83-32-9	Acenaphthene	ND	500	444	89	500	466	93	5	31-124/22
98-86-2	Acetophenone	ND	500	405	81	500	446	89	10	33-126/23
62-53-3	Aniline	ND	500	170	34	500	225	45	28	10-118/53
120-12-7	Anthracene	ND	500	481	96	500	494	99	3	39-125/22
92-87-5	Benzidine	ND	1000	39.7	4*	1000	76.0	8*	63*	10-84/53
85-68-7	Butyl benzyl phthalate	ND	500	528	106	500	549	110	4	39-137/21
111-44-4	bis(2-Chloroethyl)ether	ND	500	399	80	500	452	90	12	11-151/30
122-66-7	1,2-Diphenylhydrazine	ND	500	476	95	500	497	99	4	34-137/24
121-14-2	2,4-Dinitrotoluene	ND	500	486	97	500	496	99	2	21-160/23
606-20-2	2,6-Dinitrotoluene	ND	500	456	91	500	480	96	5	40-141/20
91-94-1	3,3'-Dichlorobenzidine	ND	1000	436	44	1000	478	48	9	10-128/45
123-91-1	1,4-Dioxane	ND	500	180	36	500	203	41	12	10-114/32
84-66-2	Diethyl phthalate	ND	500	463	93	500	479	96	3	37-131/23
131-11-3	Dimethyl phthalate	ND	500	469	94	500	483	97	3	35-129/22
117-81-7	bis(2-Ethylhexyl)phthalate	ND	500	485	97	500	508	102	5	36-137/27
206-44-0	Fluoranthene	ND	500	477	95	500	488	98	2	37-137/25
86-73-7	Fluorene	ND	500	459	92	500	482	96	5	32-138/24
118-74-1	Hexachlorobenzene	ND	500	481	96	500	494	99	3	40-120/21
77-47-4	Hexachlorocyclopentadiene	ND	1000	370	37	1000	382	38	3	10-115/38
67-72-1	Hexachloroethane	ND	500	290	58	500	309	62	6	10-120/26
78-59-1	Isophorone	ND	500	423	85	500	464	93	9	36-133/25
98-95-3	Nitrobenzene	ND	500	404	81	500	451	90	11	26-138/26
62-75-9	n-Nitrosodimethylamine	ND	500	228	46	500	245	49	7	10-109/30
621-64-7	N-Nitroso-di-n-propylamine	ND	500	423	85	500	452	90	7	28-137/26

* = Outside of Control Limits.

7.5.5
7

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JD35488
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP37369-MS	P146875.D	1	12/29/21	KLS	12/27/21	OP37369	EP6768
OP37369-MSD	P146876.D	1	12/29/21	KLS	12/27/21	OP37369	EP6768
JD36990-1A	P146845.D	1	12/28/21	KLS	12/27/21	OP37369	EP6767

The QC reported here applies to the following samples:

Method: SW846 8270E

JD35488-7

CAS No.	Compound	JD36990-1A Spike		MS	MS	Spike	MSD	MSD	RPD	Limits	
		ug/l	Q	ug/l	ug/l	%	ug/l	ug/l		%	Rec/RPD
129-00-0	Pyrene	ND		500	485	97	500	510	102	5	38-131/24
110-86-1	Pyridine	ND		500	132	26	500	181	36	31	10-94/49
120-82-1	1,2,4-Trichlorobenzene	ND		500	347	69	500	367	73	6	10-137/27

CAS No.	Surrogate Recoveries	MS	MSD	JD36990-1A Limits	
367-12-4	2-Fluorophenol	37%	47%	38%	10-73%
4165-62-2	Phenol-d5	27%	32%	26%	10-64%
118-79-6	2,4,6-Tribromophenol	95%	97%	100%	31-130%
4165-60-0	Nitrobenzene-d5	80%	87%	78%	28-126%
321-60-8	2-Fluorobiphenyl	86%	92%	82%	26-114%
1718-51-0	Terphenyl-d14	98%	99%	102%	16-122%

* = Outside of Control Limits.

7.5.5
7

Leachate Spike Summary

Job Number: JD35488
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP37049-LS8	F204188.D	1	12/11/21	CS	12/09/21	OP37049	EF8949
JD35487-1	F204190.D	1	12/11/21	CS	12/09/21	OP37049	EF8949

The QC reported here applies to the following samples:

Method: SW846 8270E

JD35488-1

CAS No.	Compound	JD35487-1 ug/l	Spike Q	LS ug/l	LS %	Limits
95-57-8	2-Chlorophenol	ND	500	241	48	13-123
59-50-7	4-Chloro-3-methyl phenol	ND	500	271	54	12-152
120-83-2	2,4-Dichlorophenol	ND	500	262	52	29-126
105-67-9	2,4-Dimethylphenol	ND	500	225	45	10-154
51-28-5	2,4-Dinitrophenol	ND	1000	699	70	10-157
95-48-7	2-Methylphenol	ND	500	223	45	10-130
	3&4-Methylphenol	ND	1000	403	40	10-128
87-86-5	Pentachlorophenol	ND	1000	619	62	29-154
108-95-2	Phenol	ND	500	127	25	10-132
58-90-2	2,3,4,6-Tetrachlorophenol	ND	500	327	65	34-133
95-95-4	2,4,5-Trichlorophenol	ND	500	294	59	33-130
88-06-2	2,4,6-Trichlorophenol	ND	500	277	55	35-129
83-32-9	Acenaphthene	ND	500	273	55	31-124
98-86-2	Acetophenone	ND	500	284	57	33-126
62-53-3	Aniline	ND	500	191	38	10-118
120-12-7	Anthracene	ND	500	303	61	39-125
92-87-5	Benzidine	ND	1000	135	14	10-84
85-68-7	Butyl benzyl phthalate	ND	500	333	67	39-137
111-44-4	bis(2-Chloroethyl)ether	ND	500	260	52	11-151
122-66-7	1,2-Diphenylhydrazine	ND	500	257	51	34-137
121-14-2	2,4-Dinitrotoluene	ND	500	325	65	21-160
606-20-2	2,6-Dinitrotoluene	ND	500	320	64	40-141
91-94-1	3,3'-Dichlorobenzidine	ND	1000	236	24	10-128
123-91-1	1,4-Dioxane	ND	500	95.3	19	10-114
84-66-2	Diethyl phthalate	ND	500	321	64	37-131
131-11-3	Dimethyl phthalate	ND	500	302	60	35-129
117-81-7	bis(2-Ethylhexyl)phthalate	ND	500	332	66	36-137
206-44-0	Fluoranthene	ND	500	334	67	37-137
86-73-7	Fluorene	ND	500	299	60	32-138
118-74-1	Hexachlorobenzene	ND	500	300	60	40-120
77-47-4	Hexachlorocyclopentadiene	ND	1000	265	27	10-115
67-72-1	Hexachloroethane	ND	500	214	43	10-120
78-59-1	Isophorone	ND	500	251	50	36-133
98-95-3	Nitrobenzene	ND	500	238	48	26-138
62-75-9	n-Nitrosodimethylamine	ND	500	125	25	10-109
621-64-7	N-Nitroso-di-n-propylamine	ND	500	278	56	28-137

* = Outside of Control Limits.

Leachate Spike Summary

Job Number: JD35488
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP37049-LS8	F204188.D	1	12/11/21	CS	12/09/21	OP37049	EF8949
JD35487-1	F204190.D	1	12/11/21	CS	12/09/21	OP37049	EF8949

The QC reported here applies to the following samples:

Method: SW846 8270E

JD35488-1

CAS No.	Compound	JD35487-1 ug/l	Spike Q	LS ug/l	LS %	Limits
129-00-0	Pyrene	ND	500	296	59	38-131
110-86-1	Pyridine	ND	500	128	26	10-94
120-82-1	1,2,4-Trichlorobenzene	ND	500	227	45	10-137

CAS No.	Surrogate Recoveries	LS	JD35487-1	Limits
367-12-4	2-Fluorophenol	29%	20%	10-73%
4165-62-2	Phenol-d5	21%	14%	10-64%
118-79-6	2,4,6-Tribromophenol	65%	68%	31-130%
4165-60-0	Nitrobenzene-d5	48%	51%	28-126%
321-60-8	2-Fluorobiphenyl	53%	57%	26-114%
1718-51-0	Terphenyl-d14	62%	51%	16-122%

* = Outside of Control Limits.

Leachate Spike Summary

Job Number: JD35488
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP37155-LS7	F204316.D	1	12/16/21	CS	12/14/21	OP37155	EF8956
JD35488-2	F204318.D	1	12/16/21	CS	12/14/21	OP37155	EF8956

The QC reported here applies to the following samples:

Method: SW846 8270E

JD35488-2

CAS No.	Compound	JD35488-2 ug/l	Spike Q	LS ug/l	LS %	Limits
95-57-8	2-Chlorophenol	ND	500	305	61	13-123
59-50-7	4-Chloro-3-methyl phenol	ND	500	356	71	12-152
120-83-2	2,4-Dichlorophenol	ND	500	369	74	29-126
105-67-9	2,4-Dimethylphenol	ND	500	310	62	10-154
51-28-5	2,4-Dinitrophenol	ND	1000	995	100	10-157
95-48-7	2-Methylphenol	ND	500	270	54	10-130
	3&4-Methylphenol	ND	1000	490	49	10-128
87-86-5	Pentachlorophenol	ND	1000	870	87	29-154
108-95-2	Phenol	ND	500	145	29	10-132
58-90-2	2,3,4,6-Tetrachlorophenol	ND	500	447	89	34-133
95-95-4	2,4,5-Trichlorophenol	ND	500	424	85	33-130
88-06-2	2,4,6-Trichlorophenol	ND	500	411	82	35-129
83-32-9	Acenaphthene	ND	500	406	81	31-124
98-86-2	Acetophenone	ND	500	375	75	33-126
62-53-3	Aniline	ND	500	ND	0* a	10-118
120-12-7	Anthracene	ND	500	406	81	39-125
92-87-5	Benzidine	ND	500	ND	0*	10-84
85-68-7	Butyl benzyl phthalate	ND	500	439	88	39-137
111-44-4	bis(2-Chloroethyl)ether	ND	500	369	74	11-151
122-66-7	1,2-Diphenylhydrazine	ND	500	365	73	34-137
121-14-2	2,4-Dinitrotoluene	ND	500	445	89	21-160
606-20-2	2,6-Dinitrotoluene	ND	500	454	91	40-141
91-94-1	3,3'-Dichlorobenzidine	ND	500	79.1	16	10-128
123-91-1	1,4-Dioxane	ND	500	147	29	10-114
84-66-2	Diethyl phthalate	ND	500	442	88	37-131
131-11-3	Dimethyl phthalate	ND	500	430	86	35-129
117-81-7	bis(2-Ethylhexyl)phthalate	ND	500	435	87	36-137
206-44-0	Fluoranthene	ND	500	422	84	37-137
86-73-7	Fluorene	ND	500	429	86	32-138
118-74-1	Hexachlorobenzene	ND	500	384	77	40-120
77-47-4	Hexachlorocyclopentadiene	ND	1000	443	44	10-115
67-72-1	Hexachloroethane	ND	500	301	60	10-120
78-59-1	Isophorone	ND	500	365	73	36-133
98-95-3	Nitrobenzene	ND	500	350	70	26-138
62-75-9	n-Nitrosodimethylamine	ND	500	150	30	10-109
621-64-7	N-Nitroso-di-n-propylamine	ND	500	384	77	28-137

* = Outside of Control Limits.

7.6.2
7

Leachate Spike Summary

Job Number: JD35488
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP37155-LS7	F204316.D	1	12/16/21	CS	12/14/21	OP37155	EF8956
JD35488-2	F204318.D	1	12/16/21	CS	12/14/21	OP37155	EF8956

The QC reported here applies to the following samples:

Method: SW846 8270E

JD35488-2

CAS No.	Compound	JD35488-2 ug/l	Spike Q	LS ug/l	LS %	Limits
82-68-8	Pentachloronitrobenzene	ND	500	418	84	10-103
129-00-0	Pyrene	ND	500	405	81	38-131
110-86-1	Pyridine	ND	500	104	21	10-94
120-82-1	1,2,4-Trichlorobenzene	ND	500	324	65	10-137

CAS No.	Surrogate Recoveries	LS	JD35488-2	Limits
367-12-4	2-Fluorophenol	37%	40%	10-73%
4165-62-2	Phenol-d5	28%	27%	10-64%
118-79-6	2,4,6-Tribromophenol	93%	93%	31-130%
4165-60-0	Nitrobenzene-d5	73%	72%	28-126%
321-60-8	2-Fluorobiphenyl	81%	81%	26-114%
1718-51-0	Terphenyl-d14	64%	89%	16-122%

(a) Outside control limits due to matrix interference.

* = Outside of Control Limits.

Leachate Spike Summary

Job Number: JD35488
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP37159-LS13	F204319.D	1	12/16/21	CS	12/15/21	OP37159	EF8956
JD35487-4	F204321.D	1	12/16/21	CS	12/15/21	OP37159	EF8956

The QC reported here applies to the following samples:

Method: SW846 8270E

JD35488-3, JD35488-4, JD35488-5

CAS No.	Compound	JD35487-4 ug/l	Spike Q	LS ug/l	LS %	Limits
95-57-8	2-Chlorophenol	ND	500	273	55	13-123
59-50-7	4-Chloro-3-methyl phenol	ND	500	309	62	12-152
120-83-2	2,4-Dichlorophenol	ND	500	308	62	29-126
105-67-9	2,4-Dimethylphenol	ND	500	251	50	10-154
51-28-5	2,4-Dinitrophenol	ND	1000	841	84	10-157
95-48-7	2-Methylphenol	ND	500	246	49	10-130
	3&4-Methylphenol	ND	1000	467	47	10-128
87-86-5	Pentachlorophenol	ND	1000	796	80	29-154
108-95-2	Phenol	ND	500	145	29	10-132
58-90-2	2,3,4,6-Tetrachlorophenol	ND	500	407	81	34-133
95-95-4	2,4,5-Trichlorophenol	ND	500	369	74	33-130
88-06-2	2,4,6-Trichlorophenol	ND	500	358	72	35-129
83-32-9	Acenaphthene	ND	500	402	80	31-124
98-86-2	Acetophenone	ND	500	376	75	33-126
62-53-3	Aniline	ND	500	154	31	10-118
120-12-7	Anthracene	ND	500	412	82	39-125
92-87-5	Benzidine	ND	1000	ND	0* a	10-84
85-68-7	Butyl benzyl phthalate	ND	500	461	92	39-137
111-44-4	bis(2-Chloroethyl)ether	ND	500	364	73	11-151
122-66-7	1,2-Diphenylhydrazine	ND	500	372	74	34-137
121-14-2	2,4-Dinitrotoluene	ND	500	441	88	21-160
606-20-2	2,6-Dinitrotoluene	ND	500	444	89	40-141
91-94-1	3,3'-Dichlorobenzidine	ND	1000	306	31	10-128
123-91-1	1,4-Dioxane	ND	500	152	30	10-114
84-66-2	Diethyl phthalate	ND	500	437	87	37-131
131-11-3	Dimethyl phthalate	ND	500	416	83	35-129
117-81-7	bis(2-Ethylhexyl)phthalate	ND	500	466	93	36-137
206-44-0	Fluoranthene	ND	500	429	86	37-137
86-73-7	Fluorene	ND	500	425	85	32-138
118-74-1	Hexachlorobenzene	ND	500	408	82	40-120
77-47-4	Hexachlorocyclopentadiene	ND	1000	326	33	10-115
67-72-1	Hexachloroethane	ND	500	292	58	10-120
78-59-1	Isophorone	ND	500	360	72	36-133
98-95-3	Nitrobenzene	ND	500	348	70	26-138
62-75-9	n-Nitrosodimethylamine	ND	500	162	32	10-109
621-64-7	N-Nitroso-di-n-propylamine	ND	500	377	75	28-137

* = Outside of Control Limits.

7.6.3
7

Leachate Spike Summary

Job Number: JD35488
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP37159-LS13	F204319.D	1	12/16/21	CS	12/15/21	OP37159	EF8956
JD35487-4	F204321.D	1	12/16/21	CS	12/15/21	OP37159	EF8956

The QC reported here applies to the following samples:

Method: SW846 8270E

JD35488-3, JD35488-4, JD35488-5

CAS No.	Compound	JD35487-4 ug/l	Spike Q	LS ug/l	LS %	Limits
82-68-8	Pentachloronitrobenzene	ND	500	453	91	10-103
129-00-0	Pyrene	ND	500	427	85	38-131
110-86-1	Pyridine	ND	500	113	23	10-94
120-82-1	1,2,4-Trichlorobenzene	ND	500	321	64	10-137

CAS No.	Surrogate Recoveries	LS	JD35487-4	Limits
367-12-4	2-Fluorophenol	36%	36%	10-73%
4165-62-2	Phenol-d5	26%	24%	10-64%
118-79-6	2,4,6-Tribromophenol	81%	83%	31-130%
4165-60-0	Nitrobenzene-d5	71%	68%	28-126%
321-60-8	2-Fluorobiphenyl	80%	76%	26-114%
1718-51-0	Terphenyl-d14	75%	74%	16-122%

(a) Outside of in house control limits.

* = Outside of Control Limits.

Leachate Spike Summary

Job Number: JD35488
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP37314-LS29	F204615.D	1	12/28/21	KLS	12/23/21	OP37314	EF8970
JD36933-1A	F204614.D	1	12/28/21	KLS	12/23/21	OP37314	EF8970

The QC reported here applies to the following samples:

Method: SW846 8270E

JD35488-6

CAS No.	Compound	JD36933-1A ug/l	Spike Q	LS ug/l	LS %	Limits
95-57-8	2-Chlorophenol	ND	500	357	71	13-123
59-50-7	4-Chloro-3-methyl phenol	ND	500	395	79	12-152
120-83-2	2,4-Dichlorophenol	ND	500	428	86	29-126
105-67-9	2,4-Dimethylphenol	ND	500	359	72	10-154
51-28-5	2,4-Dinitrophenol	ND	1000	1000	100	10-157
95-48-7	2-Methylphenol	ND	500	322	64	10-130
	Cresol, Total	ND	1000	906	91	10-151
	3&4-Methylphenol	ND	1000	585	59	10-128
87-86-5	Pentachlorophenol	ND	1000	902	90	29-154
108-95-2	Phenol	ND	500	184	37	10-132
58-90-2	2,3,4,6-Tetrachlorophenol	ND	500	479	96	34-133
95-95-4	2,4,5-Trichlorophenol	ND	500	472	94	33-130
88-06-2	2,4,6-Trichlorophenol	ND	500	456	91	35-129
83-32-9	Acenaphthene	ND	500	478	96	31-124
98-86-2	Acetophenone	ND	500	436	87	33-126
62-53-3	Aniline	ND	500	183	37	10-118
120-12-7	Anthracene	ND	500	500	100	39-125
92-87-5	Benzidine	ND	500	15.5	4*	10-84
85-68-7	Butyl benzyl phthalate	ND	500	522	104	39-137
111-44-4	bis(2-Chloroethyl)ether	ND	500	433	87	11-151
122-66-7	1,2-Diphenylhydrazine	ND	500	459	92	34-137
121-14-2	2,4-Dinitrotoluene	ND	500	487	97	21-160
606-20-2	2,6-Dinitrotoluene	ND	500	505	101	40-141
91-94-1	3,3'-Dichlorobenzidine	ND	1000	346	35	10-128
123-91-1	1,4-Dioxane	ND	500	201	40	10-114
84-66-2	Diethyl phthalate	ND	500	486	97	37-131
131-11-3	Dimethyl phthalate	ND	500	487	97	35-129
117-81-7	bis(2-Ethylhexyl)phthalate	ND	500	531	106	36-137
206-44-0	Fluoranthene	ND	500	487	97	37-137
86-73-7	Fluorene	ND	500	488	98	32-138
118-74-1	Hexachlorobenzene	ND	500	494	99	40-120
77-47-4	Hexachlorocyclopentadiene	ND	1000	543	54	10-115
67-72-1	Hexachloroethane	ND	500	353	71	10-120
78-59-1	Isophorone	ND	500	433	87	36-133
98-95-3	Nitrobenzene	ND	500	426	85	26-138
62-75-9	n-Nitrosodimethylamine	ND	500	197	39	10-109

* = Outside of Control Limits.

Leachate Spike Summary

Job Number: JD35488
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP37314-LS29	F204615.D	1	12/28/21	KLS	12/23/21	OP37314	EF8970
JD36933-1A	F204614.D	1	12/28/21	KLS	12/23/21	OP37314	EF8970

The QC reported here applies to the following samples:

Method: SW846 8270E

JD35488-6

CAS No.	Compound	JD36933-1A ug/l	Spike Q	ug/l	LS ug/l	LS %	Limits
621-64-7	N-Nitroso-di-n-propylamine	ND		500	436	87	28-137
82-68-8	Pentachloronitrobenzene	ND		500	500	100	10-103
129-00-0	Pyrene	ND		500	504	101	38-131
110-86-1	Pyridine	ND		500	176	35	10-94
120-82-1	1,2,4-Trichlorobenzene	ND		500	394	79	10-137

CAS No.	Surrogate Recoveries	LS	JD36933-1A	Limits
367-12-4	2-Fluorophenol	46%	39%	10-73%
4165-62-2	Phenol-d5	31%	26%	10-64%
118-79-6	2,4,6-Tribromophenol	101%	93%	31-130%
4165-60-0	Nitrobenzene-d5	83%	80%	28-126%
321-60-8	2-Fluorobiphenyl	94%	89%	26-114%
1718-51-0	Terphenyl-d14	97%	70%	16-122%

* = Outside of Control Limits.

Leachate Spike Summary

Job Number: JD35488
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP37369-LS2	P146875.D	1	12/29/21	KLS	12/27/21	OP37369	EP6768
JD36990-1A	P146845.D	1	12/28/21	KLS	12/27/21	OP37369	EP6767

The QC reported here applies to the following samples:

Method: SW846 8270E

JD35488-7

CAS No.	Compound	JD36990-1A ug/l	Spike Q	LS ug/l	LS %	Limits
95-57-8	2-Chlorophenol	ND	500	320	64	13-123
59-50-7	4-Chloro-3-methyl phenol	ND	500	348	70	12-152
120-83-2	2,4-Dichlorophenol	ND	500	380	76	29-126
105-67-9	2,4-Dimethylphenol	ND	500	314	63	10-154
51-28-5	2,4-Dinitrophenol	ND	1000	317	32	10-157
95-48-7	2-Methylphenol	ND	500	283	57	10-130
	3&4-Methylphenol	ND	1000	507	51	10-128
87-86-5	Pentachlorophenol	ND	1000	380	38	29-154
108-95-2	Phenol	ND	500	144	29	10-132
58-90-2	2,3,4,6-Tetrachlorophenol	ND	500	413	83	34-133
95-95-4	2,4,5-Trichlorophenol	ND	500	461	92	33-130
88-06-2	2,4,6-Trichlorophenol	ND	500	438	88	35-129
83-32-9	Acenaphthene	ND	500	444	89	31-124
98-86-2	Acetophenone	ND	500	405	81	33-126
62-53-3	Aniline	ND	500	170	34	10-118
120-12-7	Anthracene	ND	500	481	96	39-125
92-87-5	Benzidine	ND	1000	39.7	4*	10-84
85-68-7	Butyl benzyl phthalate	ND	500	528	106	39-137
111-44-4	bis(2-Chloroethyl)ether	ND	500	399	80	11-151
122-66-7	1,2-Diphenylhydrazine	ND	500	476	95	34-137
121-14-2	2,4-Dinitrotoluene	ND	500	486	97	21-160
606-20-2	2,6-Dinitrotoluene	ND	500	456	91	40-141
91-94-1	3,3'-Dichlorobenzidine	ND	1000	436	44	10-128
123-91-1	1,4-Dioxane	ND	500	180	36	10-114
84-66-2	Diethyl phthalate	ND	500	463	93	37-131
131-11-3	Dimethyl phthalate	ND	500	469	94	35-129
117-81-7	bis(2-Ethylhexyl)phthalate	ND	500	485	97	36-137
206-44-0	Fluoranthene	ND	500	477	95	37-137
86-73-7	Fluorene	ND	500	459	92	32-138
118-74-1	Hexachlorobenzene	ND	500	481	96	40-120
77-47-4	Hexachlorocyclopentadiene	ND	1000	370	37	10-115
67-72-1	Hexachloroethane	ND	500	290	58	10-120
78-59-1	Isophorone	ND	500	423	85	36-133
98-95-3	Nitrobenzene	ND	500	404	81	26-138
62-75-9	n-Nitrosodimethylamine	ND	500	228	46	10-109
621-64-7	N-Nitroso-di-n-propylamine	ND	500	423	85	28-137

* = Outside of Control Limits.

Leachate Spike Summary

Job Number: JD35488
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP37369-LS2	P146875.D	1	12/29/21	KLS	12/27/21	OP37369	EP6768
JD36990-1A	P146845.D	1	12/28/21	KLS	12/27/21	OP37369	EP6767

The QC reported here applies to the following samples:

Method: SW846 8270E

JD35488-7

CAS No.	Compound	JD36990-1A ug/l	Spike Q	ug/l	LS ug/l	LS %	Limits
129-00-0	Pyrene	ND	500	485	97	38-131	
110-86-1	Pyridine	ND	500	132	26	10-94	
120-82-1	1,2,4-Trichlorobenzene	ND	500	347	69	10-137	

CAS No.	Surrogate Recoveries	LS	JD36990-1A	Limits
367-12-4	2-Fluorophenol	37%	38%	10-73%
4165-62-2	Phenol-d5	27%	26%	10-64%
118-79-6	2,4,6-Tribromophenol	95%	100%	31-130%
4165-60-0	Nitrobenzene-d5	80%	78%	28-126%
321-60-8	2-Fluorobiphenyl	86%	82%	26-114%
1718-51-0	Terphenyl-d14	98%	102%	16-122%

* = Outside of Control Limits.

Instrument Performance Check (DFTPP)

Job Number: JD35488
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample: E6P3562-DFTPP	Injection Date: 11/29/21
Lab File ID: 6P502859.D	Injection Time: 16:21
Instrument ID: GCMS6P	

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
51	30.0 - 60.0% of mass 198	230626	33.0	Pass
68	Less than 2.0% of mass 69	3468	0.50 (1.07) ^a	Pass
69	Mass 69 relative abundance	322958	46.3	Pass
70	Less than 2.0% of mass 69	1951	0.28 (0.60) ^a	Pass
127	40.0 - 60.0% of mass 198	408277	58.5	Pass
197	Less than 1.0% of mass 198	3458	0.50	Pass
198	Base peak, 100% relative abundance	697962	100.0	Pass
199	5.0 - 9.0% of mass 198	47437	6.80	Pass
275	10.0 - 30.0% of mass 198	144461	20.7	Pass
365	1.0 - 100.0% of mass 198	20847	2.99	Pass
441	Present, but less than mass 443	61740	8.85 (74.1) ^b	Pass
442	40.0 - 100.0% of mass 198	451565	64.7	Pass
443	17.0 - 23.0% of mass 442	83334	11.9 (18.5) ^c	Pass

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

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

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
E6P3562-IC3562	6P502860.D	11/29/21	16:39	00:18	Initial cal 100
E6P3562-IC3562	6P502861.D	11/29/21	17:00	00:39	Initial cal 2
E6P3562-IC3562	6P502862.D	11/29/21	17:22	01:01	Initial cal 80
E6P3562-IC3562	6P502863.D	11/29/21	17:44	01:23	Initial cal 1
E6P3562-ICC3562	6P502864.D	11/29/21	18:06	01:45	Initial cal 50
E6P3562-IC3562	6P502865.D	11/29/21	18:28	02:07	Initial cal 5
E6P3562-IC3562	6P502866.D	11/29/21	18:50	02:29	Initial cal 25
E6P3562-IC3562	6P502867.D	11/29/21	19:12	02:51	Initial cal 10
E6P3562-ICV3562	6P502868.D	11/29/21	19:34	03:13	Initial cal verification 50
E6P3562-ICV3562	6P502869.D	11/29/21	19:56	03:35	Initial cal verification 50
E6P3562-ICV3562	6P502870.D	11/29/21	20:17	03:56	Initial cal verification 50
E6P3562-ICV3562	6P502871.D	11/29/21	20:39	04:18	Initial cal verification 50

7.7.1
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Instrument Performance Check (DFTPP)

Job Number: JD35488
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample: E6P3571-DFTPP	Injection Date: 12/10/21
Lab File ID: 6P503030.D	Injection Time: 14:24
Instrument ID: GCMS6P	

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
51	30.0 - 60.0% of mass 198	199711	32.2	Pass
68	Less than 2.0% of mass 69	4247	0.68 (1.51) ^a	Pass
69	Mass 69 relative abundance	280843	45.3	Pass
70	Less than 2.0% of mass 69	2025	0.33 (0.72) ^a	Pass
127	40.0 - 60.0% of mass 198	342634	55.2	Pass
197	Less than 1.0% of mass 198	4312	0.70	Pass
198	Base peak, 100% relative abundance	620330	100.0	Pass
199	5.0 - 9.0% of mass 198	41000	6.61	Pass
275	10.0 - 30.0% of mass 198	136946	22.1	Pass
365	1.0 - 100.0% of mass 198	21426	3.45	Pass
441	Present, but less than mass 443	62934	10.1 (76.3) ^b	Pass
442	40.0 - 100.0% of mass 198	453245	73.1	Pass
443	17.0 - 23.0% of mass 442	82451	13.3 (18.2) ^c	Pass

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

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

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
E6P3571-CC3562	6P503031.D	12/10/21	14:40	00:16	Continuing cal 50
OP37049-MB1	6P503032.D	12/10/21	15:15	00:51	Method Blank
OP37049-LB5	6P503033.D	12/10/21	15:37	01:13	Leachate Blank
OP37049-LB8	6P503034.D	12/10/21	16:00	01:36	Leachate Blank
OP37049-BS1	6P503035.D	12/10/21	16:22	01:58	Blank Spike
ZZZZZZ	6P503036.D	12/10/21	16:45	02:21	(unrelated sample)
ZZZZZZ	6P503037.D	12/10/21	17:07	02:43	(unrelated sample)
ZZZZZZ	6P503038.D	12/10/21	17:30	03:06	(unrelated sample)
ZZZZZZ	6P503039.D	12/10/21	17:52	03:28	(unrelated sample)
ZZZZZZ	6P503040.D	12/10/21	18:15	03:51	(unrelated sample)
ZZZZZZ	6P503041.D	12/10/21	18:37	04:13	(unrelated sample)
ZZZZZZ	6P503042.D	12/10/21	19:00	04:36	(unrelated sample)
ZZZZZZ	6P503043.D	12/10/21	19:22	04:58	(unrelated sample)
ZZZZZZ	6P503044.D	12/10/21	19:44	05:20	(unrelated sample)
ZZZZZZ	6P503045.D	12/10/21	20:07	05:43	(unrelated sample)
ZZZZZZ	6P503046.D	12/10/21	20:29	06:05	(unrelated sample)
ZZZZZZ	6P503047.D	12/10/21	20:52	06:28	(unrelated sample)

7.7.2
7

Instrument Performance Check (DFTPP)

Job Number: JD35488
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample: E6P3572-DFTPP	Injection Date: 12/13/21
Lab File ID: 6P503049.D	Injection Time: 11:10
Instrument ID: GCMS6P	

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
51	30.0 - 60.0% of mass 198	206354	30.1	Pass
68	Less than 2.0% of mass 69	4206	0.61 (1.40) ^a	Pass
69	Mass 69 relative abundance	299373	43.7	Pass
70	Less than 2.0% of mass 69	1608	0.23 (0.54) ^a	Pass
127	40.0 - 60.0% of mass 198	374549	54.6	Pass
197	Less than 1.0% of mass 198	4936	0.72	Pass
198	Base peak, 100% relative abundance	685610	100.0	Pass
199	5.0 - 9.0% of mass 198	46490	6.78	Pass
275	10.0 - 30.0% of mass 198	160570	23.4	Pass
365	1.0 - 100.0% of mass 198	25671	3.74	Pass
441	Present, but less than mass 443	79661	11.6 (77.1) ^b	Pass
442	40.0 - 100.0% of mass 198	549504	80.1	Pass
443	17.0 - 23.0% of mass 442	103368	15.1 (18.8) ^c	Pass

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

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

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
E6P3572-IC3572	6P503050.D	12/13/21	11:42	00:32	Initial cal 100
E6P3572-IC3572	6P503051.D	12/13/21	12:05	00:55	Initial cal 1
E6P3572-IC3572	6P503052.D	12/13/21	12:27	01:17	Initial cal 80
E6P3572-IC3572	6P503053.D	12/13/21	12:49	01:39	Initial cal 2
E6P3572-ICC3572	6P503054.D	12/13/21	13:12	02:02	Initial cal 50
E6P3572-IC3572	6P503055.D	12/13/21	13:34	02:24	Initial cal 5
E6P3572-IC3572	6P503056.D	12/13/21	13:56	02:46	Initial cal 25
E6P3572-IC3572	6P503057.D	12/13/21	14:19	03:09	Initial cal 10
E6P3572-ICV3572	6P503058.D	12/13/21	15:29	04:19	Initial cal verification 50
E6P3572-ICV3572	6P503059.D	12/13/21	15:51	04:41	Initial cal verification 50
E6P3572-ICV3572	6P503060.D	12/13/21	16:14	05:04	Initial cal verification 50
E6P3572-ICV3572	6P503062.D	12/13/21	17:43	06:33	Initial cal verification 50

7.7.3
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Instrument Performance Check (DFTPP)

Job Number: JD35488
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample: E6P3574-DFTPP	Injection Date: 12/16/21
Lab File ID: 6P503065.D	Injection Time: 03:35
Instrument ID: GCMS6P	

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
51	30.0 - 60.0% of mass 198	216799	31.4	Pass
68	Less than 2.0% of mass 69	4476	0.65 (1.45) ^a	Pass
69	Mass 69 relative abundance	309333	44.8	Pass
70	Less than 2.0% of mass 69	1541	0.22 (0.50) ^a	Pass
127	40.0 - 60.0% of mass 198	388416	56.3	Pass
197	Less than 1.0% of mass 198	4783	0.69	Pass
198	Base peak, 100% relative abundance	689856	100.0	Pass
199	5.0 - 9.0% of mass 198	46277	6.71	Pass
275	10.0 - 30.0% of mass 198	154050	22.3	Pass
365	1.0 - 100.0% of mass 198	23336	3.38	Pass
441	Present, but less than mass 443	73167	10.6 (75.7) ^b	Pass
442	40.0 - 100.0% of mass 198	504144	73.1	Pass
443	17.0 - 23.0% of mass 442	96657	14.0 (19.2) ^c	Pass

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

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

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
E6P3574-CC3572	6P503066.D	12/16/21	03:48	00:13	Continuing cal 50
OP37159-MB1	6P503067.D	12/16/21	04:32	00:57	Method Blank
OP37159-LB13	6P503068A.D	12/16/21	05:26	01:51	Leachate Blank
OP37159-LB16	6P503069.D	12/16/21	05:49	02:14	Leachate Blank
OP37159-BS1	6P503070.D	12/16/21	06:11	02:36	Blank Spike
ZZZZZZ	6P503071.D	12/16/21	06:34	02:59	(unrelated sample)
ZZZZZZ	6P503072.D	12/16/21	06:57	03:22	(unrelated sample)
ZZZZZZ	6P503073.D	12/16/21	07:20	03:45	(unrelated sample)
ZZZZZZ	6P503074.D	12/16/21	07:43	04:08	(unrelated sample)
ZZZZZZ	6P503075.D	12/16/21	08:06	04:31	(unrelated sample)
ZZZZZZ	6P503076.D	12/16/21	08:28	04:53	(unrelated sample)
ZZZZZZ	6P503077.D	12/16/21	08:51	05:16	(unrelated sample)
ZZZZZZ	6P503078.D	12/16/21	09:14	05:39	(unrelated sample)
ZZZZZZ	6P503080.D	12/16/21	09:59	06:24	(unrelated sample)

7.7.4
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Instrument Performance Check (DFTPP)

Job Number: JD35488
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample: E6P3580-DFTPP	Injection Date: 12/27/21
Lab File ID: 6P503177.D	Injection Time: 14:42
Instrument ID: GCMS6P	

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
51	30.0 - 60.0% of mass 198	268385	30.8	Pass
68	Less than 2.0% of mass 69	5338	0.61 (1.40) ^a	Pass
69	Mass 69 relative abundance	381976	43.9	Pass
70	Less than 2.0% of mass 69	2168	0.25 (0.57) ^a	Pass
127	40.0 - 60.0% of mass 198	477248	54.8	Pass
197	Less than 1.0% of mass 198	6579	0.76	Pass
198	Base peak, 100% relative abundance	870165	100.0	Pass
199	5.0 - 9.0% of mass 198	56477	6.49	Pass
275	10.0 - 30.0% of mass 198	193722	22.3	Pass
365	1.0 - 100.0% of mass 198	29941	3.44	Pass
441	Present, but less than mass 443	93033	10.7 (73.7) ^b	Pass
442	40.0 - 100.0% of mass 198	683792	78.6	Pass
443	17.0 - 23.0% of mass 442	126261	14.5 (18.5) ^c	Pass

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

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

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
E6P3580-CC3572	6P503178.D	12/27/21	14:58	00:16	Continuing cal 25
OP37314-MB1	6P503179.D	12/27/21	16:10	01:28	Method Blank
OP37314-LB29	6P503180.D	12/27/21	16:32	01:50	Leachate Blank
OP37314-BS1	6P503181.D	12/27/21	16:54	02:12	Blank Spike
OP37314-BSD	6P503182.D	12/27/21	17:16	02:34	Blank Spike Duplicate
ZZZZZZ	6P503183.D	12/27/21	17:39	02:57	(unrelated sample)
ZZZZZZ	6P503184.D	12/27/21	18:01	03:19	(unrelated sample)
ZZZZZZ	6P503185.D	12/27/21	18:23	03:41	(unrelated sample)
ZZZZZZ	6P503186.D	12/27/21	18:46	04:04	(unrelated sample)
ZZZZZZ	6P503187.D	12/27/21	19:08	04:26	(unrelated sample)
ZZZZZZ	6P503188.D	12/27/21	19:30	04:48	(unrelated sample)
ZZZZZZ	6P503189.D	12/27/21	19:52	05:10	(unrelated sample)
ZZZZZZ	6P503190.D	12/27/21	20:14	05:32	(unrelated sample)
ZZZZZZ	6P503191.D	12/27/21	20:37	05:55	(unrelated sample)
ZZZZZZ	6P503192.D	12/27/21	20:59	06:17	(unrelated sample)
ZZZZZZ	6P503193.D	12/27/21	21:21	06:39	(unrelated sample)
ZZZZZZ	6P503194.D	12/27/21	21:43	07:01	(unrelated sample)
ZZZZZZ	6P503195.D	12/27/21	22:06	07:24	(unrelated sample)
ZZZZZZ	6P503196.D	12/27/21	22:28	07:46	(unrelated sample)

7.7.5
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Instrument Performance Check (DFTPP)

Job Number: JD35488
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample: E6P3580-DFTPP	Injection Date: 12/27/21
Lab File ID: 6P503177.D	Injection Time: 14:42
Instrument ID: GCMS6P	

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
ZZZZZZ	6P503197.D	12/27/21	22:50	08:08	(unrelated sample)
ZZZZZZ	6P503198.D	12/27/21	23:12	08:30	(unrelated sample)
ZZZZZZ	6P503199.D	12/27/21	23:34	08:52	(unrelated sample)
ZZZZZZ	6P503200.D	12/27/21	23:57	09:15	(unrelated sample)
ZZZZZZ	6P503201.D	12/28/21	00:19	09:37	(unrelated sample)
ZZZZZZ	6P503202.D	12/28/21	00:41	09:59	(unrelated sample)
ZZZZZZ	6P503203.D	12/28/21	01:03	10:21	(unrelated sample)
ZZZZZZ	6P503204.D	12/28/21	01:26	10:44	(unrelated sample)
ZZZZZZ	6P503205.D	12/28/21	01:48	11:06	(unrelated sample)
ZZZZZZ	6P503206.D	12/28/21	02:10	11:28	(unrelated sample)
ZZZZZZ	6P503207.D	12/28/21	02:32	11:50	(unrelated sample)

7.7.5
7

Instrument Performance Check (DFTPP)

Job Number: JD35488
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample: EF8913-DFTPP	Injection Date: 11/10/21
Lab File ID: F203410.D	Injection Time: 03:18
Instrument ID: GCMSF	

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
51	30.0 - 60.0% of mass 198	60680	39.9	Pass
68	Less than 2.0% of mass 69	0	0.00 (0.00) ^a	Pass
69	Mass 69 relative abundance	74819	49.2	Pass
70	Less than 2.0% of mass 69	267	0.18 (0.36) ^a	Pass
127	40.0 - 60.0% of mass 198	70330	46.3	Pass
197	Less than 1.0% of mass 198	0	0.00	Pass
198	Base peak, 100% relative abundance	151930	100.0	Pass
199	5.0 - 9.0% of mass 198	10548	6.94	Pass
275	10.0 - 30.0% of mass 198	43138	28.4	Pass
365	1.0 - 100.0% of mass 198	4638	3.05	Pass
441	Present, but less than mass 443	15889	10.5 (82.3) ^b	Pass
442	40.0 - 100.0% of mass 198	100954	66.4	Pass
443	17.0 - 23.0% of mass 442	19303	12.7 (19.1) ^c	Pass

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

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

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
EF8913-IC8913	F203411.D	11/10/21	03:41	00:23	Initial cal 1
EF8913-IC8913	F203412.D	11/10/21	04:09	00:51	Initial cal 2
EF8913-IC8913	F203413.D	11/10/21	04:37	01:19	Initial cal 5
EF8913-IC8913	F203414.D	11/10/21	05:04	01:46	Initial cal 10
EF8913-IC8913	F203415.D	11/10/21	05:32	02:14	Initial cal 25
EF8913-ICC8913	F203416.D	11/10/21	06:00	02:42	Initial cal 50
EF8913-IC8913	F203417.D	11/10/21	06:27	03:09	Initial cal 80
EF8913-IC8913	F203418.D	11/10/21	06:55	03:37	Initial cal 100
EF8913-ICV8913	F203419.D	11/10/21	07:22	04:04	Initial cal verification 50
EF8913-ICV8913	F203420.D	11/10/21	07:50	04:32	Initial cal verification 50
EF8913-ICV8913	F203421.D	11/10/21	08:17	04:59	Initial cal verification 50
EF8913-ICV8913	F203422.D	11/10/21	08:44	05:26	Initial cal verification 50

7.7.6
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Instrument Performance Check (DFTPP)

Job Number: JD35488
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample: EF8914-DFTPP	Injection Date: 11/10/21
Lab File ID: F203423.D	Injection Time: 09:08
Instrument ID: GCMSF	

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
51	30.0 - 60.0% of mass 198	63540	40.8	Pass
68	Less than 2.0% of mass 69	0	0.00 (0.00) ^a	Pass
69	Mass 69 relative abundance	78744	50.6	Pass
70	Less than 2.0% of mass 69	687	0.44 (0.87) ^a	Pass
127	40.0 - 60.0% of mass 198	73872	47.5	Pass
197	Less than 1.0% of mass 198	0	0.00	Pass
198	Base peak, 100% relative abundance	155549	100.0	Pass
199	5.0 - 9.0% of mass 198	10181	6.55	Pass
275	10.0 - 30.0% of mass 198	44115	28.4	Pass
365	1.0 - 100.0% of mass 198	5329	3.43	Pass
441	Present, but less than mass 443	14302	9.19 (77.3) ^b	Pass
442	40.0 - 100.0% of mass 198	92789	59.7	Pass
443	17.0 - 23.0% of mass 442	18500	11.9 (19.9) ^c	Pass

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

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

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
EF8914-IC8914	F203424.D	11/10/21	09:20	00:12	Initial cal 80
EF8914-ICC8914	F203425.D	11/10/21	09:48	00:40	Initial cal 50
EF8914-IC8914	F203426.D	11/10/21	10:15	01:07	Initial cal 25
EF8914-IC8914	F203427.D	11/10/21	10:43	01:35	Initial cal 10
EF8914-IC8914	F203428.D	11/10/21	11:10	02:02	Initial cal 5
EF8914-IC8914	F203429.D	11/10/21	11:38	02:30	Initial cal 2
EF8914-IC8914	F203430.D	11/10/21	12:05	02:57	Initial cal 1
EF8914-IC8914	F203433.D	11/10/21	14:29	05:21	Initial cal 100
EF8914-ICV8914	F203434.D	11/10/21	14:57	05:49	Initial cal verification 50

7.7.7
7

Instrument Performance Check (DFTPP)

Job Number: JD35488
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample: EF8915-DFTPP	Injection Date: 11/10/21
Lab File ID: F203435.D	Injection Time: 22:06
Instrument ID: GCMSF	

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
51	30.0 - 60.0% of mass 198	64133	37.4	Pass
68	Less than 2.0% of mass 69	0	0.00 (0.00) ^a	Pass
69	Mass 69 relative abundance	80909	47.1	Pass
70	Less than 2.0% of mass 69	264	0.15 (0.33) ^a	Pass
127	40.0 - 60.0% of mass 198	79522	46.3	Pass
197	Less than 1.0% of mass 198	0	0.00	Pass
198	Base peak, 100% relative abundance	171602	100.0	Pass
199	5.0 - 9.0% of mass 198	11769	6.86	Pass
275	10.0 - 30.0% of mass 198	47634	27.8	Pass
365	1.0 - 100.0% of mass 198	5729	3.34	Pass
441	Present, but less than mass 443	16520	9.63 (77.5) ^b	Pass
442	40.0 - 100.0% of mass 198	113189	66.0	Pass
443	17.0 - 23.0% of mass 442	21307	12.4 (18.8) ^c	Pass

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

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

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
EF8915-IC8915	F203436.D	11/10/21	22:29	00:23	Initial cal 100
EF8915-IC8915	F203437.D	11/10/21	22:57	00:51	Initial cal 80
EF8915-ICC8915	F203438.D	11/10/21	23:24	01:18	Initial cal 50
EF8915-IC8915	F203439.D	11/10/21	23:51	01:45	Initial cal 25
EF8915-IC8915	F203440.D	11/11/21	00:18	02:12	Initial cal 10
EF8915-IC8915	F203441.D	11/11/21	00:46	02:40	Initial cal 5
EF8915-IC8915	F203442.D	11/11/21	01:13	03:07	Initial cal 2
EF8915-IC8915	F203443.D	11/11/21	01:40	03:34	Initial cal 1
EF8915-ICV8915	F203444.D	11/11/21	03:10	05:04	Initial cal verification 50
EF8915-ICV8915	F203445.D	11/11/21	04:04	05:58	Initial cal verification 50
EF8915-ICV8915	F203446.D	11/11/21	04:31	06:25	Initial cal verification 50
EF8915-ICV8915	F203447.D	11/11/21	04:58	06:52	Initial cal verification 50
EF8915-ICV8915	F203448.D	11/11/21	05:25	07:19	Initial cal verification 50

7.7.8
7

Instrument Performance Check (DFTPP)

Job Number: JD35488
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample: EF8949-DFTPP	Injection Date: 12/10/21
Lab File ID: F204174.D	Injection Time: 22:42
Instrument ID: GCMSF	

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
51	30.0 - 60.0% of mass 198	33837	32.2	Pass
68	Less than 2.0% of mass 69	0	0.00 (0.00) ^a	Pass
69	Mass 69 relative abundance	44472	42.3	Pass
70	Less than 2.0% of mass 69	206	0.20 (0.46) ^a	Pass
127	40.0 - 60.0% of mass 198	48096	45.7	Pass
197	Less than 1.0% of mass 198	0	0.00	Pass
198	Base peak, 100% relative abundance	105235	100.0	Pass
199	5.0 - 9.0% of mass 198	6723	6.39	Pass
275	10.0 - 30.0% of mass 198	27683	26.3	Pass
365	1.0 - 100.0% of mass 198	4027	3.83	Pass
441	Present, but less than mass 443	12695	12.1 (80.8) ^b	Pass
442	40.0 - 100.0% of mass 198	82829	78.7	Pass
443	17.0 - 23.0% of mass 442	15713	14.9 (19.0) ^c	Pass

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

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

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
EF8949-CC8913	F204175.D	12/10/21	23:16	00:34	Continuing cal 50
EF8949-CC8914	F204176.D	12/10/21	23:40	00:58	Continuing cal 50
EF8949-CC8915	F204177.D	12/11/21	00:05	01:23	Continuing cal 50
OP37021-MB1	F204180.D	12/11/21	01:21	02:39	Method Blank
OP37021-BS1	F204181.D	12/11/21	01:46	03:04	Blank Spike
OP37021-BSD	F204182.D	12/11/21	02:11	03:29	Blank Spike Duplicate
OP37021-BS13	F204183.D	12/11/21	02:36	03:54	Blank Spike
OP37049-MB1	F204184.D	12/11/21	03:01	04:19	Method Blank
OP37049-LB5	F204185.D	12/11/21	03:26	04:44	Leachate Blank
OP37049-LB8	F204186.D	12/11/21	03:51	05:09	Leachate Blank
OP37049-BS13	F204187.D	12/11/21	04:16	05:34	Blank Spike
OP37049-LS8	F204188.D	12/11/21	04:41	05:59	Leachate Spike
OP37049-MS	F204188.D	12/11/21	04:41	05:59	Matrix Spike
OP37049-MSD	F204189.D	12/11/21	05:06	06:24	Matrix Spike Duplicate
JD35487-1	F204190.D	12/11/21	05:31	06:49	(used for QC only; not part of job JD35488)
JD35488-1	F204191.D	12/11/21	05:55	07:13	11215131-120121-IDW-SS-NE
ZZZZZZ	F204192.D	12/11/21	06:20	07:38	(unrelated sample)
ZZZZZZ	F204193.D	12/11/21	06:45	08:03	(unrelated sample)
ZZZZZZ	F204194.D	12/11/21	07:10	08:28	(unrelated sample)

7.7.9
7

Instrument Performance Check (DFTPP)

Job Number: JD35488
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample: EF8949-DFTPP	Injection Date: 12/10/21
Lab File ID: F204174.D	Injection Time: 22:42
Instrument ID: GCMSF	

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
ZZZZZZ	F204195.D	12/11/21	07:35	08:53	(unrelated sample)
ZZZZZZ	F204196.D	12/11/21	08:00	09:18	(unrelated sample)
ZZZZZZ	F204197.D	12/11/21	08:25	09:43	(unrelated sample)
ZZZZZZ	F204198.D	12/11/21	08:50	10:08	(unrelated sample)
ZZZZZZ	F204199.D	12/11/21	09:15	10:33	(unrelated sample)
ZZZZZZ	F204200.D	12/11/21	09:40	10:58	(unrelated sample)
ZZZZZZ	F204201.D	12/11/21	10:05	11:23	(unrelated sample)
ZZZZZZ	F204202.D	12/11/21	10:30	11:48	(unrelated sample)

7.7.9
7

Instrument Performance Check (DFTPP)

Job Number: JD35488
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample: EF8956-DFTPP	Injection Date: 12/16/21
Lab File ID: F204301.D	Injection Time: 03:56
Instrument ID: GCMSF	

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
51	30.0 - 60.0% of mass 198	37432	37.8	Pass
68	Less than 2.0% of mass 69	0	0.00 (0.00) ^a	Pass
69	Mass 69 relative abundance	48389	48.8	Pass
70	Less than 2.0% of mass 69	50	0.05 (0.10) ^a	Pass
127	40.0 - 60.0% of mass 198	48160	48.6	Pass
197	Less than 1.0% of mass 198	0	0.00	Pass
198	Base peak, 100% relative abundance	99093	100.0	Pass
199	5.0 - 9.0% of mass 198	6512	6.57	Pass
275	10.0 - 30.0% of mass 198	26922	27.2	Pass
365	1.0 - 100.0% of mass 198	2753	2.78	Pass
441	Present, but less than mass 443	10936	11.0 (79.9) ^b	Pass
442	40.0 - 100.0% of mass 198	68384	69.0	Pass
443	17.0 - 23.0% of mass 442	13683	13.8 (20.0) ^c	Pass

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

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

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
EF8956-CC8913	F204302.D	12/16/21	04:09	00:13	Continuing cal 25
EF8956-CC8914	F204303.D	12/16/21	04:34	00:38	Continuing cal 25
EF8956-CC8915	F204304.D	12/16/21	05:00	01:04	Continuing cal 25
OP37159-MB1	F204307.D	12/16/21	06:26	02:30	Method Blank
OP37159-LB13	F204308.D	12/16/21	06:51	02:55	Leachate Blank
OP37159-LB16	F204309.D	12/16/21	07:17	03:21	Leachate Blank
OP37159-BS1	F204310.D	12/16/21	07:42	03:46	Blank Spike
OP37159-BS13	F204311.D	12/16/21	08:07	04:11	Blank Spike
OP37155-MB1	F204312.D	12/16/21	08:32	04:36	Method Blank
OP37155-LB7	F204313.D	12/16/21	08:57	05:01	Leachate Blank
OP37155-BS1	F204314.D	12/16/21	09:22	05:26	Blank Spike
OP37155-BS13	F204315.D	12/16/21	09:47	05:51	Blank Spike
OP37155-LS7	F204316.D	12/16/21	10:12	06:16	Leachate Spike
OP37155-MS	F204316.D	12/16/21	10:12	06:16	Matrix Spike
OP37155-MSD	F204317.D	12/16/21	10:37	06:41	Matrix Spike Duplicate
JD35488-2	F204318.D	12/16/21	11:02	07:06	11215131-120121-IDW-SPS-NE DECON
OP37159-LS13	F204319.D	12/16/21	11:27	07:31	Leachate Spike
OP37159-MS	F204319.D	12/16/21	11:27	07:31	Matrix Spike
OP37159-MSD	F204320.D	12/16/21	11:53	07:57	Matrix Spike Duplicate

7.7.10
7

Instrument Performance Check (DFTPP)

Job Number: JD35488
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample: EF8956-DFTPP	Injection Date: 12/16/21
Lab File ID: F204301.D	Injection Time: 03:56
Instrument ID: GCMSF	

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
JD35487-4	F204321.D	12/16/21	12:18	08:22	(used for QC only; not part of job JD35488)
JD35488-3	F204322.D	12/16/21	12:43	08:47	11215131-120721-IDW-SS-SC
JD35488-4	F204323.D	12/16/21	13:08	09:12	11215131-120721-IDW-SS-DECON2
JD35488-5	F204324.D	12/16/21	13:33	09:37	11215131-120821-IDW-SS-SW

7.7.10
7

Instrument Performance Check (DFTPP)

Job Number: JD35488
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample: EF8970-DFTPP	Injection Date: 12/28/21
Lab File ID: F204602.D	Injection Time: 11:52
Instrument ID: GCMSF	

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
51	30.0 - 60.0% of mass 198	41282	33.8	Pass
68	Less than 2.0% of mass 69	0	0.00 (0.00) ^a	Pass
69	Mass 69 relative abundance	53104	43.5	Pass
70	Less than 2.0% of mass 69	116	0.10 (0.22) ^a	Pass
127	40.0 - 60.0% of mass 198	55304	45.3	Pass
197	Less than 1.0% of mass 198	0	0.00	Pass
198	Base peak, 100% relative abundance	121987	100.0	Pass
199	5.0 - 9.0% of mass 198	8170	6.70	Pass
275	10.0 - 30.0% of mass 198	32667	26.8	Pass
365	1.0 - 100.0% of mass 198	3749	3.07	Pass
441	Present, but less than mass 443	15180	12.4 (86.3) ^b	Pass
442	40.0 - 100.0% of mass 198	90408	74.1	Pass
443	17.0 - 23.0% of mass 442	17592	14.4 (19.5) ^c	Pass

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

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

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
EF8970-CC8913	F204603.D	12/28/21	12:06	00:14	Continuing cal 25
EF8970-CC8914	F204604.D	12/28/21	12:44	00:52	Continuing cal 25
EF8970-CC8915	F204605.D	12/28/21	13:09	01:17	Continuing cal 25
OP37314-MB1	F204608.D	12/28/21	14:32	02:40	Method Blank
OP37314-LB29	F204609.D	12/28/21	14:57	03:05	Leachate Blank
OP37314-BS1	F204610.D	12/28/21	15:22	03:30	Blank Spike
OP37314-BS13	F204611.D	12/28/21	15:47	03:55	Blank Spike
JD35488-6	F204612.D	12/28/21	16:12	04:20	11215131-121421-IDW-BN-NC
ZZZZZZ	F204613.D	12/28/21	16:37	04:45	(unrelated sample)
JD36933-1A	F204614.D	12/28/21	17:10	05:18	(used for QC only; not part of job JD35488)
OP37314-MS	F204615.D	12/28/21	17:35	05:43	Matrix Spike
OP37314-LS29	F204615.D	12/28/21	17:35	05:43	Leachate Spike
OP37314-MSD	F204616.D	12/28/21	18:00	06:08	Matrix Spike Duplicate
ZZZZZZ	F204617.D	12/28/21	18:25	06:33	(unrelated sample)
ZZZZZZ	F204618.D	12/28/21	18:50	06:58	(unrelated sample)
ZZZZZZ	F204619.D	12/28/21	19:15	07:23	(unrelated sample)
ZZZZZZ	F204620.D	12/28/21	19:40	07:48	(unrelated sample)
ZZZZZZ	F204621.D	12/28/21	20:05	08:13	(unrelated sample)
ZZZZZZ	F204622.D	12/28/21	20:30	08:38	(unrelated sample)

7.7.11
7

Instrument Performance Check (DFTPP)

Job Number: JD35488
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample: EF8970-DFTPP	Injection Date: 12/28/21
Lab File ID: F204602.D	Injection Time: 11:52
Instrument ID: GCMSF	

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
ZZZZZZ	F204623.D	12/28/21	20:55	09:03	(unrelated sample)
ZZZZZZ	F204624.D	12/28/21	21:20	09:28	(unrelated sample)
ZZZZZZ	F204625.D	12/28/21	21:45	09:53	(unrelated sample)
ZZZZZZ	F204626.D	12/28/21	22:10	10:18	(unrelated sample)
ZZZZZZ	F204627.D	12/28/21	22:35	10:43	(unrelated sample)
ZZZZZZ	F204628.D	12/28/21	23:00	11:08	(unrelated sample)
ZZZZZZ	F204629.D	12/28/21	23:25	11:33	(unrelated sample)

7.7.11
7

Instrument Performance Check (DFTPP)

Job Number: JD35488
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample: EF8971-DFTPP	Injection Date: 12/29/21
Lab File ID: F204631.D	Injection Time: 13:14
Instrument ID: GCMSF	

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
51	30.0 - 60.0% of mass 198	47157	35.5	Pass
68	Less than 2.0% of mass 69	0	0.00 (0.00) ^a	Pass
69	Mass 69 relative abundance	59725	45.0	Pass
70	Less than 2.0% of mass 69	101	0.08 (0.17) ^a	Pass
127	40.0 - 60.0% of mass 198	59240	44.7	Pass
197	Less than 1.0% of mass 198	0	0.00	Pass
198	Base peak, 100% relative abundance	132653	100.0	Pass
199	5.0 - 9.0% of mass 198	8798	6.63	Pass
275	10.0 - 30.0% of mass 198	37890	28.6	Pass
365	1.0 - 100.0% of mass 198	3918	2.95	Pass
441	Present, but less than mass 443	16367	12.3 (87.4) ^b	Pass
442	40.0 - 100.0% of mass 198	98589	74.3	Pass
443	17.0 - 23.0% of mass 442	18723	14.1 (19.0) ^c	Pass

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

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

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
EF8971-CC8913	F204632.D	12/29/21	13:36	00:22	Continuing cal 50
EF8971-CC8914	F204633A.D	12/29/21	14:01	00:47	Continuing cal 50
EF8971-CC8913	F204634.D	12/29/21	14:28	01:14	Continuing cal 5
EF8971-CC8915	F204635.D	12/29/21	14:53	01:39	Continuing cal 50
OP37369-MB1	F204637.D	12/29/21	15:48	02:34	Method Blank
OP37368-MB1	F204637.D	12/29/21	15:48	02:34	Method Blank
OP37369-BS13	F204638.D	12/29/21	16:13	02:59	Blank Spike
JD35488-7	F204640.D	12/29/21	17:05	03:51	11215131-122021-IDW-SS-PURGE
ZZZZZZ	F204641.D	12/29/21	17:30	04:16	(unrelated sample)
ZZZZZZ	F204642.D	12/29/21	17:56	04:42	(unrelated sample)
ZZZZZZ	F204643.D	12/29/21	18:21	05:07	(unrelated sample)
ZZZZZZ	F204644.D	12/29/21	18:46	05:32	(unrelated sample)
ZZZZZZ	F204645.D	12/29/21	19:11	05:57	(unrelated sample)
ZZZZZZ	F204646.D	12/29/21	19:36	06:22	(unrelated sample)
ZZZZZZ	F204647.D	12/29/21	20:01	06:47	(unrelated sample)
ZZZZZZ	F204648.D	12/29/21	20:26	07:12	(unrelated sample)
ZZZZZZ	F204649.D	12/29/21	20:51	07:37	(unrelated sample)
ZZZZZZ	F204650.D	12/29/21	21:16	08:02	(unrelated sample)
ZZZZZZ	F204651.D	12/29/21	21:41	08:27	(unrelated sample)

7.7.12
7

Instrument Performance Check (DFTPP)

Job Number: JD35488
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample: EF8971-DFTPP	Injection Date: 12/29/21
Lab File ID: F204631.D	Injection Time: 13:14
Instrument ID: GCMSF	

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
EF8971-ECC8913	F204652.D	12/29/21	22:06	08:52	Ending cal 50

7.7.12

7

Instrument Performance Check (DFTPP)

Job Number: JD35488
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample: EP6741-DFTPP	Injection Date: 12/02/21
Lab File ID: P146319.D	Injection Time: 17:37
Instrument ID: GCMSP	

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
51	30.0 - 60.0% of mass 198	218126	30.5	Pass
68	Less than 2.0% of mass 69	0	0.00 (0.00) ^a	Pass
69	Mass 69 relative abundance	287479	40.2	Pass
70	Less than 2.0% of mass 69	1626	0.23 (0.57) ^a	Pass
127	40.0 - 60.0% of mass 198	359914	50.4	Pass
197	Less than 1.0% of mass 198	0	0.00	Pass
198	Base peak, 100% relative abundance	714325	100.0	Pass
199	5.0 - 9.0% of mass 198	47794	6.69	Pass
275	10.0 - 30.0% of mass 198	191160	26.8	Pass
365	1.0 - 100.0% of mass 198	25949	3.63	Pass
441	Present, but less than mass 443	90666	12.7 (80.0) ^b	Pass
442	40.0 - 100.0% of mass 198	595349	83.3	Pass
443	17.0 - 23.0% of mass 442	113384	15.9 (19.0) ^c	Pass

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

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

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
EP6741-IC6741	P146320.D	12/02/21	18:01	00:24	Initial cal 100
EP6741-IC6741	P146321.D	12/02/21	18:26	00:49	Initial cal 2
EP6741-IC6741	P146322.D	12/02/21	18:52	01:15	Initial cal 80
EP6741-IC6741	P146323.D	12/02/21	19:18	01:41	Initial cal 1
EP6741-ICC6741	P146324.D	12/02/21	19:43	02:06	Initial cal 50
EP6741-IC6741	P146325.D	12/02/21	20:08	02:31	Initial cal 5
EP6741-IC6741	P146326.D	12/02/21	20:34	02:57	Initial cal 25
EP6741-IC6741	P146327.D	12/02/21	21:00	03:23	Initial cal 10
EP6741-ICV6741	P146328.D	12/02/21	21:37	04:00	Initial cal verification 50
EP6741-ICV6741	P146329.D	12/02/21	22:03	04:26	Initial cal verification 50
EP6741-ICV6741	P146330.D	12/02/21	22:30	04:53	Initial cal verification 50
EP6741-ICV6741	P146331.D	12/02/21	22:55	05:18	Initial cal verification 50

7.7.13
7

Instrument Performance Check (DFTPP)

Job Number: JD35488
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample: EP6742-DFTPP	Injection Date: 12/03/21
Lab File ID: P146332.D	Injection Time: 04:24
Instrument ID: GCMSP	

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
51	30.0 - 60.0% of mass 198	249101	32.8	Pass
68	Less than 2.0% of mass 69	0	0.00 (0.00) ^a	Pass
69	Mass 69 relative abundance	332553	43.7	Pass
70	Less than 2.0% of mass 69	2122	0.28 (0.64) ^a	Pass
127	40.0 - 60.0% of mass 198	403361	53.0	Pass
197	Less than 1.0% of mass 198	0	0.00	Pass
198	Base peak, 100% relative abundance	760512	100.0	Pass
199	5.0 - 9.0% of mass 198	51552	6.78	Pass
275	10.0 - 30.0% of mass 198	199813	26.3	Pass
365	1.0 - 100.0% of mass 198	26473	3.48	Pass
441	Present, but less than mass 443	79302	10.4 (72.5) ^b	Pass
442	40.0 - 100.0% of mass 198	565008	74.3	Pass
443	17.0 - 23.0% of mass 442	109448	14.4 (19.4) ^c	Pass

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

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

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
EP6742-IC6742	P146333.D	12/03/21	04:49	00:25	Initial cal 100
EP6742-IC6742	P146334.D	12/03/21	05:14	00:50	Initial cal 80
EP6742-ICC6742	P146335.D	12/03/21	05:39	01:15	Initial cal 50
EP6742-IC6742	P146336.D	12/03/21	06:04	01:40	Initial cal 25
EP6742-IC6742	P146337.D	12/03/21	06:31	02:07	Initial cal 10
EP6742-IC6742	P146338.D	12/03/21	06:56	02:32	Initial cal 5
EP6742-IC6742	P146339.D	12/03/21	07:21	02:57	Initial cal 2
EP6742-IC6742	P146340.D	12/03/21	07:46	03:22	Initial cal 1
EP6742-ICV6742	P146341.D	12/03/21	09:07	04:43	Initial cal verification 50

7.7.14
7

Instrument Performance Check (DFTPP)

Job Number: JD35488
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample: EP6767-DFTPP	Injection Date: 12/28/21
Lab File ID: P146830.D	Injection Time: 11:43
Instrument ID: GCMSP	

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
51	30.0 - 60.0% of mass 198	138819	30.8	Pass
68	Less than 2.0% of mass 69	0	0.00 (0.00) ^a	Pass
69	Mass 69 relative abundance	194529	43.1	Pass
70	Less than 2.0% of mass 69	666	0.15 (0.34) ^a	Pass
127	40.0 - 60.0% of mass 198	222462	49.3	Pass
197	Less than 1.0% of mass 198	1292	0.29	Pass
198	Base peak, 100% relative abundance	450880	100.0	Pass
199	5.0 - 9.0% of mass 198	27888	6.19	Pass
275	10.0 - 30.0% of mass 198	124831	27.7	Pass
365	1.0 - 100.0% of mass 198	17011	3.77	Pass
441	Present, but less than mass 443	57053	12.7 (76.7) ^b	Pass
442	40.0 - 100.0% of mass 198	388592	86.2	Pass
443	17.0 - 23.0% of mass 442	74397	16.5 (19.1) ^c	Pass

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

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

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
EP6767-CC6741	P146831.D	12/28/21	11:57	00:14	Continuing cal 25
EP6767-CC6742	P146832.D	12/28/21	12:23	00:40	Continuing cal 25
OP37368-MB1	P146833.D	12/28/21	13:02	01:19	Method Blank
OP37369-MB1	P146833.D	12/28/21	13:02	01:19	Method Blank
OP37370-MB1	P146833.D	12/28/21	13:02	01:19	Method Blank
OP37369-LB2	P146834.D	12/28/21	13:27	01:44	Leachate Blank
OP37370-LB5	P146835.D	12/28/21	13:52	02:09	Leachate Blank
OP37368-LB1	P146836.D	12/28/21	14:17	02:34	Leachate Blank
OP37369-BS1	P146837.D	12/28/21	14:42	02:59	Blank Spike
OP37370-BS1	P146837.D	12/28/21	14:42	02:59	Blank Spike
OP37368-BS1	P146837.D	12/28/21	14:42	02:59	Blank Spike
ZZZZZZ	P146838.D	12/28/21	15:07	03:24	(unrelated sample)
ZZZZZZ	P146839.D	12/28/21	15:32	03:49	(unrelated sample)
ZZZZZZ	P146840.D	12/28/21	15:59	04:16	(unrelated sample)
JD37026-1	P146841.D	12/28/21	16:28	04:45	(used for QC only; not part of job JD35488)
OP37313-MS	P146842.D	12/28/21	16:54	05:11	Matrix Spike
OP37313-MSD	P146843.D	12/28/21	17:19	05:36	Matrix Spike Duplicate
ZZZZZZ	P146844.D	12/28/21	17:44	06:01	(unrelated sample)
JD36990-1A	P146845.D	12/28/21	18:09	06:26	(used for QC only; not part of job JD35488)

7.7.15
7

Instrument Performance Check (DFTPP)

Job Number: JD35488
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample: EP6767-DFTPP	Injection Date: 12/28/21
Lab File ID: P146830.D	Injection Time: 11:43
Instrument ID: GCMSP	

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
ZZZZZZ	P146846.D	12/28/21	18:34	06:51	(unrelated sample)
ZZZZZZ	P146847.D	12/28/21	18:59	07:16	(unrelated sample)
ZZZZZZ	P146848.D	12/28/21	19:24	07:41	(unrelated sample)
ZZZZZZ	P146849.D	12/28/21	19:49	08:06	(unrelated sample)
ZZZZZZ	P146850.D	12/28/21	20:14	08:31	(unrelated sample)
ZZZZZZ	P146851.D	12/28/21	20:39	08:56	(unrelated sample)
ZZZZZZ	P146852.D	12/28/21	21:04	09:21	(unrelated sample)
ZZZZZZ	P146853.D	12/28/21	21:29	09:46	(unrelated sample)
ZZZZZZ	P146854.D	12/28/21	21:54	10:11	(unrelated sample)
ZZZZZZ	P146855.D	12/28/21	22:19	10:36	(unrelated sample)

7.7.15
7

Instrument Performance Check (DFTPP)

Job Number: JD35488
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample: EP6768-DFTPP	Injection Date: 12/29/21
Lab File ID: P146857.D	Injection Time: 13:37
Instrument ID: GCMSP	

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
51	30.0 - 60.0% of mass 198	142982	34.8	Pass
68	Less than 2.0% of mass 69	0	0.00 (0.00) ^a	Pass
69	Mass 69 relative abundance	188529	45.9	Pass
70	Less than 2.0% of mass 69	273	0.07 (0.14) ^a	Pass
127	40.0 - 60.0% of mass 198	201291	49.0	Pass
197	Less than 1.0% of mass 198	0	0.00	Pass
198	Base peak, 100% relative abundance	410453	100.0	Pass
199	5.0 - 9.0% of mass 198	29154	7.10	Pass
275	10.0 - 30.0% of mass 198	112365	27.4	Pass
365	1.0 - 100.0% of mass 198	15360	3.74	Pass
441	Present, but less than mass 443	48793	11.9 (78.4) ^b	Pass
442	40.0 - 100.0% of mass 198	321859	78.4	Pass
443	17.0 - 23.0% of mass 442	62253	15.2 (19.3) ^c	Pass

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

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

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
EP6768-CC6741	P146858.D	12/29/21	13:50	00:13	Continuing cal 50
EP6768-CC6742	P146859.D	12/29/21	14:15	00:38	Continuing cal 50
OP37386B-MB1	P146860.D	12/29/21	15:01	01:24	Method Blank
OP37386-MB1	P146860.D	12/29/21	15:01	01:24	Method Blank
OP37386-BS1	P146861.D	12/29/21	15:34	01:57	Blank Spike
OP37386B-BS1	P146861.D	12/29/21	15:34	01:57	Blank Spike
OP37386-BSD	P146862.D	12/29/21	15:59	02:22	Blank Spike Duplicate
OP37386B-BSD	P146862.D	12/29/21	15:59	02:22	Blank Spike Duplicate
ZZZZZZ	P146863.D	12/29/21	16:25	02:48	(unrelated sample)
ZZZZZZ	P146864.D	12/29/21	16:50	03:13	(unrelated sample)
ZZZZZZ	P146865.D	12/29/21	17:15	03:38	(unrelated sample)
ZZZZZZ	P146866.D	12/29/21	17:40	04:03	(unrelated sample)
ZZZZZZ	P146867.D	12/29/21	18:06	04:29	(unrelated sample)
JD37168-15A	P146868.D	12/29/21	18:31	04:54	(used for QC only; not part of job JD35488)
ZZZZZZ	P146869.D	12/29/21	18:56	05:19	(unrelated sample)
JD36893-6	P146870.D	12/29/21	19:21	05:44	(used for QC only; not part of job JD35488)
OP37368-MS	P146871.D	12/29/21	19:46	06:09	Matrix Spike
OP37368-LS1	P146871.D	12/29/21	19:46	06:09	Leachate Spike
OP37368-MSD	P146872.D	12/29/21	20:11	06:34	Matrix Spike Duplicate

7.7.16
7

Instrument Performance Check (DFTPP)

Job Number: JD35488
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample: EP6768-DFTPP	Injection Date: 12/29/21
Lab File ID: P146857.D	Injection Time: 13:37
Instrument ID: GCMSP	

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
OP37370-LS5	P146873.D	12/29/21	20:36	06:59	Leachate Spike
OP37370-MS	P146873.D	12/29/21	20:36	06:59	Matrix Spike
OP37370-MSD	P146874.D	12/29/21	21:01	07:24	Matrix Spike Duplicate
OP37369-MS	P146875.D	12/29/21	21:26	07:49	Matrix Spike
OP37369-LS2	P146875.D	12/29/21	21:26	07:49	Leachate Spike
OP37369-MSD	P146876.D	12/29/21	21:51	08:14	Matrix Spike Duplicate

7.7.16
7

Surrogate Recovery Summary

Job Number: JD35488
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Method: SW846 8270E	Matrix: LEACHATE
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Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1	S2	S3	S4	S5	S6
JD35488-1	F204191.D	25	18	66	50	57	59
JD35488-2	F204318.D	40	27	93	72	81	89
JD35488-3	F204322.D	25	17	64	60	66	42
JD35488-4	F204323.D	23	18	50	65	74	34
JD35488-5	F204324.D	26	18	75	68	78	48
JD35488-6	F204612.D	30	20	75	69	76	58
JD35488-7	F204640.D	28	19	86	63	72	84
OP37049-BS1	6P503035.D	40	28	93	78	75	82
OP37049-BS13	F204187.D	24	17	61	51	57	63
OP37049-LB5	6P503033.D	24	17	78	78	74	73
OP37049-LB5	F204185.D	22	16	72	63	69	70
OP37049-LB8	6P503034.D	28	20	81	74	70	77
OP37049-LB8	F204186.D	28	21	76	59	65	78
OP37049-LS8	F204188.D	29	21	65	48	53	62
OP37049-MB1	6P503032.D	37	24	69	67	61	78
OP37049-MB1	F204184.D	35	24	66	53	56	77
OP37049-MS	F204188.D	29	21	65	48	53	62
OP37049-MSD	F204189.D	23	17	67	49	55	65
OP37155-BS1	F204314.D	39	29	92	75	86	88
OP37155-BS13	F204315.D	43	31	94	76	86	89
OP37155-LB7	F204313.D	36	25	83	69	77	84
OP37155-LS7	F204316.D	37	28	93	73	81	64
OP37155-MB1	F204312.D	37	25	87	76	82	86
OP37155-MS	F204316.D	37	28	93	73	81	64
OP37155-MSD	F204317.D	31	23	92	70	78	60
OP37159-BS1	F204310.D	45	33	85	76	84	85
OP37159-BS1	6P503070.D	46	34	90	82	88	85
OP37159-BS13	F204311.D	30	21	77	67	73	83
OP37159-LB13	F204308.D	26	17	69	69	74	89
OP37159-LB13	6P503068A.D	26	18	66	73	78	89
OP37159-LB16	F204309.D	43	27	85	74	80	87
OP37159-LB16	6P503069.D	44	28	81	77	84	86
OP37159-LS13	F204319.D	36	26	81	71	80	75
OP37159-MB1	F204307.D	25	17	66	60	68	57
OP37159-MB1	6P503067.D	26	19	66	65	70	56
OP37159-MS	F204319.D	36	26	81	71	80	75
OP37159-MSD	F204320.D	41	29	89	71	85	76
OP37314-BS1	6P503181.D	21	15	51	41	49	50
OP37314-BS1	F204610.D	21	15	48	40	46	49
OP37314-BS13	F204611.D	44	29	90	66	83	104

7.8.1
7

Surrogate Recovery Summary

Job Number: JD35488
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Method: SW846 8270E	Matrix: LEACHATE
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Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1	S2	S3	S4	S5	S6
OP37314-BSD	6P503182.D	41	29	95	84	94	82
OP37314-LB29	6P503180.D	44	27	90	81	86	101
OP37314-LB29	F204609.D	42	27	92	74	83	101
OP37314-LS29	F204615.D	46	31	101	83	94	97
OP37314-MB1	6P503179.D	42	26	85	74	78	97
OP37314-MB1	F204608.D	41	25	83	67	73	98
OP37314-MS	F204615.D	46	31	101	83	94	97
OP37314-MSD	F204616.D	43	30	98	76	90	87
OP37369-BS1	P146837.D	41	28	108	87	93	91
OP37369-BS13	F204638.D	48	34	90	76	90	101
OP37369-LB2	P146834.D	53	34	104	85	87	101
OP37369-LS2	P146875.D	37	27	95	80	86	98
OP37369-MB1	P146833.D	51	33	106	85	87	104
OP37369-MB1	F204637.D	49	32	98	80	87	106
OP37369-MS	P146875.D	37	27	95	80	86	98
OP37369-MSD	P146876.D	47	32	97	87	92	99

Surrogate Compounds	Recovery Limits
S1 = 2-Fluorophenol	10-73%
S2 = Phenol-d5	10-64%
S3 = 2,4,6-Tribromophenol	31-130%
S4 = Nitrobenzene-d5	28-126%
S5 = 2-Fluorobiphenyl	26-114%
S6 = Terphenyl-d14	16-122%

7.8.1
7

GC/LC Semi-volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Surrogate Recovery Summaries

Method Blank Summary

Job Number: JD35488
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP37051-MB1	OA155562.D	1	12/12/21	CP	12/09/21	OP37051	GOA5501

The QC reported here applies to the following samples:

Method: SW846 8151A

JD35488-1

CAS No.	Compound	Result	RL	MDL	Units	Q
94-75-7	2,4-D	ND	0.33	0.098	ug/l	
93-72-1	2,4,5-TP (Silvex)	ND	0.10	0.020	ug/l	
88-85-7	Dinoseb	ND	0.33	0.13	ug/l	

CAS No.	Surrogate Recoveries	Limits
19719-28-9	2,4-DCAA	77% 13-169%
19719-28-9	2,4-DCAA	69% 13-169%

8.1.1
8

Method Blank Summary

Job Number: JD35488
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP37156-MB1	3G134604.D	1	12/16/21	CP	12/14/21	OP37156	G3G4911

The QC reported here applies to the following samples:

Method: SW846 8151A

JD35488-2

CAS No.	Compound	Result	RL	MDL	Units	Q
94-75-7	2,4-D	ND	0.33	0.098	ug/l	
93-72-1	2,4,5-TP (Silvex)	ND	0.10	0.020	ug/l	
88-85-7	Dinoseb ^a	ND	0.33	0.13	ug/l	

CAS No.	Surrogate Recoveries	Limits
19719-28-9	2,4-DCAA	85% 13-169%
19719-28-9	2,4-DCAA	86% 13-169%

(a) This compound outside control limits biased high in the associated CCV.

8.1.2
8

Method Blank Summary

Job Number: JD35488
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP37163-MB1	3G134641.D	1	12/19/21	CP	12/15/21	OP37163	G3G4913

The QC reported here applies to the following samples:

Method: SW846 8151A

JD35488-3, JD35488-4, JD35488-5

CAS No.	Compound	Result	RL	MDL	Units	Q
94-75-7	2,4-D	ND	0.33	0.098	ug/l	
93-72-1	2,4,5-TP (Silvex)	ND	0.10	0.020	ug/l	
88-85-7	Dinoseb	ND	0.33	0.13	ug/l	

CAS No.	Surrogate Recoveries	Limits
19719-28-9	2,4-DCAA	80% 13-169%
19719-28-9	2,4-DCAA	69% 13-169%

8.1.3
8

Method Blank Summary

Job Number: JD35488
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP37316-MB1	3G134709.D	1	12/27/21	CP	12/23/21	OP37316	G3G4916

The QC reported here applies to the following samples:

Method: SW846 8151A

JD35488-6

CAS No.	Compound	Result	RL	MDL	Units	Q
94-75-7	2,4-D	ND	0.33	0.098	ug/l	
93-72-1	2,4,5-TP (Silvex)	ND	0.10	0.020	ug/l	
88-85-7	Dinoseb ^a	ND	0.33	0.13	ug/l	

CAS No.	Surrogate Recoveries	Limits
19719-28-9	2,4-DCAA	85% 13-169%
19719-28-9	2,4-DCAA	67% 13-169%

(a) This compound outside control limits biased high in the associated CCV.

8.1.4
8

Method Blank Summary

Job Number: JD35488
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP37425-MB1	3G134912.D	1	01/10/22	RK	12/29/21	OP37425	G3G4923

The QC reported here applies to the following samples:

Method: SW846 8151A

JD35488-7

CAS No.	Compound	Result	RL	MDL	Units	Q
94-75-7	2,4-D	ND	0.33	0.098	ug/l	
93-72-1	2,4,5-TP (Silvex)	ND	0.10	0.020	ug/l	
88-85-7	Dinoseb	ND	0.33	0.13	ug/l	

CAS No.	Surrogate Recoveries	Limits
19719-28-9	2,4-DCAA	75% 13-169%
19719-28-9	2,4-DCAA	96% 13-169%

Method Blank Summary

Job Number: JD35488
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP37157-MB1	1G172100.D	1	12/15/21	CP	12/14/21	OP37157	G1G5938

The QC reported here applies to the following samples:

Method: SW846 8081B

JD35488-2

CAS No.	Compound	Result	RL	MDL	Units	Q
58-89-9	gamma-BHC (Lindane)	ND	0.020	0.012	ug/l	
12789-03-6	Chlordane	ND	1.0	0.43	ug/l	
60-57-1	Dieldrin	ND	0.020	0.015	ug/l	
72-54-8	4,4'-DDD	ND	0.020	0.011	ug/l	
72-55-9	4,4'-DDE	ND	0.020	0.010	ug/l	
50-29-3	4,4'-DDT	ND	0.020	0.014	ug/l	
72-20-8	Endrin	ND	0.020	0.012	ug/l	
959-98-8	Endosulfan-I	ND	0.020	0.011	ug/l	
33213-65-9	Endosulfan-II	ND	0.020	0.0098	ug/l	
76-44-8	Heptachlor	ND	0.020	0.0090	ug/l	
1024-57-3	Heptachlor epoxide	ND	0.020	0.012	ug/l	
72-43-5	Methoxychlor	ND	0.040	0.013	ug/l	
2385-85-5	Mirex	ND	0.10	0.0092	ug/l	
8001-35-2	Toxaphene	ND	0.50	0.32	ug/l	

CAS No.	Surrogate Recoveries	Limits
877-09-8	Tetrachloro-m-xylene	84% 30-137%
877-09-8	Tetrachloro-m-xylene	81% 30-137%
2051-24-3	Decachlorobiphenyl	80% 10-137%
2051-24-3	Decachlorobiphenyl	91% 10-137%

8.1.6
8

Method Blank Summary

Job Number: JD35488
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP37162-MB1	6G81244.D	1	12/17/21	CP	12/15/21	OP37162	G6G2873

The QC reported here applies to the following samples:

Method: SW846 8081B

JD35488-1, JD35488-3, JD35488-4, JD35488-5

CAS No.	Compound	Result	RL	MDL	Units	Q
58-89-9	gamma-BHC (Lindane)	ND	0.020	0.012	ug/l	
12789-03-6	Chlordane	ND	1.0	0.43	ug/l	
60-57-1	Dieldrin	ND	0.020	0.015	ug/l	
72-54-8	4,4'-DDD	ND	0.020	0.011	ug/l	
72-55-9	4,4'-DDE	ND	0.020	0.010	ug/l	
50-29-3	4,4'-DDT	ND	0.020	0.014	ug/l	
72-20-8	Endrin	ND	0.020	0.012	ug/l	
959-98-8	Endosulfan-I	ND	0.020	0.011	ug/l	
33213-65-9	Endosulfan-II	ND	0.020	0.0098	ug/l	
76-44-8	Heptachlor	ND	0.020	0.0090	ug/l	
1024-57-3	Heptachlor epoxide	ND	0.020	0.012	ug/l	
72-43-5	Methoxychlor	ND	0.040	0.013	ug/l	
2385-85-5	Mirex	ND	0.10	0.0092	ug/l	
8001-35-2	Toxaphene	ND	0.50	0.32	ug/l	

CAS No.	Surrogate Recoveries	Limits
877-09-8	Tetrachloro-m-xylene	69% 30-137%
877-09-8	Tetrachloro-m-xylene	64% 30-137%
2051-24-3	Decachlorobiphenyl	47% 10-137%
2051-24-3	Decachlorobiphenyl	60% 10-137%

8.1.7
8

Method Blank Summary

Job Number: JD35488
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP37318-MB1	6G81502.D	1	12/29/21	CP	12/23/21	OP37318	G6G2887

The QC reported here applies to the following samples:

Method: SW846 8081B

JD35488-6

CAS No.	Compound	Result	RL	MDL	Units	Q
58-89-9	gamma-BHC (Lindane)	ND	0.020	0.012	ug/l	
12789-03-6	Chlordane	ND	1.0	0.43	ug/l	
60-57-1	Dieldrin	ND	0.020	0.015	ug/l	
72-54-8	4,4'-DDD	ND	0.020	0.011	ug/l	
72-55-9	4,4'-DDE	ND	0.020	0.010	ug/l	
50-29-3	4,4'-DDT	ND	0.020	0.014	ug/l	
72-20-8	Endrin	ND	0.020	0.012	ug/l	
959-98-8	Endosulfan-I	ND	0.020	0.011	ug/l	
33213-65-9	Endosulfan-II	ND	0.020	0.0098	ug/l	
76-44-8	Heptachlor	ND	0.020	0.0090	ug/l	
1024-57-3	Heptachlor epoxide	ND	0.020	0.012	ug/l	
72-43-5	Methoxychlor	ND	0.040	0.013	ug/l	
2385-85-5	Mirex	ND	0.10	0.0092	ug/l	
8001-35-2	Toxaphene	ND	0.50	0.32	ug/l	

CAS No.	Surrogate Recoveries	Limits
877-09-8	Tetrachloro-m-xylene	79% 30-137%
877-09-8	Tetrachloro-m-xylene	73% 30-137%
2051-24-3	Decachlorobiphenyl	74% 10-137%
2051-24-3	Decachlorobiphenyl	68% 10-137%

8.18
8

Method Blank Summary

Job Number: JD35488
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP37424-MB1	6G81799.D	1	01/09/22	TL	12/29/21	OP37424	G6G2898

The QC reported here applies to the following samples:

Method: SW846 8081B

JD35488-7

CAS No.	Compound	Result	RL	MDL	Units	Q
58-89-9	gamma-BHC (Lindane)	ND	0.020	0.012	ug/l	
12789-03-6	Chlordane	ND	1.0	0.43	ug/l	
60-57-1	Dieldrin	ND	0.020	0.015	ug/l	
72-54-8	4,4'-DDD	ND	0.020	0.011	ug/l	
72-55-9	4,4'-DDE	ND	0.020	0.010	ug/l	
50-29-3	4,4'-DDT	ND	0.020	0.014	ug/l	
72-20-8	Endrin	ND	0.020	0.012	ug/l	
959-98-8	Endosulfan-I	ND	0.020	0.011	ug/l	
33213-65-9	Endosulfan-II	ND	0.020	0.0098	ug/l	
76-44-8	Heptachlor	ND	0.020	0.0090	ug/l	
1024-57-3	Heptachlor epoxide	ND	0.020	0.012	ug/l	
72-43-5	Methoxychlor	ND	0.040	0.013	ug/l	
2385-85-5	Mirex	ND	0.10	0.0092	ug/l	
8001-35-2	Toxaphene	ND	0.50	0.32	ug/l	

CAS No.	Surrogate Recoveries	Limits
877-09-8	Tetrachloro-m-xylene	97% 30-137%
877-09-8	Tetrachloro-m-xylene	86% 30-137%
2051-24-3	Decachlorobiphenyl	88% 10-137%
2051-24-3	Decachlorobiphenyl	96% 10-137%

8.1.9
8

Leachate Blank Summary

Job Number: JD35488
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP37051-LB5	OA155570.D	1	12/13/21	CP	12/09/21	OP37051	GOA5501

The QC reported here applies to the following samples:

Method: SW846 8151A

JD35488-1

CAS No.	Compound	Result	RL	MDL	Units	Q
94-75-7	2,4-D	ND	3.3	0.98	ug/l	
93-72-1	2,4,5-TP (Silvex)	ND	1.0	0.20	ug/l	
88-85-7	Dinoseb	ND	3.3	1.3	ug/l	

CAS No.	Surrogate Recoveries	Limits
19719-28-9	2,4-DCAA	87% 13-169%
19719-28-9	2,4-DCAA	95% 13-169%

Leachate Blank Summary

Job Number: JD35488
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP37051-LB8	OA155581.D	1	12/13/21	CP	12/09/21	OP37051	GOA5501

The QC reported here applies to the following samples:

Method: SW846 8151A

JD35488-1

CAS No.	Compound	Result	RL	MDL	Units	Q
94-75-7	2,4-D	ND	3.3	0.98	ug/l	
93-72-1	2,4,5-TP (Silvex)	ND	1.0	0.20	ug/l	
88-85-7	Dinoseb	ND	3.3	1.3	ug/l	

CAS No.	Surrogate Recoveries	Limits
19719-28-9	2,4-DCAA	74% 13-169%
19719-28-9	2,4-DCAA	59% 13-169%

8.2.2
8

Leachate Blank Summary

Job Number: JD35488
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP37156-LB7	3G134610.D	1	12/16/21	CP	12/14/21	OP37156	G3G4911

The QC reported here applies to the following samples:

Method: SW846 8151A

JD35488-2

CAS No.	Compound	Result	RL	MDL	Units	Q
94-75-7	2,4-D	ND	3.3	0.98	ug/l	
93-72-1	2,4,5-TP (Silvex)	ND	1.0	0.20	ug/l	
88-85-7	Dinoseb ^a	ND	3.3	1.3	ug/l	

CAS No.	Surrogate Recoveries	Limits
19719-28-9	2,4-DCAA	51% 13-169%
19719-28-9	2,4-DCAA	47% 13-169%

(a) This compound outside control limits biased high in the associated CCV.

8.2.3
8

Leachate Blank Summary

Job Number: JD35488
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP37163-LB13	3G134649.D	1	12/20/21	CP	12/15/21	OP37163	G3G4913

The QC reported here applies to the following samples:

Method: SW846 8151A

JD35488-3, JD35488-4, JD35488-5

CAS No.	Compound	Result	RL	MDL	Units	Q
94-75-7	2,4-D	ND	3.3	0.98	ug/l	
93-72-1	2,4,5-TP (Silvex)	ND	1.0	0.20	ug/l	
88-85-7	Dinoseb	ND	3.3	1.3	ug/l	

CAS No.	Surrogate Recoveries	Limits
19719-28-9	2,4-DCAA	92% 13-169%
19719-28-9	2,4-DCAA	62% 13-169%

8.2.4
8

Leachate Blank Summary

Job Number: JD35488
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP37163-LB16	3G134660.D	1	12/20/21	CP	12/15/21	OP37163	G3G4913

The QC reported here applies to the following samples:

Method: SW846 8151A

JD35488-3, JD35488-4, JD35488-5

CAS No.	Compound	Result	RL	MDL	Units	Q
94-75-7	2,4-D	ND	3.3	0.98	ug/l	
93-72-1	2,4,5-TP (Silvex)	ND	1.0	0.20	ug/l	
88-85-7	Dinoseb	ND	3.3	1.3	ug/l	

CAS No.	Surrogate Recoveries	Limits
19719-28-9	2,4-DCAA	82% 13-169%
19719-28-9	2,4-DCAA	62% 13-169%

Leachate Blank Summary

Job Number: JD35488
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP37316-LB29	3G134717.D	1	12/28/21	CP	12/23/21	OP37316	G3G4916

The QC reported here applies to the following samples:

Method: SW846 8151A

JD35488-6

CAS No.	Compound	Result	RL	MDL	Units	Q
94-75-7	2,4-D	ND	3.3	0.98	ug/l	
93-72-1	2,4,5-TP (Silvex)	ND	1.0	0.20	ug/l	
88-85-7	Dinoseb	ND	3.3	1.3	ug/l	

CAS No.	Surrogate Recoveries	Limits
19719-28-9	2,4-DCAA	104% 13-169%
19719-28-9	2,4-DCAA	71% 13-169%

8.2.6

8

Leachate Blank Summary

Job Number: JD35488
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP37425-LB10	3G134869.D	1	01/07/22	RK	12/29/21	OP37425	G3G4921

The QC reported here applies to the following samples:

Method: SW846 8151A

JD35488-7

CAS No.	Compound	Result	RL	MDL	Units	Q
94-75-7	2,4-D	ND	3.3	0.98	ug/l	
93-72-1	2,4,5-TP (Silvex)	ND	1.0	0.20	ug/l	
88-85-7	Dinoseb	ND	3.3	1.3	ug/l	

CAS No.	Surrogate Recoveries	Limits
19719-28-9	2,4-DCAA	63% 13-169%
19719-28-9	2,4-DCAA	59% 13-169%

8.2.7
8

Leachate Blank Summary

Job Number: JD35488
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP37157-LB7	1G172106.D	1	12/16/21	CP	12/14/21	OP37157	G1G5938

The QC reported here applies to the following samples:

Method: SW846 8081B

JD35488-2

CAS No.	Compound	Result	RL	MDL	Units	Q
58-89-9	gamma-BHC (Lindane)	ND	0.067	0.040	ug/l	
12789-03-6	Chlordane	ND	3.3	1.4	ug/l	
60-57-1	Dieldrin	ND	0.067	0.051	ug/l	
72-54-8	4,4'-DDD	ND	0.067	0.038	ug/l	
72-55-9	4,4'-DDE	ND	0.067	0.034	ug/l	
50-29-3	4,4'-DDT	ND	0.067	0.046	ug/l	
72-20-8	Endrin	ND	0.067	0.040	ug/l	
959-98-8	Endosulfan-I	ND	0.067	0.035	ug/l	
33213-65-9	Endosulfan-II	ND	0.067	0.033	ug/l	
76-44-8	Heptachlor	ND	0.067	0.030	ug/l	
1024-57-3	Heptachlor epoxide	ND	0.067	0.040	ug/l	
72-43-5	Methoxychlor	ND	0.13	0.045	ug/l	
2385-85-5	Mirex	ND	0.33	0.031	ug/l	
8001-35-2	Toxaphene	ND	1.7	1.1	ug/l	

CAS No.	Surrogate Recoveries	Limits	
877-09-8	Tetrachloro-m-xylene	79%	30-137%
877-09-8	Tetrachloro-m-xylene	72%	30-137%
2051-24-3	Decachlorobiphenyl	83%	10-137%
2051-24-3	Decachlorobiphenyl	73%	10-137%

8.2.8
8

Leachate Blank Summary

Job Number: JD35488
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP37162-LB13	6G81257.D	1	12/17/21	CP	12/15/21	OP37162	G6G2873

The QC reported here applies to the following samples:

Method: SW846 8081B

JD35488-1, JD35488-3, JD35488-4, JD35488-5

CAS No.	Compound	Result	RL	MDL	Units	Q
58-89-9	gamma-BHC (Lindane)	ND	0.067	0.040	ug/l	
12789-03-6	Chlordane	ND	3.3	1.4	ug/l	
60-57-1	Dieldrin	ND	0.067	0.051	ug/l	
72-54-8	4,4'-DDD	ND	0.067	0.038	ug/l	
72-55-9	4,4'-DDE	ND	0.067	0.034	ug/l	
50-29-3	4,4'-DDT	ND	0.067	0.046	ug/l	
72-20-8	Endrin	ND	0.067	0.040	ug/l	
959-98-8	Endosulfan-I	ND	0.067	0.035	ug/l	
33213-65-9	Endosulfan-II	ND	0.067	0.033	ug/l	
76-44-8	Heptachlor	ND	0.067	0.030	ug/l	
1024-57-3	Heptachlor epoxide	ND	0.067	0.040	ug/l	
72-43-5	Methoxychlor	ND	0.13	0.045	ug/l	
2385-85-5	Mirex	ND	0.33	0.031	ug/l	
8001-35-2	Toxaphene	ND	1.7	1.1	ug/l	

CAS No.	Surrogate Recoveries	Limits
877-09-8	Tetrachloro-m-xylene	67% 30-137%
877-09-8	Tetrachloro-m-xylene	63% 30-137%
2051-24-3	Decachlorobiphenyl	53% 10-137%
2051-24-3	Decachlorobiphenyl	70% 10-137%

8.2.9
8

Leachate Blank Summary

Job Number: JD35488
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP37162-LB16	6G81258.D	1	12/17/21	CP	12/15/21	OP37162	G6G2873

The QC reported here applies to the following samples:

Method: SW846 8081B

JD35488-1, JD35488-3, JD35488-4, JD35488-5

CAS No.	Compound	Result	RL	MDL	Units	Q
58-89-9	gamma-BHC (Lindane)	ND	0.067	0.040	ug/l	
12789-03-6	Chlordane	ND	3.3	1.4	ug/l	
60-57-1	Dieldrin	ND	0.067	0.051	ug/l	
72-54-8	4,4'-DDD	ND	0.067	0.038	ug/l	
72-55-9	4,4'-DDE	ND	0.067	0.034	ug/l	
50-29-3	4,4'-DDT	ND	0.067	0.046	ug/l	
72-20-8	Endrin	ND	0.067	0.040	ug/l	
959-98-8	Endosulfan-I	ND	0.067	0.035	ug/l	
33213-65-9	Endosulfan-II	ND	0.067	0.033	ug/l	
76-44-8	Heptachlor	ND	0.067	0.030	ug/l	
1024-57-3	Heptachlor epoxide	ND	0.067	0.040	ug/l	
72-43-5	Methoxychlor	ND	0.13	0.045	ug/l	
2385-85-5	Mirex	ND	0.33	0.031	ug/l	
8001-35-2	Toxaphene	ND	1.7	1.1	ug/l	

CAS No.	Surrogate Recoveries	Limits
877-09-8	Tetrachloro-m-xylene	96% 30-137%
877-09-8	Tetrachloro-m-xylene	89% 30-137%
2051-24-3	Decachlorobiphenyl	83% 10-137%
2051-24-3	Decachlorobiphenyl	96% 10-137%

8.2.10
8

Leachate Blank Summary

Job Number: JD35488
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP37318-LB29	6G81504.D	1	12/29/21	CP	12/23/21	OP37318	G6G2887

The QC reported here applies to the following samples:

Method: SW846 8081B

JD35488-6

CAS No.	Compound	Result	RL	MDL	Units	Q
58-89-9	gamma-BHC (Lindane)	ND	0.067	0.040	ug/l	
12789-03-6	Chlordane	ND	3.3	1.4	ug/l	
60-57-1	Dieldrin	ND	0.067	0.051	ug/l	
72-54-8	4,4'-DDD	ND	0.067	0.038	ug/l	
72-55-9	4,4'-DDE	ND	0.067	0.034	ug/l	
50-29-3	4,4'-DDT	ND	0.067	0.046	ug/l	
72-20-8	Endrin	ND	0.067	0.040	ug/l	
959-98-8	Endosulfan-I	ND	0.067	0.035	ug/l	
33213-65-9	Endosulfan-II	ND	0.067	0.033	ug/l	
76-44-8	Heptachlor	ND	0.067	0.030	ug/l	
1024-57-3	Heptachlor epoxide	ND	0.067	0.040	ug/l	
72-43-5	Methoxychlor	ND	0.13	0.045	ug/l	
2385-85-5	Mirex	ND	0.33	0.031	ug/l	
8001-35-2	Toxaphene	ND	1.7	1.1	ug/l	

CAS No.	Surrogate Recoveries	Limits
877-09-8	Tetrachloro-m-xylene	90% 30-137%
877-09-8	Tetrachloro-m-xylene	87% 30-137%
2051-24-3	Decachlorobiphenyl	80% 10-137%
2051-24-3	Decachlorobiphenyl	82% 10-137%

Leachate Blank Summary

Job Number: JD35488
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP37424-LB10	6G81801.D	1	01/09/22	TL	12/29/21	OP37424	G6G2898

The QC reported here applies to the following samples:

Method: SW846 8081B

JD35488-7

CAS No.	Compound	Result	RL	MDL	Units	Q
58-89-9	gamma-BHC (Lindane)	ND	0.067	0.040	ug/l	
12789-03-6	Chlordane	ND	3.3	1.4	ug/l	
60-57-1	Dieldrin	ND	0.067	0.051	ug/l	
72-54-8	4,4'-DDD	ND	0.067	0.038	ug/l	
72-55-9	4,4'-DDE	ND	0.067	0.034	ug/l	
50-29-3	4,4'-DDT	ND	0.067	0.046	ug/l	
72-20-8	Endrin	ND	0.067	0.040	ug/l	
959-98-8	Endosulfan-I	ND	0.067	0.035	ug/l	
33213-65-9	Endosulfan-II	ND	0.067	0.033	ug/l	
76-44-8	Heptachlor	ND	0.067	0.030	ug/l	
1024-57-3	Heptachlor epoxide	ND	0.067	0.040	ug/l	
72-43-5	Methoxychlor	ND	0.13	0.045	ug/l	
2385-85-5	Mirex	ND	0.33	0.031	ug/l	
8001-35-2	Toxaphene	ND	1.7	1.1	ug/l	

CAS No.	Surrogate Recoveries	Limits	
877-09-8	Tetrachloro-m-xylene	95%	30-137%
877-09-8	Tetrachloro-m-xylene	87%	30-137%
2051-24-3	Decachlorobiphenyl	101%	10-137%
2051-24-3	Decachlorobiphenyl	114%	10-137%

8.2.12
8

Blank Spike Summary

Job Number: JD35488
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP37163-BS1	3G134642.D	1	12/20/21	CP	12/15/21	OP37163	G3G4913

The QC reported here applies to the following samples:

Method: SW846 8151A

JD35488-3, JD35488-4, JD35488-5

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
94-75-7	2,4-D	1.33	0.67	50	36-158
93-72-1	2,4,5-TP (Silvex)	0.267	0.12	45	44-158
88-85-7	Dinoseb	1.33	1.2	90 ^a	10-139

CAS No.	Surrogate Recoveries	BSP	Limits
19719-28-9	2,4-DCAA	64%	13-169%
19719-28-9	2,4-DCAA	64%	13-169%

(a) Reported from the 2nd signal. The %D of the CCV on the 1st signal exceeds the method criteria of 20%, so it being used for confirmation only.

* = Outside of Control Limits.

Blank Spike Summary

Job Number: JD35488
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP37316-BS1	3G134710.D	1	12/28/21	CP	12/23/21	OP37316	G3G4916

The QC reported here applies to the following samples:

Method: SW846 8151A

JD35488-6

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
94-75-7	2,4-D	1.33	1.1	82	36-158
93-72-1	2,4,5-TP (Silvex)	0.267	0.24	90	44-158
88-85-7	Dinoseb	1.33	2.6	195* a	10-139

CAS No.	Surrogate Recoveries	BSP	Limits
19719-28-9	2,4-DCAA	107%	13-169%
19719-28-9	2,4-DCAA	92%	13-169%

(a) Outside control limits. This compound outside control limits biased high in the associated CCV.

* = Outside of Control Limits.

8.3.2
8

Blank Spike Summary

Job Number: JD35488
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP37425-BS1	3G134913.D	1	01/11/22	RK	12/29/21	OP37425	G3G4923

The QC reported here applies to the following samples:

Method: SW846 8151A

JD35488-7

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
94-75-7	2,4-D	1.33	1.1	82	36-158
93-72-1	2,4,5-TP (Silvex)	0.267	0.23	86 ^a	44-158
88-85-7	Dinoseb	1.33	1.3	97	10-139

CAS No.	Surrogate Recoveries	BSP	Limits
19719-28-9	2,4-DCAA	98%	13-169%
19719-28-9	2,4-DCAA	102%	13-169%

(a) Reported from the 1st signal. The %D of the CCV on the 2nd signal exceeds the method criteria of 20%, so it being used for confirmation only.

* = Outside of Control Limits.



Blank Spike Summary

Job Number: JD35488
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP37318-BS1	6G81503.D	1	12/29/21	CP	12/23/21	OP37318	G6G2887

The QC reported here applies to the following samples:

Method: SW846 8081B

JD35488-6

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
58-89-9	gamma-BHC (Lindane)	0.5	0.41	82	37-178
60-57-1	Dieldrin	0.5	0.47	94	44-177
72-54-8	4,4'-DDD	0.5	0.43	86	42-183
72-55-9	4,4'-DDE	0.5	0.42	84	39-179
50-29-3	4,4'-DDT	0.5	0.47	94	39-190
72-20-8	Endrin	0.5	0.45	90	45-182
959-98-8	Endosulfan-I	0.5	0.45	90	40-172
33213-65-9	Endosulfan-II	0.5	0.44	88	41-174
76-44-8	Heptachlor	0.5	0.40	80	26-172
1024-57-3	Heptachlor epoxide	0.5	0.41	82	43-173
72-43-5	Methoxychlor	0.5	0.46	92	40-192
2385-85-5	Mirex	0.5	0.28	56	33-176

CAS No.	Surrogate Recoveries	BSP	Limits
877-09-8	Tetrachloro-m-xylene	74%	30-137%
877-09-8	Tetrachloro-m-xylene	83%	30-137%
2051-24-3	Decachlorobiphenyl	49%	10-137%
2051-24-3	Decachlorobiphenyl	55%	10-137%

* = Outside of Control Limits.

Blank Spike Summary

Job Number: JD35488
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP37424-BS1	6G81800.D	1	01/09/22	TL	12/29/21	OP37424	G6G2898

The QC reported here applies to the following samples:

Method: SW846 8081B

JD35488-7

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
58-89-9	gamma-BHC (Lindane)	0.5	0.49	98	37-178
60-57-1	Dieldrin	0.5	0.51	102	44-177
72-54-8	4,4'-DDD	0.5	0.47	94	42-183
72-55-9	4,4'-DDE	0.5	0.49	98	39-179
50-29-3	4,4'-DDT	0.5	0.44	88	39-190
72-20-8	Endrin	0.5	0.51	102	45-182
959-98-8	Endosulfan-I	0.5	0.53	106	40-172
33213-65-9	Endosulfan-II	0.5	0.52	104	41-174
76-44-8	Heptachlor	0.5	0.46	92	26-172
1024-57-3	Heptachlor epoxide	0.5	0.51	102	43-173
72-43-5	Methoxychlor	0.5	0.46	92	40-192
2385-85-5	Mirex	0.5	0.37	74	33-176

CAS No.	Surrogate Recoveries	BSP	Limits
877-09-8	Tetrachloro-m-xylene	101%	30-137%
877-09-8	Tetrachloro-m-xylene	94%	30-137%
2051-24-3	Decachlorobiphenyl	57%	10-137%
2051-24-3	Decachlorobiphenyl	64%	10-137%

* = Outside of Control Limits.

Blank Spike/Blank Spike Duplicate Summary

Job Number: JD35488
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP37051-BS1	OA155563.D	1	12/13/21	CP	12/09/21	OP37051	GOA5501
OP37051-BSD	OA155564.D	1	12/13/21	CP	12/09/21	OP37051	GOA5501

The QC reported here applies to the following samples:

Method: SW846 8151A

JD35488-1

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	BSD ug/l	BSD %	RPD	Limits Rec/RPD
94-75-7	2,4-D	1.33	1.4	105 ^a	1.5	112	7	36-158/47
93-72-1	2,4,5-TP (Silvex)	0.267	0.26	97	0.31	116	18	44-158/49
88-85-7	Dinoseb	1.33	1.5	112	1.8	135	18	10-139/97

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
19719-28-9	2,4-DCAA	85%	109%	13-169%
19719-28-9	2,4-DCAA	85%	100%	13-169%

(a) Reported from the 1st signal. The %D of the CCV on the 2nd signal exceeds the method criteria of 20%, so it being used for confirmation only.

* = Outside of Control Limits.

Blank Spike/Blank Spike Duplicate Summary

Job Number: JD35488
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP37156-BS1	3G134605.D	1	12/16/21	CP	12/14/21	OP37156	G3G4911
OP37156-BSD	3G134606.D	1	12/16/21	CP	12/14/21	OP37156	G3G4911

The QC reported here applies to the following samples:

Method: SW846 8151A

JD35488-2

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	BSD ug/l	BSD %	RPD	Limits Rec/RPD
94-75-7	2,4-D	1.33	1.4	105	0.87	65	47	36-158/47
93-72-1	2,4,5-TP (Silvex)	0.267	0.28	105 ^a	0.18	67 ^a	43 ^a	44-158/49
88-85-7	Dinoseb	1.33	1.7	127 ^b	1.1	82	43	10-139/97

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
19719-28-9	2,4-DCAA	98%	58%	13-169%
19719-28-9	2,4-DCAA	88%	107%	13-169%

(a) Reported from the 2nd signal. The %D of the CCV on the 1st signal exceeds the method criteria of 20%, so it being used for confirmation only.

(b) This compound outside control limits biased high in the associated CCV.

* = Outside of Control Limits.

Blank Spike/Blank Spike Duplicate Summary

Job Number: JD35488
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP37157-BS1	1G172101.D	1	12/15/21	CP	12/14/21	OP37157	G1G5938
OP37157-BSD	1G172102.D	1	12/16/21	CP	12/14/21	OP37157	G1G5938

The QC reported here applies to the following samples:

Method: SW846 8081B

JD35488-2

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	BSD ug/l	BSD %	RPD	Limits Rec/RPD
58-89-9	gamma-BHC (Lindane)	0.5	0.42	84	0.43	86	2	37-178/30
60-57-1	Dieldrin	0.5	0.48	96	0.49	98	2	44-177/30
72-54-8	4,4'-DDD	0.5	0.45	90	0.47	94	4	42-183/30
72-55-9	4,4'-DDE	0.5	0.45	90	0.46	92	2	39-179/30
50-29-3	4,4'-DDT	0.5	0.49	98	0.51	102	4	39-190/30
72-20-8	Endrin	0.5	0.50	100	0.51	102	2	45-182/30
959-98-8	Endosulfan-I	0.5	0.46	92	0.49	98	6	40-172/30
33213-65-9	Endosulfan-II	0.5	0.48	96	0.50	100	4	41-174/30
76-44-8	Heptachlor	0.5	0.43	86	0.45	90	5	26-172/30
1024-57-3	Heptachlor epoxide	0.5	0.48	96 ^a	0.50	100 ^a	4 ^a	43-173/30
72-43-5	Methoxychlor	0.5	0.55	110	0.53	106	4	40-192/30
2385-85-5	Mirex	0.5	0.41	82 ^b	0.43	86 ^b	5 ^b	33-176/30

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
877-09-8	Tetrachloro-m-xylene	68%	70%	30-137%
877-09-8	Tetrachloro-m-xylene	63%	65%	30-137%
2051-24-3	Decachlorobiphenyl	65%	66%	10-137%
2051-24-3	Decachlorobiphenyl	71%	71%	10-137%

(a) Reported from the 2nd signal. The %D of the CCV on the 1st signal exceeds the method criteria of 20%, so it being used for confirmation only.

(b) Reported from the 1st signal. The %D of the CCV on the 2nd signal exceeds the method criteria of 20%, so it being used for confirmation only.

* = Outside of Control Limits.

Blank Spike/Blank Spike Duplicate Summary

Job Number: JD35488
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP37162-BS1	6G81245.D	1	12/17/21	CP	12/15/21	OP37162	G6G2873
OP37162-BSD	6G81246.D	1	12/17/21	CP	12/15/21	OP37162	G6G2873

The QC reported here applies to the following samples:

Method: SW846 8081B

JD35488-1, JD35488-3, JD35488-4, JD35488-5

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	BSD ug/l	BSD %	RPD	Limits Rec/RPD
58-89-9	gamma-BHC (Lindane)	0.5	0.51	102	0.56	112	9	37-178/30
60-57-1	Dieldrin	0.5	0.52	104	0.52	104	0	44-177/30
72-54-8	4,4'-DDD	0.5	0.52	104	0.53	106	2	42-183/30
72-55-9	4,4'-DDE	0.5	0.49	98	0.52	104	6	39-179/30
50-29-3	4,4'-DDT	0.5	0.49	98	0.52	104	6	39-190/30
72-20-8	Endrin	0.5	0.55	110	0.56	112	2	45-182/30
959-98-8	Endosulfan-I	0.5	0.38	76	0.36	72	5	40-172/30
33213-65-9	Endosulfan-II	0.5	0.49	98	0.50	100	2	41-174/30
76-44-8	Heptachlor	0.5	0.51	102	0.50	100	2	26-172/30
1024-57-3	Heptachlor epoxide	0.5	0.53	106	0.52	104	2	43-173/30
72-43-5	Methoxychlor	0.5	0.55	110	0.58	116	5	40-192/30
2385-85-5	Mirex	0.5	0.35	70	0.45	90	14	33-176/30

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
877-09-8	Tetrachloro-m-xylene	75%	88%	30-137%
877-09-8	Tetrachloro-m-xylene	72%	74%	30-137%
2051-24-3	Decachlorobiphenyl	61%	72%	10-137%
2051-24-3	Decachlorobiphenyl	77%	80%	10-137%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JD35488
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP37051-MS	OA155573.D	1	12/13/21	CP	12/09/21	OP37051	GOA5501
OP37051-MSD	OA155574.D	1	12/13/21	CP	12/09/21	OP37051	GOA5501
JD36176-1A	OA155569.D	1	12/13/21	CP	12/09/21	OP37051	GOA5501

The QC reported here applies to the following samples:

Method: SW846 8151A

JD35488-1

CAS No.	Compound	JD36176-1A ug/l	Spike Q ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
94-75-7	2,4-D	ND	13.3	17.5	131	13.3	15.1	113	15	35-196/60
93-72-1	2,4,5-TP (Silvex)	ND	2.67	2.6	97	2.67	2.8	105	7	10-226/52
88-85-7	Dinoseb	ND	13.3	17.2	129* a	13.3	17.8	133* a	3	29-95/74

CAS No.	Surrogate Recoveries	MS	MSD	JD36176-1A	Limits
19719-28-9	2,4-DCAA	82%	97%	81%	13-169%
19719-28-9	2,4-DCAA	82%	118%	73%	13-169%

(a) Outside of in house control limits.

* = Outside of Control Limits.

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Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JD35488
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP37156-MS	3G134608.D	1	12/16/21	CP	12/14/21	OP37156	G3G4911
OP37156-MSD	3G134609.D	1	12/16/21	CP	12/14/21	OP37156	G3G4911
JD35488-2	3G134607.D	1	12/16/21	CP	12/14/21	OP37156	G3G4911

The QC reported here applies to the following samples:

Method: SW846 8151A

JD35488-2

CAS No.	Compound	JD35488-2 ug/l	Spike Q	ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
94-75-7	2,4-D	ND		13.3	13.9	104	13.3	15.7	118	12	35-196/60
93-72-1	2,4,5-TP (Silvex)	0.39	J	2.67	2.7	87	2.67	2.6	83	4	10-226/52
88-85-7	Dinoseb	ND		13.3	13.6	102* a	13.3	17.7	133* a	26	29-95/74

CAS No.	Surrogate Recoveries	MS	MSD	JD35488-2	Limits
19719-28-9	2,4-DCAA	84%	105%	68%	13-169%
19719-28-9	2,4-DCAA	82%	104%	84%	13-169%

(a) Outside of in house control limits.

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JD35488
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP37163-MS	3G134644.D	1	12/20/21	CP	12/15/21	OP37163	G3G4913
OP37163-MSD	3G134645.D	1	12/20/21	CP	12/15/21	OP37163	G3G4913
JD35487-4	3G134643.D	1	12/20/21	CP	12/15/21	OP37163	G3G4913

The QC reported here applies to the following samples:

Method: SW846 8151A

JD35488-3, JD35488-4, JD35488-5

CAS No.	Compound	JD35487-4 ug/l	Spike Q	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
94-75-7	2,4-D	ND	13.3	9.9	74	13.3	12.4	93	22	35-196/60
93-72-1	2,4,5-TP (Silvex)	ND	2.67	1.2	45	2.67	1.3	49	8	10-226/52
88-85-7	Dinoseb	ND	13.3	13.1	98* a	13.3	13.5	101* a	3	29-95/74

CAS No.	Surrogate Recoveries	MS	MSD	JD35487-4	Limits
19719-28-9	2,4-DCAA	63%	65%	70%	13-169%
19719-28-9	2,4-DCAA	61%	56%	54%	13-169%

(a) Outside control limits due to matrix interference.

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JD35488
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP37316-MS	3G134713.D	1	12/28/21	CP	12/23/21	OP37316	G3G4916
OP37316-MSD	3G134714.D	1	12/28/21	CP	12/23/21	OP37316	G3G4916
JD36933-1A	3G134712.D	1	12/28/21	CP	12/23/21	OP37316	G3G4916

The QC reported here applies to the following samples:

Method: SW846 8151A

JD35488-6

CAS No.	Compound	JD36933-1A ug/l	Spike Q	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
94-75-7	2,4-D	ND	13.3	11.7	88	13.3	13.0	97	11	35-196/60
93-72-1	2,4,5-TP (Silvex)	ND	2.67	2.4	90	2.67	2.7	101	12	10-226/52
88-85-7	Dinoseb	ND	13.3	28.5	214* a	13.3	31.7	238* a	11 b	29-95/74

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CAS No.	Surrogate Recoveries	MS	MSD	JD36933-1A	Limits
19719-28-9	2,4-DCAA	100%	112%	94%	13-169%
19719-28-9	2,4-DCAA	76%	84%	56%	13-169%

- (a) Outside in house control limits. This compound outside control limits biased high in the associated CCV.
- (b) This compound outside control limits biased high in the associated CCV.

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JD35488
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP37425-MS	3G134865.D	1	01/07/22	RK	12/29/21	OP37425	G3G4921
OP37425-MSD	3G134866.D	1	01/07/22	RK	12/29/21	OP37425	G3G4921
JD37319-1A	3G134864.D	1	01/07/22	RK	12/29/21	OP37425	G3G4921

The QC reported here applies to the following samples:

Method: SW846 8151A

JD35488-7

CAS No.	Compound	JD37319-1A ug/l	Spike Q	ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
94-75-7	2,4-D	ND	13.3	5.5	41	13.3	3.7	28* a	39	35-196/60	
93-72-1	2,4,5-TP (Silvex)	ND	2.67	1.3	49	2.67	1.4	52	7	10-226/52	
88-85-7	Dinoseb	ND	13.3	8.2	61	13.3	9.1	68	10	29-95/74	

CAS No.	Surrogate Recoveries	MS	MSD	JD37319-1A	Limits
19719-28-9	2,4-DCAA	74%	74%	99%	13-169%
19719-28-9	2,4-DCAA	50%	80%	92%	13-169%

(a) Outside control limits due to matrix interference.

* = Outside of Control Limits.



Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JD35488
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP37157-MS	1G172104.D	1	12/16/21	CP	12/14/21	OP37157	G1G5938
OP37157-MSD	1G172105.D	1	12/16/21	CP	12/14/21	OP37157	G1G5938
JD35488-2	1G172103.D	1	12/16/21	CP	12/14/21	OP37157	G1G5938

The QC reported here applies to the following samples:

Method: SW846 8081B

JD35488-2

CAS No.	Compound	JD35488-2 ug/l	Spike Q ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
58-89-9	gamma-BHC (Lindane)	ND	1.67	2.3	138	1.67	3.0	180* ^a	26	39-160/97
12789-03-6	Chlordane	ND		ND			ND		nc	81-123/10
60-57-1	Dieldrin	ND	1.67	2.1	126	1.67	2.5	150	17	41-161/94
72-54-8	4,4'-DDD	ND	1.67	1.9	114	1.67	2.2	132	15	39-167/97
72-55-9	4,4'-DDE	ND	1.67	2.1	126	1.67	2.4	144	13	37-156/94
50-29-3	4,4'-DDT	ND	1.67	2.2	132	1.67	2.5	150	13	34-172/99
72-20-8	Endrin	ND	1.67	2.5	150	1.67	2.8	168	11	43-169/95
959-98-8	Endosulfan-I	ND	1.67	2.4	144	1.67	2.6	156* ^a	8	42-154/95
33213-65-9	Endosulfan-II	ND	1.67	2.2	132	1.67	2.5	150	13	42-159/94
76-44-8	Heptachlor	ND	1.67	2.5	150	1.67	2.5	150	0	35-152/102
1024-57-3	Heptachlor epoxide	ND	1.67	2.1	126	1.67	2.2	132	5	42-159/96
72-43-5	Methoxychlor	ND	1.67	3.9	234* ^a	1.67	4.3	258* ^a	10	47-170/99
2385-85-5	Mirex	ND	1.67	1.5	90	1.67	1.8	108	18* ^b	-/10
8001-35-2	Toxaphene	ND		ND			ND		nc	50-150/8

CAS No.	Surrogate Recoveries	MS	MSD	JD35488-2	Limits
877-09-8	Tetrachloro-m-xylene	105%	122%	106%	30-137%
877-09-8	Tetrachloro-m-xylene	77%	82%	68%	30-137%
2051-24-3	Decachlorobiphenyl	57%	62%	63%	10-137%
2051-24-3	Decachlorobiphenyl	41%	49%	48%	10-137%

- (a) Outside control limits due to matrix interference.
- (b) Analytical precision exceeds in-house control limits.

* = Outside of Control Limits.

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Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JD35488
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP37162-MS	6G81251.D	1	12/17/21	CP	12/15/21	OP37162	G6G2873
OP37162-MSD	6G81252.D	1	12/17/21	CP	12/15/21	OP37162	G6G2873
JD35487-4	6G81250.D	1	12/17/21	CP	12/15/21	OP37162	G6G2873

The QC reported here applies to the following samples:

Method: SW846 8081B

JD35488-1, JD35488-3, JD35488-4, JD35488-5

CAS No.	Compound	JD35487-4 ug/l	Spike Q ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
58-89-9	gamma-BHC (Lindane)	ND	1.67	2.2	132	1.67	2.1	126	5	39-160/97
12789-03-6	Chlordane	ND		ND			ND		nc	81-123/10
60-57-1	Dieldrin	ND	1.67	2.0	120	1.67	2.1	126	5	41-161/94
72-54-8	4,4'-DDD	ND	1.67	2.4	144	1.67	2.2	132	9	39-167/97
72-55-9	4,4'-DDE	ND	1.67	2.2	132	1.67	2.1	126	5	37-156/94
50-29-3	4,4'-DDT	ND	1.67	2.1	126	1.67	2.1	126	0	34-172/99
72-20-8	Endrin	ND	1.67	1.9	114	1.67	2.0	120	5	43-169/95
959-98-8	Endosulfan-I	ND	1.67	2.6	156* a	1.67	2.6	156* a	0	42-154/95
33213-65-9	Endosulfan-II	ND	1.67	0.58	35* a	1.67	0.78	47	29	42-159/94
76-44-8	Heptachlor	ND	1.67	2.2	132	1.67	2.4	144	9	35-152/102
1024-57-3	Heptachlor epoxide	ND	1.67	2.1	126	1.67	2.6	156	21	42-159/96
72-43-5	Methoxychlor	ND	1.67	2.4	144	1.67	2.4	144	0	47-170/99
2385-85-5	Mirex	ND	1.67	1.6	96	1.67	2.2	132	32* b	-/10
8001-35-2	Toxaphene	ND		ND			ND		nc	50-150/8

CAS No.	Surrogate Recoveries	MS	MSD	JD35487-4	Limits
877-09-8	Tetrachloro-m-xylene	80%	75%	70%	30-137%
877-09-8	Tetrachloro-m-xylene	63%	63%	68%	30-137%
2051-24-3	Decachlorobiphenyl	66%	66%	45%	10-137%
2051-24-3	Decachlorobiphenyl	88%	75%	63%	10-137%

(a) Outside of in house control limits.

(b) Analytical precision exceeds in-house control limits.

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JD35488
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP37318-MS	6G81507.D	1	12/29/21	CP	12/23/21	OP37318	G6G2887
OP37318-MSD	6G81508.D	1	12/29/21	CP	12/23/21	OP37318	G6G2887
JD36933-1A	6G81506.D	1	12/29/21	CP	12/23/21	OP37318	G6G2887

The QC reported here applies to the following samples:

Method: SW846 8081B

JD35488-6

CAS No.	Compound	JD36933-1A Spike		MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
		ug/l	Q							
58-89-9	gamma-BHC (Lindane)	ND	1.67	1.5	90	1.67	1.4	84	7	39-160/97
12789-03-6	Chlordane	ND		ND			ND		nc	81-123/10
60-57-1	Dieldrin	ND	1.67	1.5	90	1.67	1.4	84	7	41-161/94
72-54-8	4,4'-DDD	ND	1.67	1.5	90	1.67	1.4	84	7	39-167/97
72-55-9	4,4'-DDE	ND	1.67	1.5	90	1.67	1.4	84	7	37-156/94
50-29-3	4,4'-DDT	ND	1.67	1.6	96	1.67	1.6	96	0	34-172/99
72-20-8	Endrin	ND	1.67	1.6	96	1.67	1.5	90	6	43-169/95
959-98-8	Endosulfan-I	ND	1.67	1.5	90	1.67	1.5	90	0	42-154/95
33213-65-9	Endosulfan-II	ND	1.67	1.6	96	1.67	1.5	90	6	42-159/94
76-44-8	Heptachlor	ND	1.67	1.5	90	1.67	1.4	84	7	35-152/102
1024-57-3	Heptachlor epoxide	ND	1.67	1.5	90	1.67	1.5	90	0	42-159/96
72-43-5	Methoxychlor	ND	1.67	1.5	90	1.67	1.4	84	7	47-170/99
2385-85-5	Mirex	ND	1.67	1.4	84	1.67	1.4	84	0	-/10
8001-35-2	Toxaphene	ND		ND			ND		nc	50-150/8

CAS No.	Surrogate Recoveries	MS	MSD	JD36933-1A	Limits
877-09-8	Tetrachloro-m-xylene	86%	89%	81%	30-137%
877-09-8	Tetrachloro-m-xylene	81%	79%	76%	30-137%
2051-24-3	Decachlorobiphenyl	84%	84%	77%	10-137%
2051-24-3	Decachlorobiphenyl	81%	79%	79%	10-137%

* = Outside of Control Limits.



Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JD35488
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP37424-MS	6G81803.D	1	01/09/22	TL	12/29/21	OP37424	G6G2898
OP37424-MSD	6G81804.D	1	01/09/22	TL	12/29/21	OP37424	G6G2898
JD37319-1A	6G81802.D	1	01/09/22	TL	12/29/21	OP37424	G6G2898

The QC reported here applies to the following samples:

Method: SW846 8081B

JD35488-7

CAS No.	Compound	JD37319-1A Spike		MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
		ug/l	Q							
58-89-9	gamma-BHC (Lindane)	ND	1.67	1.6	96	1.67	1.4	84	13	39-160/97
12789-03-6	Chlordane	ND		ND			ND		nc	81-123/10
60-57-1	Dieldrin	ND	1.67	1.8	108	1.67	1.5	90	18	41-161/94
72-54-8	4,4'-DDD	ND	1.67	1.8	108	1.67	1.5	90	18	39-167/97
72-55-9	4,4'-DDE	ND	1.67	1.7	102	1.67	1.4	84	19	37-156/94
50-29-3	4,4'-DDT	ND	1.67	1.9	114	1.67	1.5	90	24	34-172/99
72-20-8	Endrin	ND	1.67	1.9	114	1.67	1.6	96	17	43-169/95
959-98-8	Endosulfan-I	ND	1.67	1.9	114	1.67	1.6	96	17	42-154/95
33213-65-9	Endosulfan-II	ND	1.67	1.9	114	1.67	1.6	96	17	42-159/94
76-44-8	Heptachlor	ND	1.67	1.7	102	1.67	1.5	90	13	35-152/102
1024-57-3	Heptachlor epoxide	ND	1.67	1.7	102	1.67	1.5	90	13	42-159/96
72-43-5	Methoxychlor	ND	1.67	1.6	96	1.67	1.3	78	21	47-170/99
2385-85-5	Mirex	ND	1.67	1.7	102	1.67	1.6	96	6	-/10
8001-35-2	Toxaphene	ND		ND			ND		nc	50-150/8

CAS No.	Surrogate Recoveries	MS	MSD	JD37319-1A Limits	
877-09-8	Tetrachloro-m-xylene	96%	98%	75%	30-137%
877-09-8	Tetrachloro-m-xylene	89%	93%	67%	30-137%
2051-24-3	Decachlorobiphenyl	96%	98%	83%	10-137%
2051-24-3	Decachlorobiphenyl	116%	111%	84%	10-137%

* = Outside of Control Limits.

Leachate Spike Summary

Job Number: JD35488
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP37051-LS8	OA155573.D	1	12/13/21	CP	12/09/21	OP37051	GOA5501
JD36176-1A	OA155569.D	1	12/13/21	CP	12/09/21	OP37051	GOA5501

The QC reported here applies to the following samples:

Method: SW846 8151A

JD35488-1

CAS No.	Compound	JD36176-1A ug/l	Spike Q	ug/l	LS ug/l	LS %	Limits
94-75-7	2,4-D	ND	13.3	17.5	131	35-196	
93-72-1	2,4,5-TP (Silvex)	ND	2.67	2.6	97	10-226	
88-85-7	Dinoseb	ND	13.3	17.2	129* a	29-95	

CAS No.	Surrogate Recoveries	LS	JD36176-1A	Limits
19719-28-9	2,4-DCAA	82%	81%	13-169%
19719-28-9	2,4-DCAA	82%	73%	13-169%

(a) Outside of in house control limits.

* = Outside of Control Limits.

Leachate Spike Summary

Job Number: JD35488
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP37156-LS7	3G134608.D	1	12/16/21	CP	12/14/21	OP37156	G3G4911
JD35488-2	3G134607.D	1	12/16/21	CP	12/14/21	OP37156	G3G4911

The QC reported here applies to the following samples:

Method: SW846 8151A

JD35488-2

CAS No.	Compound	JD35488-2 ug/l	Spike Q	ug/l	LS ug/l	LS %	Limits
94-75-7	2,4-D	ND		13.3	13.9	104	35-196
93-72-1	2,4,5-TP (Silvex)	0.39	J	2.67	2.7	87	10-226
88-85-7	Dinoseb	ND		13.3	13.6	102* a	29-95

CAS No.	Surrogate Recoveries	LS	JD35488-2	Limits
19719-28-9	2,4-DCAA	84%	68%	13-169%
19719-28-9	2,4-DCAA	82%	84%	13-169%

(a) Outside of in house control limits.

* = Outside of Control Limits.

Leachate Spike Summary

Job Number: JD35488
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP37163-LS13	3G134644.D	1	12/20/21	CP	12/15/21	OP37163	G3G4913
JD35487-4	3G134643.D	1	12/20/21	CP	12/15/21	OP37163	G3G4913

The QC reported here applies to the following samples:

Method: SW846 8151A

JD35488-3, JD35488-4, JD35488-5

CAS No.	Compound	JD35487-4 ug/l	Spike Q	LS ug/l	LS %	Limits
94-75-7	2,4-D	ND	13.3	9.9	74	35-196
93-72-1	2,4,5-TP (Silvex)	ND	2.67	1.2	45	10-226
88-85-7	Dinoseb	ND	13.3	13.1	98* a	29-95

CAS No.	Surrogate Recoveries	LS	JD35487-4	Limits
19719-28-9	2,4-DCAA	63%	70%	13-169%
19719-28-9	2,4-DCAA	61%	54%	13-169%

(a) Outside control limits due to matrix interference.

* = Outside of Control Limits.

8.6.3
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Leachate Spike Summary

Job Number: JD35488
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP37316-LS29	3G134713.D	1	12/28/21	CP	12/23/21	OP37316	G3G4916
JD36933-1A	3G134712.D	1	12/28/21	CP	12/23/21	OP37316	G3G4916

The QC reported here applies to the following samples:

Method: SW846 8151A

JD35488-6

CAS No.	Compound	JD36933-1A ug/l	Spike Q	ug/l	LS ug/l	LS %	Limits
94-75-7	2,4-D	ND		13.3	11.7	88	35-196
93-72-1	2,4,5-TP (Silvex)	ND		2.67	2.4	90	10-226
88-85-7	Dinoseb	ND		13.3	28.5	214* a	29-95

CAS No.	Surrogate Recoveries	LS	JD36933-1A	Limits
19719-28-9	2,4-DCAA	100%	94%	13-169%
19719-28-9	2,4-DCAA	76%	56%	13-169%

(a) Outside in house control limits. This compound outside control limits biased high in the associated CCV.

* = Outside of Control Limits.

Leachate Spike Summary

Job Number: JD35488
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP37425-LS10	3G134865.D	1	01/07/22	RK	12/29/21	OP37425	G3G4921
JD37319-1A	3G134864.D	1	01/07/22	RK	12/29/21	OP37425	G3G4921

The QC reported here applies to the following samples:

Method: SW846 8151A

JD35488-7

CAS No.	Compound	JD37319-1A ug/l	Spike Q	ug/l	LS ug/l	LS %	Limits
94-75-7	2,4-D	ND		13.3	5.5	41	35-196
93-72-1	2,4,5-TP (Silvex)	ND		2.67	1.3	49	10-226
88-85-7	Dinoseb	ND		13.3	8.2	61	29-95

CAS No.	Surrogate Recoveries	LS	JD37319-1A	Limits
19719-28-9	2,4-DCAA	74%	99%	13-169%
19719-28-9	2,4-DCAA	50%	92%	13-169%

* = Outside of Control Limits.

Leachate Spike Summary

Job Number: JD35488
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP37157-LS7	1G172104.D	1	12/16/21	CP	12/14/21	OP37157	G1G5938
JD35488-2	1G172103.D	1	12/16/21	CP	12/14/21	OP37157	G1G5938

The QC reported here applies to the following samples:

Method: SW846 8081B

JD35488-2

CAS No.	Compound	JD35488-2 ug/l	Spike Q	LS ug/l	LS %	Limits
58-89-9	gamma-BHC (Lindane)	ND	1.67	2.3	138	39-160
12789-03-6	Chlordane	ND		ND		81-123
60-57-1	Dieldrin	ND	1.67	2.1	126	41-161
72-54-8	4,4'-DDD	ND	1.67	1.9	114	39-167
72-55-9	4,4'-DDE	ND	1.67	2.1	126	37-156
50-29-3	4,4'-DDT	ND	1.67	2.2	132	34-172
72-20-8	Endrin	ND	1.67	2.5	150	43-169
959-98-8	Endosulfan-I	ND	1.67	2.4	144	42-154
33213-65-9	Endosulfan-II	ND	1.67	2.2	132	42-159
76-44-8	Heptachlor	ND	1.67	2.5	150	35-152
1024-57-3	Heptachlor epoxide	ND	1.67	2.1	126	42-159
72-43-5	Methoxychlor	ND	1.67	3.9	234* a	47-170
2385-85-5	Mirex	ND	1.67	1.5	90	50-150 b
8001-35-2	Toxaphene	ND		ND		50-150

CAS No.	Surrogate Recoveries	LS	JD35488-2	Limits
877-09-8	Tetrachloro-m-xylene	105%	106%	30-137%
877-09-8	Tetrachloro-m-xylene	77%	68%	30-137%
2051-24-3	Decachlorobiphenyl	57%	63%	10-137%
2051-24-3	Decachlorobiphenyl	41%	48%	10-137%

(a) Outside control limits due to matrix interference.

(b) Advisory control limits.

* = Outside of Control Limits.

Leachate Spike Summary

Job Number: JD35488
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP37162-LS13	6G81251.D	1	12/17/21	CP	12/15/21	OP37162	G6G2873
JD35487-4	6G81250.D	1	12/17/21	CP	12/15/21	OP37162	G6G2873

The QC reported here applies to the following samples:

Method: SW846 8081B

JD35488-1, JD35488-3, JD35488-4, JD35488-5

CAS No.	Compound	JD35487-4 ug/l	Spike Q	LS ug/l	LS %	Limits
58-89-9	gamma-BHC (Lindane)	ND	1.67	2.2	132	39-160
12789-03-6	Chlordane	ND		ND		81-123
60-57-1	Dieldrin	ND	1.67	2.0	120	41-161
72-54-8	4,4'-DDD	ND	1.67	2.4	144	39-167
72-55-9	4,4'-DDE	ND	1.67	2.2	132	37-156
50-29-3	4,4'-DDT	ND	1.67	2.1	126	34-172
72-20-8	Endrin	ND	1.67	1.9	114	43-169
959-98-8	Endosulfan-I	ND	1.67	2.6	156* a	42-154
33213-65-9	Endosulfan-II	ND	1.67	0.58	35* a	42-159
76-44-8	Heptachlor	ND	1.67	2.2	132	35-152
1024-57-3	Heptachlor epoxide	ND	1.67	2.1	126	42-159
72-43-5	Methoxychlor	ND	1.67	2.4	144	47-170
2385-85-5	Mirex	ND	1.67	1.6	96	50-150 b
8001-35-2	Toxaphene	ND		ND		50-150

CAS No.	Surrogate Recoveries	LS	JD35487-4	Limits
877-09-8	Tetrachloro-m-xylene	80%	70%	30-137%
877-09-8	Tetrachloro-m-xylene	63%	68%	30-137%
2051-24-3	Decachlorobiphenyl	66%	45%	10-137%
2051-24-3	Decachlorobiphenyl	88%	63%	10-137%

(a) Outside of in house control limits.

(b) Advisory control limits.

* = Outside of Control Limits.

Leachate Spike Summary

Job Number: JD35488
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP37318-LS29	6G81507.D	1	12/29/21	CP	12/23/21	OP37318	G6G2887
JD36933-1A	6G81506.D	1	12/29/21	CP	12/23/21	OP37318	G6G2887

The QC reported here applies to the following samples:

Method: SW846 8081B

JD35488-6

CAS No.	Compound	JD36933-1A ug/l	Spike Q	ug/l	LS ug/l	LS %	Limits
58-89-9	gamma-BHC (Lindane)	ND		1.67	1.5	90	39-160
12789-03-6	Chlordane	ND			ND		81-123
60-57-1	Dieldrin	ND		1.67	1.5	90	41-161
72-54-8	4,4'-DDD	ND		1.67	1.5	90	39-167
72-55-9	4,4'-DDE	ND		1.67	1.5	90	37-156
50-29-3	4,4'-DDT	ND		1.67	1.6	96	34-172
72-20-8	Endrin	ND		1.67	1.6	96	43-169
959-98-8	Endosulfan-I	ND		1.67	1.5	90	42-154
33213-65-9	Endosulfan-II	ND		1.67	1.6	96	42-159
76-44-8	Heptachlor	ND		1.67	1.5	90	35-152
1024-57-3	Heptachlor epoxide	ND		1.67	1.5	90	42-159
72-43-5	Methoxychlor	ND		1.67	1.5	90	47-170
2385-85-5	Mirex	ND		1.67	1.4	84	50-150 ^a
8001-35-2	Toxaphene	ND			ND		50-150

CAS No.	Surrogate Recoveries	LS	JD36933-1A	Limits
877-09-8	Tetrachloro-m-xylene	86%	81%	30-137%
877-09-8	Tetrachloro-m-xylene	81%	76%	30-137%
2051-24-3	Decachlorobiphenyl	84%	77%	10-137%
2051-24-3	Decachlorobiphenyl	81%	79%	10-137%

(a) Advisory control limits.

* = Outside of Control Limits.

8.6.8
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Leachate Spike Summary

Job Number: JD35488
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP37424-LS10	6G81803.D	1	01/09/22	TL	12/29/21	OP37424	G6G2898
JD37319-1A	6G81802.D	1	01/09/22	TL	12/29/21	OP37424	G6G2898

The QC reported here applies to the following samples:

Method: SW846 8081B

JD35488-7

CAS No.	Compound	JD37319-1A ug/l	Spike Q	ug/l	LS ug/l	LS %	Limits
58-89-9	gamma-BHC (Lindane)	ND		1.67	1.6	96	39-160
12789-03-6	Chlordane	ND			ND		81-123
60-57-1	Dieldrin	ND		1.67	1.8	108	41-161
72-54-8	4,4'-DDD	ND		1.67	1.8	108	39-167
72-55-9	4,4'-DDE	ND		1.67	1.7	102	37-156
50-29-3	4,4'-DDT	ND		1.67	1.9	114	34-172
72-20-8	Endrin	ND		1.67	1.9	114	43-169
959-98-8	Endosulfan-I	ND		1.67	1.9	114	42-154
33213-65-9	Endosulfan-II	ND		1.67	1.9	114	42-159
76-44-8	Heptachlor	ND		1.67	1.7	102	35-152
1024-57-3	Heptachlor epoxide	ND		1.67	1.7	102	42-159
72-43-5	Methoxychlor	ND		1.67	1.6	96	47-170
2385-85-5	Mirex	ND		1.67	1.7	102	50-150 ^a
8001-35-2	Toxaphene	ND			ND		50-150

CAS No.	Surrogate Recoveries	LS	JD37319-1A	Limits
877-09-8	Tetrachloro-m-xylene	96%	75%	30-137%
877-09-8	Tetrachloro-m-xylene	89%	67%	30-137%
2051-24-3	Decachlorobiphenyl	96%	83%	10-137%
2051-24-3	Decachlorobiphenyl	116%	84%	10-137%

(a) Advisory control limits.

* = Outside of Control Limits.

8.6.9
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Surrogate Recovery Summary

Job Number: JD35488
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Method: SW846 8151A	Matrix: LEACHATE
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Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1 ^a	S1 ^b
JD35488-1	OA155568.D	112	91
JD35488-2	3G134607.D	68	84
JD35488-3	3G134646.D	62	54
JD35488-4	3G134647.D	63	60
JD35488-5	3G134648.D	53	42
JD35488-6	3G134715.D	100	67
JD35488-7	3G134861.D	139	146
OP37051-BS1	OA155563.D	85	85
OP37051-BSD	OA155564.D	109	100
OP37051-LB5	OA155570.D	87	95
OP37051-LB8	OA155581.D	74	59
OP37051-LS8	OA155573.D	82	82
OP37051-MB1	OA155562.D	77	69
OP37051-MS	OA155573.D	82	82
OP37051-MSD	OA155574.D	97	118
OP37156-BS1	3G134605.D	98	88
OP37156-BSD	3G134606.D	58	107
OP37156-LB7	3G134610.D	51	47
OP37156-LS7	3G134608.D	84	82
OP37156-MB1	3G134604.D	85	86
OP37156-MS	3G134608.D	84	82
OP37156-MSD	3G134609.D	105	104
OP37163-BS1	3G134642.D	64	64
OP37163-LB13	3G134649.D	92	62
OP37163-LB16	3G134660.D	82	62
OP37163-LS13	3G134644.D	63	61
OP37163-MB1	3G134641.D	80	69
OP37163-MS	3G134644.D	63	61
OP37163-MSD	3G134645.D	65	56
OP37316-BS1	3G134710.D	107	92
OP37316-LB29	3G134717.D	104	71
OP37316-LS29	3G134713.D	100	76
OP37316-MB1	3G134709.D	85	67
OP37316-MS	3G134713.D	100	76
OP37316-MSD	3G134714.D	112	84
OP37425-BS1	3G134913.D	98	102
OP37425-LB10	3G134869.D	63	59
OP37425-LS10	3G134865.D	74	50
OP37425-MB1	3G134912.D	75	96
OP37425-MS	3G134865.D	74	50

Surrogate Recovery Summary

Job Number: JD35488
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Method: SW846 8151A	Matrix: LEACHATE
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Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1 ^a	S1 ^b
OP37425-MSD	3G134866.D	74	80

Surrogate Compounds	Recovery Limits
S1 = 2,4-DCAA	13-169%

- (a) Recovery from GC signal #2
- (b) Recovery from GC signal #1

Surrogate Recovery Summary

Job Number: JD35488
Account: CRATXH GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Method: SW846 8081B	Matrix: LEACHATE
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Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1 ^a	S1 ^b	S2 ^a	S2 ^b
JD35488-1	6G81253.D	56	55	36	54
JD35488-2	1G172103.D	106	68	63	48
JD35488-3	6G81254.D	66	57	75	64
JD35488-4	6G81255.D	68	67	57	52
JD35488-5	6G81256.D	73	66	77	76
JD35488-6	6G81523.D	91	88	82	88
JD35488-7	6G81815.D	81	75	95	110
OP37157-BS1	1G172101.D	68	63	65	71
OP37157-BSD	1G172102.D	70	65	66	71
OP37157-LB7	1G172106.D	79	72	83	73
OP37157-LS7	1G172104.D	105	77	57	41
OP37157-MB1	1G172100.D	84	81	80	91
OP37157-MS	1G172104.D	105	77	57	41
OP37157-MSD	1G172105.D	122	82	62	49
OP37162-BS1	6G81245.D	75	72	61	77
OP37162-BSD	6G81246.D	88	74	72	80
OP37162-LB13	6G81257.D	67	63	53	70
OP37162-LB16	6G81258.D	96	89	83	96
OP37162-LS13	6G81251.D	80	63	66	88
OP37162-MB1	6G81244.D	69	64	47	60
OP37162-MS	6G81251.D	80	63	66	88
OP37162-MSD	6G81252.D	75	63	66	75
OP37318-BS1	6G81503.D	74	83	49	55
OP37318-LB29	6G81504.D	90	87	80	82
OP37318-LS29	6G81507.D	86	81	84	81
OP37318-MB1	6G81502.D	79	73	74	68
OP37318-MS	6G81507.D	86	81	84	81
OP37318-MSD	6G81508.D	89	79	84	79
OP37424-BS1	6G81800.D	101	94	57	64
OP37424-LB10	6G81801.D	95	87	101	114
OP37424-LS10	6G81803.D	96	89	96	116
OP37424-MB1	6G81799.D	97	86	88	96
OP37424-MS	6G81803.D	96	89	96	116
OP37424-MSD	6G81804.D	98	93	98	111

Surrogate Compounds

Recovery Limits

S1 = Tetrachloro-m-xylene
 S2 = Decachlorobiphenyl

30-137%
 10-137%

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Surrogate Recovery Summary

Job Number: JD35488

Account: CRATXH GHD Services Inc.

Project: SJRWP - PCFSE, Harris County, TX

Method: SW846 8081B	Matrix: LEACHATE
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Samples and QC shown here apply to the above method

Surrogate Compounds	Recovery Limits
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(a) Recovery from GC signal #1

(b) Recovery from GC signal #2

Metals Analysis

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Matrix Spike and Duplicate Summaries
- Blank Spike and Lab Control Sample Summaries
- Serial Dilution Summaries

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: JD35488
Account: CRATXH - GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

QC Batch ID: MP30254
Matrix Type: LEACHATE

Methods: SW846 6010D
Units: mg/l

Prep Date: 12/09/21

Metal	RL	IDL	MDL	MB raw	final
Aluminum	0.20	.0092	.046		
Antimony	0.10	.0028	.0047	-0.00020	<0.10
Arsenic	0.10	.0026	.0028	-0.0016	<0.10
Barium	0.20	.0002	.013	0.0044	<0.20
Beryllium	0.0020	.0002	.0005	0.0	<0.0020
Bismuth	0.020	.0025	.004		
Boron	0.10	.0018	.063		
Cadmium	0.0040	.0004	.001	0.0	<0.0040
Calcium	5.0	.013	.099		
Chromium	0.010	.0007	.002	-0.00010	<0.010
Cobalt	0.050	.0006	.0026		
Copper	0.010	.0007	.0059		
Iron	0.10	.0033	.032		
Lead	0.10	.002	.0018	0.00060	<0.10
Lithium	0.050	.0015	.0073		
Magnesium	5.0	.025	.14		
Manganese	0.015	.0001	.0014		
Molybdenum	0.020	.0006	.0036		
Nickel	0.010	.0008	.0017	0.00030	<0.010
Phosphorus	0.050	.007	.018		
Potassium	10	.035	.2		
Selenium	0.10	.0036	.0049	-0.0010	<0.10
Silicon	0.20	.0022	.1		
Silver	0.010	.0006	.0019	-0.00090	<0.010
Sodium	10	.014	.57		
Strontium	0.010	.0001	.001		
Sulfur	0.050	.0037	.045		
Thallium	0.10	.0052	.0018		
Tin	0.010	.0014	.0037		
Titanium	0.010	.0008	.0025		
Tungsten	0.050	.0013	.04		
Vanadium	0.050	.0005	.0018	0.00010	<0.050
Zinc	0.020	.0003	.0069		

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: JD35488
Account: CRATXH - GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

QC Batch ID: MP30254
Matrix Type: LEACHATE

Methods: SW846 6010D
Units: mg/l

Prep Date: 12/09/21

Metal	RL	IDL	MDL	MB raw	final
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Zirconium 0.010 .0005 .0041

Associated samples MP30254: JD35488-2

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: JD35488
 Account: CRATXH - GHD Services Inc.
 Project: SJRWP - PCFSE, Harris County, TX

QC Batch ID: MP30254
 Matrix Type: LEACHATE

Methods: SW846 6010D
 Units: mg/l

Prep Date: 12/09/21

Metal	JD35488-2 Original MS		SpikeLot MPSPK2	% Rec	QC Limits
Aluminum					
Antimony	0.0	1.8	2.0	90.0	75-125
Arsenic	0.0042	1.9	2.0	94.8	75-125
Barium	0.057	1.8	2.0	87.2	75-125
Beryllium	0.0	1.9	2.0	95.0	75-125
Bismuth					
Boron					
Cadmium	0.0	1.9	2.0	95.0	75-125
Calcium					
Chromium	0.0016	1.9	2.0	94.9	75-125
Cobalt					
Copper					
Iron					
Lead	0.0026	1.9	2.0	94.9	75-125
Lithium					
Magnesium					
Manganese					
Molybdenum					
Nickel	0.0045	1.9	2.0	94.8	75-125
Phosphorus					
Potassium					
Selenium	0.0	1.8	2.0	90.0	75-125
Silicon					
Silver	0.0	0.25	0.25	100.0	75-125
Sodium					
Strontium					
Sulfur					
Thallium					
Tin					
Titanium					
Tungsten					
Vanadium	0.0030	1.9	2.0	94.9	75-125
Zinc					

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MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: JD35488
 Account: CRATXH - GHD Services Inc.
 Project: SJRWP - PCFSE, Harris County, TX

QC Batch ID: MP30254
 Matrix Type: LEACHATE

Methods: SW846 6010D
 Units: mg/l

Prep Date: 12/09/21

Metal	JD35488-2 Original MS	SpikeLot MPSPK2	% Rec	QC Limits
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Zirconium

Associated samples MP30254: JD35488-2

Results < IDL are shown as zero for calculation purposes

(*) Outside of QC limits

(N) Matrix Spike Rec. outside of QC limits

(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: JD35488
 Account: CRATXH - GHD Services Inc.
 Project: SJRWP - PCFSE, Harris County, TX

QC Batch ID: MP30254
 Matrix Type: LEACHATE

Methods: SW846 6010D
 Units: mg/l

Prep Date: 12/09/21

Metal	JD35488-2 Original MSD		SpikeLot MPSPK2	% Rec	MSD RPD	QC Limit
Aluminum						
Antimony	0.0	1.8	2.0	90.0	0.0	20
Arsenic	0.0042	1.8	2.0	89.8	5.4	20
Barium	0.057	1.8	2.0	87.2	0.0	20
Beryllium	0.0	1.9	2.0	95.0	0.0	20
Bismuth						
Boron						
Cadmium	0.0	1.9	2.0	95.0	0.0	20
Calcium						
Chromium	0.0016	1.9	2.0	94.9	0.0	20
Cobalt						
Copper						
Iron						
Lead	0.0026	1.9	2.0	94.9	0.0	20
Lithium						
Magnesium						
Manganese						
Molybdenum						
Nickel	0.0045	1.9	2.0	94.8	0.0	20
Phosphorus						
Potassium						
Selenium	0.0	1.8	2.0	90.0	0.0	20
Silicon						
Silver	0.0	0.25	0.25	100.0	0.0	20
Sodium						
Strontium						
Sulfur						
Thallium						
Tin						
Titanium						
Tungsten						
Vanadium	0.0030	1.9	2.0	94.9	0.0	20
Zinc						

9.12
9

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: JD35488
 Account: CRATXH - GHD Services Inc.
 Project: SJRWP - PCFSE, Harris County, TX

QC Batch ID: MP30254
 Matrix Type: LEACHATE

Methods: SW846 6010D
 Units: mg/l

Prep Date: 12/09/21

Metal	JD35488-2 Original MSD	SpikeLot MPSPK2	% Rec	MSD RPD	QC Limit
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Zirconium

Associated samples MP30254: JD35488-2

Results < IDL are shown as zero for calculation purposes

(*) Outside of QC limits

(N) Matrix Spike Rec. outside of QC limits

(anr) Analyte not requested

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: JD35488
 Account: CRATXH - GHD Services Inc.
 Project: SJRWP - PCFSE, Harris County, TX

QC Batch ID: MP30254
 Matrix Type: LEACHATE

Methods: SW846 6010D
 Units: mg/l

Prep Date: 12/09/21

Metal	BSP Result	Spikelot MPSPK2	% Rec	QC Limits
Aluminum				
Antimony	1.8	2.0	90.0	80-120
Arsenic	1.8	2.0	90.0	80-120
Barium	1.8	2.0	90.0	80-120
Beryllium	1.9	2.0	95.0	80-120
Bismuth				
Boron				
Cadmium	1.9	2.0	95.0	80-120
Calcium				
Chromium	1.9	2.0	95.0	80-120
Cobalt				
Copper				
Iron				
Lead	1.9	2.0	95.0	80-120
Lithium				
Magnesium				
Manganese				
Molybdenum				
Nickel	1.9	2.0	95.0	80-120
Phosphorus				
Potassium				
Selenium	1.8	2.0	90.0	80-120
Silicon				
Silver	0.24	0.25	96.0	80-120
Sodium				
Strontium				
Sulfur				
Thallium				
Tin				
Titanium				
Tungsten				
Vanadium	1.9	2.0	95.0	80-120
Zinc				

9.1.3
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SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: JD35488
Account: CRATXH - GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

QC Batch ID: MP30254
Matrix Type: LEACHATE

Methods: SW846 6010D
Units: mg/l

Prep Date: 12/09/21

Metal	BSP Result	Spikelot MPSPK2	% Rec	QC Limits
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Zirconium

Associated samples MP30254: JD35488-2

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

SERIAL DILUTION RESULTS SUMMARY

Login Number: JD35488
 Account: CRATXH - GHD Services Inc.
 Project: SJRWP - PCFSE, Harris County, TX

QC Batch ID: MP30254
 Matrix Type: LEACHATE

Methods: SW846 6010D
 Units: ug/l

Prep Date: 12/09/21

Metal	JD35488-2 Original	SDL 1:5	%DIF	QC Limits
Aluminum				
Antimony	0.00	0.00	NC	0-10
Arsenic	4.20	0.00	100.0 (a)	0-10
Barium	57.2	58.2	1.7	0-10
Beryllium	0.00	0.00	NC	0-10
Bismuth				
Boron				
Cadmium	0.00	0.00	NC	0-10
Calcium				
Chromium	1.60	0.00	100.0 (a)	0-10
Cobalt				
Copper				
Iron				
Lead	2.60	0.00	100.0 (a)	0-10
Lithium				
Magnesium				
Manganese				
Molybdenum				
Nickel	4.50	0.00	100.0 (a)	0-10
Phosphorus				
Potassium				
Selenium	0.00	0.00	NC	0-10
Silicon				
Silver	0.00	0.00	NC	0-10
Sodium				
Strontium				
Sulfur				
Thallium				
Tin				
Titanium				
Tungsten				
Vanadium	3.00	4.50	50.0 (a)	0-10
Zinc				

9.1.4
9

SERIAL DILUTION RESULTS SUMMARY

Login Number: JD35488
Account: CRATXH - GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

QC Batch ID: MP30254
Matrix Type: LEACHATE

Methods: SW846 6010D
Units: ug/l

Prep Date: 12/09/21

Metal	JD35488-2	QC
	Original SDL 1:5 %DIF	Limits

Zirconium

Associated samples MP30254: JD35488-2

Results < IDL are shown as zero for calculation purposes

(*) Outside of QC limits

(anr) Analyte not requested

(a) Percent difference acceptable due to low initial sample concentration (< 50 times IDL).

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: JD35488
Account: CRATXH - GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

QC Batch ID: MP30255
Matrix Type: LEACHATE

Methods: SW846 6010D
Units: mg/l

Prep Date: 12/09/21

Metal	RL	IDL	MDL	MB raw	final
Aluminum	0.20	.017	.046		
Antimony	0.10	.0017	.0047	-0.00030	<0.10
Arsenic	0.10	.0021	.0028	0.0014	<0.10
Barium	0.20	.0008	.013	0.0065	<0.20
Beryllium	0.0020	.0003	.0005	0.0	<0.0020
Bismuth	0.020	.0023	.004		
Boron	0.10	.0023	.063		
Cadmium	0.0040	.0003	.001	0.00030	<0.0040
Calcium	5.0	.0066	.099		
Chromium	0.010	.0003	.002	0.0069	<0.010(a)
Cobalt	0.050	.0004	.0026		
Copper	0.010	.0008	.0059		
Iron	0.10	.0053	.032		
Lead	0.10	.0011	.0018	0.0043	<0.10
Lithium	0.050	.0048	.0073		
Magnesium	5.0	.032	.14		
Manganese	0.015	.0001	.0014		
Molybdenum	0.020	.0006	.0036		
Nickel	0.020	.0004	.0017	0.0093	<0.020
Phosphorus	0.050	.0012	.018		
Potassium	10	.077	.2		
Selenium	0.10	.0032	.0049	0.0019	<0.10
Silicon	0.20	.0017	.1		
Silver	0.010	.001	.0019	-0.0014	<0.010
Strontium	0.010	.0003	.001		
Sulfur	0.050	.003	.045		
Thallium	0.10	.0018	.0018		
Tin	0.010	.0008	.0037		
Titanium	0.010	.0005	.0025		
Tungsten	0.050	.0026	.04		
Vanadium	0.050	.0006	.0018	0.00020	<0.050
Zinc	0.020	.0001	.0069		
Zirconium	0.010	.0003	.0041		

9.2.1
9

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: JD35488
Account: CRATXH - GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

QC Batch ID: MP30255
Matrix Type: LEACHATE

Methods: SW846 6010D
Units: mg/l

Prep Date: 12/09/21

Metal	RL	IDL	MDL	MB raw	final
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Associated samples MP30255: JD35488-1

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested
(a) All reported results <RL or >10x MB value.

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: JD35488
 Account: CRATXH - GHD Services Inc.
 Project: SJRWP - PCFSE, Harris County, TX

QC Batch ID: MP30255
 Matrix Type: LEACHATE

Methods: SW846 6010D
 Units: mg/l

Prep Date: 12/09/21

Metal	JD35487-2 Original MS		Spike lot MPSPK2	% Rec	QC Limits
Aluminum					
Antimony	0.016	2.1	2.0	104.2	75-125
Arsenic	0.011	2.2	2.0	109.5	75-125
Barium	0.98	3.1	2.0	106.0	75-125
Beryllium	0.0	2.0	2.0	100.0	75-125
Bismuth					
Boron					
Cadmium	0.0023	2.2	2.0	109.9	75-125
Chromium	0.0068	2.0	2.0	99.7	75-125
Cobalt					
Copper					
Iron					
Lead	0.013	2.1	2.0	104.4	75-125
Lithium					
Magnesium					
Molybdenum					
Nickel	0.086	2.2	2.0	105.7	75-125
Phosphorus					
Potassium					
Selenium	0.0	2.2	2.0	110.0	75-125
Silicon					
Silver	0.0069	0.28	0.25	109.2	75-125
Strontium					
Sulfur					
Thallium					
Tin					
Titanium					
Tungsten					
Vanadium	0.0062	2.1	2.0	104.7	75-125
Zinc					
Zirconium					

Associated samples MP30255: JD35488-1

Results < IDL are shown as zero for calculation purposes
 (*) Outside of QC limits

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: JD35488
Account: CRATXH - GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

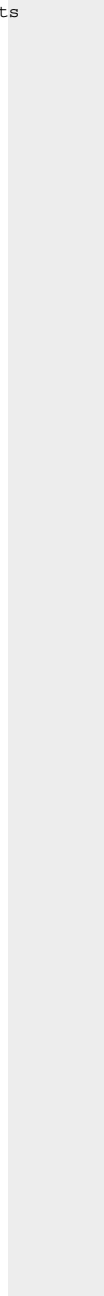
QC Batch ID: MP30255
Matrix Type: LEACHATE

Methods: SW846 6010D
Units: mg/l

Prep Date: 12/09/21

Metal	JD35487-2 Original MS	SpikeLot MPSPK2	% Rec	QC Limits
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(N) Matrix Spike Rec. outside of QC limits
(anr) Analyte not requested



MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: JD35488
 Account: CRATXH - GHD Services Inc.
 Project: SJRWP - PCFSE, Harris County, TX

QC Batch ID: MP30255
 Matrix Type: LEACHATE

Methods: SW846 6010D
 Units: mg/l

Prep Date: 12/09/21

Metal	JD35487-2 Original MSD		SpikeLot MPSPK2	% Rec	MSD RPD	QC Limit
Aluminum						
Antimony	0.016	2.1	2.0	104.2	0.0	20
Arsenic	0.011	2.2	2.0	109.5	0.0	20
Barium	0.98	3.1	2.0	106.0	0.0	20
Beryllium	0.0	2.0	2.0	100.0	0.0	20
Bismuth						
Boron						
Cadmium	0.0023	2.2	2.0	109.9	0.0	20
Chromium	0.0068	2.0	2.0	99.7	0.0	20
Cobalt						
Copper						
Iron						
Lead	0.013	2.1	2.0	104.4	0.0	20
Lithium						
Magnesium						
Molybdenum						
Nickel	0.086	2.2	2.0	105.7	0.0	20
Phosphorus						
Potassium						
Selenium	0.0	2.2	2.0	110.0	0.0	20
Silicon						
Silver	0.0069	0.28	0.25	109.2	0.0	20
Strontium						
Sulfur						
Thallium						
Tin						
Titanium						
Tungsten						
Vanadium	0.0062	2.1	2.0	104.7	0.0	20
Zinc						
Zirconium						

Associated samples MP30255: JD35488-1

Results < IDL are shown as zero for calculation purposes
 (*) Outside of QC limits

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: JD35488
Account: CRATXH - GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

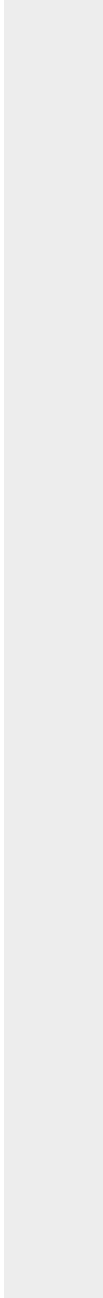
QC Batch ID: MP30255
Matrix Type: LEACHATE

Methods: SW846 6010D
Units: mg/l

Prep Date: 12/09/21

Metal	JD35487-2 Original MSD	SpikeLot MPSPK2	% Rec	MSD RPD	QC Limit
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(N) Matrix Spike Rec. outside of QC limits
(anr) Analyte not requested



SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: JD35488
 Account: CRATXH - GHD Services Inc.
 Project: SJRWP - PCFSE, Harris County, TX

QC Batch ID: MP30255
 Matrix Type: LEACHATE

Methods: SW846 6010D
 Units: mg/l

Prep Date: 12/09/21

Metal	BSP Result	Spikelot MPSPK2	% Rec	QC Limits
Aluminum				
Antimony	2.0	2.0	100.0	80-120
Arsenic	2.1	2.0	105.0	80-120
Barium	2.0	2.0	100.0	80-120
Beryllium	2.0	2.0	100.0	80-120
Bismuth				
Boron				
Cadmium	2.1	2.0	105.0	80-120
Calcium				
Chromium	2.0	2.0	100.0	80-120
Cobalt				
Copper				
Iron				
Lead	2.1	2.0	105.0	80-120
Lithium				
Magnesium				
Manganese				
Molybdenum				
Nickel	2.1	2.0	105.0	80-120
Phosphorus				
Potassium				
Selenium	2.1	2.0	105.0	80-120
Silicon				
Silver	0.26	0.25	104.0	80-120
Strontium				
Sulfur				
Thallium				
Tin				
Titanium				
Tungsten				
Vanadium	2.1	2.0	105.0	80-120
Zinc				
Zirconium				

9.2.3
9

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: JD35488
Account: CRATXH - GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

QC Batch ID: MP30255
Matrix Type: LEACHATE

Methods: SW846 6010D
Units: mg/l

Prep Date: 12/09/21

Metal	BSP Result	Spikelot MPSPK2	% Rec	QC Limits
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Associated samples MP30255: JD35488-1

Results < IDL are shown as zero for calculation purposes

(*) Outside of QC limits

(anr) Analyte not requested

SERIAL DILUTION RESULTS SUMMARY

Login Number: JD35488
 Account: CRATXH - GHD Services Inc.
 Project: SJRWP - PCFSE, Harris County, TX

QC Batch ID: MP30255
 Matrix Type: LEACHATE

Methods: SW846 6010D
 Units: ug/l

Prep Date: 12/09/21

Metal	JD35487-2 Original	SDL 1:5	%DIF	QC Limits
Aluminum				
Antimony	16.2	9.00	44.4 (a)	0-10
Arsenic	10.8	16.0	48.1 (a)	0-10
Barium	982	968	1.4	0-10
Beryllium	0.00	0.00	NC	0-10
Bismuth				
Boron				
Cadmium	2.30	3.50	52.2 (a)	0-10
Calcium				
Chromium	6.80	10.2	50.0 (a)	0-10
Cobalt				
Copper				
Iron				
Lead	13.0	15.4	18.5 (a)	0-10
Lithium				
Magnesium				
Manganese				
Molybdenum				
Nickel	85.6	88.8	3.7	0-10
Phosphorus				
Potassium				
Selenium	0.00	0.00	NC	0-10
Silicon				
Silver	6.90	0.00	100.0(a)	0-10
Strontium				
Sulfur				
Thallium				
Tin				
Titanium				
Tungsten				
Vanadium	6.20	6.20	0.0	0-10
Zinc				
Zirconium				

9.2.4
 9

SERIAL DILUTION RESULTS SUMMARY

Login Number: JD35488
Account: CRATXH - GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

QC Batch ID: MP30255
Matrix Type: LEACHATE

Methods: SW846 6010D
Units: ug/l

Prep Date: 12/09/21

Metal	JD35487-2	QC
	Original SDL 1:5 %DIF	Limits

Associated samples MP30255: JD35488-1

Results < IDL are shown as zero for calculation purposes

(*) Outside of QC limits

(anr) Analyte not requested

(a) Percent difference acceptable due to low initial sample concentration (< 50 times IDL).

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: JD35488
Account: CRATXH - GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

QC Batch ID: MP30274
Matrix Type: LEACHATE

Methods: SW846 7470A
Units: mg/l

Prep Date: 12/09/21

Metal	RL	IDL	MDL	MB raw	final
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Mercury 0.00020 .000034 .000095 -0.0000054<0.00020

Associated samples MP30274: JD35488-2

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: JD35488
 Account: CRATXH - GHD Services Inc.
 Project: SJRWP - PCFSE, Harris County, TX

QC Batch ID: MP30274
 Matrix Type: LEACHATE

Methods: SW846 7470A
 Units: mg/l

Prep Date: 12/09/21

Metal	JD35488-2 Original MS	SpikeLot HGPW3	% Rec	QC Limits
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Mercury	0.0	0.0021	0.0020	105.0	75-125
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Associated samples MP30274: JD35488-2

Results < IDL are shown as zero for calculation purposes
 (*) Outside of QC limits
 (N) Matrix Spike Rec. outside of QC limits
 (anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: JD35488
 Account: CRATXH - GHD Services Inc.
 Project: SJRWP - PCFSE, Harris County, TX

QC Batch ID: MP30274
 Matrix Type: LEACHATE

Methods: SW846 7470A
 Units: mg/l

Prep Date: 12/09/21

Metal	JD35488-2 Original MSD	SpikeLot HGPW3	% Rec	MSD RPD	QC Limit
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Mercury	0.0	0.0021	0.0020	105.0	0.0	20
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Associated samples MP30274: JD35488-2

Results < IDL are shown as zero for calculation purposes
 (*) Outside of QC limits
 (N) Matrix Spike Rec. outside of QC limits
 (anr) Analyte not requested

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: JD35488
Account: CRATXH - GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

QC Batch ID: MP30274
Matrix Type: LEACHATE

Methods: SW846 7470A
Units: mg/l

Prep Date: 12/09/21

Metal	BSP Result	Spikelot HGPW3	% Rec	QC Limits
Mercury	0.0021	0.0020	105.0	80-120

Associated samples MP30274: JD35488-2

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: JD35488
Account: CRATXH - GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

QC Batch ID: MP30275
Matrix Type: LEACHATE

Methods: SW846 7470A
Units: mg/l

Prep Date: 12/09/21

Metal	RL	IDL	MDL	MB	
				raw	final
Mercury	0.00020	.000034	.000095	-0.000014	<0.00020

Associated samples MP30275: JD35488-1

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: JD35488
 Account: CRATXH - GHD Services Inc.
 Project: SJRWP - PCFSE, Harris County, TX

QC Batch ID: MP30275
 Matrix Type: LEACHATE

Methods: SW846 7470A
 Units: mg/l

Prep Date: 12/09/21

Metal	JD35487-2 Original MS	Spike HGPW3	Spike % Rec	QC Limits
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Mercury	0.0	0.0018	0.0020	90.0	75-125
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Associated samples MP30275: JD35488-1

Results < IDL are shown as zero for calculation purposes
 (*) Outside of QC limits
 (N) Matrix Spike Rec. outside of QC limits
 (anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: JD35488
 Account: CRATXH - GHD Services Inc.
 Project: SJRWP - PCFSE, Harris County, TX

QC Batch ID: MP30275
 Matrix Type: LEACHATE

Methods: SW846 7470A
 Units: mg/l

Prep Date: 12/09/21

Metal	JD35487-2 Original MSD	SpikeLot HGPW3	% Rec	MSD RPD	QC Limit
Mercury	0.0	0.0019	0.0020	95.0	5.4 20

Associated samples MP30275: JD35488-1

Results < IDL are shown as zero for calculation purposes
 (*) Outside of QC limits
 (N) Matrix Spike Rec. outside of QC limits
 (anr) Analyte not requested

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: JD35488
Account: CRATXH - GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

QC Batch ID: MP30275
Matrix Type: LEACHATE

Methods: SW846 7470A
Units: mg/l

Prep Date: 12/09/21

Metal	BSP Result	Spikelot HGPW3	% Rec	QC Limits
Mercury	0.0018	0.0020	90.0	80-120

Associated samples MP30275: JD35488-1

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: JD35488
Account: CRATXH - GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

QC Batch ID: MP30329
Matrix Type: LEACHATE

Methods: SW846 6010D
Units: mg/l

Prep Date: 12/11/21

Metal	RL	IDL	MDL	MB raw	final
Aluminum	0.20	.0092	.046		
Antimony	0.10	.0028	.0047	-0.0013	<0.10
Arsenic	0.10	.0026	.0028	-0.00030	<0.10
Barium	0.20	.0002	.013	0.0037	<0.20
Beryllium	0.0020	.0002	.0005	0.0	<0.0020
Bismuth	0.020	.0025	.004		
Boron	0.10	.0018	.063		
Cadmium	0.0040	.0004	.001	0.00020	<0.0040
Calcium	5.0	.013	.099		
Chromium	0.010	.0007	.002	0.00010	<0.010
Cobalt	0.050	.0006	.0026		
Copper	0.010	.0007	.0059		
Iron	0.10	.0033	.032		
Lead	0.10	.002	.0018	-0.00010	<0.10
Lithium	0.050	.0015	.0073		
Magnesium	5.0	.025	.14		
Manganese	0.015	.0001	.0014		
Molybdenum	0.020	.0006	.0036		
Nickel	0.010	.0008	.0017	0.00040	<0.010
Phosphorus	0.050	.007	.018		
Potassium	10	.035	.2		
Selenium	0.10	.0036	.0049	0.00070	<0.10
Silicon	0.20	.0022	.1		
Silver	0.010	.0006	.0019	-0.00070	<0.010
Sodium	10	.014	.57		
Strontium	0.010	.0001	.001		
Sulfur	0.050	.0037	.045		
Thallium	0.10	.0052	.0018		
Tin	0.010	.0014	.0037		
Titanium	0.010	.0008	.0025		
Tungsten	0.050	.0013	.04		
Vanadium	0.050	.0005	.0018	0.00040	<0.050
Zinc	0.020	.0003	.0069		

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: JD35488
Account: CRATXH - GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

QC Batch ID: MP30329
Matrix Type: LEACHATE

Methods: SW846 6010D
Units: mg/l

Prep Date: 12/11/21

Metal	RL	IDL	MDL	MB raw	final
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Zirconium 0.010 .0005 .0041

Associated samples MP30329: JD35488-4

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: JD35488
 Account: CRATXH - GHD Services Inc.
 Project: SJRWP - PCFSE, Harris County, TX

QC Batch ID: MP30329
 Matrix Type: LEACHATE

Methods: SW846 6010D
 Units: mg/l

Prep Date: 12/11/21

Metal	JD35488-4 Original MS		SpikeLot MPSPK2	% Rec	QC Limits
Aluminum					
Antimony	0.0	2.1	2.0	105.0	75-125
Arsenic	0.0	2.1	2.0	105.0	75-125
Barium	0.10	2.1	2.0	100.0	75-125
Beryllium	0.0	2.0	2.0	100.0	75-125
Bismuth					
Boron					
Cadmium	0.0	2.1	2.0	105.0	75-125
Calcium					
Chromium	0.0	2.0	2.0	100.0	75-125
Cobalt					
Copper					
Iron					
Lead	0.0	2.1	2.0	105.0	75-125
Lithium					
Magnesium					
Manganese					
Molybdenum					
Nickel	0.0035	2.1	2.0	104.8	75-125
Phosphorus					
Potassium					
Selenium	0.0	2.1	2.0	105.0	75-125
Silicon					
Silver	0.0	0.28	0.25	112.0	75-125
Sodium					
Strontium					
Sulfur					
Thallium					
Tin					
Titanium					
Tungsten					
Vanadium	0.0	2.1	2.0	105.0	75-125
Zinc					

9.5.2
9

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: JD35488
Account: CRATXH - GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

QC Batch ID: MP30329
Matrix Type: LEACHATE

Methods: SW846 6010D
Units: mg/l

Prep Date: 12/11/21

Metal	JD35488-4 Original MS	SpikeLot MPSPK2	% Rec	QC Limits
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Zirconium

Associated samples MP30329: JD35488-4

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: JD35488
 Account: CRATXH - GHD Services Inc.
 Project: SJRWP - PCFSE, Harris County, TX

QC Batch ID: MP30329
 Matrix Type: LEACHATE

Methods: SW846 6010D
 Units: mg/l

Prep Date: 12/11/21

Metal	JD35488-4 Original MSD	MSD	SpikeLot MPSPK2	% Rec	MSD RPD	QC Limit
Aluminum						
Antimony	0.0	2.2	2.0	110.0	4.7	20
Arsenic	0.0	2.1	2.0	105.0	0.0	20
Barium	0.10	2.2	2.0	105.0	4.7	20
Beryllium	0.0	2.1	2.0	105.0	4.9	20
Bismuth						
Boron						
Cadmium	0.0	2.1	2.0	105.0	0.0	20
Calcium						
Chromium	0.0	2.1	2.0	105.0	4.9	20
Cobalt						
Copper						
Iron						
Lead	0.0	2.1	2.0	105.0	0.0	20
Lithium						
Magnesium						
Manganese						
Molybdenum						
Nickel	0.0035	2.1	2.0	104.8	0.0	20
Phosphorus						
Potassium						
Selenium	0.0	2.1	2.0	105.0	0.0	20
Silicon						
Silver	0.0	0.28	0.25	112.0	0.0	20
Sodium						
Strontium						
Sulfur						
Thallium						
Tin						
Titanium						
Tungsten						
Vanadium	0.0	2.1	2.0	105.0	0.0	20
Zinc						

9.5.2
9

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: JD35488
 Account: CRATXH - GHD Services Inc.
 Project: SJRWP - PCFSE, Harris County, TX

QC Batch ID: MP30329
 Matrix Type: LEACHATE

Methods: SW846 6010D
 Units: mg/l

Prep Date: 12/11/21

Metal	JD35488-4 Original MSD	SpikeLot MPSPK2	% Rec	MSD RPD	QC Limit
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Zirconium

Associated samples MP30329: JD35488-4

Results < IDL are shown as zero for calculation purposes
 (*) Outside of QC limits
 (N) Matrix Spike Rec. outside of QC limits
 (anr) Analyte not requested

9.5.2
 9

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: JD35488
 Account: CRATXH - GHD Services Inc.
 Project: SJRWP - PCFSE, Harris County, TX

QC Batch ID: MP30329
 Matrix Type: LEACHATE

Methods: SW846 6010D
 Units: mg/l

Prep Date: 12/11/21

Metal	BSP Result	Spikelot MPSPK2	% Rec	QC Limits
Aluminum				
Antimony	2.1	2.0	105.0	80-120
Arsenic	2.1	2.0	105.0	80-120
Barium	2.0	2.0	100.0	80-120
Beryllium	2.0	2.0	100.0	80-120
Bismuth				
Boron				
Cadmium	2.1	2.0	105.0	80-120
Calcium				
Chromium	2.0	2.0	100.0	80-120
Cobalt				
Copper				
Iron				
Lead	2.1	2.0	105.0	80-120
Lithium				
Magnesium				
Manganese				
Molybdenum				
Nickel	2.1	2.0	105.0	80-120
Phosphorus				
Potassium				
Selenium	2.1	2.0	105.0	80-120
Silicon				
Silver	0.27	0.25	108.0	80-120
Sodium				
Strontium				
Sulfur				
Thallium				
Tin				
Titanium				
Tungsten				
Vanadium	2.0	2.0	100.0	80-120
Zinc				

9.5.3
9

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: JD35488
Account: CRATXH - GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

QC Batch ID: MP30329
Matrix Type: LEACHATE

Methods: SW846 6010D
Units: mg/l

Prep Date: 12/11/21

Metal	BSP Result	Spikelot MPSPK2	% Rec	QC Limits
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Zirconium

Associated samples MP30329: JD35488-4

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

SERIAL DILUTION RESULTS SUMMARY

Login Number: JD35488
 Account: CRATXH - GHD Services Inc.
 Project: SJRWP - PCFSE, Harris County, TX

QC Batch ID: MP30329
 Matrix Type: LEACHATE

Methods: SW846 6010D
 Units: ug/l

Prep Date: 12/11/21

Metal	JD35488-4 Original	SDL 1:5	%DIF	QC Limits
Aluminum				
Antimony	0.00	0.00	NC	0-10
Arsenic	0.00	0.00	NC	0-10
Barium	103	101	2.1	0-10
Beryllium	0.00	0.00	NC	0-10
Bismuth				
Boron				
Cadmium	0.00	0.00	NC	0-10
Calcium				
Chromium	0.00	0.00	NC	0-10
Cobalt				
Copper				
Iron				
Lead	0.00	0.00	NC	0-10
Lithium				
Magnesium				
Manganese				
Molybdenum				
Nickel	3.50	0.00	100.0(a)	0-10
Phosphorus				
Potassium				
Selenium	0.00	0.00	NC	0-10
Silicon				
Silver	0.00	0.00	NC	0-10
Sodium				
Strontium				
Sulfur				
Thallium				
Tin				
Titanium				
Tungsten				
Vanadium	0.00	0.00	NC	0-10
Zinc				

9.5.4
9

SERIAL DILUTION RESULTS SUMMARY

Login Number: JD35488
Account: CRATXH - GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

QC Batch ID: MP30329
Matrix Type: LEACHATE

Methods: SW846 6010D
Units: ug/l

Prep Date: 12/11/21

Metal	JD35488-4	QC
	Original SDL 1:5 %DIF	Limits

Zirconium

Associated samples MP30329: JD35488-4

Results < IDL are shown as zero for calculation purposes

(*) Outside of QC limits

(anr) Analyte not requested

(a) Percent difference acceptable due to low initial sample concentration (< 50 times IDL).

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: JD35488
Account: CRATXH - GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

QC Batch ID: MP30355
Matrix Type: LEACHATE

Methods: SW846 7470A
Units: mg/l

Prep Date: 12/14/21

Metal	RL	IDL	MDL	MB	
				raw	final
Mercury	0.00020	.000034	.000095	-0.000027	<0.00020

Associated samples MP30355: JD35488-4

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: JD35488
Account: CRATXH - GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

QC Batch ID: MP30355
Matrix Type: LEACHATE

Methods: SW846 7470A
Units: mg/l

Prep Date: 12/14/21

Metal	JD35488-4 Original MS	SpikeLot HGPW3	% Rec	QC Limits
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Mercury 0.0 0.0021 0.0020 105.0 75-125

Associated samples MP30355: JD35488-4

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: JD35488
 Account: CRATXH - GHD Services Inc.
 Project: SJRWP - PCFSE, Harris County, TX

QC Batch ID: MP30355
 Matrix Type: LEACHATE

Methods: SW846 7470A
 Units: mg/l

Prep Date: 12/14/21

Metal	JD35488-4 Original MSD	SpikeLot HGPW3	% Rec	MSD RPD	QC Limit
Mercury	0.0	0.0021	0.0020	105.0	0.0 20

Associated samples MP30355: JD35488-4

Results < IDL are shown as zero for calculation purposes
 (*) Outside of QC limits
 (N) Matrix Spike Rec. outside of QC limits
 (anr) Analyte not requested

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: JD35488
Account: CRATXH - GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

QC Batch ID: MP30355
Matrix Type: LEACHATE

Methods: SW846 7470A
Units: mg/l

Prep Date: 12/14/21

Metal	BSP Result	Spikelot HGPW3	% Rec	QC Limits
Mercury	0.0021	0.0020	105.0	80-120

Associated samples MP30355: JD35488-4

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: JD35488
Account: CRATXH - GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

QC Batch ID: MP30365
Matrix Type: LEACHATE

Methods: SW846 6010D
Units: mg/l

Prep Date: 12/15/21

Metal	RL	IDL	MDL	MB raw	final
Aluminum	0.20	.027	.046		
Antimony	0.10	.0022	.0047	0.00080	<0.10
Arsenic	0.10	.0013	.0028	0.00040	<0.10
Barium	0.20	.001	.013	0.0048	<0.20
Beryllium	0.0020	.0002	.0005	-0.00010	<0.0020
Bismuth	0.020	.0021	.004		
Boron	0.10	.001	.063		
Cadmium	0.0040	.0002	.001	0.00010	<0.0040
Calcium	5.0	.0077	.099		
Chromium	0.010	.0005	.002	0.0025	<0.010
Cobalt	0.050	.0004	.0026		
Copper	0.010	.0068	.0059		
Iron	0.10	.015	.032		
Lead	0.10	.0016	.0018	0.0013	<0.10
Lithium	0.050	.0037	.0073		
Magnesium	5.0	.054	.14		
Manganese	0.015	.0001	.0014		
Molybdenum	0.020	.0005	.0036		
Nickel	0.010	.0003	.0017	0.0025	<0.010
Phosphorus	0.050	.0018	.018		
Potassium	10	.077	.2		
Selenium	0.10	.002	.0049	0.0022	<0.10
Silicon	0.20	.0013	.1		
Silver	0.010	.0009	.0019	-0.0013	<0.010
Strontium	0.010	.0004	.001		
Sulfur	0.050	.0041	.045		
Thallium	0.10	.0016	.0018		
Tin	0.010	.0009	.0037		
Titanium	0.010	.0009	.0025		
Tungsten	0.050	.002	.04		
Vanadium	0.050	.0008	.0018	-0.00010	<0.050
Zinc	0.020	.0002	.0069		
Zirconium	0.010	.0005	.0041		

9.7.1
9

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: JD35488
Account: CRATXH - GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

QC Batch ID: MP30365
Matrix Type: LEACHATE

Methods: SW846 6010D
Units: mg/l

Prep Date: 12/15/21

Metal	RL	IDL	MDL	MB raw	final
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Associated samples MP30365: JD35488-3

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: JD35488
 Account: CRATXH - GHD Services Inc.
 Project: SJRWP - PCFSE, Harris County, TX

QC Batch ID: MP30365
 Matrix Type: LEACHATE

Methods: SW846 6010D
 Units: mg/l

Prep Date: 12/15/21

Metal	JD35488-3 Original	MSD	SpikeLot MPSPK2	% Rec	MSD RPD	QC Limit
Aluminum						
Antimony	0.0025	2.0	2.0	99.9	0.0	20
Arsenic	0.0049	2.1	2.0	104.8	0.0	20
Barium	0.60	2.6	2.0	100.0	0.0	20
Beryllium	0.0	1.9	2.0	95.0	0.0	20
Bismuth						
Boron						
Cadmium	0.0043	1.9	2.0	94.8	5.1	20
Chromium	0.0	1.8	2.0	90.0	0.0	20
Cobalt						
Copper						
Iron						
Lead	0.0	1.8	2.0	90.0	0.0	20
Lithium						
Magnesium						
Manganese						
Molybdenum						
Nickel	0.044	1.9	2.0	92.8	0.0	20
Phosphorus						
Potassium						
Selenium	0.0055	2.0	2.0	99.7	4.9	20
Silicon						
Silver	0.0	0.26	0.25	104.0	0.0	20
Strontium						
Sulfur						
Thallium						
Tin						
Titanium						
Tungsten						
Vanadium	0.011	1.9	2.0	94.5	0.0	20
Zinc						
Zirconium						

Associated samples MP30365: JD35488-3

9.7.2
9

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: JD35488
 Account: CRATXH - GHD Services Inc.
 Project: SJRWP - PCFSE, Harris County, TX

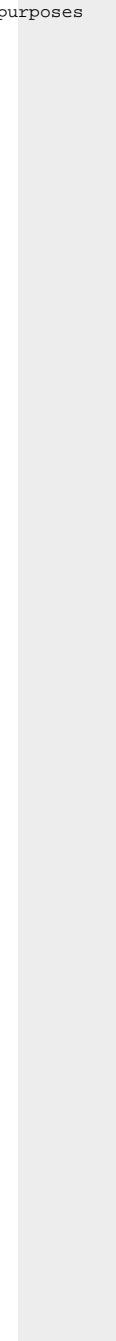
QC Batch ID: MP30365
 Matrix Type: LEACHATE

Methods: SW846 6010D
 Units: mg/l

Prep Date: 12/15/21

Metal	JD35488-3 Original MSD	SpikeLot MPSPK2	% Rec	MSD RPD	QC Limit
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Results < IDL are shown as zero for calculation purposes
 (*) Outside of QC limits
 (N) Matrix Spike Rec. outside of QC limits
 (anr) Analyte not requested



9.7.2
 9

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: JD35488
 Account: CRATXH - GHD Services Inc.
 Project: SJRWP - PCFSE, Harris County, TX

QC Batch ID: MP30365
 Matrix Type: LEACHATE

Methods: SW846 6010D
 Units: mg/l

Prep Date: 12/15/21

Metal	JD35488-3 Original MS		SpikeLot MPSPK2	% Rec	QC Limits
Aluminum					
Antimony	0.0025	2.0	2.0	99.9	75-125
Arsenic	0.0049	2.1	2.0	104.8	75-125
Barium	0.60	2.6	2.0	100.0	75-125
Beryllium	0.0	1.9	2.0	95.0	75-125
Bismuth					
Boron					
Cadmium	0.0043	2.0	2.0	99.8	75-125
Chromium	0.0	1.8	2.0	90.0	75-125
Cobalt					
Copper					
Iron					
Lead	0.0	1.8	2.0	90.0	75-125
Lithium					
Magnesium					
Manganese					
Molybdenum					
Nickel	0.044	1.9	2.0	92.8	75-125
Phosphorus					
Potassium					
Selenium	0.0055	2.1	2.0	104.7	75-125
Silicon					
Silver	0.0	0.26	0.25	104.0	75-125
Strontium					
Sulfur					
Thallium					
Tin					
Titanium					
Tungsten					
Vanadium	0.011	1.9	2.0	94.5	75-125
Zinc					
Zirconium					

Associated samples MP30365: JD35488-3

9.7.2
9

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: JD35488
Account: CRATXH - GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

QC Batch ID: MP30365
Matrix Type: LEACHATE

Methods: SW846 6010D
Units: mg/l

Prep Date: 12/15/21

Metal	JD35488-3 Original MS	SpikeLot MPSPK2	% Rec	QC Limits
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Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(anr) Analyte not requested

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: JD35488
 Account: CRATXH - GHD Services Inc.
 Project: SJRWP - PCFSE, Harris County, TX

QC Batch ID: MP30365
 Matrix Type: LEACHATE

Methods: SW846 6010D
 Units: mg/l

Prep Date: 12/15/21

Metal	BSP Result	Spikelot MPSPK2	% Rec	QC Limits
Aluminum				
Antimony	1.9	2.0	95.0	80-120
Arsenic	2.0	2.0	100.0	80-120
Barium	2.0	2.0	100.0	80-120
Beryllium	1.9	2.0	95.0	80-120
Bismuth				
Boron				
Cadmium	1.9	2.0	95.0	80-120
Calcium				
Chromium	1.9	2.0	95.0	80-120
Cobalt				
Copper				
Iron				
Lead	1.9	2.0	95.0	80-120
Lithium				
Magnesium				
Manganese				
Molybdenum				
Nickel	2.0	2.0	100.0	80-120
Phosphorus				
Potassium				
Selenium	2.0	2.0	100.0	80-120
Silicon				
Silver	0.25	0.25	100.0	80-120
Strontium				
Sulfur				
Thallium				
Tin				
Titanium				
Tungsten				
Vanadium	1.9	2.0	95.0	80-120
Zinc				
Zirconium				

9.7.3
 9

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: JD35488
Account: CRATXH - GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

QC Batch ID: MP30365
Matrix Type: LEACHATE

Methods: SW846 6010D
Units: mg/l

Prep Date: 12/15/21

Metal	BSP Result	Spikelot MPSPK2	% Rec	QC Limits
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Associated samples MP30365: JD35488-3

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

SERIAL DILUTION RESULTS SUMMARY

Login Number: JD35488
 Account: CRATXH - GHD Services Inc.
 Project: SJRWP - PCFSE, Harris County, TX

QC Batch ID: MP30365
 Matrix Type: LEACHATE

Methods: SW846 6010D
 Units: ug/l

Prep Date: 12/15/21

Metal	JD35488-3 Original	SDL 1:5	%DIF	QC Limits
Aluminum				
Antimony	2.50	0.00	100.0(a)	0-10
Arsenic	4.90	0.00	100.0(a)	0-10
Barium	604	595	1.5	0-10
Beryllium	0.00	0.00	NC	0-10
Bismuth				
Boron				
Cadmium	4.30	4.30	0.0	0-10
Calcium				
Chromium	0.00	0.00	NC	0-10
Cobalt				
Copper				
Iron				
Lead	0.00	0.00	NC	0-10
Lithium				
Magnesium				
Manganese				
Molybdenum				
Nickel	44.2	44.5	0.7	0-10
Phosphorus				
Potassium				
Selenium	5.50	13.4	143.6(a)	0-10
Silicon				
Silver	0.00	0.00	NC	0-10
Strontium				
Sulfur				
Thallium				
Tin				
Titanium				
Tungsten				
Vanadium	11.0	11.5	4.5	0-10
Zinc				
Zirconium				

9.7.4
9

SERIAL DILUTION RESULTS SUMMARY

Login Number: JD35488
Account: CRATXH - GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

QC Batch ID: MP30365
Matrix Type: LEACHATE

Methods: SW846 6010D
Units: ug/l

Prep Date: 12/15/21

Metal	JD35488-3	QC
	Original SDL 1:5 %DIF	Limits

Associated samples MP30365: JD35488-3

Results < IDL are shown as zero for calculation purposes

(*) Outside of QC limits

(anr) Analyte not requested

(a) Percent difference acceptable due to low initial sample concentration (< 50 times IDL).

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: JD35488
Account: CRATXH - GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

QC Batch ID: MP30375
Matrix Type: LEACHATE

Methods: SW846 6010D
Units: mg/l

Prep Date: 12/15/21

Metal	RL	IDL	MDL	MB raw	final
Aluminum	0.20	.027	.046		
Antimony	0.10	.0022	.0047	-0.00040	<0.10
Arsenic	0.10	.0013	.0028	0.00070	<0.10
Barium	0.20	.001	.013	0.018	<0.20
Beryllium	0.0020	.0002	.0005	-0.00020	<0.0020
Bismuth	0.020	.0021	.004		
Boron	0.10	.001	.063		
Cadmium	0.0040	.0002	.001	0.00010	<0.0040
Calcium	5.0	.0077	.099		
Chromium	0.020	.0005	.002	0.011	<0.020(a
Cobalt	0.050	.0004	.0026		
Copper	0.010	.0068	.0059		
Iron	0.10	.015	.032		
Lead	0.10	.0016	.0018	0.018	<0.10
Lithium	0.050	.0037	.0073		
Magnesium	5.0	.054	.14		
Manganese	0.015	.0001	.0014		
Molybdenum	0.020	.0005	.0036		
Nickel	0.020	.0003	.0017	0.011	<0.020(a
Phosphorus	0.050	.0018	.018		
Potassium	10	.077	.2		
Selenium	0.10	.002	.0049	0.0056	<0.10
Silicon	0.20	.0013	.1		
Silver	0.010	.0009	.0019	-0.0022	<0.010
Strontium	0.010	.0004	.001		
Sulfur	0.050	.0041	.045		
Thallium	0.10	.0016	.0018		
Tin	0.010	.0009	.0037		
Titanium	0.010	.0009	.0025		
Tungsten	0.050	.002	.04		
Vanadium	0.050	.0008	.0018	0.0	<0.050
Zinc	0.020	.0002	.0069		
Zirconium	0.010	.0005	.0041		

9.8.1
9

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: JD35488
Account: CRATXH - GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

QC Batch ID: MP30375
Matrix Type: LEACHATE

Methods: SW846 6010D
Units: mg/l

Prep Date: 12/15/21

Metal	RL	IDL	MDL	MB raw	final
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Associated samples MP30375: JD35488-5

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested
(a) All reported results <RL or >10x MB value.

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: JD35488
 Account: CRATXH - GHD Services Inc.
 Project: SJRWP - PCFSE, Harris County, TX

QC Batch ID: MP30375
 Matrix Type: LEACHATE

Methods: SW846 6010D
 Units: mg/l

Prep Date: 12/15/21

Metal	JD35488-5 Original MS		SpikeLot MPSPK2	% Rec	QC Limits
Aluminum					
Antimony	0.0	2.0	2.0	100.0	75-125
Arsenic	0.0	2.0	2.0	100.0	75-125
Barium	1.1	3.2	2.0	105.0	75-125
Beryllium	0.0	1.9	2.0	95.0	75-125
Bismuth					
Boron					
Cadmium	0.0010	1.9	2.0	95.0	75-125
Chromium	0.00080	1.8	2.0	90.0	75-125
Cobalt					
Copper					
Iron					
Lead	0.0	1.9	2.0	95.0	75-125
Lithium					
Magnesium					
Manganese					
Molybdenum					
Nickel	0.018	1.9	2.0	94.1	75-125
Phosphorus					
Potassium					
Selenium	0.0065	2.1	2.0	104.7	75-125
Silicon					
Silver	0.0	0.25	0.25	100.0	75-125
Strontium					
Sulfur					
Thallium					
Tin					
Titanium					
Tungsten					
Vanadium	0.0055	1.9	2.0	94.7	75-125
Zinc					
Zirconium					

Associated samples MP30375: JD35488-5

9.8.2
9

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: JD35488
Account: CRATXH - GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

QC Batch ID: MP30375
Matrix Type: LEACHATE

Methods: SW846 6010D
Units: mg/l

Prep Date: 12/15/21

Metal	JD35488-5 Original MS	SpikeLot MPSPK2	% Rec	QC Limits
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Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: JD35488
 Account: CRATXH - GHD Services Inc.
 Project: SJRWP - PCFSE, Harris County, TX

QC Batch ID: MP30375
 Matrix Type: LEACHATE

Methods: SW846 6010D
 Units: mg/l

Prep Date: 12/15/21

Metal	JD35488-5 Original MSD		SpikeLot MPSPK2 % Rec		MSD RPD	QC Limit
Aluminum						
Antimony	0.0	2.0	2.0	100.0	0.0	20
Arsenic	0.0	2.0	2.0	100.0	0.0	20
Barium	1.1	3.2	2.0	105.0	0.0	20
Beryllium	0.0	1.9	2.0	95.0	0.0	20
Bismuth						
Boron						
Cadmium	0.0010	1.9	2.0	95.0	0.0	20
Chromium	0.00080	1.8	2.0	90.0	0.0	20
Cobalt						
Copper						
Iron						
Lead	0.0	1.8	2.0	90.0	5.4	20
Lithium						
Magnesium						
Manganese						
Molybdenum						
Nickel	0.018	1.9	2.0	94.1	0.0	20
Phosphorus						
Potassium						
Selenium	0.0065	2.1	2.0	104.7	0.0	20
Silicon						
Silver	0.0	0.25	0.25	100.0	0.0	20
Strontium						
Sulfur						
Thallium						
Tin						
Titanium						
Tungsten						
Vanadium	0.0055	1.9	2.0	94.7	0.0	20
Zinc						
Zirconium						

Associated samples MP30375: JD35488-5

9.8.2
9

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: JD35488
 Account: CRATXH - GHD Services Inc.
 Project: SJRWP - PCFSE, Harris County, TX

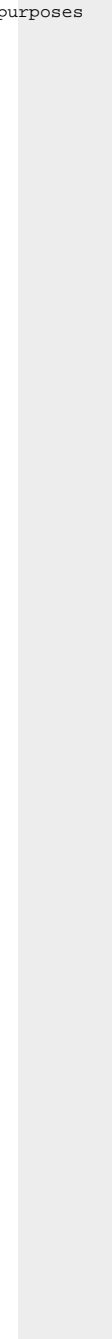
QC Batch ID: MP30375
 Matrix Type: LEACHATE

Methods: SW846 6010D
 Units: mg/l

Prep Date: 12/15/21

Metal	JD35488-5 Original MSD	SpikeLot MPSPK2	% Rec	MSD RPD	QC Limit
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Results < IDL are shown as zero for calculation purposes
 (*) Outside of QC limits
 (N) Matrix Spike Rec. outside of QC limits
 (anr) Analyte not requested



9.8.2
9

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: JD35488
 Account: CRATXH - GHD Services Inc.
 Project: SJRWP - PCFSE, Harris County, TX

QC Batch ID: MP30375
 Matrix Type: LEACHATE

Methods: SW846 6010D
 Units: mg/l

Prep Date: 12/15/21

Metal	BSP Result	Spikelot MPSPK2	% Rec	QC Limits
Aluminum				
Antimony	1.9	2.0	95.0	80-120
Arsenic	2.0	2.0	100.0	80-120
Barium	2.1	2.0	105.0	80-120
Beryllium	1.9	2.0	95.0	80-120
Bismuth				
Boron				
Cadmium	1.9	2.0	95.0	80-120
Calcium				
Chromium	1.9	2.0	95.0	80-120
Cobalt				
Copper				
Iron				
Lead	1.9	2.0	95.0	80-120
Lithium				
Magnesium				
Manganese				
Molybdenum				
Nickel	2.0	2.0	100.0	80-120
Phosphorus				
Potassium				
Selenium	2.1	2.0	105.0	80-120
Silicon				
Silver	0.25	0.25	100.0	80-120
Strontium				
Sulfur				
Thallium				
Tin				
Titanium				
Tungsten				
Vanadium	1.9	2.0	95.0	80-120
Zinc				
Zirconium				

9.8.3
 9

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: JD35488
Account: CRATXH - GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

QC Batch ID: MP30375
Matrix Type: LEACHATE

Methods: SW846 6010D
Units: mg/l

Prep Date: 12/15/21

Metal	BSP Result	Spikelot MPSPK2	% Rec	QC Limits
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Associated samples MP30375: JD35488-5

Results < IDL are shown as zero for calculation purposes

(*) Outside of QC limits

(anr) Analyte not requested

SERIAL DILUTION RESULTS SUMMARY

Login Number: JD35488
 Account: CRATXH - GHD Services Inc.
 Project: SJRWP - PCFSE, Harris County, TX

QC Batch ID: MP30375
 Matrix Type: LEACHATE

Methods: SW846 6010D
 Units: ug/l

Prep Date: 12/15/21

Metal	JD35488-5 Original	SDL 1:5	%DIF	QC Limits
Aluminum				
Antimony	0.00	0.00	NC	0-10
Arsenic	0.00	0.00	NC	0-10
Barium	1140	1160	1.5	0-10
Beryllium	0.00	0.00	NC	0-10
Bismuth				
Boron				
Cadmium	1.00	1.70	70.0 (a)	0-10
Calcium				
Chromium	0.800	0.00	100.0(a)	0-10
Cobalt				
Copper				
Iron				
Lead	0.00	0.00	NC	0-10
Lithium				
Magnesium				
Manganese				
Molybdenum				
Nickel	18.1	19.2	6.1	0-10
Phosphorus				
Potassium				
Selenium	6.50	0.00	100.0(a)	0-10
Silicon				
Silver	0.00	0.00	NC	0-10
Strontium				
Sulfur				
Thallium				
Tin				
Titanium				
Tungsten				
Vanadium	5.50	4.70	14.5 (a)	0-10
Zinc				
Zirconium				

9.8.4
 9

SERIAL DILUTION RESULTS SUMMARY

Login Number: JD35488
Account: CRATXH - GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

QC Batch ID: MP30375
Matrix Type: LEACHATE

Methods: SW846 6010D
Units: ug/l

Prep Date: 12/15/21

Metal	JD35488-5	QC
	Original SDL 1:5 %DIF	Limits

Associated samples MP30375: JD35488-5

Results < IDL are shown as zero for calculation purposes

(*) Outside of QC limits

(anr) Analyte not requested

(a) Percent difference acceptable due to low initial sample concentration (< 50 times IDL).

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: JD35488
Account: CRATXH - GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

QC Batch ID: MP30383
Matrix Type: LEACHATE

Methods: SW846 7470A
Units: mg/l

Prep Date: 12/15/21

Metal	RL	IDL	MDL	MB	
				raw	final
Mercury	0.00020	.000034	.000095	0.0000032	<0.00020

Associated samples MP30383: JD35488-3

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: JD35488
 Account: CRATXH - GHD Services Inc.
 Project: SJRWP - PCFSE, Harris County, TX

QC Batch ID: MP30383
 Matrix Type: LEACHATE

Methods: SW846 7470A
 Units: mg/l

Prep Date: 12/15/21

Metal	JD35488-3 Original MS	SpikeLot HGPW3	% Rec	QC Limits
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Mercury	0.0	0.0020	0.0020	100.0	75-125
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Associated samples MP30383: JD35488-3

Results < IDL are shown as zero for calculation purposes
 (*) Outside of QC limits
 (N) Matrix Spike Rec. outside of QC limits
 (anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: JD35488
 Account: CRATXH - GHD Services Inc.
 Project: SJRWP - PCFSE, Harris County, TX

QC Batch ID: MP30383
 Matrix Type: LEACHATE

Methods: SW846 7470A
 Units: mg/l

Prep Date: 12/15/21

Metal	JD35488-3 Original MSD	Spike lot HGPW3	% Rec	MSD RPD	QC Limit
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Mercury	0.0	0.0022	0.0020	110.0	9.5	20
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Associated samples MP30383: JD35488-3

Results < IDL are shown as zero for calculation purposes
 (*) Outside of QC limits
 (N) Matrix Spike Rec. outside of QC limits
 (anr) Analyte not requested

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: JD35488
Account: CRATXH - GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

QC Batch ID: MP30383
Matrix Type: LEACHATE

Methods: SW846 7470A
Units: mg/l

Prep Date: 12/15/21

Metal	BSP Result	Spikelot HGPW3	% Rec	QC Limits
Mercury	0.0022	0.0020	110.0	80-120

Associated samples MP30383: JD35488-3

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: JD35488
Account: CRATXH - GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

QC Batch ID: MP30384
Matrix Type: LEACHATE

Methods: SW846 7470A
Units: mg/l

Prep Date: 12/15/21

Metal	RL	IDL	MDL	MB raw	final
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Mercury 0.00020 .000034 .000095 0.0000060<0.00020

Associated samples MP30384: JD35488-5

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: JD35488
Account: CRATXH - GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

QC Batch ID: MP30384
Matrix Type: LEACHATE

Methods: SW846 7470A
Units: mg/l

Prep Date: 12/15/21

Metal	JD35488-5 Original MS	SpikeLot HGPW3	% Rec	QC Limits
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Mercury 0.0 0.0022 0.0020 110.0 75-125

Associated samples MP30384: JD35488-5

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: JD35488
 Account: CRATXH - GHD Services Inc.
 Project: SJRWP - PCFSE, Harris County, TX

QC Batch ID: MP30384
 Matrix Type: LEACHATE

Methods: SW846 7470A
 Units: mg/l

Prep Date: 12/15/21

Metal	JD35488-5 Original MSD	SpikeLot HGPW3	% Rec	MSD RPD	QC Limit
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Mercury	0.0	0.0023	0.0020	115.0	4.4	20
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Associated samples MP30384: JD35488-5

Results < IDL are shown as zero for calculation purposes
 (*) Outside of QC limits
 (N) Matrix Spike Rec. outside of QC limits
 (anr) Analyte not requested

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: JD35488
Account: CRATXH - GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

QC Batch ID: MP30384
Matrix Type: LEACHATE

Methods: SW846 7470A
Units: mg/l

Prep Date: 12/15/21

Metal	BSP Result	Spikelot HGPW3	% Rec	QC Limits
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Mercury 0.0023 0.0020 115.0 80-120

Associated samples MP30384: JD35488-5

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: JD35488
Account: CRATXH - GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

QC Batch ID: MP30491
Matrix Type: LEACHATE

Methods: SW846 6010D
Units: mg/l

Prep Date: 12/22/21

Metal	RL	IDL	MDL	MB raw	final
Aluminum	0.20	.027	.046		
Antimony	0.10	.0022	.0047	-0.0017	<0.10
Arsenic	0.10	.0013	.0028	0.0017	<0.10
Barium	0.20	.001	.013	0.0096	<0.20
Beryllium	0.0020	.0002	.0005	-0.00010	<0.0020
Bismuth	0.020	.0021	.004		
Boron	0.10	.001	.063		
Cadmium	0.0040	.0002	.001	0.00020	<0.0040
Calcium	5.0	.0077	.099		
Chromium	0.020	.0005	.002	0.0071	<0.020
Cobalt	0.050	.0004	.0026		
Copper	0.010	.0068	.0059		
Iron	0.10	.015	.032		
Lead	0.10	.0016	.0018	0.0063	<0.10
Lithium	0.050	.0037	.0073		
Magnesium	5.0	.054	.14		
Manganese	0.015	.0001	.0014		
Molybdenum	0.020	.0005	.0036		
Nickel	0.010	.0003	.0017	0.0023	<0.010
Phosphorus	0.050	.0018	.018		
Potassium	10	.077	.2		
Selenium	0.10	.002	.0049	0.0040	<0.10
Silicon	0.20	.0013	.1		
Silver	0.010	.0009	.0019	-0.00040	<0.010
Strontium	0.010	.0004	.001		
Sulfur	0.050	.0041	.045		
Thallium	0.10	.0016	.0018		
Tin	0.010	.0009	.0037		
Titanium	0.010	.0009	.0025		
Tungsten	0.050	.002	.04		
Vanadium	0.050	.0008	.0018	0.00030	<0.050
Zinc	0.10	.0002	.0069		
Zirconium	0.010	.0005	.0041		

9.11.1
9

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: JD35488
Account: CRATXH - GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

QC Batch ID: MP30491
Matrix Type: LEACHATE

Methods: SW846 6010D
Units: mg/l

Prep Date: 12/22/21

Metal	RL	IDL	MDL	MB raw	final
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Associated samples MP30491: JD35488-6

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: JD35488
 Account: CRATXH - GHD Services Inc.
 Project: SJRWP - PCFSE, Harris County, TX

QC Batch ID: MP30491
 Matrix Type: LEACHATE

Methods: SW846 6010D
 Units: mg/l

Prep Date: 12/22/21

Metal	JD35488-6 Original MS		SpikeLot MPSPK2	% Rec	QC Limits
Aluminum					
Antimony	0.0	2.0	2.0	100.0	75-125
Arsenic	0.0018	2.0	2.0	99.9	75-125
Barium	0.40	2.2	2.0	90.0	75-125
Beryllium	0.0	1.8	2.0	90.0	75-125
Bismuth					
Boron					
Cadmium	0.0011	1.9	2.0	94.9	75-125
Chromium	0.0	1.7	2.0	85.0	75-125
Cobalt					
Copper	anr				
Iron					
Lead	0.0053	1.8	2.0	89.7	75-125
Lithium					
Magnesium					
Manganese					
Molybdenum					
Nickel	0.020	1.8	2.0	89.0	75-125
Phosphorus					
Potassium					
Selenium	0.0	2.0	2.0	100.0	75-125
Silicon					
Silver	0.0	0.26	0.25	104.0	75-125
Strontium					
Sulfur					
Thallium					
Tin					
Titanium					
Tungsten					
Vanadium	0.0	1.8	2.0	90.0	75-125
Zinc	anr				
Zirconium					

Associated samples MP30491: JD35488-6

9.11.2
9

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: JD35488
Account: CRATXH - GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

QC Batch ID: MP30491
Matrix Type: LEACHATE

Methods: SW846 6010D
Units: mg/l

Prep Date: 12/22/21

Metal	JD35488-6 Original MS	SpikeLot MPSPK2	% Rec	QC Limits
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Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: JD35488
 Account: CRATXH - GHD Services Inc.
 Project: SJRWP - PCFSE, Harris County, TX

QC Batch ID: MP30491
 Matrix Type: LEACHATE

Methods: SW846 6010D
 Units: mg/l

Prep Date: 12/22/21

Metal	JD35488-6 Original MSD		SpikeLot MPSPK2	% Rec	MSD RPD	QC Limit
Aluminum						
Antimony	0.0	2.0	2.0	100.0	0.0	20
Arsenic	0.0018	2.1	2.0	104.9	4.9	20
Barium	0.40	2.3	2.0	95.0	4.4	20
Beryllium	0.0	1.8	2.0	90.0	0.0	20
Bismuth						
Boron						
Cadmium	0.0011	1.9	2.0	94.9	0.0	20
Chromium	0.0	1.8	2.0	90.0	5.7	20
Cobalt						
Copper	anr					
Iron						
Lead	0.0053	1.8	2.0	89.7	0.0	20
Lithium						
Magnesium						
Manganese						
Molybdenum						
Nickel	0.020	1.8	2.0	89.0	0.0	20
Phosphorus						
Potassium						
Selenium	0.0	2.0	2.0	100.0	0.0	20
Silicon						
Silver	0.0	0.27	0.25	108.0	3.8	20
Strontium						
Sulfur						
Thallium						
Tin						
Titanium						
Tungsten						
Vanadium	0.0	1.8	2.0	90.0	0.0	20
Zinc	anr					
Zirconium						

Associated samples MP30491: JD35488-6

9.11.2
9

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: JD35488
 Account: CRATXH - GHD Services Inc.
 Project: SJRWP - PCFSE, Harris County, TX

QC Batch ID: MP30491
 Matrix Type: LEACHATE

Methods: SW846 6010D
 Units: mg/l

Prep Date: 12/22/21

Metal	JD35488-6 Original MSD	SpikeLot MPSPK2	% Rec	MSD RPD	QC Limit
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Results < IDL are shown as zero for calculation purposes
 (*) Outside of QC limits
 (N) Matrix Spike Rec. outside of QC limits
 (anr) Analyte not requested

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: JD35488
 Account: CRATXH - GHD Services Inc.
 Project: SJRWP - PCFSE, Harris County, TX

QC Batch ID: MP30491
 Matrix Type: LEACHATE

Methods: SW846 6010D
 Units: mg/l

Prep Date: 12/22/21 12/22/21

Metal	BSP Result	Spikelot MPSPK2	% Rec	QC Limits	BSP Result	Spikelot MPSPK2	% Rec	QC Limits
Aluminum								
Antimony	1.9	2.0	95.0	80-120	1.9	2.0	95.0	80-120
Arsenic	2.0	2.0	100.0	80-120	2.0	2.0	100.0	80-120
Barium	1.8	2.0	90.0	80-120	1.8	2.0	90.0	80-120
Beryllium	1.8	2.0	90.0	80-120	1.8	2.0	90.0	80-120
Bismuth								
Boron								
Cadmium	1.8	2.0	90.0	80-120	1.8	2.0	90.0	80-120
Calcium								
Chromium	1.8	2.0	90.0	80-120	1.8	2.0	90.0	80-120
Cobalt								
Copper	anr							
Iron								
Lead	1.8	2.0	90.0	80-120	1.8	2.0	90.0	80-120
Lithium								
Magnesium								
Manganese								
Molybdenum								
Nickel	1.9	2.0	95.0	80-120	1.9	2.0	95.0	80-120
Phosphorus								
Potassium								
Selenium	1.9	2.0	95.0	80-120	1.9	2.0	95.0	80-120
Silicon								
Silver	0.25	0.25	100.0	80-120	0.26	0.25	104.0	80-120
Strontium								
Sulfur								
Thallium								
Tin								
Titanium								
Tungsten								
Vanadium	1.8	2.0	90.0	80-120	1.8	2.0	90.0	80-120
Zinc	anr							
Zirconium								

9.11.3
9

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: JD35488
 Account: CRATXH - GHD Services Inc.
 Project: SJRWP - PCFSE, Harris County, TX

QC Batch ID: MP30491
 Matrix Type: LEACHATE

Methods: SW846 6010D
 Units: mg/l

Prep Date: 12/22/21 12/22/21

Metal	BSP Result	Spikelot MPSPK2	% Rec	QC Limits	BSP Result	Spikelot MPSPK2	% Rec	QC Limits
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Associated samples MP30491: JD35488-6

Results < IDL are shown as zero for calculation purposes
 (*) Outside of QC limits
 (anr) Analyte not requested

SERIAL DILUTION RESULTS SUMMARY

Login Number: JD35488
 Account: CRATXH - GHD Services Inc.
 Project: SJRWP - PCFSE, Harris County, TX

QC Batch ID: MP30491
 Matrix Type: LEACHATE

Methods: SW846 6010D
 Units: ug/l

Prep Date: 12/22/21

Metal	JD35488-6 Original	SDL 1:5	%DIF	QC Limits
Aluminum				
Antimony	0.00	0.00	NC	0-10
Arsenic	1.80	0.00	100.0(a)	0-10
Barium	402	401	0.1	0-10
Beryllium	0.00	0.00	NC	0-10
Bismuth				
Boron				
Cadmium	1.10	0.00	100.0(a)	0-10
Calcium				
Chromium	0.00	0.00	NC	0-10
Cobalt				
Copper	anr			
Iron				
Lead	5.30	0.00	100.0(a)	0-10
Lithium				
Magnesium				
Manganese				
Molybdenum				
Nickel	19.8	19.1	3.5	0-10
Phosphorus				
Potassium				
Selenium	0.00	0.00	NC	0-10
Silicon				
Silver	0.00	0.00	NC	0-10
Strontium				
Sulfur				
Thallium				
Tin				
Titanium				
Tungsten				
Vanadium	0.00	0.00	NC	0-10
Zinc	anr			
Zirconium				

9.11.4
9

SERIAL DILUTION RESULTS SUMMARY

Login Number: JD35488
Account: CRATXH - GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

QC Batch ID: MP30491
Matrix Type: LEACHATE

Methods: SW846 6010D
Units: ug/l

Prep Date: 12/22/21

Metal	JD35488-6	QC
	Original SDL 1:5 %DIF	Limits

Associated samples MP30491: JD35488-6

Results < IDL are shown as zero for calculation purposes

(*) Outside of QC limits

(anr) Analyte not requested

(a) Percent difference acceptable due to low initial sample concentration (< 50 times IDL).

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: JD35488
Account: CRATXH - GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

QC Batch ID: MP30528
Matrix Type: LEACHATE

Methods: SW846 7470A
Units: mg/l

Prep Date: 12/23/21

Metal	RL	IDL	MDL	MB	
				raw	final
Mercury	0.00020	.000034	.000095	-0.000012	<0.00020

Associated samples MP30528: JD35488-6

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: JD35488
 Account: CRATXH - GHD Services Inc.
 Project: SJRWP - PCFSE, Harris County, TX

QC Batch ID: MP30528
 Matrix Type: LEACHATE

Methods: SW846 7470A
 Units: mg/l

Prep Date: 12/23/21

Metal	JD35488-6 Original MS	Spike lot HGPW3	% Rec	QC Limits
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Mercury	0.0	0.0019	0.0020	95.0	75-125
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Associated samples MP30528: JD35488-6

Results < IDL are shown as zero for calculation purposes
 (*) Outside of QC limits
 (N) Matrix Spike Rec. outside of QC limits
 (anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: JD35488
 Account: CRATXH - GHD Services Inc.
 Project: SJRWP - PCFSE, Harris County, TX

QC Batch ID: MP30528
 Matrix Type: LEACHATE

Methods: SW846 7470A
 Units: mg/l

Prep Date: 12/23/21

Metal	JD35488-6 Original MSD	Spike lot HGPW3	% Rec	MSD RPD	QC Limit
-------	---------------------------	-----------------------	-------	------------	-------------

Mercury	0.0	0.0021	0.0020	105.0	10.0	20
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Associated samples MP30528: JD35488-6

Results < IDL are shown as zero for calculation purposes
 (*) Outside of QC limits
 (N) Matrix Spike Rec. outside of QC limits
 (anr) Analyte not requested

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: JD35488
 Account: CRATXH - GHD Services Inc.
 Project: SJRWP - PCFSE, Harris County, TX

QC Batch ID: MP30528
 Matrix Type: LEACHATE

Methods: SW846 7470A
 Units: mg/l

Prep Date: 12/23/21 12/23/21

Metal	BSP Result	Spikelot HGPW3	% Rec	QC Limits	BSD Result	Spikelot HGPW3	% Rec	BSD RPD	QC Limit
Mercury	0.0019	0.0020	95.0	80-120	0.0018	0.0020	90.0	5.4	

Associated samples MP30528: JD35488-6

Results < IDL are shown as zero for calculation purposes
 (*) Outside of QC limits
 (anr) Analyte not requested

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: JD35488
Account: CRATXH - GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

QC Batch ID: MP30547
Matrix Type: LEACHATE

Methods: SW846 6010D
Units: mg/l

Prep Date: 12/26/21

Metal	RL	IDL	MDL	MB raw	final
Aluminum	0.20	.017	.046		
Antimony	0.10	.0017	.0047	-0.00050	<0.10
Arsenic	0.10	.0021	.0028	0.00010	<0.10
Barium	0.20	.0008	.013	0.012	<0.20
Beryllium	0.0020	.0003	.0005	-0.00010	<0.0020
Bismuth	0.020	.0023	.004		
Boron	0.10	.0023	.063		
Cadmium	0.0040	.0003	.001	0.00050	<0.0040
Calcium	5.0	.0066	.099		
Chromium	0.010	.0003	.002	0.00040	<0.010
Cobalt	0.050	.0004	.0026		
Copper	0.010	.0008	.0059		
Iron	0.10	.0053	.032		
Lead	0.10	.0011	.0018	0.00080	<0.10
Lithium	0.050	.0048	.0073		
Magnesium	5.0	.032	.14		
Manganese	0.015	.0001	.0014		
Molybdenum	0.020	.0006	.0036		
Nickel	0.010	.0004	.0017	0.0011	<0.010
Phosphorus	0.050	.0012	.018		
Potassium	10	.077	.2		
Selenium	0.10	.0032	.0049	0.0012	<0.10
Silicon	0.20	.0017	.1		
Silver	0.010	.001	.0019	-0.00060	<0.010
Sodium	10	.034	.57		
Strontium	0.010	.0003	.001		
Sulfur	0.050	.003	.045		
Thallium	0.10	.0018	.0018		
Tin	0.010	.0008	.0037		
Titanium	0.010	.0005	.0025		
Tungsten	0.050	.0026	.04		
Vanadium	0.050	.0006	.0018	0.0	<0.050
Zinc	0.020	.0001	.0069		

9.13.1
9

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: JD35488
Account: CRATXH - GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

QC Batch ID: MP30547
Matrix Type: LEACHATE

Methods: SW846 6010D
Units: mg/l

Prep Date: 12/26/21

Metal	RL	IDL	MDL	MB raw	final
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Zirconium 0.010 .0003 .0041

Associated samples MP30547: JD35488-7

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

9.13.1

9

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: JD35488
 Account: CRATXH - GHD Services Inc.
 Project: SJRWP - PCFSE, Harris County, TX

QC Batch ID: MP30547
 Matrix Type: LEACHATE

Methods: SW846 6010D
 Units: mg/l

Prep Date: 12/26/21

Metal	JD35488-7 Original MS		SpikeLot MPSPK2	% Rec	QC Limits
Aluminum					
Antimony	0.0028	2.1	2.0	104.9	75-125
Arsenic	0.0	2.1	2.0	105.0	75-125
Barium	0.21	2.1	2.0	94.5	75-125
Beryllium	0.00040	1.9	2.0	95.0	75-125
Bismuth					
Boron					
Cadmium	0.0019	2.1	2.0	104.9	75-125
Calcium					
Chromium	0.00090	2.0	2.0	100.0	75-125
Cobalt					
Copper					
Iron					
Lead	0.0040	2.0	2.0	99.8	75-125
Lithium					
Magnesium					
Manganese					
Molybdenum					
Nickel	0.0022	2.0	2.0	99.9	75-125
Phosphorus					
Potassium					
Selenium	0.0	2.0	2.0	100.0	75-125
Silicon					
Silver	0.0040	0.27	0.25	106.4	75-125
Strontium					
Sulfur					
Thallium					
Tin					
Titanium					
Tungsten					
Vanadium	0.0011	2.0	2.0	99.9	75-125
Zinc					
Zirconium					

9.132
9

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: JD35488
Account: CRATXH - GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

QC Batch ID: MP30547
Matrix Type: LEACHATE

Methods: SW846 6010D
Units: mg/l

Prep Date: 12/26/21

Metal	JD35488-7 Original MS	SpikeLot MPSPK2	% Rec	QC Limits
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Associated samples MP30547: JD35488-7

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: JD35488
 Account: CRATXH - GHD Services Inc.
 Project: SJRWP - PCFSE, Harris County, TX

QC Batch ID: MP30547
 Matrix Type: LEACHATE

Methods: SW846 6010D
 Units: mg/l

Prep Date: 12/26/21

Metal	JD35488-7 Original	MSD	SpikeLot MPSPK2	% Rec	MSD RPD	QC Limit
Aluminum						
Antimony	0.0028	2.1	2.0	104.9	0.0	20
Arsenic	0.0	2.1	2.0	105.0	0.0	20
Barium	0.21	2.1	2.0	94.5	0.0	20
Beryllium	0.00040	1.9	2.0	95.0	0.0	20
Bismuth						
Boron						
Cadmium	0.0019	2.1	2.0	104.9	0.0	20
Calcium						
Chromium	0.00090	2.0	2.0	100.0	0.0	20
Cobalt						
Copper						
Iron						
Lead	0.0040	2.0	2.0	99.8	0.0	20
Lithium						
Magnesium						
Manganese						
Molybdenum						
Nickel	0.0022	2.0	2.0	99.9	0.0	20
Phosphorus						
Potassium						
Selenium	0.0	2.0	2.0	100.0	0.0	20
Silicon						
Silver	0.0040	0.27	0.25	106.4	0.0	20
Strontium						
Sulfur						
Thallium						
Tin						
Titanium						
Tungsten						
Vanadium	0.0011	2.0	2.0	99.9	0.0	20
Zinc						
Zirconium						

9.132
9

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: JD35488
 Account: CRATXH - GHD Services Inc.
 Project: SJRWP - PCFSE, Harris County, TX

QC Batch ID: MP30547
 Matrix Type: LEACHATE

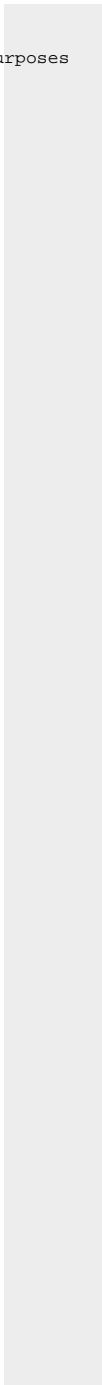
Methods: SW846 6010D
 Units: mg/l

Prep Date: 12/26/21

Metal	JD35488-7 Original MSD	SpikeLot MPSPK2	% Rec	MSD RPD	QC Limit
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Associated samples MP30547: JD35488-7

Results < IDL are shown as zero for calculation purposes
 (*) Outside of QC limits
 (N) Matrix Spike Rec. outside of QC limits
 (anr) Analyte not requested



9.13.2
9

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: JD35488
 Account: CRATXH - GHD Services Inc.
 Project: SJRWP - PCFSE, Harris County, TX

QC Batch ID: MP30547
 Matrix Type: LEACHATE

Methods: SW846 6010D
 Units: mg/l

Prep Date: 12/26/21

Metal	BSP Result	Spikelot MPSPK2	% Rec	QC Limits
Aluminum				
Antimony	1.9	2.0	95.0	80-120
Arsenic	1.9	2.0	95.0	80-120
Barium	1.8	2.0	90.0	80-120
Beryllium	1.8	2.0	90.0	80-120
Bismuth				
Boron				
Cadmium	1.9	2.0	95.0	80-120
Calcium				
Chromium	1.8	2.0	90.0	80-120
Cobalt				
Copper				
Iron				
Lead	1.8	2.0	90.0	80-120
Lithium				
Magnesium				
Manganese				
Molybdenum				
Nickel	1.8	2.0	90.0	80-120
Phosphorus				
Potassium				
Selenium	1.8	2.0	90.0	80-120
Silicon				
Silver	0.24	0.25	96.0	80-120
Sodium				
Strontium				
Sulfur				
Thallium				
Tin				
Titanium				
Tungsten				
Vanadium	1.9	2.0	95.0	80-120
Zinc				

9.13.3
9

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: JD35488
Account: CRATXH - GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

QC Batch ID: MP30547
Matrix Type: LEACHATE

Methods: SW846 6010D
Units: mg/l

Prep Date: 12/26/21

Metal	BSP Result	Spikelot MPSPK2	% Rec	QC Limits
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Zirconium

Associated samples MP30547: JD35488-7

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

9.13.3

9

SERIAL DILUTION RESULTS SUMMARY

Login Number: JD35488
 Account: CRATXH - GHD Services Inc.
 Project: SJRWP - PCFSE, Harris County, TX

QC Batch ID: MP30547
 Matrix Type: LEACHATE

Methods: SW846 6010D
 Units: ug/l

Prep Date: 12/26/21

Metal	JD35488-7 Original	SDL 1:5	%DIF	QC Limits
Aluminum				
Antimony	2.80	0.00	100.0(a)	0-10
Arsenic	0.00	0.00	NC	0-10
Barium	213	215	1.2	0-10
Beryllium	0.400	0.00	100.0(a)	0-10
Bismuth				
Boron				
Cadmium	1.90	2.70	42.1 (a)	0-10
Calcium				
Chromium	0.900	0.00	100.0(a)	0-10
Cobalt				
Copper				
Iron				
Lead	4.00	0.00	100.0(a)	0-10
Lithium				
Magnesium				
Manganese				
Molybdenum				
Nickel	2.20	2.60	18.2 (a)	0-10
Phosphorus				
Potassium				
Selenium	0.00	0.00	NC	0-10
Silicon				
Silver	4.00	0.00	100.0(a)	0-10
Sodium				
Strontium				
Sulfur				
Thallium				
Tin				
Titanium				
Tungsten				
Vanadium	1.10	0.00	100.0(a)	0-10
Zinc				

9.13.4
 9

SERIAL DILUTION RESULTS SUMMARY

Login Number: JD35488
Account: CRATXH - GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

QC Batch ID: MP30547
Matrix Type: LEACHATE

Methods: SW846 6010D
Units: ug/l

Prep Date: 12/26/21

Metal	JD35488-7	QC
	Original SDL 1:5 %DIF	Limits

Zirconium

Associated samples MP30547: JD35488-7

Results < IDL are shown as zero for calculation purposes

(*) Outside of QC limits

(anr) Analyte not requested

(a) Percent difference acceptable due to low initial sample concentration (< 50 times IDL).

9.13.4

9

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: JD35488
Account: CRATXH - GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

QC Batch ID: MP30574
Matrix Type: LEACHATE

Methods: SW846 7470A
Units: mg/l

Prep Date: 12/27/21

Metal	RL	IDL	MDL	MB	
				raw	final
Mercury	0.00020	.000034	.000095	-0.000036	<0.00020

Associated samples MP30574: JD35488-7

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: JD35488
 Account: CRATXH - GHD Services Inc.
 Project: SJRWP - PCFSE, Harris County, TX

QC Batch ID: MP30574
 Matrix Type: LEACHATE

Methods: SW846 7470A
 Units: mg/l

Prep Date: 12/27/21

Metal	JD35488-7 Original MS	Spike lot	HGPW3	% Rec	QC Limits
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Mercury	0.0	0.0018	0.0020	90.0	75-125
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Associated samples MP30574: JD35488-7

Results < IDL are shown as zero for calculation purposes
 (*) Outside of QC limits
 (N) Matrix Spike Rec. outside of QC limits
 (anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: JD35488
 Account: CRATXH - GHD Services Inc.
 Project: SJRWP - PCFSE, Harris County, TX

QC Batch ID: MP30574
 Matrix Type: LEACHATE

Methods: SW846 7470A
 Units: mg/l

Prep Date: 12/27/21

Metal	JD35488-7 Original MSD	Spike lot HGPW3	% Rec	MSD RPD	QC Limit
Mercury	0.0	0.0019	0.0020	95.0	5.4 20

Associated samples MP30574: JD35488-7

Results < IDL are shown as zero for calculation purposes
 (*) Outside of QC limits
 (N) Matrix Spike Rec. outside of QC limits
 (anr) Analyte not requested

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: JD35488
Account: CRATXH - GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

QC Batch ID: MP30574
Matrix Type: LEACHATE

Methods: SW846 7470A
Units: mg/l

Prep Date: 12/27/21

Metal	BSP Result	Spikelot HGPW3	% Rec	QC Limits
Mercury	0.0020	0.0020	100.0	80-120

Associated samples MP30574: JD35488-7

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

General Chemistry

QC Data Summaries

Includes the following where applicable:

- Method Blank and Blank Spike Summaries
- Duplicate Summaries
- Matrix Spike Summaries

METHOD BLANK AND SPIKE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: JD35488
Account: CRATXH - GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Analyte	Batch ID	RL	MB Result	Units	Spike Amount	BSP Result	BSP %Recov	QC Limits
Cyanide Reactivity	GP37438/GN24591	10	0.0	mg/l	100	7.75	7.8	.25-27%
Cyanide Reactivity	GP37560/GN24986	10	0.0	mg/l	100	-0.262	0.0(a)	.25-27%
Cyanide Reactivity	GP37562/GN24986	10	0.0	mg/l	100	-0.209	0.0(a)	.25-27%
Cyanide Reactivity	GP37839/GN25313	10	0.0	mg/kg	100	4.58	4.6	.25-27%
Cyanide Reactivity	GP37842/GN25313	10	0.0	mg/l	100	3.55	3.6	.25-27%
Sulfide Reactivity	GP37437/GN24577	100	0.0	mg/l	410	250	61.0	46-107%
Sulfide Reactivity	GP37559/GN24750	100	0.0	mg/l	514	403	78.4	46-107%
Sulfide Reactivity	GP37561/GN24754	100	0.0	mg/l	524	403	76.9	46-107%
Sulfide Reactivity	GP37838/GN25280	100	0.0	mg/kg	530	430	81.1	42-107%
Sulfide Reactivity	GP37841/GN25293	100	0.0	mg/l	530	430	81.1	46-107%

Associated Samples:

Batch GP37437: JD35488-1, JD35488-2
Batch GP37438: JD35488-1, JD35488-2
Batch GP37559: JD35488-3, JD35488-5
Batch GP37560: JD35488-3, JD35488-5
Batch GP37561: JD35488-4
Batch GP37562: JD35488-4
Batch GP37838: JD35488-6
Batch GP37839: JD35488-6
Batch GP37841: JD35488-7
Batch GP37842: JD35488-7

(*) Outside of QC limits

(a) Spike blank indicates possible low bias. Since instrument QCs are within control data are qualified and reported.

10.1
10

DUPLICATE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: JD35488
Account: CRATXH - GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Analyte	Batch ID	QC Sample	Units	Original Result	DUP Result	RPD	QC Limits
Cyanide Reactivity	GP37438/GN24591	JD36144-5	mg/l	0.0	0.0	0.0	0-20%
Cyanide Reactivity	GP37560/GN24986	JD36407-1	mg/l	0.0	0.0	0.0	0-20%
Cyanide Reactivity	GP37562/GN24986	JD36629-3A	mg/l	0.0	0.0	0.0	0-20%
Cyanide Reactivity	GP37839/GN25313	JD35488-6	mg/kg	9.6 U	0.0	0.0	0-20%
Cyanide Reactivity	GP37842/GN25313	JD37045-1	mg/l	10 U	0.0	0.0	0-20%
Ignitability (Flashpoint)	GN24504	JD35487-2	Deg. F	>200	>200	0.0	0-10%
Ignitability (Flashpoint)	GN24609	JD35488-2	Deg. F	>200	>200	0.0	0-10%
Ignitability (Flashpoint)	GN24741	JD35488-3	Deg. F	>200	>200	0.0	0-10%
Ignitability (Flashpoint)	GN24776	JD35488-4	Deg. F	>200	>200	0.0	0-10%
Ignitability (Flashpoint)	GN24804	JD35488-5	Deg. F	>200	>200	0.0	0-10%
Ignitability (Flashpoint)	GN24958	JD36629-4	Deg. F	>200	>200	0.0	0-10%
Ignitability (Flashpoint)	GN25118	JD35488-7	Deg. F	>200	>200	0.0	0-10%
Solids, Percent	GN24499	JD36178-4	%	86.8	86.7	0.1	0-5%
Solids, Percent	GN24663	JD35488-3	%	79.4	81.5	2.6	0-5%
Solids, Percent	GN24685	JD36564-1	%	82.5	82.6	0.1	0-5%
Solids, Percent	GN24898	JD36931-1	%	80.9	81.2	0.4	0-5%
Sulfide Reactivity	GP37437/GN24577	JD36144-5	mg/l	0.00	0.00	0.0	0-19%
Sulfide Reactivity	GP37559/GN24750	JD36407-1	mg/l	0.00	0.0	0.0	0-19%
Sulfide Reactivity	GP37561/GN24754	JD36629-3A	mg/l	0.0	0.0	0.0	0-19%
Sulfide Reactivity	GP37838/GN25280	JD35488-6	mg/kg	76 U	0.00	0.0	0-20%
Sulfide Reactivity	GP37841/GN25293	JD37045-1	mg/l	43 U	0.0	0.0	0-19%

Associated Samples:

Batch GN24499: JD35488-1
 Batch GN24504: JD35488-1
 Batch GN24609: JD35488-2
 Batch GN24663: JD35488-3
 Batch GN24685: JD35488-5
 Batch GN24741: JD35488-3
 Batch GN24776: JD35488-4
 Batch GN24804: JD35488-5
 Batch GN24898: JD35488-6
 Batch GN24958: JD35488-6
 Batch GN25118: JD35488-7
 Batch GP37437: JD35488-1, JD35488-2
 Batch GP37438: JD35488-1, JD35488-2
 Batch GP37559: JD35488-3, JD35488-5
 Batch GP37560: JD35488-3, JD35488-5
 Batch GP37561: JD35488-4
 Batch GP37562: JD35488-4
 Batch GP37838: JD35488-6
 Batch GP37839: JD35488-6
 Batch GP37841: JD35488-7
 Batch GP37842: JD35488-7
 (*) Outside of QC limits

10.2
10

MATRIX SPIKE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: JD35488
Account: CRATXH - GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Analyte	Batch ID	QC Sample	Units	Original Result	Spike Amount	MS Result	%Rec	QC Limits
Sulfide Reactivity	GP37437/GN24577	JD36144-5	mg/l	0.00	410	154	37.6	10-104%
Sulfide Reactivity	GP37559/GN24750	JD36407-1	mg/l	0.00	514	352	68.5	10-104%
Sulfide Reactivity	GP37561/GN24754	JD36629-3A	mg/l	0.0	524	343	65.5	10-104%
Sulfide Reactivity	GP37838/GN25280	JD35488-6	mg/kg	76 U	690	507	73.5	20-82%
Sulfide Reactivity	GP37841/GN25293	JD37045-1	mg/l	43 U	530	400	75.5	10-104%

Associated Samples:

Batch GP37437: JD35488-1, JD35488-2

Batch GP37559: JD35488-3, JD35488-5

Batch GP37561: JD35488-4

Batch GP37838: JD35488-6

Batch GP37841: JD35488-7

(*) Outside of QC limits

(N) Matrix Spike Rec. outside of QC limits

10.3
10

Misc. Forms

Custody Documents and Other Forms

(SGS Houston, TX)

Includes the following where applicable:

- Chain of Custody





CHAIN OF CUSTODY

SGS North America Inc. - Dayton
2335 Route 330 - Dayton, NJ 08810
TEL: 732-329-0209 FAX: 732-329-3499/3488
www.sgs.com/houston

Form containing Client/Reporting Information, Project Information, Requested Analysis, Matrix Codes, and Laboratory Use Only sections. Includes fields for Company Name, Project Name, Street Address, City, State, Zip, Project Contact, Project #, Client Purchase Order #, and a detailed collection table with columns for Date, Time, Sampler, Matrix, and various analytes.

Form containing Turnaround Time (Business days), Approved By (SGS PM), Data Deliverable Information, and Comments / Special Instructions sections. Includes checkboxes for Standard 10 Business Days, 5 Business Days RUSH, 3 Business Days RUSH, 2 Business Days RUSH, 1 Business Day EMERGENCY, and Other Date 12/19/2021.

Form containing a chain of custody table with columns for Delivered By, Date / Time, Received By, and Date / Time. Includes handwritten signatures and dates, such as 'Fedex' and '12/21'.

JD35488: Chain of Custody
Page 1 of 5
SGS Houston, TX



Job Change Order: JD35488

Requested Date:	2/21/2022	Received Date:	12/3/2021		
Account Name:	GHD Services Inc.	Due Date:	2/21/2022		
Project Description:	SJRWP - PCFSE, Harris County, TX		Deliverable:	FULT1	
C/O Initiated By:	KELLY.RAM	PM:	KR	TAT (Days):	1

Sample #: JD35488-ALL **Change:**
Dept: Please revise to COMMBN and reissue report
TAT: 1

Above Changes Per: Kathy Shaw

Date/Time: 2/21/2022

To Client: This Change Order is confirmation of the revisions, previously discussed with the Client Service Representative.



SGS Sample Receipt Summary

Job Number: JD35488 **Client:** SGS NORTH **Project:** SJRWP - PCFSE, HARRIS COUNTY TX
Date / Time Received: 12/7/2021 10:48:00 AM **Delv Method:** FEDEX **Airbill #s:** 527206368785
of Coolers: 4 **Therm ID:** IR-11; IR-9; IR-9; **Temp Adjustment Factor:** 0.5; 0.1; 0.1;

Cooler Temps (Initial/Adjusted): #1: (0.5/1); #2: (2/2.1); #3: (2/2.1); #4: (1.4/1.5);

Test Strip Lot #s: _____ **pH 1-12:** _____ **pH 12+:** _____ **Other: (Specify)** _____

<u>Cooler Information</u>	<u>Y</u>	<u>or</u>	<u>N</u>	<u>N/A</u>
1. Custody Seals Present:	<input checked="" type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>
2. Custody Seals Intact:	<input checked="" type="checkbox"/>		<input type="checkbox"/>	
3. Temp criteria achieved:	<input checked="" type="checkbox"/>		<input type="checkbox"/>	
4. Cooler temp verification:				
3. Cooler media:				<u>Ice (Bag)</u>

<u>Trip Blank Information</u>	<u>Y</u>	<u>or</u>	<u>N</u>	<u>N/A</u>
1. Trip Blank present / cooler:	<input type="checkbox"/>		<input type="checkbox"/>	<input checked="" type="checkbox"/>
2. Trip Blank listed on COC:	<input type="checkbox"/>		<input type="checkbox"/>	<input checked="" type="checkbox"/>
3. Type Of TB Received				
	<u>W</u>	<u>or</u>	<u>S</u>	<u>N/A</u>
	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>

Misc. Information

Number of terracores: _____ Number of Lab Filtered Metals: _____
 Number of 5035 Field Kits: _____
 Residual Chlorine Test Strip Lot #: _____

<u>Sample Information</u>	<u>Y</u>	<u>or</u>	<u>N</u>	<u>N/A</u>
1. Sample labels present on bottles:	<input checked="" type="checkbox"/>		<input type="checkbox"/>	
2. Samples preserved properly:	<input checked="" type="checkbox"/>		<input type="checkbox"/>	
3. Sufficient volume recvd for analysis:	<input checked="" type="checkbox"/>		<input type="checkbox"/>	
4. Condition of sample:				Intact
5. Sample recvd within HT:	<input checked="" type="checkbox"/>		<input type="checkbox"/>	
6. Dates/Times/IDs on COC match Sample Label	<input checked="" type="checkbox"/>		<input type="checkbox"/>	
7. Container labeling complete:	<input checked="" type="checkbox"/>		<input type="checkbox"/>	
8. Analysis requested is clear:	<input checked="" type="checkbox"/>		<input type="checkbox"/>	
9. VOCs headspace free:	<input type="checkbox"/>		<input type="checkbox"/>	<input checked="" type="checkbox"/>
10. Bottles received for unspecified tests	<input checked="" type="checkbox"/>		<input type="checkbox"/>	
11. COC Present:	<input checked="" type="checkbox"/>		<input type="checkbox"/>	
12. Special Instructions (compositing/filtering) clear:	<input type="checkbox"/>		<input type="checkbox"/>	<input checked="" type="checkbox"/>
13. Voa Soil Kits/Jars received past 48hrs?	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>
14. % Solids Jar received?	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>
15. Residual Chlorine Present?	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>

Comments

Lab received sample -4 (2 40ml none preserved vials) not listed on the chain of custody.
 Lab received additional volume (2 TPH 1005 vials) for -5 on 12/16/2021.

11.1

Sample Receipt Log

Job #: JD35488

Date / Time Received: 12/7/2021 10:48:00 AM

Initials: MICHAEL

Client: SGS NORTH

Cooler #	Sample ID:	Vol	Bot #	Location	Pres	pH	Therm ID	Initial Temp	Therm CF	Corrected Temp
1	JD35488-1	60ml	1	VRFREEZ	N/P	Note #2 - Preservative check not applicable.	IR-11	0.5	0.5	1
1	JD35488-1	60ml	2	VRFREEZ	N/P	Note #2 - Preservative check not applicable.	IR-11	0.5	0.5	1
1	JD35488-1	40ml	3	TPHFREEZ	N/P	Note #2 - Preservative check not applicable.	IR-11	0.5	0.5	1
1	JD35488-1	40ml	4	TPHFREEZ	N/P	Note #2 - Preservative check not applicable.	IR-11	0.5	0.5	1
1	JD35488-1	40ml	5	TPHFREEZ	N/P	Note #2 - Preservative check not applicable.	IR-11	0.5	0.5	1
1	JD35488-1	40ml	6	TPHFREEZ	N/P	Note #2 - Preservative check not applicable.	IR-11	0.5	0.5	1
1	JD35488-2	40ml	1	VR28	HCL	Note #1 - Preservative to be checked by analyst at the instrument.	IR-11	0.5	0.5	1
1	JD35488-2	40ml	2	VR28	HCL	Note #1 - Preservative to be checked by analyst at the instrument.	IR-11	0.5	0.5	1
1	JD35488-2	40ml	3	VR28	HCL	Note #1 - Preservative to be checked by analyst at the instrument.	IR-11	0.5	0.5	1
1	JD35488-2	40ml	4	4Q	N/P	Note #2 - Preservative check not applicable.	IR-11	0.5	0.5	1
1	JD35488-2	40ml	5	4Q	N/P	Note #2 - Preservative check not applicable.	IR-11	0.5	0.5	1
1	JD35488-2	40ml	6	4Q	N/P	Note #2 - Preservative check not applicable.	IR-11	0.5	0.5	1
2	JD35488-3	50ml	1	2-40	N/P	Note #2 - Preservative check not applicable.	IR-9	2	0.1	2.1
2	JD35488-3	50ml	2	2-40	N/P	Note #2 - Preservative check not applicable.	IR-9	2	0.1	2.1
2	JD35488-3	40ml	3	TPHFREEZ	N/P	Note #2 - Preservative check not applicable.	IR-9	2	0.1	2.1
2	JD35488-3	40ml	4	TPHFREEZ	N/P	Note #2 - Preservative check not applicable.	IR-9	2	0.1	2.1
2	JD35488-3	8oz	5	2-41	N/P	Note #2 - Preservative check not applicable.	IR-9	2	0.1	2.1
2	JD35488-3	8oz	6	SUB	N/P	Note #2 - Preservative check not applicable.	IR-9	2	0.1	2.1
2	JD35488-4	40ml	1	VR56	N/P	Note #2 - Preservative check not applicable.	IR-9	2	0.1	2.1
2	JD35488-4	40ml	2	VR56	N/P	Note #2 - Preservative check not applicable.	IR-9	2	0.1	2.1
2	JD35488-4	LAG	3	4R	N/P	Note #2 - Preservative check not applicable.	IR-9	2	0.1	2.1
2	JD35488-4	LAG	4	4R	N/P	Note #2 - Preservative check not applicable.	IR-9	2	0.1	2.1
2	JD35488-4	40ml	5	4R	HCL	Note #2 - Preservative check not applicable.	IR-9	2	0.1	2.1

JD35488: Chain of Custody

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Sample Receipt Log

Job #: JD35488

Date / Time Received: 12/7/2021 10:48:00 AM

Initials: MICHAEL

Client: SGS NORTH

Cooler #	Sample ID:	Vol	Bot #	Location	Pres	pH	Therm ID	Initial Temp	Therm CF	Corrected Temp
2	JD35488-4	40ml	6	4R	HCL	Note #2 - Preservative check not applicable.	IR-9	2	0.1	2.1
2	JD35488-4	40ml	7	4R	HCL	Note #2 - Preservative check not applicable.	IR-9	2	0.1	2.1
1	JD35488-5	40ml	1	TPHFREEZ	N/P	Note #2 - Preservative check not applicable.	IR-11	0.5	0.5	1
1	JD35488-5	40ml	2	TPHFREEZ	N/P	Note #2 - Preservative check not applicable.	IR-11	0.5	0.5	1
1	JD35488-5	4oz	3	2-41	N/P	Note #2 - Preservative check not applicable.	IR-11	0.5	0.5	1
1	JD35488-5	40ml	4	TPHFREEZ	N/P	Note #2 - Preservative check not applicable.	IR-11	0.5	0.5	1
1	JD35488-5	40ml	5	TPHFREEZ	N/P	Note #2 - Preservative check not applicable.	IR-11	0.5	0.5	1
3	JD35488-6	40ml	1	TPHFREEZ	N/P	Note #2 - Preservative check not applicable.	IR-9	2	0.1	2.1
3	JD35488-6	40ml	2	TPHFREEZ	N/P	Note #2 - Preservative check not applicable.	IR-9	2	0.1	2.1
3	JD35488-6	4oz	3	SUB	N/P	Note #2 - Preservative check not applicable.	IR-9	2	0.1	2.1
3	JD35488-6	4oz	4	2-50	N/P	Note #2 - Preservative check not applicable.	IR-9	2	0.1	2.1
3	JD35488-6	4oz	5	2-50	N/P	Note #2 - Preservative check not applicable.	IR-9	2	0.1	2.1
3	JD35488-7	LAG	1	4Q	HCL	Note #2 - Preservative check not applicable.	IR-9	2	0.1	2.1
3	JD35488-7	40ml	2	VR 4	HCL	Note #1 - Preservative to be checked by analyst at the instrument.	IR-9	2	0.1	2.1
3	JD35488-7	40ml	3	VR 4	HCL	Note #1 - Preservative to be checked by analyst at the instrument.	IR-9	2	0.1	2.1
3	JD35488-7	40ml	4	VR 4	HCL	Note #1 - Preservative to be checked by analyst at the instrument.	IR-9	2	0.1	2.1

11.1
11

JD35488: Chain of Custody

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GC Volatiles

QC Data Summaries

(SGS Houston, TX)

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Surrogate Recovery Summaries

Leachate Blank Summary

Job Number: JD35488
Account: ALNJ SGS Dayton, NJ
Project: CRATXH: SJRWP - PCFSE, Harris County, TX (IDW)

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GRR2599-LB	RR0173965.D	1	12/15/21	JW	n/a	n/a	GRR2599

The QC reported here applies to the following samples:

Method: SW846 8015C

JD35488-1A

CAS No.	Compound	Result	RL	MDL	Units	Q
110-80-5	2-Ethoxyethanol	ND	10	1.0	mg/l	
109-86-4	2-Methoxyethanol	ND	10	1.0	mg/l	
107-21-1	Ethylene Glycol	3.3	10	1.0	mg/l	J

CAS No.	Surrogate Recoveries	Limits
78-83-1	Isobutanol	83% 41-154%

12.1.1
12

Leachate Blank Summary

Job Number: JD35488
Account: ALNJ SGS Dayton, NJ
Project: CRATXH: SJRWP - PCFSE, Harris County, TX (IDW)

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GRR2606-LB	RR0174122.D	1	01/04/22	JW	n/a	n/a	GRR2606

The QC reported here applies to the following samples:

Method: SW846 8015C

JD35488-6A

CAS No.	Compound	Result	RL	MDL	Units	Q
110-80-5	2-Ethoxyethanol	ND	10	1.0	mg/l	
109-86-4	2-Methoxyethanol	ND	10	1.0	mg/l	
107-21-1	Ethylene Glycol	5.1	10	1.0	mg/l	J

CAS No.	Surrogate Recoveries	Limits
78-83-1	Isobutanol	92% 41-154%

12.1.2
12

Leachate Blank Summary

Job Number: JD35488
Account: ALNJ SGS Dayton, NJ
Project: CRATXH: SJRWP - PCFSE, Harris County, TX (IDW)

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GRR2606-LB	RR0174123.D	1	01/04/22	JW	n/a	n/a	GRR2606

The QC reported here applies to the following samples:

Method: SW846 8015C

JD35488-7A

CAS No.	Compound	Result	RL	MDL	Units	Q
110-80-5	2-Ethoxyethanol	ND	10	1.0	mg/l	
109-86-4	2-Methoxyethanol	ND	10	1.0	mg/l	
107-21-1	Ethylene Glycol	ND	10	1.0	mg/l	

CAS No.	Surrogate Recoveries	Limits
78-83-1	Isobutanol	93% 41-154%

12.1.3
12

Blank Spike Summary

Job Number: JD35488
Account: ALNJ SGS Dayton, NJ
Project: CRATXH: SJRWP - PCFSE, Harris County, TX (IDW)

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GRR2599-BS	RR0173963.D	1	12/15/21	JW	n/a	n/a	GRR2599

The QC reported here applies to the following samples:

Method: SW846 8015C

JD35488-1A, JD35488-2A

CAS No.	Compound	Spike mg/l	BSP mg/l	BSP %	Limits
110-80-5	2-Ethoxyethanol	400	391	98	83-152
109-86-4	2-Methoxyethanol	400	393	98	74-137
107-21-1	Ethylene Glycol	400	411	103	70-144

CAS No.	Surrogate Recoveries	BSP	Limits
78-83-1	Isobutanol	83%	41-154%

12.2.1
12

* = Outside of Control Limits.

Blank Spike Summary

Job Number: JD35488
Account: ALNJ SGS Dayton, NJ
Project: CRATXH: SJRWP - PCFSE, Harris County, TX (IDW)

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GRR2606-BS	RR0174124.D	1	01/04/22	JW	n/a	n/a	GRR2606

The QC reported here applies to the following samples:

Method: SW846 8015C

JD35488-6A, JD35488-7A

CAS No.	Compound	Spike mg/l	BSP mg/l	BSP %	Limits
110-80-5	2-Ethoxyethanol	400	384	96	83-152
109-86-4	2-Methoxyethanol	400	390	98	74-137
107-21-1	Ethylene Glycol	400	331	83	70-144

CAS No.	Surrogate Recoveries	BSP	Limits
78-83-1	Isobutanol	85%	41-154%

12.2.2
12

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JD35488

Account: ALNJ SGS Dayton, NJ

Project: CRATXH: SJRWP - PCFSE, Harris County, TX (IDW)

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JD35488-2AMS	RR0173971.D	1	12/15/21	JW	n/a	n/a	GRR2599
JD35488-2AMSD	RR0173972.D	1	12/15/21	JW	n/a	n/a	GRR2599
JD35488-2A	RR0173970.D	1	12/15/21	JW	12/08/21	OP56400	GRR2599

The QC reported here applies to the following samples:

Method: SW846 8015C

JD35488-1A, JD35488-2A

CAS No.	Compound	JD35488-2A Spike		MS	MS	Spike	MSD	MSD	RPD	Limits
		mg/l	Q mg/l	mg/l	%	mg/l	mg/l	%		Rec/RPD
110-80-5	2-Ethoxyethanol	ND	400	346	87	400	323	81*	7	83-152/18
109-86-4	2-Methoxyethanol	ND	400	351	88	400	329	82	6	74-137/19
107-21-1	Ethylene Glycol	5.2	JB 400	340	84	400	372	92	9	70-144/21

CAS No.	Surrogate Recoveries	MS	MSD	JD35488-2A Limits
78-83-1	Isobutanol	74%	67%	77% 41-154%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JD35488

Account: ALNJ SGS Dayton, NJ

Project: CRATXH: SJRWP - PCFSE, Harris County, TX (IDW)

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JD35488-7AMS	RR0174127.D	1	01/04/22	JW	n/a	n/a	GRR2606
JD35488-7AMSD	RR0174128.D	1	01/04/22	JW	n/a	n/a	GRR2606
JD35488-7A	RR0174126.D	1	01/04/22	JW	12/29/21	OP56412	GRR2606

The QC reported here applies to the following samples:

Method: SW846 8015C

JD35488-6A, JD35488-7A

CAS No.	Compound	JD35488-7A Spike		MS	MS	Spike	MSD	MSD	RPD	Limits
		mg/l	Q mg/l	mg/l	%	mg/l	mg/l	%		Rec/RPD
110-80-5	2-Ethoxyethanol	ND	400	363	91	400	369	92	2	83-152/18
109-86-4	2-Methoxyethanol	ND	400	373	93	400	371	93	1	74-137/19
107-21-1	Ethylene Glycol	12.7	400	320	77	400	331	80	3	70-144/21

CAS No.	Surrogate Recoveries	MS	MSD	JD35488-7A Limits
78-83-1	Isobutanol	79%	87%	80% 41-154%

12.3.2
12

* = Outside of Control Limits.

Surrogate Recovery Summary

Job Number: JD35488

Account: ALNJ SGS Dayton, NJ

Project: CRATXH: SJRWP - PCFSE, Harris County, TX (IDW)

Method: SW846 8015C

Matrix: LEACHATE

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1 ^a
JD35488-1A	RR0173969.D	82
JD35488-2A	RR0173970.D	77
JD35488-6A	RR0174125.D	84
JD35488-7A	RR0174126.D	80
GRR2599-BS	RR0173963.D	83
GRR2599-LB	RR0173965.D	83
GRR2606-BS	RR0174124.D	85
GRR2606-LB	RR0174122.D	92
GRR2606-LB	RR0174123.D	93
JD35488-2AMS	RR0173971.D	74
JD35488-2AMSD	RR0173972.D	67
JD35488-7AMS	RR0174127.D	79
JD35488-7AMSD	RR0174128.D	87

Surrogate Compounds

Recovery Limits

S1 = Isobutanol

41-154%

(a) Recovery from GC signal #1

12.4.1
12

GC/LC Semi-volatiles

QC Data Summaries

(SGS Houston, TX)

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Surrogate Recovery Summaries

Method Blank Summary

Job Number: JD35488
Account: ALNJ SGS Dayton, NJ
Project: CRATXH: SJRWP - PCFSE, Harris County, TX (IDW)

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP56278-MB	JB117599.D	1	12/09/21	LT	12/09/21	OP56278	GJB2255

The QC reported here applies to the following samples:

Method: TCEQ 1005

JD35488-2A

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C6-C12)	ND	2.5	0.84	mg/l	
	TPH (> C12-C28)	ND	2.5	0.64	mg/l	
	TPH (> C28-C35)	ND	2.5	0.64	mg/l	
	TPH (C6-C35)	ND	2.5	0.64	mg/l	

CAS No.	Surrogate Recoveries	Limits	
84-15-1	o-Terphenyl	88%	70-130%
98-08-8	aaa-Trifluorotoluene	90%	70-130%

Method Blank Summary

Job Number: JD35488

Account: ALNJ SGS Dayton, NJ

Project: CRATXH: SJRWP - PCFSE, Harris County, TX (IDW)

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP56309-MB	LB194407.D	1	12/15/21	GR	12/14/21	OP56309	GLB3172

The QC reported here applies to the following samples:

Method: TCEQ 1005

JD35488-4A

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C6-C12)	ND	2.5	0.84	mg/l	
	TPH (> C12-C28)	ND	2.5	0.64	mg/l	
	TPH (> C28-C35)	ND	2.5	0.64	mg/l	
	TPH (C6-C35)	ND	2.5	0.64	mg/l	

CAS No.	Surrogate Recoveries	Limits	
84-15-1	o-Terphenyl	101%	70-130%
98-08-8	aaa-Trifluorotoluene	102%	70-130%

Method Blank Summary

Job Number: JD35488

Account: ALNJ SGS Dayton, NJ

Project: CRATXH: SJRWP - PCFSE, Harris County, TX (IDW)

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP56326-MB	LB194485.D	1	12/16/21	GR	12/16/21	OP56326	GLB3173

The QC reported here applies to the following samples:

Method: TCEQ 1005

JD35488-1A, JD35488-3A

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C6-C12)	ND	25	6.4	mg/kg	
	TPH (> C12-C28)	ND	25	4.6	mg/kg	
	TPH (> C28-C35)	ND	25	4.6	mg/kg	
	TPH (C6-C35)	ND	25	4.6	mg/kg	

CAS No.	Surrogate Recoveries	Limits	
84-15-1	o-Terphenyl	82%	70-130%
98-08-8	aaa-Trifluorotoluene	94%	70-130%

Method Blank Summary

Job Number: JD35488
Account: ALNJ SGS Dayton, NJ
Project: CRATXH: SJRWP - PCFSE, Harris County, TX (IDW)

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP56336-MB	LB194521.D	1	12/17/21	GR	12/17/21	OP56336	GLB3174

The QC reported here applies to the following samples:

Method: TCEQ 1005

JD35488-5A

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C6-C12)	ND	25	6.4	mg/kg	
	TPH (> C12-C28)	ND	25	4.6	mg/kg	
	TPH (> C28-C35)	ND	25	4.6	mg/kg	
	TPH (C6-C35)	ND	25	4.6	mg/kg	

CAS No.	Surrogate Recoveries	Limits	
84-15-1	o-Terphenyl	80%	70-130%
98-08-8	aaa-Trifluorotoluene	87%	70-130%

Method Blank Summary

Job Number: JD35488

Account: ALNJ SGS Dayton, NJ

Project: CRATXH: SJRWP - PCFSE, Harris County, TX (IDW)

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP56389-MB	JB117977.D	1	12/30/21	LT	12/23/21	OP56389	GJB2266

The QC reported here applies to the following samples:

Method: TCEQ 1005

JD35488-6A

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C6-C12)	ND	25	6.4	mg/kg	
	TPH (> C12-C28)	ND	25	4.6	mg/kg	
	TPH (> C28-C35)	ND	25	4.6	mg/kg	
	TPH (C6-C35)	ND	25	4.6	mg/kg	

CAS No.	Surrogate Recoveries	Limits	
84-15-1	o-Terphenyl	92%	70-130%
98-08-8	aaa-Trifluorotoluene	104%	70-130%

Method Blank Summary

Job Number: JD35488
Account: ALNJ SGS Dayton, NJ
Project: CRATXH: SJRWP - PCFSE, Harris County, TX (IDW)

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP56438-MB	JF118096.D	1	01/04/22	GR	01/04/22	OP56438	GJF2269

The QC reported here applies to the following samples:

Method: TCEQ 1005

JD35488-7A

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C6-C12)	ND	2.5	0.84	mg/l	
	TPH (> C12-C28)	ND	2.5	0.64	mg/l	
	TPH (> C28-C35)	ND	2.5	0.64	mg/l	
	TPH (C6-C35)	ND	2.5	0.64	mg/l	

CAS No.	Surrogate Recoveries		Limits
84-15-1	o-Terphenyl	92%	70-130%
98-08-8	aaa-Trifluorotoluene	97%	70-130%

Blank Spike/Blank Spike Duplicate Summary

Job Number: JD35488

Account: ALNJ SGS Dayton, NJ

Project: CRATXH: SJRWP - PCFSE, Harris County, TX (IDW)

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP56278-BS	JB117595.D	1	12/09/21	LT	12/09/21	OP56278	GJB2255
OP56278-BSD ^a	JB117597.D	1	12/09/21	LT	12/09/21	OP56278	GJB2255

The QC reported here applies to the following samples:

Method: TCEQ 1005

JD35488-2A

CAS No.	Compound	Spike mg/l	BSP mg/l	BSP %	BSD mg/l	BSD %	RPD	Limits Rec/RPD
	TPH (C6-C12)	50	44.8	90	46.1	92	3	75-125/20
	TPH (> C12-C28)	50	39.9	80	41.6	83	4	75-125/20
	TPH (C6-C35)	100	84.7	85	87.7	88	3	75-125/20

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
84-15-1	o-Terphenyl	93%	96%	70-130%
98-08-8	aaa-Trifluorotoluene	89%	90%	70-130%

(a) Insufficient sample available for MS/MSD.

13.2.1
13

* = Outside of Control Limits.

Blank Spike/Blank Spike Duplicate Summary

Job Number: JD35488
Account: ALNJ SGS Dayton, NJ
Project: CRATXH: SJRWP - PCFSE, Harris County, TX (IDW)

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP56309-BS	LF194364.D	1	12/14/21	LT	12/14/21	OP56309	GLF3171
OP56309-BSD ^a	LF194366.D	1	12/14/21	LT	12/14/21	OP56309	GLF3171

The QC reported here applies to the following samples:

Method: TCEQ 1005

JD35488-4A

CAS No.	Compound	Spike mg/l	BSP mg/l	BSP %	BSD mg/l	BSD %	RPD	Limits Rec/RPD
	TPH (C6-C12)	50	46.1	92	45.7	91	1	75-125/20
	TPH (> C12-C28)	50	41.2	82	43.3	87	5	75-125/20
	TPH (C6-C35)	100	87.3	87	89.0	89	2	75-125/20

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
84-15-1	o-Terphenyl	96%	101%	70-130%
98-08-8	aaa-Trifluorotoluene	87%	86%	70-130%

(a) Insufficient sample available for MS/MSD.

13.2.2
13

* = Outside of Control Limits.

Blank Spike/Blank Spike Duplicate Summary

Job Number: JD35488

Account: ALNJ SGS Dayton, NJ

Project: CRATXH: SJRWP - PCFSE, Harris County, TX (IDW)

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP56326-BS	LB194477.D	1	12/16/21	GR	12/16/21	OP56326	GLB3173
OP56326-BSD	LB194479.D	1	12/16/21	GR	12/16/21	OP56326	GLB3173

The QC reported here applies to the following samples:

Method: TCEQ 1005

JD35488-1A, JD35488-3A

CAS No.	Compound	Spike mg/kg	BSP mg/kg	BSP %	BSD mg/kg	BSD %	RPD	Limits Rec/RPD
	TPH (C6-C12)	250	254	102	292	117	14	75-125/20
	TPH (> C12-C28)	250	188	75	192	77	2	75-125/20
	TPH (C6-C35)	500	442	88	484	97	9	75-125/20

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
84-15-1	o-Terphenyl	88%	90%	70-130%
98-08-8	aaa-Trifluorotoluene	96%	100%	70-130%

* = Outside of Control Limits.

Blank Spike/Blank Spike Duplicate Summary

Job Number: JD35488
Account: ALNJ SGS Dayton, NJ
Project: CRATXH: SJRWP - PCFSE, Harris County, TX (IDW)

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP56336-BS	LB194705.D	1	12/22/21	LT	12/17/21	OP56336	GLB3177
OP56336-BSD	LB194707.D	1	12/22/21	LT	12/17/21	OP56336	GLB3177

The QC reported here applies to the following samples:

Method: TCEQ 1005

JD35488-5A

CAS No.	Compound	Spike mg/kg	BSP mg/kg	BSP %	BSD mg/kg	BSD %	RPD	Limits Rec/RPD
	TPH (C6-C12)	250	294	118	307	123	4	75-125/20
	TPH (> C12-C28)	250	231	92	238	95	3	75-125/20
	TPH (C6-C35)	500	525	105	545	109	4	75-125/20

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
84-15-1	o-Terphenyl	97%	100%	70-130%
98-08-8	aaa-Trifluorotoluene	97%	105%	70-130%

* = Outside of Control Limits.

Blank Spike/Blank Spike Duplicate Summary

Job Number: JD35488

Account: ALNJ SGS Dayton, NJ

Project: CRATXH: SJRWP - PCFSE, Harris County, TX (IDW)

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP56389-BS	JB117979.D	1	12/30/21	LT	12/23/21	OP56389	GJB2266
OP56389-BSD	JB117981.D	1	12/30/21	LT	12/23/21	OP56389	GJB2266

The QC reported here applies to the following samples:

Method: TCEQ 1005

JD35488-6A

CAS No.	Compound	Spike mg/kg	BSP mg/kg	BSP %	BSD mg/kg	BSD %	RPD	Limits Rec/RPD
	TPH (C6-C12)	250	297	119	268	107	10	75-125/20
	TPH (> C12-C28)	250	230	92	209	84	10	75-125/20
	TPH (C6-C35)	500	527	105	477	95	10	75-125/20

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
84-15-1	o-Terphenyl	94%	82%	70-130%
98-08-8	aaa-Trifluorotoluene	105%	92%	70-130%

* = Outside of Control Limits.

Blank Spike/Blank Spike Duplicate Summary

Job Number: JD35488

Account: ALNJ SGS Dayton, NJ

Project: CRATXH: SJRWP - PCFSE, Harris County, TX (IDW)

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP56438-BS	LF194976.D	1	01/05/22	GR	01/04/22	OP56438	GLF3184
OP56438-BSD	LF194978.D	1	01/05/22	GR	01/04/22	OP56438	GLF3184

The QC reported here applies to the following samples:

Method: TCEQ 1005

JD35488-7A

CAS No.	Compound	Spike mg/l	BSP mg/l	BSP %	BSD mg/l	BSD %	RPD	Limits Rec/RPD
	TPH (C6-C12)	50	45.4	91	41.6	83	9	75-125/20
	TPH (> C12-C28)	50	44.3	89	39.9	80	10	75-125/20
	TPH (C6-C35)	100	89.7	90	81.6	82	9	75-125/20

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
84-15-1	o-Terphenyl	111%	100%	70-130%
98-08-8	aaa-Trifluorotoluene	92%	85%	70-130%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JD35488
Account: ALNJ SGS Dayton, NJ
Project: CRATXH: SJRWP - PCFSE, Harris County, TX (IDW)

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP56326-MS	LF194478.D	1	12/16/21	GR	12/16/21	OP56326	GLF3173
OP56326-MSD	LF194480.D	1	12/16/21	GR	12/16/21	OP56326	GLF3173
TD76663-1	LF194476.D	1	12/16/21	GR	12/16/21	OP56326	GLF3173

The QC reported here applies to the following samples: **Method:** TCEQ 1005

JD35488-1A, JD35488-3A

CAS No.	Compound	TD76663-1 mg/kg	Spike Q	mg/kg	MS mg/kg	MS %	Spike mg/kg	MSD mg/kg	MSD %	RPD	Limits Rec/RPD
	TPH (C6-C12)	ND	325	327	101	323	323	100	1		75-125/20
	TPH (> C12-C28)	57.6	325	328	83	323	319	81	3		75-125/20
	TPH (C6-C35)	92.1	649	665	88	645	654	87	2		75-125/20

CAS No.	Surrogate Recoveries	MS	MSD	TD76663-1	Limits
84-15-1	o-Terphenyl	100%	97%	99%	70-130%
98-08-8	aaa-Trifluorotoluene	91%	90%	97%	70-130%

13.3.1
13

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JD35488
Account: ALNJ SGS Dayton, NJ
Project: CRATXH: SJRWP - PCFSE, Harris County, TX (IDW)

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP56389-MS	LF194776.D	1	12/24/21	LT	12/23/21	OP56389	GLF3179
OP56389-MSD	LF194778.D	1	12/24/21	LT	12/23/21	OP56389	GLF3179
TD77024-1	LF194774.D	1	12/24/21	LT	12/23/21	OP56389	GLF3179

The QC reported here applies to the following samples:

Method: TCEQ 1005

JD35488-6A

CAS No.	Compound	TD77024-1 mg/kg	Spike Q	mg/kg	MS mg/kg	MS %	Spike mg/kg	MSD mg/kg	MSD %	RPD	Limits Rec/RPD
	TPH (C6-C12)	25.8	J	303	374	115	222	288	118	26*	75-125/20
	TPH (> C12-C28)	81.3		303	528	148*	222	382	136*	32*	75-125/20
	TPH (C6-C35)	194		606	1020	136*	443	757	127*	30*	75-125/20

CAS No.	Surrogate Recoveries	MS	MSD	TD77024-1	Limits
84-15-1	o-Terphenyl	119%	115%	123%	70-130%
98-08-8	aaa-Trifluorotoluene	93%	88%	104%	70-130%

* = Outside of Control Limits.

Surrogate Recovery Summary

Job Number: JD35488

Account: ALNJ SGS Dayton, NJ

Project: CRATXH: SJRWP - PCFSE, Harris County, TX (IDW)

Method: TCEQ 1005

Matrix: AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1 ^a	S2 ^a
JD35488-2A	JF117596.D	99	80
JD35488-4A	LB194371.D	103	105
JD35488-7A	JF118102.D	94	97
OP56278-BS	JB117595.D	93	89
OP56278-BSD	JB117597.D	96	90
OP56278-MB	JB117599.D	88	90
OP56309-BS	LF194364.D	96	87
OP56309-BSD	LF194366.D	101	86
OP56309-MB	LB194407.D	101	102
OP56438-BS	LF194976.D	111	92
OP56438-BSD	LF194978.D	100	85
OP56438-MB	JF118096.D	92	97

Surrogate Compounds

Recovery Limits

S1 = o-Terphenyl

70-130%

S2 = aaa-Trifluorotoluene

70-130%

(a) Recovery from GC signal #1

Surrogate Recovery Summary

Job Number: JD35488
Account: ALNJ SGS Dayton, NJ
Project: CRATXH: SJRWP - PCFSE, Harris County, TX (IDW)

Method: TCEQ 1005	Matrix: SO
--------------------------	-------------------

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1 ^a	S2 ^a
JD35488-1A	LF194486.D	103	93
JD35488-3A	LB194487.D	87	99
JD35488-5A	LB194547.D	81	93
JD35488-6A	LF194860.D	112	92
OP56326-BS	LB194477.D	88	96
OP56326-BSD	LB194479.D	90	100
OP56326-MB	LB194485.D	82	94
OP56326-MS	LF194478.D	100	91
OP56326-MSD	LF194480.D	97	90
OP56336-BS	LB194705.D	97	97
OP56336-BSD	LB194707.D	100	105
OP56336-MB	LB194521.D	80	87
OP56389-BS	JB117979.D	94	105
OP56389-BSD	JB117981.D	82	92
OP56389-MB	JB117977.D	92	104
OP56389-MS	LF194776.D	119	93
OP56389-MSD	LF194778.D	115	88

Surrogate Compounds	Recovery Limits
S1 = o-Terphenyl	70-130%
S2 = aaa-Trifluorotoluene	70-130%

(a) Recovery from GC signal #1

13.4.2
13

Misc. Forms

Custody Documents and Other Forms

(SGS Orlando, FL)


Includes the following where applicable:

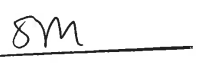
- Chain of Custody



CHAIN OF CUSTODY
 SGS North America Inc. - Dayton
 2235 Route 130, Dayton, NJ 08810
 TEL: 732-329-0200 FAX: 732-329-3499/3480
 www.sgs.com/ehsusua

Client / Reporting Information		Project Information										Requested Analysis	Matrix Codes						
Company Name:		Project Name:										DW - Drinking Water GW - Ground Water WW - Water SW - Surface Water SO - Soil SL - Sludge SED - Sediment OI - Oil LIQ - Other Liquid AIR - Air SOL - Other Solid WIP - Wipes FB - Field Blank EB - Equipment Blank RB - Rinse Blank TB - Trip Blank	LAB USE ONLY						
Street Address:		Street:																	
City State Zip:		City State Billing Information (if different from Report to):																	
Project Contact E-mail:		Project # Street Address:																	
Phone #:		Client Purchase Order # City State Zip:																	
Sampler(s) Name(s) SPS:		Project Manager Attention:										BR16TCLPACRAMIDE							
SGS Sample #		Collection																	
Field ID / Point of Collection		MECH/DX Vial #	Date		Time		Sampled by	Matrix	# of bottles	TIC	INCH			INSD	INSD	INSD	DI WATER	MCHD	ENCORE
5U		11215131-120821-IDW-SS-SW		12/8/21		3:30:00 PM		SPS	SO										
T turnaround Time (Business days)		Data Deliverable Information												Comments / Special Instructions					
<input type="checkbox"/> Standard 10 Business Days <input type="checkbox"/> 5 Business Days RUSH <input type="checkbox"/> 3 Business Days RUSH <input type="checkbox"/> 2 Business Days RUSH <input type="checkbox"/> 1 Business Day EMERGENCY <input checked="" type="checkbox"/> Other Due 12/13/2021		Approved by (SGS PM) / Date: <input type="checkbox"/> Commercial "A" (Level 1) <input type="checkbox"/> NYASP Category A <input type="checkbox"/> Commercial "B" (Level 2) <input type="checkbox"/> NYASP Category B <input type="checkbox"/> FULLT1 (Level 3+4) <input type="checkbox"/> State Forms <input type="checkbox"/> NJ Reduced <input type="checkbox"/> EDD Format <input type="checkbox"/> Commercial "C" <input checked="" type="checkbox"/> Other FULLT1												Sample -SU aliquot 4oz jar					
Emergency & Rush TIA data available via Lablink. Approval needed for RUSH/Emergency TAT		Commercial "A" = Results Only Commercial "B" = Results + OC Summary Commercial "C" = Results + OC Summary + Partial Raw data												http://www.sgs.com/en/terms-and-conditions					
Relinquished by:		Date / Time:	Received By:	Date / Time:	Relinquished By:	Date / Time:	Received By:	Date / Time:	Received By:	Date / Time:	Received By:			Date / Time:					
1		12/14/21	Kedric	12/15/21	Kedric	12/15/21	Kedric	12/15/21	Kedric	12/15/21	Kedric			12/15/21					
3																			
5																			
Custody Seal #		Intact	Not Intact	Preserved where applicable	Assess	Therm. ID	On Ice	Cooler Temp. °C	24.40										

INITIAL ASSESSMENT 

LABEL VERIFICATION 



SGS Sample Receipt Summary

Job Number: JD35488

Client: SGS NJ

Project: SJRWP - PCFSE, HARRIS COUNTY

Date / Time Received: 12/14/2021 10:45:00 AM

Delivery Method: FX

Airbill #'s: 5272 0637 1472

Therm ID: IR 1;

Therm CF: 0.2;

of Coolers: 1

Cooler Temps (Raw Measured) °C: Cooler 2: (1.4);

Cooler Temps (Corrected) °C: Cooler 2: (1.6);

Cooler Information

Y or N

- 1. Custody Seals Present
- 2. Custody Seals Intact
- 3. Temp criteria achieved
- 4. Cooler temp verification IR Gun
- 5. Cooler media Ice (Bag)

Trip Blank Information

Y or N

N/A

- 1. Trip Blank present / cooler
 - 2. Trip Blank listed on COC
- W or S N/A
- 3. Type Of TB Received

Sample Information

Y or N

N/A

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

Misc. Information

Number of Encores: 25-Gram _____ 5-Gram _____
 Test Strip Lot #s: pH 0-3 230315
 Residual Chlorine Test Strip Lot #: _____

Number of 5035 Field Kits: _____
 pH 10-12 219813A

Number of Lab Filtered Metals: _____
 Other: (Specify) _____

Comments

SM001
Rev. Date 05/24/17

Technician: STEPHENP

Date: 12/14/2021 10:45:00

Reviewer: _____

Date: _____

14.1
14

JD35488: Chain of Custody

Page 2 of 6

SGS Sample Receipt Summary

Job Number: JD35488

Client: SGS NJ

Project: SJRWP - PCFSE, HARRIS COUNTY

Date / Time Received: 12/15/2021 3:15:00 PM

Delivery Method: FX

Airbill #s: 5272 0637 1965

Therm ID: IR 1;

Therm CF: 0.2;

of Coolers: 1

Cooler Temps (Raw Measured) °C: Cooler 3: (2.2);

Cooler Temps (Corrected) °C: Cooler 3: (2.4);

Cooler Information

Y or N

- | | | |
|-----------------------------|-------------------------------------|--------------------------|
| 1. Custody Seals Present | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 2. Custody Seals Intact | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 3. Temp criteria achieved | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 4. Cooler temp verification | <u>IR Gun</u> | |
| 5. Cooler media | <u>Ice (Bag)</u> | |

Trip Blank Information

Y or N N/A

- | | | | |
|--------------------------------|--------------------------|--------------------------|-------------------------------------|
| 1. Trip Blank present / cooler | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 2. Trip Blank listed on COC | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| | <u>W or S</u> | | <u>N/A</u> |
| 3. Type Of TB Received | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

Sample Information

Y or N N/A

- | | | | |
|---|-------------------------------------|-------------------------------------|-------------------------------------|
| 1. Sample labels present on bottles | <input checked="" type="checkbox"/> | <input type="checkbox"/> | |
| 2. Samples preserved properly | <input checked="" type="checkbox"/> | <input type="checkbox"/> | |
| 3. Sufficient volume/containers recvd for analysis: | <input checked="" type="checkbox"/> | <input type="checkbox"/> | |
| 4. Condition of sample | <u>Intact</u> | | |
| 5. Sample recvd within HT | <input checked="" type="checkbox"/> | <input type="checkbox"/> | |
| 6. Dates/Times/IDs on COC match Sample Label | <input checked="" type="checkbox"/> | <input type="checkbox"/> | |
| 7. VOCs have headspace | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 8. Bottles received for unspecified tests | <input type="checkbox"/> | <input checked="" type="checkbox"/> | |
| 9. Compositing instructions clear | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 10. Voa Soil Kits/Jars received past 48hrs? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 11. % Solids Jar received? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 12. Residual Chlorine Present? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

Misc. Information

Number of Encores: 25-Gram _____ 5-Gram _____
 Test Strip Lot #s: pH 0-3 230315
 Residual Chlorine Test Strip Lot #: _____

Number of 5035 Field Kits: _____
 pH 10-12 219813A

Number of Lab Filtered Metals: _____
 Other: (Specify) _____

Comments

SM001
Rev. Date 05/24/17

Technician: STEPHENP

Date: 12/15/2021 3:15:00 P

Reviewer: _____

Date: _____

14.1
14

JD35488: Chain of Custody

Page 3 of 6

SGS Sample Receipt Summary

Job Number: JD35488

Client: SGS NJ

Project: SJRWP - PCFSE, HARRIS COUNTY

Date / Time Received: 12/7/2021 4:00:00 PM

Delivery Method: FX

Airbill #s: _____

Therm ID: IR 1;

Therm CF: 0.2;

of Coolers: 1

Cooler Temps (Raw Measured) °C: Cooler 1: (2.4);

Cooler Temps (Corrected) °C: Cooler 1: (2.6);

Cooler Information

Y or N

- | | | |
|-----------------------------|-------------------------------------|--------------------------|
| 1. Custody Seals Present | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 2. Custody Seals Intact | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 3. Temp criteria achieved | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 4. Cooler temp verification | <u>IR Gun</u> | |
| 5. Cooler media | <u>Ice (Bag)</u> | |

Trip Blank Information

Y or N N/A

- | | | | |
|--------------------------------|--------------------------|--------------------------|-------------------------------------|
| 1. Trip Blank present / cooler | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 2. Trip Blank listed on COC | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| | <u>W or S</u> | | <u>N/A</u> |
| 3. Type Of TB Received | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

Sample Information

Y or N N/A

- | | | | |
|---|-------------------------------------|-------------------------------------|-------------------------------------|
| 1. Sample labels present on bottles | <input checked="" type="checkbox"/> | <input type="checkbox"/> | |
| 2. Samples preserved properly | <input checked="" type="checkbox"/> | <input type="checkbox"/> | |
| 3. Sufficient volume/containers recvd for analysis: | <input checked="" type="checkbox"/> | <input type="checkbox"/> | |
| 4. Condition of sample | <u>Intact</u> | | |
| 5. Sample recvd within HT | <input checked="" type="checkbox"/> | <input type="checkbox"/> | |
| 6. Dates/Times/IDs on COC match Sample Label | <input checked="" type="checkbox"/> | <input type="checkbox"/> | |
| 7. VOCs have headspace | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 8. Bottles received for unspecified tests | <input type="checkbox"/> | <input checked="" type="checkbox"/> | |
| 9. Compositing instructions clear | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 10. Voa Soil Kits/Jars received past 48hrs? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 11. % Solids Jar received? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 12. Residual Chlorine Present? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

Misc. Information

Number of Encores: 25-Gram _____ 5-Gram _____ Number of 5035 Field Kits: _____ Number of Lab Filtered Metals: _____
 Test Strip Lot #s: pH 0-3 230315 pH 10-12 219813A Other: (Specify) _____
 Residual Chlorine Test Strip Lot #: _____

Comments SAMPLE #2R IS NON PRESERVED BUT HAS A GREEN CAP.

SM001
Rev. Date 05/24/17

Technician: NATHANS

Date: 12/7/2021 4:00:00 PM

Reviewer: _____

Date: _____

14.1
14

JD35488: Chain of Custody

Page 4 of 6



Client / Reporting Information Company Name: _____ Street Address: _____ City _____ State _____ Zip _____ Project Contact E-mail: <u>kelly.ramos@sgs.com</u> Phone # _____ Sampler(s) Name(s) _____ SPS _____		Project Information Project Name: <u>SJRWP - PCFSE, Harris County, TX (IDW)</u> Street _____ City _____ State _____ Zip _____ Billing Information (if different from Report to) Company Name _____ Street Address _____ City _____ State _____ Zip _____ Client Purchase Order # _____ Project Manager _____ Attention: _____				FED-EX Tracking # _____ Home Order Control # _____ SGS Quote # _____ SGS Job # <u>JD35488</u>			
		Requested Analysis Matrix Codes DW - Drinking Water GW - Ground Water WW - Water SW - Surface Water SO - Soil SL - Sludge SED - Sediment OI - Oil LIQ - Other Liquid AIR - Air SOL - Other Solid WIP - Wipe FB - Field Blank EB - Equipment Blank RB - Rinse Blank TB - Trip Blank LAB USE ONLY							
SPS Sample # <u>6V</u> Field ID / Point of Collection <u>11215131-121421-DW-BN-NS</u> MECHID Val # _____ Date <u>12/14/21</u> Time <u>1:30:00 PM</u> Sampled by <u>SPS</u> Matrix <u>SO</u>		Collection # of bottles _____ DIS. _____ BOTT. _____ P-200 _____ P-500 _____ NONE _____ 1/4 Water _____ 1/2 Water _____ MECH. _____ ENCODED _____ BR151TCUPACRAMIDE, TOLUENE, BR151TCUPACRAMIDE, TOLUENE, DTX-105701RHS, DIBP1TCUPREBY, DDC-ETHOXE, DSC-METHOXE, SR1619CDDOP, TOLUENE, <input checked="" type="checkbox"/>							
Turnaround Time (Business days) _____ <input type="checkbox"/> Standard 10 Business Days <input type="checkbox"/> 5 Business Days RUSH <input type="checkbox"/> 3 Business Days RUSH <input type="checkbox"/> 2 Business Days RUSH <input type="checkbox"/> 1 Business Day EMERGENCY <input checked="" type="checkbox"/> Other Due <u>12/13/2021</u> <small>Emergency & Rush T/A data available via Lablink. Approval needed for RUSH/Emergency TAT.</small>		Data Deliverable Information <input type="checkbox"/> Commercial "A" (Level 1) <input type="checkbox"/> Commercial "B" (Level 2) <input type="checkbox"/> FULLT1 (Level 3+4) <input type="checkbox"/> NJ Reduced <input type="checkbox"/> Commercial "C" <input type="checkbox"/> NYASP Category A <input type="checkbox"/> NYASP Category B <input type="checkbox"/> State Forms <input type="checkbox"/> EDD Format <input checked="" type="checkbox"/> Other FULLT1 <small>Commercial "A" = Results Only Commercial "B" = Results + QC Summary Commercial "C" = Results + QC Summary + Parcel Raw data</small>							
Approved By (SGS PM) / Date: _____ _____		Comments / Special Instructions alliquot 4oz jar INITIAL ASSESSMENT LABEL VERIFICATION http://www.sgs.com/en/terms-and-conditions							
Relinquished by: <u>[Signature]</u> Date / Time: <u>12/14/21</u>		Received By: <u>FED</u> Date / Time: <u>12/14/21</u>		Relinquished by: _____ Date / Time: _____					
Relinquished by: _____ Date / Time: _____		Received By: _____ Date / Time: _____		Relinquished by: _____ Date / Time: _____					
Relinquished by: _____ Date / Time: _____		Received By: _____ Date / Time: _____		Relinquished by: _____ Date / Time: _____					
		Custody Seal # _____ <input type="checkbox"/> Intact <input type="checkbox"/> Not Intact <input type="checkbox"/> Absent Preserved where applicable Therm ID _____ On Ice <input checked="" type="checkbox"/> Cooler Temp. °C <u>11.6</u> IRA							

GC/LC Semi-volatiles

QC Data Summaries

(SGS Orlando, FL)

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries

Method Blank Summary

Job Number: JD35488

Account: ALNJ SGS Dayton, NJ

Project: CRATXH: SJRWP - PCFSE, Harris County, TX (IDW)

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP89084-LB	AA082393.D	1	12/31/21	JB	12/12/21	OP89084	GAA3398

The QC reported here applies to the following samples:

Method: SW846 8316

JD35488-7W

CAS No.	Compound	Result	RL	MDL	Units	Q
79-06-1	Acrylamide	ND	50	13	ug/l	

Method Blank Summary

Job Number: JD35488

Account: ALNJ SGS Dayton, NJ

Project: CRATXH: SJRWP - PCFSE, Harris County, TX (IDW)

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP88895-LB	AA082373.D	1	12/17/21	JB	12/17/21	OP88895	GAA3396

The QC reported here applies to the following samples:

Method: SW846 8316

JD35488-3T, JD35488-4T, JD35488-5U

CAS No.	Compound	Result	RL	MDL	Units	Q
79-06-1	Acrylamide	ND	50	13	ug/l	

Leachate Blank Summary

Job Number: JD35488

Account: ALNJ SGS Dayton, NJ

Project: CRATXH: SJRWP - PCFSE, Harris County, TX (IDW)

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP88794-LB	AA082365.D	1	12/13/21	JB	12/13/21	OP88794	GAA3395

The QC reported here applies to the following samples:

Method: SW846 8316

JD35488-1R, JD35488-2R

CAS No.	Compound	Result	RL	MDL	Units	Q
79-06-1	Acrylamide	ND	50	13	ug/l	

Leachate Blank Summary

Job Number: JD35488

Account: ALNJ SGS Dayton, NJ

Project: CRATXH: SJRWP - PCFSE, Harris County, TX (IDW)

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP89208-LB	AA082412.D	1	01/12/22	WH	01/12/22	OP89208	GAA3400

The QC reported here applies to the following samples:

Method: SW846 8316

JD35488-6V

CAS No.	Compound	Result	RL	MDL	Units	Q
79-06-1	Acrylamide	ND	50	13	ug/l	

Blank Spike Summary

Job Number: JD35488

Account: ALNJ SGS Dayton, NJ

Project: CRATXH: SJRWP - PCFSE, Harris County, TX (IDW)

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP89084-LBS	AA082394.D	1	12/31/21	JB	12/12/21	OP89084	GAA3398

The QC reported here applies to the following samples:

Method: SW846 8316

JD35488-7W

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
79-06-1	Acrylamide	500	441	88	60-140

* = Outside of Control Limits.

Blank Spike Summary

Job Number: JD35488
Account: ALNJ SGS Dayton, NJ
Project: CRATXH: SJRWP - PCFSE, Harris County, TX (IDW)

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP88794-LBS	AA082366.D	1	12/13/21	JB	12/13/21	OP88794	GAA3395

The QC reported here applies to the following samples:

Method: SW846 8316

JD35488-1R, JD35488-2R

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
79-06-1	Acrylamide	500	456	91	60-140

* = Outside of Control Limits.

Blank Spike Summary

Job Number: JD35488
Account: ALNJ SGS Dayton, NJ
Project: CRATXH: SJRWP - PCFSE, Harris County, TX (IDW)

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP88895-LBS	AA082374.D	1	12/17/21	JB	12/17/21	OP88895	GAA3396

The QC reported here applies to the following samples:

Method: SW846 8316

JD35488-3T, JD35488-4T, JD35488-5U

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
79-06-1	Acrylamide	500	433	87	60-140

* = Outside of Control Limits.

Blank Spike Summary

Job Number: JD35488
Account: ALNJ SGS Dayton, NJ
Project: CRATXH: SJRWP - PCFSE, Harris County, TX (IDW)

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP89208-LBS	AA082411.D	1	01/12/22	WH	01/12/22	OP89208	GAA3400

The QC reported here applies to the following samples:

Method: SW846 8316

JD35488-6V

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
79-06-1	Acrylamide	500	451	90	60-140

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JD35488
Account: ALNJ SGS Dayton, NJ
Project: CRATXH: SJRWP - PCFSE, Harris County, TX (IDW)

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP89084-MS	AA082396.D	1	12/31/21	JB	12/12/21	OP89084	GAA3398
OP89084-MSD	AA082397.D	1	12/31/21	JB	12/12/21	OP89084	GAA3398
JD35488-7W	AA082395.D	1	12/31/21	JB	12/31/21	OP89084	GAA3398

The QC reported here applies to the following samples:

Method: SW846 8316

JD35488-7W

CAS No.	Compound	JD35488-7W Spike		MS	MS	Spike	MSD	MSD	RPD	Limits
		ug/l	Q ug/l	ug/l	%	ug/l	ug/l	%		Rec/RPD
79-06-1	Acrylamide	ND	500	465	93	500	514	103	10	60-140/30

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JD35488

Account: ALNJ SGS Dayton, NJ

Project: CRATXH: SJRWP - PCFSE, Harris County, TX (IDW)

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP88794-MS	AA082369.D	1	12/13/21	JB	12/13/21	OP88794	GAA3395
OP88794-MSD	AA082370.D	1	12/13/21	JB	12/13/21	OP88794	GAA3395
JD35488-2R	AA082368.D	1	12/13/21	JB	12/13/21	OP88794	GAA3395

The QC reported here applies to the following samples:

Method: SW846 8316

JD35488-1R, JD35488-2R

CAS No.	Compound	JD35488-2R Spike		MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
		ug/l	Q ug/l							
79-06-1	Acrylamide	ND	500	398	80	500	401	80	1	60-140/30

15.4.2
15

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JD35488

Account: ALNJ SGS Dayton, NJ

Project: CRATXH: SJRWP - PCFSE, Harris County, TX (IDW)

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP88895-MS	AA082378.D	1	12/17/21	JB	12/17/21	OP88895	GAA3396
OP88895-MSD	AA082379.D	1	12/17/21	JB	12/17/21	OP88895	GAA3396
JD35488-5U	AA082377.D	1	12/17/21	JB	12/17/21	OP88895	GAA3396

The QC reported here applies to the following samples:

Method: SW846 8316

JD35488-3T, JD35488-4T, JD35488-5U

CAS No.	Compound	JD35488-5U Spike		MS	MS	Spike	MSD	MSD	RPD	Limits
		ug/l	Q ug/l	ug/l	%	ug/l	ug/l	%		Rec/RPD
79-06-1	Acrylamide	ND	500	428	86	500	443	89	3	60-140/30

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JD35488
Account: ALNJ SGS Dayton, NJ
Project: CRATXH: SJRWP - PCFSE, Harris County, TX (IDW)

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP89208-MS	AA082414.D	1	01/12/22	WH	01/12/22	OP89208	GAA3400
OP89208-MSD	AA082415.D	1	01/12/22	WH	01/12/22	OP89208	GAA3400
JD35488-6V ^a	AA082413.D	1	01/12/22	WH	01/12/22	OP89208	GAA3400

The QC reported here applies to the following samples:

Method: SW846 8316

JD35488-6V

CAS No.	Compound	JD35488-6V Spike		MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
		ug/l	Q							
79-06-1	Acrylamide	ND	500	450	90	500	444	89	1	60-140/30

(a) Sample analyzed beyond hold time.

* = Outside of Control Limits.

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

e-Hardcopy 2.0
Automated Report

Technical Report for

GHD Services Inc.

SJRWP - PCFSE, Harris County, TX (IDW)

11215131 SSOW:11215131 2021-001

SGS Job Number: JD35488XA

Sampling Dates: 12/07/21 - 12/20/21



Report to:

GHD Services Inc.
11451 Katy Freeway Suite 400
Houston, TX 77079
Nate.Reece@ghd.com; Meagan.Willis@ghd.com;
Kathleen.Shaw@GHD.com; Marisa.Oriaku@GHD.com
ATTN: Meagan Willis

Total number of pages in report: **33**



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

Mike Earp
General Manager

Client Service contact: Kelly Ramos 732-329-0200

Certifications: NJ(12129), NY(10983), CA, CT, FL, IL, IN, KS, KY, LA, MA, MD, ME, MN, NC, OH VAP (CL0056), AK (UST-103), AZ (AZ0786), PA, RI, SC, TX, UT, VA, WV, DoD ELAP (ANAB L2248)

This report shall not be reproduced, except in its entirety, without the written approval of SGS.
Test results relate only to samples analyzed.

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Section 3: Misc. Forms	24
3.1: Chain of Custody	25



Sample Summary

GHD Services Inc.

Job No: JD35488XA

SJRWP - PCFSE, Harris County, TX (IDW)
 Project No: 11215131 SSOW:11215131 2021-001

Sample Number	Collected		Received	Matrix		Client Sample ID
	Date	Time By		Code	Type	
JD35488-3X	12/07/21	14:20 SPS	12/08/21	SO	Soil	11215131-120721-IDW-SS-SC
JD35488-4X	12/07/21	14:20 SPS	12/08/21	AQ	Water	11215131-120721-IDW-SS-DECON2
JD35488-5X	12/08/21	15:30 SPS	12/09/21	SO	Soil	11215131-120821-IDW-SS-SW
JD35488-6X	12/14/21	13:30 SPS	12/15/21	SO	Soil	11215131-121421-IDW-BN-NC
JD35488-7X	12/20/21	11:15 SPS	12/21/21	AQ	Water	11215131-122021-IDW-SS-PURGE

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

Subcontract Lab Data

Report of Analysis

Laboratory Analysis Report

Total Number of Pages: 7

Job ID : 21122389



10100 East Freeway, Suite 100, Houston, TX 77029 tel: 713-453-6060, fax: 713-453-6091, http://www.ablabs.com

Client Project Name :

JD35488X / SJRWP - PCFSE Harris County, TX

Report To : Client Name: SGS North America Inc. P.O.#.: JD35488X
Attn: Kelly Ramos Sample Collected By: SPS
Client Address: 2235 Route 130 Date Collected: 12/14/21 - 12/20/21
City, State, Zip: Dayton, New Jersey, 08810

A&B Labs has analyzed the following samples...

Client Sample ID	Matrix	A&B Sample ID
11215131-121421-IDW-BN-NC	Soil	21122389.01
11215131-122021-IDW-SS-PURGE	Water	21122389.02

Alisha Hughes

Released By: Alisha Hughes
Title: Project Manager
Date: 1/5/2022



This Laboratory is NELAP (T104704213) accredited. Effective: 04/01/2021; Expires: 3/31/2022

Scope: Non-Potable Water, Drinking Water, Air, Solid, Biological Tissue, Hazardous Waste

I am the laboratory manager, or his/her designee, and I am responsible for the release of this data package. This laboratory data package has been reviewed and is complete and technically compliant with the requirements of the methods used, except where noted in the attached exception reports. I affirm, to the best of my knowledge that all problems/anomalies observed by this laboratory (and if applicable, any and all laboratories subcontracted through this laboratory) that might affect the quality of the data, have been identified in the Laboratory Review Checklist, and that no information or data have been knowingly withheld that would affect the quality of the data.

This report cannot be reproduced, except in full, without prior written permission of A&B Labs. Results shown relate only to the items tested. Results apply to the sample as received. Samples are assumed to be in acceptable condition unless otherwise noted. Blank correction is not made unless otherwise noted. Air concentrations reported are based on field sampling information provided by client. Soil samples are reported on a wet weight basis unless otherwise noted. Uncertainty estimates are available on request.

ab-q210-0321

REVISED

Date Received : 12/22/2021 12:37



Laboratory Report: Case Narrative

A&B Job ID: 21122389

Date: 01/05/22

2

Client Name: SGS North America Inc.

Attn: Kelly Ramos

Project Name: JD35488X / SJRWP - PCFSE Harris County, TX

Date Received: 12/22/21

Collected By: SPS

REVISED REPORT -

Per client email, the ID for 11215131-121421-IDW-BN-NS was changed to 11215131-121421-IDW-BN-NC.

A handwritten signature in black ink that reads "Alisha Hughes".

Released By: Alisha Hughes

Title: Project Manager



Job ID : 21122389

Date : 1/5/2022

CLIENT Name : SGS North America Inc.

ATTN : Kelly Ramos

PROJECT Name : JD35488X / SJRWP - PCFSE Harris County, TX

Method	ClientSampleID Parameter	Result	Units	Matrix	D.F	Rpt Limit	Reg Limit	Collection DateTime	Analysis DateTime	Analyst	SampleID	Q
	11215131-121421-IDW-BN -NC TX335 TCLP Pesticide (NPD)											
SW-846 8141B	Methomyl ²	BRL	mg/L	Soil	1	0.05	90	12/14/21 13:30	12/23/21 13:30	VMN	21122389.01	
	4-Chloro-3-Nitro-Benzene(surr)	71.4	%	Soil	1	50-130		12/14/21 13:30	12/23/21 13:30	VMN	21122389.01	
	11215131-122021-IDW-SS -PURGE											
SW-846 8141B	Methomyl ²	BRL	mg/L	Water	1	0.05	90	12/20/21 11:15	12/23/21 14:33	VMN	21122389.02	
	4-Chloro-3-Nitro-Benzene(surr)	77.5	%	Water	1	50-130		12/20/21 11:15	12/23/21 14:33	VMN	21122389.02	

²-Parameter not available for accreditation.



LABORATORY QUALITY CONTROL CERTIFICATE

A&B Job ID : 21122389

Date : 1/5/2022

QCType: LCS and LCSD												
Parameter	Method	Spike Added	LCS Result	LCSD Result	LCS Rec %	LCSD Rec %	RPD	% RPD CLimits	% Rec CLimits	QCBatchID	Qual	
Methomyl	SW-846 8141B	0.005	0.0043	0.0037	86.2	74.5	15.2	30	50-130	Qb211227106		

QCType: MS and MSD													
Parameter	Method	Sample Result	Spike Added	MS Result	MSD Result	MS Rec %	MSD Rec %	RPD	% RPD CLimits	% Rec CLimits	QCBatchID	QCSampleID	Qual
Methomyl	SW-846 8141B	BRL	0.005	0.0034		68.1				40-140	Qb211227106	21122389.01	

QCType: Method Blank											
Parameter	Method	CAS #	Result	Units	D.F.	Rpt Limit	QCBatchID	Qual			
Methomyl	SW-846 8141B	16752-77-5	BRL	mg/L	1	0.05	Qb211227106				
4-Chloro-3-Nitro-Benzene(surr)	SW-846 8141B		119	%	1	50-130	Qb211227106				

LABORATORY TERM AND QUALIFIER DEFINITION REPORT



Job ID : 21122389

Date: 1/5/2022

2

General Term Definition

Back-Wt	Back Weight	Post-Wt	Post Weight
BRL	Below Reporting Limit	ppm	parts per million
cfu	colony-forming units	Pre-Wt	Previous Weight
Conc.	Concentration	Q	Qualifier
D.F.	Dilution Factor	RegLimit	Regulatory Limit
Front-Wt	Front Weight	RPD	Relative Percent Difference
LCS	Laboratory Check Standard	RptLimit	Reporting Limit
LCSD	Laboratory Check Standard Duplicate	SDL	Sample Detection Limit
MS	Matrix Spike	surr	Surrogate
MSD	Matrix Spike Duplicate	T	Time
MW	Molecular Weight	TNTC	Too numerous to count
J	Estimation. Below calibration range but above MDL		

Qualifier Definition



CHAIN OF CUSTODY

SGS North America Inc. - Dayton
2235 Route 130, Dayton, NJ 08810
TEL: 732-329-0200 FAX: 732-329-3499/3480
www.sgs.com/ehsusa

Form containing Client/Reporting Information, Project Information, Requested Analysis, Matrix Codes, and Chain of Custody table with columns for Date, Time, Matrix, and various analysis codes.

Job ID: 21122389



12/22/2021 SGS North America Inc ACH

Handwritten note: A & B LAB.

Handwritten note: 13.0°C WR





Sample Condition Checklist

2

A&B JobID : 21122389	Date Received : 12/22/2021	Time Received : 12:37PM
Client Name : SGS North America Inc.		
Temperature : 13.0°C	Sample pH : NA	
Thermometer ID : IR1	pH Paper ID : NA	
Preservative :		

	Check Points	Yes	No	N/A
1.	Cooler Seal present and signed.			X
2.	Sample(s) in a cooler.		X	
3.	If yes, ice in cooler.			X
4.	Sample(s) received with chain-of-custody.	X		
5.	C-O-C signed and dated.	X		
6.	Sample(s) received with signed sample custody seal.		X	
7.	Sample containers arrived intact. (If No comment)	X		
8.	Matrix: Water Soil Liquid Sludge Solid Cassette Tube Bulk Badge Food Other <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>			
9.	Samples were received in appropriate container(s)	X		
10.	Sample(s) were received with Proper preservative			X
11.	All samples were tagged or labeled.	X		
12.	Sample ID labels match C-O-C ID's.	X		
13.	Bottle count on C-O-C matches bottles found.	X		
14.	Sample volume is sufficient for analyses requested.	X		
15.	Samples were received with in the hold time.	X		
16.	VOA vials completely filled.			X
17.	Sample accepted.	X		
18.	Has client been contacted about sub-out			X

Comments : Include actions taken to resolve discrepancies/problem: Sample 01=soil and sample 02=water

Received by : Jedralin

Check in by/date : Jedralin / 12/22/2021

ab-s005-0321

Phone : 713-453-6060

www.ablabs.com

Laboratory Analysis Report

Total Number of Pages: 6

Job ID : 21121101



10100 East Freeway, Suite 100, Houston, TX 77029 tel: 713-453-6060, fax: 713-453-6091, http://www.ablabs.com

Client Project Name :

JD35488X / SJRWP - PCFSE Harris County, TX

Report To : Client Name: SGS North America Inc. P.O.#.: JD35488X
Attn: Kelly Ramos Sample Collected By:
Client Address: 2235 Route 130 Date Collected: 12/08/21
City, State, Zip: Dayton, New Jersey, 08810

A&B Labs has analyzed the following samples...

Client Sample ID	Matrix	A&B Sample ID
11215131-120821-IDW-SS-SW	Soil	21121101.01

A handwritten signature in black ink, appearing to read 'Senthilkumar Sevukan', with a horizontal line underneath.

Released By: Senthilkumar Sevukan
Title: Vice President Operations
Date: 12/17/2021



This Laboratory is NELAP (T104704213) accredited. Effective: 04/01/2021; Expires: 3/31/2022

Scope: Non-Potable Water, Drinking Water, Air, Solid, Biological Tissue, Hazardous Waste

I am the laboratory manager, or his/her designee, and I am responsible for the release of this data package. This laboratory data package has been reviewed and is complete and technically compliant with the requirements of the methods used, except where noted in the attached exception reports. I affirm, to the best of my knowledge that all problems/anomalies observed by this laboratory (and if applicable, any and all laboratories subcontracted through this laboratory) that might affect the quality of the data, have been identified in the Laboratory Review Checklist, and that no information or data have been knowingly withheld that would affect the quality of the data.

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ab-q210-0321

Date Received : 12/10/2021 13:41



Job ID : 21121101

Date : 12/17/2021

CLIENT Name : SGS North America Inc.

ATTN : Kelly Ramos

PROJECT Name : JD35488X / SJRWP - PCFSE Harris County, TX

Method	ClientSampleID Parameter	Result	Units	Matrix	D.F	Rpt Limit	Reg Limit	Collection DateTime	Analysis DateTime	Analyst	SampleID	Q
	11215131-120821-IDW-SS -SW TX335 TCLP Pesticide (NPD)											
SW-846 8141B	Methomyl ²	BRL	mg/L	Soil	0.2	0.025	90	12/08/21 15:30	12/16/21 19:41	VMN	21121101.01	
	4-Chloro-3-Nitro-Benzene(surr)	64.2	%	Soil	0.2	50-130		12/08/21 15:30	12/16/21 19:41	VMN	21121101.01	

ab-q212-0321

²-Parameter not available for accreditation.



LABORATORY QUALITY CONTROL CERTIFICATE

A&B Job ID : 21121101

Date : 12/17/2021

QType: LCS and LCSD												
Parameter	Method	Spike Added	LCS Result	LCSD Result	LCS Rec %	LCSD Rec %	RPD	% RPD CLimits	% Rec CLimits	QCBatchID	Qual	
Methomyl	SW-846 8141B	0.005	0.0051	0.0042	102	84.1	19.3	30	50-130	Qb21121744		

QType: MS and MSD													
Parameter	Method	Sample Result	Spike Added	MS Result	MSD Result	MS Rec %	MSD Rec %	RPD	% RPD CLimits	% Rec CLimits	QCBatchID	QCSampleID	Qual
Methomyl	SW-846 8141B	BRL	0.005	0.0041		82				40-140	Qb21121744	21120912.01	

QType: Method Blank										
Parameter	Method	CAS #	Result	Units	D.F.	Rpt Limit	QCBatchID	Qual		
Methomyl	SW-846 8141B	16752-77-5	BRL	mg/L	0.2	0.025	Qb21121744			
4-Chloro-3-Nitro-Benzene(surr)	SW-846 8141B		71.8	%	0.2	50-130	Qb21121744			

LABORATORY TERM AND QUALIFIER DEFINITION REPORT



Job ID : 21121101

Date: 12/17/2021

2

General Term Definition

Back-Wt	Back Weight	Post-Wt	Post Weight
BRL	Below Reporting Limit	ppm	parts per million
cfu	colony-forming units	Pre-Wt	Previous Weight
Conc.	Concentration	Q	Qualifier
D.F.	Dilution Factor	RegLimit	Regulatory Limit
Front-Wt	Front Weight	RPD	Relative Percent Difference
LCS	Laboratory Check Standard	RptLimit	Reporting Limit
LCSD	Laboratory Check Standard Duplicate	SDL	Sample Detection Limit
MS	Matrix Spike	surr	Surrogate
MSD	Matrix Spike Duplicate	T	Time
MW	Molecular Weight	TNTC	Too numerous to count
J	Estimation. Below calibration range but above MDL		

Qualifier Definition



CHAIN OF CUSTODY

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2235 Route 130, Dayton, NJ 08810
TEL: 732-329-0200 FAX: 732-329-3499/3480
www.sgs.com/ehsus

FED-EX Tracking #
Butte Order Control #
SGS Quote #
SGS Job # JD35488X

Client / Reporting Information, Project information, Requested Analysis, Matrix Codes, Lab Use Only, Turnaround Time, Data Deliverable Information, Comments, Chain of Custody table, Custody Seal #

Job ID:21121101



12/10/2021 SGS North America Inc. ACH

A+B LABS

OIA

On Job 5.4 C
IRI





Sample Condition Checklist

2

A&B JobID : 21121101	Date Received : 12/10/2021	Time Received : 1:41PM
Client Name : SGS North America Inc.		
Temperature : 5.4°C	Sample pH : NA	
Thermometer ID : IR1	pH Paper ID : NA	
Preservative :		

Check Points		Yes	No	N/A
1.	Cooler Seal present and signed.		X	
2.	Sample(s) in a cooler.	X		
3.	If yes, ice in cooler.	X		
4.	Sample(s) received with chain-of-custody.	X		
5.	C-O-C signed and dated.	X		
6.	Sample(s) received with signed sample custody seal.		X	
7.	Sample containers arrived intact. (If No comment)	X		
8.	Matrix: Water Soil Liquid Sludge Solid Cassette Tube Bulk Badge Food Other <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>			
9.	Samples were received in appropriate container(s)	X		
10.	Sample(s) were received with Proper preservative			X
11.	All samples were tagged or labeled.	X		
12.	Sample ID labels match C-O-C ID's.	X		
13.	Bottle count on C-O-C matches bottles found.	X		
14.	Sample volume is sufficient for analyses requested.	X		
15.	Samples were received with in the hold time.	X		
16.	VOA vials completely filled.			X
17.	Sample accepted.	X		
18.	Has client been contacted about sub-out			X

Comments : Include actions taken to resolve discrepancies/problem:
 4oz jar

Received by : Jedralin

Check in by/date : Jedralin / 12/10/2021

ab-s005-0321

Phone : 713-453-6060

www.ablabs.com

Laboratory Analysis Report

Total Number of Pages: 6

Job ID : 21120912



10100 East Freeway, Suite 100, Houston, TX 77029 tel: 713-453-6060, fax: 713-453-6091, http://www.ablabs.com

Client Project Name :

JD35488X / SJRWP - PCFSE Harris County, TX

Report To : Client Name: SGS North America P.O.#.: JD35488X
Attn: Kelly Ramos Sample Collected By:
Client Address: 10165 Harwin Drive, Ste. # 150 Date Collected: 12/01/21 - 12/07/21
City, State, Zip: Houston , Texas, 77036

A&B Labs has analyzed the following samples...

Client Sample ID	Matrix	A&B Sample ID
11215131-120721 - IDW-SS-SC	Solid	21120912.01
11215131-120721 - IDW-SS-DECON2	Water	21120912.02

A handwritten signature in black ink, appearing to read 'Senthilkumar Sevukan', with a horizontal line drawn underneath.

Released By: Senthilkumar Sevukan
Title: Vice President Operations
Date: 12/20/2021



This Laboratory is NELAP (T104704213) accredited. Effective: 04/01/2021; Expires: 3/31/2022

Scope: Non-Potable Water, Drinking Water, Air, Solid, Biological Tissue, Hazardous Waste

I am the laboratory manager, or his/her designee, and I am responsible for the release of this data package. This laboratory data package has been reviewed and is complete and technically compliant with the requirements of the methods used, except where noted in the attached exception reports. I affirm, to the best of my knowledge that all problems/anomalies observed by this laboratory (and if applicable, any and all laboratories subcontracted through this laboratory) that might affect the quality of the data, have been identified in the Laboratory Review Checklist, and that no information or data have been knowingly withheld that would affect the quality of the data.

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ab-q210-0321

Date Received : 12/09/2021 11:07



Job ID : 21120912

Date : 12/20/2021

CLIENT Name : SGS North America ATTN : Kelly Ramos

PROJECT Name : JD35488X / SJRWP - PCFSE Harris County, TX

Method	ClientSampleID Parameter	Result	Units	Matrix	D.F	Rpt Limit	Reg Limit	Collection DateTime	Analysis DateTime	Analyst	SampleID	Q
	11215131-120721 - IDW-SS-SC TX335 TCLP Pesticide (NPD)											
SW-846 8141B	Methomyl ²	BRL	mg/L	Solid	0.2	0.01	90	12/07/21 14:20	12/16/21 12:04	VMN	21120912.01	
	4-Chloro-3-Nitro-Benzene(surr)	43.4	%	Solid	0.2	50-130		12/07/21 14:20	12/16/21 12:04	VMN	21120912.01	S6
	11215131-120721 - IDW-SS-DECON2											
SW-846 8141B	Methomyl ²	BRL	mg/L	Water	0.2	0.025	90	12/01/21 14:30	12/16/21 16:42	VMN	21120912.02	
	4-Chloro-3-Nitro-Benzene(surr)	47.6	%	Water	0.2	50-130		12/01/21 14:30	12/16/21 16:42	VMN	21120912.02	S6

²-Parameter not available for accreditation.



LABORATORY QUALITY CONTROL CERTIFICATE

A&B Job ID : 21120912

Date : 12/20/2021

QType: LCS and LCSD												
Parameter	Method	Spike Added	LCS Result	LCSD Result	LCS Rec %	LCSD Rec %	RPD	% RPD CLimits	% Rec CLimits	QCBatchID		Qual
Methomyl	SW-846 8141B	0.005	0.0051	0.0042	102	84.1	19.3	30	50-130	Qb21121744		

QType: MS and MSD													
Parameter	Method	Sample Result	Spike Added	MS Result	MSD Result	MS Rec %	MSD Rec %	RPD	% RPD CLimits	% Rec CLimits	QCBatchID	QCSampleID	Qual
Methomyl	SW-846 8141B	BRL	0.005	0.0041		82				40-140	Qb21121744	21120912.01	

QType: Method Blank													
Parameter	Method	CAS #	Result	Units	D.F.	Rpt Limit					QCBatchID		Qual
Methomyl	SW-846 8141B	16752-77-5	BRL	mg/L	0.2	0.025					Qb21121744		
4-Chloro-3-Nitro-Benzene(surr)	SW-846 8141B		71.8	%	0.2	50-130					Qb21121744		

LABORATORY TERM AND QUALIFIER DEFINITION REPORT



Job ID : 21120912

Date: 12/20/2021

2

General Term Definition

Back-Wt	Back Weight	Post-Wt	Post Weight
BRL	Below Reporting Limit	ppm	parts per million
cfu	colony-forming units	Pre-Wt	Previous Weight
Conc.	Concentration	Q	Qualifier
D.F.	Dilution Factor	RegLimit	Regulatory Limit
Front-Wt	Front Weight	RPD	Relative Percent Difference
LCS	Laboratory Check Standard	RptLimit	Reporting Limit
LCSD	Laboratory Check Standard Duplicate	SDL	Sample Detection Limit
MS	Matrix Spike	surr	Surrogate
MSD	Matrix Spike Duplicate	T	Time
MW	Molecular Weight	TNTC	Too numerous to count
J	Estimation. Below calibration range but above MDL		

Qualifier Definition

S6 Surrogate recovery is outside control limits due to matrix effects.



CHAIN OF CUSTODY

SGS North America Inc. - Dayton
2235 Route 130, Dayton, NJ 08810
TEL: 732-329-0200 FAX: 732-329-3499/3480
www.sgs.com/ehsusa

Table with 2 columns: FED-EX Tracking #, Bottle Order Control #; and 2 columns: SGS Quote #, SGS Job # (JD35488X)

Main form containing Client/Reporting Information, Project Information, Requested Analysis, Matrix Codes, Collection data table, Turnaround Time, Data Deliverable Information, and Chain of Custody table.

Job ID: 21120912



12/09/2021 SGS North America ACH



Sample Condition Checklist

A&B JobID : 21120912	Date Received : 12/09/2021	Time Received : 11:07AM
Client Name : SGS North America		
Temperature : 5.8°C	Sample pH : NA	
Thermometer ID : IR1	pH Paper ID : NA	
Preservative :		

	Check Points	Yes	No	N/A
1.	Cooler Seal present and signed.		X	
2.	Sample(s) in a cooler.	X		
3.	If yes, ice in cooler.	X		
4.	Sample(s) received with chain-of-custody.	X		
5.	C-O-C signed and dated.	X		
6.	Sample(s) received with signed sample custody seal.		X	
7.	Sample containers arrived intact. (If No comment)	X		
8.	Matrix: Water Soil Liquid Sludge Solid Cassette Tube Bulk Badge Food Other <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>			
9.	Samples were received in appropriate container(s)	X		
10.	Sample(s) were received with Proper preservative			X
11.	All samples were tagged or labeled.	X		
12.	Sample ID labels match C-O-C ID's.	X		
13.	Bottle count on C-O-C matches bottles found.	X		
14.	Sample volume is sufficient for analyses requested.	X		
15.	Samples were received with in the hold time.	X		
16.	VOA vials completely filled.			X
17.	Sample accepted.	X		
18.	Has client been contacted about sub-out			X

Comments : Include actions taken to resolve discrepancies/problem:
 Sample 01=Soil and sample 02=water

Received by : Jedralin

Check in by/date : Jedralin / 12/09/2021

ab-s005-0321

Phone : 713-453-6060

www.ablabs.com

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody

SGS North America Inc. - Dayton
2235 Route 130, Dayton, NJ 08810
TEL 732-329-0200 FAX 732-329-3499
www.sgs.com/ehsusa

Client / Reporting Information		Project Information		Requested Analysis (see TEST CODE sheet)		Matrix Codes																				
Company Name GHD Street Address 11451 Katy Freeway Suite 400 City Houston TX 77079 Project Contact Meagan Willis Meagan.willis@ghd.com Phone # 713-907-3710 Sampler(s) Name(s) Stephan Siker		Project Name SJRWP - PCFSE (IDW Composite Samples) Street Channelview City Harris County TX Project # 11215131 Client Purchase Order # SGS # CRATX0489 Project Manager Stephan Siker 832 225 1285		Billing Information (if different from Report to) Company Name Harris County TX Street Address Harris County TX City Harris County TX State TX Zip		Matrix Codes DW - Drinking Water GW - Ground Water WW - Water SW - Surface Water SO - Soil SL - Sludge SED - Sediment OI - Oil LIQ - Other Liquid AIR - Air SOL - Other Solid WP - Wipe FB-Field Blank EB-Equipment Blank RB- Rinse Blank TB-Trip Blank																				
Lab Sample #	Field ID / Point of Collection	MEOH/DI Vial #	Date	Time	Sampled by	Matrix	# of bottles	HCl	NaOH	HNO3	H2SO4	NONE	DI Water	MEDH	ENCORE	TCLP Herbs (H915)TCLP, HGC-DINOSBEE	AB9270TCLP,PSL	TCLP,PM, EVA, ESB, ENI, EBE	P0081TCLP,SL	V8280TCLP,SL	BTX10051PHR3 (SGS Houston to analyze)	DOB19TCLP,RECY, DGC,ETHOXYE and DGC-METHOXYE (SGS Houston to analyze)	SR141TCLP,METHOMYL (6ab to A&B Labs, TX)	TCLP Dioxin/Furans (Dayton, teaching only)	CREAC - SREAC - IGR	LAB USE ONLY P3 P10 P34 Sub
Turnaround Time (Business days) <input checked="" type="checkbox"/> Std. 10 Business Days <input type="checkbox"/> 5 Day RUSH <input type="checkbox"/> 3 Day RUSH <input type="checkbox"/> 2 Day RUSH <input type="checkbox"/> 1 Day RUSH <input type="checkbox"/> other		Approved by (SGS Project Manager) Date: 		Data Deliverable Information <input type="checkbox"/> Commercial "A" (Level 1) <input type="checkbox"/> Commercial "B" (Level 2) <input checked="" type="checkbox"/> FULL T1 (Level 3+4) <input type="checkbox"/> NJ Reduced <input type="checkbox"/> Commercial "C" <input type="checkbox"/> NJ Data of Known Quality Protocol Reporting Commercial "A" = Results Only; Commercial "B" = Results + QC Summary NJ Reduced = Results + QC Summary + Partial Raw data		Comments / Special Instructions Log in under JD35488 Please pack the dioxin/furan bottles in the Dayton cooler for the IDW analysis Initial Assessment 2/28/21 Label Verification 2/28/21 Sample inventory is verified upon receipt in the Laboratory																				
Sample Custody must be documented below each time samples change possession, including courier delivery.																										
Relinquished by Sampler: Stephan Siker Date Time: 12/21/21 12:45		Received By: Eddie Cost Date Time: 12/21/21 1:25		Relinquished by Sampler: Stephan Siker Date Time: 12/28/21 1:52		Received By: Damee Kim Date Time: 12/28/21 1:52		Relinquished By: Eddie Cost Date Time: 12-2-21 15:20		Received By: Stephan Siker Date Time: 12/28/21 15:25		Custody Seal #		<input type="checkbox"/> Intact	<input type="checkbox"/> Not Intact	<input type="checkbox"/> Preserved where applicable	<input type="checkbox"/> On Ice	<input type="checkbox"/> Cooler Temp.								

Form:SM088-03C (revised 2/12/18)

5.0 °C CIP
http://www.sgs.com/en/terms-and-conditions.



so

CHAIN OF CUSTODY

SGS North America Inc. - Dayton
2235 Route 130, Dayton, NJ 08810
TEL. 732-329-0200 FAX 732-329-3499
www.sgs.com/ehsusa

FED-EX Tracking #
SGS Quote #
Bottle Order Control # **KR-111821-58**
SGS Job # **JD35488**

Client / Reporting Information		Project Information						Requested Analysis (see TEST CODE sheet)												Matrix Codes															
Company Name GHD		Project Name SJRWP - PCFSE (IDW Composite Samples)						<table border="1"> <tr> <td>TCLP Herb (H815) TCLP, HGC-DINOSBEE</td> <td>ABB270TCLPSL</td> <td>TCLPM, EVA, ESB, ENI, EBE</td> <td>P0081TCLPSL</td> <td>V8280TCLPSL</td> <td>BITX005TPHR3 (SGS Houston to analyze)</td> <td>D8015TCLPBGV, DGC-ETHOXYE and DGC-METHOXYE (SGS Houston to analyze)</td> <td>S8141TCLPMETHOMYL (sent to A&B Labs, TX)</td> <td>TCLP Dioxin/Furans (Dayton teaching only)</td> <td>CREAC, SREAC, IGN</td> <td colspan="2">LAB USE ONLY</td> <td colspan="2">DW - Drinking Water GW - Ground Water WW - Water SW - Surface Water SO - Soil SL - Sludge SED - Sediment OI - Oil LIQ - Other Liquid AIR - Air SOL - Other Solid WP - Wipe FB - Field Blank EB - Equipment Blank RB - Rinse Blank TB - Trip Blank</td> </tr> </table>												TCLP Herb (H815) TCLP, HGC-DINOSBEE	ABB270TCLPSL	TCLPM, EVA, ESB, ENI, EBE	P0081TCLPSL	V8280TCLPSL	BITX005TPHR3 (SGS Houston to analyze)	D8015TCLPBGV, DGC-ETHOXYE and DGC-METHOXYE (SGS Houston to analyze)	S8141TCLPMETHOMYL (sent to A&B Labs, TX)	TCLP Dioxin/Furans (Dayton teaching only)	CREAC, SREAC, IGN	LAB USE ONLY		DW - Drinking Water GW - Ground Water WW - Water SW - Surface Water SO - Soil SL - Sludge SED - Sediment OI - Oil LIQ - Other Liquid AIR - Air SOL - Other Solid WP - Wipe FB - Field Blank EB - Equipment Blank RB - Rinse Blank TB - Trip Blank		DW - Drinking Water GW - Ground Water WW - Water SW - Surface Water SO - Soil SL - Sludge SED - Sediment OI - Oil LIQ - Other Liquid AIR - Air SOL - Other Solid WP - Wipe FB - Field Blank EB - Equipment Blank RB - Rinse Blank TB - Trip Blank	
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Street Address 11451 Katy Freeway Suite 400		Street Channellview																																	
City Houston TX 77079		Billing Information (if different from Report to) City Harris County TX State TX Company Name Street Address 																																	
Project Contact Meagan Willis Meagan.willis@ghd.com		Project # 11215131 SGS # CRATXH90499																																	
Phone # 713-907-3710		Client Purchase Order # 																																	
Sample(s) Name(s) Steph Sels		Project Manager 83222387																																	
Lab Sample #		Field ID / Point of Collection		MEOH/DI Vial #		Date		Time		Sampled by		Matrix		# of bottles																					
2		11215131-120121-IDW-SB NE DEPO				12/1/21		1550		SPS		W		21														EPD C13 SUB Initial Assessment Label Verification							
Turnaround Time (Business days)		Approved by (SGS Project Manager)/Date:						Data Deliverable Information						Comments / Special Instructions																					
<input checked="" type="checkbox"/> Std. 10 Business Days <input type="checkbox"/> 5 Day RUSH <input type="checkbox"/> 3 Day RUSH <input type="checkbox"/> 2 Day RUSH <input type="checkbox"/> 1 Day RUSH <input type="checkbox"/> other								<input type="checkbox"/> Commercial "A" (Level 1) <input type="checkbox"/> NYASP Category A <input type="checkbox"/> Commercial "B" (Level 2) <input type="checkbox"/> NYASP Category B <input checked="" type="checkbox"/> FULLT1 (Level 3+4) <input type="checkbox"/> State Forms <input type="checkbox"/> NJ Reduced <input type="checkbox"/> EDD Format <input type="checkbox"/> Commercial "C" <input type="checkbox"/> NJ Data of Known Quality Protocol Reporting Commercial "A" = Results Only; Commercial "B" = Results + QC Summary NJ Reduced = Results + QC Summary + Partial Raw data						Log in under JD35488 Please pack the dioxin/furan bottles in the Dayton cooler for the IDW analysis * Single sample is with excess																					
Emergency & Rush T/A data available via LabLink		Sample inventory is verified upon receipt in the Laboratory																																	
Relinquished by Sampler: Steph Sels		Date Time: 12/1/21 1555		Received By: [Signature]		Date Time: 12/2/21 1505		Relinquished By: [Signature]		Date Time: 12/2/21 1523		Received By: [Signature]		Date Time: 12/2/21 1523		Received By: [Signature]																			
Relinquished by:		Date Time:		Received By:		Date Time:		Relinquished By:		Date Time:		Received By:		Date Time:		Received By:																			
																		3.7°C																	
																		4.4°C																	

31
3



SGS Sample Receipt Summary

Job Number: JD35488

Client: GHD SERVICES INC.

Project: SJRWP - PCFSE, HARRIS COUNTY, TX (IDW B

Date / Time Received: 12/3/2021 3:25:00 PM

Delivery Method:

Airbill #'s:

Cooler Temps (Raw Measured) °C: Cooler 2: (4.4); Cooler 3: (3.7);

Cooler Temps (Corrected) °C: Cooler 2: (3.0); Cooler 3: (2.3);

<u>Cooler Security</u>	<u>Y or N</u>			<u>Y or N</u>	
1. Custody Seals Present:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	3. COC Present:	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2. Custody Seals Intact:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	4. Smpl Dates/Time OK	<input checked="" type="checkbox"/>	<input type="checkbox"/>

<u>Cooler Temperature</u>	<u>Y or N</u>	
1. Temp criteria achieved:	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2. Cooler temp verification:	IR Gun	
3. Cooler media:	Ice (Bag)	
4. No. Coolers:	2	

<u>Quality Control Preservation</u>	<u>Y or N</u>		<u>N/A</u>
1. Trip Blank present / cooler:	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
2. Trip Blank listed on COC:	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
3. Samples preserved properly:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
4. VOCs headspace free:	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

<u>Sample Integrity - Documentation</u>	<u>Y or N</u>	
1. Sample labels present on bottles:	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2. Container labeling complete:	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3. Sample container label / COC agree:	<input checked="" type="checkbox"/>	<input type="checkbox"/>

<u>Sample Integrity - Condition</u>	<u>Y or N</u>	
1. Sample recvd within HT:	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2. All containers accounted for:	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3. Condition of sample:	Intact	

<u>Sample Integrity - Instructions</u>	<u>Y or N</u>		<u>N/A</u>
1. Analysis requested is clear:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
2. Bottles received for unspecified tests	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
3. Sufficient volume recvd for analysis:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
4. Compositing instructions clear:	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
5. Filtering instructions clear:	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Test Strip Lot #s: pH 1-12: 231619 pH 12+: 203117A Other: (Specify)

Comments

SM089-03
Rev. Date 12/7/17

JD35488XA: Chain of Custody

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Job Change Order: JD35488

Requested Date:	12/10/2021	Received Date:	12/3/2021
Account Name:	GHD Services Inc.	Due Date:	12/10/2021
Project Description:	SJRWP - PCFSE, Harris County, TX (IDW)	Deliverable:	FULT1
C/O Initiated By:	KELLY.RAM	PM:	KR
		TAT (Days):	7

Sample #:	JD35488-3, 4	Change:	
Dept:			Please relog for B8316TCLPACRAMIDE and TCLPE
TAT:	7		

Above Changes Per: Kathy Shaw

Date/Time: 12/10/2021

To Client: This Change Order is confirmation of the revisions, previously discussed with the Client Service Representative.

Job Change Order: JD35488

Requested Date:	12/14/2021	Received Date:	12/3/2021
Account Name:	GHD Services Inc.	Due Date:	12/14/2021
Project Description:	SJRWP - PCFSE, Harris County, TX (IDW)	Deliverable:	FULT1
C/O Initiated By:	KELLY.RAM	PM:	KR
		TAT (Days):	7

Sample #:	JD35488-5	Change:	
Dept:			Please relog for TCLPE and B8316TCLPACRAMIDE and sub to ALSE
TAT:	7		

11215131-120821-IDW-SS-SW

Above Changes Per:

Date/Time: 12/14/2021

To Client: This Change Order is confirmation of the revisions, previously discussed with the Client Service Representative.

Page 1 of 1

JD35488XA: Chain of Custody
Page 5 of 9

SGS North America Inc. - Dayton
2235 Route 130, Dayton, NJ 08810
TEL 732-329-0200 FAX 732-329-3499
www.sgs.com/ehsusa

FED-EM Tracking #
Bottle Order Control #
SGS Quote #
SGS Job #

11821-159
JD35488

Main form containing Client/Reporting Information, Project Information, Requested Analysis, Matrix Codes, Lab Sample table, and Data Deliverable Information. Includes handwritten entries for sample ID 11215191-120821-IDW-SS-5W and collection date 12/8/21.

31
3

B2S
F29T
B15

Job Change Order: JD35488

Requested Date:	12/20/2021	Received Date:	12/3/2021
Account Name:	GHD Services Inc.	Due Date:	12/20/2021
Project Description:	SJRWP - PCFSE, Harris County, TX (IDW)	Deliverable:	FULT1
C/O Initiated By:	KELLY.RAM	PM:	KR
		TAT (Days):	7

Sample #:	JD35488-6	Change:	
Dept:			Please relog for TCLPE, B8316TCLPACRAMIDE and sub to ALSE
TAT:	7		

11215131-121421-IDW-BN-NS

Above Changes Per:

Date/Time: 12/20/2021

To Client: This Change Order is confirmation of the revisions, previously discussed with the Client Service Representative.

Page 1 of 1

JD35488XA: Chain of Custody
Page 7 of 9

50
SU

SGS North America Inc. - Dayton
2235 Route 130, Dayton, NJ 09810
TEL: 732-329-0200 FAX: 732-329-3499
www.sgs.com/ehsusa

FED-EX Tracking # _____ Bottle Order Control # _____
SGS Quote # _____ SGS Job # **JD35488**

Client / Reporting Information		Project Information					Requested Analysis (see TEST CODE sheet)										Matrix Codes																										
Company Name GHD		Project Name SJRW - PCFSE (IDW Composite Samples)					<table border="1"> <tr> <td>TCLP Metals (4815) TCLP, HCC-DINOSEB</td> <td>AB8270TCLPSL</td> <td>TCLPM, EVA, ESS, ENI, EBE</td> <td>PB081TCLPSL</td> <td>V8260TCLPSL</td> <td>BTX10051PHR3 (SGS Houston to analyze)</td> <td>DB016TCLPEGLY, DGC+ETHOXE and DGC+METHOXE (SGS Houston to analyze)</td> <td>SR141TCLPMETHOMYL (sub to A&B Labs, TX)</td> <td>TCLP Dioxin/Furans (Dayton leaching only)</td> <td>CREAC, SREAC, IGN</td> <td>DW - Drinking Water</td> <td>GW - Ground Water</td> <td>WW - Water</td> <td>SW - Surface Water</td> <td>SO - Soil</td> <td>SL - Sludge</td> <td>SED - Sediment</td> <td>OI - Oil</td> <td>LIQ - Other Liquid</td> <td>AIR - Air</td> <td>SOL - Other Solid</td> <td>WP - Wipe</td> <td>FB - Field Blank</td> <td>EB - Equipment Blank</td> <td>RB - Rinse Blank</td> <td>TB - Trip Blank</td> </tr> </table>										TCLP Metals (4815) TCLP, HCC-DINOSEB	AB8270TCLPSL	TCLPM, EVA, ESS, ENI, EBE	PB081TCLPSL	V8260TCLPSL	BTX10051PHR3 (SGS Houston to analyze)	DB016TCLPEGLY, DGC+ETHOXE and DGC+METHOXE (SGS Houston to analyze)	SR141TCLPMETHOMYL (sub to A&B Labs, TX)	TCLP Dioxin/Furans (Dayton leaching only)	CREAC, SREAC, IGN	DW - Drinking Water	GW - Ground Water	WW - Water	SW - Surface Water	SO - Soil	SL - Sludge	SED - Sediment	OI - Oil	LIQ - Other Liquid	AIR - Air	SOL - Other Solid	WP - Wipe	FB - Field Blank	EB - Equipment Blank	RB - Rinse Blank	TB - Trip Blank	LAB USE ONLY SGA YALZ ZLS PYT DYT
TCLP Metals (4815) TCLP, HCC-DINOSEB	AB8270TCLPSL	TCLPM, EVA, ESS, ENI, EBE	PB081TCLPSL	V8260TCLPSL	BTX10051PHR3 (SGS Houston to analyze)	DB016TCLPEGLY, DGC+ETHOXE and DGC+METHOXE (SGS Houston to analyze)											SR141TCLPMETHOMYL (sub to A&B Labs, TX)	TCLP Dioxin/Furans (Dayton leaching only)	CREAC, SREAC, IGN	DW - Drinking Water	GW - Ground Water	WW - Water	SW - Surface Water	SO - Soil	SL - Sludge	SED - Sediment	OI - Oil	LIQ - Other Liquid	AIR - Air	SOL - Other Solid	WP - Wipe	FB - Field Blank	EB - Equipment Blank	RB - Rinse Blank	TB - Trip Blank								
Street Address 11451 Katy Freeway Suite 400		Street Channelview															Billing Information (if different from Report to)																										
City State Zip Houston TX 77079		City State Harris County TX					Company Name																																				
Project Contact Meagan Willis Meagan.willis@ghd.com		Project # 11215131					SGS # CRATXH90499																																				
Phone # 713-907-3710		Client Purchase Order #					City State Zip																																				
Sampler(s) Name(s) Breanna North 561-454-9966		Project Manager					Attention:																																				
Lab Sample #	Field ID / Point of Collection	MEOH/DI Vial #	Collection					Number of preserved bottles									LAB USE ONLY																										
			Date	Time	Sampled by	Matrix	# of bottles	HCl	HNO ₃	HNO ₃	H ₂ SO ₄	NONE	DV Water	MEDM	ENGORE																												
6	11215131-121421-IDW-BN-NC		12-14-21	1330	BN	S	11																																				
Turnaround Time (Business days)		Approved by (SGS Project Manager)/Date:					Data Deliverable Information								Comments / Special Instructions																												
							<input type="checkbox"/> Commercial "A" (Level 1) <input type="checkbox"/> NYASP Category A <input type="checkbox"/> Commercial "B" (Level 2) <input type="checkbox"/> NYASP Category B <input checked="" type="checkbox"/> FULLT1 (Level 3+4) <input type="checkbox"/> State Forms <input type="checkbox"/> NJ Reduced <input type="checkbox"/> EDD Format <input type="checkbox"/> Commercial "C" <input type="checkbox"/> NJ Data of Known Quality Protocol Reporting Commercial "A" = Results Only; Commercial "B" = Results + QC Summary NJ Reduced = Results + QC Summary + Partial Raw data																																				
<input checked="" type="checkbox"/> Std. 10 Business Days <input type="checkbox"/> 5 Day RUSH <input type="checkbox"/> 3 Day RUSH <input type="checkbox"/> 2 Day RUSH <input type="checkbox"/> 1 Day RUSH <input type="checkbox"/> other							<input type="checkbox"/> Commercial "A" (Level 1) <input type="checkbox"/> NYASP Category A <input type="checkbox"/> Commercial "B" (Level 2) <input type="checkbox"/> NYASP Category B <input checked="" type="checkbox"/> FULLT1 (Level 3+4) <input type="checkbox"/> State Forms <input type="checkbox"/> NJ Reduced <input type="checkbox"/> EDD Format <input type="checkbox"/> Commercial "C" <input type="checkbox"/> NJ Data of Known Quality Protocol Reporting Commercial "A" = Results Only; Commercial "B" = Results + QC Summary NJ Reduced = Results + QC Summary + Partial Raw data								Log in under JD35488 Please pack the dioxin/furan bottles in the Dayton cooler for the IDW analysis Sample inventory is verified upon receipt in the Laboratory																												
Emergency & Rush TIA data available via LabLink		Sample custody must be documented below each time samples change possession, including courier delivery.																																									
1 Relinquished by Sampler: Breanna North		Date Time: 12-14-21 1400		Relinquished By: Breanna North		Date Time: 12-14-21 1530		2 Relinquished By: Eric Coates		Date Time: 12-14-21		Received By: [Signature]		Date Time: 12/14/21																													
3 Relinquished by Sampler: Kolox		Date Time:		Received By: [Signature]		Date Time:		4 Relinquished By: [Signature]		Date Time:		Received By: [Signature]		Date Time:																													
5 Relinquished by:		Date Time:		Received By: [Signature]		Date Time:		Custody Seal # 1		<input checked="" type="checkbox"/> Intact <input type="checkbox"/> Not intact		Preserved where applicable <input type="checkbox"/> On Ice <input checked="" type="checkbox"/> Cooler Temp. 1.8°C																															

Job Change Order: JD35488

Requested Date:	1/4/2022	Received Date:	12/3/2021
Account Name:	GHD Services Inc.	Due Date:	1/4/2022
Project Description:	SJRWP - PCFSE, Harris County, TX (IDW)	Deliverable:	FULT1
C/O Initiated By:	KELLY.RAM	PM:	KR
		TAT (Days):	7

Sample #:	JD35488-3, -4, -5	Change:	
Dept:			Please move to XB job for D8015TCLPEGLY, DGC+ETHOXYE, DGC+METHOXYE. Samples subbed to ALS
TAT:	7		

Above Changes Per:

Date/Time: 1/4/2022

To Client: This Change Order is confirmation of the revisions, previously discussed with the Client Service Representative.

Page 1 of 1

JD35488XA: Chain of Custody
Page 9 of 9

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

e-Hardcopy 2.0
Automated Report

Technical Report for

GHD Services Inc.

SJRWP - PCFSE, Harris County, TX

SSOW:11215131 2021-001 / PO#340-002625

SGS Job Number: JD35488XB

Sampling Dates: 12/07/21 - 12/08/21

Report to:

GHD Services Inc.
11451 Katy Freeway Suite 400
Houston, TX 77079
Nate.Reece@ghd.com; Meagan.Willis@ghd.com;
Kathleen.Shaw@GHD.com; Marisa.Oriaku@GHD.com
ATTN: Meagan Willis

Total number of pages in report: 42



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

A handwritten signature in black ink, appearing to read "Mike Earp".

Mike Earp
General Manager

Client Service contact: Kelly Ramos 732-329-0200

Certifications: NJ(12129), NY(10983), CA, CT, FL, IL, IN, KS, KY, LA, MA, MD, ME, MN, NC, OH VAP (CL0056), AK (UST-103), AZ (AZ0786), PA, RI, SC, TX, UT, VA, WV, DoD ELAP (ANAB L2248)

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Test results relate only to samples analyzed.

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Sample Summary

GHD Services Inc.

Job No: JD35488XB

SJRWP - PCFSE, Harris County, TX

Project No: SSOW:11215131 2021-001 / PO#340-002625

Sample Number	Collected Date	Time By	Received	Matrix Code	Type	Client Sample ID
JD35488-3AX	12/07/21	14:20	SPS	12/08/21	SO Soil	11215131-120721-IDW-SS-SC
JD35488-4AX	12/07/21	14:20	SPS	12/08/21	AQ Water	11215131-120721-IDW-SS-DECON2
JD35488-5AX	12/08/21	15:30	SPS	12/09/21	SO Soil	11215131-120821-IDW-SS-SW

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

Subcontract Lab Data

Report of Analysis



ANALYTICAL REPORT

Eurofins Houston
4145 Greenbriar Dr
Stafford, TX 77477
Tel: (281)240-4200

Laboratory Job ID: 860-17839-1

Client Project/Site: CRATXH SJRWP PCFSE Harris County TX
(IDW) TD35488

Revision: 2

For:
SGS North America Inc
10165 Harwin Dr.
Suite 150
Houston, Texas 77036

Attn: Electa Brown



Authorized for release by:
1/19/2022 6:06:39 PM

Bethany McDaniel, Senior Project Manager
(713)358-2005
Bethany.McDaniel@Eurofinset.com

LINKS

Review your project
results through
TotalAccess

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 **Ask
The
Expert**

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www.eurofinsus.com/Env

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Definitions/Glossary

Client: SGS North America Inc
Project/Site: CRATXH SJRWP PCFSE Harris County TX (IDW)
TD35488

Job ID: 860-17839-1



Qualifiers

GC VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.

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
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
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)
TNTC	Too Numerous To Count

Eurofins Houston

Case Narrative

Client: SGS North America Inc
Project/Site: CRATXH SJRWP PCFSE Harris County TX (IDW) TD

Job ID: 860-17839-1

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Job ID: 860-17839-1

Laboratory: Eurofins Houston

Narrative

Job Narrative 860-17839-1

REVISION

This report was revised on January 5, 2021 to add Ethylene Glycol to the 8015 method per client request.. Revision 2 was to change client sample ID's.

Receipt

The samples were received on 12/22/2021 6:05 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 3.9°C

GC VOA

Method 8015D_DAI_G: The following samples were diluted due to the nature of the sample matrix: JD35488-3A (860-17839-1), JD35488-4A (860-17839-2), JD35488-5A (860-17839-3), OP56306-LB (860-17839-4) and OP16299-LB (860-17839-5). Elevated reporting limits (RLs) are provided.

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

Detection Summary

Client: SGS North America Inc
Project/Site: CRATXH SJRWP PCFSE Harris County TX (IDW)
TD35488

Job ID: 860-17839-1

Client Sample ID: 11215131-120721-IDW-SS-SC **Lab Sample ID: 860-17839-1**

No Detections.

Client Sample ID: 11215131-120721-IDW-SS-DECON2 **Lab Sample ID: 860-17839-2**

No Detections.

Client Sample ID: 11215131-120821-IDW-SS-SW **Lab Sample ID: 860-17839-3**

No Detections.

Client Sample ID: OP56306-LB **Lab Sample ID: 860-17839-4**

No Detections.

Client Sample ID: OP16299-LB **Lab Sample ID: 860-17839-5**

No Detections.

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This Detection Summary does not include radiochemical test results.

Eurofins Houston

Client Sample Results

Client: SGS North America Inc
 Project/Site: CRATXH SJRWP PCFSE Harris County TX (IDW)
 TD35488

Job ID: 860-17839-1



Client Sample ID: 11215131-120721-IDW-SS-SC

Lab Sample ID: 860-17839-1

Date Collected: 12/07/21 14:20

Matrix: Water

Date Received: 12/22/21 18:05

Method: 8015D - Glycols- Direct Injection (GC/FID)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Ethoxyethanol	25.0	U	25.0	25.0	mg/L			12/23/21 11:34	5
2-Methoxyethanol	25.0	U	25.0	25.0	mg/L			12/23/21 11:34	5
Ethylene glycol	14.7	U	25.0	14.7	mg/L			12/23/21 11:34	5

Client Sample ID: 11215131-120721-IDW-SS-DECON2

Lab Sample ID: 860-17839-2

Date Collected: 12/07/21 14:20

Matrix: Water

Date Received: 12/22/21 18:05

Method: 8015D - Glycols- Direct Injection (GC/FID)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Ethoxyethanol	25.0	U	25.0	25.0	mg/L			12/23/21 11:46	5
2-Methoxyethanol	25.0	U	25.0	25.0	mg/L			12/23/21 11:46	5
Ethylene glycol	14.7	U	25.0	14.7	mg/L			12/23/21 11:46	5

Client Sample ID: 11215131-120821-IDW-SS-SW

Lab Sample ID: 860-17839-3

Date Collected: 12/08/21 15:30

Matrix: Water

Date Received: 12/22/21 18:05

Method: 8015D - Glycols- Direct Injection (GC/FID)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Ethoxyethanol	25.0	U	25.0	25.0	mg/L			12/23/21 11:58	5
2-Methoxyethanol	25.0	U	25.0	25.0	mg/L			12/23/21 11:58	5
Ethylene glycol	14.7	U	25.0	14.7	mg/L			12/23/21 11:58	5

Client Sample ID: OP56306-LB

Lab Sample ID: 860-17839-4

Date Collected: 12/08/21 15:30

Matrix: Water

Date Received: 12/22/21 18:05

Method: 8015D - Glycols- Direct Injection (GC/FID)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Ethoxyethanol	25.0	U	25.0	25.0	mg/L			12/23/21 12:11	5
2-Methoxyethanol	25.0	U	25.0	25.0	mg/L			12/23/21 12:11	5
Ethylene glycol	14.7	U	25.0	14.7	mg/L			12/23/21 12:11	5

Client Sample ID: OP16299-LB

Lab Sample ID: 860-17839-5

Date Collected: 12/07/21 14:20

Matrix: Water

Date Received: 12/22/21 18:05

Method: 8015D - Glycols- Direct Injection (GC/FID)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Ethoxyethanol	25.0	U	25.0	25.0	mg/L			12/23/21 12:23	5
2-Methoxyethanol	25.0	U	25.0	25.0	mg/L			12/23/21 12:23	5
Ethylene glycol	14.7	U	25.0	14.7	mg/L			12/23/21 12:23	5

Eurofins Houston

QC Sample Results

Client: SGS North America Inc
 Project/Site: CRATXH SJRWP PCFSE Harris County TX (IDW)
 TD35488

Job ID: 860-17839-1

Method: 8015D - Glycols- Direct Injection (GC/FID)

Lab Sample ID: MB 860-35416/3
Matrix: Water
Analysis Batch: 35416

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

Analyte	MB MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
2-Ethoxyethanol	5.00	U	5.00	5.00	mg/L			12/23/21 08:04	1
2-Methoxyethanol	5.00	U	5.00	5.00	mg/L			12/23/21 08:04	1
Ethylene glycol	2.95	U	5.00	2.95	mg/L			12/23/21 08:04	1

Lab Sample ID: LCS 860-35416/4
Matrix: Water
Analysis Batch: 35416

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
2-Methoxyethanol	50.0	50.07		mg/L		100	70 - 130
Ethylene glycol	50.0	45.31		mg/L		91	70 - 130

Lab Sample ID: LCSD 860-35416/5
Matrix: Water
Analysis Batch: 35416

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
2-Methoxyethanol	50.0	53.08		mg/L		106	70 - 130	6	30
Ethylene glycol	50.0	46.40		mg/L		93	70 - 130	2	30



QC Association Summary

Client: SGS North America Inc
Project/Site: CRATXH SJRWP PCFSE Harris County TX (IDW)
TD35488

Job ID: 860-17839-1



GC VOA

Analysis Batch: 35416

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
860-17839-1	11215131-120721-IDW-SS-SC	Total/NA	Water	8015D	
860-17839-2	11215131-120721-IDW-SS-DECON2	Total/NA	Water	8015D	
860-17839-3	11215131-120821-IDW-SS-SW	Total/NA	Water	8015D	
860-17839-4	OP56306-LB	Total/NA	Water	8015D	
860-17839-5	OP16299-LB	Total/NA	Water	8015D	
MB 860-35416/3	Method Blank	Total/NA	Water	8015D	
LCS 860-35416/4	Lab Control Sample	Total/NA	Water	8015D	
LCSD 860-35416/5	Lab Control Sample Dup	Total/NA	Water	8015D	

Eurofins Houston

Lab Chronicle

Client: SGS North America Inc
Project/Site: CRATXH SJRWP PCFSE Harris County TX (IDW)
TD35488

Job ID: 860-17839-1

Client Sample ID: 11215131-120721-IDW-SS-SC

Lab Sample ID: 860-17839-1

Date Collected: 12/07/21 14:20

Matrix: Water

Date Received: 12/22/21 18:05

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015D		5			35416	12/23/21 11:34	CZT	XEN STF

Client Sample ID: 11215131-120721-IDW-SS-DECON2

Lab Sample ID: 860-17839-2

Date Collected: 12/07/21 14:20

Matrix: Water

Date Received: 12/22/21 18:05

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015D		5			35416	12/23/21 11:46	CZT	XEN STF

Client Sample ID: 11215131-120821-IDW-SS-SW

Lab Sample ID: 860-17839-3

Date Collected: 12/08/21 15:30

Matrix: Water

Date Received: 12/22/21 18:05

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015D		5			35416	12/23/21 11:58	CZT	XEN STF

Client Sample ID: OP56306-LB

Lab Sample ID: 860-17839-4

Date Collected: 12/08/21 15:30

Matrix: Water

Date Received: 12/22/21 18:05

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015D		5			35416	12/23/21 12:11	CZT	XEN STF

Client Sample ID: OP16299-LB

Lab Sample ID: 860-17839-5

Date Collected: 12/07/21 14:20

Matrix: Water

Date Received: 12/22/21 18:05

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015D		5			35416	12/23/21 12:23	CZT	XEN STF

Laboratory References:

XEN STF = Eurofins Houston, 4145 Greenbriar Dr, Stafford, TX 77477, TEL (281)240-4200

Eurofins Houston

Accreditation/Certification Summary

Client: SGS North America Inc
 Project/Site: CRATXH SJRWP PCFSE Harris County TX (IDW)
 TD35488

Job ID: 860-17839-1



Laboratory: Eurofins Houston

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704215-21-44	06-30-22
The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.			
Analysis Method	Prep Method	Matrix	Analyte
8015D		Water	2-Ethoxyethanol
8015D		Water	2-Methoxyethanol

Method Summary

Client: SGS North America Inc
Project/Site: CRATXH SJRWP PCFSE Harris County TX (IDW)
TD35488

Job ID: 860-17839-1



Method	Method Description	Protocol	Laboratory
8015D	Glycols- Direct Injection (GC/FID)	SW846	XEN STF

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

XEN STF = Eurofins Houston, 4145 Greenbriar Dr, Stafford, TX 77477, TEL (281)240-4200

Eurofins Houston

Sample Summary

Client: SGS North America Inc
Project/Site: CRATXH SJRWP PCFSE Harris County TX
(IDW) TD35488

Job ID: 860-17839-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
860-17839-1	11215131-120721-IDW-SS-SC	Water	12/07/21 14:20	12/22/21 18:05
860-17839-2	11215131-120721-IDW-SS-DECON2	Water	12/07/21 14:20	12/22/21 18:05
860-17839-3	11215131-120821-IDW-SS-SW	Water	12/08/21 15:30	12/22/21 18:05
860-17839-4	OP56306-LB	Water	12/08/21 15:30	12/22/21 18:05
860-17839-5	OP16299-LB	Water	12/07/21 14:20	12/22/21 18:05

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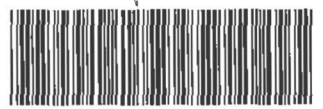
CHAIN OF CUSTODY

10165 Harwin Drive, Houston, TX 77036
 TEL: 713-271-4700 FAX: 713-271-4770
 www.sgs.com

FED-EX Tracking #	Bottle Order Control #
SGS Quote #	SGS Job # JD35488

Client / Reporting Information		Project Information				Requested Analysis (see TEST CODE sheet)										Matrix Codes						
Company Name: SGS North America Inc.		Project Name: CRATXH SJRWP PCFSE, Harris County TX (IDW)				D8015TCLPEGLY ,DGC+ETHOXYE ,DGC+METHOXYE										DW Drinking Water GW Ground Water WW Water SW Surface Water SO Soil SL Sludge SED-Sediment OI Oil LIQ Other Liquid AIR Air SOL Other Solid WP Wipe FB-Field Blank EB-Equipment Blank RB- Rinse Blank TB-Trip Blank						
Street Address 10165 Harwin Drive		Street																				
City State Zip Houston TX 77036		City State																				
Project Contact E-mail long.nguyen2@sgs.com		Project #		Street Address																		
Phone # 713-271-4700		Fax #		Client Purchase Order #													City		State		Zip	
Sampler(s) Name(s) SPS		Phone		Project Manager													Attention:					

SGS Sample #	Field ID / Point of Collection	MEOH/DI Vol#	Collection		Sampled by	Matrix	# of bottles	Number of preserved Bottles								LAB USE ONLY		
			Date	Time				HCl	HAcH	HNO3	H2SO4	NONE	D1 Water	MEOH	ENCORE			
3A	11215131-120721-IDW-SS-SC		12/7/2021	2:20:00 PM	SPS	SO												X
4A	11215131-120721-IDW-SS-DECON2		12/7/2021	2:20:00 PM	SPS	AQ												X
5A	11215131-120821-IDW-SS-SW		12/8/21	3:30:00 PM	SPS	SO												X



860-17839 Chain of Custody

Temp. **3.9** IR ID:HOU-272
 C/F:+0.0
 Corrected Temp:**3.9**

Turnaround Time (Business days)		Data Deliverable Information				Comments / Special Instructions	
<input type="checkbox"/> Std. 10 Business Days <input type="checkbox"/> 5 Day RUSH <input type="checkbox"/> 3 Day EMERGENCY <input type="checkbox"/> 2 Day EMERGENCY <input type="checkbox"/> 1 Day EMERGENCY <input checked="" type="checkbox"/> other Due 12/15/2021 Emergency & Rush T/A data available VIA Lablink		Approved By (SGS PM): Date: _____ _____		<input type="checkbox"/> Commercial "A" (Level 1) <input type="checkbox"/> Commercial "B" (Level 2) <input type="checkbox"/> FULLT1 (Level 3+4) <input type="checkbox"/> NJ Reduced <input type="checkbox"/> Commercial "C" <input type="checkbox"/> NYASP Category A <input type="checkbox"/> NYASP Category B <input type="checkbox"/> State Forms <input type="checkbox"/> EDD Format <input checked="" type="checkbox"/> Other FULL1		Eurofins/Xenco Commercial "A" Results Only Commercial "B" Results + QC Summary NJ Reduced Results + QC Summary + Partial Raw data	

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

Relinquished by: <i>[Signature]</i>	Date/Time: 12-22-21	Received By: <i>[Signature]</i>	Relinquished By:	Date Time:	Received By:
1		1	2		2
Relinquished:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:
3		3	4		4
Relinquished by:	Date Time:	Received By:	Custody Seal #	<input type="checkbox"/> Intact Preserved where applicable <input type="checkbox"/> Not intact On Ice Cooler Temp.	
5		5			





TCLP SPLP ZHE PREPARATION LOGBOOK

METHODS 1311/1312 Balance ID: TCU-Ball pH Meter ID: TCU-PH1 pH Probe S/N: TCUPA Probe Thermometer ID: TCU-71 Tumbler IDs: #4

Prep Code: <u>ZHE</u>	Analyst (start/end): <u>XC1 SC</u>	90mm filter paper Lot#: <u>115883-1127-D</u>	Observed / Corrected
OP #: <u>56299</u>	Date (start/end): <u>12/13/24 / 12/14/24</u>	Fluid #1 Lot#: <u>017-OP-63-2TC</u>	Temperature, °C Start: <u>23.2 / 23.1</u>
	Time (start/end): <u>13:52 / 06:57</u>	SPLP Fluid Lot: <u> / </u>	Temperature °C End: <u>23.7 / 23.8</u>
	Hours tumbled: <u>17h 01min</u>		Min Temp °C: <u>23.2 / 23.1</u>
			Max Temp °C: <u>24.2 / 24.1</u>

Controls. pH range TCLP #1 4.88-4.98; pH range TCLP #2. 2.83-2.93, Tumble Range: 16 - 20 hours Min/Max Temp Range: 21 - 25°C

Sample ID	Matrix	ALL SAMPLES ZHE Vessels only				SOLID PHASE				LIQUID PHASE	MIXED PHASE (SOLID & LIQUID)					
		Vessel #	Preliminary Evaluation Logbook, page	ZHE Initial Pressure psi	ZHE Final Pressure Y or N	Wt. sample, g Max Weight = 25.0g	Wt. of residue g	Corrected weight (sample - residue) g	Weight of sample leached g	Weight of sample leached g Wt. of Primary Leachate g	Does Primary Leachate have 2 phases?	If Y record vol of Primary organic phase, mL	If Y record vol of Primary aqueous phase, mL	Vol. of Secondary Leachate Ml (if Primary Leachate)	Are Primary and Secondary Leachates miscible?	If N, was a second sample aliquot logged into LIMS?
—	-	#	page	psi	Y or N	g	g	g	g	g	Y or N	mL	mL	mL	Y or N	Y or N
LEACHATE BLANK		22		10	Y											
LEACHATE BLANK SPIKE																
SAMPLE DUPLICATE																
TD76565-1	S	10	97/98	10	Y	24.96	0.00	24.96	24.96							
-2	S	29		10	Y	24.96	0.00	24.96	24.96							
-3	S	36		10	Y	24.99	0.00	24.99	24.99							
TD76569-1	S	55		10	Y	24.93	0.00	24.93	24.93							
JD35488-3A	S	77		10	Y	24.95	0.00	24.95	24.95							
JD35488-5A	S	81		10	Y	24.97	0.00	24.97	24.97							
TD76491-2	S	88	96/96	10	Y	25.31	0.38	24.93	24.93							
				SC												

COMMENTS:

MATRIX CODE:
 S = Solid no visible liquid
 L = Liquid, <0.5% dry solids
 MP = Mixed Phase, solid and liquid phases

Reviewed by/Date: _____ MP

Check here if batch is continued on next page





TCLP SPLP ZHE PREPARATION LOGBOOK

METHODS 1311/1312 Balance ID: TCLP-Ball pH Meter ID: TCLP-PH1 pH-Probe S/N: TCLP-PH1 Thermometer ID: TCLP-T1 Tumbler IDs: 1

Prep Code: <u>ZHE</u>	Analyst (start/end): <u>SL / SL</u>	90mm filter paper Lot#: <u>113553-1127-D</u>	Observed / Corrected
OP #: <u>56306</u>	Date (start/end): <u>12/11/21 / 12/11/21</u>	Fluid #1 Lot#: <u>1</u>	Temperature °C Start: <u>26.0 / 23.9</u>
	Time (start/end): <u>08:00 / 3:30</u>	SPLP Fluid Lot: <u>1</u>	Temperature °C End: <u>2nd / 19h.0</u>
	Hours tumbled: <u>1</u>		Min Temp °C: <u>1 / 1 / 1</u>
			Max Temp °C: <u>1 / 1 / 1</u>

Controls: pH range TCLP #1 4.88-4.98; pH range TCLP #2: 2.83-2.93, Tumble Range: 16 – 20 hours Min/Max Temp Range: 21 – 25°C

ALL SAMPLES, ZHE Vessels only				SOLID PHASE				LIQUID PHASE		MIXED PHASE (SOLID & LIQUID)								
Sample ID	Matrix	Vessel #	Preliminary Evaluation Logbook, page	ZHE Initial Pressure psi	ZHE Final Pressure Y or N	Wt. sample g Max Weight = 25.0g	Wt. of residue g	Corrected weight (sample - residue) g	Weight of sample leached g	Weight of sample leached g	Wt. of Primary Leachate g	Does Primary Leachate have 2 phases?	If Y record vol. of Primary organic phase, mL	If Y record vol. of Primary aqueous phase, mL	Vol. of Secondary Leachate, mL (if Primary Leachate)	Are Primary and Secondary Leachates miscible?	If N, was a second sample aliquot logged into LIMS?	
—	-	#	page	psi	Y or N	g	g	g	g	g	g	Y or N	mL	mL	mL	Y or N	Y or N	
LEACHATE BLANK				①														
LEACHATE BLANK SPIKE																		
SAMPLE DUPLICATE																		
<u>7035485-4A</u>	<u>L</u>		<u>97197</u>												<u>100%</u>			

COMMENTS:

MATRIX CODE:
 S = Solid no visible liquid
 L = Liquid <0.5% dry solids
 MP = Mixed Phase, solid and liquid phases

Reviewed by/Date: _____ MP

Check here if batch is continued on next page



Login Sample Receipt Checklist

Client: SGS North America Inc

Job Number: 860-17839-1

Login Number: 17839

List Source: Eurofins Houston

List Number: 1

Creator: Torrez, Lisandra

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
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 (excluding tests with immediate HTs)	False	Received out of hold
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.	False	Received preserved
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
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	



Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody



So

CHAIN OF CUSTODY

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TEL. 732-329-0200 FAX 732-329-3499
www.sgs.com/ehsusa

FED-EX Tracking # _____ Bottle Order Control # **KR-111821-59**
SGS Quote # _____ SGS Job # **JD35488**

Client / Reporting Information		Project Information				Requested Analysis (see TEST CODE sheet)										Matrix Codes											
Company Name GHD		Project Name SJRWP - PCFSE (IDW Composite Samples)				DW - Drinking Water GW - Ground Water WW - Water SW - Surface Water SO - Soil SL - Sludge SED - Sediment OI - Oil LIQ - Other Liquid AIR - Air SOL - Other Solid WP - Wipe FB - Field Blank EB - Equipment Blank RB - Rinse Blank TB - Trip Blank										LAB USE ONLY											
Street Address 11451 Katy Freeway Suite 400		Street Channelview		Billing Information (if different from Report to) Company Name																							
City State Zip Houston TX 77079		City State Harris County TX		Street Address		TCLP - Herbs (#8151TCLP, HGC+DINOSEB) ABB270TCLP TCLPM, EVA, ESB, ENI, EBE P808TCLP V8260TCLP BTX1000TPHR3 (SGS Houston to analyze) DB01STCLEPELY, DGC-ETHOXYE and DGC-METHOXYE (SGS Houston to analyze) SR141TCLPMETHOMYL (sub to A&B Labs, TX) TCLP Dioxin/Furans (Dayton teaching only) CREAC, SREAC, IGN																					
Project Contact Meagan Willis Meagan.willis@ghd.com		Project # 11215131		SGS # CRATXH90499																							
Phone # 713-907-3710		Client Purchase Order #		City State Zip																							
Sampler(s) Name(s) Stephan Siler		Project Manager		Attention:																							
Lab Sample #		Field ID / Point of Collection		MEOH/DI Vial #		Date		Time		Sampled by		Matrix		# of bottles		# of bottles											
1		11215131-120121-IDW-SK-NE				12/1/21		1530		SPS		5		9													
Turnaround Time (Business days)		Approved by (SGS Project Manager)/Date:				<input type="checkbox"/> Commercial "A" (Level 1) <input type="checkbox"/> NYASP Category A <input type="checkbox"/> Commercial "B" (Level 2) <input type="checkbox"/> NYASP Category B <input checked="" type="checkbox"/> FULLT1 (Level 3+4) <input type="checkbox"/> State Forms <input type="checkbox"/> NJ Reduced <input type="checkbox"/> EDD Format <input type="checkbox"/> Commercial "C" <input type="checkbox"/> Other <input type="checkbox"/> NJ Data of Known Quality Protocol Reporting Commercial "A" = Results Only; Commercial "B" = Results + QC Summary NJ Reduced = Results + QC Summary + Partial Raw data										Log in under JD35488 Please pack the dioxin/furan bottles in the Dayton cooler for the IDW analysis. Initial Assessment 2/3/21 Label Verification 2/3/21 Sample inventory is verified upon receipt in the Laboratory 1/15/21											
Emergency & Rush T/A data available via LabLink		Sample Custody must be documented below each time samples change possession, including courier delivery.																									
Relinquished by Sampler Stephan Siler		Date Time 12/2/21 12:46		Received By James Sun		Relinquished by Stephan Siler		Date Time 12/2/21 12:55		Received By James Sun		Relinquished by Stephan Siler		Date Time 12/2/21 12:55		Received By James Sun											
Relinquished by Stephan Siler		Date Time 12/2/21 12:55		Received By James Sun		Relinquished by Stephan Siler		Date Time 12/2/21 12:55		Received By James Sun		Relinquished by Stephan Siler		Date Time 12/2/21 12:55		Received By James Sun											
Relinquished by Stephan Siler		Date Time 12/2/21 12:55		Received By James Sun		Relinquished by Stephan Siler		Date Time 12/2/21 12:55		Received By James Sun		Relinquished by Stephan Siler		Date Time 12/2/21 12:55		Received By James Sun											
Custody Seal #		<input type="checkbox"/> Intact		<input type="checkbox"/> Preserved where applicable		<input type="checkbox"/> On Ice		<input type="checkbox"/> Cooler Temp.																			

Form SM088-03C (revised 2/12/18)

5.0°C CIP

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

JD35488XB: Chain of Custody

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FED-EX Tracking #
Bottle Order Control # KR-111821-5
SGS Quote #
SGS Job # JD35488

Client / Reporting Information, Project Information, Requested Analysis, Matrix Codes, Lab Sample #, Collection, Data Deliverable Information, Sample Chain of Custody, Relinquished by, Date Time, Received By, Date Time, Custody Seal #, Intact, Not intact, Preserved where applicable, On Ice, Cooler Temp. 3.7C, 4.4C

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FED-EX Tracking #
SGS Quote #
Bottle Order Control # KR-111821-59
SGS Job # JD35488

Client Reporting Information, Project Information, Requested Analysis, Matrix Codes, Lab Sample #, Field ID / Point of Collection, Turnaround Time, Data Deliverable Information, Sample inventory is verified upon receipt in the Laboratory.

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Client Reporting Information Company Name: GHD Street Address: 11451 Katy Freeway Suite 400 City: Houston TX 77079 Project Contact: Meagan Willis (Meagan.willis@ghd.com) Phone #: 713-907-3710 Sampler(s) Name(s): Stephen Sallee Lab Sample #: 4		Project Information Project Name: SJRWP - PCFSE (IDW Composite Samples) Street: Channelview City: Harris County TX Project #: 11215131 Client Purchase Order #: SGS # CRATXH90499 Project Manager: [Signature] Attention: [Signature]		Requested Analysis (see TES CODE sheet) Matrix Codes: DW - Drinking Water, GW - Ground Water, WW - Water, SW - Surface Water, SO - Soil, SL - Sludge, SED - Sediment, OI - Oil, LIQ - Other Liquid, AIR - Air, SOL - Other Solid, WP - Wipe, FB - Field Blank, EB - Equipment Blank, RB - Rinse Blank, TB - Trip Blank Analysis: TCLP Metals (H8101TCLP, HCC-DINOSEB), TCLP Metals (H8101TCLP, HCC-DINOSEB), AB8270TCLP, TCLP.M, EVA, ESB, ENI, EBE, P808-TCLP, V8260TCLP, BTX1005TPHR3 (SGS Houston to analyze), DB01STCLPEGLY, DGC-ETHOXYE and DGC-METHOXYE (SGS Houston to analyze), S814TCLPMETHOMYL (sub to A&B Labs TX), TCLP Dioxin/Furans (Dayton leaching only), CREAC, SREAC, IGN											
Field ID / Point of Collection	MECHDI Vial #	Date	Time	Sampled by	Matrix	# of bottles	HC	HSC	H303	H304	None	D Value	HSC	ENCORE	LAB USE ONLY
11215131-120721-IDW-SS-DEON Z	0	12/7/21	1430	SS	W	21	3					18			ES8 G17 V1007
Turnaround Time (Business days)		Data Deliverable Information										Comments / Special Instructions			
<input checked="" type="checkbox"/> Std. 10 Business Days <input type="checkbox"/> 5 Day RUSH <input type="checkbox"/> 3 Day RUSH <input type="checkbox"/> 2 Day RUSH <input type="checkbox"/> 1 Day RUSH <input type="checkbox"/> other		Approved by (SGS Project Manager)/Date: [Signature] 12/7/21		<input type="checkbox"/> Commercial "A" (Level 1) <input type="checkbox"/> Commercial "B" (Level 2) <input checked="" type="checkbox"/> FULLT1 (Level 3+4) <input type="checkbox"/> NJ Reduced <input type="checkbox"/> Commercial "C" <input type="checkbox"/> NJ Data of Known Quality Protocol Reporting				<input type="checkbox"/> NYASP Category A <input type="checkbox"/> NYASP Category B <input type="checkbox"/> State Forms <input type="checkbox"/> EDD Format <input type="checkbox"/> Other				Log in under JD35488 - OPEN SDG Please pack the dioxin/furan bottles in the Dayton cooler for the IDW analysis DUP7			
Emergency & Rush TIA data available via LabLink		Sample inventory is verified upon receipt in the Laboratory										Sample inventory must be documented below each time samples change possession, including courier delivery.			
Relinquished by: [Signature]	Date Time: 12/9/21	Relinquished by: [Signature]	Date Time: 12/9/21	Relinquished by: [Signature]	Date Time: 12/9/21	Relinquished by: [Signature]	Date Time: 12/9/21	Relinquished by: [Signature]	Date Time: 12/9/21	Relinquished by: [Signature]	Date Time: 12/9/21	Relinquished by: [Signature]	Date Time: 12/9/21	Relinquished by: [Signature]	Date Time: 12/9/21
Relinquished by: [Signature]	Date Time: 12/9/21	Relinquished by: [Signature]	Date Time: 12/9/21	Relinquished by: [Signature]	Date Time: 12/9/21	Relinquished by: [Signature]	Date Time: 12/9/21	Relinquished by: [Signature]	Date Time: 12/9/21	Relinquished by: [Signature]	Date Time: 12/9/21	Relinquished by: [Signature]	Date Time: 12/9/21	Relinquished by: [Signature]	Date Time: 12/9/21
Relinquished by: [Signature]	Date Time: 12/9/21	Relinquished by: [Signature]	Date Time: 12/9/21	Relinquished by: [Signature]	Date Time: 12/9/21	Relinquished by: [Signature]	Date Time: 12/9/21	Relinquished by: [Signature]	Date Time: 12/9/21	Relinquished by: [Signature]	Date Time: 12/9/21	Relinquished by: [Signature]	Date Time: 12/9/21	Relinquished by: [Signature]	Date Time: 12/9/21
Custody Seal #		Intact		Preserved where applicable		On Ice		Cooler Temp.		1.7 CIP		1.2 CIP			

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JD35488XB: Chain of Custody

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FED-EX Tracking #	Bottle Order Control #
SGS Quote #	KA-111821-159
	JD35488

Client / Reporting Information		Project Information										Requested Analysis (see TEST CODE sheet)										Matrix Codes						
Company Name GHD		Project Name SJRWP - PCFSE (IDW Composite Samples)										HIGC-DINOSIEB TCLP Heats (H815) TCLP, HIGC-DINOSIEB AB8270TCLPSSL TCLP.M. EVA, ESB, ENI, EBE P809TCLPSSL V8260TCLPSSL BTX1005TPHR3 (SGS Houston to analyze) DB016TCLPECLY, DGC-ETHOXYE and DGC-METHOXYE (SGS Houston to analyze) SS141TCLPMETHOMYL (sub to A&B Lab, TX) TCLP Dioxin/Furans (Dayton leaching only) CREAM, SREAC, IGN										DW - Drinking Water GW - Ground Water WW - Water SW - Surface Water SO - Soil SL - Sludge SED - Sediment OI - Oil LIQ - Other Liquid AIR - Air SOL - Other Solid WP - Wipe FB-Field Blank EB-Equipment Blank RB- Rinse Blank TB-Trip Blank						
Street Address 11451 Katy Freeway Suite 400		Street Chanelview																										
City State Zip Houston TX 77079		City State Harris County TX																										
Project Contact Meagan Willis Meagan.willis@ghd.com		Project # 11215131 SGS # CRATXH90499																										
Phone # 713-907-3710		Client Purchase Order #																										
Sample(s) Name(s) Stephen Siller		Project Manager Stephan Siller																										
Lab Sample #		Collection																										
Field ID / Point of Collection		MECH/ID Vial #		Date		Time		Sampled by		Matrix		# of bottles		HIGC		WASH		H8204		NONE		DI Water		MECH		ENCORE		LAB USE ONLY
S 11215131-120821-IDW-SS-SW				12/8/21		1530		SS		S		11																B2S F29T B15
Turnaround Time (Business days)		Data Deliverable Information										Comments / Special Instructions																
<input checked="" type="checkbox"/> Std. 10 Business Days <input type="checkbox"/> 5 Day RUSH <input type="checkbox"/> 3 Day RUSH <input type="checkbox"/> 2 Day RUSH <input type="checkbox"/> 1 Day RUSH <input type="checkbox"/> other		Approved by (SGS Project Manager)/Date: [Signature] 2/12/21 Label Verification [Signature] JK										<input type="checkbox"/> Commercial "A" (Level 1) <input type="checkbox"/> Commercial "B" (Level 2) <input checked="" type="checkbox"/> FULLT1 (Level 3+4) <input type="checkbox"/> NJ Reduced <input type="checkbox"/> Commercial "C" <input type="checkbox"/> NJ Data of Known Quality Protocol Reporting Commercial "A" = Results Only; Commercial "B" = Results + QC Summary NJ Reduced = Results + QC Summary + Partial Raw data										<input type="checkbox"/> NYASP Category A <input type="checkbox"/> NYASP Category B <input type="checkbox"/> State Forms <input type="checkbox"/> EDD Format <input type="checkbox"/> Other	Log in under JD35488 Please pack the dioxin/furan bottles in the Dayton cooler for the IDW analysis Sample inventory is verified upon receipt in the Laboratory					
Emergency & Rush TIA data available via LabLink		Sample inventory must be documented below each time samples change possession, including courier delivery.																										
1 Relinquished by Sampler: [Signature]		Date Time: 12/21/21 1330		2 Relinquished by: [Signature]		Date Time: 12/21/21 1400		3 Relinquished by: [Signature]		Date Time:		4 Relinquished by: [Signature]		Date Time:		5 Relinquished by: [Signature]		Date Time:		Custody Seal #		<input type="checkbox"/> Intact <input type="checkbox"/> Not intact		Preserved where applicable		Cooler Temp. 3.2°C		



SO
SLU

CHAIN OF CUSTODY

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FED-EX Tracking #	Botle Order Control #
SGS Quote #	SGS Job # JD35488

Client / Reporting Information		Project Information										Requested Analysis (see TEST CODE sheet)										Matrix Codes				
Company Name GHD		Project Name: SJRW - PCFSE (IDW Composite Samples)										TCLP Herbs (H8151TCLP, HGC-DINOSIB) AB8270TCLP TCLPM, EVA, ESB, ENI, EBE P8081TCLP V8260TCLP BTX1005TPHR3 (SGS Houston to analyze) D8015TCLPREGLY, DCC-ETHOXYE and DCC-METHOXYE (SGS Houston to analyze) S8141TCLPMEHTOMYL (sub to A&B Labs, TX) TCLP Dioxin/Furans (Dayton teaching only) CREA, SREAC, IGN										DW - Drinking Water GW - Ground Water WW - Water SW - Surface Water SO - Soil SL - Sludge SED - Sediment OI - Oil LIQ - Other Liquid AIR - Air SOL - Other Solid WP - Wipe FB - Field Blank EB - Equipment Blank RB - Rinse Blank TB - Trip Blank				
Street Address 11451 Katy Freeway Suite 400		Street Channelview																								
City State Zip Houston TX 77079		City State Harris County TX																								
Project Contact Meagan Willis Meagan.willis@ghd.com		Project # 11215131 SGS # CRATXH90499																								
Phone # 713-907-3710		Street Address																								
Sampler(s) Name(s) Breanna North 501-457-9966		Project Manager Meagan Willis																								
Lab Sample # 6		Field ID / Point of Collection 11215131-121421-IDW-BN-NC		MECH/DI Vial #		Date 12-14-21		Time 1330		Sampled by BN		Matrix S		# of bottles 11		HCl NaOH HNO3 H2SO4 NONE Di Water MICH ENCORE										LAB USE ONLY
Turnaround Time (Business days)		Data Deliverable Information										Comments / Special Instructions														
<input checked="" type="checkbox"/> Std. 10 Business Days <input type="checkbox"/> 5 Day RUSH <input type="checkbox"/> 3 Day RUSH <input type="checkbox"/> 2 Day RUSH <input type="checkbox"/> 1 Day RUSH <input type="checkbox"/> other		Approved by (SGS Project Manager)/Date: _____										<input type="checkbox"/> Commercial "A" (Level 1) <input type="checkbox"/> Commercial "B" (Level 2) <input checked="" type="checkbox"/> FULLT1 (Level 3+4) <input type="checkbox"/> NJ Reduced <input type="checkbox"/> Commercial "C" <input type="checkbox"/> NJ Data of Known Quality Protocol Reporting Commercial "A" = Results Only; Commercial "B" = Results + QC Summary NJ Reduced = Results + QC Summary + Partial Raw data										<input type="checkbox"/> NYASP Category A <input type="checkbox"/> NYASP Category B <input type="checkbox"/> State Forms <input type="checkbox"/> EDD Format <input type="checkbox"/> Other	Log in under JD35488 Please pack the dioxin/furan bottles in the Dayton cooler for the IDW analysis			
Emergency & Rush T/A data available via LabLink		Sample inventory is verified upon receipt in the Laboratory																								
1 Relinquished by Sampler: Breanna North		Date Time: 12-14-21 1400		Relinquished By: Edo Castro		Date Time: 12-15-21		Received By: Amir		Date Time: 12/15/21		Received By: Amir														
3 Relinquished by Sampler: Kolox		Date Time:		Received By:		Date Time:		Received By:		Date Time:		Received By:														
5 Relinquished by:		Date Time:		Received By:		Date Time:		Received By:		Date Time:		Received By:														
				Custody Seal #		<input checked="" type="checkbox"/> Intact <input type="checkbox"/> Not intact		Preserved where applicable		On Ice		Cooler Temp. 1.30														

SEE
SSOW

[Large handwritten scribble]

SO
4124
215
P47
D4171

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1 of 2 coolers

FED-EX Tracking # 4805 2704 2896
SGS Quote # 12-1222-1-125
SGS Job # JD35488

Client Reporting Information, Project Information, Requested Analysis, Matrix Codes, Lab Sample #, Collection, Data Deliverable Information, Turnaround Time, Sample Inventory, Relinquished by Sampler.

31 3

Initial Assessment TS 44

Label Verification





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2 of 2 coolers
 PAGE 2 OF 2

Field # **27042885** Bottle Order Control #
 SGS Code # **JD35488**

Client/Reporting Information		Project Information				Requested Analysis (see TEST CODE sheet)												Matrix Codes									
Company Name GHD		Project Name SJRWP - PCFSE (IDW Composite Samples)				TCLP Herbs (H8151TCLP, HGC-DINOSEB) AB8270TCLPSL TCLPM, EVA, ESB, EN, EBE P80811TCLPSL V8280TCLPSL BTX10051PHR3 (SGS Houston to analyze) D8015TCLPEGLY, DGC-ETHOXYE and DGC-METHOXYE (SGS Houston to analyze) S8141TCLPMETHOMYL (Ship to A&B Labs, TX) TCLP Dioxin/Furans (Dayton leaching only) CREAC, SREAC, IGN												DW - Drinking Water GW - Ground Water WW - Water SW - Surface Water SO - Soil SL - Sludge SED - Sediment LIQ - Other Liquid AIR - Air SOL - Other Solid WP - Wipe FB - Field Blank EB - Equipment Blank RB - Rinse Blank TB - Trip Blank									
Street Address 11451 Katy Freeway Suite 400		City Channelview		State TX															Billing Information (if different from Report to)								
City Houston TX 77079		Project # 11215131		Client Purchase Order # SGS # CRATXH90499															Company Name								
Project Contact Meagan Willis		E-mail Meagan.willis@ghd.com		Street Address															City								
Phone # 713-907-3710		Fax #		City		State		Zip																			
Sampler(s) Name(s) Stephan Salter		Phone # 832-228-1568		Project Manager		Attention:																					
Lab Sample #	Field ID / Point of Collection	MEOH/DI#	Date	Time	Sampled by	Matrix	# of bottles	HCl	NaOH	HNO3	H2SO4	NONE	DI Water	MEOH	ENCORE												
	11215131-122021-IDW-SS-PURGE		1220	1115	SS	W	21	3								<input checked="" type="checkbox"/> TCLP Herbs <input checked="" type="checkbox"/> AB8270TCLPSL <input checked="" type="checkbox"/> TCLPM, EVA, ESB, EN, EBE <input checked="" type="checkbox"/> P80811TCLPSL <input checked="" type="checkbox"/> V8280TCLPSL <input checked="" type="checkbox"/> BTX10051PHR3 <input checked="" type="checkbox"/> D8015TCLPEGLY, DGC-ETHOXYE and DGC-METHOXYE <input checked="" type="checkbox"/> S8141TCLPMETHOMYL <input checked="" type="checkbox"/> TCLP Dioxin/Furans <input checked="" type="checkbox"/> CREAC, SREAC, IGN											
Turnaround Time (Business days)	<input checked="" type="checkbox"/> Std. 10 Business Days <input type="checkbox"/> 5 Day RUSH <input type="checkbox"/> 3 Day RUSH <input type="checkbox"/> 2 Day RUSH <input type="checkbox"/> 1 Day RUSH <input type="checkbox"/> other	Approved by (SGS Project Manager)/Date:	<input type="checkbox"/> Commercial "A" (Level 1) <input type="checkbox"/> Commercial "B" (Level 2) <input checked="" type="checkbox"/> FULLT1 (Level 3+4) <input type="checkbox"/> NJ Reduced <input type="checkbox"/> Commercial "C" <input type="checkbox"/> NJ Data of Known Quality Protocol Reporting	<input type="checkbox"/> NYASP Category A <input type="checkbox"/> NYASP Category B <input type="checkbox"/> State Forms <input type="checkbox"/> EDD Format <input type="checkbox"/> Other	Commercial "A" = Results Only; Commercial "B" = Results + QC Summary NJ Reduced = Results + QC Summary / Partial Raw data	Log in under JD35488 Please pack the dioxin/furan bottles in the Dayton cooler for the IDW analysis	Comments / Special Instructions																				
								Emergency & Rush T/A data available via LabLink																			
Sample Chain of Custody must be documented below each time samples change possession, including courier delivery.	Sample inventory is verified upon receipt in the Laboratory																										
Relinquished by Sampler:	Date/Time:	Received By:	Date/Time:	Relinquished By:	Date/Time:	Received By:	Date/Time:	Relinquished By:	Date/Time:	Received By:	Date/Time:	Relinquished By:	Date/Time:	Received By:	Date/Time:	Received By:	Date/Time:	Received By:									
1	12/20/20	1	12/20/20	2	12/20/20	3	12/20/20	4	12/20/20	5	12/20/20	6	12/20/20	7	12/20/20	8	12/20/20	9	12/20/20								
3	12/20/21	4	12/20/21	5	12/20/21	6	12/20/21	7	12/20/21	8	12/20/21	9	12/20/21	10	12/20/21	11	12/20/21	12	12/20/21								
5																											

COPY of Pg 1 of 2

JD35488XB: Chain of Custody

Page 8 of 21



SGS Sample Receipt Summary

Job Number: JD35488

Client: _____

Project: _____

Date / Time Received: 12/10/2021 2:04:00 PM

Delivery Method: _____

Airbill #'s: _____

Cooler Temps (Raw Measured) °C: Cooler 7: (3.2);

Cooler Temps (Corrected) °C: Cooler 7: (1.8);

Cooler Security

- | | | | | | | | |
|---------------------------|-------------------------------------|-----------|--------------------------|-----------------------|-------------------------------------|-----------|--------------------------|
| | <u>Y</u> | <u>or</u> | <u>N</u> | | <u>Y</u> | <u>or</u> | <u>N</u> |
| 1. Custody Seals Present: | <input checked="" type="checkbox"/> | | <input type="checkbox"/> | 3. COC Present: | <input checked="" type="checkbox"/> | | <input type="checkbox"/> |
| 2. Custody Seals Intact: | <input checked="" type="checkbox"/> | | <input type="checkbox"/> | 4. Smpl Dates/Time OK | <input checked="" type="checkbox"/> | | <input type="checkbox"/> |

Cooler Temperature

- | | | | |
|------------------------------|-------------------------------------|-----------|--------------------------|
| | <u>Y</u> | <u>or</u> | <u>N</u> |
| 1. Temp criteria achieved: | <input checked="" type="checkbox"/> | | <input type="checkbox"/> |
| 2. Cooler temp verification: | IR Gun | | |
| 3. Cooler media: | Ice (Bag) | | |
| 4. No. Coolers: | 1 | | |

Quality Control Preservation

- | | | | | |
|---------------------------------|-------------------------------------|-----------|-------------------------------------|-------------------------------------|
| | <u>Y</u> | <u>or</u> | <u>N</u> | <u>N/A</u> |
| 1. Trip Blank present / cooler: | <input type="checkbox"/> | | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 2. Trip Blank listed on COC: | <input type="checkbox"/> | | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 3. Samples preserved properly: | <input checked="" type="checkbox"/> | | <input type="checkbox"/> | |
| 4. VOCs headspace free: | <input type="checkbox"/> | | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

Sample Integrity - Documentation

- | | | | |
|--|-------------------------------------|-----------|--------------------------|
| | <u>Y</u> | <u>or</u> | <u>N</u> |
| 1. Sample labels present on bottles: | <input checked="" type="checkbox"/> | | <input type="checkbox"/> |
| 2. Container labeling complete: | <input checked="" type="checkbox"/> | | <input type="checkbox"/> |
| 3. Sample container label / COC agree: | <input checked="" type="checkbox"/> | | <input type="checkbox"/> |

Sample Integrity - Condition

- | | | | |
|----------------------------------|-------------------------------------|-----------|--------------------------|
| | <u>Y</u> | <u>or</u> | <u>N</u> |
| 1. Sample recvd within HT: | <input checked="" type="checkbox"/> | | <input type="checkbox"/> |
| 2. All containers accounted for: | <input checked="" type="checkbox"/> | | <input type="checkbox"/> |
| 3. Condition of sample: | Intact | | |

Sample Integrity - Instructions

- | | | | | |
|---|-------------------------------------|-----------|-------------------------------------|-------------------------------------|
| | <u>Y</u> | <u>or</u> | <u>N</u> | <u>N/A</u> |
| 1. Analysis requested is clear: | <input checked="" type="checkbox"/> | | <input type="checkbox"/> | |
| 2. Bottles received for unspecified tests | <input type="checkbox"/> | | <input checked="" type="checkbox"/> | |
| 3. Sufficient volume recvd for analysis: | <input checked="" type="checkbox"/> | | <input type="checkbox"/> | |
| 4. Compositing instructions clear: | <input type="checkbox"/> | | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 5. Filtering instructions clear: | <input type="checkbox"/> | | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

Test Strip Lot #s: pH 1-12: 231619 pH 12+: 203117A Other: (Specify) _____

Comments

SM089-03
Rev. Date 12/7/17

JD35488XB: Chain of Custody

Page 9 of 21

SGS Sample Receipt Summary

Job Number: JD35488

Client: GHD SERVICES INC.

Project: SJRWP - PCFSE, HARRIS COUNTY, TX (IDW B

Date / Time Received: 12/9/2021 5:05:00 PM

Delivery Method:

Airbill #'s:

Cooler Temps (Raw Measured) °C: Cooler : (1.2); Cooler 5: (1.7);

Cooler Temps (Corrected) °C: Cooler : (-0.2); Cooler 5: (0.3);

Cooler Security

	<u>Y</u>	<u>or</u>	<u>N</u>		<u>Y</u>	<u>or</u>	<u>N</u>
1. Custody Seals Present:	<input checked="" type="checkbox"/>		<input type="checkbox"/>	3. COC Present:	<input checked="" type="checkbox"/>		<input type="checkbox"/>
2. Custody Seals Intact:	<input checked="" type="checkbox"/>		<input type="checkbox"/>	4. Smpl Dates/Time OK	<input checked="" type="checkbox"/>		<input type="checkbox"/>

Cooler Temperature

	<u>Y</u>	<u>or</u>	<u>N</u>
1. Temp criteria achieved:	<input checked="" type="checkbox"/>		<input type="checkbox"/>
2. Cooler temp verification:	IR Gun		
3. Cooler media:	Ice (Bag)		
4. No. Coolers:	1		

Quality Control Preservation

	<u>Y</u>	<u>or</u>	<u>N</u>	<u>N/A</u>
1. Trip Blank present / cooler:	<input type="checkbox"/>		<input type="checkbox"/>	<input checked="" type="checkbox"/>
2. Trip Blank listed on COC:	<input type="checkbox"/>		<input type="checkbox"/>	<input checked="" type="checkbox"/>
3. Samples preserved properly:	<input checked="" type="checkbox"/>		<input type="checkbox"/>	
4. VOCs headspace free:	<input type="checkbox"/>		<input type="checkbox"/>	<input checked="" type="checkbox"/>

Sample Integrity - Documentation

	<u>Y</u>	<u>or</u>	<u>N</u>
1. Sample labels present on bottles:	<input checked="" type="checkbox"/>		<input type="checkbox"/>
2. Container labeling complete:	<input checked="" type="checkbox"/>		<input type="checkbox"/>
3. Sample container label / COC agree:	<input checked="" type="checkbox"/>		<input type="checkbox"/>

Sample Integrity - Condition

	<u>Y</u>	<u>or</u>	<u>N</u>
1. Sample recvd within HT:	<input checked="" type="checkbox"/>		<input type="checkbox"/>
2. All containers accounted for:	<input checked="" type="checkbox"/>		<input type="checkbox"/>
3. Condition of sample:	Intact		

Sample Integrity - Instructions

	<u>Y</u>	<u>or</u>	<u>N</u>	<u>N/A</u>
1. Analysis requested is clear:	<input checked="" type="checkbox"/>		<input type="checkbox"/>	
2. Bottles received for unspecified tests	<input type="checkbox"/>		<input checked="" type="checkbox"/>	
3. Sufficient volume recvd for analysis:	<input checked="" type="checkbox"/>		<input type="checkbox"/>	
4. Compositing instructions clear:	<input type="checkbox"/>		<input type="checkbox"/>	<input checked="" type="checkbox"/>
5. Filtering instructions clear:	<input type="checkbox"/>		<input type="checkbox"/>	<input checked="" type="checkbox"/>

Test Strip Lot #s: pH 1-12: 231619 pH 12+: 203117A Other: (Specify)

Comments

SM089-03
Rev. Date 12/7/17

JD35488XB: Chain of Custody

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SGS Sample Receipt Summary

Job Number: JD35488

Client: GHD SERVICES INC.

Project: SJRWP - PCFSE, HARRIS COUNTY, TX (IDW B

Date / Time Received: 12/21/2021 11:00:00 AM

Delivery Method: _____

Airbill #'s: _____

Cooler Temps (Raw Measured) °C: Cooler 9: (3.2);

Cooler Temps (Corrected) °C: Cooler 9: (1.8);

Cooler Security

- | | <u>Y</u> | <u>or</u> | <u>N</u> | | <u>Y</u> | <u>or</u> | <u>N</u> |
|---------------------------|-------------------------------------|-----------|--------------------------|-----------------------|-------------------------------------|-----------|--------------------------|
| 1. Custody Seals Present: | <input checked="" type="checkbox"/> | | <input type="checkbox"/> | 3. COC Present: | <input checked="" type="checkbox"/> | | <input type="checkbox"/> |
| 2. Custody Seals Intact: | <input checked="" type="checkbox"/> | | <input type="checkbox"/> | 4. Smpl Dates/Time OK | <input checked="" type="checkbox"/> | | <input type="checkbox"/> |

Cooler Temperature

- | | <u>Y</u> | <u>or</u> | <u>N</u> |
|------------------------------|-------------------------------------|-----------|--------------------------|
| 1. Temp criteria achieved: | <input checked="" type="checkbox"/> | | <input type="checkbox"/> |
| 2. Cooler temp verification: | IR Gun | | |
| 3. Cooler media: | Ice (Bag) | | |
| 4. No. Coolers: | 1 | | |

Quality Control Preservation

- | | <u>Y</u> | <u>or</u> | <u>N</u> | <u>N/A</u> |
|---------------------------------|-------------------------------------|-----------|-------------------------------------|--------------------------|
| 1. Trip Blank present / cooler: | <input type="checkbox"/> | | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 2. Trip Blank listed on COC: | <input type="checkbox"/> | | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 3. Samples preserved properly: | <input checked="" type="checkbox"/> | | <input type="checkbox"/> | |
| 4. VOCs headspace free: | <input checked="" type="checkbox"/> | | <input type="checkbox"/> | <input type="checkbox"/> |

Sample Integrity - Documentation

- | | <u>Y</u> | <u>or</u> | <u>N</u> |
|--|-------------------------------------|-----------|--------------------------|
| 1. Sample labels present on bottles: | <input checked="" type="checkbox"/> | | <input type="checkbox"/> |
| 2. Container labeling complete: | <input checked="" type="checkbox"/> | | <input type="checkbox"/> |
| 3. Sample container label / COC agree: | <input checked="" type="checkbox"/> | | <input type="checkbox"/> |

Sample Integrity - Condition

- | | <u>Y</u> | <u>or</u> | <u>N</u> |
|----------------------------------|-------------------------------------|-----------|--------------------------|
| 1. Sample recvd within HT: | <input checked="" type="checkbox"/> | | <input type="checkbox"/> |
| 2. All containers accounted for: | <input checked="" type="checkbox"/> | | <input type="checkbox"/> |
| 3. Condition of sample: | Intact | | |

Sample Integrity - Instructions

- | | <u>Y</u> | <u>or</u> | <u>N</u> | <u>N/A</u> |
|---|-------------------------------------|-----------|-------------------------------------|-------------------------------------|
| 1. Analysis requested is clear: | <input checked="" type="checkbox"/> | | <input type="checkbox"/> | |
| 2. Bottles received for unspecified tests | <input type="checkbox"/> | | <input checked="" type="checkbox"/> | |
| 3. Sufficient volume recvd for analysis: | <input checked="" type="checkbox"/> | | <input type="checkbox"/> | |
| 4. Compositing instructions clear: | <input type="checkbox"/> | | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 5. Filtering instructions clear: | <input type="checkbox"/> | | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

Test Strip Lot #s: pH 1-12: 231619 pH 12+: 203117A Other: (Specify) _____

Comments

SM089-03
Rev. Date 12/7/17

JD35488XB: Chain of Custody

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SGS Sample Receipt Summary

Job Number: JD35488

Client: GHD SERVICES INC.

Project: SJRWP - PCFSE, HARRIS COUNTY, TX (IDW B

Date / Time Received: 12/3/2021 3:25:00 PM

Delivery Method:

Airbill #'s:

Cooler Temps (Raw Measured) °C: Cooler 2: (4.4); Cooler 3: (3.7);

Cooler Temps (Corrected) °C: Cooler 2: (3.0); Cooler 3: (2.3);

Cooler Security

	<u>Y or N</u>			<u>Y or N</u>	
1. Custody Seals Present:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	3. COC Present:	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2. Custody Seals Intact:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	4. Smpl Dates/Time OK	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Cooler Temperature

	<u>Y or N</u>	
1. Temp criteria achieved:	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2. Cooler temp verification:	IR Gun	
3. Cooler media:	Ice (Bag)	
4. No. Coolers:	2	

Quality Control Preservation

	<u>Y</u>	<u>or</u>	<u>N</u>	<u>N/A</u>
1. Trip Blank present / cooler:	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
2. Trip Blank listed on COC:	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
3. Samples preserved properly:	<input checked="" type="checkbox"/>	<input type="checkbox"/>		
4. VOCs headspace free:	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	

Sample Integrity - Documentation

	<u>Y or N</u>	
1. Sample labels present on bottles:	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2. Container labeling complete:	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3. Sample container label / COC agree:	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Sample Integrity - Condition

	<u>Y or N</u>	
1. Sample recvd within HT:	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2. All containers accounted for:	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3. Condition of sample:	Intact	

Sample Integrity - Instructions

	<u>Y</u>	<u>or</u>	<u>N</u>	<u>N/A</u>
1. Analysis requested is clear:	<input checked="" type="checkbox"/>		<input type="checkbox"/>	
2. Bottles received for unspecified tests	<input type="checkbox"/>		<input checked="" type="checkbox"/>	
3. Sufficient volume recvd for analysis:	<input checked="" type="checkbox"/>		<input type="checkbox"/>	
4. Compositing instructions clear:	<input type="checkbox"/>		<input type="checkbox"/>	<input checked="" type="checkbox"/>
5. Filtering instructions clear:	<input type="checkbox"/>		<input type="checkbox"/>	<input checked="" type="checkbox"/>

Test Strip Lot #s: pH 1-12: 231619 pH 12+: 203117A Other: (Specify)

Comments

SM089-03
Rev. Date 12/7/17

JD35488XB: Chain of Custody

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SGS Sample Receipt Summary

Job Number: JD35488

Client: GHD

Project: SJRWP

Date / Time Received: 12/16/2021 11:00:00 AM

Delivery Method: FedEx

Airbill #'s:

Cooler Temps (Raw Measured) °C: Cooler 8: (1.8);

Cooler Temps (Corrected) °C: Cooler 8: (0.4);

<u>Cooler Security</u>	<u>Y</u>	<u>or</u>	<u>N</u>		<u>Y</u>	<u>or</u>	<u>N</u>
1. Custody Seals Present:	<input checked="" type="checkbox"/>		<input type="checkbox"/>	3. COC Present:	<input checked="" type="checkbox"/>		<input type="checkbox"/>
2. Custody Seals Intact:	<input checked="" type="checkbox"/>		<input type="checkbox"/>	4. Smpl Dates/Time OK	<input checked="" type="checkbox"/>		<input type="checkbox"/>

<u>Cooler Temperature</u>	<u>Y</u>	<u>or</u>	<u>N</u>
1. Temp criteria achieved:	<input checked="" type="checkbox"/>		<input type="checkbox"/>
2. Cooler temp verification:	IR Gun		
3. Cooler media:	Ice (Bag)		
4. No. Coolers:	1		

<u>Quality Control Preservation</u>	<u>Y</u>	<u>or</u>	<u>N</u>	<u>N/A</u>
1. Trip Blank present / cooler:	<input type="checkbox"/>		<input checked="" type="checkbox"/>	<input type="checkbox"/>
2. Trip Blank listed on COC:	<input type="checkbox"/>		<input checked="" type="checkbox"/>	<input type="checkbox"/>
3. Samples preserved properly:	<input checked="" type="checkbox"/>		<input type="checkbox"/>	
4. VOCs headspace free:	<input type="checkbox"/>		<input type="checkbox"/>	<input checked="" type="checkbox"/>

<u>Sample Integrity - Documentation</u>	<u>Y</u>	<u>or</u>	<u>N</u>
1. Sample labels present on bottles:	<input checked="" type="checkbox"/>		<input type="checkbox"/>
2. Container labeling complete:	<input checked="" type="checkbox"/>		<input type="checkbox"/>
3. Sample container label / COC agree:	<input checked="" type="checkbox"/>		<input type="checkbox"/>

<u>Sample Integrity - Condition</u>	<u>Y</u>	<u>or</u>	<u>N</u>
1. Sample recvd within HT:	<input type="checkbox"/>		<input checked="" type="checkbox"/>
2. All containers accounted for:	<input checked="" type="checkbox"/>		<input type="checkbox"/>
3. Condition of sample:	Intact		

<u>Sample Integrity - Instructions</u>	<u>Y</u>	<u>or</u>	<u>N</u>	<u>N/A</u>
1. Analysis requested is clear:	<input checked="" type="checkbox"/>		<input type="checkbox"/>	
2. Bottles received for unspecified tests	<input type="checkbox"/>		<input checked="" type="checkbox"/>	
3. Sufficient volume recvd for analysis:	<input checked="" type="checkbox"/>		<input type="checkbox"/>	
4. Compositing instructions clear:	<input type="checkbox"/>		<input type="checkbox"/>	<input checked="" type="checkbox"/>
5. Filtering instructions clear:	<input type="checkbox"/>		<input type="checkbox"/>	<input checked="" type="checkbox"/>

Test Strip Lot #s: pH 1-12: 231619 pH 12+: 203117A Other: (Specify)

Comments Sample -6: Soil volatiles not prepped to 5035 specifications. Lab to prep from intact volume for low level voc analysis outside of hold time.

SM089-03
Rev. Date 12/7/17

JD35488XB: Chain of Custody

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Responded to by: CSR: N/A

Response Date: Response Date: 12/17/2021

Response:

Response: Proceed with analysis

JD35488XB: Chain of Custody
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Job Change Order: JD35488

Requested Date:	12/6/2021	Received Date:	12/3/2021
Account Name:	GHD Services Inc.	Due Date:	12/6/2021
Project Description:	SJRWP - PCFSE, Harris County, TX	Deliverable:	FULT1
C/O Initiated By:	KELLY.RAM	PM:	KR
		TAT (Days):	7

Sample #:	JD35488-1,-2	Change:	Please revise AB8270TCLPSL to AB8270TCLPAP9SL
Dept:			
TAT:	7		

Above Changes Per:

Date/Time: 12/6/2021

To Client: This Change Order is confirmation of the revisions, previously discussed with the Client Service Representative.

Job Change Order: JD35488

Requested Date:	12/6/2021	Received Date:	12/3/2021
Account Name:	GHD Services Inc.	Due Date:	12/6/2021
Project Description:	SJRWP - PCFSE, Harris County, TX	Deliverable:	FULT1
C/O Initiated By:	KELLY.RAM	PM:	KR
		TAT (Days):	7

=====
Sample #: JD35488-1, -2 **Change:**
Dept: Please log in for B8316TCLPACRAMIDE and sub to ALSE
TAT: 7
=====

Above Changes Per: Meagan Willis

Date/Time: 12/6/2021

To Client: This Change Order is confirmation of the revisions, previously discussed with the Client Service Representative.

Job Change Order: JD35488

Requested Date:	12/10/2021	Received Date:	12/3/2021
Account Name:	GHD Services Inc.	Due Date:	12/10/2021
Project Description:	SJRWP - PCFSE, Harris County, TX (IDW)	Deliverable:	FULT1
C/O Initiated By:	KELLY.RAM	PM:	KR
		TAT (Days):	7

Sample #:	JD35488-3, 4	Change:	
Dept:			Please relog for B8316TCLPACRAMIDE and TCLPE
TAT:	7		

Above Changes Per: Kathy Shaw

Date/Time: 12/10/2021

To Client: This Change Order is confirmation of the revisions, previously discussed with the Client Service Representative.

Job Change Order: JD35488

Requested Date:	12/14/2021	Received Date:	12/3/2021
Account Name:	GHD Services Inc.	Due Date:	12/14/2021
Project Description:	SJRWP - PCFSE, Harris County, TX (IDW)	Deliverable:	FULT1
C/O Initiated By:	KELLY.RAM	PM:	KR
		TAT (Days):	7

Sample #:	JD35488-5	Change:	
Dept:			Please relog for TCLPE and B8316TCLPACRAMIDE and sub to ALSE
TAT:	7		

11215131-120821-IDW-SS-SW

Above Changes Per:

Date/Time: 12/14/2021

To Client: This Change Order is confirmation of the revisions, previously discussed with the Client Service Representative.

Job Change Order: JD35488

Requested Date:	12/20/2021	Received Date:	12/3/2021
Account Name:	GHD Services Inc.	Due Date:	12/20/2021
Project Description:	SJRWP - PCFSE, Harris County, TX (IDW)	Deliverable:	FULT1
C/O Initiated By:	KELLY.RAM	PM:	KR
		TAT (Days):	7

Sample #:	JD35488-6	Change:	
Dept:			Please relog for TCLPE, B8316TCLPACRAMIDE and sub to ALSE
TAT:	7		

11215131-121421-IDW-BN-NS

Above Changes Per:

Date/Time: 12/20/2021

To Client: This Change Order is confirmation of the revisions, previously discussed with the Client Service Representative.

Job Change Order: JD35488

Requested Date:	12/23/2021	Received Date:	12/3/2021
Account Name:	GHD Services Inc.	Due Date:	12/23/2021
Project Description:	SJRWP - PCFSE, Harris County, TX (IDW)	Deliverable:	FULT1
C/O Initiated By:	KELLY.RAM	PM:	KR
		TAT (Days):	7

Sample #:	JD35488-7	Change:	
Dept:			Please relog for B8316TCLPACRAMIDE and TCLPE and sub to ALSE
TAT:	7		

11215131-122021-IDW-SS-PURGE

Above Changes Per:

Date/Time: 12/23/2021

To Client: This Change Order is confirmation of the revisions, previously discussed with the Client Service Representative.

Page 1 of 1

JD35488XB: Chain of Custody
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Job Change Order: JD35488

Requested Date:	1/4/2022	Received Date:	12/3/2021
Account Name:	GHD Services Inc.	Due Date:	1/4/2022
Project Description:	SJRWP - PCFSE, Harris County, TX (IDW)	Deliverable:	FULT1
C/O Initiated By:	KELLY.RAM	PM:	KR
		TAT (Days):	7

Sample #:	JD35488-3, -4, -5	Change:	
Dept:			Please move to XB job for D8015TCLPEGLY, DGC+ETHOXYE, DGC+METHOXYE. Samples subbed to ALS
TAT:	7		

Above Changes Per:

Date/Time: 1/4/2022

To Client: This Change Order is confirmation of the revisions, previously discussed with the Client Service Representative.

Page 1 of 1

JD35488XB: Chain of Custody
Page 21 of 21

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

e-Hardcopy 2.0
Automated Report

Technical Report for

GHD Services Inc.

SJRWP - PCFSE, Harris County, TX

SSOW:11215131 2021-001 / PO#340-002625

SGS Job Number: JD35489

Sampling Dates: 12/16/21 - 12/17/21



Report to:

GHD Services Inc.
11451 Katy Freeway Suite 400
Houston, TX 77079
Nate.Reece@ghd.com; Meagan.Willis@ghd.com;
Kathleen.Shaw@GHD.com; Marisa.Oriaku@GHD.com
ATTN: Meagan Willis

Total number of pages in report: 82



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

Mike Earp
General Manager

Client Service contact: Kelly Ramos 732-329-0200

Certifications: NJ(12129), NY(10983), CA, CT, FL, IL, IN, KS, KY, LA, MA, MD, ME, MN, NC, OH VAP (CL0056), AK (UST-103), AZ (AZ0786), PA, RI, SC, TX, UT, VA, WV, DoD ELAP (ANAB L2248)

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Test results relate only to samples analyzed.



February 21, 2022

**Ms. Meagan Willis
GHD Services Inc.
11451 Katy Freeway Suite 400
Houston, TX 77079**

RE: SGS – Dayton, Job # JD35489- Reissues

Dear Ms. Willis,

The final report for SGS job number JD35489 has been edited to reflect corrections to the results. These edits have been incorporated into the revised report which is attached.

Specifically, this report has been revised COMMBN as per client's request. The attached revised report incorporates these revisions.

SGS apologizes for this occurrence and for any inconvenience this situation may have caused. Please contact me if I can be of further assistance in this matter.

Sincerely,

Report Department

SGS North America Inc.

SGS North America Inc. | Mid-Atlantic 2235 US Highway 130 Dayton, NJ 08810, USA t +1 (0)732 329 0200 www.sgs.com

Member of the SGS Group (SGS SA)

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Sample Summary

GHD Services Inc.

Job No: JD35489

SJRWP - PCFSE, Harris County, TX

Project No: SSOW:11215131 2021-001 / PO#340-002625

Sample Number	Collected		Received	Matrix		Client Sample ID
	Date	Time By		Code	Type	
JD35489-1	12/17/21	08:20 SS	12/17/21	AQ	Ground Water	11215131-121721-GW-SS-PZ-NE
JD35489-1A	12/17/21	08:20 SS	12/17/21	AQ	Ground Water	11215131-121721-GW-SS-PZ-NE
JD35489-1F	12/17/21	08:20 SS	12/17/21	AQ	Groundwater Filtered	11215131-121721-GW-SS-PZ-NE
JD35489-2	12/17/21	00:00 SS	12/17/21	AQ	Ground Water	11215131-121721-GW-SS-DUP-1
JD35489-2A	12/17/21	00:00 SS	12/17/21	AQ	Ground Water	11215131-121721-GW-SS-DUP-1
JD35489-3	12/17/21	08:50 SS	12/17/21	AQ	Equipment Blank	11215131-121721-GW-SS-RB-1
JD35489-3A	12/17/21	08:50 SS	12/17/21	AQ	Equipment Blank	11215131-121721-GW-SS-RB-1
JD35489-4	12/16/21	15:40 SS	12/17/21	AQ	Ground Water	11215131-121621-GW-SS-PZ-SW
JD35489-4A	12/16/21	15:40 SS	12/17/21	AQ	Ground Water	11215131-121621-GW-SS-PZ-SW
JD35489-4F	12/16/21	15:40 SS	12/17/21	AQ	Groundwater Filtered	11215131-121621-GW-SS-PZ-SW
JD35489-5	12/16/21	14:10 SS	12/17/21	AQ	Ground Water	11215131-121621-GW-SS-PZ-SC
JD35489-5A	12/16/21	14:10 SS	12/17/21	AQ	Ground Water	11215131-121621-GW-SS-PZ-SC
JD35489-5D	12/16/21	14:10 SS	12/17/21	AQ	Water Dup/MSD	11215131-121621-GW-SS-PZ-SC MSD



Sample Summary

(continued)

GHD Services Inc.

Job No: JD35489

SJRWP - PCFSE, Harris County, TX

Project No: SSOW:11215131 2021-001 / PO#340-002625

Sample Number	Collected		Received	Matrix		Client Sample ID
	Date	Time By		Code	Type	
JD35489-5F	12/16/21	14:10 SS	12/17/21	AQ	Groundwater Filtered	11215131-121621-GW-SS-PZ-SC
JD35489-5S	12/16/21	14:10 SS	12/17/21	AQ	Water Matrix Spike	11215131-121621-GW-SS-PZ-SC MS
JD35489-6	12/16/21	11:50 SS	12/17/21	AQ	Ground Water	11215131-121621-GW-SS-PZ-NC
JD35489-6A	12/16/21	11:50 SS	12/17/21	AQ	Ground Water	11215131-121621-GW-SS-PZ-NC
JD35489-6F	12/16/21	11:50 SS	12/17/21	AQ	Groundwater Filtered	11215131-121621-GW-SS-PZ-NC

CASE NARRATIVE / CONFORMANCE SUMMARY

Client: GHD Services Inc.

Job No JD35489

Site: SJRWP - PCFSE, Harris County, TX

Report Date 1/20/2022 4:13:06 PM

Between 12/17/2021 and 12/18/2021, 6 Sample(s), 0 Trip Blank(s) and 0 Field Blank(s) were received at SGS North America Inc. at a maximum corrected temperature of 3.6 C. Samples were intact and chemically preserved, unless noted below. A SGS North America Inc. Job Number of JD35489 was assigned to the project. Laboratory sample ID, client sample ID and dates of sample collection are detailed in the report's Results Summary Section.

Specified quality control criteria were achieved for this job except as noted below. For more information, please refer to the analytical results and QC summary pages.

Compounds qualified as out of range in the continuing calibration summary report are acceptable as per method requirements when there is a high bias but the sample result is non-detect.

Metals Analysis By Method SW846 6010D

Matrix: AQ	Batch ID: MP30594
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- All samples were digested within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JD35489-5MS, JD35489-5MSD, JD36943-2SDL were used as the QC samples for metals.
- Matrix Spike/Matrix Spike Duplicate Recovery(s) for Calcium are outside control limits. Spike amount low relative to the sample amount. Refer to lab control or spike blank for recovery information.
- RPD(s) for Serial Dilution for Aluminum, Antimony, Beryllium, Cadmium, Cobalt, Copper, Iron, Molybdenum, Nickel, Selenium, Titanium, Vanadium are outside control limits for sample MP30594-SD1. Percent difference acceptable due to low initial sample concentration (< 50 times IDL).
- RPD(s) for Serial Dilution for Barium, Calcium, Zinc: Serial dilution indicates possible matrix interference.

Metals Analysis By Method SW846 7470A

Matrix: AQ	Batch ID: MP30529
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- All samples were digested within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JD35489-5MS, JD35489-5MSD were used as the QC samples for metals.

General Chemistry By Method EPA 300/SW846 9056A

Matrix: AQ	Batch ID: GP37856
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- All samples were prepared within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JD35489-5DUP, JD35489-5MS were used as the QC samples for Bromide, Chloride, Fluoride, Sulfate, Bromide.
- Matrix Spike Recovery(s) for Bromide are outside control limits. Spike recovery indicates possible matrix interference.
- JD35489-6 for Bromide: Elevated sample detection limit due to difficult sample matrix.

General Chemistry By Method EPA 353.2

Matrix: AQ **Batch ID:** T:GP63117

- The data for EPA 353.2 meets quality control requirements.
- JD35489-6A for Nitrogen, Nitrite: Analysis performed at SGS Houston, TX.
- JD35489-1A for Nitrogen, Nitrite: Analysis performed at SGS Houston, TX.
- JD35489-4A for Nitrogen, Nitrite: Analysis performed at SGS Houston, TX.
- JD35489-2A for Nitrogen, Nitrite: Analysis performed at SGS Houston, TX.
- JD35489-3A for Nitrogen, Nitrite: Elevated reporting limit due to matrix interference. Analysis performed at SGS Houston, TX.
- JD35489-5A for Nitrogen, Nitrite: Analysis performed at SGS Houston, TX.

Matrix: AQ **Batch ID:** T:GP63118

- The data for EPA 353.2 meets quality control requirements.
- JD35489-6A for Nitrogen, Nitrate + Nitrite: Analysis performed at SGS Houston, TX.
- JD35489-2A for Nitrogen, Nitrate + Nitrite: Analysis performed at SGS Houston, TX.
- JD35489-4A for Nitrogen, Nitrate + Nitrite: Analysis performed at SGS Houston, TX.
- JD35489-5A for Nitrogen, Nitrate + Nitrite: Analysis performed at SGS Houston, TX.
- JD35489-3A for Nitrogen, Nitrate + Nitrite: Elevated reporting limit due to matrix interference. Analysis performed at SGS Houston, TX.
- JD35489-1A for Nitrogen, Nitrate + Nitrite: Analysis performed at SGS Houston, TX.

Matrix: AQ **Batch ID:** T:R67940

- The data for EPA 353.2 meets quality control requirements.
- JD35489-2A for Nitrogen, Nitrate: Calculated as: (Nitrogen, Nitrate + Nitrite) - (Nitrogen, Nitrite) Analysis performed at SGS Houston, TX.

Matrix: AQ **Batch ID:** T:R67941

- The data for EPA 353.2 meets quality control requirements.
- JD35489-1A for Nitrogen, Nitrate: Calculated as: (Nitrogen, Nitrate + Nitrite) - (Nitrogen, Nitrite) Analysis performed at SGS Houston, TX.

Matrix: AQ **Batch ID:** T:R67942

- The data for EPA 353.2 meets quality control requirements.
- JD35489-3A for Nitrogen, Nitrate: Calculated as: (Nitrogen, Nitrate + Nitrite) - (Nitrogen, Nitrite) Analysis performed at SGS Houston, TX.

Matrix: AQ **Batch ID:** T:R67943

- The data for EPA 353.2 meets quality control requirements.
- JD35489-4A for Nitrogen, Nitrate: Calculated as: (Nitrogen, Nitrate + Nitrite) - (Nitrogen, Nitrite) Analysis performed at SGS Houston, TX.

Matrix: AQ **Batch ID:** T:R67944

- The data for EPA 353.2 meets quality control requirements.
- JD35489-5A for Nitrogen, Nitrate: Calculated as: (Nitrogen, Nitrate + Nitrite) - (Nitrogen, Nitrite) Analysis performed at SGS Houston, TX.

Matrix: AQ **Batch ID:** T:R67945

- The data for EPA 353.2 meets quality control requirements.
- JD35489-6A for Nitrogen, Nitrate: Calculated as: (Nitrogen, Nitrate + Nitrite) - (Nitrogen, Nitrite) Analysis performed at SGS Houston, TX.

General Chemistry By Method EPA 365.3

Matrix: AQ **Batch ID:** GP37757

- All samples were prepared within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JD36949-1ADUP, JD36949-1AMS were used as the QC samples for Phosphorus, Total.

General Chemistry By Method EPA353.2/SM4500NO2B

Matrix: AQ **Batch ID:** R195272

- The data for EPA353.2/SM4500NO2B meets quality control requirements.
- JD35489-3A for Nitrogen, Nitrate: Calculated as: (Nitrogen, Nitrate + Nitrite) - (Nitrogen, Nitrite)

Matrix: AQ **Batch ID:** R195273

- The data for EPA353.2/SM4500NO2B meets quality control requirements.
- JD35489-2A for Nitrogen, Nitrate: Calculated as: (Nitrogen, Nitrate + Nitrite) - (Nitrogen, Nitrite)

Matrix: AQ **Batch ID:** R195274

- The data for EPA353.2/SM4500NO2B meets quality control requirements.
- JD35489-1A for Nitrogen, Nitrate: Calculated as: (Nitrogen, Nitrate + Nitrite) - (Nitrogen, Nitrite)

Matrix: AQ **Batch ID:** R195275

- The data for EPA353.2/SM4500NO2B meets quality control requirements.
- JD35489-6A for Nitrogen, Nitrate: Calculated as: (Nitrogen, Nitrate + Nitrite) - (Nitrogen, Nitrite)

Matrix: AQ **Batch ID:** R195276

- The data for EPA353.2/SM4500NO2B meets quality control requirements.
- JD35489-5A for Nitrogen, Nitrate: Calculated as: (Nitrogen, Nitrate + Nitrite) - (Nitrogen, Nitrite)

Matrix: AQ **Batch ID:** R195277

- The data for EPA353.2/SM4500NO2B meets quality control requirements.
- JD35489-4A for Nitrogen, Nitrate: Calculated as: (Nitrogen, Nitrate + Nitrite) - (Nitrogen, Nitrite)

General Chemistry By Method SM 5210B-2011

Matrix: AQ **Batch ID:** T:GP63096

- The data for SM 5210B-2011 meets quality control requirements.
- JD35489-4A for BOD, 5 Day: Analysis performed at SGS Houston, TX.
- JD35489-2A for BOD, 5 Day: Analysis performed at SGS Houston, TX.
- JD35489-5A for BOD, 5 Day: Analysis performed at SGS Houston, TX.
- JD35489-6A for BOD, 5 Day: Analysis performed at SGS Houston, TX.
- JD35489-1A for BOD, 5 Day: Analysis performed at SGS Houston, TX.
- JD35489-3A for BOD, 5 Day: Analysis performed at SGS Houston, TX.

General Chemistry By Method SM2320 B-11

Matrix: AQ**Batch ID:** GN24970

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JD36952-13DUP were used as the QC samples for Alkalinity, Total as CaCO₃.
- JD35489-5 for Alkalinity, Total as CaCO₃: Sample was titrated to a final pH of 4.5. Sample received with head space.
- JD35489-4 for Alkalinity, Total as CaCO₃: Sample was titrated to a final pH of 4.5. Sample received with head space.
- JD35489-1 for Alkalinity, Total as CaCO₃: Sample was titrated to a final pH of 4.5. Sample received with head space.
- JD35489-6 for Alkalinity, Total as CaCO₃: Sample was titrated to a final pH of 4.5. Sample received with head space.

Matrix: AQ**Batch ID:** GN24989

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JD37132-7DUP were used as the QC samples for Alkalinity, Total as CaCO₃.
- JD35489-2 for Alkalinity, Total as CaCO₃: Sample was titrated to a final pH of 4.5. Sample received with head space.
- JD35489-3 for Alkalinity, Total as CaCO₃: Sample was titrated to a final pH of 4.2. Sample received with head space.

General Chemistry By Method SM2540 C-11

Matrix: AQ**Batch ID:** GN24930

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JD36949-1ADUP were used as the QC samples for Solids, Total Dissolved.

General Chemistry By Method SM2540 D-11

Matrix: AQ**Batch ID:** GN24928

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JD37048-1DUP were used as the QC samples for Solids, Total Suspended.
- JD35489-6 for Solids, Total Suspended: Reported sample aliquot obtained from filtration of 50 mL of sample. Volume was reduced from 1 liter due to nature of sample matrix.
- JD35489-4 for Solids, Total Suspended: Reported sample aliquot obtained from filtration of 25 mL of sample. Volume was reduced from 1 liter due to nature of sample matrix.
- JD35489-5 for Solids, Total Suspended: Reported sample aliquot obtained from filtration of 100 mL of sample. Volume was reduced from 1 liter due to nature of sample matrix.

Matrix: AQ**Batch ID:** GN24979

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JD35489-3DUP were used as the QC samples for Solids, Total Suspended.

General Chemistry By Method SM4500H+ B-11

Matrix: AQ

Batch ID: T:GN15647

- The data for SM4500H+ B-11 meets quality control requirements.
- JD35489-1A for pH: Field analysis required. Received out of hold time and analyzed by request. Temp of pH Reading: 17.2 Deg. C Analysis performed at SGS Houston, TX.
- JD35489-3A for pH: Field analysis required. Received out of hold time and analyzed by request. Temp of pH Reading: 15.1 Deg. C Analysis performed at SGS Houston, TX.
- JD35489-2A for pH: Field analysis required. Received out of hold time and analyzed by request. Temp of pH Reading: 15.3 Deg. C Analysis performed at SGS Houston, TX.
- JD35489-4A for pH: Field analysis required. Received out of hold time and analyzed by request. Temp of pH Reading: 15.8 Deg. C Analysis performed at SGS Houston, TX.
- JD35489-5A for pH: Field analysis required. Received out of hold time and analyzed by request. Temp of pH Reading: 16.4 Deg. C Analysis performed at SGS Houston, TX.
- JD35489-6A for pH: Field analysis required. Received out of hold time and analyzed by request. Temp of pH Reading: 16.2 Deg. C Analysis performed at SGS Houston, TX.

General Chemistry By Method SM4500NH3 H-11LACHAT

Matrix: AQ

Batch ID: GP37881

- All samples were prepared within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JD35489-5DUP, JD35489-5MS, JD35489-5MSD were used as the QC samples for Nitrogen, Ammonia.

General Chemistry By Method SM4500S2- F-11

Matrix: AQ

Batch ID: GN24968

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JD35489-1MS, JD35489-2DUP were used as the QC samples for Sulfide.

General Chemistry By Method SM5220 C-11,HACH8000

Matrix: AQ

Batch ID: GP37700

- All samples were prepared within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JD36762-1DUP, JD36762-1MS were used as the QC samples for Chemical Oxygen Demand.

Matrix: AQ

Batch ID: GP37701

- All samples were prepared within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JD36876-1DUP, JD36876-1MS were used as the QC samples for Chemical Oxygen Demand.

Matrix: AQ

Batch ID: GP37745

- All samples were prepared within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JD35489-1DUP, JD35489-1MS were used as the QC samples for Chemical Oxygen Demand.

General Chemistry By Method SM5310 B-11

Matrix: AQ

Batch ID: GP37760

- All samples were prepared within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JD36952-13MS, JD36952-13MSD were used as the QC samples for Total Organic Carbon.

Matrix: AQ

Batch ID: GP37762

- All samples were prepared within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JD35489-6MS, JD35489-6MSD were used as the QC samples for Total Organic Carbon.

SGS North America Inc. certifies that data reported for samples received, listed on the associated custody chain or analytical task order, were produced to specifications meeting the Quality System precision, accuracy and completeness objectives except as noted.

Estimated non-standard method measurement uncertainty data is available on request, based on quality control bias and implicit for standard methods. Acceptable uncertainty requires tested parameter quality control data to meet method criteria.

SGS North America Inc. is not responsible for data quality assumptions if partial reports are used and recommends that this report be used in its entirety. Data release is authorized by SGS North America Inc indicated via signature on the report cover

SAMPLE DELIVERY GROUP CASE NARRATIVE

Client: SGS Dayton, NJ

Job No: JD35489

Site: CRATXH: SJRWP - PCFSE, Harris County, TX (IDW)

Report Date 12/30/2021 5:40:35 P

6 Samples were collected on between 12/16/2021 and 12/17/2021 and received intact at SGS North America Inc (SGS) between 12/17/2021 and 12/18/2021 and properly preserved in 4 coolers at 2.8 Deg C. The samples received an SGS job number of JD35489. A listing of the Laboratory Sample ID, Client Sample ID and dates of collection are presented in the Results Summary Section of this report.

Except as noted below, all method specified calibrations and quality control performance criteria were met for this job. For more information, please refer to QC summary pages.

General Chemistry By Method EPA 353.2

Matrix: AQ	Batch ID: GP63063
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- All samples were prepared within the recommended method holding time.
- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JD35489-2MS, JD35489-2DUP were used as the QC samples for Nitrogen, Nitrite.
- RPD(s) for Duplicate for Nitrogen, Nitrite are outside control limits for sample GP63063-D1. RPD acceptable due to low duplicate and sample concentrations.
- JD35489-3 for Nitrogen, Nitrite: Elevated reporting limit due to matrix interference.

Matrix: AQ	Batch ID: GP63064
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- All samples were prepared within the recommended method holding time.
- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JD35489-2DUP, JD35489-2MS were used as the QC samples for Nitrogen, Nitrate + Nitrite.
- JD35489-3 for Nitrogen, Nitrate + Nitrite: Elevated reporting limit due to matrix interference.

Matrix: AQ	Batch ID: GP63117
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- All samples were prepared within the recommended method holding time.
- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JD35489-2AMS, JD35489-2ADUP were used as the QC samples for Nitrogen, Nitrite.
- RPD(s) for Duplicate for Nitrogen, Nitrite are outside control limits for sample GP63117-D1. RPD acceptable due to low duplicate and sample concentrations.
- JD35489-3A for Nitrogen, Nitrite: Elevated reporting limit due to matrix interference.

Matrix: AQ	Batch ID: GP63118
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- All samples were prepared within the recommended method holding time.
- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JD35489-2ADUP, JD35489-2AMS were used as the QC samples for Nitrogen, Nitrate + Nitrite.
- JD35489-3A for Nitrogen, Nitrate + Nitrite: Elevated reporting limit due to matrix interference.

Matrix: AQ	Batch ID: R67914
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- JD35489-2 for Nitrogen, Nitrate: Calculated as: (Nitrogen, Nitrate + Nitrite) - (Nitrogen, Nitrite)

Matrix: AQ	Batch ID: R67915
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Thursday, December 30, 2021

Page 1 of 2

General Chemistry By Method EPA 353.2

Matrix: AQ	Batch ID: R67915
<ul style="list-style-type: none"> JD35489-1 for Nitrogen, Nitrate: Calculated as: (Nitrogen, Nitrate + Nitrite) - (Nitrogen, Nitrite) 	
Matrix: AQ	Batch ID: R67916
<ul style="list-style-type: none"> JD35489-3 for Nitrogen, Nitrate: Calculated as: (Nitrogen, Nitrate + Nitrite) - (Nitrogen, Nitrite) 	
Matrix: AQ	Batch ID: R67917
<ul style="list-style-type: none"> JD35489-4 for Nitrogen, Nitrate: Calculated as: (Nitrogen, Nitrate + Nitrite) - (Nitrogen, Nitrite) 	
Matrix: AQ	Batch ID: R67918
<ul style="list-style-type: none"> JD35489-5 for Nitrogen, Nitrate: Calculated as: (Nitrogen, Nitrate + Nitrite) - (Nitrogen, Nitrite) 	
Matrix: AQ	Batch ID: R67919
<ul style="list-style-type: none"> JD35489-6 for Nitrogen, Nitrate: Calculated as: (Nitrogen, Nitrate + Nitrite) - (Nitrogen, Nitrite) 	
Matrix: AQ	Batch ID: R67940
<ul style="list-style-type: none"> JD35489-2A for Nitrogen, Nitrate: Calculated as: (Nitrogen, Nitrate + Nitrite) - (Nitrogen, Nitrite) 	
Matrix: AQ	Batch ID: R67941
<ul style="list-style-type: none"> JD35489-1A for Nitrogen, Nitrate: Calculated as: (Nitrogen, Nitrate + Nitrite) - (Nitrogen, Nitrite) 	
Matrix: AQ	Batch ID: R67942
<ul style="list-style-type: none"> JD35489-3A for Nitrogen, Nitrate: Calculated as: (Nitrogen, Nitrate + Nitrite) - (Nitrogen, Nitrite) 	
Matrix: AQ	Batch ID: R67943
<ul style="list-style-type: none"> JD35489-4A for Nitrogen, Nitrate: Calculated as: (Nitrogen, Nitrate + Nitrite) - (Nitrogen, Nitrite) 	
Matrix: AQ	Batch ID: R67944
<ul style="list-style-type: none"> JD35489-5A for Nitrogen, Nitrate: Calculated as: (Nitrogen, Nitrate + Nitrite) - (Nitrogen, Nitrite) 	
Matrix: AQ	Batch ID: R67945
<ul style="list-style-type: none"> JD35489-6A for Nitrogen, Nitrate: Calculated as: (Nitrogen, Nitrate + Nitrite) - (Nitrogen, Nitrite) 	

General Chemistry By Method SM 4500H+B-2011

Matrix: AQ	Batch ID: GN15516
<ul style="list-style-type: none"> Sample(s) TD76734-1DUP were used as the QC samples for pH. JD35489-1A, 2A, 3A, 4A, 5A, 6A for pH: Field analysis required. Received out of hold time and analyzed by request. Temp 17.2 C. 	

General Chemistry By Method SM 5210B-2011

Matrix: AQ	Batch ID: GP63096
<ul style="list-style-type: none"> All samples were prepared within the recommended method holding time. All samples were analyzed within the recommended method holding time. All method blanks for this batch meet method specific criteria. Sample(s) TD76820-1DUP were used as the QC samples for BOD, 5 Day. RPD(s) for Duplicate for BOD, 5 Day are outside control limits for sample GP63096-D1. RPD acceptable due to low duplicate and sample concentrations. 	

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

Summary of Hits

Job Number: JD35489
Account: GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX
Collected: 12/16/21 thru 12/17/21



Lab Sample ID	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
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JD35489-1 11215131-121721-GW-SS-PZ-NE

Arsenic	3.0	3.0	2.8	ug/l	SW846 6010D
Barium	425	200	13	ug/l	SW846 6010D
Boron	418	100	10	ug/l	SW846 6010D
Cadmium	2.1 B	3.0	1.0	ug/l	SW846 6010D
Calcium	125000	5000	99	ug/l	SW846 6010D
Chromium	2.0 B	10	2.0	ug/l	SW846 6010D
Iron	20000	100	32	ug/l	SW846 6010D
Magnesium	52400	5000	140	ug/l	SW846 6010D
Manganese	676	15	1.4	ug/l	SW846 6010D
Potassium	35800	10000	200	ug/l	SW846 6010D
Sodium	154000	10000	570	ug/l	SW846 6010D
Strontium	894	10	2.7	ug/l	SW846 6010D
Zinc	13.7 B	20	6.9	ug/l	SW846 6010D
Alkalinity, Total as CaCO3 ^a	598	10	7.1	mg/l	SM2320 B-11
Bromide	2.6	0.50	0.11	mg/l	EPA 300/SW846 9056A
Chemical Oxygen Demand	37.5	20	11	mg/l	SM5220 C-11,HACH8000
Chloride	209	2.0	0.83	mg/l	EPA 300/SW846 9056A
Fluoride	2.3	0.20	0.055	mg/l	EPA 300/SW846 9056A
Nitrogen, Ammonia	3.5	0.20	0.089	mg/l	SM4500NH3 H-11LACHAT
Phosphorus, Total	0.24	0.050	0.027	mg/l	EPA 365.3
Solids, Total Dissolved	340	10	6.0	mg/l	SM2540 C-11
Solids, Total Suspended	28.0	4.0	1.5	mg/l	SM2540 D-11
Sulfate	6.9	2.0	0.89	mg/l	EPA 300/SW846 9056A
Total Organic Carbon	12.0	1.0	0.72	mg/l	SM5310 B-11

JD35489-1A 11215131-121721-GW-SS-PZ-NE

BOD, 5 Day ^b	1.5 B	2.0	1.0	mg/l	SM 5210B-2011
pH ^c	8.15			su	SM4500H+ B-11

JD35489-1F 11215131-121721-GW-SS-PZ-NE

Arsenic	4.2	3.0	2.8	ug/l	SW846 6010D
Barium	439	200	13	ug/l	SW846 6010D
Boron	426	100	10	ug/l	SW846 6010D
Cadmium	2.2 B	3.0	1.0	ug/l	SW846 6010D
Calcium	128000	5000	99	ug/l	SW846 6010D
Iron	21100	100	32	ug/l	SW846 6010D
Magnesium	53600	5000	140	ug/l	SW846 6010D
Manganese	631	15	1.4	ug/l	SW846 6010D
Potassium	36500	10000	200	ug/l	SW846 6010D
Sodium	155000	10000	570	ug/l	SW846 6010D
Strontium	909	10	2.7	ug/l	SW846 6010D

Summary of Hits

Job Number: JD35489
Account: GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX
Collected: 12/16/21 thru 12/17/21



Lab Sample ID	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
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Zinc		10.6 B	20	6.9	ug/l	SW846 6010D
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JD35489-2 11215131-121721-GW-SS-DUP-1

Arsenic		4.6	3.0	2.8	ug/l	SW846 6010D
Barium		432	200	13	ug/l	SW846 6010D
Boron		420	100	10	ug/l	SW846 6010D
Cadmium		2.1 B	3.0	1.0	ug/l	SW846 6010D
Calcium		126000	5000	99	ug/l	SW846 6010D
Chromium		2.7 B	10	2.0	ug/l	SW846 6010D
Iron		20600	100	32	ug/l	SW846 6010D
Magnesium		52700	5000	140	ug/l	SW846 6010D
Manganese		649	15	1.4	ug/l	SW846 6010D
Potassium		35900	10000	200	ug/l	SW846 6010D
Sodium		155000	10000	570	ug/l	SW846 6010D
Strontium		896	10	2.7	ug/l	SW846 6010D
Zinc		13.7 B	20	6.9	ug/l	SW846 6010D
Alkalinity, Total as CaCO3 ^a		607	10	7.1	mg/l	SM2320 B-11
Bromide		4.1	0.50	0.11	mg/l	EPA 300/SW846 9056A
Chemical Oxygen Demand		32.5	20	11	mg/l	SM5220 C-11,HACH8000
Chloride		205	2.0	0.83	mg/l	EPA 300/SW846 9056A
Fluoride		2.3	0.20	0.055	mg/l	EPA 300/SW846 9056A
Nitrogen, Ammonia		3.3	0.20	0.089	mg/l	SM4500NH3 H-11LACHAT
Phosphorus, Total		0.25	0.050	0.027	mg/l	EPA 365.3
Solids, Total Dissolved		540	10	6.0	mg/l	SM2540 C-11
Solids, Total Suspended		30.0	4.0	1.5	mg/l	SM2540 D-11
Sulfate		9.0	2.0	0.89	mg/l	EPA 300/SW846 9056A
Total Organic Carbon		12.1	1.0	0.72	mg/l	SM5310 B-11

JD35489-2A 11215131-121721-GW-SS-DUP-1

BOD, 5 Day ^b		8.7 B	12	6.0	mg/l	SM 5210B-2011
pH ^d		7.04			su	SM4500H+ B-11

JD35489-3 11215131-121721-GW-SS-RB-1

Sodium		611 B	10000	570	ug/l	SW846 6010D
Thallium		2.1 B	10	1.8	ug/l	SW846 6010D
Zinc		15.3 B	20	6.9	ug/l	SW846 6010D
Nitrogen, Ammonia		0.17 B	0.20	0.089	mg/l	SM4500NH3 H-11LACHAT

JD35489-3A 11215131-121721-GW-SS-RB-1

BOD, 5 Day ^b		30.1	12	6.0	mg/l	SM 5210B-2011
pH ^e		7.12			su	SM4500H+ B-11

Summary of Hits

Job Number: JD35489
Account: GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX
Collected: 12/16/21 thru 12/17/21



Lab Sample ID	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
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JD35489-4 11215131-121621-GW-SS-PZ-SW

Arsenic	5.4	3.0	2.8	ug/l	SW846 6010D
Barium	686	200	13	ug/l	SW846 6010D
Beryllium	0.70 B	1.0	0.50	ug/l	SW846 6010D
Boron	759	100	10	ug/l	SW846 6010D
Cadmium	2.3 B	3.0	1.0	ug/l	SW846 6010D
Calcium	163000	5000	99	ug/l	SW846 6010D
Iron	2330	100	32	ug/l	SW846 6010D
Magnesium	186000	5000	140	ug/l	SW846 6010D
Manganese	2360	15	1.4	ug/l	SW846 6010D
Potassium	63400	10000	200	ug/l	SW846 6010D
Sodium	1270000	100000	5700	ug/l	SW846 6010D
Strontium	1890	10	2.7	ug/l	SW846 6010D
Vanadium	2.8 B	50	1.8	ug/l	SW846 6010D
Zinc	13.9 B	20	6.9	ug/l	SW846 6010D
Alkalinity, Total as CaCO ₃ ^a	717	10	7.1	mg/l	SM2320 B-11
Bromide	8.3	5.0	1.1	mg/l	EPA 300/SW846 9056A
Chemical Oxygen Demand	200	20	11	mg/l	SM5220 C-11, HACH8000
Chloride	2680	20	8.3	mg/l	EPA 300/SW846 9056A
Fluoride	0.75	0.20	0.055	mg/l	EPA 300/SW846 9056A
Nitrogen, Ammonia	0.11 B	0.20	0.089	mg/l	SM4500NH3 H-11LACHAT
Phosphorus, Total	0.74	0.10	0.054	mg/l	EPA 365.3
Solids, Total Dissolved	4730	10	6.0	mg/l	SM2540 C-11
Solids, Total Suspended ^f	16.0	4.0	1.5	mg/l	SM2540 D-11
Sulfate	241	2.0	0.89	mg/l	EPA 300/SW846 9056A
Total Organic Carbon	16.8	1.0	0.72	mg/l	SM5310 B-11

JD35489-4A 11215131-121621-GW-SS-PZ-SW

Nitrogen, Nitrite ^b	0.0051 B	0.010	0.0050	mg/l	EPA 353.2
pH ^g	7.05			su	SM4500H+ B-11

JD35489-4F 11215131-121621-GW-SS-PZ-SW

Arsenic	5.1	3.0	2.8	ug/l	SW846 6010D
Barium	681	200	13	ug/l	SW846 6010D
Beryllium	0.80 B	1.0	0.50	ug/l	SW846 6010D
Boron	757	100	10	ug/l	SW846 6010D
Cadmium	2.2 B	3.0	1.0	ug/l	SW846 6010D
Calcium	164000	5000	99	ug/l	SW846 6010D
Iron	6270	100	32	ug/l	SW846 6010D
Magnesium	188000	5000	140	ug/l	SW846 6010D
Manganese	2310	15	1.4	ug/l	SW846 6010D

Summary of Hits

Job Number: JD35489
Account: GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX
Collected: 12/16/21 thru 12/17/21



Lab Sample ID	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
Nickel		2.0 B	10	1.7	ug/l	SW846 6010D
Potassium		64000	10000	200	ug/l	SW846 6010D
Sodium		1270000	100000	5700	ug/l	SW846 6010D
Strontium		1910	10	2.7	ug/l	SW846 6010D
Thallium		1.8 B	10	1.8	ug/l	SW846 6010D
Vanadium		3.7 B	50	1.8	ug/l	SW846 6010D
Zinc		18.7 B	20	6.9	ug/l	SW846 6010D

JD35489-5 11215131-121621-GW-SS-PZ-SC

Barium		420	200	13	ug/l	SW846 6010D
Boron		816	100	10	ug/l	SW846 6010D
Cadmium		2.5 B	3.0	1.0	ug/l	SW846 6010D
Calcium		285000	10000	200	ug/l	SW846 6010D
Chromium		2.9 B	10	2.0	ug/l	SW846 6010D
Iron		1000	100	32	ug/l	SW846 6010D
Lead		1.9 B	3.0	1.8	ug/l	SW846 6010D
Magnesium		55100	5000	140	ug/l	SW846 6010D
Manganese		1290	15	1.4	ug/l	SW846 6010D
Potassium		128000	10000	200	ug/l	SW846 6010D
Silver		6.7 B	10	6.1	ug/l	SW846 6010D
Sodium		156000	10000	570	ug/l	SW846 6010D
Strontium		1200	10	2.7	ug/l	SW846 6010D
Vanadium		2.6 B	50	1.8	ug/l	SW846 6010D
Zinc		13.5 B	20	6.9	ug/l	SW846 6010D
Alkalinity, Total as CaCO3 ^a		1120	5.0	3.6	mg/l	SM2320 B-11
Bromide		3.4	0.50	0.11	mg/l	EPA 300/SW846 9056A
Chemical Oxygen Demand		133	20	11	mg/l	SM5220 C-11, HACH8000
Chloride		133	2.0	0.83	mg/l	EPA 300/SW846 9056A
Fluoride		0.61	0.20	0.055	mg/l	EPA 300/SW846 9056A
Nitrogen, Ammonia		7.1	0.20	0.089	mg/l	SM4500NH3 H-11LACHAT
Phosphorus, Total		0.97	0.20	0.11	mg/l	EPA 365.3
Solids, Total Dissolved		1500	10	6.0	mg/l	SM2540 C-11
Sulfate		32.1	2.0	0.89	mg/l	EPA 300/SW846 9056A
Sulfide		4.3	2.0	0.48	mg/l	SM4500S2- F-11
Total Organic Carbon		37.0	1.0	0.72	mg/l	SM5310 B-11

JD35489-5A 11215131-121621-GW-SS-PZ-SC

pH ^h		6.08			su	SM4500H+ B-11
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JD35489-5F 11215131-121621-GW-SS-PZ-SC

Arsenic		3.4	3.0	2.8	ug/l	SW846 6010D
Barium		426	200	13	ug/l	SW846 6010D

Summary of Hits

Job Number: JD35489
Account: GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX
Collected: 12/16/21 thru 12/17/21



Lab Sample ID	Client Sample ID	Result/ Qual	RL	MDL	Units	Method	
		Boron	837	100	10	ug/l	SW846 6010D
		Cadmium	2.4 B	3.0	1.0	ug/l	SW846 6010D
		Calcium	289000	10000	200	ug/l	SW846 6010D
		Chromium	2.7 B	10	2.0	ug/l	SW846 6010D
		Iron	1220	100	32	ug/l	SW846 6010D
		Magnesium	56600	5000	140	ug/l	SW846 6010D
		Manganese	1360	15	1.4	ug/l	SW846 6010D
		Potassium	130000	10000	200	ug/l	SW846 6010D
		Silver	6.2 B	10	6.1	ug/l	SW846 6010D
		Sodium	163000	10000	570	ug/l	SW846 6010D
		Strontium	1220	10	2.7	ug/l	SW846 6010D
		Thallium	1.8 B	10	1.8	ug/l	SW846 6010D
		Vanadium	2.3 B	50	1.8	ug/l	SW846 6010D

JD35489-6 11215131-121621-GW-SS-PZ-NC

		Aluminum	191 B	200	150	ug/l	SW846 6010D
		Antimony	6.4	6.0	4.7	ug/l	SW846 6010D
		Barium	115 B	200	13	ug/l	SW846 6010D
		Beryllium	2.6	1.0	0.50	ug/l	SW846 6010D
		Boron	628	100	10	ug/l	SW846 6010D
		Cadmium	1.2 B	3.0	1.0	ug/l	SW846 6010D
		Calcium	250000	25000	500	ug/l	SW846 6010D
		Chromium	2.4 B	10	2.0	ug/l	SW846 6010D
		Iron	10700	100	32	ug/l	SW846 6010D
		Lead	2.4 B	3.0	1.8	ug/l	SW846 6010D
		Magnesium	141000	5000	140	ug/l	SW846 6010D
		Manganese	731	15	1.4	ug/l	SW846 6010D
		Molybdenum	5.4 B	20	3.6	ug/l	SW846 6010D
		Potassium	75800	10000	200	ug/l	SW846 6010D
		Selenium	5.9 B	10	4.9	ug/l	SW846 6010D
		Sodium	421000	50000	2800	ug/l	SW846 6010D
		Strontium	1800	10	2.7	ug/l	SW846 6010D
		Thallium	5.5 B	10	1.8	ug/l	SW846 6010D
		Vanadium	2.5 B	50	1.8	ug/l	SW846 6010D
		Zinc	22.8	20	6.9	ug/l	SW846 6010D
		Alkalinity, Total as CaCO3 ^a	1140	5.0	3.6	mg/l	SM2320 B-11
		Bromide ⁱ	1.0 B	2.0	0.42	mg/l	EPA 300/SW846 9056A
		Chemical Oxygen Demand	66.7	20	11	mg/l	SM5220 C-11,HACH8000
		Chloride	185	2.0	0.83	mg/l	EPA 300/SW846 9056A
		Fluoride	0.61	0.20	0.055	mg/l	EPA 300/SW846 9056A
		Nitrogen, Ammonia	5.6	0.20	0.089	mg/l	SM4500NH3 H-11LACHAT
		Phosphorus, Total	0.34	0.20	0.11	mg/l	EPA 365.3
		Solids, Total Dissolved	2130	10	6.0	mg/l	SM2540 C-11
		Solids, Total Suspended ^j	16.0	4.0	1.5	mg/l	SM2540 D-11

Summary of Hits

Job Number: JD35489
Account: GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX
Collected: 12/16/21 thru 12/17/21



Lab Sample ID	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
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Sulfate		714	8.0	3.5	mg/l	EPA 300/SW846 9056A
Total Organic Carbon		17.3	1.0	0.72	mg/l	SM5310 B-11

JD35489-6A 11215131-121621-GW-SS-PZ-NC

Nitrogen, Nitrite ^b		0.0058 B	0.010	0.0050	mg/l	EPA 353.2
pH ^k		6.89			su	SM4500H+ B-11

JD35489-6F 11215131-121621-GW-SS-PZ-NC

Antimony		6.8	6.0	4.7	ug/l	SW846 6010D
Arsenic		3.3	3.0	2.8	ug/l	SW846 6010D
Barium		117 B	200	13	ug/l	SW846 6010D
Beryllium		2.6	1.0	0.50	ug/l	SW846 6010D
Boron		643	100	10	ug/l	SW846 6010D
Cadmium		1.3 B	3.0	1.0	ug/l	SW846 6010D
Calcium		249000	25000	500	ug/l	SW846 6010D
Chromium		2.4 B	10	2.0	ug/l	SW846 6010D
Iron		10500	100	32	ug/l	SW846 6010D
Magnesium		143000	5000	140	ug/l	SW846 6010D
Manganese		743	15	1.4	ug/l	SW846 6010D
Molybdenum		5.6 B	20	3.6	ug/l	SW846 6010D
Potassium		77300	10000	200	ug/l	SW846 6010D
Selenium		5.8 B	10	4.9	ug/l	SW846 6010D
Sodium		425000	50000	2800	ug/l	SW846 6010D
Strontium		1820	10	2.7	ug/l	SW846 6010D
Thallium		5.8 B	10	1.8	ug/l	SW846 6010D
Vanadium		1.8 B	50	1.8	ug/l	SW846 6010D
Zinc		7.9 B	20	6.9	ug/l	SW846 6010D

- (a) Sample was titrated to a final pH of 4.5. Sample received with head space.
- (b) Analysis performed at SGS Houston, TX.
- (c) Field analysis required. Received out of hold time and analyzed by request. Temp of pH Reading: 17.2 Deg. C
Analysis performed at SGS Houston, TX.
- (d) Field analysis required. Received out of hold time and analyzed by request. Temp of pH Reading: 15.3 Deg. C
Analysis performed at SGS Houston, TX.
- (e) Field analysis required. Received out of hold time and analyzed by request. Temp of pH Reading: 15.1 Deg. C
Analysis performed at SGS Houston, TX.
- (f) Reported sample aliquot obtained from filtration of 25 mL of sample. Volume was reduced from 1 liter due to nature of sample matrix.
- (g) Field analysis required. Received out of hold time and analyzed by request. Temp of pH Reading: 15.8 Deg. C
Analysis performed at SGS Houston, TX.
- (h) Field analysis required. Received out of hold time and analyzed by request. Temp of pH Reading: 16.4 Deg. C
Analysis performed at SGS Houston, TX.
- (i) Elevated sample detection limit due to difficult sample matrix.

Summary of Hits

Job Number: JD35489
Account: GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX
Collected: 12/16/21 thru 12/17/21



Lab Sample ID	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
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- (j) Reported sample aliquot obtained from filtration of 50 mL of sample. Volume was reduced from 1 liter due to nature of sample matrix.
- (k) Field analysis required. Received out of hold time and analyzed by request. Temp of pH Reading: 16.2 Deg. C
Analysis performed at SGS Houston, TX.

Sample Results

Report of Analysis

Report of Analysis

Client Sample ID: 11215131-121721-GW-SS-PZ-NE	Date Sampled: 12/17/21
Lab Sample ID: JD35489-1	Date Received: 12/17/21
Matrix: AQ - Ground Water	Percent Solids: n/a
Project: SJRWP - PCFSE, Harris County, TX	

Total Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed By	Method	Prep Method
Aluminum	150 U	200	150	ug/l	1	12/29/21	01/06/22 FW	SW846 6010D ²	SW846 3010A ⁵
Antimony	4.7 U	6.0	4.7	ug/l	1	12/29/21	01/06/22 FW	SW846 6010D ²	SW846 3010A ⁵
Arsenic	3.0	3.0	2.8	ug/l	1	12/29/21	01/14/22 FW	SW846 6010D ³	SW846 3010A ⁵
Barium	425	200	13	ug/l	1	12/29/21	01/06/22 FW	SW846 6010D ²	SW846 3010A ⁵
Beryllium	0.50 U	1.0	0.50	ug/l	1	12/29/21	01/06/22 FW	SW846 6010D ²	SW846 3010A ⁵
Boron	418	100	10	ug/l	1	12/29/21	01/06/22 FW	SW846 6010D ²	SW846 3010A ⁵
Cadmium	2.1 B	3.0	1.0	ug/l	1	12/29/21	01/06/22 FW	SW846 6010D ²	SW846 3010A ⁵
Calcium	125000	5000	99	ug/l	1	12/29/21	01/06/22 FW	SW846 6010D ²	SW846 3010A ⁵
Chromium	2.0 B	10	2.0	ug/l	1	12/29/21	01/06/22 FW	SW846 6010D ²	SW846 3010A ⁵
Cobalt	2.6 U	50	2.6	ug/l	1	12/29/21	01/06/22 FW	SW846 6010D ²	SW846 3010A ⁵
Copper	5.9 U	10	5.9	ug/l	1	12/29/21	01/06/22 FW	SW846 6010D ²	SW846 3010A ⁵
Iron	20000	100	32	ug/l	1	12/29/21	01/06/22 FW	SW846 6010D ²	SW846 3010A ⁵
Lead	1.8 U	3.0	1.8	ug/l	1	12/29/21	01/06/22 FW	SW846 6010D ²	SW846 3010A ⁵
Magnesium	52400	5000	140	ug/l	1	12/29/21	01/06/22 FW	SW846 6010D ²	SW846 3010A ⁵
Manganese	676	15	1.4	ug/l	1	12/29/21	01/06/22 FW	SW846 6010D ²	SW846 3010A ⁵
Mercury	0.095 U	0.20	0.095	ug/l	1	12/23/21	12/23/21 SB	SW846 7470A ¹	SW846 7470A ⁴
Molybdenum	3.6 U	20	3.6	ug/l	1	12/29/21	01/06/22 FW	SW846 6010D ²	SW846 3010A ⁵
Nickel	1.7 U	10	1.7	ug/l	1	12/29/21	01/06/22 FW	SW846 6010D ²	SW846 3010A ⁵
Potassium	35800	10000	200	ug/l	1	12/29/21	01/06/22 FW	SW846 6010D ²	SW846 3010A ⁵
Selenium	4.9 U	10	4.9	ug/l	1	12/29/21	01/06/22 FW	SW846 6010D ²	SW846 3010A ⁵
Silver	6.1 U	10	6.1	ug/l	1	12/29/21	01/06/22 FW	SW846 6010D ²	SW846 3010A ⁵
Sodium	154000	10000	570	ug/l	1	12/29/21	01/06/22 FW	SW846 6010D ²	SW846 3010A ⁵
Strontium	894	10	2.7	ug/l	1	12/29/21	01/06/22 FW	SW846 6010D ²	SW846 3010A ⁵
Thallium	1.8 U	10	1.8	ug/l	1	12/29/21	01/06/22 FW	SW846 6010D ²	SW846 3010A ⁵
Tin	3.7 U	10	3.7	ug/l	1	12/29/21	01/06/22 FW	SW846 6010D ²	SW846 3010A ⁵
Titanium	2.5 U	10	2.5	ug/l	1	12/29/21	01/06/22 FW	SW846 6010D ²	SW846 3010A ⁵
Vanadium	1.8 U	50	1.8	ug/l	1	12/29/21	01/06/22 FW	SW846 6010D ²	SW846 3010A ⁵
Zinc	13.7 B	20	6.9	ug/l	1	12/29/21	01/06/22 FW	SW846 6010D ²	SW846 3010A ⁵

- (1) Instrument QC Batch: MA51641
- (2) Instrument QC Batch: MA51692
- (3) Instrument QC Batch: MA51737
- (4) Prep QC Batch: MP30529
- (5) Prep QC Batch: MP30594

RL = Reporting Limit
 MDL = Method Detection Limit

U = Indicates a result < MDL
 B = Indicates a result > = MDL but < RL

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Report of Analysis

Client Sample ID: 11215131-121721-GW-SS-PZ-NE Lab Sample ID: JD35489-1 Matrix: AQ - Ground Water Project: SJRWP - PCFSE, Harris County, TX	Date Sampled: 12/17/21 Date Received: 12/17/21 Percent Solids: n/a
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General Chemistry

Analyte	Result	RL	MDL	Units	DF	Analyzed	By	Method
Alkalinity, Total as CaCO ₃ ^a	598	10	7.1	mg/l	1	12/22/21 10:58 NP	SM2320	B-11
Bromide	2.6	0.50	0.11	mg/l	1	01/03/22 02:05 HP	EPA 300/SW846	9056A
Chemical Oxygen Demand	37.5	20	11	mg/l	1	12/23/21 14:25 NP	SM5220	C-11,HACH8000
Chloride	209	2.0	0.83	mg/l	1	01/03/22 02:05 HP	EPA 300/SW846	9056A
Fluoride	2.3	0.20	0.055	mg/l	1	01/03/22 02:05 HP	EPA 300/SW846	9056A
Nitrogen, Ammonia	3.5	0.20	0.089	mg/l	1	01/05/22 16:41 MM	SM4500NH3	H-11LACHAT
Phosphorus, Total	0.24	0.050	0.027	mg/l	1	12/26/21	JOO EPA 365.3	
Solids, Total Dissolved	340	10	6.0	mg/l	1	12/21/21 14:00 SP	SM2540	C-11
Solids, Total Suspended	28.0	4.0	1.5	mg/l	1	12/22/21 15:48 SP	SM2540	D-11
Sulfate	6.9	2.0	0.89	mg/l	1	01/03/22 02:05 HP	EPA 300/SW846	9056A
Sulfide	0.48 U	2.0	0.48	mg/l	1	12/22/21 11:30 MP	SM4500S2-	F-11
Total Organic Carbon	12.0	1.0	0.72	mg/l	1	12/24/21 02:12 MB	SM5310	B-11

(a) Sample was titrated to a final pH of 4.5. Sample received with head space.

RL = Reporting Limit
 MDL = Method Detection Limit

U = Indicates a result < MDL
 B = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID: 11215131-121721-GW-SS-PZ-NE	Date Sampled: 12/17/21
Lab Sample ID: JD35489-1A	Date Received: 12/17/21
Matrix: AQ - Ground Water	Percent Solids: n/a
Project: SJRWP - PCFSE, Harris County, TX	

General Chemistry

Analyte	Result	RL	MDL	Units	DF	Analyzed	By Method
BOD, 5 Day ^a	1.5 B	2.0	1.0	mg/l	1	12/17/21 22:15	ATXSM 5210B-2011
Nitrogen, Nitrate ^b	0.045 U	0.060	0.045	mg/l	1	12/18/21 10:37	ATXEPA 353.2
Nitrogen, Nitrate ^c	0.045 U	0.060	0.045	mg/l	1	12/18/21 10:37	ATXEPA353.2/SM4500NO2B
Nitrogen, Nitrate + Nitrite ^a	0.040 U	0.050	0.040	mg/l	1	12/18/21 10:37	ATXEPA 353.2
Nitrogen, Nitrite ^a	0.0050 U	0.010	0.0050	mg/l	1	12/18/21 09:33	ATXEPA 353.2
pH ^d	8.15			su	1	12/27/21 10:00	ATXSM4500H+ B-11

(a) Analysis performed at SGS Houston, TX.

(b) Calculated as: (Nitrogen, Nitrate + Nitrite) - (Nitrogen, Nitrite) Analysis performed at SGS Houston, TX.

(c) Calculated as: (Nitrogen, Nitrate + Nitrite) - (Nitrogen, Nitrite)

(d) Field analysis required. Received out of hold time and analyzed by request. Temp of pH Reading: 17.2 Deg. C
Analysis performed at SGS Houston, TX.

RL = Reporting Limit
MDL = Method Detection Limit

U = Indicates a result < MDL
B = Indicates a result > = MDL but < RL

4.2
4

Report of Analysis

Client Sample ID: 11215131-121721-GW-SS-PZ-NE	Date Sampled: 12/17/21
Lab Sample ID: JD35489-1F	Date Received: 12/17/21
Matrix: AQ - Groundwater Filtered	Percent Solids: n/a
Project: SJRWP - PCFSE, Harris County, TX	

Dissolved Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed By	Method	Prep Method
Aluminum	150 U	200	150	ug/l	1	12/29/21	01/06/22 FW	SW846 6010D ²	SW846 3010A ⁵
Antimony	4.7 U	6.0	4.7	ug/l	1	12/29/21	01/06/22 FW	SW846 6010D ²	SW846 3010A ⁵
Arsenic	4.2	3.0	2.8	ug/l	1	12/29/21	01/14/22 FW	SW846 6010D ³	SW846 3010A ⁵
Barium	439	200	13	ug/l	1	12/29/21	01/06/22 FW	SW846 6010D ²	SW846 3010A ⁵
Beryllium	0.50 U	1.0	0.50	ug/l	1	12/29/21	01/06/22 FW	SW846 6010D ²	SW846 3010A ⁵
Boron	426	100	10	ug/l	1	12/29/21	01/06/22 FW	SW846 6010D ²	SW846 3010A ⁵
Cadmium	2.2 B	3.0	1.0	ug/l	1	12/29/21	01/06/22 FW	SW846 6010D ²	SW846 3010A ⁵
Calcium	128000	5000	99	ug/l	1	12/29/21	01/06/22 FW	SW846 6010D ²	SW846 3010A ⁵
Chromium	2.0 U	10	2.0	ug/l	1	12/29/21	01/06/22 FW	SW846 6010D ²	SW846 3010A ⁵
Cobalt	2.6 U	50	2.6	ug/l	1	12/29/21	01/06/22 FW	SW846 6010D ²	SW846 3010A ⁵
Copper	5.9 U	10	5.9	ug/l	1	12/29/21	01/06/22 FW	SW846 6010D ²	SW846 3010A ⁵
Iron	21100	100	32	ug/l	1	12/29/21	01/06/22 FW	SW846 6010D ²	SW846 3010A ⁵
Lead	1.8 U	3.0	1.8	ug/l	1	12/29/21	01/06/22 FW	SW846 6010D ²	SW846 3010A ⁵
Magnesium	53600	5000	140	ug/l	1	12/29/21	01/06/22 FW	SW846 6010D ²	SW846 3010A ⁵
Manganese	631	15	1.4	ug/l	1	12/29/21	01/06/22 FW	SW846 6010D ²	SW846 3010A ⁵
Mercury	0.095 U	0.20	0.095	ug/l	1	12/23/21	12/23/21 SB	SW846 7470A ¹	SW846 7470A ⁴
Molybdenum	3.6 U	20	3.6	ug/l	1	12/29/21	01/06/22 FW	SW846 6010D ²	SW846 3010A ⁵
Nickel	1.7 U	10	1.7	ug/l	1	12/29/21	01/06/22 FW	SW846 6010D ²	SW846 3010A ⁵
Potassium	36500	10000	200	ug/l	1	12/29/21	01/06/22 FW	SW846 6010D ²	SW846 3010A ⁵
Selenium	4.9 U	10	4.9	ug/l	1	12/29/21	01/06/22 FW	SW846 6010D ²	SW846 3010A ⁵
Silver	6.1 U	10	6.1	ug/l	1	12/29/21	01/06/22 FW	SW846 6010D ²	SW846 3010A ⁵
Sodium	155000	10000	570	ug/l	1	12/29/21	01/06/22 FW	SW846 6010D ²	SW846 3010A ⁵
Strontium	909	10	2.7	ug/l	1	12/29/21	01/06/22 FW	SW846 6010D ²	SW846 3010A ⁵
Thallium	1.8 U	10	1.8	ug/l	1	12/29/21	01/06/22 FW	SW846 6010D ²	SW846 3010A ⁵
Tin	3.7 U	10	3.7	ug/l	1	12/29/21	01/06/22 FW	SW846 6010D ²	SW846 3010A ⁵
Titanium	2.5 U	10	2.5	ug/l	1	12/29/21	01/06/22 FW	SW846 6010D ²	SW846 3010A ⁵
Vanadium	1.8 U	50	1.8	ug/l	1	12/29/21	01/06/22 FW	SW846 6010D ²	SW846 3010A ⁵
Zinc	10.6 B	20	6.9	ug/l	1	12/29/21	01/06/22 FW	SW846 6010D ²	SW846 3010A ⁵

- (1) Instrument QC Batch: MA51641
- (2) Instrument QC Batch: MA51692
- (3) Instrument QC Batch: MA51737
- (4) Prep QC Batch: MP30529
- (5) Prep QC Batch: MP30594

RL = Reporting Limit
 MDL = Method Detection Limit

U = Indicates a result < MDL
 B = Indicates a result > = MDL but < RL

4.3
4

Report of Analysis

Client Sample ID: 11215131-121721-GW-SS-DUP-1	Date Sampled: 12/17/21
Lab Sample ID: JD35489-2	Date Received: 12/17/21
Matrix: AQ - Ground Water	Percent Solids: n/a
Project: SJRWP - PCFSE, Harris County, TX	

Total Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed By	Method	Prep Method
Aluminum	150 U	200	150	ug/l	1	12/29/21	01/06/22 FW	SW846 6010D ²	SW846 3010A ⁵
Antimony	4.7 U	6.0	4.7	ug/l	1	12/29/21	01/06/22 FW	SW846 6010D ²	SW846 3010A ⁵
Arsenic	4.6	3.0	2.8	ug/l	1	12/29/21	01/14/22 FW	SW846 6010D ³	SW846 3010A ⁵
Barium	432	200	13	ug/l	1	12/29/21	01/06/22 FW	SW846 6010D ²	SW846 3010A ⁵
Beryllium	0.50 U	1.0	0.50	ug/l	1	12/29/21	01/06/22 FW	SW846 6010D ²	SW846 3010A ⁵
Boron	420	100	10	ug/l	1	12/29/21	01/06/22 FW	SW846 6010D ²	SW846 3010A ⁵
Cadmium	2.1 B	3.0	1.0	ug/l	1	12/29/21	01/06/22 FW	SW846 6010D ²	SW846 3010A ⁵
Calcium	126000	5000	99	ug/l	1	12/29/21	01/06/22 FW	SW846 6010D ²	SW846 3010A ⁵
Chromium	2.7 B	10	2.0	ug/l	1	12/29/21	01/06/22 FW	SW846 6010D ²	SW846 3010A ⁵
Cobalt	2.6 U	50	2.6	ug/l	1	12/29/21	01/06/22 FW	SW846 6010D ²	SW846 3010A ⁵
Copper	5.9 U	10	5.9	ug/l	1	12/29/21	01/06/22 FW	SW846 6010D ²	SW846 3010A ⁵
Iron	20600	100	32	ug/l	1	12/29/21	01/06/22 FW	SW846 6010D ²	SW846 3010A ⁵
Lead	1.8 U	3.0	1.8	ug/l	1	12/29/21	01/06/22 FW	SW846 6010D ²	SW846 3010A ⁵
Magnesium	52700	5000	140	ug/l	1	12/29/21	01/06/22 FW	SW846 6010D ²	SW846 3010A ⁵
Manganese	649	15	1.4	ug/l	1	12/29/21	01/06/22 FW	SW846 6010D ²	SW846 3010A ⁵
Mercury	0.095 U	0.20	0.095	ug/l	1	12/23/21	12/23/21 SB	SW846 7470A ¹	SW846 7470A ⁴
Molybdenum	3.6 U	20	3.6	ug/l	1	12/29/21	01/06/22 FW	SW846 6010D ²	SW846 3010A ⁵
Nickel	1.7 U	10	1.7	ug/l	1	12/29/21	01/06/22 FW	SW846 6010D ²	SW846 3010A ⁵
Potassium	35900	10000	200	ug/l	1	12/29/21	01/06/22 FW	SW846 6010D ²	SW846 3010A ⁵
Selenium	4.9 U	10	4.9	ug/l	1	12/29/21	01/06/22 FW	SW846 6010D ²	SW846 3010A ⁵
Silver	6.1 U	10	6.1	ug/l	1	12/29/21	01/06/22 FW	SW846 6010D ²	SW846 3010A ⁵
Sodium	155000	10000	570	ug/l	1	12/29/21	01/06/22 FW	SW846 6010D ²	SW846 3010A ⁵
Strontium	896	10	2.7	ug/l	1	12/29/21	01/06/22 FW	SW846 6010D ²	SW846 3010A ⁵
Thallium	1.8 U	10	1.8	ug/l	1	12/29/21	01/06/22 FW	SW846 6010D ²	SW846 3010A ⁵
Tin	3.7 U	10	3.7	ug/l	1	12/29/21	01/06/22 FW	SW846 6010D ²	SW846 3010A ⁵
Titanium	2.5 U	10	2.5	ug/l	1	12/29/21	01/06/22 FW	SW846 6010D ²	SW846 3010A ⁵
Vanadium	1.8 U	50	1.8	ug/l	1	12/29/21	01/06/22 FW	SW846 6010D ²	SW846 3010A ⁵
Zinc	13.7 B	20	6.9	ug/l	1	12/29/21	01/06/22 FW	SW846 6010D ²	SW846 3010A ⁵

- (1) Instrument QC Batch: MA51641
- (2) Instrument QC Batch: MA51692
- (3) Instrument QC Batch: MA51737
- (4) Prep QC Batch: MP30529
- (5) Prep QC Batch: MP30594

RL = Reporting Limit
 MDL = Method Detection Limit

U = Indicates a result < MDL
 B = Indicates a result > = MDL but < RL

4.4
4

Report of Analysis

Client Sample ID: 11215131-121721-GW-SS-DUP-1 Lab Sample ID: JD35489-2 Matrix: AQ - Ground Water Project: SJRWP - PCFSE, Harris County, TX	Date Sampled: 12/17/21 Date Received: 12/17/21 Percent Solids: n/a
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General Chemistry

Analyte	Result	RL	MDL	Units	DF	Analyzed	By	Method
Alkalinity, Total as CaCO3 ^a	607	10	7.1	mg/l	1	12/22/21 14:27 NP	SM2320	B-11
Bromide	4.1	0.50	0.11	mg/l	1	01/03/22 02:29 HP	EPA 300/SW846	9056A
Chemical Oxygen Demand	32.5	20	11	mg/l	1	12/23/21 14:25 NP	SM5220	C-11,HACH8000
Chloride	205	2.0	0.83	mg/l	1	01/03/22 02:29 HP	EPA 300/SW846	9056A
Fluoride	2.3	0.20	0.055	mg/l	1	01/03/22 02:29 HP	EPA 300/SW846	9056A
Nitrogen, Ammonia	3.3	0.20	0.089	mg/l	1	01/05/22 16:43 MM	SM4500NH3	H-11LACHAT
Phosphorus, Total	0.25	0.050	0.027	mg/l	1	12/26/21	JOO EPA 365.3	
Solids, Total Dissolved	540	10	6.0	mg/l	1	12/21/21 14:00 SP	SM2540	C-11
Solids, Total Suspended	30.0	4.0	1.5	mg/l	1	12/22/21 15:48 SP	SM2540	D-11
Sulfate	9.0	2.0	0.89	mg/l	1	01/03/22 02:29 HP	EPA 300/SW846	9056A
Sulfide	0.48 U	2.0	0.48	mg/l	1	12/22/21 11:30 MP	SM4500S2-	F-11
Total Organic Carbon	12.1	1.0	0.72	mg/l	1	12/24/21 02:30 MB	SM5310	B-11

(a) Sample was titrated to a final pH of 4.5. Sample received with head space.

RL = Reporting Limit
 MDL = Method Detection Limit

U = Indicates a result < MDL
 B = Indicates a result > = MDL but < RL

4.4
4

Report of Analysis

Client Sample ID: 11215131-121721-GW-SS-DUP-1	Date Sampled: 12/17/21
Lab Sample ID: JD35489-2A	Date Received: 12/17/21
Matrix: AQ - Ground Water	Percent Solids: n/a
Project: SJRWP - PCFSE, Harris County, TX	

General Chemistry

Analyte	Result	RL	MDL	Units	DF	Analyzed	By Method
BOD, 5 Day ^a	8.7 B	12	6.0	mg/l	1	12/17/21 22:16 ATXSM 5210B-2011	
Nitrogen, Nitrate ^b	0.045 U	0.060	0.045	mg/l	1	12/18/21 10:35 ATXEPA 353.2	
Nitrogen, Nitrate ^c	0.045 U	0.060	0.045	mg/l	1	12/18/21 10:35 ATXEPA353.2/SM4500NO2B	
Nitrogen, Nitrate + Nitrite ^a	0.040 U	0.050	0.040	mg/l	1	12/18/21 10:35 ATXEPA 353.2	
Nitrogen, Nitrite ^a	0.0050 U	0.010	0.0050	mg/l	1	12/18/21 09:33 ATXEPA 353.2	
pH ^d	7.04			su	1	12/27/21 10:00 ATXSM4500H+ B-11	

(a) Analysis performed at SGS Houston, TX.

(b) Calculated as: (Nitrogen, Nitrate + Nitrite) - (Nitrogen, Nitrite) Analysis performed at SGS Houston, TX.

(c) Calculated as: (Nitrogen, Nitrate + Nitrite) - (Nitrogen, Nitrite)

(d) Field analysis required. Received out of hold time and analyzed by request. Temp of pH Reading: 15.3 Deg. C
 Analysis performed at SGS Houston, TX.

RL = Reporting Limit
 MDL = Method Detection Limit

U = Indicates a result < MDL
 B = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID: 11215131-121721-GW-SS-RB-1	Date Sampled: 12/17/21
Lab Sample ID: JD35489-3	Date Received: 12/17/21
Matrix: AQ - Equipment Blank	Percent Solids: n/a
Project: SJRWP - PCFSE, Harris County, TX	

Total Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed By	Method	Prep Method
Aluminum	150 U	200	150	ug/l	1	12/29/21	01/06/22 FW	SW846 6010D ²	SW846 3010A ⁵
Antimony	4.7 U	6.0	4.7	ug/l	1	12/29/21	01/06/22 FW	SW846 6010D ²	SW846 3010A ⁵
Arsenic	2.8 U	3.0	2.8	ug/l	1	12/29/21	01/14/22 FW	SW846 6010D ³	SW846 3010A ⁵
Barium	13 U	200	13	ug/l	1	12/29/21	01/06/22 FW	SW846 6010D ²	SW846 3010A ⁵
Beryllium	0.50 U	1.0	0.50	ug/l	1	12/29/21	01/06/22 FW	SW846 6010D ²	SW846 3010A ⁵
Boron	10 U	100	10	ug/l	1	12/29/21	01/06/22 FW	SW846 6010D ²	SW846 3010A ⁵
Cadmium	1.0 U	3.0	1.0	ug/l	1	12/29/21	01/06/22 FW	SW846 6010D ²	SW846 3010A ⁵
Calcium	99 U	5000	99	ug/l	1	12/29/21	01/06/22 FW	SW846 6010D ²	SW846 3010A ⁵
Chromium	2.0 U	10	2.0	ug/l	1	12/29/21	01/06/22 FW	SW846 6010D ²	SW846 3010A ⁵
Cobalt	2.6 U	50	2.6	ug/l	1	12/29/21	01/06/22 FW	SW846 6010D ²	SW846 3010A ⁵
Copper	5.9 U	10	5.9	ug/l	1	12/29/21	01/06/22 FW	SW846 6010D ²	SW846 3010A ⁵
Iron	32 U	100	32	ug/l	1	12/29/21	01/06/22 FW	SW846 6010D ²	SW846 3010A ⁵
Lead	1.8 U	3.0	1.8	ug/l	1	12/29/21	01/06/22 FW	SW846 6010D ²	SW846 3010A ⁵
Magnesium	140 U	5000	140	ug/l	1	12/29/21	01/06/22 FW	SW846 6010D ²	SW846 3010A ⁵
Manganese	1.4 U	15	1.4	ug/l	1	12/29/21	01/06/22 FW	SW846 6010D ²	SW846 3010A ⁵
Mercury	0.095 U	0.20	0.095	ug/l	1	12/23/21	12/23/21 SB	SW846 7470A ¹	SW846 7470A ⁴
Molybdenum	3.6 U	20	3.6	ug/l	1	12/29/21	01/06/22 FW	SW846 6010D ²	SW846 3010A ⁵
Nickel	1.7 U	10	1.7	ug/l	1	12/29/21	01/06/22 FW	SW846 6010D ²	SW846 3010A ⁵
Potassium	200 U	10000	200	ug/l	1	12/29/21	01/06/22 FW	SW846 6010D ²	SW846 3010A ⁵
Selenium	4.9 U	10	4.9	ug/l	1	12/29/21	01/06/22 FW	SW846 6010D ²	SW846 3010A ⁵
Silver	6.1 U	10	6.1	ug/l	1	12/29/21	01/06/22 FW	SW846 6010D ²	SW846 3010A ⁵
Sodium	611 B	10000	570	ug/l	1	12/29/21	01/06/22 FW	SW846 6010D ²	SW846 3010A ⁵
Strontium	2.7 U	10	2.7	ug/l	1	12/29/21	01/06/22 FW	SW846 6010D ²	SW846 3010A ⁵
Thallium	2.1 B	10	1.8	ug/l	1	12/29/21	01/06/22 FW	SW846 6010D ²	SW846 3010A ⁵
Tin	3.7 U	10	3.7	ug/l	1	12/29/21	01/06/22 FW	SW846 6010D ²	SW846 3010A ⁵
Titanium	2.5 U	10	2.5	ug/l	1	12/29/21	01/06/22 FW	SW846 6010D ²	SW846 3010A ⁵
Vanadium	1.8 U	50	1.8	ug/l	1	12/29/21	01/06/22 FW	SW846 6010D ²	SW846 3010A ⁵
Zinc	15.3 B	20	6.9	ug/l	1	12/29/21	01/06/22 FW	SW846 6010D ²	SW846 3010A ⁵

- (1) Instrument QC Batch: MA51641
- (2) Instrument QC Batch: MA51692
- (3) Instrument QC Batch: MA51737
- (4) Prep QC Batch: MP30529
- (5) Prep QC Batch: MP30594

RL = Reporting Limit
 MDL = Method Detection Limit

U = Indicates a result < MDL
 B = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID: 11215131-121721-GW-SS-RB-1	Date Sampled: 12/17/21
Lab Sample ID: JD35489-3	Date Received: 12/17/21
Matrix: AQ - Equipment Blank	Percent Solids: n/a
Project: SJRWP - PCFSE, Harris County, TX	

4.6
4

General Chemistry

Analyte	Result	RL	MDL	Units	DF	Analyzed	By	Method
Alkalinity, Total as CaCO3 ^a	3.6 U	5.0	3.6	mg/l	1	12/22/21 14:27 NP	SM2320	B-11
Bromide	0.11 U	0.50	0.11	mg/l	1	01/03/22 02:53 HP	EPA 300/SW846	9056A
Chemical Oxygen Demand	11 U	20	11	mg/l	1	12/21/21 14:10 NP	SM5220	C-11,HACH8000
Chloride	0.83 U	2.0	0.83	mg/l	1	01/03/22 02:53 HP	EPA 300/SW846	9056A
Fluoride	0.055 U	0.20	0.055	mg/l	1	01/03/22 02:53 HP	EPA 300/SW846	9056A
Nitrogen, Ammonia	0.17 B	0.20	0.089	mg/l	1	01/05/22 16:47 MM	SM4500NH3	H-11LACHAT
Phosphorus, Total	0.027 U	0.050	0.027	mg/l	1	12/26/21	JOO EPA 365.3	
Solids, Total Dissolved	6.0 U	10	6.0	mg/l	1	12/21/21 14:00 SP	SM2540	C-11
Solids, Total Suspended	1.5 U	4.0	1.5	mg/l	1	12/22/21 15:48 SP	SM2540	D-11
Sulfate	0.89 U	2.0	0.89	mg/l	1	01/03/22 02:53 HP	EPA 300/SW846	9056A
Sulfide	0.48 U	2.0	0.48	mg/l	1	12/22/21 11:30 MP	SM4500S2-	F-11
Total Organic Carbon	0.72 U	1.0	0.72	mg/l	1	12/24/21 02:42 MB	SM5310	B-11

(a) Sample was titrated to a final pH of 4.2. Sample received with head space.

RL = Reporting Limit
MDL = Method Detection Limit

U = Indicates a result < MDL
B = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID: 11215131-121721-GW-SS-RB-1	Date Sampled: 12/17/21
Lab Sample ID: JD35489-3A	Date Received: 12/17/21
Matrix: AQ - Equipment Blank	Percent Solids: n/a
Project: SJRWP - PCFSE, Harris County, TX	

General Chemistry

Analyte	Result	RL	MDL	Units	DF	Analyzed By Method
BOD, 5 Day ^a	30.1	12	6.0	mg/l	1	12/17/21 22:19 ATXSM 5210B-2011
Nitrogen, Nitrate ^b	0.23 U	0.30	0.23	mg/l	1	12/18/21 10:39 ATXEPA 353.2
Nitrogen, Nitrate ^c	0.23 U	0.30	0.23	mg/l	1	12/18/21 10:39 ATXEPA353.2/SM4500NO2B
Nitrogen, Nitrate + Nitrite ^d	0.20 U	0.25	0.20	mg/l	5	12/18/21 10:39 ATXEPA 353.2
Nitrogen, Nitrite ^d	0.025 U	0.050	0.025	mg/l	5	12/18/21 09:34 ATXEPA 353.2
pH ^e	7.12			su	1	12/27/21 10:00 ATXSM4500H+ B-11

(a) Analysis performed at SGS Houston, TX.

(b) Calculated as: (Nitrogen, Nitrate + Nitrite) - (Nitrogen, Nitrite) Analysis performed at SGS Houston, TX.

(c) Calculated as: (Nitrogen, Nitrate + Nitrite) - (Nitrogen, Nitrite)

(d) Elevated reporting limit due to matrix interference. Analysis performed at SGS Houston, TX.

(e) Field analysis required. Received out of hold time and analyzed by request. Temp of pH Reading: 15.1 Deg. C
 Analysis performed at SGS Houston, TX.

RL = Reporting Limit
 MDL = Method Detection Limit

U = Indicates a result < MDL
 B = Indicates a result > = MDL but < RL

4.7
4

Report of Analysis

Client Sample ID: 11215131-121621-GW-SS-PZ-SW	Date Sampled: 12/16/21
Lab Sample ID: JD35489-4	Date Received: 12/17/21
Matrix: AQ - Ground Water	Percent Solids: n/a
Project: SJRWP - PCFSE, Harris County, TX	

Total Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed By	Method	Prep Method
Aluminum	150 U	200	150	ug/l	1	12/29/21	01/06/22 FW	SW846 6010D ²	SW846 3010A ⁵
Antimony	4.7 U	6.0	4.7	ug/l	1	12/29/21	01/06/22 FW	SW846 6010D ²	SW846 3010A ⁵
Arsenic	5.4	3.0	2.8	ug/l	1	12/29/21	01/14/22 FW	SW846 6010D ³	SW846 3010A ⁵
Barium	686	200	13	ug/l	1	12/29/21	01/06/22 FW	SW846 6010D ²	SW846 3010A ⁵
Beryllium	0.70 B	1.0	0.50	ug/l	1	12/29/21	01/06/22 FW	SW846 6010D ²	SW846 3010A ⁵
Boron	759	100	10	ug/l	1	12/29/21	01/06/22 FW	SW846 6010D ²	SW846 3010A ⁵
Cadmium	2.3 B	3.0	1.0	ug/l	1	12/29/21	01/06/22 FW	SW846 6010D ²	SW846 3010A ⁵
Calcium	163000	5000	99	ug/l	1	12/29/21	01/06/22 FW	SW846 6010D ²	SW846 3010A ⁵
Chromium	2.0 U	10	2.0	ug/l	1	12/29/21	01/06/22 FW	SW846 6010D ²	SW846 3010A ⁵
Cobalt	2.6 U	50	2.6	ug/l	1	12/29/21	01/06/22 FW	SW846 6010D ²	SW846 3010A ⁵
Copper	5.9 U	10	5.9	ug/l	1	12/29/21	01/06/22 FW	SW846 6010D ²	SW846 3010A ⁵
Iron	2330	100	32	ug/l	1	12/29/21	01/06/22 FW	SW846 6010D ²	SW846 3010A ⁵
Lead	1.8 U	3.0	1.8	ug/l	1	12/29/21	01/06/22 FW	SW846 6010D ²	SW846 3010A ⁵
Magnesium	186000	5000	140	ug/l	1	12/29/21	01/06/22 FW	SW846 6010D ²	SW846 3010A ⁵
Manganese	2360	15	1.4	ug/l	1	12/29/21	01/06/22 FW	SW846 6010D ²	SW846 3010A ⁵
Mercury	0.095 U	0.20	0.095	ug/l	1	12/23/21	12/23/21 SB	SW846 7470A ¹	SW846 7470A ⁴
Molybdenum	3.6 U	20	3.6	ug/l	1	12/29/21	01/06/22 FW	SW846 6010D ²	SW846 3010A ⁵
Nickel	1.7 U	10	1.7	ug/l	1	12/29/21	01/06/22 FW	SW846 6010D ²	SW846 3010A ⁵
Potassium	63400	10000	200	ug/l	1	12/29/21	01/06/22 FW	SW846 6010D ²	SW846 3010A ⁵
Selenium	4.9 U	10	4.9	ug/l	1	12/29/21	01/06/22 FW	SW846 6010D ²	SW846 3010A ⁵
Silver	6.1 U	10	6.1	ug/l	1	12/29/21	01/06/22 FW	SW846 6010D ²	SW846 3010A ⁵
Sodium	1270000	100000	5700	ug/l	10	12/29/21	01/14/22 FW	SW846 6010D ³	SW846 3010A ⁵
Strontium	1890	10	2.7	ug/l	1	12/29/21	01/06/22 FW	SW846 6010D ²	SW846 3010A ⁵
Thallium	1.8 U	10	1.8	ug/l	1	12/29/21	01/06/22 FW	SW846 6010D ²	SW846 3010A ⁵
Tin	3.7 U	10	3.7	ug/l	1	12/29/21	01/06/22 FW	SW846 6010D ²	SW846 3010A ⁵
Titanium	2.5 U	10	2.5	ug/l	1	12/29/21	01/06/22 FW	SW846 6010D ²	SW846 3010A ⁵
Vanadium	2.8 B	50	1.8	ug/l	1	12/29/21	01/06/22 FW	SW846 6010D ²	SW846 3010A ⁵
Zinc	13.9 B	20	6.9	ug/l	1	12/29/21	01/06/22 FW	SW846 6010D ²	SW846 3010A ⁵

- (1) Instrument QC Batch: MA51641
- (2) Instrument QC Batch: MA51692
- (3) Instrument QC Batch: MA51737
- (4) Prep QC Batch: MP30529
- (5) Prep QC Batch: MP30594

RL = Reporting Limit
 MDL = Method Detection Limit

U = Indicates a result < MDL
 B = Indicates a result > = MDL but < RL

4.8
4

Report of Analysis

Client Sample ID: 11215131-121621-GW-SS-PZ-SW	Date Sampled: 12/16/21
Lab Sample ID: JD35489-4	Date Received: 12/17/21
Matrix: AQ - Ground Water	Percent Solids: n/a
Project: SJRWP - PCFSE, Harris County, TX	

4.8
4

General Chemistry

Analyte	Result	RL	MDL	Units	DF	Analyzed	By	Method
Alkalinity, Total as CaCO ₃ ^a	717	10	7.1	mg/l	1	12/22/21 10:58 NP	SM2320	B-11
Bromide	8.3	5.0	1.1	mg/l	10	01/05/22 12:23 HP	EPA 300/SW846	9056A
Chemical Oxygen Demand	200	20	11	mg/l	1	12/21/21 15:17 NP	SM5220	C-11,HACH8000
Chloride	2680	20	8.3	mg/l	10	01/05/22 12:23 HP	EPA 300/SW846	9056A
Fluoride	0.75	0.20	0.055	mg/l	1	01/03/22 03:17 HP	EPA 300/SW846	9056A
Nitrogen, Ammonia	0.11 B	0.20	0.089	mg/l	1	01/05/22 16:49 MM	SM4500NH3	H-11LACHAT
Phosphorus, Total	0.74	0.10	0.054	mg/l	2	12/26/21	JOO EPA 365.3	
Solids, Total Dissolved	4730	10	6.0	mg/l	1	12/21/21 14:00 SP	SM2540	C-11
Solids, Total Suspended ^b	16.0	4.0	1.5	mg/l	1	12/21/21 16:20 SP	SM2540	D-11
Sulfate	241	2.0	0.89	mg/l	1	01/03/22 03:17 HP	EPA 300/SW846	9056A
Sulfide	0.48 U	2.0	0.48	mg/l	1	12/22/21 11:30 MP	SM4500S2-	F-11
Total Organic Carbon	16.8	1.0	0.72	mg/l	1	12/24/21 02:56 MB	SM5310	B-11

(a) Sample was titrated to a final pH of 4.5. Sample received with head space.

(b) Reported sample aliquot obtained from filtration of 25 mL of sample. Volume was reduced from 1 liter due to nature of sample matrix.

RL = Reporting Limit
MDL = Method Detection Limit

U = Indicates a result < MDL
B = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID: 11215131-121621-GW-SS-PZ-SW	Date Sampled: 12/16/21
Lab Sample ID: JD35489-4A	Date Received: 12/17/21
Matrix: AQ - Ground Water	Percent Solids: n/a
Project: SJRWP - PCFSE, Harris County, TX	

General Chemistry

Analyte	Result	RL	MDL	Units	DF	Analyzed By Method
BOD, 5 Day ^a	6.0 U	12	6.0	mg/l	1	12/17/21 22:19 ATXSM 5210B-2011
Nitrogen, Nitrate ^b	0.045 U	0.060	0.045	mg/l	1	12/18/21 10:40 ATXEPA 353.2
Nitrogen, Nitrate ^c	0.045 U	0.060	0.045	mg/l	1	12/18/21 10:40 ATXEPA353.2/SM4500NO2B
Nitrogen, Nitrate + Nitrite ^a	0.040 U	0.050	0.040	mg/l	1	12/18/21 10:40 ATXEPA 353.2
Nitrogen, Nitrite ^a	0.0051 B	0.010	0.0050	mg/l	1	12/18/21 09:35 ATXEPA 353.2
pH ^d	7.05			su	1	12/27/21 10:00 ATXSM4500H+ B-11

(a) Analysis performed at SGS Houston, TX.

(b) Calculated as: (Nitrogen, Nitrate + Nitrite) - (Nitrogen, Nitrite) Analysis performed at SGS Houston, TX.

(c) Calculated as: (Nitrogen, Nitrate + Nitrite) - (Nitrogen, Nitrite)

(d) Field analysis required. Received out of hold time and analyzed by request. Temp of pH Reading: 15.8 Deg. C
Analysis performed at SGS Houston, TX.

RL = Reporting Limit
MDL = Method Detection Limit

U = Indicates a result < MDL
B = Indicates a result > = MDL but < RL

4.9
4

Report of Analysis

Client Sample ID: 11215131-121621-GW-SS-PZ-SW	Date Sampled: 12/16/21
Lab Sample ID: JD35489-4F	Date Received: 12/17/21
Matrix: AQ - Groundwater Filtered	Percent Solids: n/a
Project: SJRWP - PCFSE, Harris County, TX	

Dissolved Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed By	Method	Prep Method
Aluminum	150 U	200	150	ug/l	1	12/29/21	01/06/22 FW	SW846 6010D ²	SW846 3010A ⁵
Antimony	4.7 U	6.0	4.7	ug/l	1	12/29/21	01/06/22 FW	SW846 6010D ²	SW846 3010A ⁵
Arsenic	5.1	3.0	2.8	ug/l	1	12/29/21	01/14/22 FW	SW846 6010D ³	SW846 3010A ⁵
Barium	681	200	13	ug/l	1	12/29/21	01/06/22 FW	SW846 6010D ²	SW846 3010A ⁵
Beryllium	0.80 B	1.0	0.50	ug/l	1	12/29/21	01/06/22 FW	SW846 6010D ²	SW846 3010A ⁵
Boron	757	100	10	ug/l	1	12/29/21	01/06/22 FW	SW846 6010D ²	SW846 3010A ⁵
Cadmium	2.2 B	3.0	1.0	ug/l	1	12/29/21	01/06/22 FW	SW846 6010D ²	SW846 3010A ⁵
Calcium	164000	5000	99	ug/l	1	12/29/21	01/06/22 FW	SW846 6010D ²	SW846 3010A ⁵
Chromium	2.0 U	10	2.0	ug/l	1	12/29/21	01/06/22 FW	SW846 6010D ²	SW846 3010A ⁵
Cobalt	2.6 U	50	2.6	ug/l	1	12/29/21	01/06/22 FW	SW846 6010D ²	SW846 3010A ⁵
Copper	5.9 U	10	5.9	ug/l	1	12/29/21	01/06/22 FW	SW846 6010D ²	SW846 3010A ⁵
Iron	6270	100	32	ug/l	1	12/29/21	01/06/22 FW	SW846 6010D ²	SW846 3010A ⁵
Lead	1.8 U	3.0	1.8	ug/l	1	12/29/21	01/06/22 FW	SW846 6010D ²	SW846 3010A ⁵
Magnesium	188000	5000	140	ug/l	1	12/29/21	01/06/22 FW	SW846 6010D ²	SW846 3010A ⁵
Manganese	2310	15	1.4	ug/l	1	12/29/21	01/06/22 FW	SW846 6010D ²	SW846 3010A ⁵
Mercury	0.095 U	0.20	0.095	ug/l	1	12/23/21	12/23/21 SB	SW846 7470A ¹	SW846 7470A ⁴
Molybdenum	3.6 U	20	3.6	ug/l	1	12/29/21	01/06/22 FW	SW846 6010D ²	SW846 3010A ⁵
Nickel	2.0 B	10	1.7	ug/l	1	12/29/21	01/06/22 FW	SW846 6010D ²	SW846 3010A ⁵
Potassium	64000	10000	200	ug/l	1	12/29/21	01/06/22 FW	SW846 6010D ²	SW846 3010A ⁵
Selenium	4.9 U	10	4.9	ug/l	1	12/29/21	01/06/22 FW	SW846 6010D ²	SW846 3010A ⁵
Silver	6.1 U	10	6.1	ug/l	1	12/29/21	01/06/22 FW	SW846 6010D ²	SW846 3010A ⁵
Sodium	1270000	100000	5700	ug/l	10	12/29/21	01/14/22 FW	SW846 6010D ³	SW846 3010A ⁵
Strontium	1910	10	2.7	ug/l	1	12/29/21	01/06/22 FW	SW846 6010D ²	SW846 3010A ⁵
Thallium	1.8 B	10	1.8	ug/l	1	12/29/21	01/06/22 FW	SW846 6010D ²	SW846 3010A ⁵
Tin	3.7 U	10	3.7	ug/l	1	12/29/21	01/06/22 FW	SW846 6010D ²	SW846 3010A ⁵
Titanium	2.5 U	10	2.5	ug/l	1	12/29/21	01/06/22 FW	SW846 6010D ²	SW846 3010A ⁵
Vanadium	3.7 B	50	1.8	ug/l	1	12/29/21	01/06/22 FW	SW846 6010D ²	SW846 3010A ⁵
Zinc	18.7 B	20	6.9	ug/l	1	12/29/21	01/06/22 FW	SW846 6010D ²	SW846 3010A ⁵

- (1) Instrument QC Batch: MA51641
- (2) Instrument QC Batch: MA51692
- (3) Instrument QC Batch: MA51737
- (4) Prep QC Batch: MP30529
- (5) Prep QC Batch: MP30594

RL = Reporting Limit
 MDL = Method Detection Limit

U = Indicates a result < MDL
 B = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID: 11215131-121621-GW-SS-PZ-SC	Date Sampled: 12/16/21
Lab Sample ID: JD35489-5	Date Received: 12/17/21
Matrix: AQ - Ground Water	Percent Solids: n/a
Project: SJRWP - PCFSE, Harris County, TX	

Total Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed By	Method	Prep Method
Aluminum	150 U	200	150	ug/l	1	12/29/21	01/06/22 FW	SW846 6010D ²	SW846 3010A ⁶
Antimony	4.7 U	6.0	4.7	ug/l	1	12/29/21	01/06/22 FW	SW846 6010D ²	SW846 3010A ⁶
Arsenic	2.8 U	3.0	2.8	ug/l	1	12/29/21	01/14/22 FW	SW846 6010D ³	SW846 3010A ⁶
Barium	420	200	13	ug/l	1	12/29/21	01/06/22 FW	SW846 6010D ²	SW846 3010A ⁶
Beryllium	0.50 U	1.0	0.50	ug/l	1	12/29/21	01/06/22 FW	SW846 6010D ²	SW846 3010A ⁶
Boron	816	100	10	ug/l	1	12/29/21	01/06/22 FW	SW846 6010D ²	SW846 3010A ⁶
Cadmium	2.5 B	3.0	1.0	ug/l	1	12/29/21	01/06/22 FW	SW846 6010D ²	SW846 3010A ⁶
Calcium	285000	10000	200	ug/l	2	12/29/21	01/18/22 ND	SW846 6010D ⁴	SW846 3010A ⁶
Chromium	2.9 B	10	2.0	ug/l	1	12/29/21	01/06/22 FW	SW846 6010D ²	SW846 3010A ⁶
Cobalt	2.6 U	50	2.6	ug/l	1	12/29/21	01/06/22 FW	SW846 6010D ²	SW846 3010A ⁶
Copper	5.9 U	10	5.9	ug/l	1	12/29/21	01/06/22 FW	SW846 6010D ²	SW846 3010A ⁶
Iron	1000	100	32	ug/l	1	12/29/21	01/06/22 FW	SW846 6010D ²	SW846 3010A ⁶
Lead	1.9 B	3.0	1.8	ug/l	1	12/29/21	01/06/22 FW	SW846 6010D ²	SW846 3010A ⁶
Magnesium	55100	5000	140	ug/l	1	12/29/21	01/06/22 FW	SW846 6010D ²	SW846 3010A ⁶
Manganese	1290	15	1.4	ug/l	1	12/29/21	01/06/22 FW	SW846 6010D ²	SW846 3010A ⁶
Mercury	0.095 U	0.20	0.095	ug/l	1	12/23/21	12/23/21 SB	SW846 7470A ¹	SW846 7470A ⁵
Molybdenum	3.6 U	20	3.6	ug/l	1	12/29/21	01/06/22 FW	SW846 6010D ²	SW846 3010A ⁶
Nickel	1.7 U	10	1.7	ug/l	1	12/29/21	01/06/22 FW	SW846 6010D ²	SW846 3010A ⁶
Potassium	128000	10000	200	ug/l	1	12/29/21	01/06/22 FW	SW846 6010D ²	SW846 3010A ⁶
Selenium	4.9 U	10	4.9	ug/l	1	12/29/21	01/06/22 FW	SW846 6010D ²	SW846 3010A ⁶
Silver	6.7 B	10	6.1	ug/l	1	12/29/21	01/06/22 FW	SW846 6010D ²	SW846 3010A ⁶
Sodium	156000	10000	570	ug/l	1	12/29/21	01/06/22 FW	SW846 6010D ²	SW846 3010A ⁶
Strontium	1200	10	2.7	ug/l	1	12/29/21	01/06/22 FW	SW846 6010D ²	SW846 3010A ⁶
Thallium	1.8 U	10	1.8	ug/l	1	12/29/21	01/06/22 FW	SW846 6010D ²	SW846 3010A ⁶
Tin	3.7 U	10	3.7	ug/l	1	12/29/21	01/06/22 FW	SW846 6010D ²	SW846 3010A ⁶
Titanium	2.5 U	10	2.5	ug/l	1	12/29/21	01/06/22 FW	SW846 6010D ²	SW846 3010A ⁶
Vanadium	2.6 B	50	1.8	ug/l	1	12/29/21	01/06/22 FW	SW846 6010D ²	SW846 3010A ⁶
Zinc	13.5 B	20	6.9	ug/l	1	12/29/21	01/06/22 FW	SW846 6010D ²	SW846 3010A ⁶

- (1) Instrument QC Batch: MA51641
- (2) Instrument QC Batch: MA51692
- (3) Instrument QC Batch: MA51737
- (4) Instrument QC Batch: MA51744
- (5) Prep QC Batch: MP30529
- (6) Prep QC Batch: MP30594

RL = Reporting Limit
 MDL = Method Detection Limit

U = Indicates a result < MDL
 B = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID: 11215131-121621-GW-SS-PZ-SC Lab Sample ID: JD35489-5 Matrix: AQ - Ground Water Project: SJRWP - PCFSE, Harris County, TX	Date Sampled: 12/16/21 Date Received: 12/17/21 Percent Solids: n/a
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4.11
4

General Chemistry

Analyte	Result	RL	MDL	Units	DF	Analyzed	By	Method
Alkalinity, Total as CaCO ₃ ^a	1120	5.0	3.6	mg/l	1	12/22/21 10:58 NP	SM2320	B-11
Bromide	3.4	0.50	0.11	mg/l	1	01/03/22 05:17 HP	EPA 300/SW846	9056A
Chemical Oxygen Demand	133	20	11	mg/l	1	12/21/21 15:17 NP	SM5220	C-11,HACH8000
Chloride	133	2.0	0.83	mg/l	1	01/03/22 05:17 HP	EPA 300/SW846	9056A
Fluoride	0.61	0.20	0.055	mg/l	1	01/03/22 05:17 HP	EPA 300/SW846	9056A
Nitrogen, Ammonia	7.1	0.20	0.089	mg/l	1	01/05/22 16:40 MM	SM4500NH3	H-11LACHAT
Phosphorus, Total	0.97	0.20	0.11	mg/l	1	12/26/21	JOO EPA 365.3	
Solids, Total Dissolved	1500	10	6.0	mg/l	1	12/21/21 14:00 SP	SM2540	C-11
Solids, Total Suspended ^b	1.5 U	4.0	1.5	mg/l	1	12/21/21 16:20 SP	SM2540	D-11
Sulfate	32.1	2.0	0.89	mg/l	1	01/03/22 05:17 HP	EPA 300/SW846	9056A
Sulfide	4.3	2.0	0.48	mg/l	1	12/22/21 11:30 MP	SM4500S2-	F-11
Total Organic Carbon	37.0	1.0	0.72	mg/l	1	12/24/21 04:48 MB	SM5310	B-11

(a) Sample was titrated to a final pH of 4.5. Sample received with head space.

(b) Reported sample aliquot obtained from filtration of 100 mL of sample. Volume was reduced from 1 liter due to nature of sample matrix.

RL = Reporting Limit
 MDL = Method Detection Limit

U = Indicates a result < MDL
 B = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID: 11215131-121621-GW-SS-PZ-SC	Date Sampled: 12/16/21
Lab Sample ID: JD35489-5A	Date Received: 12/17/21
Matrix: AQ - Ground Water	Percent Solids: n/a
Project: SJRWP - PCFSE, Harris County, TX	

4.12
4

General Chemistry

Analyte	Result	RL	MDL	Units	DF	Analyzed	By Method
BOD, 5 Day ^a	1.0 U	2.0	1.0	mg/l	1	12/17/21 22:23	ATXSM 5210B-2011
Nitrogen, Nitrate ^b	0.045 U	0.060	0.045	mg/l	1	12/18/21 10:45	ATXEPA 353.2
Nitrogen, Nitrate ^c	0.045 U	0.060	0.045	mg/l	1	12/18/21 10:45	ATXEPA353.2/SM4500NO2B
Nitrogen, Nitrate + Nitrite ^a	0.040 U	0.050	0.040	mg/l	1	12/18/21 10:45	ATXEPA 353.2
Nitrogen, Nitrite ^a	0.0050 U	0.010	0.0050	mg/l	1	12/18/21 09:36	ATXEPA 353.2
pH ^d	6.08			su	1	12/27/21 10:00	ATXSM4500H+ B-11

(a) Analysis performed at SGS Houston, TX.

(b) Calculated as: (Nitrogen, Nitrate + Nitrite) - (Nitrogen, Nitrite) Analysis performed at SGS Houston, TX.

(c) Calculated as: (Nitrogen, Nitrate + Nitrite) - (Nitrogen, Nitrite)

(d) Field analysis required. Received out of hold time and analyzed by request. Temp of pH Reading: 16.4 Deg. C
Analysis performed at SGS Houston, TX.

RL = Reporting Limit
MDL = Method Detection Limit

U = Indicates a result < MDL
B = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID: 11215131-121621-GW-SS-PZ-SC	Date Sampled: 12/16/21
Lab Sample ID: JD35489-5F	Date Received: 12/17/21
Matrix: AQ - Groundwater Filtered	Percent Solids: n/a
Project: SJRWP - PCFSE, Harris County, TX	

Dissolved Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed By	Method	Prep Method
Aluminum	150 U	200	150	ug/l	1	12/29/21	01/06/22 FW	SW846 6010D ²	SW846 3010A ⁶
Antimony	4.7 U	6.0	4.7	ug/l	1	12/29/21	01/06/22 FW	SW846 6010D ²	SW846 3010A ⁶
Arsenic	3.4	3.0	2.8	ug/l	1	12/29/21	01/14/22 FW	SW846 6010D ³	SW846 3010A ⁶
Barium	426	200	13	ug/l	1	12/29/21	01/06/22 FW	SW846 6010D ²	SW846 3010A ⁶
Beryllium	0.50 U	1.0	0.50	ug/l	1	12/29/21	01/06/22 FW	SW846 6010D ²	SW846 3010A ⁶
Boron	837	100	10	ug/l	1	12/29/21	01/06/22 FW	SW846 6010D ²	SW846 3010A ⁶
Cadmium	2.4 B	3.0	1.0	ug/l	1	12/29/21	01/06/22 FW	SW846 6010D ²	SW846 3010A ⁶
Calcium	289000	10000	200	ug/l	2	12/29/21	01/18/22 ND	SW846 6010D ⁴	SW846 3010A ⁶
Chromium	2.7 B	10	2.0	ug/l	1	12/29/21	01/06/22 FW	SW846 6010D ²	SW846 3010A ⁶
Cobalt	2.6 U	50	2.6	ug/l	1	12/29/21	01/06/22 FW	SW846 6010D ²	SW846 3010A ⁶
Copper	5.9 U	10	5.9	ug/l	1	12/29/21	01/06/22 FW	SW846 6010D ²	SW846 3010A ⁶
Iron	1220	100	32	ug/l	1	12/29/21	01/06/22 FW	SW846 6010D ²	SW846 3010A ⁶
Lead	1.8 U	3.0	1.8	ug/l	1	12/29/21	01/06/22 FW	SW846 6010D ²	SW846 3010A ⁶
Magnesium	56600	5000	140	ug/l	1	12/29/21	01/06/22 FW	SW846 6010D ²	SW846 3010A ⁶
Manganese	1360	15	1.4	ug/l	1	12/29/21	01/06/22 FW	SW846 6010D ²	SW846 3010A ⁶
Mercury	0.095 U	0.20	0.095	ug/l	1	12/23/21	12/23/21 SB	SW846 7470A ¹	SW846 7470A ⁵
Molybdenum	3.6 U	20	3.6	ug/l	1	12/29/21	01/06/22 FW	SW846 6010D ²	SW846 3010A ⁶
Nickel	1.7 U	10	1.7	ug/l	1	12/29/21	01/06/22 FW	SW846 6010D ²	SW846 3010A ⁶
Potassium	130000	10000	200	ug/l	1	12/29/21	01/06/22 FW	SW846 6010D ²	SW846 3010A ⁶
Selenium	4.9 U	10	4.9	ug/l	1	12/29/21	01/06/22 FW	SW846 6010D ²	SW846 3010A ⁶
Silver	6.2 B	10	6.1	ug/l	1	12/29/21	01/06/22 FW	SW846 6010D ²	SW846 3010A ⁶
Sodium	163000	10000	570	ug/l	1	12/29/21	01/06/22 FW	SW846 6010D ²	SW846 3010A ⁶
Strontium	1220	10	2.7	ug/l	1	12/29/21	01/06/22 FW	SW846 6010D ²	SW846 3010A ⁶
Thallium	1.8 B	10	1.8	ug/l	1	12/29/21	01/06/22 FW	SW846 6010D ²	SW846 3010A ⁶
Tin	3.7 U	10	3.7	ug/l	1	12/29/21	01/06/22 FW	SW846 6010D ²	SW846 3010A ⁶
Titanium	2.5 U	10	2.5	ug/l	1	12/29/21	01/06/22 FW	SW846 6010D ²	SW846 3010A ⁶
Vanadium	2.3 B	50	1.8	ug/l	1	12/29/21	01/06/22 FW	SW846 6010D ²	SW846 3010A ⁶
Zinc	6.9 U	20	6.9	ug/l	1	12/29/21	01/06/22 FW	SW846 6010D ²	SW846 3010A ⁶

- (1) Instrument QC Batch: MA51641
- (2) Instrument QC Batch: MA51692
- (3) Instrument QC Batch: MA51737
- (4) Instrument QC Batch: MA51744
- (5) Prep QC Batch: MP30529
- (6) Prep QC Batch: MP30594

RL = Reporting Limit
 MDL = Method Detection Limit

U = Indicates a result < MDL
 B = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID: 11215131-121621-GW-SS-PZ-NC	Date Sampled: 12/16/21
Lab Sample ID: JD35489-6	Date Received: 12/17/21
Matrix: AQ - Ground Water	Percent Solids: n/a
Project: SJRWP - PCFSE, Harris County, TX	

Total Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed By	Method	Prep Method
Aluminum	191 B	200	150	ug/l	1	12/29/21	01/06/22 FW	SW846 6010D ²	SW846 3010A ⁶
Antimony	6.4	6.0	4.7	ug/l	1	12/29/21	01/14/22 FW	SW846 6010D ³	SW846 3010A ⁶
Arsenic	2.8 U	3.0	2.8	ug/l	1	12/29/21	01/14/22 FW	SW846 6010D ³	SW846 3010A ⁶
Barium	115 B	200	13	ug/l	1	12/29/21	01/06/22 FW	SW846 6010D ²	SW846 3010A ⁶
Beryllium	2.6	1.0	0.50	ug/l	1	12/29/21	01/06/22 FW	SW846 6010D ²	SW846 3010A ⁶
Boron	628	100	10	ug/l	1	12/29/21	01/06/22 FW	SW846 6010D ²	SW846 3010A ⁶
Cadmium	1.2 B	3.0	1.0	ug/l	1	12/29/21	01/06/22 FW	SW846 6010D ²	SW846 3010A ⁶
Calcium	250000	25000	500	ug/l	5	12/29/21	01/18/22 ND	SW846 6010D ⁴	SW846 3010A ⁶
Chromium	2.4 B	10	2.0	ug/l	1	12/29/21	01/06/22 FW	SW846 6010D ²	SW846 3010A ⁶
Cobalt	2.6 U	50	2.6	ug/l	1	12/29/21	01/06/22 FW	SW846 6010D ²	SW846 3010A ⁶
Copper	5.9 U	10	5.9	ug/l	1	12/29/21	01/06/22 FW	SW846 6010D ²	SW846 3010A ⁶
Iron	10700	100	32	ug/l	1	12/29/21	01/06/22 FW	SW846 6010D ²	SW846 3010A ⁶
Lead	2.4 B	3.0	1.8	ug/l	1	12/29/21	01/14/22 FW	SW846 6010D ³	SW846 3010A ⁶
Magnesium	141000	5000	140	ug/l	1	12/29/21	01/06/22 FW	SW846 6010D ²	SW846 3010A ⁶
Manganese	731	15	1.4	ug/l	1	12/29/21	01/06/22 FW	SW846 6010D ²	SW846 3010A ⁶
Mercury	0.095 U	0.20	0.095	ug/l	1	12/23/21	12/23/21 SB	SW846 7470A ¹	SW846 7470A ⁵
Molybdenum	5.4 B	20	3.6	ug/l	1	12/29/21	01/06/22 FW	SW846 6010D ²	SW846 3010A ⁶
Nickel	1.7 U	10	1.7	ug/l	1	12/29/21	01/06/22 FW	SW846 6010D ²	SW846 3010A ⁶
Potassium	75800	10000	200	ug/l	1	12/29/21	01/06/22 FW	SW846 6010D ²	SW846 3010A ⁶
Selenium	5.9 B	10	4.9	ug/l	1	12/29/21	01/06/22 FW	SW846 6010D ²	SW846 3010A ⁶
Silver	6.1 U	10	6.1	ug/l	1	12/29/21	01/06/22 FW	SW846 6010D ²	SW846 3010A ⁶
Sodium	421000	50000	2800	ug/l	5	12/29/21	01/14/22 FW	SW846 6010D ³	SW846 3010A ⁶
Strontium	1800	10	2.7	ug/l	1	12/29/21	01/06/22 FW	SW846 6010D ²	SW846 3010A ⁶
Thallium	5.5 B	10	1.8	ug/l	1	12/29/21	01/06/22 FW	SW846 6010D ²	SW846 3010A ⁶
Tin	3.7 U	10	3.7	ug/l	1	12/29/21	01/06/22 FW	SW846 6010D ²	SW846 3010A ⁶
Titanium	2.5 U	10	2.5	ug/l	1	12/29/21	01/06/22 FW	SW846 6010D ²	SW846 3010A ⁶
Vanadium	2.5 B	50	1.8	ug/l	1	12/29/21	01/06/22 FW	SW846 6010D ²	SW846 3010A ⁶
Zinc	22.8	20	6.9	ug/l	1	12/29/21	01/06/22 FW	SW846 6010D ²	SW846 3010A ⁶

- (1) Instrument QC Batch: MA51641
- (2) Instrument QC Batch: MA51692
- (3) Instrument QC Batch: MA51737
- (4) Instrument QC Batch: MA51744
- (5) Prep QC Batch: MP30529
- (6) Prep QC Batch: MP30594

RL = Reporting Limit
 MDL = Method Detection Limit

U = Indicates a result < MDL
 B = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID: 11215131-121621-GW-SS-PZ-NC	Date Sampled: 12/16/21
Lab Sample ID: JD35489-6	Date Received: 12/17/21
Matrix: AQ - Ground Water	Percent Solids: n/a
Project: SJRWP - PCFSE, Harris County, TX	

4.14
4

General Chemistry

Analyte	Result	RL	MDL	Units	DF	Analyzed	By	Method
Alkalinity, Total as CaCO3 ^a	1140	5.0	3.6	mg/l	1	12/22/21 10:58 NP	SM2320	B-11
Bromide ^b	1.0 B	2.0	0.42	mg/l	4	01/05/22 12:47 HP	EPA 300/SW846	9056A
Chemical Oxygen Demand	66.7	20	11	mg/l	1	12/21/21 15:17 NP	SM5220	C-11,HACH8000
Chloride	185	2.0	0.83	mg/l	1	01/03/22 05:41 HP	EPA 300/SW846	9056A
Fluoride	0.61	0.20	0.055	mg/l	1	01/03/22 05:41 HP	EPA 300/SW846	9056A
Nitrogen, Ammonia	5.6	0.20	0.089	mg/l	1	01/05/22 16:50 MM	SM4500NH3	H-11LACHAT
Phosphorus, Total	0.34	0.20	0.11	mg/l	1	12/26/21	JOO EPA 365.3	
Solids, Total Dissolved	2130	10	6.0	mg/l	1	12/21/21 14:00 SP	SM2540	C-11
Solids, Total Suspended ^c	16.0	4.0	1.5	mg/l	1	12/21/21 16:20 SP	SM2540	D-11
Sulfate	714	8.0	3.5	mg/l	4	01/05/22 12:47 HP	EPA 300/SW846	9056A
Sulfide	0.48 U	2.0	0.48	mg/l	1	12/22/21 11:30 MP	SM4500S2-	F-11
Total Organic Carbon	17.3	1.0	0.72	mg/l	1	12/24/21 03:58 MB	SM5310	B-11

(a) Sample was titrated to a final pH of 4.5. Sample received with head space.

(b) Elevated sample detection limit due to difficult sample matrix.

(c) Reported sample aliquot obtained from filtration of 50 mL of sample. Volume was reduced from 1 liter due to nature of sample matrix.

RL = Reporting Limit
MDL = Method Detection Limit

U = Indicates a result < MDL
B = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID: 11215131-121621-GW-SS-PZ-NC	Date Sampled: 12/16/21
Lab Sample ID: JD35489-6A	Date Received: 12/17/21
Matrix: AQ - Ground Water	Percent Solids: n/a
Project: SJRWP - PCFSE, Harris County, TX	

4.15
4

General Chemistry

Analyte	Result	RL	MDL	Units	DF	Analyzed By Method
BOD, 5 Day ^a	6.0 U	12	6.0	mg/l	1	12/17/21 22:23 ATXSM 5210B-2011
Nitrogen, Nitrate ^b	0.045 U	0.060	0.045	mg/l	1	12/18/21 10:47 ATXEPA 353.2
Nitrogen, Nitrate ^c	0.045 U	0.060	0.045	mg/l	1	12/18/21 10:47 ATXEPA353.2/SM4500NO2B
Nitrogen, Nitrate + Nitrite ^a	0.040 U	0.050	0.040	mg/l	1	12/18/21 10:47 ATXEPA 353.2
Nitrogen, Nitrite ^a	0.0058 B	0.010	0.0050	mg/l	1	12/18/21 09:36 ATXEPA 353.2
pH ^d	6.89			su	1	12/27/21 10:00 ATXSM4500H+ B-11

- (a) Analysis performed at SGS Houston, TX.
- (b) Calculated as: (Nitrogen, Nitrate + Nitrite) - (Nitrogen, Nitrite) Analysis performed at SGS Houston, TX.
- (c) Calculated as: (Nitrogen, Nitrate + Nitrite) - (Nitrogen, Nitrite)
- (d) Field analysis required. Received out of hold time and analyzed by request. Temp of pH Reading: 16.2 Deg. C
Analysis performed at SGS Houston, TX.

RL = Reporting Limit
MDL = Method Detection Limit

U = Indicates a result < MDL
B = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID: 11215131-121621-GW-SS-PZ-NC	Date Sampled: 12/16/21
Lab Sample ID: JD35489-6F	Date Received: 12/17/21
Matrix: AQ - Groundwater Filtered	Percent Solids: n/a
Project: SJRWP - PCFSE, Harris County, TX	

Dissolved Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed By	Method	Prep Method
Aluminum	150 U	200	150	ug/l	1	12/29/21	01/06/22 FW	SW846 6010D ²	SW846 3010A ⁶
Antimony	6.8	6.0	4.7	ug/l	1	12/29/21	01/14/22 FW	SW846 6010D ³	SW846 3010A ⁶
Arsenic	3.3	3.0	2.8	ug/l	1	12/29/21	01/14/22 FW	SW846 6010D ³	SW846 3010A ⁶
Barium	117 B	200	13	ug/l	1	12/29/21	01/06/22 FW	SW846 6010D ²	SW846 3010A ⁶
Beryllium	2.6	1.0	0.50	ug/l	1	12/29/21	01/06/22 FW	SW846 6010D ²	SW846 3010A ⁶
Boron	643	100	10	ug/l	1	12/29/21	01/06/22 FW	SW846 6010D ²	SW846 3010A ⁶
Cadmium	1.3 B	3.0	1.0	ug/l	1	12/29/21	01/06/22 FW	SW846 6010D ²	SW846 3010A ⁶
Calcium	249000	25000	500	ug/l	5	12/29/21	01/18/22 ND	SW846 6010D ⁴	SW846 3010A ⁶
Chromium	2.4 B	10	2.0	ug/l	1	12/29/21	01/06/22 FW	SW846 6010D ²	SW846 3010A ⁶
Cobalt	2.6 U	50	2.6	ug/l	1	12/29/21	01/06/22 FW	SW846 6010D ²	SW846 3010A ⁶
Copper	5.9 U	10	5.9	ug/l	1	12/29/21	01/06/22 FW	SW846 6010D ²	SW846 3010A ⁶
Iron	10500	100	32	ug/l	1	12/29/21	01/06/22 FW	SW846 6010D ²	SW846 3010A ⁶
Lead	1.8 U	3.0	1.8	ug/l	1	12/29/21	01/14/22 FW	SW846 6010D ³	SW846 3010A ⁶
Magnesium	143000	5000	140	ug/l	1	12/29/21	01/06/22 FW	SW846 6010D ²	SW846 3010A ⁶
Manganese	743	15	1.4	ug/l	1	12/29/21	01/06/22 FW	SW846 6010D ²	SW846 3010A ⁶
Mercury	0.095 U	0.20	0.095	ug/l	1	12/23/21	12/23/21 SB	SW846 7470A ¹	SW846 7470A ⁵
Molybdenum	5.6 B	20	3.6	ug/l	1	12/29/21	01/06/22 FW	SW846 6010D ²	SW846 3010A ⁶
Nickel	1.7 U	10	1.7	ug/l	1	12/29/21	01/06/22 FW	SW846 6010D ²	SW846 3010A ⁶
Potassium	77300	10000	200	ug/l	1	12/29/21	01/06/22 FW	SW846 6010D ²	SW846 3010A ⁶
Selenium	5.8 B	10	4.9	ug/l	1	12/29/21	01/06/22 FW	SW846 6010D ²	SW846 3010A ⁶
Silver	6.1 U	10	6.1	ug/l	1	12/29/21	01/06/22 FW	SW846 6010D ²	SW846 3010A ⁶
Sodium	425000	50000	2800	ug/l	5	12/29/21	01/14/22 FW	SW846 6010D ³	SW846 3010A ⁶
Strontium	1820	10	2.7	ug/l	1	12/29/21	01/06/22 FW	SW846 6010D ²	SW846 3010A ⁶
Thallium	5.8 B	10	1.8	ug/l	1	12/29/21	01/06/22 FW	SW846 6010D ²	SW846 3010A ⁶
Tin	3.7 U	10	3.7	ug/l	1	12/29/21	01/06/22 FW	SW846 6010D ²	SW846 3010A ⁶
Titanium	2.5 U	10	2.5	ug/l	1	12/29/21	01/06/22 FW	SW846 6010D ²	SW846 3010A ⁶
Vanadium	1.8 B	50	1.8	ug/l	1	12/29/21	01/06/22 FW	SW846 6010D ²	SW846 3010A ⁶
Zinc	7.9 B	20	6.9	ug/l	1	12/29/21	01/06/22 FW	SW846 6010D ²	SW846 3010A ⁶

- (1) Instrument QC Batch: MA51641
- (2) Instrument QC Batch: MA51692
- (3) Instrument QC Batch: MA51737
- (4) Instrument QC Batch: MA51744
- (5) Prep QC Batch: MP30529
- (6) Prep QC Batch: MP30594

RL = Reporting Limit
 MDL = Method Detection Limit

U = Indicates a result < MDL
 B = Indicates a result > = MDL but < RL

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody



C

HAIN OF CUSTODY

SGS North America Inc. - Dayton
2235 Route 130, Dayton, NJ 08810
TEL. 732-329-0200 FAX 732-329-3499
www.sgs.com/nasusa

PEDEX Tracking # 1905-27042803
Bottle Order Control # KR-11821-63
SGS Order # JD35489

Client/Reporting Information Project Information Requested Analytes (use TEST CODE sheet) Matrix Codes

Client Name: GHD
Address: 11451 Katy Freeway Suite 400, Houston TX 77079
Project # 11215131
Project Manager: Stephen Schulz

Requested Analytes table with columns for various chemical tests like ALK, TDS, AMN, BRO, CHL, F, SO4, etc.

Collection table with columns for Field ID, MEQ/ML, Date, Time, Matrix, and Number of preserved bottles.

Turnaround Time (Business days)
Data Deliverable Information
Comments / Special Instructions

Sample inventory is verified upon receipt in the Laboratory
Inquired by: [Signatures]
Date Time: [Signatures]

Form:SM088-03C (revised 2/12/18)

http://www.sgs.com/en/it conditions.





CHAIN OF CUSTODY

SGS North America Inc. - Dayton
2235 Route 130, Dayton, NJ 08810
TEL. 732-329-0200 FAX 732-329-3499
www.sgs.com/ehsusa

Table with tracking and control information including FED-EX Tracking #, SGS Quote #, and SGS Job # JD35489.

Main data entry section containing Client/Reporting Information, Project Information, Requested Analysis, Matrix Codes, and a detailed table for Lab Sample #, Field ID, Date, Time, and various chemical analysis results.

Turnaround Time (Business days) Data Deliverable Information Comments / Special Instructions

Approval and delivery options section including checkboxes for 'Std. 10 Business Days', 'RUSH' options, and 'Data Deliverable Information' choices.

Chain of custody table with columns for Relinquished By, Date Time, Received By, and Custody #, showing the sequence of sample handoffs.





GW

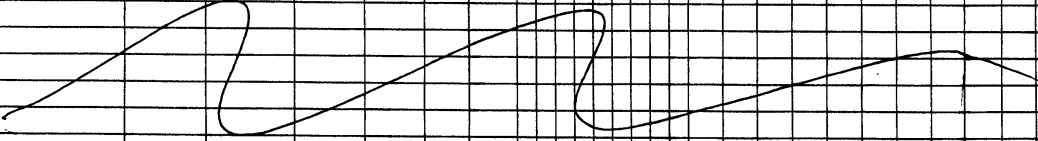
CHAIN OF CUSTODY

SGS North America Inc. - Dayton
 2235 Route 130, Dayton, NJ 08810
 TEL 732-329-0200 FAX 732-329-3499
 www.sgs.com/enhsusa

FED-EX Tracking # **490527042852**
 SGS Quote #
 Bottle Order Control # **14811621-63**
 SGS Job # **JD35489**

Client / Reporting Information		Project Information		Requested Analytes (see TEST CODE sheet)												Matrix Codes
Company Name: GHD Address: 11451 Katy Freeway Suite 400 State: TX Zip: 77079 City: Harris County TX Contact: Megan Willis E-mail: Megan.willis@ghd.com Phone: 3-907-3710 Fax: 832-2281544		Project Name: SJRWP - PCFSE (Groundwater Samples) Street: Channelview City: Harris County TX Project #: 11218131 Company Name: SGS # CRATX0499 Project Manager: Stephen Saker Phone: 832-2281544		Billing Information (If different from Report to) Company Name: _____ Street Address: _____ City: _____ State: _____ Zip: _____ Client Purchase Order #: _____ Attention: _____												DW - Drinking Water GW - Ground Water WW - Water SW - Surface Water SO - Soil SL - Sludge SED - Sediment OI - Oil LIQ - Other Liquid AIR - Air SOL - Other Solid WP - Wipe FB - Field Blank EB - Equipment Blank RB - Rinse Blank TB - Trip Blank
Turnaround Time (Business days): _____		Data Deliverable Information <input type="checkbox"/> Commercial "A" (Level 1) <input type="checkbox"/> NYASP Category A <input type="checkbox"/> Commercial "B" (Level 2) <input type="checkbox"/> NYASP Category B <input checked="" type="checkbox"/> FULLT1 (Level 3+4) <input type="checkbox"/> State Forms <input type="checkbox"/> NJ Reduced <input type="checkbox"/> EDD Format <input type="checkbox"/> Commercial "C" <input type="checkbox"/> Other _____ <input type="checkbox"/> NJ Data of Known Quality Protocol Reporting Commercial "A" = Results Only; Commercial "B" = Results + QC Summary NJ Reduced = Results + QC Summary + Partial Raw data												Log in under JD35489 Initial Assessment: AR/B Label Verification: TS		
Approved by (SGS Project Manager)/Date: _____		Sample inventory is verified upon receipt in the laboratory														
Inquisition 1: Steph Saker Date Time: 12/17/21 Received By: [Signature] Inquisition 2: [Signature] Date Time: 12/17/21 Received By: Fredex Inquisition 3: [Signature] Date Time: _____ Received By: _____		Relinquished By: [Signature] Date Time: 11:10 Received By: [Signature] Relinquished By: Fredex Date Time: 12/17/21 Received By: [Signature]												Custody Seal # _____ <input type="checkbox"/> Intact <input type="checkbox"/> Preserved where applicable <input type="checkbox"/> On Ice <input type="checkbox"/> Cooler Temp: 10°C <input type="checkbox"/> Not Intact		

SF
GF



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6v

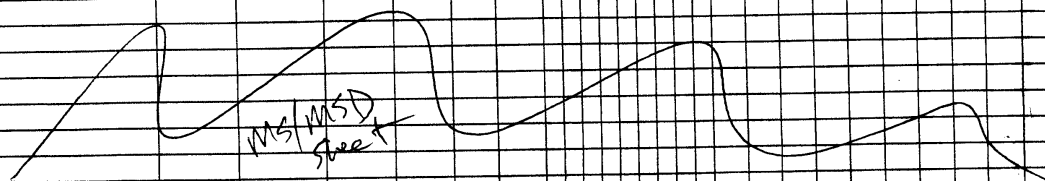
CHAIN OF CUSTODY

SGS North America Inc. - Dayton
 2235 Route 130, Dayton, NJ 08810
 TEL. 732-329-0200 FAX 732-329-3499
 www.sgs.com/ehsus

FED/EX Tracking # 4906 2704 2830
 Bottle Order Control # KA-111821-63
 SGS Quote # JD35489

Client / Reporting Information		Project Information		Requested Analysis (use TEST CODES/short)												Matrix Codes	
Company Name: GHD Address: 11451 Katy Freeway Suite 400 State: TX Zip: 77079 Contact: Megan Willie E-mail: Meagan.willie@ghd.com Phone: 3-807-3710 Fax: 832288154 Project Manager: Stephen Schur		Project Name: SJRWP - PCFSE (Groundwater Samples) Street: Channelview City: Harris County State: TX Billing Information (if different from Report to): Company Name: _____ Street Address: _____ City: _____ State: _____ Zip: _____ Client Purchase Order #: 11215131 Project #: SGS # CRATXH90488 Attention: _____		Total Metals (MTAL plus B, MO, SR, SN, TI by 6010) Discontinued/FF Metals (MTAL plus B, MO, SR, SN, TI by 6010) ALK, TDS AMN BRO, CHL, F, SO4 BOD (SGS Houston to analyze short hold) COD, TP04 XN030, pH (SGS Houston to analyze short hold) S TOC TSS												DW - Drinking Water GW - Ground Water WW - Water SW - Surface Water SO - Soil SL - Sludge SED - Sediment OI - Oil LIQ - Other Liquid AIR - Air SOL - Other Solid WP - Wipe FB-Field Blank EB-Equipment Blank RB- Rinse Blank TB-Trip Blank	
Field ID / Point of Collection MECH/DI/Vial # Date Time Sampled by Matrix # of bottles		HCl MECH HNO3 H2SO4 HNO3 DI Water MECH ENCORE												LAB USE ONLY A24 628 622TY 1414			
Turnaround Time (Business days) <input checked="" type="checkbox"/> Std. 10 Business Days <input type="checkbox"/> 5 Day RUSH <input type="checkbox"/> 3 Day RUSH <input type="checkbox"/> 2 Day RUSH <input type="checkbox"/> 1 Day RUSH <input type="checkbox"/> other		Approved by (SGS Project Manager)/Date: _____		Data Deliverable Information <input type="checkbox"/> Commercial "A" (Level 1) <input type="checkbox"/> Commercial "B" (Level 2) <input checked="" type="checkbox"/> FULLT1 (Level 3+4) <input type="checkbox"/> NJ Reduced <input type="checkbox"/> Commercial "C" <input type="checkbox"/> NJ Data of Known Quality Protocol Reporting <input type="checkbox"/> Commercial "A" = Results Only; Commercial "B" = Results + QC Summary <input type="checkbox"/> NJ Reduced = Results + QC Summary + Partial Raw data												Comments / Special Instructions Log in under JD35489 Initial Assessment: AR 7A Label Verification: AR	
Inquisition by Sampler: _____ Date Time: 12/13/21 Inquisition by Receiver: _____ Date Time: 12/14/21		Received By: 1 Received By: 2 Received By: 3 Received By: 4 Received By: 5		Sample Custody must be documented below each time sample changes possession, including courier delivery. Relinquished By: 2 Relinquished By: 4 Custody Seal # <input type="checkbox"/> Intact <input type="checkbox"/> Not intact <input type="checkbox"/> Preserved where applicable <input type="checkbox"/> On Ice <input type="checkbox"/> Cooler Temp.												Sample Inventory is verified upon receipt in the Laboratory	

SF



SGS Sample Receipt Summary

Job Number: JD35489

Client: GHD SERVICES INC.

Project: SJRWP - PCFSE, HARRIS COUNTY, TX (GW B

Date / Time Received: 12/18/2021 11:00:00 AM

Delivery Method:

Airbill #'s:

Cooler Temps (Raw Measured) °C: Cooler 4: (5.0);

Cooler Temps (Corrected) °C: Cooler 4: (3.6);

Cooler Security

- | | | | | | | | |
|---------------------------|-------------------------------------|-----------|--------------------------|-----------------------|-------------------------------------|-----------|--------------------------|
| | <u>Y</u> | <u>or</u> | <u>N</u> | | <u>Y</u> | <u>or</u> | <u>N</u> |
| 1. Custody Seals Present: | <input checked="" type="checkbox"/> | | <input type="checkbox"/> | 3. COC Present: | <input checked="" type="checkbox"/> | | <input type="checkbox"/> |
| 2. Custody Seals Intact: | <input checked="" type="checkbox"/> | | <input type="checkbox"/> | 4. Smpl Dates/Time OK | <input checked="" type="checkbox"/> | | <input type="checkbox"/> |

Cooler Temperature

- | | | | |
|------------------------------|-------------------------------------|-----------|--------------------------|
| | <u>Y</u> | <u>or</u> | <u>N</u> |
| 1. Temp criteria achieved: | <input checked="" type="checkbox"/> | | <input type="checkbox"/> |
| 2. Cooler temp verification: | IR Gun | | |
| 3. Cooler media: | Ice (Bag) | | |
| 4. No. Coolers: | 1 | | |

Quality Control Preservation

- | | | | | |
|---------------------------------|-------------------------------------|-----------|-------------------------------------|-------------------------------------|
| | <u>Y</u> | <u>or</u> | <u>N</u> | <u>N/A</u> |
| 1. Trip Blank present / cooler: | <input type="checkbox"/> | | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 2. Trip Blank listed on COC: | <input type="checkbox"/> | | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 3. Samples preserved properly: | <input checked="" type="checkbox"/> | | <input type="checkbox"/> | |
| 4. VOCs headspace free: | <input type="checkbox"/> | | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

Sample Integrity - Documentation

- | | | | |
|--|-------------------------------------|-----------|--------------------------|
| | <u>Y</u> | <u>or</u> | <u>N</u> |
| 1. Sample labels present on bottles: | <input checked="" type="checkbox"/> | | <input type="checkbox"/> |
| 2. Container labeling complete: | <input checked="" type="checkbox"/> | | <input type="checkbox"/> |
| 3. Sample container label / COC agree: | <input checked="" type="checkbox"/> | | <input type="checkbox"/> |

Sample Integrity - Condition

- | | | | |
|----------------------------------|-------------------------------------|-----------|--------------------------|
| | <u>Y</u> | <u>or</u> | <u>N</u> |
| 1. Sample recvd within HT: | <input checked="" type="checkbox"/> | | <input type="checkbox"/> |
| 2. All containers accounted for: | <input checked="" type="checkbox"/> | | <input type="checkbox"/> |
| 3. Condition of sample: | Intact | | |

Sample Integrity - Instructions

- | | | | | |
|---|-------------------------------------|-----------|-------------------------------------|-------------------------------------|
| | <u>Y</u> | <u>or</u> | <u>N</u> | <u>N/A</u> |
| 1. Analysis requested is clear: | <input checked="" type="checkbox"/> | | <input type="checkbox"/> | |
| 2. Bottles received for unspecified tests | <input type="checkbox"/> | | <input checked="" type="checkbox"/> | |
| 3. Sufficient volume recvd for analysis: | <input checked="" type="checkbox"/> | | <input type="checkbox"/> | |
| 4. Compositing instructions clear: | <input type="checkbox"/> | | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 5. Filtering instructions clear: | <input type="checkbox"/> | | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

Test Strip Lot #s: pH 1-12: 231619 pH 12+: 203117A Other: (Specify)

Comments

SM089-03
Rev. Date 12/7/17

JD35489: Chain of Custody

Page 5 of 6

5.1
5

Job Change Order: JD35489

Requested Date:	2/21/2022	Received Date:	12/17/2021
Account Name:	GHD Services Inc.	Due Date:	2/21/2022
Project Description:	SJRWP - PCFSE, Harris County, TX	Deliverable:	FULT1
C/O Initiated By:	KELLY.RAM	PM:	KR
		TAT (Days):	1

Sample #:	JD35489-ALL	Change:	
Dept:			Please revise to COMMBN and reissue report
TAT:	1		

Above Changes Per: Kathy Shaw

Date/Time: 2/21/2022

To Client: This Change Order is confirmation of the revisions, previously discussed with the Client Service Representative.

Metals Analysis

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Matrix Spike and Duplicate Summaries
- Blank Spike and Lab Control Sample Summaries
- Serial Dilution Summaries

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: JD35489
Account: CRATXH - GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

QC Batch ID: MP30529
Matrix Type: AQUEOUS

Methods: SW846 7470A
Units: ug/l

Prep Date: 12/23/21 01/11/22

Metal	RL	IDL	MDL	MB raw	final	MB raw	final
Mercury	0.20	.034	.095	-0.0028	<0.20	0.028	<0.20

Associated samples MP30529: JD35489-1, JD35489-2, JD35489-3, JD35489-4, JD35489-5, JD35489-6, JD35489-1F, JD35489-4F, JD35489-5F, JD35489-6F

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

6.1.1
6

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: JD35489
 Account: CRATXH - GHD Services Inc.
 Project: SJRWP - PCFSE, Harris County, TX

QC Batch ID: MP30529
 Matrix Type: AQUEOUS

Methods: SW846 7470A
 Units: ug/l

Prep Date: 01/11/22

Metal	JD35489-5 Original MS		SpikeLot HGPW3	% Rec	QC Limits
Mercury	0.039	1.9	2	93.1	75-125

Associated samples MP30529: JD35489-1, JD35489-2, JD35489-3, JD35489-4, JD35489-5, JD35489-6, JD35489-1F, JD35489-4F, JD35489-5F, JD35489-6F

Results < IDL are shown as zero for calculation purposes
 (*) Outside of QC limits
 (N) Matrix Spike Rec. outside of QC limits
 (anr) Analyte not requested

6.12
6

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: JD35489
 Account: CRATXH - GHD Services Inc.
 Project: SJRWP - PCFSE, Harris County, TX

QC Batch ID: MP30529
 Matrix Type: AQUEOUS

Methods: SW846 7470A
 Units: ug/l

Prep Date: 01/11/22

Metal	JD35489-5 Original MSD	Spikelot HGPW3	% Rec	MSD RPD	QC Limit
Mercury	0.039	2.0	2	98.1	5.1 20

Associated samples MP30529: JD35489-1, JD35489-2, JD35489-3, JD35489-4, JD35489-5, JD35489-6, JD35489-1F, JD35489-4F, JD35489-5F, JD35489-6F

Results < IDL are shown as zero for calculation purposes
 (*) Outside of QC limits
 (N) Matrix Spike Rec. outside of QC limits
 (anr) Analyte not requested

6.12
6

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: JD35489
 Account: CRATXH - GHD Services Inc.
 Project: SJRWP - PCFSE, Harris County, TX

QC Batch ID: MP30529
 Matrix Type: AQUEOUS

Methods: SW846 7470A
 Units: ug/l

Prep Date: 12/23/21 01/11/22

Metal	BSP Result	Spikelot HGPW3	% Rec	QC Limits	BSP Result	Spikelot HGPW3	% Rec	QC Limits
Mercury	1.8	2	90.0	80-120	2.0	2	100.0	80-120

Associated samples MP30529: JD35489-1, JD35489-2, JD35489-3, JD35489-4, JD35489-5, JD35489-6, JD35489-1F, JD35489-4F, JD35489-5F, JD35489-6F

Results < IDL are shown as zero for calculation purposes
 (*) Outside of QC limits
 (anr) Analyte not requested

6.1.3
 6

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: JD35489
Account: CRATXH - GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

QC Batch ID: MP30594
Matrix Type: AQUEOUS

Methods: SW846 6010D
Units: ug/l

Prep Date: 12/29/21

Metal	RL	IDL	MDL	MB raw	final
Aluminum	200	9.2	150	-6.7	<200
Antimony	6.0	1.7	4.7	-1.9	<6.0
Arsenic	3.0	1.3	2.8	-0.40	<3.0
Barium	200	.2	13	0.40	<200
Beryllium	1.0	.2	.5	0.10	<1.0
Bismuth	20	2.1	8.6		
Boron	100	1	10	1.4	<100
Cadmium	3.0	.2	1	0.20	<3.0
Calcium	5000	6.6	99	7.7	<5000
Cerium	100				
Chromium	10	.3	2	0.0	<10
Cobalt	50	.4	2.6	-0.10	<50
Copper	10	.7	5.9	-0.10	<10
Iron	100	3.3	32	5.4	<100
Lead	3.0	1.1	1.8	-0.60	<3.0
Lithium	50	1.5	7.3		
Magnesium	5000	25	140	-5.9	<5000
Manganese	15	.1	1.4	0.10	<15
Molybdenum	20	.5	3.6	0.10	<20
Nickel	10	.3	1.7	-0.10	<10
Phosphorus	50	1.2	18		
Potassium	10000	35	200	25.0	<10000
Selenium	10	2	4.9	3.7	<10
Silicon	200	1.3	32		
Silver	10	.6	6.1	-0.50	<10
Sodium	10000	14	570	-7.3	<10000
Strontium	10	.1	2.7	-0.10	<10
Sulfur	50	3	45		
Thallium	10	1.6	1.8	1.3	<10
Tin	10	.8	3.7	-0.20	<10
Titanium	10	.5	2.5	-0.20	<10
Tungsten	50	1.3	40		
Vanadium	50	.5	1.8	0.30	<50

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: JD35489
Account: CRATXH - GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

QC Batch ID: MP30594
Matrix Type: AQUEOUS

Methods: SW846 6010D
Units: ug/l

Prep Date: 12/29/21

Metal	RL	IDL	MDL	MB raw	final
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Zinc 20 .1 6.9 2.5 <20

Zirconium 10 .3 4.1

Associated samples MP30594: JD35489-1, JD35489-2, JD35489-3, JD35489-4, JD35489-5, JD35489-6, JD35489-1F, JD35489-4F, JD35489-5F, JD35489-6F

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

6.2.1

6

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: JD35489
 Account: CRATXH - GHD Services Inc.
 Project: SJRWP - PCFSE, Harris County, TX

QC Batch ID: MP30594
 Matrix Type: AQUEOUS

Methods: SW846 6010D
 Units: ug/l

Prep Date: 01/18/22

Metal	JD35489-5 Original MS		SpikeLot MPSPK2	% Rec	QC Limits
Aluminum	0.00	53000	50000	106.0	75-125
Antimony	0.0	3810	4000	95.3	75-125
Arsenic	0.0	3820	4000	95.5	75-125
Barium	420	4390	4000	99.3	75-125
Beryllium	0.0	4020	4000	100.5	75-125
Bismuth					
Boron	816	4640	4000	95.6	75-125
Cadmium	2.5	3850	4000	96.2	75-125
Calcium	285000	312000	50000	54.0 (a)	75-125
Cerium					
Chromium	2.9	3860	4000	96.4	75-125
Cobalt	0.50	3890	4000	97.2	75-125
Copper	0.0	3890	4000	97.3	75-125
Iron	1000	53900	50000	105.8	75-125
Lead	1.9	3900	4000	97.5	75-125
Lithium					
Magnesium	55100	105000	50000	99.8	75-125
Manganese	1290	5170	4000	97.0	75-125
Molybdenum	0.80	3800	4000	95.0	75-125
Nickel	1.5	3940	4000	98.5	75-125
Phosphorus					
Potassium	128000	173000	50000	90.0	75-125
Selenium	0.0	3870	4000	96.8	75-125
Silicon					
Silver	6.7	517	500	102.1	75-125
Sodium	156000	213000	50000	114.0	75-125
Strontium	1200	5060	4000	96.5	75-125
Sulfur					
Thallium	0.0	3920	4000	98.0	75-125
Tin	0.0	3790	4000	94.8	75-125
Titanium	0.0	3850	4000	96.3	75-125
Tungsten					
Vanadium	2.6	3930	4000	98.2	75-125

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: JD35489
 Account: CRATXH - GHD Services Inc.
 Project: SJRWP - PCFSE, Harris County, TX

QC Batch ID: MP30594
 Matrix Type: AQUEOUS

Methods: SW846 6010D
 Units: ug/l

Prep Date: 01/18/22

Metal	JD35489-5 Original MS	Spike lot	QC Limits
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Zinc	13.5	3840	4000	95.7	75-125
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Zirconium

Associated samples MP30594: JD35489-1, JD35489-2, JD35489-3, JD35489-4, JD35489-5, JD35489-6, JD35489-1F, JD35489-4F, JD35489-5F, JD35489-6F

Results < IDL are shown as zero for calculation purposes

- (*) Outside of QC limits
- (N) Matrix Spike Rec. outside of QC limits
- (anr) Analyte not requested
- (a) Spike amount low relative to the sample amount. Refer to lab control or spike blank for recovery information.

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: JD35489
 Account: CRATXH - GHD Services Inc.
 Project: SJRWP - PCFSE, Harris County, TX

QC Batch ID: MP30594
 Matrix Type: AQUEOUS

Methods: SW846 6010D
 Units: ug/l

Prep Date: 01/18/22

Metal	JD35489-5 Original MSD	52700	SpikeLot MPSPK2	% Rec	MSD RPD	QC Limit
Aluminum	0.00	52700	50000	105.4	0.6	20
Antimony	0.0	3900	4000	97.5	2.3	20
Arsenic	0.0	3890	4000	97.3	1.8	20
Barium	420	4330	4000	97.8	1.4	20
Beryllium	0.0	3960	4000	99.0	1.5	20
Bismuth						
Boron	816	4680	4000	96.6	0.9	20
Cadmium	2.5	3880	4000	96.9	0.8	20
Calcium	285000	309000	50000	48.0 (a)	1.0	20
Cerium						
Chromium	2.9	3850	4000	96.2	0.3	20
Cobalt	0.50	3920	4000	98.0	0.8	20
Copper	0.0	3880	4000	97.0	0.3	20
Iron	1000	53800	50000	105.6	0.2	20
Lead	1.9	3920	4000	98.0	0.5	20
Lithium						
Magnesium	55100	105000	50000	99.8	0.0	20
Manganese	1290	5130	4000	96.0	0.8	20
Molybdenum	0.80	3890	4000	97.2	2.3	20
Nickel	1.5	3960	4000	99.0	0.5	20
Phosphorus						
Potassium	128000	172000	50000	88.0	0.6	20
Selenium	0.0	3900	4000	97.5	0.8	20
Silicon						
Silver	6.7	519	500	102.5	0.4	20
Sodium	156000	211000	50000	110.0	0.9	20
Strontium	1200	5000	4000	95.0	1.2	20
Sulfur						
Thallium	0.0	3950	4000	98.8	0.8	20
Tin	0.0	3870	4000	96.8	2.1	20
Titanium	0.0	3910	4000	97.8	1.5	20
Tungsten						
Vanadium	2.6	3910	4000	97.7	0.5	20

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: JD35489
 Account: CRATXH - GHD Services Inc.
 Project: SJRWP - PCFSE, Harris County, TX

QC Batch ID: MP30594
 Matrix Type: AQUEOUS

Methods: SW846 6010D
 Units: ug/l

Prep Date: 01/18/22

Metal	JD35489-5 Original MSD	Spike lot MPSPK2	% Rec	MSD RPD	QC Limit
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Zinc	13.5	3860	4000	96.2	0.5	20
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Zirconium

Associated samples MP30594: JD35489-1, JD35489-2, JD35489-3, JD35489-4, JD35489-5, JD35489-6, JD35489-1F, JD35489-4F, JD35489-5F, JD35489-6F

Results < IDL are shown as zero for calculation purposes

(*) Outside of QC limits

(N) Matrix Spike Rec. outside of QC limits

(anr) Analyte not requested

(a) Spike amount low relative to the sample amount. Refer to lab control or spike blank for recovery information.

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: JD35489
 Account: CRATXH - GHD Services Inc.
 Project: SJRWP - PCFSE, Harris County, TX

QC Batch ID: MP30594
 Matrix Type: AQUEOUS

Methods: SW846 6010D
 Units: ug/l

Prep Date: 12/29/21

Metal	BSP Result	SpikeLot MPSPK2	% Rec	QC Limits
Aluminum	25300	25000	101.2	80-120
Antimony	1900	2000	95.0	80-120
Arsenic	1850	2000	92.5	80-120
Barium	1940	2000	97.0	80-120
Beryllium	1950	2000	97.5	80-120
Bismuth				
Boron	1930	2000	96.5	80-120
Cadmium	1960	2000	98.0	80-120
Calcium	25500	25000	102.0	80-120
Cerium				
Chromium	1930	2000	96.5	80-120
Cobalt	1960	2000	98.0	80-120
Copper	1930	2000	96.5	80-120
Iron	25600	25000	102.4	80-120
Lead	1960	2000	98.0	80-120
Lithium				
Magnesium	25500	25000	102.0	80-120
Manganese	1980	2000	99.0	80-120
Molybdenum	1920	2000	96.0	80-120
Nickel	1970	2000	98.5	80-120
Phosphorus				
Potassium	24800	25000	99.2	80-120
Selenium	1900	2000	95.0	80-120
Silicon				
Silver	240	250	96.0	80-120
Sodium	25400	25000	101.6	80-120
Strontium	1940	2000	97.0	80-120
Sulfur				
Thallium	1920	2000	96.0	80-120
Tin	1940	2000	97.0	80-120
Titanium	1890	2000	94.5	80-120
Tungsten				
Vanadium	1930	2000	96.5	80-120

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: JD35489
 Account: CRATXH - GHD Services Inc.
 Project: SJRWP - PCFSE, Harris County, TX

QC Batch ID: MP30594
 Matrix Type: AQUEOUS

Methods: SW846 6010D
 Units: ug/l

Prep Date: 12/29/21

Metal	BSP Result	Spikelot MPSPK2	% Rec	QC Limits
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Zinc	1950	2000	97.5	80-120
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Zirconium

Associated samples MP30594: JD35489-1, JD35489-2, JD35489-3, JD35489-4, JD35489-5, JD35489-6, JD35489-1F, JD35489-4F, JD35489-5F, JD35489-6F

Results < IDL are shown as zero for calculation purposes
 (*) Outside of QC limits
 (anr) Analyte not requested

SERIAL DILUTION RESULTS SUMMARY

Login Number: JD35489
 Account: CRATXH - GHD Services Inc.
 Project: SJRWP - PCFSE, Harris County, TX

QC Batch ID: MP30594
 Matrix Type: AQUEOUS

Methods: SW846 6010D
 Units: ug/l

Prep Date: 12/29/21

Metal	JD36943-2 Original	SDL 1:1	%DIF	QC Limits
Aluminum	47.0	101	114.3 (a)	0-10
Antimony	7.40	0.00	100.0 (a)	0-10
Arsenic	0.00	0.00	NC	0-10
Barium	40.3	44.4	10.2* (b)	0-10
Beryllium	0.500	0.00	100.0 (a)	0-10
Bismuth				
Boron	130	141	8.2	0-10
Cadmium	1.50	2.20	46.7 (a)	0-10
Calcium	2370	3070	29.5* (b)	0-10
Cerium				
Chromium	180	183	1.6	0-10
Cobalt	5.40	4.60	14.8 (a)	0-10
Copper	14.6	17.6	20.5 (a)	0-10
Iron	122	158	30.0 (a)	0-10
Lead	0.00	0.00	NC	0-10
Lithium				
Magnesium	939	888	5.4	0-10
Manganese	11.6	12.5	7.8	0-10
Molybdenum	9.30	7.30	21.5 (a)	0-10
Nickel	8.50	7.50	11.8 (a)	0-10
Phosphorus				
Potassium	522000	526000	0.8	0-10
Selenium	4.10	0.00	100.0 (a)	0-10
Silicon				
Silver	0.00	0.00	NC	0-10
Sodium	657000	675000	2.7	0-10
Strontium	453	476	4.9	0-10
Sulfur				
Thallium	0.00	10.1	NC	0-10
Tin	0.00	0.00	NC	0-10
Titanium	1.50	0.00	100.0 (a)	0-10
Tungsten				
Vanadium	3.50	4.30	22.9 (a)	0-10

SERIAL DILUTION RESULTS SUMMARY

Login Number: JD35489
Account: CRATXH - GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

QC Batch ID: MP30594
Matrix Type: AQUEOUS

Methods: SW846 6010D
Units: ug/l

Prep Date: 12/29/21

Metal	JD36943-2 Original	SDL 1:1	%DIF	QC Limits
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Zinc 5.20 11.1 113.5*(b) 0-10

Zirconium

Associated samples MP30594: JD35489-1, JD35489-2, JD35489-3, JD35489-4, JD35489-5, JD35489-6, JD35489-1F, JD35489-4F, JD35489-5F, JD35489-6F

Results < IDL are shown as zero for calculation purposes

(*) Outside of QC limits

(anr) Analyte not requested

(a) Percent difference acceptable due to low initial sample concentration (< 50 times IDL).

(b) Serial dilution indicates possible matrix interference.

General Chemistry

QC Data Summaries

Includes the following where applicable:

- Method Blank and Blank Spike Summaries
- Duplicate Summaries
- Matrix Spike Summaries

METHOD BLANK AND SPIKE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: JD35489
Account: CRATXH - GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Analyte	Batch ID	RL	MB Result	Units	Spike Amount	BSP Result	BSP %Recov	QC Limits
Alkalinity, Total as CaCO3	GN24970	5.0	0.0	mg/l	50	48.5	97.0	90-110%
Alkalinity, Total as CaCO3	GN24970			mg/l	250	246	98.4	90-110%
Alkalinity, Total as CaCO3	GN24989	5.0	0.0	mg/l	250	246	98.4	90-110%
Alkalinity, Total as CaCO3	GN24989			mg/l	50	48.5	97.0	90-110%
Bromide	GP37856/GN25220	0.50	0.0	mg/l	2	2.00	100.0	90-110%
Bromide	GP37856/GN25220	0.50	0.0	mg/l				
Bromide	GP37856/GN25220	0.50	0.0	mg/l				
Bromide	GP37856/GN25220	0.50	0.0	mg/l	2	1.89	94.5	90-110%
Chemical Oxygen Demand	GP37700/GN24936	20	0.0	mg/l				
Chemical Oxygen Demand	GP37700/GN24936	20	0.0	mg/l	150	156	104.0	90-110%
Chemical Oxygen Demand	GP37700/GN24936			mg/l	750	755	100.7	90-110%
Chemical Oxygen Demand	GP37701/GN24935	20	0.0	mg/l				
Chemical Oxygen Demand	GP37701/GN24935	20	0.0	mg/l	50	51.3	102.6	90-110%
Chemical Oxygen Demand	GP37745/GN25042	20	0.0	mg/l				
Chemical Oxygen Demand	GP37745/GN25042	20	0.0	mg/l	50	52.5	105.0	90-110%
Chloride	GP37856/GN25220	2.0	0.0	mg/l	80	82.8	103.5	90-110%
Chloride	GP37856/GN25220	2.0	0.0	mg/l	80	82.5	103.1	90-110%
Chloride	GP37856/GN25220	2.0	0.0	mg/l	80	82.2	102.8	90-110%
Chloride	GP37856/GN25220	2.0	0.0	mg/l	80	81.8	102.3	90-110%
Fluoride	GP37856/GN25220	0.20	0.0	mg/l	2	2.04	102.0	90-110%
Fluoride	GP37856/GN25220	0.20	0.0	mg/l	2	2.01	100.5	90-110%
Fluoride	GP37856/GN25220	0.20	0.0	mg/l	2	2.06	103.0	90-110%
Fluoride	GP37856/GN25220	0.20	0.0	mg/l	2	2.08	104.0	90-110%
Nitrogen, Ammonia	GP37881/GN25298	0.20	0.10	mg/l	1	0.996	99.6	80-120%
Phosphorus, Total	GP37757/GN25059	0.050	0.0	mg/l	.4	0.41	102.5	80-120%
Solids, Total Dissolved	GN24930	10	0.0	mg/l				
Solids, Total Suspended	GN24928	4.0	0.0	mg/l				
Solids, Total Suspended	GN24979	4.0	0.0	mg/l				
Sulfate	GP37856/GN25220	2.0	0.0	mg/l	80	79.5	99.4	90-110%
Sulfate	GP37856/GN25220	2.0	0.0	mg/l	80	80.8	101.0	90-110%
Sulfate	GP37856/GN25220	2.0	0.0	mg/l	80	78.7	98.4	90-110%
Sulfate	GP37856/GN25220	2.0	0.0	mg/l	80	80.8	101.0	90-110%
Sulfide	GN24968	2.0	0.0	mg/l	10.6	10.2	96.2	80-120%
Sulfide	GN24968			mg/l	5.3	5.3	100.0	80-120%
Total Organic Carbon	GP37760/GN25067	1.0	0.0	mg/l	10	10.9	109.0	90-110%
Total Organic Carbon	GP37762/GN25067	1.0	0.0	mg/l	10	10.8	108.0	90-110%

Associated Samples:

Batch GN24928: JD35489-4, JD35489-5, JD35489-6
 Batch GN24930: JD35489-1, JD35489-2, JD35489-3, JD35489-4, JD35489-5, JD35489-6
 Batch GN24968: JD35489-1, JD35489-2, JD35489-3, JD35489-4, JD35489-5, JD35489-6
 Batch GN24970: JD35489-1, JD35489-4, JD35489-5, JD35489-6
 Batch GN24979: JD35489-1, JD35489-2, JD35489-3
 Batch GN24989: JD35489-2, JD35489-3
 Batch GP37700: JD35489-4, JD35489-5, JD35489-6
 Batch GP37701: JD35489-3
 Batch GP37745: JD35489-1, JD35489-2
 Batch GP37757: JD35489-1, JD35489-2, JD35489-3, JD35489-4, JD35489-5, JD35489-6
 Batch GP37760: JD35489-1, JD35489-2, JD35489-3, JD35489-4
 Batch GP37762: JD35489-5, JD35489-6
 Batch GP37856: JD35489-1, JD35489-2, JD35489-3, JD35489-4, JD35489-5, JD35489-6
 Batch GP37881: JD35489-1, JD35489-2, JD35489-3, JD35489-4, JD35489-5, JD35489-6
 (*) Outside of QC limits

DUPLICATE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: JD35489
Account: CRATXH - GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Analyte	Batch ID	QC Sample	Units	Original Result	DUP Result	RPD	QC Limits
Alkalinity, Total as CaCO3	GN24970	JD36952-13	mg/l	199	199	0.0	0-10%
Alkalinity, Total as CaCO3	GN24989	JD37132-7	mg/l	642	642	0.0	0-10%
Bromide	GP37856/GN25220	JD35489-5	mg/l	3.4	4.1	18.7	0-20%
Chemical Oxygen Demand	GP37700/GN24936	JD36762-1	mg/l	467	467	0.0	0-25%
Chemical Oxygen Demand	GP37701/GN24935	JD36876-1	mg/l	0.00	0.00	0.0	0-25%
Chemical Oxygen Demand	GP37745/GN25042	JD35489-1	mg/l	37.5	37.5	0.0	0-25%
Chloride	GP37856/GN25220	JD35489-5	mg/l	133	133	0.0	0-20%
Fluoride	GP37856/GN25220	JD35489-5	mg/l	0.61	0.62	1.6	0-20%
Nitrogen, Ammonia	GP37881/GN25298	JD35489-5	mg/l	7.1	6.9	2.9	0-33%
Phosphorus, Total	GP37757/GN25059	JD36949-1A	mg/l	0.024	0.0	0.0	0-38%
Solids, Total Dissolved	GN24930	JD36949-1A	mg/l	4780	4550	4.9	0-16%
Solids, Total Suspended	GN24928	JD37048-1	mg/l	0.0	0.0	0.0	0-17%
Solids, Total Suspended	GN24979	JD35489-3	mg/l	1.5 U	0.0	0.0	0-17%
Sulfate	GP37856/GN25220	JD35489-5	mg/l	32.1	32.7	1.9	0-20%
Sulfide	GN24968	JD35489-2	mg/l	0.48 U	0.0	0.0	0-12%

Associated Samples:

Batch GN24928: JD35489-4, JD35489-5, JD35489-6
 Batch GN24930: JD35489-1, JD35489-2, JD35489-3, JD35489-4, JD35489-5, JD35489-6
 Batch GN24968: JD35489-1, JD35489-2, JD35489-3, JD35489-4, JD35489-5, JD35489-6
 Batch GN24970: JD35489-1, JD35489-4, JD35489-5, JD35489-6
 Batch GN24979: JD35489-1, JD35489-2, JD35489-3
 Batch GN24989: JD35489-2, JD35489-3
 Batch GP37700: JD35489-4, JD35489-5, JD35489-6
 Batch GP37701: JD35489-3
 Batch GP37745: JD35489-1, JD35489-2
 Batch GP37757: JD35489-1, JD35489-2, JD35489-3, JD35489-4, JD35489-5, JD35489-6
 Batch GP37856: JD35489-1, JD35489-2, JD35489-3, JD35489-4, JD35489-5, JD35489-6
 Batch GP37881: JD35489-1, JD35489-2, JD35489-3, JD35489-4, JD35489-5, JD35489-6

(*) Outside of QC limits

7.2
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MATRIX SPIKE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: JD35489
Account: CRATXH - GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Analyte	Batch ID	QC Sample	Units	Original Result	Spike Amount	MS Result	%Rec	QC Limits
Bromide	GP37856/GN25220	JD35489-5	mg/l	3.4	2	2.9	-25.0N(a)	80-120%
Chemical Oxygen Demand	GP37700/GN24936	JD36762-1	mg/l	467	250	711	97.6	55-133%
Chemical Oxygen Demand	GP37701/GN24935	JD36876-1	mg/l	0.00	50	61.5	123.0	55-133%
Chemical Oxygen Demand	GP37745/GN25042	JD35489-1	mg/l	37.5	50	90.0	105.0	55-133%
Chloride	GP37856/GN25220	JD35489-5	mg/l	133	80	210	96.3	80-120%
Fluoride	GP37856/GN25220	JD35489-5	mg/l	0.61	2	2.6	99.5	80-120%
Nitrogen, Ammonia	GP37881/GN25298	JD35489-5	mg/l	7.1	1	8.0	90.0	75-131%
Phosphorus, Total	GP37757/GN25059	JD36949-1A	mg/l	0.024	.4	0.42	105.0	35-137%
Sulfate	GP37856/GN25220	JD35489-5	mg/l	32.1	80	113	101.1	80-120%
Sulfide	GN24968	JD35489-1	mg/l	0.48 U	3.66	3.2	87.4	37-135%
Total Organic Carbon	GP37760/GN25067	JD36952-13	mg/l	5.4	10	15.5	101.0	71-132%
Total Organic Carbon	GP37762/GN25067	JD35489-6	mg/l	17.3	10	27.5	102.0	71-132%

Associated Samples:

Batch GN24968: JD35489-1, JD35489-2, JD35489-3, JD35489-4, JD35489-5, JD35489-6
 Batch GP37700: JD35489-4, JD35489-5, JD35489-6
 Batch GP37701: JD35489-3
 Batch GP37745: JD35489-1, JD35489-2
 Batch GP37757: JD35489-1, JD35489-2, JD35489-3, JD35489-4, JD35489-5, JD35489-6
 Batch GP37760: JD35489-1, JD35489-2, JD35489-3, JD35489-4
 Batch GP37762: JD35489-5, JD35489-6
 Batch GP37856: JD35489-1, JD35489-2, JD35489-3, JD35489-4, JD35489-5, JD35489-6
 Batch GP37881: JD35489-1, JD35489-2, JD35489-3, JD35489-4, JD35489-5, JD35489-6

(*) Outside of QC limits

(N) Matrix Spike Rec. outside of QC limits

(a) Spike recovery indicates possible matrix interference.

7.3
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MATRIX SPIKE DUPLICATE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: JD35489
Account: CRATXH - GHD Services Inc.
Project: SJRWP - PCFSE, Harris County, TX

Analyte	Batch ID	QC Sample	Units	Original Result	Spike Amount	MSD Result	RPD	QC Limit
Nitrogen, Ammonia	GP37881/GN25298	JD35489-5	mg/l	7.1	1	8.2	2.5	14%
Total Organic Carbon	GP37760/GN25067	JD36952-13	mg/l	5.4	10	15.6	0.6	10%
Total Organic Carbon	GP37762/GN25067	JD35489-6	mg/l	17.3	10	26.8	2.6	10%

Associated Samples:

Batch GP37760: JD35489-1, JD35489-2, JD35489-3, JD35489-4

Batch GP37762: JD35489-5, JD35489-6

Batch GP37881: JD35489-1, JD35489-2, JD35489-3, JD35489-4, JD35489-5, JD35489-6

(*) Outside of QC limits

(N) Matrix Spike Rec. outside of QC limits

7.4

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Misc. Forms

Custody Documents and Other Forms

(SGS Houston, TX)

Includes the following where applicable:

- Chain of Custody





SGS North America Inc. Dayton
 2235 Route 130, Dayton NJ 08810
 TEL 732-329-0000 FAX 732-326-3499
 WWW.SGS.COM/EH/USA

PER-EX Tracking #	Lable Cite. C and #
SGS Chain #	SGS Job # JD35489

Client/Reporting Information		Project Information				Requested Analysis (see TEST CODE sheet)												Matrix Codes	
Company Name GHD		Project Name SJRW - PCFSE (Groundwater Samples)				Total Metals: (METAL plus B, Cd, Cr, Pb, Ni, Tl by B010) Dissolved FT Metals (MTAL plus B, Ni, Cd, Sn, Tl by B010) ALK, TDS AMN BRO, CHL, F, SO4 BOD (SGS Houston to analyze short body) COD, TPCH NH3NO3, pH (SGS Houston to analyze short body) S TOC TSS												CA - Drinking Water CW - Ground Water SW - Surface Water SC - Soil SU - Sludge SEC - Sediment G - Gas UQ - Other, TUS A-R - Air SOL - Composite WP - Waste PBT - PCBs EB - Equipment Blank RB - Reagent Blank TB - Test Blank	
Address 11451 Katy Freeway Suite 400		Street Channelview		City Harris County TX															
State TX 77079		City Harris County TX		State TX															
Zip 77079		City Harris County TX		State TX															
Contact Meagan Willis		Project # 11215131		Client Purchase Order # 868 # CRATXH0499															
Phone # 832-2281541		Project Manager		Attention:															

Field ID / Point of Collection	NEQMDI Vial #	Collection			Matrix	# of bottles	Number of preserved bottles							Total Metals (Metal plus B, Cd, Cr, Pb, Ni, Tl by B010)	Dissolved FT Metals (MTAL plus B, Ni, Cd, Sn, Tl by B010)	ALK, TDS	AMN	BRO, CHL, F, SO4	BOD (SGS Houston to analyze short body)	COD, TPCH	NH3NO3, pH (SGS Houston to analyze short body)	S	TOC	TSS	LAB USE ONLY
		Date	Time	Sampled by			NaOH	NaOH	NaOH	NaOH	NaOH	NaOH	NaOH												
4 11215131-121721-BW-SS-PZ-NE		12/17/21	920	SS CW	2	2	2	2	2	2	2	2	2	2	X	X	X	X	X	X	X	X	X	X	
6 11215131-121721-BW-SS-DLP-1		↓	↓	SS CW	1	1	1	1	1	1	1	1	1	1	X	X	X	X	X	X	X	X	X	X	

Turnaround Time (Business days)		Data Deliverable Information								Comments / Special Instructions	
<input checked="" type="checkbox"/> Std. 10 Business Days <input type="checkbox"/> 5 Day RUSH <input type="checkbox"/> 3 Day RUSH <input type="checkbox"/> 2 Day RUSH <input type="checkbox"/> 1 Day RUSH <input type="checkbox"/> other		Approved by (SGS Project Manager)/Date: _____ _____ _____ _____ _____ _____								Lor in under JD35489 _____ _____ _____	
<input type="checkbox"/> Commercial "A" (Level 1) <input type="checkbox"/> Commercial "B" (Level 2) <input checked="" type="checkbox"/> FULLTY (Level 3+4) <input type="checkbox"/> NJ Reduced <input type="checkbox"/> Commercial "C" <input type="checkbox"/> NJ Data of Known Quality Protocol Reporting Commercial "A" = Results Only Commercial "B" = Results + CC Summary NJ Reduced = Results + CC Summary + Field Raw data		<input type="checkbox"/> NYASP Category A <input type="checkbox"/> NYASP Category B <input type="checkbox"/> State Forms <input type="checkbox"/> EDO Format <input type="checkbox"/> Other								Sample inventory is verified upon receipt in the Laboratory _____ _____ _____	
Requested by Sampler: Meagan Willis Date Time: 12/17/21 Received By: [Signature] Date Time: 12/17/21		Requested by Sampler: [Signature] Date Time: 12/17/21 Received By: [Signature] Date Time: 12/17/21								Requested by Sampler: [Signature] Date Time: 12/17/21 Received By: [Signature] Date Time: 12/17/21	
Requested by: _____ Date Time: _____ Received By: _____ Date Time: _____		Requested by: _____ Date Time: _____ Received By: _____ Date Time: _____								Requested by: _____ Date Time: _____ Received By: _____ Date Time: _____	



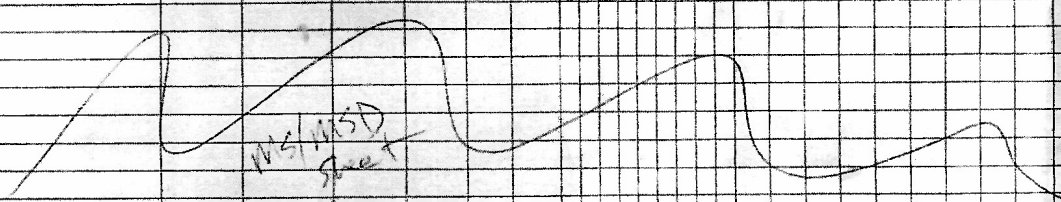


CHAIN OF CUSTODY

SGS North America Inc. - Dayton
 2235 Route 130, Dayton, NJ 08810
 TEL 732-329-0200 FAX 732-329-3499
 www.sgs.com/ehsusa

Project Name: **JD35489**
 Requested Analysis (see TEST CODE sheet)

Client / Reporting Information		Project Information										Requested Analysis (see TEST CODE sheet)										Matrix Codes	
Company Name: GHD		Project Name: SJRW - PCFSE (Groundwater Samples)										Total Metals (MTAL, plus B, MC, SR, SN, Tly, Tly by) Dissolved/FF Metals (MTAL, plus B, MC, SR, SN, Tly, Tly by) ALK, TDS AMN BRO, CHL, F, S04 BOD (SGS Houston to analyze short hold) COD, TPDA XUC30, pH (SGS Houston to analyze short hold) S TOC TSS										GW - Drinking Water GW - Ground Water WW - Water SW - Surface Water SO - Soil SED - Sediment OI - Oil LIQ - Other Liquid AIR - Air SOL - Other Solid WIP - Waste FB - Field Blank EB - Equipment Blank RB - Rinsate Blank TB - Trip Blank	
Address: 11451 Katy Freeway Suite 400		Street: Channelview																					
City: Houston TX 77079		City: Harris County TX																					
Contact: Meagan Willis		Project #: 11216131										Matrix Codes										LAB USE ONLY	
Phone: 3-907-3710		Project Manager: Stephen Saly																					
E-mail: Meagan.willis@ghd.com		Grant Purchase Order #																					
Fax: 832-205-1394		City: _____ State: _____ Zip: _____																					
Attention: _____		Date Deliverable Information										Comments / Special Instructions											
Turnaround Time (Business days)		Approved by (SGS Project Manager)/Date:										<input type="checkbox"/> Commercial "A" (Level 1) <input type="checkbox"/> Commercial "B" (Level 2) <input checked="" type="checkbox"/> FULL T1 (Level 3+4) <input type="checkbox"/> NJ Reduced <input type="checkbox"/> Commercial "C" <input type="checkbox"/> NJ Date of Known Quality Protocol Reporting <input type="checkbox"/> Commercial "A" = Results Only; Commercial "B" = Results + QC Summary										Log In under JD35489	
<input checked="" type="checkbox"/> Std. 10 Business Days <input type="checkbox"/> 5 Day RUSH <input type="checkbox"/> 3 Day RUSH <input type="checkbox"/> 2 Day RUSH <input type="checkbox"/> 1 Day RUSH <input type="checkbox"/> other _____		<input type="checkbox"/> NYASP Category A <input type="checkbox"/> NYASP Category B <input type="checkbox"/> State Forms <input type="checkbox"/> EDD Format <input type="checkbox"/> Other _____										Sample Inventory is verified upon receipt in the Laboratory											
Emergency & Rush TIA data available via LabLink		Sample Custody must be documented below each time samples changed possession, including courier delivery.																					
Inquired by Sample: _____		Date/Time: 12/17/21		Received By: [Signature]		Received Date/Time: 12-17-21		Received By: [Signature]		Date/Time: _____		Received By: _____		Date/Time: _____		Received By: _____							
Inquired by Sanitizer: _____		Date/Time: _____		Received By: _____		Received Date/Time: _____		Received By: _____		Date/Time: _____		Received By: _____		Date/Time: _____		Received By: _____							
Inquired by: _____		Date/Time: _____		Received By: _____		Received Date/Time: _____		Received By: _____		Date/Time: _____		Received By: _____		Date/Time: _____		Received By: _____							





CHAIN OF CUSTODY

SGS North America Inc. - Dayton
2235 Route 130, Dayton, NJ 08810
TEL. 732-329-0200 FAX 732-329-9499
www.sgs.com/ehseusa

FEDER Tracking #
Sample Order Control #
SGS Job # JD35489

Client / Reporting Information, Project Information, Requested Analysis, Matrix Codes, Lab Sample #, Field ID / Point of Collection, Date, Time, Matrix, # of bottles, Analysis results table, Turnaround Time, Data Deliverable Information, Comments, Relinquished by, Received By, Date Time.

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Job Change Order: JD35489

Requested Date:	2/21/2022	Received Date:	12/17/2021
Account Name:	GHD Services Inc.	Due Date:	2/21/2022
Project Description:	SJRW - PCFSE, Harris County, TX	Deliverable:	FULT1
C/O Initiated By:	KELLY.RAM	PM:	KR
		TAT (Days):	1

Sample #: JD35489-ALL **Change:**
Dept: Please revise to COMMBN and reissue report
TAT: 1

Above Changes Per: Kathy Shaw

Date/Time: 2/21/2022

To Client: This Change Order is confirmation of the revisions, previously discussed with the Client Service Representative.

SGS Sample Receipt Summary

Job Number: JD35489 **Client:** SGS NJ **Project:** _____
Date / Time Received: 12/17/2021 3:25:00 PM **Delv Method:** SGS-EC **Airbill #'s:** _____
of Coolers: 5 **Therm ID:** IR-4; **Temp Adjustment Factor:** -0.1;

Cooler Temps (Initial/Adjusted): #1: (2.9/2.8); #2: (2.4/2.3); #3: (1.5/1.4); #4: (1.8/1.7);

Test Strip Lot #s: **pH 1-12:** 10D0391 **pH 12+:** _____ **Other: (Specify)** _____

<u>Cooler Information</u>	<u>Y</u>	<u>or</u>	<u>N</u>	<u>N/A</u>
1. Custody Seals Present:	<input checked="" type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>
2. Custody Seals Intact:	<input checked="" type="checkbox"/>		<input type="checkbox"/>	
3. Temp criteria achieved:	<input checked="" type="checkbox"/>		<input type="checkbox"/>	
4. Cooler temp verification:				
3. Cooler media:				<u>Ice (Bag)</u>

<u>Trip Blank Information</u>	<u>Y</u>	<u>or</u>	<u>N</u>	<u>N/A</u>
1. Trip Blank present / cooler:	<input type="checkbox"/>		<input type="checkbox"/>	<input checked="" type="checkbox"/>
2. Trip Blank listed on COC:	<input type="checkbox"/>		<input type="checkbox"/>	<input checked="" type="checkbox"/>
3. Type Of TB Received	<u>W</u>	<u>or</u>	<u>S</u>	<u>N/A</u>
	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>

Misc. Information

Number of terracores: _____ Number of Lab Filtered Metals: _____

Number of 5035 Field Kits: _____

Residual Chlorine Test Strip Lot #: _____

<u>Sample Information</u>	<u>Y</u>	<u>or</u>	<u>N</u>	<u>N/A</u>
1. Sample labels present on bottles:	<input checked="" type="checkbox"/>		<input type="checkbox"/>	
2. Samples preserved properly:	<input checked="" type="checkbox"/>		<input type="checkbox"/>	
3. Sufficient volume recvd for analysis:	<input checked="" type="checkbox"/>		<input type="checkbox"/>	
4. Condition of sample:				Intact
5. Sample recvd within HT:	<input checked="" type="checkbox"/>		<input type="checkbox"/>	
6. Dates/Times/IDs on COC match Sample Label	<input checked="" type="checkbox"/>		<input type="checkbox"/>	
7. Container labeling complete:	<input checked="" type="checkbox"/>		<input type="checkbox"/>	
8. Analysis requested is clear:	<input checked="" type="checkbox"/>		<input type="checkbox"/>	
9. VOCs headspace free:	<input type="checkbox"/>		<input type="checkbox"/>	<input checked="" type="checkbox"/>
10. Bottles received for unspecified tests	<input type="checkbox"/>		<input checked="" type="checkbox"/>	
11. COC Present:	<input checked="" type="checkbox"/>		<input type="checkbox"/>	
12. Special Instructions (compositing/filtering) clear:	<input type="checkbox"/>		<input type="checkbox"/>	<input checked="" type="checkbox"/>
13. Voa Soil Kits/Jars received past 48hrs?	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>
14. % Solids Jar received?	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>
15. Residual Chlorine Present?	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>

Comments

JD35489: Chain of Custody
Page 6 of 7

8.1

Sample Receipt Log

Job #: JD35489 _____

Date / Time Received: 12/17/2021 3:25:00 PM _____

Initials: BELINDG _____

Client: SGS NJ _____

Cooler #	Sample ID:	Vol	Bot #	Location	Pres	pH	Therm ID	Initial Temp	Therm CF	Corrected Temp
2	JD35489-1	250ml	1	3L	N/P	Note #2 - Preservative check not applicable.	IR-4	2.4	-0.1	2.3
2	JD35489-1	250ml	2	3L	N/P	Note #2 - Preservative check not applicable.	IR-4	2.4	-0.1	2.3
4	JD35489-2	250ml	1	3L	N/P	Note #2 - Preservative check not applicable.	IR-4	1.8	-0.1	1.7
4	JD35489-2	250ml	2	3L	N/P	Note #2 - Preservative check not applicable.	IR-4	1.8	-0.1	1.7
4	JD35489-2	250ml	3	3L	N/P	Note #2 - Preservative check not applicable.	IR-4	1.8	-0.1	1.7
4	JD35489-2	250ml	4	3L	N/P	Note #2 - Preservative check not applicable.	IR-4	1.8	-0.1	1.7
4	JD35489-2	250ml	5	3L	N/P	Note #2 - Preservative check not applicable.	IR-4	1.8	-0.1	1.7
4	JD35489-2	250ml	6	3L	N/P	Note #2 - Preservative check not applicable.	IR-4	1.8	-0.1	1.7
1	JD35489-3	250ml	1	3L	N/P	Note #2 - Preservative check not applicable.	IR-4	2.9	-0.1	2.8
1	JD35489-3	250ml	2	3L	N/P	Note #2 - Preservative check not applicable.	IR-4	2.9	-0.1	2.8
3	JD35489-4	250ml	1	3L	N/P	Note #2 - Preservative check not applicable.	IR-4	1.5	-0.1	1.4
3	JD35489-4	250ml	2	3L	N/P	Note #2 - Preservative check not applicable.	IR-4	1.5	-0.1	1.4
4	JD35489-5	250ml	1	3L	N/P	Note #2 - Preservative check not applicable.	IR-4	1.8	-0.1	1.7
4	JD35489-5	250ml	2	3L	N/P	Note #2 - Preservative check not applicable.	IR-4	1.8	-0.1	1.7
2	JD35489-6	250ml	1	3L	N/P	Note #2 - Preservative check not applicable.	IR-4	2.4	-0.1	2.3
2	JD35489-6	250ml	2	3L	N/P	Note #2 - Preservative check not applicable.	IR-4	2.4	-0.1	2.3

JD35489: Chain of Custody

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General Chemistry

QC Data Summaries

(SGS Houston, TX)

Includes the following where applicable:

- Method Blank and Blank Spike Summaries
- Duplicate Summaries
- Matrix Spike Summaries

METHOD BLANK AND SPIKE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: JD35489
Account: ALNJ - SGS Dayton, NJ
Project: CRATXH: SJRWP - PCFSE, Harris County, TX (IDW)

Analyte	Batch ID	RL	MB Result	Units	Spike Amount	BSP Result	BSP %Recov	QC Limits
BOD, 5 Day	GP63096/GN15498	2.0	0.0	mg/l	198	185	93.4	85-115%
Nitrogen, Nitrate + Nitrite	GP63118/GN15524	0.050	0.0	mg/l	1	1.02	102.0	90-110%
Nitrogen, Nitrite	GP63117/GN15523	0.010	0.0	mg/l	0.1	0.0996	99.6	90-110%

Associated Samples:

Batch GP63096: JD35489-1A, JD35489-2A, JD35489-3A, JD35489-4A, JD35489-5A, JD35489-6A

Batch GP63117: JD35489-1A, JD35489-2A, JD35489-3A, JD35489-4A, JD35489-5A, JD35489-6A

Batch GP63118: JD35489-1A, JD35489-2A, JD35489-3A, JD35489-4A, JD35489-5A, JD35489-6A

(*) Outside of QC limits

DUPLICATE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: JD35489
Account: ALNJ - SGS Dayton, NJ
Project: CRATXH: SJRWP - PCFSE, Harris County, TX (IDW)

Analyte	Batch ID	QC Sample	Units	Original Result	DUP Result	RPD	QC Limits
BOD, 5 Day	GP63096/GN15498	TD76820-1	mg/l	0.0	1.3	200.0(a)	0-28%
Nitrogen, Nitrate + Nitrite	GP63118/GN15524	JD35489-2A	mg/l	0.0	0.0	0.0	0-11%
Nitrogen, Nitrite	GP63117/GN15523	JD35489-2A	mg/l	0.0	0.0083	200.0(a)	0-20%
pH	GN15647	TD76734-1Q	su	6.43	6.40	0.5	0-10%

Associated Samples:

Batch GN15647: JD35489-1A, JD35489-2A, JD35489-3A, JD35489-4A, JD35489-5A, JD35489-6A

Batch GP63096: JD35489-1A, JD35489-2A, JD35489-3A, JD35489-4A, JD35489-5A, JD35489-6A

Batch GP63117: JD35489-1A, JD35489-2A, JD35489-3A, JD35489-4A, JD35489-5A, JD35489-6A

Batch GP63118: JD35489-1A, JD35489-2A, JD35489-3A, JD35489-4A, JD35489-5A, JD35489-6A

(*) Outside of QC limits

(a) RPD acceptable due to low duplicate and sample concentrations.

MATRIX SPIKE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: JD35489
Account: ALNJ - SGS Dayton, NJ
Project: CRATXH: SJRWP - PCFSE, Harris County, TX (IDW)

Analyte	Batch ID	QC Sample	Units	Original Result	Spike Amount	MS Result	%Rec	QC Limits
Nitrogen, Nitrate + Nitrite	GP63118/GN15524	JD35489-2A	mg/l	0.0	1	1.0	100.0	90-110%
Nitrogen, Nitrite	GP63117/GN15523	JD35489-2A	mg/l	0.0	0.1	0.099	99.0	90-110%

Associated Samples:

Batch GP63117: JD35489-1A, JD35489-2A, JD35489-3A, JD35489-4A, JD35489-5A, JD35489-6A

Batch GP63118: JD35489-1A, JD35489-2A, JD35489-3A, JD35489-4A, JD35489-5A, JD35489-6A

(*) Outside of QC limits

(N) Matrix Spike Rec. outside of QC limits



FINAL LAB REPORT

Prepared by

SGS NORTH AMERICA

Prepared for

This report is approved by

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PROJECT INFORMATION SUMMARY *(When applicable, see QC Annotations for details)*

Client Project
SGS Project #
Analytical Protocol(s)
No. Samples Submitted
Additional QC Sample(s)
No. Laboratory Method Blanks
No. OPRs / Batch CS3
Date Received
Condition Received
Temperature upon Receipt (°C)
Extraction within Holding Time
Analysis within Holding Time



QC ANNOTATIONS:

1. Please see Appendices attached for data qualifier/attribute and lab identifier descriptions which may be contained in the project.

APPENDIX A: GENERAL DATA QUALIFIERS / DATA ATTRIBUTES

B	The analyte was found in the method blank, at a concentration that was at least 10% of the concentration in the sample.
C	Two or more congeners co-elute. In EDDs, C denotes the lowest IUPAC congener in a co-elution group and additional co-eluters for the group are shown with the number of the lowest IUPAC co-eluter.
E	The reported concentration exceeds the calibration range (upper point of the calibration curve) and is an estimated value.
EMPC	Represents an Estimated Maximum Possible Concentration. EMPCs arise in cases where the signal/noise ratio is not sufficient for peak identification (the determined ion-abundance ratio is outside the allowed theoretical range), or where there is a co-eluting interference.
H/h	If the standard recovery is below the method or SOP specified value "H" is assigned. If the obtained value is less than half the specified value "h" is assigned.
J	Indicates that an analyte has a concentration below the reporting limit (lowest point of the calibration curve) and is an estimated value.
ND	Indicates a non-detect.
NR or R	Indicates a value that is not reportable.
PR	Due to interference, the associated congener is poorly resolved.
QI	Indicates the presence of a quantitative interference.
SI	Denotes "Single Ion Mode" and is utilized for PCBs where the secondary ion trace has a significantly elevated noise level due to background PFK. Responses for such peaks are calculated using an EMPC approach based solely on the primary ion area(s) and may be considered estimates.
U	The analyte was not detected. The estimated detection limit (EDL) may be reported for this analyte.
V	The labeled standard recovery was found to be outside of the method control limits.



APPENDIX B: DRBC/TMDL SPECIFIC DATA QUALIFIERS / DATA ATTRIBUTES

J	The reported result is an estimate. The value is less than the minimum calibration level but greater than the estimated detection limit (EDL).
U	The analyte was not detected in the sample at the estimated detection limit (EDL).
E	The reported concentration is an estimate. The value exceeds the upper calibration range (upper point of the calibration curve).
D	Dilution Data. Result was obtained from the analysis of a dilution.
B	Analyte found in the sample and associated method blank.
C	Co-eluting congener
Cxx	Co-elutes with the indicated congener, data is reported under the lowest IUPAC congener. 'Xx' denotes the IUPAC number with the lowest numerical designated congener.
NR	Analyte is not reportable because of problems in sample preparation or analysis.
V	Labeled standard recovery is not within method control limits.
X	Results from re-injection/repeat/second-column analysis.
EMPC	Estimated maximum possible concentration. Indicates that a peak is identified but did not meet the method specified ion-abundance ratio.

APPENDIX C: LAB IDENTIFIERS

AR	Indicates use of the archived portion of the sample extract.
CU	Indicates a sample that required additional clean-up prior to MS injection/processing.
D	Indicates a dilution of the sample extract. The number that follows the "D" indicates the dilution factor.
DE	Indicates a dilution performed with the addition of ES (extraction standard) solution.
DUP	Designation for a duplicate sample.
MS	Designation for a matrix spike.
MSD	Designation for a matrix spike duplicate.
RJ	Indicates a reinjection of the sample extract.
S	Indicates a sample split. The number that follows the "S" indicates the split factor.




SGS CERTIFICATIONS

Alaska DEC LAP	17-012
Alaska DEC LCP	NC00919
Arkansas	20-054-0
California (ELAP)	ELAP Cert #2914
CLIA	34D1013708
Connecticut	PH-0258
USDA Soil Permit	P330-20-00103
American Association for Laboratory Accreditation (A2LA)	2726.01 (ISO 17025:2017, 2009 TNI, DoD ELAP QSM 5.3)
Florida DOH	E87634
Louisiana DEQ	4115
Louisiana DOH	LA031
Maine	2020019
Massachusetts	M-NC919
Michigan	9950
Minnesota (Primary NELAP For Method 23)	037-999-459
Montana	0106
New Hampshire (Secondary NELAP)	2083
New Jersey	NC100
New York	11685
North Carolina DEQ	481
North Dakota	R-197
Ohio	87785
Oregon	NC200002
Pennsylvania	68-03675
South Carolina	99029002
Texas	T104704260
US Coast Guard	16714/159.317/SGS
Vermont	VT-87634
Virginia	460214
Washington	C913

Rev. 12-Oct-2021

Sample ID: 11215131-120121-IDW-SS-NE

Method 1613B

Client Data		Sample Data		Laboratory Data			
Name:	GHD Services Inc.	Matrix:	Aqueous	Lab Project ID:	B6004	Date Received:	09-Dec-2021
Project ID:	11215131-SJRWP-PCFSE	Weight/Volume:	0.96 L	Lab Sample ID:	B6004_18735_DF_001	Date Extracted:	13-Dec-2021
Date Collected:	08-Dec-2021	pH:	6	QC Batch No.:	18735	Date Analyzed:	15-Dec-2021
		Split:	-	Dilution:	-	Time Analyzed:	6:36:46
Analyte	Conc. (pg/L)	DL (pg/L)	EMPC (pg/L)	Qualifiers	Standard	ES Recoveries	Qualifiers
2378-TCDD	ND	1.43			ES 2378-TCDD	92.9	
12378-PeCDD	ND	2.31			ES 12378-PeCDD	96.9	
123478-HxCDD	ND	1.3			ES 123478-HxCDD	99	
123678-HxCDD	ND	1.26			ES 123678-HxCDD	95.7	
123789-HxCDD	EMPC		1.33	J	ES 123789-HxCDD	98	
1234678-HpCDD	EMPC		2.23	J	ES 1234678-HpCDD	84.1	
OCDD	25.9			J	ES OCDD	45.9	
2378-TCDF	9.8			B	ES 2378-TCDF	91.9	
12378-PeCDF	ND	1.25			ES 12378-PeCDF	95.4	
23478-PeCDF	ND	1.32			ES 23478-PeCDF	95.4	
123478-HxCDF	ND	1.06			ES 123478-HxCDF	97.3	
123678-HxCDF	ND	1.08			ES 123678-HxCDF	102	
234678-HxCDF	ND	1.03			ES 234678-HxCDF	103	
123789-HxCDF	ND	1.07			ES 123789-HxCDF	106	
1234678-HpCDF	EMPC		1.32	J B	ES 1234678-HpCDF	95.8	
1234789-HpCDF	ND	1.01			ES 1234789-HpCDF	85.5	
OCDF	EMPC		4.86	J	ES OCDF	48.9	
Totals					Standard	CS Recoveries	
Total TCDD	ND	1.43	ND		CS 37Cl-2378-TCDD	95.9	
Total PeCDD	ND	2.31	ND		CS 12347-PeCDD	106	
Total HxCDD	ND		1.33		CS 12346-PeCDF	100	
Total HpCDD	ND		4.84		CS 123469-HxCDF	112	
Total TCDF	14.9		15.8		CS 1234689-HpCDF	108	
Total PeCDF	ND	1.29	ND				
Total HxCDF	ND	1.06	ND				
Total HpCDF	ND		1.32				
Total PCDD/Fs	40.8		54				
WHO-2005 TEQs					 5500 Business Drive Wilmington, NC 28405, USA www.us.sgs.com Tel: +1 910 794-1613; Toll-Free 866 846-8290		
TEQ: ND=0	0.988		1.16				
TEQ: ND=DL/2	3.42	2.55	3.59				
TEQ: ND=DL	5.86	5.1	6.03				

Sample ID: 11215131-120121-IDW-SS-NE

Method 1613B

Client Data			Sample Data			Laboratory Data						
Name:	GHD Services Inc.		Matrix:	Aqueous		Lab Project ID:	B6004		Date Received:	09-Dec-2021		
Project ID:	11215131-SJRWP-PCFSE		Weight/Volume:	0.96 L		Lab Sample ID:	B6004_18735_DF_001		Date Extracted:	13-Dec-2021		
Date Collected:	08-Dec-2021		pH:	6		QC Batch No.:	18735		Date Analyzed:	15-Dec-2021		
			Split:	-		Dilution:	-		Time Analyzed:	6:36:46		

Tetra-Dioxins	Conc. (pg/L)	Qualifiers	Penta-Dioxins	Conc. (pg/L)	Qualifiers	Hexa-Dioxins	Conc (pg/L)	Qualifiers	Hepta-Dioxins	Conc (pg/L)	Qualifiers
1368D	(1.43)		12479/12468D	(2.31)		124679/124689D	(1.26)		1234679D	[2.61]	J
1379D	(1.43)		12469D	(2.31)		123468D	(1.26)		1234678D	[2.23]	J
1369D	(1.43)		12368D	(2.31)		123679/123689D	(1.26)				
1469D	(1.43)		12478D	(2.31)		123469D	(1.26)				
1247D...[4]	(1.43)		12379D	(2.31)		123478D	(1.3)				
1378D	(1.43)		12369D...[3]	(2.31)		123678D	(1.26)				
1268D	(1.43)		12346/12347D	(2.31)		123467D	(1.26)				
1478D	(1.43)		12378D	(2.31)		123789D	[1.33]	J	Conc.	0	
1279D	(1.43)		12367D	(2.31)					EMPC	4.84	
1234/1269D	(1.43)		12389D	(2.31)							
1236D	(1.43)								Octa-Dioxin	Conc	Qualifiers
1237/1238D	(1.43)									(pg/L)	
1239D	(1.43)								OCDD	25.9	J
2378D	(1.43)										
1278D	(1.43)										
1267D	(1.43)										
1289D	(1.43)										
Conc.	0		Conc.	0		Conc.	0				
EMPC	0		EMPC	0		EMPC	1.33				



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WHO-2005 TEQs	Conc.	EMPC
TEQ: ND=0	0.988	1.16
TEQ: ND=DL/2	3.42	3.59
TEQ: ND=DL	5.86	6.03
	Conc.	EMPC
Total PCDD/Fs	40.8	54

Checkcode: 831-098-VQF

Report Created: 15-Dec-2021 16:15 Analyst: TF

Sample ID: 11215131-120121-IDW-SS-NE

Method 1613B

Client Data			Sample Data			Laboratory Data			Date Received: 09-Dec-2021		
Name: GHD Services Inc.			Matrix: Aqueous			Lab Project ID: B6004			Date Received: 09-Dec-2021		
Project ID: 11215131-SJRWP-PCFSE			Weight/Volume: 0.96 L			Lab Sample ID: B6004_18735_DF_001			Date Extracted: 13-Dec-2021		
Date Collected: 08-Dec-2021			pH: 6			QC Batch No.: 18735			Date Analyzed: 15-Dec-2021		
			Split: -			Dilution: -			Time Analyzed: 6:36:46		
Tetra-Furans	Conc. (pg/L)	Qualifiers	Penta-Furans	Conc. (pg/L)	Qualifiers	Hexa-Furans	Conc (pg/L)	Qualifiers	Hepta-Furans	Conc (pg/L)	Qualifiers
1368F	(0.831)		13468/12468F	(0.751)		123468F	(1.06)		1234678F	[1.32]	J B
1468F	(0.831)		13678F...[3]	(1.29)		124678/134678F	(1.06)		1234679F	(0.821)	
2468F	(0.831)		12368F...[3]	(1.29)		134679F	(1.06)		1234689F	(0.821)	
1346/1246F	(0.831)		14678F	(1.29)		124679F	(1.06)		1234789F	(1.01)	
1347F...[3]	(0.831)		13479F	(1.29)		124689F	(1.06)				
1348F	(0.831)		13469/12479F	(1.29)		123467F	(1.06)				
1248F...[3]	(0.831)		12346F	(1.29)		123478F	(1.06)				
1268F	(0.831)		23468/12469F	(1.29)		123678F	(1.08)				
1467F	(0.831)		12347F	(1.29)		123479F	(1.06)				
1478F	(0.831)		12348F	(1.29)		123469F	(1.06)				
1369/1237F	(0.831)		12378F	(1.25)		123679F	(1.06)				
2467F	(0.831)		12678/12367F	(1.29)		234678F	(1.03)		Conc.	0	
2368F	(0.831)		12379F	(1.29)		234678/123689F	0		EMPC	1.32	
1238F...[5]	(0.831)		12679F	(1.29)		123689F	(1.06)				
1278F	5.1	J B	23467/12369F	(1.29)		123789F	(1.07)		Octa-Furan	Conc	Qualifiers
1349F	(0.831)		23478F	(1.32)		123789/123489F	0			(pg/L)	
1267F	(0.831)		23478/12489F	0		123489F	(1.06)		OCDF	[4.86]	J
2346/1249F	(0.831)		12489F	(1.29)							
2347/1279F	(0.831)		12349F	(1.29)							
2348F	(0.831)		12389F	(1.29)							
2378F	9.8	B									
2367/3467F	[0.901]	J									
1269F	(0.831)										
1239F	(0.831)										
1289F	(0.831)										
Conc.	14.9		Conc.	0		Conc.	0				
EMPC	15.8		EMPC	0		EMPC	0				


Checkcode: 831-098-VQF

Report Created: 15-Dec-2021 16:15 Analyst: TF

Sample ID: 11215131-120121-IDW-SS-NE **TEQ Summary** **Method 1613B**

Client Project Name:	GHD Services Inc.	Matrix:	Aqueous	Lab Sample ID:	B6004_18735_DF_001
Client Project ID:	11215131-SJRWP-PCFSE	Weight/Volume:	0.96 L	QC Batch No.:	18735
Date Collected:	08-Dec-2021	Split:	-	Date Extracted:	13-Dec-2021
Date Received:	09-Dec-2021	Dilution:	-	Date Analyzed:	15-Dec-2021 06:36
Lab Project No:	B6004	Units	pg/L		


Analyte	Result	Qualifiers	DLs	I-TEQ	WHO-1998	WHO-2005
2378-TCDD	(1.43)		1.43	(1.43)	(1.43)	(1.43)
12378-PeCDD	(2.31)		2.31	(1.16)	(2.31)	(2.31)
123478-HxCDD	(1.3)		1.3	(0.13)	(0.13)	(0.13)
123678-HxCDD	(1.26)		1.26	(0.126)	(0.126)	(0.126)
123789-HxCDD	[1.33]	J	1.24	[0.133]	[0.133]	[0.133]
1234678-HpCDD	[2.23]	J	1.24	[0.0223]	[0.0223]	[0.0223]
OCDD	25.9	J	7.19	0.0259	0.00259	0.00776
2378-TCDF	9.8	B	0.831	0.98	0.98	0.98
12378-PeCDF	(1.25)		1.25	(0.0627)	(0.0627)	(0.0376)
23478-PeCDF	(1.32)		1.32	(0.659)	(0.659)	(0.395)
123478-HxCDF	(1.06)		1.06	(0.106)	(0.106)	(0.106)
123678-HxCDF	(1.08)		1.08	(0.108)	(0.108)	(0.108)
234678-HxCDF	(1.03)		1.03	(0.103)	(0.103)	(0.103)
123789-HxCDF	(1.07)		1.07	(0.107)	(0.107)	(0.107)
1234678-HpCDF	[1.32]	J B	0.674	[0.0132]	[0.0132]	[0.0132]
1234789-HpCDF	(1.01)		1.01	(0.0101)	(0.0101)	(0.0101)
OCDF	[4.86]	J	3.1	[0.00486]	[0.000486]	[0.00146]

5500 Business Drive Wilmington, NC 28405, USA Tel: +1 910 794-1613; Toll-Free 866 846-8290 www.us.sgs.com 	TEQ Summaries			
	EMPC = 0, ND = 0	1.01	0.983	0.988
	EMPC = 0, ND = DL / 2	3.01	3.56	3.42
	EMPC = 0, ND = DL	5.01	6.14	5.86
	EMPC = 0, < J-level = 0	0.98	0.98	0.98
	EMPC = EMPC, ND = 0	1.18	1.15	1.16
	EMPC = EMPC, ND = DL / 2	3.18	3.73	3.59
	EMPC = EMPC, ND = DL	5.18	6.31	6.03
	EMPC = EMPC, < J-level = 0	0.98	0.98	0.98

Sample ID: 11215131-120121-IDW-SS-NE DECON

Method 1613B

Client Data		Sample Data		Laboratory Data			
Name:	GHD Services Inc.	Matrix:	Aqueous	Lab Project ID:	B6004	Date Received:	09-Dec-2021
Project ID:	11215131-SJRWP-PCFSE	Weight/Volume:	0.93 L	Lab Sample ID:	B6004_18735_DF_002	Date Extracted:	13-Dec-2021
Date Collected:	07-Dec-2021	pH:	6	QC Batch No.:	18735	Date Analyzed:	15-Dec-2021
		Split:	-	Dilution:	-	Time Analyzed:	7:23:06

Analyte	Conc. (pg/L)	DL (pg/L)	EMPC (pg/L)	Qualifiers	Standard	ES Recoveries	Qualifiers
2378-TCDD	2.9			J	ES 2378-TCDD	96.2	
12378-PeCDD	ND	1.42			ES 12378-PeCDD	98.8	
123478-HxCDD	ND	1.04			ES 123478-HxCDD	99	
123678-HxCDD	ND	1.05			ES 123678-HxCDD	98.8	
123789-HxCDD	ND	0.969			ES 123789-HxCDD	102	
1234678-HpCDD	EMPC		7.89	J	ES 1234678-HpCDD	82.3	
OCDD	153				ES OCDD	41	
2378-TCDF	EMPC		6.57	B	ES 2378-TCDF	90.8	
12378-PeCDF	ND	0.919			ES 12378-PeCDF	99.3	
23478-PeCDF	ND	0.945			ES 23478-PeCDF	97.2	
123478-HxCDF	ND	0.859			ES 123478-HxCDF	103	
123678-HxCDF	ND	0.811			ES 123678-HxCDF	110	
234678-HxCDF	ND	0.84			ES 234678-HxCDF	107	
123789-HxCDF	ND	0.838			ES 123789-HxCDF	106	
1234678-HpCDF	EMPC		2.75	J B	ES 1234678-HpCDF	94.3	
1234789-HpCDF	ND	1.43			ES 1234789-HpCDF	83.5	
OCDF	EMPC		11.1	J	ES OCDF	44.3	
Totals					Standard	CS Recoveries	
Total TCDD	2.9		2.9		CS 37Cl-2378-TCDD	96.7	
Total PeCDD	ND	1.42	ND		CS 12347-PeCDD	107	
Total HxCDD	1.69		1.69		CS 12346-PeCDF	106	
Total HpCDD	8.92		16.8		CS 123469-HxCDF	117	
Total TCDF	3.86		10.4		CS 1234689-HpCDF	102	
Total PeCDF	ND	0.932	ND				
Total HxCDF	ND	0.835	ND				
Total HpCDF	ND		5.71				
Total PCDD/Fs	171		202				
WHO-2005 TEQs							
TEQ: ND=0	2.94		3.71			5500 Business Drive Wilmington, NC 28405, USA www.us.sgs.com Tel: +1 910 794-1613; Toll-Free 866 846-8290	
TEQ: ND=DL/2	4.14	1.66	4.9				
TEQ: ND=DL	5.33	3.32	6.09				

Sample ID: 11215131-120121-IDW-SS-NE DECON Method 1613B

Client Data			Sample Data			Laboratory Data						
Name:	GHD Services Inc.		Matrix:	Aqueous		Lab Project ID:	B6004		Date Received:	09-Dec-2021		
Project ID:	11215131-SJRWP-PCFSE		Weight/Volume:	0.93 L		Lab Sample ID:	B6004_18735_DF_002		Date Extracted:	13-Dec-2021		
Date Collected:	07-Dec-2021		pH:	6		QC Batch No.:	18735		Date Analyzed:	15-Dec-2021		
			Split:	-		Dilution:	-		Time Analyzed:	7:23:06		

Tetra-Dioxins	Conc. (pg/L)	Qualifiers	Penta-Dioxins	Conc. (pg/L)	Qualifiers	Hexa-Dioxins	Conc (pg/L)	Qualifiers	Hepta-Dioxins	Conc (pg/L)	Qualifiers
1368D	(0.836)		12479/12468D	(1.42)		124679/124689D	1.69	J	1234679D	8.92	J
1379D	(0.836)		12469D	(1.42)		123468D	(1.01)		1234678D	[7.89]	J
1369D	(0.836)		12368D	(1.42)		123679/123689D	(1.01)				
1469D	(0.836)		12478D	(1.42)		123469D	(1.01)				
1247D...[4]	(0.836)		12379D	(1.42)		123478D	(1.04)				
1378D	(0.836)		12369D...[3]	(1.42)		123678D	(1.05)				
1268D	(0.836)		12346/12347D	(1.42)		123467D	(1.01)				
1478D	(0.836)		12378D	(1.42)		123789D	(0.969)		Conc.	8.92	
1279D	(0.836)		12367D	(1.42)					EMPC	16.8	
1234/1269D	(0.836)		12389D	(1.42)							
1236D	(0.836)								Octa-Dioxin	Conc	Qualifiers
										(pg/L)	
									OCDD	153	
1237/1238D	(0.836)										
1239D	(0.836)										
2378D	2.9	J									
1278D	(0.836)										
1267D	(0.836)										
1289D	(0.836)										
Conc.	2.9		Conc.	0		Conc.	1.69				
EMPC	2.9		EMPC	0		EMPC	1.69				



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WHO-2005 TEQs	Conc.	EMPC
TEQ: ND=0	2.94	3.71
TEQ: ND=DL/2	4.14	4.9
TEQ: ND=DL	5.33	6.09

Total PCDD/Fs	Conc.	EMPC
	171	202

Checkcode: 224-154-JQG

Report Created: 15-Dec-2021 16:15 Analyst: TF

Sample ID: 11215131-120121-IDW-SS-NE DECON Method 1613B

<u>Client Data</u>			<u>Sample Data</u>			<u>Laboratory Data</u>					
Name: GHD Services Inc.			Matrix: Aqueous			Lab Project ID: B6004			Date Received: 09-Dec-2021		
Project ID: 11215131-SJRWP-PCFSE			Weight/Volume: 0.93 L			Lab Sample ID: B6004_18735_DF_002			Date Extracted: 13-Dec-2021		
Date Collected: 07-Dec-2021			pH: 6			QC Batch No.: 18735			Date Analyzed: 15-Dec-2021		
			Split: -			Dilution: -			Time Analyzed: 7:23:06		
Tetra-Furans	Conc. (pg/L)	Qualifiers	Penta-Furans	Conc. (pg/L)	Qualifiers	Hexa-Furans	Conc (pg/L)	Qualifiers	Hepta-Furans	Conc (pg/L)	Qualifiers
1368F	(0.723)		13468/12468F	(0.607)		123468F	(0.835)		1234678F	[2.75]	J B
1468F	(0.723)		13678F...[3]	(0.932)		124678/134678F	(0.835)		1234679F	(1.1)	
2468F	(0.723)		12368F...[3]	(0.932)		134679F	(0.835)		1234689F	[2.96]	J
1346/1246F	(0.723)		14678F	(0.932)		124679F	(0.835)		1234789F	(1.43)	
1347F...[3]	(0.723)		13479F	(0.932)		124689F	(0.835)				
1348F	(0.723)		13469/12479F	(0.932)		123467F	(0.835)				
1248F...[3]	(0.723)		12346F	(0.932)		123478F	(0.859)				
1268F	(0.723)		23468/12469F	(0.932)		123678F	(0.811)				
1467F	(0.723)		12347F	(0.932)		123479F	(0.835)				
1478F	(0.723)		12348F	(0.932)		123469F	(0.835)				
1369/1237F	(0.723)		12378F	(0.919)		123679F	(0.835)				
2467F	(0.723)		12678/12367F	(0.932)		234678F	(0.84)		Conc.	0	
2368F	(0.723)		12379F	(0.932)		234678/123689F	0		EMPC	5.71	
1238F...[5]	(0.723)		12679F	(0.932)		123689F	(0.835)				
1278F	3.86	J B	23467/12369F	(0.932)		123789F	(0.838)		Octa-Furan	Conc	Qualifiers
1349F	(0.723)		23478F	(0.945)		123789/123489F	0			(pg/L)	
1267F	(0.723)		23478/12489F	0		123489F	(0.835)		OCDF	[11.1]	J
2346/1249F	(0.723)		12489F	(0.932)							
2347/1279F	(0.723)		12349F	(0.932)							
2348F	(0.723)		12389F	(0.932)							
2378F	[6.57]	B									
2367/3467F	(0.723)										
1269F	(0.723)										
1239F	(0.723)										
1289F	(0.723)										
Conc.	3.86		Conc.	0		Conc.	0				
EMPC	10.4		EMPC	0		EMPC	0				

Checkcode: 224-154-JQG


Report Created: 15-Dec-2021 16:15 Analyst: TF

Sample ID: 11215131-120121-IDW-SS-NE DECONTEQ Summary

Method 1613B

Client Project Name:	GHD Services Inc.	Matrix:	Aqueous	Lab Sample ID:	B6004_18735_DF_002
Client Project ID:	11215131-SJRWP-PCFSE	Weight/Volume:	0.93 L	QC Batch No.:	18735
Date Collected:	07-Dec-2021	Split:	-	Date Extracted:	13-Dec-2021
Date Received:	09-Dec-2021	Dilution:	-	Date Analyzed:	15-Dec-2021 07:23
Lab Project No:	B6004	Units	pg/L		

Analyte	Result	Qualifiers	DLs	I-TEQ	WHO-1998	WHO-2005
2378-TCDD	2.9	J	0.836	2.9	2.9	2.9
12378-PeCDD	(1.42)		1.42	(0.709)	(1.42)	(1.42)
123478-HxCDD	(1.04)		1.04	(0.104)	(0.104)	(0.104)
123678-HxCDD	(1.05)		1.05	(0.105)	(0.105)	(0.105)
123789-HxCDD	(0.969)		0.969	(0.0969)	(0.0969)	(0.0969)
1234678-HpCDD	[7.89]	J	1.78	[0.0789]	[0.0789]	[0.0789]
OCDD	153		9.72	0.153	0.0153	0.046
2378-TCDF	[6.57]	B	0.723	[0.657]	[0.657]	[0.657]
12378-PeCDF	(0.919)		0.919	(0.046)	(0.046)	(0.0276)
23478-PeCDF	(0.945)		0.945	(0.473)	(0.473)	(0.284)
123478-HxCDF	(0.859)		0.859	(0.0859)	(0.0859)	(0.0859)
123678-HxCDF	(0.811)		0.811	(0.0811)	(0.0811)	(0.0811)
234678-HxCDF	(0.84)		0.84	(0.084)	(0.084)	(0.084)
123789-HxCDF	(0.838)		0.838	(0.0838)	(0.0838)	(0.0838)
1234678-HpCDF	[2.75]	J B	0.856	[0.0275]	[0.0275]	[0.0275]
1234789-HpCDF	(1.43)		1.43	(0.0143)	(0.0143)	(0.0143)
OCDF	[11.1]	J	4.81	[0.0111]	[0.00111]	[0.00334]

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	EMPC = 0, ND = 0	3.05	2.91	2.94
	EMPC = 0, ND = DL / 2	3.99	4.21	4.14
	EMPC = 0, ND = DL	4.93	5.5	5.33
	EMPC = 0, < J-level = 0	0.153	0.0153	0.046
	EMPC = EMPC, ND = 0	3.83	3.68	3.71
	EMPC = EMPC, ND = DL / 2	4.77	4.97	4.9
	EMPC = EMPC, ND = DL	5.71	6.27	6.09
	EMPC = EMPC, < J-level = 0	0.81	0.672	0.703

Sample ID: 11215131-120121-IDW-SS-NE DECON-TCLP LB

Method 1613B

Client Data		Sample Data		Laboratory Data			
Name:	GHD Services Inc.	Matrix:	Aqueous	Lab Project ID:	B6004	Date Received:	09-Dec-2021
Project ID:	11215131-SJRWP-PCFSE	Weight/Volume:	0.93 L	Lab Sample ID:	B6004_18735_DF_003	Date Extracted:	13-Dec-2021
Date Collected:	07-Dec-2021	pH:	5	QC Batch No.:	18735	Date Analyzed:	15-Dec-2021
		Split:	-	Dilution:	-	Time Analyzed:	8:15:15
Analyte	Conc. (pg/L)	DL (pg/L)	EMPC (pg/L)	Qualifiers	Standard	ES Recoveries	Qualifiers
2378-TCDD	ND	1.17			ES 2378-TCDD	89.9	
12378-PeCDD	ND	1.79			ES 12378-PeCDD	95.1	
123478-HxCDD	ND	1.08			ES 123478-HxCDD	91.7	
123678-HxCDD	ND	1.09			ES 123678-HxCDD	90.3	
123789-HxCDD	ND	0.929			ES 123789-HxCDD	91.2	
1234678-HpCDD	ND	2.13			ES 1234678-HpCDD	77.8	
OCDD	ND	12.1			ES OCDD	42.9	
2378-TCDF	ND	0.693			ES 2378-TCDF	87.2	
12378-PeCDF	ND	1.02			ES 12378-PeCDF	92.6	
23478-PeCDF	ND	1.01			ES 23478-PeCDF	91.7	
123478-HxCDF	ND	1.06			ES 123478-HxCDF	95.1	
123678-HxCDF	ND	1.07			ES 123678-HxCDF	99	
234678-HxCDF	ND	1.03			ES 234678-HxCDF	98.9	
123789-HxCDF	ND	1.11			ES 123789-HxCDF	98	
1234678-HpCDF	ND	0.685			ES 1234678-HpCDF	91.1	
1234789-HpCDF	ND	1.12			ES 1234789-HpCDF	81	
OCDF	ND	4.61			ES OCDF	45.4	
Totals					Standard	CS Recoveries	
Total TCDD	ND	1.17	ND		CS 37Cl-2378-TCDD	99.5	
Total PeCDD	ND	1.79	ND		CS 12347-PeCDD	109	
Total HxCDD	ND	1.03	ND		CS 12346-PeCDF	102	
Total HpCDD	ND	2.13	ND		CS 123469-HxCDF	115	
					CS 1234689-HpCDF	104	
Total TCDF	ND	0.693	ND				
Total PeCDF	ND	1.02	ND				
Total HxCDF	ND	1.06	ND				
Total HpCDF	ND	0.871	ND				
Total PCDD/Fs	ND		ND				
WHO-2005 TEQs							
TEQ: ND=0	0		0				
TEQ: ND=DL/2	2.07	2.07	2.07				
TEQ: ND=DL	4.15	4.15	4.15				



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Sample ID: 11215131-120121-IDW-SS-NE DECON-TCLP LB Method 1613B

Client Data			Sample Data			Laboratory Data						
Name:	GHD Services Inc.		Matrix:	Aqueous		Lab Project ID:	B6004		Date Received:	09-Dec-2021		
Project ID:	11215131-SJRWP-PCFSE		Weight/Volume:	0.93 L		Lab Sample ID:	B6004_18735_DF_003		Date Extracted:	13-Dec-2021		
Date Collected:	07-Dec-2021		pH:	5		QC Batch No.:	18735		Date Analyzed:	15-Dec-2021		
			Split:	-		Dilution:	-		Time Analyzed:	8:15:15		

Tetra-Dioxins	Conc. (pg/L)	Qualifiers	Penta-Dioxins	Conc. (pg/L)	Qualifiers	Hexa-Dioxins	Conc. (pg/L)	Qualifiers	Hepta-Dioxins	Conc. (pg/L)	Qualifiers
1368D	(1.17)		12479/12468D	(1.79)		124679/124689D	(1.03)		1234679D	(2.13)	
1379D	(1.17)		12469D	(1.79)		123468D	(1.03)		1234678D	(2.13)	
1369D	(1.17)		12368D	(1.79)		123679/123689D	(1.03)				
1469D	(1.17)		12478D	(1.79)		123469D	(1.03)				
1247D...[4]	(1.17)		12379D	(1.79)		123478D	(1.08)				
1378D	(1.17)		12369D...[3]	(1.79)		123678D	(1.09)				
1268D	(1.17)		12346/12347D	(1.79)		123467D	(1.03)				
1478D	(1.17)		12378D	(1.79)		123789D	(0.929)		Conc.	0	
1279D	(1.17)		12367D	(1.79)					EMPC	0	
1234/1269D	(1.17)		12389D	(1.79)							
1236D	(1.17)								Octa-Dioxin	Conc	Qualifiers
1237/1238D	(1.17)									(pg/L)	
1239D	(1.17)								OCDD	(12.1)	
2378D	(1.17)										
1278D	(1.17)										
1267D	(1.17)										
1289D	(1.17)										
Conc.	0		Conc.	0		Conc.	0				
EMPC	0		EMPC	0		EMPC	0				



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WHO-2005 TEQs	Conc.	EMPC
TEQ: ND=0	0	0
TEQ: ND=DL/2	2.07	2.07
TEQ: ND=DL	4.15	4.15
Total PCDD/Fs	Conc.	EMPC
	0	0

Checkcode: 607-758-RMJ

Report Created: 15-Dec-2021 16:16 Analyst: TF

Sample ID: 11215131-120121-IDW-SS-NE DECON-TCLP LB Method 1613B

<u>Client Data</u>			<u>Sample Data</u>			<u>Laboratory Data</u>					
Name: GHD Services Inc.			Matrix: Aqueous			Lab Project ID: B6004			Date Received: 09-Dec-2021		
Project ID: 11215131-SJRWP-PCFSE			Weight/Volume: 0.93 L			Lab Sample ID: B6004_18735_DF_003			Date Extracted: 13-Dec-2021		
Date Collected: 07-Dec-2021			pH: 5			QC Batch No.: 18735			Date Analyzed: 15-Dec-2021		
			Split: -			Dilution: -			Time Analyzed: 8:15:15		
Tetra-Furans	Conc. (pg/L)	Qualifiers	Penta-Furans	Conc. (pg/L)	Qualifiers	Hexa-Furans	Conc (pg/L)	Qualifiers	Hepta-Furans	Conc (pg/L)	Qualifiers
1368F	(0.693)		13468/12468F	(0.778)		123468F	(1.06)		1234678F	(0.685)	
1468F	(0.693)		13678F...[3]	(1.02)		124678/134678F	(1.06)		1234679F	(0.871)	
2468F	(0.693)		12368F...[3]	(1.02)		134679F	(1.06)		1234689F	(0.871)	
1346/1246F	(0.693)		14678F	(1.02)		124679F	(1.06)		1234789F	(1.12)	
1347F...[3]	(0.693)		13479F	(1.02)		124689F	(1.06)				
1348F	(0.693)		13469/12479F	(1.02)		123467F	(1.06)				
1248F...[3]	(0.693)		12346F	(1.02)		123478F	(1.06)				
1268F	(0.693)		23468/12469F	(1.02)		123678F	(1.07)				
1467F	(0.693)		12347F	(1.02)		123479F	(1.06)				
1478F	(0.693)		12348F	(1.02)		123469F	(1.06)				
1369/1237F	(0.693)		12378F	(1.02)		123679F	(1.06)				
2467F	(0.693)		12678/12367F	(1.02)		234678F	(1.03)		Conc.	0	
2368F	(0.693)		12379F	(1.02)		234678/123689F	0		EMPC	0	
1238F...[5]	(0.693)		12679F	(1.02)		123689F	(1.06)				
1278F	(0.693)		23467/12369F	(1.02)		123789F	(1.11)		Octa-Furan	Conc	Qualifiers
1349F	(0.693)		23478F	(1.01)		123789/123489F	0			(pg/L)	
1267F	(0.693)		23478/12489F	0		123489F	(1.06)		OCDF	(4.61)	
2346/1249F	(0.693)		12489F	(1.02)							
2347/1279F	(0.693)		12349F	(1.02)							
2348F	(0.693)		12389F	(1.02)							
2378F	(0.693)										
2367/3467F	(0.693)										
1269F	(0.693)										
1239F	(0.693)										
1289F	(0.693)										
Conc.	0		Conc.	0		Conc.	0				
EMPC	0		EMPC	0		EMPC	0				

Checkcode: 607-758-RMJ


Report Created: 15-Dec-2021 16:16 Analyst: TF

Sample ID: 11215131-120121-IDW-SS-NE DECONTEQ Summary

Method 1613B


Client Project Name:	GHD Services Inc.	Matrix:	Aqueous	Lab Sample ID:	B6004_18735_DF_003
Client Project ID:	11215131-SJRWP-PCFSE	Weight/Volume:	0.93 L	QC Batch No.:	18735
Date Collected:	07-Dec-2021	Split:	-	Date Extracted:	13-Dec-2021
Date Received:	09-Dec-2021	Dilution:	-	Date Analyzed:	15-Dec-2021 08:15
Lab Project No:	B6004	Units	pg/L		

Analyte	Result	Qualifiers	DLs	I-TEQ	WHO-1998	WHO-2005
2378-TCDD	(1.17)		1.17	(1.17)	(1.17)	(1.17)
12378-PeCDD	(1.79)		1.79	(0.897)	(1.79)	(1.79)
123478-HxCDD	(1.08)		1.08	(0.108)	(0.108)	(0.108)
123678-HxCDD	(1.09)		1.09	(0.109)	(0.109)	(0.109)
123789-HxCDD	(0.929)		0.929	(0.0929)	(0.0929)	(0.0929)
1234678-HpCDD	(2.13)		2.13	(0.0213)	(0.0213)	(0.0213)
OCDD	(12.1)		12.1	(0.0121)	(0.00121)	(0.00362)
2378-TCDF	(0.693)		0.693	(0.0693)	(0.0693)	(0.0693)
12378-PeCDF	(1.02)		1.02	(0.0509)	(0.0509)	(0.0305)
23478-PeCDF	(1.01)		1.01	(0.507)	(0.507)	(0.304)
123478-HxCDF	(1.06)		1.06	(0.106)	(0.106)	(0.106)
123678-HxCDF	(1.07)		1.07	(0.107)	(0.107)	(0.107)
234678-HxCDF	(1.03)		1.03	(0.103)	(0.103)	(0.103)
123789-HxCDF	(1.11)		1.11	(0.111)	(0.111)	(0.111)
1234678-HpCDF	(0.685)		0.685	(0.00685)	(0.00685)	(0.00685)
1234789-HpCDF	(1.12)		1.12	(0.0112)	(0.0112)	(0.0112)
OCDF	(4.61)		4.61	(0.00461)	(0.000461)	(0.00138)

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	EMPC = 0, ND = 0	0	0	0
	EMPC = 0, ND = DL / 2	1.74	2.18	2.07
	EMPC = 0, ND = DL	3.49	4.37	4.15
	EMPC = 0, < J-level = 0	0	0	0
	EMPC = EMPC, ND = 0	0	0	0
	EMPC = EMPC, ND = DL / 2	1.74	2.18	2.07
	EMPC = EMPC, ND = DL	3.49	4.37	4.15
	EMPC = EMPC, < J-level = 0	0	0	0

Sample ID: 11215131-120121-IDW-SS-NE-TCLP LB

Method 1613B

Client Data		Sample Data		Laboratory Data			
Name:	GHD Services Inc.	Matrix:	Aqueous	Lab Project ID:	B6004	Date Received:	09-Dec-2021
Project ID:	11215131-SJRWP-PCFSE	Weight/Volume:	0.96 L	Lab Sample ID:	B6004_18735_DF_004	Date Extracted:	13-Dec-2021
Date Collected:	08-Dec-2021	pH:	5	QC Batch No.:	18735	Date Analyzed:	15-Dec-2021
		Split:	-	Dilution:	-	Time Analyzed:	9:01:26
Analyte	Conc. (pg/L)	DL (pg/L)	EMPC (pg/L)	Qualifiers	Standard	ES Recoveries	Qualifiers
2378-TCDD	ND	1.06			ES 2378-TCDD	95.6	
12378-PeCDD	ND	1.86			ES 12378-PeCDD	101	
123478-HxCDD	ND	1.1			ES 123478-HxCDD	97.5	
123678-HxCDD	ND	1.06			ES 123678-HxCDD	96.1	
123789-HxCDD	ND	1.05			ES 123789-HxCDD	96.2	
1234678-HpCDD	ND	1.85			ES 1234678-HpCDD	81	
OCDD	EMPC		17.8	J	ES OCDD	41	
2378-TCDF	ND	1.11			ES 2378-TCDF	90.6	
12378-PeCDF	ND	1.11			ES 12378-PeCDF	98.1	
23478-PeCDF	ND	1.22			ES 23478-PeCDF	97.2	
123478-HxCDF	ND	1.12			ES 123478-HxCDF	100	
123678-HxCDF	ND	1.03			ES 123678-HxCDF	107	
234678-HxCDF	ND	1.06			ES 234678-HxCDF	105	
123789-HxCDF	ND	1.05			ES 123789-HxCDF	104	
1234678-HpCDF	1.47			J B	ES 1234678-HpCDF	93	
1234789-HpCDF	ND	1.22			ES 1234789-HpCDF	83.1	
OCDF	ND	5.36			ES OCDF	44	
Totals					Standard	CS Recoveries	
Total TCDD	ND	1.06	ND		CS 37Cl-2378-TCDD	97.2	
Total PeCDD	ND	1.86	ND		CS 12347-PeCDD	109	
Total HxCDD	ND	1.07	ND		CS 12346-PeCDF	103	
Total HpCDD	ND		2.5		CS 123469-HxCDF	113	
Total TCDF	ND	1.11	ND		CS 1234689-HpCDF	101	
Total PeCDF	ND	1.16	ND				
Total HxCDF	ND	1.06	ND				
Total HpCDF	1.47		1.47				
Total PCDD/Fs	1.47		21.7				
WHO-2005 TEQs					 5500 Business Drive Wilmington, NC 28405, USA www.us.sgs.com Tel: +1 910 794-1613; Toll-Free 866 846-8290		
TEQ: ND=0	0.0147		0.02				
TEQ: ND=DL/2	2.12	2.11	2.13				
TEQ: ND=DL	4.23	4.22	4.23				

Sample ID: 11215131-120121-IDW-SS-NE-TCLP LB **Method 1613B**

Client Data			Sample Data			Laboratory Data					
Name: GHD Services Inc.			Matrix: Aqueous			Lab Project ID: B6004			Date Received: 09-Dec-2021		
Project ID: 11215131-SJRWP-PCFSE			Weight/Volume: 0.96 L			Lab Sample ID: B6004_18735_DF_004			Date Extracted: 13-Dec-2021		
Date Collected: 08-Dec-2021			pH: 5			QC Batch No.: 18735			Date Analyzed: 15-Dec-2021		
			Split: -			Dilution: -			Time Analyzed: 9:01:26		

Tetra-Dioxins	Conc. (pg/L)	Qualifiers	Penta-Dioxins	Conc. (pg/L)	Qualifiers	Hexa-Dioxins	Conc. (pg/L)	Qualifiers	Hepta-Dioxins	Conc. (pg/L)	Qualifiers
1368D	(1.06)		12479/12468D	(1.86)		124679/124689D	(1.07)		1234679D	[2.5]	J
1379D	(1.06)		12469D	(1.86)		123468D	(1.07)		1234678D	(1.85)	
1369D	(1.06)		12368D	(1.86)		123679/123689D	(1.07)				
1469D	(1.06)		12478D	(1.86)		123469D	(1.07)				
1247D...[4]	(1.06)		12379D	(1.86)		123478D	(1.1)				
1378D	(1.06)		12369D...[3]	(1.86)		123678D	(1.06)				
1268D	(1.06)		12346/12347D	(1.86)		123467D	(1.07)				
1478D	(1.06)		12378D	(1.86)		123789D	(1.05)		Conc.	0	
1279D	(1.06)		12367D	(1.86)					EMPC	2.5	
1234/1269D	(1.06)		12389D	(1.86)							
Conc.	0		Conc.	0		Conc.	0		Conc.	0	
EMPC	0		EMPC	0		EMPC	0		EMPC	0	

<p>5500 Business Drive Wilmington, NC 28405, USA Tel: +1 910 794-1613 www.us.sgs.com</p>	WHO-2005 TEQs		Conc.	EMPC
	TEQ: ND=0		0.0147	0.02
	TEQ: ND=DL/2		2.12	2.13
	TEQ: ND=DL		4.23	4.23
	Total PCDD/Fs		Conc.	EMPC
		1.47	21.7	

Checkcode: 065-337-FKB

Report Created: 15-Dec-2021 16:16 Analyst: TF

Sample ID: 11215131-120121-IDW-SS-NE-TCLP LB Method 1613B

<u>Client Data</u>			<u>Sample Data</u>			<u>Laboratory Data</u>					
Name: GHD Services Inc.			Matrix: Aqueous			Lab Project ID: B6004			Date Received: 09-Dec-2021		
Project ID: 11215131-SJRWP-PCFSE			Weight/Volume: 0.96 L			Lab Sample ID: B6004_18735_DF_004			Date Extracted: 13-Dec-2021		
Date Collected: 08-Dec-2021			pH: 5			QC Batch No.: 18735			Date Analyzed: 15-Dec-2021		
			Split: -			Dilution: -			Time Analyzed: 9:01:26		
Tetra-Furans	Conc. (pg/L)	Qualifiers	Penta-Furans	Conc. (pg/L)	Qualifiers	Hexa-Furans	Conc (pg/L)	Qualifiers	Hepta-Furans	Conc (pg/L)	Qualifiers
1368F	(1.11)		13468/12468F	(1.04)		123468F	(1.06)		1234678F	1.47	J B
1468F	(1.11)		13678F...[3]	(1.16)		124678/134678F	(1.06)		1234679F	(0.945)	
2468F	(1.11)		12368F...[3]	(1.16)		134679F	(1.06)		1234689F	(0.945)	
1346/1246F	(1.11)		14678F	(1.16)		124679F	(1.06)		1234789F	(1.22)	
1347F...[3]	(1.11)		13479F	(1.16)		124689F	(1.06)				
1348F	(1.11)		13469/12479F	(1.16)		123467F	(1.06)				
1248F...[3]	(1.11)		12346F	(1.16)		123478F	(1.12)				
1268F	(1.11)		23468/12469F	(1.16)		123678F	(1.03)				
1467F	(1.11)		12347F	(1.16)		123479F	(1.06)				
1478F	(1.11)		12348F	(1.16)		123469F	(1.06)				
1369/1237F	(1.11)		12378F	(1.11)		123679F	(1.06)				
2467F	(1.11)		12678/12367F	(1.16)		234678F	(1.06)		Conc.	1.47	
2368F	(1.11)		12379F	(1.16)		234678/123689F	0		EMPC	1.47	
1238F...[5]	(1.11)		12679F	(1.16)		123689F	(1.06)				
1278F	(1.11)		23467/12369F	(1.16)		123789F	(1.05)		Octa-Furan	Conc	Qualifiers
1349F	(1.11)		23478F	(1.22)		123789/123489F	0			(pg/L)	
1267F	(1.11)		23478/12489F	0		123489F	(1.06)		OCDF	(5.36)	
2346/1249F	(1.11)		12489F	(1.16)							
2347/1279F	(1.11)		12349F	(1.16)							
2348F	(1.11)		12389F	(1.16)							
2378F	(1.11)										
2367/3467F	(1.11)										
1269F	(1.11)										
1239F	(1.11)										
1289F	(1.11)										
Conc.	0		Conc.	0		Conc.	0				
EMPC	0		EMPC	0		EMPC	0				

Checkcode: 065-337-FKB


Report Created: 15-Dec-2021 16:16 Analyst: TF

Sample ID: 11215131-120121-IDW-SS-NE-TCLP LTEQ Summary

Method 1613B

Client Project Name:	GHD Services Inc.	Matrix:	Aqueous	Lab Sample ID:	B6004_18735_DF_004
Client Project ID:	11215131-SJRWP-PCFSE	Weight/Volume:	0.96 L	QC Batch No.:	18735
Date Collected:	08-Dec-2021	Split:	-	Date Extracted:	13-Dec-2021
Date Received:	09-Dec-2021	Dilution:	-	Date Analyzed:	15-Dec-2021 09:01
Lab Project No:	B6004	Units	pg/L		

Analyte	Result	Qualifiers	DLs	I-TEQ	WHO-1998	WHO-2005
2378-TCDD	(1.06)		1.06	(1.06)	(1.06)	(1.06)
12378-PeCDD	(1.86)		1.86	(0.93)	(1.86)	(1.86)
123478-HxCDD	(1.1)		1.1	(0.11)	(0.11)	(0.11)
123678-HxCDD	(1.06)		1.06	(0.106)	(0.106)	(0.106)
123789-HxCDD	(1.05)		1.05	(0.105)	(0.105)	(0.105)
1234678-HpCDD	(1.85)		1.85	(0.0185)	(0.0185)	(0.0185)
OCDD	[17.8]	J	13.8	[0.0178]	[0.00178]	[0.00533]
2378-TCDF	(1.11)		1.11	(0.111)	(0.111)	(0.111)
12378-PeCDF	(1.11)		1.11	(0.0554)	(0.0554)	(0.0333)
23478-PeCDF	(1.22)		1.22	(0.61)	(0.61)	(0.366)
123478-HxCDF	(1.12)		1.12	(0.112)	(0.112)	(0.112)
123678-HxCDF	(1.03)		1.03	(0.103)	(0.103)	(0.103)
234678-HxCDF	(1.06)		1.06	(0.106)	(0.106)	(0.106)
123789-HxCDF	(1.05)		1.05	(0.105)	(0.105)	(0.105)
1234678-HpCDF	1.47	J B	0.733	0.0147	0.0147	0.0147
1234789-HpCDF	(1.22)		1.22	(0.0122)	(0.0122)	(0.0122)
OCDF	(5.36)		5.36	(0.00536)	(0.000536)	(0.00161)


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	EMPC = 0, ND = 0	0.0147	0.0147	0.0147
	EMPC = 0, ND = DL / 2	1.79	2.25	2.12
	EMPC = 0, ND = DL	3.57	4.49	4.23
	EMPC = 0, < J-level = 0	0	0	0
	EMPC = EMPC, ND = 0	0.0325	0.0165	0.02
	EMPC = EMPC, ND = DL / 2	1.81	2.26	2.13
	EMPC = EMPC, ND = DL	3.58	4.49	4.23
EMPC = EMPC, < J-level = 0	0	0	0	

Checkcode: 065-337-FKB

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Sample ID: Method Blank B6004_18735

Method 1613B

Client Data		Sample Data		Laboratory Data			
Name:	GHD Services Inc.	Matrix:	Aqueous	Lab Project ID:	B6004	Date Received:	n/a
Project ID:	11215131-SJRWP-PCFSE	Weight/Volume:	1.00 L	Lab Sample ID:	MB1_18735_DF_TLX	Date Extracted:	13-Dec-2021
Date Collected:	n/a	pH:	n/a	QC Batch No:	18735	Date Analyzed:	15-Dec-2021
		Split:	-	Dilution:	-	Time Analyzed:	5:50:22
Analyte	Conc. (pg/L)	DL (pg/L)	EMPC (pg/L)	Qualifiers	Standard	ES Recoveries	Qualifiers
2378-TCDD	ND	0.675			ES 2378-TCDD	91.7	
12378-PeCDD	ND	1.46			ES 12378-PeCDD	91.5	
123478-HxCDD	ND	1.16			ES 123478-HxCDD	93.1	
123678-HxCDD	ND	1.12			ES 123678-HxCDD	94.6	
123789-HxCDD	ND	1.02			ES 123789-HxCDD	92.4	
1234678-HpCDD	ND	1.27			ES 1234678-HpCDD	75.2	
OCDD	ND	10.7			ES OCDD	39.5	
2378-TCDF	EMPC		1.05	J	ES 2378-TCDF	86.6	
12378-PeCDF	ND	1.91			ES 12378-PeCDF	92.5	
23478-PeCDF	ND	2.05			ES 23478-PeCDF	91.6	
123478-HxCDF	ND	0.802			ES 123478-HxCDF	98.5	
123678-HxCDF	ND	0.751			ES 123678-HxCDF	104	
234678-HxCDF	ND	0.768			ES 234678-HxCDF	103	
123789-HxCDF	ND	0.78			ES 123789-HxCDF	100	
1234678-HpCDF	EMPC		1.13	J	ES 1234678-HpCDF	88.9	
1234789-HpCDF	ND	1.49			ES 1234789-HpCDF	76.1	
OCDF	ND	3			ES OCDF	42	
Totals					Standard	CS Recoveries	
Total TCDD	ND	0.675	ND		CS 37Cl-2378-TCDD	98.3	
Total PeCDD	ND		2.08		CS 12347-PeCDD	107	
Total HxCDD	ND	1.1	ND		CS 12346-PeCDF	104	
Total HpCDD	ND	1.27	ND		CS 123469-HxCDF	117	
					CS 1234689-HpCDF	102	
Total TCDF	3.31		9.85				
Total PeCDF	ND	1.98	ND				
Total HxCDF	ND	0.773	ND				
Total HpCDF	ND		1.13				
Total PCDD/Fs	3.31		13.1				
WHO-2005 TEQs					 5500 Business Drive Wilmington, NC 28405, USA www.us.sgs.com Tel: +1 910 794-1613; Toll-Free 866 846-8290		
TEQ: ND=0	0		0.117				
TEQ: ND=DL/2	1.74	1.79	1.85				
TEQ: ND=DL	3.48	3.57	3.59				

Sample ID: Method Blank B6004_18735

Method 1613B

Client Data		Sample Data		Laboratory Data			
Name:	GHD Services Inc.	Matrix:	Aqueous	Lab Project ID:	B6004	Date Received:	n/a
Project ID:	11215131-SJRWP-PCFSE	Weight/Volume:	1.00 L	Lab Sample ID:	MB1_18735_DF_TLX	Date Extracted:	13-Dec-2021
Date Collected:	n/a	pH:	n/a	QC Batch No.:	18735	Date Analyzed:	15-Dec-2021
		Split:	-	Dilution:	-	Time Analyzed:	5:50:22

Tetra-Dioxins	Conc. (pg/L)	Qualifiers	Penta-Dioxins	Conc. (pg/L)	Qualifiers	Hexa-Dioxins	Conc (pg/L)	Qualifiers	Hepta-Dioxins	Conc (pg/L)	Qualifiers
1368D	(0.675)		12479/12468D	(1.46)		124679/124689D	(1.1)		1234679D	(1.27)	
1379D	(0.675)		12469D	(1.46)		123468D	(1.1)		1234678D	(1.27)	
1369D	(0.675)		12368D	[2.08]	J	123679/123689D	(1.1)				
1469D	(0.675)		12478D	(1.46)		123469D	(1.1)				
1247D...[4]	(0.675)		12379D	(1.46)		123478D	(1.16)				
1378D	(0.675)		12369D...[3]	(1.46)		123678D	(1.12)				
1268D	(0.675)		12346/12347D	(1.46)		123467D	(1.1)				
1478D	(0.675)		12378D	(1.46)		123789D	(1.02)		Conc.	0	
1279D	(0.675)		12367D	(1.46)					EMPC	0	
1234/1269D	(0.675)		12389D	(1.46)							
1236D	(0.675)								Octa-Dioxin	Conc	Qualifiers
1237/1238D	(0.675)									(pg/L)	
1239D	(0.675)								OCDD	(10.7)	
2378D	(0.675)										
1278D	(0.675)										
1267D	(0.675)										
1289D	(0.675)										
Conc.	0		Conc.	0		Conc.	0				
EMPC	0		EMPC	2.08		EMPC	0				



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WHO-2005 TEQs	Conc.	EMPC
TEQ: ND=0	0	0.117
TEQ: ND=DL/2	1.74	1.85
TEQ: ND=DL	3.48	3.59
Total PCDD/Fs	Conc.	EMPC
	3.31	13.1

Checkcode: 403-004-YQT

Report Created: 15-Dec-2021 16:15 Analyst: TF

Sample ID: Method Blank B6004_18735

Method 1613B

Client Data			Sample Data			Laboratory Data			Date Received: n/a		
Name: GHD Services Inc.			Matrix: Aqueous			Lab Project ID: B6004			Date Received: n/a		
Project ID: 11215131-SJRWP-PCFSE			Weight/Volume: 1.00 L			Lab Sample ID: MB1_18735_DF_TLX			Date Extracted: 13-Dec-2021		
Date Collected: n/a			pH: n/a			QC Batch No.: 18735			Date Analyzed: 15-Dec-2021		
			Split: -			Dilution: -			Time Analyzed: 5:50:22		
Tetra-Furans	Conc. (pg/L)	Qualifiers	Penta-Furans	Conc. (pg/L)	Qualifiers	Hexa-Furans	Conc (pg/L)	Qualifiers	Hepta-Furans	Conc (pg/L)	Qualifiers
1368F	(0.865)		13468/12468F	(0.675)		123468F	(0.773)		1234678F	[1.13]	J
1468F	(0.865)		13678F...[3]	(1.98)		124678/134678F	(0.773)		1234679F	(1.18)	
2468F	(0.865)		12368F...[3]	(1.98)		134679F	(0.773)		1234689F	(1.18)	
1346/1246F	(0.865)		14678F	(1.98)		124679F	(0.773)		1234789F	(1.49)	
1347F...[3]	[2.1]	J	13479F	(1.98)		124689F	(0.773)				
1348F	(0.865)		13469/12479F	(1.98)		123467F	(0.773)				
1248F...[3]	(0.865)		12346F	(1.98)		123478F	(0.802)				
1268F	(0.865)		23468/12469F	(1.98)		123678F	(0.751)				
1467F	(0.865)		12347F	(1.98)		123479F	(0.773)				
1478F	(0.865)		12348F	(1.98)		123469F	(0.773)				
1369/1237F	(0.865)		12378F	(1.91)		123679F	(0.773)				
2467F	(0.865)		12678/12367F	(1.98)		234678F	(0.768)		Conc.	0	
2368F	1.74	J	12379F	(1.98)		234678/123689F	0		EMPC	1.13	
1238F...[5]	1.57	J	12679F	(1.98)		123689F	(0.773)				
1278F	[1.32]	J	23467/12369F	(1.98)		123789F	(0.78)		Octa-Furan	Conc	Qualifiers
1349F	(0.865)		23478F	(2.05)		123789/123489F	0			(pg/L)	
1267F	(0.865)		23478/12489F	0		123489F	(0.773)		OCDF	(3)	
2346/1249F	(0.865)		12489F	(1.98)							
2347/1279F	[0.89]	J	12349F	(1.98)							
2348F	[1.18]	J	12389F	(1.98)							
2378F	[1.05]	J									
2367/3467F	(0.865)										
1269F	(0.865)										
1239F	(0.865)										
1289F	(0.865)										
Conc.	3.31		Conc.	0		Conc.	0				
EMPC	9.85		EMPC	0		EMPC	0				


Checkcode: 403-004-YQT

Report Created: 15-Dec-2021 16:15 Analyst: TF

Sample ID: Method Blank B6004_18735 **TEQ Summary** **Method 1613B**

Client Project Name:	GHD Services Inc.	Matrix:	Aqueous	Lab Sample ID:	MB1_18735_DF_TLX
Client Project ID:	11215131-SJRWP-PCFSE	Weight/Volume:	1.00 L	QC Batch No.:	18735
Date Collected:	n/a	Split:	-	Date Extracted:	13-Dec-2021
Date Received:	n/a	Dilution:	-	Date Analyzed:	15-Dec-2021 05:50
Lab Project No:	B6004	Units	pg/L		


Analyte	Result	Qualifiers	DLs	I-TEQ	WHO-1998	WHO-2005
2378-TCDD	(0.675)		0.675	(0.675)	(0.675)	(0.675)
12378-PeCDD	(1.46)		1.46	(0.729)	(1.46)	(1.46)
123478-HxCDD	(1.16)		1.16	(0.116)	(0.116)	(0.116)
123678-HxCDD	(1.12)		1.12	(0.112)	(0.112)	(0.112)
123789-HxCDD	(1.02)		1.02	(0.102)	(0.102)	(0.102)
1234678-HpCDD	(1.27)		1.27	(0.0127)	(0.0127)	(0.0127)
OCDD	(10.7)		10.7	(0.0107)	(0.00107)	(0.0032)
2378-TCDF	[1.05]	J	0.865	[0.105]	[0.105]	[0.105]
12378-PeCDF	(1.91)		1.91	(0.0957)	(0.0957)	(0.0574)
23478-PeCDF	(2.05)		2.05	(1.02)	(1.02)	(0.614)
123478-HxCDF	(0.802)		0.802	(0.0802)	(0.0802)	(0.0802)
123678-HxCDF	(0.751)		0.751	(0.0751)	(0.0751)	(0.0751)
234678-HxCDF	(0.768)		0.768	(0.0768)	(0.0768)	(0.0768)
123789-HxCDF	(0.78)		0.78	(0.078)	(0.078)	(0.078)
1234678-HpCDF	[1.13]	J	0.955	[0.0113]	[0.0113]	[0.0113]
1234789-HpCDF	(1.49)		1.49	(0.0149)	(0.0149)	(0.0149)
OCDF	(3)		3	(0.003)	(0.0003)	(0.0009)

5500 Business Drive Wilmington, NC 28405, USA Tel: +1 910 794-1613; Toll-Free 866 846-8290 www.us.sgs.com 	TEQ Summaries			
	EMPC = 0, ND = 0	0	0	0
	EMPC = 0, ND = DL / 2	1.6	1.96	1.74
	EMPC = 0, ND = DL	3.2	3.92	3.48
	EMPC = 0, < J-level = 0	0	0	0
	EMPC = EMPC, ND = 0	0.117	0.117	0.117
	EMPC = EMPC, ND = DL / 2	1.72	2.08	1.85
	EMPC = EMPC, ND = DL	3.32	4.04	3.59
	EMPC = EMPC, < J-level = 0	0	0	0

Sample ID: 0_18735_OPR001

Method 1613B


Client Data		Sample Data		Laboratory Data			
Name:	GHD Services Inc.	Matrix:	Aqueous	Lab Project ID:	B6004	Date Received:	n/a
Project ID:	11215131-SJRWP-PCFSE	Weight/Volume:	1 uL	Lab Sample ID:	OPR1_18735_DF	Date Extracted:	13-Dec-2021
Date Collected:	n/a	pH:	n/a	QC Batch No:	18735	Date Analyzed:	15-Dec-2021
		Split:	-	Dilution:	-	Time Analyzed:	3:31:24

Analyte	Conc. (pg/uL)	DL (pg/uL)	EMPC (pg/uL)	Qualifiers	Standard	ES Recoveries	Qualifiers
2378-TCDD	11.5				ES 2378-TCDD	96.1	
12378-PeCDD	49.9				ES 12378-PeCDD	97.7	
123478-HxCDD	54.4				ES 123478-HxCDD	98.5	
123678-HxCDD	54.1				ES 123678-HxCDD	102	
123789-HxCDD	53.6				ES 123789-HxCDD	99.8	
1234678-HpCDD	52.8				ES 1234678-HpCDD	81.9	
OCDD	109				ES OCDD	41.8	
2378-TCDF	10.9				ES 2378-TCDF	89.8	
12378-PeCDF	51.7				ES 12378-PeCDF	96.3	
23478-PeCDF	56				ES 23478-PeCDF	95.7	
123478-HxCDF	54.2				ES 123478-HxCDF	105	
123678-HxCDF	52.2				ES 123678-HxCDF	114	
234678-HxCDF	54.7				ES 234678-HxCDF	109	
123789-HxCDF	52.9				ES 123789-HxCDF	106	
1234678-HpCDF	53.3				ES 1234678-HpCDF	96	
1234789-HpCDF	53.7				ES 1234789-HpCDF	82	
OCDF	104				ES OCDF	45.8	
Totals					Standard	CS Recoveries	
Total TCDD	51.7		51.7		CS 37Cl-2378-TCDD	99.7	
Total PeCDD	76.9		76.9		CS 12347-PeCDD	106	
Total HxCDD	179		179		CS 12346-PeCDF	103	
Total HpCDD	67.2		67.2		CS 123469-HxCDF	117	
					CS 1234689-HpCDF	105	
Total TCDF	65.7		65.7				
Total PeCDF	207		207				
Total HxCDF	343		343				
Total HpCDF	107		107				
Total PCDD/Fs	1,310		1,310				
WHO-2005 TEQs					 5500 Business Drive Wilmington, NC 28405, USA www.us.sgs.com Tel: +1 910 794-1613; Toll-Free 866 846-8290		
TEQ: ND=0	120		120				
TEQ: ND=DL/2	120	0.0966	120				
TEQ: ND=DL	120	0.193	120				

Sample ID: 0_18735_OPR002

Method 1613B

Client Data		Sample Data		Laboratory Data		Date Received	
Name:	GHD Services Inc.	Matrix:	Aqueous	Lab Project ID:	B6004	Date Received:	n/a
Project ID:	11215131-SJRWP-PCFSE	Weight/Volume:	1 uL	Lab Sample ID:	OPR2_18735_DF	Date Extracted:	13-Dec-2021
Date Collected:	n/a	pH:	n/a	QC Batch No:	18735	Date Analyzed:	15-Dec-2021
		Split:	-	Dilution:	-	Time Analyzed:	4:17:43

Analyte	Conc. (pg/uL)	DL (pg/uL)	EMPC (pg/uL)	Qualifiers	Standard	ES Recoveries	Qualifiers
2378-TCDD	11.4				ES 2378-TCDD	91	
12378-PeCDD	48.9				ES 12378-PeCDD	92.3	
123478-HxCDD	54.1				ES 123478-HxCDD	94.5	
123678-HxCDD	54.1				ES 123678-HxCDD	94.2	
123789-HxCDD	53.9				ES 123789-HxCDD	93.1	
1234678-HpCDD	52.8				ES 1234678-HpCDD	75.8	
OCDD	106				ES OCDD	38.1	
2378-TCDF	11.1				ES 2378-TCDF	89.3	
12378-PeCDF	50.4				ES 12378-PeCDF	91.2	
23478-PeCDF	55.4				ES 23478-PeCDF	93.5	
123478-HxCDF	55.1				ES 123478-HxCDF	97.9	
123678-HxCDF	52.9				ES 123678-HxCDF	106	
234678-HxCDF	54				ES 234678-HxCDF	102	
123789-HxCDF	51.6				ES 123789-HxCDF	100	
1234678-HpCDF	53.5				ES 1234678-HpCDF	87.8	
1234789-HpCDF	52.5				ES 1234789-HpCDF	74.8	
OCDF	105				ES OCDF	40.4	
Totals					Standard	CS Recoveries	
Total TCDD	52.3		52.3		CS 37Cl-2378-TCDD	97.3	
Total PeCDD	74.8		74.8		CS 12347-PeCDD	100	
Total HxCDD	179		179		CS 12346-PeCDF	103	
Total HpCDD	67.6		67.6		CS 123469-HxCDF	113	
Total TCDF	64.7		64.7		CS 1234689-HpCDF	98.9	
Total PeCDF	207		207				
Total HxCDF	342		342				
Total HpCDF	106		106				
Total PCDD/Fs	1,300		1,300				
WHO-2005 TEQs					 5500 Business Drive Wilmington, NC 28405, USA www.us.sgs.com Tel: +1 910 794-1613; Toll-Free 866 846-8290		
TEQ: ND=0	119		119				
TEQ: ND=DL/2	119	0.104	119				
TEQ: ND=DL	119	0.207	119				

Sample DUP

Method 1613B

Sample ID: 0_18735_OPR001

Analyte	OPR1_18735_DF pg/uL	OPR2_18735_DF (DUP) pg/uL	RPD
2,3,7,8-TCDD	11.5	11.4	0.4%
1,2,3,7,8-PeCDD	49.9	48.9	1.9%
1,2,3,4,7,8-HxCDD	54.4	54.1	0.5%
1,2,3,6,7,8-HxCDD	54.1	54.1	0.0%
1,2,3,7,8,9-HxCDD	53.6	53.9	0.6%
1,2,3,4,6,7,8-HpCDD	52.8	52.8	0.0%
OCDD	109	106	3.4%
2,3,7,8-TCDF	10.9	11.1	2.1%
1,2,3,7,8-PeCDF	51.7	50.4	2.6%
2,3,4,7,8-PeCDF	56	55.4	1.1%
1,2,3,4,7,8-HxCDF	54.2	55.1	1.6%
1,2,3,6,7,8-HxCDF	52.2	52.9	1.3%
2,3,4,6,7,8-HxCDF	54.7	54	1.3%
1,2,3,7,8,9-HxCDF	52.9	51.6	2.5%
1,2,3,4,6,7,8-HpCDF	53.3	53.5	0.3%
1,2,3,4,7,8,9-HpCDF	53.7	52.5	2.3%
OCDF	104	105	0.2%
Totals			
Total TCDD	51.7	52.3	1.0%
Total PeCDD	76.9	74.8	2.8%
Total HxCDD	179	179	0.1%
Total HpCDD	67.2	67.6	0.6%
Total TCDF	65.7	64.7	1.6%
Total PeCDF	207	207	0.2%
Total HxCDF	343	342	0.3%
Total HpCDF	107	106	1.0%



Sample Receipt Notification

5500 Business Drive
 Wilmington, NC 28405 USA
 Tel: 910 794-1613
 Toll Free: 866 846-8290
 Fax: 910 794-3919

Project Manager: Tamara Burkamper
Receipt Date & Time: 09-Dec-21 at 11:11
AP Project name: B6004
Requested TAT: 5 business days
Projected due date: 16-Dec-21
Matrix: Aqueous
Phone#: 910-794-1613
Email Address: Tamara.Burkamper@sgs.com

Company Contact: Meagan Willis
Company: GHD Services Inc.
Project Name & Site: 11215131-SJRWP-PCFSE
Project PO#: 340-002625
QAAP/Contract #: file
Requested Analysis: M1613B
Phone#: 713-907-3710
Email Address: Meagan.Willis@ghd.com

Client Smp ID	AP Smp ID	Sample Condition & Notes	Quantity	Size	Sampling Date	Sampling Time	Received Temp (°C)	Container #	Shipping #
11215131-120121-IDW-SS-NE	B6004_001	AQ	2	1-Liter Amber	08-Dec-21	08:41	1.4	1	5272 0636 9932
11215131-120121-IDW-SS-NE DECON	B6004_002	AQ	2	1-Liter Amber	07-Dec-21	-	1.4	1	5272 0636 9932
11215131-120121-IDW-SS-NE DECON-TCLP LB	B6004_003	AQ	2	1-Liter Amber	07-Dec-21	-	1.4	1	5272 0636 9932
11215131-120121-IDW-SS-NE-TCLP LB	B6004_004	AQ	2	1-Liter Amber	08-Dec-21	08:41	1.4	1	5272 0636 9932

Preservation Type:	Sample Seals: No
Notes/Comments:	
Samples received intact	Any un-extracted sample will be stored for 90 days from reporting date. Additional storage fees may apply for any samples stored longer than 90 days.

Received by: Ashley Owens

Logged in by: Ashley Owens

QC'ed by: AK 9 Dec 21

All services are rendered in accordance with the applicable SGS General Conditions of Service accessible via: http://www.sgs.com/terms_and_conditions.htm



CHAIN OF CUSTODY

SGS North America Inc. - Dayton
2235 Route 130, Dayton, N.J. 08810
TEL. 732-329-0200 FAX: 732-329-3499/3480
www.sgs.com/ehsususa

B6004

Form containing Client/Reporting Information, Project Information, Requested Analysis, Matrix Codes, and a data table with columns for Sample #, Field ID, Date, Time, and various chemical analysis results.

*=Samples in this project.

B6004

Date / Time: 12/8/2021 3:04:29 PM
CSR: SHALINIW
Job #: JD35488
Client Project: SJRWP - PCFSE, Harris County, TX (IDW)
Deliverable: FULT1
TAT: Due 12/10/2021

Sub Lab: SGS - Wilmington, NC
Address: 5500 Business Drive
City: Wilmington
State: NC
Contact:
Phone: (910) 794-1613

Address: 5500 Business Drive
City: Wilmington
Zip: 28405

SGS Sample #	Client Sample Description	Analysis	Location	Sampled By	Date Sampled	Time Sampled	Aliquot
<u>JD35488-1B</u>	<u>11215131-120121-IDW-SS-NE</u>	<u>SB1613PCDDDF</u>		<u>SPS</u>	<u>12/1/2021</u>	<u>3:30:00 PM</u>	
<u>JD35488-2B</u>	<u>11215131-120121-IDW-SS-NE DECON</u>	<u>SB1613PCDDDF</u>		<u>SPS</u>	<u>12/1/2021</u>	<u>3:50:00 PM</u>	

* Comments: send leachate volume! Wilmington to log in and report in their system

Sample Management Receipt: Ashley Owens

Date: 12/9/2021 11:11

* = Samples in this project.



TOXICITY CHARACTERISTIC LEACHING PROCEDURE FOR METALS & EXTRACTABLES, METHOD SW846 1311 (TCLPE)

NOTE: Only one lot of fluid 1 or fluid 2 may be used per sheet. Lots shown on page 2.

TC Batch ID: TCO761

B6004

TCLPE

Samples		Container			Leaching Dates		Leaching Times				Extracted Masses			Preliminary Evaluation*				Extraction Fluid						
Sample ID	PS?*(Y/N)	No.	Type	Rot.	Started	Stopped	Start	Earliest Stop	Latest Stop	Actual Stop	Grams Total	%SOL	Grams Solid	Buffer TV	Step1 pH	Step 1 spin	Buffer TV	Step2 pH	Fluid #	pH	Pass?	Vol. (mL)	Buffer TV	Final pH
PH Buffer														4.00	4.03		4.00	4.03	#1 pH = 4.93 ± 0.05 #2 pH = 2.88 ± 0.05				4.00	3.99
PH Buffer														7.00	7.02		7.00	7.02					7.00	6.95
PH Buffer														10.00	10.01		10.00	10.01					10.00	9.96
LB (fluid #1)	N	39	M/E	7	7-Dec-21	8-Dec-21	16:32	8:32	12:32	8:41	NA	NA	NA	NA	NA	NA	NA	NA	1	4.95	YES	2000	NA	4.83
LB (fluid #2)					7-Dec-21	8-Dec-21	16:32	8:32	12:32	8:41	NA	NA	NA	NA	NA	NA	NA	NA	2	2.83	YES	2000	NA	
JD35487-2	N	1	M/E	7	7-Dec-21	8-Dec-21	16:32	8:32	12:32	8:41	100.10	100	100.10	NA	9.00	5 mins	NA	2.08	1	4.95	YES	2002	NA	6.41
JD35487-3	N	5	M/E	7	7-Dec-21	8-Dec-21	16:32	8:32	12:32	8:41	100.14	100	100.14	NA	8.45	5 mins	NA	1.83	1	4.95	YES	2002.8	NA	5.09
JD35488-1	N	8	M/E	7	7-Dec-21	8-Dec-21	16:32	8:32	12:32	8:41	100.20	100	100.20	NA	9.05	5 mins	NA	1.90	1	4.95	YES	2004	NA	6.27
JD36103-1	N	18	M/E	7	7-Dec-21	8-Dec-21	16:32	8:32	12:32	8:41	85.76	100	85.76	NA	6.60	5 mins	NA	1.65	1	4.95	YES	1715.2	NA	4.98
JD36103-2	N	20	M/E	7	7-Dec-21	8-Dec-21	16:32	8:32	12:32	8:41	100.24	100	100.24	NA	8.51	5 mins	NA	1.80	1	4.95	YES	2004.8	NA	6.00
JD36176-1	N	24	M/E	7	7-Dec-21	8-Dec-21	16:32	8:32	12:32	8:41	100.68	100	100.68	NA	7.51	5 mins	NA	1.78	1	4.95	YES	2013.6	NA	4.90
JD36176-2	N	27	M/E	7	7-Dec-21	8-Dec-21	16:32	8:32	12:32	8:41	100.05	100	100.05	NA	6.90	5 mins	NA	1.70	1	4.95	YES	2001	NA	4.88
JD36176-3	N	28	M/E	7	7-Dec-21	8-Dec-21	16:32	8:32	12:32	8:41	100.63	100	100.63	NA	9.28	5 mins	NA	1.80	1	4.95	YES	2012.6	NA	5.38
JD36176-4	N	30	M/E	7	7-Dec-21	8-Dec-21	16:32	8:32	12:32	8:41	100.61	100	100.61	NA	7.14	5 mins	NA	1.68	1	4.95	YES	2012.2	NA	4.88
JD36176-14	N	36	M/E	7	7-Dec-21	8-Dec-21	16:32	8:32	12:32	8:41	100.85	100	100.85	NA	6.78	5 mins	NA	1.67	1	4.95	YES	2017	NA	4.88
PH Buffer														4.00	4.03		2.00	2.02					4.00	3.99
PH Buffer														10.00	10.03		4.00	4.03					10.00	9.92
JD36176-15	N	37	M/E	7	7-Dec-21	8-Dec-21	16:32	8:32	12:32	8:41	100.30	100	100.30	NA	9.32	5 mins	NA	1.67	1	4.95	YES	2006	NA	4.93
JD35002-1	N	38	M/E	7	7-Dec-21	8-Dec-21	16:32	8:32	12:32	8:41	100.11	100	100.11	NA	8.47	5 mins	NA	1.69	1	4.95	YES	2002.2	NA	5.13
											100	0.00	NA		5 mins	NA			1	4.95	YES		NA	
											100	0.00	NA		5 mins	NA			1	4.95	YES		NA	
											100	0.00	NA		5 mins	NA			1	4.95	YES		NA	
											100	0.00	NA		5 mins	NA			1	4.95	YES		NA	
											100	0.00	NA		5 mins	NA			1	4.95	YES		NA	
											100	0.00	NA		5 mins	NA			1	4.95	YES		NA	
											100	0.00	NA		5 mins	NA			1	4.95	YES		NA	
PH Buffer														4.00	4.03		2.00	2.02					4.00	4.01
PH Buffer														10.00	10.03		4.00	4.03					7.00	6.93

Comments and additional information continued on the next page. (*PS=particle sizing)

Data Reviewer / Date: _____

Set-up analyst: JD NF

Take-down analyst: NF AL JD



Temperature ranges during leaching. (Must be from 20.5-25.4 °C, and recorded for each leaching period).

Balance ID: B54

pH meter ID: PH 67

Probe ID	Uncorrected Temperatures			Corrected Temperatures		For rotator(s)
	Minimum	Maximum	CF	Minimum	Maximum	
56418	23.77	24.58	0	23.77	24.58	7 & 8
50266			0	0.00	0.00	9 & 10
56717			0	0.00	0.00	4
45776			0	0.00	0.00	5
49504			0	0.00	0.00	11 & 12

Rotator revolution rates. (Must be from 28-32 rpm, and check weekly for all rotators).

*Preliminary Evaluation Temperature (49.5-50.4 °C, heat for 10 min)

Rotator ID:	Rate:	Last measured:
4	31	22-Nov-21
5	30	22-Nov-21
7	28	22-Nov-21
8	NA	22-Apr-21
9	32	22-Nov-21
10	32	22-Nov-21
11	NA	7-Sep-21
12	28	22-Nov-21

Thermometer ID: 5624720
 Expiration: 30-Jun-21
 Recorded temperature: 50
 Heating time: Start:
 End:

Reagent Information

Reagent ID or Manufacturer Lot

Expiration Date

Reagent	Reagent ID or Manufacturer Lot	Expiration Date
Extraction fluid 1	GNE12-68083-TCLP	16-Dec-2021
Extraction fluid 2	GNE11-67930-TCLP	1-Dec-2021
TCLP filters	Env. Exp. Lot 113883-1320-AG	N/A
Filter acid-rinse solution	GNE12-68095-TCLP	3-Jun-2022
pH 2 buffer	FISHER 210051	1-Mar-2023
pH 4 buffer	FISHER 207758	1-Jan-2023
pH 7 buffer	FISHER 213754	1-Jun-2023
pH 10 buffer	FISHER 202303	1-Jun-2022
pH 12 buffer	N/A	N/A
pH 13 buffer	SPECTRUM 1KC0229	1-Apr-2022
Nitric acid, concentrated	J.T. BAKER 0000282671	3-Dec-2026
Nitric acid, 70% Form: AGN-TCLPE-07b Revised: 18-Jun-17		
1N HCl Validated: AD, 18-Jun-17	GNE12-68094-TCLP	6/30/2022

TCLPE

Samples		Container			Leaching Dates		Leaching Times				Extracted Masses			Preliminary Evaluation				Extraction Fluid						
Sample ID	PS?*(Y/N)	No.	Type	Rot.	Started	Stopped	Start	Earliest Stop	Latest Stop	Actual Stop	Grams Total	%SOL	Grams Solid	Buffer TV	Step1 pH	Step 1 spin	Buffer TV	Step2 pH	Fluid #	pH	Pass?	Vol. (mL)	Buffer TV	Final pH
PH Buffer														4.00	NA		4.00	NA	#1 pH = 4.93 ± 0.05 #2 pH = 2.88 ± 0.05				4.00	4.03
PH Buffer														7.00	NA		7.00	NA					7.00	7.02
PH Buffer														10.00	NA		10.00	NA					10.00	10.01
LB (fluid #1)					7-Dec-21	7-Dec-21	FILTER			ONLY	NA	NA	NA	NA	NA	NA	NA	NA	1	DI	NO	2000	NA	6.85
LB (fluid #2)	No fluid 2 samples leached				7-Dec-21	7-Dec-21					NA	NA	NA	NA	NA	NA	NA	NA	2		NO	2000	NA	
JD36488-2					7-Dec-21	7-Dec-21	FILTER			ONLY		100	0.0	NA		5 mins	NA		1	DI	NO		NA	7.50
												100	0.0	NA		5 mins	NA		1	DI	NO		NA	
												100	0.0	NA		5 mins	NA		1	DI	NO		NA	
												100	0.0	NA		5 mins	NA		1	DI	NO		NA	
												100	0.0	NA		5 mins	NA		1	DI	NO		NA	
												100	0.0	NA		5 mins	NA		1	DI	NO		NA	
												100	0.0	NA		5 mins	NA		1	DI	NO		NA	
												100	0.0	NA		5 mins	NA		1	DI	NO		NA	
												100	0.0	NA		5 mins	NA		1	DI	NO		NA	
												100	0.0	NA		5 mins	NA		1	DI	NO		NA	
												100	0.0	NA		5 mins	NA		1	DI	NO		NA	
												100	0.0	NA		5 mins	NA		1	DI	NO		NA	
												100	0.0	NA		5 mins	NA		1	DI	NO		NA	
												100	0.0	NA		5 mins	NA		1	DI	NO		NA	
												100	0.0	NA		5 mins	NA		1	DI	NO		NA	
												100	0.0	NA		5 mins	NA		1	DI	NO		NA	
												100	0.0	NA		5 mins	NA		1	DI	NO		NA	
												100	0.0	NA		5 mins	NA		1	DI	NO		NA	
												100	0.0	NA		5 mins	NA		1	DI	NO		NA	
PH Buffer														4.00	NA		4.00	NA					4.00	4.02
PH Buffer														4.00	NA		4.00	NA					7.00	7.05
														100		5 mins	NA		1	DI	NO		NA	
														100		5 mins	NA		1	DI	NO		NA	
														100		5 mins	NA		1	DI	NO		NA	
														100		5 mins	NA		1	DI	NO		NA	
														100		5 mins	NA		1	DI	NO		NA	
														100		5 mins	NA		1	DI	NO		NA	
														100		5 mins	NA		1	DI	NO		NA	
														100		5 mins	NA		1	DI	NO		NA	
														100		5 mins	NA		1	DI	NO		NA	
														100		5 mins	NA		1	DI	NO		NA	
														100		5 mins	NA		1	DI	NO		NA	
														100		5 mins	NA		1	DI	NO		NA	
														100		5 mins	NA		1	DI	NO		NA	
PH Buffer														4.00	NA		4.00	NA					4.00	
PH Buffer														4.00	NA		4.00	NA					10.00	

Comments and additional information continued on the next page. (*PS=particle sizing)

Data Reviewer/Date: _____

Set-up analyst: JD

Take-down analyst: JD



TOXICITY CHARACTERISTIC LEACHING PROCEDURE FOR METALS & EXTRACTABLES, METHOD SW846 1311 (TCLPE)

TC Batch ID: TC0760

Balance ID: B-54

pH meter ID: 67

Temperature ranges during leaching. (Must be from 21-25 degrees C, or 69.8-77 degrees F, and recorded daily for all probes).

Probe ID	Uncorrected Temperatures			Corrected Temperatures		For rotator(s)
	Minimum	Maximum	CF	Minimum	Maximum	
56418			0			7 & 8
50266			0			9 & 10
56717			0			4
45776			0			5
49504			0			11 & 12

Rotator revolution rates. (Must be from 28-32 rpm, and check weekly for all rotators).

Rotator ID:	Rate:	Last measured:
4	NA	NA
7	NA	NA
8	NA	NA
9	NA	NA
10	NA	NA
11	NA	NA
12	NA	NA

Reagent Information

Reagent	Reagent ID or Manufacturer Lot	Expiration Date
Extraction fluid 1	DI H2O	
Extraction fluid 2		
TCLP filters	Env. Exp. Lot 113883-1138-T	N/A
Filter acid-rinse solution	GNE3-65690-TCLP	30-Nov-2021
pH 2 buffer	FISHER 205162	31-Oct-2022
pH 4 buffer	FISHER 206704	1-Nov-2022
pH 7 buffer	FISHER 196400	1-Oct-2021
pH 10 buffer	FISHER 192995	1-Feb-2023
pH 12 buffer	N/A	N/A
pH 13 buffer	RICCA 2004B86	21-Oct-2021
Nitric acid, concentrated	J.T. BAKER 0000271456	25-Oct-2025
Nitric acid, 1N	N/A	N/A
1N HCl		

Form: AGN-TCLPE-04
 Revised: 18-JUN-2017
 Validated: Anthony Dapaah
 Date: 18-JUN-2017

B6004

ORIGIN ID:ZRPA (732) 329-0200
SAMPLE MANAGEMENT
SGS NORTH AMERICA INC.
2235 US HIGHWAY 130

SHIP DATE: 08DEC21
ACTWGT: 55.55 LB
CAD: 0692838/CAFE3211

DAYTON, NJ 08810
UNITED STATES US

BILL SENDER

TO **SAMPLE RECEIVING**
SGS EHS WILMINGTON
5500 BUSINESS DRIVE

12/9/2021

11:11

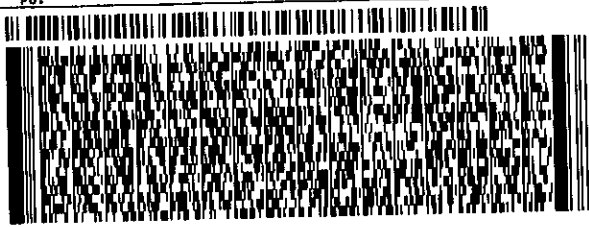
WILMINGTON NC 28405

1.4° (T.B.)

(910) 794-1613

REF:

DEPT:



FedEx
Express

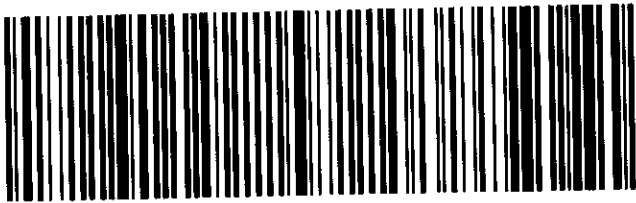


THU - 09 DEC 11:30A
PRIORITY OVERNIGHT

TRK# 5272 0636 9932
0201

GE ILMA

28405
NC-US RDU



Pat # 156148-434 MTW EXP 09/22

551C3/E934/104C

J18118065010*



FINAL LAB REPORT

Prepared by

SGS NORTH AMERICA

Prepared for

This report is approved by

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PROJECT INFORMATION SUMMARY *(When applicable, see QC Annotations for details)*

Client Project
SGS Project #
Analytical Protocol(s)
No. Samples Submitted
Additional QC Sample(s)
No. Laboratory Method Blanks
No. OPRs / Batch CS3
Date Received
Condition Received
Temperature upon Receipt (°C)
Extraction within Holding Time
Analysis within Holding Time



QC ANNOTATIONS:

1. Please see Appendices attached for data qualifier/attribute and lab identifier descriptions which may be contained in the project.



APPENDIX A: GENERAL DATA QUALIFIERS / DATA ATTRIBUTES

B	The analyte was found in the method blank, at a concentration that was at least 10% of the concentration in the sample.
C	Two or more congeners co-elute. In EDDs, C denotes the lowest IUPAC congener in a co-elution group and additional co-eluters for the group are shown with the number of the lowest IUPAC co-eluter.
E	The reported concentration exceeds the calibration range (upper point of the calibration curve) and is an estimated value.
EMPC	Represents an Estimated Maximum Possible Concentration. EMPCs arise in cases where the signal/noise ratio is not sufficient for peak identification (the determined ion-abundance ratio is outside the allowed theoretical range), or where there is a co-eluting interference.
H/h	If the standard recovery is below the method or SOP specified value "H" is assigned. If the obtained value is less than half the specified value "h" is assigned.
J	Indicates that an analyte has a concentration below the reporting limit (lowest point of the calibration curve) and is an estimated value.
ND	Indicates a non-detect.
NR or R	Indicates a value that is not reportable.
PR	Due to interference, the associated congener is poorly resolved.
QI	Indicates the presence of a quantitative interference.
SI	Denotes "Single Ion Mode" and is utilized for PCBs where the secondary ion trace has a significantly elevated noise level due to background PFK. Responses for such peaks are calculated using an EMPC approach based solely on the primary ion area(s) and may be considered estimates.
U	The analyte was not detected. The estimated detection limit (EDL) may be reported for this analyte.
V	The labeled standard recovery was found to be outside of the method control limits.



APPENDIX B: DRBC/TMDL SPECIFIC DATA QUALIFIERS / DATA ATTRIBUTES

J	The reported result is an estimate. The value is less than the minimum calibration level but greater than the estimated detection limit (EDL).
U	The analyte was not detected in the sample at the estimated detection limit (EDL).
E	The reported concentration is an estimate. The value exceeds the upper calibration range (upper point of the calibration curve).
D	Dilution Data. Result was obtained from the analysis of a dilution.
B	Analyte found in the sample and associated method blank.
C	Co-eluting congener
Cxx	Co-elutes with the indicated congener, data is reported under the lowest IUPAC congener. 'Xx' denotes the IUPAC number with the lowest numerical designated congener.
NR	Analyte is not reportable because of problems in sample preparation or analysis.
V	Labeled standard recovery is not within method control limits.
X	Results from re-injection/repeat/second-column analysis.
EMPC	Estimated maximum possible concentration. Indicates that a peak is identified but did not meet the method specified ion-abundance ratio.

APPENDIX C: LAB IDENTIFIERS

AR	Indicates use of the archived portion of the sample extract.
CU	Indicates a sample that required additional clean-up prior to MS injection/processing.
D	Indicates a dilution of the sample extract. The number that follows the "D" indicates the dilution factor.
DE	Indicates a dilution performed with the addition of ES (extraction standard) solution.
DUP	Designation for a duplicate sample.
MS	Designation for a matrix spike.
MSD	Designation for a matrix spike duplicate.
RJ	Indicates a reinjection of the sample extract.
S	Indicates a sample split. The number that follows the "S" indicates the split factor.




SGS CERTIFICATIONS

Alaska DEC LAP	17-012
Alaska DEC LCP	NC00919
Arkansas	20-054-0
California (ELAP)	ELAP Cert #2914
CLIA	34D1013708
Connecticut	PH-0258
USDA Soil Permit	P330-20-00103
American Association for Laboratory Accreditation (A2LA)	2726.01 (ISO 17025:2017, 2009 TNI, DoD ELAP QSM 5.3)
Florida DOH	E87634
Louisiana DEQ	4115
Louisiana DOH	LA031
Maine	2020019
Massachusetts	M-NC919
Michigan	9950
Minnesota (Primary NELAP For Method 23)	037-999-459
Montana	0106
New Hampshire (Secondary NELAP)	2083
New Jersey	NC100
New York	11685
North Carolina DEQ	481
North Dakota	R-197
Ohio	87785
Oregon	NC200002
Pennsylvania	68-03675
South Carolina	99029002
Texas	T104704260
US Coast Guard	16714/159.317/SGS
Vermont	VT-87634
Virginia	460214
Washington	C913

Rev. 12-Oct-2021

Sample ID: 11215131-120721-IDW-SS-SC

Method 1613B

Client Data		Sample Data		Laboratory Data			
Name:	GHD Services Inc.	Matrix:	Aqueous	Lab Project ID:	B6013	Date Received:	15-Dec-2021
Project ID:	11215131-SJRWP-PCFSE	Weight/Volume:	0.96 L	Lab Sample ID:	B6013_18765_DF_001	Date Extracted:	22-Dec-2021
Date Collected:	07-Dec-2021	pH:	6	QC Batch No:	18765	Date Analyzed:	25-Dec-2021
		Split:	-	Dilution:	-	Time Analyzed:	15:21:15
Analyte	Conc. (pg/L)	DL (pg/L)	EMPC (pg/L)	Qualifiers	Standard	ES Recoveries	Qualifiers
2378-TCDD	ND	2.48			ES 2378-TCDD	94.6	
12378-PeCDD	ND	1.59			ES 12378-PeCDD	114	
123478-HxCDD	ND	2.53			ES 123478-HxCDD	102	
123678-HxCDD	ND	2.21			ES 123678-HxCDD	110	
123789-HxCDD	EMPC		2.76	J	ES 123789-HxCDD	102	
1234678-HpCDD	3.93			J	ES 1234678-HpCDD	94.2	
OCDD	ND	11.1			ES OCDD	52.9	
2378-TCDF	EMPC		3.83	J	ES 2378-TCDF	91	
12378-PeCDF	2.57			J	ES 12378-PeCDF	107	
23478-PeCDF	EMPC		2.03	J	ES 23478-PeCDF	107	
123478-HxCDF	EMPC		1.97	J	ES 123478-HxCDF	111	
123678-HxCDF	2.34			J	ES 123678-HxCDF	121	
234678-HxCDF	EMPC		2.05	J	ES 234678-HxCDF	109	
123789-HxCDF	EMPC		1.94	J	ES 123789-HxCDF	115	
1234678-HpCDF	EMPC		3.03	J	ES 1234678-HpCDF	107	
1234789-HpCDF	ND	2.17			ES 1234789-HpCDF	101	
OCDF	ND	4.43			ES OCDF	60	
Totals					Standard	CS Recoveries	
Total TCDD	ND	2.48	ND		CS 37Cl-2378-TCDD	103	
Total PeCDD	ND	1.59	ND		CS 12347-PeCDD	126	
Total HxCDD	ND		2.76		CS 12346-PeCDF	116	
Total HpCDD	3.93		3.93		CS 123469-HxCDF	131	V
					CS 1234689-HpCDF	122	
Total TCDF	2.65		6.48				
Total PeCDF	2.57		4.6				
Total HxCDF	2.34		12.8				
Total HpCDF	ND		3.03				
Total PCDD/Fs	11.5		33.6				
WHO-2005 TEQs					 5500 Business Drive Wilmington, NC 28405, USA www.us.sgs.com Tel: +1 910 794-1613; Toll-Free 866 846-8290		
TEQ: ND=0	0.351		2.24				
TEQ: ND=DL/2	2.64	2.97	4.53				
TEQ: ND=DL	4.92	5.94	6.81				

Sample ID: 11215131-120721-IDW-SS-SC

Method 1613B

Client Data		Sample Data			Laboratory Data						
Name:	GHD Services Inc.	Matrix:	Aqueous		Lab Project ID:	B6013		Date Received:	15-Dec-2021		
Project ID:	11215131-SJRWP-PCFSE	Weight/Volume:	0.96 L		Lab Sample ID:	B6013_18765_DF_001		Date Extracted:	22-Dec-2021		
Date Collected:	07-Dec-2021	pH:	6		QC Batch No.:	18765		Date Analyzed:	25-Dec-2021		
		Split:	-		Dilution:	-		Time Analyzed:	15:21:15		

Tetra-Dioxins	Conc. (pg/L)	Qualifiers	Penta-Dioxins	Conc. (pg/L)	Qualifiers	Hexa-Dioxins	Conc (pg/L)	Qualifiers	Hepta-Dioxins	Conc (pg/L)	Qualifiers
1368D	(2.48)		12479/12468D	(1.59)		124679/124689D	(2.31)		1234679D	(3.13)	
1379D	(2.48)		12469D	(1.59)		123468D	(2.31)		1234678D	3.93	J
1369D	(2.48)		12368D	(1.59)		123679/123689D	(2.31)				
1469D	(2.48)		12478D	(1.59)		123469D	(2.31)				
1247D...[4]	(2.48)		12379D	(1.59)		123478D	(2.53)				
1378D	(2.48)		12369D...[3]	(1.59)		123678D	(2.21)				
1268D	(2.48)		12346/12347D	(1.59)		123467D	(2.31)				
1478D	(2.48)		12378D	(1.59)		123789D	[2.76]	J	Conc.	3.93	
1279D	(2.48)		12367D	(1.59)					EMPC	3.93	
1234/1269D	(2.48)		12389D	(1.59)							
1236D	(2.48)								Octa-Dioxin	Conc	Qualifiers
1237/1238D	(2.48)									(pg/L)	
1239D	(2.48)								OCDD	(11.1)	
2378D	(2.48)										
1278D	(2.48)										
1267D	(2.48)										
1289D	(2.48)										
Conc.	0		Conc.	0		Conc.	0				
EMPC	0		EMPC	0		EMPC	2.76				



5500 Business Drive
 Wilmington, NC 28405, USA
 Tel: +1 910 794-1613
 www.us.sgs.com

WHO-2005 TEQs	Conc.	EMPC
TEQ: ND=0	0.351	2.24
TEQ: ND=DL/2	2.64	4.53
TEQ: ND=DL	4.92	6.81
Total PCDD/Fs	Conc.	EMPC
	11.5	33.6

Checkcode: 230-164-TQS

Report Created: 04-Jan-2022 10:38 Analyst: TF

Sample ID: 11215131-120721-IDW-SS-SC

Method 1613B

Client Data			Sample Data			Laboratory Data			Date Received: 15-Dec-2021		
Name: GHD Services Inc.			Matrix: Aqueous			Lab Project ID: B6013			Date Received: 15-Dec-2021		
Project ID: 11215131-SJRWP-PCFSE			Weight/Volume: 0.96 L			Lab Sample ID: B6013_18765_DF_001			Date Extracted: 22-Dec-2021		
Date Collected: 07-Dec-2021			pH: 6			QC Batch No.: 18765			Date Analyzed: 25-Dec-2021		
			Split: -			Dilution: -			Time Analyzed: 15:21:15		
Tetra-Furans	Conc. (pg/L)	Qualifiers	Penta-Furans	Conc. (pg/L)	Qualifiers	Hexa-Furans	Conc (pg/L)	Qualifiers	Hepta-Furans	Conc (pg/L)	Qualifiers
1368F	(2.12)		13468/12468F	(0.951)		123468F	[4.48]	J	1234678F	[3.03]	J
1468F	(2.12)		13678F...[3]	(1.32)		124678/134678F	(1.16)		1234679F	(1.77)	
2468F	(2.12)		12368F...[3]	(1.32)		134679F	(1.16)		1234689F	(1.77)	
1346/1246F	(2.12)		14678F	(1.32)		124679F	(1.16)		1234789F	(2.17)	
1347F...[3]	(2.12)		13479F	(1.32)		124689F	(1.16)				
1348F	(2.12)		13469/12479F	(1.32)		123467F	(1.16)				
1248F...[3]	(2.12)		12346F	(1.32)		123478F	[1.97]	J			
1268F	(2.12)		23468/12469F	(1.32)		123678F	2.34	J			
1467F	(2.12)		12347F	(1.32)		123479F	(1.16)				
1478F	(2.12)		12348F	(1.32)		123469F	(1.16)				
1369/1237F	(2.12)		12378F	2.57	J	123679F	(1.16)				
2467F	(2.12)		12678/12367F	(1.32)		234678F	[2.05]	J	Conc.	0	
2368F	(2.12)		12379F	(1.32)		234678/123689F	0		EMPC	3.03	
1238F...[5]	(2.12)		12679F	(1.32)		123689F	(1.16)				
1278F	2.65	J	23467/12369F	(1.32)		123789F	[1.94]	J	Octa-Furan	Conc	Qualifiers
1349F	(2.12)		23478F	[2.03]	J	123789/123489F	0			(pg/L)	
1267F	(2.12)		23478/12489F	0		123489F	(1.16)		OCDF	(4.43)	
2346/1249F	(2.12)		12489F	(1.32)							
2347/1279F	(2.12)		12349F	(1.32)							
2348F	(2.12)		12389F	(1.32)							
2378F	[3.83]	J									
2367/3467F	(2.12)										
1269F	(2.12)										
1239F	(2.12)										
1289F	(2.12)										
Conc.	2.65		Conc.	2.57		Conc.	2.34				
EMPC	6.48		EMPC	4.6		EMPC	12.8				


Checkcode: 230-164-TQS

Report Created: 04-Jan-2022 10:38 Analyst: TF

Sample ID: 11215131-120721-IDW-SS-SC **TEQ Summary** **Method 1613B**

Client Project Name:	GHD Services Inc.	Matrix:	Aqueous	Lab Sample ID:	B6013_18765_DF_001
Client Project ID:	11215131-SJRWP-PCFSE	Weight/Volume:	0.96 L	QC Batch No.:	18765
Date Collected:	07-Dec-2021	Split:	-	Date Extracted:	22-Dec-2021
Date Received:	15-Dec-2021	Dilution:	-	Date Analyzed:	25-Dec-2021 15:21
Lab Project No:	B6013	Units	pg/L		

Analyte	Result	Qualifiers	DLs	I-TEQ	WHO-1998	WHO-2005
2378-TCDD	(2.48)		2.48	(2.48)	(2.48)	(2.48)
12378-PeCDD	(1.59)		1.59	(0.794)	(1.59)	(1.59)
123478-HxCDD	(2.53)		2.53	(0.253)	(0.253)	(0.253)
123678-HxCDD	(2.21)		2.21	(0.221)	(0.221)	(0.221)
123789-HxCDD	[2.76]	J	2.21	[0.276]	[0.276]	[0.276]
1234678-HpCDD	3.93	J	3.13	0.0393	0.0393	0.0393
OCDD	(11.1)		11.1	(0.0111)	(0.00111)	(0.00332)
2378-TCDF	[3.83]	J	2.12	[0.383]	[0.383]	[0.383]
12378-PeCDF	2.57	J	1.35	0.128	0.128	0.077
23478-PeCDF	[2.03]	J	1.29	[1.02]	[1.02]	[0.61]
123478-HxCDF	[1.97]	J	1.15	[0.197]	[0.197]	[0.197]
123678-HxCDF	2.34	J	1.03	0.234	0.234	0.234
234678-HxCDF	[2.05]	J	1.26	[0.205]	[0.205]	[0.205]
123789-HxCDF	[1.94]	J	1.25	[0.194]	[0.194]	[0.194]
1234678-HpCDF	[3.03]	J	1.45	[0.0303]	[0.0303]	[0.0303]
1234789-HpCDF	(2.17)		2.17	(0.0217)	(0.0217)	(0.0217)
OCDF	(4.43)		4.43	(0.00443)	(0.000443)	(0.00133)

5500 Business Drive Wilmington, NC 28405, USA Tel: +1 910 794-1613; Toll-Free 866 846-8290 www.us.sgs.com 	TEQ Summaries			
	EMPC = 0, ND = 0	0.402	0.402	0.351
	EMPC = 0, ND = DL / 2	2.29	2.68	2.64
	EMPC = 0, ND = DL	4.19	4.97	4.92
	EMPC = 0, < J-level = 0	0	0	0
	EMPC = EMPC, ND = 0	2.7	2.7	2.24
	EMPC = EMPC, ND = DL / 2	4.6	4.99	4.53
	EMPC = EMPC, ND = DL	6.49	7.27	6.81
	EMPC = EMPC, < J-level = 0	0	0	0

Sample ID: 11215131-120721-IDW-SS-SC-TCLP-LB

Method 1613B

Client Data		Sample Data		Laboratory Data			
Name:	GHD Services Inc.	Matrix:	Aqueous	Lab Project ID:	B6013	Date Received:	15-Dec-2021
Project ID:	11215131-SJRWP-PCFSE	Weight/Volume:	0.96 L	Lab Sample ID:	B6013_18765_DF_002	Date Extracted:	22-Dec-2021
Date Collected:	14-Dec-2021	pH:	5	QC Batch No.:	18765	Date Analyzed:	25-Dec-2021
		Split:	-	Dilution:	-	Time Analyzed:	16:07:34
Analyte	Conc. (pg/L)	DL (pg/L)	EMPC (pg/L)	Qualifiers	Standard	ES Recoveries	Qualifiers
2378-TCDD	ND	3			ES 2378-TCDD	90.1	
12378-PeCDD	ND	1.82			ES 12378-PeCDD	105	
123478-HxCDD	ND	1.3			ES 123478-HxCDD	96.2	
123678-HxCDD	ND	1.2			ES 123678-HxCDD	101	
123789-HxCDD	ND	1.17			ES 123789-HxCDD	94	
1234678-HpCDD	ND	2.02			ES 1234678-HpCDD	87.8	
OCDD	ND	8.93			ES OCDD	52.2	
2378-TCDF	ND	1.16			ES 2378-TCDF	87.5	
12378-PeCDF	ND	1.04			ES 12378-PeCDF	97.1	
23478-PeCDF	ND	1			ES 23478-PeCDF	99.1	
123478-HxCDF	ND	1.12			ES 123478-HxCDF	100	
123678-HxCDF	ND	1.06			ES 123678-HxCDF	108	
234678-HxCDF	ND	1.28			ES 234678-HxCDF	97.6	
123789-HxCDF	ND	1.2			ES 123789-HxCDF	107	
1234678-HpCDF	ND	0.902			ES 1234678-HpCDF	102	
1234789-HpCDF	ND	1.36			ES 1234789-HpCDF	96.1	
OCDF	ND	4.83			ES OCDF	59.3	
Totals					Standard	CS Recoveries	
Total TCDD	ND	3	ND		CS 37Cl-2378-TCDD	93.7	
Total PeCDD	ND	1.82	ND		CS 12347-PeCDD	118	
Total HxCDD	ND	1.22	ND		CS 12346-PeCDF	103	
Total HpCDD	ND	2.02	ND		CS 123469-HxCDF	115	
					CS 1234689-HpCDF	112	
Total TCDF	ND	1.16	ND				
Total PeCDF	ND	1.02	ND				
Total HxCDF	ND	1.16	ND				
Total HpCDF	ND	1.11	ND				
Total PCDD/Fs	ND		ND				
WHO-2005 TEQs							
TEQ: ND=0	0		0				
TEQ: ND=DL/2	3.07	3.07	3.07				
TEQ: ND=DL	6.15	6.15	6.15				



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Sample ID: 11215131-120721-IDW-SS-SC-TCLP-LB

Method 1613B

Client Data			Sample Data			Laboratory Data						
Name:	GHD Services Inc.		Matrix:	Aqueous		Lab Project ID:	B6013		Date Received:	15-Dec-2021		
Project ID:	11215131-SJRWP-PCFSE		Weight/Volume:	0.96 L		Lab Sample ID:	B6013_18765_DF_002		Date Extracted:	22-Dec-2021		
Date Collected:	14-Dec-2021		pH:	5		QC Batch No.:	18765		Date Analyzed:	25-Dec-2021		
			Split:	-		Dilution:	-		Time Analyzed:	16:07:34		

Tetra-Dioxins	Conc. (pg/L)	Qualifiers	Penta-Dioxins	Conc. (pg/L)	Qualifiers	Hexa-Dioxins	Conc. (pg/L)	Qualifiers	Hepta-Dioxins	Conc. (pg/L)	Qualifiers
1368D	(3)		12479/12468D	(1.82)		124679/124689D	(1.22)		1234679D	(2.02)	
1379D	(3)		12469D	(1.82)		123468D	(1.22)		1234678D	(2.02)	
1369D	(3)		12368D	(1.82)		123679/123689D	(1.22)				
1469D	(3)		12478D	(1.82)		123469D	(1.22)				
1247D...[4]	(3)		12379D	(1.82)		123478D	(1.3)				
1378D	(3)		12369D...[3]	(1.82)		123678D	(1.2)				
1268D	(3)		12346/12347D	(1.82)		123467D	(1.22)				
1478D	(3)		12378D	(1.82)		123789D	(1.17)		Conc.	0	
1279D	(3)		12367D	(1.82)					EMPC	0	
1234/1269D	(3)		12389D	(1.82)							
1236D	(3)								Octa-Dioxin	Conc	Qualifiers
1237/1238D	(3)									(pg/L)	
1239D	(3)								OCDD	(8.93)	
2378D	(3)										
1278D	(3)										
1267D	(3)										
1289D	(3)										
Conc.	0		Conc.	0		Conc.	0				
EMPC	0		EMPC	0		EMPC	0				



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WHO-2005 TEQs	Conc.	EMPC
TEQ: ND=0	0	0
TEQ: ND=DL/2	3.07	3.07
TEQ: ND=DL	6.15	6.15

Total PCDD/Fs	Conc.	EMPC
	0	0

Checkcode: 278-896-JDZ

Report Created: 30-Dec-2021 14:18 Analyst: TF

Sample ID: 11215131-120721-IDW-SS-SC-TCLP-LB Method 1613B

<u>Client Data</u>			<u>Sample Data</u>			<u>Laboratory Data</u>					
Name: GHD Services Inc.			Matrix: Aqueous			Lab Project ID: B6013			Date Received: 15-Dec-2021		
Project ID: 11215131-SJRWP-PCFSE			Weight/Volume: 0.96 L			Lab Sample ID: B6013_18765_DF_002			Date Extracted: 22-Dec-2021		
Date Collected: 14-Dec-2021			pH: 5			QC Batch No.: 18765			Date Analyzed: 25-Dec-2021		
			Split: -			Dilution: -			Time Analyzed: 16:07:34		
Tetra-Furans	Conc. (pg/L)	Qualifiers	Penta-Furans	Conc. (pg/L)	Qualifiers	Hexa-Furans	Conc (pg/L)	Qualifiers	Hepta-Furans	Conc (pg/L)	Qualifiers
1368F	(1.16)		13468/12468F	(1.11)		123468F	(1.16)		1234678F	(0.902)	
1468F	(1.16)		13678F...[3]	(1.02)		124678/134678F	(1.16)		1234679F	(1.11)	
2468F	(1.16)		12368F...[3]	(1.02)		134679F	(1.16)		1234689F	(1.11)	
1346/1246F	(1.16)		14678F	(1.02)		124679F	(1.16)		1234789F	(1.36)	
1347F...[3]	(1.16)		13479F	(1.02)		124689F	(1.16)				
1348F	(1.16)		13469/12479F	(1.02)		123467F	(1.16)				
1248F...[3]	(1.16)		12346F	(1.02)		123478F	(1.12)				
1268F	(1.16)		23468/12469F	(1.02)		123678F	(1.06)				
1467F	(1.16)		12347F	(1.02)		123479F	(1.16)				
1478F	(1.16)		12348F	(1.02)		123469F	(1.16)				
1369/1237F	(1.16)		12378F	(1.04)		123679F	(1.16)				
2467F	(1.16)		12678/12367F	(1.02)		234678F	(1.28)		Conc.	0	
2368F	(1.16)		12379F	(1.02)		234678/123689F	0		EMPC	0	
1238F...[5]	(1.16)		12679F	(1.02)		123689F	(1.16)				
1278F	(1.16)		23467/12369F	(1.02)		123789F	(1.2)		Octa-Furan	Conc	Qualifiers
1349F	(1.16)		23478F	(1)		123789/123489F	0			(pg/L)	
1267F	(1.16)		23478/12489F	0		123489F	(1.16)		OCDF	(4.83)	
2346/1249F	(1.16)		12489F	(1.02)							
2347/1279F	(1.16)		12349F	(1.02)							
2348F	(1.16)		12389F	(1.02)							
2378F	(1.16)										
2367/3467F	(1.16)										
1269F	(1.16)										
1239F	(1.16)										
1289F	(1.16)										
Conc.	0		Conc.	0		Conc.	0				
EMPC	0		EMPC	0		EMPC	0				

Checkcode: 278-896-JDZ


Report Created: 30-Dec-2021 14:18 Analyst: TF

Sample ID: 11215131-120721-IDW-SS-SC-TCLP-I TEQ Summary

Method 1613B

Client Project Name:	GHD Services Inc.	Matrix:	Aqueous	Lab Sample ID:	B6013_18765_DF_002
Client Project ID:	11215131-SJRWP-PCFSE	Weight/Volume:	0.96 L	QC Batch No.:	18765
Date Collected:	14-Dec-2021	Split:	-	Date Extracted:	22-Dec-2021
Date Received:	15-Dec-2021	Dilution:	-	Date Analyzed:	25-Dec-2021 16:07
Lab Project No:	B6013	Units	pg/L		

Analyte	Result	Qualifiers	DLs	I-TEQ	WHO-1998	WHO-2005
2378-TCDD	(3)		3	(3)	(3)	(3)
12378-PeCDD	(1.82)		1.82	(0.908)	(1.82)	(1.82)
123478-HxCDD	(1.3)		1.3	(0.13)	(0.13)	(0.13)
123678-HxCDD	(1.2)		1.2	(0.12)	(0.12)	(0.12)
123789-HxCDD	(1.17)		1.17	(0.117)	(0.117)	(0.117)
1234678-HpCDD	(2.02)		2.02	(0.0202)	(0.0202)	(0.0202)
OCDD	(8.93)		8.93	(0.00893)	(0.000893)	(0.00268)
2378-TCDF	(1.16)		1.16	(0.116)	(0.116)	(0.116)
12378-PeCDF	(1.04)		1.04	(0.0522)	(0.0522)	(0.0313)
23478-PeCDF	(1)		1	(0.501)	(0.501)	(0.301)
123478-HxCDF	(1.12)		1.12	(0.112)	(0.112)	(0.112)
123678-HxCDF	(1.06)		1.06	(0.106)	(0.106)	(0.106)
234678-HxCDF	(1.28)		1.28	(0.128)	(0.128)	(0.128)
123789-HxCDF	(1.2)		1.2	(0.12)	(0.12)	(0.12)
1234678-HpCDF	(0.902)		0.902	(0.00902)	(0.00902)	(0.00902)
1234789-HpCDF	(1.36)		1.36	(0.0136)	(0.0136)	(0.0136)
OCDF	(4.83)		4.83	(0.00483)	(0.000483)	(0.00145)

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	EMPC = 0, ND = 0	0	0	0
	EMPC = 0, ND = DL / 2	2.73	3.18	3.07
	EMPC = 0, ND = DL	5.47	6.36	6.15
	EMPC = 0, < J-level = 0	0	0	0
	EMPC = EMPC, ND = 0	0	0	0
	EMPC = EMPC, ND = DL / 2	2.73	3.18	3.07
	EMPC = EMPC, ND = DL	5.47	6.36	6.15
EMPC = EMPC, < J-level = 0	0	0	0	


Checkcode: 278-896-JDZ

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Sample ID: 11215131-120721-IDW-SS-DECON2

Method 1613B

Client Data		Sample Data		Laboratory Data			
Name:	GHD Services Inc.	Matrix:	Aqueous	Lab Project ID:	B6013	Date Received:	11-Dec-2021
Project ID:	11215131-SJRWP-PCFSE	Weight/Volume:	0.94 L	Lab Sample ID:	B6013_18765_DF_003	Date Extracted:	22-Dec-2021
Date Collected:	07-Dec-2021	pH:	6	QC Batch No.:	18765	Date Analyzed:	25-Dec-2021
		Split:	-	Dilution:	-	Time Analyzed:	16:53:54

Analyte	Conc. (pg/L)	DL (pg/L)	EMPC (pg/L)	Qualifiers	Standard	ES Recoveries	Qualifiers
2378-TCDD	ND	2.09			ES 2378-TCDD	95.4	
12378-PeCDD	ND	1.39			ES 12378-PeCDD	114	
123478-HxCDD	ND	1.52			ES 123478-HxCDD	101	
123678-HxCDD	ND	1.36			ES 123678-HxCDD	106	
123789-HxCDD	ND	1.39			ES 123789-HxCDD	98.7	
1234678-HpCDD	ND	2.06			ES 1234678-HpCDD	88.7	
OCDD	ND	8.17			ES OCDD	48.8	
2378-TCDF	EMPC		6.55		ES 2378-TCDF	92.9	
12378-PeCDF	ND	0.902			ES 12378-PeCDF	105	
23478-PeCDF	ND	0.92			ES 23478-PeCDF	107	
123478-HxCDF	ND	1.04			ES 123478-HxCDF	108	
123678-HxCDF	ND	0.994			ES 123678-HxCDF	117	
234678-HxCDF	ND	1.24			ES 234678-HxCDF	104	
123789-HxCDF	ND	1.13			ES 123789-HxCDF	115	
1234678-HpCDF	1.62			J	ES 1234678-HpCDF	102	
1234789-HpCDF	ND	1.66			ES 1234789-HpCDF	96.6	
OCDF	ND	5.84			ES OCDF	56.9	
Totals					Standard	CS Recoveries	
Total TCDD	ND	2.09	ND		CS 37Cl-2378-TCDD	101	
Total PeCDD	ND	1.39	ND		CS 12347-PeCDD	123	
Total HxCDD	ND	1.42	ND		CS 12346-PeCDF	110	
Total HpCDD	ND	2.06	ND		CS 123469-HxCDF	127	
					CS 1234689-HpCDF	114	
Total TCDF	3.61		10.2				
Total PeCDF	ND	0.911	ND				
Total HxCDF	ND	1.09	ND				
Total HpCDF	1.62		1.62				
Total PCDD/Fs	5.24		11.8				
WHO-2005 TEQs					 5500 Business Drive Wilmington, NC 28405, USA www.us.sgs.com Tel: +1 910 794-1613; Toll-Free 866 846-8290		
TEQ: ND=0	0.0162		0.672				
TEQ: ND=DL/2	2.36	2.42	3.02				
TEQ: ND=DL	4.71	4.84	5.37				

Sample ID: 11215131-120721-IDW-SS-DECON2

Method 1613B

Client Data			Sample Data			Laboratory Data						
Name:	GHD Services Inc.		Matrix:	Aqueous		Lab Project ID:	B6013		Date Received:	11-Dec-2021		
Project ID:	11215131-SJRWP-PCFSE		Weight/Volume:	0.94 L		Lab Sample ID:	B6013_18765_DF_003		Date Extracted:	22-Dec-2021		
Date Collected:	07-Dec-2021		pH:	6		QC Batch No.:	18765		Date Analyzed:	25-Dec-2021		
			Split:	-		Dilution:	-		Time Analyzed:	16:53:54		

Tetra-Dioxins	Conc. (pg/L)	Qualifiers	Penta-Dioxins	Conc. (pg/L)	Qualifiers	Hexa-Dioxins	Conc. (pg/L)	Qualifiers	Hepta-Dioxins	Conc. (pg/L)	Qualifiers
1368D	(2.09)		12479/12468D	(1.39)		124679/124689D	(1.42)		1234679D	(2.06)	
1379D	(2.09)		12469D	(1.39)		123468D	(1.42)		1234678D	(2.06)	
1369D	(2.09)		12368D	(1.39)		123679/123689D	(1.42)				
1469D	(2.09)		12478D	(1.39)		123469D	(1.42)				
1247D...[4]	(2.09)		12379D	(1.39)		123478D	(1.52)				
1378D	(2.09)		12369D...[3]	(1.39)		123678D	(1.36)				
1268D	(2.09)		12346/12347D	(1.39)		123467D	(1.42)				
1478D	(2.09)		12378D	(1.39)		123789D	(1.39)		Conc.	0	
1279D	(2.09)		12367D	(1.39)					EMPC	0	
1234/1269D	(2.09)		12389D	(1.39)							
1236D	(2.09)								Octa-Dioxin	Conc	Qualifiers
1237/1238D	(2.09)									(pg/L)	
1239D	(2.09)								OCDD	(8.17)	
2378D	(2.09)										
1278D	(2.09)										
1267D	(2.09)										
1289D	(2.09)										
Conc.	0		Conc.	0		Conc.	0				
EMPC	0		EMPC	0		EMPC	0				



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WHO-2005 TEQs	Conc.	EMPC
TEQ: ND=0	0.0162	0.672
TEQ: ND=DL/2	2.36	3.02
TEQ: ND=DL	4.71	5.37

Total PCDD/Fs	Conc.	EMPC
	5.24	11.8

Checkcode: 486-189-WMS

Report Created: 30-Dec-2021 14:18 Analyst: TF

Sample ID: 11215131-120721-IDW-SS-DECON2

Method 1613B

Client Data			Sample Data			Laboratory Data			Date Received: 11-Dec-2021		
Name: GHD Services Inc.			Matrix: Aqueous			Lab Project ID: B6013			Date Received: 11-Dec-2021		
Project ID: 11215131-SJRWP-PCFSE			Weight/Volume: 0.94 L			Lab Sample ID: B6013_18765_DF_003			Date Extracted: 22-Dec-2021		
Date Collected: 07-Dec-2021			pH: 6			QC Batch No.: 18765			Date Analyzed: 25-Dec-2021		
			Split: -			Dilution: -			Time Analyzed: 16:53:54		
Tetra-Furans	Conc. (pg/L)	Qualifiers	Penta-Furans	Conc. (pg/L)	Qualifiers	Hexa-Furans	Conc (pg/L)	Qualifiers	Hepta-Furans	Conc (pg/L)	Qualifiers
1368F	(1.32)		13468/12468F	(0.869)		123468F	(1.09)		1234678F	1.62	J
1468F	(1.32)		13678F...[3]	(0.911)		124678/134678F	(1.09)		1234679F	(1.36)	
2468F	(1.32)		12368F...[3]	(0.911)		134679F	(1.09)		1234689F	(1.36)	
1346/1246F	(1.32)		14678F	(0.911)		124679F	(1.09)		1234789F	(1.66)	
1347F...[3]	(1.32)		13479F	(0.911)		124689F	(1.09)				
1348F	(1.32)		13469/12479F	(0.911)		123467F	(1.09)				
1248F...[3]	(1.32)		12346F	(0.911)		123478F	(1.04)				
1268F	(1.32)		23468/12469F	(0.911)		123678F	(0.994)				
1467F	(1.32)		12347F	(0.911)		123479F	(1.09)				
1478F	(1.32)		12348F	(0.911)		123469F	(1.09)				
1369/1237F	(1.32)		12378F	(0.902)		123679F	(1.09)				
2467F	(1.32)		12678/12367F	(0.911)		234678F	(1.24)		Conc.	1.62	
2368F	(1.32)		12379F	(0.911)		234678/123689F	0		EMPC	1.62	
1238F...[5]	(1.32)		12679F	(0.911)		123689F	(1.09)				
1278F	3.61	J	23467/12369F	(0.911)		123789F	(1.13)		Octa-Furan	Conc	Qualifiers
1349F	(1.32)		23478F	(0.92)		123789/123489F	0			(pg/L)	
1267F	(1.32)		23478/12489F	0		123489F	(1.09)		OCDF	(5.84)	
2346/1249F	(1.32)		12489F	(0.911)							
2347/1279F	(1.32)		12349F	(0.911)							
2348F	(1.32)		12389F	(0.911)							
2378F	[6.55]										
2367/3467F	(1.32)										
1269F	(1.32)										
1239F	(1.32)										
1289F	(1.32)										
Conc.	3.61		Conc.	0		Conc.	0				
EMPC	10.2		EMPC	0		EMPC	0				


Checkcode: 486-189-WMS

Report Created: 30-Dec-2021 14:18 Analyst: TF

Sample ID: 11215131-120721-IDW-SS-DECON2 TEQ Summary Method 1613B

Client Project Name:	GHD Services Inc.	Matrix:	Aqueous	Lab Sample ID:	B6013_18765_DF_003
Client Project ID:	11215131-SJRWP-PCFSE	Weight/Volume:	0.94 L	QC Batch No.:	18765
Date Collected:	07-Dec-2021	Split:	-	Date Extracted:	22-Dec-2021
Date Received:	11-Dec-2021	Dilution:	-	Date Analyzed:	25-Dec-2021 16:53
Lab Project No:	B6013	Units	pg/L		

Analyte	Result	Qualifiers	DLs	I-TEQ	WHO-1998	WHO-2005
2378-TCDD	(2.09)		2.09	(2.09)	(2.09)	(2.09)
12378-PeCDD	(1.39)		1.39	(0.694)	(1.39)	(1.39)
123478-HxCDD	(1.52)		1.52	(0.152)	(0.152)	(0.152)
123678-HxCDD	(1.36)		1.36	(0.136)	(0.136)	(0.136)
123789-HxCDD	(1.39)		1.39	(0.139)	(0.139)	(0.139)
1234678-HpCDD	(2.06)		2.06	(0.0206)	(0.0206)	(0.0206)
OCDD	(8.17)		8.17	(0.00817)	(0.000817)	(0.00245)
2378-TCDF	[6.55]		1.32	[0.655]	[0.655]	[0.655]
12378-PeCDF	(0.902)		0.902	(0.0451)	(0.0451)	(0.0271)
23478-PeCDF	(0.92)		0.92	(0.46)	(0.46)	(0.276)
123478-HxCDF	(1.04)		1.04	(0.104)	(0.104)	(0.104)
123678-HxCDF	(0.994)		0.994	(0.0994)	(0.0994)	(0.0994)
234678-HxCDF	(1.24)		1.24	(0.124)	(0.124)	(0.124)
123789-HxCDF	(1.13)		1.13	(0.113)	(0.113)	(0.113)
1234678-HpCDF	1.62	J	1.12	0.0162	0.0162	0.0162
1234789-HpCDF	(1.66)		1.66	(0.0166)	(0.0166)	(0.0166)
OCDF	(5.84)		5.84	(0.00584)	(0.000584)	(0.00175)

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	EMPC = 0, ND = 0	0.0162	0.0162	0.0162
	EMPC = 0, ND = DL / 2	2.12	2.46	2.36
	EMPC = 0, ND = DL	4.23	4.91	4.71
	EMPC = 0, < J-level = 0	0	0	0
	EMPC = EMPC, ND = 0	0.672	0.672	0.672
	EMPC = EMPC, ND = DL / 2	2.78	3.12	3.02
	EMPC = EMPC, ND = DL	4.88	5.56	5.37
	EMPC = EMPC, < J-level = 0	0.655	0.655	0.655

Sample ID: 11215131-120721-IDW-SS-DECON2-TCLP-LB

Method 1613B

Client Data		Sample Data		Laboratory Data			
Name:	GHD Services Inc.	Matrix:	Aqueous	Lab Project ID:	B6013	Date Received:	11-Dec-2021
Project ID:	11215131-SJRWP-PCFSE	Weight/Volume:	0.95 L	Lab Sample ID:	B6013_18765_DF_004	Date Extracted:	22-Dec-2021
Date Collected:	10-Dec-2021	pH:	5	QC Batch No.:	18765	Date Analyzed:	25-Dec-2021
		Split:	-	Dilution:	-	Time Analyzed:	17:40:13

Analyte	Conc. (pg/L)	DL (pg/L)	EMPC (pg/L)	Qualifiers	Standard	ES Recoveries	Qualifiers
2378-TCDD	ND	2.57			ES 2378-TCDD	92.3	
12378-PeCDD	ND	1.57			ES 12378-PeCDD	106	
123478-HxCDD	ND	1.41			ES 123478-HxCDD	99.8	
123678-HxCDD	ND	1.33			ES 123678-HxCDD	106	
123789-HxCDD	ND	1.39			ES 123789-HxCDD	97.2	
1234678-HpCDD	ND	1.93			ES 1234678-HpCDD	91.4	
OCDD	ND	8.49			ES OCDD	52.5	
2378-TCDF	ND	0.839			ES 2378-TCDF	90.5	
12378-PeCDF	ND	1.04			ES 12378-PeCDF	98.2	
23478-PeCDF	ND	1.01			ES 23478-PeCDF	100	
123478-HxCDF	ND	0.838			ES 123478-HxCDF	105	
123678-HxCDF	ND	0.798			ES 123678-HxCDF	114	
234678-HxCDF	ND	0.962			ES 234678-HxCDF	104	
123789-HxCDF	ND	0.886			ES 123789-HxCDF	110	
1234678-HpCDF	ND	0.824			ES 1234678-HpCDF	104	
1234789-HpCDF	ND	1.27			ES 1234789-HpCDF	95.5	
OCDF	ND	5.06			ES OCDF	58.6	
Totals					Standard	CS Recoveries	
Total TCDD	ND	2.57	ND		CS 37Cl-2378-TCDD	94.3	
Total PeCDD	ND	1.57	ND		CS 12347-PeCDD	113	
Total HxCDD	ND	1.38	ND		CS 12346-PeCDF	103	
Total HpCDD	ND	1.93	ND		CS 123469-HxCDF	122	
					CS 1234689-HpCDF	114	
Total TCDF	ND	0.839	ND				
Total PeCDF	ND	1.03	ND				
Total HxCDF	ND	0.866	ND				
Total HpCDF	ND	1.02	ND				
Total PCDD/Fs	ND		ND				
WHO-2005 TEQs							
TEQ: ND=0	0		0				
TEQ: ND=DL/2	2.68	2.68	2.68				
TEQ: ND=DL	5.36	5.36	5.36				



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Sample ID: 11215131-120721-IDW-SS-DECON2-TCLP-LB **Method 1613B**

Client Data			Sample Data			Laboratory Data					
Name: GHD Services Inc.			Matrix: Aqueous			Lab Project ID: B6013			Date Received: 11-Dec-2021		
Project ID: 11215131-SJRWP-PCFSE			Weight/Volume: 0.95 L			Lab Sample ID: B6013_18765_DF_004			Date Extracted: 22-Dec-2021		
Date Collected: 10-Dec-2021			pH: 5			QC Batch No.: 18765			Date Analyzed: 25-Dec-2021		
			Split: -			Dilution: -			Time Analyzed: 17:40:13		

Tetra-Dioxins	Conc. (pg/L)	Qualifiers	Penta-Dioxins	Conc. (pg/L)	Qualifiers	Hexa-Dioxins	Conc. (pg/L)	Qualifiers	Hepta-Dioxins	Conc. (pg/L)	Qualifiers
1368D	(2.57)		12479/12468D	(1.57)		124679/124689D	(1.38)		1234679D	(1.93)	
1379D	(2.57)		12469D	(1.57)		123468D	(1.38)		1234678D	(1.93)	
1369D	(2.57)		12368D	(1.57)		123679/123689D	(1.38)				
1469D	(2.57)		12478D	(1.57)		123469D	(1.38)				
1247D...[4]	(2.57)		12379D	(1.57)		123478D	(1.41)				
1378D	(2.57)		12369D...[3]	(1.57)		123678D	(1.33)				
1268D	(2.57)		12346/12347D	(1.57)		123467D	(1.38)				
1478D	(2.57)		12378D	(1.57)		123789D	(1.39)		Conc.	0	
1279D	(2.57)		12367D	(1.57)					EMPC	0	
1234/1269D	(2.57)		12389D	(1.57)							
Conc.	0		Conc.	0		Conc.	0		Conc.	0	
EMPC	0		EMPC	0		EMPC	0		EMPC	0	

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WHO-2005 TEQs	Conc.	EMPC
TEQ: ND=0	0	0
TEQ: ND=DL/2	2.68	2.68
TEQ: ND=DL	5.36	5.36
Total PCDD/Fs	Conc.	EMPC
	0	0

Checkcode: 851-446-HNQ

Report Created: 30-Dec-2021 14:18 Analyst: TF

Sample ID: 11215131-120721-IDW-SS-DECON2-TCLP-LB **Method 1613B**

<u>Client Data</u>			<u>Sample Data</u>			<u>Laboratory Data</u>					
Name: GHD Services Inc.			Matrix: Aqueous			Lab Project ID: B6013			Date Received: 11-Dec-2021		
Project ID: 11215131-SJRWP-PCFSE			Weight/Volume: 0.95 L			Lab Sample ID: B6013_18765_DF_004			Date Extracted: 22-Dec-2021		
Date Collected: 10-Dec-2021			pH: 5			QC Batch No.: 18765			Date Analyzed: 25-Dec-2021		
			Split: -			Dilution: -			Time Analyzed: 17:40:13		
Tetra-Furans	Conc. (pg/L)	Qualifiers	Penta-Furans	Conc. (pg/L)	Qualifiers	Hexa-Furans	Conc (pg/L)	Qualifiers	Hepta-Furans	Conc (pg/L)	Qualifiers
1368F	(0.839)		13468/12468F	(0.968)		123468F	(0.866)		1234678F	(0.824)	
1468F	(0.839)		13678F...[3]	(1.03)		124678/134678F	(0.866)		1234679F	(1.02)	
2468F	(0.839)		12368F...[3]	(1.03)		134679F	(0.866)		1234689F	(1.02)	
1346/1246F	(0.839)		14678F	(1.03)		124679F	(0.866)		1234789F	(1.27)	
1347F...[3]	(0.839)		13479F	(1.03)		124689F	(0.866)				
1348F	(0.839)		13469/12479F	(1.03)		123467F	(0.866)				
1248F...[3]	(0.839)		12346F	(1.03)		123478F	(0.838)				
1268F	(0.839)		23468/12469F	(1.03)		123678F	(0.798)				
1467F	(0.839)		12347F	(1.03)		123479F	(0.866)				
1478F	(0.839)		12348F	(1.03)		123469F	(0.866)				
1369/1237F	(0.839)		12378F	(1.04)		123679F	(0.866)				
2467F	(0.839)		12678/12367F	(1.03)		234678F	(0.962)		Conc.	0	
2368F	(0.839)		12379F	(1.03)		234678/123689F	0		EMPC	0	
1238F...[5]	(0.839)		12679F	(1.03)		123689F	(0.866)				
1278F	(0.839)		23467/12369F	(1.03)		123789F	(0.886)		Octa-Furan	Conc	Qualifiers
1349F	(0.839)		23478F	(1.01)		123789/123489F	0			(pg/L)	
1267F	(0.839)		23478/12489F	0		123489F	(0.866)		OCDF	(5.06)	
2346/1249F	(0.839)		12489F	(1.03)							
2347/1279F	(0.839)		12349F	(1.03)							
2348F	(0.839)		12389F	(1.03)							
2378F	(0.839)										
2367/3467F	(0.839)										
1269F	(0.839)										
1239F	(0.839)										
1289F	(0.839)										
Conc.	0		Conc.	0		Conc.	0				
EMPC	0		EMPC	0		EMPC	0				

Checkcode: 851-446-HNQ


Report Created: 30-Dec-2021 14:18 Analyst: TF

Sample ID: 11215131-120721-IDW-SS-DECON2-TTEQ Summary

Method 1613B

Client Project Name:	GHD Services Inc.	Matrix:	Aqueous	Lab Sample ID:	B6013_18765_DF_004
Client Project ID:	11215131-SJRWP-PCFSE	Weight/Volume:	0.95 L	QC Batch No.:	18765
Date Collected:	10-Dec-2021	Split:	-	Date Extracted:	22-Dec-2021
Date Received:	11-Dec-2021	Dilution:	-	Date Analyzed:	25-Dec-2021 17:40
Lab Project No:	B6013	Units	pg/L		

Analyte	Result	Qualifiers	DLs	I-TEQ	WHO-1998	WHO-2005
2378-TCDD	(2.57)		2.57	(2.57)	(2.57)	(2.57)
12378-PeCDD	(1.57)		1.57	(0.784)	(1.57)	(1.57)
123478-HxCDD	(1.41)		1.41	(0.141)	(0.141)	(0.141)
123678-HxCDD	(1.33)		1.33	(0.133)	(0.133)	(0.133)
123789-HxCDD	(1.39)		1.39	(0.139)	(0.139)	(0.139)
1234678-HpCDD	(1.93)		1.93	(0.0193)	(0.0193)	(0.0193)
OCDD	(8.49)		8.49	(0.00849)	(0.000849)	(0.00255)
2378-TCDF	(0.839)		0.839	(0.0839)	(0.0839)	(0.0839)
12378-PeCDF	(1.04)		1.04	(0.0519)	(0.0519)	(0.0311)
23478-PeCDF	(1.01)		1.01	(0.507)	(0.507)	(0.304)
123478-HxCDF	(0.838)		0.838	(0.0838)	(0.0838)	(0.0838)
123678-HxCDF	(0.798)		0.798	(0.0798)	(0.0798)	(0.0798)
234678-HxCDF	(0.962)		0.962	(0.0962)	(0.0962)	(0.0962)
123789-HxCDF	(0.886)		0.886	(0.0886)	(0.0886)	(0.0886)
1234678-HpCDF	(0.824)		0.824	(0.00824)	(0.00824)	(0.00824)
1234789-HpCDF	(1.27)		1.27	(0.0127)	(0.0127)	(0.0127)
OCDF	(5.06)		5.06	(0.00506)	(0.000506)	(0.00152)

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	EMPC = 0, ND = 0	0	0	0
	EMPC = 0, ND = DL / 2	2.4	2.79	2.68
	EMPC = 0, ND = DL	4.81	5.58	5.36
	EMPC = 0, < J-level = 0	0	0	0
	EMPC = EMPC, ND = 0	0	0	0
	EMPC = EMPC, ND = DL / 2	2.4	2.79	2.68
	EMPC = EMPC, ND = DL	4.81	5.58	5.36
	EMPC = EMPC, < J-level = 0	0	0	0

Checkcode: 851-446-HNQ

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Sample ID: Method Blank B6013_18765

Method 1613B

Client Data		Sample Data		Laboratory Data			
Name:	GHD Services Inc.	Matrix:	Aqueous	Lab Project ID:	B6013	Date Received:	n/a
Project ID:	11215131-SJRWP-PCFSE	Weight/Volume:	1.00 L	Lab Sample ID:	MB1_18765_DF_TLX	Date Extracted:	22-Dec-2021
Date Collected:	n/a	pH:	n/a	QC Batch No:	18765	Date Analyzed:	25-Dec-2021
		Split:	-	Dilution:	-	Time Analyzed:	13:02:09
Analyte	Conc. (pg/L)	DL (pg/L)	EMPC (pg/L)	Qualifiers	Standard	ES Recoveries	Qualifiers
2378-TCDD	ND	2.43			ES 2378-TCDD	95.9	
12378-PeCDD	ND	1.68			ES 12378-PeCDD	115	
123478-HxCDD	ND	1.64			ES 123478-HxCDD	94	
123678-HxCDD	ND	1.42			ES 123678-HxCDD	102	
123789-HxCDD	ND	1.53			ES 123789-HxCDD	91.5	
1234678-HpCDD	ND	1.96			ES 1234678-HpCDD	84.6	
OCDD	ND	10.5			ES OCDD	46.6	
2378-TCDF	ND	1.15			ES 2378-TCDF	91.9	
12378-PeCDF	ND	1.13			ES 12378-PeCDF	106	
23478-PeCDF	ND	1.14			ES 23478-PeCDF	107	
123478-HxCDF	ND	1.17			ES 123478-HxCDF	104	
123678-HxCDF	ND	1.11			ES 123678-HxCDF	114	
234678-HxCDF	ND	1.33			ES 234678-HxCDF	103	
123789-HxCDF	ND	1.27			ES 123789-HxCDF	109	
1234678-HpCDF	ND	1.49			ES 1234678-HpCDF	99.2	
1234789-HpCDF	ND	2.48			ES 1234789-HpCDF	90.4	
OCDF	ND	4.89			ES OCDF	53.8	
Totals					Standard	CS Recoveries	
Total TCDD	ND	2.43	ND		CS 37Cl-2378-TCDD	100	
Total PeCDD	ND	1.68	ND		CS 12347-PeCDD	125	
Total HxCDD	ND	1.53	ND		CS 12346-PeCDF	112	
Total HpCDD	ND	1.96	ND		CS 123469-HxCDF	118	
					CS 1234689-HpCDF	106	
Total TCDF	ND	1.15	ND				
Total PeCDF	ND	1.13	ND				
Total HxCDF	ND	1.21	ND				
Total HpCDF	ND	1.93	ND				
Total PCDD/Fs	ND		ND				
WHO-2005 TEQs							
TEQ: ND=0	0		0				
TEQ: ND=DL/2	2.81	2.81	2.81				
TEQ: ND=DL	5.61	5.61	5.61				



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Sample ID: Method Blank B6013_18765 **Method 1613B**

Client Data			Sample Data			Laboratory Data					
Name: GHD Services Inc.			Matrix: Aqueous			Lab Project ID: B6013			Date Received: n/a		
Project ID: 11215131-SJRWP-PCFSE			Weight/Volume: 1.00 L			Lab Sample ID: MB1_18765_DF_TLX			Date Extracted: 22-Dec-2021		
Date Collected: n/a			pH: n/a			QC Batch No.: 18765			Date Analyzed: 25-Dec-2021		
			Split: -			Dilution: -			Time Analyzed: 13:02:09		

Tetra-Dioxins	Conc. (pg/L)	Qualifiers	Penta-Dioxins	Conc. (pg/L)	Qualifiers	Hexa-Dioxins	Conc. (pg/L)	Qualifiers	Hepta-Dioxins	Conc. (pg/L)	Qualifiers
1368D	(2.43)		12479/12468D	(1.68)		124679/124689D	(1.53)		1234679D	(1.96)	
1379D	(2.43)		12469D	(1.68)		123468D	(1.53)		1234678D	(1.96)	
1369D	(2.43)		12368D	(1.68)		123679/123689D	(1.53)				
1469D	(2.43)		12478D	(1.68)		123469D	(1.53)				
1247D...[4]	(2.43)		12379D	(1.68)		123478D	(1.64)				
1378D	(2.43)		12369D...[3]	(1.68)		123678D	(1.42)				
1268D	(2.43)		12346/12347D	(1.68)		123467D	(1.53)				
1478D	(2.43)		12378D	(1.68)		123789D	(1.53)		Conc.	0	
1279D	(2.43)		12367D	(1.68)					EMPC	0	
1234/1269D	(2.43)		12389D	(1.68)							
Conc.	0		Conc.	0		Conc.	0		Conc.	0	
EMPC	0		EMPC	0		EMPC	0		EMPC	0	

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	TEQ: ND=0		0	0
	TEQ: ND=DL/2		2.81	2.81
	TEQ: ND=DL		5.61	5.61
	Total PCDD/Fs		Conc.	EMPC
		0	0	

Checkcode: 132-782-YRY

Report Created: 30-Dec-2021 14:18 Analyst: TF

Sample ID: Method Blank B6013_18765

Method 1613B

Client Data			Sample Data			Laboratory Data			Date Received: n/a		
Name: GHD Services Inc.			Matrix: Aqueous			Lab Project ID: B6013			Date Extracted: 22-Dec-2021		
Project ID: 11215131-SJRWP-PCFSE			Weight/Volume: 1.00 L			Lab Sample ID: MB1_18765_DF_TLX			Date Analyzed: 25-Dec-2021		
Date Collected: n/a			pH: n/a			QC Batch No.: 18765			Time Analyzed: 13:02:09		
Split: -			Dilution: -								
Tetra-Furans	Conc. (pg/L)	Qualifiers	Penta-Furans	Conc. (pg/L)	Qualifiers	Hexa-Furans	Conc (pg/L)	Qualifiers	Hepta-Furans	Conc (pg/L)	Qualifiers
1368F	(1.15)		13468/12468F	(0.828)		123468F	(1.21)		1234678F	(1.49)	
1468F	(1.15)		13678F...[3]	(1.13)		124678/134678F	(1.21)		1234679F	(1.93)	
2468F	(1.15)		12368F...[3]	(1.13)		134679F	(1.21)		1234689F	(1.93)	
1346/1246F	(1.15)		14678F	(1.13)		124679F	(1.21)		1234789F	(2.48)	
1347F...[3]	(1.15)		13479F	(1.13)		124689F	(1.21)				
1348F	(1.15)		13469/12479F	(1.13)		123467F	(1.21)				
1248F...[3]	(1.15)		12346F	(1.13)		123478F	(1.17)				
1268F	(1.15)		23468/12469F	(1.13)		123678F	(1.11)				
1467F	(1.15)		12347F	(1.13)		123479F	(1.21)				
1478F	(1.15)		12348F	(1.13)		123469F	(1.21)				
1369/1237F	(1.15)		12378F	(1.13)		123679F	(1.21)				
2467F	(1.15)		12678/12367F	(1.13)		234678F	(1.33)		Conc.	0	
2368F	(1.15)		12379F	(1.13)		234678/123689F	0		EMPC	0	
1238F...[5]	(1.15)		12679F	(1.13)		123689F	(1.21)				
1278F	(1.15)		23467/12369F	(1.13)		123789F	(1.27)		Octa-Furan	Conc	Qualifiers
1349F	(1.15)		23478F	(1.14)		123789/123489F	0			(pg/L)	
1267F	(1.15)		23478/12489F	0		123489F	(1.21)		OCDF	(4.89)	
2346/1249F	(1.15)		12489F	(1.13)							
2347/1279F	(1.15)		12349F	(1.13)							
2348F	(1.15)		12389F	(1.13)							
2378F	(1.15)										
2367/3467F	(1.15)										
1269F	(1.15)										
1239F	(1.15)										
1289F	(1.15)										
Conc.	0		Conc.	0		Conc.	0				
EMPC	0		EMPC	0		EMPC	0				


Checkcode: 132-782-YRY

Report Created: 30-Dec-2021 14:18 Analyst: TF

Sample ID: Method Blank B6013_18765 **TEQ Summary** **Method 1613B**

Client Project Name:	GHD Services Inc.	Matrix:	Aqueous	Lab Sample ID:	MB1_18765_DF_TLX
Client Project ID:	11215131-SJRWP-PCFSE	Weight/Volume:	1.00 L	QC Batch No.:	18765
Date Collected:	n/a	Split:	-	Date Extracted:	22-Dec-2021
Date Received:	n/a	Dilution:	-	Date Analyzed:	25-Dec-2021 13:02
Lab Project No:	B6013	Units	pg/L		

Analyte	Result	Qualifiers	DLs	I-TEQ	WHO-1998	WHO-2005
2378-TCDD	(2.43)		2.43	(2.43)	(2.43)	(2.43)
12378-PeCDD	(1.68)		1.68	(0.839)	(1.68)	(1.68)
123478-HxCDD	(1.64)		1.64	(0.164)	(0.164)	(0.164)
123678-HxCDD	(1.42)		1.42	(0.142)	(0.142)	(0.142)
123789-HxCDD	(1.53)		1.53	(0.153)	(0.153)	(0.153)
1234678-HpCDD	(1.96)		1.96	(0.0196)	(0.0196)	(0.0196)
OCDD	(10.5)		10.5	(0.0105)	(0.00105)	(0.00315)
2378-TCDF	(1.15)		1.15	(0.115)	(0.115)	(0.115)
12378-PeCDF	(1.13)		1.13	(0.0563)	(0.0563)	(0.0338)
23478-PeCDF	(1.14)		1.14	(0.57)	(0.57)	(0.342)
123478-HxCDF	(1.17)		1.17	(0.117)	(0.117)	(0.117)
123678-HxCDF	(1.11)		1.11	(0.111)	(0.111)	(0.111)
234678-HxCDF	(1.33)		1.33	(0.133)	(0.133)	(0.133)
123789-HxCDF	(1.27)		1.27	(0.127)	(0.127)	(0.127)
1234678-HpCDF	(1.49)		1.49	(0.0149)	(0.0149)	(0.0149)
1234789-HpCDF	(2.48)		2.48	(0.0248)	(0.0248)	(0.0248)
OCDF	(4.89)		4.89	(0.00489)	(0.000489)	(0.00147)

5500 Business Drive Wilmington, NC 28405, USA Tel: +1 910 794-1613; Toll-Free 866 846-8290 www.us.sgs.com 	TEQ Summaries			
	EMPC = 0, ND = 0	0	0	0
	EMPC = 0, ND = DL / 2	2.52	2.93	2.81
	EMPC = 0, ND = DL	5.03	5.86	5.61
	EMPC = 0, < J-level = 0	0	0	0
	EMPC = EMPC, ND = 0	0	0	0
	EMPC = EMPC, ND = DL / 2	2.52	2.93	2.81
	EMPC = EMPC, ND = DL	5.03	5.86	5.61
	EMPC = EMPC, < J-level = 0	0	0	0

Sample ID: 0_18765_OPR001

Method 1613B

Client Data		Sample Data		Laboratory Data			
Name:	GHD Services Inc.	Matrix:	Aqueous	Lab Project ID:	B6013	Date Received:	n/a
Project ID:	11215131-SJRWP-PCFSE	Weight/Volume:	1 uL	Lab Sample ID:	OPR1_18765_DF	Date Extracted:	22-Dec-2021
Date Collected:	n/a	pH:	n/a	QC Batch No:	18765	Date Analyzed:	25-Dec-2021
		Split:	-	Dilution:	-	Time Analyzed:	10:43:04
Analyte	Conc. (pg/uL)	DL (pg/uL)	EMPC (pg/uL)	Qualifiers	Standard	ES Recoveries	Qualifiers
2378-TCDD	11.4				ES 2378-TCDD	93.3	
12378-PeCDD	48.9				ES 12378-PeCDD	111	
123478-HxCDD	53				ES 123478-HxCDD	95.1	
123678-HxCDD	54.9				ES 123678-HxCDD	102	
123789-HxCDD	54.2				ES 123789-HxCDD	91.4	
1234678-HpCDD	51.2				ES 1234678-HpCDD	88.7	
OCDD	105				ES OCDD	50.6	
2378-TCDF	12				ES 2378-TCDF	91.4	
12378-PeCDF	51.2				ES 12378-PeCDF	105	
23478-PeCDF	55				ES 23478-PeCDF	106	
123478-HxCDF	51.4				ES 123478-HxCDF	103	
123678-HxCDF	50.2				ES 123678-HxCDF	115	
234678-HxCDF	48.7				ES 234678-HxCDF	101	
123789-HxCDF	49.5				ES 123789-HxCDF	105	
1234678-HpCDF	50.5				ES 1234678-HpCDF	97.9	
1234789-HpCDF	52.1				ES 1234789-HpCDF	91	
OCDF	104				ES OCDF	57.3	
Totals					Standard	CS Recoveries	
Total TCDD	54.9		54.9		CS 37Cl-2378-TCDD	97.7	
Total PeCDD	75.5		75.5		CS 12347-PeCDD	119	
Total HxCDD	178		178		CS 12346-PeCDF	109	
Total HpCDD	65.4		65.4		CS 123469-HxCDF	117	
Total TCDF	68.1		68.1		CS 1234689-HpCDF	108	
Total PeCDF	193		193				
Total HxCDF	330		330				
Total HpCDF	103		103				
Total PCDD/Fs	1,280		1,280				
WHO-2005 TEQs							
TEQ: ND=0	117		117				
TEQ: ND=DL/2	117	0.129	117				
TEQ: ND=DL	117	0.257	117				



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 Wilmington, NC 28405, USA
 www.us.sgs.com

Tel: +1 910 794-1613; Toll-Free 866 846-8290

Sample ID: 0_18765_OPR002

Method 1613B

Client Data		Sample Data		Laboratory Data			
Name:	GHD Services Inc.	Matrix:	Aqueous	Lab Project ID:	B6013	Date Received:	n/a
Project ID:	11215131-SJRWP-PCFSE	Weight/Volume:	1 uL	Lab Sample ID:	OPR2_18765_DF	Date Extracted:	22-Dec-2021
Date Collected:	n/a	pH:	n/a	QC Batch No:	18765	Date Analyzed:	25-Dec-2021
		Split:	-	Dilution:	-	Time Analyzed:	11:29:29

Analyte	Conc. (pg/uL)	DL (pg/uL)	EMPC (pg/uL)	Qualifiers	Standard	ES Recoveries	Qualifiers
2378-TCDD	13.9				ES 2378-TCDD	80.8	
12378-PeCDD	57.3				ES 12378-PeCDD	99.3	
123478-HxCDD	64				ES 123478-HxCDD	88	
123678-HxCDD	62				ES 123678-HxCDD	97.5	
123789-HxCDD	60.8				ES 123789-HxCDD	87.1	
1234678-HpCDD	59.4				ES 1234678-HpCDD	84.9	
OCDD	123				ES OCDD	55.5	
2378-TCDF	13.6				ES 2378-TCDF	82.6	
12378-PeCDF	60.6				ES 12378-PeCDF	95.1	
23478-PeCDF	64.1				ES 23478-PeCDF	96.3	
123478-HxCDF	60.7				ES 123478-HxCDF	94.9	
123678-HxCDF	58.8				ES 123678-HxCDF	106	
234678-HxCDF	57.2				ES 234678-HxCDF	95.9	
123789-HxCDF	58				ES 123789-HxCDF	99.2	
1234678-HpCDF	60.1				ES 1234678-HpCDF	93.3	
1234789-HpCDF	59.2				ES 1234789-HpCDF	90.3	
OCDF	119				ES OCDF	62.2	

Totals					Standard	CS Recoveries	
Total TCDD	64.5		64.5		CS 37Cl-2378-TCDD	93.8	
Total PeCDD	86.7		86.7		CS 12347-PeCDD	116	
Total HxCDD	205		205		CS 12346-PeCDF	108	
Total HpCDD	74.7		74.7		CS 123469-HxCDF	120	
Total TCDF	77.5		77.5		CS 1234689-HpCDF	114	
Total PeCDF	221		221				
Total HxCDF	382		382				
Total HpCDF	119		119				
Total PCDD/Fs	1,470		1,470				

WHO-2005 TEQs					SGS		
TEQ: ND=0	138		138		5500 Business Drive Wilmington, NC 28405, USA www.us.sgs.com Tel: +1 910 794-1613; Toll-Free 866 846-8290		
TEQ: ND=DL/2	138	0.18	138				
TEQ: ND=DL	138	0.36	138				

Sample DUP

Method 1613B

Sample ID: 0_18765_OPR001

Analyte	OPR1_18765_DF pg/uL	OPR2_18765_DF (DUP) pg/uL	RPD
2,3,7,8-TCDD	11.4	13.9	19.9%
1,2,3,7,8-PeCDD	48.9	57.3	15.8%
1,2,3,4,7,8-HxCDD	53	64	18.9%
1,2,3,6,7,8-HxCDD	54.9	62	12.2%
1,2,3,7,8,9-HxCDD	54.2	60.8	11.5%
1,2,3,4,6,7,8-HpCDD	51.2	59.4	14.8%
OCDD	105	123	15.5%
2,3,7,8-TCDF	12	13.6	12.4%
1,2,3,7,8-PeCDF	51.2	60.6	16.8%
2,3,4,7,8-PeCDF	55	64.1	15.3%
1,2,3,4,7,8-HxCDF	51.4	60.7	16.6%
1,2,3,6,7,8-HxCDF	50.2	58.8	15.8%
2,3,4,6,7,8-HxCDF	48.7	57.2	16.0%
1,2,3,7,8,9-HxCDF	49.5	58	15.7%
1,2,3,4,6,7,8-HpCDF	50.5	60.1	17.3%
1,2,3,4,7,8,9-HpCDF	52.1	59.2	12.9%
OCDF	104	119	14.0%
Totals			
Total TCDD	54.9	64.5	16.0%
Total PeCDD	75.5	86.7	13.9%
Total HxCDD	178	205	14.1%
Total HpCDD	65.4	74.7	13.2%
Total TCDF	68.1	77.5	13.0%
Total PeCDF	193	221	13.6%
Total HxCDF	330	382	14.5%
Total HpCDF	103	119	15.1%



Sample Receipt Notification

5500 Business Drive
 Wilmington, NC 28405 USA
 Tel: 910 794-1613
 Toll Free: 866 846-8290
 Fax: 910 794-3919

Project Manager: Tamara Burkamper
Receipt Date & Time: 11-Dec-21 at 12:35, 15-Dec-21 at 11:35
AP Project name: B6013
Requested TAT: 10 business days
Projected due date: 28-Dec-21
Matrix: Aqueous
Phone#: 910-794-1613
Email Address: Tamara.Burkamper@sgs.com

Company Contact: Meagan Willis
Company: GHD Services Inc.
Project Name & Site: 11215131-SJRWP-PCFSE
Project PO#: 340-002625
QAAP/Contract #: file
Requested Analysis: M1613B
Phone#: 713-907-3710
Email Address: Meagan.Willis@ghd.com

Client Smp ID	AP Smp ID	Sample Condition & Notes	Quantity	Size	Sampling Date	Sampling Time	Received Temp (°C)	Container #	Shipping #
11215131-120721-IDW-SS-SC	B6013_001	AQ	2	1-Liter Amber	07-Dec-21	14:20	0.8	2	5272 0637 1987
11215131-120721-IDW-SS-SC-TCLP-LB	B6013_002	AQ	2	1-Liter Amber	14-Dec-21	00:00	0.8	2	5272 0637 1987
11215131-120721-IDW-SS-DECON2	B6013_003	AQ	2	1-Liter Amber	07-Dec-21	14:20	0.6	1	5272 0637 0774
11215131-120721-IDW-SS-DECON2-TCLP-LB	B6013_004	AQ	2	1-Liter Amber	10-Dec-21	00:00	0.6	1	5272 0637 0774

Preservation Type:	Sample Seals:	No
Notes/Comments:		Any un-extracted sample will be stored for 90 days from reporting date. Additional storage fees may apply for any samples stored longer than 90 days.
Samples received intact		

Received by: Iesha L. Clinton

Logged in by: Ashley Owens

QC'ed by: TB 12/17/2021

All services are rendered in accordance with the applicable SGS General Conditions of Service accessible via: http://www.sgs.com/terms_and_conditions.htm



CHAIN OF CUSTODY

SGS North America Inc. - Dayton
 2235 Route 130, Dayton, NJ 08810
 TEL: 732-329-0200 FAX: 732-329-3499/3480
 www.sgs.com/ehsusa

B6013

FED-EX Tracking #	Bottle Order Control #
SGS Quote #	SGS Job # JD35488

Client / Reporting Information			Project Information										Requested Analysis												Matrix Codes										
Company Name			Project Name SJRWP - PCFSE, Harris County, TX (IDW)										DW - Drinking Water GW - Ground Water WW - Water SW - Surface Water SO - Soil SL - Sludge SED - Sediment OI - Oil LIQ - Other Liquid AIR - Air SOL - Other Solid WP - Wipe FB - Field Blank EB - Equipment Blank RB - Rinse Blank TB - Trip Blank												LAB USE ONLY										
Street Address			Street																																
City State Zip			City State																																
Project Contact E-mail kelly.ramos@sgs.com			Project #																							Street Address									
Phone #			Client Purchase Order #																							City State Zip									
Sampler(s) Name(s) SPS			Project Manager										Attention:																						
SGS Sample #	Field ID / Point of Collection		MECH/ID Vial #	Collection		Sampled by	Matrix	# of bottles	HCl	NaOH	HNO ₃	H ₂ SO ₄	NONE	DI Water	MEOH	ENCORE	SB1613PCDDDF	X	X																
3B	11215131-120721-IDW-SS-SC			12/7/21	2:20:00 PM	SPS	SO																												
4B	11215131-120721-IDW-SS-DECON2			12/7/21	2:20:00 PM	SPS	AQ																												

Turnaround Time (Business days)			Data Deliverable Information										Comments / Special Instructions									
<input type="checkbox"/> Standard 10 Business Days <input type="checkbox"/> 5 Business Days RUSH <input type="checkbox"/> 3 Business Days RUSH <input type="checkbox"/> 2 Business Days RUSH <input type="checkbox"/> 1 Business Day EMERGENCY <input checked="" type="checkbox"/> Other Due 12/13/2021			Approved By (SGS PM): / Date: _____ <input type="checkbox"/> Commercial "A" (Level 1) <input type="checkbox"/> NYASP Category A <input type="checkbox"/> Commercial "B" (Level 2) <input type="checkbox"/> NYASP Category B <input type="checkbox"/> FULLT1 (Level 3+4) <input type="checkbox"/> State Forms <input type="checkbox"/> NJ Reduced <input type="checkbox"/> EDD Format <input type="checkbox"/> Commercial "C" <input checked="" type="checkbox"/> Other FULL1										Send leachate volume! Wilmington to log in and report in their system http://www.sgs.com/en/terms-and-conditions									

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

Relinquished by: 1	Date / Time: 12/15/21 2:10:00 PM	Received By: 1	Date / Time: 12/15/21 11:35 AM	Relinquished By: 2	Date / Time: 12/12/21 12:35 PM	Received By: 2	Date / Time: 12/12/21 12:35 PM
Relinquished by: 3	Date / Time: 12/15/21 2:10:00 PM	Received By: 3	Date / Time: 12/15/21 11:35 AM	Relinquished By: 4	Date / Time: 12/12/21 12:35 PM	Received By: 4	Date / Time: 12/12/21 12:35 PM
Relinquished by: 5	Date / Time: 12/15/21 2:10:00 PM	Received By: 5	Date / Time: 12/15/21 11:35 AM	Custody Seal # <input checked="" type="checkbox"/> Intact <input type="checkbox"/> Not intact Preserved where applicable <input type="checkbox"/> Absent Therm. ID: 124- / 0.0, 0.8 Probe			

B6013 2/2

Date / Time: 12/13/2021 10:57:40 AM

CSR: THAMS

Job #: JD35488

Client Project: SJRWP - PCFSE, Harris County, TX (IDW)

Deliverable: FULT1

TAT: Due 12/13/2021

Sub Lab: SGS - Wilmington, NC

Address: 5500 Business Drive

City: Wilmington

State: NC

Zip: 28405

Contact:

Phone: (910) 794-1613

SGS Sample #	Client Sample Description	Analysis	Location	Sampled By	Date Sampled	Time Sampled	Aliquot
<u>JD35488-3B</u>	<u>11215131-120721-IDW-SS-SC</u>	<u>SB1613PCDDDF</u>		<u>SPS</u>	<u>12/7/2021</u>	<u>2:20:00 PM</u>	
<u>JD35488-4B</u>	<u>11215131-120721-IDW-SS-DECON2</u>	<u>SB1613PCDDDF</u>		<u>SPS</u>	<u>12/7/2021</u>	<u>2:20:00 PM</u>	

Comments: Send leachate volume! Wilmington to log in and report in their system

Sample Management Receipt:

Ashley Owens

Date:

12/11/2021 12:35
12/15/2021 11:35

B6013

1/2

ORIGIN ID: ZKPA (732) 329-0200
SAMPLE MANAGEMENT
SGS NORTH AMERICA INC.
2235 US HIGHWAY 130

#1

SHIP DATE: 10DEC21
ACTWGT: 39.75 LB
CAD: 0692838/CAFE3211

DAYTON, NJ 08810
UNITED STATES US

BILL SENDER

TO **SAMPLE RECEIVING**
SGS EHS WILMINGTON
5500 BUSINESS DRIVE

12/11/2021

12:35

0.6° (T.B.)

551C3/E934/104C

WILMINGTON NC 28405

(910) 794-1813

REF:

INU:

DEPT:



FedEx
Express



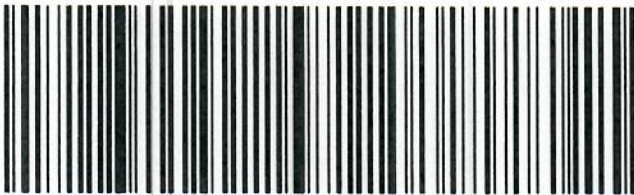
J161180605014V

TRK# 5272 0637 0774
0201

SATURDAY 12:00P
PRIORITY OVERNIGHT

GO ILMA

28405
NC-US RDU



Print # 156148-494 INTW EXP 08/22 *

BLOB 2/2

ORIGIN ID: ZRPA (732) 329-0200
SAMPLE MANAGEMENT
SGS NORTH AMERICA INC.
2235 US HIGHWAY 130

#2

SHIP DATE: 14DEC21
ACTWTG: 37.25 LB
CAD: 0692838/CAFE3211

DAYTON, NJ 08810
UNITED STATES US

BILL SENDER

551C3/E934/104C

TO **SAMPLE RECEIVING**
SGS EHS WILMINGTON
5500 BUSINESS DRIVE

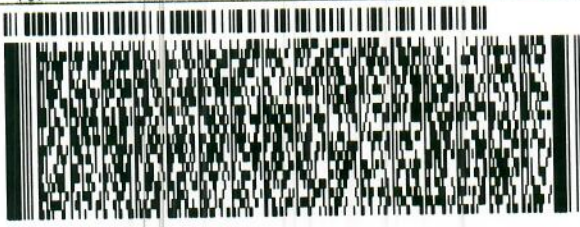
12/15/2021
11:35
0.8° (T.B.)

WILMINGTON NC 28405

(910) 794-1613
INU:
PO:

REF:

DEPT:



FedEx
Express



J18111800607 uv

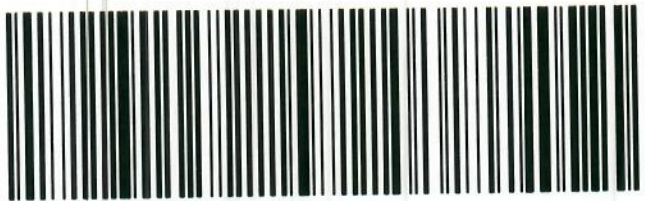
TRK# 5272 0637 1987
0201

WED - 15 DEC 11:30A
PRIORITY OVERNIGHT

GE ILMA

28405
NC-US RDU

Part # 155148-434 MTW EXP 08/22





TOXICITY CHARACTERISTIC LEACHING PROCEDURE FOR METALS & EXTRACTABLES, METHOD SW846 1311 (TCLPE)

NOTE: Only one lot of fluid 1 or fluid 2 may be used per sheet. Lots shown on page 2.

TC Batch ID: TCO760

B6013 1/2

TCLPE

Samples		Container			Leaching Dates		Leaching Times			Extracted Masses			Preliminary Evaluation				Extraction Fluid							
Sample ID	PS?*(Y/N)	No.	Type	Rot.	Started	Stopped	Start	Earliest Stop	Latest Stop	Actual Stop	Grams Total	%SOL	Grams Solid	Buffer TV	Step1 pH	Step 1 spin	Buffer TV	Step2 pH	Fluid #	pH	Pass?	Vol. (mL)	Buffer TV	Final pH
PH Buffer														4.00	NA		4.00	NA	#1 pH = 4.93 ± 0.05 #2 pH = 2.88 ± 0.05				4.00	3.99
PH Buffer														7.00	NA		7.00	NA					7.00	6.99
PH Buffer														10.00	NA		10.00	NA					10.00	9.97
LB (fluid #1)					10-Dec-21	10-Dec-21	FILTER			ONLY	NA	NA	NA	NA	NA	NA	NA	NA	1	DI	NO	2000	NA	6.25
LB (fluid #2)	No fluid 2 samples leached				10-Dec-21	10-Dec-21					NA	NA	NA	NA	NA	NA	NA	NA	2		NO	2000	NA	
JD35488-4					10-Dec-21	10-Dec-21	FILTER			ONLY	100	0.0	NA		5 mins	NA			1	DI	NO		NA	7.48
JD36326-1					10-Dec-21	10-Dec-21	FILTER			ONLY	100	0.0	NA		5 mins	NA			1	DI	NO		NA	OIL
											100	0.0	NA		5 mins	NA			1	DI	NO		NA	
											100	0.0	NA		5 mins	NA			1	DI	NO		NA	
											100	0.0	NA		5 mins	NA			1	DI	NO		NA	
											100	0.0	NA		5 mins	NA			1	DI	NO		NA	
											100	0.0	NA		5 mins	NA			1	DI	NO		NA	
											100	0.0	NA		5 mins	NA			1	DI	NO		NA	
											100	0.0	NA		5 mins	NA			1	DI	NO		NA	
											100	0.0	NA		5 mins	NA			1	DI	NO		NA	
PH Buffer														4.00	NA		4.00	NA					4.00	4.01
PH Buffer														4.00	NA		4.00	NA					7.00	7.05
											100	0.0	NA		5 mins	NA			1	DI	NO		NA	
											100	0.0	NA		5 mins	NA			1	DI	NO		NA	
											100	0.0	NA		5 mins	NA			1	DI	NO		NA	
											100	0.0	NA		5 mins	NA			1	DI	NO		NA	
											100	0.0	NA		5 mins	NA			1	DI	NO		NA	
											100	0.0	NA		5 mins	NA			1	DI	NO		NA	
											100	0.0	NA		5 mins	NA			1	DI	NO		NA	
											100	0.0	NA		5 mins	NA			1	DI	NO		NA	
PH Buffer														4.00	NA		4.00	NA					4.00	
PH Buffer														4.00	NA		4.00	NA					10.00	

Comments and additional information continued on the next page. (*PS=particle sizing)

Data Reviewer/Date: _____

Set-up analyst: JD

Take-down analyst: JD

Form: AGN-TCLPE-04
 Revised: 18-JUN-2017
 Validated: Anthony Dapaah
 Date: 18-JUN-2017

B6013 2/8

Temperature ranges during leaching. (Must be from 21-25 degrees C, or 69.8-77 degrees F, and recorded daily for all probes).

Balance ID: B-54
pH meter ID: 67

Probe ID	Uncorrected Temperatures		CF	Corrected Temperatures		For rotator(s)
	Minimum	Maximum		Minimum	Maximum	
56418			0			7 & 8
50266			0			9 & 10
56717			0			4
45776			0			5
49504			0			11 & 12

Rotator revolution rates. (Must be from 28-32 rpm, and check weekly for all rotators).

Rotator ID:	Rate:	Last measured:
4	NA	NA
7	NA	NA
8	NA	NA
9	NA	NA
10	NA	NA
11	NA	NA
12	N/A	NA

Reagent Information

Reagent	Reagent ID or Manufacturer Lot	Expiration Date
Extraction fluid 1	DI H20	
Extraction fluid 2		
TCLP filters	Env. Exp. Lot 113883-1320-AG	N/A
Filter acid-rinse solution	GNE12-68095-TCLP	3-Jun-2022
pH 2 buffer	FISHER 210051	1-Mar-2023
pH 4 buffer	FISHER 207758	1-Jan-2023
pH 7 buffer	FISHER 213754	1-Jun-2023
pH 10 buffer	FISHER 202303	1-Jun-2022
pH 12 buffer	N/A	N/A
pH 13 buffer	SPECTRUM 1KC0229	1-Apr-2022
Nitric acid, concentrated	J.T. BAKER 0000282671	3-Dec-2026
Nitric acid, 1N	N/A	N/A
1N HCl		

Form: AGN-TCLPE-04
Revised: 18-JUN-2017
Validated: Anthony Dapaah
Date: 18-JUN-2017



FINAL LAB REPORT

Prepared by

SGS NORTH AMERICA

Prepared for

This report is approved by

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PROJECT INFORMATION SUMMARY *(When applicable, see QC Annotations for details)*

Client Project
SGS Project #
Analytical Protocol(s)
No. Samples Submitted
Additional QC Sample(s)
No. Laboratory Method Blanks
No. OPRs / Batch CS3
Date Received
Condition Received
Temperature upon Receipt (°C)
Extraction within Holding Time
Analysis within Holding Time



QC ANNOTATIONS:

1. Please see Appendices attached for data qualifier/attribute and lab identifier descriptions which may be contained in the project.



APPENDIX A: GENERAL DATA QUALIFIERS / DATA ATTRIBUTES

B	The analyte was found in the method blank, at a concentration that was at least 10% of the concentration in the sample.
C	Two or more congeners co-elute. In EDDs, C denotes the lowest IUPAC congener in a co-elution group and additional co-eluters for the group are shown with the number of the lowest IUPAC co-eluter.
E	The reported concentration exceeds the calibration range (upper point of the calibration curve) and is an estimated value.
EMPC	Represents an Estimated Maximum Possible Concentration. EMPCs arise in cases where the signal/noise ratio is not sufficient for peak identification (the determined ion-abundance ratio is outside the allowed theoretical range), or where there is a co-eluting interference.
H/h	If the standard recovery is below the method or SOP specified value "H" is assigned. If the obtained value is less than half the specified value "h" is assigned.
J	Indicates that an analyte has a concentration below the reporting limit (lowest point of the calibration curve) and is an estimated value.
ND	Indicates a non-detect.
NR or R	Indicates a value that is not reportable.
PR	Due to interference, the associated congener is poorly resolved.
QI	Indicates the presence of a quantitative interference.
SI	Denotes "Single Ion Mode" and is utilized for PCBs where the secondary ion trace has a significantly elevated noise level due to background PFK. Responses for such peaks are calculated using an EMPC approach based solely on the primary ion area(s) and may be considered estimates.
U	The analyte was not detected. The estimated detection limit (EDL) may be reported for this analyte.
V	The labeled standard recovery was found to be outside of the method control limits.



APPENDIX B: DRBC/TMDL SPECIFIC DATA QUALIFIERS / DATA ATTRIBUTES

J	The reported result is an estimate. The value is less than the minimum calibration level but greater than the estimated detection limit (EDL).
U	The analyte was not detected in the sample at the estimated detection limit (EDL).
E	The reported concentration is an estimate. The value exceeds the upper calibration range (upper point of the calibration curve).
D	Dilution Data. Result was obtained from the analysis of a dilution.
B	Analyte found in the sample and associated method blank.
C	Co-eluting congener
Cxx	Co-elutes with the indicated congener, data is reported under the lowest IUPAC congener. 'Xx' denotes the IUPAC number with the lowest numerical designated congener.
NR	Analyte is not reportable because of problems in sample preparation or analysis.
V	Labeled standard recovery is not within method control limits.
X	Results from re-injection/repeat/second-column analysis.
EMPC	Estimated maximum possible concentration. Indicates that a peak is identified but did not meet the method specified ion-abundance ratio.

APPENDIX C: LAB IDENTIFIERS

AR	Indicates use of the archived portion of the sample extract.
CU	Indicates a sample that required additional clean-up prior to MS injection/processing.
D	Indicates a dilution of the sample extract. The number that follows the "D" indicates the dilution factor.
DE	Indicates a dilution performed with the addition of ES (extraction standard) solution.
DUP	Designation for a duplicate sample.
MS	Designation for a matrix spike.
MSD	Designation for a matrix spike duplicate.
RJ	Indicates a reinjection of the sample extract.
S	Indicates a sample split. The number that follows the "S" indicates the split factor.



SGS CERTIFICATIONS


Alaska DEC LAP	17-012
Alaska DEC LCP	NC00919
Arkansas	20-054-0
California (ELAP)	ELAP Cert #2914
CLIA	34D1013708
Connecticut	PH-0258
USDA Soil Permit	P330-20-00103
American Association for Laboratory Accreditation (A2LA)	2726.01 (ISO 17025:2017, 2009 TNI, DoD ELAP QSM 5.3)
Florida DOH	E87634
Louisiana DEQ	4115
Louisiana DOH	LA031
Maine	2020019
Massachusetts	M-NC919
Michigan	9950
Minnesota (Primary NELAP For Method 23)	037-999-459
Montana	0106
New Hampshire (Secondary NELAP)	2083
New Jersey	NC100
New York	11685
North Carolina DEQ	481
North Dakota	R-197
Ohio	87785
Oregon	NC200002
Pennsylvania	68-03675
South Carolina	99029002
Texas	T104704260
US Coast Guard	16714/159.317/SGS
Vermont	VT-87634
Virginia	460214
Washington	C913

Rev. 12-Oct-2021

Sample ID: 11215131-120821-IDW-SS-SW

Method 1613B

Client Data		Sample Data		Laboratory Data			
Name:	GHD Services Inc.	Matrix:	Aqueous	Lab Project ID:	B6081	Date Received:	15-Dec-2021
Project ID:	11215131-SJRWP-PCFSE	Weight/Volume:	0.95 L	Lab Sample ID:	B6081_18774_DF_001-RJ	Date Extracted:	27-Dec-2021
Date Collected:	14-Dec-2021	pH:	6	QC Batch No:	18774	Date Analyzed:	09-Jan-2022
		Split:	-	Dilution:	-	Time Analyzed:	20:04:46
Analyte	Conc. (pg/L)	DL (pg/L)	EMPC (pg/L)	Qualifiers	Standard	ES Recoveries	Qualifiers
2378-TCDD	EMPC		14.2		ES 2378-TCDD	84	
12378-PeCDD	ND	7.3			ES 12378-PeCDD	80.3	
123478-HxCDD	ND	7.01			ES 123478-HxCDD	88.8	
123678-HxCDD	ND	6.34			ES 123678-HxCDD	96.4	
123789-HxCDD	ND	6.63			ES 123789-HxCDD	88.4	
1234678-HpCDD	ND	5.96			ES 1234678-HpCDD	85.6	
OCDD	ND	11.5			ES OCDD	72.8	
2378-TCDF	52.1				ES 2378-TCDF	76.6	
12378-PeCDF	ND	6.3			ES 12378-PeCDF	87.5	
23478-PeCDF	ND	6.27			ES 23478-PeCDF	85.9	
123478-HxCDF	ND	5.04			ES 123478-HxCDF	87.3	
123678-HxCDF	ND	5.25			ES 123678-HxCDF	90.5	
234678-HxCDF	ND	5.82			ES 234678-HxCDF	88.9	
123789-HxCDF	ND	6.28			ES 123789-HxCDF	82.7	
1234678-HpCDF	ND	4.36			ES 1234678-HpCDF	92.1	
1234789-HpCDF	ND	4.95			ES 1234789-HpCDF	92.7	
OCDF	ND	10.7			ES OCDF	76.8	
Totals					Standard	CS Recoveries	
Total TCDD	ND		14.2		CS 37Cl-2378-TCDD	75.8	
Total PeCDD	ND	7.3	ND		CS 12347-PeCDD	86.2	
Total HxCDD	ND	6.65	ND		CS 12346-PeCDF	92.4	
Total HpCDD	ND	5.96	ND		CS 123469-HxCDF	99.3	
					CS 1234689-HpCDF	99.8	
Total TCDF	52.1		77				
Total PeCDF	ND	6.29	ND				
Total HxCDF	ND	5.56	ND				
Total HpCDF	ND	4.64	ND				
Total PCDD/Fs	52.1		91.1				
WHO-2005 TEQs							
TEQ: ND=0	5.21		19.4				
TEQ: ND=DL/2	12.1	11.2	26.3				
TEQ: ND=DL	19	22.3	33.1				



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Sample ID: 11215131-120821-IDW-SS-SW

Method 1613B

Client Data			Sample Data			Laboratory Data			Date Received: 15-Dec-2021		
Name:	GHD Services Inc.		Matrix:	Aqueous		Lab Project ID:	B6081		Date Received:	15-Dec-2021	
Project ID:	11215131-SJRWP-PCFSE		Weight/Volume:	0.95 L		Lab Sample ID:	B6081_18774_DF_001-RJ		Date Extracted:	27-Dec-2021	
Date Collected:	14-Dec-2021		pH:	6		QC Batch No.:	18774		Date Analyzed:	09-Jan-2022	
			Split:	-		Dilution:	-		Time Analyzed:	20:04:46	

Tetra-Dioxins	Conc. (pg/L)	Qualifiers	Penta-Dioxins	Conc. (pg/L)	Qualifiers	Hexa-Dioxins	Conc. (pg/L)	Qualifiers	Hepta-Dioxins	Conc. (pg/L)	Qualifiers
1368D	(7.68)		12479/12468D	(7.3)		124679/124689D	(6.65)		1234679D	(5.96)	
1379D	(7.68)		12469D	(7.3)		123468D	(6.65)		1234678D	(5.96)	
1369D	(7.68)		12368D	(7.3)		123679/123689D	(6.65)				
1469D	(7.68)		12478D	(7.3)		123469D	(6.65)				
1247D...[4]	(7.68)		12379D	(7.3)		123478D	(7.01)				
1378D	(7.68)		12369D...[3]	(7.3)		123678D	(6.34)				
1268D	(7.68)		12346/12347D	(7.3)		123467D	(6.65)				
1478D	(7.68)		12378D	(7.3)		123789D	(6.63)		Conc.	0	
1279D	(7.68)		12367D	(7.3)					EMPC	0	
1234/1269D	(7.68)		12389D	(7.3)							
1236D	(7.68)								Octa-Dioxin	Conc	Qualifiers
1237/1238D	(7.68)									(pg/L)	
1239D	(7.68)								OCDD	(11.5)	
2378D	[14.2]										
1278D	(7.68)										
1267D	(7.68)										
1289D	(7.68)										
Conc.	0		Conc.	0		Conc.	0				
EMPC	14.2		EMPC	0		EMPC	0				



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WHO-2005 TEQs	Conc.	EMPC
TEQ: ND=0	5.21	19.4
TEQ: ND=DL/2	12.1	26.3
TEQ: ND=DL	19	33.1
	Conc.	EMPC
Total PCDD/Fs	52.1	91.1

Checkcode: 399-675-BYG

Report Created: 10-Jan-2022 11:59 Analyst: pw

Sample ID: 11215131-120821-IDW-SS-SW

Method 1613B

Client Data			Sample Data			Laboratory Data			Date Received: 15-Dec-2021		
Name: GHD Services Inc.			Matrix: Aqueous			Lab Project ID: B6081			Date Received: 15-Dec-2021		
Project ID: 11215131-SJRWP-PCFSE			Weight/Volume: 0.95 L			Lab Sample ID: B6081_18774_DF_001-RJ			Date Extracted: 27-Dec-2021		
Date Collected: 14-Dec-2021			pH: 6			QC Batch No.: 18774			Date Analyzed: 09-Jan-2022		
			Split: -			Dilution: -			Time Analyzed: 20:04:46		
Tetra-Furans	Conc. (pg/L)	Qualifiers	Penta-Furans	Conc. (pg/L)	Qualifiers	Hexa-Furans	Conc (pg/L)	Qualifiers	Hepta-Furans	Conc (pg/L)	Qualifiers
1368F	(8.72)		13468/12468F	(8.4)		123468F	(5.56)		1234678F	(4.36)	
1468F	(8.72)		13678F...[3]	(6.29)		124678/134678F	(5.56)		1234679F	(4.64)	
2468F	(8.72)		12368F...[3]	(6.29)		134679F	(5.56)		1234689F	(4.64)	
1346/1246F	(8.72)		14678F	(6.29)		124679F	(5.56)		1234789F	(4.95)	
1347F...[3]	(8.72)		13479F	(6.29)		124689F	(5.56)				
1348F	(8.72)		13469/12479F	(6.29)		123467F	(5.56)				
1248F...[3]	(8.72)		12346F	(6.29)		123478F	(5.04)				
1268F	(8.72)		23468/12469F	(6.29)		123678F	(5.25)				
1467F	(8.72)		12347F	(6.29)		123479F	(5.56)				
1478F	(8.72)		12348F	(6.29)		123469F	(5.56)				
1369/1237F	(8.72)		12378F	(6.3)		123679F	(5.56)				
2467F	(8.72)		12678/12367F	(6.29)		234678F	(5.82)		Conc.	0	
2368F	(8.72)		12379F	(6.29)		234678/123689F	0		EMPC	0	
1238F...[5]	(8.72)		12679F	(6.29)		123689F	(5.56)				
1278F	[24.8]		23467/12369F	(6.29)		123789F	(6.28)		Octa-Furan	Conc	Qualifiers
1349F	(8.72)		23478F	(6.27)		123789/123489F	0			(pg/L)	
1267F	(8.72)		23478/12489F	0		123489F	(5.56)		OCDF	(10.7)	
2346/1249F	(8.72)		12489F	(6.29)							
2347/1279F	(8.72)		12349F	(6.29)							
2348F	(8.72)		12389F	(6.29)							
2378F	52.1										
2367/3467F	(8.72)										
1269F	(8.72)										
1239F	(8.72)										
1289F	(8.72)										
Conc.	52.1		Conc.	0		Conc.	0				
EMPC	77		EMPC	0		EMPC	0				


Checkcode: 399-675-BYG

Report Created: 10-Jan-2022 11:59 Analyst: pw

Sample ID: 11215131-120821-IDW-SS-SW **TEQ Summary** **Method 1613B**

Client Project Name:	GHD Services Inc.	Matrix:	Aqueous	Lab Sample ID:	B6081_18774_DF_001-RJ
Client Project ID:	11215131-SJRWP-PCFSE	Weight/Volume:	0.95 L	QC Batch No.:	18774
Date Collected:	14-Dec-2021	Split:	-	Date Extracted:	27-Dec-2021
Date Received:	15-Dec-2021	Dilution:	-	Date Analyzed:	09-Jan-2022 20:04
Lab Project No:	B6081	Units	pg/L		


Analyte	Result	Qualifiers	DLs	I-TEQ	WHO-1998	WHO-2005
2378-TCDD	[14.2]		7.68	[14.2]	[14.2]	[14.2]
12378-PeCDD	(7.3)		7.3	(3.65)	(7.3)	(7.3)
123478-HxCDD	(7.01)		7.01	(0.701)	(0.701)	(0.701)
123678-HxCDD	(6.34)		6.34	(0.634)	(0.634)	(0.634)
123789-HxCDD	(6.63)		6.63	(0.663)	(0.663)	(0.663)
1234678-HpCDD	(5.96)		5.96	(0.0596)	(0.0596)	(0.0596)
OCDD	(11.5)		11.5	(0.0115)	(0.00115)	(0.00346)
2378-TCDF	52.1		8.72	5.21	5.21	5.21
12378-PeCDF	(6.3)		6.3	(0.315)	(0.315)	(0.189)
23478-PeCDF	(6.27)		6.27	(3.14)	(3.14)	(1.88)
123478-HxCDF	(5.04)		5.04	(0.504)	(0.504)	(0.504)
123678-HxCDF	(5.25)		5.25	(0.525)	(0.525)	(0.525)
234678-HxCDF	(5.82)		5.82	(0.582)	(0.582)	(0.582)
123789-HxCDF	(6.28)		6.28	(0.628)	(0.628)	(0.628)
1234678-HpCDF	(4.36)		4.36	(0.0436)	(0.0436)	(0.0436)
1234789-HpCDF	(4.95)		4.95	(0.0495)	(0.0495)	(0.0495)
OCDF	(10.7)		10.7	(0.0107)	(0.00107)	(0.00321)

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	EMPC = 0, ND = 0	5.21	5.21	5.21
	EMPC = 0, ND = DL / 2	11	12.8	12.1
	EMPC = 0, ND = DL	16.7	20.4	19
	EMPC = 0, < J-level = 0	5.21	5.21	5.21
	EMPC = EMPC, ND = 0	19.4	19.4	19.4
	EMPC = EMPC, ND = DL / 2	25.1	26.9	26.3
	EMPC = EMPC, ND = DL	30.9	34.5	33.1
	EMPC = EMPC, < J-level = 0	19.4	19.4	19.4

Sample ID: 11215131-120821-IDW-SS-SW-TCLP LB

Method 1613B

Client Data		Sample Data		Laboratory Data			
Name:	GHD Services Inc.	Matrix:	Aqueous	Lab Project ID:	B6081	Date Received:	15-Dec-2021
Project ID:	11215131-SJRWP-PCFSE	Weight/Volume:	0.96 L	Lab Sample ID:	B6081_18774_DF_002-RJ	Date Extracted:	27-Dec-2021
Date Collected:	14-Dec-2021	pH:	5	QC Batch No:	18774	Date Analyzed:	09-Jan-2022
		Split:	-	Dilution:	-	Time Analyzed:	20:52:20
Analyte	Conc. (pg/L)	DL (pg/L)	EMPC (pg/L)	Qualifiers	Standard	ES Recoveries	Qualifiers
2378-TCDD	ND	5.82			ES 2378-TCDD	82.6	
12378-PeCDD	ND	5.99			ES 12378-PeCDD	79.8	
123478-HxCDD	ND	5.59			ES 123478-HxCDD	96.1	
123678-HxCDD	ND	5.81			ES 123678-HxCDD	101	
123789-HxCDD	ND	5.77			ES 123789-HxCDD	92.5	
1234678-HpCDD	ND	6.54			ES 1234678-HpCDD	88.3	
OCDD	EMPC		32.9	J	ES OCDD	76	
2378-TCDF	ND	5.47			ES 2378-TCDF	76.2	
12378-PeCDF	ND	5.92			ES 12378-PeCDF	84.2	
23478-PeCDF	ND	6.13			ES 23478-PeCDF	80.4	
123478-HxCDF	ND	4.2			ES 123478-HxCDF	90.7	
123678-HxCDF	ND	3.95			ES 123678-HxCDF	93	
234678-HxCDF	ND	4.71			ES 234678-HxCDF	92.4	
123789-HxCDF	ND	4.61			ES 123789-HxCDF	91.3	
1234678-HpCDF	ND	4.2			ES 1234678-HpCDF	95.1	
1234789-HpCDF	ND	4.76			ES 1234789-HpCDF	93.1	
OCDF	ND	9.34			ES OCDF	81.3	
Totals					Standard	CS Recoveries	
Total TCDD	ND	5.82	ND		CS 37Cl-2378-TCDD	78.4	
Total PeCDD	ND	5.99	ND		CS 12347-PeCDD	93.3	
Total HxCDD	ND	5.72	ND		CS 12346-PeCDF	100	
Total HpCDD	ND	6.54	ND		CS 123469-HxCDF	112	
					CS 1234689-HpCDF	114	
Total TCDF	ND	5.47	ND				
Total PeCDF	ND	6.02	ND				
Total HxCDF	ND	4.35	ND				
Total HpCDF	ND	4.46	ND				
Total PCDD/Fs	ND		32.9				
WHO-2005 TEQs							
TEQ: ND=0	0		0.00987				
TEQ: ND=DL/2	9	9	9.01				
TEQ: ND=DL	18	18	18				



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Sample ID: 11215131-120821-IDW-SS-SW-TCLP LB **Method 1613B**

Client Data			Sample Data			Laboratory Data					
Name: GHD Services Inc.			Matrix: Aqueous			Lab Project ID: B6081			Date Received: 15-Dec-2021		
Project ID: 11215131-SJRWP-PCFSE			Weight/Volume: 0.96 L			Lab Sample ID: B6081_18774_DF_002-RJ			Date Extracted: 27-Dec-2021		
Date Collected: 14-Dec-2021			pH: 5			QC Batch No.: 18774			Date Analyzed: 09-Jan-2022		
			Split: -			Dilution: -			Time Analyzed: 20:52:20		

Tetra-Dioxins	Conc. (pg/L)	Qualifiers	Penta-Dioxins	Conc. (pg/L)	Qualifiers	Hexa-Dioxins	Conc. (pg/L)	Qualifiers	Hepta-Dioxins	Conc. (pg/L)	Qualifiers
1368D	(5.82)		12479/12468D	(5.99)		124679/124689D	(5.72)		1234679D	(6.54)	
1379D	(5.82)		12469D	(5.99)		123468D	(5.72)		1234678D	(6.54)	
1369D	(5.82)		12368D	(5.99)		123679/123689D	(5.72)				
1469D	(5.82)		12478D	(5.99)		123469D	(5.72)				
1247D...[4]	(5.82)		12379D	(5.99)		123478D	(5.59)				
1378D	(5.82)		12369D...[3]	(5.99)		123678D	(5.81)				
1268D	(5.82)		12346/12347D	(5.99)		123467D	(5.72)				
1478D	(5.82)		12378D	(5.99)		123789D	(5.77)		Conc.	0	
1279D	(5.82)		12367D	(5.99)					EMPC	0	
1234/1269D	(5.82)		12389D	(5.99)							
Conc.	0		Conc.	0		Conc.	0		Conc.	0	
EMPC	0		EMPC	0		EMPC	0		EMPC	0	

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	TEQ: ND=0		0	0.00987
	TEQ: ND=DL/2		9	9.01
	TEQ: ND=DL		18	18
	Total PCDD/Fs		Conc.	EMPC
		0	32.9	

Checkcode: 825-792-LYY

Report Created: 10-Jan-2022 11:59 Analyst: pw

Sample ID: 11215131-120821-IDW-SS-SW-TCLP LB **Method 1613B**

<u>Client Data</u>			<u>Sample Data</u>			<u>Laboratory Data</u>					
Name: GHD Services Inc.			Matrix: Aqueous			Lab Project ID: B6081			Date Received: 15-Dec-2021		
Project ID: 11215131-SJRWP-PCFSE			Weight/Volume: 0.96 L			Lab Sample ID: B6081_18774_DF_002-RJ			Date Extracted: 27-Dec-2021		
Date Collected: 14-Dec-2021			pH: 5			QC Batch No.: 18774			Date Analyzed: 09-Jan-2022		
			Split: -			Dilution: -			Time Analyzed: 20:52:20		
Tetra-Furans	Conc. (pg/L)	Qualifiers	Penta-Furans	Conc. (pg/L)	Qualifiers	Hexa-Furans	Conc (pg/L)	Qualifiers	Hepta-Furans	Conc (pg/L)	Qualifiers
1368F	(5.47)		13468/12468F	(8.12)		123468F	(4.35)		1234678F	(4.2)	
1468F	(5.47)		13678F...[3]	(6.02)		124678/134678F	(4.35)		1234679F	(4.46)	
2468F	(5.47)		12368F...[3]	(6.02)		134679F	(4.35)		1234689F	(4.46)	
1346/1246F	(5.47)		14678F	(6.02)		124679F	(4.35)		1234789F	(4.76)	
1347F...[3]	(5.47)		13479F	(6.02)		124689F	(4.35)				
1348F	(5.47)		13469/12479F	(6.02)		123467F	(4.35)				
1248F...[3]	(5.47)		12346F	(6.02)		123478F	(4.2)				
1268F	(5.47)		23468/12469F	(6.02)		123678F	(3.95)				
1467F	(5.47)		12347F	(6.02)		123479F	(4.35)				
1478F	(5.47)		12348F	(6.02)		123469F	(4.35)				
1369/1237F	(5.47)		12378F	(5.92)		123679F	(4.35)				
2467F	(5.47)		12678/12367F	(6.02)		234678F	(4.71)		Conc.	0	
2368F	(5.47)		12379F	(6.02)		234678/123689F	0		EMPC	0	
1238F...[5]	(5.47)		12679F	(6.02)		123689F	(4.35)				
1278F	(5.47)		23467/12369F	(6.02)		123789F	(4.61)		Octa-Furan	Conc	Qualifiers
1349F	(5.47)		23478F	(6.13)		123789/123489F	0			(pg/L)	
1267F	(5.47)		23478/12489F	0		123489F	(4.35)		OCDF	(9.34)	
2346/1249F	(5.47)		12489F	(6.02)							
2347/1279F	(5.47)		12349F	(6.02)							
2348F	(5.47)		12389F	(6.02)							
2378F	(5.47)										
2367/3467F	(5.47)										
1269F	(5.47)										
1239F	(5.47)										
1289F	(5.47)										
Conc.	0		Conc.	0		Conc.	0				
EMPC	0		EMPC	0		EMPC	0				

Checkcode: 825-792-LYY


Report Created: 10-Jan-2022 11:59 Analyst: pw

Sample ID: 11215131-120821-IDW-SS-SW-TCLP TEQ Summary

Method 1613B

Client Project Name:	GHD Services Inc.	Matrix:	Aqueous	Lab Sample ID:	B6081_18774_DF_002-RJ
Client Project ID:	11215131-SJRWP-PCFSE	Weight/Volume:	0.96 L	QC Batch No.:	18774
Date Collected:	14-Dec-2021	Split:	-	Date Extracted:	27-Dec-2021
Date Received:	15-Dec-2021	Dilution:	-	Date Analyzed:	09-Jan-2022 20:52
Lab Project No:	B6081	Units	pg/L		


Analyte	Result	Qualifiers	DLs	I-TEQ	WHO-1998	WHO-2005
2378-TCDD	(5.82)		5.82	(5.82)	(5.82)	(5.82)
12378-PeCDD	(5.99)		5.99	(2.99)	(5.99)	(5.99)
123478-HxCDD	(5.59)		5.59	(0.559)	(0.559)	(0.559)
123678-HxCDD	(5.81)		5.81	(0.581)	(0.581)	(0.581)
123789-HxCDD	(5.77)		5.77	(0.577)	(0.577)	(0.577)
1234678-HpCDD	(6.54)		6.54	(0.0654)	(0.0654)	(0.0654)
OCDD	[32.9]	J	13.5	[0.0329]	[0.00329]	[0.00987]
2378-TCDF	(5.47)		5.47	(0.547)	(0.547)	(0.547)
12378-PeCDF	(5.92)		5.92	(0.296)	(0.296)	(0.178)
23478-PeCDF	(6.13)		6.13	(3.06)	(3.06)	(1.84)
123478-HxCDF	(4.2)		4.2	(0.42)	(0.42)	(0.42)
123678-HxCDF	(3.95)		3.95	(0.395)	(0.395)	(0.395)
234678-HxCDF	(4.71)		4.71	(0.471)	(0.471)	(0.471)
123789-HxCDF	(4.61)		4.61	(0.461)	(0.461)	(0.461)
1234678-HpCDF	(4.2)		4.2	(0.042)	(0.042)	(0.042)
1234789-HpCDF	(4.76)		4.76	(0.0476)	(0.0476)	(0.0476)
OCDF	(9.34)		9.34	(0.00934)	(0.000934)	(0.0028)

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	EMPC = 0, ND = 0	0	0	0
	EMPC = 0, ND = DL / 2	8.17	9.67	9
	EMPC = 0, ND = DL	16.3	19.3	18
	EMPC = 0, < J-level = 0	0	0	0
	EMPC = EMPC, ND = 0	0.0329	0.00329	0.00987
	EMPC = EMPC, ND = DL / 2	8.21	9.67	9.01
	EMPC = EMPC, ND = DL	16.4	19.3	18
EMPC = EMPC, < J-level = 0	0	0	0	

Sample ID: Method Blank B6081_18774

Method 1613B

Client Data		Sample Data		Laboratory Data			
Name:	GHD Services Inc.	Matrix:	Aqueous	Lab Project ID:	B6081	Date Received:	n/a
Project ID:	11215131-SJRWP-PCFSE	Weight/Volume:	1.00 L	Lab Sample ID:	MB1_18774_DF_TLX-RJ	Date Extracted:	27-Dec-2021
Date Collected:	n/a	pH:	n/a	QC Batch No:	18774	Date Analyzed:	09-Jan-2022
		Split:	-	Dilution:	-	Time Analyzed:	12:56:55
Analyte	Conc. (pg/L)	DL (pg/L)	EMPC (pg/L)	Qualifiers	Standard	ES Recoveries	Qualifiers
2378-TCDD	ND	7.74			ES 2378-TCDD	88.9	
12378-PeCDD	ND	6.56			ES 12378-PeCDD	78.9	
123478-HxCDD	ND	6.96			ES 123478-HxCDD	97	
123678-HxCDD	ND	6.62			ES 123678-HxCDD	106	
123789-HxCDD	ND	7.43			ES 123789-HxCDD	92.3	
1234678-HpCDD	ND	5.82			ES 1234678-HpCDD	93.9	
OCDD	ND	13.3			ES OCDD	79	
2378-TCDF	ND	6.25			ES 2378-TCDF	81.3	
12378-PeCDF	ND	5.46			ES 12378-PeCDF	85.1	
23478-PeCDF	ND	5.29			ES 23478-PeCDF	83.6	
123478-HxCDF	ND	5.21			ES 123478-HxCDF	87.4	
123678-HxCDF	ND	5.18			ES 123678-HxCDF	95.5	
234678-HxCDF	ND	5.68			ES 234678-HxCDF	91.7	
123789-HxCDF	ND	6.2			ES 123789-HxCDF	86.5	
1234678-HpCDF	ND	3.64			ES 1234678-HpCDF	94	
1234789-HpCDF	ND	4.14			ES 1234789-HpCDF	96.5	
OCDF	ND	8.03			ES OCDF	77.6	
Totals					Standard	CS Recoveries	
Total TCDD	ND	7.74	ND		CS 37Cl-2378-TCDD	79	
Total PeCDD	ND	6.56	ND		CS 12347-PeCDD	91.1	
Total HxCDD	ND	6.99	ND		CS 12346-PeCDF	94.2	
Total HpCDD	ND	5.82	ND		CS 123469-HxCDF	111	
					CS 1234689-HpCDF	113	
Total TCDF	ND	6.25	ND				
Total PeCDF	ND	5.37	ND				
Total HxCDF	ND	5.53	ND				
Total HpCDF	ND	3.88	ND				
Total PCDD/Fs	ND		ND				
WHO-2005 TEQs							
TEQ: ND=0	0		0				
TEQ: ND=DL/2	10.6	10.6	10.6				
TEQ: ND=DL	21.1	21.1	21.1				




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Sample ID: Method Blank B6081_18774 **Method 1613B**

Client Data			Sample Data			Laboratory Data					
Name: GHD Services Inc.			Matrix: Aqueous			Lab Project ID: B6081			Date Received: n/a		
Project ID: 11215131-SJRWP-PCFSE			Weight/Volume: 1.00 L			Lab Sample ID: MB1_18774_DF_TLX-RJ			Date Extracted: 27-Dec-2021		
Date Collected: n/a			pH: n/a			QC Batch No.: 18774			Date Analyzed: 09-Jan-2022		
			Split: -			Dilution: -			Time Analyzed: 12:56:55		

Tetra-Dioxins	Conc. (pg/L)	Qualifiers	Penta-Dioxins	Conc. (pg/L)	Qualifiers	Hexa-Dioxins	Conc. (pg/L)	Qualifiers	Hepta-Dioxins	Conc. (pg/L)	Qualifiers
1368D	(7.74)		12479/12468D	(6.56)		124679/124689D	(6.99)		1234679D	(5.82)	
1379D	(7.74)		12469D	(6.56)		123468D	(6.99)		1234678D	(5.82)	
1369D	(7.74)		12368D	(6.56)		123679/123689D	(6.99)				
1469D	(7.74)		12478D	(6.56)		123469D	(6.99)				
1247D...[4]	(7.74)		12379D	(6.56)		123478D	(6.96)				
1378D	(7.74)		12369D...[3]	(6.56)		123678D	(6.62)				
1268D	(7.74)		12346/12347D	(6.56)		123467D	(6.99)				
1478D	(7.74)		12378D	(6.56)		123789D	(7.43)		Conc.	0	
1279D	(7.74)		12367D	(6.56)					EMPC	0	
1234/1269D	(7.74)		12389D	(6.56)							
1236D	(7.74)								Octa-Dioxin	Conc	Qualifiers
1237/1238D	(7.74)									(pg/L)	
1239D	(7.74)								OCDD	(13.3)	
2378D	(7.74)										
1278D	(7.74)										
1267D	(7.74)										
1289D	(7.74)										
Conc.	0		Conc.	0		Conc.	0				
EMPC	0		EMPC	0		EMPC	0				

 <p>5500 Business Drive Wilmington, NC 28405, USA Tel: +1 910 794-1613 www.us.sgs.com</p>	WHO-2005 TEQs		Conc.	EMPC
	TEQ: ND=0		0	0
	TEQ: ND=DL/2		10.6	10.6
	TEQ: ND=DL		21.1	21.1
	Total PCDD/Fs		Conc.	EMPC
		0	0	

Checkcode: 874-651-BXF

Report Created: 10-Jan-2022 11:59 Analyst: pw

Sample ID: Method Blank B6081_18774

Method 1613B

Client Data			Sample Data			Laboratory Data			Date Received: n/a		
Name: GHD Services Inc.			Matrix: Aqueous			Lab Project ID: B6081			Date Received: n/a		
Project ID: 11215131-SJRWP-PCFSE			Weight/Volume: 1.00 L			Lab Sample ID: MB1_18774_DF_TLX-RJ			Date Extracted: 27-Dec-2021		
Date Collected: n/a			pH: n/a			QC Batch No.: 18774			Date Analyzed: 09-Jan-2022		
			Split: -			Dilution: -			Time Analyzed: 12:56:55		
Tetra-Furans	Conc. (pg/L)	Qualifiers	Penta-Furans	Conc. (pg/L)	Qualifiers	Hexa-Furans	Conc (pg/L)	Qualifiers	Hepta-Furans	Conc (pg/L)	Qualifiers
1368F	(6.25)		13468/12468F	(8.64)		123468F	(5.53)		1234678F	(3.64)	
1468F	(6.25)		13678F...[3]	(5.37)		124678/134678F	(5.53)		1234679F	(3.88)	
2468F	(6.25)		12368F...[3]	(5.37)		134679F	(5.53)		1234689F	(3.88)	
1346/1246F	(6.25)		14678F	(5.37)		124679F	(5.53)		1234789F	(4.14)	
1347F...[3]	(6.25)		13479F	(5.37)		124689F	(5.53)				
1348F	(6.25)		13469/12479F	(5.37)		123467F	(5.53)				
1248F...[3]	(6.25)		12346F	(5.37)		123478F	(5.21)				
1268F	(6.25)		23468/12469F	(5.37)		123678F	(5.18)				
1467F	(6.25)		12347F	(5.37)		123479F	(5.53)				
1478F	(6.25)		12348F	(5.37)		123469F	(5.53)				
1369/1237F	(6.25)		12378F	(5.46)		123679F	(5.53)				
2467F	(6.25)		12678/12367F	(5.37)		234678F	(5.68)		Conc.	0	
2368F	(6.25)		12379F	(5.37)		234678/123689F	0		EMPC	0	
1238F...[5]	(6.25)		12679F	(5.37)		123689F	(5.53)				
1278F	(6.25)		23467/12369F	(5.37)		123789F	(6.2)		Octa-Furan	Conc	Qualifiers
1349F	(6.25)		23478F	(5.29)		123789/123489F	0			(pg/L)	
1267F	(6.25)		23478/12489F	0		123489F	(5.53)		OCDF	(8.03)	
2346/1249F	(6.25)		12489F	(5.37)							
2347/1279F	(6.25)		12349F	(5.37)							
2348F	(6.25)		12389F	(5.37)							
2378F	(6.25)										
2367/3467F	(6.25)										
1269F	(6.25)										
1239F	(6.25)										
1289F	(6.25)										
Conc.	0		Conc.	0		Conc.	0				
EMPC	0		EMPC	0		EMPC	0				


Checkcode: 874-651-BXF

Report Created: 10-Jan-2022 11:59 Analyst: pw

Sample ID: Method Blank B6081_18774 **TEQ Summary** **Method 1613B**

Client Project Name:	GHD Services Inc.	Matrix:	Aqueous	Lab Sample ID:	MB1_18774_DF_TLX-RJ
Client Project ID:	11215131-SJRWP-PCFSE	Weight/Volume:	1.00 L	QC Batch No.:	18774
Date Collected:	n/a	Split:	-	Date Extracted:	27-Dec-2021
Date Received:	n/a	Dilution:	-	Date Analyzed:	09-Jan-2022 12:56
Lab Project No:	B6081	Units	pg/L		

Analyte	Result	Qualifiers	DLs	I-TEQ	WHO-1998	WHO-2005
2378-TCDD	(7.74)		7.74	(7.74)	(7.74)	(7.74)
12378-PeCDD	(6.56)		6.56	(3.28)	(6.56)	(6.56)
123478-HxCDD	(6.96)		6.96	(0.696)	(0.696)	(0.696)
123678-HxCDD	(6.62)		6.62	(0.662)	(0.662)	(0.662)
123789-HxCDD	(7.43)		7.43	(0.743)	(0.743)	(0.743)
1234678-HpCDD	(5.82)		5.82	(0.0582)	(0.0582)	(0.0582)
OCDD	(13.3)		13.3	(0.0133)	(0.00133)	(0.004)
2378-TCDF	(6.25)		6.25	(0.625)	(0.625)	(0.625)
12378-PeCDF	(5.46)		5.46	(0.273)	(0.273)	(0.164)
23478-PeCDF	(5.29)		5.29	(2.64)	(2.64)	(1.59)
123478-HxCDF	(5.21)		5.21	(0.521)	(0.521)	(0.521)
123678-HxCDF	(5.18)		5.18	(0.518)	(0.518)	(0.518)
234678-HxCDF	(5.68)		5.68	(0.568)	(0.568)	(0.568)
123789-HxCDF	(6.2)		6.2	(0.62)	(0.62)	(0.62)
1234678-HpCDF	(3.64)		3.64	(0.0364)	(0.0364)	(0.0364)
1234789-HpCDF	(4.14)		4.14	(0.0414)	(0.0414)	(0.0414)
OCDF	(8.03)		8.03	(0.00803)	(0.000803)	(0.00241)

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	EMPC = 0, ND = 0	0	0	0
	EMPC = 0, ND = DL / 2	9.52	11.2	10.6
	EMPC = 0, ND = DL	19	22.3	21.1
	EMPC = 0, < J-level = 0	0	0	0
	EMPC = EMPC, ND = 0	0	0	0
	EMPC = EMPC, ND = DL / 2	9.52	11.2	10.6
	EMPC = EMPC, ND = DL	19	22.3	21.1
EMPC = EMPC, < J-level = 0	0	0	0	

Sample ID: 0_18774_OPR001

Method 1613B

Client Data		Sample Data		Laboratory Data			
Name:	GHD Services Inc.	Matrix:	Aqueous	Lab Project ID:	B6081	Date Received:	n/a
Project ID:	11215131-SJRWP-PCFSE	Weight/Volume:	1 uL	Lab Sample ID	OPR1_18774_DF	Date Extracted:	27-Dec-2021
Date Collected:	n/a	pH:	n/a	QC Batch No:	18774	Date Analyzed:	08-Jan-2022
		Split:	-	Dilution:	-	Time Analyzed:	12:34:54
Analyte	Conc. (pg/uL)	DL (pg/uL)	EMPC (pg/uL)	Qualifiers	Standard	ES Recoveries	Qualifiers
2378-TCDD	9.08				ES 2378-TCDD	92.7	
12378-PeCDD	46.1				ES 12378-PeCDD	82.8	
123478-HxCDD	51.5				ES 123478-HxCDD	100	
123678-HxCDD	55.6				ES 123678-HxCDD	108	
123789-HxCDD	48.7				ES 123789-HxCDD	104	
1234678-HpCDD	55.1				ES 1234678-HpCDD	94.7	
OCDD	107				ES OCDD	77.4	
2378-TCDF	11.9				ES 2378-TCDF	85.4	
12378-PeCDF	54.8				ES 12378-PeCDF	93	
23478-PeCDF	59				ES 23478-PeCDF	92.5	
123478-HxCDF	53.5				ES 123478-HxCDF	98.9	
123678-HxCDF	51.3				ES 123678-HxCDF	107	
234678-HxCDF	57.5				ES 234678-HxCDF	92.9	
123789-HxCDF	50.2				ES 123789-HxCDF	94.1	
1234678-HpCDF	53.9				ES 1234678-HpCDF	104	
1234789-HpCDF	54.7				ES 1234789-HpCDF	100	
OCDF	109				ES OCDF	80.7	
Totals					Standard	CS Recoveries	
Total TCDD	42.4		42.4		CS 37Cl-2378-TCDD	83.1	
Total PeCDD	68.9		68.9		CS 12347-PeCDD	92.7	
Total HxCDD	168		168		CS 12346-PeCDF	100	
Total HpCDD	67.9		67.9		CS 123469-HxCDF	118	
Total TCDF	68.2		68.2		CS 1234689-HpCDF	120	
Total PeCDF	233		233				
Total HxCDF	346		346				
Total HpCDF	109		109				
Total PCDD/Fs	1,320		1,320				
WHO-2005 TEQs							
TEQ: ND=0	114		114				
TEQ: ND=DL/2	114	0.37	114				
TEQ: ND=DL	114	0.741	114				



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Sample ID: 0_18774_OPR002

Method 1613B

Client Data		Sample Data		Laboratory Data			
Name:	GHD Services Inc.	Matrix:	Aqueous	Lab Project ID:	B6081	Date Received:	n/a
Project ID:	11215131-SJRWP-PCFSE	Weight/Volume:	1 uL	Lab Sample ID	OPR2_18774_DF-RJ	Date Extracted:	27-Dec-2021
Date Collected:	n/a	pH:	n/a	QC Batch No:	18774	Date Analyzed:	09-Jan-2022
		Split:	-	Dilution:	-	Time Analyzed:	11:21:49
Analyte	Conc. (pg/uL)	DL (pg/uL)	EMPC (pg/uL)	Qualifiers	Standard	ES Recoveries	Qualifiers
2378-TCDD	9.56				ES 2378-TCDD	87.4	
12378-PeCDD	47.6				ES 12378-PeCDD	79.7	
123478-HxCDD	56.7				ES 123478-HxCDD	90.8	
123678-HxCDD	58.4				ES 123678-HxCDD	96.3	
123789-HxCDD	52.9				ES 123789-HxCDD	90.8	
1234678-HpCDD	56.6				ES 1234678-HpCDD	87.3	
OCDD	109				ES OCDD	73.7	
2378-TCDF	12.9				ES 2378-TCDF	79.4	
12378-PeCDF	56.5				ES 12378-PeCDF	86	
23478-PeCDF	61.6				ES 23478-PeCDF	84.5	
123478-HxCDF	58.7				ES 123478-HxCDF	86.7	
123678-HxCDF	57.5				ES 123678-HxCDF	95	
234678-HxCDF	59.8				ES 234678-HxCDF	91.3	
123789-HxCDF	54.5				ES 123789-HxCDF	85.8	
1234678-HpCDF	58.5				ES 1234678-HpCDF	88.1	
1234789-HpCDF	57.6				ES 1234789-HpCDF	89.9	
OCDF	113				ES OCDF	73.6	
Totals					Standard	CS Recoveries	
Total TCDD	45.9		45.9		CS 37Cl-2378-TCDD	84	
Total PeCDD	71.5		71.5		CS 12347-PeCDD	95.4	
Total HxCDD	182		182		CS 12346-PeCDF	97.8	
Total HpCDD	70		70		CS 123469-HxCDF	113	
Total TCDF	72.7		72.7		CS 1234689-HpCDF	110	
Total PeCDF	244		244				
Total HxCDF	370		370				
Total HpCDF	116		116				
Total PCDD/Fs	1,390		1,390				
WHO-2005 TEQs							
TEQ: ND=0	120		120				
TEQ: ND=DL/2	120	0.66	120				
TEQ: ND=DL	120	1.32	120				



5500 Business Drive
 Wilmington, NC 28405, USA
 www.us.sgs.com

Tel: +1 910 794-1613; Toll-Free 866 846-8290

Sample DUP

Method 1613B

Sample ID: 0_18774_OPR001

Analyte	OPR1_18774_DF pg/uL	OPR2_18774_DF-RJ (DUP) pg/uL	RPD
2,3,7,8-TCDD	9.08	9.56	5.2%
1,2,3,7,8-PeCDD	46.1	47.6	3.2%
1,2,3,4,7,8-HxCDD	51.5	56.7	9.6%
1,2,3,6,7,8-HxCDD	55.6	58.4	4.9%
1,2,3,7,8,9-HxCDD	48.7	52.9	8.3%
1,2,3,4,6,7,8-HpCDD	55.1	56.6	2.8%
OCDD	107	109	2.5%
2,3,7,8-TCDF	11.9	12.9	8.1%
1,2,3,7,8-PeCDF	54.8	56.5	3.1%
2,3,4,7,8-PeCDF	59	61.6	4.3%
1,2,3,4,7,8-HxCDF	53.5	58.7	9.2%
1,2,3,6,7,8-HxCDF	51.3	57.5	11.5%
2,3,4,6,7,8-HxCDF	57.5	59.8	3.9%
1,2,3,7,8,9-HxCDF	50.2	54.5	8.2%
1,2,3,4,6,7,8-HpCDF	53.9	58.5	8.2%
1,2,3,4,7,8,9-HpCDF	54.7	57.6	5.1%
OCDF	109	113	3.3%
Totals			
Total TCDD	42.4	45.9	7.9%
Total PeCDD	68.9	71.5	3.8%
Total HxCDD	168	182	7.7%
Total HpCDD	67.9	70	3.1%
Total TCDF	68.2	72.7	6.4%
Total PeCDF	233	244	4.8%
Total HxCDF	346	370	6.8%
Total HpCDF	109	116	6.7%



Sample Receipt Notification

5500 Business Drive
Wilmington, NC 28405 USA
Tel: 910 794-1613
Toll Free: 866 846-8290
Fax: 910 794-3919

Project Manager: *Tamara Burkamper*
Receipt Date & Time: *15-Dec-21 at 11:35*
AP Project name: *B6081*
Requested TAT: *10 business days*
Projected due date: *30-Dec-21*
Matrix: *Aqueous*
Phone#: *910-794-1613*
Email Address: *Tamara.Burkamper@sgs.com*

Company Contact: *Meagan Willis*
Company: *GHD Services Inc.*
Project Name & Site: *11215131-SJRWP-PCFSE*
Project PO#: *340-002625*
QAAP/Contract #: *on file*
Requested Analysis: *M1613B*
Phone#: *713-907-3710*
Email Address: *Meagan.Willis@ghd.com*

Client Smp ID	AP Smp ID	Sample Condition & Notes	Quantity	Size	Sampling Date	Sampling Time	Received Temp (°C)	Container #	Shipping #
11215131-120821-IDW-SS-SW	B6081_001	Leachate	2	1-Liter Amber	14-Dec-21	00:00	1.1	1	5272 0637 1998
11215131-120821-IDW-SS-SW-TCLP LB	B6081_002	Blank	2	1-Liter Amber	14-Dec-21	00:00	1.1	1	5272 0637 1998

Preservation Type: Sample Seals: No	Any un-extracted sample will be stored for 90 days from reporting date. Additional storage fees may apply for any samples stored longer than 90 days.
Notes/Comments: Samples received intact.	

Received by: Ashley Owens

Logged in by: Ashley Owens

QC'ed by: AK 20 Dec 21

All services are rendered in accordance with the applicable SGS General Conditions of Service accessible via: http://www.sgs.com/terms_and_conditions.htm



TOXICITY CHARACTERISTIC LEACHING PROCEDURE FOR METALS & EXTRACTABLES, METHOD SW846 1311 (TCLPE)

NOTE: Only one lot of fluid 1 or fluid 2 may be used per sheet. Lots shown on page 2.

TC Batch ID: TC0761

TCLPE

B6081

Samples		Container			Leaching Dates		Leaching Times				Extracted Masses			Preliminary Evaluation*					Extraction Fluid					
Sample ID	PS? (Y/N)	No.	Type	Rot.	Started	Stopped	Start	Earliest Stop	Latest Stop	Actual Stop	Grams Total	%SOL	Grams Solid	Buffer TV	Step1 pH	Step 1 spin	Buffer TV	Step2 pH	Fluid #	pH	Pass?	Vol. (mL)	Buffer TV	Final pH
PH Buffer														4.00	4.02		4.00	4.02	#1 pH = 4.93 ± 0.05 #2 pH = 2.88 ± 0.05				4.00	4.05
PH Buffer														7.00	7.04		7.00	7.04					7.00	7.04
PH Buffer														10.00	9.99		10.00	9.99					10.00	9.98
LB (fluid #1)	N	8	M/E	9	13-Dec-21	14-Dec-21	15:39	7:39	11:39	9:39	NA	NA	NA	NA	NA	NA	NA	NA	1	4.97	YES	2000	NA	4.97
LB (fluid #2)	N				13-Dec-21	14-Dec-21	15:39	7:39	11:39	9:39	NA	NA	NA	NA	NA	NA	NA	NA	2		NO	2000	NA	
JD35488-5	N	9	M/E	9	13-Dec-21	14-Dec-21	15:39	7:39	11:39	9:39	100.61	100	100.61	NA	7.72	5 mins	NA	1.96	1	4.97	YES	2012.2	NA	6.18
JD36511-1	N	16	M/E	9	13-Dec-21	14-Dec-21	15:39	7:39	11:39	9:39	100.88	100	100.88	NA	9.05	5 mins	NA	1.70	1	4.97	YES	2017.6	NA	5.68
JD36543-1	N	20	M/E	9	13-Dec-21	14-Dec-21	15:39	7:39	11:39	9:39	100.79	100	100.79	NA	6.75	5 mins	NA	1.71	1	4.97	YES	2015.8	NA	5.00
JD36543-3	N	22	M/E	9	13-Dec-21	14-Dec-21	15:39	7:39	11:39	9:39	100.44	100	100.44	NA	6.81	5 mins	NA	1.69	1	4.97	YES	2008.8	NA	5.00
JD36543-5	N	24	M/E	9	13-Dec-21	14-Dec-21	15:39	7:39	11:39	9:39	100.42	100	100.42	NA	6.46	5 mins	NA	1.68	1	4.97	YES	2008.4	NA	5.02
JD36543-7	N	25	M/E	9	13-Dec-21	14-Dec-21	15:39	7:39	11:39	9:39	100.50	100	100.50	NA	7.30	5 mins	NA	1.68	1	4.97	YES	2010	NA	5.05
JD36543-9	N	27	M/E	9	13-Dec-21	14-Dec-21	15:39	7:39	11:39	9:39	100.26	100	100.26	NA	7.30	5 mins	NA	1.67	1	4.97	YES	2005.2	NA	5.02
JD36552-1	N	39	M/E	9	13-Dec-21	14-Dec-21	15:39	7:39	11:39	9:39	100.46	100	100.46	NA	9.61	5 mins	NA	1.85	1	4.97	YES	2009.2	NA	5.68
JD36629-2	N	42	M/E	9	13-Dec-21	14-Dec-21	15:39	7:39	11:39	9:39	100.26	100	100.26	NA	7.09	5 mins	NA	1.67	1	4.97	YES	2005.2	NA	5.02
											100	0.00	NA		5 mins	NA			1	4.97	YES		NA	
PH Buffer														4.00	4.18		2.00	2.13					4.00	4.10
PH Buffer														10.00	10.15		4.00	4.18					10.00	10.01
											100	0.00	NA		5 mins	NA			1	4.97	YES		NA	
											100	0.00	NA		5 mins	NA			1	4.97	YES		NA	
											100	0.00	NA		5 mins	NA			1	4.97	YES		NA	
											100	0.00	NA		5 mins	NA			1	4.97	YES		NA	
											100	0.00	NA		5 mins	NA			1	4.97	YES		NA	
											100	0.00	NA		5 mins	NA			1	4.97	YES		NA	
											100	0.00	NA		5 mins	NA			1	4.97	YES		NA	
											100	0.00	NA		5 mins	NA			1	4.97	YES		NA	
											100	0.00	NA		5 mins	NA			1	4.97	YES		NA	
PH Buffer														4.00			2.00						4.00	
PH Buffer														10.00			4.00						7.00	

Comments and additional information continued on the next page. (*PS=particle sizing)

Data Reviewer / Date: _____

Set-up analyst: JD AL NF

Take-down analyst: JD MB AL

Form: AGN-TCLPE-07b
Revised: 18-Jun-17
Validated: AD, 18-Jun-17

TOXICITY CHARACTERISTIC LEACHING PROCEDURE FOR METALS & EXTRACTABLES, METHOD SW846 1311 (TCLPE)

TC Batch ID: TC0761

Balance ID: B54

pH meter ID: PH 67

Temperature ranges during leaching. (Must be from 20.5-25.4 °C, and recorded for each leaching period).

Probe ID	Uncorrected Temperatures		CF	Corrected Temperatures		For rotator(s)
	Minimum	Maximum		Minimum	Maximum	
56418			0	0.00	0.00	7 & 8
50266	22.42	24.41	0	22.42	24.41	9 & 10
56717			0	0.00	0.00	4
45776			0	0.00	0.00	5
49504			0	0.00	0.00	11 & 12

Rotator revolution rates. (Must be from 28-32 rpm, and check weekly for all rotators).

Rotator ID:	Rate:	Last measured:
4	30	6-Dec-21
5	30	6-Dec-21
7	28	6-Dec-21
8	NA	22-Apr-21
9	32	6-Dec-21
10	32	6-Dec-21
11	NA	7-Sep-21
12	28	6-Dec-21

*Preliminary Evaluation Temperature (49.5-50.4 °C, heat for 10 min)

Thermometer ID: 5624720
Expiration: 30-Jun-22
Recorded temperature: 50
Heating time: Start:
End:

Reagent Information

Reagent

Reagent ID or Manufacturer Lot

Expiration Date

Extraction fluid 1	GNE12-68259-TCLP	27-Dec-2021
Extraction fluid 2	GNE12-68142-TCLP	21-Dec-2021
TCLP filters	Env. Exp. Lot 113883-1320-AG	N/A
Filter acid-rinse solution	GNE12-68095-TCLP	3-Jun-2022
pH 2 buffer	FISHER 210051	1-Mar-2023
pH 4 buffer	FISHER 207758	1-Jan-2023
pH 7 buffer	FISHER 213754	1-Jun-2023
pH 10 buffer	FISHER 202303	1-Jun-2022
pH 12 buffer	N/A	N/A
pH 13 buffer	SPECTRUM 1KC0229	1-Apr-2022
Nitric acid, concentrated	J.T. BAKER 0000282671	3-Dec-2026
Nitric acid, 70% Revised: 18-Jun-17		
1N HCl Validated: AD, 18-Jun-17	GNE12-68094-TCLP	6/3/2022

B6081

ORIGIN ID:ZRPA (732) 329-0200
SAMPLE MANAGEMENT
SGS NORTH AMERICA INC.
2235 US HIGHWAY 130

SHIP DATE: 14DEC21
ACTWGT: 41.05 LB
CAD: 0692838/CAFE3211

DAYTON, NJ 08810
UNITED STATES US

BILL SENDER

TO **SAMPLE RECEIVING**
SGS EHS WILMINGTON
5500 BUSINESS DRIVE

12/15/2021
11:35
1.1° (T.B.)

551C3/E934/104C

WILMINGTON NC 28405

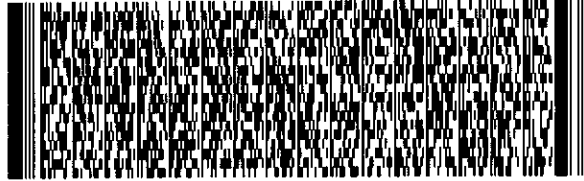
(910) 794-1818

REF:

DEPT:

INU:

PO:



FedEx
Express



J181118060501 00

WED - 15 DEC 11:30A
PRIORITY OVERNIGHT

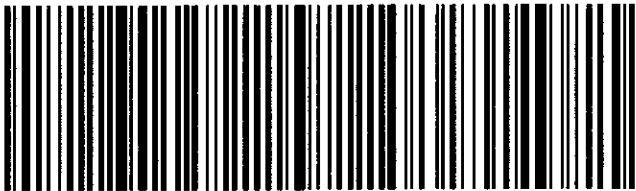
TRK# **5272 0637 1998**

0201

GE ILMA

28405
NC-US RDU

Part # 158148-434 INTW EXP 08/22





FINAL LAB REPORT

Prepared by

SGS NORTH AMERICA

Prepared for

This report is approved by

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PROJECT INFORMATION SUMMARY *(When applicable, see QC Annotations for details)*

Client Project
SGS Project #
Analytical Protocol(s)
No. Samples Submitted
Additional QC Sample(s)
No. Laboratory Method Blanks
No. OPRs / Batch CS3
Date Received
Condition Received
Temperature upon Receipt (°C)
Extraction within Holding Time
Analysis within Holding Time



QC ANNOTATIONS:

1. Please see Appendices attached for data qualifier/attribute and lab identifier descriptions which may be contained in the project.



APPENDIX A: GENERAL DATA QUALIFIERS / DATA ATTRIBUTES

B	The analyte was found in the method blank, at a concentration that was at least 10% of the concentration in the sample.
C	Two or more congeners co-elute. In EDDs, C denotes the lowest IUPAC congener in a co-elution group and additional co-eluters for the group are shown with the number of the lowest IUPAC co-eluter.
E	The reported concentration exceeds the calibration range (upper point of the calibration curve) and is an estimated value.
EMPC	Represents an Estimated Maximum Possible Concentration. EMPCs arise in cases where the signal/noise ratio is not sufficient for peak identification (the determined ion-abundance ratio is outside the allowed theoretical range), or where there is a co-eluting interference.
H/h	If the standard recovery is below the method or SOP specified value "H" is assigned. If the obtained value is less than half the specified value "h" is assigned.
J	Indicates that an analyte has a concentration below the reporting limit (lowest point of the calibration curve) and is an estimated value.
ND	Indicates a non-detect.
NR or R	Indicates a value that is not reportable.
PR	Due to interference, the associated congener is poorly resolved.
QI	Indicates the presence of a quantitative interference.
SI	Denotes "Single Ion Mode" and is utilized for PCBs where the secondary ion trace has a significantly elevated noise level due to background PFK. Responses for such peaks are calculated using an EMPC approach based solely on the primary ion area(s) and may be considered estimates.
U	The analyte was not detected. The estimated detection limit (EDL) may be reported for this analyte.
V	The labeled standard recovery was found to be outside of the method control limits.



APPENDIX B: DRBC/TMDL SPECIFIC DATA QUALIFIERS / DATA ATTRIBUTES

J	The reported result is an estimate. The value is less than the minimum calibration level but greater than the estimated detection limit (EDL).
U	The analyte was not detected in the sample at the estimated detection limit (EDL).
E	The reported concentration is an estimate. The value exceeds the upper calibration range (upper point of the calibration curve).
D	Dilution Data. Result was obtained from the analysis of a dilution.
B	Analyte found in the sample and associated method blank.
C	Co-eluting congener
Cxx	Co-elutes with the indicated congener, data is reported under the lowest IUPAC congener. 'Xx' denotes the IUPAC number with the lowest numerical designated congener.
NR	Analyte is not reportable because of problems in sample preparation or analysis.
V	Labeled standard recovery is not within method control limits.
X	Results from re-injection/repeat/second-column analysis.
EMPC	Estimated maximum possible concentration. Indicates that a peak is identified but did not meet the method specified ion-abundance ratio.

APPENDIX C: LAB IDENTIFIERS

AR	Indicates use of the archived portion of the sample extract.
CU	Indicates a sample that required additional clean-up prior to MS injection/processing.
D	Indicates a dilution of the sample extract. The number that follows the "D" indicates the dilution factor.
DE	Indicates a dilution performed with the addition of ES (extraction standard) solution.
DUP	Designation for a duplicate sample.
MS	Designation for a matrix spike.
MSD	Designation for a matrix spike duplicate.
RJ	Indicates a reinjection of the sample extract.
S	Indicates a sample split. The number that follows the "S" indicates the split factor.



SGS CERTIFICATIONS

Alaska DEC LAP	17-012
Alaska DEC LCP	NC00919
Arkansas	20-054-0
California (ELAP)	ELAP Cert #2914
CLIA	34D1013708
Connecticut	PH-0258
USDA Soil Permit	P330-20-00103
American Association for Laboratory Accreditation (A2LA)	2726.01 (ISO 17025:2017, 2009 TNI, DoD ELAP QSM 5.3)
Florida DOH	E87634
Louisiana DEQ	4115
Louisiana DOH	LA031
Maine	2020019
Massachusetts	M-NC919
Michigan	9950
Minnesota (Primary NELAP For Method 23)	037-999-459
Montana	0106
New Hampshire (Secondary NELAP)	2083
New Jersey	NC100
New York	11685
North Carolina DEQ	481
North Dakota	R-197
Ohio	87785
Oregon	NC200002
Pennsylvania	68-03675
South Carolina	99029002
Texas	T104704260
US Coast Guard	16714/159.317/SGS
Vermont	VT-87634
Virginia	460214
Washington	C913

Rev. 12-Oct-2021

Sample ID: 11215131-121421-IDW-BN-NC

Method 1613B

Client Data		Sample Data		Laboratory Data			
Name:	GHD Services Inc.	Matrix:	Aqueous	Lab Project ID:	B6105	Date Received:	22-Dec-2021
Project ID:	11215131-SJRWP-PCFSE	Weight/Volume:	0.97 L	Lab Sample ID:	B6105_18789_DF_001	Date Extracted:	29-Dec-2021
Date Collected:	14-Dec-2021	pH:	6	QC Batch No:	18789	Date Analyzed:	11-Jan-2022
		Split:	-	Dilution:	-	Time Analyzed:	13:54:42

Analyte	Conc. (pg/L)	DL (pg/L)	EMPC (pg/L)	Qualifiers	Standard	ES Recoveries	Qualifiers
2378-TCDD	13.4				ES 2378-TCDD	88.9	
12378-PeCDD	ND	3.87			ES 12378-PeCDD	91	
123478-HxCDD	ND	4.52			ES 123478-HxCDD	103	
123678-HxCDD	ND	4.93			ES 123678-HxCDD	106	
123789-HxCDD	ND	5.16			ES 123789-HxCDD	93.4	
1234678-HpCDD	EMPC		14.2	J	ES 1234678-HpCDD	90.8	
OCDD	199				ES OCDD	63.8	
2378-TCDF	58.2				ES 2378-TCDF	76	
12378-PeCDF	ND	3.35			ES 12378-PeCDF	104	
23478-PeCDF	ND	3.67			ES 23478-PeCDF	100	
123478-HxCDF	ND	3.43			ES 123478-HxCDF	98.9	
123678-HxCDF	ND	2.99			ES 123678-HxCDF	113	
234678-HxCDF	ND	3.01			ES 234678-HxCDF	122	
123789-HxCDF	ND	4.26			ES 123789-HxCDF	92.2	
1234678-HpCDF	8.32			J	ES 1234678-HpCDF	98.9	
1234789-HpCDF	ND	3.98			ES 1234789-HpCDF	98.6	
OCDF	86.5				ES OCDF	67.9	
Totals					Standard	CS Recoveries	
Total TCDD	13.4		13.4		CS 37Cl-2378-TCDD	83.9	
Total PeCDD	ND	3.87	ND		CS 12347-PeCDD	104	
Total HxCDD	ND	4.87	ND		CS 12346-PeCDF	120	
Total HpCDD	ND		35.7		CS 123469-HxCDF	117	
					CS 1234689-HpCDF	116	
Total TCDF	86.3		86.3				
Total PeCDF	ND	3.51	ND				
Total HxCDF	ND	3.35	ND				
Total HpCDF	15.1		15.1				
Total PCDD/Fs	400		436				
WHO-2005 TEQs							
TEQ: ND=0	19.3		19.5				
TEQ: ND=DL/2	23.3	6.93	23.5				
TEQ: ND=DL	27.3	13.9	27.4				



5500 Business Drive
Wilmington, NC 28405, USA
www.us.sgs.com

Tel: +1 910 794-1613; Toll-Free 866 846-8290

Sample ID: 11215131-121421-IDW-BN-NC

Method 1613B

Client Data			Sample Data			Laboratory Data						
Name:	GHD Services Inc.		Matrix:	Aqueous		Lab Project ID:	B6105		Date Received:	22-Dec-2021		
Project ID:	11215131-SJRWP-PCFSE		Weight/Volume:	0.97 L		Lab Sample ID:	B6105_18789_DF_001		Date Extracted:	29-Dec-2021		
Date Collected:	14-Dec-2021		pH:	6		QC Batch No.:	18789		Date Analyzed:	11-Jan-2022		
			Split:	-		Dilution:	-		Time Analyzed:	13:54:42		

Tetra-Dioxins	Conc. (pg/L)	Qualifiers	Penta-Dioxins	Conc. (pg/L)	Qualifiers	Hexa-Dioxins	Conc. (pg/L)	Qualifiers	Hepta-Dioxins	Conc. (pg/L)	Qualifiers
1368D	(5.34)		12479/12468D	(3.87)		124679/124689D	(4.87)		1234679D	[21.4]	J
1379D	(5.34)		12469D	(3.87)		123468D	(4.87)		1234678D	[14.2]	J
1369D	(5.34)		12368D	(3.87)		123679/123689D	(4.87)				
1469D	(5.34)		12478D	(3.87)		123469D	(4.87)				
1247D...[4]	(5.34)		12379D	(3.87)		123478D	(4.52)				
1378D	(5.34)		12369D...[3]	(3.87)		123678D	(4.93)				
1268D	(5.34)		12346/12347D	(3.87)		123467D	(4.87)				
1478D	(5.34)		12378D	(3.87)		123789D	(5.16)		Conc.	0	
1279D	(5.34)		12367D	(3.87)					EMPC	35.7	
1234/1269D	(5.34)		12389D	(3.87)							
1236D	(5.34)								Octa-Dioxin	Conc	Qualifiers
1237/1238D	(5.34)									(pg/L)	
1239D	(5.34)								OCDD	199	
2378D	13.4										
1278D	(5.34)										
1267D	(5.34)										
1289D	(5.34)										
Conc.	13.4		Conc.	0		Conc.	0				
EMPC	13.4		EMPC	0		EMPC	0				



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WHO-2005 TEQs	Conc.	EMPC
TEQ: ND=0	19.3	19.5
TEQ: ND=DL/2	23.3	23.5
TEQ: ND=DL	27.3	27.4
	Conc.	EMPC
Total PCDD/Fs	400	436

Checkcode: 151-241-QSQ

Report Created: 12-Jan-2022 12:17 Analyst: pw

Sample ID: 11215131-121421-IDW-BN-NC

Method 1613B

Client Data			Sample Data			Laboratory Data			Date Received: 22-Dec-2021		
Name: GHD Services Inc.			Matrix: Aqueous			Lab Project ID: B6105			Date Received: 22-Dec-2021		
Project ID: 11215131-SJRWP-PCFSE			Weight/Volume: 0.97 L			Lab Sample ID: B6105_18789_DF_001			Date Extracted: 29-Dec-2021		
Date Collected: 14-Dec-2021			pH: 6			QC Batch No.: 18789			Date Analyzed: 11-Jan-2022		
			Split: -			Dilution: -			Time Analyzed: 13:54:42		
Tetra-Furans	Conc. (pg/L)	Qualifiers	Penta-Furans	Conc. (pg/L)	Qualifiers	Hexa-Furans	Conc (pg/L)	Qualifiers	Hepta-Furans	Conc (pg/L)	Qualifiers
1368F	(5.03)		13468/12468F	(4.95)		123468F	(3.35)		1234678F	8.32	J
1468F	(5.03)		13678F...[3]	(3.51)		124678/134678F	(3.35)		1234679F	(3.49)	
2468F	(5.03)		12368F...[3]	(3.51)		134679F	(3.35)		1234689F	6.8	J
1346/1246F	(5.03)		14678F	(3.51)		124679F	(3.35)		1234789F	(3.98)	
1347F...[3]	(5.03)		13479F	(3.51)		124689F	(3.35)				
1348F	(5.03)		13469/12479F	(3.51)		123467F	(3.35)				
1248F...[3]	(5.03)		12346F	(3.51)		123478F	(3.43)				
1268F	(5.03)		23468/12469F	(3.51)		123678F	(2.99)				
1467F	(5.03)		12347F	(3.51)		123479F	(3.35)				
1478F	(5.03)		12348F	(3.51)		123469F	(3.35)				
1369/1237F	(5.03)		12378F	(3.35)		123679F	(3.35)				
2467F	(5.03)		12678/12367F	(3.51)		234678F	(3.01)		Conc.	15.1	
2368F	(5.03)		12379F	(3.51)		234678/123689F	0		EMPC	15.1	
1238F...[5]	(5.03)		12679F	(3.51)		123689F	(3.35)				
1278F	22.8		23467/12369F	(3.51)		123789F	(4.26)		Octa-Furan	Conc	Qualifiers
1349F	(5.03)		23478F	(3.67)		123789/123489F	0			(pg/L)	
1267F	(5.03)		23478/12489F	0		123489F	(3.35)		OCDF	86.5	
2346/1249F	(5.03)		12489F	(3.51)							
2347/1279F	(5.03)		12349F	(3.51)							
2348F	5.33		12389F	(3.51)							
2378F	58.2										
2367/3467F	(5.03)										
1269F	(5.03)										
1239F	(5.03)										
1289F	(5.03)										
Conc.	86.3		Conc.	0		Conc.	0				
EMPC	86.3		EMPC	0		EMPC	0				


Checkcode: 151-241-QSQ

Report Created: 12-Jan-2022 12:17 Analyst: pw

Sample ID: 11215131-121421-IDW-BN-NC **TEQ Summary** **Method 1613B**

Client Project Name:	GHD Services Inc.	Matrix:	Aqueous	Lab Sample ID:	B6105_18789_DF_001
Client Project ID:	11215131-SJRWP-PCFSE	Weight/Volume:	0.97 L	QC Batch No.:	18789
Date Collected:	14-Dec-2021	Split:	-	Date Extracted:	29-Dec-2021
Date Received:	22-Dec-2021	Dilution:	-	Date Analyzed:	11-Jan-2022 13:54
Lab Project No:	B6105	Units	pg/L		

Analyte	Result	Qualifiers	DLs	I-TEQ	WHO-1998	WHO-2005
2378-TCDD	13.4		5.34	13.4	13.4	13.4
12378-PeCDD	(3.87)		3.87	(1.93)	(3.87)	(3.87)
123478-HxCDD	(4.52)		4.52	(0.452)	(0.452)	(0.452)
123678-HxCDD	(4.93)		4.93	(0.493)	(0.493)	(0.493)
123789-HxCDD	(5.16)		5.16	(0.516)	(0.516)	(0.516)
1234678-HpCDD	[14.2]	J	4.75	[0.142]	[0.142]	[0.142]
OCDD	199		10.5	0.199	0.0199	0.0597
2378-TCDF	58.2		5.03	5.82	5.82	5.82
12378-PeCDF	(3.35)		3.35	(0.168)	(0.168)	(0.101)
23478-PeCDF	(3.67)		3.67	(1.83)	(1.83)	(1.1)
123478-HxCDF	(3.43)		3.43	(0.343)	(0.343)	(0.343)
123678-HxCDF	(2.99)		2.99	(0.299)	(0.299)	(0.299)
234678-HxCDF	(3.01)		3.01	(0.301)	(0.301)	(0.301)
123789-HxCDF	(4.26)		4.26	(0.426)	(0.426)	(0.426)
1234678-HpCDF	8.32	J	3.07	0.0832	0.0832	0.0832
1234789-HpCDF	(3.98)		3.98	(0.0398)	(0.0398)	(0.0398)
OCDF	86.5		8.87	0.0865	0.00865	0.0259

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	EMPC = 0, ND = 0	19.5	19.3	19.3
	EMPC = 0, ND = DL / 2	22.9	23.7	23.3
	EMPC = 0, ND = DL	26.3	28	27.3
	EMPC = 0, < J-level = 0	19.5	19.2	19.3
	EMPC = EMPC, ND = 0	19.7	19.4	19.5
	EMPC = EMPC, ND = DL / 2	23.1	23.8	23.5
	EMPC = EMPC, ND = DL	26.5	28.2	27.4
	EMPC = EMPC, < J-level = 0	19.5	19.2	19.3

Sample ID: 11215131-121421-IDW-BN-NC TCLP LB

Method 1613B

Client Data		Sample Data		Laboratory Data			
Name:	GHD Services Inc.	Matrix:	Aqueous	Lab Project ID:	B6105	Date Received:	22-Dec-2021
Project ID:	11215131-SJRWP-PCFSE	Weight/Volume:	0.95 L	Lab Sample ID:	B6105_18789_DF_002	Date Extracted:	29-Dec-2021
Date Collected:	20-Dec-2021	pH:	5	QC Batch No.:	18789	Date Analyzed:	11-Jan-2022
		Split:	-	Dilution:	-	Time Analyzed:	14:42:10
Analyte	Conc. (pg/L)	DL (pg/L)	EMPC (pg/L)	Qualifiers	Standard	ES Recoveries	Qualifiers
2378-TCDD	ND	6.34			ES 2378-TCDD	85.4	
12378-PeCDD	ND	6.25			ES 12378-PeCDD	82.8	
123478-HxCDD	ND	5.86			ES 123478-HxCDD	96.9	
123678-HxCDD	ND	5.93			ES 123678-HxCDD	105	
123789-HxCDD	ND	6.16			ES 123789-HxCDD	91.3	
1234678-HpCDD	ND	5.66			ES 1234678-HpCDD	81.4	
OCDD	ND	18.4			ES OCDD	53.1	
2378-TCDF	ND	6.05			ES 2378-TCDF	72.4	
12378-PeCDF	ND	4.26			ES 12378-PeCDF	95.6	
23478-PeCDF	ND	4.47			ES 23478-PeCDF	87.6	
123478-HxCDF	ND	4.67			ES 123478-HxCDF	91.4	
123678-HxCDF	ND	3.48			ES 123678-HxCDF	111	
234678-HxCDF	ND	3.02			ES 234678-HxCDF	116	
123789-HxCDF	ND	4.7			ES 123789-HxCDF	88	
1234678-HpCDF	ND	4.15			ES 1234678-HpCDF	91.6	
1234789-HpCDF	ND	4.32			ES 1234789-HpCDF	87.2	
OCDF	ND	10.9			ES OCDF	56.1	
Totals					Standard	CS Recoveries	
Total TCDD	ND	6.34	ND		CS 37Cl-2378-TCDD	79.8	
Total PeCDD	ND	6.25	ND		CS 12347-PeCDD	94.1	
Total HxCDD	ND	5.98	ND		CS 12346-PeCDF	109	
Total HpCDD	ND	5.66	ND		CS 123469-HxCDF	108	
					CS 1234689-HpCDF	107	
Total TCDF	ND	6.05	ND				
Total PeCDF	ND	4.36	ND				
Total HxCDF	ND	3.85	ND				
Total HpCDF	ND	4.23	ND				
Total PCDD/Fs	ND		ND				
WHO-2005 TEQs							
TEQ: ND=0	0		0				
TEQ: ND=DL/2	9.1	9.1	9.1				
TEQ: ND=DL	18.2	18.2	18.2				



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Sample ID: 11215131-121421-IDW-BN-NC TCLP LB **Method 1613B**

Client Data			Sample Data			Laboratory Data						
Name:	GHD Services Inc.		Matrix:	Aqueous		Lab Project ID:	B6105		Date Received:	22-Dec-2021		
Project ID:	11215131-SJRWP-PCFSE		Weight/Volume:	0.95 L		Lab Sample ID:	B6105_18789_DF_002		Date Extracted:	29-Dec-2021		
Date Collected:	20-Dec-2021		pH:	5		QC Batch No.:	18789		Date Analyzed:	11-Jan-2022		
			Split:	-		Dilution:	-		Time Analyzed:	14:42:10		

Tetra-Dioxins	Conc. (pg/L)	Qualifiers	Penta-Dioxins	Conc. (pg/L)	Qualifiers	Hexa-Dioxins	Conc. (pg/L)	Qualifiers	Hepta-Dioxins	Conc. (pg/L)	Qualifiers
1368D	(6.34)		12479/12468D	(6.25)		124679/124689D	(5.98)		1234679D	(5.66)	
1379D	(6.34)		12469D	(6.25)		123468D	(5.98)		1234678D	(5.66)	
1369D	(6.34)		12368D	(6.25)		123679/123689D	(5.98)				
1469D	(6.34)		12478D	(6.25)		123469D	(5.98)				
1247D...[4]	(6.34)		12379D	(6.25)		123478D	(5.86)				
1378D	(6.34)		12369D...[3]	(6.25)		123678D	(5.93)				
1268D	(6.34)		12346/12347D	(6.25)		123467D	(5.98)				
1478D	(6.34)		12378D	(6.25)		123789D	(6.16)		Conc.	0	
1279D	(6.34)		12367D	(6.25)					EMPC	0	
1234/1269D	(6.34)		12389D	(6.25)							
1236D	(6.34)								Octa-Dioxin	Conc	Qualifiers
										(pg/L)	
									OCDD	(18.4)	
1237/1238D	(6.34)										
1239D	(6.34)										
2378D	(6.34)										
1278D	(6.34)										
1267D	(6.34)										
1289D	(6.34)										
Conc.	0		Conc.	0		Conc.	0				
EMPC	0		EMPC	0		EMPC	0				



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WHO-2005 TEQs	Conc.	EMPC
TEQ: ND=0	0	0
TEQ: ND=DL/2	9.1	9.1
TEQ: ND=DL	18.2	18.2
Total PCDD/Fs	Conc.	EMPC
	0	0

Checkcode: 603-181-LQT

Report Created: 12-Jan-2022 12:17 Analyst: pw

Sample ID: 11215131-121421-IDW-BN-NC TCLP LB **Method 1613B**

<u>Client Data</u>			<u>Sample Data</u>			<u>Laboratory Data</u>					
Name: GHD Services Inc.			Matrix: Aqueous			Lab Project ID: B6105			Date Received: 22-Dec-2021		
Project ID: 11215131-SJRWP-PCFSE			Weight/Volume: 0.95 L			Lab Sample ID: B6105_18789_DF_002			Date Extracted: 29-Dec-2021		
Date Collected: 20-Dec-2021			pH: 5			QC Batch No.: 18789			Date Analyzed: 11-Jan-2022		
			Split: -			Dilution: -			Time Analyzed: 14:42:10		
Tetra-Furans	Conc. (pg/L)	Qualifiers	Penta-Furans	Conc. (pg/L)	Qualifiers	Hexa-Furans	Conc (pg/L)	Qualifiers	Hepta-Furans	Conc (pg/L)	Qualifiers
1368F	(6.05)		13468/12468F	(6.31)		123468F	(3.85)		1234678F	(4.15)	
1468F	(6.05)		13678F...[3]	(4.36)		124678/134678F	(3.85)		1234679F	(4.23)	
2468F	(6.05)		12368F...[3]	(4.36)		134679F	(3.85)		1234689F	(4.23)	
1346/1246F	(6.05)		14678F	(4.36)		124679F	(3.85)		1234789F	(4.32)	
1347F...[3]	(6.05)		13479F	(4.36)		124689F	(3.85)				
1348F	(6.05)		13469/12479F	(4.36)		123467F	(3.85)				
1248F...[3]	(6.05)		12346F	(4.36)		123478F	(4.67)				
1268F	(6.05)		23468/12469F	(4.36)		123678F	(3.48)				
1467F	(6.05)		12347F	(4.36)		123479F	(3.85)				
1478F	(6.05)		12348F	(4.36)		123469F	(3.85)				
1369/1237F	(6.05)		12378F	(4.26)		123679F	(3.85)				
2467F	(6.05)		12678/12367F	(4.36)		234678F	(3.02)		Conc.	0	
2368F	(6.05)		12379F	(4.36)		234678/123689F	0		EMPC	0	
1238F...[5]	(6.05)		12679F	(4.36)		123689F	(3.85)				
1278F	(6.05)		23467/12369F	(4.36)		123789F	(4.7)		Octa-Furan	Conc	Qualifiers
1349F	(6.05)		23478F	(4.47)		123789/123489F	0			(pg/L)	
1267F	(6.05)		23478/12489F	0		123489F	(3.85)		OCDF	(10.9)	
2346/1249F	(6.05)		12489F	(4.36)							
2347/1279F	(6.05)		12349F	(4.36)							
2348F	(6.05)		12389F	(4.36)							
2378F	(6.05)										
2367/3467F	(6.05)										
1269F	(6.05)										
1239F	(6.05)										
1289F	(6.05)										
Conc.	0		Conc.	0		Conc.	0				
EMPC	0		EMPC	0		EMPC	0				

Checkcode: 603-181-LQT


Report Created: 12-Jan-2022 12:17 Analyst: pw

Sample ID: 11215131-121421-IDW-BN-NC TCLP ITEQ Summary

Method 1613B

Client Project Name:	GHD Services Inc.	Matrix:	Aqueous	Lab Sample ID:	B6105_18789_DF_002
Client Project ID:	11215131-SJRWP-PCFSE	Weight/Volume:	0.95 L	QC Batch No.:	18789
Date Collected:	20-Dec-2021	Split:	-	Date Extracted:	29-Dec-2021
Date Received:	22-Dec-2021	Dilution:	-	Date Analyzed:	11-Jan-2022 14:42
Lab Project No:	B6105	Units	pg/L		

Analyte	Result	Qualifiers	DLs	I-TEQ	WHO-1998	WHO-2005
2378-TCDD	(6.34)		6.34	(6.34)	(6.34)	(6.34)
12378-PeCDD	(6.25)		6.25	(3.13)	(6.25)	(6.25)
123478-HxCDD	(5.86)		5.86	(0.586)	(0.586)	(0.586)
123678-HxCDD	(5.93)		5.93	(0.593)	(0.593)	(0.593)
123789-HxCDD	(6.16)		6.16	(0.616)	(0.616)	(0.616)
1234678-HpCDD	(5.66)		5.66	(0.0566)	(0.0566)	(0.0566)
OCDD	(18.4)		18.4	(0.0184)	(0.00184)	(0.00553)
2378-TCDF	(6.05)		6.05	(0.605)	(0.605)	(0.605)
12378-PeCDF	(4.26)		4.26	(0.213)	(0.213)	(0.128)
23478-PeCDF	(4.47)		4.47	(2.24)	(2.24)	(1.34)
123478-HxCDF	(4.67)		4.67	(0.467)	(0.467)	(0.467)
123678-HxCDF	(3.48)		3.48	(0.348)	(0.348)	(0.348)
234678-HxCDF	(3.02)		3.02	(0.302)	(0.302)	(0.302)
123789-HxCDF	(4.7)		4.7	(0.47)	(0.47)	(0.47)
1234678-HpCDF	(4.15)		4.15	(0.0415)	(0.0415)	(0.0415)
1234789-HpCDF	(4.32)		4.32	(0.0432)	(0.0432)	(0.0432)
OCDF	(10.9)		10.9	(0.0109)	(0.00109)	(0.00328)


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	EMPC = 0, ND = 0	0	0	0
	EMPC = 0, ND = DL / 2	8.04	9.59	9.1
	EMPC = 0, ND = DL	16.1	19.2	18.2
	EMPC = 0, < J-level = 0	0	0	0
	EMPC = EMPC, ND = 0	0	0	0
	EMPC = EMPC, ND = DL / 2	8.04	9.59	9.1
	EMPC = EMPC, ND = DL	16.1	19.2	18.2
EMPC = EMPC, < J-level = 0	0	0	0	

Checkcode: 603-181-LQT

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Sample ID: Method Blank B6105_18789

Method 1613B

Client Data		Sample Data		Laboratory Data			
Name:	GHD Services Inc.	Matrix:	Aqueous	Lab Project ID:	B6105	Date Received:	n/a
Project ID:	11215131-SJRWP-PCFSE	Weight/Volume:	1.00 L	Lab Sample ID:	MB1_18789_DF_TLX	Date Extracted:	29-Dec-2021
Date Collected:	n/a	pH:	n/a	QC Batch No.:	18789	Date Analyzed:	11-Jan-2022
		Split:	-	Dilution:	-	Time Analyzed:	13:07:15
Analyte	Conc. (pg/L)	DL (pg/L)	EMPC (pg/L)	Qualifiers	Standard	ES Recoveries	Qualifiers
2378-TCDD	ND	5.81			ES 2378-TCDD	92.9	
12378-PeCDD	ND	5.9			ES 12378-PeCDD	87.6	
123478-HxCDD	ND	4.62			ES 123478-HxCDD	97.8	
123678-HxCDD	ND	4.9			ES 123678-HxCDD	103	
123789-HxCDD	ND	4.69			ES 123789-HxCDD	96	
1234678-HpCDD	ND	4.6			ES 1234678-HpCDD	88	
OCDD	ND	10.4			ES OCDD	62.4	
2378-TCDF	ND	5.66			ES 2378-TCDF	73.6	
12378-PeCDF	ND	3.83			ES 12378-PeCDF	94.7	
23478-PeCDF	ND	4.12			ES 23478-PeCDF	92.1	
123478-HxCDF	ND	3.18			ES 123478-HxCDF	90.5	
123678-HxCDF	ND	2.6			ES 123678-HxCDF	107	
234678-HxCDF	ND	2.47			ES 234678-HxCDF	116	
123789-HxCDF	ND	3.58			ES 123789-HxCDF	91.8	
1234678-HpCDF	ND	2.86			ES 1234678-HpCDF	95.9	
1234789-HpCDF	ND	3.57			ES 1234789-HpCDF	91.5	
OCDF	ND	9.18			ES OCDF	63.3	
Totals					Standard	CS Recoveries	
Total TCDD	ND	5.81	ND		CS 37Cl-2378-TCDD	83.8	
Total PeCDD	ND	5.9	ND		CS 12347-PeCDD	103	
Total HxCDD	ND	4.74	ND		CS 12346-PeCDF	117	
Total HpCDD	ND	4.6	ND		CS 123469-HxCDF	113	
					CS 1234689-HpCDF	115	
Total TCDF	ND	5.66	ND				
Total PeCDF	ND	3.97	ND				
Total HxCDF	ND	2.89	ND				
Total HpCDF	ND	3.18	ND				
Total PCDD/Fs	ND		ND				
WHO-2005 TEQs							
TEQ: ND=0	0		0			5500 Business Drive Wilmington, NC 28405, USA www.us.sgs.com Tel: +1 910 794-1613; Toll-Free 866 846-8290	
TEQ: ND=DL/2	8.18	8.18	8.18				
TEQ: ND=DL	16.4	16.4	16.4				

Sample ID: Method Blank B6105_18789 **Method 1613B**

Client Data			Sample Data			Laboratory Data					
Name: GHD Services Inc.			Matrix: Aqueous			Lab Project ID: B6105			Date Received: n/a		
Project ID: 11215131-SJRWP-PCFSE			Weight/Volume: 1.00 L			Lab Sample ID: MB1_18789_DF_TLX			Date Extracted: 29-Dec-2021		
Date Collected: n/a			pH: n/a			QC Batch No.: 18789			Date Analyzed: 11-Jan-2022		
			Split: -			Dilution: -			Time Analyzed: 13:07:15		

Tetra-Dioxins	Conc. (pg/L)	Qualifiers	Penta-Dioxins	Conc. (pg/L)	Qualifiers	Hexa-Dioxins	Conc. (pg/L)	Qualifiers	Hepta-Dioxins	Conc. (pg/L)	Qualifiers
1368D	(5.81)		12479/12468D	(5.9)		124679/124689D	(4.74)		1234679D	(4.6)	
1379D	(5.81)		12469D	(5.9)		123468D	(4.74)		1234678D	(4.6)	
1369D	(5.81)		12368D	(5.9)		123679/123689D	(4.74)				
1469D	(5.81)		12478D	(5.9)		123469D	(4.74)				
1247D...[4]	(5.81)		12379D	(5.9)		123478D	(4.62)				
1378D	(5.81)		12369D...[3]	(5.9)		123678D	(4.9)				
1268D	(5.81)		12346/12347D	(5.9)		123467D	(4.74)				
1478D	(5.81)		12378D	(5.9)		123789D	(4.69)		Conc.	0	
1279D	(5.81)		12367D	(5.9)					EMPC	0	
1234/1269D	(5.81)		12389D	(5.9)							
1236D	(5.81)								Octa-Dioxin	Conc	Qualifiers
										(pg/L)	
									OCDD	(10.4)	
1237/1238D	(5.81)										
1239D	(5.81)										
2378D	(5.81)										
1278D	(5.81)										
1267D	(5.81)										
1289D	(5.81)										
Conc.	0		Conc.	0		Conc.	0				
EMPC	0		EMPC	0		EMPC	0				



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WHO-2005 TEQs	Conc.	EMPC
TEQ: ND=0	0	0
TEQ: ND=DL/2	8.18	8.18
TEQ: ND=DL	16.4	16.4
Total PCDD/Fs	Conc.	EMPC
	0	0

Checkcode: 318-770-NSW

Report Created: 12-Jan-2022 12:17 Analyst: pw

Sample ID: Method Blank B6105_18789

Method 1613B

Client Data			Sample Data			Laboratory Data			Date Received: n/a		
Name: GHD Services Inc.			Matrix: Aqueous			Lab Project ID: B6105			Date Extracted: 29-Dec-2021		
Project ID: 11215131-SJRWP-PCFSE			Weight/Volume: 1.00 L			Lab Sample ID: MB1_18789_DF_TLX			Date Analyzed: 11-Jan-2022		
Date Collected: n/a			pH: n/a			QC Batch No.: 18789			Time Analyzed: 13:07:15		
Split: -			Dilution: -								
Tetra-Furans	Conc. (pg/L)	Qualifiers	Penta-Furans	Conc. (pg/L)	Qualifiers	Hexa-Furans	Conc (pg/L)	Qualifiers	Hepta-Furans	Conc (pg/L)	Qualifiers
1368F	(5.66)		13468/12468F	(6.01)		123468F	(2.89)		1234678F	(2.86)	
1468F	(5.66)		13678F...[3]	(3.97)		124678/134678F	(2.89)		1234679F	(3.18)	
2468F	(5.66)		12368F...[3]	(3.97)		134679F	(2.89)		1234689F	(3.18)	
1346/1246F	(5.66)		14678F	(3.97)		124679F	(2.89)		1234789F	(3.57)	
1347F...[3]	(5.66)		13479F	(3.97)		124689F	(2.89)				
1348F	(5.66)		13469/12479F	(3.97)		123467F	(2.89)				
1248F...[3]	(5.66)		12346F	(3.97)		123478F	(3.18)				
1268F	(5.66)		23468/12469F	(3.97)		123678F	(2.6)				
1467F	(5.66)		12347F	(3.97)		123479F	(2.89)				
1478F	(5.66)		12348F	(3.97)		123469F	(2.89)				
1369/1237F	(5.66)		12378F	(3.83)		123679F	(2.89)				
2467F	(5.66)		12678/12367F	(3.97)		234678F	(2.47)		Conc.	0	
2368F	(5.66)		12379F	(3.97)		234678/123689F	0		EMPC	0	
1238F...[5]	(5.66)		12679F	(3.97)		123689F	(2.89)				
1278F	(5.66)		23467/12369F	(3.97)		123789F	(3.58)		Octa-Furan	Conc	Qualifiers
1349F	(5.66)		23478F	(4.12)		123789/123489F	0			(pg/L)	
1267F	(5.66)		23478/12489F	0		123489F	(2.89)		OCDF	(9.18)	
2346/1249F	(5.66)		12489F	(3.97)							
2347/1279F	(5.66)		12349F	(3.97)							
2348F	(5.66)		12389F	(3.97)							
2378F	(5.66)										
2367/3467F	(5.66)										
1269F	(5.66)										
1239F	(5.66)										
1289F	(5.66)										
Conc.	0		Conc.	0		Conc.	0				
EMPC	0		EMPC	0		EMPC	0				


Checkcode: 318-770-NSW

Report Created: 12-Jan-2022 12:17 Analyst: pw

Sample ID: Method Blank B6105_18789 **TEQ Summary** **Method 1613B**

Client Project Name:	GHD Services Inc.	Matrix:	Aqueous	Lab Sample ID:	MB1_18789_DF_TLX
Client Project ID:	11215131-SJRWP-PCFSE	Weight/Volume:	1.00 L	QC Batch No.:	18789
Date Collected:	n/a	Split:	-	Date Extracted:	29-Dec-2021
Date Received:	n/a	Dilution:	-	Date Analyzed:	11-Jan-2022 13:07
Lab Project No:	B6105	Units	pg/L		


Analyte	Result	Qualifiers	DLs	I-TEQ	WHO-1998	WHO-2005
2378-TCDD	(5.81)		5.81	(5.81)	(5.81)	(5.81)
12378-PeCDD	(5.9)		5.9	(2.95)	(5.9)	(5.9)
123478-HxCDD	(4.62)		4.62	(0.462)	(0.462)	(0.462)
123678-HxCDD	(4.9)		4.9	(0.49)	(0.49)	(0.49)
123789-HxCDD	(4.69)		4.69	(0.469)	(0.469)	(0.469)
1234678-HpCDD	(4.6)		4.6	(0.046)	(0.046)	(0.046)
OCDD	(10.4)		10.4	(0.0104)	(0.00104)	(0.00311)
2378-TCDF	(5.66)		5.66	(0.566)	(0.566)	(0.566)
12378-PeCDF	(3.83)		3.83	(0.191)	(0.191)	(0.115)
23478-PeCDF	(4.12)		4.12	(2.06)	(2.06)	(1.24)
123478-HxCDF	(3.18)		3.18	(0.318)	(0.318)	(0.318)
123678-HxCDF	(2.6)		2.6	(0.26)	(0.26)	(0.26)
234678-HxCDF	(2.47)		2.47	(0.247)	(0.247)	(0.247)
123789-HxCDF	(3.58)		3.58	(0.358)	(0.358)	(0.358)
1234678-HpCDF	(2.86)		2.86	(0.0286)	(0.0286)	(0.0286)
1234789-HpCDF	(3.57)		3.57	(0.0357)	(0.0357)	(0.0357)
OCDF	(9.18)		9.18	(0.00918)	(0.000918)	(0.00275)

5500 Business Drive Wilmington, NC 28405, USA Tel: +1 910 794-1613; Toll-Free 866 846-8290 www.us.sgs.com 	TEQ Summaries			
	EMPC = 0, ND = 0	0	0	0
	EMPC = 0, ND = DL / 2	7.16	8.62	8.18
	EMPC = 0, ND = DL	14.3	17.2	16.4
	EMPC = 0, < J-level = 0	0	0	0
	EMPC = EMPC, ND = 0	0	0	0
	EMPC = EMPC, ND = DL / 2	7.16	8.62	8.18
	EMPC = EMPC, ND = DL	14.3	17.2	16.4
	EMPC = EMPC, < J-level = 0	0	0	0

Sample ID: 0_18789_OPR001

Method 1613B

Client Data		Sample Data		Laboratory Data			
Name:	GHD Services Inc.	Matrix:	Aqueous	Lab Project ID:	B6105	Date Received:	n/a
Project ID:	11215131-SJRWP-PCFSE	Weight/Volume:	1 uL	Lab Sample ID:	OPR1_18789_DF-RJ	Date Extracted:	29-Dec-2021
Date Collected:	n/a	pH:	n/a	QC Batch No:	18789	Date Analyzed:	11-Jan-2022
		Split:	-	Dilution:	-	Time Analyzed:	11:28:55

Analyte	Conc. (pg/uL)	DL (pg/uL)	EMPC (pg/uL)	Qualifiers	Standard	ES Recoveries	Qualifiers
2378-TCDD	8.84				ES 2378-TCDD	93	
12378-PeCDD	44.5				ES 12378-PeCDD	93.8	
123478-HxCDD	51.7				ES 123478-HxCDD	105	
123678-HxCDD	52.8				ES 123678-HxCDD	108	
123789-HxCDD	49.9				ES 123789-HxCDD	97.8	
1234678-HpCDD	54.9				ES 1234678-HpCDD	86.8	
OCDD	106				ES OCDD	62.4	
2378-TCDF	11.5				ES 2378-TCDF	78.4	
12378-PeCDF	55				ES 12378-PeCDF	103	
23478-PeCDF	60.4				ES 23478-PeCDF	97.3	
123478-HxCDF	54.5				ES 123478-HxCDF	95.7	
123678-HxCDF	53.9				ES 123678-HxCDF	110	
234678-HxCDF	54.7				ES 234678-HxCDF	114	
123789-HxCDF	50.1				ES 123789-HxCDF	92.8	
1234678-HpCDF	53.3				ES 1234678-HpCDF	96.9	
1234789-HpCDF	53.7				ES 1234789-HpCDF	92.3	
OCDF	111				ES OCDF	61.8	
Totals					Standard	CS Recoveries	
Total TCDD	43.7		43.7		CS 37Cl-2378-TCDD	85	
Total PeCDD	68.5		68.5		CS 12347-PeCDD	104	
Total HxCDD	170		170		CS 12346-PeCDF	119	
Total HpCDD	68.3		68.3		CS 123469-HxCDF	117	
					CS 1234689-HpCDF	115	
Total TCDF	70.6		70.6				
Total PeCDF	226		226				
Total HxCDF	340		340				
Total HpCDF	107		107				
Total PCDD/Fs	1,310		1,310				
WHO-2005 TEQs					 5500 Business Drive Wilmington, NC 28405, USA www.us.sgs.com Tel: +1 910 794-1613; Toll-Free 866 846-8290		
TEQ: ND=0	113		113				
TEQ: ND=DL/2	113	0.343	113				
TEQ: ND=DL	113	0.686	113				

Sample ID: 0_18789_OPR002

Method 1613B

Client Data		Sample Data		Laboratory Data			
Name:	GHD Services Inc.	Matrix:	Aqueous	Lab Project ID:	B6105	Date Received:	n/a
Project ID:	11215131-SJRWP-PCFSE	Weight/Volume:	1 uL	Lab Sample ID:	OPR2_18789_DF	Date Extracted:	29-Dec-2021
Date Collected:	n/a	pH:	n/a	QC Batch No:	18789	Date Analyzed:	11-Jan-2022
		Split:	-	Dilution:	-	Time Analyzed:	18:56:24
Analyte	Conc. (pg/uL)	DL (pg/uL)	EMPC (pg/uL)	Qualifiers	Standard	ES Recoveries	Qualifiers
2378-TCDD	9.53				ES 2378-TCDD	84.3	
12378-PeCDD	45.8				ES 12378-PeCDD	83.8	
123478-HxCDD	51.3				ES 123478-HxCDD	101	
123678-HxCDD	56.7				ES 123678-HxCDD	97.2	
123789-HxCDD	52.9				ES 123789-HxCDD	88.6	
1234678-HpCDD	54.8				ES 1234678-HpCDD	83.7	
OCDD	107				ES OCDD	60.5	
2378-TCDF	11.2				ES 2378-TCDF	74.5	
12378-PeCDF	57.2				ES 12378-PeCDF	95	
23478-PeCDF	62.1				ES 23478-PeCDF	89.3	
123478-HxCDF	56.3				ES 123478-HxCDF	88	
123678-HxCDF	55.6				ES 123678-HxCDF	107	
234678-HxCDF	54.8				ES 234678-HxCDF	115	
123789-HxCDF	53.2				ES 123789-HxCDF	84.5	
1234678-HpCDF	54				ES 1234678-HpCDF	92.6	
1234789-HpCDF	54.6				ES 1234789-HpCDF	88.7	
OCDF	112				ES OCDF	61.5	
Totals					Standard	CS Recoveries	
Total TCDD	45.8		45.8		CS 37Cl-2378-TCDD	86.2	
Total PeCDD	72.7		72.7		CS 12347-PeCDD	103	
Total HxCDD	177		177		CS 12346-PeCDF	120	
Total HpCDD	67.9		67.9		CS 123469-HxCDF	113	
					CS 1234689-HpCDF	121	
Total TCDF	72.3		72.3				
Total PeCDF	238		238				
Total HxCDF	349		349				
Total HpCDF	109		109				
Total PCDD/Fs	1,350		1,350				
WHO-2005 TEQs							
TEQ: ND=0	117		117				
TEQ: ND=DL/2	117	0.455	117				
TEQ: ND=DL	117	0.911	117				



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Sample DUP

Method 1613B

Sample ID: 0_18789_OPR001

Analyte	OPR1_18789_DF-RJ pg/uL	OPR2_18789_DF (DUP) pg/uL	RPD
2,3,7,8-TCDD	8.84	9.53	7.4%
1,2,3,7,8-PeCDD	44.5	45.8	2.9%
1,2,3,4,7,8-HxCDD	51.7	51.3	0.7%
1,2,3,6,7,8-HxCDD	52.8	56.7	7.2%
1,2,3,7,8,9-HxCDD	49.9	52.9	5.8%
1,2,3,4,6,7,8-HpCDD	54.9	54.8	0.2%
OCDD	106	107	1.1%
2,3,7,8-TCDF	11.5	11.2	2.6%
1,2,3,7,8-PeCDF	55	57.2	3.9%
2,3,4,7,8-PeCDF	60.4	62.1	2.9%
1,2,3,4,7,8-HxCDF	54.5	56.3	3.4%
1,2,3,6,7,8-HxCDF	53.9	55.6	3.1%
2,3,4,6,7,8-HxCDF	54.7	54.8	0.3%
1,2,3,7,8,9-HxCDF	50.1	53.2	6.0%
1,2,3,4,6,7,8-HpCDF	53.3	54	1.1%
1,2,3,4,7,8,9-HpCDF	53.7	54.6	1.7%
OCDF	111	112	0.3%
Totals			
Total TCDD	43.7	45.8	4.6%
Total PeCDD	68.5	72.7	6.0%
Total HxCDD	170	177	4.2%
Total HpCDD	68.3	67.9	0.6%
Total TCDF	70.6	72.3	2.4%
Total PeCDF	226	238	4.9%
Total HxCDF	340	349	2.6%
Total HpCDF	107	109	1.4%



Sample Receipt Notification

5500 Business Drive
 Wilmington, NC 28405 USA
 Tel: 910 794-1613
 Toll Free: 866 846-8290
 Fax: 910 794-3919

Project Manager: Tamara Burkamper
Receipt Date & Time: 22-Dec-21 at 12:07
AP Project name: B6105
Requested TAT: 10 business days
Projected due date: 7-Jan-22
Matrix: Aqueous
Phone#: 910-794-1613
Email Address: Tamara.Burkamper@sgs.com

Company Contact: Meagan Willis
Company: GHD Services Inc.
Project Name & Site: 11215131-SJRWP-PCFSE
Project PO#: 340-002625
QAAP/Contract #: file
Requested Analysis: M1613B
Phone#: 713-907-3710
Email Address: Meagan.Willis@ghd.com

Client Smp ID	AP Smp ID	Sample Condition & Notes	Quantity	Size	Sampling Date	Sampling Time	Received Temp (°C)	Container #	Shipping #
11215131-121421-IDW-BN-NC	B6105_001	Leachate	2	1L Amber	14-Dec-21	13:30	1.1	1	5272 0637 4118
11215131-121421-IDW-BN-NC TCLP LB	B6105_002	Leachate Blank	2	1L Amber	20-Dec-21	17:15	1.1	1	5272 0637 4118

Preservation Type:	Sample Seals: No
Notes/Comments: Samples received intact; sample IDs updated per email dated 12/22/2021	
Any un-extracted sample will be stored for 90 days from reporting date. Additional storage fees may apply for any samples stored longer than 90 days.	

Received by: Amy Boehm Logged in by: Tamara Burkamper QC'ed by: AK 22 Dec 21

All services are rendered in accordance with the applicable SGS General Conditions of Service accessible via: http://www.sgs.com/terms_and_conditions.htm





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B6105 1/2

FED-EX Tracking # attached
Bottle Order Control # n/a
SGS Quote # n/a
SGS Job # JD35488

Client / Reporting Information
Project Information
Requested Analysis
Matrix Codes
Collection table with columns for Date, Time, Sampled by, Matrix, # of bottles, and various chemical parameters.

Turnaround Time (Business days)
Approved By (SGS PM) / Date:
Data Deliverable Information
Comments / Special Instructions

Relinquished by:
Received By:
Date / Time:
Custody Seal #
In tact
Not In tact
Preserved where applicable
Therm. ID
Cooler Temp. °C

1207

1.1 °C

IR-4

B6105 2/2

Date / Time: 12/21/2021 4:03:05 PM
CSR: SHALINIW
Job #: JD35488
Client Project: SJRWP - PCFSE, Harris County, TX (IDW)
Deliverable: FULT1
TAT: Due 12/13/2021

Sub Lab: SGS - Wilmington, NC
Address: 5500 Business Drive
City: Wilmington
State: NC
Zip: 28405
Contact:
Phone: (910) 794-1613

SGS Sample #	Client Sample Description	Analysis	Location	Sampled By	Date Sampled	Time Sampled	Aliquot
<u>JD35488-6B</u>	<u>11215131-121421-IDW-BN-NS</u>	<u>SB1613PCDDDF</u>		<u>SPS</u>	<u>12/14/2021</u>	<u>1:30:00 PM</u>	

Comments: "send leachate volume! Wilmington to log in and report in their system"

Sample Management Receipt: ASL SGS

Date: 12/22/21 12⁰⁷



TOXICITY CHARACTERISTIC LEACHING PROCEDURE FOR METALS & EXTRACTABLES, METHOD SW846 1311 (TCLPE)

B6105/12

NOTE: Only one lot of fluid 1 or fluid 2 may be used per sheet. Lots shown on page 2.

TC Batch ID: TCO761

TCLPE

Samples		Container			Leaching Dates		Leaching Times				Extracted Masses			Preliminary Evaluation*					Extraction Fluid					
Sample ID	PS?*(Y/N)	No.	Type	Rot.	Started	Stopped	Start	Earliest Stop	Latest Stop	Actual Stop	Grams Total	%SOL	Grams Solid	Buffer TV	Step1 pH	Step 1 spin	Buffer TV	Step2 pH	Fluid #	pH	Pass?	Vol. (mL)	Buffer TV	Final pH
PH Buffer														4.00	4.05		4.00	4.05	#1 pH = 4.93 ± 0.05 #2 pH = 2.88 ± 0.05				4.00	3.97
PH Buffer														7.00	7.00		7.00	7.05					7.00	6.98
PH Buffer														10.00	10.04		10.00	10.04					10.00	10.00
LB (fluid #1)	N	1	M/E	7	20-Dec-21	21-Dec-21	17:15	9:15	13:15	9:30	NA	NA	NA	NA	NA	NA	NA	NA	1		NO	2000	NA	4.79
LB (fluid #2)	N		M/E	7	20-Dec-21	21-Dec-21	17:15	9:15	13:15	9:30	NA	NA	NA	NA	NA	NA	NA	NA	2		NO	2000	NA	
JD36923-5	N	3	M/E	7	20-Dec-21	21-Dec-21	17:15	9:15	13:15	9:30	100.67	100	100.67	NA	11.13	5 mins	NA	1.97	1	0.00	NO	2013.4	NA	9.57
JD35488-6	N	8	M/E	7	20-Dec-21	21-Dec-21	17:15	9:15	13:15	9:30	100.25	100	100.25	NA	8.83	5 mins	NA	1.67	1	0.00	NO	2005	NA	6.41
JD36872-1	N	9	M/E	7	20-Dec-21	21-Dec-21	17:15	9:15	13:15	9:30	100.57	100	100.57	NA	9.47	5 mins	NA	1.78	1	0.00	NO	2011.4	NA	6.41
JD36872-2	N	11	M/E	7	20-Dec-21	21-Dec-21	17:15	9:15	13:15	9:30	100.92	100	100.92	NA	9.14	5 mins	NA	1.66	1	0.00	NO	2018.4	NA	5.17
JD36893-5	N	12	M/E	7	20-Dec-21	21-Dec-21	17:15	9:15	13:15	9:30	100.22	100	100.22	NA	7.66	5 mins	NA	1.62	1	0.00	NO	2004.4	NA	5.01
JD36930-1	N	16	M/E	7	20-Dec-21	21-Dec-21	17:15	9:15	13:15	9:30	100.20	100	100.20	NA	7.06	5 mins	NA	1.62	1	0.00	NO	2004	NA	4.86
JD36933-1	N	17	M/E	7	20-Dec-21	21-Dec-21	17:15	9:15	13:15	9:30	100.44	100	100.44	NA	6.64	5 mins	NA	1.74	1	0.00	NO	2008.8	NA	4.84
JD36933-3	N	20	M/E	7	20-Dec-21	21-Dec-21	17:15	9:15	13:15	9:30	100.05	100	100.05	NA	7.22	5 mins	NA	1.62	1	0.00	NO	2001	NA	4.85
JD36933-5	N	21	M/E	7	20-Dec-21	21-Dec-21	17:15	9:15	13:15	9:30	100.04	100	100.04	NA	10.95	5 mins	NA	1.66	1	0.00	NO	2000.8	NA	4.90
JD36933-7	N	24	M/E	7	20-Dec-21	21-Dec-21	17:15	9:15	13:15	9:30	100.25	100	100.25	NA	6.81	5 mins	NA	1.62	1	0.00	NO	2005	NA	4.85
PH Buffer														4.00	4.16		2.00	2.12					4.00	4.01
PH Buffer														10.00	10.13		4.00	4.16					10.00	10.01
JD36933-9	N	25	M/E	7	20-Dec-21	21-Dec-21	17:15	9:15	13:15	9:30	100.36	100	100.36	NA	6.21	5 mins	NA	1.60	1	0.00	NO	2007.2	NA	4.83
JD36933-11	N	27	M/E	7	20-Dec-21	21-Dec-21	17:15	9:15	13:15	9:30	100.40	100	100.40	NA	5.97	5 mins	NA	1.60	1	0.00	NO	2008	NA	4.82
JD36933-13	N	31	M/E	7	20-Dec-21	21-Dec-21	17:15	9:15	13:15	9:30	100.29	100	100.29	NA	6.35	5 mins	NA	1.60	1	0.00	NO	2005.8	NA	4.82
JD36933-15	N	33	M/E	7	20-Dec-21	21-Dec-21	17:15	9:15	13:15	9:30	100.19	100	100.19	NA	6.94	5 mins	NA	1.61	1	0.00	NO	2003.8	NA	4.85
JD36933-17	N	34	M/E	7	20-Dec-21	21-Dec-21	17:15	9:15	13:15	9:30	100.05	100	100.05	NA	9.79	5 mins	NA	1.64	1	0.00	NO	2001	NA	4.86
JD36933-19	N	35	M/E	7	20-Dec-21	21-Dec-21	17:15	9:15	13:15	9:30	100.19	100	100.19	NA	6.73	5 mins	NA	1.63	1	0.00	NO	2003.8	NA	4.87
JD36933-21	N	36	M/E	7	20-Dec-21	21-Dec-21	17:15	9:15	13:15	9:30	100.52	100	100.52	NA	6.89	5 mins	NA	1.64	1	0.00	NO	2010.4	NA	4.85
JD36933-23	N	38	M/E	7	20-Dec-21	21-Dec-21	17:15	9:15	13:15	9:30	100.47	100	100.47	NA	6.92	5 mins	NA	1.65	1	0.00	NO	2009.4	NA	4.86
JD36934-1	N	39	M/E	7	20-Dec-21	21-Dec-21	17:15	9:15	13:15	9:30	60.93	100	60.93	NA	9.10	5 mins	NA	1.66	1	0.00	NO	1218.6	NA	5.07
JD36934-2	N	42	M/E	7	20-Dec-21	21-Dec-21	17:15	9:15	13:15	9:30	100.69	100	100.69	NA	6.66	5 mins	NA	1.67	1	0.00	NO	2013.8	NA	4.86
PH Buffer														4.00	4.10		2.00	2.12					4.00	4.07
PH Buffer														10.00	10.06		4.00	4.10					7.00	7.04

Comments and additional information continued on the next page. (*PS=particle sizing)

Data Reviewer / Date: _____

Set-up analyst: JD AL NF

Take-down analyst: JD AL NF

TC Batch ID: TC0761

Balance ID: B54
pH meter ID: PH 67

Temperature ranges during leaching. (Must be from 20.5-25.4 °C, and recorded for each leaching period).

Probe ID	Uncorrected Temperatures			Corrected Temperatures		For rotator(s)
	Minimum	Maximum	CF	Minimum	Maximum	
56418	22.45	23.82	0	22.45	23.82	7 & 8
50266			0	0.00	0.00	9 & 10
56717			0	0.00	0.00	4
45776			0	0.00	0.00	5
49504			0	0.00	0.00	11 & 12

Rotator revolution rates. (Must be from 28-32 rpm, and check weekly for all rotators).

Rotator ID:	Rate:	Last measured:
4	30	6-Dec-21
5	30	6-Dec-21
7	28	6-Dec-21
8	NA	22-Apr-21
9	32	6-Dec-21
10	32	6-Dec-21
11	NA	7-Sep-21
12	28	6-Dec-21

*Preliminary Evaluation Temperature (49.5-50.4 °C, heat for 10 min)

Thermometer ID: 5624720
Expiration: 30-Jun-22
Recorded temperature: 50
Heating time: Start:
End:

Reagent Information

Reagent

Reagent ID or Manufacturer Lot

Expiration Date

Extraction fluid 1	GNE12-68297-TCLP	29-Dec-2021
Extraction fluid 2	GNE12-68142-TCLP	21-Dec-2021
TCLP filters	Env. Exp. Lot 113883-1320-AG	N/A
Filter acid-rinse solution	GNE12-68095-TCLP	3-Jun-2022
pH 2 buffer	FISHER 210051	1-Mar-2023
pH 4 buffer	FISHER 207758	1-Jan-2023
pH 7 buffer	FISHER 213754	1-Jun-2023
pH 10 buffer	FISHER 202303	1-Jun-2022
pH 12 buffer	N/A	N/A
pH 13 buffer	SPECTRUM 1KC0229	1-Apr-2022
Nitric acid, concentrated	J.T. BAKER 0000282671	3-Dec-2026
Nitric acid, 7.5M	AGN-TCLPE-07b	
1N HCl	Revised: 18-Jun-17 Validated: AD, 18-Jun-17	
	GNE12-68094-TCLP	

B6105 1/1

ORIGIN ID:ZRPA (732) 329-0200
SAMPLE MANAGEMENT
SGS NORTH AMERICA INC.
2235 US HIGHWAY 130

SHIP DATE: 21DEC21
ACTWT: 34.90 LB
CAD: 0692838/CAFE3211

DAYTON, NJ 08810
UNITED STATES US

BILL SENDER

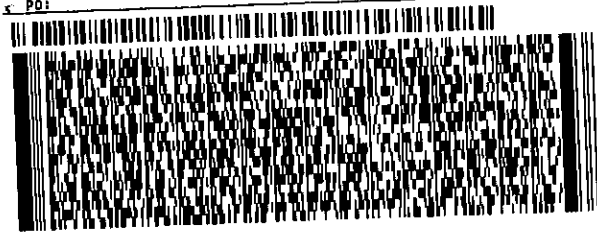
TO **SAMPLE RECEIVING**
SGS EHS WILMINGTON
5500 BUSINESS DRIVE

WILMINGTON NC 28405

(910) 794-1618

REF:

DEPT:



FedEx
Express



IN LB95090811131J

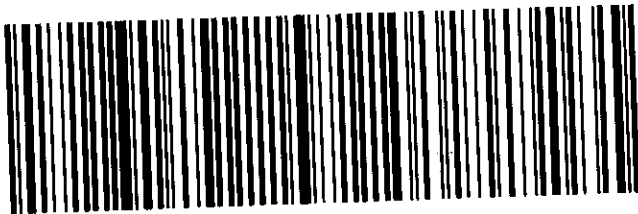
WED - 22 DEC 11:30A
PRIORITY OVERNIGHT

TRK# 5272 0637 4118
0201

GE ILMA

28405
NC-US RDU

Part # 155748-434 MTAV EXP 08/22



3401/4663/CE1155

TB 12/22/21



Customer
DATE
SIGNATURE
12/22/21
28998

12:07 12/22/21



FINAL LAB REPORT

Prepared by

SGS NORTH AMERICA

Prepared for

This report is approved by

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PROJECT INFORMATION SUMMARY *(When applicable, see QC Annotations for details)*

Client Project
SGS Project #
Analytical Protocol(s)
No. Samples Submitted
Additional QC Sample(s)
No. Laboratory Method Blanks
No. OPRs / Batch CS3
Date Received
Condition Received
Temperature upon Receipt (°C)
Extraction within Holding Time
Analysis within Holding Time



QC ANNOTATIONS:

1. Please see Appendices attached for data qualifier/attribute and lab identifier descriptions which may be contained in the project.

APPENDIX A: GENERAL DATA QUALIFIERS / DATA ATTRIBUTES

B	The analyte was found in the method blank, at a concentration that was at least 10% of the concentration in the sample.
C	Two or more congeners co-elute. In EDDs, C denotes the lowest IUPAC congener in a co-elution group and additional co-eluters for the group are shown with the number of the lowest IUPAC co-eluter.
E	The reported concentration exceeds the calibration range (upper point of the calibration curve) and is an estimated value.
EMPC	Represents an Estimated Maximum Possible Concentration. EMPCs arise in cases where the signal/noise ratio is not sufficient for peak identification (the determined ion-abundance ratio is outside the allowed theoretical range), or where there is a co-eluting interference.
H/h	If the standard recovery is below the method or SOP specified value "H" is assigned. If the obtained value is less than half the specified value "h" is assigned.
J	Indicates that an analyte has a concentration below the reporting limit (lowest point of the calibration curve) and is an estimated value.
ND	Indicates a non-detect.
NR or R	Indicates a value that is not reportable.
PR	Due to interference, the associated congener is poorly resolved.
QI	Indicates the presence of a quantitative interference.
SI	Denotes "Single Ion Mode" and is utilized for PCBs where the secondary ion trace has a significantly elevated noise level due to background PFK. Responses for such peaks are calculated using an EMPC approach based solely on the primary ion area(s) and may be considered estimates.
U	The analyte was not detected. The estimated detection limit (EDL) may be reported for this analyte.
V	The labeled standard recovery was found to be outside of the method control limits.



APPENDIX B: DRBC/TMDL SPECIFIC DATA QUALIFIERS / DATA ATTRIBUTES

J	The reported result is an estimate. The value is less than the minimum calibration level but greater than the estimated detection limit (EDL).
U	The analyte was not detected in the sample at the estimated detection limit (EDL).
E	The reported concentration is an estimate. The value exceeds the upper calibration range (upper point of the calibration curve).
D	Dilution Data. Result was obtained from the analysis of a dilution.
B	Analyte found in the sample and associated method blank.
C	Co-eluting congener
Cxx	Co-elutes with the indicated congener, data is reported under the lowest IUPAC congener. 'Xx' denotes the IUPAC number with the lowest numerical designated congener.
NR	Analyte is not reportable because of problems in sample preparation or analysis.
V	Labeled standard recovery is not within method control limits.
X	Results from re-injection/repeat/second-column analysis.
EMPC	Estimated maximum possible concentration. Indicates that a peak is identified but did not meet the method specified ion-abundance ratio.

APPENDIX C: LAB IDENTIFIERS

AR	Indicates use of the archived portion of the sample extract.
CU	Indicates a sample that required additional clean-up prior to MS injection/processing.
D	Indicates a dilution of the sample extract. The number that follows the "D" indicates the dilution factor.
DE	Indicates a dilution performed with the addition of ES (extraction standard) solution.
DUP	Designation for a duplicate sample.
MS	Designation for a matrix spike.
MSD	Designation for a matrix spike duplicate.
RJ	Indicates a reinjection of the sample extract.
S	Indicates a sample split. The number that follows the "S" indicates the split factor.



SGS CERTIFICATIONS

Alaska DEC LAP	17-012
Alaska DEC LCP	NC00919
Arkansas	20-054-0
California (ELAP)	ELAP Cert #2914
CLIA	34D1013708
Connecticut	PH-0258
USDA Soil Permit	P330-20-00103
American Association for Laboratory Accreditation (A2LA)	2726.01 (ISO 17025:2017, 2009 TNI, DoD ELAP QSM 5.3)
Florida DOH	E87634
Louisiana DEQ	4115
Louisiana DOH	LA031
Maine	2020019
Massachusetts	M-NC919
Michigan	9950
Minnesota (Primary NELAP For Method 23)	037-999-459
Montana	0106
New Hampshire (Secondary NELAP)	2083
New Jersey	NC100
New York	11685
North Carolina DEQ	481
North Dakota	R-197
Ohio	87785
Oregon	NC200002
Pennsylvania	68-03675
South Carolina	99029002
Texas	T104704260
US Coast Guard	16714/159.317/SGS
Vermont	VT-87634
Virginia	460214
Washington	C913

Rev. 12-Oct-2021

Sample ID: 11215131-122021-IDW-SS-PURGE

Method 1613B

Client Data		Sample Data		Laboratory Data			
Name:	GHD Services Inc.	Matrix:	Aqueous	Lab Project ID:	B6118	Date Received:	28-Dec-2021
Project ID:	11215131-SJRWP-PCFSE	Weight/Volume:	0.97 L	Lab Sample ID:	B6118_18801_DF_001-RJ	Date Extracted:	04-Jan-2022
Date Collected:	23-Dec-2021	pH:	7	QC Batch No:	18801	Date Analyzed:	19-Jan-2022
		Split:	-	Dilution:	-	Time Analyzed:	6:09:56
Analyte	Conc. (pg/L)	DL (pg/L)	EMPC (pg/L)	Qualifiers	Standard	ES Recoveries	Qualifiers
2378-TCDD	EMPC		21.6		ES 2378-TCDD	91.8	
12378-PeCDD	ND	2.88			ES 12378-PeCDD	80.6	
123478-HxCDD	ND	3.25			ES 123478-HxCDD	97.4	
123678-HxCDD	ND	3.21			ES 123678-HxCDD	95.7	
123789-HxCDD	ND	3.04			ES 123789-HxCDD	97.2	
1234678-HpCDD	ND	3.74			ES 1234678-HpCDD	89.2	
OCDD	EMPC		39.9	J	ES OCDD	69.3	
2378-TCDF	77.2				ES 2378-TCDF	90.9	
12378-PeCDF	ND	3.26			ES 12378-PeCDF	93.2	
23478-PeCDF	ND	3.42			ES 23478-PeCDF	91.7	
123478-HxCDF	ND	2.64			ES 123478-HxCDF	108	
123678-HxCDF	ND	2.79			ES 123678-HxCDF	112	
234678-HxCDF	ND	4.49			ES 234678-HxCDF	67.6	
123789-HxCDF	ND	3.53			ES 123789-HxCDF	100	
1234678-HpCDF	5.55			J	ES 1234678-HpCDF	107	
1234789-HpCDF	ND	2.72			ES 1234789-HpCDF	100	
OCDF	ND	5.06			ES OCDF	78	
Totals					Standard	CS Recoveries	
Total TCDD	ND		21.6		CS 37Cl-2378-TCDD	83.2	
Total PeCDD	ND	2.88	ND		CS 12347-PeCDD	87	
Total HxCDD	ND	3.16	ND		CS 12346-PeCDF	96.7	
Total HpCDD	ND	3.74	ND		CS 123469-HxCDF	124	
					CS 1234689-HpCDF	122	
Total TCDF	126		126				
Total PeCDF	ND	3.34	ND				
Total HxCDF	ND	3.22	ND				
Total HpCDF	5.55		5.55				
Total PCDD/Fs	131		193				
WHO-2005 TEQs							
TEQ: ND=0	7.78		29.4				
TEQ: ND=DL/2	11	5.46	32.6				
TEQ: ND=DL	14.1	10.9	35.8				




5500 Business Drive
Wilmington, NC 28405, USA
www.us.sgs.com

Tel: +1 910 794-1613; Toll-Free 866 846-8290

Sample ID: 11215131-122021-IDW-SS-PURGE

Method 1613B

Client Data			Sample Data			Laboratory Data			Date Received: 28-Dec-2021						
Name: GHD Services Inc.			Matrix: Aqueous			Lab Project ID: B6118			Date Received: 28-Dec-2021						
Project ID: 11215131-SJRWP-PCFSE			Weight/Volume: 0.97 L			Lab Sample ID: B6118_18801_DF_001-RJ			Date Extracted: 04-Jan-2022						
Date Collected: 23-Dec-2021			pH: 7			QC Batch No.: 18801			Date Analyzed: 19-Jan-2022						
			Split: -			Dilution: -			Time Analyzed: 6:09:56						
Tetra-Dioxins	Conc. (pg/L)	Qualifiers	Penta-Dioxins	Conc. (pg/L)	Qualifiers	Hexa-Dioxins	Conc. (pg/L)	Qualifiers	Hepta-Dioxins	Conc. (pg/L)	Qualifiers				
1368D	(3.86)		12479/12468D	(2.88)		124679/124689D	(3.16)		1234679D	(3.74)					
1379D	(3.86)		12469D	(2.88)		123468D	(3.16)		1234678D	(3.74)					
1369D	(3.86)		12368D	(2.88)		123679/123689D	(3.16)								
1469D	(3.86)		12478D	(2.88)		123469D	(3.16)								
1247D...[4]	(3.86)		12379D	(2.88)		123478D	(3.25)								
1378D	(3.86)		12369D...[3]	(2.88)		123678D	(3.21)								
1268D	(3.86)		12346/12347D	(2.88)		123467D	(3.16)								
1478D	(3.86)		12378D	(2.88)		123789D	(3.04)		Conc.	0					
1279D	(3.86)		12367D	(2.88)					EMPC	0					
1234/1269D	(3.86)		12389D	(2.88)											
1236D	(3.86)								Octa-Dioxin	Conc	Qualifiers				
1237/1238D	(3.86)									(pg/L)					
1239D	(3.86)								OCDD	[39.9]	J				
2378D	[21.6]														
1278D	(3.86)														
1267D	(3.86)														
1289D	(3.86)														
Conc.	0		Conc.	0		Conc.	0								
EMPC	21.6		EMPC	0		EMPC	0								
 5500 Business Drive Wilmington, NC 28405, USA Tel: +1 910 794-1613 www.us.sgs.com						WHO-2005 TEQs			Conc.		EMPC				
						TEQ: ND=0						7.78		29.4	
						TEQ: ND=DL/2						11		32.6	
						TEQ: ND=DL						14.1		35.8	
						Total PCDD/Fs						131		193	

Checkcode: 337-796-RVG

Report Created: 19-Jan-2022 09:22 Analyst: gd

Sample ID: 11215131-122021-IDW-SS-PURGE

Method 1613B

Client Data			Sample Data			Laboratory Data			Date Received: 28-Dec-2021		
Name: GHD Services Inc.			Matrix: Aqueous			Lab Project ID: B6118			Date Received: 28-Dec-2021		
Project ID: 11215131-SJRWP-PCFSE			Weight/Volume: 0.97 L			Lab Sample ID: B6118_18801_DF_001-RJ			Date Extracted: 04-Jan-2022		
Date Collected: 23-Dec-2021			pH: 7			QC Batch No.: 18801			Date Analyzed: 19-Jan-2022		
			Split: -			Dilution: -			Time Analyzed: 6:09:56		
Tetra-Furans	Conc. (pg/L)	Qualifiers	Penta-Furans	Conc. (pg/L)	Qualifiers	Hexa-Furans	Conc (pg/L)	Qualifiers	Hepta-Furans	Conc (pg/L)	Qualifiers
1368F	(6.79)		13468/12468F	(3.19)		123468F	(3.22)		1234678F	5.55	J
1468F	(6.79)		13678F...[3]	(3.34)		124678/134678F	(3.22)		1234679F	(2.44)	
2468F	(6.79)		12368F...[3]	(3.34)		134679F	(3.22)		1234689F	(2.44)	
1346/1246F	(6.79)		14678F	(3.34)		124679F	(3.22)		1234789F	(2.72)	
1347F...[3]	(6.79)		13479F	(3.34)		124689F	(3.22)				
1348F	(6.79)		13469/12479F	(3.34)		123467F	(3.22)				
1248F...[3]	(6.79)		12346F	(3.34)		123478F	(2.64)				
1268F	(6.79)		23468/12469F	(3.34)		123678F	(2.79)				
1467F	(6.79)		12347F	(3.34)		123479F	(3.22)				
1478F	(6.79)		12348F	(3.34)		123469F	(3.22)				
1369/1237F	(6.79)		12378F	(3.26)		123679F	(3.22)				
2467F	(6.79)		12678/12367F	(3.34)		234678F	(4.49)		Conc.	5.55	
2368F	(6.79)		12379F	(3.34)		234678/123689F	0		EMPC	5.55	
1238F...[5]	(6.79)		12679F	(3.34)		123689F	(3.22)				
1278F	33.5		23467/12369F	(3.34)		123789F	(3.53)		Octa-Furan	Conc	Qualifiers
1349F	(6.79)		23478F	(3.42)		123789/123489F	0			(pg/L)	
1267F	(6.79)		23478/12489F	0		123489F	(3.22)		OCDF	(5.06)	
2346/1249F	(6.79)		12489F	(3.34)							
2347/1279F	(6.79)		12349F	(3.34)							
2348F	8.53		12389F	(3.34)							
2378F	77.2										
2367/3467F	(6.79)										
1269F	(6.79)										
1239F	(6.79)										
1289F	6.38										
Conc.	126		Conc.	0		Conc.	0				
EMPC	126		EMPC	0		EMPC	0				


Checkcode: 337-796-RVG

Report Created: 19-Jan-2022 09:22 Analyst: gd

Sample ID: 11215131-122021-IDW-SS-PURGE TEQ Summary Method 1613B


Client Project Name:	GHD Services Inc.	Matrix:	Aqueous	Lab Sample ID:	B6118_18801_DF_001-RJ
Client Project ID:	11215131-SJRWP-PCFSE	Weight/Volume:	0.97 L	QC Batch No.:	18801
Date Collected:	23-Dec-2021	Split:	-	Date Extracted:	04-Jan-2022
Date Received:	28-Dec-2021	Dilution:	-	Date Analyzed:	19-Jan-2022 06:09
Lab Project No:	B6118	Units	pg/L		

Analyte	Result	Qualifiers	DLs	I-TEQ	WHO-1998	WHO-2005
2378-TCDD	[21.6]		3.86	[21.6]	[21.6]	[21.6]
12378-PeCDD	(2.88)		2.88	(1.44)	(2.88)	(2.88)
123478-HxCDD	(3.25)		3.25	(0.325)	(0.325)	(0.325)
123678-HxCDD	(3.21)		3.21	(0.321)	(0.321)	(0.321)
123789-HxCDD	(3.04)		3.04	(0.304)	(0.304)	(0.304)
1234678-HpCDD	(3.74)		3.74	(0.0374)	(0.0374)	(0.0374)
OCDD	[39.9]	J	9.04	[0.0399]	[0.00399]	[0.012]
2378-TCDF	77.2		6.79	7.72	7.72	7.72
12378-PeCDF	(3.26)		3.26	(0.163)	(0.163)	(0.0978)
23478-PeCDF	(3.42)		3.42	(1.71)	(1.71)	(1.02)
123478-HxCDF	(2.64)		2.64	(0.264)	(0.264)	(0.264)
123678-HxCDF	(2.79)		2.79	(0.279)	(0.279)	(0.279)
234678-HxCDF	(4.49)		4.49	(0.449)	(0.449)	(0.449)
123789-HxCDF	(3.53)		3.53	(0.353)	(0.353)	(0.353)
1234678-HpCDF	5.55	J	2.21	0.0555	0.0555	0.0555
1234789-HpCDF	(2.72)		2.72	(0.0272)	(0.0272)	(0.0272)
OCDF	(5.06)		5.06	(0.00506)	(0.000506)	(0.00152)

5500 Business Drive Wilmington, NC 28405, USA Tel: +1 910 794-1613; Toll-Free 866 846-8290 www.us.sgs.com 	TEQ Summaries			
	EMPC = 0, ND = 0	7.78	7.78	7.78
	EMPC = 0, ND = DL / 2	10.6	11.3	11
	EMPC = 0, ND = DL	13.5	14.9	14.1
	EMPC = 0, < J-level = 0	7.72	7.72	7.72
	EMPC = EMPC, ND = 0	29.4	29.4	29.4
	EMPC = EMPC, ND = DL / 2	32.3	33	32.6
	EMPC = EMPC, ND = DL	35.1	36.5	35.8
	EMPC = EMPC, < J-level = 0	29.3	29.3	29.3

Sample ID: 11215131-122021-IDW-SS-PURGE-TCLP LB

Method 1613B

Client Data		Sample Data		Laboratory Data			
Name:	GHD Services Inc.	Matrix:	Aqueous	Lab Project ID:	B6118	Date Received:	28-Dec-2021
Project ID:	11215131-SJRWP-PCFSE	Weight/Volume:	0.95 L	Lab Sample ID:	B6118_18801_DF_002-RJ	Date Extracted:	04-Jan-2022
Date Collected:	23-Dec-2021	pH:	5	QC Batch No.:	18801	Date Analyzed:	19-Jan-2022
		Split:	-	Dilution:	-	Time Analyzed:	6:56:40
Analyte	Conc. (pg/L)	DL (pg/L)	EMPC (pg/L)	Qualifiers	Standard	ES Recoveries	Qualifiers
2378-TCDD	11.1				ES 2378-TCDD	90	
12378-PeCDD	ND	2.74			ES 12378-PeCDD	82.8	
123478-HxCDD	ND	2.48			ES 123478-HxCDD	96.7	
123678-HxCDD	ND	2.9			ES 123678-HxCDD	96	
123789-HxCDD	ND	2.76			ES 123789-HxCDD	95.6	
1234678-HpCDD	ND	3.26			ES 1234678-HpCDD	87.4	
OCDD	ND	8.36			ES OCDD	66.5	
2378-TCDF	23.8				ES 2378-TCDF	91	
12378-PeCDF	ND	2.43			ES 12378-PeCDF	92.3	
23478-PeCDF	ND	2.31			ES 23478-PeCDF	91.1	
123478-HxCDF	4.95			J	ES 123478-HxCDF	103	
123678-HxCDF	ND	2.38			ES 123678-HxCDF	109	
234678-HxCDF	ND	4.13			ES 234678-HxCDF	65.3	
123789-HxCDF	ND	3.09			ES 123789-HxCDF	97	
1234678-HpCDF	8.31			J	ES 1234678-HpCDF	101	
1234789-HpCDF	ND	2.21			ES 1234789-HpCDF	93.9	
OCDF	ND	4.7			ES OCDF	71.8	
Totals					Standard	CS Recoveries	
Total TCDD	11.1		11.1		CS 37Cl-2378-TCDD	84.3	
Total PeCDD	ND	2.74	ND		CS 12347-PeCDD	87.6	
Total HxCDD	ND	2.71	ND		CS 12346-PeCDF	98.7	
Total HpCDD	ND	3.26	ND		CS 123469-HxCDF	124	
					CS 1234689-HpCDF	119	
Total TCDF	33.1		33.1				
Total PeCDF	ND	2.37	ND				
Total HxCDF	4.95		4.95				
Total HpCDF	8.31		8.31				
Total PCDD/Fs	57.4		57.4				
WHO-2005 TEQs					 5500 Business Drive Wilmington, NC 28405, USA www.us.sgs.com Tel: +1 910 794-1613; Toll-Free 866 846-8290		
TEQ: ND=0	14		14				
TEQ: ND=DL/2	16.7	4.63	16.7				
TEQ: ND=DL	19.4	9.27	19.4				

Sample ID: 11215131-122021-IDW-SS-PURGE-TCLP LB **Method 1613B**

Client Data			Sample Data			Laboratory Data					
Name: GHD Services Inc.			Matrix: Aqueous			Lab Project ID: B6118			Date Received: 28-Dec-2021		
Project ID: 11215131-SJRWP-PCFSE			Weight/Volume: 0.95 L			Lab Sample ID: B6118_18801_DF_002-RJ			Date Extracted: 04-Jan-2022		
Date Collected: 23-Dec-2021			pH: 5			QC Batch No.: 18801			Date Analyzed: 19-Jan-2022		
			Split: -			Dilution: -			Time Analyzed: 6:56:40		

Tetra-Dioxins	Conc. (pg/L)	Qualifiers	Penta-Dioxins	Conc. (pg/L)	Qualifiers	Hexa-Dioxins	Conc. (pg/L)	Qualifiers	Hepta-Dioxins	Conc. (pg/L)	Qualifiers
1368D	(3.26)		12479/12468D	(2.74)		124679/124689D	(2.71)		1234679D	(3.26)	
1379D	(3.26)		12469D	(2.74)		123468D	(2.71)		1234678D	(3.26)	
1369D	(3.26)		12368D	(2.74)		123679/123689D	(2.71)				
1469D	(3.26)		12478D	(2.74)		123469D	(2.71)				
1247D...[4]	(3.26)		12379D	(2.74)		123478D	(2.48)				
1378D	(3.26)		12369D...[3]	(2.74)		123678D	(2.9)				
1268D	(3.26)		12346/12347D	(2.74)		123467D	(2.71)				
1478D	(3.26)		12378D	(2.74)		123789D	(2.76)		Conc.	0	
1279D	(3.26)		12367D	(2.74)					EMPC	0	
1234/1269D	(3.26)		12389D	(2.74)							
Conc.	11.1		Conc.	0		Conc.	0		Conc.	0	
EMPC	11.1		EMPC	0		EMPC	0		EMPC	0	

<p>5500 Business Drive Wilmington, NC 28405, USA Tel: +1 910 794-1613 www.us.sgs.com</p>	WHO-2005 TEQs		Conc.	EMPC
	TEQ: ND=0		14	14
	TEQ: ND=DL/2		16.7	16.7
	TEQ: ND=DL		19.4	19.4
	Total PCDD/Fs		Conc.	EMPC
			57.4	57.4

Checkcode: 009-458-MBF

Report Created: 19-Jan-2022 09:23 Analyst: gd

Sample ID: 11215131-122021-IDW-SS-PURGE-TCLP LB Method 1613B

Client Data			Sample Data			Laboratory Data			Date Received: 28-Dec-2021		
Name: GHD Services Inc.			Matrix: Aqueous			Lab Project ID: B6118			Date Extracted: 04-Jan-2022		
Project ID: 11215131-SJRWP-PCFSE			Weight/Volume: 0.95 L			Lab Sample ID: B6118_18801_DF_002-RJ			Date Analyzed: 19-Jan-2022		
Date Collected: 23-Dec-2021			pH: 5			QC Batch No.: 18801			Time Analyzed: 6:56:40		
Split: -			Dilution: -								
Tetra-Furans	Conc. (pg/L)	Qualifiers	Penta-Furans	Conc. (pg/L)	Qualifiers	Hexa-Furans	Conc (pg/L)	Qualifiers	Hepta-Furans	Conc (pg/L)	Qualifiers
1368F	(4.1)		13468/12468F	(2.58)		123468F	(2.89)		1234678F	8.31	J
1468F	(4.1)		13678F...[3]	(2.37)		124678/134678F	(2.89)		1234679F	(2.01)	
2468F	(4.1)		12368F...[3]	(2.37)		134679F	(2.89)		1234689F	(2.01)	
1346/1246F	(4.1)		14678F	(2.37)		124679F	(2.89)		1234789F	(2.21)	
1347F...[3]	(4.1)		13479F	(2.37)		124689F	(2.89)				
1348F	(4.1)		13469/12479F	(2.37)		123467F	(2.89)				
1248F...[3]	(4.1)		12346F	(2.37)		123478F	4.95	J			
1268F	(4.1)		23468/12469F	(2.37)		123678F	(2.38)				
1467F	(4.1)		12347F	(2.37)		123479F	(2.89)				
1478F	(4.1)		12348F	(2.37)		123469F	(2.89)				
1369/1237F	(4.1)		12378F	(2.43)		123679F	(2.89)				
2467F	(4.1)		12678/12367F	(2.37)		234678F	(4.13)		Conc.	8.31	
2368F	(4.1)		12379F	(2.37)		234678/123689F	0		EMPC	8.31	
1238F...[5]	(4.1)		12679F	(2.37)		123689F	(2.89)				
1278F	9.37		23467/12369F	(2.37)		123789F	(3.09)		Octa-Furan	Conc	Qualifiers
1349F	(4.1)		23478F	(2.31)		123789/123489F	0			(pg/L)	
1267F	(4.1)		23478/12489F	0		123489F	(2.89)		OCDF	(4.7)	
2346/1249F	(4.1)		12489F	(2.37)							
2347/1279F	(4.1)		12349F	(2.37)							
2348F	(4.1)		12389F	(2.37)							
2378F	23.8										
2367/3467F	(4.1)										
1269F	(4.1)										
1239F	(4.1)										
1289F	(4.1)										
Conc.	33.1		Conc.	0		Conc.	4.95				
EMPC	33.1		EMPC	0		EMPC	4.95				

Checkcode: 009-458-MBF


Report Created: 19-Jan-2022 09:23 Analyst: gd

Sample ID: 11215131-122021-IDW-SS-PURGE-TC TEQ Summary

Method 1613B


Client Project Name:	GHD Services Inc.	Matrix:	Aqueous	Lab Sample ID:	B6118_18801_DF_002-RJ
Client Project ID:	11215131-SJRWP-PCFSE	Weight/Volume:	0.95 L	QC Batch No.:	18801
Date Collected:	23-Dec-2021	Split:	-	Date Extracted:	04-Jan-2022
Date Received:	28-Dec-2021	Dilution:	-	Date Analyzed:	19-Jan-2022 06:56
Lab Project No:	B6118	Units	pg/L		

Analyte	Result	Qualifiers	DLs	I-TEQ	WHO-1998	WHO-2005
2378-TCDD	11.1		3.26	11.1	11.1	11.1
12378-PeCDD	(2.74)		2.74	(1.37)	(2.74)	(2.74)
123478-HxCDD	(2.48)		2.48	(0.248)	(0.248)	(0.248)
123678-HxCDD	(2.9)		2.9	(0.29)	(0.29)	(0.29)
123789-HxCDD	(2.76)		2.76	(0.276)	(0.276)	(0.276)
1234678-HpCDD	(3.26)		3.26	(0.0326)	(0.0326)	(0.0326)
OCDD	(8.36)		8.36	(0.00836)	(0.000836)	(0.00251)
2378-TCDF	23.8		4.1	2.38	2.38	2.38
12378-PeCDF	(2.43)		2.43	(0.122)	(0.122)	(0.0729)
23478-PeCDF	(2.31)		2.31	(1.16)	(1.16)	(0.694)
123478-HxCDF	4.95	J	2.5	0.495	0.495	0.495
123678-HxCDF	(2.38)		2.38	(0.238)	(0.238)	(0.238)
234678-HxCDF	(4.13)		4.13	(0.413)	(0.413)	(0.413)
123789-HxCDF	(3.09)		3.09	(0.309)	(0.309)	(0.309)
1234678-HpCDF	8.31	J	1.85	0.0831	0.0831	0.0831
1234789-HpCDF	(2.21)		2.21	(0.0221)	(0.0221)	(0.0221)
OCDF	(4.7)		4.7	(0.0047)	(0.00047)	(0.00141)

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	EMPC = 0, ND = 0	14	14	14
	EMPC = 0, ND = DL / 2	16.3	16.9	16.7
	EMPC = 0, ND = DL	18.5	19.9	19.4
	EMPC = 0, < J-level = 0	13.4	13.4	13.4
	EMPC = EMPC, ND = 0	14	14	14
	EMPC = EMPC, ND = DL / 2	16.3	16.9	16.7
	EMPC = EMPC, ND = DL	18.5	19.9	19.4
EMPC = EMPC, < J-level = 0	13.4	13.4	13.4	


Sample ID: Method Blank B6118_18801

Method 1613B

Client Data		Sample Data		Laboratory Data			
Name:	GHD Services Inc.	Matrix:	Aqueous	Lab Project ID:	B6118	Date Received:	n/a
Project ID:	11215131-SJRWP-PCFSE	Weight/Volume:	1.00 L	Lab Sample ID:	MB1_18801_DF_TLX-RJ	Date Extracted:	04-Jan-2022
Date Collected:	n/a	pH:	n/a	QC Batch No.:	18801	Date Analyzed:	19-Jan-2022
		Split:	-	Dilution:	-	Time Analyzed:	1:16:58
Analyte	Conc. (pg/L)	DL (pg/L)	EMPC (pg/L)	Qualifiers	Standard	ES Recoveries	Qualifiers
2378-TCDD	ND	3.94			ES 2378-TCDD	90.4	
12378-PeCDD	ND	4.24			ES 12378-PeCDD	81	
123478-HxCDD	ND	4.9			ES 123478-HxCDD	92.1	
123678-HxCDD	ND	4.73			ES 123678-HxCDD	95	
123789-HxCDD	ND	4.35			ES 123789-HxCDD	93.8	
1234678-HpCDD	ND	4.5			ES 1234678-HpCDD	87.6	
OCDD	ND	9.02			ES OCDD	66.4	
2378-TCDF	ND	3.89			ES 2378-TCDF	87.9	
12378-PeCDF	ND	3.35			ES 12378-PeCDF	89.1	
23478-PeCDF	ND	3.25			ES 23478-PeCDF	85.9	
123478-HxCDF	ND	3.43			ES 123478-HxCDF	101	
123678-HxCDF	ND	3.22			ES 123678-HxCDF	106	
234678-HxCDF	ND	4.94			ES 234678-HxCDF	65.1	
123789-HxCDF	ND	4.23			ES 123789-HxCDF	94.4	
1234678-HpCDF	ND	2.98			ES 1234678-HpCDF	100	
1234789-HpCDF	ND	3.2			ES 1234789-HpCDF	95.9	
OCDF	ND	7.05			ES OCDF	70.1	
Totals					Standard	CS Recoveries	
Total TCDD	ND	3.94	ND		CS 37Cl-2378-TCDD	83.9	
Total PeCDD	ND	4.24	ND		CS 12347-PeCDD	85.5	
Total HxCDD	ND	4.65	ND		CS 12346-PeCDF	98.4	
Total HpCDD	ND	4.5	ND		CS 123469-HxCDF	120	
					CS 1234689-HpCDF	117	
Total TCDF	ND	3.89	ND				
Total PeCDF	ND	3.3	ND				
Total HxCDF	ND	3.82	ND				
Total HpCDF	ND	3.08	ND				
Total PCDD/Fs	ND		ND				
WHO-2005 TEQs					 5500 Business Drive Wilmington, NC 28405, USA www.us.sgs.com Tel: +1 910 794-1613; Toll-Free 866 846-8290		
TEQ: ND=0	0		0				
TEQ: ND=DL/2	6.37	6.37	6.37				
TEQ: ND=DL	12.7	12.7	12.7				

Sample ID: Method Blank B6118_18801

Method 1613B

Client Data			Sample Data			Laboratory Data			Date Received: n/a						
Name: GHD Services Inc.			Matrix: Aqueous			Lab Project ID: B6118			Date Received: n/a						
Project ID: 11215131-SJRWP-PCFSE			Weight/Volume: 1.00 L			Lab Sample ID: MB1_18801_DF_TLX-RJ			Date Extracted: 04-Jan-2022						
Date Collected: n/a			pH: n/a			QC Batch No.: 18801			Date Analyzed: 19-Jan-2022						
			Split: -			Dilution: -			Time Analyzed: 1:16:58						
Tetra-Dioxins	Conc. (pg/L)	Qualifiers	Penta-Dioxins	Conc. (pg/L)	Qualifiers	Hexa-Dioxins	Conc. (pg/L)	Qualifiers	Hepta-Dioxins	Conc. (pg/L)	Qualifiers				
1368D	(3.94)		12479/12468D	(4.24)		124679/124689D	(4.65)		1234679D	(4.5)					
1379D	(3.94)		12469D	(4.24)		123468D	(4.65)		1234678D	(4.5)					
1369D	(3.94)		12368D	(4.24)		123679/123689D	(4.65)								
1469D	(3.94)		12478D	(4.24)		123469D	(4.65)								
1247D...[4]	(3.94)		12379D	(4.24)		123478D	(4.9)								
1378D	(3.94)		12369D...[3]	(4.24)		123678D	(4.73)								
1268D	(3.94)		12346/12347D	(4.24)		123467D	(4.65)								
1478D	(3.94)		12378D	(4.24)		123789D	(4.35)		Conc.	0					
1279D	(3.94)		12367D	(4.24)					EMPC	0					
1234/1269D	(3.94)		12389D	(4.24)											
1236D	(3.94)								Octa-Dioxin	Conc	Qualifiers				
1237/1238D	(3.94)									(pg/L)					
1239D	(3.94)								OCDD	(9.02)					
2378D	(3.94)														
1278D	(3.94)														
1267D	(3.94)														
1289D	(3.94)														
Conc.	0		Conc.	0		Conc.	0								
EMPC	0		EMPC	0		EMPC	0								
 5500 Business Drive Wilmington, NC 28405, USA Tel: +1 910 794-1613 www.us.sgs.com						WHO-2005 TEQs			Conc.		EMPC				
						TEQ: ND=0						0		0	
						TEQ: ND=DL/2						6.37		6.37	
						TEQ: ND=DL						12.7		12.7	
												Conc.		EMPC	
Total PCDD/Fs						0		0							

Checkcode: 884-540-GHC

Report Created: 19-Jan-2022 09:22 Analyst: gd

Sample ID: Method Blank B6118_18801 **Method 1613B**

<u>Client Data</u>			<u>Sample Data</u>			<u>Laboratory Data</u>					
Name: GHD Services Inc.			Matrix: Aqueous			Lab Project ID: B6118			Date Received: n/a		
Project ID: 11215131-SJRWP-PCFSE			Weight/Volume: 1.00 L			Lab Sample ID: MB1_18801_DF_TLX-RJ			Date Extracted: 04-Jan-2022		
Date Collected: n/a			pH: n/a			QC Batch No.: 18801			Date Analyzed: 19-Jan-2022		
			Split: -			Dilution: -			Time Analyzed: 1:16:58		
Tetra-Furans	Conc. (pg/L)	Qualifiers	Penta-Furans	Conc. (pg/L)	Qualifiers	Hexa-Furans	Conc (pg/L)	Qualifiers	Hepta-Furans	Conc (pg/L)	Qualifiers
1368F	(3.89)		13468/12468F	(4.42)		123468F	(3.82)		1234678F	(2.98)	
1468F	(3.89)		13678F...[3]	(3.3)		124678/134678F	(3.82)		1234679F	(3.08)	
2468F	(3.89)		12368F...[3]	(3.3)		134679F	(3.82)		1234689F	(3.08)	
1346/1246F	(3.89)		14678F	(3.3)		124679F	(3.82)		1234789F	(3.2)	
1347F...[3]	(3.89)		13479F	(3.3)		124689F	(3.82)				
1348F	(3.89)		13469/12479F	(3.3)		123467F	(3.82)				
1248F...[3]	(3.89)		12346F	(3.3)		123478F	(3.43)				
1268F	(3.89)		23468/12469F	(3.3)		123678F	(3.22)				
1467F	(3.89)		12347F	(3.3)		123479F	(3.82)				
1478F	(3.89)		12348F	(3.3)		123469F	(3.82)				
1369/1237F	(3.89)		12378F	(3.35)		123679F	(3.82)				
2467F	(3.89)		12678/12367F	(3.3)		234678F	(4.94)		Conc.	0	
2368F	(3.89)		12379F	(3.3)		234678/123689F	0		EMPC	0	
1238F...[5]	(3.89)		12679F	(3.3)		123689F	(3.82)				
1278F	(3.89)		23467/12369F	(3.3)		123789F	(4.23)		Octa-Furan	Conc	Qualifiers
1349F	(3.89)		23478F	(3.25)		123789/123489F	0			(pg/L)	
1267F	(3.89)		23478/12489F	0		123489F	(3.82)		OCDF	(7.05)	
2346/1249F	(3.89)		12489F	(3.3)							
2347/1279F	(3.89)		12349F	(3.3)							
2348F	(3.89)		12389F	(3.3)							
2378F	(3.89)										
2367/3467F	(3.89)										
1269F	(3.89)										
1239F	(3.89)										
1289F	(3.89)										
Conc.	0		Conc.	0		Conc.	0				
EMPC	0		EMPC	0		EMPC	0				


Checkcode: 884-540-GHC

Report Created: 19-Jan-2022 09:22 Analyst: gd

Sample ID: Method Blank B6118_18801 **TEQ Summary** **Method 1613B**

Client Project Name:	GHD Services Inc.	Matrix:	Aqueous	Lab Sample ID:	MB1_18801_DF_TLX-RJ
Client Project ID:	11215131-SJRWP-PCFSE	Weight/Volume:	1.00 L	QC Batch No.:	18801
Date Collected:	n/a	Split:	-	Date Extracted:	04-Jan-2022
Date Received:	n/a	Dilution:	-	Date Analyzed:	19-Jan-2022 01:16
Lab Project No:	B6118	Units	pg/L		

Analyte	Result	Qualifiers	DLs	I-TEQ	WHO-1998	WHO-2005
2378-TCDD	(3.94)		3.94	(3.94)	(3.94)	(3.94)
12378-PeCDD	(4.24)		4.24	(2.12)	(4.24)	(4.24)
123478-HxCDD	(4.9)		4.9	(0.49)	(0.49)	(0.49)
123678-HxCDD	(4.73)		4.73	(0.473)	(0.473)	(0.473)
123789-HxCDD	(4.35)		4.35	(0.435)	(0.435)	(0.435)
1234678-HpCDD	(4.5)		4.5	(0.045)	(0.045)	(0.045)
OCDD	(9.02)		9.02	(0.00902)	(0.000902)	(0.00271)
2378-TCDF	(3.89)		3.89	(0.389)	(0.389)	(0.389)
12378-PeCDF	(3.35)		3.35	(0.168)	(0.168)	(0.101)
23478-PeCDF	(3.25)		3.25	(1.62)	(1.62)	(0.975)
123478-HxCDF	(3.43)		3.43	(0.343)	(0.343)	(0.343)
123678-HxCDF	(3.22)		3.22	(0.322)	(0.322)	(0.322)
234678-HxCDF	(4.94)		4.94	(0.494)	(0.494)	(0.494)
123789-HxCDF	(4.23)		4.23	(0.423)	(0.423)	(0.423)
1234678-HpCDF	(2.98)		2.98	(0.0298)	(0.0298)	(0.0298)
1234789-HpCDF	(3.2)		3.2	(0.032)	(0.032)	(0.032)
OCDF	(7.05)		7.05	(0.00705)	(0.000705)	(0.00211)

5500 Business Drive Wilmington, NC 28405, USA Tel: +1 910 794-1613; Toll-Free 866 846-8290 www.us.sgs.com 	TEQ Summaries			
	EMPC = 0, ND = 0	0	0	0
	EMPC = 0, ND = DL / 2	5.67	6.72	6.37
	EMPC = 0, ND = DL	11.3	13.4	12.7
	EMPC = 0, < J-level = 0	0	0	0
	EMPC = EMPC, ND = 0	0	0	0
	EMPC = EMPC, ND = DL / 2	5.67	6.72	6.37
	EMPC = EMPC, ND = DL	11.3	13.4	12.7
	EMPC = EMPC, < J-level = 0	0	0	0

Sample ID: 0_18801_OPR001

Method 1613B

Client Data		Sample Data		Laboratory Data			
Name:	GHD Services Inc.	Matrix:	Aqueous	Lab Project ID:	B6118	Date Received:	n/a
Project ID:	11215131-SJRWP-PCFSE	Weight/Volume:	1 uL	Lab Sample ID:	OPR1_18801_DF-RJ	Date Extracted:	04-Jan-2022
Date Collected:	n/a	pH:	n/a	QC Batch No:	18801	Date Analyzed:	18-Jan-2022
		Split:	-	Dilution:	-	Time Analyzed:	21:19:19
Analyte	Conc. (pg/uL)	DL (pg/uL)	EMPC (pg/uL)	Qualifiers	Standard	ES Recoveries	Qualifiers
2378-TCDD	9.28				ES 2378-TCDD	81.6	
12378-PeCDD	46.8				ES 12378-PeCDD	74.4	
123478-HxCDD	53.6				ES 123478-HxCDD	90	
123678-HxCDD	57.5				ES 123678-HxCDD	89.8	
123789-HxCDD	51.8				ES 123789-HxCDD	90.9	
1234678-HpCDD	54.4				ES 1234678-HpCDD	86.1	
OCDD	110				ES OCDD	68.1	
2378-TCDF	12.3				ES 2378-TCDF	83.8	
12378-PeCDF	55.6				ES 12378-PeCDF	84.5	
23478-PeCDF	61.1				ES 23478-PeCDF	80.8	
123478-HxCDF	55.3				ES 123478-HxCDF	96.4	
123678-HxCDF	54.5				ES 123678-HxCDF	100	
234678-HxCDF	49.1				ES 234678-HxCDF	62.3	
123789-HxCDF	49.9				ES 123789-HxCDF	94	
1234678-HpCDF	55.5				ES 1234678-HpCDF	95.2	
1234789-HpCDF	54.5				ES 1234789-HpCDF	92.1	
OCDF	109				ES OCDF	71.9	
Totals					Standard	CS Recoveries	
Total TCDD	40.3		40.3		CS 37Cl-2378-TCDD	79.7	
Total PeCDD	66.5		66.5		CS 12347-PeCDD	81.6	
Total HxCDD	175		175		CS 12346-PeCDF	94.4	
Total HpCDD	65.5		65.5		CS 123469-HxCDF	116	
Total TCDF	58.3		58.3		CS 1234689-HpCDF	112	
Total PeCDF	221		221				
Total HxCDF	340		340				
Total HpCDF	110		110				
Total PCDD/Fs	1,300		1,300				
WHO-2005 TEQs							
TEQ: ND=0	116		116				
TEQ: ND=DL/2	116	0.38	116				
TEQ: ND=DL	116	0.761	116				



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Sample ID: 0_18801_OPR002

Method 1613B

Client Data		Sample Data		Laboratory Data			
Name:	GHD Services Inc.	Matrix:	Aqueous	Lab Project ID:	B6118	Date Received:	n/a
Project ID:	11215131-SJRWP-PCFSE	Weight/Volume:	1 uL	Lab Sample ID:	OPR2_18801_DF-RJ	Date Extracted:	04-Jan-2022
Date Collected:	n/a	pH:	n/a	QC Batch No:	18801	Date Analyzed:	18-Jan-2022
		Split:	-	Dilution:	-	Time Analyzed:	22:06:53

Analyte	Conc. (pg/uL)	DL (pg/uL)	EMPC (pg/uL)	Qualifiers	Standard	ES Recoveries	Qualifiers
2378-TCDD	9.43				ES 2378-TCDD	91.7	
12378-PeCDD	46.7				ES 12378-PeCDD	83.5	
123478-HxCDD	54				ES 123478-HxCDD	98	
123678-HxCDD	57.9				ES 123678-HxCDD	100	
123789-HxCDD	50.1				ES 123789-HxCDD	103	
1234678-HpCDD	56.6				ES 1234678-HpCDD	91.7	
OCDD	110				ES OCDD	73.7	
2378-TCDF	12.1				ES 2378-TCDF	91.3	
12378-PeCDF	55.7				ES 12378-PeCDF	91.9	
23478-PeCDF	60.9				ES 23478-PeCDF	89.2	
123478-HxCDF	56.4				ES 123478-HxCDF	107	
123678-HxCDF	54.5				ES 123678-HxCDF	113	
234678-HxCDF	48.3				ES 234678-HxCDF	69.9	
123789-HxCDF	52.8				ES 123789-HxCDF	104	
1234678-HpCDF	55.1				ES 1234678-HpCDF	108	
1234789-HpCDF	55.9				ES 1234789-HpCDF	101	
OCDF	111				ES OCDF	79	
Totals					Standard	CS Recoveries	
Total TCDD	42.7		42.7		CS 37Cl-2378-TCDD	85.1	
Total PeCDD	68.7		68.7		CS 12347-PeCDD	87.3	
Total HxCDD	176		176		CS 12346-PeCDF	95.6	
Total HpCDD	68.8		68.8		CS 123469-HxCDF	128	
					CS 1234689-HpCDF	117	
Total TCDF	63.5		63.5				
Total PeCDF	229		229				
Total HxCDF	359		359				
Total HpCDF	111		111				
Total PCDD/Fs	1,340		1,340				
WHO-2005 TEQs							
TEQ: ND=0	116		116				
TEQ: ND=DL/2	116	0.32	116				
TEQ: ND=DL	116	0.64	116				



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Sample DUP

Method 1613B

Sample ID: 0_18801_OPR001

Analyte	OPR1_18801_DF-RJ pg/uL	OPR2_18801_DF-RJ (DUP) pg/uL	RPD
2,3,7,8-TCDD	9.28	9.43	1.6%
1,2,3,7,8-PeCDD	46.8	46.7	0.1%
1,2,3,4,7,8-HxCDD	53.6	54	0.7%
1,2,3,6,7,8-HxCDD	57.5	57.9	0.8%
1,2,3,7,8,9-HxCDD	51.8	50.1	3.3%
1,2,3,4,6,7,8-HpCDD	54.4	56.6	4.0%
OCDD	110	110	0.1%
2,3,7,8-TCDF	12.3	12.1	2.0%
1,2,3,7,8-PeCDF	55.6	55.7	0.2%
2,3,4,7,8-PeCDF	61.1	60.9	0.4%
1,2,3,4,7,8-HxCDF	55.3	56.4	2.0%
1,2,3,6,7,8-HxCDF	54.5	54.5	0.1%
2,3,4,6,7,8-HxCDF	49.1	48.3	1.5%
1,2,3,7,8,9-HxCDF	49.9	52.8	5.8%
1,2,3,4,6,7,8-HpCDF	55.5	55.1	0.7%
1,2,3,4,7,8,9-HpCDF	54.5	55.9	2.6%
OCDF	109	111	1.8%
Totals			
Total TCDD	40.3	42.7	5.7%
Total PeCDD	66.5	68.7	3.2%
Total HxCDD	175	176	0.3%
Total HpCDD	65.5	68.8	4.9%
Total TCDF	58.3	63.5	8.6%
Total PeCDF	221	229	3.7%
Total HxCDF	340	359	5.4%
Total HpCDF	110	111	0.9%



Sample Receipt Notification

5500 Business Drive
Wilmington, NC 28405 USA
Tel: 910 794-1613
Toll Free: 866 846-8290
Fax: 910 794-3919

Project Manager: Tamara Burkamper
Receipt Date & Time: 28-Dec-21 at 09:59
AP Project name: B6118
Requested TAT: 10 business days
Projected due date: 12-Jan-22
Matrix: Aqueous
Phone#: 910-794-1613
Email Address: Tamara.Burkamper@sgs.com

Company Contact: Meagan Willis
Company: GHD Services Inc.
Project Name & Site: 11215131-SJRWP-PCFSE
Project PO#: 340-002625
QAAP/Contract #: on file
Requested Analysis: M1613B
Phone#: 713-907-3710
Email Address: Meagan.Willis@ghd.com

Client Smp ID	AP Smp ID	Sample Condition & Notes	Quantity	Size	Sampling Date	Sampling Time	Received Temp (°C)	Container #	Shipping #
11215131-122021-IDW-SS-PURGE	B6118_001	AQ	2	1-Liter Amber	23-Dec-21	11:15	0.3	1	5272 0637 5560
11215131-122021-IDW-SS-PURGE-TCLP LB	B6118_002	AQ	2	1-Liter Amber	23-Dec-21	-	0.3	1	5272 0637 5560

Preservation Type:	Sample Seals:	No
Notes/Comments:		Any un-extracted sample will be stored for 90 days from reporting date. Additional storage fees may apply for any samples stored longer than 90 days.
Samples received intact.		
Sample collection dates on samples do not match sample collection dates on COC. Logged in as listed on samples.		

Received by: Ashley Owens

Logged in by: Ashley Owens

QC'ed by: [ajb 12/28/21](#)

All services are rendered in accordance with the applicable SGS General Conditions of Service accessible via: http://www.sgs.com/terms_and_conditions.htm



CHAIN OF CUSTODY

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2235 Route 130, Dayton, NJ 08810
TEL: 732-329-0200 FAX: 732-329-3499/3480
www.sgs.com/ehsusa

B6118

SGS Quote # 5772.00315500
SGS Job # JD35488

Client / Reporting Information			Project Information										Requested Analysis										Matrix Codes
Company Name			Project Name: SJRWP - PCFSE, Harris County, TX (IDW)																				DW - Drinking Water GW - Ground Water WW - Water SW - Surface Water SO - Soil SL - Sludge SED - Sediment OL - Oil LIQ - Other Liquid AIR - Air SOL - Other Solid WP - Wipe FB - Field Blank EB - Equipment Blank RB - Rins Blank TB - Trip Blank
Street Address			Street																				
City State Zip			City State																				
Project Contact E-mail			Billing information (if different from Report to) Company Name																				
Phone #			Street Address																				
Sampler(s) Name(s) SPS			Client Purchase Order #																				
Field ID / Point of Collection			Date										Number of preserved Bottles										LAB USE ONLY
7B 11215131-122021-IDW-SS-PURGE			12/20/21 11:15 SPS WW										<input type="checkbox"/> HCl <input type="checkbox"/> NaOH <input type="checkbox"/> HNO ₃ <input type="checkbox"/> H ₂ SO ₄ <input type="checkbox"/> NONE <input type="checkbox"/> DI Water <input type="checkbox"/> MECH <input type="checkbox"/> ENCORE										X
Turnaround Time (Business days)			Data Deliverable Information										Comments / Special Instructions										
<input type="checkbox"/> Standard 10 Business Days <input type="checkbox"/> 5 Business Days RUSH <input type="checkbox"/> 3 Business Days RUSH <input type="checkbox"/> 2 Business Days RUSH <input type="checkbox"/> 1 Business Day EMERGENCY <input checked="" type="checkbox"/> Other			Approved By (SGS PM): / Date: _____ _____ _____ _____										<input type="checkbox"/> Commercial "A" (Level 1) <input type="checkbox"/> Commercial "B" (Level 2) <input type="checkbox"/> FULLT1 (Level 3+4) <input type="checkbox"/> NJ Reduced <input type="checkbox"/> Commercial "C" <input type="checkbox"/> NYASP Category A <input type="checkbox"/> NYASP Category B <input type="checkbox"/> State Forms <input type="checkbox"/> EDD Format <input checked="" type="checkbox"/> Other FULLT1										Send leachate volume! Wilmington to log in and report in their system *
Emergency & Rush T/A data available via Lablink Approval needed for RUSH/Emergency TAT			Sample Custody must be documented below each time samples change possession, including courier delivery.										http://www.sgs.com/en/terms-and-conditions										
Relinquished by: 1			Received By: 1										Relinquished By: 2										Date / Time: 12/21/21 9:51 AM
Relinquished by: 3			Received By: 3										Relinquished By: 4										Date / Time: 12/21/21 10:30 AM
Relinquished by: 5			Received By: 5										Custody Seal #										<input checked="" type="checkbox"/> Intact <input type="checkbox"/> Not intact <input type="checkbox"/> Absent <input type="checkbox"/> Preserved where applicable <input type="checkbox"/> Therm ID

* = samples in this project.



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TEL. 732-329-0200 FAX 732-329-3499
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B6118

10 + 2 coolers

FED-EX Tracking # 4985 2704 7396
Bottle Cooler Control # KC-12221-125
SGS Quote #
SGS Job # JD35488

Client/Reporting Information, Project Information, Requested Analysis, Matrix Codes, Lab Sample #, Field ID / Point of Collection, MEOH/DI Val #, Date, Time, Sampled by, Matrix, # of bottles, HCl, NiOH, HNO3, H2SO4, NONE, DI Water, MESH, ENCORE, TCLP Herbs, AB8270TCLPSL, TCLPM, EVA, ESB, ENI, EBE, P8081TCLPSL, V8260TCLPSL, BTX1005TP-HR3, D8016TCLPEGLY, DGC-METHOXYE and DGC-METHOXYE, S6 (TCLPMETHOMYL), TCLP Dioxin/Furans, CREAM, SREAC, IGN, DW - Drinking Water, GW - Ground Water, WW - Water, SW - Surface Water, SO - Soil, SL - Sludge, SED - Sediment, OI - Oil, LIQ - Other Liquid, AIR - Air, SOL - Other Solid, WP - Wipe, FB - Field Blank, EB - Equipment Blank, RB - Rinse Blank, TB - Trip Blank, LAB USE ONLY

Turnaround Time (Business days), Data Deliverable Information, Commercial "A" (Level 1), Commercial "B" (Level 2), FULLT1 (Level 3+4), NJ Reduced, Commercial "C", NYASP Category A, NYASP Category B, State Forms, EDD Format, Other, Commercial "A" = Results Only, Commercial "B" = Results + QC Summary, NJ Reduced = Results + QC Summary + Partial Raw data, Sample inventory is verified upon receipt in the Laboratory

Relinquished by Sampler, Date Time, Received By, Date Time, Relinquished by, Date Time, Received By, Date Time, Relinquished by, Date Time, Received By, Date Time, Custody Seal #, Intact, Preserved where applicable, Cooler Temp

Initial Assessment: 734

2.2 d, 0.3°C



TOXICITY CHARACTERISTIC LEACHING PROCEDURE FOR METALS & EXTRACTABLES, METHOD SW846 1311 (TCLPE)

NOTE: Only one lot of fluid 1 or fluid 2 may be used per sheet. Lots shown on page 2.

TC Batch ID: TCO760

Bull 18

TCLPE

Samples		Container			Leaching Dates		Leaching Times			Extracted Masses			Preliminary Evaluation				Extraction Fluid							
Sample ID	PS?*(Y/N)	No.	Type	Rot.	Started	Stopped	Start	Earliest Stop	Latest Stop	Actual Stop	Grams Total	%SOL	Grams Solid	Buffer TV	Step1 pH	Step 1 spin	Buffer TV	Step2 pH	Fluid #	pH	Pass?	Vol. (mL)	Buffer TV	Final pH
PH Buffer														4.00	NA		4.00	NA	#1 pH = 4.93 ± 0.05 #2 pH = 2.88 ± 0.05				4.00	4.05
PH Buffer													7.00	NA		7.00	NA						7.00	6.98
PH Buffer													10.00	NA		10.00	NA						10.00	9.99
*LB (fluid #1)					23-Dec-21	23-Dec-21	FILTER			ONLY	NA	NA	NA	NA	NA	NA	NA	NA	1	DI	NO	2000	NA	5.85
*LB (fluid #2)		No fluid 2 samples leached			23-Dec-21	23-Dec-21					NA	NA	NA	NA	NA	NA	NA	NA	2		NO	2000	NA	
*JD35488-7					23-Dec-21	23-Dec-21	FILTER			ONLY	100	0.0	NA		5 mins	NA			1	DI	NO		NA	7.32
											100	0.0	NA		5 mins	NA			1	DI	NO		NA	
											100	0.0	NA		5 mins	NA			1	DI	NO		NA	
											100	0.0	NA		5 mins	NA			1	DI	NO		NA	
											100	0.0	NA		5 mins	NA			1	DI	NO		NA	
											100	0.0	NA		5 mins	NA			1	DI	NO		NA	
											100	0.0	NA		5 mins	NA			1	DI	NO		NA	
											100	0.0	NA		5 mins	NA			1	DI	NO		NA	
											100	0.0	NA		5 mins	NA			1	DI	NO		NA	
											100	0.0	NA		5 mins	NA			1	DI	NO		NA	
											100	0.0	NA		5 mins	NA			1	DI	NO		NA	
											100	0.0	NA		5 mins	NA			1	DI	NO		NA	
											100	0.0	NA		5 mins	NA			1	DI	NO		NA	
											100	0.0	NA		5 mins	NA			1	DI	NO		NA	
PH Buffer														4.00	NA		4.00	NA					4.00	4.10
PH Buffer														4.00	NA		4.00	NA					7.00	7.00
											100	0.0	NA		5 mins	NA			1	DI	NO		NA	
											100	0.0	NA		5 mins	NA			1	DI	NO		NA	
											100	0.0	NA		5 mins	NA			1	DI	NO		NA	
											100	0.0	NA		5 mins	NA			1	DI	NO		NA	
											100	0.0	NA		5 mins	NA			1	DI	NO		NA	
											100	0.0	NA		5 mins	NA			1	DI	NO		NA	
											100	0.0	NA		5 mins	NA			1	DI	NO		NA	
											100	0.0	NA		5 mins	NA			1	DI	NO		NA	
											100	0.0	NA		5 mins	NA			1	DI	NO		NA	
											100	0.0	NA		5 mins	NA			1	DI	NO		NA	
PH Buffer														4.00	NA		4.00	NA					4.00	
PH Buffer														4.00	NA		4.00	NA					10.00	

Comments and additional information continued on the next page. (*PS=particle sizing)

Data Reviewer/Date: _____

Set-up analyst: JD

Take-down analyst: JD

***=samples in this project.**

TC Batch ID: TCO760

Temperature ranges during leaching. (Must be from 21-25 degrees C, or 69.8-77 degrees F, and recorded daily for all probes).

Balance ID: B-54

pH meter ID: 67

Probe ID	Uncorrected Temperatures			Corrected Temperatures		For rotator(s)
	Minimum	Maximum	CF	Minimum	Maximum	
56418			0			7 & 8
50266			0			9 & 10
56717			0			4
45776			0			5
49504			0			11 & 12

Rotator revolution rates. (Must be from 28-32 rpm, and check weekly for all rotators).

Rotator ID:	Rate:	Last measured:
4	NA	NA
7	NA	NA
8	NA	NA
9	NA	NA
10	NA	NA
11	NA	NA
12	N/A	NA

Reagent Information

Reagent	Reagent ID or Manufacturer Lot	Expiration Date
Extraction fluid 1	DI H2O	
Extraction fluid 2		
TCLP filters	Env. Exp. Lot 113883-1320-AG	N/A
Filter acid-rinse solution	GNE12-68095-TCLP	3-Jun-2022
pH 2 buffer	FISHER 210051	1-Mar-2023
pH 4 buffer	FISHER 207758	1-Jan-2023
pH 7 buffer	FISHER 213754	1-Jun-2023
pH 10 buffer	FISHER 202303	1-Jun-2022
pH 12 buffer	N/A	N/A
pH 13 buffer	SPECTRUM 1KC0229	1-Apr-2022
Nitric acid, concentrated	J.T. BAKER 0000282671	3-Dec-2026
Nitric acid, 1N	N/A	N/A
1N HCl		

Form: AGN-TCLPE-04
 Revised: 18-JUN-2017
 Validated: Anthony Dapaah
 Date: 18-JUN-2017

B6118

ORIGIN ID:ZRPA (732) 329-0200
SAMPLE MANAGEMENT
SGS NORTH AMERICA INC.
2235 US HIGHWAY 130

SHIP DATE: 27DEC21
ACTWGT: 61.75 LB
CAD: 0692838/CAFE3211

DAYTON, NJ 08810
UNITED STATES US

BILL SENDER

TO **SAMPLE RECEIVING**
SGS EHS WILMINGTON
5500 BUSINESS DRIVE

12/28/2021
9:59
0.3° (T.B.)

WILMINGTON NC 28405

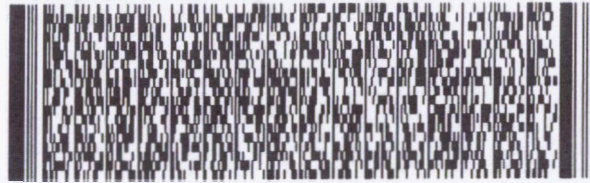
(910) 794-1813

REF:

INU:

DEPT:

PO:



FedEx
Express



J181118060501 00

1 of 2

TRK# 5272 0637 5560
0201

MASTER

GE ILMA

TUE - 28 DEC 11:30A
PRIORITY OVERNIGHT

28405
NC-US RDU

Part # 156148-434 MTW EXP 08/22



ORIGIN ID:ZRPA (732) 329-0200
SAMPLE MANAGEMENT
SGS NORTH AMERICA INC.
2235 US HIGHWAY 130

SHIP DATE: 27DEC21
ACTWGT: 19.85 LB
CAD: 0692838/CAFE3211

DAYTON, NJ 08810
UNITED STATES US

BILL SENDER

TO **SAMPLE RECEIVING**
SGS EHS WILMINGTON
5500 BUSINESS DRIVE

12/28/2021
9:59
0.4° (T.B.)

WILMINGTON NC 28405

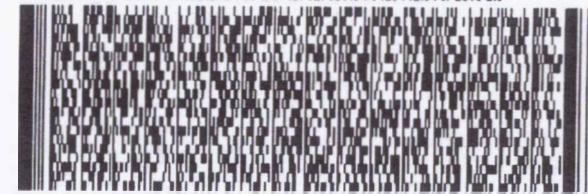
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