



April 1, 2020
File: PU19214A

Ms. Alisha Piper
City of Kennewick
P.O. Box 6108
210 West 6th Avenue
Kennewick, Washington 99336
509.585.4432
Alisha.piper@ci.kennewick.wa.us

RE: **Phase II Environmental Site Assessment**
RFP 19-026, Proposed Public Housing Site
414 E 10th Avenue
Kennewick, Washington

Good day, Alisha.

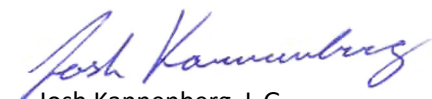
GeoProfessional Innovation Corporation (GPI) is pleased to provide this Phase II Environmental Site Assessment (ESA) for the City of Kennewick's (City) property located at 414 East 10th Avenue in Kennewick, Washington. GPI accomplished our scope of services, referencing ASTM E1903-19 and GPI's proposed scope of service dated October 24, 2019.

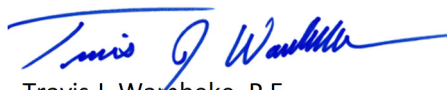
GPI prepared a Phase I ESA at the site and identified recognized environmental conditions (RECs). The 2 waste oil underground storage tanks (USTs) installed south of the vehicle maintenance shop have been in place for approximately 40 years and represents a site REC. The site has operated as the City's maintenance shop facility since the 1950s. The site's historic use as a vehicle repair and maintenance facility, including use of the wash rack on the east side of the oil/lube building, for approximately 70 years, represents a REC.

This Phase II ESA report documents investigation of potential impacts to subsurface soil from the RECs identified in the phase I ESA and unknown subsurface anomalies identified during the geophysical survey. GPI coordinated with Washington DOE regarding our soil sampling plan and analytical methods prior to advancing fieldwork. GPI, then coordinated field activities with the City and conducted the subsurface investigation and soil sampling. This Phase II ESA report documents our subsurface investigation and summarizes the soil sample analytical results compared to the DOE Model Toxics Control Act (MTCA) Method A cleanup levels.

This report is for the exclusive use of the City and the Kennewick Housing Authority (KHA). We do not authorize its use to other parties without the express written permission of the City and GPI. This evaluation reflects only conditions reported and/or observed at the site and at the time of this evaluation. This acknowledgement is in lieu of any express or implied warranties. We appreciate the opportunity to work with you on this project and stand ready to assist the City with environmental or other GeoProfessional consulting needs during future redevelopment on the project.

Sincerely,
GPI


Josh Kannenberg, L.G.
Environmental Services Manager


Travis J. Wambke, P.E.
Principal Engineer

Phase II Environmental Site Assessment

RFP 19-026, Proposed Public Housing Site
414 E 10th Avenue
Kennewick, Washington

PREPARED FOR:

Ms. Alisha Piper
City of Kennewick
P.O. Box 6108
210 West 6th Avenue
Kennewick, Washington 99336
509.585.4432
Alisha.piper@ci.kennewick.wa.us



PREPARED BY:

GPI
6 O'Donnell Road
Pullman, Washington 99163
509.339.2000

Report Date: April 1, 2020

TABLE OF CONTENTS

INTRODUCTION.....	1
GEOPHYSICAL SURVEY	1
DOE COORDINATION AND APPROVAL.....	2
SUBSURFACE EXPLORATION AND SOIL SAMPLING.....	2
GeoProbe Soil Borings.....	2
Soil Sampling	3
LABORATORY ANALYTICAL RESULTS.....	3
Soil Analytical Results.....	3
Quality Control Evaluation	4
LIMITATIONS	4
CONCLUSIONS.....	4
RECOMMENDATIONS	4

REPORT PLATES

Plate 1 - Exploration Map

Appendix A – Boring Logs

Appendix B – Photographic Log

Appendix C - Soil Sample Analytical Data Tables and Laboratory Analytical Reports

LIST OF ACRONYMS

BTEXN	Benzene, toluene, ethylbenzene, total xylenes, and naphthalene
COC	Chemical of concern
DEQ	Idaho Department of Environmental Quality
EDB	Ethylene Dibromide
EDC	1,2-Dichlorethane
EPA	U.S. Environmental Protection Agency
ESA	Environmental Site Assessment
ESC	Environmental Science Corporation
GC/MS	Gas Chromatograph/Mass Spectrometer
HASP	Health and Safety Plan
HI	Hazard Index
IDTLs	Initial Default Target Levels
IDW	Investigation Derived Waste
MDL	Method Detection Limit
mg/kg	Milligrams per kilogram
MTBE	Methyl tert-Butyl Ether
PAHs	Polycyclic Aromatic Hydrocarbons
PID	Photo-ionization Detector
POE	Point of Exposure
PQL	Practical Quantitative Limit
QAPP	Quality Assurance Project Plan
RATL	Remedial Action Target Level
RE-2	Tier 2 Risk Evaluation
REM	Risk Evaluation Manual
RPD	Relative Percent Difference
SCLs	Residential Use Screening Levels
VOCs	Volatile organic compounds

Phase II Environmental Site Assessment
RFP 19-026, Proposed Public Housing Site
414 E 10th Avenue
Kennewick, Washington

INTRODUCTION

GeoProfessional Innovation Corporation (GPI) is providing this authorized Phase II Environmental Site Assessment (ESA) for the City of Kennewick's (City's) property located at 414 East 10th Avenue in Kennewick, Washington. We performed the Phase II ESA referencing our proposal dated October 28, 2019 and referencing ASTM E1903-19 *Standard Practice for Environmental Site Assessments: Phase II Environmental Site Assessment Process*. The property is referred to as the 'site' in this report.

GPI prepared a Phase I ESA at the site and identified recognized environmental conditions (RECs). The 2 waste oil underground storage tanks (USTs) installed south of the vehicle maintenance shop have been in place for approximately 40 years and represents a site REC. The site has operated as the City of Kennewick's (City's) maintenance shop facility since the 1950s. The site's historic use as a vehicle repair and maintenance facility, including use of the wash rack on the east side of the oil/lube building, for approximately 70 years, represents a REC.

Our scope of services included a geophysical survey of the site to help identify subsurface features and anomalies using ground penetrating radar (GPR) and electro-magnetic (EM) induction equipment. The purpose of this Phase II ESA is to investigate potential impacts to subsurface soil from the RECs identified in the phase I ESA and unknown subsurface anomalies identified during the geophysical survey. Based on the findings of our Phase I ESA report and the geophysical survey, GPI coordinated with Washington DOE regarding a Phase II ESA including subsurface investigation and soil sampling to assess the RECs identified in the Phase I ESA.

The purpose of this Phase II ESA is to investigate potential impacts to subsurface soil from the RECs identified in the phase I ESA and unknown subsurface anomalies identified during the geophysical survey. GPI coordinated with Washington DOE regarding our soil sampling plan and analytical methods prior to advancing fieldwork. GPI, then coordinated field activities with the City and conducted the subsurface investigation and soil sampling. This Phase II ESA report documents our subsurface investigation and summarizes the soil sample analytical results compared to the DOE *Model Toxics Control Act (MTCA) Method A* cleanup levels.

GEOPHYSICAL SURVEY

We subcontracted geophysical survey services by Geophysical Survey, LLC to survey the subsurface of the site. Mr. Mark Villa, L.G., performed the geophysical survey on December 19, 2019. Survey methods included GPR and EM survey equipment to help identify subsurface anomalies such as metal, voids, debris, and similar conditions. Mr. Villa conducted the EM survey using a Geonics EM-61MKII high sensitivity metal detector. Data was collected on transects spaced approximately 5 feet apart in the exposed soil/aggregate areas of the site. Data was recorded at 5 readings per second along each transect and digitally recorded on an Allegro CX data logger using NAV61 software from Geomar.

Mr. Villa collected GPR data using a GSSI G1 and SIR4000 control unit and a 350 MHz antenna. GPR data was collected across identified EM anomalies. Location control was established using a Trimble Pro6H GNSS receiver outputting a NMEA GGA string to the Allegro CX data logger. EM data is converted to NAD83 State Plane coordinates using Didger from Golden Software. Geo-referenced data was gridded and contoured using Surfer 13 from Golden Software.

The geophysical survey confirmed the location of the 2 waste oil USTs on the south side of the fleet

maintenance building. The estimated subsurface area of the USTs was painted on the ground surface to aid in positioning soil borings for future exploration of the USTs. In addition to the waste oil USTs, the geophysical survey also identified unknown metallic anomalies and 1 non-metallic anomaly south of the current SWAT storage building. The location of these features are shown in the geophysical survey report and on Plate 1, Exploration Map.

DOE COORDINATION AND APPROVAL

GPI's scope of services included coordinating and submitting a sampling plan to the DOE for their approval. Once GPI had identified areas planned for subsurface investigation based on the RECs identified during the Phase I ESA and subsurface anomalies in the geophysical survey, GPI contacted the DOE to discuss the sampling plan. GPI contacted Mr. Jeff Newschwander with the DOE Central Region Toxics Cleanup Department regarding a sampling plan submittal. Mr. Newschwander explained that the DOE does not offer 3rd Party review or approval of sampling plans unless there is a Voluntary Cleanup Program (VCP) agreement in place for a site. In the case of the City's property, there is no need to enter the VCP unless petroleum or hazardous material contamination was confirmed at the site that would necessitate cleanup action. Mr. Newschwander directed GPI to the DOE guidance documents regarding the investigation of releases from waste oil tanks to confirm our proposed analytical test methods were appropriate for the waste oil tanks. He advised GPI to contact the DOE if petroleum contamination exceeding cleanup levels at the site was identified. If the results of the subsurface investigation did not find evidence of contamination, then entering the VCP program or submittal of a quality assurance project plan (QAPP) was not applicable for the site.

GPI referenced the DOE guidance documents including *Table 830-7: Required Testing for Petroleum Releases* from the MTCA Cleanup regulation, dated October 12, 2007. GPI also referenced the DOE's *Guidance on Sampling and Data Analysis Methods*, dated January 1995, Publication No. 94-49. GPI confirmed that our selected analytical methods, quality control (QC) procedures, and accreditation for the analytical laboratory met the requirements outlined in the guidance documents.

SUBSURFACE EXPLORATION AND SOIL SAMPLING

GPI mobilized to the site on March 19, 2020 to perform the soil boring and sampling activities. Using a truck-mounted Geoprobe 5400 drill rig, a total of 9 borings were advanced, logged, and sampled. The boring locations are presented on Plate 1, *Exploration Map*. Boring logs are presented in Appendix A. A photographic log of the boring locations and field activities is included in Appendix B.

GeoProbe Soil Borings

The 9 boring locations include: the area surrounding the 2 waste oil USTs south of the fleet maintenance shop (B-19214-1 through B-19214-5); adjacent to the wash rack catch basins on the east side of the oil/lube building (B-19214-6 and B-19214-7); subsurface anomalies identified during the geophysical survey (B-19214-8 and B-19214-9).

Waste oil UST soil samples (B-19214-1 through B-19214-5): The 5 borings advanced around the waste oil USTs were located immediately adjacent to east and west sides of the USTs and on the south end of the tank. The boring depths ranged from 4.0- 16.0-feet below the ground surface. Each of these 5 borings were advanced until drill equipment refusal on dense gravel and cobbles. Based on the reported size of the waste oil tanks and the outlined width of the tanks provided by the geophysical survey, we estimate the bottom of the tanks to be approximately 4.0- to 6.0- feet below the ground surface. Soil lithology near the waste oil tanks was observed as brown, poorly graded gravel with sand and brown silty sand fill that was loose to medium dense and moist from the surface to approximately 8.0-feet below the surface in the borings surrounding the waste oil USTs. GPI observed brown poorly graded gravel with sand alluvium beneath the fill to the termination depths in borings B-19214-1 and B-19214-4.

Wash Rack samples (B-19214-6 and B-19214-7): In borings near the wash rack catch basins, brown silty sand fill that was loose and moist to wet extended to approximately 4.0-feet below the surface. The fill was underlain by brown poorly graded gravel with sand alluvium, that was medium dense to dense and moist to the termination depth of 12.0-feet in each boring.

Unknown subsurface anomalies (B-19214-8 and B-19214-9): The same profile of fill was observed to a depth of 4.0-feet underlain by alluvium to the termination depth of 14.5-feet was observed in boring B-19214-8, near a non-metallic subsurface anomaly identified south of the current police storage building. The remaining boring B-19214-9 was advanced near a metallic anomaly on the south side of the site near the vehicle impound lot and comprised brown poorly graded gravel with sand fill to a depth of approximately 4.0-feet underlain by brown poorly grade gravel alluvium to the termination depth of 8 feet.

Soil Sampling

Soil samples were collected continuously in 4.0-foot long sections using new polypropylene plastic liners within the GeoProbe tooling for each sample interval. Each sample was field-screened using a 10.6-electron volt photo-ionization detector (PID) to assess volatile organic compound (VOC) concentrations. Upon completing the exploratory borings, we did not detect elevated PID readings (above 10.0 ppm) in the soil borings; therefore, GPI collected a sample from each boring at the approximate UST base or the bottom of the boring for laboratory analysis.

GPI collected 13 total samples including 2 duplicate samples. Samples were analyzed for the following contaminants of concern (COCs):

- ☒ BTEXN, by Environmental Protection Agency (EPA) Method 8260B (referencing EPA Method 5035)
- ☒ VOCs full suite by Method 8260B (waste oil samples only)
- ☒ PAHs by EPA Method 8270C-SIM
- ☒ PCBs by EPA Method 8082 (waste oil samples only)
- ☒ Total lead by EPA Method 6010 (waste oil samples only)

Soil samples were placed in laboratory-supplied containers and shipped to Pace National Laboratory (Pace) in Mt. Juliet, Tennessee under standard chain-of-custody procedures.

LABORATORY ANALYTICAL RESULTS

Soil Analytical Results

The following summarizes the results of laboratory analyses performed on the soil samples. Laboratory result summaries are presented in Tables B-1 of Appendix B.

Soil sample analytical results were compared to Washington DOE's MTCA Method A SCLs. The laboratory analytical report (ESC Report No. L1201677) is included in Appendix C. Each sample identification corresponds to the boring number and the sample depth below the ground surface, i.e. soil sample B-1-8' is from Boring B-19049-1 at 8 feet below the ground surface. The following summarizes the soil sample results:

Waste oil UST soil samples (B-19214-1 through B-19214-5): VOC and PAH analytes were reported above the laboratory Method Detection Limits (MDLs) but several orders of magnitude below the respective MTCA Method A SCLs. PCBs were not detected above the laboratory MDL except for in sample B-2-4', which was below the SCLs. Total lead concentrations in the waste oil UST samples ranged from 3.46 to 35.7 milligrams per kilogram (mg/kg), which is below the 250 mg/kg SCL.

Wash Rack samples (B-19214-6 and B-19214-7): VOC and PAH analytes were reported above the laboratory Method Detection Limits (MDLs), but several orders of magnitude below the respective MTCA Method A SCLs.

Unknown subsurface anomalies (B-19214-8 and B-19214-9): BTEX and PAH analytes were reported above the laboratory Method Detection Limits (MDLs), but several orders of magnitude below the respective MTCA Method A SCLs.

Based on the soil samples results, evidence of a release from the waste oil USTs was not identified. Exploration and resulting soil samples near the wash rack and subsurface anomalies identified during the geophysical survey did not show evidence of impacts to the subsurface.

Quality Control Evaluation

GPI reviewed laboratory quality control samples in the analytical reports and submitted a field blank (trip blank) with the soil samples for analysis. The analytical data for soil and groundwater are considered acceptable and have met the quality control and quality assurance objectives and goals for this project. The following was identified during the review:

- ☒ Laboratory blank soil samples were not detected above the method blank reporting limit.
- ☒ Laboratory control sample percent recoveries were within established criteria.
- ☒ Soil surrogate recoveries were within established criteria.
- ☒ VOC analytes were not detected in the trip blanks.
- ☒ Soil duplicate sample RPDs were within acceptable levels of precision.

LIMITATIONS

Conditions may vary from those encountered at specific soil exploration explorations; the data, interpretations, findings, and our recommendations are based solely upon data obtained at the time and within the scope of these services. GPI's services were performed in a manner consistent with generally accepted practices of the profession undertaken in similar situations in the same geographical area during the same time period. GPI makes no warranties, either express or implied, regarding the findings, opinions, or recommendations. These Phase II ESA services were performed in reference to our October 24, 2019, proposal, and were not restricted by or in strict conformance with ASTM E1903-19 *Standard Practice for Environmental Site Assessments: Phase II Environmental Site Assessment Process*.

Certain indicators of the presence of hazardous substances, petroleum products, or other constituents may have been latent, inaccessible, unobservable, non-detectable, or not present during these services, and we cannot represent the site contains no hazardous substances, toxic materials, petroleum products, or other latent conditions.

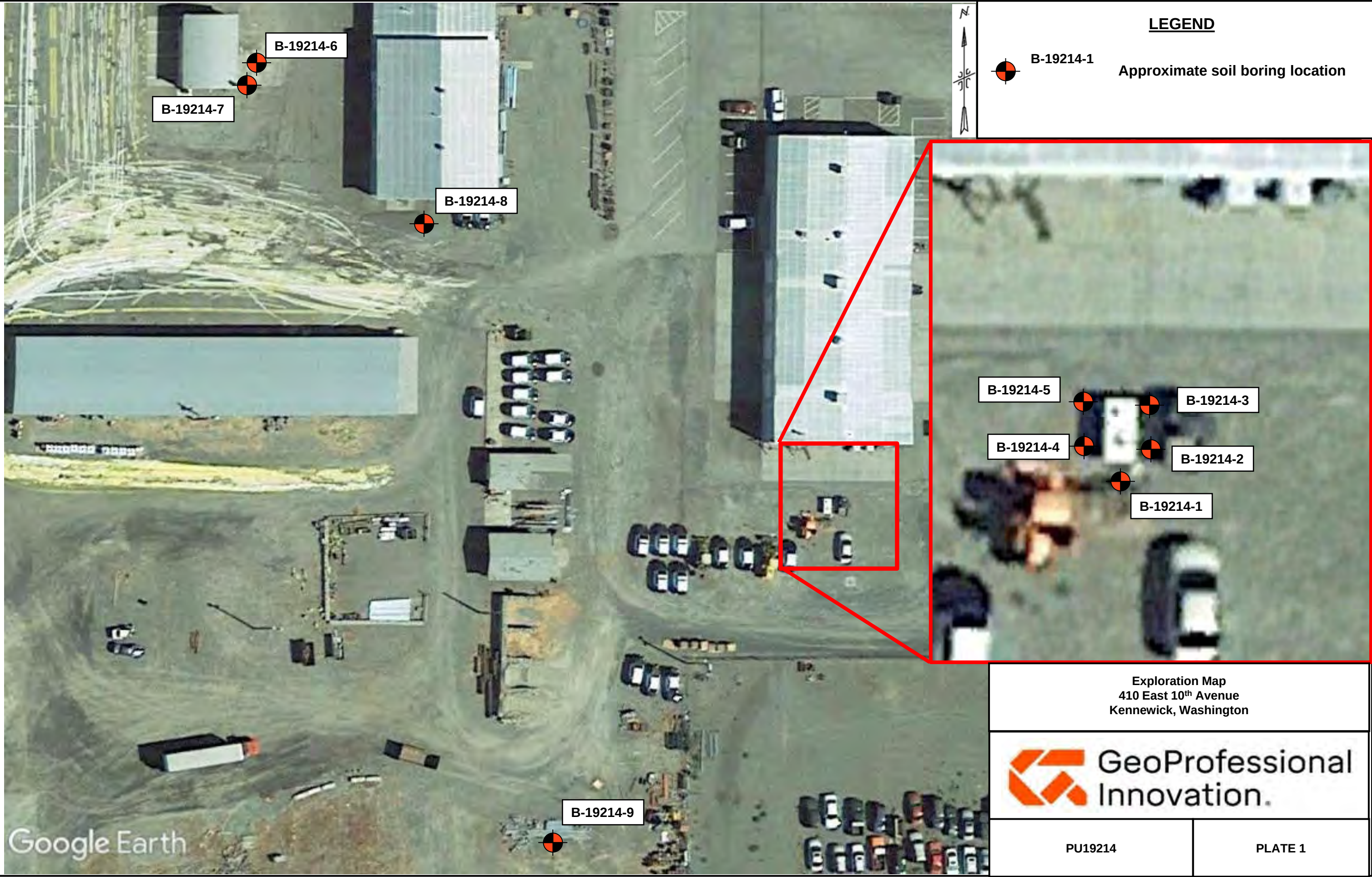
CONCLUSIONS

Phase II ESA subsurface investigation including soil borings and soil sampling, was conducted on March 19, 2020. Soil and samples were submitted for laboratory analysis. Based on the soil samples results, evidence of a release from the waste oil USTs was not identified. Exploration and resulting soil samples near the wash rack and subsurface anomalies identified during the geophysical survey did not show evidence of impacts to the subsurface.

RECOMMENDATIONS

GPI recommends an environmental professional be present to observe and document the condition of the waste oil USTs during future removal. GPI is uniquely suited, based on our knowledge and assessment of the

site, to offer environmental continuity on the project by providing this oversight. We stand ready to offer our services and remain available during future demolition and redevelopment activities at the site. We are proud to be part of this important project for the City of Kennewick and look forward to continuing our environmental consulting services as this project moves forward.



Reference: Google Earth aerial imagery, July 20, 2018. No scale intended.

APPENDIX A

Boring Logs

USCS Description	Depth (ft)	U.S.C.S. Class	Symbol	Sample Type	% Passing No. 200 Sieve	Dry Density (pcf)	Moisture Content (%)	Pocket Pen. (tsf)	Atterberg Limits LL PI	Remarks Note: BGS = Below Ground Surface
FILL - POORLY-GRADED GRAVEL, (GP) brown, loose to medium dense, moist	0.0	GP								PID = 0.3ppm
	2.5									
FILL - SILTY SAND, (SM) brown, medium dense, moist		SM								PID = 0.2ppm
	5.0	GP								PID = 0.7ppm
FILL - POORLY-GRADED GRAVEL, (GP) gray, medium dense to dense, moist	7.5									
	10.0	GP								PID = 0.4ppm
ALLUVIUM - POORLY-GRADED GRAVEL WITH SAND, (GP) brown, dense, moist	12.5									
	15.0									
Borehole Terminated at 16.0 Feet.										
Client: City of Kennewick		Boring Number: B-19214A-1							EXPLORATORY BORING LOG	
Project: Public Housing Site		Date Drilled: 03-19-2020								
Drill Rig: GEOPROBE 5400		Borehole Diameter: 3"								
Depth to Groundwater: N.E.		Logged By: JTK								
Sheet 1 Of 1										

USCS Description	Depth (ft)	U.S.C.S. Class	Symbol	Sample Type	% Passing No. 200 Sieve	Dry Density (pcf)	Moisture Content (%)	Pocket Pen. (tsf)	Atterberg Limits LL PI	Remarks Note: BGS = Below Ground Surface
FILL - POORLY-GRADED GRAVEL WITH SAND, (GP) brown, loose, moist	0.0	GP								PID = 0.4ppm
	2.5									
Borehole Terminated at 4.0 Feet.										

Client: City of Kennewick

Project: Public Housing Site

Drill Rig: GEOPROBE 5400

Depth to Groundwater: N.E.

Boring Number: B-19214A-2

Date Drilled: 03-19-2020

Borehole Diameter: 3"

Logged By: JTK

EXPLORATORY BORING LOG

Sheet 1 Of 1

USCS Description	Depth (ft)	U.S.C.S. Class	Symbol	Sample Type	% Passing No. 200 Sieve	Dry Density (pcf)	Moisture Content (%)	Pocket Pen. (tsf)	Atterberg Limits LL PI	Remarks Note: BGS = Below Ground Surface
FILL - POORLY-GRADED GRAVEL, (GP) brown, loose to medium dense, moist	0.0	GP								PID = 0.9ppm
	2.5									PID = 0.6ppm
Borehole Terminated at 6.5 Feet.										
Client: City of Kennewick Project: Public Housing Site Drill Rig: GEOPROBE 5400 Depth to Groundwater: N.E. Boring Number: B-19214A-3 Date Drilled: 03-19-2020 Borehole Diameter: 3" Logged By: JTK  EXPLORATORY BORING LOG Sheet 1 Of 1										

USCS Description	Depth (ft)	U.S.C.S. Class	Symbol	Sample Type	% Passing No. 200 Sieve	Dry Density (pcf)	Moisture Content (%)	Pocket Pen. (tsf)	Atterberg Limits LL PI	Remarks Note: BGS = Below Ground Surface
FILL - POORLY-GRADED GRAVEL WITH SAND, (GP) brown, loose to medium dense, moist	0.0	GP								PID = 0.9ppm
	2.5									PID = 1.2ppm
	5.0									
	7.5									
ALLUVIUM - POORLY-GRADED GRAVEL, (GP) brown, dense, moist		GP								PID = 0.6ppm
Borehole Terminated at 9.0 Feet.										

USCS Description	Depth (ft)	U.S.C.S. Class	Symbol	Sample Type	% Passing No. 200 Sieve	Dry Density (pcf)	Moisture Content (%)	Pocket Pen. (tsf)	Atterberg Limits LL PI	Remarks Note: BGS = Below Ground Surface	
FILL - POORLY-GRADED GRAVEL WITH SAND, (GP) brown, loose to medium dense, moist	0.0	GP								PID = 0.4ppm	
FILL - SILTY SAND, (SM) brown, medium dense, moist	2.5									SM	
Borehole Terminated at 4.0 Feet.											
Client: City of Kennewick		Boring Number: B-19214A-5							EXPLORATORY BORING LOG		
Project: Public Housing Site		Date Drilled: 03-19-2020									
Drill Rig: GEOPROBE 5400		Borehole Diameter: 3"									
Depth to Groundwater: N.E.		Logged By: JTK									
										Sheet 1 Of 1	

USCS Description	Depth (ft)	U.S.C.S. Class	Symbol	Sample Type	% Passing No. 200 Sieve	Dry Density (pcf)	Moisture Content (%)	Pocket Pen. (tsf)	Atterberg Limits LL PI	Remarks Note: BGS = Below Ground Surface
ASPHALT CONCRETE (2.0")	0.0									PID = 1.7ppm
FILL - SILTY SAND, (GP) brown, loose, moist to wet	2.5	GP								PID = 3.5ppm
ALLUVIUM - POORLY-GRADED GRAVEL WITH SAND, (GP) brown, medium dense to dense, moist	5.0									PID = 0.3ppm
	7.5	GP								PID = 0.3ppm
	10.0									
Borehole Terminated at 12.0 Feet.										
Client: City of Kennewick Project: Public Housing Site Drill Rig: GEOPROBE 5400 Depth to Groundwater: N.E. Boring Number: B-19214A-6 Date Drilled: 03-19-2020 Borehole Diameter: 3" Logged By: JTK  EXPLORATORY BORING LOG Sheet 1 Of 1										

GP1 TEST PIT - STRATA.GDT - 3/24/20 15:37 - V:\ENGINEERING\GINT FILES\2020\200319 PU19214 - PUBLIC HOUSING SITE.GPJ

USCS Description	Depth (ft)	U.S.C.S. Class	Symbol	Sample Type	% Passing No. 200 Sieve	Dry Density (pcf)	Moisture Content (%)	Pocket Pen. (tsf)	Atterberg Limits	Remarks
									LL PI	Note: BGS = Below Ground Surface
ASPHALT CONCRETE (2.0")	0.0									PID = 0.3ppm
FILL - POORLY-GRADED GRAVEL, (GP) gray, loose to medium dense, moist										
	2.5									PID = 0.3ppm
										PID = 0.5ppm
	5.0									
		GP								PID = 0.5ppm
	7.5									
	10.0									
Borehole Terminated at 12.0 Feet.										
Client: City of Kennewick		Boring Number: B-19214A-7							EXPLORATORY BORING LOG	
Project: Public Housing Site		Date Drilled: 03-19-2020								
Drill Rig: GEOPROBE 5400		Borehole Diameter: 3"								
Depth to Groundwater: N.E.		Logged By: JTK								
Sheet 1 Of 1										

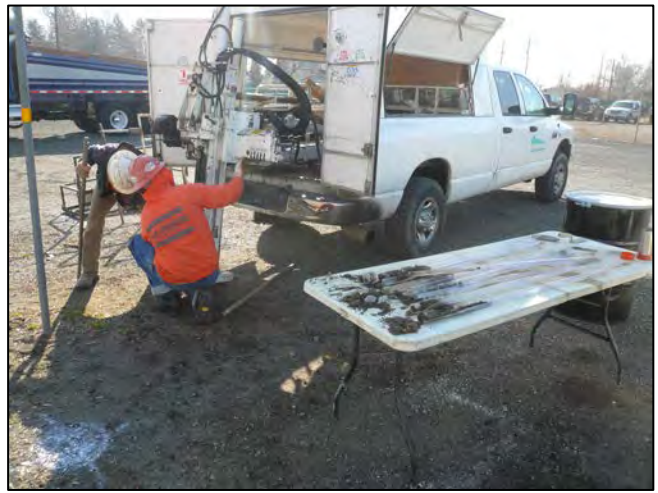
USCS Description	Depth (ft)	U.S.C.S. Class	Symbol	Sample Type	% Passing No. 200 Sieve	Dry Density (pcf)	Moisture Content (%)	Pocket Pen. (tsf)	Atterberg Limits LL PI	Remarks Note: BGS = Below Ground Surface
ASPHALT CONCRETE (2.0")	0.0									PID = 0.3ppm
FILL - SILTY SAND, (SM) brown, loose, moist	2.5	SM								
ALLUVIUM - POORLY-GRADED GRAVEL, (GP) grayish brown, medium dense to dense, moist	5.0									PID = 0.5ppm
	7.5									PID = 0.5ppm
	10.0	GP								PID = 0.3ppm
	12.5									
Borehole Terminated at 14.5 Feet.										
Client: City of Kennewick	Boring Number: B-19214A-8								EXPLORATORY BORING LOG Sheet 1 Of 1	
Project: Public Housing Site	Date Drilled: 03-19-2020									
Drill Rig: GEOPROBE 5400	Borehole Diameter: 3"									
Depth to Groundwater: N.E.	Logged By: JTK									

APPENDIX B

Photographic Log



Photograph 1: View of the area surrounding the Waste Oil USTs.



Photograph 2: Drilling Operations at B-19214-1.



Photograph 3: Close up view of soil samples from UST borings.



Photograph 4: Drilling near the wash rack east of the oil/lube building.



Photograph 5: View of the wash rack area.



Photograph 6: Close up of soil samples near the wash rack.

APPENDIX C

Soil Sample Analytical Data Tables and Laboratory Analytical Reports

GeoProfessional Innovation Corporation

Sample Delivery Group: L1201677
Samples Received: 03/21/2020
Project Number: PU19214
Description: City of Kennewick

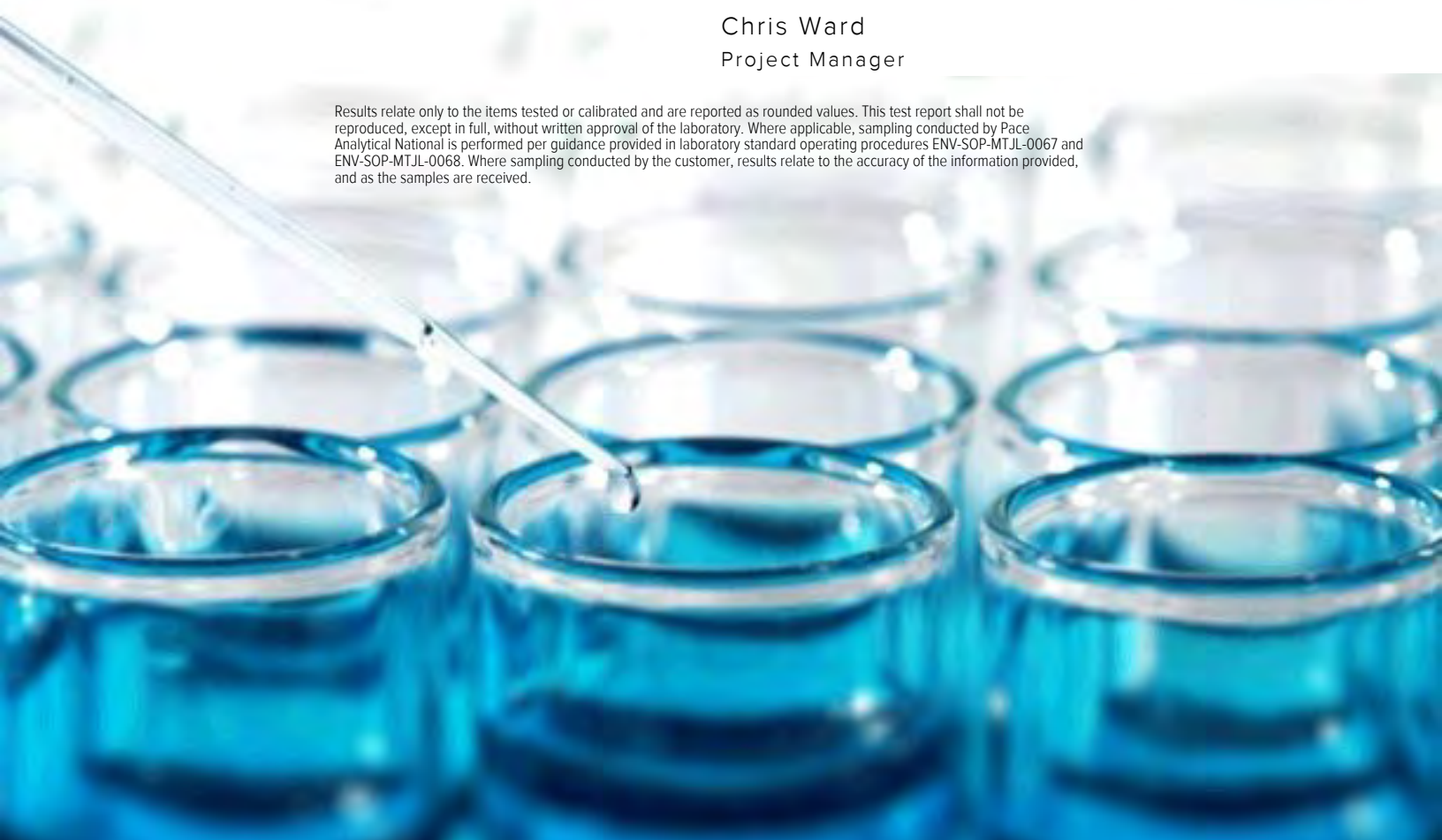
Report To: Josh Kannenberg
6 O'Donnell Road
Pullman, WA 99163

Entire Report Reviewed By:

Chris Ward

Chris Ward
Project Manager

Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by Pace Analytical National is performed per guidance provided in laboratory standard operating procedures ENV-SOP-MTJL-0067 and ENV-SOP-MTJL-0068. Where sampling conducted by the customer, results relate to the accuracy of the information provided, and as the samples are received.





Cp: Cover Page	1
Tc: Table of Contents	2
Ss: Sample Summary	3
Cn: Case Narrative	6
Sr: Sample Results	7
B-1-8' L1201677-01	7
B-1-12' L1201677-02	10
B-1-12D L1201677-03	13
B-2-4' L1201677-04	15
B-3-6.5' L1201677-05	18
B-4-8' L1201677-06	21
B-6-4' L1201677-07	24
B-6-4D L1201677-08	27
B-7-12' L1201677-09	30
B-8-4' L1201677-10	31
B-8-14 L1201677-11	32
B-9-3.5 L1201677-12	33
B-9-3.5 L1201677-13	34
Qc: Quality Control Summary	36
Total Solids by Method 2540 G-2011	36
Metals (ICP) by Method 6010D	39
Volatile Organic Compounds (GC/MS) by Method 8260D	40
Polychlorinated Biphenyls (GC) by Method 8082 A	53
Semi Volatile Organic Compounds (GC/MS) by Method 8270E-SIM	54
Gl: Glossary of Terms	56
Al: Accreditations & Locations	57
Sc: Sample Chain of Custody	58



SAMPLE SUMMARY

ONE LAB. NATIONWIDE.



B-1-8' L1201677-01 Solid

Collected by Josh Kannenberg
Collected date/time 03/19/20 09:28
Received date/time 03/21/20 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1449390	1	03/24/20 12:47	03/24/20 12:56	MT	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1449499	1	03/24/20 15:50	03/25/20 14:41	EL	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1449180	1.92	03/19/20 09:28	03/24/20 14:33	ACG	Mt. Juliet, TN
Polychlorinated Biphenyls (GC) by Method 8082 A	WG1449458	1	03/24/20 18:27	03/25/20 00:20	MTJ	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270E-SIM	WG1450433	1	03/26/20 06:00	03/26/20 11:00	DMG	Mt. Juliet, TN

¹ Cp

² Tc

³ Ss

⁴ Cn

B-1-12' L1201677-02 Solid

Collected by Josh Kannenberg
Collected date/time 03/19/20 09:45
Received date/time 03/21/20 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1449390	1	03/24/20 12:47	03/24/20 12:56	MT	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1449499	1	03/24/20 15:50	03/25/20 14:44	EL	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1449180	1.25	03/19/20 09:45	03/24/20 16:08	ACG	Mt. Juliet, TN
Polychlorinated Biphenyls (GC) by Method 8082 A	WG1449458	1	03/24/20 18:27	03/25/20 00:33	MTJ	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270E-SIM	WG1450433	1	03/26/20 06:00	03/26/20 11:23	DMG	Mt. Juliet, TN

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

B-1-12D L1201677-03 Solid

Collected by Josh Kannenberg
Collected date/time 03/19/20 10:00
Received date/time 03/21/20 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1449725	1	03/25/20 15:20	03/25/20 15:30	KBC	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1449180	1	03/19/20 10:00	03/24/20 16:46	DWR	Mt. Juliet, TN

⁹ Sc

B-2-4' L1201677-04 Solid

Collected by Josh Kannenberg
Collected date/time 03/19/20 10:32
Received date/time 03/21/20 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1449392	1	03/24/20 23:29	03/24/20 23:37	KDW	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1449499	1	03/24/20 15:50	03/25/20 14:47	EL	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1449180	1.01	03/19/20 10:32	03/24/20 17:05	DWR	Mt. Juliet, TN
Polychlorinated Biphenyls (GC) by Method 8082 A	WG1449458	1	03/24/20 18:27	03/25/20 00:45	MTJ	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270E-SIM	WG1450433	1	03/26/20 06:00	03/26/20 11:46	DMG	Mt. Juliet, TN

B-3-6.5' L1201677-05 Solid

Collected by Josh Kannenberg
Collected date/time 03/19/20 11:10
Received date/time 03/21/20 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1449392	1	03/24/20 23:29	03/24/20 23:37	KDW	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1449499	1	03/24/20 15:50	03/25/20 14:49	EL	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1449180	1.25	03/19/20 11:10	03/24/20 17:23	DWR	Mt. Juliet, TN
Polychlorinated Biphenyls (GC) by Method 8082 A	WG1449458	1	03/24/20 18:27	03/25/20 00:58	MTJ	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270E-SIM	WG1450433	1	03/26/20 06:00	03/26/20 12:09	DMG	Mt. Juliet, TN

B-4-8' L1201677-06 Solid

Collected by Josh Kannenberg
Collected date/time 03/19/20 11:30
Received date/time 03/21/20 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1449392	1	03/24/20 23:29	03/24/20 23:37	KDW	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1449499	1	03/24/20 15:50	03/25/20 14:52	EL	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1450543	1.36	03/19/20 11:30	03/26/20 10:00	JAH	Mt. Juliet, TN
Polychlorinated Biphenyls (GC) by Method 8082 A	WG1449458	1	03/24/20 18:27	03/25/20 01:10	MTJ	Mt. Juliet, TN

ACCOUNT:

GeoProfessional Innovation Corporation

PROJECT:

PU19214

SDG:

L1201677

DATE/TIME:

03/26/20 15:57

PAGE:

3 of 60

SAMPLE SUMMARY

ONE LAB. NATIONWIDE.



B-4-8' L1201677-06 Solid

Collected by
Josh Kannenberg

Collected date/time
03/19/20 11:30

Received date/time
03/21/20 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Semi Volatile Organic Compounds (GC/MS) by Method 8270E-SIM	WG1450433	1	03/26/20 06:00	03/26/20 12:31	DMG	Mt. Juliet, TN

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc

B-6-4' L1201677-07 Solid

Collected by
Josh Kannenberg

Collected date/time
03/19/20 12:28

Received date/time
03/21/20 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1449392	1	03/24/20 23:29	03/24/20 23:37	KDW	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1449499	1	03/24/20 15:50	03/25/20 14:54	EL	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1449180	1	03/19/20 12:28	03/24/20 17:42	DWR	Mt. Juliet, TN
Polychlorinated Biphenyls (GC) by Method 8082 A	WG1449458	1	03/24/20 18:27	03/25/20 01:22	MTJ	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270E-SIM	WG1450433	1	03/26/20 06:00	03/26/20 12:54	DMG	Mt. Juliet, TN

B-6-4D L1201677-08 Solid

Collected by
Josh Kannenberg

Collected date/time
03/19/20 12:30

Received date/time
03/21/20 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1449392	1	03/24/20 23:29	03/24/20 23:37	KDW	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1449499	1	03/24/20 15:50	03/25/20 14:57	EL	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1449180	1	03/19/20 12:30	03/24/20 18:01	DWR	Mt. Juliet, TN
Polychlorinated Biphenyls (GC) by Method 8082 A	WG1449458	1	03/24/20 18:27	03/25/20 01:35	MTJ	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270E-SIM	WG1450433	1	03/26/20 06:00	03/26/20 13:17	DMG	Mt. Juliet, TN

B-7-12' L1201677-09 Solid

Collected by
Josh Kannenberg

Collected date/time
03/19/20 13:38

Received date/time
03/21/20 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1449392	1	03/24/20 23:29	03/24/20 23:37	KDW	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1449489	1.38	03/19/20 13:38	03/24/20 23:36	DWR	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270E-SIM	WG1450433	1	03/26/20 06:00	03/26/20 14:49	DMG	Mt. Juliet, TN

B-8-4' L1201677-10 Solid

Collected by
Josh Kannenberg

Collected date/time
03/19/20 14:02

Received date/time
03/21/20 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1449392	1	03/24/20 23:29	03/24/20 23:37	KDW	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1449489	1	03/19/20 14:02	03/24/20 23:55	DWR	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270E-SIM	WG1450433	1	03/26/20 06:00	03/26/20 13:40	DMG	Mt. Juliet, TN

B-8-14 L1201677-11 Solid

Collected by
Josh Kannenberg

Collected date/time
03/19/20 14:30

Received date/time
03/21/20 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1449392	1	03/24/20 23:29	03/24/20 23:37	KDW	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1449489	1.05	03/19/20 14:30	03/25/20 00:14	DWR	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270E-SIM	WG1450433	1	03/26/20 06:00	03/26/20 14:26	DMG	Mt. Juliet, TN

ACCOUNT:

GeoProfessional Innovation Corporation

PROJECT:

PU19214

SDG:

L1201677

DATE/TIME:

03/26/20 15:57

PAGE:

4 of 60



B-9-3.5 L1201677-12 Solid

Collected by
Josh Kannenberg

Collected date/time
03/19/20 15:15

Received date/time
03/21/20 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1449392	1	03/24/20 23:29	03/24/20 23:37	KDW	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1449489	1.15	03/19/20 15:15	03/25/20 00:33	DWR	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270E-SIM	WG1450433	1	03/26/20 06:00	03/26/20 14:03	DMG	Mt. Juliet, TN

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ Gl⁸ Al⁹ Sc

B-9-3.5 L1201677-13 GW

Collected by
Josh Kannenberg

Collected date/time
03/19/20 00:00

Received date/time
03/21/20 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1449691	1	03/24/20 23:18	03/24/20 23:18	ADM	Mt. Juliet, TN



All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times, unless qualified or notated within the report. Where applicable, all MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.

Chris Ward
Project Manager

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	92.4		1	03/24/2020 12:56	WG1449390

Metals (ICP) by Method 6010D

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Lead	3.46		0.206	0.541	1	03/25/2020 14:41	WG1449499

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Acetone	U	<u>J3</u>	0.0285	0.0520	1.92	03/24/2020 14:33	WG1449180
Acrylonitrile	U		0.00395	0.0260	1.92	03/24/2020 14:33	WG1449180
Benzene	0.00176	<u>J</u>	0.000832	0.00208	1.92	03/24/2020 14:33	WG1449180
Bromobenzene	U		0.00219	0.0260	1.92	03/24/2020 14:33	WG1449180
Bromodichloromethane	U		0.00163	0.00520	1.92	03/24/2020 14:33	WG1449180
Bromoform	U		0.0125	0.0520	1.92	03/24/2020 14:33	WG1449180
Bromomethane	U		0.00769	0.0260	1.92	03/24/2020 14:33	WG1449180
n-Butylbenzene	U		0.00798	0.0260	1.92	03/24/2020 14:33	WG1449180
sec-Butylbenzene	U		0.00526	0.0260	1.92	03/24/2020 14:33	WG1449180
tert-Butylbenzene	U		0.00323	0.0104	1.92	03/24/2020 14:33	WG1449180
Carbon tetrachloride	U		0.00224	0.0104	1.92	03/24/2020 14:33	WG1449180
Chlorobenzene	U		0.00119	0.00520	1.92	03/24/2020 14:33	WG1449180
Chlorodibromomethane	U		0.000936	0.00520	1.92	03/24/2020 14:33	WG1449180
Chloroethane	U		0.00224	0.0104	1.92	03/24/2020 14:33	WG1449180
Chloroform	U		0.000863	0.00520	1.92	03/24/2020 14:33	WG1449180
Chloromethane	U		0.00289	0.0260	1.92	03/24/2020 14:33	WG1449180
2-Chlorotoluene	U		0.00192	0.00520	1.92	03/24/2020 14:33	WG1449180
4-Chlorotoluene	U		0.00235	0.0104	1.92	03/24/2020 14:33	WG1449180
1,2-Dibromo-3-Chloropropane	U		0.0106	0.0520	1.92	03/24/2020 14:33	WG1449180
1,2-Dibromoethane	U		0.00109	0.00520	1.92	03/24/2020 14:33	WG1449180
Dibromomethane	U		0.00208	0.0104	1.92	03/24/2020 14:33	WG1449180
1,2-Dichlorobenzene	U		0.00301	0.0104	1.92	03/24/2020 14:33	WG1449180
1,3-Dichlorobenzene	U		0.00353	0.0104	1.92	03/24/2020 14:33	WG1449180
1,4-Dichlorobenzene	U		0.00409	0.0104	1.92	03/24/2020 14:33	WG1449180
Dichlorodifluoromethane	U		0.00170	0.00520	1.92	03/24/2020 14:33	WG1449180
1,1-Dichloroethane	U		0.00119	0.00520	1.92	03/24/2020 14:33	WG1449180
1,2-Dichloroethane	U		0.000987	0.00520	1.92	03/24/2020 14:33	WG1449180
1,1-Dichloroethene	U		0.00104	0.00520	1.92	03/24/2020 14:33	WG1449180
cis-1,2-Dichloroethene	U		0.00143	0.00520	1.92	03/24/2020 14:33	WG1449180
trans-1,2-Dichloroethene	U		0.00298	0.0104	1.92	03/24/2020 14:33	WG1449180
1,2-Dichloropropane	U		0.00264	0.0104	1.92	03/24/2020 14:33	WG1449180
1,1-Dichloropropene	U		0.00145	0.00520	1.92	03/24/2020 14:33	WG1449180
1,3-Dichloropropane	U		0.00364	0.0104	1.92	03/24/2020 14:33	WG1449180
cis-1,3-Dichloropropene	U		0.00141	0.00520	1.92	03/24/2020 14:33	WG1449180
trans-1,3-Dichloropropene	U		0.00318	0.0104	1.92	03/24/2020 14:33	WG1449180
2,2-Dichloropropane	U		0.00165	0.00520	1.92	03/24/2020 14:33	WG1449180
Di-isopropyl ether	U		0.000728	0.00208	1.92	03/24/2020 14:33	WG1449180
Ethylbenzene	0.00260	<u>J</u>	0.00110	0.00520	1.92	03/24/2020 14:33	WG1449180
Hexachloro-1,3-butadiene	U		0.0264	0.0520	1.92	03/24/2020 14:33	WG1449180
Isopropylbenzene	U		0.00180	0.00520	1.92	03/24/2020 14:33	WG1449180
p-Isopropyltoluene	U		0.00484	0.0104	1.92	03/24/2020 14:33	WG1449180
2-Butanone (MEK)	0.0264	<u>B J</u>	0.0260	0.0520	1.92	03/24/2020 14:33	WG1449180
Methylene Chloride	U		0.0138	0.0520	1.92	03/24/2020 14:33	WG1449180
4-Methyl-2-pentanone (MIBK)	U		0.0208	0.0520	1.92	03/24/2020 14:33	WG1449180
Methyl tert-butyl ether	0.00141	<u>J</u>	0.000613	0.00208	1.92	03/24/2020 14:33	WG1449180

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

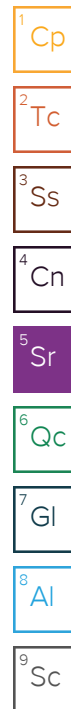


Collected date/time: 03/19/20 09:28

L1201677

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Naphthalene	U		0.00649	0.0260	1.92	03/24/2020 14:33	WG1449180
n-Propylbenzene	U		0.00246	0.0104	1.92	03/24/2020 14:33	WG1449180
Styrene	U		0.00567	0.0260	1.92	03/24/2020 14:33	WG1449180
1,1,1,2-Tetrachloroethane	U		0.00104	0.00520	1.92	03/24/2020 14:33	WG1449180
1,1,2,2-Tetrachloroethane	U		0.000811	0.00520	1.92	03/24/2020 14:33	WG1449180
1,1,2-Trichlorotrifluoroethane	U		0.00141	0.00520	1.92	03/24/2020 14:33	WG1449180
Tetrachloroethene	U		0.00145	0.00520	1.92	03/24/2020 14:33	WG1449180
Toluene	0.0174		0.00260	0.0104	1.92	03/24/2020 14:33	WG1449180
1,2,3-Trichlorobenzene	U		0.00130	0.0260	1.92	03/24/2020 14:33	WG1449180
1,2,4-Trichlorobenzene	U		0.0100	0.0260	1.92	03/24/2020 14:33	WG1449180
1,1,1-Trichloroethane	U		0.000572	0.00520	1.92	03/24/2020 14:33	WG1449180
1,1,2-Trichloroethane	U		0.00184	0.00520	1.92	03/24/2020 14:33	WG1449180
Trichloroethene	0.00722		0.000832	0.00208	1.92	03/24/2020 14:33	WG1449180
Trichlorofluoromethane	U		0.00104	0.00520	1.92	03/24/2020 14:33	WG1449180
1,2,3-Trichloropropane	U		0.0106	0.0260	1.92	03/24/2020 14:33	WG1449180
1,2,4-Trimethylbenzene	0.00826	J	0.00241	0.0104	1.92	03/24/2020 14:33	WG1449180
1,2,3-Trimethylbenzene	U		0.00239	0.0104	1.92	03/24/2020 14:33	WG1449180
Vinyl chloride	U		0.00142	0.00520	1.92	03/24/2020 14:33	WG1449180
1,3,5-Trimethylbenzene	U		0.00224	0.0104	1.92	03/24/2020 14:33	WG1449180
Xylenes, Total	0.0180		0.00994	0.0135	1.92	03/24/2020 14:33	WG1449180
(S) Toluene-d8	113			75.0-131		03/24/2020 14:33	WG1449180
(S) 4-Bromofluorobenzene	89.6			67.0-138		03/24/2020 14:33	WG1449180
(S) 1,2-Dichloroethane-d4	95.1			70.0-130		03/24/2020 14:33	WG1449180



Polychlorinated Biphenyls (GC) by Method 8082 A

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
PCB 1016	U		0.00379	0.0184	1	03/25/2020 00:20	WG1449458
PCB 1221	U		0.00581	0.0184	1	03/25/2020 00:20	WG1449458
PCB 1232	U		0.00452	0.0184	1	03/25/2020 00:20	WG1449458
PCB 1242	U		0.00344	0.0184	1	03/25/2020 00:20	WG1449458
PCB 1248	U		0.00341	0.0184	1	03/25/2020 00:20	WG1449458
PCB 1254	U		0.00511	0.0184	1	03/25/2020 00:20	WG1449458
PCB 1260	U		0.00535	0.0184	1	03/25/2020 00:20	WG1449458
(S) Decachlorobiphenyl	81.7			10.0-135		03/25/2020 00:20	WG1449458
(S) Tetrachloro-m-xylene	86.7			10.0-139		03/25/2020 00:20	WG1449458

Semi Volatile Organic Compounds (GC/MS) by Method 8270E-SIM

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Anthracene	U		0.000650	0.00650	1	03/26/2020 11:00	WG1450433
Acenaphthene	U		0.000650	0.00650	1	03/26/2020 11:00	WG1450433
Acenaphthylene	U		0.000650	0.00650	1	03/26/2020 11:00	WG1450433
Benzo(a)anthracene	U		0.000650	0.00650	1	03/26/2020 11:00	WG1450433
Benzo(a)pyrene	U		0.000650	0.00650	1	03/26/2020 11:00	WG1450433
Benzo(b)fluoranthene	U		0.000650	0.00650	1	03/26/2020 11:00	WG1450433
Benzo(g,h,i)perylene	U		0.000650	0.00650	1	03/26/2020 11:00	WG1450433
Benzo(k)fluoranthene	U		0.000650	0.00650	1	03/26/2020 11:00	WG1450433
Chrysene	U		0.000650	0.00650	1	03/26/2020 11:00	WG1450433
Dibenz(a,h)anthracene	U		0.000650	0.00650	1	03/26/2020 11:00	WG1450433
Fluoranthene	U		0.000650	0.00650	1	03/26/2020 11:00	WG1450433
Fluorene	U		0.000650	0.00650	1	03/26/2020 11:00	WG1450433
Indeno(1,2,3-cd)pyrene	U		0.000650	0.00650	1	03/26/2020 11:00	WG1450433
Naphthalene	U		0.00217	0.0217	1	03/26/2020 11:00	WG1450433
Phenanthrene	U		0.000650	0.00650	1	03/26/2020 11:00	WG1450433

Semi Volatile Organic Compounds (GC/MS) by Method 8270E-SIM

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Pyrene	U		0.000650	0.00650	1	03/26/2020 11:00	WG1450433
1-Methylnaphthalene	U		0.00217	0.0217	1	03/26/2020 11:00	WG1450433
2-Methylnaphthalene	U		0.00217	0.0217	1	03/26/2020 11:00	WG1450433
2-Chloronaphthalene	U		0.00217	0.0217	1	03/26/2020 11:00	WG1450433
(S) Nitrobenzene-d5	68.5			14.0-149		03/26/2020 11:00	WG1450433
(S) 2-Fluorobiphenyl	72.0			34.0-125		03/26/2020 11:00	WG1450433
(S) p-Terphenyl-d14	74.3			23.0-120		03/26/2020 11:00	WG1450433

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	94.2		1	03/24/2020 12:56	WG1449390

Metals (ICP) by Method 6010D

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Lead	4.76		0.202	0.531	1	03/25/2020 14:44	WG1449499

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Acetone	U	J3	0.0182	0.0332	1.25	03/24/2020 16:08	WG1449180
Acrylonitrile	U		0.00253	0.0166	1.25	03/24/2020 16:08	WG1449180
Benzene	0.00150		0.000531	0.00133	1.25	03/24/2020 16:08	WG1449180
Bromobenzene	U		0.00139	0.0166	1.25	03/24/2020 16:08	WG1449180
Bromodichloromethane	U		0.00105	0.00332	1.25	03/24/2020 16:08	WG1449180
Bromoform	U		0.00794	0.0332	1.25	03/24/2020 16:08	WG1449180
Bromomethane	U		0.00492	0.0166	1.25	03/24/2020 16:08	WG1449180
n-Butylbenzene	U		0.00510	0.0166	1.25	03/24/2020 16:08	WG1449180
sec-Butylbenzene	U		0.00336	0.0166	1.25	03/24/2020 16:08	WG1449180
tert-Butylbenzene	U		0.00206	0.00664	1.25	03/24/2020 16:08	WG1449180
Carbon tetrachloride	U		0.00143	0.00664	1.25	03/24/2020 16:08	WG1449180
Chlorobenzene	U		0.000760	0.00332	1.25	03/24/2020 16:08	WG1449180
Chlorodibromomethane	U		0.000598	0.00332	1.25	03/24/2020 16:08	WG1449180
Chloroethane	U		0.00143	0.00664	1.25	03/24/2020 16:08	WG1449180
Chloroform	U		0.000551	0.00332	1.25	03/24/2020 16:08	WG1449180
Chloromethane	U		0.00185	0.0166	1.25	03/24/2020 16:08	WG1449180
2-Chlorotoluene	U		0.00122	0.00332	1.25	03/24/2020 16:08	WG1449180
4-Chlorotoluene	U		0.00150	0.00664	1.25	03/24/2020 16:08	WG1449180
1,2-Dibromo-3-Chloropropane	U		0.00678	0.0332	1.25	03/24/2020 16:08	WG1449180
1,2-Dibromoethane	U		0.000697	0.00332	1.25	03/24/2020 16:08	WG1449180
Dibromomethane	U		0.00133	0.00664	1.25	03/24/2020 16:08	WG1449180
1,2-Dichlorobenzene	U		0.00192	0.00664	1.25	03/24/2020 16:08	WG1449180
1,3-Dichlorobenzene	U		0.00225	0.00664	1.25	03/24/2020 16:08	WG1449180
1,4-Dichlorobenzene	U		0.00261	0.00664	1.25	03/24/2020 16:08	WG1449180
Dichlorodifluoromethane	U		0.00108	0.00332	1.25	03/24/2020 16:08	WG1449180
1,1-Dichloroethane	U		0.000764	0.00332	1.25	03/24/2020 16:08	WG1449180
1,2-Dichloroethane	U		0.000631	0.00332	1.25	03/24/2020 16:08	WG1449180
1,1-Dichloroethene	U		0.000664	0.00332	1.25	03/24/2020 16:08	WG1449180
cis-1,2-Dichloroethene	U		0.000917	0.00332	1.25	03/24/2020 16:08	WG1449180
trans-1,2-Dichloroethene	U		0.00190	0.00664	1.25	03/24/2020 16:08	WG1449180
1,2-Dichloropropane	U		0.00169	0.00664	1.25	03/24/2020 16:08	WG1449180
1,1-Dichloropropene	U		0.000929	0.00332	1.25	03/24/2020 16:08	WG1449180
1,3-Dichloropropane	U		0.00233	0.00664	1.25	03/24/2020 16:08	WG1449180
cis-1,3-Dichloropropene	U		0.000901	0.00332	1.25	03/24/2020 16:08	WG1449180
trans-1,3-Dichloropropene	U		0.00203	0.00664	1.25	03/24/2020 16:08	WG1449180
2,2-Dichloropropane	U		0.00105	0.00332	1.25	03/24/2020 16:08	WG1449180
Di-isopropyl ether	U		0.000465	0.00133	1.25	03/24/2020 16:08	WG1449180
Ethylbenzene	0.00159	J	0.000704	0.00332	1.25	03/24/2020 16:08	WG1449180
Hexachloro-1,3-butadiene	U		0.0169	0.0332	1.25	03/24/2020 16:08	WG1449180
Isopropylbenzene	U		0.00115	0.00332	1.25	03/24/2020 16:08	WG1449180
p-Isopropyltoluene	U		0.00309	0.00664	1.25	03/24/2020 16:08	WG1449180
2-Butanone (MEK)	U		0.0166	0.0332	1.25	03/24/2020 16:08	WG1449180
Methylene Chloride	U		0.00882	0.0332	1.25	03/24/2020 16:08	WG1449180
4-Methyl-2-pentanone (MIBK)	U		0.0133	0.0332	1.25	03/24/2020 16:08	WG1449180
Methyl tert-butyl ether	0.000664	J	0.000392	0.00133	1.25	03/24/2020 16:08	WG1449180

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Naphthalene	U		0.00414	0.0166	1.25	03/24/2020 16:08	WG1449180
n-Propylbenzene	U		0.00157	0.00664	1.25	03/24/2020 16:08	WG1449180
Styrene	U		0.00362	0.0166	1.25	03/24/2020 16:08	WG1449180
1,1,1,2-Tetrachloroethane	U		0.000664	0.00332	1.25	03/24/2020 16:08	WG1449180
1,1,2,2-Tetrachloroethane	U		0.000518	0.00332	1.25	03/24/2020 16:08	WG1449180
1,1,2-Trichlorotrifluoroethane	U		0.000896	0.00332	1.25	03/24/2020 16:08	WG1449180
Tetrachloroethene	U		0.000929	0.00332	1.25	03/24/2020 16:08	WG1449180
Toluene	0.00917		0.00166	0.00664	1.25	03/24/2020 16:08	WG1449180
1,2,3-Trichlorobenzene	U		0.000830	0.0166	1.25	03/24/2020 16:08	WG1449180
1,2,4-Trichlorobenzene	U		0.00639	0.0166	1.25	03/24/2020 16:08	WG1449180
1,1,1-Trichloroethane	U		0.000365	0.00332	1.25	03/24/2020 16:08	WG1449180
1,1,2-Trichloroethane	U		0.00117	0.00332	1.25	03/24/2020 16:08	WG1449180
Trichloroethene	0.00484		0.000531	0.00133	1.25	03/24/2020 16:08	WG1449180
Trichlorofluoromethane	U		0.000664	0.00332	1.25	03/24/2020 16:08	WG1449180
1,2,3-Trichloropropane	U		0.00678	0.0166	1.25	03/24/2020 16:08	WG1449180
1,2,4-Trimethylbenzene	0.00488	J	0.00154	0.00664	1.25	03/24/2020 16:08	WG1449180
1,2,3-Trimethylbenzene	U		0.00153	0.00664	1.25	03/24/2020 16:08	WG1449180
Vinyl chloride	U		0.000907	0.00332	1.25	03/24/2020 16:08	WG1449180
1,3,5-Trimethylbenzene	U		0.00143	0.00664	1.25	03/24/2020 16:08	WG1449180
Xylenes, Total	0.0104		0.00635	0.00863	1.25	03/24/2020 16:08	WG1449180
(S) Toluene-d8	114			75.0-131		03/24/2020 16:08	WG1449180
(S) 4-Bromofluorobenzene	92.8			67.0-138		03/24/2020 16:08	WG1449180
(S) 1,2-Dichloroethane-d4	98.1			70.0-130		03/24/2020 16:08	WG1449180

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Polychlorinated Biphenyls (GC) by Method 8082 A

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
PCB 1016	U		0.00372	0.0181	1	03/25/2020 00:33	WG1449458
PCB 1221	U		0.00570	0.0181	1	03/25/2020 00:33	WG1449458
PCB 1232	U		0.00443	0.0181	1	03/25/2020 00:33	WG1449458
PCB 1242	U		0.00338	0.0181	1	03/25/2020 00:33	WG1449458
PCB 1248	U		0.00335	0.0181	1	03/25/2020 00:33	WG1449458
PCB 1254	U		0.00501	0.0181	1	03/25/2020 00:33	WG1449458
PCB 1260	U		0.00525	0.0181	1	03/25/2020 00:33	WG1449458
(S) Decachlorobiphenyl	89.3			10.0-135		03/25/2020 00:33	WG1449458
(S) Tetrachloro-m-xylene	91.7			10.0-139		03/25/2020 00:33	WG1449458

Semi Volatile Organic Compounds (GC/MS) by Method 8270E-SIM

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Anthracene	U		0.000637	0.00637	1	03/26/2020 11:23	WG1450433
Acenaphthene	U		0.000637	0.00637	1	03/26/2020 11:23	WG1450433
Acenaphthylene	U		0.000637	0.00637	1	03/26/2020 11:23	WG1450433
Benzo(a)anthracene	U		0.000637	0.00637	1	03/26/2020 11:23	WG1450433
Benzo(a)pyrene	U		0.000637	0.00637	1	03/26/2020 11:23	WG1450433
Benzo(b)fluoranthene	U		0.000637	0.00637	1	03/26/2020 11:23	WG1450433
Benzo(g,h,i)perylene	U		0.000637	0.00637	1	03/26/2020 11:23	WG1450433
Benzo(k)fluoranthene	U		0.000637	0.00637	1	03/26/2020 11:23	WG1450433
Chrysene	U		0.000637	0.00637	1	03/26/2020 11:23	WG1450433
Dibenz(a,h)anthracene	U		0.000637	0.00637	1	03/26/2020 11:23	WG1450433
Fluoranthene	U		0.000637	0.00637	1	03/26/2020 11:23	WG1450433
Fluorene	U		0.000637	0.00637	1	03/26/2020 11:23	WG1450433
Indeno(1,2,3-cd)pyrene	U		0.000637	0.00637	1	03/26/2020 11:23	WG1450433
Naphthalene	U		0.00212	0.0212	1	03/26/2020 11:23	WG1450433
Phenanthrene	U		0.000637	0.00637	1	03/26/2020 11:23	WG1450433

Semi Volatile Organic Compounds (GC/MS) by Method 8270E-SIM

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Pyrene	U		0.000637	0.00637	1	03/26/2020 11:23	WG1450433
1-Methylnaphthalene	U		0.00212	0.0212	1	03/26/2020 11:23	WG1450433
2-Methylnaphthalene	U		0.00212	0.0212	1	03/26/2020 11:23	WG1450433
2-Chloronaphthalene	U		0.00212	0.0212	1	03/26/2020 11:23	WG1450433
(S) Nitrobenzene-d5	75.8			14.0-149		03/26/2020 11:23	WG1450433
(S) 2-Fluorobiphenyl	79.3			34.0-125		03/26/2020 11:23	WG1450433
(S) p-Terphenyl-d14	79.3			23.0-120		03/26/2020 11:23	WG1450433

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	90.1		1	03/25/2020 15:30	WG1449725

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Acetone	U	J3	0.0152	0.0277	1	03/24/2020 16:46	WG1449180
Acrylonitrile	U		0.00211	0.0139	1	03/24/2020 16:46	WG1449180
Benzene	0.000498	J	0.000444	0.00111	1	03/24/2020 16:46	WG1449180
Bromobenzene	U		0.00117	0.0139	1	03/24/2020 16:46	WG1449180
Bromodichloromethane	U		0.000874	0.00277	1	03/24/2020 16:46	WG1449180
Bromoform	U		0.00664	0.0277	1	03/24/2020 16:46	WG1449180
Bromomethane	U		0.00411	0.0139	1	03/24/2020 16:46	WG1449180
n-Butylbenzene	U		0.00426	0.0139	1	03/24/2020 16:46	WG1449180
sec-Butylbenzene	U		0.00281	0.0139	1	03/24/2020 16:46	WG1449180
tert-Butylbenzene	U		0.00172	0.00555	1	03/24/2020 16:46	WG1449180
Carbon tetrachloride	U		0.00120	0.00555	1	03/24/2020 16:46	WG1449180
Chlorobenzene	0.00195	J	0.000636	0.00277	1	03/24/2020 16:46	WG1449180
Chlorodibromomethane	U		0.000499	0.00277	1	03/24/2020 16:46	WG1449180
Chloroethane	U		0.00120	0.00555	1	03/24/2020 16:46	WG1449180
Chloroform	U		0.000460	0.00277	1	03/24/2020 16:46	WG1449180
Chloromethane	U		0.00154	0.0139	1	03/24/2020 16:46	WG1449180
2-Chlorotoluene	U		0.00102	0.00277	1	03/24/2020 16:46	WG1449180
4-Chlorotoluene	U		0.00125	0.00555	1	03/24/2020 16:46	WG1449180
1,2-Dibromo-3-Chloropropane	U		0.00566	0.0277	1	03/24/2020 16:46	WG1449180
1,2-Dibromoethane	U		0.000583	0.00277	1	03/24/2020 16:46	WG1449180
Dibromomethane	U		0.00111	0.00555	1	03/24/2020 16:46	WG1449180
1,2-Dichlorobenzene	U		0.00161	0.00555	1	03/24/2020 16:46	WG1449180
1,3-Dichlorobenzene	U		0.00189	0.00555	1	03/24/2020 16:46	WG1449180
1,4-Dichlorobenzene	0.00301	J	0.00219	0.00555	1	03/24/2020 16:46	WG1449180
Dichlorodifluoromethane	U		0.000908	0.00277	1	03/24/2020 16:46	WG1449180
1,1-Dichloroethane	U		0.000638	0.00277	1	03/24/2020 16:46	WG1449180
1,2-Dichloroethane	U		0.000527	0.00277	1	03/24/2020 16:46	WG1449180
1,1-Dichloroethene	U		0.000555	0.00277	1	03/24/2020 16:46	WG1449180
cis-1,2-Dichloroethene	U		0.000766	0.00277	1	03/24/2020 16:46	WG1449180
trans-1,2-Dichloroethene	U		0.00159	0.00555	1	03/24/2020 16:46	WG1449180
1,2-Dichloropropane	U		0.00141	0.00555	1	03/24/2020 16:46	WG1449180
1,1-Dichloropropene	U		0.000777	0.00277	1	03/24/2020 16:46	WG1449180
1,3-Dichloropropane	U		0.00194	0.00555	1	03/24/2020 16:46	WG1449180
cis-1,3-Dichloropropene	U		0.000752	0.00277	1	03/24/2020 16:46	WG1449180
trans-1,3-Dichloropropene	U		0.00170	0.00555	1	03/24/2020 16:46	WG1449180
2,2-Dichloropropane	U		0.000880	0.00277	1	03/24/2020 16:46	WG1449180
Di-isopropyl ether	U		0.000388	0.00111	1	03/24/2020 16:46	WG1449180
Ethylbenzene	U		0.000588	0.00277	1	03/24/2020 16:46	WG1449180
Hexachloro-1,3-butadiene	U		0.0141	0.0277	1	03/24/2020 16:46	WG1449180
Isopropylbenzene	U		0.000958	0.00277	1	03/24/2020 16:46	WG1449180
p-Isopropyltoluene	U		0.00259	0.00555	1	03/24/2020 16:46	WG1449180
2-Butanone (MEK)	U		0.0139	0.0277	1	03/24/2020 16:46	WG1449180
Methylene Chloride	U		0.00737	0.0277	1	03/24/2020 16:46	WG1449180
4-Methyl-2-pentanone (MIBK)	U		0.0111	0.0277	1	03/24/2020 16:46	WG1449180
Methyl tert-butyl ether	U		0.000327	0.00111	1	03/24/2020 16:46	WG1449180
Naphthalene	U		0.00346	0.0139	1	03/24/2020 16:46	WG1449180
n-Propylbenzene	U		0.00131	0.00555	1	03/24/2020 16:46	WG1449180
Styrene	U		0.00303	0.0139	1	03/24/2020 16:46	WG1449180
1,1,1,2-Tetrachloroethane	U		0.000555	0.00277	1	03/24/2020 16:46	WG1449180
1,1,2,2-Tetrachloroethane	U		0.000433	0.00277	1	03/24/2020 16:46	WG1449180

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 03/19/20 10:00

L1201677

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
1,1,2-Trichlorotrifluoroethane	U		0.000749	0.00277	1	03/24/2020 16:46	WG1449180
Tetrachloroethene	U		0.000777	0.00277	1	03/24/2020 16:46	WG1449180
Toluene	0.00413	J	0.00139	0.00555	1	03/24/2020 16:46	WG1449180
1,2,3-Trichlorobenzene	U		0.000694	0.0139	1	03/24/2020 16:46	WG1449180
1,2,4-Trichlorobenzene	U		0.00535	0.0139	1	03/24/2020 16:46	WG1449180
1,1,1-Trichloroethane	U		0.000305	0.00277	1	03/24/2020 16:46	WG1449180
1,1,2-Trichloroethane	U		0.000980	0.00277	1	03/24/2020 16:46	WG1449180
Trichloroethene	0.00117		0.000444	0.00111	1	03/24/2020 16:46	WG1449180
Trichlorofluoromethane	U		0.000555	0.00277	1	03/24/2020 16:46	WG1449180
1,2,3-Trichloropropane	U		0.00566	0.0139	1	03/24/2020 16:46	WG1449180
1,2,4-Trimethylbenzene	U		0.00129	0.00555	1	03/24/2020 16:46	WG1449180
1,2,3-Trimethylbenzene	U		0.00128	0.00555	1	03/24/2020 16:46	WG1449180
Vinyl chloride	U		0.000758	0.00277	1	03/24/2020 16:46	WG1449180
1,3,5-Trimethylbenzene	U		0.00120	0.00555	1	03/24/2020 16:46	WG1449180
Xylenes, Total	U		0.00530	0.00721	1	03/24/2020 16:46	WG1449180
(S) Toluene-d8	112			75.0-131		03/24/2020 16:46	WG1449180
(S) 4-Bromofluorobenzene	89.1			67.0-138		03/24/2020 16:46	WG1449180
(S) 1,2-Dichloroethane-d4	95.7			70.0-130		03/24/2020 16:46	WG1449180

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	95.5		1	03/24/2020 23:37	WG1449392

Metals (ICP) by Method 6010D

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Lead	35.7		0.199	0.524	1	03/25/2020 14:47	WG1449499

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Acetone	U	J3	0.0145	0.0265	1.01	03/24/2020 17:05	WG1449180
Acrylonitrile	U		0.00201	0.0132	1.01	03/24/2020 17:05	WG1449180
Benzene	0.000555	J	0.000423	0.00106	1.01	03/24/2020 17:05	WG1449180
Bromobenzene	U		0.00111	0.0132	1.01	03/24/2020 17:05	WG1449180
Bromodichloromethane	U		0.000834	0.00265	1.01	03/24/2020 17:05	WG1449180
Bromoform	U		0.00632	0.0265	1.01	03/24/2020 17:05	WG1449180
Bromomethane	U		0.00392	0.0132	1.01	03/24/2020 17:05	WG1449180
n-Butylbenzene	U		0.00406	0.0132	1.01	03/24/2020 17:05	WG1449180
sec-Butylbenzene	U		0.00268	0.0132	1.01	03/24/2020 17:05	WG1449180
tert-Butylbenzene	U		0.00164	0.00529	1.01	03/24/2020 17:05	WG1449180
Carbon tetrachloride	U		0.00114	0.00529	1.01	03/24/2020 17:05	WG1449180
Chlorobenzene	U		0.000606	0.00265	1.01	03/24/2020 17:05	WG1449180
Chlorodibromomethane	U		0.000476	0.00265	1.01	03/24/2020 17:05	WG1449180
Chloroethane	U		0.00114	0.00529	1.01	03/24/2020 17:05	WG1449180
Chloroform	U		0.000439	0.00265	1.01	03/24/2020 17:05	WG1449180
Chloromethane	U		0.00147	0.0132	1.01	03/24/2020 17:05	WG1449180
2-Chlorotoluene	U		0.000973	0.00265	1.01	03/24/2020 17:05	WG1449180
4-Chlorotoluene	U		0.00119	0.00529	1.01	03/24/2020 17:05	WG1449180
1,2-Dibromo-3-Chloropropane	U		0.00539	0.0265	1.01	03/24/2020 17:05	WG1449180
1,2-Dibromoethane	U		0.000555	0.00265	1.01	03/24/2020 17:05	WG1449180
Dibromomethane	U		0.00106	0.00529	1.01	03/24/2020 17:05	WG1449180
1,2-Dichlorobenzene	U		0.00153	0.00529	1.01	03/24/2020 17:05	WG1449180
1,3-Dichlorobenzene	U		0.00180	0.00529	1.01	03/24/2020 17:05	WG1449180
1,4-Dichlorobenzene	0.00685		0.00208	0.00529	1.01	03/24/2020 17:05	WG1449180
Dichlorodifluoromethane	U		0.000865	0.00265	1.01	03/24/2020 17:05	WG1449180
1,1-Dichloroethane	U		0.000608	0.00265	1.01	03/24/2020 17:05	WG1449180
1,2-Dichloroethane	U		0.000503	0.00265	1.01	03/24/2020 17:05	WG1449180
1,1-Dichloroethene	U		0.000529	0.00265	1.01	03/24/2020 17:05	WG1449180
cis-1,2-Dichloroethene	U		0.000730	0.00265	1.01	03/24/2020 17:05	WG1449180
trans-1,2-Dichloroethene	U		0.00151	0.00529	1.01	03/24/2020 17:05	WG1449180
1,2-Dichloropropane	U		0.00134	0.00529	1.01	03/24/2020 17:05	WG1449180
1,1-Dichloropropene	U		0.000740	0.00265	1.01	03/24/2020 17:05	WG1449180
1,3-Dichloropropane	U		0.00185	0.00529	1.01	03/24/2020 17:05	WG1449180
cis-1,3-Dichloropropene	U		0.000717	0.00265	1.01	03/24/2020 17:05	WG1449180
trans-1,3-Dichloropropene	U		0.00162	0.00529	1.01	03/24/2020 17:05	WG1449180
2,2-Dichloropropane	U		0.000839	0.00265	1.01	03/24/2020 17:05	WG1449180
Di-isopropyl ether	U		0.000370	0.00106	1.01	03/24/2020 17:05	WG1449180
Ethylbenzene	0.000926	J	0.000560	0.00265	1.01	03/24/2020 17:05	WG1449180
Hexachloro-1,3-butadiene	U		0.0134	0.0265	1.01	03/24/2020 17:05	WG1449180
Isopropylbenzene	U		0.000913	0.00265	1.01	03/24/2020 17:05	WG1449180
p-Isopropyltoluene	U		0.00246	0.00529	1.01	03/24/2020 17:05	WG1449180
2-Butanone (MEK)	U		0.0132	0.0265	1.01	03/24/2020 17:05	WG1449180
Methylene Chloride	U		0.00703	0.0265	1.01	03/24/2020 17:05	WG1449180
4-Methyl-2-pentanone (MIBK)	U		0.0106	0.0265	1.01	03/24/2020 17:05	WG1449180
Methyl tert-butyl ether	0.000476	J	0.000312	0.00106	1.01	03/24/2020 17:05	WG1449180

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 03/19/20 10:32

L1201677

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Naphthalene	U		0.00330	0.0132	1.01	03/24/2020 17:05	WG1449180
n-Propylbenzene	U		0.00125	0.00529	1.01	03/24/2020 17:05	WG1449180
Styrene	U		0.00289	0.0132	1.01	03/24/2020 17:05	WG1449180
1,1,1,2-Tetrachloroethane	U		0.000529	0.00265	1.01	03/24/2020 17:05	WG1449180
1,1,2,2-Tetrachloroethane	U		0.000413	0.00265	1.01	03/24/2020 17:05	WG1449180
1,1,2-Trichlorotrifluoroethane	U		0.000714	0.00265	1.01	03/24/2020 17:05	WG1449180
Tetrachloroethene	U		0.000740	0.00265	1.01	03/24/2020 17:05	WG1449180
Toluene	0.00565		0.00132	0.00529	1.01	03/24/2020 17:05	WG1449180
1,2,3-Trichlorobenzene	U		0.000661	0.0132	1.01	03/24/2020 17:05	WG1449180
1,2,4-Trichlorobenzene	U		0.00510	0.0132	1.01	03/24/2020 17:05	WG1449180
1,1,1-Trichloroethane	U		0.000291	0.00265	1.01	03/24/2020 17:05	WG1449180
1,1,2-Trichloroethane	U		0.000934	0.00265	1.01	03/24/2020 17:05	WG1449180
Trichloroethene	0.00265		0.000423	0.00106	1.01	03/24/2020 17:05	WG1449180
Trichlorofluoromethane	U		0.000529	0.00265	1.01	03/24/2020 17:05	WG1449180
1,2,3-Trichloropropane	U		0.00539	0.0132	1.01	03/24/2020 17:05	WG1449180
1,2,4-Trimethylbenzene	0.00272	J	0.00123	0.00529	1.01	03/24/2020 17:05	WG1449180
1,2,3-Trimethylbenzene	U		0.00121	0.00529	1.01	03/24/2020 17:05	WG1449180
Vinyl chloride	U		0.000723	0.00265	1.01	03/24/2020 17:05	WG1449180
1,3,5-Trimethylbenzene	U		0.00114	0.00529	1.01	03/24/2020 17:05	WG1449180
Xylenes, Total	U		0.00506	0.00687	1.01	03/24/2020 17:05	WG1449180
(S) Toluene-d8	112			75.0-131		03/24/2020 17:05	WG1449180
(S) 4-Bromofluorobenzene	89.3			67.0-138		03/24/2020 17:05	WG1449180
(S) 1,2-Dichloroethane-d4	93.3			70.0-130		03/24/2020 17:05	WG1449180

1	Cp
2	Tc
3	Ss
4	Cn
5	Sr
6	Qc
7	Gl
8	Al
9	Sc

Polychlorinated Biphenyls (GC) by Method 8082 A

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
PCB 1016	U		0.00366	0.0178	1	03/25/2020 00:45	WG1449458
PCB 1221	U		0.00562	0.0178	1	03/25/2020 00:45	WG1449458
PCB 1232	U		0.00437	0.0178	1	03/25/2020 00:45	WG1449458
PCB 1242	U		0.00333	0.0178	1	03/25/2020 00:45	WG1449458
PCB 1248	U		0.00330	0.0178	1	03/25/2020 00:45	WG1449458
PCB 1254	0.00792	J	0.00494	0.0178	1	03/25/2020 00:45	WG1449458
PCB 1260	U		0.00517	0.0178	1	03/25/2020 00:45	WG1449458
(S) Decachlorobiphenyl	96.1			10.0-135		03/25/2020 00:45	WG1449458
(S) Tetrachloro-m-xylene	95.7			10.0-139		03/25/2020 00:45	WG1449458

Semi Volatile Organic Compounds (GC/MS) by Method 8270E-SIM

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Anthracene	0.00142	J	0.000628	0.00628	1	03/26/2020 11:46	WG1450433
Acenaphthene	U		0.000628	0.00628	1	03/26/2020 11:46	WG1450433
Acenaphthylene	U		0.000628	0.00628	1	03/26/2020 11:46	WG1450433
Benzo(a)anthracene	0.00382	J	0.000628	0.00628	1	03/26/2020 11:46	WG1450433
Benzo(a)pyrene	0.00459	J	0.000628	0.00628	1	03/26/2020 11:46	WG1450433
Benzo(b)fluoranthene	0.00948		0.000628	0.00628	1	03/26/2020 11:46	WG1450433
Benzo(g,h,i)perylene	0.00690		0.000628	0.00628	1	03/26/2020 11:46	WG1450433
Benzo(k)fluoranthene	0.00265	J	0.000628	0.00628	1	03/26/2020 11:46	WG1450433
Chrysene	0.00404	J	0.000628	0.00628	1	03/26/2020 11:46	WG1450433
Dibenz(a,h)anthracene	0.00125	J	0.000628	0.00628	1	03/26/2020 11:46	WG1450433
Fluoranthene	0.00512	J	0.000628	0.00628	1	03/26/2020 11:46	WG1450433
Fluorene	U		0.000628	0.00628	1	03/26/2020 11:46	WG1450433
Indeno(1,2,3-cd)pyrene	0.00375	J	0.000628	0.00628	1	03/26/2020 11:46	WG1450433
Naphthalene	0.00234	J	0.00209	0.0209	1	03/26/2020 11:46	WG1450433
Phenanthrene	0.00317	J	0.000628	0.00628	1	03/26/2020 11:46	WG1450433

Semi Volatile Organic Compounds (GC/MS) by Method 8270E-SIM

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Pyrene	0.00628	J	0.000628	0.00628	1	03/26/2020 11:46	WG1450433
1-Methylnaphthalene	U		0.00209	0.0209	1	03/26/2020 11:46	WG1450433
2-Methylnaphthalene	0.00325	J	0.00209	0.0209	1	03/26/2020 11:46	WG1450433
2-Chloronaphthalene	U		0.00209	0.0209	1	03/26/2020 11:46	WG1450433
(S) Nitrobenzene-d5	71.1			14.0-149		03/26/2020 11:46	WG1450433
(S) 2-Fluorobiphenyl	73.0			34.0-125		03/26/2020 11:46	WG1450433
(S) p-Terphenyl-d14	78.1			23.0-120		03/26/2020 11:46	WG1450433

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc



Collected date/time: 03/19/20 11:10

L1201677

Total Solids by Method 2540 G-2011

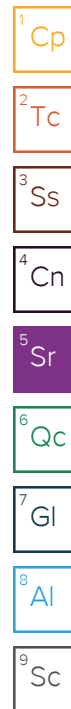
Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	96.6		1	03/24/2020 23:37	WG1449392

Metals (ICP) by Method 6010D

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Lead	3.91		0.197	0.518	1	03/25/2020 14:49	WG1449499

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Acetone	U	J3	0.0177	0.0324	1.25	03/24/2020 17:23	WG1449180
Acrylonitrile	U		0.00246	0.0162	1.25	03/24/2020 17:23	WG1449180
Benzene	0.000971	J	0.000518	0.00129	1.25	03/24/2020 17:23	WG1449180
Bromobenzene	U		0.00136	0.0162	1.25	03/24/2020 17:23	WG1449180
Bromodichloromethane	U		0.00102	0.00324	1.25	03/24/2020 17:23	WG1449180
Bromoform	U		0.00775	0.0324	1.25	03/24/2020 17:23	WG1449180
Bromomethane	U		0.00480	0.0162	1.25	03/24/2020 17:23	WG1449180
n-Butylbenzene	U		0.00497	0.0162	1.25	03/24/2020 17:23	WG1449180
sec-Butylbenzene	U		0.00327	0.0162	1.25	03/24/2020 17:23	WG1449180
tert-Butylbenzene	U		0.00201	0.00647	1.25	03/24/2020 17:23	WG1449180
Carbon tetrachloride	U		0.00140	0.00647	1.25	03/24/2020 17:23	WG1449180
Chlorobenzene	U		0.000742	0.00324	1.25	03/24/2020 17:23	WG1449180
Chlorodibromomethane	U		0.000583	0.00324	1.25	03/24/2020 17:23	WG1449180
Chloroethane	U		0.00140	0.00647	1.25	03/24/2020 17:23	WG1449180
Chloroform	U		0.000538	0.00324	1.25	03/24/2020 17:23	WG1449180
Chloromethane	U		0.00180	0.0162	1.25	03/24/2020 17:23	WG1449180
2-Chlorotoluene	U		0.00119	0.00324	1.25	03/24/2020 17:23	WG1449180
4-Chlorotoluene	U		0.00146	0.00647	1.25	03/24/2020 17:23	WG1449180
1,2-Dibromo-3-Chloropropane	U		0.00661	0.0324	1.25	03/24/2020 17:23	WG1449180
1,2-Dibromoethane	U		0.000679	0.00324	1.25	03/24/2020 17:23	WG1449180
Dibromomethane	U		0.00129	0.00647	1.25	03/24/2020 17:23	WG1449180
1,2-Dichlorobenzene	U		0.00187	0.00647	1.25	03/24/2020 17:23	WG1449180
1,3-Dichlorobenzene	U		0.00220	0.00647	1.25	03/24/2020 17:23	WG1449180
1,4-Dichlorobenzene	0.0111		0.00255	0.00647	1.25	03/24/2020 17:23	WG1449180
Dichlorodifluoromethane	U		0.00106	0.00324	1.25	03/24/2020 17:23	WG1449180
1,1-Dichloroethane	U		0.000745	0.00324	1.25	03/24/2020 17:23	WG1449180
1,2-Dichloroethane	U		0.000615	0.00324	1.25	03/24/2020 17:23	WG1449180
1,1-Dichloroethene	U		0.000647	0.00324	1.25	03/24/2020 17:23	WG1449180
cis-1,2-Dichloroethene	U		0.000894	0.00324	1.25	03/24/2020 17:23	WG1449180
trans-1,2-Dichloroethene	U		0.00185	0.00647	1.25	03/24/2020 17:23	WG1449180
1,2-Dichloropropane	U		0.00165	0.00647	1.25	03/24/2020 17:23	WG1449180
1,1-Dichloropropene	U		0.000906	0.00324	1.25	03/24/2020 17:23	WG1449180
1,3-Dichloropropane	U		0.00227	0.00647	1.25	03/24/2020 17:23	WG1449180
cis-1,3-Dichloropropene	U		0.000878	0.00324	1.25	03/24/2020 17:23	WG1449180
trans-1,3-Dichloropropene	U		0.00198	0.00647	1.25	03/24/2020 17:23	WG1449180
2,2-Dichloropropane	U		0.00103	0.00324	1.25	03/24/2020 17:23	WG1449180
Di-isopropyl ether	U		0.000454	0.00129	1.25	03/24/2020 17:23	WG1449180
Ethylbenzene	0.00191	J	0.000687	0.00324	1.25	03/24/2020 17:23	WG1449180
Hexachloro-1,3-butadiene	U		0.0165	0.0324	1.25	03/24/2020 17:23	WG1449180
Isopropylbenzene	U		0.00112	0.00324	1.25	03/24/2020 17:23	WG1449180
p-Isopropyltoluene	U		0.00301	0.00647	1.25	03/24/2020 17:23	WG1449180
2-Butanone (MEK)	U		0.0162	0.0324	1.25	03/24/2020 17:23	WG1449180
Methylene Chloride	U		0.00860	0.0324	1.25	03/24/2020 17:23	WG1449180
4-Methyl-2-pentanone (MIBK)	U		0.0129	0.0324	1.25	03/24/2020 17:23	WG1449180
Methyl tert-butyl ether	0.000874	J	0.000382	0.00129	1.25	03/24/2020 17:23	WG1449180





Collected date/time: 03/19/20 11:10

L1201677

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Naphthalene	U		0.00404	0.0162	1.25	03/24/2020 17:23	WG1449180
n-Propylbenzene	U		0.00153	0.00647	1.25	03/24/2020 17:23	WG1449180
Styrene	U		0.00353	0.0162	1.25	03/24/2020 17:23	WG1449180
1,1,1,2-Tetrachloroethane	U		0.000647	0.00324	1.25	03/24/2020 17:23	WG1449180
1,1,2,2-Tetrachloroethane	U		0.000505	0.00324	1.25	03/24/2020 17:23	WG1449180
1,1,2-Trichlorotrifluoroethane	U		0.000874	0.00324	1.25	03/24/2020 17:23	WG1449180
Tetrachloroethene	U		0.000906	0.00324	1.25	03/24/2020 17:23	WG1449180
Toluene	0.0103		0.00162	0.00647	1.25	03/24/2020 17:23	WG1449180
1,2,3-Trichlorobenzene	U		0.000809	0.0162	1.25	03/24/2020 17:23	WG1449180
1,2,4-Trichlorobenzene	U		0.00623	0.0162	1.25	03/24/2020 17:23	WG1449180
1,1,1-Trichloroethane	U		0.000356	0.00324	1.25	03/24/2020 17:23	WG1449180
1,1,2-Trichloroethane	U		0.00114	0.00324	1.25	03/24/2020 17:23	WG1449180
Trichloroethene	0.00509		0.000518	0.00129	1.25	03/24/2020 17:23	WG1449180
Trichlorofluoromethane	U		0.000647	0.00324	1.25	03/24/2020 17:23	WG1449180
1,2,3-Trichloropropane	U		0.00661	0.0162	1.25	03/24/2020 17:23	WG1449180
1,2,4-Trimethylbenzene	0.00475	J	0.00150	0.00647	1.25	03/24/2020 17:23	WG1449180
1,2,3-Trimethylbenzene	U		0.00149	0.00647	1.25	03/24/2020 17:23	WG1449180
Vinyl chloride	U		0.000884	0.00324	1.25	03/24/2020 17:23	WG1449180
1,3,5-Trimethylbenzene	U		0.00140	0.00647	1.25	03/24/2020 17:23	WG1449180
Xylenes, Total	0.0108		0.00619	0.00842	1.25	03/24/2020 17:23	WG1449180
(S) Toluene-d8	113			75.0-131		03/24/2020 17:23	WG1449180
(S) 4-Bromofluorobenzene	89.8			67.0-138		03/24/2020 17:23	WG1449180
(S) 1,2-Dichloroethane-d4	92.9			70.0-130		03/24/2020 17:23	WG1449180

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Polychlorinated Biphenyls (GC) by Method 8082 A

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
PCB 1016	U		0.00362	0.0176	1	03/25/2020 00:58	WG1449458
PCB 1221	U		0.00556	0.0176	1	03/25/2020 00:58	WG1449458
PCB 1232	U		0.00432	0.0176	1	03/25/2020 00:58	WG1449458
PCB 1242	U		0.00329	0.0176	1	03/25/2020 00:58	WG1449458
PCB 1248	U		0.00326	0.0176	1	03/25/2020 00:58	WG1449458
PCB 1254	U		0.00489	0.0176	1	03/25/2020 00:58	WG1449458
PCB 1260	U		0.00512	0.0176	1	03/25/2020 00:58	WG1449458
(S) Decachlorobiphenyl	94.2			10.0-135		03/25/2020 00:58	WG1449458
(S) Tetrachloro-m-xylene	94.6			10.0-139		03/25/2020 00:58	WG1449458

Semi Volatile Organic Compounds (GC/MS) by Method 8270E-SIM

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Anthracene	0.00164	J	0.000621	0.00621	1	03/26/2020 12:09	WG1450433
Acenaphthene	U		0.000621	0.00621	1	03/26/2020 12:09	WG1450433
Acenaphthylene	U		0.000621	0.00621	1	03/26/2020 12:09	WG1450433
Benzo(a)anthracene	0.00252	J	0.000621	0.00621	1	03/26/2020 12:09	WG1450433
Benzo(a)pyrene	0.00173	J	0.000621	0.00621	1	03/26/2020 12:09	WG1450433
Benzo(b)fluoranthene	0.00229	J	0.000621	0.00621	1	03/26/2020 12:09	WG1450433
Benzo(g,h,i)perylene	0.00445	J	0.000621	0.00621	1	03/26/2020 12:09	WG1450433
Benzo(k)fluoranthene	0.000906	J	0.000621	0.00621	1	03/26/2020 12:09	WG1450433
Chrysene	0.00190	J	0.000621	0.00621	1	03/26/2020 12:09	WG1450433
Dibenz(a,h)anthracene	U		0.000621	0.00621	1	03/26/2020 12:09	WG1450433
Fluoranthene	0.00229	J	0.000621	0.00621	1	03/26/2020 12:09	WG1450433
Fluorene	U		0.000621	0.00621	1	03/26/2020 12:09	WG1450433
Indeno(1,2,3-cd)pyrene	0.00136	J	0.000621	0.00621	1	03/26/2020 12:09	WG1450433
Naphthalene	U		0.00207	0.0207	1	03/26/2020 12:09	WG1450433
Phenanthrene	0.00113	J	0.000621	0.00621	1	03/26/2020 12:09	WG1450433



Collected date/time: 03/19/20 11:10

L1201677

Semi Volatile Organic Compounds (GC/MS) by Method 8270E-SIM

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Pyrene	0.00637		0.000621	0.00621	1	03/26/2020 12:09	WG1450433
1-Methylnaphthalene	U		0.00207	0.0207	1	03/26/2020 12:09	WG1450433
2-Methylnaphthalene	U		0.00207	0.0207	1	03/26/2020 12:09	WG1450433
2-Chloronaphthalene	U		0.00207	0.0207	1	03/26/2020 12:09	WG1450433
(S) Nitrobenzene-d5	83.1			14.0-149		03/26/2020 12:09	WG1450433
(S) 2-Fluorobiphenyl	77.6			34.0-125		03/26/2020 12:09	WG1450433
(S) p-Terphenyl-d14	86.8			23.0-120		03/26/2020 12:09	WG1450433

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ Gl⁸ Al⁹ Sc



Total Solids by Method 2540 G-2011

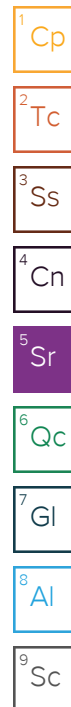
Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	84.4		1	03/24/2020 23:37	WG1449392

Metals (ICP) by Method 6010D

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Lead	7.29		0.225	0.592	1	03/25/2020 14:52	WG1449499

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Acetone	U		0.0220	0.0403	1.36	03/26/2020 10:00	WG1450543
Acrylonitrile	U		0.00306	0.0201	1.36	03/26/2020 10:00	WG1450543
Benzene	0.00141	J	0.000644	0.00161	1.36	03/26/2020 10:00	WG1450543
Bromobenzene	U		0.00169	0.0201	1.36	03/26/2020 10:00	WG1450543
Bromodichloromethane	U		0.00127	0.00403	1.36	03/26/2020 10:00	WG1450543
Bromoform	U		0.00963	0.0403	1.36	03/26/2020 10:00	WG1450543
Bromomethane	U		0.00596	0.0201	1.36	03/26/2020 10:00	WG1450543
n-Butylbenzene	U		0.00618	0.0201	1.36	03/26/2020 10:00	WG1450543
sec-Butylbenzene	U		0.00407	0.0201	1.36	03/26/2020 10:00	WG1450543
tert-Butylbenzene	U		0.00250	0.00805	1.36	03/26/2020 10:00	WG1450543
Carbon tetrachloride	U		0.00174	0.00805	1.36	03/26/2020 10:00	WG1450543
Chlorobenzene	U		0.000923	0.00403	1.36	03/26/2020 10:00	WG1450543
Chlorodibromomethane	U		0.000725	0.00403	1.36	03/26/2020 10:00	WG1450543
Chloroethane	U		0.00174	0.00805	1.36	03/26/2020 10:00	WG1450543
Chloroform	U		0.000668	0.00403	1.36	03/26/2020 10:00	WG1450543
Chloromethane	U		0.00224	0.0201	1.36	03/26/2020 10:00	WG1450543
2-Chlorotoluene	U		0.00148	0.00403	1.36	03/26/2020 10:00	WG1450543
4-Chlorotoluene	U		0.00182	0.00805	1.36	03/26/2020 10:00	WG1450543
1,2-Dibromo-3-Chloropropane	U		0.00822	0.0403	1.36	03/26/2020 10:00	WG1450543
1,2-Dibromoethane	U		0.000846	0.00403	1.36	03/26/2020 10:00	WG1450543
Dibromomethane	U		0.00161	0.00805	1.36	03/26/2020 10:00	WG1450543
1,2-Dichlorobenzene	U		0.00233	0.00805	1.36	03/26/2020 10:00	WG1450543
1,3-Dichlorobenzene	U		0.00274	0.00805	1.36	03/26/2020 10:00	WG1450543
1,4-Dichlorobenzene	0.0139		0.00317	0.00805	1.36	03/26/2020 10:00	WG1450543
Dichlorodifluoromethane	U	J4	0.00131	0.00403	1.36	03/26/2020 10:00	WG1450543
1,1-Dichloroethane	U		0.000926	0.00403	1.36	03/26/2020 10:00	WG1450543
1,2-Dichloroethane	U		0.000765	0.00403	1.36	03/26/2020 10:00	WG1450543
1,1-Dichloroethene	U		0.000805	0.00403	1.36	03/26/2020 10:00	WG1450543
cis-1,2-Dichloroethene	U		0.00111	0.00403	1.36	03/26/2020 10:00	WG1450543
trans-1,2-Dichloroethene	U		0.00230	0.00805	1.36	03/26/2020 10:00	WG1450543
1,2-Dichloropropane	U		0.00205	0.00805	1.36	03/26/2020 10:00	WG1450543
1,1-Dichloropropene	U		0.00113	0.00403	1.36	03/26/2020 10:00	WG1450543
1,3-Dichloropropane	U		0.00282	0.00805	1.36	03/26/2020 10:00	WG1450543
cis-1,3-Dichloropropene	U		0.00109	0.00403	1.36	03/26/2020 10:00	WG1450543
trans-1,3-Dichloropropene	U		0.00246	0.00805	1.36	03/26/2020 10:00	WG1450543
2,2-Dichloropropane	U		0.00128	0.00403	1.36	03/26/2020 10:00	WG1450543
Di-isopropyl ether	U		0.000564	0.00161	1.36	03/26/2020 10:00	WG1450543
Ethylbenzene	0.00386	J	0.000854	0.00403	1.36	03/26/2020 10:00	WG1450543
Hexachloro-1,3-butadiene	U		0.0205	0.0403	1.36	03/26/2020 10:00	WG1450543
Isopropylbenzene	U		0.00139	0.00403	1.36	03/26/2020 10:00	WG1450543
p-Isopropyltoluene	U		0.00375	0.00805	1.36	03/26/2020 10:00	WG1450543
2-Butanone (MEK)	0.0419	B	0.0201	0.0403	1.36	03/26/2020 10:00	WG1450543
Methylene Chloride	U		0.0107	0.0403	1.36	03/26/2020 10:00	WG1450543
4-Methyl-2-pentanone (MIBK)	U		0.0161	0.0403	1.36	03/26/2020 10:00	WG1450543
Methyl tert-butyl ether	U		0.000475	0.00161	1.36	03/26/2020 10:00	WG1450543





Collected date/time: 03/19/20 11:30

L1201677

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Naphthalene	U		0.00502	0.0201	1.36	03/26/2020 10:00	WG1450543
n-Propylbenzene	0.00210	J	0.00190	0.00805	1.36	03/26/2020 10:00	WG1450543
Styrene	U		0.00439	0.0201	1.36	03/26/2020 10:00	WG1450543
1,1,1,2-Tetrachloroethane	U		0.000805	0.00403	1.36	03/26/2020 10:00	WG1450543
1,1,2,2-Tetrachloroethane	U		0.000628	0.00403	1.36	03/26/2020 10:00	WG1450543
1,1,2-Trichlorotrifluoroethane	U		0.00109	0.00403	1.36	03/26/2020 10:00	WG1450543
Tetrachloroethene	U		0.00113	0.00403	1.36	03/26/2020 10:00	WG1450543
Toluene	0.0155		0.00201	0.00805	1.36	03/26/2020 10:00	WG1450543
1,2,3-Trichlorobenzene	U		0.00101	0.0201	1.36	03/26/2020 10:00	WG1450543
1,2,4-Trichlorobenzene	U		0.00777	0.0201	1.36	03/26/2020 10:00	WG1450543
1,1,1-Trichloroethane	U		0.000443	0.00403	1.36	03/26/2020 10:00	WG1450543
1,1,2-Trichloroethane	U		0.00142	0.00403	1.36	03/26/2020 10:00	WG1450543
Trichloroethene	0.00580		0.000644	0.00161	1.36	03/26/2020 10:00	WG1450543
Trichlorofluoromethane	U		0.000805	0.00403	1.36	03/26/2020 10:00	WG1450543
1,2,3-Trichloropropane	U		0.00822	0.0201	1.36	03/26/2020 10:00	WG1450543
1,2,4-Trimethylbenzene	0.0118		0.00187	0.00805	1.36	03/26/2020 10:00	WG1450543
1,2,3-Trimethylbenzene	0.00285	J	0.00185	0.00805	1.36	03/26/2020 10:00	WG1450543
Vinyl chloride	U	J4	0.00110	0.00403	1.36	03/26/2020 10:00	WG1450543
1,3,5-Trimethylbenzene	0.00346	J	0.00174	0.00805	1.36	03/26/2020 10:00	WG1450543
Xylenes, Total	0.0200		0.00770	0.0105	1.36	03/26/2020 10:00	WG1450543
(S) Toluene-d8	114			75.0-131		03/26/2020 10:00	WG1450543
(S) 4-Bromofluorobenzene	89.4			67.0-138		03/26/2020 10:00	WG1450543
(S) 1,2-Dichloroethane-d4	87.4			70.0-130		03/26/2020 10:00	WG1450543

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Polychlorinated Biphenyls (GC) by Method 8082 A

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
PCB 1016	U		0.00415	0.0201	1	03/25/2020 01:10	WG1449458
PCB 1221	U		0.00636	0.0201	1	03/25/2020 01:10	WG1449458
PCB 1232	U		0.00494	0.0201	1	03/25/2020 01:10	WG1449458
PCB 1242	U		0.00377	0.0201	1	03/25/2020 01:10	WG1449458
PCB 1248	U		0.00373	0.0201	1	03/25/2020 01:10	WG1449458
PCB 1254	U		0.00559	0.0201	1	03/25/2020 01:10	WG1449458
PCB 1260	U		0.00585	0.0201	1	03/25/2020 01:10	WG1449458
(S) Decachlorobiphenyl	82.9			10.0-135		03/25/2020 01:10	WG1449458
(S) Tetrachloro-m-xylene	86.0			10.0-139		03/25/2020 01:10	WG1449458

Semi Volatile Organic Compounds (GC/MS) by Method 8270E-SIM

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Anthracene	U		0.000711	0.00711	1	03/26/2020 12:31	WG1450433
Acenaphthene	U		0.000711	0.00711	1	03/26/2020 12:31	WG1450433
Acenaphthylene	U		0.000711	0.00711	1	03/26/2020 12:31	WG1450433
Benzo(a)anthracene	0.00124	J	0.000711	0.00711	1	03/26/2020 12:31	WG1450433
Benzo(a)pyrene	0.00123	J	0.000711	0.00711	1	03/26/2020 12:31	WG1450433
Benzo(b)fluoranthene	0.00191	J	0.000711	0.00711	1	03/26/2020 12:31	WG1450433
Benzo(g,h,i)perylene	0.00230	J	0.000711	0.00711	1	03/26/2020 12:31	WG1450433
Benzo(k)fluoranthene	U		0.000711	0.00711	1	03/26/2020 12:31	WG1450433
Chrysene	0.00106	J	0.000711	0.00711	1	03/26/2020 12:31	WG1450433
Dibenz(a,h)anthracene	U		0.000711	0.00711	1	03/26/2020 12:31	WG1450433
Fluoranthene	0.00205	J	0.000711	0.00711	1	03/26/2020 12:31	WG1450433
Fluorene	U		0.000711	0.00711	1	03/26/2020 12:31	WG1450433
Indeno(1,2,3-cd)pyrene	0.00112	J	0.000711	0.00711	1	03/26/2020 12:31	WG1450433
Naphthalene	U		0.00237	0.0237	1	03/26/2020 12:31	WG1450433
Phenanthrene	U		0.000711	0.00711	1	03/26/2020 12:31	WG1450433

Semi Volatile Organic Compounds (GC/MS) by Method 8270E-SIM

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Pyrene	0.00198	J	0.000711	0.00711	1	03/26/2020 12:31	WG1450433
1-Methylnaphthalene	U		0.00237	0.0237	1	03/26/2020 12:31	WG1450433
2-Methylnaphthalene	U		0.00237	0.0237	1	03/26/2020 12:31	WG1450433
2-Chloronaphthalene	U		0.00237	0.0237	1	03/26/2020 12:31	WG1450433
(S) Nitrobenzene-d5	82.0			14.0-149		03/26/2020 12:31	WG1450433
(S) 2-Fluorobiphenyl	77.1			34.0-125		03/26/2020 12:31	WG1450433
(S) p-Terphenyl-d14	82.5			23.0-120		03/26/2020 12:31	WG1450433

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc



Collected date/time: 03/19/20 12:28

L1201677

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	86.7		1	03/24/2020 23:37	WG1449392

Metals (ICP) by Method 6010D

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Lead	7.61		0.219	0.577	1	03/25/2020 14:54	WG1449499

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Acetone	U	J3	0.0158	0.0288	1	03/24/2020 17:42	WG1449180
Acrylonitrile	U		0.00219	0.0144	1	03/24/2020 17:42	WG1449180
Benzene	0.000469	J	0.000462	0.00115	1	03/24/2020 17:42	WG1449180
Bromobenzene	U		0.00121	0.0144	1	03/24/2020 17:42	WG1449180
Bromodichloromethane	U		0.000909	0.00288	1	03/24/2020 17:42	WG1449180
Bromoform	U		0.00690	0.0288	1	03/24/2020 17:42	WG1449180
Bromomethane	U		0.00427	0.0144	1	03/24/2020 17:42	WG1449180
n-Butylbenzene	U		0.00443	0.0144	1	03/24/2020 17:42	WG1449180
sec-Butylbenzene	U		0.00292	0.0144	1	03/24/2020 17:42	WG1449180
tert-Butylbenzene	U		0.00179	0.00577	1	03/24/2020 17:42	WG1449180
Carbon tetrachloride	U		0.00125	0.00577	1	03/24/2020 17:42	WG1449180
Chlorobenzene	U		0.000661	0.00288	1	03/24/2020 17:42	WG1449180
Chlorodibromomethane	U		0.000519	0.00288	1	03/24/2020 17:42	WG1449180
Chloroethane	U		0.00125	0.00577	1	03/24/2020 17:42	WG1449180
Chloroform	U		0.000479	0.00288	1	03/24/2020 17:42	WG1449180
Chloromethane	U		0.00160	0.0144	1	03/24/2020 17:42	WG1449180
2-Chlorotoluene	U		0.00106	0.00288	1	03/24/2020 17:42	WG1449180
4-Chlorotoluene	U		0.00130	0.00577	1	03/24/2020 17:42	WG1449180
1,2-Dibromo-3-Chloropropane	U		0.00589	0.0288	1	03/24/2020 17:42	WG1449180
1,2-Dibromoethane	U		0.000606	0.00288	1	03/24/2020 17:42	WG1449180
Dibromomethane	U		0.00115	0.00577	1	03/24/2020 17:42	WG1449180
1,2-Dichlorobenzene	U		0.00167	0.00577	1	03/24/2020 17:42	WG1449180
1,3-Dichlorobenzene	U		0.00196	0.00577	1	03/24/2020 17:42	WG1449180
1,4-Dichlorobenzene	0.00459	J	0.00227	0.00577	1	03/24/2020 17:42	WG1449180
Dichlorodifluoromethane	U		0.000944	0.00288	1	03/24/2020 17:42	WG1449180
1,1-Dichloroethane	U		0.000664	0.00288	1	03/24/2020 17:42	WG1449180
1,2-Dichloroethane	U		0.000548	0.00288	1	03/24/2020 17:42	WG1449180
1,1-Dichloroethene	U		0.000577	0.00288	1	03/24/2020 17:42	WG1449180
cis-1,2-Dichloroethene	U		0.000796	0.00288	1	03/24/2020 17:42	WG1449180
trans-1,2-Dichloroethene	U		0.00165	0.00577	1	03/24/2020 17:42	WG1449180
1,2-Dichloropropane	U		0.00147	0.00577	1	03/24/2020 17:42	WG1449180
1,1-Dichloropropene	U		0.000808	0.00288	1	03/24/2020 17:42	WG1449180
1,3-Dichloropropane	U		0.00202	0.00577	1	03/24/2020 17:42	WG1449180
cis-1,3-Dichloropropene	U		0.000782	0.00288	1	03/24/2020 17:42	WG1449180
trans-1,3-Dichloropropene	U		0.00177	0.00577	1	03/24/2020 17:42	WG1449180
2,2-Dichloropropane	U		0.000915	0.00288	1	03/24/2020 17:42	WG1449180
Di-isopropyl ether	U		0.000404	0.00115	1	03/24/2020 17:42	WG1449180
Ethylbenzene	0.000844	J	0.000612	0.00288	1	03/24/2020 17:42	WG1449180
Hexachloro-1,3-butadiene	U		0.0147	0.0288	1	03/24/2020 17:42	WG1449180
Isopropylbenzene	U		0.000996	0.00288	1	03/24/2020 17:42	WG1449180
p-Isopropyltoluene	U		0.00269	0.00577	1	03/24/2020 17:42	WG1449180
2-Butanone (MEK)	U		0.0144	0.0288	1	03/24/2020 17:42	WG1449180
Methylene Chloride	U		0.00766	0.0288	1	03/24/2020 17:42	WG1449180
4-Methyl-2-pentanone (MIBK)	U		0.0115	0.0288	1	03/24/2020 17:42	WG1449180
Methyl tert-butyl ether	U		0.000340	0.00115	1	03/24/2020 17:42	WG1449180

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

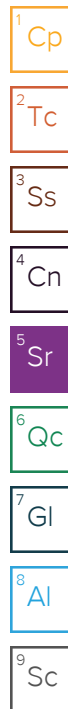


Collected date/time: 03/19/20 12:28

L1201677

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Naphthalene	U		0.00360	0.0144	1	03/24/2020 17:42	WG1449180
n-Propylbenzene	U		0.00136	0.00577	1	03/24/2020 17:42	WG1449180
Styrene	U		0.00315	0.0144	1	03/24/2020 17:42	WG1449180
1,1,1,2-Tetrachloroethane	U		0.000577	0.00288	1	03/24/2020 17:42	WG1449180
1,1,2,2-Tetrachloroethane	U		0.000450	0.00288	1	03/24/2020 17:42	WG1449180
1,1,2-Trichlorotrifluoroethane	U		0.000779	0.00288	1	03/24/2020 17:42	WG1449180
Tetrachloroethene	U		0.000808	0.00288	1	03/24/2020 17:42	WG1449180
Toluene	0.00390	J	0.00144	0.00577	1	03/24/2020 17:42	WG1449180
1,2,3-Trichlorobenzene	U		0.000721	0.0144	1	03/24/2020 17:42	WG1449180
1,2,4-Trichlorobenzene	U		0.00556	0.0144	1	03/24/2020 17:42	WG1449180
1,1,1-Trichloroethane	U		0.000317	0.00288	1	03/24/2020 17:42	WG1449180
1,1,2-Trichloroethane	U		0.00102	0.00288	1	03/24/2020 17:42	WG1449180
Trichloroethene	0.00182		0.000462	0.00115	1	03/24/2020 17:42	WG1449180
Trichlorofluoromethane	U		0.000577	0.00288	1	03/24/2020 17:42	WG1449180
1,2,3-Trichloropropane	U		0.00589	0.0144	1	03/24/2020 17:42	WG1449180
1,2,4-Trimethylbenzene	0.00193	J	0.00134	0.00577	1	03/24/2020 17:42	WG1449180
1,2,3-Trimethylbenzene	U		0.00133	0.00577	1	03/24/2020 17:42	WG1449180
Vinyl chloride	U		0.000788	0.00288	1	03/24/2020 17:42	WG1449180
1,3,5-Trimethylbenzene	U		0.00125	0.00577	1	03/24/2020 17:42	WG1449180
Xylenes, Total	U		0.00552	0.00750	1	03/24/2020 17:42	WG1449180
(S) Toluene-d8	114			75.0-131		03/24/2020 17:42	WG1449180
(S) 4-Bromofluorobenzene	91.6			67.0-138		03/24/2020 17:42	WG1449180
(S) 1,2-Dichloroethane-d4	96.8			70.0-130		03/24/2020 17:42	WG1449180



Polychlorinated Biphenyls (GC) by Method 8082 A

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
PCB 1016	U		0.00404	0.0196	1	03/25/2020 01:22	WG1449458
PCB 1221	U		0.00620	0.0196	1	03/25/2020 01:22	WG1449458
PCB 1232	U		0.00481	0.0196	1	03/25/2020 01:22	WG1449458
PCB 1242	U		0.00367	0.0196	1	03/25/2020 01:22	WG1449458
PCB 1248	U		0.00363	0.0196	1	03/25/2020 01:22	WG1449458
PCB 1254	U		0.00545	0.0196	1	03/25/2020 01:22	WG1449458
PCB 1260	U		0.00570	0.0196	1	03/25/2020 01:22	WG1449458
(S) Decachlorobiphenyl	95.0			10.0-135		03/25/2020 01:22	WG1449458
(S) Tetrachloro-m-xylene	91.2			10.0-139		03/25/2020 01:22	WG1449458

Semi Volatile Organic Compounds (GC/MS) by Method 8270E-SIM

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Anthracene	U		0.000692	0.00692	1	03/26/2020 12:54	WG1450433
Acenaphthene	U		0.000692	0.00692	1	03/26/2020 12:54	WG1450433
Acenaphthylene	U		0.000692	0.00692	1	03/26/2020 12:54	WG1450433
Benzo(a)anthracene	U		0.000692	0.00692	1	03/26/2020 12:54	WG1450433
Benzo(a)pyrene	U		0.000692	0.00692	1	03/26/2020 12:54	WG1450433
Benzo(b)fluoranthene	U		0.000692	0.00692	1	03/26/2020 12:54	WG1450433
Benzo(g,h,i)perylene	U		0.000692	0.00692	1	03/26/2020 12:54	WG1450433
Benzo(k)fluoranthene	U		0.000692	0.00692	1	03/26/2020 12:54	WG1450433
Chrysene	U		0.000692	0.00692	1	03/26/2020 12:54	WG1450433
Dibenz(a,h)anthracene	U		0.000692	0.00692	1	03/26/2020 12:54	WG1450433
Fluoranthene	U		0.000692	0.00692	1	03/26/2020 12:54	WG1450433
Fluorene	U		0.000692	0.00692	1	03/26/2020 12:54	WG1450433
Indeno(1,2,3-cd)pyrene	U		0.000692	0.00692	1	03/26/2020 12:54	WG1450433
Naphthalene	U		0.00231	0.0231	1	03/26/2020 12:54	WG1450433
Phenanthrene	U		0.000692	0.00692	1	03/26/2020 12:54	WG1450433

Semi Volatile Organic Compounds (GC/MS) by Method 8270E-SIM

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Pyrene	U		0.000692	0.00692	1	03/26/2020 12:54	WG1450433
1-Methylnaphthalene	U		0.00231	0.0231	1	03/26/2020 12:54	WG1450433
2-Methylnaphthalene	U		0.00231	0.0231	1	03/26/2020 12:54	WG1450433
2-Chloronaphthalene	U		0.00231	0.0231	1	03/26/2020 12:54	WG1450433
(S) Nitrobenzene-d5	72.1			14.0-149		03/26/2020 12:54	WG1450433
(S) 2-Fluorobiphenyl	66.7			34.0-125		03/26/2020 12:54	WG1450433
(S) p-Terphenyl-d14	60.3			23.0-120		03/26/2020 12:54	WG1450433

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc



Collected date/time: 03/19/20 12:30

L1201677

Total Solids by Method 2540 G-2011

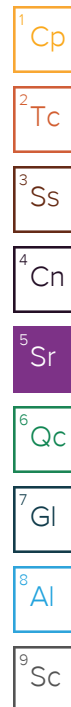
Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	86.5		1	03/24/2020 23:37	WG1449392

Metals (ICP) by Method 6010D

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Lead	6.94		0.220	0.578	1	03/25/2020 14:57	WG1449499

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Acetone	U	J3	0.0158	0.0289	1	03/24/2020 18:01	WG1449180
Acrylonitrile	U		0.00220	0.0145	1	03/24/2020 18:01	WG1449180
Benzene	0.000578	J	0.000462	0.00116	1	03/24/2020 18:01	WG1449180
Bromobenzene	U		0.00121	0.0145	1	03/24/2020 18:01	WG1449180
Bromodichloromethane	U		0.000911	0.00289	1	03/24/2020 18:01	WG1449180
Bromoform	U		0.00691	0.0289	1	03/24/2020 18:01	WG1449180
Bromomethane	U		0.00428	0.0145	1	03/24/2020 18:01	WG1449180
n-Butylbenzene	U		0.00444	0.0145	1	03/24/2020 18:01	WG1449180
sec-Butylbenzene	U		0.00293	0.0145	1	03/24/2020 18:01	WG1449180
tert-Butylbenzene	U		0.00179	0.00578	1	03/24/2020 18:01	WG1449180
Carbon tetrachloride	U		0.00125	0.00578	1	03/24/2020 18:01	WG1449180
Chlorobenzene	U		0.000663	0.00289	1	03/24/2020 18:01	WG1449180
Chlorodibromomethane	U		0.000520	0.00289	1	03/24/2020 18:01	WG1449180
Chloroethane	U		0.00125	0.00578	1	03/24/2020 18:01	WG1449180
Chloroform	U		0.000480	0.00289	1	03/24/2020 18:01	WG1449180
Chloromethane	U		0.00161	0.0145	1	03/24/2020 18:01	WG1449180
2-Chlorotoluene	U		0.00106	0.00289	1	03/24/2020 18:01	WG1449180
4-Chlorotoluene	U		0.00131	0.00578	1	03/24/2020 18:01	WG1449180
1,2-Dibromo-3-Chloropropane	U		0.00590	0.0289	1	03/24/2020 18:01	WG1449180
1,2-Dibromoethane	U		0.000607	0.00289	1	03/24/2020 18:01	WG1449180
Dibromomethane	U		0.00116	0.00578	1	03/24/2020 18:01	WG1449180
1,2-Dichlorobenzene	U		0.00168	0.00578	1	03/24/2020 18:01	WG1449180
1,3-Dichlorobenzene	U		0.00197	0.00578	1	03/24/2020 18:01	WG1449180
1,4-Dichlorobenzene	0.00657		0.00228	0.00578	1	03/24/2020 18:01	WG1449180
Dichlorodifluoromethane	U		0.000946	0.00289	1	03/24/2020 18:01	WG1449180
1,1-Dichloroethane	U		0.000665	0.00289	1	03/24/2020 18:01	WG1449180
1,2-Dichloroethane	U		0.000549	0.00289	1	03/24/2020 18:01	WG1449180
1,1-Dichloroethene	U		0.000578	0.00289	1	03/24/2020 18:01	WG1449180
cis-1,2-Dichloroethene	U		0.000798	0.00289	1	03/24/2020 18:01	WG1449180
trans-1,2-Dichloroethene	U		0.00165	0.00578	1	03/24/2020 18:01	WG1449180
1,2-Dichloropropane	U		0.00147	0.00578	1	03/24/2020 18:01	WG1449180
1,1-Dichloropropene	U		0.000809	0.00289	1	03/24/2020 18:01	WG1449180
1,3-Dichloropropane	U		0.00202	0.00578	1	03/24/2020 18:01	WG1449180
cis-1,3-Dichloropropene	U		0.000784	0.00289	1	03/24/2020 18:01	WG1449180
trans-1,3-Dichloropropene	U		0.00177	0.00578	1	03/24/2020 18:01	WG1449180
2,2-Dichloropropane	U		0.000917	0.00289	1	03/24/2020 18:01	WG1449180
Di-isopropyl ether	U		0.000405	0.00116	1	03/24/2020 18:01	WG1449180
Ethylbenzene	0.000979	J	0.000613	0.00289	1	03/24/2020 18:01	WG1449180
Hexachloro-1,3-butadiene	U		0.0147	0.0289	1	03/24/2020 18:01	WG1449180
Isopropylbenzene	U		0.000998	0.00289	1	03/24/2020 18:01	WG1449180
p-Isopropyltoluene	U		0.00269	0.00578	1	03/24/2020 18:01	WG1449180
2-Butanone (MEK)	U		0.0145	0.0289	1	03/24/2020 18:01	WG1449180
Methylene Chloride	U		0.00768	0.0289	1	03/24/2020 18:01	WG1449180
4-Methyl-2-pentanone (MIBK)	U		0.0116	0.0289	1	03/24/2020 18:01	WG1449180
Methyl tert-butyl ether	U		0.000341	0.00116	1	03/24/2020 18:01	WG1449180



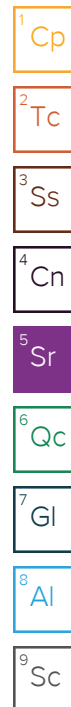


Collected date/time: 03/19/20 12:30

L1201677

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Naphthalene	U		0.00361	0.0145	1	03/24/2020 18:01	WG1449180
n-Propylbenzene	U		0.00136	0.00578	1	03/24/2020 18:01	WG1449180
Styrene	U		0.00316	0.0145	1	03/24/2020 18:01	WG1449180
1,1,1,2-Tetrachloroethane	U		0.000578	0.00289	1	03/24/2020 18:01	WG1449180
1,1,2,2-Tetrachloroethane	U		0.000451	0.00289	1	03/24/2020 18:01	WG1449180
1,1,2-Trichlorotrifluoroethane	U		0.000780	0.00289	1	03/24/2020 18:01	WG1449180
Tetrachloroethene	U		0.000809	0.00289	1	03/24/2020 18:01	WG1449180
Toluene	0.00626		0.00145	0.00578	1	03/24/2020 18:01	WG1449180
1,2,3-Trichlorobenzene	U		0.000723	0.0145	1	03/24/2020 18:01	WG1449180
1,2,4-Trichlorobenzene	U		0.00557	0.0145	1	03/24/2020 18:01	WG1449180
1,1,1-Trichloroethane	U		0.000318	0.00289	1	03/24/2020 18:01	WG1449180
1,1,2-Trichloroethane	U		0.00102	0.00289	1	03/24/2020 18:01	WG1449180
Trichloroethene	0.00272		0.000462	0.00116	1	03/24/2020 18:01	WG1449180
Trichlorofluoromethane	U		0.000578	0.00289	1	03/24/2020 18:01	WG1449180
1,2,3-Trichloropropane	U		0.00590	0.0145	1	03/24/2020 18:01	WG1449180
1,2,4-Trimethylbenzene	0.00296	J	0.00134	0.00578	1	03/24/2020 18:01	WG1449180
1,2,3-Trimethylbenzene	U		0.00133	0.00578	1	03/24/2020 18:01	WG1449180
Vinyl chloride	U		0.000790	0.00289	1	03/24/2020 18:01	WG1449180
1,3,5-Trimethylbenzene	U		0.00125	0.00578	1	03/24/2020 18:01	WG1449180
Xylenes, Total	0.00615	J	0.00553	0.00752	1	03/24/2020 18:01	WG1449180
(S) Toluene-d8	112			75.0-131		03/24/2020 18:01	WG1449180
(S) 4-Bromofluorobenzene	90.1			67.0-138		03/24/2020 18:01	WG1449180
(S) 1,2-Dichloroethane-d4	92.1			70.0-130		03/24/2020 18:01	WG1449180



Polychlorinated Biphenyls (GC) by Method 8082 A

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
PCB 1016	U		0.00405	0.0197	1	03/25/2020 01:35	WG1449458
PCB 1221	U		0.00621	0.0197	1	03/25/2020 01:35	WG1449458
PCB 1232	U		0.00482	0.0197	1	03/25/2020 01:35	WG1449458
PCB 1242	U		0.00368	0.0197	1	03/25/2020 01:35	WG1449458
PCB 1248	U		0.00364	0.0197	1	03/25/2020 01:35	WG1449458
PCB 1254	U		0.00546	0.0197	1	03/25/2020 01:35	WG1449458
PCB 1260	U		0.00571	0.0197	1	03/25/2020 01:35	WG1449458
(S) Decachlorobiphenyl	78.0			10.0-135		03/25/2020 01:35	WG1449458
(S) Tetrachloro-m-xylene	75.9			10.0-139		03/25/2020 01:35	WG1449458

Semi Volatile Organic Compounds (GC/MS) by Method 8270E-SIM

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Anthracene	U		0.000694	0.00694	1	03/26/2020 13:17	WG1450433
Acenaphthene	U		0.000694	0.00694	1	03/26/2020 13:17	WG1450433
Acenaphthylene	U		0.000694	0.00694	1	03/26/2020 13:17	WG1450433
Benzo(a)anthracene	U		0.000694	0.00694	1	03/26/2020 13:17	WG1450433
Benzo(a)pyrene	U		0.000694	0.00694	1	03/26/2020 13:17	WG1450433
Benzo(b)fluoranthene	U		0.000694	0.00694	1	03/26/2020 13:17	WG1450433
Benzo(g,h,i)perylene	U		0.000694	0.00694	1	03/26/2020 13:17	WG1450433
Benzo(k)fluoranthene	U		0.000694	0.00694	1	03/26/2020 13:17	WG1450433
Chrysene	U		0.000694	0.00694	1	03/26/2020 13:17	WG1450433
Dibenz(a,h)anthracene	U		0.000694	0.00694	1	03/26/2020 13:17	WG1450433
Fluoranthene	U		0.000694	0.00694	1	03/26/2020 13:17	WG1450433
Fluorene	U		0.000694	0.00694	1	03/26/2020 13:17	WG1450433
Indeno(1,2,3-cd)pyrene	U		0.000694	0.00694	1	03/26/2020 13:17	WG1450433
Naphthalene	U		0.00231	0.0231	1	03/26/2020 13:17	WG1450433
Phenanthrene	U		0.000694	0.00694	1	03/26/2020 13:17	WG1450433



Collected date/time: 03/19/20 12:30

L1201677

Semi Volatile Organic Compounds (GC/MS) by Method 8270E-SIM

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Pyrene	U		0.000694	0.00694	1	03/26/2020 13:17	WG1450433
1-Methylnaphthalene	U		0.00231	0.0231	1	03/26/2020 13:17	WG1450433
2-Methylnaphthalene	U		0.00231	0.0231	1	03/26/2020 13:17	WG1450433
2-Chloronaphthalene	U		0.00231	0.0231	1	03/26/2020 13:17	WG1450433
(S) Nitrobenzene-d5	62.1			14.0-149		03/26/2020 13:17	WG1450433
(S) 2-Fluorobiphenyl	60.7			34.0-125		03/26/2020 13:17	WG1450433
(S) p-Terphenyl-d14	51.9			23.0-120		03/26/2020 13:17	WG1450433

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc



Total Solids by Method 2540 G-2011

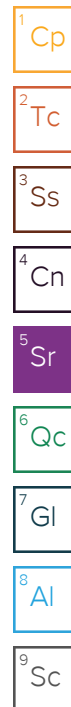
Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	95.3		1	03/24/2020 23:37	WG1449392

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Benzene	0.00145	J	0.000579	0.00145	1.38	03/24/2020 23:36	WG1449489
Toluene	0.0125		0.00182	0.00724	1.38	03/24/2020 23:36	WG1449489
Ethylbenzene	0.00272	J	0.000767	0.00362	1.38	03/24/2020 23:36	WG1449489
Total Xylenes	0.0137		0.00693	0.00941	1.38	03/24/2020 23:36	WG1449489
Methyl tert-butyl ether	0.000579	J	0.000427	0.00145	1.38	03/24/2020 23:36	WG1449489
1,2-Dichloroethane	U		0.000688	0.00362	1.38	03/24/2020 23:36	WG1449489
1,2-Dibromoethane	U		0.000761	0.00362	1.38	03/24/2020 23:36	WG1449489
Naphthalene	U		0.00452	0.0182	1.38	03/24/2020 23:36	WG1449489
(S) Toluene-d8	113			75.0-131		03/24/2020 23:36	WG1449489
(S) 4-Bromofluorobenzene	92.4			67.0-138		03/24/2020 23:36	WG1449489
(S) 1,2-Dichloroethane-d4	95.0			70.0-130		03/24/2020 23:36	WG1449489

Semi Volatile Organic Compounds (GC/MS) by Method 8270E-SIM

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Anthracene	U		0.000630	0.00630	1	03/26/2020 14:49	WG1450433
Acenaphthene	U		0.000630	0.00630	1	03/26/2020 14:49	WG1450433
Acenaphthylene	U		0.000630	0.00630	1	03/26/2020 14:49	WG1450433
Benzo(a)anthracene	0.00258	J	0.000630	0.00630	1	03/26/2020 14:49	WG1450433
Benzo(a)pyrene	0.00417	J	0.000630	0.00630	1	03/26/2020 14:49	WG1450433
Benzo(b)fluoranthene	0.00281	J	0.000630	0.00630	1	03/26/2020 14:49	WG1450433
Benzo(g,h,i)perylene	0.0176		0.000630	0.00630	1	03/26/2020 14:49	WG1450433
Benzo(k)fluoranthene	U		0.000630	0.00630	1	03/26/2020 14:49	WG1450433
Chrysene	0.00449	J	0.000630	0.00630	1	03/26/2020 14:49	WG1450433
Dibenz(a,h)anthracene	U		0.000630	0.00630	1	03/26/2020 14:49	WG1450433
Fluoranthene	0.00194	J	0.000630	0.00630	1	03/26/2020 14:49	WG1450433
Fluorene	U		0.000630	0.00630	1	03/26/2020 14:49	WG1450433
Indeno(1,2,3-cd)pyrene	0.00292	J	0.000630	0.00630	1	03/26/2020 14:49	WG1450433
Naphthalene	U		0.00210	0.0210	1	03/26/2020 14:49	WG1450433
Phenanthrene	0.00451	J	0.000630	0.00630	1	03/26/2020 14:49	WG1450433
Pyrene	0.00500	J	0.000630	0.00630	1	03/26/2020 14:49	WG1450433
1-Methylnaphthalene	U		0.00210	0.0210	1	03/26/2020 14:49	WG1450433
2-Methylnaphthalene	U		0.00210	0.0210	1	03/26/2020 14:49	WG1450433
2-Chloronaphthalene	U		0.00210	0.0210	1	03/26/2020 14:49	WG1450433
(S) Nitrobenzene-d5	80.6			14.0-149		03/26/2020 14:49	WG1450433
(S) 2-Fluorobiphenyl	75.5			34.0-125		03/26/2020 14:49	WG1450433
(S) p-Terphenyl-d14	81.5			23.0-120		03/26/2020 14:49	WG1450433





Collected date/time: 03/19/20 14:02

L1201677

Total Solids by Method 2540 G-2011

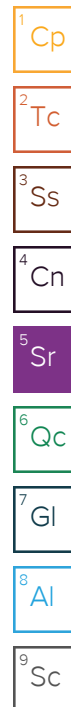
Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	91.1		1	03/24/2020 23:37	WG1449392

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Benzene	0.000668	U	0.000439	0.00110	1	03/24/2020 23:55	WG1449489
Toluene	0.00616		0.00137	0.00549	1	03/24/2020 23:55	WG1449489
Ethylbenzene	0.00102	U	0.000582	0.00275	1	03/24/2020 23:55	WG1449489
Total Xylenes	0.00653	U	0.00525	0.00714	1	03/24/2020 23:55	WG1449489
Methyl tert-butyl ether	0.000579	U	0.000324	0.00110	1	03/24/2020 23:55	WG1449489
1,2-Dichloroethane	U		0.000522	0.00275	1	03/24/2020 23:55	WG1449489
1,2-Dibromoethane	U		0.000576	0.00275	1	03/24/2020 23:55	WG1449489
Naphthalene	U		0.00343	0.0137	1	03/24/2020 23:55	WG1449489
(S) Toluene-d8	115			75.0-131		03/24/2020 23:55	WG1449489
(S) 4-Bromofluorobenzene	91.1			67.0-138		03/24/2020 23:55	WG1449489
(S) 1,2-Dichloroethane-d4	96.0			70.0-130		03/24/2020 23:55	WG1449489

Semi Volatile Organic Compounds (GC/MS) by Method 8270E-SIM

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Anthracene	U		0.000659	0.00659	1	03/26/2020 13:40	WG1450433
Acenaphthene	U		0.000659	0.00659	1	03/26/2020 13:40	WG1450433
Acenaphthylene	U		0.000659	0.00659	1	03/26/2020 13:40	WG1450433
Benzo(a)anthracene	0.00123	U	0.000659	0.00659	1	03/26/2020 13:40	WG1450433
Benzo(a)pyrene	0.000865	U	0.000659	0.00659	1	03/26/2020 13:40	WG1450433
Benzo(b)fluoranthene	0.00108	U	0.000659	0.00659	1	03/26/2020 13:40	WG1450433
Benzo(g,h,i)perylene	0.00111	U	0.000659	0.00659	1	03/26/2020 13:40	WG1450433
Benzo(k)fluoranthene	U		0.000659	0.00659	1	03/26/2020 13:40	WG1450433
Chrysene	0.000964	U	0.000659	0.00659	1	03/26/2020 13:40	WG1450433
Dibenz(a,h)anthracene	U		0.000659	0.00659	1	03/26/2020 13:40	WG1450433
Fluoranthene	0.00160	U	0.000659	0.00659	1	03/26/2020 13:40	WG1450433
Fluorene	U		0.000659	0.00659	1	03/26/2020 13:40	WG1450433
Indeno(1,2,3-cd)pyrene	U		0.000659	0.00659	1	03/26/2020 13:40	WG1450433
Naphthalene	U		0.00220	0.0220	1	03/26/2020 13:40	WG1450433
Phenanthrene	0.000706	U	0.000659	0.00659	1	03/26/2020 13:40	WG1450433
Pyrene	0.00169	U	0.000659	0.00659	1	03/26/2020 13:40	WG1450433
1-Methylnaphthalene	U		0.00220	0.0220	1	03/26/2020 13:40	WG1450433
2-Methylnaphthalene	U		0.00220	0.0220	1	03/26/2020 13:40	WG1450433
2-Chloronaphthalene	U		0.00220	0.0220	1	03/26/2020 13:40	WG1450433
(S) Nitrobenzene-d5	78.7			14.0-149		03/26/2020 13:40	WG1450433
(S) 2-Fluorobiphenyl	74.4			34.0-125		03/26/2020 13:40	WG1450433
(S) p-Terphenyl-d14	76.8			23.0-120		03/26/2020 13:40	WG1450433





Total Solids by Method 2540 G-2011

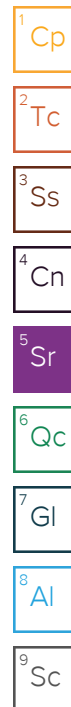
Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	95.5		1	03/24/2020 23:37	WG1449392

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Benzene	0.000632	J	0.000440	0.00110	1.05	03/25/2020 00:14	WG1449489
Toluene	0.00566		0.00137	0.00550	1.05	03/25/2020 00:14	WG1449489
Ethylbenzene	0.00107	J	0.000582	0.00275	1.05	03/25/2020 00:14	WG1449489
Total Xylenes	U		0.00526	0.00715	1.05	03/25/2020 00:14	WG1449489
Methyl tert-butyl ether	0.000660	J	0.000325	0.00110	1.05	03/25/2020 00:14	WG1449489
1,2-Dichloroethane	U		0.000522	0.00275	1.05	03/25/2020 00:14	WG1449489
1,2-Dibromoethane	U		0.000577	0.00275	1.05	03/25/2020 00:14	WG1449489
Naphthalene	U		0.00343	0.0137	1.05	03/25/2020 00:14	WG1449489
(S) Toluene-d8	114			75.0-131		03/25/2020 00:14	WG1449489
(S) 4-Bromofluorobenzene	89.2			67.0-138		03/25/2020 00:14	WG1449489
(S) 1,2-Dichloroethane-d4	95.5			70.0-130		03/25/2020 00:14	WG1449489

Semi Volatile Organic Compounds (GC/MS) by Method 8270E-SIM

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Anthracene	0.000960	J	0.000628	0.00628	1	03/26/2020 14:26	WG1450433
Acenaphthene	U		0.000628	0.00628	1	03/26/2020 14:26	WG1450433
Acenaphthylene	U		0.000628	0.00628	1	03/26/2020 14:26	WG1450433
Benzo(a)anthracene	0.00462	J	0.000628	0.00628	1	03/26/2020 14:26	WG1450433
Benzo(a)pyrene	0.00502	J	0.000628	0.00628	1	03/26/2020 14:26	WG1450433
Benzo(b)fluoranthene	0.00765		0.000628	0.00628	1	03/26/2020 14:26	WG1450433
Benzo(g,h,i)perylene	0.00595	J	0.000628	0.00628	1	03/26/2020 14:26	WG1450433
Benzo(k)fluoranthene	0.00269	J	0.000628	0.00628	1	03/26/2020 14:26	WG1450433
Chrysene	0.00466	J	0.000628	0.00628	1	03/26/2020 14:26	WG1450433
Dibenz(a,h)anthracene	0.00124	J	0.000628	0.00628	1	03/26/2020 14:26	WG1450433
Fluoranthene	0.00786		0.000628	0.00628	1	03/26/2020 14:26	WG1450433
Fluorene	U		0.000628	0.00628	1	03/26/2020 14:26	WG1450433
Indeno(1,2,3-cd)pyrene	0.00382	J	0.000628	0.00628	1	03/26/2020 14:26	WG1450433
Naphthalene	U		0.00209	0.0209	1	03/26/2020 14:26	WG1450433
Phenanthrene	0.00264	J	0.000628	0.00628	1	03/26/2020 14:26	WG1450433
Pyrene	0.00711		0.000628	0.00628	1	03/26/2020 14:26	WG1450433
1-Methylnaphthalene	U		0.00209	0.0209	1	03/26/2020 14:26	WG1450433
2-Methylnaphthalene	U		0.00209	0.0209	1	03/26/2020 14:26	WG1450433
2-Chloronaphthalene	U		0.00209	0.0209	1	03/26/2020 14:26	WG1450433
(S) Nitrobenzene-d5	76.1			14.0-149		03/26/2020 14:26	WG1450433
(S) 2-Fluorobiphenyl	74.9			34.0-125		03/26/2020 14:26	WG1450433
(S) p-Terphenyl-d14	80.6			23.0-120		03/26/2020 14:26	WG1450433





Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	83.5		1	03/24/2020 23:37	WG1449392

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Benzene	0.000619	J	0.000551	0.00138	1.15	03/25/2020 00:33	WG1449489
Toluene	0.00743		0.00172	0.00688	1.15	03/25/2020 00:33	WG1449489
Ethylbenzene	0.00130	J	0.000729	0.00345	1.15	03/25/2020 00:33	WG1449489
Total Xylenes	0.00798	J	0.00658	0.00895	1.15	03/25/2020 00:33	WG1449489
Methyl tert-butyl ether	0.000654	J	0.000406	0.00138	1.15	03/25/2020 00:33	WG1449489
1,2-Dichloroethane	U		0.000654	0.00345	1.15	03/25/2020 00:33	WG1449489
1,2-Dibromoethane	U		0.000723	0.00345	1.15	03/25/2020 00:33	WG1449489
Naphthalene	U		0.00430	0.0172	1.15	03/25/2020 00:33	WG1449489
(S) Toluene-d8	113			75.0-131		03/25/2020 00:33	WG1449489
(S) 4-Bromofluorobenzene	92.9			67.0-138		03/25/2020 00:33	WG1449489
(S) 1,2-Dichloroethane-d4	99.2			70.0-130		03/25/2020 00:33	WG1449489

Semi Volatile Organic Compounds (GC/MS) by Method 8270E-SIM

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Anthracene	U		0.000718	0.00718	1	03/26/2020 14:03	WG1450433
Acenaphthene	U		0.000718	0.00718	1	03/26/2020 14:03	WG1450433
Acenaphthylene	U		0.000718	0.00718	1	03/26/2020 14:03	WG1450433
Benzo(a)anthracene	U		0.000718	0.00718	1	03/26/2020 14:03	WG1450433
Benzo(a)pyrene	U		0.000718	0.00718	1	03/26/2020 14:03	WG1450433
Benzo(b)fluoranthene	U		0.000718	0.00718	1	03/26/2020 14:03	WG1450433
Benzo(g,h,i)perylene	U		0.000718	0.00718	1	03/26/2020 14:03	WG1450433
Benzo(k)fluoranthene	U		0.000718	0.00718	1	03/26/2020 14:03	WG1450433
Chrysene	U		0.000718	0.00718	1	03/26/2020 14:03	WG1450433
Dibenz(a,h)anthracene	U		0.000718	0.00718	1	03/26/2020 14:03	WG1450433
Fluoranthene	U		0.000718	0.00718	1	03/26/2020 14:03	WG1450433
Fluorene	U		0.000718	0.00718	1	03/26/2020 14:03	WG1450433
Indeno(1,2,3-cd)pyrene	U		0.000718	0.00718	1	03/26/2020 14:03	WG1450433
Naphthalene	U		0.00239	0.0239	1	03/26/2020 14:03	WG1450433
Phenanthrene	U		0.000718	0.00718	1	03/26/2020 14:03	WG1450433
Pyrene	U		0.000718	0.00718	1	03/26/2020 14:03	WG1450433
1-Methylnaphthalene	U		0.00239	0.0239	1	03/26/2020 14:03	WG1450433
2-Methylnaphthalene	U		0.00239	0.0239	1	03/26/2020 14:03	WG1450433
2-Chloronaphthalene	U		0.00239	0.0239	1	03/26/2020 14:03	WG1450433
(S) Nitrobenzene-d5	72.8			14.0-149		03/26/2020 14:03	WG1450433
(S) 2-Fluorobiphenyl	73.5			34.0-125		03/26/2020 14:03	WG1450433
(S) p-Terphenyl-d14	75.9			23.0-120		03/26/2020 14:03	WG1450433

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc



Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Acetone	U	J4	0.0100	0.0500	1	03/24/2020 23:18	WG1449691
Acrolein	U	J0 J3	0.00887	0.0500	1	03/24/2020 23:18	WG1449691
Acrylonitrile	U		0.00187	0.0100	1	03/24/2020 23:18	WG1449691
Benzene	U		0.000331	0.00100	1	03/24/2020 23:18	WG1449691
Bromobenzene	U		0.000352	0.00100	1	03/24/2020 23:18	WG1449691
Bromodichloromethane	U		0.000380	0.00100	1	03/24/2020 23:18	WG1449691
Bromoform	U		0.000469	0.00100	1	03/24/2020 23:18	WG1449691
Bromomethane	U		0.000866	0.00500	1	03/24/2020 23:18	WG1449691
n-Butylbenzene	U		0.000361	0.00100	1	03/24/2020 23:18	WG1449691
sec-Butylbenzene	U		0.000365	0.00100	1	03/24/2020 23:18	WG1449691
tert-Butylbenzene	U		0.000399	0.00100	1	03/24/2020 23:18	WG1449691
Carbon tetrachloride	U		0.000379	0.00100	1	03/24/2020 23:18	WG1449691
Chlorobenzene	U		0.000348	0.00100	1	03/24/2020 23:18	WG1449691
Chlorodibromomethane	U		0.000327	0.00100	1	03/24/2020 23:18	WG1449691
Chloroethane	U		0.000453	0.00500	1	03/24/2020 23:18	WG1449691
Chloroform	U		0.000324	0.00500	1	03/24/2020 23:18	WG1449691
Chloromethane	U		0.000276	0.00250	1	03/24/2020 23:18	WG1449691
2-Chlorotoluene	U		0.000375	0.00100	1	03/24/2020 23:18	WG1449691
4-Chlorotoluene	U		0.000351	0.00100	1	03/24/2020 23:18	WG1449691
1,2-Dibromo-3-Chloropropane	U		0.00133	0.00500	1	03/24/2020 23:18	WG1449691
1,2-Dibromoethane	U		0.000381	0.00100	1	03/24/2020 23:18	WG1449691
Dibromomethane	U		0.000346	0.00100	1	03/24/2020 23:18	WG1449691
1,2-Dichlorobenzene	U		0.000349	0.00100	1	03/24/2020 23:18	WG1449691
1,3-Dichlorobenzene	U		0.000220	0.00100	1	03/24/2020 23:18	WG1449691
1,4-Dichlorobenzene	U		0.000274	0.00100	1	03/24/2020 23:18	WG1449691
Dichlorodifluoromethane	U		0.000551	0.00500	1	03/24/2020 23:18	WG1449691
1,1-Dichloroethane	U		0.000259	0.00100	1	03/24/2020 23:18	WG1449691
1,2-Dichloroethane	U		0.000361	0.00100	1	03/24/2020 23:18	WG1449691
1,1-Dichloroethene	U		0.000398	0.00100	1	03/24/2020 23:18	WG1449691
cis-1,2-Dichloroethene	U		0.000260	0.00100	1	03/24/2020 23:18	WG1449691
trans-1,2-Dichloroethene	U		0.000396	0.00100	1	03/24/2020 23:18	WG1449691
1,2-Dichloropropane	U		0.000306	0.00100	1	03/24/2020 23:18	WG1449691
1,1-Dichloropropene	U		0.000352	0.00100	1	03/24/2020 23:18	WG1449691
1,3-Dichloropropane	U		0.000366	0.00100	1	03/24/2020 23:18	WG1449691
cis-1,3-Dichloropropene	U		0.000418	0.00100	1	03/24/2020 23:18	WG1449691
trans-1,3-Dichloropropene	U		0.000419	0.00100	1	03/24/2020 23:18	WG1449691
2,2-Dichloropropane	U		0.000321	0.00100	1	03/24/2020 23:18	WG1449691
Di-isopropyl ether	U		0.000320	0.00100	1	03/24/2020 23:18	WG1449691
Ethylbenzene	U		0.000384	0.00100	1	03/24/2020 23:18	WG1449691
Hexachloro-1,3-butadiene	U		0.000256	0.00100	1	03/24/2020 23:18	WG1449691
Isopropylbenzene	U		0.000326	0.00100	1	03/24/2020 23:18	WG1449691
p-Isopropyltoluene	U		0.000350	0.00100	1	03/24/2020 23:18	WG1449691
2-Butanone (MEK)	U		0.00393	0.0100	1	03/24/2020 23:18	WG1449691
Methylene Chloride	U		0.00100	0.00500	1	03/24/2020 23:18	WG1449691
4-Methyl-2-pentanone (MIBK)	U		0.00214	0.0100	1	03/24/2020 23:18	WG1449691
Methyl tert-butyl ether	U		0.000367	0.00100	1	03/24/2020 23:18	WG1449691
Naphthalene	U		0.00100	0.00500	1	03/24/2020 23:18	WG1449691
n-Propylbenzene	U		0.000349	0.00100	1	03/24/2020 23:18	WG1449691
Styrene	U		0.000307	0.00100	1	03/24/2020 23:18	WG1449691
1,1,1,2-Tetrachloroethane	U		0.000385	0.00100	1	03/24/2020 23:18	WG1449691
1,1,2,2-Tetrachloroethane	U		0.000130	0.00100	1	03/24/2020 23:18	WG1449691
1,1,2-Trichlorotrifluoroethane	U		0.000303	0.00100	1	03/24/2020 23:18	WG1449691
Tetrachloroethene	U		0.000372	0.00100	1	03/24/2020 23:18	WG1449691
Toluene	U		0.000412	0.00100	1	03/24/2020 23:18	WG1449691
1,2,3-Trichlorobenzene	U		0.000230	0.00100	1	03/24/2020 23:18	WG1449691
1,2,4-Trichlorobenzene	U		0.000355	0.00100	1	03/24/2020 23:18	WG1449691

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 03/19/20 00:00

L1201677

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
1,1,1-Trichloroethane	U		0.000319	0.00100	1	03/24/2020 23:18	WG1449691
1,1,2-Trichloroethane	U		0.000383	0.00100	1	03/24/2020 23:18	WG1449691
Trichloroethene	U		0.000398	0.00100	1	03/24/2020 23:18	WG1449691
Trichlorofluoromethane	U		0.00120	0.00500	1	03/24/2020 23:18	WG1449691
1,2,3-Trichloropropane	U	J4	0.000807	0.00250	1	03/24/2020 23:18	WG1449691
1,2,4-Trimethylbenzene	U		0.000373	0.00100	1	03/24/2020 23:18	WG1449691
1,2,3-Trimethylbenzene	U		0.000321	0.00100	1	03/24/2020 23:18	WG1449691
1,3,5-Trimethylbenzene	U		0.000387	0.00100	1	03/24/2020 23:18	WG1449691
Vinyl chloride	U		0.000259	0.00100	1	03/24/2020 23:18	WG1449691
Xylenes, Total	U		0.00106	0.00300	1	03/24/2020 23:18	WG1449691
(S) Toluene-d8	112			80.0-120		03/24/2020 23:18	WG1449691
(S) 4-Bromofluorobenzene	107			77.0-126		03/24/2020 23:18	WG1449691
(S) 1,2-Dichloroethane-d4	105			70.0-130		03/24/2020 23:18	WG1449691

Sample Narrative:

L1201677-13 WG1449691: 1. J0-15

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc



Total Solids by Method 2540 G-2011

L1201677-01,02

Method Blank (MB)

(MB) R3512051-1 03/24/20 12:56

	MB Result	<u>MB Qualifier</u>	MB MDL	MB RDL
Analyte	%		%	%
Total Solids	0.000			

Cp

 ${}^2\text{Tc}$

Ss

 C_n ⁸⁷Sr

Qc

L1201933-13 Original Sample (OS) • Duplicate (DUP)

(OS) L1201933-13 03/24/20 12:56 • (DUP) R3512051-3 03/24/20 12:56

	Original Result	DUP Result	Dilution	DUP RPD	<u>DUP Qualifier</u>	DUP RPD Limits
Analyte	%	%		%		%
Total Solids	88.0	85.1	1	3.40		10

G|

Al

Sc

Laboratory Control Sample (LCS)

(LCS) R3512051-2 03/24/20 12:56

Analyte	Spike Amount %	LCS Result %	LCS Rec. %	Rec. Limits %	<u>LCS Qualifier</u>
Total Solids	50.0	50.0	100	85.0-115	

Method Blank (MB)

(MB) R3512332-1 03/24/20 23:37

	MB Result	<u>MB Qualifier</u>	MB MDL	MB RDL
Analyte	%		%	%
Total Solids	0.00100			

1

Cp

2

Tc

3

Ss

4

Cn

5

Sr

6

Qc

7

Gl

8

Al

9

Sc

L1201780-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1201780-01 03/24/20 23:37 • (DUP) R3512332-3 03/24/20 23:37

	Original Result	DUP Result	Dilution	DUP RPD	<u>DUP Qualifier</u>	DUP RPD Limits
Analyte	%	%		%		%
Total Solids	82.7	83.3	1	0.714		10

Laboratory Control Sample (LCS)

(LCS) R3512332-2 03/24/20 23:37

	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	<u>LCS Qualifier</u>
Analyte	%	%	%	%	
Total Solids	50.0	50.0	100	85.0-115	

Method Blank (MB)

(MB) R3512644-1 03/25/20 15:30

	MB Result	MB Qualifier	MB MDL	MB RDL
Analyte	%		%	%
Total Solids	0.000			

1

Cp

2

Tc

3

Ss

4

Cn

5

Sr

6

Qc

7

Gl

8

Al

9

Sc

L1202074-07 Original Sample (OS) • Duplicate (DUP)

(OS) L1202074-07 03/25/20 15:30 • (DUP) R3512644-3 03/25/20 15:30

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	%	%		%		%
Total Solids	79.6	80.8	1	1.55		10

Laboratory Control Sample (LCS)

(LCS) R3512644-2 03/25/20 15:30

	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Analyte	%	%	%	%	
Total Solids	50.0	50.0	100	85.0-115	



[L1201677-01,02,04,05,06,07,08](#)

Method Blank (MB)

(MB) R3512564-1 03/25/20 14:10

	MB Result	MB Qualifier	MB MDL	MB RDL
Analyte	mg/kg		mg/kg	mg/kg
Lead	U		0.190	0.500

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

Laboratory Control Sample (LCS)

(LCS) R3512564-2 03/25/20 14:13

	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Analyte	mg/kg	mg/kg	%	%	
Lead	100	98.7	98.7	80.0-120	

⁷Gl

⁸Al

⁹Sc

L1201679-10 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1201679-10 03/25/20 14:16 • (MS) R3512564-5 03/25/20 14:23 • (MSD) R3512564-6 03/25/20 14:26

	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
Analyte	mg/kg	mg/kg	mg/kg	mg/kg	%	%		%			%	%
Lead	100	19.3	120	113	101	93.7	1	75.0-125			6.00	20



Method Blank (MB)

(MB) R3511944-3 03/24/20 08:30

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Acetone	U		0.0137	0.0250
Acrylonitrile	U		0.00190	0.0125
Benzene	U		0.000400	0.00100
Bromobenzene	U		0.00105	0.0125
Bromodichloromethane	U		0.000788	0.00250
Bromoform	U		0.00598	0.0250
Bromomethane	U		0.00370	0.0125
n-Butylbenzene	U		0.00384	0.0125
sec-Butylbenzene	U		0.00253	0.0125
tert-Butylbenzene	U		0.00155	0.00500
Carbon tetrachloride	U		0.00108	0.00500
Chlorobenzene	U		0.000573	0.00250
Chlorodibromomethane	U		0.000450	0.00250
Chloroethane	U		0.00108	0.00500
Chloroform	U		0.000415	0.00250
Chloromethane	U		0.00139	0.0125
2-Chlorotoluene	U		0.000920	0.00250
4-Chlorotoluene	U		0.00113	0.00500
1,2-Dibromo-3-Chloropropane	U		0.00510	0.0250
1,2-Dibromoethane	U		0.000525	0.00250
Dibromomethane	U		0.00100	0.00500
1,2-Dichlorobenzene	U		0.00145	0.00500
1,3-Dichlorobenzene	U		0.00170	0.00500
1,4-Dichlorobenzene	U		0.00197	0.00500
Dichlorodifluoromethane	U		0.000818	0.00250
1,1-Dichloroethane	U		0.000575	0.00250
1,2-Dichloroethane	U		0.000475	0.00250
1,1-Dichloroethene	U		0.000500	0.00250
cis-1,2-Dichloroethene	U		0.000690	0.00250
trans-1,2-Dichloroethene	U		0.00143	0.00500
1,2-Dichloropropane	U		0.00127	0.00500
1,1-Dichloropropene	U		0.000700	0.00250
1,3-Dichloropropane	U		0.00175	0.00500
cis-1,3-Dichloropropene	U		0.000678	0.00250
trans-1,3-Dichloropropene	U		0.00153	0.00500
2,2-Dichloropropane	U		0.000793	0.00250
Di-isopropyl ether	U		0.000350	0.00100
Ethylbenzene	U		0.000530	0.00250
Hexachloro-1,3-butadiene	U		0.0127	0.0250
Isopropylbenzene	U		0.000863	0.00250

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc



Method Blank (MB)

(MB) R3511944-3 03/24/20 08:30

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
p-Isopropyltoluene	U		0.00233	0.00500
2-Butanone (MEK)	0.0363		0.0125	0.0250
Methylene Chloride	U		0.00664	0.0250
4-Methyl-2-pentanone (MIBK)	U		0.0100	0.0250
Methyl tert-butyl ether	U		0.000295	0.00100
Naphthalene	U		0.00312	0.0125
n-Propylbenzene	U		0.00118	0.00500
Styrene	U		0.00273	0.0125
1,1,1,2-Tetrachloroethane	U		0.000500	0.00250
1,1,2,2-Tetrachloroethane	U		0.000390	0.00250
Tetrachloroethene	U		0.000700	0.00250
Toluene	U		0.00125	0.00500
1,1,2-Trichlorotrifluoroethane	U		0.000675	0.00250
1,2,3-Trichlorobenzene	U		0.000625	0.0125
1,2,4-Trichlorobenzene	U		0.00482	0.0125
1,1,1-Trichloroethane	U		0.000275	0.00250
1,1,2-Trichloroethane	U		0.000883	0.00250
Trichloroethene	U		0.000400	0.00100
Trichlorofluoromethane	U		0.000500	0.00250
1,2,3-Trichloropropane	U		0.00510	0.0125
1,2,3-Trimethylbenzene	U		0.00115	0.00500
1,2,4-Trimethylbenzene	U		0.00116	0.00500
1,3,5-Trimethylbenzene	U		0.00108	0.00500
Vinyl chloride	U		0.000683	0.00250
Xylenes, Total	U		0.00478	0.00650
(S) Toluene-d8	114			75.0-131
(S) 4-Bromofluorobenzene	89.1			67.0-138
(S) 1,2-Dichloroethane-d4	95.6			70.0-130

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3511944-1 03/24/20 06:47 • (LCSD) R3511944-2 03/24/20 07:06

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCSD Result mg/kg	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Acetone	0.625	0.500	0.825	80.0	132	10.0-160		J3	49.1	31
Acrylonitrile	0.625	0.713	0.722	114	116	45.0-153			1.25	22
Benzene	0.125	0.124	0.124	99.2	99.2	70.0-123			0.000	20
Bromobenzene	0.125	0.139	0.140	111	112	73.0-121			0.717	20
Bromodichloromethane	0.125	0.131	0.130	105	104	73.0-121			0.766	20



Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3511944-1 03/24/20 06:47 • (LCSD) R3511944-2 03/24/20 07:06

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCSD Result mg/kg	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Bromoform	0.125	0.134	0.131	107	105	64.0-132			2.26	20
Bromomethane	0.125	0.136	0.134	109	107	56.0-147			1.48	20
n-Butylbenzene	0.125	0.127	0.124	102	99.2	68.0-135			2.39	20
sec-Butylbenzene	0.125	0.137	0.134	110	107	74.0-130			2.21	20
tert-Butylbenzene	0.125	0.127	0.127	102	102	75.0-127			0.000	20
Carbon tetrachloride	0.125	0.128	0.128	102	102	66.0-128			0.000	20
Chlorobenzene	0.125	0.126	0.128	101	102	76.0-128			1.57	20
Chlorodibromomethane	0.125	0.120	0.120	96.0	96.0	74.0-127			0.000	20
Chloroethane	0.125	0.144	0.145	115	116	61.0-134			0.692	20
Chloroform	0.125	0.142	0.144	114	115	72.0-123			1.40	20
Chloromethane	0.125	0.136	0.141	109	113	51.0-138			3.61	20
2-Chlorotoluene	0.125	0.124	0.126	99.2	101	75.0-124			1.60	20
4-Chlorotoluene	0.125	0.136	0.138	109	110	75.0-124			1.46	20
1,2-Dibromo-3-Chloropropane	0.125	0.128	0.130	102	104	59.0-130			1.55	20
1,2-Dibromoethane	0.125	0.126	0.128	101	102	74.0-128			1.57	20
Dibromomethane	0.125	0.123	0.123	98.4	98.4	75.0-122			0.000	20
1,2-Dichlorobenzene	0.125	0.130	0.130	104	104	76.0-124			0.000	20
1,3-Dichlorobenzene	0.125	0.141	0.139	113	111	76.0-125			1.43	20
1,4-Dichlorobenzene	0.125	0.134	0.133	107	106	77.0-121			0.749	20
Dichlorodifluoromethane	0.125	0.163	0.162	130	130	43.0-156			0.615	20
1,1-Dichloroethane	0.125	0.132	0.131	106	105	70.0-127			0.760	20
1,2-Dichloroethane	0.125	0.155	0.156	124	125	65.0-131			0.643	20
1,1-Dichloroethene	0.125	0.135	0.134	108	107	65.0-131			0.743	20
cis-1,2-Dichloroethene	0.125	0.130	0.130	104	104	73.0-125			0.000	20
trans-1,2-Dichloroethene	0.125	0.136	0.132	109	106	71.0-125			2.99	20
1,2-Dichloropropane	0.125	0.132	0.129	106	103	74.0-125			2.30	20
1,1-Dichloropropene	0.125	0.123	0.122	98.4	97.6	73.0-125			0.816	20
1,3-Dichloropropane	0.125	0.129	0.130	103	104	80.0-125			0.772	20
cis-1,3-Dichloropropene	0.125	0.125	0.124	100	99.2	76.0-127			0.803	20
trans-1,3-Dichloropropene	0.125	0.130	0.130	104	104	73.0-127			0.000	20
2,2-Dichloropropane	0.125	0.136	0.132	109	106	59.0-135			2.99	20
Di-isopropyl ether	0.125	0.138	0.138	110	110	60.0-136			0.000	20
Ethylbenzene	0.125	0.134	0.136	107	109	74.0-126			1.48	20
Hexachloro-1,3-butadiene	0.125	0.138	0.131	110	105	57.0-150			5.20	20
Isopropylbenzene	0.125	0.129	0.130	103	104	72.0-127			0.772	20
p-Isopropyltoluene	0.125	0.130	0.130	104	104	72.0-133			0.000	20
2-Butanone (MEK)	0.625	0.678	0.696	108	111	30.0-160			2.62	24
Methylene Chloride	0.125	0.122	0.124	97.6	99.2	68.0-123			1.63	20
4-Methyl-2-pentanone (MIBK)	0.625	0.701	0.691	112	111	56.0-143			1.44	20
Methyl tert-butyl ether	0.125	0.137	0.139	110	111	66.0-132			1.45	20

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc



Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3511944-1 03/24/20 06:47 • (LCSD) R3511944-2 03/24/20 07:06

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCSD Result mg/kg	LCS Rec. %	LCSD Rec. %	Rec. Limits %	<u>LCS Qualifier</u>	<u>LCSD Qualifier</u>	RPD %	RPD Limits %
Naphthalene	0.125	0.128	0.121	102	96.8	59.0-130			5.62	20
n-Propylbenzene	0.125	0.134	0.136	107	109	74.0-126			1.48	20
Styrene	0.125	0.128	0.129	102	103	72.0-127			0.778	20
1,1,1,2-Tetrachloroethane	0.125	0.127	0.126	102	101	74.0-129			0.791	20
1,1,2,2-Tetrachloroethane	0.125	0.149	0.146	119	117	68.0-128			2.03	20
Tetrachloroethene	0.125	0.139	0.141	111	113	70.0-136			1.43	20
Toluene	0.125	0.131	0.131	105	105	75.0-121			0.000	20
1,1,2-Trichlorotrifluoroethane	0.125	0.145	0.145	116	116	61.0-139			0.000	20
1,2,3-Trichlorobenzene	0.125	0.140	0.133	112	106	59.0-139			5.13	20
1,2,4-Trichlorobenzene	0.125	0.137	0.131	110	105	62.0-137			4.48	20
1,1,1-Trichloroethane	0.125	0.142	0.142	114	114	69.0-126			0.000	20
1,1,2-Trichloroethane	0.125	0.131	0.130	105	104	78.0-123			0.766	20
Trichloroethene	0.125	0.116	0.117	92.8	93.6	76.0-126			0.858	20
Trichlorofluoromethane	0.125	0.150	0.148	120	118	61.0-142			1.34	20
1,2,3-Trichloropropane	0.125	0.130	0.129	104	103	67.0-129			0.772	20
1,2,3-Trimethylbenzene	0.125	0.121	0.121	96.8	96.8	74.0-124			0.000	20
1,2,4-Trimethylbenzene	0.125	0.126	0.126	101	101	70.0-126			0.000	20
1,3,5-Trimethylbenzene	0.125	0.139	0.140	111	112	73.0-127			0.717	20
Vinyl chloride	0.125	0.160	0.162	128	130	63.0-134			1.24	20
Xylenes, Total	0.375	0.360	0.391	96.0	104	72.0-127			8.26	20
(S) Toluene-d8				108	109	75.0-131				
(S) 4-Bromofluorobenzene				100	98.4	67.0-138				
(S) 1,2-Dichloroethane-d4				110	109	70.0-130				

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc



Method Blank (MB)

(MB) R3512178-3 03/24/20 21:04

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Benzene	U		0.000400	0.00100
1,2-Dibromoethane	U		0.000525	0.00250
1,2-Dichloroethane	U		0.000475	0.00250
Ethylbenzene	U		0.000530	0.00250
Methyl tert-butyl ether	U		0.000295	0.00100
Naphthalene	U		0.00312	0.0125
Toluene	U		0.00125	0.00500
Xylenes, Total	U		0.00478	0.00650
(S) Toluene-d8	113			75.0-131
(S) 4-Bromofluorobenzene	90.9			67.0-138
(S) 1,2-Dichloroethane-d4	96.4			70.0-130

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3512178-1 03/24/20 19:35 • (LCSD) R3512178-2 03/24/20 19:54

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCSD Result mg/kg	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Benzene	0.125	0.113	0.111	90.4	88.8	70.0-123			1.79	20
1,2-Dibromoethane	0.125	0.108	0.108	86.4	86.4	74.0-128			0.000	20
1,2-Dichloroethane	0.125	0.141	0.137	113	110	65.0-131			2.88	20
Ethylbenzene	0.125	0.120	0.120	96.0	96.0	74.0-126			0.000	20
Methyl tert-butyl ether	0.125	0.119	0.117	95.2	93.6	66.0-132			1.69	20
Naphthalene	0.125	0.100	0.0964	80.0	77.1	59.0-130			3.67	20
Toluene	0.125	0.117	0.116	93.6	92.8	75.0-121			0.858	20
Xylenes, Total	0.375	0.344	0.339	91.7	90.4	72.0-127			1.46	20
(S) Toluene-d8				107	109	75.0-131				
(S) 4-Bromofluorobenzene				97.2	98.3	67.0-138				
(S) 1,2-Dichloroethane-d4				111	109	70.0-130				

Method Blank (MB)

(MB) R3512714-3 03/26/20 07:03

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Acetone	U		0.0137	0.0250
Acrylonitrile	U		0.00190	0.0125
Benzene	U		0.000400	0.00100
Bromobenzene	U		0.00105	0.0125
Bromodichloromethane	U		0.000788	0.00250
Bromoform	U		0.00598	0.0250
Bromomethane	U		0.00370	0.0125
n-Butylbenzene	U		0.00384	0.0125
sec-Butylbenzene	U		0.00253	0.0125
tert-Butylbenzene	U		0.00155	0.00500
Carbon tetrachloride	U		0.00108	0.00500
Chlorobenzene	U		0.000573	0.00250
Chlorodibromomethane	U		0.000450	0.00250
Chloroethane	U		0.00108	0.00500
Chloroform	U		0.000415	0.00250
Chloromethane	U		0.00139	0.0125
2-Chlorotoluene	U		0.000920	0.00250
4-Chlorotoluene	U		0.00113	0.00500
1,2-Dibromo-3-Chloropropane	U		0.00510	0.0250
1,2-Dibromoethane	U		0.000525	0.00250
Dibromomethane	U		0.00100	0.00500
1,2-Dichlorobenzene	U		0.00145	0.00500
1,3-Dichlorobenzene	U		0.00170	0.00500
1,4-Dichlorobenzene	U		0.00197	0.00500
Dichlorodifluoromethane	U		0.000818	0.00250
1,1-Dichloroethane	U		0.000575	0.00250
1,2-Dichloroethane	U		0.000475	0.00250
1,1-Dichloroethene	U		0.000500	0.00250
cis-1,2-Dichloroethene	U		0.000690	0.00250
trans-1,2-Dichloroethene	U		0.00143	0.00500
1,2-Dichloropropane	U		0.00127	0.00500
1,1-Dichloropropene	U		0.000700	0.00250
1,3-Dichloropropane	U		0.00175	0.00500
cis-1,3-Dichloropropene	U		0.000678	0.00250
trans-1,3-Dichloropropene	U		0.00153	0.00500
2,2-Dichloropropane	U		0.000793	0.00250
Di-isopropyl ether	U		0.000350	0.00100
Ethylbenzene	U		0.000530	0.00250
Hexachloro-1,3-butadiene	U		0.0127	0.0250
Isopropylbenzene	U		0.000863	0.00250

1

Cp

2

Tc

3

Ss

4

Cn

5

Sr

6

Qc

7

Gl

8

Al

9

Sc



Method Blank (MB)

(MB) R3512714-3 03/26/20 07:03

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
p-Isopropyltoluene	U		0.00233	0.00500
2-Butanone (MEK)	0.0509		0.0125	0.0250
Methylene Chloride	U		0.00664	0.0250
4-Methyl-2-pentanone (MIBK)	U		0.0100	0.0250
Methyl tert-butyl ether	U		0.000295	0.00100
Naphthalene	U		0.00312	0.0125
n-Propylbenzene	U		0.00118	0.00500
Styrene	U		0.00273	0.0125
1,1,1,2-Tetrachloroethane	U		0.000500	0.00250
1,1,2,2-Tetrachloroethane	U		0.000390	0.00250
Tetrachloroethene	U		0.000700	0.00250
Toluene	U		0.00125	0.00500
1,1,2-Trichlorotrifluoroethane	U		0.000675	0.00250
1,2,3-Trichlorobenzene	U		0.000625	0.0125
1,2,4-Trichlorobenzene	U		0.00482	0.0125
1,1,1-Trichloroethane	U		0.000275	0.00250
1,1,2-Trichloroethane	U		0.000883	0.00250
Trichloroethene	U		0.000400	0.00100
Trichlorofluoromethane	U		0.000500	0.00250
1,2,3-Trichloropropane	U		0.00510	0.0125
1,2,3-Trimethylbenzene	U		0.00115	0.00500
1,2,4-Trimethylbenzene	U		0.00116	0.00500
1,3,5-Trimethylbenzene	U		0.00108	0.00500
Vinyl chloride	U		0.000683	0.00250
Xylenes, Total	U		0.00478	0.00650
(S) Toluene-d8	117			75.0-131
(S) 4-Bromofluorobenzene	89.9			67.0-138
(S) 1,2-Dichloroethane-d4	89.5			70.0-130

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3512714-1 03/26/20 05:29 • (LCSD) R3512714-2 03/26/20 05:48

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCSD Result mg/kg	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Acetone	0.625	0.678	0.659	108	105	10.0-160			2.84	31
Acrylonitrile	0.625	0.648	0.646	104	103	45.0-153			0.309	22
Benzene	0.125	0.116	0.114	92.8	91.2	70.0-123			1.74	20
Bromobenzene	0.125	0.132	0.130	106	104	73.0-121			1.53	20
Bromodichloromethane	0.125	0.114	0.117	91.2	93.6	73.0-121			2.60	20



Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3512714-1 03/26/20 05:29 • (LCSD) R3512714-2 03/26/20 05:48

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCSD Result mg/kg	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Bromoform	0.125	0.115	0.115	92.0	92.0	64.0-132			0.000	20
Bromomethane	0.125	0.123	0.120	98.4	96.0	56.0-147			2.47	20
n-Butylbenzene	0.125	0.111	0.107	88.8	85.6	68.0-135			3.67	20
sec-Butylbenzene	0.125	0.123	0.119	98.4	95.2	74.0-130			3.31	20
tert-Butylbenzene	0.125	0.116	0.115	92.8	92.0	75.0-127			0.866	20
Carbon tetrachloride	0.125	0.120	0.117	96.0	93.6	66.0-128			2.53	20
Chlorobenzene	0.125	0.117	0.117	93.6	93.6	76.0-128			0.000	20
Chlorodibromomethane	0.125	0.106	0.106	84.8	84.8	74.0-127			0.000	20
Chloroethane	0.125	0.134	0.131	107	105	61.0-134			2.26	20
Chloroform	0.125	0.130	0.130	104	104	72.0-123			0.000	20
Chloromethane	0.125	0.145	0.139	116	111	51.0-138			4.23	20
2-Chlorotoluene	0.125	0.115	0.117	92.0	93.6	75.0-124			1.72	20
4-Chlorotoluene	0.125	0.125	0.123	100	98.4	75.0-124			1.61	20
1,2-Dibromo-3-Chloropropane	0.125	0.114	0.111	91.2	88.8	59.0-130			2.67	20
1,2-Dibromoethane	0.125	0.109	0.114	87.2	91.2	74.0-128			4.48	20
Dibromomethane	0.125	0.105	0.104	84.0	83.2	75.0-122			0.957	20
1,2-Dichlorobenzene	0.125	0.117	0.114	93.6	91.2	76.0-124			2.60	20
1,3-Dichlorobenzene	0.125	0.125	0.123	100	98.4	76.0-125			1.61	20
1,4-Dichlorobenzene	0.125	0.119	0.118	95.2	94.4	77.0-121			0.844	20
Dichlorodifluoromethane	0.125	0.202	0.198	162	158	43.0-156	J4	J4	2.00	20
1,1-Dichloroethane	0.125	0.121	0.119	96.8	95.2	70.0-127			1.67	20
1,2-Dichloroethane	0.125	0.135	0.136	108	109	65.0-131			0.738	20
1,1-Dichloroethene	0.125	0.123	0.121	98.4	96.8	65.0-131			1.64	20
cis-1,2-Dichloroethene	0.125	0.117	0.117	93.6	93.6	73.0-125			0.000	20
trans-1,2-Dichloroethene	0.125	0.124	0.123	99.2	98.4	71.0-125			0.810	20
1,2-Dichloropropane	0.125	0.120	0.119	96.0	95.2	74.0-125			0.837	20
1,1-Dichloropropene	0.125	0.115	0.111	92.0	88.8	73.0-125			3.54	20
1,3-Dichloropropane	0.125	0.115	0.119	92.0	95.2	80.0-125			3.42	20
cis-1,3-Dichloropropene	0.125	0.110	0.111	88.0	88.8	76.0-127			0.905	20
trans-1,3-Dichloropropene	0.125	0.117	0.118	93.6	94.4	73.0-127			0.851	20
2,2-Dichloropropane	0.125	0.118	0.115	94.4	92.0	59.0-135			2.58	20
Di-isopropyl ether	0.125	0.123	0.123	98.4	98.4	60.0-136			0.000	20
Ethylbenzene	0.125	0.123	0.125	98.4	100	74.0-126			1.61	20
Hexachloro-1,3-butadiene	0.125	0.116	0.111	92.8	88.8	57.0-150			4.41	20
Isopropylbenzene	0.125	0.117	0.117	93.6	93.6	72.0-127			0.000	20
p-Isopropyltoluene	0.125	0.115	0.114	92.0	91.2	72.0-133			0.873	20
2-Butanone (MEK)	0.625	0.568	0.569	90.9	91.0	30.0-160			0.176	24
Methylene Chloride	0.125	0.111	0.110	88.8	88.0	68.0-123			0.905	20
4-Methyl-2-pentanone (MIBK)	0.625	0.598	0.604	95.7	96.6	56.0-143			0.998	20
Methyl tert-butyl ether	0.125	0.124	0.120	99.2	96.0	66.0-132			3.28	20

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc



Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3512714-1 03/26/20 05:29 • (LCSD) R3512714-2 03/26/20 05:48

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCSD Result mg/kg	LCS Rec. %	LCSD Rec. %	Rec. Limits %	<u>LCS Qualifier</u>	<u>LCSD Qualifier</u>	RPD %	RPD Limits %
Naphthalene	0.125	0.103	0.0996	82.4	79.7	59.0-130			3.36	20
n-Propylbenzene	0.125	0.123	0.122	98.4	97.6	74.0-126			0.816	20
Styrene	0.125	0.115	0.115	92.0	92.0	72.0-127			0.000	20
1,1,1,2-Tetrachloroethane	0.125	0.117	0.116	93.6	92.8	74.0-129			0.858	20
1,1,2,2-Tetrachloroethane	0.125	0.132	0.130	106	104	68.0-128			1.53	20
Tetrachloroethene	0.125	0.133	0.129	106	103	70.0-136			3.05	20
Toluene	0.125	0.122	0.121	97.6	96.8	75.0-121			0.823	20
1,1,2-Trichlorotrifluoroethane	0.125	0.142	0.132	114	106	61.0-139			7.30	20
1,2,3-Trichlorobenzene	0.125	0.111	0.108	88.8	86.4	59.0-139			2.74	20
1,2,4-Trichlorobenzene	0.125	0.112	0.107	89.6	85.6	62.0-137			4.57	20
1,1,1-Trichloroethane	0.125	0.127	0.129	102	103	69.0-126			1.56	20
1,1,2-Trichloroethane	0.125	0.116	0.118	92.8	94.4	78.0-123			1.71	20
Trichloroethene	0.125	0.109	0.106	87.2	84.8	76.0-126			2.79	20
Trichlorofluoromethane	0.125	0.136	0.134	109	107	61.0-142			1.48	20
1,2,3-Trichloropropane	0.125	0.121	0.120	96.8	96.0	67.0-129			0.830	20
1,2,3-Trimethylbenzene	0.125	0.107	0.103	85.6	82.4	74.0-124			3.81	20
1,2,4-Trimethylbenzene	0.125	0.112	0.110	89.6	88.0	70.0-126			1.80	20
1,3,5-Trimethylbenzene	0.125	0.126	0.124	101	99.2	73.0-127			1.60	20
Vinyl chloride	0.125	0.170	0.166	136	133	63.0-134	J4		2.38	20
Xylenes, Total	0.375	0.345	0.349	92.0	93.1	72.0-127			1.15	20
(S) Toluene-d8				109	110	75.0-131				
(S) 4-Bromofluorobenzene				97.2	97.0	67.0-138				
(S) 1,2-Dichloroethane-d4				108	107	70.0-130				

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc



Method Blank (MB)

(MB) R3512171-4 03/24/20 21:54

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Acetone	U		0.0100	0.0500
Acrolein	U		0.00887	0.0500
Acrylonitrile	U		0.00187	0.0100
Benzene	U		0.000331	0.00100
Bromobenzene	U		0.000352	0.00100
Bromodichloromethane	U		0.000380	0.00100
Bromoform	U		0.000469	0.00100
Bromomethane	U		0.000866	0.00500
n-Butylbenzene	U		0.000361	0.00100
sec-Butylbenzene	U		0.000365	0.00100
tert-Butylbenzene	U		0.000399	0.00100
Carbon tetrachloride	U		0.000379	0.00100
Chlorobenzene	U		0.000348	0.00100
Chlorodibromomethane	U		0.000327	0.00100
Chloroethane	U		0.000453	0.00500
Chloroform	U		0.000324	0.00500
Chloromethane	U		0.000276	0.00250
2-Chlorotoluene	U		0.000375	0.00100
4-Chlorotoluene	U		0.000351	0.00100
1,2-Dibromo-3-Chloropropane	U		0.00133	0.00500
1,2-Dibromoethane	U		0.000381	0.00100
Dibromomethane	U		0.000346	0.00100
1,2-Dichlorobenzene	U		0.000349	0.00100
1,3-Dichlorobenzene	U		0.000220	0.00100
1,4-Dichlorobenzene	U		0.000274	0.00100
Dichlorodifluoromethane	U		0.000551	0.00500
1,1-Dichloroethane	U		0.000259	0.00100
1,2-Dichloroethane	U		0.000361	0.00100
1,1-Dichloroethene	U		0.000398	0.00100
cis-1,2-Dichloroethene	U		0.000260	0.00100
trans-1,2-Dichloroethene	U		0.000396	0.00100
1,2-Dichloropropane	U		0.000306	0.00100
1,1-Dichloropropene	U		0.000352	0.00100
1,3-Dichloropropane	U		0.000366	0.00100
cis-1,3-Dichloropropene	U		0.000418	0.00100
trans-1,3-Dichloropropene	U		0.000419	0.00100
2,2-Dichloropropane	U		0.000321	0.00100
Di-isopropyl ether	U		0.000320	0.00100
Ethylbenzene	U		0.000384	0.00100
Hexachloro-1,3-butadiene	U		0.000256	0.00100

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc



Method Blank (MB)

(MB) R3512171-4 03/24/20 21:54

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Isopropylbenzene	U		0.000326	0.00100
p-Isopropyltoluene	U		0.000350	0.00100
2-Butanone (MEK)	U		0.00393	0.0100
Methylene Chloride	U		0.00100	0.00500
4-Methyl-2-pentanone (MIBK)	U		0.00214	0.0100
Methyl tert-butyl ether	U		0.000367	0.00100
Naphthalene	U		0.00100	0.00500
n-Propylbenzene	U		0.000349	0.00100
Styrene	U		0.000307	0.00100
1,1,1,2-Tetrachloroethane	U		0.000385	0.00100
1,1,2,2-Tetrachloroethane	U		0.000130	0.00100
Tetrachloroethene	U		0.000372	0.00100
Toluene	U		0.000412	0.00100
1,1,2-Trichlorotrifluoroethane	U		0.000303	0.00100
1,2,3-Trichlorobenzene	U		0.000230	0.00100
1,2,4-Trichlorobenzene	U		0.000355	0.00100
1,1,1-Trichloroethane	U		0.000319	0.00100
1,1,2-Trichloroethane	U		0.000383	0.00100
Trichloroethene	U		0.000398	0.00100
Trichlorofluoromethane	U		0.00120	0.00500
1,2,3-Trichloropropane	U		0.000807	0.00250
1,2,3-Trimethylbenzene	U		0.000321	0.00100
1,2,4-Trimethylbenzene	U		0.000373	0.00100
1,3,5-Trimethylbenzene	U		0.000387	0.00100
Vinyl chloride	U		0.000259	0.00100
Xylenes, Total	U		0.00106	0.00300
(S) Toluene-d8	112			80.0-120
(S) 4-Bromofluorobenzene	106			77.0-126
(S) 1,2-Dichloroethane-d4	105			70.0-130

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3512171-1 03/24/20 19:35 • (LCSD) R3512171-3 03/24/20 21:04

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Acetone	0.0250	0.0471	0.0418	188	167	19.0-160	J4	J4	11.9	27
Acrolein	0.0250	0.0114	0.0288	45.6	115	10.0-160		J3	86.6	26
Acrylonitrile	0.0250	0.0283	0.0255	113	102	55.0-149			10.4	20
Benzene	0.00500	0.00533	0.00480	107	96.0	70.0-123			10.5	20



Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3512171-1 03/24/20 19:35 • (LCSD) R3512171-3 03/24/20 21:04

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	<u>LCS Qualifier</u>	<u>LCSD Qualifier</u>	RPD %	RPD Limits %
Bromobenzene	0.00500	0.00590	0.00556	118	111	73.0-121			5.93	20
Bromodichloromethane	0.00500	0.00528	0.00462	106	92.4	75.0-120			13.3	20
Bromoform	0.00500	0.00502	0.00434	100	86.8	68.0-132			14.5	20
Bromomethane	0.00500	0.00486	0.00416	97.2	83.2	10.0-160			15.5	25
n-Butylbenzene	0.00500	0.00594	0.00560	119	112	73.0-125			5.89	20
sec-Butylbenzene	0.00500	0.00551	0.00527	110	105	75.0-125			4.45	20
tert-Butylbenzene	0.00500	0.00564	0.00537	113	107	76.0-124			4.90	20
Carbon tetrachloride	0.00500	0.00524	0.00486	105	97.2	68.0-126			7.52	20
Chlorobenzene	0.00500	0.00540	0.00481	108	96.2	80.0-121			11.6	20
Chlorodibromomethane	0.00500	0.00534	0.00478	107	95.6	77.0-125			11.1	20
Chloroethane	0.00500	0.00410	0.00358	82.0	71.6	47.0-150			13.5	20
Chloroform	0.00500	0.00520	0.00467	104	93.4	73.0-120			10.7	20
Chloromethane	0.00500	0.00484	0.00431	96.8	86.2	41.0-142			11.6	20
2-Chlorotoluene	0.00500	0.00594	0.00546	119	109	76.0-123			8.42	20
4-Chlorotoluene	0.00500	0.00590	0.00551	118	110	75.0-122			6.84	20
1,2-Dibromo-3-Chloropropane	0.00500	0.00534	0.00471	107	94.2	58.0-134			12.5	20
1,2-Dibromoethane	0.00500	0.00584	0.00504	117	101	80.0-122			14.7	20
Dibromomethane	0.00500	0.00515	0.00488	103	97.6	80.0-120			5.38	20
1,2-Dichlorobenzene	0.00500	0.00551	0.00500	110	100	79.0-121			9.71	20
1,3-Dichlorobenzene	0.00500	0.00519	0.00482	104	96.4	79.0-120			7.39	20
1,4-Dichlorobenzene	0.00500	0.00495	0.00473	99.0	94.6	79.0-120			4.55	20
Dichlorodifluoromethane	0.00500	0.00596	0.00517	119	103	51.0-149			14.2	20
1,1-Dichloroethane	0.00500	0.00530	0.00478	106	95.6	70.0-126			10.3	20
1,2-Dichloroethane	0.00500	0.00496	0.00443	99.2	88.6	70.0-128			11.3	20
1,1-Dichloroethene	0.00500	0.00518	0.00467	104	93.4	71.0-124			10.4	20
cis-1,2-Dichloroethene	0.00500	0.00526	0.00493	105	98.6	73.0-120			6.48	20
trans-1,2-Dichloroethene	0.00500	0.00521	0.00462	104	92.4	73.0-120			12.0	20
1,2-Dichloropropane	0.00500	0.00527	0.00468	105	93.6	77.0-125			11.9	20
1,1-Dichloropropene	0.00500	0.00550	0.00501	110	100	74.0-126			9.32	20
1,3-Dichloropropane	0.00500	0.00564	0.00498	113	99.6	80.0-120			12.4	20
cis-1,3-Dichloropropene	0.00500	0.00514	0.00469	103	93.8	80.0-123			9.16	20
trans-1,3-Dichloropropene	0.00500	0.00498	0.00445	99.6	89.0	78.0-124			11.2	20
2,2-Dichloropropane	0.00500	0.00526	0.00502	105	100	58.0-130			4.67	20
Di-isopropyl ether	0.00500	0.00501	0.00456	100	91.2	58.0-138			9.40	20
Ethylbenzene	0.00500	0.00521	0.00465	104	93.0	79.0-123			11.4	20
Hexachloro-1,3-butadiene	0.00500	0.00560	0.00543	112	109	54.0-138			3.08	20
Isopropylbenzene	0.00500	0.00573	0.00509	115	102	76.0-127			11.8	20
p-Isopropyltoluene	0.00500	0.00522	0.00491	104	98.2	76.0-125			6.12	20
2-Butanone (MEK)	0.0250	0.0312	0.0278	125	111	44.0-160			11.5	20
Methylene Chloride	0.00500	0.00539	0.00467	108	93.4	67.0-120			14.3	20

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc



Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3512171-1 03/24/20 19:35 • (LCSD) R3512171-3 03/24/20 21:04

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	<u>LCS Qualifier</u>	<u>LCSD Qualifier</u>	RPD %	RPD Limits %
4-Methyl-2-pentanone (MIBK)	0.0250	0.0260	0.0218	104	87.2	68.0-142			17.6	20
Methyl tert-butyl ether	0.00500	0.00501	0.00453	100	90.6	68.0-125			10.1	20
Naphthalene	0.00500	0.00589	0.00554	118	111	54.0-135			6.12	20
n-Propylbenzene	0.00500	0.00595	0.00569	119	114	77.0-124			4.47	20
Styrene	0.00500	0.00534	0.00457	107	91.4	73.0-130			15.5	20
1,1,1,2-Tetrachloroethane	0.00500	0.00571	0.00497	114	99.4	75.0-125			13.9	20
1,1,2,2-Tetrachloroethane	0.00500	0.00605	0.00581	121	116	65.0-130			4.05	20
Tetrachloroethene	0.00500	0.00519	0.00446	104	89.2	72.0-132			15.1	20
Toluene	0.00500	0.00549	0.00475	110	95.0	79.0-120			14.5	20
1,1,2-Trichlorotrifluoroethane	0.00500	0.00523	0.00462	105	92.4	69.0-132			12.4	20
1,2,3-Trichlorobenzene	0.00500	0.00604	0.00573	121	115	50.0-138			5.27	20
1,2,4-Trichlorobenzene	0.00500	0.00591	0.00565	118	113	57.0-137			4.50	20
1,1,1-Trichloroethane	0.00500	0.00573	0.00510	115	102	73.0-124			11.6	20
1,1,2-Trichloroethane	0.00500	0.00559	0.00490	112	98.0	80.0-120			13.2	20
Trichloroethene	0.00500	0.00522	0.00464	104	92.8	78.0-124			11.8	20
Trichlorofluoromethane	0.00500	0.00664	0.00611	133	122	59.0-147			8.31	20
1,2,3-Trichloropropane	0.00500	0.00659	0.00592	132	118	73.0-130	J4		10.7	20
1,2,3-Trimethylbenzene	0.00500	0.00509	0.00469	102	93.8	77.0-120			8.18	20
1,2,4-Trimethylbenzene	0.00500	0.00552	0.00511	110	102	76.0-121			7.71	20
1,3,5-Trimethylbenzene	0.00500	0.00608	0.00568	122	114	76.0-122			6.80	20
Vinyl chloride	0.00500	0.00462	0.00406	92.4	81.2	67.0-131			12.9	20
Xylenes, Total	0.0150	0.0162	0.0145	108	96.7	79.0-123			11.1	20
(S) Toluene-d8				110	107	80.0-120				
(S) 4-Bromofluorobenzene				112	106	77.0-126				
(S) 1,2-Dichloroethane-d4				104	103	70.0-130				

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc



Method Blank (MB)

(MB) R3512341-1 03/24/20 22:28

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
PCB 1016	U		0.00350	0.0170
PCB 1221	U		0.00537	0.0170
PCB 1232	U		0.00417	0.0170
PCB 1242	U		0.00318	0.0170
PCB 1248	U		0.00315	0.0170
PCB 1254	U		0.00472	0.0170
PCB 1260	U		0.00494	0.0170
(S) Decachlorobiphenyl	61.7			10.0-135
(S) Tetrachloro-m-xylene	56.6			10.0-139

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc

Laboratory Control Sample (LCS)

(LCS) R3512341-2 03/24/20 22:41

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
PCB 1260	0.167	0.0830	49.7	37.0-145	
PCB 1016	0.167	0.0893	53.5	36.0-141	
(S) Decachlorobiphenyl			82.6	10.0-135	
(S) Tetrachloro-m-xylene			77.6	10.0-139	

L1201298-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1201298-01 03/24/20 23:18 • (MS) R3512341-3 03/24/20 23:30 • (MSD) R3512341-4 03/24/20 23:43

Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MSD Result mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
PCB 1260	0.167	U	0.154	0.138	92.2	82.6	1	10.0-160	P		11.0	38
PCB 1016	0.167	U	0.143	0.134	85.6	80.2	1	10.0-160	P		6.50	37
(S) Decachlorobiphenyl					108	97.3		10.0-135				
(S) Tetrachloro-m-xylene					88.4	81.8		10.0-139				

Method Blank (MB)

(MB) R3512759-2 03/26/20 10:37

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Anthracene	U		0.000600	0.00600
Acenaphthene	U		0.000600	0.00600
Acenaphthylene	U		0.000600	0.00600
Benzo(a)anthracene	U		0.000600	0.00600
Benzo(a)pyrene	U		0.000600	0.00600
Benzo(b)fluoranthene	U		0.000600	0.00600
Benzo(g,h,i)perylene	U		0.000600	0.00600
Benzo(k)fluoranthene	U		0.000600	0.00600
Chrysene	U		0.000600	0.00600
Dibenz(a,h)anthracene	U		0.000600	0.00600
Fluoranthene	U		0.000600	0.00600
Fluorene	U		0.000600	0.00600
Indeno(1,2,3-cd)pyrene	U		0.000600	0.00600
Naphthalene	U		0.00200	0.0200
Phenanthrene	U		0.000600	0.00600
Pyrene	U		0.000600	0.00600
1-Methylnaphthalene	U		0.00200	0.0200
2-Methylnaphthalene	U		0.00200	0.0200
2-Chloronaphthalene	U		0.00200	0.0200
(S) Nitrobenzene-d5	74.7			14.0-149
(S) 2-Fluorobiphenyl	80.0			34.0-125
(S) p-Terphenyl-d14	81.9			23.0-120

1

Cp

2

Tc

3

Ss

4

Cn

5

Sr

6

Qc

7

Gl

8

Al

9

Sc

Laboratory Control Sample (LCS)

(LCS) R3512759-1 03/26/20 10:14

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Anthracene	0.0800	0.0571	71.4	50.0-126	
Acenaphthene	0.0800	0.0585	73.1	50.0-120	
Acenaphthylene	0.0800	0.0610	76.3	50.0-120	
Benzo(a)anthracene	0.0800	0.0594	74.3	45.0-120	
Benzo(a)pyrene	0.0800	0.0499	62.4	42.0-120	
Benzo(b)fluoranthene	0.0800	0.0586	73.3	42.0-121	
Benzo(g,h,i)perylene	0.0800	0.0636	79.5	45.0-125	
Benzo(k)fluoranthene	0.0800	0.0577	72.1	49.0-125	
Chrysene	0.0800	0.0580	72.5	49.0-122	
Dibenz(a,h)anthracene	0.0800	0.0643	80.4	47.0-125	
Fluoranthene	0.0800	0.0624	78.0	49.0-129	

Laboratory Control Sample (LCS)

(LCS) R3512759-1 03/26/20 10:14

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	<u>LCS Qualifier</u>
Fluorene	0.0800	0.0608	76.0	49.0-120	
Indeno(1,2,3-cd)pyrene	0.0800	0.0642	80.3	46.0-125	
Naphthalene	0.0800	0.0581	72.6	50.0-120	
Phenanthrene	0.0800	0.0582	72.8	47.0-120	
Pyrene	0.0800	0.0526	65.8	43.0-123	
1-Methylnaphthalene	0.0800	0.0613	76.6	51.0-121	
2-Methylnaphthalene	0.0800	0.0589	73.6	50.0-120	
2-Chloronaphthalene	0.0800	0.0605	75.6	50.0-120	
(S) Nitrobenzene-d5			77.0	14.0-149	
(S) 2-Fluorobiphenyl			77.5	34.0-125	
(S) p-Terphenyl-d14			78.5	23.0-120	

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc



Guide to Reading and Understanding Your Laboratory Report

The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

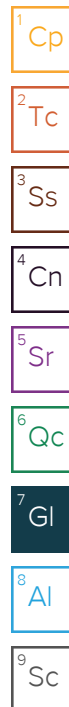
Results Disclaimer - Information that may be provided by the customer, and contained within this report, include Permit Limits, Project Name, Sample ID, Sample Matrix, Sample Preservation, Field Blanks, Field Spikes, Field Duplicates, On-Site Data, Sampling Collection Dates/Times, and Sampling Location. Results relate to the accuracy of this information provided, and as the samples are received.

Abbreviations and Definitions

(dry)	Results are reported based on the dry weight of the sample. [this will only be present on a dry report basis for soils].
MDL	Method Detection Limit.
MDL (dry)	Method Detection Limit.
RDL	Reported Detection Limit.
RDL (dry)	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
(S)	Surrogate (Surrogate Standard) - Analytes added to every blank, sample, Laboratory Control Sample/Duplicate and Matrix Spike/Duplicate; used to evaluate analytical efficiency by measuring recovery. Surrogates are not expected to be detected in all environmental media.
U	Not detected at the Reporting Limit (or MDL where applicable).
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.
Dilution	If the sample matrix contains an interfering material, the sample preparation volume or weight values differ from the standard, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor.
Limits	These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges.
Original Sample	The non-spiked sample in the prep batch used to determine the Relative Percent Difference (RPD) from a quality control sample. The Original Sample may not be included within the reported SDG.
Qualifier	This column provides a letter and/or number designation that corresponds to additional information concerning the result reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable.
Result	The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state "ND" (Not Detected) or "BDL" (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte.
Uncertainty (Radiochemistry)	Confidence level of 2 sigma.
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.
Quality Control Summary (Qc)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.

Qualifier Description

B	The same analyte is found in the associated blank.
J	The identification of the analyte is acceptable; the reported value is an estimate.
J0	J0: The identification of the analyte is acceptable, but the reported concentration is an estimate. The calibration method criteria.
J3	The associated batch QC was outside the established quality control range for precision.
J4	The associated batch QC was outside the established quality control range for accuracy.
P	RPD between the primary and confirmatory analysis exceeded 40%.





Pace National is the only environmental laboratory accredited/certified to support your work nationwide from one location. One phone call, one point of contact, one laboratory. No other lab is as accessible or prepared to handle your needs throughout the country. Our capacity and capability from our single location laboratory is comparable to the collective totals of the network laboratories in our industry. The most significant benefit to our one location design is the design of our laboratory campus. The model is conducive to accelerated productivity, decreasing turn-around time, and preventing cross contamination, thus protecting sample integrity. Our focus on premium quality and prompt service allows us to be YOUR LAB OF CHOICE.

* Not all certifications held by the laboratory are applicable to the results reported in the attached report.

* Accreditation is only applicable to the test methods specified on each scope of accreditation held by Pace National.

State Accreditations

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN-03-2002-34
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey–NELAP	TN002
California	2932	New Mexico ¹	n/a
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina ¹	DW21704
Georgia	NELAP	North Carolina ³	41
Georgia ¹	923	North Dakota	R-140
Idaho	TN00003	Ohio–VAP	CL0069
Illinois	200008	Oklahoma	9915
Indiana	C-TN-01	Oregon	TN200002
Iowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	LA000356
Kentucky ^{1 6}	90010	South Carolina	84004
Kentucky ²	16	South Dakota	n/a
Louisiana	AI30792	Tennessee ^{1 4}	2006
Louisiana ¹	LA180010	Texas	T104704245-18-15
Maine	TN0002	Texas ⁵	LAB0152
Maryland	324	Utah	TN00003
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	460132
Minnesota	047-999-395	Washington	C847
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	9980939910
Montana	CERT0086	Wyoming	A2LA

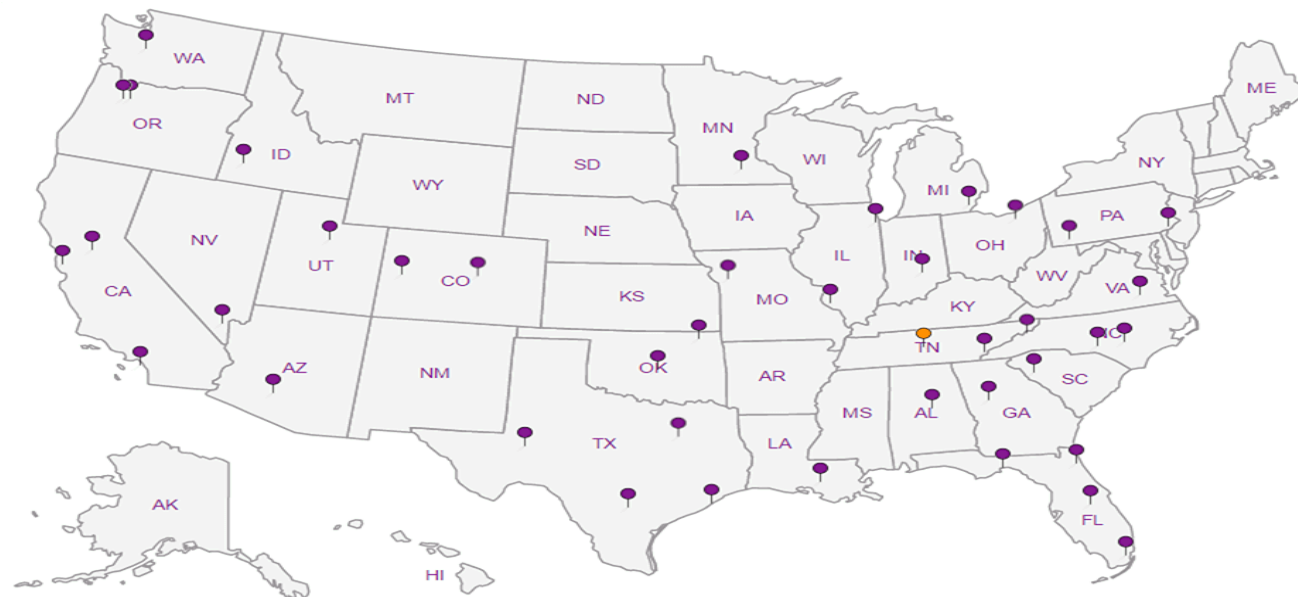
Third Party Federal Accreditations

A2LA – ISO 17025	1461.01	AIHA-LAP, LLC EMLAP	100789
A2LA – ISO 17025 ⁵	1461.02	DOD	1461.01
Canada	1461.01	USDA	P330-15-00234
EPA–Crypto	TN00003		

¹ Drinking Water ² Underground Storage Tanks ³ Aquatic Toxicity ⁴ Chemical/Microbiological ⁵ Mold ⁶ Wastewater n/a Accreditation not applicable

Our Locations

Pace National has sixty-four client support centers that provide sample pickup and/or the delivery of sampling supplies. If you would like assistance from one of our support offices, please contact our main office. Pace National performs all testing at our central laboratory.



GPI
6 O'Donnell Road
Pullman, WA 99163

Billing Information:
GPI
6 O'Donnell Road
Pullman, WA 99163

Pres
Chk

Analysis / Container / Preservative



Report to:
Josh Kannenberg

Email To:
jkannenberg@geoprocorp.com

Project
Description: City of Kennewick

City/State
Collected: Kennewick, WA

Phone: 509.339.2000
Fax: 509.339.2001

Client Project #
PU19214

Lab Project #

Collected by (print):
Josh Kannenberg

Site/Facility ID #

P.O. #
PU19214

Collected by (signature):
Josh Kannenberg

Rush? (Lab MUST Be Notified)

Quote #

Same Day Five Day
Next Day 5 Day (Rad Only)
Two Day 10 Day (Rad Only)
Three Day

Date Results Needed

No.
of
Cntrs

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs
B-1-8'	Grab	SS	8'	3-19-20	0928	4
B-1-12'	Grab	SS	12'	3-19-20	0945	4
B-1-12D	Grab	SS	12'	3-19-20	1000	3
B-2-4'	Grab	SS	4'	3-19-20	1032	4
B-3-6.5'	Grab	SS	6.5'	3-19-20	1110	4
B-4-8'	Grab	SS	8'	3-19-20	1130	4
B-6-4'	Grab	SS	4'	3-19-20	1228	4
B-6-4D	Grab	SS	4'	3-19-20	1230	4
B-7-12'	Grab	SS	12'	3-19-20	1338	4
B-8-4'	Grab	SS	4'	3-19-20	1402	4

BTEXN, MTBE, EDC, EDB 8260

PAHs 8270SIM

VOC Full Suite 8260

Total Lead 6010

PCBs 8082

L# 1201677

J026

Acctnum:

Template:

Prelogin:

TSR:

PB:

Shipped Via:

Remarks Sample # (lab only)

* Matrix:
SS - Soil AIR - Air F - Filter
GW - Groundwater B - Bioassay
WW - WasteWater
DW - Drinking Water
OT - Other

Remarks:

pH Temp

Flow Other

Samples returned via:
UPS FedEx Courier

Tracking # 474/88422135

Sample Receipt Checklist
COC Seal Present/Intact: NP Y N
COC Signed/Accurate: Y N
Bottles arrive intact: Y N
Correct bottles used: Y N
Sufficient volume sent: Y N
If Applicable
VOA Zero Headspace: Y N
Preservation Correct/Checked: Y N
RAD SCREEN: <0.5 mR/hr

Relinquished by: (Signature)

Date:

Time:

Received by: (Signature)

Trip Blank Received: Yes/No
1 HCL/MeOH
TBR

Relinquished by: (Signature)

Date:

Time:

Received by: (Signature)

Temp: 11.1/11.2 °C
Bottles Received: 49

If preservation required by Login: Date/Time

Relinquished by: (Signature)

Date:

Time:

Received for lab by: (Signature)

Date: 3/20/20
Time: 0845

Hold: Condition: NCF / OK

Matt Shacklock



Login #: L1201677	Client:GEOINNPWA	Date:03/21	Evaluated by:Kelsey S
-------------------	------------------	------------	-----------------------

Non-Conformance (check applicable items)

Sample Integrity	Chain of Custody Clarification	If Broken Container:
Parameter(s) past holding time	☒ Login Clarification Needed	Insufficient packing material around container
Temperature not in range	Chain of custody is incomplete	Insufficient packing material inside cooler
Improper container type	Please specify Metals requested.	Improper handling by carrier (FedEx / UPS / Cour
pH not in range.	Please specify TCLP requested.	Sample was frozen
Insufficient sample volume.	Received additional samples not listed on coc.	Container lid not intact
Sample is biphasic.	Sample ids on containers do not match ids on coc	If no Chain of Custody:
Vials received with headspace.	Trip Blank not received.	Received by:
Broken container	Client did not "X" analysis.	Date /Time:
Broken container:	Chain of Custody is missing	Temp./Cont. Rec./pH:
Sufficient sample remains		Carrier:
		Tracking#

Login Comments: No bulk container received for B-1-12D

Client informed by:	Call	☒ Email	Voice Mail	Date: 3/23/20	Time: 0939
TSR Initials: CMW	Client Contact: Josh Kannenberg				

Login Instructions:

Please updated to 3 day rush due 3/26 as long as that is ok with the labs.

Please pull TS volume from -02, which is the parent sample