



COMPREHENSIVE SITE ASSESSMENT REPORT

Client:

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Cabinet Company**
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Revision 1

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Acronyms and Abbreviations

ADEQ	Arkansas Department of Environmental Quality
AMSL	Above mean sea level
AMWE	Arkansas Municipal Waste-to-Energy
APC&EC	Arkansas Pollution Control and Ecology Commission
bgs	Below ground surface
°C	degree Celsius
CERCLA	Comprehensive Environmental Response, Compensation and Liability Act
CSA	Comprehensive Site Assessment
DO	Dissolved oxygen
DRO	Diesel range organics
EPA	U.S. Environmental Protection Agency
ESA	Environmental Site Assessment
FID	Flame ionization detector
FTN	FTN Associates
GPM	gallons per minute
GPR	Ground penetrating radar
GPRS	Ground Penetrating Radar Systems, Inc.
GPS	Global positioning system
GRO	Gasoline range organics
Harbor	Harbor Environmental and Safety
HASP	Health and Safety Plan
HAZWOPER	Hazardous Waste Operations and Emergency Response
IDW	Investigation-derived waste
LDPE	Low-density polyethylene
MCL	Maximum Contaminant Level
MEK	Methyl ethyl ketone
mg/kg	milligrams per kilogram
mg/L	milligrams per liter
MS/MSD	Matrix spike/matrix spike duplicate
mV	millivolts
NTU	Nephelometric turbidity unit
OD	Outside diameter
ORP	Oxidation-reduction potential
Parsons	JT Parsons Cabinet Company
PCE	Tetrachloroethylene (Perchloroethylene)
P.G.	Professional Geologist
PRP	Potentially Responsible Party
PVC	Polyvinyl chloride
QA	Quality Assurance
QC	Quality Control
QAPP	Quality Assurance Project Plan
RATFA	Remedial Action Trust Fund Act
RCRA	Resource Conservation and Recovery Act
RPD	Relative percent difference
RSL	Regional Screening Level

QAO	Quality Assurance Officer
SU	Standard Units
SAP	Sampling and Analysis Plan
SPL	State Priority List
SSL	Soil Screening Level
SVOCs	Semi-volatile organic compounds
TCE	Trichloroethene
TOC	Top of casing
TPH	Total petroleum hydrocarbons
μS/cm	micro Siemens per centimeter
USGS	United States Geological Survey
UST	Underground storage tank
VOCs	Volatile organic compounds

1.0 Introduction

Harbor Environmental and Safety (Harbor) was retained by the Arkansas Department of Environmental Quality (ADEQ) to conduct a Comprehensive Site Assessment (CSA) of the former JT Parsons Cabinet Company (Parsons) site in Osceola, Mississippi County, Arkansas. Site assessment field activities were conducted during the weeks of December 17, 2018 and January 7, 2019, in accordance with the ADEQ-approved Sampling and Analysis Plan (SAP, *Harbor, November 2018*).

This CSA Report outlines the onsite field activities and subsequent investigation results. In general, this report includes:

- Background project and site information (Section 2.0);
- General project scope of work (Section 3.0);
- Description of site assessment activities (Section 4.0);
- Results from the investigation (Section 5.0);
- Comparison of sampling results to applicable risk-based screening standards (Section 6.0); and
- Summary and conclusions to the CSA (Section 7.0).

1.1 Responsible Agency

The CSA of the Parsons site was conducted on behalf of ADEQ and in accordance with Arkansas Pollution Control and Ecology Commission (APC&EC) Regulation 23.

1.2 Project Organization

Persons involved in implementing the CSA, along with their roles and responsibilities, are identified in Table 1-1 below:

Table 1-1 – Key Project Personnel Contact Information and Responsibilities

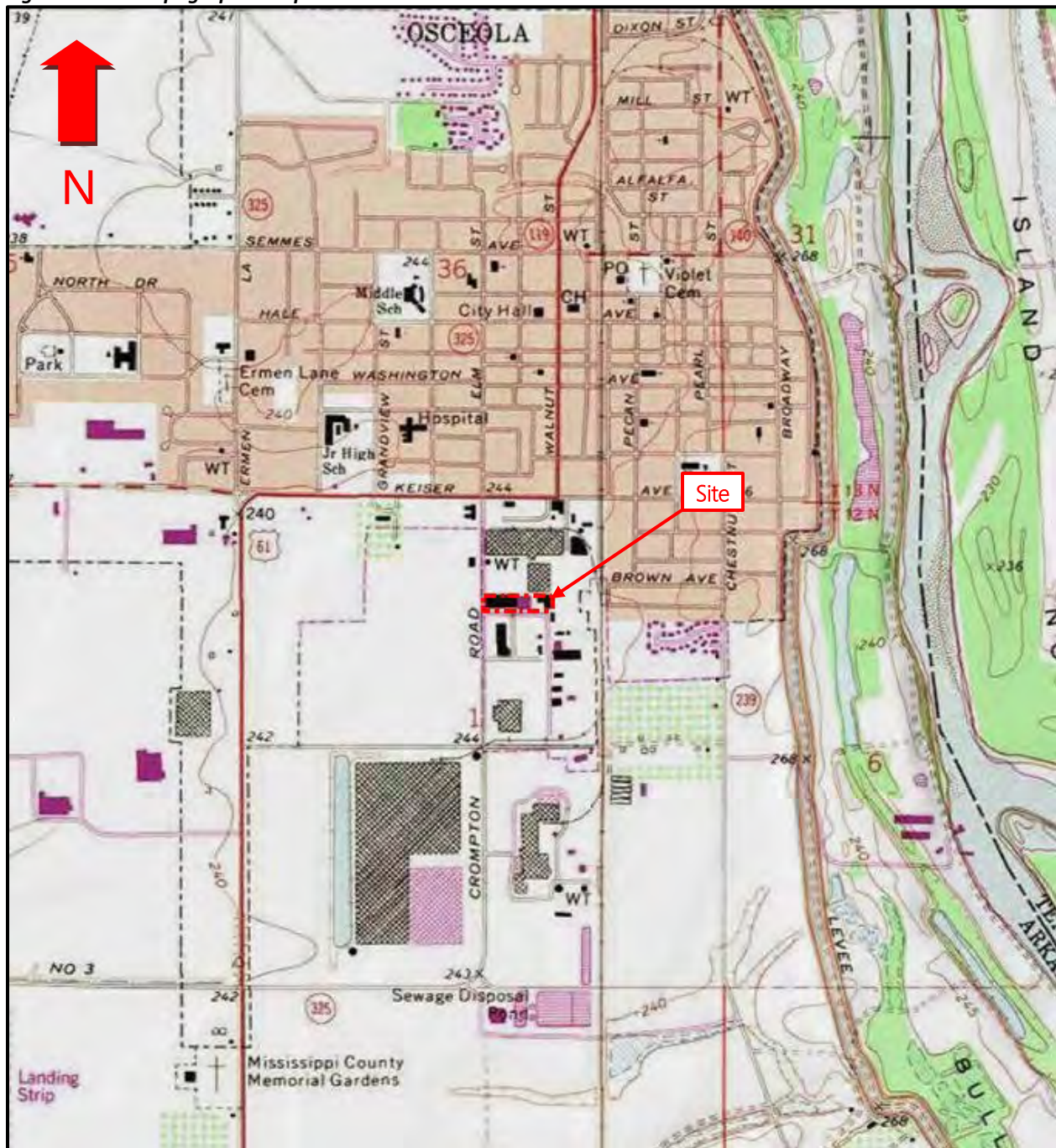
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2.0 General Information and Project Background

The Parsons project site is located at 420 West Ohlendorf Road in Osceola, Mississippi County, Arkansas. The facility location is further described as an approximately 4.2-acre tract in Section 1, Township 12 North, Range 10 West. Figure 1 below is a copy of the United States Geological Survey (USGS) topographic map showing the site location.

Figure 1 – Site Topographic Map



Source: USGS, Osceola Quadrangle, 1994

The project site is located in an industrial area on the south side of Osceola and is currently owned by the City of Osceola. Undeveloped areas in the vicinity consist of pastureland and farmland. A scrap metal recycler is located directly adjacent to the east. Review of the USGS 7.5-minute topographic map of the area (*Osceola, AR, 1994*) indicates that topography at the site and surrounding areas is generally flat with an approximate elevation of 240 feet above mean sea level (AMSL). The Mississippi River is located approximately one mile east of the project site.

2.1 Geologic and Hydrogeologic Setting

The site is located within the Mississippi Embayment physiographic province. According to the Geologic Map of Arkansas (*Bush et al., 1993*), the site and surrounding areas are underlain by Quaternary-age stream overbank alluvium and alluvium deposited by the Mississippi River, which generally consists of "alluvial sediments of present streams and include gravels, sands, silts, clays, and mixtures of any and all of these" (*Stratigraphic Summary of Arkansas, 2004*).

These deposits also comprise the Mississippi River Valley Alluvial Aquifer, which underlies the area and contains the uppermost occurrence of groundwater. Based on general characteristics of the alluvial aquifer, groundwater below the general area is likely unconfined and contained within the pore spaces of the underlying sediments. (*Groundwater Atlas of the United States, Segment 5 – Arkansas, Louisiana, Mississippi, 1998*). Due to its close proximity to the Mississippi River, groundwater flow below the site is likely influenced by the river. Aquifer well yields and water quality are highly variable. The aquifer is used mainly for agricultural and industrial purposes, rather than domestic or municipal water supply.

2.2 Site Background and Previous Investigations

Review of a Phase I Environmental Site Assessment (ESA) conducted by FTN Associates (FTN) in September 2014 indicates that the site was in use as a furniture manufacturing facility (sewing machine cabinets) from the early 1970s until the late-1990s. Chemicals in use at the facility included paints, lacquers, sealers, and stains, along with acetone, ethylbenzene, methyl ethyl ketone (MEK), methyl isobutyl ketone, naphthalene, tetrachloroethene (PCE), toluene, trichloroethene (TCE), and xylene. An air permit was issued to the facility by ADEQ for volatile air emissions but was voided in 2000. Parsons discontinued use of the facility around this same time. The FTN report also suggested the potential presence of an underground storage tank (UST) on the site. Additionally, the report also indicated that several offsite adjacent facilities could have adversely impacted the site.

Review of the State Priority List (SPL) summary indicates that a citizen complaint was submitted to ADEQ in 2003 regarding the storage of flammable materials in a portion of the building on the site, which was being used by Arkansas Municipal Waste-to-Energy (AMWE). A subsequent investigation by ADEQ confirmed that AMWE was illegally storing containers of both hazardous and non-hazardous materials in the building. Approximately 20,000 containers of wastes were noted during the ADEQ investigation. Leaking containers and spills were also observed and noted by ADEQ. These materials were intended for incineration at a nearby incinerator. Between 2003

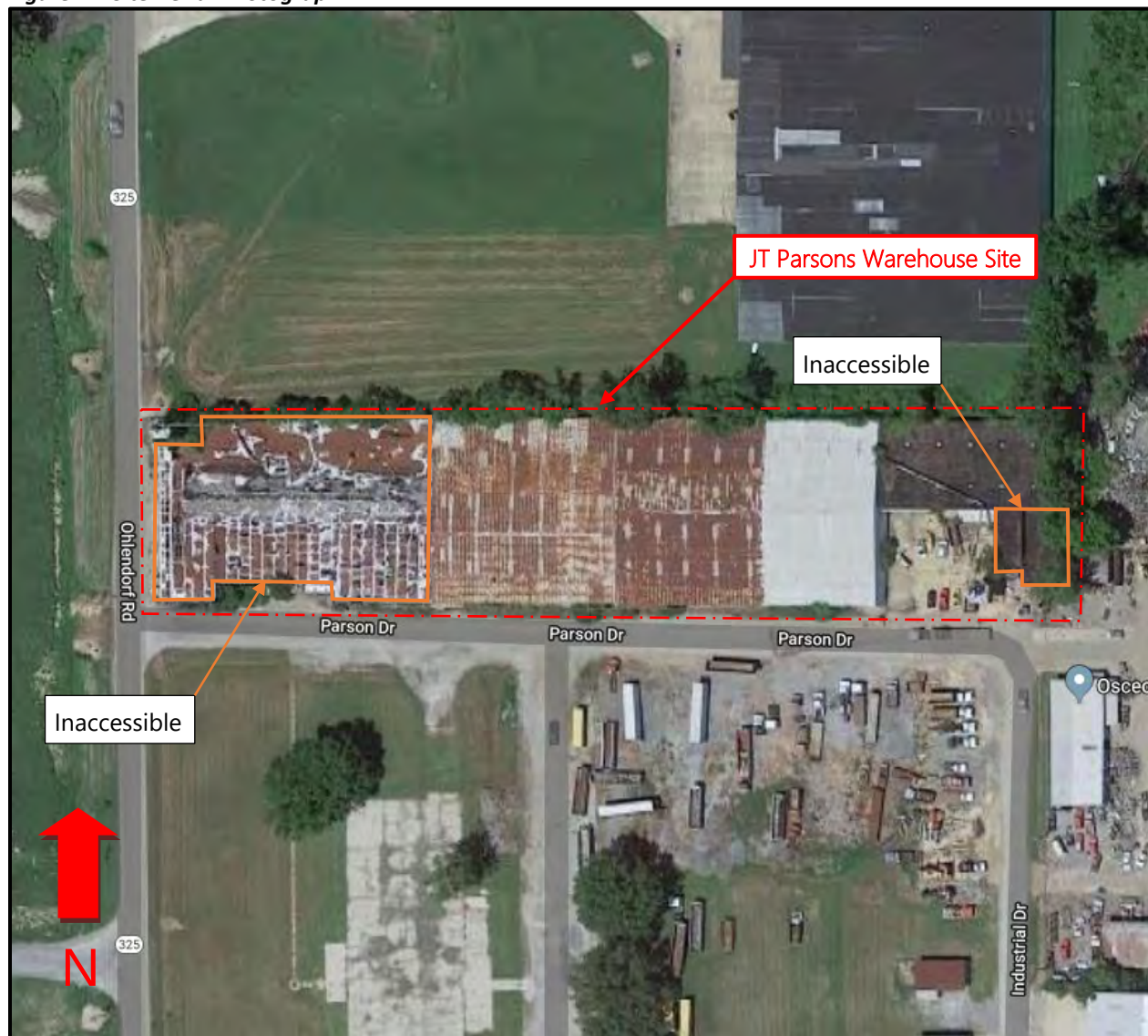
and 2010, the majority of these materials were removed by the potentially responsible party (PRP) for appropriate disposal. The site was placed on the Arkansas Remedial Action Trust Act (RATFA) SPL in 2005 as a result of ongoing cleanup associated with the former AMWE operations. The remaining materials were removed from the AMWE storage location in 2012. The AMWE warehouse site has been recommended for removal from the SPL.

2.3 Current Site Conditions

The warehouse building on the project site is currently vacant and in generally poor condition. The westernmost portion (approximately one-third) of the building contains the original warehouse, which is constructed of masonry wall, slab-on-grade, with wood and steel-truss roof joists covered by a metal roof. Much of the roof has deteriorated, which has resulted in several collapsed areas and generally poor structural integrity. In addition to being open to the western side of the building, access to this portion of the building is via a locked glass entry door. The west side of the building parallels Ohlendorf Road. There is a paved area between the road and the building; however, no building access was observed on the western side of the building. One unlabeled 55-gallon drum was observed within this portion of the building. It appeared to be empty and upside down, and had vegetation growing on top of it.

The easternmost two-thirds of the building is newer and is in fairly good condition. This portion of the building is steel frame, steel clad, slab-on-grade, with a metal roof that is largely intact. A loading dock with two bays is located along the southern side of the building. The loading dock slab slopes down and is currently flooded up to approximately two feet in depth. A third overhead access door at grade level is also located along the southern side of the building; however, the door is off the tracks and cannot be opened. A paved exterior area is located on the eastern side of the building. An access door to the building is located in this area, which allowed access to the building interior. The southeasternmost portion of the building (east of the open paved area) contains another flooded loading dock, and an additional area with a collapsed roof.

The northern property line parallels the northern side of the building and is heavily vegetated. No building access was observed along the northern side of the building. Access to this area would be via the adjacent property to the north. Abundant vegetation was also observed along the southern side of the building, which is lacking building access. Figure 2 below is an aerial photograph that shows the building and immediately surrounding areas.

Figure 2 – Site Aerial Photograph

Source: Google Maps, downloaded 9/18/2018

Note: Areas outlined in orange are inaccessible due to overhead roof damage

3.0 Scope of Work

3.1 Health and Safety Plan

Prior to initiating field activities, Harbor prepared a site-specific Health and Safety Plan (HASP) to protect site workers and visitors during the investigation. The HASP was prepared in accordance with the most current requirements of Title 29 Code of Federal Regulations (CFR) 1910.120, Standards for Hazardous Waste Operations and Emergency Responders (HAZWOPER). In general, the HASP included:

- Project personnel and responsibilities;
- Emergency contact information;
- Emergency response procedures;
- Potential site hazards;
- Site control/security methods;
- Required personal protective equipment; and
- HASP acknowledgement by field personnel.

All site workers and visitors were required to review the HASP and sign an Acceptance Form prior to commencement of onsite work. Arkansas One Call (811) was contacted at least two working days before site activities to locate underground utilities prior to subsurface investigation.

3.2 Subsurface Investigation

Harbor provided an Arkansas-registered P.G. to oversee and conduct the CSA activities. A total of 16 soil borings (B-1 through B-16) were completed to characterize subsurface conditions below the site. Three of the borings (B-12, B-15, and B-16) were drilled in accessible areas on the exterior of the western and southern sides of the building. The remaining 13 borings were drilled inside accessible portions of the building. **As shown in Figure 2 above, portions of the building were deemed inaccessible due to partially collapsed roofs. It was Harbor's opinion that trying to access these portions of the building with a drill rig could put personnel and equipment in danger due to the potential for additional collapse.** Six of the borings were converted into two-inch monitoring wells (see Section 3.3 below for additional details). A small tracked rig was utilized to advance the soil borings to depths ranging from 12 feet to 20 feet below ground surface (bgs) utilizing direct-push technology. Borings selected for monitoring well installation were over-drilled using hollow-stem augers to the desired depths. The boring and well locations are shown on Figure 3.

During drilling operations, soils were collected and screened for headspace at two-foot intervals using a flame-ionization detector (FID) to monitor the presence of volatile organic compounds (VOCs) in soils. Soil descriptions, along with the headspace screening results, were documented

on soil boring logs for each boring. Soil samples were collected at the surface (immediately below the floor or exterior pavement) in all borings. An additional sample was collected from each boring based on the headspace screening results or other visual or olfactory observations, as applicable. Two soil samples were collected from each boring, resulting in a total of 32 investigative samples. The soil samples were submitted to a State of Arkansas-accredited laboratory for analysis of the CSA constituents, as described in Section 3.5 below.

3.3 Monitoring Well Installation and Development

Harbor installed six two-inch diameter monitoring wells (MW-1 through MW-6), as shown on Figure 3. Borings utilized for the monitoring wells were overdrilled using 6.5-inch outside diameter (OD) hollow stem augers to allow sufficient annular space for a filter pack and bentonite seal. Each well consisted of two-inch diameter schedule 40 polyvinyl chloride (PVC) with a ten-foot 0.010-inch slotted screen and end cap. The filter pack consisted of 20/40 silica sand placed to a level two feet above the screened interval. A two-foot (minimum) bentonite seal was placed above the filter pack to seal the well from surface contamination. The top of the seal extended to near ground surface due to the shallow occurrence of groundwater. The majority of the wells were completed at the surface with a flush-mount well cover. Two of the outdoor wells (MW-3 and MW-5) were completed with stick-up metal casings due to the potential for water ponding in the vicinity. The new monitoring wells were developed using the surge block method via submersible pump to remove particulates from the wells and filter pack media. Well development activities were conducted at least 24 hours after well completion.

3.4 Monitoring Well Purging and Sampling

Prior to purging and sampling, depth to groundwater was measured in each well using a water level indicator. A measurement mark was placed on the top of each well casing. Harbor utilized the low-flow sampling method as described in Puls and Barcelona (1996) to purge the wells and collect groundwater samples. Harbor used a peristaltic pump with dedicated low-density polyethylene (LDPE) tubing to purge and sample the wells. The tubing discharge was connected to a flow-through cell to monitor field parameters during purging. Field parameters were monitored via YSI multi-parameter meter to assure that true formation water was collected for laboratory analyses. The field parameters tested included pH in standard units (SU), dissolved oxygen (DO) in milligrams per liter (mg/L), specific conductance in micro Siemens per centimeter ($\mu\text{S}/\text{cm}$), temperature in degrees Celsius ($^{\circ}\text{C}$), and oxidation-reduction potential (ORP) in millivolts (mV). A separate turbidity meter was used to monitor turbidity in nephelometric turbidity units (NTU). Parameters measurements were logged on a groundwater sampling form at approximately five-minute intervals until the parameters stabilized. The parameters were considered stabilized when three successive readings were within ± 0.1 for pH, $\pm 3\%$ for conductivity, ± 10 mv for ORP, and $\pm 10\%$ for DO. Turbidity was considered stable when less than 10 NTU (or consistent).

Upon stabilization, the discharge tube was disconnected from the flow-through cell and groundwater was discharged directly into the appropriate laboratory-supplied sample containers. The silicone tubing coupling was changed between well locations to eliminate the potential for

cross-contamination. Appropriate sample containers were provided by the designated laboratory. Each container was labeled to include project name, date, time, sample identification number, preservative (if applicable), and requested analysis. Collected samples were immediately placed on ice in an ice chest for shipment to the designated laboratory under proper chain-of-custody.

3.5 Laboratory Analyses

The soil and groundwater samples were shipped to Pace Analytical, a State of Arkansas-accredited laboratory, for analysis of VOCs per U.S. Environmental Protection Agency (EPA) Method 8260B, semivolatile organic compounds (SVOCs) per EPA Method 8270C, total petroleum hydrocarbons (TPH) diesel range organics (DRO) per EPA Method 8015, TPH gasoline range organics (GRO) per EPA Method 8015, and Resource Conservation and Recovery Act (RCRA) metals per EPA Method 6010/7471. The field and laboratory analytical parameters for this CSA are summarized below in Table 3-1 below.

Table 3-1 – Field Parameters and CSA Constituents

Field Parameters		
Dissolved Oxygen	pH	Temperature
Oxidation-Reduction Potential	Specific Conductance	Turbidity
Volatile Organic Compounds (Method 8260B)		
Acetone	Dibromomethane	4-Methyl-2-Pentanone (MIBK)
Acrolein	1,2-Dichlorobenzene	Methyl Tert-Butyl Ether
Acrylonitrile	1,3-Dichlorobenzene	Naphthalene
Benzene	1,4-Dichlorobenzene	n-Propylbenzene
Bromobenzene	Dichlorodifluoromethane	Styrene
Bromodichloromethane	1,1-Dichloroethane	1,1,1,2-Tetrachloroethane
Bromoform	1,2-Dichloroethane	1,1,2,2-Tetrachloroethane
Bromomethane	1,1-Dichloroethene	Tetrachloroethene
2-Butanone (MEK)	cis-1,2-Dichloroethene	Toluene
n-Butylbenzene	trans-1,2-Dichloroethene	1,2,3-Trichlorobenzene
sec-Butylbenzene	1,2-Dichloropropane	1,2,4-Trichlorobenzene
tert-butylbenzene	1,3-Dichloropropane	1,1,1-Trichloroethane
Carbon Tetrachloride	2,2-Dichloropropane	1,1,2-Trichloroethane
Chlorobenzene	1,1-Dichloropropene	Trichloroethene
Chlorodibromomethane	cis-1,3-Dichloropropene	1,2,3-Trichloropropane
Chloroethane	trans-1,3-Dichloropropene	Trichlorofluoromethane
Chloroform	Ethylbenzene	1,1,2-Trichlorotrifluoroethane
Chloromethane	Hexachlor-1,3-Butadiene	1,2,3-Trimethylbenzene
2-Chlorotoluene	Isopropylbenzene	1,2,4-Trimethylbenzene
4-Chlorotoluene	Di-Isopropyl Ether	1,3,5-Trimethylbenzene
1,2-Dibromo-3-Chloropropane	p-Isopropyltoluene	Vinyl Chloride
1,2-Dibromoethane	Methylene Chloride	Xylenes, Total

Table 3-1 – Field Parameters and CSA Constituents (continued)

Semi-Volatile Organic Compounds (Method 8270C)			
Acenaphthene		4-Chlorophenyl-phenylether	
Acenaphthylene		Chrysene	
Anthracene		di-n-Butyl phthalate	
Benzidine		di-n-Octyl phthalate	
Benzo(a)anthracene		Dibenz(a,h)anthracene	
Benzo(a)pyrene		2,4-Dichlorophenol	
Benzo(b)fluoranthene		3,3-Dichlorobenzidine	
Benzo(g,h,i)perylene		Diethyl phthalate	
Benzo(k)fluoranthene		2,4-Dimethylphenol	
Benzylbutyl phthalate		Dimethyl phthalate	
bis(2-Chloroethoxy)methane		4,6-Dinitro-2-methylphenol	
bis(2-Chloroethyl)ether		2,4-Dinitrophenol	
bis(2-Chloroisopropyl)ether		2,4-Dinitrotoluene	
bis(2-Ethylhexyl)phthalate		2,6-Dinitrotoluene	
4-Bromophenol-phenylether		Fluoranthene	
4-Chloro-3-methylphenol		Fluorene	
2-Chloronaphthalene		Hexachloro-1,3-butadiene	
2-Chlorophenol		Hexachlorobenzene	
Total Petroleum Hydrocarbons (Method 8015)			
Diesel Range Organics		Gasoline Range Organics	
RCRA Metals (Method 6010/7471)			
Arsenic	Cadmium	Lead	Selenium
Barium	Chromium	Mercury	Silver

3.6 Ground Penetrating Radar

To evaluate the potential presence of a UST onsite (as reported in the 2014 Phase I ESA, see Section 2.2), Harbor conducted a Ground Penetrating Radar (GPR) survey at the suspect UST area. Harbor sub-contracted Ground Penetrating Radar Systems, Inc. (GPRS) of Conway, Arkansas to conduct the GPR survey. GPR uses a high frequency radio signal that is transmitted into the ground and reflected signals are returned to the receiver and stored on digital media. The computer measures the time taken for a pulse to travel to and from the target which indicates its depth and location.

4.0 Field Activities and Sampling Methodology

An Arkansas-registered P.G. directed all probing, drilling, well installation, and groundwater sampling activities. All field work was conducted in accordance with the site-specific HASP, included in Appendix A of the SAP. Copies of field notes are included in Appendix A. Site photographs are included in Appendix B and referenced in the following sections.

4.1 Subsurface Investigation and Soil Sampling

Soil boring and sampling was conducted by McCray Drilling, LLC of Memphis, Tennessee utilizing a track-mounted Geoprobe 7720DT direct push/rotary drilling rig (see Photo 1, Appendix B). Continuous soil sampling was conducted using four-foot stainless-steel sampling tubes equipped with Macro-Core clear PVC liners, which allow for discreet evaluation of subsurface conditions. A new liner was used for each sample interval. Sampling continued to target depth, which ranged from 12 to 20 feet bgs. Soils were logged by an Arkansas-registered P.G. on boring logs to describe the subsurface conditions (e.g., soil type, color, moisture content, density, depth to groundwater, etc.). The boring logs also contain information regarding project name, boring number, date, drilling method, FID headspace analysis results, and other pertinent information. Boring logs for the 16 borings (B-1 through B-16) completed at the former Parsons facility are included in Appendix C. Boring locations are shown on Figure 3.

Representative soil samples were collected at approximate two-foot intervals and placed in zipper lock bags for field screening purposes. Please note that four-foot intervals were used for screening in some borings, particularly within upper intervals, due to poor sample recoveries. The bags were sealed and allowed to sit for approximately 10 minutes prior to insertion of the FID probe for headspace analysis. Headspace readings were recorded on boring logs (see Appendix C).

Two soil samples were collected each boring, the surface interval and the "worst-case" interval based on field screening results. For those samples collected for VOC analysis, Terra Core sampling devices were used in accordance with EPA Method SW846 5035. Dedicated Terra Core devices were used for each sample interval to collect two 5-milligram samples of soil. One aliquot was placed in a pre-weighed 40-milliliter vial preserved with sodium bisulfite (low VOC range). The second aliquot was placed in a second pre-weighed 40-milliliter vial preserved with methanol (high VOC range). Samples collected for TPH-DRO, SVOCs and RCRA metals were placed directly into laboratory-supplied four-ounce glass jars. The containers were properly labeled and placed on ice in an ice chest for shipment to Pace Analytical for laboratory analyses (see Section 3.5). Soil sampling results are discussed in Section 5.3.

Borings selected for conversion to monitoring wells were over-drilled utilizing 6.5-inch OD hollow-stem augers. Well development activities are discussed below in Section 4.2. All soil borings not converted to monitoring wells were grouted to surface with hydrated bentonite.

4.2 Monitoring Well Installation and Development

Six monitoring wells (MW-1 through MW-6) were installed at the former Parsons facility to characterize shallow groundwater below the site. The wells were installed at boring locations B-10 (MW-1), B-2 (MW-2), B-12 (MW-3), B-16 (MW-4), B-15 (MW-5), and B-8 (MW-6). The well locations are shown on Figure 3. Well depths ranged from 15.4 feet bgs to 16.6 feet bgs. Due to very shallow groundwater levels at the site (generally less than one foot below surface), the well screen intervals were set as high as possible to allow for a two-foot sand interval above the screen and adequate bentonite seal (minimum two feet) at the surface. Specifications for the six monitoring wells are included on the corresponding boring logs (see Appendix C).

For those wells installed within surface concrete or asphalt, a jackhammer was used to create a void for installing a flush-mount manhole cover (see Photos 2 through 4, Appendix B). Two of the wells (MW-3 and MW-5) were completed with above-ground stick-up casings (Photo 5). The protective casing was painted caution yellow. All wells were labeled with permanent ink and keyed-alike locks were secured on the wells.

The monitoring wells were developed prior to sampling to remove particulates from the wells and filter pack media. Well development activities were conducted at least 24 hours after well completion. Development was accomplished using the surge block method. A surge block connected to small-diameter PVC piping (Photo 6) was lowered into the monitoring well and manually plunged in an up-and-down motion throughout the entire saturated screened interval. A battery-operated submersible pump (Photo 7) was then used between surging sequences to remove turbid groundwater from the well. The purge water was discharged into a 55-gallon drum (Photo 8). Field parameters (pH, conductivity, temperature, and turbidity) were monitored during well development activities. Well development was continued until groundwater was free of particulates, with turbidity below 10 NTU or constant, and other field parameters stabilized. Well development information was recorded on Well Development Records included in Appendix D. A summary of the well development data is included below in Table 4-1.

Table 4-1 – Summary of Well Development Data

Well No.	Approx. Gallons Removed	Final Turbidity (NTU)	General Well Yield
MW-1	85	9.7	Moderate (0.5 to 1.0 GPM)
MW-2	165	9.1	High (>2.0 GPM)
MW-3	25	7.0	Moderate (0.5 to 1.0 GPM)
MW-4	100	20.8	Moderate (~1.0 GPM)
MW-5	20	66.2	Low (<0.5 GPM)
MW-6	60	81	Low (<0.5 GPM)

Notes: GPM = Gallons per minute.
NTU = Nephelometric turbidity units

4.3 Water Level Measurement

After the wells were developed, they were allowed to recover overnight (at a minimum) prior to purging and sampling. Each well cap was removed, and the static water level allowed to equilibrate prior to recording the static water level. An electronic water level indicator was then used to measure the static groundwater level and total well depth. Measurements were made from the surveyed reference mark on top of the well casing. Groundwater depth and total depth were recorded on Groundwater Sampling Records, included as Appendix E. The water level measurements were subtracted from the well casing elevations to determine static water level elevations for each well. This information was used to evaluate groundwater flow patterns below the site (see Section 5.2). A summary of the monitoring well and groundwater measurements is included below in Table 4-2.

Table 4-2 – Summary of Well and Groundwater Measurement Data

Well No.	Well Depth (feet bgs)	Screened Interval (feet bgs)	Top of Casing Elevation (feet AMSL)	Depth to Static Water Level (feet TOC)	Static Water Level Elevation (feet AMSL)
MW-1	15.4	5.0 – 15.0	242.68	0.33	242.35
MW-2	15.5	5.1 – 15.1	242.36	0.40	241.96
MW-3	16.6	6.2 – 16.2	246.23	4.45	241.78
MW-4	15.9	5.5 – 15.5	241.72	0.56	241.16
MW-5	16.4	6.0 – 16.0	246.45	5.81	240.64
MW-6	16.0	5.6 – 15.6	242.33	0.08	242.25

Notes:

bgs = Below ground surface.

AMSL = Above mean sea level.

TOC = Top of well casing.

Water levels measured on January 8, 2019.

See Figure 4 for well locations and potentiometric surface map for the site.

4.4 Groundwater Purging and Sampling

The wells were purged and sampled via peristaltic pump (Photo 9, Appendix B) utilizing EPA's *Low-Flow (Minimal Drawdown) Groundwater Sampling Procedures* (April 1996). Dedicated LDPE tubing was gently lowered into the well to a point within the screened interval. The LDPE discharge tubing was connected to a flow-through cell to enable measurement of field parameters by a YSI multi-parameter instrument. Field parameters measured included DO, ORP, pH, specific conductance, temperature, and turbidity.

Once the groundwater in the well had stabilized, minimal drawdown had occurred, and turbidity was less than 10 NTU (or constant), groundwater samples were collected from the well. The 10 NTU turbidity goal was achieved for all wells except well MW-6. In the case of MW-6, the well was allowed to stabilize overnight prior to sampling due to high turbidity (>75 NTU). The turbidity

of MW-6 was 16.1 NTU at the time of sampling. The groundwater samples were collected in laboratory-supplied containers. In the case of VOC vials, the samples were collected such that zero headspace existed within the vials. The containers were properly labeled and placed on ice in an ice chest for shipment to Pace Analytical for laboratory analyses (Section 3.5). Groundwater sampling measurements and observations were recorded on Groundwater Sampling Records included in Appendix E. Groundwater sampling results are discussed in Section 5.4.

4.5 Quality Assurance/Quality Control

In general, sampling procedures, sample identification, labeling, sample preservation, sample packaging/shipping, field documentation, and laboratory analytical methods were conducted in accordance with the SAP. Nitrile gloves were worn during sampling activities and changed between sampling intervals/locations. The sample ice chests were stored within a locked vehicle or hotel room while unattended. Chain-of-custody forms were used for transferring samples to the laboratory. Upon transfer of custody, the form was signed by a Harbor representative, who noted the date and time the samples were relinquished. The chain-of-custody forms were placed within sealed ice chests, and all ice chests were secured with custody seals and strapping tape. The ice chests were shipped overnight to the laboratory via Federal Express. Copies of the completed chain-of-custody forms are included with the laboratory analytical data sheets (Appendix F).

Field quality assurance/quality control (QA/QC) samples for the CSA generally included blind duplicate samples (one in 20, per matrix), rinsate blanks (one per day), and trip blanks (one per cooler for VOCs). Laboratory QA/QC analyses included method blank samples, laboratory control samples, matrix spike samples, and surrogate recoveries. Harbor conducted an independent QA/QC data review to evaluate the validity of the results generated during the investigation. QA/QC results are discussed in Section 5.5.

4.6 Ground Penetrating Radar

As previously noted, Harbor sub-contracted GPRS to conduct a GPR survey to evaluate the potential presence of a UST on the former Parsons site. GPRS utilized a Geophysical Survey Systems, Inc. SIR-3000 GPR unit equipped with a 400-megahertz (MHz) antenna. The 400 MHz antenna is calibrated specifically for locating USTs and other underground hazards. GPRS scanned the suspect UST area utilizing a north-south and east-west grid pattern. The GPR survey results are presented in Section 5.6.

4.7 Well Survey

The horizontal location of the monitoring wells and boring locations were surveyed by Harbor personnel using a combination of global positioning system (GPS) technology and conventional electronic measuring equipment to determine geodetic (latitude/longitude) coordinates. Additionally, the top of casing (TOC) elevation for each monitoring well was surveyed to enable

determination of groundwater flow patterns. An Arkansas-licensed professional land surveyor, Johnny Tweedle, RLS #1203, surveyed the wells and mean sea level datum.

4.8 Equipment Decontamination

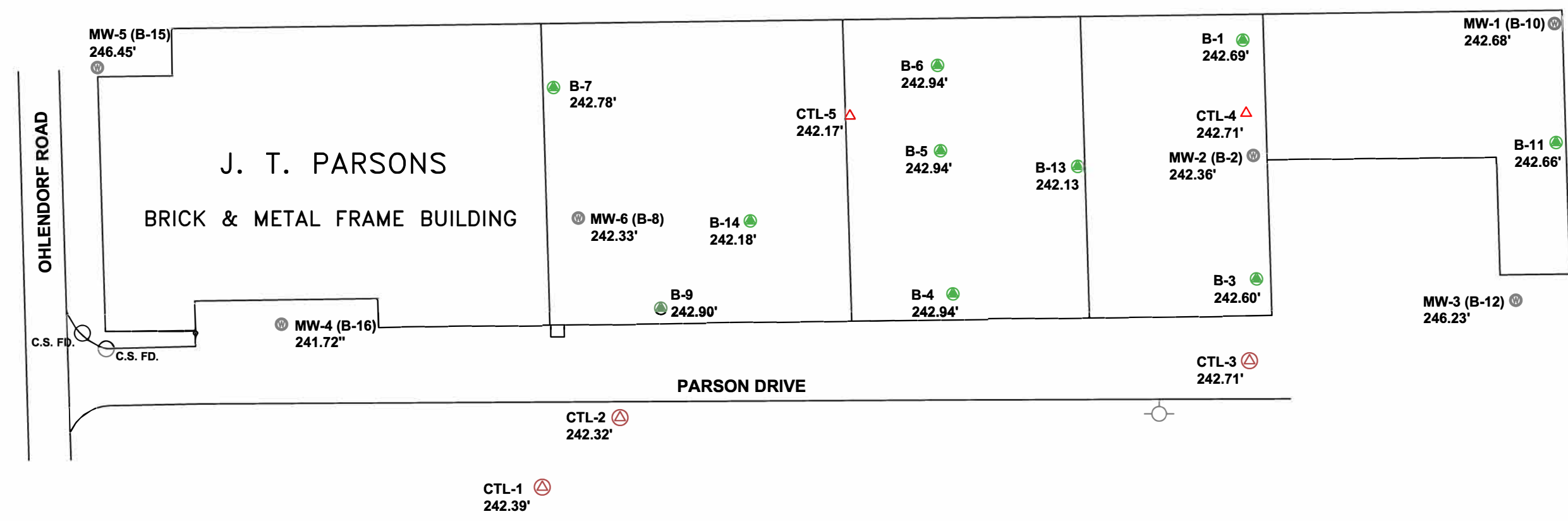
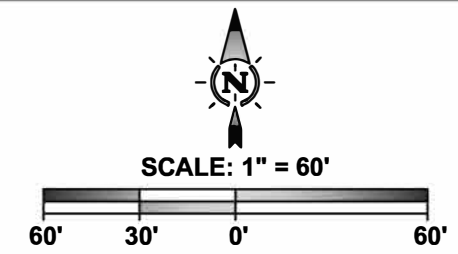
All non-dedicated equipment, such as soil sampling equipment, submersible pump and water level indicator, was properly decontaminated before use using the following procedure:

- Wash equipment using distilled water and phosphate-free soap (e.g., Liquinox);
- Turn pump on to allow soap solution to clean internal portion of pump;
- Thoroughly rinse equipment with tap water (including running pump);
- Double-rinse equipment with distilled water; and
- Allow equipment to air dry and wrap in aluminum foil (if not used immediately).

The decontamination area generally included a work table, gross wash bucket with brush, tap water sprayer, deionized water sprayer, and equipment drying area. Plastic sheeting was used to contain any spills from the decontamination process. New tubing used for well development and groundwater sampling did not require decontamination.

4.9 Equipment Calibration

All field equipment was calibrated daily prior to use per manufacturer's specifications. Calibration Logs are included in Appendix G. Please note the YSI meter was calibrated by the rental company (Northside Sales Company) prior to use.



KEY MAP

- ⊙ MONITORING WELL (WITH TOP OF CASING ELEVATION)
- 🌿 SOIL BORING (WITH GROUND SURFACE ELEVATION)
- △ CONTROL POINT (WITH GROUND SURFACE ELEVATION)
- ⊕ FIRE HYDRANT



REVISION DESCRIPTION		DATE
NO	X	X-X-X
Drawn By: DLF/JRT		
Date: 2-7-19		
Scale: 1"=60'		
FIG. 3		

5.0 Comprehensive Site Assessment Results

5.1 Site Geology/Hydrogeology

Subsurface materials at the site generally consisted of alluvial deposits of sands, silts, and clays. The concrete slab for the onsite buildings covered the majority of the site surface and was generally three inches in thickness. A thin layer of sub-base existed immediately below the concrete foundation. Near-surface soils consisted primarily of clays with lesser amounts of silts and sands. The exception was boring B-2 (MW-2), which exhibited coarse-grained sands from surface to four feet bgs. The upper clay unit generally extended to depths ranging from four to 11 feet bgs. The clays were underlain by fine to very-fine grained sands with lesser amounts of silts and clays.

Groundwater was generally encountered in the borings at depths of three to five feet bgs. The static groundwater levels generally rose to within one foot of surface, indicating the upper water-bearing zone below the site is semi-confined. It is believed the static water levels at the site would be considerably lower during drier months, as the investigation was conducted during the wet season following an above-average rainfall period. Well yields for the six monitoring wells ranged from less than 0.5 gallons per minute (GPM) to greater than 2.0 GPM.

5.2 Groundwater Flow Patterns

The static groundwater elevation data were used to generate a potentiometric surface map for the site (see Figure 4). As shown on the figure, a hydraulic ridge exists below the building, with flow radiating primarily to the south-southeast and north-northwest. Considerable groundwater mounding likely occurs below the building, skewing local groundwater flow patterns. The regional groundwater flow direction is likely eastward, toward the nearby Mississippi River. The groundwater gradient across the site (east/west) is considered relatively low (approximately 0.002), similar to surrounding topography.

5.3 Soil Sampling Results

As discussed above, two soil samples were collected from each of the 16 soil borings, including a surface sample and the deeper “worst-case” interval based on field screening results (32 total samples). Analytical results are summarized below in Table 5-1. All concentrations are listed in milligrams per kilogram (mg/kg). Please note that for the VOC and SVOC scans, only those compounds detected are listed in Table 5-1. The table includes EPA’s risk-based Regional Screening Levels (*RSLs, November 2018*) for comparison purposes. These include both residential and industrial screening levels for surface soils, along with EPA maximum contaminant level (MCL)-based protective of groundwater soil screening levels. Any detections above the applicable RSLs are listed in **bold**. Please note that in some cases the laboratory detection limits exceeded respective screening levels. Laboratory analytical data sheets are included in Appendix F.

Table 5-1 – Soil Sampling Results

Analyte	Sample Concentration (mg/kg)								Soil Screening Levels (mg/kg)		
	B-1		B-2		B-3		B-4		Residential Soils	Industrial Soils	Protective of Groundwater
	0-1 ft.	4-6 ft.	4-6 ft.	6-8 ft.	0-4 ft.	4-6 ft.	0-4 ft.	4-6 ft.			
Arsenic	4.11	3.91	3.29	5.42	3.79	2.15	4.78	3.79	0.68	3.0	0.29
Barium	126	113	94.4	117	124	94.9	130	125	15,000	220,000	82
Cadmium	<0.500	<0.500	<0.500	<0.500	0.509	<0.500	<0.500	<0.500	71	980	0.38
Total Chromium	11.9	10.8	10.5	9.91	11.6	8.97	11.5	10.3	120,000	1,800,000	180,000
Lead	7.45	6.67	9.17	6.04	8.18	5.49	7.61	6.39	400	800	14
Selenium	<2.00	<2.00	<2.00	<2.00	<2.00	<2.00	<2.00	<2.00	390	5,800	0.26
Silver	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	390	5,800	0.80
Mercury	0.0207	<0.0200	<0.0200	<0.0200	0.0214	<0.0200	0.024	<0.0200	11	46	0.10
TPH-DRO	<4.00	<4.00	<4.00	<4.00	<4.00	<4.00	<4.00	<4.00	110	600	0.023
TPH-GRO	<0.100	<2.50	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	82	420	0.017
VOCs											
cis-1,2-Dichloroethene	ND	ND	0.00357	0.00297	ND	0.0667	ND	ND	160	2,300	0.021
Tetrachloroethene (PCE)	0.00934	ND	0.0249	ND	ND	ND	ND	ND	24	100	0.0023
Trichloroethene (TCE)	ND	0.0011	0.00365	ND	ND	ND	ND	ND	0.94	6.0	0.0018
SVOCs	ND	ND	ND	ND	ND	ND	ND	ND	--	--	--

Notes:

mg/kg = Milligrams per kilogram.

TPH = Total Petroleum Hydrocarbons; DRO = Diesel-Range Organics; GRO = Gasoline-Range Organics.

VOCs = Volatile Organic Compounds; SVOCs = Semi-Volatile Organic Compounds.

ND = All compounds in scan reported as non-detect (see Appendix F for detection limits).

Chromium (III) RSLs used for Residential and Industrial soil screening levels.

Aromatic High screening levels used for DRO; Aromatic Low screening levels used for GRO.

For Protective of Groundwater, MCL-based screening levels used where available; otherwise, Risk-Based screening levels used.

See Figure 3 for boring locations.

Results listed in **bold** exceed one or more screening levels.

Table 5-1 – Soil Sampling Results (Cont.)

Analyte	Sample Concentration (mg/kg)								Soil Screening Levels (mg/kg)		
	B-5		B-6		B-7		B-8		Residential Soils	Industrial Soils	Protective of Groundwater
	0-4 ft.	10-12 ft.	0-4 ft.	6-8 ft.	0-4 ft.	6-8 ft.	0-4 ft.	6-8 ft.			
Arsenic	3.03	2.45	4.72	3.11	5.98	5.15	9.42	4.52	0.68	3.0	0.29
Barium	94.7	132	137	108	94.3	104	129	121	15,000	220,000	82
Cadmium	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	71	980	0.38
Total Chromium	9.38	8.97	14.5	9.49	10.2	9.07	12.2	10.9	120,000	1,800,000	180,000
Lead	5.84	5.22	9.26	5.90	7.34	5.42	8.02	6.52	400	800	14
Selenium	<2.00	<2.00	<2.00	<2.00	<2.00	<2.00	<2.00	<2.00	390	5,800	0.26
Silver	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	390	5,800	0.80
Mercury	<0.0200	<0.0200	0.0203	<0.0200	0.0251	<0.0200	0.0280	<0.0200	11	46	0.10
TPH-DRO	<4.00	<4.00	<4.00	<4.00	<4.00	<4.00	<4.00	<4.00	110	600	0.023
TPH-GRO	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	82	420	0.017
VOCs											
Tetrachloroethene (PCE)	ND	ND	0.0159	0.00309	ND	ND	ND	ND	24	100	0.0023
SVOCs	ND	ND	ND	ND	ND	ND	ND	ND	--	--	--

Table 5-1 – Soil Sampling Results (Cont.)

Analyte	Sample Concentration (mg/kg)								Soil Screening Levels (mg/kg)		
	B-9		B-10		B-11		B-12		Residential Soils	Industrial Soils	Protective of Groundwater
	0-4 ft.	4-5 ft.	0-4 ft.	6-8 ft.	0-4 ft.	4-6 ft.	4-6 ft.	10-12 ft.			
Arsenic	4.42	2.74	3.73	2.74	5.36	2.86	12	<2.00	0.68	3.0	0.29
Barium	124	105	102	118	154	111	142	137	15,000	220,000	82
Cadmium	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	71	980	0.38
Total Chromium	13	9.14	12.4	9.66	13.0	11.7	17.3	11.5	120,000	1,800,000	180,000
Lead	8.71	5.26	16.7	6.01	13.8	8.19	10.8	7.43	400	800	14
Selenium	<2.00	<2.00	<2.00	<2.00	<2.00	<2.00	<2.00	<2.00	390	5,800	0.26
Silver	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	390	5,800	0.80
Mercury	0.0239	<0.0200	0.0603	0.0215	0.0251	0.0524	0.0265	0.0212	11	46	0.10
TPH-DRO	<4.00	<4.00	27.5	<4.00	<16.0	<4.00	<4.00	<4.00	110	600	0.023
TPH-GRO	<0.100	<0.100	<0.100	<0.119	<0.100	<0.100	<0.100	<0.100	82	420	0.017
VOCs											
Acetone	0.0301	ND	ND	ND	ND	ND	ND	ND	61,000	670,000	2.9
SVOCs	ND	ND	ND	ND	ND	ND	ND	ND	--	--	--

Table 5-1 – Soil Sampling Results (Cont.)

Analyte	Sample Concentration (mg/kg)								Soil Screening Levels (mg/kg)		
	B-13		B-14		B-15		B-16		Residential Soils	Industrial Soils	Protective of Groundwater
	0-4 ft.	4-6 ft.	0-4 ft.	6-8 ft.	0-4 ft.	4-6 ft.	0-4 ft.	4-6 ft.			
Arsenic	2.8	2.62	2.37	<2.00	<2.00	<2.00	6.2	2.15	0.68	3.0	0.29
Barium	116	125	122	126	98.9	105	139	110	15,000	220,000	82
Cadmium	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	71	980	0.38
Total Chromium	11.4	10.6	11.7	11.5	9.27	9.99	14.8	11.1	120,000	1,800,000	180,000
Lead	6.98	6.21	7.12	6.63	12.4	6.07	10.3	6.58	400	800	14
Selenium	<2.00	<2.00	<2.00	<2.00	<2.00	<2.00	<2.00	<2.00	390	5,800	0.26
Silver	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	390	5,800	0.80
Mercury	0.0205	<0.0200	0.0261	0.0237	0.0255	0.0217	0.0297	0.0231	11	46	0.10
TPH-DRO	<4.00	<4.00	<4.00	<4.00	<4.00	<4.00	<16.0	<4.00	110	600	0.023
TPH-GRO	<0.100	<0.100	<0.100	<0.132	<0.100	<0.100	<0.100	<0.100	82	420	0.017
VOCs											
Acetone	ND	ND	0.0315	ND	ND	ND	ND	ND	61,000	670,000	2.9
SVOCs											
Benzo(a)anthracene	ND	ND	ND	ND	0.112	ND	ND	ND	1.1	21	0.011
Benzo(b)fluoranthene	ND	ND	ND	ND	0.311	ND	ND	ND	1.1	21	0.30
Benzo(k)fluoranthene	ND	ND	ND	ND	0.0994	ND	ND	ND	11	210	2.9
Benzo(g,h,i)perylene	ND	ND	ND	ND	0.0791	ND	ND	ND	--	--	--
Benzo(a)pyrene	ND	ND	ND	ND	0.142	ND	ND	ND	0.11	2.1	0.24
Chrysene	ND	ND	ND	ND	0.105	ND	ND	ND	110	2,100	9.0
Fluoranthene	ND	ND	ND	ND	0.163	ND	ND	ND	2,400	30,000	89
Indeno(1,2,3-cd)pyrene	ND	ND	ND	ND	0.0773	ND	ND	ND	1.1	21	0.98
Phenanthrene	ND	ND	ND	ND	0.0875	ND	ND	ND	--	--	--
Bis(2-ethylhexyl)phthalate	ND	ND	ND	ND	2.23	ND	ND	ND	39	160	1.4
Pyrene	ND	ND	ND	ND	0.137	ND	ND	ND	1,800	23,000	13

As shown in Table 5-1, arsenic was detected in the majority of soil samples at concentrations ranging up to 12 mg/kg (B-12, 4-6 feet). Arsenic levels in four of the soil samples were below the detection limit of 2.00 mg/kg. Barium was detected in all soil samples at concentrations ranging from 94.3 mg/kg up to 154 mg/kg (B-11, 0-4 feet). Total chromium was detected in all soil samples at levels ranging from 8.97 mg/kg up to 17.3 mg/kg (B-11, 0-4 feet). Lead was detected in all soil samples at concentrations ranging from 5.22 mg/kg up to 16.7 mg/kg (B-10, 0-4 feet). Mercury was detected in the majority of soil samples at concentrations ranging up to 0.0603 mg/kg (B-10, 0-4 feet). Metals concentrations were below detection limits for cadmium (less than 0.500 mg/kg), selenium (less than 2.00 mg/kg), and silver (less than 1.00 mg/kg).

TPH-DRO was detected in the 0- to 4-foot sample from B-10 at a concentration of 27.5 mg/kg. TPH-DRO levels in the remaining soil samples were reported as non-detect (see Table 5-1 for detection limits). THP-GRO concentrations were non-detect (detection limits varied) in all soil samples. Four individual VOCs were detected in the soil samples at trace concentrations. cis-1,2-Dichloroethene was detected in both soil samples from boring B-2 (4-6 feet, 0.00357 mg/kg; 6-8 feet, 0.00297 mg/kg) and the 4- to 6-foot sample from B-3 (0.0667 mg/kg). Tetrachloroethene (PCE) was detected in the 0- to 1-foot sample from B-1 (0.00934 mg/kg), the 4- to 6-foot sample from B-2 (0.00357 mg/kg), and both soil samples from B-6 (0-4 feet, 0.0159 mg/kg; 6-8 feet, 0.00309 mg/kg). TCE was detected in the 4- to 6-foot samples from B-1 (0.0011 mg/kg) and B-2 (0.00365 mg/kg). Acetone was detected in the 0- to 4-foot sample from B-9 (0.0301 mg/kg) and the 0- to 4-foot sample from B-14 (0.0315 mg/kg). All other VOCs were reported as non-detect (see Appendix F for detection limits).

Eleven individual SVOCs were detected in the 0- to 4-foot soil sample from boring B-15, located immediately outside the northwestern corner of the building (see Table 5-1, Figure 3). All other SVOC results were non-detect (see Appendix F for detection limits). See Section 6.0 for a discussion of the soil sampling results in relation to respective risk-based RSLs.

5.4 Groundwater Sampling Results

Groundwater sampling results from the CSA are summarized below in Table 5-2 below. EPA's MCLs for drinking water were included in the table for comparison purposes. EPA Tap Water screening levels (EPA, November 2018) were used for those parameters for which an MCL has not been established. As shown in the table, arsenic was detected in five of the six groundwater samples at concentrations ranging from 0.0107 mg/L up to 0.0842 mg/L (MW-6). Arsenic for the MW-2 groundwater sample was reported as non-detect (less than 0.0100 mg/L). Barium was detected in all six groundwater samples at concentrations ranging from 0.166 mg/L up to 0.546 mg/L (MW-5). Lead was detected in the samples from MW-4 (0.00577 mg/L), MW-5 (0.00518 mg/L), and MW-6 (0.0102 mg/L). Cadmium, chromium, selenium, silver, and mercury were below laboratory detection limits (see Table 5-2) in all of the samples.

TPH-DRO was detected in the MW-3 groundwater sample at a concentration of 0.109 mg/L. All remaining TPH-DRO results were non-detect (less than 0.100 mg/L). TPH-GRO was not detected (less than 0.100 mg/L) in any of the groundwater samples. cis-1,2-dichloroethene was detected in samples from MW-1 (0.0238 mg/L), MW-2 (0.00533 mg/L) and MW-4 (0.00235 mg/L). PCE

(0.0505 mg/L) and TCE (0.00489 mg/L) were detected in MW-2. All remaining VOCs were reported as non-detect. Phenol was detected in the MW-1 groundwater sample at a concentration of 0.0109 mg/L. All other SVOCs were reported as non-detect. See Section 6.0 for a discussion of the groundwater sampling results in relation to respective risk-based RSLs.

Table 5-2 – Groundwater Sampling Results

Analyte	Sample Concentration (mg/L)						MCL (mg/L)
	MW-1	MW-2	MW-3	MW-4	MW-5	MW-6	
Arsenic	0.0107	<0.0100	0.0312	0.0398	0.0155	0.0842	0.010
Barium	0.336	0.166	0.242	0.247	0.546	0.216	2.0
Cadmium	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	0.005
Total Chromium	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	0.10
Lead	0.00808	<0.00500	<0.00500	0.00577	0.00518	0.0102	0.015
Selenium	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	0.050
Silver	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	0.094*
Mercury	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	0.002
TPH-DRO	<0.100	<0.100	0.109	<0.100	<0.100	<0.100	0.0055*
TPH-GRO	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	0.033*
VOCs							
cis-1,2-Dichloroethene	0.0238	0.00533	ND	0.00235	ND	ND	0.070
Tetrachloroethene (PCE)	ND	0.0505	ND	ND	ND	ND	0.005
Trichloroethene (TCE)	ND	0.00489	ND	ND	ND	ND	0.005
SVOCs							
Phenol	0.0109	ND	ND	ND	ND	ND	5.8*

Notes:

mg/L = Milligrams per liter.

MCL = EPA Maximum Contaminant Level for drinking water.

TPH = Total Petroleum Hydrocarbons; DRO = Diesel-Range Organics; GRO = Gasoline-Range Organics.

VOCs = Volatile Organic Compounds; SVOCs = Semi-Volatile Organic Compounds.

ND = All compounds in scan reported as non-detect (see Appendix F for detection limits).

*MCL not available for parameter; EPA Tap Water screening level used.

Aromatic High screening levels used for DRO; Aromatic Low screening levels used for GRO.

See Figure 3 for monitoring well locations.

Results listed in **bold** exceed one or more screening levels.

5.5 QA/QC Results

An analytical data review summary for the Parsons laboratory data is provided in Appendix H. The summary contains results of the field and laboratory QC samples and a discussion of the applicable QA/QC criteria. In general, the review indicated adequate laboratory precision. The data generated during the Parsons CSA was determined to be satisfactory and usable as reported.

5.6 GPR Survey Results

The GPR survey report, as provided by GPRS, is included in Appendix I. As indicated in the report, a UST was not identified within the suspect indoor area (described in the 2014 Phase I ESA) to the maximum penetration depth of 3.5 to 4.5 feet bgs. Potential abandoned piping was identified at depths between one to two feet bgs. Markings identifying the buried piping were made on the indoor concrete surface (see photos in GPRS report, Appendix I).

5.7 Investigative-Derived Wastes

Investigative-derived wastes (IDW) generated during the CSA included soil cuttings, plastic sampling sleeves, well development groundwater, purged groundwater (from sampling), decontamination water, and expendables (e.g., nitrile gloves, plastic sheeting, plastic tubing). The IDW was segregated and containerized in 55-gallon drums. A paint pen was used to mark the contents (e.g., soil cuttings, groundwater, well number) and generation date for each drum, and "Non-Hazardous Waste" labels were placed on the drums (see Photo 10, Appendix B). All drums were staged under roof inside the warehouse building. A total of 17 IDW drums were generated, included six drums for solids (soil cuttings and expendables) and 11 drums for liquids (development water, purge water, and decontamination water).

Based on the laboratory results, the wastes will be properly disposed as a "Non-Hazardous Waste" at an appropriately permitted facility. Documentation of disposal (e.g., waste manifests, disposal records) will be submitted to the ADEQ as supplemental information to this CSA Report.

6.0 Comparison of CSA Results to Screening Levels

6.1 Soil Sampling Results

As shown in Table 5-1, numerous soil sample results exceeded respective risk-based screening levels. All arsenic detections exceeded the residential soil screening level (SSL) for surface soils (0.68 mg/kg), and the majority of detections exceeded the industrial SSL of 3.0 mg/kg. All arsenic detections exceeded the protective of groundwater SSL of 0.29 mg/kg. All barium detections in soil samples exceeded the protective of groundwater SSL of 82 mg/kg. All barium results were below the residential and industrial SSLs. One lead detection (B-10, 0-4 feet) slightly exceeded the respective protective of groundwater SSL 14 mg/kg. All remaining lead results were below the applicable SSLs. Results for all remaining metals (cadmium, chromium, selenium, silver, and mercury) were below respective screening levels.

The lone DRO detection in the 0- to 4-foot sample from boring B-10 exceeded the protective of groundwater SSL (0.023 mg/kg) but was below the residential (100 mg/kg) and industrial (600 mg/kg) SSLs. Three VOCs (cis-1,2-dichloroethene, PCE, and TCE) were detected at trace levels above the protective of groundwater SSL, but below the residential and industrial SSLs. These exceedances occurred in borings B-1, B-2, B-3, and B-6 (see Figure 3, Table 5-1). Four SVOCs were detected in the 0- to 4-foot sample from boring B-15 at low to trace levels that exceeded the protective of groundwater SSLs. One of these detections (benzo(a)pyrene, 0.142 mg/kg) slightly exceeded the respective residential SSL (0.11 mg/kg). Organic compound results for all other soil samples were below applicable screening standards.

6.2 Groundwater Sampling Results

Arsenic results for five of the six groundwater samples exceeded the respective MCL of 0.010 mg/L. All other metals detections in groundwater samples were below respective MCLs. DRO was detected in the MW-3 groundwater sample at a concentration of 0.0109 mg/L. This detection exceeded EPA's RSL for tap water (0.0055 mg/L). The PCE detection (0.0505 mg/L) in the MW-2 sample exceeded the respective MCL. All other organic compound detections were below applicable screening levels for groundwater.

6.3 Discussion of Screening Level Exceedances and Potential Receptors

6.3.1 Soil Sampling Results

The metals arsenic, barium, and lead are naturally-occurring in the environment. A review of background metals concentrations in surface soils from surrounding counties (Crittenden, Greene, and Woodruff) located within the Mississippi alluvial plain indicate that onsite levels of these three metals are consistent with or even below naturally-occurring concentrations (*Boerngen and Shacklette, 1981; Shacklette and Boerngen, 1984*). Regional levels of arsenic ranged from 5.3 mg/kg up to 11 mg/kg, consistent with or slightly higher than arsenic concentrations detected during the investigation (see Table 5-1). Levels of barium from previous studies ranged from 500 mg/kg up to 1,000 mg/kg,

considerably higher than barium levels in onsite soils. Naturally-occurring lead levels from the region ranged from 20 mg/kg up to 30 mg/kg, higher than lead concentrations detected in soils at the Parsons site. The data suggest that the soil RSL exceedances for arsenic, barium, and lead are likely related to naturally-occurring metals in soils rather than environmental impact from previous site operations. In any event, a permanent surface barrier (i.e., concrete or asphalt) exists at 15 of the 16 boring locations (all except B-15), which would prevent surface exposure to underlying soils.

The residential SSL for the SVOC benzo(a)pyrene (0.11 mg/kg) was slightly exceeded in the 0- to 4-foot soil sample from boring B-15 (0.142 mg/kg). This boring is located immediately outside the northwestern corner of the building. Surface exposure (i.e., no surface barrier) exists at this locale.

The protective of groundwater SSL exceedances for DRO (boring B-10), VOCs (B-1, B-2, B-3, and B-6), and SVOCs (B-10) were generally at trace concentrations. The protective of groundwater SSLs are based on conservative calculations to replicate leaching and migration of contaminants from soils to underlying groundwater. The significance of the protective of groundwater SSLs for the Parsons site is diminished because groundwater sampling was conducted during the CSA (discussed below).

6.3.2 Groundwater Sampling Results

Similar to soils, metals are naturally-occurring in groundwater. The MCL for arsenic (0.010 mg/L) was exceeded in five of the six groundwater samples (see Table 5-2). Based on groundwater flow patterns (Figure 4) well MW-1 would be considered the upgradient well at the site, although groundwater mounding creates a somewhat radial flow due to a hydraulic ridge below the building. Arsenic concentrations in the remaining wells are generally similar to MW-1. The elevated arsenic level in the MW-6 sample may have been related to turbidity (see Section 4.4 and Well Development Record, Appendix D). The data indicate the MCL exceedances for arsenic may be related to naturally-occurring levels of arsenic in groundwater.

The TPH-DRO result for MW-3 (0.109 mg/L) and the PCE result for MW-2 (0.0505 mg/L) exceeded the respective RSLs (see Table 5-2). Risk to potential receptors is likely low due to the low analyte concentrations in groundwater, absence of nearby surface water bodies, and absence of known groundwater wells at the site and vicinity.

7.0 CSA Summary/Conclusions

Harbor conducted CSA field activities at the former Parsons facility during the weeks of December 17, 2018 and January 7, 2019, in accordance with the ADEQ-approved SAP. A total of 32 soil samples were collected from 16 soil borings (B-1 through B-16) for analysis of VOCs, SVOCs, TPH-DRO, TPH-GRO, and RCRA metals. Six of the borings were converted to permanent water wells (MW-1 through MW-6). Groundwater samples were collected for analysis of the same parameter set. A GPR survey was conducted in the vicinity of a potential UST identified during a previous Phase I ESA at the site. A summary of the findings is included below.

- One or more soil sample results for arsenic, barium, and lead exceeded respective SSLs. Based on background concentrations of these metals for the region, the SSL exceedances are likely due to naturally-occurring metals in the soils.
- Benzo(a)pyrene was detected in the 0- to 4-foot soil sample from boring B-15 at a concentration of 0.142 mg/kg, slightly above the residential SSL (0.11 mg/kg). Surface exposure exists at this location.
- The MCL for arsenic (0.010 mg/L) was exceeded in five of the six groundwater samples; however, these exceedances may be related to naturally-occurring levels of arsenic in groundwater or elevated turbidity levels.
- The TPH-DRO result for MW-3 (0.109 mg/L) and the PCE result for MW-2 (0.0505 mg/L) exceeded the respective MCLs. Risk to potential receptors is likely low due to the low analyte concentrations in groundwater, absence of nearby surface water bodies, and absence of known groundwater wells at the site and vicinity.
- Groundwater mounding exists below the onsite buildings, with flow patterns radiating primarily to the south-southeast and north-northwest. The regional groundwater flow direction is likely eastward, toward the Mississippi River.
- The GPR survey did not identify the suspect UST described during the previous Phase I ESA. Three buried pipes were identified and marked.

8.0 References

The following references were used in preparation of this CSA Report:

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- Groundwater Atlas of the United States*. 1998. USGS Document HA 730-F. U.S. Department of Interior. Washington, D.C.
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- McFarland, J.D. 2004. *Stratigraphic Summary of Arkansas* Information Circular 36, p. 38. Arkansas Geological Commission. Little Rock, Arkansas.
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- Puls, R.W. and M.J. Barcelona. 1996. *Low-Flow (Minimal Drawdown) Groundwater Sampling Procedures*. EPA Groundwater Issue (April 1996). EPA/540/S-95/504.
- Regional Screening Level (RSL) Summary Table (TR=1E-06, HQ=1)*. November 2018. Environmental Protection Agency. Washington, D.C.
- Sampling and Analysis Plan*. November 2018. Harbor Environmental and Safety. Little Rock, Arkansas.
- Shacklette, H.T. and J.G. Boerngen. 1984. *Element Concentrations in Soils and Other Surficial Materials of the Conterminous United States*. USGS Paper 1270. U.S. Department of Interior. Washington, D.C.

Appendix A

Copies of Project Field Notes

(1)

12/17/18

AM - Clear, mild

PM - Clear, mild

1040 - Arrive @ Fanson's Site, McCray
drill crew on site

1050 - Conduct safety meeting,
unload probe, prepare for borings.

1120 - Start concrete hammer - B-1,
NE corner of main metal building.

1200 - Start B-2 Middle of east end
of main bldg.

1230 - Start B-3, SE corner of
main bldg.

1250 - Start B-4, see filled map.

Note: See chain-of-custody for
sampling times & depth intervals.

1310 - Start B-5 - see map.

1350 - Start B-6 - see map.

1415 - Start B-7 - see map.

1440 - Start B-8 - see map.

1510 - Start B-9 - see map.

1540 - Start B-10 - see map.

1606 - Start B-11 - see map.

1620 - Start B-12 - Outside, SE corner.

1650 - Drill crew leaves site for

(2)

12/17/18

day. Geoprobe used is truck-mounted
TT20DT.

Harbor crew (M. Lybrand / T. Huetter)
prepare to leave site for day. All
samples on ice, will be secured
in Tom's hotel room overnight.
See chain-of-custody for sample
times / depths. See Boring Logs for
lithology, groundwater conditions,
and FID readings. See Calibration
Logs for equipment calibration
info. Note: Rinsate collected @ 1640 (spoon
1317 - Harbor crew leaves site.

M. Lybrand

12/13/18

AM - Partly cloudy, cool.

PM - Partly cloudy, mild.

0750 - M. Lybrand arrives @ site, prepares for day's activities.

0805 - Ethan King (GPRS) onsite to conduct GPR survey. Tom Huetten onsite.

0830 - McCray Drilling crew arrives @ site, crew prepares to continue soil sampling.

0858 - Start B-13 - see field map.

See Boring logs for lithology & FIJ results. Note: Concrete foundation below building has been ~3" at all boring locations.

0922 - Start B-14 - see map.

1025 - Start B-15 - NW corner (outside).

1050 - Start B-16 - Outside - see map.

1110 - Drill crew leave site for concrete.

1115 - ABEQ onsite (Candice Brock/Katie Krup)

1130 - Collect Equipment Blank using decontaminated spoon.

1140 - Check groundwater levels at all boring locations?

(2)

12/18/13

B-1 - 0.5'	B-9 - 0.7'
B-2 - 0.7'	B-10 - 0.2'
B-3 - 0.6'	B-11 - 0.4'
B-4 - 0.7'	B-12 - 0.1'
B-5 - 0.5'	B-13 - 0.5'
B-6 - 0.4'	B-14 - 0.7'
B-7 - 0.7'	B-15 - 2.4'
B-8 - 0.7'	B-16 - 1.0'

* Depth below concrete or ground surface.

1230 - ADE2 leaves site.

1240 - Tom Huetter leaves site.

Mr. Lybrand leaves for lunch.

1300 - Mr. Lybrand back onsite.

1305 - McCray crew back onsite,
prepare to jackhammer for wells
in concrete.

1330 - Start jackhammering. Six monitor
wells will be installed at following
boring locations: B-2, B-8, B-10, B-15,
and B-16. Concrete is present @
B-2, B-8, B-10, & B-16.

1445 - Complete jackhammering inside
building, prepare to drill MW-1 @
B-10 location (NE corner of bldg.).

(5)

12/18/18

1515 - Start MW-1 w/ Geoprobe via 6.0-inch hollow-stem augers. Augers have been decontaminated.

1633 - Complete MW-1 - See well diagram for specifications. Crew cleans up, prepares to leave site for day.

1700 - M. Lybrand and McCray Drilling crew leaves site.

Note: T. Huetter took all samples from site, will ship to lab today or tomorrow.

Mr. S. Z...

⑥

12/19/18

AM - Pthly cloudy, cold.

PM - Cloudy, cool.

0709 - M. Lybrand arrives @ site, prepares for days activities.

0730 - McCray crew arrives @ site, prepares for days activities.

0800 - Start hollow-stem drilling for MW-2 (B-2 location).

0815 - Obstruction @ 2.0' feet (likely concrete), crew jackhammers new pad several feet south of B-2 location.

0832 - Restart drilling for MW-2.

0923 - Complete MW-2 - see well diagram for well specs.

0943 - Start MW-3, SE corner of site outside (B-12 location).

1035 - Complete MW-3 - see well diagram for well specs.

1048 - Start MW-4 - SW corner of site outside (Boring B-16 location).

1134 - Complete MW-4 - see well diagram for specs.

1210 - Start MW-5 - NW corner of site outside (B-15 location).

(7)

12/19/18

1320 - Complete MW-5. Note: Threaded connection between riser pipe + screen broke when Driller pushed bottom plug out of hollow-stem bit. Had to re-drill borehole to remove PVC and install new well. Driller does not have extra bottom plug so, MW-6 will have to wait for tomorrow morning (Driller will get more plugs this evening from shop).

1400 - Crew prepares to set surface completions @ well locations. More jackhammering will be required at some locations. See well diagrams for surface completion specs.

1633 - Start developing MW-1 with submersible pump. See Well Development form for development info.

1735 - Leave site for day.

M. J. [Signature]

(8)

12/20/18

AM - Cloudy, cold.

PM - Cloudy, cold.

0640 - Mr. Lybrand arrives @ Parsons site, prepares to continue well development @ MW-1.

0655 - Continue development - MW-1
(See Well Development Form.)

0740 - Complete development - MW-1.

0750 - Start development @ MW-2 - see Well Development Form.

0830 - McClary drill crew on site, prepare to install well MW-6 (B-8 location).

0900 - Start well installation - MW-6.

See Boring Log for well specifications.

0930 - Complete well development - MW-2

0940 - Start well development - MW-3
(See Well Dev. Form).

1030 - Complete well installation @ MW-6

Drill crew grouts all open boreholes, moves drums, and cleans up work areas.

1100 - Complete well development @ MW-3.

1120 - Start developing MW-4 - See Well Dev. Form.

1310 - Complete development @ MW-4.

12/20/8

1320 - Start development @ Mw-5. - See Well Dev. Form.

1340 - McCray crew leaves site for day - will have to come back and complete flush-mount cover @ Mw-1 (too much water below concrete foundation from overnight rain).

1430 - Complete well development @ Mw-5. M. Lybrand prepares to leave site for day.

1440 - M. Lybrand leaves site. All wells locked. All drums have been moved inside building. City will be contacted to lock-up building.

M. S. Lybrand

11/7/19

PM - Cool, light rain (but under roof).

1230 - M. Lybrand arrives @ site,
prepares to develop MW-6.

1245 - Start well dev. @ MW-6 using
submersible pump. See Well Dev. Form
for information.

1250 - Calibrate field meter - see
Calibration log.

1255 - David Fields (Harbor) arrives
@ site.

1538 - Water still turbid after 55
gallons, switch to low flow via
peristaltic pump.

1625 - Stop pumping MW-6, water
still turbid (81 NTU). Will allow
well to stabilize overnight, sample
in morning.

1630 - Crew leaves site for day.

Sample containers locked in Harbor
truck.

M.S. Lybrand

(11)

1/8/19

AM - Cloudy, cool, wet.

PM - Cloudy, mild.

0715 - M. Lybrand arrives @ site, prepares to sample MW-6. See field form for sampling info.

0730 - D. Fields arrives @ site.

0750 - MW-6 sample collected. Note! see Groundwater Sampling Forms for all field measurements and gw sampling info. Crew prepares to sample MW-1.

0819 - Start purging MW-1.

0900 - MW-1 sample collected. Crew prepares to sample MW-2.

0915 - Start purging MW-2.

0940 - MW-2 sample collected. Note! Harbor surveyor onsite to survey XYZ for all borings + wells. Crew prepares to sample MW-3.

1010 - Start purging MW-3.

1040 - MW-3 sample collected. Crew prepares to sample MW-4.

1046 - Start purging MW-4.

1115 - MW-4 sample collected. Crew

(12)

11/3/19

prepares to sample MW-5.

1124 - Start purging MW-5.

1145 - MW-5 sample collected.

M. Lybrand begins inventorying, labeling, & tightening all drums from Parsons investigation. Takes final measurements on all monitor wells (see Boring Logs for well specs.) Groundwater samples are secured on ice in ice chest.

Drum Inventory:

MW-1 soil - [1]; purge water - [2]

MW-2 soil - [1]; purge water - [3]

MW-3 soil - [1]; purge water - [1]

MW-4 soil - [1]; purge water - [2]

MW-5 soil - [1]; purge water - [1]

MW-6 soil - [1]; purge water - [1]

Purged groundwater from today (all wells) - [1]

[17] total drums from investigation.

All drums have been moved under roof within building. Each drum is labeling "Non-hazardous Waste" with contents. Not all drums are completely full.

1335 - M. Lybrand leaves site with

1/8/19

groundwater samples. Sample ice chest
will be locked in garage overnight.
Samples are on ice. Samples will be
shipped to Pace Analytical tomorrow
via Fed Ex. Harbor survey crew
still onsite, will make sure all wells
are locked and secured, will close-up
building when they leave site.

M.S. [signature]

Appendix B

Site Photographs



Photo 1. Track-mounted Geoprobe unit used for soil sampling and monitoring well installation, B-16 (MW-4).



Photo 2. Jackhammering for flush-mount manhole cover, MW-1.



Photo 3. Void space for flush-mount surface completion, MW-2.



Photo 4. Flush-mount surface completion, MW-4.



Photo 5. Above-ground stick-up completion, MW-3.



Photo 6. Surge block used for well development.



Photo 7. Submersible pump used for well development.



Photo 8. Well development discharge into 55-gallon drum.



Photo 9. Peristaltic pump used for groundwater sampling.



Photo 10. Labeled IDW drum.

Appendix C

Boring Logs and Monitoring Well Specifications



LOG OF BORING B-2 (MW-2)

(Page 1 of 1)

J.T. Parsons Investigation
Osceola, Arkansas

Date Started : 12/17/18
Date Completed : 12/19/18
Hole Diameter : 3.25 in./6.5 inch
Drilling Method : Geoprobe/Hollow-stem
Sampling Method : 4-ft. SS Sampler

Northing Coord. : 501640.6943
Easting Coord. : 1914828.3030
Drilling Company : McCray Drilling
Logged By : M. Lybrand, P.G.
Company : Harbor Environmental

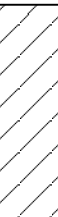
Depth in Feet	USCS	GRAPHIC	DESCRIPTION	FID (ppm)	REMARKS	Well: MW-2 Elev.: 241.96 (TOC)
0	SP		3-in. concrete at surface, then brown to gray coarse-grained SAND and gravel, wet, firm.	0.0	Poor recovery 0-4 ft. Water level 1-8-19.	
5	CL		Dark brown SILTY CLAY, wet to saturated, soft.	5.0		
	SC		Dark brown to gray v. fine-grained CLAYEY SAND, wet, firm. w/ some clayey silt and silty clay.	0.9 0.0		
10			SILTY SAND at bottom of boring.	0.0		
15					Probe used for soil sampling to 12.0 feet, then hollow-stem auger used to 16.0 feet for installation of well MW-2. Well consisted of 2-inch PVC w/ 10-foot slotted well screen. 20/40 silica sand added around well screen to depth of two feet above screen, then hydrated bentonite seal (2+ feet) to near ground surface. Flush-mount manhole surface completion set within concrete pad.	
20						
25						



LOG OF BORING B-3

(Page 1 of 1)

J.T. Parsons Investigation
Osceola, ArkansasDate Started : 12/17/18
Date Completed : 12/17/18
Hole Diameter : 3.25 in.
Drilling Method : Geoprobe
Sampling Method : 4-ft. SS SamplerNorthing Coord. : 501580.0746
Easting Coord. : 1914829.8914
Drilling Company : McCray Drilling
Logged By : M. Lybrand, P.G.
Company : Harbor Environmental

Depth in Feet	USCS	GRAPHIC	DESCRIPTION	FID (ppm)	REMARKS	Well: Elev.:
0			Dark gray SILTY CLAY, damp, soft to med.		3 in. concrete at surface.	
	CL			4.6		
5			Dark gray v. fine-grained CLAYEY SILTY SAND, wet to sat., firm.			
	SM			7.6		
				1.2		
				1.3		
10				1.3		
					TD = 12.0 ft. Boring grouted to surface with hydrated bentonite.	
15						
20						
25						



LOG OF BORING B-4

(Page 1 of 1)

J.T. Parsons Investigation
Osceola, ArkansasDate Started : 12/17/18
Date Completed : 12/17/18
Hole Diameter : 3.25 in.
Drilling Method : Geoprobe
Sampling Method : 4-ft. SS SamplerNorthing Coord. : 501572.3358
Easting Coord. : 1914679.9798
Drilling Company : McCray Drilling
Logged By : M. Lybrand, P.G.
Company : Harbor Environmental

Depth in Feet	USCS	GRAPHIC	DESCRIPTION	FID (ppm)	REMARKS	Well: Elev.:
0	CL		Dark brown to dark gray SILTY CLAY, damp, med. stiffness.		3 in. concrete at surface.	
			Brown, wet, soft.	19		
			Dark brown, wet, soft.			
5			Dark gray.	1.9		
	SM		Dark gray.	0.0		
			Dark gray v. fine-grained CLAYEY SILTY SAND, sat., firm.	0.0		
10				0.0		
					TD = 12.0 ft. Boring grouted to surface with hydrated bentonite.	
15						
20						
25						



LOG OF BORING B-5

(Page 1 of 1)

J.T. Parsons Investigation
Osceola, ArkansasDate Started : 12/17/18
Date Completed : 12/17/18
Hole Diameter : 3.25 in.
Drilling Method : Geoprobe
Sampling Method : 4-ft. SS SamplerNorthing Coord. : 501643.0560
Easting Coord. : 1914673.7653
Drilling Company : McCray Drilling
Logged By : M. Lybrand, P.G.
Company : Harbor Environmental

Depth in Feet	USCS	GRAPHIC	DESCRIPTION	FID (ppm)	REMARKS	Well: Elev.:
0	CL		Dark brown to dark gray SILTY CLAY, damp, med. stiffness.	0.0	3 in. concrete at surface. Poor recovery 0-4 ft.	
			Moist, soft.			
5	SM		Dark brown to dark gray v. fine-grained SILTY SAND, wet, firm.	0.0		
				0.0		
				0.0		
10			Dark gray v. fine-grained CLAYEY SILTY SAND, wet to sat., firm.	0.0	TD = 12.0 ft. Boring grouted to surface with hydrated bentonite.	
15						
20						
25						



LOG OF BORING B-6

(Page 1 of 1)

J.T. Parsons Investigation
Osceola, ArkansasDate Started : 12/17/18
Date Completed : 12/17/18
Hole Diameter : 3.25 in.
Drilling Method : Geoprobe
Sampling Method : 4-ft. SS SamplerNorthing Coord. : 501685.1270
Easting Coord. : 1914672.2624
Drilling Company : McCray Drilling
Logged By : M. Lybrand, P.G.
Company : Harbor Environmental

Depth in Feet	USCS	GRAPHIC	DESCRIPTION	FID (ppm)	REMARKS	Well: Elev.:
0	CL		Dark brown SILTY CLAY, damp, med. stiffness.		3 in. concrete at surface. Poor recovery 0-4 ft.	
			Moist, soft.	0.3		
			Dark brown to dark gray, wet, soft.			
5	CL			0.0		
				0.0		
				0.0		
				0.0		
10	SM		Dark gray v. fine-grained SILTY SAND, wet, firm.	0.0		
					TD = 12.0 ft. Boring grouted to surface with hydrated bentonite.	
15						
20						
25						



LOG OF BORING B-7

(Page 1 of 1)

J.T. Parsons Investigation
Osceola, Arkansas

Date Started : 12/17/18
Date Completed : 12/17/18
Hole Diameter : 3.25 in.
Drilling Method : Geoprobe
Sampling Method : 4-ft. SS Sampler

Northing Coord. : 501674.1647
Easting Coord. : 1914482.3949
Drilling Company : McCray Drilling
Logged By : M. Lybrand, P.G.
Company : Harbor Environmental

Depth in Feet	USCS	GRAPHIC	DESCRIPTION	FID (ppm)	REMARKS	Well: Elev.:
0			Brown clay and gravel fill, damp, med. stiffness (only 5-in. recovery)		3 in. concrete at surface. Poor recovery 0-4 ft.	
				0.2		
5	CL		Dark brown SILTY CLAY, wet to sat., soft.	0.0		
				0.0		
10				0.0		
	SM		Dark brown to dark gray v. fine-grained CLAYEY SILTY SAND, wet, firm.	0.0		
					TD = 12.0 ft. Boring grouted to surface with hydrated bentonite.	
15						
20						
25						



LOG OF BORING B-8 (MW-6)

(Page 1 of 1)

J.T. Parsons Investigation
Osceola, Arkansas

Date Started : 12/17/18
Date Completed : 12/20/18
Hole Diameter : 3.25 in./6.5 inch
Drilling Method : Geoprobe/Hollow-stem
Sampling Method : 4-ft. SS Sampler

Northing Coord. : 501609.8063
Easting Coord. : 1914494.7847
Drilling Company : McCray Drilling
Logged By : M. Lybrand, P.G.
Company : Harbor Environmental

Depth in Feet	USCS	GRAPHIC	DESCRIPTION	FID (ppm)	REMARKS	Well: MW-6 Elev.: 242.25 (TOC)
0			3-in. concrete at surface, then dark gray SILTY CLAY, damp, med. stiffness. Moist, soft to med.	3.7	Water level 1-8-19.	
5	CL		Dark gray SILTY SANDY CLAY, wet to sat., soft.	0.3		
10	SM		Dark gray v.fine-grained CLAYEY SILTY SAND, wet to saturated, firm.	0.0		
15				0.0		
20						
25						

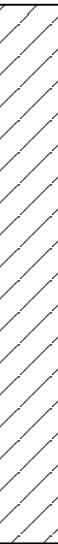
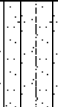
Probe used for soil sampling to 12.0 feet, then hollow-stem auger used to 16.0 feet for installation of well MW-6. Well consisted of 2-inch PVC w/ 10-foot slotted well screen. 20/40 silica sand added around well screen to depth of two feet above screen, then hydrated bentonite seal (2+ feet) to near ground surface. Flush-mount manhole surface completion set within concrete pad.



LOG OF BORING B-9

(Page 1 of 1)

J.T. Parsons Investigation
Osceola, ArkansasDate Started : 12/17/18
Date Completed : 12/17/18
Hole Diameter : 3.25 in.
Drilling Method : Geoprobe
Sampling Method : 4-ft. SS SamplerNorthing Coord. : 501565.1635
Easting Coord. : 1914535.4908
Drilling Company : McCray Drilling
Logged By : M. Lybrand, P.G.
Company : Harbor Environmental

Depth in Feet	USCS	GRAPHIC	DESCRIPTION	FID (ppm)	REMARKS	Well: Elev.:
0	CL		Dark gray SILTY CLAY, damp, med. stiffness.		3 in. concrete at surface. Poor recovery 0-4 ft.	
			Moist, soft to med.	0.5		
			Dark gray SILTY CLAY, wet to sat., soft.	0.8		
5				0.0		
	SM		Dark gray v. fine-grained CLAYEY SILTY SAND, wet to sat., firm.	0.0		
10						
					TD = 12.0 ft. Boring grouted to surface with hydrated bentonite.	
15						
20						
25						



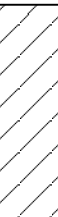
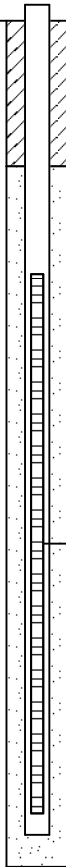
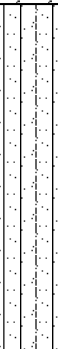
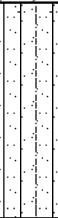
LOG OF BORING B-10 (MW-1)

(Page 1 of 1)

J.T. Parsons Investigation
Osceola, Arkansas

Date Started : 12/17/18
Date Completed : 12/19/18
Hole Diameter : 3.25 in./6.5 inch
Drilling Method : Geoprobe/Hollow-stem
Sampling Method : 4-ft. SS Sampler

Northing Coord. : 501705.8396
Easting Coord. : 1914977.4036
Drilling Company : McCray Drilling
Logged By : M. Lybrand, P.G.
Company : Harbor Environmental

Depth in Feet	USCS	GRAPHIC	DESCRIPTION	FID (ppm)	REMARKS	Well: MW-1 Elev.: 242.35 (TOC)
0	CL		3-in. concrete at surface, then dark brown SILTY CLAY, damp, med. stiffness.	0.8	Poor recovery 0-4 ft. Water level 1-8-19.	 Seal Sand Pack Screen
5	SM		Brown v. fine-grained CLAYEY SILTY SAND, moist to wet, firm.	0.3		
10	CL		Dark gray SANDY CLAY, moist, soft to med.	0.0		
15	SM		Dark gray v. fine-grained SILTY SAND, wet, firm.	0.0		
20						
25						

Probe used for soil sampling to 16.0 feet, then hollow-stem auger used to 16.0 feet for installation of well MW-1. Well consisted of 2-inch PVC w/ 10-foot slotted well screen. 20/40 silica sand added around well screen to depth of two feet above screen, then hydrated bentonite seal (2+ feet) to near ground surface. Flush-mount manhole surface completion wet within concrete pad.



LOG OF BORING B-11

(Page 1 of 1)

J.T. Parsons Investigation
Osceola, ArkansasDate Started : 12/17/18
Date Completed : 12/17/18
Hole Diameter : 3.25 in.
Drilling Method : Geoprobe
Sampling Method : 4-ft. SS SamplerNorthing Coord. : 501647.0936
Easting Coord. : 1914978.1444
Drilling Company : McCray Drilling
Logged By : M. Lybrand, P.G.
Company : Harbor Environmental

Depth in Feet	USCS	GRAPHIC	DESCRIPTION	FID (ppm)	REMARKS	Well: Elev.:
0	CL		Dark brown SILTY CLAY, damp, med. to stiff, w/ gravel near surface.		3 in. concrete at surface. Poor recovery 0-4 ft.	
			Moist, soft to med.	0.5		
5			Dark brown to dark gray SILTY CLAY, wet, soft.	0.6		
				0.2		
				0.0		
10	SM		Dark brown to dark gray v. fine-grained CLAYEY SILTY SAND, wet to sat., firm.	0.0		
					TD = 12.0 ft. Boring grouted to surface with hydrated bentonite.	
15						
20						
25						



LOG OF BORING B-12 (MW-3)

(Page 1 of 1)

J.T. Parsons Investigation
Osceola, Arkansas

Date Started : 12/17/18
Date Completed : 12/19/18
Hole Diameter : 3.25 in./6.5 inch
Drilling Method : Geoprobe/Hollow-stem
Sampling Method : 4-ft. SS Sampler

Northing Coord. : 501569.1584
Easting Coord. : 1914958.3062
Drilling Company : McCray Drilling
Logged By : M. Lybrand, P.G.
Company : Harbor Environmental

Depth in Feet	USCS	GRAPHIC	DESCRIPTION	FID (ppm)	REMARKS	
0			3-inch concrete at surface, then dark brown SILTY CLAY, damp, med. stiffness, w/ gravel near surface.		Poor recovery 0-4 ft. Water level 1-8-19.	Well: MW-3 Elev.: 241.78 (TOC)
5	CL		Dark gray, moist to wet, soft.	0.0		
10	SP		Dark brown to dark gray fine- to med.-grained SAND, wet to saturated, firm.	0.0		
	SM		Dark brown to dark gray v. fine-grained CLAYEY SILTY SAND, wet, firm.	0.0		
15					Probe used for soil sampling to 12.0 feet, then hollow-stem auger used to 17.0 feet for installation of well MW-3. Well consisted of 2-inch PVC w/ 10-foot slotted well screen. 20/40 silica sand added around well screen to depth of two feet above screen, then hydrated bentonite seal (2+ feet) to near ground surface. Stick-up casing surface completion set within concrete pad.	
20						
25						



LOG OF BORING B-13

(Page 1 of 1)

J.T. Parsons Investigation
Osceola, Arkansas

Date Started : 12/18/18
Date Completed : 12/18/18
Hole Diameter : 3.25 in.
Drilling Method : Geoprobe
Sampling Method : 4-ft. SS Sampler

Northing Coord. : 501635.2121
Easting Coord. : 1914741.6250
Drilling Company : McCray Drilling
Logged By : M. Lybrand, P.G.
Company : Harbor Environmental

Depth in Feet	USCS	GRAPHIC	DESCRIPTION	FID (ppm)	REMARKS	Well: Elev.:
0	CL		Dark brown SILTY CLAY, damp, med. stiffness.		3 in. concrete at surface.	
	SM		Dark brown v. fine-grained CLAYEY SILTY SAND, wet to sat., firm	0.0		
5	CL		Dark brown SILTY CLAY, wet to sat., soft.	0.0		
				0.0		
				0.0		
10	SM		Dark brown to dark gray v. fine-grained CLAYEY SILTY SAND, wet, firm.	0.0		
15						
20						
25						

TD = 12.0 ft. Boring grouted to surface with hydrated bentonite.



LOG OF BORING B-14

(Page 1 of 1)

J.T. Parsons Investigation
Osceola, ArkansasDate Started : 12/18/18
Date Completed : 12/18/18
Hole Diameter : 3.25 in.
Drilling Method : Geoprobe
Sampling Method : 4-ft. SS SamplerNorthing Coord. : 501608.2186
Easting Coord. : 1914579.5940
Drilling Company : McCray Drilling
Logged By : M. Lybrand, P.G.
Company : Harbor Environmental

Depth in Feet	USCS	GRAPHIC	DESCRIPTION	FID (ppm)	REMARKS	Well: Elev.:
0			Dark brown SILTY CLAY, damp to moist, med. stiffness.		3 in. concrete at surface. Poor recovery 0-4 ft.	
				166		
5	CL		Dark brown to dark gray, wet to sat., soft	19		
				26		
10				8.2		
				25		
	SM		Dark gray v. fine-grained CLAYEY SILTY SAND, wet, firm.			
					TD = 12.0 ft. Boring grouted to surface with hydrated bentonite.	
15						
20						
25						

J.T. Parsons Investigation
Osceola, Arkansas

Date Started : 12/18/18
Date Completed : 12/19/18
Hole Diameter : 3.25 in./6.5 inch
Drilling Method : Geoprobe/Hollow-stem
Sampling Method : 4-ft. SS Sampler

Northing Coord. : 501684.2123
Easting Coord. : 1914256.9191
Drilling Company : McCray Drilling
Logged By : M. Lybrand, P.G.
Company : Harbor Environmental

Depth in Feet	USCS	GRAPHIC	DESCRIPTION	FID (ppm)	REMARKS	
0			Dark brown SILTY CLAY w/ gravel, damp to moist, med. stiffness. Med. to dark brown, damp (no gravel).	0.8		Well: MW-5 Elev.: 240.64 (TOC) Seal Sand Pack Screen
5	CL		Dark brown SILTY CLAY, wet to sat., soft.	1.1		
	SM		Dark brown to dark gray v. fine-grained CLAYEY SILTY SAND, wet to saturated, firm.	0.3		
10	CL		Med. to dark brown SILTY CLAY, wet. to sat., soft.	0.0		
	SM		Dark brown to dark gray v. fine-grained CLAYEY SILTY SAND, wet, firm.	0.0		
15				0.0		
	CL		Dark gray SILTY SANDY CLAY, wet to sat., soft.	0.0		
20				0.0		
25				0.0		

Water level 1-8-19.

Probe used for soil sampling to 20.0 feet, then hollow-stem auger used to 17.0 feet for installation of well MW-5. Well consisted of 2-inch PVC w/ 10-foot slotted well screen. 20/40 silica sand added around well screen to depth of two feet above screen, then hydrated bentonite seal (2+ feet) to near ground surface. Stick-up casing surface completion set within concrete pad.



LOG OF BORING B-16 (MW-4)

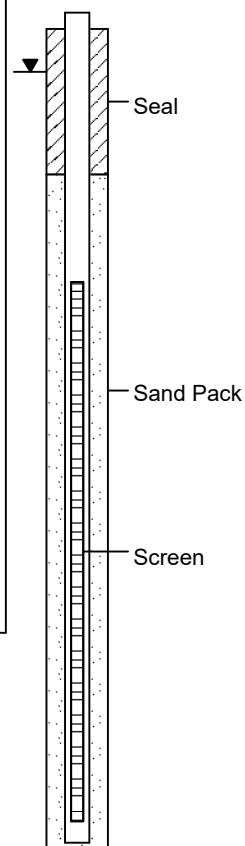
(Page 1 of 1)

J.T. Parsons Investigation
Osceola, Arkansas

Date Started : 12/18/18
Date Completed : 12/19/18
Hole Diameter : 3.25 in./6.5 inch
Drilling Method : Geoprobe/Hollow-stem
Sampling Method : 4-ft. SS Sampler

Northing Coord. : 501557.3312
Easting Coord. : 1914347.9326
Drilling Company : McCray Drilling
Logged By : M. Lybrand, P.G.
Company : Harbor Environmental

Depth in Feet	USCS	GRAPHIC	DESCRIPTION	FID (ppm)	REMARKS	Well: MW-4 Elev.: 241.16 (TOC)
0			3-in. asphalt at surface, then dark brown to dark gray SILTY CLAY, damp, med. to stiff.		Poor recovery 0-4 ft.	
				39	Water level 1-8-19.	
5	CL		Dark gray SILTY SANDY CLAY, wet, soft.	16		
				1.1		
10				1.3		
	SM		Dark gray v.fine-grained SILTY SAND, wet, firm.			
15					Probe used for soil sampling to 12.0 feet, then hollow-stem auger used to 16.0 feet for installation of well MW-4. Well consisted of 2-inch PVC w/ 10-foot slotted well screen. 20/40 silica sand added around well screen to depth of two feet above screen, then hydrated bentonite seal (2+ feet) to near ground surface. Flush-mount manhole surface completion set within concrete pad.	
20						
25						



Appendix D

Well Development Records



WELL DEVELOPMENT RECORD

Date:	12/19/18	Time Started:	1633	Time Completed:	1730
Well ID:	MW-1	Well Depth:	15.4' (TOC)	Initial Depth to GW:	0.35' (TOC)
Screened Interval:	5.0' (TOC)	to	15.0' (TOC)		
Project:	J.T. PARSONS	Client:	ADEP		
Personnel:	M. Lybrand	Driller:	MCCRAY DRILLING		
Weather Conditions:	Cloudy, cool.				

Time	Volume Removed	pH	Conductivity ^{TDS}	Temperature	Turbidity
1655	25 GAL.	7.5	804	16.9	24.3
1700	30 GAL.	7.0	739	17.2	76.6
1707	35 GAL.	6.9	716	17.3	91.0
1714	40 GAL.	6.9	606	17.1	33.5
1719	45 GAL.	6.8	644	17.2	63.9
1725	50 GAL.	6.8	690	17.2	17.5
1730	55 GAL.	6.8	618	17.2	22.6
* Stopped for the day, will continue development in morning - see next page.					

Total Volume Removed (gallons):	~ 85 Gal.

Final Water Level (feet below TOC):	Purged dry.

Other Observations:	Well yield 0.5 - 1.0 GPM. Used submersible pump + surge block.

M. J. Lybrand
Signature

12/19/18
Date

Date:	12/20/18	Time Started:	0655	Time Completed:	0740
Well ID:	Mw-1	Well Depth:		Initial Depth to GW:	
Screened Interval:				to	
Project:				Client:	
Personnel:				Driller:	
Weather Conditions:	Cloudy, cold				

TDS

Time	Volume Removed	pH	Conductivity	Temperature	Turbidity
0705	60 GAL.	6.9	621	17.0	18.4
0713	65 GAL.	6.8	615	17.2	13.5
0719	70 GAL.	6.8	610	17.2	15.2
0727	75 GAL.	6.8	608	17.2	12.1
0734	80 GAL.	6.8	608	17.3	11.4
0740	85 GAL.	6.8	606	17.2	9.7

Total Volume Removed (gallons):	~ 85 gal.

Final Water Level (feet below TOC):	Purged dry.

Other Observations:	
* See previous page ① of ②.	

M. J. [Signature]
Signature

12/20/18
Date

Date:	12/20/18	Time Started:	0750	Time Completed:	0930
Well ID:	MW-2	Well Depth:	15.1' (TOC)	Initial Depth to GW:	0.17' (TOC)
Screened Interval:	5.1' (TOC)		to	15.1' (TOC)	
Project:	J.T. Parsons	Client:	ADER.		
Personnel:	M. Lybrand	Driller:	MCCRAY DRILLING		
Weather Conditions:	Cloudy, cold.				

Time	Volume Removed	pH	Conductivity	Temperature	Turbidity
0815	40 GAL.	7.8	312	15.2	306
0820	50 GAL.	7.7	306	15.1	211
0826	60 GAL.	7.6	295	15.1	178
0834	70 GAL.	7.4	259	15.2	107
0839	80 GAL.	7.3	247	15.3	96.1
0845	90 GAL.	7.3	279	15.3	98.6
0850	100 GAL.	7.2	284	15.3	78.6
0856	110 GAL.	7.3	270	15.3	49.1
0902	120 GAL.	7.3	266	15.3	42.9

* Continued on page 2 of 2

Total Volume Removed (gallons):	~165 GAL.

Final Water Level (feet below TOC):	

Other Observations:	Used submersible pump + surge block. Pump could not keep up with well - well yield > 2 GPM.

Mr. S. Lybrand
Signature

12/20/18
Date

Harbor

WELL DEVELOPMENT RECORD

Date:	12/20/18	Time Started:	0750	Time Completed:	0930
Well ID:	MW-2	Well Depth:		Initial Depth to GW:	
Screened Interval:			to		
Project:		Client:			
Personnel:		Driller:			
Weather Conditions:	Cloudy, cold.				

Time	Volume Removed	pH	Conductivity	Temperature	Turbidity
0909	130 GAL.	7.3	275	15.3	28.9
0915	140 GAL.	7.3	264	15.3	44.0
0920	150 GAL.	7.3	266	15.3	25.5
0926	160 GAL.	7.3	268	15.3	15.7
0930	165 GAL.	7.3	266	15.3	9.1

Total Volume Removed (gallons): ~ 165 GAL.

Final Water Level (feet below TOC): 3.47' (TOC)

Other Observations: * See previous page ① of ②.

M. J. Z...
Signature

12/20/18
Date

Date:	12/20/18	Time Started:	0940	Time Completed:	1100
Well ID:	MW-3	Well Depth:	20.4' (TOC)	Initial Depth to GW:	4.31' (TOC)
Screened Interval:	6.2' (TOC)		to	16.2' (TOC)	
Project:	J.T. Parsons		Client:	ADEQ	
Personnel:	M. Lybrand		Driller:	MCCRAY DRILLING	
Weather Conditions:	Cloudy, cold				

Time	Volume Removed	pH	^{TDS} Conductivity	Temperature	Turbidity
0952	10 GAL.	6.8	571	15.4	47.8
1006	13 GAL.	7.0	546	17.5	30.2
1020	16 GAL.	7.1	541	18.0	9.1
1035	19 GAL.	7.2	525	18.0	10.0
1048	22 GAL.	7.2	521	18.0	8.2
1100	25 GAL.	7.2	520	18.0	7.0

Total Volume Removed (gallons):	~ 25 GAL.

Final Water Level (feet below TOC):	Purged dry.

Other Observations:	Used submersible pump + surge block. Well yield < 1 GPM.

M. Lybrand
Signature

12/20/18
Date

Date:	12/20/18	Time Started:	1120	Time Completed:	1310
Well ID:	MW-4	Well Depth:	15.4' (TOC)	Initial Depth to GW:	0.33' (TOC)
Screened Interval:	5.5' (TOC)		to	15.5' (TOC)	
Project:	J.T. Parsons	Client:	ADER.		
Personnel:	M. Lybrand	Driller:	McCRAY DRILLING		
Weather Conditions:	Cloudy, cold.				

TDS					
Time	Volume Removed	pH	Conductivity	Temperature	Turbidity
1152	30 GAL.	7.3	380	17.9	202
1203	40 GAL.	7.2	370	18.4	118
1215	50 GAL.	7.1	365	18.3	111
1227	60 GAL.	7.1	360	18.4	94.9
1233	65 GAL.	7.1	368	18.4	71.1
1238	70 GAL.	7.1	369	18.4	44.7
1243	75 GAL.	7.1	370	18.4	31.2
1248	80 GAL.	7.1	369	18.4	24.6
1254	85 GAL.	7.1	370	18.4	21.1

* Continued on Page ② OF ②.

Total Volume Removed (gallons):	~100 GAL.

Final Water Level (feet below TOC):	Purged dry.

Other Observations:	Used submersible pump + surge block. Well yield ~ 1 GPM. Turbidity stabilized but did not achieve 10 NTU.

M. J. Lybrand
Signature

12/20/18
Date

Date:	12/20/18	Time Started:	1120	Time Completed:	1310
Well ID:	MW-4	Well Depth:		Initial Depth to GW:	
Screened Interval:			to		
Project:				Client:	
Personnel:				Driller:	
Weather Conditions:	Cloudy, cold.				

Time	Volume Removed	pH	Conductivity	Temperature	Turbidity
1300	90 GAL.	7.1	370	18.4	20.2
1305	95 GAL.	7.1	369	18.4	21.3
1310	100 GAL.	7.1	368	18.4	20.8

Total Volume Removed (gallons):	~ 100 GAL.

Final Water Level (feet below TOC):	Purged dry.

Other Observations:	* See previous page (1) OF (2).

M. L. [Signature]
Signature

12/20/18
Date

Date:	12/20/18	Time Started:	1320	Time Completed:	1430
Well ID:	Mw-5	Well Depth:	19.9' (TOC)	Initial Depth to GW:	5.94' (TOC)
Screened Interval:	6.0' (TOC)	to	16.0' (TOC)		
Project:	J.T. Parsons	Client:	ASQR		
Personnel:	M. Lybrand	Driller:	McCRAY DRILLING		
Weather Conditions:	Cloudy, cold				

TDS

Time	Volume Removed	pH	Conductivity	Temperature	Turbidity
1330	3 GAL.	7.1	408	15.4	126
1338	5 GAL.	7.1	402	15.5	87.6
1350	8 GAL.	7.0	418	15.6	63.8
1400	11 GAL.	7.0	420	15.7	69.9
1410	14 GAL.	7.0	425	15.7	69.3
1420	17 GAL.	7.0	424	15.7	64.1
1430	20 GAL.	7.0	423	15.7	66.2

Total Volume Removed (gallons):	~ 20 GAL.

Final Water Level (feet below TOC):	Purged dry.

Other Observations:	Used peristaltic pump + surge block. Well yield < 0.5 GPM. Turbidity stabilized but did not achieve 10 NTU.

M. S. Lybrand
Signature

12/20/18
Date

Date:	1/7/19	Time Started:	1245	Time Completed:	1625
Well ID:	MW-6	Well Depth:	15.4' (TOC)	Initial Depth to GW:	0.09 (TOC)
Screened Interval:	5.6' (TOC)		to	15.6' (TOC)	
Project:	J.T. Parsons	Client:	ADEQ		
Personnel:	M. Lybrand / D. Fields	Driller:	McCray Drilling		
Weather Conditions:	Cool, light rain (well under roof).				

Time	Volume Removed	pH	Conductivity	Temperature	Turbidity
1431	25 GAL.	6.9	0.65	18.2	516
1452	35 GAL.	6.8	0.62	18.1	464
1509	45 GAL.	6.9	0.61	17.9	494
1529	55 GAL.	6.9	0.61	18.0	478
1538	- After 55 gal. go to peristaltic pump.				
1540	56 GAL.	7.0	0.52	17.9	146
1550	57 GAL.	6.9	0.51	17.9	144
1605	58 GAL.	6.9	0.51	17.9	77
1615	59 GAL.	6.9	0.51	17.9	81

Total Volume Removed (gallons):	Approx. 60 GAL

Final Water Level (feet below TOC):	2.4' (w/ low-flow)

Other Observations:	Water still turbid after 3 hours 40 min. Well will be allowed to stabilize overnight, sampling in morning. Yield 40.5 GPM.

M. Lybrand
Signature

1-7-19
Date

Appendix E

Groundwater Sampling Records

Groundwater Sampling Record

Site Name: J.T. Parsons - Osceola, AR						Well ID: MW-1		Date: 1-8-19			
Well Diameter: 2"		Well Depth: 15.4'		Screened Interval From: 5.0 to: 15.0		Initial Depth to Water: 0.33		Volume in Well: NA			
Sampling Method: Low-Flow				Pump Type: Peristaltic		Tubing Type: Teflon		Tubing Diameter: 0.25"			
Time	Volume Purged (gallons)	Cumulative Volume Purged (gallons)	Purge Rate (mL/min)	Depth to Water (feet)	Dissolved Oxygen (mg/L)	Conductivity (μ S/cm)	Oxidation-Reduction Potential (mV)	pH (Standard Units)	Temperature ($^{\circ}$ C)	Turbidity (NTU)	Odor/Color
0819	Start purging.										
0830				0.79	0.41	1,310	75	6.5	13.0	31.6	
0835				0.80	1.03	1,320	47	6.5	13.4	25.0	
0840				0.78	1.28	1,320	25	6.6	13.6	23.9	
0845				0.78	1.32	1,320	9.0	6.6	13.8	17.3	
0850				0.78	1.72	1,330	3.2	6.6	13.9	17.8	
0853				0.78	1.90	1,330	-2.4	6.6	13.9	13.1	
0856				0.77	1.92	1,320	-3.1	6.6	13.9	10.2	
0859	~4.0	~4.0	303	0.77	1.94	1,320	-3.5	6.6	14.0	9.1	Clean
			(Ave.)								
* All depth measurements are from Top of Casing (TOC).											

Sampling Data

Sample ID: MW-1	Date: 1-8-19	Time: 0900	Sampler(s): M. Lybrand / D. Fields
Laboratory Analysis: See Chain of Custody	# Bottles: 10	Preservative: Varied	
Comments: Tubing within top of screened section.			

Notes: Stabilization criteria for range of variation of last three consecutive readings - pH: ± 0.2 units; Temperature: ± 0.2 $^{\circ}$ C; Specific Conductance: $\pm 5\%$; Dissolved Oxygen: ± 0.2 mg/L or $\pm 10\%$ (whichever is greater); Turbidity: all readings < 20 NTU; optionally ± 5 NTU or $\pm 10\%$ (whichever is greater)

ML

Groundwater Sampling Record

Site Name: J.T. Parsons - Osceola, AR						Well ID: MW-2		Date: 1-8-19			
Well Diameter: 2"		Well Depth: 15.1'		Screened Interval From: 5.1 to: 15.1		Initial Depth to Water: 0.40		Volume in Well: NA			
Sampling Method: Low-Flow			Pump Type: Peristaltic		Tubing Type: Teflon			Tubing Diameter: 0.25"			
Time	Volume Purged (gallons)	Cumulative Volume Purged (gallons)	Purge Rate (mL/min)	Depth to Water (feet)	Dissolved Oxygen (mg/L)	Conductivity (µS/cm)	Oxidation-Reduction Potential (mV)	pH (Standard Units)	Temperature (°C)	Turbidity (NTU)	Odor/Color
0915	- Start purging.			0.45	2.4	329	63	7.5	13.6	15.1	
0920											
0925				0.46	1.5	338	61	7.4	14.0	11.4	
0930				0.47	1.7	339	57	7.4	14.1	8.5	
0935	~3.0	~3.0	568	0.47	1.6	340	56	7.4	14.1	7.0	Clear
			(Ave.)								
* Blind Duplicate (BD) collected from MW-2.											
* All depth measurements are from Top of Casing (TOC).											

Sampling Data

Sample ID: MW-2	Date: 1-8-19	Time: 0940	Sampler(s): M. Lybrand / D. Fields
Laboratory Analysis: See Chain of Custody	# Bottles: 20	Preservative: Varies	
Comments: Tubing set within top of screened section.			

Notes: Stabilization criteria for range of variation of last three consecutive readings – pH: ± 0.2 units; Temperature: ± 0.2 °C; Specific Conductance: ± 5%; Dissolved Oxygen: ± 0.2 mg/L or ± 10% (whichever is greater); Turbidity: all readings < 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)

ML

Groundwater Sampling Record

[illegible]

Sampling Data

Sampling Data									
Sample ID:	Mw-3	Date:	1-8-19	Time:	1040	Sampler(s):	M. Hybrand / D. Fields		
Laboratory Analysis:	See Chain of Custody					# Bottles:	10	Preservative:	Varies
Comments:	Tubing set within top of screened section.								

Notes: Stabilization criteria for range of variation of last three consecutive readings – pH: ± 0.2 units; Temperature: ± 0.2 °C; Specific Conductance: $\pm 5\%$; Dissolved Oxygen: ± 0.2 mg/L or $\pm 10\%$ (whichever is greater); Turbidity: all readings < 20 NTU; optionally ± 5 NTU or $\pm 10\%$ (whichever is greater)

ML

Groundwater Sampling Record

[illegible]

Sampling Data

Sampling Data									
Sample ID:	MW-4	Date:	1-8-19	Time:	11:15	Sampler(s):	M. Lybrand / D. Fields		
Laboratory Analysis:	See Chain of Custody.					# Bottles:	10	Preservative:	Varies
Comments:	Tubing set within top of screened section.								

Comments: *Tubing set within top of screened section.*

Notes: Stabilization criteria for range of variation of last three consecutive readings – pH: ± 0.2 units; Temperature: ± 0.2 °C; Specific Conductance: $\pm 5\%$; Dissolved Oxygen: ± 0.2 mg/L or $\pm 10\%$ (whichever is greater); Turbidity: all readings < 20 NTU; optionally ± 5 NTU or $\pm 10\%$ (whichever is greater)

111-

ML

Groundwater Sampling Record

[illegible]

Sampling Data

Sampling Data									
Sample ID:	MW-5	Date:	1-8-19	Time:	1145	Sampler(s):	M. Lybrand / D. Fields		
Laboratory Analysis:	See Chain of Custody					# Bottles:	10	Preservative:	Varies
Comments:	Tubing set within top of screened section.								

Comments: Tubing set within top of screened section

Notes: Stabilization criteria for range of variation of last three consecutive readings – pH: ± 0.2 units; Temperature: ± 0.2 °C; Specific Conductance: $\pm 5\%$; Dissolved Oxygen: ± 0.2 mg/L or $\pm 10\%$ (whichever is greater); Turbidity: all readings < 20 NTU; optionally ± 5 NTU or $\pm 10\%$ (whichever is greater)

MC



Groundwater Sampling Record

Site Name: J.T. Parsons - Osceola, AR						Well ID: MW-6		Date: 1-8-19			
Well Diameter: 2"		Well Depth: 15.4'		Screened Interval From: 5.6 to: 15.6		Initial Depth to Water: 0.08		Volume in Well: NA			
Sampling Method: Low-flow				Pump Type: Peristaltic		Tubing Type: Teflon		Tubing Diameter: 0.25"			
Time	Volume Purged (gallons)	Cumulative Volume Purged (gallons)	Purge Rate (mL/min)	Depth to Water (feet)	Dissolved Oxygen (mg/L)	Conductivity (μ S/cm)	Oxidation-Reduction Potential (mV)	pH (Standard Units)	Temperature ($^{\circ}$ C)	Turbidity (NTU)	Odor/Color
Note: MW-6 was purged on 1/7/19 - see Well Development Record.											
Turbidity levels never decreased below 15 NTU, so well was allowed to stabilize overnight prior to sampling. Turbidity level during sampling was 16.1 NTU.											
* All depth measurements are from top of casing.											

Sampling Data

Sample ID: MW-6	Date: 1-8-19	Time: 0750	Sampler(s): M. Lybrand / D. Fields	
Laboratory Analysis: See Chain of Custody			# Bottles: 10	Preservative: Varies
Comments: Tubing set within top of screened section.				

Notes: Stabilization criteria for range of variation of last three consecutive readings - pH: ± 0.2 units; Temperature: ± 0.2 $^{\circ}$ C; Specific Conductance: $\pm 5\%$; Dissolved Oxygen: ± 0.2 mg/L or $\pm 10\%$ (whichever is greater); Turbidity: all readings < 20 NTU; optionally ± 5 NTU or $\pm 10\%$ (whichever is greater)

ML

Appendix F

Laboratory Analytical Data Sheets

December 28, 2018

Harbor Env. & Safety - Little Rock, AR

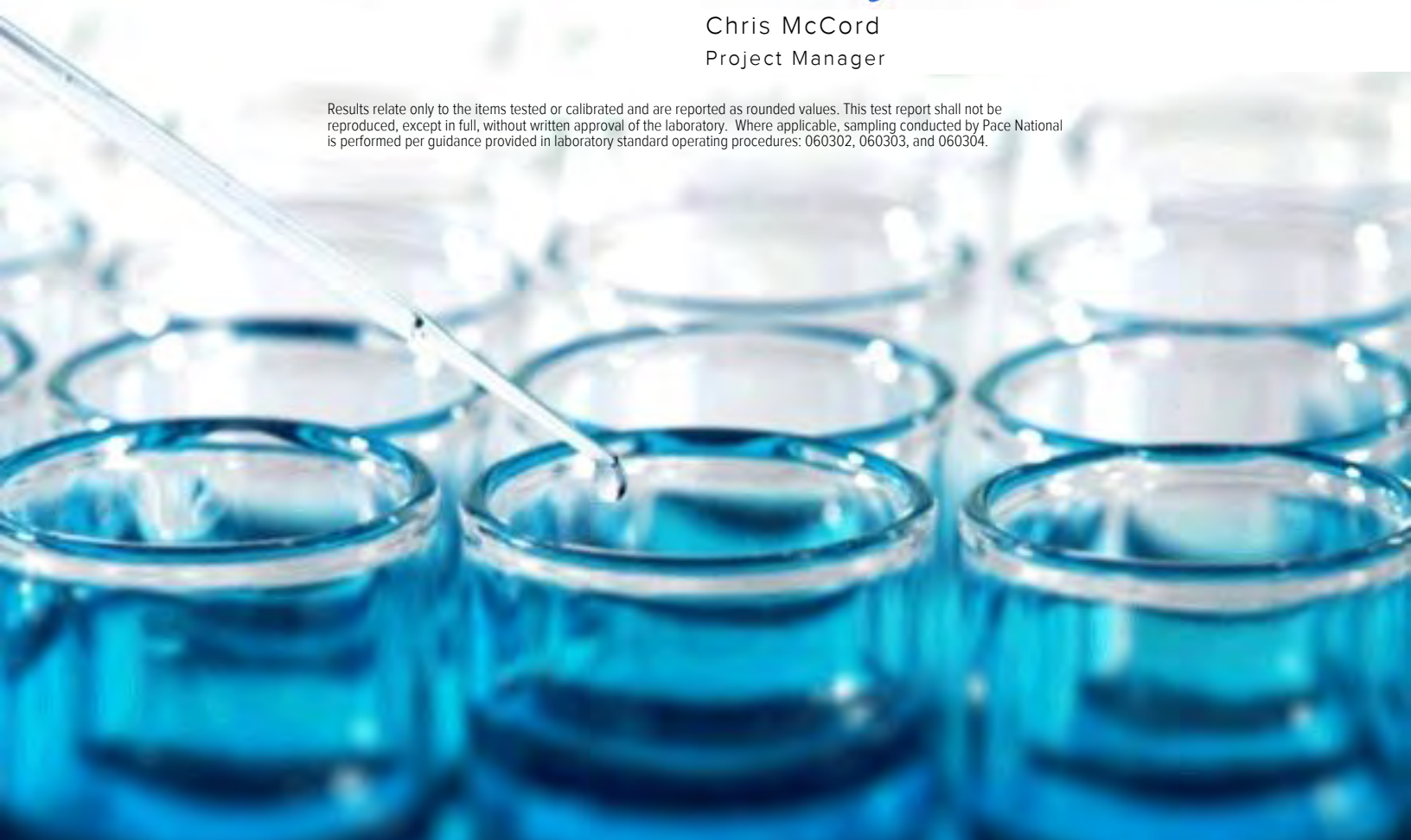
Sample Delivery Group: L1054617
Samples Received: 12/19/2018
Project Number:
Description: Osceola PH II
Site: J.T. PARSONS
Report To: Tom Huetter
5800 Evergreen Drive
Little Rock, AR 72205

Entire Report Reviewed By:



Chris McCord
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 National is performed per guidance provided in laboratory standard operating procedures: 060302, 060303, and 060304.





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SAMPLE SUMMARY

ONE LAB. NATIONWIDE.



B-1 O'-1' L1054617-01 Solid

Collected by
Thomas A. Huetter

Collected date/time
12/17/18 11:56

Received date/time
12/19/18 09:15

¹ Cp

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1214087	1	12/20/18 15:09	12/20/18 15:18	JD
Mercury by Method 7471A	WG1214206	1	12/20/18 16:24	12/21/18 10:10	TRB
Metals (ICP) by Method 6010B	WG1214050	1	12/20/18 15:26	12/22/18 15:21	WBD
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1214279	1	12/17/18 11:56	12/27/18 14:04	BMB
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1215511	1	12/17/18 11:56	12/24/18 19:18	DWR
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1216063	1	12/17/18 11:56	12/26/18 17:45	ACG
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1215652	1	12/27/18 18:15	12/28/18 09:13	DMW
Semi Volatile Organic Compounds (GC/MS) by Method 8270C	WG1214108	1	12/24/18 08:47	12/24/18 20:09	LEA

² Tc

³ Ss

⁴ Cn

⁵ Sr

B-1 4'-6' L1054617-02 Solid

Collected by
Thomas A. Huetter

Collected date/time
12/17/18 12:04

Received date/time
12/19/18 09:15

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1214089	1	12/21/18 09:24	12/21/18 09:35	KDW
Mercury by Method 7471A	WG1214206	1	12/20/18 16:24	12/21/18 10:13	TRB
Metals (ICP) by Method 6010B	WG1214050	1	12/20/18 15:26	12/22/18 15:24	WBD
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1214279	25	12/17/18 12:04	12/27/18 14:28	BMB
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1216063	1	12/17/18 12:04	12/26/18 18:06	ACG
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1215652	1	12/27/18 18:15	12/28/18 09:25	DMW
Semi Volatile Organic Compounds (GC/MS) by Method 8270C	WG1214108	1	12/24/18 08:47	12/24/18 20:32	LEA

B-2 4'-6' L1054617-03 Solid

Collected by
Thomas A. Huetter

Collected date/time
12/17/18 12:30

Received date/time
12/19/18 09:15

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1214089	1	12/21/18 09:24	12/21/18 09:35	KDW
Mercury by Method 7471A	WG1214206	1	12/20/18 16:24	12/21/18 10:15	TRB
Metals (ICP) by Method 6010B	WG1214050	1	12/20/18 15:26	12/22/18 15:08	WBD
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1214279	1	12/17/18 12:30	12/27/18 14:52	BMB
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1215610	1	12/17/18 12:30	12/24/18 17:45	JHH
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1215652	1	12/27/18 18:15	12/28/18 08:38	DMW
Semi Volatile Organic Compounds (GC/MS) by Method 8270C	WG1214108	1	12/24/18 08:47	12/24/18 20:55	LEA

B-2 6'-8' L1054617-04 Solid

Collected by
Thomas A. Huetter

Collected date/time
12/17/18 12:33

Received date/time
12/19/18 09:15

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1214089	1	12/21/18 09:24	12/21/18 09:35	KDW
Mercury by Method 7471A	WG1214206	1	12/20/18 16:24	12/21/18 10:18	TRB
Metals (ICP) by Method 6010B	WG1214050	1	12/20/18 15:26	12/22/18 15:32	WBD
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1214279	1	12/17/18 12:33	12/27/18 15:16	BMB
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1215610	1	12/17/18 12:33	12/24/18 18:04	JHH
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1215652	1	12/27/18 18:15	12/28/18 09:37	DMW
Semi Volatile Organic Compounds (GC/MS) by Method 8270C	WG1214108	1	12/24/18 08:47	12/24/18 21:18	LEA

B-3 O'-4' L1054617-05 Solid

Collected by
Thomas A. Huetter

Collected date/time
12/17/18 12:49

Received date/time
12/19/18 09:15

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1214089	1	12/21/18 09:24	12/21/18 09:35	KDW
Mercury by Method 7471A	WG1214206	1	12/20/18 16:24	12/21/18 10:25	TRB
Metals (ICP) by Method 6010B	WG1214050	1	12/20/18 15:26	12/22/18 15:34	WBD

ACCOUNT:

Harbor Env. & Safety - Little Rock, AR

PROJECT:

SDG:

L1054617

DATE/TIME:

12/28/18 16:08

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SAMPLE SUMMARY

ONE LAB. NATIONWIDE.



B-3 0'-4' L1054617-05 Solid

Collected by
Thomas A. Huetter

Collected date/time
12/17/18 12:49

Received date/time
12/19/18 09:15

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1214279	1	12/17/18 12:49	12/27/18 15:41	BMB
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1215610	1	12/17/18 12:49	12/24/18 18:23	JHH
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1215652	1	12/27/18 18:15	12/28/18 09:49	DMW
Semi Volatile Organic Compounds (GC/MS) by Method 8270C	WG1214108	1	12/24/18 08:47	12/24/18 22:49	LEA

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc

B-3 4'-6' L1054617-06 Solid

Collected by
Thomas A. Huetter

Collected date/time
12/17/18 12:53

Received date/time
12/19/18 09:15

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1214089	1	12/21/18 09:24	12/21/18 09:35	KDW
Mercury by Method 7471A	WG1214206	1	12/20/18 16:24	12/21/18 10:28	TRB
Metals (ICP) by Method 6010B	WG1214050	1	12/20/18 15:26	12/22/18 15:37	WBD
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1214279	1	12/17/18 12:53	12/27/18 16:05	BMB
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1215610	1	12/17/18 12:53	12/24/18 18:42	JHH
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1215652	1	12/27/18 18:15	12/28/18 10:00	DMW
Semi Volatile Organic Compounds (GC/MS) by Method 8270C	WG1214108	1	12/24/18 08:47	12/24/18 23:52	LEA

B-4 0'-4' L1054617-07 Solid

Collected by
Thomas A. Huetter

Collected date/time
12/17/18 13:21

Received date/time
12/19/18 09:15

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1214089	1	12/21/18 09:24	12/21/18 09:35	KDW
Mercury by Method 7471A	WG1214206	1	12/20/18 16:24	12/21/18 10:31	TRB
Metals (ICP) by Method 6010B	WG1214050	1	12/20/18 15:26	12/22/18 15:40	WBD
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1214279	1	12/17/18 13:21	12/27/18 16:29	BMB
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1215610	1	12/17/18 13:21	12/24/18 19:01	JHH
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1215652	1	12/27/18 18:15	12/28/18 10:12	DMW
Semi Volatile Organic Compounds (GC/MS) by Method 8270C	WG1214108	1	12/24/18 08:47	12/25/18 00:15	LEA

B-4 4'-6' L1054617-08 Solid

Collected by
Thomas A. Huetter

Collected date/time
12/17/18 13:26

Received date/time
12/19/18 09:15

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1214089	1	12/21/18 09:24	12/21/18 09:35	KDW
Mercury by Method 7471A	WG1214206	1	12/20/18 16:24	12/21/18 10:02	TRB
Metals (ICP) by Method 6010B	WG1214050	1	12/20/18 15:26	12/22/18 15:43	WBD
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1214279	1	12/17/18 13:26	12/27/18 16:53	BMB
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1215610	1	12/17/18 13:26	12/24/18 19:20	JHH
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1215652	1	12/27/18 18:15	12/28/18 10:24	DMW
Semi Volatile Organic Compounds (GC/MS) by Method 8270C	WG1214108	1	12/24/18 08:47	12/25/18 00:38	LEA

TB-1 L1054617-09 GW

Collected by
Thomas A. Huetter

Collected date/time
12/17/18 00:00

Received date/time
12/19/18 09:15

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1214328	1	12/21/18 04:22	12/21/18 04:22	ACG

ACCOUNT:

Harbor Env. & Safety - Little Rock, AR

PROJECT:

SDG:

L1054617

DATE/TIME:

12/28/18 16:08

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SAMPLE SUMMARY

ONE LAB. NATIONWIDE.



B-5 0-4' L1054617-10 Solid

Collected by
Thomas A. Huetter

Collected date/time
12/17/18 13:43

Received date/time
12/19/18 09:15

¹ Cp

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1214089	1	12/21/18 09:24	12/21/18 09:35	KDW
Mercury by Method 7471A	WG1214206	1	12/20/18 16:24	12/21/18 10:33	TRB
Metals (ICP) by Method 6010B	WG1214050	1	12/20/18 15:26	12/22/18 15:45	WBD
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1216687	1	12/17/18 13:43	12/27/18 13:59	BMB
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1215610	1	12/17/18 13:43	12/24/18 19:40	JHH
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1215652	1	12/27/18 18:15	12/28/18 10:36	DMW
Semi Volatile Organic Compounds (GC/MS) by Method 8270C	WG1214108	1	12/24/18 08:47	12/25/18 01:01	LEA

² Tc

³ Ss

⁴ Cn

⁵ Sr

B-5 10-12' L1054617-11 Solid

Collected by
Thomas A. Huetter

Collected date/time
12/17/18 13:50

Received date/time
12/19/18 09:15

⁶ Qc

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1214089	1	12/21/18 09:24	12/21/18 09:35	KDW
Mercury by Method 7471A	WG1214206	1	12/20/18 16:24	12/21/18 10:36	TRB
Metals (ICP) by Method 6010B	WG1214050	1	12/20/18 15:26	12/22/18 15:48	WBD
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1216687	1	12/17/18 13:50	12/27/18 14:20	BMB
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1215610	1	12/17/18 13:50	12/24/18 19:59	JHH
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1215652	1	12/27/18 18:15	12/28/18 10:48	DMW
Semi Volatile Organic Compounds (GC/MS) by Method 8270C	WG1214108	1	12/24/18 08:47	12/25/18 23:50	MEC

⁷ Gl

⁸ Al

⁹ Sc

B-6 0-4' L1054617-12 Solid

Collected by
Thomas A. Huetter

Collected date/time
12/17/18 14:05

Received date/time
12/19/18 09:15

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1214089	1	12/21/18 09:24	12/21/18 09:35	KDW
Mercury by Method 7471A	WG1214206	1	12/20/18 16:24	12/21/18 10:44	TRB
Metals (ICP) by Method 6010B	WG1214050	1	12/20/18 15:26	12/22/18 15:51	WBD
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1216687	1	12/17/18 14:05	12/27/18 14:42	BMB
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1215610	1	12/17/18 14:05	12/24/18 20:18	JHH
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1215652	1	12/27/18 18:15	12/28/18 11:00	DMW
Semi Volatile Organic Compounds (GC/MS) by Method 8270C	WG1214111	1	12/24/18 18:55	12/25/18 01:54	JNJ

B-6 6'-8' L1054617-13 Solid

Collected by
Thomas A. Huetter

Collected date/time
12/17/18 14:10

Received date/time
12/19/18 09:15

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1214090	1	12/21/18 09:08	12/21/18 09:19	KDW
Mercury by Method 7471A	WG1214206	1	12/20/18 16:24	12/21/18 10:47	TRB
Metals (ICP) by Method 6010B	WG1214050	1	12/20/18 15:26	12/22/18 15:53	WBD
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1216687	1	12/17/18 14:10	12/27/18 15:04	BMB
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1215610	1	12/17/18 14:10	12/24/18 20:37	JHH
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1215652	1	12/27/18 18:15	12/28/18 11:12	DMW
Semi Volatile Organic Compounds (GC/MS) by Method 8270C	WG1214111	1	12/24/18 18:55	12/25/18 02:17	JNJ

B-7 0-4' L1054617-14 Solid

Collected by
Thomas A. Huetter

Collected date/time
12/17/18 14:40

Received date/time
12/19/18 09:15

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1214090	1	12/21/18 09:08	12/21/18 09:19	KDW
Mercury by Method 7471A	WG1214206	1	12/20/18 16:24	12/21/18 10:49	TRB
Metals (ICP) by Method 6010B	WG1214050	1	12/20/18 15:26	12/22/18 15:56	WBD
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1216687	1	12/17/18 14:40	12/27/18 15:26	BMB

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L1054617

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12/28/18 16:08

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SAMPLE SUMMARY

ONE LAB. NATIONWIDE.



B-7 0-4' L1054617-14 Solid

Collected by
Thomas A. Huetter

Collected date/time
12/17/18 14:40

Received date/time
12/19/18 09:15

¹ Cp

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1215610	1	12/17/18 14:40	12/24/18 20:55	JHH
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1215652	1	12/27/18 18:15	12/28/18 11:23	DMW
Semi Volatile Organic Compounds (GC/MS) by Method 8270C	WG1214111	1	12/24/18 18:55	12/25/18 08:50	JNJ

² Tc

³ Ss

B-7 6'-8' L1054617-15 Solid

Collected by
Thomas A. Huetter

Collected date/time
12/17/18 14:48

Received date/time
12/19/18 09:15

⁴ Cn

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1214090	1	12/21/18 09:08	12/21/18 09:19	KDW
Mercury by Method 7471A	WG1214206	1	12/20/18 16:24	12/21/18 10:52	TRB
Metals (ICP) by Method 6010B	WG1214050	1	12/20/18 15:26	12/22/18 16:04	WBD
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1216687	1	12/17/18 14:48	12/27/18 15:48	BMB
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1215610	2.34	12/17/18 14:48	12/24/18 21:15	JHH
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1215652	1	12/27/18 18:15	12/28/18 11:35	DMW
Semi Volatile Organic Compounds (GC/MS) by Method 8270C	WG1214111	1	12/24/18 18:55	12/25/18 02:40	JNJ

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

B-8 0-4' L1054617-16 Solid

Collected by
Thomas A. Huetter

Collected date/time
12/17/18 15:00

Received date/time
12/19/18 09:15

⁹ Sc

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1214090	1	12/21/18 09:08	12/21/18 09:19	KDW
Mercury by Method 7471A	WG1214206	1	12/20/18 16:24	12/21/18 10:54	TRB
Metals (ICP) by Method 6010B	WG1214050	1	12/20/18 15:26	12/22/18 16:07	WBD
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1216687	1	12/17/18 15:00	12/27/18 16:10	BMB
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1215610	1	12/17/18 15:00	12/24/18 21:34	JHH
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1215652	1	12/27/18 18:15	12/28/18 11:47	DMW
Semi Volatile Organic Compounds (GC/MS) by Method 8270C	WG1214111	1	12/24/18 18:55	12/25/18 03:03	JNJ

B-8 6'-8' L1054617-17 Solid

Collected by
Thomas A. Huetter

Collected date/time
12/17/18 15:06

Received date/time
12/19/18 09:15

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1214090	1	12/21/18 09:08	12/21/18 09:19	KDW
Mercury by Method 7471A	WG1214206	1	12/20/18 16:24	12/21/18 11:02	TRB
Metals (ICP) by Method 6010B	WG1214050	1	12/20/18 15:26	12/22/18 16:10	WBD
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1216687	1	12/17/18 15:06	12/27/18 16:32	BMB
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1215610	1	12/17/18 15:06	12/24/18 21:53	JHH
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1215652	1	12/27/18 18:15	12/28/18 11:59	DMW
Semi Volatile Organic Compounds (GC/MS) by Method 8270C	WG1214111	1	12/24/18 18:55	12/25/18 03:26	JNJ

B-8 DUP L1054617-18 Solid

Collected by
Thomas A. Huetter

Collected date/time
12/17/18 15:06

Received date/time
12/19/18 09:15

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1214090	1	12/21/18 09:08	12/21/18 09:19	KDW
Mercury by Method 7471A	WG1214206	1	12/20/18 16:24	12/21/18 11:05	TRB
Metals (ICP) by Method 6010B	WG1214050	1	12/20/18 15:26	12/22/18 16:12	WBD
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1216687	1	12/17/18 15:06	12/27/18 16:54	BMB
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1215610	1	12/17/18 15:06	12/24/18 22:12	JHH
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1215652	1	12/27/18 18:15	12/28/18 12:11	DMW
Semi Volatile Organic Compounds (GC/MS) by Method 8270C	WG1214111	1	12/24/18 18:55	12/25/18 03:49	JNJ

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SAMPLE SUMMARY

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TB-2 L1054617-19 GW

Collected by
Thomas A. Huetter

Collected date/time
12/17/18 00:00

Received date/time
12/19/18 09:15

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1214702	1	12/21/18 21:46	12/21/18 21:46	TJJ

¹ Cp

² Tc

³ Ss

B-9 0-4' L1054617-20 Solid

Collected by
Thomas A. Huetter

Collected date/time
12/17/18 15:22

Received date/time
12/19/18 09:15

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1214090	1	12/21/18 09:08	12/21/18 09:19	KDW
Mercury by Method 7471A	WG1214206	1	12/20/18 16:24	12/21/18 11:07	TRB
Metals (ICP) by Method 6010B	WG1214050	1	12/20/18 15:26	12/22/18 16:15	WBD
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1216687	1	12/17/18 15:22	12/27/18 17:16	BMB
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1215658	1	12/17/18 15:22	12/27/18 02:49	DWR
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1215790	1	12/26/18 16:42	12/27/18 09:43	DMW
Semi Volatile Organic Compounds (GC/MS) by Method 8270C	WG1214111	1	12/24/18 18:55	12/25/18 04:59	JNJ

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

B-9 4'-5' L1054617-21 Solid

Collected by
Thomas A. Huetter

Collected date/time
12/17/18 15:30

Received date/time
12/19/18 09:15

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1214090	1	12/21/18 09:08	12/21/18 09:19	KDW
Mercury by Method 7471A	WG1214211	1	12/20/18 16:27	12/21/18 13:02	TRB
Metals (ICP) by Method 6010B	WG1214050	1	12/20/18 15:26	12/22/18 16:18	WBD
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1216687	1	12/17/18 15:30	12/27/18 17:38	BMB
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1215658	1	12/17/18 15:30	12/27/18 03:11	DWR
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1215790	1	12/26/18 16:42	12/27/18 00:49	DMW
Semi Volatile Organic Compounds (GC/MS) by Method 8270C	WG1214111	1	12/24/18 18:55	12/25/18 05:22	JNJ

⁸ Al

⁹ Sc

B-10 0-4' L1054617-22 Solid

Collected by
Thomas A. Huetter

Collected date/time
12/17/18 15:55

Received date/time
12/19/18 09:15

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1214090	1	12/21/18 09:08	12/21/18 09:19	KDW
Mercury by Method 7471A	WG1214211	1	12/20/18 16:27	12/21/18 13:18	TRB
Metals (ICP) by Method 6010B	WG1214054	1	12/20/18 15:35	12/21/18 08:36	CCE
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1216687	1	12/17/18 15:55	12/27/18 18:00	BMB
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1215658	1	12/17/18 15:55	12/27/18 03:33	DWR
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1215790	4	12/26/18 16:42	12/27/18 14:03	DMW
Semi Volatile Organic Compounds (GC/MS) by Method 8270C	WG1214111	10	12/24/18 18:55	12/26/18 02:08	MEC

B-10 6'-8' L1054617-23 Solid

Collected by
Thomas A. Huetter

Collected date/time
12/17/18 16:01

Received date/time
12/19/18 09:15

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1214090	1	12/21/18 09:08	12/21/18 09:19	KDW
Mercury by Method 7471A	WG1214211	1	12/20/18 16:27	12/21/18 13:20	TRB
Metals (ICP) by Method 6010B	WG1214054	1	12/20/18 15:35	12/21/18 08:50	CCE
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1215337	1.19	12/17/18 16:01	12/23/18 20:39	BMB
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1215658	1	12/17/18 16:01	12/27/18 03:55	DWR
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1215790	1	12/26/18 16:42	12/27/18 09:55	DMW
Semi Volatile Organic Compounds (GC/MS) by Method 8270C	WG1214111	1	12/24/18 18:55	12/25/18 05:45	JNJ

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SAMPLE SUMMARY

ONE LAB. NATIONWIDE.



B-11 0-4' L1054617-24 Solid

Collected by
Thomas A. Huetter

Collected date/time
12/17/18 16:14

Received date/time
12/19/18 09:15

¹ Cp

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1214092	1	12/21/18 09:55	12/21/18 10:05	KDW
Mercury by Method 7471A	WG1214211	1	12/20/18 16:27	12/21/18 13:23	TRB
Metals (ICP) by Method 6010B	WG1214054	1	12/20/18 15:35	12/21/18 08:52	CCE
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1214641	1	12/17/18 16:14	12/22/18 09:05	BMB
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1215658	1	12/17/18 16:14	12/27/18 04:18	DWR
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1215790	4	12/26/18 16:42	12/27/18 14:15	DMW
Semi Volatile Organic Compounds (GC/MS) by Method 8270C	WG1214111	10	12/24/18 18:55	12/26/18 02:31	MEC

² Tc

³ Ss

⁴ Cn

⁵ Sr

B-11 4'-6' L1054617-25 Solid

Collected by
Thomas A. Huetter

Collected date/time
12/17/18 16:24

Received date/time
12/19/18 09:15

⁶ Qc

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1214092	1	12/21/18 09:55	12/21/18 10:05	KDW
Mercury by Method 7471A	WG1214211	1	12/20/18 16:27	12/21/18 13:25	TRB
Metals (ICP) by Method 6010B	WG1214054	1	12/20/18 15:35	12/21/18 09:17	CCE
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1215337	1	12/17/18 16:24	12/23/18 21:04	BMB
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1215658	1	12/17/18 16:24	12/27/18 04:40	DWR
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1215790	1	12/26/18 16:42	12/27/18 10:42	DMW
Semi Volatile Organic Compounds (GC/MS) by Method 8270C	WG1214111	1	12/24/18 18:55	12/25/18 06:08	JNJ

⁷ Gl

⁸ Al

⁹ Sc

B-12 4'-6' L1054617-26 Solid

Collected by
Thomas A. Huetter

Collected date/time
12/17/18 16:55

Received date/time
12/19/18 09:15

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1214092	1	12/21/18 09:55	12/21/18 10:05	KDW
Mercury by Method 7471A	WG1214211	1	12/20/18 16:27	12/21/18 13:28	TRB
Metals (ICP) by Method 6010B	WG1214054	1	12/20/18 15:35	12/21/18 09:20	CCE
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1214641	1	12/17/18 16:55	12/22/18 09:47	BMB
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1215658	1	12/17/18 16:55	12/27/18 05:02	DWR
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1215790	1	12/26/18 16:42	12/27/18 10:54	DMW
Semi Volatile Organic Compounds (GC/MS) by Method 8270C	WG1214111	1	12/24/18 18:55	12/25/18 06:31	JNJ

B-12 10'-12' L1054617-27 Solid

Collected by
Thomas A. Huetter

Collected date/time
12/17/18 16:59

Received date/time
12/19/18 09:15

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1214092	1	12/21/18 09:55	12/21/18 10:05	KDW
Mercury by Method 7471A	WG1214211	1	12/20/18 16:27	12/21/18 13:31	TRB
Metals (ICP) by Method 6010B	WG1214054	1	12/20/18 15:35	12/21/18 09:23	CCE
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1214641	1	12/17/18 16:59	12/22/18 10:09	BMB
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1215658	1	12/17/18 16:59	12/27/18 05:24	DWR
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1215790	1	12/26/18 16:42	12/27/18 11:06	DMW
Semi Volatile Organic Compounds (GC/MS) by Method 8270C	WG1214111	1	12/24/18 18:55	12/25/18 06:54	JNJ

EB-1 L1054617-28 GW

Collected by
Thomas A. Huetter

Collected date/time
12/17/18 16:40

Received date/time
12/19/18 09:15

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Mercury by Method 7470A	WG1213623	1	12/20/18 10:02	12/20/18 19:25	TCT
Metals (ICP) by Method 6010B	WG1213747	1	12/20/18 15:46	12/22/18 09:44	WBD
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1213653	1	12/20/18 09:09	12/20/18 09:09	JAH
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1214328	1	12/21/18 05:01	12/21/18 05:01	ACG

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SAMPLE SUMMARY

ONE LAB. NATIONWIDE.



EB-1 L1054617-28 GW

			Collected by	Collected date/time	Received date/time
			Thomas A. Huetter	12/17/18 16:40	12/19/18 09:15
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Semi-Volatile Organic Compounds (GC) by Method 3511/8015	WG1213642	1	12/21/18 11:17	12/22/18 17:21	SHG
Semi Volatile Organic Compounds (GC/MS) by Method 8270C	WG1214165	1	12/22/18 17:12	12/23/18 16:22	LEA

¹ Cp

² Tc

³ Ss

TB-3 L1054617-29 GW

			Collected by	Collected date/time	Received date/time
			Thomas A. Huetter	12/17/18 00:00	12/19/18 09:15
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1214328	1	12/21/18 05:20	12/21/18 05:20	ACG

⁴ Cn

⁵ Sr

⁶ Qc

B-13 0-4' L1054617-30 Solid

			Collected by	Collected date/time	Received date/time
			Thomas A. Huetter	12/17/18 09:20	12/19/18 09:15
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1214092	1	12/21/18 09:55	12/21/18 10:05	KDW
Mercury by Method 7471A	WG1214211	1	12/20/18 16:27	12/21/18 13:33	TRB
Metals (ICP) by Method 6010B	WG1214054	1	12/20/18 15:35	12/21/18 09:25	CCE
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1214641	1	12/17/18 09:20	12/22/18 10:34	BMB
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1215658	1	12/17/18 09:20	12/27/18 05:47	DWR
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1215790	1	12/26/18 16:42	12/27/18 11:18	DMW
Semi Volatile Organic Compounds (GC/MS) by Method 8270C	WG1214111	1	12/24/18 18:55	12/25/18 07:17	JNJ

⁷ Gl

⁸ Al

⁹ Sc

B-13 4-6' L1054617-31 Solid

			Collected by	Collected date/time	Received date/time
			Thomas A. Huetter	12/17/18 09:30	12/19/18 09:15
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1214092	1	12/21/18 09:55	12/21/18 10:05	KDW
Mercury by Method 7471A	WG1214211	1	12/20/18 16:27	12/21/18 13:36	TRB
Metals (ICP) by Method 6010B	WG1214054	1	12/20/18 15:35	12/21/18 09:28	CCE
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1214641	1	12/17/18 09:30	12/22/18 10:59	BMB
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1215658	1.08	12/17/18 09:30	12/27/18 06:09	DWR
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1215790	1	12/26/18 16:42	12/27/18 11:29	DMW
Semi Volatile Organic Compounds (GC/MS) by Method 8270C	WG1214111	1	12/24/18 18:55	12/25/18 07:40	JNJ

B-14 0-4' L1054617-32 Solid

			Collected by	Collected date/time	Received date/time
			Thomas A. Huetter	12/17/18 09:44	12/19/18 09:15
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1214092	1	12/21/18 09:55	12/21/18 10:05	KDW
Mercury by Method 7471A	WG1214211	1	12/20/18 16:27	12/21/18 13:38	TRB
Metals (ICP) by Method 6010B	WG1214054	1	12/20/18 15:35	12/21/18 09:31	CCE
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1214641	1	12/17/18 09:44	12/22/18 11:51	BMB
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1215658	1	12/17/18 09:44	12/27/18 06:31	DWR
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1215790	1	12/26/18 16:42	12/27/18 11:41	DMW
Semi Volatile Organic Compounds (GC/MS) by Method 8270C	WG1214111	1	12/24/18 18:55	12/25/18 08:04	JNJ

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SAMPLE SUMMARY

ONE LAB. NATIONWIDE.



B-14 6-8' L1054617-33 Solid

Collected by
Thomas A. Huetter

Collected date/time
12/17/18 09:50

Received date/time
12/19/18 09:15

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1214092	1	12/21/18 09:55	12/21/18 10:05	KDW
Mercury by Method 7471A	WG1214211	1	12/20/18 16:27	12/21/18 13:46	TRB
Metals (ICP) by Method 6010B	WG1214054	1	12/20/18 15:35	12/21/18 09:34	CCE
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1214641	1.32	12/17/18 09:50	12/22/18 12:13	BMB
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1215658	1	12/17/18 09:50	12/27/18 06:54	DWR
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1215790	1	12/26/18 16:42	12/27/18 11:53	DMW
Semi Volatile Organic Compounds (GC/MS) by Method 8270C	WG1214111	1	12/24/18 18:55	12/25/18 08:27	JNJ

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

B-14 DUP L1054617-34 Solid

Collected by
Thomas A. Huetter

Collected date/time
12/17/18 09:50

Received date/time
12/19/18 09:15

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1214092	1	12/21/18 09:55	12/21/18 10:05	KDW
Mercury by Method 7471A	WG1214211	1	12/20/18 16:27	12/21/18 13:49	TRB
Metals (ICP) by Method 6010B	WG1214054	1	12/20/18 15:35	12/21/18 09:36	CCE
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1214641	1	12/17/18 09:50	12/22/18 12:34	BMB
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1215658	1.1	12/17/18 09:50	12/27/18 07:16	DWR
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1215790	1	12/26/18 16:42	12/27/18 12:05	DMW
Semi Volatile Organic Compounds (GC/MS) by Method 8270C	WG1215208	1	12/24/18 17:19	12/25/18 01:11	MEC

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc

B-15 0-4' L1054617-35 Solid

Collected by
Thomas A. Huetter

Collected date/time
12/17/18 10:42

Received date/time
12/19/18 09:15

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1214092	1	12/21/18 09:55	12/21/18 10:05	KDW
Mercury by Method 7471A	WG1214211	1	12/20/18 16:27	12/21/18 13:51	TRB
Metals (ICP) by Method 6010B	WG1214054	1	12/20/18 15:35	12/21/18 09:39	CCE
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1214641	1	12/17/18 10:42	12/22/18 12:55	BMB
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1215658	1	12/17/18 10:42	12/27/18 07:38	DWR
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1215790	1	12/26/18 16:42	12/27/18 12:29	DMW
Semi Volatile Organic Compounds (GC/MS) by Method 8270C	WG1215208	2	12/24/18 17:19	12/25/18 03:28	MEC

B-15 4-6' L1054617-36 Solid

Collected by
Thomas A. Huetter

Collected date/time
12/17/18 10:50

Received date/time
12/19/18 09:15

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1214392	1	12/21/18 10:20	12/21/18 10:28	KDW
Mercury by Method 7471A	WG1214211	1	12/20/18 16:27	12/21/18 13:54	TRB
Metals (ICP) by Method 6010B	WG1214054	1	12/20/18 15:35	12/21/18 09:42	CCE
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1215337	1	12/17/18 10:50	12/23/18 21:28	BMB
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1215658	1.07	12/17/18 10:50	12/27/18 08:00	DWR
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1215790	1	12/26/18 16:42	12/27/18 12:17	DMW
Semi Volatile Organic Compounds (GC/MS) by Method 8270C	WG1215208	1	12/24/18 17:19	12/25/18 00:25	MEC

B-16 0-4' L1054617-37 Solid

Collected by
Thomas A. Huetter

Collected date/time
12/17/18 11:00

Received date/time
12/19/18 09:15

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1214392	1	12/21/18 10:20	12/21/18 10:28	KDW
Mercury by Method 7471A	WG1214211	1	12/20/18 16:27	12/21/18 13:57	TRB
Metals (ICP) by Method 6010B	WG1214054	1	12/20/18 15:35	12/21/18 09:01	CCE
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1214641	1	12/17/18 11:00	12/22/18 13:37	BMB

ACCOUNT:

Harbor Env. & Safety - Little Rock, AR

PROJECT:

SDG:

L1054617

DATE/TIME:

12/28/18 16:08

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SAMPLE SUMMARY

ONE LAB. NATIONWIDE.



B-16 0-4' L1054617-37 Solid

Collected by
Thomas A. Huetter

Collected date/time
12/17/18 11:00

Received date/time
12/19/18 09:15

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1215658	1	12/17/18 11:00	12/27/18 08:22	DWR
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1215790	4	12/26/18 16:42	12/27/18 13:51	DMW
Semi Volatile Organic Compounds (GC/MS) by Method 8270C	WG1215208	2	12/24/18 17:19	12/26/18 00:59	MEC

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc

B-16 4-6' L1054617-38 Solid

Collected by
Thomas A. Huetter

Collected date/time
12/17/18 11:06

Received date/time
12/19/18 09:15

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1214392	1	12/21/18 10:20	12/21/18 10:28	KDW
Mercury by Method 7471A	WG1214211	1	12/20/18 16:27	12/21/18 13:59	TRB
Metals (ICP) by Method 6010B	WG1214054	1	12/20/18 15:35	12/21/18 09:03	CCE
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1214641	1	12/17/18 11:06	12/22/18 13:58	BMB
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1215658	1	12/17/18 11:06	12/27/18 08:45	DWR
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1215793	1	12/27/18 11:24	12/27/18 16:47	MTJ
Semi Volatile Organic Compounds (GC/MS) by Method 8270C	WG1215208	1	12/24/18 17:19	12/25/18 00:48	MEC

EB-2 L1054617-39 GW

Collected by
Thomas A. Huetter

Collected date/time
12/17/18 11:30

Received date/time
12/19/18 09:15

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Mercury by Method 7470A	WG1213623	1	12/20/18 10:02	12/20/18 19:28	TCT
Metals (ICP) by Method 6010B	WG1213747	1	12/20/18 15:46	12/22/18 09:53	WBD
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1213653	1	12/20/18 09:32	12/20/18 09:32	JAH
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1214328	1	12/21/18 05:40	12/21/18 05:40	ACG
Semi-Volatile Organic Compounds (GC) by Method 3511/8015	WG1213642	1	12/21/18 11:17	12/22/18 17:43	SHG
Semi Volatile Organic Compounds (GC/MS) by Method 8270C	WG1214165	1	12/22/18 17:12	12/23/18 16:46	LEA

TB-4 L1054617-40 GW

Collected by
Thomas A. Huetter

Collected date/time
12/17/18 00:00

Received date/time
12/19/18 09:15

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1214328	1	12/21/18 05:59	12/21/18 05:59	ACG

ACCOUNT:

Harbor Env. & Safety - Little Rock, AR

PROJECT:

SDG:

L1054617

DATE/TIME:

12/28/18 16:08

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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 McCord
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 date / time	Batch
Total Solids	75.2		1	12/20/2018 15:18	WG1214087

Mercury by Method 7471A

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Mercury	0.0207	<u>B</u>	0.0200	1	12/21/2018 10:10	WG1214206

Metals (ICP) by Method 6010B

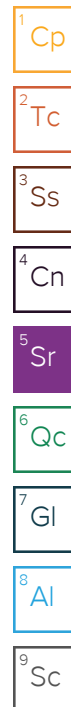
Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Arsenic	4.11		2.00	1	12/22/2018 15:21	WG1214050
Barium	126		0.500	1	12/22/2018 15:21	WG1214050
Cadmium	ND		0.500	1	12/22/2018 15:21	WG1214050
Chromium	11.9		1.00	1	12/22/2018 15:21	WG1214050
Lead	7.45		0.500	1	12/22/2018 15:21	WG1214050
Selenium	ND		2.00	1	12/22/2018 15:21	WG1214050
Silver	ND		1.00	1	12/22/2018 15:21	WG1214050

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	ND		0.100	1	12/27/2018 14:04	WG1214279
(S) a,a,a-Trifluorotoluene(FID)	92.4		77.0-120		12/27/2018 14:04	WG1214279

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

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Acetone	ND	<u>J4</u>	0.0250	1	12/24/2018 19:18	WG1215511
Acrylonitrile	ND		0.0125	1	12/24/2018 19:18	WG1215511
Benzene	ND		0.00100	1	12/24/2018 19:18	WG1215511
Bromobenzene	ND		0.0125	1	12/24/2018 19:18	WG1215511
Bromodichloromethane	ND		0.00250	1	12/24/2018 19:18	WG1215511
Bromoform	ND		0.0250	1	12/24/2018 19:18	WG1215511
Bromomethane	ND		0.0125	1	12/24/2018 19:18	WG1215511
n-Butylbenzene	ND		0.0125	1	12/24/2018 19:18	WG1215511
sec-Butylbenzene	ND		0.0125	1	12/24/2018 19:18	WG1215511
tert-Butylbenzene	ND		0.00500	1	12/24/2018 19:18	WG1215511
Carbon tetrachloride	ND		0.00500	1	12/24/2018 19:18	WG1215511
Chlorobenzene	ND		0.00250	1	12/24/2018 19:18	WG1215511
Chlorodibromomethane	ND		0.00250	1	12/24/2018 19:18	WG1215511
Chloroethane	ND		0.00500	1	12/24/2018 19:18	WG1215511
Chloroform	ND		0.00250	1	12/24/2018 19:18	WG1215511
Chloromethane	ND	<u>J4</u>	0.0125	1	12/24/2018 19:18	WG1215511
2-Chlorotoluene	ND		0.00250	1	12/24/2018 19:18	WG1215511
4-Chlorotoluene	ND		0.00500	1	12/24/2018 19:18	WG1215511
1,2-Dibromo-3-Chloropropane	ND		0.0250	1	12/24/2018 19:18	WG1215511
1,2-Dibromoethane	ND		0.00250	1	12/24/2018 19:18	WG1215511
Dibromomethane	ND		0.00500	1	12/24/2018 19:18	WG1215511
1,2-Dichlorobenzene	ND		0.00500	1	12/24/2018 19:18	WG1215511
1,3-Dichlorobenzene	ND		0.00500	1	12/24/2018 19:18	WG1215511
1,4-Dichlorobenzene	ND		0.00500	1	12/24/2018 19:18	WG1215511
Dichlorodifluoromethane	ND		0.00250	1	12/24/2018 19:18	WG1215511
1,1-Dichloroethane	ND		0.00250	1	12/24/2018 19:18	WG1215511
1,2-Dichloroethane	ND		0.00250	1	12/24/2018 19:18	WG1215511





Collected date/time: 12/17/18 11:56

L1054617

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

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
1,1-Dichloroethene	ND		0.00250	1	12/24/2018 19:18	WG1215511
cis-1,2-Dichloroethene	ND		0.00250	1	12/24/2018 19:18	WG1215511
trans-1,2-Dichloroethene	ND		0.00500	1	12/24/2018 19:18	WG1215511
1,2-Dichloropropane	ND		0.00500	1	12/24/2018 19:18	WG1215511
1,1-Dichloropropene	ND		0.00250	1	12/24/2018 19:18	WG1215511
1,3-Dichloropropane	ND		0.00500	1	12/24/2018 19:18	WG1215511
cis-1,3-Dichloropropene	ND		0.00250	1	12/24/2018 19:18	WG1215511
trans-1,3-Dichloropropene	ND		0.00500	1	12/24/2018 19:18	WG1215511
2,2-Dichloropropane	ND		0.00250	1	12/24/2018 19:18	WG1215511
Di-isopropyl ether	ND		0.00100	1	12/24/2018 19:18	WG1215511
Ethylbenzene	ND		0.00250	1	12/24/2018 19:18	WG1215511
Hexachloro-1,3-butadiene	ND		0.0250	1	12/24/2018 19:18	WG1215511
Isopropylbenzene	ND		0.00250	1	12/24/2018 19:18	WG1215511
p-Isopropyltoluene	ND		0.00500	1	12/24/2018 19:18	WG1215511
2-Butanone (MEK)	ND		0.0250	1	12/24/2018 19:18	WG1215511
Methylene Chloride	ND		0.0250	1	12/24/2018 19:18	WG1215511
4-Methyl-2-pentanone (MIBK)	ND		0.0250	1	12/24/2018 19:18	WG1215511
Methyl tert-butyl ether	ND		0.00100	1	12/24/2018 19:18	WG1215511
Naphthalene	ND		0.0125	1	12/24/2018 19:18	WG1215511
n-Propylbenzene	ND		0.00500	1	12/24/2018 19:18	WG1215511
Styrene	ND		0.0125	1	12/24/2018 19:18	WG1215511
1,1,1,2-Tetrachloroethane	ND		0.00250	1	12/24/2018 19:18	WG1215511
1,1,2,2-Tetrachloroethane	ND		0.00250	1	12/24/2018 19:18	WG1215511
1,1,2-Trichlorotrifluoroethane	ND		0.00250	1	12/24/2018 19:18	WG1215511
Tetrachloroethene	0.00934		0.00250	1	12/26/2018 17:45	WG1216063
Toluene	ND		0.00500	1	12/24/2018 19:18	WG1215511
1,2,3-Trichlorobenzene	ND		0.00250	1	12/24/2018 19:18	WG1215511
1,2,4-Trichlorobenzene	ND		0.0125	1	12/24/2018 19:18	WG1215511
1,1,1-Trichloroethane	ND		0.00250	1	12/24/2018 19:18	WG1215511
1,1,2-Trichloroethane	ND		0.00250	1	12/24/2018 19:18	WG1215511
Trichloroethene	ND	J4	0.00100	1	12/26/2018 17:45	WG1216063
Trichlorofluoromethane	ND		0.00250	1	12/24/2018 19:18	WG1215511
1,2,3-Trichloropropane	ND		0.0125	1	12/24/2018 19:18	WG1215511
1,2,4-Trimethylbenzene	ND		0.00500	1	12/24/2018 19:18	WG1215511
1,2,3-Trimethylbenzene	ND		0.00500	1	12/24/2018 19:18	WG1215511
1,3,5-Trimethylbenzene	ND		0.00500	1	12/24/2018 19:18	WG1215511
Vinyl chloride	ND		0.00250	1	12/24/2018 19:18	WG1215511
Xylenes, Total	ND		0.00650	1	12/24/2018 19:18	WG1215511
(S) Toluene-d8	116		75.0-131		12/24/2018 19:18	WG1215511
(S) Toluene-d8	109		75.0-131		12/26/2018 17:45	WG1216063
(S) Dibromofluoromethane	99.6		65.0-129		12/24/2018 19:18	WG1215511
(S) Dibromofluoromethane	116		65.0-129		12/26/2018 17:45	WG1216063
(S) 4-Bromofluorobenzene	116		67.0-138		12/24/2018 19:18	WG1215511
(S) 4-Bromofluorobenzene	98.9		67.0-138		12/26/2018 17:45	WG1216063

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

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	ND		4.00	1	12/28/2018 09:13	WG1215652
(S) o-Terphenyl	51.0		18.0-148		12/28/2018 09:13	WG1215652



Collected date/time: 12/17/18 11:56

L1054617

Semi Volatile Organic Compounds (GC/MS) by Method 8270C

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Acenaphthene	ND		0.0333	1	12/24/2018 20:09	WG1214108
Acenaphthylene	ND		0.0333	1	12/24/2018 20:09	WG1214108
Anthracene	ND		0.0333	1	12/24/2018 20:09	WG1214108
Benzo(a)anthracene	ND		0.0333	1	12/24/2018 20:09	WG1214108
Benzo(b)fluoranthene	ND		0.0333	1	12/24/2018 20:09	WG1214108
Benzo(k)fluoranthene	ND		0.0333	1	12/24/2018 20:09	WG1214108
Benzo(g,h,i)perylene	ND		0.0333	1	12/24/2018 20:09	WG1214108
Benzo(a)pyrene	ND		0.0333	1	12/24/2018 20:09	WG1214108
Bis(2-chlorethoxy)methane	ND		0.333	1	12/24/2018 20:09	WG1214108
Bis(2-chloroethyl)ether	ND		0.333	1	12/24/2018 20:09	WG1214108
Bis(2-chloroisopropyl)ether	ND		0.333	1	12/24/2018 20:09	WG1214108
4-Bromophenyl-phenylether	ND		0.333	1	12/24/2018 20:09	WG1214108
2-Chloronaphthalene	ND		0.0333	1	12/24/2018 20:09	WG1214108
4-Chlorophenyl-phenylether	ND		0.333	1	12/24/2018 20:09	WG1214108
Chrysene	ND		0.0333	1	12/24/2018 20:09	WG1214108
Dibenz(a,h)anthracene	ND		0.0333	1	12/24/2018 20:09	WG1214108
3,3-Dichlorobenzidine	ND		0.333	1	12/24/2018 20:09	WG1214108
2,4-Dinitrotoluene	ND		0.333	1	12/24/2018 20:09	WG1214108
2,6-Dinitrotoluene	ND		0.333	1	12/24/2018 20:09	WG1214108
Fluoranthene	ND		0.0333	1	12/24/2018 20:09	WG1214108
Fluorene	ND		0.0333	1	12/24/2018 20:09	WG1214108
Hexachlorobenzene	ND		0.333	1	12/24/2018 20:09	WG1214108
Hexachloro-1,3-butadiene	ND		0.333	1	12/24/2018 20:09	WG1214108
Hexachlorocyclopentadiene	ND		0.333	1	12/24/2018 20:09	WG1214108
Hexachloroethane	ND		0.333	1	12/24/2018 20:09	WG1214108
Indeno(1,2,3-cd)pyrene	ND		0.0333	1	12/24/2018 20:09	WG1214108
Isophorone	ND		0.333	1	12/24/2018 20:09	WG1214108
Naphthalene	ND		0.0333	1	12/24/2018 20:09	WG1214108
Nitrobenzene	ND		0.333	1	12/24/2018 20:09	WG1214108
n-Nitrosodimethylamine	ND		0.333	1	12/24/2018 20:09	WG1214108
n-Nitrosodiphenylamine	ND		0.333	1	12/24/2018 20:09	WG1214108
n-Nitrosodi-n-propylamine	ND		0.333	1	12/24/2018 20:09	WG1214108
Phenanthrene	ND		0.0333	1	12/24/2018 20:09	WG1214108
Benzylbutyl phthalate	ND		0.333	1	12/24/2018 20:09	WG1214108
Bis(2-ethylhexyl)phthalate	ND		0.333	1	12/24/2018 20:09	WG1214108
Di-n-butyl phthalate	ND		0.333	1	12/24/2018 20:09	WG1214108
Diethyl phthalate	ND		0.333	1	12/24/2018 20:09	WG1214108
Dimethyl phthalate	ND		0.333	1	12/24/2018 20:09	WG1214108
Di-n-octyl phthalate	ND		0.333	1	12/24/2018 20:09	WG1214108
Pyrene	ND		0.0333	1	12/24/2018 20:09	WG1214108
1,2,4-Trichlorobenzene	ND		0.333	1	12/24/2018 20:09	WG1214108
4-Chloro-3-methylphenol	ND		0.333	1	12/24/2018 20:09	WG1214108
2-Chlorophenol	ND		0.333	1	12/24/2018 20:09	WG1214108
2,4-Dichlorophenol	ND		0.333	1	12/24/2018 20:09	WG1214108
2,4-Dimethylphenol	ND		0.333	1	12/24/2018 20:09	WG1214108
4,6-Dinitro-2-methylphenol	ND		0.333	1	12/24/2018 20:09	WG1214108
2,4-Dinitrophenol	ND		0.333	1	12/24/2018 20:09	WG1214108
2-Nitrophenol	ND		0.333	1	12/24/2018 20:09	WG1214108
4-Nitrophenol	ND		0.333	1	12/24/2018 20:09	WG1214108
Pentachlorophenol	ND		0.333	1	12/24/2018 20:09	WG1214108
Phenol	ND		0.333	1	12/24/2018 20:09	WG1214108
2,4,6-Trichlorophenol	ND		0.333	1	12/24/2018 20:09	WG1214108
(S) 2-Fluorophenol	71.1		12.0-120		12/24/2018 20:09	WG1214108
(S) Phenol-d5	62.0		10.0-120		12/24/2018 20:09	WG1214108
(S) Nitrobenzene-d5	63.6		10.0-122		12/24/2018 20:09	WG1214108
(S) 2-Fluorobiphenyl	63.3		15.0-120		12/24/2018 20:09	WG1214108

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 12/17/18 11:56

L1054617

Semi Volatile Organic Compounds (GC/MS) by Method 8270C

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
(S) 2,4,6-Tribromophenol	59.4		10.0-127		12/24/2018 20:09	WG1214108
(S) p-Terphenyl-d14	67.0		10.0-120		12/24/2018 20:09	WG1214108

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 date / time	Batch
Total Solids	75.7		1	12/21/2018 09:35	WG1214089

Mercury by Method 7471A

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Mercury	ND		0.0200	1	12/21/2018 10:13	WG1214206

Metals (ICP) by Method 6010B

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Arsenic	3.91		2.00	1	12/22/2018 15:24	WG1214050
Barium	113		0.500	1	12/22/2018 15:24	WG1214050
Cadmium	ND		0.500	1	12/22/2018 15:24	WG1214050
Chromium	10.8		1.00	1	12/22/2018 15:24	WG1214050
Lead	6.67		0.500	1	12/22/2018 15:24	WG1214050
Selenium	ND		2.00	1	12/22/2018 15:24	WG1214050
Silver	ND		1.00	1	12/22/2018 15:24	WG1214050

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	ND		2.50	25	12/27/2018 14:28	WG1214279
(S) a,a,a-Trifluorotoluene(FID)	95.2		77.0-120		12/27/2018 14:28	WG1214279

Sample Narrative:

L1054617-02 WG1214279: Stir bars were received overweight and unusable.

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

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Acetone	ND		0.0250	1	12/26/2018 18:06	WG1216063
Acrylonitrile	ND		0.0125	1	12/26/2018 18:06	WG1216063
Benzene	ND		0.00100	1	12/26/2018 18:06	WG1216063
Bromobenzene	ND		0.0125	1	12/26/2018 18:06	WG1216063
Bromodichloromethane	ND		0.00250	1	12/26/2018 18:06	WG1216063
Bromoform	ND		0.0250	1	12/26/2018 18:06	WG1216063
Bromomethane	ND		0.0125	1	12/26/2018 18:06	WG1216063
n-Butylbenzene	ND		0.0125	1	12/26/2018 18:06	WG1216063
sec-Butylbenzene	ND		0.0125	1	12/26/2018 18:06	WG1216063
tert-Butylbenzene	ND		0.00500	1	12/26/2018 18:06	WG1216063
Carbon tetrachloride	ND		0.00500	1	12/26/2018 18:06	WG1216063
Chlorobenzene	ND		0.00250	1	12/26/2018 18:06	WG1216063
Chlorodibromomethane	ND		0.00250	1	12/26/2018 18:06	WG1216063
Chloroethane	ND		0.00500	1	12/26/2018 18:06	WG1216063
Chloroform	ND		0.00250	1	12/26/2018 18:06	WG1216063
Chloromethane	ND		0.0125	1	12/26/2018 18:06	WG1216063
2-Chlorotoluene	ND		0.00250	1	12/26/2018 18:06	WG1216063
4-Chlorotoluene	ND		0.00500	1	12/26/2018 18:06	WG1216063
1,2-Dibromo-3-Chloropropane	ND		0.0250	1	12/26/2018 18:06	WG1216063
1,2-Dibromoethane	ND		0.00250	1	12/26/2018 18:06	WG1216063
Dibromomethane	ND		0.00500	1	12/26/2018 18:06	WG1216063
1,2-Dichlorobenzene	ND		0.00500	1	12/26/2018 18:06	WG1216063
1,3-Dichlorobenzene	ND		0.00500	1	12/26/2018 18:06	WG1216063
1,4-Dichlorobenzene	ND		0.00500	1	12/26/2018 18:06	WG1216063



Collected date/time: 12/17/18 12:04

L1054617

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

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Dichlorodifluoromethane	ND		0.00250	1	12/26/2018 18:06	WG1216063
1,1-Dichloroethane	ND		0.00250	1	12/26/2018 18:06	WG1216063
1,2-Dichloroethane	ND		0.00250	1	12/26/2018 18:06	WG1216063
1,1-Dichloroethene	ND		0.00250	1	12/26/2018 18:06	WG1216063
cis-1,2-Dichloroethene	ND		0.00250	1	12/26/2018 18:06	WG1216063
trans-1,2-Dichloroethene	ND		0.00500	1	12/26/2018 18:06	WG1216063
1,2-Dichloropropane	ND		0.00500	1	12/26/2018 18:06	WG1216063
1,1-Dichloropropene	ND		0.00250	1	12/26/2018 18:06	WG1216063
1,3-Dichloropropane	ND		0.00500	1	12/26/2018 18:06	WG1216063
cis-1,3-Dichloropropene	ND		0.00250	1	12/26/2018 18:06	WG1216063
trans-1,3-Dichloropropene	ND		0.00500	1	12/26/2018 18:06	WG1216063
2,2-Dichloropropane	ND		0.00250	1	12/26/2018 18:06	WG1216063
Di-isopropyl ether	ND		0.00100	1	12/26/2018 18:06	WG1216063
Ethylbenzene	ND		0.00250	1	12/26/2018 18:06	WG1216063
Hexachloro-1,3-butadiene	ND		0.0250	1	12/26/2018 18:06	WG1216063
Isopropylbenzene	ND		0.00250	1	12/26/2018 18:06	WG1216063
p-Isopropyltoluene	ND		0.00500	1	12/26/2018 18:06	WG1216063
2-Butanone (MEK)	ND		0.0250	1	12/26/2018 18:06	WG1216063
Methylene Chloride	ND		0.0250	1	12/26/2018 18:06	WG1216063
4-Methyl-2-pentanone (MIBK)	ND		0.0250	1	12/26/2018 18:06	WG1216063
Methyl tert-butyl ether	ND		0.00100	1	12/26/2018 18:06	WG1216063
Naphthalene	ND		0.0125	1	12/26/2018 18:06	WG1216063
n-Propylbenzene	ND		0.00500	1	12/26/2018 18:06	WG1216063
Styrene	ND		0.0125	1	12/26/2018 18:06	WG1216063
1,1,1,2-Tetrachloroethane	ND		0.00250	1	12/26/2018 18:06	WG1216063
1,1,2,2-Tetrachloroethane	ND		0.00250	1	12/26/2018 18:06	WG1216063
1,1,2-Trichlorotrifluoroethane	ND	J4	0.00250	1	12/26/2018 18:06	WG1216063
Tetrachloroethene	ND		0.00250	1	12/26/2018 18:06	WG1216063
Toluene	ND		0.00500	1	12/26/2018 18:06	WG1216063
1,2,3-Trichlorobenzene	ND		0.00250	1	12/26/2018 18:06	WG1216063
1,2,4-Trichlorobenzene	ND		0.0125	1	12/26/2018 18:06	WG1216063
1,1,1-Trichloroethane	ND		0.00250	1	12/26/2018 18:06	WG1216063
1,1,2-Trichloroethane	ND		0.00250	1	12/26/2018 18:06	WG1216063
Trichloroethene	0.00110	J4	0.00100	1	12/26/2018 18:06	WG1216063
Trichlorofluoromethane	ND		0.00250	1	12/26/2018 18:06	WG1216063
1,2,3-Trichloropropane	ND		0.0125	1	12/26/2018 18:06	WG1216063
1,2,4-Trimethylbenzene	ND		0.00500	1	12/26/2018 18:06	WG1216063
1,2,3-Trimethylbenzene	ND		0.00500	1	12/26/2018 18:06	WG1216063
1,3,5-Trimethylbenzene	ND		0.00500	1	12/26/2018 18:06	WG1216063
Vinyl chloride	ND		0.00250	1	12/26/2018 18:06	WG1216063
Xylenes, Total	ND		0.00650	1	12/26/2018 18:06	WG1216063
(S) Toluene-d8	111		75.0-131		12/26/2018 18:06	WG1216063
(S) Dibromofluoromethane	110		65.0-129		12/26/2018 18:06	WG1216063
(S) 4-Bromofluorobenzene	95.2		67.0-138		12/26/2018 18:06	WG1216063

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

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	ND		4.00	1	12/28/2018 09:25	WG1215652
(S) o-Terphenyl	75.0		18.0-148		12/28/2018 09:25	WG1215652

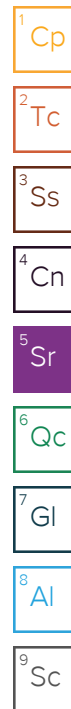


Collected date/time: 12/17/18 12:04

L1054617

Semi Volatile Organic Compounds (GC/MS) by Method 8270C

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Acenaphthene	ND		0.0333	1	12/24/2018 20:32	WG1214108
Acenaphthylene	ND		0.0333	1	12/24/2018 20:32	WG1214108
Anthracene	ND		0.0333	1	12/24/2018 20:32	WG1214108
Benzo(a)anthracene	ND		0.0333	1	12/24/2018 20:32	WG1214108
Benzo(b)fluoranthene	ND		0.0333	1	12/24/2018 20:32	WG1214108
Benzo(k)fluoranthene	ND		0.0333	1	12/24/2018 20:32	WG1214108
Benzo(g,h,i)perylene	ND		0.0333	1	12/24/2018 20:32	WG1214108
Benzo(a)pyrene	ND		0.0333	1	12/24/2018 20:32	WG1214108
Bis(2-chlorethoxy)methane	ND		0.333	1	12/24/2018 20:32	WG1214108
Bis(2-chloroethyl)ether	ND		0.333	1	12/24/2018 20:32	WG1214108
Bis(2-chloroisopropyl)ether	ND		0.333	1	12/24/2018 20:32	WG1214108
4-Bromophenyl-phenylether	ND		0.333	1	12/24/2018 20:32	WG1214108
2-Chloronaphthalene	ND		0.0333	1	12/24/2018 20:32	WG1214108
4-Chlorophenyl-phenylether	ND		0.333	1	12/24/2018 20:32	WG1214108
Chrysene	ND		0.0333	1	12/24/2018 20:32	WG1214108
Dibenz(a,h)anthracene	ND		0.0333	1	12/24/2018 20:32	WG1214108
3,3-Dichlorobenzidine	ND		0.333	1	12/24/2018 20:32	WG1214108
2,4-Dinitrotoluene	ND		0.333	1	12/24/2018 20:32	WG1214108
2,6-Dinitrotoluene	ND		0.333	1	12/24/2018 20:32	WG1214108
Fluoranthene	ND		0.0333	1	12/24/2018 20:32	WG1214108
Fluorene	ND		0.0333	1	12/24/2018 20:32	WG1214108
Hexachlorobenzene	ND		0.333	1	12/24/2018 20:32	WG1214108
Hexachloro-1,3-butadiene	ND		0.333	1	12/24/2018 20:32	WG1214108
Hexachlorocyclopentadiene	ND		0.333	1	12/24/2018 20:32	WG1214108
Hexachloroethane	ND		0.333	1	12/24/2018 20:32	WG1214108
Indeno(1,2,3-cd)pyrene	ND		0.0333	1	12/24/2018 20:32	WG1214108
Isophorone	ND		0.333	1	12/24/2018 20:32	WG1214108
Naphthalene	ND		0.0333	1	12/24/2018 20:32	WG1214108
Nitrobenzene	ND		0.333	1	12/24/2018 20:32	WG1214108
n-Nitrosodimethylamine	ND		0.333	1	12/24/2018 20:32	WG1214108
n-Nitrosodiphenylamine	ND		0.333	1	12/24/2018 20:32	WG1214108
n-Nitrosodi-n-propylamine	ND		0.333	1	12/24/2018 20:32	WG1214108
Phenanthrene	ND		0.0333	1	12/24/2018 20:32	WG1214108
Benzylbutyl phthalate	ND		0.333	1	12/24/2018 20:32	WG1214108
Bis(2-ethylhexyl)phthalate	ND		0.333	1	12/24/2018 20:32	WG1214108
Di-n-butyl phthalate	ND		0.333	1	12/24/2018 20:32	WG1214108
Diethyl phthalate	ND		0.333	1	12/24/2018 20:32	WG1214108
Dimethyl phthalate	ND		0.333	1	12/24/2018 20:32	WG1214108
Di-n-octyl phthalate	ND		0.333	1	12/24/2018 20:32	WG1214108
Pyrene	ND		0.0333	1	12/24/2018 20:32	WG1214108
1,2,4-Trichlorobenzene	ND		0.333	1	12/24/2018 20:32	WG1214108
4-Chloro-3-methylphenol	ND		0.333	1	12/24/2018 20:32	WG1214108
2-Chlorophenol	ND		0.333	1	12/24/2018 20:32	WG1214108
2,4-Dichlorophenol	ND		0.333	1	12/24/2018 20:32	WG1214108
2,4-Dimethylphenol	ND		0.333	1	12/24/2018 20:32	WG1214108
4,6-Dinitro-2-methylphenol	ND		0.333	1	12/24/2018 20:32	WG1214108
2,4-Dinitrophenol	ND		0.333	1	12/24/2018 20:32	WG1214108
2-Nitrophenol	ND		0.333	1	12/24/2018 20:32	WG1214108
4-Nitrophenol	ND		0.333	1	12/24/2018 20:32	WG1214108
Pentachlorophenol	ND		0.333	1	12/24/2018 20:32	WG1214108
Phenol	ND		0.333	1	12/24/2018 20:32	WG1214108
2,4,6-Trichlorophenol	ND		0.333	1	12/24/2018 20:32	WG1214108
(S) 2-Fluorophenol	62.2		12.0-120		12/24/2018 20:32	WG1214108
(S) Phenol-d5	55.2		10.0-120		12/24/2018 20:32	WG1214108
(S) Nitrobenzene-d5	56.5		10.0-122		12/24/2018 20:32	WG1214108
(S) 2-Fluorobiphenyl	55.0		15.0-120		12/24/2018 20:32	WG1214108





Semi Volatile Organic Compounds (GC/MS) by Method 8270C

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
(S) 2,4,6-Tribromophenol	51.7		10.0-127		12/24/2018 20:32	WG1214108
(S) p-Terphenyl-d14	58.1		10.0-120		12/24/2018 20:32	WG1214108

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 date / time	Batch
Total Solids	75.7		1	12/21/2018 09:35	WG1214089

Mercury by Method 7471A

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Mercury	ND		0.0200	1	12/21/2018 10:15	WG1214206

Metals (ICP) by Method 6010B

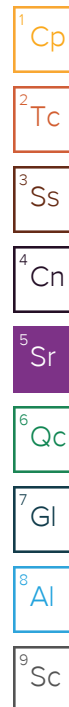
Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Arsenic	3.29		2.00	1	12/22/2018 15:08	WG1214050
Barium	94.4		0.500	1	12/22/2018 15:08	WG1214050
Cadmium	ND		0.500	1	12/22/2018 15:08	WG1214050
Chromium	10.5		1.00	1	12/22/2018 15:08	WG1214050
Lead	9.17		0.500	1	12/22/2018 15:08	WG1214050
Selenium	ND		2.00	1	12/22/2018 15:08	WG1214050
Silver	ND		1.00	1	12/22/2018 15:08	WG1214050

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	ND		0.100	1	12/27/2018 14:52	WG1214279
(S) a,a,a-Trifluorotoluene(FID)	93.9		77.0-120		12/27/2018 14:52	WG1214279

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

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Acetone	ND		0.0250	1	12/24/2018 17:45	WG1215610
Acrylonitrile	ND		0.0125	1	12/24/2018 17:45	WG1215610
Benzene	ND		0.00100	1	12/24/2018 17:45	WG1215610
Bromobenzene	ND		0.0125	1	12/24/2018 17:45	WG1215610
Bromodichloromethane	ND		0.00250	1	12/24/2018 17:45	WG1215610
Bromoform	ND		0.0250	1	12/24/2018 17:45	WG1215610
Bromomethane	ND		0.0125	1	12/24/2018 17:45	WG1215610
n-Butylbenzene	ND		0.0125	1	12/24/2018 17:45	WG1215610
sec-Butylbenzene	ND		0.0125	1	12/24/2018 17:45	WG1215610
tert-Butylbenzene	ND		0.00500	1	12/24/2018 17:45	WG1215610
Carbon tetrachloride	ND		0.00500	1	12/24/2018 17:45	WG1215610
Chlorobenzene	ND		0.00250	1	12/24/2018 17:45	WG1215610
Chlorodibromomethane	ND		0.00250	1	12/24/2018 17:45	WG1215610
Chloroethane	ND		0.00500	1	12/24/2018 17:45	WG1215610
Chloroform	ND		0.00250	1	12/24/2018 17:45	WG1215610
Chloromethane	ND		0.0125	1	12/24/2018 17:45	WG1215610
2-Chlorotoluene	ND		0.00250	1	12/24/2018 17:45	WG1215610
4-Chlorotoluene	ND		0.00500	1	12/24/2018 17:45	WG1215610
1,2-Dibromo-3-Chloropropane	ND		0.0250	1	12/24/2018 17:45	WG1215610
1,2-Dibromoethane	ND		0.00250	1	12/24/2018 17:45	WG1215610
Dibromomethane	ND		0.00500	1	12/24/2018 17:45	WG1215610
1,2-Dichlorobenzene	ND		0.00500	1	12/24/2018 17:45	WG1215610
1,3-Dichlorobenzene	ND		0.00500	1	12/24/2018 17:45	WG1215610
1,4-Dichlorobenzene	ND		0.00500	1	12/24/2018 17:45	WG1215610
Dichlorodifluoromethane	ND		0.00250	1	12/24/2018 17:45	WG1215610
1,1-Dichloroethane	ND		0.00250	1	12/24/2018 17:45	WG1215610
1,2-Dichloroethane	ND		0.00250	1	12/24/2018 17:45	WG1215610





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

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
1,1-Dichloroethene	ND		0.00250	1	12/24/2018 17:45	WG1215610
cis-1,2-Dichloroethene	0.00357		0.00250	1	12/24/2018 17:45	WG1215610
trans-1,2-Dichloroethene	ND		0.00500	1	12/24/2018 17:45	WG1215610
1,2-Dichloropropane	ND		0.00500	1	12/24/2018 17:45	WG1215610
1,1-Dichloropropene	ND		0.00250	1	12/24/2018 17:45	WG1215610
1,3-Dichloropropane	ND		0.00500	1	12/24/2018 17:45	WG1215610
cis-1,3-Dichloropropene	ND		0.00250	1	12/24/2018 17:45	WG1215610
trans-1,3-Dichloropropene	ND		0.00500	1	12/24/2018 17:45	WG1215610
2,2-Dichloropropane	ND		0.00250	1	12/24/2018 17:45	WG1215610
Di-isopropyl ether	ND		0.00100	1	12/24/2018 17:45	WG1215610
Ethylbenzene	ND		0.00250	1	12/24/2018 17:45	WG1215610
Hexachloro-1,3-butadiene	ND		0.0250	1	12/24/2018 17:45	WG1215610
Isopropylbenzene	ND	J4	0.00250	1	12/24/2018 17:45	WG1215610
p-Isopropyltoluene	ND		0.00500	1	12/24/2018 17:45	WG1215610
2-Butanone (MEK)	ND		0.0250	1	12/24/2018 17:45	WG1215610
Methylene Chloride	ND		0.0250	1	12/24/2018 17:45	WG1215610
4-Methyl-2-pentanone (MIBK)	ND		0.0250	1	12/24/2018 17:45	WG1215610
Methyl tert-butyl ether	ND		0.00100	1	12/24/2018 17:45	WG1215610
Naphthalene	ND		0.0125	1	12/24/2018 17:45	WG1215610
n-Propylbenzene	ND		0.00500	1	12/24/2018 17:45	WG1215610
Styrene	ND		0.0125	1	12/24/2018 17:45	WG1215610
1,1,1,2-Tetrachloroethane	ND		0.00250	1	12/24/2018 17:45	WG1215610
1,1,2,2-Tetrachloroethane	ND		0.00250	1	12/24/2018 17:45	WG1215610
1,1,2-Trichlorotrifluoroethane	ND		0.00250	1	12/24/2018 17:45	WG1215610
Tetrachloroethene	0.0249		0.00250	1	12/24/2018 17:45	WG1215610
Toluene	ND		0.00500	1	12/24/2018 17:45	WG1215610
1,2,3-Trichlorobenzene	ND		0.00250	1	12/24/2018 17:45	WG1215610
1,2,4-Trichlorobenzene	ND		0.0125	1	12/24/2018 17:45	WG1215610
1,1,1-Trichloroethane	ND		0.00250	1	12/24/2018 17:45	WG1215610
1,1,2-Trichloroethane	ND		0.00250	1	12/24/2018 17:45	WG1215610
Trichloroethene	0.00365		0.00100	1	12/24/2018 17:45	WG1215610
Trichlorofluoromethane	ND		0.00250	1	12/24/2018 17:45	WG1215610
1,2,3-Trichloropropane	ND		0.0125	1	12/24/2018 17:45	WG1215610
1,2,4-Trimethylbenzene	ND		0.00500	1	12/24/2018 17:45	WG1215610
1,2,3-Trimethylbenzene	ND		0.00500	1	12/24/2018 17:45	WG1215610
1,3,5-Trimethylbenzene	ND		0.00500	1	12/24/2018 17:45	WG1215610
Vinyl chloride	ND		0.00250	1	12/24/2018 17:45	WG1215610
Xylenes, Total	ND		0.00650	1	12/24/2018 17:45	WG1215610
(S) Toluene-d8	105		75.0-131		12/24/2018 17:45	WG1215610
(S) Dibromofluoromethane	102		65.0-129		12/24/2018 17:45	WG1215610
(S) 4-Bromofluorobenzene	102		67.0-138		12/24/2018 17:45	WG1215610

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

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	ND		4.00	1	12/28/2018 08:38	WG1215652
(S) o-Terphenyl	57.0		18.0-148		12/28/2018 08:38	WG1215652

Semi Volatile Organic Compounds (GC/MS) by Method 8270C

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Acenaphthene	ND		0.0333	1	12/24/2018 20:55	WG1214108
Acenaphthylene	ND		0.0333	1	12/24/2018 20:55	WG1214108
Anthracene	ND		0.0333	1	12/24/2018 20:55	WG1214108
Benzo(a)anthracene	ND		0.0333	1	12/24/2018 20:55	WG1214108



Collected date/time: 12/17/18 12:30

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Semi Volatile Organic Compounds (GC/MS) by Method 8270C

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Benzo(b)fluoranthene	ND		0.0333	1	12/24/2018 20:55	WG1214108
Benzo(k)fluoranthene	ND		0.0333	1	12/24/2018 20:55	WG1214108
Benzo(g,h,i)perylene	ND		0.0333	1	12/24/2018 20:55	WG1214108
Benzo(a)pyrene	ND		0.0333	1	12/24/2018 20:55	WG1214108
Bis(2-chloroethoxy)methane	ND		0.333	1	12/24/2018 20:55	WG1214108
Bis(2-chloroethyl)ether	ND		0.333	1	12/24/2018 20:55	WG1214108
Bis(2-chloroisopropyl)ether	ND		0.333	1	12/24/2018 20:55	WG1214108
4-Bromophenyl-phenylether	ND		0.333	1	12/24/2018 20:55	WG1214108
2-Chloronaphthalene	ND		0.0333	1	12/24/2018 20:55	WG1214108
4-Chlorophenyl-phenylether	ND		0.333	1	12/24/2018 20:55	WG1214108
Chrysene	ND		0.0333	1	12/24/2018 20:55	WG1214108
Dibenz(a,h)anthracene	ND		0.0333	1	12/24/2018 20:55	WG1214108
3,3-Dichlorobenzidine	ND		0.333	1	12/24/2018 20:55	WG1214108
2,4-Dinitrotoluene	ND		0.333	1	12/24/2018 20:55	WG1214108
2,6-Dinitrotoluene	ND		0.333	1	12/24/2018 20:55	WG1214108
Fluoranthene	ND		0.0333	1	12/24/2018 20:55	WG1214108
Fluorene	ND		0.0333	1	12/24/2018 20:55	WG1214108
Hexachlorobenzene	ND		0.333	1	12/24/2018 20:55	WG1214108
Hexachloro-1,3-butadiene	ND		0.333	1	12/24/2018 20:55	WG1214108
Hexachlorocyclopentadiene	ND		0.333	1	12/24/2018 20:55	WG1214108
Hexachloroethane	ND		0.333	1	12/24/2018 20:55	WG1214108
Indeno(1,2,3-cd)pyrene	ND		0.0333	1	12/24/2018 20:55	WG1214108
Isophorone	ND		0.333	1	12/24/2018 20:55	WG1214108
Naphthalene	ND		0.0333	1	12/24/2018 20:55	WG1214108
Nitrobenzene	ND		0.333	1	12/24/2018 20:55	WG1214108
n-Nitrosodimethylamine	ND		0.333	1	12/24/2018 20:55	WG1214108
n-Nitrosodiphenylamine	ND		0.333	1	12/24/2018 20:55	WG1214108
n-Nitrosodi-n-propylamine	ND		0.333	1	12/24/2018 20:55	WG1214108
Phenanthrene	ND		0.0333	1	12/24/2018 20:55	WG1214108
Benzylbutyl phthalate	ND		0.333	1	12/24/2018 20:55	WG1214108
Bis(2-ethylhexyl)phthalate	ND		0.333	1	12/24/2018 20:55	WG1214108
Di-n-butyl phthalate	ND		0.333	1	12/24/2018 20:55	WG1214108
Diethyl phthalate	ND		0.333	1	12/24/2018 20:55	WG1214108
Dimethyl phthalate	ND		0.333	1	12/24/2018 20:55	WG1214108
Di-n-octyl phthalate	ND		0.333	1	12/24/2018 20:55	WG1214108
Pyrene	ND		0.0333	1	12/24/2018 20:55	WG1214108
1,2,4-Trichlorobenzene	ND		0.333	1	12/24/2018 20:55	WG1214108
4-Chloro-3-methylphenol	ND		0.333	1	12/24/2018 20:55	WG1214108
2-Chlorophenol	ND		0.333	1	12/24/2018 20:55	WG1214108
2,4-Dichlorophenol	ND		0.333	1	12/24/2018 20:55	WG1214108
2,4-Dimethylphenol	ND		0.333	1	12/24/2018 20:55	WG1214108
4,6-Dinitro-2-methylphenol	ND		0.333	1	12/24/2018 20:55	WG1214108
2,4-Dinitrophenol	ND		0.333	1	12/24/2018 20:55	WG1214108
2-Nitrophenol	ND		0.333	1	12/24/2018 20:55	WG1214108
4-Nitrophenol	ND		0.333	1	12/24/2018 20:55	WG1214108
Pentachlorophenol	ND		0.333	1	12/24/2018 20:55	WG1214108
Phenol	ND		0.333	1	12/24/2018 20:55	WG1214108
2,4,6-Trichlorophenol	ND		0.333	1	12/24/2018 20:55	WG1214108
(S) 2-Fluorophenol	80.7		12.0-120		12/24/2018 20:55	WG1214108
(S) Phenol-d5	68.8		10.0-120		12/24/2018 20:55	WG1214108
(S) Nitrobenzene-d5	67.4		10.0-122		12/24/2018 20:55	WG1214108
(S) 2-Fluorobiphenyl	63.6		15.0-120		12/24/2018 20:55	WG1214108
(S) 2,4,6-Tribromophenol	64.5		10.0-127		12/24/2018 20:55	WG1214108
(S) p-Terphenyl-d14	66.1		10.0-120		12/24/2018 20:55	WG1214108

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 date / time	Batch
Total Solids	75.1		1	12/21/2018 09:35	WG1214089

Mercury by Method 7471A

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Mercury	ND		0.0200	1	12/21/2018 10:18	WG1214206

Metals (ICP) by Method 6010B

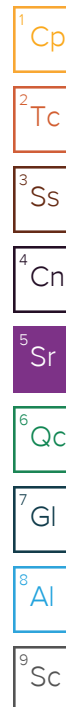
Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Arsenic	5.42		2.00	1	12/22/2018 15:32	WG1214050
Barium	117		0.500	1	12/22/2018 15:32	WG1214050
Cadmium	ND		0.500	1	12/22/2018 15:32	WG1214050
Chromium	9.91		1.00	1	12/22/2018 15:32	WG1214050
Lead	6.04		0.500	1	12/22/2018 15:32	WG1214050
Selenium	ND		2.00	1	12/22/2018 15:32	WG1214050
Silver	ND		1.00	1	12/22/2018 15:32	WG1214050

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	ND		0.100	1	12/27/2018 15:16	WG1214279
(S) a,a,a-Trifluorotoluene(FID)	92.5		77.0-120		12/27/2018 15:16	WG1214279

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

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Acetone	ND		0.0250	1	12/24/2018 18:04	WG1215610
Acrylonitrile	ND		0.0125	1	12/24/2018 18:04	WG1215610
Benzene	ND		0.00100	1	12/24/2018 18:04	WG1215610
Bromobenzene	ND		0.0125	1	12/24/2018 18:04	WG1215610
Bromodichloromethane	ND		0.00250	1	12/24/2018 18:04	WG1215610
Bromoform	ND		0.0250	1	12/24/2018 18:04	WG1215610
Bromomethane	ND		0.0125	1	12/24/2018 18:04	WG1215610
n-Butylbenzene	ND		0.0125	1	12/24/2018 18:04	WG1215610
sec-Butylbenzene	ND		0.0125	1	12/24/2018 18:04	WG1215610
tert-Butylbenzene	ND		0.00500	1	12/24/2018 18:04	WG1215610
Carbon tetrachloride	ND		0.00500	1	12/24/2018 18:04	WG1215610
Chlorobenzene	ND		0.00250	1	12/24/2018 18:04	WG1215610
Chlorodibromomethane	ND		0.00250	1	12/24/2018 18:04	WG1215610
Chloroethane	ND		0.00500	1	12/24/2018 18:04	WG1215610
Chloroform	ND		0.00250	1	12/24/2018 18:04	WG1215610
Chloromethane	ND		0.0125	1	12/24/2018 18:04	WG1215610
2-Chlorotoluene	ND		0.00250	1	12/24/2018 18:04	WG1215610
4-Chlorotoluene	ND		0.00500	1	12/24/2018 18:04	WG1215610
1,2-Dibromo-3-Chloropropane	ND		0.0250	1	12/24/2018 18:04	WG1215610
1,2-Dibromoethane	ND		0.00250	1	12/24/2018 18:04	WG1215610
Dibromomethane	ND		0.00500	1	12/24/2018 18:04	WG1215610
1,2-Dichlorobenzene	ND		0.00500	1	12/24/2018 18:04	WG1215610
1,3-Dichlorobenzene	ND		0.00500	1	12/24/2018 18:04	WG1215610
1,4-Dichlorobenzene	ND		0.00500	1	12/24/2018 18:04	WG1215610
Dichlorodifluoromethane	ND		0.00250	1	12/24/2018 18:04	WG1215610
1,1-Dichloroethane	ND		0.00250	1	12/24/2018 18:04	WG1215610
1,2-Dichloroethane	ND		0.00250	1	12/24/2018 18:04	WG1215610





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

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
1,1-Dichloroethene	ND		0.00250	1	12/24/2018 18:04	WG1215610
cis-1,2-Dichloroethene	0.00297		0.00250	1	12/24/2018 18:04	WG1215610
trans-1,2-Dichloroethene	ND		0.00500	1	12/24/2018 18:04	WG1215610
1,2-Dichloropropane	ND		0.00500	1	12/24/2018 18:04	WG1215610
1,1-Dichloropropene	ND		0.00250	1	12/24/2018 18:04	WG1215610
1,3-Dichloropropane	ND		0.00500	1	12/24/2018 18:04	WG1215610
cis-1,3-Dichloropropene	ND		0.00250	1	12/24/2018 18:04	WG1215610
trans-1,3-Dichloropropene	ND		0.00500	1	12/24/2018 18:04	WG1215610
2,2-Dichloropropane	ND		0.00250	1	12/24/2018 18:04	WG1215610
Di-isopropyl ether	ND		0.00100	1	12/24/2018 18:04	WG1215610
Ethylbenzene	ND		0.00250	1	12/24/2018 18:04	WG1215610
Hexachloro-1,3-butadiene	ND		0.0250	1	12/24/2018 18:04	WG1215610
Isopropylbenzene	ND	J4	0.00250	1	12/24/2018 18:04	WG1215610
p-Isopropyltoluene	ND		0.00500	1	12/24/2018 18:04	WG1215610
2-Butanone (MEK)	ND		0.0250	1	12/24/2018 18:04	WG1215610
Methylene Chloride	ND		0.0250	1	12/24/2018 18:04	WG1215610
4-Methyl-2-pentanone (MIBK)	ND		0.0250	1	12/24/2018 18:04	WG1215610
Methyl tert-butyl ether	ND		0.00100	1	12/24/2018 18:04	WG1215610
Naphthalene	ND		0.0125	1	12/24/2018 18:04	WG1215610
n-Propylbenzene	ND		0.00500	1	12/24/2018 18:04	WG1215610
Styrene	ND		0.0125	1	12/24/2018 18:04	WG1215610
1,1,1,2-Tetrachloroethane	ND		0.00250	1	12/24/2018 18:04	WG1215610
1,1,2,2-Tetrachloroethane	ND		0.00250	1	12/24/2018 18:04	WG1215610
1,1,2-Trichlorotrifluoroethane	ND		0.00250	1	12/24/2018 18:04	WG1215610
Tetrachloroethene	ND		0.00250	1	12/24/2018 18:04	WG1215610
Toluene	ND		0.00500	1	12/24/2018 18:04	WG1215610
1,2,3-Trichlorobenzene	ND		0.00250	1	12/24/2018 18:04	WG1215610
1,2,4-Trichlorobenzene	ND		0.0125	1	12/24/2018 18:04	WG1215610
1,1,1-Trichloroethane	ND		0.00250	1	12/24/2018 18:04	WG1215610
1,1,2-Trichloroethane	ND		0.00250	1	12/24/2018 18:04	WG1215610
Trichloroethene	ND		0.00100	1	12/24/2018 18:04	WG1215610
Trichlorofluoromethane	ND		0.00250	1	12/24/2018 18:04	WG1215610
1,2,3-Trichloropropane	ND		0.0125	1	12/24/2018 18:04	WG1215610
1,2,4-Trimethylbenzene	ND		0.00500	1	12/24/2018 18:04	WG1215610
1,2,3-Trimethylbenzene	ND		0.00500	1	12/24/2018 18:04	WG1215610
1,3,5-Trimethylbenzene	ND		0.00500	1	12/24/2018 18:04	WG1215610
Vinyl chloride	ND		0.00250	1	12/24/2018 18:04	WG1215610
Xylenes, Total	ND		0.00650	1	12/24/2018 18:04	WG1215610
(S) Toluene-d8	104		75.0-131		12/24/2018 18:04	WG1215610
(S) Dibromofluoromethane	100		65.0-129		12/24/2018 18:04	WG1215610
(S) 4-Bromofluorobenzene	104		67.0-138		12/24/2018 18:04	WG1215610

1 Cp
2 Tc
3 Ss
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5 Sr
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8 Al
9 Sc

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	ND		4.00	1	12/28/2018 09:37	WG1215652
(S) o-Terphenyl	61.0		18.0-148		12/28/2018 09:37	WG1215652

Semi Volatile Organic Compounds (GC/MS) by Method 8270C

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Acenaphthene	ND		0.0333	1	12/24/2018 21:18	WG1214108
Acenaphthylene	ND		0.0333	1	12/24/2018 21:18	WG1214108
Anthracene	ND		0.0333	1	12/24/2018 21:18	WG1214108
Benzo(a)anthracene	ND		0.0333	1	12/24/2018 21:18	WG1214108



Semi Volatile Organic Compounds (GC/MS) by Method 8270C

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Benzo(b)fluoranthene	ND		0.0333	1	12/24/2018 21:18	WG1214108
Benzo(k)fluoranthene	ND	J3	0.0333	1	12/24/2018 21:18	WG1214108
Benzo(g,h,i)perylene	ND		0.0333	1	12/24/2018 21:18	WG1214108
Benzo(a)pyrene	ND		0.0333	1	12/24/2018 21:18	WG1214108
Bis(2-chloroethoxy)methane	ND		0.333	1	12/24/2018 21:18	WG1214108
Bis(2-chloroethyl)ether	ND		0.333	1	12/24/2018 21:18	WG1214108
Bis(2-chloroisopropyl)ether	ND		0.333	1	12/24/2018 21:18	WG1214108
4-Bromophenyl-phenylether	ND		0.333	1	12/24/2018 21:18	WG1214108
2-Chloronaphthalene	ND		0.0333	1	12/24/2018 21:18	WG1214108
4-Chlorophenyl-phenylether	ND		0.333	1	12/24/2018 21:18	WG1214108
Chrysene	ND		0.0333	1	12/24/2018 21:18	WG1214108
Dibenz(a,h)anthracene	ND		0.0333	1	12/24/2018 21:18	WG1214108
3,3-Dichlorobenzidine	ND		0.333	1	12/24/2018 21:18	WG1214108
2,4-Dinitrotoluene	ND		0.333	1	12/24/2018 21:18	WG1214108
2,6-Dinitrotoluene	ND		0.333	1	12/24/2018 21:18	WG1214108
Fluoranthene	ND		0.0333	1	12/24/2018 21:18	WG1214108
Fluorene	ND		0.0333	1	12/24/2018 21:18	WG1214108
Hexachlorobenzene	ND		0.333	1	12/24/2018 21:18	WG1214108
Hexachloro-1,3-butadiene	ND		0.333	1	12/24/2018 21:18	WG1214108
Hexachlorocyclopentadiene	ND		0.333	1	12/24/2018 21:18	WG1214108
Hexachloroethane	ND		0.333	1	12/24/2018 21:18	WG1214108
Indeno(1,2,3-cd)pyrene	ND		0.0333	1	12/24/2018 21:18	WG1214108
Isophorone	ND		0.333	1	12/24/2018 21:18	WG1214108
Naphthalene	ND		0.0333	1	12/24/2018 21:18	WG1214108
Nitrobenzene	ND		0.333	1	12/24/2018 21:18	WG1214108
n-Nitrosodimethylamine	ND		0.333	1	12/24/2018 21:18	WG1214108
n-Nitrosodiphenylamine	ND		0.333	1	12/24/2018 21:18	WG1214108
n-Nitrosodi-n-propylamine	ND		0.333	1	12/24/2018 21:18	WG1214108
Phenanthrene	ND		0.0333	1	12/24/2018 21:18	WG1214108
Benzylbutyl phthalate	ND		0.333	1	12/24/2018 21:18	WG1214108
Bis(2-ethylhexyl)phthalate	ND		0.333	1	12/24/2018 21:18	WG1214108
Di-n-butyl phthalate	ND		0.333	1	12/24/2018 21:18	WG1214108
Diethyl phthalate	ND		0.333	1	12/24/2018 21:18	WG1214108
Dimethyl phthalate	ND		0.333	1	12/24/2018 21:18	WG1214108
Di-n-octyl phthalate	ND		0.333	1	12/24/2018 21:18	WG1214108
Pyrene	ND		0.0333	1	12/24/2018 21:18	WG1214108
1,2,4-Trichlorobenzene	ND		0.333	1	12/24/2018 21:18	WG1214108
4-Chloro-3-methylphenol	ND		0.333	1	12/24/2018 21:18	WG1214108
2-Chlorophenol	ND		0.333	1	12/24/2018 21:18	WG1214108
2,4-Dichlorophenol	ND		0.333	1	12/24/2018 21:18	WG1214108
2,4-Dimethylphenol	ND		0.333	1	12/24/2018 21:18	WG1214108
4,6-Dinitro-2-methylphenol	ND		0.333	1	12/24/2018 21:18	WG1214108
2,4-Dinitrophenol	ND		0.333	1	12/24/2018 21:18	WG1214108
2-Nitrophenol	ND		0.333	1	12/24/2018 21:18	WG1214108
4-Nitrophenol	ND		0.333	1	12/24/2018 21:18	WG1214108
Pentachlorophenol	ND		0.333	1	12/24/2018 21:18	WG1214108
Phenol	ND		0.333	1	12/24/2018 21:18	WG1214108
2,4,6-Trichlorophenol	ND		0.333	1	12/24/2018 21:18	WG1214108
(S) 2-Fluorophenol	68.2		12.0-120		12/24/2018 21:18	WG1214108
(S) Phenol-d5	59.6		10.0-120		12/24/2018 21:18	WG1214108
(S) Nitrobenzene-d5	58.7		10.0-122		12/24/2018 21:18	WG1214108
(S) 2-Fluorobiphenyl	57.1		15.0-120		12/24/2018 21:18	WG1214108
(S) 2,4,6-Tribromophenol	53.3		10.0-127		12/24/2018 21:18	WG1214108
(S) p-Terphenyl-d14	55.9		10.0-120		12/24/2018 21:18	WG1214108

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 date / time	Batch
Total Solids	79.1		1	12/21/2018 09:35	WG1214089

Mercury by Method 7471A

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Mercury	0.0214	<u>B</u>	0.0200	1	12/21/2018 10:25	WG1214206

Metals (ICP) by Method 6010B

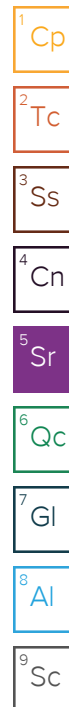
Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Arsenic	3.79		2.00	1	12/22/2018 15:34	WG1214050
Barium	124		0.500	1	12/22/2018 15:34	WG1214050
Cadmium	0.509		0.500	1	12/22/2018 15:34	WG1214050
Chromium	11.6		1.00	1	12/22/2018 15:34	WG1214050
Lead	8.18		0.500	1	12/22/2018 15:34	WG1214050
Selenium	ND		2.00	1	12/22/2018 15:34	WG1214050
Silver	ND		1.00	1	12/22/2018 15:34	WG1214050

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	ND		0.100	1	12/27/2018 15:41	WG1214279
(S) a,a,a-Trifluorotoluene(FID)	91.0		77.0-120		12/27/2018 15:41	WG1214279

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

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Acetone	ND		0.0250	1	12/24/2018 18:23	WG1215610
Acrylonitrile	ND		0.0125	1	12/24/2018 18:23	WG1215610
Benzene	ND		0.00100	1	12/24/2018 18:23	WG1215610
Bromobenzene	ND		0.0125	1	12/24/2018 18:23	WG1215610
Bromodichloromethane	ND		0.00250	1	12/24/2018 18:23	WG1215610
Bromoform	ND		0.0250	1	12/24/2018 18:23	WG1215610
Bromomethane	ND		0.0125	1	12/24/2018 18:23	WG1215610
n-Butylbenzene	ND		0.0125	1	12/24/2018 18:23	WG1215610
sec-Butylbenzene	ND		0.0125	1	12/24/2018 18:23	WG1215610
tert-Butylbenzene	ND		0.00500	1	12/24/2018 18:23	WG1215610
Carbon tetrachloride	ND		0.00500	1	12/24/2018 18:23	WG1215610
Chlorobenzene	ND		0.00250	1	12/24/2018 18:23	WG1215610
Chlorodibromomethane	ND		0.00250	1	12/24/2018 18:23	WG1215610
Chloroethane	ND		0.00500	1	12/24/2018 18:23	WG1215610
Chloroform	ND		0.00250	1	12/24/2018 18:23	WG1215610
Chloromethane	ND		0.0125	1	12/24/2018 18:23	WG1215610
2-Chlorotoluene	ND		0.00250	1	12/24/2018 18:23	WG1215610
4-Chlorotoluene	ND		0.00500	1	12/24/2018 18:23	WG1215610
1,2-Dibromo-3-Chloropropane	ND		0.0250	1	12/24/2018 18:23	WG1215610
1,2-Dibromoethane	ND		0.00250	1	12/24/2018 18:23	WG1215610
Dibromomethane	ND		0.00500	1	12/24/2018 18:23	WG1215610
1,2-Dichlorobenzene	ND		0.00500	1	12/24/2018 18:23	WG1215610
1,3-Dichlorobenzene	ND		0.00500	1	12/24/2018 18:23	WG1215610
1,4-Dichlorobenzene	ND		0.00500	1	12/24/2018 18:23	WG1215610
Dichlorodifluoromethane	ND		0.00250	1	12/24/2018 18:23	WG1215610
1,1-Dichloroethane	ND		0.00250	1	12/24/2018 18:23	WG1215610
1,2-Dichloroethane	ND		0.00250	1	12/24/2018 18:23	WG1215610





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

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
1,1-Dichloroethene	ND		0.00250	1	12/24/2018 18:23	WG1215610
cis-1,2-Dichloroethene	ND		0.00250	1	12/24/2018 18:23	WG1215610
trans-1,2-Dichloroethene	ND		0.00500	1	12/24/2018 18:23	WG1215610
1,2-Dichloropropane	ND		0.00500	1	12/24/2018 18:23	WG1215610
1,1-Dichloropropene	ND		0.00250	1	12/24/2018 18:23	WG1215610
1,3-Dichloropropane	ND		0.00500	1	12/24/2018 18:23	WG1215610
cis-1,3-Dichloropropene	ND		0.00250	1	12/24/2018 18:23	WG1215610
trans-1,3-Dichloropropene	ND		0.00500	1	12/24/2018 18:23	WG1215610
2,2-Dichloropropane	ND		0.00250	1	12/24/2018 18:23	WG1215610
Di-isopropyl ether	ND		0.00100	1	12/24/2018 18:23	WG1215610
Ethylbenzene	ND		0.00250	1	12/24/2018 18:23	WG1215610
Hexachloro-1,3-butadiene	ND		0.0250	1	12/24/2018 18:23	WG1215610
Isopropylbenzene	ND	J4	0.00250	1	12/24/2018 18:23	WG1215610
p-Isopropyltoluene	ND		0.00500	1	12/24/2018 18:23	WG1215610
2-Butanone (MEK)	ND		0.0250	1	12/24/2018 18:23	WG1215610
Methylene Chloride	ND		0.0250	1	12/24/2018 18:23	WG1215610
4-Methyl-2-pentanone (MIBK)	ND		0.0250	1	12/24/2018 18:23	WG1215610
Methyl tert-butyl ether	ND		0.00100	1	12/24/2018 18:23	WG1215610
Naphthalene	ND		0.0125	1	12/24/2018 18:23	WG1215610
n-Propylbenzene	ND		0.00500	1	12/24/2018 18:23	WG1215610
Styrene	ND		0.0125	1	12/24/2018 18:23	WG1215610
1,1,1,2-Tetrachloroethane	ND		0.00250	1	12/24/2018 18:23	WG1215610
1,1,2,2-Tetrachloroethane	ND		0.00250	1	12/24/2018 18:23	WG1215610
1,1,2-Trichlorotrifluoroethane	ND		0.00250	1	12/24/2018 18:23	WG1215610
Tetrachloroethene	ND		0.00250	1	12/24/2018 18:23	WG1215610
Toluene	ND		0.00500	1	12/24/2018 18:23	WG1215610
1,2,3-Trichlorobenzene	ND		0.00250	1	12/24/2018 18:23	WG1215610
1,2,4-Trichlorobenzene	ND		0.0125	1	12/24/2018 18:23	WG1215610
1,1,1-Trichloroethane	ND		0.00250	1	12/24/2018 18:23	WG1215610
1,1,2-Trichloroethane	ND		0.00250	1	12/24/2018 18:23	WG1215610
Trichloroethene	ND		0.00100	1	12/24/2018 18:23	WG1215610
Trichlorofluoromethane	ND		0.00250	1	12/24/2018 18:23	WG1215610
1,2,3-Trichloropropane	ND		0.0125	1	12/24/2018 18:23	WG1215610
1,2,4-Trimethylbenzene	ND		0.00500	1	12/24/2018 18:23	WG1215610
1,2,3-Trimethylbenzene	ND		0.00500	1	12/24/2018 18:23	WG1215610
1,3,5-Trimethylbenzene	ND		0.00500	1	12/24/2018 18:23	WG1215610
Vinyl chloride	ND		0.00250	1	12/24/2018 18:23	WG1215610
Xylenes, Total	ND		0.00650	1	12/24/2018 18:23	WG1215610
(S) Toluene-d8	106		75.0-131		12/24/2018 18:23	WG1215610
(S) Dibromofluoromethane	96.8		65.0-129		12/24/2018 18:23	WG1215610
(S) 4-Bromofluorobenzene	100		67.0-138		12/24/2018 18:23	WG1215610

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	ND		4.00	1	12/28/2018 09:49	WG1215652
(S) o-Terphenyl	56.2		18.0-148		12/28/2018 09:49	WG1215652

Semi Volatile Organic Compounds (GC/MS) by Method 8270C

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Acenaphthene	ND		0.0333	1	12/24/2018 22:49	WG1214108
Acenaphthylene	ND		0.0333	1	12/24/2018 22:49	WG1214108
Anthracene	ND		0.0333	1	12/24/2018 22:49	WG1214108
Benzo(a)anthracene	ND		0.0333	1	12/24/2018 22:49	WG1214108



Collected date/time: 12/17/18 12:49

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Semi Volatile Organic Compounds (GC/MS) by Method 8270C

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Benzo(b)fluoranthene	ND		0.0333	1	12/24/2018 22:49	WG1214108
Benzo(k)fluoranthene	ND		0.0333	1	12/24/2018 22:49	WG1214108
Benzo(g,h,i)perylene	ND		0.0333	1	12/24/2018 22:49	WG1214108
Benzo(a)pyrene	ND		0.0333	1	12/24/2018 22:49	WG1214108
Bis(2-chlorethoxy)methane	ND		0.333	1	12/24/2018 22:49	WG1214108
Bis(2-chloroethyl)ether	ND		0.333	1	12/24/2018 22:49	WG1214108
Bis(2-chloroisopropyl)ether	ND		0.333	1	12/24/2018 22:49	WG1214108
4-Bromophenyl-phenylether	ND		0.333	1	12/24/2018 22:49	WG1214108
2-Chloronaphthalene	ND		0.0333	1	12/24/2018 22:49	WG1214108
4-Chlorophenyl-phenylether	ND		0.333	1	12/24/2018 22:49	WG1214108
Chrysene	ND		0.0333	1	12/24/2018 22:49	WG1214108
Dibenz(a,h)anthracene	ND		0.0333	1	12/24/2018 22:49	WG1214108
3,3-Dichlorobenzidine	ND		0.333	1	12/24/2018 22:49	WG1214108
2,4-Dinitrotoluene	ND		0.333	1	12/24/2018 22:49	WG1214108
2,6-Dinitrotoluene	ND		0.333	1	12/24/2018 22:49	WG1214108
Fluoranthene	ND		0.0333	1	12/24/2018 22:49	WG1214108
Fluorene	ND		0.0333	1	12/24/2018 22:49	WG1214108
Hexachlorobenzene	ND		0.333	1	12/24/2018 22:49	WG1214108
Hexachloro-1,3-butadiene	ND		0.333	1	12/24/2018 22:49	WG1214108
Hexachlorocyclopentadiene	ND		0.333	1	12/24/2018 22:49	WG1214108
Hexachloroethane	ND		0.333	1	12/24/2018 22:49	WG1214108
Indeno(1,2,3-cd)pyrene	ND		0.0333	1	12/24/2018 22:49	WG1214108
Isophorone	ND		0.333	1	12/24/2018 22:49	WG1214108
Naphthalene	ND		0.0333	1	12/24/2018 22:49	WG1214108
Nitrobenzene	ND		0.333	1	12/24/2018 22:49	WG1214108
n-Nitrosodimethylamine	ND		0.333	1	12/24/2018 22:49	WG1214108
n-Nitrosodiphenylamine	ND		0.333	1	12/24/2018 22:49	WG1214108
n-Nitrosodi-n-propylamine	ND		0.333	1	12/24/2018 22:49	WG1214108
Phenanthrene	ND		0.0333	1	12/24/2018 22:49	WG1214108
Benzylbutyl phthalate	ND		0.333	1	12/24/2018 22:49	WG1214108
Bis(2-ethylhexyl)phthalate	ND		0.333	1	12/24/2018 22:49	WG1214108
Di-n-butyl phthalate	ND		0.333	1	12/24/2018 22:49	WG1214108
Diethyl phthalate	ND		0.333	1	12/24/2018 22:49	WG1214108
Dimethyl phthalate	ND		0.333	1	12/24/2018 22:49	WG1214108
Di-n-octyl phthalate	ND		0.333	1	12/24/2018 22:49	WG1214108
Pyrene	ND		0.0333	1	12/24/2018 22:49	WG1214108
1,2,4-Trichlorobenzene	ND		0.333	1	12/24/2018 22:49	WG1214108
4-Chloro-3-methylphenol	ND		0.333	1	12/24/2018 22:49	WG1214108
2-Chlorophenol	ND		0.333	1	12/24/2018 22:49	WG1214108
2,4-Dichlorophenol	ND		0.333	1	12/24/2018 22:49	WG1214108
2,4-Dimethylphenol	ND		0.333	1	12/24/2018 22:49	WG1214108
4,6-Dinitro-2-methylphenol	ND		0.333	1	12/24/2018 22:49	WG1214108
2,4-Dinitrophenol	ND		0.333	1	12/24/2018 22:49	WG1214108
2-Nitrophenol	ND		0.333	1	12/24/2018 22:49	WG1214108
4-Nitrophenol	ND		0.333	1	12/24/2018 22:49	WG1214108
Pentachlorophenol	ND		0.333	1	12/24/2018 22:49	WG1214108
Phenol	ND		0.333	1	12/24/2018 22:49	WG1214108
2,4,6-Trichlorophenol	ND		0.333	1	12/24/2018 22:49	WG1214108
(S) 2-Fluorophenol	66.3		12.0-120		12/24/2018 22:49	WG1214108
(S) Phenol-d5	56.4		10.0-120		12/24/2018 22:49	WG1214108
(S) Nitrobenzene-d5	57.6		10.0-122		12/24/2018 22:49	WG1214108
(S) 2-Fluorobiphenyl	58.2		15.0-120		12/24/2018 22:49	WG1214108
(S) 2,4,6-Tribromophenol	52.9		10.0-127		12/24/2018 22:49	WG1214108
(S) p-Terphenyl-d14	60.1		10.0-120		12/24/2018 22:49	WG1214108

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	76.7		1	12/21/2018 09:35	WG1214089

Mercury by Method 7471A

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Mercury	ND		0.0200	1	12/21/2018 10:28	WG1214206

Metals (ICP) by Method 6010B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Arsenic	2.15		2.00	1	12/22/2018 15:37	WG1214050
Barium	94.9		0.500	1	12/22/2018 15:37	WG1214050
Cadmium	ND		0.500	1	12/22/2018 15:37	WG1214050
Chromium	8.97		1.00	1	12/22/2018 15:37	WG1214050
Lead	5.49		0.500	1	12/22/2018 15:37	WG1214050
Selenium	ND		2.00	1	12/22/2018 15:37	WG1214050
Silver	ND		1.00	1	12/22/2018 15:37	WG1214050

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
TPH (GC/FID) Low Fraction	ND		0.100	1	12/27/2018 16:05	WG1214279
(S) a,a,a-Trifluorotoluene(FID)	92.6		77.0-120		12/27/2018 16:05	WG1214279

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

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Acetone	ND		0.0250	1	12/24/2018 18:42	WG1215610
Acrylonitrile	ND		0.0125	1	12/24/2018 18:42	WG1215610
Benzene	ND		0.00100	1	12/24/2018 18:42	WG1215610
Bromobenzene	ND		0.0125	1	12/24/2018 18:42	WG1215610
Bromodichloromethane	ND		0.00250	1	12/24/2018 18:42	WG1215610
Bromoform	ND		0.0250	1	12/24/2018 18:42	WG1215610
Bromomethane	ND		0.0125	1	12/24/2018 18:42	WG1215610
n-Butylbenzene	ND		0.0125	1	12/24/2018 18:42	WG1215610
sec-Butylbenzene	ND		0.0125	1	12/24/2018 18:42	WG1215610
tert-Butylbenzene	ND		0.00500	1	12/24/2018 18:42	WG1215610
Carbon tetrachloride	ND		0.00500	1	12/24/2018 18:42	WG1215610
Chlorobenzene	ND		0.00250	1	12/24/2018 18:42	WG1215610
Chlorodibromomethane	ND		0.00250	1	12/24/2018 18:42	WG1215610
Chloroethane	ND		0.00500	1	12/24/2018 18:42	WG1215610
Chloroform	ND		0.00250	1	12/24/2018 18:42	WG1215610
Chloromethane	ND		0.0125	1	12/24/2018 18:42	WG1215610
2-Chlorotoluene	ND		0.00250	1	12/24/2018 18:42	WG1215610
4-Chlorotoluene	ND		0.00500	1	12/24/2018 18:42	WG1215610
1,2-Dibromo-3-Chloropropane	ND		0.0250	1	12/24/2018 18:42	WG1215610
1,2-Dibromoethane	ND		0.00250	1	12/24/2018 18:42	WG1215610
Dibromomethane	ND		0.00500	1	12/24/2018 18:42	WG1215610
1,2-Dichlorobenzene	ND		0.00500	1	12/24/2018 18:42	WG1215610
1,3-Dichlorobenzene	ND		0.00500	1	12/24/2018 18:42	WG1215610
1,4-Dichlorobenzene	ND		0.00500	1	12/24/2018 18:42	WG1215610
Dichlorodifluoromethane	ND		0.00250	1	12/24/2018 18:42	WG1215610
1,1-Dichloroethane	ND		0.00250	1	12/24/2018 18:42	WG1215610
1,2-Dichloroethane	ND		0.00250	1	12/24/2018 18:42	WG1215610

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 8260B

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
1,1-Dichloroethene	ND		0.00250	1	12/24/2018 18:42	WG1215610
cis-1,2-Dichloroethene	0.0667		0.00250	1	12/24/2018 18:42	WG1215610
trans-1,2-Dichloroethene	ND		0.00500	1	12/24/2018 18:42	WG1215610
1,2-Dichloropropane	ND		0.00500	1	12/24/2018 18:42	WG1215610
1,1-Dichloropropene	ND		0.00250	1	12/24/2018 18:42	WG1215610
1,3-Dichloropropane	ND		0.00500	1	12/24/2018 18:42	WG1215610
cis-1,3-Dichloropropene	ND		0.00250	1	12/24/2018 18:42	WG1215610
trans-1,3-Dichloropropene	ND		0.00500	1	12/24/2018 18:42	WG1215610
2,2-Dichloropropane	ND		0.00250	1	12/24/2018 18:42	WG1215610
Di-isopropyl ether	ND		0.00100	1	12/24/2018 18:42	WG1215610
Ethylbenzene	ND		0.00250	1	12/24/2018 18:42	WG1215610
Hexachloro-1,3-butadiene	ND		0.0250	1	12/24/2018 18:42	WG1215610
Isopropylbenzene	ND	J4	0.00250	1	12/24/2018 18:42	WG1215610
p-Isopropyltoluene	ND		0.00500	1	12/24/2018 18:42	WG1215610
2-Butanone (MEK)	ND		0.0250	1	12/24/2018 18:42	WG1215610
Methylene Chloride	ND		0.0250	1	12/24/2018 18:42	WG1215610
4-Methyl-2-pentanone (MIBK)	ND		0.0250	1	12/24/2018 18:42	WG1215610
Methyl tert-butyl ether	ND		0.00100	1	12/24/2018 18:42	WG1215610
Naphthalene	ND		0.0125	1	12/24/2018 18:42	WG1215610
n-Propylbenzene	ND		0.00500	1	12/24/2018 18:42	WG1215610
Styrene	ND		0.0125	1	12/24/2018 18:42	WG1215610
1,1,1,2-Tetrachloroethane	ND		0.00250	1	12/24/2018 18:42	WG1215610
1,1,2,2-Tetrachloroethane	ND		0.00250	1	12/24/2018 18:42	WG1215610
1,1,2-Trichlorotrifluoroethane	ND		0.00250	1	12/24/2018 18:42	WG1215610
Tetrachloroethene	ND		0.00250	1	12/24/2018 18:42	WG1215610
Toluene	ND		0.00500	1	12/24/2018 18:42	WG1215610
1,2,3-Trichlorobenzene	ND		0.00250	1	12/24/2018 18:42	WG1215610
1,2,4-Trichlorobenzene	ND		0.0125	1	12/24/2018 18:42	WG1215610
1,1,1-Trichloroethane	ND		0.00250	1	12/24/2018 18:42	WG1215610
1,1,2-Trichloroethane	ND		0.00250	1	12/24/2018 18:42	WG1215610
Trichloroethene	ND		0.00100	1	12/24/2018 18:42	WG1215610
Trichlorofluoromethane	ND		0.00250	1	12/24/2018 18:42	WG1215610
1,2,3-Trichloropropane	ND		0.0125	1	12/24/2018 18:42	WG1215610
1,2,4-Trimethylbenzene	ND		0.00500	1	12/24/2018 18:42	WG1215610
1,2,3-Trimethylbenzene	ND		0.00500	1	12/24/2018 18:42	WG1215610
1,3,5-Trimethylbenzene	ND		0.00500	1	12/24/2018 18:42	WG1215610
Vinyl chloride	ND		0.00250	1	12/24/2018 18:42	WG1215610
Xylenes, Total	ND		0.00650	1	12/24/2018 18:42	WG1215610
(S) Toluene-d8	105		75.0-131		12/24/2018 18:42	WG1215610
(S) Dibromofluoromethane	100		65.0-129		12/24/2018 18:42	WG1215610
(S) 4-Bromofluorobenzene	103		67.0-138		12/24/2018 18:42	WG1215610

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

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	ND		4.00	1	12/28/2018 10:00	WG1215652
(S) o-Terphenyl	81.9		18.0-148		12/28/2018 10:00	WG1215652

Semi Volatile Organic Compounds (GC/MS) by Method 8270C

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Acenaphthene	ND		0.0333	1	12/24/2018 23:52	WG1214108
Acenaphthylene	ND		0.0333	1	12/24/2018 23:52	WG1214108
Anthracene	ND		0.0333	1	12/24/2018 23:52	WG1214108
Benzo(a)anthracene	ND		0.0333	1	12/24/2018 23:52	WG1214108



Collected date/time: 12/17/18 12:53

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Semi Volatile Organic Compounds (GC/MS) by Method 8270C

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Benzo(b)fluoranthene	ND		0.0333	1	12/24/2018 23:52	WG1214108
Benzo(k)fluoranthene	ND		0.0333	1	12/24/2018 23:52	WG1214108
Benzo(g,h,i)perylene	ND		0.0333	1	12/24/2018 23:52	WG1214108
Benzo(a)pyrene	ND		0.0333	1	12/24/2018 23:52	WG1214108
Bis(2-chlorethoxy)methane	ND		0.333	1	12/24/2018 23:52	WG1214108
Bis(2-chloroethyl)ether	ND		0.333	1	12/24/2018 23:52	WG1214108
Bis(2-chloroisopropyl)ether	ND		0.333	1	12/24/2018 23:52	WG1214108
4-Bromophenyl-phenylether	ND		0.333	1	12/24/2018 23:52	WG1214108
2-Chloronaphthalene	ND		0.0333	1	12/24/2018 23:52	WG1214108
4-Chlorophenyl-phenylether	ND		0.333	1	12/24/2018 23:52	WG1214108
Chrysene	ND		0.0333	1	12/24/2018 23:52	WG1214108
Dibenz(a,h)anthracene	ND		0.0333	1	12/24/2018 23:52	WG1214108
3,3-Dichlorobenzidine	ND		0.333	1	12/24/2018 23:52	WG1214108
2,4-Dinitrotoluene	ND		0.333	1	12/24/2018 23:52	WG1214108
2,6-Dinitrotoluene	ND		0.333	1	12/24/2018 23:52	WG1214108
Fluoranthene	ND		0.0333	1	12/24/2018 23:52	WG1214108
Fluorene	ND		0.0333	1	12/24/2018 23:52	WG1214108
Hexachlorobenzene	ND		0.333	1	12/24/2018 23:52	WG1214108
Hexachloro-1,3-butadiene	ND		0.333	1	12/24/2018 23:52	WG1214108
Hexachlorocyclopentadiene	ND		0.333	1	12/24/2018 23:52	WG1214108
Hexachloroethane	ND		0.333	1	12/24/2018 23:52	WG1214108
Indeno(1,2,3-cd)pyrene	ND		0.0333	1	12/24/2018 23:52	WG1214108
Isophorone	ND		0.333	1	12/24/2018 23:52	WG1214108
Naphthalene	ND		0.0333	1	12/24/2018 23:52	WG1214108
Nitrobenzene	ND		0.333	1	12/24/2018 23:52	WG1214108
n-Nitrosodimethylamine	ND		0.333	1	12/24/2018 23:52	WG1214108
n-Nitrosodiphenylamine	ND		0.333	1	12/24/2018 23:52	WG1214108
n-Nitrosodi-n-propylamine	ND		0.333	1	12/24/2018 23:52	WG1214108
Phenanthrene	ND		0.0333	1	12/24/2018 23:52	WG1214108
Benzylbutyl phthalate	ND		0.333	1	12/24/2018 23:52	WG1214108
Bis(2-ethylhexyl)phthalate	ND		0.333	1	12/24/2018 23:52	WG1214108
Di-n-butyl phthalate	ND		0.333	1	12/24/2018 23:52	WG1214108
Diethyl phthalate	ND		0.333	1	12/24/2018 23:52	WG1214108
Dimethyl phthalate	ND		0.333	1	12/24/2018 23:52	WG1214108
Di-n-octyl phthalate	ND		0.333	1	12/24/2018 23:52	WG1214108
Pyrene	ND		0.0333	1	12/24/2018 23:52	WG1214108
1,2,4-Trichlorobenzene	ND		0.333	1	12/24/2018 23:52	WG1214108
4-Chloro-3-methylphenol	ND		0.333	1	12/24/2018 23:52	WG1214108
2-Chlorophenol	ND		0.333	1	12/24/2018 23:52	WG1214108
2,4-Dichlorophenol	ND		0.333	1	12/24/2018 23:52	WG1214108
2,4-Dimethylphenol	ND		0.333	1	12/24/2018 23:52	WG1214108
4,6-Dinitro-2-methylphenol	ND		0.333	1	12/24/2018 23:52	WG1214108
2,4-Dinitrophenol	ND		0.333	1	12/24/2018 23:52	WG1214108
2-Nitrophenol	ND		0.333	1	12/24/2018 23:52	WG1214108
4-Nitrophenol	ND		0.333	1	12/24/2018 23:52	WG1214108
Pentachlorophenol	ND		0.333	1	12/24/2018 23:52	WG1214108
Phenol	ND		0.333	1	12/24/2018 23:52	WG1214108
2,4,6-Trichlorophenol	ND		0.333	1	12/24/2018 23:52	WG1214108
(S) 2-Fluorophenol	56.7		12.0-120		12/24/2018 23:52	WG1214108
(S) Phenol-d5	48.8		10.0-120		12/24/2018 23:52	WG1214108
(S) Nitrobenzene-d5	49.7		10.0-122		12/24/2018 23:52	WG1214108
(S) 2-Fluorobiphenyl	48.4		15.0-120		12/24/2018 23:52	WG1214108
(S) 2,4,6-Tribromophenol	45.3		10.0-127		12/24/2018 23:52	WG1214108
(S) p-Terphenyl-d14	49.7		10.0-120		12/24/2018 23:52	WG1214108

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 date / time	Batch
Total Solids	75.4		1	12/21/2018 09:35	WG1214089

Mercury by Method 7471A

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Mercury	0.0240	<u>B</u>	0.0200	1	12/21/2018 10:31	WG1214206

Metals (ICP) by Method 6010B

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Arsenic	4.78		2.00	1	12/22/2018 15:40	WG1214050
Barium	130		0.500	1	12/22/2018 15:40	WG1214050
Cadmium	ND		0.500	1	12/22/2018 15:40	WG1214050
Chromium	11.5		1.00	1	12/22/2018 15:40	WG1214050
Lead	7.61		0.500	1	12/22/2018 15:40	WG1214050
Selenium	ND		2.00	1	12/22/2018 15:40	WG1214050
Silver	ND		1.00	1	12/22/2018 15:40	WG1214050

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	ND		0.100	1	12/27/2018 16:29	WG1214279
(S) a,a,a-Trifluorotoluene(FID)	93.0		77.0-120		12/27/2018 16:29	WG1214279

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

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Acetone	ND		0.0250	1	12/24/2018 19:01	WG1215610
Acrylonitrile	ND		0.0125	1	12/24/2018 19:01	WG1215610
Benzene	ND		0.00100	1	12/24/2018 19:01	WG1215610
Bromobenzene	ND		0.0125	1	12/24/2018 19:01	WG1215610
Bromodichloromethane	ND		0.00250	1	12/24/2018 19:01	WG1215610
Bromoform	ND		0.0250	1	12/24/2018 19:01	WG1215610
Bromomethane	ND		0.0125	1	12/24/2018 19:01	WG1215610
n-Butylbenzene	ND		0.0125	1	12/24/2018 19:01	WG1215610
sec-Butylbenzene	ND		0.0125	1	12/24/2018 19:01	WG1215610
tert-Butylbenzene	ND		0.00500	1	12/24/2018 19:01	WG1215610
Carbon tetrachloride	ND		0.00500	1	12/24/2018 19:01	WG1215610
Chlorobenzene	ND		0.00250	1	12/24/2018 19:01	WG1215610
Chlorodibromomethane	ND		0.00250	1	12/24/2018 19:01	WG1215610
Chloroethane	ND		0.00500	1	12/24/2018 19:01	WG1215610
Chloroform	ND		0.00250	1	12/24/2018 19:01	WG1215610
Chloromethane	ND		0.0125	1	12/24/2018 19:01	WG1215610
2-Chlorotoluene	ND		0.00250	1	12/24/2018 19:01	WG1215610
4-Chlorotoluene	ND		0.00500	1	12/24/2018 19:01	WG1215610
1,2-Dibromo-3-Chloropropane	ND		0.0250	1	12/24/2018 19:01	WG1215610
1,2-Dibromoethane	ND		0.00250	1	12/24/2018 19:01	WG1215610
Dibromomethane	ND		0.00500	1	12/24/2018 19:01	WG1215610
1,2-Dichlorobenzene	ND		0.00500	1	12/24/2018 19:01	WG1215610
1,3-Dichlorobenzene	ND		0.00500	1	12/24/2018 19:01	WG1215610
1,4-Dichlorobenzene	ND		0.00500	1	12/24/2018 19:01	WG1215610
Dichlorodifluoromethane	ND		0.00250	1	12/24/2018 19:01	WG1215610
1,1-Dichloroethane	ND		0.00250	1	12/24/2018 19:01	WG1215610
1,2-Dichloroethane	ND		0.00250	1	12/24/2018 19:01	WG1215610

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 8260B

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
1,1-Dichloroethene	ND		0.00250	1	12/24/2018 19:01	WG1215610
cis-1,2-Dichloroethene	ND		0.00250	1	12/24/2018 19:01	WG1215610
trans-1,2-Dichloroethene	ND		0.00500	1	12/24/2018 19:01	WG1215610
1,2-Dichloropropane	ND		0.00500	1	12/24/2018 19:01	WG1215610
1,1-Dichloropropene	ND		0.00250	1	12/24/2018 19:01	WG1215610
1,3-Dichloropropane	ND		0.00500	1	12/24/2018 19:01	WG1215610
cis-1,3-Dichloropropene	ND		0.00250	1	12/24/2018 19:01	WG1215610
trans-1,3-Dichloropropene	ND		0.00500	1	12/24/2018 19:01	WG1215610
2,2-Dichloropropane	ND		0.00250	1	12/24/2018 19:01	WG1215610
Di-isopropyl ether	ND		0.00100	1	12/24/2018 19:01	WG1215610
Ethylbenzene	ND		0.00250	1	12/24/2018 19:01	WG1215610
Hexachloro-1,3-butadiene	ND		0.0250	1	12/24/2018 19:01	WG1215610
Isopropylbenzene	ND	J4	0.00250	1	12/24/2018 19:01	WG1215610
p-Isopropyltoluene	ND		0.00500	1	12/24/2018 19:01	WG1215610
2-Butanone (MEK)	ND		0.0250	1	12/24/2018 19:01	WG1215610
Methylene Chloride	ND		0.0250	1	12/24/2018 19:01	WG1215610
4-Methyl-2-pentanone (MIBK)	ND		0.0250	1	12/24/2018 19:01	WG1215610
Methyl tert-butyl ether	ND		0.00100	1	12/24/2018 19:01	WG1215610
Naphthalene	ND		0.0125	1	12/24/2018 19:01	WG1215610
n-Propylbenzene	ND		0.00500	1	12/24/2018 19:01	WG1215610
Styrene	ND		0.0125	1	12/24/2018 19:01	WG1215610
1,1,1,2-Tetrachloroethane	ND		0.00250	1	12/24/2018 19:01	WG1215610
1,1,2,2-Tetrachloroethane	ND		0.00250	1	12/24/2018 19:01	WG1215610
1,1,2-Trichlorotrifluoroethane	ND		0.00250	1	12/24/2018 19:01	WG1215610
Tetrachloroethene	ND		0.00250	1	12/24/2018 19:01	WG1215610
Toluene	ND		0.00500	1	12/24/2018 19:01	WG1215610
1,2,3-Trichlorobenzene	ND		0.00250	1	12/24/2018 19:01	WG1215610
1,2,4-Trichlorobenzene	ND		0.0125	1	12/24/2018 19:01	WG1215610
1,1,1-Trichloroethane	ND		0.00250	1	12/24/2018 19:01	WG1215610
1,1,2-Trichloroethane	ND		0.00250	1	12/24/2018 19:01	WG1215610
Trichloroethene	ND		0.00100	1	12/24/2018 19:01	WG1215610
Trichlorofluoromethane	ND		0.00250	1	12/24/2018 19:01	WG1215610
1,2,3-Trichloropropane	ND		0.0125	1	12/24/2018 19:01	WG1215610
1,2,4-Trimethylbenzene	ND		0.00500	1	12/24/2018 19:01	WG1215610
1,2,3-Trimethylbenzene	ND		0.00500	1	12/24/2018 19:01	WG1215610
1,3,5-Trimethylbenzene	ND		0.00500	1	12/24/2018 19:01	WG1215610
Vinyl chloride	ND		0.00250	1	12/24/2018 19:01	WG1215610
Xylenes, Total	ND		0.00650	1	12/24/2018 19:01	WG1215610
(S) Toluene-d8	104		75.0-131		12/24/2018 19:01	WG1215610
(S) Dibromofluoromethane	101		65.0-129		12/24/2018 19:01	WG1215610
(S) 4-Bromofluorobenzene	104		67.0-138		12/24/2018 19:01	WG1215610

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

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	ND		4.00	1	12/28/2018 10:12	WG1215652
(S) o-Terphenyl	42.2		18.0-148		12/28/2018 10:12	WG1215652

Semi Volatile Organic Compounds (GC/MS) by Method 8270C

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Acenaphthene	ND		0.0333	1	12/25/2018 00:15	WG1214108
Acenaphthylene	ND		0.0333	1	12/25/2018 00:15	WG1214108
Anthracene	ND		0.0333	1	12/25/2018 00:15	WG1214108
Benzo(a)anthracene	ND		0.0333	1	12/25/2018 00:15	WG1214108



Collected date/time: 12/17/18 13:21

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Semi Volatile Organic Compounds (GC/MS) by Method 8270C

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Benzo(b)fluoranthene	ND		0.0333	1	12/25/2018 00:15	WG1214108
Benzo(k)fluoranthene	ND		0.0333	1	12/25/2018 00:15	WG1214108
Benzo(g,h,i)perylene	ND		0.0333	1	12/25/2018 00:15	WG1214108
Benzo(a)pyrene	ND		0.0333	1	12/25/2018 00:15	WG1214108
Bis(2-chlorethoxy)methane	ND		0.333	1	12/25/2018 00:15	WG1214108
Bis(2-chloroethyl)ether	ND		0.333	1	12/25/2018 00:15	WG1214108
Bis(2-chloroisopropyl)ether	ND		0.333	1	12/25/2018 00:15	WG1214108
4-Bromophenyl-phenylether	ND		0.333	1	12/25/2018 00:15	WG1214108
2-Chloronaphthalene	ND		0.0333	1	12/25/2018 00:15	WG1214108
4-Chlorophenyl-phenylether	ND		0.333	1	12/25/2018 00:15	WG1214108
Chrysene	ND		0.0333	1	12/25/2018 00:15	WG1214108
Dibenz(a,h)anthracene	ND		0.0333	1	12/25/2018 00:15	WG1214108
3,3-Dichlorobenzidine	ND		0.333	1	12/25/2018 00:15	WG1214108
2,4-Dinitrotoluene	ND		0.333	1	12/25/2018 00:15	WG1214108
2,6-Dinitrotoluene	ND		0.333	1	12/25/2018 00:15	WG1214108
Fluoranthene	ND		0.0333	1	12/25/2018 00:15	WG1214108
Fluorene	ND		0.0333	1	12/25/2018 00:15	WG1214108
Hexachlorobenzene	ND		0.333	1	12/25/2018 00:15	WG1214108
Hexachloro-1,3-butadiene	ND		0.333	1	12/25/2018 00:15	WG1214108
Hexachlorocyclopentadiene	ND		0.333	1	12/25/2018 00:15	WG1214108
Hexachloroethane	ND		0.333	1	12/25/2018 00:15	WG1214108
Indeno(1,2,3-cd)pyrene	ND		0.0333	1	12/25/2018 00:15	WG1214108
Isophorone	ND		0.333	1	12/25/2018 00:15	WG1214108
Naphthalene	ND		0.0333	1	12/25/2018 00:15	WG1214108
Nitrobenzene	ND		0.333	1	12/25/2018 00:15	WG1214108
n-Nitrosodimethylamine	ND		0.333	1	12/25/2018 00:15	WG1214108
n-Nitrosodiphenylamine	ND		0.333	1	12/25/2018 00:15	WG1214108
n-Nitrosodi-n-propylamine	ND		0.333	1	12/25/2018 00:15	WG1214108
Phenanthrene	ND		0.0333	1	12/25/2018 00:15	WG1214108
Benzylbutyl phthalate	ND		0.333	1	12/25/2018 00:15	WG1214108
Bis(2-ethylhexyl)phthalate	ND		0.333	1	12/25/2018 00:15	WG1214108
Di-n-butyl phthalate	ND		0.333	1	12/25/2018 00:15	WG1214108
Diethyl phthalate	ND		0.333	1	12/25/2018 00:15	WG1214108
Dimethyl phthalate	ND		0.333	1	12/25/2018 00:15	WG1214108
Di-n-octyl phthalate	ND		0.333	1	12/25/2018 00:15	WG1214108
Pyrene	ND		0.0333	1	12/25/2018 00:15	WG1214108
1,2,4-Trichlorobenzene	ND		0.333	1	12/25/2018 00:15	WG1214108
4-Chloro-3-methylphenol	ND		0.333	1	12/25/2018 00:15	WG1214108
2-Chlorophenol	ND		0.333	1	12/25/2018 00:15	WG1214108
2,4-Dichlorophenol	ND		0.333	1	12/25/2018 00:15	WG1214108
2,4-Dimethylphenol	ND		0.333	1	12/25/2018 00:15	WG1214108
4,6-Dinitro-2-methylphenol	ND		0.333	1	12/25/2018 00:15	WG1214108
2,4-Dinitrophenol	ND		0.333	1	12/25/2018 00:15	WG1214108
2-Nitrophenol	ND		0.333	1	12/25/2018 00:15	WG1214108
4-Nitrophenol	ND		0.333	1	12/25/2018 00:15	WG1214108
Pentachlorophenol	ND		0.333	1	12/25/2018 00:15	WG1214108
Phenol	ND		0.333	1	12/25/2018 00:15	WG1214108
2,4,6-Trichlorophenol	ND		0.333	1	12/25/2018 00:15	WG1214108
(S) 2-Fluorophenol	58.8		12.0-120		12/25/2018 00:15	WG1214108
(S) Phenol-d5	51.4		10.0-120		12/25/2018 00:15	WG1214108
(S) Nitrobenzene-d5	52.7		10.0-122		12/25/2018 00:15	WG1214108
(S) 2-Fluorobiphenyl	52.4		15.0-120		12/25/2018 00:15	WG1214108
(S) 2,4,6-Tribromophenol	46.0		10.0-127		12/25/2018 00:15	WG1214108
(S) p-Terphenyl-d14	54.0		10.0-120		12/25/2018 00:15	WG1214108

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	72.7		1	12/21/2018 09:35	WG1214089

Mercury by Method 7471A

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Mercury	ND		0.0200	1	12/21/2018 10:02	WG1214206

Metals (ICP) by Method 6010B

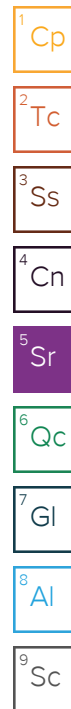
Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Arsenic	3.79		2.00	1	12/22/2018 15:43	WG1214050
Barium	125		0.500	1	12/22/2018 15:43	WG1214050
Cadmium	ND		0.500	1	12/22/2018 15:43	WG1214050
Chromium	10.3		1.00	1	12/22/2018 15:43	WG1214050
Lead	6.39		0.500	1	12/22/2018 15:43	WG1214050
Selenium	ND		2.00	1	12/22/2018 15:43	WG1214050
Silver	ND		1.00	1	12/22/2018 15:43	WG1214050

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
TPH (GC/FID) Low Fraction	ND		0.100	1	12/27/2018 16:53	WG1214279
(S) a,a,a-Trifluorotoluene(FID)	91.2		77.0-120		12/27/2018 16:53	WG1214279

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

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Acetone	ND		0.0250	1	12/24/2018 19:20	WG1215610
Acrylonitrile	ND		0.0125	1	12/24/2018 19:20	WG1215610
Benzene	ND		0.00100	1	12/24/2018 19:20	WG1215610
Bromobenzene	ND		0.0125	1	12/24/2018 19:20	WG1215610
Bromodichloromethane	ND		0.00250	1	12/24/2018 19:20	WG1215610
Bromoform	ND		0.0250	1	12/24/2018 19:20	WG1215610
Bromomethane	ND		0.0125	1	12/24/2018 19:20	WG1215610
n-Butylbenzene	ND		0.0125	1	12/24/2018 19:20	WG1215610
sec-Butylbenzene	ND		0.0125	1	12/24/2018 19:20	WG1215610
tert-Butylbenzene	ND		0.00500	1	12/24/2018 19:20	WG1215610
Carbon tetrachloride	ND		0.00500	1	12/24/2018 19:20	WG1215610
Chlorobenzene	ND		0.00250	1	12/24/2018 19:20	WG1215610
Chlorodibromomethane	ND		0.00250	1	12/24/2018 19:20	WG1215610
Chloroethane	ND		0.00500	1	12/24/2018 19:20	WG1215610
Chloroform	ND		0.00250	1	12/24/2018 19:20	WG1215610
Chloromethane	ND		0.0125	1	12/24/2018 19:20	WG1215610
2-Chlorotoluene	ND		0.00250	1	12/24/2018 19:20	WG1215610
4-Chlorotoluene	ND		0.00500	1	12/24/2018 19:20	WG1215610
1,2-Dibromo-3-Chloropropane	ND		0.0250	1	12/24/2018 19:20	WG1215610
1,2-Dibromoethane	ND		0.00250	1	12/24/2018 19:20	WG1215610
Dibromomethane	ND		0.00500	1	12/24/2018 19:20	WG1215610
1,2-Dichlorobenzene	ND		0.00500	1	12/24/2018 19:20	WG1215610
1,3-Dichlorobenzene	ND		0.00500	1	12/24/2018 19:20	WG1215610
1,4-Dichlorobenzene	ND		0.00500	1	12/24/2018 19:20	WG1215610
Dichlorodifluoromethane	ND		0.00250	1	12/24/2018 19:20	WG1215610
1,1-Dichloroethane	ND		0.00250	1	12/24/2018 19:20	WG1215610
1,2-Dichloroethane	ND		0.00250	1	12/24/2018 19:20	WG1215610





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

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
1,1-Dichloroethene	ND		0.00250	1	12/24/2018 19:20	WG1215610
cis-1,2-Dichloroethene	ND		0.00250	1	12/24/2018 19:20	WG1215610
trans-1,2-Dichloroethene	ND		0.00500	1	12/24/2018 19:20	WG1215610
1,2-Dichloropropane	ND		0.00500	1	12/24/2018 19:20	WG1215610
1,1-Dichloropropene	ND		0.00250	1	12/24/2018 19:20	WG1215610
1,3-Dichloropropane	ND		0.00500	1	12/24/2018 19:20	WG1215610
cis-1,3-Dichloropropene	ND		0.00250	1	12/24/2018 19:20	WG1215610
trans-1,3-Dichloropropene	ND		0.00500	1	12/24/2018 19:20	WG1215610
2,2-Dichloropropane	ND		0.00250	1	12/24/2018 19:20	WG1215610
Di-isopropyl ether	ND		0.00100	1	12/24/2018 19:20	WG1215610
Ethylbenzene	ND		0.00250	1	12/24/2018 19:20	WG1215610
Hexachloro-1,3-butadiene	ND		0.0250	1	12/24/2018 19:20	WG1215610
Isopropylbenzene	ND	J4	0.00250	1	12/24/2018 19:20	WG1215610
p-Isopropyltoluene	ND		0.00500	1	12/24/2018 19:20	WG1215610
2-Butanone (MEK)	ND		0.0250	1	12/24/2018 19:20	WG1215610
Methylene Chloride	ND		0.0250	1	12/24/2018 19:20	WG1215610
4-Methyl-2-pentanone (MIBK)	ND		0.0250	1	12/24/2018 19:20	WG1215610
Methyl tert-butyl ether	ND		0.00100	1	12/24/2018 19:20	WG1215610
Naphthalene	ND		0.0125	1	12/24/2018 19:20	WG1215610
n-Propylbenzene	ND		0.00500	1	12/24/2018 19:20	WG1215610
Styrene	ND		0.0125	1	12/24/2018 19:20	WG1215610
1,1,1,2-Tetrachloroethane	ND		0.00250	1	12/24/2018 19:20	WG1215610
1,1,2,2-Tetrachloroethane	ND		0.00250	1	12/24/2018 19:20	WG1215610
1,1,2-Trichlorotrifluoroethane	ND		0.00250	1	12/24/2018 19:20	WG1215610
Tetrachloroethene	ND		0.00250	1	12/24/2018 19:20	WG1215610
Toluene	ND		0.00500	1	12/24/2018 19:20	WG1215610
1,2,3-Trichlorobenzene	ND		0.00250	1	12/24/2018 19:20	WG1215610
1,2,4-Trichlorobenzene	ND		0.0125	1	12/24/2018 19:20	WG1215610
1,1,1-Trichloroethane	ND		0.00250	1	12/24/2018 19:20	WG1215610
1,1,2-Trichloroethane	ND		0.00250	1	12/24/2018 19:20	WG1215610
Trichloroethene	ND		0.00100	1	12/24/2018 19:20	WG1215610
Trichlorofluoromethane	ND		0.00250	1	12/24/2018 19:20	WG1215610
1,2,3-Trichloropropane	ND		0.0125	1	12/24/2018 19:20	WG1215610
1,2,4-Trimethylbenzene	ND		0.00500	1	12/24/2018 19:20	WG1215610
1,2,3-Trimethylbenzene	ND		0.00500	1	12/24/2018 19:20	WG1215610
1,3,5-Trimethylbenzene	ND		0.00500	1	12/24/2018 19:20	WG1215610
Vinyl chloride	ND		0.00250	1	12/24/2018 19:20	WG1215610
Xylenes, Total	ND		0.00650	1	12/24/2018 19:20	WG1215610
(S) Toluene-d8	103		75.0-131		12/24/2018 19:20	WG1215610
(S) Dibromofluoromethane	103		65.0-129		12/24/2018 19:20	WG1215610
(S) 4-Bromofluorobenzene	98.8		67.0-138		12/24/2018 19:20	WG1215610

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

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	ND		4.00	1	12/28/2018 10:24	WG1215652
(S) o-Terphenyl	77.5		18.0-148		12/28/2018 10:24	WG1215652

Semi Volatile Organic Compounds (GC/MS) by Method 8270C

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Acenaphthene	ND		0.0333	1	12/25/2018 00:38	WG1214108
Acenaphthylene	ND		0.0333	1	12/25/2018 00:38	WG1214108
Anthracene	ND		0.0333	1	12/25/2018 00:38	WG1214108
Benzo(a)anthracene	ND		0.0333	1	12/25/2018 00:38	WG1214108



Collected date/time: 12/17/18 13:26

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Semi Volatile Organic Compounds (GC/MS) by Method 8270C

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Benzo(b)fluoranthene	ND		0.0333	1	12/25/2018 00:38	WG1214108
Benzo(k)fluoranthene	ND		0.0333	1	12/25/2018 00:38	WG1214108
Benzo(g,h,i)perylene	ND		0.0333	1	12/25/2018 00:38	WG1214108
Benzo(a)pyrene	ND		0.0333	1	12/25/2018 00:38	WG1214108
Bis(2-chlorethoxy)methane	ND		0.333	1	12/25/2018 00:38	WG1214108
Bis(2-chloroethyl)ether	ND		0.333	1	12/25/2018 00:38	WG1214108
Bis(2-chloroisopropyl)ether	ND		0.333	1	12/25/2018 00:38	WG1214108
4-Bromophenyl-phenylether	ND		0.333	1	12/25/2018 00:38	WG1214108
2-Chloronaphthalene	ND		0.0333	1	12/25/2018 00:38	WG1214108
4-Chlorophenyl-phenylether	ND		0.333	1	12/25/2018 00:38	WG1214108
Chrysene	ND		0.0333	1	12/25/2018 00:38	WG1214108
Dibenz(a,h)anthracene	ND		0.0333	1	12/25/2018 00:38	WG1214108
3,3-Dichlorobenzidine	ND		0.333	1	12/25/2018 00:38	WG1214108
2,4-Dinitrotoluene	ND		0.333	1	12/25/2018 00:38	WG1214108
2,6-Dinitrotoluene	ND		0.333	1	12/25/2018 00:38	WG1214108
Fluoranthene	ND		0.0333	1	12/25/2018 00:38	WG1214108
Fluorene	ND		0.0333	1	12/25/2018 00:38	WG1214108
Hexachlorobenzene	ND		0.333	1	12/25/2018 00:38	WG1214108
Hexachloro-1,3-butadiene	ND		0.333	1	12/25/2018 00:38	WG1214108
Hexachlorocyclopentadiene	ND		0.333	1	12/25/2018 00:38	WG1214108
Hexachloroethane	ND		0.333	1	12/25/2018 00:38	WG1214108
Indeno(1,2,3-cd)pyrene	ND		0.0333	1	12/25/2018 00:38	WG1214108
Isophorone	ND		0.333	1	12/25/2018 00:38	WG1214108
Naphthalene	ND		0.0333	1	12/25/2018 00:38	WG1214108
Nitrobenzene	ND		0.333	1	12/25/2018 00:38	WG1214108
n-Nitrosodimethylamine	ND		0.333	1	12/25/2018 00:38	WG1214108
n-Nitrosodiphenylamine	ND		0.333	1	12/25/2018 00:38	WG1214108
n-Nitrosodi-n-propylamine	ND		0.333	1	12/25/2018 00:38	WG1214108
Phenanthrene	ND		0.0333	1	12/25/2018 00:38	WG1214108
Benzylbutyl phthalate	ND		0.333	1	12/25/2018 00:38	WG1214108
Bis(2-ethylhexyl)phthalate	ND		0.333	1	12/25/2018 00:38	WG1214108
Di-n-butyl phthalate	ND		0.333	1	12/25/2018 00:38	WG1214108
Diethyl phthalate	ND		0.333	1	12/25/2018 00:38	WG1214108
Dimethyl phthalate	ND		0.333	1	12/25/2018 00:38	WG1214108
Di-n-octyl phthalate	ND		0.333	1	12/25/2018 00:38	WG1214108
Pyrene	ND		0.0333	1	12/25/2018 00:38	WG1214108
1,2,4-Trichlorobenzene	ND		0.333	1	12/25/2018 00:38	WG1214108
4-Chloro-3-methylphenol	ND		0.333	1	12/25/2018 00:38	WG1214108
2-Chlorophenol	ND		0.333	1	12/25/2018 00:38	WG1214108
2,4-Dichlorophenol	ND		0.333	1	12/25/2018 00:38	WG1214108
2,4-Dimethylphenol	ND		0.333	1	12/25/2018 00:38	WG1214108
4,6-Dinitro-2-methylphenol	ND		0.333	1	12/25/2018 00:38	WG1214108
2,4-Dinitrophenol	ND		0.333	1	12/25/2018 00:38	WG1214108
2-Nitrophenol	ND		0.333	1	12/25/2018 00:38	WG1214108
4-Nitrophenol	ND		0.333	1	12/25/2018 00:38	WG1214108
Pentachlorophenol	ND		0.333	1	12/25/2018 00:38	WG1214108
Phenol	ND		0.333	1	12/25/2018 00:38	WG1214108
2,4,6-Trichlorophenol	ND		0.333	1	12/25/2018 00:38	WG1214108
(S) 2-Fluorophenol	56.2		12.0-120		12/25/2018 00:38	WG1214108
(S) Phenol-d5	48.4		10.0-120		12/25/2018 00:38	WG1214108
(S) Nitrobenzene-d5	48.6		10.0-122		12/25/2018 00:38	WG1214108
(S) 2-Fluorobiphenyl	48.2		15.0-120		12/25/2018 00:38	WG1214108
(S) 2,4,6-Tribromophenol	42.7		10.0-127		12/25/2018 00:38	WG1214108
(S) p-Terphenyl-d14	48.9		10.0-120		12/25/2018 00:38	WG1214108

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

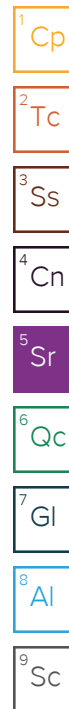


Collected date/time: 12/17/18 00:00

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

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
Acetone	ND		0.0500	1	12/21/2018 04:22	WG1214328
Acrolein	ND	J4	0.0500	1	12/21/2018 04:22	WG1214328
Acrylonitrile	ND		0.0100	1	12/21/2018 04:22	WG1214328
Benzene	ND		0.00100	1	12/21/2018 04:22	WG1214328
Bromobenzene	ND		0.00100	1	12/21/2018 04:22	WG1214328
Bromodichloromethane	ND		0.00100	1	12/21/2018 04:22	WG1214328
Bromoform	ND		0.00100	1	12/21/2018 04:22	WG1214328
Bromomethane	ND		0.00500	1	12/21/2018 04:22	WG1214328
n-Butylbenzene	ND		0.00100	1	12/21/2018 04:22	WG1214328
sec-Butylbenzene	ND		0.00100	1	12/21/2018 04:22	WG1214328
tert-Butylbenzene	ND		0.00100	1	12/21/2018 04:22	WG1214328
Carbon tetrachloride	ND		0.00100	1	12/21/2018 04:22	WG1214328
Chlorobenzene	ND		0.00100	1	12/21/2018 04:22	WG1214328
Chlorodibromomethane	ND		0.00100	1	12/21/2018 04:22	WG1214328
Chloroethane	ND		0.00500	1	12/21/2018 04:22	WG1214328
Chloroform	ND		0.00500	1	12/21/2018 04:22	WG1214328
Chloromethane	ND		0.00250	1	12/21/2018 04:22	WG1214328
2-Chlorotoluene	ND		0.00100	1	12/21/2018 04:22	WG1214328
4-Chlorotoluene	ND		0.00100	1	12/21/2018 04:22	WG1214328
1,2-Dibromo-3-Chloropropane	ND		0.00500	1	12/21/2018 04:22	WG1214328
1,2-Dibromoethane	ND		0.00100	1	12/21/2018 04:22	WG1214328
Dibromomethane	ND		0.00100	1	12/21/2018 04:22	WG1214328
1,2-Dichlorobenzene	ND		0.00100	1	12/21/2018 04:22	WG1214328
1,3-Dichlorobenzene	ND		0.00100	1	12/21/2018 04:22	WG1214328
1,4-Dichlorobenzene	ND		0.00100	1	12/21/2018 04:22	WG1214328
Dichlorodifluoromethane	ND		0.00500	1	12/21/2018 04:22	WG1214328
1,1-Dichloroethane	ND		0.00100	1	12/21/2018 04:22	WG1214328
1,2-Dichloroethane	ND		0.00100	1	12/21/2018 04:22	WG1214328
1,1-Dichloroethene	ND		0.00100	1	12/21/2018 04:22	WG1214328
cis-1,2-Dichloroethene	ND		0.00100	1	12/21/2018 04:22	WG1214328
trans-1,2-Dichloroethene	ND		0.00100	1	12/21/2018 04:22	WG1214328
1,2-Dichloropropane	ND		0.00100	1	12/21/2018 04:22	WG1214328
1,1-Dichloropropene	ND		0.00100	1	12/21/2018 04:22	WG1214328
1,3-Dichloropropane	ND		0.00100	1	12/21/2018 04:22	WG1214328
cis-1,3-Dichloropropene	ND		0.00100	1	12/21/2018 04:22	WG1214328
trans-1,3-Dichloropropene	ND		0.00100	1	12/21/2018 04:22	WG1214328
2,2-Dichloropropane	ND		0.00100	1	12/21/2018 04:22	WG1214328
Di-isopropyl ether	ND		0.00100	1	12/21/2018 04:22	WG1214328
Ethylbenzene	ND		0.00100	1	12/21/2018 04:22	WG1214328
Hexachloro-1,3-butadiene	ND		0.00100	1	12/21/2018 04:22	WG1214328
Isopropylbenzene	ND		0.00100	1	12/21/2018 04:22	WG1214328
p-Isopropyltoluene	ND		0.00100	1	12/21/2018 04:22	WG1214328
2-Butanone (MEK)	ND		0.0100	1	12/21/2018 04:22	WG1214328
Methylene Chloride	ND		0.00500	1	12/21/2018 04:22	WG1214328
4-Methyl-2-pentanone (MIBK)	ND		0.0100	1	12/21/2018 04:22	WG1214328
Methyl tert-butyl ether	ND		0.00100	1	12/21/2018 04:22	WG1214328
Naphthalene	ND		0.00500	1	12/21/2018 04:22	WG1214328
n-Propylbenzene	ND		0.00100	1	12/21/2018 04:22	WG1214328
Styrene	ND		0.00100	1	12/21/2018 04:22	WG1214328
1,1,1,2-Tetrachloroethane	ND		0.00100	1	12/21/2018 04:22	WG1214328
1,1,2,2-Tetrachloroethane	ND		0.00100	1	12/21/2018 04:22	WG1214328
1,1,2-Trichlorotrifluoroethane	ND		0.00100	1	12/21/2018 04:22	WG1214328
Tetrachloroethene	ND		0.00100	1	12/21/2018 04:22	WG1214328
Toluene	ND		0.00100	1	12/21/2018 04:22	WG1214328
1,2,3-Trichlorobenzene	ND		0.00100	1	12/21/2018 04:22	WG1214328
1,2,4-Trichlorobenzene	ND		0.00100	1	12/21/2018 04:22	WG1214328





Collected date/time: 12/17/18 00:00

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

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
1,1,1-Trichloroethane	ND		0.00100	1	12/21/2018 04:22	WG1214328
1,1,2-Trichloroethane	ND		0.00100	1	12/21/2018 04:22	WG1214328
Trichloroethene	ND		0.00100	1	12/21/2018 04:22	WG1214328
Trichlorofluoromethane	ND		0.00500	1	12/21/2018 04:22	WG1214328
1,2,3-Trichloropropane	ND		0.00250	1	12/21/2018 04:22	WG1214328
1,2,4-Trimethylbenzene	ND		0.00100	1	12/21/2018 04:22	WG1214328
1,2,3-Trimethylbenzene	ND		0.00100	1	12/21/2018 04:22	WG1214328
1,3,5-Trimethylbenzene	ND		0.00100	1	12/21/2018 04:22	WG1214328
Vinyl chloride	ND		0.00100	1	12/21/2018 04:22	WG1214328
Xylenes, Total	ND		0.00300	1	12/21/2018 04:22	WG1214328
(S) Toluene-d8	107		80.0-120		12/21/2018 04:22	WG1214328
(S) Dibromofluoromethane	85.8		75.0-120		12/21/2018 04:22	WG1214328
(S) 4-Bromofluorobenzene	101		77.0-126		12/21/2018 04:22	WG1214328

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	76.3		1	12/21/2018 09:35	WG1214089

Mercury by Method 7471A

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Mercury	ND		0.0200	1	12/21/2018 10:33	WG1214206

Metals (ICP) by Method 6010B

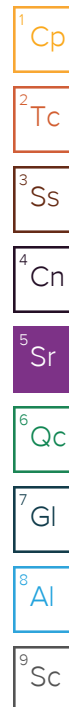
Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Arsenic	3.03		2.00	1	12/22/2018 15:45	WG1214050
Barium	94.7		0.500	1	12/22/2018 15:45	WG1214050
Cadmium	ND		0.500	1	12/22/2018 15:45	WG1214050
Chromium	9.38		1.00	1	12/22/2018 15:45	WG1214050
Lead	5.84		0.500	1	12/22/2018 15:45	WG1214050
Selenium	ND		2.00	1	12/22/2018 15:45	WG1214050
Silver	ND		1.00	1	12/22/2018 15:45	WG1214050

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
TPH (GC/FID) Low Fraction	ND		0.100	1	12/27/2018 13:59	WG1216687
(S) a,a,a-Trifluorotoluene(FID)	100		77.0-120		12/27/2018 13:59	WG1216687

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

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Acetone	ND		0.0250	1	12/24/2018 19:40	WG1215610
Acrylonitrile	ND		0.0125	1	12/24/2018 19:40	WG1215610
Benzene	ND		0.00100	1	12/24/2018 19:40	WG1215610
Bromobenzene	ND		0.0125	1	12/24/2018 19:40	WG1215610
Bromodichloromethane	ND		0.00250	1	12/24/2018 19:40	WG1215610
Bromoform	ND		0.0250	1	12/24/2018 19:40	WG1215610
Bromomethane	ND		0.0125	1	12/24/2018 19:40	WG1215610
n-Butylbenzene	ND		0.0125	1	12/24/2018 19:40	WG1215610
sec-Butylbenzene	ND		0.0125	1	12/24/2018 19:40	WG1215610
tert-Butylbenzene	ND		0.00500	1	12/24/2018 19:40	WG1215610
Carbon tetrachloride	ND		0.00500	1	12/24/2018 19:40	WG1215610
Chlorobenzene	ND		0.00250	1	12/24/2018 19:40	WG1215610
Chlorodibromomethane	ND		0.00250	1	12/24/2018 19:40	WG1215610
Chloroethane	ND		0.00500	1	12/24/2018 19:40	WG1215610
Chloroform	ND		0.00250	1	12/24/2018 19:40	WG1215610
Chloromethane	ND		0.0125	1	12/24/2018 19:40	WG1215610
2-Chlorotoluene	ND		0.00250	1	12/24/2018 19:40	WG1215610
4-Chlorotoluene	ND		0.00500	1	12/24/2018 19:40	WG1215610
1,2-Dibromo-3-Chloropropane	ND		0.0250	1	12/24/2018 19:40	WG1215610
1,2-Dibromoethane	ND		0.00250	1	12/24/2018 19:40	WG1215610
Dibromomethane	ND		0.00500	1	12/24/2018 19:40	WG1215610
1,2-Dichlorobenzene	ND		0.00500	1	12/24/2018 19:40	WG1215610
1,3-Dichlorobenzene	ND		0.00500	1	12/24/2018 19:40	WG1215610
1,4-Dichlorobenzene	ND		0.00500	1	12/24/2018 19:40	WG1215610
Dichlorodifluoromethane	ND		0.00250	1	12/24/2018 19:40	WG1215610
1,1-Dichloroethane	ND		0.00250	1	12/24/2018 19:40	WG1215610
1,2-Dichloroethane	ND		0.00250	1	12/24/2018 19:40	WG1215610





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

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
1,1-Dichloroethene	ND		0.00250	1	12/24/2018 19:40	WG1215610
cis-1,2-Dichloroethene	ND		0.00250	1	12/24/2018 19:40	WG1215610
trans-1,2-Dichloroethene	ND		0.00500	1	12/24/2018 19:40	WG1215610
1,2-Dichloropropane	ND		0.00500	1	12/24/2018 19:40	WG1215610
1,1-Dichloropropene	ND		0.00250	1	12/24/2018 19:40	WG1215610
1,3-Dichloropropane	ND		0.00500	1	12/24/2018 19:40	WG1215610
cis-1,3-Dichloropropene	ND		0.00250	1	12/24/2018 19:40	WG1215610
trans-1,3-Dichloropropene	ND		0.00500	1	12/24/2018 19:40	WG1215610
2,2-Dichloropropane	ND		0.00250	1	12/24/2018 19:40	WG1215610
Di-isopropyl ether	ND		0.00100	1	12/24/2018 19:40	WG1215610
Ethylbenzene	ND		0.00250	1	12/24/2018 19:40	WG1215610
Hexachloro-1,3-butadiene	ND		0.0250	1	12/24/2018 19:40	WG1215610
Isopropylbenzene	ND	J4	0.00250	1	12/24/2018 19:40	WG1215610
p-Isopropyltoluene	ND		0.00500	1	12/24/2018 19:40	WG1215610
2-Butanone (MEK)	ND		0.0250	1	12/24/2018 19:40	WG1215610
Methylene Chloride	ND		0.0250	1	12/24/2018 19:40	WG1215610
4-Methyl-2-pentanone (MIBK)	ND		0.0250	1	12/24/2018 19:40	WG1215610
Methyl tert-butyl ether	ND		0.00100	1	12/24/2018 19:40	WG1215610
Naphthalene	ND		0.0125	1	12/24/2018 19:40	WG1215610
n-Propylbenzene	ND		0.00500	1	12/24/2018 19:40	WG1215610
Styrene	ND		0.0125	1	12/24/2018 19:40	WG1215610
1,1,1,2-Tetrachloroethane	ND		0.00250	1	12/24/2018 19:40	WG1215610
1,1,2,2-Tetrachloroethane	ND		0.00250	1	12/24/2018 19:40	WG1215610
1,1,2-Trichlorotrifluoroethane	ND		0.00250	1	12/24/2018 19:40	WG1215610
Tetrachloroethene	ND		0.00250	1	12/24/2018 19:40	WG1215610
Toluene	ND		0.00500	1	12/24/2018 19:40	WG1215610
1,2,3-Trichlorobenzene	ND		0.00250	1	12/24/2018 19:40	WG1215610
1,2,4-Trichlorobenzene	ND		0.0125	1	12/24/2018 19:40	WG1215610
1,1,1-Trichloroethane	ND		0.00250	1	12/24/2018 19:40	WG1215610
1,1,2-Trichloroethane	ND		0.00250	1	12/24/2018 19:40	WG1215610
Trichloroethene	ND		0.00100	1	12/24/2018 19:40	WG1215610
Trichlorofluoromethane	ND		0.00250	1	12/24/2018 19:40	WG1215610
1,2,3-Trichloropropane	ND		0.0125	1	12/24/2018 19:40	WG1215610
1,2,4-Trimethylbenzene	ND		0.00500	1	12/24/2018 19:40	WG1215610
1,2,3-Trimethylbenzene	ND		0.00500	1	12/24/2018 19:40	WG1215610
1,3,5-Trimethylbenzene	ND		0.00500	1	12/24/2018 19:40	WG1215610
Vinyl chloride	ND		0.00250	1	12/24/2018 19:40	WG1215610
Xylenes, Total	ND		0.00650	1	12/24/2018 19:40	WG1215610
(S) Toluene-d8	104		75.0-131		12/24/2018 19:40	WG1215610
(S) Dibromofluoromethane	101		65.0-129		12/24/2018 19:40	WG1215610
(S) 4-Bromofluorobenzene	102		67.0-138		12/24/2018 19:40	WG1215610

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

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	ND		4.00	1	12/28/2018 10:36	WG1215652
(S) o-Terphenyl	60.1		18.0-148		12/28/2018 10:36	WG1215652

Semi Volatile Organic Compounds (GC/MS) by Method 8270C

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Acenaphthene	ND		0.0333	1	12/25/2018 01:01	WG1214108
Acenaphthylene	ND		0.0333	1	12/25/2018 01:01	WG1214108
Anthracene	ND		0.0333	1	12/25/2018 01:01	WG1214108
Benzo(a)anthracene	ND		0.0333	1	12/25/2018 01:01	WG1214108



Collected date/time: 12/17/18 13:43

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Semi Volatile Organic Compounds (GC/MS) by Method 8270C

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Benzo(b)fluoranthene	ND		0.0333	1	12/25/2018 01:01	WG1214108
Benzo(k)fluoranthene	ND		0.0333	1	12/25/2018 01:01	WG1214108
Benzo(g,h,i)perylene	ND		0.0333	1	12/25/2018 01:01	WG1214108
Benzo(a)pyrene	ND		0.0333	1	12/25/2018 01:01	WG1214108
Bis(2-chlorethoxy)methane	ND		0.333	1	12/25/2018 01:01	WG1214108
Bis(2-chloroethyl)ether	ND		0.333	1	12/25/2018 01:01	WG1214108
Bis(2-chloroisopropyl)ether	ND		0.333	1	12/25/2018 01:01	WG1214108
4-Bromophenyl-phenylether	ND		0.333	1	12/25/2018 01:01	WG1214108
2-Chloronaphthalene	ND		0.0333	1	12/25/2018 01:01	WG1214108
4-Chlorophenyl-phenylether	ND		0.333	1	12/25/2018 01:01	WG1214108
Chrysene	ND		0.0333	1	12/25/2018 01:01	WG1214108
Dibenz(a,h)anthracene	ND		0.0333	1	12/25/2018 01:01	WG1214108
3,3-Dichlorobenzidine	ND		0.333	1	12/25/2018 01:01	WG1214108
2,4-Dinitrotoluene	ND		0.333	1	12/25/2018 01:01	WG1214108
2,6-Dinitrotoluene	ND		0.333	1	12/25/2018 01:01	WG1214108
Fluoranthene	ND		0.0333	1	12/25/2018 01:01	WG1214108
Fluorene	ND		0.0333	1	12/25/2018 01:01	WG1214108
Hexachlorobenzene	ND		0.333	1	12/25/2018 01:01	WG1214108
Hexachloro-1,3-butadiene	ND		0.333	1	12/25/2018 01:01	WG1214108
Hexachlorocyclopentadiene	ND		0.333	1	12/25/2018 01:01	WG1214108
Hexachloroethane	ND		0.333	1	12/25/2018 01:01	WG1214108
Indeno(1,2,3-cd)pyrene	ND		0.0333	1	12/25/2018 01:01	WG1214108
Isophorone	ND		0.333	1	12/25/2018 01:01	WG1214108
Naphthalene	ND		0.0333	1	12/25/2018 01:01	WG1214108
Nitrobenzene	ND		0.333	1	12/25/2018 01:01	WG1214108
n-Nitrosodimethylamine	ND		0.333	1	12/25/2018 01:01	WG1214108
n-Nitrosodiphenylamine	ND		0.333	1	12/25/2018 01:01	WG1214108
n-Nitrosodi-n-propylamine	ND		0.333	1	12/25/2018 01:01	WG1214108
Phenanthrene	ND		0.0333	1	12/25/2018 01:01	WG1214108
Benzylbutyl phthalate	ND		0.333	1	12/25/2018 01:01	WG1214108
Bis(2-ethylhexyl)phthalate	ND		0.333	1	12/25/2018 01:01	WG1214108
Di-n-butyl phthalate	ND		0.333	1	12/25/2018 01:01	WG1214108
Diethyl phthalate	ND		0.333	1	12/25/2018 01:01	WG1214108
Dimethyl phthalate	ND		0.333	1	12/25/2018 01:01	WG1214108
Di-n-octyl phthalate	ND		0.333	1	12/25/2018 01:01	WG1214108
Pyrene	ND		0.0333	1	12/25/2018 01:01	WG1214108
1,2,4-Trichlorobenzene	ND		0.333	1	12/25/2018 01:01	WG1214108
4-Chloro-3-methylphenol	ND		0.333	1	12/25/2018 01:01	WG1214108
2-Chlorophenol	ND		0.333	1	12/25/2018 01:01	WG1214108
2,4-Dichlorophenol	ND		0.333	1	12/25/2018 01:01	WG1214108
2,4-Dimethylphenol	ND		0.333	1	12/25/2018 01:01	WG1214108
4,6-Dinitro-2-methylphenol	ND		0.333	1	12/25/2018 01:01	WG1214108
2,4-Dinitrophenol	ND		0.333	1	12/25/2018 01:01	WG1214108
2-Nitrophenol	ND		0.333	1	12/25/2018 01:01	WG1214108
4-Nitrophenol	ND		0.333	1	12/25/2018 01:01	WG1214108
Pentachlorophenol	ND		0.333	1	12/25/2018 01:01	WG1214108
Phenol	ND		0.333	1	12/25/2018 01:01	WG1214108
2,4,6-Trichlorophenol	ND		0.333	1	12/25/2018 01:01	WG1214108
(S) 2-Fluorophenol	64.7		12.0-120		12/25/2018 01:01	WG1214108
(S) Phenol-d5	55.8		10.0-120		12/25/2018 01:01	WG1214108
(S) Nitrobenzene-d5	57.8		10.0-122		12/25/2018 01:01	WG1214108
(S) 2-Fluorobiphenyl	56.9		15.0-120		12/25/2018 01:01	WG1214108
(S) 2,4,6-Tribromophenol	55.6		10.0-127		12/25/2018 01:01	WG1214108
(S) p-Terphenyl-d14	59.7		10.0-120		12/25/2018 01:01	WG1214108

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 date / time	Batch
Total Solids	75.2		1	12/21/2018 09:35	WG1214089

Mercury by Method 7471A

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Mercury	ND		0.0200	1	12/21/2018 10:36	WG1214206

Metals (ICP) by Method 6010B

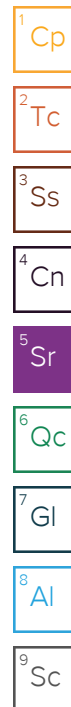
Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Arsenic	2.45		2.00	1	12/22/2018 15:48	WG1214050
Barium	132		0.500	1	12/22/2018 15:48	WG1214050
Cadmium	ND		0.500	1	12/22/2018 15:48	WG1214050
Chromium	8.97		1.00	1	12/22/2018 15:48	WG1214050
Lead	5.22		0.500	1	12/22/2018 15:48	WG1214050
Selenium	ND		2.00	1	12/22/2018 15:48	WG1214050
Silver	ND		1.00	1	12/22/2018 15:48	WG1214050

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	ND		0.100	1	12/27/2018 14:20	WG1216687
(S) a,a,a-Trifluorotoluene(FID)	101		77.0-120		12/27/2018 14:20	WG1216687

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

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Acetone	ND		0.0250	1	12/24/2018 19:59	WG1215610
Acrylonitrile	ND		0.0125	1	12/24/2018 19:59	WG1215610
Benzene	ND		0.00100	1	12/24/2018 19:59	WG1215610
Bromobenzene	ND		0.0125	1	12/24/2018 19:59	WG1215610
Bromodichloromethane	ND		0.00250	1	12/24/2018 19:59	WG1215610
Bromoform	ND		0.0250	1	12/24/2018 19:59	WG1215610
Bromomethane	ND		0.0125	1	12/24/2018 19:59	WG1215610
n-Butylbenzene	ND		0.0125	1	12/24/2018 19:59	WG1215610
sec-Butylbenzene	ND		0.0125	1	12/24/2018 19:59	WG1215610
tert-Butylbenzene	ND		0.00500	1	12/24/2018 19:59	WG1215610
Carbon tetrachloride	ND		0.00500	1	12/24/2018 19:59	WG1215610
Chlorobenzene	ND		0.00250	1	12/24/2018 19:59	WG1215610
Chlorodibromomethane	ND		0.00250	1	12/24/2018 19:59	WG1215610
Chloroethane	ND		0.00500	1	12/24/2018 19:59	WG1215610
Chloroform	ND		0.00250	1	12/24/2018 19:59	WG1215610
Chloromethane	ND		0.0125	1	12/24/2018 19:59	WG1215610
2-Chlorotoluene	ND		0.00250	1	12/24/2018 19:59	WG1215610
4-Chlorotoluene	ND		0.00500	1	12/24/2018 19:59	WG1215610
1,2-Dibromo-3-Chloropropane	ND		0.0250	1	12/24/2018 19:59	WG1215610
1,2-Dibromoethane	ND		0.00250	1	12/24/2018 19:59	WG1215610
Dibromomethane	ND		0.00500	1	12/24/2018 19:59	WG1215610
1,2-Dichlorobenzene	ND		0.00500	1	12/24/2018 19:59	WG1215610
1,3-Dichlorobenzene	ND		0.00500	1	12/24/2018 19:59	WG1215610
1,4-Dichlorobenzene	ND		0.00500	1	12/24/2018 19:59	WG1215610
Dichlorodifluoromethane	ND		0.00250	1	12/24/2018 19:59	WG1215610
1,1-Dichloroethane	ND		0.00250	1	12/24/2018 19:59	WG1215610
1,2-Dichloroethane	ND		0.00250	1	12/24/2018 19:59	WG1215610





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

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
1,1-Dichloroethene	ND		0.00250	1	12/24/2018 19:59	WG1215610
cis-1,2-Dichloroethene	ND		0.00250	1	12/24/2018 19:59	WG1215610
trans-1,2-Dichloroethene	ND		0.00500	1	12/24/2018 19:59	WG1215610
1,2-Dichloropropane	ND		0.00500	1	12/24/2018 19:59	WG1215610
1,1-Dichloropropene	ND		0.00250	1	12/24/2018 19:59	WG1215610
1,3-Dichloropropane	ND		0.00500	1	12/24/2018 19:59	WG1215610
cis-1,3-Dichloropropene	ND		0.00250	1	12/24/2018 19:59	WG1215610
trans-1,3-Dichloropropene	ND		0.00500	1	12/24/2018 19:59	WG1215610
2,2-Dichloropropane	ND		0.00250	1	12/24/2018 19:59	WG1215610
Di-isopropyl ether	ND		0.00100	1	12/24/2018 19:59	WG1215610
Ethylbenzene	ND		0.00250	1	12/24/2018 19:59	WG1215610
Hexachloro-1,3-butadiene	ND		0.0250	1	12/24/2018 19:59	WG1215610
Isopropylbenzene	ND	J4	0.00250	1	12/24/2018 19:59	WG1215610
p-Isopropyltoluene	ND		0.00500	1	12/24/2018 19:59	WG1215610
2-Butanone (MEK)	ND		0.0250	1	12/24/2018 19:59	WG1215610
Methylene Chloride	ND		0.0250	1	12/24/2018 19:59	WG1215610
4-Methyl-2-pentanone (MIBK)	ND		0.0250	1	12/24/2018 19:59	WG1215610
Methyl tert-butyl ether	ND		0.00100	1	12/24/2018 19:59	WG1215610
Naphthalene	ND		0.0125	1	12/24/2018 19:59	WG1215610
n-Propylbenzene	ND		0.00500	1	12/24/2018 19:59	WG1215610
Styrene	ND		0.0125	1	12/24/2018 19:59	WG1215610
1,1,1,2-Tetrachloroethane	ND		0.00250	1	12/24/2018 19:59	WG1215610
1,1,2,2-Tetrachloroethane	ND		0.00250	1	12/24/2018 19:59	WG1215610
1,1,2-Trichlorotrifluoroethane	ND		0.00250	1	12/24/2018 19:59	WG1215610
Tetrachloroethene	ND		0.00250	1	12/24/2018 19:59	WG1215610
Toluene	ND		0.00500	1	12/24/2018 19:59	WG1215610
1,2,3-Trichlorobenzene	ND		0.00250	1	12/24/2018 19:59	WG1215610
1,2,4-Trichlorobenzene	ND		0.0125	1	12/24/2018 19:59	WG1215610
1,1,1-Trichloroethane	ND		0.00250	1	12/24/2018 19:59	WG1215610
1,1,2-Trichloroethane	ND		0.00250	1	12/24/2018 19:59	WG1215610
Trichloroethene	ND		0.00100	1	12/24/2018 19:59	WG1215610
Trichlorofluoromethane	ND		0.00250	1	12/24/2018 19:59	WG1215610
1,2,3-Trichloropropane	ND		0.0125	1	12/24/2018 19:59	WG1215610
1,2,4-Trimethylbenzene	ND		0.00500	1	12/24/2018 19:59	WG1215610
1,2,3-Trimethylbenzene	ND		0.00500	1	12/24/2018 19:59	WG1215610
1,3,5-Trimethylbenzene	ND		0.00500	1	12/24/2018 19:59	WG1215610
Vinyl chloride	ND		0.00250	1	12/24/2018 19:59	WG1215610
Xylenes, Total	ND		0.00650	1	12/24/2018 19:59	WG1215610
(S) Toluene-d8	106		75.0-131		12/24/2018 19:59	WG1215610
(S) Dibromofluoromethane	107		65.0-129		12/24/2018 19:59	WG1215610
(S) 4-Bromofluorobenzene	101		67.0-138		12/24/2018 19:59	WG1215610

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

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	ND		4.00	1	12/28/2018 10:48	WG1215652
(S) o-Terphenyl	62.6		18.0-148		12/28/2018 10:48	WG1215652

Semi Volatile Organic Compounds (GC/MS) by Method 8270C

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Acenaphthene	ND		0.0333	1	12/25/2018 23:50	WG1214108
Acenaphthylene	ND		0.0333	1	12/25/2018 23:50	WG1214108
Anthracene	ND		0.0333	1	12/25/2018 23:50	WG1214108
Benzo(a)anthracene	ND		0.0333	1	12/25/2018 23:50	WG1214108



Collected date/time: 12/17/18 13:50

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Semi Volatile Organic Compounds (GC/MS) by Method 8270C

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Benzo(b)fluoranthene	ND		0.0333	1	12/25/2018 23:50	WG1214108
Benzo(k)fluoranthene	ND		0.0333	1	12/25/2018 23:50	WG1214108
Benzo(g,h,i)perylene	ND		0.0333	1	12/25/2018 23:50	WG1214108
Benzo(a)pyrene	ND		0.0333	1	12/25/2018 23:50	WG1214108
Bis(2-chlorethoxy)methane	ND		0.333	1	12/25/2018 23:50	WG1214108
Bis(2-chloroethyl)ether	ND		0.333	1	12/25/2018 23:50	WG1214108
Bis(2-chloroisopropyl)ether	ND		0.333	1	12/25/2018 23:50	WG1214108
4-Bromophenyl-phenylether	ND		0.333	1	12/25/2018 23:50	WG1214108
2-Chloronaphthalene	ND		0.0333	1	12/25/2018 23:50	WG1214108
4-Chlorophenyl-phenylether	ND		0.333	1	12/25/2018 23:50	WG1214108
Chrysene	ND		0.0333	1	12/25/2018 23:50	WG1214108
Dibenz(a,h)anthracene	ND		0.0333	1	12/25/2018 23:50	WG1214108
3,3-Dichlorobenzidine	ND		0.333	1	12/25/2018 23:50	WG1214108
2,4-Dinitrotoluene	ND		0.333	1	12/25/2018 23:50	WG1214108
2,6-Dinitrotoluene	ND		0.333	1	12/25/2018 23:50	WG1214108
Fluoranthene	ND		0.0333	1	12/25/2018 23:50	WG1214108
Fluorene	ND		0.0333	1	12/25/2018 23:50	WG1214108
Hexachlorobenzene	ND		0.333	1	12/25/2018 23:50	WG1214108
Hexachloro-1,3-butadiene	ND		0.333	1	12/25/2018 23:50	WG1214108
Hexachlorocyclopentadiene	ND		0.333	1	12/25/2018 23:50	WG1214108
Hexachloroethane	ND		0.333	1	12/25/2018 23:50	WG1214108
Indeno(1,2,3-cd)pyrene	ND		0.0333	1	12/25/2018 23:50	WG1214108
Isophorone	ND		0.333	1	12/25/2018 23:50	WG1214108
Naphthalene	ND		0.0333	1	12/25/2018 23:50	WG1214108
Nitrobenzene	ND		0.333	1	12/25/2018 23:50	WG1214108
n-Nitrosodimethylamine	ND		0.333	1	12/25/2018 23:50	WG1214108
n-Nitrosodiphenylamine	ND		0.333	1	12/25/2018 23:50	WG1214108
n-Nitrosodi-n-propylamine	ND		0.333	1	12/25/2018 23:50	WG1214108
Phenanthrene	ND		0.0333	1	12/25/2018 23:50	WG1214108
Benzylbutyl phthalate	ND		0.333	1	12/25/2018 23:50	WG1214108
Bis(2-ethylhexyl)phthalate	ND		0.333	1	12/25/2018 23:50	WG1214108
Di-n-butyl phthalate	ND		0.333	1	12/25/2018 23:50	WG1214108
Diethyl phthalate	ND		0.333	1	12/25/2018 23:50	WG1214108
Dimethyl phthalate	ND		0.333	1	12/25/2018 23:50	WG1214108
Di-n-octyl phthalate	ND		0.333	1	12/25/2018 23:50	WG1214108
Pyrene	ND		0.0333	1	12/25/2018 23:50	WG1214108
1,2,4-Trichlorobenzene	ND		0.333	1	12/25/2018 23:50	WG1214108
4-Chloro-3-methylphenol	ND		0.333	1	12/25/2018 23:50	WG1214108
2-Chlorophenol	ND		0.333	1	12/25/2018 23:50	WG1214108
2,4-Dichlorophenol	ND		0.333	1	12/25/2018 23:50	WG1214108
2,4-Dimethylphenol	ND		0.333	1	12/25/2018 23:50	WG1214108
4,6-Dinitro-2-methylphenol	ND		0.333	1	12/25/2018 23:50	WG1214108
2,4-Dinitrophenol	ND		0.333	1	12/25/2018 23:50	WG1214108
2-Nitrophenol	ND		0.333	1	12/25/2018 23:50	WG1214108
4-Nitrophenol	ND		0.333	1	12/25/2018 23:50	WG1214108
Pentachlorophenol	ND		0.333	1	12/25/2018 23:50	WG1214108
Phenol	ND		0.333	1	12/25/2018 23:50	WG1214108
2,4,6-Trichlorophenol	ND		0.333	1	12/25/2018 23:50	WG1214108
(S) 2-Fluorophenol	54.5		12.0-120		12/25/2018 23:50	WG1214108
(S) Phenol-d5	48.3		10.0-120		12/25/2018 23:50	WG1214108
(S) Nitrobenzene-d5	46.7		10.0-122		12/25/2018 23:50	WG1214108
(S) 2-Fluorobiphenyl	47.6		15.0-120		12/25/2018 23:50	WG1214108
(S) 2,4,6-Tribromophenol	36.5		10.0-127		12/25/2018 23:50	WG1214108
(S) p-Terphenyl-d14	48.2		10.0-120		12/25/2018 23:50	WG1214108

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 date / time	Batch
Total Solids	75.9		1	12/21/2018 09:35	WG1214089

Mercury by Method 7471A

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Mercury	0.0203	B	0.0200	1	12/21/2018 10:44	WG1214206

Metals (ICP) by Method 6010B

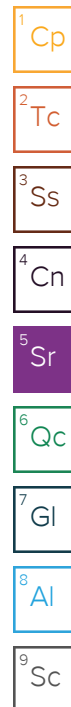
Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Arsenic	4.72		2.00	1	12/22/2018 15:51	WG1214050
Barium	137		0.500	1	12/22/2018 15:51	WG1214050
Cadmium	ND		0.500	1	12/22/2018 15:51	WG1214050
Chromium	14.5		1.00	1	12/22/2018 15:51	WG1214050
Lead	9.26		0.500	1	12/22/2018 15:51	WG1214050
Selenium	ND		2.00	1	12/22/2018 15:51	WG1214050
Silver	ND		1.00	1	12/22/2018 15:51	WG1214050

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	ND		0.100	1	12/27/2018 14:42	WG1216687
(S) a,a,a-Trifluorotoluene(FID)	101		77.0-120		12/27/2018 14:42	WG1216687

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

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Acetone	ND		0.0250	1	12/24/2018 20:18	WG1215610
Acrylonitrile	ND		0.0125	1	12/24/2018 20:18	WG1215610
Benzene	ND		0.00100	1	12/24/2018 20:18	WG1215610
Bromobenzene	ND		0.0125	1	12/24/2018 20:18	WG1215610
Bromodichloromethane	ND		0.00250	1	12/24/2018 20:18	WG1215610
Bromoform	ND		0.0250	1	12/24/2018 20:18	WG1215610
Bromomethane	ND		0.0125	1	12/24/2018 20:18	WG1215610
n-Butylbenzene	ND		0.0125	1	12/24/2018 20:18	WG1215610
sec-Butylbenzene	ND		0.0125	1	12/24/2018 20:18	WG1215610
tert-Butylbenzene	ND		0.00500	1	12/24/2018 20:18	WG1215610
Carbon tetrachloride	ND		0.00500	1	12/24/2018 20:18	WG1215610
Chlorobenzene	ND		0.00250	1	12/24/2018 20:18	WG1215610
Chlorodibromomethane	ND		0.00250	1	12/24/2018 20:18	WG1215610
Chloroethane	ND		0.00500	1	12/24/2018 20:18	WG1215610
Chloroform	ND		0.00250	1	12/24/2018 20:18	WG1215610
Chloromethane	ND		0.0125	1	12/24/2018 20:18	WG1215610
2-Chlorotoluene	ND		0.00250	1	12/24/2018 20:18	WG1215610
4-Chlorotoluene	ND		0.00500	1	12/24/2018 20:18	WG1215610
1,2-Dibromo-3-Chloropropane	ND		0.0250	1	12/24/2018 20:18	WG1215610
1,2-Dibromoethane	ND		0.00250	1	12/24/2018 20:18	WG1215610
Dibromomethane	ND		0.00500	1	12/24/2018 20:18	WG1215610
1,2-Dichlorobenzene	ND		0.00500	1	12/24/2018 20:18	WG1215610
1,3-Dichlorobenzene	ND		0.00500	1	12/24/2018 20:18	WG1215610
1,4-Dichlorobenzene	ND		0.00500	1	12/24/2018 20:18	WG1215610
Dichlorodifluoromethane	ND		0.00250	1	12/24/2018 20:18	WG1215610
1,1-Dichloroethane	ND		0.00250	1	12/24/2018 20:18	WG1215610
1,2-Dichloroethane	ND		0.00250	1	12/24/2018 20:18	WG1215610





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

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
1,1-Dichloroethene	ND		0.00250	1	12/24/2018 20:18	WG1215610
cis-1,2-Dichloroethene	ND		0.00250	1	12/24/2018 20:18	WG1215610
trans-1,2-Dichloroethene	ND		0.00500	1	12/24/2018 20:18	WG1215610
1,2-Dichloropropane	ND		0.00500	1	12/24/2018 20:18	WG1215610
1,1-Dichloropropene	ND		0.00250	1	12/24/2018 20:18	WG1215610
1,3-Dichloropropane	ND		0.00500	1	12/24/2018 20:18	WG1215610
cis-1,3-Dichloropropene	ND		0.00250	1	12/24/2018 20:18	WG1215610
trans-1,3-Dichloropropene	ND		0.00500	1	12/24/2018 20:18	WG1215610
2,2-Dichloropropane	ND		0.00250	1	12/24/2018 20:18	WG1215610
Di-isopropyl ether	ND		0.00100	1	12/24/2018 20:18	WG1215610
Ethylbenzene	ND		0.00250	1	12/24/2018 20:18	WG1215610
Hexachloro-1,3-butadiene	ND		0.0250	1	12/24/2018 20:18	WG1215610
Isopropylbenzene	ND	J4	0.00250	1	12/24/2018 20:18	WG1215610
p-Isopropyltoluene	ND		0.00500	1	12/24/2018 20:18	WG1215610
2-Butanone (MEK)	ND		0.0250	1	12/24/2018 20:18	WG1215610
Methylene Chloride	ND		0.0250	1	12/24/2018 20:18	WG1215610
4-Methyl-2-pentanone (MIBK)	ND		0.0250	1	12/24/2018 20:18	WG1215610
Methyl tert-butyl ether	ND		0.00100	1	12/24/2018 20:18	WG1215610
Naphthalene	ND		0.0125	1	12/24/2018 20:18	WG1215610
n-Propylbenzene	ND		0.00500	1	12/24/2018 20:18	WG1215610
Styrene	ND		0.0125	1	12/24/2018 20:18	WG1215610
1,1,1,2-Tetrachloroethane	ND		0.00250	1	12/24/2018 20:18	WG1215610
1,1,2,2-Tetrachloroethane	ND		0.00250	1	12/24/2018 20:18	WG1215610
1,1,2-Trichlorotrifluoroethane	ND		0.00250	1	12/24/2018 20:18	WG1215610
Tetrachloroethene	0.0159		0.00250	1	12/24/2018 20:18	WG1215610
Toluene	ND		0.00500	1	12/24/2018 20:18	WG1215610
1,2,3-Trichlorobenzene	ND		0.00250	1	12/24/2018 20:18	WG1215610
1,2,4-Trichlorobenzene	ND		0.0125	1	12/24/2018 20:18	WG1215610
1,1,1-Trichloroethane	ND		0.00250	1	12/24/2018 20:18	WG1215610
1,1,2-Trichloroethane	ND		0.00250	1	12/24/2018 20:18	WG1215610
Trichloroethene	ND		0.00100	1	12/24/2018 20:18	WG1215610
Trichlorofluoromethane	ND		0.00250	1	12/24/2018 20:18	WG1215610
1,2,3-Trichloropropane	ND		0.0125	1	12/24/2018 20:18	WG1215610
1,2,4-Trimethylbenzene	ND		0.00500	1	12/24/2018 20:18	WG1215610
1,2,3-Trimethylbenzene	ND		0.00500	1	12/24/2018 20:18	WG1215610
1,3,5-Trimethylbenzene	ND		0.00500	1	12/24/2018 20:18	WG1215610
Vinyl chloride	ND		0.00250	1	12/24/2018 20:18	WG1215610
Xylenes, Total	ND		0.00650	1	12/24/2018 20:18	WG1215610
(S) Toluene-d8	104		75.0-131		12/24/2018 20:18	WG1215610
(S) Dibromofluoromethane	102		65.0-129		12/24/2018 20:18	WG1215610
(S) 4-Bromofluorobenzene	104		67.0-138		12/24/2018 20:18	WG1215610

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

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	ND		4.00	1	12/28/2018 11:00	WG1215652
(S) o-Terphenyl	47.0		18.0-148		12/28/2018 11:00	WG1215652

Semi Volatile Organic Compounds (GC/MS) by Method 8270C

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Acenaphthene	ND		0.0333	1	12/25/2018 01:54	WG1214111
Acenaphthylene	ND		0.0333	1	12/25/2018 01:54	WG1214111
Anthracene	ND		0.0333	1	12/25/2018 01:54	WG1214111
Benzo(a)anthracene	ND		0.0333	1	12/25/2018 01:54	WG1214111

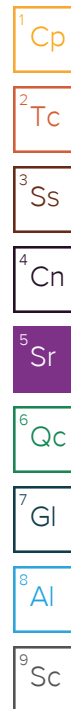


Collected date/time: 12/17/18 14:05

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Semi Volatile Organic Compounds (GC/MS) by Method 8270C

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Benzo(b)fluoranthene	ND		0.0333	1	12/25/2018 01:54	WG1214111
Benzo(k)fluoranthene	ND		0.0333	1	12/25/2018 01:54	WG1214111
Benzo(g,h,i)perylene	ND		0.0333	1	12/25/2018 01:54	WG1214111
Benzo(a)pyrene	ND		0.0333	1	12/25/2018 01:54	WG1214111
Bis(2-chlorethoxy)methane	ND		0.333	1	12/25/2018 01:54	WG1214111
Bis(2-chloroethyl)ether	ND		0.333	1	12/25/2018 01:54	WG1214111
Bis(2-chloroisopropyl)ether	ND		0.333	1	12/25/2018 01:54	WG1214111
4-Bromophenyl-phenylether	ND		0.333	1	12/25/2018 01:54	WG1214111
2-Chloronaphthalene	ND		0.0333	1	12/25/2018 01:54	WG1214111
4-Chlorophenyl-phenylether	ND		0.333	1	12/25/2018 01:54	WG1214111
Chrysene	ND		0.0333	1	12/25/2018 01:54	WG1214111
Dibenz(a,h)anthracene	ND		0.0333	1	12/25/2018 01:54	WG1214111
3,3-Dichlorobenzidine	ND		0.333	1	12/25/2018 01:54	WG1214111
2,4-Dinitrotoluene	ND		0.333	1	12/25/2018 01:54	WG1214111
2,6-Dinitrotoluene	ND		0.333	1	12/25/2018 01:54	WG1214111
Fluoranthene	ND		0.0333	1	12/25/2018 01:54	WG1214111
Fluorene	ND		0.0333	1	12/25/2018 01:54	WG1214111
Hexachlorobenzene	ND		0.333	1	12/25/2018 01:54	WG1214111
Hexachloro-1,3-butadiene	ND		0.333	1	12/25/2018 01:54	WG1214111
Hexachlorocyclopentadiene	ND		0.333	1	12/25/2018 01:54	WG1214111
Hexachloroethane	ND		0.333	1	12/25/2018 01:54	WG1214111
Indeno(1,2,3-cd)pyrene	ND		0.0333	1	12/25/2018 01:54	WG1214111
Isophorone	ND		0.333	1	12/25/2018 01:54	WG1214111
Naphthalene	ND		0.0333	1	12/25/2018 01:54	WG1214111
Nitrobenzene	ND		0.333	1	12/25/2018 01:54	WG1214111
n-Nitrosodimethylamine	ND		0.333	1	12/25/2018 01:54	WG1214111
n-Nitrosodiphenylamine	ND		0.333	1	12/25/2018 01:54	WG1214111
n-Nitrosodi-n-propylamine	ND		0.333	1	12/25/2018 01:54	WG1214111
Phenanthrene	ND		0.0333	1	12/25/2018 01:54	WG1214111
Benzylbutyl phthalate	ND		0.333	1	12/25/2018 01:54	WG1214111
Bis(2-ethylhexyl)phthalate	ND		0.333	1	12/25/2018 01:54	WG1214111
Di-n-butyl phthalate	ND		0.333	1	12/25/2018 01:54	WG1214111
Diethyl phthalate	ND		0.333	1	12/25/2018 01:54	WG1214111
Dimethyl phthalate	ND		0.333	1	12/25/2018 01:54	WG1214111
Di-n-octyl phthalate	ND		0.333	1	12/25/2018 01:54	WG1214111
Pyrene	ND		0.0333	1	12/25/2018 01:54	WG1214111
1,2,4-Trichlorobenzene	ND		0.333	1	12/25/2018 01:54	WG1214111
4-Chloro-3-methylphenol	ND		0.333	1	12/25/2018 01:54	WG1214111
2-Chlorophenol	ND		0.333	1	12/25/2018 01:54	WG1214111
2,4-Dichlorophenol	ND		0.333	1	12/25/2018 01:54	WG1214111
2,4-Dimethylphenol	ND		0.333	1	12/25/2018 01:54	WG1214111
4,6-Dinitro-2-methylphenol	ND		0.333	1	12/25/2018 01:54	WG1214111
2,4-Dinitrophenol	ND		0.333	1	12/25/2018 01:54	WG1214111
2-Nitrophenol	ND		0.333	1	12/25/2018 01:54	WG1214111
4-Nitrophenol	ND		0.333	1	12/25/2018 01:54	WG1214111
Pentachlorophenol	ND		0.333	1	12/25/2018 01:54	WG1214111
Phenol	ND		0.333	1	12/25/2018 01:54	WG1214111
2,4,6-Trichlorophenol	ND		0.333	1	12/25/2018 01:54	WG1214111
(S) 2-Fluorophenol	73.5		12.0-120		12/25/2018 01:54	WG1214111
(S) Phenol-d5	64.2		10.0-120		12/25/2018 01:54	WG1214111
(S) Nitrobenzene-d5	67.9		10.0-122		12/25/2018 01:54	WG1214111
(S) 2-Fluorobiphenyl	66.7		15.0-120		12/25/2018 01:54	WG1214111
(S) 2,4,6-Tribromophenol	61.2		10.0-127		12/25/2018 01:54	WG1214111
(S) p-Terphenyl-d14	68.8		10.0-120		12/25/2018 01:54	WG1214111





Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	74.0		1	12/21/2018 09:19	WG1214090

Mercury by Method 7471A

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Mercury	ND		0.0200	1	12/21/2018 10:47	WG1214206

Metals (ICP) by Method 6010B

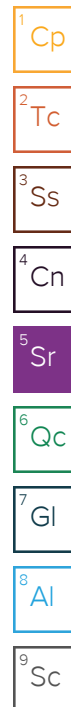
Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Arsenic	3.11		2.00	1	12/22/2018 15:53	WG1214050
Barium	108		0.500	1	12/22/2018 15:53	WG1214050
Cadmium	ND		0.500	1	12/22/2018 15:53	WG1214050
Chromium	9.49		1.00	1	12/22/2018 15:53	WG1214050
Lead	5.90		0.500	1	12/22/2018 15:53	WG1214050
Selenium	ND		2.00	1	12/22/2018 15:53	WG1214050
Silver	ND		1.00	1	12/22/2018 15:53	WG1214050

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	ND		0.100	1	12/27/2018 15:04	WG1216687
(S) a,a,a-Trifluorotoluene(FID)	102		77.0-120		12/27/2018 15:04	WG1216687

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

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Acetone	ND		0.0250	1	12/24/2018 20:37	WG1215610
Acrylonitrile	ND		0.0125	1	12/24/2018 20:37	WG1215610
Benzene	ND		0.00100	1	12/24/2018 20:37	WG1215610
Bromobenzene	ND		0.0125	1	12/24/2018 20:37	WG1215610
Bromodichloromethane	ND		0.00250	1	12/24/2018 20:37	WG1215610
Bromoform	ND		0.0250	1	12/24/2018 20:37	WG1215610
Bromomethane	ND		0.0125	1	12/24/2018 20:37	WG1215610
n-Butylbenzene	ND		0.0125	1	12/24/2018 20:37	WG1215610
sec-Butylbenzene	ND		0.0125	1	12/24/2018 20:37	WG1215610
tert-Butylbenzene	ND		0.00500	1	12/24/2018 20:37	WG1215610
Carbon tetrachloride	ND		0.00500	1	12/24/2018 20:37	WG1215610
Chlorobenzene	ND		0.00250	1	12/24/2018 20:37	WG1215610
Chlorodibromomethane	ND		0.00250	1	12/24/2018 20:37	WG1215610
Chloroethane	ND		0.00500	1	12/24/2018 20:37	WG1215610
Chloroform	ND		0.00250	1	12/24/2018 20:37	WG1215610
Chloromethane	ND		0.0125	1	12/24/2018 20:37	WG1215610
2-Chlorotoluene	ND		0.00250	1	12/24/2018 20:37	WG1215610
4-Chlorotoluene	ND		0.00500	1	12/24/2018 20:37	WG1215610
1,2-Dibromo-3-Chloropropane	ND		0.0250	1	12/24/2018 20:37	WG1215610
1,2-Dibromoethane	ND		0.00250	1	12/24/2018 20:37	WG1215610
Dibromomethane	ND		0.00500	1	12/24/2018 20:37	WG1215610
1,2-Dichlorobenzene	ND		0.00500	1	12/24/2018 20:37	WG1215610
1,3-Dichlorobenzene	ND		0.00500	1	12/24/2018 20:37	WG1215610
1,4-Dichlorobenzene	ND		0.00500	1	12/24/2018 20:37	WG1215610
Dichlorodifluoromethane	ND		0.00250	1	12/24/2018 20:37	WG1215610
1,1-Dichloroethane	ND		0.00250	1	12/24/2018 20:37	WG1215610
1,2-Dichloroethane	ND		0.00250	1	12/24/2018 20:37	WG1215610





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

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
1,1-Dichloroethene	ND		0.00250	1	12/24/2018 20:37	WG1215610
cis-1,2-Dichloroethene	ND		0.00250	1	12/24/2018 20:37	WG1215610
trans-1,2-Dichloroethene	ND		0.00500	1	12/24/2018 20:37	WG1215610
1,2-Dichloropropane	ND		0.00500	1	12/24/2018 20:37	WG1215610
1,1-Dichloropropene	ND		0.00250	1	12/24/2018 20:37	WG1215610
1,3-Dichloropropane	ND		0.00500	1	12/24/2018 20:37	WG1215610
cis-1,3-Dichloropropene	ND		0.00250	1	12/24/2018 20:37	WG1215610
trans-1,3-Dichloropropene	ND		0.00500	1	12/24/2018 20:37	WG1215610
2,2-Dichloropropane	ND		0.00250	1	12/24/2018 20:37	WG1215610
Di-isopropyl ether	ND		0.00100	1	12/24/2018 20:37	WG1215610
Ethylbenzene	ND		0.00250	1	12/24/2018 20:37	WG1215610
Hexachloro-1,3-butadiene	ND		0.0250	1	12/24/2018 20:37	WG1215610
Isopropylbenzene	ND	J4	0.00250	1	12/24/2018 20:37	WG1215610
p-Isopropyltoluene	ND		0.00500	1	12/24/2018 20:37	WG1215610
2-Butanone (MEK)	ND		0.0250	1	12/24/2018 20:37	WG1215610
Methylene Chloride	ND		0.0250	1	12/24/2018 20:37	WG1215610
4-Methyl-2-pentanone (MIBK)	ND		0.0250	1	12/24/2018 20:37	WG1215610
Methyl tert-butyl ether	ND		0.00100	1	12/24/2018 20:37	WG1215610
Naphthalene	ND		0.0125	1	12/24/2018 20:37	WG1215610
n-Propylbenzene	ND		0.00500	1	12/24/2018 20:37	WG1215610
Styrene	ND		0.0125	1	12/24/2018 20:37	WG1215610
1,1,1,2-Tetrachloroethane	ND		0.00250	1	12/24/2018 20:37	WG1215610
1,1,2,2-Tetrachloroethane	ND		0.00250	1	12/24/2018 20:37	WG1215610
1,1,2-Trichlorotrifluoroethane	ND		0.00250	1	12/24/2018 20:37	WG1215610
Tetrachloroethene	0.00309		0.00250	1	12/24/2018 20:37	WG1215610
Toluene	ND		0.00500	1	12/24/2018 20:37	WG1215610
1,2,3-Trichlorobenzene	ND		0.00250	1	12/24/2018 20:37	WG1215610
1,2,4-Trichlorobenzene	ND		0.0125	1	12/24/2018 20:37	WG1215610
1,1,1-Trichloroethane	ND		0.00250	1	12/24/2018 20:37	WG1215610
1,1,2-Trichloroethane	ND		0.00250	1	12/24/2018 20:37	WG1215610
Trichloroethene	ND		0.00100	1	12/24/2018 20:37	WG1215610
Trichlorofluoromethane	ND		0.00250	1	12/24/2018 20:37	WG1215610
1,2,3-Trichloropropane	ND		0.0125	1	12/24/2018 20:37	WG1215610
1,2,4-Trimethylbenzene	ND		0.00500	1	12/24/2018 20:37	WG1215610
1,2,3-Trimethylbenzene	ND		0.00500	1	12/24/2018 20:37	WG1215610
1,3,5-Trimethylbenzene	ND		0.00500	1	12/24/2018 20:37	WG1215610
Vinyl chloride	ND		0.00250	1	12/24/2018 20:37	WG1215610
Xylenes, Total	ND		0.00650	1	12/24/2018 20:37	WG1215610
(S) Toluene-d8	104		75.0-131		12/24/2018 20:37	WG1215610
(S) Dibromofluoromethane	98.6		65.0-129		12/24/2018 20:37	WG1215610
(S) 4-Bromofluorobenzene	103		67.0-138		12/24/2018 20:37	WG1215610

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

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	ND		4.00	1	12/28/2018 11:12	WG1215652
(S) o-Terphenyl	65.3		18.0-148		12/28/2018 11:12	WG1215652

Semi Volatile Organic Compounds (GC/MS) by Method 8270C

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Acenaphthene	ND		0.0333	1	12/25/2018 02:17	WG1214111
Acenaphthylene	ND		0.0333	1	12/25/2018 02:17	WG1214111
Anthracene	ND		0.0333	1	12/25/2018 02:17	WG1214111
Benzo(a)anthracene	ND		0.0333	1	12/25/2018 02:17	WG1214111

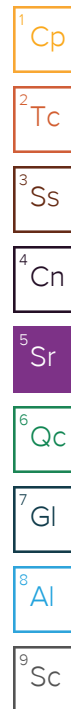


Collected date/time: 12/17/18 14:10

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Semi Volatile Organic Compounds (GC/MS) by Method 8270C

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Benzo(b)fluoranthene	ND		0.0333	1	12/25/2018 02:17	WG1214111
Benzo(k)fluoranthene	ND		0.0333	1	12/25/2018 02:17	WG1214111
Benzo(g,h,i)perylene	ND		0.0333	1	12/25/2018 02:17	WG1214111
Benzo(a)pyrene	ND		0.0333	1	12/25/2018 02:17	WG1214111
Bis(2-chlorethoxy)methane	ND		0.333	1	12/25/2018 02:17	WG1214111
Bis(2-chloroethyl)ether	ND		0.333	1	12/25/2018 02:17	WG1214111
Bis(2-chloroisopropyl)ether	ND		0.333	1	12/25/2018 02:17	WG1214111
4-Bromophenyl-phenylether	ND		0.333	1	12/25/2018 02:17	WG1214111
2-Chloronaphthalene	ND		0.0333	1	12/25/2018 02:17	WG1214111
4-Chlorophenyl-phenylether	ND		0.333	1	12/25/2018 02:17	WG1214111
Chrysene	ND		0.0333	1	12/25/2018 02:17	WG1214111
Dibenz(a,h)anthracene	ND		0.0333	1	12/25/2018 02:17	WG1214111
3,3-Dichlorobenzidine	ND		0.333	1	12/25/2018 02:17	WG1214111
2,4-Dinitrotoluene	ND		0.333	1	12/25/2018 02:17	WG1214111
2,6-Dinitrotoluene	ND		0.333	1	12/25/2018 02:17	WG1214111
Fluoranthene	ND		0.0333	1	12/25/2018 02:17	WG1214111
Fluorene	ND		0.0333	1	12/25/2018 02:17	WG1214111
Hexachlorobenzene	ND		0.333	1	12/25/2018 02:17	WG1214111
Hexachloro-1,3-butadiene	ND		0.333	1	12/25/2018 02:17	WG1214111
Hexachlorocyclopentadiene	ND		0.333	1	12/25/2018 02:17	WG1214111
Hexachloroethane	ND		0.333	1	12/25/2018 02:17	WG1214111
Indeno(1,2,3-cd)pyrene	ND		0.0333	1	12/25/2018 02:17	WG1214111
Isophorone	ND		0.333	1	12/25/2018 02:17	WG1214111
Naphthalene	ND		0.0333	1	12/25/2018 02:17	WG1214111
Nitrobenzene	ND		0.333	1	12/25/2018 02:17	WG1214111
n-Nitrosodimethylamine	ND		0.333	1	12/25/2018 02:17	WG1214111
n-Nitrosodiphenylamine	ND		0.333	1	12/25/2018 02:17	WG1214111
n-Nitrosodi-n-propylamine	ND		0.333	1	12/25/2018 02:17	WG1214111
Phenanthrene	ND		0.0333	1	12/25/2018 02:17	WG1214111
Benzylbutyl phthalate	ND		0.333	1	12/25/2018 02:17	WG1214111
Bis(2-ethylhexyl)phthalate	ND		0.333	1	12/25/2018 02:17	WG1214111
Di-n-butyl phthalate	ND		0.333	1	12/25/2018 02:17	WG1214111
Diethyl phthalate	ND		0.333	1	12/25/2018 02:17	WG1214111
Dimethyl phthalate	ND		0.333	1	12/25/2018 02:17	WG1214111
Di-n-octyl phthalate	ND		0.333	1	12/25/2018 02:17	WG1214111
Pyrene	ND		0.0333	1	12/25/2018 02:17	WG1214111
1,2,4-Trichlorobenzene	ND		0.333	1	12/25/2018 02:17	WG1214111
4-Chloro-3-methylphenol	ND		0.333	1	12/25/2018 02:17	WG1214111
2-Chlorophenol	ND		0.333	1	12/25/2018 02:17	WG1214111
2,4-Dichlorophenol	ND		0.333	1	12/25/2018 02:17	WG1214111
2,4-Dimethylphenol	ND		0.333	1	12/25/2018 02:17	WG1214111
4,6-Dinitro-2-methylphenol	ND		0.333	1	12/25/2018 02:17	WG1214111
2,4-Dinitrophenol	ND		0.333	1	12/25/2018 02:17	WG1214111
2-Nitrophenol	ND		0.333	1	12/25/2018 02:17	WG1214111
4-Nitrophenol	ND		0.333	1	12/25/2018 02:17	WG1214111
Pentachlorophenol	ND		0.333	1	12/25/2018 02:17	WG1214111
Phenol	ND		0.333	1	12/25/2018 02:17	WG1214111
2,4,6-Trichlorophenol	ND		0.333	1	12/25/2018 02:17	WG1214111
(S) 2-Fluorophenol	63.4		12.0-120		12/25/2018 02:17	WG1214111
(S) Phenol-d5	54.8		10.0-120		12/25/2018 02:17	WG1214111
(S) Nitrobenzene-d5	57.1		10.0-122		12/25/2018 02:17	WG1214111
(S) 2-Fluorobiphenyl	55.3		15.0-120		12/25/2018 02:17	WG1214111
(S) 2,4,6-Tribromophenol	58.7		10.0-127		12/25/2018 02:17	WG1214111
(S) p-Terphenyl-d14	60.1		10.0-120		12/25/2018 02:17	WG1214111





Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	78.3		1	12/21/2018 09:19	WG1214090

Mercury by Method 7471A

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Mercury	0.0251	<u>B</u>	0.0200	1	12/21/2018 10:49	WG1214206

Metals (ICP) by Method 6010B

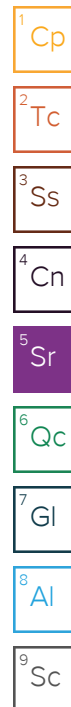
Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Arsenic	5.98		2.00	1	12/22/2018 15:56	WG1214050
Barium	94.3		0.500	1	12/22/2018 15:56	WG1214050
Cadmium	ND		0.500	1	12/22/2018 15:56	WG1214050
Chromium	10.2		1.00	1	12/22/2018 15:56	WG1214050
Lead	7.34		0.500	1	12/22/2018 15:56	WG1214050
Selenium	ND		2.00	1	12/22/2018 15:56	WG1214050
Silver	ND		1.00	1	12/22/2018 15:56	WG1214050

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	ND		0.100	1	12/27/2018 15:26	WG1216687
(S) a,a,a-Trifluorotoluene(FID)	102		77.0-120		12/27/2018 15:26	WG1216687

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

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Acetone	ND		0.0250	1	12/24/2018 20:55	WG1215610
Acrylonitrile	ND		0.0125	1	12/24/2018 20:55	WG1215610
Benzene	ND		0.00100	1	12/24/2018 20:55	WG1215610
Bromobenzene	ND		0.0125	1	12/24/2018 20:55	WG1215610
Bromodichloromethane	ND		0.00250	1	12/24/2018 20:55	WG1215610
Bromoform	ND		0.0250	1	12/24/2018 20:55	WG1215610
Bromomethane	ND		0.0125	1	12/24/2018 20:55	WG1215610
n-Butylbenzene	ND		0.0125	1	12/24/2018 20:55	WG1215610
sec-Butylbenzene	ND		0.0125	1	12/24/2018 20:55	WG1215610
tert-Butylbenzene	ND		0.00500	1	12/24/2018 20:55	WG1215610
Carbon tetrachloride	ND		0.00500	1	12/24/2018 20:55	WG1215610
Chlorobenzene	ND		0.00250	1	12/24/2018 20:55	WG1215610
Chlorodibromomethane	ND		0.00250	1	12/24/2018 20:55	WG1215610
Chloroethane	ND		0.00500	1	12/24/2018 20:55	WG1215610
Chloroform	ND		0.00250	1	12/24/2018 20:55	WG1215610
Chloromethane	ND		0.0125	1	12/24/2018 20:55	WG1215610
2-Chlorotoluene	ND		0.00250	1	12/24/2018 20:55	WG1215610
4-Chlorotoluene	ND		0.00500	1	12/24/2018 20:55	WG1215610
1,2-Dibromo-3-Chloropropane	ND		0.0250	1	12/24/2018 20:55	WG1215610
1,2-Dibromoethane	ND		0.00250	1	12/24/2018 20:55	WG1215610
Dibromomethane	ND		0.00500	1	12/24/2018 20:55	WG1215610
1,2-Dichlorobenzene	ND		0.00500	1	12/24/2018 20:55	WG1215610
1,3-Dichlorobenzene	ND		0.00500	1	12/24/2018 20:55	WG1215610
1,4-Dichlorobenzene	ND		0.00500	1	12/24/2018 20:55	WG1215610
Dichlorodifluoromethane	ND		0.00250	1	12/24/2018 20:55	WG1215610
1,1-Dichloroethane	ND		0.00250	1	12/24/2018 20:55	WG1215610
1,2-Dichloroethane	ND		0.00250	1	12/24/2018 20:55	WG1215610





Collected date/time: 12/17/18 14:40

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

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
1,1-Dichloroethene	ND		0.00250	1	12/24/2018 20:55	WG1215610
cis-1,2-Dichloroethene	ND		0.00250	1	12/24/2018 20:55	WG1215610
trans-1,2-Dichloroethene	ND		0.00500	1	12/24/2018 20:55	WG1215610
1,2-Dichloropropane	ND		0.00500	1	12/24/2018 20:55	WG1215610
1,1-Dichloropropene	ND		0.00250	1	12/24/2018 20:55	WG1215610
1,3-Dichloropropane	ND		0.00500	1	12/24/2018 20:55	WG1215610
cis-1,3-Dichloropropene	ND		0.00250	1	12/24/2018 20:55	WG1215610
trans-1,3-Dichloropropene	ND		0.00500	1	12/24/2018 20:55	WG1215610
2,2-Dichloropropane	ND		0.00250	1	12/24/2018 20:55	WG1215610
Di-isopropyl ether	ND		0.00100	1	12/24/2018 20:55	WG1215610
Ethylbenzene	ND		0.00250	1	12/24/2018 20:55	WG1215610
Hexachloro-1,3-butadiene	ND		0.0250	1	12/24/2018 20:55	WG1215610
Isopropylbenzene	ND	J4	0.00250	1	12/24/2018 20:55	WG1215610
p-Isopropyltoluene	ND		0.00500	1	12/24/2018 20:55	WG1215610
2-Butanone (MEK)	ND		0.0250	1	12/24/2018 20:55	WG1215610
Methylene Chloride	ND		0.0250	1	12/24/2018 20:55	WG1215610
4-Methyl-2-pentanone (MIBK)	ND		0.0250	1	12/24/2018 20:55	WG1215610
Methyl tert-butyl ether	ND		0.00100	1	12/24/2018 20:55	WG1215610
Naphthalene	ND		0.0125	1	12/24/2018 20:55	WG1215610
n-Propylbenzene	ND		0.00500	1	12/24/2018 20:55	WG1215610
Styrene	ND		0.0125	1	12/24/2018 20:55	WG1215610
1,1,1,2-Tetrachloroethane	ND		0.00250	1	12/24/2018 20:55	WG1215610
1,1,2,2-Tetrachloroethane	ND		0.00250	1	12/24/2018 20:55	WG1215610
1,1,2-Trichlorotrifluoroethane	ND		0.00250	1	12/24/2018 20:55	WG1215610
Tetrachloroethene	ND		0.00250	1	12/24/2018 20:55	WG1215610
Toluene	ND		0.00500	1	12/24/2018 20:55	WG1215610
1,2,3-Trichlorobenzene	ND		0.00250	1	12/24/2018 20:55	WG1215610
1,2,4-Trichlorobenzene	ND		0.0125	1	12/24/2018 20:55	WG1215610
1,1,1-Trichloroethane	ND		0.00250	1	12/24/2018 20:55	WG1215610
1,1,2-Trichloroethane	ND		0.00250	1	12/24/2018 20:55	WG1215610
Trichloroethene	ND		0.00100	1	12/24/2018 20:55	WG1215610
Trichlorofluoromethane	ND		0.00250	1	12/24/2018 20:55	WG1215610
1,2,3-Trichloropropane	ND		0.0125	1	12/24/2018 20:55	WG1215610
1,2,4-Trimethylbenzene	ND		0.00500	1	12/24/2018 20:55	WG1215610
1,2,3-Trimethylbenzene	ND		0.00500	1	12/24/2018 20:55	WG1215610
1,3,5-Trimethylbenzene	ND		0.00500	1	12/24/2018 20:55	WG1215610
Vinyl chloride	ND		0.00250	1	12/24/2018 20:55	WG1215610
Xylenes, Total	ND		0.00650	1	12/24/2018 20:55	WG1215610
(S) Toluene-d8	107		75.0-131		12/24/2018 20:55	WG1215610
(S) Dibromofluoromethane	103		65.0-129		12/24/2018 20:55	WG1215610
(S) 4-Bromofluorobenzene	107		67.0-138		12/24/2018 20:55	WG1215610

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

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	ND		4.00	1	12/28/2018 11:23	WG1215652
(S) o-Terphenyl	66.1		18.0-148		12/28/2018 11:23	WG1215652

Semi Volatile Organic Compounds (GC/MS) by Method 8270C

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Acenaphthene	ND		0.0333	1	12/25/2018 08:50	WG1214111
Acenaphthylene	ND		0.0333	1	12/25/2018 08:50	WG1214111
Anthracene	ND		0.0333	1	12/25/2018 08:50	WG1214111
Benzo(a)anthracene	ND		0.0333	1	12/25/2018 08:50	WG1214111



Collected date/time: 12/17/18 14:40

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Semi Volatile Organic Compounds (GC/MS) by Method 8270C

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Benzo(b)fluoranthene	ND		0.0333	1	12/25/2018 08:50	WG1214111
Benzo(k)fluoranthene	ND		0.0333	1	12/25/2018 08:50	WG1214111
Benzo(g,h,i)perylene	ND		0.0333	1	12/25/2018 08:50	WG1214111
Benzo(a)pyrene	ND		0.0333	1	12/25/2018 08:50	WG1214111
Bis(2-chloroethoxy)methane	ND		0.333	1	12/25/2018 08:50	WG1214111
Bis(2-chloroethyl)ether	ND		0.333	1	12/25/2018 08:50	WG1214111
Bis(2-chloroisopropyl)ether	ND		0.333	1	12/25/2018 08:50	WG1214111
4-Bromophenyl-phenylether	ND		0.333	1	12/25/2018 08:50	WG1214111
2-Chloronaphthalene	ND		0.0333	1	12/25/2018 08:50	WG1214111
4-Chlorophenyl-phenylether	ND		0.333	1	12/25/2018 08:50	WG1214111
Chrysene	ND		0.0333	1	12/25/2018 08:50	WG1214111
Dibenz(a,h)anthracene	ND		0.0333	1	12/25/2018 08:50	WG1214111
3,3-Dichlorobenzidine	ND		0.333	1	12/25/2018 08:50	WG1214111
2,4-Dinitrotoluene	ND		0.333	1	12/25/2018 08:50	WG1214111
2,6-Dinitrotoluene	ND		0.333	1	12/25/2018 08:50	WG1214111
Fluoranthene	ND		0.0333	1	12/25/2018 08:50	WG1214111
Fluorene	ND		0.0333	1	12/25/2018 08:50	WG1214111
Hexachlorobenzene	ND		0.333	1	12/25/2018 08:50	WG1214111
Hexachloro-1,3-butadiene	ND		0.333	1	12/25/2018 08:50	WG1214111
Hexachlorocyclopentadiene	ND		0.333	1	12/25/2018 08:50	WG1214111
Hexachloroethane	ND		0.333	1	12/25/2018 08:50	WG1214111
Indeno(1,2,3-cd)pyrene	ND		0.0333	1	12/25/2018 08:50	WG1214111
Isophorone	ND		0.333	1	12/25/2018 08:50	WG1214111
Naphthalene	ND		0.0333	1	12/25/2018 08:50	WG1214111
Nitrobenzene	ND		0.333	1	12/25/2018 08:50	WG1214111
n-Nitrosodimethylamine	ND		0.333	1	12/25/2018 08:50	WG1214111
n-Nitrosodiphenylamine	ND		0.333	1	12/25/2018 08:50	WG1214111
n-Nitrosodi-n-propylamine	ND		0.333	1	12/25/2018 08:50	WG1214111
Phenanthrene	ND		0.0333	1	12/25/2018 08:50	WG1214111
Benzylbutyl phthalate	ND		0.333	1	12/25/2018 08:50	WG1214111
Bis(2-ethylhexyl)phthalate	ND		0.333	1	12/25/2018 08:50	WG1214111
Di-n-butyl phthalate	ND		0.333	1	12/25/2018 08:50	WG1214111
Diethyl phthalate	ND		0.333	1	12/25/2018 08:50	WG1214111
Dimethyl phthalate	ND		0.333	1	12/25/2018 08:50	WG1214111
Di-n-octyl phthalate	ND		0.333	1	12/25/2018 08:50	WG1214111
Pyrene	ND		0.0333	1	12/25/2018 08:50	WG1214111
1,2,4-Trichlorobenzene	ND		0.333	1	12/25/2018 08:50	WG1214111
4-Chloro-3-methylphenol	ND		0.333	1	12/25/2018 08:50	WG1214111
2-Chlorophenol	ND		0.333	1	12/25/2018 08:50	WG1214111
2,4-Dichlorophenol	ND		0.333	1	12/25/2018 08:50	WG1214111
2,4-Dimethylphenol	ND		0.333	1	12/25/2018 08:50	WG1214111
4,6-Dinitro-2-methylphenol	ND		0.333	1	12/25/2018 08:50	WG1214111
2,4-Dinitrophenol	ND		0.333	1	12/25/2018 08:50	WG1214111
2-Nitrophenol	ND		0.333	1	12/25/2018 08:50	WG1214111
4-Nitrophenol	ND		0.333	1	12/25/2018 08:50	WG1214111
Pentachlorophenol	ND		0.333	1	12/25/2018 08:50	WG1214111
Phenol	ND		0.333	1	12/25/2018 08:50	WG1214111
2,4,6-Trichlorophenol	ND		0.333	1	12/25/2018 08:50	WG1214111
(S) 2-Fluorophenol	53.2		12.0-120		12/25/2018 08:50	WG1214111
(S) Phenol-d5	46.0		10.0-120		12/25/2018 08:50	WG1214111
(S) Nitrobenzene-d5	53.3		10.0-122		12/25/2018 08:50	WG1214111
(S) 2-Fluorobiphenyl	57.1		15.0-120		12/25/2018 08:50	WG1214111
(S) 2,4,6-Tribromophenol	54.6		10.0-127		12/25/2018 08:50	WG1214111
(S) p-Terphenyl-d14	62.9		10.0-120		12/25/2018 08:50	WG1214111

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 date / time	Batch
Total Solids	72.8		1	12/21/2018 09:19	WG1214090

Mercury by Method 7471A

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Mercury	ND		0.0200	1	12/21/2018 10:52	WG1214206

Metals (ICP) by Method 6010B

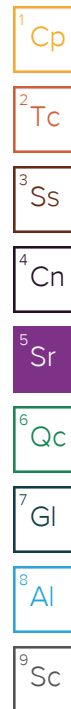
Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Arsenic	5.15		2.00	1	12/22/2018 16:04	WG1214050
Barium	104		0.500	1	12/22/2018 16:04	WG1214050
Cadmium	ND		0.500	1	12/22/2018 16:04	WG1214050
Chromium	9.07		1.00	1	12/22/2018 16:04	WG1214050
Lead	5.42		0.500	1	12/22/2018 16:04	WG1214050
Selenium	ND		2.00	1	12/22/2018 16:04	WG1214050
Silver	ND		1.00	1	12/22/2018 16:04	WG1214050

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	ND		0.100	1	12/27/2018 15:48	WG1216687
(S) a,a,a-Trifluorotoluene(FID)	102		77.0-120		12/27/2018 15:48	WG1216687

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

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Acetone	ND		0.0585	2.34	12/24/2018 21:15	WG1215610
Acrylonitrile	ND		0.0292	2.34	12/24/2018 21:15	WG1215610
Benzene	ND		0.00234	2.34	12/24/2018 21:15	WG1215610
Bromobenzene	ND		0.0292	2.34	12/24/2018 21:15	WG1215610
Bromodichloromethane	ND		0.00585	2.34	12/24/2018 21:15	WG1215610
Bromoform	ND		0.0585	2.34	12/24/2018 21:15	WG1215610
Bromomethane	ND		0.0292	2.34	12/24/2018 21:15	WG1215610
n-Butylbenzene	ND		0.0292	2.34	12/24/2018 21:15	WG1215610
sec-Butylbenzene	ND		0.0292	2.34	12/24/2018 21:15	WG1215610
tert-Butylbenzene	ND		0.0117	2.34	12/24/2018 21:15	WG1215610
Carbon tetrachloride	ND		0.0117	2.34	12/24/2018 21:15	WG1215610
Chlorobenzene	ND		0.00585	2.34	12/24/2018 21:15	WG1215610
Chlorodibromomethane	ND		0.00585	2.34	12/24/2018 21:15	WG1215610
Chloroethane	ND		0.0117	2.34	12/24/2018 21:15	WG1215610
Chloroform	ND		0.00585	2.34	12/24/2018 21:15	WG1215610
Chloromethane	ND		0.0292	2.34	12/24/2018 21:15	WG1215610
2-Chlorotoluene	ND		0.00585	2.34	12/24/2018 21:15	WG1215610
4-Chlorotoluene	ND		0.0117	2.34	12/24/2018 21:15	WG1215610
1,2-Dibromo-3-Chloropropane	ND		0.0585	2.34	12/24/2018 21:15	WG1215610
1,2-Dibromoethane	ND		0.00585	2.34	12/24/2018 21:15	WG1215610
Dibromomethane	ND		0.0117	2.34	12/24/2018 21:15	WG1215610
1,2-Dichlorobenzene	ND		0.0117	2.34	12/24/2018 21:15	WG1215610
1,3-Dichlorobenzene	ND		0.0117	2.34	12/24/2018 21:15	WG1215610
1,4-Dichlorobenzene	ND		0.0117	2.34	12/24/2018 21:15	WG1215610
Dichlorodifluoromethane	ND		0.00585	2.34	12/24/2018 21:15	WG1215610
1,1-Dichloroethane	ND		0.00585	2.34	12/24/2018 21:15	WG1215610
1,2-Dichloroethane	ND		0.00585	2.34	12/24/2018 21:15	WG1215610





Collected date/time: 12/17/18 14:48

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

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
1,1-Dichloroethene	ND		0.00585	2.34	12/24/2018 21:15	WG1215610
cis-1,2-Dichloroethene	ND		0.00585	2.34	12/24/2018 21:15	WG1215610
trans-1,2-Dichloroethene	ND		0.0117	2.34	12/24/2018 21:15	WG1215610
1,2-Dichloropropane	ND		0.0117	2.34	12/24/2018 21:15	WG1215610
1,1-Dichloropropene	ND		0.00585	2.34	12/24/2018 21:15	WG1215610
1,3-Dichloropropane	ND		0.0117	2.34	12/24/2018 21:15	WG1215610
cis-1,3-Dichloropropene	ND		0.00585	2.34	12/24/2018 21:15	WG1215610
trans-1,3-Dichloropropene	ND		0.0117	2.34	12/24/2018 21:15	WG1215610
2,2-Dichloropropane	ND		0.00585	2.34	12/24/2018 21:15	WG1215610
Di-isopropyl ether	ND		0.00234	2.34	12/24/2018 21:15	WG1215610
Ethylbenzene	ND		0.00585	2.34	12/24/2018 21:15	WG1215610
Hexachloro-1,3-butadiene	ND		0.0585	2.34	12/24/2018 21:15	WG1215610
Isopropylbenzene	ND	J4	0.00585	2.34	12/24/2018 21:15	WG1215610
p-Isopropyltoluene	ND		0.0117	2.34	12/24/2018 21:15	WG1215610
2-Butanone (MEK)	ND		0.0585	2.34	12/24/2018 21:15	WG1215610
Methylene Chloride	ND		0.0585	2.34	12/24/2018 21:15	WG1215610
4-Methyl-2-pentanone (MIBK)	ND		0.0585	2.34	12/24/2018 21:15	WG1215610
Methyl tert-butyl ether	ND		0.00234	2.34	12/24/2018 21:15	WG1215610
Naphthalene	ND		0.0292	2.34	12/24/2018 21:15	WG1215610
n-Propylbenzene	ND		0.0117	2.34	12/24/2018 21:15	WG1215610
Styrene	ND		0.0292	2.34	12/24/2018 21:15	WG1215610
1,1,1,2-Tetrachloroethane	ND		0.00585	2.34	12/24/2018 21:15	WG1215610
1,1,2,2-Tetrachloroethane	ND		0.00585	2.34	12/24/2018 21:15	WG1215610
1,1,2-Trichlorotrifluoroethane	ND		0.00585	2.34	12/24/2018 21:15	WG1215610
Tetrachloroethene	ND		0.00585	2.34	12/24/2018 21:15	WG1215610
Toluene	ND		0.0117	2.34	12/24/2018 21:15	WG1215610
1,2,3-Trichlorobenzene	ND		0.00585	2.34	12/24/2018 21:15	WG1215610
1,2,4-Trichlorobenzene	ND		0.0292	2.34	12/24/2018 21:15	WG1215610
1,1,1-Trichloroethane	ND		0.00585	2.34	12/24/2018 21:15	WG1215610
1,1,2-Trichloroethane	ND		0.00585	2.34	12/24/2018 21:15	WG1215610
Trichloroethene	ND		0.00234	2.34	12/24/2018 21:15	WG1215610
Trichlorofluoromethane	ND		0.00585	2.34	12/24/2018 21:15	WG1215610
1,2,3-Trichloropropane	ND		0.0292	2.34	12/24/2018 21:15	WG1215610
1,2,4-Trimethylbenzene	ND		0.0117	2.34	12/24/2018 21:15	WG1215610
1,2,3-Trimethylbenzene	ND		0.0117	2.34	12/24/2018 21:15	WG1215610
1,3,5-Trimethylbenzene	ND		0.0117	2.34	12/24/2018 21:15	WG1215610
Vinyl chloride	ND		0.00585	2.34	12/24/2018 21:15	WG1215610
Xylenes, Total	ND		0.0152	2.34	12/24/2018 21:15	WG1215610
(S) Toluene-d8	107		75.0-131		12/24/2018 21:15	WG1215610
(S) Dibromofluoromethane	99.5		65.0-129		12/24/2018 21:15	WG1215610
(S) 4-Bromofluorobenzene	105		67.0-138		12/24/2018 21:15	WG1215610

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

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	ND		4.00	1	12/28/2018 11:35	WG1215652
(S) o-Terphenyl	67.3		18.0-148		12/28/2018 11:35	WG1215652

Semi Volatile Organic Compounds (GC/MS) by Method 8270C

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Acenaphthene	ND		0.0333	1	12/25/2018 02:40	WG1214111
Acenaphthylene	ND		0.0333	1	12/25/2018 02:40	WG1214111
Anthracene	ND		0.0333	1	12/25/2018 02:40	WG1214111
Benzo(a)anthracene	ND		0.0333	1	12/25/2018 02:40	WG1214111



Collected date/time: 12/17/18 14:48

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Semi Volatile Organic Compounds (GC/MS) by Method 8270C

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Benzo(b)fluoranthene	ND		0.0333	1	12/25/2018 02:40	WG1214111
Benzo(k)fluoranthene	ND		0.0333	1	12/25/2018 02:40	WG1214111
Benzo(g,h,i)perylene	ND		0.0333	1	12/25/2018 02:40	WG1214111
Benzo(a)pyrene	ND		0.0333	1	12/25/2018 02:40	WG1214111
Bis(2-chlorethoxy)methane	ND		0.333	1	12/25/2018 02:40	WG1214111
Bis(2-chloroethyl)ether	ND		0.333	1	12/25/2018 02:40	WG1214111
Bis(2-chloroisopropyl)ether	ND		0.333	1	12/25/2018 02:40	WG1214111
4-Bromophenyl-phenylether	ND		0.333	1	12/25/2018 02:40	WG1214111
2-Chloronaphthalene	ND		0.0333	1	12/25/2018 02:40	WG1214111
4-Chlorophenyl-phenylether	ND		0.333	1	12/25/2018 02:40	WG1214111
Chrysene	ND		0.0333	1	12/25/2018 02:40	WG1214111
Dibenz(a,h)anthracene	ND		0.0333	1	12/25/2018 02:40	WG1214111
3,3-Dichlorobenzidine	ND		0.333	1	12/25/2018 02:40	WG1214111
2,4-Dinitrotoluene	ND		0.333	1	12/25/2018 02:40	WG1214111
2,6-Dinitrotoluene	ND		0.333	1	12/25/2018 02:40	WG1214111
Fluoranthene	ND		0.0333	1	12/25/2018 02:40	WG1214111
Fluorene	ND		0.0333	1	12/25/2018 02:40	WG1214111
Hexachlorobenzene	ND		0.333	1	12/25/2018 02:40	WG1214111
Hexachloro-1,3-butadiene	ND		0.333	1	12/25/2018 02:40	WG1214111
Hexachlorocyclopentadiene	ND		0.333	1	12/25/2018 02:40	WG1214111
Hexachloroethane	ND		0.333	1	12/25/2018 02:40	WG1214111
Indeno(1,2,3-cd)pyrene	ND		0.0333	1	12/25/2018 02:40	WG1214111
Isophorone	ND		0.333	1	12/25/2018 02:40	WG1214111
Naphthalene	ND		0.0333	1	12/25/2018 02:40	WG1214111
Nitrobenzene	ND		0.333	1	12/25/2018 02:40	WG1214111
n-Nitrosodimethylamine	ND		0.333	1	12/25/2018 02:40	WG1214111
n-Nitrosodiphenylamine	ND		0.333	1	12/25/2018 02:40	WG1214111
n-Nitrosodi-n-propylamine	ND		0.333	1	12/25/2018 02:40	WG1214111
Phenanthrene	ND		0.0333	1	12/25/2018 02:40	WG1214111
Benzylbutyl phthalate	ND		0.333	1	12/25/2018 02:40	WG1214111
Bis(2-ethylhexyl)phthalate	ND		0.333	1	12/25/2018 02:40	WG1214111
Di-n-butyl phthalate	ND		0.333	1	12/25/2018 02:40	WG1214111
Diethyl phthalate	ND		0.333	1	12/25/2018 02:40	WG1214111
Dimethyl phthalate	ND		0.333	1	12/25/2018 02:40	WG1214111
Di-n-octyl phthalate	ND		0.333	1	12/25/2018 02:40	WG1214111
Pyrene	ND		0.0333	1	12/25/2018 02:40	WG1214111
1,2,4-Trichlorobenzene	ND		0.333	1	12/25/2018 02:40	WG1214111
4-Chloro-3-methylphenol	ND		0.333	1	12/25/2018 02:40	WG1214111
2-Chlorophenol	ND		0.333	1	12/25/2018 02:40	WG1214111
2,4-Dichlorophenol	ND		0.333	1	12/25/2018 02:40	WG1214111
2,4-Dimethylphenol	ND		0.333	1	12/25/2018 02:40	WG1214111
4,6-Dinitro-2-methylphenol	ND		0.333	1	12/25/2018 02:40	WG1214111
2,4-Dinitrophenol	ND		0.333	1	12/25/2018 02:40	WG1214111
2-Nitrophenol	ND		0.333	1	12/25/2018 02:40	WG1214111
4-Nitrophenol	ND		0.333	1	12/25/2018 02:40	WG1214111
Pentachlorophenol	ND		0.333	1	12/25/2018 02:40	WG1214111
Phenol	ND		0.333	1	12/25/2018 02:40	WG1214111
2,4,6-Trichlorophenol	ND		0.333	1	12/25/2018 02:40	WG1214111
(S) 2-Fluorophenol	62.8		12.0-120		12/25/2018 02:40	WG1214111
(S) Phenol-d5	56.3		10.0-120		12/25/2018 02:40	WG1214111
(S) Nitrobenzene-d5	57.7		10.0-122		12/25/2018 02:40	WG1214111
(S) 2-Fluorobiphenyl	56.2		15.0-120		12/25/2018 02:40	WG1214111
(S) 2,4,6-Tribromophenol	60.9		10.0-127		12/25/2018 02:40	WG1214111
(S) p-Terphenyl-d14	64.7		10.0-120		12/25/2018 02:40	WG1214111

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 date / time	Batch
Total Solids	74.7		1	12/21/2018 09:19	WG1214090

Mercury by Method 7471A

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Mercury	0.0280	<u>B</u>	0.0200	1	12/21/2018 10:54	WG1214206

Metals (ICP) by Method 6010B

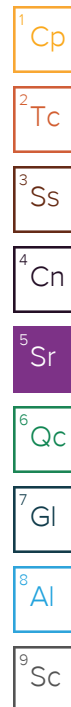
Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Arsenic	9.42		2.00	1	12/22/2018 16:07	WG1214050
Barium	129		0.500	1	12/22/2018 16:07	WG1214050
Cadmium	ND		0.500	1	12/22/2018 16:07	WG1214050
Chromium	12.2		1.00	1	12/22/2018 16:07	WG1214050
Lead	8.02		0.500	1	12/22/2018 16:07	WG1214050
Selenium	ND		2.00	1	12/22/2018 16:07	WG1214050
Silver	ND		1.00	1	12/22/2018 16:07	WG1214050

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	ND		0.100	1	12/27/2018 16:10	WG1216687
(S) a,a,a-Trifluorotoluene(FID)	102		77.0-120		12/27/2018 16:10	WG1216687

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

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Acetone	ND		0.0250	1	12/24/2018 21:34	WG1215610
Acrylonitrile	ND		0.0125	1	12/24/2018 21:34	WG1215610
Benzene	ND		0.00100	1	12/24/2018 21:34	WG1215610
Bromobenzene	ND		0.0125	1	12/24/2018 21:34	WG1215610
Bromodichloromethane	ND		0.00250	1	12/24/2018 21:34	WG1215610
Bromoform	ND		0.0250	1	12/24/2018 21:34	WG1215610
Bromomethane	ND		0.0125	1	12/24/2018 21:34	WG1215610
n-Butylbenzene	ND		0.0125	1	12/24/2018 21:34	WG1215610
sec-Butylbenzene	ND		0.0125	1	12/24/2018 21:34	WG1215610
tert-Butylbenzene	ND		0.00500	1	12/24/2018 21:34	WG1215610
Carbon tetrachloride	ND		0.00500	1	12/24/2018 21:34	WG1215610
Chlorobenzene	ND		0.00250	1	12/24/2018 21:34	WG1215610
Chlorodibromomethane	ND		0.00250	1	12/24/2018 21:34	WG1215610
Chloroethane	ND		0.00500	1	12/24/2018 21:34	WG1215610
Chloroform	ND		0.00250	1	12/24/2018 21:34	WG1215610
Chloromethane	ND		0.0125	1	12/24/2018 21:34	WG1215610
2-Chlorotoluene	ND		0.00250	1	12/24/2018 21:34	WG1215610
4-Chlorotoluene	ND		0.00500	1	12/24/2018 21:34	WG1215610
1,2-Dibromo-3-Chloropropane	ND		0.0250	1	12/24/2018 21:34	WG1215610
1,2-Dibromoethane	ND		0.00250	1	12/24/2018 21:34	WG1215610
Dibromomethane	ND		0.00500	1	12/24/2018 21:34	WG1215610
1,2-Dichlorobenzene	ND		0.00500	1	12/24/2018 21:34	WG1215610
1,3-Dichlorobenzene	ND		0.00500	1	12/24/2018 21:34	WG1215610
1,4-Dichlorobenzene	ND		0.00500	1	12/24/2018 21:34	WG1215610
Dichlorodifluoromethane	ND		0.00250	1	12/24/2018 21:34	WG1215610
1,1-Dichloroethane	ND		0.00250	1	12/24/2018 21:34	WG1215610
1,2-Dichloroethane	ND		0.00250	1	12/24/2018 21:34	WG1215610





Collected date/time: 12/17/18 15:00

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

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
1,1-Dichloroethene	ND		0.00250	1	12/24/2018 21:34	WG1215610
cis-1,2-Dichloroethene	ND		0.00250	1	12/24/2018 21:34	WG1215610
trans-1,2-Dichloroethene	ND		0.00500	1	12/24/2018 21:34	WG1215610
1,2-Dichloropropane	ND		0.00500	1	12/24/2018 21:34	WG1215610
1,1-Dichloropropene	ND		0.00250	1	12/24/2018 21:34	WG1215610
1,3-Dichloropropane	ND		0.00500	1	12/24/2018 21:34	WG1215610
cis-1,3-Dichloropropene	ND		0.00250	1	12/24/2018 21:34	WG1215610
trans-1,3-Dichloropropene	ND		0.00500	1	12/24/2018 21:34	WG1215610
2,2-Dichloropropane	ND		0.00250	1	12/24/2018 21:34	WG1215610
Di-isopropyl ether	ND		0.00100	1	12/24/2018 21:34	WG1215610
Ethylbenzene	ND		0.00250	1	12/24/2018 21:34	WG1215610
Hexachloro-1,3-butadiene	ND		0.0250	1	12/24/2018 21:34	WG1215610
Isopropylbenzene	ND	J4	0.00250	1	12/24/2018 21:34	WG1215610
p-Isopropyltoluene	ND		0.00500	1	12/24/2018 21:34	WG1215610
2-Butanone (MEK)	ND		0.0250	1	12/24/2018 21:34	WG1215610
Methylene Chloride	ND		0.0250	1	12/24/2018 21:34	WG1215610
4-Methyl-2-pentanone (MIBK)	ND		0.0250	1	12/24/2018 21:34	WG1215610
Methyl tert-butyl ether	ND		0.00100	1	12/24/2018 21:34	WG1215610
Naphthalene	ND		0.0125	1	12/24/2018 21:34	WG1215610
n-Propylbenzene	ND		0.00500	1	12/24/2018 21:34	WG1215610
Styrene	ND		0.0125	1	12/24/2018 21:34	WG1215610
1,1,1,2-Tetrachloroethane	ND		0.00250	1	12/24/2018 21:34	WG1215610
1,1,2,2-Tetrachloroethane	ND		0.00250	1	12/24/2018 21:34	WG1215610
1,1,2-Trichlorotrifluoroethane	ND		0.00250	1	12/24/2018 21:34	WG1215610
Tetrachloroethene	ND		0.00250	1	12/24/2018 21:34	WG1215610
Toluene	ND		0.00500	1	12/24/2018 21:34	WG1215610
1,2,3-Trichlorobenzene	ND		0.00250	1	12/24/2018 21:34	WG1215610
1,2,4-Trichlorobenzene	ND		0.0125	1	12/24/2018 21:34	WG1215610
1,1,1-Trichloroethane	ND		0.00250	1	12/24/2018 21:34	WG1215610
1,1,2-Trichloroethane	ND		0.00250	1	12/24/2018 21:34	WG1215610
Trichloroethene	ND		0.00100	1	12/24/2018 21:34	WG1215610
Trichlorofluoromethane	ND		0.00250	1	12/24/2018 21:34	WG1215610
1,2,3-Trichloropropane	ND		0.0125	1	12/24/2018 21:34	WG1215610
1,2,4-Trimethylbenzene	ND		0.00500	1	12/24/2018 21:34	WG1215610
1,2,3-Trimethylbenzene	ND		0.00500	1	12/24/2018 21:34	WG1215610
1,3,5-Trimethylbenzene	ND		0.00500	1	12/24/2018 21:34	WG1215610
Vinyl chloride	ND		0.00250	1	12/24/2018 21:34	WG1215610
Xylenes, Total	ND		0.00650	1	12/24/2018 21:34	WG1215610
(S) Toluene-d8	98.4		75.0-131		12/24/2018 21:34	WG1215610
(S) Dibromofluoromethane	104		65.0-129		12/24/2018 21:34	WG1215610
(S) 4-Bromofluorobenzene	103		67.0-138		12/24/2018 21:34	WG1215610

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

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	ND		4.00	1	12/28/2018 11:47	WG1215652
(S) o-Terphenyl	60.6		18.0-148		12/28/2018 11:47	WG1215652

Semi Volatile Organic Compounds (GC/MS) by Method 8270C

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Acenaphthene	ND		0.0333	1	12/25/2018 03:03	WG1214111
Acenaphthylene	ND		0.0333	1	12/25/2018 03:03	WG1214111
Anthracene	ND		0.0333	1	12/25/2018 03:03	WG1214111
Benzo(a)anthracene	ND		0.0333	1	12/25/2018 03:03	WG1214111

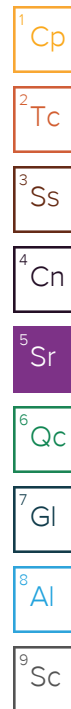


Collected date/time: 12/17/18 15:00

L1054617

Semi Volatile Organic Compounds (GC/MS) by Method 8270C

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Benzo(b)fluoranthene	ND		0.0333	1	12/25/2018 03:03	WG1214111
Benzo(k)fluoranthene	ND		0.0333	1	12/25/2018 03:03	WG1214111
Benzo(g,h,i)perylene	ND		0.0333	1	12/25/2018 03:03	WG1214111
Benzo(a)pyrene	ND		0.0333	1	12/25/2018 03:03	WG1214111
Bis(2-chlorethoxy)methane	ND		0.333	1	12/25/2018 03:03	WG1214111
Bis(2-chloroethyl)ether	ND		0.333	1	12/25/2018 03:03	WG1214111
Bis(2-chloroisopropyl)ether	ND		0.333	1	12/25/2018 03:03	WG1214111
4-Bromophenyl-phenylether	ND		0.333	1	12/25/2018 03:03	WG1214111
2-Chloronaphthalene	ND		0.0333	1	12/25/2018 03:03	WG1214111
4-Chlorophenyl-phenylether	ND		0.333	1	12/25/2018 03:03	WG1214111
Chrysene	ND		0.0333	1	12/25/2018 03:03	WG1214111
Dibenz(a,h)anthracene	ND		0.0333	1	12/25/2018 03:03	WG1214111
3,3-Dichlorobenzidine	ND		0.333	1	12/25/2018 03:03	WG1214111
2,4-Dinitrotoluene	ND		0.333	1	12/25/2018 03:03	WG1214111
2,6-Dinitrotoluene	ND		0.333	1	12/25/2018 03:03	WG1214111
Fluoranthene	ND		0.0333	1	12/25/2018 03:03	WG1214111
Fluorene	ND		0.0333	1	12/25/2018 03:03	WG1214111
Hexachlorobenzene	ND		0.333	1	12/25/2018 03:03	WG1214111
Hexachloro-1,3-butadiene	ND		0.333	1	12/25/2018 03:03	WG1214111
Hexachlorocyclopentadiene	ND		0.333	1	12/25/2018 03:03	WG1214111
Hexachloroethane	ND		0.333	1	12/25/2018 03:03	WG1214111
Indeno(1,2,3-cd)pyrene	ND		0.0333	1	12/25/2018 03:03	WG1214111
Isophorone	ND		0.333	1	12/25/2018 03:03	WG1214111
Naphthalene	ND		0.0333	1	12/25/2018 03:03	WG1214111
Nitrobenzene	ND		0.333	1	12/25/2018 03:03	WG1214111
n-Nitrosodimethylamine	ND		0.333	1	12/25/2018 03:03	WG1214111
n-Nitrosodiphenylamine	ND		0.333	1	12/25/2018 03:03	WG1214111
n-Nitrosodi-n-propylamine	ND		0.333	1	12/25/2018 03:03	WG1214111
Phenanthrene	ND		0.0333	1	12/25/2018 03:03	WG1214111
Benzylbutyl phthalate	ND		0.333	1	12/25/2018 03:03	WG1214111
Bis(2-ethylhexyl)phthalate	ND		0.333	1	12/25/2018 03:03	WG1214111
Di-n-butyl phthalate	ND		0.333	1	12/25/2018 03:03	WG1214111
Diethyl phthalate	ND		0.333	1	12/25/2018 03:03	WG1214111
Dimethyl phthalate	ND		0.333	1	12/25/2018 03:03	WG1214111
Di-n-octyl phthalate	ND		0.333	1	12/25/2018 03:03	WG1214111
Pyrene	ND		0.0333	1	12/25/2018 03:03	WG1214111
1,2,4-Trichlorobenzene	ND		0.333	1	12/25/2018 03:03	WG1214111
4-Chloro-3-methylphenol	ND		0.333	1	12/25/2018 03:03	WG1214111
2-Chlorophenol	ND		0.333	1	12/25/2018 03:03	WG1214111
2,4-Dichlorophenol	ND		0.333	1	12/25/2018 03:03	WG1214111
2,4-Dimethylphenol	ND		0.333	1	12/25/2018 03:03	WG1214111
4,6-Dinitro-2-methylphenol	ND		0.333	1	12/25/2018 03:03	WG1214111
2,4-Dinitrophenol	ND		0.333	1	12/25/2018 03:03	WG1214111
2-Nitrophenol	ND		0.333	1	12/25/2018 03:03	WG1214111
4-Nitrophenol	ND		0.333	1	12/25/2018 03:03	WG1214111
Pentachlorophenol	ND		0.333	1	12/25/2018 03:03	WG1214111
Phenol	ND		0.333	1	12/25/2018 03:03	WG1214111
2,4,6-Trichlorophenol	ND		0.333	1	12/25/2018 03:03	WG1214111
(S) 2-Fluorophenol	65.3		12.0-120		12/25/2018 03:03	WG1214111
(S) Phenol-d5	57.6		10.0-120		12/25/2018 03:03	WG1214111
(S) Nitrobenzene-d5	58.4		10.0-122		12/25/2018 03:03	WG1214111
(S) 2-Fluorobiphenyl	58.7		15.0-120		12/25/2018 03:03	WG1214111
(S) 2,4,6-Tribromophenol	68.3		10.0-127		12/25/2018 03:03	WG1214111
(S) p-Terphenyl-d14	73.8		10.0-120		12/25/2018 03:03	WG1214111





Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	75.0		1	12/21/2018 09:19	WG1214090

Mercury by Method 7471A

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Mercury	ND		0.0200	1	12/21/2018 11:02	WG1214206

Metals (ICP) by Method 6010B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Arsenic	4.52		2.00	1	12/22/2018 16:10	WG1214050
Barium	121		0.500	1	12/22/2018 16:10	WG1214050
Cadmium	ND		0.500	1	12/22/2018 16:10	WG1214050
Chromium	10.9		1.00	1	12/22/2018 16:10	WG1214050
Lead	6.52		0.500	1	12/22/2018 16:10	WG1214050
Selenium	ND		2.00	1	12/22/2018 16:10	WG1214050
Silver	ND		1.00	1	12/22/2018 16:10	WG1214050

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
TPH (GC/FID) Low Fraction	ND		0.100	1	12/27/2018 16:32	WG1216687
(S) a,a,a-Trifluorotoluene(FID)	102		77.0-120		12/27/2018 16:32	WG1216687

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

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Acetone	ND		0.0250	1	12/24/2018 21:53	WG1215610
Acrylonitrile	ND		0.0125	1	12/24/2018 21:53	WG1215610
Benzene	ND		0.00100	1	12/24/2018 21:53	WG1215610
Bromobenzene	ND		0.0125	1	12/24/2018 21:53	WG1215610
Bromodichloromethane	ND		0.00250	1	12/24/2018 21:53	WG1215610
Bromoform	ND		0.0250	1	12/24/2018 21:53	WG1215610
Bromomethane	ND		0.0125	1	12/24/2018 21:53	WG1215610
n-Butylbenzene	ND		0.0125	1	12/24/2018 21:53	WG1215610
sec-Butylbenzene	ND		0.0125	1	12/24/2018 21:53	WG1215610
tert-Butylbenzene	ND		0.00500	1	12/24/2018 21:53	WG1215610
Carbon tetrachloride	ND		0.00500	1	12/24/2018 21:53	WG1215610
Chlorobenzene	ND		0.00250	1	12/24/2018 21:53	WG1215610
Chlorodibromomethane	ND		0.00250	1	12/24/2018 21:53	WG1215610
Chloroethane	ND		0.00500	1	12/24/2018 21:53	WG1215610
Chloroform	ND		0.00250	1	12/24/2018 21:53	WG1215610
Chloromethane	ND		0.0125	1	12/24/2018 21:53	WG1215610
2-Chlorotoluene	ND		0.00250	1	12/24/2018 21:53	WG1215610
4-Chlorotoluene	ND		0.00500	1	12/24/2018 21:53	WG1215610
1,2-Dibromo-3-Chloropropane	ND		0.0250	1	12/24/2018 21:53	WG1215610
1,2-Dibromoethane	ND		0.00250	1	12/24/2018 21:53	WG1215610
Dibromomethane	ND		0.00500	1	12/24/2018 21:53	WG1215610
1,2-Dichlorobenzene	ND		0.00500	1	12/24/2018 21:53	WG1215610
1,3-Dichlorobenzene	ND		0.00500	1	12/24/2018 21:53	WG1215610
1,4-Dichlorobenzene	ND		0.00500	1	12/24/2018 21:53	WG1215610
Dichlorodifluoromethane	ND		0.00250	1	12/24/2018 21:53	WG1215610
1,1-Dichloroethane	ND		0.00250	1	12/24/2018 21:53	WG1215610
1,2-Dichloroethane	ND		0.00250	1	12/24/2018 21:53	WG1215610

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 8260B

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
1,1-Dichloroethene	ND		0.00250	1	12/24/2018 21:53	WG1215610
cis-1,2-Dichloroethene	ND		0.00250	1	12/24/2018 21:53	WG1215610
trans-1,2-Dichloroethene	ND		0.00500	1	12/24/2018 21:53	WG1215610
1,2-Dichloropropane	ND		0.00500	1	12/24/2018 21:53	WG1215610
1,1-Dichloropropene	ND		0.00250	1	12/24/2018 21:53	WG1215610
1,3-Dichloropropane	ND		0.00500	1	12/24/2018 21:53	WG1215610
cis-1,3-Dichloropropene	ND		0.00250	1	12/24/2018 21:53	WG1215610
trans-1,3-Dichloropropene	ND		0.00500	1	12/24/2018 21:53	WG1215610
2,2-Dichloropropane	ND		0.00250	1	12/24/2018 21:53	WG1215610
Di-isopropyl ether	ND		0.00100	1	12/24/2018 21:53	WG1215610
Ethylbenzene	ND		0.00250	1	12/24/2018 21:53	WG1215610
Hexachloro-1,3-butadiene	ND		0.0250	1	12/24/2018 21:53	WG1215610
Isopropylbenzene	ND	J4	0.00250	1	12/24/2018 21:53	WG1215610
p-Isopropyltoluene	ND		0.00500	1	12/24/2018 21:53	WG1215610
2-Butanone (MEK)	ND		0.0250	1	12/24/2018 21:53	WG1215610
Methylene Chloride	ND		0.0250	1	12/24/2018 21:53	WG1215610
4-Methyl-2-pentanone (MIBK)	ND		0.0250	1	12/24/2018 21:53	WG1215610
Methyl tert-butyl ether	ND		0.00100	1	12/24/2018 21:53	WG1215610
Naphthalene	ND		0.0125	1	12/24/2018 21:53	WG1215610
n-Propylbenzene	ND		0.00500	1	12/24/2018 21:53	WG1215610
Styrene	ND		0.0125	1	12/24/2018 21:53	WG1215610
1,1,1,2-Tetrachloroethane	ND		0.00250	1	12/24/2018 21:53	WG1215610
1,1,2,2-Tetrachloroethane	ND		0.00250	1	12/24/2018 21:53	WG1215610
1,1,2-Trichlorotrifluoroethane	ND		0.00250	1	12/24/2018 21:53	WG1215610
Tetrachloroethene	ND		0.00250	1	12/24/2018 21:53	WG1215610
Toluene	ND		0.00500	1	12/24/2018 21:53	WG1215610
1,2,3-Trichlorobenzene	ND		0.00250	1	12/24/2018 21:53	WG1215610
1,2,4-Trichlorobenzene	ND		0.0125	1	12/24/2018 21:53	WG1215610
1,1,1-Trichloroethane	ND		0.00250	1	12/24/2018 21:53	WG1215610
1,1,2-Trichloroethane	ND		0.00250	1	12/24/2018 21:53	WG1215610
Trichloroethene	ND		0.00100	1	12/24/2018 21:53	WG1215610
Trichlorofluoromethane	ND		0.00250	1	12/24/2018 21:53	WG1215610
1,2,3-Trichloropropane	ND		0.0125	1	12/24/2018 21:53	WG1215610
1,2,4-Trimethylbenzene	ND		0.00500	1	12/24/2018 21:53	WG1215610
1,2,3-Trimethylbenzene	ND		0.00500	1	12/24/2018 21:53	WG1215610
1,3,5-Trimethylbenzene	ND		0.00500	1	12/24/2018 21:53	WG1215610
Vinyl chloride	ND		0.00250	1	12/24/2018 21:53	WG1215610
Xylenes, Total	ND		0.00650	1	12/24/2018 21:53	WG1215610
(S) Toluene-d8	102		75.0-131		12/24/2018 21:53	WG1215610
(S) Dibromofluoromethane	102		65.0-129		12/24/2018 21:53	WG1215610
(S) 4-Bromofluorobenzene	101		67.0-138		12/24/2018 21:53	WG1215610

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

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	ND		4.00	1	12/28/2018 11:59	WG1215652
(S) o-Terphenyl	55.2		18.0-148		12/28/2018 11:59	WG1215652

Semi Volatile Organic Compounds (GC/MS) by Method 8270C

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Acenaphthene	ND		0.0333	1	12/25/2018 03:26	WG1214111
Acenaphthylene	ND		0.0333	1	12/25/2018 03:26	WG1214111
Anthracene	ND		0.0333	1	12/25/2018 03:26	WG1214111
Benzo(a)anthracene	ND		0.0333	1	12/25/2018 03:26	WG1214111



Semi Volatile Organic Compounds (GC/MS) by Method 8270C

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Benzo(b)fluoranthene	ND		0.0333	1	12/25/2018 03:26	WG1214111
Benzo(k)fluoranthene	ND		0.0333	1	12/25/2018 03:26	WG1214111
Benzo(g,h,i)perylene	ND		0.0333	1	12/25/2018 03:26	WG1214111
Benzo(a)pyrene	ND		0.0333	1	12/25/2018 03:26	WG1214111
Bis(2-chlorethoxy)methane	ND		0.333	1	12/25/2018 03:26	WG1214111
Bis(2-chloroethyl)ether	ND		0.333	1	12/25/2018 03:26	WG1214111
Bis(2-chloroisopropyl)ether	ND		0.333	1	12/25/2018 03:26	WG1214111
4-Bromophenyl-phenylether	ND		0.333	1	12/25/2018 03:26	WG1214111
2-Chloronaphthalene	ND		0.0333	1	12/25/2018 03:26	WG1214111
4-Chlorophenyl-phenylether	ND		0.333	1	12/25/2018 03:26	WG1214111
Chrysene	ND		0.0333	1	12/25/2018 03:26	WG1214111
Dibenz(a,h)anthracene	ND		0.0333	1	12/25/2018 03:26	WG1214111
3,3-Dichlorobenzidine	ND		0.333	1	12/25/2018 03:26	WG1214111
2,4-Dinitrotoluene	ND		0.333	1	12/25/2018 03:26	WG1214111
2,6-Dinitrotoluene	ND		0.333	1	12/25/2018 03:26	WG1214111
Fluoranthene	ND		0.0333	1	12/25/2018 03:26	WG1214111
Fluorene	ND		0.0333	1	12/25/2018 03:26	WG1214111
Hexachlorobenzene	ND		0.333	1	12/25/2018 03:26	WG1214111
Hexachloro-1,3-butadiene	ND		0.333	1	12/25/2018 03:26	WG1214111
Hexachlorocyclopentadiene	ND		0.333	1	12/25/2018 03:26	WG1214111
Hexachloroethane	ND		0.333	1	12/25/2018 03:26	WG1214111
Indeno(1,2,3-cd)pyrene	ND		0.0333	1	12/25/2018 03:26	WG1214111
Isophorone	ND		0.333	1	12/25/2018 03:26	WG1214111
Naphthalene	ND		0.0333	1	12/25/2018 03:26	WG1214111
Nitrobenzene	ND		0.333	1	12/25/2018 03:26	WG1214111
n-Nitrosodimethylamine	ND		0.333	1	12/25/2018 03:26	WG1214111
n-Nitrosodiphenylamine	ND		0.333	1	12/25/2018 03:26	WG1214111
n-Nitrosodi-n-propylamine	ND		0.333	1	12/25/2018 03:26	WG1214111
Phenanthrene	ND		0.0333	1	12/25/2018 03:26	WG1214111
Benzylbutyl phthalate	ND		0.333	1	12/25/2018 03:26	WG1214111
Bis(2-ethylhexyl)phthalate	ND		0.333	1	12/25/2018 03:26	WG1214111
Di-n-butyl phthalate	ND		0.333	1	12/25/2018 03:26	WG1214111
Diethyl phthalate	ND		0.333	1	12/25/2018 03:26	WG1214111
Dimethyl phthalate	ND		0.333	1	12/25/2018 03:26	WG1214111
Di-n-octyl phthalate	ND		0.333	1	12/25/2018 03:26	WG1214111
Pyrene	ND		0.0333	1	12/25/2018 03:26	WG1214111
1,2,4-Trichlorobenzene	ND		0.333	1	12/25/2018 03:26	WG1214111
4-Chloro-3-methylphenol	ND		0.333	1	12/25/2018 03:26	WG1214111
2-Chlorophenol	ND		0.333	1	12/25/2018 03:26	WG1214111
2,4-Dichlorophenol	ND		0.333	1	12/25/2018 03:26	WG1214111
2,4-Dimethylphenol	ND		0.333	1	12/25/2018 03:26	WG1214111
4,6-Dinitro-2-methylphenol	ND		0.333	1	12/25/2018 03:26	WG1214111
2,4-Dinitrophenol	ND		0.333	1	12/25/2018 03:26	WG1214111
2-Nitrophenol	ND		0.333	1	12/25/2018 03:26	WG1214111
4-Nitrophenol	ND		0.333	1	12/25/2018 03:26	WG1214111
Pentachlorophenol	ND		0.333	1	12/25/2018 03:26	WG1214111
Phenol	ND		0.333	1	12/25/2018 03:26	WG1214111
2,4,6-Trichlorophenol	ND		0.333	1	12/25/2018 03:26	WG1214111
(S) 2-Fluorophenol	64.5		12.0-120		12/25/2018 03:26	WG1214111
(S) Phenol-d5	56.7		10.0-120		12/25/2018 03:26	WG1214111
(S) Nitrobenzene-d5	58.6		10.0-122		12/25/2018 03:26	WG1214111
(S) 2-Fluorobiphenyl	57.9		15.0-120		12/25/2018 03:26	WG1214111
(S) 2,4,6-Tribromophenol	58.3		10.0-127		12/25/2018 03:26	WG1214111
(S) p-Terphenyl-d14	64.2		10.0-120		12/25/2018 03:26	WG1214111

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 date / time	Batch
Total Solids	73.4		1	12/21/2018 09:19	WG1214090

Mercury by Method 7471A

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Mercury	ND		0.0200	1	12/21/2018 11:05	WG1214206

Metals (ICP) by Method 6010B

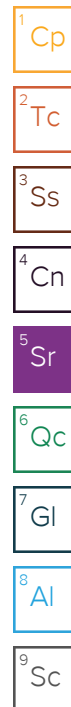
Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Arsenic	3.31		2.00	1	12/22/2018 16:12	WG1214050
Barium	112		0.500	1	12/22/2018 16:12	WG1214050
Cadmium	ND		0.500	1	12/22/2018 16:12	WG1214050
Chromium	9.98		1.00	1	12/22/2018 16:12	WG1214050
Lead	6.12		0.500	1	12/22/2018 16:12	WG1214050
Selenium	ND		2.00	1	12/22/2018 16:12	WG1214050
Silver	ND		1.00	1	12/22/2018 16:12	WG1214050

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	ND		0.100	1	12/27/2018 16:54	WG1216687
(S) a,a,a-Trifluorotoluene(FID)	102		77.0-120		12/27/2018 16:54	WG1216687

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

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Acetone	ND		0.0250	1	12/24/2018 22:12	WG1215610
Acrylonitrile	ND		0.0125	1	12/24/2018 22:12	WG1215610
Benzene	ND		0.00100	1	12/24/2018 22:12	WG1215610
Bromobenzene	ND		0.0125	1	12/24/2018 22:12	WG1215610
Bromodichloromethane	ND		0.00250	1	12/24/2018 22:12	WG1215610
Bromoform	ND		0.0250	1	12/24/2018 22:12	WG1215610
Bromomethane	ND		0.0125	1	12/24/2018 22:12	WG1215610
n-Butylbenzene	ND		0.0125	1	12/24/2018 22:12	WG1215610
sec-Butylbenzene	ND		0.0125	1	12/24/2018 22:12	WG1215610
tert-Butylbenzene	ND		0.00500	1	12/24/2018 22:12	WG1215610
Carbon tetrachloride	ND		0.00500	1	12/24/2018 22:12	WG1215610
Chlorobenzene	ND		0.00250	1	12/24/2018 22:12	WG1215610
Chlorodibromomethane	ND		0.00250	1	12/24/2018 22:12	WG1215610
Chloroethane	ND		0.00500	1	12/24/2018 22:12	WG1215610
Chloroform	ND		0.00250	1	12/24/2018 22:12	WG1215610
Chloromethane	ND		0.0125	1	12/24/2018 22:12	WG1215610
2-Chlorotoluene	ND		0.00250	1	12/24/2018 22:12	WG1215610
4-Chlorotoluene	ND		0.00500	1	12/24/2018 22:12	WG1215610
1,2-Dibromo-3-Chloropropane	ND		0.0250	1	12/24/2018 22:12	WG1215610
1,2-Dibromoethane	ND		0.00250	1	12/24/2018 22:12	WG1215610
Dibromomethane	ND		0.00500	1	12/24/2018 22:12	WG1215610
1,2-Dichlorobenzene	ND		0.00500	1	12/24/2018 22:12	WG1215610
1,3-Dichlorobenzene	ND		0.00500	1	12/24/2018 22:12	WG1215610
1,4-Dichlorobenzene	ND		0.00500	1	12/24/2018 22:12	WG1215610
Dichlorodifluoromethane	ND		0.00250	1	12/24/2018 22:12	WG1215610
1,1-Dichloroethane	ND		0.00250	1	12/24/2018 22:12	WG1215610
1,2-Dichloroethane	ND		0.00250	1	12/24/2018 22:12	WG1215610





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

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
1,1-Dichloroethene	ND		0.00250	1	12/24/2018 22:12	WG1215610
cis-1,2-Dichloroethene	ND		0.00250	1	12/24/2018 22:12	WG1215610
trans-1,2-Dichloroethene	ND		0.00500	1	12/24/2018 22:12	WG1215610
1,2-Dichloropropane	ND		0.00500	1	12/24/2018 22:12	WG1215610
1,1-Dichloropropene	ND		0.00250	1	12/24/2018 22:12	WG1215610
1,3-Dichloropropane	ND		0.00500	1	12/24/2018 22:12	WG1215610
cis-1,3-Dichloropropene	ND		0.00250	1	12/24/2018 22:12	WG1215610
trans-1,3-Dichloropropene	ND		0.00500	1	12/24/2018 22:12	WG1215610
2,2-Dichloropropane	ND		0.00250	1	12/24/2018 22:12	WG1215610
Di-isopropyl ether	ND		0.00100	1	12/24/2018 22:12	WG1215610
Ethylbenzene	ND		0.00250	1	12/24/2018 22:12	WG1215610
Hexachloro-1,3-butadiene	ND		0.0250	1	12/24/2018 22:12	WG1215610
Isopropylbenzene	ND	J4	0.00250	1	12/24/2018 22:12	WG1215610
p-Isopropyltoluene	ND		0.00500	1	12/24/2018 22:12	WG1215610
2-Butanone (MEK)	ND		0.0250	1	12/24/2018 22:12	WG1215610
Methylene Chloride	ND		0.0250	1	12/24/2018 22:12	WG1215610
4-Methyl-2-pentanone (MIBK)	ND		0.0250	1	12/24/2018 22:12	WG1215610
Methyl tert-butyl ether	ND		0.00100	1	12/24/2018 22:12	WG1215610
Naphthalene	ND		0.0125	1	12/24/2018 22:12	WG1215610
n-Propylbenzene	ND		0.00500	1	12/24/2018 22:12	WG1215610
Styrene	ND		0.0125	1	12/24/2018 22:12	WG1215610
1,1,1,2-Tetrachloroethane	ND		0.00250	1	12/24/2018 22:12	WG1215610
1,1,2,2-Tetrachloroethane	ND		0.00250	1	12/24/2018 22:12	WG1215610
1,1,2-Trichlorotrifluoroethane	ND		0.00250	1	12/24/2018 22:12	WG1215610
Tetrachloroethene	ND		0.00250	1	12/24/2018 22:12	WG1215610
Toluene	ND		0.00500	1	12/24/2018 22:12	WG1215610
1,2,3-Trichlorobenzene	ND		0.00250	1	12/24/2018 22:12	WG1215610
1,2,4-Trichlorobenzene	ND		0.0125	1	12/24/2018 22:12	WG1215610
1,1,1-Trichloroethane	ND		0.00250	1	12/24/2018 22:12	WG1215610
1,1,2-Trichloroethane	ND		0.00250	1	12/24/2018 22:12	WG1215610
Trichloroethene	ND		0.00100	1	12/24/2018 22:12	WG1215610
Trichlorofluoromethane	ND		0.00250	1	12/24/2018 22:12	WG1215610
1,2,3-Trichloropropane	ND		0.0125	1	12/24/2018 22:12	WG1215610
1,2,4-Trimethylbenzene	ND		0.00500	1	12/24/2018 22:12	WG1215610
1,2,3-Trimethylbenzene	ND		0.00500	1	12/24/2018 22:12	WG1215610
1,3,5-Trimethylbenzene	ND		0.00500	1	12/24/2018 22:12	WG1215610
Vinyl chloride	ND		0.00250	1	12/24/2018 22:12	WG1215610
Xylenes, Total	ND		0.00650	1	12/24/2018 22:12	WG1215610
(S) Toluene-d8	103		75.0-131		12/24/2018 22:12	WG1215610
(S) Dibromofluoromethane	104		65.0-129		12/24/2018 22:12	WG1215610
(S) 4-Bromofluorobenzene	102		67.0-138		12/24/2018 22:12	WG1215610

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

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	ND		4.00	1	12/28/2018 12:11	WG1215652
(S) o-Terphenyl	67.4		18.0-148		12/28/2018 12:11	WG1215652

Semi Volatile Organic Compounds (GC/MS) by Method 8270C

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Acenaphthene	ND		0.0333	1	12/25/2018 03:49	WG1214111
Acenaphthylene	ND		0.0333	1	12/25/2018 03:49	WG1214111
Anthracene	ND		0.0333	1	12/25/2018 03:49	WG1214111
Benzo(a)anthracene	ND		0.0333	1	12/25/2018 03:49	WG1214111

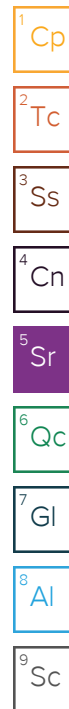


Collected date/time: 12/17/18 15:06

L1054617

Semi Volatile Organic Compounds (GC/MS) by Method 8270C

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Benzo(b)fluoranthene	ND		0.0333	1	12/25/2018 03:49	WG1214111
Benzo(k)fluoranthene	ND		0.0333	1	12/25/2018 03:49	WG1214111
Benzo(g,h,i)perylene	ND		0.0333	1	12/25/2018 03:49	WG1214111
Benzo(a)pyrene	ND		0.0333	1	12/25/2018 03:49	WG1214111
Bis(2-chlorethoxy)methane	ND		0.333	1	12/25/2018 03:49	WG1214111
Bis(2-chloroethyl)ether	ND		0.333	1	12/25/2018 03:49	WG1214111
Bis(2-chloroisopropyl)ether	ND		0.333	1	12/25/2018 03:49	WG1214111
4-Bromophenyl-phenylether	ND		0.333	1	12/25/2018 03:49	WG1214111
2-Chloronaphthalene	ND		0.0333	1	12/25/2018 03:49	WG1214111
4-Chlorophenyl-phenylether	ND		0.333	1	12/25/2018 03:49	WG1214111
Chrysene	ND		0.0333	1	12/25/2018 03:49	WG1214111
Dibenz(a,h)anthracene	ND		0.0333	1	12/25/2018 03:49	WG1214111
3,3-Dichlorobenzidine	ND		0.333	1	12/25/2018 03:49	WG1214111
2,4-Dinitrotoluene	ND		0.333	1	12/25/2018 03:49	WG1214111
2,6-Dinitrotoluene	ND		0.333	1	12/25/2018 03:49	WG1214111
Fluoranthene	ND		0.0333	1	12/25/2018 03:49	WG1214111
Fluorene	ND		0.0333	1	12/25/2018 03:49	WG1214111
Hexachlorobenzene	ND		0.333	1	12/25/2018 03:49	WG1214111
Hexachloro-1,3-butadiene	ND		0.333	1	12/25/2018 03:49	WG1214111
Hexachlorocyclopentadiene	ND		0.333	1	12/25/2018 03:49	WG1214111
Hexachloroethane	ND	<u>J3</u>	0.333	1	12/25/2018 03:49	WG1214111
Indeno(1,2,3-cd)pyrene	ND		0.0333	1	12/25/2018 03:49	WG1214111
Isophorone	ND		0.333	1	12/25/2018 03:49	WG1214111
Naphthalene	ND		0.0333	1	12/25/2018 03:49	WG1214111
Nitrobenzene	ND		0.333	1	12/25/2018 03:49	WG1214111
n-Nitrosodimethylamine	ND		0.333	1	12/25/2018 03:49	WG1214111
n-Nitrosodiphenylamine	ND		0.333	1	12/25/2018 03:49	WG1214111
n-Nitrosodi-n-propylamine	ND		0.333	1	12/25/2018 03:49	WG1214111
Phenanthrene	ND		0.0333	1	12/25/2018 03:49	WG1214111
Benzylbutyl phthalate	ND		0.333	1	12/25/2018 03:49	WG1214111
Bis(2-ethylhexyl)phthalate	ND		0.333	1	12/25/2018 03:49	WG1214111
Di-n-butyl phthalate	ND		0.333	1	12/25/2018 03:49	WG1214111
Diethyl phthalate	ND		0.333	1	12/25/2018 03:49	WG1214111
Dimethyl phthalate	ND		0.333	1	12/25/2018 03:49	WG1214111
Di-n-octyl phthalate	ND		0.333	1	12/25/2018 03:49	WG1214111
Pyrene	ND		0.0333	1	12/25/2018 03:49	WG1214111
1,2,4-Trichlorobenzene	ND		0.333	1	12/25/2018 03:49	WG1214111
4-Chloro-3-methylphenol	ND		0.333	1	12/25/2018 03:49	WG1214111
2-Chlorophenol	ND		0.333	1	12/25/2018 03:49	WG1214111
2,4-Dichlorophenol	ND		0.333	1	12/25/2018 03:49	WG1214111
2,4-Dimethylphenol	ND		0.333	1	12/25/2018 03:49	WG1214111
4,6-Dinitro-2-methylphenol	ND	<u>J3 J6</u>	0.333	1	12/25/2018 03:49	WG1214111
2,4-Dinitrophenol	ND	<u>J3 J6</u>	0.333	1	12/25/2018 03:49	WG1214111
2-Nitrophenol	ND		0.333	1	12/25/2018 03:49	WG1214111
4-Nitrophenol	ND		0.333	1	12/25/2018 03:49	WG1214111
Pentachlorophenol	ND		0.333	1	12/25/2018 03:49	WG1214111
Phenol	ND		0.333	1	12/25/2018 03:49	WG1214111
2,4,6-Trichlorophenol	ND		0.333	1	12/25/2018 03:49	WG1214111
(S) 2-Fluorophenol	53.2		12.0-120		12/25/2018 03:49	WG1214111
(S) Phenol-d5	18.8		10.0-120		12/25/2018 03:49	WG1214111
(S) Nitrobenzene-d5	46.3		10.0-122		12/25/2018 03:49	WG1214111
(S) 2-Fluorobiphenyl	46.3		15.0-120		12/25/2018 03:49	WG1214111
(S) 2,4,6-Tribromophenol	43.8		10.0-127		12/25/2018 03:49	WG1214111
(S) p-Terphenyl-d14	59.4		10.0-120		12/25/2018 03:49	WG1214111





Collected date/time: 12/17/18 00:00

L1054617

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

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
Acetone	ND		0.0500	1	12/21/2018 21:46	WG1214702
Acrolein	ND		0.0500	1	12/21/2018 21:46	WG1214702
Acrylonitrile	ND		0.0100	1	12/21/2018 21:46	WG1214702
Benzene	ND		0.00100	1	12/21/2018 21:46	WG1214702
Bromobenzene	ND		0.00100	1	12/21/2018 21:46	WG1214702
Bromodichloromethane	ND		0.00100	1	12/21/2018 21:46	WG1214702
Bromoform	ND		0.00100	1	12/21/2018 21:46	WG1214702
Bromomethane	ND		0.00500	1	12/21/2018 21:46	WG1214702
n-Butylbenzene	ND		0.00100	1	12/21/2018 21:46	WG1214702
sec-Butylbenzene	ND		0.00100	1	12/21/2018 21:46	WG1214702
tert-Butylbenzene	ND		0.00100	1	12/21/2018 21:46	WG1214702
Carbon tetrachloride	ND		0.00100	1	12/21/2018 21:46	WG1214702
Chlorobenzene	ND		0.00100	1	12/21/2018 21:46	WG1214702
Chlorodibromomethane	ND		0.00100	1	12/21/2018 21:46	WG1214702
Chloroethane	ND		0.00500	1	12/21/2018 21:46	WG1214702
Chloroform	ND		0.00500	1	12/21/2018 21:46	WG1214702
Chloromethane	ND		0.00250	1	12/21/2018 21:46	WG1214702
2-Chlorotoluene	ND		0.00100	1	12/21/2018 21:46	WG1214702
4-Chlorotoluene	ND		0.00100	1	12/21/2018 21:46	WG1214702
1,2-Dibromo-3-Chloropropane	ND		0.00500	1	12/21/2018 21:46	WG1214702
1,2-Dibromoethane	ND		0.00100	1	12/21/2018 21:46	WG1214702
Dibromomethane	ND		0.00100	1	12/21/2018 21:46	WG1214702
1,2-Dichlorobenzene	ND		0.00100	1	12/21/2018 21:46	WG1214702
1,3-Dichlorobenzene	ND		0.00100	1	12/21/2018 21:46	WG1214702
1,4-Dichlorobenzene	ND		0.00100	1	12/21/2018 21:46	WG1214702
Dichlorodifluoromethane	ND		0.00500	1	12/21/2018 21:46	WG1214702
1,1-Dichloroethane	ND		0.00100	1	12/21/2018 21:46	WG1214702
1,2-Dichloroethane	ND		0.00100	1	12/21/2018 21:46	WG1214702
1,1-Dichloroethene	ND		0.00100	1	12/21/2018 21:46	WG1214702
cis-1,2-Dichloroethene	ND		0.00100	1	12/21/2018 21:46	WG1214702
trans-1,2-Dichloroethene	ND		0.00100	1	12/21/2018 21:46	WG1214702
1,2-Dichloropropane	ND		0.00100	1	12/21/2018 21:46	WG1214702
1,1-Dichloropropene	ND		0.00100	1	12/21/2018 21:46	WG1214702
1,3-Dichloropropane	ND		0.00100	1	12/21/2018 21:46	WG1214702
cis-1,3-Dichloropropene	ND		0.00100	1	12/21/2018 21:46	WG1214702
trans-1,3-Dichloropropene	ND		0.00100	1	12/21/2018 21:46	WG1214702
2,2-Dichloropropane	ND		0.00100	1	12/21/2018 21:46	WG1214702
Di-isopropyl ether	ND		0.00100	1	12/21/2018 21:46	WG1214702
Ethylbenzene	ND		0.00100	1	12/21/2018 21:46	WG1214702
Hexachloro-1,3-butadiene	ND	J3	0.00100	1	12/21/2018 21:46	WG1214702
Isopropylbenzene	ND		0.00100	1	12/21/2018 21:46	WG1214702
p-Isopropyltoluene	ND		0.00100	1	12/21/2018 21:46	WG1214702
2-Butanone (MEK)	ND		0.0100	1	12/21/2018 21:46	WG1214702
Methylene Chloride	ND		0.00500	1	12/21/2018 21:46	WG1214702
4-Methyl-2-pentanone (MIBK)	ND		0.0100	1	12/21/2018 21:46	WG1214702
Methyl tert-butyl ether	ND		0.00100	1	12/21/2018 21:46	WG1214702
Naphthalene	ND	J3	0.00500	1	12/21/2018 21:46	WG1214702
n-Propylbenzene	ND		0.00100	1	12/21/2018 21:46	WG1214702
Styrene	ND		0.00100	1	12/21/2018 21:46	WG1214702
1,1,1,2-Tetrachloroethane	ND		0.00100	1	12/21/2018 21:46	WG1214702
1,1,2,2-Tetrachloroethane	ND		0.00100	1	12/21/2018 21:46	WG1214702
1,1,2-Trichlorotrifluoroethane	ND		0.00100	1	12/21/2018 21:46	WG1214702
Tetrachloroethene	ND		0.00100	1	12/21/2018 21:46	WG1214702
Toluene	ND		0.00100	1	12/21/2018 21:46	WG1214702
1,2,3-Trichlorobenzene	ND	J3	0.00100	1	12/21/2018 21:46	WG1214702
1,2,4-Trichlorobenzene	ND	J3	0.00100	1	12/21/2018 21:46	WG1214702

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 12/17/18 00:00

L1054617

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

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
1,1,1-Trichloroethane	ND		0.00100	1	12/21/2018 21:46	WG1214702
1,1,2-Trichloroethane	ND		0.00100	1	12/21/2018 21:46	WG1214702
Trichloroethene	ND		0.00100	1	12/21/2018 21:46	WG1214702
Trichlorofluoromethane	ND		0.00500	1	12/21/2018 21:46	WG1214702
1,2,3-Trichloropropane	ND		0.00250	1	12/21/2018 21:46	WG1214702
1,2,4-Trimethylbenzene	ND		0.00100	1	12/21/2018 21:46	WG1214702
1,2,3-Trimethylbenzene	ND		0.00100	1	12/21/2018 21:46	WG1214702
1,3,5-Trimethylbenzene	ND		0.00100	1	12/21/2018 21:46	WG1214702
Vinyl chloride	ND		0.00100	1	12/21/2018 21:46	WG1214702
Xylenes, Total	ND		0.00300	1	12/21/2018 21:46	WG1214702
(S) Toluene-d8	104		80.0-120		12/21/2018 21:46	WG1214702
(S) Dibromofluoromethane	96.1		75.0-120		12/21/2018 21:46	WG1214702
(S) 4-Bromofluorobenzene	90.7		77.0-126		12/21/2018 21:46	WG1214702

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ Gl⁸ Al⁹ Sc



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	72.6		1	12/21/2018 09:19	WG1214090

Mercury by Method 7471A

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Mercury	0.0239	<u>B</u>	0.0200	1	12/21/2018 11:07	WG1214206

Metals (ICP) by Method 6010B

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Arsenic	4.42		2.00	1	12/22/2018 16:15	WG1214050
Barium	124		0.500	1	12/22/2018 16:15	WG1214050
Cadmium	ND		0.500	1	12/22/2018 16:15	WG1214050
Chromium	13.0		1.00	1	12/22/2018 16:15	WG1214050
Lead	8.71		0.500	1	12/22/2018 16:15	WG1214050
Selenium	ND		2.00	1	12/22/2018 16:15	WG1214050
Silver	ND		1.00	1	12/22/2018 16:15	WG1214050

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	ND		0.100	1	12/27/2018 17:16	WG1216687
(S) a,a,a-Trifluorotoluene(FID)	103		77.0-120		12/27/2018 17:16	WG1216687

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

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Acetone	0.0301		0.0250	1	12/27/2018 02:49	WG1215658
Acrylonitrile	ND		0.0125	1	12/27/2018 02:49	WG1215658
Benzene	ND		0.00100	1	12/27/2018 02:49	WG1215658
Bromobenzene	ND		0.0125	1	12/27/2018 02:49	WG1215658
Bromodichloromethane	ND		0.00250	1	12/27/2018 02:49	WG1215658
Bromoform	ND		0.0250	1	12/27/2018 02:49	WG1215658
Bromomethane	ND		0.0125	1	12/27/2018 02:49	WG1215658
n-Butylbenzene	ND		0.0125	1	12/27/2018 02:49	WG1215658
sec-Butylbenzene	ND		0.0125	1	12/27/2018 02:49	WG1215658
tert-Butylbenzene	ND		0.00500	1	12/27/2018 02:49	WG1215658
Carbon tetrachloride	ND		0.00500	1	12/27/2018 02:49	WG1215658
Chlorobenzene	ND		0.00250	1	12/27/2018 02:49	WG1215658
Chlorodibromomethane	ND		0.00250	1	12/27/2018 02:49	WG1215658
Chloroethane	ND		0.00500	1	12/27/2018 02:49	WG1215658
Chloroform	ND		0.00250	1	12/27/2018 02:49	WG1215658
Chloromethane	ND		0.0125	1	12/27/2018 02:49	WG1215658
2-Chlorotoluene	ND		0.00250	1	12/27/2018 02:49	WG1215658
4-Chlorotoluene	ND		0.00500	1	12/27/2018 02:49	WG1215658
1,2-Dibromo-3-Chloropropane	ND		0.0250	1	12/27/2018 02:49	WG1215658
1,2-Dibromoethane	ND		0.00250	1	12/27/2018 02:49	WG1215658
Dibromomethane	ND		0.00500	1	12/27/2018 02:49	WG1215658
1,2-Dichlorobenzene	ND		0.00500	1	12/27/2018 02:49	WG1215658
1,3-Dichlorobenzene	ND		0.00500	1	12/27/2018 02:49	WG1215658
1,4-Dichlorobenzene	ND		0.00500	1	12/27/2018 02:49	WG1215658
Dichlorodifluoromethane	ND		0.00250	1	12/27/2018 02:49	WG1215658
1,1-Dichloroethane	ND		0.00250	1	12/27/2018 02:49	WG1215658
1,2-Dichloroethane	ND		0.00250	1	12/27/2018 02:49	WG1215658

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 8260B

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
1,1-Dichloroethene	ND		0.00250	1	12/27/2018 02:49	WG1215658
cis-1,2-Dichloroethene	ND		0.00250	1	12/27/2018 02:49	WG1215658
trans-1,2-Dichloroethene	ND		0.00500	1	12/27/2018 02:49	WG1215658
1,2-Dichloropropane	ND		0.00500	1	12/27/2018 02:49	WG1215658
1,1-Dichloropropene	ND		0.00250	1	12/27/2018 02:49	WG1215658
1,3-Dichloropropane	ND		0.00500	1	12/27/2018 02:49	WG1215658
cis-1,3-Dichloropropene	ND		0.00250	1	12/27/2018 02:49	WG1215658
trans-1,3-Dichloropropene	ND		0.00500	1	12/27/2018 02:49	WG1215658
2,2-Dichloropropane	ND		0.00250	1	12/27/2018 02:49	WG1215658
Di-isopropyl ether	ND		0.00100	1	12/27/2018 02:49	WG1215658
Ethylbenzene	ND		0.00250	1	12/27/2018 02:49	WG1215658
Hexachloro-1,3-butadiene	ND		0.0250	1	12/27/2018 02:49	WG1215658
Isopropylbenzene	ND		0.00250	1	12/27/2018 02:49	WG1215658
p-Isopropyltoluene	ND		0.00500	1	12/27/2018 02:49	WG1215658
2-Butanone (MEK)	ND		0.0250	1	12/27/2018 02:49	WG1215658
Methylene Chloride	ND		0.0250	1	12/27/2018 02:49	WG1215658
4-Methyl-2-pentanone (MIBK)	ND		0.0250	1	12/27/2018 02:49	WG1215658
Methyl tert-butyl ether	ND		0.00100	1	12/27/2018 02:49	WG1215658
Naphthalene	ND		0.0125	1	12/27/2018 02:49	WG1215658
n-Propylbenzene	ND		0.00500	1	12/27/2018 02:49	WG1215658
Styrene	ND		0.0125	1	12/27/2018 02:49	WG1215658
1,1,1,2-Tetrachloroethane	ND		0.00250	1	12/27/2018 02:49	WG1215658
1,1,2,2-Tetrachloroethane	ND		0.00250	1	12/27/2018 02:49	WG1215658
1,1,2-Trichlorotrifluoroethane	ND		0.00250	1	12/27/2018 02:49	WG1215658
Tetrachloroethene	ND		0.00250	1	12/27/2018 02:49	WG1215658
Toluene	ND		0.00500	1	12/27/2018 02:49	WG1215658
1,2,3-Trichlorobenzene	ND		0.00250	1	12/27/2018 02:49	WG1215658
1,2,4-Trichlorobenzene	ND		0.0125	1	12/27/2018 02:49	WG1215658
1,1,1-Trichloroethane	ND		0.00250	1	12/27/2018 02:49	WG1215658
1,1,2-Trichloroethane	ND		0.00250	1	12/27/2018 02:49	WG1215658
Trichloroethene	ND		0.00100	1	12/27/2018 02:49	WG1215658
Trichlorofluoromethane	ND		0.00250	1	12/27/2018 02:49	WG1215658
1,2,3-Trichloropropane	ND		0.0125	1	12/27/2018 02:49	WG1215658
1,2,4-Trimethylbenzene	ND		0.00500	1	12/27/2018 02:49	WG1215658
1,2,3-Trimethylbenzene	ND		0.00500	1	12/27/2018 02:49	WG1215658
1,3,5-Trimethylbenzene	ND		0.00500	1	12/27/2018 02:49	WG1215658
Vinyl chloride	ND		0.00250	1	12/27/2018 02:49	WG1215658
Xylenes, Total	ND		0.00650	1	12/27/2018 02:49	WG1215658
(S) Toluene-d8	101		75.0-131		12/27/2018 02:49	WG1215658
(S) Dibromofluoromethane	95.9		65.0-129		12/27/2018 02:49	WG1215658
(S) 4-Bromofluorobenzene	101		67.0-138		12/27/2018 02:49	WG1215658

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

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	ND		4.00	1	12/27/2018 09:43	WG1215790
(S) o-Terphenyl	33.7		18.0-148		12/27/2018 09:43	WG1215790

Semi Volatile Organic Compounds (GC/MS) by Method 8270C

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Acenaphthene	ND		0.0333	1	12/25/2018 04:59	WG1214111
Acenaphthylene	ND		0.0333	1	12/25/2018 04:59	WG1214111
Anthracene	ND		0.0333	1	12/25/2018 04:59	WG1214111
Benzo(a)anthracene	ND		0.0333	1	12/25/2018 04:59	WG1214111



Collected date/time: 12/17/18 15:22

L1054617

Semi Volatile Organic Compounds (GC/MS) by Method 8270C

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Benzo(b)fluoranthene	ND		0.0333	1	12/25/2018 04:59	WG1214111
Benzo(k)fluoranthene	ND		0.0333	1	12/25/2018 04:59	WG1214111
Benzo(g,h,i)perylene	ND		0.0333	1	12/25/2018 04:59	WG1214111
Benzo(a)pyrene	ND		0.0333	1	12/25/2018 04:59	WG1214111
Bis(2-chloroethoxy)methane	ND		0.333	1	12/25/2018 04:59	WG1214111
Bis(2-chloroethyl)ether	ND		0.333	1	12/25/2018 04:59	WG1214111
Bis(2-chloroisopropyl)ether	ND		0.333	1	12/25/2018 04:59	WG1214111
4-Bromophenyl-phenylether	ND		0.333	1	12/25/2018 04:59	WG1214111
2-Chloronaphthalene	ND		0.0333	1	12/25/2018 04:59	WG1214111
4-Chlorophenyl-phenylether	ND		0.333	1	12/25/2018 04:59	WG1214111
Chrysene	ND		0.0333	1	12/25/2018 04:59	WG1214111
Dibenz(a,h)anthracene	ND		0.0333	1	12/25/2018 04:59	WG1214111
3,3-Dichlorobenzidine	ND		0.333	1	12/25/2018 04:59	WG1214111
2,4-Dinitrotoluene	ND		0.333	1	12/25/2018 04:59	WG1214111
2,6-Dinitrotoluene	ND		0.333	1	12/25/2018 04:59	WG1214111
Fluoranthene	ND		0.0333	1	12/25/2018 04:59	WG1214111
Fluorene	ND		0.0333	1	12/25/2018 04:59	WG1214111
Hexachlorobenzene	ND		0.333	1	12/25/2018 04:59	WG1214111
Hexachloro-1,3-butadiene	ND		0.333	1	12/25/2018 04:59	WG1214111
Hexachlorocyclopentadiene	ND		0.333	1	12/25/2018 04:59	WG1214111
Hexachloroethane	ND		0.333	1	12/25/2018 04:59	WG1214111
Indeno(1,2,3-cd)pyrene	ND		0.0333	1	12/25/2018 04:59	WG1214111
Isophorone	ND		0.333	1	12/25/2018 04:59	WG1214111
Naphthalene	ND		0.0333	1	12/25/2018 04:59	WG1214111
Nitrobenzene	ND		0.333	1	12/25/2018 04:59	WG1214111
n-Nitrosodimethylamine	ND		0.333	1	12/25/2018 04:59	WG1214111
n-Nitrosodiphenylamine	ND		0.333	1	12/25/2018 04:59	WG1214111
n-Nitrosodi-n-propylamine	ND		0.333	1	12/25/2018 04:59	WG1214111
Phenanthrene	ND		0.0333	1	12/25/2018 04:59	WG1214111
Benzylbutyl phthalate	ND		0.333	1	12/25/2018 04:59	WG1214111
Bis(2-ethylhexyl)phthalate	ND		0.333	1	12/25/2018 04:59	WG1214111
Di-n-butyl phthalate	ND		0.333	1	12/25/2018 04:59	WG1214111
Diethyl phthalate	ND		0.333	1	12/25/2018 04:59	WG1214111
Dimethyl phthalate	ND		0.333	1	12/25/2018 04:59	WG1214111
Di-n-octyl phthalate	ND		0.333	1	12/25/2018 04:59	WG1214111
Pyrene	ND		0.0333	1	12/25/2018 04:59	WG1214111
1,2,4-Trichlorobenzene	ND		0.333	1	12/25/2018 04:59	WG1214111
4-Chloro-3-methylphenol	ND		0.333	1	12/25/2018 04:59	WG1214111
2-Chlorophenol	ND		0.333	1	12/25/2018 04:59	WG1214111
2,4-Dichlorophenol	ND		0.333	1	12/25/2018 04:59	WG1214111
2,4-Dimethylphenol	ND		0.333	1	12/25/2018 04:59	WG1214111
4,6-Dinitro-2-methylphenol	ND		0.333	1	12/25/2018 04:59	WG1214111
2,4-Dinitrophenol	ND		0.333	1	12/25/2018 04:59	WG1214111
2-Nitrophenol	ND		0.333	1	12/25/2018 04:59	WG1214111
4-Nitrophenol	ND		0.333	1	12/25/2018 04:59	WG1214111
Pentachlorophenol	ND		0.333	1	12/25/2018 04:59	WG1214111
Phenol	ND		0.333	1	12/25/2018 04:59	WG1214111
2,4,6-Trichlorophenol	ND		0.333	1	12/25/2018 04:59	WG1214111
(S) 2-Fluorophenol	59.1		12.0-120		12/25/2018 04:59	WG1214111
(S) Phenol-d5	43.7		10.0-120		12/25/2018 04:59	WG1214111
(S) Nitrobenzene-d5	53.4		10.0-122		12/25/2018 04:59	WG1214111
(S) 2-Fluorobiphenyl	56.2		15.0-120		12/25/2018 04:59	WG1214111
(S) 2,4,6-Tribromophenol	48.6		10.0-127		12/25/2018 04:59	WG1214111
(S) p-Terphenyl-d14	57.1		10.0-120		12/25/2018 04:59	WG1214111

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 date / time	Batch
Total Solids	72.5		1	12/21/2018 09:19	WG1214090

Mercury by Method 7471A

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Mercury	ND		0.0200	1	12/21/2018 13:02	WG1214211

Metals (ICP) by Method 6010B

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Arsenic	2.74		2.00	1	12/22/2018 16:18	WG1214050
Barium	105		0.500	1	12/22/2018 16:18	WG1214050
Cadmium	ND		0.500	1	12/22/2018 16:18	WG1214050
Chromium	9.14		1.00	1	12/22/2018 16:18	WG1214050
Lead	5.26		0.500	1	12/22/2018 16:18	WG1214050
Selenium	ND		2.00	1	12/22/2018 16:18	WG1214050
Silver	ND		1.00	1	12/22/2018 16:18	WG1214050

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	ND		0.100	1	12/27/2018 17:38	WG1216687
(S) a,a,a-Trifluorotoluene(FID)	102		77.0-120		12/27/2018 17:38	WG1216687

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

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Acetone	ND		0.0250	1	12/27/2018 03:11	WG1215658
Acrylonitrile	ND		0.0125	1	12/27/2018 03:11	WG1215658
Benzene	ND		0.00100	1	12/27/2018 03:11	WG1215658
Bromobenzene	ND		0.0125	1	12/27/2018 03:11	WG1215658
Bromodichloromethane	ND		0.00250	1	12/27/2018 03:11	WG1215658
Bromoform	ND		0.0250	1	12/27/2018 03:11	WG1215658
Bromomethane	ND		0.0125	1	12/27/2018 03:11	WG1215658
n-Butylbenzene	ND		0.0125	1	12/27/2018 03:11	WG1215658
sec-Butylbenzene	ND		0.0125	1	12/27/2018 03:11	WG1215658
tert-Butylbenzene	ND		0.00500	1	12/27/2018 03:11	WG1215658
Carbon tetrachloride	ND		0.00500	1	12/27/2018 03:11	WG1215658
Chlorobenzene	ND		0.00250	1	12/27/2018 03:11	WG1215658
Chlorodibromomethane	ND		0.00250	1	12/27/2018 03:11	WG1215658
Chloroethane	ND		0.00500	1	12/27/2018 03:11	WG1215658
Chloroform	ND		0.00250	1	12/27/2018 03:11	WG1215658
Chloromethane	ND		0.0125	1	12/27/2018 03:11	WG1215658
2-Chlorotoluene	ND		0.00250	1	12/27/2018 03:11	WG1215658
4-Chlorotoluene	ND		0.00500	1	12/27/2018 03:11	WG1215658
1,2-Dibromo-3-Chloropropane	ND		0.0250	1	12/27/2018 03:11	WG1215658
1,2-Dibromoethane	ND		0.00250	1	12/27/2018 03:11	WG1215658
Dibromomethane	ND		0.00500	1	12/27/2018 03:11	WG1215658
1,2-Dichlorobenzene	ND		0.00500	1	12/27/2018 03:11	WG1215658
1,3-Dichlorobenzene	ND		0.00500	1	12/27/2018 03:11	WG1215658
1,4-Dichlorobenzene	ND		0.00500	1	12/27/2018 03:11	WG1215658
Dichlorodifluoromethane	ND		0.00250	1	12/27/2018 03:11	WG1215658
1,1-Dichloroethane	ND		0.00250	1	12/27/2018 03:11	WG1215658
1,2-Dichloroethane	ND		0.00250	1	12/27/2018 03:11	WG1215658

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 8260B

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
1,1-Dichloroethene	ND		0.00250	1	12/27/2018 03:11	WG1215658
cis-1,2-Dichloroethene	ND		0.00250	1	12/27/2018 03:11	WG1215658
trans-1,2-Dichloroethene	ND		0.00500	1	12/27/2018 03:11	WG1215658
1,2-Dichloropropane	ND		0.00500	1	12/27/2018 03:11	WG1215658
1,1-Dichloropropene	ND		0.00250	1	12/27/2018 03:11	WG1215658
1,3-Dichloropropane	ND		0.00500	1	12/27/2018 03:11	WG1215658
cis-1,3-Dichloropropene	ND		0.00250	1	12/27/2018 03:11	WG1215658
trans-1,3-Dichloropropene	ND		0.00500	1	12/27/2018 03:11	WG1215658
2,2-Dichloropropane	ND		0.00250	1	12/27/2018 03:11	WG1215658
Di-isopropyl ether	ND		0.00100	1	12/27/2018 03:11	WG1215658
Ethylbenzene	ND		0.00250	1	12/27/2018 03:11	WG1215658
Hexachloro-1,3-butadiene	ND		0.0250	1	12/27/2018 03:11	WG1215658
Isopropylbenzene	ND		0.00250	1	12/27/2018 03:11	WG1215658
p-Isopropyltoluene	ND		0.00500	1	12/27/2018 03:11	WG1215658
2-Butanone (MEK)	ND		0.0250	1	12/27/2018 03:11	WG1215658
Methylene Chloride	ND		0.0250	1	12/27/2018 03:11	WG1215658
4-Methyl-2-pentanone (MIBK)	ND		0.0250	1	12/27/2018 03:11	WG1215658
Methyl tert-butyl ether	ND		0.00100	1	12/27/2018 03:11	WG1215658
Naphthalene	ND		0.0125	1	12/27/2018 03:11	WG1215658
n-Propylbenzene	ND		0.00500	1	12/27/2018 03:11	WG1215658
Styrene	ND		0.0125	1	12/27/2018 03:11	WG1215658
1,1,1,2-Tetrachloroethane	ND		0.00250	1	12/27/2018 03:11	WG1215658
1,1,2,2-Tetrachloroethane	ND		0.00250	1	12/27/2018 03:11	WG1215658
1,1,2-Trichlorotrifluoroethane	ND		0.00250	1	12/27/2018 03:11	WG1215658
Tetrachloroethene	ND		0.00250	1	12/27/2018 03:11	WG1215658
Toluene	ND		0.00500	1	12/27/2018 03:11	WG1215658
1,2,3-Trichlorobenzene	ND		0.00250	1	12/27/2018 03:11	WG1215658
1,2,4-Trichlorobenzene	ND		0.0125	1	12/27/2018 03:11	WG1215658
1,1,1-Trichloroethane	ND		0.00250	1	12/27/2018 03:11	WG1215658
1,1,2-Trichloroethane	ND		0.00250	1	12/27/2018 03:11	WG1215658
Trichloroethene	ND		0.00100	1	12/27/2018 03:11	WG1215658
Trichlorofluoromethane	ND		0.00250	1	12/27/2018 03:11	WG1215658
1,2,3-Trichloropropane	ND		0.0125	1	12/27/2018 03:11	WG1215658
1,2,4-Trimethylbenzene	ND		0.00500	1	12/27/2018 03:11	WG1215658
1,2,3-Trimethylbenzene	ND		0.00500	1	12/27/2018 03:11	WG1215658
1,3,5-Trimethylbenzene	ND		0.00500	1	12/27/2018 03:11	WG1215658
Vinyl chloride	ND		0.00250	1	12/27/2018 03:11	WG1215658
Xylenes, Total	ND		0.00650	1	12/27/2018 03:11	WG1215658
(S) Toluene-d8	104		75.0-131		12/27/2018 03:11	WG1215658
(S) Dibromofluoromethane	92.5		65.0-129		12/27/2018 03:11	WG1215658
(S) 4-Bromofluorobenzene	97.8		67.0-138		12/27/2018 03:11	WG1215658

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

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	ND	<u>J6</u>	4.00	1	12/27/2018 00:49	WG1215790
(S) o-Terphenyl	65.3		18.0-148		12/27/2018 00:49	WG1215790

Semi Volatile Organic Compounds (GC/MS) by Method 8270C

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Acenaphthene	ND		0.0333	1	12/25/2018 05:22	WG1214111
Acenaphthylene	ND		0.0333	1	12/25/2018 05:22	WG1214111
Anthracene	ND		0.0333	1	12/25/2018 05:22	WG1214111
Benzo(a)anthracene	ND		0.0333	1	12/25/2018 05:22	WG1214111



Collected date/time: 12/17/18 15:30

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Semi Volatile Organic Compounds (GC/MS) by Method 8270C

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Benzo(b)fluoranthene	ND		0.0333	1	12/25/2018 05:22	WG1214111
Benzo(k)fluoranthene	ND		0.0333	1	12/25/2018 05:22	WG1214111
Benzo(g,h,i)perylene	ND		0.0333	1	12/25/2018 05:22	WG1214111
Benzo(a)pyrene	ND		0.0333	1	12/25/2018 05:22	WG1214111
Bis(2-chlorethoxy)methane	ND		0.333	1	12/25/2018 05:22	WG1214111
Bis(2-chloroethyl)ether	ND		0.333	1	12/25/2018 05:22	WG1214111
Bis(2-chloroisopropyl)ether	ND		0.333	1	12/25/2018 05:22	WG1214111
4-Bromophenyl-phenylether	ND		0.333	1	12/25/2018 05:22	WG1214111
2-Chloronaphthalene	ND		0.0333	1	12/25/2018 05:22	WG1214111
4-Chlorophenyl-phenylether	ND		0.333	1	12/25/2018 05:22	WG1214111
Chrysene	ND		0.0333	1	12/25/2018 05:22	WG1214111
Dibenz(a,h)anthracene	ND		0.0333	1	12/25/2018 05:22	WG1214111
3,3-Dichlorobenzidine	ND		0.333	1	12/25/2018 05:22	WG1214111
2,4-Dinitrotoluene	ND		0.333	1	12/25/2018 05:22	WG1214111
2,6-Dinitrotoluene	ND		0.333	1	12/25/2018 05:22	WG1214111
Fluoranthene	ND		0.0333	1	12/25/2018 05:22	WG1214111
Fluorene	ND		0.0333	1	12/25/2018 05:22	WG1214111
Hexachlorobenzene	ND		0.333	1	12/25/2018 05:22	WG1214111
Hexachloro-1,3-butadiene	ND		0.333	1	12/25/2018 05:22	WG1214111
Hexachlorocyclopentadiene	ND		0.333	1	12/25/2018 05:22	WG1214111
Hexachloroethane	ND		0.333	1	12/25/2018 05:22	WG1214111
Indeno(1,2,3-cd)pyrene	ND		0.0333	1	12/25/2018 05:22	WG1214111
Isophorone	ND		0.333	1	12/25/2018 05:22	WG1214111
Naphthalene	ND		0.0333	1	12/25/2018 05:22	WG1214111
Nitrobenzene	ND		0.333	1	12/25/2018 05:22	WG1214111
n-Nitrosodimethylamine	ND		0.333	1	12/25/2018 05:22	WG1214111
n-Nitrosodiphenylamine	ND		0.333	1	12/25/2018 05:22	WG1214111
n-Nitrosodi-n-propylamine	ND		0.333	1	12/25/2018 05:22	WG1214111
Phenanthrene	ND		0.0333	1	12/25/2018 05:22	WG1214111
Benzylbutyl phthalate	ND		0.333	1	12/25/2018 05:22	WG1214111
Bis(2-ethylhexyl)phthalate	ND		0.333	1	12/25/2018 05:22	WG1214111
Di-n-butyl phthalate	ND		0.333	1	12/25/2018 05:22	WG1214111
Diethyl phthalate	ND		0.333	1	12/25/2018 05:22	WG1214111
Dimethyl phthalate	ND		0.333	1	12/25/2018 05:22	WG1214111
Di-n-octyl phthalate	ND		0.333	1	12/25/2018 05:22	WG1214111
Pyrene	ND		0.0333	1	12/25/2018 05:22	WG1214111
1,2,4-Trichlorobenzene	ND		0.333	1	12/25/2018 05:22	WG1214111
4-Chloro-3-methylphenol	ND		0.333	1	12/25/2018 05:22	WG1214111
2-Chlorophenol	ND		0.333	1	12/25/2018 05:22	WG1214111
2,4-Dichlorophenol	ND		0.333	1	12/25/2018 05:22	WG1214111
2,4-Dimethylphenol	ND		0.333	1	12/25/2018 05:22	WG1214111
4,6-Dinitro-2-methylphenol	ND		0.333	1	12/25/2018 05:22	WG1214111
2,4-Dinitrophenol	ND		0.333	1	12/25/2018 05:22	WG1214111
2-Nitrophenol	ND		0.333	1	12/25/2018 05:22	WG1214111
4-Nitrophenol	ND		0.333	1	12/25/2018 05:22	WG1214111
Pentachlorophenol	ND		0.333	1	12/25/2018 05:22	WG1214111
Phenol	ND		0.333	1	12/25/2018 05:22	WG1214111
2,4,6-Trichlorophenol	ND		0.333	1	12/25/2018 05:22	WG1214111
(S) 2-Fluorophenol	57.7		12.0-120		12/25/2018 05:22	WG1214111
(S) Phenol-d5	31.7		10.0-120		12/25/2018 05:22	WG1214111
(S) Nitrobenzene-d5	51.1		10.0-122		12/25/2018 05:22	WG1214111
(S) 2-Fluorobiphenyl	54.7		15.0-120		12/25/2018 05:22	WG1214111
(S) 2,4,6-Tribromophenol	43.8		10.0-127		12/25/2018 05:22	WG1214111
(S) p-Terphenyl-d14	51.7		10.0-120		12/25/2018 05:22	WG1214111

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 date / time	Batch
Total Solids	80.3		1	12/21/2018 09:19	WG1214090

Mercury by Method 7471A

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Mercury	0.0603		0.0200	1	12/21/2018 13:18	WG1214211

Metals (ICP) by Method 6010B

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Arsenic	3.73		2.00	1	12/21/2018 08:36	WG1214054
Barium	102	Q1	0.500	1	12/21/2018 08:36	WG1214054
Cadmium	ND		0.500	1	12/21/2018 08:36	WG1214054
Chromium	12.4	Q1	1.00	1	12/21/2018 08:36	WG1214054
Lead	16.7	Q1	0.500	1	12/21/2018 08:36	WG1214054
Selenium	ND		2.00	1	12/21/2018 08:36	WG1214054
Silver	ND		1.00	1	12/21/2018 08:36	WG1214054

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	ND		0.100	1	12/27/2018 18:00	WG1216687
(S) a,a,a-Trifluorotoluene(FID)	102		77.0-120		12/27/2018 18:00	WG1216687

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

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Acetone	ND		0.0250	1	12/27/2018 03:33	WG1215658
Acrylonitrile	ND		0.0125	1	12/27/2018 03:33	WG1215658
Benzene	ND		0.00100	1	12/27/2018 03:33	WG1215658
Bromobenzene	ND		0.0125	1	12/27/2018 03:33	WG1215658
Bromodichloromethane	ND		0.00250	1	12/27/2018 03:33	WG1215658
Bromoform	ND		0.0250	1	12/27/2018 03:33	WG1215658
Bromomethane	ND		0.0125	1	12/27/2018 03:33	WG1215658
n-Butylbenzene	ND		0.0125	1	12/27/2018 03:33	WG1215658
sec-Butylbenzene	ND		0.0125	1	12/27/2018 03:33	WG1215658
tert-Butylbenzene	ND		0.00500	1	12/27/2018 03:33	WG1215658
Carbon tetrachloride	ND		0.00500	1	12/27/2018 03:33	WG1215658
Chlorobenzene	ND		0.00250	1	12/27/2018 03:33	WG1215658
Chlorodibromomethane	ND		0.00250	1	12/27/2018 03:33	WG1215658
Chloroethane	ND		0.00500	1	12/27/2018 03:33	WG1215658
Chloroform	ND		0.00250	1	12/27/2018 03:33	WG1215658
Chloromethane	ND		0.0125	1	12/27/2018 03:33	WG1215658
2-Chlorotoluene	ND		0.00250	1	12/27/2018 03:33	WG1215658
4-Chlorotoluene	ND		0.00500	1	12/27/2018 03:33	WG1215658
1,2-Dibromo-3-Chloropropane	ND		0.0250	1	12/27/2018 03:33	WG1215658
1,2-Dibromoethane	ND		0.00250	1	12/27/2018 03:33	WG1215658
Dibromomethane	ND		0.00500	1	12/27/2018 03:33	WG1215658
1,2-Dichlorobenzene	ND		0.00500	1	12/27/2018 03:33	WG1215658
1,3-Dichlorobenzene	ND		0.00500	1	12/27/2018 03:33	WG1215658
1,4-Dichlorobenzene	ND		0.00500	1	12/27/2018 03:33	WG1215658
Dichlorodifluoromethane	ND		0.00250	1	12/27/2018 03:33	WG1215658
1,1-Dichloroethane	ND		0.00250	1	12/27/2018 03:33	WG1215658
1,2-Dichloroethane	ND		0.00250	1	12/27/2018 03:33	WG1215658

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 8260B

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
1,1-Dichloroethene	ND		0.00250	1	12/27/2018 03:33	WG1215658
cis-1,2-Dichloroethene	ND		0.00250	1	12/27/2018 03:33	WG1215658
trans-1,2-Dichloroethene	ND		0.00500	1	12/27/2018 03:33	WG1215658
1,2-Dichloropropane	ND		0.00500	1	12/27/2018 03:33	WG1215658
1,1-Dichloropropene	ND		0.00250	1	12/27/2018 03:33	WG1215658
1,3-Dichloropropane	ND		0.00500	1	12/27/2018 03:33	WG1215658
cis-1,3-Dichloropropene	ND		0.00250	1	12/27/2018 03:33	WG1215658
trans-1,3-Dichloropropene	ND		0.00500	1	12/27/2018 03:33	WG1215658
2,2-Dichloropropane	ND		0.00250	1	12/27/2018 03:33	WG1215658
Di-isopropyl ether	ND		0.00100	1	12/27/2018 03:33	WG1215658
Ethylbenzene	ND		0.00250	1	12/27/2018 03:33	WG1215658
Hexachloro-1,3-butadiene	ND		0.0250	1	12/27/2018 03:33	WG1215658
Isopropylbenzene	ND		0.00250	1	12/27/2018 03:33	WG1215658
p-Isopropyltoluene	ND		0.00500	1	12/27/2018 03:33	WG1215658
2-Butanone (MEK)	ND		0.0250	1	12/27/2018 03:33	WG1215658
Methylene Chloride	ND		0.0250	1	12/27/2018 03:33	WG1215658
4-Methyl-2-pentanone (MIBK)	ND		0.0250	1	12/27/2018 03:33	WG1215658
Methyl tert-butyl ether	ND		0.00100	1	12/27/2018 03:33	WG1215658
Naphthalene	ND		0.0125	1	12/27/2018 03:33	WG1215658
n-Propylbenzene	ND		0.00500	1	12/27/2018 03:33	WG1215658
Styrene	ND		0.0125	1	12/27/2018 03:33	WG1215658
1,1,1,2-Tetrachloroethane	ND		0.00250	1	12/27/2018 03:33	WG1215658
1,1,2,2-Tetrachloroethane	ND		0.00250	1	12/27/2018 03:33	WG1215658
1,1,2-Trichlorotrifluoroethane	ND		0.00250	1	12/27/2018 03:33	WG1215658
Tetrachloroethene	ND		0.00250	1	12/27/2018 03:33	WG1215658
Toluene	ND		0.00500	1	12/27/2018 03:33	WG1215658
1,2,3-Trichlorobenzene	ND		0.00250	1	12/27/2018 03:33	WG1215658
1,2,4-Trichlorobenzene	ND		0.0125	1	12/27/2018 03:33	WG1215658
1,1,1-Trichloroethane	ND		0.00250	1	12/27/2018 03:33	WG1215658
1,1,2-Trichloroethane	ND		0.00250	1	12/27/2018 03:33	WG1215658
Trichloroethene	ND		0.00100	1	12/27/2018 03:33	WG1215658
Trichlorofluoromethane	ND		0.00250	1	12/27/2018 03:33	WG1215658
1,2,3-Trichloropropane	ND		0.0125	1	12/27/2018 03:33	WG1215658
1,2,4-Trimethylbenzene	ND		0.00500	1	12/27/2018 03:33	WG1215658
1,2,3-Trimethylbenzene	ND		0.00500	1	12/27/2018 03:33	WG1215658
1,3,5-Trimethylbenzene	ND		0.00500	1	12/27/2018 03:33	WG1215658
Vinyl chloride	ND		0.00250	1	12/27/2018 03:33	WG1215658
Xylenes, Total	ND		0.00650	1	12/27/2018 03:33	WG1215658
(S) Toluene-d8	99.9		75.0-131		12/27/2018 03:33	WG1215658
(S) Dibromofluoromethane	93.9		65.0-129		12/27/2018 03:33	WG1215658
(S) 4-Bromofluorobenzene	99.0		67.0-138		12/27/2018 03:33	WG1215658

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

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	27.5		16.0	4	12/27/2018 14:03	WG1215790
(S) o-Terphenyl	73.9		18.0-148		12/27/2018 14:03	WG1215790

Semi Volatile Organic Compounds (GC/MS) by Method 8270C

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Acenaphthene	ND		0.333	10	12/26/2018 02:08	WG1214111
Acenaphthylene	ND		0.333	10	12/26/2018 02:08	WG1214111
Anthracene	ND		0.333	10	12/26/2018 02:08	WG1214111
Benzo(a)anthracene	ND		0.333	10	12/26/2018 02:08	WG1214111

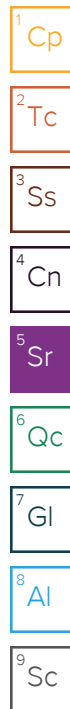


Collected date/time: 12/17/18 15:55

L1054617

Semi Volatile Organic Compounds (GC/MS) by Method 8270C

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Benzo(b)fluoranthene	ND		0.333	10	12/26/2018 02:08	WG1214111
Benzo(k)fluoranthene	ND		0.333	10	12/26/2018 02:08	WG1214111
Benzo(g,h,i)perylene	ND		0.333	10	12/26/2018 02:08	WG1214111
Benzo(a)pyrene	ND		0.333	10	12/26/2018 02:08	WG1214111
Bis(2-chlorethoxy)methane	ND		3.33	10	12/26/2018 02:08	WG1214111
Bis(2-chloroethyl)ether	ND		3.33	10	12/26/2018 02:08	WG1214111
Bis(2-chloroisopropyl)ether	ND		3.33	10	12/26/2018 02:08	WG1214111
4-Bromophenyl-phenylether	ND		3.33	10	12/26/2018 02:08	WG1214111
2-Chloronaphthalene	ND		0.333	10	12/26/2018 02:08	WG1214111
4-Chlorophenyl-phenylether	ND		3.33	10	12/26/2018 02:08	WG1214111
Chrysene	ND		0.333	10	12/26/2018 02:08	WG1214111
Dibenz(a,h)anthracene	ND		0.333	10	12/26/2018 02:08	WG1214111
3,3-Dichlorobenzidine	ND		3.33	10	12/26/2018 02:08	WG1214111
2,4-Dinitrotoluene	ND		3.33	10	12/26/2018 02:08	WG1214111
2,6-Dinitrotoluene	ND		3.33	10	12/26/2018 02:08	WG1214111
Fluoranthene	ND		0.333	10	12/26/2018 02:08	WG1214111
Fluorene	ND		0.333	10	12/26/2018 02:08	WG1214111
Hexachlorobenzene	ND		3.33	10	12/26/2018 02:08	WG1214111
Hexachloro-1,3-butadiene	ND		3.33	10	12/26/2018 02:08	WG1214111
Hexachlorocyclopentadiene	ND		3.33	10	12/26/2018 02:08	WG1214111
Hexachloroethane	ND		3.33	10	12/26/2018 02:08	WG1214111
Indeno(1,2,3-cd)pyrene	ND		0.333	10	12/26/2018 02:08	WG1214111
Isophorone	ND		3.33	10	12/26/2018 02:08	WG1214111
Naphthalene	ND		0.333	10	12/26/2018 02:08	WG1214111
Nitrobenzene	ND		3.33	10	12/26/2018 02:08	WG1214111
n-Nitrosodimethylamine	ND		3.33	10	12/26/2018 02:08	WG1214111
n-Nitrosodiphenylamine	ND		3.33	10	12/26/2018 02:08	WG1214111
n-Nitrosodi-n-propylamine	ND		3.33	10	12/26/2018 02:08	WG1214111
Phenanthrene	ND		0.333	10	12/26/2018 02:08	WG1214111
Benzylbutyl phthalate	ND		3.33	10	12/26/2018 02:08	WG1214111
Bis(2-ethylhexyl)phthalate	ND		3.33	10	12/26/2018 02:08	WG1214111
Di-n-butyl phthalate	ND		3.33	10	12/26/2018 02:08	WG1214111
Diethyl phthalate	ND		3.33	10	12/26/2018 02:08	WG1214111
Dimethyl phthalate	ND		3.33	10	12/26/2018 02:08	WG1214111
Di-n-octyl phthalate	ND		3.33	10	12/26/2018 02:08	WG1214111
Pyrene	ND		0.333	10	12/26/2018 02:08	WG1214111
1,2,4-Trichlorobenzene	ND		3.33	10	12/26/2018 02:08	WG1214111
4-Chloro-3-methylphenol	ND		3.33	10	12/26/2018 02:08	WG1214111
2-Chlorophenol	ND		3.33	10	12/26/2018 02:08	WG1214111
2,4-Dichlorophenol	ND		3.33	10	12/26/2018 02:08	WG1214111
2,4-Dimethylphenol	ND		3.33	10	12/26/2018 02:08	WG1214111
4,6-Dinitro-2-methylphenol	ND		3.33	10	12/26/2018 02:08	WG1214111
2,4-Dinitrophenol	ND		3.33	10	12/26/2018 02:08	WG1214111
2-Nitrophenol	ND		3.33	10	12/26/2018 02:08	WG1214111
4-Nitrophenol	ND		3.33	10	12/26/2018 02:08	WG1214111
Pentachlorophenol	ND		3.33	10	12/26/2018 02:08	WG1214111
Phenol	ND		3.33	10	12/26/2018 02:08	WG1214111
2,4,6-Trichlorophenol	ND		3.33	10	12/26/2018 02:08	WG1214111
(S) 2-Fluorophenol	50.9		12.0-120		12/26/2018 02:08	WG1214111
(S) Phenol-d5	45.3		10.0-120		12/26/2018 02:08	WG1214111
(S) Nitrobenzene-d5	44.3		10.0-122		12/26/2018 02:08	WG1214111
(S) 2-Fluorobiphenyl	49.1		15.0-120		12/26/2018 02:08	WG1214111
(S) 2,4,6-Tribromophenol	45.9		10.0-127		12/26/2018 02:08	WG1214111
(S) p-Terphenyl-d14	53.5		10.0-120		12/26/2018 02:08	WG1214111



Sample Narrative:

ACCOUNT:

Harbor Env. & Safety - Little Rock, AR

PROJECT:

SDG:

L1054617

DATE/TIME:

12/28/18 16:08

PAGE:

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Semi Volatile Organic Compounds (GC/MS) by Method 8270C

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
L1054617-22 WG1214111: Dilution due to matrix impact during extract concentration procedure						

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



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	74.9		1	12/21/2018 09:19	WG1214090

Mercury by Method 7471A

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Mercury	0.0215		0.0200	1	12/21/2018 13:20	WG1214211

Metals (ICP) by Method 6010B

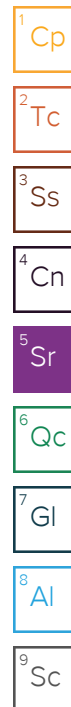
Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Arsenic	2.74		2.00	1	12/21/2018 08:50	WG1214054
Barium	118		0.500	1	12/21/2018 08:50	WG1214054
Cadmium	ND		0.500	1	12/21/2018 08:50	WG1214054
Chromium	9.66		1.00	1	12/21/2018 08:50	WG1214054
Lead	6.01		0.500	1	12/21/2018 08:50	WG1214054
Selenium	ND		2.00	1	12/21/2018 08:50	WG1214054
Silver	ND		1.00	1	12/21/2018 08:50	WG1214054

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	ND		0.119	1.19	12/23/2018 20:39	WG1215337
(S) a,a,a-Trifluorotoluene(FID)	91.9		77.0-120		12/23/2018 20:39	WG1215337

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

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Acetone	ND		0.0250	1	12/27/2018 03:55	WG1215658
Acrylonitrile	ND		0.0125	1	12/27/2018 03:55	WG1215658
Benzene	ND		0.00100	1	12/27/2018 03:55	WG1215658
Bromobenzene	ND		0.0125	1	12/27/2018 03:55	WG1215658
Bromodichloromethane	ND		0.00250	1	12/27/2018 03:55	WG1215658
Bromoform	ND		0.0250	1	12/27/2018 03:55	WG1215658
Bromomethane	ND		0.0125	1	12/27/2018 03:55	WG1215658
n-Butylbenzene	ND		0.0125	1	12/27/2018 03:55	WG1215658
sec-Butylbenzene	ND		0.0125	1	12/27/2018 03:55	WG1215658
tert-Butylbenzene	ND		0.00500	1	12/27/2018 03:55	WG1215658
Carbon tetrachloride	ND		0.00500	1	12/27/2018 03:55	WG1215658
Chlorobenzene	ND		0.00250	1	12/27/2018 03:55	WG1215658
Chlorodibromomethane	ND		0.00250	1	12/27/2018 03:55	WG1215658
Chloroethane	ND		0.00500	1	12/27/2018 03:55	WG1215658
Chloroform	ND		0.00250	1	12/27/2018 03:55	WG1215658
Chloromethane	ND		0.0125	1	12/27/2018 03:55	WG1215658
2-Chlorotoluene	ND		0.00250	1	12/27/2018 03:55	WG1215658
4-Chlorotoluene	ND		0.00500	1	12/27/2018 03:55	WG1215658
1,2-Dibromo-3-Chloropropane	ND		0.0250	1	12/27/2018 03:55	WG1215658
1,2-Dibromoethane	ND		0.00250	1	12/27/2018 03:55	WG1215658
Dibromomethane	ND		0.00500	1	12/27/2018 03:55	WG1215658
1,2-Dichlorobenzene	ND		0.00500	1	12/27/2018 03:55	WG1215658
1,3-Dichlorobenzene	ND		0.00500	1	12/27/2018 03:55	WG1215658
1,4-Dichlorobenzene	ND		0.00500	1	12/27/2018 03:55	WG1215658
Dichlorodifluoromethane	ND		0.00250	1	12/27/2018 03:55	WG1215658
1,1-Dichloroethane	ND		0.00250	1	12/27/2018 03:55	WG1215658
1,2-Dichloroethane	ND		0.00250	1	12/27/2018 03:55	WG1215658





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

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
1,1-Dichloroethene	ND		0.00250	1	12/27/2018 03:55	WG1215658
cis-1,2-Dichloroethene	ND		0.00250	1	12/27/2018 03:55	WG1215658
trans-1,2-Dichloroethene	ND		0.00500	1	12/27/2018 03:55	WG1215658
1,2-Dichloropropane	ND		0.00500	1	12/27/2018 03:55	WG1215658
1,1-Dichloropropene	ND		0.00250	1	12/27/2018 03:55	WG1215658
1,3-Dichloropropane	ND		0.00500	1	12/27/2018 03:55	WG1215658
cis-1,3-Dichloropropene	ND		0.00250	1	12/27/2018 03:55	WG1215658
trans-1,3-Dichloropropene	ND		0.00500	1	12/27/2018 03:55	WG1215658
2,2-Dichloropropane	ND		0.00250	1	12/27/2018 03:55	WG1215658
Di-isopropyl ether	ND		0.00100	1	12/27/2018 03:55	WG1215658
Ethylbenzene	ND		0.00250	1	12/27/2018 03:55	WG1215658
Hexachloro-1,3-butadiene	ND		0.0250	1	12/27/2018 03:55	WG1215658
Isopropylbenzene	ND		0.00250	1	12/27/2018 03:55	WG1215658
p-Isopropyltoluene	ND		0.00500	1	12/27/2018 03:55	WG1215658
2-Butanone (MEK)	ND		0.0250	1	12/27/2018 03:55	WG1215658
Methylene Chloride	ND		0.0250	1	12/27/2018 03:55	WG1215658
4-Methyl-2-pentanone (MIBK)	ND		0.0250	1	12/27/2018 03:55	WG1215658
Methyl tert-butyl ether	ND		0.00100	1	12/27/2018 03:55	WG1215658
Naphthalene	ND		0.0125	1	12/27/2018 03:55	WG1215658
n-Propylbenzene	ND		0.00500	1	12/27/2018 03:55	WG1215658
Styrene	ND		0.0125	1	12/27/2018 03:55	WG1215658
1,1,1,2-Tetrachloroethane	ND		0.00250	1	12/27/2018 03:55	WG1215658
1,1,2,2-Tetrachloroethane	ND		0.00250	1	12/27/2018 03:55	WG1215658
1,1,2-Trichlorotrifluoroethane	ND		0.00250	1	12/27/2018 03:55	WG1215658
Tetrachloroethene	ND		0.00250	1	12/27/2018 03:55	WG1215658
Toluene	ND		0.00500	1	12/27/2018 03:55	WG1215658
1,2,3-Trichlorobenzene	ND		0.00250	1	12/27/2018 03:55	WG1215658
1,2,4-Trichlorobenzene	ND		0.0125	1	12/27/2018 03:55	WG1215658
1,1,1-Trichloroethane	ND		0.00250	1	12/27/2018 03:55	WG1215658
1,1,2-Trichloroethane	ND		0.00250	1	12/27/2018 03:55	WG1215658
Trichloroethene	ND		0.00100	1	12/27/2018 03:55	WG1215658
Trichlorofluoromethane	ND		0.00250	1	12/27/2018 03:55	WG1215658
1,2,3-Trichloropropane	ND		0.0125	1	12/27/2018 03:55	WG1215658
1,2,4-Trimethylbenzene	ND		0.00500	1	12/27/2018 03:55	WG1215658
1,2,3-Trimethylbenzene	ND		0.00500	1	12/27/2018 03:55	WG1215658
1,3,5-Trimethylbenzene	ND		0.00500	1	12/27/2018 03:55	WG1215658
Vinyl chloride	ND		0.00250	1	12/27/2018 03:55	WG1215658
Xylenes, Total	ND		0.00650	1	12/27/2018 03:55	WG1215658
(S) Toluene-d8	103		75.0-131		12/27/2018 03:55	WG1215658
(S) Dibromofluoromethane	95.1		65.0-129		12/27/2018 03:55	WG1215658
(S) 4-Bromofluorobenzene	101		67.0-138		12/27/2018 03:55	WG1215658

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

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	ND		4.00	1	12/27/2018 09:55	WG1215790
(S) o-Terphenyl	66.0		18.0-148		12/27/2018 09:55	WG1215790

Semi Volatile Organic Compounds (GC/MS) by Method 8270C

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Acenaphthene	ND		0.0333	1	12/25/2018 05:45	WG1214111
Acenaphthylene	ND		0.0333	1	12/25/2018 05:45	WG1214111
Anthracene	ND		0.0333	1	12/25/2018 05:45	WG1214111
Benzo(a)anthracene	ND		0.0333	1	12/25/2018 05:45	WG1214111



Semi Volatile Organic Compounds (GC/MS) by Method 8270C

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Benzo(b)fluoranthene	ND		0.0333	1	12/25/2018 05:45	WG1214111
Benzo(k)fluoranthene	ND		0.0333	1	12/25/2018 05:45	WG1214111
Benzo(g,h,i)perylene	ND		0.0333	1	12/25/2018 05:45	WG1214111
Benzo(a)pyrene	ND		0.0333	1	12/25/2018 05:45	WG1214111
Bis(2-chlorethoxy)methane	ND		0.333	1	12/25/2018 05:45	WG1214111
Bis(2-chloroethyl)ether	ND		0.333	1	12/25/2018 05:45	WG1214111
Bis(2-chloroisopropyl)ether	ND		0.333	1	12/25/2018 05:45	WG1214111
4-Bromophenyl-phenylether	ND		0.333	1	12/25/2018 05:45	WG1214111
2-Chloronaphthalene	ND		0.0333	1	12/25/2018 05:45	WG1214111
4-Chlorophenyl-phenylether	ND		0.333	1	12/25/2018 05:45	WG1214111
Chrysene	ND		0.0333	1	12/25/2018 05:45	WG1214111
Dibenz(a,h)anthracene	ND		0.0333	1	12/25/2018 05:45	WG1214111
3,3-Dichlorobenzidine	ND		0.333	1	12/25/2018 05:45	WG1214111
2,4-Dinitrotoluene	ND		0.333	1	12/25/2018 05:45	WG1214111
2,6-Dinitrotoluene	ND		0.333	1	12/25/2018 05:45	WG1214111
Fluoranthene	ND		0.0333	1	12/25/2018 05:45	WG1214111
Fluorene	ND		0.0333	1	12/25/2018 05:45	WG1214111
Hexachlorobenzene	ND		0.333	1	12/25/2018 05:45	WG1214111
Hexachloro-1,3-butadiene	ND		0.333	1	12/25/2018 05:45	WG1214111
Hexachlorocyclopentadiene	ND		0.333	1	12/25/2018 05:45	WG1214111
Hexachloroethane	ND		0.333	1	12/25/2018 05:45	WG1214111
Indeno(1,2,3-cd)pyrene	ND		0.0333	1	12/25/2018 05:45	WG1214111
Isophorone	ND		0.333	1	12/25/2018 05:45	WG1214111
Naphthalene	ND		0.0333	1	12/25/2018 05:45	WG1214111
Nitrobenzene	ND		0.333	1	12/25/2018 05:45	WG1214111
n-Nitrosodimethylamine	ND		0.333	1	12/25/2018 05:45	WG1214111
n-Nitrosodiphenylamine	ND		0.333	1	12/25/2018 05:45	WG1214111
n-Nitrosodi-n-propylamine	ND		0.333	1	12/25/2018 05:45	WG1214111
Phenanthrene	ND		0.0333	1	12/25/2018 05:45	WG1214111
Benzylbutyl phthalate	ND		0.333	1	12/25/2018 05:45	WG1214111
Bis(2-ethylhexyl)phthalate	ND		0.333	1	12/25/2018 05:45	WG1214111
Di-n-butyl phthalate	ND		0.333	1	12/25/2018 05:45	WG1214111
Diethyl phthalate	ND		0.333	1	12/25/2018 05:45	WG1214111
Dimethyl phthalate	ND		0.333	1	12/25/2018 05:45	WG1214111
Di-n-octyl phthalate	ND		0.333	1	12/25/2018 05:45	WG1214111
Pyrene	ND		0.0333	1	12/25/2018 05:45	WG1214111
1,2,4-Trichlorobenzene	ND		0.333	1	12/25/2018 05:45	WG1214111
4-Chloro-3-methylphenol	ND		0.333	1	12/25/2018 05:45	WG1214111
2-Chlorophenol	ND		0.333	1	12/25/2018 05:45	WG1214111
2,4-Dichlorophenol	ND		0.333	1	12/25/2018 05:45	WG1214111
2,4-Dimethylphenol	ND		0.333	1	12/25/2018 05:45	WG1214111
4,6-Dinitro-2-methylphenol	ND		0.333	1	12/25/2018 05:45	WG1214111
2,4-Dinitrophenol	ND		0.333	1	12/25/2018 05:45	WG1214111
2-Nitrophenol	ND		0.333	1	12/25/2018 05:45	WG1214111
4-Nitrophenol	ND		0.333	1	12/25/2018 05:45	WG1214111
Pentachlorophenol	ND		0.333	1	12/25/2018 05:45	WG1214111
Phenol	ND		0.333	1	12/25/2018 05:45	WG1214111
2,4,6-Trichlorophenol	ND		0.333	1	12/25/2018 05:45	WG1214111
(S) 2-Fluorophenol	53.3		12.0-120		12/25/2018 05:45	WG1214111
(S) Phenol-d5	45.4		10.0-120		12/25/2018 05:45	WG1214111
(S) Nitrobenzene-d5	47.5		10.0-122		12/25/2018 05:45	WG1214111
(S) 2-Fluorobiphenyl	47.8		15.0-120		12/25/2018 05:45	WG1214111
(S) 2,4,6-Tribromophenol	41.0		10.0-127		12/25/2018 05:45	WG1214111
(S) p-Terphenyl-d14	49.1		10.0-120		12/25/2018 05:45	WG1214111

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 date / time	Batch
Total Solids	80.9		1	12/21/2018 10:05	WG1214092

Mercury by Method 7471A

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Mercury	0.0251		0.0200	1	12/21/2018 13:23	WG1214211

Metals (ICP) by Method 6010B

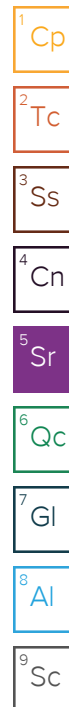
Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Arsenic	5.36		2.00	1	12/21/2018 08:52	WG1214054
Barium	154		0.500	1	12/21/2018 08:52	WG1214054
Cadmium	ND		0.500	1	12/21/2018 08:52	WG1214054
Chromium	13.0		1.00	1	12/21/2018 08:52	WG1214054
Lead	13.8		0.500	1	12/21/2018 08:52	WG1214054
Selenium	ND		2.00	1	12/21/2018 08:52	WG1214054
Silver	ND		1.00	1	12/21/2018 08:52	WG1214054

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	ND		0.100	1	12/22/2018 09:05	WG1214641
(S) a,a,a-Trifluorotoluene(FID)	101		77.0-120		12/22/2018 09:05	WG1214641

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

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Acetone	ND		0.0250	1	12/27/2018 04:18	WG1215658
Acrylonitrile	ND		0.0125	1	12/27/2018 04:18	WG1215658
Benzene	ND		0.00100	1	12/27/2018 04:18	WG1215658
Bromobenzene	ND		0.0125	1	12/27/2018 04:18	WG1215658
Bromodichloromethane	ND		0.00250	1	12/27/2018 04:18	WG1215658
Bromoform	ND		0.0250	1	12/27/2018 04:18	WG1215658
Bromomethane	ND		0.0125	1	12/27/2018 04:18	WG1215658
n-Butylbenzene	ND		0.0125	1	12/27/2018 04:18	WG1215658
sec-Butylbenzene	ND		0.0125	1	12/27/2018 04:18	WG1215658
tert-Butylbenzene	ND		0.00500	1	12/27/2018 04:18	WG1215658
Carbon tetrachloride	ND		0.00500	1	12/27/2018 04:18	WG1215658
Chlorobenzene	ND		0.00250	1	12/27/2018 04:18	WG1215658
Chlorodibromomethane	ND		0.00250	1	12/27/2018 04:18	WG1215658
Chloroethane	ND		0.00500	1	12/27/2018 04:18	WG1215658
Chloroform	ND		0.00250	1	12/27/2018 04:18	WG1215658
Chloromethane	ND		0.0125	1	12/27/2018 04:18	WG1215658
2-Chlorotoluene	ND		0.00250	1	12/27/2018 04:18	WG1215658
4-Chlorotoluene	ND		0.00500	1	12/27/2018 04:18	WG1215658
1,2-Dibromo-3-Chloropropane	ND		0.0250	1	12/27/2018 04:18	WG1215658
1,2-Dibromoethane	ND		0.00250	1	12/27/2018 04:18	WG1215658
Dibromomethane	ND		0.00500	1	12/27/2018 04:18	WG1215658
1,2-Dichlorobenzene	ND		0.00500	1	12/27/2018 04:18	WG1215658
1,3-Dichlorobenzene	ND		0.00500	1	12/27/2018 04:18	WG1215658
1,4-Dichlorobenzene	ND		0.00500	1	12/27/2018 04:18	WG1215658
Dichlorodifluoromethane	ND		0.00250	1	12/27/2018 04:18	WG1215658
1,1-Dichloroethane	ND		0.00250	1	12/27/2018 04:18	WG1215658
1,2-Dichloroethane	ND		0.00250	1	12/27/2018 04:18	WG1215658





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

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
1,1-Dichloroethene	ND		0.00250	1	12/27/2018 04:18	WG1215658
cis-1,2-Dichloroethene	ND		0.00250	1	12/27/2018 04:18	WG1215658
trans-1,2-Dichloroethene	ND		0.00500	1	12/27/2018 04:18	WG1215658
1,2-Dichloropropane	ND		0.00500	1	12/27/2018 04:18	WG1215658
1,1-Dichloropropene	ND		0.00250	1	12/27/2018 04:18	WG1215658
1,3-Dichloropropane	ND		0.00500	1	12/27/2018 04:18	WG1215658
cis-1,3-Dichloropropene	ND		0.00250	1	12/27/2018 04:18	WG1215658
trans-1,3-Dichloropropene	ND		0.00500	1	12/27/2018 04:18	WG1215658
2,2-Dichloropropane	ND		0.00250	1	12/27/2018 04:18	WG1215658
Di-isopropyl ether	ND		0.00100	1	12/27/2018 04:18	WG1215658
Ethylbenzene	ND		0.00250	1	12/27/2018 04:18	WG1215658
Hexachloro-1,3-butadiene	ND		0.0250	1	12/27/2018 04:18	WG1215658
Isopropylbenzene	ND		0.00250	1	12/27/2018 04:18	WG1215658
p-Isopropyltoluene	ND		0.00500	1	12/27/2018 04:18	WG1215658
2-Butanone (MEK)	ND		0.0250	1	12/27/2018 04:18	WG1215658
Methylene Chloride	ND		0.0250	1	12/27/2018 04:18	WG1215658
4-Methyl-2-pentanone (MIBK)	ND		0.0250	1	12/27/2018 04:18	WG1215658
Methyl tert-butyl ether	ND		0.00100	1	12/27/2018 04:18	WG1215658
Naphthalene	ND		0.0125	1	12/27/2018 04:18	WG1215658
n-Propylbenzene	ND		0.00500	1	12/27/2018 04:18	WG1215658
Styrene	ND		0.0125	1	12/27/2018 04:18	WG1215658
1,1,1,2-Tetrachloroethane	ND		0.00250	1	12/27/2018 04:18	WG1215658
1,1,2,2-Tetrachloroethane	ND		0.00250	1	12/27/2018 04:18	WG1215658
1,1,2-Trichlorotrifluoroethane	ND		0.00250	1	12/27/2018 04:18	WG1215658
Tetrachloroethene	ND		0.00250	1	12/27/2018 04:18	WG1215658
Toluene	ND		0.00500	1	12/27/2018 04:18	WG1215658
1,2,3-Trichlorobenzene	ND		0.00250	1	12/27/2018 04:18	WG1215658
1,2,4-Trichlorobenzene	ND		0.0125	1	12/27/2018 04:18	WG1215658
1,1,1-Trichloroethane	ND		0.00250	1	12/27/2018 04:18	WG1215658
1,1,2-Trichloroethane	ND		0.00250	1	12/27/2018 04:18	WG1215658
Trichloroethene	ND		0.00100	1	12/27/2018 04:18	WG1215658
Trichlorofluoromethane	ND		0.00250	1	12/27/2018 04:18	WG1215658
1,2,3-Trichloropropane	ND		0.0125	1	12/27/2018 04:18	WG1215658
1,2,4-Trimethylbenzene	ND		0.00500	1	12/27/2018 04:18	WG1215658
1,2,3-Trimethylbenzene	ND		0.00500	1	12/27/2018 04:18	WG1215658
1,3,5-Trimethylbenzene	ND		0.00500	1	12/27/2018 04:18	WG1215658
Vinyl chloride	ND		0.00250	1	12/27/2018 04:18	WG1215658
Xylenes, Total	ND		0.00650	1	12/27/2018 04:18	WG1215658
(S) Toluene-d8	102		75.0-131		12/27/2018 04:18	WG1215658
(S) Dibromofluoromethane	94.7		65.0-129		12/27/2018 04:18	WG1215658
(S) 4-Bromofluorobenzene	102		67.0-138		12/27/2018 04:18	WG1215658

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

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	ND		16.0	4	12/27/2018 14:15	WG1215790
(S) o-Terphenyl	59.4		18.0-148		12/27/2018 14:15	WG1215790

Sample Narrative:

L1054617-24 WG1215790: Cannot run at lower dilution due to viscosity of extract

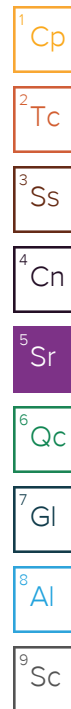


Collected date/time: 12/17/18 16:14

L1054617

Semi Volatile Organic Compounds (GC/MS) by Method 8270C

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Acenaphthene	ND		0.333	10	12/26/2018 02:31	WG1214111
Acenaphthylene	ND		0.333	10	12/26/2018 02:31	WG1214111
Anthracene	ND		0.333	10	12/26/2018 02:31	WG1214111
Benzo(a)anthracene	ND		0.333	10	12/26/2018 02:31	WG1214111
Benzo(b)fluoranthene	ND		0.333	10	12/26/2018 02:31	WG1214111
Benzo(k)fluoranthene	ND		0.333	10	12/26/2018 02:31	WG1214111
Benzo(g,h,i)perylene	ND		0.333	10	12/26/2018 02:31	WG1214111
Benzo(a)pyrene	ND		0.333	10	12/26/2018 02:31	WG1214111
Bis(2-chlorethoxy)methane	ND		3.33	10	12/26/2018 02:31	WG1214111
Bis(2-chloroethyl)ether	ND		3.33	10	12/26/2018 02:31	WG1214111
Bis(2-chloroisopropyl)ether	ND		3.33	10	12/26/2018 02:31	WG1214111
4-Bromophenyl-phenylether	ND		3.33	10	12/26/2018 02:31	WG1214111
2-Chloronaphthalene	ND		0.333	10	12/26/2018 02:31	WG1214111
4-Chlorophenyl-phenylether	ND		3.33	10	12/26/2018 02:31	WG1214111
Chrysene	ND		0.333	10	12/26/2018 02:31	WG1214111
Dibenz(a,h)anthracene	ND		0.333	10	12/26/2018 02:31	WG1214111
3,3-Dichlorobenzidine	ND		3.33	10	12/26/2018 02:31	WG1214111
2,4-Dinitrotoluene	ND		3.33	10	12/26/2018 02:31	WG1214111
2,6-Dinitrotoluene	ND		3.33	10	12/26/2018 02:31	WG1214111
Fluoranthene	ND		0.333	10	12/26/2018 02:31	WG1214111
Fluorene	ND		0.333	10	12/26/2018 02:31	WG1214111
Hexachlorobenzene	ND		3.33	10	12/26/2018 02:31	WG1214111
Hexachloro-1,3-butadiene	ND		3.33	10	12/26/2018 02:31	WG1214111
Hexachlorocyclopentadiene	ND		3.33	10	12/26/2018 02:31	WG1214111
Hexachloroethane	ND		3.33	10	12/26/2018 02:31	WG1214111
Indeno(1,2,3-cd)pyrene	ND		0.333	10	12/26/2018 02:31	WG1214111
Isophorone	ND		3.33	10	12/26/2018 02:31	WG1214111
Naphthalene	ND		0.333	10	12/26/2018 02:31	WG1214111
Nitrobenzene	ND		3.33	10	12/26/2018 02:31	WG1214111
n-Nitrosodimethylamine	ND		3.33	10	12/26/2018 02:31	WG1214111
n-Nitrosodiphenylamine	ND		3.33	10	12/26/2018 02:31	WG1214111
n-Nitrosodi-n-propylamine	ND		3.33	10	12/26/2018 02:31	WG1214111
Phenanthrene	ND		0.333	10	12/26/2018 02:31	WG1214111
Benzylbutyl phthalate	ND		3.33	10	12/26/2018 02:31	WG1214111
Bis(2-ethylhexyl)phthalate	ND		3.33	10	12/26/2018 02:31	WG1214111
Di-n-butyl phthalate	ND		3.33	10	12/26/2018 02:31	WG1214111
Diethyl phthalate	ND		3.33	10	12/26/2018 02:31	WG1214111
Dimethyl phthalate	ND		3.33	10	12/26/2018 02:31	WG1214111
Di-n-octyl phthalate	ND		3.33	10	12/26/2018 02:31	WG1214111
Pyrene	ND		0.333	10	12/26/2018 02:31	WG1214111
1,2,4-Trichlorobenzene	ND		3.33	10	12/26/2018 02:31	WG1214111
4-Chloro-3-methylphenol	ND		3.33	10	12/26/2018 02:31	WG1214111
2-Chlorophenol	ND		3.33	10	12/26/2018 02:31	WG1214111
2,4-Dichlorophenol	ND		3.33	10	12/26/2018 02:31	WG1214111
2,4-Dimethylphenol	ND		3.33	10	12/26/2018 02:31	WG1214111
4,6-Dinitro-2-methylphenol	ND		3.33	10	12/26/2018 02:31	WG1214111
2,4-Dinitrophenol	ND		3.33	10	12/26/2018 02:31	WG1214111
2-Nitrophenol	ND		3.33	10	12/26/2018 02:31	WG1214111
4-Nitrophenol	ND		3.33	10	12/26/2018 02:31	WG1214111
Pentachlorophenol	ND		3.33	10	12/26/2018 02:31	WG1214111
Phenol	ND		3.33	10	12/26/2018 02:31	WG1214111
2,4,6-Trichlorophenol	ND		3.33	10	12/26/2018 02:31	WG1214111
(S) 2-Fluorophenol	56.6		12.0-120		12/26/2018 02:31	WG1214111
(S) Phenol-d5	52.1		10.0-120		12/26/2018 02:31	WG1214111
(S) Nitrobenzene-d5	49.2		10.0-122		12/26/2018 02:31	WG1214111
(S) 2-Fluorobiphenyl	53.3		15.0-120		12/26/2018 02:31	WG1214111





Collected date/time: 12/17/18 16:14

L1054617

Semi Volatile Organic Compounds (GC/MS) by Method 8270C

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
(S) 2,4,6-Tribromophenol	43.4		10.0-127		12/26/2018 02:31	WG1214111
(S) p-Terphenyl-d14	52.7		10.0-120		12/26/2018 02:31	WG1214111

Sample Narrative:

L1054617-24 WG1214111: Dilution due to matrix impact during extract concentration procedure

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	75.4		1	12/21/2018 10:05	WG1214092

Mercury by Method 7471A

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Mercury	0.0524		0.0200	1	12/21/2018 13:25	WG1214211

Metals (ICP) by Method 6010B

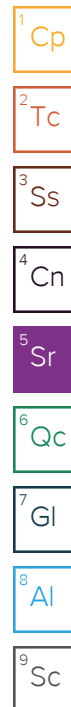
Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Arsenic	2.86		2.00	1	12/21/2018 09:17	WG1214054
Barium	111		0.500	1	12/21/2018 09:17	WG1214054
Cadmium	ND		0.500	1	12/21/2018 09:17	WG1214054
Chromium	11.7		1.00	1	12/21/2018 09:17	WG1214054
Lead	8.19		0.500	1	12/21/2018 09:17	WG1214054
Selenium	ND		2.00	1	12/21/2018 09:17	WG1214054
Silver	ND		1.00	1	12/21/2018 09:17	WG1214054

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	ND		0.100	1	12/23/2018 21:04	WG1215337
(S) a,a,a-Trifluorotoluene(FID)	92.2		77.0-120		12/23/2018 21:04	WG1215337

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

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Acetone	ND		0.0250	1	12/27/2018 04:40	WG1215658
Acrylonitrile	ND		0.0125	1	12/27/2018 04:40	WG1215658
Benzene	ND		0.00100	1	12/27/2018 04:40	WG1215658
Bromobenzene	ND		0.0125	1	12/27/2018 04:40	WG1215658
Bromodichloromethane	ND		0.00250	1	12/27/2018 04:40	WG1215658
Bromoform	ND		0.0250	1	12/27/2018 04:40	WG1215658
Bromomethane	ND		0.0125	1	12/27/2018 04:40	WG1215658
n-Butylbenzene	ND		0.0125	1	12/27/2018 04:40	WG1215658
sec-Butylbenzene	ND		0.0125	1	12/27/2018 04:40	WG1215658
tert-Butylbenzene	ND		0.00500	1	12/27/2018 04:40	WG1215658
Carbon tetrachloride	ND		0.00500	1	12/27/2018 04:40	WG1215658
Chlorobenzene	ND		0.00250	1	12/27/2018 04:40	WG1215658
Chlorodibromomethane	ND		0.00250	1	12/27/2018 04:40	WG1215658
Chloroethane	ND		0.00500	1	12/27/2018 04:40	WG1215658
Chloroform	ND		0.00250	1	12/27/2018 04:40	WG1215658
Chloromethane	ND		0.0125	1	12/27/2018 04:40	WG1215658
2-Chlorotoluene	ND		0.00250	1	12/27/2018 04:40	WG1215658
4-Chlorotoluene	ND		0.00500	1	12/27/2018 04:40	WG1215658
1,2-Dibromo-3-Chloropropane	ND		0.0250	1	12/27/2018 04:40	WG1215658
1,2-Dibromoethane	ND		0.00250	1	12/27/2018 04:40	WG1215658
Dibromomethane	ND		0.00500	1	12/27/2018 04:40	WG1215658
1,2-Dichlorobenzene	ND		0.00500	1	12/27/2018 04:40	WG1215658
1,3-Dichlorobenzene	ND		0.00500	1	12/27/2018 04:40	WG1215658
1,4-Dichlorobenzene	ND		0.00500	1	12/27/2018 04:40	WG1215658
Dichlorodifluoromethane	ND		0.00250	1	12/27/2018 04:40	WG1215658
1,1-Dichloroethane	ND		0.00250	1	12/27/2018 04:40	WG1215658
1,2-Dichloroethane	ND		0.00250	1	12/27/2018 04:40	WG1215658





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

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
1,1-Dichloroethene	ND		0.00250	1	12/27/2018 04:40	WG1215658
cis-1,2-Dichloroethene	ND		0.00250	1	12/27/2018 04:40	WG1215658
trans-1,2-Dichloroethene	ND		0.00500	1	12/27/2018 04:40	WG1215658
1,2-Dichloropropane	ND		0.00500	1	12/27/2018 04:40	WG1215658
1,1-Dichloropropene	ND		0.00250	1	12/27/2018 04:40	WG1215658
1,3-Dichloropropane	ND		0.00500	1	12/27/2018 04:40	WG1215658
cis-1,3-Dichloropropene	ND		0.00250	1	12/27/2018 04:40	WG1215658
trans-1,3-Dichloropropene	ND		0.00500	1	12/27/2018 04:40	WG1215658
2,2-Dichloropropane	ND		0.00250	1	12/27/2018 04:40	WG1215658
Di-isopropyl ether	ND		0.00100	1	12/27/2018 04:40	WG1215658
Ethylbenzene	ND		0.00250	1	12/27/2018 04:40	WG1215658
Hexachloro-1,3-butadiene	ND		0.0250	1	12/27/2018 04:40	WG1215658
Isopropylbenzene	ND		0.00250	1	12/27/2018 04:40	WG1215658
p-Isopropyltoluene	ND		0.00500	1	12/27/2018 04:40	WG1215658
2-Butanone (MEK)	ND		0.0250	1	12/27/2018 04:40	WG1215658
Methylene Chloride	ND		0.0250	1	12/27/2018 04:40	WG1215658
4-Methyl-2-pentanone (MIBK)	ND		0.0250	1	12/27/2018 04:40	WG1215658
Methyl tert-butyl ether	ND		0.00100	1	12/27/2018 04:40	WG1215658
Naphthalene	ND		0.0125	1	12/27/2018 04:40	WG1215658
n-Propylbenzene	ND		0.00500	1	12/27/2018 04:40	WG1215658
Styrene	ND		0.0125	1	12/27/2018 04:40	WG1215658
1,1,1,2-Tetrachloroethane	ND		0.00250	1	12/27/2018 04:40	WG1215658
1,1,2,2-Tetrachloroethane	ND		0.00250	1	12/27/2018 04:40	WG1215658
1,1,2-Trichlorotrifluoroethane	ND		0.00250	1	12/27/2018 04:40	WG1215658
Tetrachloroethene	ND		0.00250	1	12/27/2018 04:40	WG1215658
Toluene	ND		0.00500	1	12/27/2018 04:40	WG1215658
1,2,3-Trichlorobenzene	ND		0.00250	1	12/27/2018 04:40	WG1215658
1,2,4-Trichlorobenzene	ND		0.0125	1	12/27/2018 04:40	WG1215658
1,1,1-Trichloroethane	ND		0.00250	1	12/27/2018 04:40	WG1215658
1,1,2-Trichloroethane	ND		0.00250	1	12/27/2018 04:40	WG1215658
Trichloroethene	ND		0.00100	1	12/27/2018 04:40	WG1215658
Trichlorofluoromethane	ND		0.00250	1	12/27/2018 04:40	WG1215658
1,2,3-Trichloropropane	ND		0.0125	1	12/27/2018 04:40	WG1215658
1,2,4-Trimethylbenzene	ND		0.00500	1	12/27/2018 04:40	WG1215658
1,2,3-Trimethylbenzene	ND		0.00500	1	12/27/2018 04:40	WG1215658
1,3,5-Trimethylbenzene	ND		0.00500	1	12/27/2018 04:40	WG1215658
Vinyl chloride	ND		0.00250	1	12/27/2018 04:40	WG1215658
Xylenes, Total	ND		0.00650	1	12/27/2018 04:40	WG1215658
(S) Toluene-d8	101		75.0-131		12/27/2018 04:40	WG1215658
(S) Dibromofluoromethane	95.1		65.0-129		12/27/2018 04:40	WG1215658
(S) 4-Bromofluorobenzene	100		67.0-138		12/27/2018 04:40	WG1215658

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

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	ND		4.00	1	12/27/2018 10:42	WG1215790
(S) o-Terphenyl	47.4		18.0-148		12/27/2018 10:42	WG1215790

Semi Volatile Organic Compounds (GC/MS) by Method 8270C

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Acenaphthene	ND		0.0333	1	12/25/2018 06:08	WG1214111
Acenaphthylene	ND		0.0333	1	12/25/2018 06:08	WG1214111
Anthracene	ND		0.0333	1	12/25/2018 06:08	WG1214111
Benzo(a)anthracene	ND		0.0333	1	12/25/2018 06:08	WG1214111



Collected date/time: 12/17/18 16:24

L1054617

Semi Volatile Organic Compounds (GC/MS) by Method 8270C

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Benzo(b)fluoranthene	ND		0.0333	1	12/25/2018 06:08	WG1214111
Benzo(k)fluoranthene	ND		0.0333	1	12/25/2018 06:08	WG1214111
Benzo(g,h,i)perylene	ND		0.0333	1	12/25/2018 06:08	WG1214111
Benzo(a)pyrene	ND		0.0333	1	12/25/2018 06:08	WG1214111
Bis(2-chlorethoxy)methane	ND		0.333	1	12/25/2018 06:08	WG1214111
Bis(2-chloroethyl)ether	ND		0.333	1	12/25/2018 06:08	WG1214111
Bis(2-chloroisopropyl)ether	ND		0.333	1	12/25/2018 06:08	WG1214111
4-Bromophenyl-phenylether	ND		0.333	1	12/25/2018 06:08	WG1214111
2-Chloronaphthalene	ND		0.0333	1	12/25/2018 06:08	WG1214111
4-Chlorophenyl-phenylether	ND		0.333	1	12/25/2018 06:08	WG1214111
Chrysene	ND		0.0333	1	12/25/2018 06:08	WG1214111
Dibenz(a,h)anthracene	ND		0.0333	1	12/25/2018 06:08	WG1214111
3,3-Dichlorobenzidine	ND		0.333	1	12/25/2018 06:08	WG1214111
2,4-Dinitrotoluene	ND		0.333	1	12/25/2018 06:08	WG1214111
2,6-Dinitrotoluene	ND		0.333	1	12/25/2018 06:08	WG1214111
Fluoranthene	ND		0.0333	1	12/25/2018 06:08	WG1214111
Fluorene	ND		0.0333	1	12/25/2018 06:08	WG1214111
Hexachlorobenzene	ND		0.333	1	12/25/2018 06:08	WG1214111
Hexachloro-1,3-butadiene	ND		0.333	1	12/25/2018 06:08	WG1214111
Hexachlorocyclopentadiene	ND		0.333	1	12/25/2018 06:08	WG1214111
Hexachloroethane	ND		0.333	1	12/25/2018 06:08	WG1214111
Indeno(1,2,3-cd)pyrene	ND		0.0333	1	12/25/2018 06:08	WG1214111
Isophorone	ND		0.333	1	12/25/2018 06:08	WG1214111
Naphthalene	ND		0.0333	1	12/25/2018 06:08	WG1214111
Nitrobenzene	ND		0.333	1	12/25/2018 06:08	WG1214111
n-Nitrosodimethylamine	ND		0.333	1	12/25/2018 06:08	WG1214111
n-Nitrosodiphenylamine	ND		0.333	1	12/25/2018 06:08	WG1214111
n-Nitrosodi-n-propylamine	ND		0.333	1	12/25/2018 06:08	WG1214111
Phenanthrene	ND		0.0333	1	12/25/2018 06:08	WG1214111
Benzylbutyl phthalate	ND		0.333	1	12/25/2018 06:08	WG1214111
Bis(2-ethylhexyl)phthalate	ND		0.333	1	12/25/2018 06:08	WG1214111
Di-n-butyl phthalate	ND		0.333	1	12/25/2018 06:08	WG1214111
Diethyl phthalate	ND		0.333	1	12/25/2018 06:08	WG1214111
Dimethyl phthalate	ND		0.333	1	12/25/2018 06:08	WG1214111
Di-n-octyl phthalate	ND		0.333	1	12/25/2018 06:08	WG1214111
Pyrene	ND		0.0333	1	12/25/2018 06:08	WG1214111
1,2,4-Trichlorobenzene	ND		0.333	1	12/25/2018 06:08	WG1214111
4-Chloro-3-methylphenol	ND		0.333	1	12/25/2018 06:08	WG1214111
2-Chlorophenol	ND		0.333	1	12/25/2018 06:08	WG1214111
2,4-Dichlorophenol	ND		0.333	1	12/25/2018 06:08	WG1214111
2,4-Dimethylphenol	ND		0.333	1	12/25/2018 06:08	WG1214111
4,6-Dinitro-2-methylphenol	ND		0.333	1	12/25/2018 06:08	WG1214111
2,4-Dinitrophenol	ND		0.333	1	12/25/2018 06:08	WG1214111
2-Nitrophenol	ND		0.333	1	12/25/2018 06:08	WG1214111
4-Nitrophenol	ND		0.333	1	12/25/2018 06:08	WG1214111
Pentachlorophenol	ND		0.333	1	12/25/2018 06:08	WG1214111
Phenol	ND		0.333	1	12/25/2018 06:08	WG1214111
2,4,6-Trichlorophenol	ND		0.333	1	12/25/2018 06:08	WG1214111
(S) 2-Fluorophenol	53.8		12.0-120		12/25/2018 06:08	WG1214111
(S) Phenol-d5	48.8		10.0-120		12/25/2018 06:08	WG1214111
(S) Nitrobenzene-d5	46.2		10.0-122		12/25/2018 06:08	WG1214111
(S) 2-Fluorobiphenyl	44.7		15.0-120		12/25/2018 06:08	WG1214111
(S) 2,4,6-Tribromophenol	58.4		10.0-127		12/25/2018 06:08	WG1214111
(S) p-Terphenyl-d14	66.0		10.0-120		12/25/2018 06:08	WG1214111

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	76.1		1	12/21/2018 10:05	WG1214092

Mercury by Method 7471A

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Mercury	0.0265		0.0200	1	12/21/2018 13:28	WG1214211

Metals (ICP) by Method 6010B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Arsenic	12.0		2.00	1	12/21/2018 09:20	WG1214054
Barium	142		0.500	1	12/21/2018 09:20	WG1214054
Cadmium	ND		0.500	1	12/21/2018 09:20	WG1214054
Chromium	17.3		1.00	1	12/21/2018 09:20	WG1214054
Lead	10.8		0.500	1	12/21/2018 09:20	WG1214054
Selenium	ND		2.00	1	12/21/2018 09:20	WG1214054
Silver	ND		1.00	1	12/21/2018 09:20	WG1214054

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
TPH (GC/FID) Low Fraction	ND		0.100	1	12/22/2018 09:47	WG1214641
(S) a,a,a-Trifluorotoluene(FID)	101		77.0-120		12/22/2018 09:47	WG1214641

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

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Acetone	ND		0.0250	1	12/27/2018 05:02	WG1215658
Acrylonitrile	ND		0.0125	1	12/27/2018 05:02	WG1215658
Benzene	ND		0.00100	1	12/27/2018 05:02	WG1215658
Bromobenzene	ND		0.0125	1	12/27/2018 05:02	WG1215658
Bromodichloromethane	ND		0.00250	1	12/27/2018 05:02	WG1215658
Bromoform	ND		0.0250	1	12/27/2018 05:02	WG1215658
Bromomethane	ND		0.0125	1	12/27/2018 05:02	WG1215658
n-Butylbenzene	ND		0.0125	1	12/27/2018 05:02	WG1215658
sec-Butylbenzene	ND		0.0125	1	12/27/2018 05:02	WG1215658
tert-Butylbenzene	ND		0.00500	1	12/27/2018 05:02	WG1215658
Carbon tetrachloride	ND		0.00500	1	12/27/2018 05:02	WG1215658
Chlorobenzene	ND		0.00250	1	12/27/2018 05:02	WG1215658
Chlorodibromomethane	ND		0.00250	1	12/27/2018 05:02	WG1215658
Chloroethane	ND		0.00500	1	12/27/2018 05:02	WG1215658
Chloroform	ND		0.00250	1	12/27/2018 05:02	WG1215658
Chloromethane	ND		0.0125	1	12/27/2018 05:02	WG1215658
2-Chlorotoluene	ND		0.00250	1	12/27/2018 05:02	WG1215658
4-Chlorotoluene	ND		0.00500	1	12/27/2018 05:02	WG1215658
1,2-Dibromo-3-Chloropropane	ND		0.0250	1	12/27/2018 05:02	WG1215658
1,2-Dibromoethane	ND		0.00250	1	12/27/2018 05:02	WG1215658
Dibromomethane	ND		0.00500	1	12/27/2018 05:02	WG1215658
1,2-Dichlorobenzene	ND		0.00500	1	12/27/2018 05:02	WG1215658
1,3-Dichlorobenzene	ND		0.00500	1	12/27/2018 05:02	WG1215658
1,4-Dichlorobenzene	ND		0.00500	1	12/27/2018 05:02	WG1215658
Dichlorodifluoromethane	ND		0.00250	1	12/27/2018 05:02	WG1215658
1,1-Dichloroethane	ND		0.00250	1	12/27/2018 05:02	WG1215658
1,2-Dichloroethane	ND		0.00250	1	12/27/2018 05:02	WG1215658

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

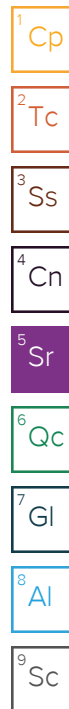
8 Al

9 Sc



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

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
1,1-Dichloroethene	ND		0.00250	1	12/27/2018 05:02	WG1215658
cis-1,2-Dichloroethene	ND		0.00250	1	12/27/2018 05:02	WG1215658
trans-1,2-Dichloroethene	ND		0.00500	1	12/27/2018 05:02	WG1215658
1,2-Dichloropropane	ND		0.00500	1	12/27/2018 05:02	WG1215658
1,1-Dichloropropene	ND		0.00250	1	12/27/2018 05:02	WG1215658
1,3-Dichloropropane	ND		0.00500	1	12/27/2018 05:02	WG1215658
cis-1,3-Dichloropropene	ND		0.00250	1	12/27/2018 05:02	WG1215658
trans-1,3-Dichloropropene	ND		0.00500	1	12/27/2018 05:02	WG1215658
2,2-Dichloropropane	ND		0.00250	1	12/27/2018 05:02	WG1215658
Di-isopropyl ether	ND		0.00100	1	12/27/2018 05:02	WG1215658
Ethylbenzene	ND		0.00250	1	12/27/2018 05:02	WG1215658
Hexachloro-1,3-butadiene	ND		0.0250	1	12/27/2018 05:02	WG1215658
Isopropylbenzene	ND		0.00250	1	12/27/2018 05:02	WG1215658
p-Isopropyltoluene	ND		0.00500	1	12/27/2018 05:02	WG1215658
2-Butanone (MEK)	ND		0.0250	1	12/27/2018 05:02	WG1215658
Methylene Chloride	ND		0.0250	1	12/27/2018 05:02	WG1215658
4-Methyl-2-pentanone (MIBK)	ND		0.0250	1	12/27/2018 05:02	WG1215658
Methyl tert-butyl ether	ND		0.00100	1	12/27/2018 05:02	WG1215658
Naphthalene	ND		0.0125	1	12/27/2018 05:02	WG1215658
n-Propylbenzene	ND		0.00500	1	12/27/2018 05:02	WG1215658
Styrene	ND		0.0125	1	12/27/2018 05:02	WG1215658
1,1,1,2-Tetrachloroethane	ND		0.00250	1	12/27/2018 05:02	WG1215658
1,1,2,2-Tetrachloroethane	ND		0.00250	1	12/27/2018 05:02	WG1215658
1,1,2-Trichlorotrifluoroethane	ND		0.00250	1	12/27/2018 05:02	WG1215658
Tetrachloroethene	ND		0.00250	1	12/27/2018 05:02	WG1215658
Toluene	ND		0.00500	1	12/27/2018 05:02	WG1215658
1,2,3-Trichlorobenzene	ND		0.00250	1	12/27/2018 05:02	WG1215658
1,2,4-Trichlorobenzene	ND		0.0125	1	12/27/2018 05:02	WG1215658
1,1,1-Trichloroethane	ND		0.00250	1	12/27/2018 05:02	WG1215658
1,1,2-Trichloroethane	ND		0.00250	1	12/27/2018 05:02	WG1215658
Trichloroethene	ND		0.00100	1	12/27/2018 05:02	WG1215658
Trichlorofluoromethane	ND		0.00250	1	12/27/2018 05:02	WG1215658
1,2,3-Trichloropropane	ND		0.0125	1	12/27/2018 05:02	WG1215658
1,2,4-Trimethylbenzene	ND		0.00500	1	12/27/2018 05:02	WG1215658
1,2,3-Trimethylbenzene	ND		0.00500	1	12/27/2018 05:02	WG1215658
1,3,5-Trimethylbenzene	ND		0.00500	1	12/27/2018 05:02	WG1215658
Vinyl chloride	ND		0.00250	1	12/27/2018 05:02	WG1215658
Xylenes, Total	ND		0.00650	1	12/27/2018 05:02	WG1215658
(S) Toluene-d8	103		75.0-131		12/27/2018 05:02	WG1215658
(S) Dibromofluoromethane	91.3		65.0-129		12/27/2018 05:02	WG1215658
(S) 4-Bromofluorobenzene	99.7		67.0-138		12/27/2018 05:02	WG1215658



Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	ND		4.00	1	12/27/2018 10:54	WG1215790
(S) o-Terphenyl	42.3		18.0-148		12/27/2018 10:54	WG1215790

Semi Volatile Organic Compounds (GC/MS) by Method 8270C

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Acenaphthene	ND		0.0333	1	12/25/2018 06:31	WG1214111
Acenaphthylene	ND		0.0333	1	12/25/2018 06:31	WG1214111
Anthracene	ND		0.0333	1	12/25/2018 06:31	WG1214111
Benzo(a)anthracene	ND		0.0333	1	12/25/2018 06:31	WG1214111



Semi Volatile Organic Compounds (GC/MS) by Method 8270C

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Benzo(b)fluoranthene	ND		0.0333	1	12/25/2018 06:31	WG1214111
Benzo(k)fluoranthene	ND		0.0333	1	12/25/2018 06:31	WG1214111
Benzo(g,h,i)perylene	ND		0.0333	1	12/25/2018 06:31	WG1214111
Benzo(a)pyrene	ND		0.0333	1	12/25/2018 06:31	WG1214111
Bis(2-chlorethoxy)methane	ND		0.333	1	12/25/2018 06:31	WG1214111
Bis(2-chloroethyl)ether	ND		0.333	1	12/25/2018 06:31	WG1214111
Bis(2-chloroisopropyl)ether	ND		0.333	1	12/25/2018 06:31	WG1214111
4-Bromophenyl-phenylether	ND		0.333	1	12/25/2018 06:31	WG1214111
2-Chloronaphthalene	ND		0.0333	1	12/25/2018 06:31	WG1214111
4-Chlorophenyl-phenylether	ND		0.333	1	12/25/2018 06:31	WG1214111
Chrysene	ND		0.0333	1	12/25/2018 06:31	WG1214111
Dibenz(a,h)anthracene	ND		0.0333	1	12/25/2018 06:31	WG1214111
3,3-Dichlorobenzidine	ND		0.333	1	12/25/2018 06:31	WG1214111
2,4-Dinitrotoluene	ND		0.333	1	12/25/2018 06:31	WG1214111
2,6-Dinitrotoluene	ND		0.333	1	12/25/2018 06:31	WG1214111
Fluoranthene	ND		0.0333	1	12/25/2018 06:31	WG1214111
Fluorene	ND		0.0333	1	12/25/2018 06:31	WG1214111
Hexachlorobenzene	ND		0.333	1	12/25/2018 06:31	WG1214111
Hexachloro-1,3-butadiene	ND		0.333	1	12/25/2018 06:31	WG1214111
Hexachlorocyclopentadiene	ND		0.333	1	12/25/2018 06:31	WG1214111
Hexachloroethane	ND		0.333	1	12/25/2018 06:31	WG1214111
Indeno(1,2,3-cd)pyrene	ND		0.0333	1	12/25/2018 06:31	WG1214111
Isophorone	ND		0.333	1	12/25/2018 06:31	WG1214111
Naphthalene	ND		0.0333	1	12/25/2018 06:31	WG1214111
Nitrobenzene	ND		0.333	1	12/25/2018 06:31	WG1214111
n-Nitrosodimethylamine	ND		0.333	1	12/25/2018 06:31	WG1214111
n-Nitrosodiphenylamine	ND		0.333	1	12/25/2018 06:31	WG1214111
n-Nitrosodi-n-propylamine	ND		0.333	1	12/25/2018 06:31	WG1214111
Phenanthrene	ND		0.0333	1	12/25/2018 06:31	WG1214111
Benzylbutyl phthalate	ND		0.333	1	12/25/2018 06:31	WG1214111
Bis(2-ethylhexyl)phthalate	ND		0.333	1	12/25/2018 06:31	WG1214111
Di-n-butyl phthalate	ND		0.333	1	12/25/2018 06:31	WG1214111
Diethyl phthalate	ND		0.333	1	12/25/2018 06:31	WG1214111
Dimethyl phthalate	ND		0.333	1	12/25/2018 06:31	WG1214111
Di-n-octyl phthalate	ND		0.333	1	12/25/2018 06:31	WG1214111
Pyrene	ND		0.0333	1	12/25/2018 06:31	WG1214111
1,2,4-Trichlorobenzene	ND		0.333	1	12/25/2018 06:31	WG1214111
4-Chloro-3-methylphenol	ND		0.333	1	12/25/2018 06:31	WG1214111
2-Chlorophenol	ND		0.333	1	12/25/2018 06:31	WG1214111
2,4-Dichlorophenol	ND		0.333	1	12/25/2018 06:31	WG1214111
2,4-Dimethylphenol	ND		0.333	1	12/25/2018 06:31	WG1214111
4,6-Dinitro-2-methylphenol	ND		0.333	1	12/25/2018 06:31	WG1214111
2,4-Dinitrophenol	ND		0.333	1	12/25/2018 06:31	WG1214111
2-Nitrophenol	ND		0.333	1	12/25/2018 06:31	WG1214111
4-Nitrophenol	ND		0.333	1	12/25/2018 06:31	WG1214111
Pentachlorophenol	ND		0.333	1	12/25/2018 06:31	WG1214111
Phenol	ND		0.333	1	12/25/2018 06:31	WG1214111
2,4,6-Trichlorophenol	ND		0.333	1	12/25/2018 06:31	WG1214111
(S) 2-Fluorophenol	54.8		12.0-120		12/25/2018 06:31	WG1214111
(S) Phenol-d5	46.2		10.0-120		12/25/2018 06:31	WG1214111
(S) Nitrobenzene-d5	47.6		10.0-122		12/25/2018 06:31	WG1214111
(S) 2-Fluorobiphenyl	50.6		15.0-120		12/25/2018 06:31	WG1214111
(S) 2,4,6-Tribromophenol	50.2		10.0-127		12/25/2018 06:31	WG1214111
(S) p-Terphenyl-d14	56.1		10.0-120		12/25/2018 06:31	WG1214111

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 date / time	Batch
Total Solids	73.9		1	12/21/2018 10:05	WG1214092

Mercury by Method 7471A

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Mercury	0.0212		0.0200	1	12/21/2018 13:31	WG1214211

Metals (ICP) by Method 6010B

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Arsenic	ND		2.00	1	12/21/2018 09:23	WG1214054
Barium	137		0.500	1	12/21/2018 09:23	WG1214054
Cadmium	ND		0.500	1	12/21/2018 09:23	WG1214054
Chromium	11.5		1.00	1	12/21/2018 09:23	WG1214054
Lead	7.43		0.500	1	12/21/2018 09:23	WG1214054
Selenium	ND		2.00	1	12/21/2018 09:23	WG1214054
Silver	ND		1.00	1	12/21/2018 09:23	WG1214054

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	ND		0.100	1	12/22/2018 10:09	WG1214641
(S) a,a,a-Trifluorotoluene(FID)	101		77.0-120		12/22/2018 10:09	WG1214641

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

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Acetone	ND		0.0250	1	12/27/2018 05:24	WG1215658
Acrylonitrile	ND		0.0125	1	12/27/2018 05:24	WG1215658
Benzene	ND		0.00100	1	12/27/2018 05:24	WG1215658
Bromobenzene	ND		0.0125	1	12/27/2018 05:24	WG1215658
Bromodichloromethane	ND		0.00250	1	12/27/2018 05:24	WG1215658
Bromoform	ND		0.0250	1	12/27/2018 05:24	WG1215658
Bromomethane	ND		0.0125	1	12/27/2018 05:24	WG1215658
n-Butylbenzene	ND		0.0125	1	12/27/2018 05:24	WG1215658
sec-Butylbenzene	ND		0.0125	1	12/27/2018 05:24	WG1215658
tert-Butylbenzene	ND		0.00500	1	12/27/2018 05:24	WG1215658
Carbon tetrachloride	ND		0.00500	1	12/27/2018 05:24	WG1215658
Chlorobenzene	ND		0.00250	1	12/27/2018 05:24	WG1215658
Chlorodibromomethane	ND		0.00250	1	12/27/2018 05:24	WG1215658
Chloroethane	ND		0.00500	1	12/27/2018 05:24	WG1215658
Chloroform	ND		0.00250	1	12/27/2018 05:24	WG1215658
Chloromethane	ND		0.0125	1	12/27/2018 05:24	WG1215658
2-Chlorotoluene	ND		0.00250	1	12/27/2018 05:24	WG1215658
4-Chlorotoluene	ND		0.00500	1	12/27/2018 05:24	WG1215658
1,2-Dibromo-3-Chloropropane	ND		0.0250	1	12/27/2018 05:24	WG1215658
1,2-Dibromoethane	ND		0.00250	1	12/27/2018 05:24	WG1215658
Dibromomethane	ND		0.00500	1	12/27/2018 05:24	WG1215658
1,2-Dichlorobenzene	ND		0.00500	1	12/27/2018 05:24	WG1215658
1,3-Dichlorobenzene	ND		0.00500	1	12/27/2018 05:24	WG1215658
1,4-Dichlorobenzene	ND		0.00500	1	12/27/2018 05:24	WG1215658
Dichlorodifluoromethane	ND		0.00250	1	12/27/2018 05:24	WG1215658
1,1-Dichloroethane	ND		0.00250	1	12/27/2018 05:24	WG1215658
1,2-Dichloroethane	ND		0.00250	1	12/27/2018 05:24	WG1215658

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 8260B

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
1,1-Dichloroethene	ND		0.00250	1	12/27/2018 05:24	WG1215658
cis-1,2-Dichloroethene	ND		0.00250	1	12/27/2018 05:24	WG1215658
trans-1,2-Dichloroethene	ND		0.00500	1	12/27/2018 05:24	WG1215658
1,2-Dichloropropane	ND		0.00500	1	12/27/2018 05:24	WG1215658
1,1-Dichloropropene	ND		0.00250	1	12/27/2018 05:24	WG1215658
1,3-Dichloropropane	ND		0.00500	1	12/27/2018 05:24	WG1215658
cis-1,3-Dichloropropene	ND		0.00250	1	12/27/2018 05:24	WG1215658
trans-1,3-Dichloropropene	ND		0.00500	1	12/27/2018 05:24	WG1215658
2,2-Dichloropropane	ND		0.00250	1	12/27/2018 05:24	WG1215658
Di-isopropyl ether	ND		0.00100	1	12/27/2018 05:24	WG1215658
Ethylbenzene	ND		0.00250	1	12/27/2018 05:24	WG1215658
Hexachloro-1,3-butadiene	ND		0.0250	1	12/27/2018 05:24	WG1215658
Isopropylbenzene	ND		0.00250	1	12/27/2018 05:24	WG1215658
p-Isopropyltoluene	ND		0.00500	1	12/27/2018 05:24	WG1215658
2-Butanone (MEK)	ND		0.0250	1	12/27/2018 05:24	WG1215658
Methylene Chloride	ND		0.0250	1	12/27/2018 05:24	WG1215658
4-Methyl-2-pentanone (MIBK)	ND		0.0250	1	12/27/2018 05:24	WG1215658
Methyl tert-butyl ether	ND		0.00100	1	12/27/2018 05:24	WG1215658
Naphthalene	ND		0.0125	1	12/27/2018 05:24	WG1215658
n-Propylbenzene	ND		0.00500	1	12/27/2018 05:24	WG1215658
Styrene	ND		0.0125	1	12/27/2018 05:24	WG1215658
1,1,1,2-Tetrachloroethane	ND		0.00250	1	12/27/2018 05:24	WG1215658
1,1,2,2-Tetrachloroethane	ND		0.00250	1	12/27/2018 05:24	WG1215658
1,1,2-Trichlorotrifluoroethane	ND		0.00250	1	12/27/2018 05:24	WG1215658
Tetrachloroethene	ND		0.00250	1	12/27/2018 05:24	WG1215658
Toluene	ND		0.00500	1	12/27/2018 05:24	WG1215658
1,2,3-Trichlorobenzene	ND		0.00250	1	12/27/2018 05:24	WG1215658
1,2,4-Trichlorobenzene	ND		0.0125	1	12/27/2018 05:24	WG1215658
1,1,1-Trichloroethane	ND		0.00250	1	12/27/2018 05:24	WG1215658
1,1,2-Trichloroethane	ND		0.00250	1	12/27/2018 05:24	WG1215658
Trichloroethene	ND		0.00100	1	12/27/2018 05:24	WG1215658
Trichlorofluoromethane	ND		0.00250	1	12/27/2018 05:24	WG1215658
1,2,3-Trichloropropane	ND		0.0125	1	12/27/2018 05:24	WG1215658
1,2,4-Trimethylbenzene	ND		0.00500	1	12/27/2018 05:24	WG1215658
1,2,3-Trimethylbenzene	ND		0.00500	1	12/27/2018 05:24	WG1215658
1,3,5-Trimethylbenzene	ND		0.00500	1	12/27/2018 05:24	WG1215658
Vinyl chloride	ND		0.00250	1	12/27/2018 05:24	WG1215658
Xylenes, Total	ND		0.00650	1	12/27/2018 05:24	WG1215658
(S) Toluene-d8	102		75.0-131		12/27/2018 05:24	WG1215658
(S) Dibromofluoromethane	94.5		65.0-129		12/27/2018 05:24	WG1215658
(S) 4-Bromofluorobenzene	98.7		67.0-138		12/27/2018 05:24	WG1215658

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

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	ND		4.00	1	12/27/2018 11:06	WG1215790
(S) o-Terphenyl	52.9		18.0-148		12/27/2018 11:06	WG1215790

Semi Volatile Organic Compounds (GC/MS) by Method 8270C

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Acenaphthene	ND		0.0333	1	12/25/2018 06:54	WG1214111
Acenaphthylene	ND		0.0333	1	12/25/2018 06:54	WG1214111
Anthracene	ND		0.0333	1	12/25/2018 06:54	WG1214111
Benzo(a)anthracene	ND		0.0333	1	12/25/2018 06:54	WG1214111



Semi Volatile Organic Compounds (GC/MS) by Method 8270C

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Benzo(b)fluoranthene	ND		0.0333	1	12/25/2018 06:54	WG1214111
Benzo(k)fluoranthene	ND		0.0333	1	12/25/2018 06:54	WG1214111
Benzo(g,h,i)perylene	ND		0.0333	1	12/25/2018 06:54	WG1214111
Benzo(a)pyrene	ND		0.0333	1	12/25/2018 06:54	WG1214111
Bis(2-chloroethoxy)methane	ND		0.333	1	12/25/2018 06:54	WG1214111
Bis(2-chloroethyl)ether	ND		0.333	1	12/25/2018 06:54	WG1214111
Bis(2-chloroisopropyl)ether	ND		0.333	1	12/25/2018 06:54	WG1214111
4-Bromophenyl-phenylether	ND		0.333	1	12/25/2018 06:54	WG1214111
2-Chloronaphthalene	ND		0.0333	1	12/25/2018 06:54	WG1214111
4-Chlorophenyl-phenylether	ND		0.333	1	12/25/2018 06:54	WG1214111
Chrysene	ND		0.0333	1	12/25/2018 06:54	WG1214111
Dibenz(a,h)anthracene	ND		0.0333	1	12/25/2018 06:54	WG1214111
3,3-Dichlorobenzidine	ND		0.333	1	12/25/2018 06:54	WG1214111
2,4-Dinitrotoluene	ND		0.333	1	12/25/2018 06:54	WG1214111
2,6-Dinitrotoluene	ND		0.333	1	12/25/2018 06:54	WG1214111
Fluoranthene	ND		0.0333	1	12/25/2018 06:54	WG1214111
Fluorene	ND		0.0333	1	12/25/2018 06:54	WG1214111
Hexachlorobenzene	ND		0.333	1	12/25/2018 06:54	WG1214111
Hexachloro-1,3-butadiene	ND		0.333	1	12/25/2018 06:54	WG1214111
Hexachlorocyclopentadiene	ND		0.333	1	12/25/2018 06:54	WG1214111
Hexachloroethane	ND		0.333	1	12/25/2018 06:54	WG1214111
Indeno(1,2,3-cd)pyrene	ND		0.0333	1	12/25/2018 06:54	WG1214111
Isophorone	ND		0.333	1	12/25/2018 06:54	WG1214111
Naphthalene	ND		0.0333	1	12/25/2018 06:54	WG1214111
Nitrobenzene	ND		0.333	1	12/25/2018 06:54	WG1214111
n-Nitrosodimethylamine	ND		0.333	1	12/25/2018 06:54	WG1214111
n-Nitrosodiphenylamine	ND		0.333	1	12/25/2018 06:54	WG1214111
n-Nitrosodi-n-propylamine	ND		0.333	1	12/25/2018 06:54	WG1214111
Phenanthrene	ND		0.0333	1	12/25/2018 06:54	WG1214111
Benzylbutyl phthalate	ND		0.333	1	12/25/2018 06:54	WG1214111
Bis(2-ethylhexyl)phthalate	ND		0.333	1	12/25/2018 06:54	WG1214111
Di-n-butyl phthalate	ND		0.333	1	12/25/2018 06:54	WG1214111
Diethyl phthalate	ND		0.333	1	12/25/2018 06:54	WG1214111
Dimethyl phthalate	ND		0.333	1	12/25/2018 06:54	WG1214111
Di-n-octyl phthalate	ND		0.333	1	12/25/2018 06:54	WG1214111
Pyrene	ND		0.0333	1	12/25/2018 06:54	WG1214111
1,2,4-Trichlorobenzene	ND		0.333	1	12/25/2018 06:54	WG1214111
4-Chloro-3-methylphenol	ND		0.333	1	12/25/2018 06:54	WG1214111
2-Chlorophenol	ND		0.333	1	12/25/2018 06:54	WG1214111
2,4-Dichlorophenol	ND		0.333	1	12/25/2018 06:54	WG1214111
2,4-Dimethylphenol	ND		0.333	1	12/25/2018 06:54	WG1214111
4,6-Dinitro-2-methylphenol	ND		0.333	1	12/25/2018 06:54	WG1214111
2,4-Dinitrophenol	ND		0.333	1	12/25/2018 06:54	WG1214111
2-Nitrophenol	ND		0.333	1	12/25/2018 06:54	WG1214111
4-Nitrophenol	ND		0.333	1	12/25/2018 06:54	WG1214111
Pentachlorophenol	ND		0.333	1	12/25/2018 06:54	WG1214111
Phenol	ND		0.333	1	12/25/2018 06:54	WG1214111
2,4,6-Trichlorophenol	ND		0.333	1	12/25/2018 06:54	WG1214111
(S) 2-Fluorophenol	50.5		12.0-120		12/25/2018 06:54	WG1214111
(S) Phenol-d5	34.4		10.0-120		12/25/2018 06:54	WG1214111
(S) Nitrobenzene-d5	45.6		10.0-122		12/25/2018 06:54	WG1214111
(S) 2-Fluorobiphenyl	48.4		15.0-120		12/25/2018 06:54	WG1214111
(S) 2,4,6-Tribromophenol	46.1		10.0-127		12/25/2018 06:54	WG1214111
(S) p-Terphenyl-d14	54.7		10.0-120		12/25/2018 06:54	WG1214111

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Mercury by Method 7470A

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Mercury	ND		0.000200	1	12/20/2018 19:25	WG1213623

Metals (ICP) by Method 6010B

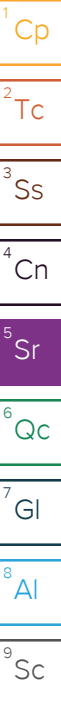
Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Arsenic	ND		0.0100	1	12/22/2018 09:44	WG1213747
Barium	ND		0.00500	1	12/22/2018 09:44	WG1213747
Cadmium	ND		0.00200	1	12/22/2018 09:44	WG1213747
Chromium	ND		0.0100	1	12/22/2018 09:44	WG1213747
Lead	ND		0.00500	1	12/22/2018 09:44	WG1213747
Selenium	ND		0.0100	1	12/22/2018 09:44	WG1213747
Silver	ND		0.00500	1	12/22/2018 09:44	WG1213747

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
TPH (GC/FID) Low Fraction	ND		0.100	1	12/20/2018 09:09	WG1213653
(S) a,a,a-Trifluorotoluene(FID)	95.7		78.0-120		12/20/2018 09:09	WG1213653

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

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Acetone	ND		0.0500	1	12/21/2018 05:01	WG1214328
Acrolein	ND	J4	0.0500	1	12/21/2018 05:01	WG1214328
Acrylonitrile	ND		0.0100	1	12/21/2018 05:01	WG1214328
Benzene	ND		0.00100	1	12/21/2018 05:01	WG1214328
Bromobenzene	ND		0.00100	1	12/21/2018 05:01	WG1214328
Bromodichloromethane	ND		0.00100	1	12/21/2018 05:01	WG1214328
Bromoform	ND		0.00100	1	12/21/2018 05:01	WG1214328
Bromomethane	ND		0.00500	1	12/21/2018 05:01	WG1214328
n-Butylbenzene	ND		0.00100	1	12/21/2018 05:01	WG1214328
sec-Butylbenzene	ND		0.00100	1	12/21/2018 05:01	WG1214328
tert-Butylbenzene	ND		0.00100	1	12/21/2018 05:01	WG1214328
Carbon tetrachloride	ND		0.00100	1	12/21/2018 05:01	WG1214328
Chlorobenzene	ND		0.00100	1	12/21/2018 05:01	WG1214328
Chlorodibromomethane	ND		0.00100	1	12/21/2018 05:01	WG1214328
Chloroethane	ND		0.00500	1	12/21/2018 05:01	WG1214328
Chloroform	ND		0.00500	1	12/21/2018 05:01	WG1214328
Chloromethane	ND		0.00250	1	12/21/2018 05:01	WG1214328
2-Chlorotoluene	ND		0.00100	1	12/21/2018 05:01	WG1214328
4-Chlorotoluene	ND		0.00100	1	12/21/2018 05:01	WG1214328
1,2-Dibromo-3-Chloropropane	ND		0.00500	1	12/21/2018 05:01	WG1214328
1,2-Dibromoethane	ND		0.00100	1	12/21/2018 05:01	WG1214328
Dibromomethane	ND		0.00100	1	12/21/2018 05:01	WG1214328
1,2-Dichlorobenzene	ND		0.00100	1	12/21/2018 05:01	WG1214328
1,3-Dichlorobenzene	ND		0.00100	1	12/21/2018 05:01	WG1214328
1,4-Dichlorobenzene	ND		0.00100	1	12/21/2018 05:01	WG1214328
Dichlorodifluoromethane	ND		0.00500	1	12/21/2018 05:01	WG1214328
1,1-Dichloroethane	ND		0.00100	1	12/21/2018 05:01	WG1214328
1,2-Dichloroethane	ND		0.00100	1	12/21/2018 05:01	WG1214328
1,1-Dichloroethene	ND		0.00100	1	12/21/2018 05:01	WG1214328
cis-1,2-Dichloroethene	ND		0.00100	1	12/21/2018 05:01	WG1214328
trans-1,2-Dichloroethene	ND		0.00100	1	12/21/2018 05:01	WG1214328
1,2-Dichloropropane	ND		0.00100	1	12/21/2018 05:01	WG1214328





Collected date/time: 12/17/18 16:40

L1054617

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

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
1,1-Dichloropropene	ND		0.00100	1	12/21/2018 05:01	WG1214328
1,3-Dichloropropane	ND		0.00100	1	12/21/2018 05:01	WG1214328
cis-1,3-Dichloropropene	ND		0.00100	1	12/21/2018 05:01	WG1214328
trans-1,3-Dichloropropene	ND		0.00100	1	12/21/2018 05:01	WG1214328
2,2-Dichloropropane	ND		0.00100	1	12/21/2018 05:01	WG1214328
Di-isopropyl ether	ND		0.00100	1	12/21/2018 05:01	WG1214328
Ethylbenzene	ND		0.00100	1	12/21/2018 05:01	WG1214328
Hexachloro-1,3-butadiene	ND		0.00100	1	12/21/2018 05:01	WG1214328
Isopropylbenzene	ND		0.00100	1	12/21/2018 05:01	WG1214328
p-Isopropyltoluene	ND		0.00100	1	12/21/2018 05:01	WG1214328
2-Butanone (MEK)	ND		0.0100	1	12/21/2018 05:01	WG1214328
Methylene Chloride	ND		0.00500	1	12/21/2018 05:01	WG1214328
4-Methyl-2-pentanone (MIBK)	ND		0.0100	1	12/21/2018 05:01	WG1214328
Methyl tert-butyl ether	ND		0.00100	1	12/21/2018 05:01	WG1214328
Naphthalene	ND		0.00500	1	12/21/2018 05:01	WG1214328
n-Propylbenzene	ND		0.00100	1	12/21/2018 05:01	WG1214328
Styrene	ND		0.00100	1	12/21/2018 05:01	WG1214328
1,1,1,2-Tetrachloroethane	ND		0.00100	1	12/21/2018 05:01	WG1214328
1,1,2,2-Tetrachloroethane	ND		0.00100	1	12/21/2018 05:01	WG1214328
1,1,2-Trichlorotrifluoroethane	ND		0.00100	1	12/21/2018 05:01	WG1214328
Tetrachloroethene	ND		0.00100	1	12/21/2018 05:01	WG1214328
Toluene	ND		0.00100	1	12/21/2018 05:01	WG1214328
1,2,3-Trichlorobenzene	ND		0.00100	1	12/21/2018 05:01	WG1214328
1,2,4-Trichlorobenzene	ND		0.00100	1	12/21/2018 05:01	WG1214328
1,1,1-Trichloroethane	ND		0.00100	1	12/21/2018 05:01	WG1214328
1,1,2-Trichloroethane	ND		0.00100	1	12/21/2018 05:01	WG1214328
Trichloroethene	ND		0.00100	1	12/21/2018 05:01	WG1214328
Trichlorofluoromethane	ND		0.00500	1	12/21/2018 05:01	WG1214328
1,2,3-Trichloropropane	ND		0.00250	1	12/21/2018 05:01	WG1214328
1,2,4-Trimethylbenzene	ND		0.00100	1	12/21/2018 05:01	WG1214328
1,2,3-Trimethylbenzene	ND		0.00100	1	12/21/2018 05:01	WG1214328
1,3,5-Trimethylbenzene	ND		0.00100	1	12/21/2018 05:01	WG1214328
Vinyl chloride	ND		0.00100	1	12/21/2018 05:01	WG1214328
Xylenes, Total	ND		0.00300	1	12/21/2018 05:01	WG1214328
(S) Toluene-d8	107		80.0-120		12/21/2018 05:01	WG1214328
(S) Dibromofluoromethane	87.5		75.0-120		12/21/2018 05:01	WG1214328
(S) 4-Bromofluorobenzene	101		77.0-126		12/21/2018 05:01	WG1214328

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

Semi-Volatile Organic Compounds (GC) by Method 3511/8015

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	ND		0.100	1	12/22/2018 17:21	WG1213642
(S) o-Terphenyl	91.1		31.0-160		12/22/2018 17:21	WG1213642

Semi Volatile Organic Compounds (GC/MS) by Method 8270C

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
Acenaphthene	ND		0.00100	1	12/23/2018 16:22	WG1214165
Acenaphthylene	ND		0.00100	1	12/23/2018 16:22	WG1214165
Anthracene	ND		0.00100	1	12/23/2018 16:22	WG1214165
Benzo(a)anthracene	ND		0.00100	1	12/23/2018 16:22	WG1214165
Benzo(b)fluoranthene	ND		0.00100	1	12/23/2018 16:22	WG1214165
Benzo(k)fluoranthene	ND		0.00100	1	12/23/2018 16:22	WG1214165
Benzo(g,h,i)perylene	ND		0.00100	1	12/23/2018 16:22	WG1214165
Benzo(a)pyrene	ND		0.00100	1	12/23/2018 16:22	WG1214165



Collected date/time: 12/17/18 16:40

L1054617

Semi Volatile Organic Compounds (GC/MS) by Method 8270C

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
Bis(2-chlorethoxy)methane	ND		0.0100	1	12/23/2018 16:22	WG1214165
Bis(2-chloroethyl)ether	ND		0.0100	1	12/23/2018 16:22	WG1214165
Bis(2-chloroisopropyl)ether	ND		0.0100	1	12/23/2018 16:22	WG1214165
4-Bromophenyl-phenylether	ND		0.0100	1	12/23/2018 16:22	WG1214165
2-Chloronaphthalene	ND		0.00100	1	12/23/2018 16:22	WG1214165
4-Chlorophenyl-phenylether	ND		0.0100	1	12/23/2018 16:22	WG1214165
Chrysene	ND		0.00100	1	12/23/2018 16:22	WG1214165
Dibenz(a,h)anthracene	ND		0.00100	1	12/23/2018 16:22	WG1214165
3,3-Dichlorobenzidine	ND		0.0100	1	12/23/2018 16:22	WG1214165
2,4-Dinitrotoluene	ND		0.0100	1	12/23/2018 16:22	WG1214165
2,6-Dinitrotoluene	ND		0.0100	1	12/23/2018 16:22	WG1214165
Fluoranthene	ND		0.00100	1	12/23/2018 16:22	WG1214165
Fluorene	ND		0.00100	1	12/23/2018 16:22	WG1214165
Hexachlorobenzene	ND		0.00100	1	12/23/2018 16:22	WG1214165
Hexachloro-1,3-butadiene	ND		0.0100	1	12/23/2018 16:22	WG1214165
Hexachlorocyclopentadiene	ND		0.0100	1	12/23/2018 16:22	WG1214165
Hexachloroethane	ND		0.0100	1	12/23/2018 16:22	WG1214165
Indeno(1,2,3-cd)pyrene	ND		0.00100	1	12/23/2018 16:22	WG1214165
Isophorone	ND		0.0100	1	12/23/2018 16:22	WG1214165
Naphthalene	ND		0.00100	1	12/23/2018 16:22	WG1214165
Nitrobenzene	ND		0.0100	1	12/23/2018 16:22	WG1214165
n-Nitrosodimethylamine	ND		0.0100	1	12/23/2018 16:22	WG1214165
n-Nitrosodiphenylamine	ND		0.0100	1	12/23/2018 16:22	WG1214165
n-Nitrosodi-n-propylamine	ND		0.0100	1	12/23/2018 16:22	WG1214165
Phenanthrene	ND		0.00100	1	12/23/2018 16:22	WG1214165
Benzylbutyl phthalate	ND		0.00300	1	12/23/2018 16:22	WG1214165
Bis(2-ethylhexyl)phthalate	ND		0.00300	1	12/23/2018 16:22	WG1214165
Di-n-butyl phthalate	ND		0.00300	1	12/23/2018 16:22	WG1214165
Diethyl phthalate	ND		0.00300	1	12/23/2018 16:22	WG1214165
Dimethyl phthalate	ND		0.00300	1	12/23/2018 16:22	WG1214165
Di-n-octyl phthalate	ND		0.00300	1	12/23/2018 16:22	WG1214165
Pyrene	ND		0.00100	1	12/23/2018 16:22	WG1214165
1,2,4-Trichlorobenzene	ND		0.0100	1	12/23/2018 16:22	WG1214165
4-Chloro-3-methylphenol	ND		0.0100	1	12/23/2018 16:22	WG1214165
2-Chlorophenol	ND		0.0100	1	12/23/2018 16:22	WG1214165
2,4-Dichlorophenol	ND		0.0100	1	12/23/2018 16:22	WG1214165
2,4-Dimethylphenol	ND		0.0100	1	12/23/2018 16:22	WG1214165
4,6-Dinitro-2-methylphenol	ND		0.0100	1	12/23/2018 16:22	WG1214165
2,4-Dinitrophenol	ND		0.0100	1	12/23/2018 16:22	WG1214165
2-Nitrophenol	ND		0.0100	1	12/23/2018 16:22	WG1214165
4-Nitrophenol	ND		0.0100	1	12/23/2018 16:22	WG1214165
Pentachlorophenol	ND		0.0100	1	12/23/2018 16:22	WG1214165
Phenol	ND		0.0100	1	12/23/2018 16:22	WG1214165
2,4,6-Trichlorophenol	ND		0.0100	1	12/23/2018 16:22	WG1214165
(S) 2-Fluorophenol	24.1		10.0-120		12/23/2018 16:22	WG1214165
(S) Phenol-d5	14.5		10.0-120		12/23/2018 16:22	WG1214165
(S) Nitrobenzene-d5	38.0		10.0-127		12/23/2018 16:22	WG1214165
(S) 2-Fluorobiphenyl	33.2		10.0-130		12/23/2018 16:22	WG1214165
(S) 2,4,6-Tribromophenol	23.1		10.0-155		12/23/2018 16:22	WG1214165
(S) p-Terphenyl-d14	35.1		10.0-128		12/23/2018 16:22	WG1214165

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 12/17/18 00:00

L1054617

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

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
Acetone	ND		0.0500	1	12/21/2018 05:20	WG1214328
Acrolein	ND	J4	0.0500	1	12/21/2018 05:20	WG1214328
Acrylonitrile	ND		0.0100	1	12/21/2018 05:20	WG1214328
Benzene	ND		0.00100	1	12/21/2018 05:20	WG1214328
Bromobenzene	ND		0.00100	1	12/21/2018 05:20	WG1214328
Bromodichloromethane	ND		0.00100	1	12/21/2018 05:20	WG1214328
Bromoform	ND		0.00100	1	12/21/2018 05:20	WG1214328
Bromomethane	ND		0.00500	1	12/21/2018 05:20	WG1214328
n-Butylbenzene	ND		0.00100	1	12/21/2018 05:20	WG1214328
sec-Butylbenzene	ND		0.00100	1	12/21/2018 05:20	WG1214328
tert-Butylbenzene	ND		0.00100	1	12/21/2018 05:20	WG1214328
Carbon tetrachloride	ND		0.00100	1	12/21/2018 05:20	WG1214328
Chlorobenzene	ND		0.00100	1	12/21/2018 05:20	WG1214328
Chlorodibromomethane	ND		0.00100	1	12/21/2018 05:20	WG1214328
Chloroethane	ND		0.00500	1	12/21/2018 05:20	WG1214328
Chloroform	ND		0.00500	1	12/21/2018 05:20	WG1214328
Chloromethane	ND		0.00250	1	12/21/2018 05:20	WG1214328
2-Chlorotoluene	ND		0.00100	1	12/21/2018 05:20	WG1214328
4-Chlorotoluene	ND		0.00100	1	12/21/2018 05:20	WG1214328
1,2-Dibromo-3-Chloropropane	ND		0.00500	1	12/21/2018 05:20	WG1214328
1,2-Dibromoethane	ND		0.00100	1	12/21/2018 05:20	WG1214328
Dibromomethane	ND		0.00100	1	12/21/2018 05:20	WG1214328
1,2-Dichlorobenzene	ND		0.00100	1	12/21/2018 05:20	WG1214328
1,3-Dichlorobenzene	ND		0.00100	1	12/21/2018 05:20	WG1214328
1,4-Dichlorobenzene	ND		0.00100	1	12/21/2018 05:20	WG1214328
Dichlorodifluoromethane	ND		0.00500	1	12/21/2018 05:20	WG1214328
1,1-Dichloroethane	ND		0.00100	1	12/21/2018 05:20	WG1214328
1,2-Dichloroethane	ND		0.00100	1	12/21/2018 05:20	WG1214328
1,1-Dichloroethene	ND		0.00100	1	12/21/2018 05:20	WG1214328
cis-1,2-Dichloroethene	ND		0.00100	1	12/21/2018 05:20	WG1214328
trans-1,2-Dichloroethene	ND		0.00100	1	12/21/2018 05:20	WG1214328
1,2-Dichloropropane	ND		0.00100	1	12/21/2018 05:20	WG1214328
1,1-Dichloropropene	ND		0.00100	1	12/21/2018 05:20	WG1214328
1,3-Dichloropropane	ND		0.00100	1	12/21/2018 05:20	WG1214328
cis-1,3-Dichloropropene	ND		0.00100	1	12/21/2018 05:20	WG1214328
trans-1,3-Dichloropropene	ND		0.00100	1	12/21/2018 05:20	WG1214328
2,2-Dichloropropane	ND		0.00100	1	12/21/2018 05:20	WG1214328
Di-isopropyl ether	ND		0.00100	1	12/21/2018 05:20	WG1214328
Ethylbenzene	ND		0.00100	1	12/21/2018 05:20	WG1214328
Hexachloro-1,3-butadiene	ND		0.00100	1	12/21/2018 05:20	WG1214328
Isopropylbenzene	ND		0.00100	1	12/21/2018 05:20	WG1214328
p-Isopropyltoluene	ND		0.00100	1	12/21/2018 05:20	WG1214328
2-Butanone (MEK)	ND		0.0100	1	12/21/2018 05:20	WG1214328
Methylene Chloride	ND		0.00500	1	12/21/2018 05:20	WG1214328
4-Methyl-2-pentanone (MIBK)	ND		0.0100	1	12/21/2018 05:20	WG1214328
Methyl tert-butyl ether	ND		0.00100	1	12/21/2018 05:20	WG1214328
Naphthalene	ND		0.00500	1	12/21/2018 05:20	WG1214328
n-Propylbenzene	ND		0.00100	1	12/21/2018 05:20	WG1214328
Styrene	ND		0.00100	1	12/21/2018 05:20	WG1214328
1,1,1,2-Tetrachloroethane	ND		0.00100	1	12/21/2018 05:20	WG1214328
1,1,2,2-Tetrachloroethane	ND		0.00100	1	12/21/2018 05:20	WG1214328
1,1,2-Trichlorotrifluoroethane	ND		0.00100	1	12/21/2018 05:20	WG1214328
Tetrachloroethene	ND		0.00100	1	12/21/2018 05:20	WG1214328
Toluene	ND		0.00100	1	12/21/2018 05:20	WG1214328
1,2,3-Trichlorobenzene	ND		0.00100	1	12/21/2018 05:20	WG1214328
1,2,4-Trichlorobenzene	ND		0.00100	1	12/21/2018 05:20	WG1214328

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 12/17/18 00:00

L1054617

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

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
1,1,1-Trichloroethane	ND		0.00100	1	12/21/2018 05:20	WG1214328
1,1,2-Trichloroethane	ND		0.00100	1	12/21/2018 05:20	WG1214328
Trichloroethene	ND		0.00100	1	12/21/2018 05:20	WG1214328
Trichlorofluoromethane	ND		0.00500	1	12/21/2018 05:20	WG1214328
1,2,3-Trichloropropane	ND		0.00250	1	12/21/2018 05:20	WG1214328
1,2,4-Trimethylbenzene	ND		0.00100	1	12/21/2018 05:20	WG1214328
1,2,3-Trimethylbenzene	ND		0.00100	1	12/21/2018 05:20	WG1214328
1,3,5-Trimethylbenzene	ND		0.00100	1	12/21/2018 05:20	WG1214328
Vinyl chloride	ND		0.00100	1	12/21/2018 05:20	WG1214328
Xylenes, Total	ND		0.00300	1	12/21/2018 05:20	WG1214328
(S) Toluene-d8	104		80.0-120		12/21/2018 05:20	WG1214328
(S) Dibromofluoromethane	86.9		75.0-120		12/21/2018 05:20	WG1214328
(S) 4-Bromofluorobenzene	102		77.0-126		12/21/2018 05:20	WG1214328

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ Gl⁸ Al⁹ Sc



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	74.3		1	12/21/2018 10:05	WG1214092

Mercury by Method 7471A

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Mercury	0.0205		0.0200	1	12/21/2018 13:33	WG1214211

Metals (ICP) by Method 6010B

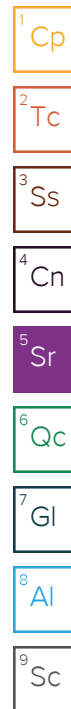
Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Arsenic	2.80		2.00	1	12/21/2018 09:25	WG1214054
Barium	116		0.500	1	12/21/2018 09:25	WG1214054
Cadmium	ND		0.500	1	12/21/2018 09:25	WG1214054
Chromium	11.4		1.00	1	12/21/2018 09:25	WG1214054
Lead	6.98		0.500	1	12/21/2018 09:25	WG1214054
Selenium	ND		2.00	1	12/21/2018 09:25	WG1214054
Silver	ND		1.00	1	12/21/2018 09:25	WG1214054

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	ND		0.100	1	12/22/2018 10:34	WG1214641
(S) a,a,a-Trifluorotoluene(FID)	101		77.0-120		12/22/2018 10:34	WG1214641

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

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Acetone	ND		0.0250	1	12/27/2018 05:47	WG1215658
Acrylonitrile	ND		0.0125	1	12/27/2018 05:47	WG1215658
Benzene	ND		0.00100	1	12/27/2018 05:47	WG1215658
Bromobenzene	ND		0.0125	1	12/27/2018 05:47	WG1215658
Bromodichloromethane	ND		0.00250	1	12/27/2018 05:47	WG1215658
Bromoform	ND		0.0250	1	12/27/2018 05:47	WG1215658
Bromomethane	ND		0.0125	1	12/27/2018 05:47	WG1215658
n-Butylbenzene	ND		0.0125	1	12/27/2018 05:47	WG1215658
sec-Butylbenzene	ND		0.0125	1	12/27/2018 05:47	WG1215658
tert-Butylbenzene	ND		0.00500	1	12/27/2018 05:47	WG1215658
Carbon tetrachloride	ND		0.00500	1	12/27/2018 05:47	WG1215658
Chlorobenzene	ND		0.00250	1	12/27/2018 05:47	WG1215658
Chlorodibromomethane	ND		0.00250	1	12/27/2018 05:47	WG1215658
Chloroethane	ND		0.00500	1	12/27/2018 05:47	WG1215658
Chloroform	ND		0.00250	1	12/27/2018 05:47	WG1215658
Chloromethane	ND		0.0125	1	12/27/2018 05:47	WG1215658
2-Chlorotoluene	ND		0.00250	1	12/27/2018 05:47	WG1215658
4-Chlorotoluene	ND		0.00500	1	12/27/2018 05:47	WG1215658
1,2-Dibromo-3-Chloropropane	ND		0.0250	1	12/27/2018 05:47	WG1215658
1,2-Dibromoethane	ND		0.00250	1	12/27/2018 05:47	WG1215658
Dibromomethane	ND		0.00500	1	12/27/2018 05:47	WG1215658
1,2-Dichlorobenzene	ND		0.00500	1	12/27/2018 05:47	WG1215658
1,3-Dichlorobenzene	ND		0.00500	1	12/27/2018 05:47	WG1215658
1,4-Dichlorobenzene	ND		0.00500	1	12/27/2018 05:47	WG1215658
Dichlorodifluoromethane	ND		0.00250	1	12/27/2018 05:47	WG1215658
1,1-Dichloroethane	ND		0.00250	1	12/27/2018 05:47	WG1215658
1,2-Dichloroethane	ND		0.00250	1	12/27/2018 05:47	WG1215658





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

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
1,1-Dichloroethene	ND		0.00250	1	12/27/2018 05:47	WG1215658
cis-1,2-Dichloroethene	ND		0.00250	1	12/27/2018 05:47	WG1215658
trans-1,2-Dichloroethene	ND		0.00500	1	12/27/2018 05:47	WG1215658
1,2-Dichloropropane	ND		0.00500	1	12/27/2018 05:47	WG1215658
1,1-Dichloropropene	ND		0.00250	1	12/27/2018 05:47	WG1215658
1,3-Dichloropropane	ND		0.00500	1	12/27/2018 05:47	WG1215658
cis-1,3-Dichloropropene	ND		0.00250	1	12/27/2018 05:47	WG1215658
trans-1,3-Dichloropropene	ND		0.00500	1	12/27/2018 05:47	WG1215658
2,2-Dichloropropane	ND		0.00250	1	12/27/2018 05:47	WG1215658
Di-isopropyl ether	ND		0.00100	1	12/27/2018 05:47	WG1215658
Ethylbenzene	ND		0.00250	1	12/27/2018 05:47	WG1215658
Hexachloro-1,3-butadiene	ND		0.0250	1	12/27/2018 05:47	WG1215658
Isopropylbenzene	ND		0.00250	1	12/27/2018 05:47	WG1215658
p-Isopropyltoluene	ND		0.00500	1	12/27/2018 05:47	WG1215658
2-Butanone (MEK)	ND		0.0250	1	12/27/2018 05:47	WG1215658
Methylene Chloride	ND		0.0250	1	12/27/2018 05:47	WG1215658
4-Methyl-2-pentanone (MIBK)	ND		0.0250	1	12/27/2018 05:47	WG1215658
Methyl tert-butyl ether	ND		0.00100	1	12/27/2018 05:47	WG1215658
Naphthalene	ND		0.0125	1	12/27/2018 05:47	WG1215658
n-Propylbenzene	ND		0.00500	1	12/27/2018 05:47	WG1215658
Styrene	ND		0.0125	1	12/27/2018 05:47	WG1215658
1,1,1,2-Tetrachloroethane	ND		0.00250	1	12/27/2018 05:47	WG1215658
1,1,2,2-Tetrachloroethane	ND		0.00250	1	12/27/2018 05:47	WG1215658
1,1,2-Trichlorotrifluoroethane	ND		0.00250	1	12/27/2018 05:47	WG1215658
Tetrachloroethene	ND		0.00250	1	12/27/2018 05:47	WG1215658
Toluene	ND		0.00500	1	12/27/2018 05:47	WG1215658
1,2,3-Trichlorobenzene	ND		0.00250	1	12/27/2018 05:47	WG1215658
1,2,4-Trichlorobenzene	ND		0.0125	1	12/27/2018 05:47	WG1215658
1,1,1-Trichloroethane	ND		0.00250	1	12/27/2018 05:47	WG1215658
1,1,2-Trichloroethane	ND		0.00250	1	12/27/2018 05:47	WG1215658
Trichloroethene	ND		0.00100	1	12/27/2018 05:47	WG1215658
Trichlorofluoromethane	ND		0.00250	1	12/27/2018 05:47	WG1215658
1,2,3-Trichloropropane	ND		0.0125	1	12/27/2018 05:47	WG1215658
1,2,4-Trimethylbenzene	ND		0.00500	1	12/27/2018 05:47	WG1215658
1,2,3-Trimethylbenzene	ND		0.00500	1	12/27/2018 05:47	WG1215658
1,3,5-Trimethylbenzene	ND		0.00500	1	12/27/2018 05:47	WG1215658
Vinyl chloride	ND		0.00250	1	12/27/2018 05:47	WG1215658
Xylenes, Total	ND		0.00650	1	12/27/2018 05:47	WG1215658
(S) Toluene-d8	101		75.0-131		12/27/2018 05:47	WG1215658
(S) Dibromofluoromethane	94.8		65.0-129		12/27/2018 05:47	WG1215658
(S) 4-Bromofluorobenzene	102		67.0-138		12/27/2018 05:47	WG1215658

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

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	ND		4.00	1	12/27/2018 11:18	WG1215790
(S) o-Terphenyl	43.8		18.0-148		12/27/2018 11:18	WG1215790

Semi Volatile Organic Compounds (GC/MS) by Method 8270C

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Acenaphthene	ND		0.0333	1	12/25/2018 07:17	WG1214111
Acenaphthylene	ND		0.0333	1	12/25/2018 07:17	WG1214111
Anthracene	ND		0.0333	1	12/25/2018 07:17	WG1214111
Benzo(a)anthracene	ND		0.0333	1	12/25/2018 07:17	WG1214111



Semi Volatile Organic Compounds (GC/MS) by Method 8270C

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Benzo(b)fluoranthene	ND		0.0333	1	12/25/2018 07:17	WG1214111
Benzo(k)fluoranthene	ND		0.0333	1	12/25/2018 07:17	WG1214111
Benzo(g,h,i)perylene	ND		0.0333	1	12/25/2018 07:17	WG1214111
Benzo(a)pyrene	ND		0.0333	1	12/25/2018 07:17	WG1214111
Bis(2-chlorethoxy)methane	ND		0.333	1	12/25/2018 07:17	WG1214111
Bis(2-chloroethyl)ether	ND		0.333	1	12/25/2018 07:17	WG1214111
Bis(2-chloroisopropyl)ether	ND		0.333	1	12/25/2018 07:17	WG1214111
4-Bromophenyl-phenylether	ND		0.333	1	12/25/2018 07:17	WG1214111
2-Chloronaphthalene	ND		0.0333	1	12/25/2018 07:17	WG1214111
4-Chlorophenyl-phenylether	ND		0.333	1	12/25/2018 07:17	WG1214111
Chrysene	ND		0.0333	1	12/25/2018 07:17	WG1214111
Dibenz(a,h)anthracene	ND		0.0333	1	12/25/2018 07:17	WG1214111
3,3-Dichlorobenzidine	ND		0.333	1	12/25/2018 07:17	WG1214111
2,4-Dinitrotoluene	ND		0.333	1	12/25/2018 07:17	WG1214111
2,6-Dinitrotoluene	ND		0.333	1	12/25/2018 07:17	WG1214111
Fluoranthene	ND		0.0333	1	12/25/2018 07:17	WG1214111
Fluorene	ND		0.0333	1	12/25/2018 07:17	WG1214111
Hexachlorobenzene	ND		0.333	1	12/25/2018 07:17	WG1214111
Hexachloro-1,3-butadiene	ND		0.333	1	12/25/2018 07:17	WG1214111
Hexachlorocyclopentadiene	ND		0.333	1	12/25/2018 07:17	WG1214111
Hexachloroethane	ND		0.333	1	12/25/2018 07:17	WG1214111
Indeno(1,2,3-cd)pyrene	ND		0.0333	1	12/25/2018 07:17	WG1214111
Isophorone	ND		0.333	1	12/25/2018 07:17	WG1214111
Naphthalene	ND		0.0333	1	12/25/2018 07:17	WG1214111
Nitrobenzene	ND		0.333	1	12/25/2018 07:17	WG1214111
n-Nitrosodimethylamine	ND		0.333	1	12/25/2018 07:17	WG1214111
n-Nitrosodiphenylamine	ND		0.333	1	12/25/2018 07:17	WG1214111
n-Nitrosodi-n-propylamine	ND		0.333	1	12/25/2018 07:17	WG1214111
Phenanthrene	ND		0.0333	1	12/25/2018 07:17	WG1214111
Benzylbutyl phthalate	ND		0.333	1	12/25/2018 07:17	WG1214111
Bis(2-ethylhexyl)phthalate	ND		0.333	1	12/25/2018 07:17	WG1214111
Di-n-butyl phthalate	ND		0.333	1	12/25/2018 07:17	WG1214111
Diethyl phthalate	ND		0.333	1	12/25/2018 07:17	WG1214111
Dimethyl phthalate	ND		0.333	1	12/25/2018 07:17	WG1214111
Di-n-octyl phthalate	ND		0.333	1	12/25/2018 07:17	WG1214111
Pyrene	ND		0.0333	1	12/25/2018 07:17	WG1214111
1,2,4-Trichlorobenzene	ND		0.333	1	12/25/2018 07:17	WG1214111
4-Chloro-3-methylphenol	ND		0.333	1	12/25/2018 07:17	WG1214111
2-Chlorophenol	ND		0.333	1	12/25/2018 07:17	WG1214111
2,4-Dichlorophenol	ND		0.333	1	12/25/2018 07:17	WG1214111
2,4-Dimethylphenol	ND		0.333	1	12/25/2018 07:17	WG1214111
4,6-Dinitro-2-methylphenol	ND		0.333	1	12/25/2018 07:17	WG1214111
2,4-Dinitrophenol	ND		0.333	1	12/25/2018 07:17	WG1214111
2-Nitrophenol	ND		0.333	1	12/25/2018 07:17	WG1214111
4-Nitrophenol	ND		0.333	1	12/25/2018 07:17	WG1214111
Pentachlorophenol	ND		0.333	1	12/25/2018 07:17	WG1214111
Phenol	ND		0.333	1	12/25/2018 07:17	WG1214111
2,4,6-Trichlorophenol	ND		0.333	1	12/25/2018 07:17	WG1214111
(S) 2-Fluorophenol	51.9		12.0-120		12/25/2018 07:17	WG1214111
(S) Phenol-d5	13.8		10.0-120		12/25/2018 07:17	WG1214111
(S) Nitrobenzene-d5	46.3		10.0-122		12/25/2018 07:17	WG1214111
(S) 2-Fluorobiphenyl	46.3		15.0-120		12/25/2018 07:17	WG1214111
(S) 2,4,6-Tribromophenol	43.5		10.0-127		12/25/2018 07:17	WG1214111
(S) p-Terphenyl-d14	52.1		10.0-120		12/25/2018 07:17	WG1214111

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 date / time	Batch
Total Solids	75.1		1	12/21/2018 10:05	WG1214092

Mercury by Method 7471A

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Mercury	ND		0.0200	1	12/21/2018 13:36	WG1214211

Metals (ICP) by Method 6010B

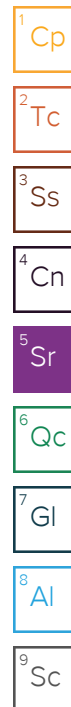
Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Arsenic	2.62		2.00	1	12/21/2018 09:28	WG1214054
Barium	125		0.500	1	12/21/2018 09:28	WG1214054
Cadmium	ND		0.500	1	12/21/2018 09:28	WG1214054
Chromium	10.6		1.00	1	12/21/2018 09:28	WG1214054
Lead	6.21		0.500	1	12/21/2018 09:28	WG1214054
Selenium	ND		2.00	1	12/21/2018 09:28	WG1214054
Silver	ND		1.00	1	12/21/2018 09:28	WG1214054

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	ND		0.100	1	12/22/2018 10:59	WG1214641
(S) a,a,a-Trifluorotoluene(FID)	98.2		77.0-120		12/22/2018 10:59	WG1214641

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

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Acetone	ND		0.0270	1.08	12/27/2018 06:09	WG1215658
Acrylonitrile	ND		0.0135	1.08	12/27/2018 06:09	WG1215658
Benzene	ND		0.00108	1.08	12/27/2018 06:09	WG1215658
Bromobenzene	ND		0.0135	1.08	12/27/2018 06:09	WG1215658
Bromodichloromethane	ND		0.00270	1.08	12/27/2018 06:09	WG1215658
Bromoform	ND		0.0270	1.08	12/27/2018 06:09	WG1215658
Bromomethane	ND		0.0135	1.08	12/27/2018 06:09	WG1215658
n-Butylbenzene	ND		0.0135	1.08	12/27/2018 06:09	WG1215658
sec-Butylbenzene	ND		0.0135	1.08	12/27/2018 06:09	WG1215658
tert-Butylbenzene	ND		0.00540	1.08	12/27/2018 06:09	WG1215658
Carbon tetrachloride	ND		0.00540	1.08	12/27/2018 06:09	WG1215658
Chlorobenzene	ND		0.00270	1.08	12/27/2018 06:09	WG1215658
Chlorodibromomethane	ND		0.00270	1.08	12/27/2018 06:09	WG1215658
Chloroethane	ND		0.00540	1.08	12/27/2018 06:09	WG1215658
Chloroform	ND		0.00270	1.08	12/27/2018 06:09	WG1215658
Chloromethane	ND		0.0135	1.08	12/27/2018 06:09	WG1215658
2-Chlorotoluene	ND		0.00270	1.08	12/27/2018 06:09	WG1215658
4-Chlorotoluene	ND		0.00540	1.08	12/27/2018 06:09	WG1215658
1,2-Dibromo-3-Chloropropane	ND		0.0270	1.08	12/27/2018 06:09	WG1215658
1,2-Dibromoethane	ND		0.00270	1.08	12/27/2018 06:09	WG1215658
Dibromomethane	ND		0.00540	1.08	12/27/2018 06:09	WG1215658
1,2-Dichlorobenzene	ND		0.00540	1.08	12/27/2018 06:09	WG1215658
1,3-Dichlorobenzene	ND		0.00540	1.08	12/27/2018 06:09	WG1215658
1,4-Dichlorobenzene	ND		0.00540	1.08	12/27/2018 06:09	WG1215658
Dichlorodifluoromethane	ND		0.00270	1.08	12/27/2018 06:09	WG1215658
1,1-Dichloroethane	ND		0.00270	1.08	12/27/2018 06:09	WG1215658
1,2-Dichloroethane	ND		0.00270	1.08	12/27/2018 06:09	WG1215658





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

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
1,1-Dichloroethene	ND		0.00270	1.08	12/27/2018 06:09	WG1215658
cis-1,2-Dichloroethene	ND		0.00270	1.08	12/27/2018 06:09	WG1215658
trans-1,2-Dichloroethene	ND		0.00540	1.08	12/27/2018 06:09	WG1215658
1,2-Dichloropropane	ND		0.00540	1.08	12/27/2018 06:09	WG1215658
1,1-Dichloropropene	ND		0.00270	1.08	12/27/2018 06:09	WG1215658
1,3-Dichloropropane	ND		0.00540	1.08	12/27/2018 06:09	WG1215658
cis-1,3-Dichloropropene	ND		0.00270	1.08	12/27/2018 06:09	WG1215658
trans-1,3-Dichloropropene	ND		0.00540	1.08	12/27/2018 06:09	WG1215658
2,2-Dichloropropane	ND		0.00270	1.08	12/27/2018 06:09	WG1215658
Di-isopropyl ether	ND		0.00108	1.08	12/27/2018 06:09	WG1215658
Ethylbenzene	ND		0.00270	1.08	12/27/2018 06:09	WG1215658
Hexachloro-1,3-butadiene	ND		0.0270	1.08	12/27/2018 06:09	WG1215658
Isopropylbenzene	ND		0.00270	1.08	12/27/2018 06:09	WG1215658
p-Isopropyltoluene	ND		0.00540	1.08	12/27/2018 06:09	WG1215658
2-Butanone (MEK)	ND		0.0270	1.08	12/27/2018 06:09	WG1215658
Methylene Chloride	ND		0.0270	1.08	12/27/2018 06:09	WG1215658
4-Methyl-2-pentanone (MIBK)	ND		0.0270	1.08	12/27/2018 06:09	WG1215658
Methyl tert-butyl ether	ND		0.00108	1.08	12/27/2018 06:09	WG1215658
Naphthalene	ND		0.0135	1.08	12/27/2018 06:09	WG1215658
n-Propylbenzene	ND		0.00540	1.08	12/27/2018 06:09	WG1215658
Styrene	ND		0.0135	1.08	12/27/2018 06:09	WG1215658
1,1,1,2-Tetrachloroethane	ND		0.00270	1.08	12/27/2018 06:09	WG1215658
1,1,2,2-Tetrachloroethane	ND		0.00270	1.08	12/27/2018 06:09	WG1215658
1,1,2-Trichlorotrifluoroethane	ND		0.00270	1.08	12/27/2018 06:09	WG1215658
Tetrachloroethene	ND		0.00270	1.08	12/27/2018 06:09	WG1215658
Toluene	ND		0.00540	1.08	12/27/2018 06:09	WG1215658
1,2,3-Trichlorobenzene	ND		0.00270	1.08	12/27/2018 06:09	WG1215658
1,2,4-Trichlorobenzene	ND		0.0135	1.08	12/27/2018 06:09	WG1215658
1,1,1-Trichloroethane	ND		0.00270	1.08	12/27/2018 06:09	WG1215658
1,1,2-Trichloroethane	ND		0.00270	1.08	12/27/2018 06:09	WG1215658
Trichloroethene	ND		0.00108	1.08	12/27/2018 06:09	WG1215658
Trichlorofluoromethane	ND		0.00270	1.08	12/27/2018 06:09	WG1215658
1,2,3-Trichloropropane	ND		0.0135	1.08	12/27/2018 06:09	WG1215658
1,2,4-Trimethylbenzene	ND		0.00540	1.08	12/27/2018 06:09	WG1215658
1,2,3-Trimethylbenzene	ND		0.00540	1.08	12/27/2018 06:09	WG1215658
1,3,5-Trimethylbenzene	ND		0.00540	1.08	12/27/2018 06:09	WG1215658
Vinyl chloride	ND		0.00270	1.08	12/27/2018 06:09	WG1215658
Xylenes, Total	ND		0.00702	1.08	12/27/2018 06:09	WG1215658
(S) Toluene-d8	101		75.0-131		12/27/2018 06:09	WG1215658
(S) Dibromofluoromethane	95.0		65.0-129		12/27/2018 06:09	WG1215658
(S) 4-Bromofluorobenzene	100		67.0-138		12/27/2018 06:09	WG1215658

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

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	ND		4.00	1	12/27/2018 11:29	WG1215790
(S) o-Terphenyl	38.0		18.0-148		12/27/2018 11:29	WG1215790

Semi Volatile Organic Compounds (GC/MS) by Method 8270C

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Acenaphthene	ND		0.0333	1	12/25/2018 07:40	WG1214111
Acenaphthylene	ND		0.0333	1	12/25/2018 07:40	WG1214111
Anthracene	ND		0.0333	1	12/25/2018 07:40	WG1214111
Benzo(a)anthracene	ND		0.0333	1	12/25/2018 07:40	WG1214111



Collected date/time: 12/17/18 09:30

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Semi Volatile Organic Compounds (GC/MS) by Method 8270C

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Benzo(b)fluoranthene	ND		0.0333	1	12/25/2018 07:40	WG1214111
Benzo(k)fluoranthene	ND		0.0333	1	12/25/2018 07:40	WG1214111
Benzo(g,h,i)perylene	ND		0.0333	1	12/25/2018 07:40	WG1214111
Benzo(a)pyrene	ND		0.0333	1	12/25/2018 07:40	WG1214111
Bis(2-chlorethoxy)methane	ND		0.333	1	12/25/2018 07:40	WG1214111
Bis(2-chloroethyl)ether	ND		0.333	1	12/25/2018 07:40	WG1214111
Bis(2-chloroisopropyl)ether	ND		0.333	1	12/25/2018 07:40	WG1214111
4-Bromophenyl-phenylether	ND		0.333	1	12/25/2018 07:40	WG1214111
2-Chloronaphthalene	ND		0.0333	1	12/25/2018 07:40	WG1214111
4-Chlorophenyl-phenylether	ND		0.333	1	12/25/2018 07:40	WG1214111
Chrysene	ND		0.0333	1	12/25/2018 07:40	WG1214111
Dibenz(a,h)anthracene	ND		0.0333	1	12/25/2018 07:40	WG1214111
3,3-Dichlorobenzidine	ND		0.333	1	12/25/2018 07:40	WG1214111
2,4-Dinitrotoluene	ND		0.333	1	12/25/2018 07:40	WG1214111
2,6-Dinitrotoluene	ND		0.333	1	12/25/2018 07:40	WG1214111
Fluoranthene	ND		0.0333	1	12/25/2018 07:40	WG1214111
Fluorene	ND		0.0333	1	12/25/2018 07:40	WG1214111
Hexachlorobenzene	ND		0.333	1	12/25/2018 07:40	WG1214111
Hexachloro-1,3-butadiene	ND		0.333	1	12/25/2018 07:40	WG1214111
Hexachlorocyclopentadiene	ND		0.333	1	12/25/2018 07:40	WG1214111
Hexachloroethane	ND		0.333	1	12/25/2018 07:40	WG1214111
Indeno(1,2,3-cd)pyrene	ND		0.0333	1	12/25/2018 07:40	WG1214111
Isophorone	ND		0.333	1	12/25/2018 07:40	WG1214111
Naphthalene	ND		0.0333	1	12/25/2018 07:40	WG1214111
Nitrobenzene	ND		0.333	1	12/25/2018 07:40	WG1214111
n-Nitrosodimethylamine	ND		0.333	1	12/25/2018 07:40	WG1214111
n-Nitrosodiphenylamine	ND		0.333	1	12/25/2018 07:40	WG1214111
n-Nitrosodi-n-propylamine	ND		0.333	1	12/25/2018 07:40	WG1214111
Phenanthrene	ND		0.0333	1	12/25/2018 07:40	WG1214111
Benzylbutyl phthalate	ND		0.333	1	12/25/2018 07:40	WG1214111
Bis(2-ethylhexyl)phthalate	ND		0.333	1	12/25/2018 07:40	WG1214111
Di-n-butyl phthalate	ND		0.333	1	12/25/2018 07:40	WG1214111
Diethyl phthalate	ND		0.333	1	12/25/2018 07:40	WG1214111
Dimethyl phthalate	ND		0.333	1	12/25/2018 07:40	WG1214111
Di-n-octyl phthalate	ND		0.333	1	12/25/2018 07:40	WG1214111
Pyrene	ND		0.0333	1	12/25/2018 07:40	WG1214111
1,2,4-Trichlorobenzene	ND		0.333	1	12/25/2018 07:40	WG1214111
4-Chloro-3-methylphenol	ND		0.333	1	12/25/2018 07:40	WG1214111
2-Chlorophenol	ND		0.333	1	12/25/2018 07:40	WG1214111
2,4-Dichlorophenol	ND		0.333	1	12/25/2018 07:40	WG1214111
2,4-Dimethylphenol	ND		0.333	1	12/25/2018 07:40	WG1214111
4,6-Dinitro-2-methylphenol	ND		0.333	1	12/25/2018 07:40	WG1214111
2,4-Dinitrophenol	ND		0.333	1	12/25/2018 07:40	WG1214111
2-Nitrophenol	ND		0.333	1	12/25/2018 07:40	WG1214111
4-Nitrophenol	ND		0.333	1	12/25/2018 07:40	WG1214111
Pentachlorophenol	ND		0.333	1	12/25/2018 07:40	WG1214111
Phenol	ND		0.333	1	12/25/2018 07:40	WG1214111
2,4,6-Trichlorophenol	ND		0.333	1	12/25/2018 07:40	WG1214111
(S) 2-Fluorophenol	56.5		12.0-120		12/25/2018 07:40	WG1214111
(S) Phenol-d5	49.1		10.0-120		12/25/2018 07:40	WG1214111
(S) Nitrobenzene-d5	50.5		10.0-122		12/25/2018 07:40	WG1214111
(S) 2-Fluorobiphenyl	49.2		15.0-120		12/25/2018 07:40	WG1214111
(S) 2,4,6-Tribromophenol	42.7		10.0-127		12/25/2018 07:40	WG1214111
(S) p-Terphenyl-d14	59.3		10.0-120		12/25/2018 07:40	WG1214111

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 date / time	Batch
Total Solids	72.6		1	12/21/2018 10:05	WG1214092

Mercury by Method 7471A

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Mercury	0.0261		0.0200	1	12/21/2018 13:38	WG1214211

Metals (ICP) by Method 6010B

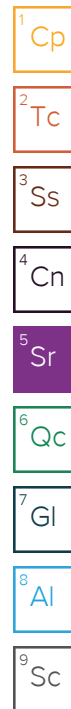
Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Arsenic	2.37		2.00	1	12/21/2018 09:31	WG1214054
Barium	122		0.500	1	12/21/2018 09:31	WG1214054
Cadmium	ND		0.500	1	12/21/2018 09:31	WG1214054
Chromium	11.7		1.00	1	12/21/2018 09:31	WG1214054
Lead	7.12		0.500	1	12/21/2018 09:31	WG1214054
Selenium	ND		2.00	1	12/21/2018 09:31	WG1214054
Silver	ND		1.00	1	12/21/2018 09:31	WG1214054

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	ND		0.100	1	12/22/2018 11:51	WG1214641
(S) a,a,a-Trifluorotoluene(FID)	101		77.0-120		12/22/2018 11:51	WG1214641

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

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Acetone	0.0315		0.0250	1	12/27/2018 06:31	WG1215658
Acrylonitrile	ND		0.0125	1	12/27/2018 06:31	WG1215658
Benzene	ND		0.00100	1	12/27/2018 06:31	WG1215658
Bromobenzene	ND		0.0125	1	12/27/2018 06:31	WG1215658
Bromodichloromethane	ND		0.00250	1	12/27/2018 06:31	WG1215658
Bromoform	ND		0.0250	1	12/27/2018 06:31	WG1215658
Bromomethane	ND		0.0125	1	12/27/2018 06:31	WG1215658
n-Butylbenzene	ND		0.0125	1	12/27/2018 06:31	WG1215658
sec-Butylbenzene	ND		0.0125	1	12/27/2018 06:31	WG1215658
tert-Butylbenzene	ND		0.00500	1	12/27/2018 06:31	WG1215658
Carbon tetrachloride	ND		0.00500	1	12/27/2018 06:31	WG1215658
Chlorobenzene	ND		0.00250	1	12/27/2018 06:31	WG1215658
Chlorodibromomethane	ND		0.00250	1	12/27/2018 06:31	WG1215658
Chloroethane	ND		0.00500	1	12/27/2018 06:31	WG1215658
Chloroform	ND		0.00250	1	12/27/2018 06:31	WG1215658
Chloromethane	ND		0.0125	1	12/27/2018 06:31	WG1215658
2-Chlorotoluene	ND		0.00250	1	12/27/2018 06:31	WG1215658
4-Chlorotoluene	ND		0.00500	1	12/27/2018 06:31	WG1215658
1,2-Dibromo-3-Chloropropane	ND		0.0250	1	12/27/2018 06:31	WG1215658
1,2-Dibromoethane	ND		0.00250	1	12/27/2018 06:31	WG1215658
Dibromomethane	ND		0.00500	1	12/27/2018 06:31	WG1215658
1,2-Dichlorobenzene	ND		0.00500	1	12/27/2018 06:31	WG1215658
1,3-Dichlorobenzene	ND		0.00500	1	12/27/2018 06:31	WG1215658
1,4-Dichlorobenzene	ND		0.00500	1	12/27/2018 06:31	WG1215658
Dichlorodifluoromethane	ND		0.00250	1	12/27/2018 06:31	WG1215658
1,1-Dichloroethane	ND		0.00250	1	12/27/2018 06:31	WG1215658
1,2-Dichloroethane	ND		0.00250	1	12/27/2018 06:31	WG1215658





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

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
1,1-Dichloroethene	ND		0.00250	1	12/27/2018 06:31	WG1215658
cis-1,2-Dichloroethene	ND		0.00250	1	12/27/2018 06:31	WG1215658
trans-1,2-Dichloroethene	ND		0.00500	1	12/27/2018 06:31	WG1215658
1,2-Dichloropropane	ND		0.00500	1	12/27/2018 06:31	WG1215658
1,1-Dichloropropene	ND		0.00250	1	12/27/2018 06:31	WG1215658
1,3-Dichloropropane	ND		0.00500	1	12/27/2018 06:31	WG1215658
cis-1,3-Dichloropropene	ND		0.00250	1	12/27/2018 06:31	WG1215658
trans-1,3-Dichloropropene	ND		0.00500	1	12/27/2018 06:31	WG1215658
2,2-Dichloropropane	ND		0.00250	1	12/27/2018 06:31	WG1215658
Di-isopropyl ether	ND		0.00100	1	12/27/2018 06:31	WG1215658
Ethylbenzene	ND		0.00250	1	12/27/2018 06:31	WG1215658
Hexachloro-1,3-butadiene	ND		0.0250	1	12/27/2018 06:31	WG1215658
Isopropylbenzene	ND		0.00250	1	12/27/2018 06:31	WG1215658
p-Isopropyltoluene	ND		0.00500	1	12/27/2018 06:31	WG1215658
2-Butanone (MEK)	ND		0.0250	1	12/27/2018 06:31	WG1215658
Methylene Chloride	ND		0.0250	1	12/27/2018 06:31	WG1215658
4-Methyl-2-pentanone (MIBK)	ND		0.0250	1	12/27/2018 06:31	WG1215658
Methyl tert-butyl ether	ND		0.00100	1	12/27/2018 06:31	WG1215658
Naphthalene	ND		0.0125	1	12/27/2018 06:31	WG1215658
n-Propylbenzene	ND		0.00500	1	12/27/2018 06:31	WG1215658
Styrene	ND		0.0125	1	12/27/2018 06:31	WG1215658
1,1,1,2-Tetrachloroethane	ND		0.00250	1	12/27/2018 06:31	WG1215658
1,1,2,2-Tetrachloroethane	ND		0.00250	1	12/27/2018 06:31	WG1215658
1,1,2-Trichlorotrifluoroethane	ND		0.00250	1	12/27/2018 06:31	WG1215658
Tetrachloroethene	ND		0.00250	1	12/27/2018 06:31	WG1215658
Toluene	ND		0.00500	1	12/27/2018 06:31	WG1215658
1,2,3-Trichlorobenzene	ND		0.00250	1	12/27/2018 06:31	WG1215658
1,2,4-Trichlorobenzene	ND		0.0125	1	12/27/2018 06:31	WG1215658
1,1,1-Trichloroethane	ND		0.00250	1	12/27/2018 06:31	WG1215658
1,1,2-Trichloroethane	ND		0.00250	1	12/27/2018 06:31	WG1215658
Trichloroethene	ND		0.00100	1	12/27/2018 06:31	WG1215658
Trichlorofluoromethane	ND		0.00250	1	12/27/2018 06:31	WG1215658
1,2,3-Trichloropropane	ND		0.0125	1	12/27/2018 06:31	WG1215658
1,2,4-Trimethylbenzene	ND		0.00500	1	12/27/2018 06:31	WG1215658
1,2,3-Trimethylbenzene	ND		0.00500	1	12/27/2018 06:31	WG1215658
1,3,5-Trimethylbenzene	ND		0.00500	1	12/27/2018 06:31	WG1215658
Vinyl chloride	ND		0.00250	1	12/27/2018 06:31	WG1215658
Xylenes, Total	ND		0.00650	1	12/27/2018 06:31	WG1215658
(S) Toluene-d8	100		75.0-131		12/27/2018 06:31	WG1215658
(S) Dibromofluoromethane	92.5		65.0-129		12/27/2018 06:31	WG1215658
(S) 4-Bromofluorobenzene	99.3		67.0-138		12/27/2018 06:31	WG1215658

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

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	ND		4.00	1	12/27/2018 11:41	WG1215790
(S) o-Terphenyl	40.8		18.0-148		12/27/2018 11:41	WG1215790

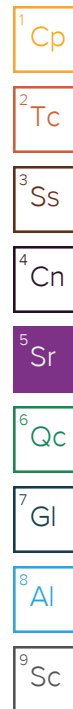
Semi Volatile Organic Compounds (GC/MS) by Method 8270C

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Acenaphthene	ND		0.0333	1	12/25/2018 08:04	WG1214111
Acenaphthylene	ND		0.0333	1	12/25/2018 08:04	WG1214111
Anthracene	ND		0.0333	1	12/25/2018 08:04	WG1214111
Benzo(a)anthracene	ND		0.0333	1	12/25/2018 08:04	WG1214111



Semi Volatile Organic Compounds (GC/MS) by Method 8270C

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Benzo(b)fluoranthene	ND		0.0333	1	12/25/2018 08:04	WG1214111
Benzo(k)fluoranthene	ND		0.0333	1	12/25/2018 08:04	WG1214111
Benzo(g,h,i)perylene	ND		0.0333	1	12/25/2018 08:04	WG1214111
Benzo(a)pyrene	ND		0.0333	1	12/25/2018 08:04	WG1214111
Bis(2-chlorethoxy)methane	ND		0.333	1	12/25/2018 08:04	WG1214111
Bis(2-chloroethyl)ether	ND		0.333	1	12/25/2018 08:04	WG1214111
Bis(2-chloroisopropyl)ether	ND		0.333	1	12/25/2018 08:04	WG1214111
4-Bromophenyl-phenylether	ND		0.333	1	12/25/2018 08:04	WG1214111
2-Chloronaphthalene	ND		0.0333	1	12/25/2018 08:04	WG1214111
4-Chlorophenyl-phenylether	ND		0.333	1	12/25/2018 08:04	WG1214111
Chrysene	ND		0.0333	1	12/25/2018 08:04	WG1214111
Dibenz(a,h)anthracene	ND		0.0333	1	12/25/2018 08:04	WG1214111
3,3-Dichlorobenzidine	ND		0.333	1	12/25/2018 08:04	WG1214111
2,4-Dinitrotoluene	ND		0.333	1	12/25/2018 08:04	WG1214111
2,6-Dinitrotoluene	ND		0.333	1	12/25/2018 08:04	WG1214111
Fluoranthene	ND		0.0333	1	12/25/2018 08:04	WG1214111
Fluorene	ND		0.0333	1	12/25/2018 08:04	WG1214111
Hexachlorobenzene	ND		0.333	1	12/25/2018 08:04	WG1214111
Hexachloro-1,3-butadiene	ND		0.333	1	12/25/2018 08:04	WG1214111
Hexachlorocyclopentadiene	ND		0.333	1	12/25/2018 08:04	WG1214111
Hexachloroethane	ND		0.333	1	12/25/2018 08:04	WG1214111
Indeno(1,2,3-cd)pyrene	ND		0.0333	1	12/25/2018 08:04	WG1214111
Isophorone	ND		0.333	1	12/25/2018 08:04	WG1214111
Naphthalene	ND		0.0333	1	12/25/2018 08:04	WG1214111
Nitrobenzene	ND		0.333	1	12/25/2018 08:04	WG1214111
n-Nitrosodimethylamine	ND		0.333	1	12/25/2018 08:04	WG1214111
n-Nitrosodiphenylamine	ND		0.333	1	12/25/2018 08:04	WG1214111
n-Nitrosodi-n-propylamine	ND		0.333	1	12/25/2018 08:04	WG1214111
Phenanthrene	ND		0.0333	1	12/25/2018 08:04	WG1214111
Benzylbutyl phthalate	ND		0.333	1	12/25/2018 08:04	WG1214111
Bis(2-ethylhexyl)phthalate	ND		0.333	1	12/25/2018 08:04	WG1214111
Di-n-butyl phthalate	ND		0.333	1	12/25/2018 08:04	WG1214111
Diethyl phthalate	ND		0.333	1	12/25/2018 08:04	WG1214111
Dimethyl phthalate	ND		0.333	1	12/25/2018 08:04	WG1214111
Di-n-octyl phthalate	ND		0.333	1	12/25/2018 08:04	WG1214111
Pyrene	ND		0.0333	1	12/25/2018 08:04	WG1214111
1,2,4-Trichlorobenzene	ND		0.333	1	12/25/2018 08:04	WG1214111
4-Chloro-3-methylphenol	ND		0.333	1	12/25/2018 08:04	WG1214111
2-Chlorophenol	ND		0.333	1	12/25/2018 08:04	WG1214111
2,4-Dichlorophenol	ND		0.333	1	12/25/2018 08:04	WG1214111
2,4-Dimethylphenol	ND		0.333	1	12/25/2018 08:04	WG1214111
4,6-Dinitro-2-methylphenol	ND		0.333	1	12/25/2018 08:04	WG1214111
2,4-Dinitrophenol	ND		0.333	1	12/25/2018 08:04	WG1214111
2-Nitrophenol	ND		0.333	1	12/25/2018 08:04	WG1214111
4-Nitrophenol	ND		0.333	1	12/25/2018 08:04	WG1214111
Pentachlorophenol	ND		0.333	1	12/25/2018 08:04	WG1214111
Phenol	ND		0.333	1	12/25/2018 08:04	WG1214111
2,4,6-Trichlorophenol	ND		0.333	1	12/25/2018 08:04	WG1214111
(S) 2-Fluorophenol	70.0		12.0-120		12/25/2018 08:04	WG1214111
(S) Phenol-d5	20.2		10.0-120		12/25/2018 08:04	WG1214111
(S) Nitrobenzene-d5	45.7		10.0-122		12/25/2018 08:04	WG1214111
(S) 2-Fluorobiphenyl	48.4		15.0-120		12/25/2018 08:04	WG1214111
(S) 2,4,6-Tribromophenol	52.3		10.0-127		12/25/2018 08:04	WG1214111
(S) p-Terphenyl-d14	59.9		10.0-120		12/25/2018 08:04	WG1214111





Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	72.8		1	12/21/2018 10:05	WG1214092

Mercury by Method 7471A

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Mercury	0.0237		0.0200	1	12/21/2018 13:46	WG1214211

Metals (ICP) by Method 6010B

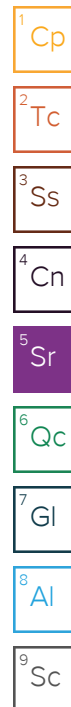
Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Arsenic	ND		2.00	1	12/21/2018 09:34	WG1214054
Barium	126		0.500	1	12/21/2018 09:34	WG1214054
Cadmium	ND		0.500	1	12/21/2018 09:34	WG1214054
Chromium	11.5		1.00	1	12/21/2018 09:34	WG1214054
Lead	6.63		0.500	1	12/21/2018 09:34	WG1214054
Selenium	ND		2.00	1	12/21/2018 09:34	WG1214054
Silver	ND		1.00	1	12/21/2018 09:34	WG1214054

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	ND		0.132	1.32	12/22/2018 12:13	WG1214641
(S) a,a,a-Trifluorotoluene(FID)	101		77.0-120		12/22/2018 12:13	WG1214641

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

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Acetone	ND		0.0250	1	12/27/2018 06:54	WG1215658
Acrylonitrile	ND		0.0125	1	12/27/2018 06:54	WG1215658
Benzene	ND		0.00100	1	12/27/2018 06:54	WG1215658
Bromobenzene	ND		0.0125	1	12/27/2018 06:54	WG1215658
Bromodichloromethane	ND		0.00250	1	12/27/2018 06:54	WG1215658
Bromoform	ND		0.0250	1	12/27/2018 06:54	WG1215658
Bromomethane	ND		0.0125	1	12/27/2018 06:54	WG1215658
n-Butylbenzene	ND		0.0125	1	12/27/2018 06:54	WG1215658
sec-Butylbenzene	ND		0.0125	1	12/27/2018 06:54	WG1215658
tert-Butylbenzene	ND		0.00500	1	12/27/2018 06:54	WG1215658
Carbon tetrachloride	ND		0.00500	1	12/27/2018 06:54	WG1215658
Chlorobenzene	ND		0.00250	1	12/27/2018 06:54	WG1215658
Chlorodibromomethane	ND		0.00250	1	12/27/2018 06:54	WG1215658
Chloroethane	ND		0.00500	1	12/27/2018 06:54	WG1215658
Chloroform	ND		0.00250	1	12/27/2018 06:54	WG1215658
Chloromethane	ND		0.0125	1	12/27/2018 06:54	WG1215658
2-Chlorotoluene	ND		0.00250	1	12/27/2018 06:54	WG1215658
4-Chlorotoluene	ND		0.00500	1	12/27/2018 06:54	WG1215658
1,2-Dibromo-3-Chloropropane	ND		0.0250	1	12/27/2018 06:54	WG1215658
1,2-Dibromoethane	ND		0.00250	1	12/27/2018 06:54	WG1215658
Dibromomethane	ND		0.00500	1	12/27/2018 06:54	WG1215658
1,2-Dichlorobenzene	ND		0.00500	1	12/27/2018 06:54	WG1215658
1,3-Dichlorobenzene	ND		0.00500	1	12/27/2018 06:54	WG1215658
1,4-Dichlorobenzene	ND		0.00500	1	12/27/2018 06:54	WG1215658
Dichlorodifluoromethane	ND		0.00250	1	12/27/2018 06:54	WG1215658
1,1-Dichloroethane	ND		0.00250	1	12/27/2018 06:54	WG1215658
1,2-Dichloroethane	ND		0.00250	1	12/27/2018 06:54	WG1215658





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

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
1,1-Dichloroethene	ND		0.00250	1	12/27/2018 06:54	WG1215658
cis-1,2-Dichloroethene	ND		0.00250	1	12/27/2018 06:54	WG1215658
trans-1,2-Dichloroethene	ND		0.00500	1	12/27/2018 06:54	WG1215658
1,2-Dichloropropane	ND		0.00500	1	12/27/2018 06:54	WG1215658
1,1-Dichloropropene	ND		0.00250	1	12/27/2018 06:54	WG1215658
1,3-Dichloropropane	ND		0.00500	1	12/27/2018 06:54	WG1215658
cis-1,3-Dichloropropene	ND		0.00250	1	12/27/2018 06:54	WG1215658
trans-1,3-Dichloropropene	ND		0.00500	1	12/27/2018 06:54	WG1215658
2,2-Dichloropropane	ND		0.00250	1	12/27/2018 06:54	WG1215658
Di-isopropyl ether	ND		0.00100	1	12/27/2018 06:54	WG1215658
Ethylbenzene	ND		0.00250	1	12/27/2018 06:54	WG1215658
Hexachloro-1,3-butadiene	ND		0.0250	1	12/27/2018 06:54	WG1215658
Isopropylbenzene	ND		0.00250	1	12/27/2018 06:54	WG1215658
p-Isopropyltoluene	ND		0.00500	1	12/27/2018 06:54	WG1215658
2-Butanone (MEK)	ND		0.0250	1	12/27/2018 06:54	WG1215658
Methylene Chloride	ND		0.0250	1	12/27/2018 06:54	WG1215658
4-Methyl-2-pentanone (MIBK)	ND		0.0250	1	12/27/2018 06:54	WG1215658
Methyl tert-butyl ether	ND		0.00100	1	12/27/2018 06:54	WG1215658
Naphthalene	ND		0.0125	1	12/27/2018 06:54	WG1215658
n-Propylbenzene	ND		0.00500	1	12/27/2018 06:54	WG1215658
Styrene	ND		0.0125	1	12/27/2018 06:54	WG1215658
1,1,1,2-Tetrachloroethane	ND		0.00250	1	12/27/2018 06:54	WG1215658
1,1,2,2-Tetrachloroethane	ND		0.00250	1	12/27/2018 06:54	WG1215658
1,1,2-Trichlorotrifluoroethane	ND		0.00250	1	12/27/2018 06:54	WG1215658
Tetrachloroethene	ND		0.00250	1	12/27/2018 06:54	WG1215658
Toluene	ND		0.00500	1	12/27/2018 06:54	WG1215658
1,2,3-Trichlorobenzene	ND		0.00250	1	12/27/2018 06:54	WG1215658
1,2,4-Trichlorobenzene	ND		0.0125	1	12/27/2018 06:54	WG1215658
1,1,1-Trichloroethane	ND		0.00250	1	12/27/2018 06:54	WG1215658
1,1,2-Trichloroethane	ND		0.00250	1	12/27/2018 06:54	WG1215658
Trichloroethene	ND		0.00100	1	12/27/2018 06:54	WG1215658
Trichlorofluoromethane	ND		0.00250	1	12/27/2018 06:54	WG1215658
1,2,3-Trichloropropane	ND		0.0125	1	12/27/2018 06:54	WG1215658
1,2,4-Trimethylbenzene	ND		0.00500	1	12/27/2018 06:54	WG1215658
1,2,3-Trimethylbenzene	ND		0.00500	1	12/27/2018 06:54	WG1215658
1,3,5-Trimethylbenzene	ND		0.00500	1	12/27/2018 06:54	WG1215658
Vinyl chloride	ND		0.00250	1	12/27/2018 06:54	WG1215658
Xylenes, Total	ND		0.00650	1	12/27/2018 06:54	WG1215658
(S) Toluene-d8	103		75.0-131		12/27/2018 06:54	WG1215658
(S) Dibromofluoromethane	95.0		65.0-129		12/27/2018 06:54	WG1215658
(S) 4-Bromofluorobenzene	99.6		67.0-138		12/27/2018 06:54	WG1215658

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

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	ND		4.00	1	12/27/2018 11:53	WG1215790
(S) o-Terphenyl	59.0		18.0-148		12/27/2018 11:53	WG1215790

Semi Volatile Organic Compounds (GC/MS) by Method 8270C

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Acenaphthene	ND		0.0333	1	12/25/2018 08:27	WG1214111
Acenaphthylene	ND		0.0333	1	12/25/2018 08:27	WG1214111
Anthracene	ND		0.0333	1	12/25/2018 08:27	WG1214111
Benzo(a)anthracene	ND		0.0333	1	12/25/2018 08:27	WG1214111



Collected date/time: 12/17/18 09:50

L1054617

Semi Volatile Organic Compounds (GC/MS) by Method 8270C

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Benzo(b)fluoranthene	ND		0.0333	1	12/25/2018 08:27	WG1214111
Benzo(k)fluoranthene	ND		0.0333	1	12/25/2018 08:27	WG1214111
Benzo(g,h,i)perylene	ND		0.0333	1	12/25/2018 08:27	WG1214111
Benzo(a)pyrene	ND		0.0333	1	12/25/2018 08:27	WG1214111
Bis(2-chlorethoxy)methane	ND		0.333	1	12/25/2018 08:27	WG1214111
Bis(2-chloroethyl)ether	ND		0.333	1	12/25/2018 08:27	WG1214111
Bis(2-chloroisopropyl)ether	ND		0.333	1	12/25/2018 08:27	WG1214111
4-Bromophenyl-phenylether	ND		0.333	1	12/25/2018 08:27	WG1214111
2-Chloronaphthalene	ND		0.0333	1	12/25/2018 08:27	WG1214111
4-Chlorophenyl-phenylether	ND		0.333	1	12/25/2018 08:27	WG1214111
Chrysene	ND		0.0333	1	12/25/2018 08:27	WG1214111
Dibenz(a,h)anthracene	ND		0.0333	1	12/25/2018 08:27	WG1214111
3,3-Dichlorobenzidine	ND		0.333	1	12/25/2018 08:27	WG1214111
2,4-Dinitrotoluene	ND		0.333	1	12/25/2018 08:27	WG1214111
2,6-Dinitrotoluene	ND		0.333	1	12/25/2018 08:27	WG1214111
Fluoranthene	ND		0.0333	1	12/25/2018 08:27	WG1214111
Fluorene	ND		0.0333	1	12/25/2018 08:27	WG1214111
Hexachlorobenzene	ND		0.333	1	12/25/2018 08:27	WG1214111
Hexachloro-1,3-butadiene	ND		0.333	1	12/25/2018 08:27	WG1214111
Hexachlorocyclopentadiene	ND		0.333	1	12/25/2018 08:27	WG1214111
Hexachloroethane	ND		0.333	1	12/25/2018 08:27	WG1214111
Indeno(1,2,3-cd)pyrene	ND		0.0333	1	12/25/2018 08:27	WG1214111
Isophorone	ND		0.333	1	12/25/2018 08:27	WG1214111
Naphthalene	ND		0.0333	1	12/25/2018 08:27	WG1214111
Nitrobenzene	ND		0.333	1	12/25/2018 08:27	WG1214111
n-Nitrosodimethylamine	ND		0.333	1	12/25/2018 08:27	WG1214111
n-Nitrosodiphenylamine	ND		0.333	1	12/25/2018 08:27	WG1214111
n-Nitrosodi-n-propylamine	ND		0.333	1	12/25/2018 08:27	WG1214111
Phenanthrene	ND		0.0333	1	12/25/2018 08:27	WG1214111
Benzylbutyl phthalate	ND		0.333	1	12/25/2018 08:27	WG1214111
Bis(2-ethylhexyl)phthalate	ND		0.333	1	12/25/2018 08:27	WG1214111
Di-n-butyl phthalate	ND		0.333	1	12/25/2018 08:27	WG1214111
Diethyl phthalate	ND		0.333	1	12/25/2018 08:27	WG1214111
Dimethyl phthalate	ND		0.333	1	12/25/2018 08:27	WG1214111
Di-n-octyl phthalate	ND		0.333	1	12/25/2018 08:27	WG1214111
Pyrene	ND		0.0333	1	12/25/2018 08:27	WG1214111
1,2,4-Trichlorobenzene	ND		0.333	1	12/25/2018 08:27	WG1214111
4-Chloro-3-methylphenol	ND		0.333	1	12/25/2018 08:27	WG1214111
2-Chlorophenol	ND		0.333	1	12/25/2018 08:27	WG1214111
2,4-Dichlorophenol	ND		0.333	1	12/25/2018 08:27	WG1214111
2,4-Dimethylphenol	ND		0.333	1	12/25/2018 08:27	WG1214111
4,6-Dinitro-2-methylphenol	ND		0.333	1	12/25/2018 08:27	WG1214111
2,4-Dinitrophenol	ND		0.333	1	12/25/2018 08:27	WG1214111
2-Nitrophenol	ND		0.333	1	12/25/2018 08:27	WG1214111
4-Nitrophenol	ND		0.333	1	12/25/2018 08:27	WG1214111
Pentachlorophenol	ND		0.333	1	12/25/2018 08:27	WG1214111
Phenol	ND		0.333	1	12/25/2018 08:27	WG1214111
2,4,6-Trichlorophenol	ND		0.333	1	12/25/2018 08:27	WG1214111
(S) 2-Fluorophenol	51.9		12.0-120		12/25/2018 08:27	WG1214111
(S) Phenol-d5	45.1		10.0-120		12/25/2018 08:27	WG1214111
(S) Nitrobenzene-d5	47.5		10.0-122		12/25/2018 08:27	WG1214111
(S) 2-Fluorobiphenyl	45.2		15.0-120		12/25/2018 08:27	WG1214111
(S) 2,4,6-Tribromophenol	40.1		10.0-127		12/25/2018 08:27	WG1214111
(S) p-Terphenyl-d14	47.8		10.0-120		12/25/2018 08:27	WG1214111

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 date / time	Batch
Total Solids	74.7		1	12/21/2018 10:05	WG1214092

Mercury by Method 7471A

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Mercury	0.0211		0.0200	1	12/21/2018 13:49	WG1214211

Metals (ICP) by Method 6010B

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Arsenic	ND		2.00	1	12/21/2018 09:36	WG1214054
Barium	116		0.500	1	12/21/2018 09:36	WG1214054
Cadmium	ND		0.500	1	12/21/2018 09:36	WG1214054
Chromium	10.4		1.00	1	12/21/2018 09:36	WG1214054
Lead	6.09		0.500	1	12/21/2018 09:36	WG1214054
Selenium	ND		2.00	1	12/21/2018 09:36	WG1214054
Silver	ND		1.00	1	12/21/2018 09:36	WG1214054

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	ND		0.100	1	12/22/2018 12:34	WG1214641
(S) a,a,a-Trifluorotoluene(FID)	100		77.0-120		12/22/2018 12:34	WG1214641

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

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Acetone	ND		0.0275	1.1	12/27/2018 07:16	WG1215658
Acrylonitrile	ND		0.0138	1.1	12/27/2018 07:16	WG1215658
Benzene	ND		0.00110	1.1	12/27/2018 07:16	WG1215658
Bromobenzene	ND		0.0138	1.1	12/27/2018 07:16	WG1215658
Bromodichloromethane	ND		0.00275	1.1	12/27/2018 07:16	WG1215658
Bromoform	ND		0.0275	1.1	12/27/2018 07:16	WG1215658
Bromomethane	ND		0.0138	1.1	12/27/2018 07:16	WG1215658
n-Butylbenzene	ND		0.0138	1.1	12/27/2018 07:16	WG1215658
sec-Butylbenzene	ND		0.0138	1.1	12/27/2018 07:16	WG1215658
tert-Butylbenzene	ND		0.00550	1.1	12/27/2018 07:16	WG1215658
Carbon tetrachloride	ND		0.00550	1.1	12/27/2018 07:16	WG1215658
Chlorobenzene	ND		0.00275	1.1	12/27/2018 07:16	WG1215658
Chlorodibromomethane	ND		0.00275	1.1	12/27/2018 07:16	WG1215658
Chloroethane	ND		0.00550	1.1	12/27/2018 07:16	WG1215658
Chloroform	ND		0.00275	1.1	12/27/2018 07:16	WG1215658
Chloromethane	ND		0.0138	1.1	12/27/2018 07:16	WG1215658
2-Chlorotoluene	ND		0.00275	1.1	12/27/2018 07:16	WG1215658
4-Chlorotoluene	ND		0.00550	1.1	12/27/2018 07:16	WG1215658
1,2-Dibromo-3-Chloropropane	ND		0.0275	1.1	12/27/2018 07:16	WG1215658
1,2-Dibromoethane	ND		0.00275	1.1	12/27/2018 07:16	WG1215658
Dibromomethane	ND		0.00550	1.1	12/27/2018 07:16	WG1215658
1,2-Dichlorobenzene	ND		0.00550	1.1	12/27/2018 07:16	WG1215658
1,3-Dichlorobenzene	ND		0.00550	1.1	12/27/2018 07:16	WG1215658
1,4-Dichlorobenzene	ND		0.00550	1.1	12/27/2018 07:16	WG1215658
Dichlorodifluoromethane	ND		0.00275	1.1	12/27/2018 07:16	WG1215658
1,1-Dichloroethane	ND		0.00275	1.1	12/27/2018 07:16	WG1215658
1,2-Dichloroethane	ND		0.00275	1.1	12/27/2018 07:16	WG1215658

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 8260B

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
1,1-Dichloroethene	ND		0.00275	1.1	12/27/2018 07:16	WG1215658
cis-1,2-Dichloroethene	ND		0.00275	1.1	12/27/2018 07:16	WG1215658
trans-1,2-Dichloroethene	ND		0.00550	1.1	12/27/2018 07:16	WG1215658
1,2-Dichloropropane	ND		0.00550	1.1	12/27/2018 07:16	WG1215658
1,1-Dichloropropene	ND		0.00275	1.1	12/27/2018 07:16	WG1215658
1,3-Dichloropropane	ND		0.00550	1.1	12/27/2018 07:16	WG1215658
cis-1,3-Dichloropropene	ND		0.00275	1.1	12/27/2018 07:16	WG1215658
trans-1,3-Dichloropropene	ND		0.00550	1.1	12/27/2018 07:16	WG1215658
2,2-Dichloropropane	ND		0.00275	1.1	12/27/2018 07:16	WG1215658
Di-isopropyl ether	ND		0.00110	1.1	12/27/2018 07:16	WG1215658
Ethylbenzene	ND		0.00275	1.1	12/27/2018 07:16	WG1215658
Hexachloro-1,3-butadiene	ND		0.0275	1.1	12/27/2018 07:16	WG1215658
Isopropylbenzene	ND		0.00275	1.1	12/27/2018 07:16	WG1215658
p-Isopropyltoluene	ND		0.00550	1.1	12/27/2018 07:16	WG1215658
2-Butanone (MEK)	ND		0.0275	1.1	12/27/2018 07:16	WG1215658
Methylene Chloride	ND		0.0275	1.1	12/27/2018 07:16	WG1215658
4-Methyl-2-pentanone (MIBK)	ND		0.0275	1.1	12/27/2018 07:16	WG1215658
Methyl tert-butyl ether	ND		0.00110	1.1	12/27/2018 07:16	WG1215658
Naphthalene	ND		0.0138	1.1	12/27/2018 07:16	WG1215658
n-Propylbenzene	ND		0.00550	1.1	12/27/2018 07:16	WG1215658
Styrene	ND		0.0138	1.1	12/27/2018 07:16	WG1215658
1,1,1,2-Tetrachloroethane	ND		0.00275	1.1	12/27/2018 07:16	WG1215658
1,1,2,2-Tetrachloroethane	ND		0.00275	1.1	12/27/2018 07:16	WG1215658
1,1,2-Trichlorotrifluoroethane	ND		0.00275	1.1	12/27/2018 07:16	WG1215658
Tetrachloroethene	ND		0.00275	1.1	12/27/2018 07:16	WG1215658
Toluene	ND		0.00550	1.1	12/27/2018 07:16	WG1215658
1,2,3-Trichlorobenzene	ND		0.00275	1.1	12/27/2018 07:16	WG1215658
1,2,4-Trichlorobenzene	ND		0.0138	1.1	12/27/2018 07:16	WG1215658
1,1,1-Trichloroethane	ND		0.00275	1.1	12/27/2018 07:16	WG1215658
1,1,2-Trichloroethane	ND		0.00275	1.1	12/27/2018 07:16	WG1215658
Trichloroethene	ND		0.00110	1.1	12/27/2018 07:16	WG1215658
Trichlorofluoromethane	ND		0.00275	1.1	12/27/2018 07:16	WG1215658
1,2,3-Trichloropropane	ND		0.0138	1.1	12/27/2018 07:16	WG1215658
1,2,4-Trimethylbenzene	ND		0.00550	1.1	12/27/2018 07:16	WG1215658
1,2,3-Trimethylbenzene	ND		0.00550	1.1	12/27/2018 07:16	WG1215658
1,3,5-Trimethylbenzene	ND		0.00550	1.1	12/27/2018 07:16	WG1215658
Vinyl chloride	ND		0.00275	1.1	12/27/2018 07:16	WG1215658
Xylenes, Total	ND		0.00715	1.1	12/27/2018 07:16	WG1215658
(S) Toluene-d8	103		75.0-131		12/27/2018 07:16	WG1215658
(S) Dibromofluoromethane	92.7		65.0-129		12/27/2018 07:16	WG1215658
(S) 4-Bromofluorobenzene	101		67.0-138		12/27/2018 07:16	WG1215658

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

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	ND		4.00	1	12/27/2018 12:05	WG1215790
(S) o-Terphenyl	41.2		18.0-148		12/27/2018 12:05	WG1215790

Semi Volatile Organic Compounds (GC/MS) by Method 8270C

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Acenaphthene	ND		0.0333	1	12/25/2018 01:11	WG1215208
Acenaphthylene	ND		0.0333	1	12/25/2018 01:11	WG1215208
Anthracene	ND		0.0333	1	12/25/2018 01:11	WG1215208
Benzo(a)anthracene	ND		0.0333	1	12/25/2018 01:11	WG1215208



Semi Volatile Organic Compounds (GC/MS) by Method 8270C

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Benzo(b)fluoranthene	ND		0.0333	1	12/25/2018 01:11	WG1215208
Benzo(k)fluoranthene	ND		0.0333	1	12/25/2018 01:11	WG1215208
Benzo(g,h,i)perylene	ND		0.0333	1	12/25/2018 01:11	WG1215208
Benzo(a)pyrene	ND		0.0333	1	12/25/2018 01:11	WG1215208
Bis(2-chlorethoxy)methane	ND		0.333	1	12/25/2018 01:11	WG1215208
Bis(2-chloroethyl)ether	ND		0.333	1	12/25/2018 01:11	WG1215208
Bis(2-chloroisopropyl)ether	ND		0.333	1	12/25/2018 01:11	WG1215208
4-Bromophenyl-phenylether	ND		0.333	1	12/25/2018 01:11	WG1215208
2-Chloronaphthalene	ND		0.0333	1	12/25/2018 01:11	WG1215208
4-Chlorophenyl-phenylether	ND		0.333	1	12/25/2018 01:11	WG1215208
Chrysene	ND		0.0333	1	12/25/2018 01:11	WG1215208
Dibenz(a,h)anthracene	ND		0.0333	1	12/25/2018 01:11	WG1215208
3,3-Dichlorobenzidine	ND		0.333	1	12/25/2018 01:11	WG1215208
2,4-Dinitrotoluene	ND		0.333	1	12/25/2018 01:11	WG1215208
2,6-Dinitrotoluene	ND		0.333	1	12/25/2018 01:11	WG1215208
Fluoranthene	ND		0.0333	1	12/25/2018 01:11	WG1215208
Fluorene	ND		0.0333	1	12/25/2018 01:11	WG1215208
Hexachlorobenzene	ND		0.333	1	12/25/2018 01:11	WG1215208
Hexachloro-1,3-butadiene	ND		0.333	1	12/25/2018 01:11	WG1215208
Hexachlorocyclopentadiene	ND		0.333	1	12/25/2018 01:11	WG1215208
Hexachloroethane	ND		0.333	1	12/25/2018 01:11	WG1215208
Indeno(1,2,3-cd)pyrene	ND		0.0333	1	12/25/2018 01:11	WG1215208
Isophorone	ND		0.333	1	12/25/2018 01:11	WG1215208
Naphthalene	ND		0.0333	1	12/25/2018 01:11	WG1215208
Nitrobenzene	ND		0.333	1	12/25/2018 01:11	WG1215208
n-Nitrosodimethylamine	ND		0.333	1	12/25/2018 01:11	WG1215208
n-Nitrosodiphenylamine	ND		0.333	1	12/25/2018 01:11	WG1215208
n-Nitrosodi-n-propylamine	ND		0.333	1	12/25/2018 01:11	WG1215208
Phenanthrene	ND		0.0333	1	12/25/2018 01:11	WG1215208
Benzylbutyl phthalate	ND		0.333	1	12/25/2018 01:11	WG1215208
Bis(2-ethylhexyl)phthalate	ND		0.333	1	12/25/2018 01:11	WG1215208
Di-n-butyl phthalate	ND		0.333	1	12/25/2018 01:11	WG1215208
Diethyl phthalate	ND		0.333	1	12/25/2018 01:11	WG1215208
Dimethyl phthalate	ND		0.333	1	12/25/2018 01:11	WG1215208
Di-n-octyl phthalate	ND		0.333	1	12/25/2018 01:11	WG1215208
Pyrene	ND		0.0333	1	12/25/2018 01:11	WG1215208
1,2,4-Trichlorobenzene	ND		0.333	1	12/25/2018 01:11	WG1215208
4-Chloro-3-methylphenol	ND		0.333	1	12/25/2018 01:11	WG1215208
2-Chlorophenol	ND		0.333	1	12/25/2018 01:11	WG1215208
2,4-Dichlorophenol	ND		0.333	1	12/25/2018 01:11	WG1215208
2,4-Dimethylphenol	ND		0.333	1	12/25/2018 01:11	WG1215208
4,6-Dinitro-2-methylphenol	ND		0.333	1	12/25/2018 01:11	WG1215208
2,4-Dinitrophenol	ND		0.333	1	12/25/2018 01:11	WG1215208
2-Nitrophenol	ND		0.333	1	12/25/2018 01:11	WG1215208
4-Nitrophenol	ND		0.333	1	12/25/2018 01:11	WG1215208
Pentachlorophenol	ND		0.333	1	12/25/2018 01:11	WG1215208
Phenol	ND		0.333	1	12/25/2018 01:11	WG1215208
2,4,6-Trichlorophenol	ND		0.333	1	12/25/2018 01:11	WG1215208
(S) 2-Fluorophenol	75.8		12.0-120		12/25/2018 01:11	WG1215208
(S) Phenol-d5	67.6		10.0-120		12/25/2018 01:11	WG1215208
(S) Nitrobenzene-d5	68.5		10.0-122		12/25/2018 01:11	WG1215208
(S) 2-Fluorobiphenyl	70.1		15.0-120		12/25/2018 01:11	WG1215208
(S) 2,4,6-Tribromophenol	69.3		10.0-127		12/25/2018 01:11	WG1215208
(S) p-Terphenyl-d14	70.1		10.0-120		12/25/2018 01:11	WG1215208

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	77.4		1	12/21/2018 10:05	WG1214092

Mercury by Method 7471A

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Mercury	0.0255		0.0200	1	12/21/2018 13:51	WG1214211

Metals (ICP) by Method 6010B

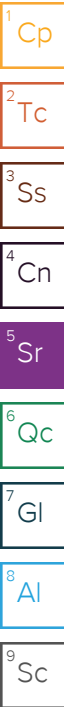
Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Arsenic	ND		2.00	1	12/21/2018 09:39	WG1214054
Barium	98.9		0.500	1	12/21/2018 09:39	WG1214054
Cadmium	ND		0.500	1	12/21/2018 09:39	WG1214054
Chromium	9.27		1.00	1	12/21/2018 09:39	WG1214054
Lead	12.4		0.500	1	12/21/2018 09:39	WG1214054
Selenium	ND		2.00	1	12/21/2018 09:39	WG1214054
Silver	ND		1.00	1	12/21/2018 09:39	WG1214054

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
TPH (GC/FID) Low Fraction	ND		0.100	1	12/22/2018 12:55	WG1214641
(S) a,a,a-Trifluorotoluene(FID)	101		77.0-120		12/22/2018 12:55	WG1214641

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

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Acetone	ND		0.0250	1	12/27/2018 07:38	WG1215658
Acrylonitrile	ND		0.0125	1	12/27/2018 07:38	WG1215658
Benzene	ND		0.00100	1	12/27/2018 07:38	WG1215658
Bromobenzene	ND		0.0125	1	12/27/2018 07:38	WG1215658
Bromodichloromethane	ND		0.00250	1	12/27/2018 07:38	WG1215658
Bromoform	ND		0.0250	1	12/27/2018 07:38	WG1215658
Bromomethane	ND		0.0125	1	12/27/2018 07:38	WG1215658
n-Butylbenzene	ND		0.0125	1	12/27/2018 07:38	WG1215658
sec-Butylbenzene	ND		0.0125	1	12/27/2018 07:38	WG1215658
tert-Butylbenzene	ND		0.00500	1	12/27/2018 07:38	WG1215658
Carbon tetrachloride	ND		0.00500	1	12/27/2018 07:38	WG1215658
Chlorobenzene	ND		0.00250	1	12/27/2018 07:38	WG1215658
Chlorodibromomethane	ND		0.00250	1	12/27/2018 07:38	WG1215658
Chloroethane	ND		0.00500	1	12/27/2018 07:38	WG1215658
Chloroform	ND		0.00250	1	12/27/2018 07:38	WG1215658
Chloromethane	ND		0.0125	1	12/27/2018 07:38	WG1215658
2-Chlorotoluene	ND		0.00250	1	12/27/2018 07:38	WG1215658
4-Chlorotoluene	ND		0.00500	1	12/27/2018 07:38	WG1215658
1,2-Dibromo-3-Chloropropane	ND		0.0250	1	12/27/2018 07:38	WG1215658
1,2-Dibromoethane	ND		0.00250	1	12/27/2018 07:38	WG1215658
Dibromomethane	ND		0.00500	1	12/27/2018 07:38	WG1215658
1,2-Dichlorobenzene	ND		0.00500	1	12/27/2018 07:38	WG1215658
1,3-Dichlorobenzene	ND		0.00500	1	12/27/2018 07:38	WG1215658
1,4-Dichlorobenzene	ND		0.00500	1	12/27/2018 07:38	WG1215658
Dichlorodifluoromethane	ND		0.00250	1	12/27/2018 07:38	WG1215658
1,1-Dichloroethane	ND		0.00250	1	12/27/2018 07:38	WG1215658
1,2-Dichloroethane	ND		0.00250	1	12/27/2018 07:38	WG1215658





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

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
1,1-Dichloroethene	ND		0.00250	1	12/27/2018 07:38	WG1215658
cis-1,2-Dichloroethene	ND		0.00250	1	12/27/2018 07:38	WG1215658
trans-1,2-Dichloroethene	ND		0.00500	1	12/27/2018 07:38	WG1215658
1,2-Dichloropropane	ND		0.00500	1	12/27/2018 07:38	WG1215658
1,1-Dichloropropene	ND		0.00250	1	12/27/2018 07:38	WG1215658
1,3-Dichloropropane	ND		0.00500	1	12/27/2018 07:38	WG1215658
cis-1,3-Dichloropropene	ND		0.00250	1	12/27/2018 07:38	WG1215658
trans-1,3-Dichloropropene	ND		0.00500	1	12/27/2018 07:38	WG1215658
2,2-Dichloropropane	ND		0.00250	1	12/27/2018 07:38	WG1215658
Di-isopropyl ether	ND		0.00100	1	12/27/2018 07:38	WG1215658
Ethylbenzene	ND		0.00250	1	12/27/2018 07:38	WG1215658
Hexachloro-1,3-butadiene	ND		0.0250	1	12/27/2018 07:38	WG1215658
Isopropylbenzene	ND		0.00250	1	12/27/2018 07:38	WG1215658
p-Isopropyltoluene	ND		0.00500	1	12/27/2018 07:38	WG1215658
2-Butanone (MEK)	ND		0.0250	1	12/27/2018 07:38	WG1215658
Methylene Chloride	ND		0.0250	1	12/27/2018 07:38	WG1215658
4-Methyl-2-pentanone (MIBK)	ND		0.0250	1	12/27/2018 07:38	WG1215658
Methyl tert-butyl ether	ND		0.00100	1	12/27/2018 07:38	WG1215658
Naphthalene	ND		0.0125	1	12/27/2018 07:38	WG1215658
n-Propylbenzene	ND		0.00500	1	12/27/2018 07:38	WG1215658
Styrene	ND		0.0125	1	12/27/2018 07:38	WG1215658
1,1,1,2-Tetrachloroethane	ND		0.00250	1	12/27/2018 07:38	WG1215658
1,1,2,2-Tetrachloroethane	ND		0.00250	1	12/27/2018 07:38	WG1215658
1,1,2-Trichlorotrifluoroethane	ND		0.00250	1	12/27/2018 07:38	WG1215658
Tetrachloroethene	ND		0.00250	1	12/27/2018 07:38	WG1215658
Toluene	ND		0.00500	1	12/27/2018 07:38	WG1215658
1,2,3-Trichlorobenzene	ND		0.00250	1	12/27/2018 07:38	WG1215658
1,2,4-Trichlorobenzene	ND		0.0125	1	12/27/2018 07:38	WG1215658
1,1,1-Trichloroethane	ND		0.00250	1	12/27/2018 07:38	WG1215658
1,1,2-Trichloroethane	ND		0.00250	1	12/27/2018 07:38	WG1215658
Trichloroethene	ND		0.00100	1	12/27/2018 07:38	WG1215658
Trichlorofluoromethane	ND		0.00250	1	12/27/2018 07:38	WG1215658
1,2,3-Trichloropropane	ND		0.0125	1	12/27/2018 07:38	WG1215658
1,2,4-Trimethylbenzene	ND		0.00500	1	12/27/2018 07:38	WG1215658
1,2,3-Trimethylbenzene	ND		0.00500	1	12/27/2018 07:38	WG1215658
1,3,5-Trimethylbenzene	ND		0.00500	1	12/27/2018 07:38	WG1215658
Vinyl chloride	ND		0.00250	1	12/27/2018 07:38	WG1215658
Xylenes, Total	ND		0.00650	1	12/27/2018 07:38	WG1215658
(S) Toluene-d8	104		75.0-131		12/27/2018 07:38	WG1215658
(S) Dibromofluoromethane	88.8		65.0-129		12/27/2018 07:38	WG1215658
(S) 4-Bromofluorobenzene	103		67.0-138		12/27/2018 07:38	WG1215658

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	ND		4.00	1	12/27/2018 12:29	WG1215790
(S) o-Terphenyl	57.6		18.0-148		12/27/2018 12:29	WG1215790

Semi Volatile Organic Compounds (GC/MS) by Method 8270C

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Acenaphthene	ND		0.0666	2	12/25/2018 03:28	WG1215208
Acenaphthylene	ND		0.0666	2	12/25/2018 03:28	WG1215208
Anthracene	ND		0.0666	2	12/25/2018 03:28	WG1215208
Benzo(a)anthracene	0.112		0.0666	2	12/25/2018 03:28	WG1215208



Collected date/time: 12/17/18 10:42

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Semi Volatile Organic Compounds (GC/MS) by Method 8270C

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Benzo(b)fluoranthene	0.311		0.0666	2	12/25/2018 03:28	WG1215208
Benzo(k)fluoranthene	0.0994		0.0666	2	12/25/2018 03:28	WG1215208
Benzo(g,h,i)perylene	0.0791		0.0666	2	12/25/2018 03:28	WG1215208
Benzo(a)pyrene	0.142		0.0666	2	12/25/2018 03:28	WG1215208
Bis(2-chlorethoxy)methane	ND		0.666	2	12/25/2018 03:28	WG1215208
Bis(2-chloroethyl)ether	ND		0.666	2	12/25/2018 03:28	WG1215208
Bis(2-chloroisopropyl)ether	ND		0.666	2	12/25/2018 03:28	WG1215208
4-Bromophenyl-phenylether	ND		0.666	2	12/25/2018 03:28	WG1215208
2-Chloronaphthalene	ND		0.0666	2	12/25/2018 03:28	WG1215208
4-Chlorophenyl-phenylether	ND		0.666	2	12/25/2018 03:28	WG1215208
Chrysene	0.105		0.0666	2	12/25/2018 03:28	WG1215208
Dibenz(a,h)anthracene	ND		0.0666	2	12/25/2018 03:28	WG1215208
3,3-Dichlorobenzidine	ND		0.666	2	12/25/2018 03:28	WG1215208
2,4-Dinitrotoluene	ND		0.666	2	12/25/2018 03:28	WG1215208
2,6-Dinitrotoluene	ND		0.666	2	12/25/2018 03:28	WG1215208
Fluoranthene	0.163		0.0666	2	12/25/2018 03:28	WG1215208
Fluorene	ND		0.0666	2	12/25/2018 03:28	WG1215208
Hexachlorobenzene	ND		0.666	2	12/25/2018 03:28	WG1215208
Hexachloro-1,3-butadiene	ND		0.666	2	12/25/2018 03:28	WG1215208
Hexachlorocyclopentadiene	ND		0.666	2	12/25/2018 03:28	WG1215208
Hexachloroethane	ND		0.666	2	12/25/2018 03:28	WG1215208
Indeno(1,2,3-cd)pyrene	0.0773		0.0666	2	12/25/2018 03:28	WG1215208
Isophorone	ND		0.666	2	12/25/2018 03:28	WG1215208
Naphthalene	ND		0.0666	2	12/25/2018 03:28	WG1215208
Nitrobenzene	ND		0.666	2	12/25/2018 03:28	WG1215208
n-Nitrosodimethylamine	ND		0.666	2	12/25/2018 03:28	WG1215208
n-Nitrosodiphenylamine	ND		0.666	2	12/25/2018 03:28	WG1215208
n-Nitrosodi-n-propylamine	ND		0.666	2	12/25/2018 03:28	WG1215208
Phenanthrene	0.0875		0.0666	2	12/25/2018 03:28	WG1215208
Benzylbutyl phthalate	ND		0.666	2	12/25/2018 03:28	WG1215208
Bis(2-ethylhexyl)phthalate	2.23		0.666	2	12/25/2018 03:28	WG1215208
Di-n-butyl phthalate	ND		0.666	2	12/25/2018 03:28	WG1215208
Diethyl phthalate	ND		0.666	2	12/25/2018 03:28	WG1215208
Dimethyl phthalate	ND		0.666	2	12/25/2018 03:28	WG1215208
Di-n-octyl phthalate	ND		0.666	2	12/25/2018 03:28	WG1215208
Pyrene	0.137		0.0666	2	12/25/2018 03:28	WG1215208
1,2,4-Trichlorobenzene	ND		0.666	2	12/25/2018 03:28	WG1215208
4-Chloro-3-methylphenol	ND		0.666	2	12/25/2018 03:28	WG1215208
2-Chlorophenol	ND		0.666	2	12/25/2018 03:28	WG1215208
2,4-Dichlorophenol	ND		0.666	2	12/25/2018 03:28	WG1215208
2,4-Dimethylphenol	ND		0.666	2	12/25/2018 03:28	WG1215208
4,6-Dinitro-2-methylphenol	ND		0.666	2	12/25/2018 03:28	WG1215208
2,4-Dinitrophenol	ND		0.666	2	12/25/2018 03:28	WG1215208
2-Nitrophenol	ND		0.666	2	12/25/2018 03:28	WG1215208
4-Nitrophenol	ND		0.666	2	12/25/2018 03:28	WG1215208
Pentachlorophenol	ND		0.666	2	12/25/2018 03:28	WG1215208
Phenol	ND		0.666	2	12/25/2018 03:28	WG1215208
2,4,6-Trichlorophenol	ND		0.666	2	12/25/2018 03:28	WG1215208
(S) 2-Fluorophenol	71.2		12.0-120		12/25/2018 03:28	WG1215208
(S) Phenol-d5	73.6		10.0-120		12/25/2018 03:28	WG1215208
(S) Nitrobenzene-d5	89.8		10.0-122		12/25/2018 03:28	WG1215208
(S) 2-Fluorobiphenyl	85.1		15.0-120		12/25/2018 03:28	WG1215208
(S) 2,4,6-Tribromophenol	83.6		10.0-127		12/25/2018 03:28	WG1215208
(S) p-Terphenyl-d14	82.2		10.0-120		12/25/2018 03:28	WG1215208

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 date / time	Batch
Total Solids	76.1		1	12/21/2018 10:28	WG1214392

Mercury by Method 7471A

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Mercury	0.0217		0.0200	1	12/21/2018 13:54	WG1214211

Metals (ICP) by Method 6010B

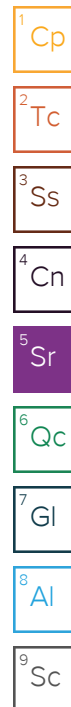
Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Arsenic	ND		2.00	1	12/21/2018 09:42	WG1214054
Barium	105		0.500	1	12/21/2018 09:42	WG1214054
Cadmium	ND		0.500	1	12/21/2018 09:42	WG1214054
Chromium	9.99		1.00	1	12/21/2018 09:42	WG1214054
Lead	6.07		0.500	1	12/21/2018 09:42	WG1214054
Selenium	ND		2.00	1	12/21/2018 09:42	WG1214054
Silver	ND		1.00	1	12/21/2018 09:42	WG1214054

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	ND		0.100	1	12/23/2018 21:28	WG1215337
(S) a,a,a-Trifluorotoluene(FID)	92.7		77.0-120		12/23/2018 21:28	WG1215337

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

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Acetone	ND		0.0268	1.07	12/27/2018 08:00	WG1215658
Acrylonitrile	ND		0.0134	1.07	12/27/2018 08:00	WG1215658
Benzene	ND		0.00107	1.07	12/27/2018 08:00	WG1215658
Bromobenzene	ND		0.0134	1.07	12/27/2018 08:00	WG1215658
Bromodichloromethane	ND		0.00268	1.07	12/27/2018 08:00	WG1215658
Bromoform	ND		0.0268	1.07	12/27/2018 08:00	WG1215658
Bromomethane	ND		0.0134	1.07	12/27/2018 08:00	WG1215658
n-Butylbenzene	ND		0.0134	1.07	12/27/2018 08:00	WG1215658
sec-Butylbenzene	ND		0.0134	1.07	12/27/2018 08:00	WG1215658
tert-Butylbenzene	ND		0.00535	1.07	12/27/2018 08:00	WG1215658
Carbon tetrachloride	ND		0.00535	1.07	12/27/2018 08:00	WG1215658
Chlorobenzene	ND		0.00268	1.07	12/27/2018 08:00	WG1215658
Chlorodibromomethane	ND		0.00268	1.07	12/27/2018 08:00	WG1215658
Chloroethane	ND		0.00535	1.07	12/27/2018 08:00	WG1215658
Chloroform	ND		0.00268	1.07	12/27/2018 08:00	WG1215658
Chloromethane	ND		0.0134	1.07	12/27/2018 08:00	WG1215658
2-Chlorotoluene	ND		0.00268	1.07	12/27/2018 08:00	WG1215658
4-Chlorotoluene	ND		0.00535	1.07	12/27/2018 08:00	WG1215658
1,2-Dibromo-3-Chloropropane	ND		0.0268	1.07	12/27/2018 08:00	WG1215658
1,2-Dibromoethane	ND		0.00268	1.07	12/27/2018 08:00	WG1215658
Dibromomethane	ND		0.00535	1.07	12/27/2018 08:00	WG1215658
1,2-Dichlorobenzene	ND		0.00535	1.07	12/27/2018 08:00	WG1215658
1,3-Dichlorobenzene	ND		0.00535	1.07	12/27/2018 08:00	WG1215658
1,4-Dichlorobenzene	ND		0.00535	1.07	12/27/2018 08:00	WG1215658
Dichlorodifluoromethane	ND		0.00268	1.07	12/27/2018 08:00	WG1215658
1,1-Dichloroethane	ND		0.00268	1.07	12/27/2018 08:00	WG1215658
1,2-Dichloroethane	ND		0.00268	1.07	12/27/2018 08:00	WG1215658





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

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
1,1-Dichloroethene	ND		0.00268	1.07	12/27/2018 08:00	WG1215658
cis-1,2-Dichloroethene	ND		0.00268	1.07	12/27/2018 08:00	WG1215658
trans-1,2-Dichloroethene	ND		0.00535	1.07	12/27/2018 08:00	WG1215658
1,2-Dichloropropane	ND		0.00535	1.07	12/27/2018 08:00	WG1215658
1,1-Dichloropropene	ND		0.00268	1.07	12/27/2018 08:00	WG1215658
1,3-Dichloropropane	ND		0.00535	1.07	12/27/2018 08:00	WG1215658
cis-1,3-Dichloropropene	ND		0.00268	1.07	12/27/2018 08:00	WG1215658
trans-1,3-Dichloropropene	ND		0.00535	1.07	12/27/2018 08:00	WG1215658
2,2-Dichloropropane	ND		0.00268	1.07	12/27/2018 08:00	WG1215658
Di-isopropyl ether	ND		0.00107	1.07	12/27/2018 08:00	WG1215658
Ethylbenzene	ND		0.00268	1.07	12/27/2018 08:00	WG1215658
Hexachloro-1,3-butadiene	ND		0.0268	1.07	12/27/2018 08:00	WG1215658
Isopropylbenzene	ND		0.00268	1.07	12/27/2018 08:00	WG1215658
p-Isopropyltoluene	ND		0.00535	1.07	12/27/2018 08:00	WG1215658
2-Butanone (MEK)	ND		0.0268	1.07	12/27/2018 08:00	WG1215658
Methylene Chloride	ND		0.0268	1.07	12/27/2018 08:00	WG1215658
4-Methyl-2-pentanone (MIBK)	ND		0.0268	1.07	12/27/2018 08:00	WG1215658
Methyl tert-butyl ether	ND		0.00107	1.07	12/27/2018 08:00	WG1215658
Naphthalene	ND		0.0134	1.07	12/27/2018 08:00	WG1215658
n-Propylbenzene	ND		0.00535	1.07	12/27/2018 08:00	WG1215658
Styrene	ND		0.0134	1.07	12/27/2018 08:00	WG1215658
1,1,1,2-Tetrachloroethane	ND		0.00268	1.07	12/27/2018 08:00	WG1215658
1,1,2,2-Tetrachloroethane	ND		0.00268	1.07	12/27/2018 08:00	WG1215658
1,1,2-Trichlorotrifluoroethane	ND		0.00268	1.07	12/27/2018 08:00	WG1215658
Tetrachloroethene	ND		0.00268	1.07	12/27/2018 08:00	WG1215658
Toluene	ND		0.00535	1.07	12/27/2018 08:00	WG1215658
1,2,3-Trichlorobenzene	ND		0.00268	1.07	12/27/2018 08:00	WG1215658
1,2,4-Trichlorobenzene	ND		0.0134	1.07	12/27/2018 08:00	WG1215658
1,1,1-Trichloroethane	ND		0.00268	1.07	12/27/2018 08:00	WG1215658
1,1,2-Trichloroethane	ND		0.00268	1.07	12/27/2018 08:00	WG1215658
Trichloroethene	ND		0.00107	1.07	12/27/2018 08:00	WG1215658
Trichlorofluoromethane	ND		0.00268	1.07	12/27/2018 08:00	WG1215658
1,2,3-Trichloropropane	ND		0.0134	1.07	12/27/2018 08:00	WG1215658
1,2,4-Trimethylbenzene	ND		0.00535	1.07	12/27/2018 08:00	WG1215658
1,2,3-Trimethylbenzene	ND		0.00535	1.07	12/27/2018 08:00	WG1215658
1,3,5-Trimethylbenzene	ND		0.00535	1.07	12/27/2018 08:00	WG1215658
Vinyl chloride	ND		0.00268	1.07	12/27/2018 08:00	WG1215658
Xylenes, Total	ND		0.00696	1.07	12/27/2018 08:00	WG1215658
(S) Toluene-d8	98.8		75.0-131		12/27/2018 08:00	WG1215658
(S) Dibromofluoromethane	94.9		65.0-129		12/27/2018 08:00	WG1215658
(S) 4-Bromofluorobenzene	101		67.0-138		12/27/2018 08:00	WG1215658

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

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	ND		4.00	1	12/27/2018 12:17	WG1215790
(S) o-Terphenyl	49.8		18.0-148		12/27/2018 12:17	WG1215790

Semi Volatile Organic Compounds (GC/MS) by Method 8270C

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Acenaphthene	ND		0.0333	1	12/25/2018 00:25	WG1215208
Acenaphthylene	ND		0.0333	1	12/25/2018 00:25	WG1215208
Anthracene	ND		0.0333	1	12/25/2018 00:25	WG1215208
Benzo(a)anthracene	ND		0.0333	1	12/25/2018 00:25	WG1215208



Collected date/time: 12/17/18 10:50

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Semi Volatile Organic Compounds (GC/MS) by Method 8270C

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Benzo(b)fluoranthene	ND		0.0333	1	12/25/2018 00:25	WG1215208
Benzo(k)fluoranthene	ND		0.0333	1	12/25/2018 00:25	WG1215208
Benzo(g,h,i)perylene	ND		0.0333	1	12/25/2018 00:25	WG1215208
Benzo(a)pyrene	ND		0.0333	1	12/25/2018 00:25	WG1215208
Bis(2-chlorethoxy)methane	ND		0.333	1	12/25/2018 00:25	WG1215208
Bis(2-chloroethyl)ether	ND		0.333	1	12/25/2018 00:25	WG1215208
Bis(2-chloroisopropyl)ether	ND		0.333	1	12/25/2018 00:25	WG1215208
4-Bromophenyl-phenylether	ND		0.333	1	12/25/2018 00:25	WG1215208
2-Chloronaphthalene	ND		0.0333	1	12/25/2018 00:25	WG1215208
4-Chlorophenyl-phenylether	ND		0.333	1	12/25/2018 00:25	WG1215208
Chrysene	ND		0.0333	1	12/25/2018 00:25	WG1215208
Dibenz(a,h)anthracene	ND		0.0333	1	12/25/2018 00:25	WG1215208
3,3-Dichlorobenzidine	ND		0.333	1	12/25/2018 00:25	WG1215208
2,4-Dinitrotoluene	ND		0.333	1	12/25/2018 00:25	WG1215208
2,6-Dinitrotoluene	ND		0.333	1	12/25/2018 00:25	WG1215208
Fluoranthene	ND		0.0333	1	12/25/2018 00:25	WG1215208
Fluorene	ND		0.0333	1	12/25/2018 00:25	WG1215208
Hexachlorobenzene	ND		0.333	1	12/25/2018 00:25	WG1215208
Hexachloro-1,3-butadiene	ND		0.333	1	12/25/2018 00:25	WG1215208
Hexachlorocyclopentadiene	ND		0.333	1	12/25/2018 00:25	WG1215208
Hexachloroethane	ND		0.333	1	12/25/2018 00:25	WG1215208
Indeno(1,2,3-cd)pyrene	ND		0.0333	1	12/25/2018 00:25	WG1215208
Isophorone	ND		0.333	1	12/25/2018 00:25	WG1215208
Naphthalene	ND		0.0333	1	12/25/2018 00:25	WG1215208
Nitrobenzene	ND		0.333	1	12/25/2018 00:25	WG1215208
n-Nitrosodimethylamine	ND		0.333	1	12/25/2018 00:25	WG1215208
n-Nitrosodiphenylamine	ND		0.333	1	12/25/2018 00:25	WG1215208
n-Nitrosodi-n-propylamine	ND		0.333	1	12/25/2018 00:25	WG1215208
Phenanthrene	ND		0.0333	1	12/25/2018 00:25	WG1215208
Benzylbutyl phthalate	ND		0.333	1	12/25/2018 00:25	WG1215208
Bis(2-ethylhexyl)phthalate	ND		0.333	1	12/25/2018 00:25	WG1215208
Di-n-butyl phthalate	ND		0.333	1	12/25/2018 00:25	WG1215208
Diethyl phthalate	ND		0.333	1	12/25/2018 00:25	WG1215208
Dimethyl phthalate	ND		0.333	1	12/25/2018 00:25	WG1215208
Di-n-octyl phthalate	ND		0.333	1	12/25/2018 00:25	WG1215208
Pyrene	ND		0.0333	1	12/25/2018 00:25	WG1215208
1,2,4-Trichlorobenzene	ND		0.333	1	12/25/2018 00:25	WG1215208
4-Chloro-3-methylphenol	ND		0.333	1	12/25/2018 00:25	WG1215208
2-Chlorophenol	ND		0.333	1	12/25/2018 00:25	WG1215208
2,4-Dichlorophenol	ND		0.333	1	12/25/2018 00:25	WG1215208
2,4-Dimethylphenol	ND		0.333	1	12/25/2018 00:25	WG1215208
4,6-Dinitro-2-methylphenol	ND		0.333	1	12/25/2018 00:25	WG1215208
2,4-Dinitrophenol	ND		0.333	1	12/25/2018 00:25	WG1215208
2-Nitrophenol	ND		0.333	1	12/25/2018 00:25	WG1215208
4-Nitrophenol	ND		0.333	1	12/25/2018 00:25	WG1215208
Pentachlorophenol	ND		0.333	1	12/25/2018 00:25	WG1215208
Phenol	ND		0.333	1	12/25/2018 00:25	WG1215208
2,4,6-Trichlorophenol	ND		0.333	1	12/25/2018 00:25	WG1215208
(S) 2-Fluorophenol	73.6		12.0-120		12/25/2018 00:25	WG1215208
(S) Phenol-d5	64.7		10.0-120		12/25/2018 00:25	WG1215208
(S) Nitrobenzene-d5	65.6		10.0-122		12/25/2018 00:25	WG1215208
(S) 2-Fluorobiphenyl	68.6		15.0-120		12/25/2018 00:25	WG1215208
(S) 2,4,6-Tribromophenol	67.8		10.0-127		12/25/2018 00:25	WG1215208
(S) p-Terphenyl-d14	70.1		10.0-120		12/25/2018 00:25	WG1215208

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 date / time	Batch
Total Solids	75.3		1	12/21/2018 10:28	WG1214392

Mercury by Method 7471A

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Mercury	0.0297		0.0200	1	12/21/2018 13:57	WG1214211

Metals (ICP) by Method 6010B

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Arsenic	6.20		2.00	1	12/21/2018 09:01	WG1214054
Barium	139		0.500	1	12/21/2018 09:01	WG1214054
Cadmium	ND		0.500	1	12/21/2018 09:01	WG1214054
Chromium	14.8		1.00	1	12/21/2018 09:01	WG1214054
Lead	10.3		0.500	1	12/21/2018 09:01	WG1214054
Selenium	ND		2.00	1	12/21/2018 09:01	WG1214054
Silver	ND		1.00	1	12/21/2018 09:01	WG1214054

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	ND		0.100	1	12/22/2018 13:37	WG1214641
(S) a,a,a-Trifluorotoluene(FID)	101		77.0-120		12/22/2018 13:37	WG1214641

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

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Acetone	ND		0.0250	1	12/27/2018 08:22	WG1215658
Acrylonitrile	ND		0.0125	1	12/27/2018 08:22	WG1215658
Benzene	ND		0.00100	1	12/27/2018 08:22	WG1215658
Bromobenzene	ND		0.0125	1	12/27/2018 08:22	WG1215658
Bromodichloromethane	ND		0.00250	1	12/27/2018 08:22	WG1215658
Bromoform	ND		0.0250	1	12/27/2018 08:22	WG1215658
Bromomethane	ND		0.0125	1	12/27/2018 08:22	WG1215658
n-Butylbenzene	ND		0.0125	1	12/27/2018 08:22	WG1215658
sec-Butylbenzene	ND		0.0125	1	12/27/2018 08:22	WG1215658
tert-Butylbenzene	ND		0.00500	1	12/27/2018 08:22	WG1215658
Carbon tetrachloride	ND		0.00500	1	12/27/2018 08:22	WG1215658
Chlorobenzene	ND		0.00250	1	12/27/2018 08:22	WG1215658
Chlorodibromomethane	ND		0.00250	1	12/27/2018 08:22	WG1215658
Chloroethane	ND		0.00500	1	12/27/2018 08:22	WG1215658
Chloroform	ND		0.00250	1	12/27/2018 08:22	WG1215658
Chloromethane	ND		0.0125	1	12/27/2018 08:22	WG1215658
2-Chlorotoluene	ND		0.00250	1	12/27/2018 08:22	WG1215658
4-Chlorotoluene	ND		0.00500	1	12/27/2018 08:22	WG1215658
1,2-Dibromo-3-Chloropropane	ND		0.0250	1	12/27/2018 08:22	WG1215658
1,2-Dibromoethane	ND		0.00250	1	12/27/2018 08:22	WG1215658
Dibromomethane	ND		0.00500	1	12/27/2018 08:22	WG1215658
1,2-Dichlorobenzene	ND		0.00500	1	12/27/2018 08:22	WG1215658
1,3-Dichlorobenzene	ND		0.00500	1	12/27/2018 08:22	WG1215658
1,4-Dichlorobenzene	ND		0.00500	1	12/27/2018 08:22	WG1215658
Dichlorodifluoromethane	ND		0.00250	1	12/27/2018 08:22	WG1215658
1,1-Dichloroethane	ND		0.00250	1	12/27/2018 08:22	WG1215658
1,2-Dichloroethane	ND		0.00250	1	12/27/2018 08:22	WG1215658

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 8260B

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
1,1-Dichloroethene	ND		0.00250	1	12/27/2018 08:22	WG1215658
cis-1,2-Dichloroethene	ND		0.00250	1	12/27/2018 08:22	WG1215658
trans-1,2-Dichloroethene	ND		0.00500	1	12/27/2018 08:22	WG1215658
1,2-Dichloropropane	ND		0.00500	1	12/27/2018 08:22	WG1215658
1,1-Dichloropropene	ND		0.00250	1	12/27/2018 08:22	WG1215658
1,3-Dichloropropane	ND		0.00500	1	12/27/2018 08:22	WG1215658
cis-1,3-Dichloropropene	ND		0.00250	1	12/27/2018 08:22	WG1215658
trans-1,3-Dichloropropene	ND		0.00500	1	12/27/2018 08:22	WG1215658
2,2-Dichloropropane	ND		0.00250	1	12/27/2018 08:22	WG1215658
Di-isopropyl ether	ND		0.00100	1	12/27/2018 08:22	WG1215658
Ethylbenzene	ND		0.00250	1	12/27/2018 08:22	WG1215658
Hexachloro-1,3-butadiene	ND		0.0250	1	12/27/2018 08:22	WG1215658
Isopropylbenzene	ND		0.00250	1	12/27/2018 08:22	WG1215658
p-Isopropyltoluene	ND		0.00500	1	12/27/2018 08:22	WG1215658
2-Butanone (MEK)	ND		0.0250	1	12/27/2018 08:22	WG1215658
Methylene Chloride	ND		0.0250	1	12/27/2018 08:22	WG1215658
4-Methyl-2-pentanone (MIBK)	ND		0.0250	1	12/27/2018 08:22	WG1215658
Methyl tert-butyl ether	ND		0.00100	1	12/27/2018 08:22	WG1215658
Naphthalene	ND		0.0125	1	12/27/2018 08:22	WG1215658
n-Propylbenzene	ND		0.00500	1	12/27/2018 08:22	WG1215658
Styrene	ND		0.0125	1	12/27/2018 08:22	WG1215658
1,1,1,2-Tetrachloroethane	ND		0.00250	1	12/27/2018 08:22	WG1215658
1,1,2,2-Tetrachloroethane	ND		0.00250	1	12/27/2018 08:22	WG1215658
1,1,2-Trichlorotrifluoroethane	ND		0.00250	1	12/27/2018 08:22	WG1215658
Tetrachloroethene	ND		0.00250	1	12/27/2018 08:22	WG1215658
Toluene	ND		0.00500	1	12/27/2018 08:22	WG1215658
1,2,3-Trichlorobenzene	ND		0.00250	1	12/27/2018 08:22	WG1215658
1,2,4-Trichlorobenzene	ND		0.0125	1	12/27/2018 08:22	WG1215658
1,1,1-Trichloroethane	ND		0.00250	1	12/27/2018 08:22	WG1215658
1,1,2-Trichloroethane	ND		0.00250	1	12/27/2018 08:22	WG1215658
Trichloroethene	ND		0.00100	1	12/27/2018 08:22	WG1215658
Trichlorofluoromethane	ND		0.00250	1	12/27/2018 08:22	WG1215658
1,2,3-Trichloropropane	ND		0.0125	1	12/27/2018 08:22	WG1215658
1,2,4-Trimethylbenzene	ND		0.00500	1	12/27/2018 08:22	WG1215658
1,2,3-Trimethylbenzene	ND		0.00500	1	12/27/2018 08:22	WG1215658
1,3,5-Trimethylbenzene	ND		0.00500	1	12/27/2018 08:22	WG1215658
Vinyl chloride	ND		0.00250	1	12/27/2018 08:22	WG1215658
Xylenes, Total	ND		0.00650	1	12/27/2018 08:22	WG1215658
(S) Toluene-d8	99.8		75.0-131		12/27/2018 08:22	WG1215658
(S) Dibromofluoromethane	93.3		65.0-129		12/27/2018 08:22	WG1215658
(S) 4-Bromofluorobenzene	102		67.0-138		12/27/2018 08:22	WG1215658

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

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	ND		16.0	4	12/27/2018 13:51	WG1215790
(S) o-Terphenyl	57.3		18.0-148		12/27/2018 13:51	WG1215790

Sample Narrative:

L1054617-37 WG1215790: Cannot run at lower dilution due to viscosity of extract



Collected date/time: 12/17/18 11:00

L1054617

Semi Volatile Organic Compounds (GC/MS) by Method 8270C

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Acenaphthene	ND		0.0666	2	12/26/2018 00:59	WG1215208
Acenaphthylene	ND		0.0666	2	12/26/2018 00:59	WG1215208
Anthracene	ND		0.0666	2	12/26/2018 00:59	WG1215208
Benzo(a)anthracene	ND		0.0666	2	12/26/2018 00:59	WG1215208
Benzo(b)fluoranthene	ND		0.0666	2	12/26/2018 00:59	WG1215208
Benzo(k)fluoranthene	ND		0.0666	2	12/26/2018 00:59	WG1215208
Benzo(g,h,i)perylene	ND		0.0666	2	12/26/2018 00:59	WG1215208
Benzo(a)pyrene	ND		0.0666	2	12/26/2018 00:59	WG1215208
Bis(2-chlorethoxy)methane	ND		0.666	2	12/26/2018 00:59	WG1215208
Bis(2-chloroethyl)ether	ND		0.666	2	12/26/2018 00:59	WG1215208
Bis(2-chloroisopropyl)ether	ND		0.666	2	12/26/2018 00:59	WG1215208
4-Bromophenyl-phenylether	ND		0.666	2	12/26/2018 00:59	WG1215208
2-Chloronaphthalene	ND		0.0666	2	12/26/2018 00:59	WG1215208
4-Chlorophenyl-phenylether	ND		0.666	2	12/26/2018 00:59	WG1215208
Chrysene	ND		0.0666	2	12/26/2018 00:59	WG1215208
Dibenz(a,h)anthracene	ND		0.0666	2	12/26/2018 00:59	WG1215208
3,3-Dichlorobenzidine	ND		0.666	2	12/26/2018 00:59	WG1215208
2,4-Dinitrotoluene	ND		0.666	2	12/26/2018 00:59	WG1215208
2,6-Dinitrotoluene	ND		0.666	2	12/26/2018 00:59	WG1215208
Fluoranthene	ND		0.0666	2	12/26/2018 00:59	WG1215208
Fluorene	ND		0.0666	2	12/26/2018 00:59	WG1215208
Hexachlorobenzene	ND		0.666	2	12/26/2018 00:59	WG1215208
Hexachloro-1,3-butadiene	ND		0.666	2	12/26/2018 00:59	WG1215208
Hexachlorocyclopentadiene	ND		0.666	2	12/26/2018 00:59	WG1215208
Hexachloroethane	ND		0.666	2	12/26/2018 00:59	WG1215208
Indeno(1,2,3-cd)pyrene	ND		0.0666	2	12/26/2018 00:59	WG1215208
Isophorone	ND		0.666	2	12/26/2018 00:59	WG1215208
Naphthalene	ND		0.0666	2	12/26/2018 00:59	WG1215208
Nitrobenzene	ND		0.666	2	12/26/2018 00:59	WG1215208
n-Nitrosodimethylamine	ND		0.666	2	12/26/2018 00:59	WG1215208
n-Nitrosodiphenylamine	ND		0.666	2	12/26/2018 00:59	WG1215208
n-Nitrosodi-n-propylamine	ND		0.666	2	12/26/2018 00:59	WG1215208
Phenanthrene	ND		0.0666	2	12/26/2018 00:59	WG1215208
Benzylbutyl phthalate	ND		0.666	2	12/26/2018 00:59	WG1215208
Bis(2-ethylhexyl)phthalate	ND		0.666	2	12/26/2018 00:59	WG1215208
Di-n-butyl phthalate	ND		0.666	2	12/26/2018 00:59	WG1215208
Diethyl phthalate	ND		0.666	2	12/26/2018 00:59	WG1215208
Dimethyl phthalate	ND		0.666	2	12/26/2018 00:59	WG1215208
Di-n-octyl phthalate	ND		0.666	2	12/26/2018 00:59	WG1215208
Pyrene	ND		0.0666	2	12/26/2018 00:59	WG1215208
1,2,4-Trichlorobenzene	ND		0.666	2	12/26/2018 00:59	WG1215208
4-Chloro-3-methylphenol	ND		0.666	2	12/26/2018 00:59	WG1215208
2-Chlorophenol	ND		0.666	2	12/26/2018 00:59	WG1215208
2,4-Dichlorophenol	ND		0.666	2	12/26/2018 00:59	WG1215208
2,4-Dimethylphenol	ND		0.666	2	12/26/2018 00:59	WG1215208
4,6-Dinitro-2-methylphenol	ND		0.666	2	12/26/2018 00:59	WG1215208
2,4-Dinitrophenol	ND		0.666	2	12/26/2018 00:59	WG1215208
2-Nitrophenol	ND		0.666	2	12/26/2018 00:59	WG1215208
4-Nitrophenol	ND		0.666	2	12/26/2018 00:59	WG1215208
Pentachlorophenol	ND		0.666	2	12/26/2018 00:59	WG1215208
Phenol	ND		0.666	2	12/26/2018 00:59	WG1215208
2,4,6-Trichlorophenol	ND		0.666	2	12/26/2018 00:59	WG1215208
(S) 2-Fluorophenol	90.4		12.0-120		12/26/2018 00:59	WG1215208
(S) Phenol-d5	77.3		10.0-120		12/26/2018 00:59	WG1215208
(S) Nitrobenzene-d5	79.9		10.0-122		12/26/2018 00:59	WG1215208
(S) 2-Fluorobiphenyl	78.1		15.0-120		12/26/2018 00:59	WG1215208

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



Collected date/time: 12/17/18 11:00

L1054617

Semi Volatile Organic Compounds (GC/MS) by Method 8270C

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
(S) 2,4,6-Tribromophenol	67.5		10.0-127		12/26/2018 00:59	WG1215208
(S) p-Terphenyl-d14	76.0		10.0-120		12/26/2018 00:59	WG1215208

Sample Narrative:

L1054617-37 WG1215208: Dilution due to matrix impact during extract concentration procedure

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	73.3		1	12/21/2018 10:28	WG1214392

Mercury by Method 7471A

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Mercury	0.0231		0.0200	1	12/21/2018 13:59	WG1214211

Metals (ICP) by Method 6010B

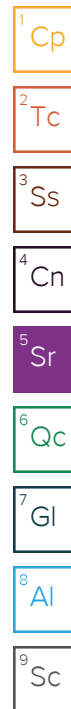
Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Arsenic	2.15		2.00	1	12/21/2018 09:03	WG1214054
Barium	110		0.500	1	12/21/2018 09:03	WG1214054
Cadmium	ND		0.500	1	12/21/2018 09:03	WG1214054
Chromium	11.1		1.00	1	12/21/2018 09:03	WG1214054
Lead	6.58		0.500	1	12/21/2018 09:03	WG1214054
Selenium	ND		2.00	1	12/21/2018 09:03	WG1214054
Silver	ND		1.00	1	12/21/2018 09:03	WG1214054

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	ND		0.100	1	12/22/2018 13:58	WG1214641
(S) a,a,a-Trifluorotoluene(FID)	101		77.0-120		12/22/2018 13:58	WG1214641

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

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Acetone	ND		0.0250	1	12/27/2018 08:45	WG1215658
Acrylonitrile	ND		0.0125	1	12/27/2018 08:45	WG1215658
Benzene	ND		0.00100	1	12/27/2018 08:45	WG1215658
Bromobenzene	ND		0.0125	1	12/27/2018 08:45	WG1215658
Bromodichloromethane	ND		0.00250	1	12/27/2018 08:45	WG1215658
Bromoform	ND		0.0250	1	12/27/2018 08:45	WG1215658
Bromomethane	ND		0.0125	1	12/27/2018 08:45	WG1215658
n-Butylbenzene	ND		0.0125	1	12/27/2018 08:45	WG1215658
sec-Butylbenzene	ND		0.0125	1	12/27/2018 08:45	WG1215658
tert-Butylbenzene	ND		0.00500	1	12/27/2018 08:45	WG1215658
Carbon tetrachloride	ND		0.00500	1	12/27/2018 08:45	WG1215658
Chlorobenzene	ND		0.00250	1	12/27/2018 08:45	WG1215658
Chlorodibromomethane	ND		0.00250	1	12/27/2018 08:45	WG1215658
Chloroethane	ND		0.00500	1	12/27/2018 08:45	WG1215658
Chloroform	ND		0.00250	1	12/27/2018 08:45	WG1215658
Chloromethane	ND		0.0125	1	12/27/2018 08:45	WG1215658
2-Chlorotoluene	ND		0.00250	1	12/27/2018 08:45	WG1215658
4-Chlorotoluene	ND		0.00500	1	12/27/2018 08:45	WG1215658
1,2-Dibromo-3-Chloropropane	ND		0.0250	1	12/27/2018 08:45	WG1215658
1,2-Dibromoethane	ND		0.00250	1	12/27/2018 08:45	WG1215658
Dibromomethane	ND		0.00500	1	12/27/2018 08:45	WG1215658
1,2-Dichlorobenzene	ND		0.00500	1	12/27/2018 08:45	WG1215658
1,3-Dichlorobenzene	ND		0.00500	1	12/27/2018 08:45	WG1215658
1,4-Dichlorobenzene	ND		0.00500	1	12/27/2018 08:45	WG1215658
Dichlorodifluoromethane	ND		0.00250	1	12/27/2018 08:45	WG1215658
1,1-Dichloroethane	ND		0.00250	1	12/27/2018 08:45	WG1215658
1,2-Dichloroethane	ND		0.00250	1	12/27/2018 08:45	WG1215658





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

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
1,1-Dichloroethene	ND		0.00250	1	12/27/2018 08:45	WG1215658
cis-1,2-Dichloroethene	ND		0.00250	1	12/27/2018 08:45	WG1215658
trans-1,2-Dichloroethene	ND		0.00500	1	12/27/2018 08:45	WG1215658
1,2-Dichloropropane	ND		0.00500	1	12/27/2018 08:45	WG1215658
1,1-Dichloropropene	ND		0.00250	1	12/27/2018 08:45	WG1215658
1,3-Dichloropropane	ND		0.00500	1	12/27/2018 08:45	WG1215658
cis-1,3-Dichloropropene	ND		0.00250	1	12/27/2018 08:45	WG1215658
trans-1,3-Dichloropropene	ND		0.00500	1	12/27/2018 08:45	WG1215658
2,2-Dichloropropane	ND		0.00250	1	12/27/2018 08:45	WG1215658
Di-isopropyl ether	ND		0.00100	1	12/27/2018 08:45	WG1215658
Ethylbenzene	ND		0.00250	1	12/27/2018 08:45	WG1215658
Hexachloro-1,3-butadiene	ND		0.0250	1	12/27/2018 08:45	WG1215658
Isopropylbenzene	ND		0.00250	1	12/27/2018 08:45	WG1215658
p-Isopropyltoluene	ND		0.00500	1	12/27/2018 08:45	WG1215658
2-Butanone (MEK)	ND		0.0250	1	12/27/2018 08:45	WG1215658
Methylene Chloride	ND		0.0250	1	12/27/2018 08:45	WG1215658
4-Methyl-2-pentanone (MIBK)	ND		0.0250	1	12/27/2018 08:45	WG1215658
Methyl tert-butyl ether	ND		0.00100	1	12/27/2018 08:45	WG1215658
Naphthalene	ND		0.0125	1	12/27/2018 08:45	WG1215658
n-Propylbenzene	ND		0.00500	1	12/27/2018 08:45	WG1215658
Styrene	ND		0.0125	1	12/27/2018 08:45	WG1215658
1,1,1,2-Tetrachloroethane	ND		0.00250	1	12/27/2018 08:45	WG1215658
1,1,2,2-Tetrachloroethane	ND		0.00250	1	12/27/2018 08:45	WG1215658
1,1,2-Trichlorotrifluoroethane	ND		0.00250	1	12/27/2018 08:45	WG1215658
Tetrachloroethene	ND		0.00250	1	12/27/2018 08:45	WG1215658
Toluene	ND		0.00500	1	12/27/2018 08:45	WG1215658
1,2,3-Trichlorobenzene	ND		0.00250	1	12/27/2018 08:45	WG1215658
1,2,4-Trichlorobenzene	ND		0.0125	1	12/27/2018 08:45	WG1215658
1,1,1-Trichloroethane	ND		0.00250	1	12/27/2018 08:45	WG1215658
1,1,2-Trichloroethane	ND		0.00250	1	12/27/2018 08:45	WG1215658
Trichloroethene	ND		0.00100	1	12/27/2018 08:45	WG1215658
Trichlorofluoromethane	ND		0.00250	1	12/27/2018 08:45	WG1215658
1,2,3-Trichloropropane	ND		0.0125	1	12/27/2018 08:45	WG1215658
1,2,4-Trimethylbenzene	ND		0.00500	1	12/27/2018 08:45	WG1215658
1,2,3-Trimethylbenzene	ND		0.00500	1	12/27/2018 08:45	WG1215658
1,3,5-Trimethylbenzene	ND		0.00500	1	12/27/2018 08:45	WG1215658
Vinyl chloride	ND		0.00250	1	12/27/2018 08:45	WG1215658
Xylenes, Total	ND		0.00650	1	12/27/2018 08:45	WG1215658
(S) Toluene-d8	101		75.0-131		12/27/2018 08:45	WG1215658
(S) Dibromofluoromethane	93.3		65.0-129		12/27/2018 08:45	WG1215658
(S) 4-Bromofluorobenzene	99.6		67.0-138		12/27/2018 08:45	WG1215658

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

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	ND	<u>J3</u>	4.00	1	12/27/2018 16:47	WG1215793
(S) o-Terphenyl	59.4		18.0-148		12/27/2018 16:47	WG1215793

Semi Volatile Organic Compounds (GC/MS) by Method 8270C

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Acenaphthene	ND		0.0333	1	12/25/2018 00:48	WG1215208
Acenaphthylene	ND		0.0333	1	12/25/2018 00:48	WG1215208
Anthracene	ND		0.0333	1	12/25/2018 00:48	WG1215208
Benzo(a)anthracene	ND		0.0333	1	12/25/2018 00:48	WG1215208

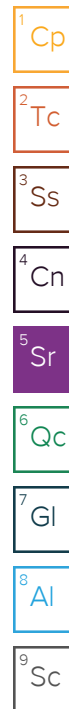


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Semi Volatile Organic Compounds (GC/MS) by Method 8270C

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Benzo(b)fluoranthene	ND		0.0333	1	12/25/2018 00:48	WG1215208
Benzo(k)fluoranthene	ND		0.0333	1	12/25/2018 00:48	WG1215208
Benzo(g,h,i)perylene	ND		0.0333	1	12/25/2018 00:48	WG1215208
Benzo(a)pyrene	ND		0.0333	1	12/25/2018 00:48	WG1215208
Bis(2-chlorethoxy)methane	ND		0.333	1	12/25/2018 00:48	WG1215208
Bis(2-chloroethyl)ether	ND		0.333	1	12/25/2018 00:48	WG1215208
Bis(2-chloroisopropyl)ether	ND		0.333	1	12/25/2018 00:48	WG1215208
4-Bromophenyl-phenylether	ND		0.333	1	12/25/2018 00:48	WG1215208
2-Chloronaphthalene	ND		0.0333	1	12/25/2018 00:48	WG1215208
4-Chlorophenyl-phenylether	ND		0.333	1	12/25/2018 00:48	WG1215208
Chrysene	ND		0.0333	1	12/25/2018 00:48	WG1215208
Dibenz(a,h)anthracene	ND		0.0333	1	12/25/2018 00:48	WG1215208
3,3-Dichlorobenzidine	ND		0.333	1	12/25/2018 00:48	WG1215208
2,4-Dinitrotoluene	ND		0.333	1	12/25/2018 00:48	WG1215208
2,6-Dinitrotoluene	ND		0.333	1	12/25/2018 00:48	WG1215208
Fluoranthene	ND		0.0333	1	12/25/2018 00:48	WG1215208
Fluorene	ND		0.0333	1	12/25/2018 00:48	WG1215208
Hexachlorobenzene	ND		0.333	1	12/25/2018 00:48	WG1215208
Hexachloro-1,3-butadiene	ND		0.333	1	12/25/2018 00:48	WG1215208
Hexachlorocyclopentadiene	ND		0.333	1	12/25/2018 00:48	WG1215208
Hexachloroethane	ND		0.333	1	12/25/2018 00:48	WG1215208
Indeno(1,2,3-cd)pyrene	ND		0.0333	1	12/25/2018 00:48	WG1215208
Isophorone	ND		0.333	1	12/25/2018 00:48	WG1215208
Naphthalene	ND		0.0333	1	12/25/2018 00:48	WG1215208
Nitrobenzene	ND		0.333	1	12/25/2018 00:48	WG1215208
n-Nitrosodimethylamine	ND		0.333	1	12/25/2018 00:48	WG1215208
n-Nitrosodiphenylamine	ND		0.333	1	12/25/2018 00:48	WG1215208
n-Nitrosodi-n-propylamine	ND		0.333	1	12/25/2018 00:48	WG1215208
Phenanthrene	ND		0.0333	1	12/25/2018 00:48	WG1215208
Benzylbutyl phthalate	ND		0.333	1	12/25/2018 00:48	WG1215208
Bis(2-ethylhexyl)phthalate	ND		0.333	1	12/25/2018 00:48	WG1215208
Di-n-butyl phthalate	ND		0.333	1	12/25/2018 00:48	WG1215208
Diethyl phthalate	ND		0.333	1	12/25/2018 00:48	WG1215208
Dimethyl phthalate	ND		0.333	1	12/25/2018 00:48	WG1215208
Di-n-octyl phthalate	ND		0.333	1	12/25/2018 00:48	WG1215208
Pyrene	ND		0.0333	1	12/25/2018 00:48	WG1215208
1,2,4-Trichlorobenzene	ND		0.333	1	12/25/2018 00:48	WG1215208
4-Chloro-3-methylphenol	ND		0.333	1	12/25/2018 00:48	WG1215208
2-Chlorophenol	ND		0.333	1	12/25/2018 00:48	WG1215208
2,4-Dichlorophenol	ND		0.333	1	12/25/2018 00:48	WG1215208
2,4-Dimethylphenol	ND		0.333	1	12/25/2018 00:48	WG1215208
4,6-Dinitro-2-methylphenol	ND		0.333	1	12/25/2018 00:48	WG1215208
2,4-Dinitrophenol	ND		0.333	1	12/25/2018 00:48	WG1215208
2-Nitrophenol	ND		0.333	1	12/25/2018 00:48	WG1215208
4-Nitrophenol	ND		0.333	1	12/25/2018 00:48	WG1215208
Pentachlorophenol	ND		0.333	1	12/25/2018 00:48	WG1215208
Phenol	ND		0.333	1	12/25/2018 00:48	WG1215208
2,4,6-Trichlorophenol	ND		0.333	1	12/25/2018 00:48	WG1215208
(S) 2-Fluorophenol	73.8		12.0-120		12/25/2018 00:48	WG1215208
(S) Phenol-d5	64.6		10.0-120		12/25/2018 00:48	WG1215208
(S) Nitrobenzene-d5	65.9		10.0-122		12/25/2018 00:48	WG1215208
(S) 2-Fluorobiphenyl	67.4		15.0-120		12/25/2018 00:48	WG1215208
(S) 2,4,6-Tribromophenol	65.9		10.0-127		12/25/2018 00:48	WG1215208
(S) p-Terphenyl-d14	66.8		10.0-120		12/25/2018 00:48	WG1215208





Mercury by Method 7470A

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Mercury	ND		0.000200	1	12/20/2018 19:28	WG1213623

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Metals (ICP) by Method 6010B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Arsenic	ND		0.0100	1	12/22/2018 09:53	WG1213747
Barium	ND		0.00500	1	12/22/2018 09:53	WG1213747
Cadmium	ND		0.00200	1	12/22/2018 09:53	WG1213747
Chromium	ND		0.0100	1	12/22/2018 09:53	WG1213747
Lead	ND		0.00500	1	12/22/2018 09:53	WG1213747
Selenium	ND		0.0100	1	12/22/2018 09:53	WG1213747
Silver	ND		0.00500	1	12/22/2018 09:53	WG1213747

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
TPH (GC/FID) Low Fraction	ND		0.100	1	12/20/2018 09:32	WG1213653
(S) a,a,a-Trifluorotoluene(FID)	95.9		78.0-120		12/20/2018 09:32	WG1213653

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

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Acetone	ND		0.0500	1	12/21/2018 05:40	WG1214328
Acrolein	ND	J4	0.0500	1	12/21/2018 05:40	WG1214328
Acrylonitrile	ND		0.0100	1	12/21/2018 05:40	WG1214328
Benzene	ND		0.00100	1	12/21/2018 05:40	WG1214328
Bromobenzene	ND		0.00100	1	12/21/2018 05:40	WG1214328
Bromodichloromethane	ND		0.00100	1	12/21/2018 05:40	WG1214328
Bromoform	ND		0.00100	1	12/21/2018 05:40	WG1214328
Bromomethane	ND		0.00500	1	12/21/2018 05:40	WG1214328
n-Butylbenzene	ND		0.00100	1	12/21/2018 05:40	WG1214328
sec-Butylbenzene	ND		0.00100	1	12/21/2018 05:40	WG1214328
tert-Butylbenzene	ND		0.00100	1	12/21/2018 05:40	WG1214328
Carbon tetrachloride	ND		0.00100	1	12/21/2018 05:40	WG1214328
Chlorobenzene	ND		0.00100	1	12/21/2018 05:40	WG1214328
Chlorodibromomethane	ND		0.00100	1	12/21/2018 05:40	WG1214328
Chloroethane	ND		0.00500	1	12/21/2018 05:40	WG1214328
Chloroform	ND		0.00500	1	12/21/2018 05:40	WG1214328
Chloromethane	ND		0.00250	1	12/21/2018 05:40	WG1214328
2-Chlorotoluene	ND		0.00100	1	12/21/2018 05:40	WG1214328
4-Chlorotoluene	ND		0.00100	1	12/21/2018 05:40	WG1214328
1,2-Dibromo-3-Chloropropane	ND		0.00500	1	12/21/2018 05:40	WG1214328
1,2-Dibromoethane	ND		0.00100	1	12/21/2018 05:40	WG1214328
Dibromomethane	ND		0.00100	1	12/21/2018 05:40	WG1214328
1,2-Dichlorobenzene	ND		0.00100	1	12/21/2018 05:40	WG1214328
1,3-Dichlorobenzene	ND		0.00100	1	12/21/2018 05:40	WG1214328
1,4-Dichlorobenzene	ND		0.00100	1	12/21/2018 05:40	WG1214328
Dichlorodifluoromethane	ND		0.00500	1	12/21/2018 05:40	WG1214328
1,1-Dichloroethane	ND		0.00100	1	12/21/2018 05:40	WG1214328
1,2-Dichloroethane	ND		0.00100	1	12/21/2018 05:40	WG1214328
1,1-Dichloroethene	ND		0.00100	1	12/21/2018 05:40	WG1214328
cis-1,2-Dichloroethene	ND		0.00100	1	12/21/2018 05:40	WG1214328
trans-1,2-Dichloroethene	ND		0.00100	1	12/21/2018 05:40	WG1214328
1,2-Dichloropropane	ND		0.00100	1	12/21/2018 05:40	WG1214328



Collected date/time: 12/17/18 11:30

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

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
1,1-Dichloropropene	ND		0.00100	1	12/21/2018 05:40	WG1214328
1,3-Dichloropropane	ND		0.00100	1	12/21/2018 05:40	WG1214328
cis-1,3-Dichloropropene	ND		0.00100	1	12/21/2018 05:40	WG1214328
trans-1,3-Dichloropropene	ND		0.00100	1	12/21/2018 05:40	WG1214328
2,2-Dichloropropane	ND		0.00100	1	12/21/2018 05:40	WG1214328
Di-isopropyl ether	ND		0.00100	1	12/21/2018 05:40	WG1214328
Ethylbenzene	ND		0.00100	1	12/21/2018 05:40	WG1214328
Hexachloro-1,3-butadiene	ND		0.00100	1	12/21/2018 05:40	WG1214328
Isopropylbenzene	ND		0.00100	1	12/21/2018 05:40	WG1214328
p-Isopropyltoluene	ND		0.00100	1	12/21/2018 05:40	WG1214328
2-Butanone (MEK)	ND		0.0100	1	12/21/2018 05:40	WG1214328
Methylene Chloride	ND		0.00500	1	12/21/2018 05:40	WG1214328
4-Methyl-2-pentanone (MIBK)	ND		0.0100	1	12/21/2018 05:40	WG1214328
Methyl tert-butyl ether	ND		0.00100	1	12/21/2018 05:40	WG1214328
Naphthalene	ND		0.00500	1	12/21/2018 05:40	WG1214328
n-Propylbenzene	ND		0.00100	1	12/21/2018 05:40	WG1214328
Styrene	ND		0.00100	1	12/21/2018 05:40	WG1214328
1,1,1,2-Tetrachloroethane	ND		0.00100	1	12/21/2018 05:40	WG1214328
1,1,2,2-Tetrachloroethane	ND		0.00100	1	12/21/2018 05:40	WG1214328
1,1,2-Trichlorotrifluoroethane	ND		0.00100	1	12/21/2018 05:40	WG1214328
Tetrachloroethene	ND		0.00100	1	12/21/2018 05:40	WG1214328
Toluene	ND		0.00100	1	12/21/2018 05:40	WG1214328
1,2,3-Trichlorobenzene	ND		0.00100	1	12/21/2018 05:40	WG1214328
1,2,4-Trichlorobenzene	ND		0.00100	1	12/21/2018 05:40	WG1214328
1,1,1-Trichloroethane	ND		0.00100	1	12/21/2018 05:40	WG1214328
1,1,2-Trichloroethane	ND		0.00100	1	12/21/2018 05:40	WG1214328
Trichloroethene	ND		0.00100	1	12/21/2018 05:40	WG1214328
Trichlorofluoromethane	ND		0.00500	1	12/21/2018 05:40	WG1214328
1,2,3-Trichloropropane	ND		0.00250	1	12/21/2018 05:40	WG1214328
1,2,4-Trimethylbenzene	ND		0.00100	1	12/21/2018 05:40	WG1214328
1,2,3-Trimethylbenzene	ND		0.00100	1	12/21/2018 05:40	WG1214328
1,3,5-Trimethylbenzene	ND		0.00100	1	12/21/2018 05:40	WG1214328
Vinyl chloride	ND		0.00100	1	12/21/2018 05:40	WG1214328
Xylenes, Total	ND		0.00300	1	12/21/2018 05:40	WG1214328
(S) Toluene-d8	108		80.0-120		12/21/2018 05:40	WG1214328
(S) Dibromofluoromethane	85.2		75.0-120		12/21/2018 05:40	WG1214328
(S) 4-Bromofluorobenzene	103		77.0-126		12/21/2018 05:40	WG1214328

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

Semi-Volatile Organic Compounds (GC) by Method 3511/8015

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	ND		0.100	1	12/22/2018 17:43	WG1213642
(S) o-Terphenyl	88.4		31.0-160		12/22/2018 17:43	WG1213642

Semi Volatile Organic Compounds (GC/MS) by Method 8270C

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
Acenaphthene	ND		0.00100	1	12/23/2018 16:46	WG1214165
Acenaphthylene	ND		0.00100	1	12/23/2018 16:46	WG1214165
Anthracene	ND		0.00100	1	12/23/2018 16:46	WG1214165
Benzo(a)anthracene	ND		0.00100	1	12/23/2018 16:46	WG1214165
Benzo(b)fluoranthene	ND		0.00100	1	12/23/2018 16:46	WG1214165
Benzo(k)fluoranthene	ND		0.00100	1	12/23/2018 16:46	WG1214165
Benzo(g,h,i)perylene	ND		0.00100	1	12/23/2018 16:46	WG1214165
Benzo(a)pyrene	ND		0.00100	1	12/23/2018 16:46	WG1214165

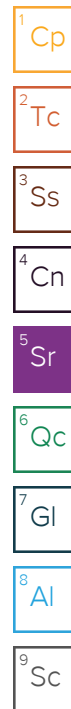


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Semi Volatile Organic Compounds (GC/MS) by Method 8270C

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
Bis(2-chlorethoxy)methane	ND		0.0100	1	12/23/2018 16:46	WG1214165
Bis(2-chloroethyl)ether	ND		0.0100	1	12/23/2018 16:46	WG1214165
Bis(2-chloroisopropyl)ether	ND		0.0100	1	12/23/2018 16:46	WG1214165
4-Bromophenyl-phenylether	ND		0.0100	1	12/23/2018 16:46	WG1214165
2-Chloronaphthalene	ND		0.00100	1	12/23/2018 16:46	WG1214165
4-Chlorophenyl-phenylether	ND		0.0100	1	12/23/2018 16:46	WG1214165
Chrysene	ND		0.00100	1	12/23/2018 16:46	WG1214165
Dibenz(a,h)anthracene	ND		0.00100	1	12/23/2018 16:46	WG1214165
3,3-Dichlorobenzidine	ND		0.0100	1	12/23/2018 16:46	WG1214165
2,4-Dinitrotoluene	ND		0.0100	1	12/23/2018 16:46	WG1214165
2,6-Dinitrotoluene	ND		0.0100	1	12/23/2018 16:46	WG1214165
Fluoranthene	ND		0.00100	1	12/23/2018 16:46	WG1214165
Fluorene	ND		0.00100	1	12/23/2018 16:46	WG1214165
Hexachlorobenzene	ND		0.00100	1	12/23/2018 16:46	WG1214165
Hexachloro-1,3-butadiene	ND		0.0100	1	12/23/2018 16:46	WG1214165
Hexachlorocyclopentadiene	ND		0.0100	1	12/23/2018 16:46	WG1214165
Hexachloroethane	ND		0.0100	1	12/23/2018 16:46	WG1214165
Indeno(1,2,3-cd)pyrene	ND		0.00100	1	12/23/2018 16:46	WG1214165
Isophorone	ND		0.0100	1	12/23/2018 16:46	WG1214165
Naphthalene	ND		0.00100	1	12/23/2018 16:46	WG1214165
Nitrobenzene	ND		0.0100	1	12/23/2018 16:46	WG1214165
n-Nitrosodimethylamine	ND		0.0100	1	12/23/2018 16:46	WG1214165
n-Nitrosodiphenylamine	ND		0.0100	1	12/23/2018 16:46	WG1214165
n-Nitrosodi-n-propylamine	ND		0.0100	1	12/23/2018 16:46	WG1214165
Phenanthrene	ND		0.00100	1	12/23/2018 16:46	WG1214165
Benzylbutyl phthalate	ND		0.00300	1	12/23/2018 16:46	WG1214165
Bis(2-ethylhexyl)phthalate	ND		0.00300	1	12/23/2018 16:46	WG1214165
Di-n-butyl phthalate	ND		0.00300	1	12/23/2018 16:46	WG1214165
Diethyl phthalate	ND		0.00300	1	12/23/2018 16:46	WG1214165
Dimethyl phthalate	ND		0.00300	1	12/23/2018 16:46	WG1214165
Di-n-octyl phthalate	ND		0.00300	1	12/23/2018 16:46	WG1214165
Pyrene	ND		0.00100	1	12/23/2018 16:46	WG1214165
1,2,4-Trichlorobenzene	ND		0.0100	1	12/23/2018 16:46	WG1214165
4-Chloro-3-methylphenol	ND		0.0100	1	12/23/2018 16:46	WG1214165
2-Chlorophenol	ND		0.0100	1	12/23/2018 16:46	WG1214165
2,4-Dichlorophenol	ND		0.0100	1	12/23/2018 16:46	WG1214165
2,4-Dimethylphenol	ND		0.0100	1	12/23/2018 16:46	WG1214165
4,6-Dinitro-2-methylphenol	ND		0.0100	1	12/23/2018 16:46	WG1214165
2,4-Dinitrophenol	ND		0.0100	1	12/23/2018 16:46	WG1214165
2-Nitrophenol	ND		0.0100	1	12/23/2018 16:46	WG1214165
4-Nitrophenol	ND		0.0100	1	12/23/2018 16:46	WG1214165
Pentachlorophenol	ND		0.0100	1	12/23/2018 16:46	WG1214165
Phenol	ND		0.0100	1	12/23/2018 16:46	WG1214165
2,4,6-Trichlorophenol	ND		0.0100	1	12/23/2018 16:46	WG1214165
(S) 2-Fluorophenol	19.0		10.0-120		12/23/2018 16:46	WG1214165
(S) Phenol-d5	11.9		10.0-120		12/23/2018 16:46	WG1214165
(S) Nitrobenzene-d5	37.1		10.0-127		12/23/2018 16:46	WG1214165
(S) 2-Fluorobiphenyl	34.1		10.0-130		12/23/2018 16:46	WG1214165
(S) 2,4,6-Tribromophenol	23.9		10.0-155		12/23/2018 16:46	WG1214165
(S) p-Terphenyl-d14	39.3		10.0-128		12/23/2018 16:46	WG1214165





Collected date/time: 12/17/18 00:00

L1054617

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

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
Acetone	ND		0.0500	1	12/21/2018 05:59	WG1214328
Acrolein	ND	J4	0.0500	1	12/21/2018 05:59	WG1214328
Acrylonitrile	ND		0.0100	1	12/21/2018 05:59	WG1214328
Benzene	ND		0.00100	1	12/21/2018 05:59	WG1214328
Bromobenzene	ND		0.00100	1	12/21/2018 05:59	WG1214328
Bromodichloromethane	ND		0.00100	1	12/21/2018 05:59	WG1214328
Bromoform	ND		0.00100	1	12/21/2018 05:59	WG1214328
Bromomethane	ND		0.00500	1	12/21/2018 05:59	WG1214328
n-Butylbenzene	ND		0.00100	1	12/21/2018 05:59	WG1214328
sec-Butylbenzene	ND		0.00100	1	12/21/2018 05:59	WG1214328
tert-Butylbenzene	ND		0.00100	1	12/21/2018 05:59	WG1214328
Carbon tetrachloride	ND		0.00100	1	12/21/2018 05:59	WG1214328
Chlorobenzene	ND		0.00100	1	12/21/2018 05:59	WG1214328
Chlorodibromomethane	ND		0.00100	1	12/21/2018 05:59	WG1214328
Chloroethane	ND		0.00500	1	12/21/2018 05:59	WG1214328
Chloroform	ND		0.00500	1	12/21/2018 05:59	WG1214328
Chloromethane	ND		0.00250	1	12/21/2018 05:59	WG1214328
2-Chlorotoluene	ND		0.00100	1	12/21/2018 05:59	WG1214328
4-Chlorotoluene	ND		0.00100	1	12/21/2018 05:59	WG1214328
1,2-Dibromo-3-Chloropropane	ND		0.00500	1	12/21/2018 05:59	WG1214328
1,2-Dibromoethane	ND		0.00100	1	12/21/2018 05:59	WG1214328
Dibromomethane	ND		0.00100	1	12/21/2018 05:59	WG1214328
1,2-Dichlorobenzene	ND		0.00100	1	12/21/2018 05:59	WG1214328
1,3-Dichlorobenzene	ND		0.00100	1	12/21/2018 05:59	WG1214328
1,4-Dichlorobenzene	ND		0.00100	1	12/21/2018 05:59	WG1214328
Dichlorodifluoromethane	ND		0.00500	1	12/21/2018 05:59	WG1214328
1,1-Dichloroethane	ND		0.00100	1	12/21/2018 05:59	WG1214328
1,2-Dichloroethane	ND		0.00100	1	12/21/2018 05:59	WG1214328
1,1-Dichloroethene	ND		0.00100	1	12/21/2018 05:59	WG1214328
cis-1,2-Dichloroethene	ND		0.00100	1	12/21/2018 05:59	WG1214328
trans-1,2-Dichloroethene	ND		0.00100	1	12/21/2018 05:59	WG1214328
1,2-Dichloropropane	ND		0.00100	1	12/21/2018 05:59	WG1214328
1,1-Dichloropropene	ND		0.00100	1	12/21/2018 05:59	WG1214328
1,3-Dichloropropane	ND		0.00100	1	12/21/2018 05:59	WG1214328
cis-1,3-Dichloropropene	ND		0.00100	1	12/21/2018 05:59	WG1214328
trans-1,3-Dichloropropene	ND		0.00100	1	12/21/2018 05:59	WG1214328
2,2-Dichloropropane	ND		0.00100	1	12/21/2018 05:59	WG1214328
Di-isopropyl ether	ND		0.00100	1	12/21/2018 05:59	WG1214328
Ethylbenzene	ND		0.00100	1	12/21/2018 05:59	WG1214328
Hexachloro-1,3-butadiene	ND		0.00100	1	12/21/2018 05:59	WG1214328
Isopropylbenzene	ND		0.00100	1	12/21/2018 05:59	WG1214328
p-Isopropyltoluene	ND		0.00100	1	12/21/2018 05:59	WG1214328
2-Butanone (MEK)	ND		0.0100	1	12/21/2018 05:59	WG1214328
Methylene Chloride	ND		0.00500	1	12/21/2018 05:59	WG1214328
4-Methyl-2-pentanone (MIBK)	ND		0.0100	1	12/21/2018 05:59	WG1214328
Methyl tert-butyl ether	ND		0.00100	1	12/21/2018 05:59	WG1214328
Naphthalene	ND		0.00500	1	12/21/2018 05:59	WG1214328
n-Propylbenzene	ND		0.00100	1	12/21/2018 05:59	WG1214328
Styrene	ND		0.00100	1	12/21/2018 05:59	WG1214328
1,1,1,2-Tetrachloroethane	ND		0.00100	1	12/21/2018 05:59	WG1214328
1,1,2,2-Tetrachloroethane	ND		0.00100	1	12/21/2018 05:59	WG1214328
1,1,2-Trichlorotrifluoroethane	ND		0.00100	1	12/21/2018 05:59	WG1214328
Tetrachloroethene	ND		0.00100	1	12/21/2018 05:59	WG1214328
Toluene	ND		0.00100	1	12/21/2018 05:59	WG1214328
1,2,3-Trichlorobenzene	ND		0.00100	1	12/21/2018 05:59	WG1214328
1,2,4-Trichlorobenzene	ND		0.00100	1	12/21/2018 05:59	WG1214328

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 12/17/18 00:00

L1054617

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

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
1,1,1-Trichloroethane	ND		0.00100	1	12/21/2018 05:59	WG1214328
1,1,2-Trichloroethane	ND		0.00100	1	12/21/2018 05:59	WG1214328
Trichloroethene	ND		0.00100	1	12/21/2018 05:59	WG1214328
Trichlorofluoromethane	ND		0.00500	1	12/21/2018 05:59	WG1214328
1,2,3-Trichloropropane	ND		0.00250	1	12/21/2018 05:59	WG1214328
1,2,4-Trimethylbenzene	ND		0.00100	1	12/21/2018 05:59	WG1214328
1,2,3-Trimethylbenzene	ND		0.00100	1	12/21/2018 05:59	WG1214328
1,3,5-Trimethylbenzene	ND		0.00100	1	12/21/2018 05:59	WG1214328
Vinyl chloride	ND		0.00100	1	12/21/2018 05:59	WG1214328
Xylenes, Total	ND		0.00300	1	12/21/2018 05:59	WG1214328
(S) Toluene-d8	107		80.0-120		12/21/2018 05:59	WG1214328
(S) Dibromofluoromethane	86.1		75.0-120		12/21/2018 05:59	WG1214328
(S) 4-Bromofluorobenzene	104		77.0-126		12/21/2018 05:59	WG1214328

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ Gl⁸ Al⁹ Sc

Total Solids by Method 2540 G-2011

[L1054617-01](#)

Method Blank (MB)

(MB) R3370332-1 12/20/18 15:18

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

L1054802-18 Original Sample (OS) • Duplicate (DUP)

(OS) L1054802-18 12/20/18 15:18 • (DUP) R3370332-3 12/20/18 15:18

	Original Result	DUP Result	Dilution	DUP RPD	<u>DUP Qualifier</u>	DUP RPD Limits
Analyte	%	%		%		%
Total Solids	89.3	89.2	1	0.0376		10

Laboratory Control Sample (LCS)

(LCS) R3370332-2 12/20/18 15:18

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

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Method Blank (MB)

(MB) R3371095-1 12/21/18 09:35

	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

L1054617-03 Original Sample (OS) • Duplicate (DUP)

(OS) L1054617-03 12/21/18 09:35 • (DUP) R3371095-3 12/21/18 09:35

	Original Result	DUP Result	Dilution	DUP RPD	<u>DUP Qualifier</u>	DUP RPD Limits
Analyte	%	%		%		%
Total Solids	75.7	73.5	1	3.07		10

Laboratory Control Sample (LCS)

(LCS) R3371095-2 12/21/18 09:35

	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	<u>LCS Qualifier</u>
Analyte	%	%	%	%	
Total Solids	50.0	50.0	99.9	85.0-115	

Total Solids by Method 2540 G-2011

[L1054617-13,14,15,16,17,18,20,21,22,23](#)

Method Blank (MB)

(MB) R3371094-1 12/21/18 09:19

	MB Result	MB Qualifier	MB MDL	MB RDL
Analyte	%		%	%
Total Solids	0.00100			

L1054617-14 Original Sample (OS) • Duplicate (DUP)

(OS) L1054617-14 12/21/18 09:19 • (DUP) R3371094-3 12/21/18 09:19

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	%	%		%		%
Total Solids	78.3	77.2	1	1.49		10

Laboratory Control Sample (LCS)

(LCS) R3371094-2 12/21/18 09:19

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

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Method Blank (MB)

(MB) R3371097-1 12/21/18 10:05

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

L1054617-24 Original Sample (OS) • Duplicate (DUP)

(OS) L1054617-24 12/21/18 10:05 • (DUP) R3371097-3 12/21/18 10:05

	Original Result	DUP Result	Dilution	DUP RPD	<u>DUP Qualifier</u>	DUP RPD Limits
Analyte	%	%		%		%
Total Solids	80.9	79.4	1	1.90		10

Laboratory Control Sample (LCS)

(LCS) R3371097-2 12/21/18 10:05

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

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

[L1054617-36,37,38](#)

Method Blank (MB)

(MB) R3371101-1 12/21/18 10:28

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

L1054617-37 Original Sample (OS) • Duplicate (DUP)

(OS) L1054617-37 12/21/18 10:28 • (DUP) R3371101-3 12/21/18 10:28

	Original Result	DUP Result	Dilution	DUP RPD	<u>DUP Qualifier</u>	DUP RPD Limits
Analyte	%	%		%		%
Total Solids	75.3	75.0	1	0.293		10

Laboratory Control Sample (LCS)

(LCS) R3371101-2 12/21/18 10:28

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

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc



Method Blank (MB)

(MB) R3370227-1 12/20/18 18:56

	MB Result	MB Qualifier	MB MDL	MB RDL
Analyte	mg/l		mg/l	mg/l
Mercury	U		0.0000490	0.000200

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

(LCS) R3370227-2 12/20/18 18:59 • (LCSD) R3370227-3 12/20/18 19:01

	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
Analyte	mg/l	mg/l	mg/l	%	%	%			%	%
Mercury	0.00300	0.00300	0.00303	100	101	80.0-120			1.01	20

L1054625-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1054625-01 12/20/18 19:03 • (MS) R3370227-4 12/20/18 19:06 • (MSD) R3370227-5 12/20/18 19:08

	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
Analyte	mg/l	mg/l	mg/l	mg/l	%	%		%			%	%
Mercury	0.00300	0.000206	0.00307	0.00316	95.3	98.4	1	75.0-125			2.94	20

1

Cp

2

Tc

3

Ss

4

Cn

5

Sr

6

Qc

7

Gl

8

Al

9

Sc



Method Blank (MB)

(MB) R3370419-6 12/21/18 09:55

	MB Result	MB Qualifier	MB MDL	MB RDL
Analyte	mg/kg		mg/kg	mg/kg
Mercury	0.00587	⬇	0.00280	0.0200

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

(LCS) R3370419-7 12/21/18 09:57 • (LCSD) R3370419-8 12/21/18 10:00

	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
Analyte	mg/kg	mg/kg	mg/kg	%	%	%			%	%
Mercury	0.300	0.303	0.310	101	103	80.0-120			2.14	20

L1054617-08 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1054617-08 12/21/18 10:02 • (MS) R3370419-9 12/21/18 10:05 • (MSD) R3370419-10 12/21/18 10:07

	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	%	%		%			%	%
Mercury	0.300	ND	0.315	0.324	98.6	102	1	75.0-125			2.87	20

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Method Blank (MB)

(MB) R3370422-1 12/21/18 12:55

	MB Result	MB Qualifier	MB MDL	MB RDL
Analyte	mg/kg		mg/kg	mg/kg
Mercury	U		0.00280	0.0200

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

(LCS) R3370422-2 12/21/18 12:57 • (LCSD) R3370422-3 12/21/18 13:00

	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
Analyte	mg/kg	mg/kg	mg/kg	%	%	%			%	%
Mercury	0.300	0.283	0.258	94.5	86.0	80.0-120			9.37	20

L1054617-21 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1054617-21 12/21/18 13:02 • (MS) R3370422-4 12/21/18 13:05 • (MSD) R3370422-5 12/21/18 13:15

	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	%	%		%			%	%
Mercury	0.300	ND	0.356	0.324	113	103	1	75.0-125			9.26	20

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc



Method Blank (MB)

(MB) R3370770-1 12/22/18 09:20

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Arsenic	U		0.00650	0.0100
Barium	U		0.00170	0.00500
Cadmium	U		0.000700	0.00200
Chromium	U		0.00140	0.0100
Lead	U		0.00190	0.00500
Selenium	U		0.00740	0.0100
Silver	U		0.00280	0.00500

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc

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

(LCS) R3370770-2 12/22/18 09:23 • (LCSD) R3370770-3 12/22/18 09:25

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 %
Arsenic	1.00	0.970	0.989	97.0	98.9	80.0-120			1.90	20
Barium	1.00	0.983	1.00	98.3	100	80.0-120			1.86	20
Cadmium	1.00	0.966	0.986	96.6	98.6	80.0-120			2.09	20
Chromium	1.00	0.959	1.00	95.9	100	80.0-120			4.33	20
Lead	1.00	0.987	1.01	98.7	101	80.0-120			1.82	20
Selenium	1.00	0.975	0.988	97.5	98.8	80.0-120			1.32	20
Silver	0.200	0.187	0.193	93.3	96.4	80.0-120			3.32	20

L1054752-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1054752-01 12/22/18 09:28 • (MS) R3370770-5 12/22/18 09:33 • (MSD) R3370770-6 12/22/18 09:36

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Arsenic	1.00	ND	1.03	1.02	103	102	1	75.0-125			0.531	20
Barium	1.00	0.0263	1.02	1.02	98.9	99.0	1	75.0-125			0.103	20
Cadmium	1.00	ND	1.01	1.01	101	101	1	75.0-125			0.0201	20
Chromium	1.00	ND	0.973	0.966	97.3	96.6	1	75.0-125			0.710	20
Lead	1.00	ND	1.01	1.01	101	101	1	75.0-125			0.114	20
Selenium	1.00	ND	1.04	1.04	104	104	1	75.0-125			0.0720	20
Silver	0.200	ND	0.196	0.194	98.1	97.1	1	75.0-125			1.00	20



Method Blank (MB)

(MB) R3370775-1 12/22/18 15:00

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Arsenic	U		0.460	2.00
Barium	U		0.170	0.500
Cadmium	U		0.0700	0.500
Chromium	U		0.140	1.00
Lead	U		0.190	0.500
Selenium	U		0.620	2.00
Silver	U		0.120	1.00

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc

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

(LCS) R3370775-2 12/22/18 15:02 • (LCSD) R3370775-3 12/22/18 15:05

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 %
Arsenic	100	99.8	99.6	99.8	99.6	80.0-120			0.233	20
Barium	100	103	103	103	103	80.0-120			0.713	20
Cadmium	100	99.0	99.7	99.0	99.7	80.0-120			0.656	20
Chromium	100	101	102	101	102	80.0-120			0.747	20
Lead	100	100	101	100	101	80.0-120			0.655	20
Selenium	100	99.4	99.5	99.4	99.5	80.0-120			0.137	20
Silver	20.0	19.3	19.3	96.4	96.4	80.0-120			0.00389	20

L1054617-03 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1054617-03 12/22/18 15:08 • (MS) R3370775-6 12/22/18 15:16 • (MSD) R3370775-7 12/22/18 15:18

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 %
Arsenic	100	3.29	104	97.1	100	93.8	1	75.0-125			6.64	20
Barium	100	94.4	208	206	114	112	1	75.0-125			0.713	20
Cadmium	100	ND	102	94.1	101	93.7	1	75.0-125			7.90	20
Chromium	100	10.5	112	104	101	93.4	1	75.0-125			7.32	20
Lead	100	9.17	114	107	105	97.6	1	75.0-125			6.81	20
Selenium	100	ND	99.9	92.8	99.9	92.8	1	75.0-125			7.32	20
Silver	20.0	ND	19.7	18.0	98.4	89.9	1	75.0-125			8.95	20



Method Blank (MB)

(MB) R3370347-1 12/21/18 08:29

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Arsenic	U		0.460	2.00
Barium	U		0.170	0.500
Cadmium	U		0.0700	0.500
Chromium	U		0.140	1.00
Lead	U		0.190	0.500
Selenium	U		0.620	2.00
Silver	U		0.120	1.00

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc

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

(LCS) R3370347-2 12/21/18 08:31 • (LCSD) R3370347-3 12/21/18 08:34

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 %
Arsenic	100	95.5	94.6	95.5	94.6	80.0-120			0.976	20
Barium	100	101	101	101	101	80.0-120			0.789	20
Cadmium	100	95.9	95.1	95.9	95.1	80.0-120			0.840	20
Chromium	100	99.0	100	99.0	100	80.0-120			0.975	20
Lead	100	95.9	95.0	95.9	95.0	80.0-120			0.884	20
Selenium	100	95.3	94.7	95.3	94.7	80.0-120			0.671	20
Silver	20.0	18.9	19.1	94.4	95.4	80.0-120			1.04	20

L1054617-22 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1054617-22 12/21/18 08:36 • (MS) R3370347-6 12/21/18 08:44 • (MSD) R3370347-7 12/21/18 08:47

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 %
Arsenic	100	3.73	101	96.1	97.1	92.4	1	75.0-125			4.76	20
Barium	100	102	214	218	113	116	1	75.0-125			1.53	20
Cadmium	100	ND	98.8	93.7	98.7	93.6	1	75.0-125			5.30	20
Chromium	100	12.4	112	107	99.3	94.7	1	75.0-125			4.14	20
Lead	100	16.7	117	107	101	89.9	1	75.0-125			9.48	20
Selenium	100	ND	97.7	92.8	97.7	92.8	1	75.0-125			5.15	20
Silver	20.0	ND	19.7	18.8	98.7	93.8	1	75.0-125			5.10	20



Method Blank (MB)

(MB) R3370051-2 12/20/18 03:49

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
TPH (GC/FID) Low Fraction	0.0427	⬇	0.0314	0.100
(S) a,a,a-Trifluorotoluene(FID)	94.9			78.0-120

1
Cp

2
Tc

3
Ss

4
Cn

5
Sr

6
Qc

7
Gl

8
Al

9
Sc

Laboratory Control Sample (LCS)

(LCS) R3370051-1 12/20/18 03:04

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
TPH (GC/FID) Low Fraction	5.50	5.39	98.0	72.0-127	
(S) a,a,a-Trifluorotoluene(FID)			100	78.0-120	



Method Blank (MB)

(MB) R3371699-3 12/27/18 12:07

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
TPH (GC/FID) Low Fraction	U		0.0217	0.100
(S) a,a,a-Trifluorotoluene(FID)	94.8			77.0-120

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

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

(LCS) R3371699-1 12/27/18 10:55 • (LCSD) R3371699-2 12/27/18 11:19

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 %
TPH (GC/FID) Low Fraction	5.50	5.43	5.54	98.7	101	72.0-127			2.06	20
(S) a,a,a-Trifluorotoluene(FID)				106	106	77.0-120				

L1054617-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1054617-02 12/27/18 14:28 • (MS) R3371699-4 12/27/18 17:17 • (MSD) R3371699-5 12/27/18 17:41

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 %
TPH (GC/FID) Low Fraction	5.50	ND	61.9	59.6	45.0	43.4	25	10.0-151			3.67	28
(S) a,a,a-Trifluorotoluene(FID)					104	104		77.0-120				

Sample Narrative:

OS: Stir bars were received overweight and unusable.



Method Blank (MB)

(MB) R3370720-5 12/22/18 05:57

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
TPH (GC/FID) Low Fraction	U		0.0217	0.100
(S) a,a,a-Trifluorotoluene(FID)	104			77.0-120

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

(LCS) R3370720-3 12/22/18 04:50 • (LCSD) R3370720-4 12/22/18 05:12

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 %
TPH (GC/FID) Low Fraction	5.50	5.76	5.68	105	103	72.0-127			1.46	20
(S) a,a,a-Trifluorotoluene(FID)				98.2	99.2	77.0-120				

1
Cp

2
Tc

3
Ss

4
Cn

5
Sr

6
Qc

7
Gl

8
Al

9
Sc



Method Blank (MB)

(MB) R3370991-5 12/23/18 14:11

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
TPH (GC/FID) Low Fraction	U		0.0217	0.100
(S) a,a,a-Trifluorotoluene(FID)	94.5			77.0-120

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

(LCS) R3370991-3 12/23/18 12:57 • (LCSD) R3370991-4 12/23/18 13:22

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 %
TPH (GC/FID) Low Fraction	5.50	5.37	5.34	97.6	97.1	72.0-127			0.544	20
(S) a,a,a-Trifluorotoluene(FID)				105	105	77.0-120				

1
Cp

2
Tc

3
Ss

4
Cn

5
Sr

6
Qc

7
Gl

8
Al

9
Sc



Method Blank (MB)

(MB) R3371704-5 12/27/18 11:59

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
TPH (GC/FID) Low Fraction	U		0.0217	0.100
(S) a,a,a-Trifluorotoluene(FID)	105			77.0-120

1
Cp

2
Tc

3
Ss

4
Cn

5
Sr

6
Qc

7
Gl

8
Al

9
Sc

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

(LCS) R3371704-3 12/27/18 10:53 • (LCSD) R3371704-4 12/27/18 11:15

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 %
TPH (GC/FID) Low Fraction	5.50	5.61	5.56	102	101	72.0-127			0.977	20
(S) a,a,a-Trifluorotoluene(FID)				105	105	77.0-120				



Method Blank (MB)

(MB) R3370405-3 12/21/18 04:03

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	0.000259	U	0.000256	0.00100

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc



Method Blank (MB)

(MB) R3370405-3 12/21/18 04:03

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	108			80.0-120
(S) Dibromofluoromethane	85.1			75.0-120
(S) 4-Bromofluorobenzene	101			77.0-126

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

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

(LCS) R3370405-1 12/21/18 03:05 • (LCSD) R3370405-2 12/21/18 03:24

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	0.125	0.102	0.101	81.8	80.9	19.0-160			1.09	27
Acrolein	0.125	0.200	0.206	160	165	10.0-160		J4	2.90	26
Acrylonitrile	0.125	0.114	0.112	91.1	89.6	55.0-149			1.67	20
Benzene	0.0250	0.0211	0.0206	84.4	82.3	70.0-123			2.53	20



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

(LCS) R3370405-1 12/21/18 03:05 • (LCSD) R3370405-2 12/21/18 03:24

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	0.0250	0.0247	0.0237	99.0	94.7	73.0-121			4.37	20
Bromodichloromethane	0.0250	0.0236	0.0227	94.4	90.9	75.0-120			3.71	20
Bromoform	0.0250	0.0229	0.0221	91.5	88.5	68.0-132			3.31	20
Bromomethane	0.0250	0.0225	0.0216	90.2	86.4	10.0-160			4.36	25
n-Butylbenzene	0.0250	0.0290	0.0277	116	111	73.0-125			4.65	20
sec-Butylbenzene	0.0250	0.0265	0.0256	106	102	75.0-125			3.50	20
tert-Butylbenzene	0.0250	0.0271	0.0260	109	104	76.0-124			4.30	20
Carbon tetrachloride	0.0250	0.0203	0.0195	81.2	77.9	68.0-126			4.26	20
Chlorobenzene	0.0250	0.0273	0.0272	109	109	80.0-121			0.324	20
Chlorodibromomethane	0.0250	0.0262	0.0266	105	106	77.0-125			1.56	20
Chloroethane	0.0250	0.0226	0.0214	90.6	85.5	47.0-150			5.73	20
Chloroform	0.0250	0.0216	0.0210	86.3	84.1	73.0-120			2.65	20
Chloromethane	0.0250	0.0199	0.0193	79.5	77.2	41.0-142			2.85	20
2-Chlorotoluene	0.0250	0.0255	0.0244	102	97.5	76.0-123			4.60	20
4-Chlorotoluene	0.0250	0.0253	0.0243	101	97.1	75.0-122			4.28	20
1,2-Dibromo-3-Chloropropane	0.0250	0.0247	0.0237	98.8	94.9	58.0-134			4.11	20
1,2-Dibromoethane	0.0250	0.0265	0.0269	106	108	80.0-122			1.38	20
Dibromomethane	0.0250	0.0244	0.0237	97.4	94.8	80.0-120			2.69	20
1,2-Dichlorobenzene	0.0250	0.0280	0.0270	112	108	79.0-121			3.80	20
1,3-Dichlorobenzene	0.0250	0.0265	0.0254	106	102	79.0-120			4.22	20
1,4-Dichlorobenzene	0.0250	0.0265	0.0259	106	104	79.0-120			2.09	20
Dichlorodifluoromethane	0.0250	0.0138	0.0150	55.1	59.8	51.0-149			8.30	20
1,1-Dichloroethane	0.0250	0.0211	0.0204	84.4	81.6	70.0-126			3.39	20
1,2-Dichloroethane	0.0250	0.0203	0.0204	81.3	81.6	70.0-128			0.346	20
1,1-Dichloroethene	0.0250	0.0218	0.0207	87.1	82.8	71.0-124			4.95	20
cis-1,2-Dichloroethene	0.0250	0.0216	0.0210	86.6	83.8	73.0-120			3.23	20
trans-1,2-Dichloroethene	0.0250	0.0210	0.0202	83.9	80.9	73.0-120			3.58	20
1,2-Dichloropropane	0.0250	0.0256	0.0240	102	96.2	77.0-125			6.16	20
1,1-Dichloropropene	0.0250	0.0212	0.0206	84.8	82.3	74.0-126			3.00	20
1,3-Dichloropropane	0.0250	0.0266	0.0265	106	106	80.0-120			0.445	20
cis-1,3-Dichloropropene	0.0250	0.0252	0.0258	101	103	80.0-123			2.42	20
trans-1,3-Dichloropropene	0.0250	0.0242	0.0248	96.9	99.1	78.0-124			2.20	20
2,2-Dichloropropane	0.0250	0.0174	0.0170	69.7	68.1	58.0-130			2.27	20
Di-isopropyl ether	0.0250	0.0215	0.0210	86.1	84.0	58.0-138			2.49	20
Ethylbenzene	0.0250	0.0265	0.0258	106	103	79.0-123			2.88	20
Hexachloro-1,3-butadiene	0.0250	0.0272	0.0271	109	108	54.0-138			0.300	20
Isopropylbenzene	0.0250	0.0273	0.0259	109	104	76.0-127			5.20	20
p-Isopropyltoluene	0.0250	0.0268	0.0255	107	102	76.0-125			4.76	20
2-Butanone (MEK)	0.125	0.106	0.105	84.8	84.3	44.0-160			0.619	20
Methylene Chloride	0.0250	0.0210	0.0206	84.1	82.4	67.0-120			2.10	20

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc



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

(LCS) R3370405-1 12/21/18 03:05 • (LCSD) R3370405-2 12/21/18 03:24

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)	0.125	0.130	0.132	104	106	68.0-142			2.14	20
Methyl tert-butyl ether	0.0250	0.0201	0.0201	80.5	80.5	68.0-125			0.0837	20
Naphthalene	0.0250	0.0251	0.0252	100	101	54.0-135			0.423	20
n-Propylbenzene	0.0250	0.0258	0.0247	103	98.9	77.0-124			4.34	20
Styrene	0.0250	0.0274	0.0260	110	104	73.0-130			5.20	20
1,1,1,2-Tetrachloroethane	0.0250	0.0269	0.0274	108	110	75.0-125			1.80	20
1,1,2,2-Tetrachloroethane	0.0250	0.0248	0.0240	99.2	95.9	65.0-130			3.30	20
Tetrachloroethene	0.0250	0.0275	0.0273	110	109	72.0-132			0.490	20
Toluene	0.0250	0.0253	0.0253	101	101	79.0-120			0.390	20
1,1,2-Trichlorotrifluoroethane	0.0250	0.0207	0.0213	83.0	85.2	69.0-132			2.61	20
1,2,3-Trichlorobenzene	0.0250	0.0267	0.0258	107	103	50.0-138			3.30	20
1,2,4-Trichlorobenzene	0.0250	0.0265	0.0262	106	105	57.0-137			1.49	20
1,1,1-Trichloroethane	0.0250	0.0216	0.0207	86.4	82.9	73.0-124			4.16	20
1,1,2-Trichloroethane	0.0250	0.0270	0.0275	108	110	80.0-120			1.69	20
Trichloroethene	0.0250	0.0251	0.0241	100	96.4	78.0-124			4.12	20
Trichlorofluoromethane	0.0250	0.0200	0.0199	80.0	79.6	59.0-147			0.533	20
1,2,3-Trichloropropane	0.0250	0.0268	0.0257	107	103	73.0-130			4.18	20
1,2,3-Trimethylbenzene	0.0250	0.0272	0.0262	109	105	77.0-120			3.83	20
1,2,4-Trimethylbenzene	0.0250	0.0254	0.0244	102	97.5	76.0-121			4.22	20
1,3,5-Trimethylbenzene	0.0250	0.0267	0.0255	107	102	76.0-122			4.44	20
Vinyl chloride	0.0250	0.0216	0.0214	86.5	85.5	67.0-131			1.18	20
Xylenes, Total	0.0750	0.0804	0.0794	107	106	79.0-123			1.25	20
(S) Toluene-d8				102	106	80.0-120				
(S) Dibromofluoromethane				84.3	85.8	75.0-120				
(S) 4-Bromofluorobenzene				94.3	96.6	77.0-126				

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc



Method Blank (MB)

(MB) R3370681-3 12/21/18 14:25

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) R3370681-3 12/21/18 14:25

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	105			80.0-120
(S) Dibromofluoromethane	98.4			75.0-120
(S) 4-Bromofluorobenzene	90.7			77.0-126

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

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

(LCS) R3370681-1 12/21/18 13:25 • (LCSD) R3370681-2 12/21/18 13:45

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	0.125	0.129	0.136	103	109	19.0-160			5.66	27
Acrolein	0.125	0.138	0.142	110	114	10.0-160			3.21	26
Acrylonitrile	0.125	0.125	0.119	99.8	95.2	55.0-149			4.67	20
Benzene	0.0250	0.0227	0.0229	90.9	91.7	70.0-123			0.781	20



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

(LCS) R3370681-1 12/21/18 13:25 • (LCSD) R3370681-2 12/21/18 13:45

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	0.0250	0.0218	0.0207	87.0	82.7	73.0-121			5.09	20
Bromodichloromethane	0.0250	0.0208	0.0214	83.3	85.4	75.0-120			2.54	20
Bromoform	0.0250	0.0219	0.0213	87.5	85.0	68.0-132			2.91	20
Bromomethane	0.0250	0.0269	0.0299	108	120	10.0-160			10.5	25
n-Butylbenzene	0.0250	0.0229	0.0249	91.7	99.6	73.0-125			8.22	20
sec-Butylbenzene	0.0250	0.0243	0.0243	97.1	97.0	75.0-125			0.0769	20
tert-Butylbenzene	0.0250	0.0235	0.0235	94.0	94.1	76.0-124			0.0857	20
Carbon tetrachloride	0.0250	0.0238	0.0242	95.0	96.9	68.0-126			1.94	20
Chlorobenzene	0.0250	0.0258	0.0257	103	103	80.0-121			0.154	20
Chlorodibromomethane	0.0250	0.0239	0.0238	95.6	95.2	77.0-125			0.363	20
Chloroethane	0.0250	0.0263	0.0293	105	117	47.0-150			10.9	20
Chloroform	0.0250	0.0227	0.0227	90.7	90.8	73.0-120			0.0495	20
Chloromethane	0.0250	0.0265	0.0262	106	105	41.0-142			0.838	20
2-Chlorotoluene	0.0250	0.0241	0.0239	96.3	95.7	76.0-123			0.646	20
4-Chlorotoluene	0.0250	0.0242	0.0233	96.8	93.3	75.0-122			3.71	20
1,2-Dibromo-3-Chloropropane	0.0250	0.0205	0.0223	81.9	89.3	58.0-134			8.67	20
1,2-Dibromoethane	0.0250	0.0243	0.0239	97.1	95.6	80.0-122			1.55	20
Dibromomethane	0.0250	0.0234	0.0230	93.7	91.9	80.0-120			2.00	20
1,2-Dichlorobenzene	0.0250	0.0222	0.0233	89.0	93.2	79.0-121			4.65	20
1,3-Dichlorobenzene	0.0250	0.0234	0.0237	93.4	95.0	79.0-120			1.65	20
1,4-Dichlorobenzene	0.0250	0.0240	0.0242	96.1	96.8	79.0-120			0.783	20
Dichlorodifluoromethane	0.0250	0.0313	0.0317	125	127	51.0-149			1.31	20
1,1-Dichloroethane	0.0250	0.0230	0.0230	92.1	92.0	70.0-126			0.141	20
1,2-Dichloroethane	0.0250	0.0222	0.0214	88.7	85.6	70.0-128			3.49	20
1,1-Dichloroethene	0.0250	0.0249	0.0251	99.8	101	71.0-124			0.757	20
cis-1,2-Dichloroethene	0.0250	0.0238	0.0232	95.1	92.7	73.0-120			2.59	20
trans-1,2-Dichloroethene	0.0250	0.0245	0.0244	98.1	97.5	73.0-120			0.617	20
1,2-Dichloropropane	0.0250	0.0237	0.0243	94.8	97.3	77.0-125			2.55	20
1,1-Dichloropropene	0.0250	0.0228	0.0223	91.3	89.2	74.0-126			2.38	20
1,3-Dichloropropane	0.0250	0.0252	0.0244	101	97.7	80.0-120			3.15	20
cis-1,3-Dichloropropene	0.0250	0.0233	0.0233	93.2	93.3	80.0-123			0.0533	20
trans-1,3-Dichloropropene	0.0250	0.0245	0.0245	97.9	98.1	78.0-124			0.227	20
2,2-Dichloropropane	0.0250	0.0251	0.0262	100	105	58.0-130			4.19	20
Di-isopropyl ether	0.0250	0.0220	0.0225	88.2	89.8	58.0-138			1.85	20
Ethylbenzene	0.0250	0.0253	0.0258	101	103	79.0-123			1.81	20
Hexachloro-1,3-butadiene	0.0250	0.0175	0.0224	70.0	89.7	54.0-138		J3	24.6	20
Isopropylbenzene	0.0250	0.0226	0.0222	90.4	88.9	76.0-127			1.69	20
p-Isopropyltoluene	0.0250	0.0229	0.0241	91.5	96.4	76.0-125			5.24	20
2-Butanone (MEK)	0.125	0.124	0.116	98.9	92.9	44.0-160			6.23	20
Methylene Chloride	0.0250	0.0254	0.0258	102	103	67.0-120			1.65	20

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc



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

(LCS) R3370681-1 12/21/18 13:25 • (LCSD) R3370681-2 12/21/18 13:45

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 %
4-Methyl-2-pentanone (MIBK)	0.125	0.127	0.122	102	97.4	68.0-142			4.38	20
Methyl tert-butyl ether	0.0250	0.0241	0.0239	96.2	95.6	68.0-125			0.612	20
Naphthalene	0.0250	0.0172	0.0212	68.7	84.9	54.0-135		J3	21.0	20
n-Propylbenzene	0.0250	0.0222	0.0220	88.6	87.8	77.0-124			0.883	20
Styrene	0.0250	0.0218	0.0213	87.2	85.2	73.0-130			2.31	20
1,1,1,2-Tetrachloroethane	0.0250	0.0243	0.0248	97.4	99.4	75.0-125			2.06	20
1,1,2,2-Tetrachloroethane	0.0250	0.0217	0.0213	86.9	85.0	65.0-130			2.19	20
Tetrachloroethene	0.0250	0.0252	0.0251	101	101	72.0-132			0.260	20
Toluene	0.0250	0.0251	0.0254	100	102	79.0-120			1.05	20
1,1,2-Trichlorotrifluoroethane	0.0250	0.0287	0.0286	115	114	69.0-132			0.433	20
1,2,3-Trichlorobenzene	0.0250	0.0171	0.0223	68.4	89.3	50.0-138		J3	26.4	20
1,2,4-Trichlorobenzene	0.0250	0.0181	0.0225	72.5	90.2	57.0-137		J3	21.7	20
1,1,1-Trichloroethane	0.0250	0.0246	0.0247	98.4	98.8	73.0-124			0.475	20
1,1,2-Trichloroethane	0.0250	0.0265	0.0267	106	107	80.0-120			0.535	20
Trichloroethene	0.0250	0.0249	0.0256	99.5	102	78.0-124			2.69	20
Trichlorofluoromethane	0.0250	0.0290	0.0296	116	119	59.0-147			2.34	20
1,2,3-Trichloropropane	0.0250	0.0243	0.0221	97.2	88.4	73.0-130			9.41	20
1,2,3-Trimethylbenzene	0.0250	0.0233	0.0249	93.2	99.6	77.0-120			6.63	20
1,2,4-Trimethylbenzene	0.0250	0.0230	0.0235	92.1	94.1	76.0-121			2.11	20
1,3,5-Trimethylbenzene	0.0250	0.0236	0.0237	94.5	95.0	76.0-122			0.536	20
Vinyl chloride	0.0250	0.0267	0.0271	107	108	67.0-131			1.39	20
Xylenes, Total	0.0750	0.0764	0.0785	102	105	79.0-123			2.71	20
(S) Toluene-d8				105	104	80.0-120				
(S) Dibromofluoromethane				98.0	96.7	75.0-120				
(S) 4-Bromofluorobenzene				87.5	84.6	77.0-126				

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Method Blank (MB)

(MB) R3371001-2 12/24/18 08:54

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) R3371001-2 12/24/18 08:54

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)	U		0.0125	0.0250
Methylene Chloride	0.0163	J	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
Toluene	U		0.00125	0.00500
1,1,2-Trichlorotrifluoroethane	U		0.000675	0.00250
1,2,3-Trichlorobenzene	U		0.000625	0.00250
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
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	0.00141	J	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) Dibromofluoromethane	103			65.0-129
(S) 4-Bromofluorobenzene	115			67.0-138

1

Cp

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Tc

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Ss

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Cn

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Sr

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Qc

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Gl

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Al

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Sc

Laboratory Control Sample (LCS)

(LCS) R3371001-1 12/24/18 07:58

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Acetone	0.625	1.17	187	10.0-160	J4
Acrylonitrile	0.625	0.854	137	45.0-153	
Benzene	0.125	0.129	103	70.0-123	
Bromobenzene	0.125	0.125	99.7	73.0-121	
Bromodichloromethane	0.125	0.112	89.7	73.0-121	
Bromoform	0.125	0.110	88.0	64.0-132	
Bromomethane	0.125	0.0856	68.5	56.0-147	

Laboratory Control Sample (LCS)

(LCS) R3371001-1 12/24/18 07:58

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	<u>LCS Qualifier</u>
n-Butylbenzene	0.125	0.104	83.2	68.0-135	
sec-Butylbenzene	0.125	0.100	80.4	74.0-130	
tert-Butylbenzene	0.125	0.103	82.4	75.0-127	
Carbon tetrachloride	0.125	0.103	82.4	66.0-128	
Chlorobenzene	0.125	0.123	98.5	76.0-128	
Chlorodibromomethane	0.125	0.117	93.5	74.0-127	
Chloroethane	0.125	0.119	95.5	61.0-134	
Chloroform	0.125	0.114	91.0	72.0-123	
Chloromethane	0.125	0.227	181	51.0-138	J4
2-Chlorotoluene	0.125	0.111	88.7	75.0-124	
4-Chlorotoluene	0.125	0.106	85.1	75.0-124	
1,2-Dibromo-3-Chloropropane	0.125	0.114	90.9	59.0-130	
1,2-Dibromoethane	0.125	0.126	101	74.0-128	
Dibromomethane	0.125	0.125	99.7	75.0-122	
1,2-Dichlorobenzene	0.125	0.109	87.0	76.0-124	
1,3-Dichlorobenzene	0.125	0.108	86.3	76.0-125	
1,4-Dichlorobenzene	0.125	0.103	82.8	77.0-121	
Dichlorodifluoromethane	0.125	0.141	113	43.0-156	
1,1-Dichloroethane	0.125	0.129	104	70.0-127	
1,2-Dichloroethane	0.125	0.134	107	65.0-131	
1,1-Dichloroethene	0.125	0.133	106	65.0-131	
cis-1,2-Dichloroethene	0.125	0.129	103	73.0-125	
trans-1,2-Dichloroethene	0.125	0.114	90.9	71.0-125	
1,2-Dichloropropane	0.125	0.143	114	74.0-125	
1,1-Dichloropropene	0.125	0.111	88.4	73.0-125	
1,3-Dichloropropane	0.125	0.133	106	80.0-125	
cis-1,3-Dichloropropene	0.125	0.118	94.4	76.0-127	
trans-1,3-Dichloropropene	0.125	0.116	92.5	73.0-127	
2,2-Dichloropropane	0.125	0.0828	66.3	59.0-135	
Di-isopropyl ether	0.125	0.157	126	60.0-136	
Ethylbenzene	0.125	0.113	90.1	74.0-126	
Hexachloro-1,3-butadiene	0.125	0.105	84.0	57.0-150	
Isopropylbenzene	0.125	0.104	83.0	72.0-127	
p-Isopropyltoluene	0.125	0.0988	79.0	72.0-133	
2-Butanone (MEK)	0.625	0.856	137	30.0-160	
Methylene Chloride	0.125	0.120	95.9	68.0-123	
4-Methyl-2-pentanone (MIBK)	0.625	0.884	142	56.0-143	
Methyl tert-butyl ether	0.125	0.116	92.7	66.0-132	
Naphthalene	0.125	0.129	103	59.0-130	
n-Propylbenzene	0.125	0.105	84.1	74.0-126	

1

Cp

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Tc

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Ss

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Cn

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Sr

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Qc

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Gl

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Al

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Sc

Laboratory Control Sample (LCS)

(LCS) R3371001-1 12/24/18 07:58

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	<u>LCS Qualifier</u>
Styrene	0.125	0.108	86.1	72.0-127	
1,1,1,2-Tetrachloroethane	0.125	0.114	91.1	74.0-129	
1,1,2,2-Tetrachloroethane	0.125	0.0901	72.1	68.0-128	
Toluene	0.125	0.111	88.7	75.0-121	
1,1,2-Trichlorotrifluoroethane	0.125	0.130	104	61.0-139	
1,2,3-Trichlorobenzene	0.125	0.130	104	59.0-139	
1,2,4-Trichlorobenzene	0.125	0.126	101	62.0-137	
1,1,1-Trichloroethane	0.125	0.110	88.1	69.0-126	
1,1,2-Trichloroethane	0.125	0.119	95.3	78.0-123	
Trichlorofluoromethane	0.125	0.113	90.3	61.0-142	
1,2,3-Trichloropropane	0.125	0.117	94.0	67.0-129	
1,2,3-Trimethylbenzene	0.125	0.108	86.6	74.0-124	
1,2,4-Trimethylbenzene	0.125	0.107	85.6	70.0-126	
1,3,5-Trimethylbenzene	0.125	0.103	82.3	73.0-127	
Vinyl chloride	0.125	0.131	105	63.0-134	
Xylenes, Total	0.375	0.357	95.2	72.0-127	
(S) Toluene-d8			114	75.0-131	
(S) Dibromofluoromethane			103	65.0-129	
(S) 4-Bromofluorobenzene			112	67.0-138	

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc



Method Blank (MB)

(MB) R3371173-2 12/24/18 12:54

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) R3371173-2 12/24/18 12:54

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)	U		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	0.00250
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	105			75.0-131
(S) Dibromofluoromethane	104			65.0-129
(S) 4-Bromofluorobenzene	103			67.0-138

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

Laboratory Control Sample (LCS)

(LCS) R3371173-1 12/24/18 11:57

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Acetone	0.625	0.627	100	10.0-160	
Acrylonitrile	0.625	0.778	124	45.0-153	
Benzene	0.125	0.104	83.4	70.0-123	
Bromobenzene	0.125	0.130	104	73.0-121	
Bromodichloromethane	0.125	0.107	85.3	73.0-121	



Laboratory Control Sample (LCS)

(LCS) R3371173-1 12/24/18 11:57

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	<u>LCS Qualifier</u>
Bromoform	0.125	0.133	107	64.0-132	
Bromomethane	0.125	0.123	98.0	56.0-147	
n-Butylbenzene	0.125	0.131	105	68.0-135	
sec-Butylbenzene	0.125	0.124	99.4	74.0-130	
tert-Butylbenzene	0.125	0.116	92.7	75.0-127	
Carbon tetrachloride	0.125	0.117	93.3	66.0-128	
Chlorobenzene	0.125	0.143	114	76.0-128	
Chlorodibromomethane	0.125	0.135	108	74.0-127	
Chloroethane	0.125	0.0860	68.8	61.0-134	
Chloroform	0.125	0.134	107	72.0-123	
Chloromethane	0.125	0.127	101	51.0-138	
2-Chlorotoluene	0.125	0.124	98.9	75.0-124	
4-Chlorotoluene	0.125	0.143	114	75.0-124	
1,2-Dibromo-3-Chloropropane	0.125	0.149	119	59.0-130	
1,2-Dibromoethane	0.125	0.144	115	74.0-128	
Dibromomethane	0.125	0.142	113	75.0-122	
1,2-Dichlorobenzene	0.125	0.115	91.6	76.0-124	
1,3-Dichlorobenzene	0.125	0.150	120	76.0-125	
1,4-Dichlorobenzene	0.125	0.121	97.1	77.0-121	
Dichlorodifluoromethane	0.125	0.117	93.7	43.0-156	
1,1-Dichloroethane	0.125	0.127	101	70.0-127	
1,2-Dichloroethane	0.125	0.125	99.7	65.0-131	
1,1-Dichloroethene	0.125	0.129	103	65.0-131	
cis-1,2-Dichloroethene	0.125	0.117	93.7	73.0-125	
trans-1,2-Dichloroethene	0.125	0.128	103	71.0-125	
1,2-Dichloropropane	0.125	0.138	111	74.0-125	
1,1-Dichloropropene	0.125	0.114	91.5	73.0-125	
1,3-Dichloropropane	0.125	0.132	106	80.0-125	
cis-1,3-Dichloropropene	0.125	0.148	118	76.0-127	
trans-1,3-Dichloropropene	0.125	0.126	101	73.0-127	
2,2-Dichloropropane	0.125	0.119	95.2	59.0-135	
Di-isopropyl ether	0.125	0.138	111	60.0-136	
Ethylbenzene	0.125	0.139	111	74.0-126	
Hexachloro-1,3-butadiene	0.125	0.134	107	57.0-150	
Isopropylbenzene	0.125	0.161	128	72.0-127	J4
p-Isopropyltoluene	0.125	0.144	115	72.0-133	
2-Butanone (MEK)	0.625	0.688	110	30.0-160	
Methylene Chloride	0.125	0.121	97.2	68.0-123	
4-Methyl-2-pentanone (MIBK)	0.625	0.737	118	56.0-143	
Methyl tert-butyl ether	0.125	0.151	121	66.0-132	

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc



Laboratory Control Sample (LCS)

(LCS) R3371173-1 12/24/18 11:57

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	<u>LCS Qualifier</u>
Naphthalene	0.125	0.123	98.5	59.0-130	
n-Propylbenzene	0.125	0.127	102	74.0-126	
Styrene	0.125	0.136	109	72.0-127	
1,1,1,2-Tetrachloroethane	0.125	0.101	81.1	74.0-129	
1,1,2,2-Tetrachloroethane	0.125	0.101	80.5	68.0-128	
Tetrachloroethene	0.125	0.154	123	70.0-136	
Toluene	0.125	0.121	96.6	75.0-121	
1,1,2-Trichlorotrifluoroethane	0.125	0.127	102	61.0-139	
1,2,3-Trichlorobenzene	0.125	0.130	104	59.0-139	
1,2,4-Trichlorobenzene	0.125	0.118	94.2	62.0-137	
1,1,1-Trichloroethane	0.125	0.133	107	69.0-126	
1,1,2-Trichloroethane	0.125	0.141	113	78.0-123	
Trichloroethene	0.125	0.108	86.3	76.0-126	
Trichlorofluoromethane	0.125	0.112	89.3	61.0-142	
1,2,3-Trichloropropane	0.125	0.117	93.5	67.0-129	
1,2,3-Trimethylbenzene	0.125	0.132	106	74.0-124	
1,2,4-Trimethylbenzene	0.125	0.156	125	70.0-126	
1,3,5-Trimethylbenzene	0.125	0.142	114	73.0-127	
Vinyl chloride	0.125	0.118	94.1	63.0-134	
Xylenes, Total	0.375	0.455	121	72.0-127	
(S) Toluene-d8			103	75.0-131	
(S) Dibromofluoromethane			104	65.0-129	
(S) 4-Bromofluorobenzene			101	67.0-138	

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc



Method Blank (MB)

(MB) R3371487-2 12/27/18 02:26

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Acetone	U		0.343	0.625
Acrylonitrile	U		0.0475	0.313
Benzene	U		0.0100	0.0250
Bromobenzene	U		0.0263	0.313
Bromodichloromethane	U		0.0197	0.0625
Bromoform	U		0.150	0.625
Bromomethane	U		0.0925	0.313
n-Butylbenzene	U		0.0960	0.313
sec-Butylbenzene	U		0.0633	0.313
tert-Butylbenzene	U		0.0388	0.125
Carbon tetrachloride	U		0.0270	0.125
Chlorobenzene	U		0.0143	0.0625
Chlorodibromomethane	U		0.0113	0.0625
Chloroethane	U		0.0270	0.125
Chloroform	U		0.0104	0.0625
Chloromethane	U		0.0348	0.313
2-Chlorotoluene	U		0.0230	0.0625
4-Chlorotoluene	U		0.0283	0.125
1,2-Dibromo-3-Chloropropane	U		0.128	0.625
1,2-Dibromoethane	U		0.0131	0.0625
Dibromomethane	U		0.0250	0.125
1,2-Dichlorobenzene	U		0.0363	0.125
1,3-Dichlorobenzene	U		0.0425	0.125
1,4-Dichlorobenzene	U		0.0493	0.125
Dichlorodifluoromethane	U		0.0205	0.0625
1,1-Dichloroethane	U		0.0144	0.0625
1,2-Dichloroethane	U		0.0119	0.0625
1,1-Dichloroethene	U		0.0125	0.0625
cis-1,2-Dichloroethene	U		0.0173	0.0625
trans-1,2-Dichloroethene	U		0.0358	0.125
1,2-Dichloropropane	U		0.0318	0.125
1,1-Dichloropropene	U		0.0175	0.0625
1,3-Dichloropropane	U		0.0438	0.125
cis-1,3-Dichloropropene	U		0.0170	0.0625
trans-1,3-Dichloropropene	U		0.0383	0.125
2,2-Dichloropropane	U		0.0198	0.0625
Di-isopropyl ether	U		0.00875	0.0250
Ethylbenzene	U		0.0133	0.0625
Hexachloro-1,3-butadiene	U		0.318	0.625
Isopropylbenzene	U		0.0216	0.0625

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc



Method Blank (MB)

(MB) R3371487-2 12/27/18 02:26

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
p-Isopropyltoluene	U		0.0583	0.125
2-Butanone (MEK)	U		0.313	0.625
Methylene Chloride	U		0.166	0.625
4-Methyl-2-pentanone (MIBK)	U		0.250	0.625
Methyl tert-butyl ether	U		0.00738	0.0250
Naphthalene	U		0.0780	0.313
n-Propylbenzene	U		0.0295	0.125
Styrene	U		0.0683	0.313
1,1,1,2-Tetrachloroethane	U		0.0125	0.0625
1,1,2,2-Tetrachloroethane	U		0.00975	0.0625
Tetrachloroethene	U		0.0175	0.0625
Toluene	U		0.0313	0.125
1,1,2-Trichlorotrifluoroethane	U		0.0169	0.0625
1,2,3-Trichlorobenzene	U		0.0156	0.0625
1,2,4-Trichlorobenzene	U		0.121	0.313
1,1,1-Trichloroethane	U		0.00688	0.0625
1,1,2-Trichloroethane	U		0.0221	0.0625
Trichloroethene	U		0.0100	0.0250
Trichlorofluoromethane	U		0.0125	0.0625
1,2,3-Trichloropropane	U		0.128	0.313
1,2,3-Trimethylbenzene	U		0.0288	0.125
1,2,4-Trimethylbenzene	U		0.0290	0.125
1,3,5-Trimethylbenzene	U		0.0270	0.125
Vinyl chloride	U		0.0171	0.0625
Xylenes, Total	U		0.120	0.163
(S) Toluene-d8	102			75.0-131
(S) Dibromofluoromethane	95.3			65.0-129
(S) 4-Bromofluorobenzene	99.0			67.0-138

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

Laboratory Control Sample (LCS)

(LCS) R3371487-1 12/27/18 01:19

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Acetone	0.625	0.727	116	10.0-160	
Acrylonitrile	0.625	0.637	102	45.0-153	
Benzene	0.125	0.128	103	70.0-123	
Bromobenzene	0.125	0.113	90.6	73.0-121	
Bromodichloromethane	0.125	0.123	98.7	73.0-121	



Laboratory Control Sample (LCS)

(LCS) R3371487-1 12/27/18 01:19

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	<u>LCS Qualifier</u>
Bromoform	0.125	0.106	84.8	64.0-132	
Bromomethane	0.125	0.141	113	56.0-147	
n-Butylbenzene	0.125	0.117	93.6	68.0-135	
sec-Butylbenzene	0.125	0.114	91.4	74.0-130	
tert-Butylbenzene	0.125	0.117	93.8	75.0-127	
Carbon tetrachloride	0.125	0.126	101	66.0-128	
Chlorobenzene	0.125	0.119	95.4	76.0-128	
Chlorodibromomethane	0.125	0.109	87.0	74.0-127	
Chloroethane	0.125	0.139	111	61.0-134	
Chloroform	0.125	0.130	104	72.0-123	
Chloromethane	0.125	0.146	117	51.0-138	
2-Chlorotoluene	0.125	0.120	95.9	75.0-124	
4-Chlorotoluene	0.125	0.114	91.6	75.0-124	
1,2-Dibromo-3-Chloropropane	0.125	0.102	82.0	59.0-130	
1,2-Dibromoethane	0.125	0.114	91.4	74.0-128	
Dibromomethane	0.125	0.114	91.0	75.0-122	
1,2-Dichlorobenzene	0.125	0.120	95.8	76.0-124	
1,3-Dichlorobenzene	0.125	0.119	95.1	76.0-125	
1,4-Dichlorobenzene	0.125	0.115	92.2	77.0-121	
Dichlorodifluoromethane	0.125	0.166	133	43.0-156	
1,1-Dichloroethane	0.125	0.129	103	70.0-127	
1,2-Dichloroethane	0.125	0.136	109	65.0-131	
1,1-Dichloroethene	0.125	0.137	110	65.0-131	
cis-1,2-Dichloroethene	0.125	0.138	111	73.0-125	
trans-1,2-Dichloroethene	0.125	0.131	105	71.0-125	
1,2-Dichloropropane	0.125	0.128	102	74.0-125	
1,1-Dichloropropene	0.125	0.128	102	73.0-125	
1,3-Dichloropropane	0.125	0.122	97.7	80.0-125	
cis-1,3-Dichloropropene	0.125	0.116	92.5	76.0-127	
trans-1,3-Dichloropropene	0.125	0.111	88.8	73.0-127	
2,2-Dichloropropane	0.125	0.117	93.6	59.0-135	
Di-isopropyl ether	0.125	0.141	113	60.0-136	
Ethylbenzene	0.125	0.122	97.3	74.0-126	
Hexachloro-1,3-butadiene	0.125	0.105	83.7	57.0-150	
Isopropylbenzene	0.125	0.116	92.9	72.0-127	
p-Isopropyltoluene	0.125	0.117	93.6	72.0-133	
2-Butanone (MEK)	0.625	0.594	95.1	30.0-160	
Methylene Chloride	0.125	0.135	108	68.0-123	
4-Methyl-2-pentanone (MIBK)	0.625	0.562	89.9	56.0-143	
Methyl tert-butyl ether	0.125	0.129	103	66.0-132	

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc



Laboratory Control Sample (LCS)

(LCS) R3371487-1 12/27/18 01:19

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	<u>LCS Qualifier</u>
Naphthalene	0.125	0.0943	75.5	59.0-130	
n-Propylbenzene	0.125	0.118	94.8	74.0-126	
Styrene	0.125	0.118	94.2	72.0-127	
1,1,1,2-Tetrachloroethane	0.125	0.118	94.5	74.0-129	
1,1,2,2-Tetrachloroethane	0.125	0.115	91.6	68.0-128	
Tetrachloroethene	0.125	0.126	101	70.0-136	
Toluene	0.125	0.119	95.5	75.0-121	
1,1,2-Trichlorotrifluoroethane	0.125	0.138	110	61.0-139	
1,2,3-Trichlorobenzene	0.125	0.0892	71.3	59.0-139	
1,2,4-Trichlorobenzene	0.125	0.108	86.1	62.0-137	
1,1,1-Trichloroethane	0.125	0.124	99.3	69.0-126	
1,1,2-Trichloroethane	0.125	0.120	96.3	78.0-123	
Trichloroethene	0.125	0.122	97.3	76.0-126	
Trichlorofluoromethane	0.125	0.140	112	61.0-142	
1,2,3-Trichloropropane	0.125	0.114	90.9	67.0-129	
1,2,3-Trimethylbenzene	0.125	0.113	90.4	74.0-124	
1,2,4-Trimethylbenzene	0.125	0.115	92.0	70.0-126	
1,3,5-Trimethylbenzene	0.125	0.115	91.7	73.0-127	
Vinyl chloride	0.125	0.146	117	63.0-134	
Xylenes, Total	0.375	0.363	96.8	72.0-127	
(S) Toluene-d8			99.4	75.0-131	
(S) Dibromofluoromethane			97.0	65.0-129	
(S) 4-Bromofluorobenzene			95.0	67.0-138	

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc



Method Blank (MB)

(MB) R3371445-2 12/26/18 17:00

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) R3371445-2 12/26/18 17:00

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)	U		0.0125	0.0250
Methylene Chloride	0.0164	⌵	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	0.00250
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) Dibromofluoromethane	105			65.0-129
(S) 4-Bromofluorobenzene	98.0			67.0-138

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc

Laboratory Control Sample (LCS)

(LCS) R3371445-1 12/26/18 15:59

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Acetone	0.625	0.790	126	10.0-160	
Acrylonitrile	0.625	0.668	107	45.0-153	
Benzene	0.125	0.138	111	70.0-123	
Bromobenzene	0.125	0.133	106	73.0-121	
Bromodichloromethane	0.125	0.148	118	73.0-121	



Laboratory Control Sample (LCS)

(LCS) R3371445-1 12/26/18 15:59

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	<u>LCS Qualifier</u>
Bromoform	0.125	0.115	92.3	64.0-132	
Bromomethane	0.125	0.142	114	56.0-147	
n-Butylbenzene	0.125	0.132	105	68.0-135	
sec-Butylbenzene	0.125	0.136	109	74.0-130	
tert-Butylbenzene	0.125	0.137	110	75.0-127	
Carbon tetrachloride	0.125	0.134	107	66.0-128	
Chlorobenzene	0.125	0.118	94.1	76.0-128	
Chlorodibromomethane	0.125	0.139	111	74.0-127	
Chloroethane	0.125	0.135	108	61.0-134	
Chloroform	0.125	0.134	107	72.0-123	
Chloromethane	0.125	0.132	106	51.0-138	
2-Chlorotoluene	0.125	0.133	107	75.0-124	
4-Chlorotoluene	0.125	0.133	106	75.0-124	
1,2-Dibromo-3-Chloropropane	0.125	0.104	82.9	59.0-130	
1,2-Dibromoethane	0.125	0.136	109	74.0-128	
Dibromomethane	0.125	0.135	108	75.0-122	
1,2-Dichlorobenzene	0.125	0.123	98.8	76.0-124	
1,3-Dichlorobenzene	0.125	0.120	96.4	76.0-125	
1,4-Dichlorobenzene	0.125	0.132	106	77.0-121	
Dichlorodifluoromethane	0.125	0.171	137	43.0-156	
1,1-Dichloroethane	0.125	0.139	111	70.0-127	
1,2-Dichloroethane	0.125	0.135	108	65.0-131	
1,1-Dichloroethene	0.125	0.136	109	65.0-131	
cis-1,2-Dichloroethene	0.125	0.127	101	73.0-125	
trans-1,2-Dichloroethene	0.125	0.134	107	71.0-125	
1,2-Dichloropropane	0.125	0.125	100	74.0-125	
1,1-Dichloropropene	0.125	0.143	115	73.0-125	
1,3-Dichloropropane	0.125	0.142	114	80.0-125	
cis-1,3-Dichloropropene	0.125	0.124	98.9	76.0-127	
trans-1,3-Dichloropropene	0.125	0.130	104	73.0-127	
2,2-Dichloropropane	0.125	0.112	89.4	59.0-135	
Di-isopropyl ether	0.125	0.140	112	60.0-136	
Ethylbenzene	0.125	0.120	96.3	74.0-126	
Hexachloro-1,3-butadiene	0.125	0.131	105	57.0-150	
Isopropylbenzene	0.125	0.127	102	72.0-127	
p-Isopropyltoluene	0.125	0.134	107	72.0-133	
2-Butanone (MEK)	0.625	0.657	105	30.0-160	
Methylene Chloride	0.125	0.135	108	68.0-123	
4-Methyl-2-pentanone (MIBK)	0.625	0.661	106	56.0-143	
Methyl tert-butyl ether	0.125	0.142	114	66.0-132	

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc



Laboratory Control Sample (LCS)

(LCS) R3371445-1 12/26/18 15:59

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	<u>LCS Qualifier</u>
Naphthalene	0.125	0.120	96.2	59.0-130	
n-Propylbenzene	0.125	0.128	102	74.0-126	
Styrene	0.125	0.135	108	72.0-127	
1,1,1,2-Tetrachloroethane	0.125	0.111	88.5	74.0-129	
1,1,2,2-Tetrachloroethane	0.125	0.119	94.8	68.0-128	
Tetrachloroethene	0.125	0.126	101	70.0-136	
Toluene	0.125	0.130	104	75.0-121	
1,1,2-Trichlorotrifluoroethane	0.125	0.178	142	61.0-139	J4
1,2,3-Trichlorobenzene	0.125	0.118	94.6	59.0-139	
1,2,4-Trichlorobenzene	0.125	0.123	98.6	62.0-137	
1,1,1-Trichloroethane	0.125	0.155	124	69.0-126	
1,1,2-Trichloroethane	0.125	0.112	89.9	78.0-123	
Trichloroethene	0.125	0.166	132	76.0-126	J4
Trichlorofluoromethane	0.125	0.152	122	61.0-142	
1,2,3-Trichloropropane	0.125	0.132	106	67.0-129	
1,2,3-Trimethylbenzene	0.125	0.132	106	74.0-124	
1,2,4-Trimethylbenzene	0.125	0.126	101	70.0-126	
1,3,5-Trimethylbenzene	0.125	0.128	103	73.0-127	
Vinyl chloride	0.125	0.148	119	63.0-134	
Xylenes, Total	0.375	0.409	109	72.0-127	
(S) Toluene-d8			105	75.0-131	
(S) Dibromofluoromethane			113	65.0-129	
(S) 4-Bromofluorobenzene			103	67.0-138	

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc



Method Blank (MB)

(MB) R3370736-1 12/22/18 14:47

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
TPH (GC/FID) High Fraction	U		0.0247	0.100
(S) o-Terphenyl	82.0			31.0-160

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

(LCS) R3370736-2 12/22/18 15:09 • (LCSD) R3370736-3 12/22/18 15:31

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 %
TPH (GC/FID) High Fraction	1.50	1.52	1.57	101	105	50.0-150			3.24	20
(S) o-Terphenyl				115	116	31.0-160				

1
Cp

2
Tc

3
Ss

4
Cn

5
Sr

6
Qc

7
Gl

8
Al

9
Sc



Method Blank (MB)

(MB) R3372002-1 12/28/18 01:44

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
TPH (GC/FID) High Fraction	U		0.769	4.00
(S) o-Terphenyl	62.9			18.0-148

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

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

(LCS) R3372002-2 12/28/18 01:56 • (LCSD) R3372002-3 12/28/18 02:07

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 %
TPH (GC/FID) High Fraction	50.0	33.6	40.6	67.2	81.2	50.0-150			18.9	20
(S) o-Terphenyl				75.1	89.3	18.0-148				

L1054617-03 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1054617-03 12/28/18 08:38 • (MS) R3372002-4 12/28/18 08:50 • (MSD) R3372002-5 12/28/18 09:02

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 %
TPH (GC/FID) High Fraction	49.5	ND	37.4	35.8	75.6	72.5	1	50.0-150			4.37	20
(S) o-Terphenyl					72.7	77.5		18.0-148				



Method Blank (MB)

(MB) R3371606-1 12/27/18 00:14

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
TPH (GC/FID) High Fraction	U		0.769	4.00
(S) o-Terphenyl	64.0			18.0-148

1
Cp

2
Tc

3
Ss

4
Cn

5
Sr

6
Qc

7
Gl

8
Al

9
Sc

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

(LCS) R3371606-2 12/27/18 00:25 • (LCSD) R3371606-3 12/27/18 00:37

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 %
TPH (GC/FID) High Fraction	50.0	27.9	29.5	55.8	59.0	50.0-150			5.57	20
(S) o-Terphenyl				64.6	71.0	18.0-148				

L1054617-21 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1054617-21 12/27/18 00:49 • (MS) R3371606-4 12/27/18 09:20 • (MSD) R3371606-5 12/27/18 09:31

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 %
TPH (GC/FID) High Fraction	50.0	ND	26.8	23.8	53.6	47.6	1	50.0-150		J6	11.9	20
(S) o-Terphenyl					61.7	50.6		18.0-148				



Method Blank (MB)

(MB) R3371724-1 12/27/18 16:11

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
TPH (GC/FID) High Fraction	U		0.769	4.00
(S) o-Terphenyl	56.3			18.0-148

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

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

(LCS) R3371724-2 12/27/18 16:23 • (LCSD) R3371724-3 12/27/18 16:35

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 %
TPH (GC/FID) High Fraction	50.0	30.9	38.5	61.8	77.0	50.0-150		J3	21.9	20
(S) o-Terphenyl				69.1	88.9	18.0-148				

Method Blank (MB)

(MB) R3371027-3 12/24/18 16:30

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Acenaphthene	U		0.00642	0.0333
Acenaphthylene	U		0.00671	0.0333
Anthracene	U		0.00632	0.0333
Benzo(a)anthracene	U		0.00428	0.0333
Benzo(b)fluoranthene	U		0.00695	0.0333
Benzo(k)fluoranthene	U		0.00582	0.0333
Benzo(g,h,i)perylene	U		0.00721	0.0333
Benzo(a)pyrene	U		0.00548	0.0333
Bis(2-chlorethoxy)methane	U		0.00770	0.333
Bis(2-chloroethyl)ether	U		0.00896	0.333
Bis(2-chloroisopropyl)ether	U		0.00760	0.333
4-Bromophenyl-phenylether	U		0.0114	0.333
2-Chloronaphthalene	U		0.00639	0.0333
4-Chlorophenyl-phenylether	U		0.00627	0.333
Chrysene	U		0.00555	0.0333
Dibenz(a,h)anthracene	U		0.00821	0.0333
3,3-Dichlorobenzidine	U		0.0794	0.333
2,4-Dinitrotoluene	U		0.00607	0.333
2,6-Dinitrotoluene	U		0.00737	0.333
Fluoranthene	U		0.00496	0.0333
Fluorene	U		0.00682	0.0333
Hexachlorobenzene	U		0.00856	0.333
Hexachloro-1,3-butadiene	U		0.0100	0.333
Hexachlorocyclopentadiene	U		0.0587	0.333
Hexachloroethane	U		0.0134	0.333
Indeno(1,2,3-cd)pyrene	U		0.00772	0.0333
Isophorone	U		0.00522	0.333
Naphthalene	U		0.00889	0.0333
Nitrobenzene	U		0.00695	0.333
n-Nitrosodimethylamine	U		0.0647	0.333
n-Nitrosodiphenylamine	U		0.0900	0.333
n-Nitrosodi-n-propylamine	U		0.00906	0.333
Phenanthrene	U		0.00528	0.0333
Benzylbutyl phthalate	U		0.0103	0.333
Bis(2-ethylhexyl)phthalate	U		0.0120	0.333
Di-n-butyl phthalate	U		0.0109	0.333
Diethyl phthalate	U		0.00691	0.333
Dimethyl phthalate	U		0.00540	0.333
Di-n-octyl phthalate	U		0.00907	0.333
Pyrene	U		0.0123	0.0333

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

Semi Volatile Organic Compounds (GC/MS) by Method 8270C

[L1054617-01.02.03.04.05.06.07.08.10.11](#)

Method Blank (MB)

(MB) R3371027-3 12/24/18 16:30

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
1,2,4-Trichlorobenzene	U		0.00876	0.333
4-Chloro-3-methylphenol	U		0.00477	0.333
2-Chlorophenol	U		0.00831	0.333
2,4-Dichlorophenol	U		0.00746	0.333
2,4-Dimethylphenol	U		0.0471	0.333
4,6-Dinitro-2-methylphenol	U		0.124	0.333
2,4-Dinitrophenol	U		0.0980	0.333
2-Nitrophenol	U		0.0130	0.333
4-Nitrophenol	U		0.0525	0.333
Pentachlorophenol	U		0.0480	0.333
Phenol	U		0.00695	0.333
2,4,6-Trichlorophenol	U		0.00779	0.333
(S) Nitrobenzene-d5	67.3			10.0-122
(S) 2-Fluorobiphenyl	70.0			15.0-120
(S) p-Terphenyl-d14	72.7			10.0-120
(S) Phenol-d5	66.5			10.0-120
(S) 2-Fluorophenol	75.5			12.0-120
(S) 2,4,6-Tribromophenol	64.7			10.0-127

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

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

(LCS) R3371027-1 12/24/18 15:44 • (LCSD) R3371027-2 12/24/18 16:07

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 %
Acenaphthene	0.666	0.454	0.471	68.2	70.7	38.0-120			3.68	22
Acenaphthylene	0.666	0.449	0.463	67.4	69.5	40.0-120			3.07	22
Anthracene	0.666	0.454	0.465	68.2	69.8	42.0-120			2.39	20
Benzo(a)anthracene	0.666	0.466	0.483	70.0	72.5	44.0-120			3.58	20
Benzo(b)fluoranthene	0.666	0.470	0.491	70.6	73.7	43.0-120			4.37	22
Benzo(k)fluoranthene	0.666	0.477	0.495	71.6	74.3	44.0-120			3.70	21
Benzo(g,h,i)perylene	0.666	0.464	0.494	69.7	74.2	43.0-120			6.26	22
Benzo(a)pyrene	0.666	0.463	0.484	69.5	72.7	45.0-120			4.44	20
Bis(2-chlorethoxy)methane	0.666	0.336	0.341	50.5	51.2	20.0-120			1.48	23
Bis(2-chloroethyl)ether	0.666	0.405	0.422	60.8	63.4	16.0-120			4.11	31
Bis(2-chloroisopropyl)ether	0.666	0.395	0.405	59.3	60.8	23.0-120			2.50	30
4-Bromophenyl-phenylether	0.666	0.464	0.467	69.7	70.1	40.0-120			0.644	21
2-Chloronaphthalene	0.666	0.428	0.441	64.3	66.2	35.0-120			2.99	24
4-Chlorophenyl-phenylether	0.666	0.464	0.489	69.7	73.4	40.0-120			5.25	22
Chrysene	0.666	0.477	0.493	71.6	74.0	43.0-120			3.30	20

Semi Volatile Organic Compounds (GC/MS) by Method 8270C

L1054617-01.02.03.04.05.06.07.08.10,11

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

(LCS) R3371027-1 12/24/18 15:44 • (LCSD) R3371027-2 12/24/18 16:07

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 %
Dibenz(a,h)anthracene	0.666	0.454	0.481	68.2	72.2	44.0-120			5.78	22
3,3-Dichlorobenzidine	0.666	0.365	0.422	54.8	63.4	28.0-120			14.5	23
2,4-Dinitrotoluene	0.666	0.509	0.536	76.4	80.5	45.0-120			5.17	21
2,6-Dinitrotoluene	0.666	0.468	0.496	70.3	74.5	42.0-120			5.81	21
Fluoranthene	0.666	0.484	0.497	72.7	74.6	44.0-120			2.65	21
Fluorene	0.666	0.457	0.472	68.6	70.9	41.0-120			3.23	22
Hexachlorobenzene	0.666	0.478	0.485	71.8	72.8	39.0-120			1.45	21
Hexachloro-1,3-butadiene	0.666	0.404	0.410	60.7	61.6	15.0-120			1.47	28
Hexachlorocyclopentadiene	0.666	0.436	0.440	65.5	66.1	15.0-120			0.913	31
Hexachloroethane	0.666	0.407	0.419	61.1	62.9	17.0-120			2.91	31
Indeno(1,2,3-cd)pyrene	0.666	0.456	0.480	68.5	72.1	45.0-120			5.13	21
Isophorone	0.666	0.346	0.349	52.0	52.4	23.0-120			0.863	23
Naphthalene	0.666	0.359	0.368	53.9	55.3	18.0-120			2.48	24
Nitrobenzene	0.666	0.350	0.354	52.6	53.2	17.0-120			1.14	26
n-Nitrosodimethylamine	0.666	0.367	0.354	55.1	53.2	10.0-125			3.61	33
n-Nitrosodiphenylamine	0.666	0.438	0.448	65.8	67.3	40.0-120			2.26	21
n-Nitrosodi-n-propylamine	0.666	0.394	0.405	59.2	60.8	26.0-120			2.75	27
Phenanthrene	0.666	0.452	0.465	67.9	69.8	42.0-120			2.84	20
Benzylbutyl phthalate	0.666	0.451	0.477	67.7	71.6	40.0-120			5.60	21
Bis(2-ethylhexyl)phthalate	0.666	0.463	0.489	69.5	73.4	41.0-120			5.46	21
Di-n-butyl phthalate	0.666	0.487	0.503	73.1	75.5	43.0-120			3.23	20
Diethyl phthalate	0.666	0.475	0.491	71.3	73.7	43.0-120			3.31	21
Dimethyl phthalate	0.666	0.468	0.488	70.3	73.3	43.0-120			4.18	22
Di-n-octyl phthalate	0.666	0.480	0.506	72.1	76.0	40.0-120			5.27	21
Pyrene	0.666	0.467	0.487	70.1	73.1	41.0-120			4.19	21
1,2,4-Trichlorobenzene	0.666	0.387	0.386	58.1	58.0	17.0-120			0.259	26
4-Chloro-3-methylphenol	0.666	0.370	0.386	55.6	58.0	28.0-120			4.23	20
2-Chlorophenol	0.666	0.433	0.450	65.0	67.6	28.0-120			3.85	28
2,4-Dichlorophenol	0.666	0.391	0.398	58.7	59.8	25.0-120			1.77	21
2,4-Dimethylphenol	0.666	0.365	0.366	54.8	55.0	15.0-120			0.274	26
4,6-Dinitro-2-methylphenol	0.666	0.479	0.482	71.9	72.4	16.0-120			0.624	33
2,4-Dinitrophenol	0.666	0.379	0.363	56.9	54.5	10.0-120			4.31	40
2-Nitrophenol	0.666	0.415	0.419	62.3	62.9	20.0-120			0.959	25
4-Nitrophenol	0.666	0.499	0.519	74.9	77.9	27.0-120			3.93	24
Pentachlorophenol	0.666	0.466	0.471	70.0	70.7	29.0-120			1.07	25
Phenol	0.666	0.404	0.416	60.7	62.5	28.0-120			2.93	27
2,4,6-Trichlorophenol	0.666	0.419	0.423	62.9	63.5	37.0-120			0.950	24
(S) Nitrobenzene-d5				54.1	54.1	10.0-122				
(S) 2-Fluorobiphenyl				66.4	67.3	15.0-120				
(S) p-Terphenyl-d14				71.8	74.8	10.0-120				

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

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

(LCS) R3371027-1 12/24/18 15:44 • (LCSD) R3371027-2 12/24/18 16:07

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 %
(S) Phenol-d5				62.3	63.8	10.0-120				
(S) 2-Fluorophenol				72.2	73.1	12.0-120				
(S) 2,4,6-Tribromophenol				68.8	70.1	10.0-127				

L1054617-04 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1054617-04 12/24/18 21:18 • (MS) R3371027-4 12/24/18 21:41 • (MSD) R3371027-5 12/24/18 22:26

Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MSD Result mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	<u>MS Qualifier</u>	<u>MSD Qualifier</u>	RPD %	RPD Limits %
Acenaphthene	0.666	ND	0.343	0.436	51.5	65.5	1	18.0-120			23.9	32
Acenaphthylene	0.666	ND	0.337	0.428	50.6	64.3	1	25.0-120			23.8	32
Anthracene	0.666	ND	0.333	0.418	50.0	62.8	1	22.0-120			22.6	29
Benzo(a)anthracene	0.666	ND	0.337	0.436	50.6	65.5	1	25.0-120			25.6	29
Benzo(b)fluoranthene	0.666	ND	0.343	0.431	51.5	64.7	1	19.0-122			22.7	31
Benzo(k)fluoranthene	0.666	ND	0.321	0.436	48.2	65.5	1	23.0-120		J3	30.4	30
Benzo(g,h,i)perylene	0.666	ND	0.353	0.431	53.0	64.7	1	10.0-120			19.9	33
Benzo(a)pyrene	0.666	ND	0.333	0.429	50.0	64.4	1	24.0-120			25.2	30
Bis(2-chlorethoxy)methane	0.666	ND	0.275	0.337	41.3	50.6	1	10.0-120			20.3	34
Bis(2-chloroethyl)ether	0.666	ND	0.335	0.420	50.3	63.1	1	10.0-120			22.5	40
Bis(2-chloroisopropyl)ether	0.666	ND	0.314	0.400	47.1	60.1	1	10.0-120			24.1	40
4-Bromophenyl-phenylether	0.666	ND	0.323	0.420	48.5	63.1	1	27.0-120			26.1	30
2-Chloronaphthalene	0.666	ND	0.328	0.416	49.2	62.5	1	20.0-120			23.7	32
4-Chlorophenyl-phenylether	0.666	ND	0.342	0.426	51.4	64.0	1	24.0-120			21.9	29
Chrysene	0.666	ND	0.342	0.435	51.4	65.3	1	21.0-120			23.9	29
Dibenz(a,h)anthracene	0.666	ND	0.350	0.434	52.6	65.2	1	10.0-120			21.4	32
3,3-Dichlorobenzidine	0.666	ND	0.298	0.379	44.7	56.9	1	10.0-120			23.9	34
2,4-Dinitrotoluene	0.666	ND	0.356	0.432	53.5	64.9	1	30.0-120			19.3	31
2,6-Dinitrotoluene	0.666	ND	0.337	0.405	50.6	60.8	1	25.0-120			18.3	31
Fluoranthene	0.666	ND	0.341	0.443	51.2	66.5	1	18.0-126			26.0	32
Fluorene	0.666	ND	0.342	0.430	51.4	64.6	1	25.0-120			22.8	30
Hexachlorobenzene	0.666	ND	0.325	0.421	48.8	63.2	1	27.0-120			25.7	28
Hexachloro-1,3-butadiene	0.666	ND	0.321	0.384	48.2	57.7	1	10.0-120			17.9	38
Hexachlorocyclopentadiene	0.666	ND	0.229	0.288	34.4	43.2	1	10.0-120			22.8	40
Hexachloroethane	0.666	ND	0.327	0.410	49.1	61.6	1	10.0-120			22.5	40
Indeno(1,2,3-cd)pyrene	0.666	ND	0.349	0.431	52.4	64.7	1	10.0-120			21.0	32
Isophorone	0.666	ND	0.288	0.347	43.2	52.1	1	13.0-120			18.6	34
Naphthalene	0.666	ND	0.293	0.355	44.0	53.3	1	10.0-120			19.1	35
Nitrobenzene	0.666	ND	0.290	0.354	43.5	53.2	1	10.0-120			19.9	36
n-Nitrosodimethylamine	0.666	ND	0.289	0.405	43.4	60.8	1	10.0-127			33.4	40

1

Cp

2

Tc

3

Ss

4

Cn

5

Sr

6

Qc

7

Gl

8

Al

9

Sc

L1054617-04 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1054617-04 12/24/18 21:18 • (MS) R3371027-4 12/24/18 21:41 • (MSD) R3371027-5 12/24/18 22:26

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 %
n-Nitrosodiphenylamine	0.666	ND	0.321	0.406	48.2	61.0	1	17.0-120			23.4	29
n-Nitrosodi-n-propylamine	0.666	ND	0.316	0.399	47.4	59.9	1	10.0-120			23.2	37
Phenanthrene	0.666	ND	0.334	0.422	50.2	63.4	1	17.0-120			23.3	31
Benzylbutyl phthalate	0.666	ND	0.357	0.459	53.6	68.9	1	23.0-120			25.0	30
Bis(2-ethylhexyl)phthalate	0.666	ND	0.368	0.466	55.3	70.0	1	17.0-126			23.5	30
Di-n-butyl phthalate	0.666	ND	0.359	0.460	53.9	69.1	1	30.0-120			24.7	29
Diethyl phthalate	0.666	ND	0.350	0.449	52.6	67.4	1	26.0-120			24.8	28
Dimethyl phthalate	0.666	ND	0.362	0.445	54.4	66.8	1	25.0-120			20.6	29
Di-n-octyl phthalate	0.666	ND	0.380	0.478	57.1	71.8	1	21.0-123			22.8	29
Pyrene	0.666	ND	0.350	0.446	52.6	67.0	1	16.0-121			24.1	32
1,2,4-Trichlorobenzene	0.666	ND	0.302	0.367	45.3	55.1	1	12.0-120			19.4	37
4-Chloro-3-methylphenol	0.666	ND	0.296	0.352	44.4	52.9	1	15.0-120			17.3	30
2-Chlorophenol	0.666	ND	0.345	0.440	51.8	66.1	1	15.0-120			24.2	37
2,4-Dichlorophenol	0.666	ND	0.307	0.366	46.1	55.0	1	20.0-120			17.5	31
2,4-Dimethylphenol	0.666	ND	0.305	0.371	45.8	55.7	1	10.0-120			19.5	33
4,6-Dinitro-2-methylphenol	0.666	ND	0.243	0.283	36.5	42.5	1	10.0-120			15.2	39
2,4-Dinitrophenol	0.666	ND	0.199	0.213	29.9	32.0	1	10.0-121			6.80	40
2-Nitrophenol	0.666	ND	0.302	0.341	45.3	51.2	1	12.0-120			12.1	39
4-Nitrophenol	0.666	ND	0.370	0.468	55.6	70.3	1	10.0-137			23.4	32
Pentachlorophenol	0.666	ND	0.333	0.416	50.0	62.5	1	10.0-160			22.2	31
Phenol	0.666	ND	0.326	0.416	48.9	62.5	1	12.0-120			24.3	38
2,4,6-Trichlorophenol	0.666	ND	0.307	0.384	46.1	57.7	1	19.0-120			22.3	32
(S) Nitrobenzene-d5					45.6	55.0		10.0-122				
(S) 2-Fluorobiphenyl					49.5	63.7		15.0-120				
(S) p-Terphenyl-d14					52.3	67.6		10.0-120				
(S) Phenol-d5					49.4	62.8		10.0-120				
(S) 2-Fluorophenol					58.1	74.9		12.0-120				
(S) 2,4,6-Tribromophenol					47.9	60.7		10.0-127				

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc



Semi Volatile Organic Compounds (GC/MS) by Method 8270C [L1054617-12,13,14,15,16,17,18,20,21,22,23,24,25,26,27,30,31,32,33](#)

Method Blank (MB)

(MB) R3371182-3 12/25/18 01:31

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Acenaphthene	U		0.00642	0.0333
Acenaphthylene	U		0.00671	0.0333
Anthracene	U		0.00632	0.0333
Benzo(a)anthracene	U		0.00428	0.0333
Benzo(b)fluoranthene	U		0.00695	0.0333
Benzo(k)fluoranthene	U		0.00582	0.0333
Benzo(g,h,i)perylene	U		0.00721	0.0333
Benzo(a)pyrene	U		0.00548	0.0333
Bis(2-chlorethoxy)methane	U		0.00770	0.333
Bis(2-chloroethyl)ether	U		0.00896	0.333
Bis(2-chloroisopropyl)ether	U		0.00760	0.333
4-Bromophenyl-phenylether	U		0.0114	0.333
2-Chloronaphthalene	U		0.00639	0.0333
4-Chlorophenyl-phenylether	U		0.00627	0.333
Chrysene	U		0.00555	0.0333
Dibenz(a,h)anthracene	U		0.00821	0.0333
3,3-Dichlorobenzidine	U		0.0794	0.333
2,4-Dinitrotoluene	U		0.00607	0.333
2,6-Dinitrotoluene	U		0.00737	0.333
Fluoranthene	U		0.00496	0.0333
Fluorene	U		0.00682	0.0333
Hexachlorobenzene	U		0.00856	0.333
Hexachloro-1,3-butadiene	U		0.0100	0.333
Hexachlorocyclopentadiene	U		0.0587	0.333
Hexachloroethane	U		0.0134	0.333
Indeno(1,2,3-cd)pyrene	U		0.00772	0.0333
Isophorone	U		0.00522	0.333
Naphthalene	U		0.00889	0.0333
Nitrobenzene	U		0.00695	0.333
n-Nitrosodimethylamine	U		0.0647	0.333
n-Nitrosodiphenylamine	U		0.0900	0.333
n-Nitrosodi-n-propylamine	U		0.00906	0.333
Phenanthrene	U		0.00528	0.0333
Benzylbutyl phthalate	U		0.0103	0.333
Bis(2-ethylhexyl)phthalate	U		0.0120	0.333
Di-n-butyl phthalate	U		0.0109	0.333
Diethyl phthalate	U		0.00691	0.333
Dimethyl phthalate	U		0.00540	0.333
Di-n-octyl phthalate	U		0.00907	0.333
Pyrene	U		0.0123	0.0333

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc



Semi Volatile Organic Compounds (GC/MS) by Method 8270C [L1054617-12,13,14,15,16,17,18,20,21,22,23,24,25,26,27,30,31,32,33](#)

Method Blank (MB)

(MB) R3371182-3 12/25/18 01:31

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
1,2,4-Trichlorobenzene	U		0.00876	0.333
4-Chloro-3-methylphenol	U		0.00477	0.333
2-Chlorophenol	U		0.00831	0.333
2,4-Dichlorophenol	U		0.00746	0.333
2,4-Dimethylphenol	U		0.0471	0.333
4,6-Dinitro-2-methylphenol	U		0.124	0.333
2,4-Dinitrophenol	U		0.0980	0.333
2-Nitrophenol	U		0.0130	0.333
4-Nitrophenol	U		0.0525	0.333
Pentachlorophenol	U		0.0480	0.333
Phenol	U		0.00695	0.333
2,4,6-Trichlorophenol	U		0.00779	0.333
(S) Nitrobenzene-d5	78.7			10.0-122
(S) 2-Fluorobiphenyl	79.0			15.0-120
(S) p-Terphenyl-d14	83.5			10.0-120
(S) Phenol-d5	75.4			10.0-120
(S) 2-Fluorophenol	85.9			12.0-120
(S) 2,4,6-Tribromophenol	75.5			10.0-127

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc

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

(LCS) R3371182-1 12/25/18 00:44 • (LCSD) R3371182-2 12/25/18 01:07

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 %
Acenaphthene	0.666	0.517	0.508	77.6	76.3	38.0-120			1.76	22
Acenaphthylene	0.666	0.514	0.508	77.2	76.3	40.0-120			1.17	22
Anthracene	0.666	0.509	0.500	76.4	75.1	42.0-120			1.78	20
Benzo(a)anthracene	0.666	0.517	0.500	77.6	75.1	44.0-120			3.34	20
Benzo(b)fluoranthene	0.666	0.521	0.517	78.2	77.6	43.0-120			0.771	22
Benzo(k)fluoranthene	0.666	0.544	0.531	81.7	79.7	44.0-120			2.42	21
Benzo(g,h,i)perylene	0.666	0.562	0.558	84.4	83.8	43.0-120			0.714	22
Benzo(a)pyrene	0.666	0.528	0.514	79.3	77.2	45.0-120			2.69	20
Bis(2-chlorethoxy)methane	0.666	0.386	0.386	58.0	58.0	20.0-120			0.000	23
Bis(2-chloroethyl)ether	0.666	0.503	0.484	75.5	72.7	16.0-120			3.85	31
Bis(2-chloroisopropyl)ether	0.666	0.473	0.478	71.0	71.8	23.0-120			1.05	30
4-Bromophenyl-phenylether	0.666	0.543	0.521	81.5	78.2	40.0-120			4.14	21
2-Chloronaphthalene	0.666	0.493	0.496	74.0	74.5	35.0-120			0.607	24
4-Chlorophenyl-phenylether	0.666	0.531	0.515	79.7	77.3	40.0-120			3.06	22
Chrysene	0.666	0.528	0.518	79.3	77.8	43.0-120			1.91	20

Semi Volatile Organic Compounds (GC/MS) by Method 8270C

L1054617-12,13,14,15,16,17,18,20,21,22,23,24,25,26,27,30,31,32,33

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

(LCS) R3371182-1 12/25/18 00:44 • (LCSD) R3371182-2 12/25/18 01:07

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 %
Dibenz(a,h)anthracene	0.666	0.552	0.547	82.9	82.1	44.0-120			0.910	22
3,3-Dichlorobenzidine	0.666	0.480	0.469	72.1	70.4	28.0-120			2.32	23
2,4-Dinitrotoluene	0.666	0.588	0.578	88.3	86.8	45.0-120			1.72	21
2,6-Dinitrotoluene	0.666	0.562	0.549	84.4	82.4	42.0-120			2.34	21
Fluoranthene	0.666	0.527	0.508	79.1	76.3	44.0-120			3.67	21
Fluorene	0.666	0.522	0.508	78.4	76.3	41.0-120			2.72	22
Hexachlorobenzene	0.666	0.550	0.524	82.6	78.7	39.0-120			4.84	21
Hexachloro-1,3-butadiene	0.666	0.425	0.432	63.8	64.9	15.0-120			1.63	28
Hexachlorocyclopentadiene	0.666	0.534	0.550	80.2	82.6	15.0-120			2.95	31
Hexachloroethane	0.666	0.474	0.484	71.2	72.7	17.0-120			2.09	31
Indeno(1,2,3-cd)pyrene	0.666	0.543	0.540	81.5	81.1	45.0-120			0.554	21
Isophorone	0.666	0.392	0.397	58.9	59.6	23.0-120			1.27	23
Naphthalene	0.666	0.392	0.397	58.9	59.6	18.0-120			1.27	24
Nitrobenzene	0.666	0.397	0.402	59.6	60.4	17.0-120			1.25	26
n-Nitrosodimethylamine	0.666	0.459	0.457	68.9	68.6	10.0-125			0.437	33
n-Nitrosodiphenylamine	0.666	0.524	0.497	78.7	74.6	40.0-120			5.29	21
n-Nitrosodi-n-propylamine	0.666	0.478	0.489	71.8	73.4	26.0-120			2.28	27
Phenanthrene	0.666	0.500	0.498	75.1	74.8	42.0-120			0.401	20
Benzylbutyl phthalate	0.666	0.554	0.544	83.2	81.7	40.0-120			1.82	21
Bis(2-ethylhexyl)phthalate	0.666	0.545	0.539	81.8	80.9	41.0-120			1.11	21
Di-n-butyl phthalate	0.666	0.563	0.529	84.5	79.4	43.0-120			6.23	20
Diethyl phthalate	0.666	0.534	0.532	80.2	79.9	43.0-120			0.375	21
Dimethyl phthalate	0.666	0.537	0.525	80.6	78.8	43.0-120			2.26	22
Di-n-octyl phthalate	0.666	0.566	0.559	85.0	83.9	40.0-120			1.24	21
Pyrene	0.666	0.530	0.518	79.6	77.8	41.0-120			2.29	21
1,2,4-Trichlorobenzene	0.666	0.411	0.418	61.7	62.8	17.0-120			1.69	26
4-Chloro-3-methylphenol	0.666	0.420	0.414	63.1	62.2	28.0-120			1.44	20
2-Chlorophenol	0.666	0.507	0.509	76.1	76.4	28.0-120			0.394	28
2,4-Dichlorophenol	0.666	0.427	0.425	64.1	63.8	25.0-120			0.469	21
2,4-Dimethylphenol	0.666	0.397	0.397	59.6	59.6	15.0-120			0.000	26
4,6-Dinitro-2-methylphenol	0.666	0.427	0.401	64.1	60.2	16.0-120			6.28	33
2,4-Dinitrophenol	0.666	0.241	0.217	36.2	32.6	10.0-120			10.5	40
2-Nitrophenol	0.666	0.452	0.454	67.9	68.2	20.0-120			0.442	25
4-Nitrophenol	0.666	0.529	0.524	79.4	78.7	27.0-120			0.950	24
Pentachlorophenol	0.666	0.462	0.456	69.4	68.5	29.0-120			1.31	25
Phenol	0.666	0.484	0.485	72.7	72.8	28.0-120			0.206	27
2,4,6-Trichlorophenol	0.666	0.504	0.484	75.7	72.7	37.0-120			4.05	24
(S) Nitrobenzene-d5				61.0	61.9	10.0-122				
(S) 2-Fluorobiphenyl				75.1	76.6	15.0-120				
(S) p-Terphenyl-d14				80.5	79.0	10.0-120				

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Cp

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Tc

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Ss

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Cn

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Sr

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Qc

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Gl

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Al

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Sc

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

(LCS) R3371182-1 12/25/18 00:44 • (LCSD) R3371182-2 12/25/18 01:07

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 %
(S) Phenol-d5				73.9	74.3	10.0-120				
(S) 2-Fluorophenol				83.2	85.0	12.0-120				
(S) 2,4,6-Tribromophenol				85.1	82.4	10.0-127				

L1054617-18 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1054617-18 12/25/18 03:49 • (MS) R3371182-4 12/25/18 04:12 • (MSD) R3371182-5 12/25/18 04:36

Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MSD Result mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	<u>MS Qualifier</u>	<u>MSD Qualifier</u>	RPD %	RPD Limits %
Acenaphthene	0.634	ND	0.374	0.287	59.0	43.2	1	18.0-120			26.3	32
Acenaphthylene	0.634	ND	0.372	0.285	58.7	42.9	1	25.0-120			26.5	32
Anthracene	0.634	ND	0.364	0.356	57.4	53.6	1	22.0-120			2.22	29
Benzo(a)anthracene	0.634	ND	0.347	0.394	54.7	59.3	1	25.0-120			12.7	29
Benzo(b)fluoranthene	0.634	ND	0.342	0.390	53.9	58.7	1	19.0-122			13.1	31
Benzo(k)fluoranthene	0.634	ND	0.348	0.375	54.9	56.5	1	23.0-120			7.47	30
Benzo(g,h,i)perylene	0.634	ND	0.385	0.419	60.7	63.1	1	10.0-120			8.46	33
Benzo(a)pyrene	0.634	ND	0.346	0.386	54.6	58.1	1	24.0-120			10.9	30
Bis(2-chlorethoxy)methane	0.634	ND	0.300	0.240	47.3	36.1	1	10.0-120			22.2	34
Bis(2-chloroethyl)ether	0.634	ND	0.361	0.256	56.9	38.6	1	10.0-120			34.0	40
Bis(2-chloroisopropyl)ether	0.634	ND	0.352	0.239	55.5	36.0	1	10.0-120			38.2	40
4-Bromophenyl-phenylether	0.634	ND	0.377	0.323	59.5	48.6	1	27.0-120			15.4	30
2-Chloronaphthalene	0.634	ND	0.364	0.273	57.4	41.1	1	20.0-120			28.6	32
4-Chlorophenyl-phenylether	0.634	ND	0.367	0.298	57.9	44.9	1	24.0-120			20.8	29
Chrysene	0.634	ND	0.359	0.404	56.6	60.8	1	21.0-120			11.8	29
Dibenz(a,h)anthracene	0.634	ND	0.383	0.424	60.4	63.9	1	10.0-120			10.2	32
3,3-Dichlorobenzidine	0.634	ND	0.314	0.392	49.5	59.0	1	10.0-120			22.1	34
2,4-Dinitrotoluene	0.634	ND	0.412	0.388	65.0	58.4	1	30.0-120			6.00	31
2,6-Dinitrotoluene	0.634	ND	0.402	0.333	63.4	50.2	1	25.0-120			18.8	31
Fluoranthene	0.634	ND	0.359	0.387	56.6	58.3	1	18.0-126			7.51	32
Fluorene	0.634	ND	0.374	0.300	59.0	45.2	1	25.0-120			22.0	30
Hexachlorobenzene	0.634	ND	0.379	0.344	59.8	51.8	1	27.0-120			9.68	28
Hexachloro-1,3-butadiene	0.634	ND	0.325	0.223	51.3	33.6	1	10.0-120			37.2	38
Hexachlorocyclopentadiene	0.634	ND	0.0849	0.0915	13.4	13.8	1	10.0-120			7.48	40
Hexachloroethane	0.634	ND	0.337	0.215	53.2	32.4	1	10.0-120		J3	44.2	40
Indeno(1,2,3-cd)pyrene	0.634	ND	0.377	0.416	59.5	62.7	1	10.0-120			9.84	32
Isophorone	0.634	ND	0.307	0.248	48.4	37.3	1	13.0-120			21.3	34
Naphthalene	0.634	ND	0.309	0.228	48.7	34.3	1	10.0-120			30.2	35
Nitrobenzene	0.634	ND	0.308	0.234	48.6	35.2	1	10.0-120			27.3	36
n-Nitrosodimethylamine	0.634	ND	0.331	0.264	52.2	39.8	1	10.0-127			22.5	40

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Cp

2

Tc

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Ss

4

Cn

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Sr

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Qc

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Gl

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Al

9

Sc

Semi Volatile Organic Compounds (GC/MS) by Method 8270C [L1054617-12,13,14,15,16,17,18,20,21,22,23,24,25,26,27,30,31,32,33](#)

L1054617-18 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1054617-18 12/25/18 03:49 • (MS) R3371182-4 12/25/18 04:12 • (MSD) R3371182-5 12/25/18 04:36

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 %
n-Nitrosodiphenylamine	0.634	ND	0.366	0.347	57.7	52.3	1	17.0-120			5.33	29
n-Nitrosodi-n-propylamine	0.634	ND	0.357	0.271	56.3	40.8	1	10.0-120			27.4	37
Phenanthrene	0.634	ND	0.359	0.348	56.6	52.4	1	17.0-120			3.11	31
Benzylbutyl phthalate	0.634	ND	0.380	0.424	59.9	63.9	1	23.0-120			10.9	30
Bis(2-ethylhexyl)phthalate	0.634	ND	0.378	0.427	59.6	64.3	1	17.0-126			12.2	30
Di-n-butyl phthalate	0.634	ND	0.380	0.405	59.9	61.0	1	30.0-120			6.37	29
Diethyl phthalate	0.634	ND	0.383	0.356	60.4	53.6	1	26.0-120			7.31	28
Dimethyl phthalate	0.634	ND	0.383	0.334	60.4	50.3	1	25.0-120			13.7	29
Di-n-octyl phthalate	0.634	ND	0.404	0.457	63.7	68.8	1	21.0-123			12.3	29
Pyrene	0.634	ND	0.367	0.403	57.9	60.7	1	16.0-121			9.35	32
1,2,4-Trichlorobenzene	0.634	ND	0.319	0.224	50.3	33.7	1	12.0-120			35.0	37
4-Chloro-3-methylphenol	0.634	ND	0.315	0.279	49.7	42.0	1	15.0-120			12.1	30
2-Chlorophenol	0.634	ND	0.366	0.291	57.7	43.8	1	15.0-120			22.8	37
2,4-Dichlorophenol	0.634	ND	0.325	0.268	51.3	40.4	1	20.0-120			19.2	31
2,4-Dimethylphenol	0.634	ND	0.313	0.270	49.4	40.7	1	10.0-120			14.8	33
4,6-Dinitro-2-methylphenol	0.634	ND	0.245	ND	38.6	0.000	1	10.0-120		J3 J6	200	39
2,4-Dinitrophenol	0.634	ND	0.175	ND	27.6	0.000	1	10.0-121		J3 J6	200	40
2-Nitrophenol	0.634	ND	0.348	0.281	54.9	42.3	1	12.0-120			21.3	39
4-Nitrophenol	0.634	ND	0.369	0.395	58.2	59.5	1	10.0-137			6.81	32
Pentachlorophenol	0.634	ND	0.366	0.357	57.7	53.8	1	10.0-160			2.49	31
Phenol	0.634	ND	0.338	0.286	53.3	43.1	1	12.0-120			16.7	38
2,4,6-Trichlorophenol	0.634	ND	0.368	0.297	58.0	44.7	1	19.0-120			21.4	32
(S) Nitrobenzene-d5					49.5	34.9		10.0-122				
(S) 2-Fluorobiphenyl					57.7	40.4		15.0-120				
(S) p-Terphenyl-d14					57.1	58.4		10.0-120				
(S) Phenol-d5					54.9	43.2		10.0-120				
(S) 2-Fluorophenol					63.7	46.5		12.0-120				
(S) 2,4,6-Tribromophenol					62.9	55.4		10.0-127				

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Method Blank (MB)

(MB) R3371203-3 12/26/18 11:18

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Acenaphthene	U		0.00642	0.0333
Acenaphthylene	U		0.00671	0.0333
Anthracene	U		0.00632	0.0333
Benzo(a)anthracene	U		0.00428	0.0333
Benzo(b)fluoranthene	U		0.00695	0.0333
Benzo(k)fluoranthene	U		0.00582	0.0333
Benzo(g,h,i)perylene	U		0.00721	0.0333
Benzo(a)pyrene	U		0.00548	0.0333
Bis(2-chlorethoxy)methane	U		0.00770	0.333
Bis(2-chloroethyl)ether	U		0.00896	0.333
Bis(2-chloroisopropyl)ether	U		0.00760	0.333
4-Bromophenyl-phenylether	U		0.0114	0.333
2-Chloronaphthalene	U		0.00639	0.0333
4-Chlorophenyl-phenylether	U		0.00627	0.333
Chrysene	U		0.00555	0.0333
Dibenz(a,h)anthracene	U		0.00821	0.0333
3,3-Dichlorobenzidine	U		0.0794	0.333
2,4-Dinitrotoluene	U		0.00607	0.333
2,6-Dinitrotoluene	U		0.00737	0.333
Fluoranthene	U		0.00496	0.0333
Fluorene	U		0.00682	0.0333
Hexachlorobenzene	U		0.00856	0.333
Hexachloro-1,3-butadiene	U		0.0100	0.333
Hexachlorocyclopentadiene	U		0.0587	0.333
Hexachloroethane	U		0.0134	0.333
Indeno(1,2,3-cd)pyrene	U		0.00772	0.0333
Isophorone	U		0.00522	0.333
Naphthalene	U		0.00889	0.0333
Nitrobenzene	U		0.00695	0.333
n-Nitrosodimethylamine	U		0.0647	0.333
n-Nitrosodiphenylamine	U		0.0900	0.333
n-Nitrosodi-n-propylamine	U		0.00906	0.333
Phenanthrene	U		0.00528	0.0333
Benzylbutyl phthalate	U		0.0103	0.333
Bis(2-ethylhexyl)phthalate	U		0.0120	0.333
Di-n-butyl phthalate	U		0.0109	0.333
Diethyl phthalate	U		0.00691	0.333
Dimethyl phthalate	U		0.00540	0.333
Di-n-octyl phthalate	U		0.00907	0.333
Pyrene	U		0.0123	0.0333

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Cp

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Tc

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Ss

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Cn

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Sr

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Qc

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Gl

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Al

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Sc



Method Blank (MB)

(MB) R3371203-3 12/26/18 11:18

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
1,2,4-Trichlorobenzene	U		0.00876	0.333
4-Chloro-3-methylphenol	U		0.00477	0.333
2-Chlorophenol	U		0.00831	0.333
2,4-Dichlorophenol	U		0.00746	0.333
2,4-Dimethylphenol	U		0.0471	0.333
4,6-Dinitro-2-methylphenol	U		0.124	0.333
2,4-Dinitrophenol	U		0.0980	0.333
2-Nitrophenol	U		0.0130	0.333
4-Nitrophenol	U		0.0525	0.333
Pentachlorophenol	U		0.0480	0.333
Phenol	U		0.00695	0.333
2,4,6-Trichlorophenol	U		0.00779	0.333
(S) Nitrobenzene-d5	69.7			10.0-122
(S) 2-Fluorobiphenyl	70.9			15.0-120
(S) p-Terphenyl-d14	71.8			10.0-120
(S) Phenol-d5	66.5			10.0-120
(S) 2-Fluorophenol	76.6			12.0-120
(S) 2,4,6-Tribromophenol	64.0			10.0-127

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

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

(LCS) R3371203-1 12/26/18 10:32 • (LCSD) R3371203-2 12/26/18 10:55

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 %
Acenaphthene	0.666	0.581	0.525	87.2	78.8	38.0-120			10.1	22
Acenaphthylene	0.666	0.569	0.525	85.4	78.8	40.0-120			8.04	22
Anthracene	0.666	0.576	0.539	86.5	80.9	42.0-120			6.64	20
Benzo(a)anthracene	0.666	0.573	0.542	86.0	81.4	44.0-120			5.56	20
Benzo(b)fluoranthene	0.666	0.590	0.542	88.6	81.4	43.0-120			8.48	22
Benzo(k)fluoranthene	0.666	0.607	0.550	91.1	82.6	44.0-120			9.85	21
Benzo(g,h,i)perylene	0.666	0.635	0.579	95.3	86.9	43.0-120			9.23	22
Benzo(a)pyrene	0.666	0.585	0.545	87.8	81.8	45.0-120			7.08	20
Bis(2-chlorethoxy)methane	0.666	0.430	0.403	64.6	60.5	20.0-120			6.48	23
Bis(2-chloroethyl)ether	0.666	0.551	0.522	82.7	78.4	16.0-120			5.41	31
Bis(2-chloroisopropyl)ether	0.666	0.543	0.504	81.5	75.7	23.0-120			7.45	30
4-Bromophenyl-phenylether	0.666	0.594	0.561	89.2	84.2	40.0-120			5.71	21
2-Chloronaphthalene	0.666	0.559	0.513	83.9	77.0	35.0-120			8.58	24
4-Chlorophenyl-phenylether	0.666	0.583	0.536	87.5	80.5	40.0-120			8.40	22
Chrysene	0.666	0.583	0.546	87.5	82.0	43.0-120			6.55	20

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

(LCS) R3371203-1 12/26/18 10:32 • (LCSD) R3371203-2 12/26/18 10:55

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 %
Dibenz(a,h)anthracene	0.666	0.621	0.568	93.2	85.3	44.0-120			8.92	22
3,3-Dichlorobenzidine	0.666	0.511	0.490	76.7	73.6	28.0-120			4.20	23
2,4-Dinitrotoluene	0.666	0.675	0.636	101	95.5	45.0-120			5.95	21
2,6-Dinitrotoluene	0.666	0.612	0.566	91.9	85.0	42.0-120			7.81	21
Fluoranthene	0.666	0.586	0.562	88.0	84.4	44.0-120			4.18	21
Fluorene	0.666	0.579	0.532	86.9	79.9	41.0-120			8.46	22
Hexachlorobenzene	0.666	0.603	0.566	90.5	85.0	39.0-120			6.33	21
Hexachloro-1,3-butadiene	0.666	0.475	0.447	71.3	67.1	15.0-120			6.07	28
Hexachlorocyclopentadiene	0.666	0.617	0.572	92.6	85.9	15.0-120			7.57	31
Hexachloroethane	0.666	0.540	0.509	81.1	76.4	17.0-120			5.91	31
Indeno(1,2,3-cd)pyrene	0.666	0.620	0.559	93.1	83.9	45.0-120			10.3	21
Isophorone	0.666	0.440	0.418	66.1	62.8	23.0-120			5.13	23
Naphthalene	0.666	0.438	0.409	65.8	61.4	18.0-120			6.85	24
Nitrobenzene	0.666	0.443	0.417	66.5	62.6	17.0-120			6.05	26
n-Nitrosodimethylamine	0.666	0.524	0.489	78.7	73.4	10.0-125			6.91	33
n-Nitrosodiphenylamine	0.666	0.560	0.532	84.1	79.9	40.0-120			5.13	21
n-Nitrosodi-n-propylamine	0.666	0.542	0.498	81.4	74.8	26.0-120			8.46	27
Phenanthrene	0.666	0.568	0.534	85.3	80.2	42.0-120			6.17	20
Benzylbutyl phthalate	0.666	0.610	0.576	91.6	86.5	40.0-120			5.73	21
Bis(2-ethylhexyl)phthalate	0.666	0.611	0.581	91.7	87.2	41.0-120			5.03	21
Di-n-butyl phthalate	0.666	0.613	0.576	92.0	86.5	43.0-120			6.22	20
Diethyl phthalate	0.666	0.616	0.578	92.5	86.8	43.0-120			6.37	21
Dimethyl phthalate	0.666	0.588	0.549	88.3	82.4	43.0-120			6.86	22
Di-n-octyl phthalate	0.666	0.643	0.618	96.5	92.8	40.0-120			3.97	21
Pyrene	0.666	0.562	0.530	84.4	79.6	41.0-120			5.86	21
1,2,4-Trichlorobenzene	0.666	0.458	0.428	68.8	64.3	17.0-120			6.77	26
4-Chloro-3-methylphenol	0.666	0.458	0.434	68.8	65.2	28.0-120			5.38	20
2-Chlorophenol	0.666	0.561	0.530	84.2	79.6	28.0-120			5.68	28
2,4-Dichlorophenol	0.666	0.457	0.428	68.6	64.3	25.0-120			6.55	21
2,4-Dimethylphenol	0.666	0.430	0.393	64.6	59.0	15.0-120			8.99	26
4,6-Dinitro-2-methylphenol	0.666	0.541	0.500	81.2	75.1	16.0-120			7.88	33
2,4-Dinitrophenol	0.666	0.331	0.287	49.7	43.1	10.0-120			14.2	40
2-Nitrophenol	0.666	0.502	0.481	75.4	72.2	20.0-120			4.27	25
4-Nitrophenol	0.666	0.587	0.543	88.1	81.5	27.0-120			7.79	24
Pentachlorophenol	0.666	0.524	0.504	78.7	75.7	29.0-120			3.89	25
Phenol	0.666	0.525	0.486	78.8	73.0	28.0-120			7.72	27
2,4,6-Trichlorophenol	0.666	0.548	0.502	82.3	75.4	37.0-120			8.76	24
(S) Nitrobenzene-d5				68.5	64.6	10.0-122				
(S) 2-Fluorobiphenyl				87.1	78.7	15.0-120				
(S) p-Terphenyl-d14				88.9	82.0	10.0-120				

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

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

(LCS) R3371203-1 12/26/18 10:32 • (LCSD) R3371203-2 12/26/18 10:55

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 %
(S) Phenol-d5				83.8	76.6	10.0-120				
(S) 2-Fluorophenol				94.0	86.6	12.0-120				
(S) 2,4,6-Tribromophenol				91.9	86.9	10.0-127				

L1054617-34 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1054617-34 12/25/18 01:11 • (MS) R3371323-1 12/25/18 01:34 • (MSD) R3371323-2 12/25/18 01:56

Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MSD Result mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	<u>MS Qualifier</u>	<u>MSD Qualifier</u>	RPD %	RPD Limits %
Acenaphthene	0.634	ND	0.361	0.361	56.9	56.2	1	18.0-120			0.000	32
Acenaphthylene	0.634	ND	0.356	0.352	56.2	54.8	1	25.0-120			1.13	32
Anthracene	0.634	ND	0.356	0.348	56.2	54.2	1	22.0-120			2.27	29
Benzo(a)anthracene	0.634	ND	0.357	0.340	56.3	53.0	1	25.0-120			4.88	29
Benzo(b)fluoranthene	0.634	ND	0.355	0.335	56.0	52.2	1	19.0-122			5.80	31
Benzo(k)fluoranthene	0.634	ND	0.362	0.350	57.1	54.5	1	23.0-120			3.37	30
Benzo(g,h,i)perylene	0.634	ND	0.385	0.365	60.7	56.9	1	10.0-120			5.33	33
Benzo(a)pyrene	0.634	ND	0.354	0.337	55.8	52.5	1	24.0-120			4.92	30
Bis(2-chlorethoxy)methane	0.634	ND	0.278	0.273	43.8	42.5	1	10.0-120			1.81	34
Bis(2-chloroethyl)ether	0.634	ND	0.337	0.333	53.2	51.9	1	10.0-120			1.19	40
Bis(2-chloroisopropyl)ether	0.634	ND	0.333	0.327	52.5	50.9	1	10.0-120			1.82	40
4-Bromophenyl-phenylether	0.634	ND	0.359	0.348	56.6	54.2	1	27.0-120			3.11	30
2-Chloronaphthalene	0.634	ND	0.348	0.345	54.9	53.7	1	20.0-120			0.866	32
4-Chlorophenyl-phenylether	0.634	ND	0.367	0.364	57.9	56.7	1	24.0-120			0.821	29
Chrysene	0.634	ND	0.373	0.351	58.8	54.7	1	21.0-120			6.08	29
Dibenz(a,h)anthracene	0.634	ND	0.388	0.368	61.2	57.3	1	10.0-120			5.29	32
3,3-Dichlorobenzidine	0.634	ND	0.316	0.325	49.8	50.6	1	10.0-120			2.81	34
2,4-Dinitrotoluene	0.634	ND	0.404	0.398	63.7	62.0	1	30.0-120			1.50	31
2,6-Dinitrotoluene	0.634	ND	0.370	0.368	58.4	57.3	1	25.0-120			0.542	31
Fluoranthene	0.634	ND	0.366	0.351	57.7	54.7	1	18.0-126			4.18	32
Fluorene	0.634	ND	0.356	0.361	56.2	56.2	1	25.0-120			1.39	30
Hexachlorobenzene	0.634	ND	0.374	0.359	59.0	55.9	1	27.0-120			4.09	28
Hexachloro-1,3-butadiene	0.634	ND	0.344	0.325	54.3	50.6	1	10.0-120			5.68	38
Hexachlorocyclopentadiene	0.634	ND	0.109	0.140	17.2	21.8	1	10.0-120			24.9	40
Hexachloroethane	0.634	ND	0.330	0.325	52.1	50.6	1	10.0-120			1.53	40
Indeno(1,2,3-cd)pyrene	0.634	ND	0.377	0.357	59.5	55.6	1	10.0-120			5.45	32
Isophorone	0.634	ND	0.286	0.284	45.1	44.2	1	13.0-120			0.702	34
Naphthalene	0.634	ND	0.305	0.301	48.1	46.9	1	10.0-120			1.32	35
Nitrobenzene	0.634	ND	0.289	0.285	45.6	44.4	1	10.0-120			1.39	36
n-Nitrosodimethylamine	0.634	ND	0.274	0.270	43.2	42.1	1	10.0-127			1.47	40

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

L1054617-34 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1054617-34 12/25/18 01:11 • (MS) R3371323-1 12/25/18 01:34 • (MSD) R3371323-2 12/25/18 01:56

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 %
n-Nitrosodiphenylamine	0.634	ND	0.340	0.333	53.6	51.9	1	17.0-120			2.08	29
n-Nitrosodi-n-propylamine	0.634	ND	0.313	0.312	49.4	48.6	1	10.0-120			0.320	37
Phenanthrene	0.634	ND	0.360	0.346	56.8	53.9	1	17.0-120			3.97	31
Benzylbutyl phthalate	0.634	ND	0.362	0.346	57.1	53.9	1	23.0-120			4.52	30
Bis(2-ethylhexyl)phthalate	0.634	ND	0.400	0.355	63.1	55.3	1	17.0-126			11.9	30
Di-n-butyl phthalate	0.634	ND	0.371	0.362	58.5	56.4	1	30.0-120			2.46	29
Diethyl phthalate	0.634	ND	0.369	0.367	58.2	57.2	1	26.0-120			0.543	28
Dimethyl phthalate	0.634	ND	0.362	0.361	57.1	56.2	1	25.0-120			0.277	29
Di-n-octyl phthalate	0.634	ND	0.409	0.381	64.5	59.3	1	21.0-123			7.09	29
Pyrene	0.634	ND	0.357	0.340	56.3	53.0	1	16.0-121			4.88	32
1,2,4-Trichlorobenzene	0.634	ND	0.321	0.308	50.6	48.0	1	12.0-120			4.13	37
4-Chloro-3-methylphenol	0.634	ND	0.279	0.273	44.0	42.5	1	15.0-120			2.17	30
2-Chlorophenol	0.634	ND	0.343	0.346	54.1	53.9	1	15.0-120			0.871	37
2,4-Dichlorophenol	0.634	ND	0.302	0.301	47.6	46.9	1	20.0-120			0.332	31
2,4-Dimethylphenol	0.634	ND	0.295	0.288	46.5	44.9	1	10.0-120			2.40	33
4,6-Dinitro-2-methylphenol	0.634	ND	0.335	0.314	52.8	48.9	1	10.0-120			6.47	39
2,4-Dinitrophenol	0.634	ND	0.284	0.263	44.8	41.0	1	10.0-121			7.68	40
2-Nitrophenol	0.634	ND	0.346	0.345	54.6	53.7	1	12.0-120			0.289	39
4-Nitrophenol	0.634	ND	0.399	0.377	62.9	58.7	1	10.0-137			5.67	32
Pentachlorophenol	0.634	ND	0.367	0.377	57.9	58.7	1	10.0-160			2.69	31
Phenol	0.634	ND	0.312	0.310	49.2	48.3	1	12.0-120			0.643	38
2,4,6-Trichlorophenol	0.634	ND	0.330	0.331	52.1	51.6	1	19.0-120			0.303	32
(S) Nitrobenzene-d5					44.8	43.6		10.0-122				
(S) 2-Fluorobiphenyl					54.9	53.3		15.0-120				
(S) p-Terphenyl-d14					56.2	53.3		10.0-120				
(S) Phenol-d5					48.6	48.0		10.0-120				
(S) 2-Fluorophenol					56.2	55.8		12.0-120				
(S) 2,4,6-Tribromophenol					55.2	53.0		10.0-127				

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Method Blank (MB)

(MB) R3371018-3 12/23/18 13:35

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Acenaphthene	U		0.000316	0.00100
Acenaphthylene	U		0.000309	0.00100
Anthracene	U		0.000291	0.00100
Benzo(a)anthracene	U		0.0000975	0.00100
Benzo(b)fluoranthene	U		0.0000896	0.00100
Benzo(k)fluoranthene	U		0.000355	0.00100
Benzo(g,h,i)perylene	U		0.000161	0.00100
Benzo(a)pyrene	U		0.000340	0.00100
Bis(2-chlorethoxy)methane	U		0.000329	0.0100
Bis(2-chloroethyl)ether	U		0.00162	0.0100
Bis(2-chloroisopropyl)ether	U		0.000445	0.0100
4-Bromophenyl-phenylether	U		0.000335	0.0100
2-Chloronaphthalene	U		0.000330	0.00100
4-Chlorophenyl-phenylether	U		0.000303	0.0100
Chrysene	U		0.000332	0.00100
Dibenz(a,h)anthracene	U		0.000279	0.00100
3,3-Dichlorobenzidine	U		0.00202	0.0100
2,4-Dinitrotoluene	U		0.00165	0.0100
2,6-Dinitrotoluene	U		0.000279	0.0100
Fluoranthene	U		0.000310	0.00100
Fluorene	U		0.000323	0.00100
Hexachlorobenzene	U		0.000341	0.00100
Hexachloro-1,3-butadiene	U		0.000329	0.0100
Hexachlorocyclopentadiene	U		0.00233	0.0100
Hexachloroethane	U		0.000365	0.0100
Indeno(1,2,3-cd)pyrene	U		0.000279	0.00100
Isophorone	U		0.000272	0.0100
Naphthalene	U		0.000372	0.00100
Nitrobenzene	U		0.000367	0.0100
n-Nitrosodimethylamine	U		0.00126	0.0100
n-Nitrosodiphenylamine	U		0.00119	0.0100
n-Nitrosodi-n-propylamine	U		0.000403	0.0100
Phenanthrene	U		0.000366	0.00100
Benzylbutyl phthalate	U		0.000275	0.00300
Bis(2-ethylhexyl)phthalate	U		0.000709	0.00300
Di-n-butyl phthalate	U		0.000266	0.00300
Diethyl phthalate	U		0.000282	0.00300
Dimethyl phthalate	U		0.000283	0.00300
Di-n-octyl phthalate	U		0.000278	0.00300
Pyrene	U		0.000330	0.00100

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Method Blank (MB)

(MB) R3371018-3 12/23/18 13:35

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
1,2,4-Trichlorobenzene	U		0.000355	0.0100
4-Chloro-3-methylphenol	U		0.000263	0.0100
2-Chlorophenol	U		0.000283	0.0100
2-Nitrophenol	U		0.000320	0.0100
4-Nitrophenol	U		0.00201	0.0100
Pentachlorophenol	U		0.000313	0.0100
Phenol	U		0.000334	0.0100
2,4,6-Trichlorophenol	U		0.000297	0.0100
2,4-Dichlorophenol	U		0.000284	0.0100
2,4-Dimethylphenol	U		0.000624	0.0100
4,6-Dinitro-2-methylphenol	U		0.00262	0.0100
2,4-Dinitrophenol	U		0.00325	0.0100
(S) Nitrobenzene-d5	38.0			10.0-127
(S) 2-Fluorobiphenyl	36.5			10.0-130
(S) p-Terphenyl-d14	50.0			10.0-128
(S) Phenol-d5	13.6			10.0-120
(S) 2-Fluorophenol	21.2			10.0-120
(S) 2,4,6-Tribromophenol	29.3			10.0-155

1

Cp

2

Tc

3

Ss

4

Cn

5

Sr

6

Qc

7

Gl

8

Al

9

Sc

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

(LCS) R3371018-1 12/23/18 12:48 • (LCSD) R3371018-2 12/23/18 13:12

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 %
Acenaphthene	0.0500	0.0241	0.0265	48.2	53.0	41.0-120			9.49	22
Acenaphthylene	0.0500	0.0235	0.0262	47.0	52.4	43.0-120			10.9	22
Anthracene	0.0500	0.0247	0.0283	49.4	56.6	45.0-120			13.6	20
Benzo(a)anthracene	0.0500	0.0237	0.0268	47.4	53.6	47.0-120			12.3	20
Benzo(b)fluoranthene	0.0500	0.0248	0.0280	49.6	56.0	46.0-120			12.1	20
Benzo(k)fluoranthene	0.0500	0.0254	0.0285	50.8	57.0	46.0-120			11.5	21
Benzo(g,h,i)perylene	0.0500	0.0247	0.0280	49.4	56.0	48.0-121			12.5	20
Benzo(a)pyrene	0.0500	0.0239	0.0268	47.8	53.6	47.0-120			11.4	20
Bis(2-chlorethoxy)methane	0.0500	0.0245	0.0257	49.0	51.4	33.0-120			4.78	24
Bis(2-chloroethyl)ether	0.0500	0.0275	0.0275	55.0	55.0	23.0-120			0.000	33
Bis(2-chloroisopropyl)ether	0.0500	0.0251	0.0251	50.2	50.2	28.0-120			0.000	31
4-Bromophenyl-phenylether	0.0500	0.0244	0.0275	48.8	55.0	45.0-120			11.9	20
2-Chloronaphthalene	0.0500	0.0231	0.0247	46.2	49.4	37.0-120			6.69	25
4-Chlorophenyl-phenylether	0.0500	0.0238	0.0266	47.6	53.2	44.0-120			11.1	20
Chrysene	0.0500	0.0248	0.0285	49.6	57.0	48.0-120			13.9	20

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

(LCS) R3371018-1 12/23/18 12:48 • (LCSD) R3371018-2 12/23/18 13:12

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 %
Dibenz(a,h)anthracene	0.0500	0.0249	0.0282	49.8	56.4	47.0-120			12.4	20
3,3-Dichlorobenzidine	0.0500	0.0227	0.0252	45.4	50.4	44.0-120			10.4	20
2,4-Dinitrotoluene	0.0500	0.0268	0.0310	53.6	62.0	49.0-124			14.5	20
2,6-Dinitrotoluene	0.0500	0.0249	0.0289	49.8	57.8	46.0-120			14.9	21
Fluoranthene	0.0500	0.0256	0.0294	51.2	58.8	51.0-120			13.8	20
Fluorene	0.0500	0.0246	0.0275	49.2	55.0	47.0-120			11.1	20
Hexachlorobenzene	0.0500	0.0245	0.0273	49.0	54.6	44.0-120			10.8	20
Hexachloro-1,3-butadiene	0.0500	0.0188	0.0178	37.6	35.6	19.0-120			5.46	32
Hexachlorocyclopentadiene	0.0500	0.0158	0.0149	31.6	29.8	15.0-120			5.86	31
Hexachloroethane	0.0500	0.0223	0.0199	44.6	39.8	15.0-120			11.4	37
Indeno(1,2,3-cd)pyrene	0.0500	0.0245	0.0277	49.0	55.4	49.0-122			12.3	20
Isophorone	0.0500	0.0265	0.0287	53.0	57.4	36.0-120			7.97	23
Naphthalene	0.0500	0.0216	0.0215	43.2	43.0	27.0-120			0.464	27
Nitrobenzene	0.0500	0.0266	0.0271	53.2	54.2	27.0-120			1.86	29
n-Nitrosodimethylamine	0.0500	0.0200	0.0199	40.0	39.8	10.0-120			0.501	40
n-Nitrosodiphenylamine	0.0500	0.0259	0.0294	51.8	58.8	47.0-120			12.7	20
n-Nitrosodi-n-propylamine	0.0500	0.0328	0.0348	65.6	69.6	31.0-120			5.92	28
Phenanthrene	0.0500	0.0246	0.0281	49.2	56.2	46.0-120			13.3	20
Benzylbutyl phthalate	0.0500	0.0281	0.0323	56.2	64.6	43.0-121			13.9	20
Bis(2-ethylhexyl)phthalate	0.0500	0.0267	0.0303	53.4	60.6	43.0-122			12.6	20
Di-n-butyl phthalate	0.0500	0.0276	0.0327	55.2	65.4	49.0-121			16.9	20
Diethyl phthalate	0.0500	0.0262	0.0306	52.4	61.2	48.0-122			15.5	20
Dimethyl phthalate	0.0500	0.0256	0.0298	51.2	59.6	48.0-120			15.2	20
Di-n-octyl phthalate	0.0500	0.0248	0.0289	49.6	57.8	42.0-125			15.3	20
Pyrene	0.0500	0.0260	0.0299	52.0	59.8	47.0-120			14.0	20
1,2,4-Trichlorobenzene	0.0500	0.0202	0.0193	40.4	38.6	24.0-120			4.56	29
4-Chloro-3-methylphenol	0.0500	0.0242	0.0257	48.4	51.4	40.0-120			6.01	21
2-Chlorophenol	0.0500	0.0221	0.0214	44.2	42.8	25.0-120			3.22	35
2,4-Dichlorophenol	0.0500	0.0226	0.0226	45.2	45.2	36.0-120			0.000	26
2,4-Dimethylphenol	0.0500	0.0231	0.0237	46.2	47.4	33.0-120			2.56	26
4,6-Dinitro-2-methylphenol	0.0500	0.0309	0.0341	61.8	68.2	38.0-138			9.85	25
2,4-Dinitrophenol	0.0500	0.0312	0.0328	62.4	65.6	10.0-120			5.00	39
2-Nitrophenol	0.0500	0.0270	0.0265	54.0	53.0	31.0-120			1.87	29
4-Nitrophenol	0.0500	0.0100	0.0119	20.0	23.8	10.0-120			17.4	33
Pentachlorophenol	0.0500	0.0228	0.0244	45.6	48.8	23.0-120			6.78	25
Phenol	0.0500	0.0115	0.0116	23.0	23.2	10.0-120			0.866	36
2,4,6-Trichlorophenol	0.0500	0.0236	0.0256	47.2	51.2	42.0-120			8.13	23
(S) Nitrobenzene-d5				42.4	41.7	10.0-127				
(S) 2-Fluorobiphenyl				35.0	38.2	10.0-130				
(S) p-Terphenyl-d14				37.5	42.9	10.0-128				

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

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

(LCS) R3371018-1 12/23/18 12:48 • (LCSD) R3371018-2 12/23/18 13:12

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 %
(S) Phenol-d5				17.5	17.3	10.0-120				
(S) 2-Fluorophenol				26.9	26.4	10.0-120				
(S) 2,4,6-Tribromophenol				35.9	39.8	10.0-155				

L1054576-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1054576-01 12/23/18 13:59 • (MS) R3371018-4 12/23/18 14:23 • (MSD) R3371018-5 12/23/18 14:47

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Acenaphthene	0.0500	U	0.0265	0.0258	53.0	51.6	1	28.0-120			2.68	25
Acenaphthylene	0.0500	U	0.0261	0.0256	52.2	51.2	1	31.0-121			1.93	25
Anthracene	0.0500	U	0.0283	0.0270	56.6	54.0	1	36.0-120			4.70	23
Benzo(a)anthracene	0.0500	U	0.0284	0.0267	56.8	53.4	1	39.0-120			6.17	23
Benzo(b)fluoranthene	0.0500	U	0.0270	0.0275	54.0	55.0	1	37.0-120			1.83	23
Benzo(k)fluoranthene	0.0500	U	0.0303	0.0300	60.6	60.0	1	37.0-120			0.995	26
Benzo(g,h,i)perylene	0.0500	U	0.0289	0.0277	57.8	55.4	1	37.0-123			4.24	25
Benzo(a)pyrene	0.0500	U	0.0280	0.0271	56.0	54.2	1	37.0-120			3.27	24
Bis(2-chlorethoxy)methane	0.0500	U	0.0255	0.0251	51.0	50.2	1	17.0-120			1.58	31
Bis(2-chloroethyl)ether	0.0500	U	0.0263	0.0249	52.6	49.8	1	14.0-120			5.47	33
Bis(2-chloroisopropyl)ether	0.0500	U	0.0240	0.0226	48.0	45.2	1	18.0-120			6.01	34
4-Bromophenyl-phenylether	0.0500	U	0.0279	0.0256	55.8	51.2	1	37.0-120			8.60	24
2-Chloronaphthalene	0.0500	U	0.0246	0.0239	49.2	47.8	1	29.0-120			2.89	28
4-Chlorophenyl-phenylether	0.0500	U	0.0267	0.0260	53.4	52.0	1	36.0-120			2.66	23
Chrysene	0.0500	U	0.0302	0.0288	60.4	57.6	1	38.0-120			4.75	23
Dibenz(a,h)anthracene	0.0500	U	0.0280	0.0278	56.0	55.6	1	36.0-121			0.717	24
3,3-Dichlorobenzidine	0.0500	U	0.0249	0.0235	49.8	47.0	1	10.0-134			5.79	30
2,4-Dinitrotoluene	0.0500	U	0.0312	0.0300	62.4	60.0	1	39.0-125			3.92	25
2,6-Dinitrotoluene	0.0500	U	0.0291	0.0283	58.2	56.6	1	36.0-120			2.79	27
Fluoranthene	0.0500	U	0.0290	0.0276	58.0	55.2	1	41.0-121			4.95	22
Fluorene	0.0500	U	0.0277	0.0270	55.4	54.0	1	37.0-120			2.56	24
Hexachlorobenzene	0.0500	U	0.0281	0.0259	56.2	51.8	1	35.0-122			8.15	24
Hexachloro-1,3-butadiene	0.0500	U	0.0174	0.0159	34.8	31.8	1	12.0-120			9.01	34
Hexachlorocyclopentadiene	0.0500	U	0.0154	0.0148	30.8	29.6	1	10.0-120			3.97	33
Hexachloroethane	0.0500	U	0.0197	0.0174	39.4	34.8	1	10.0-120			12.4	40
Indeno(1,2,3-cd)pyrene	0.0500	U	0.0275	0.0275	55.0	55.0	1	38.0-125			0.000	24
Isophorone	0.0500	U	0.0289	0.0277	57.8	55.4	1	21.0-120			4.24	27
Naphthalene	0.0500	U	0.0209	0.0198	41.8	39.6	1	10.0-120			5.41	31
Nitrobenzene	0.0500	U	0.0263	0.0249	52.6	49.8	1	12.0-120			5.47	30
n-Nitrosodimethylamine	0.0500	U	0.0175	0.0195	35.0	39.0	1	10.0-120			10.8	40

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

L1054576-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1054576-01 12/23/18 13:59 • (MS) R3371018-4 12/23/18 14:23 • (MSD) R3371018-5 12/23/18 14:47

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
n-Nitrosodiphenylamine	0.0500	U	0.0289	0.0260	57.8	52.0	1	37.0-120			10.6	24
n-Nitrosodi-n-propylamine	0.0500	U	0.0340	0.0328	68.0	65.6	1	16.0-120			3.59	30
Phenanthrene	0.0500	U	0.0283	0.0266	56.6	53.2	1	33.0-120			6.19	22
Benzylbutyl phthalate	0.0500	U	0.0332	0.0312	66.4	62.4	1	34.0-126			6.21	24
Bis(2-ethylhexyl)phthalate	0.0500	U	0.0307	0.0292	61.4	58.4	1	33.0-126			5.01	25
Di-n-butyl phthalate	0.0500	U	0.0324	0.0307	64.8	61.4	1	35.0-128			5.39	23
Diethyl phthalate	0.0500	U	0.0310	0.0301	62.0	60.2	1	39.0-125			2.95	24
Dimethyl phthalate	0.0500	U	0.0298	0.0292	59.6	58.4	1	37.0-120			2.03	24
Di-n-octyl phthalate	0.0500	U	0.0281	0.0269	56.2	53.8	1	25.0-135			4.36	26
Pyrene	0.0500	U	0.0308	0.0286	61.6	57.2	1	39.0-120			7.41	22
1,2,4-Trichlorobenzene	0.0500	U	0.0189	0.0173	37.8	34.6	1	15.0-120			8.84	31
4-Chloro-3-methylphenol	0.0500	U	0.0272	0.0256	54.4	51.2	1	26.0-120			6.06	27
2-Chlorophenol	0.0500	U	0.0196	0.0186	39.2	37.2	1	18.0-120			5.24	34
2,4-Dichlorophenol	0.0500	U	0.0218	0.0207	43.6	41.4	1	19.0-120			5.18	27
2,4-Dimethylphenol	0.0500	U	0.0232	0.0225	46.4	45.0	1	15.0-120			3.06	28
4,6-Dinitro-2-methylphenol	0.0500	U	0.0343	0.0316	68.6	63.2	1	10.0-144			8.19	39
2,4-Dinitrophenol	0.0500	U	0.0335	0.0325	67.0	65.0	1	10.0-120			3.03	40
2-Nitrophenol	0.0500	U	0.0256	0.0244	51.2	48.8	1	20.0-120			4.80	30
4-Nitrophenol	0.0500	U	0.0119	0.0118	23.8	23.6	1	10.0-120			0.844	40
Pentachlorophenol	0.0500	U	0.0243	0.0221	48.6	44.2	1	10.0-128			9.48	37
Phenol	0.0500	U	0.00989	0.0102	19.8	20.4	1	10.0-120			3.09	40
2,4,6-Trichlorophenol	0.0500	U	0.0261	0.0245	52.2	49.0	1	26.0-120			6.32	31
(S) Nitrobenzene-d5					40.9	39.0		10.0-127				
(S) 2-Fluorobiphenyl					38.3	37.7		10.0-130				
(S) p-Terphenyl-d14					44.7	41.9		10.0-128				
(S) Phenol-d5					14.8	15.0		10.0-120				
(S) 2-Fluorophenol					21.5	22.4		10.0-120				
(S) 2,4,6-Tribromophenol					39.8	34.3		10.0-155				

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.

Abbreviations and Definitions

MDL	Method Detection Limit.
ND	Not detected at the Reporting Limit (or MDL where applicable).
RDL	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.
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.
J6	The sample matrix interfered with the ability to make any accurate determination; spike value is low.
O1	The analyte failed the method required serial dilution test and/or subsequent post-spike criteria. These failures indicate matrix interference.

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



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	T 104704245-17-14
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

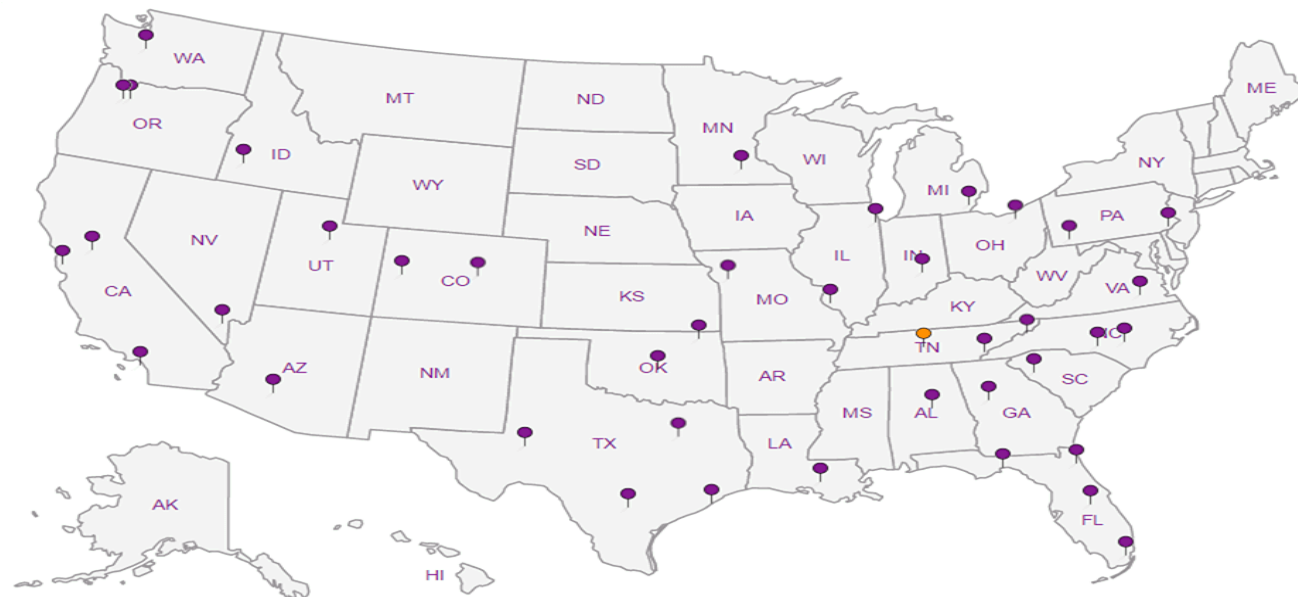
Third Party Federal Accreditations

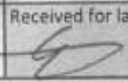
A2LA – ISO 17025	1461.01	AIHA-LAP, LLC EMLAP	100789
A2LA – ISO 17025 ⁵	1461.02	DOD	1461.01
Canada	1461.01	USDA	P330-15-00234
EPA–Crypto	TN00003		

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.



Harbor Env. & Safety - Little Rock, AR 5800 Evergreen Drive Little Rock, AR 72205				Billing Information: Accounts Payable 5800 Evergreen Drive Little Rock, AR 72205				Pres Chk		Analysis / Container / Preservative										Chain of Custody Page <u>1</u> of <u>4</u>							
				Report to: Tom Huetter				Email To: thuetter@harborenv.com														 12065 Lebanon Rd Mount Juliet, TN 37122 Phone: 615-758-5858 Phone: 800-767-5859 Fax: 615-758-5859					
Project Description: Osceola PH II				City/State Collected: OSCEOLA, AR																L# 1054617							
Phone: 501-663-8800 Fax:				Client Project #				Lab Project # HARBORLRAR-OSCEOLA												T# H181							
Collected by (print): T. HUETTER M. L. BRAND				Site/Facility ID # J.T. PARSONS				P.O. #												Acctnum: HARBORLRAR							
Collected by (signature): 				Rush? (Lab MUST Be Notified) ☐ Same Day ☐ Five Day ☐ Next Day ☐ 5 Day (Rad Only) ☐ Two Day ☐ 10 Day (Rad Only) ☐ Three Day				Quote #												Template: T143919							
Immediately Packed on Ice: N ☐ Y ☒				Date Results Needed				No. of Cntrs												Prelogin: P685619 TSR: 526 - Chris McCord PB: 12-12-186m							
Sample ID				Comp/Grab		Matrix *		Depth		Date		Time												Shipped Via: FedEX Ground			
B-1				G		SS		0'-1'		12/17/13		1156		5												Remarks	
B-1				G		SS		4'-6'		"		1204		11												Sample # (lab only)	
B-2				G		SS		4'-6'		"		1230		11												-01	
B-2				G		SS		6'-8'		"		1233		11												02	
B-3				G		SS		0'-4'		"		1249		11												03	
B-3				G		SS		4'-6'		"		1253		11												04	
B-4				G		SS		0'-4'		"		1321		11												05	
B-4				G		SS		4'-6'		"		1326		11												06	
TB-1				G		WSS		-		-		-		1												07	
						SS																				08	
																										09	
* Matrix: SS - Soil AIR - Air F - Filter GW - Groundwater B - Bioassay WW - WasteWater DW - Drinking Water OT - Other				Remarks:				Samples returned via: ☐ UPS ☐ FedEx ☐ Courier		Tracking #		pH _____ Temp _____ Flow _____ Other _____										Sample Receipt Checklist COC Seal Present/Intact: ☒ 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					
Relinquished by: (Signature) 				Date: 12/18/13		Time: 1945		Received by: (Signature) KESX		Trip Blank Received: ☒ No ☐ MeOH TBR		4757 50766223; 6201; 6197										RAD SCREEN: <0.5 mR/hr					
Relinquished by: (Signature)				Date:		Time:		Received by: (Signature)		Temp: °C 0.40.4 = 0.88		Bottles Received: 40										If preservation required by Login: Date/Time					
Relinquished by: (Signature)				Date:		Time:		Received for lab by: (Signature) 		Date: 12/19/13		Time: 0815										Hold:					
																				Condition: NCF 1 OK							

Harbor Env. & Safety - Little Rock, AR

5800 Evergreen Drive
Little Rock, AR 72205

Billing Information:

Accounts Payable
5800 Evergreen Drive
Little Rock, AR 72205

Report to:
Tom Huetter

Email To: thuetter@harborenv.com

Project
Description: Osceola PH II

City/State
Collected: OSCEOLA, AR

Phone: 501-663-8800
Fax:

Client Project #

Lab Project #
HARBORLRAR-OSCEOLA

Collected by (print):
T. HUETTER

Site/Facility ID #

J.T. PARSONS

P.O. #

Collected by (signature):

Rush? (Lab MUST Be Notified)

Quote #

Immediately
Packed on Ice N ☐ Y ☒

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

Date Results Needed

No.
of
Cnts

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cnts
B-5	G	SS	0-4'	12/17/13	1343	5
B-5	G	SS	10-12	"	1350	5
B-6	G	SS	0-4'	"	1405	5
B-6	G	SS	6'-8'	"	1410	5
B-7	G	SS	0-4'	"	1440	6
B-7	G	SS	6'-8'	"	1448	5
B-8	G	SS	0-4'	"	1500	5
B-8	G	SS	6'-8'	"	1506	5
TB-2 B-8 DUP.	G	SS	6'-8'	"	1506	5
TB-2	G	WSS	-	-	-	1

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

Remarks:

Samples returned via:

☐ UPS ☐ FedEx ☐ Courier

Tracking #

Received by: (Signature)

Received by: (Signature)

Received for lab by: (Signature)

pH _____ Temp _____

Flow _____ Other _____

Trip Blank Received: Yes / No
HCP / MeOH
TBR

Temp: 10.1 °C
3.83 g/L 190

Date: 12/19/16 Time: 0915

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

If preservation required by Login: Date/Time

Hold: Condition
NCF 100

Analysis / Container / Preservative

Chain of Custody Page 2 of 4



12065 Lebanon Rd
Mount Juliet, TN 37122
Phone: 615-758-5858
Phone: 800-767-5859
Fax: 615-758-5859



L # 1054617

Table #

Acctnum: HARBORLRAR

Template: T143919

Prelogin: P685619

TSR: 526 - Chris McCord

PB: 12-12-186

Shipped Via: FedEx Ground

Remarks Sample # (lab only)

10

11

12

13

14

15

16

17

18

19

Harbor Env. & Safety - Little Rock, AR

5800 Evergreen Drive
Little Rock, AR 72205

Billing Information:

Accounts Payable
5800 Evergreen Drive
Little Rock, AR 72205

Report to:
Tom Huetter

Email To: thuetter@harborenv.com

Project
Description: Osceola PH II

City/State
Collected: OSCEOLA, AR

Phone: 501-663-8800
Fax:

Client Project #

Lab Project #
HARBORLRAR-OSCEOLA

Collected by (print):

T. Huetter

Site/Facility ID #

J.T. PARSONS

P.O. #

Collected by (signature):

[Signature]

Rush? (Lab MUST Be Notified)

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

Quote #

Date Results Needed

Immediately
Packed on Ice N Y

Pres
Chk

Analysis / Container / Preservative

Chain of Custody Page 3 of 4



12065 Lebanon Rd
Mount Juliet, TN 37122
Phone: 615-758-5858
Phone: 800-767-5859
Fax: 615-758-5859



L# 1054617

Table #

Acctnum: HARBORLRAR

Template: T143919

Prelogin: P685619

TSR: 526 - Chris McCord

PS: 12-12-186m

Shipped Via: FedEX Ground

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	8270 100ml Amb NoPres	DRO,SV8270 4ozClr-NoPres	DROLVI 40mlAmb-HCl-BT	GRO 40mlAmb HCl	GRO,V8260 40ml/NaHSO4/Syr/MeOH	MRCRAB 250mlHDPE-HNO3	MRCRAB 4ozClr-NoPres	V8260 40mlAmb-HCl	Remarks	Sample # (lab only)
B-9	G	SS	0-4'	12/17/13	1522	5		X			X		X			20
B-9	G	SS	4'-6'	"	1530	5										21
B-10	G	SS	0-4'	"	1555	5										22
B-10	G	SS	6'-8'	"	1601	5										23
B-11	G	SS	0-4'	"	1614	5										24
B-11	G	SS	4'-6'	"	1624	5										25
B-12	G	SS	4'-6'	"	1655	5										26
B-12	G	SS	10'-12'	"	1659	5										27
EB-1	G	WSS	-	"	1640	10	X		X	X		X		X	RAD SCREEN: <0.5 mR/hr	28
TB-3	G	WSS	-	-	-	1								X		29

* 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 #

Relinquished by: (Signature)

Date: 12/18/13

Time: 1945

Received by: (Signature)

FEOSK

Trip Blank Received: Y / No
HCl / MeOH
TBR

Relinquished by: (Signature)

Date:

Time:

Received by: (Signature)

Temp: 0.8 ± 0.1 °C
Bottles Received: 190

Relinquished by: (Signature)

Date:

Time:

Received for lab by: (Signature)

Date: 12/19/13 Time: 0915

Hold:

Condition:
NCF / OK

Sample Receipt Checklist

COC Seal Present/Intact: 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

If preservation required by Log in: Date/Time

Harbor Env. & Safety - Little Rock, AR

5800 Evergreen Drive
Little Rock, AR 72205

Report to:
Tom Huetter

Project
Description: Osceola PH II

Phone: 501-663-8800
Fax:

Collected by (print):
T. Huetter

Collected by (signature):

Immediately
Packed on ice N ☒ Y ☒

Billing Information:

Accounts Payable
5800 Evergreen Drive
Little Rock, AR 72205

Email To: thuetter@harborenv.com

City/State
Collected: Osceola, AR

Lab Project #
HARBORLRAR-OSCEOLA

P.O. #

Quote #

Date Results Needed

Pres
Chk

Analysis / Container / Preservative

Chain of Custody Page 4 of 4



12065 Lebanon Rd
Mount Juliet, TN 37122
Phone: 615-758-5858
Phone: 800-767-5859
Fax: 615-758-5859



L# 1054617

Table #

Acctnum: HARBORLRAR

Template: T143919

Prelogin: P685619

TSR: 526 - Chris McCord

PS: 12-12-186

Shipped Via: FedEX Ground

Remarks Sample # (lab only)

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	8270 100ml Amb NoPres	DRO,SV8270 4ozClr-NoPres	DROLVI 40mlAmb-HCl-BT	GRO 40mlAmb HCl	GRO,V8260 40ml/NaHSO4/Syr/MeOH	MRCRA8 250mlHDPE-HNO3	MRCRA8 4ozClr-NoPres	V8260 40mlAmb-HCl			
B-13	G	SGW	0-4'	12/18/13	0920	5		X			X		X				30
B-13	G	SGW	4'-6'	"	0930	5											31
B-14	G	SGW	0'-4'	"	0944	5											32
B-14	G	SGW	6'-8'	"	0950	5											33
B-14 PUP	G	SGW	6'-8'	"	0950	5											34
B-15	G	SGW	0'-4'	"	1042	5											35
B-15	G	SGW	4'-6'	"	1050	5											36
B-16	G	SGW	0'-4'	"	1100	5											37
B-16	G	SGW	4'-6'	"	1106	5											38
B-16	G	SGW	4'-6'	"	1106	5											39
EB-2	G	WSW	-	-	1130	10	X		X	X		X		X			40

RAD SCREEN: <0.5 mR/hr

* Matrix: TB-4
SS - Soil AIR - Air F - Filter
GW - Groundwater B - Bioassay
WW - Waste Water
DW - Drinking Water
OT - Other

Remarks: W - - - - - 1

pH ____ Temp ____

Flow ____ Other ____

Samples returned via:
UPS FedEx Courier

Tracking #

Relinquished by: (Signature)

Date: 12/18/13
Time: 1945

Received by: (Signature)

FedEx

Trip Blank Received: Yes/No
X4 No/MeOH
TBR

Relinquished by: (Signature)

Date: ____
Time: ____

Received by: (Signature)

Temp: °C Bottles Received: 190
1.050M

If preservation required by Login: Date/Time

Relinquished by: (Signature)

Date: ____
Time: ____

Received for lab by: (Signature)

Date: 12/19/16
Time: 0915

Hold: Condition: NCF / OK

January 17, 2019

Harbor Env. & Safety - Little Rock, AR

Sample Delivery Group: L1059921

Samples Received: 01/10/2019

Project Number:

Description: Osceola PH II

Report To: Tom Huetter

5800 Evergreen Drive

Little Rock, AR 72205

Entire Report Reviewed By:



Chris McCord
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 National is performed per guidance provided in laboratory standard operating procedures: 060302, 060303, and 060304.



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SAMPLE SUMMARY

ONE LAB. NATIONWIDE.



MW-1 L1059921-01 GW

Collected by
Mike S. Lybrand

Collected date/time
01/08/19 09:00

Received date/time
01/10/19 08:45

¹ Cp

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Mercury by Method 7470A	WG1222003	1	01/10/19 20:11	01/14/19 10:17	ABL
Metals (ICP) by Method 6010B	WG1222773	1	01/14/19 20:12	01/15/19 13:38	TRB
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1222078	1	01/11/19 07:21	01/11/19 07:21	DWR
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1222044	1	01/11/19 01:20	01/11/19 01:20	PP
Semi-Volatile Organic Compounds (GC) by Method 3511/8015	WG1222607	1	01/12/19 13:46	01/14/19 00:25	SHG
Semi Volatile Organic Compounds (GC/MS) by Method 8270C	WG1222062	1	01/12/19 13:46	01/13/19 13:08	AO

² Tc

³ Ss

⁴ Cn

⁵ Sr

MW-2 L1059921-02 GW

Collected by
Mike S. Lybrand

Collected date/time
01/08/19 09:40

Received date/time
01/10/19 08:45

⁶ Qc

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Mercury by Method 7470A	WG1222003	1	01/10/19 20:11	01/14/19 11:48	ABL
Metals (ICP) by Method 6010B	WG1222773	1	01/14/19 20:12	01/15/19 13:27	TRB
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1222078	1	01/11/19 08:51	01/11/19 08:51	DWR
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1222044	1	01/11/19 01:40	01/11/19 01:40	PP
Semi-Volatile Organic Compounds (GC) by Method 3511/8015	WG1222607	1	01/12/19 13:46	01/14/19 00:47	SHG
Semi Volatile Organic Compounds (GC/MS) by Method 8270C	WG1222062	1	01/12/19 13:46	01/13/19 13:31	AO

⁷ Gl

⁸ Al

⁹ Sc

MW-3 L1059921-03 GW

Collected by
Mike S. Lybrand

Collected date/time
01/08/19 10:40

Received date/time
01/10/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Mercury by Method 7470A	WG1222003	1	01/10/19 20:11	01/14/19 11:51	ABL
Metals (ICP) by Method 6010B	WG1222773	1	01/14/19 20:12	01/15/19 13:40	TRB
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1222078	1	01/11/19 09:13	01/11/19 09:13	DWR
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1222044	1	01/11/19 02:00	01/11/19 02:00	PP
Semi-Volatile Organic Compounds (GC) by Method 3511/8015	WG1222607	1	01/12/19 13:46	01/14/19 01:09	SHG
Semi Volatile Organic Compounds (GC/MS) by Method 8270C	WG1222062	1	01/12/19 13:46	01/13/19 13:55	AO

MW-4 L1059921-04 GW

Collected by
Mike S. Lybrand

Collected date/time
01/08/19 11:15

Received date/time
01/10/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Mercury by Method 7470A	WG1222003	1	01/10/19 20:11	01/14/19 11:53	ABL
Metals (ICP) by Method 6010B	WG1222773	1	01/14/19 20:12	01/15/19 13:43	TRB
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1222078	1	01/11/19 09:35	01/11/19 09:35	DWR
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1222044	1	01/11/19 02:20	01/11/19 02:20	PP
Semi-Volatile Organic Compounds (GC) by Method 3511/8015	WG1222607	1	01/12/19 13:46	01/14/19 01:31	SHG
Semi Volatile Organic Compounds (GC/MS) by Method 8270C	WG1222062	1	01/12/19 13:46	01/13/19 14:19	AO

MW-5 L1059921-05 GW

Collected by
Mike S. Lybrand

Collected date/time
01/08/19 11:45

Received date/time
01/10/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Mercury by Method 7470A	WG1222003	1	01/10/19 20:11	01/14/19 11:56	ABL
Metals (ICP) by Method 6010B	WG1222773	1	01/14/19 20:12	01/15/19 13:51	TRB
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1222078	1	01/11/19 09:57	01/11/19 09:57	DWR
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1222044	1	01/11/19 02:40	01/11/19 02:40	PP
Semi-Volatile Organic Compounds (GC) by Method 3511/8015	WG1222607	1	01/12/19 13:46	01/14/19 01:53	SHG
Semi Volatile Organic Compounds (GC/MS) by Method 8270C	WG1222062	1	01/12/19 13:46	01/13/19 14:42	AO

ACCOUNT:

Harbor Env. & Safety - Little Rock, AR

PROJECT:

SDG:

L1059921

DATE/TIME:

01/17/19 16:21

PAGE:

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SAMPLE SUMMARY

ONE LAB. NATIONWIDE.



MW-6 L1059921-06 GW

Collected by
Mike S. Lybrand

Collected date/time
01/08/19 07:50

Received date/time
01/10/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Mercury by Method 7470A	WG1222003	1	01/10/19 20:11	01/14/19 11:58	ABL
Metals (ICP) by Method 6010B	WG1222773	1	01/14/19 20:12	01/15/19 13:53	TRB
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1222078	1	01/11/19 10:20	01/11/19 10:20	DWR
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1222044	1	01/11/19 03:00	01/11/19 03:00	PP
Semi-Volatile Organic Compounds (GC) by Method 3511/8015	WG1222607	1	01/12/19 13:46	01/14/19 02:15	SHG
Semi Volatile Organic Compounds (GC/MS) by Method 8270C	WG1222062	1	01/12/19 13:46	01/13/19 15:06	AO

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ Gl⁸ Al⁹ Sc

BD L1059921-07 GW

Collected by
Mike S. Lybrand

Collected date/time
01/08/19 00:00

Received date/time
01/10/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Mercury by Method 7470A	WG1222003	1	01/10/19 20:11	01/14/19 12:01	ABL
Metals (ICP) by Method 6010B	WG1222773	1	01/14/19 20:12	01/15/19 13:56	TRB
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1222078	1	01/11/19 10:42	01/11/19 10:42	DWR
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1222044	1	01/11/19 03:20	01/11/19 03:20	PP
Semi-Volatile Organic Compounds (GC) by Method 3511/8015	WG1222607	1	01/12/19 13:46	01/14/19 02:37	SHG
Semi Volatile Organic Compounds (GC/MS) by Method 8270C	WG1222062	1	01/12/19 13:46	01/13/19 15:30	AO

TRIP BLANK L1059921-08 GW

Collected by
Mike S. Lybrand

Collected date/time
01/08/19 00:00

Received date/time
01/10/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1222078	1	01/11/19 03:39	01/11/19 03:39	DWR
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1222044	1	01/10/19 21:40	01/10/19 21:40	JHH

ACCOUNT:

Harbor Env. & Safety - Little Rock, AR

PROJECT:

SDG:

L1059921

DATE/TIME:

01/17/19 16:21

PAGE:

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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 McCord
Project Manager

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ Gl⁸ Al⁹ Sc



Mercury by Method 7470A

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Mercury	ND		0.000200	1	01/14/2019 10:17	WG1222003

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Metals (ICP) by Method 6010B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Arsenic	0.0107		0.0100	1	01/15/2019 13:38	WG1222773
Barium	0.336		0.00500	1	01/15/2019 13:38	WG1222773
Cadmium	ND		0.00200	1	01/15/2019 13:38	WG1222773
Chromium	ND		0.0100	1	01/15/2019 13:38	WG1222773
Lead	0.00808		0.00500	1	01/15/2019 13:38	WG1222773
Selenium	ND		0.0100	1	01/15/2019 13:38	WG1222773
Silver	ND		0.00500	1	01/15/2019 13:38	WG1222773

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
TPH (GC/FID) Low Fraction	ND		0.100	1	01/11/2019 07:21	WG1222078
(S) a,a,a-Trifluorotoluene(FID)	102		78.0-120		01/11/2019 07:21	WG1222078

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

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Acetone	ND		0.0500	1	01/11/2019 01:20	WG1222044
Acrolein	ND		0.0500	1	01/11/2019 01:20	WG1222044
Acrylonitrile	ND		0.0100	1	01/11/2019 01:20	WG1222044
Benzene	ND		0.00100	1	01/11/2019 01:20	WG1222044
Bromobenzene	ND		0.00100	1	01/11/2019 01:20	WG1222044
Bromodichloromethane	ND		0.00100	1	01/11/2019 01:20	WG1222044
Bromoform	ND		0.00100	1	01/11/2019 01:20	WG1222044
Bromomethane	ND		0.00500	1	01/11/2019 01:20	WG1222044
n-Butylbenzene	ND		0.00100	1	01/11/2019 01:20	WG1222044
sec-Butylbenzene	ND		0.00100	1	01/11/2019 01:20	WG1222044
tert-Butylbenzene	ND		0.00100	1	01/11/2019 01:20	WG1222044
Carbon tetrachloride	ND		0.00100	1	01/11/2019 01:20	WG1222044
Chlorobenzene	ND		0.00100	1	01/11/2019 01:20	WG1222044
Chlorodibromomethane	ND		0.00100	1	01/11/2019 01:20	WG1222044
Chloroethane	ND		0.00500	1	01/11/2019 01:20	WG1222044
Chloroform	ND		0.00500	1	01/11/2019 01:20	WG1222044
Chloromethane	ND		0.00250	1	01/11/2019 01:20	WG1222044
2-Chlorotoluene	ND		0.00100	1	01/11/2019 01:20	WG1222044
4-Chlorotoluene	ND		0.00100	1	01/11/2019 01:20	WG1222044
1,2-Dibromo-3-Chloropropane	ND		0.00500	1	01/11/2019 01:20	WG1222044
1,2-Dibromoethane	ND		0.00100	1	01/11/2019 01:20	WG1222044
Dibromomethane	ND		0.00100	1	01/11/2019 01:20	WG1222044
1,2-Dichlorobenzene	ND		0.00100	1	01/11/2019 01:20	WG1222044
1,3-Dichlorobenzene	ND		0.00100	1	01/11/2019 01:20	WG1222044
1,4-Dichlorobenzene	ND		0.00100	1	01/11/2019 01:20	WG1222044
Dichlorodifluoromethane	ND		0.00500	1	01/11/2019 01:20	WG1222044
1,1-Dichloroethane	ND		0.00100	1	01/11/2019 01:20	WG1222044
1,2-Dichloroethane	ND		0.00100	1	01/11/2019 01:20	WG1222044
1,1-Dichloroethene	ND		0.00100	1	01/11/2019 01:20	WG1222044
cis-1,2-Dichloroethene	0.0238		0.00100	1	01/11/2019 01:20	WG1222044
trans-1,2-Dichloroethene	ND		0.00100	1	01/11/2019 01:20	WG1222044
1,2-Dichloropropane	ND		0.00100	1	01/11/2019 01:20	WG1222044



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

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
1,1-Dichloropropene	ND		0.00100	1	01/11/2019 01:20	WG1222044
1,3-Dichloropropane	ND		0.00100	1	01/11/2019 01:20	WG1222044
cis-1,3-Dichloropropene	ND		0.00100	1	01/11/2019 01:20	WG1222044
trans-1,3-Dichloropropene	ND		0.00100	1	01/11/2019 01:20	WG1222044
2,2-Dichloropropane	ND		0.00100	1	01/11/2019 01:20	WG1222044
Di-isopropyl ether	ND		0.00100	1	01/11/2019 01:20	WG1222044
Ethylbenzene	ND		0.00100	1	01/11/2019 01:20	WG1222044
Hexachloro-1,3-butadiene	ND		0.00100	1	01/11/2019 01:20	WG1222044
Isopropylbenzene	ND		0.00100	1	01/11/2019 01:20	WG1222044
p-Isopropyltoluene	ND		0.00100	1	01/11/2019 01:20	WG1222044
2-Butanone (MEK)	ND		0.0100	1	01/11/2019 01:20	WG1222044
Methylene Chloride	ND		0.00500	1	01/11/2019 01:20	WG1222044
4-Methyl-2-pentanone (MIBK)	ND		0.0100	1	01/11/2019 01:20	WG1222044
Methyl tert-butyl ether	ND		0.00100	1	01/11/2019 01:20	WG1222044
Naphthalene	ND		0.00500	1	01/11/2019 01:20	WG1222044
n-Propylbenzene	ND		0.00100	1	01/11/2019 01:20	WG1222044
Styrene	ND		0.00100	1	01/11/2019 01:20	WG1222044
1,1,1,2-Tetrachloroethane	ND		0.00100	1	01/11/2019 01:20	WG1222044
1,1,2,2-Tetrachloroethane	ND		0.00100	1	01/11/2019 01:20	WG1222044
1,1,2-Trichlorotrifluoroethane	ND		0.00100	1	01/11/2019 01:20	WG1222044
Tetrachloroethene	ND		0.00100	1	01/11/2019 01:20	WG1222044
Toluene	ND		0.00100	1	01/11/2019 01:20	WG1222044
1,2,3-Trichlorobenzene	ND		0.00100	1	01/11/2019 01:20	WG1222044
1,2,4-Trichlorobenzene	ND		0.00100	1	01/11/2019 01:20	WG1222044
1,1,1-Trichloroethane	ND		0.00100	1	01/11/2019 01:20	WG1222044
1,1,2-Trichloroethane	ND		0.00100	1	01/11/2019 01:20	WG1222044
Trichloroethene	ND		0.00100	1	01/11/2019 01:20	WG1222044
Trichlorofluoromethane	ND		0.00500	1	01/11/2019 01:20	WG1222044
1,2,3-Trichloropropane	ND		0.00250	1	01/11/2019 01:20	WG1222044
1,2,4-Trimethylbenzene	ND		0.00100	1	01/11/2019 01:20	WG1222044
1,2,3-Trimethylbenzene	ND		0.00100	1	01/11/2019 01:20	WG1222044
1,3,5-Trimethylbenzene	ND		0.00100	1	01/11/2019 01:20	WG1222044
Vinyl chloride	ND		0.00100	1	01/11/2019 01:20	WG1222044
Xylenes, Total	ND		0.00300	1	01/11/2019 01:20	WG1222044
(S) Toluene-d8	110		80.0-120		01/11/2019 01:20	WG1222044
(S) Dibromofluoromethane	87.3		75.0-120		01/11/2019 01:20	WG1222044
(S) 4-Bromofluorobenzene	85.8		77.0-126		01/11/2019 01:20	WG1222044

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

Semi-Volatile Organic Compounds (GC) by Method 3511/8015

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	ND		0.100	1	01/14/2019 00:25	WG1222607
(S) o-Terphenyl	74.2		31.0-160		01/14/2019 00:25	WG1222607

Semi Volatile Organic Compounds (GC/MS) by Method 8270C

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
Acenaphthene	ND	J3	0.00100	1	01/13/2019 13:08	WG1222062
Acenaphthylene	ND	J3	0.00100	1	01/13/2019 13:08	WG1222062
Anthracene	ND	J3	0.00100	1	01/13/2019 13:08	WG1222062
Benzo(a)anthracene	ND	J3	0.00100	1	01/13/2019 13:08	WG1222062
Benzo(b)fluoranthene	ND	J3	0.00100	1	01/13/2019 13:08	WG1222062
Benzo(k)fluoranthene	ND	J3	0.00100	1	01/13/2019 13:08	WG1222062
Benzo(g,h,i)perylene	ND	J3	0.00100	1	01/13/2019 13:08	WG1222062
Benzo(a)pyrene	ND	J3	0.00100	1	01/13/2019 13:08	WG1222062



Collected date/time: 01/08/19 09:00

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Semi Volatile Organic Compounds (GC/MS) by Method 8270C

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
Bis(2-chlorethoxy)methane	ND	J3	0.0100	1	01/13/2019 13:08	WG1222062
Bis(2-chloroethyl)ether	ND		0.0100	1	01/13/2019 13:08	WG1222062
Bis(2-chloroisopropyl)ether	ND		0.0100	1	01/13/2019 13:08	WG1222062
4-Bromophenyl-phenylether	ND	J3	0.0100	1	01/13/2019 13:08	WG1222062
2-Chloronaphthalene	ND	J3	0.00100	1	01/13/2019 13:08	WG1222062
4-Chlorophenyl-phenylether	ND	J3	0.0100	1	01/13/2019 13:08	WG1222062
Chrysene	ND	J3	0.00100	1	01/13/2019 13:08	WG1222062
Dibenz(a,h)anthracene	ND	J3	0.00100	1	01/13/2019 13:08	WG1222062
3,3-Dichlorobenzidine	ND	J3	0.0100	1	01/13/2019 13:08	WG1222062
2,4-Dinitrotoluene	ND	J3	0.0100	1	01/13/2019 13:08	WG1222062
2,6-Dinitrotoluene	ND	J3	0.0100	1	01/13/2019 13:08	WG1222062
Fluoranthene	ND	J3	0.00100	1	01/13/2019 13:08	WG1222062
Fluorene	ND	J3	0.00100	1	01/13/2019 13:08	WG1222062
Hexachlorobenzene	ND	J3	0.00100	1	01/13/2019 13:08	WG1222062
Hexachloro-1,3-butadiene	ND		0.0100	1	01/13/2019 13:08	WG1222062
Hexachlorocyclopentadiene	ND		0.0100	1	01/13/2019 13:08	WG1222062
Hexachloroethane	ND		0.0100	1	01/13/2019 13:08	WG1222062
Indeno(1,2,3-cd)pyrene	ND	J3	0.00100	1	01/13/2019 13:08	WG1222062
Isophorone	ND	J3	0.0100	1	01/13/2019 13:08	WG1222062
Naphthalene	ND		0.00100	1	01/13/2019 13:08	WG1222062
Nitrobenzene	ND		0.0100	1	01/13/2019 13:08	WG1222062
n-Nitrosodimethylamine	ND		0.0100	1	01/13/2019 13:08	WG1222062
n-Nitrosodiphenylamine	ND	J3	0.0100	1	01/13/2019 13:08	WG1222062
n-Nitrosodi-n-propylamine	ND	J3	0.0100	1	01/13/2019 13:08	WG1222062
Phenanthrene	ND	J3	0.00100	1	01/13/2019 13:08	WG1222062
Benzylbutyl phthalate	ND	J3	0.00300	1	01/13/2019 13:08	WG1222062
Bis(2-ethylhexyl)phthalate	ND	J3	0.00300	1	01/13/2019 13:08	WG1222062
Di-n-butyl phthalate	ND	J3	0.00300	1	01/13/2019 13:08	WG1222062
Diethyl phthalate	ND	J3	0.00300	1	01/13/2019 13:08	WG1222062
Dimethyl phthalate	ND	J3	0.00300	1	01/13/2019 13:08	WG1222062
Di-n-octyl phthalate	ND	J3	0.00300	1	01/13/2019 13:08	WG1222062
Pyrene	ND	J3	0.00100	1	01/13/2019 13:08	WG1222062
1,2,4-Trichlorobenzene	ND		0.0100	1	01/13/2019 13:08	WG1222062
4-Chloro-3-methylphenol	ND	J3	0.0100	1	01/13/2019 13:08	WG1222062
2-Chlorophenol	ND		0.0100	1	01/13/2019 13:08	WG1222062
2,4-Dichlorophenol	ND	J3	0.0100	1	01/13/2019 13:08	WG1222062
2,4-Dimethylphenol	ND	J3	0.0100	1	01/13/2019 13:08	WG1222062
4,6-Dinitro-2-methylphenol	ND	J3	0.0100	1	01/13/2019 13:08	WG1222062
2,4-Dinitrophenol	ND		0.0100	1	01/13/2019 13:08	WG1222062
2-Nitrophenol	ND		0.0100	1	01/13/2019 13:08	WG1222062
4-Nitrophenol	ND	J3	0.0100	1	01/13/2019 13:08	WG1222062
Pentachlorophenol	ND	J3	0.0100	1	01/13/2019 13:08	WG1222062
Phenol	0.0109		0.0100	1	01/13/2019 13:08	WG1222062
2,4,6-Trichlorophenol	ND	J3	0.0100	1	01/13/2019 13:08	WG1222062
(S) 2-Fluorophenol	39.5		10.0-120		01/13/2019 13:08	WG1222062
(S) Phenol-d5	24.9		10.0-120		01/13/2019 13:08	WG1222062
(S) Nitrobenzene-d5	54.5		10.0-127		01/13/2019 13:08	WG1222062
(S) 2-Fluorobiphenyl	54.4		10.0-130		01/13/2019 13:08	WG1222062
(S) 2,4,6-Tribromophenol	52.0		10.0-155		01/13/2019 13:08	WG1222062
(S) p-Terphenyl-d14	63.5		10.0-128		01/13/2019 13:08	WG1222062

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Mercury by Method 7470A

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Mercury	ND		0.000200	1	01/14/2019 11:48	WG1222003

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Metals (ICP) by Method 6010B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Arsenic	ND		0.0100	1	01/15/2019 13:27	WG1222773
Barium	0.166		0.00500	1	01/15/2019 13:27	WG1222773
Cadmium	ND		0.00200	1	01/15/2019 13:27	WG1222773
Chromium	ND		0.0100	1	01/15/2019 13:27	WG1222773
Lead	ND		0.00500	1	01/15/2019 13:27	WG1222773
Selenium	ND		0.0100	1	01/15/2019 13:27	WG1222773
Silver	ND		0.00500	1	01/15/2019 13:27	WG1222773

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
TPH (GC/FID) Low Fraction	ND		0.100	1	01/11/2019 08:51	WG1222078
(S) a,a,a-Trifluorotoluene(FID)	102		78.0-120		01/11/2019 08:51	WG1222078

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

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Acetone	ND		0.0500	1	01/11/2019 01:40	WG1222044
Acrolein	ND		0.0500	1	01/11/2019 01:40	WG1222044
Acrylonitrile	ND		0.0100	1	01/11/2019 01:40	WG1222044
Benzene	ND		0.00100	1	01/11/2019 01:40	WG1222044
Bromobenzene	ND		0.00100	1	01/11/2019 01:40	WG1222044
Bromodichloromethane	ND		0.00100	1	01/11/2019 01:40	WG1222044
Bromoform	ND		0.00100	1	01/11/2019 01:40	WG1222044
Bromomethane	ND		0.00500	1	01/11/2019 01:40	WG1222044
n-Butylbenzene	ND		0.00100	1	01/11/2019 01:40	WG1222044
sec-Butylbenzene	ND		0.00100	1	01/11/2019 01:40	WG1222044
tert-Butylbenzene	ND		0.00100	1	01/11/2019 01:40	WG1222044
Carbon tetrachloride	ND		0.00100	1	01/11/2019 01:40	WG1222044
Chlorobenzene	ND		0.00100	1	01/11/2019 01:40	WG1222044
Chlorodibromomethane	ND		0.00100	1	01/11/2019 01:40	WG1222044
Chloroethane	ND		0.00500	1	01/11/2019 01:40	WG1222044
Chloroform	ND		0.00500	1	01/11/2019 01:40	WG1222044
Chloromethane	ND		0.00250	1	01/11/2019 01:40	WG1222044
2-Chlorotoluene	ND		0.00100	1	01/11/2019 01:40	WG1222044
4-Chlorotoluene	ND		0.00100	1	01/11/2019 01:40	WG1222044
1,2-Dibromo-3-Chloropropane	ND		0.00500	1	01/11/2019 01:40	WG1222044
1,2-Dibromoethane	ND		0.00100	1	01/11/2019 01:40	WG1222044
Dibromomethane	ND		0.00100	1	01/11/2019 01:40	WG1222044
1,2-Dichlorobenzene	ND		0.00100	1	01/11/2019 01:40	WG1222044
1,3-Dichlorobenzene	ND		0.00100	1	01/11/2019 01:40	WG1222044
1,4-Dichlorobenzene	ND		0.00100	1	01/11/2019 01:40	WG1222044
Dichlorodifluoromethane	ND		0.00500	1	01/11/2019 01:40	WG1222044
1,1-Dichloroethane	ND		0.00100	1	01/11/2019 01:40	WG1222044
1,2-Dichloroethane	ND		0.00100	1	01/11/2019 01:40	WG1222044
1,1-Dichloroethene	ND		0.00100	1	01/11/2019 01:40	WG1222044
cis-1,2-Dichloroethene	0.00533		0.00100	1	01/11/2019 01:40	WG1222044
trans-1,2-Dichloroethene	ND		0.00100	1	01/11/2019 01:40	WG1222044
1,2-Dichloropropane	ND		0.00100	1	01/11/2019 01:40	WG1222044



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

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
1,1-Dichloropropene	ND		0.00100	1	01/11/2019 01:40	WG1222044
1,3-Dichloropropane	ND		0.00100	1	01/11/2019 01:40	WG1222044
cis-1,3-Dichloropropene	ND		0.00100	1	01/11/2019 01:40	WG1222044
trans-1,3-Dichloropropene	ND		0.00100	1	01/11/2019 01:40	WG1222044
2,2-Dichloropropane	ND		0.00100	1	01/11/2019 01:40	WG1222044
Di-isopropyl ether	ND		0.00100	1	01/11/2019 01:40	WG1222044
Ethylbenzene	ND		0.00100	1	01/11/2019 01:40	WG1222044
Hexachloro-1,3-butadiene	ND		0.00100	1	01/11/2019 01:40	WG1222044
Isopropylbenzene	ND		0.00100	1	01/11/2019 01:40	WG1222044
p-Isopropyltoluene	ND		0.00100	1	01/11/2019 01:40	WG1222044
2-Butanone (MEK)	ND		0.0100	1	01/11/2019 01:40	WG1222044
Methylene Chloride	ND		0.00500	1	01/11/2019 01:40	WG1222044
4-Methyl-2-pentanone (MIBK)	ND		0.0100	1	01/11/2019 01:40	WG1222044
Methyl tert-butyl ether	ND		0.00100	1	01/11/2019 01:40	WG1222044
Naphthalene	ND		0.00500	1	01/11/2019 01:40	WG1222044
n-Propylbenzene	ND		0.00100	1	01/11/2019 01:40	WG1222044
Styrene	ND		0.00100	1	01/11/2019 01:40	WG1222044
1,1,1,2-Tetrachloroethane	ND		0.00100	1	01/11/2019 01:40	WG1222044
1,1,2,2-Tetrachloroethane	ND		0.00100	1	01/11/2019 01:40	WG1222044
1,1,2-Trichlorotrifluoroethane	ND		0.00100	1	01/11/2019 01:40	WG1222044
Tetrachloroethene	0.0505		0.00100	1	01/11/2019 01:40	WG1222044
Toluene	ND		0.00100	1	01/11/2019 01:40	WG1222044
1,2,3-Trichlorobenzene	ND		0.00100	1	01/11/2019 01:40	WG1222044
1,2,4-Trichlorobenzene	ND		0.00100	1	01/11/2019 01:40	WG1222044
1,1,1-Trichloroethane	ND		0.00100	1	01/11/2019 01:40	WG1222044
1,1,2-Trichloroethane	ND		0.00100	1	01/11/2019 01:40	WG1222044
Trichloroethene	0.00489		0.00100	1	01/11/2019 01:40	WG1222044
Trichlorofluoromethane	ND		0.00500	1	01/11/2019 01:40	WG1222044
1,2,3-Trichloropropane	ND		0.00250	1	01/11/2019 01:40	WG1222044
1,2,4-Trimethylbenzene	ND		0.00100	1	01/11/2019 01:40	WG1222044
1,2,3-Trimethylbenzene	ND		0.00100	1	01/11/2019 01:40	WG1222044
1,3,5-Trimethylbenzene	ND		0.00100	1	01/11/2019 01:40	WG1222044
Vinyl chloride	ND		0.00100	1	01/11/2019 01:40	WG1222044
Xylenes, Total	ND		0.00300	1	01/11/2019 01:40	WG1222044
(S) Toluene-d8	110		80.0-120		01/11/2019 01:40	WG1222044
(S) Dibromofluoromethane	89.7		75.0-120		01/11/2019 01:40	WG1222044
(S) 4-Bromofluorobenzene	89.5		77.0-126		01/11/2019 01:40	WG1222044

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

Semi-Volatile Organic Compounds (GC) by Method 3511/8015

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	ND		0.100	1	01/14/2019 00:47	WG1222607
(S) o-Terphenyl	77.9		31.0-160		01/14/2019 00:47	WG1222607

Semi Volatile Organic Compounds (GC/MS) by Method 8270C

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
Acenaphthene	ND	J3	0.00100	1	01/13/2019 13:31	WG1222062
Acenaphthylene	ND	J3	0.00100	1	01/13/2019 13:31	WG1222062
Anthracene	ND	J3	0.00100	1	01/13/2019 13:31	WG1222062
Benzo(a)anthracene	ND	J3	0.00100	1	01/13/2019 13:31	WG1222062
Benzo(b)fluoranthene	ND	J3	0.00100	1	01/13/2019 13:31	WG1222062
Benzo(k)fluoranthene	ND	J3	0.00100	1	01/13/2019 13:31	WG1222062
Benzo(g,h,i)perylene	ND	J3	0.00100	1	01/13/2019 13:31	WG1222062
Benzo(a)pyrene	ND	J3	0.00100	1	01/13/2019 13:31	WG1222062

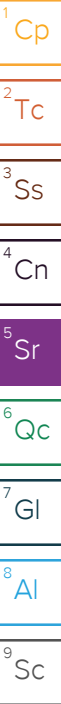


Collected date/time: 01/08/19 09:40

L1059921

Semi Volatile Organic Compounds (GC/MS) by Method 8270C

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
Bis(2-chlorethoxy)methane	ND	J3	0.0100	1	01/13/2019 13:31	WG1222062
Bis(2-chloroethyl)ether	ND		0.0100	1	01/13/2019 13:31	WG1222062
Bis(2-chloroisopropyl)ether	ND		0.0100	1	01/13/2019 13:31	WG1222062
4-Bromophenyl-phenylether	ND	J3	0.0100	1	01/13/2019 13:31	WG1222062
2-Chloronaphthalene	ND	J3	0.00100	1	01/13/2019 13:31	WG1222062
4-Chlorophenyl-phenylether	ND	J3	0.0100	1	01/13/2019 13:31	WG1222062
Chrysene	ND	J3	0.00100	1	01/13/2019 13:31	WG1222062
Dibenz(a,h)anthracene	ND	J3	0.00100	1	01/13/2019 13:31	WG1222062
3,3-Dichlorobenzidine	ND	J3	0.0100	1	01/13/2019 13:31	WG1222062
2,4-Dinitrotoluene	ND	J3	0.0100	1	01/13/2019 13:31	WG1222062
2,6-Dinitrotoluene	ND	J3	0.0100	1	01/13/2019 13:31	WG1222062
Fluoranthene	ND	J3	0.00100	1	01/13/2019 13:31	WG1222062
Fluorene	ND	J3	0.00100	1	01/13/2019 13:31	WG1222062
Hexachlorobenzene	ND	J3	0.00100	1	01/13/2019 13:31	WG1222062
Hexachloro-1,3-butadiene	ND		0.0100	1	01/13/2019 13:31	WG1222062
Hexachlorocyclopentadiene	ND		0.0100	1	01/13/2019 13:31	WG1222062
Hexachloroethane	ND		0.0100	1	01/13/2019 13:31	WG1222062
Indeno(1,2,3-cd)pyrene	ND	J3	0.00100	1	01/13/2019 13:31	WG1222062
Isophorone	ND	J3	0.0100	1	01/13/2019 13:31	WG1222062
Naphthalene	ND		0.00100	1	01/13/2019 13:31	WG1222062
Nitrobenzene	ND		0.0100	1	01/13/2019 13:31	WG1222062
n-Nitrosodimethylamine	ND		0.0100	1	01/13/2019 13:31	WG1222062
n-Nitrosodiphenylamine	ND	J3	0.0100	1	01/13/2019 13:31	WG1222062
n-Nitrosodi-n-propylamine	ND	J3	0.0100	1	01/13/2019 13:31	WG1222062
Phenanthrene	ND	J3	0.00100	1	01/13/2019 13:31	WG1222062
Benzylbutyl phthalate	ND	J3	0.00300	1	01/13/2019 13:31	WG1222062
Bis(2-ethylhexyl)phthalate	ND	J3	0.00300	1	01/13/2019 13:31	WG1222062
Di-n-butyl phthalate	ND	J3	0.00300	1	01/13/2019 13:31	WG1222062
Diethyl phthalate	ND	J3	0.00300	1	01/13/2019 13:31	WG1222062
Dimethyl phthalate	ND	J3	0.00300	1	01/13/2019 13:31	WG1222062
Di-n-octyl phthalate	ND	J3	0.00300	1	01/13/2019 13:31	WG1222062
Pyrene	ND	J3	0.00100	1	01/13/2019 13:31	WG1222062
1,2,4-Trichlorobenzene	ND		0.0100	1	01/13/2019 13:31	WG1222062
4-Chloro-3-methylphenol	ND	J3	0.0100	1	01/13/2019 13:31	WG1222062
2-Chlorophenol	ND		0.0100	1	01/13/2019 13:31	WG1222062
2,4-Dichlorophenol	ND	J3	0.0100	1	01/13/2019 13:31	WG1222062
2,4-Dimethylphenol	ND	J3	0.0100	1	01/13/2019 13:31	WG1222062
4,6-Dinitro-2-methylphenol	ND	J3	0.0100	1	01/13/2019 13:31	WG1222062
2,4-Dinitrophenol	ND		0.0100	1	01/13/2019 13:31	WG1222062
2-Nitrophenol	ND		0.0100	1	01/13/2019 13:31	WG1222062
4-Nitrophenol	ND	J3	0.0100	1	01/13/2019 13:31	WG1222062
Pentachlorophenol	ND	J3	0.0100	1	01/13/2019 13:31	WG1222062
Phenol	ND		0.0100	1	01/13/2019 13:31	WG1222062
2,4,6-Trichlorophenol	ND	J3	0.0100	1	01/13/2019 13:31	WG1222062
(S) 2-Fluorophenol	35.1		10.0-120		01/13/2019 13:31	WG1222062
(S) Phenol-d5	21.2		10.0-120		01/13/2019 13:31	WG1222062
(S) Nitrobenzene-d5	49.8		10.0-127		01/13/2019 13:31	WG1222062
(S) 2-Fluorobiphenyl	51.3		10.0-130		01/13/2019 13:31	WG1222062
(S) 2,4,6-Tribromophenol	45.8		10.0-155		01/13/2019 13:31	WG1222062
(S) p-Terphenyl-d14	60.1		10.0-128		01/13/2019 13:31	WG1222062





Mercury by Method 7470A

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Mercury	ND		0.000200	1	01/14/2019 11:51	WG1222003

1
Cp2
Tc3
Ss4
Cn5
Sr6
Qc7
Gl8
Al9
Sc

Metals (ICP) by Method 6010B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Arsenic	0.0312		0.0100	1	01/15/2019 13:40	WG1222773
Barium	0.242		0.00500	1	01/15/2019 13:40	WG1222773
Cadmium	ND		0.00200	1	01/15/2019 13:40	WG1222773
Chromium	ND		0.0100	1	01/15/2019 13:40	WG1222773
Lead	ND		0.00500	1	01/15/2019 13:40	WG1222773
Selenium	ND		0.0100	1	01/15/2019 13:40	WG1222773
Silver	ND		0.00500	1	01/15/2019 13:40	WG1222773

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
TPH (GC/FID) Low Fraction	ND		0.100	1	01/11/2019 09:13	WG1222078
(S) a,a,a-Trifluorotoluene(FID)	103		78.0-120		01/11/2019 09:13	WG1222078

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

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Acetone	ND		0.0500	1	01/11/2019 02:00	WG1222044
Acrolein	ND		0.0500	1	01/11/2019 02:00	WG1222044
Acrylonitrile	ND		0.0100	1	01/11/2019 02:00	WG1222044
Benzene	ND		0.00100	1	01/11/2019 02:00	WG1222044
Bromobenzene	ND		0.00100	1	01/11/2019 02:00	WG1222044
Bromodichloromethane	ND		0.00100	1	01/11/2019 02:00	WG1222044
Bromoform	ND		0.00100	1	01/11/2019 02:00	WG1222044
Bromomethane	ND		0.00500	1	01/11/2019 02:00	WG1222044
n-Butylbenzene	ND		0.00100	1	01/11/2019 02:00	WG1222044
sec-Butylbenzene	ND		0.00100	1	01/11/2019 02:00	WG1222044
tert-Butylbenzene	ND		0.00100	1	01/11/2019 02:00	WG1222044
Carbon tetrachloride	ND		0.00100	1	01/11/2019 02:00	WG1222044
Chlorobenzene	ND		0.00100	1	01/11/2019 02:00	WG1222044
Chlorodibromomethane	ND		0.00100	1	01/11/2019 02:00	WG1222044
Chloroethane	ND		0.00500	1	01/11/2019 02:00	WG1222044
Chloroform	ND		0.00500	1	01/11/2019 02:00	WG1222044
Chloromethane	ND		0.00250	1	01/11/2019 02:00	WG1222044
2-Chlorotoluene	ND		0.00100	1	01/11/2019 02:00	WG1222044
4-Chlorotoluene	ND		0.00100	1	01/11/2019 02:00	WG1222044
1,2-Dibromo-3-Chloropropane	ND		0.00500	1	01/11/2019 02:00	WG1222044
1,2-Dibromoethane	ND		0.00100	1	01/11/2019 02:00	WG1222044
Dibromomethane	ND		0.00100	1	01/11/2019 02:00	WG1222044
1,2-Dichlorobenzene	ND		0.00100	1	01/11/2019 02:00	WG1222044
1,3-Dichlorobenzene	ND		0.00100	1	01/11/2019 02:00	WG1222044
1,4-Dichlorobenzene	ND		0.00100	1	01/11/2019 02:00	WG1222044
Dichlorodifluoromethane	ND		0.00500	1	01/11/2019 02:00	WG1222044
1,1-Dichloroethane	ND		0.00100	1	01/11/2019 02:00	WG1222044
1,2-Dichloroethane	ND		0.00100	1	01/11/2019 02:00	WG1222044
1,1-Dichloroethene	ND		0.00100	1	01/11/2019 02:00	WG1222044
cis-1,2-Dichloroethene	ND		0.00100	1	01/11/2019 02:00	WG1222044
trans-1,2-Dichloroethene	ND		0.00100	1	01/11/2019 02:00	WG1222044
1,2-Dichloropropane	ND		0.00100	1	01/11/2019 02:00	WG1222044



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

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
1,1-Dichloropropene	ND		0.00100	1	01/11/2019 02:00	WG1222044
1,3-Dichloropropane	ND		0.00100	1	01/11/2019 02:00	WG1222044
cis-1,3-Dichloropropene	ND		0.00100	1	01/11/2019 02:00	WG1222044
trans-1,3-Dichloropropene	ND		0.00100	1	01/11/2019 02:00	WG1222044
2,2-Dichloropropane	ND		0.00100	1	01/11/2019 02:00	WG1222044
Di-isopropyl ether	ND		0.00100	1	01/11/2019 02:00	WG1222044
Ethylbenzene	ND		0.00100	1	01/11/2019 02:00	WG1222044
Hexachloro-1,3-butadiene	ND		0.00100	1	01/11/2019 02:00	WG1222044
Isopropylbenzene	ND		0.00100	1	01/11/2019 02:00	WG1222044
p-Isopropyltoluene	ND		0.00100	1	01/11/2019 02:00	WG1222044
2-Butanone (MEK)	ND		0.0100	1	01/11/2019 02:00	WG1222044
Methylene Chloride	ND		0.00500	1	01/11/2019 02:00	WG1222044
4-Methyl-2-pentanone (MIBK)	ND		0.0100	1	01/11/2019 02:00	WG1222044
Methyl tert-butyl ether	ND		0.00100	1	01/11/2019 02:00	WG1222044
Naphthalene	ND		0.00500	1	01/11/2019 02:00	WG1222044
n-Propylbenzene	ND		0.00100	1	01/11/2019 02:00	WG1222044
Styrene	ND		0.00100	1	01/11/2019 02:00	WG1222044
1,1,1,2-Tetrachloroethane	ND		0.00100	1	01/11/2019 02:00	WG1222044
1,1,2,2-Tetrachloroethane	ND		0.00100	1	01/11/2019 02:00	WG1222044
1,1,2-Trichlorotrifluoroethane	ND		0.00100	1	01/11/2019 02:00	WG1222044
Tetrachloroethene	ND		0.00100	1	01/11/2019 02:00	WG1222044
Toluene	ND		0.00100	1	01/11/2019 02:00	WG1222044
1,2,3-Trichlorobenzene	ND		0.00100	1	01/11/2019 02:00	WG1222044
1,2,4-Trichlorobenzene	ND		0.00100	1	01/11/2019 02:00	WG1222044
1,1,1-Trichloroethane	ND		0.00100	1	01/11/2019 02:00	WG1222044
1,1,2-Trichloroethane	ND		0.00100	1	01/11/2019 02:00	WG1222044
Trichloroethene	ND		0.00100	1	01/11/2019 02:00	WG1222044
Trichlorofluoromethane	ND		0.00500	1	01/11/2019 02:00	WG1222044
1,2,3-Trichloropropane	ND		0.00250	1	01/11/2019 02:00	WG1222044
1,2,4-Trimethylbenzene	ND		0.00100	1	01/11/2019 02:00	WG1222044
1,2,3-Trimethylbenzene	ND		0.00100	1	01/11/2019 02:00	WG1222044
1,3,5-Trimethylbenzene	ND		0.00100	1	01/11/2019 02:00	WG1222044
Vinyl chloride	ND		0.00100	1	01/11/2019 02:00	WG1222044
Xylenes, Total	ND		0.00300	1	01/11/2019 02:00	WG1222044
(S) Toluene-d8	105		80.0-120		01/11/2019 02:00	WG1222044
(S) Dibromofluoromethane	89.5		75.0-120		01/11/2019 02:00	WG1222044
(S) 4-Bromofluorobenzene	89.1		77.0-126		01/11/2019 02:00	WG1222044

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

Semi-Volatile Organic Compounds (GC) by Method 3511/8015

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	0.109		0.100	1	01/14/2019 01:09	WG1222607
(S) o-Terphenyl	78.9		31.0-160		01/14/2019 01:09	WG1222607

Semi Volatile Organic Compounds (GC/MS) by Method 8270C

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
Acenaphthene	ND	J3	0.00100	1	01/13/2019 13:55	WG1222062
Acenaphthylene	ND	J3	0.00100	1	01/13/2019 13:55	WG1222062
Anthracene	ND	J3	0.00100	1	01/13/2019 13:55	WG1222062
Benzo(a)anthracene	ND	J3	0.00100	1	01/13/2019 13:55	WG1222062
Benzo(b)fluoranthene	ND	J3	0.00100	1	01/13/2019 13:55	WG1222062
Benzo(k)fluoranthene	ND	J3	0.00100	1	01/13/2019 13:55	WG1222062
Benzo(g,h,i)perylene	ND	J3	0.00100	1	01/13/2019 13:55	WG1222062
Benzo(a)pyrene	ND	J3	0.00100	1	01/13/2019 13:55	WG1222062



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Semi Volatile Organic Compounds (GC/MS) by Method 8270C

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
Bis(2-chlorethoxy)methane	ND	J3	0.0100	1	01/13/2019 13:55	WG1222062
Bis(2-chloroethyl)ether	ND		0.0100	1	01/13/2019 13:55	WG1222062
Bis(2-chloroisopropyl)ether	ND		0.0100	1	01/13/2019 13:55	WG1222062
4-Bromophenyl-phenylether	ND	J3	0.0100	1	01/13/2019 13:55	WG1222062
2-Chloronaphthalene	ND	J3	0.00100	1	01/13/2019 13:55	WG1222062
4-Chlorophenyl-phenylether	ND	J3	0.0100	1	01/13/2019 13:55	WG1222062
Chrysene	ND	J3	0.00100	1	01/13/2019 13:55	WG1222062
Dibenz(a,h)anthracene	ND	J3	0.00100	1	01/13/2019 13:55	WG1222062
3,3-Dichlorobenzidine	ND	J3	0.0100	1	01/13/2019 13:55	WG1222062
2,4-Dinitrotoluene	ND	J3	0.0100	1	01/13/2019 13:55	WG1222062
2,6-Dinitrotoluene	ND	J3	0.0100	1	01/13/2019 13:55	WG1222062
Fluoranthene	ND	J3	0.00100	1	01/13/2019 13:55	WG1222062
Fluorene	ND	J3	0.00100	1	01/13/2019 13:55	WG1222062
Hexachlorobenzene	ND	J3	0.00100	1	01/13/2019 13:55	WG1222062
Hexachloro-1,3-butadiene	ND		0.0100	1	01/13/2019 13:55	WG1222062
Hexachlorocyclopentadiene	ND		0.0100	1	01/13/2019 13:55	WG1222062
Hexachloroethane	ND		0.0100	1	01/13/2019 13:55	WG1222062
Indeno(1,2,3-cd)pyrene	ND	J3	0.00100	1	01/13/2019 13:55	WG1222062
Isophorone	ND	J3	0.0100	1	01/13/2019 13:55	WG1222062
Naphthalene	ND		0.00100	1	01/13/2019 13:55	WG1222062
Nitrobenzene	ND		0.0100	1	01/13/2019 13:55	WG1222062
n-Nitrosodimethylamine	ND		0.0100	1	01/13/2019 13:55	WG1222062
n-Nitrosodiphenylamine	ND	J3	0.0100	1	01/13/2019 13:55	WG1222062
n-Nitrosodi-n-propylamine	ND	J3	0.0100	1	01/13/2019 13:55	WG1222062
Phenanthrene	ND	J3	0.00100	1	01/13/2019 13:55	WG1222062
Benzylbutyl phthalate	ND	J3	0.00300	1	01/13/2019 13:55	WG1222062
Bis(2-ethylhexyl)phthalate	ND	J3	0.00300	1	01/13/2019 13:55	WG1222062
Di-n-butyl phthalate	ND	J3	0.00300	1	01/13/2019 13:55	WG1222062
Diethyl phthalate	ND	J3	0.00300	1	01/13/2019 13:55	WG1222062
Dimethyl phthalate	ND	J3	0.00300	1	01/13/2019 13:55	WG1222062
Di-n-octyl phthalate	ND	J3	0.00300	1	01/13/2019 13:55	WG1222062
Pyrene	ND	J3	0.00100	1	01/13/2019 13:55	WG1222062
1,2,4-Trichlorobenzene	ND		0.0100	1	01/13/2019 13:55	WG1222062
4-Chloro-3-methylphenol	ND	J3	0.0100	1	01/13/2019 13:55	WG1222062
2-Chlorophenol	ND		0.0100	1	01/13/2019 13:55	WG1222062
2,4-Dichlorophenol	ND	J3	0.0100	1	01/13/2019 13:55	WG1222062
2,4-Dimethylphenol	ND	J3	0.0100	1	01/13/2019 13:55	WG1222062
4,6-Dinitro-2-methylphenol	ND	J3	0.0100	1	01/13/2019 13:55	WG1222062
2,4-Dinitrophenol	ND		0.0100	1	01/13/2019 13:55	WG1222062
2-Nitrophenol	ND		0.0100	1	01/13/2019 13:55	WG1222062
4-Nitrophenol	ND	J3	0.0100	1	01/13/2019 13:55	WG1222062
Pentachlorophenol	ND	J3	0.0100	1	01/13/2019 13:55	WG1222062
Phenol	ND		0.0100	1	01/13/2019 13:55	WG1222062
2,4,6-Trichlorophenol	ND	J3	0.0100	1	01/13/2019 13:55	WG1222062
(S) 2-Fluorophenol	40.7		10.0-120		01/13/2019 13:55	WG1222062
(S) Phenol-d5	24.1		10.0-120		01/13/2019 13:55	WG1222062
(S) Nitrobenzene-d5	55.8		10.0-127		01/13/2019 13:55	WG1222062
(S) 2-Fluorobiphenyl	58.1		10.0-130		01/13/2019 13:55	WG1222062
(S) 2,4,6-Tribromophenol	51.5		10.0-155		01/13/2019 13:55	WG1222062
(S) p-Terphenyl-d14	63.7		10.0-128		01/13/2019 13:55	WG1222062

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Mercury by Method 7470A

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Mercury	ND		0.000200	1	01/14/2019 11:53	WG1222003

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Metals (ICP) by Method 6010B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Arsenic	0.0398		0.0100	1	01/15/2019 13:43	WG1222773
Barium	0.247		0.00500	1	01/15/2019 13:43	WG1222773
Cadmium	ND		0.00200	1	01/15/2019 13:43	WG1222773
Chromium	ND		0.0100	1	01/15/2019 13:43	WG1222773
Lead	0.00577		0.00500	1	01/15/2019 13:43	WG1222773
Selenium	ND		0.0100	1	01/15/2019 13:43	WG1222773
Silver	ND		0.00500	1	01/15/2019 13:43	WG1222773

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
TPH (GC/FID) Low Fraction	ND		0.100	1	01/11/2019 09:35	WG1222078
(S) a,a,a-Trifluorotoluene(FID)	103		78.0-120		01/11/2019 09:35	WG1222078

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

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Acetone	ND		0.0500	1	01/11/2019 02:20	WG1222044
Acrolein	ND		0.0500	1	01/11/2019 02:20	WG1222044
Acrylonitrile	ND		0.0100	1	01/11/2019 02:20	WG1222044
Benzene	ND		0.00100	1	01/11/2019 02:20	WG1222044
Bromobenzene	ND		0.00100	1	01/11/2019 02:20	WG1222044
Bromodichloromethane	ND		0.00100	1	01/11/2019 02:20	WG1222044
Bromoform	ND		0.00100	1	01/11/2019 02:20	WG1222044
Bromomethane	ND		0.00500	1	01/11/2019 02:20	WG1222044
n-Butylbenzene	ND		0.00100	1	01/11/2019 02:20	WG1222044
sec-Butylbenzene	ND		0.00100	1	01/11/2019 02:20	WG1222044
tert-Butylbenzene	ND		0.00100	1	01/11/2019 02:20	WG1222044
Carbon tetrachloride	ND		0.00100	1	01/11/2019 02:20	WG1222044
Chlorobenzene	ND		0.00100	1	01/11/2019 02:20	WG1222044
Chlorodibromomethane	ND		0.00100	1	01/11/2019 02:20	WG1222044
Chloroethane	ND		0.00500	1	01/11/2019 02:20	WG1222044
Chloroform	ND		0.00500	1	01/11/2019 02:20	WG1222044
Chloromethane	ND		0.00250	1	01/11/2019 02:20	WG1222044
2-Chlorotoluene	ND		0.00100	1	01/11/2019 02:20	WG1222044
4-Chlorotoluene	ND		0.00100	1	01/11/2019 02:20	WG1222044
1,2-Dibromo-3-Chloropropane	ND		0.00500	1	01/11/2019 02:20	WG1222044
1,2-Dibromoethane	ND		0.00100	1	01/11/2019 02:20	WG1222044
Dibromomethane	ND		0.00100	1	01/11/2019 02:20	WG1222044
1,2-Dichlorobenzene	ND		0.00100	1	01/11/2019 02:20	WG1222044
1,3-Dichlorobenzene	ND		0.00100	1	01/11/2019 02:20	WG1222044
1,4-Dichlorobenzene	ND		0.00100	1	01/11/2019 02:20	WG1222044
Dichlorodifluoromethane	ND		0.00500	1	01/11/2019 02:20	WG1222044
1,1-Dichloroethane	ND		0.00100	1	01/11/2019 02:20	WG1222044
1,2-Dichloroethane	ND		0.00100	1	01/11/2019 02:20	WG1222044
1,1-Dichloroethene	ND		0.00100	1	01/11/2019 02:20	WG1222044
cis-1,2-Dichloroethene	0.00235		0.00100	1	01/11/2019 02:20	WG1222044
trans-1,2-Dichloroethene	ND		0.00100	1	01/11/2019 02:20	WG1222044
1,2-Dichloropropane	ND		0.00100	1	01/11/2019 02:20	WG1222044



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

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
1,1-Dichloropropene	ND		0.00100	1	01/11/2019 02:20	WG1222044
1,3-Dichloropropane	ND		0.00100	1	01/11/2019 02:20	WG1222044
cis-1,3-Dichloropropene	ND		0.00100	1	01/11/2019 02:20	WG1222044
trans-1,3-Dichloropropene	ND		0.00100	1	01/11/2019 02:20	WG1222044
2,2-Dichloropropane	ND		0.00100	1	01/11/2019 02:20	WG1222044
Di-isopropyl ether	ND		0.00100	1	01/11/2019 02:20	WG1222044
Ethylbenzene	ND		0.00100	1	01/11/2019 02:20	WG1222044
Hexachloro-1,3-butadiene	ND		0.00100	1	01/11/2019 02:20	WG1222044
Isopropylbenzene	ND		0.00100	1	01/11/2019 02:20	WG1222044
p-Isopropyltoluene	ND		0.00100	1	01/11/2019 02:20	WG1222044
2-Butanone (MEK)	ND		0.0100	1	01/11/2019 02:20	WG1222044
Methylene Chloride	ND		0.00500	1	01/11/2019 02:20	WG1222044
4-Methyl-2-pentanone (MIBK)	ND		0.0100	1	01/11/2019 02:20	WG1222044
Methyl tert-butyl ether	ND		0.00100	1	01/11/2019 02:20	WG1222044
Naphthalene	ND		0.00500	1	01/11/2019 02:20	WG1222044
n-Propylbenzene	ND		0.00100	1	01/11/2019 02:20	WG1222044
Styrene	ND		0.00100	1	01/11/2019 02:20	WG1222044
1,1,1,2-Tetrachloroethane	ND		0.00100	1	01/11/2019 02:20	WG1222044
1,1,2,2-Tetrachloroethane	ND		0.00100	1	01/11/2019 02:20	WG1222044
1,1,2-Trichlorotrifluoroethane	ND		0.00100	1	01/11/2019 02:20	WG1222044
Tetrachloroethene	ND		0.00100	1	01/11/2019 02:20	WG1222044
Toluene	ND		0.00100	1	01/11/2019 02:20	WG1222044
1,2,3-Trichlorobenzene	ND		0.00100	1	01/11/2019 02:20	WG1222044
1,2,4-Trichlorobenzene	ND		0.00100	1	01/11/2019 02:20	WG1222044
1,1,1-Trichloroethane	ND		0.00100	1	01/11/2019 02:20	WG1222044
1,1,2-Trichloroethane	ND		0.00100	1	01/11/2019 02:20	WG1222044
Trichloroethene	ND		0.00100	1	01/11/2019 02:20	WG1222044
Trichlorofluoromethane	ND		0.00500	1	01/11/2019 02:20	WG1222044
1,2,3-Trichloropropane	ND		0.00250	1	01/11/2019 02:20	WG1222044
1,2,4-Trimethylbenzene	ND		0.00100	1	01/11/2019 02:20	WG1222044
1,2,3-Trimethylbenzene	ND		0.00100	1	01/11/2019 02:20	WG1222044
1,3,5-Trimethylbenzene	ND		0.00100	1	01/11/2019 02:20	WG1222044
Vinyl chloride	ND		0.00100	1	01/11/2019 02:20	WG1222044
Xylenes, Total	ND		0.00300	1	01/11/2019 02:20	WG1222044
(S) Toluene-d8	111		80.0-120		01/11/2019 02:20	WG1222044
(S) Dibromofluoromethane	91.7		75.0-120		01/11/2019 02:20	WG1222044
(S) 4-Bromofluorobenzene	90.7		77.0-126		01/11/2019 02:20	WG1222044

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

Semi-Volatile Organic Compounds (GC) by Method 3511/8015

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	ND		0.100	1	01/14/2019 01:31	WG1222607
(S) o-Terphenyl	71.1		31.0-160		01/14/2019 01:31	WG1222607

Semi Volatile Organic Compounds (GC/MS) by Method 8270C

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
Acenaphthene	ND	J3	0.00100	1	01/13/2019 14:19	WG1222062
Acenaphthylene	ND	J3	0.00100	1	01/13/2019 14:19	WG1222062
Anthracene	ND	J3	0.00100	1	01/13/2019 14:19	WG1222062
Benzo(a)anthracene	ND	J3	0.00100	1	01/13/2019 14:19	WG1222062
Benzo(b)fluoranthene	ND	J3	0.00100	1	01/13/2019 14:19	WG1222062
Benzo(k)fluoranthene	ND	J3	0.00100	1	01/13/2019 14:19	WG1222062
Benzo(g,h,i)perylene	ND	J3	0.00100	1	01/13/2019 14:19	WG1222062
Benzo(a)pyrene	ND	J3	0.00100	1	01/13/2019 14:19	WG1222062



Collected date/time: 01/08/19 11:15

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Semi Volatile Organic Compounds (GC/MS) by Method 8270C

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
Bis(2-chlorethoxy)methane	ND	J3	0.0100	1	01/13/2019 14:19	WG1222062
Bis(2-chloroethyl)ether	ND		0.0100	1	01/13/2019 14:19	WG1222062
Bis(2-chloroisopropyl)ether	ND		0.0100	1	01/13/2019 14:19	WG1222062
4-Bromophenyl-phenylether	ND	J3	0.0100	1	01/13/2019 14:19	WG1222062
2-Chloronaphthalene	ND	J3	0.00100	1	01/13/2019 14:19	WG1222062
4-Chlorophenyl-phenylether	ND	J3	0.0100	1	01/13/2019 14:19	WG1222062
Chrysene	ND	J3	0.00100	1	01/13/2019 14:19	WG1222062
Dibenz(a,h)anthracene	ND	J3	0.00100	1	01/13/2019 14:19	WG1222062
3,3-Dichlorobenzidine	ND	J3	0.0100	1	01/13/2019 14:19	WG1222062
2,4-Dinitrotoluene	ND	J3	0.0100	1	01/13/2019 14:19	WG1222062
2,6-Dinitrotoluene	ND	J3	0.0100	1	01/13/2019 14:19	WG1222062
Fluoranthene	ND	J3	0.00100	1	01/13/2019 14:19	WG1222062
Fluorene	ND	J3	0.00100	1	01/13/2019 14:19	WG1222062
Hexachlorobenzene	ND	J3	0.00100	1	01/13/2019 14:19	WG1222062
Hexachloro-1,3-butadiene	ND		0.0100	1	01/13/2019 14:19	WG1222062
Hexachlorocyclopentadiene	ND		0.0100	1	01/13/2019 14:19	WG1222062
Hexachloroethane	ND		0.0100	1	01/13/2019 14:19	WG1222062
Indeno(1,2,3-cd)pyrene	ND	J3	0.00100	1	01/13/2019 14:19	WG1222062
Isophorone	ND	J3	0.0100	1	01/13/2019 14:19	WG1222062
Naphthalene	ND		0.00100	1	01/13/2019 14:19	WG1222062
Nitrobenzene	ND		0.0100	1	01/13/2019 14:19	WG1222062
n-Nitrosodimethylamine	ND		0.0100	1	01/13/2019 14:19	WG1222062
n-Nitrosodiphenylamine	ND	J3	0.0100	1	01/13/2019 14:19	WG1222062
n-Nitrosodi-n-propylamine	ND	J3	0.0100	1	01/13/2019 14:19	WG1222062
Phenanthrene	ND	J3	0.00100	1	01/13/2019 14:19	WG1222062
Benzylbutyl phthalate	ND	J3	0.00300	1	01/13/2019 14:19	WG1222062
Bis(2-ethylhexyl)phthalate	ND	J3	0.00300	1	01/13/2019 14:19	WG1222062
Di-n-butyl phthalate	ND	J3	0.00300	1	01/13/2019 14:19	WG1222062
Diethyl phthalate	ND	J3	0.00300	1	01/13/2019 14:19	WG1222062
Dimethyl phthalate	ND	J3	0.00300	1	01/13/2019 14:19	WG1222062
Di-n-octyl phthalate	ND	J3	0.00300	1	01/13/2019 14:19	WG1222062
Pyrene	ND	J3	0.00100	1	01/13/2019 14:19	WG1222062
1,2,4-Trichlorobenzene	ND		0.0100	1	01/13/2019 14:19	WG1222062
4-Chloro-3-methylphenol	ND	J3	0.0100	1	01/13/2019 14:19	WG1222062
2-Chlorophenol	ND		0.0100	1	01/13/2019 14:19	WG1222062
2,4-Dichlorophenol	ND	J3	0.0100	1	01/13/2019 14:19	WG1222062
2,4-Dimethylphenol	ND	J3	0.0100	1	01/13/2019 14:19	WG1222062
4,6-Dinitro-2-methylphenol	ND	J3	0.0100	1	01/13/2019 14:19	WG1222062
2,4-Dinitrophenol	ND		0.0100	1	01/13/2019 14:19	WG1222062
2-Nitrophenol	ND		0.0100	1	01/13/2019 14:19	WG1222062
4-Nitrophenol	ND	J3	0.0100	1	01/13/2019 14:19	WG1222062
Pentachlorophenol	ND	J3	0.0100	1	01/13/2019 14:19	WG1222062
Phenol	ND		0.0100	1	01/13/2019 14:19	WG1222062
2,4,6-Trichlorophenol	ND	J3	0.0100	1	01/13/2019 14:19	WG1222062
(S) 2-Fluorophenol	40.5		10.0-120		01/13/2019 14:19	WG1222062
(S) Phenol-d5	24.2		10.0-120		01/13/2019 14:19	WG1222062
(S) Nitrobenzene-d5	55.8		10.0-127		01/13/2019 14:19	WG1222062
(S) 2-Fluorobiphenyl	58.3		10.0-130		01/13/2019 14:19	WG1222062
(S) 2,4,6-Tribromophenol	52.5		10.0-155		01/13/2019 14:19	WG1222062
(S) p-Terphenyl-d14	65.3		10.0-128		01/13/2019 14:19	WG1222062

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Mercury by Method 7470A

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Mercury	ND		0.000200	1	01/14/2019 11:56	WG1222003

Metals (ICP) by Method 6010B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Arsenic	0.0155		0.0100	1	01/15/2019 13:51	WG1222773
Barium	0.546		0.00500	1	01/15/2019 13:51	WG1222773
Cadmium	ND		0.00200	1	01/15/2019 13:51	WG1222773
Chromium	ND		0.0100	1	01/15/2019 13:51	WG1222773
Lead	0.00518		0.00500	1	01/15/2019 13:51	WG1222773
Selenium	ND		0.0100	1	01/15/2019 13:51	WG1222773
Silver	ND		0.00500	1	01/15/2019 13:51	WG1222773

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
TPH (GC/FID) Low Fraction	ND		0.100	1	01/11/2019 09:57	WG1222078
(S) a,a,a-Trifluorotoluene(FID)	103		78.0-120		01/11/2019 09:57	WG1222078

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

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Acetone	ND		0.0500	1	01/11/2019 02:40	WG1222044
Acrolein	ND		0.0500	1	01/11/2019 02:40	WG1222044
Acrylonitrile	ND		0.0100	1	01/11/2019 02:40	WG1222044
Benzene	ND		0.00100	1	01/11/2019 02:40	WG1222044
Bromobenzene	ND		0.00100	1	01/11/2019 02:40	WG1222044
Bromodichloromethane	ND		0.00100	1	01/11/2019 02:40	WG1222044
Bromoform	ND		0.00100	1	01/11/2019 02:40	WG1222044
Bromomethane	ND		0.00500	1	01/11/2019 02:40	WG1222044
n-Butylbenzene	ND		0.00100	1	01/11/2019 02:40	WG1222044
sec-Butylbenzene	ND		0.00100	1	01/11/2019 02:40	WG1222044
tert-Butylbenzene	ND		0.00100	1	01/11/2019 02:40	WG1222044
Carbon tetrachloride	ND		0.00100	1	01/11/2019 02:40	WG1222044
Chlorobenzene	ND		0.00100	1	01/11/2019 02:40	WG1222044
Chlorodibromomethane	ND		0.00100	1	01/11/2019 02:40	WG1222044
Chloroethane	ND		0.00500	1	01/11/2019 02:40	WG1222044
Chloroform	ND		0.00500	1	01/11/2019 02:40	WG1222044
Chloromethane	ND		0.00250	1	01/11/2019 02:40	WG1222044
2-Chlorotoluene	ND		0.00100	1	01/11/2019 02:40	WG1222044
4-Chlorotoluene	ND		0.00100	1	01/11/2019 02:40	WG1222044
1,2-Dibromo-3-Chloropropane	ND		0.00500	1	01/11/2019 02:40	WG1222044
1,2-Dibromoethane	ND		0.00100	1	01/11/2019 02:40	WG1222044
Dibromomethane	ND		0.00100	1	01/11/2019 02:40	WG1222044
1,2-Dichlorobenzene	ND		0.00100	1	01/11/2019 02:40	WG1222044
1,3-Dichlorobenzene	ND		0.00100	1	01/11/2019 02:40	WG1222044
1,4-Dichlorobenzene	ND		0.00100	1	01/11/2019 02:40	WG1222044
Dichlorodifluoromethane	ND		0.00500	1	01/11/2019 02:40	WG1222044
1,1-Dichloroethane	ND		0.00100	1	01/11/2019 02:40	WG1222044
1,2-Dichloroethane	ND		0.00100	1	01/11/2019 02:40	WG1222044
1,1-Dichloroethene	ND		0.00100	1	01/11/2019 02:40	WG1222044
cis-1,2-Dichloroethene	ND		0.00100	1	01/11/2019 02:40	WG1222044
trans-1,2-Dichloroethene	ND		0.00100	1	01/11/2019 02:40	WG1222044
1,2-Dichloropropane	ND		0.00100	1	01/11/2019 02:40	WG1222044

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 8260B

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
1,1-Dichloropropene	ND		0.00100	1	01/11/2019 02:40	WG1222044
1,3-Dichloropropane	ND		0.00100	1	01/11/2019 02:40	WG1222044
cis-1,3-Dichloropropene	ND		0.00100	1	01/11/2019 02:40	WG1222044
trans-1,3-Dichloropropene	ND		0.00100	1	01/11/2019 02:40	WG1222044
2,2-Dichloropropane	ND		0.00100	1	01/11/2019 02:40	WG1222044
Di-isopropyl ether	ND		0.00100	1	01/11/2019 02:40	WG1222044
Ethylbenzene	ND		0.00100	1	01/11/2019 02:40	WG1222044
Hexachloro-1,3-butadiene	ND		0.00100	1	01/11/2019 02:40	WG1222044
Isopropylbenzene	ND		0.00100	1	01/11/2019 02:40	WG1222044
p-Isopropyltoluene	ND		0.00100	1	01/11/2019 02:40	WG1222044
2-Butanone (MEK)	ND		0.0100	1	01/11/2019 02:40	WG1222044
Methylene Chloride	ND		0.00500	1	01/11/2019 02:40	WG1222044
4-Methyl-2-pentanone (MIBK)	ND		0.0100	1	01/11/2019 02:40	WG1222044
Methyl tert-butyl ether	ND		0.00100	1	01/11/2019 02:40	WG1222044
Naphthalene	ND		0.00500	1	01/11/2019 02:40	WG1222044
n-Propylbenzene	ND		0.00100	1	01/11/2019 02:40	WG1222044
Styrene	ND		0.00100	1	01/11/2019 02:40	WG1222044
1,1,1,2-Tetrachloroethane	ND		0.00100	1	01/11/2019 02:40	WG1222044
1,1,2,2-Tetrachloroethane	ND		0.00100	1	01/11/2019 02:40	WG1222044
1,1,2-Trichlorotrifluoroethane	ND		0.00100	1	01/11/2019 02:40	WG1222044
Tetrachloroethene	ND		0.00100	1	01/11/2019 02:40	WG1222044
Toluene	ND		0.00100	1	01/11/2019 02:40	WG1222044
1,2,3-Trichlorobenzene	ND		0.00100	1	01/11/2019 02:40	WG1222044
1,2,4-Trichlorobenzene	ND		0.00100	1	01/11/2019 02:40	WG1222044
1,1,1-Trichloroethane	ND		0.00100	1	01/11/2019 02:40	WG1222044
1,1,2-Trichloroethane	ND		0.00100	1	01/11/2019 02:40	WG1222044
Trichloroethene	ND		0.00100	1	01/11/2019 02:40	WG1222044
Trichlorofluoromethane	ND		0.00500	1	01/11/2019 02:40	WG1222044
1,2,3-Trichloropropane	ND		0.00250	1	01/11/2019 02:40	WG1222044
1,2,4-Trimethylbenzene	ND		0.00100	1	01/11/2019 02:40	WG1222044
1,2,3-Trimethylbenzene	ND		0.00100	1	01/11/2019 02:40	WG1222044
1,3,5-Trimethylbenzene	ND		0.00100	1	01/11/2019 02:40	WG1222044
Vinyl chloride	ND		0.00100	1	01/11/2019 02:40	WG1222044
Xylenes, Total	ND		0.00300	1	01/11/2019 02:40	WG1222044
(S) Toluene-d8	109		80.0-120		01/11/2019 02:40	WG1222044
(S) Dibromofluoromethane	90.6		75.0-120		01/11/2019 02:40	WG1222044
(S) 4-Bromofluorobenzene	87.4		77.0-126		01/11/2019 02:40	WG1222044

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

Semi-Volatile Organic Compounds (GC) by Method 3511/8015

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	ND		0.100	1	01/14/2019 01:53	WG1222607
(S) o-Terphenyl	76.3		31.0-160		01/14/2019 01:53	WG1222607

Semi Volatile Organic Compounds (GC/MS) by Method 8270C

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
Acenaphthene	ND	J3	0.00100	1	01/13/2019 14:42	WG1222062
Acenaphthylene	ND	J3	0.00100	1	01/13/2019 14:42	WG1222062
Anthracene	ND	J3	0.00100	1	01/13/2019 14:42	WG1222062
Benzo(a)anthracene	ND	J3	0.00100	1	01/13/2019 14:42	WG1222062
Benzo(b)fluoranthene	ND	J3	0.00100	1	01/13/2019 14:42	WG1222062
Benzo(k)fluoranthene	ND	J3	0.00100	1	01/13/2019 14:42	WG1222062
Benzo(g,h,i)perylene	ND	J3	0.00100	1	01/13/2019 14:42	WG1222062
Benzo(a)pyrene	ND	J3	0.00100	1	01/13/2019 14:42	WG1222062



Collected date/time: 01/08/19 11:45

L1059921

Semi Volatile Organic Compounds (GC/MS) by Method 8270C

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
Bis(2-chlorethoxy)methane	ND	J3	0.0100	1	01/13/2019 14:42	WG1222062
Bis(2-chloroethyl)ether	ND		0.0100	1	01/13/2019 14:42	WG1222062
Bis(2-chloroisopropyl)ether	ND		0.0100	1	01/13/2019 14:42	WG1222062
4-Bromophenyl-phenylether	ND	J3	0.0100	1	01/13/2019 14:42	WG1222062
2-Chloronaphthalene	ND	J3	0.00100	1	01/13/2019 14:42	WG1222062
4-Chlorophenyl-phenylether	ND	J3	0.0100	1	01/13/2019 14:42	WG1222062
Chrysene	ND	J3	0.00100	1	01/13/2019 14:42	WG1222062
Dibenz(a,h)anthracene	ND	J3	0.00100	1	01/13/2019 14:42	WG1222062
3,3-Dichlorobenzidine	ND	J3	0.0100	1	01/13/2019 14:42	WG1222062
2,4-Dinitrotoluene	ND	J3	0.0100	1	01/13/2019 14:42	WG1222062
2,6-Dinitrotoluene	ND	J3	0.0100	1	01/13/2019 14:42	WG1222062
Fluoranthene	ND	J3	0.00100	1	01/13/2019 14:42	WG1222062
Fluorene	ND	J3	0.00100	1	01/13/2019 14:42	WG1222062
Hexachlorobenzene	ND	J3	0.00100	1	01/13/2019 14:42	WG1222062
Hexachloro-1,3-butadiene	ND		0.0100	1	01/13/2019 14:42	WG1222062
Hexachlorocyclopentadiene	ND		0.0100	1	01/13/2019 14:42	WG1222062
Hexachloroethane	ND		0.0100	1	01/13/2019 14:42	WG1222062
Indeno(1,2,3-cd)pyrene	ND	J3	0.00100	1	01/13/2019 14:42	WG1222062
Isophorone	ND	J3	0.0100	1	01/13/2019 14:42	WG1222062
Naphthalene	ND		0.00100	1	01/13/2019 14:42	WG1222062
Nitrobenzene	ND		0.0100	1	01/13/2019 14:42	WG1222062
n-Nitrosodimethylamine	ND		0.0100	1	01/13/2019 14:42	WG1222062
n-Nitrosodiphenylamine	ND	J3	0.0100	1	01/13/2019 14:42	WG1222062
n-Nitrosodi-n-propylamine	ND	J3	0.0100	1	01/13/2019 14:42	WG1222062
Phenanthrene	ND	J3	0.00100	1	01/13/2019 14:42	WG1222062
Benzylbutyl phthalate	ND	J3	0.00300	1	01/13/2019 14:42	WG1222062
Bis(2-ethylhexyl)phthalate	ND	J3	0.00300	1	01/13/2019 14:42	WG1222062
Di-n-butyl phthalate	ND	J3	0.00300	1	01/13/2019 14:42	WG1222062
Diethyl phthalate	ND	J3	0.00300	1	01/13/2019 14:42	WG1222062
Dimethyl phthalate	ND	J3	0.00300	1	01/13/2019 14:42	WG1222062
Di-n-octyl phthalate	ND	J3	0.00300	1	01/13/2019 14:42	WG1222062
Pyrene	ND	J3	0.00100	1	01/13/2019 14:42	WG1222062
1,2,4-Trichlorobenzene	ND		0.0100	1	01/13/2019 14:42	WG1222062
4-Chloro-3-methylphenol	ND	J3	0.0100	1	01/13/2019 14:42	WG1222062
2-Chlorophenol	ND		0.0100	1	01/13/2019 14:42	WG1222062
2,4-Dichlorophenol	ND	J3	0.0100	1	01/13/2019 14:42	WG1222062
2,4-Dimethylphenol	ND	J3	0.0100	1	01/13/2019 14:42	WG1222062
4,6-Dinitro-2-methylphenol	ND	J3	0.0100	1	01/13/2019 14:42	WG1222062
2,4-Dinitrophenol	ND		0.0100	1	01/13/2019 14:42	WG1222062
2-Nitrophenol	ND		0.0100	1	01/13/2019 14:42	WG1222062
4-Nitrophenol	ND	J3	0.0100	1	01/13/2019 14:42	WG1222062
Pentachlorophenol	ND	J3	0.0100	1	01/13/2019 14:42	WG1222062
Phenol	ND		0.0100	1	01/13/2019 14:42	WG1222062
2,4,6-Trichlorophenol	ND	J3	0.0100	1	01/13/2019 14:42	WG1222062
(S) 2-Fluorophenol	33.2		10.0-120		01/13/2019 14:42	WG1222062
(S) Phenol-d5	20.3		10.0-120		01/13/2019 14:42	WG1222062
(S) Nitrobenzene-d5	44.4		10.0-127		01/13/2019 14:42	WG1222062
(S) 2-Fluorobiphenyl	44.9		10.0-130		01/13/2019 14:42	WG1222062
(S) 2,4,6-Tribromophenol	38.1		10.0-155		01/13/2019 14:42	WG1222062
(S) p-Terphenyl-d14	54.5		10.0-128		01/13/2019 14:42	WG1222062

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Mercury by Method 7470A

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Mercury	ND		0.000200	1	01/14/2019 11:58	WG1222003

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Metals (ICP) by Method 6010B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Arsenic	0.0842		0.0100	1	01/15/2019 13:53	WG1222773
Barium	0.216		0.00500	1	01/15/2019 13:53	WG1222773
Cadmium	ND		0.00200	1	01/15/2019 13:53	WG1222773
Chromium	ND		0.0100	1	01/15/2019 13:53	WG1222773
Lead	0.0102		0.00500	1	01/15/2019 13:53	WG1222773
Selenium	ND		0.0100	1	01/15/2019 13:53	WG1222773
Silver	ND		0.00500	1	01/15/2019 13:53	WG1222773

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
TPH (GC/FID) Low Fraction	ND		0.100	1	01/11/2019 10:20	WG1222078
(S) a,a,a-Trifluorotoluene(FID)	103		78.0-120		01/11/2019 10:20	WG1222078

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

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Acetone	ND		0.0500	1	01/11/2019 03:00	WG1222044
Acrolein	ND		0.0500	1	01/11/2019 03:00	WG1222044
Acrylonitrile	ND		0.0100	1	01/11/2019 03:00	WG1222044
Benzene	ND		0.00100	1	01/11/2019 03:00	WG1222044
Bromobenzene	ND		0.00100	1	01/11/2019 03:00	WG1222044
Bromodichloromethane	ND		0.00100	1	01/11/2019 03:00	WG1222044
Bromoform	ND		0.00100	1	01/11/2019 03:00	WG1222044
Bromomethane	ND		0.00500	1	01/11/2019 03:00	WG1222044
n-Butylbenzene	ND		0.00100	1	01/11/2019 03:00	WG1222044
sec-Butylbenzene	ND		0.00100	1	01/11/2019 03:00	WG1222044
tert-Butylbenzene	ND		0.00100	1	01/11/2019 03:00	WG1222044
Carbon tetrachloride	ND		0.00100	1	01/11/2019 03:00	WG1222044
Chlorobenzene	ND		0.00100	1	01/11/2019 03:00	WG1222044
Chlorodibromomethane	ND		0.00100	1	01/11/2019 03:00	WG1222044
Chloroethane	ND		0.00500	1	01/11/2019 03:00	WG1222044
Chloroform	ND		0.00500	1	01/11/2019 03:00	WG1222044
Chloromethane	ND		0.00250	1	01/11/2019 03:00	WG1222044
2-Chlorotoluene	ND		0.00100	1	01/11/2019 03:00	WG1222044
4-Chlorotoluene	ND		0.00100	1	01/11/2019 03:00	WG1222044
1,2-Dibromo-3-Chloropropane	ND		0.00500	1	01/11/2019 03:00	WG1222044
1,2-Dibromoethane	ND		0.00100	1	01/11/2019 03:00	WG1222044
Dibromomethane	ND		0.00100	1	01/11/2019 03:00	WG1222044
1,2-Dichlorobenzene	ND		0.00100	1	01/11/2019 03:00	WG1222044
1,3-Dichlorobenzene	ND		0.00100	1	01/11/2019 03:00	WG1222044
1,4-Dichlorobenzene	ND		0.00100	1	01/11/2019 03:00	WG1222044
Dichlorodifluoromethane	ND		0.00500	1	01/11/2019 03:00	WG1222044
1,1-Dichloroethane	ND		0.00100	1	01/11/2019 03:00	WG1222044
1,2-Dichloroethane	ND		0.00100	1	01/11/2019 03:00	WG1222044
1,1-Dichloroethene	ND		0.00100	1	01/11/2019 03:00	WG1222044
cis-1,2-Dichloroethene	ND		0.00100	1	01/11/2019 03:00	WG1222044
trans-1,2-Dichloroethene	ND		0.00100	1	01/11/2019 03:00	WG1222044
1,2-Dichloropropane	ND		0.00100	1	01/11/2019 03:00	WG1222044



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

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
1,1-Dichloropropene	ND		0.00100	1	01/11/2019 03:00	WG1222044
1,3-Dichloropropane	ND		0.00100	1	01/11/2019 03:00	WG1222044
cis-1,3-Dichloropropene	ND		0.00100	1	01/11/2019 03:00	WG1222044
trans-1,3-Dichloropropene	ND		0.00100	1	01/11/2019 03:00	WG1222044
2,2-Dichloropropane	ND		0.00100	1	01/11/2019 03:00	WG1222044
Di-isopropyl ether	ND		0.00100	1	01/11/2019 03:00	WG1222044
Ethylbenzene	ND		0.00100	1	01/11/2019 03:00	WG1222044
Hexachloro-1,3-butadiene	ND		0.00100	1	01/11/2019 03:00	WG1222044
Isopropylbenzene	ND		0.00100	1	01/11/2019 03:00	WG1222044
p-Isopropyltoluene	ND		0.00100	1	01/11/2019 03:00	WG1222044
2-Butanone (MEK)	ND		0.0100	1	01/11/2019 03:00	WG1222044
Methylene Chloride	ND		0.00500	1	01/11/2019 03:00	WG1222044
4-Methyl-2-pentanone (MIBK)	ND		0.0100	1	01/11/2019 03:00	WG1222044
Methyl tert-butyl ether	ND		0.00100	1	01/11/2019 03:00	WG1222044
Naphthalene	ND		0.00500	1	01/11/2019 03:00	WG1222044
n-Propylbenzene	ND		0.00100	1	01/11/2019 03:00	WG1222044
Styrene	ND		0.00100	1	01/11/2019 03:00	WG1222044
1,1,1,2-Tetrachloroethane	ND		0.00100	1	01/11/2019 03:00	WG1222044
1,1,2,2-Tetrachloroethane	ND		0.00100	1	01/11/2019 03:00	WG1222044
1,1,2-Trichlorotrifluoroethane	ND		0.00100	1	01/11/2019 03:00	WG1222044
Tetrachloroethene	ND		0.00100	1	01/11/2019 03:00	WG1222044
Toluene	ND		0.00100	1	01/11/2019 03:00	WG1222044
1,2,3-Trichlorobenzene	ND		0.00100	1	01/11/2019 03:00	WG1222044
1,2,4-Trichlorobenzene	ND		0.00100	1	01/11/2019 03:00	WG1222044
1,1,1-Trichloroethane	ND		0.00100	1	01/11/2019 03:00	WG1222044
1,1,2-Trichloroethane	ND		0.00100	1	01/11/2019 03:00	WG1222044
Trichloroethene	ND		0.00100	1	01/11/2019 03:00	WG1222044
Trichlorofluoromethane	ND		0.00500	1	01/11/2019 03:00	WG1222044
1,2,3-Trichloropropane	ND		0.00250	1	01/11/2019 03:00	WG1222044
1,2,4-Trimethylbenzene	ND		0.00100	1	01/11/2019 03:00	WG1222044
1,2,3-Trimethylbenzene	ND		0.00100	1	01/11/2019 03:00	WG1222044
1,3,5-Trimethylbenzene	ND		0.00100	1	01/11/2019 03:00	WG1222044
Vinyl chloride	ND		0.00100	1	01/11/2019 03:00	WG1222044
Xylenes, Total	ND		0.00300	1	01/11/2019 03:00	WG1222044
(S) Toluene-d8	106		80.0-120		01/11/2019 03:00	WG1222044
(S) Dibromofluoromethane	88.1		75.0-120		01/11/2019 03:00	WG1222044
(S) 4-Bromofluorobenzene	91.0		77.0-126		01/11/2019 03:00	WG1222044

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

Semi-Volatile Organic Compounds (GC) by Method 3511/8015

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	ND		0.100	1	01/14/2019 02:15	WG1222607
(S) o-Terphenyl	74.7		31.0-160		01/14/2019 02:15	WG1222607

Semi Volatile Organic Compounds (GC/MS) by Method 8270C

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
Acenaphthene	ND	J3	0.00100	1	01/13/2019 15:06	WG1222062
Acenaphthylene	ND	J3	0.00100	1	01/13/2019 15:06	WG1222062
Anthracene	ND	J3	0.00100	1	01/13/2019 15:06	WG1222062
Benzo(a)anthracene	ND	J3	0.00100	1	01/13/2019 15:06	WG1222062
Benzo(b)fluoranthene	ND	J3	0.00100	1	01/13/2019 15:06	WG1222062
Benzo(k)fluoranthene	ND	J3	0.00100	1	01/13/2019 15:06	WG1222062
Benzo(g,h,i)perylene	ND	J3	0.00100	1	01/13/2019 15:06	WG1222062
Benzo(a)pyrene	ND	J3	0.00100	1	01/13/2019 15:06	WG1222062



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Semi Volatile Organic Compounds (GC/MS) by Method 8270C

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
Bis(2-chlorethoxy)methane	ND	J3	0.0100	1	01/13/2019 15:06	WG1222062
Bis(2-chloroethyl)ether	ND		0.0100	1	01/13/2019 15:06	WG1222062
Bis(2-chloroisopropyl)ether	ND		0.0100	1	01/13/2019 15:06	WG1222062
4-Bromophenyl-phenylether	ND	J3	0.0100	1	01/13/2019 15:06	WG1222062
2-Chloronaphthalene	ND	J3	0.00100	1	01/13/2019 15:06	WG1222062
4-Chlorophenyl-phenylether	ND	J3	0.0100	1	01/13/2019 15:06	WG1222062
Chrysene	ND	J3	0.00100	1	01/13/2019 15:06	WG1222062
Dibenz(a,h)anthracene	ND	J3	0.00100	1	01/13/2019 15:06	WG1222062
3,3-Dichlorobenzidine	ND	J3	0.0100	1	01/13/2019 15:06	WG1222062
2,4-Dinitrotoluene	ND	J3	0.0100	1	01/13/2019 15:06	WG1222062
2,6-Dinitrotoluene	ND	J3	0.0100	1	01/13/2019 15:06	WG1222062
Fluoranthene	ND	J3	0.00100	1	01/13/2019 15:06	WG1222062
Fluorene	ND	J3	0.00100	1	01/13/2019 15:06	WG1222062
Hexachlorobenzene	ND	J3	0.00100	1	01/13/2019 15:06	WG1222062
Hexachloro-1,3-butadiene	ND		0.0100	1	01/13/2019 15:06	WG1222062
Hexachlorocyclopentadiene	ND		0.0100	1	01/13/2019 15:06	WG1222062
Hexachloroethane	ND		0.0100	1	01/13/2019 15:06	WG1222062
Indeno(1,2,3-cd)pyrene	ND	J3	0.00100	1	01/13/2019 15:06	WG1222062
Isophorone	ND	J3	0.0100	1	01/13/2019 15:06	WG1222062
Naphthalene	ND		0.00100	1	01/13/2019 15:06	WG1222062
Nitrobenzene	ND		0.0100	1	01/13/2019 15:06	WG1222062
n-Nitrosodimethylamine	ND		0.0100	1	01/13/2019 15:06	WG1222062
n-Nitrosodiphenylamine	ND	J3	0.0100	1	01/13/2019 15:06	WG1222062
n-Nitrosodi-n-propylamine	ND	J3	0.0100	1	01/13/2019 15:06	WG1222062
Phenanthrene	ND	J3	0.00100	1	01/13/2019 15:06	WG1222062
Benzylbutyl phthalate	ND	J3	0.00300	1	01/13/2019 15:06	WG1222062
Bis(2-ethylhexyl)phthalate	ND	J3	0.00300	1	01/13/2019 15:06	WG1222062
Di-n-butyl phthalate	ND	J3	0.00300	1	01/13/2019 15:06	WG1222062
Diethyl phthalate	ND	J3	0.00300	1	01/13/2019 15:06	WG1222062
Dimethyl phthalate	ND	J3	0.00300	1	01/13/2019 15:06	WG1222062
Di-n-octyl phthalate	ND	J3	0.00300	1	01/13/2019 15:06	WG1222062
Pyrene	ND	J3	0.00100	1	01/13/2019 15:06	WG1222062
1,2,4-Trichlorobenzene	ND		0.0100	1	01/13/2019 15:06	WG1222062
4-Chloro-3-methylphenol	ND	J3	0.0100	1	01/13/2019 15:06	WG1222062
2-Chlorophenol	ND		0.0100	1	01/13/2019 15:06	WG1222062
2,4-Dichlorophenol	ND	J3	0.0100	1	01/13/2019 15:06	WG1222062
2,4-Dimethylphenol	ND	J3	0.0100	1	01/13/2019 15:06	WG1222062
4,6-Dinitro-2-methylphenol	ND	J3	0.0100	1	01/13/2019 15:06	WG1222062
2,4-Dinitrophenol	ND		0.0100	1	01/13/2019 15:06	WG1222062
2-Nitrophenol	ND		0.0100	1	01/13/2019 15:06	WG1222062
4-Nitrophenol	ND	J3	0.0100	1	01/13/2019 15:06	WG1222062
Pentachlorophenol	ND	J3	0.0100	1	01/13/2019 15:06	WG1222062
Phenol	ND		0.0100	1	01/13/2019 15:06	WG1222062
2,4,6-Trichlorophenol	ND	J3	0.0100	1	01/13/2019 15:06	WG1222062
(S) 2-Fluorophenol	30.8		10.0-120		01/13/2019 15:06	WG1222062
(S) Phenol-d5	20.0		10.0-120		01/13/2019 15:06	WG1222062
(S) Nitrobenzene-d5	39.9		10.0-127		01/13/2019 15:06	WG1222062
(S) 2-Fluorobiphenyl	45.9		10.0-130		01/13/2019 15:06	WG1222062
(S) 2,4,6-Tribromophenol	41.3		10.0-155		01/13/2019 15:06	WG1222062
(S) p-Terphenyl-d14	54.9		10.0-128		01/13/2019 15:06	WG1222062

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Mercury by Method 7470A

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Mercury	ND		0.000200	1	01/14/2019 12:01	WG1222003

Metals (ICP) by Method 6010B

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Arsenic	ND		0.0100	1	01/15/2019 13:56	WG1222773
Barium	0.166		0.00500	1	01/15/2019 13:56	WG1222773
Cadmium	ND		0.00200	1	01/15/2019 13:56	WG1222773
Chromium	ND		0.0100	1	01/15/2019 13:56	WG1222773
Lead	ND		0.00500	1	01/15/2019 13:56	WG1222773
Selenium	ND		0.0100	1	01/15/2019 13:56	WG1222773
Silver	ND		0.00500	1	01/15/2019 13:56	WG1222773

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	ND		0.100	1	01/11/2019 10:42	WG1222078
(S) a,a,a-Trifluorotoluene(FID)	102		78.0-120		01/11/2019 10:42	WG1222078

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

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Acetone	ND		0.0500	1	01/11/2019 03:20	WG1222044
Acrolein	ND		0.0500	1	01/11/2019 03:20	WG1222044
Acrylonitrile	ND		0.0100	1	01/11/2019 03:20	WG1222044
Benzene	ND		0.00100	1	01/11/2019 03:20	WG1222044
Bromobenzene	ND		0.00100	1	01/11/2019 03:20	WG1222044
Bromodichloromethane	ND		0.00100	1	01/11/2019 03:20	WG1222044
Bromoform	ND		0.00100	1	01/11/2019 03:20	WG1222044
Bromomethane	ND		0.00500	1	01/11/2019 03:20	WG1222044
n-Butylbenzene	ND		0.00100	1	01/11/2019 03:20	WG1222044
sec-Butylbenzene	ND		0.00100	1	01/11/2019 03:20	WG1222044
tert-Butylbenzene	ND		0.00100	1	01/11/2019 03:20	WG1222044
Carbon tetrachloride	ND		0.00100	1	01/11/2019 03:20	WG1222044
Chlorobenzene	ND		0.00100	1	01/11/2019 03:20	WG1222044
Chlorodibromomethane	ND		0.00100	1	01/11/2019 03:20	WG1222044
Chloroethane	ND		0.00500	1	01/11/2019 03:20	WG1222044
Chloroform	ND		0.00500	1	01/11/2019 03:20	WG1222044
Chloromethane	ND		0.00250	1	01/11/2019 03:20	WG1222044
2-Chlorotoluene	ND		0.00100	1	01/11/2019 03:20	WG1222044
4-Chlorotoluene	ND		0.00100	1	01/11/2019 03:20	WG1222044
1,2-Dibromo-3-Chloropropane	ND		0.00500	1	01/11/2019 03:20	WG1222044
1,2-Dibromoethane	ND		0.00100	1	01/11/2019 03:20	WG1222044
Dibromomethane	ND		0.00100	1	01/11/2019 03:20	WG1222044
1,2-Dichlorobenzene	ND		0.00100	1	01/11/2019 03:20	WG1222044
1,3-Dichlorobenzene	ND		0.00100	1	01/11/2019 03:20	WG1222044
1,4-Dichlorobenzene	ND		0.00100	1	01/11/2019 03:20	WG1222044
Dichlorodifluoromethane	ND		0.00500	1	01/11/2019 03:20	WG1222044
1,1-Dichloroethane	ND		0.00100	1	01/11/2019 03:20	WG1222044
1,2-Dichloroethane	ND		0.00100	1	01/11/2019 03:20	WG1222044
1,1-Dichloroethene	ND		0.00100	1	01/11/2019 03:20	WG1222044
cis-1,2-Dichloroethene	0.00553		0.00100	1	01/11/2019 03:20	WG1222044
trans-1,2-Dichloroethene	ND		0.00100	1	01/11/2019 03:20	WG1222044
1,2-Dichloropropane	ND		0.00100	1	01/11/2019 03:20	WG1222044

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ Gl⁸ Al⁹ Sc



Collected date/time: 01/08/19 00:00

L1059921

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

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
1,1-Dichloropropene	ND		0.00100	1	01/11/2019 03:20	WG1222044
1,3-Dichloropropane	ND		0.00100	1	01/11/2019 03:20	WG1222044
cis-1,3-Dichloropropene	ND		0.00100	1	01/11/2019 03:20	WG1222044
trans-1,3-Dichloropropene	ND		0.00100	1	01/11/2019 03:20	WG1222044
2,2-Dichloropropane	ND		0.00100	1	01/11/2019 03:20	WG1222044
Di-isopropyl ether	ND		0.00100	1	01/11/2019 03:20	WG1222044
Ethylbenzene	ND		0.00100	1	01/11/2019 03:20	WG1222044
Hexachloro-1,3-butadiene	ND		0.00100	1	01/11/2019 03:20	WG1222044
Isopropylbenzene	ND		0.00100	1	01/11/2019 03:20	WG1222044
p-Isopropyltoluene	ND		0.00100	1	01/11/2019 03:20	WG1222044
2-Butanone (MEK)	ND		0.0100	1	01/11/2019 03:20	WG1222044
Methylene Chloride	ND		0.00500	1	01/11/2019 03:20	WG1222044
4-Methyl-2-pentanone (MIBK)	ND		0.0100	1	01/11/2019 03:20	WG1222044
Methyl tert-butyl ether	ND		0.00100	1	01/11/2019 03:20	WG1222044
Naphthalene	ND		0.00500	1	01/11/2019 03:20	WG1222044
n-Propylbenzene	ND		0.00100	1	01/11/2019 03:20	WG1222044
Styrene	ND		0.00100	1	01/11/2019 03:20	WG1222044
1,1,1,2-Tetrachloroethane	ND		0.00100	1	01/11/2019 03:20	WG1222044
1,1,2,2-Tetrachloroethane	ND		0.00100	1	01/11/2019 03:20	WG1222044
1,1,2-Trichlorotrifluoroethane	ND		0.00100	1	01/11/2019 03:20	WG1222044
Tetrachloroethene	0.0509		0.00100	1	01/11/2019 03:20	WG1222044
Toluene	ND		0.00100	1	01/11/2019 03:20	WG1222044
1,2,3-Trichlorobenzene	ND		0.00100	1	01/11/2019 03:20	WG1222044
1,2,4-Trichlorobenzene	ND		0.00100	1	01/11/2019 03:20	WG1222044
1,1,1-Trichloroethane	ND		0.00100	1	01/11/2019 03:20	WG1222044
1,1,2-Trichloroethane	ND		0.00100	1	01/11/2019 03:20	WG1222044
Trichloroethene	0.00512		0.00100	1	01/11/2019 03:20	WG1222044
Trichlorofluoromethane	ND		0.00500	1	01/11/2019 03:20	WG1222044
1,2,3-Trichloropropane	ND		0.00250	1	01/11/2019 03:20	WG1222044
1,2,4-Trimethylbenzene	ND		0.00100	1	01/11/2019 03:20	WG1222044
1,2,3-Trimethylbenzene	ND		0.00100	1	01/11/2019 03:20	WG1222044
1,3,5-Trimethylbenzene	ND		0.00100	1	01/11/2019 03:20	WG1222044
Vinyl chloride	ND		0.00100	1	01/11/2019 03:20	WG1222044
Xylenes, Total	ND		0.00300	1	01/11/2019 03:20	WG1222044
(S) Toluene-d8	109		80.0-120		01/11/2019 03:20	WG1222044
(S) Dibromofluoromethane	95.2		75.0-120		01/11/2019 03:20	WG1222044
(S) 4-Bromofluorobenzene	85.3		77.0-126		01/11/2019 03:20	WG1222044

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

Semi-Volatile Organic Compounds (GC) by Method 3511/8015

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	ND		0.100	1	01/14/2019 02:37	WG1222607
(S) o-Terphenyl	71.1		31.0-160		01/14/2019 02:37	WG1222607

Semi Volatile Organic Compounds (GC/MS) by Method 8270C

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
Acenaphthene	ND	J3	0.00100	1	01/13/2019 15:30	WG1222062
Acenaphthylene	ND	J3	0.00100	1	01/13/2019 15:30	WG1222062
Anthracene	ND	J3	0.00100	1	01/13/2019 15:30	WG1222062
Benzo(a)anthracene	ND	J3	0.00100	1	01/13/2019 15:30	WG1222062
Benzo(b)fluoranthene	ND	J3	0.00100	1	01/13/2019 15:30	WG1222062
Benzo(k)fluoranthene	ND	J3	0.00100	1	01/13/2019 15:30	WG1222062
Benzo(g,h,i)perylene	ND	J3	0.00100	1	01/13/2019 15:30	WG1222062
Benzo(a)pyrene	ND	J3	0.00100	1	01/13/2019 15:30	WG1222062



Collected date/time: 01/08/19 00:00

L1059921

Semi Volatile Organic Compounds (GC/MS) by Method 8270C

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
Bis(2-chlorethoxy)methane	ND	J3	0.0100	1	01/13/2019 15:30	WG1222062
Bis(2-chloroethyl)ether	ND		0.0100	1	01/13/2019 15:30	WG1222062
Bis(2-chloroisopropyl)ether	ND		0.0100	1	01/13/2019 15:30	WG1222062
4-Bromophenyl-phenylether	ND	J3	0.0100	1	01/13/2019 15:30	WG1222062
2-Chloronaphthalene	ND	J3	0.00100	1	01/13/2019 15:30	WG1222062
4-Chlorophenyl-phenylether	ND	J3	0.0100	1	01/13/2019 15:30	WG1222062
Chrysene	ND	J3	0.00100	1	01/13/2019 15:30	WG1222062
Dibenz(a,h)anthracene	ND	J3	0.00100	1	01/13/2019 15:30	WG1222062
3,3-Dichlorobenzidine	ND	J3	0.0100	1	01/13/2019 15:30	WG1222062
2,4-Dinitrotoluene	ND	J3	0.0100	1	01/13/2019 15:30	WG1222062
2,6-Dinitrotoluene	ND	J3	0.0100	1	01/13/2019 15:30	WG1222062
Fluoranthene	ND	J3	0.00100	1	01/13/2019 15:30	WG1222062
Fluorene	ND	J3	0.00100	1	01/13/2019 15:30	WG1222062
Hexachlorobenzene	ND	J3	0.00100	1	01/13/2019 15:30	WG1222062
Hexachloro-1,3-butadiene	ND		0.0100	1	01/13/2019 15:30	WG1222062
Hexachlorocyclopentadiene	ND		0.0100	1	01/13/2019 15:30	WG1222062
Hexachloroethane	ND		0.0100	1	01/13/2019 15:30	WG1222062
Indeno(1,2,3-cd)pyrene	ND	J3	0.00100	1	01/13/2019 15:30	WG1222062
Isophorone	ND	J3	0.0100	1	01/13/2019 15:30	WG1222062
Naphthalene	ND		0.00100	1	01/13/2019 15:30	WG1222062
Nitrobenzene	ND		0.0100	1	01/13/2019 15:30	WG1222062
n-Nitrosodimethylamine	ND		0.0100	1	01/13/2019 15:30	WG1222062
n-Nitrosodiphenylamine	ND	J3	0.0100	1	01/13/2019 15:30	WG1222062
n-Nitrosodi-n-propylamine	ND	J3	0.0100	1	01/13/2019 15:30	WG1222062
Phenanthrene	ND	J3	0.00100	1	01/13/2019 15:30	WG1222062
Benzylbutyl phthalate	ND	J3	0.00300	1	01/13/2019 15:30	WG1222062
Bis(2-ethylhexyl)phthalate	ND	J3	0.00300	1	01/13/2019 15:30	WG1222062
Di-n-butyl phthalate	ND	J3	0.00300	1	01/13/2019 15:30	WG1222062
Diethyl phthalate	ND	J3	0.00300	1	01/13/2019 15:30	WG1222062
Dimethyl phthalate	ND	J3	0.00300	1	01/13/2019 15:30	WG1222062
Di-n-octyl phthalate	ND	J3	0.00300	1	01/13/2019 15:30	WG1222062
Pyrene	ND	J3	0.00100	1	01/13/2019 15:30	WG1222062
1,2,4-Trichlorobenzene	ND		0.0100	1	01/13/2019 15:30	WG1222062
4-Chloro-3-methylphenol	ND	J3	0.0100	1	01/13/2019 15:30	WG1222062
2-Chlorophenol	ND		0.0100	1	01/13/2019 15:30	WG1222062
2,4-Dichlorophenol	ND	J3	0.0100	1	01/13/2019 15:30	WG1222062
2,4-Dimethylphenol	ND	J3	0.0100	1	01/13/2019 15:30	WG1222062
4,6-Dinitro-2-methylphenol	ND	J3	0.0100	1	01/13/2019 15:30	WG1222062
2,4-Dinitrophenol	ND		0.0100	1	01/13/2019 15:30	WG1222062
2-Nitrophenol	ND		0.0100	1	01/13/2019 15:30	WG1222062
4-Nitrophenol	ND	J3	0.0100	1	01/13/2019 15:30	WG1222062
Pentachlorophenol	ND	J3	0.0100	1	01/13/2019 15:30	WG1222062
Phenol	ND		0.0100	1	01/13/2019 15:30	WG1222062
2,4,6-Trichlorophenol	ND	J3	0.0100	1	01/13/2019 15:30	WG1222062
(S) 2-Fluorophenol	36.0		10.0-120		01/13/2019 15:30	WG1222062
(S) Phenol-d5	22.5		10.0-120		01/13/2019 15:30	WG1222062
(S) Nitrobenzene-d5	49.3		10.0-127		01/13/2019 15:30	WG1222062
(S) 2-Fluorobiphenyl	51.0		10.0-130		01/13/2019 15:30	WG1222062
(S) 2,4,6-Tribromophenol	41.9		10.0-155		01/13/2019 15:30	WG1222062
(S) p-Terphenyl-d14	58.8		10.0-128		01/13/2019 15:30	WG1222062

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	ND		0.100	1	01/11/2019 03:39	WG1222078
(S) a,a,a-Trifluorotoluene(FID)	102		78.0-120		01/11/2019 03:39	WG1222078

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

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
Acetone	ND		0.0500	1	01/10/2019 21:40	WG1222044
Acrolein	ND		0.0500	1	01/10/2019 21:40	WG1222044
Acrylonitrile	ND		0.0100	1	01/10/2019 21:40	WG1222044
Benzene	ND		0.00100	1	01/10/2019 21:40	WG1222044
Bromobenzene	ND		0.00100	1	01/10/2019 21:40	WG1222044
Bromodichloromethane	ND		0.00100	1	01/10/2019 21:40	WG1222044
Bromoform	ND		0.00100	1	01/10/2019 21:40	WG1222044
Bromomethane	ND		0.00500	1	01/10/2019 21:40	WG1222044
n-Butylbenzene	ND		0.00100	1	01/10/2019 21:40	WG1222044
sec-Butylbenzene	ND		0.00100	1	01/10/2019 21:40	WG1222044
tert-Butylbenzene	ND		0.00100	1	01/10/2019 21:40	WG1222044
Carbon tetrachloride	ND		0.00100	1	01/10/2019 21:40	WG1222044
Chlorobenzene	ND		0.00100	1	01/10/2019 21:40	WG1222044
Chlorodibromomethane	ND		0.00100	1	01/10/2019 21:40	WG1222044
Chloroethane	ND		0.00500	1	01/10/2019 21:40	WG1222044
Chloroform	ND		0.00500	1	01/10/2019 21:40	WG1222044
Chloromethane	ND		0.00250	1	01/10/2019 21:40	WG1222044
2-Chlorotoluene	ND		0.00100	1	01/10/2019 21:40	WG1222044
4-Chlorotoluene	ND		0.00100	1	01/10/2019 21:40	WG1222044
1,2-Dibromo-3-Chloropropane	ND		0.00500	1	01/10/2019 21:40	WG1222044
1,2-Dibromoethane	ND		0.00100	1	01/10/2019 21:40	WG1222044
Dibromomethane	ND		0.00100	1	01/10/2019 21:40	WG1222044
1,2-Dichlorobenzene	ND		0.00100	1	01/10/2019 21:40	WG1222044
1,3-Dichlorobenzene	ND		0.00100	1	01/10/2019 21:40	WG1222044
1,4-Dichlorobenzene	ND		0.00100	1	01/10/2019 21:40	WG1222044
Dichlorodifluoromethane	ND		0.00500	1	01/10/2019 21:40	WG1222044
1,1-Dichloroethane	ND		0.00100	1	01/10/2019 21:40	WG1222044
1,2-Dichloroethane	ND		0.00100	1	01/10/2019 21:40	WG1222044
1,1-Dichloroethene	ND		0.00100	1	01/10/2019 21:40	WG1222044
cis-1,2-Dichloroethene	ND		0.00100	1	01/10/2019 21:40	WG1222044
trans-1,2-Dichloroethene	ND		0.00100	1	01/10/2019 21:40	WG1222044
1,2-Dichloropropane	ND		0.00100	1	01/10/2019 21:40	WG1222044
1,1-Dichloropropene	ND		0.00100	1	01/10/2019 21:40	WG1222044
1,3-Dichloropropane	ND		0.00100	1	01/10/2019 21:40	WG1222044
cis-1,3-Dichloropropene	ND		0.00100	1	01/10/2019 21:40	WG1222044
trans-1,3-Dichloropropene	ND		0.00100	1	01/10/2019 21:40	WG1222044
2,2-Dichloropropane	ND		0.00100	1	01/10/2019 21:40	WG1222044
Di-isopropyl ether	ND		0.00100	1	01/10/2019 21:40	WG1222044
Ethylbenzene	ND		0.00100	1	01/10/2019 21:40	WG1222044
Hexachloro-1,3-butadiene	ND		0.00100	1	01/10/2019 21:40	WG1222044
Isopropylbenzene	ND		0.00100	1	01/10/2019 21:40	WG1222044
p-Isopropyltoluene	ND		0.00100	1	01/10/2019 21:40	WG1222044
2-Butanone (MEK)	ND		0.0100	1	01/10/2019 21:40	WG1222044
Methylene Chloride	ND		0.00500	1	01/10/2019 21:40	WG1222044
4-Methyl-2-pentanone (MIBK)	ND		0.0100	1	01/10/2019 21:40	WG1222044
Methyl tert-butyl ether	ND		0.00100	1	01/10/2019 21:40	WG1222044
Naphthalene	ND		0.00500	1	01/10/2019 21:40	WG1222044
n-Propylbenzene	ND		0.00100	1	01/10/2019 21:40	WG1222044
Styrene	ND		0.00100	1	01/10/2019 21:40	WG1222044

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 01/08/19 00:00

L1059921

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

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch	
1,1,1,2-Tetrachloroethane	ND		0.00100	1	01/10/2019 21:40	WG1222044	¹ Cp
1,1,2,2-Tetrachloroethane	ND		0.00100	1	01/10/2019 21:40	WG1222044	² Tc
1,1,2-Trichlorotrifluoroethane	ND		0.00100	1	01/10/2019 21:40	WG1222044	
Tetrachloroethene	ND		0.00100	1	01/10/2019 21:40	WG1222044	³ Ss
Toluene	ND		0.00100	1	01/10/2019 21:40	WG1222044	
1,2,3-Trichlorobenzene	ND		0.00100	1	01/10/2019 21:40	WG1222044	⁴ Cn
1,2,4-Trichlorobenzene	ND		0.00100	1	01/10/2019 21:40	WG1222044	
1,1,1-Trichloroethane	ND		0.00100	1	01/10/2019 21:40	WG1222044	
1,1,2-Trichloroethane	ND		0.00100	1	01/10/2019 21:40	WG1222044	⁵ Sr
Trichloroethene	ND		0.00100	1	01/10/2019 21:40	WG1222044	
Trichlorofluoromethane	ND		0.00500	1	01/10/2019 21:40	WG1222044	⁶ Qc
1,2,3-Trichloropropane	ND		0.00250	1	01/10/2019 21:40	WG1222044	
1,2,4-Trimethylbenzene	ND		0.00100	1	01/10/2019 21:40	WG1222044	
1,2,3-Trimethylbenzene	ND		0.00100	1	01/10/2019 21:40	WG1222044	⁷ Gl
1,3,5-Trimethylbenzene	ND		0.00100	1	01/10/2019 21:40	WG1222044	
Vinyl chloride	ND		0.00100	1	01/10/2019 21:40	WG1222044	⁸ Al
Xylenes, Total	ND		0.00300	1	01/10/2019 21:40	WG1222044	
(S) Toluene-d8	109		80.0-120		01/10/2019 21:40	WG1222044	⁹ Sc
(S) Dibromofluoromethane	92.9		75.0-120		01/10/2019 21:40	WG1222044	
(S) 4-Bromofluorobenzene	86.0		77.0-126		01/10/2019 21:40	WG1222044	



Method Blank (MB)

(MB) R3375599-1 01/14/19 10:09

	MB Result	MB Qualifier	MB MDL	MB RDL
Analyte	mg/l		mg/l	mg/l
Mercury	U		0.0000490	0.000200

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

(LCS) R3375599-2 01/14/19 10:12 • (LCSD) R3375599-3 01/14/19 10:14

	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
Analyte	mg/l	mg/l	mg/l	%	%	%			%	%
Mercury	0.00300	0.00312	0.00316	104	105	80.0-120			1.15	20

L1059921-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1059921-01 01/14/19 10:17 • (MS) R3375599-4 01/14/19 10:20 • (MSD) R3375599-5 01/14/19 10:22

	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
Analyte	mg/l	mg/l	mg/l	mg/l	%	%		%			%	%
Mercury	0.00300	ND	0.00279	0.00283	93.1	94.3	1	75.0-125			1.26	20

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc



Method Blank (MB)

(MB) R3376045-1 01/15/19 13:20

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Arsenic	U		0.00650	0.0100
Barium	U		0.00170	0.00500
Cadmium	U		0.000700	0.00200
Chromium	U		0.00140	0.0100
Lead	U		0.00190	0.00500
Selenium	U		0.00740	0.0100
Silver	U		0.00280	0.00500

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc

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

(LCS) R3376045-2 01/15/19 13:22 • (LCSD) R3376045-3 01/15/19 13:25

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 %
Arsenic	1.00	0.949	0.961	94.9	96.1	80.0-120			1.24	20
Barium	1.00	1.01	1.01	101	101	80.0-120			0.200	20
Cadmium	1.00	0.975	0.974	97.5	97.4	80.0-120			0.0738	20
Chromium	1.00	0.998	0.971	99.8	97.1	80.0-120			2.73	20
Lead	1.00	0.978	0.984	97.8	98.4	80.0-120			0.624	20
Selenium	1.00	0.958	0.972	95.8	97.2	80.0-120			1.46	20
Silver	0.200	0.188	0.184	93.9	92.0	80.0-120			2.10	20

L1059921-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1059921-02 01/15/19 13:27 • (MS) R3376045-5 01/15/19 13:33 • (MSD) R3376045-6 01/15/19 13:35

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Arsenic	1.00	ND	0.981	0.970	98.1	97.0	1	75.0-125			1.12	20
Barium	1.00	0.166	1.15	1.16	98.5	99.0	1	75.0-125			0.497	20
Cadmium	1.00	ND	0.965	0.971	96.5	97.1	1	75.0-125			0.674	20
Chromium	1.00	ND	0.979	0.990	97.9	99.0	1	75.0-125			1.08	20
Lead	1.00	ND	0.990	0.984	98.7	98.2	1	75.0-125			0.573	20
Selenium	1.00	ND	0.979	0.980	97.9	98.0	1	75.0-125			0.158	20
Silver	0.200	ND	0.187	0.189	93.5	94.3	1	75.0-125			0.901	20



Method Blank (MB)

(MB) R3375954-3 01/11/19 03:17

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
TPH (GC/FID) Low Fraction	U		0.0314	0.100
(S) a,a,a-Trifluorotoluene(FID)	102			78.0-120

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

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

(LCS) R3375954-1 01/11/19 02:10 • (LCSD) R3375954-2 01/11/19 02:32

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 %
TPH (GC/FID) Low Fraction	5.50	4.94	5.03	89.9	91.4	72.0-127			1.70	20
(S) a,a,a-Trifluorotoluene(FID)				105	104	78.0-120				

L1059921-07 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1059921-07 01/11/19 10:42 • (MS) R3375954-4 01/11/19 11:04 • (MSD) R3375954-5 01/11/19 11:26

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
TPH (GC/FID) Low Fraction	5.50	ND	2.75	2.80	49.9	50.8	1	10.0-160			1.85	22
(S) a,a,a-Trifluorotoluene(FID)					103	103		78.0-120				



Method Blank (MB)

(MB) R3375065-3 01/10/19 21:00

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) R3375065-3 01/10/19 21:00

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	106			80.0-120
(S) Dibromofluoromethane	93.5			75.0-120
(S) 4-Bromofluorobenzene	86.7			77.0-126

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

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

(LCS) R3375065-1 01/10/19 20:00 • (LCSD) R3375065-2 01/10/19 20:20

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	0.125	0.122	0.116	97.9	92.6	19.0-160			5.60	27
Acrolein	0.125	0.109	0.113	87.2	90.4	10.0-160			3.57	26
Acrylonitrile	0.125	0.124	0.121	99.2	96.4	55.0-149			2.82	20
Benzene	0.0250	0.0232	0.0229	92.8	91.8	70.0-123			1.08	20

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

(LCS) R3375065-1 01/10/19 20:00 • (LCSD) R3375065-2 01/10/19 20:20

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 %
Bromobenzene	0.0250	0.0220	0.0218	88.1	87.3	73.0-121			0.921	20
Bromodichloromethane	0.0250	0.0207	0.0212	82.7	84.7	75.0-120			2.37	20
Bromoform	0.0250	0.0232	0.0235	92.9	94.0	68.0-132			1.17	20
Bromomethane	0.0250	0.0301	0.0259	120	104	10.0-160			14.9	25
n-Butylbenzene	0.0250	0.0251	0.0249	100	99.6	73.0-125			0.876	20
sec-Butylbenzene	0.0250	0.0250	0.0249	100	99.4	75.0-125			0.712	20
tert-Butylbenzene	0.0250	0.0243	0.0237	97.2	94.9	76.0-124			2.41	20
Carbon tetrachloride	0.0250	0.0225	0.0217	90.0	86.8	68.0-126			3.69	20
Chlorobenzene	0.0250	0.0269	0.0263	107	105	80.0-121			2.08	20
Chlorodibromomethane	0.0250	0.0267	0.0256	107	102	77.0-125			4.03	20
Chloroethane	0.0250	0.0258	0.0262	103	105	47.0-150			1.49	20
Chloroform	0.0250	0.0211	0.0209	84.2	83.6	73.0-120			0.742	20
Chloromethane	0.0250	0.0246	0.0235	98.4	93.9	41.0-142			4.70	20
2-Chlorotoluene	0.0250	0.0241	0.0241	96.4	96.6	76.0-123			0.244	20
4-Chlorotoluene	0.0250	0.0241	0.0238	96.6	95.1	75.0-122			1.52	20
1,2-Dibromo-3-Chloropropane	0.0250	0.0237	0.0239	94.6	95.5	58.0-134			0.901	20
1,2-Dibromoethane	0.0250	0.0261	0.0256	104	103	80.0-122			1.70	20
Dibromomethane	0.0250	0.0219	0.0226	87.5	90.4	80.0-120			3.24	20
1,2-Dichlorobenzene	0.0250	0.0241	0.0238	96.4	95.1	79.0-121			1.34	20
1,3-Dichlorobenzene	0.0250	0.0245	0.0241	97.8	96.4	79.0-120			1.46	20
1,4-Dichlorobenzene	0.0250	0.0254	0.0258	102	103	79.0-120			1.32	20
Dichlorodifluoromethane	0.0250	0.0247	0.0244	98.8	97.4	51.0-149			1.34	20
1,1-Dichloroethane	0.0250	0.0221	0.0216	88.5	86.4	70.0-126			2.41	20
1,2-Dichloroethane	0.0250	0.0233	0.0226	93.1	90.3	70.0-128			2.99	20
1,1-Dichloroethene	0.0250	0.0204	0.0216	81.5	86.3	71.0-124			5.68	20
cis-1,2-Dichloroethene	0.0250	0.0210	0.0203	84.2	81.0	73.0-120			3.76	20
trans-1,2-Dichloroethene	0.0250	0.0211	0.0213	84.5	85.3	73.0-120			1.00	20
1,2-Dichloropropane	0.0250	0.0246	0.0241	98.5	96.2	77.0-125			2.36	20
1,1-Dichloropropene	0.0250	0.0234	0.0222	93.8	88.6	74.0-126			5.61	20
1,3-Dichloropropane	0.0250	0.0287	0.0277	115	111	80.0-120			3.55	20
cis-1,3-Dichloropropene	0.0250	0.0270	0.0263	108	105	80.0-123			2.51	20
trans-1,3-Dichloropropene	0.0250	0.0290	0.0296	116	118	78.0-124			2.15	20
2,2-Dichloropropane	0.0250	0.0190	0.0194	76.0	77.6	58.0-130			2.14	20
Di-isopropyl ether	0.0250	0.0234	0.0229	93.5	91.6	58.0-138			2.05	20
Ethylbenzene	0.0250	0.0259	0.0254	104	102	79.0-123			1.80	20
Hexachloro-1,3-butadiene	0.0250	0.0219	0.0212	87.5	84.7	54.0-138			3.28	20
Isopropylbenzene	0.0250	0.0236	0.0236	94.2	94.5	76.0-127			0.255	20
p-Isopropyltoluene	0.0250	0.0243	0.0240	97.4	95.8	76.0-125			1.59	20
2-Butanone (MEK)	0.125	0.125	0.119	100	95.0	44.0-160			5.49	20
Methylene Chloride	0.0250	0.0215	0.0212	86.1	84.6	67.0-120			1.74	20

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

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

(LCS) R3375065-1 01/10/19 20:00 • (LCSD) R3375065-2 01/10/19 20:20

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 %
4-Methyl-2-pentanone (MIBK)	0.125	0.134	0.130	107	104	68.0-142			3.23	20
Methyl tert-butyl ether	0.0250	0.0237	0.0233	94.6	93.3	68.0-125			1.41	20
Naphthalene	0.0250	0.0236	0.0237	94.2	94.7	54.0-135			0.483	20
n-Propylbenzene	0.0250	0.0233	0.0231	93.1	92.3	77.0-124			0.927	20
Styrene	0.0250	0.0232	0.0232	92.9	92.7	73.0-130			0.305	20
1,1,1,2-Tetrachloroethane	0.0250	0.0234	0.0231	93.8	92.3	75.0-125			1.61	20
1,1,2,2-Tetrachloroethane	0.0250	0.0232	0.0221	92.8	88.3	65.0-130			4.92	20
Tetrachloroethene	0.0250	0.0268	0.0261	107	104	72.0-132			2.70	20
Toluene	0.0250	0.0270	0.0264	108	105	79.0-120			2.50	20
1,1,2-Trichlorotrifluoroethane	0.0250	0.0241	0.0235	96.5	94.1	69.0-132			2.47	20
1,2,3-Trichlorobenzene	0.0250	0.0240	0.0227	95.9	90.7	50.0-138			5.53	20
1,2,4-Trichlorobenzene	0.0250	0.0224	0.0223	89.5	89.4	57.0-137			0.158	20
1,1,1-Trichloroethane	0.0250	0.0221	0.0220	88.2	87.8	73.0-124			0.447	20
1,1,2-Trichloroethane	0.0250	0.0292	0.0290	117	116	80.0-120			0.967	20
Trichloroethene	0.0250	0.0243	0.0250	97.3	100	78.0-124			2.75	20
Trichlorofluoromethane	0.0250	0.0267	0.0279	107	112	59.0-147			4.45	20
1,2,3-Trichloropropane	0.0250	0.0246	0.0237	98.3	94.7	73.0-130			3.72	20
1,2,3-Trimethylbenzene	0.0250	0.0264	0.0264	106	106	77.0-120			0.0296	20
1,2,4-Trimethylbenzene	0.0250	0.0236	0.0241	94.6	96.3	76.0-121			1.77	20
1,3,5-Trimethylbenzene	0.0250	0.0242	0.0242	97.0	96.7	76.0-122			0.249	20
Vinyl chloride	0.0250	0.0247	0.0248	99.0	99.4	67.0-131			0.378	20
Xylenes, Total	0.0750	0.0755	0.0753	101	100	79.0-123			0.265	20
(S) Toluene-d8				108	108	80.0-120				
(S) Dibromofluoromethane				89.0	88.2	75.0-120				
(S) 4-Bromofluorobenzene				84.0	82.9	77.0-126				

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc



Method Blank (MB)

(MB) R3375556-1 01/13/19 19:38

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
TPH (GC/FID) High Fraction	U		0.0247	0.100
(S) o-Terphenyl	67.0			31.0-160

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

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

(LCS) R3375556-2 01/13/19 20:00 • (LCSD) R3375556-3 01/13/19 20:22

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 %
TPH (GC/FID) High Fraction	1.50	1.69	1.77	113	118	50.0-150			4.62	20
(S) o-Terphenyl				114	114	31.0-160				

L1059677-05 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1059677-05 01/13/19 22:13 • (MS) R3375556-4 01/13/19 22:35 • (MSD) R3375556-5 01/13/19 22:57

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
TPH (GC/FID) High Fraction	1.43	0.152	1.76	1.70	112	108	1	50.0-150			3.47	20
(S) o-Terphenyl					117	116		31.0-160				

Method Blank (MB)

(MB) R3375497-3 01/13/19 12:21

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Acenaphthene	U		0.000316	0.00100
Acenaphthylene	U		0.000309	0.00100
Anthracene	U		0.000291	0.00100
Benzo(a)anthracene	U		0.0000975	0.00100
Benzo(b)fluoranthene	U		0.0000896	0.00100
Benzo(k)fluoranthene	U		0.000355	0.00100
Benzo(g,h,i)perylene	U		0.000161	0.00100
Benzo(a)pyrene	U		0.000340	0.00100
Bis(2-chlorethoxy)methane	U		0.000329	0.0100
Bis(2-chloroethyl)ether	U		0.00162	0.0100
Bis(2-chloroisopropyl)ether	U		0.000445	0.0100
4-Bromophenyl-phenylether	U		0.000335	0.0100
2-Chloronaphthalene	U		0.000330	0.00100
4-Chlorophenyl-phenylether	U		0.000303	0.0100
Chrysene	U		0.000332	0.00100
Dibenz(a,h)anthracene	U		0.000279	0.00100
3,3-Dichlorobenzidine	U		0.00202	0.0100
2,4-Dinitrotoluene	U		0.00165	0.0100
2,6-Dinitrotoluene	U		0.000279	0.0100
Fluoranthene	U		0.000310	0.00100
Fluorene	U		0.000323	0.00100
Hexachlorobenzene	U		0.000341	0.00100
Hexachloro-1,3-butadiene	U		0.000329	0.0100
Hexachlorocyclopentadiene	U		0.00233	0.0100
Hexachloroethane	U		0.000365	0.0100
Indeno(1,2,3-cd)pyrene	U		0.000279	0.00100
Isophorone	U		0.000272	0.0100
Naphthalene	U		0.000372	0.00100
Nitrobenzene	U		0.000367	0.0100
n-Nitrosodimethylamine	U		0.00126	0.0100
n-Nitrosodiphenylamine	U		0.00119	0.0100
n-Nitrosodi-n-propylamine	U		0.000403	0.0100
Phenanthrene	U		0.000366	0.00100
Benzylbutyl phthalate	U		0.000275	0.00300
Bis(2-ethylhexyl)phthalate	U		0.000709	0.00300
Di-n-butyl phthalate	U		0.000266	0.00300
Diethyl phthalate	U		0.000282	0.00300
Dimethyl phthalate	U		0.000283	0.00300
Di-n-octyl phthalate	U		0.000278	0.00300
Pyrene	U		0.000330	0.00100

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Method Blank (MB)

(MB) R3375497-3 01/13/19 12:21

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
1,2,4-Trichlorobenzene	U		0.000355	0.0100
4-Chloro-3-methylphenol	U		0.000263	0.0100
2-Chlorophenol	U		0.000283	0.0100
2,4-Dichlorophenol	U		0.000284	0.0100
2,4-Dimethylphenol	U		0.000624	0.0100
4,6-Dinitro-2-methylphenol	U		0.00262	0.0100
2,4-Dinitrophenol	U		0.00325	0.0100
2-Nitrophenol	U		0.000320	0.0100
4-Nitrophenol	U		0.00201	0.0100
Pentachlorophenol	U		0.000313	0.0100
Phenol	U		0.000334	0.0100
2,4,6-Trichlorophenol	U		0.000297	0.0100
(S) Nitrobenzene-d5	40.9			10.0-127
(S) 2-Fluorobiphenyl	45.2			10.0-130
(S) p-Terphenyl-d14	56.5			10.0-128
(S) Phenol-d5	19.7			10.0-120
(S) 2-Fluorophenol	30.9			10.0-120
(S) 2,4,6-Tribromophenol	29.3			10.0-155

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Cp

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Tc

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Ss

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Cn

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Sr

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Qc

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Gl

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Al

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Sc

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

(LCS) R3375497-1 01/13/19 11:33 • (LCSD) R3375497-2 01/13/19 11:57

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 %
Acenaphthene	0.0500	0.0272	0.0367	54.4	73.4	41.0-120		J3	29.7	22
Acenaphthylene	0.0500	0.0266	0.0366	53.2	73.2	43.0-120		J3	31.6	22
Anthracene	0.0500	0.0276	0.0388	55.2	77.6	45.0-120		J3	33.7	20
Benzo(a)anthracene	0.0500	0.0277	0.0383	55.4	76.6	47.0-120		J3	32.1	20
Benzo(b)fluoranthene	0.0500	0.0284	0.0395	56.8	79.0	46.0-120		J3	32.7	20
Benzo(k)fluoranthene	0.0500	0.0305	0.0426	61.0	85.2	46.0-120		J3	33.1	21
Benzo(g,h,i)perylene	0.0500	0.0300	0.0422	60.0	84.4	48.0-121		J3	33.8	20
Benzo(a)pyrene	0.0500	0.0284	0.0391	56.8	78.2	47.0-120		J3	31.7	20
Bis(2-chlorethoxy)methane	0.0500	0.0240	0.0311	48.0	62.2	33.0-120		J3	25.8	24
Bis(2-chloroethyl)ether	0.0500	0.0252	0.0333	50.4	66.6	23.0-120			27.7	33
Bis(2-chloroisopropyl)ether	0.0500	0.0243	0.0321	48.6	64.2	28.0-120			27.7	31
4-Bromophenyl-phenylether	0.0500	0.0273	0.0395	54.6	79.0	45.0-120		J3	36.5	20
2-Chloronaphthalene	0.0500	0.0251	0.0338	50.2	67.6	37.0-120		J3	29.5	25
4-Chlorophenyl-phenylether	0.0500	0.0280	0.0386	56.0	77.2	44.0-120		J3	31.8	20
Chrysene	0.0500	0.0298	0.0409	59.6	81.8	48.0-120		J3	31.4	20

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

(LCS) R3375497-1 01/13/19 11:33 • (LCSD) R3375497-2 01/13/19 11:57

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 %
Dibenz(a,h)anthracene	0.0500	0.0299	0.0425	59.8	85.0	47.0-120		J3	34.8	20
3,3-Dichlorobenzidine	0.0500	0.0279	0.0394	55.8	78.8	44.0-120		J3	34.2	20
2,4-Dinitrotoluene	0.0500	0.0293	0.0423	58.6	84.6	49.0-124		J3	36.3	20
2,6-Dinitrotoluene	0.0500	0.0281	0.0402	56.2	80.4	46.0-120		J3	35.4	21
Fluoranthene	0.0500	0.0291	0.0414	58.2	82.8	51.0-120		J3	34.9	20
Fluorene	0.0500	0.0275	0.0377	55.0	75.4	47.0-120		J3	31.3	20
Hexachlorobenzene	0.0500	0.0291	0.0402	58.2	80.4	44.0-120		J3	32.0	20
Hexachloro-1,3-butadiene	0.0500	0.0219	0.0247	43.8	49.4	19.0-120			12.0	32
Hexachlorocyclopentadiene	0.0500	0.0201	0.0207	40.2	41.4	15.0-120			2.94	31
Hexachloroethane	0.0500	0.0215	0.0244	43.0	48.8	15.0-120			12.6	37
Indeno(1,2,3-cd)pyrene	0.0500	0.0295	0.0416	59.0	83.2	49.0-122		J3	34.0	20
Isophorone	0.0500	0.0254	0.0339	50.8	67.8	36.0-120		J3	28.7	23
Naphthalene	0.0500	0.0222	0.0285	44.4	57.0	27.0-120			24.9	27
Nitrobenzene	0.0500	0.0243	0.0313	48.6	62.6	27.0-120			25.2	29
n-Nitrosodimethylamine	0.0500	0.0160	0.0217	32.0	43.4	10.0-120			30.2	40
n-Nitrosodiphenylamine	0.0500	0.0268	0.0380	53.6	76.0	47.0-120		J3	34.6	20
n-Nitrosodi-n-propylamine	0.0500	0.0263	0.0351	52.6	70.2	31.0-120		J3	28.7	28
Phenanthrene	0.0500	0.0271	0.0384	54.2	76.8	46.0-120		J3	34.5	20
Benzylbutyl phthalate	0.0500	0.0306	0.0427	61.2	85.4	43.0-121		J3	33.0	20
Bis(2-ethylhexyl)phthalate	0.0500	0.0303	0.0422	60.6	84.4	43.0-122		J3	32.8	20
Di-n-butyl phthalate	0.0500	0.0312	0.0439	62.4	87.8	49.0-121		J3	33.8	20
Diethyl phthalate	0.0500	0.0298	0.0424	59.6	84.8	48.0-122		J3	34.9	20
Dimethyl phthalate	0.0500	0.0281	0.0396	56.2	79.2	48.0-120		J3	34.0	20
Di-n-octyl phthalate	0.0500	0.0316	0.0448	63.2	89.6	42.0-125		J3	34.6	20
Pyrene	0.0500	0.0294	0.0403	58.8	80.6	47.0-120		J3	31.3	20
1,2,4-Trichlorobenzene	0.0500	0.0218	0.0266	43.6	53.2	24.0-120			19.8	29
4-Chloro-3-methylphenol	0.0500	0.0252	0.0346	50.4	69.2	40.0-120		J3	31.4	21
2-Chlorophenol	0.0500	0.0239	0.0311	47.8	62.2	25.0-120			26.2	35
2,4-Dichlorophenol	0.0500	0.0249	0.0328	49.8	65.6	36.0-120		J3	27.4	26
2,4-Dimethylphenol	0.0500	0.0245	0.0322	49.0	64.4	33.0-120		J3	27.2	26
4,6-Dinitro-2-methylphenol	0.0500	0.0331	0.0455	66.2	91.0	38.0-138		J3	31.6	25
2,4-Dinitrophenol	0.0500	0.0296	0.0406	59.2	81.2	10.0-120			31.3	39
2-Nitrophenol	0.0500	0.0279	0.0371	55.8	74.2	31.0-120			28.3	29
4-Nitrophenol	0.0500	0.0122	0.0179	24.4	35.8	10.0-120		J3	37.9	33
Pentachlorophenol	0.0500	0.0232	0.0351	46.4	70.2	23.0-120		J3	40.8	25
Phenol	0.0500	0.0118	0.0153	23.6	30.6	10.0-120			25.8	36
2,4,6-Trichlorophenol	0.0500	0.0275	0.0392	55.0	78.4	42.0-120		J3	35.1	23
(S) Nitrobenzene-d5				38.5	51.8	10.0-127				
(S) 2-Fluorobiphenyl				43.4	58.0	10.0-130				
(S) p-Terphenyl-d14				49.2	68.1	10.0-128				

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

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

(LCS) R3375497-1 01/13/19 11:33 • (LCSD) R3375497-2 01/13/19 11:57

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 %
(S) Phenol-d5				18.8	24.0	10.0-120				
(S) 2-Fluorophenol				29.3	38.2	10.0-120				
(S) 2,4,6-Tribromophenol				44.4	64.0	10.0-155				

L1060001-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1060001-01 01/13/19 19:03 • (MS) R3375497-4 01/13/19 19:26 • (MSD) R3375497-5 01/13/19 19:50

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Acenaphthene	0.0500	U	0.0313	0.0352	62.6	70.4	1	28.0-120			11.7	25
Acenaphthylene	0.0500	U	0.0310	0.0344	62.0	68.8	1	31.0-121			10.4	25
Anthracene	0.0500	U	0.0320	0.0377	64.0	75.4	1	36.0-120			16.4	23
Benzo(a)anthracene	0.0500	U	0.0318	0.0361	63.6	72.2	1	39.0-120			12.7	23
Benzo(b)fluoranthene	0.0500	U	0.0320	0.0392	64.0	78.4	1	37.0-120			20.2	23
Benzo(k)fluoranthene	0.0500	U	0.0343	0.0369	68.6	73.8	1	37.0-120			7.30	26
Benzo(g,h,i)perylene	0.0500	U	0.0335	0.0388	67.0	77.6	1	37.0-123			14.7	25
Benzo(a)pyrene	0.0500	U	0.0312	0.0360	62.4	72.0	1	37.0-120			14.3	24
Bis(2-chlorethoxy)methane	0.0500	U	0.0274	0.0291	54.8	58.2	1	17.0-120			6.02	31
Bis(2-chloroethyl)ether	0.0500	U	0.0284	0.0297	56.8	59.4	1	14.0-120			4.48	33
Bis(2-chloroisopropyl)ether	0.0500	U	0.0275	0.0285	55.0	57.0	1	18.0-120			3.57	34
4-Bromophenyl-phenylether	0.0500	U	0.0319	0.0375	63.8	75.0	1	37.0-120			16.1	24
2-Chloronaphthalene	0.0500	U	0.0295	0.0314	59.0	62.8	1	29.0-120			6.24	28
4-Chlorophenyl-phenylether	0.0500	U	0.0320	0.0370	64.0	74.0	1	36.0-120			14.5	23
Chrysene	0.0500	U	0.0342	0.0384	68.4	76.8	1	38.0-120			11.6	23
Dibenz(a,h)anthracene	0.0500	U	0.0338	0.0385	67.6	77.0	1	36.0-121			13.0	24
3,3-Dichlorobenzidine	0.0500	U	0.0333	0.0374	66.6	74.8	1	10.0-134			11.6	30
2,4-Dinitrotoluene	0.0500	U	0.0347	0.0406	69.4	81.2	1	39.0-125			15.7	25
2,6-Dinitrotoluene	0.0500	U	0.0325	0.0381	65.0	76.2	1	36.0-120			15.9	27
Fluoranthene	0.0500	U	0.0341	0.0394	68.2	78.8	1	41.0-121			14.4	22
Fluorene	0.0500	U	0.0319	0.0362	63.8	72.4	1	37.0-120			12.6	24
Hexachlorobenzene	0.0500	U	0.0334	0.0388	66.8	77.6	1	35.0-122			15.0	24
Hexachloro-1,3-butadiene	0.0500	U	0.0228	0.0240	45.6	48.0	1	12.0-120			5.13	34
Hexachlorocyclopentadiene	0.0500	U	0.0172	0.0191	34.4	38.2	1	10.0-120			10.5	33
Hexachloroethane	0.0500	U	0.0215	0.0239	43.0	47.8	1	10.0-120			10.6	40
Indeno(1,2,3-cd)pyrene	0.0500	U	0.0329	0.0376	65.8	75.2	1	38.0-125			13.3	24
Isophorone	0.0500	U	0.0291	0.0315	58.2	63.0	1	21.0-120			7.92	27
Naphthalene	0.0500	U	0.0254	0.0262	50.8	52.4	1	10.0-120			3.10	31
Nitrobenzene	0.0500	U	0.0276	0.0283	55.2	56.6	1	12.0-120			2.50	30
n-Nitrosodimethylamine	0.0500	U	0.0193	0.0200	38.6	40.0	1	10.0-120			3.56	40

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Cp

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Tc

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Ss

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Cn

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Sr

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Qc

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Gl

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Al

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Sc

L1060001-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1060001-01 01/13/19 19:03 • (MS) R3375497-4 01/13/19 19:26 • (MSD) R3375497-5 01/13/19 19:50

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
n-Nitrosodiphenylamine	0.0500	U	0.0312	0.0368	62.4	73.6	1	37.0-120			16.5	24
n-Nitrosodi-n-propylamine	0.0500	U	0.0300	0.0324	60.0	64.8	1	16.0-120			7.69	30
Phenanthrene	0.0500	U	0.0317	0.0371	63.4	74.2	1	33.0-120			15.7	22
Benzylbutyl phthalate	0.0500	U	0.0361	0.0415	72.2	83.0	1	34.0-126			13.9	24
Bis(2-ethylhexyl)phthalate	0.0500	U	0.0345	0.0391	69.0	78.2	1	33.0-126			12.5	25
Di-n-butyl phthalate	0.0500	U	0.0358	0.0422	71.6	84.4	1	35.0-128			16.4	23
Diethyl phthalate	0.0500	U	0.0350	0.0409	70.0	81.8	1	39.0-125			15.5	24
Dimethyl phthalate	0.0500	U	0.0329	0.0379	65.8	75.8	1	37.0-120			14.1	24
Di-n-octyl phthalate	0.0500	U	0.0363	0.0411	72.6	82.2	1	25.0-135			12.4	26
Pyrene	0.0500	U	0.0339	0.0390	67.8	78.0	1	39.0-120			14.0	22
1,2,4-Trichlorobenzene	0.0500	U	0.0240	0.0249	48.0	49.8	1	15.0-120			3.68	31
4-Chloro-3-methylphenol	0.0500	U	0.0296	0.0335	59.2	67.0	1	26.0-120			12.4	27
2-Chlorophenol	0.0500	U	0.0270	0.0286	54.0	57.2	1	18.0-120			5.76	34
2,4-Dichlorophenol	0.0500	U	0.0290	0.0308	58.0	61.6	1	19.0-120			6.02	27
2,4-Dimethylphenol	0.0500	U	0.0286	0.0307	57.2	61.4	1	15.0-120			7.08	28
4,6-Dinitro-2-methylphenol	0.0500	U	0.0345	0.0420	69.0	84.0	1	10.0-144			19.6	39
2,4-Dinitrophenol	0.0500	U	0.0327	0.0406	65.4	81.2	1	10.0-120			21.6	40
2-Nitrophenol	0.0500	U	0.0314	0.0328	62.8	65.6	1	20.0-120			4.36	30
4-Nitrophenol	0.0500	U	0.0147	0.0169	29.4	33.8	1	10.0-120			13.9	40
Pentachlorophenol	0.0500	U	0.0284	0.0361	56.8	72.2	1	10.0-128			23.9	37
Phenol	0.0500	U	0.0136	0.0141	27.2	28.2	1	10.0-120			3.61	40
2,4,6-Trichlorophenol	0.0500	U	0.0320	0.0372	64.0	74.4	1	26.0-120			15.0	31
(S) Nitrobenzene-d5					45.3	46.4		10.0-127				
(S) 2-Fluorobiphenyl					49.7	52.2		10.0-130				
(S) p-Terphenyl-d14					56.0	64.1		10.0-128				
(S) Phenol-d5					20.3	21.4		10.0-120				
(S) 2-Fluorophenol					33.2	34.9		10.0-120				
(S) 2,4,6-Tribromophenol					49.4	59.5		10.0-155				

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.

Abbreviations and Definitions

MDL	Method Detection Limit.
ND	Not detected at the Reporting Limit (or MDL where applicable).
RDL	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

J3	The associated batch QC was outside the established quality control range for precision.

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



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	T 104704245-17-14
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

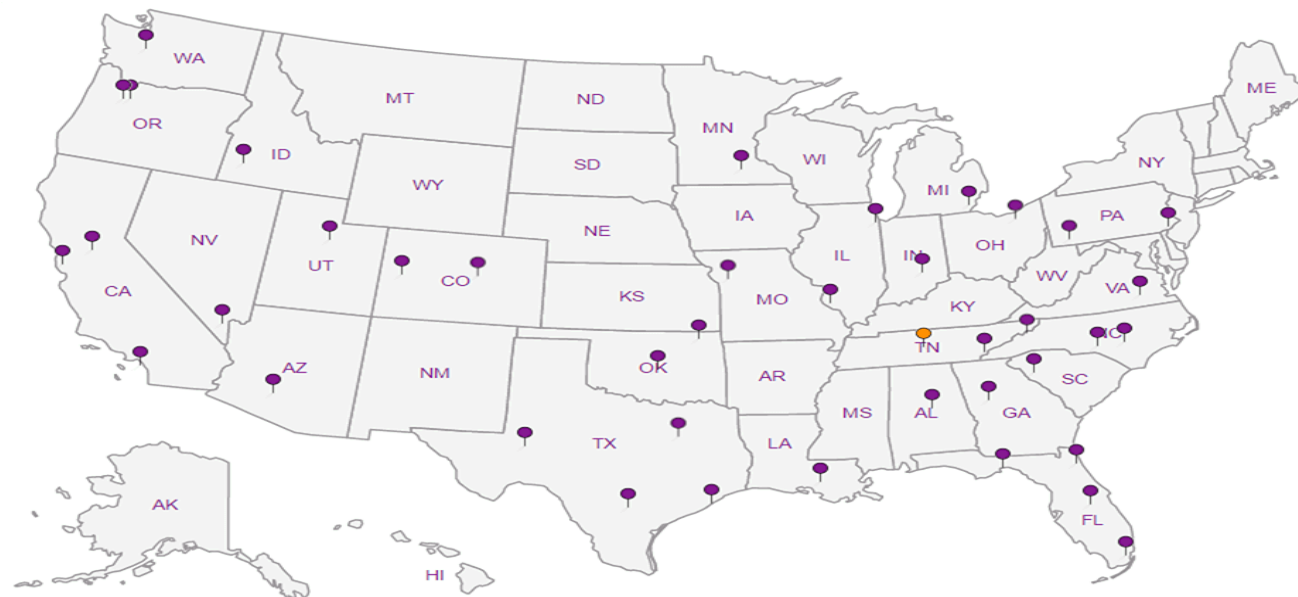
Third Party Federal Accreditations

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.



CHAIN-OF-CUSTODY

PROJECT INFORMATION						PROJECT NUMBER		Turnaround Time		Preservation Codes:													
J.T. PARSONS OSCEOLA, AR								24 Hour		1. Cool, 4 Degrees Centigrade				4. Thiosulfate for Dechlorination									
								48 Hour		2. Sulfuric Acid (H_2SO_4), pH < 2				5. Hydrochloric Acid(HCl)									
								72 Hour		3. Nitric Acid (HNO_3), pH < 2				6. Sodium Hydroxide (NaOH), pH > 12									
M.I. LYBRAND						SEND REPORT TO: TOM HUETTER		Routine (5 Day)		TEST PARAMETERS								Bottle Type Code					
								Preservative Code:										G = Glass; P = Plastic					
								Bottle Type:										V = Septum; A = Amber					
Sampler(s) Signature						Sampler(s) Printed:						LAB IDENTIFICATION											
SAMPLE NUMBER		SAMPLE COLLECTION Date/s Time/s		Grab	Comp	Number of Bottles	Sample Matrix	SAMPLE IDENTIFICATION/ DESCRIPTION															
MW-1	1-8-19	0900	✓		10	W	MW-1 GROUNDWATER	✓	✓	✓	✓	✓				L1659921-01							
MW-2		0940	✓		10	W	MW-2	✓	✓	✓	✓	✓				02							
MW-3		1040	✓		10	W	MW-3	✓	✓	✓	✓	✓				03							
MW-4		1115	✓		10	W	MW-4	✓	✓	✓	✓	✓				04							
MW-5		1145	✓		10	W	MW-5	✓	✓	✓	✓	✓				05							
MW-6		0750	✓		10	W	MW-6	✓	✓	✓	✓	✓				06							
BD	✓	-	✓		10	W	BLIND DUPLICATE	✓	✓	✓	✓	✓				07							
TRIP BLANK	-	-	✓		1	W	TRIP BLANK			✓	✓					08							
1. Relinquished by: (Signature) M.I. Lybrand MIKE LYBRAND										Date/Time 1-9-19 1240		2. Received by: (Signature) 				SAMPLE CONDITION UPON RECEIPT IN LAB				REMARKS / SAMPLE COMMENTS			
3. Relinquished by: (Signature)										Date/Time		4. Received by lab: (Signature) 11/10/19 845				1. CUSTODY SEALS: Yes No				* Shipped via Fed Ex EXPRESS			
																2. CONTAINERS CORRECT: Yes No				* Report and Invoice to:			
																3. COC/LABELS AGREE: Yes No				Tom Huetter			
																4. PRESERVATION CONFIRMED: Yes No				Harbor Env.			
																5. RECEIVED ON ICE: Yes No				RAD SCREEN: <0.5 mR/hr			
																6. TEMPERATURE ON RECEIPT: 0.4 °C							
FOR COMPLETION BY LAB ONLY																							

4752 50 78 212

64

Pace Analytical National Center for Testing & Innovation Cooler Receipt Form

Client:		14 ALBORZAR		SDG#	21659921	
Cooler Received/Opened On: 01/10/2019				Temperature:	04	
Received By: Patrick Nshizirungu						
Signature: 						
Receipt Check List				NP	Yes	No
COC Seal Present / Intact?				/		
COC Signed / Accurate?						
Bottles arrive intact?					/	
Correct bottles used?					/	
Sufficient volume sent?					/	
If Applicable					/	
VOA Zero headspace?						
Preservation Correct / Checked?					/	

Appendix G

Equipment Calibration Logs



Field Meter Calibration Log

Date:	12/17/13	Time:	0600
Project:	PARSONS		
Site Location:	OSCEOLA, AR		
Personnel:	M. Lybrand		
Manufacturer:	Foxboro PHOTO VAC		
Model #:	Micro FID		
Calibration Solution:	Zero GAS / 500 ppm Methane		
Parameter:	Units:	Initial Reading:	Final Reading:
pH: Methane	S.U.	—	500 ppm
Specific Conductance:	mS/cm		
Turbidity:	NTU		
Dissolved Oxygen:	mg/L		
	%		
ORP:	mV		
Comments:	Low battery - will use charger and AC inverter.		
Signature		Date	
M. S. Lybrand		12/17/13	

Notes: S.U. – standard units; mS/cm – micro Siemens per centimeter; NTU – nephelometric turbidity units; mg/L – milligrams per liter; % - percent; mV - millivolt



Field Meter Calibration Log

Date:	12/13/13	Time:	0640
Project:	PARSONS		
Site Location:	OSCEOLA, AR		
Personnel:	M. Lybrand		
Manufacturer:	Foxboro Photo VAC		
Model #:	Micro FID		
Calibration Solution:	500 ppm Methan / Zero GAS		
Parameter:	Units:	Initial Reading:	Final Reading:
pH: Methan	S.U.	—	500 ppm
Specific Conductance:	mS/cm		
Turbidity:	NTU		
Dissolved Oxygen:	mg/L		
	%		
ORP:	mV		
Comments:	low battery - will use charger and AC inverter.		
Signature		Date	
M. S. Lybrand		12/13/13	

Notes: S.U. – standard units; mS/cm – micro Siemens per centimeter; NTU – nephelometric turbidity units; mg/L – milligrams per liter; % - percent; mV - millivolt



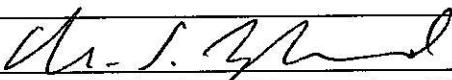
Field Meter Calibration Log

Date:	12/19/18	Time:	1640
Project:	PARSONS		
Site Location:	OSCEOLA, AR		
Personnel:	M. LYBRAND		
Manufacturer:	HANNA		
Model #:	HI 9813-6		
Calibration Solution:	PH: 4.00/7.00; COND: 1413 μ S		
Parameter:	Units:	Initial Reading:	Final Reading:
pH:	S.U.	—	4.00/7.00
Specific Conductance:	mS/cm	—	1.41 mS/cm
Turbidity:	NTU		
Dissolved Oxygen:	mg/L		
	%		
ORP:	mV		
Comments:	Used meter for well development @ MW-1.		
Signature		Date	
M. J. Lybrand		12/19/18	

Notes: S.U. – standard units; mS/cm – micro Siemens per centimeter; NTU – nephelometric turbidity units; mg/L – milligrams per liter; % - percent; mV - millivolt



Field Meter Calibration Log

Date:	12/20/18	Time:	0700
Project:	PARSONS		
Site Location:	OSCEOLA, AR		
Personnel:	M. LTBAND		
Manufacturer:	HANNA		
Model #:	HI 9813-6		
Calibration Solution:	PH: 4.00/7.00 ; COND: 1413 μ S		
Parameter:	Units:	Initial Reading:	Final Reading:
pH:	S.U.	—	4.00 / 7.00
Specific Conductance:	mS/cm	—	1.41 mS/cm
Turbidity:	NTU		
Dissolved Oxygen:	mg/L		
	%		
ORP:	mV		
Comments:	Used water for well development.		
Signature 			Date 12/20/18

Notes: S.U. – standard units; mS/cm – micro Siemens per centimeter; NTU – nephelometric turbidity units; mg/L – milligrams per liter; % – percent; mV – millivolt



Field Meter Calibration Log

Date:	1/7/19	Time:	1255
Project:	PARSONS		
Site Location:	OSCEOLA, AR		
Personnel:	Mr. LYBRAND		
Manufacturer:	HANNA		
Model #:	HI 9813-6		
Calibration Solution:	pH: 4.00/7.00; COND: 1413 MS		
Parameter:	Units:	Initial Reading:	Final Reading:
pH:	S.U.	-	4.00/7.00
Specific Conductance:	mS/cm	-	1.41 MS/cm
Turbidity:	NTU		
Dissolved Oxygen:	mg/L		
	%		
ORP:	mV		
Comments:	Used meter for well development @ MW-6.		
Signature		Date	
M. S. Lybrand		1/7/19	

Notes: S.U. – standard units; mS/cm – micro Siemens per centimeter; NTU – nephelometric turbidity units; mg/L – milligrams per liter; % – percent; mV – millivolt

Appendix H

QA/QC Data Review Summary

**QA/QC DATA REVIEW SUMMARY
COMPREHENSIVE SITE ASSESSMENT
JT PARSONS CABINET COMPANY – OSCEOLA, ARKANSAS**

1.0 Introduction

Harbor Environmental and Safety (Harbor) has completed a quality assurance/quality control (QA/QC) data review of laboratory reports associated with the Comprehensive Site Assessment (CSA) at the former JT Parsons Cabinet Company (Parsons) facility in Osceola, Arkansas. Field activities were conducted during the weeks of December 17, 2018 and January 7, 2019. Soil and groundwater investigative samples, along with associated QC samples, were shipped overnight via Federal Express to Pace Analytical of Mount Juliet, Tennessee for laboratory analyses. Two separate sets of sample were delivered, resulting in two sample delivery groups. A summary of the samples collected, laboratory analyses, and sample delivery groups is included below in Table H-1.

Table H-1 – Summary of Samples Collected and Analyzed

Sample Delivery Group	Sample Type/Count	General Analyses
L1054617	Soil – 32 QC – 8	Volatile Organic Compounds – EPA Method 8260B Semi-Volatile Organic Compounds – EPA Method 8270C TPH – Diesel Range Organics (DRO) – EPA Method 8015 TPH – Gasoline Range Organics (GRO) – EPA Method 8015D RCRA Metals – EPA Method 6010/7471
L1059921	Groundwater – 6 QC – 2	Volatile Organic Compounds – EPA Method 8260B Semi-Volatile Organic Compounds – EPA Method 8270C TPH – Diesel Range Organics (DRO) – EPA Method 8015 TPH – Gasoline Range Organics (GRO) – EPA Method 8015D RCRA Metals – EPA Method 6010/7471

In all a total of 38 investigative samples (32 soil, six groundwater) were collected at the site, along with 10 QC samples (five trip blanks, two equipment blanks, and three duplicate samples). Data evaluation for samples collected at the Parsons site included the following parameters: sample preservation, sample holding times, blank sample analysis, spike sample recoveries, matrix spike sample results, duplicate precision, and surrogate recoveries. These QA/QC criteria are discussed in the following sections. Laboratory analytical data sheets are included in Appendix F and referenced below.

2.0 Sample Preservation

All samples were collected within laboratory-supplied containers using the proper chemical preservatives. The samples were sealed in ice chests, secured with custody seals, and shipped overnight via Federal Express to Pace Analytical in Mt. Juliet, Tennessee for laboratory analyses. The sample ice chests for the two separate shipments were received at temperatures ranging from 0.4° C up to 3.9° C, below the recommended temperature of 4.0° C.

3.0 Sample Holding Times

All laboratory receipt dates were considered and noted in combination with sample collection dates and sample extraction and/or analysis dates. All analyses were conducted within the proper holding times.

4.0 Blank Sample Analysis

Blanks assist in determining the existence and magnitude of any contamination resulting from field or laboratory conditions. Blank samples delivered to the laboratory included five trip blanks and two equipment blanks. The trip blank samples remained in the sample ice chests along with the investigative samples during handling and shipping. The equipment blanks were collected by pouring deionized water over decontaminated stainless-steel spoons used for soil sampling. Please note that equipment blanks were not collected during groundwater sampling, as new tubing was used and changed between well locations. All parameter results for the trip blanks and equipment blanks were reported as non-detect.

Laboratory method blanks were analyzed by Pace Analytical during sample analyses. Numerous parameters were detected in method blank samples from the L1054617 data package at trace concentrations (flagged with "J", Appendix F). The detection of these analytes was acceptable and the reported values are estimated. Mercury detections in soil samples were flagged with "B," as mercury was detected in the associated blanks. These mercury results should be considered estimated. No detections were reported in method blanks from the L1059921 data package.

5.0 Spike Sample Recoveries

Spike recoveries were evaluated through laboratory control samples (LCS) and LCS duplicates (LCSD) and provided information needed to assess the accuracy of the analytical method (reagents, instruments, human error, etc.). USEPA methods require the addition of known amounts of "spike compounds" or compounds that are not likely to be found in the actual samples. If spike percent recoveries (%Rs) are close to the known concentrations as defined within the limits set by the laboratory, the reported target compound concentrations are assumed to be accurate.

In the L1054617 data package some LCS and/or LCSD recoveries (%Rs) associated with Method 8260B analysis (VOCs) were outside the established QC range for accuracy (flagged with "J4"). The associated compound results in the investigative soil samples (marked "J4") should be considered estimated (the majority of these results were reported as non-detect).

In the L1054617 data package, the relative percent difference (RPD) between many of the LCS and LCSD results for Method 8260B (VOCs), 8270C (SVOCs), and TPH high fraction (DRO) were outside the QC range for precision. These exceedances are flagged with "J3." Although all associated compounds were reported as non-detect in the investigative soil samples, these results (marked "J3") should be considered estimated.

In the L1059921 data package, the relative percent difference (RPD) between many of the LCS and LCSD results for Method 8270C (SVOCs) were outside the QC range for precision. These exceedances are flagged with "J3." Although all associated compounds were reported as non-detect in the investigative groundwater samples, these results (marked "J3") should be considered estimated.

6.0 Matrix Spike Sample Results

Matrix spikes (MS) and matrix spike duplicates (MSD) were generated to provide information about the effect of each sample matrix on the sample preparation procedures and the measurement methodology. In the L1054617 data package some MS and/or MSD recoveries (%Rs) associated with Method 8270C (SVOCs) and TPH high fraction (DRO) were outside the QC range (flagged as "J6"). The spike values were low, indicating that sample matrix interfered with the ability to make an accurate determination. Although all associated compounds were reported as non-detect in the investigative samples, these results (marked "J6") should be considered estimated. All MS and MSD sample recoveries associated with analyses in the L1059921 data package were within acceptability laboratory criteria.

7.0 Duplicate Precision

Precision was evaluated through duplicate sample analyses, including laboratory duplicates and field duplicates. Laboratory duplicate determinations are used to demonstrate acceptable method precision by the laboratory at the time of analysis. All laboratory duplicate results were within the acceptable criteria. MS/MSD and LCS/LCSD QC results are discussed above.

A total of three field duplicate samples (two soil and one groundwater) were collected during the CSA. Soil duplicates were collected from the 6- to 8-foot sample from B-8 (labeled "B-8 Dup") and the 6- to 8-foot sample from B-14 ("B-14 Dup"). The groundwater duplicate (labeled "BD") was a blind duplicate sample (location not disclosed) collected from well MW-2. Field duplicates measure both field and laboratory precision; therefore, field duplicate results may have more variability than laboratory duplicates. Neither EPA Region 4 nor ADEQ have a published QC limit for the RPD between field duplicate and investigative samples; however, recent EPA Region 1 guidance (June 2018) establishes RPD limits of 50 percent for soil samples and 30 percent for aqueous samples. These Region 1 values are non-binding for this project but serve as a useful point of reference for evaluating the field duplicate data in the absence of other applicable guidance.

As summarized below in Table H-2, RPD values between soil sample duplicate results and corresponding investigative sample results, where applicable, ranged from 6.3 percent up to 30.9 percent. RPD values between the groundwater duplicate set results ranged from 0.0 percent up to 4.6 percent. All RPD values were below the project QC goals (50 percent for soils, 30 percent for groundwater), indicating adequate precision.

Table H-2 – Duplicate Sample Results

Investigative Sample No.	Parameter	Concentration (ppm)	Duplicate Sample No.	Concentration (ppm)	RPD (%)
B-8 6-8' (Soil)	Arsenic	4.52	B-8 Dup (Soil)	3.31	30.9
	Barium	121		112	7.7
	Cadmium	<0.500		<0.500	--
	Total Chromium	10.9		9.98	8.8
	Lead	6.52		6.12	6.3
	Selenium	<2.00		<2.00	--
	Silver	<1.00		<1.00	--
	Mercury	<0.0200		<0.0200	--
	TPH-DRO	<4.00		<4.00	--
	TPH-GRO	<0.100		<0.100	--
	VOCs	ND		ND	--
	SVOCS	ND		ND	--
B-14 6-8' (Soil)	Arsenic	<2.00	B-14 Dup (Soil)	<2.00	--
	Barium	126		116	8.3
	Cadmium	<0.500		<0.500	--
	Total Chromium	11.5		10.4	10.0
	Lead	6.63		6.09	8.5
	Selenium	<2.00		<2.00	--
	Silver	<1.00		<1.00	--
	Mercury	0.0237		0.0211	11.6
	TPH-DRO	<4.00		<4.00	--
	TPH-GRO	<0.132		<0.100	--
	VOCs	ND		ND	--
	SVOCS	ND		ND	--
MW-2 (Groundwater)	Arsenic	<0.0100	BD (Groundwater)	<0.0100	--
	Barium	0.166		0.166	0.0
	Cadmium	<0.00200		<0.00200	--
	Total Chromium	<0.0100		<0.0100	--
	Lead	<0.00500		<0.00500	--
	Selenium	<0.0100		<0.0100	--
	Silver	<0.00500		<0.00500	--
	Mercury	<0.000200		<0.000200	--
	TPH-DRO	<0.100		<0.100	--
	TPH-GRO	<0.100		<0.100	--
	VOCs				
	cis-1,2-Dichloroethene	0.00533		0.00553	3.7
	Tetrachloroethene (PCE)	0.0505		0.0509	0.8
	Trichloroethene (TCE)	0.00489		0.00512	4.6
	SVOCS	ND		ND	--

Notes:

ppm = parts per million, equivalent to milligrams per kilogram (mg/kg) for soil and milligrams per liter (mg/L) for water.

RPD = Relative percent difference = [Sample Conc. – Duplicate Conc.]/Average Conc. * 100.

TPH = Total Petroleum Hydrocarbons.

DRO = Diesel-Range Organics

GRO = Gasoline-Range Organics

VOCs = Volatile Organic Compounds

SVOCS = Semi-Volatile Organic Compounds

ND = Not detected at individual compound detection limits (see Appendix F).

Only individual compounds detected are listed in table (VOCs/SVOCS).

8.0 Surrogate Recoveries

Sample aliquots spiked with surrogates, compounds that are similar in character to target analytes but not normally found in the environment, were analyzed along with the investigative samples. All surrogate recoveries were within the laboratory's QC limits.

9.0 Other QC Considerations

During metals analyses (Method 6010B) for the 0- to 4-foot soil sample from boring B-10 (data package L1054617), barium, chromium, and lead failed the method-required serial dilution test and/or subsequent post-spike criteria. These failures indicate matrix interference; the associated analyte results for the soil sample should be considered estimated.

10.0 Data Completeness

Completeness is defined as the percentage of measurements made that are judged to be valid. In consideration of the QC flags discussed above, all analytical measurements were judged to be valid and none of the project data were rejected. The overall data quality of the analytical work performed as part of the CSA at the former Parsons facility was satisfactory and considered acceptable for future use.

11.0 References

The following reference was used in preparation of this QA/QC Data Review Summary.

- *Environmental Data Review Supplement for Region 1 – Data Review Elements and Superfund Specific Guidance/Procedures.* June 2018. EPA Region 1. Boston, Massachusetts.

Appendix I
GPRS Report



**SUBSURFACE
SCANNING
SOLUTIONS**

Subsurface Investigation for Storage Tanks/Anomalies

Prepared For: Harbor Environmental

Prepared By:
Ethan King
Project Manager- Arkansas
12/23/2018



December 23, 2018

Harbor Environmental

Attn: Tom Huetter

Site: 420 Ohlendorf, Osceola, AR

We appreciate the opportunity to provide this report for our work completed on 12/18/18 at the above address in Little Rock, AR.

PURPOSE

The purpose of this project was to search for any underground storage tanks (UST's) or UST-related piping inside old building. We covered an area of approximately 15'x15' at the address above.

EQUIPMENT

- **400 MHz GPR Antenna.** The antenna is mounted in a stroller frame which rolls over the surface. The surface needs to be reasonably smooth and unobstructed in order to obtain readable scans. Obstructions such as curbs, landscaping, and vegetation will limit the feasibility of GPR. The data is displayed on a screen and marked in the field in real time. GPR works by sending pulses of energy into a material and recording the strength and the time required for the return of the reflected signal. Reflections are produced when the energy pulses enter into a material with different electrical properties from the material it left. The strength of the reflection is determined by the contrast in signal speed between the two materials. The total depth achieved can be as much as 8' or more with this antenna but can vary widely depending on the conductivity of the materials. Depths provided should always be treated as estimates as their accuracy can be affected by multiple factors. For more information, please visit: [Link](#)
- **Electromagnetic Pipe Locator.** The EM locator can detect the electromagnetic fields from live power or radio frequency signals. It can also be used in conjunction with a transmitter to connect directly to accessible, metallic pipes, risers, or tracer wires. A current is sent through the pipe or tracer wire at a specific frequency and the resulting EM field can then be detected by the receiver. The receiver is moved over the surface without coming in contact with the ground so it is not affected by terrain. Depths provided should always be treated as estimates as their accuracy can be affected by multiple factors. Depths achieved can be as much as 20' depending on the type of signal being traced or methods used. For more information, please visit: [Link](#)

PROCESS

The EM pipe locator was used to connect to accessible, traceable pipes that may be tank-related such as vent pipes or product lines. A current is induced onto the pipe which creates an electromagnetic field that can be traced using the receiver. We can then attempt to trace these pipes to their origin or end point and paint or flag their locations.

Initial GPR scans were collected in order to evaluate the data and calibrate the equipment. Based on these findings, a scanning strategy is formed, typically consisting of scanning the entire area in a grid with 3'-5' scan spacing in order to locate any potential UST's that may remain at the site. The GPR data is interpreted in real time and anomalies in the data are located and marked on the surface along with their depths using spray paint, pin flags, etc. Depths are dependent on the dielectric of the materials being scanned so depth accuracy can vary throughout a site. Relevant scan examples were saved and will be provided in this report.

The EMI is first calibrated in an area that appears to be typical to the site. Data is then collected with a 3'-5' scan spacing in one orientation across the site. The findings are post-processed to produce contour maps of the conductivity values that were obtained.

LIMITATIONS

Please keep in mind that there are limitations to any subsurface investigation. The equipment may not achieve maximum effectiveness due to soil conditions, above ground obstructions, reinforced concrete, and a variety of other factors. No subsurface investigation or equipment can provide a complete image of what lies below. Our results should always be used in conjunction with as many methods as possible including consulting existing plans and drawings, exploratory excavation or potholing, visual inspection of above ground features, and utilization of services such as One Call/811.

At this site, some scans were limited by curbs around landscaping and parking areas along with cars that were parked in the area. The parked cars can be seen in a photo on [page 4](#).

FINDINGS

We found that the surface allowed for maximum GPR depth penetration of 3.5'-4.5' in most areas. We set up our equipment and scanned the area in a NSEW pattern. No UST's were located in the area. Potential abandon lines were located in the area of concern. All 3 utilities detected were running perpendicular to the building. All lines were between 1' and 2' in depth from the surface. All markings were made clearly on the surface using marking paint. All findings were reviewed with site contact.

The following pages will provide photos and further explanation of our findings.

Photo 1



The photo above represents the 3 utilities located in the area of concern.

Photo 2



CLOSING

GPRS, Inc. has been in business since 2001, specializing in underground storage tank location, concrete scanning, utility locating, and shallow void detection for projects throughout the United States. I encourage you to visit our website (www.gprsinc.com) and contact any of the numerous references listed.

GPRS appreciates the opportunity to offer our services, and we look forward to continuing to work with you on future projects. Please feel free to contact us for additional information or with any questions you may have regarding this report.

Thank you,

Ethan King
Project Manager—Arkansas



Direct: 501-251-4036
Ethan.king@gprsinc.com
www.gprsinc.com

End of Report