July 24, 2019

Mr. Blair K. Rollins
Caerus Oil and Gas LLC
143 Diamond Ave
Parachute, CO 81635

Via Email

RE Caerus K22 Pad - Soil Investigation and SVE Installation
COGCC Facility ID 457575, Remediation Project # 12690
Garfield County, Colorado

Mr. Rollins,

Entrada Consulting Group, Inc. (Entrada) has prepared this Investigation Report for Caerus Oil and Gas, LLC (Caerus) in response to the K22 Pad Release (Site) located in Garfield County, Parachute, Colorado. The Site is located in the NE ¼, SW ¼, of Section 22, Township 5S, Range 96W of the 6th Principal Meridian. The release location coordinates are approximately 39.599025° North latitude, and -108.159530° West longitude, World Geodetic System 1984 (WGS84). The following narrative presents Site background information and presents the results of a subsurface investigation conducted by Entrada on July 8th through the 10th, 2019.

BACKGROUND

The release was discovered by Caerus operations personnel on September 18th, 2018 during routine pressure testing. The release was determined to have been the result of flowline corrosion associated with the K22 596 3C-27 well (API 05-045-18860). An unknown volume of condensate and produced water was released at a depth of approximately five feet below ground surface (ft-bgs). The flowline was then isolated, purged and removed from service at the production facility. The release was reported to the Colorado Oil and Gas Conservation Commission (COGCC) in a Spill/Release Report Form 19 dated September 28, 2018.

Initial spill response by Caerus involved excavating impacted soil in the vicinity of the release and installing a Soil Vapor Extraction (SVE) well adjacent to and east of the Point of Release (POR). This initial well is referred to in this report as the “POR Well” and is shown on Figure 2. The results of initial response work are available on the COGCC database under the Facility ID 457575.

GEOLOGY AND PHYSIOGRAPHY

The geology of this part of the Central Roan Plateau area is dominated at the surface by the Eocene Uinta and Green River Formations. The steep sided canyon walls that surround the Site consist of the Parachute Creek Member of the Green River Formation and is characterized by light gray to light brown-weathered lacustrine marlstones (calcium carbonate to lime rich mudstones), much of which is comprised of kerogen-rich oil shale interbedded with occasional siltstones and sandstones of the Parachute Creek Member. The overlying Uinta Formation consists more of fluvial-deltaic clastic sediments the prograded to the south into Eocene Lake Uinta (William J. Hale, 1922).

A small stream exists approximately 300 feet laterally to the south of the reported point of releaseand serves as a tributary to the West Fork of Parachute Creek. According to a review of theColorado Division of Water Resource's database, there are no existing groundwater wells in closeproximity to the Site that would lead to an indication of where groundwater elevation would be expected beneath the Site.

SOIL INVESTIGATION AND ADDITIONAL SVE WELL INSTALLATION

Entrada contracted Colorado Drilling and Sampling of Montrose, Colorado to advance five additional SVE wells (SB01, SB02, SB03, SB04 and SB05) in the vicinity of the Point of Release, from July 8th through July 10th, 2019. The locations of these additional borings are shown on Figure 2. Due to a high density of flowlines in the area, the proposed boring locations were first potholed to depths of 6 to 8 feet using a hydrovac truck.

Soil borings were installed with a 4.25 inch solid stem auger driven by a track-mounted Simco drill rig. Soil samples were collected at five-foot intervals using a standard penetration test 24-inch split spoon sampler. The soil was visually examined for evidence of potential environmental impact (e.g., petroleum staining and odor) and field-screened using a photo-ionization detector (PID) to evaluate the presence of volatile organic compounds (VOCs). The maximum PID reading observed during the investigation was 14.2 parts per million (ppm) from the 15 to 17 ft-bgs interval of SB05 (soil sample SB05-15/17). The only hydrocarbon staining observed was in the 10 to 12 ft-bgs interval of SB02 (soil sample SB02-10/12). Due to a lack of visual impact during the investigation and low PID readings, all samples collected from the split spoon intervals, totaling 27 soils samples, were submitted to the laboratory for analysis. The soil borings were completed as SVE wells and set with 2-inch PVC, near the bottom of each boring and capped with hydrated bentonite before backfilling the boring. In general, screened intervals begin 10 to 17 ft-bgs with 20 to 25 feet of screen in each well.

Little variability was observed in regard to the general character of the soils collected during the investigation. The soil and rock beneath the pad are interpreted to be characteristic of native fill material associated with the construction of the pad. Soils can be generally described as light brown silt and fine to medium grained sand with coarse angular gravels exhibiting high porosity

and permeability. The gravels are identifiable as colluvium eroded from the above Parachute Creek Member. Boring logs with lithologic descriptions and well completion diagrams are provided as Attachment A. Groundwater was not encountered during the advancement of soil borings as a result of this investigation.

SOIL ANALYSIS

Soil samples were collected in sample containers appropriate for the specified analyses, sealed, labeled and placed into an ice filled cooler for preservation. Soil samples were submitted to Pace Analytical in Mt. Juliet, TN following chain of custody procedures and analyzed for the following contaminants of concern (COCs) by the indicated methods:

- Total Petroleum Hydrocarbons – diesel range organics (TPH-DRO) by U.S. Environmental Protection Agency (EPA) Method 8015;
- TPH-gasoline range organics (GRO) by EPA Method 8015D;
- Benzene, Toluene, Ethylbenzene and Xylenes (BTEX) by EPA Method 8260B; and
- Polycyclic Aromatic Hydrocarbons (PAHs) (COGCC Table 910-1) by EPA Method 8270C.

SOIL ANALYTICAL RESULTS

Soil analytical results were reported for 27 soil samples at depths ranging from 10 to 42 ft-bgs. Analytical results are summarized in Table 1 and are compared to the appropriate COGCC Table 910-1 Concentration Levels. The laboratory analytical report and chain-of-custody documentation are included as an Attachment.

Soil analytical results are summarized below:

- Concentrations of total TPH (TPH-GRO and TPH-DRO) are compliant with the Table 910-1 Concentration Level for TPH of 500 milligrams per kilogram (mg/kg).
    - The maximum total TPH concentration is 258.78 mg/kg, reported for the soil sample SB04-25/27.
- Concentrations of benzene are compliant with the Table 910-1 Concentration Level for benzene of 0.17 mg/kg.
    - The maximum benzene concentration is 0.00333 mg/kg, reported for the soil sample SB02-10/12.
- Concentrations of toluene are compliant with the Table 910-1 Concentration Level for toluene of 85 mg/kg.
    - The maximum toluene concentration is 0.0378 mg/kg, reported for the soil sample SB01-25/27.
- Concentrations of ethylbenzene are compliant with the Table 910-1 Concentration Level for ethylbenzene of 100 mg/kg.
    - The maximum ethylbenzene concentration is 0.0102 mg/kg, reported for the soil sample SB02-10/12.

- Concentrations of total xylene are compliant with the Table 910-1 Concentration Level for total xylene of 175 mg/kg.
    - The maximum total xylene concentration is 0.225 mg/kg, reported for the soil sample SB02-10/12.
- Concentrations of PAHs are compliant with their respective Table 910-1 Concentration Levels.

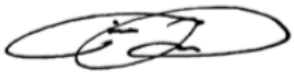
CONCLUSIONS AND RECOMMENDATIONS

Laboratory analytical results for the 27 soil samples collected from soil borings SB01, SB02, SB03, SB04 and SB05 indicate no impacts above COGCC Table 910-1 Concentration Levels. Previous work completed in September of 2018 during the initial response by Caerus, including the excavation in the vicinity of the point of release, and the installation of the POR Well, suggests that remaining shallow impacts may exist beneath the array of flowlines that connect the wellheads to the meter sheds. COGCC records indicate a TPH exceedance between 19 and 20 ft-bgs reported for samples collected in association with installation of the POR well. Analytical results from soil borings SB01 through SB05 and during previous site investigations indicate that vertical and lateral extent of impact has been identified in the release area.

Entrada suggests using the six existing dry wells on Site as SVE wells utilizing a mobile, solar powered SVE unit to assist in the removal of vapors that may remain underground associated with the release. Any residual shallow impacts beneath the flow line trench should be addressed during and after final plugging and abandonment (P&A) activities and final pad reclamation.

We appreciate the opportunity to assist Caerus Oil and Gas. Please contact me (804) 513-0707 if you have any questions.

Sincerely,
ENTRADA CONSULTING GROUP, INC



Ben Baugh
Senior Geologist

Tim Dobransky
Principal Scientist

Attachments:

Table 1 – Soil Data Summary
Figure 1 – Site Location Map
Figure 2 – Boring Location Map
Boring Logs
Laboratory Analytical Reports

TABLES

Table 1
Caerus K22 Pad
Soil Data Summary

SAMPLE SUMMARY	
Location Description	Caerus K22 Pad
Sample Type	Soil

LABORATORY DATA SUMMARY																	
Sample ID	SB01-10/12	SB01-15/17	SB01-20/22	SB01-25/27	SB01-30/32	SB02-10/12	SB02-15/17	SB02-20/22	SB02-25/27	SB02-30/32	SB03-10/12	SB03-15/17	SB03-20/22	SB03-25/27	SB03-30/32		
Depth	10-12'	15-17'	20-22'	25-27'	30-32'	10-12'	15-17'	20-22'	25-27'	30-32'	10-12'	15-17'	20-22'	25-27'	30-32'	**COGCC TABLE 910-1 CONCENTRATION LEVELS**	**UNITS**
Sample Date	7/10/2019	7/10/2019	7/10/2019	7/10/2019	7/10/2019	7/9/2019	7/9/2019	7/9/2019	7/9/2019	7/9/2019	7/9/2019	7/9/2019	7/9/2019	7/9/2019	7/9/2019		
Analytical Parameters																	
TPH																	
TPH Gasoline Range Organics (GRO)	0.201	0.325	0.579	0.291	0.258	1.49	0.278	0.275	0.534	0.212	0.452	0.290	0.401	0.333	0.444		NA
TPH Diesel Range Organics (DRO)	127	179	152	240	92.3	183	53.9	76.9	136	124	121	134	241	197	203	500	NA
TPH GRO+DRO	127.2	179.325	152.579	240.291	92.558	184.49	54.18	77.175	136.534	124.212	121.452	134.29	241.4	197.33	203.44		mg/kg
BTEX																	
Benzene	<0.00100	<0.00100	<0.00100	0.00115	<0.00100	0.00333	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	0.00112	0.17	mg/kg
Toluene	<0.00500	0.0231	0.0130	0.0378	0.00790	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	0.00698	<0.00500	<0.00500	<0.00500	0.0113	85	mg/kg
Ethylbenzene	<0.00250	0.00401	0.00813	0.00598	<0.00250	0.0102	<0.00250	<0.00250	0.00519	<0.00250	0.00597	<0.00250	<0.00250	<0.00250	0.00921	100	mg/kg
Total Xylene	<0.00650	0.0984	0.1050	0.130	0.0369	0.225	<0.00650	0.0071	0.0364	<0.00650	0.0432	<0.00650	0.0330	0.0221	0.0648	175	mg/kg
Polynuclear Aromatic Hyrdrocarbons																	
Anthracene	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	1,000	mg/kg
Acenaphthene	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	1,000	mg/kg
Benzo(a)anthracene	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	0.22	mg/kg
Benzo(a)pyrene	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	0.022	mg/kg
Benzo(b)fluoranthene	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	0.22	mg/kg
Benzo(g,h,i)perylene	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	NA	mg/kg
Benzo(k)flouranthene	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	NA	mg/kg
Chrysene	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	22	mg/kg
Dibenzo(a,h)anthracene	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	0.022	mg/kg
Fluoranthene	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	1,000	mg/kg
Fluorene	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	1,000	mg/kg
Indeno(1,2,3-cd)pyrene	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	0.22	mg/kg
Napthalene	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	0.0221	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	23	mg/kg
Pyrene	<0.00600	<0.00600	0.00649	0.00772	<0.00600	0.00694	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	1,000	mg/kg
1-Methylnapthalene	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	NA	mg/kg
2-Methylnapthalene	<0.0200	0.0454	0.0554	0.0511	0.0259	0.0264	<0.0200	<0.0200	0.0393	<0.0200	<0.0200	<0.0200	0.0214	<0.0200	0.0374	NA	mg/kg
2-Chloronapthalene	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	NA	mg/kg

LABORATORY DATA SUMMARY														
Sample ID	SB04-10/12	SB04-15/17	SB04-20/22	SB04-25/27	SB04-30/32	SB05-10/12	SB05-15/17	SB05-20/22	SB05-25/27	SB05-30/32	SB05-35/37	SB05-40/42		
Depth	10-12'	15-17'	20-22'	25-27'	30-32'	10-12'	15-17'	20-22'	25-27'	30-32'	35-37'	40-42'	**COGCC TABLE 910-1 CONCENTRATION LEVELS**	**UNITS**
Sample Date	7/8/2019	7/8/2019	7/9/2019	7/9/2019	7/9/2019	7/8/2019	7/8/2019	7/8/2019	7/8/2019	7/8/2019	7/8/2019	7/8/2019		
Analytical Parameters														
TPH														
TPH Gasoline Range Organics (GRO)	<0.100	0.708	0.420	0.783	0.208	<0.100	<0.100	<0.100	0.280	0.137	0.349	0.209		NA
TPH Diesel Range Organics (DRO)	155	258	251	258	144	182	152	202	118	239	151	90.3	500	NA
TPH GRO+DRO	155	258.708	251.42	258.783	144.208	182	152	202	118.28	239.137	151.349	90.509		mg/kg
BTEX														
Benzene	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	0.17	mg/kg
Toluene	<0.00500	<0.00500	<0.00500	0.00939	0.00844	<0.00500	<0.00500	0.0201	0.00750	<0.00500	0.0102	0.00729	85	mg/kg
Ethylbenzene	<0.00250	0.00316	0.00384	0.00309	0.00738	<0.00250	<0.00250	0.00280	<0.00250	<0.00250	0.00265	<0.00250	100	mg/kg
Total Xylene	<0.00650	0.0311	0.0331	0.0534	0.0355	0.0123	0.0118	0.0570	0.0234	0.0086	0.0335	0.0291	175	mg/kg
Polynuclear Aromatic Hyrdrocarbons														
Anthracene	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	1,000	mg/kg
Acenaphthene	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	1,000	mg/kg
Benzo(a)anthracene	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	0.22	mg/kg
Benzo(a)pyrene	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	0.022	mg/kg
Benzo(b)fluoranthene	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	0.22	mg/kg
Benzo(g,h,i)perylene	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	NA	mg/kg
Benzo(k)flouranthene	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	NA	mg/kg
Chrysene	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	22	mg/kg
Dibenzo(a,h)anthracene	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	0.022	mg/kg
Fluoranthene	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	1,000	mg/kg
Fluorene	<0.00600	0.0110	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	1,000	mg/kg
Indeno(1,2,3-cd)pyrene	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	0.22	mg/kg
Napthalene	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	0.0211	<0.0200	<0.0200	<0.0200	<0.0200	23	mg/kg
Pyrene	<0.00600	<0.00600	<0.00600	0.00819	<0.00600	<0.00600	<0.00600	0.00608	<0.00600	<0.00600	<0.00600	<0.00600	1,000	mg/kg
1-Methylnapthalene	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	NA	mg/kg
2-Methylnapthalene	<0.0200	0.0453	0.0389	0.0409	<0.0200	0.0215	<0.0200	0.0216	0.0290	0.0254	0.0256	<0.0200	NA	mg/kg
2-Chloronapthalene	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	NA	mg/kg

mg/kg - milligrams per kilogram
NA - not applicable
NT - parameter was not tested

Over COGCC Table 910-1 concentration levels but under BACKGROUND level.

Over COGCC Table 910-1 concentration levels and not within BACKGROUND level.

Over COGCC Table 910-1 concentration levels

FIGURES

LEGEND

Site Location

0 1 2 3 4 Miles

1 inch = 2 mi

N W E S

Project No: 019-040 Map By: NDB Date: 7/25/2019	SITE LOCATION MAP K-22 WELL PAD CAERUS OIL AND GAS, LLC NE/4 SW/4 SEC 22 5S 36W GARFIELD COUNTY, COLORADO	ENTRADA CONSULTING GROUP 330 Grand Avenue, Unit C Grand Junction, CO 81501 970-549-1015	Figure 1

LEGEND

Point of Release, from COGCC F19 — SVE WELL

0 — 50 — 100 Feet

1 inch = 50 ft

N W E S

Project No:	019-040
Map By:	NDB
Date:	7/25/2019

SVE INVESTIGATION
K-22 WELL PAD
CAERUS OIL AND GAS, LLC
NE/4 SW/4 SEC 22 5S 36W
GARFIELD COUNTY, COLORADO

ENTRADA CONSULTING GROUP
330 Grand Avenue, Unit C
Grand Junction, CO 81501
970-549-1015

Figure
2

BORING LOGS

ENTRADA CONSULTING GROUP

Caerus Oil and Gas LLC
143 Diamond Ave.
Parachute, CO 81635

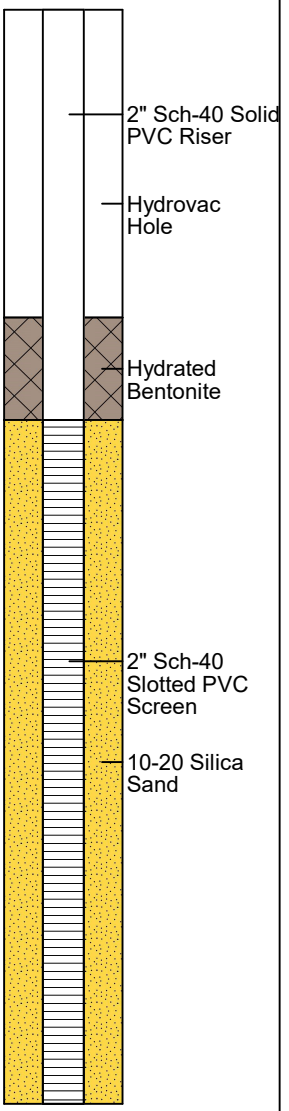
K22 SVE wells

SB01

Start/End Date	: 7/10/19
TD	: 32.0'
DTW/DTP	: NA/NA
Drilling Method	: Solid Stem
Sampling Method	: Split Spoon
Drilled By	: CO Drilling & Sampling
Latitude	: 39.598933°
Longitude	: -108.159600°
Logged By	: B. Baugh
Project Number	: 019-040

Depth in Feet	Surf. Elev. 6527	GRAPHIC	DESCRIPTION	Moisture	% Fines	Structure	Vapor	Staining	Sample Recovery	Penetration Res	Sample #
0	6525		1-8: Hydrovac Hole	NA	NA	-	NA	NA	NA	NA	-
5	6520			NA	NA	-	NA	NA	NA	NA	-
10	6515		10-12: Dark brown clayey silt with gravels into 6" siltstone (boulder) into light brown sand and angular gravels. Dry.	10	30	-	<1	N	18"	26, 10, 7, 11	SB01 10-12
15	6510		15-17: Dark brown fine sand and coarse angular gravels. 2" siltstone lens. Dry.	10	30	-	3.0	N	18"	8, 12, 29, 17	SB01 15-17
20	6505		20-22: Dark brown fine sand and silt with coarse angular gravels. 2" sandstone lens (boulder).	20	40	-	1.1	N	18"	5, 10, 7, 9	SB01 20-22
25	6500		25-27: Brown silty sand and pea sized gravel into 3" sandstone lens. Moist.	20	60	-	7.5	N	18"	10, 19, 13, 15	SB01 25-27
30	6495		30-32: Dark brown silty sand and coarse angular gravels. Two 2" lenses of siltstone (boulders). Moist.	20	50	-	1.4	N	18"	6, 8, 9, 7	SB01 30-32
35											

Well: SB01:
Elev. 6527:



NOTES: Detector MR3000
Surface elevation from COGCC

Slot: 0.010"

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ENTRADA CONSULTING GROUP

Caerus Oil and Gas LLC
143 Diamond Ave.
Parachute, CO 81635

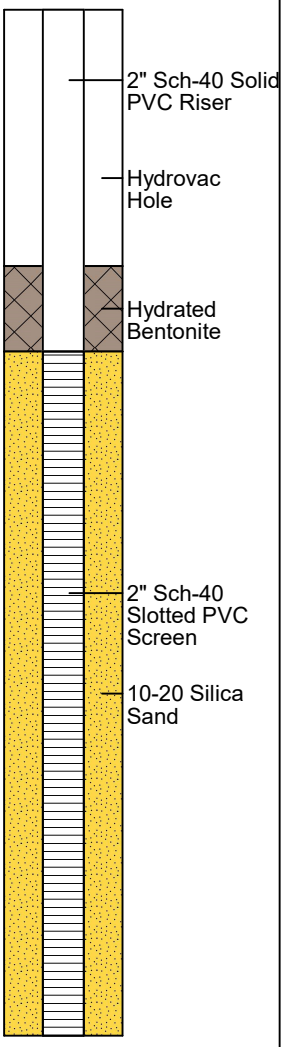
K22 SVE wells

SB02

Start/End Date	: 7/9/19
TD	: 30.0'
DTW/DTP	: NA/NA
Drilling Method	: Solid Stem
Sampling Method	: 2" Split Spoon
Drilled By	: CO Drilling & Sampling
Latitude	: 39.598983°
Longitude	: -108.159450°
Logged By	: B. Baugh
Project Number	: 019-040

Depth in Feet	Surf. Elev. 6527	GRAPHIC	DESCRIPTION	Moisture	% Fines	Structure	Vapor	Staining	Sample Recovery	Penetration Res	Sample #
0			1-8: Hydrovac Hole								
	6525			NA	NA	-	NA	NA	NA	NA	-
5											
	6520			NA	NA	-	NA	NA	NA	NA	-
10			10-12: Grey/black medium grained sand and angular gravel. Hydrocarbon odor and staining.								
	6515			10	30	-	10	Y	18"	7, 21, 12, 9	SB02 10-12
15			15-17: 2" Grey sand into light and dark brown silty sand and angular gravels. Staining top 2".								
	6510			10	30	-	1.7	Y	18"	4, 4, 4, 10	SB02 15-17
20			20-22: Light to dark brown silty sand with coarse subangular gravels. Little to no plasticity. Dry. No stain or odor.								
	6505			10	30	-	1.1	N	18"	6, 4, 8, 9	SB02 20-22
25			25-27: Light brown fine sand and angular gravel into clayey silt and gravel. Dry. No stain or odor.								
	6500			10	50	-	3.2	N	18"	6, 6, 7, 12	SB02 25-27
30			30-32: Fine grained sand and silt with coarse angular gravel. Dry. No stain or odor.								
	6495			10	40	-	1.3	N	18"	7, 8, 7, 8	SB02 30-32
35											

Well: SB02:
Elev. 6527:



NOTES: Detector MR3000
Surface elevation from COGCC

Slot: 0.010"

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ENTRADA CONSULTING GROUP

Caerus Oil and Gas LLC
143 Diamond Ave.
Parachute, CO 81635

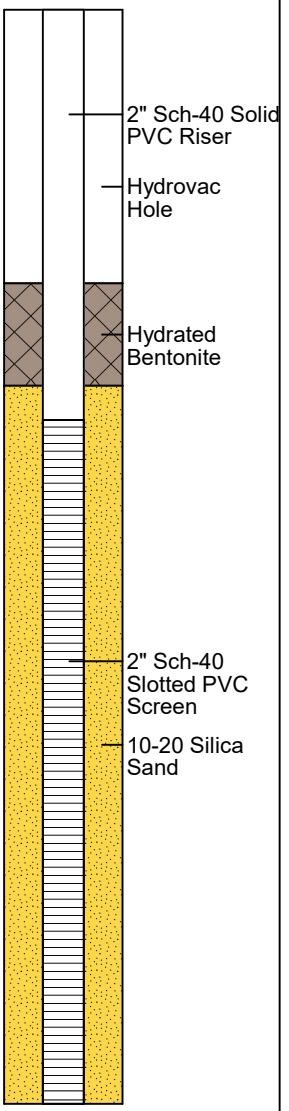
K22 SVE wells

SB03

Start/End Date	: 7/9/19
TD	: 32.0'
DTW/DTP	: NA/NA
Drilling Method	: Solid Stem
Sampling Method	: 2" Split Spoon
Drilled By	: CO Drilling & Sampling
Latitude	: 39.599050°
Longitude	: -108.159383°
Logged By	: B. Baugh
Project Number	: 019-040

Depth in Feet	Surf. Elev. 6527	GRAPHIC	DESCRIPTION	Moisture	% Fines	Structure	Vapor	Staining	Sample Recovery	Penetration Res	Sample #
0			1-8: Hydrovac Hole								
	6525			NA	NA	-	NA	NA	NA	NA	-
5											
	6520			NA	NA	-	NA	NA	NA	NA	-
10			10-12: Dark brown fine sand and silt with coarse angular gravels. 3" siltstone lens (boulder).	10	50	-	1.1	N	18"	18, 16, 21	SB03 10-12
	6515										
15			15-17: Clayey dark brown silt with pebble gravel into light brown sand and cobble angular gravel. Dry. No odor.	10	30	-	<1	N	18"	7, 7, 7, 10	SB03 15-17
	6510										
20			20-22: Light brown medium grained sand and angular gravel into dark brown clayey silt. Minor plasticity. Dry. No odor.	10	30	-	3.1	N	18"	9, 9, 9, 10	SB03 20-22
	6505										
25			25-27: Light brown silt and fine sand with angular gravels into 3" dark brown silty clay.	10	30	-	2.3	N	18"	8, 8, 6, 11	SB03 25-27
	6500										
30			30-32: Light brown silty sand with coarse angular gravels into 4" fissle sandstone (likely a boulder). Dry, no odor or staining.	10	30	-	3.4	N	18"	6, 8, 11, 15	SB03 30-32
	6495										
35											

Well: SB03:
Elev. 6527:



NOTES: Detector MR3000
Surface elevation from COGCC

Slot: 0.010"

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ENTRADA CONSULTING GROUP

Caerus Oil and Gas LLC
143 Diamond Ave.
Parachute, CO 81635

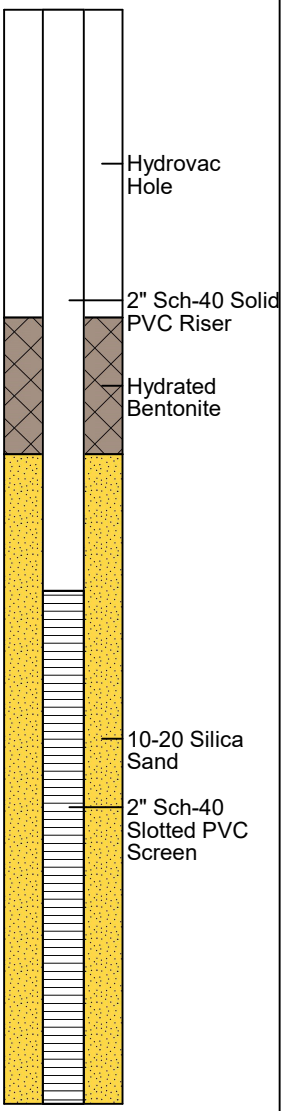
K22 SVE wells

SB04

Start/End Date	: 7/9/19
TD	: 32.0'
DTW/DTP	: NA/NA
Drilling Method	: Solid Stem
Sampling Method	: 2" Split Spoon
Drilled By	: CO Drilling & Sampling
Latitude	: 39.599067°
Longitude	: -108.159633°
Logged By	: B. Baugh
Project Number	: 019-040

Depth in Feet	Surf. Elev. 6527	GRAPHIC	DESCRIPTION	Moisture	% Fines	Structure	Vapor	Staining	Sample Recovery	Penetration Res	Sample #
0			1-8: Hydrovac Hole								
	6525			NA	NA	-	NA	NA	NA	NA	-
5											
	6520			NA	NA	-	NA	NA	NA	NA	-
10			10-11: Brown sand and angular gravel. Dry.								
	6515			10	20	-	<1	N	13"	2, 4, 4, 9	SB04 10-11
15			15-17: Dark brown silty clay into light brown medium grained sand. Angular gravels throughout.								
	6510			10	30	-	<1	N	18"	4, 5, 6, 18	SB04 15-17
20			20-22: Brown fine sand and pebble gravel. 2" siltstone (boulder). Moist.								
	6505			10	30	-	3.6	N	18"	7, 9, 48, 16	SB04 20-22
25			25-27: Brown fine sand with trace angular gravels. Moist. No odor.								
	6500			10	50	-	13	N	18"	9, 28, 20, 19	SB04 25-27
30			30-32: Brown medium grained sand and coarse cobble sized angular gravels. No stain or odor. Dry.								
	6495			10	20	-	1.4	N	18"	8, 10, 10, 10	SB04 30-32
35											

Well: SB04:
Elev. 6527:



NOTES: Detector MR3000
Surface elevation from COGCC

Slot: 0.010"

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ENTRADA CONSULTING GROUP

Caerus Oil and Gas LLC
143 Diamond Ave.
Parachute, CO 81635

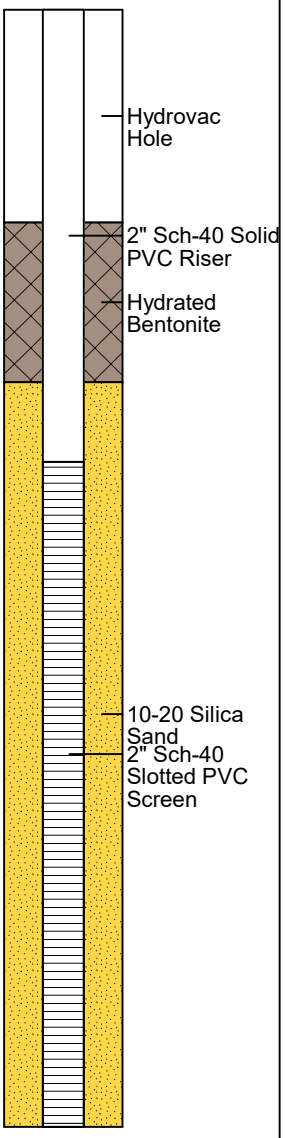
K22 SVE wells

SB05

Start/End Date	: 7/8/19
TD	: 42.0'
DTW/DTP	: NA/NA
Drilling Method	: Solid Stem
Sampling Method	: 18" Split Spoon
Drilled By	: CO Drilling & Sampling
Latitude	: 39.598767°
Longitude	: -108.159283°
Logged By	: B. Baugh
Project Number	: 019-040

Depth in Feet	Surf. Elev.	GRAPHIC	DESCRIPTION	Moisture	% Fines	Structure	Vapor	Staining	Sample Recovery	Penetration Res	Sample #
0			1-6: Hydrovac Hole	NA	NA	-	NA	NA	NA	NA	-
5				NA	NA	-	NA	NA	NA	NA	-
10			10-11.5: Brown sandy angular gravel. Moist from hydrovac and rain water.	20	5	-	8.5	N	13"	8, 7, 4	SB04 10-11.5
15			15-16.5: Brown sand and large angular gravel. Moist. Mostly gravel by volume.	20	10	-	14.2	N	14"	4, 6, 5, 8	SB04 15-16.5
20			20-22: Brown sand and pebble size angular gravel. 2" lens of siltstone. Moist.	20	30	-	9.3	N	16"	14, 11, 8, 7	SB04 20-22
25			25-27: 3' Dark brown clay into clayey fine sand and angular gravels. Bottom 2" siltstone.	30	30	-	8.4	N	16"	6, 7, 7, 11	SB04 25-27
30			30-32: Coarse gravely clay into sandy pebble gravel into 3" siltstone. Dry.	10	30	-	10.3	N	24"	5, 6, 11, 42	SB04 30-32
35			35-37: Silty clay with angular gravel into medium grained sand w trace gravels. Moist. Minor siltstone lenses.	15	30	-	14.1	N	22"	11, 9, 18, 14	SB05 35-37
40			40-42: Brown clayey silt with angular gravels and cobbles. Bottom 2" grey siltstone. Dry.	15	30	-	9.7	N	18"	10, 11, 17, 15	SB05 40-42
45											

Well: SB05:



NOTES: Detector MR3000
Surface elevation TBD.

Slot: 0.010"

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ANALYTICAL REPORT

Pace Analytical®
National Center for Testing & Innovation

ANALYTICAL REPORT

July 22, 2019

Caerus Oil and Gas

Sample Delivery Group:	L1118015
Samples Received:	07/12/2019
Project Number:	019-040
Description:	K22 Spill Assessment Soil Borings
Site:	457575
Report To:	Jake Janicek 143 Diamond Avenue Parachute, CO 81635

Entire Report Reviewed By: Chris Ward

Chris Ward
Project Manager

SB05-10/12 L1118015-01 Solid

Collected by: Ben Baugh | Collected date/time: 07/08/19 13:30 | Received date/time: 07/12/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1313592	1	07/16/19 13:42	07/18/19 15:45	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1313634	1	07/16/19 13:42	07/18/19 15:03	BMB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1312495	10	07/17/19 06:58	07/19/19 06:09	CLG	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM	WG1313779	1	07/18/19 21:40	07/19/19 14:01	DMG	Mt. Juliet, TN

SB05-15/17 L1118015-02 Solid

Collected by: Ben Baugh | Collected date/time: 07/08/19 13:30 | Received date/time: 07/12/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1313592	1	07/16/19 13:42	07/18/19 16:10	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1313634	1	07/16/19 13:42	07/18/19 15:21	BMB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1312495	10	07/17/19 06:58	07/19/19 06:53	CLG	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM	WG1313779	1	07/18/19 21:40	07/19/19 14:22	DMG	Mt. Juliet, TN

SB05-20/22 L1118015-03 Solid

Collected by: Ben Baugh | Collected date/time: 07/08/19 13:30 | Received date/time: 07/12/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1313592	1	07/16/19 13:42	07/18/19 16:34	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1313634	1	07/16/19 13:42	07/18/19 15:40	BMB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1312495	10	07/17/19 06:58	07/19/19 07:07	CLG	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM	WG1313779	1	07/18/19 21:40	07/19/19 14:44	DMG	Mt. Juliet, TN

SB05-25/27 L1118015-04 Solid

Collected by: Ben Baugh | Collected date/time: 07/08/19 13:30 | Received date/time: 07/12/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1313592	1	07/16/19 13:42	07/18/19 16:58	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1313634	1	07/16/19 13:42	07/18/19 15:59	BMB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1312495	20	07/17/19 06:58	07/19/19 08:36	CLG	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM	WG1313779	1	07/18/19 21:40	07/19/19 15:05	DMG	Mt. Juliet, TN

SB05-30/32 L1118015-05 Solid

Collected by: Ben Baugh | Collected date/time: 07/08/19 13:30 | Received date/time: 07/12/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1313592	1	07/16/19 13:42	07/18/19 17:21	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1313634	1	07/16/19 13:42	07/18/19 16:17	BMB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1312495	20	07/17/19 06:58	07/19/19 08:52	CLG	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM	WG1313779	1	07/18/19 21:40	07/19/19 15:26	DMG	Mt. Juliet, TN

SB05-35/37 L1118015-06 Solid

Collected by: Ben Baugh | Collected date/time: 07/08/19 13:30 | Received date/time: 07/12/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1313592	1	07/16/19 13:42	07/18/19 17:45	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1313634	1	07/16/19 13:42	07/18/19 16:38	BMB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1312495	10	07/17/19 06:58	07/19/19 07:37	CLG	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM	WG1313779	1	07/18/19 21:40	07/19/19 15:47	DMG	Mt. Juliet, TN

SB05-40/42 L1118015-07 Solid

Collected by: Ben Baugh | Collected date/time: 07/08/19 13:30 | Received date/time: 07/12/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1313592	1	07/16/19 13:42	07/18/19 18:09	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1313634	1	07/16/19 13:42	07/18/19 16:57	BMB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1312495	10	07/17/19 06:58	07/19/19 07:22	CLG	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM	WG1313779	1	07/18/19 21:40	07/19/19 16:08	DMG	Mt. Juliet, TN

SB04-10/12 L1118015-08 Solid

Collected by: Ben Baugh | Collected date/time: 07/08/19 15:00 | Received date/time: 07/12/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1313592	1	07/16/19 13:42	07/18/19 18:33	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1313634	1	07/16/19 13:42	07/18/19 17:15	BMB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1312495	20	07/17/19 06:58	07/19/19 09:22	CLG	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM	WG1313779	1	07/18/19 21:40	07/19/19 16:29	DMG	Mt. Juliet, TN

SB04-15/17 L1118015-09 Solid

Collected by: Ben Baugh | Collected date/time: 07/08/19 15:00 | Received date/time: 07/12/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1313592	1	07/16/19 13:42	07/18/19 18:57	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1313634	1	07/16/19 13:42	07/18/19 17:33	BMB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1312495	20	07/17/19 06:58	07/19/19 09:08	CLG	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM	WG1313779	1	07/18/19 21:40	07/19/19 16:50	DMG	Mt. Juliet, TN

SB04-20/22 L1118015-10 Solid

Collected by: Ben Baugh | Collected date/time: 07/09/19 08:30 | Received date/time: 07/12/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1313592	1	07/16/19 13:42	07/18/19 19:21	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1313634	1	07/16/19 13:42	07/18/19 17:52	BMB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1312495	10	07/17/19 06:58	07/19/19 07:52	CLG	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM	WG1313779	1	07/18/19 21:40	07/19/19 17:11	DMG	Mt. Juliet, TN

SB04-25/27 L1118015-11 Solid

Collected by: Ben Baugh | Collected date/time: 07/09/19 09:00 | Received date/time: 07/12/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1313592	1	07/16/19 13:42	07/18/19 19:45	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1313634	1	07/16/19 13:42	07/18/19 18:10	BMB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1312495	20	07/17/19 06:58	07/19/19 10:08	CLG	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM	WG1313779	1	07/18/19 21:40	07/19/19 17:32	DMG	Mt. Juliet, TN

SB04-30/32 L1118015-12 Solid

Collected by: Ben Baugh | Collected date/time: 07/09/19 09:50 | Received date/time: 07/12/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1313592	1	07/16/19 13:42	07/18/19 20:08	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1313634	1	07/16/19 13:42	07/18/19 18:29	BMB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1312495	20	07/17/19 06:58	07/19/19 10:24	CLG	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM	WG1313780	1	07/18/19 16:28	07/19/19 01:25	DMG	Mt. Juliet, TN

SB03-10/12 L1118015-13 Solid

Collected by: Ben Baugh | Collected date/time: 07/09/19 10:50 | Received date/time: 07/12/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1313713	1	07/16/19 13:42	07/18/19 14:29	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1313634	1	07/16/19 13:42	07/18/19 18:48	BMB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1312495	10	07/17/19 06:58	07/19/19 08:07	CLG	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM	WG1313780	1	07/18/19 16:28	07/19/19 01:47	DMG	Mt. Juliet, TN

SB03-15/17 L1118015-14 Solid

Collected by: Ben Baugh | Collected date/time: 07/09/19 11:20 | Received date/time: 07/12/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1313713	1	07/16/19 13:42	07/18/19 14:50	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1313637	1	07/16/19 13:42	07/18/19 16:25	ACG	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1312495	10	07/17/19 06:58	07/19/19 08:22	CLG	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM	WG1313780	1	07/18/19 16:28	07/19/19 02:09	DMG	Mt. Juliet, TN

SB03-20/22 L1118015-15 Solid

Collected by: Ben Baugh | Collected date/time: 07/09/19 11:40 | Received date/time: 07/12/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1313713	1	07/16/19 13:42	07/18/19 15:11	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1313637	1	07/16/19 13:42	07/18/19 16:46	ACG	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1312495	20	07/17/19 06:58	07/19/19 09:52	CLG	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM	WG1313780	1	07/18/19 16:28	07/19/19 02:31	DMG	Mt. Juliet, TN

SB03-25/27 L1118015-16 Solid

Collected by: Ben Baugh | Collected date/time: 07/09/19 12:10 | Received date/time: 07/12/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1313713	1	07/16/19 13:42	07/18/19 15:31	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1313637	1	07/16/19 13:42	07/18/19 17:08	ACG	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1312495	20	07/17/19 06:58	07/19/19 09:36	CLG	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM	WG1313780	1	07/18/19 16:28	07/19/19 02:53	DMG	Mt. Juliet, TN

SB03-30/32 L1118015-17 Solid

Collected by: Ben Baugh | Collected date/time: 07/09/19 12:55 | Received date/time: 07/12/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1313713	1	07/16/19 13:42	07/18/19 15:52	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1313637	1	07/16/19 13:42	07/18/19 17:29	ACG	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1312496	20	07/17/19 07:03	07/18/19 18:28	CLG	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM	WG1313780	1	07/18/19 16:28	07/19/19 03:15	DMG	Mt. Juliet, TN

SB02-10/12 L1118015-18 Solid

Collected by: Ben Baugh | Collected date/time: 07/09/19 13:50 | Received date/time: 07/12/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1313713	1	07/16/19 13:42	07/18/19 16:12	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1313637	1	07/16/19 13:42	07/18/19 17:51	ACG	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1312496	20	07/17/19 07:03	07/18/19 19:13	FM	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM	WG1313780	1	07/18/19 16:28	07/19/19 03:36	DMG	Mt. Juliet, TN

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

SB02-15/17 L1118015-19 Solid

Collected by: Ben Baugh | Collected date/time: 07/09/19 14:00 | Received date/time: 07/12/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1313713	1	07/16/19 13:42	07/18/19 16:33	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1313637	1	07/16/19 13:42	07/18/19 18:12	ACG	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1312496	10	07/17/19 07:03	07/18/19 16:57	FM	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM	WG1313780	1	07/18/19 16:28	07/19/19 03:58	DMG	Mt. Juliet, TN

SB02-20/22 L1118015-20 Solid

Collected by: Ben Baugh | Collected date/time: 07/09/19 14:20 | Received date/time: 07/12/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1313713	1	07/16/19 13:42	07/18/19 16:53	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1313637	1	07/16/19 13:42	07/18/19 19:22	ACG	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1312496	10	07/17/19 07:03	07/18/19 17:12	FM	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM	WG1313780	1	07/18/19 16:28	07/19/19 05:04	DMG	Mt. Juliet, TN

SB02-25/27 L1118015-21 Solid

Collected by: Ben Baugh | Collected date/time: 07/09/19 14:45 | Received date/time: 07/12/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1313713	1	07/16/19 13:42	07/18/19 17:14	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1313637	1	07/16/19 13:42	07/18/19 19:44	ACG	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1312496	10	07/17/19 07:03	07/18/19 17:27	CLG	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM	WG1313780	1	07/18/19 16:28	07/19/19 05:26	DMG	Mt. Juliet, TN

SB02-30/32 L1118015-22 Solid

Collected by: Ben Baugh | Collected date/time: 07/09/19 15:00 | Received date/time: 07/12/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1313713	1	07/16/19 13:42	07/18/19 17:35	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1313637	1	07/16/19 13:42	07/18/19 20:06	ACG	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1312496	10	07/17/19 07:03	07/18/19 17:41	CLG	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM	WG1313780	1	07/18/19 16:28	07/19/19 05:48	DMG	Mt. Juliet, TN

SB01-10/12 L1118015-23 Solid

Collected by: Ben Baugh | Collected date/time: 07/10/19 08:50 | Received date/time: 07/12/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1313713	1	07/16/19 13:42	07/18/19 17:55	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1313637	1	07/16/19 13:42	07/18/19 20:27	ACG	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1312496	10	07/17/19 07:03	07/18/19 17:57	FM	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM	WG1313780	1	07/18/19 16:28	07/19/19 06:10	DMG	Mt. Juliet, TN

SB01-15/17 L1118015-24 Solid

Collected by: Ben Baugh | Collected date/time: 07/10/19 09:20 | Received date/time: 07/12/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1313713	1	07/16/19 13:42	07/18/19 18:16	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1313637	1	07/16/19 13:42	07/18/19 20:48	ACG	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1312496	10	07/17/19 07:03	07/18/19 16:42	CLG	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM	WG1313780	1	07/18/19 16:28	07/19/19 06:32	DMG	Mt. Juliet, TN

SB01-20/22 L1118015-25 Solid

Collected by: Ben Baugh | Collected date/time: 07/10/19 09:40 | Received date/time: 07/12/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1313713	1	07/16/19 13:42	07/18/19 18:36	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1313637	1	07/16/19 13:42	07/18/19 21:10	ACG	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1312496	10	07/17/19 07:03	07/18/19 16:26	CLG	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM	WG1313780	1	07/18/19 16:28	07/19/19 06:54	DMG	Mt. Juliet, TN

SB01-25/27 L1118015-26 Solid

Collected by: Ben Baugh | Collected date/time: 07/10/19 10:15 | Received date/time: 07/12/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1314011	1	07/16/19 13:42	07/19/19 13:32	JAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1313637	1	07/16/19 13:42	07/18/19 21:32	ACG	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1312496	20	07/17/19 07:03	07/18/19 19:27	FM	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM	WG1313780	1	07/18/19 16:28	07/19/19 07:16	DMG	Mt. Juliet, TN

SB01-30/32 L1118015-27 Solid

Collected by: Ben Baugh | Collected date/time: 07/10/19 10:40 | Received date/time: 07/12/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1314011	1	07/16/19 13:42	07/19/19 13:54	JAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1313637	1	07/16/19 13:42	07/18/19 21:53	ACG	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1312496	10	07/17/19 07:03	07/18/19 18:12	FM	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM	WG1313780	1	07/18/19 16:28	07/19/19 07:38	DMG	Mt. Juliet, TN

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

Chris Ward
Project Manager

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

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	ND		0.100	1	07/18/2019 15:45	WG1313592
(S) a,a,a-Trifluorotoluene(FID)	*94.5*		*77.0-120*		*07/18/2019 15:45*	WG1313592

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

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Benzene	ND		0.00100	1	07/18/2019 15:03	WG1313634
Toluene	ND		0.00500	1	07/18/2019 15:03	WG1313634
Ethylbenzene	ND		0.00250	1	07/18/2019 15:03	WG1313634
Total Xylenes	0.0123		0.00650	1	07/18/2019 15:03	WG1313634
(S) Toluene-d8	*111*		*75.0-131*		*07/18/2019 15:03*	WG1313634
(S) 4-Bromofluorobenzene	*102*		*67.0-138*		*07/18/2019 15:03*	WG1313634
(S) 1,2-Dichloroethane-d4	*104*		*70.0-130*		*07/18/2019 15:03*	WG1313634

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	182	J6	40.0	10	07/19/2019 06:09	WG1312495
(S) o-Terphenyl	*94.0*		*18.0-148*		*07/19/2019 06:09*	WG1312495

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

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Anthracene	ND		0.00600	1	07/19/2019 14:01	WG1313779
Acenaphthene	ND		0.00600	1	07/19/2019 14:01	WG1313779
Acenaphthylene	ND		0.00600	1	07/19/2019 14:01	WG1313779
Benzo(a)anthracene	ND		0.00600	1	07/19/2019 14:01	WG1313779
Benzo(a)pyrene	ND		0.00600	1	07/19/2019 14:01	WG1313779
Benzo(b)fluoranthene	ND		0.00600	1	07/19/2019 14:01	WG1313779
Benzo(g,h,i)perylene	ND		0.00600	1	07/19/2019 14:01	WG1313779
Benzo(k)fluoranthene	ND		0.00600	1	07/19/2019 14:01	WG1313779
Chrysene	ND		0.00600	1	07/19/2019 14:01	WG1313779
Dibenz(a,h)anthracene	ND		0.00600	1	07/19/2019 14:01	WG1313779
Fluoranthene	ND		0.00600	1	07/19/2019 14:01	WG1313779
Fluorene	ND		0.00600	1	07/19/2019 14:01	WG1313779
Indeno(1,2,3-cd)pyrene	ND		0.00600	1	07/19/2019 14:01	WG1313779
Naphthalene	ND		0.0200	1	07/19/2019 14:01	WG1313779
Phenanthrene	ND		0.00600	1	07/19/2019 14:01	WG1313779
Pyrene	ND		0.00600	1	07/19/2019 14:01	WG1313779
1-Methylnaphthalene	ND		0.0200	1	07/19/2019 14:01	WG1313779
2-Methylnaphthalene	0.0215		0.0200	1	07/19/2019 14:01	WG1313779
2-Chloronaphthalene	ND		0.0200	1	07/19/2019 14:01	WG1313779
(S) p-Terphenyl-d14	*111*		*23.0-120*		*07/19/2019 14:01*	WG1313779
(S) Nitrobenzene-d5	*100*		*14.0-149*		*07/19/2019 14:01*	WG1313779
(S) 2-Fluorobiphenyl	*87.7*		*34.0-125*		*07/19/2019 14:01*	WG1313779

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

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	ND		0.100	1	07/18/2019 16:10	WG1313592
(S) a,a,a-Trifluorotoluene(FID)	*94.4*		*77.0-120*		*07/18/2019 16:10*	WG1313592

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

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Benzene	ND		0.00100	1	07/18/2019 15:21	WG1313634
Toluene	ND		0.00500	1	07/18/2019 15:21	WG1313634
Ethylbenzene	ND		0.00250	1	07/18/2019 15:21	WG1313634
Total Xylenes	0.0118		0.00650	1	07/18/2019 15:21	WG1313634
(S) Toluene-d8	*108*		*75.0-131*		*07/18/2019 15:21*	WG1313634
(S) 4-Bromofluorobenzene	*107*		*67.0-138*		*07/18/2019 15:21*	WG1313634
(S) 1,2-Dichloroethane-d4	*105*		*70.0-130*		*07/18/2019 15:21*	WG1313634

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	152		40.0	10	07/19/2019 06:53	WG1312495
(S) o-Terphenyl	*86.1*		*18.0-148*		*07/19/2019 06:53*	WG1312495

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

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Anthracene	ND		0.00600	1	07/19/2019 14:22	WG1313779
Acenaphthene	ND		0.00600	1	07/19/2019 14:22	WG1313779
Acenaphthylene	ND		0.00600	1	07/19/2019 14:22	WG1313779
Benzo(a)anthracene	ND		0.00600	1	07/19/2019 14:22	WG1313779
Benzo(a)pyrene	ND		0.00600	1	07/19/2019 14:22	WG1313779
Benzo(b)fluoranthene	ND		0.00600	1	07/19/2019 14:22	WG1313779
Benzo(g,h,i)perylene	ND		0.00600	1	07/19/2019 14:22	WG1313779
Benzo(k)fluoranthene	ND		0.00600	1	07/19/2019 14:22	WG1313779
Chrysene	ND		0.00600	1	07/19/2019 14:22	WG1313779
Dibenz(a,h)anthracene	ND		0.00600	1	07/19/2019 14:22	WG1313779
Fluoranthene	ND		0.00600	1	07/19/2019 14:22	WG1313779
Fluorene	ND		0.00600	1	07/19/2019 14:22	WG1313779
Indeno(1,2,3-cd)pyrene	ND		0.00600	1	07/19/2019 14:22	WG1313779
Naphthalene	ND		0.0200	1	07/19/2019 14:22	WG1313779
Phenanthrene	ND		0.00600	1	07/19/2019 14:22	WG1313779
Pyrene	ND		0.00600	1	07/19/2019 14:22	WG1313779
1-Methylnaphthalene	ND		0.0200	1	07/19/2019 14:22	WG1313779
2-Methylnaphthalene	ND		0.0200	1	07/19/2019 14:22	WG1313779
2-Chloronaphthalene	ND		0.0200	1	07/19/2019 14:22	WG1313779
(S) p-Terphenyl-d14	*108*		*23.0-120*		*07/19/2019 14:22*	WG1313779
(S) Nitrobenzene-d5	*120*		*14.0-149*		*07/19/2019 14:22*	WG1313779
(S) 2-Fluorobiphenyl	*103*		*34.0-125*		*07/19/2019 14:22*	WG1313779

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

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	ND		0.100	1	07/18/2019 16:34	WG1313592
(S) a,a,a-Trifluorotoluene(FID)	*92.7*		*77.0-120*		*07/18/2019 16:34*	WG1313592

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

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Benzene	ND		0.00100	1	07/18/2019 15:40	WG1313634
Toluene	0.0201		0.00500	1	07/18/2019 15:40	WG1313634
Ethylbenzene	0.00280		0.00250	1	07/18/2019 15:40	WG1313634
Total Xylenes	0.0570		0.00650	1	07/18/2019 15:40	WG1313634
(S) Toluene-d8	*105*		*75.0-131*		*07/18/2019 15:40*	WG1313634
(S) 4-Bromofluorobenzene	*102*		*67.0-138*		*07/18/2019 15:40*	WG1313634
(S) 1,2-Dichloroethane-d4	*102*		*70.0-130*		*07/18/2019 15:40*	WG1313634

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	202		40.0	10	07/19/2019 07:07	WG1312495
(S) o-Terphenyl	*85.8*		*18.0-148*		*07/19/2019 07:07*	WG1312495

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

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Anthracene	ND		0.00600	1	07/19/2019 14:44	WG1313779
Acenaphthene	ND		0.00600	1	07/19/2019 14:44	WG1313779
Acenaphthylene	ND		0.00600	1	07/19/2019 14:44	WG1313779
Benzo(a)anthracene	ND		0.00600	1	07/19/2019 14:44	WG1313779
Benzo(a)pyrene	ND		0.00600	1	07/19/2019 14:44	WG1313779
Benzo(b)fluoranthene	ND		0.00600	1	07/19/2019 14:44	WG1313779
Benzo(g,h,i)perylene	ND		0.00600	1	07/19/2019 14:44	WG1313779
Benzo(k)fluoranthene	ND		0.00600	1	07/19/2019 14:44	WG1313779
Chrysene	ND		0.00600	1	07/19/2019 14:44	WG1313779
Dibenz(a,h)anthracene	ND		0.00600	1	07/19/2019 14:44	WG1313779
Fluoranthene	ND		0.00600	1	07/19/2019 14:44	WG1313779
Fluorene	ND		0.00600	1	07/19/2019 14:44	WG1313779
Indeno(1,2,3-cd)pyrene	ND		0.00600	1	07/19/2019 14:44	WG1313779
Naphthalene	0.0211		0.0200	1	07/19/2019 14:44	WG1313779
Phenanthrene	0.00608		0.00600	1	07/19/2019 14:44	WG1313779
Pyrene	ND		0.00600	1	07/19/2019 14:44	WG1313779
1-Methylnaphthalene	ND		0.0200	1	07/19/2019 14:44	WG1313779
2-Methylnaphthalene	0.0216		0.0200	1	07/19/2019 14:44	WG1313779
2-Chloronaphthalene	ND		0.0200	1	07/19/2019 14:44	WG1313779
(S) p-Terphenyl-d14	*120*		*23.0-120*		*07/19/2019 14:44*	WG1313779
(S) Nitrobenzene-d5	*105*		*14.0-149*		*07/19/2019 14:44*	WG1313779
(S) 2-Fluorobiphenyl	*104*		*34.0-125*		*07/19/2019 14:44*	WG1313779

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

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	0.280		0.100	1	07/18/2019 16:58	WG1313592
(S) a,a,a-Trifluorotoluene(FID)	*88.6*		*77.0-120*		*07/18/2019 16:58*	WG1313592

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

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Benzene	ND		0.00100	1	07/18/2019 15:59	WG1313634
Toluene	0.00750		0.00500	1	07/18/2019 15:59	WG1313634
Ethylbenzene	ND		0.00250	1	07/18/2019 15:59	WG1313634
Total Xylenes	0.0234		0.00650	1	07/18/2019 15:59	WG1313634
(S) Toluene-d8	*111*		*75.0-131*		*07/18/2019 15:59*	WG1313634
(S) 4-Bromofluorobenzene	*104*		*67.0-138*		*07/18/2019 15:59*	WG1313634
(S) 1,2-Dichloroethane-d4	*98.7*		*70.0-130*		*07/18/2019 15:59*	WG1313634

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	118		80.0	20	07/19/2019 08:36	WG1312495
(S) o-Terphenyl	*79.9*	J7	*18.0-148*		*07/19/2019 08:36*	WG1312495

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

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Anthracene	ND		0.00600	1	07/19/2019 15:05	WG1313779
Acenaphthene	ND		0.00600	1	07/19/2019 15:05	WG1313779
Acenaphthylene	ND		0.00600	1	07/19/2019 15:05	WG1313779
Benzo(a)anthracene	ND		0.00600	1	07/19/2019 15:05	WG1313779
Benzo(a)pyrene	ND		0.00600	1	07/19/2019 15:05	WG1313779
Benzo(b)fluoranthene	ND		0.00600	1	07/19/2019 15:05	WG1313779
Benzo(g,h,i)perylene	ND		0.00600	1	07/19/2019 15:05	WG1313779
Benzo(k)fluoranthene	ND		0.00600	1	07/19/2019 15:05	WG1313779
Chrysene	ND		0.00600	1	07/19/2019 15:05	WG1313779
Dibenz(a,h)anthracene	ND		0.00600	1	07/19/2019 15:05	WG1313779
Fluoranthene	ND		0.00600	1	07/19/2019 15:05	WG1313779
Fluorene	ND		0.00600	1	07/19/2019 15:05	WG1313779
Indeno(1,2,3-cd)pyrene	ND		0.00600	1	07/19/2019 15:05	WG1313779
Naphthalene	ND		0.0200	1	07/19/2019 15:05	WG1313779
Phenanthrene	ND		0.00600	1	07/19/2019 15:05	WG1313779
Pyrene	ND		0.00600	1	07/19/2019 15:05	WG1313779
1-Methylnaphthalene	ND		0.0200	1	07/19/2019 15:05	WG1313779
2-Methylnaphthalene	0.0290		0.0200	1	07/19/2019 15:05	WG1313779
2-Chloronaphthalene	ND		0.0200	1	07/19/2019 15:05	WG1313779
(S) p-Terphenyl-d14	*107*		*23.0-120*		*07/19/2019 15:05*	WG1313779
(S) Nitrobenzene-d5	*116*		*14.0-149*		*07/19/2019 15:05*	WG1313779
(S) 2-Fluorobiphenyl	*93.6*		*34.0-125*		*07/19/2019 15:05*	WG1313779

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

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	0.137		0.100	1	07/18/2019 17:21	WG1313592
(S) a,a,a-Trifluorotoluene(FID)	*89.5*		*77.0-120*		*07/18/2019 17:21*	WG1313592

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

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Benzene	ND		0.00100	1	07/18/2019 16:17	WG1313634
Toluene	ND		0.00500	1	07/18/2019 16:17	WG1313634
Ethylbenzene	ND		0.00250	1	07/18/2019 16:17	WG1313634
Total Xylenes	0.00860		0.00650	1	07/18/2019 16:17	WG1313634
(S) Toluene-d8	*106*		*75.0-131*		*07/18/2019 16:17*	WG1313634
(S) 4-Bromofluorobenzene	*110*		*67.0-138*		*07/18/2019 16:17*	WG1313634
(S) 1,2-Dichloroethane-d4	*101*		*70.0-130*		*07/18/2019 16:17*	WG1313634

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	239		80.0	20	07/19/2019 08:52	WG1312495
(S) o-Terphenyl	*111*	J7	*18.0-148*		*07/19/2019 08:52*	WG1312495

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

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Anthracene	ND		0.00600	1	07/19/2019 15:26	WG1313779
Acenaphthene	ND		0.00600	1	07/19/2019 15:26	WG1313779
Acenaphthylene	ND		0.00600	1	07/19/2019 15:26	WG1313779
Benzo(a)anthracene	ND		0.00600	1	07/19/2019 15:26	WG1313779
Benzo(a)pyrene	ND		0.00600	1	07/19/2019 15:26	WG1313779
Benzo(b)fluoranthene	ND		0.00600	1	07/19/2019 15:26	WG1313779
Benzo(g,h,i)perylene	ND		0.00600	1	07/19/2019 15:26	WG1313779
Benzo(k)fluoranthene	ND		0.00600	1	07/19/2019 15:26	WG1313779
Chrysene	ND		0.00600	1	07/19/2019 15:26	WG1313779
Dibenz(a,h)anthracene	ND		0.00600	1	07/19/2019 15:26	WG1313779
Fluoranthene	ND		0.00600	1	07/19/2019 15:26	WG1313779
Fluorene	ND		0.00600	1	07/19/2019 15:26	WG1313779
Indeno(1,2,3-cd)pyrene	ND		0.00600	1	07/19/2019 15:26	WG1313779
Naphthalene	ND		0.0200	1	07/19/2019 15:26	WG1313779
Phenanthrene	ND		0.00600	1	07/19/2019 15:26	WG1313779
Pyrene	ND		0.00600	1	07/19/2019 15:26	WG1313779
1-Methylnaphthalene	ND		0.0200	1	07/19/2019 15:26	WG1313779
2-Methylnaphthalene	0.0254		0.0200	1	07/19/2019 15:26	WG1313779
2-Chloronaphthalene	ND		0.0200	1	07/19/2019 15:26	WG1313779
(S) p-Terphenyl-d14	*109*		*23.0-120*		*07/19/2019 15:26*	WG1313779
(S) Nitrobenzene-d5	*138*		*14.0-149*		*07/19/2019 15:26*	WG1313779
(S) 2-Fluorobiphenyl	*108*		*34.0-125*		*07/19/2019 15:26*	WG1313779

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

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	0.349		0.100	1	07/18/2019 17:45	WG1313592
(S) a,a,a-Trifluorotoluene(FID)	*91.5*		*77.0-120*		*07/18/2019 17:45*	WG1313592

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

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Benzene	ND		0.00100	1	07/18/2019 16:38	WG1313634
Toluene	0.0102		0.00500	1	07/18/2019 16:38	WG1313634
Ethylbenzene	0.00265		0.00250	1	07/18/2019 16:38	WG1313634
Total Xylenes	0.0335		0.00650	1	07/18/2019 16:38	WG1313634
(S) Toluene-d8	*109*		*75.0-131*		*07/18/2019 16:38*	WG1313634
(S) 4-Bromofluorobenzene	*104*		*67.0-138*		*07/18/2019 16:38*	WG1313634
(S) 1,2-Dichloroethane-d4	*102*		*70.0-130*		*07/18/2019 16:38*	WG1313634

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	151		40.0	10	07/19/2019 07:37	WG1312495
(S) o-Terphenyl	*79.7*		*18.0-148*		*07/19/2019 07:37*	WG1312495

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

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Anthracene	ND		0.00600	1	07/19/2019 15:47	WG1313779
Acenaphthene	ND		0.00600	1	07/19/2019 15:47	WG1313779
Acenaphthylene	ND		0.00600	1	07/19/2019 15:47	WG1313779
Benzo(a)anthracene	ND		0.00600	1	07/19/2019 15:47	WG1313779
Benzo(a)pyrene	ND		0.00600	1	07/19/2019 15:47	WG1313779
Benzo(b)fluoranthene	ND		0.00600	1	07/19/2019 15:47	WG1313779
Benzo(g,h,i)perylene	ND		0.00600	1	07/19/2019 15:47	WG1313779
Benzo(k)fluoranthene	ND		0.00600	1	07/19/2019 15:47	WG1313779
Chrysene	ND		0.00600	1	07/19/2019 15:47	WG1313779
Dibenz(a,h)anthracene	ND		0.00600	1	07/19/2019 15:47	WG1313779
Fluoranthene	ND		0.00600	1	07/19/2019 15:47	WG1313779
Fluorene	ND		0.00600	1	07/19/2019 15:47	WG1313779
Indeno(1,2,3-cd)pyrene	ND		0.00600	1	07/19/2019 15:47	WG1313779
Naphthalene	ND		0.0200	1	07/19/2019 15:47	WG1313779
Phenanthrene	ND		0.00600	1	07/19/2019 15:47	WG1313779
Pyrene	ND		0.00600	1	07/19/2019 15:47	WG1313779
1-Methylnaphthalene	ND		0.0200	1	07/19/2019 15:47	WG1313779
2-Methylnaphthalene	0.0256		0.0200	1	07/19/2019 15:47	WG1313779
2-Chloronaphthalene	ND		0.0200	1	07/19/2019 15:47	WG1313779
(S) p-Terphenyl-d14	*94.8*		*23.0-120*		*07/19/2019 15:47*	WG1313779
(S) Nitrobenzene-d5	*111*		*14.0-149*		*07/19/2019 15:47*	WG1313779
(S) 2-Fluorobiphenyl	*95.8*		*34.0-125*		*07/19/2019 15:47*	WG1313779

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

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	0.209		0.100	1	07/18/2019 18:09	WG1313592
(S) a,a,a-Trifluorotoluene(FID)	*94.9*		*77.0-120*		*07/18/2019 18:09*	WG1313592

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

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Benzene	ND		0.00100	1	07/18/2019 16:57	WG1313634
Toluene	0.00729		0.00500	1	07/18/2019 16:57	WG1313634
Ethylbenzene	ND		0.00250	1	07/18/2019 16:57	WG1313634
Total Xylenes	0.0291		0.00650	1	07/18/2019 16:57	WG1313634
(S) Toluene-d8	*108*		*75.0-131*		*07/18/2019 16:57*	WG1313634
(S) 4-Bromofluorobenzene	*110*		*67.0-138*		*07/18/2019 16:57*	WG1313634
(S) 1,2-Dichloroethane-d4	*102*		*70.0-130*		*07/18/2019 16:57*	WG1313634

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	90.3		40.0	10	07/19/2019 07:22	WG1312495
(S) o-Terphenyl	*79.8*		*18.0-148*		*07/19/2019 07:22*	WG1312495

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

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Anthracene	ND		0.00600	1	07/19/2019 16:08	WG1313779
Acenaphthene	ND		0.00600	1	07/19/2019 16:08	WG1313779
Acenaphthylene	ND		0.00600	1	07/19/2019 16:08	WG1313779
Benzo(a)anthracene	ND		0.00600	1	07/19/2019 16:08	WG1313779
Benzo(a)pyrene	ND		0.00600	1	07/19/2019 16:08	WG1313779
Benzo(b)fluoranthene	ND		0.00600	1	07/19/2019 16:08	WG1313779
Benzo(g,h,i)perylene	ND		0.00600	1	07/19/2019 16:08	WG1313779
Benzo(k)fluoranthene	ND		0.00600	1	07/19/2019 16:08	WG1313779
Chrysene	ND		0.00600	1	07/19/2019 16:08	WG1313779
Dibenz(a,h)anthracene	ND		0.00600	1	07/19/2019 16:08	WG1313779
Fluoranthene	ND		0.00600	1	07/19/2019 16:08	WG1313779
Fluorene	ND		0.00600	1	07/19/2019 16:08	WG1313779
Indeno(1,2,3-cd)pyrene	ND		0.00600	1	07/19/2019 16:08	WG1313779
Naphthalene	ND		0.0200	1	07/19/2019 16:08	WG1313779
Phenanthrene	ND		0.00600	1	07/19/2019 16:08	WG1313779
Pyrene	ND		0.00600	1	07/19/2019 16:08	WG1313779
1-Methylnaphthalene	ND		0.0200	1	07/19/2019 16:08	WG1313779
2-Methylnaphthalene	ND		0.0200	1	07/19/2019 16:08	WG1313779
2-Chloronaphthalene	ND		0.0200	1	07/19/2019 16:08	WG1313779
(S) p-Terphenyl-d14	*105*		*23.0-120*		*07/19/2019 16:08*	WG1313779
(S) Nitrobenzene-d5	*94.8*		*14.0-149*		*07/19/2019 16:08*	WG1313779
(S) 2-Fluorobiphenyl	*93.1*		*34.0-125*		*07/19/2019 16:08*	WG1313779

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

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	ND		0.100	1	07/18/2019 18:33	WG1313592
(S) a,a,a-Trifluorotoluene(FID)	*92.5*		*77.0-120*		*07/18/2019 18:33*	WG1313592

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

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Benzene	ND		0.00100	1	07/18/2019 17:15	WG1313634
Toluene	ND		0.00500	1	07/18/2019 17:15	WG1313634
Ethylbenzene	ND		0.00250	1	07/18/2019 17:15	WG1313634
Total Xylenes	ND		0.00650	1	07/18/2019 17:15	WG1313634
(S) Toluene-d8	*105*		*75.0-131*		*07/18/2019 17:15*	WG1313634
(S) 4-Bromofluorobenzene	*104*		*67.0-138*		*07/18/2019 17:15*	WG1313634
(S) 1,2-Dichloroethane-d4	*101*		*70.0-130*		*07/18/2019 17:15*	WG1313634

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	155		80.0	20	07/19/2019 09:22	WG1312495
(S) o-Terphenyl	*92.5*	J7	*18.0-148*		*07/19/2019 09:22*	WG1312495

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

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Anthracene	ND		0.00600	1	07/19/2019 16:29	WG1313779
Acenaphthene	ND		0.00600	1	07/19/2019 16:29	WG1313779
Acenaphthylene	ND		0.00600	1	07/19/2019 16:29	WG1313779
Benzo(a)anthracene	ND		0.00600	1	07/19/2019 16:29	WG1313779
Benzo(a)pyrene	ND		0.00600	1	07/19/2019 16:29	WG1313779
Benzo(b)fluoranthene	ND		0.00600	1	07/19/2019 16:29	WG1313779
Benzo(g,h,i)perylene	ND		0.00600	1	07/19/2019 16:29	WG1313779
Benzo(k)fluoranthene	ND		0.00600	1	07/19/2019 16:29	WG1313779
Chrysene	ND		0.00600	1	07/19/2019 16:29	WG1313779
Dibenz(a,h)anthracene	ND		0.00600	1	07/19/2019 16:29	WG1313779
Fluoranthene	ND		0.00600	1	07/19/2019 16:29	WG1313779
Fluorene	ND		0.00600	1	07/19/2019 16:29	WG1313779
Indeno(1,2,3-cd)pyrene	ND		0.00600	1	07/19/2019 16:29	WG1313779
Naphthalene	ND		0.0200	1	07/19/2019 16:29	WG1313779
Phenanthrene	ND		0.00600	1	07/19/2019 16:29	WG1313779
Pyrene	ND		0.00600	1	07/19/2019 16:29	WG1313779
1-Methylnaphthalene	ND		0.0200	1	07/19/2019 16:29	WG1313779
2-Methylnaphthalene	ND		0.0200	1	07/19/2019 16:29	WG1313779
2-Chloronaphthalene	ND		0.0200	1	07/19/2019 16:29	WG1313779
(S) p-Terphenyl-d14	*97.9*		*23.0-120*		*07/19/2019 16:29*	WG1313779
(S) Nitrobenzene-d5	*115*		*14.0-149*		*07/19/2019 16:29*	WG1313779
(S) 2-Fluorobiphenyl	*94.9*		*34.0-125*		*07/19/2019 16:29*	WG1313779

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

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	0.708		0.100	1	07/18/2019 18:57	WG1313592
(S) a,a,a-Trifluorotoluene(FID)	*90.9*		*77.0-120*		*07/18/2019 18:57*	WG1313592

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

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Benzene	ND		0.00100	1	07/18/2019 17:33	WG1313634
Toluene	ND		0.00500	1	07/18/2019 17:33	WG1313634
Ethylbenzene	0.00316		0.00250	1	07/18/2019 17:33	WG1313634
Total Xylenes	0.0311		0.00650	1	07/18/2019 17:33	WG1313634
(S) Toluene-d8	*108*		*75.0-131*		*07/18/2019 17:33*	WG1313634
(S) 4-Bromofluorobenzene	*106*		*67.0-138*		*07/18/2019 17:33*	WG1313634
(S) 1,2-Dichloroethane-d4	*100*		*70.0-130*		*07/18/2019 17:33*	WG1313634

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	258		80.0	20	07/19/2019 09:08	WG1312495
(S) o-Terphenyl	*84.0*	J7	*18.0-148*		*07/19/2019 09:08*	WG1312495

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

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Anthracene	ND		0.00600	1	07/19/2019 16:50	WG1313779
Acenaphthene	ND		0.00600	1	07/19/2019 16:50	WG1313779
Acenaphthylene	ND		0.00600	1	07/19/2019 16:50	WG1313779
Benzo(a)anthracene	ND		0.00600	1	07/19/2019 16:50	WG1313779
Benzo(a)pyrene	ND		0.00600	1	07/19/2019 16:50	WG1313779
Benzo(b)fluoranthene	ND		0.00600	1	07/19/2019 16:50	WG1313779
Benzo(g,h,i)perylene	ND		0.00600	1	07/19/2019 16:50	WG1313779
Benzo(k)fluoranthene	ND		0.00600	1	07/19/2019 16:50	WG1313779
Chrysene	ND		0.00600	1	07/19/2019 16:50	WG1313779
Dibenz(a,h)anthracene	ND		0.00600	1	07/19/2019 16:50	WG1313779
Fluoranthene	ND		0.00600	1	07/19/2019 16:50	WG1313779
Fluorene	0.0110		0.00600	1	07/19/2019 16:50	WG1313779
Indeno(1,2,3-cd)pyrene	ND		0.00600	1	07/19/2019 16:50	WG1313779
Naphthalene	ND		0.0200	1	07/19/2019 16:50	WG1313779
Phenanthrene	0.00638		0.00600	1	07/19/2019 16:50	WG1313779
Pyrene	ND		0.00600	1	07/19/2019 16:50	WG1313779
1-Methylnaphthalene	ND		0.0200	1	07/19/2019 16:50	WG1313779
2-Methylnaphthalene	0.0453		0.0200	1	07/19/2019 16:50	WG1313779
2-Chloronaphthalene	ND		0.0200	1	07/19/2019 16:50	WG1313779
(S) p-Terphenyl-d14	*109*		*23.0-120*		*07/19/2019 16:50*	WG1313779
(S) Nitrobenzene-d5	*107*		*14.0-149*		*07/19/2019 16:50*	WG1313779
(S) 2-Fluorobiphenyl	*99.4*		*34.0-125*		*07/19/2019 16:50*	WG1313779

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

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	0.420		0.100	1	07/18/2019 19:21	WG1313592
(S) a,a,a-Trifluorotoluene(FID)	*88.7*		*77.0-120*		*07/18/2019 19:21*	WG1313592

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

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Benzene	ND		0.00100	1	07/18/2019 17:52	WG1313634
Toluene	ND		0.00500	1	07/18/2019 17:52	WG1313634
Ethylbenzene	0.00384		0.00250	1	07/18/2019 17:52	WG1313634
Total Xylenes	0.0331		0.00650	1	07/18/2019 17:52	WG1313634
(S) Toluene-d8	*108*		*75.0-131*		*07/18/2019 17:52*	WG1313634
(S) 4-Bromofluorobenzene	*105*		*67.0-138*		*07/18/2019 17:52*	WG1313634
(S) 1,2-Dichloroethane-d4	*102*		*70.0-130*		*07/18/2019 17:52*	WG1313634

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	251		40.0	10	07/19/2019 07:52	WG1312495
(S) o-Terphenyl	*83.7*		*18.0-148*		*07/19/2019 07:52*	WG1312495

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

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Anthracene	ND		0.00600	1	07/19/2019 17:11	WG1313779
Acenaphthene	ND		0.00600	1	07/19/2019 17:11	WG1313779
Acenaphthylene	ND		0.00600	1	07/19/2019 17:11	WG1313779
Benzo(a)anthracene	ND		0.00600	1	07/19/2019 17:11	WG1313779
Benzo(a)pyrene	ND		0.00600	1	07/19/2019 17:11	WG1313779
Benzo(b)fluoranthene	ND		0.00600	1	07/19/2019 17:11	WG1313779
Benzo(g,h,i)perylene	ND		0.00600	1	07/19/2019 17:11	WG1313779
Benzo(k)fluoranthene	ND		0.00600	1	07/19/2019 17:11	WG1313779
Chrysene	ND		0.00600	1	07/19/2019 17:11	WG1313779
Dibenz(a,h)anthracene	ND		0.00600	1	07/19/2019 17:11	WG1313779
Fluoranthene	ND		0.00600	1	07/19/2019 17:11	WG1313779
Fluorene	ND		0.00600	1	07/19/2019 17:11	WG1313779
Indeno(1,2,3-cd)pyrene	ND		0.00600	1	07/19/2019 17:11	WG1313779
Naphthalene	ND		0.0200	1	07/19/2019 17:11	WG1313779
Phenanthrene	ND		0.00600	1	07/19/2019 17:11	WG1313779
Pyrene	ND		0.00600	1	07/19/2019 17:11	WG1313779
1-Methylnaphthalene	ND		0.0200	1	07/19/2019 17:11	WG1313779
2-Methylnaphthalene	0.0389		0.0200	1	07/19/2019 17:11	WG1313779
2-Chloronaphthalene	ND		0.0200	1	07/19/2019 17:11	WG1313779
(S) p-Terphenyl-d14	*108*		*23.0-120*		*07/19/2019 17:11*	WG1313779
(S) Nitrobenzene-d5	*112*		*14.0-149*		*07/19/2019 17:11*	WG1313779
(S) 2-Fluorobiphenyl	*103*		*34.0-125*		*07/19/2019 17:11*	WG1313779

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

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	0.783		0.100	1	07/18/2019 19:45	WG1313592
(S) a,a,a-Trifluorotoluene(FID)	*84.2*		*77.0-120*		*07/18/2019 19:45*	WG1313592

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

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Benzene	ND		0.00100	1	07/18/2019 18:10	WG1313634
Toluene	0.00939		0.00500	1	07/18/2019 18:10	WG1313634
Ethylbenzene	0.00309		0.00250	1	07/18/2019 18:10	WG1313634
Total Xylenes	0.0534		0.00650	1	07/18/2019 18:10	WG1313634
(S) Toluene-d8	*104*		*75.0-131*		*07/18/2019 18:10*	WG1313634
(S) 4-Bromofluorobenzene	*102*		*67.0-138*		*07/18/2019 18:10*	WG1313634
(S) 1,2-Dichloroethane-d4	*101*		*70.0-130*		*07/18/2019 18:10*	WG1313634

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	258		80.0	20	07/19/2019 10:08	WG1312495
(S) o-Terphenyl	*0.000*	J7	*18.0-148*		*07/19/2019 10:08*	WG1312495

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

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Anthracene	ND		0.00600	1	07/19/2019 17:32	WG1313779
Acenaphthene	ND		0.00600	1	07/19/2019 17:32	WG1313779
Acenaphthylene	ND		0.00600	1	07/19/2019 17:32	WG1313779
Benzo(a)anthracene	ND		0.00600	1	07/19/2019 17:32	WG1313779
Benzo(a)pyrene	ND		0.00600	1	07/19/2019 17:32	WG1313779
Benzo(b)fluoranthene	ND		0.00600	1	07/19/2019 17:32	WG1313779
Benzo(g,h,i)perylene	ND		0.00600	1	07/19/2019 17:32	WG1313779
Benzo(k)fluoranthene	ND		0.00600	1	07/19/2019 17:32	WG1313779
Chrysene	ND		0.00600	1	07/19/2019 17:32	WG1313779
Dibenz(a,h)anthracene	ND		0.00600	1	07/19/2019 17:32	WG1313779
Fluoranthene	ND		0.00600	1	07/19/2019 17:32	WG1313779
Fluorene	ND		0.00600	1	07/19/2019 17:32	WG1313779
Indeno(1,2,3-cd)pyrene	ND		0.00600	1	07/19/2019 17:32	WG1313779
Naphthalene	ND		0.0200	1	07/19/2019 17:32	WG1313779
Phenanthrene	ND		0.00600	1	07/19/2019 17:32	WG1313779
Pyrene	0.00819		0.00600	1	07/19/2019 17:32	WG1313779
1-Methylnaphthalene	ND		0.0200	1	07/19/2019 17:32	WG1313779
2-Methylnaphthalene	0.0409		0.0200	1	07/19/2019 17:32	WG1313779
2-Chloronaphthalene	ND		0.0200	1	07/19/2019 17:32	WG1313779
(S) p-Terphenyl-d14	*99.9*		*23.0-120*		*07/19/2019 17:32*	WG1313779
(S) Nitrobenzene-d5	*83.7*		*14.0-149*		*07/19/2019 17:32*	WG1313779
(S) 2-Fluorobiphenyl	*87.6*		*34.0-125*		*07/19/2019 17:32*	WG1313779

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

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	0.208		0.100	1	07/18/2019 20:08	WG1313592
(S) a,a,a-Trifluorotoluene(FID)	*91.1*		*77.0-120*		*07/18/2019 20:08*	WG1313592

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

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Benzene	ND		0.00100	1	07/18/2019 18:29	WG1313634
Toluene	0.00844		0.00500	1	07/18/2019 18:29	WG1313634
Ethylbenzene	0.00738		0.00250	1	07/18/2019 18:29	WG1313634
Total Xylenes	0.0355		0.00650	1	07/18/2019 18:29	WG1313634
(S) Toluene-d8	*112*		*75.0-131*		*07/18/2019 18:29*	WG1313634
(S) 4-Bromofluorobenzene	*102*		*67.0-138*		*07/18/2019 18:29*	WG1313634
(S) 1,2-Dichloroethane-d4	*104*		*70.0-130*		*07/18/2019 18:29*	WG1313634

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	144		80.0	20	07/19/2019 10:24	WG1312495
(S) o-Terphenyl	*92.2*	J7	*18.0-148*		*07/19/2019 10:24*	WG1312495

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

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Anthracene	ND		0.00600	1	07/19/2019 01:25	WG1313780
Acenaphthene	ND		0.00600	1	07/19/2019 01:25	WG1313780
Acenaphthylene	ND		0.00600	1	07/19/2019 01:25	WG1313780
Benzo(a)anthracene	ND		0.00600	1	07/19/2019 01:25	WG1313780
Benzo(a)pyrene	ND		0.00600	1	07/19/2019 01:25	WG1313780
Benzo(b)fluoranthene	ND		0.00600	1	07/19/2019 01:25	WG1313780
Benzo(g,h,i)perylene	ND		0.00600	1	07/19/2019 01:25	WG1313780
Benzo(k)fluoranthene	ND		0.00600	1	07/19/2019 01:25	WG1313780
Chrysene	ND		0.00600	1	07/19/2019 01:25	WG1313780
Dibenz(a,h)anthracene	ND		0.00600	1	07/19/2019 01:25	WG1313780
Fluoranthene	ND		0.00600	1	07/19/2019 01:25	WG1313780
Fluorene	ND		0.00600	1	07/19/2019 01:25	WG1313780
Indeno(1,2,3-cd)pyrene	ND		0.00600	1	07/19/2019 01:25	WG1313780
Naphthalene	ND		0.0200	1	07/19/2019 01:25	WG1313780
Phenanthrene	ND		0.00600	1	07/19/2019 01:25	WG1313780
Pyrene	ND		0.00600	1	07/19/2019 01:25	WG1313780
1-Methylnaphthalene	ND		0.0200	1	07/19/2019 01:25	WG1313780
2-Methylnaphthalene	ND		0.0200	1	07/19/2019 01:25	WG1313780
2-Chloronaphthalene	ND		0.0200	1	07/19/2019 01:25	WG1313780
(S) p-Terphenyl-d14	*84.0*		*23.0-120*		*07/19/2019 01:25*	WG1313780
(S) Nitrobenzene-d5	*53.8*		*14.0-149*		*07/19/2019 01:25*	WG1313780
(S) 2-Fluorobiphenyl	*70.8*		*34.0-125*		*07/19/2019 01:25*	WG1313780

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

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	0.452		0.100	1	07/18/2019 14:29	WG1313713
(S) a,a,a-Trifluorotoluene(FID)	*87.7*		*77.0-120*		*07/18/2019 14:29*	WG1313713

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

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Benzene	ND	J3	0.00100	1	07/18/2019 18:48	WG1313634
Toluene	0.00698		0.00500	1	07/18/2019 18:48	WG1313634
Ethylbenzene	0.00597	J3	0.00250	1	07/18/2019 18:48	WG1313634
Total Xylenes	0.0432		0.00650	1	07/18/2019 18:48	WG1313634
(S) Toluene-d8	*109*		*75.0-131*		*07/18/2019 18:48*	WG1313634
(S) 4-Bromofluorobenzene	*104*		*67.0-138*		*07/18/2019 18:48*	WG1313634
(S) 1,2-Dichloroethane-d4	*102*		*70.0-130*		*07/18/2019 18:48*	WG1313634

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	121		40.0	10	07/19/2019 08:07	WG1312495
(S) o-Terphenyl	*82.3*		*18.0-148*		*07/19/2019 08:07*	WG1312495

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

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Anthracene	ND		0.00600	1	07/19/2019 01:47	WG1313780
Acenaphthene	ND		0.00600	1	07/19/2019 01:47	WG1313780
Acenaphthylene	ND		0.00600	1	07/19/2019 01:47	WG1313780
Benzo(a)anthracene	ND		0.00600	1	07/19/2019 01:47	WG1313780
Benzo(a)pyrene	ND		0.00600	1	07/19/2019 01:47	WG1313780
Benzo(b)fluoranthene	ND		0.00600	1	07/19/2019 01:47	WG1313780
Benzo(g,h,i)perylene	ND		0.00600	1	07/19/2019 01:47	WG1313780
Benzo(k)fluoranthene	ND		0.00600	1	07/19/2019 01:47	WG1313780
Chrysene	ND		0.00600	1	07/19/2019 01:47	WG1313780
Dibenz(a,h)anthracene	ND		0.00600	1	07/19/2019 01:47	WG1313780
Fluoranthene	ND		0.00600	1	07/19/2019 01:47	WG1313780
Fluorene	ND		0.00600	1	07/19/2019 01:47	WG1313780
Indeno(1,2,3-cd)pyrene	ND		0.00600	1	07/19/2019 01:47	WG1313780
Naphthalene	ND		0.0200	1	07/19/2019 01:47	WG1313780
Phenanthrene	ND		0.00600	1	07/19/2019 01:47	WG1313780
Pyrene	ND		0.00600	1	07/19/2019 01:47	WG1313780
1-Methylnaphthalene	ND		0.0200	1	07/19/2019 01:47	WG1313780
2-Methylnaphthalene	ND		0.0200	1	07/19/2019 01:47	WG1313780
2-Chloronaphthalene	ND		0.0200	1	07/19/2019 01:47	WG1313780
(S) p-Terphenyl-d14	*93.1*		*23.0-120*		*07/19/2019 01:47*	WG1313780
(S) Nitrobenzene-d5	*58.4*		*14.0-149*		*07/19/2019 01:47*	WG1313780
(S) 2-Fluorobiphenyl	*73.8*		*34.0-125*		*07/19/2019 01:47*	WG1313780

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

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	0.290		0.100	1	07/18/2019 14:50	WG1313713
(S) a,a,a-Trifluorotoluene(FID)	*92.8*		*77.0-120*		*07/18/2019 14:50*	WG1313713

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

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Benzene	ND		0.00100	1	07/18/2019 16:25	WG1313637
Toluene	ND		0.00500	1	07/18/2019 16:25	WG1313637
Ethylbenzene	ND		0.00250	1	07/18/2019 16:25	WG1313637
Total Xylenes	ND		0.00650	1	07/18/2019 16:25	WG1313637
(S) Toluene-d8	*105*		*75.0-131*		*07/18/2019 16:25*	WG1313637
(S) 4-Bromofluorobenzene	*95.7*		*67.0-138*		*07/18/2019 16:25*	WG1313637
(S) 1,2-Dichloroethane-d4	*98.4*		*70.0-130*		*07/18/2019 16:25*	WG1313637

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	134		40.0	10	07/19/2019 08:22	WG1312495
(S) o-Terphenyl	*86.0*		*18.0-148*		*07/19/2019 08:22*	WG1312495

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

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Anthracene	ND		0.00600	1	07/19/2019 02:09	WG1313780
Acenaphthene	ND		0.00600	1	07/19/2019 02:09	WG1313780
Acenaphthylene	ND		0.00600	1	07/19/2019 02:09	WG1313780
Benzo(a)anthracene	ND		0.00600	1	07/19/2019 02:09	WG1313780
Benzo(a)pyrene	ND		0.00600	1	07/19/2019 02:09	WG1313780
Benzo(b)fluoranthene	ND		0.00600	1	07/19/2019 02:09	WG1313780
Benzo(g,h,i)perylene	ND		0.00600	1	07/19/2019 02:09	WG1313780
Benzo(k)fluoranthene	ND		0.00600	1	07/19/2019 02:09	WG1313780
Chrysene	ND		0.00600	1	07/19/2019 02:09	WG1313780
Dibenz(a,h)anthracene	ND		0.00600	1	07/19/2019 02:09	WG1313780
Fluoranthene	ND		0.00600	1	07/19/2019 02:09	WG1313780
Fluorene	ND		0.00600	1	07/19/2019 02:09	WG1313780
Indeno(1,2,3-cd)pyrene	ND		0.00600	1	07/19/2019 02:09	WG1313780
Naphthalene	ND		0.0200	1	07/19/2019 02:09	WG1313780
Phenanthrene	ND		0.00600	1	07/19/2019 02:09	WG1313780
Pyrene	ND		0.00600	1	07/19/2019 02:09	WG1313780
1-Methylnaphthalene	ND		0.0200	1	07/19/2019 02:09	WG1313780
2-Methylnaphthalene	ND		0.0200	1	07/19/2019 02:09	WG1313780
2-Chloronaphthalene	ND		0.0200	1	07/19/2019 02:09	WG1313780
(S) p-Terphenyl-d14	*96.5*		*23.0-120*		*07/19/2019 02:09*	WG1313780
(S) Nitrobenzene-d5	*62.1*		*14.0-149*		*07/19/2019 02:09*	WG1313780
(S) 2-Fluorobiphenyl	*74.3*		*34.0-125*		*07/19/2019 02:09*	WG1313780

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

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	0.401		0.100	1	07/18/2019 15:11	WG1313713
(S) a,a,a-Trifluorotoluene(FID)	*87.6*		*77.0-120*		*07/18/2019 15:11*	WG1313713

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

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Benzene	ND		0.00100	1	07/18/2019 16:46	WG1313637
Toluene	ND		0.00500	1	07/18/2019 16:46	WG1313637
Ethylbenzene	ND		0.00250	1	07/18/2019 16:46	WG1313637
Total Xylenes	0.0330		0.00650	1	07/18/2019 16:46	WG1313637
(S) Toluene-d8	*106*		*75.0-131*		*07/18/2019 16:46*	WG1313637
(S) 4-Bromofluorobenzene	*97.4*		*67.0-138*		*07/18/2019 16:46*	WG1313637
(S) 1,2-Dichloroethane-d4	*98.7*		*70.0-130*		*07/18/2019 16:46*	WG1313637

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	241		80.0	20	07/19/2019 09:52	WG1312495
(S) o-Terphenyl	*103*	J7	*18.0-148*		*07/19/2019 09:52*	WG1312495

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

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Anthracene	ND		0.00600	1	07/19/2019 02:31	WG1313780
Acenaphthene	ND		0.00600	1	07/19/2019 02:31	WG1313780
Acenaphthylene	ND		0.00600	1	07/19/2019 02:31	WG1313780
Benzo(a)anthracene	ND		0.00600	1	07/19/2019 02:31	WG1313780
Benzo(a)pyrene	ND		0.00600	1	07/19/2019 02:31	WG1313780
Benzo(b)fluoranthene	ND		0.00600	1	07/19/2019 02:31	WG1313780
Benzo(g,h,i)perylene	ND		0.00600	1	07/19/2019 02:31	WG1313780
Benzo(k)fluoranthene	ND		0.00600	1	07/19/2019 02:31	WG1313780
Chrysene	ND		0.00600	1	07/19/2019 02:31	WG1313780
Dibenz(a,h)anthracene	ND		0.00600	1	07/19/2019 02:31	WG1313780
Fluoranthene	ND		0.00600	1	07/19/2019 02:31	WG1313780
Fluorene	ND		0.00600	1	07/19/2019 02:31	WG1313780
Indeno(1,2,3-cd)pyrene	ND		0.00600	1	07/19/2019 02:31	WG1313780
Naphthalene	ND		0.0200	1	07/19/2019 02:31	WG1313780
Phenanthrene	ND		0.00600	1	07/19/2019 02:31	WG1313780
Pyrene	ND		0.00600	1	07/19/2019 02:31	WG1313780
1-Methylnaphthalene	ND		0.0200	1	07/19/2019 02:31	WG1313780
2-Methylnaphthalene	0.0214		0.0200	1	07/19/2019 02:31	WG1313780
2-Chloronaphthalene	ND		0.0200	1	07/19/2019 02:31	WG1313780
(S) p-Terphenyl-d14	*94.6*		*23.0-120*		*07/19/2019 02:31*	WG1313780
(S) Nitrobenzene-d5	*80.1*		*14.0-149*		*07/19/2019 02:31*	WG1313780
(S) 2-Fluorobiphenyl	*86.4*		*34.0-125*		*07/19/2019 02:31*	WG1313780

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

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	0.333		0.100	1	07/18/2019 15:31	WG1313713
(S) a,a,a-Trifluorotoluene(FID)	*93.0*		*77.0-120*		*07/18/2019 15:31*	WG1313713

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

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Benzene	ND		0.00100	1	07/18/2019 17:08	WG1313637
Toluene	ND		0.00500	1	07/18/2019 17:08	WG1313637
Ethylbenzene	ND		0.00250	1	07/18/2019 17:08	WG1313637
Total Xylenes	0.0221		0.00650	1	07/18/2019 17:08	WG1313637
(S) Toluene-d8	*106*		*75.0-131*		*07/18/2019 17:08*	WG1313637
(S) 4-Bromofluorobenzene	*97.8*		*67.0-138*		*07/18/2019 17:08*	WG1313637
(S) 1,2-Dichloroethane-d4	*98.7*		*70.0-130*		*07/18/2019 17:08*	WG1313637

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	197		80.0	20	07/19/2019 09:36	WG1312495
(S) o-Terphenyl	*97.4*	J7	*18.0-148*		*07/19/2019 09:36*	WG1312495

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

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Anthracene	ND		0.00600	1	07/19/2019 02:53	WG1313780
Acenaphthene	ND		0.00600	1	07/19/2019 02:53	WG1313780
Acenaphthylene	ND		0.00600	1	07/19/2019 02:53	WG1313780
Benzo(a)anthracene	ND		0.00600	1	07/19/2019 02:53	WG1313780
Benzo(a)pyrene	ND		0.00600	1	07/19/2019 02:53	WG1313780
Benzo(b)fluoranthene	ND		0.00600	1	07/19/2019 02:53	WG1313780
Benzo(g,h,i)perylene	ND		0.00600	1	07/19/2019 02:53	WG1313780
Benzo(k)fluoranthene	ND		0.00600	1	07/19/2019 02:53	WG1313780
Chrysene	ND		0.00600	1	07/19/2019 02:53	WG1313780
Dibenz(a,h)anthracene	ND		0.00600	1	07/19/2019 02:53	WG1313780
Fluoranthene	ND		0.00600	1	07/19/2019 02:53	WG1313780
Fluorene	ND		0.00600	1	07/19/2019 02:53	WG1313780
Indeno(1,2,3-cd)pyrene	ND		0.00600	1	07/19/2019 02:53	WG1313780
Naphthalene	ND		0.0200	1	07/19/2019 02:53	WG1313780
Phenanthrene	ND		0.00600	1	07/19/2019 02:53	WG1313780
Pyrene	ND		0.00600	1	07/19/2019 02:53	WG1313780
1-Methylnaphthalene	ND		0.0200	1	07/19/2019 02:53	WG1313780
2-Methylnaphthalene	ND		0.0200	1	07/19/2019 02:53	WG1313780
2-Chloronaphthalene	ND		0.0200	1	07/19/2019 02:53	WG1313780
(S) p-Terphenyl-d14	*94.5*		*23.0-120*		*07/19/2019 02:53*	WG1313780
(S) Nitrobenzene-d5	*78.5*		*14.0-149*		*07/19/2019 02:53*	WG1313780
(S) 2-Fluorobiphenyl	*85.2*		*34.0-125*		*07/19/2019 02:53*	WG1313780

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

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	0.444		0.100	1	07/18/2019 15:52	WG1313713
(S) a,a,a-Trifluorotoluene(FID)	*91.3*		*77.0-120*		*07/18/2019 15:52*	WG1313713

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

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Benzene	0.00112		0.00100	1	07/18/2019 17:29	WG1313637
Toluene	0.0113		0.00500	1	07/18/2019 17:29	WG1313637
Ethylbenzene	0.00921		0.00250	1	07/18/2019 17:29	WG1313637
Total Xylenes	0.0648		0.00650	1	07/18/2019 17:29	WG1313637
(S) Toluene-d8	*103*		*75.0-131*		*07/18/2019 17:29*	WG1313637
(S) 4-Bromofluorobenzene	*96.1*		*67.0-138*		*07/18/2019 17:29*	WG1313637
(S) 1,2-Dichloroethane-d4	*98.6*		*70.0-130*		*07/18/2019 17:29*	WG1313637

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	203		80.0	20	07/18/2019 18:28	WG1312496
(S) o-Terphenyl	*0.000*	J7	*18.0-148*		*07/18/2019 18:28*	WG1312496

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

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Anthracene	ND		0.00600	1	07/19/2019 03:15	WG1313780
Acenaphthene	ND		0.00600	1	07/19/2019 03:15	WG1313780
Acenaphthylene	ND		0.00600	1	07/19/2019 03:15	WG1313780
Benzo(a)anthracene	ND		0.00600	1	07/19/2019 03:15	WG1313780
Benzo(a)pyrene	ND		0.00600	1	07/19/2019 03:15	WG1313780
Benzo(b)fluoranthene	ND		0.00600	1	07/19/2019 03:15	WG1313780
Benzo(g,h,i)perylene	ND		0.00600	1	07/19/2019 03:15	WG1313780
Benzo(k)fluoranthene	ND		0.00600	1	07/19/2019 03:15	WG1313780
Chrysene	ND		0.00600	1	07/19/2019 03:15	WG1313780
Dibenz(a,h)anthracene	ND		0.00600	1	07/19/2019 03:15	WG1313780
Fluoranthene	ND		0.00600	1	07/19/2019 03:15	WG1313780
Fluorene	ND		0.00600	1	07/19/2019 03:15	WG1313780
Indeno(1,2,3-cd)pyrene	ND		0.00600	1	07/19/2019 03:15	WG1313780
Naphthalene	ND		0.0200	1	07/19/2019 03:15	WG1313780
Phenanthrene	ND		0.00600	1	07/19/2019 03:15	WG1313780
Pyrene	ND		0.00600	1	07/19/2019 03:15	WG1313780
1-Methylnaphthalene	ND		0.0200	1	07/19/2019 03:15	WG1313780
2-Methylnaphthalene	0.0374		0.0200	1	07/19/2019 03:15	WG1313780
2-Chloronaphthalene	ND		0.0200	1	07/19/2019 03:15	WG1313780
(S) p-Terphenyl-d14	*92.8*		*23.0-120*		*07/19/2019 03:15*	WG1313780
(S) Nitrobenzene-d5	*82.7*		*14.0-149*		*07/19/2019 03:15*	WG1313780
(S) 2-Fluorobiphenyl	*85.3*		*34.0-125*		*07/19/2019 03:15*	WG1313780

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

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	1.49		0.100	1	07/18/2019 16:12	WG1313713
(S) a,a,a-Trifluorotoluene(FID)	*92.1*		*77.0-120*		*07/18/2019 16:12*	WG1313713

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

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Benzene	0.00333		0.00100	1	07/18/2019 17:51	WG1313637
Toluene	ND		0.00500	1	07/18/2019 17:51	WG1313637
Ethylbenzene	0.0102		0.00250	1	07/18/2019 17:51	WG1313637
Total Xylenes	0.225		0.00650	1	07/18/2019 17:51	WG1313637
(S) Toluene-d8	*107*		*75.0-131*		*07/18/2019 17:51*	WG1313637
(S) 4-Bromofluorobenzene	*101*		*67.0-138*		*07/18/2019 17:51*	WG1313637
(S) 1,2-Dichloroethane-d4	*97.2*		*70.0-130*		*07/18/2019 17:51*	WG1313637

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	183		80.0	20	07/18/2019 19:13	WG1312496
(S) o-Terphenyl	*0.000*	J7	*18.0-148*		*07/18/2019 19:13*	WG1312496

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

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Anthracene	ND		0.00600	1	07/19/2019 03:36	WG1313780
Acenaphthene	ND		0.00600	1	07/19/2019 03:36	WG1313780
Acenaphthylene	ND		0.00600	1	07/19/2019 03:36	WG1313780
Benzo(a)anthracene	ND		0.00600	1	07/19/2019 03:36	WG1313780
Benzo(a)pyrene	ND		0.00600	1	07/19/2019 03:36	WG1313780
Benzo(b)fluoranthene	ND		0.00600	1	07/19/2019 03:36	WG1313780
Benzo(g,h,i)perylene	ND		0.00600	1	07/19/2019 03:36	WG1313780
Benzo(k)fluoranthene	ND		0.00600	1	07/19/2019 03:36	WG1313780
Chrysene	ND		0.00600	1	07/19/2019 03:36	WG1313780
Dibenz(a,h)anthracene	ND		0.00600	1	07/19/2019 03:36	WG1313780
Fluoranthene	ND		0.00600	1	07/19/2019 03:36	WG1313780
Fluorene	ND		0.00600	1	07/19/2019 03:36	WG1313780
Indeno(1,2,3-cd)pyrene	ND		0.00600	1	07/19/2019 03:36	WG1313780
Naphthalene	0.0221		0.0200	1	07/19/2019 03:36	WG1313780
Phenanthrene	ND		0.00600	1	07/19/2019 03:36	WG1313780
Pyrene	0.00694		0.00600	1	07/19/2019 03:36	WG1313780
1-Methylnaphthalene	ND		0.0200	1	07/19/2019 03:36	WG1313780
2-Methylnaphthalene	0.0264		0.0200	1	07/19/2019 03:36	WG1313780
2-Chloronaphthalene	ND		0.0200	1	07/19/2019 03:36	WG1313780
(S) p-Terphenyl-d14	*104*		*23.0-120*		*07/19/2019 03:36*	WG1313780
(S) Nitrobenzene-d5	*137*		*14.0-149*		*07/19/2019 03:36*	WG1313780
(S) 2-Fluorobiphenyl	*89.6*		*34.0-125*		*07/19/2019 03:36*	WG1313780

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

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	0.278		0.100	1	07/18/2019 16:33	WG1313713
(S) a,a,a-Trifluorotoluene(FID)	*95.6*		*77.0-120*		*07/18/2019 16:33*	WG1313713

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

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Benzene	ND		0.00100	1	07/18/2019 18:12	WG1313637
Toluene	ND		0.00500	1	07/18/2019 18:12	WG1313637
Ethylbenzene	ND		0.00250	1	07/18/2019 18:12	WG1313637
Total Xylenes	ND		0.00650	1	07/18/2019 18:12	WG1313637
(S) Toluene-d8	*104*		*75.0-131*		*07/18/2019 18:12*	WG1313637
(S) 4-Bromofluorobenzene	*98.1*		*67.0-138*		*07/18/2019 18:12*	WG1313637
(S) 1,2-Dichloroethane-d4	*101*		*70.0-130*		*07/18/2019 18:12*	WG1313637

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	53.9		40.0	10	07/18/2019 16:57	WG1312496
(S) o-Terphenyl	*73.4*		*18.0-148*		*07/18/2019 16:57*	WG1312496

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

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Anthracene	ND		0.00600	1	07/19/2019 03:58	WG1313780
Acenaphthene	ND		0.00600	1	07/19/2019 03:58	WG1313780
Acenaphthylene	ND		0.00600	1	07/19/2019 03:58	WG1313780
Benzo(a)anthracene	ND		0.00600	1	07/19/2019 03:58	WG1313780
Benzo(a)pyrene	ND		0.00600	1	07/19/2019 03:58	WG1313780
Benzo(b)fluoranthene	ND		0.00600	1	07/19/2019 03:58	WG1313780
Benzo(g,h,i)perylene	ND		0.00600	1	07/19/2019 03:58	WG1313780
Benzo(k)fluoranthene	ND		0.00600	1	07/19/2019 03:58	WG1313780
Chrysene	ND		0.00600	1	07/19/2019 03:58	WG1313780
Dibenz(a,h)anthracene	ND		0.00600	1	07/19/2019 03:58	WG1313780
Fluoranthene	ND		0.00600	1	07/19/2019 03:58	WG1313780
Fluorene	ND		0.00600	1	07/19/2019 03:58	WG1313780
Indeno(1,2,3-cd)pyrene	ND		0.00600	1	07/19/2019 03:58	WG1313780
Naphthalene	ND		0.0200	1	07/19/2019 03:58	WG1313780
Phenanthrene	ND		0.00600	1	07/19/2019 03:58	WG1313780
Pyrene	ND		0.00600	1	07/19/2019 03:58	WG1313780
1-Methylnaphthalene	ND		0.0200	1	07/19/2019 03:58	WG1313780
2-Methylnaphthalene	ND		0.0200	1	07/19/2019 03:58	WG1313780
2-Chloronaphthalene	ND		0.0200	1	07/19/2019 03:58	WG1313780
(S) p-Terphenyl-d14	*91.0*		*23.0-120*		*07/19/2019 03:58*	WG1313780
(S) Nitrobenzene-d5	*83.4*		*14.0-149*		*07/19/2019 03:58*	WG1313780
(S) 2-Fluorobiphenyl	*86.0*		*34.0-125*		*07/19/2019 03:58*	WG1313780

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

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	0.275		0.100	1	07/18/2019 16:53	WG1313713
(S) a,a,a-Trifluorotoluene(FID)	*95.4*		*77.0-120*		*07/18/2019 16:53*	WG1313713

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

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Benzene	ND		0.00100	1	07/18/2019 19:22	WG1313637
Toluene	ND		0.00500	1	07/18/2019 19:22	WG1313637
Ethylbenzene	ND		0.00250	1	07/18/2019 19:22	WG1313637
Total Xylenes	0.00709		0.00650	1	07/18/2019 19:22	WG1313637
(S) Toluene-d8	*101*		*75.0-131*		*07/18/2019 19:22*	WG1313637
(S) 4-Bromofluorobenzene	*96.1*		*67.0-138*		*07/18/2019 19:22*	WG1313637
(S) 1,2-Dichloroethane-d4	*96.8*		*70.0-130*		*07/18/2019 19:22*	WG1313637

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	76.9		40.0	10	07/18/2019 17:12	WG1312496
(S) o-Terphenyl	*75.8*		*18.0-148*		*07/18/2019 17:12*	WG1312496

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

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Anthracene	ND		0.00600	1	07/19/2019 05:04	WG1313780
Acenaphthene	ND		0.00600	1	07/19/2019 05:04	WG1313780
Acenaphthylene	ND		0.00600	1	07/19/2019 05:04	WG1313780
Benzo(a)anthracene	ND		0.00600	1	07/19/2019 05:04	WG1313780
Benzo(a)pyrene	ND		0.00600	1	07/19/2019 05:04	WG1313780
Benzo(b)fluoranthene	ND		0.00600	1	07/19/2019 05:04	WG1313780
Benzo(g,h,i)perylene	ND		0.00600	1	07/19/2019 05:04	WG1313780
Benzo(k)fluoranthene	ND		0.00600	1	07/19/2019 05:04	WG1313780
Chrysene	ND		0.00600	1	07/19/2019 05:04	WG1313780
Dibenz(a,h)anthracene	ND		0.00600	1	07/19/2019 05:04	WG1313780
Fluoranthene	ND		0.00600	1	07/19/2019 05:04	WG1313780
Fluorene	ND		0.00600	1	07/19/2019 05:04	WG1313780
Indeno(1,2,3-cd)pyrene	ND		0.00600	1	07/19/2019 05:04	WG1313780
Naphthalene	ND		0.0200	1	07/19/2019 05:04	WG1313780
Phenanthrene	ND		0.00600	1	07/19/2019 05:04	WG1313780
Pyrene	ND		0.00600	1	07/19/2019 05:04	WG1313780
1-Methylnaphthalene	ND		0.0200	1	07/19/2019 05:04	WG1313780
2-Methylnaphthalene	ND		0.0200	1	07/19/2019 05:04	WG1313780
2-Chloronaphthalene	ND		0.0200	1	07/19/2019 05:04	WG1313780
(S) p-Terphenyl-d14	*96.9*		*23.0-120*		*07/19/2019 05:04*	WG1313780
(S) Nitrobenzene-d5	*95.0*		*14.0-149*		*07/19/2019 05:04*	WG1313780
(S) 2-Fluorobiphenyl	*87.1*		*34.0-125*		*07/19/2019 05:04*	WG1313780

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

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	0.534		0.100	1	07/18/2019 17:14	WG1313713
(S) a,a,a-Trifluorotoluene(FID)	*89.0*		*77.0-120*		*07/18/2019 17:14*	WG1313713

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

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Benzene	ND		0.00100	1	07/18/2019 19:44	WG1313637
Toluene	ND		0.00500	1	07/18/2019 19:44	WG1313637
Ethylbenzene	0.00519		0.00250	1	07/18/2019 19:44	WG1313637
Total Xylenes	0.0364		0.00650	1	07/18/2019 19:44	WG1313637
(S) Toluene-d8	*104*		*75.0-131*		*07/18/2019 19:44*	WG1313637
(S) 4-Bromofluorobenzene	*97.1*		*67.0-138*		*07/18/2019 19:44*	WG1313637
(S) 1,2-Dichloroethane-d4	*97.6*		*70.0-130*		*07/18/2019 19:44*	WG1313637

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	136		40.0	10	07/18/2019 17:27	WG1312496
(S) o-Terphenyl	*88.0*		*18.0-148*		*07/18/2019 17:27*	WG1312496

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

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Anthracene	ND		0.00600	1	07/19/2019 05:26	WG1313780
Acenaphthene	ND		0.00600	1	07/19/2019 05:26	WG1313780
Acenaphthylene	ND		0.00600	1	07/19/2019 05:26	WG1313780
Benzo(a)anthracene	ND		0.00600	1	07/19/2019 05:26	WG1313780
Benzo(a)pyrene	ND		0.00600	1	07/19/2019 05:26	WG1313780
Benzo(b)fluoranthene	ND		0.00600	1	07/19/2019 05:26	WG1313780
Benzo(g,h,i)perylene	ND		0.00600	1	07/19/2019 05:26	WG1313780
Benzo(k)fluoranthene	ND		0.00600	1	07/19/2019 05:26	WG1313780
Chrysene	ND		0.00600	1	07/19/2019 05:26	WG1313780
Dibenz(a,h)anthracene	ND		0.00600	1	07/19/2019 05:26	WG1313780
Fluoranthene	ND		0.00600	1	07/19/2019 05:26	WG1313780
Fluorene	ND		0.00600	1	07/19/2019 05:26	WG1313780
Indeno(1,2,3-cd)pyrene	ND		0.00600	1	07/19/2019 05:26	WG1313780
Naphthalene	ND		0.0200	1	07/19/2019 05:26	WG1313780
Phenanthrene	ND		0.00600	1	07/19/2019 05:26	WG1313780
Pyrene	ND		0.00600	1	07/19/2019 05:26	WG1313780
1-Methylnaphthalene	ND		0.0200	1	07/19/2019 05:26	WG1313780
2-Methylnaphthalene	0.0393		0.0200	1	07/19/2019 05:26	WG1313780
2-Chloronaphthalene	ND		0.0200	1	07/19/2019 05:26	WG1313780
(S) p-Terphenyl-d14	*93.2*		*23.0-120*		*07/19/2019 05:26*	WG1313780
(S) Nitrobenzene-d5	*73.9*		*14.0-149*		*07/19/2019 05:26*	WG1313780
(S) 2-Fluorobiphenyl	*82.9*		*34.0-125*		*07/19/2019 05:26*	WG1313780

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

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	0.212	B	0.100	1	07/18/2019 17:35	WG1313713
(S) a,a,a-Trifluorotoluene(FID)	*96.5*		*77.0-120*		*07/18/2019 17:35*	WG1313713

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

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Benzene	ND		0.00100	1	07/18/2019 20:06	WG1313637
Toluene	ND		0.00500	1	07/18/2019 20:06	WG1313637
Ethylbenzene	ND		0.00250	1	07/18/2019 20:06	WG1313637
Total Xylenes	ND		0.00650	1	07/18/2019 20:06	WG1313637
(S) Toluene-d8	*105*		*75.0-131*		*07/18/2019 20:06*	WG1313637
(S) 4-Bromofluorobenzene	*99.2*		*67.0-138*		*07/18/2019 20:06*	WG1313637
(S) 1,2-Dichloroethane-d4	*98.2*		*70.0-130*		*07/18/2019 20:06*	WG1313637

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	124		40.0	10	07/18/2019 17:41	WG1312496
(S) o-Terphenyl	*80.9*		*18.0-148*		*07/18/2019 17:41*	WG1312496

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

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Anthracene	ND		0.00600	1	07/19/2019 05:48	WG1313780
Acenaphthene	ND		0.00600	1	07/19/2019 05:48	WG1313780
Acenaphthylene	ND		0.00600	1	07/19/2019 05:48	WG1313780
Benzo(a)anthracene	ND		0.00600	1	07/19/2019 05:48	WG1313780
Benzo(a)pyrene	ND		0.00600	1	07/19/2019 05:48	WG1313780
Benzo(b)fluoranthene	ND		0.00600	1	07/19/2019 05:48	WG1313780
Benzo(g,h,i)perylene	ND		0.00600	1	07/19/2019 05:48	WG1313780
Benzo(k)fluoranthene	ND		0.00600	1	07/19/2019 05:48	WG1313780
Chrysene	ND		0.00600	1	07/19/2019 05:48	WG1313780
Dibenz(a,h)anthracene	ND		0.00600	1	07/19/2019 05:48	WG1313780
Fluoranthene	ND		0.00600	1	07/19/2019 05:48	WG1313780
Fluorene	ND		0.00600	1	07/19/2019 05:48	WG1313780
Indeno(1,2,3-cd)pyrene	ND		0.00600	1	07/19/2019 05:48	WG1313780
Naphthalene	ND		0.0200	1	07/19/2019 05:48	WG1313780
Phenanthrene	ND		0.00600	1	07/19/2019 05:48	WG1313780
Pyrene	ND		0.00600	1	07/19/2019 05:48	WG1313780
1-Methylnaphthalene	ND		0.0200	1	07/19/2019 05:48	WG1313780
2-Methylnaphthalene	ND		0.0200	1	07/19/2019 05:48	WG1313780
2-Chloronaphthalene	ND		0.0200	1	07/19/2019 05:48	WG1313780
(S) p-Terphenyl-d14	*94.5*		*23.0-120*		*07/19/2019 05:48*	WG1313780
(S) Nitrobenzene-d5	*65.6*		*14.0-149*		*07/19/2019 05:48*	WG1313780
(S) 2-Fluorobiphenyl	*83.2*		*34.0-125*		*07/19/2019 05:48*	WG1313780

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

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	0.201	B	0.100	1	07/18/2019 17:55	WG1313713
(S) a,a,a-Trifluorotoluene(FID)	*95.6*		*77.0-120*		*07/18/2019 17:55*	WG1313713

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

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Benzene	ND		0.00100	1	07/18/2019 20:27	WG1313637
Toluene	ND		0.00500	1	07/18/2019 20:27	WG1313637
Ethylbenzene	ND		0.00250	1	07/18/2019 20:27	WG1313637
Total Xylenes	ND		0.00650	1	07/18/2019 20:27	WG1313637
(S) Toluene-d8	*106*		*75.0-131*		*07/18/2019 20:27*	WG1313637
(S) 4-Bromofluorobenzene	*97.5*		*67.0-138*		*07/18/2019 20:27*	WG1313637
(S) 1,2-Dichloroethane-d4	*98.7*		*70.0-130*		*07/18/2019 20:27*	WG1313637

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	127		40.0	10	07/18/2019 17:57	WG1312496
(S) o-Terphenyl	*66.6*		*18.0-148*		*07/18/2019 17:57*	WG1312496

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

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Anthracene	ND		0.00600	1	07/19/2019 06:10	WG1313780
Acenaphthene	ND		0.00600	1	07/19/2019 06:10	WG1313780
Acenaphthylene	ND		0.00600	1	07/19/2019 06:10	WG1313780
Benzo(a)anthracene	ND		0.00600	1	07/19/2019 06:10	WG1313780
Benzo(a)pyrene	ND		0.00600	1	07/19/2019 06:10	WG1313780
Benzo(b)fluoranthene	ND		0.00600	1	07/19/2019 06:10	WG1313780
Benzo(g,h,i)perylene	ND		0.00600	1	07/19/2019 06:10	WG1313780
Benzo(k)fluoranthene	ND		0.00600	1	07/19/2019 06:10	WG1313780
Chrysene	ND		0.00600	1	07/19/2019 06:10	WG1313780
Dibenz(a,h)anthracene	ND		0.00600	1	07/19/2019 06:10	WG1313780
Fluoranthene	ND		0.00600	1	07/19/2019 06:10	WG1313780
Fluorene	ND		0.00600	1	07/19/2019 06:10	WG1313780
Indeno(1,2,3-cd)pyrene	ND		0.00600	1	07/19/2019 06:10	WG1313780
Naphthalene	ND		0.0200	1	07/19/2019 06:10	WG1313780
Phenanthrene	ND		0.00600	1	07/19/2019 06:10	WG1313780
Pyrene	ND		0.00600	1	07/19/2019 06:10	WG1313780
1-Methylnaphthalene	ND		0.0200	1	07/19/2019 06:10	WG1313780
2-Methylnaphthalene	ND		0.0200	1	07/19/2019 06:10	WG1313780
2-Chloronaphthalene	ND		0.0200	1	07/19/2019 06:10	WG1313780
(S) p-Terphenyl-d14	*100*		*23.0-120*		*07/19/2019 06:10*	WG1313780
(S) Nitrobenzene-d5	*47.1*		*14.0-149*		*07/19/2019 06:10*	WG1313780
(S) 2-Fluorobiphenyl	*74.8*		*34.0-125*		*07/19/2019 06:10*	WG1313780

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

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	0.325		0.100	1	07/18/2019 18:16	WG1313713
(S) a,a,a-Trifluorotoluene(FID)	*94.8*		*77.0-120*		*07/18/2019 18:16*	WG1313713

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

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Benzene	ND		0.00100	1	07/18/2019 20:48	WG1313637
Toluene	0.0231		0.00500	1	07/18/2019 20:48	WG1313637
Ethylbenzene	0.00401		0.00250	1	07/18/2019 20:48	WG1313637
Total Xylenes	0.0984		0.00650	1	07/18/2019 20:48	WG1313637
(S) Toluene-d8	*103*		*75.0-131*		*07/18/2019 20:48*	WG1313637
(S) 4-Bromofluorobenzene	*97.9*		*67.0-138*		*07/18/2019 20:48*	WG1313637
(S) 1,2-Dichloroethane-d4	*98.6*		*70.0-130*		*07/18/2019 20:48*	WG1313637

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	179		40.0	10	07/18/2019 16:42	WG1312496
(S) o-Terphenyl	*70.1*		*18.0-148*		*07/18/2019 16:42*	WG1312496

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

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Anthracene	ND		0.00600	1	07/19/2019 06:32	WG1313780
Acenaphthene	ND		0.00600	1	07/19/2019 06:32	WG1313780
Acenaphthylene	ND		0.00600	1	07/19/2019 06:32	WG1313780
Benzo(a)anthracene	ND		0.00600	1	07/19/2019 06:32	WG1313780
Benzo(a)pyrene	ND		0.00600	1	07/19/2019 06:32	WG1313780
Benzo(b)fluoranthene	ND		0.00600	1	07/19/2019 06:32	WG1313780
Benzo(g,h,i)perylene	ND		0.00600	1	07/19/2019 06:32	WG1313780
Benzo(k)fluoranthene	ND		0.00600	1	07/19/2019 06:32	WG1313780
Chrysene	ND		0.00600	1	07/19/2019 06:32	WG1313780
Dibenz(a,h)anthracene	ND		0.00600	1	07/19/2019 06:32	WG1313780
Fluoranthene	ND		0.00600	1	07/19/2019 06:32	WG1313780
Fluorene	ND		0.00600	1	07/19/2019 06:32	WG1313780
Indeno(1,2,3-cd)pyrene	ND		0.00600	1	07/19/2019 06:32	WG1313780
Naphthalene	ND		0.0200	1	07/19/2019 06:32	WG1313780
Phenanthrene	ND		0.00600	1	07/19/2019 06:32	WG1313780
Pyrene	ND		0.00600	1	07/19/2019 06:32	WG1313780
1-Methylnaphthalene	ND		0.0200	1	07/19/2019 06:32	WG1313780
2-Methylnaphthalene	0.0454		0.0200	1	07/19/2019 06:32	WG1313780
2-Chloronaphthalene	ND		0.0200	1	07/19/2019 06:32	WG1313780
(S) p-Terphenyl-d14	*101*		*23.0-120*		*07/19/2019 06:32*	WG1313780
(S) Nitrobenzene-d5	*68.2*		*14.0-149*		*07/19/2019 06:32*	WG1313780
(S) 2-Fluorobiphenyl	*86.8*		*34.0-125*		*07/19/2019 06:32*	WG1313780

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

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	0.579		0.100	1	07/18/2019 18:36	WG1313713
(S) a,a,a-Trifluorotoluene(FID)	*93.6*		*77.0-120*		*07/18/2019 18:36*	WG1313713

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

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Benzene	ND		0.00100	1	07/18/2019 21:10	WG1313637
Toluene	0.0130		0.00500	1	07/18/2019 21:10	WG1313637
Ethylbenzene	0.00813		0.00250	1	07/18/2019 21:10	WG1313637
Total Xylenes	0.105		0.00650	1	07/18/2019 21:10	WG1313637
(S) Toluene-d8	*104*		*75.0-131*		*07/18/2019 21:10*	WG1313637
(S) 4-Bromofluorobenzene	*97.5*		*67.0-138*		*07/18/2019 21:10*	WG1313637
(S) 1,2-Dichloroethane-d4	*98.7*		*70.0-130*		*07/18/2019 21:10*	WG1313637

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	152		40.0	10	07/18/2019 16:26	WG1312496
(S) o-Terphenyl	*54.6*		*18.0-148*		*07/18/2019 16:26*	WG1312496

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

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Anthracene	ND		0.00600	1	07/19/2019 06:54	WG1313780
Acenaphthene	ND		0.00600	1	07/19/2019 06:54	WG1313780
Acenaphthylene	ND		0.00600	1	07/19/2019 06:54	WG1313780
Benzo(a)anthracene	ND		0.00600	1	07/19/2019 06:54	WG1313780
Benzo(a)pyrene	ND		0.00600	1	07/19/2019 06:54	WG1313780
Benzo(b)fluoranthene	ND		0.00600	1	07/19/2019 06:54	WG1313780
Benzo(g,h,i)perylene	ND		0.00600	1	07/19/2019 06:54	WG1313780
Benzo(k)fluoranthene	ND		0.00600	1	07/19/2019 06:54	WG1313780
Chrysene	ND		0.00600	1	07/19/2019 06:54	WG1313780
Dibenz(a,h)anthracene	ND		0.00600	1	07/19/2019 06:54	WG1313780
Fluoranthene	ND		0.00600	1	07/19/2019 06:54	WG1313780
Fluorene	ND		0.00600	1	07/19/2019 06:54	WG1313780
Indeno(1,2,3-cd)pyrene	ND		0.00600	1	07/19/2019 06:54	WG1313780
Naphthalene	ND		0.0200	1	07/19/2019 06:54	WG1313780
Phenanthrene	ND		0.00600	1	07/19/2019 06:54	WG1313780
Pyrene	0.00649		0.00600	1	07/19/2019 06:54	WG1313780
1-Methylnaphthalene	ND		0.0200	1	07/19/2019 06:54	WG1313780
2-Methylnaphthalene	0.0554		0.0200	1	07/19/2019 06:54	WG1313780
2-Chloronaphthalene	ND		0.0200	1	07/19/2019 06:54	WG1313780
(S) p-Terphenyl-d14	*101*		*23.0-120*		*07/19/2019 06:54*	WG1313780
(S) Nitrobenzene-d5	*64.5*		*14.0-149*		*07/19/2019 06:54*	WG1313780
(S) 2-Fluorobiphenyl	*78.1*		*34.0-125*		*07/19/2019 06:54*	WG1313780

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

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	0.291	B	0.100	1	07/19/2019 13:32	WG1314011
(S) a,a,a-Trifluorotoluene(FID)	*99.0*		*77.0-120*		*07/19/2019 13:32*	WG1314011

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

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Benzene	0.00115		0.00100	1	07/18/2019 21:32	WG1313637
Toluene	0.0378		0.00500	1	07/18/2019 21:32	WG1313637
Ethylbenzene	0.00598		0.00250	1	07/18/2019 21:32	WG1313637
Total Xylenes	0.130		0.00650	1	07/18/2019 21:32	WG1313637
(S) Toluene-d8	*107*		*75.0-131*		*07/18/2019 21:32*	WG1313637
(S) 4-Bromofluorobenzene	*100*		*67.0-138*		*07/18/2019 21:32*	WG1313637
(S) 1,2-Dichloroethane-d4	*96.8*		*70.0-130*		*07/18/2019 21:32*	WG1313637

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	240		80.0	20	07/18/2019 19:27	WG1312496
(S) o-Terphenyl	*0.000*	J7	*18.0-148*		*07/18/2019 19:27*	WG1312496

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

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Anthracene	ND		0.00600	1	07/19/2019 07:16	WG1313780
Acenaphthene	ND		0.00600	1	07/19/2019 07:16	WG1313780
Acenaphthylene	ND		0.00600	1	07/19/2019 07:16	WG1313780
Benzo(a)anthracene	ND		0.00600	1	07/19/2019 07:16	WG1313780
Benzo(a)pyrene	ND		0.00600	1	07/19/2019 07:16	WG1313780
Benzo(b)fluoranthene	ND		0.00600	1	07/19/2019 07:16	WG1313780
Benzo(g,h,i)perylene	ND		0.00600	1	07/19/2019 07:16	WG1313780
Benzo(k)fluoranthene	ND		0.00600	1	07/19/2019 07:16	WG1313780
Chrysene	ND		0.00600	1	07/19/2019 07:16	WG1313780
Dibenz(a,h)anthracene	ND		0.00600	1	07/19/2019 07:16	WG1313780
Fluoranthene	ND		0.00600	1	07/19/2019 07:16	WG1313780
Fluorene	ND		0.00600	1	07/19/2019 07:16	WG1313780
Indeno(1,2,3-cd)pyrene	ND		0.00600	1	07/19/2019 07:16	WG1313780
Naphthalene	ND		0.0200	1	07/19/2019 07:16	WG1313780
Phenanthrene	0.00636		0.00600	1	07/19/2019 07:16	WG1313780
Pyrene	0.00772		0.00600	1	07/19/2019 07:16	WG1313780
1-Methylnaphthalene	ND		0.0200	1	07/19/2019 07:16	WG1313780
2-Methylnaphthalene	0.0511		0.0200	1	07/19/2019 07:16	WG1313780
2-Chloronaphthalene	ND		0.0200	1	07/19/2019 07:16	WG1313780
(S) p-Terphenyl-d14	*94.3*		*23.0-120*		*07/19/2019 07:16*	WG1313780
(S) Nitrobenzene-d5	*72.9*		*14.0-149*		*07/19/2019 07:16*	WG1313780
(S) 2-Fluorobiphenyl	*90.2*		*34.0-125*		*07/19/2019 07:16*	WG1313780

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

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	0.258	B	0.100	1	07/19/2019 13:54	WG1314011
(S) a,a,a-Trifluorotoluene(FID)	*98.1*		*77.0-120*		*07/19/2019 13:54*	WG1314011

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

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Benzene	ND		0.00100	1	07/18/2019 21:53	WG1313637
Toluene	0.00790		0.00500	1	07/18/2019 21:53	WG1313637
Ethylbenzene	ND		0.00250	1	07/18/2019 21:53	WG1313637
Total Xylenes	0.0369		0.00650	1	07/18/2019 21:53	WG1313637
(S) Toluene-d8	*105*		*75.0-131*		*07/18/2019 21:53*	WG1313637
(S) 4-Bromofluorobenzene	*94.7*		*67.0-138*		*07/18/2019 21:53*	WG1313637
(S) 1,2-Dichloroethane-d4	*97.5*		*70.0-130*		*07/18/2019 21:53*	WG1313637

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	92.3		40.0	10	07/18/2019 18:12	WG1312496
(S) o-Terphenyl	*69.9*		*18.0-148*		*07/18/2019 18:12*	WG1312496

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

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Anthracene	ND		0.00600	1	07/19/2019 07:38	WG1313780
Acenaphthene	ND		0.00600	1	07/19/2019 07:38	WG1313780
Acenaphthylene	ND		0.00600	1	07/19/2019 07:38	WG1313780
Benzo(a)anthracene	ND		0.00600	1	07/19/2019 07:38	WG1313780
Benzo(a)pyrene	ND		0.00600	1	07/19/2019 07:38	WG1313780
Benzo(b)fluoranthene	ND		0.00600	1	07/19/2019 07:38	WG1313780
Benzo(g,h,i)perylene	ND		0.00600	1	07/19/2019 07:38	WG1313780
Benzo(k)fluoranthene	ND		0.00600	1	07/19/2019 07:38	WG1313780
Chrysene	ND		0.00600	1	07/19/2019 07:38	WG1313780
Dibenz(a,h)anthracene	ND		0.00600	1	07/19/2019 07:38	WG1313780
Fluoranthene	ND		0.00600	1	07/19/2019 07:38	WG1313780
Fluorene	ND		0.00600	1	07/19/2019 07:38	WG1313780
Indeno(1,2,3-cd)pyrene	ND		0.00600	1	07/19/2019 07:38	WG1313780
Naphthalene	ND		0.0200	1	07/19/2019 07:38	WG1313780
Phenanthrene	ND		0.00600	1	07/19/2019 07:38	WG1313780
Pyrene	ND		0.00600	1	07/19/2019 07:38	WG1313780
1-Methylnaphthalene	ND		0.0200	1	07/19/2019 07:38	WG1313780
2-Methylnaphthalene	0.0259		0.0200	1	07/19/2019 07:38	WG1313780
2-Chloronaphthalene	ND		0.0200	1	07/19/2019 07:38	WG1313780
(S) p-Terphenyl-d14	*102*		*23.0-120*		*07/19/2019 07:38*	WG1313780
(S) Nitrobenzene-d5	*69.2*		*14.0-149*		*07/19/2019 07:38*	WG1313780
(S) 2-Fluorobiphenyl	*83.4*		*34.0-125*		*07/19/2019 07:38*	WG1313780

Method Blank (MB)

(MB) R3432017-2 07/18/19 11:45

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)	*100*			*77.0-120*

Laboratory Control Sample (LCS)

(LCS) R3432017-1 07/18/19 10:57

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
TPH (GC/FID) Low Fraction	5.50	6.30	115	72.0-127	
(S) a,a,a-Trifluorotoluene(FID)			*106*	*77.0-120*	

L1118015-03 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1118015-03 07/18/19 16:34 • (MS) R3432017-3 07/18/19 20:32 • (MSD) R3432017-4 07/18/19 20:56

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 %
TPH (GC/FID) Low Fraction	5.50	ND	0.834	0.771	13.5	12.3	1	10.0-151			7.93	28
(S) a,a,a-Trifluorotoluene(FID)					*95.6*	*97.9*		*77.0-120*				

Method Blank (MB)

(MB) R3432113-2 07/18/19 13:24

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
TPH (GC/FID) Low Fraction	0.0219	J	0.0217	0.100
(S) a,a,a-Trifluorotoluene(FID)	*105*			*77.0-120*

Laboratory Control Sample (LCS)

(LCS) R3432113-1 07/18/19 12:43

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
TPH (GC/FID) Low Fraction	5.50	5.13	93.2	72.0-127	
(S) a,a,a-Trifluorotoluene(FID)			*102*	*77.0-120*	

L1118051-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1118051-01 07/18/19 18:57 • (MS) R3432113-3 07/18/19 21:20 • (MSD) R3432113-4 07/18/19 21:41

Analyte	Spike Amount (dry) mg/kg	Original Result (dry) mg/kg	MS Result (dry) mg/kg	MSD Result (dry) mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
TPH (GC/FID) Low Fraction	7.30	84.7	153	171	37.6	47.1	25	10.0-151			10.7	28
(S) a,a,a-Trifluorotoluene(FID)					*105*	*105*		*77.0-120*				

Method Blank (MB)

(MB) R3432420-2 07/19/19 12:21

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
TPH (GC/FID) Low Fraction	0.0463	J	0.0217	0.100
(S) a,a,a-Trifluorotoluene(FID)	*104*			*77.0-120*

Laboratory Control Sample (LCS)

(LCS) R3432420-1 07/19/19 11:36

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
TPH (GC/FID) Low Fraction	5.50	6.71	122	72.0-127	
(S) a,a,a-Trifluorotoluene(FID)			*108*	*77.0-120*	

Method Blank (MB)

(MB) R3432112-3 07/18/19 13:40

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Benzene	U		0.000400	0.00100
Ethylbenzene	U		0.000530	0.00250
Toluene	U		0.00125	0.00500
Xylenes, Total	U		0.00478	0.00650
(S) Toluene-d8	*107*			*75.0-131*
(S) 4-Bromofluorobenzene	*102*			*67.0-138*
(S) 1,2-Dichloroethane-d4	*106*			*70.0-130*

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

(LCS) R3432112-1 07/18/19 12:26 • (LCSD) R3432112-2 07/18/19 12:44

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCSD Result mg/kg	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Benzene	0.125	0.118	0.115	94.4	92.3	70.0-123			2.29	20
Ethylbenzene	0.125	0.130	0.130	104	104	74.0-126			0.527	20
Toluene	0.125	0.128	0.123	102	98.3	75.0-121			3.84	20
Xylenes, Total	0.375	0.379	0.366	101	97.6	72.0-127			3.49	20
(S) Toluene-d8				*110*	*108*	*75.0-131*				
(S) 4-Bromofluorobenzene				*105*	*104*	*67.0-138*				
(S) 1,2-Dichloroethane-d4				*107*	*105*	*70.0-130*				

L1118015-13 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1118015-13 07/18/19 18:48 • (MS) R3432112-4 07/18/19 20:20 • (MSD) R3432112-5 07/18/19 20:38

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 %
Benzene	0.125	ND	0.0700	0.113	56.0	90.1	1	10.0-149		J3	46.7	37
Ethylbenzene	0.125	0.00597	0.0908	0.141	67.9	108	1	10.0-160		J3	43.6	38
Toluene	0.125	0.00698	0.120	0.164	90.5	125	1	10.0-156			30.6	38
Xylenes, Total	0.375	0.0432	0.419	0.568	100	140	1	10.0-160			30.1	38
(S) Toluene-d8					*107*	*104*		*75.0-131*				
(S) 4-Bromofluorobenzene					*103*	*101*		*67.0-138*				
(S) 1,2-Dichloroethane-d4					*102*	*102*		*70.0-130*				

Method Blank (MB)

(MB) R3432174-2 07/18/19 13:44

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Benzene	U		0.000400	0.00100
Ethylbenzene	U		0.000530	0.00250
Toluene	U		0.00125	0.00500
Xylenes, Total	U		0.00478	0.00650
(S) Toluene-d8	*103*			*75.0-131*
(S) 4-Bromofluorobenzene	*97.3*			*67.0-138*
(S) 1,2-Dichloroethane-d4	*104*			*70.0-130*

Laboratory Control Sample (LCS)

(LCS) R3432174-1 07/18/19 12:25

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Benzene	0.125	0.126	101	70.0-123	
Ethylbenzene	0.125	0.127	102	74.0-126	
Toluene	0.125	0.128	103	75.0-121	
Xylenes, Total	0.375	0.384	102	72.0-127	
(S) Toluene-d8			*103*	*75.0-131*	
(S) 4-Bromofluorobenzene			*98.2*	*67.0-138*	
(S) 1,2-Dichloroethane-d4			*106*	*70.0-130*	

Method Blank (MB)

(MB) R3431512-1 07/17/19 12:35

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	*79.4*			*18.0-148*

Laboratory Control Sample (LCS)

(LCS) R3431512-2 07/17/19 12:48

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
TPH (GC/FID) High Fraction	50.0	43.4	86.8	50.0-150	
(S) o-Terphenyl			*70.6*	*18.0-148*	

L1118015-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1118015-01 07/19/19 06:09 • (MS) R3432392-1 07/19/19 06:23 • (MSD) R3432392-2 07/19/19 06:38

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	48.0	182	146	126	0.000	0.000	10	50.0-150	J6	J6	14.7	20
(S) o-Terphenyl					*115*	*110*		*18.0-148*				

Method Blank (MB)

(MB) R3431852-1 07/18/19 11:01

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	*67.4*			*18.0-148*

Laboratory Control Sample (LCS)

(LCS) R3431852-2 07/18/19 11:16

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
TPH (GC/FID) High Fraction	50.0	31.3	62.6	50.0-150	
(S) o-Terphenyl			*71.6*	*18.0-148*	

Method Blank (MB)

(MB) R3432378-1 07/19/19 09:23

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Anthracene	U		0.000600	0.00600
Acenaphthene	U		0.000600	0.00600
Acenaphthylene	U		0.000600	0.00600
Benzo(a)anthracene	U		0.000600	0.00600
Benzo(a)pyrene	U		0.000600	0.00600
Benzo(b)fluoranthene	U		0.000600	0.00600
Benzo(g,h,i)perylene	U		0.000600	0.00600
Benzo(k)fluoranthene	U		0.000600	0.00600
Chrysene	U		0.000600	0.00600
Dibenz(a,h)anthracene	U		0.000600	0.00600
Fluoranthene	U		0.000600	0.00600
Fluorene	U		0.000600	0.00600
Indeno(1,2,3-cd)pyrene	U		0.000600	0.00600
Naphthalene	U		0.00200	0.0200
Phenanthrene	U		0.000600	0.00600
Pyrene	U		0.000600	0.00600
1-Methylnaphthalene	U		0.00200	0.0200
2-Methylnaphthalene	U		0.00200	0.0200
2-Chloronaphthalene	U		0.00200	0.0200
(S) Nitrobenzene-d5	*127*			*14.0-149*
(S) 2-Fluorobiphenyl	*125*			*34.0-125*
(S) p-Terphenyl-d14	*124*	J1		*23.0-120*

Laboratory Control Sample (LCS)

(LCS) R3432378-2 07/19/19 09:44

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Anthracene	0.0800	0.0866	108	50.0-126	
Acenaphthene	0.0800	0.0834	104	50.0-120	
Acenaphthylene	0.0800	0.0856	107	50.0-120	
Benzo(a)anthracene	0.0800	0.0838	105	45.0-120	
Benzo(a)pyrene	0.0800	0.0790	98.8	42.0-120	
Benzo(b)fluoranthene	0.0800	0.0818	102	42.0-121	
Benzo(g,h,i)perylene	0.0800	0.0789	98.6	45.0-125	
Benzo(k)fluoranthene	0.0800	0.0824	103	49.0-125	
Chrysene	0.0800	0.0846	106	49.0-122	
Dibenz(a,h)anthracene	0.0800	0.0799	99.9	47.0-125	
Fluoranthene	0.0800	0.0903	113	49.0-129	

Laboratory Control Sample (LCS)

(LCS) R3432378-2 07/19/19 09:44

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Fluorene	0.0800	0.0858	107	49.0-120	
Indeno(1,2,3-cd)pyrene	0.0800	0.0797	99.6	46.0-125	
Naphthalene	0.0800	0.0789	98.6	50.0-120	
Phenanthrene	0.0800	0.0846	106	47.0-120	
Pyrene	0.0800	0.0841	105	43.0-123	
1-Methylnaphthalene	0.0800	0.0756	94.5	51.0-121	
2-Methylnaphthalene	0.0800	0.0805	101	50.0-120	
2-Chloronaphthalene	0.0800	0.0818	102	50.0-120	
(S) Nitrobenzene-d5			*121*	*14.0-149*	
(S) 2-Fluorobiphenyl			*115*	*34.0-125*	
(S) p-Terphenyl-d14			*113*	*23.0-120*	

L1118012-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1118012-01 07/19/19 10:05 • (MS) R3432378-3 07/19/19 10:26 • (MSD) R3432378-4 07/19/19 10:47

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 %
Anthracene	0.0776	U	0.0746	0.0683	96.1	89.4	1	10.0-145			8.82	30
Acenaphthene	0.0776	U	0.0736	0.0667	94.8	87.3	1	14.0-127			9.84	27
Acenaphthylene	0.0776	U	0.0746	0.0679	96.1	88.9	1	21.0-124			9.40	25
Benzo(a)anthracene	0.0776	U	0.0719	0.0632	92.7	82.7	1	10.0-139			12.9	30
Benzo(a)pyrene	0.0776	U	0.0714	0.0630	92.0	82.5	1	10.0-141			12.5	31
Benzo(b)fluoranthene	0.0776	U	0.0668	0.0599	86.1	78.4	1	10.0-140			10.9	36
Benzo(g,h,i)perylene	0.0776	U	0.0699	0.0613	90.1	80.2	1	10.0-140			13.1	33
Benzo(k)fluoranthene	0.0776	U	0.0752	0.0665	96.9	87.0	1	10.0-137			12.3	31
Chrysene	0.0776	U	0.0750	0.0667	96.6	87.3	1	10.0-145			11.7	30
Dibenz(a,h)anthracene	0.0776	U	0.0700	0.0622	90.2	81.4	1	10.0-132			11.8	31
Fluoranthene	0.0776	U	0.0794	0.0704	102	92.1	1	10.0-153			12.0	33
Fluorene	0.0776	U	0.0736	0.0675	94.8	88.4	1	11.0-130			8.65	29
Indeno(1,2,3-cd)pyrene	0.0776	U	0.0696	0.0621	89.7	81.3	1	10.0-137			11.4	32
Naphthalene	0.0776	U	0.0689	0.0638	88.8	83.5	1	10.0-135			7.69	27
Phenanthrene	0.0776	U	0.0734	0.0660	94.6	86.4	1	10.0-144			10.6	31
Pyrene	0.0776	U	0.0731	0.0653	94.2	85.5	1	10.0-148			11.3	35
1-Methylnaphthalene	0.0776	U	0.0656	0.0596	84.5	78.0	1	10.0-142			9.58	28
2-Methylnaphthalene	0.0776	U	0.0702	0.0646	90.5	84.6	1	10.0-137			8.31	28
2-Chloronaphthalene	0.0776	U	0.0715	0.0659	92.1	86.3	1	29.0-120			8.15	24
(S) Nitrobenzene-d5					*111*	*106*		*14.0-149*				
(S) 2-Fluorobiphenyl					*103*	*98.7*		*34.0-125*				
(S) p-Terphenyl-d14					*98.3*	*97.2*		*23.0-120*				

Method Blank (MB)

(MB) R3432173-2 07/18/19 23:35

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Anthracene	U		0.000600	0.00600
Acenaphthene	U		0.000600	0.00600
Acenaphthylene	U		0.000600	0.00600
Benzo(a)anthracene	U		0.000600	0.00600
Benzo(a)pyrene	U		0.000600	0.00600
Benzo(b)fluoranthene	U		0.000600	0.00600
Benzo(g,h,i)perylene	U		0.000600	0.00600
Benzo(k)fluoranthene	U		0.000600	0.00600
Chrysene	U		0.000600	0.00600
Dibenz(a,h)anthracene	U		0.000600	0.00600
Fluoranthene	U		0.000600	0.00600
Fluorene	U		0.000600	0.00600
Indeno(1,2,3-cd)pyrene	U		0.000600	0.00600
Naphthalene	U		0.00200	0.0200
Phenanthrene	U		0.000600	0.00600
Pyrene	U		0.000600	0.00600
1-Methylnaphthalene	U		0.00200	0.0200
2-Methylnaphthalene	U		0.00200	0.0200
2-Chloronaphthalene	U		0.00200	0.0200
(S) Nitrobenzene-d5	*72.7*			*14.0-149*
(S) 2-Fluorobiphenyl	*83.9*			*34.0-125*
(S) p-Terphenyl-d14	*80.3*			*23.0-120*

Laboratory Control Sample (LCS)

(LCS) R3432173-1 07/18/19 23:13

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Anthracene	0.0800	0.0814	102	50.0-126	
Acenaphthene	0.0800	0.0752	94.0	50.0-120	
Acenaphthylene	0.0800	0.0792	99.0	50.0-120	
Benzo(a)anthracene	0.0800	0.0746	93.3	45.0-120	
Benzo(a)pyrene	0.0800	0.0719	89.9	42.0-120	
Benzo(b)fluoranthene	0.0800	0.0664	83.0	42.0-121	
Benzo(g,h,i)perylene	0.0800	0.0729	91.1	45.0-125	
Benzo(k)fluoranthene	0.0800	0.0765	95.6	49.0-125	
Chrysene	0.0800	0.0747	93.4	49.0-122	
Dibenz(a,h)anthracene	0.0800	0.0764	95.5	47.0-125	
Fluoranthene	0.0800	0.0769	96.1	49.0-129	

Laboratory Control Sample (LCS)

(LCS) R3432173-1 07/18/19 23:13

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Fluorene	0.0800	0.0759	94.9	49.0-120	
Indeno(1,2,3-cd)pyrene	0.0800	0.0769	96.1	46.0-125	
Naphthalene	0.0800	0.0734	91.8	50.0-120	
Phenanthrene	0.0800	0.0713	89.1	47.0-120	
Pyrene	0.0800	0.0682	85.3	43.0-123	
1-Methylnaphthalene	0.0800	0.0763	95.4	51.0-121	
2-Methylnaphthalene	0.0800	0.0729	91.1	50.0-120	
2-Chloronaphthalene	0.0800	0.0755	94.4	50.0-120	
(S) Nitrobenzene-d5			*96.9*	*14.0-149*	
(S) 2-Fluorobiphenyl			*93.4*	*34.0-125*	
(S) p-Terphenyl-d14			*91.6*	*23.0-120*	

L1118015-19 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1118015-19 07/19/19 03:58 • (MS) R3432173-3 07/19/19 04:20 • (MSD) R3432173-4 07/19/19 04:42

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 %
Anthracene	0.0772	ND	0.0679	0.0692	88.0	89.6	1	10.0-145			1.90	30
Acenaphthene	0.0772	ND	0.0648	0.0670	83.9	86.8	1	14.0-127			3.34	27
Acenaphthylene	0.0772	ND	0.0693	0.0722	89.8	93.5	1	21.0-124			4.10	25
Benzo(a)anthracene	0.0772	ND	0.0663	0.0690	85.9	89.4	1	10.0-139			3.99	30
Benzo(a)pyrene	0.0772	ND	0.0652	0.0657	84.5	85.1	1	10.0-141			0.764	31
Benzo(b)fluoranthene	0.0772	ND	0.0604	0.0629	78.2	81.5	1	10.0-140			4.06	36
Benzo(g,h,i)perylene	0.0772	ND	0.0387	0.0375	50.1	48.6	1	10.0-140			3.15	33
Benzo(k)fluoranthene	0.0772	ND	0.0693	0.0687	89.8	89.0	1	10.0-137			0.870	31
Chrysene	0.0772	ND	0.0633	0.0662	82.0	85.8	1	10.0-145			4.48	30
Dibenz(a,h)anthracene	0.0772	ND	0.0475	0.0477	61.5	61.8	1	10.0-132			0.420	31
Fluoranthene	0.0772	ND	0.0678	0.0710	87.8	92.0	1	10.0-153			4.61	33
Fluorene	0.0772	ND	0.0663	0.0690	85.9	89.4	1	11.0-130			3.99	29
Indeno(1,2,3-cd)pyrene	0.0772	ND	0.0444	0.0442	57.5	57.3	1	10.0-137			0.451	32
Naphthalene	0.0772	ND	0.0646	0.0669	83.7	86.7	1	10.0-135			3.50	27
Phenanthrene	0.0772	ND	0.0661	0.0679	84.4	86.7	1	10.0-144			2.69	31
Pyrene	0.0772	ND	0.0643	0.0659	81.8	83.9	1	10.0-148			2.46	35
1-Methylnaphthalene	0.0772	ND	0.0658	0.0655	85.2	84.8	1	10.0-142			0.457	28
2-Methylnaphthalene	0.0772	ND	0.0659	0.0631	85.4	81.7	1	10.0-137			4.34	28
2-Chloronaphthalene	0.0772	ND	0.0648	0.0674	83.9	87.3	1	29.0-120			3.93	24
(S) Nitrobenzene-d5					*90.4*	*97.6*		*14.0-149*				
(S) 2-Fluorobiphenyl					*85.5*	*91.9*		*34.0-125*				
(S) p-Terphenyl-d14					*102*	*107*		*23.0-120*				

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

(dry)	Results are reported based on the dry weight of the sample. [this will only be present on a dry report basis for soils].
MDL	Method Detection Limit.
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.
J1	Surrogate recovery limits have been exceeded; values are outside upper control limits.
J3	The associated batch QC was outside the established quality control range for precision.
J6	The sample matrix interfered with the ability to make any accurate determination; spike value is low.
J7	Surrogate recovery cannot be used for control limit evaluation due to dilution.

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	LAO00356
Kentucky [1 6]	90010	South Carolina	84004
Kentucky [2]	16	South Dakota	n/a
Louisiana	AI30792	Tennessee [1 4]	2006
Louisiana [1]	LA180010	Texas	T104704245-18-15
Maine	TN0002	Texas [5]	LAB0152
Maryland	324	Utah	TN00003
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	460132
Minnesota	047-999-395	Washington	C847
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	9980939910
Montana	CERT0086	Wyoming	A2LA

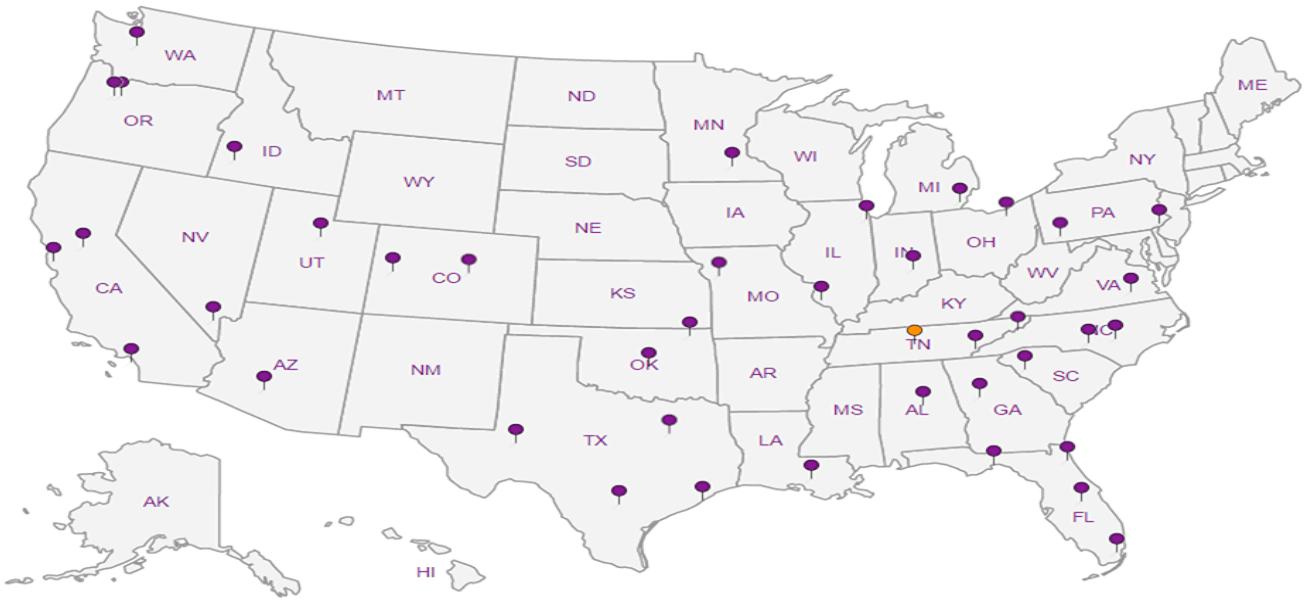
Third Party Federal Accreditations

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

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

Our Locations

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



Caerus Oil and Gas
143 Diamond Avenue
Parachute, CO 81635

Billing Information:
Same as left

Report to: Blair Rollins
Email To: brollins@caerusoilandgas.com

Project Description: K22 Spill Assessment Soil Borings
City/State Collected: CO

Phone: (970) 640-6919
Fax:

Client Project # 019-040
Lab Project #

Collected by (print): Ben Bough
Site/Facility ID # 457575
P.O. #

Collected by (signature):
Immediately Packed on Ice N ___ Y X

Rush? (Lab MUST Be Notified)
___ Same Day X Five Day
___ Next Day ___ 5 Day (Rad Only)
___ Two Day ___ 10 Day (Rad Only)
___ Three Day

Quote #

Date Results Needed

Pres Chk

Analysis / Container / Preservative

Chain of Custody Page 1 of 3

Pace Analytical®
National Center for Testing & Innovation

12065 Lebanon Rd
Mount Juliet, TN 37122
Phone: 615-758-5858
Phone: 800-767-5859
Fax: 615-758-5859

L # L1118015
E012

Acctnum: ENTCONGCO
Template:
Prelogin:
TSR:
PB:
Shipped Via:

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	TPH (DRO and GRO)	BTEX	Table 910-1 metals in soil	Table 910-1 PAHs	EC, SAR, pH	Remarks	Sample # (lab only)
SB05-10/12	Grab	SS	10-12	7/8/19	1330	1	X	X		X			-01
SB05-15/17			15-17		1339								-02
SB05-20/22			20-22		1330								-03
SB05-25/27			25-27		1330								-04
SB05-30/32			30-32		1330								-05
SB05-35/37			35-37		1330								-06
SB05-40/42			40-42		1330								-07
SB04-10/12			10-12		1500								-08
SB04-15/17			15-17	↓	1500								-09
SB04-20/22	↓	↓	20-22	7/9/19	839	↓	↓	↓		↓			-10

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

Remarks:

RAD SCREEN: <0.5 mR/hr

pH _____ Temp _____
Flow _____ Other _____

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

Samples returned via:
__ UPS X FedEx __ Courier __ _____

Tracking # 4430 3424 2287

Trip Blank Received: Yes / No
HCL / MeoH
TBR

Bottles Received:

If preservation required by Login: Date/Time

Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)
	7/11/19	600	
	7/11/19	778	
			Received for lab by: (Signature)

Temp: °C 1.8+0=1.8

Date: 7/12/19 Time: 0845

Hold:

Condition: NCF / OK

Caerus Oil and Gas
143 Diamond Avenue
Parachute, CO 81635

Billing Information:
Same as left

Report to: Blair Rollins
Email To: brollins@caerusoilandgas.com

Project Description: K22 Spill Assessment Soil Borings
City/State Collected: CO

Phone: (970) 640-6919
Fax:

Client Project # 019-040
Lab Project #

Collected by (print): Ben Baugh
Site/Facility ID # 457575
P.O. #

Collected by (signature):
Immediately Packed on Ice N ___ Y X

Rush? (Lab MUST be Notified)
___ Same Day X Five Day
___ Next Day ___ 5 Day (Rad Only)
___ Two Day ___ 10 Day (Rad Only)
___ Three Day
Date Results Needed

Quote #

Analysis / Container / Preservative

Chain of Custody Page 2 of 3

Pace Analytical®
National Center for Testing & Innovation

12065 Lebanon Rd
Mount Juliet, TN 37122
Phone: 615-758-5858
Phone: 800-767-5859
Fax: 615-758-5859

L # L1118015
Table #
Acctnum: ENTCONGJLO
Template:
Prelogin:
TSR:
PB:
Shipped Via:

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	TPH (DRO and GRO)	BTEX	Table 910-1 metals in soil	Table 910-1 PAHs	EC, SAR, pH	Remarks	Sample # (lab only)
SB04-25/27	Grab	SS	25-27	7/9/19	900	1	X	X		X			-11
SB04-30/32			30-32		950								-12
SB03-10/12			10-12		1050								-13
SB03-15/17			15-17		1120								-14
SB03-20/22			20-22		1140								-15
SB03-25/27			25-27		1210								-16
SB03-30/32			30-32		1255								-17
SB02-10/12			10-12		1350	2							-18
SB02-15/17			15-17		1400	1							-19
SB02-20/22			20-22		1420								-20

* 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 # 4430 3424 2287

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

Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Trip Blank Received: Yes / No HCL / MeoH TBR	
	7/11/19	1200			
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Temp: 1.8+0.2=1.8°C Bottles Received: 28-8oz	If preservation required by Login: Date/Time
	7/11/19	1730			
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)	Date: 7/12/19 Time: 0845	Hold: Condition: NCF / OK

Caerus Oil and Gas
143 Diamond Avenue
Parachute, CO 81635

Billing Information: **Same as left**

Report to: **Blair Rollins**

Email To: **brollins@caerusoilandgas.com**

Project Description: **K22 Spill Assessment Soil Borings**

City/State Collected: **CO**

Phone: **(970) 640-6919**
Fax:

Client Project # 019-040

Lab Project #

Collected by (print): Ben Baugh

Site/Facility ID # 457575

P.O. #

Collected by (signature):

Immediately Packed on Ice N ___ Y X

Rush? (Lab MUST Be Notified)
___ Same Day X Five Day
___ Next Day ___ 5 Day (Rad Only)
___ Two Day ___ 10 Day (Rad Only)
___ Three Day

Date Results Needed

Quote #

Analysis / Container / Preservative

Chain of Custody Page 3 of 3

Pace Analytical®
National Center for Testing & Innovation

12065 Lebanon Rd
Mount Juliet, TN 37122
Phone: 615-758-5858
Phone: 800-767-5859
Fax: 615-758-5859

L # L1118015

Table #

Acctnum: ENTCONOCO

Template:

Prelogin:

TSR:

PB:

Shipped Via:

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	TPH (DRO and GRO)	BTEX	Table 910-1 metals in soil	Table 910-1 PAHs	EC, SAR, pH	Remarks	Sample # (lab only)
SB02-25/27	Grab	SS	25-27	7/9/19	1445	1	X	X		X			-21
SB02-30/32			30-32	7/9/19	1505								-22
SB01-10/12			10-12	7/10/19	850								-23
SB01-15/17			15-17		920								-24
SB01-20/22			20-22		940								-25
SB01-25/27			25-27		1015								-26
SB01-30/32	↓	↓	30-32	↓	1040	↓	↓	↓		↓			-27

* 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 # 4430 3424 2287

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

	Date:	Time:		
Relinquished by : (Signature)	7/11/19	1200	Received by: (Signature)	Trip Blank Received: Yes / No HCL / MeoH TBR
Relinquished by : (Signature)	7/11/19	1730	Received by: (Signature)	Temp: 1.8°C 1.8°C Bottles Received: 28-8oz
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)	Date: 7/12/19 Time: 0845

If preservation required by Login: Date/Time

Hold:

Condition: NCF / OK