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Phase II Environmental Assessment Limited Subsurface Investigation

PROPERTY REFERENCE

140 Stewart Ave & 111 Gardner Ave
Brooklyn, NY 11237



Phase II Environmental Assessment Limited Subsurface Investigation

Prepared for:

Stewart Purchaser LLC
217 Havenmeyer Street
Brooklyn, NY 11211

Property Identification

140 Stewart Ave & 111 Gardner Ave
Brooklyn, NY 11237

Prepared by:

GRS | Corteq
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February 2, 2016
GRS Project #: 15-25867.2

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INTRODUCTION

This report documents the results of work completed in accordance with the agreement governing the nature and extent of the assessment. Conditions may exist which could not be identified as a result of this investigation.

PURPOSE

This investigation was intended as a screening to evaluate subsurface conditions in identified areas of concern in order to determine the related likelihood of a significant, related release of chemicals of concern as identified below. The assessment is not intended to identify additional areas of concern or to evaluate the potential for release of other chemicals of concern, or to identify the full lateral and vertical extent of release, determine appropriate cleanup actions, or develop a detailed estimate of costs to correct concerns identified.

BACKGROUND INFORMATION

This assessment is based on the following prior investigations:

- Phase I Environmental Site Assessment – GRS Corteq #15-25867.1 – 1/8/16

Information provided shows the Property is developed with two buildings with a total building area of 34,632 square feet. The 140 Stewart Avenue site is currently occupied by Skorr Steel Company, a stainless steel supplier; the 111 Gardner is occupied by Filco Carting, which operates a rubbish removal service and rents roll-off containers.

The Property appears to have been undeveloped land in 1888 and developed with an iron and steel works building at 140 Stewart Avenue and a liquid bleach manufacturer by 1933. In 1965, a warehouse and office building are located at 111 Gardner Avenue. The bleach house was no longer located on the Property by 2001. According to available information from the NYC Department of Buildings, the structure at 140 Stewart Avenue was built in 1931, and the structure at 111 Gardner Avenue in 1964.

The following environmentally sensitive activities have been conducted at the Property:

- Filco Carting utilizes a portion of their building as a active truck maintenance garage for routine maintenance and repair the trucks that are part of Filco Carting. The garage uses de-greasers, lubricants, hydraulic oils and antifreeze and all are stored in tanks, 55-gallon drums and other assorted containers. Housekeeping was noted to be poor. Based on the observed conditions, there is the potential for the related use and disposal of these hazardous materials to have impacted environmental conditions at the Property.
- Historical activities included a chemical company/liquid bleach manufacturer that operated from at least 1933 to 1992. Based on the review of Sanborn Maps, the manufacturing operations were conducted in a set of connecting buildings on the southeastern portion of

this parcel. Regulatory records, further discussed below, indicate chemicals were stored in four ASTs and drums; however, data included in the regulatory database only date back to the 1980s. No information is known on the use, storage or disposal of hazardous materials or the chlorine manufacturing operations prior to the 1980s.

As a result, the following additional actions were recommended:

- Phase II investigations to determine whether subsurface media has been impacted.

A Topographic Map of the Property and the surrounding area is attached. According to the USGS, the Property area is mapped as part of the upper glacial formation. Site-specific groundwater conditions may be different; however, the USGS indicates that groundwater to be approximately 10 feet below ground surface deep and is expected to flow toward the west.

SCOPE OF WORK

Health and Safety Plan

GRS developed a Health and Safety Plan that was specific to the Property. The development of this plan is required by the Occupational Safety and Health Administration (OSHA) under Hazardous Waste Operations & Emergency Response 29 CFR 1910.120. The Health and Safety Plan was designed to reduce the risk of physical or chemical exposures that may affect on-site workers in the proposed work area. The Health and Safety Plan includes information about chemicals expected on the property, health and safety procedures, and emergency response procedures. The Health and Safety Plan is on file at our office.

Utility Locating

A utility inspection was performed at the Property at least 48 hours prior to the initiation of the subsurface investigation, as required by New York law. This inspection consisted of the marking the underground utility locations by authorized utility locating personnel.

Subsurface Investigation

Soil Borings

Eleven soil borings were installed on the property on January 21, 2016, using a Geoprobe drill rig. Boring locations are illustrated on the attached site plan and detailed below.

140 Stewart Ave - Three soil borings (S-1 to S-3) were advanced at the Skorr Steel property at 140 Stewart Avenue to depths between 15 and 20 feet below ground level (BGL). One temporary well (GW-1) was constructed in borehole S-1.

111 Gardner Ave – Seven soil borings (S-4 to S-11) were advanced at the Filco Carting property at 111 Gardner Avenue to depths of 15 feet BGL. Three temporary wells (GW-2 to GW-4) were constructed in boreholes S-6, S-8, and S-10.

Methodology

Continuous soil samples were collected from the borings with a five-foot long, stainless-steel macro core lined with disposable acetate sleeves to the terminal depths of 15 to 20 feet BGL. The soil samples collected from each boring were field screened with a photo-ionization detector (PID) to screen for the presence of volatile organic vapors.

The following chemicals of concern would normally be expected to be associated with the identified areas of concern:

AREA OF CONCERN	CHEMICALS OF CONCERN	TEST METHODS
140 Stewart Ave	Chlorinated solvents	Volatile Organic Compounds (VOCs) by EPA Method 8260
	Petroleum hydrocarbons	Polynuclear Aromatic Hydrocarbons (PAHs) by EPA Method 8270
111 Gardner Ave	Heavy metals	Total Petroleum Hydrocarbons (TPH) as Gasoline, Diesel, and Oil by EPA Method 8015 RCRA 8 Metals by EPA Method 6010/7471

Soil Sampling

Soil encountered at the Property consisted mainly of dark brown and black sand. Groundwater was encountered between 9.0 and 14 feet BGL. The soil boring logs are attached.

Photoionization Detector (PID)

No elevated PID readings above background concentrations (<2.0 parts per million, ppm) or olfactory/visual indications of contamination were observed in the samples collected.

Sample Selection

Soil samples were collected for chemical analysis as identified below.

AREA OF CONCERN	BORING	TERMINAL DEPTH	SAMPLE DEPTH	SUPPORTING RATIONALE
140 Stewart Ave	S-1	20'	14'	Deepest Unsaturated Interval
	S-2	15'	14'	
	S-3	15'	10'	
111 Gardner Ave	S-4	15'	10'	
	S-5	15'	10'	

	S-6	15'	9'	Deepest Unsaturated Interval
	S-7	15'	10'	
	S-8	15'	10'	
	S-9	15'	10'	
	S-10	15'	9'	
	S-11	15'	10'	

Groundwater Sampling

Groundwater was encountered in each of the borings at depths between 9.0 and 14 feet BGL. In order to evaluate groundwater quality, soil borings S-1, S-6, S-8, and S-10 were selected to be converted into temporary monitoring wells consisting of 1.0-inch diameter PVC well screen and riser pipe. Groundwater samples were collected with a disposable bailer and placed directly into laboratory-supplied glassware.

Following completion of the sampling activities, the bore holes were abandoned in accordance with New York regulations.

Laboratory Analytical Results

The soil samples were transported under chain of custody to ESC Lab Sciences, Inc, out of Mt Juliet, Tennessee, a certified laboratory. Eleven soil samples (one from each boring) and four groundwater samples (from S-1, S-6, S-8, and S-10) were analyzed for volatile organic compounds (VOCs) via EPA Method 8260, and polynuclear aromatic hydrocarbons (PAHs) via EPA Method 8270, total petroleum hydrocarbons as diesel range organics (DRO), gasoline range organics (GRO), and oil range organics (ORO) by EPA Method 8015, and RCRA 8 metals by EPA Method 6010/7471.

The following two tables summarize the soil analytical results. The results were compared to the New York State Department of Environmental Conservation (NYSDEC) Part 375 Unrestricted Use Soil Cleanup Objectives (USCOs) and the Unrestricted Soil Cleanup Objective for Protection of Public Health at Industrial use properties (ISCOs).

SOIL RESULTS	S-1	S-2	S-3	S-4	S-5	S-6	USCO	ISCO
Mercury	0.419	ND	ND	0.464	0.635	0.226	0.18	5.7
Arsenic	21.5	26.5	14.8	5.23	3.99	2.71	13	16
Barium	334	209	70.3	4,040	58.8	45.8	350	10,000
Cadmium	3.37	ND	ND	0.986	ND	ND	2.5	60
Chromium	37.2	39.9	14.3	34.4	20.3	19.1	30	800
Lead	1,970	246	115	5,340	43.1	12.9	63	3,900
Selenium	2.3	4.36	ND	ND	ND	ND	3.9	6,800
GRO	ND	0.223	ND	ND	ND	ND	NE	NE
DRO	27.5	93.1	ND	ND	55	13	NE	NE
ORO	15.2	49.4	ND	51.1	36.8	7.38	NE	NE

Anthracene	0.0758	0.49	0.0171	0.377	0.0565	0.0092	100	1,000
Acenaphthene	0.0351	0.365	ND	0.0938	0.031	0.00694	100	1,000
Benzo(a)anthracene	0.326	1.03	0.0739	0.943	0.0968	0.0346	1	11
Benzo(a)pyrene	0.327	0.982	0.0713	0.768	0.076	0.0355	1	1.1
Benzo(b)fluoranthene	0.377	1.25	0.0909	0.956	0.0939	0.0047	1	11
Benzo(ghi)perylene	0.228	0.839	0.0446	0.488	0.0443	0.0278	100	1,000
Benzo(k)fluoranthene	0.107	0.282	0.0242	0.276	0.0258	0.0126	0.8	110
Chrysene	0.275	0.942	0.0651	0.756	0.0797	0.0314	1	110
Dibenz(ah)anthracene	0.0554	0.169	0.0147	0.143	0.0139	0.00712	0.33	1.1
Fluoranthene	0.61	2.43	0.142	2.02	0.228	0.0644	100	1,000
Fluorene	0.037	0.393	ND	0.187	0.0372	ND	30	1,000
Ideno(123cd)pyrene	0.189	0.598	0.0404	0.42	0.394	0.0234	0.5	11
Naphthalene	0.075	0.707	ND	0.00705	0.0411	ND	12	1,000
Phenanthrene	0.357	2.36	0.0738	1.49	0.239	0.0415	100	1,000
Pyrene	0.646	2.15	0.129	1.69	0.194	0.0693	100	1,000
p-Isopropyltoluene	ND	0.00138	ND	ND	ND	ND	NE	NE
Cis-12-dichloroethene	ND	ND	ND	0.00619	ND	ND	0.25	1,000
Tetrachloroethene	ND	ND	ND	0.0261	ND	ND	1.3	300
Trichloroethene	ND	ND	ND	0.00308	ND	ND	0.47	400

SOIL RESULTS (CONT.)	S-7	S-8	S-9	S-10	S-11	USCO	ISCO
Mercury	0.225	0.65	0.0634	429	4.13	0.18	5.7
Arsenic	3.92	8.96	2.98	50.3	4.22	13	16
Barium	49.5	60.6	67.3	289	34.2	350	10,000
Cadmium	ND	ND	ND	ND	1.14	2.5	60
Chromium	21.2	21.4	17.5	81.4	15	30	800
Lead	34.6	34.1	26.4	666	57	63	3,900
GRO	ND	ND	0.281	0.775	2.31	NE	NE
DRO	184	7.68	ND	95.4	ND	NE	NE
ORO	103	6.17	4.49	98.9	1,410	NE	NE
Anthracene	0.555	ND	0.0204	0.201	2.41	100	1,000
Acenaphthene	0.0406	ND	0.0152	0.112	1.34	100	1,000
Acenaphthylene	0.0322	ND	ND	ND	ND	20	1,000
Benzo(a)anthracene	0.94	0.00924	0.105	0.516	4.05	1	11
Benzo(a)pyrene	0.691	0.0117	0.126	0.513	3.44	1	1.1
Benzo(b)fluoranthene	0.808	0.0153	0.15	0.572	4.35	1	11
Benzo(ghi)perylene	0.329	0.00971	0.0895	0.373	2.24	100	1,000
Benzo(k)fluoranthene	0.214	ND	0.0391	0.247	0.849	0.8	110
Chrysene	0.738	0.0105	0.1	0.502	3.68	1	110
Dibenz(ah)anthracene	0.124	ND	0.0225	0.102	0.605	0.33	1.1

Fluoranthene	2.29	0.0252	0.18	1.12	10.2	100	1,000
Fluorene	0.346	ND	0.0121	0.146	1.54	30	1,000
Ideno(123cd)pyrene	0.324	0.00821	0.0693	0.299	1.82	0.5	11
Naphthalene	0.0404	ND	0.0253	0.993	1.42	12	1,000
Phenanthrene	3.02	0.0153	0.0825	0.911	11.6	100	1,000
Pyrene	1.94	0.0217	0.195	1.09	9.53	100	1,000
p-Isopropyltoluene	ND	ND	0.00642	ND	ND	NE	NE
Cis-12-dichloroethene	ND	0.0013	0.00387	ND	ND	0.25	1,000
Tetrachloroethene	ND	0.00459	0.00135	ND	ND	1.3	300
Trichloroethene	ND	ND	0.00125	ND	ND	0.47	400
Acetone	ND	ND	0.0748	ND	ND	0.05	1,000
Benzene	ND	ND	0.00124	ND	0.0104	0.06	89
n-butylbenzene	ND	ND	0.0208	ND	ND	12	1,000
Sec-butylbenzene	ND	ND	0.0152	ND	ND	11	1,000
Tert-butylbenzene	ND	ND	0.00186	ND	ND	5.9	1,000
4-chlorotoluene	ND	ND	0.0015	ND	ND	NE	NE
11-dichloroethane	ND	ND	0.00142	ND	0.00895	0.27	480
Xylene	ND	ND	0.00482	ND	ND	0.26	1,000
Ethylbenzene	ND	ND	0.00134	ND	ND	1	780
Isopropylbenzene	ND	ND	0.0104	ND	0.00226	NE	NE
2-butanone	ND	ND	0.0214	ND	ND	0.12	1,000
n-propylbenzene	ND	ND	0.0163	ND	ND	3.9	1,000
124-trimethylbenzene	ND	ND	0.0615	ND	ND	3.6	380
123-trimethylbenzene	ND	ND	0.0394	ND	0.00129	NE	NE
135-trimethylbenzene	ND	ND	0.00824	ND	ND	8.4	380

- Results reported in milligrams per kilogram (mg/kg)
- ND – Not detected above method detection limit (MDL)
- NE – SCO has not been established
- **BOLD** indicates concentration exceeds the USCO
- **Highlight** indicates concentration exceeds the ISCO

According to the laboratory report, numerous metals, TPH, PAHs, and VOCs were detected in one or more of the soil samples above the laboratory method detection limits (MDLs). The following compounds were detected above the NYSDEC SCOs:

- Mercury was detected above the USCO in the samples from S-1, S-4, S-5, S-6, S-7, S-8, S-9, and S-10. Of these, the concentration in S-10 exceeded the ISCO.
- Arsenic was detected above the USCO in the samples from S-1, S-2, S-3, and S-10. Of these, the concentrations in S-1, S-2, and S-10 exceeded the ISCO.
- Barium was detected above the USCO in the samples from S-4.

- Cadmium was detected above the USCO in the samples from S-1.
- Chromium was detected above the USCO in the samples from S-1, S-2, S-4, and S-10.
- Lead was detected above the USCO in the samples from S-1, S-2, S-3, S-4, and S-10. Of these, the concentration in S-4 exceeded the ISCO.
- Selenium was detected above the USCO in the samples from S-2.
- PAHs benzo(a)anthracene, benzo(b)fluoranthene, and ideno(123-cd)pyrene were detected in the sample from S-2 above the USCO.
- PAHs benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(k)fluoranthene, chrysene, dibenz(ah)anthracene and ideno(123-cd)pyrene were detected in the sample from S-11 above the USCO. Of the detections, the concentration of benzo(a)pyrene exceeded the ISCO.
- Acetone was detected above the USCO in the sample from S-9.

No other compounds were detected in the soil samples above the NYSDEC SCOs.

The following table summarizes the groundwater analytical results. The results were compared to the NYSDEC Water Quality Standards (WQS).

GROUNDWATER RESULTS	GW-1	GW-2	GW-3	GW-4	WQS
Mercury, dissolved	ND	ND	7.35	ND	0.7
Arsenic, dissolved	12.3	ND	125	224	25
Barium, dissolved	150	72.5	89.3	60.7	1,000
Lead	9.58	148	1,610	20.2	25
DRO	210	ND	960	651	NE
ORO	116	ND	636	573	NE
Anthracene	0.407	0.0526	1.6	0.364	20
Acenaphthene	2.33	ND	4.1	2.01	NE
Acenaphthylene	0.104	ND	ND	ND	NE
Benzo(a)anthracene	0.348	0.0558	1.18	0.234	NE
Benzo(a)pyrene	0.273	ND	0.651	0.175	NE
Benzo(b)fluoranthene	0.297	ND	0.625	0.17	0.002
Benzo(ghi)perylene	0.11	ND	0.257	0.106	NE
Benzo(k)fluoranthene	ND	ND	0.259	0.0701	0.002
Chrysene	0.357	0.053	0.87	0.231	0.002
Fluoranthene	1.4	0.145	4.28	0.824	50
Fluorene	0.658	ND	2.61	0.495	50
Ideno(123cd)pyrene	0.144	ND	0.204	0.086	0.002
Naphthalene	1.53	ND	4.19	ND	10
Phenanthrene	2.56	0.222	10.1	0.856	50
Pyrene	1.29	0.153	4.12	0.92	50

1-methylnaphthalene	0.262	ND	1.12	0.25	NE
2-methylnaphthalene	0.293	ND	0.705	ND	NE
Tetrachloroethene	ND	ND	46.1	ND	5
Trichloroethene	ND	ND	9.65	ND	5
Cis-12-dichloroethene	ND	ND	124	ND	5
Trans-12-dichloroethene	ND	ND	3.91	ND	5
Vinyl chloride	ND	ND	17.8	ND	2

- Results reported in microgram per liter (ug/L)
- ND – Not detected above method detection limit (MDL)
- NE – SCO has not been established
- **BOLD** indicates concentration exceeds the USCO

According to the laboratory report, numerous metals, PAHs, and VOCs were detected in one or more of the groundwater samples above the laboratory MDLs. The following compounds were detected above the NYSDEC WQS:

- Dissolved mercury was detected above the WQS in the sample from GW-3 (S-8).
- Dissolved arsenic was detected above the WQS in the samples from GW-3 (S-8) and GW-4 (S-10).
- Dissolved lead was detected above the WQS in the samples from GW-2 (S-6) and GW-3 (S-8).
- PAHs benzo(b)fluoranthene, chrysene, and ideno(123-cd)pyrene were detected above the WQS in the samples GW-1 (S-1).
- PAHs benzo(b)fluoranthene, benzo(k)fluoranthene, chrysene, and ideno(123-cd)pyrene were detected above the WQS in the samples GW-2 (S-6) and GW-3 (S-8).
- The PAH chrysene was detected above the WQS in the samples GW-2 (S-6).
- VOCs tetrachloroethene (PCE), trichloroethene (TCE), cis-12-dichloroethene (cis-12-DCE), and vinyl chloride were detected above the WQS in the sample from GW-3 (S-8).

No other metals or compounds were detected in the samples above the WQS.

CONCLUSIONS

Evidence of a soil and groundwater impact was detected during this investigation.

The laboratory analytical report indicated that numerous metals (mercury, arsenic, cadmium, chromium, lead, and selenium) were detected in one or more soil samples at concentrations above the NYSDEC Unrestricted SCOs. Mercury, arsenic, and lead were detected in one or more of the soil samples at concentrations that exceed the NYSDEC SCO for Industrial properties. Dissolved arsenic, mercury, and lead were detected in one or more of the groundwater samples at concentrations above the NYSDEC Water Quality Standards.

In addition to the metals, various PAHs [benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(k)fluoranthene, chrysene, dibenz(ah)anthracene and ideno(123-cd)pyrene] were detected in one or more of the soil samples above the NYSDEC Unrestricted SCO, and benzo(a)pyrene was detected in one soil sample above the NYSDEC SCO for Industrial properties. Also, benzo(b)fluoranthene, benzo(k)fluoranthene, chrysene, and ideno(123-cd)pyrene were detected in one or more of the water samples above the NYSDEC Water Quality Standards.

The laboratory report also indicated that various VOCs were detected in one of the groundwater samples above the NYSDEC Water Quality Standards. The VOCs included the chlorinated solvent PCE and its breakdown compounds (TCE, cis-12-DCE, and vinyl chloride). These compounds were also detected in the soil samples from S-8 and S-9; however, the concentrations were below the NYSDEC Unrestricted SCOs.

Based on the analytical results, evidence of metal, PAH, and VOC impact was detected at the property. As a result, GRS Corteq recommends that the findings of this investigation be reported to the NYSDEC. Additional investigation will likely required to evaluate the extent of impact or if the concentrations warrant additional action to prevent exposure to the site occupants and other sensitive ecological receptors, and/or corrective actions may be required to address impacts.

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BORING S-1/GW-1

Project No. 15-25867.2	Sample Date: 1/21/16
Project Name: S140 Stewart Ave & 111 Gardner Ave	Field Professional: Scott Stehlik
Site Location: Brooklyn, New York	Drilled By: Enviroprobe
Client: Stewart Purchaser LLC	Drill Method: Direct Push

Total Depth: 20 feet

Observed Depth to GW: 14 feet

Depth of Refusal: N/A

Sample Interval	Core Recovery	Sample Depth	Soil Description	USGS	PID (ppm)
0-5'	3'		Upper 6" – Concrete Dark Brown/Black Medium-Fine Sand, Dry	SW	0.0
5-10'	3'		Dark Brown/Black Medium-Fine Sand, Moist (bog odor)	SW	0.0
10-15'	2.5'	10-14'	10-11' - Brown Medium Sand, Wet 11-15' – Black Medium-Fine Sand, Wet	SW	0.0
15-20'	2'		Black Medium-Fine Sand (with shells), Wet	SW	0.2

NOTES:

- Soil sample SB-1 collected from 10-14' BGL
- Temporary well consisting of 1.0-inch PVC well screen and riser pipe installed at 20 feet BGL

BORING S-2

Project No. 15-25867.2	Sample Date: 1/21/16
Project Name: S140 Stewart Ave & 111 Gardner Ave	Field Professional: Scott Stehlik
Site Location: Brooklyn, New York	Drilled By: Enviroprobe
Client: Stewart Purchaser LLC	Drill Method: Direct Push

Total Depth: 15 feet

Observed Depth to GW: 14 feet

Depth of Refusal: N/A

Sample Interval	Core Recovery	Sample Depth	Soil Description	USGS	PID (ppm)
0-5'	4'		Upper 6" – Concrete 6"-2' – Black Medium-Fine Sand with Fill (brick and asphalt), Dry 2-5' - Dark Brown/Black Medium-Fine Sand, Dry	SW	0.0
5-10'	4'		5-8' - Dark Brown Medium-Fine Sand, Dry 8-10' – Dark Brown/Black Medium-Fine Sand with gravel, Moist	SW	0.0
10-15'	2'	12-14'	10-15' – Dark Brown/Black Medium-Fine Sand (bog odor), Wet	SW	0.0

NOTES:

- Soil sample SB-2 collected from 12-14' BGL

BORING S-3

Project No. 15-25867.2	Sample Date: 1/21/16
Project Name: S140 Stewart Ave & 111 Gardner Ave	Field Professional: Scott Stehlik
Site Location: Brooklyn, New York	Drilled By: Enviroprobe
Client: Stewart Purchaser LLC	Drill Method: Direct Push

Total Depth: 15 feet

Observed Depth to GW: 10 feet

Depth of Refusal: N/A

Sample Interval	Core Recovery	Sample Depth	Soil Description	USGS	PID (ppm)
0-5'	3'		Upper 6" – Concrete 6"-4'- Dark Brown/Black Medium-Fine Sand, Dry 4-5' – Dark Grey Silty Sand	SW ML	0.0
5-10'	2'	8-10'	Dark Grey/Black Silty Sand, Moist (bog odor)	ML	0.0
10-15'	4'		Grey/Green Medium Sand	SW	0.0

NOTES:

- Soil sample SB-3 collected from 8-10' BGL

BORING S-4

Project No. 15-25867.2	Sample Date: 1/21/16
Project Name: S140 Stewart Ave & 111 Gardner Ave	Field Professional: Scott Stehlik
Site Location: Brooklyn, New York	Drilled By: Enviroprobe
Client: Stewart Purchaser LLC	Drill Method: Direct Push

Total Depth: 15 feet

Observed Depth to GW: 10 feet

Depth of Refusal: N/A

Sample Interval	Core Recovery	Sample Depth	Soil Description	USGS	PID (ppm)
0-5'	3'		Upper 1' – Black Fill/Asphalt 1-1.5' - Concrete Brown Medium-Fine Sand, Dry	SW	0.0
5-10'	1'	5-10'	Brown Medium-Fine Sand, Wet	SW	0.0
10-15'	1'		Black Medium-Fine Sand (bog odor)	SW	0.0

NOTES:

- Soil sample SB-4 collected from 5-10' BGL

BORING S-5

Project No. 15-25867.2	Sample Date: 1/21/16
Project Name: S140 Stewart Ave & 111 Gardner Ave	Field Professional: Scott Stehlik
Site Location: Brooklyn, New York	Drilled By: Enviroprobe
Client: Stewart Purchaser LLC	Drill Method: Direct Push

Total Depth: 15 feet

Observed Depth to GW: 10 feet

Depth of Refusal: N/A

Sample Interval	Core Recovery	Sample Depth	Soil Description	USGS	PID (ppm)
0-5'	4'		Upper 4' – Black Medium-Fine sand with Fill 4'-5' - Brown Medium-Fine Sand, Dry	SW	0.0
5-10'	3'	8-10'	Dark Brown/Black Medium-Fine Sand, Moist	SW	0.0
10-15'	4'		Dark Brown/Black Medium Fine Sand, Wet	SW	0.0

NOTES:

- Soil sample SB-5 collected from 8-10' BGL

BORING S-6/GW-2

Project No. 15-25867.2	Sample Date: 1/21/16
Project Name: S140 Stewart Ave & 111 Gardner Ave	Field Professional: Scott Stehlik
Site Location: Brooklyn, New York	Drilled By: Enviroprobe
Client: Stewart Purchaser LLC	Drill Method: Direct Push

Total Depth: 15 feet

Observed Depth to GW: 9.0 feet

Depth of Refusal: N/A

Sample Interval	Core Recovery	Sample Depth	Soil Description	USGS	PID (ppm)
0-5'	3'		Upper 2' – Black Fill with Asphalt and Concrete Dark Brown/Black Medium-Fine Sand, Dry	SW	0.0
5-10'	2'	6-9'	Dark Brown/Black Medium-Fine Sand, Moist (bog odor)	SW	0.0
10-15'	2.5'		Black Medium-Fine Sand, Wet	SW	0.0

NOTES:

- Soil sample SB-6 collected from 6-9' BGL
- Temporary well consisting of 1.0-inch PVC well screen and riser pipe installed at 15 feet BGL

BORING S-7

Project No. 15-25867.2	Sample Date: 1/21/16
Project Name: S140 Stewart Ave & 111 Gardner Ave	Field Professional: Scott Stehlik
Site Location: Brooklyn, New York	Drilled By: Enviroprobe
Client: Stewart Purchaser LLC	Drill Method: Direct Push

Total Depth: 15 feet

Observed Depth to GW: 10 feet

Depth of Refusal: N/A

Sample Interval	Core Recovery	Sample Depth	Soil Description	USGS	PID (ppm)
0-5'	3'		Upper 2' – Brick, Concrete Black Medium-Fine Sand, Dry	SW	0.1
5-10'	3'	8-10'	Dark Brown/Black Medium-Fine Sand with brick, Moist	SW	0.2
10-15'	2'		Black Medium-Fine Sand (with shells)	SW	0.2

NOTES:

- Soil sample SB-7 collected from 8-10' BGL

BORING S-8/GW-3

Project No. 15-25867.2	Sample Date: 1/21/16
Project Name: S140 Stewart Ave & 111 Gardner Ave	Field Professional: Scott Stehlik
Site Location: Brooklyn, New York	Drilled By: Enviroprobe
Client: Stewart Purchaser LLC	Drill Method: Direct Push

Total Depth: 15 feet

Observed Depth to GW: 11 feet

Depth of Refusal: N/A

Sample Interval	Core Recovery	Sample Depth	Soil Description	USGS	PID (ppm)
0-5'	3'		Upper 3' – Fill (Asphalt/Concrete) Brown Medium-Fine Sand, Dry	SW	0.1
5-10'	3'	8-10'	Black Medium-Fine Sand, Moist	SW	0.5
10-15'	4'		Black Medium-Fine Sand, Wet	SW	1.5

NOTES:

- Soil sample SB-8 collected from 8-10' BGL
- Temporary well consisting of 1.0-inch PVC well screen and riser pipe installed at 15 feet BGL

BORING S-9

Project No. 15-25867.2	Sample Date: 1/21/16
Project Name: S140 Stewart Ave & 111 Gardner Ave	Field Professional: Scott Stehlik
Site Location: Brooklyn, New York	Drilled By: Enviroprobe
Client: Stewart Purchaser LLC	Drill Method: Direct Push

Total Depth: 15 feet

Observed Depth to GW: 10 feet

Depth of Refusal: N/A

Sample Interval	Core Recovery	Sample Depth	Soil Description	USGS	PID (ppm)
0-5'	4'		Upper 2' – Fill (Asphalt/Concrete) Dark Brown/Black Medium-Fine Sand, Dry	SW	0.4
5-10'	2.5'	8-10'	Black Medium-Fine Sand, Moist (bog odor)	SW	1.0
10-15'	3'		Black Medium-Fine Sand, Wet	SW	0.0

NOTES:

- Soil sample SB-9 collected from 8-10' BGL

BORING S-10/GW-4

Project No. 15-25867.2	Sample Date: 1/21/16
Project Name: S140 Stewart Ave & 111 Gardner Ave	Field Professional: Scott Stehlik
Site Location: Brooklyn, New York	Drilled By: Enviroprobe
Client: Stewart Purchaser LLC	Drill Method: Direct Push

Total Depth: 15 feet

Observed Depth to GW: 10 feet

Depth of Refusal: N/A

Sample Interval	Core Recovery	Sample Depth	Soil Description	USGS	PID (ppm)
0-5'	3'		Upper 4' – Fill (Asphalt/Concrete/Brick) Dark Brown Medium-Fine Sand, Dry	SW	0.4
5-10'	3'	5-9'	Dark Brown/Black Medium-Fine Sand, Moist	SW	0.6
10-15'	2'		Dark Brown/Black Medium-Fine Sand, Wet	SW	0.0

NOTES:

- Soil sample SB-10 collected from 5-9' BGL
- Temporary well consisting of 1.0-inch PVC well screen and riser pipe installed at 15 feet BGL

BORING S-11

Project No. 15-25867.2	Sample Date: 1/21/16
Project Name: S140 Stewart Ave & 111 Gardner Ave	Field Professional: Scott Stehlik
Site Location: Brooklyn, New York	Drilled By: Enviroprobe
Client: Stewart Purchaser LLC	Drill Method: Direct Push

Total Depth: 15 feet

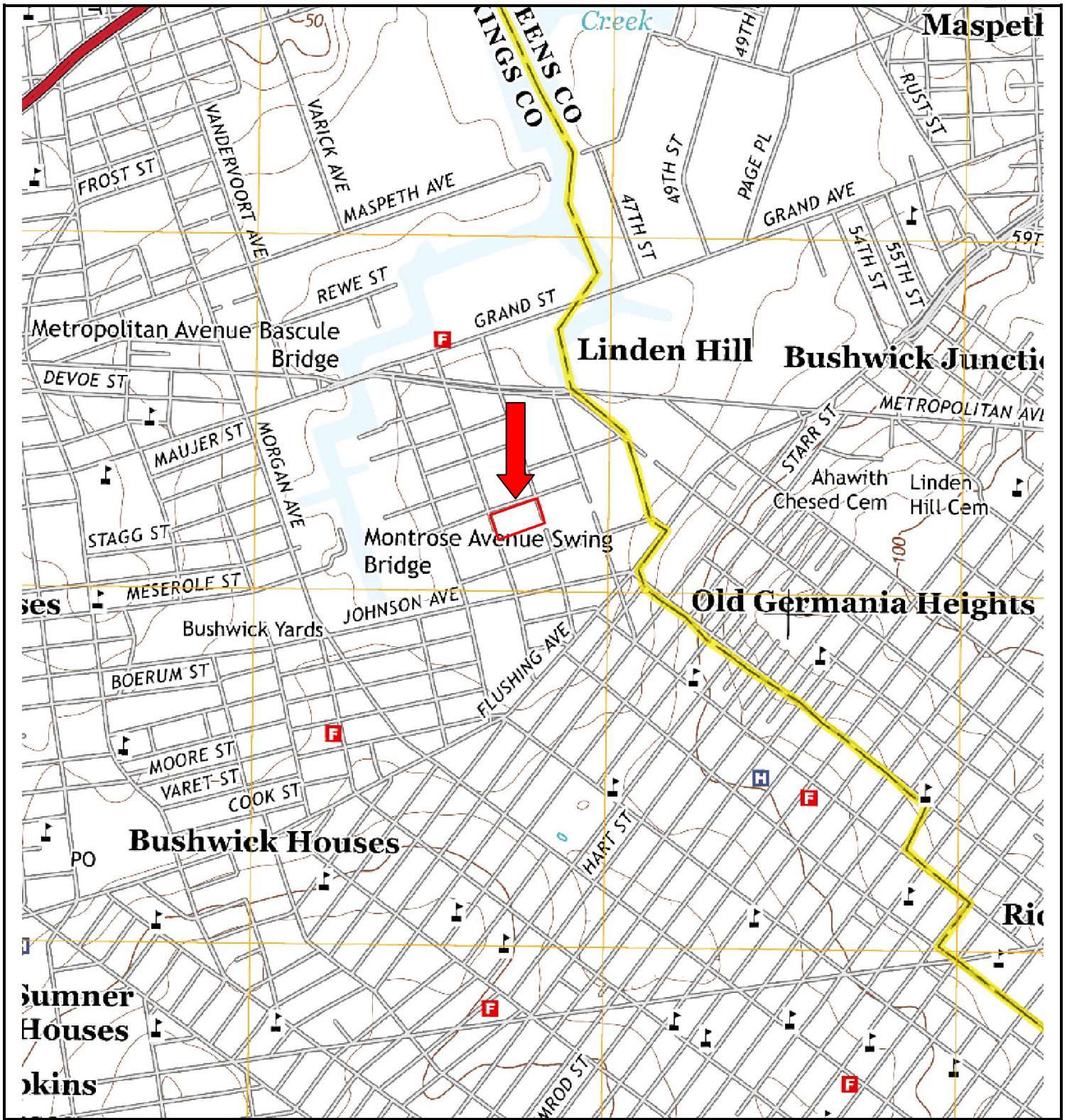
Observed Depth to GW: 10 feet

Depth of Refusal: N/A

Sample Interval	Core Recovery	Sample Depth	Soil Description	USGS	PID (ppm)
0-5'	3.5'		Upper 3' – Fill (Asphalt/Concrete/Brick) 3-4' - Light Brown Medium Sand, Dry 4-5' – Black Medium-Fine Sand, Dry	SW	0.4
5-10'	2'	5-10'	Black Medium-Fine Sand, Moist	SW	0.6
10-15'	2.5'		Black Medium-Fine Sand, Wet	SW	0.2

NOTES:

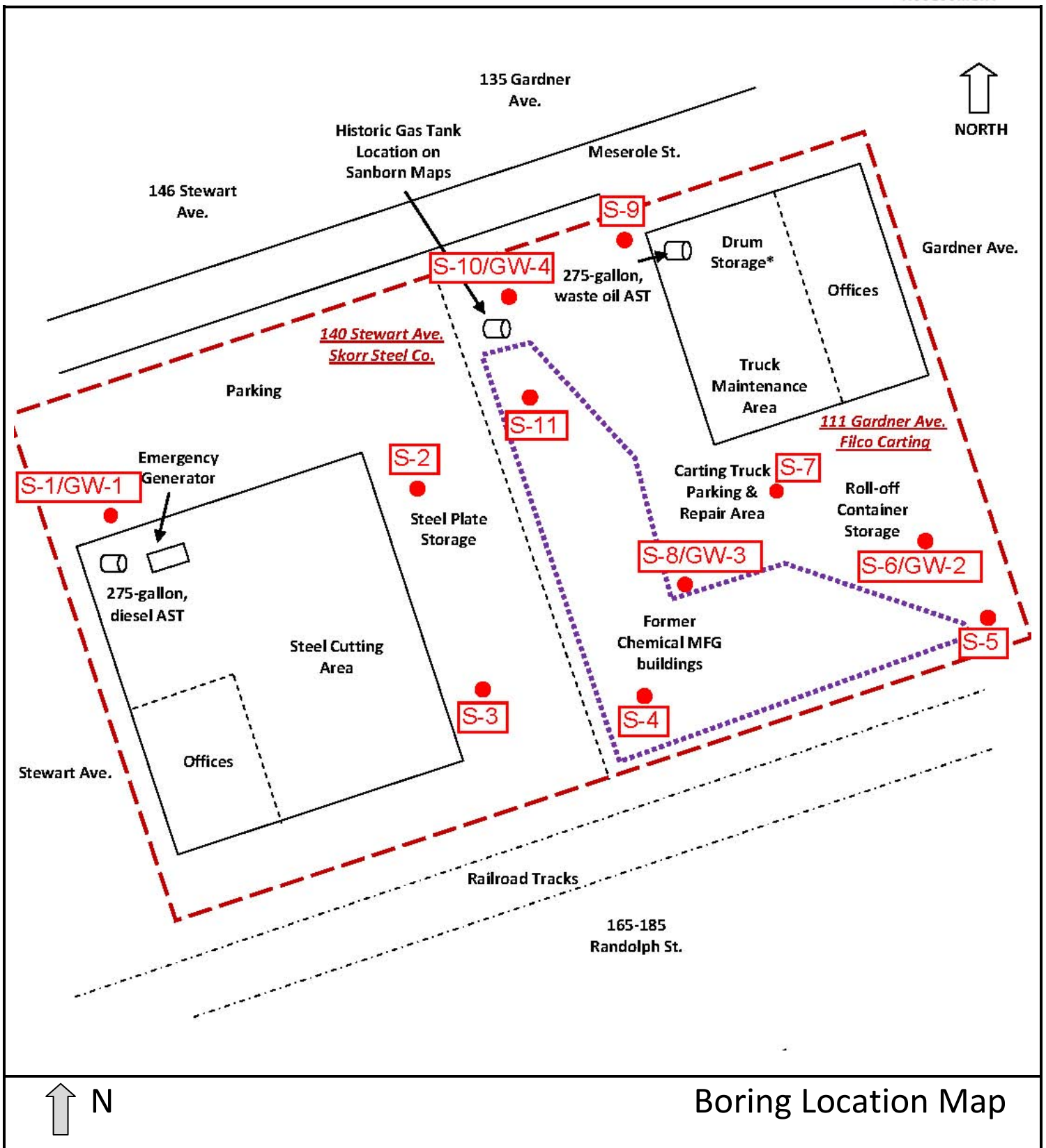
- Soil sample SB-11 collected from 5-10' BGL



Topographic Location Map

140 Stewart Ave & 111 Gardner Ave
Brooklyn, New York

GRS Corteq #: 15-25867.2



Boring Location Map

A & W Professional Services, PLLC

Sample Delivery Group: L813258
Samples Received: 01/23/2016
Project Number:
Description:
Site: BROOKLYN, NY
Report To: Mr. Austin Hewitt
7900-D Stevens Mill Road, # 120
Matthews, NC 28104

Entire Report Reviewed By:



Jimmy Hunt

Technical Service Representative

Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by ESC is performed per guidance provided in laboratory standard operating procedures: 060302, 060303, and 060304.



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SAMPLE SUMMARY

ONE LAB. NATIONWIDE.



S-1 10-14FT L813258-01 Solid

Collected by
Scott Stehlik

Collected date/time
01/21/16 10:15

Received date/time
01/23/16 13:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Mercury by Method 7471A	WG844876	1	01/27/16 15:00	01/28/16 16:46	TRB
Metals (ICP) by Method 6010C	WG844444	1	01/25/16 17:02	01/26/16 12:45	LTB
Semi Volatile Organic Compounds (GC/MS) by Method 8270D-SIM	WG844412	1	01/25/16 23:21	01/26/16 07:35	KMP
Semi-Volatile Organic Compounds (GC) by Method 8015	WG844143	1	01/24/16 19:24	01/26/16 10:04	AAT
Total Solids by Method 2540 G-2011	WG844219	1	01/25/16 06:59	01/25/16 07:12	KDW
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG844294	1	01/27/16 15:37	01/27/16 18:05	LRL
Volatile Organic Compounds (GC/MS) by Method 8260C	WG844204	1	01/24/16 09:20	01/25/16 17:33	BMB

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

S-2 12-14FT L813258-02 Solid

Collected by
Scott Stehlik

Collected date/time
01/21/16 10:30

Received date/time
01/23/16 13:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Mercury by Method 7471A	WG844876	1	01/27/16 15:00	01/28/16 16:53	TRB
Metals (ICP) by Method 6010C	WG844444	1	01/25/16 17:02	01/26/16 12:48	LTB
Semi Volatile Organic Compounds (GC/MS) by Method 8270D-SIM	WG844412	5	01/25/16 23:21	01/26/16 12:57	KMP
Semi-Volatile Organic Compounds (GC) by Method 8015	WG844143	10	01/24/16 19:24	01/25/16 20:30	AAT
Total Solids by Method 2540 G-2011	WG844219	1	01/25/16 06:59	01/25/16 07:12	KDW
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG844294	1	01/27/16 15:37	01/27/16 18:31	LRL
Volatile Organic Compounds (GC/MS) by Method 8260C	WG844204	1.09	01/24/16 09:20	01/25/16 17:55	BMB

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc

S-3 8-10FT L813258-03 Solid

Collected by
Scott Stehlik

Collected date/time
01/21/16 11:15

Received date/time
01/23/16 13:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Mercury by Method 7471A	WG844876	1	01/27/16 15:00	01/28/16 16:56	TRB
Metals (ICP) by Method 6010C	WG844444	1	01/25/16 17:02	01/26/16 12:51	LTB
Semi Volatile Organic Compounds (GC/MS) by Method 8270D-SIM	WG844412	1	01/25/16 23:21	01/26/16 07:56	KMP
Semi-Volatile Organic Compounds (GC) by Method 8015	WG844143	1	01/24/16 19:24	01/25/16 17:23	AAT
Total Solids by Method 2540 G-2011	WG844219	1	01/25/16 06:59	01/25/16 07:12	KDW
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG844294	1	01/27/16 15:37	01/27/16 18:56	LRL
Volatile Organic Compounds (GC/MS) by Method 8260C	WG844204	1	01/24/16 09:20	01/25/16 18:16	BMB

S-4 5-10FT L813258-04 Solid

Collected by
Scott Stehlik

Collected date/time
01/21/16 12:30

Received date/time
01/23/16 13:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Mercury by Method 7471A	WG844876	1	01/27/16 15:00	01/28/16 16:58	TRB
Metals (ICP) by Method 6010C	WG844444	1	01/25/16 17:02	01/26/16 12:54	LTB
Metals (ICP) by Method 6010C	WG844444	10	01/25/16 17:02	01/26/16 14:13	LTB
Semi Volatile Organic Compounds (GC/MS) by Method 8270D-SIM	WG844412	10	01/25/16 23:21	01/26/16 13:19	KMP
Semi-Volatile Organic Compounds (GC) by Method 8015	WG844143	10	01/24/16 19:24	01/25/16 21:14	AAT
Total Solids by Method 2540 G-2011	WG844219	1	01/25/16 06:59	01/25/16 07:12	KDW
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG844294	1	01/27/16 15:37	01/27/16 19:21	LRL
Volatile Organic Compounds (GC/MS) by Method 8260C	WG844204	1	01/24/16 09:20	01/25/16 18:38	BMB

S-5 8-10FT L813258-05 Solid

Collected by
Scott Stehlik

Collected date/time
01/21/16 12:45

Received date/time
01/23/16 13:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Mercury by Method 7471A	WG844876	1	01/27/16 15:00	01/28/16 17:06	TRB
Metals (ICP) by Method 6010C	WG844444	1	01/25/16 17:02	01/26/16 13:03	LTB

ACCOUNT:

A & W Professional Services, PLLC

PROJECT:

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L813258

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01/29/16 15:14

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SAMPLE SUMMARY

ONE LAB. NATIONWIDE.



S-5 8-10FT L813258-05 Solid

Collected by
Scott Stehlik

Collected date/time
01/21/16 12:45

Received date/time
01/23/16 13:00

¹ Cp

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Semi Volatile Organic Compounds (GC/MS) by Method 8270D-SIM	WG844412	1	01/25/16 23:21	01/26/16 08:18	KMP
Semi-Volatile Organic Compounds (GC) by Method 8015	WG844143	5	01/24/16 19:24	01/25/16 19:47	AAT
Total Solids by Method 2540 G-2011	WG844219	1	01/25/16 06:59	01/25/16 07:12	KDW
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG845204	20.5	01/28/16 14:26	01/28/16 14:53	JHH
Volatile Organic Compounds (GC/MS) by Method 8260C	WG844204	1	01/24/16 09:20	01/25/16 19:00	BMB

² Tc

³ Ss

⁴ Cn

S-6 6-9FT L813258-06 Solid

Collected by
Scott Stehlik

Collected date/time
01/21/16 13:15

Received date/time
01/23/16 13:00

⁵ Sr

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Mercury by Method 7471A	WG844876	1	01/27/16 15:00	01/28/16 17:09	TRB
Metals (ICP) by Method 6010C	WG844444	1	01/25/16 17:02	01/26/16 13:06	LTB
Semi Volatile Organic Compounds (GC/MS) by Method 8270D-SIM	WG844412	1	01/25/16 23:21	01/26/16 08:39	KMP
Semi-Volatile Organic Compounds (GC) by Method 8015	WG844143	1	01/24/16 19:24	01/26/16 09:50	AAT
Total Solids by Method 2540 G-2011	WG844219	1	01/25/16 06:59	01/25/16 07:12	KDW
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG844294	1	01/27/16 15:37	01/27/16 20:12	LRL
Volatile Organic Compounds (GC/MS) by Method 8260C	WG844204	1.07	01/24/16 09:20	01/25/16 19:20	BMB

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc

S-7 8-10FT L813258-07 Solid

Collected by
Scott Stehlik

Collected date/time
01/21/16 14:00

Received date/time
01/23/16 13:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Mercury by Method 7471A	WG844876	1	01/27/16 15:00	01/28/16 17:11	TRB
Metals (ICP) by Method 6010C	WG844444	1	01/25/16 17:02	01/26/16 13:09	LTB
Semi Volatile Organic Compounds (GC/MS) by Method 8270D-SIM	WG844412	1	01/25/16 23:21	01/26/16 09:01	KMP
Semi-Volatile Organic Compounds (GC) by Method 8015	WG844143	10	01/24/16 19:24	01/25/16 20:59	AAT
Total Solids by Method 2540 G-2011	WG844219	1	01/25/16 06:59	01/25/16 07:12	KDW
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG844294	1	01/27/16 15:37	01/27/16 20:37	LRL
Volatile Organic Compounds (GC/MS) by Method 8260C	WG844204	1	01/24/16 09:20	01/25/16 19:42	BMB

S-8 8-10FT L813258-08 Solid

Collected by
Scott Stehlik

Collected date/time
01/21/16 14:10

Received date/time
01/23/16 13:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Mercury by Method 7471A	WG844876	1	01/27/16 15:00	01/28/16 17:14	TRB
Metals (ICP) by Method 6010C	WG844444	1	01/25/16 17:02	01/26/16 13:12	LTB
Semi Volatile Organic Compounds (GC/MS) by Method 8270D-SIM	WG844412	1	01/25/16 23:21	01/26/16 09:22	KMP
Semi-Volatile Organic Compounds (GC) by Method 8015	WG844143	1	01/24/16 19:24	01/25/16 18:35	AAT
Total Solids by Method 2540 G-2011	WG844219	1	01/25/16 06:59	01/25/16 07:12	KDW
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG844294	1	01/27/16 15:37	01/27/16 21:18	LRL
Volatile Organic Compounds (GC/MS) by Method 8260C	WG844204	1	01/24/16 09:20	01/25/16 20:03	BMB

S-9 8-10FT L813258-09 Solid

Collected by
Scott Stehlik

Collected date/time
01/21/16 14:45

Received date/time
01/23/16 13:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Mercury by Method 7471A	WG844876	1	01/27/16 15:00	01/28/16 17:16	TRB
Metals (ICP) by Method 6010C	WG844444	1	01/25/16 17:02	01/26/16 13:15	LTB
Semi Volatile Organic Compounds (GC/MS) by Method 8270D-SIM	WG844412	1	01/25/16 23:21	01/26/16 09:44	KMP
Semi-Volatile Organic Compounds (GC) by Method 8015	WG844143	1	01/24/16 19:24	01/25/16 18:20	AAT
Total Solids by Method 2540 G-2011	WG844219	1	01/25/16 06:59	01/25/16 07:12	KDW

ACCOUNT:

A & W Professional Services, PLLC

PROJECT:

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L813258

DATE/TIME:

01/29/16 15:14

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SAMPLE SUMMARY

ONE LAB. NATIONWIDE.



S-9 8-10FT L813258-09 Solid

Collected by
Scott Stehlik

Collected date/time
01/21/16 14:45

Received date/time
01/23/16 13:00

¹ Cp

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG844294	1	01/27/16 15:37	01/28/16 00:05	LRL
Volatile Organic Compounds (GC/MS) by Method 8260C	WG844204	1	01/29/16 10:23	01/29/16 11:21	ACG

² Tc

³ Ss

S-10 5-9FT L813258-10 Solid

Collected by
Scott Stehlik

Collected date/time
01/21/16 15:20

Received date/time
01/23/16 13:00

⁴ Cn

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Mercury by Method 7471A	WG844876	500	01/27/16 15:00	01/28/16 18:24	TRB
Metals (ICP) by Method 6010C	WG844444	5	01/25/16 17:02	01/26/16 14:16	LTB
Semi Volatile Organic Compounds (GC/MS) by Method 8270D-SIM	WG844412	5	01/25/16 23:21	01/26/16 12:36	KMP
Semi-Volatile Organic Compounds (GC) by Method 8015	WG844143	10	01/24/16 19:24	01/25/16 20:44	AAT
Total Solids by Method 2540 G-2011	WG844220	1	01/25/16 09:59	01/25/16 10:08	MEL
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG844294	1.37	01/27/16 15:37	01/28/16 04:23	LRL
Volatile Organic Compounds (GC/MS) by Method 8260C	WG844204	1	01/24/16 09:20	01/25/16 20:24	BMB

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

S-11 5-10FT L813258-11 Solid

Collected by
Scott Stehlik

Collected date/time
01/21/16 15:40

Received date/time
01/23/16 13:00

⁹ Sc

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Mercury by Method 7471A	WG844876	5	01/27/16 15:00	01/28/16 18:16	TRB
Metals (ICP) by Method 6010C	WG844444	1	01/25/16 17:02	01/26/16 13:21	LTB
Semi Volatile Organic Compounds (GC/MS) by Method 8270D-SIM	WG844412	20	01/25/16 23:21	01/26/16 13:40	KMP
Semi-Volatile Organic Compounds (GC) by Method 8015	WG844143	100	01/24/16 19:24	01/25/16 21:28	AAT
Total Solids by Method 2540 G-2011	WG844220	1	01/25/16 09:59	01/25/16 10:08	MEL
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG844294	1.02	01/27/16 15:37	01/28/16 05:07	LRL
Volatile Organic Compounds (GC/MS) by Method 8260C	WG844204	1	01/24/16 09:20	01/25/16 20:45	BMB

GW-1 10FT L813258-12 GW

Collected by
Scott Stehlik

Collected date/time
01/21/16 10:45

Received date/time
01/23/16 13:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Mercury by Method 7470A	WG844286	1	01/26/16 08:03	01/26/16 13:45	BRJ
Metals (ICP) by Method 6010C	WG844285	1	01/25/16 14:30	01/26/16 00:38	CCE
Semi Volatile Organic Compounds (GC/MS) by Method 8270D-SIM	WG844464	1	01/26/16 09:36	01/26/16 16:04	FMB
Semi-Volatile Organic Compounds (GC) by Method 8015	WG843963	1	01/25/16 21:55	01/26/16 18:48	JNS
Volatile Organic Compounds (GC/MS) by Method 8260C	WG845218	1	01/28/16 16:10	01/28/16 16:10	JHH

GW-2 10FT L813258-13 GW

Collected by
Scott Stehlik

Collected date/time
01/21/16 13:45

Received date/time
01/23/16 13:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Mercury by Method 7470A	WG844286	1	01/26/16 08:03	01/26/16 13:58	BRJ
Metals (ICP) by Method 6010C	WG844285	9	01/25/16 14:30	01/26/16 00:41	CCE
Semi Volatile Organic Compounds (GC/MS) by Method 8270D-SIM	WG844464	1	01/26/16 09:36	01/26/16 16:26	FMB
Semi-Volatile Organic Compounds (GC) by Method 8015	WG843963	1	01/25/16 21:55	01/26/16 19:08	JNS
Volatile Organic Compounds (GC/MS) by Method 8260C	WG845218	1	01/28/16 16:32	01/28/16 16:32	JHH

ACCOUNT:

A & W Professional Services, PLLC

PROJECT:

SDG:

L813258

DATE/TIME:

01/29/16 15:14

PAGE:

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SAMPLE SUMMARY

ONE LAB. NATIONWIDE.



GW-3 10FT L813258-14 GW

Collected by
Scott Stehlik

Collected date/time
01/21/16 14:20

Received date/time
01/23/16 13:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Mercury by Method 7470A	WG844286	1	01/26/16 08:03	01/26/16 14:01	BRJ
Metals (ICP) by Method 6010C	WG844285	9	01/25/16 14:30	01/26/16 00:45	CCE
Semi Volatile Organic Compounds (GC/MS) by Method 8270D-SIM	WG844464	1	01/26/16 09:36	01/26/16 16:47	FMB
Semi-Volatile Organic Compounds (GC) by Method 8015	WG843963	1	01/25/16 21:55	01/26/16 19:28	JNS
Volatile Organic Compounds (GC/MS) by Method 8260C	WG845218	1	01/28/16 16:54	01/28/16 16:54	JHH

¹ Cp

² Tc

³ Ss

⁴ Cn

GW-4 10FT L813258-15 GW

Collected by
Scott Stehlik

Collected date/time
01/21/16 15:30

Received date/time
01/23/16 13:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Mercury by Method 7470A	WG844286	1	01/26/16 08:03	01/26/16 14:03	BRJ
Metals (ICP) by Method 6010C	WG844285	1	01/25/16 14:30	01/26/16 00:48	CCE
Semi Volatile Organic Compounds (GC/MS) by Method 8270D-SIM	WG844464	1	01/26/16 09:36	01/26/16 17:09	FMB
Semi-Volatile Organic Compounds (GC) by Method 8015	WG843963	1	01/25/16 21:55	01/26/16 19:48	JNS
Volatile Organic Compounds (GC/MS) by Method 8260C	WG845218	1	01/28/16 17:15	01/28/16 17:15	JHH

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc

ACCOUNT:

A & W Professional Services, PLLC

PROJECT:

SDG:

L813258

DATE/TIME:

01/29/16 15:14

PAGE:

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All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times. 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.

Jimmy Hunt
Technical Service Representative

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	88.8		1	01/25/2016 07:12	WG844219

Mercury by Method 7471A

Analyte	Result (dry)	Qualifier	RDL (dry)	Dilution	Analysis date / time	Batch
Mercury	0.419	J3 J5 O1	0.0225	1	01/28/2016 16:46	WG844876

Metals (ICP) by Method 6010C

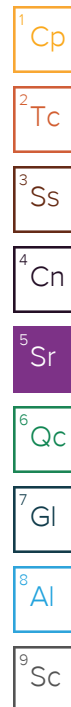
Analyte	Result (dry)	Qualifier	RDL (dry)	Dilution	Analysis date / time	Batch
Arsenic	21.5		2.25	1	01/26/2016 12:45	WG844444
Barium	334		0.563	1	01/26/2016 12:45	WG844444
Cadmium	3.37		0.563	1	01/26/2016 12:45	WG844444
Chromium	37.2		1.13	1	01/26/2016 12:45	WG844444
Lead	1970		0.563	1	01/26/2016 12:45	WG844444
Selenium	2.30		2.25	1	01/26/2016 12:45	WG844444
Silver	ND		1.13	1	01/26/2016 12:45	WG844444

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

Analyte	Result (dry)	Qualifier	RDL (dry)	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	ND		0.113	1	01/27/2016 18:05	WG844294
(S) a,a,a-Trifluorotoluene(FID)	96.9		59.0-128		01/27/2016 18:05	WG844294

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

Analyte	Result (dry)	Qualifier	RDL (dry)	Dilution	Analysis date / time	Batch
Acetone	ND		0.0563	1	01/25/2016 17:33	WG844204
Acrylonitrile	ND		0.0113	1	01/25/2016 17:33	WG844204
Benzene	ND		0.00113	1	01/25/2016 17:33	WG844204
Bromobenzene	ND		0.00113	1	01/25/2016 17:33	WG844204
Bromodichloromethane	ND		0.00113	1	01/25/2016 17:33	WG844204
Bromoform	ND		0.00113	1	01/25/2016 17:33	WG844204
Bromomethane	ND		0.00563	1	01/25/2016 17:33	WG844204
n-Butylbenzene	ND		0.00113	1	01/25/2016 17:33	WG844204
sec-Butylbenzene	ND		0.00113	1	01/25/2016 17:33	WG844204
tert-Butylbenzene	ND		0.00113	1	01/25/2016 17:33	WG844204
Carbon tetrachloride	ND		0.00113	1	01/25/2016 17:33	WG844204
Chlorobenzene	ND		0.00113	1	01/25/2016 17:33	WG844204
Chlorodibromomethane	ND		0.00113	1	01/25/2016 17:33	WG844204
Chloroethane	ND		0.00563	1	01/25/2016 17:33	WG844204
2-Chloroethyl vinyl ether	ND		0.0563	1	01/25/2016 17:33	WG844204
Chloroform	ND		0.00563	1	01/25/2016 17:33	WG844204
Chloromethane	ND		0.00281	1	01/25/2016 17:33	WG844204
2-Chlorotoluene	ND		0.00113	1	01/25/2016 17:33	WG844204
4-Chlorotoluene	ND		0.00113	1	01/25/2016 17:33	WG844204
1,2-Dibromo-3-Chloropropane	ND		0.00563	1	01/25/2016 17:33	WG844204
1,2-Dibromoethane	ND		0.00113	1	01/25/2016 17:33	WG844204
Dibromomethane	ND		0.00113	1	01/25/2016 17:33	WG844204
1,2-Dichlorobenzene	ND		0.00113	1	01/25/2016 17:33	WG844204
1,3-Dichlorobenzene	ND		0.00113	1	01/25/2016 17:33	WG844204
1,4-Dichlorobenzene	ND		0.00113	1	01/25/2016 17:33	WG844204
Dichlorodifluoromethane	ND		0.00563	1	01/25/2016 17:33	WG844204
1,1-Dichloroethane	ND		0.00113	1	01/25/2016 17:33	WG844204





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

Analyte	Result (dry) mg/kg	Qualifier	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
1,2-Dichloroethane	ND		0.0013	1	01/25/2016 17:33	WG844204
1,1-Dichloroethene	ND		0.0013	1	01/25/2016 17:33	WG844204
cis-1,2-Dichloroethene	ND		0.0013	1	01/25/2016 17:33	WG844204
trans-1,2-Dichloroethene	ND		0.0013	1	01/25/2016 17:33	WG844204
1,2-Dichloropropane	ND		0.0013	1	01/25/2016 17:33	WG844204
1,1-Dichloropropene	ND		0.0013	1	01/25/2016 17:33	WG844204
1,3-Dichloropropane	ND		0.0013	1	01/25/2016 17:33	WG844204
cis-1,3-Dichloropropene	ND		0.0013	1	01/25/2016 17:33	WG844204
trans-1,3-Dichloropropene	ND		0.0013	1	01/25/2016 17:33	WG844204
2,2-Dichloropropane	ND		0.0013	1	01/25/2016 17:33	WG844204
Di-isopropyl ether	ND		0.0013	1	01/25/2016 17:33	WG844204
Ethylbenzene	ND		0.0013	1	01/25/2016 17:33	WG844204
Hexachloro-1,3-butadiene	ND		0.0013	1	01/25/2016 17:33	WG844204
Isopropylbenzene	ND		0.0013	1	01/25/2016 17:33	WG844204
p-Isopropyltoluene	ND		0.0013	1	01/25/2016 17:33	WG844204
2-Butanone (MEK)	ND		0.0113	1	01/25/2016 17:33	WG844204
Methylene Chloride	ND		0.00563	1	01/25/2016 17:33	WG844204
4-Methyl-2-pentanone (MIBK)	ND		0.0113	1	01/25/2016 17:33	WG844204
Methyl tert-butyl ether	ND		0.0013	1	01/25/2016 17:33	WG844204
Naphthalene	ND		0.00563	1	01/25/2016 17:33	WG844204
n-Propylbenzene	ND		0.0013	1	01/25/2016 17:33	WG844204
Styrene	ND		0.0013	1	01/25/2016 17:33	WG844204
1,1,1,2-Tetrachloroethane	ND		0.0013	1	01/25/2016 17:33	WG844204
1,1,2,2-Tetrachloroethane	ND		0.0013	1	01/25/2016 17:33	WG844204
1,1,2-Trichlorotrifluoroethane	ND		0.0013	1	01/25/2016 17:33	WG844204
Tetrachloroethene	ND		0.0013	1	01/25/2016 17:33	WG844204
Toluene	ND		0.00563	1	01/25/2016 17:33	WG844204
1,2,3-Trichlorobenzene	ND		0.0013	1	01/25/2016 17:33	WG844204
1,2,4-Trichlorobenzene	ND		0.0013	1	01/25/2016 17:33	WG844204
1,1,1-Trichloroethane	ND		0.0013	1	01/25/2016 17:33	WG844204
1,1,2-Trichloroethane	ND		0.0013	1	01/25/2016 17:33	WG844204
Trichloroethene	ND		0.0013	1	01/25/2016 17:33	WG844204
Trichlorofluoromethane	ND		0.00563	1	01/25/2016 17:33	WG844204
1,2,3-Trichloropropane	ND		0.00281	1	01/25/2016 17:33	WG844204
1,2,4-Trimethylbenzene	ND		0.0013	1	01/25/2016 17:33	WG844204
1,2,3-Trimethylbenzene	ND		0.0013	1	01/25/2016 17:33	WG844204
Vinyl chloride	ND		0.0013	1	01/25/2016 17:33	WG844204
1,3,5-Trimethylbenzene	ND		0.0013	1	01/25/2016 17:33	WG844204
Xylenes, Total	ND		0.00338	1	01/25/2016 17:33	WG844204
(S) Toluene-d8	106		88.7-115		01/25/2016 17:33	WG844204
(S) Dibromofluoromethane	107		76.3-123		01/25/2016 17:33	WG844204
(S) 4-Bromofluorobenzene	101		69.7-129		01/25/2016 17:33	WG844204

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

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry) mg/kg	Qualifier	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	27.5		4.50	1	01/26/2016 10:04	WG844143
C28-C40 Oil Range	15.2		4.50	1	01/26/2016 10:04	WG844143
(S) o-Terphenyl	86.9		50.0-150		01/26/2016 10:04	WG844143



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

Analyte	Result (dry) mg/kg	Qualifier	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Anthracene	0.0758		0.00676	1	01/26/2016 07:35	WG844412
Acenaphthene	0.0351		0.00676	1	01/26/2016 07:35	WG844412
Acenaphthylene	ND		0.00676	1	01/26/2016 07:35	WG844412
Benzo(a)anthracene	0.326		0.00676	1	01/26/2016 07:35	WG844412
Benzo(a)pyrene	0.327		0.00676	1	01/26/2016 07:35	WG844412
Benzo(b)fluoranthene	0.377		0.00676	1	01/26/2016 07:35	WG844412
Benzo(g,h,i)perylene	0.228		0.00676	1	01/26/2016 07:35	WG844412
Benzo(k)fluoranthene	0.107		0.00676	1	01/26/2016 07:35	WG844412
Chrysene	0.275		0.00676	1	01/26/2016 07:35	WG844412
Dibenz(a,h)anthracene	0.0554		0.00676	1	01/26/2016 07:35	WG844412
Fluoranthene	0.610		0.00676	1	01/26/2016 07:35	WG844412
Fluorene	0.0370		0.00676	1	01/26/2016 07:35	WG844412
Indeno(1,2,3-cd)pyrene	0.189		0.00676	1	01/26/2016 07:35	WG844412
Naphthalene	0.0750		0.0225	1	01/26/2016 07:35	WG844412
Phenanthrene	0.357		0.00676	1	01/26/2016 07:35	WG844412
Pyrene	0.646		0.00676	1	01/26/2016 07:35	WG844412
1-Methylnaphthalene	ND		0.0225	1	01/26/2016 07:35	WG844412
2-Methylnaphthalene	ND		0.0225	1	01/26/2016 07:35	WG844412
2-Chloronaphthalene	ND		0.0225	1	01/26/2016 07:35	WG844412
(S) Nitrobenzene-d5	83.9		22.1-146		01/26/2016 07:35	WG844412
(S) 2-Fluorobiphenyl	91.6		40.6-122		01/26/2016 07:35	WG844412
(S) p-Terphenyl-d14	91.2		32.2-131		01/26/2016 07:35	WG844412

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	81.5		1	01/25/2016 07:12	WG844219

Mercury by Method 7471A

Analyte	Result (dry)	Qualifier	RDL (dry)	Dilution	Analysis date / time	Batch
Mercury	ND		0.0245	1	01/28/2016 16:53	WG844876

Metals (ICP) by Method 6010C

Analyte	Result (dry)	Qualifier	RDL (dry)	Dilution	Analysis date / time	Batch
Arsenic	26.5		2.45	1	01/26/2016 12:48	WG844444
Barium	209		0.614	1	01/26/2016 12:48	WG844444
Cadmium	ND		0.614	1	01/26/2016 12:48	WG844444
Chromium	39.9		1.23	1	01/26/2016 12:48	WG844444
Lead	246		0.614	1	01/26/2016 12:48	WG844444
Selenium	4.36		2.45	1	01/26/2016 12:48	WG844444
Silver	ND		1.23	1	01/26/2016 12:48	WG844444

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

Analyte	Result (dry)	Qualifier	RDL (dry)	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	0.223		0.123	1	01/27/2016 18:31	WG844294
(S) a,a,a-Trifluorotoluene(FID)	95.4		59.0-128		01/27/2016 18:31	WG844294

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

Analyte	Result (dry)	Qualifier	RDL (dry)	Dilution	Analysis date / time	Batch
Acetone	ND		0.0669	1.09	01/25/2016 17:55	WG844204
Acrylonitrile	ND		0.0134	1.09	01/25/2016 17:55	WG844204
Benzene	ND		0.00134	1.09	01/25/2016 17:55	WG844204
Bromobenzene	ND		0.00134	1.09	01/25/2016 17:55	WG844204
Bromodichloromethane	ND		0.00134	1.09	01/25/2016 17:55	WG844204
Bromoform	ND		0.00134	1.09	01/25/2016 17:55	WG844204
Bromomethane	ND		0.00669	1.09	01/25/2016 17:55	WG844204
n-Butylbenzene	ND		0.00134	1.09	01/25/2016 17:55	WG844204
sec-Butylbenzene	ND		0.00134	1.09	01/25/2016 17:55	WG844204
tert-Butylbenzene	ND		0.00134	1.09	01/25/2016 17:55	WG844204
Carbon tetrachloride	ND		0.00134	1.09	01/25/2016 17:55	WG844204
Chlorobenzene	ND		0.00134	1.09	01/25/2016 17:55	WG844204
Chlorodibromomethane	ND		0.00134	1.09	01/25/2016 17:55	WG844204
Chloroethane	ND		0.00669	1.09	01/25/2016 17:55	WG844204
2-Chloroethyl vinyl ether	ND		0.0669	1.09	01/25/2016 17:55	WG844204
Chloroform	ND		0.00669	1.09	01/25/2016 17:55	WG844204
Chloromethane	ND		0.00334	1.09	01/25/2016 17:55	WG844204
2-Chlorotoluene	ND		0.00134	1.09	01/25/2016 17:55	WG844204
4-Chlorotoluene	ND		0.00134	1.09	01/25/2016 17:55	WG844204
1,2-Dibromo-3-Chloropropane	ND		0.00669	1.09	01/25/2016 17:55	WG844204
1,2-Dibromoethane	ND		0.00134	1.09	01/25/2016 17:55	WG844204
Dibromomethane	ND		0.00134	1.09	01/25/2016 17:55	WG844204
1,2-Dichlorobenzene	ND		0.00134	1.09	01/25/2016 17:55	WG844204
1,3-Dichlorobenzene	ND		0.00134	1.09	01/25/2016 17:55	WG844204
1,4-Dichlorobenzene	ND		0.00134	1.09	01/25/2016 17:55	WG844204
Dichlorodifluoromethane	ND		0.00669	1.09	01/25/2016 17:55	WG844204
1,1-Dichloroethane	ND		0.00134	1.09	01/25/2016 17:55	WG844204

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



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

Analyte	Result (dry) mg/kg	Qualifier	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
1,2-Dichloroethane	ND		0.00134	1.09	01/25/2016 17:55	WG844204
1,1-Dichloroethene	ND		0.00134	1.09	01/25/2016 17:55	WG844204
cis-1,2-Dichloroethene	ND		0.00134	1.09	01/25/2016 17:55	WG844204
trans-1,2-Dichloroethene	ND		0.00134	1.09	01/25/2016 17:55	WG844204
1,2-Dichloropropane	ND		0.00134	1.09	01/25/2016 17:55	WG844204
1,1-Dichloropropene	ND		0.00134	1.09	01/25/2016 17:55	WG844204
1,3-Dichloropropane	ND		0.00134	1.09	01/25/2016 17:55	WG844204
cis-1,3-Dichloropropene	ND		0.00134	1.09	01/25/2016 17:55	WG844204
trans-1,3-Dichloropropene	ND		0.00134	1.09	01/25/2016 17:55	WG844204
2,2-Dichloropropane	ND		0.00134	1.09	01/25/2016 17:55	WG844204
Di-isopropyl ether	ND		0.00134	1.09	01/25/2016 17:55	WG844204
Ethylbenzene	ND		0.00134	1.09	01/25/2016 17:55	WG844204
Hexachloro-1,3-butadiene	ND		0.00134	1.09	01/25/2016 17:55	WG844204
Isopropylbenzene	ND		0.00134	1.09	01/25/2016 17:55	WG844204
p-Isopropyltoluene	0.00138		0.00134	1.09	01/25/2016 17:55	WG844204
2-Butanone (MEK)	ND		0.0134	1.09	01/25/2016 17:55	WG844204
Methylene Chloride	ND		0.00669	1.09	01/25/2016 17:55	WG844204
4-Methyl-2-pentanone (MIBK)	ND		0.0134	1.09	01/25/2016 17:55	WG844204
Methyl tert-butyl ether	ND		0.00134	1.09	01/25/2016 17:55	WG844204
Naphthalene	ND		0.00669	1.09	01/25/2016 17:55	WG844204
n-Propylbenzene	ND		0.00134	1.09	01/25/2016 17:55	WG844204
Styrene	ND		0.00134	1.09	01/25/2016 17:55	WG844204
1,1,1,2-Tetrachloroethane	ND		0.00134	1.09	01/25/2016 17:55	WG844204
1,1,2,2-Tetrachloroethane	ND		0.00134	1.09	01/25/2016 17:55	WG844204
1,1,2-Trichlorotrifluoroethane	ND		0.00134	1.09	01/25/2016 17:55	WG844204
Tetrachloroethene	ND		0.00134	1.09	01/25/2016 17:55	WG844204
Toluene	ND		0.00669	1.09	01/25/2016 17:55	WG844204
1,2,3-Trichlorobenzene	ND		0.00134	1.09	01/25/2016 17:55	WG844204
1,2,4-Trichlorobenzene	ND		0.00134	1.09	01/25/2016 17:55	WG844204
1,1,1-Trichloroethane	ND		0.00134	1.09	01/25/2016 17:55	WG844204
1,1,2-Trichloroethane	ND		0.00134	1.09	01/25/2016 17:55	WG844204
Trichloroethene	ND		0.00134	1.09	01/25/2016 17:55	WG844204
Trichlorofluoromethane	ND		0.00669	1.09	01/25/2016 17:55	WG844204
1,2,3-Trichloropropane	ND		0.00334	1.09	01/25/2016 17:55	WG844204
1,2,4-Trimethylbenzene	ND		0.00134	1.09	01/25/2016 17:55	WG844204
1,2,3-Trimethylbenzene	ND		0.00134	1.09	01/25/2016 17:55	WG844204
Vinyl chloride	ND		0.00134	1.09	01/25/2016 17:55	WG844204
1,3,5-Trimethylbenzene	ND		0.00134	1.09	01/25/2016 17:55	WG844204
Xylenes, Total	ND		0.00401	1.09	01/25/2016 17:55	WG844204
(S) Toluene-d8	104		88.7-115		01/25/2016 17:55	WG844204
(S) Dibromofluoromethane	108		76.3-123		01/25/2016 17:55	WG844204
(S) 4-Bromofluorobenzene	92.5		69.7-129		01/25/2016 17:55	WG844204

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry) mg/kg	Qualifier	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	93.1		49.1	10	01/25/2016 20:30	WG844143
C28-C40 Oil Range	49.4		49.1	10	01/25/2016 20:30	WG844143
(S) o-Terphenyl	76.5		50.0-150		01/25/2016 20:30	WG844143

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



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

Analyte	Result (dry) mg/kg	Qualifier	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Anthracene	0.490		0.0368	5	01/26/2016 12:57	WG844412
Acenaphthene	0.365		0.0368	5	01/26/2016 12:57	WG844412
Acenaphthylene	ND		0.0368	5	01/26/2016 12:57	WG844412
Benzo(a)anthracene	1.03		0.0368	5	01/26/2016 12:57	WG844412
Benzo(a)pyrene	0.982		0.0368	5	01/26/2016 12:57	WG844412
Benzo(b)fluoranthene	1.25		0.0368	5	01/26/2016 12:57	WG844412
Benzo(g,h,i)perylene	0.839		0.0368	5	01/26/2016 12:57	WG844412
Benzo(k)fluoranthene	0.282		0.0368	5	01/26/2016 12:57	WG844412
Chrysene	0.942		0.0368	5	01/26/2016 12:57	WG844412
Dibenz(a,h)anthracene	0.169		0.0368	5	01/26/2016 12:57	WG844412
Fluoranthene	2.43		0.0368	5	01/26/2016 12:57	WG844412
Fluorene	0.393		0.0368	5	01/26/2016 12:57	WG844412
Indeno(1,2,3-cd)pyrene	0.598		0.0368	5	01/26/2016 12:57	WG844412
Naphthalene	0.707		0.123	5	01/26/2016 12:57	WG844412
Phenanthrene	2.36		0.0368	5	01/26/2016 12:57	WG844412
Pyrene	2.15		0.0368	5	01/26/2016 12:57	WG844412
1-Methylnaphthalene	0.166		0.123	5	01/26/2016 12:57	WG844412
2-Methylnaphthalene	0.247		0.123	5	01/26/2016 12:57	WG844412
2-Chloronaphthalene	ND		0.123	5	01/26/2016 12:57	WG844412
(S) Nitrobenzene-d5	76.4		22.1-146		01/26/2016 12:57	WG844412
(S) 2-Fluorobiphenyl	72.1		40.6-122		01/26/2016 12:57	WG844412
(S) p-Terphenyl-d14	60.2		32.2-131		01/26/2016 12:57	WG844412

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ Gl⁸ Al⁹ Sc



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	88.0		1	01/25/2016 07:12	WG844219

Mercury by Method 7471A

Analyte	Result (dry)	Qualifier	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Mercury	ND		0.0227	1	01/28/2016 16:56	WG844876

Metals (ICP) by Method 6010C

Analyte	Result (dry)	Qualifier	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Arsenic	14.8		2.27	1	01/26/2016 12:51	WG844444
Barium	70.3		0.568	1	01/26/2016 12:51	WG844444
Cadmium	ND		0.568	1	01/26/2016 12:51	WG844444
Chromium	14.3		1.14	1	01/26/2016 12:51	WG844444
Lead	115		0.568	1	01/26/2016 12:51	WG844444
Selenium	ND		2.27	1	01/26/2016 12:51	WG844444
Silver	ND		1.14	1	01/26/2016 12:51	WG844444

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

Analyte	Result (dry)	Qualifier	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
TPH (GC/FID) Low Fraction	ND		0.114	1	01/27/2016 18:56	WG844294
(S) a,a,a-Trifluorotoluene(FID)	96.5		59.0-128		01/27/2016 18:56	WG844294

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

Analyte	Result (dry)	Qualifier	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Acetone	ND		0.0568	1	01/25/2016 18:16	WG844204
Acrylonitrile	ND		0.0114	1	01/25/2016 18:16	WG844204
Benzene	ND		0.00114	1	01/25/2016 18:16	WG844204
Bromobenzene	ND		0.00114	1	01/25/2016 18:16	WG844204
Bromodichloromethane	ND		0.00114	1	01/25/2016 18:16	WG844204
Bromoform	ND		0.00114	1	01/25/2016 18:16	WG844204
Bromomethane	ND		0.00568	1	01/25/2016 18:16	WG844204
n-Butylbenzene	ND		0.00114	1	01/25/2016 18:16	WG844204
sec-Butylbenzene	ND		0.00114	1	01/25/2016 18:16	WG844204
tert-Butylbenzene	ND		0.00114	1	01/25/2016 18:16	WG844204
Carbon tetrachloride	ND		0.00114	1	01/25/2016 18:16	WG844204
Chlorobenzene	ND		0.00114	1	01/25/2016 18:16	WG844204
Chlorodibromomethane	ND		0.00114	1	01/25/2016 18:16	WG844204
Chloroethane	ND		0.00568	1	01/25/2016 18:16	WG844204
2-Chloroethyl vinyl ether	ND		0.0568	1	01/25/2016 18:16	WG844204
Chloroform	ND		0.00568	1	01/25/2016 18:16	WG844204
Chloromethane	ND		0.00284	1	01/25/2016 18:16	WG844204
2-Chlorotoluene	ND		0.00114	1	01/25/2016 18:16	WG844204
4-Chlorotoluene	ND		0.00114	1	01/25/2016 18:16	WG844204
1,2-Dibromo-3-Chloropropane	ND		0.00568	1	01/25/2016 18:16	WG844204
1,2-Dibromoethane	ND		0.00114	1	01/25/2016 18:16	WG844204
Dibromomethane	ND		0.00114	1	01/25/2016 18:16	WG844204
1,2-Dichlorobenzene	ND		0.00114	1	01/25/2016 18:16	WG844204
1,3-Dichlorobenzene	ND		0.00114	1	01/25/2016 18:16	WG844204
1,4-Dichlorobenzene	ND		0.00114	1	01/25/2016 18:16	WG844204
Dichlorodifluoromethane	ND		0.00568	1	01/25/2016 18:16	WG844204
1,1-Dichloroethane	ND		0.00114	1	01/25/2016 18:16	WG844204

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



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

Analyte	Result (dry) mg/kg	Qualifier	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
1,2-Dichloroethane	ND		0.0014	1	01/25/2016 18:16	WG844204
1,1-Dichloroethene	ND		0.0014	1	01/25/2016 18:16	WG844204
cis-1,2-Dichloroethene	ND		0.0014	1	01/25/2016 18:16	WG844204
trans-1,2-Dichloroethene	ND		0.0014	1	01/25/2016 18:16	WG844204
1,2-Dichloropropane	ND		0.0014	1	01/25/2016 18:16	WG844204
1,1-Dichloropropene	ND		0.0014	1	01/25/2016 18:16	WG844204
1,3-Dichloropropane	ND		0.0014	1	01/25/2016 18:16	WG844204
cis-1,3-Dichloropropene	ND		0.0014	1	01/25/2016 18:16	WG844204
trans-1,3-Dichloropropene	ND		0.0014	1	01/25/2016 18:16	WG844204
2,2-Dichloropropane	ND		0.0014	1	01/25/2016 18:16	WG844204
Di-isopropyl ether	ND		0.0014	1	01/25/2016 18:16	WG844204
Ethylbenzene	ND		0.0014	1	01/25/2016 18:16	WG844204
Hexachloro-1,3-butadiene	ND		0.0014	1	01/25/2016 18:16	WG844204
Isopropylbenzene	ND		0.0014	1	01/25/2016 18:16	WG844204
p-Isopropyltoluene	ND		0.0014	1	01/25/2016 18:16	WG844204
2-Butanone (MEK)	ND		0.0114	1	01/25/2016 18:16	WG844204
Methylene Chloride	ND		0.00568	1	01/25/2016 18:16	WG844204
4-Methyl-2-pentanone (MIBK)	ND		0.0114	1	01/25/2016 18:16	WG844204
Methyl tert-butyl ether	ND		0.0014	1	01/25/2016 18:16	WG844204
Naphthalene	ND		0.00568	1	01/25/2016 18:16	WG844204
n-Propylbenzene	ND		0.0014	1	01/25/2016 18:16	WG844204
Styrene	ND		0.0014	1	01/25/2016 18:16	WG844204
1,1,1,2-Tetrachloroethane	ND		0.0014	1	01/25/2016 18:16	WG844204
1,1,2,2-Tetrachloroethane	ND		0.0014	1	01/25/2016 18:16	WG844204
1,1,2-Trichlorotrifluoroethane	ND		0.0014	1	01/25/2016 18:16	WG844204
Tetrachloroethene	ND		0.0014	1	01/25/2016 18:16	WG844204
Toluene	ND		0.00568	1	01/25/2016 18:16	WG844204
1,2,3-Trichlorobenzene	ND		0.0014	1	01/25/2016 18:16	WG844204
1,2,4-Trichlorobenzene	ND		0.0014	1	01/25/2016 18:16	WG844204
1,1,1-Trichloroethane	ND		0.0014	1	01/25/2016 18:16	WG844204
1,1,2-Trichloroethane	ND		0.0014	1	01/25/2016 18:16	WG844204
Trichloroethene	ND		0.0014	1	01/25/2016 18:16	WG844204
Trichlorofluoromethane	ND		0.00568	1	01/25/2016 18:16	WG844204
1,2,3-Trichloropropane	ND		0.00284	1	01/25/2016 18:16	WG844204
1,2,4-Trimethylbenzene	ND		0.0014	1	01/25/2016 18:16	WG844204
1,2,3-Trimethylbenzene	ND		0.0014	1	01/25/2016 18:16	WG844204
Vinyl chloride	ND		0.0014	1	01/25/2016 18:16	WG844204
1,3,5-Trimethylbenzene	ND		0.0014	1	01/25/2016 18:16	WG844204
Xylenes, Total	ND		0.00341	1	01/25/2016 18:16	WG844204
(S) Toluene-d8	105		88.7-115		01/25/2016 18:16	WG844204
(S) Dibromofluoromethane	109		76.3-123		01/25/2016 18:16	WG844204
(S) 4-Bromofluorobenzene	101		69.7-129		01/25/2016 18:16	WG844204

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

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry) mg/kg	Qualifier	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	ND		4.55	1	01/25/2016 17:23	WG844143
C28-C40 Oil Range	ND		4.55	1	01/25/2016 17:23	WG844143
(S) o-Terphenyl	98.5		50.0-150		01/25/2016 17:23	WG844143



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

Analyte	Result (dry) mg/kg	Qualifier	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Anthracene	0.0171		0.00682	1	01/26/2016 07:56	WG844412
Acenaphthene	ND		0.00682	1	01/26/2016 07:56	WG844412
Acenaphthylene	ND		0.00682	1	01/26/2016 07:56	WG844412
Benzo(a)anthracene	0.0739		0.00682	1	01/26/2016 07:56	WG844412
Benzo(a)pyrene	0.0713		0.00682	1	01/26/2016 07:56	WG844412
Benzo(b)fluoranthene	0.0909		0.00682	1	01/26/2016 07:56	WG844412
Benzo(g,h,i)perylene	0.0446		0.00682	1	01/26/2016 07:56	WG844412
Benzo(k)fluoranthene	0.0242		0.00682	1	01/26/2016 07:56	WG844412
Chrysene	0.0651		0.00682	1	01/26/2016 07:56	WG844412
Dibenz(a,h)anthracene	0.0147		0.00682	1	01/26/2016 07:56	WG844412
Fluoranthene	0.142		0.00682	1	01/26/2016 07:56	WG844412
Fluorene	ND		0.00682	1	01/26/2016 07:56	WG844412
Indeno(1,2,3-cd)pyrene	0.0404		0.00682	1	01/26/2016 07:56	WG844412
Naphthalene	ND		0.0227	1	01/26/2016 07:56	WG844412
Phenanthrene	0.0738		0.00682	1	01/26/2016 07:56	WG844412
Pyrene	0.129		0.00682	1	01/26/2016 07:56	WG844412
1-Methylnaphthalene	ND		0.0227	1	01/26/2016 07:56	WG844412
2-Methylnaphthalene	ND		0.0227	1	01/26/2016 07:56	WG844412
2-Chloronaphthalene	ND		0.0227	1	01/26/2016 07:56	WG844412
(S) Nitrobenzene-d5	92.4		22.1-146		01/26/2016 07:56	WG844412
(S) 2-Fluorobiphenyl	101		40.6-122		01/26/2016 07:56	WG844412
(S) p-Terphenyl-d14	94.7		32.2-131		01/26/2016 07:56	WG844412

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	81.7		1	01/25/2016 07:12	WG844219

Mercury by Method 7471A

Analyte	Result (dry)	Qualifier	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Mercury	0.464		0.0245	1	01/28/2016 16:58	WG844876

Metals (ICP) by Method 6010C

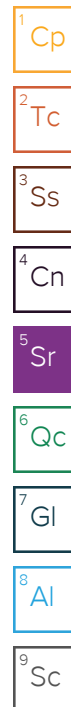
Analyte	Result (dry)	Qualifier	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Arsenic	5.23		2.45	1	01/26/2016 12:54	WG844444
Barium	4040		6.12	10	01/26/2016 14:13	WG844444
Cadmium	0.986		0.612	1	01/26/2016 12:54	WG844444
Chromium	34.4		1.22	1	01/26/2016 12:54	WG844444
Lead	5340		0.612	1	01/26/2016 12:54	WG844444
Selenium	ND		2.45	1	01/26/2016 12:54	WG844444
Silver	ND		1.22	1	01/26/2016 12:54	WG844444

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

Analyte	Result (dry)	Qualifier	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
TPH (GC/FID) Low Fraction	ND		0.122	1	01/27/2016 19:21	WG844294
(S) a,a,a-Trifluorotoluene(FID)	96.3		59.0-128		01/27/2016 19:21	WG844294

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

Analyte	Result (dry)	Qualifier	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Acetone	ND		0.0612	1	01/25/2016 18:38	WG844204
Acrylonitrile	ND		0.0122	1	01/25/2016 18:38	WG844204
Benzene	ND		0.00122	1	01/25/2016 18:38	WG844204
Bromobenzene	ND		0.00122	1	01/25/2016 18:38	WG844204
Bromodichloromethane	ND		0.00122	1	01/25/2016 18:38	WG844204
Bromoform	ND		0.00122	1	01/25/2016 18:38	WG844204
Bromomethane	ND		0.00612	1	01/25/2016 18:38	WG844204
n-Butylbenzene	ND		0.00122	1	01/25/2016 18:38	WG844204
sec-Butylbenzene	ND		0.00122	1	01/25/2016 18:38	WG844204
tert-Butylbenzene	ND		0.00122	1	01/25/2016 18:38	WG844204
Carbon tetrachloride	ND		0.00122	1	01/25/2016 18:38	WG844204
Chlorobenzene	ND		0.00122	1	01/25/2016 18:38	WG844204
Chlorodibromomethane	ND		0.00122	1	01/25/2016 18:38	WG844204
Chloroethane	ND		0.00612	1	01/25/2016 18:38	WG844204
2-Chloroethyl vinyl ether	ND		0.0612	1	01/25/2016 18:38	WG844204
Chloroform	ND		0.00612	1	01/25/2016 18:38	WG844204
Chloromethane	ND		0.00306	1	01/25/2016 18:38	WG844204
2-Chlorotoluene	ND		0.00122	1	01/25/2016 18:38	WG844204
4-Chlorotoluene	ND		0.00122	1	01/25/2016 18:38	WG844204
1,2-Dibromo-3-Chloropropane	ND		0.00612	1	01/25/2016 18:38	WG844204
1,2-Dibromoethane	ND		0.00122	1	01/25/2016 18:38	WG844204
Dibromomethane	ND		0.00122	1	01/25/2016 18:38	WG844204
1,2-Dichlorobenzene	ND		0.00122	1	01/25/2016 18:38	WG844204
1,3-Dichlorobenzene	ND		0.00122	1	01/25/2016 18:38	WG844204
1,4-Dichlorobenzene	ND		0.00122	1	01/25/2016 18:38	WG844204
Dichlorodifluoromethane	ND		0.00612	1	01/25/2016 18:38	WG844204
1,1-Dichloroethane	ND		0.00122	1	01/25/2016 18:38	WG844204





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

Analyte	Result (dry) mg/kg	Qualifier	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
1,2-Dichloroethane	ND		0.00122	1	01/25/2016 18:38	WG844204
1,1-Dichloroethene	ND		0.00122	1	01/25/2016 18:38	WG844204
cis-1,2-Dichloroethene	0.00619		0.00122	1	01/25/2016 18:38	WG844204
trans-1,2-Dichloroethene	ND		0.00122	1	01/25/2016 18:38	WG844204
1,2-Dichloropropane	ND		0.00122	1	01/25/2016 18:38	WG844204
1,1-Dichloropropene	ND		0.00122	1	01/25/2016 18:38	WG844204
1,3-Dichloropropane	ND		0.00122	1	01/25/2016 18:38	WG844204
cis-1,3-Dichloropropene	ND		0.00122	1	01/25/2016 18:38	WG844204
trans-1,3-Dichloropropene	ND		0.00122	1	01/25/2016 18:38	WG844204
2,2-Dichloropropane	ND		0.00122	1	01/25/2016 18:38	WG844204
Di-isopropyl ether	ND		0.00122	1	01/25/2016 18:38	WG844204
Ethylbenzene	ND		0.00122	1	01/25/2016 18:38	WG844204
Hexachloro-1,3-butadiene	ND		0.00122	1	01/25/2016 18:38	WG844204
Isopropylbenzene	ND		0.00122	1	01/25/2016 18:38	WG844204
p-Isopropyltoluene	ND		0.00122	1	01/25/2016 18:38	WG844204
2-Butanone (MEK)	ND		0.0122	1	01/25/2016 18:38	WG844204
Methylene Chloride	ND		0.00612	1	01/25/2016 18:38	WG844204
4-Methyl-2-pentanone (MIBK)	ND		0.0122	1	01/25/2016 18:38	WG844204
Methyl tert-butyl ether	ND		0.00122	1	01/25/2016 18:38	WG844204
Naphthalene	0.00705		0.00612	1	01/25/2016 18:38	WG844204
n-Propylbenzene	ND		0.00122	1	01/25/2016 18:38	WG844204
Styrene	ND		0.00122	1	01/25/2016 18:38	WG844204
1,1,1,2-Tetrachloroethane	ND		0.00122	1	01/25/2016 18:38	WG844204
1,1,2,2-Tetrachloroethane	ND		0.00122	1	01/25/2016 18:38	WG844204
1,1,2-Trichlorotrifluoroethane	ND		0.00122	1	01/25/2016 18:38	WG844204
Tetrachloroethene	0.0261		0.00122	1	01/25/2016 18:38	WG844204
Toluene	ND		0.00612	1	01/25/2016 18:38	WG844204
1,2,3-Trichlorobenzene	ND		0.00122	1	01/25/2016 18:38	WG844204
1,2,4-Trichlorobenzene	ND		0.00122	1	01/25/2016 18:38	WG844204
1,1,1-Trichloroethane	ND		0.00122	1	01/25/2016 18:38	WG844204
1,1,2-Trichloroethane	ND		0.00122	1	01/25/2016 18:38	WG844204
Trichloroethene	0.00308		0.00122	1	01/25/2016 18:38	WG844204
Trichlorofluoromethane	ND		0.00612	1	01/25/2016 18:38	WG844204
1,2,3-Trichloropropane	ND		0.00306	1	01/25/2016 18:38	WG844204
1,2,4-Trimethylbenzene	ND		0.00122	1	01/25/2016 18:38	WG844204
1,2,3-Trimethylbenzene	ND		0.00122	1	01/25/2016 18:38	WG844204
Vinyl chloride	ND		0.00122	1	01/25/2016 18:38	WG844204
1,3,5-Trimethylbenzene	ND		0.00122	1	01/25/2016 18:38	WG844204
Xylenes, Total	ND		0.00367	1	01/25/2016 18:38	WG844204
(S) Toluene-d8	104		88.7-115		01/25/2016 18:38	WG844204
(S) Dibromofluoromethane	109		76.3-123		01/25/2016 18:38	WG844204
(S) 4-Bromofluorobenzene	99.3		69.7-129		01/25/2016 18:38	WG844204

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry) mg/kg	Qualifier	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	ND		49.0	10	01/25/2016 21:14	WG844143
C28-C40 Oil Range	51.1		49.0	10	01/25/2016 21:14	WG844143
(S) o-Terphenyl	89.7		50.0-150		01/25/2016 21:14	WG844143



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

Analyte	Result (dry) mg/kg	Qualifier	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Anthracene	0.377		0.0735	10	01/26/2016 13:19	WG844412
Acenaphthene	0.0938		0.0735	10	01/26/2016 13:19	WG844412
Acenaphthylene	ND		0.0735	10	01/26/2016 13:19	WG844412
Benzo(a)anthracene	0.943		0.0735	10	01/26/2016 13:19	WG844412
Benzo(a)pyrene	0.768		0.0735	10	01/26/2016 13:19	WG844412
Benzo(b)fluoranthene	0.956		0.0735	10	01/26/2016 13:19	WG844412
Benzo(g,h,i)perylene	0.488		0.0735	10	01/26/2016 13:19	WG844412
Benzo(k)fluoranthene	0.276		0.0735	10	01/26/2016 13:19	WG844412
Chrysene	0.756		0.0735	10	01/26/2016 13:19	WG844412
Dibenz(a,h)anthracene	0.143		0.0735	10	01/26/2016 13:19	WG844412
Fluoranthene	2.02		0.0735	10	01/26/2016 13:19	WG844412
Fluorene	0.187		0.0735	10	01/26/2016 13:19	WG844412
Indeno(1,2,3-cd)pyrene	0.420		0.0735	10	01/26/2016 13:19	WG844412
Naphthalene	ND		0.245	10	01/26/2016 13:19	WG844412
Phenanthrene	1.49		0.0735	10	01/26/2016 13:19	WG844412
Pyrene	1.69		0.0735	10	01/26/2016 13:19	WG844412
1-Methylnaphthalene	ND		0.245	10	01/26/2016 13:19	WG844412
2-Methylnaphthalene	ND		0.245	10	01/26/2016 13:19	WG844412
2-Chloronaphthalene	ND		0.245	10	01/26/2016 13:19	WG844412
(S) Nitrobenzene-d5	81.3		22.1-146		01/26/2016 13:19	WG844412
(S) 2-Fluorobiphenyl	85.3		40.6-122		01/26/2016 13:19	WG844412
(S) p-Terphenyl-d14	69.2		32.2-131		01/26/2016 13:19	WG844412

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	83.9		1	01/25/2016 07:12	WG844219

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Mercury by Method 7471A

Analyte	Result (dry)	Qualifier	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Mercury	0.635		0.0238	1	01/28/2016 17:06	WG844876

Metals (ICP) by Method 6010C

Analyte	Result (dry)	Qualifier	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Arsenic	3.99		2.38	1	01/26/2016 13:03	WG844444
Barium	58.8		0.596	1	01/26/2016 13:03	WG844444
Cadmium	ND		0.596	1	01/26/2016 13:03	WG844444
Chromium	20.3		1.19	1	01/26/2016 13:03	WG844444
Lead	43.1		0.596	1	01/26/2016 13:03	WG844444
Selenium	ND		2.38	1	01/26/2016 13:03	WG844444
Silver	ND		1.19	1	01/26/2016 13:03	WG844444

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

Analyte	Result (dry)	Qualifier	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
TPH (GC/FID) Low Fraction	ND		2.44	20.5	01/28/2016 14:53	WG845204
(S) a,a,a-Trifluorotoluene(FID) 102			59.0-128		01/28/2016 14:53	WG845204

Sample Narrative:

8015D/GRO L813258-05 WG845204: No bisulfates remain for analysis.

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

Analyte	Result (dry)	Qualifier	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Acetone	ND		0.0596	1	01/25/2016 19:00	WG844204
Acrylonitrile	ND		0.0119	1	01/25/2016 19:00	WG844204
Benzene	ND		0.00119	1	01/25/2016 19:00	WG844204
Bromobenzene	ND		0.00119	1	01/25/2016 19:00	WG844204
Bromodichloromethane	ND		0.00119	1	01/25/2016 19:00	WG844204
Bromoform	ND		0.00119	1	01/25/2016 19:00	WG844204
Bromomethane	ND		0.00596	1	01/25/2016 19:00	WG844204
n-Butylbenzene	ND		0.00119	1	01/25/2016 19:00	WG844204
sec-Butylbenzene	ND		0.00119	1	01/25/2016 19:00	WG844204
tert-Butylbenzene	ND		0.00119	1	01/25/2016 19:00	WG844204
Carbon tetrachloride	ND		0.00119	1	01/25/2016 19:00	WG844204
Chlorobenzene	ND		0.00119	1	01/25/2016 19:00	WG844204
Chlorodibromomethane	ND		0.00119	1	01/25/2016 19:00	WG844204
Chloroethane	ND		0.00596	1	01/25/2016 19:00	WG844204
2-Chloroethyl vinyl ether	ND		0.0596	1	01/25/2016 19:00	WG844204
Chloroform	ND		0.00596	1	01/25/2016 19:00	WG844204
Chloromethane	ND		0.00298	1	01/25/2016 19:00	WG844204
2-Chlorotoluene	ND		0.00119	1	01/25/2016 19:00	WG844204
4-Chlorotoluene	ND		0.00119	1	01/25/2016 19:00	WG844204
1,2-Dibromo-3-Chloropropane	ND		0.00596	1	01/25/2016 19:00	WG844204
1,2-Dibromoethane	ND		0.00119	1	01/25/2016 19:00	WG844204
Dibromomethane	ND		0.00119	1	01/25/2016 19:00	WG844204
1,2-Dichlorobenzene	ND		0.00119	1	01/25/2016 19:00	WG844204
1,3-Dichlorobenzene	ND		0.00119	1	01/25/2016 19:00	WG844204



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

Analyte	Result (dry) mg/kg	Qualifier	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
1,4-Dichlorobenzene	ND		0.0019	1	01/25/2016 19:00	WG844204
Dichlorodifluoromethane	ND		0.00596	1	01/25/2016 19:00	WG844204
1,1-Dichloroethane	ND		0.0019	1	01/25/2016 19:00	WG844204
1,2-Dichloroethane	ND		0.0019	1	01/25/2016 19:00	WG844204
1,1-Dichloroethene	ND		0.0019	1	01/25/2016 19:00	WG844204
cis-1,2-Dichloroethene	ND		0.0019	1	01/25/2016 19:00	WG844204
trans-1,2-Dichloroethene	ND		0.0019	1	01/25/2016 19:00	WG844204
1,2-Dichloropropane	ND		0.0019	1	01/25/2016 19:00	WG844204
1,1-Dichloropropene	ND		0.0019	1	01/25/2016 19:00	WG844204
1,3-Dichloropropane	ND		0.0019	1	01/25/2016 19:00	WG844204
cis-1,3-Dichloropropene	ND		0.0019	1	01/25/2016 19:00	WG844204
trans-1,3-Dichloropropene	ND		0.0019	1	01/25/2016 19:00	WG844204
2,2-Dichloropropane	ND		0.0019	1	01/25/2016 19:00	WG844204
Di-isopropyl ether	ND		0.0019	1	01/25/2016 19:00	WG844204
Ethylbenzene	ND		0.0019	1	01/25/2016 19:00	WG844204
Hexachloro-1,3-butadiene	ND		0.0019	1	01/25/2016 19:00	WG844204
Isopropylbenzene	ND		0.0019	1	01/25/2016 19:00	WG844204
p-Isopropyltoluene	ND		0.0019	1	01/25/2016 19:00	WG844204
2-Butanone (MEK)	ND		0.0119	1	01/25/2016 19:00	WG844204
Methylene Chloride	ND		0.00596	1	01/25/2016 19:00	WG844204
4-Methyl-2-pentanone (MIBK)	ND		0.0119	1	01/25/2016 19:00	WG844204
Methyl tert-butyl ether	ND		0.0019	1	01/25/2016 19:00	WG844204
Naphthalene	ND		0.00596	1	01/25/2016 19:00	WG844204
n-Propylbenzene	ND		0.0019	1	01/25/2016 19:00	WG844204
Styrene	ND		0.0019	1	01/25/2016 19:00	WG844204
1,1,1,2-Tetrachloroethane	ND		0.0019	1	01/25/2016 19:00	WG844204
1,1,2,2-Tetrachloroethane	ND		0.0019	1	01/25/2016 19:00	WG844204
1,1,2-Trichlorotrifluoroethane	ND		0.0019	1	01/25/2016 19:00	WG844204
Tetrachloroethene	ND		0.0019	1	01/25/2016 19:00	WG844204
Toluene	ND		0.00596	1	01/25/2016 19:00	WG844204
1,2,3-Trichlorobenzene	ND		0.0019	1	01/25/2016 19:00	WG844204
1,2,4-Trichlorobenzene	ND		0.0019	1	01/25/2016 19:00	WG844204
1,1,1-Trichloroethane	ND		0.0019	1	01/25/2016 19:00	WG844204
1,1,2-Trichloroethane	ND		0.0019	1	01/25/2016 19:00	WG844204
Trichloroethene	ND		0.0019	1	01/25/2016 19:00	WG844204
Trichlorofluoromethane	ND		0.00596	1	01/25/2016 19:00	WG844204
1,2,3-Trichloropropane	ND		0.00298	1	01/25/2016 19:00	WG844204
1,2,4-Trimethylbenzene	ND		0.0019	1	01/25/2016 19:00	WG844204
1,2,3-Trimethylbenzene	ND		0.0019	1	01/25/2016 19:00	WG844204
Vinyl chloride	ND		0.0019	1	01/25/2016 19:00	WG844204
1,3,5-Trimethylbenzene	ND		0.0019	1	01/25/2016 19:00	WG844204
Xylenes, Total	ND		0.00358	1	01/25/2016 19:00	WG844204
(S) Toluene-d8	103		88.7-115		01/25/2016 19:00	WG844204
(S) Dibromofluoromethane	109		76.3-123		01/25/2016 19:00	WG844204
(S) 4-Bromofluorobenzene	101		69.7-129		01/25/2016 19:00	WG844204

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

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry) mg/kg	Qualifier	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	55.0		23.8	5	01/25/2016 19:47	WG844143
C28-C40 Oil Range	36.8		23.8	5	01/25/2016 19:47	WG844143
(S) o-Terphenyl	72.5		50.0-150		01/25/2016 19:47	WG844143



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

Analyte	Result (dry) mg/kg	Qualifier	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Anthracene	0.0565		0.00715	1	01/26/2016 08:18	WG844412
Acenaphthene	0.0310		0.00715	1	01/26/2016 08:18	WG844412
Acenaphthylene	ND		0.00715	1	01/26/2016 08:18	WG844412
Benzo(a)anthracene	0.0968		0.00715	1	01/26/2016 08:18	WG844412
Benzo(a)pyrene	0.0760		0.00715	1	01/26/2016 08:18	WG844412
Benzo(b)fluoranthene	0.0939		0.00715	1	01/26/2016 08:18	WG844412
Benzo(g,h,i)perylene	0.0443		0.00715	1	01/26/2016 08:18	WG844412
Benzo(k)fluoranthene	0.0258		0.00715	1	01/26/2016 08:18	WG844412
Chrysene	0.0797		0.00715	1	01/26/2016 08:18	WG844412
Dibenz(a,h)anthracene	0.0139		0.00715	1	01/26/2016 08:18	WG844412
Fluoranthene	0.228		0.00715	1	01/26/2016 08:18	WG844412
Fluorene	0.0372		0.00715	1	01/26/2016 08:18	WG844412
Indeno(1,2,3-cd)pyrene	0.0394		0.00715	1	01/26/2016 08:18	WG844412
Naphthalene	0.0411		0.0238	1	01/26/2016 08:18	WG844412
Phenanthrene	0.239		0.00715	1	01/26/2016 08:18	WG844412
Pyrene	0.194		0.00715	1	01/26/2016 08:18	WG844412
1-Methylnaphthalene	ND		0.0238	1	01/26/2016 08:18	WG844412
2-Methylnaphthalene	ND		0.0238	1	01/26/2016 08:18	WG844412
2-Chloronaphthalene	ND		0.0238	1	01/26/2016 08:18	WG844412
(S) Nitrobenzene-d5	89.9		22.1-146		01/26/2016 08:18	WG844412
(S) 2-Fluorobiphenyl	99.9		40.6-122		01/26/2016 08:18	WG844412
(S) p-Terphenyl-d14	92.0		32.2-131		01/26/2016 08:18	WG844412

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	90.0		1	01/25/2016 07:12	WG844219

Mercury by Method 7471A

Analyte	Result (dry)	Qualifier	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Mercury	0.226		0.0222	1	01/28/2016 17:09	WG844876

Metals (ICP) by Method 6010C

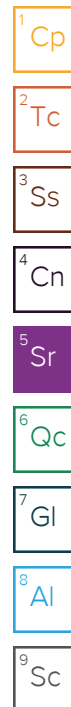
Analyte	Result (dry)	Qualifier	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Arsenic	2.71		2.22	1	01/26/2016 13:06	WG844444
Barium	45.8		0.556	1	01/26/2016 13:06	WG844444
Cadmium	ND		0.556	1	01/26/2016 13:06	WG844444
Chromium	19.1		1.11	1	01/26/2016 13:06	WG844444
Lead	12.9		0.556	1	01/26/2016 13:06	WG844444
Selenium	ND		2.22	1	01/26/2016 13:06	WG844444
Silver	ND		1.11	1	01/26/2016 13:06	WG844444

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

Analyte	Result (dry)	Qualifier	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
TPH (GC/FID) Low Fraction	ND		0.111	1	01/27/2016 20:12	WG844294
(S) a,a,a-Trifluorotoluene(FID)	96.5		59.0-128		01/27/2016 20:12	WG844294

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

Analyte	Result (dry)	Qualifier	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Acetone	ND		0.0595	1.07	01/25/2016 19:20	WG844204
Acrylonitrile	ND		0.0119	1.07	01/25/2016 19:20	WG844204
Benzene	ND		0.00119	1.07	01/25/2016 19:20	WG844204
Bromobenzene	ND		0.00119	1.07	01/25/2016 19:20	WG844204
Bromodichloromethane	ND		0.00119	1.07	01/25/2016 19:20	WG844204
Bromoform	ND		0.00119	1.07	01/25/2016 19:20	WG844204
Bromomethane	ND		0.00595	1.07	01/25/2016 19:20	WG844204
n-Butylbenzene	ND		0.00119	1.07	01/25/2016 19:20	WG844204
sec-Butylbenzene	ND		0.00119	1.07	01/25/2016 19:20	WG844204
tert-Butylbenzene	ND		0.00119	1.07	01/25/2016 19:20	WG844204
Carbon tetrachloride	ND		0.00119	1.07	01/25/2016 19:20	WG844204
Chlorobenzene	ND		0.00119	1.07	01/25/2016 19:20	WG844204
Chlorodibromomethane	ND		0.00119	1.07	01/25/2016 19:20	WG844204
Chloroethane	ND		0.00595	1.07	01/25/2016 19:20	WG844204
2-Chloroethyl vinyl ether	ND		0.0595	1.07	01/25/2016 19:20	WG844204
Chloroform	ND		0.00595	1.07	01/25/2016 19:20	WG844204
Chloromethane	ND		0.00297	1.07	01/25/2016 19:20	WG844204
2-Chlorotoluene	ND		0.00119	1.07	01/25/2016 19:20	WG844204
4-Chlorotoluene	ND		0.00119	1.07	01/25/2016 19:20	WG844204
1,2-Dibromo-3-Chloropropane	ND		0.00595	1.07	01/25/2016 19:20	WG844204
1,2-Dibromoethane	ND		0.00119	1.07	01/25/2016 19:20	WG844204
Dibromomethane	ND		0.00119	1.07	01/25/2016 19:20	WG844204
1,2-Dichlorobenzene	ND		0.00119	1.07	01/25/2016 19:20	WG844204
1,3-Dichlorobenzene	ND		0.00119	1.07	01/25/2016 19:20	WG844204
1,4-Dichlorobenzene	ND		0.00119	1.07	01/25/2016 19:20	WG844204
Dichlorodifluoromethane	ND		0.00595	1.07	01/25/2016 19:20	WG844204
1,1-Dichloroethane	ND		0.00119	1.07	01/25/2016 19:20	WG844204





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

Analyte	Result (dry) mg/kg	Qualifier	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
1,2-Dichloroethane	ND		0.00119	1.07	01/25/2016 19:20	WG844204
1,1-Dichloroethene	ND		0.00119	1.07	01/25/2016 19:20	WG844204
cis-1,2-Dichloroethene	ND		0.00119	1.07	01/25/2016 19:20	WG844204
trans-1,2-Dichloroethene	ND		0.00119	1.07	01/25/2016 19:20	WG844204
1,2-Dichloropropane	ND		0.00119	1.07	01/25/2016 19:20	WG844204
1,1-Dichloropropene	ND		0.00119	1.07	01/25/2016 19:20	WG844204
1,3-Dichloropropane	ND		0.00119	1.07	01/25/2016 19:20	WG844204
cis-1,3-Dichloropropene	ND		0.00119	1.07	01/25/2016 19:20	WG844204
trans-1,3-Dichloropropene	ND		0.00119	1.07	01/25/2016 19:20	WG844204
2,2-Dichloropropane	ND		0.00119	1.07	01/25/2016 19:20	WG844204
Di-isopropyl ether	ND		0.00119	1.07	01/25/2016 19:20	WG844204
Ethylbenzene	ND		0.00119	1.07	01/25/2016 19:20	WG844204
Hexachloro-1,3-butadiene	ND		0.00119	1.07	01/25/2016 19:20	WG844204
Isopropylbenzene	ND		0.00119	1.07	01/25/2016 19:20	WG844204
p-Isopropyltoluene	ND		0.00119	1.07	01/25/2016 19:20	WG844204
2-Butanone (MEK)	ND		0.0119	1.07	01/25/2016 19:20	WG844204
Methylene Chloride	ND		0.00595	1.07	01/25/2016 19:20	WG844204
4-Methyl-2-pentanone (MIBK)	ND		0.0119	1.07	01/25/2016 19:20	WG844204
Methyl tert-butyl ether	ND		0.00119	1.07	01/25/2016 19:20	WG844204
Naphthalene	ND		0.00595	1.07	01/25/2016 19:20	WG844204
n-Propylbenzene	ND		0.00119	1.07	01/25/2016 19:20	WG844204
Styrene	ND		0.00119	1.07	01/25/2016 19:20	WG844204
1,1,1,2-Tetrachloroethane	ND		0.00119	1.07	01/25/2016 19:20	WG844204
1,1,2,2-Tetrachloroethane	ND		0.00119	1.07	01/25/2016 19:20	WG844204
1,1,2-Trichlorotrifluoroethane	ND		0.00119	1.07	01/25/2016 19:20	WG844204
Tetrachloroethene	ND		0.00119	1.07	01/25/2016 19:20	WG844204
Toluene	ND		0.00595	1.07	01/25/2016 19:20	WG844204
1,2,3-Trichlorobenzene	ND		0.00119	1.07	01/25/2016 19:20	WG844204
1,2,4-Trichlorobenzene	ND		0.00119	1.07	01/25/2016 19:20	WG844204
1,1,1-Trichloroethane	ND		0.00119	1.07	01/25/2016 19:20	WG844204
1,1,2-Trichloroethane	ND		0.00119	1.07	01/25/2016 19:20	WG844204
Trichloroethene	ND		0.00119	1.07	01/25/2016 19:20	WG844204
Trichlorofluoromethane	ND		0.00595	1.07	01/25/2016 19:20	WG844204
1,2,3-Trichloropropane	ND		0.00297	1.07	01/25/2016 19:20	WG844204
1,2,4-Trimethylbenzene	ND		0.00119	1.07	01/25/2016 19:20	WG844204
1,2,3-Trimethylbenzene	ND		0.00119	1.07	01/25/2016 19:20	WG844204
Vinyl chloride	ND		0.00119	1.07	01/25/2016 19:20	WG844204
1,3,5-Trimethylbenzene	ND		0.00119	1.07	01/25/2016 19:20	WG844204
Xylenes, Total	ND		0.00357	1.07	01/25/2016 19:20	WG844204
(S) Toluene-d8	105		88.7-115		01/25/2016 19:20	WG844204
(S) Dibromofluoromethane	108		76.3-123		01/25/2016 19:20	WG844204
(S) 4-Bromofluorobenzene	100		69.7-129		01/25/2016 19:20	WG844204

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry) mg/kg	Qualifier	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	13.0		4.45	1	01/26/2016 09:50	WG844143
C28-C40 Oil Range	7.38		4.45	1	01/26/2016 09:50	WG844143
(S) o-Terphenyl	84.9		50.0-150		01/26/2016 09:50	WG844143



Collected date/time: 01/21/16 13:15

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

Analyte	Result (dry) mg/kg	Qualifier	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Anthracene	0.00920		0.00667	1	01/26/2016 08:39	WG844412
Acenaphthene	0.00694		0.00667	1	01/26/2016 08:39	WG844412
Acenaphthylene	ND		0.00667	1	01/26/2016 08:39	WG844412
Benzo(a)anthracene	0.0346		0.00667	1	01/26/2016 08:39	WG844412
Benzo(a)pyrene	0.0355		0.00667	1	01/26/2016 08:39	WG844412
Benzo(b)fluoranthene	0.0447		0.00667	1	01/26/2016 08:39	WG844412
Benzo(g,h,i)perylene	0.0278		0.00667	1	01/26/2016 08:39	WG844412
Benzo(k)fluoranthene	0.0126		0.00667	1	01/26/2016 08:39	WG844412
Chrysene	0.0314		0.00667	1	01/26/2016 08:39	WG844412
Dibenz(a,h)anthracene	0.00712		0.00667	1	01/26/2016 08:39	WG844412
Fluoranthene	0.0644		0.00667	1	01/26/2016 08:39	WG844412
Fluorene	ND		0.00667	1	01/26/2016 08:39	WG844412
Indeno(1,2,3-cd)pyrene	0.0234		0.00667	1	01/26/2016 08:39	WG844412
Naphthalene	ND		0.0222	1	01/26/2016 08:39	WG844412
Phenanthrene	0.0415		0.00667	1	01/26/2016 08:39	WG844412
Pyrene	0.0693		0.00667	1	01/26/2016 08:39	WG844412
1-Methylnaphthalene	ND		0.0222	1	01/26/2016 08:39	WG844412
2-Methylnaphthalene	ND		0.0222	1	01/26/2016 08:39	WG844412
2-Chloronaphthalene	ND		0.0222	1	01/26/2016 08:39	WG844412
(S) Nitrobenzene-d5	93.5		22.1-146		01/26/2016 08:39	WG844412
(S) 2-Fluorobiphenyl	101		40.6-122		01/26/2016 08:39	WG844412
(S) p-Terphenyl-d14	103		32.2-131		01/26/2016 08:39	WG844412

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	86.9		1	01/25/2016 07:12	WG844219

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ Gl⁸ Al⁹ Sc

Mercury by Method 7471A

Analyte	Result (dry)	Qualifier	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Mercury	0.225		0.0230	1	01/28/2016 17:11	WG844876

Metals (ICP) by Method 6010C

Analyte	Result (dry)	Qualifier	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Arsenic	3.92		2.30	1	01/26/2016 13:09	WG844444
Barium	49.5		0.576	1	01/26/2016 13:09	WG844444
Cadmium	ND		0.576	1	01/26/2016 13:09	WG844444
Chromium	21.2		1.15	1	01/26/2016 13:09	WG844444
Lead	34.6		0.576	1	01/26/2016 13:09	WG844444
Selenium	ND		2.30	1	01/26/2016 13:09	WG844444
Silver	ND		1.15	1	01/26/2016 13:09	WG844444

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

Analyte	Result (dry)	Qualifier	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
TPH (GC/FID) Low Fraction	ND		0.115	1	01/27/2016 20:37	WG844294
(S) a,a,a-Trifluorotoluene(FID)	96.9		59.0-128		01/27/2016 20:37	WG844294

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

Analyte	Result (dry)	Qualifier	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Acetone	ND		0.0576	1	01/25/2016 19:42	WG844204
Acrylonitrile	ND		0.0115	1	01/25/2016 19:42	WG844204
Benzene	ND		0.00115	1	01/25/2016 19:42	WG844204
Bromobenzene	ND		0.00115	1	01/25/2016 19:42	WG844204
Bromodichloromethane	ND		0.00115	1	01/25/2016 19:42	WG844204
Bromoform	ND		0.00115	1	01/25/2016 19:42	WG844204
Bromomethane	ND		0.00576	1	01/25/2016 19:42	WG844204
n-Butylbenzene	ND		0.00115	1	01/25/2016 19:42	WG844204
sec-Butylbenzene	ND		0.00115	1	01/25/2016 19:42	WG844204
tert-Butylbenzene	ND		0.00115	1	01/25/2016 19:42	WG844204
Carbon tetrachloride	ND		0.00115	1	01/25/2016 19:42	WG844204
Chlorobenzene	ND		0.00115	1	01/25/2016 19:42	WG844204
Chlorodibromomethane	ND		0.00115	1	01/25/2016 19:42	WG844204
Chloroethane	ND		0.00576	1	01/25/2016 19:42	WG844204
2-Chloroethyl vinyl ether	ND		0.0576	1	01/25/2016 19:42	WG844204
Chloroform	ND		0.00576	1	01/25/2016 19:42	WG844204
Chloromethane	ND		0.00288	1	01/25/2016 19:42	WG844204
2-Chlorotoluene	ND		0.00115	1	01/25/2016 19:42	WG844204
4-Chlorotoluene	ND		0.00115	1	01/25/2016 19:42	WG844204
1,2-Dibromo-3-Chloropropane	ND		0.00576	1	01/25/2016 19:42	WG844204
1,2-Dibromoethane	ND		0.00115	1	01/25/2016 19:42	WG844204
Dibromomethane	ND		0.00115	1	01/25/2016 19:42	WG844204
1,2-Dichlorobenzene	ND		0.00115	1	01/25/2016 19:42	WG844204
1,3-Dichlorobenzene	ND		0.00115	1	01/25/2016 19:42	WG844204
1,4-Dichlorobenzene	ND		0.00115	1	01/25/2016 19:42	WG844204
Dichlorodifluoromethane	ND		0.00576	1	01/25/2016 19:42	WG844204
1,1-Dichloroethane	ND		0.00115	1	01/25/2016 19:42	WG844204



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

Analyte	Result (dry) mg/kg	Qualifier	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
1,2-Dichloroethane	ND		0.00115	1	01/25/2016 19:42	WG844204
1,1-Dichloroethene	ND		0.00115	1	01/25/2016 19:42	WG844204
cis-1,2-Dichloroethene	ND		0.00115	1	01/25/2016 19:42	WG844204
trans-1,2-Dichloroethene	ND		0.00115	1	01/25/2016 19:42	WG844204
1,2-Dichloropropane	ND		0.00115	1	01/25/2016 19:42	WG844204
1,1-Dichloropropene	ND		0.00115	1	01/25/2016 19:42	WG844204
1,3-Dichloropropane	ND		0.00115	1	01/25/2016 19:42	WG844204
cis-1,3-Dichloropropene	ND		0.00115	1	01/25/2016 19:42	WG844204
trans-1,3-Dichloropropene	ND		0.00115	1	01/25/2016 19:42	WG844204
2,2-Dichloropropane	ND		0.00115	1	01/25/2016 19:42	WG844204
Di-isopropyl ether	ND		0.00115	1	01/25/2016 19:42	WG844204
Ethylbenzene	ND		0.00115	1	01/25/2016 19:42	WG844204
Hexachloro-1,3-butadiene	ND		0.00115	1	01/25/2016 19:42	WG844204
Isopropylbenzene	ND		0.00115	1	01/25/2016 19:42	WG844204
p-Isopropyltoluene	ND		0.00115	1	01/25/2016 19:42	WG844204
2-Butanone (MEK)	ND		0.0115	1	01/25/2016 19:42	WG844204
Methylene Chloride	ND		0.00576	1	01/25/2016 19:42	WG844204
4-Methyl-2-pentanone (MIBK)	ND		0.0115	1	01/25/2016 19:42	WG844204
Methyl tert-butyl ether	ND		0.00115	1	01/25/2016 19:42	WG844204
Naphthalene	ND		0.00576	1	01/25/2016 19:42	WG844204
n-Propylbenzene	ND		0.00115	1	01/25/2016 19:42	WG844204
Styrene	ND		0.00115	1	01/25/2016 19:42	WG844204
1,1,1,2-Tetrachloroethane	ND		0.00115	1	01/25/2016 19:42	WG844204
1,1,2,2-Tetrachloroethane	ND		0.00115	1	01/25/2016 19:42	WG844204
1,1,2-Trichlorotrifluoroethane	ND		0.00115	1	01/25/2016 19:42	WG844204
Tetrachloroethene	ND		0.00115	1	01/25/2016 19:42	WG844204
Toluene	ND		0.00576	1	01/25/2016 19:42	WG844204
1,2,3-Trichlorobenzene	ND		0.00115	1	01/25/2016 19:42	WG844204
1,2,4-Trichlorobenzene	ND		0.00115	1	01/25/2016 19:42	WG844204
1,1,1-Trichloroethane	ND		0.00115	1	01/25/2016 19:42	WG844204
1,1,2-Trichloroethane	ND		0.00115	1	01/25/2016 19:42	WG844204
Trichloroethene	ND		0.00115	1	01/25/2016 19:42	WG844204
Trichlorofluoromethane	ND		0.00576	1	01/25/2016 19:42	WG844204
1,2,3-Trichloropropane	ND		0.00288	1	01/25/2016 19:42	WG844204
1,2,4-Trimethylbenzene	ND		0.00115	1	01/25/2016 19:42	WG844204
1,2,3-Trimethylbenzene	ND		0.00115	1	01/25/2016 19:42	WG844204
Vinyl chloride	ND		0.00115	1	01/25/2016 19:42	WG844204
1,3,5-Trimethylbenzene	ND		0.00115	1	01/25/2016 19:42	WG844204
Xylenes, Total	ND		0.00345	1	01/25/2016 19:42	WG844204
(S) Toluene-d8	105		88.7-115		01/25/2016 19:42	WG844204
(S) Dibromofluoromethane	110		76.3-123		01/25/2016 19:42	WG844204
(S) 4-Bromofluorobenzene	96.4		69.7-129		01/25/2016 19:42	WG844204

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry) mg/kg	Qualifier	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	184		46.1	10	01/25/2016 20:59	WG844143
C28-C40 Oil Range	103		46.1	10	01/25/2016 20:59	WG844143
(S) o-Terphenyl	129		50.0-150		01/25/2016 20:59	WG844143



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

Analyte	Result (dry) mg/kg	Qualifier	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Anthracene	0.555		0.00691	1	01/26/2016 09:01	WG844412
Acenaphthene	0.0406		0.00691	1	01/26/2016 09:01	WG844412
Acenaphthylene	0.0322		0.00691	1	01/26/2016 09:01	WG844412
Benzo(a)anthracene	0.940		0.00691	1	01/26/2016 09:01	WG844412
Benzo(a)pyrene	0.641		0.00691	1	01/26/2016 09:01	WG844412
Benzo(b)fluoranthene	0.808		0.00691	1	01/26/2016 09:01	WG844412
Benzo(g,h,i)perylene	0.329		0.00691	1	01/26/2016 09:01	WG844412
Benzo(k)fluoranthene	0.214		0.00691	1	01/26/2016 09:01	WG844412
Chrysene	0.738		0.00691	1	01/26/2016 09:01	WG844412
Dibenz(a,h)anthracene	0.124		0.00691	1	01/26/2016 09:01	WG844412
Fluoranthene	2.29		0.00691	1	01/26/2016 09:01	WG844412
Fluorene	0.346		0.00691	1	01/26/2016 09:01	WG844412
Indeno(1,2,3-cd)pyrene	0.324		0.00691	1	01/26/2016 09:01	WG844412
Naphthalene	0.0404		0.0230	1	01/26/2016 09:01	WG844412
Phenanthrene	3.02		0.00691	1	01/26/2016 09:01	WG844412
Pyrene	1.94		0.00691	1	01/26/2016 09:01	WG844412
1-Methylnaphthalene	ND		0.0230	1	01/26/2016 09:01	WG844412
2-Methylnaphthalene	ND		0.0230	1	01/26/2016 09:01	WG844412
2-Chloronaphthalene	ND		0.0230	1	01/26/2016 09:01	WG844412
(S) Nitrobenzene-d5	84.0		22.1-146		01/26/2016 09:01	WG844412
(S) 2-Fluorobiphenyl	93.5		40.6-122		01/26/2016 09:01	WG844412
(S) p-Terphenyl-d14	88.7		32.2-131		01/26/2016 09:01	WG844412

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	89.1		1	01/25/2016 07:12	WG844219

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Mercury by Method 7471A

Analyte	Result (dry)	Qualifier	RDL (dry)	Dilution	Analysis date / time	Batch
Mercury	0.650		0.0224	1	01/28/2016 17:14	WG844876

Metals (ICP) by Method 6010C

Analyte	Result (dry)	Qualifier	RDL (dry)	Dilution	Analysis date / time	Batch
Arsenic	8.96		2.24	1	01/26/2016 13:12	WG844444
Barium	60.6		0.561	1	01/26/2016 13:12	WG844444
Cadmium	ND		0.561	1	01/26/2016 13:12	WG844444
Chromium	21.4		1.12	1	01/26/2016 13:12	WG844444
Lead	34.1		0.561	1	01/26/2016 13:12	WG844444
Selenium	ND		2.24	1	01/26/2016 13:12	WG844444
Silver	ND		1.12	1	01/26/2016 13:12	WG844444

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

Analyte	Result (dry)	Qualifier	RDL (dry)	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	ND		0.112	1	01/27/2016 21:18	WG844294
(S) a,a,a-Trifluorotoluene(FID)	96.6		59.0-128		01/27/2016 21:18	WG844294

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

Analyte	Result (dry)	Qualifier	RDL (dry)	Dilution	Analysis date / time	Batch
Acetone	ND		0.0561	1	01/25/2016 20:03	WG844204
Acrylonitrile	ND		0.0112	1	01/25/2016 20:03	WG844204
Benzene	ND		0.00112	1	01/25/2016 20:03	WG844204
Bromobenzene	ND		0.00112	1	01/25/2016 20:03	WG844204
Bromodichloromethane	ND		0.00112	1	01/25/2016 20:03	WG844204
Bromoform	ND		0.00112	1	01/25/2016 20:03	WG844204
Bromomethane	ND		0.00561	1	01/25/2016 20:03	WG844204
n-Butylbenzene	ND		0.00112	1	01/25/2016 20:03	WG844204
sec-Butylbenzene	ND		0.00112	1	01/25/2016 20:03	WG844204
tert-Butylbenzene	ND		0.00112	1	01/25/2016 20:03	WG844204
Carbon tetrachloride	ND		0.00112	1	01/25/2016 20:03	WG844204
Chlorobenzene	ND		0.00112	1	01/25/2016 20:03	WG844204
Chlorodibromomethane	ND		0.00112	1	01/25/2016 20:03	WG844204
Chloroethane	ND		0.00561	1	01/25/2016 20:03	WG844204
2-Chloroethyl vinyl ether	ND		0.0561	1	01/25/2016 20:03	WG844204
Chloroform	ND		0.00561	1	01/25/2016 20:03	WG844204
Chloromethane	ND		0.00281	1	01/25/2016 20:03	WG844204
2-Chlorotoluene	ND		0.00112	1	01/25/2016 20:03	WG844204
4-Chlorotoluene	ND		0.00112	1	01/25/2016 20:03	WG844204
1,2-Dibromo-3-Chloropropane	ND		0.00561	1	01/25/2016 20:03	WG844204
1,2-Dibromoethane	ND		0.00112	1	01/25/2016 20:03	WG844204
Dibromomethane	ND		0.00112	1	01/25/2016 20:03	WG844204
1,2-Dichlorobenzene	ND		0.00112	1	01/25/2016 20:03	WG844204
1,3-Dichlorobenzene	ND		0.00112	1	01/25/2016 20:03	WG844204
1,4-Dichlorobenzene	ND		0.00112	1	01/25/2016 20:03	WG844204
Dichlorodifluoromethane	ND		0.00561	1	01/25/2016 20:03	WG844204
1,1-Dichloroethane	ND		0.00112	1	01/25/2016 20:03	WG844204



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

Analyte	Result (dry) mg/kg	Qualifier	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
1,2-Dichloroethane	ND		0.0012	1	01/25/2016 20:03	WG844204
1,1-Dichloroethene	ND		0.0012	1	01/25/2016 20:03	WG844204
cis-1,2-Dichloroethene	0.00130		0.0012	1	01/25/2016 20:03	WG844204
trans-1,2-Dichloroethene	ND		0.0012	1	01/25/2016 20:03	WG844204
1,2-Dichloropropane	ND		0.0012	1	01/25/2016 20:03	WG844204
1,1-Dichloropropene	ND		0.0012	1	01/25/2016 20:03	WG844204
1,3-Dichloropropane	ND		0.0012	1	01/25/2016 20:03	WG844204
cis-1,3-Dichloropropene	ND		0.0012	1	01/25/2016 20:03	WG844204
trans-1,3-Dichloropropene	ND		0.0012	1	01/25/2016 20:03	WG844204
2,2-Dichloropropane	ND		0.0012	1	01/25/2016 20:03	WG844204
Di-isopropyl ether	ND		0.0012	1	01/25/2016 20:03	WG844204
Ethylbenzene	ND		0.0012	1	01/25/2016 20:03	WG844204
Hexachloro-1,3-butadiene	ND		0.0012	1	01/25/2016 20:03	WG844204
Isopropylbenzene	ND		0.0012	1	01/25/2016 20:03	WG844204
p-Isopropyltoluene	ND		0.0012	1	01/25/2016 20:03	WG844204
2-Butanone (MEK)	ND		0.012	1	01/25/2016 20:03	WG844204
Methylene Chloride	ND		0.00561	1	01/25/2016 20:03	WG844204
4-Methyl-2-pentanone (MIBK)	ND		0.012	1	01/25/2016 20:03	WG844204
Methyl tert-butyl ether	ND		0.0012	1	01/25/2016 20:03	WG844204
Naphthalene	ND		0.00561	1	01/25/2016 20:03	WG844204
n-Propylbenzene	ND		0.0012	1	01/25/2016 20:03	WG844204
Styrene	ND		0.0012	1	01/25/2016 20:03	WG844204
1,1,1,2-Tetrachloroethane	ND		0.0012	1	01/25/2016 20:03	WG844204
1,1,2,2-Tetrachloroethane	ND		0.0012	1	01/25/2016 20:03	WG844204
1,1,2-Trichlorotrifluoroethane	ND		0.0012	1	01/25/2016 20:03	WG844204
Tetrachloroethene	0.00459		0.0012	1	01/25/2016 20:03	WG844204
Toluene	ND		0.00561	1	01/25/2016 20:03	WG844204
1,2,3-Trichlorobenzene	ND		0.0012	1	01/25/2016 20:03	WG844204
1,2,4-Trichlorobenzene	ND		0.0012	1	01/25/2016 20:03	WG844204
1,1,1-Trichloroethane	ND		0.0012	1	01/25/2016 20:03	WG844204
1,1,2-Trichloroethane	ND		0.0012	1	01/25/2016 20:03	WG844204
Trichloroethene	ND		0.0012	1	01/25/2016 20:03	WG844204
Trichlorofluoromethane	ND		0.00561	1	01/25/2016 20:03	WG844204
1,2,3-Trichloropropane	ND		0.00281	1	01/25/2016 20:03	WG844204
1,2,4-Trimethylbenzene	ND		0.0012	1	01/25/2016 20:03	WG844204
1,2,3-Trimethylbenzene	ND		0.0012	1	01/25/2016 20:03	WG844204
Vinyl chloride	ND		0.0012	1	01/25/2016 20:03	WG844204
1,3,5-Trimethylbenzene	ND		0.0012	1	01/25/2016 20:03	WG844204
Xylenes, Total	ND		0.00337	1	01/25/2016 20:03	WG844204
(S) Toluene-d8	105		88.7-115		01/25/2016 20:03	WG844204
(S) Dibromofluoromethane	109		76.3-123		01/25/2016 20:03	WG844204
(S) 4-Bromofluorobenzene	105		69.7-129		01/25/2016 20:03	WG844204

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry) mg/kg	Qualifier	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	7.68		4.49	1	01/25/2016 18:35	WG844143
C28-C40 Oil Range	6.17		4.49	1	01/25/2016 18:35	WG844143
(S) o-Terphenyl	68.3		50.0-150		01/25/2016 18:35	WG844143



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

Analyte	Result (dry) mg/kg	Qualifier	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Anthracene	ND		0.00673	1	01/26/2016 09:22	WG844412
Acenaphthene	ND		0.00673	1	01/26/2016 09:22	WG844412
Acenaphthylene	ND		0.00673	1	01/26/2016 09:22	WG844412
Benzo(a)anthracene	0.00924		0.00673	1	01/26/2016 09:22	WG844412
Benzo(a)pyrene	0.0117		0.00673	1	01/26/2016 09:22	WG844412
Benzo(b)fluoranthene	0.0153		0.00673	1	01/26/2016 09:22	WG844412
Benzo(g,h,i)perylene	0.00971		0.00673	1	01/26/2016 09:22	WG844412
Benzo(k)fluoranthene	ND		0.00673	1	01/26/2016 09:22	WG844412
Chrysene	0.0105		0.00673	1	01/26/2016 09:22	WG844412
Dibenz(a,h)anthracene	ND		0.00673	1	01/26/2016 09:22	WG844412
Fluoranthene	0.0252		0.00673	1	01/26/2016 09:22	WG844412
Fluorene	ND		0.00673	1	01/26/2016 09:22	WG844412
Indeno(1,2,3-cd)pyrene	0.00821		0.00673	1	01/26/2016 09:22	WG844412
Naphthalene	ND		0.0224	1	01/26/2016 09:22	WG844412
Phenanthrene	0.0153		0.00673	1	01/26/2016 09:22	WG844412
Pyrene	0.0217		0.00673	1	01/26/2016 09:22	WG844412
1-Methylnaphthalene	ND		0.0224	1	01/26/2016 09:22	WG844412
2-Methylnaphthalene	ND		0.0224	1	01/26/2016 09:22	WG844412
2-Chloronaphthalene	ND		0.0224	1	01/26/2016 09:22	WG844412
(S) Nitrobenzene-d5	90.7		22.1-146		01/26/2016 09:22	WG844412
(S) 2-Fluorobiphenyl	100		40.6-122		01/26/2016 09:22	WG844412
(S) p-Terphenyl-d14	90.7		32.2-131		01/26/2016 09:22	WG844412

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	91.8		1	01/25/2016 07:12	WG844219

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Mercury by Method 7471A

Analyte	Result (dry)	Qualifier	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Mercury	0.0634		0.0218	1	01/28/2016 17:16	WG844876

Metals (ICP) by Method 6010C

Analyte	Result (dry)	Qualifier	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Arsenic	2.98		2.18	1	01/26/2016 13:15	WG844444
Barium	67.3		0.545	1	01/26/2016 13:15	WG844444
Cadmium	ND		0.545	1	01/26/2016 13:15	WG844444
Chromium	17.5		1.09	1	01/26/2016 13:15	WG844444
Lead	26.4		0.545	1	01/26/2016 13:15	WG844444
Selenium	ND		2.18	1	01/26/2016 13:15	WG844444
Silver	ND		1.09	1	01/26/2016 13:15	WG844444

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

Analyte	Result (dry)	Qualifier	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
TPH (GC/FID) Low Fraction	0.281		0.109	1	01/28/2016 00:05	WG844294
(S) a,a,a-Trifluorotoluene(FID)	96.5		59.0-128		01/28/2016 00:05	WG844294

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

Analyte	Result (dry)	Qualifier	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Acetone	0.0748		0.0545	1	01/29/2016 11:21	WG844204
Acrylonitrile	ND		0.0109	1	01/29/2016 11:21	WG844204
Benzene	0.00124		0.00109	1	01/29/2016 11:21	WG844204
Bromobenzene	ND		0.00109	1	01/29/2016 11:21	WG844204
Bromodichloromethane	ND		0.00109	1	01/29/2016 11:21	WG844204
Bromoform	ND		0.00109	1	01/29/2016 11:21	WG844204
Bromomethane	ND		0.00545	1	01/29/2016 11:21	WG844204
n-Butylbenzene	0.0208	J6	0.00109	1	01/29/2016 11:21	WG844204
sec-Butylbenzene	0.0152	J6	0.00109	1	01/29/2016 11:21	WG844204
tert-Butylbenzene	0.00186		0.00109	1	01/29/2016 11:21	WG844204
Carbon tetrachloride	ND		0.00109	1	01/29/2016 11:21	WG844204
Chlorobenzene	ND		0.00109	1	01/29/2016 11:21	WG844204
Chlorodibromomethane	ND		0.00109	1	01/29/2016 11:21	WG844204
Chloroethane	ND		0.00545	1	01/29/2016 11:21	WG844204
2-Chloroethyl vinyl ether	ND		0.0545	1	01/29/2016 11:21	WG844204
Chloroform	ND		0.00545	1	01/29/2016 11:21	WG844204
Chloromethane	ND		0.00272	1	01/29/2016 11:21	WG844204
2-Chlorotoluene	ND		0.00109	1	01/29/2016 11:21	WG844204
4-Chlorotoluene	0.00150	J3	0.00109	1	01/29/2016 11:21	WG844204
1,2-Dibromo-3-Chloropropane	ND		0.00545	1	01/29/2016 11:21	WG844204
1,2-Dibromoethane	ND		0.00109	1	01/29/2016 11:21	WG844204
Dibromomethane	ND		0.00109	1	01/29/2016 11:21	WG844204
1,2-Dichlorobenzene	ND		0.00109	1	01/29/2016 11:21	WG844204
1,3-Dichlorobenzene	ND		0.00109	1	01/29/2016 11:21	WG844204
1,4-Dichlorobenzene	ND		0.00109	1	01/29/2016 11:21	WG844204
Dichlorodifluoromethane	ND		0.00545	1	01/29/2016 11:21	WG844204
1,1-Dichloroethane	0.00142		0.00109	1	01/29/2016 11:21	WG844204



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

Analyte	Result (dry) mg/kg	Qualifier	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
1,2-Dichloroethane	ND		0.00109	1	01/29/2016 11:21	WG844204
1,1-Dichloroethene	ND		0.00109	1	01/29/2016 11:21	WG844204
cis-1,2-Dichloroethene	0.00387		0.00109	1	01/29/2016 11:21	WG844204
trans-1,2-Dichloroethene	ND		0.00109	1	01/29/2016 11:21	WG844204
1,2-Dichloropropane	ND		0.00109	1	01/29/2016 11:21	WG844204
1,1-Dichloropropene	ND		0.00109	1	01/29/2016 11:21	WG844204
1,3-Dichloropropane	ND		0.00109	1	01/29/2016 11:21	WG844204
cis-1,3-Dichloropropene	ND		0.00109	1	01/29/2016 11:21	WG844204
trans-1,3-Dichloropropene	ND		0.00109	1	01/29/2016 11:21	WG844204
2,2-Dichloropropane	ND		0.00109	1	01/29/2016 11:21	WG844204
Di-isopropyl ether	ND		0.00109	1	01/29/2016 11:21	WG844204
Ethylbenzene	0.00134		0.00109	1	01/29/2016 11:21	WG844204
Hexachloro-1,3-butadiene	ND		0.00109	1	01/29/2016 11:21	WG844204
Isopropylbenzene	0.0104	J6	0.00109	1	01/29/2016 11:21	WG844204
p-Isopropyltoluene	0.00642	J6	0.00109	1	01/29/2016 11:21	WG844204
2-Butanone (MEK)	0.0214		0.0109	1	01/29/2016 11:21	WG844204
Methylene Chloride	ND		0.00545	1	01/29/2016 11:21	WG844204
4-Methyl-2-pentanone (MIBK)	ND		0.0109	1	01/29/2016 11:21	WG844204
Methyl tert-butyl ether	ND		0.00109	1	01/29/2016 11:21	WG844204
Naphthalene	ND		0.00545	1	01/29/2016 11:21	WG844204
n-Propylbenzene	0.0163	J6	0.00109	1	01/29/2016 11:21	WG844204
Styrene	ND		0.00109	1	01/29/2016 11:21	WG844204
1,1,1,2-Tetrachloroethane	ND		0.00109	1	01/29/2016 11:21	WG844204
1,1,2,2-Tetrachloroethane	ND		0.00109	1	01/29/2016 11:21	WG844204
1,1,2-Trichlorotrifluoroethane	ND		0.00109	1	01/29/2016 11:21	WG844204
Tetrachloroethene	0.00135		0.00109	1	01/29/2016 11:21	WG844204
Toluene	ND		0.00545	1	01/29/2016 11:21	WG844204
1,2,3-Trichlorobenzene	ND		0.00109	1	01/29/2016 11:21	WG844204
1,2,4-Trichlorobenzene	ND		0.00109	1	01/29/2016 11:21	WG844204
1,1,1-Trichloroethane	ND		0.00109	1	01/29/2016 11:21	WG844204
1,1,2-Trichloroethane	ND		0.00109	1	01/29/2016 11:21	WG844204
Trichloroethene	0.00125		0.00109	1	01/29/2016 11:21	WG844204
Trichlorofluoromethane	ND		0.00545	1	01/29/2016 11:21	WG844204
1,2,3-Trichloropropane	ND		0.00272	1	01/29/2016 11:21	WG844204
1,2,4-Trimethylbenzene	0.0615	J6	0.00109	1	01/29/2016 11:21	WG844204
1,2,3-Trimethylbenzene	0.0394	J6	0.00109	1	01/29/2016 11:21	WG844204
Vinyl chloride	ND		0.00109	1	01/29/2016 11:21	WG844204
1,3,5-Trimethylbenzene	0.00824	J6	0.00109	1	01/29/2016 11:21	WG844204
Xylenes, Total	0.00482		0.00327	1	01/29/2016 11:21	WG844204
(S) Toluene-d8	97.4		88.7-115		01/29/2016 11:21	WG844204
(S) Dibromofluoromethane	127	J1	76.3-123		01/29/2016 11:21	WG844204
(S) 4-Bromofluorobenzene	136	J1	69.7-129		01/29/2016 11:21	WG844204

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

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry) mg/kg	Qualifier	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	ND		4.36	1	01/25/2016 18:20	WG844143
C28-C40 Oil Range	4.49		4.36	1	01/25/2016 18:20	WG844143
(S) o-Terphenyl	91.3		50.0-150		01/25/2016 18:20	WG844143



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

Analyte	Result (dry) mg/kg	Qualifier	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Anthracene	0.0204		0.00653	1	01/26/2016 09:44	WG844412
Acenaphthene	0.0152		0.00653	1	01/26/2016 09:44	WG844412
Acenaphthylene	ND		0.00653	1	01/26/2016 09:44	WG844412
Benzo(a)anthracene	0.105		0.00653	1	01/26/2016 09:44	WG844412
Benzo(a)pyrene	0.126		0.00653	1	01/26/2016 09:44	WG844412
Benzo(b)fluoranthene	0.150		0.00653	1	01/26/2016 09:44	WG844412
Benzo(g,h,i)perylene	0.0895		0.00653	1	01/26/2016 09:44	WG844412
Benzo(k)fluoranthene	0.0391		0.00653	1	01/26/2016 09:44	WG844412
Chrysene	0.100		0.00653	1	01/26/2016 09:44	WG844412
Dibenz(a,h)anthracene	0.0225		0.00653	1	01/26/2016 09:44	WG844412
Fluoranthene	0.180		0.00653	1	01/26/2016 09:44	WG844412
Fluorene	0.0121		0.00653	1	01/26/2016 09:44	WG844412
Indeno(1,2,3-cd)pyrene	0.0693		0.00653	1	01/26/2016 09:44	WG844412
Naphthalene	0.0253		0.0218	1	01/26/2016 09:44	WG844412
Phenanthrene	0.0825		0.00653	1	01/26/2016 09:44	WG844412
Pyrene	0.195		0.00653	1	01/26/2016 09:44	WG844412
1-Methylnaphthalene	ND		0.0218	1	01/26/2016 09:44	WG844412
2-Methylnaphthalene	ND		0.0218	1	01/26/2016 09:44	WG844412
2-Chloronaphthalene	ND		0.0218	1	01/26/2016 09:44	WG844412
(S) Nitrobenzene-d5	80.9		22.1-146		01/26/2016 09:44	WG844412
(S) 2-Fluorobiphenyl	92.8		40.6-122		01/26/2016 09:44	WG844412
(S) p-Terphenyl-d14	80.7		32.2-131		01/26/2016 09:44	WG844412

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	83.0		1	01/25/2016 10:08	WG844220

Mercury by Method 7471A

Analyte	Result (dry)	Qualifier	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Mercury	429		12.0	500	01/28/2016 18:24	WG844876

Metals (ICP) by Method 6010C

Analyte	Result (dry)	Qualifier	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Arsenic	50.3		12.0	5	01/26/2016 14:16	WG844444
Barium	289		3.01	5	01/26/2016 14:16	WG844444
Cadmium	ND		3.01	5	01/26/2016 14:16	WG844444
Chromium	81.4		6.02	5	01/26/2016 14:16	WG844444
Lead	666		3.01	5	01/26/2016 14:16	WG844444
Selenium	ND		12.0	5	01/26/2016 14:16	WG844444
Silver	ND		6.02	5	01/26/2016 14:16	WG844444

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

Analyte	Result (dry)	Qualifier	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
TPH (GC/FID) Low Fraction	0.775		0.165	1.37	01/28/2016 04:23	WG844294
(S) a,a,a-Trifluorotoluene(FID)	94.3		59.0-128		01/28/2016 04:23	WG844294

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

Analyte	Result (dry)	Qualifier	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Acetone	ND		0.0602	1	01/25/2016 20:24	WG844204
Acrylonitrile	ND		0.0120	1	01/25/2016 20:24	WG844204
Benzene	ND		0.00120	1	01/25/2016 20:24	WG844204
Bromobenzene	ND		0.00120	1	01/25/2016 20:24	WG844204
Bromodichloromethane	ND		0.00120	1	01/25/2016 20:24	WG844204
Bromoform	ND		0.00120	1	01/25/2016 20:24	WG844204
Bromomethane	ND		0.00602	1	01/25/2016 20:24	WG844204
n-Butylbenzene	ND		0.00120	1	01/25/2016 20:24	WG844204
sec-Butylbenzene	ND		0.00120	1	01/25/2016 20:24	WG844204
tert-Butylbenzene	ND		0.00120	1	01/25/2016 20:24	WG844204
Carbon tetrachloride	ND		0.00120	1	01/25/2016 20:24	WG844204
Chlorobenzene	ND		0.00120	1	01/25/2016 20:24	WG844204
Chlorodibromomethane	ND		0.00120	1	01/25/2016 20:24	WG844204
Chloroethane	ND		0.00602	1	01/25/2016 20:24	WG844204
2-Chloroethyl vinyl ether	ND		0.0602	1	01/25/2016 20:24	WG844204
Chloroform	ND		0.00602	1	01/25/2016 20:24	WG844204
Chloromethane	ND		0.00301	1	01/25/2016 20:24	WG844204
2-Chlorotoluene	ND		0.00120	1	01/25/2016 20:24	WG844204
4-Chlorotoluene	ND		0.00120	1	01/25/2016 20:24	WG844204
1,2-Dibromo-3-Chloropropane	ND		0.00602	1	01/25/2016 20:24	WG844204
1,2-Dibromoethane	ND		0.00120	1	01/25/2016 20:24	WG844204
Dibromomethane	ND		0.00120	1	01/25/2016 20:24	WG844204
1,2-Dichlorobenzene	ND		0.00120	1	01/25/2016 20:24	WG844204
1,3-Dichlorobenzene	ND		0.00120	1	01/25/2016 20:24	WG844204
1,4-Dichlorobenzene	ND		0.00120	1	01/25/2016 20:24	WG844204
Dichlorodifluoromethane	ND		0.00602	1	01/25/2016 20:24	WG844204
1,1-Dichloroethane	ND		0.00120	1	01/25/2016 20:24	WG844204

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



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

Analyte	Result (dry) mg/kg	Qualifier	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
1,2-Dichloroethane	ND		0.00120	1	01/25/2016 20:24	WG844204
1,1-Dichloroethene	ND		0.00120	1	01/25/2016 20:24	WG844204
cis-1,2-Dichloroethene	ND		0.00120	1	01/25/2016 20:24	WG844204
trans-1,2-Dichloroethene	ND		0.00120	1	01/25/2016 20:24	WG844204
1,2-Dichloropropane	ND		0.00120	1	01/25/2016 20:24	WG844204
1,1-Dichloropropene	ND		0.00120	1	01/25/2016 20:24	WG844204
1,3-Dichloropropane	ND		0.00120	1	01/25/2016 20:24	WG844204
cis-1,3-Dichloropropene	ND		0.00120	1	01/25/2016 20:24	WG844204
trans-1,3-Dichloropropene	ND		0.00120	1	01/25/2016 20:24	WG844204
2,2-Dichloropropane	ND		0.00120	1	01/25/2016 20:24	WG844204
Di-isopropyl ether	ND		0.00120	1	01/25/2016 20:24	WG844204
Ethylbenzene	ND		0.00120	1	01/25/2016 20:24	WG844204
Hexachloro-1,3-butadiene	ND		0.00120	1	01/25/2016 20:24	WG844204
Isopropylbenzene	ND		0.00120	1	01/25/2016 20:24	WG844204
p-Isopropyltoluene	ND		0.00120	1	01/25/2016 20:24	WG844204
2-Butanone (MEK)	ND		0.0120	1	01/25/2016 20:24	WG844204
Methylene Chloride	ND		0.00602	1	01/25/2016 20:24	WG844204
4-Methyl-2-pentanone (MIBK)	ND		0.0120	1	01/25/2016 20:24	WG844204
Methyl tert-butyl ether	ND		0.00120	1	01/25/2016 20:24	WG844204
Naphthalene	ND		0.00602	1	01/25/2016 20:24	WG844204
n-Propylbenzene	ND		0.00120	1	01/25/2016 20:24	WG844204
Styrene	ND		0.00120	1	01/25/2016 20:24	WG844204
1,1,1,2-Tetrachloroethane	ND		0.00120	1	01/25/2016 20:24	WG844204
1,1,2,2-Tetrachloroethane	ND		0.00120	1	01/25/2016 20:24	WG844204
1,1,2-Trichlorotrifluoroethane	ND		0.00120	1	01/25/2016 20:24	WG844204
Tetrachloroethene	ND		0.00120	1	01/25/2016 20:24	WG844204
Toluene	ND		0.00602	1	01/25/2016 20:24	WG844204
1,2,3-Trichlorobenzene	ND		0.00120	1	01/25/2016 20:24	WG844204
1,2,4-Trichlorobenzene	ND		0.00120	1	01/25/2016 20:24	WG844204
1,1,1-Trichloroethane	ND		0.00120	1	01/25/2016 20:24	WG844204
1,1,2-Trichloroethane	ND		0.00120	1	01/25/2016 20:24	WG844204
Trichloroethene	ND		0.00120	1	01/25/2016 20:24	WG844204
Trichlorofluoromethane	ND		0.00602	1	01/25/2016 20:24	WG844204
1,2,3-Trichloropropane	ND		0.00301	1	01/25/2016 20:24	WG844204
1,2,4-Trimethylbenzene	ND		0.00120	1	01/25/2016 20:24	WG844204
1,2,3-Trimethylbenzene	ND		0.00120	1	01/25/2016 20:24	WG844204
Vinyl chloride	ND		0.00120	1	01/25/2016 20:24	WG844204
1,3,5-Trimethylbenzene	ND		0.00120	1	01/25/2016 20:24	WG844204
Xylenes, Total	ND		0.00361	1	01/25/2016 20:24	WG844204
(S) Toluene-d8	104		88.7-115		01/25/2016 20:24	WG844204
(S) Dibromofluoromethane	109		76.3-123		01/25/2016 20:24	WG844204
(S) 4-Bromofluorobenzene	101		69.7-129		01/25/2016 20:24	WG844204

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry) mg/kg	Qualifier	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	95.4		48.2	10	01/25/2016 20:44	WG844143
C28-C40 Oil Range	98.9		48.2	10	01/25/2016 20:44	WG844143
(S) o-Terphenyl	63.7		50.0-150		01/25/2016 20:44	WG844143



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

Analyte	Result (dry) mg/kg	Qualifier	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Anthracene	0.201		0.0361	5	01/26/2016 12:36	WG844412
Acenaphthene	0.112		0.0361	5	01/26/2016 12:36	WG844412
Acenaphthylene	ND		0.0361	5	01/26/2016 12:36	WG844412
Benzo(a)anthracene	0.516		0.0361	5	01/26/2016 12:36	WG844412
Benzo(a)pyrene	0.513		0.0361	5	01/26/2016 12:36	WG844412
Benzo(b)fluoranthene	0.572		0.0361	5	01/26/2016 12:36	WG844412
Benzo(g,h,i)perylene	0.373		0.0361	5	01/26/2016 12:36	WG844412
Benzo(k)fluoranthene	0.247		0.0361	5	01/26/2016 12:36	WG844412
Chrysene	0.502		0.0361	5	01/26/2016 12:36	WG844412
Dibenz(a,h)anthracene	0.102		0.0361	5	01/26/2016 12:36	WG844412
Fluoranthene	1.12		0.0361	5	01/26/2016 12:36	WG844412
Fluorene	0.146		0.0361	5	01/26/2016 12:36	WG844412
Indeno(1,2,3-cd)pyrene	0.299		0.0361	5	01/26/2016 12:36	WG844412
Naphthalene	0.993		0.120	5	01/26/2016 12:36	WG844412
Phenanthrene	0.911		0.0361	5	01/26/2016 12:36	WG844412
Pyrene	1.09		0.0361	5	01/26/2016 12:36	WG844412
1-Methylnaphthalene	ND		0.120	5	01/26/2016 12:36	WG844412
2-Methylnaphthalene	0.128		0.120	5	01/26/2016 12:36	WG844412
2-Chloronaphthalene	ND		0.120	5	01/26/2016 12:36	WG844412
(S) Nitrobenzene-d5	72.4		22.1-146		01/26/2016 12:36	WG844412
(S) 2-Fluorobiphenyl	69.7		40.6-122		01/26/2016 12:36	WG844412
(S) p-Terphenyl-d14	61.1		32.2-131		01/26/2016 12:36	WG844412

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ Gl⁸ Al⁹ Sc



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	80.7		1	01/25/2016 10:08	WG844220

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Mercury by Method 7471A

Analyte	Result (dry)	Qualifier	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Mercury	4.13		0.124	5	01/28/2016 18:16	WG844876

Metals (ICP) by Method 6010C

Analyte	Result (dry)	Qualifier	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Arsenic	4.22		2.48	1	01/26/2016 13:21	WG844444
Barium	34.2		0.620	1	01/26/2016 13:21	WG844444
Cadmium	1.14		0.620	1	01/26/2016 13:21	WG844444
Chromium	15.0		1.24	1	01/26/2016 13:21	WG844444
Lead	57.0		0.620	1	01/26/2016 13:21	WG844444
Selenium	ND		2.48	1	01/26/2016 13:21	WG844444
Silver	ND		1.24	1	01/26/2016 13:21	WG844444

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

Analyte	Result (dry)	Qualifier	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
TPH (GC/FID) Low Fraction	2.31		0.126	1.02	01/28/2016 05:07	WG844294
(S) a,a,a-Trifluorotoluene(FID)	91.0		59.0-128		01/28/2016 05:07	WG844294

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

Analyte	Result (dry)	Qualifier	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Acetone	ND		0.0620	1	01/25/2016 20:45	WG844204
Acrylonitrile	ND		0.0124	1	01/25/2016 20:45	WG844204
Benzene	0.0104		0.00124	1	01/25/2016 20:45	WG844204
Bromobenzene	ND		0.00124	1	01/25/2016 20:45	WG844204
Bromodichloromethane	ND		0.00124	1	01/25/2016 20:45	WG844204
Bromoform	ND		0.00124	1	01/25/2016 20:45	WG844204
Bromomethane	ND		0.00620	1	01/25/2016 20:45	WG844204
n-Butylbenzene	ND		0.00124	1	01/25/2016 20:45	WG844204
sec-Butylbenzene	ND		0.00124	1	01/25/2016 20:45	WG844204
tert-Butylbenzene	ND		0.00124	1	01/25/2016 20:45	WG844204
Carbon tetrachloride	ND		0.00124	1	01/25/2016 20:45	WG844204
Chlorobenzene	ND		0.00124	1	01/25/2016 20:45	WG844204
Chlorodibromomethane	ND		0.00124	1	01/25/2016 20:45	WG844204
Chloroethane	ND		0.00620	1	01/25/2016 20:45	WG844204
2-Chloroethyl vinyl ether	ND		0.0620	1	01/25/2016 20:45	WG844204
Chloroform	ND		0.00620	1	01/25/2016 20:45	WG844204
Chloromethane	ND		0.00310	1	01/25/2016 20:45	WG844204
2-Chlorotoluene	ND		0.00124	1	01/25/2016 20:45	WG844204
4-Chlorotoluene	ND		0.00124	1	01/25/2016 20:45	WG844204
1,2-Dibromo-3-Chloropropane	ND		0.00620	1	01/25/2016 20:45	WG844204
1,2-Dibromoethane	ND		0.00124	1	01/25/2016 20:45	WG844204
Dibromomethane	ND		0.00124	1	01/25/2016 20:45	WG844204
1,2-Dichlorobenzene	ND		0.00124	1	01/25/2016 20:45	WG844204
1,3-Dichlorobenzene	ND		0.00124	1	01/25/2016 20:45	WG844204
1,4-Dichlorobenzene	ND		0.00124	1	01/25/2016 20:45	WG844204
Dichlorodifluoromethane	ND		0.00620	1	01/25/2016 20:45	WG844204
1,1-Dichloroethane	0.00895		0.00124	1	01/25/2016 20:45	WG844204



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

Analyte	Result (dry) mg/kg	Qualifier	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
1,2-Dichloroethane	ND		0.00124	1	01/25/2016 20:45	WG844204
1,1-Dichloroethene	ND		0.00124	1	01/25/2016 20:45	WG844204
cis-1,2-Dichloroethene	ND		0.00124	1	01/25/2016 20:45	WG844204
trans-1,2-Dichloroethene	ND		0.00124	1	01/25/2016 20:45	WG844204
1,2-Dichloropropane	ND		0.00124	1	01/25/2016 20:45	WG844204
1,1-Dichloropropene	ND		0.00124	1	01/25/2016 20:45	WG844204
1,3-Dichloropropane	ND		0.00124	1	01/25/2016 20:45	WG844204
cis-1,3-Dichloropropene	ND		0.00124	1	01/25/2016 20:45	WG844204
trans-1,3-Dichloropropene	ND		0.00124	1	01/25/2016 20:45	WG844204
2,2-Dichloropropane	ND		0.00124	1	01/25/2016 20:45	WG844204
Di-isopropyl ether	ND		0.00124	1	01/25/2016 20:45	WG844204
Ethylbenzene	ND		0.00124	1	01/25/2016 20:45	WG844204
Hexachloro-1,3-butadiene	ND		0.00124	1	01/25/2016 20:45	WG844204
Isopropylbenzene	0.00226		0.00124	1	01/25/2016 20:45	WG844204
p-Isopropyltoluene	ND		0.00124	1	01/25/2016 20:45	WG844204
2-Butanone (MEK)	ND		0.0124	1	01/25/2016 20:45	WG844204
Methylene Chloride	ND		0.00620	1	01/25/2016 20:45	WG844204
4-Methyl-2-pentanone (MIBK)	ND		0.0124	1	01/25/2016 20:45	WG844204
Methyl tert-butyl ether	ND		0.00124	1	01/25/2016 20:45	WG844204
Naphthalene	ND		0.00620	1	01/25/2016 20:45	WG844204
n-Propylbenzene	ND		0.00124	1	01/25/2016 20:45	WG844204
Styrene	ND		0.00124	1	01/25/2016 20:45	WG844204
1,1,1,2-Tetrachloroethane	ND		0.00124	1	01/25/2016 20:45	WG844204
1,1,2,2-Tetrachloroethane	ND		0.00124	1	01/25/2016 20:45	WG844204
1,1,2-Trichlorotrifluoroethane	ND		0.00124	1	01/25/2016 20:45	WG844204
Tetrachloroethene	ND		0.00124	1	01/25/2016 20:45	WG844204
Toluene	ND		0.00620	1	01/25/2016 20:45	WG844204
1,2,3-Trichlorobenzene	ND		0.00124	1	01/25/2016 20:45	WG844204
1,2,4-Trichlorobenzene	ND		0.00124	1	01/25/2016 20:45	WG844204
1,1,1-Trichloroethane	ND		0.00124	1	01/25/2016 20:45	WG844204
1,1,2-Trichloroethane	ND		0.00124	1	01/25/2016 20:45	WG844204
Trichloroethene	ND		0.00124	1	01/25/2016 20:45	WG844204
Trichlorofluoromethane	ND		0.00620	1	01/25/2016 20:45	WG844204
1,2,3-Trichloropropane	ND		0.00310	1	01/25/2016 20:45	WG844204
1,2,4-Trimethylbenzene	ND		0.00124	1	01/25/2016 20:45	WG844204
1,2,3-Trimethylbenzene	0.00129		0.00124	1	01/25/2016 20:45	WG844204
Vinyl chloride	ND		0.00124	1	01/25/2016 20:45	WG844204
1,3,5-Trimethylbenzene	ND		0.00124	1	01/25/2016 20:45	WG844204
Xylenes, Total	ND		0.00372	1	01/25/2016 20:45	WG844204
(S) Toluene-d8	107		88.7-115		01/25/2016 20:45	WG844204
(S) Dibromofluoromethane	111		76.3-123		01/25/2016 20:45	WG844204
(S) 4-Bromofluorobenzene	98.2		69.7-129		01/25/2016 20:45	WG844204

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

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry) mg/kg	Qualifier	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	ND		496	100	01/25/2016 21:28	WG844143
C28-C40 Oil Range	1410		496	100	01/25/2016 21:28	WG844143
(S) o-Terphenyl	104	J7	50.0-150		01/25/2016 21:28	WG844143

Sample Narrative:

8015 L813258-11 WG844143: Cannot run at lower dilution due to viscosity of extract



Collected date/time: 01/21/16 15:40

L813258

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

Analyte	Result (dry) mg/kg	Qualifier	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Anthracene	2.41		0.149	20	01/26/2016 13:40	WG844412
Acenaphthene	1.34		0.149	20	01/26/2016 13:40	WG844412
Acenaphthylene	ND		0.149	20	01/26/2016 13:40	WG844412
Benzo(a)anthracene	4.05		0.149	20	01/26/2016 13:40	WG844412
Benzo(a)pyrene	3.44		0.149	20	01/26/2016 13:40	WG844412
Benzo(b)fluoranthene	4.35		0.149	20	01/26/2016 13:40	WG844412
Benzo(g,h,i)perylene	2.24		0.149	20	01/26/2016 13:40	WG844412
Benzo(k)fluoranthene	0.849		0.149	20	01/26/2016 13:40	WG844412
Chrysene	3.68		0.149	20	01/26/2016 13:40	WG844412
Dibenz(a,h)anthracene	0.605		0.149	20	01/26/2016 13:40	WG844412
Fluoranthene	10.2		0.149	20	01/26/2016 13:40	WG844412
Fluorene	1.54		0.149	20	01/26/2016 13:40	WG844412
Indeno(1,2,3-cd)pyrene	1.82		0.149	20	01/26/2016 13:40	WG844412
Naphthalene	1.42		0.496	20	01/26/2016 13:40	WG844412
Phenanthrene	11.6		0.149	20	01/26/2016 13:40	WG844412
Pyrene	9.53		0.149	20	01/26/2016 13:40	WG844412
1-Methylnaphthalene	ND		0.496	20	01/26/2016 13:40	WG844412
2-Methylnaphthalene	0.572		0.496	20	01/26/2016 13:40	WG844412
2-Chloronaphthalene	ND		0.496	20	01/26/2016 13:40	WG844412
(S) Nitrobenzene-d5	76.8	J7	22.1-146		01/26/2016 13:40	WG844412
(S) 2-Fluorobiphenyl	79.3	J7	40.6-122		01/26/2016 13:40	WG844412
(S) p-Terphenyl-d14	78.2	J7	32.2-131		01/26/2016 13:40	WG844412

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ Gl⁸ Al⁹ Sc



Mercury by Method 7470A

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
Mercury,Dissolved	ND		0.000200	1	01/26/2016 13:45	WG844286

Metals (ICP) by Method 6010C

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
Arsenic,Dissolved	0.0123		0.0100	1	01/26/2016 00:38	WG844285
Barium,Dissolved	0.150		0.00500	1	01/26/2016 00:38	WG844285
Cadmium,Dissolved	ND		0.00200	1	01/26/2016 00:38	WG844285
Chromium,Dissolved	ND		0.0100	1	01/26/2016 00:38	WG844285
Lead,Dissolved	0.00958		0.00500	1	01/26/2016 00:38	WG844285
Selenium,Dissolved	ND		0.0100	1	01/26/2016 00:38	WG844285
Silver,Dissolved	ND		0.00500	1	01/26/2016 00:38	WG844285

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

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
Acetone	ND		0.0500	1	01/28/2016 16:10	WG845218
Acrolein	ND		0.0500	1	01/28/2016 16:10	WG845218
Acrylonitrile	ND		0.0100	1	01/28/2016 16:10	WG845218
Benzene	ND		0.00100	1	01/28/2016 16:10	WG845218
Bromobenzene	ND		0.00100	1	01/28/2016 16:10	WG845218
Bromodichloromethane	ND		0.00100	1	01/28/2016 16:10	WG845218
Bromoform	ND		0.00100	1	01/28/2016 16:10	WG845218
Bromomethane	ND		0.00500	1	01/28/2016 16:10	WG845218
n-Butylbenzene	ND		0.00100	1	01/28/2016 16:10	WG845218
sec-Butylbenzene	ND		0.00100	1	01/28/2016 16:10	WG845218
tert-Butylbenzene	ND		0.00100	1	01/28/2016 16:10	WG845218
Carbon tetrachloride	ND		0.00100	1	01/28/2016 16:10	WG845218
Chlorobenzene	ND		0.00100	1	01/28/2016 16:10	WG845218
Chlorodibromomethane	ND		0.00100	1	01/28/2016 16:10	WG845218
Chloroethane	ND		0.00500	1	01/28/2016 16:10	WG845218
2-Chloroethyl vinyl ether	ND	J3	0.0500	1	01/28/2016 16:10	WG845218
Chloroform	ND		0.00500	1	01/28/2016 16:10	WG845218
Chloromethane	ND		0.00250	1	01/28/2016 16:10	WG845218
2-Chlorotoluene	ND		0.00100	1	01/28/2016 16:10	WG845218
4-Chlorotoluene	ND		0.00100	1	01/28/2016 16:10	WG845218
1,2-Dibromo-3-Chloropropane	ND		0.00500	1	01/28/2016 16:10	WG845218
1,2-Dibromoethane	ND		0.00100	1	01/28/2016 16:10	WG845218
Dibromomethane	ND		0.00100	1	01/28/2016 16:10	WG845218
1,2-Dichlorobenzene	ND		0.00100	1	01/28/2016 16:10	WG845218
1,3-Dichlorobenzene	ND		0.00100	1	01/28/2016 16:10	WG845218
1,4-Dichlorobenzene	ND		0.00100	1	01/28/2016 16:10	WG845218
Dichlorodifluoromethane	ND		0.00500	1	01/28/2016 16:10	WG845218
1,1-Dichloroethane	ND		0.00100	1	01/28/2016 16:10	WG845218
1,2-Dichloroethane	ND		0.00100	1	01/28/2016 16:10	WG845218
1,1-Dichloroethene	ND		0.00100	1	01/28/2016 16:10	WG845218
cis-1,2-Dichloroethene	ND		0.00100	1	01/28/2016 16:10	WG845218
trans-1,2-Dichloroethene	ND		0.00100	1	01/28/2016 16:10	WG845218
1,2-Dichloropropane	ND		0.00100	1	01/28/2016 16:10	WG845218
1,1-Dichloropropene	ND		0.00100	1	01/28/2016 16:10	WG845218
1,3-Dichloropropane	ND		0.00100	1	01/28/2016 16:10	WG845218
cis-1,3-Dichloropropene	ND		0.00100	1	01/28/2016 16:10	WG845218
trans-1,3-Dichloropropene	ND		0.00100	1	01/28/2016 16:10	WG845218
2,2-Dichloropropane	ND		0.00100	1	01/28/2016 16:10	WG845218
Di-isopropyl ether	ND		0.00100	1	01/28/2016 16:10	WG845218

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

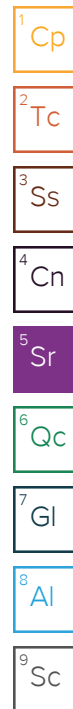
8 Al

9 Sc



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

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
Ethylbenzene	ND		0.00100	1	01/28/2016 16:10	WG845218
Hexachloro-1,3-butadiene	ND		0.00100	1	01/28/2016 16:10	WG845218
Isopropylbenzene	ND		0.00100	1	01/28/2016 16:10	WG845218
p-Isopropyltoluene	ND		0.00100	1	01/28/2016 16:10	WG845218
2-Butanone (MEK)	ND		0.0100	1	01/28/2016 16:10	WG845218
Methylene Chloride	ND		0.00500	1	01/28/2016 16:10	WG845218
4-Methyl-2-pentanone (MIBK)	ND		0.0100	1	01/28/2016 16:10	WG845218
Methyl tert-butyl ether	ND		0.00100	1	01/28/2016 16:10	WG845218
Naphthalene	ND		0.00500	1	01/28/2016 16:10	WG845218
n-Propylbenzene	ND		0.00100	1	01/28/2016 16:10	WG845218
Styrene	ND		0.00100	1	01/28/2016 16:10	WG845218
1,1,1,2-Tetrachloroethane	ND		0.00100	1	01/28/2016 16:10	WG845218
1,1,2,2-Tetrachloroethane	ND		0.00100	1	01/28/2016 16:10	WG845218
1,1,2-Trichlorotrifluoroethane	ND		0.00100	1	01/28/2016 16:10	WG845218
Tetrachloroethene	ND		0.00100	1	01/28/2016 16:10	WG845218
Toluene	ND		0.00500	1	01/28/2016 16:10	WG845218
1,2,3-Trichlorobenzene	ND		0.00100	1	01/28/2016 16:10	WG845218
1,2,4-Trichlorobenzene	ND		0.00100	1	01/28/2016 16:10	WG845218
1,1,1-Trichloroethane	ND		0.00100	1	01/28/2016 16:10	WG845218
1,1,2-Trichloroethane	ND		0.00100	1	01/28/2016 16:10	WG845218
Trichloroethene	ND		0.00100	1	01/28/2016 16:10	WG845218
Trichlorofluoromethane	ND		0.00500	1	01/28/2016 16:10	WG845218
1,2,3-Trichloropropane	ND		0.00250	1	01/28/2016 16:10	WG845218
1,2,4-Trimethylbenzene	ND		0.00100	1	01/28/2016 16:10	WG845218
1,2,3-Trimethylbenzene	ND		0.00100	1	01/28/2016 16:10	WG845218
1,3,5-Trimethylbenzene	ND		0.00100	1	01/28/2016 16:10	WG845218
Vinyl chloride	ND		0.00100	1	01/28/2016 16:10	WG845218
Xylenes, Total	ND		0.00300	1	01/28/2016 16:10	WG845218
(S) Toluene-d8	102		90.0-115		01/28/2016 16:10	WG845218
(S) Dibromofluoromethane	101		79.0-121		01/28/2016 16:10	WG845218
(S) 4-Bromofluorobenzene	102		80.1-120		01/28/2016 16:10	WG845218



Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	0.210		0.100	1	01/26/2016 18:48	WG843963
C28-C40 Oil Range	0.116		0.100	1	01/26/2016 18:48	WG843963
(S) o-Terphenyl	82.4		50.0-150		01/26/2016 18:48	WG843963

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

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
Anthracene	0.000407		0.0000500	1	01/26/2016 16:04	WG844464
Acenaphthene	0.00233		0.0000500	1	01/26/2016 16:04	WG844464
Acenaphthylene	0.000104		0.0000500	1	01/26/2016 16:04	WG844464
Benzo(a)anthracene	0.000348		0.0000500	1	01/26/2016 16:04	WG844464
Benzo(a)pyrene	0.000273		0.0000500	1	01/26/2016 16:04	WG844464
Benzo(b)fluoranthene	0.000297		0.0000500	1	01/26/2016 16:04	WG844464
Benzo(g,h,i)perylene	0.000162		0.0000500	1	01/26/2016 16:04	WG844464
Benzo(k)fluoranthene	0.000110		0.0000500	1	01/26/2016 16:04	WG844464
Chrysene	0.000357		0.0000500	1	01/26/2016 16:04	WG844464
Dibenz(a,h)anthracene	ND		0.0000500	1	01/26/2016 16:04	WG844464
Fluoranthene	0.00140		0.0000500	1	01/26/2016 16:04	WG844464
Fluorene	0.000658		0.0000500	1	01/26/2016 16:04	WG844464
Indeno(1,2,3-cd)pyrene	0.000144		0.0000500	1	01/26/2016 16:04	WG844464



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

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
Naphthalene	0.00153		0.000250	1	01/26/2016 16:04	WG844464
Phenanthrene	0.00256		0.0000500	1	01/26/2016 16:04	WG844464
Pyrene	0.00129		0.0000500	1	01/26/2016 16:04	WG844464
1-Methylnaphthalene	0.000262		0.000250	1	01/26/2016 16:04	WG844464
2-Methylnaphthalene	0.000293		0.000250	1	01/26/2016 16:04	WG844464
2-Chloronaphthalene	ND		0.000250	1	01/26/2016 16:04	WG844464
(S) Nitrobenzene-d5	68.7		45.1-170		01/26/2016 16:04	WG844464
(S) 2-Fluorobiphenyl	85.4		57.7-153		01/26/2016 16:04	WG844464
(S) p-Terphenyl-d14	70.5		53.2-156		01/26/2016 16:04	WG844464

1
Cp2
Tc3
Ss4
Cn5
Sr6
Qc7
Gl8
Al9
Sc



Mercury by Method 7470A

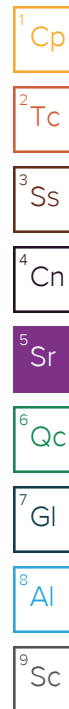
Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
Mercury,Dissolved	ND		0.000200	1	01/26/2016 13:58	WG844286

Metals (ICP) by Method 6010C

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
Arsenic,Dissolved	ND		0.0900	9	01/26/2016 00:41	WG844285
Barium,Dissolved	0.0725		0.0450	9	01/26/2016 00:41	WG844285
Cadmium,Dissolved	ND		0.0180	9	01/26/2016 00:41	WG844285
Chromium,Dissolved	ND		0.0900	9	01/26/2016 00:41	WG844285
Lead,Dissolved	0.148		0.0450	9	01/26/2016 00:41	WG844285
Selenium,Dissolved	ND		0.0900	9	01/26/2016 00:41	WG844285
Silver,Dissolved	ND		0.0450	9	01/26/2016 00:41	WG844285

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

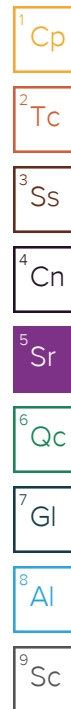
Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
Acetone	ND		0.0500	1	01/28/2016 16:32	WG845218
Acrolein	ND		0.0500	1	01/28/2016 16:32	WG845218
Acrylonitrile	ND		0.0100	1	01/28/2016 16:32	WG845218
Benzene	ND		0.00100	1	01/28/2016 16:32	WG845218
Bromobenzene	ND		0.00100	1	01/28/2016 16:32	WG845218
Bromodichloromethane	ND		0.00100	1	01/28/2016 16:32	WG845218
Bromoform	ND		0.00100	1	01/28/2016 16:32	WG845218
Bromomethane	ND		0.00500	1	01/28/2016 16:32	WG845218
n-Butylbenzene	ND		0.00100	1	01/28/2016 16:32	WG845218
sec-Butylbenzene	ND		0.00100	1	01/28/2016 16:32	WG845218
tert-Butylbenzene	ND		0.00100	1	01/28/2016 16:32	WG845218
Carbon tetrachloride	ND		0.00100	1	01/28/2016 16:32	WG845218
Chlorobenzene	ND		0.00100	1	01/28/2016 16:32	WG845218
Chlorodibromomethane	ND		0.00100	1	01/28/2016 16:32	WG845218
Chloroethane	ND		0.00500	1	01/28/2016 16:32	WG845218
2-Chloroethyl vinyl ether	ND	J3	0.0500	1	01/28/2016 16:32	WG845218
Chloroform	ND		0.00500	1	01/28/2016 16:32	WG845218
Chloromethane	ND		0.00250	1	01/28/2016 16:32	WG845218
2-Chlorotoluene	ND		0.00100	1	01/28/2016 16:32	WG845218
4-Chlorotoluene	ND		0.00100	1	01/28/2016 16:32	WG845218
1,2-Dibromo-3-Chloropropane	ND		0.00500	1	01/28/2016 16:32	WG845218
1,2-Dibromoethane	ND		0.00100	1	01/28/2016 16:32	WG845218
Dibromomethane	ND		0.00100	1	01/28/2016 16:32	WG845218
1,2-Dichlorobenzene	ND		0.00100	1	01/28/2016 16:32	WG845218
1,3-Dichlorobenzene	ND		0.00100	1	01/28/2016 16:32	WG845218
1,4-Dichlorobenzene	ND		0.00100	1	01/28/2016 16:32	WG845218
Dichlorodifluoromethane	ND		0.00500	1	01/28/2016 16:32	WG845218
1,1-Dichloroethane	ND		0.00100	1	01/28/2016 16:32	WG845218
1,2-Dichloroethane	ND		0.00100	1	01/28/2016 16:32	WG845218
1,1-Dichloroethene	ND		0.00100	1	01/28/2016 16:32	WG845218
cis-1,2-Dichloroethene	ND		0.00100	1	01/28/2016 16:32	WG845218
trans-1,2-Dichloroethene	ND		0.00100	1	01/28/2016 16:32	WG845218
1,2-Dichloropropane	ND		0.00100	1	01/28/2016 16:32	WG845218
1,1-Dichloropropene	ND		0.00100	1	01/28/2016 16:32	WG845218
1,3-Dichloropropane	ND		0.00100	1	01/28/2016 16:32	WG845218
cis-1,3-Dichloropropene	ND		0.00100	1	01/28/2016 16:32	WG845218
trans-1,3-Dichloropropene	ND		0.00100	1	01/28/2016 16:32	WG845218
2,2-Dichloropropane	ND		0.00100	1	01/28/2016 16:32	WG845218
Di-isopropyl ether	ND		0.00100	1	01/28/2016 16:32	WG845218





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

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
Ethylbenzene	ND		0.00100	1	01/28/2016 16:32	WG845218
Hexachloro-1,3-butadiene	ND		0.00100	1	01/28/2016 16:32	WG845218
Isopropylbenzene	ND		0.00100	1	01/28/2016 16:32	WG845218
p-Isopropyltoluene	ND		0.00100	1	01/28/2016 16:32	WG845218
2-Butanone (MEK)	ND		0.0100	1	01/28/2016 16:32	WG845218
Methylene Chloride	ND		0.00500	1	01/28/2016 16:32	WG845218
4-Methyl-2-pentanone (MIBK)	ND		0.0100	1	01/28/2016 16:32	WG845218
Methyl tert-butyl ether	ND		0.00100	1	01/28/2016 16:32	WG845218
Naphthalene	ND		0.00500	1	01/28/2016 16:32	WG845218
n-Propylbenzene	ND		0.00100	1	01/28/2016 16:32	WG845218
Styrene	ND		0.00100	1	01/28/2016 16:32	WG845218
1,1,1,2-Tetrachloroethane	ND		0.00100	1	01/28/2016 16:32	WG845218
1,1,2,2-Tetrachloroethane	ND		0.00100	1	01/28/2016 16:32	WG845218
1,1,2-Trichlorotrifluoroethane	ND		0.00100	1	01/28/2016 16:32	WG845218
Tetrachloroethene	ND		0.00100	1	01/28/2016 16:32	WG845218
Toluene	ND		0.00500	1	01/28/2016 16:32	WG845218
1,2,3-Trichlorobenzene	ND		0.00100	1	01/28/2016 16:32	WG845218
1,2,4-Trichlorobenzene	ND		0.00100	1	01/28/2016 16:32	WG845218
1,1,1-Trichloroethane	ND		0.00100	1	01/28/2016 16:32	WG845218
1,1,2-Trichloroethane	ND		0.00100	1	01/28/2016 16:32	WG845218
Trichloroethene	ND		0.00100	1	01/28/2016 16:32	WG845218
Trichlorofluoromethane	ND		0.00500	1	01/28/2016 16:32	WG845218
1,2,3-Trichloropropane	ND		0.00250	1	01/28/2016 16:32	WG845218
1,2,4-Trimethylbenzene	ND		0.00100	1	01/28/2016 16:32	WG845218
1,2,3-Trimethylbenzene	ND		0.00100	1	01/28/2016 16:32	WG845218
1,3,5-Trimethylbenzene	ND		0.00100	1	01/28/2016 16:32	WG845218
Vinyl chloride	ND		0.00100	1	01/28/2016 16:32	WG845218
Xylenes, Total	ND		0.00300	1	01/28/2016 16:32	WG845218
(S) Toluene-d8	102		90.0-115		01/28/2016 16:32	WG845218
(S) Dibromofluoromethane	101		79.0-121		01/28/2016 16:32	WG845218
(S) 4-Bromofluorobenzene	101		80.1-120		01/28/2016 16:32	WG845218



Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	ND		0.100	1	01/26/2016 19:08	WG843963
C28-C40 Oil Range	ND		0.100	1	01/26/2016 19:08	WG843963
(S) o-Terphenyl	78.8		50.0-150		01/26/2016 19:08	WG843963

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

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
Anthracene	0.0000526		0.0000500	1	01/26/2016 16:26	WG844464
Acenaphthene	ND		0.0000500	1	01/26/2016 16:26	WG844464
Acenaphthylene	ND		0.0000500	1	01/26/2016 16:26	WG844464
Benzo(a)anthracene	0.0000558		0.0000500	1	01/26/2016 16:26	WG844464
Benzo(a)pyrene	ND		0.0000500	1	01/26/2016 16:26	WG844464
Benzo(b)fluoranthene	ND		0.0000500	1	01/26/2016 16:26	WG844464
Benzo(g,h,i)perylene	ND		0.0000500	1	01/26/2016 16:26	WG844464
Benzo(k)fluoranthene	ND		0.0000500	1	01/26/2016 16:26	WG844464
Chrysene	0.0000530		0.0000500	1	01/26/2016 16:26	WG844464
Dibenz(a,h)anthracene	ND		0.0000500	1	01/26/2016 16:26	WG844464
Fluoranthene	0.000145		0.0000500	1	01/26/2016 16:26	WG844464
Fluorene	ND		0.0000500	1	01/26/2016 16:26	WG844464
Indeno(1,2,3-cd)pyrene	ND		0.0000500	1	01/26/2016 16:26	WG844464



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

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
Naphthalene	ND		0.000250	1	01/26/2016 16:26	WG844464
Phenanthrene	0.000222		0.0000500	1	01/26/2016 16:26	WG844464
Pyrene	0.000153		0.0000500	1	01/26/2016 16:26	WG844464
1-Methylnaphthalene	ND		0.000250	1	01/26/2016 16:26	WG844464
2-Methylnaphthalene	ND		0.000250	1	01/26/2016 16:26	WG844464
2-Chloronaphthalene	ND		0.000250	1	01/26/2016 16:26	WG844464
(S) Nitrobenzene-d5	78.1		45.1-170		01/26/2016 16:26	WG844464
(S) 2-Fluorobiphenyl	88.3		57.7-153		01/26/2016 16:26	WG844464
(S) p-Terphenyl-d14	60.4		53.2-156		01/26/2016 16:26	WG844464

1
Cp2
Tc3
Ss4
Cn5
Sr6
Qc7
Gl8
Al9
Sc



Mercury by Method 7470A

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
Mercury,Dissolved	0.00735		0.000200	1	01/26/2016 14:01	WG844286

Metals (ICP) by Method 6010C

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
Arsenic,Dissolved	0.125		0.0900	9	01/26/2016 00:45	WG844285
Barium,Dissolved	0.0893		0.0450	9	01/26/2016 00:45	WG844285
Cadmium,Dissolved	ND		0.0180	9	01/26/2016 00:45	WG844285
Chromium,Dissolved	ND		0.0900	9	01/26/2016 00:45	WG844285
Lead,Dissolved	1.61		0.0450	9	01/26/2016 00:45	WG844285
Selenium,Dissolved	ND		0.0900	9	01/26/2016 00:45	WG844285
Silver,Dissolved	ND		0.0450	9	01/26/2016 00:45	WG844285

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

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
Acetone	ND		0.0500	1	01/28/2016 16:54	WG845218
Acrolein	ND		0.0500	1	01/28/2016 16:54	WG845218
Acrylonitrile	ND		0.0100	1	01/28/2016 16:54	WG845218
Benzene	ND		0.00100	1	01/28/2016 16:54	WG845218
Bromobenzene	ND		0.00100	1	01/28/2016 16:54	WG845218
Bromodichloromethane	ND		0.00100	1	01/28/2016 16:54	WG845218
Bromoform	ND		0.00100	1	01/28/2016 16:54	WG845218
Bromomethane	ND		0.00500	1	01/28/2016 16:54	WG845218
n-Butylbenzene	ND		0.00100	1	01/28/2016 16:54	WG845218
sec-Butylbenzene	ND		0.00100	1	01/28/2016 16:54	WG845218
tert-Butylbenzene	ND		0.00100	1	01/28/2016 16:54	WG845218
Carbon tetrachloride	ND		0.00100	1	01/28/2016 16:54	WG845218
Chlorobenzene	ND		0.00100	1	01/28/2016 16:54	WG845218
Chlorodibromomethane	ND		0.00100	1	01/28/2016 16:54	WG845218
Chloroethane	ND		0.00500	1	01/28/2016 16:54	WG845218
2-Chloroethyl vinyl ether	ND	J3	0.0500	1	01/28/2016 16:54	WG845218
Chloroform	ND		0.00500	1	01/28/2016 16:54	WG845218
Chloromethane	ND		0.00250	1	01/28/2016 16:54	WG845218
2-Chlorotoluene	ND		0.00100	1	01/28/2016 16:54	WG845218
4-Chlorotoluene	ND		0.00100	1	01/28/2016 16:54	WG845218
1,2-Dibromo-3-Chloropropane	ND		0.00500	1	01/28/2016 16:54	WG845218
1,2-Dibromoethane	ND		0.00100	1	01/28/2016 16:54	WG845218
Dibromomethane	ND		0.00100	1	01/28/2016 16:54	WG845218
1,2-Dichlorobenzene	ND		0.00100	1	01/28/2016 16:54	WG845218
1,3-Dichlorobenzene	ND		0.00100	1	01/28/2016 16:54	WG845218
1,4-Dichlorobenzene	ND		0.00100	1	01/28/2016 16:54	WG845218
Dichlorodifluoromethane	ND		0.00500	1	01/28/2016 16:54	WG845218
1,1-Dichloroethane	ND		0.00100	1	01/28/2016 16:54	WG845218
1,2-Dichloroethane	ND		0.00100	1	01/28/2016 16:54	WG845218
1,1-Dichloroethene	ND		0.00100	1	01/28/2016 16:54	WG845218
cis-1,2-Dichloroethene	0.124		0.00100	1	01/28/2016 16:54	WG845218
trans-1,2-Dichloroethene	0.00391		0.00100	1	01/28/2016 16:54	WG845218
1,2-Dichloropropane	ND		0.00100	1	01/28/2016 16:54	WG845218
1,1-Dichloropropene	ND		0.00100	1	01/28/2016 16:54	WG845218
1,3-Dichloropropane	ND		0.00100	1	01/28/2016 16:54	WG845218
cis-1,3-Dichloropropene	ND		0.00100	1	01/28/2016 16:54	WG845218
trans-1,3-Dichloropropene	ND		0.00100	1	01/28/2016 16:54	WG845218
2,2-Dichloropropane	ND		0.00100	1	01/28/2016 16:54	WG845218
Di-isopropyl ether	ND		0.00100	1	01/28/2016 16:54	WG845218

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

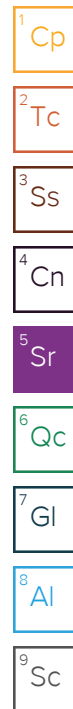
8 Al

9 Sc



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

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
Ethylbenzene	ND		0.00100	1	01/28/2016 16:54	WG845218
Hexachloro-1,3-butadiene	ND		0.00100	1	01/28/2016 16:54	WG845218
Isopropylbenzene	ND		0.00100	1	01/28/2016 16:54	WG845218
p-Isopropyltoluene	ND		0.00100	1	01/28/2016 16:54	WG845218
2-Butanone (MEK)	ND		0.0100	1	01/28/2016 16:54	WG845218
Methylene Chloride	ND		0.00500	1	01/28/2016 16:54	WG845218
4-Methyl-2-pentanone (MIBK)	ND		0.0100	1	01/28/2016 16:54	WG845218
Methyl tert-butyl ether	ND		0.00100	1	01/28/2016 16:54	WG845218
Naphthalene	ND		0.00500	1	01/28/2016 16:54	WG845218
n-Propylbenzene	ND		0.00100	1	01/28/2016 16:54	WG845218
Styrene	ND		0.00100	1	01/28/2016 16:54	WG845218
1,1,1,2-Tetrachloroethane	ND		0.00100	1	01/28/2016 16:54	WG845218
1,1,2,2-Tetrachloroethane	ND		0.00100	1	01/28/2016 16:54	WG845218
1,1,2-Trichlorotrifluoroethane	ND		0.00100	1	01/28/2016 16:54	WG845218
Tetrachloroethene	0.0461		0.00100	1	01/28/2016 16:54	WG845218
Toluene	ND		0.00500	1	01/28/2016 16:54	WG845218
1,2,3-Trichlorobenzene	ND		0.00100	1	01/28/2016 16:54	WG845218
1,2,4-Trichlorobenzene	ND		0.00100	1	01/28/2016 16:54	WG845218
1,1,1-Trichloroethane	ND		0.00100	1	01/28/2016 16:54	WG845218
1,1,2-Trichloroethane	ND		0.00100	1	01/28/2016 16:54	WG845218
Trichloroethene	0.00965		0.00100	1	01/28/2016 16:54	WG845218
Trichlorofluoromethane	ND		0.00500	1	01/28/2016 16:54	WG845218
1,2,3-Trichloropropane	ND		0.00250	1	01/28/2016 16:54	WG845218
1,2,4-Trimethylbenzene	ND		0.00100	1	01/28/2016 16:54	WG845218
1,2,3-Trimethylbenzene	ND		0.00100	1	01/28/2016 16:54	WG845218
1,3,5-Trimethylbenzene	ND		0.00100	1	01/28/2016 16:54	WG845218
Vinyl chloride	0.0178		0.00100	1	01/28/2016 16:54	WG845218
Xylenes, Total	ND		0.00300	1	01/28/2016 16:54	WG845218
(S) Toluene-d8	101		90.0-115		01/28/2016 16:54	WG845218
(S) Dibromofluoromethane	101		79.0-121		01/28/2016 16:54	WG845218
(S) 4-Bromofluorobenzene	101		80.1-120		01/28/2016 16:54	WG845218



Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	0.960		0.100	1	01/26/2016 19:28	WG843963
C28-C40 Oil Range	0.636		0.100	1	01/26/2016 19:28	WG843963
(S) o-Terphenyl	79.4		50.0-150		01/26/2016 19:28	WG843963

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

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
Anthracene	0.00160		0.0000500	1	01/26/2016 16:47	WG844464
Acenaphthene	0.00410		0.0000500	1	01/26/2016 16:47	WG844464
Acenaphthylene	ND		0.0000500	1	01/26/2016 16:47	WG844464
Benzo(a)anthracene	0.00118		0.0000500	1	01/26/2016 16:47	WG844464
Benzo(a)pyrene	0.000651		0.0000500	1	01/26/2016 16:47	WG844464
Benzo(b)fluoranthene	0.000625		0.0000500	1	01/26/2016 16:47	WG844464
Benzo(g,h,i)perylene	0.000257		0.0000500	1	01/26/2016 16:47	WG844464
Benzo(k)fluoranthene	0.000259		0.0000500	1	01/26/2016 16:47	WG844464
Chrysene	0.000870		0.0000500	1	01/26/2016 16:47	WG844464
Dibenz(a,h)anthracene	ND		0.0000500	1	01/26/2016 16:47	WG844464
Fluoranthene	0.00428		0.0000500	1	01/26/2016 16:47	WG844464
Fluorene	0.00261		0.0000500	1	01/26/2016 16:47	WG844464
Indeno(1,2,3-cd)pyrene	0.000204		0.0000500	1	01/26/2016 16:47	WG844464



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

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
Naphthalene	0.00419		0.000250	1	01/26/2016 16:47	WG844464
Phenanthrene	0.0101		0.0000500	1	01/26/2016 16:47	WG844464
Pyrene	0.00412		0.0000500	1	01/26/2016 16:47	WG844464
1-Methylnaphthalene	0.00112		0.000250	1	01/26/2016 16:47	WG844464
2-Methylnaphthalene	0.000705		0.000250	1	01/26/2016 16:47	WG844464
2-Chloronaphthalene	ND		0.000250	1	01/26/2016 16:47	WG844464
(S) Nitrobenzene-d5	71.5		45.1-170		01/26/2016 16:47	WG844464
(S) 2-Fluorobiphenyl	75.9		57.7-153		01/26/2016 16:47	WG844464
(S) p-Terphenyl-d14	37.4	J2	53.2-156		01/26/2016 16:47	WG844464

1
Cp2
Tc3
Ss4
Cn5
Sr6
Qc7
Gl8
Al9
Sc



Mercury by Method 7470A

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Mercury,Dissolved	ND		0.000200	1	01/26/2016 14:03	WG844286

Metals (ICP) by Method 6010C

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Arsenic,Dissolved	0.224		0.0100	1	01/26/2016 00:48	WG844285
Barium,Dissolved	0.0607		0.00500	1	01/26/2016 00:48	WG844285
Cadmium,Dissolved	ND		0.00200	1	01/26/2016 00:48	WG844285
Chromium,Dissolved	ND		0.0100	1	01/26/2016 00:48	WG844285
Lead,Dissolved	0.0202		0.00500	1	01/26/2016 00:48	WG844285
Selenium,Dissolved	ND		0.0100	1	01/26/2016 00:48	WG844285
Silver,Dissolved	ND		0.00500	1	01/26/2016 00:48	WG844285

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

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Acetone	ND		0.0500	1	01/28/2016 17:15	WG845218
Acrolein	ND		0.0500	1	01/28/2016 17:15	WG845218
Acrylonitrile	ND		0.0100	1	01/28/2016 17:15	WG845218
Benzene	ND		0.00100	1	01/28/2016 17:15	WG845218
Bromobenzene	ND		0.00100	1	01/28/2016 17:15	WG845218
Bromodichloromethane	ND		0.00100	1	01/28/2016 17:15	WG845218
Bromoform	ND		0.00100	1	01/28/2016 17:15	WG845218
Bromomethane	ND		0.00500	1	01/28/2016 17:15	WG845218
n-Butylbenzene	ND		0.00100	1	01/28/2016 17:15	WG845218
sec-Butylbenzene	ND		0.00100	1	01/28/2016 17:15	WG845218
tert-Butylbenzene	ND		0.00100	1	01/28/2016 17:15	WG845218
Carbon tetrachloride	ND		0.00100	1	01/28/2016 17:15	WG845218
Chlorobenzene	ND		0.00100	1	01/28/2016 17:15	WG845218
Chlorodibromomethane	ND		0.00100	1	01/28/2016 17:15	WG845218
Chloroethane	ND		0.00500	1	01/28/2016 17:15	WG845218
2-Chloroethyl vinyl ether	ND	J3	0.0500	1	01/28/2016 17:15	WG845218
Chloroform	ND		0.00500	1	01/28/2016 17:15	WG845218
Chloromethane	ND		0.00250	1	01/28/2016 17:15	WG845218
2-Chlorotoluene	ND		0.00100	1	01/28/2016 17:15	WG845218
4-Chlorotoluene	ND		0.00100	1	01/28/2016 17:15	WG845218
1,2-Dibromo-3-Chloropropane	ND		0.00500	1	01/28/2016 17:15	WG845218
1,2-Dibromoethane	ND		0.00100	1	01/28/2016 17:15	WG845218
Dibromomethane	ND		0.00100	1	01/28/2016 17:15	WG845218
1,2-Dichlorobenzene	ND		0.00100	1	01/28/2016 17:15	WG845218
1,3-Dichlorobenzene	ND		0.00100	1	01/28/2016 17:15	WG845218
1,4-Dichlorobenzene	ND		0.00100	1	01/28/2016 17:15	WG845218
Dichlorodifluoromethane	ND		0.00500	1	01/28/2016 17:15	WG845218
1,1-Dichloroethane	ND		0.00100	1	01/28/2016 17:15	WG845218
1,2-Dichloroethane	ND		0.00100	1	01/28/2016 17:15	WG845218
1,1-Dichloroethene	ND		0.00100	1	01/28/2016 17:15	WG845218
cis-1,2-Dichloroethene	ND		0.00100	1	01/28/2016 17:15	WG845218
trans-1,2-Dichloroethene	ND		0.00100	1	01/28/2016 17:15	WG845218
1,2-Dichloropropane	ND		0.00100	1	01/28/2016 17:15	WG845218
1,1-Dichloropropene	ND		0.00100	1	01/28/2016 17:15	WG845218
1,3-Dichloropropane	ND		0.00100	1	01/28/2016 17:15	WG845218
cis-1,3-Dichloropropene	ND		0.00100	1	01/28/2016 17:15	WG845218
trans-1,3-Dichloropropene	ND		0.00100	1	01/28/2016 17:15	WG845218
2,2-Dichloropropane	ND		0.00100	1	01/28/2016 17:15	WG845218
Di-isopropyl ether	ND		0.00100	1	01/28/2016 17:15	WG845218

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

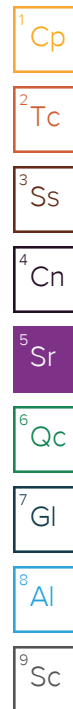
8 Al

9 Sc



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

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
Ethylbenzene	ND		0.00100	1	01/28/2016 17:15	WG845218
Hexachloro-1,3-butadiene	ND		0.00100	1	01/28/2016 17:15	WG845218
Isopropylbenzene	ND		0.00100	1	01/28/2016 17:15	WG845218
p-Isopropyltoluene	ND		0.00100	1	01/28/2016 17:15	WG845218
2-Butanone (MEK)	ND		0.0100	1	01/28/2016 17:15	WG845218
Methylene Chloride	ND		0.00500	1	01/28/2016 17:15	WG845218
4-Methyl-2-pentanone (MIBK)	ND		0.0100	1	01/28/2016 17:15	WG845218
Methyl tert-butyl ether	ND		0.00100	1	01/28/2016 17:15	WG845218
Naphthalene	ND		0.00500	1	01/28/2016 17:15	WG845218
n-Propylbenzene	ND		0.00100	1	01/28/2016 17:15	WG845218
Styrene	ND		0.00100	1	01/28/2016 17:15	WG845218
1,1,1,2-Tetrachloroethane	ND		0.00100	1	01/28/2016 17:15	WG845218
1,1,2,2-Tetrachloroethane	ND		0.00100	1	01/28/2016 17:15	WG845218
1,1,2-Trichlorotrifluoroethane	ND		0.00100	1	01/28/2016 17:15	WG845218
Tetrachloroethene	ND		0.00100	1	01/28/2016 17:15	WG845218
Toluene	ND		0.00500	1	01/28/2016 17:15	WG845218
1,2,3-Trichlorobenzene	ND		0.00100	1	01/28/2016 17:15	WG845218
1,2,4-Trichlorobenzene	ND		0.00100	1	01/28/2016 17:15	WG845218
1,1,1-Trichloroethane	ND		0.00100	1	01/28/2016 17:15	WG845218
1,1,2-Trichloroethane	ND		0.00100	1	01/28/2016 17:15	WG845218
Trichloroethene	ND		0.00100	1	01/28/2016 17:15	WG845218
Trichlorofluoromethane	ND		0.00500	1	01/28/2016 17:15	WG845218
1,2,3-Trichloropropane	ND		0.00250	1	01/28/2016 17:15	WG845218
1,2,4-Trimethylbenzene	ND		0.00100	1	01/28/2016 17:15	WG845218
1,2,3-Trimethylbenzene	ND		0.00100	1	01/28/2016 17:15	WG845218
1,3,5-Trimethylbenzene	ND		0.00100	1	01/28/2016 17:15	WG845218
Vinyl chloride	ND		0.00100	1	01/28/2016 17:15	WG845218
Xylenes, Total	ND		0.00300	1	01/28/2016 17:15	WG845218
(S) Toluene-d8	102		90.0-115		01/28/2016 17:15	WG845218
(S) Dibromofluoromethane	99.7		79.0-121		01/28/2016 17:15	WG845218
(S) 4-Bromofluorobenzene	99.8		80.1-120		01/28/2016 17:15	WG845218



Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	0.651		0.100	1	01/26/2016 19:48	WG843963
C28-C40 Oil Range	0.573		0.100	1	01/26/2016 19:48	WG843963
(S) o-Terphenyl	87.3		50.0-150		01/26/2016 19:48	WG843963

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

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
Anthracene	0.000364		0.0000500	1	01/26/2016 17:09	WG844464
Acenaphthene	0.00201		0.0000500	1	01/26/2016 17:09	WG844464
Acenaphthylene	ND		0.0000500	1	01/26/2016 17:09	WG844464
Benzo(a)anthracene	0.000234		0.0000500	1	01/26/2016 17:09	WG844464
Benzo(a)pyrene	0.000175		0.0000500	1	01/26/2016 17:09	WG844464
Benzo(b)fluoranthene	0.000170		0.0000500	1	01/26/2016 17:09	WG844464
Benzo(g,h,i)perylene	0.000106		0.0000500	1	01/26/2016 17:09	WG844464
Benzo(k)fluoranthene	0.0000701		0.0000500	1	01/26/2016 17:09	WG844464
Chrysene	0.000231		0.0000500	1	01/26/2016 17:09	WG844464
Dibenz(a,h)anthracene	ND		0.0000500	1	01/26/2016 17:09	WG844464
Fluoranthene	0.000824		0.0000500	1	01/26/2016 17:09	WG844464
Fluorene	0.000495		0.0000500	1	01/26/2016 17:09	WG844464
Indeno(1,2,3-cd)pyrene	0.0000860		0.0000500	1	01/26/2016 17:09	WG844464



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

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
Naphthalene	ND		0.000250	1	01/26/2016 17:09	WG844464
Phenanthrene	0.000856		0.0000500	1	01/26/2016 17:09	WG844464
Pyrene	0.000920		0.0000500	1	01/26/2016 17:09	WG844464
1-Methylnaphthalene	0.000250		0.000250	1	01/26/2016 17:09	WG844464
2-Methylnaphthalene	ND		0.000250	1	01/26/2016 17:09	WG844464
2-Chloronaphthalene	ND		0.000250	1	01/26/2016 17:09	WG844464
(S) Nitrobenzene-d5	75.1		45.1-170		01/26/2016 17:09	WG844464
(S) 2-Fluorobiphenyl	87.0		57.7-153		01/26/2016 17:09	WG844464
(S) p-Terphenyl-d14	78.9		53.2-156		01/26/2016 17:09	WG844464

1
Cp2
Tc3
Ss4
Cn5
Sr6
Qc7
Gl8
Al9
Sc

[L813258-01,02,03,04,05,06,07,08,09](#)

Method Blank (MB)

(MB) 01/25/16 07:12

Analyte	MB Result %	<u>MB Qualifier</u>	MB RDL %
Total Solids	0.000800		

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

L813258-09 Original Sample (OS) • Duplicate (DUP)

(OS) 01/25/16 07:12 • (DUP) 01/25/16 07:12

Analyte	Original Result %	DUP Result %	Dilution	DUP RPD %	<u>DUP Qualifier</u>	DUP RPD Limits %
Total Solids	91.8	91.3	1	0.609		5

Laboratory Control Sample (LCS)

(LCS) 01/25/16 07:12

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



Method Blank (MB)

(MB) 01/25/16 10:08

Analyte	MB Result %	MB Qualifier	MB RDL %
Total Solids	0.00130		

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

L813262-01 Original Sample (OS) • Duplicate (DUP)

(OS) 01/25/16 10:08 • (DUP) 01/25/16 10:08

Analyte	Original Result %	DUP Result %	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Total Solids	89.4	89.1	1	0.353		5

Laboratory Control Sample (LCS)

(LCS) 01/25/16 10:08

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



Method Blank (MB)

(MB) 01/26/16 13:38

Analyte	MB Result mg/l	MB Qualifier	MB RDL mg/l
Mercury,Dissolved	ND		0.000200

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

(LCS) 01/26/16 13:40 • (LCSD) 01/26/16 13:43

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Mercury,Dissolved	0.00300	0.00263	0.00260	88	87	80-120			1	20

L813258-12 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) 01/26/16 13:45 • (MS) 01/26/16 13:48 • (MSD) 01/26/16 13:51

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Mercury,Dissolved	0.00300	ND	0.00248	0.00278	83	93	1	75-125			12	20

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc



Method Blank (MB)

(MB) 01/28/16 16:38

Analyte	MB Result mg/kg	MB Qualifier	MB RDL mg/kg
Mercury	ND		0.0200

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc

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

(LCS) 01/28/16 16:40 • (LCSD) 01/28/16 16:43

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 %
Mercury	0.300	0.280	0.280	93	93	80-120			0	20

L813258-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) 01/28/16 16:46 • (MS) 01/28/16 16:48 • (MSD) 01/28/16 16:51

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 %
Mercury	0.300	0.372	0.686	0.908	104	179	1	75-125		J3 J5	28	20



Method Blank (MB)

(MB) 01/25/16 23:49

Analyte	MB Result mg/l	MB Qualifier	MB RDL mg/l
Arsenic,Dissolved	ND		0.0100
Barium,Dissolved	ND		0.00500
Cadmium,Dissolved	ND		0.00200
Chromium,Dissolved	ND		0.0100
Lead,Dissolved	ND		0.00500
Selenium,Dissolved	ND		0.0100
Silver,Dissolved	ND		0.00500

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc

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

(LCS) 01/25/16 23:52 • (LCSD) 01/25/16 23:55

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Arsenic,Dissolved	1.00	1.05	1.06	105	106	80-120			1	20
Barium,Dissolved	1.00	1.03	1.04	103	104	80-120			1	20
Cadmium,Dissolved	1.00	1.02	1.03	102	103	80-120			1	20
Chromium,Dissolved	1.00	1.05	1.06	105	106	80-120			1	20
Lead,Dissolved	1.00	1.02	1.02	102	102	80-120			0	20
Selenium,Dissolved	1.00	1.05	1.07	105	107	80-120			1	20
Silver,Dissolved	1.00	1.01	1.02	101	102	80-120			1	20

L812983-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) 01/25/16 23:58 • (MS) 01/26/16 00:04 • (MSD) 01/26/16 00:07

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Arsenic,Dissolved	1.00	0.00463	1.07	1.05	106	105	1	75-125			1	20
Barium,Dissolved	1.00	0.0320	1.06	1.04	103	101	1	75-125			2	20
Cadmium,Dissolved	1.00	0.000181	1.04	1.02	104	102	1	75-125			2	20
Chromium,Dissolved	1.00	0.000485	1.06	1.04	106	104	1	75-125			2	20
Lead,Dissolved	1.00	0.00646	1.03	1.01	102	100	1	75-125			1	20
Selenium,Dissolved	1.00	ND	1.07	1.06	107	106	1	75-125			2	20
Silver,Dissolved	1.00	0.000524	1.03	1.01	103	101	1	75-125			1	20

[L813258-01,02,03,04,05,06,07,08,09,10,11](#)

Method Blank (MB)

(MB) 01/26/16 11:50

Analyte	MB Result mg/kg	MB Qualifier	MB RDL mg/kg
Arsenic	ND		2.00
Barium	ND		0.500
Cadmium	ND		0.500
Chromium	ND		1.00
Lead	ND		0.500
Selenium	ND		2.00
Silver	ND		1.00

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc

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

(LCS) 01/26/16 11:55 • (LCSD) 01/26/16 11:58

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCSD Result mg/kg	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Arsenic	100	98.5	101	99	101	80-120			3	20
Barium	100	99.1	102	99	102	80-120			3	20
Cadmium	100	98.4	101	98	101	80-120			3	20
Chromium	100	97.3	100	97	100	80-120			3	20
Lead	100	99.3	102	99	102	80-120			3	20
Selenium	100	99.8	103	100	103	80-120			3	20
Silver	100	95.7	98.9	96	99	80-120			3	20

L813154-04 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) 01/26/16 12:01 • (MS) 01/26/16 12:10 • (MSD) 01/26/16 12:12

Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MSD Result mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Arsenic	100	3.22	98.2	96.4	95	93	1	75-125			2	20
Barium	100	56.4	149	139	92	82	1	75-125			7	20
Cadmium	100	0.0722	99.6	97.2	100	97	1	75-125			2	20
Chromium	100	62.3	141	182	79	120	1	75-125		J3	26	20
Lead	100	19.4	129	128	110	109	1	75-125			1	20
Selenium	100	ND	95.0	92.6	95	93	1	75-125			3	20
Silver	100	ND	102	99.8	102	100	1	75-125			2	20



Method Blank (MB)

(MB) 01/27/16 13:07

Analyte	MB Result mg/kg	MB Qualifier	MB RDL mg/kg
TPH (GC/FID) Low Fraction	ND		0.100
(S) a,a,a-Trifluorotoluene(FID)	98.7		59.0-128

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

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

(LCS) 01/27/16 11:17 • (LCSD) 01/27/16 11:43

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCSD Result mg/kg	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
TPH (GC/FID) Low Fraction	5.50	6.03	6.16	110	112	63.5-137			2.01	20
(S) a,a,a-Trifluorotoluene(FID)				106	107	59.0-128				

L813281-27 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) 01/27/16 15:59 • (MS) 01/27/16 16:25 • (MSD) 01/27/16 16:50

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	0.0114	28.9	28.5	105	104	5	28.5-138			1.62	23.6
(S) a,a,a-Trifluorotoluene(FID)					105	105		59.0-128				

Method Blank (MB)

(MB) 01/28/16 13:23

Analyte	MB Result mg/kg	MB Qualifier	MB RDL mg/kg
TPH (GC/FID) Low Fraction	ND		0.100
(S) a,a,a-Trifluorotoluene(FID)	102		59.0-128

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

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

(LCS) 01/28/16 11:31 • (LCSD) 01/28/16 11:51

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCSD Result mg/kg	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
TPH (GC/FID) Low Fraction	5.50	4.97	5.29	90.4	96.2	63.5-137			6.19	20
(S) a,a,a-Trifluorotoluene(FID)				102	103	59.0-128				

L813728-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) 01/28/16 18:21 • (MS) 01/28/16 18:41 • (MSD) 01/28/16 19:02

Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MSD Result mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
TPH (GC/FID) Low Fraction	5.50	0.0849	23.9	24.0	86.6	87.1	5	28.5-138			0.580	23.6
(S) a,a,a-Trifluorotoluene(FID)					101	100		59.0-128				

Method Blank (MB)

(MB) 01/25/16 13:05

Analyte	MB Result mg/kg	MB Qualifier	MB RDL mg/kg
Acetone	ND		0.0500
Acrylonitrile	ND		0.0100
Benzene	ND		0.00100
Bromobenzene	ND		0.00100
Bromodichloromethane	ND		0.00100
Bromoform	ND		0.00100
Bromomethane	ND		0.00500
n-Butylbenzene	ND		0.00100
sec-Butylbenzene	ND		0.00100
tert-Butylbenzene	ND		0.00100
Carbon tetrachloride	ND		0.00100
Chlorobenzene	ND		0.00100
Chlorodibromomethane	ND		0.00100
Chloroethane	ND		0.00500
2-Chloroethyl vinyl ether	ND		0.0500
Chloroform	ND		0.00500
Chloromethane	ND		0.00250
2-Chlorotoluene	ND		0.00100
4-Chlorotoluene	ND		0.00100
1,2-Dibromo-3-Chloropropane	ND		0.00500
1,2-Dibromoethane	ND		0.00100
Dibromomethane	ND		0.00100
1,2-Dichlorobenzene	ND		0.00100
1,3-Dichlorobenzene	ND		0.00100
1,4-Dichlorobenzene	ND		0.00100
Dichlorodifluoromethane	ND		0.00500
1,1-Dichloroethane	ND		0.00100
1,2-Dichloroethane	ND		0.00100
1,1-Dichloroethene	ND		0.00100
cis-1,2-Dichloroethene	ND		0.00100
trans-1,2-Dichloroethene	ND		0.00100
1,2-Dichloropropane	ND		0.00100
1,1-Dichloropropene	ND		0.00100
1,3-Dichloropropane	ND		0.00100
cis-1,3-Dichloropropene	ND		0.00100
trans-1,3-Dichloropropene	ND		0.00100

1

Cp

2

Tc

3

Ss

4

Cn

5

Sr

6

Qc

7

Gl

8

Al

9

Sc



Method Blank (MB)

(MB) 01/25/16 13:05

Analyte	MB Result mg/kg	MB Qualifier	MB RDL mg/kg
2,2-Dichloropropane	ND		0.00100
Di-isopropyl ether	ND		0.00100
Ethylbenzene	ND		0.00100
Hexachloro-1,3-butadiene	ND		0.00100
Isopropylbenzene	ND		0.00100
p-Isopropyltoluene	ND		0.00100
2-Butanone (MEK)	ND		0.0100
Methylene Chloride	ND		0.00500
4-Methyl-2-pentanone (MIBK)	ND		0.0100
Methyl tert-butyl ether	ND		0.00100
n-Propylbenzene	ND		0.00100
Naphthalene	ND		0.00500
1,1,1,2-Tetrachloroethane	ND		0.00100
Styrene	ND		0.00100
1,1,2,2-Tetrachloroethane	ND		0.00100
1,2,3-Trichlorobenzene	ND		0.00100
1,2,4-Trichlorobenzene	ND		0.00100
Tetrachloroethene	ND		0.00100
Toluene	ND		0.00500
1,1,2-Trichlorotrifluoroethane	ND		0.00100
Trichlorofluoromethane	ND		0.00500
1,2,3-Trichloropropane	ND		0.00250
1,1,1-Trichloroethane	ND		0.00100
1,1,2-Trichloroethane	ND		0.00100
1,2,4-Trimethylbenzene	ND		0.00100
1,3,5-Trimethylbenzene	ND		0.00100
Trichloroethene	ND		0.00100
1,2,3-Trimethylbenzene	ND		0.00100
Vinyl chloride	ND		0.00100
Xylenes, Total	ND		0.00300
(S) Toluene-d8	105		88.7-115
(S) Dibromofluoromethane	102		76.3-123
(S) 4-Bromofluorobenzene	102		69.7-129

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

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

(LCS) 01/25/16 11:18 • (LCSD) 01/25/16 11:40

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCSD Result mg/kg	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Acetone	0.125	0.105	0.101	84.0	80.9	25.3-178			3.74	22.9
Benzene	0.0250	0.0231	0.0235	92.3	93.9	72.6-120			1.75	20
Bromobenzene	0.0250	0.0226	0.0239	90.6	95.5	80.3-115			5.28	20
Acrylonitrile	0.125	0.120	0.119	95.7	94.8	57.8-143			0.970	20
Bromodichloromethane	0.0250	0.0248	0.0249	99.3	99.8	75.3-119			0.450	20
Bromoform	0.0250	0.0235	0.0241	94.1	96.5	69.1-135			2.43	20
Bromomethane	0.0250	0.0237	0.0247	94.7	98.8	23.0-191			4.27	20
n-Butylbenzene	0.0250	0.0239	0.0238	95.6	95.0	74.2-134			0.550	20
Carbon tetrachloride	0.0250	0.0231	0.0235	92.3	94.1	69.4-129			1.90	20
sec-Butylbenzene	0.0250	0.0245	0.0255	98.1	102	77.8-129			4.03	20
tert-Butylbenzene	0.0250	0.0240	0.0252	96.0	101	77.2-129			4.85	20
Chlorobenzene	0.0250	0.0232	0.0243	93.0	97.4	78.9-122			4.66	20
Chlorodibromomethane	0.0250	0.0233	0.0243	93.2	97.1	76.4-126			4.10	20
Chloroethane	0.0250	0.0247	0.0248	98.8	99.2	47.2-147			0.410	20
Chloroform	0.0250	0.0242	0.0250	97.0	99.9	73.3-122			3.00	20
Chloromethane	0.0250	0.0211	0.0217	84.4	86.7	53.1-135			2.62	20
2-Chloroethyl vinyl ether	0.125	0.141	0.135	113	108	16.7-162			4.51	23.7
1,2-Dibromo-3-Chloropropane	0.0250	0.0226	0.0227	90.5	90.8	64.9-131			0.360	20
1,2-Dibromoethane	0.0250	0.0229	0.0237	91.7	94.7	67.2-121			3.27	20
2-Chlorotoluene	0.0250	0.0237	0.0250	94.8	100	74.6-127			5.47	20
4-Chlorotoluene	0.0250	0.0241	0.0254	96.4	101	79.5-123			5.06	20
1,2-Dichlorobenzene	0.0250	0.0233	0.0235	93.1	94.1	83.6-119			1.02	20
1,3-Dichlorobenzene	0.0250	0.0231	0.0243	92.5	97.1	75.9-129			4.95	20
Dibromomethane	0.0250	0.0248	0.0248	99.1	99.2	78.5-117			0.110	20
1,4-Dichlorobenzene	0.0250	0.0227	0.0228	90.8	91.3	81.0-115			0.590	20
1,1-Dichloroethane	0.0250	0.0245	0.0248	98.0	99.1	71.7-125			1.15	20
1,2-Dichloroethane	0.0250	0.0243	0.0250	97.0	100	67.2-121			3.09	20
Dichlorodifluoromethane	0.0250	0.0232	0.0233	92.8	93.3	50.9-139			0.570	20
1,1-Dichloroethene	0.0250	0.0241	0.0243	96.4	97.4	60.6-133			1.00	20
cis-1,2-Dichloroethene	0.0250	0.0251	0.0256	100	102	76.1-121			1.99	20
trans-1,2-Dichloroethene	0.0250	0.0239	0.0244	95.5	97.5	70.7-124			2.10	20
1,2-Dichloropropane	0.0250	0.0244	0.0244	97.4	97.7	76.9-123			0.310	20
cis-1,3-Dichloropropene	0.0250	0.0257	0.0260	103	104	77.3-123			1.01	20
trans-1,3-Dichloropropene	0.0250	0.0252	0.0252	101	101	73.0-127			0.180	20
1,1-Dichloropropene	0.0250	0.0254	0.0259	102	104	71.2-126			2.04	20
1,3-Dichloropropane	0.0250	0.0229	0.0241	91.7	96.2	80.3-114			4.84	20

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

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

(LCS) 01/25/16 11:18 • (LCSD) 01/25/16 11:40

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 %
Di-isopropyl ether	0.0250	0.0235	0.0241	94.0	96.3	67.2-131			2.47	20
2,2-Dichloropropane	0.0250	0.0239	0.0260	95.7	104	61.9-132			8.10	20
Ethylbenzene	0.0250	0.0231	0.0245	92.4	98.0	78.6-124			5.89	20
Hexachloro-1,3-butadiene	0.0250	0.0245	0.0251	97.9	100	69.2-136			2.35	20
2-Butanone (MEK)	0.125	0.111	0.107	88.7	86.0	44.5-154			3.11	21.3
Methylene Chloride	0.0250	0.0232	0.0240	92.7	96.2	68.2-119			3.70	20
Isopropylbenzene	0.0250	0.0237	0.0251	94.9	100	79.4-126			5.53	20
4-Methyl-2-pentanone (MIBK)	0.125	0.117	0.113	93.6	90.2	61.1-138			3.67	20
p-Isopropyltoluene	0.0250	0.0253	0.0265	101	106	75.4-132			4.98	20
Methyl tert-butyl ether	0.0250	0.0238	0.0235	95.1	94.0	70.2-122			1.20	20
Naphthalene	0.0250	0.0225	0.0229	90.2	91.5	69.9-132			1.52	20
Styrene	0.0250	0.0255	0.0265	102	106	79.4-124			3.66	20
1,1,2,2-Tetrachloroethane	0.0250	0.0224	0.0226	89.4	90.4	78.8-124			1.07	20
n-Propylbenzene	0.0250	0.0237	0.0247	94.7	98.7	80.2-124			4.15	20
Tetrachloroethene	0.0250	0.0233	0.0244	93.3	97.7	71.1-133			4.56	20
1,1,1,2-Tetrachloroethane	0.0250	0.0237	0.0247	94.6	98.9	76.7-127			4.38	20
Toluene	0.0250	0.0234	0.0238	93.4	95.4	76.7-116			2.06	20
1,1,2-Trichlorotrifluoroethane	0.0250	0.0251	0.0248	101	99.3	62.6-138			1.32	20
1,1,1-Trichloroethane	0.0250	0.0241	0.0247	96.4	98.9	69.9-127			2.65	20
1,1,2-Trichloroethane	0.0250	0.0221	0.0233	88.4	93.1	81.9-119			5.16	20
1,2,3-Trichlorobenzene	0.0250	0.0250	0.0252	100	101	72.5-137			0.860	20
Trichloroethene	0.0250	0.0239	0.0244	95.7	97.5	77.2-122			1.84	20
1,2,4-Trichlorobenzene	0.0250	0.0244	0.0247	97.7	98.7	74.0-137			0.960	20
1,2,3-Trimethylbenzene	0.0250	0.0230	0.0231	91.9	92.3	79.4-118			0.410	20
Trichlorofluoromethane	0.0250	0.0243	0.0249	97.3	99.7	51.5-151			2.44	20
1,2,3-Trichloropropane	0.0250	0.0224	0.0230	89.6	92.1	74.0-124			2.79	20
1,2,4-Trimethylbenzene	0.0250	0.0238	0.0249	95.4	99.4	77.1-124			4.11	20
1,3,5-Trimethylbenzene	0.0250	0.0236	0.0249	94.3	99.4	79.0-125			5.34	20
Vinyl chloride	0.0250	0.0243	0.0251	97.1	100	58.4-134			3.23	20
Xylenes, Total	0.0750	0.0695	0.0727	92.7	97.0	78.1-123			4.53	20
(S) Toluene-d8				104	105	88.7-115				
(S) Dibromofluoromethane				101	101	76.3-123				
(S) 4-Bromofluorobenzene				100	104	69.7-129				

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

L813258-09 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) 01/29/16 11:21 • (MS) 01/29/16 12:22 • (MSD) 01/29/16 12:42

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 %
Acetone	0.125	0.0686	0.149	0.161	64.3	74.0	1	5.00-182			7.83	31.5
Benzene	0.0250	0.00114	0.0239	0.0206	90.9	77.8	1	47.8-131			14.7	22.8
Bromobenzene	0.0250	ND	0.0172	0.0136	68.8	54.4	1	40.0-130			23.4	27.4
Bromodichloromethane	0.0250	ND	0.0230	0.0200	92.1	80.0	1	50.6-128			14.0	22.8
Acrylonitrile	0.125	ND	0.123	0.107	98.3	85.2	1	39.3-152			14.3	27.2
Bromoform	0.0250	ND	0.0200	0.0166	80.1	66.4	1	43.3-139			18.7	25.9
Bromomethane	0.0250	ND	0.0297	0.0254	119	102	1	5.00-189			15.6	26.7
n-Butylbenzene	0.0250	0.0191	0.0126	0.00925	0.000	0.000	1	23.6-146	J6	J6	30.3	39.2
Carbon tetrachloride	0.0250	ND	0.0261	0.0219	104	87.7	1	46.0-140			17.5	27.2
Chlorobenzene	0.0250	ND	0.0175	0.0141	70.2	56.5	1	44.1-134			21.7	25.7
sec-Butylbenzene	0.0250	0.0139	0.0148	0.0112	3.34	0.000	1	31.0-142	J6	J6	27.9	34.7
tert-Butylbenzene	0.0250	0.00171	0.0164	0.0128	58.9	44.5	1	36.9-142			24.5	31.7
Chlorodibromomethane	0.0250	ND	0.0202	0.0170	80.7	67.9	1	49.7-134			17.2	24
Chloroethane	0.0250	ND	0.0296	0.0252	118	101	1	5.00-164			15.9	28.4
Chloroform	0.0250	ND	0.0262	0.0221	105	88.6	1	51.2-133			16.9	22.8
Chloromethane	0.0250	ND	0.0235	0.0201	94.1	80.5	1	31.4-141			15.6	24.6
2-Chloroethyl vinyl ether	0.125	ND	0.112	0.100	89.4	80.0	1	5.00-159			11.1	40
1,2-Dibromo-3-Chloropropane	0.0250	ND	0.0183	0.0164	73.1	65.5	1	40.4-138			11.0	30.8
1,2-Dibromoethane	0.0250	ND	0.0193	0.0162	77.0	64.9	1	50.2-133			17.1	23.6
2-Chlorotoluene	0.0250	ND	0.0159	0.0121	63.4	48.5	1	36.1-137			26.6	28.9
4-Chlorotoluene	0.0250	0.00138	0.0150	0.0111	54.7	38.8	1	35.4-137		J3	30.4	29.8
1,2-Dichlorobenzene	0.0250	ND	0.0162	0.0131	64.7	52.5	1	34.6-139			20.8	29.9
1,3-Dichlorobenzene	0.0250	ND	0.0134	0.00999	53.5	40.0	1	28.4-142			28.9	31.2
1,4-Dichlorobenzene	0.0250	ND	0.0147	0.0114	58.9	45.6	1	35.0-133			25.6	31.1
Dibromomethane	0.0250	ND	0.0234	0.0205	93.6	81.9	1	52.4-128			13.3	23
1,1-Dichloroethane	0.0250	0.00130	0.0256	0.0213	97.2	80.0	1	49.1-136			18.4	22.9
1,2-Dichloroethane	0.0250	0.000231	0.0263	0.0221	104	87.3	1	47.1-129			17.7	22.7
1,1-Dichloroethene	0.0250	ND	0.0274	0.0233	110	93.2	1	36.1-142			16.1	25.6
Dichlorodifluoromethane	0.0250	ND	0.0248	0.0217	99.0	86.8	1	31.2-144			13.1	30.2
cis-1,2-Dichloroethene	0.0250	0.00355	0.0231	0.0188	78.2	61.1	1	50.6-133			20.4	23
trans-1,2-Dichloroethene	0.0250	0.000953	0.0202	0.0169	77.2	63.8	1	43.8-135			18.1	24.8
1,2-Dichloropropane	0.0250	ND	0.0232	0.0194	92.9	77.6	1	50.3-134			18.0	22.7
cis-1,3-Dichloropropene	0.0250	ND	0.0218	0.0182	87.2	72.9	1	48.4-134			17.9	23.6
trans-1,3-Dichloropropene	0.0250	ND	0.0213	0.0181	85.0	72.2	1	46.6-135			16.3	25.3
1,1-Dichloropropene	0.0250	ND	0.0236	0.0194	94.4	77.5	1	43.0-137			19.7	26.4
1,3-Dichloropropane	0.0250	ND	0.0206	0.0178	82.4	71.2	1	51.4-127			14.6	23.1

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

L813258-09 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) 01/29/16 11:21 • (MS) 01/29/16 12:22 • (MSD) 01/29/16 12:42

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 %
Di-isopropyl ether	0.0250	ND	0.0251	0.0217	100	86.7	1	46.7-140			14.5	23.5
Ethylbenzene	0.0250	0.00123	0.0174	0.0138	64.9	50.3	1	44.8-135			23.3	26.9
2,2-Dichloropropane	0.0250	ND	0.0244	0.0204	97.7	81.4	1	45.2-141			18.2	26.8
Hexachloro-1,3-butadiene	0.0250	ND	0.00836	0.00572	33.4	22.9	1	10.0-149			37.4	40
2-Butanone (MEK)	0.125	0.0196	0.142	0.144	97.5	99.2	1	23.9-170			1.47	28.3
Methylene Chloride	0.0250	ND	0.0225	0.0186	90.1	74.6	1	46.7-125			18.9	22.2
4-Methyl-2-pentanone (MIBK)	0.125	ND	0.120	0.111	96.0	88.5	1	42.4-146			8.06	26.7
Isopropylbenzene	0.0250	0.00952	0.0169	0.0132	29.7	14.8	1	41.9-139	J6	J6	24.7	29.3
p-Isopropyltoluene	0.0250	0.00590	0.0140	0.0102	32.3	17.3	1	27.3-146		J6	30.9	35.1
Methyl tert-butyl ether	0.0250	ND	0.0259	0.0222	104	88.7	1	50.4-131			15.4	24.8
Naphthalene	0.0250	0.00413	0.0144	0.0122	41.2	32.2	1	18.4-145			16.9	34
Styrene	0.0250	ND	0.0166	0.0133	66.4	53.4	1	39.7-137			21.7	28.2
n-Propylbenzene	0.0250	0.0150	0.0152	0.0117	0.748	0.000	1	35.2-139	J6	J6	26.2	31.9
1,1,2,2-Tetrachloroethane	0.0250	ND	0.0212	0.0178	84.7	71.1	1	45.7-140			17.4	26.4
Tetrachloroethene	0.0250	0.00124	0.0145	0.0116	53.0	41.5	1	37.7-140			22.1	29.2
Toluene	0.0250	0.00166	0.0212	0.0178	78.2	64.6	1	47.8-127			17.4	24.3
1,1,1,2-Tetrachloroethane	0.0250	ND	0.0194	0.0159	77.7	63.6	1	48.8-136			19.9	25.5
1,1,2-Trichlorotrifluoroethane	0.0250	ND	0.0232	0.0199	93.0	79.5	1	35.7-146			15.7	28.8
1,1,1-Trichloroethane	0.0250	ND	0.0263	0.0221	105	88.6	1	49.0-138			17.1	25.3
1,1,2-Trichloroethane	0.0250	ND	0.0204	0.0173	81.8	69.0	1	52.3-132			17.0	23.4
Trichloroethene	0.0250	0.00115	0.0192	0.0157	72.1	58.3	1	48.0-132			19.8	24.8
1,2,3-Trichlorobenzene	0.0250	ND	0.0108	0.00854	43.3	34.2	1	10.0-150			23.6	38.5
1,2,4-Trichlorobenzene	0.0250	ND	0.00982	0.00733	39.3	29.3	1	10.0-153			29.1	39.3
1,2,3-Trimethylbenzene	0.0250	0.0362	0.0185	0.0149	0.000	0.000	1	41.0-133	J6	J6	21.7	27.6
Trichlorofluoromethane	0.0250	ND	0.0289	0.0244	116	97.5	1	12.8-169			17.1	29.7
1,2,3-Trichloropropane	0.0250	ND	0.0206	0.0169	82.4	67.6	1	44.4-138			19.8	26.3
Vinyl chloride	0.0250	ND	0.0253	0.0218	101	87.1	1	32.0-146			14.9	26.3
1,2,4-Trimethylbenzene	0.0250	0.0565	0.0157	0.0122	0.000	0.000	1	32.9-139	J6	J6	25.3	30.6
Xylenes, Total	0.0750	0.00442	0.0508	0.0405	61.9	48.1	1	42.7-135			22.7	26.6
1,3,5-Trimethylbenzene	0.0250	0.00757	0.0156	0.0122	32.2	18.7	1	37.1-138	J6	J6	24.4	30.6
(S) Toluene-d8					105	106		88.7-115				
(S) Dibromofluoromethane					108	108		76.3-123				
(S) 4-Bromofluorobenzene					91.5	90.3		69.7-129				

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc



Method Blank (MB)

(MB) 01/28/16 13:12

Analyte	MB Result mg/l	MB Qualifier	MB RDL mg/l
Acetone	ND		0.0500
Acrolein	ND		0.0500
Acrylonitrile	ND		0.0100
Benzene	ND		0.00100
Bromobenzene	ND		0.00100
Bromodichloromethane	ND		0.00100
Bromoform	ND		0.00100
Bromomethane	ND		0.00500
n-Butylbenzene	ND		0.00100
sec-Butylbenzene	ND		0.00100
tert-Butylbenzene	ND		0.00100
Carbon tetrachloride	ND		0.00100
Chlorobenzene	ND		0.00100
Chlorodibromomethane	ND		0.00100
Chloroethane	ND		0.00500
2-Chloroethyl vinyl ether	ND		0.0500
Chloroform	ND		0.00500
Chloromethane	ND		0.00250
2-Chlorotoluene	ND		0.00100
4-Chlorotoluene	ND		0.00100
1,2-Dibromo-3-Chloropropane	ND		0.00500
1,2-Dibromoethane	ND		0.00100
Dibromomethane	ND		0.00100
1,2-Dichlorobenzene	ND		0.00100
1,3-Dichlorobenzene	ND		0.00100
1,4-Dichlorobenzene	ND		0.00100
Dichlorodifluoromethane	ND		0.00500
1,1-Dichloroethane	ND		0.00100
1,2-Dichloroethane	ND		0.00100
1,1-Dichloroethene	ND		0.00100
cis-1,2-Dichloroethene	ND		0.00100
trans-1,2-Dichloroethene	ND		0.00100
1,2-Dichloropropane	ND		0.00100
1,1-Dichloropropene	ND		0.00100
1,3-Dichloropropane	ND		0.00100
cis-1,3-Dichloropropene	ND		0.00100

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc



Method Blank (MB)

(MB) 01/28/16 13:12

Analyte	MB Result mg/l	MB Qualifier	MB RDL mg/l
trans-1,3-Dichloropropene	ND		0.00100
2,2-Dichloropropane	ND		0.00100
Di-isopropyl ether	ND		0.00100
Ethylbenzene	ND		0.00100
Hexachloro-1,3-butadiene	ND		0.00100
Isopropylbenzene	ND		0.00100
p-Isopropyltoluene	ND		0.00100
2-Butanone (MEK)	ND		0.0100
Methylene Chloride	ND		0.00500
4-Methyl-2-pentanone (MIBK)	ND		0.0100
Methyl tert-butyl ether	ND		0.00100
Naphthalene	ND		0.00500
n-Propylbenzene	ND		0.00100
Styrene	ND		0.00100
1,1,1,2-Tetrachloroethane	ND		0.00100
1,1,2,2-Tetrachloroethane	ND		0.00100
Tetrachloroethene	ND		0.00100
Toluene	ND		0.00500
1,1,2-Trichlorotrifluoroethane	ND		0.00100
1,2,3-Trichlorobenzene	ND		0.00100
1,2,4-Trichlorobenzene	ND		0.00100
1,1,1-Trichloroethane	ND		0.00100
1,1,2-Trichloroethane	ND		0.00100
Trichloroethene	ND		0.00100
Trichlorofluoromethane	ND		0.00500
1,2,3-Trichloropropane	ND		0.00250
1,2,3-Trimethylbenzene	ND		0.00100
1,2,4-Trimethylbenzene	ND		0.00100
1,3,5-Trimethylbenzene	ND		0.00100
Vinyl chloride	ND		0.00100
Xylenes, Total	ND		0.00300
(S) Toluene-d8	103		90.0-115
(S) Dibromofluoromethane	102		79.0-121
(S) 4-Bromofluorobenzene	101		80.1-120

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc



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

(LCS) 01/28/16 11:25 • (LCSD) 01/28/16 11:46

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Acetone	0.125	0.0990	0.0910	79.2	72.8	28.7-175			8.41	20.9
Acrolein	0.125	0.0865	0.0837	69.2	67.0	40.4-172			3.30	20
Acrylonitrile	0.125	0.121	0.116	96.9	92.5	58.2-145			4.61	20
Benzene	0.0250	0.0233	0.0235	93.2	94.2	73.0-122			0.980	20
Bromobenzene	0.0250	0.0248	0.0243	99.3	97.1	81.5-115			2.26	20
Bromodichloromethane	0.0250	0.0254	0.0253	102	101	75.5-121			0.500	20
Bromoform	0.0250	0.0263	0.0247	105	98.9	71.5-131			6.10	20
Bromomethane	0.0250	0.0253	0.0251	101	100	22.4-187			1.03	20
n-Butylbenzene	0.0250	0.0257	0.0249	103	99.7	75.9-134			3.02	20
sec-Butylbenzene	0.0250	0.0267	0.0258	107	103	80.6-126			3.42	20
tert-Butylbenzene	0.0250	0.0266	0.0259	106	104	79.3-127			2.47	20
Carbon tetrachloride	0.0250	0.0234	0.0232	93.8	92.8	70.9-129			1.00	20
Chlorobenzene	0.0250	0.0256	0.0250	102	100	79.7-122			2.24	20
Chlorodibromomethane	0.0250	0.0261	0.0253	105	101	78.2-124			3.28	20
Chloroethane	0.0250	0.0261	0.0253	104	101	41.2-153			3.07	20
2-Chloroethyl vinyl ether	0.125	0.148	0.104	118	83.5	23.4-162		J3	34.7	23.5
Chloroform	0.0250	0.0246	0.0251	98.4	100	73.2-125			2.02	20
Chloromethane	0.0250	0.0216	0.0216	86.4	86.6	55.8-134			0.230	20
2-Chlorotoluene	0.0250	0.0264	0.0257	106	103	76.4-125			2.66	20
4-Chlorotoluene	0.0250	0.0261	0.0256	104	102	81.5-121			2.00	20
1,2-Dibromo-3-Chloropropane	0.0250	0.0255	0.0238	102	95.3	64.8-131			6.98	20
1,2-Dibromoethane	0.0250	0.0256	0.0244	103	97.7	79.8-122			4.89	20
Dibromomethane	0.0250	0.0254	0.0250	102	100	78.8-119			1.65	20
1,2-Dichlorobenzene	0.0250	0.0258	0.0255	103	102	84.7-118			1.15	20
1,3-Dichlorobenzene	0.0250	0.0250	0.0244	99.9	97.7	77.6-127			2.17	20
1,4-Dichlorobenzene	0.0250	0.0247	0.0243	98.8	97.1	82.2-114			1.79	20
Dichlorodifluoromethane	0.0250	0.0229	0.0229	91.5	91.4	56.0-134			0.0600	20
1,1-Dichloroethane	0.0250	0.0246	0.0251	98.3	100	71.7-127			2.04	20
1,2-Dichloroethane	0.0250	0.0246	0.0248	98.5	99.4	79.8-122			0.840	20
1,1-Dichloroethene	0.0250	0.0245	0.0246	97.8	98.5	59.9-137			0.680	20
cis-1,2-Dichloroethene	0.0250	0.0258	0.0262	103	105	77.3-122			1.51	20
trans-1,2-Dichloroethene	0.0250	0.0250	0.0254	100	102	72.6-125			1.56	20
1,2-Dichloropropane	0.0250	0.0250	0.0251	100	100	77.4-125			0.260	20
1,1-Dichloropropene	0.0250	0.0259	0.0258	104	103	72.5-127			0.350	20
1,3-Dichloropropane	0.0250	0.0254	0.0246	102	98.3	80.6-115			3.46	20
cis-1,3-Dichloropropene	0.0250	0.0260	0.0260	104	104	77.7-124			0.0500	20

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



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

(LCS) 01/28/16 11:25 • (LCSD) 01/28/16 11:46

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
trans-1,3-Dichloropropene	0.0250	0.0255	0.0249	102	99.7	73.5-127			2.20	20
2,2-Dichloropropane	0.0250	0.0266	0.0262	106	105	61.3-134			1.33	20
Di-isopropyl ether	0.0250	0.0240	0.0241	95.8	96.6	65.1-135			0.800	20
Ethylbenzene	0.0250	0.0258	0.0250	103	100	80.9-121			2.98	20
Hexachloro-1,3-butadiene	0.0250	0.0273	0.0265	109	106	73.7-133			3.20	20
Isopropylbenzene	0.0250	0.0264	0.0255	106	102	81.6-124			3.57	20
p-Isopropyltoluene	0.0250	0.0276	0.0268	111	107	77.6-129			3.23	20
2-Butanone (MEK)	0.125	0.106	0.0982	84.8	78.5	46.4-155			7.73	20
Methylene Chloride	0.0250	0.0243	0.0245	97.4	97.9	69.5-120			0.500	20
4-Methyl-2-pentanone (MIBK)	0.125	0.116	0.110	93.1	87.7	63.3-138			5.99	20
Methyl tert-butyl ether	0.0250	0.0239	0.0236	95.6	94.3	70.1-125			1.37	20
Naphthalene	0.0250	0.0249	0.0245	99.5	98.1	69.7-134			1.43	20
n-Propylbenzene	0.0250	0.0257	0.0248	103	99.1	81.9-122			3.77	20
Styrene	0.0250	0.0278	0.0270	111	108	79.9-124			3.11	20
1,1,1,2-Tetrachloroethane	0.0250	0.0261	0.0260	104	104	78.5-125			0.190	20
1,1,2,2-Tetrachloroethane	0.0250	0.0244	0.0231	97.6	92.4	79.3-123			5.44	20
Tetrachloroethene	0.0250	0.0259	0.0250	104	100	73.5-130			3.50	20
Toluene	0.0250	0.0240	0.0236	95.9	94.6	77.9-116			1.40	20
1,1,2-Trichlorotrifluoroethane	0.0250	0.0252	0.0257	101	103	62.0-141			1.96	20
1,2,3-Trichlorobenzene	0.0250	0.0270	0.0270	108	108	75.7-134			0.180	20
1,2,4-Trichlorobenzene	0.0250	0.0257	0.0255	103	102	76.1-136			0.820	20
1,1,1-Trichloroethane	0.0250	0.0248	0.0246	99.3	98.4	71.1-129			0.840	20
1,1,2-Trichloroethane	0.0250	0.0253	0.0239	101	95.4	81.6-120			5.82	20
Trichloroethene	0.0250	0.0248	0.0246	99.1	98.6	79.5-121			0.470	20
Trichlorofluoromethane	0.0250	0.0246	0.0242	98.3	96.7	49.1-157			1.65	20
1,2,3-Trichloropropane	0.0250	0.0249	0.0237	99.6	94.7	74.9-124			5.00	20
1,2,3-Trimethylbenzene	0.0250	0.0257	0.0252	103	101	79.9-118			1.82	20
1,2,4-Trimethylbenzene	0.0250	0.0260	0.0252	104	101	79.0-122			3.17	20
1,3,5-Trimethylbenzene	0.0250	0.0259	0.0252	104	101	81.0-123			2.88	20
Vinyl chloride	0.0250	0.0245	0.0242	97.9	96.7	61.5-134			1.25	20
Xylenes, Total	0.0750	0.0771	0.0752	103	100	79.2-122			2.54	20
(S) Toluene-d8				102	102	90.0-115				
(S) Dibromofluoromethane				98.7	101	79.0-121				
(S) 4-Bromofluorobenzene				101	97.6	80.1-120				

1

Cp

2

Tc

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Ss

4

Cn

5

Sr

6

Qc

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Gl

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Al

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Sc

L813258-12 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) 01/28/16 16:10 • (MS) 01/28/16 14:23 • (MSD) 01/28/16 14:45

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Acetone	0.125	0.00126	0.0535	0.0473	41.8	36.8	1	25.0-156			12.4	21.5
Acrolein	0.125	ND	0.0845	0.0801	67.6	64.1	1	34.0-194			5.29	21.5
Acrylonitrile	0.125	ND	0.131	0.119	105	95.0	1	55.9-161			9.64	20
Benzene	0.0250	ND	0.0222	0.0223	88.9	89.0	1	58.6-133			0.140	20
Bromobenzene	0.0250	ND	0.0235	0.0239	93.9	95.6	1	70.6-125			1.79	20
Bromodichloromethane	0.0250	ND	0.0243	0.0246	97.3	98.5	1	69.2-127			1.30	20
Bromoform	0.0250	ND	0.0263	0.0250	105	100	1	66.3-140			4.91	20
Bromomethane	0.0250	ND	0.0218	0.0222	87.4	88.8	1	16.6-183			1.59	20.5
n-Butylbenzene	0.0250	ND	0.0274	0.0282	110	113	1	64.8-145			2.89	20
sec-Butylbenzene	0.0250	ND	0.0273	0.0277	109	111	1	66.8-139			1.29	20
tert-Butylbenzene	0.0250	ND	0.0268	0.0275	107	110	1	67.1-138			2.39	20
Carbon tetrachloride	0.0250	ND	0.0238	0.0238	95.0	95.0	1	60.6-139			0.0200	20
Chlorobenzene	0.0250	ND	0.0242	0.0244	96.8	97.7	1	70.1-130			0.900	20
Chlorodibromomethane	0.0250	ND	0.0250	0.0245	100	98.2	1	71.6-132			1.94	20
Chloroethane	0.0250	ND	0.0245	0.0241	98.1	96.3	1	33.3-155			1.88	20
2-Chloroethyl vinyl ether	0.125	ND	0.0529	0.0144	42.3	11.5	1	5.00-149		J3	114	40
Chloroform	0.0250	ND	0.0238	0.0244	95.1	97.6	1	66.1-133			2.55	20
Chloromethane	0.0250	ND	0.0192	0.0197	76.8	78.9	1	40.7-139			2.66	20
2-Chlorotoluene	0.0250	ND	0.0252	0.0254	101	101	1	66.9-134			0.480	20
4-Chlorotoluene	0.0250	ND	0.0255	0.0258	102	103	1	66.8-134			1.05	20
1,2-Dibromo-3-Chloropropane	0.0250	ND	0.0282	0.0267	113	107	1	63.9-142			5.41	20.2
1,2-Dibromoethane	0.0250	ND	0.0247	0.0238	98.6	95.3	1	73.8-131			3.37	20
Dibromomethane	0.0250	ND	0.0244	0.0242	97.6	97.0	1	72.8-127			0.660	20
1,2-Dichlorobenzene	0.0250	ND	0.0251	0.0256	100	103	1	77.4-127			2.02	20
1,3-Dichlorobenzene	0.0250	ND	0.0247	0.0248	98.9	99.2	1	67.9-136			0.330	20
1,4-Dichlorobenzene	0.0250	ND	0.0244	0.0248	97.8	99.3	1	74.4-123			1.60	20
Dichlorodifluoromethane	0.0250	ND	0.0248	0.0248	99.2	99.0	1	42.2-146			0.200	20
1,1-Dichloroethane	0.0250	ND	0.0239	0.0243	95.6	97.3	1	64.0-134			1.67	20
1,2-Dichloroethane	0.0250	ND	0.0236	0.0235	94.6	94.0	1	60.7-132			0.600	20
1,1-Dichloroethene	0.0250	ND	0.0243	0.0233	97.3	93.2	1	48.8-144			4.30	20
cis-1,2-Dichloroethene	0.0250	ND	0.0246	0.0247	98.5	98.6	1	60.6-136			0.180	20
trans-1,2-Dichloroethene	0.0250	ND	0.0231	0.0235	92.4	93.8	1	61.0-132			1.55	20
1,2-Dichloropropane	0.0250	ND	0.0236	0.0240	94.2	96.1	1	69.7-130			1.95	20
1,1-Dichloropropene	0.0250	ND	0.0253	0.0258	101	103	1	61.5-136			1.76	20
1,3-Dichloropropane	0.0250	ND	0.0244	0.0239	97.6	95.7	1	74.3-123			1.96	20
cis-1,3-Dichloropropene	0.0250	ND	0.0246	0.0246	98.4	98.2	1	71.1-129			0.130	20

1

Cp

2

Tc

3

Ss

4

Cn

5

Sr

6

Qc

7

Gl

8

Al

9

Sc

L813258-12 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) 01/28/16 16:10 • (MS) 01/28/16 14:23 • (MSD) 01/28/16 14:45

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
trans-1,3-Dichloropropene	0.0250	ND	0.0244	0.0240	97.7	96.0	1	66.3-136			1.71	20
2,2-Dichloropropane	0.0250	ND	0.0256	0.0271	102	108	1	54.9-142			5.56	20
Di-isopropyl ether	0.0250	ND	0.0228	0.0231	91.3	92.6	1	59.9-140			1.36	20
Ethylbenzene	0.0250	ND	0.0246	0.0251	98.5	100	1	62.7-136			1.79	20
Hexachloro-1,3-butadiene	0.0250	ND	0.0284	0.0297	114	119	1	61.1-144			4.59	20.1
Isopropylbenzene	0.0250	ND	0.0262	0.0266	105	106	1	67.4-136			1.19	20
p-Isopropyltoluene	0.0250	ND	0.0285	0.0286	114	114	1	62.8-143			0.260	20
2-Butanone (MEK)	0.125	0.00138	0.0855	0.0752	67.3	59.1	1	45.0-156			12.9	20.8
Methylene Chloride	0.0250	0.000370	0.0223	0.0227	87.7	89.2	1	61.5-125			1.65	20
4-Methyl-2-pentanone (MIBK)	0.125	ND	0.129	0.117	104	93.2	1	60.7-150			10.5	20
Methyl tert-butyl ether	0.0250	0.000236	0.0239	0.0233	94.6	92.2	1	61.4-136			2.58	20
Naphthalene	0.0250	0.00116	0.0274	0.0269	105	103	1	61.8-143			1.71	20
n-Propylbenzene	0.0250	ND	0.0260	0.0262	104	105	1	63.2-139			0.930	20
Styrene	0.0250	ND	0.0266	0.0261	106	104	1	68.2-133			1.83	20
1,1,1,2-Tetrachloroethane	0.0250	ND	0.0249	0.0253	99.6	101	1	70.5-132			1.43	20
1,1,2,2-Tetrachloroethane	0.0250	ND	0.0253	0.0239	101	95.8	1	64.9-145			5.45	20
Tetrachloroethene	0.0250	ND	0.0249	0.0253	99.7	101	1	57.4-141			1.62	20
Toluene	0.0250	ND	0.0228	0.0231	91.1	92.5	1	67.8-124			1.52	20
1,1,2-Trichlorotrifluoroethane	0.0250	ND	0.0270	0.0270	108	108	1	53.7-150			0.0600	20
1,2,3-Trichlorobenzene	0.0250	ND	0.0272	0.0281	109	112	1	65.7-143			3.11	20
1,2,4-Trichlorobenzene	0.0250	ND	0.0271	0.0277	108	111	1	67.0-146			2.33	20
1,1,1-Trichloroethane	0.0250	ND	0.0250	0.0255	100	102	1	62.8-138			1.97	20
1,1,2-Trichloroethane	0.0250	ND	0.0245	0.0233	98.1	93.2	1	74.1-130			5.16	20
Trichloroethene	0.0250	ND	0.0238	0.0243	95.1	97.2	1	48.9-148			2.22	20
Trichlorofluoromethane	0.0250	ND	0.0251	0.0252	100	101	1	39.9-165			0.540	20
1,2,3-Trichloropropane	0.0250	ND	0.0253	0.0240	101	95.8	1	71.5-134			5.35	20
1,2,3-Trimethylbenzene	0.0250	ND	0.0247	0.0255	99.0	102	1	62.7-133			2.87	20
1,2,4-Trimethylbenzene	0.0250	ND	0.0256	0.0258	102	103	1	60.5-137			0.970	20
1,3,5-Trimethylbenzene	0.0250	ND	0.0256	0.0259	103	104	1	67.9-134			1.11	20
Vinyl chloride	0.0250	ND	0.0233	0.0239	93.1	95.7	1	44.3-143			2.71	20
Xylenes, Total	0.0750	0.000131	0.0741	0.0748	98.6	99.6	1	65.6-133			1.05	20
(S) Toluene-d8					102	101		90.0-115				
(S) Dibromofluoromethane					101	99.7		79.0-121				
(S) 4-Bromofluorobenzene					99.7	97.4		80.1-120				

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Method Blank (MB)

(MB) 01/26/16 12:03

Analyte	MB Result mg/l	MB Qualifier	MB RDL mg/l
C10-C28 Diesel Range	ND		0.100
C28-C40 Oil Range	ND		0.100
(S) o-Terphenyl	87.2		50.0-150

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

(LCS) 01/26/16 12:23 • (LCSD) 01/26/16 12:43

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
C10-C28 Diesel Range	1.50	1.35	1.40	90.2	93.6	70.0-130			3.70	20
(S) o-Terphenyl				77.3	84.3	50.0-150				

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc



Method Blank (MB)

(MB) 01/25/16 12:08

Analyte	MB Result mg/kg	MB Qualifier	MB RDL mg/kg
C10-C28 Diesel Range	ND		4.00
C28-C40 Oil Range	ND		4.00
(S) o-Terphenyl	96.4		50.0-150

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

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

(LCS) 01/25/16 12:22 • (LCSD) 01/25/16 12:36

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 %
C10-C28 Diesel Range	60.0	50.8	46.5	84.7	77.5	50.0-100			8.88	20
(S) o-Terphenyl				102	94.7	50.0-150				



Method Blank (MB)

(MB) 01/26/16 05:21

Analyte	MB Result mg/kg	MB Qualifier	MB RDL mg/kg
Anthracene	ND		0.00600
Acenaphthene	ND		0.00600
Acenaphthylene	ND		0.00600
Benzo(a)anthracene	ND		0.00600
Benzo(a)pyrene	ND		0.00600
Benzo(b)fluoranthene	ND		0.00600
Benzo(g,h,i)perylene	ND		0.00600
Benzo(k)fluoranthene	ND		0.00600
Chrysene	ND		0.00600
Dibenz(a,h)anthracene	ND		0.00600
Fluoranthene	ND		0.00600
Fluorene	ND		0.00600
Indeno(1,2,3-cd)pyrene	ND		0.00600
Naphthalene	ND		0.0200
Phenanthrene	ND		0.00600
Pyrene	ND		0.00600
1-Methylnaphthalene	ND		0.0200
2-Methylnaphthalene	ND		0.0200
2-Chloronaphthalene	ND		0.0200
(S) p-Terphenyl-d14	87.1		32.2-131
(S) Nitrobenzene-d5	85.9		22.1-146
(S) 2-Fluorobiphenyl	95.5		40.6-122

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

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

(LCS) 01/26/16 06:08 • (LCSD) 01/26/16 04:59

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 %
Anthracene	0.0800	0.0705	0.0696	88.2	87.0	50.3-130			1.30	20
Acenaphthene	0.0800	0.0758	0.0748	94.8	93.4	52.4-120			1.41	20
Acenaphthylene	0.0800	0.0758	0.0750	94.8	93.7	49.6-120			1.08	20
Benzo(a)anthracene	0.0800	0.0784	0.0765	97.9	95.6	46.7-125			2.39	20
Benzo(a)pyrene	0.0800	0.0612	0.0588	76.5	73.5	42.3-119			4.00	20
Benzo(b)fluoranthene	0.0800	0.0800	0.0818	100	102	43.6-124			2.20	20
Benzo(g,h,i)perylene	0.0800	0.0860	0.0849	107	106	45.1-132			1.23	20
Benzo(k)fluoranthene	0.0800	0.0730	0.0702	91.2	87.8	46.1-131			3.87	20

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

(LCS) 01/26/16 06:08 • (LCSD) 01/26/16 04:59

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 %
Chrysene	0.0800	0.0731	0.0717	91.4	89.6	49.5-131			1.93	20
Dibenz(a,h)anthracene	0.0800	0.0908	0.0901	113	113	44.8-133			0.710	20
Fluoranthene	0.0800	0.0791	0.0786	98.9	98.2	49.3-128			0.730	20
Fluorene	0.0800	0.0769	0.0760	96.1	95.0	50.6-121			1.13	20
Indeno(1,2,3-cd)pyrene	0.0800	0.0871	0.0862	109	108	46.1-135			1.14	20
Naphthalene	0.0800	0.0735	0.0730	91.9	91.2	49.6-115			0.730	20
Phenanthrene	0.0800	0.0793	0.0788	99.1	98.5	48.8-121			0.570	20
Pyrene	0.0800	0.0693	0.0678	86.6	84.8	44.7-130			2.12	20
1-Methylnaphthalene	0.0800	0.0760	0.0753	95.0	94.1	50.6-122			0.880	20
2-Methylnaphthalene	0.0800	0.0759	0.0756	94.8	94.5	50.4-120			0.420	20
2-Chloronaphthalene	0.0800	0.0752	0.0746	94.0	93.2	53.9-121			0.860	20
(S) p-Terphenyl-d14				87.8	85.5	32.2-131				
(S) Nitrobenzene-d5				92.9	89.8	22.1-146				
(S) 2-Fluorobiphenyl				99.1	95.4	40.6-122				

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

L813116-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) 01/26/16 11:31 • (MS) 01/26/16 11:53 • (MSD) 01/26/16 12:14

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	0.0400	0.00208	0.0540	0.0585	65.0	70.6	2	26.5-141			7.98	21.2
Acenaphthene	0.0400	0.00168	0.0568	0.0616	68.9	74.9	2	31.9-130			8.15	20
Acenaphthylene	0.0400	ND	0.0595	0.0617	74.4	77.1	2	33.7-129			3.55	20
Benzo(a)anthracene	0.0400	0.00472	0.0560	0.0614	64.1	70.9	2	18.3-136			9.18	24.6
Benzo(a)pyrene	0.0400	0.00488	0.0514	0.0585	58.1	67.0	2	16.9-135			12.9	25.2
Benzo(b)fluoranthene	0.0400	0.00566	0.0485	0.0560	53.6	63.0	2	10.0-134			14.4	30.9
Benzo(g,h,i)perylene	0.0400	0.00510	0.0523	0.0622	59.1	71.4	2	14.1-140			17.3	25.5
Benzo(k)fluoranthene	0.0400	0.00234	0.0521	0.0611	62.2	73.5	2	18.2-138			16.0	25.6
Chrysene	0.0400	0.00557	0.0565	0.0612	63.7	69.6	2	17.1-145			8.01	24.2
Dibenz(a,h)anthracene	0.0400	0.00219	0.0591	0.0635	71.1	76.7	2	18.5-138			7.26	24.3
Fluoranthene	0.0400	0.00711	0.0659	0.0683	73.5	76.5	2	15.4-144			3.54	27.1
Fluorene	0.0400	0.00198	0.0555	0.0609	66.9	73.7	2	23.5-136			9.30	20
Indeno(1,2,3-cd)pyrene	0.0400	0.00369	0.0547	0.0629	63.8	74.0	2	14.5-142			13.9	25.8
Naphthalene	0.0400	0.0187	0.0666	0.0757	59.9	71.3	2	29.2-128			12.8	20
Phenanthrene	0.0400	0.0113	0.0613	0.0636	62.5	65.4	2	20.1-134			3.66	23.6
Pyrene	0.0400	0.00784	0.0562	0.0586	60.4	63.4	2	11.0-148			4.14	26.1

L813116-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) 01/26/16 11:31 • (MS) 01/26/16 11:53 • (MSD) 01/26/16 12:14

Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MSD Result mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	<u>MS Qualifier</u>	<u>MSD Qualifier</u>	RPD %	RPD Limits %
1-Methylnaphthalene	0.0400	0.0154	0.0646	0.0696	61.5	67.7	2	28.4-137			7.41	20
2-Methylnaphthalene	0.0400	0.0207	0.0644	0.0697	54.5	61.2	2	26.6-137			7.97	20
2-Chloronaphthalene	0.0400	ND	0.0568	0.0619	71.0	77.4	2	38.6-126			8.64	20
(S) p-Terphenyl-d14					74.1	73.7		32.2-131				
(S) Nitrobenzene-d5					86.5	90.2		22.1-146				
(S) 2-Fluorobiphenyl					86.3	89.3		40.6-122				

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Method Blank (MB)

(MB) 01/26/16 15:42

Analyte	MB Result mg/l	MB Qualifier	MB RDL mg/l
Anthracene	ND		0.0000500
Acenaphthene	ND		0.0000500
Acenaphthylene	ND		0.0000500
Benzo(a)anthracene	ND		0.0000500
Benzo(a)pyrene	ND		0.0000500
Benzo(b)fluoranthene	ND		0.0000500
Benzo(g,h,i)perylene	ND		0.0000500
Benzo(k)fluoranthene	ND		0.0000500
Chrysene	ND		0.0000500
Dibenz(a,h)anthracene	ND		0.0000500
Fluoranthene	ND		0.0000500
Fluorene	ND		0.0000500
Indeno(1,2,3-cd)pyrene	ND		0.0000500
Naphthalene	ND		0.000250
Phenanthrene	ND		0.0000500
Pyrene	ND		0.0000500
1-Methylnaphthalene	ND		0.000250
2-Methylnaphthalene	ND		0.000250
2-Chloronaphthalene	ND		0.000250
(S) Nitrobenzene-d5	77.8		45.1-170
(S) 2-Fluorobiphenyl	96.9		57.7-153
(S) p-Terphenyl-d14	91.5		53.2-156

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

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

(LCS) 01/26/16 14:59 • (LCSD) 01/26/16 15:20

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Anthracene	0.00200	0.00186	0.00188	93.2	93.9	68.9-153			0.770	20
Acenaphthene	0.00200	0.00176	0.00181	87.8	90.6	67.7-141			3.10	20
Acenaphthylene	0.00200	0.00179	0.00182	89.3	90.9	66.9-141			1.78	20
Benzo(a)anthracene	0.00200	0.00174	0.00182	87.0	90.9	63.1-147			4.44	20
Benzo(a)pyrene	0.00200	0.00170	0.00179	85.2	89.6	62.2-150			5.13	20
Benzo(b)fluoranthene	0.00200	0.00170	0.00173	85.2	86.7	58.4-148			1.71	20
Benzo(g,h,i)perylene	0.00200	0.00170	0.00179	85.1	89.6	57.4-152			5.20	20
Benzo(k)fluoranthene	0.00200	0.00162	0.00178	80.8	89.2	60.5-154			9.85	20

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

(LCS) 01/26/16 14:59 • (LCSD) 01/26/16 15:20

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	<u>LCS Qualifier</u>	<u>LCSD Qualifier</u>	RPD %	RPD Limits %
Chrysene	0.00200	0.00174	0.00182	86.8	91.0	64.8-155			4.75	20
Dibenz(a,h)anthracene	0.00200	0.00175	0.00185	87.6	92.5	53.5-153			5.38	20
Fluoranthene	0.00200	0.00189	0.00192	94.3	96.0	68.6-153			1.86	20
Fluorene	0.00200	0.00172	0.00177	85.8	88.3	67.3-141			2.94	20
Indeno(1,2,3-cd)pyrene	0.00200	0.00172	0.00181	86.2	90.6	57.0-155			4.89	20
Naphthalene	0.00200	0.00173	0.00178	86.5	89.0	66.7-135			2.89	20
Phenanthrene	0.00200	0.00176	0.00178	88.2	88.9	64.3-143			0.850	20
Pyrene	0.00200	0.00170	0.00175	84.8	87.3	60.2-154			2.96	20
1-Methylnaphthalene	0.00200	0.00177	0.00183	88.3	91.3	68.3-144			3.31	20
2-Methylnaphthalene	0.00200	0.00179	0.00184	89.5	91.9	67.6-143			2.68	20
2-Chloronaphthalene	0.00200	0.00176	0.00181	88.0	90.3	69.7-144			2.60	20
(S) Nitrobenzene-d5				74.3	73.8	45.1-170				
(S) 2-Fluorobiphenyl				90.5	92.2	57.7-153				
(S) p-Terphenyl-d14				80.6	84.4	53.2-156				

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc



Abbreviations and Definitions

SDG	Sample Delivery Group.
MDL	Method Detection Limit.
RDL	Reported Detection Limit.
ND,U	Not detected at the Reporting Limit (or MDL where applicable).
RPD	Relative Percent Difference.
(dry)	Results are reported based on the dry weight of the sample. [this will only be present on a dry report basis for soils].
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.
(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.
Rec.	Recovery.
SDL	Sample Detection Limit.
MQL	Method Quantitation Limit.
Unadj. MQL	Unadjusted Method Quantitation Limit.

Qualifier	Description
J1	Surrogate recovery limits have been exceeded; values are outside upper control limits.
J2	Surrogate recovery limits have been exceeded; values are outside lower control limits.
J3	The associated batch QC was outside the established quality control range for precision.
J5	The sample matrix interfered with the ability to make any accurate determination; spike value is high.
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.
O1	The analyte failed the method required serial dilution test and/or subsequent post-spike criteria. These failures indicate matrix interference.

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc



ESC Lab Sciences 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.

State Accreditations

Alabama	40660	Nevada	TN-03-2002-34
Alaska	UST-080	New Hampshire	2975
Arizona	AZ0612	New Jersey–NELAP	TN002
Arkansas	88-0469	New Mexico	TN00003
California	01157CA	New York	11742
Colorado	TN00003	North Carolina	Env375
Connecticut	PH-0197	North Carolina ¹	DW21704
Florida	E87487	North Carolina ²	41
Georgia	NELAP	North Dakota	R-140
Georgia ¹	923	Ohio–VAP	CL0069
Idaho	TN00003	Oklahoma	9915
Illinois	200008	Oregon	TN200002
Indiana	C-TN-01	Pennsylvania	68-02979
Iowa	364	Rhode Island	221
Kansas	E-10277	South Carolina	84004
Kentucky ¹	90010	South Dakota	n/a
Kentucky ²	16	Tennessee ¹⁴	2006
Louisiana	AI30792	Texas	T 104704245-07-TX
Maine	TN0002	Texas ⁵	LAB0152
Maryland	324	Utah	6157585858
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	109
Minnesota	047-999-395	Washington	C1915
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	9980939910
Montana	CERT0086	Wyoming	A2LA
Nebraska	NE-OS-15-05		

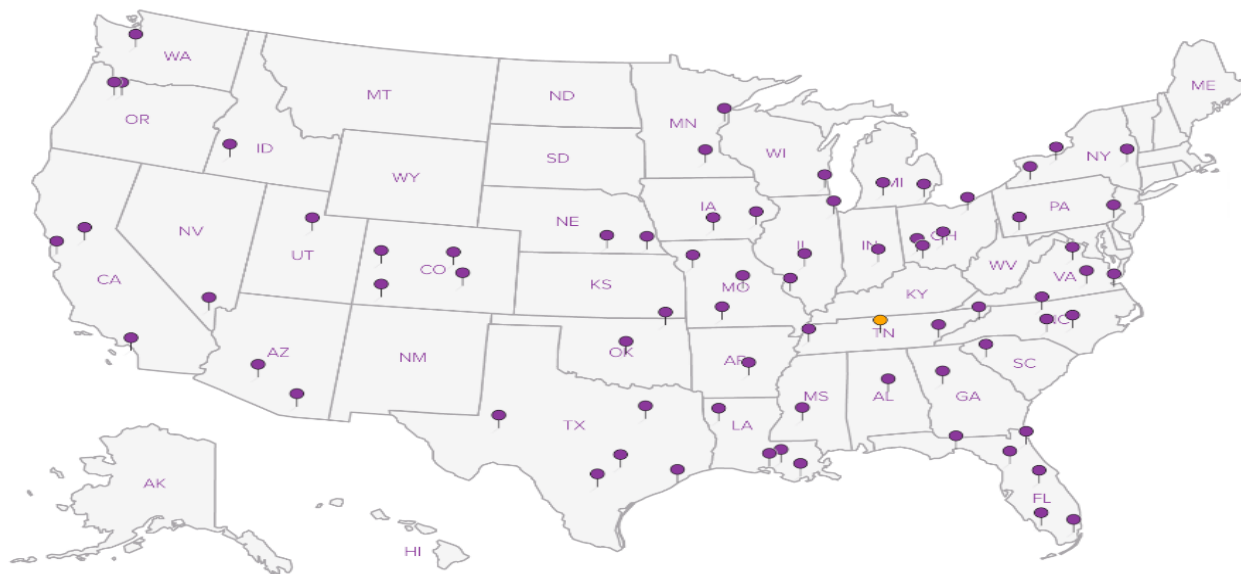
Third Party & Federal Accreditations

A2LA – ISO 17025	1461.01	AIHA	100789
A2LA – ISO 17025 ⁵	1461.02	DOD	1461.01
Canada	1461.01	USDA	S-67674
EPA–Crypto	TN00003		

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

Our Locations

ESC Lab Sciences 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. **ESC Lab Sciences performs all testing at our central laboratory.**



A & W Professional Services, PLLC

7900-D Stevens Mill Road, # 120
Matthews, NC 28104

Billing Information:

Mr. Austin Hewitt
7900-D Stevens Mill Road, # 120
Matthews, NC 28104

Report to:
Mr. Austin Hewitt

Email To: austin@awprofessionalservices.com

Project
Description:

City/State
Collected: *Brooklyn, NY*

Phone: 704-877-3541
Fax:

Client Project #

Lab Project #
AWPROMNC-BROOKLYN

Collected by (print):

Site/Facility ID #
BROOKLYN, NY

P.O. #

Collected by (signature):

Scott Stehlik

Date Results Needed

Immediately
Packed on Ice N ☐ Y ☒

Rush? (Lab MUST Be Notified)
☐ Same Day200%
☐ Next Day100%
☐ Two Day50%
☐ Three Day25%

Email? ☐ No ☒ Yes
FAX? ☐ No ☐ Yes

No.
of
Cntrs

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	Cntrs	DROROLVI 40ml/Amb-HCl-BT	DRORLA 4ozClr-NoPres	Diss RCRA8 Metals 500mlHDPE-NoPres	GRO 2ozClr-NoPres	PAHSIMLVID 40ml/Amb-NoPres-WT	RCRA8 Metals 2ozClr-NoPres	SV8270PAHSIMD 4ozAmb-NoPres	Screen for V8260C 2ozClr-NoPres	TS 2ozClr-NoPres	V8260C (MeOH) 40ml/NaHSO4/Syr/MeOH	
S-1	7	SS	10-14	1/21/16	10:15	9		X		X		X	X	X	X	X	
S-2		SS	12-14		10:30	9		X		X		X	X	X	X	X	-01
S-3		SS	8-10		11:15	9		X		X		X	X	X	X	X	-02
S-4		SS	5-10		12:30	9		X		X		X	X	X	X	X	-03
S-5		SS	8-10		12:45	9		X		X		X	X	X	X	X	-04
S-6		SS	6-9		1:15	9		X		X		X	X	X	X	X	-05
S-7		SS	8-10		2:00	9		X		X		X	X	X	X	X	-06
S-8	7	SS	8-10		2:10	9		X		X		X	X	X	X	X	-07
S-9		SS	8-10		2:45	9		X		X		X	X	X	X	X	-08
S-10	7	SS	5-9		3:20	9		X		X		X	X	X	X	X	-09
																	-10

* Matrix: SS - Soil GW - Groundwater WW - WasteWater DW - Drinking Water OT - Other

Remarks:

pH _____ Temp _____

Flow _____ Other _____

Hold #

Relinquished by: (Signature)

Date:

Time:

Received by: (Signature)

Samples returned via: ☐ UPS

Condition: (lab use only)

Relinquished by: (Signature)

Date:

Time:

Received by: (Signature)

Temp: _____ °C Bottles Received:

COC Seal Intact: ☒ Y ☐ N ☐ NA

Relinquished by: (Signature)

Date:

Time:

Received for lab by: (Signature)

Date:

Time:

pH Checked:

NCF:

Chain of Custody Page 1 of 4

ESC
L.A.B S.C.I.E.N.C.E.S

YOUR LAB OF CHOICE

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



L# *6813258*

Tab *A136*

Acctnum: AWPROMNC

Template: T108940

Prelimin: P538480

TSR: 350 - Jimmy Hunt

PB: *1-15-166m*

Shipped Via: FedEx Ground

Rem./Contaminant Sample # (lab only)

46173605 9103
46173605 9099

TD11

X

A & W Professional Services, PLLC

7900-D Stevens Mill Road, # 120
Matthews, NC 28104

Billing Information:

Mr. Austin Hewitt
7900-D Stevens Mill Road, # 120
Matthews, NC 28104

Report to:
Mr. Austin Hewitt

Email To: austin@awprofessionalservices.com

Project
Description:

City/State
Collected: *Brooklyn, NY*
Lab Project #
AWPROMNC-BROOKLYN

Phone: 704-877-3541
Fax:

Client Project #

Collected by (print):

Site/Facility ID #
BROOKLYN, NY

P.O. #

Collected by (signature):

Rush? (Lab MUST Be Notified)

Date Results Needed

Immediately
Packed on Ice N ☐ Y ☒

☐ Same Day200%
☐ Next Day100%
☐ Two Day50%
☐ Three Day25%

Email? ☐ No ☒ Yes
FAX? ☐ No ☐ Yes

No.
of
Cntrs

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs
S-1	C2	SS	10-14	1/21/16	10:15	9
S-2		SS	12-14		10:30	9
S-3		SS	8-10		11:15	9
S-4		SS	5-10		12:30	9
S-5		SS	8-10		12:45	9
S-6		SS	6-9		1:45	9
S-7		SS	8-10		2:00	9
S-8		SS	8-10		2:10	9
S-9		SS	8-10		2:45	9
* S-10	G	SS	5-9		3:00	9

* Matrix: SS - Soil GW - Groundwater WW - WasteWater DW - Drinking Water OT - Other

Remarks: *40ml vial broken on arrival

Analysis / Container / Preservative

V8260C 40ml/NaHSO4/Syr/MeOH

V8260C 40mlAmb-HCl

Chain of Custody Page 2 of 4



YOUR LAB OF CHOICE

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



L # *L813 258*

Table #

Acctnum: AWPROMNC

Template: T108940

Prelogin: P538480

TSR: 350 - Jimmy Hunt

PB: *1-15-16gm*

Shipped Via: FedEX Ground

Rem./Contaminant Sample # (lab only)

-01
-02
-03
-04
-05
-06
-07
-08
-09
-10

pH _____ Temp _____

Flow _____ Other _____

Hold #

Relinquished by: (Signature)

Date:

Time:

Received by: (Signature)

Samples returned via: ☐ UPS

Condition: (lab use only)

Relinquished by: (Signature)

Date:

Time:

Received by: (Signature)

☒ FedEx ☐ Courier ☐ _____

Temp: *21.0* °C Bottles Received:

COC Seal Intact: ☒ Y ☐ N ☐ NA

Relinquished by: (Signature)

Date:

Time:

Received for lab by: (Signature)

Date: *1/23/16* Time: *1300*

pH Checked:

NCF: *X*

A & W Professional Services, PLLC

7900-D Stevens Mill Road, # 120
Matthews, NC 28104

Billing Information:

Mr. Austin Hewitt
7900-D Stevens Mill Road, # 120
Matthews, NC 28104

Report to:
Mr. Austin Hewitt

Email To: austin@awprofessionalservices.com

Project
Description:

City/State
Collected: Brooklyn, NY

Phone: 704-877-3541
Fax:

Client Project #

Lab Project #
AWPROMNC-BROOKLYN

Collected by (print):

Site/Facility ID #
BROOKLYN, NY

P.O. #

Collected by (signature):

Rush? (Lab MUST Be Notified)

Date Results Needed

Immediately
Packed on Ice N Y

Same Day200%
Next Day100%
Two Day50%
Three Day25%

Email? No X Yes
FAX? No Yes

No.
of
Cntrs

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	Cntrs	DROROLVI 40mlAmb-HCl-BT	DRORLA 4ozClr-NoPres	Diss RCRA8 Metals 500mlHDPE-NoPres	GRO 2ozClr-NoPres	FAHSLMLVID 40mlAmb-NoPres-WT	RCRA8 Metals 2ozClr-NoPres	SV8270PAHSIMD 4ozAmb-NoPres	Screen for V8260C 2ozClr-NoPres	TS 2ozClr-NoPres	V8260C (MeOH) 40ml/NaHSO4/Syr/MeOH	Rem./Contaminant	Sample # (lab only)
S-11	G	SS	570	1/21/16	3:40	9		X		X		X	X	X	X	X		-11
GW-1		GW	10		10:45	9	X		X		X							-12
GW-2		GW	10		145	9	X		X		X							-13
GW-3		GW	10		220	9	X		X		X							-14
GW-4		GW	10		3:30	9	X		X		X							-15

* Matrix: SS - Soil GW - Groundwater WW - WasteWater DW - Drinking Water OT - Other

Remarks:

pH Temp

Flow Other

Hold #

Relinquished by: (Signature)

Date:

Time:

Received by: (Signature)

Samples returned via: ☐ UPS

Condition: (lab use only)

Relinquished by: (Signature)

Date:

Time:

Received by: (Signature)

Temp °C Bottles Received:

COC Seal Intact: Y N NA

Relinquished by: (Signature)

Date:

Time:

Received for lab by: (Signature)

Date: Time:

pH Checked:

NCF:

NCF.

Sample # (lab only)

Mark Halloran

Director

YEARS OF EXPERIENCE: 21

EDUCATION

Master of City and
Regional Planning
Rutgers University

Bachelor of Arts
Saint Michael's College

LICENSES AND CERTIFICATIONS

Certified ASTM E 1527
trainer

AFFILIATIONS

MBA of America
CREFC

SUMMARY OF SKILLS AND TECHNICAL QUALIFICATIONS

Mr. Halloran's career has paralleled the growth of the real estate due diligence industry. In the early 1990s, he conducted Phase I ESAs for the nascent assessment industry. When the due diligence business began to self-regulate circa 1993, Mr. Halloran was among the first group to be trained by ASTM to teach their site assessment class. While working for a due diligence firm, Mr. Halloran had the unique experience of formally educating his client's on environmental risk through the ASTM training courses. During this period, the commercial loan securization industry was developing in NYC. Mr. Halloran played an integral role in the development of assessment guidelines for pioneering firms in the CMBS industry. Since the mid-1990s, his focus has been on business development and the generation and maintenance of relationships with firms that provide the full suite of commercial real estate related services. Mr. Halloran has performed this role for privately-held firms and for a publically-traded, Fortune 500 company.

ENVIRONMENTAL ASSESSMENT

Mr. Halloran started his career as a writer for a conservation group in NJ. While studying for a Master's Degree, Mr. Halloran worked as an environmental planner for an international environmental engineering firm. Mr. Halloran has performed hundreds of environmental assessments for public entities and for major lending institutions and equity players.

PROPERTY CONDITION ASSESSMENT

Having worked closely with construction professionals, contractors and engineers, Mr. Halloran has developed a working knowledge of the requirements to complete Property Condition Surveys for lenders and developers.

PROFESSIONAL EXPERIENCE & CAREER HIGHLIGHTS

Vice President, National Sales

Responsible for direct relationships with select national clients and for the management of the overall sales planning process involving national and regional client managers.

- Management of and responsibility for several National Sales Managers
- Understanding and promotion of non-core services including appraisal, title, lease abstraction, an cost segregation

Director of Business Development

Managed national clients while running the sales team for a Houston-based due diligence firm.

- Expansion of client base both geographically and by client type
- Oversaw and exponential growth in sales revenue from 2000 – 2004



John T. Burkart

Field Professional

Education: University of Pittsburgh,
Bachelor of Science Earth and Environmental Sciences

Licenses/Registrations: **Professional Geologist** in Indiana IN1274, Illinois #196.001.1256, Texas #912, Kentucky #0394, Tennessee #652, Washington State #1662 Geologist and Hydrogeologist, Mississippi # 0133, Alabama #3419, Pennsylvania # 107G, New Hampshire #717, Wyoming # 2356, REA I CA 0313.

Years of Experience: 23 years

Summary of Professional Experience

Mr. Burkart has successfully managed single and multi-site environmental due diligence projects encompassing a broad range of property types including, retail, office, industrial (ROI), hospitality, assisted living and special use. He has interfaced directly with bank loan officers, regulatory agencies, environmental analysts and numerous borrowers on subjects including environmental compliance and liability as well as contracting and scope of work issues. Mr. Burkart's major projects included large-scale loan portfolio due diligence assessments, subsurface soil and groundwater investigations, underground storage tank removals and desk reviews of inactive hazardous waste sites, cost analysis, Remedial Action Plans, Comprehensive Site Assessments and closure with regulatory agencies.

Mr. Burkart has over 20 years experience in the consulting field, Mr. Burkart has performed Environmental Site Assessments (ESAs) and Phase II Environmental Site Assessments (Phase II) throughout United States for major lending institutes, industrial and private companies. He has also performed geological and hydrogeological investigations, groundwater monitoring well development, and other soil and groundwater investigation projects as well as remediation of complex sites.

Mr. Burkart has also served as Project Manager for hazardous material compliance audits, remediation compliance issues and inactive hazardous waste site closures. He has been responsible for QA/QC oversight and successfully developed and implemented multiple project-tracking database programs.

Mr. Burkart is multiple disciplined in geology and hydrogeology and familiar with regulatory guidelines on a nationwide basis.

Mr. Burkart has published articles for trade shows and magazines as well as provided expert testimony for bankruptcy cases and environmental cases.

Austin Hewitt, PE, LEED AP

Field Professional

YEARS OF EXPERIENCE: 9

EDUCATION

Bachelor of Science, Civil &
Environmental Engineering,
Tennessee Tech University, 2002

REGISTRATIONS

Registered Professional Engineer,
North Carolina, #034411

LICENSES AND CERTIFICATIONS

OSHA 40-Hour Hazardous Waste
Worker
LEED Accredited Professional,
#103467456

SUMMARY OF SKILLS AND QUALIFICATIONS

- **Over 9 years experience** - performing Phase I, Phase II, property condition assessments, construction draws, and other environmental /structural site reconnaissance services.
- **Over 3 years experience** – as a project manager overseeing nationwide projects for one of the largest lender-related due diligence firms in the nation.

SUMMARY OF COMPLETED PROJECTS

- Managed over **300** ASTM compliant phase II projects in the past **5** years
- Personally written over **200** ASTM compliant phase I, phase II, and/or PCA reports within the last **3** years
- Personally performed the site reconnaissance and total report preparation for projects in **24** states; including **6** projects in Mexico
- Completed **7** construction draw inspections for lending institutions over the last year

RECENT PROJECTS

- Phase II, Soil-Gas, & Indoor Air Sampling: Rochdale Village – Queens, NY
- Phase II Portfolio: 9 Penn-Med rush projects - Pennsylvania
- Phase II: 850 The Alameda – San Jose, CA
- Phase II: Subaru Dealership – Kalispell, MT
- Construction Draw: Yorktowne Apartments – Durham, NC
- Phase II: Westinghouse Research Park – Churchill, PA