

August 17, 2020

Julie Garver, Director of Housing Development
Innovative Housing, Inc.
210 NW Second Avenue
Portland, Oregon 97209

**Re: Limited Subsurface Investigation
Barbur Boulevard Rental Property
8205 SW Barbur Boulevard
Portland, Oregon 97071
150-026-002**

Dear Ms. Garver:

Hart Crowser presents this letter report to Innovative Housing, Inc. (IHI), which summarizes the results of a limited subsurface investigation conducted at the Barbur Boulevard Rental facility at 8205 SW Barbur Boulevard in Portland, Oregon ("Property"; Figure 1). In December 2019, Hart Crowser completed a Phase I Environmental Site Assessment (ESA) for the Property that revealed numerous areas where current or former activities could have affected soil and/or groundwater quality beneath the Property. At your request, Hart Crowser conducted a limited subsurface investigation to evaluate groundwater quality only in those areas that were determined to have the greatest potential for impacts to groundwater quality.

Background

In December 2019, Hart Crowser completed a Phase I ESA for the Property which identified several areas where current or former activities could have affected soil and/or groundwater quality. In 1991, two underground storage tanks (USTs) were removed from the central part of the Property. The USTs were discovered to be leaking and approximately 110 cubic yards of soil were removed and transported off site for disposal. Reportedly, confirmation soil samples revealed non-detectable to low concentrations of petroleum hydrocarbons remaining in soil. During our Phase I ESA site reconnaissance, we also observed an equipment wash pad and an approximately 2,000-gallon dual-compartment aboveground storage tank (AST) near the location of the two former USTs and a former truck wash basin that had been filled in the 1980s north of the former USTs. These areas are shown on Figure 2 and were the focus of this limited subsurface investigation.

Other features of interest that were also identified during the Phase I ESA included two concrete batching machines that had been in the central part of the Property; and a variety of petroleum products and cleaners used as part of equipment maintenance and operations. These areas as well as floor drains and



on-site catch basins, the location of a former hydraulic hoist, and various storage areas were not included in this limited subsurface investigation.

Pre-Field Activities

Prior to field sampling, Hart Crowser prepared a Health and Safety Plan that was utilized in the field by Hart Crowser field personnel. Oregon's One-Call utility notification service was contacted so that notifications of the subsurface work could be relayed to area utility companies. Hart Crowser also contracted with Applied Professional Services of North Bend, Washington, a private utility locator, to clear proposed push probe locations prior to drilling work.

Field Investigation

On December 19, 2019, Stratus Corporation of Gaston, Oregon (an Oregon-licensed driller subcontracted by Hart Crowser), completed four push-probe borings at the Property using a direct-push drill rig. Hart Crowser field personnel were present to observe drilling activities, document subsurface conditions, and collect groundwater samples from temporary well points.

Boring Locations and Subsurface Geology. Borings were conducted in the areas of the two former USTs (DP-1), between the AST and equipment wash pad (DP-2), and adjacent to the former truck wash basin (DP-3). Field logs for these borings are included in Attachment A. Another boring was also completed at a downgradient location on the northeastern part of the Property (DP-4) for groundwater only. Boring locations are shown on Figure 2.

The borings were advanced to depths from 25 to 35 feet below ground surface (bgs). Soils encountered during drilling consisted of gray to orange-brown silt and silt with varying amounts of clay. The degree of stiff (hard) silt was variable in each boring and in one boring (DP-2), a 1-foot-thick interval of silt with small gravels was encountered around 15 feet bgs. Groundwater was as shallow as approximately 9 feet bgs and as deep as approximately 24.7 feet bgs across the Property.

Soil and Groundwater Sample Collection. Soil samples were collected from borings DP-1, DP-2, and DP-3. No soil samples were collected from boring DP-4. Soil cores were collected at approximately 5-foot increments and were field screened using a photoionization detector and visual methods for indications of potential contamination (e.g., sheen, staining). All samples were collected in labelled, laboratory-supplied glass jars, which were placed into a cooler with ice for transport to the analytical laboratory.

Of the soil samples collected, three soil samples were submitted for chemical analysis. One soil sample (DP-1-14) was collected from the boring in the area of the two former USTs at 14 feet bgs, the approximate depth below the base of the former tank excavation. One soil sample (DP-2-9) was collected from the boring between the AST and the equipment wash pad at the soil-groundwater



interface, a depth of approximately 9 feet bgs. One soil sample (DP-3-8) was collected from the boring adjacent to the former truck wash basin at 8 feet bgs, the approximate depth below the former base of the truck wash basin.

Once groundwater was encountered, each boring (DP-1 through DP-4) was left open to allow for groundwater to recharge while sampling equipment was set in place. Hart Crowser employed a low-flow sampling technique at each location. This technique involves extracting groundwater using clean, new flexible tubing between sampling locations and a peristaltic pump to extract groundwater at rates comparable to ambient groundwater flow. Stabilization parameters pH, dissolved oxygen, conductivity, and temperature were monitored during low-flow purging until parameter outputs reached a steady state, indicating water being pumped was representative of groundwater conditions. Once equilibrium was reached, groundwater samples were collected into clean, laboratory-supplied, no-headspace glass vials. Glass vials were then labeled and placed into a cooler with ice for transport to the analytical laboratory.

Boring Abandonment. Once groundwater sampling was completed, the probes were abandoned by filling the boreholes with granular bentonite and hydrating the bentonite with water.

Decontamination and Investigation-Derived Waste (IDW). To prevent cross contamination between sampling points, clean dedicated sampling equipment (e.g., disposable gloves, groundwater sampling tubing, push probe sleeves) were used for each sampling event and discarded after a single use. During drilling activities, IDW was generated and consisted of soil from the push probe cores, decontamination water, sampling supplies (e.g., soil core tubes), and personal protective equipment (e.g., gloves). Low volumes of water and soil were generated and were stored in two separate labeled Department of Transportation-approved 55-gallon drums to await analytical results. Disposable sampling supplies, personal protective equipment, and other refuse were disposed of as solid waste.

Hart Crowser completed a waste disposal profile on June 9, 2020, and the IDW was taken off site by Stratus Corporation in June 2020. A copy of the waste disposal profile and disposal receipt are included in Appendix B.

Chemical Analysis and Results

Hart Crowser submitted the samples to Pace Analytical, Inc., in Mt. Juliet, Tennessee, for analysis. A total of three soil samples and four groundwater samples were analyzed for volatile organic compounds (VOCs) using EPA Method 8260C and total petroleum hydrocarbons (TPH) using Northwest Method NWTPH-HCID. The laboratory report presenting the analytical results is included in Attachment C.

Analytical results detected one or more VOCs in each of the three soil samples at concentrations just above laboratory method detection limits (MDLs) and well below applicable Oregon Department of



Environmental Quality's (DEQ's) risk-based concentrations (RBCs). Additionally, TPH was not detected above MDLs in the soil samples analyzed. Table 1 shows only those chemical compounds that were detected in analyzed soil samples.

Analytical results detected VOCs in three of the four groundwater samples (DP-1-W, DP-2-W, and DP-4-W) at concentrations well below applicable DEQ RBCs. Only one groundwater sample (DP-1-W) contained diesel- and oil-range petroleum hydrocarbons at concentrations of 36.0 and 222 micrograms per liter ($\mu\text{g/L}$), respectively. This concentration is greater than the applicable DEQ RBC for residential and urban residential groundwater use of 100 $\mu\text{g/L}$. The RBC of 100 $\mu\text{g/L}$ is not necessarily specific for oil-range petroleum hydrocarbons, but it is a surrogate RBC for oil-range TPH, which is how it is used in this context. Groundwater sample results showing detections only are included in Table 2.

Conclusions and Recommendations

Based on the results of our limited baseline subsurface investigation, no widespread indications of a release of VOCs was encountered in soil or groundwater beneath the Barbur Boulevard Rentals facility. However, groundwater in the vicinity of the former USTs appears to be slightly impacted by oil-range TPH at concentrations that exceed groundwater use RBCs under residential and urban residential use scenarios. We recommend additional groundwater sampling in the area of the former USTs to confirm the minor contamination in groundwater associated with the USTs and to evaluate other areas that were not included in this investigation. While it is possible that VOCs may still be present beneath the site that were not identified from this investigation, groundwater quality beneath the site does not appear to have been affected by large releases of VOCs to TPH.

Limitations

Due to the limited nature of the work scope, it is not possible to evaluate all areas where soil and/or groundwater quality could have been affected from current or past operations. Our work scope focused only on those areas with the greatest potential for contaminant impacts to soil and/or groundwater quality, based on the results of a Phase I ESA completed in December 2019 and presented in our report dated May 1, 2020. The results of the limited subsurface investigation show soil and groundwater conditions at specific locations and at a specific time and cannot be construed to represent conditions elsewhere on the site not sampled.

Sampling for other conditions such as the presence of regulated building materials (asbestos, lead, radon, etc.) were not included in this limited subsurface investigation. The work scope completed was limited only to that scope of work presented in our proposal to IHI, dated December 18, 2019.



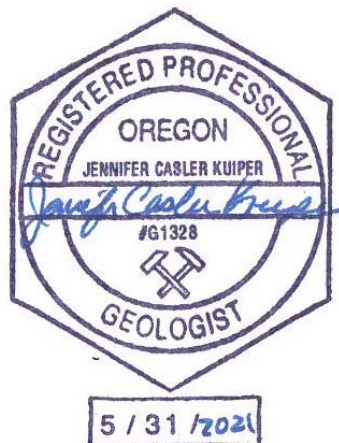
Closing

Work performed by Hart Crowser for this project and the preparation of this report were conducted in accordance with generally accepted professional practices in the same or similar localities, related to the nature of the work accomplished at the time our services were performed. This report is for specific application to the referenced project and for the exclusive use by IHI. No other warranty, express or implied, is made.

If you have any questions regarding this letter, please feel free to give Jennifer a call at (971) 808-5169.

Sincerely,

HART CROWSER, INC.



JENNIFER CASLER KUIPER, RG
Senior Associate Geologist

RICHARD D. ERNST, RG
Principal Geologist

Attachments:

- Table 1 – Soil Chemical Analyses Results
- Table 2 – Groundwater Chemical Analyses Results
- Figure 1 – Vicinity Map
- Figure 2 – Boring Location Map
- Attachment A – Boring Logs
- Attachment B – IDW Disposal Profile and Receipt
- Attachment C – Laboratory Report

Table 1 - Soil Chemical Analyses Results
Barbur Boulevard Rentals
8205 SW Barbur Boulevard
Portland, Oregon

Sample	Depth (ft bgs)	Date	Volatile Organic Compounds (EPA 8260C) mg/kg		
			Acetone	Benzene	Xylenes
DP-1-14	14	19-Dec-20	0.0164 J	<0.000369	<0.000953
DP-2-9	9	19-Dec-20	0.0149 J	<0.000359	<0.000928
DP-3-8	8	19-Dec-20	0.0222 J	0.000559 J	0.00103 J
DEQ RBCs					
Direct Contact - Residential			-	8.2	1,400
Direct Contact - Urban Residential			-	24	2,900
Direct Contact - Occupational			-	37	25,000
Direct Contact - Construction Worker			-	380	20,000
Direct Contact - Excavation Worker			-	11,000	560,000

Notes:

Only volatile organic compounds (VOCs) detected are shown. The full analyte list of VOCs by EPA Method 8260C are provided in the analytical report in Attachment C.

ft bgs = Feet below ground surface.

Bold denotes a detected concentration.

DEQ risk-based concentrations (RBCs) updated May 2018.

J = Estimated concentration between laboratory method detection limit and reported detection limit.

mg/kg = milligrams per kilogram.

- = Not available.

ft bgs = Feet below ground surface.

Table 2 - Groundwater Chemical Analyses Results
Barbur Boulevard Rentals
8205 SW Barbur Boulevard
Portland, Oregon

Sample	Date	Volatile Organic Compounds (EPA 8260C) µg/L						Petroleum Hydrocarbons (NWT PH-HCID) µg/L	
		Acetone	Benzene	Carbon Disulfide	2-Butanone (MEK)	Vinyl Acetate	Xylenes	Diesel	Motor Oil
DP-1-GW	19-Dec-20	13.9 J	0.136 J	<0.101	1.55 J	<0.645 JO	<0.316	36.0 J	222 J
DP-2-GW	19-Dec-20	<1.05	<0.0896	<0.101	<1.28	<0.645 JO	<0.316	<33.3	<167
DP-3-GW	19-Dec-20	5.36 J	<0.0896	<0.101	<1.28	<0.645 JO	0.823 J	<33.3	<167
DP-4-GW	19-Dec-20	21.1 J	<0.0896	0.289 J	3.69 J	<0.645 JO	<0.316	-	-
DEQ RBCs		-	-	-	-	-	-	-	-
Groundwater Use - Residential		-	0.46	-	-	-	190	100	100
Groundwater Use - Urban Residential		-	2	-	-	-	710	100	100
Vapor Intrusion - Residential		-	210	-	-	-	86,000	>S	>S
Vapor Intrusion - Urban Residential		-	510	-	-	-	86,000	>S	>S
Groundwater in Excavation		-	1,800	-	-	-	23,999	>S	>S

Notes:

Only volatile organic compounds (VOCs) detected are shown. The full analyte list of VOCs by EPA Method 8260C are provided in the analytical report in Attachment C.

Bold denotes a detected concentration.

DEQ risk-based concentrations (RBCs) are from DEQ (2018).

Shading denotes a concentration exceeding an RBC.

J = Estimated concentration between laboratory method detection limit and reported detection limit.

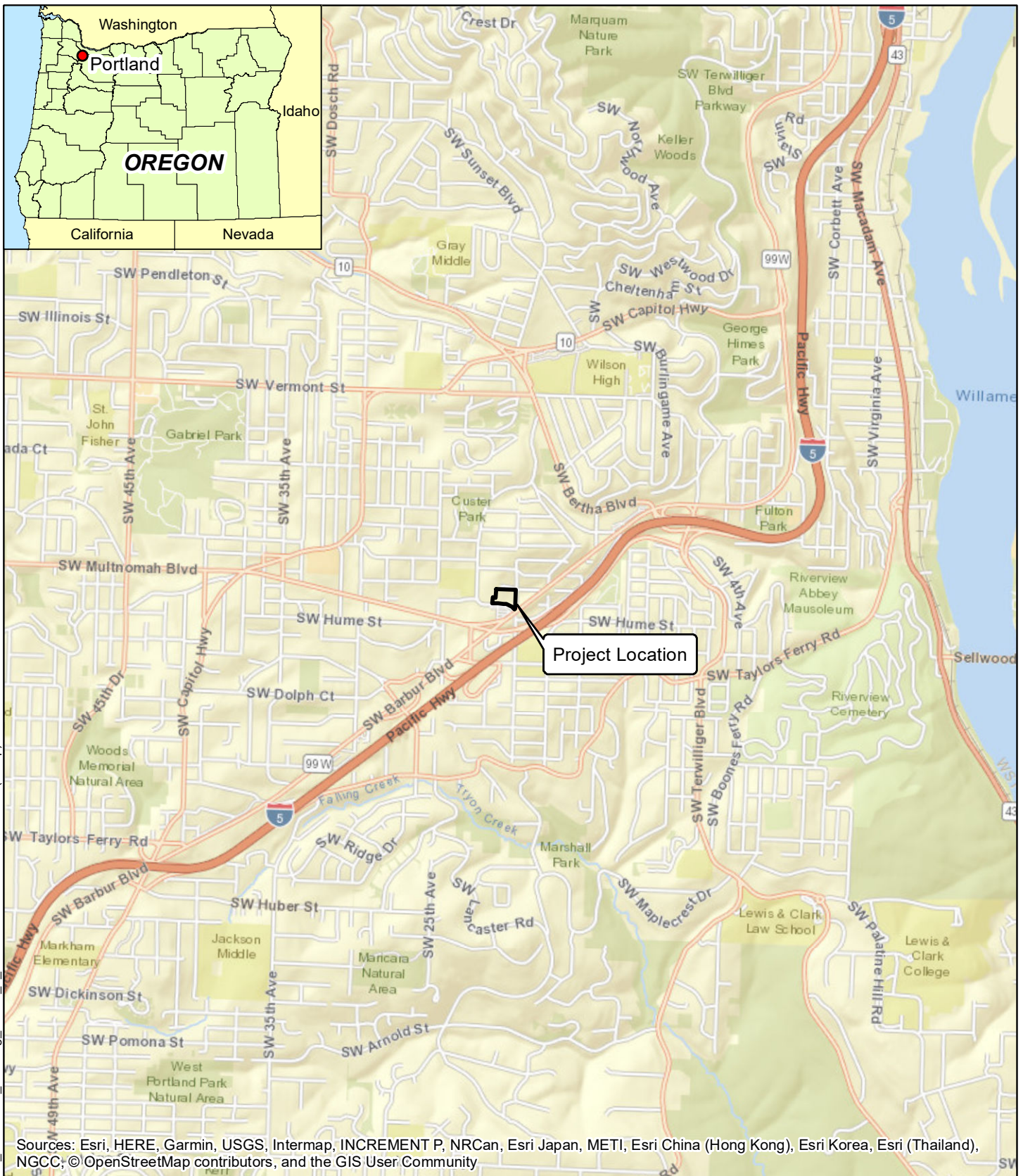
JO = Identified analyte is acceptable; calibration met method criteria and the reported concentration is an estimate.

µg/L = Micrograms per liter.

>S = Greater than solubility.

- = Not available.

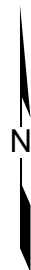
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Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, © OpenStreetMap contributors, and the GIS User Community

0 1,000 2,000 4,000
Feet

Note: Feature locations are approximate.



Innovative Housing Limited Subsurface
Investigation Portland, Oregon

Vicinity Map

150-026-002

12/19



Figure

1



Source: Aerial photograph provided by Hexagon Imagery Program Data.

Legend

-  Catch Basin
  = Direct Push (DP) Sampling Location
-  Property Boundary
- 0 20 40 80
 Feet
 Note: Feature locations are approximate.

Innovative Housing Limited Subsurface
Investigation Portland, Oregon

Boring Location Map

150-026-002

12/19


HARTCROWSER

Figure

2

ATTACHMENT A
Boring Logs

Job #: 156-026-002	Contractor/Crew: Stratus	Sheet: 1 of 3
Job Name: 1mm. Housing	Drilling Method: Push Probe	Hole Diameter: 2 1/4"
Logged By: TL	Drill Rig Model: GeoProbe 78220T	Drill Rig Type: Track 38
Date Started: 12/19/19 Completed:	Hammer Type:	Hammer Weight/Drop:
Bottom of Exploration: 25ft	Location/Elevation:	

DATE/TIME	SAMPLE NO.	TYPE	DEPTH (FT.)	LENGTH (IN.)	RECOVERY (IN.)	BLOW COUNTS (N-VALUES)	PID / PP / TV / Other	FIELD IDENTIFICATION AND DRILLING NOTES
								ORDER OF DESCRIPTION: ASTM D2488 Group Name, (ASTM SYMBOL), minor soil type, density/consistency, moisture, color, additional soil ident. comments, staining, odor, non-soil description comments. [Geologic Name] DRILLING NOTES: Chatter, change in rate of penetration, loss of circulation, etc.
		Core	0-5	160	24			0-0.5ft Asphalt
								0.5-5ft gravelly silt, graded to silt. Brown → Black, dry → moist
			5-10		16			5-10ft gray silt soft moist
			10-15		60			10-12ft moist, gray silt, barely any rocks, smaller than my pinky.
								12-13ft becomes wet, warmer gray
								13-14 hard, dry silt, color Δ
								14-15 mix of brown gray
			15-20		60			15-16 wet, brown / gray
								16-17 Mix of brown with orange moist → stiff.
								17-20 Stiff orange clay
			20-25		60			20-25 moist orange-brown lense mix
								Samples:
								DP-1-13 @ 1005 (14ft)
								DP-1-14 @ 1000 (14ft)
								DP-1-17 @ 1010 (17ft)
								groundwater @ 10.1 ft.
								PIP @ 13ft read Q
								16 read Q
								23 + 13 th read Q

GROUNDWATER DATA		NOTES:
WATER DEPTH	DATE / TIME	
INSTALL: Y ☐ N ☐		
INSTALL ID:		

Job #: 150-D26-002	Contractor/Crew: Stratus	Sheet: 2 of 3
Job Name: Inn. Housing	Drilling Method: Dosh Probe	Hole Diameter: 2 1/4"
Logged By: TL	Drill Rig Model: Geo Probe 7824DT	Drill Rig Type: Track 38
Date Started: 12/19/19 Completed	Hammer Type:	Hammer Weight/Drop:
Bottom of Exploration: 30ft	Location/Elevation:	

DATE/TIME	SAMPLE NO.	TYPE	DEPTH (FT.)	LENGTH (IN.)	RECOVERY (IN.)	BLOW COUNTS (N-VALUES)	PID / PP / TV / Other	FIELD IDENTIFICATION AND DRILLING NOTES
								ORDER OF DESCRIPTION: ASTM D2488 Group Name, (ASTM SYMBOL), minor soil type, density/consistency, moisture, color, additional soil ident. comments, staining, odor, non-soil description comments. [Geologic Name] DRILLING NOTES: Chatter, change in rate of penetration, loss of circulation, etc.
		core	0-5	60 in	24			0-0.5ft Asphalt 0.5-5ft gravelly silt, grading to silt. Brown.
			5-10		31			5-9ft gray silt, soft, moist → dry. wood found @ 5ft
			10-15		55			9-10ft orange clay mix dry rocks 10-11 gray stiff → moist 11-12 mix of gray & orange silt + clay. stiff. 12-15 more orange clay stiff becomes soft @ 14ft
			15-20		60			15-16 very soft, wet, mix of both clay + silt, small rocks, 16-18 orange soft, no rocks 18-19 dark brown lense of clay, 19-20 stiff, grey orange 20-21 wet, gw, grey whit again 21-21 becomes stiff 24-25 stiff, dry odd color 25-30 gray mix brown. Same as 21-24.
			20-25		60			Samples: DP-2-9 @ 1040 DP-2-21 @ 1050 DP-2-24 @ 1055
			25-30		60			gw @ 9.2ft.
								PID readings @ 9, 11, 19, 25ft. All read 0

GROUNDWATER DATA		NOTES:
WATER DEPTH	DATE / TIME	
INSTALL: Y ☐ N ☐		INSTALL ID:

Job #: 150-024-002	Contractor/Crew: Stratus	Sheet: 3 of 3
Job Name: lyn. housing	Drilling Method: Push Probe	Hole Diameter: 2 1/4"
Logged By: TL	Drill Rig Model: GeoProbe 7B22DT	Drill Rig Type: Track 3E.
Date Started: 12/19/19 Completed:	Hammer Type:	Hammer Weight/Drop:
Bottom of Exploration: 35ft	Location/Elevation:	

DATE/TIME	SAMPLE NO.	TYPE <i>core</i>	DEPTH (FT.)	LENGTH (IN.) <i>60</i>	RECOVERY (IN.)	BLOW COUNTS (N-VALUES)	PID / PP / TV / Other	FIELD IDENTIFICATION AND DRILLING NOTES
								ORDER OF DESCRIPTION: ASTM D2488 Group Name, (ASTM SYMBOL), minor soil type, density/consistency, moisture, color, additional soil ident. comments, staining, odor, non-soil description comments. (Geologic Name) DRILLING NOTES: Chatter, change in rate of penetration, loss of circulation, etc.
			0-5		32			0-0.5ft Asphalt 0.5-5ft gravelly silt grading to silt, w/ chunks of concrete. Dry → moist becoming grayish @ 5ft
			5-10		41			5-6 becomes soft, brown gray 6-8 gray silt 8-10 brown gray silt
			10-15		44			10-12 → 12-13 becomes brown 13-14 becomes stiff 14-15 orange brown clay silt ^{stiff}
			15-20		53			15-20 → 16' becomes soft, moist
			20-25		60			20-21 → 21-22 lenses of brown clay mixed w/ gray silt 22-22.5 lenses of brown silt only 22.5-23.5 lenses of mix silt + clay 23.5-24 moist → 24.5 becomes stiff
			25-30		60			24-25 moist, mix clay + silt 25-26 moist → wet, mix of both 26-27 loose moist gray + orange 27-29 orange clay only ^{w/ red lenses} 29-30 →
			30-35		60			30-31 mix of both, stiff moist 31-35 red clay only
								Samples: DP-3-8 @ 0910 DP-3-13 @ 0922 DP-3-24 @ 0919 AW @ 24.7

GROUNDWATER DATA		NOTES: PID @ 7, 14, 26. read @ 13
WATER DEPTH	DATE / TIME	
		INSTALL: Y ☐ N ☐
		INSTALL ID:

ATTACHMENT B
IDW Disposal Profile and Receipt



Requested Facility: _____ ☐ Unsure Profile Number: _____
☐ Multiple Generator Locations (Attach Locations) ☐ Request Certificate of Disposal ☐ Renewal? Original Profile Number: _____

A. GENERATOR INFORMATION (MATERIAL ORIGIN)

1. Generator Name: _____
2. Site Address: _____
(City, State, ZIP) _____
3. County: _____
4. Contact Name: _____
5. Email: _____
6. Phone: _____ 7. Fax: _____
8. Generator EPA ID: _____ ☐ N/A
9. State ID: _____ ☐ N/A

C. MATERIAL INFORMATION

1. Common Name: _____
Describe Process Generating Material: ☐ See Attached
2. Material Composition and Contaminants: ☐ See Attached

1.	
2.	
3.	
4.	

Total composition must be equal to or greater than 100% ≥100%
3. State Waste Codes: _____ ☐ N/A
4. Color: _____
5. Physical State at 70°F: ☐ Solid ☐ Liquid ☐ Other: _____
6. Free Liquid Range Percentage: _____ to _____ ☐ N/A
7. pH: _____ to _____ ☐ N/A
8. Strong Odor: ☐ Yes ☐ No Describe: _____
9. Flash Point: ☐ <140°F ☐ 140°–199°F ☐ ≥200° ☐ N/A

E. ANALYTICAL AND OTHER REPRESENTATIVE INFORMATION

1. Analytical attached ☐ Yes
Please identify applicable samples and/or lab reports:
2. Other information attached (such as MSDS)? ☐ Yes

G. GENERATOR CERTIFICATION (PLEASE READ AND CERTIFY BY SIGNATURE)

By signing this EZ Profile™ form, I hereby certify that all information submitted in this and all attached documents contain true and accurate descriptions of this material, and that all relevant information necessary for proper material characterization and to identify known and suspected hazards has been provided. Any analytical data attached was derived from a sample that is representative as defined in 40 CFR 261 – Appendix 1 or by using an equivalent method. All changes occurring in the character of the material (i.e., changes in the process or new analytical) will be identified by the Generator and be disclosed to Waste Management prior to providing the material to Waste Management.

If I am an agent signing on behalf of the Generator, I have confirmed with the Generator that information contained in this Profile is accurate and complete.

Name (Print): _____ Date: _____
Title: _____
Company: _____

B. BILLING INFORMATION☐ SAME AS GENERATOR

1. Billing Name: _____
2. Billing Address: _____
(City, State, ZIP) _____
3. Contact Name: _____
4. Email: _____
5. Phone: _____ 6. Fax: _____
7. WM Hauled? ☐ Yes ☐ No
8. P.O. Number: _____
9. Payment Method: ☐ Credit Account ☐ Cash ☐ Credit Card

D. REGULATORY INFORMATION

1. EPA Hazardous Waste? ☐ Yes* ☐ No
Code: _____
 2. State Hazardous Waste? ☐ Yes ☐ No
Code: _____
 3. Is this material non-hazardous due to Treatment, Delisting, or an Exclusion? ☐ Yes* ☐ No
 4. Contains Underlying Hazardous Constituents? ☐ Yes* ☐ No
 5. Contains benzene **and** subject to Benzene NESHAP? ☐ Yes* ☐ No
 6. Facility remediation subject to 40 CFR 63 GGGGG? ☐ Yes* ☐ No
 7. CERCLA or State-mandated clean-up? ☐ Yes* ☐ No
 8. NRC or State-regulated radioactive or NORM waste? ☐ Yes* ☐ No
- *If Yes, see Addendum (page 2) for additional questions and space.**
9. Contains PCBs? → If Yes, answer a, b and c. ☐ Yes ☐ No
 - a. Regulated by 40 CFR 761? ☐ Yes ☐ No
 - b. Remediation under 40 CFR 761.61 (a)? ☐ Yes ☐ No
 - c. Were PCB imported into the US? ☐ Yes ☐ No
 10. Regulated and/or Untreated Medical/Infectious Waste? ☐ Yes ☐ No
 11. Contains Asbestos? ☐ Yes ☐ No
→ If Yes: ☐ Non-Friable ☐ Non-Friable – Regulated ☐ Friable

F. SHIPPING AND DOT INFORMATION

1. ☐ One-Time Event ☐ Repeat Event/Ongoing Business
2. Estimated Quantity/Unit of Measure: _____
☐ Tons ☐ Yards ☐ Drums ☐ Gallons ☐ Other: _____
3. Container Type and Size: _____
4. USDOT Proper Shipping Name: _____ ☐ N/A

Certification Signature



Only complete this Addendum if prompted by responses on EZ Profile™ (page 1) or to provide additional information. Sections and question numbers correspond to EZ Profile™.

Profile Number: _____

C. MATERIAL INFORMATION

Describe Process Generating Material (Continued from page 1):

If more space is needed, please attach additional pages.

Material Composition and Contaminants (Continued from page 1):

If more space is needed, please attach additional pages.

5.	
6.	
7.	
8.	
9.	
10.	
Total composition must be equal to or greater than 100%	
	≥100%

D. REGULATORY INFORMATION

Only questions with a "Yes" response in Section D on the EZ Profile™ form (page 1) need to be answered here.

1. EPA Hazardous Waste

a. Please list all USEPA listed and characteristic waste code numbers:

b. Is the material subject to the Alternative Debris standards (40 CFR 268.45)?

☐ Yes ☐ No

c. Is the material subject to the Alternative Soil standards (40 CFR 268.49)? → If Yes, complete question 4.

☐ Yes ☐ No

d. Is the material exempt from Subpart CC Controls (40 CFR 264.1083)?

☐ Yes ☐ No

→ If Yes, please check **one** of the following:

☐ Waste meets LDR or treatment exemptions for organics (40 CFR 264.1082(c)(2) or (c)(4))

☐ Waste contains VOCs that average <500 ppmw (CFR 264.1082(c)(1)) – will require annual update.

2. State Hazardous Waste → Please list all state waste codes: _____

3. For material that is Treated, Delisted, or Excluded → Please indicate the category, below:

☐ Delisted Hazardous Waste

☐ Excluded Waste under 40 CFR 261.4 → Specify Exclusion: _____

☐ Treated Hazardous Waste Debris

☐ Treated Characteristic Hazardous Waste → If checked, complete question 4.

4. Underlying Hazardous Constituents → Please list all Underlying Hazardous Constituents:

5. Benzene NESHP → Please include percent water/moisture in chemical composition.

a. Are you a TSDF? → If yes, please complete Benzene NESHP questionnaire. If not, continue.

b. What is your facility's current total annual benzene quantity in Megagrams?

☐ <1 Mg ☐ 1–9.99 Mg ☐ ≥10 Mg

1. Flow weighted average benzene concentration is _____ ppmw.

c. Is this waste soil from remediation at a closed facility?

☐ Yes ☐ No

1. Benzene concentration in remediation waste is _____ ppmw.

d. Has material been treated to remove 99% of the benzene or to achieve <10 ppmw?

☐ Yes ☐ No

e. Is material exempt from controls in accordance with 40 CFR 61.342?

☐ Yes ☐ No

→ If yes, specify exemption: _____

f. Based on your knowledge of your waste and the BWON regulations, do you believe that this waste stream is subject to treatment and control requirements at an off-site TSDF?

☐ Yes ☐ No

6. 40 CFR 63 GGGGG → Does the material contain <500 ppmw VOHAPs at the point of determination?

☐ Yes ☐ No

7. CERCLA or State-Mandated clean up → Please submit the Record of Decision or other documentation with process information to assist others in the evaluation for proper disposal. A "Determination of Acceptability" may be needed for CERCLA wastes not going to a CERCLA approved facility.

8. NRC or state regulated radioactive or NORM Waste → Please identify Isotopes and pCi/g: _____



C. MATERIAL INFORMATION

If more space is needed, please attach additional pages.

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Total composition must be equal to or greater than 100%	
	≥100%

D. REGULATORY INFORMATION

1. EPA Hazardous Waste
- a. Please list all USEPA listed and characteristic waste code numbers (Continued from page 2):



Hillsboro Landfill, Inc
3205 SE Minter Bridge
Hillsboro, OR, 97123
Ph: (503)-640-9427

Original
Ticket# 1572312

Customer Name STRATUSCORP STRATUS CORPORATI Carrier STRATUS CORPORATION STRATUS CORPORAT
Ticket Date 07/09/2020 Vehicle# 16 Volume
Payment Type Credit Account Container
Manual Ticket# Driver AUSTIN
Hauling Ticket# Check#
Route Billing # 0000371
State Waste Code Gen EPA ID N/A
Manifest NA
Destination Grid
PO P19247W
Profile 133439OR (LF01 Soil and Groundwater)
Generator 168-BARBUR BLVD RENTAL BARBUR BLVD RENTAL_8205 SW BARBUR BLVD, PORTLAND OR 9

	Time	Scale	Operator	Inbound	Gross	
In	07/09/2020 13:47:25	Outbound	CJOHNS81		Tare	13700 lb
Out	07/09/2020 14:04:12	Outbound	CJOHNS81		Net	13400 lb
					Tons	300 lb
						0.15

Comments

Consumer Comments? We want to know. Please call.

Product	LD%	Qty	UOM	Rate	Tax	Amount	Origin
1 Special Misc-Tons-	100	0.15	Tons				MULT-IN
2 EVF-P-Standard Env	100		%				

Total Tax
Total Ticket

Driver's Signature

ATTACHMENT C
Laboratory Report

January 02, 2020

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

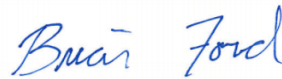
⁸Al

⁹Sc

Hart Crowser - Portland, OR

Sample Delivery Group: L1173777
Samples Received: 12/21/2019
Project Number: 150-026-002
Description: Innovative Housing
Site: INNOVATIVE HOUSING
Report To: Tess Lydick
6420 Macadam Ave.
Suite 100
Portland, OR 97239

Entire Report Reviewed By:



Brian Ford
Project Manager

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



Cp: Cover Page	1
Tc: Table of Contents	2
Ss: Sample Summary	3
Cn: Case Narrative	4
Sr: Sample Results	5
DP-1-14 L1173777-01	5
DP-3-8 L1173777-02	7
DP-1-GW L1173777-03	9
DP-2-GW L1173777-04	11
DP-3-GW L1173777-05	13
DP-4-GW L1173777-06	15
DP-2-9 L1173777-07	17
Qc: Quality Control Summary	19
Total Solids by Method 2540 G-2011	19
Volatile Organic Compounds (GC/MS) by Method 8260C	21
Semi-Volatile Organic Compounds (GC) by Method NWTPH-HCID	31
Gl: Glossary of Terms	34
Al: Accreditations & Locations	35
Sc: Sample Chain of Custody	36



SAMPLE SUMMARY

ONE LAB. NATIONWIDE.



DP-1-14 L1173777-01 Solid

				Collected by Tess Lydick	Collected date/time 12/19/19 10:00	Received date/time 12/21/19 08:00
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1402972	1	12/27/19 18:42	12/27/19 19:03	KDW	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1403601	1	12/19/19 10:00	12/28/19 14:57	ACG	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWT PH-HCID	WG1403207	1	12/27/19 18:17	12/28/19 13:04	FM	Mt. Juliet, TN

¹ Cp

² Tc

³ Ss

DP-3-8 L1173777-02 Solid

				Collected by Tess Lydick	Collected date/time 12/19/19 09:10	Received date/time 12/21/19 08:00
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1402972	1	12/27/19 18:42	12/27/19 19:03	KDW	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1403601	1	12/19/19 09:10	12/28/19 15:17	ACG	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWT PH-HCID	WG1403207	1	12/27/19 18:17	12/28/19 14:39	FM	Mt. Juliet, TN

⁴ Cn

⁵ Sr

⁶ Qc

DP-1-GW L1173777-03 GW

				Collected by Tess Lydick	Collected date/time 12/19/19 11:50	Received date/time 12/21/19 08:00
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1403188	1	12/27/19 18:22	12/27/19 18:22	BMB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWT PH-HCID	WG1402169	1	12/24/19 21:58	12/26/19 12:42	KME	Mt. Juliet, TN

⁷ Gl

⁸ Al

⁹ Sc

DP-2-GW L1173777-04 GW

				Collected by Tess Lydick	Collected date/time 12/19/19 12:10	Received date/time 12/21/19 08:00
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1403188	1	12/27/19 18:42	12/27/19 18:42	BMB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWT PH-HCID	WG1402169	1	12/24/19 21:58	12/26/19 12:55	KME	Mt. Juliet, TN

DP-3-GW L1173777-05 GW

				Collected by Tess Lydick	Collected date/time 12/19/19 11:20	Received date/time 12/21/19 08:00
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1403188	1	12/27/19 19:03	12/27/19 19:03	BMB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWT PH-HCID	WG1402169	1	12/24/19 21:58	12/26/19 13:07	KME	Mt. Juliet, TN

DP-4-GW L1173777-06 GW

				Collected by Tess Lydick	Collected date/time 12/19/19 12:45	Received date/time 12/21/19 08:00
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1403188	1	12/27/19 19:23	12/27/19 19:23	BMB	Mt. Juliet, TN

DP-2-9 L1173777-07 Solid

				Collected by Tess Lydick	Collected date/time 12/19/19 10:40	Received date/time 12/27/19 08:30
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1403992	1	12/31/19 13:56	12/31/19 14:08	KBC	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1403601	1	12/19/19 10:40	12/28/19 15:38	ACG	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWT PH-HCID	WG1404153	1	12/31/19 06:05	01/02/20 00:10	KME	Mt. Juliet, TN

ACCOUNT:

Hart Crowser - Portland, OR

PROJECT:

150-026-002

SDG:

L1173777

DATE/TIME:

01/02/20 17:53

PAGE:

3 of 39



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

Brian Ford
Project Manager

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	73.2		1	12/27/2019 19:03	WG1402972

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Acetone	0.0164	J	0.0137	0.0683	1	12/28/2019 14:57	WG1403601
Acrylonitrile	U		0.00245	0.0137	1	12/28/2019 14:57	WG1403601
Benzene	U		0.000369	0.00137	1	12/28/2019 14:57	WG1403601
Bromobenzene	U		0.000388	0.00137	1	12/28/2019 14:57	WG1403601
Bromodichloromethane	U		0.000347	0.00137	1	12/28/2019 14:57	WG1403601
Bromoform	U		0.000579	0.00137	1	12/28/2019 14:57	WG1403601
Bromomethane	U		0.00183	0.00683	1	12/28/2019 14:57	WG1403601
n-Butylbenzene	U		0.000352	0.00137	1	12/28/2019 14:57	WG1403601
sec-Butylbenzene	U		0.000275	0.00137	1	12/28/2019 14:57	WG1403601
tert-Butylbenzene	U		0.000281	0.00137	1	12/28/2019 14:57	WG1403601
Carbon tetrachloride	U		0.000448	0.00137	1	12/28/2019 14:57	WG1403601
Chlorobenzene	U		0.000290	0.00137	1	12/28/2019 14:57	WG1403601
Chlorodibromomethane	U		0.000510	0.00137	1	12/28/2019 14:57	WG1403601
Chloroethane	U		0.00129	0.00683	1	12/28/2019 14:57	WG1403601
Chloroform	U		0.000313	0.00683	1	12/28/2019 14:57	WG1403601
Chloromethane	U	JO	0.000512	0.00342	1	12/28/2019 14:57	WG1403601
2-Chlorotoluene	U		0.000411	0.00137	1	12/28/2019 14:57	WG1403601
4-Chlorotoluene	U		0.000328	0.00137	1	12/28/2019 14:57	WG1403601
1,2-Dibromo-3-Chloropropane	U		0.00143	0.00683	1	12/28/2019 14:57	WG1403601
1,2-Dibromoethane	U		0.000469	0.00137	1	12/28/2019 14:57	WG1403601
Dibromomethane	U		0.000522	0.00137	1	12/28/2019 14:57	WG1403601
1,2-Dichlorobenzene	U		0.000417	0.00137	1	12/28/2019 14:57	WG1403601
1,3-Dichlorobenzene	U		0.000326	0.00137	1	12/28/2019 14:57	WG1403601
1,4-Dichlorobenzene	U		0.000309	0.00137	1	12/28/2019 14:57	WG1403601
Dichlorodifluoromethane	U		0.000974	0.00683	1	12/28/2019 14:57	WG1403601
1,1-Dichloroethane	U		0.000272	0.00137	1	12/28/2019 14:57	WG1403601
1,2-Dichloroethane	U		0.000362	0.00137	1	12/28/2019 14:57	WG1403601
1,1-Dichloroethene	U		0.000414	0.00137	1	12/28/2019 14:57	WG1403601
cis-1,2-Dichloroethene	U		0.000321	0.00137	1	12/28/2019 14:57	WG1403601
trans-1,2-Dichloroethene	U		0.000361	0.00137	1	12/28/2019 14:57	WG1403601
1,2-Dichloropropane	U		0.000489	0.00137	1	12/28/2019 14:57	WG1403601
1,1-Dichloropropene	U		0.000433	0.00137	1	12/28/2019 14:57	WG1403601
1,3-Dichloropropane	U		0.000283	0.00137	1	12/28/2019 14:57	WG1403601
cis-1,3-Dichloropropene	U		0.000358	0.00137	1	12/28/2019 14:57	WG1403601
trans-1,3-Dichloropropene	U		0.000365	0.00137	1	12/28/2019 14:57	WG1403601
2,2-Dichloropropane	U		0.000381	0.00137	1	12/28/2019 14:57	WG1403601
Di-isopropyl ether	U		0.000339	0.00137	1	12/28/2019 14:57	WG1403601
Ethylbenzene	U		0.000406	0.00137	1	12/28/2019 14:57	WG1403601
Hexachloro-1,3-butadiene	U		0.000467	0.00137	1	12/28/2019 14:57	WG1403601
Isopropylbenzene	U		0.000332	0.00137	1	12/28/2019 14:57	WG1403601
p-Isopropyltoluene	U		0.000279	0.00137	1	12/28/2019 14:57	WG1403601
2-Butanone (MEK)	U		0.00639	0.0137	1	12/28/2019 14:57	WG1403601
Methylene Chloride	U		0.00137	0.00683	1	12/28/2019 14:57	WG1403601
4-Methyl-2-pentanone (MIBK)	U		0.00257	0.0137	1	12/28/2019 14:57	WG1403601
Methyl tert-butyl ether	U		0.000290	0.00137	1	12/28/2019 14:57	WG1403601
Naphthalene	U		0.00137	0.00683	1	12/28/2019 14:57	WG1403601
n-Propylbenzene	U		0.000281	0.00137	1	12/28/2019 14:57	WG1403601
Styrene	U		0.000320	0.00137	1	12/28/2019 14:57	WG1403601
1,1,1,2-Tetrachloroethane	U		0.000361	0.00137	1	12/28/2019 14:57	WG1403601
1,1,2,2-Tetrachloroethane	U		0.000499	0.00137	1	12/28/2019 14:57	WG1403601

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	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
1,1,2-Trichlorotrifluoroethane	U		0.000499	0.00137	1	12/28/2019 14:57	WG1403601
Tetrachloroethene	U		0.000377	0.00137	1	12/28/2019 14:57	WG1403601
Toluene	U		0.000593	0.00683	1	12/28/2019 14:57	WG1403601
1,2,3-Trichlorobenzene	U		0.000418	0.00137	1	12/28/2019 14:57	WG1403601
1,2,4-Trichlorobenzene	U		0.000530	0.00137	1	12/28/2019 14:57	WG1403601
1,1,1-Trichloroethane	U		0.000391	0.00137	1	12/28/2019 14:57	WG1403601
1,1,2-Trichloroethane	U		0.000378	0.00137	1	12/28/2019 14:57	WG1403601
Trichloroethene	U		0.000381	0.00137	1	12/28/2019 14:57	WG1403601
Trichlorofluoromethane	U		0.000522	0.00683	1	12/28/2019 14:57	WG1403601
1,2,3-Trichloropropane	U		0.00101	0.00342	1	12/28/2019 14:57	WG1403601
1,2,4-Trimethylbenzene	U		0.000288	0.00137	1	12/28/2019 14:57	WG1403601
1,2,3-Trimethylbenzene	U		0.000392	0.00137	1	12/28/2019 14:57	WG1403601
Vinyl chloride	U		0.000398	0.00137	1	12/28/2019 14:57	WG1403601
1,3,5-Trimethylbenzene	U		0.000363	0.00137	1	12/28/2019 14:57	WG1403601
Xylenes, Total	U		0.000953	0.00410	1	12/28/2019 14:57	WG1403601
(S) Toluene-d8	103			75.0-131		12/28/2019 14:57	WG1403601
(S) 4-Bromofluorobenzene	103			67.0-138		12/28/2019 14:57	WG1403601
(S) 1,2-Dichloroethane-d4	107			70.0-130		12/28/2019 14:57	WG1403601

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 NWTPH-HCID

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Gasoline (C7-C12)	U		1.82	5.46	1	12/28/2019 13:04	WG1403207
Mineral Spirits	U		1.82	5.46	1	12/28/2019 13:04	WG1403207
Kerosene	U		1.82	5.46	1	12/28/2019 13:04	WG1403207
Diesel (C12-C24)	U		1.82	5.46	1	12/28/2019 13:04	WG1403207
#6 Fuel Oil	U		1.82	5.46	1	12/28/2019 13:04	WG1403207
Hydraulic Fluid	U		1.82	5.46	1	12/28/2019 13:04	WG1403207
Motor Oil (C24-C30)	U		4.55	13.7	1	12/28/2019 13:04	WG1403207
(S) o-Terphenyl	58.5			18.0-148		12/28/2019 13:04	WG1403207



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	75.4		1	12/27/2019 19:03	WG1402972

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Acetone	0.0222	J	0.0133	0.0663	1	12/28/2019 15:17	WG1403601
Acrylonitrile	U		0.00238	0.0133	1	12/28/2019 15:17	WG1403601
Benzene	0.000559	J	0.000358	0.00133	1	12/28/2019 15:17	WG1403601
Bromobenzene	U		0.000377	0.00133	1	12/28/2019 15:17	WG1403601
Bromodichloromethane	U		0.000337	0.00133	1	12/28/2019 15:17	WG1403601
Bromoform	U		0.000563	0.00133	1	12/28/2019 15:17	WG1403601
Bromomethane	U		0.00178	0.00663	1	12/28/2019 15:17	WG1403601
n-Butylbenzene	U		0.000342	0.00133	1	12/28/2019 15:17	WG1403601
sec-Butylbenzene	U		0.000267	0.00133	1	12/28/2019 15:17	WG1403601
tert-Butylbenzene	U		0.000273	0.00133	1	12/28/2019 15:17	WG1403601
Carbon tetrachloride	U		0.000435	0.00133	1	12/28/2019 15:17	WG1403601
Chlorobenzene	U		0.000281	0.00133	1	12/28/2019 15:17	WG1403601
Chlorodibromomethane	U		0.000495	0.00133	1	12/28/2019 15:17	WG1403601
Chloroethane	U		0.00126	0.00663	1	12/28/2019 15:17	WG1403601
Chloroform	U		0.000304	0.00663	1	12/28/2019 15:17	WG1403601
Chloromethane	U	JO	0.000498	0.00332	1	12/28/2019 15:17	WG1403601
2-Chlorotoluene	U		0.000399	0.00133	1	12/28/2019 15:17	WG1403601
4-Chlorotoluene	U		0.000318	0.00133	1	12/28/2019 15:17	WG1403601
1,2-Dibromo-3-Chloropropane	U		0.00139	0.00663	1	12/28/2019 15:17	WG1403601
1,2-Dibromoethane	U		0.000455	0.00133	1	12/28/2019 15:17	WG1403601
Dibromomethane	U		0.000507	0.00133	1	12/28/2019 15:17	WG1403601
1,2-Dichlorobenzene	U		0.000405	0.00133	1	12/28/2019 15:17	WG1403601
1,3-Dichlorobenzene	U		0.000317	0.00133	1	12/28/2019 15:17	WG1403601
1,4-Dichlorobenzene	U		0.000300	0.00133	1	12/28/2019 15:17	WG1403601
Dichlorodifluoromethane	U		0.000946	0.00663	1	12/28/2019 15:17	WG1403601
1,1-Dichloroethane	U		0.000264	0.00133	1	12/28/2019 15:17	WG1403601
1,2-Dichloroethane	U		0.000352	0.00133	1	12/28/2019 15:17	WG1403601
1,1-Dichloroethene	U		0.000402	0.00133	1	12/28/2019 15:17	WG1403601
cis-1,2-Dichloroethene	U		0.000312	0.00133	1	12/28/2019 15:17	WG1403601
trans-1,2-Dichloroethene	U		0.000350	0.00133	1	12/28/2019 15:17	WG1403601
1,2-Dichloropropane	U		0.000475	0.00133	1	12/28/2019 15:17	WG1403601
1,1-Dichloropropene	U		0.000421	0.00133	1	12/28/2019 15:17	WG1403601
1,3-Dichloropropane	U		0.000275	0.00133	1	12/28/2019 15:17	WG1403601
cis-1,3-Dichloropropene	U		0.000348	0.00133	1	12/28/2019 15:17	WG1403601
trans-1,3-Dichloropropene	U		0.000354	0.00133	1	12/28/2019 15:17	WG1403601
2,2-Dichloropropane	U		0.000370	0.00133	1	12/28/2019 15:17	WG1403601
Di-isopropyl ether	U		0.000329	0.00133	1	12/28/2019 15:17	WG1403601
Ethylbenzene	U		0.000394	0.00133	1	12/28/2019 15:17	WG1403601
Hexachloro-1,3-butadiene	U		0.000454	0.00133	1	12/28/2019 15:17	WG1403601
Isopropylbenzene	U		0.000322	0.00133	1	12/28/2019 15:17	WG1403601
p-Isopropyltoluene	U		0.000271	0.00133	1	12/28/2019 15:17	WG1403601
2-Butanone (MEK)	U		0.00621	0.0133	1	12/28/2019 15:17	WG1403601
Methylene Chloride	U		0.00133	0.00663	1	12/28/2019 15:17	WG1403601
4-Methyl-2-pentanone (MIBK)	U		0.00249	0.0133	1	12/28/2019 15:17	WG1403601
Methyl tert-butyl ether	U		0.000281	0.00133	1	12/28/2019 15:17	WG1403601
Naphthalene	U		0.00133	0.00663	1	12/28/2019 15:17	WG1403601
n-Propylbenzene	U		0.000273	0.00133	1	12/28/2019 15:17	WG1403601
Styrene	U		0.000310	0.00133	1	12/28/2019 15:17	WG1403601
1,1,1,2-Tetrachloroethane	U		0.000350	0.00133	1	12/28/2019 15:17	WG1403601
1,1,2,2-Tetrachloroethane	U		0.000484	0.00133	1	12/28/2019 15:17	WG1403601

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	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
1,1,2-Trichlorotrifluoroethane	U		0.000484	0.00133	1	12/28/2019 15:17	WG1403601
Tetrachloroethene	U		0.000366	0.00133	1	12/28/2019 15:17	WG1403601
Toluene	U		0.000576	0.00663	1	12/28/2019 15:17	WG1403601
1,2,3-Trichlorobenzene	U		0.000406	0.00133	1	12/28/2019 15:17	WG1403601
1,2,4-Trichlorobenzene	U		0.000515	0.00133	1	12/28/2019 15:17	WG1403601
1,1,1-Trichloroethane	U		0.000379	0.00133	1	12/28/2019 15:17	WG1403601
1,1,2-Trichloroethane	U		0.000368	0.00133	1	12/28/2019 15:17	WG1403601
Trichloroethene	U		0.000370	0.00133	1	12/28/2019 15:17	WG1403601
Trichlorofluoromethane	U		0.000507	0.00663	1	12/28/2019 15:17	WG1403601
1,2,3-Trichloropropane	U		0.000983	0.00332	1	12/28/2019 15:17	WG1403601
1,2,4-Trimethylbenzene	U		0.000280	0.00133	1	12/28/2019 15:17	WG1403601
1,2,3-Trimethylbenzene	U		0.000381	0.00133	1	12/28/2019 15:17	WG1403601
Vinyl chloride	U		0.000386	0.00133	1	12/28/2019 15:17	WG1403601
1,3,5-Trimethylbenzene	U		0.000353	0.00133	1	12/28/2019 15:17	WG1403601
Xylenes, Total	0.00103	J	0.000926	0.00398	1	12/28/2019 15:17	WG1403601
(S) Toluene-d8	103			75.0-131		12/28/2019 15:17	WG1403601
(S) 4-Bromofluorobenzene	105			67.0-138		12/28/2019 15:17	WG1403601
(S) 1,2-Dichloroethane-d4	111			70.0-130		12/28/2019 15:17	WG1403601

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 NWTPH-HCID

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Gasoline (C7-C12)	U		1.76	5.31	1	12/28/2019 14:39	WG1403207
Mineral Spirits	U		1.76	5.31	1	12/28/2019 14:39	WG1403207
Kerosene	U		1.76	5.31	1	12/28/2019 14:39	WG1403207
Diesel (C12-C24)	U	J3	1.76	5.31	1	12/28/2019 14:39	WG1403207
#6 Fuel Oil	U		1.76	5.31	1	12/28/2019 14:39	WG1403207
Hydraulic Fluid	U		1.76	5.31	1	12/28/2019 14:39	WG1403207
Motor Oil (C24-C30)	U		4.42	13.3	1	12/28/2019 14:39	WG1403207
(S) o-Terphenyl	60.7			18.0-148		12/28/2019 14:39	WG1403207



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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	13.9	J	1.05	25.0	1	12/27/2019 18:22	WG1403188
Acrylonitrile	U		0.873	5.00	1	12/27/2019 18:22	WG1403188
Benzene	0.136	J	0.0896	0.500	1	12/27/2019 18:22	WG1403188
Bromobenzene	U		0.133	0.500	1	12/27/2019 18:22	WG1403188
Bromodichloromethane	U		0.0800	0.500	1	12/27/2019 18:22	WG1403188
Bromochloromethane	U		0.145	0.500	1	12/27/2019 18:22	WG1403188
Bromoform	U		0.186	0.500	1	12/27/2019 18:22	WG1403188
Bromomethane	U		0.157	2.50	1	12/27/2019 18:22	WG1403188
n-Butylbenzene	U		0.143	0.500	1	12/27/2019 18:22	WG1403188
sec-Butylbenzene	U		0.134	0.500	1	12/27/2019 18:22	WG1403188
tert-Butylbenzene	U		0.183	0.500	1	12/27/2019 18:22	WG1403188
Carbon disulfide	U		0.101	0.500	1	12/27/2019 18:22	WG1403188
Carbon tetrachloride	U		0.159	0.500	1	12/27/2019 18:22	WG1403188
Chlorobenzene	U		0.140	0.500	1	12/27/2019 18:22	WG1403188
Chlorodibromomethane	U		0.128	0.500	1	12/27/2019 18:22	WG1403188
Chloroethane	U		0.141	2.50	1	12/27/2019 18:22	WG1403188
Chloroform	U		0.0860	0.500	1	12/27/2019 18:22	WG1403188
Chloromethane	U		0.153	1.25	1	12/27/2019 18:22	WG1403188
2-Chlorotoluene	U		0.111	0.500	1	12/27/2019 18:22	WG1403188
4-Chlorotoluene	U		0.0972	0.500	1	12/27/2019 18:22	WG1403188
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	12/27/2019 18:22	WG1403188
1,2-Dibromoethane	U		0.193	0.500	1	12/27/2019 18:22	WG1403188
Dibromomethane	U		0.117	0.500	1	12/27/2019 18:22	WG1403188
1,2-Dichlorobenzene	U		0.101	0.500	1	12/27/2019 18:22	WG1403188
1,3-Dichlorobenzene	U		0.130	0.500	1	12/27/2019 18:22	WG1403188
1,4-Dichlorobenzene	U		0.121	0.500	1	12/27/2019 18:22	WG1403188
Dichlorodifluoromethane	U		0.127	2.50	1	12/27/2019 18:22	WG1403188
1,1-Dichloroethane	U		0.114	0.500	1	12/27/2019 18:22	WG1403188
1,2-Dichloroethane	U		0.108	0.500	1	12/27/2019 18:22	WG1403188
1,1-Dichloroethene	U		0.188	0.500	1	12/27/2019 18:22	WG1403188
cis-1,2-Dichloroethene	U		0.0933	0.500	1	12/27/2019 18:22	WG1403188
trans-1,2-Dichloroethene	U		0.152	0.500	1	12/27/2019 18:22	WG1403188
1,2-Dichloropropane	U		0.190	0.500	1	12/27/2019 18:22	WG1403188
1,1-Dichloropropene	U		0.128	0.500	1	12/27/2019 18:22	WG1403188
1,3-Dichloropropane	U		0.147	1.00	1	12/27/2019 18:22	WG1403188
cis-1,3-Dichloropropene	U		0.0976	0.500	1	12/27/2019 18:22	WG1403188
trans-1,3-Dichloropropene	U		0.222	0.500	1	12/27/2019 18:22	WG1403188
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	12/27/2019 18:22	WG1403188
2,2-Dichloropropane	U		0.0929	0.500	1	12/27/2019 18:22	WG1403188
Di-isopropyl ether	U		0.0924	0.500	1	12/27/2019 18:22	WG1403188
Ethylbenzene	U		0.158	0.500	1	12/27/2019 18:22	WG1403188
Hexachloro-1,3-butadiene	U		0.157	1.00	1	12/27/2019 18:22	WG1403188
2-Hexanone	U		0.757	5.00	1	12/27/2019 18:22	WG1403188
n-Hexane	U		0.305	5.00	1	12/27/2019 18:22	WG1403188
Iodomethane	U		0.377	10.0	1	12/27/2019 18:22	WG1403188
Isopropylbenzene	U		0.126	0.500	1	12/27/2019 18:22	WG1403188
p-Isopropyltoluene	U		0.138	0.500	1	12/27/2019 18:22	WG1403188
2-Butanone (MEK)	1.55	J	1.28	5.00	1	12/27/2019 18:22	WG1403188
Methylene Chloride	U		1.07	2.50	1	12/27/2019 18:22	WG1403188
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	12/27/2019 18:22	WG1403188
Methyl tert-butyl ether	U		0.102	0.500	1	12/27/2019 18:22	WG1403188
Naphthalene	U		0.174	2.50	1	12/27/2019 18:22	WG1403188
n-Propylbenzene	U		0.162	0.500	1	12/27/2019 18:22	WG1403188
Styrene	U		0.117	0.500	1	12/27/2019 18:22	WG1403188
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	12/27/2019 18:22	WG1403188
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	12/27/2019 18:22	WG1403188

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 ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	12/27/2019 18:22	WG1403188
Tetrachloroethene	U		0.199	0.500	1	12/27/2019 18:22	WG1403188
Toluene	U		0.412	0.500	1	12/27/2019 18:22	WG1403188
1,2,3-Trichlorobenzene	U		0.164	0.500	1	12/27/2019 18:22	WG1403188
1,2,4-Trichlorobenzene	U		0.355	0.500	1	12/27/2019 18:22	WG1403188
1,1,1-Trichloroethane	U		0.0940	0.500	1	12/27/2019 18:22	WG1403188
1,1,2-Trichloroethane	U		0.186	0.500	1	12/27/2019 18:22	WG1403188
Trichloroethene	U		0.153	0.500	1	12/27/2019 18:22	WG1403188
Trichlorofluoromethane	U		0.130	2.50	1	12/27/2019 18:22	WG1403188
1,2,3-Trichloropropane	U		0.247	2.50	1	12/27/2019 18:22	WG1403188
1,2,4-Trimethylbenzene	U		0.123	0.500	1	12/27/2019 18:22	WG1403188
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	12/27/2019 18:22	WG1403188
1,3,5-Trimethylbenzene	U		0.124	0.500	1	12/27/2019 18:22	WG1403188
Vinyl acetate	U	<u>JO</u>	0.645	5.00	1	12/27/2019 18:22	WG1403188
Vinyl chloride	U		0.118	0.500	1	12/27/2019 18:22	WG1403188
Xylenes, Total	U		0.316	1.50	1	12/27/2019 18:22	WG1403188
(S) Toluene-d8	99.6			80.0-120		12/27/2019 18:22	WG1403188
(S) 4-Bromofluorobenzene	97.6			77.0-126		12/27/2019 18:22	WG1403188
(S) 1,2-Dichloroethane-d4	103			70.0-130		12/27/2019 18:22	WG1403188

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 NWTPH-HCID

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline (C7-C12)	U		33.3	100	1	12/26/2019 12:42	WG1402169
Mineral Spirits	U		33.3	100	1	12/26/2019 12:42	WG1402169
Kerosene	U		33.3	100	1	12/26/2019 12:42	WG1402169
Diesel (C12-C24)	36.0	<u>U</u>	33.3	100	1	12/26/2019 12:42	WG1402169
#6 Fuel Oil	U		33.3	100	1	12/26/2019 12:42	WG1402169
Hydraulic Fluid	U		33.3	100	1	12/26/2019 12:42	WG1402169
Motor Oil (C24-C30)	222	<u>U</u>	167	500	1	12/26/2019 12:42	WG1402169
(S) o-Terphenyl	49.3			31.0-160		12/26/2019 12:42	WG1402169



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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U		1.05	25.0	1	12/27/2019 18:42	WG1403188
Acrylonitrile	U		0.873	5.00	1	12/27/2019 18:42	WG1403188
Benzene	U		0.0896	0.500	1	12/27/2019 18:42	WG1403188
Bromobenzene	U		0.133	0.500	1	12/27/2019 18:42	WG1403188
Bromodichloromethane	U		0.0800	0.500	1	12/27/2019 18:42	WG1403188
Bromochloromethane	U		0.145	0.500	1	12/27/2019 18:42	WG1403188
Bromoform	U		0.186	0.500	1	12/27/2019 18:42	WG1403188
Bromomethane	U		0.157	2.50	1	12/27/2019 18:42	WG1403188
n-Butylbenzene	U		0.143	0.500	1	12/27/2019 18:42	WG1403188
sec-Butylbenzene	U		0.134	0.500	1	12/27/2019 18:42	WG1403188
tert-Butylbenzene	U		0.183	0.500	1	12/27/2019 18:42	WG1403188
Carbon disulfide	U		0.101	0.500	1	12/27/2019 18:42	WG1403188
Carbon tetrachloride	U		0.159	0.500	1	12/27/2019 18:42	WG1403188
Chlorobenzene	U		0.140	0.500	1	12/27/2019 18:42	WG1403188
Chlorodibromomethane	U		0.128	0.500	1	12/27/2019 18:42	WG1403188
Chloroethane	U		0.141	2.50	1	12/27/2019 18:42	WG1403188
Chloroform	U		0.0860	0.500	1	12/27/2019 18:42	WG1403188
Chloromethane	U		0.153	1.25	1	12/27/2019 18:42	WG1403188
2-Chlorotoluene	U		0.111	0.500	1	12/27/2019 18:42	WG1403188
4-Chlorotoluene	U		0.0972	0.500	1	12/27/2019 18:42	WG1403188
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	12/27/2019 18:42	WG1403188
1,2-Dibromoethane	U		0.193	0.500	1	12/27/2019 18:42	WG1403188
Dibromomethane	U		0.117	0.500	1	12/27/2019 18:42	WG1403188
1,2-Dichlorobenzene	U		0.101	0.500	1	12/27/2019 18:42	WG1403188
1,3-Dichlorobenzene	U		0.130	0.500	1	12/27/2019 18:42	WG1403188
1,4-Dichlorobenzene	U		0.121	0.500	1	12/27/2019 18:42	WG1403188
Dichlorodifluoromethane	U		0.127	2.50	1	12/27/2019 18:42	WG1403188
1,1-Dichloroethane	U		0.114	0.500	1	12/27/2019 18:42	WG1403188
1,2-Dichloroethane	U		0.108	0.500	1	12/27/2019 18:42	WG1403188
1,1-Dichloroethene	U		0.188	0.500	1	12/27/2019 18:42	WG1403188
cis-1,2-Dichloroethene	U		0.0933	0.500	1	12/27/2019 18:42	WG1403188
trans-1,2-Dichloroethene	U		0.152	0.500	1	12/27/2019 18:42	WG1403188
1,2-Dichloropropane	U		0.190	0.500	1	12/27/2019 18:42	WG1403188
1,1-Dichloropropene	U		0.128	0.500	1	12/27/2019 18:42	WG1403188
1,3-Dichloropropane	U		0.147	1.00	1	12/27/2019 18:42	WG1403188
cis-1,3-Dichloropropene	U		0.0976	0.500	1	12/27/2019 18:42	WG1403188
trans-1,3-Dichloropropene	U		0.222	0.500	1	12/27/2019 18:42	WG1403188
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	12/27/2019 18:42	WG1403188
2,2-Dichloropropane	U		0.0929	0.500	1	12/27/2019 18:42	WG1403188
Di-isopropyl ether	U		0.0924	0.500	1	12/27/2019 18:42	WG1403188
Ethylbenzene	U		0.158	0.500	1	12/27/2019 18:42	WG1403188
Hexachloro-1,3-butadiene	U		0.157	1.00	1	12/27/2019 18:42	WG1403188
2-Hexanone	U		0.757	5.00	1	12/27/2019 18:42	WG1403188
n-Hexane	U		0.305	5.00	1	12/27/2019 18:42	WG1403188
Iodomethane	U		0.377	10.0	1	12/27/2019 18:42	WG1403188
Isopropylbenzene	U		0.126	0.500	1	12/27/2019 18:42	WG1403188
p-Isopropyltoluene	U		0.138	0.500	1	12/27/2019 18:42	WG1403188
2-Butanone (MEK)	U		1.28	5.00	1	12/27/2019 18:42	WG1403188
Methylene Chloride	U		1.07	2.50	1	12/27/2019 18:42	WG1403188
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	12/27/2019 18:42	WG1403188
Methyl tert-butyl ether	U		0.102	0.500	1	12/27/2019 18:42	WG1403188
Naphthalene	U		0.174	2.50	1	12/27/2019 18:42	WG1403188
n-Propylbenzene	U		0.162	0.500	1	12/27/2019 18:42	WG1403188
Styrene	U		0.117	0.500	1	12/27/2019 18:42	WG1403188
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	12/27/2019 18:42	WG1403188
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	12/27/2019 18:42	WG1403188

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ Gl⁸ Al⁹ Sc



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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	12/27/2019 18:42	WG1403188
Tetrachloroethene	U		0.199	0.500	1	12/27/2019 18:42	WG1403188
Toluene	U		0.412	0.500	1	12/27/2019 18:42	WG1403188
1,2,3-Trichlorobenzene	U		0.164	0.500	1	12/27/2019 18:42	WG1403188
1,2,4-Trichlorobenzene	U		0.355	0.500	1	12/27/2019 18:42	WG1403188
1,1,1-Trichloroethane	U		0.0940	0.500	1	12/27/2019 18:42	WG1403188
1,1,2-Trichloroethane	U		0.186	0.500	1	12/27/2019 18:42	WG1403188
Trichloroethene	U		0.153	0.500	1	12/27/2019 18:42	WG1403188
Trichlorofluoromethane	U		0.130	2.50	1	12/27/2019 18:42	WG1403188
1,2,3-Trichloropropane	U		0.247	2.50	1	12/27/2019 18:42	WG1403188
1,2,4-Trimethylbenzene	U		0.123	0.500	1	12/27/2019 18:42	WG1403188
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	12/27/2019 18:42	WG1403188
1,3,5-Trimethylbenzene	U		0.124	0.500	1	12/27/2019 18:42	WG1403188
Vinyl acetate	U	JO	0.645	5.00	1	12/27/2019 18:42	WG1403188
Vinyl chloride	U		0.118	0.500	1	12/27/2019 18:42	WG1403188
Xylenes, Total	U		0.316	1.50	1	12/27/2019 18:42	WG1403188
(S) Toluene-d8	99.1			80.0-120		12/27/2019 18:42	WG1403188
(S) 4-Bromofluorobenzene	97.9			77.0-126		12/27/2019 18:42	WG1403188
(S) 1,2-Dichloroethane-d4	97.8			70.0-130		12/27/2019 18:42	WG1403188

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 NWTPH-HCID

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline (C7-C12)	U		33.3	100	1	12/26/2019 12:55	WG1402169
Mineral Spirits	U		33.3	100	1	12/26/2019 12:55	WG1402169
Kerosene	U		33.3	100	1	12/26/2019 12:55	WG1402169
Diesel (C12-C24)	U		33.3	100	1	12/26/2019 12:55	WG1402169
#6 Fuel Oil	U		33.3	100	1	12/26/2019 12:55	WG1402169
Hydraulic Fluid	U		33.3	100	1	12/26/2019 12:55	WG1402169
Motor Oil (C24-C30)	U		167	500	1	12/26/2019 12:55	WG1402169
(S) o-Terphenyl	56.0			31.0-160		12/26/2019 12:55	WG1402169



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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	5.36	J	1.05	25.0	1	12/27/2019 19:03	WG1403188
Acrylonitrile	U		0.873	5.00	1	12/27/2019 19:03	WG1403188
Benzene	U		0.0896	0.500	1	12/27/2019 19:03	WG1403188
Bromobenzene	U		0.133	0.500	1	12/27/2019 19:03	WG1403188
Bromodichloromethane	U		0.0800	0.500	1	12/27/2019 19:03	WG1403188
Bromochloromethane	U		0.145	0.500	1	12/27/2019 19:03	WG1403188
Bromoform	U		0.186	0.500	1	12/27/2019 19:03	WG1403188
Bromomethane	U		0.157	2.50	1	12/27/2019 19:03	WG1403188
n-Butylbenzene	U		0.143	0.500	1	12/27/2019 19:03	WG1403188
sec-Butylbenzene	U		0.134	0.500	1	12/27/2019 19:03	WG1403188
tert-Butylbenzene	U		0.183	0.500	1	12/27/2019 19:03	WG1403188
Carbon disulfide	U		0.101	0.500	1	12/27/2019 19:03	WG1403188
Carbon tetrachloride	U		0.159	0.500	1	12/27/2019 19:03	WG1403188
Chlorobenzene	U		0.140	0.500	1	12/27/2019 19:03	WG1403188
Chlorodibromomethane	U		0.128	0.500	1	12/27/2019 19:03	WG1403188
Chloroethane	U		0.141	2.50	1	12/27/2019 19:03	WG1403188
Chloroform	U		0.0860	0.500	1	12/27/2019 19:03	WG1403188
Chloromethane	U		0.153	1.25	1	12/27/2019 19:03	WG1403188
2-Chlorotoluene	U		0.111	0.500	1	12/27/2019 19:03	WG1403188
4-Chlorotoluene	U		0.0972	0.500	1	12/27/2019 19:03	WG1403188
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	12/27/2019 19:03	WG1403188
1,2-Dibromoethane	U		0.193	0.500	1	12/27/2019 19:03	WG1403188
Dibromomethane	U		0.117	0.500	1	12/27/2019 19:03	WG1403188
1,2-Dichlorobenzene	U		0.101	0.500	1	12/27/2019 19:03	WG1403188
1,3-Dichlorobenzene	U		0.130	0.500	1	12/27/2019 19:03	WG1403188
1,4-Dichlorobenzene	U		0.121	0.500	1	12/27/2019 19:03	WG1403188
Dichlorodifluoromethane	U		0.127	2.50	1	12/27/2019 19:03	WG1403188
1,1-Dichloroethane	U		0.114	0.500	1	12/27/2019 19:03	WG1403188
1,2-Dichloroethane	U		0.108	0.500	1	12/27/2019 19:03	WG1403188
1,1-Dichloroethene	U		0.188	0.500	1	12/27/2019 19:03	WG1403188
cis-1,2-Dichloroethene	U		0.0933	0.500	1	12/27/2019 19:03	WG1403188
trans-1,2-Dichloroethene	U		0.152	0.500	1	12/27/2019 19:03	WG1403188
1,2-Dichloropropane	U		0.190	0.500	1	12/27/2019 19:03	WG1403188
1,1-Dichloropropene	U		0.128	0.500	1	12/27/2019 19:03	WG1403188
1,3-Dichloropropane	U		0.147	1.00	1	12/27/2019 19:03	WG1403188
cis-1,3-Dichloropropene	U		0.0976	0.500	1	12/27/2019 19:03	WG1403188
trans-1,3-Dichloropropene	U		0.222	0.500	1	12/27/2019 19:03	WG1403188
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	12/27/2019 19:03	WG1403188
2,2-Dichloropropane	U		0.0929	0.500	1	12/27/2019 19:03	WG1403188
Di-isopropyl ether	U		0.0924	0.500	1	12/27/2019 19:03	WG1403188
Ethylbenzene	U		0.158	0.500	1	12/27/2019 19:03	WG1403188
Hexachloro-1,3-butadiene	U		0.157	1.00	1	12/27/2019 19:03	WG1403188
2-Hexanone	U		0.757	5.00	1	12/27/2019 19:03	WG1403188
n-Hexane	U		0.305	5.00	1	12/27/2019 19:03	WG1403188
Iodomethane	U		0.377	10.0	1	12/27/2019 19:03	WG1403188
Isopropylbenzene	U		0.126	0.500	1	12/27/2019 19:03	WG1403188
p-Isopropyltoluene	U		0.138	0.500	1	12/27/2019 19:03	WG1403188
2-Butanone (MEK)	U		1.28	5.00	1	12/27/2019 19:03	WG1403188
Methylene Chloride	U		1.07	2.50	1	12/27/2019 19:03	WG1403188
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	12/27/2019 19:03	WG1403188
Methyl tert-butyl ether	U		0.102	0.500	1	12/27/2019 19:03	WG1403188
Naphthalene	U		0.174	2.50	1	12/27/2019 19:03	WG1403188
n-Propylbenzene	U		0.162	0.500	1	12/27/2019 19:03	WG1403188
Styrene	U		0.117	0.500	1	12/27/2019 19:03	WG1403188
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	12/27/2019 19:03	WG1403188
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	12/27/2019 19:03	WG1403188

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 ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	12/27/2019 19:03	WG1403188
Tetrachloroethene	U		0.199	0.500	1	12/27/2019 19:03	WG1403188
Toluene	U		0.412	0.500	1	12/27/2019 19:03	WG1403188
1,2,3-Trichlorobenzene	U		0.164	0.500	1	12/27/2019 19:03	WG1403188
1,2,4-Trichlorobenzene	U		0.355	0.500	1	12/27/2019 19:03	WG1403188
1,1,1-Trichloroethane	U		0.0940	0.500	1	12/27/2019 19:03	WG1403188
1,1,2-Trichloroethane	U		0.186	0.500	1	12/27/2019 19:03	WG1403188
Trichloroethene	U		0.153	0.500	1	12/27/2019 19:03	WG1403188
Trichlorofluoromethane	U		0.130	2.50	1	12/27/2019 19:03	WG1403188
1,2,3-Trichloropropane	U		0.247	2.50	1	12/27/2019 19:03	WG1403188
1,2,4-Trimethylbenzene	U		0.123	0.500	1	12/27/2019 19:03	WG1403188
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	12/27/2019 19:03	WG1403188
1,3,5-Trimethylbenzene	U		0.124	0.500	1	12/27/2019 19:03	WG1403188
Vinyl acetate	U	<u>JO</u>	0.645	5.00	1	12/27/2019 19:03	WG1403188
Vinyl chloride	U		0.118	0.500	1	12/27/2019 19:03	WG1403188
Xylenes, Total	0.823	<u>J</u>	0.316	1.50	1	12/27/2019 19:03	WG1403188
(S) Toluene-d8	98.4			80.0-120		12/27/2019 19:03	WG1403188
(S) 4-Bromofluorobenzene	98.1			77.0-126		12/27/2019 19:03	WG1403188
(S) 1,2-Dichloroethane-d4	100			70.0-130		12/27/2019 19:03	WG1403188

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 NWTPH-HCID

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline (C7-C12)	U		33.3	100	1	12/26/2019 13:07	WG1402169
Mineral Spirits	U		33.3	100	1	12/26/2019 13:07	WG1402169
Kerosene	U		33.3	100	1	12/26/2019 13:07	WG1402169
Diesel (C12-C24)	U		33.3	100	1	12/26/2019 13:07	WG1402169
#6 Fuel Oil	U		33.3	100	1	12/26/2019 13:07	WG1402169
Hydraulic Fluid	U		33.3	100	1	12/26/2019 13:07	WG1402169
Motor Oil (C24-C30)	U		167	500	1	12/26/2019 13:07	WG1402169
(S) o-Terphenyl	37.0			31.0-160		12/26/2019 13:07	WG1402169



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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	21.1	J	1.05	25.0	1	12/27/2019 19:23	WG1403188
Acrylonitrile	U		0.873	5.00	1	12/27/2019 19:23	WG1403188
Benzene	U		0.0896	0.500	1	12/27/2019 19:23	WG1403188
Bromobenzene	U		0.133	0.500	1	12/27/2019 19:23	WG1403188
Bromodichloromethane	U		0.0800	0.500	1	12/27/2019 19:23	WG1403188
Bromochloromethane	U		0.145	0.500	1	12/27/2019 19:23	WG1403188
Bromoform	U		0.186	0.500	1	12/27/2019 19:23	WG1403188
Bromomethane	U		0.157	2.50	1	12/27/2019 19:23	WG1403188
n-Butylbenzene	U		0.143	0.500	1	12/27/2019 19:23	WG1403188
sec-Butylbenzene	U		0.134	0.500	1	12/27/2019 19:23	WG1403188
tert-Butylbenzene	U		0.183	0.500	1	12/27/2019 19:23	WG1403188
Carbon disulfide	0.289	J	0.101	0.500	1	12/27/2019 19:23	WG1403188
Carbon tetrachloride	U		0.159	0.500	1	12/27/2019 19:23	WG1403188
Chlorobenzene	U		0.140	0.500	1	12/27/2019 19:23	WG1403188
Chlorodibromomethane	U		0.128	0.500	1	12/27/2019 19:23	WG1403188
Chloroethane	U		0.141	2.50	1	12/27/2019 19:23	WG1403188
Chloroform	U		0.0860	0.500	1	12/27/2019 19:23	WG1403188
Chloromethane	U		0.153	1.25	1	12/27/2019 19:23	WG1403188
2-Chlorotoluene	U		0.111	0.500	1	12/27/2019 19:23	WG1403188
4-Chlorotoluene	U		0.0972	0.500	1	12/27/2019 19:23	WG1403188
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	12/27/2019 19:23	WG1403188
1,2-Dibromoethane	U		0.193	0.500	1	12/27/2019 19:23	WG1403188
Dibromomethane	U		0.117	0.500	1	12/27/2019 19:23	WG1403188
1,2-Dichlorobenzene	U		0.101	0.500	1	12/27/2019 19:23	WG1403188
1,3-Dichlorobenzene	U		0.130	0.500	1	12/27/2019 19:23	WG1403188
1,4-Dichlorobenzene	U		0.121	0.500	1	12/27/2019 19:23	WG1403188
Dichlorodifluoromethane	U		0.127	2.50	1	12/27/2019 19:23	WG1403188
1,1-Dichloroethane	U		0.114	0.500	1	12/27/2019 19:23	WG1403188
1,2-Dichloroethane	U		0.108	0.500	1	12/27/2019 19:23	WG1403188
1,1-Dichloroethene	U		0.188	0.500	1	12/27/2019 19:23	WG1403188
cis-1,2-Dichloroethene	U		0.0933	0.500	1	12/27/2019 19:23	WG1403188
trans-1,2-Dichloroethene	U		0.152	0.500	1	12/27/2019 19:23	WG1403188
1,2-Dichloropropane	U		0.190	0.500	1	12/27/2019 19:23	WG1403188
1,1-Dichloropropene	U		0.128	0.500	1	12/27/2019 19:23	WG1403188
1,3-Dichloropropane	U		0.147	1.00	1	12/27/2019 19:23	WG1403188
cis-1,3-Dichloropropene	U		0.0976	0.500	1	12/27/2019 19:23	WG1403188
trans-1,3-Dichloropropene	U		0.222	0.500	1	12/27/2019 19:23	WG1403188
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	12/27/2019 19:23	WG1403188
2,2-Dichloropropane	U		0.0929	0.500	1	12/27/2019 19:23	WG1403188
Di-isopropyl ether	U		0.0924	0.500	1	12/27/2019 19:23	WG1403188
Ethylbenzene	U		0.158	0.500	1	12/27/2019 19:23	WG1403188
Hexachloro-1,3-butadiene	U		0.157	1.00	1	12/27/2019 19:23	WG1403188
2-Hexanone	U		0.757	5.00	1	12/27/2019 19:23	WG1403188
n-Hexane	U		0.305	5.00	1	12/27/2019 19:23	WG1403188
Iodomethane	U		0.377	10.0	1	12/27/2019 19:23	WG1403188
Isopropylbenzene	U		0.126	0.500	1	12/27/2019 19:23	WG1403188
p-Isopropyltoluene	U		0.138	0.500	1	12/27/2019 19:23	WG1403188
2-Butanone (MEK)	3.69	J	1.28	5.00	1	12/27/2019 19:23	WG1403188
Methylene Chloride	U		1.07	2.50	1	12/27/2019 19:23	WG1403188
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	12/27/2019 19:23	WG1403188
Methyl tert-butyl ether	U		0.102	0.500	1	12/27/2019 19:23	WG1403188
Naphthalene	U		0.174	2.50	1	12/27/2019 19:23	WG1403188
n-Propylbenzene	U		0.162	0.500	1	12/27/2019 19:23	WG1403188
Styrene	U		0.117	0.500	1	12/27/2019 19:23	WG1403188
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	12/27/2019 19:23	WG1403188
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	12/27/2019 19:23	WG1403188

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 12/19/19 12:45

L1173777

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	12/27/2019 19:23	WG1403188
Tetrachloroethene	U		0.199	0.500	1	12/27/2019 19:23	WG1403188
Toluene	U		0.412	0.500	1	12/27/2019 19:23	WG1403188
1,2,3-Trichlorobenzene	U		0.164	0.500	1	12/27/2019 19:23	WG1403188
1,2,4-Trichlorobenzene	U		0.355	0.500	1	12/27/2019 19:23	WG1403188
1,1,1-Trichloroethane	U		0.0940	0.500	1	12/27/2019 19:23	WG1403188
1,1,2-Trichloroethane	U		0.186	0.500	1	12/27/2019 19:23	WG1403188
Trichloroethene	U		0.153	0.500	1	12/27/2019 19:23	WG1403188
Trichlorofluoromethane	U		0.130	2.50	1	12/27/2019 19:23	WG1403188
1,2,3-Trichloropropane	U		0.247	2.50	1	12/27/2019 19:23	WG1403188
1,2,4-Trimethylbenzene	U		0.123	0.500	1	12/27/2019 19:23	WG1403188
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	12/27/2019 19:23	WG1403188
1,3,5-Trimethylbenzene	U		0.124	0.500	1	12/27/2019 19:23	WG1403188
Vinyl acetate	U	<u>JO</u>	0.645	5.00	1	12/27/2019 19:23	WG1403188
Vinyl chloride	U		0.118	0.500	1	12/27/2019 19:23	WG1403188
Xylenes, Total	U		0.316	1.50	1	12/27/2019 19:23	WG1403188
(S) Toluene-d8	100			80.0-120		12/27/2019 19:23	WG1403188
(S) 4-Bromofluorobenzene	94.8			77.0-126		12/27/2019 19:23	WG1403188
(S) 1,2-Dichloroethane-d4	99.4			70.0-130		12/27/2019 19:23	WG1403188

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	75.2		1	12/31/2019 14:08	WG1403992

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Acetone	0.0149	J	0.0133	0.0665	1	12/28/2019 15:38	WG1403601
Acrylonitrile	U		0.00238	0.0133	1	12/28/2019 15:38	WG1403601
Benzene	U		0.000359	0.00133	1	12/28/2019 15:38	WG1403601
Bromobenzene	U		0.000378	0.00133	1	12/28/2019 15:38	WG1403601
Bromodichloromethane	U		0.000338	0.00133	1	12/28/2019 15:38	WG1403601
Bromoform	U		0.000564	0.00133	1	12/28/2019 15:38	WG1403601
Bromomethane	U		0.00178	0.00665	1	12/28/2019 15:38	WG1403601
n-Butylbenzene	U		0.000343	0.00133	1	12/28/2019 15:38	WG1403601
sec-Butylbenzene	U		0.000267	0.00133	1	12/28/2019 15:38	WG1403601
tert-Butylbenzene	U		0.000274	0.00133	1	12/28/2019 15:38	WG1403601
Carbon tetrachloride	U		0.000436	0.00133	1	12/28/2019 15:38	WG1403601
Chlorobenzene	U		0.000282	0.00133	1	12/28/2019 15:38	WG1403601
Chlorodibromomethane	U		0.000496	0.00133	1	12/28/2019 15:38	WG1403601
Chloroethane	U		0.00126	0.00665	1	12/28/2019 15:38	WG1403601
Chloroform	U		0.000305	0.00665	1	12/28/2019 15:38	WG1403601
Chloromethane	U	JO	0.000499	0.00332	1	12/28/2019 15:38	WG1403601
2-Chlorotoluene	U		0.000400	0.00133	1	12/28/2019 15:38	WG1403601
4-Chlorotoluene	U		0.000319	0.00133	1	12/28/2019 15:38	WG1403601
1,2-Dibromo-3-Chloropropane	U		0.00140	0.00665	1	12/28/2019 15:38	WG1403601
1,2-Dibromoethane	U		0.000456	0.00133	1	12/28/2019 15:38	WG1403601
Dibromomethane	U		0.000508	0.00133	1	12/28/2019 15:38	WG1403601
1,2-Dichlorobenzene	U		0.000406	0.00133	1	12/28/2019 15:38	WG1403601
1,3-Dichlorobenzene	U		0.000318	0.00133	1	12/28/2019 15:38	WG1403601
1,4-Dichlorobenzene	U		0.000301	0.00133	1	12/28/2019 15:38	WG1403601
Dichlorodifluoromethane	U		0.000948	0.00665	1	12/28/2019 15:38	WG1403601
1,1-Dichloroethane	U		0.000265	0.00133	1	12/28/2019 15:38	WG1403601
1,2-Dichloroethane	U		0.000352	0.00133	1	12/28/2019 15:38	WG1403601
1,1-Dichloroethene	U		0.000403	0.00133	1	12/28/2019 15:38	WG1403601
cis-1,2-Dichloroethene	U		0.000312	0.00133	1	12/28/2019 15:38	WG1403601
trans-1,2-Dichloroethene	U		0.000351	0.00133	1	12/28/2019 15:38	WG1403601
1,2-Dichloropropane	U		0.000476	0.00133	1	12/28/2019 15:38	WG1403601
1,1-Dichloropropene	U		0.000422	0.00133	1	12/28/2019 15:38	WG1403601
1,3-Dichloropropane	U		0.000275	0.00133	1	12/28/2019 15:38	WG1403601
cis-1,3-Dichloropropene	U		0.000348	0.00133	1	12/28/2019 15:38	WG1403601
trans-1,3-Dichloropropene	U		0.000355	0.00133	1	12/28/2019 15:38	WG1403601
2,2-Dichloropropane	U		0.000371	0.00133	1	12/28/2019 15:38	WG1403601
Di-isopropyl ether	U		0.000330	0.00133	1	12/28/2019 15:38	WG1403601
Ethylbenzene	U		0.000395	0.00133	1	12/28/2019 15:38	WG1403601
Hexachloro-1,3-butadiene	U		0.000455	0.00133	1	12/28/2019 15:38	WG1403601
Isopropylbenzene	U		0.000323	0.00133	1	12/28/2019 15:38	WG1403601
p-Isopropyltoluene	U		0.000271	0.00133	1	12/28/2019 15:38	WG1403601
2-Butanone (MEK)	U		0.00622	0.0133	1	12/28/2019 15:38	WG1403601
Methylene Chloride	U		0.00133	0.00665	1	12/28/2019 15:38	WG1403601
4-Methyl-2-pentanone (MIBK)	U		0.00250	0.0133	1	12/28/2019 15:38	WG1403601
Methyl tert-butyl ether	U		0.000282	0.00133	1	12/28/2019 15:38	WG1403601
Naphthalene	U		0.00133	0.00665	1	12/28/2019 15:38	WG1403601
n-Propylbenzene	U		0.000274	0.00133	1	12/28/2019 15:38	WG1403601
Styrene	U		0.000311	0.00133	1	12/28/2019 15:38	WG1403601
1,1,1,2-Tetrachloroethane	U		0.000351	0.00133	1	12/28/2019 15:38	WG1403601
1,1,2,2-Tetrachloroethane	U		0.000485	0.00133	1	12/28/2019 15:38	WG1403601

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 12/19/19 10:40

L1173777

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

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
1,1,2-Trichlorotrifluoroethane	U		0.000485	0.00133	1	12/28/2019 15:38	WG1403601
Tetrachloroethene	U		0.000367	0.00133	1	12/28/2019 15:38	WG1403601
Toluene	U		0.000577	0.00665	1	12/28/2019 15:38	WG1403601
1,2,3-Trichlorobenzene	U		0.000407	0.00133	1	12/28/2019 15:38	WG1403601
1,2,4-Trichlorobenzene	U		0.000516	0.00133	1	12/28/2019 15:38	WG1403601
1,1,1-Trichloroethane	U		0.000380	0.00133	1	12/28/2019 15:38	WG1403601
1,1,2-Trichloroethane	U		0.000368	0.00133	1	12/28/2019 15:38	WG1403601
Trichloroethene	U		0.000371	0.00133	1	12/28/2019 15:38	WG1403601
Trichlorofluoromethane	U		0.000508	0.00665	1	12/28/2019 15:38	WG1403601
1,2,3-Trichloropropane	U		0.000985	0.00332	1	12/28/2019 15:38	WG1403601
1,2,4-Trimethylbenzene	U		0.000281	0.00133	1	12/28/2019 15:38	WG1403601
1,2,3-Trimethylbenzene	U		0.000382	0.00133	1	12/28/2019 15:38	WG1403601
Vinyl chloride	U		0.000387	0.00133	1	12/28/2019 15:38	WG1403601
1,3,5-Trimethylbenzene	U		0.000354	0.00133	1	12/28/2019 15:38	WG1403601
Xylenes, Total	U		0.000928	0.00399	1	12/28/2019 15:38	WG1403601
(S) Toluene-d8	103			75.0-131		12/28/2019 15:38	WG1403601
(S) 4-Bromofluorobenzene	104			67.0-138		12/28/2019 15:38	WG1403601
(S) 1,2-Dichloroethane-d4	109			70.0-130		12/28/2019 15:38	WG1403601

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ Gl⁸ Al⁹ Sc

Semi-Volatile Organic Compounds (GC) by Method NWTPH-HCID

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Gasoline (C7-C12)	U		1.77	5.32	1	01/02/2020 00:10	WG1404153
Mineral Spirits	U		1.77	5.32	1	01/02/2020 00:10	WG1404153
Kerosene	U		1.77	5.32	1	01/02/2020 00:10	WG1404153
Diesel (C12-C24)	U	J3 J6	1.77	5.32	1	01/02/2020 00:10	WG1404153
#6 Fuel Oil	U		1.77	5.32	1	01/02/2020 00:10	WG1404153
Hydraulic Fluid	U		1.77	5.32	1	01/02/2020 00:10	WG1404153
Motor Oil (C24-C30)	U		4.43	13.3	1	01/02/2020 00:10	WG1404153
(S) o-Terphenyl	19.6			18.0-148		01/02/2020 00:10	WG1404153



Total Solids by Method 2540 G-2011

L1173777-01,02

Method Blank (MB)

(MB) R3486515-1 12/27/19 19:03

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

Cp

 ${}^2\text{Tc}$

Ss

Cn

⁸⁷Sr

Qc

L1173722-23 Original Sample (OS) • Duplicate (DUP)

(OS) L1173722-23 12/27/19 19:03 • (DUP) R3486515-3 12/27/19 19:03

	Original Result	DUP Result	Dilution	DUP RPD	<u>DUP Qualifier</u>	DUP RPD Limits
Analyte	%	%		%		%
Total Solids	82.0	81.5	1	0.543		10

G|

Al

Sc

Laboratory Control Sample (LCS)

(LCS) R3486515-2 12/27/19 19:03

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



Total Solids by Method 2540 G-2011

L1173777-07

Method Blank (MB)

(MB) R3487573-1 12/31/19 14:08

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

Laboratory Control Sample (LCS)

(LCS) R3487573-2 12/31/19 14:08

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

Cp

 ${}^2\text{Tc}$

Ss

$$C_n$$
 ^{87}Sr

Qc

GI

 ${}^3\text{Al}$

Sc



Method Blank (MB)

(MB) R3486584-2 12/27/19 11:42

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Acetone	U		1.05	25.0
Acrylonitrile	U		0.873	5.00
Benzene	U		0.0896	0.500
Bromobenzene	U		0.133	0.500
Bromodichloromethane	U		0.0800	0.500
Bromochloromethane	U		0.145	0.500
Bromoform	U		0.186	0.500
Bromomethane	U		0.157	2.50
n-Butylbenzene	U		0.143	0.500
sec-Butylbenzene	U		0.134	0.500
tert-Butylbenzene	U		0.183	0.500
Carbon disulfide	U		0.101	0.500
Carbon tetrachloride	U		0.159	0.500
Chlorobenzene	U		0.140	0.500
Chlorodibromomethane	U		0.128	0.500
Chloroethane	U		0.141	2.50
Chloroform	U		0.0860	0.500
Chloromethane	U		0.153	1.25
2-Chlorotoluene	U		0.111	0.500
4-Chlorotoluene	U		0.0972	0.500
1,2-Dibromo-3-Chloropropane	U		0.325	2.50
1,2-Dibromoethane	U		0.193	0.500
Dibromomethane	U		0.117	0.500
1,2-Dichlorobenzene	U		0.101	0.500
1,3-Dichlorobenzene	U		0.130	0.500
1,4-Dichlorobenzene	U		0.121	0.500
trans-1,4-Dichloro-2-butene	U		0.257	5.00
Dichlorodifluoromethane	U		0.127	2.50
1,1-Dichloroethane	U		0.114	0.500
1,2-Dichloroethane	U		0.108	0.500
1,1-Dichloroethene	U		0.188	0.500
cis-1,2-Dichloroethene	U		0.0933	0.500
trans-1,2-Dichloroethene	U		0.152	0.500
1,2-Dichloropropane	U		0.190	0.500
1,1-Dichloropropene	U		0.128	0.500
1,3-Dichloropropane	U		0.147	1.00
cis-1,3-Dichloropropene	U		0.0976	0.500
trans-1,3-Dichloropropene	U		0.222	0.500
2,2-Dichloropropane	U		0.0929	0.500
Di-isopropyl ether	U		0.0924	0.500

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc



Method Blank (MB)

(MB) R3486584-2 12/27/19 11:42

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Ethylbenzene	U		0.158	0.500
Hexachloro-1,3-butadiene	U		0.157	1.00
2-Hexanone	U		0.757	5.00
n-Hexane	U		0.305	5.00
Iodomethane	U		0.377	10.0
Isopropylbenzene	U		0.126	0.500
p-Isopropyltoluene	U		0.138	0.500
2-Butanone (MEK)	U		1.28	5.00
Methylene Chloride	U		1.07	2.50
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00
Methyl tert-butyl ether	U		0.102	0.500
Naphthalene	U		0.174	2.50
n-Propylbenzene	U		0.162	0.500
Styrene	U		0.117	0.500
1,1,1,2-Tetrachloroethane	U		0.120	0.500
1,1,2,2-Tetrachloroethane	U		0.130	0.500
Tetrachloroethene	0.311	U	0.199	0.500
Toluene	U		0.412	0.500
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500
1,2,3-Trichlorobenzene	U		0.164	0.500
1,2,4-Trichlorobenzene	U		0.355	0.500
1,1,1-Trichloroethane	U		0.0940	0.500
1,1,2-Trichloroethane	U		0.186	0.500
Trichloroethene	U		0.153	0.500
Trichlorofluoromethane	U		0.130	2.50
1,2,3-Trichloropropane	U		0.247	2.50
1,2,3-Trimethylbenzene	U		0.0739	0.500
1,2,4-Trimethylbenzene	U		0.123	0.500
1,3,5-Trimethylbenzene	U		0.124	0.500
Vinyl acetate	U		0.645	5.00
Vinyl chloride	U		0.118	0.500
Xylenes, Total	U		0.316	1.50
(S) Toluene-d8	98.9			80.0-120
(S) 4-Bromofluorobenzene	96.1			77.0-126
(S) 1,2-Dichloroethane-d4	100			70.0-130

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc



Laboratory Control Sample (LCS)

(LCS) R3486584-1 12/27/19 11:01

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	<u>LCS Qualifier</u>
Acetone	25.0	26.5	106	19.0-160	
Acrylonitrile	25.0	24.2	96.8	55.0-149	
Benzene	5.00	4.81	96.2	70.0-123	
Bromobenzene	5.00	4.69	93.8	73.0-121	
Bromodichloromethane	5.00	4.89	97.8	75.0-120	
Bromochloromethane	5.00	4.72	94.4	76.0-122	
Bromoform	5.00	4.62	92.4	68.0-132	
Bromomethane	5.00	5.08	102	10.0-160	
n-Butylbenzene	5.00	4.69	93.8	73.0-125	
sec-Butylbenzene	5.00	4.91	98.2	75.0-125	
tert-Butylbenzene	5.00	4.46	89.2	76.0-124	
Carbon disulfide	5.00	4.61	92.2	61.0-128	
Carbon tetrachloride	5.00	5.07	101	68.0-126	
Chlorobenzene	5.00	4.81	96.2	80.0-121	
Chlorodibromomethane	5.00	4.75	95.0	77.0-125	
Chloroethane	5.00	5.19	104	47.0-150	
Chloroform	5.00	4.78	95.6	73.0-120	
Chloromethane	5.00	4.78	95.6	41.0-142	
2-Chlorotoluene	5.00	4.67	93.4	76.0-123	
4-Chlorotoluene	5.00	4.57	91.4	75.0-122	
1,2-Dibromo-3-Chloropropane	5.00	5.44	109	58.0-134	
1,2-Dibromoethane	5.00	4.73	94.6	80.0-122	
Dibromomethane	5.00	4.59	91.8	80.0-120	
1,2-Dichlorobenzene	5.00	4.88	97.6	79.0-121	
1,3-Dichlorobenzene	5.00	4.85	97.0	79.0-120	
1,4-Dichlorobenzene	5.00	4.67	93.4	79.0-120	
trans-1,4-Dichloro-2-butene	5.00	4.43	88.6	33.0-144	
Dichlorodifluoromethane	5.00	5.60	112	51.0-149	
1,1-Dichloroethane	5.00	4.72	94.4	70.0-126	
1,2-Dichloroethane	5.00	4.74	94.8	70.0-128	
1,1-Dichloroethene	5.00	4.64	92.8	71.0-124	
cis-1,2-Dichloroethene	5.00	4.96	99.2	73.0-120	
trans-1,2-Dichloroethene	5.00	4.80	96.0	73.0-120	
1,2-Dichloropropane	5.00	4.50	90.0	77.0-125	
1,1-Dichloropropene	5.00	4.78	95.6	74.0-126	
1,3-Dichloropropane	5.00	4.80	96.0	80.0-120	
cis-1,3-Dichloropropene	5.00	4.73	94.6	80.0-123	
trans-1,3-Dichloropropene	5.00	4.64	92.8	78.0-124	
2,2-Dichloropropane	5.00	4.71	94.2	58.0-130	
Di-isopropyl ether	5.00	4.85	97.0	58.0-138	

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc



Laboratory Control Sample (LCS)

(LCS) R3486584-1 12/27/19 11:01

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	<u>LCS Qualifier</u>
Ethylbenzene	5.00	4.62	92.4	79.0-123	
Hexachloro-1,3-butadiene	5.00	4.57	91.4	54.0-138	
2-Hexanone	25.0	23.9	95.6	67.0-149	
n-Hexane	5.00	4.40	88.0	57.0-133	
Iodomethane	25.0	23.9	95.6	33.0-147	
Isopropylbenzene	5.00	4.82	96.4	76.0-127	
p-Isopropyltoluene	5.00	4.67	93.4	76.0-125	
2-Butanone (MEK)	25.0	23.4	93.6	44.0-160	
Methylene Chloride	5.00	4.78	95.6	67.0-120	
4-Methyl-2-pentanone (MIBK)	25.0	22.5	90.0	68.0-142	
Methyl tert-butyl ether	5.00	4.89	97.8	68.0-125	
Naphthalene	5.00	4.58	91.6	54.0-135	
n-Propylbenzene	5.00	4.54	90.8	77.0-124	
Styrene	5.00	4.69	93.8	73.0-130	
1,1,1,2-Tetrachloroethane	5.00	4.29	85.8	75.0-125	
1,1,2,2-Tetrachloroethane	5.00	4.16	83.2	65.0-130	
Tetrachloroethene	5.00	5.30	106	72.0-132	
Toluene	5.00	4.67	93.4	79.0-120	
1,1,2-Trichlorotrifluoroethane	5.00	5.13	103	69.0-132	
1,2,3-Trichlorobenzene	5.00	4.31	86.2	50.0-138	
1,2,4-Trichlorobenzene	5.00	4.79	95.8	57.0-137	
1,1,1-Trichloroethane	5.00	4.86	97.2	73.0-124	
1,1,2-Trichloroethane	5.00	4.73	94.6	80.0-120	
Trichloroethene	5.00	5.04	101	78.0-124	
Trichlorofluoromethane	5.00	5.26	105	59.0-147	
1,2,3-Trichloropropane	5.00	4.73	94.6	73.0-130	
1,2,3-Trimethylbenzene	5.00	4.77	95.4	77.0-120	
1,2,4-Trimethylbenzene	5.00	4.71	94.2	76.0-121	
1,3,5-Trimethylbenzene	5.00	4.45	89.0	76.0-122	
Vinyl acetate	25.0	12.5	50.0	11.0-160	
Vinyl chloride	5.00	4.79	95.8	67.0-131	
Xylenes, Total	15.0	14.0	93.3	79.0-123	
(S) Toluene-d8			99.1	80.0-120	
(S) 4-Bromofluorobenzene			96.9	77.0-126	
(S) 1,2-Dichloroethane-d4			99.1	70.0-130	

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc



Method Blank (MB)

(MB) R3486962-3 12/28/19 12:04

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Acetone	U		0.0100	0.0500
Acrylonitrile	U		0.00179	0.0100
Benzene	U		0.000270	0.00100
Bromobenzene	U		0.000284	0.00100
Bromodichloromethane	U		0.000254	0.00100
Bromoform	U		0.000424	0.00100
Bromomethane	U		0.00134	0.00500
n-Butylbenzene	U		0.000258	0.00100
sec-Butylbenzene	U		0.000201	0.00100
tert-Butylbenzene	U		0.000206	0.00100
Carbon tetrachloride	U		0.000328	0.00100
Chlorobenzene	U		0.000212	0.00100
Chlorodibromomethane	U		0.000373	0.00100
Chloroethane	U		0.000946	0.00500
Chloroform	U		0.000229	0.00500
Chloromethane	U		0.000375	0.00250
2-Chlorotoluene	U		0.000301	0.00100
4-Chlorotoluene	U		0.000240	0.00100
1,2-Dibromo-3-Chloropropane	U		0.00105	0.00500
1,2-Dibromoethane	U		0.000343	0.00100
Dibromomethane	U		0.000382	0.00100
1,2-Dichlorobenzene	U		0.000305	0.00100
1,3-Dichlorobenzene	U		0.000239	0.00100
1,4-Dichlorobenzene	U		0.000226	0.00100
Dichlorodifluoromethane	U		0.000713	0.00500
1,1-Dichloroethane	U		0.000199	0.00100
1,2-Dichloroethane	U		0.000265	0.00100
1,1-Dichloroethene	U		0.000303	0.00100
cis-1,2-Dichloroethene	U		0.000235	0.00100
trans-1,2-Dichloroethene	U		0.000264	0.00100
1,2-Dichloropropane	U		0.000358	0.00100
1,1-Dichloropropene	U		0.000317	0.00100
1,3-Dichloropropane	U		0.000207	0.00100
cis-1,3-Dichloropropene	U		0.000262	0.00100
trans-1,3-Dichloropropene	U		0.000267	0.00100
2,2-Dichloropropane	U		0.000279	0.00100
Di-isopropyl ether	U		0.000248	0.00100
Ethylbenzene	U		0.000297	0.00100
Hexachloro-1,3-butadiene	U		0.000342	0.00100
Isopropylbenzene	U		0.000243	0.00100

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc



Method Blank (MB)

(MB) R3486962-3 12/28/19 12:04

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
p-Isopropyltoluene	U		0.000204	0.00100
2-Butanone (MEK)	U		0.00468	0.0100
Methylene Chloride	U		0.00100	0.00500
4-Methyl-2-pentanone (MIBK)	U		0.00188	0.0100
Methyl tert-butyl ether	U		0.000212	0.00100
Naphthalene	U		0.00100	0.00500
n-Propylbenzene	U		0.000206	0.00100
Styrene	U		0.000234	0.00100
1,1,1,2-Tetrachloroethane	U		0.000264	0.00100
1,1,2,2-Tetrachloroethane	U		0.000365	0.00100
Tetrachloroethene	U		0.000276	0.00100
Toluene	U		0.000434	0.00500
1,1,2-Trichlorotrifluoroethane	U		0.000365	0.00100
1,2,3-Trichlorobenzene	U		0.000306	0.00100
1,2,4-Trichlorobenzene	U		0.000388	0.00100
1,1,1-Trichloroethane	U		0.000286	0.00100
1,1,2-Trichloroethane	U		0.000277	0.00100
Trichloroethene	U		0.000279	0.00100
Trichlorofluoromethane	U		0.000382	0.00500
1,2,3-Trichloropropane	U		0.000741	0.00250
1,2,3-Trimethylbenzene	U		0.000287	0.00100
1,2,4-Trimethylbenzene	U		0.000211	0.00100
1,3,5-Trimethylbenzene	U		0.000266	0.00100
Vinyl chloride	U		0.000291	0.00100
Xylenes, Total	U		0.000698	0.00300
(S) Toluene-d8	106			75.0-131
(S) 4-Bromofluorobenzene	104			67.0-138
(S) 1,2-Dichloroethane-d4	94.1			70.0-130

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

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

(LCS) R3486962-1 12/28/19 11:04 • (LCSD) R3486962-2 12/28/19 11:24

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	0.111	0.102	88.8	81.6	10.0-160			8.45	31
Acrylonitrile	0.125	0.148	0.152	118	122	45.0-153			2.67	22
Benzene	0.0250	0.0264	0.0273	106	109	70.0-123			3.35	20
Bromobenzene	0.0250	0.0242	0.0251	96.8	100	73.0-121			3.65	20
Bromodichloromethane	0.0250	0.0274	0.0285	110	114	73.0-121			3.94	20



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

(LCS) R3486962-1 12/28/19 11:04 • (LCSD) R3486962-2 12/28/19 11:24

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCSD Result mg/kg	LCS Rec. %	LCSD Rec. %	Rec. Limits %	<u>LCS Qualifier</u>	<u>LCSD Qualifier</u>	RPD %	RPD Limits %
Bromoform	0.0250	0.0280	0.0288	112	115	64.0-132			2.82	20
Bromomethane	0.0250	0.0214	0.0219	85.6	87.6	56.0-147			2.31	20
n-Butylbenzene	0.0250	0.0266	0.0272	106	109	68.0-135			2.23	20
sec-Butylbenzene	0.0250	0.0273	0.0281	109	112	74.0-130			2.89	20
tert-Butylbenzene	0.0250	0.0252	0.0263	101	105	75.0-127			4.27	20
Carbon tetrachloride	0.0250	0.0294	0.0303	118	121	66.0-128			3.02	20
Chlorobenzene	0.0250	0.0282	0.0290	113	116	76.0-128			2.80	20
Chlorodibromomethane	0.0250	0.0264	0.0275	106	110	74.0-127			4.08	20
Chloroethane	0.0250	0.0214	0.0222	85.6	88.8	61.0-134			3.67	20
Chloroform	0.0250	0.0252	0.0258	101	103	72.0-123			2.35	20
Chloromethane	0.0250	0.0196	0.0196	78.4	78.4	51.0-138			0.000	20
2-Chlorotoluene	0.0250	0.0242	0.0247	96.8	98.8	75.0-124			2.04	20
4-Chlorotoluene	0.0250	0.0267	0.0276	107	110	75.0-124			3.31	20
1,2-Dibromo-3-Chloropropane	0.0250	0.0237	0.0257	94.8	103	59.0-130			8.10	20
1,2-Dibromoethane	0.0250	0.0269	0.0279	108	112	74.0-128			3.65	20
Dibromomethane	0.0250	0.0272	0.0273	109	109	75.0-122			0.367	20
1,2-Dichlorobenzene	0.0250	0.0257	0.0268	103	107	76.0-124			4.19	20
1,3-Dichlorobenzene	0.0250	0.0272	0.0283	109	113	76.0-125			3.96	20
1,4-Dichlorobenzene	0.0250	0.0262	0.0271	105	108	77.0-121			3.38	20
Dichlorodifluoromethane	0.0250	0.0281	0.0282	112	113	43.0-156			0.355	20
1,1-Dichloroethane	0.0250	0.0277	0.0287	111	115	70.0-127			3.55	20
1,2-Dichloroethane	0.0250	0.0267	0.0272	107	109	65.0-131			1.86	20
1,1-Dichloroethene	0.0250	0.0243	0.0247	97.2	98.8	65.0-131			1.63	20
cis-1,2-Dichloroethene	0.0250	0.0277	0.0284	111	114	73.0-125			2.50	20
trans-1,2-Dichloroethene	0.0250	0.0247	0.0257	98.8	103	71.0-125			3.97	20
1,2-Dichloropropane	0.0250	0.0299	0.0307	120	123	74.0-125			2.64	20
1,1-Dichloropropene	0.0250	0.0269	0.0271	108	108	73.0-125			0.741	20
1,3-Dichloropropane	0.0250	0.0268	0.0278	107	111	80.0-125			3.66	20
cis-1,3-Dichloropropene	0.0250	0.0285	0.0291	114	116	76.0-127			2.08	20
trans-1,3-Dichloropropene	0.0250	0.0266	0.0279	106	112	73.0-127			4.77	20
2,2-Dichloropropane	0.0250	0.0304	0.0317	122	127	59.0-135			4.19	20
Di-isopropyl ether	0.0250	0.0242	0.0248	96.8	99.2	60.0-136			2.45	20
Ethylbenzene	0.0250	0.0276	0.0287	110	115	74.0-126			3.91	20
Hexachloro-1,3-butadiene	0.0250	0.0322	0.0328	129	131	57.0-150			1.85	20
Isopropylbenzene	0.0250	0.0295	0.0305	118	122	72.0-127			3.33	20
p-Isopropyltoluene	0.0250	0.0265	0.0275	106	110	72.0-133			3.70	20
2-Butanone (MEK)	0.125	0.121	0.124	96.8	99.2	30.0-160			2.45	24
Methylene Chloride	0.0250	0.0242	0.0247	96.8	98.8	68.0-123			2.04	20
4-Methyl-2-pentanone (MIBK)	0.125	0.119	0.124	95.2	99.2	56.0-143			4.12	20
Methyl tert-butyl ether	0.0250	0.0281	0.0291	112	116	66.0-132			3.50	20

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc



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

(LCS) R3486962-1 12/28/19 11:04 • (LCSD) R3486962-2 12/28/19 11:24

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCSD Result mg/kg	LCS Rec. %	LCSD Rec. %	Rec. Limits %	<u>LCS Qualifier</u>	<u>LCSD Qualifier</u>	RPD %	RPD Limits %
Naphthalene	0.0250	0.0268	0.0289	107	116	59.0-130			7.54	20
n-Propylbenzene	0.0250	0.0258	0.0266	103	106	74.0-126			3.05	20
Styrene	0.0250	0.0284	0.0284	114	114	72.0-127			0.000	20
1,1,1,2-Tetrachloroethane	0.0250	0.0303	0.0314	121	126	74.0-129			3.57	20
1,1,2,2-Tetrachloroethane	0.0250	0.0242	0.0250	96.8	100	68.0-128			3.25	20
Tetrachloroethene	0.0250	0.0308	0.0317	123	127	70.0-136			2.88	20
Toluene	0.0250	0.0266	0.0278	106	111	75.0-121			4.41	20
1,1,2-Trichlorotrifluoroethane	0.0250	0.0251	0.0253	100	101	61.0-139			0.794	20
1,2,3-Trichlorobenzene	0.0250	0.0290	0.0309	116	124	59.0-139			6.34	20
1,2,4-Trichlorobenzene	0.0250	0.0313	0.0323	125	129	62.0-137			3.14	20
1,1,1-Trichloroethane	0.0250	0.0281	0.0287	112	115	69.0-126			2.11	20
1,1,2-Trichloroethane	0.0250	0.0284	0.0294	114	118	78.0-123			3.46	20
Trichloroethene	0.0250	0.0300	0.0306	120	122	76.0-126			1.98	20
Trichlorofluoromethane	0.0250	0.0292	0.0307	117	123	61.0-142			5.01	20
1,2,3-Trichloropropane	0.0250	0.0259	0.0261	104	104	67.0-129			0.769	20
1,2,3-Trimethylbenzene	0.0250	0.0256	0.0264	102	106	74.0-124			3.08	20
1,2,4-Trimethylbenzene	0.0250	0.0274	0.0282	110	113	70.0-126			2.88	20
1,3,5-Trimethylbenzene	0.0250	0.0260	0.0265	104	106	73.0-127			1.90	20
Vinyl chloride	0.0250	0.0240	0.0237	96.0	94.8	63.0-134			1.26	20
Xylenes, Total	0.0750	0.0843	0.0875	112	117	72.0-127			3.73	20
(S) Toluene-d8				104	106	75.0-131				
(S) 4-Bromofluorobenzene				104	106	67.0-138				
(S) 1,2-Dichloroethane-d4				96.3	99.4	70.0-130				

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

L1173777-07 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1173777-07 12/28/19 15:38 • (MS) R3486962-4 12/28/19 15:57 • (MSD) R3486962-5 12/28/19 16:17

Analyte	Spike Amount (dry) mg/kg	Original Result (dry) mg/kg	MS Result (dry) mg/kg	MSD Result (dry) mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	<u>MS Qualifier</u>	<u>MSD Qualifier</u>	RPD %	RPD Limits %
Acetone	0.166	0.0149	0.115	0.115	60.5	60.2	1	10.0-160			0.346	40
Acrylonitrile	0.166	U	0.164	0.156	98.4	93.6	1	10.0-160			5.00	40
Benzene	0.0332	U	0.0253	0.0250	76.0	75.2	1	10.0-149			1.06	37
Bromobenzene	0.0332	U	0.0203	0.0197	61.2	59.2	1	10.0-156			3.32	38
Bromodichloromethane	0.0332	U	0.0253	0.0250	76.0	75.2	1	10.0-143			1.06	37
Bromoform	0.0332	U	0.0275	0.0278	82.8	83.6	1	10.0-146			0.962	36
Bromomethane	0.0332	U	0.0222	0.0217	66.8	65.2	1	10.0-149			2.42	38
n-Butylbenzene	0.0332	U	0.0197	0.0182	59.2	54.8	1	10.0-160			7.72	40
sec-Butylbenzene	0.0332	U	0.0218	0.0211	65.6	63.6	1	10.0-159			3.10	39
tert-Butylbenzene	0.0332	U	0.0210	0.0205	63.2	61.6	1	10.0-156			2.56	39

L1173777-07 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1173777-07 12/28/19 15:38 • (MS) R3486962-4 12/28/19 15:57 • (MSD) R3486962-5 12/28/19 16:17

Analyte	Spike Amount (dry) mg/kg	Original Result (dry) mg/kg	MS Result (dry) mg/kg	MSD Result (dry) mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Carbon tetrachloride	0.0332	U	0.0275	0.0275	82.8	82.8	1	10.0-145			0.000	37
Chlorobenzene	0.0332	U	0.0246	0.0243	74.0	73.2	1	10.0-152			1.09	39
Chlorodibromomethane	0.0332	U	0.0255	0.0245	76.8	73.6	1	10.0-146			4.26	37
Chloroethane	0.0332	U	0.0223	0.0223	67.2	67.2	1	10.0-146			0.000	40
Chloroform	0.0332	U	0.0233	0.0230	70.0	69.2	1	10.0-146			1.15	37
Chloromethane	0.0332	U	0.0215	0.0207	64.8	62.4	1	10.0-159			3.77	37
2-Chlorotoluene	0.0332	U	0.0195	0.0190	58.8	57.2	1	10.0-159			2.76	38
4-Chlorotoluene	0.0332	U	0.0206	0.0203	62.0	61.2	1	10.0-155			1.30	39
1,2-Dibromo-3-Chloropropane	0.0332	U	0.0265	0.0263	79.6	79.2	1	10.0-151			0.504	39
1,2-Dibromoethane	0.0332	U	0.0273	0.0277	82.0	83.2	1	10.0-148			1.45	34
Dibromomethane	0.0332	U	0.0275	0.0275	82.8	82.8	1	10.0-147			0.000	35
1,2-Dichlorobenzene	0.0332	U	0.0198	0.0193	59.6	58.0	1	10.0-155			2.72	37
1,3-Dichlorobenzene	0.0332	U	0.0205	0.0198	61.6	59.6	1	10.0-153			3.30	38
1,4-Dichlorobenzene	0.0332	U	0.0198	0.0190	59.6	57.2	1	10.0-151			4.11	38
Dichlorodifluoromethane	0.0332	U	0.0302	0.0312	90.8	94.0	1	10.0-160			3.46	35
1,1-Dichloroethane	0.0332	U	0.0257	0.0254	77.2	76.4	1	10.0-147			1.04	37
1,2-Dichloroethane	0.0332	U	0.0266	0.0258	80.0	77.6	1	10.0-148			3.05	35
1,1-Dichloroethene	0.0332	U	0.0243	0.0243	73.2	73.2	1	10.0-155			0.000	37
cis-1,2-Dichloroethene	0.0332	U	0.0255	0.0249	76.8	74.8	1	10.0-149			2.64	37
trans-1,2-Dichloroethene	0.0332	U	0.0247	0.0243	74.4	73.2	1	10.0-150			1.63	37
1,2-Dichloropropane	0.0332	U	0.0273	0.0279	82.0	84.0	1	10.0-148			2.41	37
1,1-Dichloropropene	0.0332	U	0.0258	0.0261	77.6	78.4	1	10.0-153			1.03	35
1,3-Dichloropropane	0.0332	U	0.0262	0.0257	78.8	77.2	1	10.0-154			2.05	35
cis-1,3-Dichloropropene	0.0332	U	0.0258	0.0254	77.6	76.4	1	10.0-151			1.56	37
trans-1,3-Dichloropropene	0.0332	U	0.0251	0.0249	75.6	74.8	1	10.0-148			1.06	37
2,2-Dichloropropane	0.0332	U	0.0277	0.0282	83.2	84.8	1	10.0-138			1.90	36
Di-isopropyl ether	0.0332	U	0.0227	0.0225	68.4	67.6	1	10.0-147			1.18	36
Ethylbenzene	0.0332	U	0.0246	0.0250	74.0	75.2	1	10.0-160			1.61	38
Hexachloro-1,3-butadiene	0.0332	U	0.0235	0.0214	70.8	64.4	1	10.0-160			9.47	40
Isopropylbenzene	0.0332	U	0.0261	0.0257	78.4	77.2	1	10.0-155			1.54	38
p-Isopropyltoluene	0.0332	U	0.0210	0.0203	63.2	61.2	1	10.0-160			3.22	40
2-Butanone (MEK)	0.166	U	0.142	0.138	85.6	83.2	1	10.0-160			2.84	40
Methylene Chloride	0.0332	U	0.0231	0.0227	69.6	68.4	1	10.0-141			1.74	37
4-Methyl-2-pentanone (MIBK)	0.166	U	0.149	0.144	89.6	86.4	1	10.0-160			3.64	35
Methyl tert-butyl ether	0.0332	U	0.0290	0.0282	87.2	84.8	1	11.0-147			2.79	35
Naphthalene	0.0332	U	0.0199	0.0190	60.0	57.2	1	10.0-160			4.78	36
n-Propylbenzene	0.0332	U	0.0211	0.0205	63.6	61.6	1	10.0-158			3.19	38
Styrene	0.0332	U	0.0223	0.0218	67.2	65.6	1	10.0-160			2.41	40
1,1,1,2-Tetrachloroethane	0.0332	U	0.0269	0.0269	80.8	80.8	1	10.0-149			0.000	39

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc



L1173777-07 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1173777-07 12/28/19 15:38 • (MS) R3486962-4 12/28/19 15:57 • (MSD) R3486962-5 12/28/19 16:17

Analyte	Spike Amount (dry) mg/kg	Original Result (dry) mg/kg	MS Result (dry) mg/kg	MSD Result (dry) mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
1,1,2,2-Tetrachloroethane	0.0332	U	0.0245	0.0242	73.6	72.8	1	10.0-160			1.09	35
Tetrachloroethene	0.0332	U	0.0299	0.0297	90.0	89.2	1	10.0-156			0.893	39
Toluene	0.0332	U	0.0250	0.0246	75.2	74.0	1	10.0-156			1.61	38
1,1,2-Trichlorotrifluoroethane	0.0332	U	0.0235	0.0241	70.8	72.4	1	10.0-160			2.23	36
1,2,3-Trichlorobenzene	0.0332	U	0.0169	0.0158	50.8	47.6	1	10.0-160			6.50	40
1,2,4-Trichlorobenzene	0.0332	U	0.0176	0.0166	52.8	50.0	1	10.0-160			5.45	40
1,1,1-Trichloroethane	0.0332	U	0.0259	0.0267	78.0	80.4	1	10.0-144			3.03	35
1,1,2-Trichloroethane	0.0332	U	0.0279	0.0275	84.0	82.8	1	10.0-160			1.44	35
Trichloroethene	0.0332	U	0.0278	0.0282	83.6	84.8	1	10.0-156			1.43	38
Trichlorofluoromethane	0.0332	U	0.0261	0.0274	78.4	82.4	1	10.0-160			4.98	40
1,2,3-Trichloropropane	0.0332	U	0.0261	0.0258	78.4	77.6	1	10.0-156			1.03	35
1,2,3-Trimethylbenzene	0.0332	U	0.0203	0.0201	61.2	60.4	1	10.0-160			1.32	36
1,2,4-Trimethylbenzene	0.0332	U	0.0214	0.0209	64.4	62.8	1	10.0-160			2.52	36
1,3,5-Trimethylbenzene	0.0332	U	0.0210	0.0205	63.2	61.6	1	10.0-160			2.56	38
Vinyl chloride	0.0332	U	0.0259	0.0253	78.0	76.0	1	10.0-160			2.60	37
Xylenes, Total	0.0997	U	0.0742	0.0745	74.4	74.7	1	10.0-160			0.358	38
(S) Toluene-d8					106	105		75.0-131				
(S) 4-Bromofluorobenzene					107	107		67.0-138				
(S) 1,2-Dichloroethane-d4					113	108		70.0-130				

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Method Blank (MB)

(MB) R3486014-1 12/26/19 11:13

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Mineral Spirits	U		33.3	100
Kerosene	U		33.3	100
#6 Fuel Oil	U		33.3	100
Hydraulic Fluid	U		33.3	100
Gasoline (C7-C12)	U		33.3	100
Diesel (C12-C24)	U		33.3	100
Motor Oil (C24-C30)	U		83.3	500
(S) o-Terphenyl	59.0			31.0-160

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

(LCS) R3486014-2 12/26/19 11:26 • (LCSD) R3486014-3 12/26/19 11:39

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Diesel (C12-C24)	1500	1200	1140	80.0	76.0	50.0-150			5.13	20
(S) o-Terphenyl				63.0	57.5	31.0-160				

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc



Method Blank (MB)

(MB) R3486570-1 12/28/19 12:13

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Mineral Spirits	U		1.33	4.00
Kerosene	U		1.33	4.00
#6 Fuel Oil	U		1.33	4.00
Hydraulic Fluid	U		1.33	4.00
Gasoline (C7-C12)	U		1.33	4.00
Diesel (C12-C24)	U		1.33	4.00
Motor Oil (C24-C30)	U		3.33	10.0
(S) o-Terphenyl	73.4			18.0-148

Laboratory Control Sample (LCS)

(LCS) R3486570-2 12/28/19 12:26

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Diesel (C12-C24)	50.0	45.6	91.2	50.0-150	
(S) o-Terphenyl			68.9	18.0-148	

L1173777-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1173777-02 12/28/19 14:39 • (MS) R3486570-3 12/28/19 14:51 • (MSD) R3486570-4 12/28/19 15:04

Analyte	Spike Amount (dry) mg/kg	Original Result (dry) mg/kg	MS Result (dry) mg/kg	MSD Result (dry) mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Diesel (C12-C24)	64.9	U	43.3	53.7	66.7	84.0	1	50.0-150		J3	21.6	20
(S) o-Terphenyl					44.8	50.2		18.0-148				

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc



Method Blank (MB)

(MB) R3487533-1 01/01/20 23:45

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Mineral Spirits	U		1.33	4.00
Kerosene	U		1.33	4.00
#6 Fuel Oil	U		1.33	4.00
Hydraulic Fluid	U		1.33	4.00
Gasoline (C7-C12)	U		1.33	4.00
Diesel (C12-C24)	U		1.33	4.00
Motor Oil (C24-C30)	U		3.33	10.0
(S) o-Terphenyl	72.1			18.0-148

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc

Laboratory Control Sample (LCS)

(LCS) R3487533-2 01/01/20 23:57

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Diesel (C12-C24)	50.0	41.6	83.2	50.0-150	
(S) o-Terphenyl			63.5	18.0-148	

L1173777-07 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1173777-07 01/02/20 00:10 • (MS) R3487533-3 01/02/20 00:23 • (MSD) R3487533-4 01/02/20 00:35

Analyte	Spike Amount (dry) mg/kg	Original Result (dry) mg/kg	MS Result (dry) mg/kg	MSD Result (dry) mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Diesel (C12-C24)	63.6	U	30.3	21.8	47.7	34.4	1	50.0-150	J6	J3 J6	32.7	20
(S) o-Terphenyl					33.4	21.9		18.0-148				



Guide to Reading and Understanding Your Laboratory Report

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

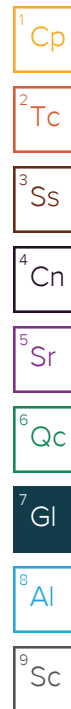
Results Disclaimer - Information that may be provided by the customer, and contained within this report, include Permit Limits, Project Name, Sample ID, Sample Matrix, Sample Preservation, Field Blanks, Field Spikes, Field Duplicates, On-Site Data, Sampling Collection Dates/Times, and Sampling Location.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

Abbreviations and Definitions

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

Qualifier Description

J	The identification of the analyte is acceptable; the reported value is an estimate.
J0	J0: The identification of the analyte is acceptable, but the reported concentration is an estimate. The calibration method criteria.
J3	The associated batch QC was outside the established quality control range for precision.
J6	The sample matrix interfered with the ability to make any accurate determination; spike value is low.





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

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

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

State Accreditations

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

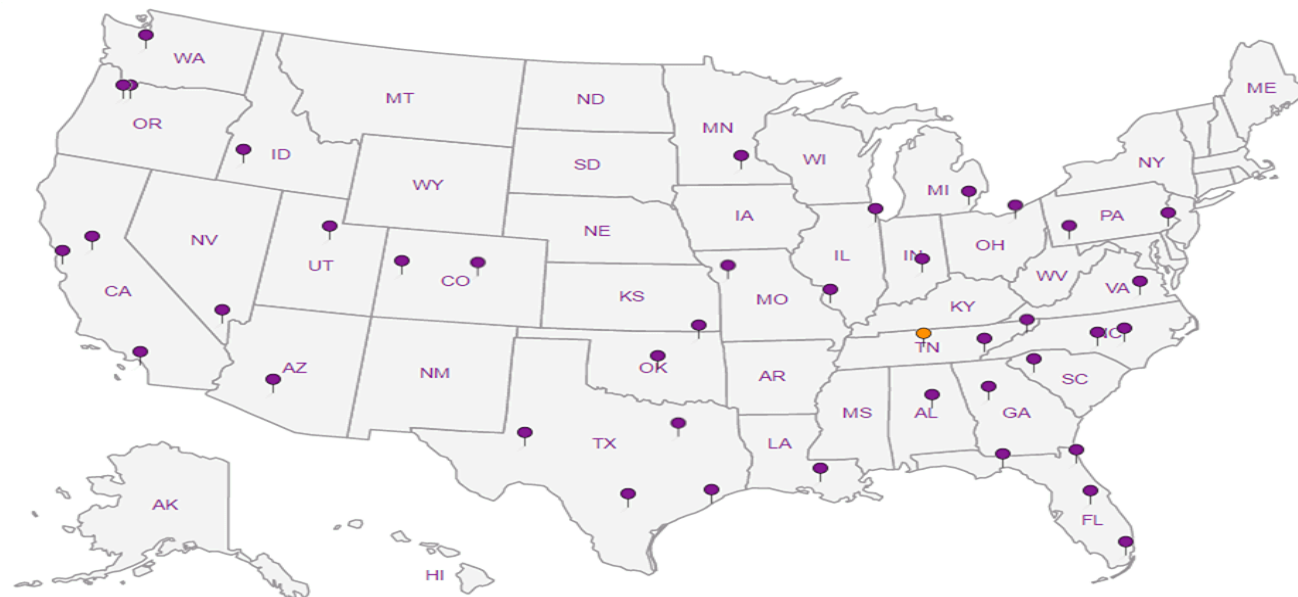
Third Party Federal Accreditations

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

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

Our Locations

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



Hart Crowser - Portland, OR

6420 Macadam Ave.
Suite 100
Portland, OR 97239

Report to:
Tess Lydick

Project
Description: **Innovative Housing**

Phone: **503-620-7284**
Fax:

Collected by (print):

Collected by (signature):

Immediately
Packed on Ice N ☐ Y ☐

Billing Information:

Accounts Payable
6420 Macadam Ave., Ste. 100
Portland, OR 97239

Email To: tess.lydick@hartcrowser.com;
jennifer.kuiper@hartcrowser.com

City/State
Collected:

Please Circle:
PT MT CT ET

Client Project #
150-026-002

Lab Project #
HARCROPOR-150026002

Site/Facility ID #

P.O. #

Rush? (Lab MUST Be Notified)

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

Quote #

Date Results Needed

No.
of
Cntrs

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs
DP-2-24	Grab	SS	24	12/19/19	1055	1
DP-3-24		SS	24	↓	0919	1
DP-3-17		SS	17	↓	0922	1
		SS TL				
		SW TL				
		SW TL				
		SW TL				
		SW TL				
		SW TL				

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

Remarks:

Samples returned via:

☐ UPS ☐ FedEx ☐ Courier

Tracking #

Relinquished by: (Signature)

Date:

Time:

Received by: (Signature)

Trip Blank Received: Yes/ No

Relinquished by: (Signature)

Date:

Time:

Received by: (Signature)

Temp: 42°C Bottles Received: 29

Relinquished by: (Signature)

Date:

Time:

Received for lab by: (Signature)

Date: 12/21/19 Time: 0800

If preservation required by Login: Date/Time

Hold: Condition: NCF / OK

Analysis / Container / Preservative

Chain of Custody Page 2 of 2



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

SDG #

Table #

Acctnum: **HARCROPOR**

Template: **T160615**

Prelogin: **P747197**

PM: **110 - Brian Ford**

PB:

Shipped Via:

Remarks

Sample # (lab only)

Troy Dunlap



Login #: L1173777	Client: HARCROPOR	Date: 12/21/19	Evaluated by: Troy Dunlap
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Non-Conformance (check applicable items)

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

Login Comments: Did not receive DP-2-9 and DP-2-21.

Client informed by:	Call	Email x	Voice Mail	Date: 12/27/19	Time: 1251
TSR Initials: bjf	Client Contact: PMs				

Login Instructions:

Received on Fri 12/27 in a separate shipment.