

June 30, 2020

920.128.02

Weyerhaeuser Company
220 Occidental Avenue South
Seattle, Washington 98104-3120

Attention: Ms. Meline MacCurdy

**SEDIMENT AND SOIL SAMPLING SUMMARY
WEYERHAEUSER SNOQUALMIE MILL POND
SNOQUALMIE, WASHINGTON**

Dear Ms. MacCurdy:

PES Environmental, Inc. (“PES”), is submitting this letter to summarize the sampling and analysis of sediment and soil samples collected in and near the former Weyerhaeuser Company (“Weyerhaeuser”) Snoqualmie Mill Pond (“Mill Pond”) in Snoqualmie, Washington. Following are brief summaries of the sampling scope and procedures, the laboratory analyses, and results.

SCOPE OF WORK

PES implemented the scope of work presented in the PES proposal dated May 11, 2020¹, which was consistent with the scope of work presented in the Terracon proposal dated March 11, 2020.² The scope of work included collecting sediment samples from the Mill Pond (also known as Borst Lake) and soil samples along the former railroad alignment.

PES collected sediment samples from 3 locations in the former Mill Pond and soil samples from 11 locations along the abandoned railroad alignment that runs around the north and east sides of the Mill Pond. Approximate sampling coordinates were estimated prior to the sampling event, and a global positioning system (“GPS”) unit was used to locate the desired sampling locations. Sample locations are shown in Figure 1.

Sediment Sampling

PES collected sediment samples S-1, S-2, and S-3 at the approximate locations of the Washington State Department of Ecology’s (“Ecology’s”) 1993 sediment samples Sed-1, Sed-2, and Sed-3, with S-1 and S-2 collected near the north side of the pond (in the vicinity of former ditch outlets) and S-3 collected on the south side of the pond (in the vicinity of the outlet weir). The locations were accessed using a small boat, and sediment cores were collected using a

¹ PES. 2020. Scope of Work and Budget, Sediment and Soil Sampling and Analysis, Weyerhaeuser Snoqualmie Mill Pond, Snoqualmie, Washington. May 11.

² Terracon. 2020. Proposal for Limited Site Investigation, Weyerhaeuser NR Company – Snoqualmie, 7001 396th Drive southeast, Snoqualmie, King County, Washington 98065. March 11.

handheld sediment corer lined with new acetate sleeves. PES collected the sediment samples from the upper six inches of the sediment cores. Samples were collected for analysis of volatile organic compounds (“VOCs”) using US Environmental Protection Agency (“EPA”) Method 5035. PES collected additional sample volume for analysis of diesel-range organics (“DRO”), oil-range organics (“ORO”), semivolatile organic compounds (“SVOCs”), and polychlorinated biphenyls (“PCBs”). One duplicate sample was collected from S-1 in the Ecology’s Sed-1 sample area. For the duplicate sample, two sediment cores were collected to provide enough soil volume for laboratory analysis. The upper six inches of sediment from the two cores were composited in a decontaminated stainless steel bowl with a decontaminated stainless steel spoon and split into the sample bottles. All samples were placed into laboratory-provided bottles and kept on ice and shipped to Pace Analytical, a Washington-accredited laboratory, under chain-of-custody protocols.

The sediment samples were analyzed for the following parameters:

- DRO and ORO by Ecology Method NWTPH-Dx (including a silica gel cleanup step);
- VOCs by EPA Method 8260;
- SVOCs, including phenols, phthalates, and polycyclic aromatic hydrocarbons (“PAHs”) by EPA Method 8270; and
- PCBs by EPA Method 8082.

PES decontaminated reusable sampling equipment between samples using a non-phosphate soap wash, potable water rinse, and distilled water rinse. Investigation-derived waste was disposed of onto vegetated ground near one of the soil sampling locations.

Soil Sampling

PES collected soil samples at 11 locations along the railroad alignment, including the abandoned trestle, with 1 location at each end of the railroad alignment west of Southeast Snoqualmie Mill Pond Road (near the abandoned trestle) and 9 locations distributed along the southeast portion of the railroad alignment between the northern extent of the Weyerhaeuser property and Southeast Reinig Road. Figure 1 shows the sample locations. Of the nine soil samples collected along the southeast railroad alignment, four were evenly distributed along the western branch line, four were evenly distributed along the main line north of where the western line branches off, and one was located along the main line south of where the western line branches off. PES used a hand auger to collect soil samples at each of the 11 railroad alignment locations from two depths: from ground surface to approximately 1 foot below ground surface (“bgs”) and from approximately 1 to 2 feet bgs.

PES observed the samples for lithologic characterization and field-screened the samples using a photoionization detector (“PID”). Field observations included lithologic descriptions, visual and olfactory observations, and PID readings. Where field screening indicated the presence of potential contamination, PES sampled the soil interval with the highest PID measurement. The soil samples were collected for analysis of DRO, ORO, SVOCs, and PCBs. One duplicate sample was collected from the B-11 sample. For the duplicate samples, soil was composited in a sealed plastic bag after screening with a PID and split into the sample bottles. All samples were placed into laboratory-provided bottles and kept on ice until they were shipped to Pace Analytical under chain-of-custody protocols.

The soil samples were analyzed for the following parameters:

- DRO and ORO by Ecology Method NWTPH-Dx (including a silica gel cleanup step);
- SVOCs, including phenols, phthalates, and PAHs by EPA Method 8270; and
- PCBs by EPA Method 8082.

PES decontaminated reusable sampling equipment between samples using a non-phosphate soap wash, potable water rinse, and distilled water rinse. Investigation derived waste was disposed of in the borehole if possible, or onto vegetated ground.

Data Validation

PES conducted a data quality review of the investigation chemistry data consistent with EPA data review guidelines. Data completeness, holding times, laboratory instrument calibrations, surrogate recoveries, matrix spike and matrix spike duplicates, laboratory control samples, quantitation limits, method blanks, and trip blanks were reviewed. PES assigned the following data qualifiers, as needed:

- J qualifier: the analyte was positively identified. The associated numerical result is an estimate.
- UJ qualifier: the analyte was not detected at or above the reported estimated concentration.

No data were rejected based on the data validation review, and PES judged all the data acceptable for use. The data validation report is included in Attachment A.

RESULTS

Lithologic Results

Sediment sampled from the bottom of Mill Pond was typically black silt and silt with sand, and had an organic odor. The upper six inches contained abundant root organics and pieces of wood. Depth to sediment at the sampling locations ranged between 1.1 to 4.1 feet below the water surface.

Soil encountered beneath the southeastern rail alignment generally consisted of sand, silty sand, gravel, silty gravel, and silt with sand. PES observed black organic-rich soil at the surface of most sample locations. Gravel content typically increased below 0.5 feet bgs, and abundant cobbles were typically encountered with depth. PID readings were typically near 0.0 parts per million (“ppm”), and the maximum PID reading recorded was 3.6 ppm.

Soil encountered beneath the western rail alignment varied at each location. At B-10 adjacent to the Snoqualmie River, the soil consisted of sand and silty sand. At B-11 on the eastern end of the trestle, the soil consisted of silt with sand and sandy silt. PID readings were 0.0 ppm except from 0.5 to 1-foot bgs in B-11 (2.3 ppm).

Analytical Results

Table 1 summarizes sediment sample chemistry results for compounds detected above the laboratory reporting limit or compounds with sediment management standards (“SMS”) criteria. The sediment sample from S-1 contained 3&4-Methylphenol above the sediment cleanup objective and the sediment cleanup screening level for 4-Methylphenol. The duplicate split-sample from S-1 did not contain 3&4-Methylphenol above the laboratory detection limit. No other compounds were detected above the SMS criteria. The laboratory report with the sediment results is included in Attachment A.

Table 2 summarizes soil sample chemistry results for carcinogenic PAHs, PCBs and SVOCs detected above the laboratory reporting limit. No compounds were detected above their applicable Ecology Model Toxics Control Act Method A or B cleanup levels. The laboratory report with the soil results is included in Attachment A.

PES appreciates the opportunity to conduct this work. If you have any questions regarding the sampling, laboratory analyses, or results, please feel free to contact either of us at (206) 529-3980.

Sincerely,

PES ENVIRONMENTAL, INC.



William R. Haldeman, LHG, R.G.
Associate Hydrogeologist



Chris DeBoer
Project Geologist

Attachments: Table 1 – Sediment Sample Chemistry Results
Table 2 – Rail Alignment Soil Sample Chemistry Results
Figure 1 – Sampling Locations
Attachment A – Laboratory Analytical Report and Data Validation Memorandum

Table 1

**Sediment Sample Chemistry Results
Weyerhaeuser Snoqualmie Mill Pond
Snoqualmie, Washington**

Constituent	Units	Concentration							SMS Criterion	
		Sed-1 (2/9/93)	S-1 (6/1/20)	S-1 (dup) (6/1/20)	Sed-2 (2/9/93)	S-2 (6/1/20)	Sed-3 (2/9/93)	S-3 (6/1/20)	Sediment Cleanup Objective	Cleanup Screening Level
Petroleum Hydrocarbons										
Oil and Grease	mg/kg-dry	2,490	—	—	7,500	—	2,320	—	—	—
Diesel Range Organics	mg/kg-dry	—	106	122	—	46.7	—	6.16 U	340	510
Oil Range Organics	mg/kg-dry	—	265	251	—	130	—	15.4 U	3,600	4,400
VOCs										
Acetone	µg/kg-dry	130 U	528	441	300 U	449	98 U	186	—	—
Carbon Disulfide	µg/kg-dry	11 U	—	—	40 U	—	7.5	—	—	—
Chloroform	µg/kg-dry	11 U	10.1 U	10.8 U	40 U	8.20 U	8.2 U	4.16 U	—	—
2-Butanone (MEK)	µg/kg-dry	46 J	404 U	433 U	81 J	328 U	38 J	166 U	—	—
Benzene	µg/kg-dry	11 U	39.4	56.9	40 U	3.28 U	8.2 U	1.66 U	—	—
1,2,4-Trimethylbenzene	µg/kg-dry	—	20.2 U	21.6 U	—	16.4 U	—	11.3	—	—
p-Isopropyltoluene	µg/kg-dry	—	247 J	398 J	—	16.4 U	—	70.7	—	—
Naphthalene	µg/kg-dry	—	50.4 U	54.2 U	—	41.1 U	—	20.8 U	—	—
Toluene	µg/kg-dry	11 U	662 J	1,230 J	9,800 J	38.1	11 U	54.8	—	—
Ethylbenzene	µg/kg-dry	11 U	10.1 U	17.5	20 U	8.20 U	8.2 U	4.28	—	—
Total Xylenes	µg/kg-dry	23 U	26.3 UJ	42.5 J	50 J	21.3 U	16 U	14.5	—	—
BNA Compounds										
Phenol	µg/kg-dry	3,500	1,140 U	1,300 U	970 U	2,060 U	420 U	513 U	120	210
2-Methylphenol	µg/kg-dry	270	1,140 U	1,300 U	490 U	2,060 U	210 U	513 U	—	—
4-Methylphenol	µg/kg-dry	2,400	—	—	2,300	—	590	—	260	2,000
3&4-Methylphenol	µg/kg-dry	—	3,700	1,300 U	—	2,060 U	—	513 U	260	2,000
Benzoic Acid	µg/kg-dry	2,100 U	—	—	4,900 U	—	2,100 U	—	2,900	3,800
Dibenzofuran	µg/kg-dry	400	—	—	490 U	—	210 U	—	200	680
Bis(2-ethylhexyl)phthalate	µg/kg-dry	300 J	1,140 U	1,300 U	590	2,060 U	400	513 U	500	22,000
Carbazole	µg/kg-dry	210 U	—	—	490 U	—	210 U	—	900	1,100
Di-n-butyl phthalate	µg/kg-dry	210 U	1,140 U	1,300 U	570 U	2,060 U	210 U	513 U	380	1,000
Di-n-octyl phthalate	µg/kg-dry	210 U	1,140 U	1,300 U	490 U	2,060 U	210 U	513 U	39	>1,100
Pentachlorophenol	µg/kg-dry	1,000 U	1,140 U	1,300 U	2,400 U	2,060 U	1,000 U	513 U	1,200	>1,200
Endrin Ketone	µg/kg-dry	22 U	—	—	53 U	—	22 U	—	8.5	>8.5
Dieldrin	µg/kg-dry	22 U	—	—	53 U	—	22 U	—	4.9	9.3

Table 1

Sediment Sample Chemistry Results
Weyerhaeuser Snoqualmie Mill Pond
Snoqualmie, Washington

Constituent	Units	Concentration							SMS Criterion				
		Sed-1 (2/9/93)	S-1 (6/1/20)	S-1 (dup) (6/1/20)	Sed-2 (2/9/93)	S-2 (6/1/20)	Sed-3 (2/9/93)	S-3 (6/1/20)	Sediment Cleanup Objective	Cleanup Screening Level			
4,4'-DDD	µg/kg-dry	22	U	—	—	53	U	—	22	U	—	310	860
4,4'-DDT	µg/kg-dry	22	U	—	—	53	U	—	22	U	—	100	8,100
4,4'-DDE	µg/kg-dry	22	U	—	—	53	U	—	22	U	—	21	33
PAHs													
2-Methylnaphthalene	µg/kg-dry	180	J	—	—	490	U	—	170	J	—	—	—
Acenaphene	µg/kg-dry	210	U	114	U	130	U	490	U	206	U	210	U
Acenaphthylene	µg/kg-dry	850		114	U	130	U	490	U	206	U	210	U
Anthracene	µg/kg-dry	240		114	U	130	U	490	U	206	U	210	U
Benzo(a)anthracene	µg/kg-dry	230	J	114	U	130	U	490	U	206	U	210	U
Benzo(a)pyrene	µg/kg-dry	210	J	114	U	130	U	490	U	206	U	210	U
Benzo(ghi)perylene	µg/kg-dry	210	U	114	U	130	U	490	U	206	U	210	U
Chrysene	µg/kg-dry	350	J	114	U	130	U	490	U	206	U	120	J
Dibenz(ah)anthracene	µg/kg-dry	210	U	114	U	130	U	490	U	206	U	210	U
Fluoranthene	µg/kg-dry	2,300		114	U	130	U	620		206	U	270	51.3 U
Fluorene	µg/kg-dry	220		114	U	130	U	490	U	206	U	210	U
Indeno(123-cd)pyrene	µg/kg-dry	210	U	114	U	130	U	490	U	206	U	210	U
Naphthalene	µg/kg-dry	2,000		212		130	U	490	U	206	U	170	J
Phenanthrene	µg/kg-dry	1,700		114	U	130	U	550		206	U	340	51.3 U
Pyrene	µg/kg-dry	1,200	J	114	U	130	U	360	J	206	U	250	51.3 U
Total Benzofluoranthenes	µg/kg-dry	520	J	114	U	130	U	490	U	206	U	210	U
Total PAHs or Maximum Detection Limit		10,000		212		130	U	1,530		206	U	1,320	51.3 U
												Total = 17,000	Total = 30,000
PCBs													
Aroclor - 1016	µg/kg-dry	220	U	117	U	133	U	530	U	105	U	220	U
Aroclor - 1221	µg/kg-dry	440	U	117	U	133	U	1,100	U	105	U	440	U
Aroclor - 1232	µg/kg-dry	220	U	117	U	133	U	530	U	105	U	220	U
Aroclor - 1242	µg/kg-dry	220	U	117	U	133	U	530	U	105	U	220	U
Aroclor - 1248	µg/kg-dry	220	U	58.3	U	66.3	U	530	U	52.6	U	220	U
Aroclor - 1254	µg/kg-dry	220	U	58.3	U	66.3	U	530	U	52.6	U	220	U
Aroclor - 1260	µg/kg-dry	220	U	58.3	U	66.3	U	530	U	52.6	U	220	U
Highest PCB Detection Limit		440	U	117	U	133	U	1,100	U	105	U	440	U
												Total = 110	Total = 2,500

Table 1

Sediment Sample Chemistry Results
Weyerhaeuser Snoqualmie Mill Pond
Snoqualmie, Washington

Constituent	Units	Concentration							SMS Criterion	
		Sed-1 (2/9/93)	S-1 (6/1/20)	S-1 (dup) (6/1/20)	Sed-2 (2/9/93)	S-2 (6/1/20)	Sed-3 (2/9/93)	S-3 (6/1/20)	Sediment Cleanup Objective	Cleanup Screening Level
Metals										
Antimony	mg/kg-dry	3.0	UJ	—	—	3.0	UJ	—	3.0	UJ
Arsenic	mg/kg-dry	26.4	—	—	5.38	—	15.3	—	14	120
Beryllium	mg/kg-dry	0.61	—	—	0.25	—	0.65	—	—	—
Cadmium	mg/kg-dry	1.9	—	—	0.76	P	1.0	P	2.1	5.4
Chromium	mg/kg-dry	48.1	J	—	19.0	J	51.9	J	72	88
Copper	mg/kg-dry	106	J	—	40.2	J	77.0	J	400	1,200
Lead	mg/kg-dry	76.8	—	—	11	—	20.3	—	360	>1,300
Mercury	mg/kg-dry	0.356	—	—	0.074	P	0.10	P	0.66	0.8
Nickel	mg/kg-dry	48.3	—	—	22.1	—	59.6	—	26	110
Selenium	mg/kg-dry	0.40	U	—	0.40	U	0.40	U	11	>20
Silver	mg/kg-dry	1.2	—	—	0.30	U	0.30	U	0.57	1.7
Thallium	mg/kg-dry	0.50	U	—	0.50	U	0.50	U	—	—
Zinc	mg/kg-dry	320	—	—	150	—	153	—	3,200	>4,200
Notes:										
1.	U = the analyte was not detected at or above the reported concentration.									
2.	UJ = the analyte was not detected at or above the reported estimated concentration.									
3.	J = the analyte was positively identified. The associated numerical result is an estimate.									
4.	P = the analyte was detected above the instrument detection limit but below the established minimum quantification limit.									
5.	SMS = Ecology Sediment Management Standards (WAC 173-204).									
6.	Detected results shown in bold font.									
7.	Cells with results exceeding the Sediment Cleanup Objective are highlighted in gray.									
8.	Cells with results exceeding the Cleanup Screening Level are highlighted in yellow.									
9.	Duplicate sample of S-1 labeled D-1.									
10.	Only detected BNA compounds or BNA compounds with an SMS criterion are shown.									

Table 2

Rail Alignment Soil Sample Chemistry Results
Weyerhaeuser Snoqualmie Mill Pond
Snoqualmie, Washington

Constituent	Concentration (mg/kg-dry)						MTCA Cleanup Level (mg/kg)	Basis for Cleanup Level
	B-4-0.5 (5/29/20)	B-5-0.5 (5/29/20)	B-6-0.5 (5/27/20)	B-10-0.5 (5/28/20)	B-11-0.5 (6/1/20)	B-11-0.5 (dup) (6/1/20)		
Petroleum Hydrocarbons								
Diesel Range Organics	5.25 U	16.1	37.6	4.7 U	146 J	37.4 J	2,000	Method A
Oil Range Organics	13.1 U	43.9	86.1	11.8 U	413 J	173 J	2,000	Method A
SVOCs								
Acenaphthylene	0.0874 U	0.0782 U	0.0878	0.0391 U	0.439 U	0.0831 U	–	
Anthracene	0.0874 U	0.0782 U	0.128	0.0391 U	0.439 U	0.195	2,300	Method B vadose zone protective of GW
Benzo(g,h,i)perylene	0.0874 U	0.0878	0.0731 U	0.0391 U	0.439 U	0.0831 U	–	
Fluoranthene	0.125	0.153	0.369	0.0391 U	0.439 U	0.200	630	Method B vadose zone protective of GW
Naphthalene	0.0874 U	0.0782 U	0.0978	0.0391 U	0.439 U	0.0831 U	5.0	Method A
Phenanthrene	0.159	0.100	0.305	0.0391 U	0.439 U	0.0858	–	
Pyrene	0.874 U	0.115	0.259	0.0391 U	0.439 U	0.148	650	Method B vadose zone protective of GW
Carcinogenic PAHs Used for Calculated Total Toxic Equivalent Concentrations (TEQs)								
Benzo(a)anthracene	0.0874 U	0.0782 U	0.0731 U	0.0391 U	0.439 U	0.0831 U	–	
Benzo(b)fluoranthene	0.0874 U	0.205	0.0917	0.0521	0.439 U	0.322	–	
Benzo(k)fluoranthene	0.0874 U	0.0782 U	0.0731 U	0.0391 U	0.439 U	0.0831 U	–	
Benzo(a)pyrene	0.0874 U	0.0969	0.0731 U	0.0391 U	0.439 U	0.0831 U	0.19	Method B
Chrysene	0.0874 U	0.148	0.0775	0.0391 U	0.439 U	0.109	–	
Dibenz(a,h)anthracene	0.0874 U	0.0782 U	0.0731 U	0.0391 U	0.439 U	0.0831 U	–	
Indeno(1,2,3-cd)pyrene	0.0874 U	0.0782 U	0.0731 U	0.0391 U	0.439 U	0.0858	–	
Total TEQ	0.0529	0.1228	0.0502	0.0269	0.266	0.0834	0.19	Method B

Notes:

1. Due to the high number of non-detected SVOCs, only detected SVOCs shown in the table.
2. U = The analyte was not detected at or above the reported result.
3. Method A and B = Ecology Model Toxics Control Act (MTCA) cleanup levels (WAC 173-340).
4. – = no MTCA cleanup level available.
5. GW = groundwater.
6. Detected results shown in bold font; cells with results exceeding the MTCA cleanup level shown highlighted in gray.
7. Total TEQ = total toxic equivalent concentration, which is the adjusted sum of benzo(a)pyrene, benzo(a)anthracene, benzo(b)fluoranthene, benzo(k)fluoranthene, chrysene, dibenz(a,h)anthracene, and indeno(1,2,3-cd)pyrene; only detected compounds used in the calculation, with half the detection limit used for non-detections, consistent with Ecology Implementation Memorandum #10 (Publication No. 15-09-049). Due to elevated detection limits for the B-11-0.5 results and the lower detection limit of the B-11-0.5 duplicate sample, the B-11-0.5 TEQ should be ignored.
8. Method B cleanup level used for benzo(a)pyrene and total TEQ comparison, since the Method A cleanup level (0.1 mg/kg) is based on outdated toxicity values.
9. Duplicate sample of B-11-0.5 labeled D-2.

Table 2

Rail Alignment Soil Sample Chemistry Results
Weyerhaeuser Snoqualmie Mill Pond
Snoqualmie, Washington

Constituent	Concentration (mg/kg-dry)						MTCA Cleanup Level (mg/kg)	Basis for Cleanup Level
	B-4-0.5 (5/29/20)	B-5-0.5 (5/29/20)	B-6-0.5 (5/27/20)	B-10-0.5 (5/28/20)	B-11-0.5 (6/1/20)	B-11-0.5 (dup) (6/1/20)		
PCBs								
Aroclor - 1016	0.0446 U	0.0399 U	0.0373 U	0.0400 U	0.0448 U	0.0424 U	—	
Aroclor - 1221	0.0446 U	0.0399 U	0.0373 U	0.0400 U	0.0448 U	0.0424 U	—	
Aroclor - 1232	0.0446 U	0.0399 U	0.0373 U	0.0400 U	0.0448 U	0.0424 U	—	
Aroclor - 1242	0.0446 U	0.0399 U	0.0373 U	0.0400 U	0.0448 U	0.0424 U	—	
Aroclor - 1248	0.0223 U	0.0200 U	0.0186 U	0.0200 U	0.0224 U	0.0212 U	—	
Aroclor - 1254	0.0223 U	0.0200 U	0.0186 U	0.0200 U	0.0224 U	0.0212 U	—	
Aroclor - 1260	0.0223 U	0.0200 U	0.0186 U	0.0200 U	0.0224 U	0.0212 U	—	
Maximum PCB Detection Limit	0.0446 U	0.0399 U	0.0373 U	0.0400 U	0.0448 U	0.0424 U	Total PCBs = 1	Method A
Notes:								
1. Due to the high number of non-detected SVOCs, only detected SVOCs shown in the table.								
2. U = The analyte was not detected at or above the reported result.								
3. Method A and B = Ecology Model Toxics Control Act (MTCA) cleanup levels (WAC 173-340).								
4. — = no MTCA cleanup level available.								
5. GW = groundwater.								
6. Detected results shown in bold font; cells with results exceeding the MTCA cleanup level shown highlighted in gray.								
7. Total TEQ = total toxic equivalent concentration, which is the adjusted sum of benzo(a)pyrene, benzo(a)anthracene, benzo(b)fluoranthene, benzo(k)fluoranthene, chrysene, dibenz(a,h)anthracene, and indeno(1,2,3-cd)pyrene; only detected compounds used in the calculation, with half the detection limit used for non-detections, consistent with Ecology Implementation Memorandum #10 (Publication No. 15-09-049). Due to elevated detection limits for the B-11-0.5 results and the lower detection limit of the B-11-0.5 duplicate sample, the B-11-0.5 TEQ should be ignored.								
8. Method B cleanup level used for benzo(a)pyrene and total TEQ comparison, since the Method A cleanup level (0.1 mg/kg) is based on outdated toxicity values.								
9. Duplicate sample of B-11-0.5 labeled D-2.								



ATTACHMENT A

Laboratory Analytical Report and Data Validation Memorandum

ANALYTICAL REPORT

June 09, 2020

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

PES Environmental, Inc.- WA

Sample Delivery Group: L1224343
Samples Received: 06/02/2020
Project Number: 920.128.01
Description: Snoqualmie Mill Pond

Report To: Bill Haldeman
1215 Fourth Ave., Suite 1350
Seattle, WA 98161

Entire Report Reviewed By:



Jared Starkey
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	1 Cp
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SAMPLE SUMMARY

ONE LAB. NATIONWIDE.



			Collected by	Collected date/time	Received date/time	
			Chris D	05/29/20 14:50	06/02/20 08:45	
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1487638	1	06/05/20 17:14	06/05/20 17:39	KDW	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-SGT	WG1486835	1	06/04/20 05:49	06/05/20 01:34	KME	Mt. Juliet, TN
Polychlorinated Biphenyls (GC) by Method 8082 A	WG1486847	1	06/07/20 06:32	06/07/20 16:24	MTJ	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270E	WG1486836	2	06/04/20 08:40	06/04/20 23:04	AAT	Mt. Juliet, TN
			Collected by	Collected date/time	Received date/time	
			Chris D	05/29/20 15:00	06/02/20 08:45	
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1487638	1	06/05/20 17:14	06/05/20 17:39	KDW	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-SGT	WG1486835	1	06/04/20 05:49	06/05/20 02:41	KME	Mt. Juliet, TN
Polychlorinated Biphenyls (GC) by Method 8082 A	WG1486847	1	06/07/20 06:32	06/07/20 16:38	MTJ	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270E	WG1486836	2	06/04/20 08:40	06/04/20 23:27	AAT	Mt. Juliet, TN
			Collected by	Collected date/time	Received date/time	
			Chris D	05/27/20 17:15	06/02/20 08:45	
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1487638	1	06/05/20 17:14	06/05/20 17:39	KDW	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-SGT	WG1486835	5	06/04/20 05:49	06/05/20 14:14	KME	Mt. Juliet, TN
Polychlorinated Biphenyls (GC) by Method 8082 A	WG1486847	1	06/07/20 06:32	06/07/20 16:51	MTJ	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270E	WG1486836	2	06/04/20 08:40	06/04/20 21:50	JNJ	Mt. Juliet, TN
			Collected by	Collected date/time	Received date/time	
			Chris D	05/28/20 10:35	06/02/20 08:45	
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1487638	1	06/05/20 17:14	06/05/20 17:39	KDW	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-SGT	WG1486835	1	06/04/20 05:49	06/05/20 01:47	KME	Mt. Juliet, TN
Polychlorinated Biphenyls (GC) by Method 8082 A	WG1486847	1	06/07/20 06:32	06/07/20 17:05	MTJ	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270E	WG1486836	1	06/04/20 08:40	06/04/20 22:41	AAT	Mt. Juliet, TN
			Collected by	Collected date/time	Received date/time	
			Chris D	06/01/20 11:20	06/02/20 08:45	
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1487638	1	06/05/20 17:14	06/05/20 17:39	KDW	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1487880	1.06	06/01/20 11:20	06/05/20 22:32	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-SGT	WG1486835	1	06/04/20 05:49	06/05/20 02:01	KME	Mt. Juliet, TN
Polychlorinated Biphenyls (GC) by Method 8082 A	WG1486847	1	06/07/20 06:32	06/07/20 17:19	MTJ	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270E	WG1486836	2	06/04/20 08:40	06/07/20 13:31	SHG	Mt. Juliet, TN
			Collected by	Collected date/time	Received date/time	
			Chris D	06/01/20 12:10	06/02/20 08:45	
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1487639	1	06/05/20 16:48	06/05/20 17:06	KDW	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1487880	1.08	06/01/20 12:10	06/05/20 22:52	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-SGT	WG1486835	1	06/04/20 05:49	06/05/20 00:40	KME	Mt. Juliet, TN
Polychlorinated Biphenyls (GC) by Method 8082 A	WG1486847	1	06/07/20 06:32	06/07/20 17:33	MTJ	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270E	WG1486836	1	06/04/20 08:40	06/04/20 21:55	AAT	Mt. Juliet, TN



SAMPLE SUMMARY

ONE LAB. NATIONWIDE.



S-1 L1224343-07 Solid

Method	Batch	Dilution	Collected by	Collected date/time	Received date/time
			Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1487639	1	06/05/20 16:48	06/05/20 17:06	KDW
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1487880	1.18	06/01/20 13:20	06/05/20 23:12	DWR
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-SGT	WG1486835	1	06/04/20 05:49	06/05/20 00:54	KME
Polychlorinated Biphenyls (GC) by Method 8082 A	WG1486847	1	06/07/20 06:32	06/07/20 17:47	MTJ
Semi Volatile Organic Compounds (GC/MS) by Method 8270E	WG1486836	1	06/04/20 08:40	06/04/20 22:18	AAT

D-1 L1224343-08 Solid

Method	Batch	Dilution	Collected by	Collected date/time	Received date/time
			Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1487639	1	06/05/20 16:48	06/05/20 17:06	KDW
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1487880	1.11	06/01/20 14:00	06/05/20 23:32	DWR
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-SGT	WG1486835	1	06/04/20 05:49	06/05/20 01:07	KME
Polychlorinated Biphenyls (GC) by Method 8082 A	WG1486847	1	06/07/20 06:32	06/07/20 18:00	MTJ
Semi Volatile Organic Compounds (GC/MS) by Method 8270E	WG1486836	1	06/04/20 08:40	06/04/20 20:22	AAT

D-2 L1224343-09 Solid

Method	Batch	Dilution	Collected by	Collected date/time	Received date/time
			Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1487639	1	06/05/20 16:48	06/05/20 17:06	KDW
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-SGT	WG1486835	5	06/04/20 05:49	06/05/20 14:01	KME
Polychlorinated Biphenyls (GC) by Method 8082 A	WG1486847	1	06/07/20 06:32	06/07/20 18:14	MTJ
Semi Volatile Organic Compounds (GC/MS) by Method 8270E	WG1486836	2	06/04/20 08:40	06/07/20 13:51	SHG

B-11-0.5 L1224343-10 Solid

Method	Batch	Dilution	Collected by	Collected date/time	Received date/time
			Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1487639	1	06/05/20 16:48	06/05/20 17:06	KDW
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-SGT	WG1486835	5	06/04/20 05:49	06/05/20 03:08	KME
Polychlorinated Biphenyls (GC) by Method 8082 A	WG1486847	1	06/07/20 06:32	06/07/20 18:28	MTJ
Semi Volatile Organic Compounds (GC/MS) by Method 8270E	WG1487202	10	06/06/20 15:23	06/08/20 05:41	SHG
Semi Volatile Organic Compounds (GC/MS) by Method 8270E	WG1487202	10	06/06/20 15:23	06/09/20 02:08	JNJ

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



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.

Jared Starkey
Project Manager

- ¹ Cp
- ² Tc
- ³ Ss
- ⁴ Cn
- ⁵ Sr
- ⁶ Qc
- ⁷ GI
- ⁸ AI
- ⁹ SC



Total Solids by Method 2540 G-2011

Analyte	Result %	<u>Qualifier</u>	Dilution	Analysis date / time	<u>Batch</u>
Total Solids	76.2		1	06/05/2020 17:39	WG1487638

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ GI⁸ Al⁹ Sc

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-SGT

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
Diesel Range Organics (DRO)	ND		5.25	1	06/05/2020 01:34	WG1486835
Residual Range Organics (RRO)	ND		13.1	1	06/05/2020 01:34	WG1486835
(S) o-Terphenyl	72.6		18.0-148		06/05/2020 01:34	WG1486835

Polychlorinated Biphenyls (GC) by Method 8082 A

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
PCB 1016	ND		0.0446	1	06/07/2020 16:24	WG1486847
PCB 1221	ND		0.0446	1	06/07/2020 16:24	WG1486847
PCB 1232	ND		0.0446	1	06/07/2020 16:24	WG1486847
PCB 1242	ND		0.0446	1	06/07/2020 16:24	WG1486847
PCB 1248	ND		0.0223	1	06/07/2020 16:24	WG1486847
PCB 1254	ND		0.0223	1	06/07/2020 16:24	WG1486847
PCB 1260	ND		0.0223	1	06/07/2020 16:24	WG1486847
(S) Decachlorobiphenyl	82.2		10.0-135		06/07/2020 16:24	WG1486847
(S) Tetrachloro-m-xylene	79.1		10.0-139		06/07/2020 16:24	WG1486847

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

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
Acenaphthene	ND		0.0874	2	06/04/2020 23:04	WG1486836
Acenaphthylene	ND		0.0874	2	06/04/2020 23:04	WG1486836
Anthracene	ND		0.0874	2	06/04/2020 23:04	WG1486836
Benzo(a)anthracene	ND		0.0874	2	06/04/2020 23:04	WG1486836
Benzo(b)fluoranthene	ND		0.0874	2	06/04/2020 23:04	WG1486836
Benzo(k)fluoranthene	ND		0.0874	2	06/04/2020 23:04	WG1486836
Benzo(g,h,i)perylene	ND		0.0874	2	06/04/2020 23:04	WG1486836
Benzo(a)pyrene	ND		0.0874	2	06/04/2020 23:04	WG1486836
Bis(2-chlorethoxy)methane	ND		0.874	2	06/04/2020 23:04	WG1486836
Bis(2-chloroethyl)ether	ND		0.874	2	06/04/2020 23:04	WG1486836
2,2-Oxybis(1-Chloropropane)	ND		0.874	2	06/04/2020 23:04	WG1486836
4-Bromophenyl-phenylether	ND		0.874	2	06/04/2020 23:04	WG1486836
2-Chloronaphthalene	ND		0.0874	2	06/04/2020 23:04	WG1486836
4-Chlorophenyl-phenylether	ND		0.874	2	06/04/2020 23:04	WG1486836
Chrysene	ND		0.0874	2	06/04/2020 23:04	WG1486836
Dibenz(a,h)anthracene	ND		0.0874	2	06/04/2020 23:04	WG1486836
3,3-Dichlorobenzidine	ND		0.874	2	06/04/2020 23:04	WG1486836
2,4-Dinitrotoluene	ND		0.874	2	06/04/2020 23:04	WG1486836
2,6-Dinitrotoluene	ND		0.874	2	06/04/2020 23:04	WG1486836
Fluoranthene	0.125		0.0874	2	06/04/2020 23:04	WG1486836
Fluorene	ND		0.0874	2	06/04/2020 23:04	WG1486836
Hexachlorobenzene	ND		0.874	2	06/04/2020 23:04	WG1486836
Hexachloro-1,3-butadiene	ND		0.874	2	06/04/2020 23:04	WG1486836
Hexachlorocyclopentadiene	ND		0.874	2	06/04/2020 23:04	WG1486836
Hexachloroethane	ND		0.874	2	06/04/2020 23:04	WG1486836
Indeno(1,2,3-cd)pyrene	ND		0.0874	2	06/04/2020 23:04	WG1486836
Isophorone	ND		0.874	2	06/04/2020 23:04	WG1486836
Naphthalene	ND		0.0874	2	06/04/2020 23:04	WG1486836
Nitrobenzene	ND		0.874	2	06/04/2020 23:04	WG1486836

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ GI⁸ Al⁹ Sc



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

Analyte	Result (dry) mg/kg	Qualifier	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch	
n-Nitrosodimethylamine	ND		0.874	2	06/04/2020 23:04	WG1486836	¹ Cp
n-Nitrosodiphenylamine	ND		0.874	2	06/04/2020 23:04	WG1486836	² Tc
n-Nitrosodi-n-propylamine	ND		0.874	2	06/04/2020 23:04	WG1486836	³ Ss
Phenanthrene	0.159		0.0874	2	06/04/2020 23:04	WG1486836	⁴ Cn
Pyridine	ND		0.874	2	06/04/2020 23:04	WG1486836	⁵ Sr
Benzylbutyl phthalate	ND		0.874	2	06/04/2020 23:04	WG1486836	⁶ Qc
Bis(2-ethylhexyl)phthalate	ND		0.874	2	06/04/2020 23:04	WG1486836	⁷ Gl
Di-n-butyl phthalate	ND		0.874	2	06/04/2020 23:04	WG1486836	⁸ Al
Diethyl phthalate	ND		0.874	2	06/04/2020 23:04	WG1486836	⁹ Sc
Dimethyl phthalate	ND		0.874	2	06/04/2020 23:04	WG1486836	
Di-n-octyl phthalate	ND		0.874	2	06/04/2020 23:04	WG1486836	
Pyrene	ND		0.0874	2	06/04/2020 23:04	WG1486836	
1,2,4-Trichlorobenzene	ND		0.874	2	06/04/2020 23:04	WG1486836	
4-Chloro-3-methylphenol	ND		0.874	2	06/04/2020 23:04	WG1486836	
2-Chlorophenol	ND		0.874	2	06/04/2020 23:04	WG1486836	
2,4-Dichlorophenol	ND		0.874	2	06/04/2020 23:04	WG1486836	
2,4-Dimethylphenol	ND		0.874	2	06/04/2020 23:04	WG1486836	
4,6-Dinitro-2-methylphenol	ND		0.874	2	06/04/2020 23:04	WG1486836	
2,4-Dinitrophenol	ND		0.874	2	06/04/2020 23:04	WG1486836	
2-Methylphenol	ND		0.874	2	06/04/2020 23:04	WG1486836	
3&4-Methyl Phenol	ND		0.874	2	06/04/2020 23:04	WG1486836	
2-Nitrophenol	ND		0.874	2	06/04/2020 23:04	WG1486836	
4-Nitrophenol	ND		0.874	2	06/04/2020 23:04	WG1486836	
Pentachlorophenol	ND		0.874	2	06/04/2020 23:04	WG1486836	
Phenol	ND		0.874	2	06/04/2020 23:04	WG1486836	
2,4,6-Trichlorophenol	ND		0.874	2	06/04/2020 23:04	WG1486836	
2,4,5-Trichlorophenol	ND		0.874	2	06/04/2020 23:04	WG1486836	
(S) 2-Fluorophenol	36.4		12.0-120		06/04/2020 23:04	WG1486836	
(S) Phenol-d5	36.0		10.0-120		06/04/2020 23:04	WG1486836	
(S) Nitrobenzene-d5	29.1		10.0-122		06/04/2020 23:04	WG1486836	
(S) 2-Fluorobiphenyl	37.0		15.0-120		06/04/2020 23:04	WG1486836	
(S) 2,4,6-Tribromophenol	48.3		10.0-127		06/04/2020 23:04	WG1486836	
(S) p-Terphenyl-d14	49.7		10.0-120		06/04/2020 23:04	WG1486836	



Total Solids by Method 2540 G-2011

Analyte	Result %	<u>Qualifier</u>	Dilution	Analysis date / time	<u>Batch</u>
Total Solids	85.2		1	06/05/2020 17:39	WG1487638

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ GI⁸ Al⁹ Sc

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-SGT

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
Diesel Range Organics (DRO)	16.1		4.70	1	06/05/2020 02:41	WG1486835
Residual Range Organics (RRO)	43.9		11.7	1	06/05/2020 02:41	WG1486835
(S) o-Terphenyl	68.3		18.0-148		06/05/2020 02:41	WG1486835

Polychlorinated Biphenyls (GC) by Method 8082 A

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
PCB 1016	ND		0.0399	1	06/07/2020 16:38	WG1486847
PCB 1221	ND		0.0399	1	06/07/2020 16:38	WG1486847
PCB 1232	ND		0.0399	1	06/07/2020 16:38	WG1486847
PCB 1242	ND		0.0399	1	06/07/2020 16:38	WG1486847
PCB 1248	ND		0.0200	1	06/07/2020 16:38	WG1486847
PCB 1254	ND		0.0200	1	06/07/2020 16:38	WG1486847
PCB 1260	ND		0.0200	1	06/07/2020 16:38	WG1486847
(S) Decachlorobiphenyl	82.2		10.0-135		06/07/2020 16:38	WG1486847
(S) Tetrachloro-m-xylene	74.5		10.0-139		06/07/2020 16:38	WG1486847

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

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
Acenaphthene	ND		0.0782	2	06/04/2020 23:27	WG1486836
Acenaphthylene	ND		0.0782	2	06/04/2020 23:27	WG1486836
Anthracene	ND		0.0782	2	06/04/2020 23:27	WG1486836
Benzo(a)anthracene	ND		0.0782	2	06/04/2020 23:27	WG1486836
Benzo(b)fluoranthene	0.205		0.0782	2	06/04/2020 23:27	WG1486836
Benzo(k)fluoranthene	ND		0.0782	2	06/04/2020 23:27	WG1486836
Benzo(g,h,i)perylene	0.0878		0.0782	2	06/04/2020 23:27	WG1486836
Benzo(a)pyrene	0.0970		0.0782	2	06/04/2020 23:27	WG1486836
Bis(2-chlorethoxy)methane	ND		0.782	2	06/04/2020 23:27	WG1486836
Bis(2-chloroethyl)ether	ND		0.782	2	06/04/2020 23:27	WG1486836
2,2-Oxybis(1-Chloropropane)	ND		0.782	2	06/04/2020 23:27	WG1486836
4-Bromophenyl-phenylether	ND		0.782	2	06/04/2020 23:27	WG1486836
2-Chloronaphthalene	ND		0.0782	2	06/04/2020 23:27	WG1486836
4-Chlorophenyl-phenylether	ND		0.782	2	06/04/2020 23:27	WG1486836
Chrysene	0.148		0.0782	2	06/04/2020 23:27	WG1486836
Dibenz(a,h)anthracene	ND		0.0782	2	06/04/2020 23:27	WG1486836
3,3-Dichlorobenzidine	ND		0.782	2	06/04/2020 23:27	WG1486836
2,4-Dinitrotoluene	ND		0.782	2	06/04/2020 23:27	WG1486836
2,6-Dinitrotoluene	ND		0.782	2	06/04/2020 23:27	WG1486836
Fluoranthene	0.153		0.0782	2	06/04/2020 23:27	WG1486836
Fluorene	ND		0.0782	2	06/04/2020 23:27	WG1486836
Hexachlorobenzene	ND		0.782	2	06/04/2020 23:27	WG1486836
Hexachloro-1,3-butadiene	ND		0.782	2	06/04/2020 23:27	WG1486836
Hexachlorocyclopentadiene	ND		0.782	2	06/04/2020 23:27	WG1486836
Hexachloroethane	ND		0.782	2	06/04/2020 23:27	WG1486836
Indeno(1,2,3-cd)pyrene	ND		0.0782	2	06/04/2020 23:27	WG1486836
Isophorone	ND		0.782	2	06/04/2020 23:27	WG1486836
Naphthalene	ND		0.0782	2	06/04/2020 23:27	WG1486836
Nitrobenzene	ND		0.782	2	06/04/2020 23:27	WG1486836

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ GI⁸ Al⁹ Sc



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

Analyte	Result (dry) mg/kg	Qualifier	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch	
n-Nitrosodimethylamine	ND		0.782	2	06/04/2020 23:27	WG1486836	¹ Cp
n-Nitrosodiphenylamine	ND		0.782	2	06/04/2020 23:27	WG1486836	² Tc
n-Nitrosodi-n-propylamine	ND		0.782	2	06/04/2020 23:27	WG1486836	³ Ss
Phenanthrene	0.100		0.0782	2	06/04/2020 23:27	WG1486836	⁴ Cn
Pyridine	ND		0.782	2	06/04/2020 23:27	WG1486836	⁵ Sr
Benzylbutyl phthalate	ND		0.782	2	06/04/2020 23:27	WG1486836	⁶ Qc
Bis(2-ethylhexyl)phthalate	ND		0.782	2	06/04/2020 23:27	WG1486836	⁷ Gl
Di-n-butyl phthalate	ND		0.782	2	06/04/2020 23:27	WG1486836	⁸ Al
Diethyl phthalate	ND		0.782	2	06/04/2020 23:27	WG1486836	
Dimethyl phthalate	ND		0.782	2	06/04/2020 23:27	WG1486836	
Di-n-octyl phthalate	ND		0.782	2	06/04/2020 23:27	WG1486836	
Pyrene	0.115		0.0782	2	06/04/2020 23:27	WG1486836	
1,2,4-Trichlorobenzene	ND		0.782	2	06/04/2020 23:27	WG1486836	
4-Chloro-3-methylphenol	ND		0.782	2	06/04/2020 23:27	WG1486836	
2-Chlorophenol	ND		0.782	2	06/04/2020 23:27	WG1486836	
2,4-Dichlorophenol	ND		0.782	2	06/04/2020 23:27	WG1486836	
2,4-Dimethylphenol	ND		0.782	2	06/04/2020 23:27	WG1486836	
4,6-Dinitro-2-methylphenol	ND		0.782	2	06/04/2020 23:27	WG1486836	
2,4-Dinitrophenol	ND		0.782	2	06/04/2020 23:27	WG1486836	
2-Methylphenol	ND		0.782	2	06/04/2020 23:27	WG1486836	
3&4-Methyl Phenol	ND		0.782	2	06/04/2020 23:27	WG1486836	
2-Nitrophenol	ND		0.782	2	06/04/2020 23:27	WG1486836	
4-Nitrophenol	ND		0.782	2	06/04/2020 23:27	WG1486836	
Pentachlorophenol	ND		0.782	2	06/04/2020 23:27	WG1486836	
Phenol	ND		0.782	2	06/04/2020 23:27	WG1486836	
2,4,6-Trichlorophenol	ND		0.782	2	06/04/2020 23:27	WG1486836	
2,4,5-Trichlorophenol	ND		0.782	2	06/04/2020 23:27	WG1486836	
(S) 2-Fluorophenol	48.2		12.0-120		06/04/2020 23:27	WG1486836	
(S) Phenol-d5	44.0		10.0-120		06/04/2020 23:27	WG1486836	
(S) Nitrobenzene-d5	38.3		10.0-122		06/04/2020 23:27	WG1486836	
(S) 2-Fluorobiphenyl	46.1		15.0-120		06/04/2020 23:27	WG1486836	
(S) 2,4,6-Tribromophenol	49.7		10.0-127		06/04/2020 23:27	WG1486836	
(S) p-Terphenyl-d14	47.6		10.0-120		06/04/2020 23:27	WG1486836	



Total Solids by Method 2540 G-2011

Analyte	Result %	<u>Qualifier</u>	Dilution	Analysis date / time	<u>Batch</u>
Total Solids	91.2		1	06/05/2020 17:39	WG1487638

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ GI⁸ Al⁹ Sc

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-SGT

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
Diesel Range Organics (DRO)	37.6		21.9	5	06/05/2020 14:14	WG1486835
Residual Range Organics (RRO)	86.1		54.8	5	06/05/2020 14:14	WG1486835
(S) o-Terphenyl	72.4		18.0-148		06/05/2020 14:14	WG1486835

Polychlorinated Biphenyls (GC) by Method 8082 A

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
PCB 1016	ND		0.0373	1	06/07/2020 16:51	WG1486847
PCB 1221	ND		0.0373	1	06/07/2020 16:51	WG1486847
PCB 1232	ND		0.0373	1	06/07/2020 16:51	WG1486847
PCB 1242	ND		0.0373	1	06/07/2020 16:51	WG1486847
PCB 1248	ND		0.0186	1	06/07/2020 16:51	WG1486847
PCB 1254	ND		0.0186	1	06/07/2020 16:51	WG1486847
PCB 1260	ND		0.0186	1	06/07/2020 16:51	WG1486847
(S) Decachlorobiphenyl	82.6		10.0-135		06/07/2020 16:51	WG1486847
(S) Tetrachloro-m-xylene	76.4		10.0-139		06/07/2020 16:51	WG1486847

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

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
Acenaphthene	ND		0.0731	2	06/04/2020 21:50	WG1486836
Acenaphthylene	0.0878		0.0731	2	06/04/2020 21:50	WG1486836
Anthracene	0.128		0.0731	2	06/04/2020 21:50	WG1486836
Benzo(a)anthracene	ND		0.0731	2	06/04/2020 21:50	WG1486836
Benzo(b)fluoranthene	0.0917		0.0731	2	06/04/2020 21:50	WG1486836
Benzo(k)fluoranthene	ND		0.0731	2	06/04/2020 21:50	WG1486836
Benzo(g,h,i)perylene	ND		0.0731	2	06/04/2020 21:50	WG1486836
Benzo(a)pyrene	ND		0.0731	2	06/04/2020 21:50	WG1486836
Bis(2-chlorethoxy)methane	ND		0.731	2	06/04/2020 21:50	WG1486836
Bis(2-chloroethyl)ether	ND		0.731	2	06/04/2020 21:50	WG1486836
2,2-Oxybis(1-Chloropropane)	ND		0.731	2	06/04/2020 21:50	WG1486836
4-Bromophenyl-phenylether	ND		0.731	2	06/04/2020 21:50	WG1486836
2-Chloronaphthalene	ND		0.0731	2	06/04/2020 21:50	WG1486836
4-Chlorophenyl-phenylether	ND		0.731	2	06/04/2020 21:50	WG1486836
Chrysene	0.0775		0.0731	2	06/04/2020 21:50	WG1486836
Dibenz(a,h)anthracene	ND		0.0731	2	06/04/2020 21:50	WG1486836
3,3-Dichlorobenzidine	ND		0.731	2	06/04/2020 21:50	WG1486836
2,4-Dinitrotoluene	ND		0.731	2	06/04/2020 21:50	WG1486836
2,6-Dinitrotoluene	ND		0.731	2	06/04/2020 21:50	WG1486836
Fluoranthene	0.369		0.0731	2	06/04/2020 21:50	WG1486836
Fluorene	ND		0.0731	2	06/04/2020 21:50	WG1486836
Hexachlorobenzene	ND		0.731	2	06/04/2020 21:50	WG1486836
Hexachloro-1,3-butadiene	ND		0.731	2	06/04/2020 21:50	WG1486836
Hexachlorocyclopentadiene	ND		0.731	2	06/04/2020 21:50	WG1486836
Hexachloroethane	ND		0.731	2	06/04/2020 21:50	WG1486836
Indeno(1,2,3-cd)pyrene	ND		0.0731	2	06/04/2020 21:50	WG1486836
Isophorone	ND		0.731	2	06/04/2020 21:50	WG1486836
Naphthalene	0.0978		0.0731	2	06/04/2020 21:50	WG1486836
Nitrobenzene	ND		0.731	2	06/04/2020 21:50	WG1486836

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ GI⁸ Al⁹ Sc



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

Analyte	Result (dry) mg/kg	Qualifier	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch	
n-Nitrosodimethylamine	ND		0.731	2	06/04/2020 21:50	WG1486836	¹ Cp
n-Nitrosodiphenylamine	ND		0.731	2	06/04/2020 21:50	WG1486836	² Tc
n-Nitrosodi-n-propylamine	ND		0.731	2	06/04/2020 21:50	WG1486836	³ Ss
Phenanthrene	0.305		0.0731	2	06/04/2020 21:50	WG1486836	⁴ Cn
Pyridine	ND		0.731	2	06/04/2020 21:50	WG1486836	⁵ Sr
Benzylbutyl phthalate	ND		0.731	2	06/04/2020 21:50	WG1486836	⁶ Qc
Bis(2-ethylhexyl)phthalate	ND		0.731	2	06/04/2020 21:50	WG1486836	⁷ Gl
Di-n-butyl phthalate	ND		0.731	2	06/04/2020 21:50	WG1486836	⁸ Al
Diethyl phthalate	ND		0.731	2	06/04/2020 21:50	WG1486836	
Dimethyl phthalate	ND		0.731	2	06/04/2020 21:50	WG1486836	
Di-n-octyl phthalate	ND		0.731	2	06/04/2020 21:50	WG1486836	
Pyrene	0.259		0.0731	2	06/04/2020 21:50	WG1486836	
1,2,4-Trichlorobenzene	ND		0.731	2	06/04/2020 21:50	WG1486836	
4-Chloro-3-methylphenol	ND		0.731	2	06/04/2020 21:50	WG1486836	
2-Chlorophenol	ND		0.731	2	06/04/2020 21:50	WG1486836	
2,4-Dichlorophenol	ND		0.731	2	06/04/2020 21:50	WG1486836	
2,4-Dimethylphenol	ND		0.731	2	06/04/2020 21:50	WG1486836	
4,6-Dinitro-2-methylphenol	ND		0.731	2	06/04/2020 21:50	WG1486836	
2,4-Dinitrophenol	ND		0.731	2	06/04/2020 21:50	WG1486836	
2-Methylphenol	ND		0.731	2	06/04/2020 21:50	WG1486836	
3&4-Methyl Phenol	ND		0.731	2	06/04/2020 21:50	WG1486836	
2-Nitrophenol	ND		0.731	2	06/04/2020 21:50	WG1486836	
4-Nitrophenol	ND		0.731	2	06/04/2020 21:50	WG1486836	
Pentachlorophenol	ND		0.731	2	06/04/2020 21:50	WG1486836	
Phenol	ND		0.731	2	06/04/2020 21:50	WG1486836	
2,4,6-Trichlorophenol	ND		0.731	2	06/04/2020 21:50	WG1486836	
2,4,5-Trichlorophenol	ND		0.731	2	06/04/2020 21:50	WG1486836	
(S) 2-Fluorophenol	62.8		12.0-120		06/04/2020 21:50	WG1486836	
(S) Phenol-d5	60.9		10.0-120		06/04/2020 21:50	WG1486836	
(S) Nitrobenzene-d5	54.2		10.0-122		06/04/2020 21:50	WG1486836	
(S) 2-Fluorobiphenyl	50.5		15.0-120		06/04/2020 21:50	WG1486836	
(S) 2,4,6-Tribromophenol	61.9		10.0-127		06/04/2020 21:50	WG1486836	
(S) p-Terphenyl-d14	56.1		10.0-120		06/04/2020 21:50	WG1486836	

Sample Narrative:

L1224343-03 WG1486836: Dilution due to matrix impact during extraction procedure



Total Solids by Method 2540 G-2011

Analyte	Result %	<u>Qualifier</u>	Dilution	Analysis date / time	<u>Batch</u>
Total Solids	85.1		1	06/05/2020 17:39	WG1487638

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ GI⁸ Al⁹ Sc

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-SGT

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
Diesel Range Organics (DRO)	ND		4.70	1	06/05/2020 01:47	WG1486835
Residual Range Organics (RRO)	ND		11.8	1	06/05/2020 01:47	WG1486835
(S) o-Terphenyl	66.4		18.0-148		06/05/2020 01:47	WG1486835

Polychlorinated Biphenyls (GC) by Method 8082 A

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
PCB 1016	ND		0.0400	1	06/07/2020 17:05	WG1486847
PCB 1221	ND		0.0400	1	06/07/2020 17:05	WG1486847
PCB 1232	ND		0.0400	1	06/07/2020 17:05	WG1486847
PCB 1242	ND		0.0400	1	06/07/2020 17:05	WG1486847
PCB 1248	ND		0.0200	1	06/07/2020 17:05	WG1486847
PCB 1254	ND		0.0200	1	06/07/2020 17:05	WG1486847
PCB 1260	ND		0.0200	1	06/07/2020 17:05	WG1486847
(S) Decachlorobiphenyl	68.3		10.0-135		06/07/2020 17:05	WG1486847
(S) Tetrachloro-m-xylene	69.4		10.0-139		06/07/2020 17:05	WG1486847

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

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
Acenaphthene	ND		0.0391	1	06/04/2020 22:41	WG1486836
Acenaphthylene	ND		0.0391	1	06/04/2020 22:41	WG1486836
Anthracene	ND		0.0391	1	06/04/2020 22:41	WG1486836
Benzo(a)anthracene	ND		0.0391	1	06/04/2020 22:41	WG1486836
Benzo(b)fluoranthene	0.0521		0.0391	1	06/04/2020 22:41	WG1486836
Benzo(k)fluoranthene	ND		0.0391	1	06/04/2020 22:41	WG1486836
Benzo(g,h,i)perylene	ND		0.0391	1	06/04/2020 22:41	WG1486836
Benzo(a)pyrene	ND		0.0391	1	06/04/2020 22:41	WG1486836
Bis(2-chlorethoxy)methane	ND		0.391	1	06/04/2020 22:41	WG1486836
Bis(2-chloroethyl)ether	ND		0.391	1	06/04/2020 22:41	WG1486836
2,2-Oxybis(1-Chloropropane)	ND		0.391	1	06/04/2020 22:41	WG1486836
4-Bromophenyl-phenylether	ND		0.391	1	06/04/2020 22:41	WG1486836
2-Chloronaphthalene	ND		0.0391	1	06/04/2020 22:41	WG1486836
4-Chlorophenyl-phenylether	ND		0.391	1	06/04/2020 22:41	WG1486836
Chrysene	ND		0.0391	1	06/04/2020 22:41	WG1486836
Dibenz(a,h)anthracene	ND		0.0391	1	06/04/2020 22:41	WG1486836
3,3-Dichlorobenzidine	ND		0.391	1	06/04/2020 22:41	WG1486836
2,4-Dinitrotoluene	ND		0.391	1	06/04/2020 22:41	WG1486836
2,6-Dinitrotoluene	ND		0.391	1	06/04/2020 22:41	WG1486836
Fluoranthene	ND		0.0391	1	06/04/2020 22:41	WG1486836
Fluorene	ND		0.0391	1	06/04/2020 22:41	WG1486836
Hexachlorobenzene	ND		0.391	1	06/04/2020 22:41	WG1486836
Hexachloro-1,3-butadiene	ND		0.391	1	06/04/2020 22:41	WG1486836
Hexachlorocyclopentadiene	ND		0.391	1	06/04/2020 22:41	WG1486836
Hexachloroethane	ND		0.391	1	06/04/2020 22:41	WG1486836
Indeno(1,2,3-cd)pyrene	ND		0.0391	1	06/04/2020 22:41	WG1486836
Isophorone	ND		0.391	1	06/04/2020 22:41	WG1486836
Naphthalene	ND		0.0391	1	06/04/2020 22:41	WG1486836
Nitrobenzene	ND		0.391	1	06/04/2020 22:41	WG1486836

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ GI⁸ Al⁹ Sc



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

Analyte	Result (dry) mg/kg	Qualifier	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch	
n-Nitrosodimethylamine	ND		0.391	1	06/04/2020 22:41	WG1486836	¹ Cp
n-Nitrosodiphenylamine	ND		0.391	1	06/04/2020 22:41	WG1486836	² Tc
n-Nitrosodi-n-propylamine	ND		0.391	1	06/04/2020 22:41	WG1486836	³ Ss
Phenanthrene	ND		0.0391	1	06/04/2020 22:41	WG1486836	⁴ Cn
Pyridine	ND		0.391	1	06/04/2020 22:41	WG1486836	⁵ Sr
Benzylbutyl phthalate	ND		0.391	1	06/04/2020 22:41	WG1486836	⁶ Qc
Bis(2-ethylhexyl)phthalate	ND		0.391	1	06/04/2020 22:41	WG1486836	⁷ Gl
Di-n-butyl phthalate	ND		0.391	1	06/04/2020 22:41	WG1486836	⁸ Al
Diethyl phthalate	ND		0.391	1	06/04/2020 22:41	WG1486836	⁹ Sc
Dimethyl phthalate	ND		0.391	1	06/04/2020 22:41	WG1486836	
Di-n-octyl phthalate	ND		0.391	1	06/04/2020 22:41	WG1486836	
Pyrene	ND		0.0391	1	06/04/2020 22:41	WG1486836	
1,2,4-Trichlorobenzene	ND		0.391	1	06/04/2020 22:41	WG1486836	
4-Chloro-3-methylphenol	ND		0.391	1	06/04/2020 22:41	WG1486836	
2-Chlorophenol	ND		0.391	1	06/04/2020 22:41	WG1486836	
2,4-Dichlorophenol	ND		0.391	1	06/04/2020 22:41	WG1486836	
2,4-Dimethylphenol	ND		0.391	1	06/04/2020 22:41	WG1486836	
4,6-Dinitro-2-methylphenol	ND		0.391	1	06/04/2020 22:41	WG1486836	
2,4-Dinitrophenol	ND		0.391	1	06/04/2020 22:41	WG1486836	
2-Methylphenol	ND		0.391	1	06/04/2020 22:41	WG1486836	
3&4-Methyl Phenol	ND		0.391	1	06/04/2020 22:41	WG1486836	
2-Nitrophenol	ND		0.391	1	06/04/2020 22:41	WG1486836	
4-Nitrophenol	ND		0.391	1	06/04/2020 22:41	WG1486836	
Pentachlorophenol	ND		0.391	1	06/04/2020 22:41	WG1486836	
Phenol	ND		0.391	1	06/04/2020 22:41	WG1486836	
2,4,6-Trichlorophenol	ND		0.391	1	06/04/2020 22:41	WG1486836	
2,4,5-Trichlorophenol	ND		0.391	1	06/04/2020 22:41	WG1486836	
(S) 2-Fluorophenol	51.1		12.0-120		06/04/2020 22:41	WG1486836	
(S) Phenol-d5	47.0		10.0-120		06/04/2020 22:41	WG1486836	
(S) Nitrobenzene-d5	37.4		10.0-122		06/04/2020 22:41	WG1486836	
(S) 2-Fluorobiphenyl	48.7		15.0-120		06/04/2020 22:41	WG1486836	
(S) 2,4,6-Tribromophenol	59.3		10.0-127		06/04/2020 22:41	WG1486836	
(S) p-Terphenyl-d14	62.3		10.0-120		06/04/2020 22:41	WG1486836	



Total Solids by Method 2540 G-2011

Analyte	Result %	<u>Qualifier</u>	Dilution	Analysis date / time	<u>Batch</u>
Total Solids	32.3		1	06/05/2020 17:39	WG1487638

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ Gl⁸ Al⁹ Sc

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

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
Acetone	0.449		0.164	1.06	06/05/2020 22:32	WG1487880
Acrylonitrile	ND		0.0411	1.06	06/05/2020 22:32	WG1487880
Benzene	ND		0.00328	1.06	06/05/2020 22:32	WG1487880
Bromobenzene	ND		0.0411	1.06	06/05/2020 22:32	WG1487880
Bromodichloromethane	ND		0.00820	1.06	06/05/2020 22:32	WG1487880
Bromoform	ND		0.0820	1.06	06/05/2020 22:32	WG1487880
Bromomethane	ND		0.0411	1.06	06/05/2020 22:32	WG1487880
n-Butylbenzene	ND		0.0411	1.06	06/05/2020 22:32	WG1487880
sec-Butylbenzene	ND		0.0411	1.06	06/05/2020 22:32	WG1487880
tert-Butylbenzene	ND		0.0164	1.06	06/05/2020 22:32	WG1487880
Carbon tetrachloride	ND		0.0164	1.06	06/05/2020 22:32	WG1487880
Chlorobenzene	ND		0.00820	1.06	06/05/2020 22:32	WG1487880
Chlorodibromomethane	ND		0.00820	1.06	06/05/2020 22:32	WG1487880
Chloroethane	ND		0.0164	1.06	06/05/2020 22:32	WG1487880
Chloroform	ND		0.00820	1.06	06/05/2020 22:32	WG1487880
Chloromethane	ND		0.0411	1.06	06/05/2020 22:32	WG1487880
2-Chlorotoluene	ND		0.00820	1.06	06/05/2020 22:32	WG1487880
4-Chlorotoluene	ND		0.0164	1.06	06/05/2020 22:32	WG1487880
1,2-Dibromo-3-Chloropropane	ND		0.0820	1.06	06/05/2020 22:32	WG1487880
1,2-Dibromoethane	ND		0.00820	1.06	06/05/2020 22:32	WG1487880
Dibromomethane	ND		0.0164	1.06	06/05/2020 22:32	WG1487880
1,2-Dichlorobenzene	ND		0.0164	1.06	06/05/2020 22:32	WG1487880
1,3-Dichlorobenzene	ND		0.0164	1.06	06/05/2020 22:32	WG1487880
1,4-Dichlorobenzene	ND		0.0164	1.06	06/05/2020 22:32	WG1487880
Dichlorodifluoromethane	ND		0.00820	1.06	06/05/2020 22:32	WG1487880
1,1-Dichloroethane	ND		0.00820	1.06	06/05/2020 22:32	WG1487880
1,2-Dichloroethane	ND		0.00820	1.06	06/05/2020 22:32	WG1487880
1,1-Dichloroethene	ND		0.00820	1.06	06/05/2020 22:32	WG1487880
cis-1,2-Dichloroethene	ND		0.00820	1.06	06/05/2020 22:32	WG1487880
trans-1,2-Dichloroethene	ND		0.0164	1.06	06/05/2020 22:32	WG1487880
1,2-Dichloropropane	ND		0.0164	1.06	06/05/2020 22:32	WG1487880
1,1-Dichloropropene	ND		0.00820	1.06	06/05/2020 22:32	WG1487880
1,3-Dichloropropene	ND		0.0164	1.06	06/05/2020 22:32	WG1487880
cis-1,3-Dichloropropene	ND		0.00820	1.06	06/05/2020 22:32	WG1487880
trans-1,3-Dichloropropene	ND		0.0164	1.06	06/05/2020 22:32	WG1487880
2,2-Dichloropropane	ND		0.00820	1.06	06/05/2020 22:32	WG1487880
Di-isopropyl ether	ND		0.00328	1.06	06/05/2020 22:32	WG1487880
Ethylbenzene	ND		0.00820	1.06	06/05/2020 22:32	WG1487880
Hexachloro-1,3-butadiene	ND		0.0820	1.06	06/05/2020 22:32	WG1487880
Isopropylbenzene	ND		0.00820	1.06	06/05/2020 22:32	WG1487880
p-Isopropyltoluene	ND		0.0164	1.06	06/05/2020 22:32	WG1487880
2-Butanone (MEK)	ND		0.328	1.06	06/05/2020 22:32	WG1487880
Methylene Chloride	ND		0.0820	1.06	06/05/2020 22:32	WG1487880
4-Methyl-2-pentanone (MIBK)	ND		0.0820	1.06	06/05/2020 22:32	WG1487880
Methyl tert-butyl ether	ND		0.00328	1.06	06/05/2020 22:32	WG1487880
Naphthalene	ND		0.0411	1.06	06/05/2020 22:32	WG1487880
n-Propylbenzene	ND		0.0164	1.06	06/05/2020 22:32	WG1487880
Styrene	ND		0.0411	1.06	06/05/2020 22:32	WG1487880
1,1,2-Tetrachloroethane	ND		0.00820	1.06	06/05/2020 22:32	WG1487880
1,1,2,2-Tetrachloroethane	ND		0.00820	1.06	06/05/2020 22:32	WG1487880



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

Analyte	Result (dry) mg/kg	Qualifier	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch	
1,1,2-Trichlorotrifluoroethane	ND		0.00820	1.06	06/05/2020 22:32	WG1487880	¹ Cp
Tetrachloroethene	ND		0.00820	1.06	06/05/2020 22:32	WG1487880	² Tc
Toluene	0.0381		0.0164	1.06	06/05/2020 22:32	WG1487880	³ Ss
1,2,3-Trichlorobenzene	ND		0.0411	1.06	06/05/2020 22:32	WG1487880	
1,2,4-Trichlorobenzene	ND		0.0411	1.06	06/05/2020 22:32	WG1487880	
1,1,1-Trichloroethane	ND		0.00820	1.06	06/05/2020 22:32	WG1487880	
1,1,2-Trichloroethane	ND		0.00820	1.06	06/05/2020 22:32	WG1487880	
Trichloroethene	ND		0.00328	1.06	06/05/2020 22:32	WG1487880	
Trichlorofluoromethane	ND		0.00820	1.06	06/05/2020 22:32	WG1487880	
1,2,3-Trichloropropane	ND		0.0411	1.06	06/05/2020 22:32	WG1487880	
1,2,4-Trimethylbenzene	ND		0.0164	1.06	06/05/2020 22:32	WG1487880	⁵ Sr
1,2,3-Trimethylbenzene	ND		0.0164	1.06	06/05/2020 22:32	WG1487880	⁶ Qc
Vinyl chloride	ND		0.00820	1.06	06/05/2020 22:32	WG1487880	⁷ Gl
1,3,5-Trimethylbenzene	ND		0.0164	1.06	06/05/2020 22:32	WG1487880	⁸ Al
Xylenes, Total	ND		0.0213	1.06	06/05/2020 22:32	WG1487880	
(S) Toluene-d8	118		75.0-131		06/05/2020 22:32	WG1487880	
(S) 4-Bromofluorobenzene	101		67.0-138		06/05/2020 22:32	WG1487880	
(S) 1,2-Dichloroethane-d4	97.9		70.0-130		06/05/2020 22:32	WG1487880	⁹ Sc

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-SGT

Analyte	Result (dry) mg/kg	Qualifier	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	46.7		12.4	1	06/05/2020 02:01	WG1486835
Residual Range Organics (RRO)	130		30.9	1	06/05/2020 02:01	WG1486835
(S) o-Terphenyl	58.6		18.0-148		06/05/2020 02:01	WG1486835

Polychlorinated Biphenyls (GC) by Method 8082 A

Analyte	Result (dry) mg/kg	Qualifier	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
PCB 1016	ND		0.105	1	06/07/2020 17:19	WG1486847
PCB 1221	ND		0.105	1	06/07/2020 17:19	WG1486847
PCB 1232	ND		0.105	1	06/07/2020 17:19	WG1486847
PCB 1242	ND		0.105	1	06/07/2020 17:19	WG1486847
PCB 1248	ND		0.0526	1	06/07/2020 17:19	WG1486847
PCB 1254	ND		0.0526	1	06/07/2020 17:19	WG1486847
PCB 1260	ND		0.0526	1	06/07/2020 17:19	WG1486847
(S) Decachlorobiphenyl	55.2		10.0-135		06/07/2020 17:19	WG1486847
(S) Tetrachloro-m-xylene	55.1		10.0-139		06/07/2020 17:19	WG1486847

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

Analyte	Result (dry) mg/kg	Qualifier	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acenaphthene	ND		0.206	2	06/07/2020 13:31	WG1486836
Acenaphthylene	ND		0.206	2	06/07/2020 13:31	WG1486836
Anthracene	ND		0.206	2	06/07/2020 13:31	WG1486836
Benzo(a)anthracene	ND		0.206	2	06/07/2020 13:31	WG1486836
Benzo(b)fluoranthene	ND		0.206	2	06/07/2020 13:31	WG1486836
Benzo(k)fluoranthene	ND		0.206	2	06/07/2020 13:31	WG1486836
Benzo(g,h,i)perylene	ND		0.206	2	06/07/2020 13:31	WG1486836
Benzo(a)pyrene	ND		0.206	2	06/07/2020 13:31	WG1486836
Bis(2-chlorethoxy)methane	ND		2.06	2	06/07/2020 13:31	WG1486836
Bis(2-chloroethyl)ether	ND		2.06	2	06/07/2020 13:31	WG1486836
2,2-Oxybis(1-Chloropropane)	ND		2.06	2	06/07/2020 13:31	WG1486836
4-Bromophenyl-phenylether	ND		2.06	2	06/07/2020 13:31	WG1486836
2-Chloronaphthalene	ND		0.206	2	06/07/2020 13:31	WG1486836



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

Analyte	Result (dry) mg/kg	Qualifier	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch	
4-Chlorophenyl-phenylether	ND		2.06	2	06/07/2020 13:31	WG1486836	¹ Cp
Chrysene	ND		0.206	2	06/07/2020 13:31	WG1486836	² Tc
Dibenz(a,h)anthracene	ND		0.206	2	06/07/2020 13:31	WG1486836	³ Ss
3,3-Dichlorobenzidine	ND		2.06	2	06/07/2020 13:31	WG1486836	⁴ Cn
2,4-Dinitrotoluene	ND		2.06	2	06/07/2020 13:31	WG1486836	⁵ Sr
2,6-Dinitrotoluene	ND		2.06	2	06/07/2020 13:31	WG1486836	⁶ Qc
Fluoranthene	ND		0.206	2	06/07/2020 13:31	WG1486836	⁷ Gl
Fluorene	ND		0.206	2	06/07/2020 13:31	WG1486836	⁸ Al
Hexachlorobenzene	ND		2.06	2	06/07/2020 13:31	WG1486836	⁹ Sc
Hexachloro-1,3-butadiene	ND		2.06	2	06/07/2020 13:31	WG1486836	
Hexachlorocyclopentadiene	ND		2.06	2	06/07/2020 13:31	WG1486836	
Hexachloroethane	ND		2.06	2	06/07/2020 13:31	WG1486836	
Indeno[1,2,3-cd]pyrene	ND		0.206	2	06/07/2020 13:31	WG1486836	
Isophorone	ND		2.06	2	06/07/2020 13:31	WG1486836	
Naphthalene	ND		0.206	2	06/07/2020 13:31	WG1486836	
Nitrobenzene	ND		2.06	2	06/07/2020 13:31	WG1486836	
n-Nitrosodimethylamine	ND		2.06	2	06/07/2020 13:31	WG1486836	
n-Nitrosodiphenylamine	ND		2.06	2	06/07/2020 13:31	WG1486836	
n-Nitrosodi-n-propylamine	ND		2.06	2	06/07/2020 13:31	WG1486836	
Phenanthrene	ND		0.206	2	06/07/2020 13:31	WG1486836	
Pyridine	ND		2.06	2	06/07/2020 13:31	WG1486836	
Benzylbutyl phthalate	ND		2.06	2	06/07/2020 13:31	WG1486836	
Bis(2-ethylhexyl)phthalate	ND		2.06	2	06/07/2020 13:31	WG1486836	
Di-n-butyl phthalate	ND		2.06	2	06/07/2020 13:31	WG1486836	
Diethyl phthalate	ND		2.06	2	06/07/2020 13:31	WG1486836	
Dimethyl phthalate	ND		2.06	2	06/07/2020 13:31	WG1486836	
Di-n-octyl phthalate	ND		2.06	2	06/07/2020 13:31	WG1486836	
Pyrene	ND		0.206	2	06/07/2020 13:31	WG1486836	
1,2,4-Trichlorobenzene	ND		2.06	2	06/07/2020 13:31	WG1486836	
4-Chloro-3-methylphenol	ND		2.06	2	06/07/2020 13:31	WG1486836	
2-Chlorophenol	ND		2.06	2	06/07/2020 13:31	WG1486836	
2,4-Dichlorophenol	ND		2.06	2	06/07/2020 13:31	WG1486836	
2,4-Dimethylphenol	ND		2.06	2	06/07/2020 13:31	WG1486836	
4,6-Dinitro-2-methylphenol	ND		2.06	2	06/07/2020 13:31	WG1486836	
2,4-Dinitrophenol	ND		2.06	2	06/07/2020 13:31	WG1486836	
2-Methylphenol	ND		2.06	2	06/07/2020 13:31	WG1486836	
3&4-Methyl Phenol	ND		2.06	2	06/07/2020 13:31	WG1486836	
2-Nitrophenol	ND		2.06	2	06/07/2020 13:31	WG1486836	
4-Nitrophenol	ND		2.06	2	06/07/2020 13:31	WG1486836	
Pentachlorophenol	ND		2.06	2	06/07/2020 13:31	WG1486836	
Phenol	ND		2.06	2	06/07/2020 13:31	WG1486836	
2,4,6-Trichlorophenol	ND		2.06	2	06/07/2020 13:31	WG1486836	
2,4,5-Trichlorophenol	ND		2.06	2	06/07/2020 13:31	WG1486836	
(S) 2-Fluorophenol	48.4		12.0-120		06/07/2020 13:31	WG1486836	
(S) Phenol-d5	47.4		10.0-120		06/07/2020 13:31	WG1486836	
(S) Nitrobenzene-d5	40.2		10.0-122		06/07/2020 13:31	WG1486836	
(S) 2-Fluorobiphenyl	43.6		15.0-120		06/07/2020 13:31	WG1486836	
(S) 2,4,6-Tribromophenol	67.6		10.0-127		06/07/2020 13:31	WG1486836	
(S) p-Terphenyl-d14	52.6		10.0-120		06/07/2020 13:31	WG1486836	

Sample Narrative:

L1224343-05 WG1486836: Dilution due to matrix impact during extract concentration procedure



Total Solids by Method 2540 G-2011

Analyte	Result %	<u>Qualifier</u>	Dilution	Analysis date / time	<u>Batch</u>
Total Solids	65.0		1	06/05/2020 17:06	WG1487639

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ Gl⁸ Al⁹ Sc

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

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
Acetone	0.186		0.0831	1.08	06/05/2020 22:52	WG1487880
Acrylonitrile	ND		0.0208	1.08	06/05/2020 22:52	WG1487880
Benzene	ND		0.00166	1.08	06/05/2020 22:52	WG1487880
Bromobenzene	ND		0.0208	1.08	06/05/2020 22:52	WG1487880
Bromodichloromethane	ND		0.00416	1.08	06/05/2020 22:52	WG1487880
Bromoform	ND		0.0416	1.08	06/05/2020 22:52	WG1487880
Bromomethane	ND		0.0208	1.08	06/05/2020 22:52	WG1487880
n-Butylbenzene	ND		0.0208	1.08	06/05/2020 22:52	WG1487880
sec-Butylbenzene	ND		0.0208	1.08	06/05/2020 22:52	WG1487880
tert-Butylbenzene	ND		0.00831	1.08	06/05/2020 22:52	WG1487880
Carbon tetrachloride	ND		0.00831	1.08	06/05/2020 22:52	WG1487880
Chlorobenzene	ND		0.00416	1.08	06/05/2020 22:52	WG1487880
Chlorodibromomethane	ND		0.00416	1.08	06/05/2020 22:52	WG1487880
Chloroethane	ND		0.00831	1.08	06/05/2020 22:52	WG1487880
Chloroform	ND		0.00416	1.08	06/05/2020 22:52	WG1487880
Chloromethane	ND		0.0208	1.08	06/05/2020 22:52	WG1487880
2-Chlorotoluene	ND		0.00416	1.08	06/05/2020 22:52	WG1487880
4-Chlorotoluene	ND		0.00831	1.08	06/05/2020 22:52	WG1487880
1,2-Dibromo-3-Chloropropane	ND		0.0416	1.08	06/05/2020 22:52	WG1487880
1,2-Dibromoethane	ND		0.00416	1.08	06/05/2020 22:52	WG1487880
Dibromomethane	ND		0.00831	1.08	06/05/2020 22:52	WG1487880
1,2-Dichlorobenzene	ND		0.00831	1.08	06/05/2020 22:52	WG1487880
1,3-Dichlorobenzene	ND		0.00831	1.08	06/05/2020 22:52	WG1487880
1,4-Dichlorobenzene	ND		0.00831	1.08	06/05/2020 22:52	WG1487880
Dichlorodifluoromethane	ND		0.00416	1.08	06/05/2020 22:52	WG1487880
1,1-Dichloroethane	ND		0.00416	1.08	06/05/2020 22:52	WG1487880
1,2-Dichloroethane	ND		0.00416	1.08	06/05/2020 22:52	WG1487880
1,1-Dichloroethene	ND		0.00416	1.08	06/05/2020 22:52	WG1487880
cis-1,2-Dichloroethene	ND		0.00416	1.08	06/05/2020 22:52	WG1487880
trans-1,2-Dichloroethene	ND		0.00831	1.08	06/05/2020 22:52	WG1487880
1,2-Dichloropropane	ND		0.00831	1.08	06/05/2020 22:52	WG1487880
1,1-Dichloropropene	ND		0.00416	1.08	06/05/2020 22:52	WG1487880
1,3-Dichloropropane	ND		0.00831	1.08	06/05/2020 22:52	WG1487880
cis-1,3-Dichloropropene	ND		0.00416	1.08	06/05/2020 22:52	WG1487880
trans-1,3-Dichloropropene	ND		0.00831	1.08	06/05/2020 22:52	WG1487880
2,2-Dichloropropane	ND		0.00416	1.08	06/05/2020 22:52	WG1487880
Di-isopropyl ether	ND		0.00166	1.08	06/05/2020 22:52	WG1487880
Ethylbenzene	0.00428		0.00416	1.08	06/05/2020 22:52	WG1487880
Hexachloro-1,3-butadiene	ND		0.0416	1.08	06/05/2020 22:52	WG1487880
Isopropylbenzene	ND		0.00416	1.08	06/05/2020 22:52	WG1487880
p-Isopropyltoluene	0.0707		0.00831	1.08	06/05/2020 22:52	WG1487880
2-Butanone (MEK)	ND		0.166	1.08	06/05/2020 22:52	WG1487880
Methylene Chloride	ND		0.0416	1.08	06/05/2020 22:52	WG1487880
4-Methyl-2-pentanone (MIBK)	ND		0.0416	1.08	06/05/2020 22:52	WG1487880
Methyl tert-butyl ether	ND		0.00166	1.08	06/05/2020 22:52	WG1487880
Naphthalene	ND		0.0208	1.08	06/05/2020 22:52	WG1487880
n-Propylbenzene	ND		0.00831	1.08	06/05/2020 22:52	WG1487880
Styrene	ND		0.0208	1.08	06/05/2020 22:52	WG1487880
1,1,2-Tetrachloroethane	ND		0.00416	1.08	06/05/2020 22:52	WG1487880
1,1,2,2-Tetrachloroethane	ND		0.00416	1.08	06/05/2020 22:52	WG1487880



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

Analyte	Result (dry) mg/kg	Qualifier	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch	
1,1,2-Trichlorotrifluoroethane	ND		0.00416	1.08	06/05/2020 22:52	WG1487880	¹ Cp
Tetrachloroethene	ND		0.00416	1.08	06/05/2020 22:52	WG1487880	² Tc
Toluene	0.0548		0.00831	1.08	06/05/2020 22:52	WG1487880	³ Ss
1,2,3-Trichlorobenzene	ND		0.0208	1.08	06/05/2020 22:52	WG1487880	
1,2,4-Trichlorobenzene	ND		0.0208	1.08	06/05/2020 22:52	WG1487880	
1,1,1-Trichloroethane	ND		0.00416	1.08	06/05/2020 22:52	WG1487880	
1,1,2-Trichloroethane	ND		0.00416	1.08	06/05/2020 22:52	WG1487880	
Trichloroethene	ND		0.00166	1.08	06/05/2020 22:52	WG1487880	
Trichlorofluoromethane	ND		0.00416	1.08	06/05/2020 22:52	WG1487880	
1,2,3-Trichloropropane	ND		0.0208	1.08	06/05/2020 22:52	WG1487880	
1,2,4-Trimethylbenzene	0.0113		0.00831	1.08	06/05/2020 22:52	WG1487880	⁵ Sr
1,2,3-Trimethylbenzene	ND		0.00831	1.08	06/05/2020 22:52	WG1487880	⁶ Qc
Vinyl chloride	ND		0.00416	1.08	06/05/2020 22:52	WG1487880	⁷ GI
1,3,5-Trimethylbenzene	ND		0.00831	1.08	06/05/2020 22:52	WG1487880	
Xylenes, Total	0.0145		0.0108	1.08	06/05/2020 22:52	WG1487880	
(S) Toluene-d8	117		75.0-131		06/05/2020 22:52	WG1487880	
(S) 4-Bromofluorobenzene	99.6		67.0-138		06/05/2020 22:52	WG1487880	
(S) 1,2-Dichloroethane-d4	101		70.0-130		06/05/2020 22:52	WG1487880	⁸ AI

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-SGT

Analyte	Result (dry) mg/kg	Qualifier	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	ND		6.16	1	06/05/2020 00:40	WG1486835
Residual Range Organics (RRO)	ND		15.4	1	06/05/2020 00:40	WG1486835
(S) o-Terphenyl	60.6		18.0-148		06/05/2020 00:40	WG1486835

Polychlorinated Biphenyls (GC) by Method 8082 A

Analyte	Result (dry) mg/kg	Qualifier	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
PCB 1016	ND		0.0523	1	06/07/2020 17:33	WG1486847
PCB 1221	ND		0.0523	1	06/07/2020 17:33	WG1486847
PCB 1232	ND		0.0523	1	06/07/2020 17:33	WG1486847
PCB 1242	ND		0.0523	1	06/07/2020 17:33	WG1486847
PCB 1248	ND		0.0262	1	06/07/2020 17:33	WG1486847
PCB 1254	ND		0.0262	1	06/07/2020 17:33	WG1486847
PCB 1260	ND		0.0262	1	06/07/2020 17:33	WG1486847
(S) Decachlorobiphenyl	72.6		10.0-135		06/07/2020 17:33	WG1486847
(S) Tetrachloro-m-xylene	70.0		10.0-139		06/07/2020 17:33	WG1486847

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

Analyte	Result (dry) mg/kg	Qualifier	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acenaphthene	ND		0.0513	1	06/04/2020 21:55	WG1486836
Acenaphthylene	ND		0.0513	1	06/04/2020 21:55	WG1486836
Anthracene	ND		0.0513	1	06/04/2020 21:55	WG1486836
Benzo(a)anthracene	ND		0.0513	1	06/04/2020 21:55	WG1486836
Benzo(b)fluoranthene	ND		0.0513	1	06/04/2020 21:55	WG1486836
Benzo(k)fluoranthene	ND		0.0513	1	06/04/2020 21:55	WG1486836
Benzo(g,h,i)perylene	ND		0.0513	1	06/04/2020 21:55	WG1486836
Benzo(a)pyrene	ND		0.0513	1	06/04/2020 21:55	WG1486836
Bis(2-chlorethoxy)methane	ND		0.513	1	06/04/2020 21:55	WG1486836
Bis(2-chloroethyl)ether	ND		0.513	1	06/04/2020 21:55	WG1486836
2,2-Oxybis(1-Chloropropane)	ND		0.513	1	06/04/2020 21:55	WG1486836
4-Bromophenyl-phenylether	ND		0.513	1	06/04/2020 21:55	WG1486836
2-Chloronaphthalene	ND		0.0513	1	06/04/2020 21:55	WG1486836



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

Analyte	Result (dry) mg/kg	Qualifier	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch	
4-Chlorophenyl-phenylether	ND		0.513	1	06/04/2020 21:55	WG1486836	¹ Cp
Chrysene	ND		0.0513	1	06/04/2020 21:55	WG1486836	² Tc
Dibenz(a,h)anthracene	ND		0.0513	1	06/04/2020 21:55	WG1486836	³ Ss
3,3-Dichlorobenzidine	ND		0.513	1	06/04/2020 21:55	WG1486836	⁴ Cn
2,4-Dinitrotoluene	ND		0.513	1	06/04/2020 21:55	WG1486836	⁵ Sr
2,6-Dinitrotoluene	ND		0.513	1	06/04/2020 21:55	WG1486836	⁶ Qc
Fluoranthene	ND		0.0513	1	06/04/2020 21:55	WG1486836	⁷ Gl
Fluorene	ND		0.0513	1	06/04/2020 21:55	WG1486836	⁸ Al
Hexachlorobenzene	ND		0.513	1	06/04/2020 21:55	WG1486836	⁹ Sc
Hexachloro-1,3-butadiene	ND		0.513	1	06/04/2020 21:55	WG1486836	
Hexachlorocyclopentadiene	ND		0.513	1	06/04/2020 21:55	WG1486836	
Hexachloroethane	ND		0.513	1	06/04/2020 21:55	WG1486836	
Indeno[1,2,3-cd]pyrene	ND		0.0513	1	06/04/2020 21:55	WG1486836	
Isophorone	ND		0.513	1	06/04/2020 21:55	WG1486836	
Naphthalene	ND		0.0513	1	06/04/2020 21:55	WG1486836	
Nitrobenzene	ND		0.513	1	06/04/2020 21:55	WG1486836	
n-Nitrosodimethylamine	ND		0.513	1	06/04/2020 21:55	WG1486836	
n-Nitrosodiphenylamine	ND		0.513	1	06/04/2020 21:55	WG1486836	
n-Nitrosodi-n-propylamine	ND		0.513	1	06/04/2020 21:55	WG1486836	
Phenanthrene	ND		0.0513	1	06/04/2020 21:55	WG1486836	
Pyridine	ND		0.513	1	06/04/2020 21:55	WG1486836	
Benzylbutyl phthalate	ND		0.513	1	06/04/2020 21:55	WG1486836	
Bis(2-ethylhexyl)phthalate	ND		0.513	1	06/04/2020 21:55	WG1486836	
Di-n-butyl phthalate	ND		0.513	1	06/04/2020 21:55	WG1486836	
Diethyl phthalate	ND		0.513	1	06/04/2020 21:55	WG1486836	
Dimethyl phthalate	ND		0.513	1	06/04/2020 21:55	WG1486836	
Di-n-octyl phthalate	ND		0.513	1	06/04/2020 21:55	WG1486836	
Pyrene	ND		0.0513	1	06/04/2020 21:55	WG1486836	
1,2,4-Trichlorobenzene	ND		0.513	1	06/04/2020 21:55	WG1486836	
4-Chloro-3-methylphenol	ND		0.513	1	06/04/2020 21:55	WG1486836	
2-Chlorophenol	ND		0.513	1	06/04/2020 21:55	WG1486836	
2,4-Dichlorophenol	ND		0.513	1	06/04/2020 21:55	WG1486836	
2,4-Dimethylphenol	ND		0.513	1	06/04/2020 21:55	WG1486836	
4,6-Dinitro-2-methylphenol	ND		0.513	1	06/04/2020 21:55	WG1486836	
2,4-Dinitrophenol	ND		0.513	1	06/04/2020 21:55	WG1486836	
2-Methylphenol	ND		0.513	1	06/04/2020 21:55	WG1486836	
3&4-Methyl Phenol	ND		0.513	1	06/04/2020 21:55	WG1486836	
2-Nitrophenol	ND		0.513	1	06/04/2020 21:55	WG1486836	
4-Nitrophenol	ND		0.513	1	06/04/2020 21:55	WG1486836	
Pentachlorophenol	ND		0.513	1	06/04/2020 21:55	WG1486836	
Phenol	ND		0.513	1	06/04/2020 21:55	WG1486836	
2,4,6-Trichlorophenol	ND		0.513	1	06/04/2020 21:55	WG1486836	
2,4,5-Trichlorophenol	ND		0.513	1	06/04/2020 21:55	WG1486836	
(S) 2-Fluorophenol	50.5		12.0-120		06/04/2020 21:55	WG1486836	
(S) Phenol-d5	46.6		10.0-120		06/04/2020 21:55	WG1486836	
(S) Nitrobenzene-d5	37.3		10.0-122		06/04/2020 21:55	WG1486836	
(S) 2-Fluorobiphenyl	48.1		15.0-120		06/04/2020 21:55	WG1486836	
(S) 2,4,6-Tribromophenol	54.2		10.0-127		06/04/2020 21:55	WG1486836	
(S) p-Terphenyl-d14	58.7		10.0-120		06/04/2020 21:55	WG1486836	



Total Solids by Method 2540 G-2011

Analyte	Result %	<u>Qualifier</u>	Dilution	Analysis date / time	<u>Batch</u>
Total Solids	29.2		1	06/05/2020 17:06	WG1487639

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ Gl⁸ Al⁹ Sc

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

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
Acetone	0.528		0.202	1.18	06/05/2020 23:12	WG1487880
Acrylonitrile	ND		0.0504	1.18	06/05/2020 23:12	WG1487880
Benzene	0.0394		0.00404	1.18	06/05/2020 23:12	WG1487880
Bromobenzene	ND		0.0504	1.18	06/05/2020 23:12	WG1487880
Bromodichloromethane	ND		0.0101	1.18	06/05/2020 23:12	WG1487880
Bromoform	ND		0.101	1.18	06/05/2020 23:12	WG1487880
Bromomethane	ND		0.0504	1.18	06/05/2020 23:12	WG1487880
n-Butylbenzene	ND		0.0504	1.18	06/05/2020 23:12	WG1487880
sec-Butylbenzene	ND		0.0504	1.18	06/05/2020 23:12	WG1487880
tert-Butylbenzene	ND		0.0202	1.18	06/05/2020 23:12	WG1487880
Carbon tetrachloride	ND		0.0202	1.18	06/05/2020 23:12	WG1487880
Chlorobenzene	ND		0.0101	1.18	06/05/2020 23:12	WG1487880
Chlorodibromomethane	ND		0.0101	1.18	06/05/2020 23:12	WG1487880
Chloroethane	ND		0.0202	1.18	06/05/2020 23:12	WG1487880
Chloroform	ND		0.0101	1.18	06/05/2020 23:12	WG1487880
Chloromethane	ND		0.0504	1.18	06/05/2020 23:12	WG1487880
2-Chlorotoluene	ND		0.0101	1.18	06/05/2020 23:12	WG1487880
4-Chlorotoluene	ND		0.0202	1.18	06/05/2020 23:12	WG1487880
1,2-Dibromo-3-Chloropropane	ND		0.101	1.18	06/05/2020 23:12	WG1487880
1,2-Dibromoethane	ND		0.0101	1.18	06/05/2020 23:12	WG1487880
Dibromomethane	ND		0.0202	1.18	06/05/2020 23:12	WG1487880
1,2-Dichlorobenzene	ND		0.0202	1.18	06/05/2020 23:12	WG1487880
1,3-Dichlorobenzene	ND		0.0202	1.18	06/05/2020 23:12	WG1487880
1,4-Dichlorobenzene	ND		0.0202	1.18	06/05/2020 23:12	WG1487880
Dichlorodifluoromethane	ND		0.0101	1.18	06/05/2020 23:12	WG1487880
1,1-Dichloroethane	ND		0.0101	1.18	06/05/2020 23:12	WG1487880
1,2-Dichloroethane	ND		0.0101	1.18	06/05/2020 23:12	WG1487880
1,1-Dichloroethene	ND		0.0101	1.18	06/05/2020 23:12	WG1487880
cis-1,2-Dichloroethene	ND		0.0101	1.18	06/05/2020 23:12	WG1487880
trans-1,2-Dichloroethene	ND		0.0202	1.18	06/05/2020 23:12	WG1487880
1,2-Dichloropropane	ND		0.0202	1.18	06/05/2020 23:12	WG1487880
1,1-Dichloropropene	ND		0.0202	1.18	06/05/2020 23:12	WG1487880
1,3-Dichloropropene	ND		0.0202	1.18	06/05/2020 23:12	WG1487880
cis-1,3-Dichloropropene	ND		0.0202	1.18	06/05/2020 23:12	WG1487880
trans-1,3-Dichloropropene	ND		0.0202	1.18	06/05/2020 23:12	WG1487880
2,2-Dichloropropane	ND		0.0202	1.18	06/05/2020 23:12	WG1487880
Di-isopropyl ether	ND		0.0202	1.18	06/05/2020 23:12	WG1487880
Ethylbenzene	ND		0.0101	1.18	06/05/2020 23:12	WG1487880
Hexachloro-1,3-butadiene	ND		0.0101	1.18	06/05/2020 23:12	WG1487880
Isopropylbenzene	ND		0.0101	1.18	06/05/2020 23:12	WG1487880
p-Isopropyltoluene	0.247		0.0202	1.18	06/05/2020 23:12	WG1487880
2-Butanone (MEK)	ND		0.0202	1.18	06/05/2020 23:12	WG1487880
Methylene Chloride	ND		0.0202	1.18	06/05/2020 23:12	WG1487880
4-Methyl-2-pentanone (MIBK)	ND		0.0202	1.18	06/05/2020 23:12	WG1487880
Methyl tert-butyl ether	ND		0.0202	1.18	06/05/2020 23:12	WG1487880
Naphthalene	ND		0.0202	1.18	06/05/2020 23:12	WG1487880
n-Propylbenzene	ND		0.0202	1.18	06/05/2020 23:12	WG1487880
Styrene	ND		0.0202	1.18	06/05/2020 23:12	WG1487880
1,1,2-Tetrachloroethane	ND		0.0202	1.18	06/05/2020 23:12	WG1487880
1,1,2,2-Tetrachloroethane	ND		0.0202	1.18	06/05/2020 23:12	WG1487880



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

Analyte	Result (dry) mg/kg	Qualifier	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch	
1,1,2-Trichlorotrifluoroethane	ND		0.0101	1.18	06/05/2020 23:12	WG1487880	¹ Cp
Tetrachloroethene	ND		0.0101	1.18	06/05/2020 23:12	WG1487880	² Tc
Toluene	0.662		0.0202	1.18	06/05/2020 23:12	WG1487880	³ Ss
1,2,3-Trichlorobenzene	ND		0.0504	1.18	06/05/2020 23:12	WG1487880	⁴ Cn
1,2,4-Trichlorobenzene	ND		0.0504	1.18	06/05/2020 23:12	WG1487880	⁵ Sr
1,1,1-Trichloroethane	ND		0.0101	1.18	06/05/2020 23:12	WG1487880	⁶ Qc
1,1,2-Trichloroethane	ND		0.0101	1.18	06/05/2020 23:12	WG1487880	⁷ Gl
Trichloroethene	ND		0.00404	1.18	06/05/2020 23:12	WG1487880	⁸ Al
Trichlorofluoromethane	ND		0.0101	1.18	06/05/2020 23:12	WG1487880	⁹ Sc
1,2,3-Trichloropropane	ND		0.0504	1.18	06/05/2020 23:12	WG1487880	
1,2,4-Trimethylbenzene	ND		0.0202	1.18	06/05/2020 23:12	WG1487880	
1,2,3-Trimethylbenzene	ND		0.0202	1.18	06/05/2020 23:12	WG1487880	
Vinyl chloride	ND		0.0101	1.18	06/05/2020 23:12	WG1487880	
1,3,5-Trimethylbenzene	ND		0.0202	1.18	06/05/2020 23:12	WG1487880	
Xylenes, Total	ND		0.0263	1.18	06/05/2020 23:12	WG1487880	
(S) Toluene-d8	116		75.0-131		06/05/2020 23:12	WG1487880	
(S) 4-Bromofluorobenzene	100		67.0-138		06/05/2020 23:12	WG1487880	
(S) 1,2-Dichloroethane-d4	101		70.0-130		06/05/2020 23:12	WG1487880	

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-SGT

Analyte	Result (dry) mg/kg	Qualifier	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	106		13.7	1	06/05/2020 00:54	WG1486835
Residual Range Organics (RRO)	265		34.3	1	06/05/2020 00:54	WG1486835
(S) o-Terphenyl	58.9		18.0-148		06/05/2020 00:54	WG1486835

Polychlorinated Biphenyls (GC) by Method 8082 A

Analyte	Result (dry) mg/kg	Qualifier	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
PCB 1016	ND		0.117	1	06/07/2020 17:47	WG1486847
PCB 1221	ND		0.117	1	06/07/2020 17:47	WG1486847
PCB 1232	ND		0.117	1	06/07/2020 17:47	WG1486847
PCB 1242	ND		0.117	1	06/07/2020 17:47	WG1486847
PCB 1248	ND		0.0583	1	06/07/2020 17:47	WG1486847
PCB 1254	ND		0.0583	1	06/07/2020 17:47	WG1486847
PCB 1260	ND		0.0583	1	06/07/2020 17:47	WG1486847
(S) Decachlorobiphenyl	72.6		10.0-135		06/07/2020 17:47	WG1486847
(S) Tetrachloro-m-xylene	69.4		10.0-139		06/07/2020 17:47	WG1486847

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

Analyte	Result (dry) mg/kg	Qualifier	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acenaphthene	ND		0.114	1	06/04/2020 22:18	WG1486836
Acenaphthylene	ND		0.114	1	06/04/2020 22:18	WG1486836
Anthracene	ND		0.114	1	06/04/2020 22:18	WG1486836
Benzo(a)anthracene	ND		0.114	1	06/04/2020 22:18	WG1486836
Benzo(b)fluoranthene	ND		0.114	1	06/04/2020 22:18	WG1486836
Benzo(k)fluoranthene	ND		0.114	1	06/04/2020 22:18	WG1486836
Benzo(g,h,i)perylene	ND		0.114	1	06/04/2020 22:18	WG1486836
Benzo(a)pyrene	ND		0.114	1	06/04/2020 22:18	WG1486836
Bis(2-chlorethoxy)methane	ND		1.14	1	06/04/2020 22:18	WG1486836
Bis(2-chloroethyl)ether	ND		1.14	1	06/04/2020 22:18	WG1486836
2,2-Oxybis(1-Chloropropane)	ND		1.14	1	06/04/2020 22:18	WG1486836
4-Bromophenyl-phenylether	ND		1.14	1	06/04/2020 22:18	WG1486836
2-Chloronaphthalene	ND		0.114	1	06/04/2020 22:18	WG1486836



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

Analyte	Result (dry) mg/kg	Qualifier	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch	
4-Chlorophenyl-phenylether	ND		1.14	1	06/04/2020 22:18	WG1486836	¹ Cp
Chrysene	ND		0.114	1	06/04/2020 22:18	WG1486836	² Tc
Dibenz(a,h)anthracene	ND		0.114	1	06/04/2020 22:18	WG1486836	³ Ss
3,3-Dichlorobenzidine	ND		1.14	1	06/04/2020 22:18	WG1486836	⁴ Cn
2,4-Dinitrotoluene	ND		1.14	1	06/04/2020 22:18	WG1486836	⁵ Sr
2,6-Dinitrotoluene	ND		1.14	1	06/04/2020 22:18	WG1486836	⁶ Qc
Fluoranthene	ND		0.114	1	06/04/2020 22:18	WG1486836	⁷ Gl
Fluorene	ND		0.114	1	06/04/2020 22:18	WG1486836	⁸ Al
Hexachlorobenzene	ND		1.14	1	06/04/2020 22:18	WG1486836	⁹ Sc
Hexachloro-1,3-butadiene	ND		1.14	1	06/04/2020 22:18	WG1486836	
Hexachlorocyclopentadiene	ND		1.14	1	06/04/2020 22:18	WG1486836	
Hexachloroethane	ND		1.14	1	06/04/2020 22:18	WG1486836	
Indeno[1,2,3-cd]pyrene	ND		0.114	1	06/04/2020 22:18	WG1486836	
Isophorone	ND		1.14	1	06/04/2020 22:18	WG1486836	
Naphthalene	0.212		0.114	1	06/04/2020 22:18	WG1486836	
Nitrobenzene	ND		1.14	1	06/04/2020 22:18	WG1486836	
n-Nitrosodimethylamine	ND		1.14	1	06/04/2020 22:18	WG1486836	
n-Nitrosodiphenylamine	ND		1.14	1	06/04/2020 22:18	WG1486836	
n-Nitrosodi-n-propylamine	ND		1.14	1	06/04/2020 22:18	WG1486836	
Phenanthrene	ND		0.114	1	06/04/2020 22:18	WG1486836	
Pyridine	ND		1.14	1	06/04/2020 22:18	WG1486836	
Benzylbutyl phthalate	ND		1.14	1	06/04/2020 22:18	WG1486836	
Bis(2-ethylhexyl)phthalate	ND		1.14	1	06/04/2020 22:18	WG1486836	
Di-n-butyl phthalate	ND		1.14	1	06/04/2020 22:18	WG1486836	
Diethyl phthalate	ND		1.14	1	06/04/2020 22:18	WG1486836	
Dimethyl phthalate	ND		1.14	1	06/04/2020 22:18	WG1486836	
Di-n-octyl phthalate	ND		1.14	1	06/04/2020 22:18	WG1486836	
Pyrene	ND		0.114	1	06/04/2020 22:18	WG1486836	
1,2,4-Trichlorobenzene	ND		1.14	1	06/04/2020 22:18	WG1486836	
4-Chloro-3-methylphenol	ND		1.14	1	06/04/2020 22:18	WG1486836	
2-Chlorophenol	ND		1.14	1	06/04/2020 22:18	WG1486836	
2,4-Dichlorophenol	ND		1.14	1	06/04/2020 22:18	WG1486836	
2,4-Dimethylphenol	ND		1.14	1	06/04/2020 22:18	WG1486836	
4,6-Dinitro-2-methylphenol	ND		1.14	1	06/04/2020 22:18	WG1486836	
2,4-Dinitrophenol	ND		1.14	1	06/04/2020 22:18	WG1486836	
2-Methylphenol	ND		1.14	1	06/04/2020 22:18	WG1486836	
3&4-Methyl Phenol	3.70		1.14	1	06/04/2020 22:18	WG1486836	
2-Nitrophenol	ND		1.14	1	06/04/2020 22:18	WG1486836	
4-Nitrophenol	ND		1.14	1	06/04/2020 22:18	WG1486836	
Pentachlorophenol	ND		1.14	1	06/04/2020 22:18	WG1486836	
Phenol	ND		1.14	1	06/04/2020 22:18	WG1486836	
2,4,6-Trichlorophenol	ND		1.14	1	06/04/2020 22:18	WG1486836	
2,4,5-Trichlorophenol	ND		1.14	1	06/04/2020 22:18	WG1486836	
(S) 2-Fluorophenol	52.0		12.0-120		06/04/2020 22:18	WG1486836	
(S) Phenol-d5	48.5		10.0-120		06/04/2020 22:18	WG1486836	
(S) Nitrobenzene-d5	38.0		10.0-122		06/04/2020 22:18	WG1486836	
(S) 2-Fluorobiphenyl	46.3		15.0-120		06/04/2020 22:18	WG1486836	
(S) 2,4,6-Tribromophenol	61.0		10.0-127		06/04/2020 22:18	WG1486836	
(S) p-Terphenyl-d14	55.2		10.0-120		06/04/2020 22:18	WG1486836	



Total Solids by Method 2540 G-2011

Analyte	Result %	<u>Qualifier</u>	Dilution	Analysis date / time	<u>Batch</u>
Total Solids	25.7		1	06/05/2020 17:06	WG1487639

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ Gl⁸ Al⁹ Sc

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

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
Acetone	0.441		0.216	1.11	06/05/2020 23:32	WG1487880
Acrylonitrile	ND		0.0542	1.11	06/05/2020 23:32	WG1487880
Benzene	0.0569		0.00433	1.11	06/05/2020 23:32	WG1487880
Bromobenzene	ND		0.0542	1.11	06/05/2020 23:32	WG1487880
Bromodichloromethane	ND		0.0108	1.11	06/05/2020 23:32	WG1487880
Bromoform	ND		0.108	1.11	06/05/2020 23:32	WG1487880
Bromomethane	ND		0.0542	1.11	06/05/2020 23:32	WG1487880
n-Butylbenzene	ND		0.0542	1.11	06/05/2020 23:32	WG1487880
sec-Butylbenzene	ND		0.0542	1.11	06/05/2020 23:32	WG1487880
tert-Butylbenzene	ND		0.0216	1.11	06/05/2020 23:32	WG1487880
Carbon tetrachloride	ND		0.0216	1.11	06/05/2020 23:32	WG1487880
Chlorobenzene	ND		0.0108	1.11	06/05/2020 23:32	WG1487880
Chlorodibromomethane	ND		0.0108	1.11	06/05/2020 23:32	WG1487880
Chloroethane	ND		0.0216	1.11	06/05/2020 23:32	WG1487880
Chloroform	ND		0.0108	1.11	06/05/2020 23:32	WG1487880
Chloromethane	ND		0.0542	1.11	06/05/2020 23:32	WG1487880
2-Chlorotoluene	ND		0.0108	1.11	06/05/2020 23:32	WG1487880
4-Chlorotoluene	ND		0.0216	1.11	06/05/2020 23:32	WG1487880
1,2-Dibromo-3-Chloropropane	ND		0.108	1.11	06/05/2020 23:32	WG1487880
1,2-Dibromoethane	ND		0.0108	1.11	06/05/2020 23:32	WG1487880
Dibromomethane	ND		0.0216	1.11	06/05/2020 23:32	WG1487880
1,2-Dichlorobenzene	ND		0.0216	1.11	06/05/2020 23:32	WG1487880
1,3-Dichlorobenzene	ND		0.0216	1.11	06/05/2020 23:32	WG1487880
1,4-Dichlorobenzene	ND		0.0216	1.11	06/05/2020 23:32	WG1487880
Dichlorodifluoromethane	ND		0.0108	1.11	06/05/2020 23:32	WG1487880
1,1-Dichloroethane	ND		0.0108	1.11	06/05/2020 23:32	WG1487880
1,2-Dichloroethane	ND		0.0108	1.11	06/05/2020 23:32	WG1487880
1,1-Dichloroethene	ND		0.0108	1.11	06/05/2020 23:32	WG1487880
cis-1,2-Dichloroethene	ND		0.0108	1.11	06/05/2020 23:32	WG1487880
trans-1,2-Dichloroethene	ND		0.0216	1.11	06/05/2020 23:32	WG1487880
1,2-Dichloropropane	ND		0.0216	1.11	06/05/2020 23:32	WG1487880
1,1-Dichloropropene	ND		0.0216	1.11	06/05/2020 23:32	WG1487880
1,3-Dichloropropene	ND		0.0216	1.11	06/05/2020 23:32	WG1487880
cis-1,3-Dichloropropene	ND		0.0216	1.11	06/05/2020 23:32	WG1487880
trans-1,3-Dichloropropene	ND		0.0216	1.11	06/05/2020 23:32	WG1487880
2,2-Dichloropropane	ND		0.0216	1.11	06/05/2020 23:32	WG1487880
Di-isopropyl ether	ND		0.0216	1.11	06/05/2020 23:32	WG1487880
Ethylbenzene	0.0175		0.0108	1.11	06/05/2020 23:32	WG1487880
Hexachloro-1,3-butadiene	ND		0.0108	1.11	06/05/2020 23:32	WG1487880
Isopropylbenzene	ND		0.0108	1.11	06/05/2020 23:32	WG1487880
p-Isopropyltoluene	0.398		0.0108	1.11	06/05/2020 23:32	WG1487880
2-Butanone (MEK)	ND		0.433	1.11	06/05/2020 23:32	WG1487880
Methylene Chloride	ND		0.433	1.11	06/05/2020 23:32	WG1487880
4-Methyl-2-pentanone (MIBK)	ND		0.433	1.11	06/05/2020 23:32	WG1487880
Methyl tert-butyl ether	ND		0.00433	1.11	06/05/2020 23:32	WG1487880
Naphthalene	ND		0.00433	1.11	06/05/2020 23:32	WG1487880
n-Propylbenzene	ND		0.00433	1.11	06/05/2020 23:32	WG1487880
Styrene	ND		0.00433	1.11	06/05/2020 23:32	WG1487880
1,1,2-Tetrachloroethane	ND		0.00433	1.11	06/05/2020 23:32	WG1487880
1,1,2,2-Tetrachloroethane	ND		0.00433	1.11	06/05/2020 23:32	WG1487880



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

Analyte	Result (dry) mg/kg	Qualifier	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
1,1,2-Trichlorotrifluoroethane	ND		0.0108	1.11	06/05/2020 23:32	WG1487880
Tetrachloroethene	ND		0.0108	1.11	06/05/2020 23:32	WG1487880
Toluene	1.23		0.0216	1.11	06/05/2020 23:32	WG1487880
1,2,3-Trichlorobenzene	ND		0.0542	1.11	06/05/2020 23:32	WG1487880
1,2,4-Trichlorobenzene	ND		0.0542	1.11	06/05/2020 23:32	WG1487880
1,1,1-Trichloroethane	ND		0.0108	1.11	06/05/2020 23:32	WG1487880
1,1,2-Trichloroethane	ND		0.0108	1.11	06/05/2020 23:32	WG1487880
Trichloroethene	ND		0.00433	1.11	06/05/2020 23:32	WG1487880
Trichlorofluoromethane	ND		0.0108	1.11	06/05/2020 23:32	WG1487880
1,2,3-Trichloropropane	ND		0.0542	1.11	06/05/2020 23:32	WG1487880
1,2,4-Trimethylbenzene	ND		0.0216	1.11	06/05/2020 23:32	WG1487880
1,2,3-Trimethylbenzene	ND		0.0216	1.11	06/05/2020 23:32	WG1487880
Vinyl chloride	ND		0.0108	1.11	06/05/2020 23:32	WG1487880
1,3,5-Trimethylbenzene	ND		0.0216	1.11	06/05/2020 23:32	WG1487880
Xylenes, Total	0.0425		0.0281	1.11	06/05/2020 23:32	WG1487880
(S) Toluene-d8	117		75.0-131		06/05/2020 23:32	WG1487880
(S) 4-Bromofluorobenzene	102		67.0-138		06/05/2020 23:32	WG1487880
(S) 1,2-Dichloroethane-d4	100		70.0-130		06/05/2020 23:32	WG1487880

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

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-SGT

Analyte	Result (dry) mg/kg	Qualifier	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	122		15.6	1	06/05/2020 01:07	WG1486835
Residual Range Organics (RRO)	251		39.0	1	06/05/2020 01:07	WG1486835
(S) o-Terphenyl	59.7		18.0-148		06/05/2020 01:07	WG1486835

Polychlorinated Biphenyls (GC) by Method 8082 A

Analyte	Result (dry) mg/kg	Qualifier	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
PCB 1016	ND		0.133	1	06/07/2020 18:00	WG1486847
PCB 1221	ND		0.133	1	06/07/2020 18:00	WG1486847
PCB 1232	ND		0.133	1	06/07/2020 18:00	WG1486847
PCB 1242	ND		0.133	1	06/07/2020 18:00	WG1486847
PCB 1248	ND		0.0663	1	06/07/2020 18:00	WG1486847
PCB 1254	ND		0.0663	1	06/07/2020 18:00	WG1486847
PCB 1260	ND		0.0663	1	06/07/2020 18:00	WG1486847
(S) Decachlorobiphenyl	68.1		10.0-135		06/07/2020 18:00	WG1486847
(S) Tetrachloro-m-xylene	69.8		10.0-139		06/07/2020 18:00	WG1486847

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

Analyte	Result (dry) mg/kg	Qualifier	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acenaphthene	ND		0.130	1	06/04/2020 20:22	WG1486836
Acenaphthylene	ND		0.130	1	06/04/2020 20:22	WG1486836
Anthracene	ND		0.130	1	06/04/2020 20:22	WG1486836
Benzo(a)anthracene	ND		0.130	1	06/04/2020 20:22	WG1486836
Benzo(b)fluoranthene	ND		0.130	1	06/04/2020 20:22	WG1486836
Benzo(k)fluoranthene	ND		0.130	1	06/04/2020 20:22	WG1486836
Benzo(g,h,i)perylene	ND		0.130	1	06/04/2020 20:22	WG1486836
Benzo(a)pyrene	ND		0.130	1	06/04/2020 20:22	WG1486836
Bis(2-chlorethoxy)methane	ND		1.30	1	06/04/2020 20:22	WG1486836
Bis(2-chloroethyl)ether	ND		1.30	1	06/04/2020 20:22	WG1486836
2,2-Oxybis(1-Chloropropane)	ND		1.30	1	06/04/2020 20:22	WG1486836
4-Bromophenyl-phenylether	ND		1.30	1	06/04/2020 20:22	WG1486836
2-Chloronaphthalene	ND		0.130	1	06/04/2020 20:22	WG1486836



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

Analyte	Result (dry) mg/kg	Qualifier	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch	
4-Chlorophenyl-phenylether	ND		1.30	1	06/04/2020 20:22	WG1486836	¹ Cp
Chrysene	ND		0.130	1	06/04/2020 20:22	WG1486836	² Tc
Dibenz(a,h)anthracene	ND		0.130	1	06/04/2020 20:22	WG1486836	³ Ss
3,3-Dichlorobenzidine	ND		1.30	1	06/04/2020 20:22	WG1486836	⁴ Cn
2,4-Dinitrotoluene	ND		1.30	1	06/04/2020 20:22	WG1486836	⁵ Sr
2,6-Dinitrotoluene	ND		1.30	1	06/04/2020 20:22	WG1486836	⁶ Qc
Fluoranthene	ND		0.130	1	06/04/2020 20:22	WG1486836	⁷ Gl
Fluorene	ND		0.130	1	06/04/2020 20:22	WG1486836	⁸ Al
Hexachlorobenzene	ND		1.30	1	06/04/2020 20:22	WG1486836	⁹ Sc
Hexachloro-1,3-butadiene	ND		1.30	1	06/04/2020 20:22	WG1486836	
Hexachlorocyclopentadiene	ND		1.30	1	06/04/2020 20:22	WG1486836	
Hexachloroethane	ND		1.30	1	06/04/2020 20:22	WG1486836	
Indeno[1,2,3-cd]pyrene	ND		0.130	1	06/04/2020 20:22	WG1486836	
Isophorone	ND		1.30	1	06/04/2020 20:22	WG1486836	
Naphthalene	ND		0.130	1	06/04/2020 20:22	WG1486836	
Nitrobenzene	ND		1.30	1	06/04/2020 20:22	WG1486836	
n-Nitrosodimethylamine	ND		1.30	1	06/04/2020 20:22	WG1486836	
n-Nitrosodiphenylamine	ND		1.30	1	06/04/2020 20:22	WG1486836	
n-Nitrosodi-n-propylamine	ND		1.30	1	06/04/2020 20:22	WG1486836	
Phenanthrene	ND		0.130	1	06/04/2020 20:22	WG1486836	
Pyridine	ND		1.30	1	06/04/2020 20:22	WG1486836	
Benzylbutyl phthalate	ND		1.30	1	06/04/2020 20:22	WG1486836	
Bis(2-ethylhexyl)phthalate	ND		1.30	1	06/04/2020 20:22	WG1486836	
Di-n-butyl phthalate	ND		1.30	1	06/04/2020 20:22	WG1486836	
Diethyl phthalate	ND		1.30	1	06/04/2020 20:22	WG1486836	
Dimethyl phthalate	ND		1.30	1	06/04/2020 20:22	WG1486836	
Di-n-octyl phthalate	ND		1.30	1	06/04/2020 20:22	WG1486836	
Pyrene	ND		0.130	1	06/04/2020 20:22	WG1486836	
1,2,4-Trichlorobenzene	ND		1.30	1	06/04/2020 20:22	WG1486836	
4-Chloro-3-methylphenol	ND		1.30	1	06/04/2020 20:22	WG1486836	
2-Chlorophenol	ND		1.30	1	06/04/2020 20:22	WG1486836	
2,4-Dichlorophenol	ND		1.30	1	06/04/2020 20:22	WG1486836	
2,4-Dimethylphenol	ND		1.30	1	06/04/2020 20:22	WG1486836	
4,6-Dinitro-2-methylphenol	ND		1.30	1	06/04/2020 20:22	WG1486836	
2,4-Dinitrophenol	ND		1.30	1	06/04/2020 20:22	WG1486836	
2-Methylphenol	ND		1.30	1	06/04/2020 20:22	WG1486836	
3&4-Methyl Phenol	ND		1.30	1	06/04/2020 20:22	WG1486836	
2-Nitrophenol	ND		1.30	1	06/04/2020 20:22	WG1486836	
4-Nitrophenol	ND		1.30	1	06/04/2020 20:22	WG1486836	
Pentachlorophenol	ND		1.30	1	06/04/2020 20:22	WG1486836	
Phenol	ND		1.30	1	06/04/2020 20:22	WG1486836	
2,4,6-Trichlorophenol	ND		1.30	1	06/04/2020 20:22	WG1486836	
2,4,5-Trichlorophenol	ND		1.30	1	06/04/2020 20:22	WG1486836	
(S) 2-Fluorophenol	50.0		12.0-120		06/04/2020 20:22	WG1486836	
(S) Phenol-d5	47.0		10.0-120		06/04/2020 20:22	WG1486836	
(S) Nitrobenzene-d5	37.3		10.0-122		06/04/2020 20:22	WG1486836	
(S) 2-Fluorobiphenyl	44.9		15.0-120		06/04/2020 20:22	WG1486836	
(S) 2,4,6-Tribromophenol	51.9		10.0-127		06/04/2020 20:22	WG1486836	
(S) p-Terphenyl-d14	55.1		10.0-120		06/04/2020 20:22	WG1486836	



Total Solids by Method 2540 G-2011

Analyte	Result %	<u>Qualifier</u>	Dilution	Analysis date / time	<u>Batch</u>
Total Solids	80.2		1	06/05/2020 17:06	WG1487639

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ GI⁸ Al⁹ Sc

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-SGT

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
Diesel Range Organics (DRO)	37.4		24.9	5	06/05/2020 14:01	WG1486835
Residual Range Organics (RRO)	173		62.4	5	06/05/2020 14:01	WG1486835
(S) o-Terphenyl	80.7		18.0-148		06/05/2020 14:01	WG1486835

Polychlorinated Biphenyls (GC) by Method 8082 A

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
PCB 1016	ND		0.0424	1	06/07/2020 18:14	WG1486847
PCB 1221	ND		0.0424	1	06/07/2020 18:14	WG1486847
PCB 1232	ND		0.0424	1	06/07/2020 18:14	WG1486847
PCB 1242	ND		0.0424	1	06/07/2020 18:14	WG1486847
PCB 1248	ND		0.0212	1	06/07/2020 18:14	WG1486847
PCB 1254	ND		0.0212	1	06/07/2020 18:14	WG1486847
PCB 1260	ND		0.0212	1	06/07/2020 18:14	WG1486847
(S) Decachlorobiphenyl	72.9		10.0-135		06/07/2020 18:14	WG1486847
(S) Tetrachloro-m-xylene	76.8		10.0-139		06/07/2020 18:14	WG1486847

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

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
Acenaphthene	ND		0.0831	2	06/07/2020 13:51	WG1486836
Acenaphthylene	ND		0.0831	2	06/07/2020 13:51	WG1486836
Anthracene	0.195		0.0831	2	06/07/2020 13:51	WG1486836
Benzo(a)anthracene	ND		0.0831	2	06/07/2020 13:51	WG1486836
Benzo(b)fluoranthene	0.322		0.0831	2	06/07/2020 13:51	WG1486836
Benzo(k)fluoranthene	ND		0.0831	2	06/07/2020 13:51	WG1486836
Benzo(g,h,i)perylene	ND		0.0831	2	06/07/2020 13:51	WG1486836
Benzo(a)pyrene	ND		0.0831	2	06/07/2020 13:51	WG1486836
Bis(2-chlorethoxy)methane	ND		0.831	2	06/07/2020 13:51	WG1486836
Bis(2-chloroethyl)ether	ND		0.831	2	06/07/2020 13:51	WG1486836
2,2-Oxybis(1-Chloropropane)	ND		0.831	2	06/07/2020 13:51	WG1486836
4-Bromophenyl-phenylether	ND		0.831	2	06/07/2020 13:51	WG1486836
2-Chloronaphthalene	ND		0.0831	2	06/07/2020 13:51	WG1486836
4-Chlorophenyl-phenylether	ND		0.831	2	06/07/2020 13:51	WG1486836
Chrysene	0.109		0.0831	2	06/07/2020 13:51	WG1486836
Dibenz(a,h)anthracene	ND		0.0831	2	06/07/2020 13:51	WG1486836
3,3-Dichlorobenzidine	ND		0.831	2	06/07/2020 13:51	WG1486836
2,4-Dinitrotoluene	ND		0.831	2	06/07/2020 13:51	WG1486836
2,6-Dinitrotoluene	ND		0.831	2	06/07/2020 13:51	WG1486836
Fluoranthene	0.200		0.0831	2	06/07/2020 13:51	WG1486836
Fluorene	ND		0.0831	2	06/07/2020 13:51	WG1486836
Hexachlorobenzene	ND		0.831	2	06/07/2020 13:51	WG1486836
Hexachloro-1,3-butadiene	ND		0.831	2	06/07/2020 13:51	WG1486836
Hexachlorocyclopentadiene	ND		0.831	2	06/07/2020 13:51	WG1486836
Hexachloroethane	ND		0.831	2	06/07/2020 13:51	WG1486836
Indeno(1,2,3-cd)pyrene	0.0858		0.0831	2	06/07/2020 13:51	WG1486836
Isophorone	ND		0.831	2	06/07/2020 13:51	WG1486836
Naphthalene	ND		0.0831	2	06/07/2020 13:51	WG1486836
Nitrobenzene	ND		0.831	2	06/07/2020 13:51	WG1486836

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ GI⁸ Al⁹ Sc



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

Analyte	Result (dry) mg/kg	Qualifier	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch	
n-Nitrosodimethylamine	ND		0.831	2	06/07/2020 13:51	WG1486836	¹ Cp
n-Nitrosodiphenylamine	ND		0.831	2	06/07/2020 13:51	WG1486836	² Tc
n-Nitrosodi-n-propylamine	ND		0.831	2	06/07/2020 13:51	WG1486836	³ Ss
Phenanthrene	0.0858		0.0831	2	06/07/2020 13:51	WG1486836	⁴ Cn
Pyridine	ND		0.831	2	06/07/2020 13:51	WG1486836	⁵ Sr
Benzylbutyl phthalate	ND		0.831	2	06/07/2020 13:51	WG1486836	⁶ Qc
Bis(2-ethylhexyl)phthalate	ND		0.831	2	06/07/2020 13:51	WG1486836	⁷ Gl
Di-n-butyl phthalate	ND		0.831	2	06/07/2020 13:51	WG1486836	⁸ Al
Diethyl phthalate	ND		0.831	2	06/07/2020 13:51	WG1486836	
Dimethyl phthalate	ND		0.831	2	06/07/2020 13:51	WG1486836	
Di-n-octyl phthalate	ND		0.831	2	06/07/2020 13:51	WG1486836	
Pyrene	0.148		0.0831	2	06/07/2020 13:51	WG1486836	
1,2,4-Trichlorobenzene	ND		0.831	2	06/07/2020 13:51	WG1486836	
4-Chloro-3-methylphenol	ND		0.831	2	06/07/2020 13:51	WG1486836	
2-Chlorophenol	ND		0.831	2	06/07/2020 13:51	WG1486836	
2,4-Dichlorophenol	ND		0.831	2	06/07/2020 13:51	WG1486836	
2,4-Dimethylphenol	ND		0.831	2	06/07/2020 13:51	WG1486836	
4,6-Dinitro-2-methylphenol	ND		0.831	2	06/07/2020 13:51	WG1486836	
2,4-Dinitrophenol	ND		0.831	2	06/07/2020 13:51	WG1486836	
2-Methylphenol	ND		0.831	2	06/07/2020 13:51	WG1486836	
3&4-Methyl Phenol	ND		0.831	2	06/07/2020 13:51	WG1486836	
2-Nitrophenol	ND		0.831	2	06/07/2020 13:51	WG1486836	
4-Nitrophenol	ND		0.831	2	06/07/2020 13:51	WG1486836	
Pentachlorophenol	ND		0.831	2	06/07/2020 13:51	WG1486836	
Phenol	ND		0.831	2	06/07/2020 13:51	WG1486836	
2,4,6-Trichlorophenol	ND		0.831	2	06/07/2020 13:51	WG1486836	
2,4,5-Trichlorophenol	ND		0.831	2	06/07/2020 13:51	WG1486836	
(S) 2-Fluorophenol	42.0		12.0-120		06/07/2020 13:51	WG1486836	
(S) Phenol-d5	42.1		10.0-120		06/07/2020 13:51	WG1486836	
(S) Nitrobenzene-d5	36.0		10.0-122		06/07/2020 13:51	WG1486836	
(S) 2-Fluorobiphenyl	39.0		15.0-120		06/07/2020 13:51	WG1486836	
(S) 2,4,6-Tribromophenol	59.4		10.0-127		06/07/2020 13:51	WG1486836	
(S) p-Terphenyl-d14	39.0		10.0-120		06/07/2020 13:51	WG1486836	

Sample Narrative:

L1224343-09 WG1486836: Dilution due to matrix impact during extract concentration procedure



Total Solids by Method 2540 G-2011

Analyte	Result %	<u>Qualifier</u>	Dilution	Analysis date / time	<u>Batch</u>
Total Solids	75.9		1	06/05/2020 17:06	WG1487639

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ GI⁸ Al⁹ Sc

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-SGT

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
Diesel Range Organics (DRO)	146		26.4	5	06/05/2020 03:08	WG1486835
Residual Range Organics (RRO)	413		65.9	5	06/05/2020 03:08	WG1486835
(S) o-Terphenyl	54.4		18.0-148		06/05/2020 03:08	WG1486835

Polychlorinated Biphenyls (GC) by Method 8082 A

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
PCB 1016	ND		0.0448	1	06/07/2020 18:28	WG1486847
PCB 1221	ND		0.0448	1	06/07/2020 18:28	WG1486847
PCB 1232	ND		0.0448	1	06/07/2020 18:28	WG1486847
PCB 1242	ND		0.0448	1	06/07/2020 18:28	WG1486847
PCB 1248	ND		0.0224	1	06/07/2020 18:28	WG1486847
PCB 1254	ND		0.0224	1	06/07/2020 18:28	WG1486847
PCB 1260	ND		0.0224	1	06/07/2020 18:28	WG1486847
(S) Decachlorobiphenyl	83.1		10.0-135		06/07/2020 18:28	WG1486847
(S) Tetrachloro-m-xylene	80.2		10.0-139		06/07/2020 18:28	WG1486847

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

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
Acenaphthene	ND		0.439	10	06/08/2020 05:41	WG1487202
Acenaphthylene	ND		0.439	10	06/08/2020 05:41	WG1487202
Anthracene	ND		0.439	10	06/08/2020 05:41	WG1487202
Benzo(a)anthracene	ND		0.439	10	06/08/2020 05:41	WG1487202
Benzo(b)fluoranthene	ND		0.439	10	06/09/2020 02:08	WG1487202
Benzo(k)fluoranthene	ND		0.439	10	06/09/2020 02:08	WG1487202
Benzo(g,h,i)perylene	ND		0.439	10	06/09/2020 02:08	WG1487202
Benzo(a)pyrene	ND		0.439	10	06/09/2020 02:08	WG1487202
Bis(2-chlorethoxy)methane	ND		4.39	10	06/08/2020 05:41	WG1487202
Bis(2-chloroethyl)ether	ND		4.39	10	06/08/2020 05:41	WG1487202
2,2-Oxybis(1-Chloropropane)	ND		4.39	10	06/08/2020 05:41	WG1487202
4-Bromophenyl-phenylether	ND		4.39	10	06/08/2020 05:41	WG1487202
2-Chloronaphthalene	ND		0.439	10	06/08/2020 05:41	WG1487202
4-Chlorophenyl-phenylether	ND		4.39	10	06/08/2020 05:41	WG1487202
Chrysene	ND		0.439	10	06/08/2020 05:41	WG1487202
Dibenz(a,h)anthracene	ND		0.439	10	06/09/2020 02:08	WG1487202
3,3-Dichlorobenzidine	ND		4.39	10	06/08/2020 05:41	WG1487202
2,4-Dinitrotoluene	ND		4.39	10	06/08/2020 05:41	WG1487202
2,6-Dinitrotoluene	ND		4.39	10	06/08/2020 05:41	WG1487202
Fluoranthene	ND		0.439	10	06/08/2020 05:41	WG1487202
Fluorene	ND		0.439	10	06/08/2020 05:41	WG1487202
Hexachlorobenzene	ND		4.39	10	06/08/2020 05:41	WG1487202
Hexachloro-1,3-butadiene	ND		4.39	10	06/08/2020 05:41	WG1487202
Hexachlorocyclopentadiene	ND		4.39	10	06/08/2020 05:41	WG1487202
Hexachloroethane	ND		4.39	10	06/08/2020 05:41	WG1487202
Indeno(1,2,3-cd)pyrene	ND		0.439	10	06/09/2020 02:08	WG1487202
Isophorone	ND		4.39	10	06/08/2020 05:41	WG1487202
Naphthalene	ND		0.439	10	06/08/2020 05:41	WG1487202
Nitrobenzene	ND		4.39	10	06/08/2020 05:41	WG1487202

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ GI⁸ Al⁹ Sc



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

Analyte	Result (dry) mg/kg	Qualifier	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch	
n-Nitrosodimethylamine	ND		4.39	10	06/08/2020 05:41	WG1487202	¹ Cp
n-Nitrosodiphenylamine	ND		4.39	10	06/08/2020 05:41	WG1487202	² Tc
n-Nitrosodi-n-propylamine	ND		4.39	10	06/08/2020 05:41	WG1487202	³ Ss
Phenanthrene	ND		0.439	10	06/08/2020 05:41	WG1487202	⁴ Cn
Pyridine	ND	J4	4.39	10	06/08/2020 05:41	WG1487202	⁵ Sr
Benzylbutyl phthalate	ND		4.39	10	06/08/2020 05:41	WG1487202	⁶ Qc
Bis(2-ethylhexyl)phthalate	ND		4.39	10	06/08/2020 05:41	WG1487202	⁷ Gl
Di-n-butyl phthalate	ND		4.39	10	06/08/2020 05:41	WG1487202	⁸ Al
Diethyl phthalate	ND		4.39	10	06/08/2020 05:41	WG1487202	⁹ Sc
Dimethyl phthalate	ND		4.39	10	06/08/2020 05:41	WG1487202	
Di-n-octyl phthalate	ND		4.39	10	06/08/2020 05:41	WG1487202	
Pyrene	ND		0.439	10	06/08/2020 05:41	WG1487202	
1,2,4-Trichlorobenzene	ND		4.39	10	06/08/2020 05:41	WG1487202	
4-Chloro-3-methylphenol	ND		4.39	10	06/08/2020 05:41	WG1487202	
2-Chlorophenol	ND		4.39	10	06/08/2020 05:41	WG1487202	
2,4-Dichlorophenol	ND		4.39	10	06/08/2020 05:41	WG1487202	
2,4-Dimethylphenol	ND		4.39	10	06/08/2020 05:41	WG1487202	
4,6-Dinitro-2-methylphenol	ND		4.39	10	06/08/2020 05:41	WG1487202	
2,4-Dinitrophenol	ND		4.39	10	06/08/2020 05:41	WG1487202	
2-Methylphenol	ND		4.39	10	06/08/2020 05:41	WG1487202	
3&4-Methyl Phenol	ND		4.39	10	06/08/2020 05:41	WG1487202	
2-Nitrophenol	ND		4.39	10	06/08/2020 05:41	WG1487202	
4-Nitrophenol	ND		4.39	10	06/08/2020 05:41	WG1487202	
Pentachlorophenol	ND		4.39	10	06/08/2020 05:41	WG1487202	
Phenol	ND		4.39	10	06/08/2020 05:41	WG1487202	
2,4,6-Trichlorophenol	ND		4.39	10	06/08/2020 05:41	WG1487202	
2,4,5-Trichlorophenol	ND		4.39	10	06/08/2020 05:41	WG1487202	
(S) 2-Fluorophenol	63.3		12.0-120		06/09/2020 02:08	WG1487202	
(S) 2-Fluorophenol	62.3		12.0-120		06/08/2020 05:41	WG1487202	
(S) Phenol-d5	59.8		10.0-120		06/08/2020 05:41	WG1487202	
(S) Phenol-d5	58.1		10.0-120		06/09/2020 02:08	WG1487202	
(S) Nitrobenzene-d5	44.9		10.0-122		06/08/2020 05:41	WG1487202	
(S) Nitrobenzene-d5	53.5		10.0-122		06/09/2020 02:08	WG1487202	
(S) 2-Fluorobiphenyl	54.4		15.0-120		06/08/2020 05:41	WG1487202	
(S) 2-Fluorobiphenyl	54.1		15.0-120		06/09/2020 02:08	WG1487202	
(S) 2,4,6-Tribromophenol	53.3		10.0-127		06/08/2020 05:41	WG1487202	
(S) 2,4,6-Tribromophenol	72.3		10.0-127		06/09/2020 02:08	WG1487202	
(S) p-Terphenyl-d14	113		10.0-120		06/08/2020 05:41	WG1487202	
(S) p-Terphenyl-d14	60.1		10.0-120		06/09/2020 02:08	WG1487202	

Sample Narrative:

L1224343-10 WG1487202: Dilution due to matrix.



Method Blank (MB)

(MB) R3535801-1 06/05/20 17:39

Analyst	MB Result %	<u>MB Qualifier</u>	MB MDL %	MB RDL %
Total Solids	0.00200			

¹Cp²Tc³Ss⁴Cn⁵Sr⁶Qc⁷Gl⁸Al⁹Sc

L1224343-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1224343-01 06/05/20 17:39 • (DUP) R3535801-3 06/05/20 17:39

Analyst	Original Result %	DUP Result %	Dilution %	DUP RPD %	<u>DUP Qualifier</u>	DUP RPD Limits %
Total Solids	76.2	72.2	1	5.46		10

Laboratory Control Sample (LCS)

(LCS) R3535801-2 06/05/20 17:39

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

⁷Gl⁸Al⁹Sc

WG1487639

Total Solids by Method 2540 G-2011

QUALITY CONTROL SUMMARY

ONE LAB. NATIONWIDE.

L1224343-06,07,08,09,10

Method Blank (MB)

(MB) R3535800-1 06/05/20 17:06

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

¹Cp²Tc³Ss⁴Cn⁵Sr⁶Qc⁷Gl⁸Al⁹Sc

Laboratory Control Sample (LCS)

(LCS) R3535800-2 06/05/20 17:06

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

L1224343-05,06,07,08

Method Blank (MB)

(MB) R3535789-3 06/05/20 15:15

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg	
Acetone	U		0.0365	0.0500	¹ Cp
Acrylonitrile	U		0.00361	0.0125	² Tc
Benzene	U		0.000467	0.00100	³ Ss
Bromobenzene	U		0.000900	0.0125	⁴ Cn
Bromodichloromethane	U		0.000725	0.00250	⁵ Sr
Bromoform	U		0.00117	0.0250	⁶ Qc
Bromomethane	U		0.00197	0.0125	⁷ Gl
n-Butylbenzene	U		0.00525	0.0125	⁸ Al
sec-Butylbenzene	U		0.00288	0.0125	⁹ Sc
tert-Butylbenzene	U		0.00195	0.00500	
Carbon tetrachloride	U		0.000898	0.00500	
Chlorobenzene	U		0.000210	0.00250	
Chlorodibromomethane	U		0.000612	0.00250	
Chloroethane	U		0.00170	0.00500	
Chloroform	U		0.00103	0.00250	
Chloromethane	U		0.00435	0.0125	
2-Chlorotoluene	U		0.000865	0.00250	
4-Chlorotoluene	U		0.000450	0.00500	
1,2-Dibromo-3-Chloropropane	U		0.00390	0.0250	
1,2-Dibromoethane	U		0.000648	0.00250	
Dibromomethane	U		0.000750	0.00500	
1,2-Dichlorobenzene	U		0.000425	0.00500	
1,3-Dichlorobenzene	U		0.000600	0.00500	
1,4-Dichlorobenzene	U		0.000700	0.00500	
Dichlorodifluoromethane	U		0.00161	0.00250	
1,1-Dichloroethane	U		0.000491	0.00250	
1,2-Dichloroethane	U		0.000649	0.00250	
1,1-Dichloroethene	U		0.000606	0.00250	
cis-1,2-Dichloroethene	U		0.000734	0.00250	
trans-1,2-Dichloroethene	U		0.00104	0.00500	
1,2-Dichloropropane	U		0.00142	0.00500	
1,1-Dichloropropene	U		0.000809	0.00250	
1,3-Dichloropropane	U		0.000501	0.00500	
cis-1,3-Dichloropropene	U		0.000757	0.00250	
trans-1,3-Dichloropropene	U		0.00114	0.00500	
2,2-Dichloropropane	U		0.00138	0.00250	
Di-isopropyl ether	U		0.000410	0.00100	
Ethylbenzene	U		0.000737	0.00250	
Hexachloro-1,3-butadiene	U		0.00600	0.0250	
Isopropylbenzene	U		0.000425	0.00250	

ACCOUNT:

PES Environmental, Inc.- WA

PROJECT:

920.128.01

SDG:

L1224343

DATE/TIME:

06/09/20 17:33

PAGE:

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L1224343-05,06,07,08

Method Blank (MB)

(MB) R3535789-3 06/05/20 15:15

Analyte	MB Result mg/kg	<u>MB Qualifier</u>	MB MDL mg/kg	MB RDL mg/kg	¹ Cp
p-Isopropyltoluene	U		0.00255	0.00500	² Tc
2-Butanone (MEK)	U		0.0635	0.100	³ Ss
Methylene Chloride	U		0.00664	0.0250	⁴ Cn
4-Methyl-2-pentanone (MIBK)	U		0.00228	0.0250	⁵ Sr
Methyl tert-butyl ether	U		0.000350	0.00100	⁶ Qc
Naphthalene	U		0.00488	0.0125	⁷ Gl
n-Propylbenzene	U		0.000950	0.00500	⁸ Al
Styrene	U		0.000229	0.0125	⁹ Sc
1,1,2-Tetrachloroethane	U		0.000948	0.00250	
1,1,2,2-Tetrachloroethane	U		0.000695	0.00250	
Tetrachloroethene	U		0.000896	0.00250	
Toluene	U		0.00130	0.00500	
1,1,2-Trichlorotrifluoroethane	U		0.000754	0.00250	
1,2,3-Trichlorobenzene	U		0.00733	0.0125	
1,2,4-Trichlorobenzene	U		0.00440	0.0125	
1,1,1-Trichloroethane	U		0.000923	0.00250	
1,1,2-Trichloroethane	U		0.000597	0.00250	
Trichloroethene	U		0.000584	0.00100	
Trichlorofluoromethane	U		0.000827	0.00250	
1,2,3-Trichloropropane	U		0.00162	0.0125	
1,2,3-Trimethylbenzene	U		0.00158	0.00500	
1,2,4-Trimethylbenzene	U		0.00158	0.00500	
1,3,5-Trimethylbenzene	U		0.00200	0.00500	
Vinyl chloride	U		0.00116	0.00250	
Xylenes, Total	U		0.000880	0.00650	
(S) Toluene-d8	116		75.0-131		
(S) 4-Bromofluorobenzene	102		67.0-138		
(S) 1,2-Dichloroethane-d4	99.9		70.0-130		

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

(LCS) R3535789-1 06/05/20 13:56 • (LCSD) R3535789-2 06/05/20 14:16

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
Acetone	0.625	0.760	0.684	122	109	10.0-160			10.5	31
Acrylonitrile	0.625	0.515	0.506	82.4	81.0	45.0-153			1.76	22
Benzene	0.125	0.104	0.104	83.2	83.2	70.0-123			0.000	20
Bromobenzene	0.125	0.151	0.151	121	121	73.0-121			0.000	20
Bromodichloromethane	0.125	0.111	0.112	88.8	89.6	73.0-121			0.897	20



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

(LCS) R3535789-1 06/05/20 13:56 • (LCSD) R3535789-2 06/05/20 14:16

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	0.125	0.133	0.139	106	111	64.0-132			4.41	20
Bromomethane	0.125	0.0985	0.0968	78.8	77.4	56.0-147			1.74	20
n-Butylbenzene	0.125	0.105	0.109	84.0	87.2	68.0-135			3.74	20
sec-Butylbenzene	0.125	0.130	0.130	104	104	74.0-130			0.000	20
tert-Butylbenzene	0.125	0.137	0.138	110	110	75.0-127			0.727	20
Carbon tetrachloride	0.125	0.133	0.132	106	106	66.0-128			0.755	20
Chlorobenzene	0.125	0.135	0.133	108	106	76.0-128			1.49	20
Chlorodibromomethane	0.125	0.116	0.115	92.8	92.0	74.0-127			0.866	20
Chloroethane	0.125	0.0966	0.0946	77.3	75.7	61.0-134			2.09	20
Chloroform	0.125	0.110	0.110	88.0	88.0	72.0-123			0.000	20
Chloromethane	0.125	0.129	0.122	103	97.6	51.0-138			5.58	20
2-Chlorotoluene	0.125	0.141	0.138	113	110	75.0-124			2.15	20
4-Chlorotoluene	0.125	0.130	0.129	104	103	75.0-124			0.772	20
1,2-Dibromo-3-Chloropropane	0.125	0.125	0.129	100	103	59.0-130			3.15	20
1,2-Dibromoethane	0.125	0.146	0.143	117	114	74.0-128			2.08	20
Dibromomethane	0.125	0.109	0.107	87.2	85.6	75.0-122			1.85	20
1,2-Dichlorobenzene	0.125	0.132	0.133	106	106	76.0-124			0.755	20
1,3-Dichlorobenzene	0.125	0.129	0.129	103	103	76.0-125			0.000	20
1,4-Dichlorobenzene	0.125	0.121	0.119	96.8	95.2	77.0-121			1.67	20
Dichlorodifluoromethane	0.125	0.107	0.116	85.6	92.8	43.0-156			8.07	20
1,1-Dichloroethane	0.125	0.120	0.117	96.0	93.6	70.0-127			2.53	20
1,2-Dichloroethane	0.125	0.0930	0.0930	74.4	74.4	65.0-131			0.000	20
1,1-Dichloroethene	0.125	0.144	0.137	115	110	65.0-131			4.98	20
cis-1,2-Dichloroethene	0.125	0.135	0.134	108	107	73.0-125			0.743	20
trans-1,2-Dichloroethene	0.125	0.124	0.123	99.2	98.4	71.0-125			0.810	20
1,2-Dichloropropane	0.125	0.113	0.110	90.4	88.0	74.0-125			2.69	20
1,1-Dichloropropene	0.125	0.126	0.124	101	99.2	73.0-125			1.60	20
1,3-Dichloropropane	0.125	0.107	0.108	85.6	86.4	80.0-125			0.930	20
cis-1,3-Dichloropropene	0.125	0.0966	0.0997	77.3	79.8	76.0-127			3.16	20
trans-1,3-Dichloropropene	0.125	0.118	0.118	94.4	94.4	73.0-127			0.000	20
2,2-Dichloropropane	0.125	0.0905	0.0976	72.4	78.1	59.0-135			7.55	20
Di-isopropyl ether	0.125	0.0969	0.0978	77.5	78.2	60.0-136			0.924	20
Ethylbenzene	0.125	0.149	0.151	119	121	74.0-126			1.33	20
Hexachloro-1,3-butadiene	0.125	0.127	0.127	102	102	57.0-150			0.000	20
Isopropylbenzene	0.125	0.116	0.117	92.8	93.6	72.0-127			0.858	20
p-Isopropyltoluene	0.125	0.144	0.145	115	116	72.0-133			0.692	20
2-Butanone (MEK)	0.625	0.567	0.554	90.7	88.6	30.0-160			2.32	24
Methylene Chloride	0.125	0.0908	0.0906	72.6	72.5	68.0-123			0.221	20
4-Methyl-2-pentanone (MIBK)	0.625	0.654	0.660	105	106	56.0-143			0.913	20
Methyl tert-butyl ether	0.125	0.0944	0.101	75.5	80.8	66.0-132			6.76	20

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



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

(LCS) R3535789-1 06/05/20 13:56 • (LCSD) R3535789-2 06/05/20 14:16

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCSD Result mg/kg	LCS Rec. %	LCSD Rec. %	Rec. Limits %	<u>LCS Qualifier</u>	<u>LCSD Qualifier</u>	RPD %	RPD Limits %
Naphthalene	0.125	0.132	0.135	106	108	59.0-130			2.25	20
n-Propylbenzene	0.125	0.136	0.137	109	110	74.0-126			0.733	20
Styrene	0.125	0.121	0.113	96.8	90.4	72.0-127			6.84	20
1,1,1,2-Tetrachloroethane	0.125	0.116	0.118	92.8	94.4	74.0-129			1.71	20
1,1,2,2-Tetrachloroethane	0.125	0.0942	0.0920	75.4	73.6	68.0-128			2.36	20
Tetrachloroethene	0.125	0.156	0.148	125	118	70.0-136			5.26	20
Toluene	0.125	0.115	0.114	92.0	91.2	75.0-121			0.873	20
1,1,2-Trichlorotrifluoroethane	0.125	0.125	0.128	100	102	61.0-139			2.37	20
1,2,3-Trichlorobenzene	0.125	0.131	0.133	105	106	59.0-139			1.52	20
1,2,4-Trichlorobenzene	0.125	0.141	0.143	113	114	62.0-137			1.41	20
1,1,1-Trichloroethane	0.125	0.0967	0.0972	77.4	77.8	69.0-126			0.516	20
1,1,2-Trichloroethane	0.125	0.124	0.122	99.2	97.6	78.0-123			1.63	20
Trichloroethene	0.125	0.140	0.141	112	113	76.0-126			0.712	20
Trichlorofluoromethane	0.125	0.140	0.145	112	116	61.0-142			3.51	20
1,2,3-Trichloropropane	0.125	0.116	0.121	92.8	96.8	67.0-129			4.22	20
1,2,3-Trimethylbenzene	0.125	0.122	0.126	97.6	101	74.0-124			3.23	20
1,2,4-Trimethylbenzene	0.125	0.116	0.114	92.8	91.2	70.0-126			1.74	20
1,3,5-Trimethylbenzene	0.125	0.105	0.105	84.0	84.0	73.0-127			0.000	20
Vinyl chloride	0.125	0.116	0.115	92.8	92.0	63.0-134			0.866	20
Xylenes, Total	0.375	0.393	0.381	105	102	72.0-127			3.10	20
(S) Toluene-d8				116	115	75.0-131				
(S) 4-Bromofluorobenzene				102	98.8	67.0-138				
(S) 1,2-Dichloroethane-d4				100	99.2	70.0-130				

¹Cp²Tc³Ss⁴Cn⁵Sr⁶Qc⁷Gl⁸Al⁹Sc

WG1486835

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-SGT

QUALITY CONTROL SUMMARY

ONE LAB. NATIONWIDE.



L1224343-01,02,03,04,05,06,07,08,09,10

Method Blank (MB)

(MB) R3535483-1 06/05/20 00:13

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Diesel Range Organics (DRO)	U		1.33	4.00
Residual Range Organics (RRO)	U		3.33	10.0
(S) o-Terphenyl	62.2			18.0-148

¹Cp²Tc³Ss⁴Cn⁵Sr⁶Qc⁷Gl⁸Al⁹Sc

Laboratory Control Sample (LCS)

(LCS) R3535483-2 06/05/20 00:27

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Diesel Range Organics (DRO)	50.0	31.0	62.0	50.0-150	
(S) o-Terphenyl		54.1		18.0-148	

[L1224343-01,02,03,04,05,06,07,08,09,10](#)

Method Blank (MB)

(MB) R3535897-1 06/07/20 12:29

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
PCB 1016	U		0.0118	0.0340
PCB 1221	U		0.0118	0.0340
PCB 1232	U		0.0118	0.0340
PCB 1242	U		0.0118	0.0340
PCB 1248	U		0.00738	0.0170
PCB 1254	U		0.00738	0.0170
PCB 1260	U		0.00738	0.0170
(S) Decachlorobiphenyl	54.7		10.0-135	
(S) Tetrachloro-m-xylene	54.8		10.0-139	

¹Cp²Tc³Ss⁴Cn⁵Sr⁶Qc⁷Gl⁸Al⁹Sc

Laboratory Control Sample (LCS)

(LCS) R3535897-2 06/07/20 12:43

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
PCB 1260	0.167	0.143	85.6	37.0-145	
PCB 1016	0.167	0.150	89.8	36.0-141	
(S) Decachlorobiphenyl		84.7	10.0-135		
(S) Tetrachloro-m-xylene		82.6	10.0-139		



L1224343-01,02,03,04,05,06,07,08,09

Method Blank (MB)

(MB) R3535407-2 06/04/20 17:14

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Acenaphthene	U		0.00539	0.0333
Acenaphthylene	U		0.00469	0.0333
Anthracene	U		0.00593	0.0333
Benzo(a)anthracene	U		0.00587	0.0333
Benzo(b)fluoranthene	U		0.00621	0.0333
Benzo(k)fluoranthene	U		0.00592	0.0333
Benzo(g,h,i)perylene	U		0.00609	0.0333
Benzo(a)pyrene	U		0.00619	0.0333
Bis(2-chlorethoxy)methane	U		0.0100	0.333
Bis(2-chloroethyl)ether	U		0.0110	0.333
2,2-Oxybis(1-Chloropropane)	U		0.0144	0.333
4-Bromophenyl-phenylether	U		0.0117	0.333
2-Chloronaphthalene	U		0.00585	0.0333
4-Chlorophenyl-phenylether	U		0.0116	0.333
Chrysene	U		0.00662	0.0333
Dibenz(a,h)anthracene	U		0.00923	0.0333
3,3-Dichlorobenzidine	U		0.0123	0.333
2,4-Dinitrotoluene	U		0.00955	0.333
2,6-Dinitrotoluene	U		0.0109	0.333
Fluoranthene	U		0.00601	0.0333
Fluorene	U		0.00542	0.0333
Hexachlorobenzene	U		0.0118	0.333
Hexachloro-1,3-butadiene	U		0.0112	0.333
Hexachlorocyclopentadiene	U		0.0175	0.333
Hexachloroethane	U		0.0131	0.333
Indeno(1,2,3-cd)pyrene	U		0.00941	0.0333
Isophorone	U		0.0102	0.333
Naphthalene	U		0.00836	0.0333
Nitrobenzene	U		0.0116	0.333
n-Nitrosodimethylamine	U		0.0494	0.333
n-Nitrosodiphenylamine	U		0.0252	0.333
n-Nitrosodi-n-propylamine	U		0.0111	0.333
Phenanthrene	U		0.00661	0.0333
Benzylbutyl phthalate	U		0.0104	0.333
Bis(2-ethylhexyl)phthalate	U		0.0422	0.333
Di-n-butyl phthalate	U		0.0114	0.333
Diethyl phthalate	U		0.0110	0.333
Dimethyl phthalate	U		0.0706	0.333
Di-n-octyl phthalate	U		0.0225	0.333
Pyrene	U		0.00648	0.0333

¹Cp²Tc³Ss⁴Cn⁵Sr⁶Qc⁷Gl⁸Al⁹Sc



L1224343-01,02,03,04,05,06,07,08,09

Method Blank (MB)

(MB) R3535407-2 06/04/20 17:14

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg	
Pyridine	U		0.0220	0.333	¹ Cp
1,2,4-Trichlorobenzene	U		0.0104	0.333	² Tc
4-Chloro-3-methylphenol	U		0.0108	0.333	³ Ss
2-Chlorophenol	U		0.0110	0.333	⁴ Cn
2-Methylphenol	U		0.0100	0.333	⁵ Sr
3&4-Methyl Phenol	U		0.0104	0.333	⁶ Qc
2,4-Dichlorophenol	U		0.00970	0.333	⁷ Gl
2,4-Dimethylphenol	U		0.00870	0.333	⁸ Al
4,6-Dinitro-2-methylphenol	U		0.0755	0.333	⁹ Sc
2,4-Dinitrophenol	U		0.0779	0.333	
2-Nitrophenol	U		0.0119	0.333	
4-Nitrophenol	U		0.0104	0.333	
Pentachlorophenol	U		0.00896	0.333	
Phenol	U		0.0134	0.333	
2,4,5-Trichlorophenol	U		0.0113	0.333	
2,4,6-Trichlorophenol	U		0.0107	0.333	
(S) Nitrobenzene-d5	53.8		10.0-122		
(S) 2-Fluorobiphenyl	64.6		15.0-120		
(S) p-Terphenyl-d14	75.7		10.0-120		
(S) Phenol-d5	61.3		10.0-120		
(S) 2-Fluorophenol	67.3		12.0-120		
(S) 2,4,6-Tribromophenol	58.6		10.0-127		

Laboratory Control Sample (LCS)

(LCS) R3535407-1 06/04/20 16:51

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Acenaphthene	0.666	0.402	60.4	38.0-120	
Acenaphthylene	0.666	0.454	68.2	40.0-120	
Anthracene	0.666	0.437	65.6	42.0-120	
Benzo(a)anthracene	0.666	0.504	75.7	44.0-120	
Benzo(b)fluoranthene	0.666	0.475	71.3	43.0-120	
Benzo(k)fluoranthene	0.666	0.462	69.4	44.0-120	
Benzo(g,h,i)perylene	0.666	0.461	69.2	43.0-120	
Benzo(a)pyrene	0.666	0.511	76.7	45.0-120	
Bis(2-chlorethoxy)methane	0.666	0.320	48.0	20.0-120	
Bis(2-chloroethyl)ether	0.666	0.376	56.5	16.0-120	
2,2-Oxybis(1-Chloropropane)	0.666	0.378	56.8	23.0-120	



L1224343-01,02,03,04,05,06,07,08,09

Laboratory Control Sample (LCS)

(LCS) R3535407-1 06/04/20 16:51

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	<u>LCS Qualifier</u>
4-Bromophenyl-phenylether	0.666	0.390	58.6	40.0-120	¹ Cp
2-Chloronaphthalene	0.666	0.410	61.6	35.0-120	² Tc
4-Chlorophenyl-phenylether	0.666	0.421	63.2	40.0-120	³ Ss
Chrysene	0.666	0.480	72.1	43.0-120	⁴ Cn
Dibenz(a,h)anthracene	0.666	0.444	66.7	44.0-120	⁵ Sr
3,3-Dichlorobenzidine	1.33	0.908	68.3	28.0-120	⁶ Qc
2,4-Dinitrotoluene	0.666	0.490	73.6	45.0-120	⁷ Gl
2,6-Dinitrotoluene	0.666	0.470	70.6	42.0-120	⁸ Al
Fluoranthene	0.666	0.444	66.7	44.0-120	⁹ Sc
Fluorene	0.666	0.430	64.6	41.0-120	
Hexachlorobenzene	0.666	0.378	56.8	39.0-120	
Hexachloro-1,3-butadiene	0.666	0.301	45.2	15.0-120	
Hexachlorocyclopentadiene	0.666	0.339	50.9	15.0-120	
Hexachloroethane	0.666	0.387	58.1	17.0-120	
Indeno(1,2,3-cd)pyrene	0.666	0.466	70.0	45.0-120	
Isophorone	0.666	0.308	46.2	23.0-120	
Naphthalene	0.666	0.334	50.2	18.0-120	
Nitrobenzene	0.666	0.320	48.0	17.0-120	
n-Nitrosodimethylamine	0.666	0.339	50.9	10.0-125	
n-Nitrosodiphenylamine	0.666	0.436	65.5	40.0-120	
n-Nitrosodi-n-propylamine	0.666	0.348	52.3	26.0-120	
Phenanthrene	0.666	0.419	62.9	42.0-120	
Benzylbutyl phthalate	0.666	0.592	88.9	40.0-120	
Bis(2-ethylhexyl)phthalate	0.666	0.574	86.2	41.0-120	
Di-n-butyl phthalate	0.666	0.493	74.0	43.0-120	
Diethyl phthalate	0.666	0.456	68.5	43.0-120	
Dimethyl phthalate	0.666	0.422	63.4	43.0-120	
Di-n-octyl phthalate	0.666	0.585	87.8	40.0-120	
Pyrene	0.666	0.504	75.7	41.0-120	
Pyridine	0.666	0.186	27.9	10.0-120	
1,2,4-Trichlorobenzene	0.666	0.330	49.5	17.0-120	
4-Chloro-3-methylphenol	0.666	0.371	55.7	28.0-120	
2-Chlorophenol	0.666	0.421	63.2	28.0-120	
2-Methylphenol	0.666	0.417	62.6	35.0-120	
3&4-Methyl Phenol	0.666	0.472	70.9	42.0-120	
2,4-Dichlorophenol	0.666	0.365	54.8	25.0-120	
2,4-Dimethylphenol	0.666	0.378	56.8	15.0-120	
4,6-Dinitro-2-methylphenol	0.666	0.415	62.3	16.0-120	
2,4-Dinitrophenol	0.666	0.380	57.1	10.0-120	
2-Nitrophenol	0.666	0.384	57.7	20.0-120	

ACCOUNT:

PES Environmental, Inc.- WA

PROJECT:

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L1224343-01,02,03,04,05,06,07,08,09

Laboratory Control Sample (LCS)

(LCS) R3535407-1 06/04/20 16:51

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	<u>LCS Qualifier</u>
4-Nitrophenol	0.666	0.466	70.0	27.0-120	
Pentachlorophenol	0.666	0.483	72.5	29.0-120	
Phenol	0.666	0.391	58.7	28.0-120	
2,4,5-Trichlorophenol	0.666	0.472	70.9	38.0-120	
2,4,6-Trichlorophenol	0.666	0.434	65.2	37.0-120	
(S) Nitrobenzene-d5		52.0	10.0-122		
(S) 2-Fluorobiphenyl		63.7	15.0-120		
(S) p-Terphenyl-d14		79.3	10.0-120		
(S) Phenol-d5		64.0	10.0-120		
(S) 2-Fluorophenol		68.2	12.0-120		
(S) 2,4,6-Tribromophenol		68.3	10.0-127		

¹Cp²Tc³Ss⁴Cn⁵Sr⁶Qc⁷Gl⁸Al⁹Sc



L1224343-10

Method Blank (MB)

(MB) R3536283-2 06/07/20 20:28

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg	
Acenaphthene	U		0.00539	0.0333	¹ Cp
Acenaphthylene	U		0.00469	0.0333	² Tc
Anthracene	U		0.00593	0.0333	³ Ss
Benzo(a)anthracene	U		0.00587	0.0333	⁴ Cn
Benzo(b)fluoranthene	U		0.00621	0.0333	⁵ Sr
Benzo(k)fluoranthene	U		0.00592	0.0333	⁶ Qc
Benzo(g,h,i)perylene	U		0.00609	0.0333	⁷ Gl
Benzo(a)pyrene	U		0.00619	0.0333	⁸ Al
Bis(2-chlorethoxy)methane	U		0.0100	0.333	⁹ Sc
Bis(2-chloroethyl)ether	U		0.0110	0.333	
2,2-Oxybis(1-Chloropropane)	U		0.0144	0.333	
4-Bromophenyl-phenylether	U		0.0117	0.333	
2-Chloronaphthalene	U		0.00585	0.0333	
4-Chlorophenyl-phenylether	U		0.0116	0.333	
Chrysene	U		0.00662	0.0333	
Dibenz(a,h)anthracene	U		0.00923	0.0333	
3,3-Dichlorobenzidine	U		0.0123	0.333	
2,4-Dinitrotoluene	U		0.00955	0.333	
2,6-Dinitrotoluene	U		0.0109	0.333	
Fluoranthene	U		0.00601	0.0333	
Fluorene	U		0.00542	0.0333	
Hexachlorobenzene	U		0.0118	0.333	
Hexachloro-1,3-butadiene	U		0.0112	0.333	
Hexachlorocyclopentadiene	U		0.0175	0.333	
Hexachloroethane	U		0.0131	0.333	
Indeno(1,2,3-cd)pyrene	U		0.00941	0.0333	
Isophorone	U		0.0102	0.333	
Naphthalene	U		0.00836	0.0333	
Nitrobenzene	U		0.0116	0.333	
n-Nitrosodimethylamine	U		0.0494	0.333	
n-Nitrosodiphenylamine	U		0.0252	0.333	
n-Nitrosodi-n-propylamine	U		0.0111	0.333	
Phenanthrene	U		0.00661	0.0333	
Benzylbutyl phthalate	U		0.0104	0.333	
Bis(2-ethylhexyl)phthalate	U		0.0422	0.333	
Di-n-butyl phthalate	U		0.0114	0.333	
Diethyl phthalate	U		0.0110	0.333	
Dimethyl phthalate	U		0.0706	0.333	
Di-n-octyl phthalate	U		0.0225	0.333	
Pyrene	U		0.00648	0.0333	

ACCOUNT:

PES Environmental, Inc.- WA

PROJECT:

920.128.01

SDG:

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Method Blank (MB)

(MB) R3536283-2 06/07/20 20:28

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg	
Pyridine	U		0.0220	0.333	¹ Cp
1,2,4-Trichlorobenzene	U		0.0104	0.333	² Tc
4-Chloro-3-methylphenol	U		0.0108	0.333	³ Ss
2-Chlorophenol	U		0.0110	0.333	⁴ Cn
2-Methylphenol	U		0.0100	0.333	⁵ Sr
3&4-Methyl Phenol	U		0.0104	0.333	⁶ Qc
2,4-Dichlorophenol	U		0.00970	0.333	⁷ Gl
2,4-Dimethylphenol	U		0.00870	0.333	⁸ Al
4,6-Dinitro-2-methylphenol	U		0.0755	0.333	⁹ Sc
2,4-Dinitrophenol	U		0.0779	0.333	
2-Nitrophenol	U		0.0119	0.333	
4-Nitrophenol	U		0.0104	0.333	
Pentachlorophenol	U		0.00896	0.333	
Phenol	U		0.0134	0.333	
2,4,5-Trichlorophenol	U		0.0113	0.333	
2,4,6-Trichlorophenol	U		0.0107	0.333	
(S) Nitrobenzene-d5	50.8		10.0-122		
(S) 2-Fluorobiphenyl	60.7		15.0-120		
(S) p-Terphenyl-d14	65.8		10.0-120		
(S) Phenol-d5	64.0		10.0-120		
(S) 2-Fluorophenol	68.2		12.0-120		
(S) 2,4,6-Tribromophenol	53.2		10.0-127		

Laboratory Control Sample (LCS)

(LCS) R3536283-1 06/07/20 20:06

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Acenaphthene	0.666	0.385	57.8	38.0-120	
Acenaphthylene	0.666	0.408	61.3	40.0-120	
Anthracene	0.666	0.449	67.4	42.0-120	
Benzo(a)anthracene	0.666	0.489	73.4	44.0-120	
Benzo(b)fluoranthene	0.666	0.486	73.0	43.0-120	
Benzo(k)fluoranthene	0.666	0.479	71.9	44.0-120	
Benzo(g,h,i)perylene	0.666	0.387	58.1	43.0-120	
Benzo(a)pyrene	0.666	0.482	72.4	45.0-120	
Bis(2-chlorethoxy)methane	0.666	0.337	50.6	20.0-120	
Bis(2-chloroethyl)ether	0.666	0.371	55.7	16.0-120	
2,2-Oxybis(1-Chloropropane)	0.666	0.354	53.2	23.0-120	



Laboratory Control Sample (LCS)

(LCS) R3536283-1 06/07/20 20:06

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	<u>LCS Qualifier</u>
4-Bromophenyl-phenylether	0.666	0.403	60.5	40.0-120	
2-Chloronaphthalene	0.666	0.384	57.7	35.0-120	
4-Chlorophenyl-phenylether	0.666	0.393	59.0	40.0-120	
Chrysene	0.666	0.457	68.6	43.0-120	
Dibenz(a,h)anthracene	0.666	0.410	61.6	44.0-120	
3,3-Dichlorobenzidine	1.33	0.857	64.4	28.0-120	
2,4-Dinitrotoluene	0.666	0.447	67.1	45.0-120	
2,6-Dinitrotoluene	0.666	0.423	63.5	42.0-120	
Fluoranthene	0.666	0.460	69.1	44.0-120	
Fluorene	0.666	0.406	61.0	41.0-120	
Hexachlorobenzene	0.666	0.388	58.3	39.0-120	
Hexachloro-1,3-butadiene	0.666	0.249	37.4	15.0-120	
Hexachlorocyclopentadiene	0.666	0.246	36.9	15.0-120	
Hexachloroethane	0.666	0.308	46.2	17.0-120	
Indeno(1,2,3-cd)pyrene	0.666	0.414	62.2	45.0-120	
Isophorone	0.666	0.321	48.2	23.0-120	
Naphthalene	0.666	0.293	44.0	18.0-120	
Nitrobenzene	0.666	0.307	46.1	17.0-120	
n-Nitrosodimethylamine	0.666	0.340	51.1	10.0-125	
n-Nitrosodiphenylamine	0.666	0.431	64.7	40.0-120	
n-Nitrosodi-n-propylamine	0.666	0.415	62.3	26.0-120	
Phenanthrene	0.666	0.442	66.4	42.0-120	
Benzylbutyl phthalate	0.666	0.511	76.7	40.0-120	
Bis(2-ethylhexyl)phthalate	0.666	0.492	73.9	41.0-120	
Di-n-butyl phthalate	0.666	0.495	74.3	43.0-120	
Diethyl phthalate	0.666	0.431	64.7	43.0-120	
Dimethyl phthalate	0.666	0.423	63.5	43.0-120	
Di-n-octyl phthalate	0.666	0.484	72.7	40.0-120	
Pyrene	0.666	0.483	72.5	41.0-120	
Pyridine	0.666	0.0661	9.92	10.0-120	J4
1,2,4-Trichlorobenzene	0.666	0.262	39.3	17.0-120	
4-Chloro-3-methylphenol	0.666	0.316	47.4	28.0-120	
2-Chlorophenol	0.666	0.360	54.1	28.0-120	
2-Methylphenol	0.666	0.400	60.1	35.0-120	
3&4-Methyl Phenol	0.666	0.480	72.1	42.0-120	
2,4-Dichlorophenol	0.666	0.325	48.8	25.0-120	
2,4-Dimethylphenol	0.666	0.333	50.0	15.0-120	
4,6-Dinitro-2-methylphenol	0.666	0.330	49.5	16.0-120	
2,4-Dinitrophenol	0.666	0.290	43.5	10.0-120	
2-Nitrophenol	0.666	0.290	43.5	20.0-120	

¹Cp²Tc³Ss⁴Cn⁵Sr⁶Qc⁷Gl⁸Al⁹Sc



Laboratory Control Sample (LCS)

(LCS) R3536283-1 06/07/20 20:06

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	<u>LCS Qualifier</u>
4-Nitrophenol	0.666	0.411	61.7	27.0-120	
Pentachlorophenol	0.666	0.452	67.9	29.0-120	
Phenol	0.666	0.375	56.3	28.0-120	
2,4,5-Trichlorophenol	0.666	0.430	64.6	38.0-120	
2,4,6-Trichlorophenol	0.666	0.374	56.2	37.0-120	
(S) Nitrobenzene-d5		48.3	10.0-122		
(S) 2-Fluorobiphenyl		59.2	15.0-120		
(S) p-Terphenyl-d14		65.2	10.0-120		
(S) Phenol-d5		58.4	10.0-120		
(S) 2-Fluorophenol		60.4	12.0-120		
(S) 2,4,6-Tribromophenol		57.7	10.0-127		

¹Cp²Tc³Ss⁴Cn⁵Sr⁶Qc⁷Gl⁸Al⁹Sc



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].	¹ Cp
MDL	Method Detection Limit.	² Tc
ND	Not detected at the Reporting Limit (or MDL where applicable).	³ Ss
RDL	Reported Detection Limit.	⁴ Cn
RDL (dry)	Reported Detection Limit.	⁵ Sr
Rec.	Recovery.	⁶ Qc
RPD	Relative Percent Difference.	⁷ GI
SDG	Sample Delivery Group.	⁸ Al
(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.	⁹ Sc
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
J4	The associated batch QC was outside the established quality control range for accuracy.



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
Alaska	17-026
Arizona	AZ0612
Arkansas	88-0469
California	2932
Colorado	TN00003
Connecticut	PH-0197
Florida	E87487
Georgia	NELAP
Georgia ¹	923
Idaho	TN00003
Illinois	200008
Indiana	C-TN-01
Iowa	364
Kansas	E-10277
Kentucky ^{1,6}	90010
Kentucky ²	16
Louisiana	AI30792
Louisiana ¹	LA180010
Maine	TN0002
Maryland	324
Massachusetts	M-TN003
Michigan	9958
Minnesota	047-999-395
Mississippi	TN00003
Missouri	340
Montana	CERT0086

Nebraska	NE-OS-15-05
Nevada	TN-03-2002-34
New Hampshire	2975
New Jersey-NELAP	TN002
New Mexico ¹	n/a
New York	11742
North Carolina	Env375
North Carolina ¹	DW21704
North Carolina ³	41
North Dakota	R-140
Ohio-VAP	CL0069
Oklahoma	9915
Oregon	TN200002
Pennsylvania	68-02979
Rhode Island	LA000356
South Carolina	84004
South Dakota	n/a
Tennessee ^{1,4}	2006
Texas	T104704245-18-15
Texas ⁵	LAB0152
Utah	TN00003
Vermont	VT2006
Virginia	460132
Washington	C847
West Virginia	233
Wisconsin	9980939910
Wyoming	A2LA

Third Party Federal Accreditations

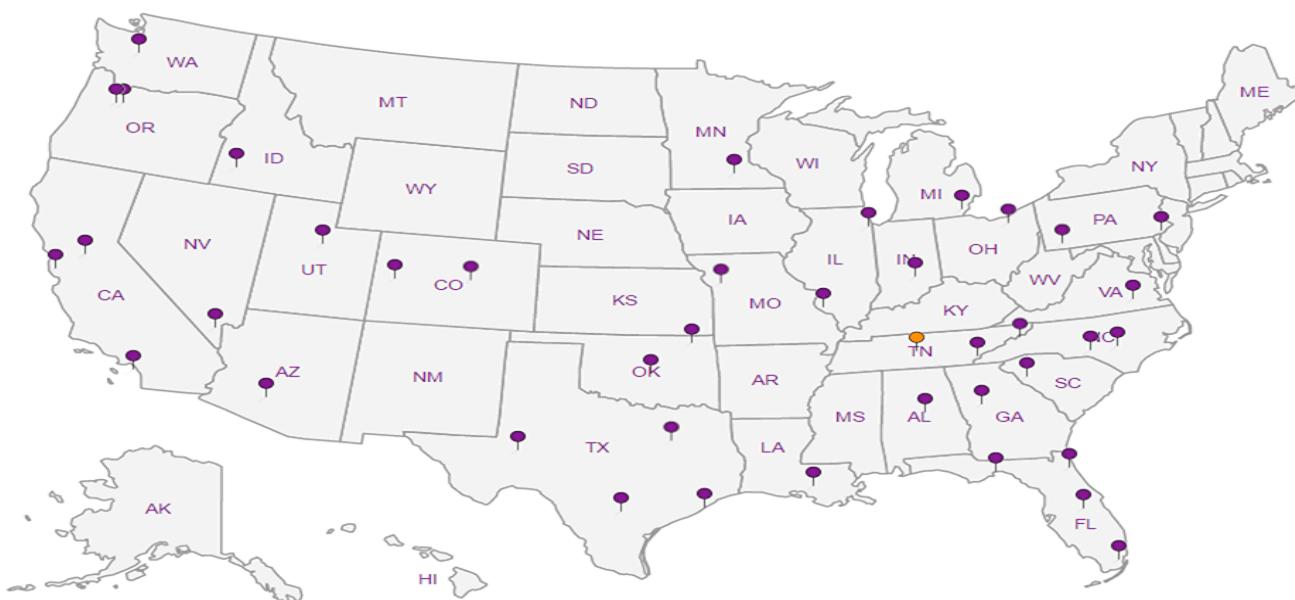
A2LA – ISO 17025	1461.01
A2LA – ISO 17025 ⁵	1461.02
Canada	1461.01
EPA-Crypto	TN00003

AIHA-LAP,LLC EMLAP	100789
DOD	1461.01
USDA	P330-15-00234

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.



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

PES Environmental, Inc.- WA			Billing Information: Attn: Accounts Payable 1215 Fourth Ave., Ste. 1350 Seattle, WA 98161			Analysis / Container / Preservative						Chain of Custody Page 1 of 3			
1215 Fourth Ave., Suite 1350 Seattle, WA 98161						Pres Chk								Pace Analytical® National Center for Testing & Innovation	
Report to: Bill Haldeman			Email To: bhaldeman@pesenv.com									12065 Lebanon Rd Mount Juliet, TN 37122 Phone: 615-758-5858 Phone: 800-767-5859 Fax: 615-758-5859			
Project Description: <i>Shoquadrone Mill Pond</i>			City/State Collected:	Snoqualmie, WA	Please Circle: PT MT CT ET							SDG # L1724843			
Phone: 206-529-3980			Client Project #	920.128.01	Lab Project # PESENVSWA-HALDEMAN							F167			
Collected by (print): <i>Chris DeBoer</i>			Site/Facility ID #		P.O. #							Medium: PESENVSWA Template: T168320 Prelogin: P775245 PM: 546 - Jared Starkey PB:			
Collected by (signature): <i>Chris DeBoer</i>			Rush? (Lab MUST Be Notified)	Quote #	Date Results Needed	No. of Cntrs							Shipped Via:		
Immediately Packed on Ice N Y X			Same Day Five Day Next Day 5 Day (Rad Only) Two Day 10 Day (Rad Only) Three Day										Remarks	Sample # (lab only)	
Sample ID			Comp/Grab	Matrix *	Depth	Date	Time								
B-1-0.5			Comp	SS	0.5	5/29/20	1010	1	X	X	X	X	X		
B-1-1.5				SS	1.5		1115	1							
B-2-0.5				SS	0.5		1135	1	X	X	X	X			
B-2-1.5				SS	1.5		1240	1							
B-3-0.5				SS	0.5		1210	1							
B-3-1.5				SS	1.5		1300	1							
B-4-0.5				SS	0.5	1450			X	X	X			-C1	
B-4-1.5				SS	1.5	1455	1450	1				X			
B-5-0.5				SS	0.5		1500	1	X	X	X			-C2	
B-5-1				SS	1.5		1510	1	X	X	X				
* Matrix: SS - Soil AIR - Air F - Filter GW - Groundwater B - Bioassay WW - WasteWater DW - Drinking Water OT - Other _____			Remarks:									pH	Temp		
												Flow	Other		Sample Receipt Checklist
															COC Seal Present/Intact: <input checked="" type="checkbox"/> NP <input checked="" type="checkbox"/> N COC Signed/Accurate: <input checked="" type="checkbox"/> Bottles arrive intact: <input checked="" type="checkbox"/> Correct bottles used: <input checked="" type="checkbox"/> Sufficient volume sent: <input checked="" type="checkbox"/> If Applicable VOA Zero Headspace: <input checked="" type="checkbox"/> V <input checked="" type="checkbox"/> N Preservation Correct/Checked: <input checked="" type="checkbox"/> P <input checked="" type="checkbox"/> N RAD Screen <0.5 mR/hr: <input checked="" type="checkbox"/> R <input checked="" type="checkbox"/> N
Samples returned via: UPS FedEx Courier			Tracking # 175000026001												
Relinquished by : (Signature) <i>Chris DeBoer</i>			Date: 6/1/20	Time: 1530	Received by: (Signature)			Trip Blank Received: <input checked="" type="checkbox"/> Yes <input checked="" type="checkbox"/> No HCl / MeOH <input checked="" type="checkbox"/> TBR <input checked="" type="checkbox"/>			Temp: 47 °C Bottles Received: 31			If preservation required by Login: Date/Time	
Relinquished by : (Signature)			Date:	Time:	Received by: (Signature)										
Relinquished by : (Signature)			Date:	Time:	Received for lab by: (Signature)			Date: 06/02/20	Time: 0845				Condition: NCF <input checked="" type="checkbox"/> OK	06-003	

PES Environmental, Inc.- WA 1215 Fourth Ave., Suite 1350 Seattle, WA 98161		Billing Information: Attn: Accounts Payable 1215 Fourth Ave., Ste. 1350 Seattle, WA 98161		Pres Chk	Analysis / Container / Preservative		Chain of Custody	
Report to: Bill Haldeman		Email To: bhaldeman@pesenv.com						
Project Description: <i>Snequahnie Mill Pond</i>		City/State Collected: <i>Snequahnie, WA</i>	Please Circle: PT MT CT ET					
Phone: 206-529-3980		Client Project # <i>920.128.01</i>	Lab Project # PESENVSWA-HALDEMAN					
Collected by (print): <i>Chris DeBoer</i>		Site/Facility ID #	P.O. #					
Collected by (signature): <i>Chris DeBoer</i>		Rush? (Lab MUST Be Notified) <input type="checkbox"/> Same Day <input type="checkbox"/> Five Day <input type="checkbox"/> Next Day <input type="checkbox"/> 5 Day (Rad Only) <input type="checkbox"/> Two Day <input type="checkbox"/> 10 Day (Rad Only) <input type="checkbox"/> Three Day	Quote #	Date Results Needed	No. of Cntrs			
Immediately Packed on Ice N <input type="checkbox"/> Y <input checked="" type="checkbox"/>								
Sample ID		Comp/Grab	Matrix *	Depth	Date	Time		
<i>B-6 - 0.5</i> <i>B-6 - 1.5</i> <i>B-7 - 0.5</i> <i>B-7 - 1.5</i> <i>B-8 - 0.5</i> <i>Bug - 1.5</i> <i>B-9 - 0.5</i> <i>Bug - 1.5</i> <i>B-10 - 0.5</i> <i>B-10 - 1.5</i>		<i>Comp</i>	<i>ss</i>	<i>0.5</i>	<i>5/27/20</i>	<i>1715</i>	<i>1</i> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <i>1720</i> <input checked="" type="checkbox"/> <i>1700</i> <input checked="" type="checkbox"/> <i>1710</i> <input checked="" type="checkbox"/> <i>0945</i> <input checked="" type="checkbox"/> <i>09536</i> <input checked="" type="checkbox"/> <i>0920</i> <input checked="" type="checkbox"/> <i>0925</i> <input checked="" type="checkbox"/> <i>1035</i> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <i>1040</i> <input checked="" type="checkbox"/>	
							<i>Keweenaw</i>	
							<i>-03</i>	
							<i>-04</i>	
* Matrix: SS - Soil AIR - Air F - Filter GW - Groundwater B - Bioassay WW - WasteWater DW - Drinking Water OT - Other _____		Remarks:		pH _____	Temp _____	Sample Receipt Checklist		
		Samples returned via: <input type="checkbox"/> UPS <input type="checkbox"/> FedEx <input type="checkbox"/> Courier _____		Flow _____	Other _____	COC Seal Present/Intact: <input checked="" type="checkbox"/> NP <input checked="" type="checkbox"/> N COC Signed/Accurate: <input checked="" type="checkbox"/> Y <input checked="" type="checkbox"/> N Bottles arrive intact: <input checked="" type="checkbox"/> Y <input checked="" type="checkbox"/> N Correct bottles used: <input checked="" type="checkbox"/> Y <input checked="" type="checkbox"/> N Sufficient volume sent: <input checked="" type="checkbox"/> Y <input checked="" type="checkbox"/> N <i>If Applicable</i> VOA Zero Headspace: <input checked="" type="checkbox"/> Y <input checked="" type="checkbox"/> N Preservation Correct/Checked: <input checked="" type="checkbox"/> Y <input checked="" type="checkbox"/> N RAD Screen <0.5 mR/hr: <input checked="" type="checkbox"/> Y <input checked="" type="checkbox"/> N		
Relinquished by : (Signature) <i>Chris DeBoer</i>		Date: <i>6/1/20</i>	Time: <i>1530</i>	Received by: (Signature)	Trip Blank Received: <input checked="" type="checkbox"/> Yes / No <i>1</i> <input checked="" type="checkbox"/> HCL / MeOH <i>1</i> <input checked="" type="checkbox"/> TBR	If preservation required by Login: Date/Time		
Relinquished by : (Signature)		Date: _____	Time: _____	Received by: (Signature)	Temp: <i>AT</i> °C Bottles Received: <i>31</i>			
Relinquished by : (Signature)		Date: _____	Time: _____	Received for lab by: (Signature)	Date: <i>06/02/20</i> Time: <i>0845</i>	Hold: _____	Condition: <i>NCF 10K</i>	

PES Environmental, Inc.- WA 1215 Fourth Ave., Suite 1350 Seattle, WA 98161			Billing Information: Attn: Accounts Payable 1215 Fourth Ave., Ste. 1350 Seattle, WA 98161			Pres Chk	Analysis / Container / Preservative			Chain of Custody	
											Page 3 of 3
Report to: Bill Haldeman			Email To: bhaldeaman@pesenv.com							Pace Analytical® National Center for Testing & Innovation	
Project Description: Snoqualmie Mill Pond		City/State Collected:	Please Circle: PT MT CT ET							12065 Lebanon Rd Mount Juliet, TN 37122 Phone: 615-758-5858 Phone: 800-767-5859 Fax: 615-758-5859	
Phone: 206-529-3980		Client Project #	Lab Project #							SDG # U774M1	
Collected by (print): Chris DeBoer		Site/Facility ID #	P.O. #							Table #	
Collected by (signature): Chris DeBoer		Rush? (Lab MUST Be Notified)	Quote #							Acctnum: PESENVSWA	
Immediately Packed on Ice N Y X		Same Day Five Day Next Day 5 Day (Rad Only) Two Day 10 Day (Rad Only) Three Day	Date Results Needed		No. of Cntrs					Template: T168320	
Sample ID		Comp/Grab	Matrix *	Depth	Date	Time				Prelogin: P775245	
B-11-0.5 1.5		Comp	SS	1.5	5/28/20	1130	1			PM: 546 - Jared Starkey	
5-X-1		Comp	SS	0.5	6/1/20	1120	2	X		PB:	
5-3			SS	0.5		1210	2	X		Shipped Via:	
5-1			SS	0.5		1320	2	X		Remarks Sample # (lab only)	
D-1			SS	0.5		1400	2	X			
D-2			SS	0.5		1230	1	X			
B-11-0.5			SS	0.5		1450	1	X			
TB-060120		NA	SS	-	↓	1530	1	X			
SS - Soil AIR - Air F - Filter GW - Groundwater B - Bioassay WW - WasteWater DW - Drinking Water OT - Other _____		Remarks:			pH _____ Temp _____ Flow _____ Other _____			Sample Receipt Checklist COC Seal Present/Intact: <input checked="" type="checkbox"/> NP <input checked="" type="checkbox"/> Y <input type="checkbox"/> N COC Signed/Accurate: <input checked="" type="checkbox"/> Bottles arrive intact: <input checked="" type="checkbox"/> Correct bottles used: <input checked="" type="checkbox"/> Sufficient volume sent: <input checked="" type="checkbox"/> If Applicable VOA Zero Headspace: <input checked="" type="checkbox"/> Preservation Correct/Checked: <input checked="" type="checkbox"/> RAD Screen <0.5 mR/hr: <input checked="" type="checkbox"/>			
Relinquished by : (Signature)		Date: 6/1/20	Time: 1530	Received by: (Signature)	Trip Blank Received: <input checked="" type="checkbox"/> Yes / No HCl / MeOH TBR	Samples returned via: UPS FedEx Courier			Tracking #		
Relinquished by : (Signature)		Date:	Time:	Received by: (Signature)	Temp: <u>4.8-14.7</u> °C	Bottles Received: <u>31</u>	If preservation required by Lab: Date/Time				
Relinquished by : (Signature)		Date:	Time:	Received for lab by: (Signature)	Date: 06/02/20	Time: 0845	Hold:	Condition: NCF / OK			

MEMORANDUM

TO: Project File **DATE:** June 16, 2020

FROM: Jessie Compeau

SUBJECT: Laboratory Data Validation Review

PROJECT: Weyerhaeuser Snoqualmie Mill Pond - Data Validation

PROJECT #: 920.128.002.03

TASK: EIM Data Validation Level EPA2A for Soil and Sediment Samples - May and June 2020

LAB: Pace Sample Delivery Group (SDG) Number: L1224343

Six soil samples (including a field duplicate), four sediment samples (including a field duplicate), and one trip blank were collected as part of a sampling event at the Weyerhaeuser Snoqualmie Mill Pond, in Snoqualmie Washington. Remaining seventeen samples and the trip blank were placed on hold. Samples were collected between May 27, 28, 29, and June 1, 2020. Multiple samples and the trip blank were placed on hold. The samples were shipped and delivered to Pace Lab Sciences (Pace) of Mount Juliet, TN for laboratory analysis. Selected samples were analyzed for the following:

- Volatile organic compounds (VOCs) by United States Environmental Protection Agency (USEPA) Method 8260D;
 - Total petroleum hydrocarbons (TPH) as diesel range organics (DRO) and residual range organics (RRO) by NWTPHDX-Silica Gel Treated (SGT) per analytical methods stipulated by Washington State Department of Ecology;
 - Polychlorinated Biphenyls (PCBs) by USEPA Method 8082A (Aroclors 1016, 1221, 1232, 1242, 1248, 1254, and 1260);
 - Semivolatile Organic Compounds (SVOCs) by USEPA Method 8270E; and
 - Total Solids (Sample Moisture) by SM 2540 G-2011.

The quality assurance review on Pace SDG L1224343 is summarized below.

DATA QUALIFICATIONS

Guidelines established by USEPA for a limited data validation review of analytical data along with Pace Analytical (Pace) control limit criteria were used to validate the data. The comments presented in this memorandum refer to the laboratory's performance in meeting the quality control criteria outlined in the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (USEPA, 2017).

DATA VALIDATION

Completeness

All samples were collected and analyzed as requested.

Sample Collection and Preservation

Samples were collected in laboratory-supplied sample containers preserved as appropriate for the individual analyses conducted. The samples were packed on ice in coolers and shipped by courier to the analytical laboratory. Cooler and samples were received at or below the EPA recommended preservation temperature of 6°C. No data were qualified based upon the sample collection and preservation information.

Holding Times

USEPA Method 8260D:

All samples were analyzed for VOCs within the USEPA recommended holding time of fourteen days for preserved soils. All holding time criteria were met.

NWTPH-Dx Method:

All samples were extracted within the WA State recommended holding time of fourteen days for soils from the date of sample collection to extraction. All samples were analyzed within forty days from the date of extraction. All holding time criteria were met.

USEPA Method 8082A:

All samples were extracted within the USEPA recommended holding time of fourteen days for soils from the date of sample collection to extraction. All samples were analyzed within forty days from the date of extraction. All holding time criteria were met.

USEPA Method 8270E:

All samples were extracted within the USEPA recommended holding time of fourteen days for soils from the date of sample collection to extraction. All samples were analyzed within forty days from the date of extraction. All holding time criteria were met.

Total Solids by SM 2540 G-11:

Samples were analyzed within the USEPA recommended holding time of seven days for total solids. All holding time criteria were met.

Initial and Continuing Calibration

Initial and continuing calibration data for this project are retained by the laboratory and available for review if necessary. These data were not provided nor requested for this project and Pace did not indicate any issues with initial and continuing calibration criteria.

Method Blank Results

USEPA Method 8260D:

A laboratory method blank was included with the analytical batch per method requirement. The target analytes were not detected in the method blank at or above the reporting detection limit (RDLs).

NWTPH-Dx Method:

A laboratory method blank was included with the analytical batch per method requirement. The target analytes (diesel and residual range organics) were not detected in the method blank at or above the RDLs.

USEPA Method 8082A:

A laboratory method blank was included with the analytical batch per method requirement. The target analytes (PCBs) are not detected in the method blank at or above the RDLs.

USEPA Method 8270E:

Laboratory method blanks were included with the analytical batches per method requirement. The target analytes (SVOCs) are not detected in the method blanks at or above the RDLs.

Total Solids by SM 2540 G-11:

A laboratory method blank was included with the analytical batch per method requirement. The target analyte (% moisture) is detected at a low level in the associated method blank and has no impact on the associated results.

Trip Blank Results

USEPA Method 8260D:

One trip blank (TB-060120) was collected but was not analyzed. No action is taken other than to note this.

Field, Rinsate, or Equipment Blank Results

An equipment blank was not collected. No action is taken other than to note this.

Field Duplicate Analyses

Field duplicate sample pairs are as follows:

- Sample S-1 and D-1 (sediment); and
- Sample B-11-0.5 and D-2 (soil)

All target analyte results are comparable and within a relative percent difference (RPD) of 30% ($\pm 2 \times$ RDL for soil results <5X the RDL) for the field duplicates with the following exceptions:

- Samples S-1 and D-1: RPDs for VOC compounds (p-isopropyltoluene, toluene, and total xylenes) are greater than acceptance criteria. **Field duplicate results for these compounds are estimated and qualified (J/UJ).**

- Samples B-11-0.5 and D-2: RPDs for diesel and residual range organic compounds exceed criteria. **Field duplicate results for diesel and residual range organic compounds are estimated and qualified (J).**
- Samples B-11-0.5 and D-2: Sample narratives indicate that dilutions were performed due to matrix impacts from samples D-2 and B-11-0.5. Sample B-11-0.5 detection limits are raised ten-fold whereas sample D-2 detection limits are raised two-fold. As a result, SVOCs are detected in sample D-2 slightly above the RDL but are not detected in sample B-11-0.5 due to reported matrix interference and necessary dilution(s). In this case no action is taken since differences between the two samples are not enough to qualify due to difference in dilution factors.

Laboratory Duplicate Analyses

USEPA Method 8260D:

Laboratory duplicate samples were not performed. Refer to laboratory control sample results and field duplicate results for precision data.

NWTPH-Dx Method:

Laboratory duplicate samples were not performed. Refer to field duplicate results for precision data.

USEPA Method 8082A:

Laboratory duplicate samples were not performed. Refer to field duplicate results for precision data.

USEPA Method 8270E:

Laboratory duplicate samples were not performed. Refer to field duplicate results for precision data.

Total Solids by SM 2540 G-11:

Laboratory duplicate sample analyses were performed on client sample B-4-0.5. Relative percent difference (RPD) criteria is met.

Surrogate Recoveries

USEPA Method 8260D:

The surrogate recovery results for the samples, laboratory control samples, and blanks are within the laboratory surrogate control limits for all analyses.

NWTPH-Dx Method:

The surrogate recovery results for the samples, laboratory control samples, and method blanks are within the laboratory surrogate control limits.

USEPA Method 8082A:

The surrogate recovery results for the samples, laboratory control samples, and method blanks are within the laboratory surrogate control limits with the following exceptions:

USEPA Method 8270E:

The surrogate recovery results for the samples, laboratory control samples, and method blanks are within the laboratory surrogate control limits.

Laboratory Control Samples

USEPA Method 8260D:

Laboratory control sample/laboratory control sample duplicate (LCS/LCSD) were analyzed by USEPA Method 8260D method along with each analytical batch. The LCS/LCSD %Rs and RPDs for all target compounds (VOCs) are within the laboratory control criteria.

NWTPH-Dx Method:

An LCS was analyzed by the NWTPH-Dx method along with the analytical batch. The LCS %Rs for the target compound (diesel) are within the laboratory control criteria.

USEPA Method 8082A:

An LCS was analyzed by the PCB method along with the analytical batch. The LCS %Rs and for target compounds are within the laboratory control criteria.

USEPA Method 8270E:

An LCS was analyzed by the SVOC method along with each analytical batch. The LCS %Rs for the target compound (SVOCs) are within the laboratory control criteria with one exception:

- Analytical batch WG1487202: LCS pyridine recovery is 9.92% and is slightly below acceptance criteria of 10-120%. No action is taken in this case since the exceedance is marginal.

Matrix Spike/Matrix Spike Duplicates

USEPA Method 8260D:

Matrix spike analyses were not performed. Refer to LCS and field duplicate results for accuracy and precision data.

NWTPH-Dx Method:

Matrix spike analyses were not performed. Refer to LCS and field duplicate results for accuracy and precision data.

USEPA Methods 8082A:

Matrix spike analyses were not performed. Refer to LCS and field duplicate results for accuracy and precision data.

USEPA Method 8270E:

Matrix spike analyses were not performed. Refer to LCS and field duplicate results for accuracy and precision data.

Other Quality Control Issues

No laboratory quality control issues were identified in the laboratory reports with the following discussion:

- Electronic data deliverables (EDDs) for these Work Orders were provided by the laboratory and data validator qualifiers were entered into the EDDs.

Compound Identification and Quantitation Limits

No sample notes regarding total petroleum hydrocarbon compound identifications are included.

The RDLs used for this sample group are acceptable for the project. Several samples were diluted due to either matrix effect (samples B-6-0.5, S-2, D-2, and B-11-0.5) or elevated concentrations of various target analytes. No action was taken other than to note this.

Data Assessment

The laboratory data reported for this project were reviewed based on the criteria outlined in:

- USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (USEPA, 2017)

Data qualifiers are assigned and laboratory report pages with qualifiers are attached. All data, including qualified data, are judged to be acceptable for their intended use.



Total Solids by Method 2540 G-2011

Analyte	Result %	<u>Qualifier</u>	Dilution	Analysis date / time	<u>Batch</u>
Total Solids	29.2		1	06/05/2020 17:06	WG1487639

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ Gl⁸ Al⁹ Sc

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

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
Acetone	0.528		0.202	1.18	06/05/2020 23:12	WG1487880
Acrylonitrile	ND		0.0504	1.18	06/05/2020 23:12	WG1487880
Benzene	0.0394		0.00404	1.18	06/05/2020 23:12	WG1487880
Bromobenzene	ND		0.0504	1.18	06/05/2020 23:12	WG1487880
Bromodichloromethane	ND		0.0101	1.18	06/05/2020 23:12	WG1487880
Bromoform	ND		0.101	1.18	06/05/2020 23:12	WG1487880
Bromomethane	ND		0.0504	1.18	06/05/2020 23:12	WG1487880
n-Butylbenzene	ND		0.0504	1.18	06/05/2020 23:12	WG1487880
sec-Butylbenzene	ND		0.0504	1.18	06/05/2020 23:12	WG1487880
tert-Butylbenzene	ND		0.0202	1.18	06/05/2020 23:12	WG1487880
Carbon tetrachloride	ND		0.0202	1.18	06/05/2020 23:12	WG1487880
Chlorobenzene	ND		0.0101	1.18	06/05/2020 23:12	WG1487880
Chlorodibromomethane	ND		0.0101	1.18	06/05/2020 23:12	WG1487880
Chloroethane	ND		0.0202	1.18	06/05/2020 23:12	WG1487880
Chloroform	ND		0.0101	1.18	06/05/2020 23:12	WG1487880
Chloromethane	ND		0.0504	1.18	06/05/2020 23:12	WG1487880
2-Chlorotoluene	ND		0.0101	1.18	06/05/2020 23:12	WG1487880
4-Chlorotoluene	ND		0.0202	1.18	06/05/2020 23:12	WG1487880
1,2-Dibromo-3-Chloropropane	ND		0.101	1.18	06/05/2020 23:12	WG1487880
1,2-Dibromoethane	ND		0.0101	1.18	06/05/2020 23:12	WG1487880
Dibromomethane	ND		0.0202	1.18	06/05/2020 23:12	WG1487880
1,2-Dichlorobenzene	ND		0.0202	1.18	06/05/2020 23:12	WG1487880
1,3-Dichlorobenzene	ND		0.0202	1.18	06/05/2020 23:12	WG1487880
1,4-Dichlorobenzene	ND		0.0202	1.18	06/05/2020 23:12	WG1487880
Dichlorodifluoromethane	ND		0.0101	1.18	06/05/2020 23:12	WG1487880
1,1-Dichloroethane	ND		0.0101	1.18	06/05/2020 23:12	WG1487880
1,2-Dichloroethane	ND		0.0101	1.18	06/05/2020 23:12	WG1487880
1,1-Dichloroethene	ND		0.0101	1.18	06/05/2020 23:12	WG1487880
cis-1,2-Dichloroethene	ND		0.0101	1.18	06/05/2020 23:12	WG1487880
trans-1,2-Dichloroethene	ND		0.0202	1.18	06/05/2020 23:12	WG1487880
1,2-Dichloropropane	ND		0.0202	1.18	06/05/2020 23:12	WG1487880
1,1-Dichloropropene	ND		0.0202	1.18	06/05/2020 23:12	WG1487880
1,3-Dichloropropene	ND		0.0202	1.18	06/05/2020 23:12	WG1487880
cis-1,3-Dichloropropene	ND		0.0202	1.18	06/05/2020 23:12	WG1487880
trans-1,3-Dichloropropene	ND		0.0202	1.18	06/05/2020 23:12	WG1487880
2,2-Dichloropropane	ND		0.0202	1.18	06/05/2020 23:12	WG1487880
Di-isopropyl ether	ND		0.0202	1.18	06/05/2020 23:12	WG1487880
Ethylbenzene	ND		0.0101	1.18	06/05/2020 23:12	WG1487880
Hexachloro-1,3-butadiene	ND		0.0101	1.18	06/05/2020 23:12	WG1487880
Isopropylbenzene	ND		0.0101	1.18	06/05/2020 23:12	WG1487880
p-Isopropyltoluene	0.247	J	0.0202	1.18	06/05/2020 23:12	WG1487880
2-Butanone (MEK)	ND		0.0202	1.18	06/05/2020 23:12	WG1487880
Methylene Chloride	ND		0.0202	1.18	06/05/2020 23:12	WG1487880
4-Methyl-2-pentanone (MIBK)	ND		0.0202	1.18	06/05/2020 23:12	WG1487880
Methyl tert-butyl ether	ND		0.0202	1.18	06/05/2020 23:12	WG1487880
Naphthalene	ND		0.0202	1.18	06/05/2020 23:12	WG1487880
n-Propylbenzene	ND		0.0202	1.18	06/05/2020 23:12	WG1487880
Styrene	ND		0.0202	1.18	06/05/2020 23:12	WG1487880
1,1,2-Tetrachloroethane	ND		0.0202	1.18	06/05/2020 23:12	WG1487880
1,1,2,2-Tetrachloroethane	ND		0.0202	1.18	06/05/2020 23:12	WG1487880

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

Analyte	Result (dry) mg/kg	Qualifier	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch	
1,1,2-Trichlorotrifluoroethane	ND		0.0101	1.18	06/05/2020 23:12	WG1487880	¹ Cp
Tetrachloroethene	ND		0.0101	1.18	06/05/2020 23:12	WG1487880	² Tc
Toluene	0.662	J	0.0202	1.18	06/05/2020 23:12	WG1487880	³ Ss
1,2,3-Trichlorobenzene	ND		0.0504	1.18	06/05/2020 23:12	WG1487880	⁴ Cn
1,2,4-Trichlorobenzene	ND		0.0504	1.18	06/05/2020 23:12	WG1487880	⁵ Sr
1,1,1-Trichloroethane	ND		0.0101	1.18	06/05/2020 23:12	WG1487880	⁶ Qc
1,1,2-Trichloroethane	ND		0.0101	1.18	06/05/2020 23:12	WG1487880	⁷ Gl
Trichloroethene	ND		0.00404	1.18	06/05/2020 23:12	WG1487880	⁸ Al
Trichlorofluoromethane	ND		0.0101	1.18	06/05/2020 23:12	WG1487880	⁹ Sc
1,2,3-Trichloropropane	ND		0.0504	1.18	06/05/2020 23:12	WG1487880	
1,2,4-Trimethylbenzene	ND		0.0202	1.18	06/05/2020 23:12	WG1487880	
1,2,3-Trimethylbenzene	ND		0.0202	1.18	06/05/2020 23:12	WG1487880	
Vinyl chloride	ND		0.0101	1.18	06/05/2020 23:12	WG1487880	
1,3,5-Trimethylbenzene	ND		0.0202	1.18	06/05/2020 23:12	WG1487880	
Xylenes, Total	ND	UJ	0.0263	1.18	06/05/2020 23:12	WG1487880	
(S) Toluene-d8	116		75.0-131		06/05/2020 23:12	WG1487880	
(S) 4-Bromofluorobenzene	100		67.0-138		06/05/2020 23:12	WG1487880	
(S) 1,2-Dichloroethane-d4	101		70.0-130		06/05/2020 23:12	WG1487880	

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-SGT

Analyte	Result (dry) mg/kg	Qualifier	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	106		13.7	1	06/05/2020 00:54	WG1486835
Residual Range Organics (RRO)	265		34.3	1	06/05/2020 00:54	WG1486835
(S) o-Terphenyl	58.9		18.0-148		06/05/2020 00:54	WG1486835

Polychlorinated Biphenyls (GC) by Method 8082 A

Analyte	Result (dry) mg/kg	Qualifier	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
PCB 1016	ND		0.117	1	06/07/2020 17:47	WG1486847
PCB 1221	ND		0.117	1	06/07/2020 17:47	WG1486847
PCB 1232	ND		0.117	1	06/07/2020 17:47	WG1486847
PCB 1242	ND		0.117	1	06/07/2020 17:47	WG1486847
PCB 1248	ND		0.0583	1	06/07/2020 17:47	WG1486847
PCB 1254	ND		0.0583	1	06/07/2020 17:47	WG1486847
PCB 1260	ND		0.0583	1	06/07/2020 17:47	WG1486847
(S) Decachlorobiphenyl	72.6		10.0-135		06/07/2020 17:47	WG1486847
(S) Tetrachloro-m-xylene	69.4		10.0-139		06/07/2020 17:47	WG1486847

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

Analyte	Result (dry) mg/kg	Qualifier	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acenaphthene	ND		0.114	1	06/04/2020 22:18	WG1486836
Acenaphthylene	ND		0.114	1	06/04/2020 22:18	WG1486836
Anthracene	ND		0.114	1	06/04/2020 22:18	WG1486836
Benzo(a)anthracene	ND		0.114	1	06/04/2020 22:18	WG1486836
Benzo(b)fluoranthene	ND		0.114	1	06/04/2020 22:18	WG1486836
Benzo(k)fluoranthene	ND		0.114	1	06/04/2020 22:18	WG1486836
Benzo(g,h,i)perylene	ND		0.114	1	06/04/2020 22:18	WG1486836
Benzo(a)pyrene	ND		0.114	1	06/04/2020 22:18	WG1486836
Bis(2-chlorethoxy)methane	ND		1.14	1	06/04/2020 22:18	WG1486836
Bis(2-chloroethyl)ether	ND		1.14	1	06/04/2020 22:18	WG1486836
2,2-Oxybis(1-Chloropropane)	ND		1.14	1	06/04/2020 22:18	WG1486836
4-Bromophenyl-phenylether	ND		1.14	1	06/04/2020 22:18	WG1486836
2-Chloronaphthalene	ND		0.114	1	06/04/2020 22:18	WG1486836



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

Analyte	Result (dry) mg/kg	Qualifier	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch	
4-Chlorophenyl-phenylether	ND		1.14	1	06/04/2020 22:18	WG1486836	¹ Cp
Chrysene	ND		0.114	1	06/04/2020 22:18	WG1486836	² Tc
Dibenz(a,h)anthracene	ND		0.114	1	06/04/2020 22:18	WG1486836	³ Ss
3,3-Dichlorobenzidine	ND		1.14	1	06/04/2020 22:18	WG1486836	⁴ Cn
2,4-Dinitrotoluene	ND		1.14	1	06/04/2020 22:18	WG1486836	⁵ Sr
2,6-Dinitrotoluene	ND		1.14	1	06/04/2020 22:18	WG1486836	⁶ Qc
Fluoranthene	ND		0.114	1	06/04/2020 22:18	WG1486836	⁷ Gl
Fluorene	ND		0.114	1	06/04/2020 22:18	WG1486836	⁸ Al
Hexachlorobenzene	ND		1.14	1	06/04/2020 22:18	WG1486836	⁹ Sc
Hexachloro-1,3-butadiene	ND		1.14	1	06/04/2020 22:18	WG1486836	
Hexachlorocyclopentadiene	ND		1.14	1	06/04/2020 22:18	WG1486836	
Hexachloroethane	ND		1.14	1	06/04/2020 22:18	WG1486836	
Indeno[1,2,3-cd]pyrene	ND		0.114	1	06/04/2020 22:18	WG1486836	
Isophorone	ND		1.14	1	06/04/2020 22:18	WG1486836	
Naphthalene	0.212		0.114	1	06/04/2020 22:18	WG1486836	
Nitrobenzene	ND		1.14	1	06/04/2020 22:18	WG1486836	
n-Nitrosodimethylamine	ND		1.14	1	06/04/2020 22:18	WG1486836	
n-Nitrosodiphenylamine	ND		1.14	1	06/04/2020 22:18	WG1486836	
n-Nitrosodi-n-propylamine	ND		1.14	1	06/04/2020 22:18	WG1486836	
Phenanthrene	ND		0.114	1	06/04/2020 22:18	WG1486836	
Pyridine	ND		1.14	1	06/04/2020 22:18	WG1486836	
Benzylbutyl phthalate	ND		1.14	1	06/04/2020 22:18	WG1486836	
Bis(2-ethylhexyl)phthalate	ND		1.14	1	06/04/2020 22:18	WG1486836	
Di-n-butyl phthalate	ND		1.14	1	06/04/2020 22:18	WG1486836	
Diethyl phthalate	ND		1.14	1	06/04/2020 22:18	WG1486836	
Dimethyl phthalate	ND		1.14	1	06/04/2020 22:18	WG1486836	
Di-n-octyl phthalate	ND		1.14	1	06/04/2020 22:18	WG1486836	
Pyrene	ND		0.114	1	06/04/2020 22:18	WG1486836	
1,2,4-Trichlorobenzene	ND		1.14	1	06/04/2020 22:18	WG1486836	
4-Chloro-3-methylphenol	ND		1.14	1	06/04/2020 22:18	WG1486836	
2-Chlorophenol	ND		1.14	1	06/04/2020 22:18	WG1486836	
2,4-Dichlorophenol	ND		1.14	1	06/04/2020 22:18	WG1486836	
2,4-Dimethylphenol	ND		1.14	1	06/04/2020 22:18	WG1486836	
4,6-Dinitro-2-methylphenol	ND		1.14	1	06/04/2020 22:18	WG1486836	
2,4-Dinitrophenol	ND		1.14	1	06/04/2020 22:18	WG1486836	
2-Methylphenol	ND		1.14	1	06/04/2020 22:18	WG1486836	
3&4-Methyl Phenol	3.70		1.14	1	06/04/2020 22:18	WG1486836	
2-Nitrophenol	ND		1.14	1	06/04/2020 22:18	WG1486836	
4-Nitrophenol	ND		1.14	1	06/04/2020 22:18	WG1486836	
Pentachlorophenol	ND		1.14	1	06/04/2020 22:18	WG1486836	
Phenol	ND		1.14	1	06/04/2020 22:18	WG1486836	
2,4,6-Trichlorophenol	ND		1.14	1	06/04/2020 22:18	WG1486836	
2,4,5-Trichlorophenol	ND		1.14	1	06/04/2020 22:18	WG1486836	
(S) 2-Fluorophenol	52.0		12.0-120		06/04/2020 22:18	WG1486836	
(S) Phenol-d5	48.5		10.0-120		06/04/2020 22:18	WG1486836	
(S) Nitrobenzene-d5	38.0		10.0-122		06/04/2020 22:18	WG1486836	
(S) 2-Fluorobiphenyl	46.3		15.0-120		06/04/2020 22:18	WG1486836	
(S) 2,4,6-Tribromophenol	61.0		10.0-127		06/04/2020 22:18	WG1486836	JC 6/15/2020
(S) p-Terphenyl-d14	55.2		10.0-120		06/04/2020 22:18	WG1486836	



Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	25.7		1	06/05/2020 17:06	WG1487639

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ Gl⁸ Al⁹ Sc

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

Analyte	Result (dry) mg/kg	Qualifier	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	0.441		0.216	1.11	06/05/2020 23:32	WG1487880
Acrylonitrile	ND		0.0542	1.11	06/05/2020 23:32	WG1487880
Benzene	0.0569		0.00433	1.11	06/05/2020 23:32	WG1487880
Bromobenzene	ND		0.0542	1.11	06/05/2020 23:32	WG1487880
Bromodichloromethane	ND		0.0108	1.11	06/05/2020 23:32	WG1487880
Bromoform	ND		0.108	1.11	06/05/2020 23:32	WG1487880
Bromomethane	ND		0.0542	1.11	06/05/2020 23:32	WG1487880
n-Butylbenzene	ND		0.0542	1.11	06/05/2020 23:32	WG1487880
sec-Butylbenzene	ND		0.0542	1.11	06/05/2020 23:32	WG1487880
tert-Butylbenzene	ND		0.0216	1.11	06/05/2020 23:32	WG1487880
Carbon tetrachloride	ND		0.0216	1.11	06/05/2020 23:32	WG1487880
Chlorobenzene	ND		0.0108	1.11	06/05/2020 23:32	WG1487880
Chlorodibromomethane	ND		0.0108	1.11	06/05/2020 23:32	WG1487880
Chloroethane	ND		0.0216	1.11	06/05/2020 23:32	WG1487880
Chloroform	ND		0.0108	1.11	06/05/2020 23:32	WG1487880
Chloromethane	ND		0.0542	1.11	06/05/2020 23:32	WG1487880
2-Chlorotoluene	ND		0.0108	1.11	06/05/2020 23:32	WG1487880
4-Chlorotoluene	ND		0.0216	1.11	06/05/2020 23:32	WG1487880
1,2-Dibromo-3-Chloropropane	ND		0.108	1.11	06/05/2020 23:32	WG1487880
1,2-Dibromoethane	ND		0.0108	1.11	06/05/2020 23:32	WG1487880
Dibromomethane	ND		0.0216	1.11	06/05/2020 23:32	WG1487880
1,2-Dichlorobenzene	ND		0.0216	1.11	06/05/2020 23:32	WG1487880
1,3-Dichlorobenzene	ND		0.0216	1.11	06/05/2020 23:32	WG1487880
1,4-Dichlorobenzene	ND		0.0216	1.11	06/05/2020 23:32	WG1487880
Dichlorodifluoromethane	ND		0.0108	1.11	06/05/2020 23:32	WG1487880
1,1-Dichloroethane	ND		0.0108	1.11	06/05/2020 23:32	WG1487880
1,2-Dichloroethane	ND		0.0108	1.11	06/05/2020 23:32	WG1487880
1,1-Dichloroethene	ND		0.0108	1.11	06/05/2020 23:32	WG1487880
cis-1,2-Dichloroethene	ND		0.0108	1.11	06/05/2020 23:32	WG1487880
trans-1,2-Dichloroethene	ND		0.0216	1.11	06/05/2020 23:32	WG1487880
1,2-Dichloropropane	ND		0.0216	1.11	06/05/2020 23:32	WG1487880
1,1-Dichloropropene	ND		0.0216	1.11	06/05/2020 23:32	WG1487880
1,3-Dichloropropene	ND		0.0216	1.11	06/05/2020 23:32	WG1487880
cis-1,3-Dichloropropene	ND		0.0216	1.11	06/05/2020 23:32	WG1487880
trans-1,3-Dichloropropene	ND		0.0216	1.11	06/05/2020 23:32	WG1487880
2,2-Dichloropropane	ND		0.0216	1.11	06/05/2020 23:32	WG1487880
Di-isopropyl ether	ND		0.0216	1.11	06/05/2020 23:32	WG1487880
Ethylbenzene	0.0175		0.0108	1.11	06/05/2020 23:32	WG1487880
Hexachloro-1,3-butadiene	ND		0.0108	1.11	06/05/2020 23:32	WG1487880
Isopropylbenzene	ND		0.0108	1.11	06/05/2020 23:32	WG1487880
p-Isopropyltoluene	0.398	J	0.0216	1.11	06/05/2020 23:32	WG1487880
2-Butanone (MEK)	ND		0.433	1.11	06/05/2020 23:32	WG1487880
Methylene Chloride	ND		0.108	1.11	06/05/2020 23:32	WG1487880
4-Methyl-2-pentanone (MIBK)	ND		0.108	1.11	06/05/2020 23:32	WG1487880
Methyl tert-butyl ether	ND		0.00433	1.11	06/05/2020 23:32	WG1487880
Naphthalene	ND		0.0542	1.11	06/05/2020 23:32	WG1487880
n-Propylbenzene	ND		0.0216	1.11	06/05/2020 23:32	WG1487880
Styrene	ND		0.0542	1.11	06/05/2020 23:32	WG1487880
1,1,2-Tetrachloroethane	ND		0.0108	1.11	06/05/2020 23:32	WG1487880
1,1,2,2-Tetrachloroethane	ND		0.0108	1.11	06/05/2020 23:32	WG1487880

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

Analyte	Result (dry) mg/kg	Qualifier	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch	
1,1,2-Trichlorotrifluoroethane	ND		0.0108	1.11	06/05/2020 23:32	WG1487880	¹ Cp
Tetrachloroethene	ND		0.0108	1.11	06/05/2020 23:32	WG1487880	² Tc
Toluene	1.23	J	0.0216	1.11	06/05/2020 23:32	WG1487880	³ Ss
1,2,3-Trichlorobenzene	ND		0.0542	1.11	06/05/2020 23:32	WG1487880	⁴ Cn
1,2,4-Trichlorobenzene	ND		0.0542	1.11	06/05/2020 23:32	WG1487880	⁵ Sr
1,1,1-Trichloroethane	ND		0.0108	1.11	06/05/2020 23:32	WG1487880	⁶ Qc
1,1,2-Trichloroethane	ND		0.0108	1.11	06/05/2020 23:32	WG1487880	⁷ Gl
Trichloroethene	ND		0.00433	1.11	06/05/2020 23:32	WG1487880	⁸ Al
Trichlorofluoromethane	ND		0.0108	1.11	06/05/2020 23:32	WG1487880	⁹ Sc
1,2,3-Trichloropropane	ND		0.0542	1.11	06/05/2020 23:32	WG1487880	
1,2,4-Trimethylbenzene	ND		0.0216	1.11	06/05/2020 23:32	WG1487880	
1,2,3-Trimethylbenzene	ND		0.0216	1.11	06/05/2020 23:32	WG1487880	
Vinyl chloride	ND		0.0108	1.11	06/05/2020 23:32	WG1487880	
1,3,5-Trimethylbenzene	ND		0.0216	1.11	06/05/2020 23:32	WG1487880	
Xylenes, Total	0.0425	J	0.0281	1.11	06/05/2020 23:32	WG1487880	
(S) Toluene-d8	117		75.0-131		06/05/2020 23:32	WG1487880	
(S) 4-Bromofluorobenzene	102		67.0-138		06/05/2020 23:32	WG1487880	
(S) 1,2-Dichloroethane-d4	100		70.0-130		06/05/2020 23:32	WG1487880	

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-SGT

Analyte	Result (dry) mg/kg	Qualifier	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	122		15.6	1	06/05/2020 01:07	WG1486835
Residual Range Organics (RRO)	251		39.0	1	06/05/2020 01:07	WG1486835
(S) o-Terphenyl	59.7		18.0-148		06/05/2020 01:07	WG1486835

Polychlorinated Biphenyls (GC) by Method 8082 A

Analyte	Result (dry) mg/kg	Qualifier	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
PCB 1016	ND		0.133	1	06/07/2020 18:00	WG1486847
PCB 1221	ND		0.133	1	06/07/2020 18:00	WG1486847
PCB 1232	ND		0.133	1	06/07/2020 18:00	WG1486847
PCB 1242	ND		0.133	1	06/07/2020 18:00	WG1486847
PCB 1248	ND		0.0663	1	06/07/2020 18:00	WG1486847
PCB 1254	ND		0.0663	1	06/07/2020 18:00	WG1486847
PCB 1260	ND		0.0663	1	06/07/2020 18:00	WG1486847
(S) Decachlorobiphenyl	68.1		10.0-135		06/07/2020 18:00	WG1486847
(S) Tetrachloro-m-xylene	69.8		10.0-139		06/07/2020 18:00	WG1486847

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

Analyte	Result (dry) mg/kg	Qualifier	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acenaphthene	ND		0.130	1	06/04/2020 20:22	WG1486836
Acenaphthylene	ND		0.130	1	06/04/2020 20:22	WG1486836
Anthracene	ND		0.130	1	06/04/2020 20:22	WG1486836
Benzo(a)anthracene	ND		0.130	1	06/04/2020 20:22	WG1486836
Benzo(b)fluoranthene	ND		0.130	1	06/04/2020 20:22	WG1486836
Benzo(k)fluoranthene	ND		0.130	1	06/04/2020 20:22	WG1486836
Benzo(g,h,i)perylene	ND		0.130	1	06/04/2020 20:22	WG1486836
Benzo(a)pyrene	ND		0.130	1	06/04/2020 20:22	WG1486836
Bis(2-chlorethoxy)methane	ND		1.30	1	06/04/2020 20:22	WG1486836
Bis(2-chloroethyl)ether	ND		1.30	1	06/04/2020 20:22	WG1486836
2,2-Oxybis(1-Chloropropane)	ND		1.30	1	06/04/2020 20:22	WG1486836
4-Bromophenyl-phenylether	ND		1.30	1	06/04/2020 20:22	WG1486836
2-Chloronaphthalene	ND		0.130	1	06/04/2020 20:22	WG1486836

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

Analyte	Result (dry) mg/kg	Qualifier	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch	
4-Chlorophenyl-phenylether	ND		1.30	1	06/04/2020 20:22	WG1486836	¹ Cp
Chrysene	ND		0.130	1	06/04/2020 20:22	WG1486836	² Tc
Dibenz(a,h)anthracene	ND		0.130	1	06/04/2020 20:22	WG1486836	³ Ss
3,3-Dichlorobenzidine	ND		1.30	1	06/04/2020 20:22	WG1486836	⁴ Cn
2,4-Dinitrotoluene	ND		1.30	1	06/04/2020 20:22	WG1486836	⁵ Sr
2,6-Dinitrotoluene	ND		1.30	1	06/04/2020 20:22	WG1486836	⁶ Qc
Fluoranthene	ND		0.130	1	06/04/2020 20:22	WG1486836	⁷ Gl
Fluorene	ND		0.130	1	06/04/2020 20:22	WG1486836	⁸ Al
Hexachlorobenzene	ND		1.30	1	06/04/2020 20:22	WG1486836	⁹ Sc
Hexachloro-1,3-butadiene	ND		1.30	1	06/04/2020 20:22	WG1486836	
Hexachlorocyclopentadiene	ND		1.30	1	06/04/2020 20:22	WG1486836	
Hexachloroethane	ND		1.30	1	06/04/2020 20:22	WG1486836	
Indeno[1,2,3-cd]pyrene	ND		0.130	1	06/04/2020 20:22	WG1486836	
Isophorone	ND		1.30	1	06/04/2020 20:22	WG1486836	
Naphthalene	ND		0.130	1	06/04/2020 20:22	WG1486836	
Nitrobenzene	ND		1.30	1	06/04/2020 20:22	WG1486836	
n-Nitrosodimethylamine	ND		1.30	1	06/04/2020 20:22	WG1486836	
n-Nitrosodiphenylamine	ND		1.30	1	06/04/2020 20:22	WG1486836	
n-Nitrosodi-n-propylamine	ND		1.30	1	06/04/2020 20:22	WG1486836	
Phenanthrene	ND		0.130	1	06/04/2020 20:22	WG1486836	
Pyridine	ND		1.30	1	06/04/2020 20:22	WG1486836	
Benzylbutyl phthalate	ND		1.30	1	06/04/2020 20:22	WG1486836	
Bis(2-ethylhexyl)phthalate	ND		1.30	1	06/04/2020 20:22	WG1486836	
Di-n-butyl phthalate	ND		1.30	1	06/04/2020 20:22	WG1486836	
Diethyl phthalate	ND		1.30	1	06/04/2020 20:22	WG1486836	
Dimethyl phthalate	ND		1.30	1	06/04/2020 20:22	WG1486836	
Di-n-octyl phthalate	ND		1.30	1	06/04/2020 20:22	WG1486836	
Pyrene	ND		0.130	1	06/04/2020 20:22	WG1486836	
1,2,4-Trichlorobenzene	ND		1.30	1	06/04/2020 20:22	WG1486836	
4-Chloro-3-methylphenol	ND		1.30	1	06/04/2020 20:22	WG1486836	
2-Chlorophenol	ND		1.30	1	06/04/2020 20:22	WG1486836	
2,4-Dichlorophenol	ND		1.30	1	06/04/2020 20:22	WG1486836	
2,4-Dimethylphenol	ND		1.30	1	06/04/2020 20:22	WG1486836	
4,6-Dinitro-2-methylphenol	ND		1.30	1	06/04/2020 20:22	WG1486836	
2,4-Dinitrophenol	ND		1.30	1	06/04/2020 20:22	WG1486836	
2-Methylphenol	ND		1.30	1	06/04/2020 20:22	WG1486836	
3&4-Methyl Phenol	ND		1.30	1	06/04/2020 20:22	WG1486836	
2-Nitrophenol	ND		1.30	1	06/04/2020 20:22	WG1486836	
4-Nitrophenol	ND		1.30	1	06/04/2020 20:22	WG1486836	
Pentachlorophenol	ND		1.30	1	06/04/2020 20:22	WG1486836	
Phenol	ND		1.30	1	06/04/2020 20:22	WG1486836	
2,4,6-Trichlorophenol	ND		1.30	1	06/04/2020 20:22	WG1486836	
2,4,5-Trichlorophenol	ND		1.30	1	06/04/2020 20:22	WG1486836	
(S) 2-Fluorophenol	50.0		12.0-120		06/04/2020 20:22	WG1486836	
(S) Phenol-d5	47.0		10.0-120		06/04/2020 20:22	WG1486836	
(S) Nitrobenzene-d5	37.3		10.0-122		06/04/2020 20:22	WG1486836	
(S) 2-Fluorobiphenyl	44.9		15.0-120		06/04/2020 20:22	WG1486836	
(S) 2,4,6-Tribromophenol	51.9		10.0-127		06/04/2020 20:22	WG1486836	
(S) p-Terphenyl-d14	55.1		10.0-120		06/04/2020 20:22	WG1486836	

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Total Solids by Method 2540 G-2011

Analyte	Result %	<u>Qualifier</u>	Dilution	Analysis date / time	<u>Batch</u>
Total Solids	80.2		1	06/05/2020 17:06	WG1487639

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ GI⁸ Al⁹ Sc

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-SGT

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
Diesel Range Organics (DRO)	37.4	J	24.9	5	06/05/2020 14:01	WG1486835
Residual Range Organics (RRO)	173	J	62.4	5	06/05/2020 14:01	WG1486835
(S) o-Terphenyl	80.7		18.0-148		06/05/2020 14:01	WG1486835

Polychlorinated Biphenyls (GC) by Method 8082 A

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
PCB 1016	ND		0.0424	1	06/07/2020 18:14	WG1486847
PCB 1221	ND		0.0424	1	06/07/2020 18:14	WG1486847
PCB 1232	ND		0.0424	1	06/07/2020 18:14	WG1486847
PCB 1242	ND		0.0424	1	06/07/2020 18:14	WG1486847
PCB 1248	ND		0.0212	1	06/07/2020 18:14	WG1486847
PCB 1254	ND		0.0212	1	06/07/2020 18:14	WG1486847
PCB 1260	ND		0.0212	1	06/07/2020 18:14	WG1486847
(S) Decachlorobiphenyl	72.9		10.0-135		06/07/2020 18:14	WG1486847
(S) Tetrachloro-m-xylene	76.8		10.0-139		06/07/2020 18:14	WG1486847

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

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
Acenaphthene	ND		0.0831	2	06/07/2020 13:51	WG1486836
Acenaphthylene	ND		0.0831	2	06/07/2020 13:51	WG1486836
Anthracene	0.195		0.0831	2	06/07/2020 13:51	WG1486836
Benzo(a)anthracene	ND		0.0831	2	06/07/2020 13:51	WG1486836
Benzo(b)fluoranthene	0.322		0.0831	2	06/07/2020 13:51	WG1486836
Benzo(k)fluoranthene	ND		0.0831	2	06/07/2020 13:51	WG1486836
Benzo(g,h,i)perylene	ND		0.0831	2	06/07/2020 13:51	WG1486836
Benzo(a)pyrene	ND		0.0831	2	06/07/2020 13:51	WG1486836
Bis(2-chlorethoxy)methane	ND		0.831	2	06/07/2020 13:51	WG1486836
Bis(2-chloroethyl)ether	ND		0.831	2	06/07/2020 13:51	WG1486836
2,2-Oxybis(1-Chloropropane)	ND		0.831	2	06/07/2020 13:51	WG1486836
4-Bromophenyl-phenylether	ND		0.831	2	06/07/2020 13:51	WG1486836
2-Chloronaphthalene	ND		0.0831	2	06/07/2020 13:51	WG1486836
4-Chlorophenyl-phenylether	ND		0.831	2	06/07/2020 13:51	WG1486836
Chrysene	0.109		0.0831	2	06/07/2020 13:51	WG1486836
Dibenz(a,h)anthracene	ND		0.0831	2	06/07/2020 13:51	WG1486836
3,3-Dichlorobenzidine	ND		0.831	2	06/07/2020 13:51	WG1486836
2,4-Dinitrotoluene	ND		0.831	2	06/07/2020 13:51	WG1486836
2,6-Dinitrotoluene	ND		0.831	2	06/07/2020 13:51	WG1486836
Fluoranthene	0.200		0.0831	2	06/07/2020 13:51	WG1486836
Fluorene	ND		0.0831	2	06/07/2020 13:51	WG1486836
Hexachlorobenzene	ND		0.831	2	06/07/2020 13:51	WG1486836
Hexachloro-1,3-butadiene	ND		0.831	2	06/07/2020 13:51	WG1486836
Hexachlorocyclopentadiene	ND		0.831	2	06/07/2020 13:51	WG1486836
Hexachloroethane	ND		0.831	2	06/07/2020 13:51	WG1486836
Indeno(1,2,3-cd)pyrene	0.0858		0.0831	2	06/07/2020 13:51	WG1486836
Isophorone	ND		0.831	2	06/07/2020 13:51	WG1486836
Naphthalene	ND		0.0831	2	06/07/2020 13:51	WG1486836
Nitrobenzene	ND		0.831	2	06/07/2020 13:51	WG1486836

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

Analyte	Result (dry) mg/kg	Qualifier	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch	
n-Nitrosodimethylamine	ND		0.831	2	06/07/2020 13:51	WG1486836	¹ Cp
n-Nitrosodiphenylamine	ND		0.831	2	06/07/2020 13:51	WG1486836	² Tc
n-Nitrosodi-n-propylamine	ND		0.831	2	06/07/2020 13:51	WG1486836	³ Ss
Phenanthrene	0.0858		0.0831	2	06/07/2020 13:51	WG1486836	⁴ Cn
Pyridine	ND		0.831	2	06/07/2020 13:51	WG1486836	⁵ Sr
Benzylbutyl phthalate	ND		0.831	2	06/07/2020 13:51	WG1486836	⁶ Qc
Bis(2-ethylhexyl)phthalate	ND		0.831	2	06/07/2020 13:51	WG1486836	⁷ Gl
Di-n-butyl phthalate	ND		0.831	2	06/07/2020 13:51	WG1486836	⁸ Al
Diethyl phthalate	ND		0.831	2	06/07/2020 13:51	WG1486836	
Dimethyl phthalate	ND		0.831	2	06/07/2020 13:51	WG1486836	
Di-n-octyl phthalate	ND		0.831	2	06/07/2020 13:51	WG1486836	
Pyrene	0.148		0.0831	2	06/07/2020 13:51	WG1486836	
1,2,4-Trichlorobenzene	ND		0.831	2	06/07/2020 13:51	WG1486836	
4-Chloro-3-methylphenol	ND		0.831	2	06/07/2020 13:51	WG1486836	
2-Chlorophenol	ND		0.831	2	06/07/2020 13:51	WG1486836	
2,4-Dichlorophenol	ND		0.831	2	06/07/2020 13:51	WG1486836	
2,4-Dimethylphenol	ND		0.831	2	06/07/2020 13:51	WG1486836	
4,6-Dinitro-2-methylphenol	ND		0.831	2	06/07/2020 13:51	WG1486836	
2,4-Dinitrophenol	ND		0.831	2	06/07/2020 13:51	WG1486836	
2-Methylphenol	ND		0.831	2	06/07/2020 13:51	WG1486836	
3&4-Methyl Phenol	ND		0.831	2	06/07/2020 13:51	WG1486836	
2-Nitrophenol	ND		0.831	2	06/07/2020 13:51	WG1486836	
4-Nitrophenol	ND		0.831	2	06/07/2020 13:51	WG1486836	
Pentachlorophenol	ND		0.831	2	06/07/2020 13:51	WG1486836	
Phenol	ND		0.831	2	06/07/2020 13:51	WG1486836	
2,4,6-Trichlorophenol	ND		0.831	2	06/07/2020 13:51	WG1486836	
2,4,5-Trichlorophenol	ND		0.831	2	06/07/2020 13:51	WG1486836	
(S) 2-Fluorophenol	42.0		12.0-120		06/07/2020 13:51	WG1486836	
(S) Phenol-d5	42.1		10.0-120		06/07/2020 13:51	WG1486836	
(S) Nitrobenzene-d5	36.0		10.0-122		06/07/2020 13:51	WG1486836	
(S) 2-Fluorobiphenyl	39.0		15.0-120		06/07/2020 13:51	WG1486836	
(S) 2,4,6-Tribromophenol	59.4		10.0-127		06/07/2020 13:51	WG1486836	
(S) p-Terphenyl-d14	39.0		10.0-120		06/07/2020 13:51	WG1486836	

Sample Narrative:

L1224343-09 WG1486836: Dilution due to matrix impact during extract concentration procedure

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Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	75.9		1	06/05/2020 17:06	WG1487639

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ GI⁸ Al⁹ Sc

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-SGT

Analyte	Result (dry) mg/kg	Qualifier	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	146	J	26.4	5	06/05/2020 03:08	WG1486835
Residual Range Organics (RRO)	413	J	65.9	5	06/05/2020 03:08	WG1486835
(S) o-Terphenyl	54.4		18.0-148		06/05/2020 03:08	WG1486835

Polychlorinated Biphenyls (GC) by Method 8082 A

Analyte	Result (dry) mg/kg	Qualifier	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
PCB 1016	ND		0.0448	1	06/07/2020 18:28	WG1486847
PCB 1221	ND		0.0448	1	06/07/2020 18:28	WG1486847
PCB 1232	ND		0.0448	1	06/07/2020 18:28	WG1486847
PCB 1242	ND		0.0448	1	06/07/2020 18:28	WG1486847
PCB 1248	ND		0.0224	1	06/07/2020 18:28	WG1486847
PCB 1254	ND		0.0224	1	06/07/2020 18:28	WG1486847
PCB 1260	ND		0.0224	1	06/07/2020 18:28	WG1486847
(S) Decachlorobiphenyl	83.1		10.0-135		06/07/2020 18:28	WG1486847
(S) Tetrachloro-m-xylene	80.2		10.0-139		06/07/2020 18:28	WG1486847

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

Analyte	Result (dry) mg/kg	Qualifier	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acenaphthene	ND		0.439	10	06/08/2020 05:41	WG1487202
Acenaphthylene	ND		0.439	10	06/08/2020 05:41	WG1487202
Anthracene	ND		0.439	10	06/08/2020 05:41	WG1487202
Benzo(a)anthracene	ND		0.439	10	06/08/2020 05:41	WG1487202
Benzo(b)fluoranthene	ND		0.439	10	06/09/2020 02:08	WG1487202
Benzo(k)fluoranthene	ND		0.439	10	06/09/2020 02:08	WG1487202
Benzo(g,h,i)perylene	ND		0.439	10	06/09/2020 02:08	WG1487202
Benzo(a)pyrene	ND		0.439	10	06/09/2020 02:08	WG1487202
Bis(2-chlorethoxy)methane	ND		4.39	10	06/08/2020 05:41	WG1487202
Bis(2-chloroethyl)ether	ND		4.39	10	06/08/2020 05:41	WG1487202
2,2-Oxybis(1-Chloropropane)	ND		4.39	10	06/08/2020 05:41	WG1487202
4-Bromophenyl-phenylether	ND		4.39	10	06/08/2020 05:41	WG1487202
2-Chloronaphthalene	ND		0.439	10	06/08/2020 05:41	WG1487202
4-Chlorophenyl-phenylether	ND		4.39	10	06/08/2020 05:41	WG1487202
Chrysene	ND		0.439	10	06/08/2020 05:41	WG1487202
Dibenz(a,h)anthracene	ND		0.439	10	06/09/2020 02:08	WG1487202
3,3-Dichlorobenzidine	ND		4.39	10	06/08/2020 05:41	WG1487202
2,4-Dinitrotoluene	ND		4.39	10	06/08/2020 05:41	WG1487202
2,6-Dinitrotoluene	ND		4.39	10	06/08/2020 05:41	WG1487202
Fluoranthene	ND		0.439	10	06/08/2020 05:41	WG1487202
Fluorene	ND		0.439	10	06/08/2020 05:41	WG1487202
Hexachlorobenzene	ND		4.39	10	06/08/2020 05:41	WG1487202
Hexachloro-1,3-butadiene	ND		4.39	10	06/08/2020 05:41	WG1487202
Hexachlorocyclopentadiene	ND		4.39	10	06/08/2020 05:41	WG1487202
Hexachloroethane	ND		4.39	10	06/08/2020 05:41	WG1487202
Indeno(1,2,3-cd)pyrene	ND		0.439	10	06/09/2020 02:08	WG1487202
Isophorone	ND		4.39	10	06/08/2020 05:41	WG1487202
Naphthalene	ND		0.439	10	06/08/2020 05:41	WG1487202
Nitrobenzene	ND		4.39	10	06/08/2020 05:41	WG1487202

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

Analyte	Result (dry) mg/kg	Qualifier	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch	
n-Nitrosodimethylamine	ND		4.39	10	06/08/2020 05:41	WG1487202	¹ Cp
n-Nitrosodiphenylamine	ND		4.39	10	06/08/2020 05:41	WG1487202	² Tc
n-Nitrosodi-n-propylamine	ND		4.39	10	06/08/2020 05:41	WG1487202	³ Ss
Phenanthrene	ND		0.439	10	06/08/2020 05:41	WG1487202	⁴ Cn
Pyridine	ND	J4	4.39	10	06/08/2020 05:41	WG1487202	⁵ Sr
Benzylbutyl phthalate	ND		4.39	10	06/08/2020 05:41	WG1487202	⁶ Qc
Bis(2-ethylhexyl)phthalate	ND		4.39	10	06/08/2020 05:41	WG1487202	⁷ Gl
Di-n-butyl phthalate	ND		4.39	10	06/08/2020 05:41	WG1487202	⁸ Al
Diethyl phthalate	ND		4.39	10	06/08/2020 05:41	WG1487202	⁹ Sc
Dimethyl phthalate	ND		4.39	10	06/08/2020 05:41	WG1487202	
Di-n-octyl phthalate	ND		4.39	10	06/08/2020 05:41	WG1487202	
Pyrene	ND		0.439	10	06/08/2020 05:41	WG1487202	
1,2,4-Trichlorobenzene	ND		4.39	10	06/08/2020 05:41	WG1487202	
4-Chloro-3-methylphenol	ND		4.39	10	06/08/2020 05:41	WG1487202	
2-Chlorophenol	ND		4.39	10	06/08/2020 05:41	WG1487202	
2,4-Dichlorophenol	ND		4.39	10	06/08/2020 05:41	WG1487202	
2,4-Dimethylphenol	ND		4.39	10	06/08/2020 05:41	WG1487202	
4,6-Dinitro-2-methylphenol	ND		4.39	10	06/08/2020 05:41	WG1487202	
2,4-Dinitrophenol	ND		4.39	10	06/08/2020 05:41	WG1487202	
2-Methylphenol	ND		4.39	10	06/08/2020 05:41	WG1487202	
3&4-Methyl Phenol	ND		4.39	10	06/08/2020 05:41	WG1487202	
2-Nitrophenol	ND		4.39	10	06/08/2020 05:41	WG1487202	
4-Nitrophenol	ND		4.39	10	06/08/2020 05:41	WG1487202	
Pentachlorophenol	ND		4.39	10	06/08/2020 05:41	WG1487202	
Phenol	ND		4.39	10	06/08/2020 05:41	WG1487202	
2,4,6-Trichlorophenol	ND		4.39	10	06/08/2020 05:41	WG1487202	
2,4,5-Trichlorophenol	ND		4.39	10	06/08/2020 05:41	WG1487202	
(S) 2-Fluorophenol	63.3		12.0-120		06/09/2020 02:08	WG1487202	
(S) 2-Fluorophenol	62.3		12.0-120		06/08/2020 05:41	WG1487202	
(S) Phenol-d5	59.8		10.0-120		06/08/2020 05:41	WG1487202	
(S) Phenol-d5	58.1		10.0-120		06/09/2020 02:08	WG1487202	
(S) Nitrobenzene-d5	44.9		10.0-122		06/08/2020 05:41	WG1487202	
(S) Nitrobenzene-d5	53.5		10.0-122		06/09/2020 02:08	WG1487202	
(S) 2-Fluorobiphenyl	54.4		15.0-120		06/08/2020 05:41	WG1487202	
(S) 2-Fluorobiphenyl	54.1		15.0-120		06/09/2020 02:08	WG1487202	
(S) 2,4,6-Tribromophenol	53.3		10.0-127		06/08/2020 05:41	WG1487202	
(S) 2,4,6-Tribromophenol	72.3		10.0-127		06/09/2020 02:08	WG1487202	
(S) p-Terphenyl-d14	113		10.0-120		06/08/2020 05:41	WG1487202	
(S) p-Terphenyl-d14	60.1		10.0-120		06/09/2020 02:08	WG1487202	

Sample Narrative:

L1224343-10 WG1487202: Dilution due to matrix.

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