PES Environmental, Inc.
Engineering & Environmental Services

December 21, 2018

1413.001.02

Washington Department of Ecology
Northwest Regional Office Toxics Control Program
3190 – 160th Ave. SE
Bellevue, WA 98008-5452
Attn: Ms. Tamara Cardona

BY EMAIL ONLY

PROGRESS REPORT NO. 13 – NOVEMBER 2018
FORMER AMERICAN LINEN SUPPLY CO.
AGREED ORDER NO. DE 14302

Dear Ms. Cardona:

On behalf of BMR-Dexter LLC ("BMRD"), PES Environmental, Inc. ("PES") is submitting this monthly progress report in accordance with the requirements of Agreed Order No. DE 14302 (the "AO") between the State of Washington Department of Ecology ("Ecology") and BMRD. Specifically, the progress report was prepared to fulfill the requirements of Sections VII.F and VII.G of the AO. This progress report provides information pertaining to work conducted during November 2018.

This progress report discusses: (1) activities that took place during the reporting period, (2) deviations from approved work plans or other required tasks not already documented in project plans or reports, (3) deviations or anticipated problems in meeting the schedule or objectives set forth in the AO or approved work plans, (4) validated laboratory data received and data entered into Ecology's Environmental Information Management ("EIM") database during the reporting period, (5) work planned and anticipated deliverables for the next reporting period (i.e., December 2018), and (6) summaries of contacts with representatives of the local community, public interest groups, press, and federal, state or tribal governments.

ACTIVITIES CONDUCTED DURING THE REPORTING PERIOD

During the reporting period, BMRD conducted the following work:

- Completed redevelopment of select injection wells (IW54B, -10C, -11C, -22C, and -27C) on November 1 and 2, 2018, prior to initiating the second round of *in situ* chemical oxidation (ISCO) injections.

- Initiated the second round of ISCO injections on November 5, 2018. The second round ISCO injections were completed on December 1, 2018. As described in the October 2018 progress report, select injection wells were redeveloped in an attempt to improve the ability inject reagents and a number of electrical resistivity heating (ERH) wells were sealed to

prevent surfacing of reagent through the wells. The redevelopment was effective in significantly improving the injection of reagents in four of the redeveloped injection wells and no surfacing was observed through the sealed ERH wells.

- Submitted two variance requests to the minimum standards for well construction to Ecology's Water Resources Program on November 7, 2018. The variance requests addressed: (1) the approach for decommissioning the former ERH wells, and (2) installation of the perimeter injection wells as dual completion (nested) wells.

- Provided a summary of the first round of ISCO injections to Ecology via e-mail on November 8, 2019. A complete summary of the first-round injection event is included as an attachment to this progress report.

- Met with Ecology on November 9th to discuss soil management approach and waste designation procedures as part of developing the Contaminated Media Management Plan, reinitiating work on the draft remedial investigation/feasibility study (RI/FS) work plan, and overall project schedule.

- Received comments on the Draft Contingent Action Addendum provided to Ecology by the City of Seattle and Farallon Consulting (on behalf of Vulcan) via e-mail from Ecology on November 15, 2018.

- Received Ecology's comments on the Agency Review Draft Remedial Investigation/Feasibility Study Work Plan (dated March 16, 2018) via e-mail on November 15, 2018.

- Submitted the Draft Contaminated Media Management Plan to Ecology for review on November 26, 2018.

- Received Ecology comments on the Draft Contingent Action Addendum via e-mail on November 27, 2018.

- Met with Ecology on November 29th, 2018 to review and discuss Ecology's comments on the Draft Contingent Action Addendum.

DEVIATIONS FROM REQUIRED TASKS NOT ALREADY REPORTED

No unreported deviations from required tasks occurred during the reporting period.

DEVIATIONS FROM THE SCHEDULE

No deviations were encountered during the reporting period, and there are no anticipated problems in meeting the schedule or objectives set forth in the AO.

VALIDATED DATA RECEIVED, AND DATA ENTERED INTO EIM

Data associated with the soil sampling conducted during the installation of additional injection wells and the IW-54A/IW54B investigation, and the inter-injection performance groundwater monitoring event was validated during the reporting period; these data will be entered into the EIM database during the next reporting period.

WORK PLANNED AND ANTICIPATED DELIVERABLES DURING UPCOMING REPORTING PERIOD

Work planned during the December 2018 reporting period includes implementing the interim action activities pursuant to the approved Final IAWP, including:

- As noted above, the second round of ISCO injections was completed on December 1, 2108. A summary of the second round ISCO injection event will be included in the January 2019 progress report;
- Begin the third round of ISCO injections during the week of December 17th. Activities conducted that week will include receipt of additional chemical reagents and chemical injection into the injection wells;
- Responding to Ecology's comments on the Draft Contingent Action Addendum;
- Receiving and responding to Ecology's comments on the Draft Contaminated Media Management Plan;
- Begin revising the RI/FS Work plan to address ecology's comments;
- Receiving Ecology's response to the variance requests for decommissioning the ERH wells and for installing the perimeter injection wells; and
- Coordinating with the Seattle Department of Transportation regarding the installation of the perimeter injection wells.

There are no other deliverables anticipated to be submitted to Ecology during the December 2018 reporting period.

CONTACTS WITH PUBLIC AND GOVERNMENTAL PERSONNEL

In addition to routine communications with Ecology regarding the ongoing work, BMRD and its representatives met with staff from the City of Seattle on November 11th to provide an update on the implementation of the Interim Action Work Plan, including discussing the Draft Contingent Action Addendum and answering questions. Mr. Ron Timm of Ecology also attended the meeting. BMRD did not issue any press releases or fact sheets related to the project and did not participate in any major meetings with interested public or local governments.

Please call if you have any questions or comments regarding information included in this progress report.
Sincerely,

PES ENVIRONMENTAL, INC.

Daniel A. Balbiani, P.E.
Principal Engineer

Attachment: Technical Memorandum – Round 1 ISCO Injection Completion Summary

cc: John Moshy, BMR-Dexter LLC

PES Environmental, Inc.
Engineering & Environmental Services

MEMORANDUM

TO: John Moshy, BMR-Dexter

FROM: Brian O'Neal/Dan Balbiani

DATE: December 20, 2018

SUBJECT: Summary of Round #1 ISCO Injection
American Linen Supply Co – Dexter Ave. Site
Seattle, Washington

PROJECT NO.: 1413.001.05(305)

PES Environmental, Inc. ("PES") has prepared this memorandum to summarize the first round of *in situ* chemical oxidation (ISCO) injections at the American Linen Supply Co - Dexter Ave Site ("Site") located at 700 Dexter Avenue North, Seattle, Washington. The first round of ISCO injections was conducted consistent with the Final Interim Action Work Plan ("IAWP")[1]. PES provided the Washington Department of Ecology (Ecology) with a preliminary summary of the first-round injections via e-mail on November 8, 2108, and information contained in that e-mail is included in this memorandum. In addition to summarizing the injection activities, this memorandum presents the results of the first inter-injection round groundwater sampling event.

FIRST ROUND ISCO INJECTION SUMMARY

The first round of ISCO injections were conducted consistent with the IAWP between September 13 and October 3, 2018. These injections were conducted using the 155 injection wells existing at the time; 133 injection wells installed earlier in 2018 and 22 additional injection wells installed in late August and September 2018. Figure 1 shows the location of these injection wells, and Table 1 provides an overall summary of the quantity of reagents injected into each of the four treatment zones. Table 2 provides a summary on a well-by-well basis, including the quantity of reagents injected, maximum injection pressure encountered, and comments regarding where surfacing of reagents occurred. A total of just over 75,000 gallons of reagents were injected during round one, including 36,900 gallons of the peroxide solution. For the first round, peroxide was injected at a concentration of 6 percent. As expected, injections into Treatment Zones A, B, and D delivered greater volumes at lower pressures compared with Treatment Zone C.

As shown on Table 2, a total of 34 on-Property injection wells experienced surfacing of reagents at some stage during the injection process; no surfacing occurred off the Property. In 12 of these wells, a minimum of 300 gallons of reagent was injected before surfacing occurred. Approximately half of the

[1] PES Environmental, Inc. 2018. *Final Interim Action Work Plan, American Linen Supply Co-Dexter Avenue Site, 700 Dexter Avenue North, Seattle, Washington*. August.

wells that surfaced were Treatment Zone A injection wells (18 wells), with the remaining surfacing occurring in Treatment Zone B (9 wells), Treatment Zone C (6 wells), and one Treatment Zone D well.

Where surfacing occurred on the Property, it happened in one of two ways: (1) through a nearby electrical resistivity heating (ERH) well or (2) through the soil. Surfacing occurred through an ERH well in 14 cases. These ERH wells were sealed prior to initiating the second round of injections. The second round of injections will inject reagents to the extent possible in all wells where surfacing occurred. There were also nine wells that accepted little or no reagents at pressures up to 100 psi. These wells were redeveloped prior to round two injections in an effort to improve their performance.

INTER-INJECTION ROUND GROUNDWATER SAMPLING RESULTS

The first inter-injection round groundwater monitoring event was conducted consistent with the IAWP between October 25 and October 29, 2018. Table 18 from the IAWP identifies 19 existing wells to be sampled after each injection round. Note that monitoring well MW-140 was one of these 19 wells to be sampled, but this well had to be decommissioned due to conflicts with undergrounding of utilities and could not be sampled. Monitoring well MW-130 was inadvertently not sampled during the first inter-injection round. The locations of these wells are shown on Figure 54 from the IAWP, which is attached for reference.

The analytical results for the primary chlorinated volatile organic compounds (CVOCs) for the 17 wells that were sampled are summarized on Table 1 along with previous results for these wells from 2017 and 2018, including the baseline monitoring event conducted in April 2018. The analytical data from the October 2018 monitoring was validated consistent with the Quality Assurance Project Plan (Appendix M of the IAWP), and the data was deemed acceptable for use in the interim action. The laboratory reports and data validation memoranda for these samples are attached. As can be seen in Table 1, the majority of the CVOC concentrations either decreased or stayed approximately the same compared to the baseline monitoring event. Specific observations are discussed below.

Former Loading Dock Area. Intermediate A well MW-149, located just downgradient from the loading dock, showed a 61 to 68 percent reduction in tetrachloroethene (PCE), trichloroethene (TCE), cis-1,2-dichloroethene (cDCE), and vinyl chloride concentrations. Conversely, adjacent Intermediate B monitoring well MW-150 showed CVOC concentrations increasing by approximately a factor 2 to 7, depending on the CVOC. Intermediate B monitoring well MW-135, located in the center of the north-central source area, showed a 39 percent decrease in PCE concentrations (45,900 µg/L compared to 75,800 µg/L in the baseline event), and a 46 percent increase in cDCE concentrations (40,400 µg/L compared to 27,700 µg/L in the baseline event), while the concentrations of TCE and vinyl chloride both showed only slight increases in concentrations.

As described in the IAWP, CVOC concentrations in groundwater may temporarily increase after initial injections of modified Fenton's reagent due to desorption of VOCs from soil. It is also possible to see a temporary increase in concentration of degradation daughter products (cDCE and vinyl chloride); this is not a direct result of the chemical oxidation reactions, as these do not generate the partially dechlorinated daughter products. Rather, the oxidation reactions with organic carbon in soil can result in dissolved organic carbon in groundwater that can be metabolized by aerobic bacteria and lead to reducing conditions and, as a result, reductive dechlorination reactions may be occurring following the ISCO injection.

Both of these processes upset the equilibrium between CVOC concentrations in soil and groundwater in the treatment zone which can lead to transitory increases in dissolved concentrations, especially early in the treatment program. These changes are generally localized to the areas around the injection wells and are not expected to cause increased migration of CVOCs off the Property. As described below, CVOC concentrations in the downgradient monitoring wells sampled to date (e.g., MW-134, MW-141) have not increased.

Former Western Boiler Room Area. CVOC concentrations in Intermediate A monitoring well MW-151 remained generally low. For Intermediate B monitoring well MW-152, concentrations of PCE and TCE dropped by 97 percent and 52 percent, respectively, while concentrations of cDCE and vinyl chloride both increased. There are four monitoring wells located generally downgradient of the former western boiler room: MW-131, MW-136, MW-137, and MW-139. CVOC concentrations in these wells were generally low, but either decreased (MW-131 and MW-136) or remained generally the same (MW-137 and MW-139).

MW-132. This Intermediate B monitoring well located in the middle of the Property showed more than a 99 percent reduction in concentrations of PCE, TCE, and cDCE, while the concentration of vinyl chloride increased from 10 µg/L to 158 µg/L.

Downgradient Wells. CVOC concentrations in downgradient monitoring wells along 8th Avenue (MW-134, MW-141, W-MW-01, W-MW-02, and MW104) generally decreased in concentration or remained approximately the same compared to the baseline event.

As noted above, some increases in CVOC concentration following the initial ISCO injections are to be expected as contaminants are desorbed from soil into the dissolved phase, and this appears to be occurring in a least one location (MW-150). In other cases (MW-135, MW-150, and MW-152), temporary increases in the concentrations of daughter products may be observed as increases in the organic carbon concentrations in groundwater may cause conditions conducive to reductive dechlorination. Combined with temporary increases in parent compound (PCE and TCE) concentrations due to desorption from soil, this may lead to a short-term increase in concentrations of cDCE and vinyl chloride. These dissolved phase CVOCs will be directly oxidized during the next round of injections, and as noted above, are transitory and not anticipated to lead to increased migration off the Property.

Attachments:

Table 1 – Round 1 ISCO Injection Statistics
Table 2 – Round 1 Injection Well Reagent Totals
Table 3 – Primary CVOCs Detected in Groundwater after Initial ISCO Injection
Figure 1 – Interim Action Injection Wells
IAWP Figure 54 – Interim Action Performance Monitoring Wells
Laboratory Reports and Data Validation Memorandum for October 2108 Groundwater Sampling

Table 1
Round #1 ISCO Injection Statistics
Former American Linen Supply Co
Seattle, Washington

Treatment Zone	Number of Wells	Total Reagent Injected	Average Reagent Per Well	Wells Receiving Minimum Volume (380 gal)	Wells Exceeding 500 gallons
A	56	28,458	508	46	39
B	56	27,812	497	45	43
C	28	10,212	365	16	14
D	15	8,800	587	15	13
Overall	155	75,282	486	122	109

Table 2
Round #1 Injection Well Reagent Totals
September 13-October 3, 2018
Former American Linen Supply Co
Seattle, Washington

Injection Well ID	Catalyst Solution (gallons)	Peroxide Solution (gallons)	Total Reagent (gallons)	Max Pressure (psi)	Comments
Treatment Zone A Wells					
IW-1A	300	300	600	16	
IW-2A	300	300	600	12	
IW-3A	300	300	600	22	
IW-4A	300	300	600	16	
IW-5A	300	300	600	30	
IW-6A	300	300	600	2	
IW-7A	300	300	600	12	
IW-8A	300	300	600	4	
IW-9A	300	300	600	22	
IW-10A	300	300	600	14	
IW-11A	300	300	600	14	
IW-12A	300	300	600	10	
IW-13A	300	300	600	16	
IW-14A	300	300	600	18	
IW-15A	300	300	600	16	
IW-16A	300	300	600	12	
IW-17A	300	300	600	10	
IW-18A	250	250	500	10	
IW-19A	300	300	600	18	
IW-20A	300	300	600	12	
IW-21A	300	300	600	20	
IW-22A	300	300	600	12	
IW-23A	250	300	550	60	
IW-24A	300	300	600	16	
IW-25A	300	300	600	12	
IW-26A	300	300	600	22	
IW-27A	300	300	600	20	
IW-28A	300	300	600	20	
IW-29A	300	300	600	40	
IW-30A	300	300	600	50	
IW-31A	300	300	600	90	
IW-32A	300	267	567	44	Surfaced through adjacent ERH well; ERH well will be sealed prior to Round #2 Injections.
IW-33A	300	300	600	30	
IW-34A	200	125	325	36	Surfaced 4 feet to the south
IW-35A	250	150	400	30	Surfaced 9 feet to the northeast
IW-36A	100	20	120	64	Surfaced 3 feet to the northwest
IW-37A	100	40	140	50	Surfaced 5 feet to the southeast
IW-38A	100	85	185	46	Surfaced 5 feet to the southwest
IW-39A	250	120	370	42	Surfaced 12 feet to the northeast
IW-40A	300	300	600	20	
IW-41A	300	300	600	48	
IW-42A	300	250	550	24	

Table 2
Round #1 Injection Well Reagent Totals
September 13-October 3, 2018
Former American Linen Supply Co
Seattle, Washington

Injection Well ID	Catalyst Solution (gallons)	Peroxide Solution (gallons)	Total Reagent (gallons)	Max Pressure (psi)	Comments
IW-43A	250	220	470	78	Surfaced through ERH well to north; ERH well will be sealed prior to Round #2 Injections.
IW-44A	200	280	480	68	Surfaced 6 feet to the southeast
IW-45A	100	100	200	50	Surfaced 15 feet to the west; ERH well will be sealed prior to Round #2 Injections.
IW-46A	300	300	600	84	Surfaced through ERH well to west; ERH well will be sealed prior to Round #2 Injections.
IW-47A	250	236	486	100	
IW-48A	300	265	565	100	Surfaced 18 feet to the northeast
IW-49A	Well Not Installed Due to Obstructions				
IW-50A	200	95	295	18	Surfaced 4 feet to the south
IW-51A	100	70	170	26	Surfaced
IW-52A	250	240	490	14	Surfaced 10 feet to the southeast; ERH well will be sealed prior to Round #2 Injections.
IW-53A	300	300	600	38	
IW-54A	205	220	425	50	Surfaced through ERH well to west; ERH well will be sealed prior to Round #2 Injections.
IW-55A	50	50	100	64	Surfaced through well annulus
IW-56A	225	250	475	80	
IW-57A	100	95	195	72	Surfaced through ERH well to northwest; ERH well will be sealed prior to Round #2 Injections.
Treatment Zone B Wells					
IW-1B	300	300	600	16	
IW-2B	300	300	600	28	
IW-3B	300	300	600	12	
IW-4B	300	300	600	24	
IW-5B	300	300	600	22	
IW-6B	300	300	600	16	
IW-7B	300	300	600	16	
IW-8B	300	300	600	50	
IW-9B	300	300	600	28	
IW-10B	310	300	610	40	
IW-11B	300	300	600	20	
IW-12B	300	300	600	14	
IW-13B	300	300	600	16	
IW-14B	300	300	600	20	
IW-15B	300	300	600	14	
IW-16B	300	300	600	30	
IW-17B	300	300	600	12	
IW-18B	300	300	600	26	
IW-19B	300	300	600	30	
IW-20B	300	300	600	28	
IW-21B	300	300	600	10	

Table 2
Round #1 Injection Well Reagent Totals
September 13-October 3, 2018
Former American Linen Supply Co
Seattle, Washington

Injection Well ID	Catalyst Solution (gallons)	Peroxide Solution (gallons)	Total Reagent (gallons)	Max Pressure (psi)	Comments
IW-22B	100	100	200	20	Surfaced through ERH wells to south and southwest; ERH wells will be sealed prior to Round #2 Injections.
IW-23B	250	200	450	20	
IW-24B	100	100	200	40	Surfaced through ERH well to the north; ERH well will be sealed prior to Round #2 Injections.
IW-25B	300	300	600	68	
IW-26B	300	300	600	22	
IW-27B	300	300	600	80	
IW-28B	100	50	150	40	Surfaced through ERH well to the north; ERH well will be sealed prior to Round #2 Injections.
IW-29B	300	300	600	28	
IW-30B	300	250	550	58	
IW-31B	300	300	600	30	
IW-32B	300	300	600	70	
IW-33B	300	300	600	22	
IW-34B	100	35	135	74	Surfaced through ERH wells to north and east; ERH wells will be sealed prior to Round #2 Injections.
IW-35B	200	155	355	50	Surface 2 feet to the south
IW-36B	57	50	107	50	Surfaced through ERH well to the northwest; ERH well will be sealed prior to Round #2 Injections.
IW-37B	100	75	175	62	Surface 12 feet to the southwest
IW-38B	300	300	600	84	
IW-39B	300	300	600	30	
IW-40B	100	85	185	98	Surfaced
IW-41B	250	250	500	80	
IW-42B	100	60	160	60	Surfaced 15 feet to the northeast
IW-43B	300	235	535	100	
IW-44B	250	200	450	60	
IW-45B	300	280	580	100	
IW-46B	250	250	500	70	
IW-47B	250	250	500	82	
IW-48B	300	300	600	58	
IW-49B	300	300	600	26	
IW-50B	300	300	600	52	
IW-51B	315	300	615	70	
IW-52B	250	250	500	44	
IW-53B	275	250	525	100	
IW-54B	5	0	5	100	Well will be redeveloped prior to Round #2 injections
IW-55B	25	0	25	98	Well will be redeveloped prior to Round #2 injections
IW-56B	300	300	600	60	

Table 2
Round #1 Injection Well Reagent Totals
September 13-October 3, 2018
Former American Linen Supply Co
Seattle, Washington

Injection Well ID	Catalyst Solution (gallons)	Peroxide Solution (gallons)	Total Reagent (gallons)	Max Pressure (psi)	Comments
Treatment Zone C Wells					
IW-1C	300	300	600	28	
IW-2C	300	300	600	30	
IW-3C	300	300	600	80	
IW-4C	250	250	500	68	
IW-5C	300	300	600	30	
IW-6C	300	300	600	34	
IW-7C	300	300	600	84	
IW-8C	300	300	600	66	
IW-9C	100	100	200	82	Surfaced through ERH well to the north; ERH well will be sealed prior to Round #2 Injections.
IW-10C	25	0	25	100	Well will be redeveloped prior to Round #2 injections
IW-11C	100	100	200	70	Well will be redeveloped prior to Round #2 injections
IW-12C	250	235	485	100	
IW-13C	100	95	195	98	Surface 12 feet to the south
IW-14C	250	250	500	94	Surfaced 9 feet to the southeast near ERH well; ERH well will be sealed prior to Round #2 Injections.
IW-15C	250	250	500	86	
IW-16C	100	85	185	90	Surfaced 15 feet to the east
IW-17C	300	300	600	84	
IW-18C	250	250	500	60	
IW-19C	100	100	200	84	Surfaced 20 feet to the east
IW-20C	300	300	600	24	
IW-21C	250	250	500	74	
IW-22C	3	0	3	100	Well will be redeveloped prior to Round #2 injections
IW-23C	50	25	75	78	Surface along annulus. Well will be redeveloped prior to Round #2 injections
IW-24C	9	0	9	100	Well will be redeveloped prior to Round #2 injections
IW-25C	250	150	400	95	
IW-26C	150	110	260	100	
IW-27C	25	0	25	100	Well will be redeveloped prior to Round #2 injections
IW-28C	50	0	50	100	Well will be redeveloped prior to Round #2 injections

Table 2
Round #1 Injection Well Reagent Totals
September 13-October 3, 2018
Former American Linen Supply Co
Seattle, Washington

Injection Well ID	Catalyst Solution (gallons)	Peroxide Solution (gallons)	Total Reagent (gallons)	Max Pressure (psi)	Comments
Treatment Zone D Wells					
IW-1D	300	300	600	30	
IW-2D	300	300	600	60	
IW-3D	300	300	600	90	
IW-4D	300	300	600	48	
IW-5D	200	275	475	100	Surface 9 feet to the northwest
IW-6D	300	300	600	12	
IW-7D	300	300	600	24	
IW-8D	300	300	600	10	
IW-9D	300	300	600	16	
IW-10D	300	300	600	44	
IW-11D	350	300	650	74	
IW-12D	250	225	475	100	
IW-13D	300	300	600	26	
IW-14D	300	300	600	42	
IW-15D	300	300	600	30	
	38,379	**36,903**	**75,282**		

Table 3
Primary CVOCs Detected in Groundwater Samples After Round #1 ISCO Injection
Former American Linen Supply
700 Dexter Avenue North, Seattle, Washington

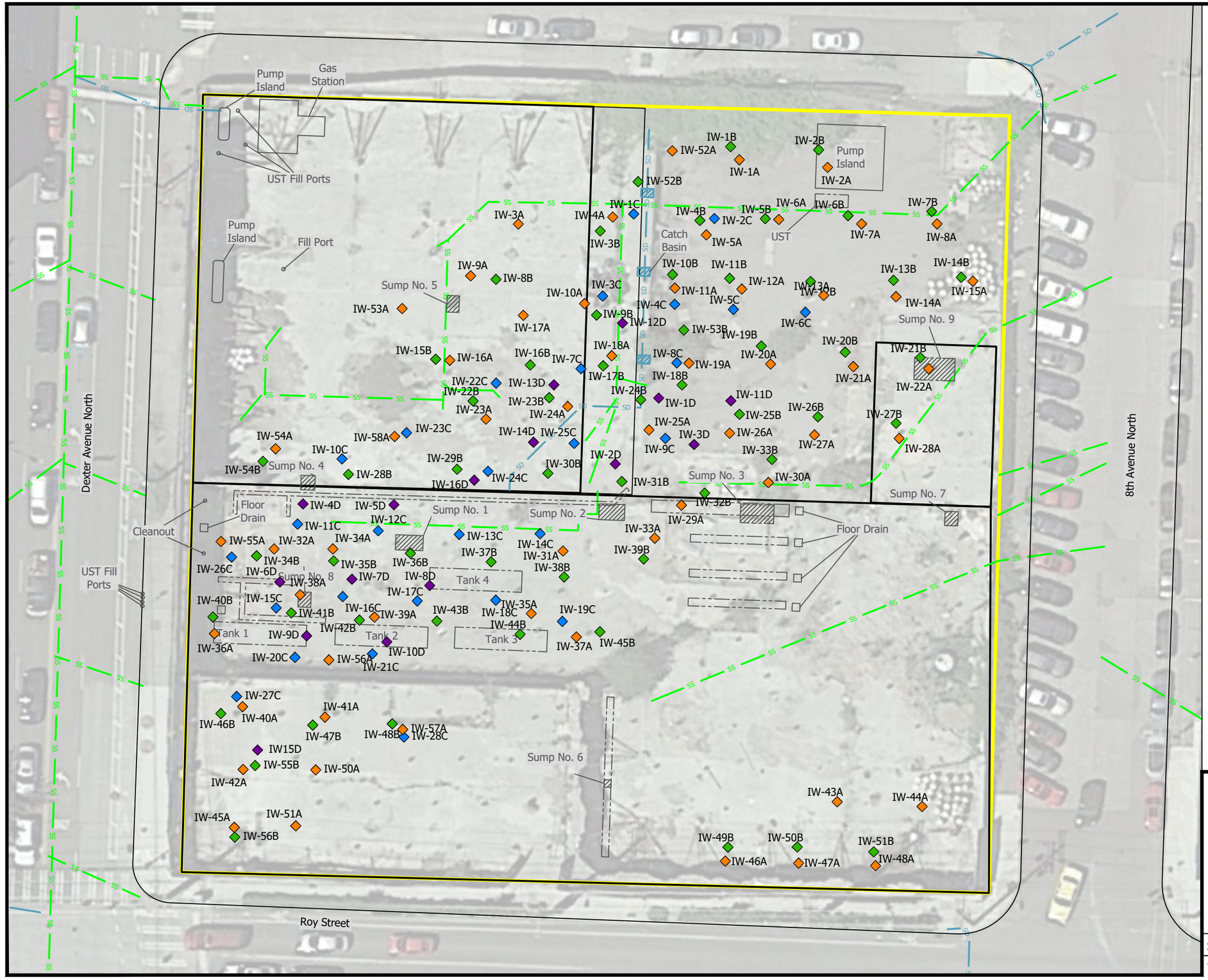
Sample Location	Property	Sample Date	Sampling Method	Analytical Results (micrograms per liter) PCE		TCE		cDCE		tDCE		VC	
			Screening Level	2.4		1		16		100		0.2	
Intermediate A Water-Bearing Zone													
MW131	Property	03/27/17	Peristaltic	0.199	U	0.153	U	**243**		**0.981**		**804**	
		06/20/17	Peristaltic	0.995	U	0.765	U	**2.55**		0.760	U	**435**	
		04/16/18	Peristaltic	**7.05**		**3.25**		**10.4**		**0.276**	**J**	**18.0**	
		10/25/18	Peristaltic	**0.895**		**0.347**	**J**	**1.65**	**J+**	0.152	U	**1.83**	
MW-149	Property	04/10/18	Peristaltic	**19,200**		**8,050**		**10,500**		**29.8**		**863**	
		10/25/18	Peristaltic	**6,100**		**2,720**		**3,320**		**15.3**		**100**	
MW-151	Property	04/10/18	Peristaltic	**1.13**		**0.310**	**J**	**59.1**	**J-**	**0.388**	**J-**	**11.4**	
		10/25/18	Peristaltic	**2.28**		**1.38**		**5.80**		**0.346**	**J**	**7.7**	
Intermediate B Water-Bearing Zone													
MW-132	Property	09/25/17	Bladder	0.995	U	**1.95**	**J**	**196**		0.760	U	**1.76**	**J**
		04/26/18	Bladder	**2,830**		**840**		**3,300**		**16.3**		**10.2**	
		10/25/18	Peristaltic	**3.53**		**0.75**		**12.1**		**0.254**	**J**	**158**	
MW-134	Property	09/22/17	Bladder	0.995	U	0.765	U	**86.2**		0.760	U	**229**	
		04/16/18	Peristaltic	**1.49**		0.153	U	**0.287**	**J**	0.152	U	**68.6**	
		10/25/18	Bladder	0.199	U	0.153	U	0.0933	U	0.152	U	**20.9**	
MW-135	Property	09/25/17	Bladder	**10,400**		**2,480**		**16,100**		15.2	U	**82.0**	**J**
		04/25/18	Peristaltic	**75,800**		**7,890**		**27,700**		**30.7**		**989**	
		10/25/18	Peristaltic	**45,900**		**8,330**		**40,400**		**54.4**		**1,170**	
MW-136	Property	09/25/17	Bladder	**15.4**		**10.7**		**18.7**		0.152	U	0.118	U
		04/16/18	Submersible	**2.59**		**0.365**	**J**	**4.73**		0.152	U	**8.57**	
		10/29/18	Bladder	0.199	U	**0.177**	**J**	**1.44**		0.152	U	**0.236**	**J**
MW-139	Property	09/25/17	Bladder	0.199	U	0.153	U	**1.42**		0.152	U	**0.246**	**J**
		04/25/18	Peristaltic	0.199	U	0.153	U	**0.175**	**J**	0.152	U	0.118	U
		10/25/18	Peristaltic	**1.29**		**0.282**	**J**	0.454	U	0.152	U	0.118	U
MW-150	Property	04/10/18	Peristaltic	**2,500**		**3,200**		**9,710**		**21.1**		**766**	
		10/25/18	Peristaltic	**15,200**		**8,800**		**17,700**		**49.7**		**1,430**	
MW-152	Property	04/10/18	Peristaltic	**67,300**		**6,550**		**35,300**		**42.1**		**3,660**	
		10/26/18	Peristaltic	**1,960**		**3,150**		**73,000**		**109**		**4,510**	
W-MW-01	8th Ave N ROW	03/30/17	Peristaltic	**0.330**	**J**	**0.203**	**J**	**0.491**	**J**	0.152	U	**1.83**	
		06/19/17	Bladder	0.199	U	0.153	U	**0.320**	**J**	0.152	U	**1.09**	
		04/13/18	Bladder	**5.33**		**1.68**		**1.31**		0.152	U	**8.79**	
		10/29/18	Bladder	**0.22**	**J**	**0.696**		**0.629**		0.152	U	**3.9**	
W-MW-02	8th Ave N ROW	03/27/17	Peristaltic	0.199	U	**0.259**	**J**	**33.0**		**2.16**		**36.4**	
		06/19/17	Bladder	0.199	U	0.153	U	**18.2**		**0.746**		**25.6**	
		06/12/18	Bladder	0.199	U	0.153	U	**4.72**		**0.279**	**J**	**4.95**	
		10/26/18	Peristaltic	0.199	U	0.153	U	**2.01**		**0.410**	**J**	**1.41**	
(dup)		10/26/18	Peristaltic	0.199	U	0.153	U	**2.11**	**J+**	**0.435**	**J**	**1.8**	

Table 3
Primary CVOCs Detected in Groundwater Samples After Round #1 ISCO Injection
Former American Linen Supply
700 Dexter Avenue North, Seattle, Washington

Sample Location	Property	Sample Date	Sampling Method	Analytical Results (micrograms per liter) PCE		TCE		cDCE		tDCE		VC	
			Screening Level	**2.4**		**1**		**16**		**100**		**0.2**	
Deep Water-Bearing Zone													
MW104	8th Ave N ROW	03/30/17	Peristaltic	0.199	U	0.153	U	**3.97**		0.152	U	0.118	U
		06/30/17	Bladder	**5.83**		**5.21**		**1.54**		0.152	U	0.118	U
		04/09/18	Peristaltic	**0.541**		**2.00**		**176**		**1.02**		**32.3**	
		10/26/18	Bladder	**1.87**	**J+**	**2.94**	**J+**	**71.2**		**0.257**	**J**	**43.5**	
MW-133	Property	09/25/17	Bladder	**12.7**		**16.2**		**13.3**		**1.13**		**0.239**	**J**
		04/25/18	Bladder	**0.646**		**0.516**		**10.7**		**0.315**	**J**	**3.51**	
		10/26/18	Bladder	**1.92**	**J+**	**1.63**	**J+**	**7.94**		**0.257**	**J**	**3.43**	
MW-137	Property	09/25/17	Bladder	**15.0**		**19.1**		**62.0**		0.152	U	0.118	U
		04/12/18	Bladder	0.199	U	0.153	U	**1.79**		0.152	U	**4.26**	
		10/26/18	Bladder	**0.896**	**J+**	0.463	U	**0.893**	**J+**	0.152	U	0.118	U
MW-138	Dexter Ave N	09/21/17	Bladder	0.398	U	0.306	U	0.187	U	0.304	U	0.236	U
		04/11/18	Bladder	0.199	U	0.153	U	0.0933	U	0.152	U	0.118	U
		10/29/18	Bladder	0.199	U	0.153	U	0.0933	U	0.152	U	**0.169**	**J**
MW-141	Property	09/22/17	Bladder	0.199	U	0.153	U	**0.345**	**J**	0.152	U	**0.457**	**J**
		04/12/18	Submersible	**71.3**	**J+**	**25.6**	**J+**	**91.6**	**J+**	**5.68**	**J+**	**7.01**	**J+**
		10/25/18	Bladder	0.199	U	0.153	U	**3.10**		0.152	U	0.118	U

Notes:

1. PCE = perchloroethylene (tetrachloroethene)
2. TCE = trichloroethene
3. cDCE = cis-1,2-dichloroethene
4. tDCE = trans-1,2-dichloroethene
5. VC = vinyl chloride
6. All values reported in micrograms per liter (µg/L)
7. Detected results shown in bold, detections above the screening level highlighted in gray
8. U = not detected at or above the laboratory method detection limit (MDL); detections above the MDL but below the laboratory reported detection limit (RDL) are qualified with a "J"
9. J = the analyte was poitively identified, the associated numerical value is the approximate concentration of the analyte in the sample
10. J+ = the analyte was poitively identified, the associated numerical value is the approximate concentration of the analyte in the sample: likely to have a high bias
11. J- = the analyte was poitively identified, the associated numerical value is the approximate concentration of the analyte in the sample: likely to have a low bias



Explanation

- Approximate Property Boundary
- Sanitary Sewer Line
- Storm Drain Line
- Combined Main
- N 231800 / E 1268300 — Coordinate Reference Point (NAD83, Washington State Plane North, US Feet)
- IW-1A — Treatment Zone A Injection Well
- IW-13B — Treatment Zone B Injection Well
- IW-6C — Treatment Zone C Injection Well
- IW-11D — Treatment Zone D Injection Well

N

0 30

SCALE IN FEET

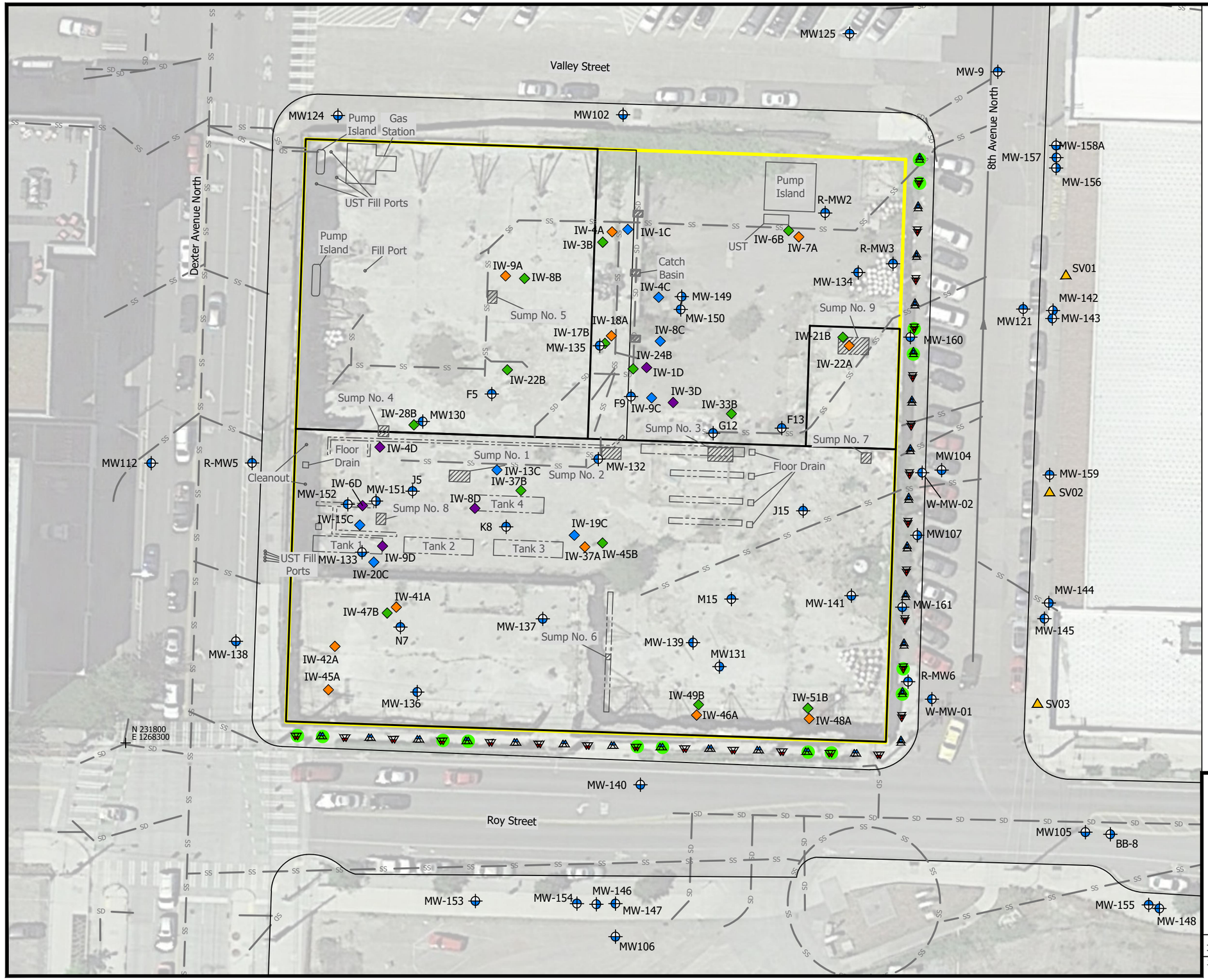
Aerial Photo: June 27, 2016 (Google 2017)

PES Environmental, Inc.
Engineering & Environmental Services

Interim Action Injection Wells
Former American Linen Supply
700 Dexter Avenue North
Seattle, Washington

FIGURE
1

1413.001.02.404	141300102404_Inj_FM_1	DRAFT	12/18
JOB NUMBER	DRAWING NUMBER	REVIEWED BY	DATE



Explanation

- Approximate Property Boundary
- SS — Sanitary Sewer Line
- SD — Storm Drain Line
- Combined Main
- MW101 — Shallow Zone Monitoring Well
- MW107 — Intermediate A Zone Monitoring Well
- W-MW-02 — Intermediate B Zone Monitoring Well
- MW105 — Deep Zone Monitoring Well
- N 231800 E 1268300 — Coordinate Reference Point (NAD83, Washington State Plane North, US Feet)
- Treatment Zone A Injection Well
- Treatment Zone B Injection Well
- Treatment Zone C Injection Well
- Treatment Zone D Injection Well
- Type 1 Perimeter Injection Well
- Type 2 Perimeter Injection Well
- Perimeter Injection wells to be sampled prior to injecting EVO
- SV01 — Soil Gas Monitoring Point

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0 40

SCALE IN FEET

Aerial Photo: June 27, 2016 (Google 2017)

PES Environmental, Inc.
Engineering & Environmental Services

Interim Action Performance Monitoring Network
Former American Linen Supply
700 Dexter Avenue North
Seattle, Washington

FIGURE
54

1413.001.02.404	141300102404_IAWP_54	WRH	8/18
JOB NUMBER	DRAWING NUMBER	REVIEWED BY	DATE

MEMORANDUM

TO: Project File **DATE:** November 12, 2018

FROM: Jessie Compeau

SUBJECT: Laboratory Data Validation Review

PROJECT: American Linen Data Validation

PROJECT #: 1413.001.05.304

TASK: October 2018 - Groundwater Samples

LAB: Pace Analytical Sample Delivery Groups L1038864, L1038867, and L1039305

Eighteen (18) groundwater samples (including one field duplicate), one rinsate, and one trip blank sample were collected as part of a sampling event at the Former American Linen Supply Site, in Seattle, Washington, between October 25 and October 29, 2018. The samples were shipped and delivered to Pace Analytical (formerly ESC Lab Sciences (ESC)) 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 8260C; and
- Total petroleum hydrocarbons as gasoline (TPH-Gx) by NWTPH-Gx per analytical methods stipulated by Washington State Department of Ecology.

Associated sample data are reported in three Pace Analytical (Pace) SDGs (L1038864, L1038867, and L1039305). The quality assurance review of the sample data are summarized below.

DATA QUALIFICATIONS

Guidelines established by USEPA for a limited data validation review of analytical data along with 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 delivered by courier to the analytical laboratory. The laboratory reported that the coolers were received at cooler temperatures less than the recommended temperature preservation less than 6°C. Samples were received in good condition with the following discussion:

- SDG L1038864. Sample W-MW-02-102618 is incorrectly listed on the lab report as IW-MW-02-102618. No action is taken other than to note this as a minor discrepancy.

No data were qualified based upon the sample collection and preservation information.

Holding Times

USEPA Method 8260C:
All samples were analyzed for VOCs within the EPA recommended holding time of fourteen days for preserved waters from the date of collection. All holding time criteria were met.

NWTPH-Gx Method:
All samples were analyzed within the WA State recommended holding time of fourteen days for preserved waters from the date of sample collection. All holding time criteria were met.

Initial and Continuing Calibration

Calibration data for this project are not required for this deliverable however PACE's notes indicate the following:

- SDG L1038864 - *USEPA Method 8260C:* A continuing calibration verification (CCV) issue was noted by Pace for vinyl acetate associated with analytical batch WG1188129 (analyzed on November 6, 2018). The vinyl acetate result is qualified by the laboratory "J0" to indicate that percent difference CCV is outside of laboratory acceptance criteria. **Associated vinyl acetate result (sample MW-300-102618) with a laboratory qualified (J0) result is estimated and qualified (J/UJ).**

- SDGs L1038864 and L1038867 - *USEPA Method 8260C:* Continuing calibration verification (CCV) issues were noted by Pace for multiple compounds associated with analytical batch WG1188131 (analyzed on October 29, 2018). These results are qualified by the laboratory "J0" to indicate that percent difference CCVs are outside of laboratory acceptance criteria. **All associated results with laboratory qualified (J0) results are estimated and qualified (J/UJ).**

Method Blank Results

USEPA Method 8260C:

Laboratory method blanks were included with the analytical batches per method requirement. The target analytes were not detected in the method blanks at or above the reporting detection limits (RDLs) with the following exceptions:

- SDG L1038864 - Analytical batch WG1188129: Low levels of carbon disulfide, cis-1,2-dichloroethene, hexachloro-1,3-butadiene and 1,2,3-trichlorobenzene are detected in the method blank. **Both hexachloro-1,3-butadiene and 1,2,3-trichlorobenzene are detected below the RDL in sample MW-300-102618 and these results are qualified as not detected (U) due to method blank contamination. Sample MW-300-102618 result for cis-1,2-dichloroethene is detected above the RDL and qualified (J+) to indicate potential high bias due to method blank contamination.** Carbon disulfide is not detected in the associated sample and no action is required.

- SDG L1038864 - Analytical batch WG1191566: A low level of cis-1,2-dichloroethene is detected in the method blank below the RDL and in sample MW-139-102518. **The cis-1,2-dichloroethene sample MW-139-102518 result is qualified as not detected (U) due to method blank contamination. Sample MW-131-102518 result for cis-1,2-dichloroethene is detected above the RDL and qualified (J+) to indicate potential high bias due to method blank contamination.** Remaining results are significantly greater than the blank detection and no further action is taken with the following discussion:

    - Sample IW-MW-02-102618 (or W-MW-02-102618), was analyzed twice for cis-1,2-dichloroethene. Pace opted to report cis-1,2-dichloroethene result from October 29, 2018 (analytical batch WG1188131) therefore the sample result is not impacted by the contaminated blank associated with analytical batch WG1191566.

- SDG L1039305 - Analytical batch WG1188785: Low levels of hexachloro-1,3-butadiene, iodomethane, and 1,2,3-trichlorobenzene are detected in the method blank. **Idomethane (also referred to as methyl iodide) is detected at low levels (below the RDL) in samples MW-136-102918, MW-138-102918, and W-MW-01-102918 and these results are qualified as not detected (U) due to method blank contamination.** Hexachloro-1,3-butadiene and 1,2,3-trichlorobenzene are not detected in the associated samples and no action is required.

NWTPH-Gx Method:
Laboratory method blanks were included with the analytical batches per method requirement. The target analyte (gasoline) was not detected in the method blanks at or above the RDLs with the following exceptions:

- SDG L1038864 - Analytical batch WG1189237: Gasoline was detected at a low level in the method blank. Gasoline was also detected at low levels in associated samples IW-MW-02-102618 (or W-MW-02-102618), MW-151-102518, MW-131-102518, MW-139-102518, and MW-132-102518. **Sample MW-151-102518, MW-131-102518, MW-139-102518, and MW-132-102518 gasoline results were reported below the RDL and are qualified as not detected (U) due to method blank contamination. Sample MW-**

300-102618 gasoline result is slightly above the RDL and qualified (J+) to indicate potential high bias. For field duplicate samples IW-MW-02-102618 (or W-MW-02-102618) and MW-300-102618 please refer to the Field Duplicate Analyses for additional discussion on qualifiers. Remaining results are significantly greater than the blank detection and no further action is taken.

- SDG L1038867 - Analytical batch WG1189621: Gasoline was detected at a low level in the method blank. Gasoline was detected at low levels in associated samples MW-134-102518, MW-137-102618, and in the rinsate sample (Rinsate). **Sample MW-134-102518, MW-137-102618, and Rinsate gasoline results were reported below the RDL and are qualified as not detected (U) due to method blank contamination.** Remaining results are significantly greater than the blank detection and no further action is taken.

- SDG L1039305 - Analytical batch WG1190352: Gasoline was detected at a low level in the method blank. Gasoline was detected at low levels in associated samples MW-136-102918, MW-138-102918, and in the trip blank. **Sample MW-136-102918, MW-138-102918, and trip blank gasoline results were reported below the RDL and are qualified as not detected (U) due to method blank contamination.** Remaining results are significantly greater than the blank detection and no further action is taken.

Trip Blank Results

USEPA Method 8260Cand NWTPH-Gx Method:
Two trip blanks were collected and analyzed. The target analytes were not detected in the trip blanks at or above the RDLs with the following exceptions:

- SDG L1039305 - Analytical batch WG1188785: Low levels of acetone and iodomethane are detected in the trip blank. Low levels of acetone are detected in samples MW-136-102918, MW-138-102918, and W-MW-01-102918**. Sample MW-136-102918, MW-138-102918, and W-MW-01-102918 results for acetone are qualified as not detected (U) due to trip blank contamination.** No action is required for iodomethane as this compound is also detected in the associated method blank. Refer to the discussion under Method Blank for further details.

Field, Rinsate, or Equipment Blank Results

A rinsate was collected and analyzed. The target analytes were not detected in the rinsate at or above the RDLs with the following exceptions:

- SDG L1038867: Low levels of gasoline, acetone, cis-1,2-dichloroethene, tetrachloroethene, toluene, and trichloroethene were detected in the rinsate sample (Rinsate) at levels above and below the RDL. Actions are as follows:

    - **Gasoline is detected in the associated method blank therefore the gasoline result in the Rinsate is qualified as not detected (U) due to method blank contamination.**

- Acetone is detected below the RDL in the rinsate and below the RDL in samples MW-104-102618 and MW-133-102618. **The low level acetone results in sample MW-104-102618 and MW-133-102618 are qualified as not detected (U) due to possible rinsate blank contamination.**

- cis-1,2-Dichloroethene is detected below the RDL in the rinsate and slightly above the RDL in sample MW-137-102618. **Sample MW-137-102618 cis-1,2-dichloroethene result is qualified (J+) to indicate potential high bias due to possible equipment blank contamination.**

- Tetrachloroethene is detected above the RDL in the Rinsate and above the RDL in samples MW-104-102618, MW-133-102618, and MW-137-102618. Tetrachloroethene detections are less than five times (5X) the blank contamination. **Sample MW-104-102618, MW-133-102618, and MW-137-102618 results for tetrachloroethene are estimated and qualified (J+) due to rinsate blank contamination.**

- Toluene is detected above the RDL in the Rinsate and above the RDL in sample MW-104-102618. **Sample MW-104-102618 result for toluene is estimated and qualified (J+) due to rinsate blank contamination.**

- Trichloroethene is detected below the RDL in the Rinsate. **Samples MW-104-102618 and MW-133-102618 are detected above the RDL and are estimated with high bias (J+) due to blank contamination. Sample MW-137-102618 is detected below the RDL and qualified as not detected (U) due to rinsate blank contamination.**

Field Duplicate Analyses

Field duplicate pairs were submitted and analyzed. Field duplicate sample pair is as follows:

- SDG L1038864: Sample IW-MW-02-102618 and MW-300-102618

VOC target analyte results are comparable and within a relative percent difference (RPD) of 30% (for results >5X the RDL or absolute difference <1X the RL) for the field duplicate with the following exception:

- Gasoline results are not comparable due, in part, to method blank contamination. Sample MW-300-102618 is qualified (J+) due to method blank contamination. Sample IW-MW-02-102618 was initially qualified (U) due to method blank contamination and superseded with an estimated (UJ) qualifier due to precision data. **Field duplicate sample results for gasoline are estimated and qualified (J+/UJ) due to poor precision.**

Laboratory Duplicate Analyses

USEPA Method 8260C:

A laboratory duplicate sample was not analyzed. Refer to the section on Laboratory Control Samples for additional details.

NWTPH-Gx Method:
A laboratory duplicate sample was not analyzed. Refer to laboratory control sample/sample duplicate (LCS/LCSD) or matrix spike/matrix spike duplicates (MS/MSDs) results for precision data.

Surrogate Recoveries

USEPA Method 8260C:
The surrogate recovery results for the samples, laboratory control samples, and blanks are within the laboratory surrogate control limits for all of the analyses.

NWTPH-Gx Method:
The surrogate recovery results for the samples, laboratory control samples, matrix spike samples, and blanks are within the laboratory surrogate control limits for all of the analyses.

Laboratory Control Samples

USEPA Method 8260C:

Laboratory control sample and laboratory control sample duplicate (LCS/LCSD) were analyzed by USEPA Method 8260C method. The LCS/LCSD %Rs and RPDs for the all target compounds are within the laboratory control criteria for waters.

NWTPH-Gx Method:
The LCS/LCSD %Rs and RPDs for the target compound (gasoline) are within the laboratory control criteria for waters.

Matrix Spike/Matrix Spike Duplicates

USEPA Method 8260C:
Matrix spike/matrix spike duplicate (MS/MSD) analyses were not performed. Refer to LCS/LCSD and field duplicate data for accuracy and precision data.

NWTPH-Gx Method:
Matrix spike/matrix spike duplicate (MS/MSD) analyses were not performed. Refer to LCS/LCSD and field duplicate data for accuracy and precision data.

Other Quality Control Issues

No laboratory quality control issues were identified in the laboratory report.

Quantitation Limits

Results of the analyses were reported based on laboratory RDLs for all compounds. RDLs for selected compounds are elevated due to method-required dilutions. The RDLs used for this sample group are acceptable for the project. Several samples were diluted due to elevated concentrations of various target analytes. Pace sample narrative notes indicate that for water samples MW-152-102618, MW-135-102518, MW-150-102518, and MW-149-102518 (SDG L1038864) the target compounds were too high to run the sample at a lower dilution. No action is taken other than to note that these results should be reviewed for unusual trends against the existing data set.

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.

Pace Analytical®
National Center for Testing & Innovation

ANALYTICAL REPORT

November 06, 2018

PES Environmental, Inc.- WA

Sample Delivery Group:	L1038864
Samples Received:	10/27/2018
Project Number:	1413.001.05.601
Description:	American Linen
Report To:	Brian O'Neal/Bill Haldeman
	1215 Fourth Ave., Suite 1350
	Seattle, WA 98161

Entire Report Reviewed By:

Brian Ford

Project Manager

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

TABLE OF CONTENTS

MW-300-102618 L1038864-01 GW

Collected by: R. McLaughlin | Collected date/time: 10/26/18 13:00 | Received date/time: 10/27/18 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1189237	1	10/31/18 19:40	10/31/18 19:40	ACE
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1188129	1	11/06/18 13:41	11/06/18 13:41	JAH
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1192268	1	11/06/18 16:15	11/06/18 16:15	BMB

IW-MW-02-102618 L1038864-02 GW

Collected by: R. McLaughlin | Collected date/time: 10/26/18 12:00 | Received date/time: 10/27/18 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1189237	1	10/31/18 20:02	10/31/18 20:02	ACE
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1188131	1	10/29/18 18:01	10/29/18 18:01	JHH
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1191566	1	11/05/18 14:11	11/05/18 14:11	BMB

MW-152-102618 L1038864-03 GW

Collected by: R. McLaughlin | Collected date/time: 10/26/18 08:07 | Received date/time: 10/27/18 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1189237	20	10/31/18 20:25	10/31/18 20:25	ACE
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1188131	50	10/29/18 18:21	10/29/18 18:21	JHH
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1191566	2000	11/05/18 15:50	11/05/18 15:50	BMB

MW-151-102518 L1038864-04 GW

Collected by: R. McLaughlin | Collected date/time: 10/25/18 16:17 | Received date/time: 10/27/18 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1189237	1	10/31/18 20:48	10/31/18 20:48	ACE
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1188131	1	10/29/18 18:40	10/29/18 18:40	JHH
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1191566	1	11/05/18 14:31	11/05/18 14:31	BMB

MW-131-102518 L1038864-05 GW

Collected by: R. McLaughlin | Collected date/time: 10/25/18 14:47 | Received date/time: 10/27/18 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1189237	1	10/31/18 21:11	10/31/18 21:11	ACE
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1188131	1	10/29/18 19:00	10/29/18 19:00	JHH
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1191566	1	11/05/18 14:51	11/05/18 14:51	BMB

MW-139-102518 L1038864-06 GW

Collected by: R. McLaughlin | Collected date/time: 10/25/18 13:57 | Received date/time: 10/27/18 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1189237	1	10/31/18 21:33	10/31/18 21:33	ACE
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1188131	1	10/29/18 19:19	10/29/18 19:19	JHH
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1191566	1	11/05/18 15:10	11/05/18 15:10	BMB

MW-132-102518 L1038864-07 GW

Collected by: R. McLaughlin
Collected date/time: 10/25/18 13:07
Received date/time: 10/27/18 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1189237	1	10/31/18 21:56	10/31/18 21:56	ACE
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1188131	1	10/29/18 19:38	10/29/18 19:38	JHH
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1191566	1	11/05/18 15:30	11/05/18 15:30	BMB

MW-135-102518 L1038864-08 GW

Collected by: R. McLaughlin
Collected date/time: 10/25/18 12:12
Received date/time: 10/27/18 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1189237	20	10/31/18 22:19	10/31/18 22:19	ACE
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1188131	25	10/29/18 19:57	10/29/18 19:57	JHH
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1191566	1000	11/05/18 16:10	11/05/18 16:10	BMB
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1191566	200	11/05/18 18:09	11/05/18 18:09	BMB

MW-150-102518 L1038864-09 GW

Collected by: R. McLaughlin
Collected date/time: 10/25/18 11:12
Received date/time: 10/27/18 08:45

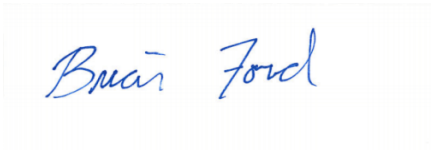
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1189237	5	10/31/18 22:42	10/31/18 22:42	ACE
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1188131	1	10/29/18 20:17	10/29/18 20:17	JHH
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1191566	500	11/05/18 16:30	11/05/18 16:30	BMB

MW-149-102518 L1038864-10 GW

Collected by: R. McLaughlin
Collected date/time: 10/25/18 10:28
Received date/time: 10/27/18 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1189237	1	10/31/18 23:04	10/31/18 23:04	ACE
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1188131	1	10/29/18 20:36	10/29/18 20:36	JHH
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1191566	200	11/05/18 16:50	11/05/18 16:50	BMB

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



Brian Ford
Project Manager

Sample Handling and Receiving

VOC pH outside of method requirement.

Lab Sample ID	Project Sample ID	Method
L1038864-01	MW-300-102618	8260C

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	246	B	31.6	100	1	10/31/2018 19:40	WG1189237
(S) a,a,a-Trifluorotoluene(FID)	*91.7*			*78.0-120*		*10/31/2018 19:40*	WG1189237

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	3.87	J	1.05	25.0	1	11/06/2018 13:41	WG1188129
Acrylonitrile	U		0.873	5.00	1	11/06/2018 13:41	WG1188129
Benzene	U		0.0896	0.500	1	11/06/2018 13:41	WG1188129
Bromobenzene	U		0.133	0.500	1	11/06/2018 13:41	WG1188129
Bromodichloromethane	U		0.0800	0.500	1	11/06/2018 13:41	WG1188129
Bromochloromethane	U		0.145	0.500	1	11/06/2018 13:41	WG1188129
Bromoform	U		0.186	0.500	1	11/06/2018 13:41	WG1188129
Bromomethane	U		0.157	2.50	1	11/06/2018 13:41	WG1188129
n-Butylbenzene	U		0.143	0.500	1	11/06/2018 13:41	WG1188129
sec-Butylbenzene	U		0.134	0.500	1	11/06/2018 13:41	WG1188129
tert-Butylbenzene	U		0.183	0.500	1	11/06/2018 13:41	WG1188129
Carbon disulfide	U		0.101	0.500	1	11/06/2018 13:41	WG1188129
Carbon tetrachloride	U		0.159	0.500	1	11/06/2018 13:41	WG1188129
Chlorobenzene	U		0.140	0.500	1	11/06/2018 13:41	WG1188129
Chlorodibromomethane	U		0.128	0.500	1	11/06/2018 13:41	WG1188129
Chloroethane	U		0.141	2.50	1	11/06/2018 13:41	WG1188129
Chloroform	U		0.0860	0.500	1	11/06/2018 13:41	WG1188129
Chloromethane	U		0.153	1.25	1	11/06/2018 13:41	WG1188129
2-Chlorotoluene	U		0.111	0.500	1	11/06/2018 13:41	WG1188129
4-Chlorotoluene	U		0.0972	0.500	1	11/06/2018 13:41	WG1188129
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	11/06/2018 13:41	WG1188129
1,2-Dibromoethane	U		0.193	0.500	1	11/06/2018 13:41	WG1188129
Dibromomethane	U		0.117	0.500	1	11/06/2018 13:41	WG1188129
1,2-Dichlorobenzene	U		0.101	0.500	1	11/06/2018 13:41	WG1188129
1,3-Dichlorobenzene	U		0.130	0.500	1	11/06/2018 13:41	WG1188129
1,4-Dichlorobenzene	U		0.121	0.500	1	11/06/2018 13:41	WG1188129
Dichlorodifluoromethane	U		0.127	2.50	1	11/06/2018 13:41	WG1188129
1,1-Dichloroethane	U		0.114	0.500	1	11/06/2018 13:41	WG1188129
1,2-Dichloroethane	U		0.108	0.500	1	11/06/2018 13:41	WG1188129
1,1-Dichloroethene	U		0.188	0.500	1	11/06/2018 13:41	WG1188129
cis-1,2-Dichloroethene	2.11	B	0.0933	0.500	1	11/06/2018 13:41	WG1188129
trans-1,2-Dichloroethene	0.435	J	0.152	0.500	1	11/06/2018 13:41	WG1188129
1,2-Dichloropropane	U		0.190	0.500	1	11/06/2018 13:41	WG1188129
1,1-Dichloropropene	U		0.128	0.500	1	11/06/2018 13:41	WG1188129
1,3-Dichloropropane	U		0.147	1.00	1	11/06/2018 13:41	WG1188129
cis-1,3-Dichloropropene	U		0.0976	0.500	1	11/06/2018 13:41	WG1188129
trans-1,3-Dichloropropene	U		0.222	0.500	1	11/06/2018 13:41	WG1188129
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	11/06/2018 13:41	WG1188129
2,2-Dichloropropane	U		0.0929	0.500	1	11/06/2018 13:41	WG1188129
Di-isopropyl ether	U		0.0924	0.500	1	11/06/2018 13:41	WG1188129
Ethylbenzene	U		0.158	0.500	1	11/06/2018 13:41	WG1188129
Hexachloro-1,3-butadiene	0.202	B J	0.157	1.00	1	11/06/2018 13:41	WG1188129
2-Hexanone	U		0.757	5.00	1	11/06/2018 13:41	WG1188129
n-Hexane	U		0.305	5.00	1	11/06/2018 13:41	WG1188129
Iodomethane	U		0.377	10.0	1	11/06/2018 13:41	WG1188129
Isopropylbenzene	U		0.126	0.500	1	11/06/2018 13:41	WG1188129
p-Isopropyltoluene	U		0.138	0.500	1	11/06/2018 13:41	WG1188129
2-Butanone (MEK)	U		1.28	5.00	1	11/06/2018 13:41	WG1188129

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Methylene Chloride	U		1.07	2.50	1	11/06/2018 13:41	WG1188129
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	11/06/2018 13:41	WG1188129
Methyl tert-butyl ether	U		0.102	0.500	1	11/06/2018 13:41	WG1188129
Naphthalene	0.191	J	0.174	2.50	1	11/06/2018 13:41	WG1188129
n-Propylbenzene	U		0.162	0.500	1	11/06/2018 13:41	WG1188129
Styrene	U		0.117	0.500	1	11/06/2018 13:41	WG1188129
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	11/06/2018 13:41	WG1188129
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	11/06/2018 13:41	WG1188129
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	11/06/2018 13:41	WG1188129
Tetrachloroethene	U		0.199	0.500	1	11/06/2018 13:41	WG1188129
Toluene	0.587		0.412	0.500	1	11/06/2018 13:41	WG1188129
1,2,3-Trichlorobenzene	0.181	B J	0.164	0.500	1	11/06/2018 13:41	WG1188129
1,2,4-Trichlorobenzene	U		0.355	0.500	1	11/06/2018 13:41	WG1188129
1,1,1-Trichloroethane	U		0.0940	0.500	1	11/06/2018 13:41	WG1188129
1,1,2-Trichloroethane	U		0.186	0.500	1	11/06/2018 13:41	WG1188129
Trichloroethene	U		0.153	0.500	1	11/06/2018 16:15	WG1192268
Trichlorofluoromethane	U		0.130	2.50	1	11/06/2018 13:41	WG1188129
1,2,3-Trichloropropane	U		0.247	2.50	1	11/06/2018 13:41	WG1188129
1,2,4-Trimethylbenzene	U		0.123	0.500	1	11/06/2018 13:41	WG1188129
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	11/06/2018 13:41	WG1188129
1,3,5-Trimethylbenzene	U		0.124	0.500	1	11/06/2018 13:41	WG1188129
Vinyl acetate	U	J0	0.645	5.00	1	11/06/2018 13:41	WG1188129
Vinyl chloride	1.80		0.118	0.500	1	11/06/2018 13:41	WG1188129
Xylenes, Total	U		0.316	1.50	1	11/06/2018 13:41	WG1188129
(S) Toluene-d8	*99.4*			*80.0-120*		*11/06/2018 13:41*	WG1188129
(S) Toluene-d8	*103*			*80.0-120*		*11/06/2018 16:15*	WG1192268
(S) Dibromofluoromethane	*108*			*75.0-120*		*11/06/2018 13:41*	WG1188129
(S) Dibromofluoromethane	*97.8*			*75.0-120*		*11/06/2018 16:15*	WG1192268
(S) 4-Bromofluorobenzene	*106*			*77.0-126*		*11/06/2018 13:41*	WG1188129
(S) 4-Bromofluorobenzene	*99.4*			*77.0-126*		*11/06/2018 16:15*	WG1192268

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	90.2	B J	31.6	100	1	10/31/2018 20:02	WG1189237
(S) a,a,a-Trifluorotoluene(FID)	*92.4*			*78.0-120*		*10/31/2018 20:02*	WG1189237

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	1.42	J J0	1.05	25.0	1	10/29/2018 18:01	WG1188131
Acrylonitrile	U	J0	0.873	5.00	1	10/29/2018 18:01	WG1188131
Benzene	U		0.0896	0.500	1	10/29/2018 18:01	WG1188131
Bromobenzene	U		0.133	0.500	1	10/29/2018 18:01	WG1188131
Bromodichloromethane	U		0.0800	0.500	1	10/29/2018 18:01	WG1188131
Bromochloromethane	U		0.145	0.500	1	10/29/2018 18:01	WG1188131
Bromoform	U		0.186	0.500	1	10/29/2018 18:01	WG1188131
Bromomethane	U	J0	0.157	2.50	1	10/29/2018 18:01	WG1188131
n-Butylbenzene	U	J0	0.143	0.500	1	10/29/2018 18:01	WG1188131
sec-Butylbenzene	U		0.134	0.500	1	10/29/2018 18:01	WG1188131
tert-Butylbenzene	U		0.183	0.500	1	10/29/2018 18:01	WG1188131
Carbon disulfide	0.214	J	0.101	0.500	1	10/29/2018 18:01	WG1188131
Carbon tetrachloride	U		0.159	0.500	1	10/29/2018 18:01	WG1188131
Chlorobenzene	U		0.140	0.500	1	10/29/2018 18:01	WG1188131
Chlorodibromomethane	U		0.128	0.500	1	10/29/2018 18:01	WG1188131
Chloroethane	U	J0	0.141	2.50	1	10/29/2018 18:01	WG1188131
Chloroform	U		0.0860	0.500	1	10/29/2018 18:01	WG1188131
Chloromethane	U		0.153	1.25	1	11/05/2018 14:11	WG1191566
2-Chlorotoluene	U		0.111	0.500	1	10/29/2018 18:01	WG1188131
4-Chlorotoluene	U		0.0972	0.500	1	10/29/2018 18:01	WG1188131
1,2-Dibromo-3-Chloropropane	U	J0	0.325	2.50	1	10/29/2018 18:01	WG1188131
1,2-Dibromoethane	U		0.193	0.500	1	10/29/2018 18:01	WG1188131
Dibromomethane	U		0.117	0.500	1	10/29/2018 18:01	WG1188131
1,2-Dichlorobenzene	U		0.101	0.500	1	10/29/2018 18:01	WG1188131
1,3-Dichlorobenzene	U		0.130	0.500	1	10/29/2018 18:01	WG1188131
1,4-Dichlorobenzene	U		0.121	0.500	1	10/29/2018 18:01	WG1188131
Dichlorodifluoromethane	U		0.127	2.50	1	11/05/2018 14:11	WG1191566
1,1-Dichloroethane	U		0.114	0.500	1	10/29/2018 18:01	WG1188131
1,2-Dichloroethane	U	J0	0.108	0.500	1	10/29/2018 18:01	WG1188131
1,1-Dichloroethene	U		0.188	0.500	1	10/29/2018 18:01	WG1188131
cis-1,2-Dichloroethene	2.01		0.0933	0.500	1	10/29/2018 18:01	WG1188131
trans-1,2-Dichloroethene	0.410	J	0.152	0.500	1	10/29/2018 18:01	WG1188131
1,2-Dichloropropane	U		0.190	0.500	1	10/29/2018 18:01	WG1188131
1,1-Dichloropropene	U		0.128	0.500	1	10/29/2018 18:01	WG1188131
1,3-Dichloropropane	U		0.147	1.00	1	10/29/2018 18:01	WG1188131
cis-1,3-Dichloropropene	U		0.0976	0.500	1	10/29/2018 18:01	WG1188131
trans-1,3-Dichloropropene	U		0.222	0.500	1	10/29/2018 18:01	WG1188131
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	11/05/2018 14:11	WG1191566
2,2-Dichloropropane	U		0.0929	0.500	1	10/29/2018 18:01	WG1188131
Di-isopropyl ether	U		0.0924	0.500	1	10/29/2018 18:01	WG1188131
Ethylbenzene	U		0.158	0.500	1	10/29/2018 18:01	WG1188131
Hexachloro-1,3-butadiene	U		0.157	1.00	1	10/29/2018 18:01	WG1188131
2-Hexanone	U		0.757	5.00	1	10/29/2018 18:01	WG1188131
n-Hexane	U		0.305	5.00	1	10/29/2018 18:01	WG1188131
Iodomethane	U		0.377	10.0	1	10/29/2018 18:01	WG1188131
Isopropylbenzene	U		0.126	0.500	1	10/29/2018 18:01	WG1188131
p-Isopropyltoluene	U		0.138	0.500	1	10/29/2018 18:01	WG1188131
2-Butanone (MEK)	U	J0	1.28	5.00	1	10/29/2018 18:01	WG1188131

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Methylene Chloride	U		1.07	2.50	1	10/29/2018 18:01	WG1188131
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	10/29/2018 18:01	WG1188131
Methyl tert-butyl ether	U		0.102	0.500	1	10/29/2018 18:01	WG1188131
Naphthalene	U	J0	0.174	2.50	1	10/29/2018 18:01	WG1188131
n-Propylbenzene	U		0.162	0.500	1	10/29/2018 18:01	WG1188131
Styrene	U		0.117	0.500	1	10/29/2018 18:01	WG1188131
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	10/29/2018 18:01	WG1188131
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	10/29/2018 18:01	WG1188131
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	10/29/2018 18:01	WG1188131
Tetrachloroethene	U		0.199	0.500	1	10/29/2018 18:01	WG1188131
Toluene	0.641		0.412	0.500	1	10/29/2018 18:01	WG1188131
1,2,3-Trichlorobenzene	U	J0	0.164	0.500	1	10/29/2018 18:01	WG1188131
1,2,4-Trichlorobenzene	U		0.355	0.500	1	10/29/2018 18:01	WG1188131
1,1,1-Trichloroethane	U		0.0940	0.500	1	10/29/2018 18:01	WG1188131
1,1,2-Trichloroethane	U		0.186	0.500	1	10/29/2018 18:01	WG1188131
Trichloroethene	U		0.153	0.500	1	10/29/2018 18:01	WG1188131
Trichlorofluoromethane	U		0.130	2.50	1	10/29/2018 18:01	WG1188131
1,2,3-Trichloropropane	U		0.247	2.50	1	10/29/2018 18:01	WG1188131
1,2,4-Trimethylbenzene	U		0.123	0.500	1	10/29/2018 18:01	WG1188131
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	10/29/2018 18:01	WG1188131
1,3,5-Trimethylbenzene	U		0.124	0.500	1	10/29/2018 18:01	WG1188131
Vinyl acetate	U		0.645	5.00	1	10/29/2018 18:01	WG1188131
Vinyl chloride	1.41		0.118	0.500	1	10/29/2018 18:01	WG1188131
Xylenes, Total	U		0.316	1.50	1	10/29/2018 18:01	WG1188131
(S) Toluene-d8	*102*			*80.0-120*		*10/29/2018 18:01*	WG1188131
(S) Toluene-d8	*104*			*80.0-120*		*11/05/2018 14:11*	WG1191566
(S) Dibromofluoromethane	*93.0*			*75.0-120*		*10/29/2018 18:01*	WG1188131
(S) Dibromofluoromethane	*89.6*			*75.0-120*		*11/05/2018 14:11*	WG1191566
(S) 4-Bromofluorobenzene	*103*			*77.0-126*		*10/29/2018 18:01*	WG1188131
(S) 4-Bromofluorobenzene	*84.1*			*77.0-126*		*11/05/2018 14:11*	WG1191566

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	36700		632	2000	20	10/31/2018 20:25	WG1189237
(S) a,a,a-Trifluorotoluene(FID)	*92.6*			*78.0-120*		*10/31/2018 20:25*	WG1189237

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	65.4	J J0	52.5	1250	50	10/29/2018 18:21	WG1188131
Acrylonitrile	U	J0	43.6	250	50	10/29/2018 18:21	WG1188131
Benzene	U		4.48	25.0	50	10/29/2018 18:21	WG1188131
Bromobenzene	U		6.65	25.0	50	10/29/2018 18:21	WG1188131
Bromodichloromethane	U		4.00	25.0	50	10/29/2018 18:21	WG1188131
Bromochloromethane	U		7.25	25.0	50	10/29/2018 18:21	WG1188131
Bromoform	U		9.30	25.0	50	10/29/2018 18:21	WG1188131
Bromomethane	U	J0	7.85	125	50	10/29/2018 18:21	WG1188131
n-Butylbenzene	U	J0	7.15	25.0	50	10/29/2018 18:21	WG1188131
sec-Butylbenzene	U		6.70	25.0	50	10/29/2018 18:21	WG1188131
tert-Butylbenzene	U		9.15	25.0	50	10/29/2018 18:21	WG1188131
Carbon disulfide	U		5.05	25.0	50	10/29/2018 18:21	WG1188131
Carbon tetrachloride	U		7.95	25.0	50	10/29/2018 18:21	WG1188131
Chlorobenzene	U		7.00	25.0	50	10/29/2018 18:21	WG1188131
Chlorodibromomethane	U		6.40	25.0	50	10/29/2018 18:21	WG1188131
Chloroethane	U	J0	7.05	125	50	10/29/2018 18:21	WG1188131
Chloroform	4.46	J	4.30	25.0	50	10/29/2018 18:21	WG1188131
Chloromethane	U		306	2500	2000	11/05/2018 15:50	WG1191566
2-Chlorotoluene	U		5.55	25.0	50	10/29/2018 18:21	WG1188131
4-Chlorotoluene	U		4.86	25.0	50	10/29/2018 18:21	WG1188131
1,2-Dibromo-3-Chloropropane	U	J0	16.2	125	50	10/29/2018 18:21	WG1188131
1,2-Dibromoethane	U		9.65	25.0	50	10/29/2018 18:21	WG1188131
Dibromomethane	U		5.85	25.0	50	10/29/2018 18:21	WG1188131
1,2-Dichlorobenzene	U		5.05	25.0	50	10/29/2018 18:21	WG1188131
1,3-Dichlorobenzene	U		6.50	25.0	50	10/29/2018 18:21	WG1188131
1,4-Dichlorobenzene	U		6.05	25.0	50	10/29/2018 18:21	WG1188131
Dichlorodifluoromethane	U		254	5000	2000	11/05/2018 15:50	WG1191566
1,1-Dichloroethane	U		5.70	25.0	50	10/29/2018 18:21	WG1188131
1,2-Dichloroethane	U	J0	5.40	25.0	50	10/29/2018 18:21	WG1188131
1,1-Dichloroethene	86.9		9.40	25.0	50	10/29/2018 18:21	WG1188131
cis-1,2-Dichloroethene	73000		187	1000	2000	11/05/2018 15:50	WG1191566
trans-1,2-Dichloroethene	109		7.60	25.0	50	10/29/2018 18:21	WG1188131
1,2-Dichloropropane	U		9.50	25.0	50	10/29/2018 18:21	WG1188131
1,1-Dichloropropene	U		6.40	25.0	50	10/29/2018 18:21	WG1188131
1,3-Dichloropropane	U		7.35	50.0	50	10/29/2018 18:21	WG1188131
cis-1,3-Dichloropropene	U		4.88	25.0	50	10/29/2018 18:21	WG1188131
trans-1,3-Dichloropropene	U		11.1	25.0	50	10/29/2018 18:21	WG1188131
trans-1,4-Dichloro-2-butene	U		514	10000	2000	11/05/2018 15:50	WG1191566
2,2-Dichloropropane	U		4.64	25.0	50	10/29/2018 18:21	WG1188131
Di-isopropyl ether	U		4.62	25.0	50	10/29/2018 18:21	WG1188131
Ethylbenzene	U		7.90	25.0	50	10/29/2018 18:21	WG1188131
Hexachloro-1,3-butadiene	U		7.85	50.0	50	10/29/2018 18:21	WG1188131
2-Hexanone	U		37.8	250	50	10/29/2018 18:21	WG1188131
n-Hexane	U		15.2	250	50	10/29/2018 18:21	WG1188131
Iodomethane	U		18.8	500	50	10/29/2018 18:21	WG1188131
Isopropylbenzene	U		6.30	25.0	50	10/29/2018 18:21	WG1188131
p-Isopropyltoluene	U		6.90	25.0	50	10/29/2018 18:21	WG1188131
2-Butanone (MEK)	213	J J0	64.0	250	50	10/29/2018 18:21	WG1188131

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Methylene Chloride	U		53.5	125	50	10/29/2018 18:21	WG1188131
4-Methyl-2-pentanone (MIBK)	U		41.2	250	50	10/29/2018 18:21	WG1188131
Methyl tert-butyl ether	U		5.10	25.0	50	10/29/2018 18:21	WG1188131
Naphthalene	U	J0	8.70	125	50	10/29/2018 18:21	WG1188131
n-Propylbenzene	U		8.10	25.0	50	10/29/2018 18:21	WG1188131
Styrene	U		5.85	25.0	50	10/29/2018 18:21	WG1188131
1,1,1,2-Tetrachloroethane	U		6.00	25.0	50	10/29/2018 18:21	WG1188131
1,1,2,2-Tetrachloroethane	U		6.50	25.0	50	10/29/2018 18:21	WG1188131
1,1,2-Trichlorotrifluoroethane	U		8.20	25.0	50	10/29/2018 18:21	WG1188131
Tetrachloroethene	1960		9.95	25.0	50	10/29/2018 18:21	WG1188131
Toluene	U		20.6	25.0	50	10/29/2018 18:21	WG1188131
1,2,3-Trichlorobenzene	U	J0	8.20	25.0	50	10/29/2018 18:21	WG1188131
1,2,4-Trichlorobenzene	U		17.8	25.0	50	10/29/2018 18:21	WG1188131
1,1,1-Trichloroethane	U		4.70	25.0	50	10/29/2018 18:21	WG1188131
1,1,2-Trichloroethane	U		9.30	25.0	50	10/29/2018 18:21	WG1188131
Trichloroethene	3150		7.65	25.0	50	10/29/2018 18:21	WG1188131
Trichlorofluoromethane	U		6.50	125	50	10/29/2018 18:21	WG1188131
1,2,3-Trichloropropane	U		12.4	125	50	10/29/2018 18:21	WG1188131
1,2,4-Trimethylbenzene	U		6.15	25.0	50	10/29/2018 18:21	WG1188131
1,2,3-Trimethylbenzene	U		3.70	25.0	50	10/29/2018 18:21	WG1188131
1,3,5-Trimethylbenzene	U		6.20	25.0	50	10/29/2018 18:21	WG1188131
Vinyl acetate	U		32.2	250	50	10/29/2018 18:21	WG1188131
Vinyl chloride	4510		5.90	25.0	50	10/29/2018 18:21	WG1188131
Xylenes, Total	U		15.8	75.0	50	10/29/2018 18:21	WG1188131
(S) Toluene-d8	*102*			*80.0-120*		*10/29/2018 18:21*	WG1188131
(S) Toluene-d8	*103*			*80.0-120*		*11/05/2018 15:50*	WG1191566
(S) Dibromofluoromethane	*91.7*			*75.0-120*		*10/29/2018 18:21*	WG1188131
(S) Dibromofluoromethane	*91.4*			*75.0-120*		*11/05/2018 15:50*	WG1191566
(S) 4-Bromofluorobenzene	*96.6*			*77.0-126*		*10/29/2018 18:21*	WG1188131
(S) 4-Bromofluorobenzene	*87.7*			*77.0-126*		*11/05/2018 15:50*	WG1191566

Sample Narrative:

L1038864-03 WG1188131, WG1191566: Not all compounds reportable at lower dilution.

L1038864-03 WG1188131, WG1191566: Cannot be reanalyzed at a lower dilution due to high levels of target analytes.

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	99.4	B J	31.6	100	1	10/31/2018 20:48	WG1189237
(S) a,a,a-Trifluorotoluene(FID)	*92.4*			*78.0-120*		*10/31/2018 20:48*	WG1189237

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	107	J0	1.05	25.0	1	10/29/2018 18:40	WG1188131
Acrylonitrile	U	J0	0.873	5.00	1	10/29/2018 18:40	WG1188131
Benzene	0.167	J	0.0896	0.500	1	10/29/2018 18:40	WG1188131
Bromobenzene	U		0.133	0.500	1	10/29/2018 18:40	WG1188131
Bromodichloromethane	U		0.0800	0.500	1	10/29/2018 18:40	WG1188131
Bromochloromethane	U		0.145	0.500	1	10/29/2018 18:40	WG1188131
Bromoform	U		0.186	0.500	1	10/29/2018 18:40	WG1188131
Bromomethane	U	J0	0.157	2.50	1	10/29/2018 18:40	WG1188131
n-Butylbenzene	U	J0	0.143	0.500	1	10/29/2018 18:40	WG1188131
sec-Butylbenzene	U		0.134	0.500	1	10/29/2018 18:40	WG1188131
tert-Butylbenzene	U		0.183	0.500	1	10/29/2018 18:40	WG1188131
Carbon disulfide	9.13		0.101	0.500	1	10/29/2018 18:40	WG1188131
Carbon tetrachloride	U		0.159	0.500	1	10/29/2018 18:40	WG1188131
Chlorobenzene	U		0.140	0.500	1	10/29/2018 18:40	WG1188131
Chlorodibromomethane	U		0.128	0.500	1	10/29/2018 18:40	WG1188131
Chloroethane	U	J0	0.141	2.50	1	10/29/2018 18:40	WG1188131
Chloroform	1.02		0.0860	0.500	1	10/29/2018 18:40	WG1188131
Chloromethane	U		0.153	1.25	1	11/05/2018 14:31	WG1191566
2-Chlorotoluene	U		0.111	0.500	1	10/29/2018 18:40	WG1188131
4-Chlorotoluene	U		0.0972	0.500	1	10/29/2018 18:40	WG1188131
1,2-Dibromo-3-Chloropropane	U	J0	0.325	2.50	1	10/29/2018 18:40	WG1188131
1,2-Dibromoethane	U		0.193	0.500	1	10/29/2018 18:40	WG1188131
Dibromomethane	U		0.117	0.500	1	10/29/2018 18:40	WG1188131
1,2-Dichlorobenzene	U		0.101	0.500	1	10/29/2018 18:40	WG1188131
1,3-Dichlorobenzene	U		0.130	0.500	1	10/29/2018 18:40	WG1188131
1,4-Dichlorobenzene	U		0.121	0.500	1	10/29/2018 18:40	WG1188131
Dichlorodifluoromethane	U		0.127	2.50	1	11/05/2018 14:31	WG1191566
1,1-Dichloroethane	U		0.114	0.500	1	10/29/2018 18:40	WG1188131
1,2-Dichloroethane	U	J0	0.108	0.500	1	10/29/2018 18:40	WG1188131
1,1-Dichloroethene	U		0.188	0.500	1	10/29/2018 18:40	WG1188131
cis-1,2-Dichloroethene	5.80		0.0933	0.500	1	11/05/2018 14:31	WG1191566
trans-1,2-Dichloroethene	0.346	J	0.152	0.500	1	10/29/2018 18:40	WG1188131
1,2-Dichloropropane	U		0.190	0.500	1	10/29/2018 18:40	WG1188131
1,1-Dichloropropene	U		0.128	0.500	1	10/29/2018 18:40	WG1188131
1,3-Dichloropropane	U		0.147	1.00	1	10/29/2018 18:40	WG1188131
cis-1,3-Dichloropropene	U		0.0976	0.500	1	10/29/2018 18:40	WG1188131
trans-1,3-Dichloropropene	U		0.222	0.500	1	10/29/2018 18:40	WG1188131
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	11/05/2018 14:31	WG1191566
2,2-Dichloropropane	U		0.0929	0.500	1	10/29/2018 18:40	WG1188131
Di-isopropyl ether	U		0.0924	0.500	1	10/29/2018 18:40	WG1188131
Ethylbenzene	U		0.158	0.500	1	10/29/2018 18:40	WG1188131
Hexachloro-1,3-butadiene	U		0.157	1.00	1	10/29/2018 18:40	WG1188131
2-Hexanone	U		0.757	5.00	1	10/29/2018 18:40	WG1188131
n-Hexane	U		0.305	5.00	1	10/29/2018 18:40	WG1188131
Iodomethane	U		0.377	10.0	1	10/29/2018 18:40	WG1188131
Isopropylbenzene	U		0.126	0.500	1	10/29/2018 18:40	WG1188131
p-Isopropyltoluene	U		0.138	0.500	1	10/29/2018 18:40	WG1188131
2-Butanone (MEK)	31.7	J0	1.28	5.00	1	10/29/2018 18:40	WG1188131

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Methylene Chloride	U		1.07	2.50	1	10/29/2018 18:40	WG1188131
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	10/29/2018 18:40	WG1188131
Methyl tert-butyl ether	U		0.102	0.500	1	10/29/2018 18:40	WG1188131
Naphthalene	U	J0	0.174	2.50	1	10/29/2018 18:40	WG1188131
n-Propylbenzene	U		0.162	0.500	1	10/29/2018 18:40	WG1188131
Styrene	U		0.117	0.500	1	10/29/2018 18:40	WG1188131
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	10/29/2018 18:40	WG1188131
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	10/29/2018 18:40	WG1188131
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	10/29/2018 18:40	WG1188131
Tetrachloroethene	2.28		0.199	0.500	1	10/29/2018 18:40	WG1188131
Toluene	U		0.412	0.500	1	10/29/2018 18:40	WG1188131
1,2,3-Trichlorobenzene	U	J0	0.164	0.500	1	10/29/2018 18:40	WG1188131
1,2,4-Trichlorobenzene	U		0.355	0.500	1	10/29/2018 18:40	WG1188131
1,1,1-Trichloroethane	U		0.0940	0.500	1	10/29/2018 18:40	WG1188131
1,1,2-Trichloroethane	U		0.186	0.500	1	10/29/2018 18:40	WG1188131
Trichloroethene	1.38		0.153	0.500	1	10/29/2018 18:40	WG1188131
Trichlorofluoromethane	U		0.130	2.50	1	10/29/2018 18:40	WG1188131
1,2,3-Trichloropropane	U		0.247	2.50	1	10/29/2018 18:40	WG1188131
1,2,4-Trimethylbenzene	U		0.123	0.500	1	10/29/2018 18:40	WG1188131
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	10/29/2018 18:40	WG1188131
1,3,5-Trimethylbenzene	U		0.124	0.500	1	10/29/2018 18:40	WG1188131
Vinyl acetate	U		0.645	5.00	1	10/29/2018 18:40	WG1188131
Vinyl chloride	7.70		0.118	0.500	1	10/29/2018 18:40	WG1188131
Xylenes, Total	U		0.316	1.50	1	10/29/2018 18:40	WG1188131
(S) Toluene-d8	*103*			*80.0-120*		*10/29/2018 18:40*	WG1188131
(S) Toluene-d8	*105*			*80.0-120*		*11/05/2018 14:31*	WG1191566
(S) Dibromofluoromethane	*92.1*			*75.0-120*		*10/29/2018 18:40*	WG1188131
(S) Dibromofluoromethane	*89.7*			*75.0-120*		*11/05/2018 14:31*	WG1191566
(S) 4-Bromofluorobenzene	*99.4*			*77.0-126*		*10/29/2018 18:40*	WG1188131
(S) 4-Bromofluorobenzene	*86.2*			*77.0-126*		*11/05/2018 14:31*	WG1191566

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

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	57.6	B J	31.6	100	1	10/31/2018 21:11	WG1189237
(S) a,a,a-Trifluorotoluene(FID)	*92.7*			*78.0-120*		*10/31/2018 21:11*	WG1189237

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	6.30	J J0	1.05	25.0	1	10/29/2018 19:00	WG1188131
Acrylonitrile	U	J0	0.873	5.00	1	10/29/2018 19:00	WG1188131
Benzene	U		0.0896	0.500	1	10/29/2018 19:00	WG1188131
Bromobenzene	U		0.133	0.500	1	10/29/2018 19:00	WG1188131
Bromodichloromethane	U		0.0800	0.500	1	10/29/2018 19:00	WG1188131
Bromochloromethane	U		0.145	0.500	1	10/29/2018 19:00	WG1188131
Bromoform	U		0.186	0.500	1	10/29/2018 19:00	WG1188131
Bromomethane	U	J0	0.157	2.50	1	10/29/2018 19:00	WG1188131
n-Butylbenzene	U	J0	0.143	0.500	1	10/29/2018 19:00	WG1188131
sec-Butylbenzene	U		0.134	0.500	1	10/29/2018 19:00	WG1188131
tert-Butylbenzene	U		0.183	0.500	1	10/29/2018 19:00	WG1188131
Carbon disulfide	0.152	J	0.101	0.500	1	10/29/2018 19:00	WG1188131
Carbon tetrachloride	U		0.159	0.500	1	10/29/2018 19:00	WG1188131
Chlorobenzene	U		0.140	0.500	1	10/29/2018 19:00	WG1188131
Chlorodibromomethane	U		0.128	0.500	1	10/29/2018 19:00	WG1188131
Chloroethane	U	J0	0.141	2.50	1	10/29/2018 19:00	WG1188131
Chloroform	U		0.0860	0.500	1	10/29/2018 19:00	WG1188131
Chloromethane	U		0.153	1.25	1	11/05/2018 14:51	WG1191566
2-Chlorotoluene	U		0.111	0.500	1	10/29/2018 19:00	WG1188131
4-Chlorotoluene	U		0.0972	0.500	1	10/29/2018 19:00	WG1188131
1,2-Dibromo-3-Chloropropane	U	J0	0.325	2.50	1	10/29/2018 19:00	WG1188131
1,2-Dibromoethane	U		0.193	0.500	1	10/29/2018 19:00	WG1188131
Dibromomethane	U		0.117	0.500	1	10/29/2018 19:00	WG1188131
1,2-Dichlorobenzene	U		0.101	0.500	1	10/29/2018 19:00	WG1188131
1,3-Dichlorobenzene	U		0.130	0.500	1	10/29/2018 19:00	WG1188131
1,4-Dichlorobenzene	U		0.121	0.500	1	10/29/2018 19:00	WG1188131
Dichlorodifluoromethane	U		0.127	2.50	1	11/05/2018 14:51	WG1191566
1,1-Dichloroethane	U		0.114	0.500	1	10/29/2018 19:00	WG1188131
1,2-Dichloroethane	U	J0	0.108	0.500	1	10/29/2018 19:00	WG1188131
1,1-Dichloroethene	U		0.188	0.500	1	10/29/2018 19:00	WG1188131
cis-1,2-Dichloroethene	1.65	B	0.0933	0.500	1	11/05/2018 14:51	WG1191566
trans-1,2-Dichloroethene	U		0.152	0.500	1	10/29/2018 19:00	WG1188131
1,2-Dichloropropane	U		0.190	0.500	1	10/29/2018 19:00	WG1188131
1,1-Dichloropropene	U		0.128	0.500	1	10/29/2018 19:00	WG1188131
1,3-Dichloropropane	U		0.147	1.00	1	10/29/2018 19:00	WG1188131
cis-1,3-Dichloropropene	U		0.0976	0.500	1	10/29/2018 19:00	WG1188131
trans-1,3-Dichloropropene	U		0.222	0.500	1	10/29/2018 19:00	WG1188131
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	11/05/2018 14:51	WG1191566
2,2-Dichloropropane	U		0.0929	0.500	1	10/29/2018 19:00	WG1188131
Di-isopropyl ether	U		0.0924	0.500	1	10/29/2018 19:00	WG1188131
Ethylbenzene	U		0.158	0.500	1	10/29/2018 19:00	WG1188131
Hexachloro-1,3-butadiene	U		0.157	1.00	1	10/29/2018 19:00	WG1188131
2-Hexanone	U		0.757	5.00	1	10/29/2018 19:00	WG1188131
n-Hexane	U		0.305	5.00	1	10/29/2018 19:00	WG1188131
Iodomethane	U		0.377	10.0	1	10/29/2018 19:00	WG1188131
Isopropylbenzene	U		0.126	0.500	1	10/29/2018 19:00	WG1188131
p-Isopropyltoluene	U		0.138	0.500	1	10/29/2018 19:00	WG1188131
2-Butanone (MEK)	2.26	J J0	1.28	5.00	1	10/29/2018 19:00	WG1188131

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Methylene Chloride	U		1.07	2.50	1	10/29/2018 19:00	WG1188131
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	10/29/2018 19:00	WG1188131
Methyl tert-butyl ether	U		0.102	0.500	1	10/29/2018 19:00	WG1188131
Naphthalene	U	J0	0.174	2.50	1	10/29/2018 19:00	WG1188131
n-Propylbenzene	U		0.162	0.500	1	10/29/2018 19:00	WG1188131
Styrene	U		0.117	0.500	1	10/29/2018 19:00	WG1188131
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	10/29/2018 19:00	WG1188131
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	10/29/2018 19:00	WG1188131
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	10/29/2018 19:00	WG1188131
Tetrachloroethene	0.895		0.199	0.500	1	10/29/2018 19:00	WG1188131
Toluene	U		0.412	0.500	1	10/29/2018 19:00	WG1188131
1,2,3-Trichlorobenzene	U	J0	0.164	0.500	1	10/29/2018 19:00	WG1188131
1,2,4-Trichlorobenzene	U		0.355	0.500	1	10/29/2018 19:00	WG1188131
1,1,1-Trichloroethane	U		0.0940	0.500	1	10/29/2018 19:00	WG1188131
1,1,2-Trichloroethane	U		0.186	0.500	1	10/29/2018 19:00	WG1188131
Trichloroethene	0.347	J	0.153	0.500	1	10/29/2018 19:00	WG1188131
Trichlorofluoromethane	U		0.130	2.50	1	10/29/2018 19:00	WG1188131
1,2,3-Trichloropropane	U		0.247	2.50	1	10/29/2018 19:00	WG1188131
1,2,4-Trimethylbenzene	U		0.123	0.500	1	10/29/2018 19:00	WG1188131
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	10/29/2018 19:00	WG1188131
1,3,5-Trimethylbenzene	U		0.124	0.500	1	10/29/2018 19:00	WG1188131
Vinyl acetate	U		0.645	5.00	1	10/29/2018 19:00	WG1188131
Vinyl chloride	1.83		0.118	0.500	1	10/29/2018 19:00	WG1188131
Xylenes, Total	U		0.316	1.50	1	10/29/2018 19:00	WG1188131
(S) Toluene-d8	*102*			*80.0-120*		*10/29/2018 19:00*	WG1188131
(S) Toluene-d8	*106*			*80.0-120*		*11/05/2018 14:51*	WG1191566
(S) Dibromofluoromethane	*92.2*			*75.0-120*		*10/29/2018 19:00*	WG1188131
(S) Dibromofluoromethane	*89.1*			*75.0-120*		*11/05/2018 14:51*	WG1191566
(S) 4-Bromofluorobenzene	*95.9*			*77.0-126*		*10/29/2018 19:00*	WG1188131
(S) 4-Bromofluorobenzene	*85.9*			*77.0-126*		*11/05/2018 14:51*	WG1191566

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	47.4	B J	31.6	100	1	10/31/2018 21:33	WG1189237
(S) a,a,a-Trifluorotoluene(FID)	*92.9*			*78.0-120*		*10/31/2018 21:33*	WG1189237

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	1.08	J J0	1.05	25.0	1	10/29/2018 19:19	WG1188131
Acrylonitrile	U	J0	0.873	5.00	1	10/29/2018 19:19	WG1188131
Benzene	U		0.0896	0.500	1	10/29/2018 19:19	WG1188131
Bromobenzene	U		0.133	0.500	1	10/29/2018 19:19	WG1188131
Bromodichloromethane	U		0.0800	0.500	1	10/29/2018 19:19	WG1188131
Bromochloromethane	U		0.145	0.500	1	10/29/2018 19:19	WG1188131
Bromoform	U		0.186	0.500	1	10/29/2018 19:19	WG1188131
Bromomethane	U	J0	0.157	2.50	1	10/29/2018 19:19	WG1188131
n-Butylbenzene	U	J0	0.143	0.500	1	10/29/2018 19:19	WG1188131
sec-Butylbenzene	U		0.134	0.500	1	10/29/2018 19:19	WG1188131
tert-Butylbenzene	U		0.183	0.500	1	10/29/2018 19:19	WG1188131
Carbon disulfide	0.156	J	0.101	0.500	1	10/29/2018 19:19	WG1188131
Carbon tetrachloride	U		0.159	0.500	1	10/29/2018 19:19	WG1188131
Chlorobenzene	U		0.140	0.500	1	10/29/2018 19:19	WG1188131
Chlorodibromomethane	U		0.128	0.500	1	10/29/2018 19:19	WG1188131
Chloroethane	U	J0	0.141	2.50	1	10/29/2018 19:19	WG1188131
Chloroform	U		0.0860	0.500	1	10/29/2018 19:19	WG1188131
Chloromethane	U		0.153	1.25	1	11/05/2018 15:10	WG1191566
2-Chlorotoluene	U		0.111	0.500	1	10/29/2018 19:19	WG1188131
4-Chlorotoluene	U		0.0972	0.500	1	10/29/2018 19:19	WG1188131
1,2-Dibromo-3-Chloropropane	U	J0	0.325	2.50	1	10/29/2018 19:19	WG1188131
1,2-Dibromoethane	U		0.193	0.500	1	10/29/2018 19:19	WG1188131
Dibromomethane	U		0.117	0.500	1	10/29/2018 19:19	WG1188131
1,2-Dichlorobenzene	U		0.101	0.500	1	10/29/2018 19:19	WG1188131
1,3-Dichlorobenzene	U		0.130	0.500	1	10/29/2018 19:19	WG1188131
1,4-Dichlorobenzene	U		0.121	0.500	1	10/29/2018 19:19	WG1188131
Dichlorodifluoromethane	U		0.127	2.50	1	11/05/2018 15:10	WG1191566
1,1-Dichloroethane	U		0.114	0.500	1	10/29/2018 19:19	WG1188131
1,2-Dichloroethane	U	J0	0.108	0.500	1	10/29/2018 19:19	WG1188131
1,1-Dichloroethene	U		0.188	0.500	1	10/29/2018 19:19	WG1188131
cis-1,2-Dichloroethene	0.454	B J	0.0933	0.500	1	11/05/2018 15:10	WG1191566
trans-1,2-Dichloroethene	U		0.152	0.500	1	10/29/2018 19:19	WG1188131
1,2-Dichloropropane	U		0.190	0.500	1	10/29/2018 19:19	WG1188131
1,1-Dichloropropene	U		0.128	0.500	1	10/29/2018 19:19	WG1188131
1,3-Dichloropropane	U		0.147	1.00	1	10/29/2018 19:19	WG1188131
cis-1,3-Dichloropropene	U		0.0976	0.500	1	10/29/2018 19:19	WG1188131
trans-1,3-Dichloropropene	U		0.222	0.500	1	10/29/2018 19:19	WG1188131
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	11/05/2018 15:10	WG1191566
2,2-Dichloropropane	U		0.0929	0.500	1	10/29/2018 19:19	WG1188131
Di-isopropyl ether	U		0.0924	0.500	1	10/29/2018 19:19	WG1188131
Ethylbenzene	U		0.158	0.500	1	10/29/2018 19:19	WG1188131
Hexachloro-1,3-butadiene	U		0.157	1.00	1	10/29/2018 19:19	WG1188131
2-Hexanone	U		0.757	5.00	1	10/29/2018 19:19	WG1188131
n-Hexane	U		0.305	5.00	1	10/29/2018 19:19	WG1188131
Iodomethane	U		0.377	10.0	1	10/29/2018 19:19	WG1188131
Isopropylbenzene	U		0.126	0.500	1	10/29/2018 19:19	WG1188131
p-Isopropyltoluene	U		0.138	0.500	1	10/29/2018 19:19	WG1188131
2-Butanone (MEK)	U	J0	1.28	5.00	1	10/29/2018 19:19	WG1188131

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Methylene Chloride	U		1.07	2.50	1	10/29/2018 19:19	WG1188131
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	10/29/2018 19:19	WG1188131
Methyl tert-butyl ether	U		0.102	0.500	1	10/29/2018 19:19	WG1188131
Naphthalene	U	J0	0.174	2.50	1	10/29/2018 19:19	WG1188131
n-Propylbenzene	U		0.162	0.500	1	10/29/2018 19:19	WG1188131
Styrene	U		0.117	0.500	1	10/29/2018 19:19	WG1188131
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	10/29/2018 19:19	WG1188131
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	10/29/2018 19:19	WG1188131
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	10/29/2018 19:19	WG1188131
Tetrachloroethene	1.29		0.199	0.500	1	10/29/2018 19:19	WG1188131
Toluene	U		0.412	0.500	1	10/29/2018 19:19	WG1188131
1,2,3-Trichlorobenzene	U	J0	0.164	0.500	1	10/29/2018 19:19	WG1188131
1,2,4-Trichlorobenzene	U		0.355	0.500	1	10/29/2018 19:19	WG1188131
1,1,1-Trichloroethane	U		0.0940	0.500	1	10/29/2018 19:19	WG1188131
1,1,2-Trichloroethane	U		0.186	0.500	1	10/29/2018 19:19	WG1188131
Trichloroethene	0.282	J	0.153	0.500	1	10/29/2018 19:19	WG1188131
Trichlorofluoromethane	U		0.130	2.50	1	10/29/2018 19:19	WG1188131
1,2,3-Trichloropropane	U		0.247	2.50	1	10/29/2018 19:19	WG1188131
1,2,4-Trimethylbenzene	U		0.123	0.500	1	10/29/2018 19:19	WG1188131
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	10/29/2018 19:19	WG1188131
1,3,5-Trimethylbenzene	U		0.124	0.500	1	10/29/2018 19:19	WG1188131
Vinyl acetate	U		0.645	5.00	1	10/29/2018 19:19	WG1188131
Vinyl chloride	U		0.118	0.500	1	10/29/2018 19:19	WG1188131
Xylenes, Total	U		0.316	1.50	1	10/29/2018 19:19	WG1188131
(S) Toluene-d8	*99.4*			*80.0-120*		*10/29/2018 19:19*	WG1188131
(S) Toluene-d8	*108*			*80.0-120*		*11/05/2018 15:10*	WG1191566
(S) Dibromofluoromethane	*93.4*			*75.0-120*		*10/29/2018 19:19*	WG1188131
(S) Dibromofluoromethane	*89.6*			*75.0-120*		*11/05/2018 15:10*	WG1191566
(S) 4-Bromofluorobenzene	*97.9*			*77.0-126*		*10/29/2018 19:19*	WG1188131
(S) 4-Bromofluorobenzene	*82.0*			*77.0-126*		*11/05/2018 15:10*	WG1191566

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

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	48.3	B J	31.6	100	1	10/31/2018 21:56	WG1189237
(S) a,a,a-Trifluorotoluene(FID)	*93.0*			*78.0-120*		*10/31/2018 21:56*	WG1189237

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U	J0	1.05	25.0	1	10/29/2018 19:38	WG1188131
Acrylonitrile	U	J0	0.873	5.00	1	10/29/2018 19:38	WG1188131
Benzene	U		0.0896	0.500	1	10/29/2018 19:38	WG1188131
Bromobenzene	U		0.133	0.500	1	10/29/2018 19:38	WG1188131
Bromodichloromethane	U		0.0800	0.500	1	10/29/2018 19:38	WG1188131
Bromochloromethane	U		0.145	0.500	1	10/29/2018 19:38	WG1188131
Bromoform	U		0.186	0.500	1	10/29/2018 19:38	WG1188131
Bromomethane	U	J0	0.157	2.50	1	10/29/2018 19:38	WG1188131
n-Butylbenzene	U	J0	0.143	0.500	1	10/29/2018 19:38	WG1188131
sec-Butylbenzene	U		0.134	0.500	1	10/29/2018 19:38	WG1188131
tert-Butylbenzene	U		0.183	0.500	1	10/29/2018 19:38	WG1188131
Carbon disulfide	U		0.101	0.500	1	10/29/2018 19:38	WG1188131
Carbon tetrachloride	U		0.159	0.500	1	10/29/2018 19:38	WG1188131
Chlorobenzene	U		0.140	0.500	1	10/29/2018 19:38	WG1188131
Chlorodibromomethane	U		0.128	0.500	1	10/29/2018 19:38	WG1188131
Chloroethane	U	J0	0.141	2.50	1	10/29/2018 19:38	WG1188131
Chloroform	U		0.0860	0.500	1	10/29/2018 19:38	WG1188131
Chloromethane	U		0.153	1.25	1	11/05/2018 15:30	WG1191566
2-Chlorotoluene	U		0.111	0.500	1	10/29/2018 19:38	WG1188131
4-Chlorotoluene	U		0.0972	0.500	1	10/29/2018 19:38	WG1188131
1,2-Dibromo-3-Chloropropane	U	J0	0.325	2.50	1	10/29/2018 19:38	WG1188131
1,2-Dibromoethane	U		0.193	0.500	1	10/29/2018 19:38	WG1188131
Dibromomethane	U		0.117	0.500	1	10/29/2018 19:38	WG1188131
1,2-Dichlorobenzene	U		0.101	0.500	1	10/29/2018 19:38	WG1188131
1,3-Dichlorobenzene	U		0.130	0.500	1	10/29/2018 19:38	WG1188131
1,4-Dichlorobenzene	U		0.121	0.500	1	10/29/2018 19:38	WG1188131
Dichlorodifluoromethane	U		0.127	2.50	1	11/05/2018 15:30	WG1191566
1,1-Dichloroethane	U		0.114	0.500	1	10/29/2018 19:38	WG1188131
1,2-Dichloroethane	U	J0	0.108	0.500	1	10/29/2018 19:38	WG1188131
1,1-Dichloroethene	U		0.188	0.500	1	10/29/2018 19:38	WG1188131
cis-1,2-Dichloroethene	12.1		0.0933	0.500	1	10/29/2018 19:38	WG1188131
trans-1,2-Dichloroethene	0.254	J	0.152	0.500	1	10/29/2018 19:38	WG1188131
1,2-Dichloropropane	U		0.190	0.500	1	10/29/2018 19:38	WG1188131
1,1-Dichloropropene	U		0.128	0.500	1	10/29/2018 19:38	WG1188131
1,3-Dichloropropane	U		0.147	1.00	1	10/29/2018 19:38	WG1188131
cis-1,3-Dichloropropene	U		0.0976	0.500	1	10/29/2018 19:38	WG1188131
trans-1,3-Dichloropropene	U		0.222	0.500	1	10/29/2018 19:38	WG1188131
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	11/05/2018 15:30	WG1191566
2,2-Dichloropropane	U		0.0929	0.500	1	10/29/2018 19:38	WG1188131
Di-isopropyl ether	U		0.0924	0.500	1	10/29/2018 19:38	WG1188131
Ethylbenzene	U		0.158	0.500	1	10/29/2018 19:38	WG1188131
Hexachloro-1,3-butadiene	U		0.157	1.00	1	10/29/2018 19:38	WG1188131
2-Hexanone	U		0.757	5.00	1	10/29/2018 19:38	WG1188131
n-Hexane	U		0.305	5.00	1	10/29/2018 19:38	WG1188131
Iodomethane	U		0.377	10.0	1	10/29/2018 19:38	WG1188131
Isopropylbenzene	U		0.126	0.500	1	10/29/2018 19:38	WG1188131
p-Isopropyltoluene	U		0.138	0.500	1	10/29/2018 19:38	WG1188131
2-Butanone (MEK)	U	J0	1.28	5.00	1	10/29/2018 19:38	WG1188131

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Methylene Chloride	U		1.07	2.50	1	10/29/2018 19:38	WG1188131
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	10/29/2018 19:38	WG1188131
Methyl tert-butyl ether	U		0.102	0.500	1	10/29/2018 19:38	WG1188131
Naphthalene	U	J0	0.174	2.50	1	10/29/2018 19:38	WG1188131
n-Propylbenzene	U		0.162	0.500	1	10/29/2018 19:38	WG1188131
Styrene	U		0.117	0.500	1	10/29/2018 19:38	WG1188131
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	10/29/2018 19:38	WG1188131
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	10/29/2018 19:38	WG1188131
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	10/29/2018 19:38	WG1188131
Tetrachloroethene	3.53		0.199	0.500	1	10/29/2018 19:38	WG1188131
Toluene	U		0.412	0.500	1	10/29/2018 19:38	WG1188131
1,2,3-Trichlorobenzene	U	J0	0.164	0.500	1	10/29/2018 19:38	WG1188131
1,2,4-Trichlorobenzene	U		0.355	0.500	1	10/29/2018 19:38	WG1188131
1,1,1-Trichloroethane	U		0.0940	0.500	1	10/29/2018 19:38	WG1188131
1,1,2-Trichloroethane	U		0.186	0.500	1	10/29/2018 19:38	WG1188131
Trichloroethene	0.750		0.153	0.500	1	10/29/2018 19:38	WG1188131
Trichlorofluoromethane	U		0.130	2.50	1	10/29/2018 19:38	WG1188131
1,2,3-Trichloropropane	U		0.247	2.50	1	10/29/2018 19:38	WG1188131
1,2,4-Trimethylbenzene	U		0.123	0.500	1	10/29/2018 19:38	WG1188131
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	10/29/2018 19:38	WG1188131
1,3,5-Trimethylbenzene	U		0.124	0.500	1	10/29/2018 19:38	WG1188131
Vinyl acetate	U		0.645	5.00	1	10/29/2018 19:38	WG1188131
Vinyl chloride	158		0.118	0.500	1	10/29/2018 19:38	WG1188131
Xylenes, Total	U		0.316	1.50	1	10/29/2018 19:38	WG1188131
(S) Toluene-d8	*101*			*80.0-120*		*10/29/2018 19:38*	WG1188131
(S) Toluene-d8	*103*			*80.0-120*		*11/05/2018 15:30*	WG1191566
(S) Dibromofluoromethane	*94.0*			*75.0-120*		*10/29/2018 19:38*	WG1188131
(S) Dibromofluoromethane	*89.5*			*75.0-120*		*11/05/2018 15:30*	WG1191566
(S) 4-Bromofluorobenzene	*97.7*			*77.0-126*		*10/29/2018 19:38*	WG1188131
(S) 4-Bromofluorobenzene	*87.5*			*77.0-126*		*11/05/2018 15:30*	WG1191566

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	31800		632	2000	20	10/31/2018 22:19	WG1189237
(S) a,a,a-Trifluorotoluene(FID)	*93.4*			*78.0-120*		*10/31/2018 22:19*	WG1189237

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U	J0	26.2	625	25	10/29/2018 19:57	WG1188131
Acrylonitrile	U	J0	21.8	125	25	10/29/2018 19:57	WG1188131
Benzene	U		2.24	12.5	25	10/29/2018 19:57	WG1188131
Bromobenzene	U		3.32	12.5	25	10/29/2018 19:57	WG1188131
Bromodichloromethane	U		2.00	12.5	25	10/29/2018 19:57	WG1188131
Bromochloromethane	U		3.62	12.5	25	10/29/2018 19:57	WG1188131
Bromoform	U		4.65	12.5	25	10/29/2018 19:57	WG1188131
Bromomethane	U	J0	3.92	62.5	25	10/29/2018 19:57	WG1188131
n-Butylbenzene	U	J0	3.58	12.5	25	10/29/2018 19:57	WG1188131
sec-Butylbenzene	U		3.35	12.5	25	10/29/2018 19:57	WG1188131
tert-Butylbenzene	U		4.58	12.5	25	10/29/2018 19:57	WG1188131
Carbon disulfide	U		2.52	12.5	25	10/29/2018 19:57	WG1188131
Carbon tetrachloride	U		3.98	12.5	25	10/29/2018 19:57	WG1188131
Chlorobenzene	U		3.50	12.5	25	10/29/2018 19:57	WG1188131
Chlorodibromomethane	U		3.20	12.5	25	10/29/2018 19:57	WG1188131
Chloroethane	U	J0	3.52	62.5	25	10/29/2018 19:57	WG1188131
Chloroform	U		2.15	12.5	25	10/29/2018 19:57	WG1188131
Chloromethane	U		153	1250	1000	11/05/2018 16:10	WG1191566
2-Chlorotoluene	U		2.78	12.5	25	10/29/2018 19:57	WG1188131
4-Chlorotoluene	U		2.43	12.5	25	10/29/2018 19:57	WG1188131
1,2-Dibromo-3-Chloropropane	U	J0	8.12	62.5	25	10/29/2018 19:57	WG1188131
1,2-Dibromoethane	U		4.82	12.5	25	10/29/2018 19:57	WG1188131
Dibromomethane	U		2.92	12.5	25	10/29/2018 19:57	WG1188131
1,2-Dichlorobenzene	U		2.52	12.5	25	10/29/2018 19:57	WG1188131
1,3-Dichlorobenzene	U		3.25	12.5	25	10/29/2018 19:57	WG1188131
1,4-Dichlorobenzene	U		3.02	12.5	25	10/29/2018 19:57	WG1188131
Dichlorodifluoromethane	U		127	2500	1000	11/05/2018 16:10	WG1191566
1,1-Dichloroethane	U		2.85	12.5	25	10/29/2018 19:57	WG1188131
1,2-Dichloroethane	U	J0	2.70	12.5	25	10/29/2018 19:57	WG1188131
1,1-Dichloroethene	167		4.70	12.5	25	10/29/2018 19:57	WG1188131
cis-1,2-Dichloroethene	40400		93.3	500	1000	11/05/2018 16:10	WG1191566
trans-1,2-Dichloroethene	54.4		3.80	12.5	25	10/29/2018 19:57	WG1188131
1,2-Dichloropropane	U		4.75	12.5	25	10/29/2018 19:57	WG1188131
1,1-Dichloropropene	U		3.20	12.5	25	10/29/2018 19:57	WG1188131
1,3-Dichloropropane	U		3.68	25.0	25	10/29/2018 19:57	WG1188131
cis-1,3-Dichloropropene	U		2.44	12.5	25	10/29/2018 19:57	WG1188131
trans-1,3-Dichloropropene	U		5.55	12.5	25	10/29/2018 19:57	WG1188131
trans-1,4-Dichloro-2-butene	U		257	5000	1000	11/05/2018 16:10	WG1191566
2,2-Dichloropropane	U		2.32	12.5	25	10/29/2018 19:57	WG1188131
Di-isopropyl ether	U		2.31	12.5	25	10/29/2018 19:57	WG1188131
Ethylbenzene	U		3.95	12.5	25	10/29/2018 19:57	WG1188131
Hexachloro-1,3-butadiene	U		3.92	25.0	25	10/29/2018 19:57	WG1188131
2-Hexanone	U		18.9	125	25	10/29/2018 19:57	WG1188131
n-Hexane	U		7.62	125	25	10/29/2018 19:57	WG1188131
Iodomethane	U		9.42	250	25	10/29/2018 19:57	WG1188131
Isopropylbenzene	U		3.15	12.5	25	10/29/2018 19:57	WG1188131
p-Isopropyltoluene	U		3.45	12.5	25	10/29/2018 19:57	WG1188131
2-Butanone (MEK)	U	J0	32.0	125	25	10/29/2018 19:57	WG1188131

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Methylene Chloride	U		26.8	62.5	25	10/29/2018 19:57	WG1188131
4-Methyl-2-pentanone (MIBK)	U		20.6	125	25	10/29/2018 19:57	WG1188131
Methyl tert-butyl ether	U		2.55	12.5	25	10/29/2018 19:57	WG1188131
Naphthalene	U	J0	4.35	62.5	25	10/29/2018 19:57	WG1188131
n-Propylbenzene	U		4.05	12.5	25	10/29/2018 19:57	WG1188131
Styrene	U		2.92	12.5	25	10/29/2018 19:57	WG1188131
1,1,1,2-Tetrachloroethane	U		3.00	12.5	25	10/29/2018 19:57	WG1188131
1,1,2,2-Tetrachloroethane	U		3.25	12.5	25	10/29/2018 19:57	WG1188131
1,1,2-Trichlorotrifluoroethane	U		4.10	12.5	25	10/29/2018 19:57	WG1188131
Tetrachloroethene	45900		199	500	1000	11/05/2018 16:10	WG1191566
Toluene	U		10.3	12.5	25	10/29/2018 19:57	WG1188131
1,2,3-Trichlorobenzene	U	J0	4.10	12.5	25	10/29/2018 19:57	WG1188131
1,2,4-Trichlorobenzene	U		8.88	12.5	25	10/29/2018 19:57	WG1188131
1,1,1-Trichloroethane	U		2.35	12.5	25	10/29/2018 19:57	WG1188131
1,1,2-Trichloroethane	U		4.65	12.5	25	10/29/2018 19:57	WG1188131
Trichloroethene	8330		30.6	100	200	11/05/2018 18:09	WG1191566
Trichlorofluoromethane	U		3.25	62.5	25	10/29/2018 19:57	WG1188131
1,2,3-Trichloropropane	U		6.18	62.5	25	10/29/2018 19:57	WG1188131
1,2,4-Trimethylbenzene	U		3.08	12.5	25	10/29/2018 19:57	WG1188131
1,2,3-Trimethylbenzene	U		1.85	12.5	25	10/29/2018 19:57	WG1188131
1,3,5-Trimethylbenzene	U		3.10	12.5	25	10/29/2018 19:57	WG1188131
Vinyl acetate	U		16.1	125	25	10/29/2018 19:57	WG1188131
Vinyl chloride	1170		2.95	12.5	25	10/29/2018 19:57	WG1188131
Xylenes, Total	U		7.90	37.5	25	10/29/2018 19:57	WG1188131
(S) Toluene-d8	*104*			*80.0-120*		*10/29/2018 19:57*	WG1188131
(S) Toluene-d8	*106*			*80.0-120*		*11/05/2018 18:09*	WG1191566
(S) Toluene-d8	*106*			*80.0-120*		*11/05/2018 16:10*	WG1191566
(S) Dibromofluoromethane	*92.4*			*75.0-120*		*10/29/2018 19:57*	WG1188131
(S) Dibromofluoromethane	*92.1*			*75.0-120*		*11/05/2018 16:10*	WG1191566
(S) Dibromofluoromethane	*90.8*			*75.0-120*		*11/05/2018 18:09*	WG1191566
(S) 4-Bromofluorobenzene	*96.7*			*77.0-126*		*10/29/2018 19:57*	WG1188131
(S) 4-Bromofluorobenzene	*83.3*			*77.0-126*		*11/05/2018 18:09*	WG1191566
(S) 4-Bromofluorobenzene	*85.6*			*77.0-126*		*11/05/2018 16:10*	WG1191566

Sample Narrative:

L1038864-08 WG1188131, WG1191566: Not all compounds reportable at lower dilution.

L1038864-08 WG1188131, WG1191566: Cannot be reanalyzed at a lower dilution due to high levels of target analytes.

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	14600		158	500	5	10/31/2018 22:42	WG1189237
(S) a,a,a-Trifluorotoluene(FID)	*94.3*			*78.0-120*		*10/31/2018 22:42*	WG1189237

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	9.83	J J0	1.05	25.0	1	10/29/2018 20:17	WG1188131
Acrylonitrile	U	J0	0.873	5.00	1	10/29/2018 20:17	WG1188131
Benzene	0.413	J	0.0896	0.500	1	10/29/2018 20:17	WG1188131
Bromobenzene	U		0.133	0.500	1	10/29/2018 20:17	WG1188131
Bromodichloromethane	U		0.0800	0.500	1	10/29/2018 20:17	WG1188131
Bromochloromethane	U		0.145	0.500	1	10/29/2018 20:17	WG1188131
Bromoform	U		0.186	0.500	1	10/29/2018 20:17	WG1188131
Bromomethane	U	J0	0.157	2.50	1	10/29/2018 20:17	WG1188131
n-Butylbenzene	U	J0	0.143	0.500	1	10/29/2018 20:17	WG1188131
sec-Butylbenzene	U		0.134	0.500	1	10/29/2018 20:17	WG1188131
tert-Butylbenzene	U		0.183	0.500	1	10/29/2018 20:17	WG1188131
Carbon disulfide	1.76		0.101	0.500	1	10/29/2018 20:17	WG1188131
Carbon tetrachloride	U		0.159	0.500	1	10/29/2018 20:17	WG1188131
Chlorobenzene	U		0.140	0.500	1	10/29/2018 20:17	WG1188131
Chlorodibromomethane	U		0.128	0.500	1	10/29/2018 20:17	WG1188131
Chloroethane	U	J0	0.141	2.50	1	10/29/2018 20:17	WG1188131
Chloroform	0.591		0.0860	0.500	1	10/29/2018 20:17	WG1188131
Chloromethane	U		76.5	625	500	11/05/2018 16:30	WG1191566
2-Chlorotoluene	U		0.111	0.500	1	10/29/2018 20:17	WG1188131
4-Chlorotoluene	U		0.0972	0.500	1	10/29/2018 20:17	WG1188131
1,2-Dibromo-3-Chloropropane	U	J0	0.325	2.50	1	10/29/2018 20:17	WG1188131
1,2-Dibromoethane	U		0.193	0.500	1	10/29/2018 20:17	WG1188131
Dibromomethane	U		0.117	0.500	1	10/29/2018 20:17	WG1188131
1,2-Dichlorobenzene	U		0.101	0.500	1	10/29/2018 20:17	WG1188131
1,3-Dichlorobenzene	U		0.130	0.500	1	10/29/2018 20:17	WG1188131
1,4-Dichlorobenzene	U		0.121	0.500	1	10/29/2018 20:17	WG1188131
Dichlorodifluoromethane	U		63.5	1250	500	11/05/2018 16:30	WG1191566
1,1-Dichloroethane	U		0.114	0.500	1	10/29/2018 20:17	WG1188131
1,2-Dichloroethane	U	J0	0.108	0.500	1	10/29/2018 20:17	WG1188131
1,1-Dichloroethene	61.9		0.188	0.500	1	10/29/2018 20:17	WG1188131
cis-1,2-Dichloroethene	17700		46.6	250	500	11/05/2018 16:30	WG1191566
trans-1,2-Dichloroethene	49.7		0.152	0.500	1	10/29/2018 20:17	WG1188131
1,2-Dichloropropane	U		0.190	0.500	1	10/29/2018 20:17	WG1188131
1,1-Dichloropropene	U		0.128	0.500	1	10/29/2018 20:17	WG1188131
1,3-Dichloropropane	U		0.147	1.00	1	10/29/2018 20:17	WG1188131
cis-1,3-Dichloropropene	U		0.0976	0.500	1	10/29/2018 20:17	WG1188131
trans-1,3-Dichloropropene	U		0.222	0.500	1	10/29/2018 20:17	WG1188131
trans-1,4-Dichloro-2-butene	U		128	2500	500	11/05/2018 16:30	WG1191566
2,2-Dichloropropane	U		0.0929	0.500	1	10/29/2018 20:17	WG1188131
Di-isopropyl ether	U		0.0924	0.500	1	10/29/2018 20:17	WG1188131
Ethylbenzene	0.226	J	0.158	0.500	1	10/29/2018 20:17	WG1188131
Hexachloro-1,3-butadiene	U		0.157	1.00	1	10/29/2018 20:17	WG1188131
2-Hexanone	U		0.757	5.00	1	10/29/2018 20:17	WG1188131
n-Hexane	U		0.305	5.00	1	10/29/2018 20:17	WG1188131
Iodomethane	U		0.377	10.0	1	10/29/2018 20:17	WG1188131
Isopropylbenzene	U		0.126	0.500	1	10/29/2018 20:17	WG1188131
p-Isopropyltoluene	U		0.138	0.500	1	10/29/2018 20:17	WG1188131
2-Butanone (MEK)	3.56	J J0	1.28	5.00	1	10/29/2018 20:17	WG1188131

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Methylene Chloride	U		1.07	2.50	1	10/29/2018 20:17	WG1188131
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	10/29/2018 20:17	WG1188131
Methyl tert-butyl ether	U		0.102	0.500	1	10/29/2018 20:17	WG1188131
Naphthalene	0.209	J J0	0.174	2.50	1	10/29/2018 20:17	WG1188131
n-Propylbenzene	U		0.162	0.500	1	10/29/2018 20:17	WG1188131
Styrene	U		0.117	0.500	1	10/29/2018 20:17	WG1188131
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	10/29/2018 20:17	WG1188131
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	10/29/2018 20:17	WG1188131
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	10/29/2018 20:17	WG1188131
Tetrachloroethene	15200		99.5	250	500	11/05/2018 16:30	WG1191566
Toluene	2.53		0.412	0.500	1	10/29/2018 20:17	WG1188131
1,2,3-Trichlorobenzene	U	J0	0.164	0.500	1	10/29/2018 20:17	WG1188131
1,2,4-Trichlorobenzene	U		0.355	0.500	1	10/29/2018 20:17	WG1188131
1,1,1-Trichloroethane	U		0.0940	0.500	1	10/29/2018 20:17	WG1188131
1,1,2-Trichloroethane	U		0.186	0.500	1	10/29/2018 20:17	WG1188131
Trichloroethene	8800		76.5	250	500	11/05/2018 16:30	WG1191566
Trichlorofluoromethane	U		0.130	2.50	1	10/29/2018 20:17	WG1188131
1,2,3-Trichloropropane	U		0.247	2.50	1	10/29/2018 20:17	WG1188131
1,2,4-Trimethylbenzene	0.576		0.123	0.500	1	10/29/2018 20:17	WG1188131
1,2,3-Trimethylbenzene	0.317	J	0.0739	0.500	1	10/29/2018 20:17	WG1188131
1,3,5-Trimethylbenzene	0.162	J	0.124	0.500	1	10/29/2018 20:17	WG1188131
Vinyl acetate	U		0.645	5.00	1	10/29/2018 20:17	WG1188131
Vinyl chloride	1430		59.0	250	500	11/05/2018 16:30	WG1191566
Xylenes, Total	1.13	J	0.316	1.50	1	10/29/2018 20:17	WG1188131
(S) Toluene-d8	*104*			*80.0-120*		*10/29/2018 20:17*	WG1188131
(S) Toluene-d8	*107*			*80.0-120*		*11/05/2018 16:30*	WG1191566
(S) Dibromofluoromethane	*92.0*			*75.0-120*		*10/29/2018 20:17*	WG1188131
(S) Dibromofluoromethane	*89.4*			*75.0-120*		*11/05/2018 16:30*	WG1191566
(S) 4-Bromofluorobenzene	*98.8*			*77.0-126*		*10/29/2018 20:17*	WG1188131
(S) 4-Bromofluorobenzene	*84.2*			*77.0-126*		*11/05/2018 16:30*	WG1191566

Sample Narrative:

L1038864-09 WG1188131, WG1191566: Not all compounds reportable at lower dilution.

L1038864-09 WG1188131, WG1191566: Cannot be reanalyzed at a lower dilution due to high levels of target analytes.

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	4570		31.6	100	1	10/31/2018 23:04	WG1189237
(S) a,a,a-Trifluorotoluene(FID)	*95.2*			*78.0-120*		*10/31/2018 23:04*	WG1189237

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	1.71	J J0	1.05	25.0	1	10/29/2018 20:36	WG1188131
Acrylonitrile	U	J0	0.873	5.00	1	10/29/2018 20:36	WG1188131
Benzene	U		0.0896	0.500	1	10/29/2018 20:36	WG1188131
Bromobenzene	U		0.133	0.500	1	10/29/2018 20:36	WG1188131
Bromodichloromethane	U		0.0800	0.500	1	10/29/2018 20:36	WG1188131
Bromochloromethane	U		0.145	0.500	1	10/29/2018 20:36	WG1188131
Bromoform	U		0.186	0.500	1	10/29/2018 20:36	WG1188131
Bromomethane	U	J0	0.157	2.50	1	10/29/2018 20:36	WG1188131
n-Butylbenzene	U	J0	0.143	0.500	1	10/29/2018 20:36	WG1188131
sec-Butylbenzene	U		0.134	0.500	1	10/29/2018 20:36	WG1188131
tert-Butylbenzene	U		0.183	0.500	1	10/29/2018 20:36	WG1188131
Carbon disulfide	0.181	J	0.101	0.500	1	10/29/2018 20:36	WG1188131
Carbon tetrachloride	U		0.159	0.500	1	10/29/2018 20:36	WG1188131
Chlorobenzene	U		0.140	0.500	1	10/29/2018 20:36	WG1188131
Chlorodibromomethane	U		0.128	0.500	1	10/29/2018 20:36	WG1188131
Chloroethane	14.2	J0	0.141	2.50	1	10/29/2018 20:36	WG1188131
Chloroform	0.395	J	0.0860	0.500	1	10/29/2018 20:36	WG1188131
Chloromethane	U		30.6	250	200	11/05/2018 16:50	WG1191566
2-Chlorotoluene	U		0.111	0.500	1	10/29/2018 20:36	WG1188131
4-Chlorotoluene	U		0.0972	0.500	1	10/29/2018 20:36	WG1188131
1,2-Dibromo-3-Chloropropane	U	J0	0.325	2.50	1	10/29/2018 20:36	WG1188131
1,2-Dibromoethane	U		0.193	0.500	1	10/29/2018 20:36	WG1188131
Dibromomethane	U		0.117	0.500	1	10/29/2018 20:36	WG1188131
1,2-Dichlorobenzene	U		0.101	0.500	1	10/29/2018 20:36	WG1188131
1,3-Dichlorobenzene	U		0.130	0.500	1	10/29/2018 20:36	WG1188131
1,4-Dichlorobenzene	U		0.121	0.500	1	10/29/2018 20:36	WG1188131
Dichlorodifluoromethane	U		25.4	500	200	11/05/2018 16:50	WG1191566
1,1-Dichloroethane	U		0.114	0.500	1	10/29/2018 20:36	WG1188131
1,2-Dichloroethane	U	J0	0.108	0.500	1	10/29/2018 20:36	WG1188131
1,1-Dichloroethene	25.7		0.188	0.500	1	10/29/2018 20:36	WG1188131
cis-1,2-Dichloroethene	3320		18.7	100	200	11/05/2018 16:50	WG1191566
trans-1,2-Dichloroethene	15.3		0.152	0.500	1	10/29/2018 20:36	WG1188131
1,2-Dichloropropane	U		0.190	0.500	1	10/29/2018 20:36	WG1188131
1,1-Dichloropropene	U		0.128	0.500	1	10/29/2018 20:36	WG1188131
1,3-Dichloropropane	U		0.147	1.00	1	10/29/2018 20:36	WG1188131
cis-1,3-Dichloropropene	U		0.0976	0.500	1	10/29/2018 20:36	WG1188131
trans-1,3-Dichloropropene	U		0.222	0.500	1	10/29/2018 20:36	WG1188131
trans-1,4-Dichloro-2-butene	U		51.4	1000	200	11/05/2018 16:50	WG1191566
2,2-Dichloropropane	U		0.0929	0.500	1	10/29/2018 20:36	WG1188131
Di-isopropyl ether	U		0.0924	0.500	1	10/29/2018 20:36	WG1188131
Ethylbenzene	U		0.158	0.500	1	10/29/2018 20:36	WG1188131
Hexachloro-1,3-butadiene	U		0.157	1.00	1	10/29/2018 20:36	WG1188131
2-Hexanone	U		0.757	5.00	1	10/29/2018 20:36	WG1188131
n-Hexane	U		0.305	5.00	1	10/29/2018 20:36	WG1188131
Iodomethane	U		0.377	10.0	1	10/29/2018 20:36	WG1188131
Isopropylbenzene	U		0.126	0.500	1	10/29/2018 20:36	WG1188131
p-Isopropyltoluene	U		0.138	0.500	1	10/29/2018 20:36	WG1188131
2-Butanone (MEK)	U	J0	1.28	5.00	1	10/29/2018 20:36	WG1188131

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Methylene Chloride	U		1.07	2.50	1	10/29/2018 20:36	WG1188131
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	10/29/2018 20:36	WG1188131
Methyl tert-butyl ether	U		0.102	0.500	1	10/29/2018 20:36	WG1188131
Naphthalene	U	J0	0.174	2.50	1	10/29/2018 20:36	WG1188131
n-Propylbenzene	U		0.162	0.500	1	10/29/2018 20:36	WG1188131
Styrene	U		0.117	0.500	1	10/29/2018 20:36	WG1188131
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	10/29/2018 20:36	WG1188131
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	10/29/2018 20:36	WG1188131
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	10/29/2018 20:36	WG1188131
Tetrachloroethene	6100		39.8	100	200	11/05/2018 16:50	WG1191566
Toluene	U		0.412	0.500	1	10/29/2018 20:36	WG1188131
1,2,3-Trichlorobenzene	U	J0	0.164	0.500	1	10/29/2018 20:36	WG1188131
1,2,4-Trichlorobenzene	U		0.355	0.500	1	10/29/2018 20:36	WG1188131
1,1,1-Trichloroethane	U		0.0940	0.500	1	10/29/2018 20:36	WG1188131
1,1,2-Trichloroethane	U		0.186	0.500	1	10/29/2018 20:36	WG1188131
Trichloroethene	2720		30.6	100	200	11/05/2018 16:50	WG1191566
Trichlorofluoromethane	U		0.130	2.50	1	10/29/2018 20:36	WG1188131
1,2,3-Trichloropropane	U		0.247	2.50	1	10/29/2018 20:36	WG1188131
1,2,4-Trimethylbenzene	0.139	J	0.123	0.500	1	10/29/2018 20:36	WG1188131
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	10/29/2018 20:36	WG1188131
1,3,5-Trimethylbenzene	U		0.124	0.500	1	10/29/2018 20:36	WG1188131
Vinyl acetate	U		0.645	5.00	1	10/29/2018 20:36	WG1188131
Vinyl chloride	100		0.118	0.500	1	10/29/2018 20:36	WG1188131
Xylenes, Total	U		0.316	1.50	1	10/29/2018 20:36	WG1188131
(S) Toluene-d8	*103*			*80.0-120*		*10/29/2018 20:36*	WG1188131
(S) Toluene-d8	*106*			*80.0-120*		*11/05/2018 16:50*	WG1191566
(S) Dibromofluoromethane	*90.4*			*75.0-120*		*10/29/2018 20:36*	WG1188131
(S) Dibromofluoromethane	*89.8*			*75.0-120*		*11/05/2018 16:50*	WG1191566
(S) 4-Bromofluorobenzene	*98.5*			*77.0-126*		*10/29/2018 20:36*	WG1188131
(S) 4-Bromofluorobenzene	*86.6*			*77.0-126*		*11/05/2018 16:50*	WG1191566

Sample Narrative:

L1038864-10 WG1188131, WG1191566: Not all compounds reportable at lower dilution.

L1038864-10 WG1188131, WG1191566: Cannot be reanalyzed at a lower dilution due to high levels of target analytes.

Method Blank (MB)

(MB) R3356478-3 10/31/18 15:19

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Gasoline Range Organics-NWTPH	42.3	J	31.6	100
(S) a,a,a-Trifluorotoluene(FID)	*92.2*			*78.0-120*

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

(LCS) R3356478-1 10/31/18 14:03 • (LCSD) R3356478-2 10/31/18 14:33

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Gasoline Range Organics-NWTPH	5500	4880	4990	88.8	90.7	70.0-124			2.18	20
(S) a,a,a-Trifluorotoluene(FID)				*96.9*	*97.0*	*78.0-120*				

Method Blank (MB)

(MB) R3357429-3 11/06/18 12:14

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Acetone	U		1.05	25.0
Acrylonitrile	U		0.873	5.00
Benzene	U		0.0896	0.500
Bromobenzene	U		0.133	0.500
Bromodichloromethane	U		0.0800	0.500
Bromochloromethane	U		0.145	0.500
Bromoform	U		0.186	0.500
Bromomethane	U		0.157	2.50
n-Butylbenzene	U		0.143	0.500
sec-Butylbenzene	U		0.134	0.500
tert-Butylbenzene	U		0.183	0.500
Carbon disulfide	0.165	J	0.101	0.500
Carbon tetrachloride	U		0.159	0.500
Chlorobenzene	U		0.140	0.500
Chlorodibromomethane	U		0.128	0.500
Chloroethane	U		0.141	2.50
Chloroform	U		0.0860	0.500
Chloromethane	U		0.153	1.25
2-Chlorotoluene	U		0.111	0.500
4-Chlorotoluene	U		0.0972	0.500
1,2-Dibromo-3-Chloropropane	U		0.325	2.50
1,2-Dibromoethane	U		0.193	0.500
Dibromomethane	U		0.117	0.500
1,2-Dichlorobenzene	U		0.101	0.500
1,3-Dichlorobenzene	U		0.130	0.500
1,4-Dichlorobenzene	U		0.121	0.500
Dichlorodifluoromethane	U		0.127	2.50
1,1-Dichloroethane	U		0.114	0.500
1,2-Dichloroethane	U		0.108	0.500
1,1-Dichloroethene	U		0.188	0.500
cis-1,2-Dichloroethene	0.215	J	0.0933	0.500
trans-1,2-Dichloroethene	U		0.152	0.500
1,2-Dichloropropane	U		0.190	0.500
1,1-Dichloropropene	U		0.128	0.500
1,3-Dichloropropane	U		0.147	1.00
cis-1,3-Dichloropropene	U		0.0976	0.500
trans-1,3-Dichloropropene	U		0.222	0.500
trans-1,4-Dichloro-2-butene	U		0.257	5.00
2,2-Dichloropropane	U		0.0929	0.500
Di-isopropyl ether	U		0.0924	0.500

Method Blank (MB)

(MB) R3357429-3 11/06/18 12:14

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Ethylbenzene	U		0.158	0.500
Hexachloro-1,3-butadiene	0.178	J	0.157	1.00
2-Hexanone	U		0.757	5.00
n-Hexane	U		0.305	5.00
Iodomethane	U		0.377	10.0
Isopropylbenzene	U		0.126	0.500
p-Isopropyltoluene	U		0.138	0.500
2-Butanone (MEK)	U		1.28	5.00
Methylene Chloride	U		1.07	2.50
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00
Methyl tert-butyl ether	U		0.102	0.500
Naphthalene	U		0.174	2.50
n-Propylbenzene	U		0.162	0.500
Styrene	U		0.117	0.500
1,1,1,2-Tetrachloroethane	U		0.120	0.500
1,1,2,2-Tetrachloroethane	U		0.130	0.500
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500
Tetrachloroethene	U		0.199	0.500
Toluene	U		0.412	0.500
1,2,3-Trichlorobenzene	0.209	J	0.164	0.500
1,2,4-Trichlorobenzene	U		0.355	0.500
1,1,1-Trichloroethane	U		0.0940	0.500
1,1,2-Trichloroethane	U		0.186	0.500
Trichlorofluoromethane	U		0.130	2.50
1,2,3-Trichloropropane	U		0.247	2.50
1,2,4-Trimethylbenzene	U		0.123	0.500
1,2,3-Trimethylbenzene	U		0.0739	0.500
1,3,5-Trimethylbenzene	U		0.124	0.500
Vinyl acetate	U		0.645	5.00
Vinyl chloride	U		0.118	0.500
Xylenes, Total	U		0.316	1.50
(S) Toluene-d8	*97.9*			*80.0-120*
(S) Dibromofluoromethane	*112*			*75.0-120*
(S) 4-Bromofluorobenzene	*100*			*77.0-126*

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

(LCS) R3357429-1 11/06/18 10:24 • (LCSD) R3357429-2 11/06/18 10:45

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Acetone	125	179	168	143	134	19.0-160			6.23	27
Acrylonitrile	125	146	153	117	122	55.0-149			4.68	20
Benzene	25.0	24.6	25.5	98.5	102	70.0-123			3.29	20
Bromobenzene	25.0	24.3	26.5	97.3	106	73.0-121			8.51	20
Bromodichloromethane	25.0	27.0	28.4	108	114	75.0-120			5.10	20
Bromochloromethane	25.0	24.3	25.8	97.2	103	76.0-122			6.10	20
Bromoform	25.0	25.8	28.0	103	112	68.0-132			8.28	20
Bromomethane	25.0	22.4	24.1	89.5	96.3	10.0-160			7.33	25
n-Butylbenzene	25.0	24.3	26.7	97.2	107	73.0-125			9.25	20
sec-Butylbenzene	25.0	24.1	26.0	96.6	104	75.0-125			7.23	20
tert-Butylbenzene	25.0	23.9	25.9	95.5	104	76.0-124			8.24	20
Carbon disulfide	25.0	21.9	22.8	87.5	91.2	61.0-128			4.07	20
Carbon tetrachloride	25.0	27.3	27.9	109	112	68.0-126			1.97	20
Chlorobenzene	25.0	22.4	23.9	89.5	95.4	80.0-121			6.45	20
Chlorodibromomethane	25.0	24.9	26.4	99.4	105	77.0-125			5.86	20
Chloroethane	25.0	25.6	26.2	102	105	47.0-150			2.46	20
Chloroform	25.0	26.4	27.6	105	110	73.0-120			4.54	20
Chloromethane	25.0	29.0	29.5	116	118	41.0-142			1.98	20
2-Chlorotoluene	25.0	24.7	26.4	98.9	106	76.0-123			6.55	20
4-Chlorotoluene	25.0	24.7	26.6	98.9	106	75.0-122			7.17	20
1,2-Dibromo-3-Chloropropane	25.0	22.9	25.7	91.4	103	58.0-134			11.6	20
1,2-Dibromoethane	25.0	22.6	24.1	90.3	96.3	80.0-122			6.41	20
Dibromomethane	25.0	26.0	27.0	104	108	80.0-120			3.88	20
1,2-Dichlorobenzene	25.0	22.6	24.9	90.3	99.5	79.0-121			9.63	20
1,3-Dichlorobenzene	25.0	22.8	24.6	91.1	98.5	79.0-120			7.77	20
1,4-Dichlorobenzene	25.0	22.2	24.3	88.6	97.0	79.0-120			9.07	20
Dichlorodifluoromethane	25.0	27.8	29.1	111	116	51.0-149			4.64	20
1,1-Dichloroethane	25.0	26.9	28.1	108	112	70.0-126			4.24	20
1,2-Dichloroethane	25.0	30.1	31.3	120	125	70.0-128			3.92	20
1,1-Dichloroethene	25.0	23.7	24.6	95.0	98.5	71.0-124			3.71	20
cis-1,2-Dichloroethene	25.0	23.9	24.8	95.5	99.1	73.0-120			3.63	20
trans-1,2-Dichloroethene	25.0	25.0	26.3	100	105	73.0-120			5.16	20
1,2-Dichloropropane	25.0	24.4	25.3	97.7	101	77.0-125			3.38	20
1,1-Dichloropropene	25.0	25.7	27.2	103	109	74.0-126			5.70	20
1,3-Dichloropropane	25.0	22.6	24.3	90.4	97.1	80.0-120			7.18	20
cis-1,3-Dichloropropene	25.0	22.9	24.2	91.7	96.8	80.0-123			5.35	20
trans-1,3-Dichloropropene	25.0	23.6	24.9	94.3	99.5	78.0-124			5.35	20
trans-1,4-Dichloro-2-butene	25.0	30.4	31.1	122	124	33.0-144			2.27	20
2,2-Dichloropropane	25.0	25.2	27.1	101	108	58.0-130			7.37	20
Di-isopropyl ether	25.0	29.5	30.5	118	122	58.0-138			3.31	20

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

(LCS) R3357429-1 11/06/18 10:24 • (LCSD) R3357429-2 11/06/18 10:45

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Ethylbenzene	25.0	22.5	23.8	89.9	95.3	79.0-123			5.81	20
Hexachloro-1,3-butadiene	25.0	21.9	25.0	87.4	99.9	54.0-138			13.3	20
2-Hexanone	125	127	134	101	107	67.0-149			5.23	20
n-Hexane	25.0	25.3	25.5	101	102	57.0-133			0.790	20
Iodomethane	125	124	129	99.1	103	33.0-147			3.69	26
Isopropylbenzene	25.0	24.3	26.5	97.3	106	76.0-127			8.57	20
p-Isopropyltoluene	25.0	24.1	26.2	96.5	105	76.0-125			8.36	20
2-Butanone (MEK)	125	157	160	125	128	44.0-160			2.32	20
Methylene Chloride	25.0	23.4	24.5	93.6	98.0	67.0-120			4.53	20
4-Methyl-2-pentanone (MIBK)	125	145	152	116	122	68.0-142			4.71	20
Methyl tert-butyl ether	25.0	26.6	27.2	106	109	68.0-125			2.09	20
Naphthalene	25.0	22.0	24.5	88.1	98.0	54.0-135			10.6	20
n-Propylbenzene	25.0	24.3	26.2	97.1	105	77.0-124			7.56	20
Styrene	25.0	24.3	26.5	97.1	106	73.0-130			8.68	20
1,1,1,2-Tetrachloroethane	25.0	24.5	25.9	98.0	104	75.0-125			5.63	20
1,1,2,2-Tetrachloroethane	25.0	23.1	25.2	92.5	101	65.0-130			8.52	20
1,1,2-Trichlorotrifluoroethane	25.0	24.6	25.3	98.5	101	69.0-132			2.88	20
Tetrachloroethene	25.0	20.5	22.0	82.0	88.2	72.0-132			7.20	20
Toluene	25.0	22.1	23.3	88.2	93.2	79.0-120			5.49	20
1,2,3-Trichlorobenzene	25.0	22.8	25.6	91.4	102	50.0-138			11.2	20
1,2,4-Trichlorobenzene	25.0	23.5	25.7	93.9	103	57.0-137			9.02	20
1,1,1-Trichloroethane	25.0	28.8	29.8	115	119	73.0-124			3.36	20
1,1,2-Trichloroethane	25.0	22.5	23.5	89.9	93.9	80.0-120			4.39	20
Trichlorofluoromethane	25.0	31.2	32.5	125	130	59.0-147			4.10	20
1,2,3-Trichloropropane	25.0	26.2	28.4	105	113	73.0-130			8.01	20
1,2,4-Trimethylbenzene	25.0	24.8	26.6	99.1	106	76.0-121			7.16	20
1,2,3-Trimethylbenzene	25.0	24.4	26.6	97.5	106	77.0-120			8.68	20
1,3,5-Trimethylbenzene	25.0	25.3	27.2	101	109	76.0-122			7.27	20
Vinyl acetate	125	93.4	105	74.8	83.9	11.0-160			11.5	20
Vinyl chloride	25.0	26.5	27.4	106	110	67.0-131			3.52	20
Xylenes, Total	75.0	67.4	71.2	89.9	94.9	79.0-123			5.48	20
(S) Toluene-d8				*95.5*	*96.2*	*80.0-120*				
(S) Dibromofluoromethane				*112*	*110*	*75.0-120*				
(S) 4-Bromofluorobenzene				*101*	*104*	*77.0-126*				

Method Blank (MB)

(MB) R3356910-4 10/29/18 16:03

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Acetone	U		1.05	25.0
Acrylonitrile	U		0.873	5.00
Benzene	U		0.0896	0.500
Bromobenzene	U		0.133	0.500
Bromodichloromethane	U		0.0800	0.500
Bromochloromethane	U		0.145	0.500
Bromoform	U		0.186	0.500
Bromomethane	U		0.157	2.50
n-Butylbenzene	U		0.143	0.500
sec-Butylbenzene	U		0.134	0.500
tert-Butylbenzene	U		0.183	0.500
Carbon disulfide	U		0.101	0.500
Carbon tetrachloride	U		0.159	0.500
Chlorobenzene	U		0.140	0.500
Chlorodibromomethane	U		0.128	0.500
Chloroethane	U		0.141	2.50
Chloroform	U		0.0860	0.500
2-Chlorotoluene	U		0.111	0.500
4-Chlorotoluene	U		0.0972	0.500
1,2-Dibromo-3-Chloropropane	U		0.325	2.50
1,2-Dibromoethane	U		0.193	0.500
Dibromomethane	U		0.117	0.500
1,2-Dichlorobenzene	U		0.101	0.500
1,3-Dichlorobenzene	U		0.130	0.500
1,4-Dichlorobenzene	U		0.121	0.500
1,1-Dichloroethane	U		0.114	0.500
1,2-Dichloroethane	U		0.108	0.500
1,1-Dichloroethene	U		0.188	0.500
cis-1,2-Dichloroethene	U		0.0933	0.500
trans-1,2-Dichloroethene	U		0.152	0.500
1,2-Dichloropropane	U		0.190	0.500
1,1-Dichloropropene	U		0.128	0.500
1,3-Dichloropropane	U		0.147	1.00
cis-1,3-Dichloropropene	U		0.0976	0.500
trans-1,3-Dichloropropene	U		0.222	0.500
2,2-Dichloropropane	U		0.0929	0.500
Di-isopropyl ether	U		0.0924	0.500
Ethylbenzene	U		0.158	0.500
Hexachloro-1,3-butadiene	U		0.157	1.00
2-Hexanone	U		0.757	5.00

Method Blank (MB)

(MB) R3356910-4 10/29/18 16:03

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
n-Hexane	U		0.305	5.00
Iodomethane	U		0.377	10.0
Isopropylbenzene	U		0.126	0.500
p-Isopropyltoluene	U		0.138	0.500
2-Butanone (MEK)	U		1.28	5.00
Methylene Chloride	U		1.07	2.50
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00
Methyl tert-butyl ether	U		0.102	0.500
Naphthalene	U		0.174	2.50
n-Propylbenzene	U		0.162	0.500
Styrene	U		0.117	0.500
1,1,1,2-Tetrachloroethane	U		0.120	0.500
1,1,2,2-Tetrachloroethane	U		0.130	0.500
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500
Tetrachloroethene	U		0.199	0.500
Toluene	U		0.412	0.500
1,2,3-Trichlorobenzene	U		0.164	0.500
1,2,4-Trichlorobenzene	U		0.355	0.500
1,1,1-Trichloroethane	U		0.0940	0.500
1,1,2-Trichloroethane	U		0.186	0.500
Trichloroethene	U		0.153	0.500
Trichlorofluoromethane	U		0.130	2.50
1,2,3-Trichloropropane	U		0.247	2.50
1,2,4-Trimethylbenzene	U		0.123	0.500
1,2,3-Trimethylbenzene	U		0.0739	0.500
1,3,5-Trimethylbenzene	U		0.124	0.500
Vinyl acetate	U		0.645	5.00
Vinyl chloride	U		0.118	0.500
Xylenes, Total	U		0.316	1.50
(S) Toluene-d8	*103*			*80.0-120*
(S) Dibromofluoromethane	*92.3*			*75.0-120*
(S) 4-Bromofluorobenzene	*97.5*			*77.0-126*

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

(LCS) R3356910-1 10/29/18 14:45 • (LCSD) R3356910-2 10/29/18 15:05

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Acetone	125	82.1	80.1	65.7	64.1	19.0-160			2.39	27
Acrylonitrile	125	97.5	96.6	78.0	77.3	55.0-149			0.905	20
Benzene	25.0	22.6	22.3	90.6	89.0	70.0-123			1.70	20
Bromobenzene	25.0	22.6	24.6	90.4	98.4	73.0-121			8.48	20
Bromodichloromethane	25.0	22.4	22.4	89.6	89.5	75.0-120			0.0545	20
Bromochloromethane	25.0	24.3	24.0	97.0	96.0	76.0-122			1.12	20
Bromoform	25.0	26.0	28.8	104	115	68.0-132			10.2	20
Bromomethane	25.0	18.1	21.0	72.5	84.2	10.0-160			14.9	25
n-Butylbenzene	25.0	18.8	20.2	75.2	80.6	73.0-125			6.96	20
sec-Butylbenzene	25.0	21.6	23.6	86.4	94.6	75.0-125			9.00	20
tert-Butylbenzene	25.0	23.0	25.3	91.9	101	76.0-124			9.43	20
Carbon disulfide	25.0	23.7	22.3	95.0	89.3	61.0-128			6.10	20
Carbon tetrachloride	25.0	22.5	22.1	90.0	88.2	68.0-126			1.99	20
Chlorobenzene	25.0	26.1	25.8	104	103	80.0-121			1.01	20
Chlorodibromomethane	25.0	26.1	25.9	104	104	77.0-125			0.649	20
Chloroethane	25.0	19.8	20.4	79.0	81.6	47.0-150			3.18	20
Chloroform	25.0	22.4	22.1	89.8	88.4	73.0-120			1.57	20
2-Chlorotoluene	25.0	23.4	25.4	93.8	102	76.0-123			8.19	20
4-Chlorotoluene	25.0	23.1	25.0	92.4	100	75.0-122			8.07	20
1,2-Dibromo-3-Chloropropane	25.0	19.1	21.9	76.5	87.5	58.0-134			13.4	20
1,2-Dibromoethane	25.0	24.8	24.8	99.2	99.1	80.0-122			0.0468	20
Dibromomethane	25.0	23.0	23.1	92.0	92.5	80.0-120			0.523	20
1,2-Dichlorobenzene	25.0	21.6	23.2	86.2	92.8	79.0-121			7.34	20
1,3-Dichlorobenzene	25.0	22.9	24.6	91.6	98.3	79.0-120			7.06	20
1,4-Dichlorobenzene	25.0	22.2	24.3	88.7	97.4	79.0-120			9.36	20
1,1-Dichloroethane	25.0	21.8	21.4	87.3	85.5	70.0-126			2.04	20
1,2-Dichloroethane	25.0	19.7	19.7	78.9	78.7	70.0-128			0.233	20
1,1-Dichloroethene	25.0	25.0	23.7	100	94.9	71.0-124			5.29	20
cis-1,2-Dichloroethene	25.0	24.1	23.5	96.4	93.8	73.0-120			2.71	20
trans-1,2-Dichloroethene	25.0	23.4	23.0	93.7	92.2	73.0-120			1.63	20
1,2-Dichloropropane	25.0	23.2	23.0	92.8	91.9	77.0-125			0.997	20
1,1-Dichloropropene	25.0	22.3	21.7	89.2	87.0	74.0-126			2.54	20
1,3-Dichloropropane	25.0	24.2	23.7	96.7	94.8	80.0-120			2.03	20
cis-1,3-Dichloropropene	25.0	24.7	24.4	98.8	97.8	80.0-123			1.06	20
trans-1,3-Dichloropropene	25.0	24.4	24.1	97.7	96.6	78.0-124			1.11	20
2,2-Dichloropropane	25.0	21.9	21.3	87.7	85.4	58.0-130			2.69	20
Di-isopropyl ether	25.0	20.5	20.3	82.1	81.0	58.0-138			1.33	20
Ethylbenzene	25.0	25.8	25.5	103	102	79.0-123			1.18	20
Hexachloro-1,3-butadiene	25.0	20.1	23.3	80.4	93.1	54.0-138			14.6	20
2-Hexanone	125	108	108	86.2	86.2	67.0-149			0.0374	20

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

(LCS) R3356910-1 10/29/18 14:45 • (LCSD) R3356910-2 10/29/18 15:05

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
n-Hexane	25.0	20.7	20.3	82.8	81.3	57.0-133			1.85	20
Iodomethane	125	132	125	105	100	33.0-147			5.12	26
Isopropylbenzene	25.0	23.7	25.6	94.7	103	76.0-127			7.88	20
p-Isopropyltoluene	25.0	21.8	23.8	87.1	95.2	76.0-125			8.88	20
2-Butanone (MEK)	125	87.6	86.1	70.1	68.8	44.0-160			1.73	20
Methylene Chloride	25.0	23.2	22.5	92.7	90.1	67.0-120			2.84	20
4-Methyl-2-pentanone (MIBK)	125	100	101	80.3	80.6	68.0-142			0.367	20
Methyl tert-butyl ether	25.0	21.5	20.8	86.1	83.1	68.0-125			3.61	20
Naphthalene	25.0	18.1	19.9	72.3	79.6	54.0-135			9.62	20
n-Propylbenzene	25.0	22.7	24.9	90.9	99.5	77.0-124			9.05	20
Styrene	25.0	24.8	26.8	99.2	107	73.0-130			7.52	20
1,1,1,2-Tetrachloroethane	25.0	27.0	26.9	108	108	75.0-125			0.528	20
1,1,2,2-Tetrachloroethane	25.0	23.7	26.1	94.9	104	65.0-130			9.48	20
1,1,2-Trichlorotrifluoroethane	25.0	24.3	25.4	97.3	102	69.0-132			4.29	20
Tetrachloroethene	25.0	26.8	26.5	107	106	72.0-132			0.926	20
Toluene	25.0	24.8	24.4	99.4	97.5	79.0-120			1.94	20
1,2,3-Trichlorobenzene	25.0	19.4	21.7	77.4	86.8	50.0-138			11.5	20
1,2,4-Trichlorobenzene	25.0	20.0	22.1	80.1	88.3	57.0-137			9.74	20
1,1,1-Trichloroethane	25.0	23.0	22.4	92.0	89.5	73.0-124			2.77	20
1,1,2-Trichloroethane	25.0	25.0	25.0	100	100	80.0-120			0.0538	20
Trichloroethene	25.0	25.2	25.1	101	100	78.0-124			0.315	20
Trichlorofluoromethane	25.0	21.2	21.4	85.0	85.5	59.0-147			0.621	20
1,2,3-Trichloropropane	25.0	24.0	25.5	95.9	102	73.0-130			6.34	20
1,2,4-Trimethylbenzene	25.0	22.6	24.7	90.5	98.8	76.0-121			8.73	20
1,2,3-Trimethylbenzene	25.0	21.4	23.0	85.5	92.2	77.0-120			7.48	20
1,3,5-Trimethylbenzene	25.0	23.7	25.8	94.8	103	76.0-122			8.43	20
Vinyl acetate	125	128	129	103	103	11.0-160			0.600	20
Vinyl chloride	25.0	20.7	20.9	82.8	83.8	67.0-131			1.10	20
Xylenes, Total	75.0	76.3	75.1	102	100	79.0-123			1.59	20
(S) Toluene-d8				*101*	*100*	*80.0-120*				
(S) Dibromofluoromethane				*91.5*	*90.1*	*75.0-120*				
(S) 4-Bromofluorobenzene				*93.2*	*97.5*	*77.0-126*				

Method Blank (MB)

(MB) R3357085-5 11/05/18 10:55

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Chloromethane	U		0.153	1.25
Dichlorodifluoromethane	U		0.127	2.50
cis-1,2-Dichloroethene	0.203	J	0.0933	0.500
trans-1,4-Dichloro-2-butene	U		0.257	5.00
Tetrachloroethene	U		0.199	0.500
Trichloroethene	0.985		0.153	0.500
Vinyl chloride	U		0.118	0.500
(S) Toluene-d8	*106*			*80.0-120*
(S) Dibromofluoromethane	*91.1*			*75.0-120*
(S) 4-Bromofluorobenzene	*87.9*			*77.0-126*

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

(LCS) R3357085-1 11/05/18 09:16 • (LCSD) R3357085-2 11/05/18 09:36

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Chloromethane	25.0	20.3	20.8	81.0	83.4	41.0-142			2.87	20
Dichlorodifluoromethane	25.0	26.6	26.8	106	107	51.0-149			0.717	20
cis-1,2-Dichloroethene	25.0	25.4	24.4	102	97.5	73.0-120			4.07	20
trans-1,4-Dichloro-2-butene	25.0	20.1	21.1	80.3	84.5	33.0-144			5.12	20
Tetrachloroethene	25.0	27.7	28.4	111	114	72.0-132			2.39	20
Trichloroethene	25.0	28.1	29.0	113	116	78.0-124			2.98	20
Vinyl chloride	25.0	26.0	26.4	104	106	67.0-131			1.57	20
(S) Toluene-d8				*103*	*103*	*80.0-120*				
(S) Dibromofluoromethane				*88.5*	*88.5*	*75.0-120*				
(S) 4-Bromofluorobenzene				*82.7*	*82.9*	*77.0-126*				

Method Blank (MB)

(MB) R3357448-3 11/06/18 11:11

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Trichloroethene	U		0.153	0.500
(S) Toluene-d8	*104*			*80.0-120*
(S) Dibromofluoromethane	*101*			*75.0-120*
(S) 4-Bromofluorobenzene	*98.2*			*77.0-126*

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

(LCS) R3357448-1 11/06/18 10:15 • (LCSD) R3357448-2 11/06/18 10:34

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Trichloroethene	25.0	23.0	22.5	91.8	90.1	78.0-124			1.91	20
(S) Toluene-d8				*101*	*103*	*80.0-120*				
(S) Dibromofluoromethane				*100*	*93.7*	*75.0-120*				
(S) 4-Bromofluorobenzene				*102*	*104*	*77.0-126*				

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

Guide to Reading and Understanding Your Laboratory Report

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

Abbreviations and Definitions

MDL	Method Detection Limit.
RDL	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
(S)	Surrogate (Surrogate Standard) - Analytes added to every blank, sample, Laboratory Control Sample/Duplicate and Matrix Spike/Duplicate; used to evaluate analytical efficiency by measuring recovery. Surrogates are not expected to be detected in all environmental media.
U	Not detected at the Reporting Limit (or MDL where applicable).
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.
Dilution	If the sample matrix contains an interfering material, the sample preparation volume or weight values differ from the standard, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor.
Limits	These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges.
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.
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.
Quality Control Summary (Qc)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.

Qualifier	Description
B	The same analyte is found in the associated blank.
J	The identification of the analyte is acceptable; the reported value is an estimate.
J0	J0: Calibration verification outside of acceptance limits. Result is estimated.

Pace National is the only environmental laboratory accredited/certified to support your work nationwide from one location. One phone call, one point of contact, one laboratory. No other lab is as accessible or prepared to handle your needs throughout the country. Our capacity and capability from our single location laboratory is comparable to the collective totals of the network laboratories in our industry. The most significant benefit to our one location design is the design of our laboratory campus. The model is conducive to accelerated productivity, decreasing turn-around time, and preventing cross contamination, thus protecting sample integrity. Our focus on premium quality and prompt service allows us to be YOUR LAB OF CHOICE.
* Not all certifications held by the laboratory are applicable to the results reported in the attached report.
* Accreditation is only applicable to the test methods specified on each scope of accreditation held by Pace National.

State Accreditations

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN-03-2002-34
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey–NELAP	TN002
California	2932	New Mexico [1]	n/a
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina [1]	DW21704
Georgia	NELAP	North Carolina [3]	41
Georgia [1]	923	North Dakota	R-140
Idaho	TN00003	Ohio–VAP	CL0069
Illinois	200008	Oklahoma	9915
Indiana	C-TN-01	Oregon	TN200002
Iowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	LAO00356
Kentucky [1 6]	90010	South Carolina	84004
Kentucky [2]	16	South Dakota	n/a
Louisiana	AI30792	Tennessee [1 4]	2006
Louisiana [1]	LA180010	Texas	T 104704245-17-14
Maine	TN0002	Texas [5]	LAB0152
Maryland	324	Utah	TN00003
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	460132
Minnesota	047-999-395	Washington	C847
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	9980939910
Montana	CERT0086	Wyoming	A2LA

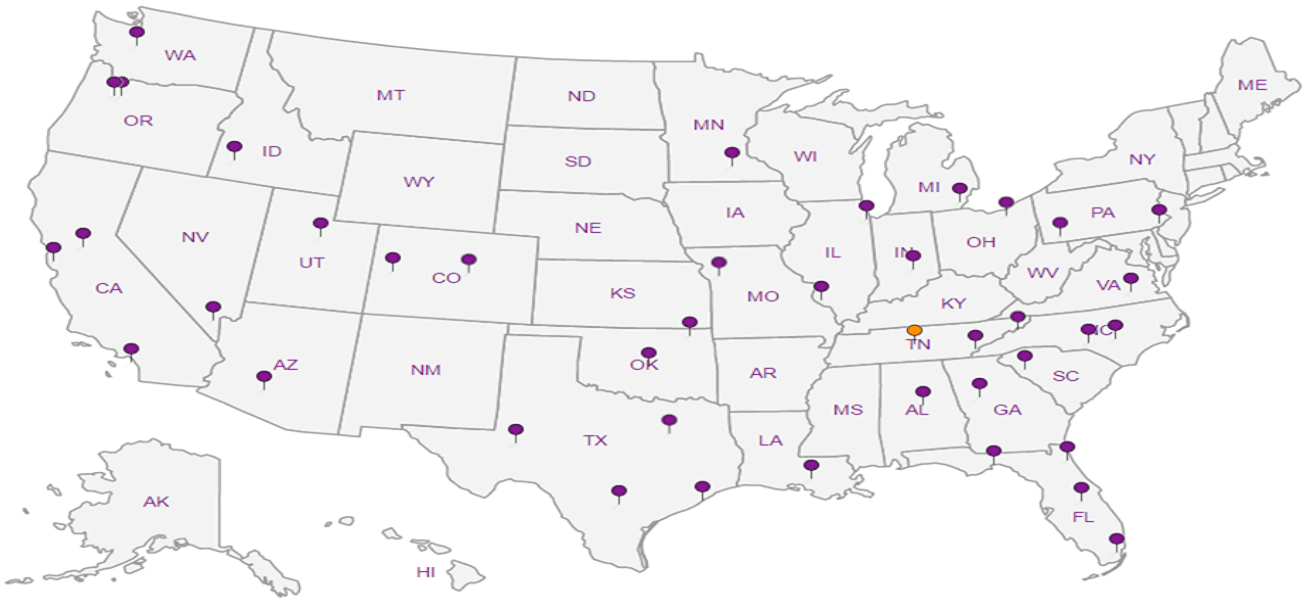
Third Party Federal Accreditations

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

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

Our Locations

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



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

Report to: Bill Haldeman

Email To: bhaldeman@pesenv.com

Project Description: American Linen

City/State Collected:

Phone: 206-529-3980
Fax: 206-529-3985

Client Project # 1413.001.05.601

Lab Project # PESENVSWA-HALDEMAN

Collected by (print): R. McLaughlin

Site/Facility ID #

P.O. #

Collected by (signature): RT McLaughl

Immediately Packed on ice N ___ Y X

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

Quote #

Date Results Needed

Analysis / Container / Preservative

Chain of Custody Page ___ of ___

Pace Analytical
National Center for Testing & Innovation

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

L# L1038864

D162

Acctnum: PESENVSWA
Template: T141146
Prelogin: P673966
TSR: 110 - Brian Ford
PB:

Shipped Via: FedEX Ground

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	V8260C 40mlAmb-HCl	Remarks	Sample # (lab only)
MW-300-102618	Grab	GW	75	10/26/18	1300	3	X		-01
MW-MW-02-102618		GW	75		1200	3	X		-02
MW-152-102618		GW	55		807	3	X		-03
MW-151-102518		GW	40	10/25/18	1617	3	X		-04
MW-131-102518		GW	49		1447	3	X		-05
MW-139-102518		GW	75		1357	3	X		-06
MW-132-102518		GW	75		1307	3	X		-07
MW-135-102518		GW	74.5'		1212	3	X		-08
MW-150-102518		GW	54		1112	3	X		-09
MW-149-102518	X	GW	39.5'	X	1028	3	X		-10

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

Remarks:

RAD SCREEN: <0.5 mR/hr

pH _____ Temp _____

Flow _____ Other _____

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

Tracking #

Sample Receipt Checklist
COC Seal Present/Intact: NP Y N
COC Signed/Accurate: Y N
Bottles arrive intact: Y N
Correct bottles used: Y N
Sufficient volume sent: Y N
If Applicable
VOA Zero Headspace: Y N
Preservation Correct/Checked: Y N

Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)
RT McLaughlin	10/26/18	1400	
	10/26/18	1600	
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)
			Marie Tisdale

Trip Blank Received: Yes / No
1 HCl / MeoH
TBR

Temp: °C Bottles Received:
0.2+0.2=0.4 27

If preservation required by Login: Date/Time
+TB

Date: 10/27 Time: 8:45

Hold:

Condition: NCF / OK

Pace Analytical®
National Center for Testing & Innovation

ANALYTICAL REPORT

November 06, 2018

PES Environmental, Inc.- WA

Sample Delivery Group:	L1038867
Samples Received:	10/27/2018
Project Number:	1413.001.05.601
Description:	American Linen
Report To:	Brian O'Neal/Bill Haldeman
	1215 Fourth Ave., Suite 1350
	Seattle, WA 98161

Entire Report Reviewed By:

Brian Ford

Project Manager

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

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MW-134-102518 L1038867-01 GW

Collected by: Ben Hecht | Collected date/time: 10/25/18 12:00 | Received date/time: 10/27/18 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1189621	1	11/01/18 17:54	11/01/18 17:54	LRL
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1188131	1	10/29/18 22:11	10/29/18 22:11	JHH
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1191602	1	11/05/18 15:29	11/05/18 15:29	JHH

MW-141-102518 L1038867-02 GW

Collected by: Ben Hecht | Collected date/time: 10/25/18 13:20 | Received date/time: 10/27/18 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1189621	1	11/01/18 18:17	11/01/18 18:17	LRL
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1188131	1	10/29/18 22:31	10/29/18 22:31	JHH
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1191602	1	11/05/18 15:50	11/05/18 15:50	JHH

MW-104-102618 L1038867-03 GW

Collected by: Ben Hecht | Collected date/time: 10/26/18 08:45 | Received date/time: 10/27/18 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1189621	1	11/01/18 18:39	11/01/18 18:39	LRL
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1188131	1	10/29/18 22:50	10/29/18 22:50	JHH
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1191602	1	11/05/18 16:10	11/05/18 16:10	JHH

MW-133-102618 L1038867-04 GW

Collected by: Ben Hecht | Collected date/time: 10/26/18 11:05 | Received date/time: 10/27/18 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1189621	1	11/01/18 19:02	11/01/18 19:02	LRL
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1188131	1	10/29/18 23:10	10/29/18 23:10	JHH
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1191602	1	11/05/18 16:30	11/05/18 16:30	JHH

MW-137-102618 L1038867-05 GW

Collected by: Ben Hecht | Collected date/time: 10/26/18 13:30 | Received date/time: 10/27/18 08:45

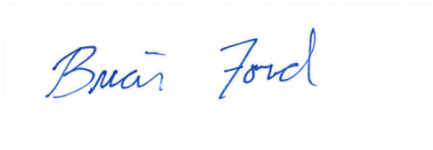
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1189621	1	11/01/18 19:25	11/01/18 19:25	LRL
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1188131	1	10/29/18 23:29	10/29/18 23:29	JHH
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1191602	1	11/05/18 16:51	11/05/18 16:51	JHH

RINSATE L1038867-06 GW

Collected by: Ben Hecht | Collected date/time: 10/26/18 12:15 | Received date/time: 10/27/18 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1189621	1	11/01/18 19:47	11/01/18 19:47	LRL
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1188131	1	10/29/18 23:48	10/29/18 23:48	JHH
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1191602	1	11/05/18 17:11	11/05/18 17:11	JHH

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



Brian Ford
Project Manager

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	38.2	B J	31.6	100	1	11/01/2018 17:54	WG1189621
(S) a,a,a-Trifluorotoluene(FID)	*96.7*			*78.0-120*		*11/01/2018 17:54*	WG1189621

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U	J0	1.05	25.0	1	10/29/2018 22:11	WG1188131
Acrylonitrile	U	J0	0.873	5.00	1	10/29/2018 22:11	WG1188131
Benzene	U		0.0896	0.500	1	11/05/2018 15:29	WG1191602
Bromobenzene	U		0.133	0.500	1	10/29/2018 22:11	WG1188131
Bromodichloromethane	U		0.0800	0.500	1	10/29/2018 22:11	WG1188131
Bromochloromethane	U		0.145	0.500	1	10/29/2018 22:11	WG1188131
Bromoform	U		0.186	0.500	1	10/29/2018 22:11	WG1188131
Bromomethane	U	J0	0.157	2.50	1	10/29/2018 22:11	WG1188131
n-Butylbenzene	U	J0	0.143	0.500	1	10/29/2018 22:11	WG1188131
sec-Butylbenzene	U		0.134	0.500	1	10/29/2018 22:11	WG1188131
tert-Butylbenzene	U		0.183	0.500	1	10/29/2018 22:11	WG1188131
Carbon disulfide	U		0.101	0.500	1	10/29/2018 22:11	WG1188131
Carbon tetrachloride	U		0.159	0.500	1	10/29/2018 22:11	WG1188131
Chlorobenzene	U		0.140	0.500	1	10/29/2018 22:11	WG1188131
Chlorodibromomethane	U		0.128	0.500	1	10/29/2018 22:11	WG1188131
Chloroethane	U	J0	0.141	2.50	1	10/29/2018 22:11	WG1188131
Chloroform	U		0.0860	0.500	1	10/29/2018 22:11	WG1188131
Chloromethane	U		0.153	1.25	1	11/05/2018 15:29	WG1191602
2-Chlorotoluene	U		0.111	0.500	1	10/29/2018 22:11	WG1188131
4-Chlorotoluene	U		0.0972	0.500	1	10/29/2018 22:11	WG1188131
1,2-Dibromo-3-Chloropropane	U	J0	0.325	2.50	1	10/29/2018 22:11	WG1188131
1,2-Dibromoethane	U		0.193	0.500	1	10/29/2018 22:11	WG1188131
Dibromomethane	U		0.117	0.500	1	10/29/2018 22:11	WG1188131
1,2-Dichlorobenzene	U		0.101	0.500	1	10/29/2018 22:11	WG1188131
1,3-Dichlorobenzene	U		0.130	0.500	1	10/29/2018 22:11	WG1188131
1,4-Dichlorobenzene	U		0.121	0.500	1	10/29/2018 22:11	WG1188131
Dichlorodifluoromethane	U		0.127	2.50	1	11/05/2018 15:29	WG1191602
1,1-Dichloroethane	U		0.114	0.500	1	10/29/2018 22:11	WG1188131
1,2-Dichloroethane	U	J0	0.108	0.500	1	10/29/2018 22:11	WG1188131
1,1-Dichloroethene	U		0.188	0.500	1	10/29/2018 22:11	WG1188131
cis-1,2-Dichloroethene	U		0.0933	0.500	1	11/05/2018 15:29	WG1191602
trans-1,2-Dichloroethene	U		0.152	0.500	1	10/29/2018 22:11	WG1188131
1,2-Dichloropropane	U		0.190	0.500	1	10/29/2018 22:11	WG1188131
1,1-Dichloropropene	U		0.128	0.500	1	10/29/2018 22:11	WG1188131
1,3-Dichloropropane	U		0.147	1.00	1	10/29/2018 22:11	WG1188131
cis-1,3-Dichloropropene	U		0.0976	0.500	1	10/29/2018 22:11	WG1188131
trans-1,3-Dichloropropene	U		0.222	0.500	1	10/29/2018 22:11	WG1188131
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	11/05/2018 15:29	WG1191602
2,2-Dichloropropane	U		0.0929	0.500	1	10/29/2018 22:11	WG1188131
Di-isopropyl ether	U		0.0924	0.500	1	10/29/2018 22:11	WG1188131
Ethylbenzene	U		0.158	0.500	1	11/05/2018 15:29	WG1191602
Hexachloro-1,3-butadiene	U		0.157	1.00	1	10/29/2018 22:11	WG1188131
2-Hexanone	U		0.757	5.00	1	10/29/2018 22:11	WG1188131
n-Hexane	U		0.305	5.00	1	10/29/2018 22:11	WG1188131
Iodomethane	U		0.377	10.0	1	10/29/2018 22:11	WG1188131
Isopropylbenzene	U		0.126	0.500	1	10/29/2018 22:11	WG1188131
p-Isopropyltoluene	U		0.138	0.500	1	10/29/2018 22:11	WG1188131
2-Butanone (MEK)	U	J0	1.28	5.00	1	10/29/2018 22:11	WG1188131

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Methylene Chloride	U		1.07	2.50	1	10/29/2018 22:11	WG1188131
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	10/29/2018 22:11	WG1188131
Methyl tert-butyl ether	U		0.102	0.500	1	10/29/2018 22:11	WG1188131
Naphthalene	U	J0	0.174	2.50	1	11/05/2018 15:29	WG1191602
n-Propylbenzene	U		0.162	0.500	1	10/29/2018 22:11	WG1188131
Styrene	U		0.117	0.500	1	10/29/2018 22:11	WG1188131
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	10/29/2018 22:11	WG1188131
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	10/29/2018 22:11	WG1188131
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	10/29/2018 22:11	WG1188131
Tetrachloroethene	U		0.199	0.500	1	11/05/2018 15:29	WG1191602
Toluene	U		0.412	0.500	1	11/05/2018 15:29	WG1191602
1,2,3-Trichlorobenzene	U	J0	0.164	0.500	1	10/29/2018 22:11	WG1188131
1,2,4-Trichlorobenzene	U		0.355	0.500	1	10/29/2018 22:11	WG1188131
1,1,1-Trichloroethane	U		0.0940	0.500	1	10/29/2018 22:11	WG1188131
1,1,2-Trichloroethane	U		0.186	0.500	1	10/29/2018 22:11	WG1188131
Trichloroethene	U		0.153	0.500	1	11/05/2018 15:29	WG1191602
Trichlorofluoromethane	U		0.130	2.50	1	10/29/2018 22:11	WG1188131
1,2,3-Trichloropropane	U		0.247	2.50	1	10/29/2018 22:11	WG1188131
1,2,4-Trimethylbenzene	U		0.123	0.500	1	11/05/2018 15:29	WG1191602
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	11/05/2018 15:29	WG1191602
1,3,5-Trimethylbenzene	U		0.124	0.500	1	11/05/2018 15:29	WG1191602
Vinyl acetate	U		0.645	5.00	1	10/29/2018 22:11	WG1188131
Vinyl chloride	20.9		0.118	0.500	1	10/29/2018 22:11	WG1188131
Xylenes, Total	U		0.316	1.50	1	11/05/2018 15:29	WG1191602
(S) Toluene-d8	*103*			*80.0-120*		*10/29/2018 22:11*	WG1188131
(S) Toluene-d8	*105*			*80.0-120*		*11/05/2018 15:29*	WG1191602
(S) Dibromofluoromethane	*90.8*			*75.0-120*		*10/29/2018 22:11*	WG1188131
(S) Dibromofluoromethane	*105*			*75.0-120*		*11/05/2018 15:29*	WG1191602
(S) 4-Bromofluorobenzene	*97.8*			*77.0-126*		*10/29/2018 22:11*	WG1188131
(S) 4-Bromofluorobenzene	*104*			*77.0-126*		*11/05/2018 15:29*	WG1191602

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		31.6	100	1	11/01/2018 18:17	WG1189621
(S) a,a,a-Trifluorotoluene(FID)	*96.7*			*78.0-120*		*11/01/2018 18:17*	WG1189621

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U	J0	1.05	25.0	1	10/29/2018 22:31	WG1188131
Acrylonitrile	U	J0	0.873	5.00	1	10/29/2018 22:31	WG1188131
Benzene	U		0.0896	0.500	1	11/05/2018 15:50	WG1191602
Bromobenzene	U		0.133	0.500	1	10/29/2018 22:31	WG1188131
Bromodichloromethane	U		0.0800	0.500	1	10/29/2018 22:31	WG1188131
Bromochloromethane	U		0.145	0.500	1	10/29/2018 22:31	WG1188131
Bromoform	U		0.186	0.500	1	10/29/2018 22:31	WG1188131
Bromomethane	U	J0	0.157	2.50	1	10/29/2018 22:31	WG1188131
n-Butylbenzene	U	J0	0.143	0.500	1	10/29/2018 22:31	WG1188131
sec-Butylbenzene	U		0.134	0.500	1	10/29/2018 22:31	WG1188131
tert-Butylbenzene	U		0.183	0.500	1	10/29/2018 22:31	WG1188131
Carbon disulfide	0.317	J	0.101	0.500	1	10/29/2018 22:31	WG1188131
Carbon tetrachloride	U		0.159	0.500	1	10/29/2018 22:31	WG1188131
Chlorobenzene	U		0.140	0.500	1	10/29/2018 22:31	WG1188131
Chlorodibromomethane	U		0.128	0.500	1	10/29/2018 22:31	WG1188131
Chloroethane	U	J0	0.141	2.50	1	10/29/2018 22:31	WG1188131
Chloroform	U		0.0860	0.500	1	10/29/2018 22:31	WG1188131
Chloromethane	U		0.153	1.25	1	11/05/2018 15:50	WG1191602
2-Chlorotoluene	U		0.111	0.500	1	10/29/2018 22:31	WG1188131
4-Chlorotoluene	U		0.0972	0.500	1	10/29/2018 22:31	WG1188131
1,2-Dibromo-3-Chloropropane	U	J0	0.325	2.50	1	10/29/2018 22:31	WG1188131
1,2-Dibromoethane	U		0.193	0.500	1	10/29/2018 22:31	WG1188131
Dibromomethane	U		0.117	0.500	1	10/29/2018 22:31	WG1188131
1,2-Dichlorobenzene	U		0.101	0.500	1	10/29/2018 22:31	WG1188131
1,3-Dichlorobenzene	U		0.130	0.500	1	10/29/2018 22:31	WG1188131
1,4-Dichlorobenzene	U		0.121	0.500	1	10/29/2018 22:31	WG1188131
Dichlorodifluoromethane	U		0.127	2.50	1	11/05/2018 15:50	WG1191602
1,1-Dichloroethane	U		0.114	0.500	1	10/29/2018 22:31	WG1188131
1,2-Dichloroethane	U	J0	0.108	0.500	1	10/29/2018 22:31	WG1188131
1,1-Dichloroethene	U		0.188	0.500	1	10/29/2018 22:31	WG1188131
cis-1,2-Dichloroethene	3.10		0.0933	0.500	1	11/05/2018 15:50	WG1191602
trans-1,2-Dichloroethene	U		0.152	0.500	1	10/29/2018 22:31	WG1188131
1,2-Dichloropropane	U		0.190	0.500	1	10/29/2018 22:31	WG1188131
1,1-Dichloropropene	U		0.128	0.500	1	10/29/2018 22:31	WG1188131
1,3-Dichloropropane	U		0.147	1.00	1	10/29/2018 22:31	WG1188131
cis-1,3-Dichloropropene	U		0.0976	0.500	1	10/29/2018 22:31	WG1188131
trans-1,3-Dichloropropene	U		0.222	0.500	1	10/29/2018 22:31	WG1188131
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	11/05/2018 15:50	WG1191602
2,2-Dichloropropane	U		0.0929	0.500	1	10/29/2018 22:31	WG1188131
Di-isopropyl ether	U		0.0924	0.500	1	10/29/2018 22:31	WG1188131
Ethylbenzene	U		0.158	0.500	1	10/29/2018 22:31	WG1188131
Hexachloro-1,3-butadiene	U		0.157	1.00	1	10/29/2018 22:31	WG1188131
2-Hexanone	U		0.757	5.00	1	10/29/2018 22:31	WG1188131
n-Hexane	U		0.305	5.00	1	10/29/2018 22:31	WG1188131
Iodomethane	U		0.377	10.0	1	10/29/2018 22:31	WG1188131
Isopropylbenzene	U		0.126	0.500	1	10/29/2018 22:31	WG1188131
p-Isopropyltoluene	U		0.138	0.500	1	10/29/2018 22:31	WG1188131
2-Butanone (MEK)	U	J0	1.28	5.00	1	10/29/2018 22:31	WG1188131

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Methylene Chloride	U		1.07	2.50	1	10/29/2018 22:31	WG1188131
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	10/29/2018 22:31	WG1188131
Methyl tert-butyl ether	U		0.102	0.500	1	10/29/2018 22:31	WG1188131
Naphthalene	U	J0	0.174	2.50	1	11/05/2018 15:50	WG1191602
n-Propylbenzene	U		0.162	0.500	1	10/29/2018 22:31	WG1188131
Styrene	U		0.117	0.500	1	10/29/2018 22:31	WG1188131
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	10/29/2018 22:31	WG1188131
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	10/29/2018 22:31	WG1188131
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	10/29/2018 22:31	WG1188131
Tetrachloroethene	U		0.199	0.500	1	11/05/2018 15:50	WG1191602
Toluene	U		0.412	0.500	1	11/05/2018 15:50	WG1191602
1,2,3-Trichlorobenzene	U	J0	0.164	0.500	1	10/29/2018 22:31	WG1188131
1,2,4-Trichlorobenzene	U		0.355	0.500	1	10/29/2018 22:31	WG1188131
1,1,1-Trichloroethane	U		0.0940	0.500	1	10/29/2018 22:31	WG1188131
1,1,2-Trichloroethane	U		0.186	0.500	1	10/29/2018 22:31	WG1188131
Trichloroethene	U		0.153	0.500	1	11/05/2018 15:50	WG1191602
Trichlorofluoromethane	U		0.130	2.50	1	10/29/2018 22:31	WG1188131
1,2,3-Trichloropropane	U		0.247	2.50	1	10/29/2018 22:31	WG1188131
1,2,4-Trimethylbenzene	U		0.123	0.500	1	11/05/2018 15:50	WG1191602
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	10/29/2018 22:31	WG1188131
1,3,5-Trimethylbenzene	U		0.124	0.500	1	10/29/2018 22:31	WG1188131
Vinyl acetate	U		0.645	5.00	1	10/29/2018 22:31	WG1188131
Vinyl chloride	U		0.118	0.500	1	10/29/2018 22:31	WG1188131
Xylenes, Total	U		0.316	1.50	1	11/05/2018 15:50	WG1191602
(S) Toluene-d8	*103*			*80.0-120*		*10/29/2018 22:31*	WG1188131
(S) Toluene-d8	*106*			*80.0-120*		*11/05/2018 15:50*	WG1191602
(S) Dibromofluoromethane	*91.9*			*75.0-120*		*10/29/2018 22:31*	WG1188131
(S) Dibromofluoromethane	*103*			*75.0-120*		*11/05/2018 15:50*	WG1191602
(S) 4-Bromofluorobenzene	*95.4*			*77.0-126*		*10/29/2018 22:31*	WG1188131
(S) 4-Bromofluorobenzene	*107*			*77.0-126*		*11/05/2018 15:50*	WG1191602

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	1570		31.6	100	1	11/01/2018 18:39	WG1189621
(S) a,a,a-Trifluorotoluene(FID)	*95.4*			*78.0-120*		*11/01/2018 18:39*	WG1189621

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	2.91	J J0	1.05	25.0	1	10/29/2018 22:50	WG1188131
Acrylonitrile	U	J0	0.873	5.00	1	10/29/2018 22:50	WG1188131
Benzene	U		0.0896	0.500	1	11/05/2018 16:10	WG1191602
Bromobenzene	U		0.133	0.500	1	10/29/2018 22:50	WG1188131
Bromodichloromethane	U		0.0800	0.500	1	10/29/2018 22:50	WG1188131
Bromochloromethane	U		0.145	0.500	1	10/29/2018 22:50	WG1188131
Bromoform	U		0.186	0.500	1	10/29/2018 22:50	WG1188131
Bromomethane	U	J0	0.157	2.50	1	10/29/2018 22:50	WG1188131
n-Butylbenzene	U	J0	0.143	0.500	1	10/29/2018 22:50	WG1188131
sec-Butylbenzene	U		0.134	0.500	1	10/29/2018 22:50	WG1188131
tert-Butylbenzene	U		0.183	0.500	1	10/29/2018 22:50	WG1188131
Carbon disulfide	0.675		0.101	0.500	1	10/29/2018 22:50	WG1188131
Carbon tetrachloride	U		0.159	0.500	1	10/29/2018 22:50	WG1188131
Chlorobenzene	U		0.140	0.500	1	10/29/2018 22:50	WG1188131
Chlorodibromomethane	U		0.128	0.500	1	10/29/2018 22:50	WG1188131
Chloroethane	U	J0	0.141	2.50	1	10/29/2018 22:50	WG1188131
Chloroform	U		0.0860	0.500	1	10/29/2018 22:50	WG1188131
Chloromethane	U		0.153	1.25	1	11/05/2018 16:10	WG1191602
2-Chlorotoluene	U		0.111	0.500	1	10/29/2018 22:50	WG1188131
4-Chlorotoluene	U		0.0972	0.500	1	10/29/2018 22:50	WG1188131
1,2-Dibromo-3-Chloropropane	U	J0	0.325	2.50	1	10/29/2018 22:50	WG1188131
1,2-Dibromoethane	U		0.193	0.500	1	10/29/2018 22:50	WG1188131
Dibromomethane	U		0.117	0.500	1	10/29/2018 22:50	WG1188131
1,2-Dichlorobenzene	U		0.101	0.500	1	10/29/2018 22:50	WG1188131
1,3-Dichlorobenzene	U		0.130	0.500	1	10/29/2018 22:50	WG1188131
1,4-Dichlorobenzene	U		0.121	0.500	1	10/29/2018 22:50	WG1188131
Dichlorodifluoromethane	U		0.127	2.50	1	11/05/2018 16:10	WG1191602
1,1-Dichloroethane	U		0.114	0.500	1	10/29/2018 22:50	WG1188131
1,2-Dichloroethane	U	J0	0.108	0.500	1	10/29/2018 22:50	WG1188131
1,1-Dichloroethene	0.374	J	0.188	0.500	1	10/29/2018 22:50	WG1188131
cis-1,2-Dichloroethene	71.2		0.0933	0.500	1	10/29/2018 22:50	WG1188131
trans-1,2-Dichloroethene	0.257	J	0.152	0.500	1	10/29/2018 22:50	WG1188131
1,2-Dichloropropane	U		0.190	0.500	1	10/29/2018 22:50	WG1188131
1,1-Dichloropropene	U		0.128	0.500	1	10/29/2018 22:50	WG1188131
1,3-Dichloropropane	U		0.147	1.00	1	10/29/2018 22:50	WG1188131
cis-1,3-Dichloropropene	U		0.0976	0.500	1	10/29/2018 22:50	WG1188131
trans-1,3-Dichloropropene	U		0.222	0.500	1	10/29/2018 22:50	WG1188131
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	11/05/2018 16:10	WG1191602
2,2-Dichloropropane	U		0.0929	0.500	1	10/29/2018 22:50	WG1188131
Di-isopropyl ether	U		0.0924	0.500	1	10/29/2018 22:50	WG1188131
Ethylbenzene	U		0.158	0.500	1	10/29/2018 22:50	WG1188131
Hexachloro-1,3-butadiene	U		0.157	1.00	1	10/29/2018 22:50	WG1188131
2-Hexanone	U		0.757	5.00	1	10/29/2018 22:50	WG1188131
n-Hexane	U		0.305	5.00	1	10/29/2018 22:50	WG1188131
Iodomethane	U		0.377	10.0	1	10/29/2018 22:50	WG1188131
Isopropylbenzene	U		0.126	0.500	1	10/29/2018 22:50	WG1188131
p-Isopropyltoluene	U		0.138	0.500	1	10/29/2018 22:50	WG1188131
2-Butanone (MEK)	U	J0	1.28	5.00	1	10/29/2018 22:50	WG1188131

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Methylene Chloride	U		1.07	2.50	1	10/29/2018 22:50	WG1188131
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	10/29/2018 22:50	WG1188131
Methyl tert-butyl ether	U		0.102	0.500	1	10/29/2018 22:50	WG1188131
Naphthalene	U	J0	0.174	2.50	1	11/05/2018 16:10	WG1191602
n-Propylbenzene	U		0.162	0.500	1	10/29/2018 22:50	WG1188131
Styrene	U		0.117	0.500	1	10/29/2018 22:50	WG1188131
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	10/29/2018 22:50	WG1188131
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	10/29/2018 22:50	WG1188131
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	10/29/2018 22:50	WG1188131
Tetrachloroethene	1.87		0.199	0.500	1	10/29/2018 22:50	WG1188131
Toluene	0.618		0.412	0.500	1	11/05/2018 16:10	WG1191602
1,2,3-Trichlorobenzene	U	J0	0.164	0.500	1	10/29/2018 22:50	WG1188131
1,2,4-Trichlorobenzene	U		0.355	0.500	1	10/29/2018 22:50	WG1188131
1,1,1-Trichloroethane	U		0.0940	0.500	1	10/29/2018 22:50	WG1188131
1,1,2-Trichloroethane	U		0.186	0.500	1	10/29/2018 22:50	WG1188131
Trichloroethene	2.94		0.153	0.500	1	10/29/2018 22:50	WG1188131
Trichlorofluoromethane	U		0.130	2.50	1	10/29/2018 22:50	WG1188131
1,2,3-Trichloropropane	U		0.247	2.50	1	10/29/2018 22:50	WG1188131
1,2,4-Trimethylbenzene	U		0.123	0.500	1	10/29/2018 22:50	WG1188131
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	10/29/2018 22:50	WG1188131
1,3,5-Trimethylbenzene	U		0.124	0.500	1	10/29/2018 22:50	WG1188131
Vinyl acetate	U		0.645	5.00	1	10/29/2018 22:50	WG1188131
Vinyl chloride	43.5		0.118	0.500	1	10/29/2018 22:50	WG1188131
Xylenes, Total	U		0.316	1.50	1	11/05/2018 16:10	WG1191602
(S) Toluene-d8	*103*			*80.0-120*		*10/29/2018 22:50*	WG1188131
(S) Toluene-d8	*104*			*80.0-120*		*11/05/2018 16:10*	WG1191602
(S) Dibromofluoromethane	*92.2*			*75.0-120*		*10/29/2018 22:50*	WG1188131
(S) Dibromofluoromethane	*106*			*75.0-120*		*11/05/2018 16:10*	WG1191602
(S) 4-Bromofluorobenzene	*95.3*			*77.0-126*		*10/29/2018 22:50*	WG1188131
(S) 4-Bromofluorobenzene	*111*			*77.0-126*		*11/05/2018 16:10*	WG1191602

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	458		31.6	100	1	11/01/2018 19:02	WG1189621
(S) a,a,a-Trifluorotoluene(FID)	*96.7*			*78.0-120*		*11/01/2018 19:02*	WG1189621

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	1.14	J J0	1.05	25.0	1	10/29/2018 23:10	WG1188131
Acrylonitrile	U	J0	0.873	5.00	1	10/29/2018 23:10	WG1188131
Benzene	U		0.0896	0.500	1	11/05/2018 16:30	WG1191602
Bromobenzene	U		0.133	0.500	1	10/29/2018 23:10	WG1188131
Bromodichloromethane	U		0.0800	0.500	1	10/29/2018 23:10	WG1188131
Bromochloromethane	U		0.145	0.500	1	10/29/2018 23:10	WG1188131
Bromoform	U		0.186	0.500	1	10/29/2018 23:10	WG1188131
Bromomethane	U	J0	0.157	2.50	1	10/29/2018 23:10	WG1188131
n-Butylbenzene	U	J0	0.143	0.500	1	10/29/2018 23:10	WG1188131
sec-Butylbenzene	U		0.134	0.500	1	10/29/2018 23:10	WG1188131
tert-Butylbenzene	U		0.183	0.500	1	10/29/2018 23:10	WG1188131
Carbon disulfide	0.205	J	0.101	0.500	1	10/29/2018 23:10	WG1188131
Carbon tetrachloride	U		0.159	0.500	1	10/29/2018 23:10	WG1188131
Chlorobenzene	U		0.140	0.500	1	10/29/2018 23:10	WG1188131
Chlorodibromomethane	U		0.128	0.500	1	10/29/2018 23:10	WG1188131
Chloroethane	U	J0	0.141	2.50	1	10/29/2018 23:10	WG1188131
Chloroform	U		0.0860	0.500	1	10/29/2018 23:10	WG1188131
Chloromethane	U		0.153	1.25	1	11/05/2018 16:30	WG1191602
2-Chlorotoluene	U		0.111	0.500	1	10/29/2018 23:10	WG1188131
4-Chlorotoluene	U		0.0972	0.500	1	10/29/2018 23:10	WG1188131
1,2-Dibromo-3-Chloropropane	U	J0	0.325	2.50	1	10/29/2018 23:10	WG1188131
1,2-Dibromoethane	U		0.193	0.500	1	10/29/2018 23:10	WG1188131
Dibromomethane	U		0.117	0.500	1	10/29/2018 23:10	WG1188131
1,2-Dichlorobenzene	U		0.101	0.500	1	10/29/2018 23:10	WG1188131
1,3-Dichlorobenzene	U		0.130	0.500	1	10/29/2018 23:10	WG1188131
1,4-Dichlorobenzene	U		0.121	0.500	1	10/29/2018 23:10	WG1188131
Dichlorodifluoromethane	U		0.127	2.50	1	11/05/2018 16:30	WG1191602
1,1-Dichloroethane	U		0.114	0.500	1	10/29/2018 23:10	WG1188131
1,2-Dichloroethane	U	J0	0.108	0.500	1	10/29/2018 23:10	WG1188131
1,1-Dichloroethene	0.619		0.188	0.500	1	10/29/2018 23:10	WG1188131
cis-1,2-Dichloroethene	7.94		0.0933	0.500	1	10/29/2018 23:10	WG1188131
trans-1,2-Dichloroethene	0.257	J	0.152	0.500	1	10/29/2018 23:10	WG1188131
1,2-Dichloropropane	U		0.190	0.500	1	10/29/2018 23:10	WG1188131
1,1-Dichloropropene	U		0.128	0.500	1	10/29/2018 23:10	WG1188131
1,3-Dichloropropane	U		0.147	1.00	1	10/29/2018 23:10	WG1188131
cis-1,3-Dichloropropene	U		0.0976	0.500	1	10/29/2018 23:10	WG1188131
trans-1,3-Dichloropropene	U		0.222	0.500	1	10/29/2018 23:10	WG1188131
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	11/05/2018 16:30	WG1191602
2,2-Dichloropropane	U		0.0929	0.500	1	10/29/2018 23:10	WG1188131
Di-isopropyl ether	U		0.0924	0.500	1	10/29/2018 23:10	WG1188131
Ethylbenzene	U		0.158	0.500	1	10/29/2018 23:10	WG1188131
Hexachloro-1,3-butadiene	U		0.157	1.00	1	10/29/2018 23:10	WG1188131
2-Hexanone	U		0.757	5.00	1	10/29/2018 23:10	WG1188131
n-Hexane	U		0.305	5.00	1	10/29/2018 23:10	WG1188131
Iodomethane	U		0.377	10.0	1	10/29/2018 23:10	WG1188131
Isopropylbenzene	U		0.126	0.500	1	10/29/2018 23:10	WG1188131
p-Isopropyltoluene	U		0.138	0.500	1	10/29/2018 23:10	WG1188131
2-Butanone (MEK)	U	J0	1.28	5.00	1	10/29/2018 23:10	WG1188131

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Methylene Chloride	U		1.07	2.50	1	10/29/2018 23:10	WG1188131
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	10/29/2018 23:10	WG1188131
Methyl tert-butyl ether	U		0.102	0.500	1	10/29/2018 23:10	WG1188131
Naphthalene	0.411	J J0	0.174	2.50	1	10/29/2018 23:10	WG1188131
n-Propylbenzene	U		0.162	0.500	1	10/29/2018 23:10	WG1188131
Styrene	U		0.117	0.500	1	10/29/2018 23:10	WG1188131
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	10/29/2018 23:10	WG1188131
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	10/29/2018 23:10	WG1188131
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	10/29/2018 23:10	WG1188131
Tetrachloroethene	1.92		0.199	0.500	1	10/29/2018 23:10	WG1188131
Toluene	U		0.412	0.500	1	11/05/2018 16:30	WG1191602
1,2,3-Trichlorobenzene	U	J0	0.164	0.500	1	10/29/2018 23:10	WG1188131
1,2,4-Trichlorobenzene	U		0.355	0.500	1	10/29/2018 23:10	WG1188131
1,1,1-Trichloroethane	U		0.0940	0.500	1	10/29/2018 23:10	WG1188131
1,1,2-Trichloroethane	U		0.186	0.500	1	10/29/2018 23:10	WG1188131
Trichloroethene	1.63		0.153	0.500	1	10/29/2018 23:10	WG1188131
Trichlorofluoromethane	U		0.130	2.50	1	10/29/2018 23:10	WG1188131
1,2,3-Trichloropropane	U		0.247	2.50	1	10/29/2018 23:10	WG1188131
1,2,4-Trimethylbenzene	U		0.123	0.500	1	10/29/2018 23:10	WG1188131
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	10/29/2018 23:10	WG1188131
1,3,5-Trimethylbenzene	U		0.124	0.500	1	10/29/2018 23:10	WG1188131
Vinyl acetate	U		0.645	5.00	1	10/29/2018 23:10	WG1188131
Vinyl chloride	3.43		0.118	0.500	1	10/29/2018 23:10	WG1188131
Xylenes, Total	U		0.316	1.50	1	10/29/2018 23:10	WG1188131
(S) Toluene-d8	*103*			*80.0-120*		*10/29/2018 23:10*	WG1188131
(S) Toluene-d8	*106*			*80.0-120*		*11/05/2018 16:30*	WG1191602
(S) Dibromofluoromethane	*91.7*			*75.0-120*		*10/29/2018 23:10*	WG1188131
(S) Dibromofluoromethane	*107*			*75.0-120*		*11/05/2018 16:30*	WG1191602
(S) 4-Bromofluorobenzene	*95.7*			*77.0-126*		*10/29/2018 23:10*	WG1188131
(S) 4-Bromofluorobenzene	*108*			*77.0-126*		*11/05/2018 16:30*	WG1191602

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	86.9	B J	31.6	100	1	11/01/2018 19:25	WG1189621
(S) a,a,a-Trifluorotoluene(FID)	*96.8*			*78.0-120*		*11/01/2018 19:25*	WG1189621

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U	J0	1.05	25.0	1	10/29/2018 23:29	WG1188131
Acrylonitrile	U	J0	0.873	5.00	1	10/29/2018 23:29	WG1188131
Benzene	U		0.0896	0.500	1	11/05/2018 16:51	WG1191602
Bromobenzene	U		0.133	0.500	1	10/29/2018 23:29	WG1188131
Bromodichloromethane	U		0.0800	0.500	1	10/29/2018 23:29	WG1188131
Bromochloromethane	U		0.145	0.500	1	10/29/2018 23:29	WG1188131
Bromoform	U		0.186	0.500	1	10/29/2018 23:29	WG1188131
Bromomethane	U	J0	0.157	2.50	1	10/29/2018 23:29	WG1188131
n-Butylbenzene	U	J0	0.143	0.500	1	10/29/2018 23:29	WG1188131
sec-Butylbenzene	U		0.134	0.500	1	10/29/2018 23:29	WG1188131
tert-Butylbenzene	U		0.183	0.500	1	10/29/2018 23:29	WG1188131
Carbon disulfide	0.282	J	0.101	0.500	1	10/29/2018 23:29	WG1188131
Carbon tetrachloride	U		0.159	0.500	1	10/29/2018 23:29	WG1188131
Chlorobenzene	U		0.140	0.500	1	10/29/2018 23:29	WG1188131
Chlorodibromomethane	U		0.128	0.500	1	10/29/2018 23:29	WG1188131
Chloroethane	U	J0	0.141	2.50	1	10/29/2018 23:29	WG1188131
Chloroform	U		0.0860	0.500	1	10/29/2018 23:29	WG1188131
Chloromethane	U		0.153	1.25	1	11/05/2018 16:51	WG1191602
2-Chlorotoluene	U		0.111	0.500	1	10/29/2018 23:29	WG1188131
4-Chlorotoluene	U		0.0972	0.500	1	10/29/2018 23:29	WG1188131
1,2-Dibromo-3-Chloropropane	U	J0	0.325	2.50	1	10/29/2018 23:29	WG1188131
1,2-Dibromoethane	U		0.193	0.500	1	10/29/2018 23:29	WG1188131
Dibromomethane	U		0.117	0.500	1	10/29/2018 23:29	WG1188131
1,2-Dichlorobenzene	U		0.101	0.500	1	10/29/2018 23:29	WG1188131
1,3-Dichlorobenzene	U		0.130	0.500	1	10/29/2018 23:29	WG1188131
1,4-Dichlorobenzene	U		0.121	0.500	1	10/29/2018 23:29	WG1188131
Dichlorodifluoromethane	U		0.127	2.50	1	11/05/2018 16:51	WG1191602
1,1-Dichloroethane	U		0.114	0.500	1	10/29/2018 23:29	WG1188131
1,2-Dichloroethane	U	J0	0.108	0.500	1	10/29/2018 23:29	WG1188131
1,1-Dichloroethene	U		0.188	0.500	1	10/29/2018 23:29	WG1188131
cis-1,2-Dichloroethene	0.893		0.0933	0.500	1	10/29/2018 23:29	WG1188131
trans-1,2-Dichloroethene	U		0.152	0.500	1	10/29/2018 23:29	WG1188131
1,2-Dichloropropane	U		0.190	0.500	1	10/29/2018 23:29	WG1188131
1,1-Dichloropropene	U		0.128	0.500	1	10/29/2018 23:29	WG1188131
1,3-Dichloropropane	U		0.147	1.00	1	10/29/2018 23:29	WG1188131
cis-1,3-Dichloropropene	U		0.0976	0.500	1	10/29/2018 23:29	WG1188131
trans-1,3-Dichloropropene	U		0.222	0.500	1	10/29/2018 23:29	WG1188131
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	11/05/2018 16:51	WG1191602
2,2-Dichloropropane	U		0.0929	0.500	1	10/29/2018 23:29	WG1188131
Di-isopropyl ether	U		0.0924	0.500	1	10/29/2018 23:29	WG1188131
Ethylbenzene	U		0.158	0.500	1	10/29/2018 23:29	WG1188131
Hexachloro-1,3-butadiene	U		0.157	1.00	1	10/29/2018 23:29	WG1188131
2-Hexanone	U		0.757	5.00	1	10/29/2018 23:29	WG1188131
n-Hexane	U		0.305	5.00	1	10/29/2018 23:29	WG1188131
Iodomethane	U		0.377	10.0	1	10/29/2018 23:29	WG1188131
Isopropylbenzene	U		0.126	0.500	1	10/29/2018 23:29	WG1188131
p-Isopropyltoluene	U		0.138	0.500	1	10/29/2018 23:29	WG1188131
2-Butanone (MEK)	U	J0	1.28	5.00	1	10/29/2018 23:29	WG1188131

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Methylene Chloride	U		1.07	2.50	1	10/29/2018 23:29	WG1188131
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	10/29/2018 23:29	WG1188131
Methyl tert-butyl ether	U		0.102	0.500	1	10/29/2018 23:29	WG1188131
Naphthalene	U	J0	0.174	2.50	1	10/29/2018 23:29	WG1188131
n-Propylbenzene	U		0.162	0.500	1	10/29/2018 23:29	WG1188131
Styrene	U		0.117	0.500	1	10/29/2018 23:29	WG1188131
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	10/29/2018 23:29	WG1188131
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	10/29/2018 23:29	WG1188131
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	10/29/2018 23:29	WG1188131
Tetrachloroethene	0.896		0.199	0.500	1	10/29/2018 23:29	WG1188131
Toluene	U		0.412	0.500	1	11/05/2018 16:51	WG1191602
1,2,3-Trichlorobenzene	U	J0	0.164	0.500	1	10/29/2018 23:29	WG1188131
1,2,4-Trichlorobenzene	U		0.355	0.500	1	10/29/2018 23:29	WG1188131
1,1,1-Trichloroethane	U		0.0940	0.500	1	10/29/2018 23:29	WG1188131
1,1,2-Trichloroethane	U		0.186	0.500	1	10/29/2018 23:29	WG1188131
Trichloroethene	0.463	J	0.153	0.500	1	10/29/2018 23:29	WG1188131
Trichlorofluoromethane	U		0.130	2.50	1	10/29/2018 23:29	WG1188131
1,2,3-Trichloropropane	U		0.247	2.50	1	10/29/2018 23:29	WG1188131
1,2,4-Trimethylbenzene	U		0.123	0.500	1	10/29/2018 23:29	WG1188131
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	10/29/2018 23:29	WG1188131
1,3,5-Trimethylbenzene	U		0.124	0.500	1	10/29/2018 23:29	WG1188131
Vinyl acetate	U		0.645	5.00	1	10/29/2018 23:29	WG1188131
Vinyl chloride	U		0.118	0.500	1	10/29/2018 23:29	WG1188131
Xylenes, Total	U		0.316	1.50	1	10/29/2018 23:29	WG1188131
(S) Toluene-d8	*103*			*80.0-120*		*10/29/2018 23:29*	WG1188131
(S) Toluene-d8	*107*			*80.0-120*		*11/05/2018 16:51*	WG1191602
(S) Dibromofluoromethane	*91.4*			*75.0-120*		*10/29/2018 23:29*	WG1188131
(S) Dibromofluoromethane	*105*			*75.0-120*		*11/05/2018 16:51*	WG1191602
(S) 4-Bromofluorobenzene	*94.9*			*77.0-126*		*10/29/2018 23:29*	WG1188131
(S) 4-Bromofluorobenzene	*105*			*77.0-126*		*11/05/2018 16:51*	WG1191602

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	41.5	B J	31.6	100	1	11/01/2018 19:47	WG1189621
(S) a,a,a-Trifluorotoluene(FID)	*97.1*			*78.0-120*		*11/01/2018 19:47*	WG1189621

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	1.86	J J0	1.05	25.0	1	10/29/2018 23:48	WG1188131
Acrylonitrile	U	J0	0.873	5.00	1	10/29/2018 23:48	WG1188131
Benzene	U		0.0896	0.500	1	10/29/2018 23:48	WG1188131
Bromobenzene	U		0.133	0.500	1	10/29/2018 23:48	WG1188131
Bromodichloromethane	U		0.0800	0.500	1	10/29/2018 23:48	WG1188131
Bromochloromethane	U		0.145	0.500	1	10/29/2018 23:48	WG1188131
Bromoform	U		0.186	0.500	1	10/29/2018 23:48	WG1188131
Bromomethane	U	J0	0.157	2.50	1	10/29/2018 23:48	WG1188131
n-Butylbenzene	U	J0	0.143	0.500	1	10/29/2018 23:48	WG1188131
sec-Butylbenzene	U		0.134	0.500	1	10/29/2018 23:48	WG1188131
tert-Butylbenzene	U		0.183	0.500	1	10/29/2018 23:48	WG1188131
Carbon disulfide	U		0.101	0.500	1	10/29/2018 23:48	WG1188131
Carbon tetrachloride	U		0.159	0.500	1	10/29/2018 23:48	WG1188131
Chlorobenzene	U		0.140	0.500	1	10/29/2018 23:48	WG1188131
Chlorodibromomethane	U		0.128	0.500	1	10/29/2018 23:48	WG1188131
Chloroethane	U	J0	0.141	2.50	1	10/29/2018 23:48	WG1188131
Chloroform	U		0.0860	0.500	1	10/29/2018 23:48	WG1188131
Chloromethane	U		0.153	1.25	1	11/05/2018 17:11	WG1191602
2-Chlorotoluene	U		0.111	0.500	1	10/29/2018 23:48	WG1188131
4-Chlorotoluene	U		0.0972	0.500	1	10/29/2018 23:48	WG1188131
1,2-Dibromo-3-Chloropropane	U	J0	0.325	2.50	1	10/29/2018 23:48	WG1188131
1,2-Dibromoethane	U		0.193	0.500	1	10/29/2018 23:48	WG1188131
Dibromomethane	U		0.117	0.500	1	10/29/2018 23:48	WG1188131
1,2-Dichlorobenzene	U		0.101	0.500	1	10/29/2018 23:48	WG1188131
1,3-Dichlorobenzene	U		0.130	0.500	1	10/29/2018 23:48	WG1188131
1,4-Dichlorobenzene	U		0.121	0.500	1	10/29/2018 23:48	WG1188131
Dichlorodifluoromethane	U		0.127	2.50	1	11/05/2018 17:11	WG1191602
1,1-Dichloroethane	U		0.114	0.500	1	10/29/2018 23:48	WG1188131
1,2-Dichloroethane	U	J0	0.108	0.500	1	10/29/2018 23:48	WG1188131
1,1-Dichloroethene	U		0.188	0.500	1	10/29/2018 23:48	WG1188131
cis-1,2-Dichloroethene	0.486	J	0.0933	0.500	1	10/29/2018 23:48	WG1188131
trans-1,2-Dichloroethene	U		0.152	0.500	1	10/29/2018 23:48	WG1188131
1,2-Dichloropropane	U		0.190	0.500	1	10/29/2018 23:48	WG1188131
1,1-Dichloropropene	U		0.128	0.500	1	10/29/2018 23:48	WG1188131
1,3-Dichloropropane	U		0.147	1.00	1	10/29/2018 23:48	WG1188131
cis-1,3-Dichloropropene	U		0.0976	0.500	1	10/29/2018 23:48	WG1188131
trans-1,3-Dichloropropene	U		0.222	0.500	1	10/29/2018 23:48	WG1188131
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	11/05/2018 17:11	WG1191602
2,2-Dichloropropane	U		0.0929	0.500	1	10/29/2018 23:48	WG1188131
Di-isopropyl ether	U		0.0924	0.500	1	10/29/2018 23:48	WG1188131
Ethylbenzene	U		0.158	0.500	1	10/29/2018 23:48	WG1188131
Hexachloro-1,3-butadiene	U		0.157	1.00	1	10/29/2018 23:48	WG1188131
2-Hexanone	U		0.757	5.00	1	10/29/2018 23:48	WG1188131
n-Hexane	U		0.305	5.00	1	10/29/2018 23:48	WG1188131
Iodomethane	U		0.377	10.0	1	10/29/2018 23:48	WG1188131
Isopropylbenzene	U		0.126	0.500	1	10/29/2018 23:48	WG1188131
p-Isopropyltoluene	U		0.138	0.500	1	10/29/2018 23:48	WG1188131
2-Butanone (MEK)	U	J0	1.28	5.00	1	10/29/2018 23:48	WG1188131

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Methylene Chloride	U		1.07	2.50	1	10/29/2018 23:48	WG1188131
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	10/29/2018 23:48	WG1188131
Methyl tert-butyl ether	U		0.102	0.500	1	10/29/2018 23:48	WG1188131
Naphthalene	U	J0	0.174	2.50	1	10/29/2018 23:48	WG1188131
n-Propylbenzene	U		0.162	0.500	1	10/29/2018 23:48	WG1188131
Styrene	U		0.117	0.500	1	10/29/2018 23:48	WG1188131
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	10/29/2018 23:48	WG1188131
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	10/29/2018 23:48	WG1188131
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	10/29/2018 23:48	WG1188131
Tetrachloroethene	0.850		0.199	0.500	1	10/29/2018 23:48	WG1188131
Toluene	0.527		0.412	0.500	1	10/29/2018 23:48	WG1188131
1,2,3-Trichlorobenzene	U	J0	0.164	0.500	1	10/29/2018 23:48	WG1188131
1,2,4-Trichlorobenzene	U		0.355	0.500	1	10/29/2018 23:48	WG1188131
1,1,1-Trichloroethane	U		0.0940	0.500	1	10/29/2018 23:48	WG1188131
1,1,2-Trichloroethane	U		0.186	0.500	1	10/29/2018 23:48	WG1188131
Trichloroethene	0.371	J	0.153	0.500	1	10/29/2018 23:48	WG1188131
Trichlorofluoromethane	U		0.130	2.50	1	10/29/2018 23:48	WG1188131
1,2,3-Trichloropropane	U		0.247	2.50	1	10/29/2018 23:48	WG1188131
1,2,4-Trimethylbenzene	U		0.123	0.500	1	10/29/2018 23:48	WG1188131
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	10/29/2018 23:48	WG1188131
1,3,5-Trimethylbenzene	U		0.124	0.500	1	10/29/2018 23:48	WG1188131
Vinyl acetate	U		0.645	5.00	1	10/29/2018 23:48	WG1188131
Vinyl chloride	U		0.118	0.500	1	10/29/2018 23:48	WG1188131
Xylenes, Total	U		0.316	1.50	1	10/29/2018 23:48	WG1188131
(S) Toluene-d8	*103*			*80.0-120*		*10/29/2018 23:48*	WG1188131
(S) Toluene-d8	*103*			*80.0-120*		*11/05/2018 17:11*	WG1191602
(S) Dibromofluoromethane	*92.8*			*75.0-120*		*10/29/2018 23:48*	WG1188131
(S) Dibromofluoromethane	*106*			*75.0-120*		*11/05/2018 17:11*	WG1191602
(S) 4-Bromofluorobenzene	*95.6*			*77.0-126*		*10/29/2018 23:48*	WG1188131
(S) 4-Bromofluorobenzene	*105*			*77.0-126*		*11/05/2018 17:11*	WG1191602

Method Blank (MB)

(MB) R3356100-3 11/01/18 12:12

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Gasoline Range Organics-NWTPH	44.3	J	31.6	100
(S) a,a,a-Trifluorotoluene(FID)	*95.4*			*78.0-120*

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

(LCS) R3356100-2 11/01/18 11:27 • (LCSD) R3356100-1 11/01/18 10:44

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Gasoline Range Organics-NWTPH	5500	6320	5470	115	99.4	70.0-124			14.4	20
(S) a,a,a-Trifluorotoluene(FID)				*102*	*101*	*78.0-120*				

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

Method Blank (MB)

(MB) R3356910-4 10/29/18 16:03

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Acetone	U		1.05	25.0
Acrylonitrile	U		0.873	5.00
Benzene	U		0.0896	0.500
Bromobenzene	U		0.133	0.500
Bromodichloromethane	U		0.0800	0.500
Bromochloromethane	U		0.145	0.500
Bromoform	U		0.186	0.500
Bromomethane	U		0.157	2.50
n-Butylbenzene	U		0.143	0.500
sec-Butylbenzene	U		0.134	0.500
tert-Butylbenzene	U		0.183	0.500
Carbon disulfide	U		0.101	0.500
Carbon tetrachloride	U		0.159	0.500
Chlorobenzene	U		0.140	0.500
Chlorodibromomethane	U		0.128	0.500
Chloroethane	U		0.141	2.50
Chloroform	U		0.0860	0.500
2-Chlorotoluene	U		0.111	0.500
4-Chlorotoluene	U		0.0972	0.500
1,2-Dibromo-3-Chloropropane	U		0.325	2.50
1,2-Dibromoethane	U		0.193	0.500
Dibromomethane	U		0.117	0.500
1,2-Dichlorobenzene	U		0.101	0.500
1,3-Dichlorobenzene	U		0.130	0.500
1,4-Dichlorobenzene	U		0.121	0.500
1,1-Dichloroethane	U		0.114	0.500
1,2-Dichloroethane	U		0.108	0.500
1,1-Dichloroethene	U		0.188	0.500
cis-1,2-Dichloroethene	U		0.0933	0.500
trans-1,2-Dichloroethene	U		0.152	0.500
1,2-Dichloropropane	U		0.190	0.500
1,1-Dichloropropene	U		0.128	0.500
1,3-Dichloropropane	U		0.147	1.00
cis-1,3-Dichloropropene	U		0.0976	0.500
trans-1,3-Dichloropropene	U		0.222	0.500
2,2-Dichloropropane	U		0.0929	0.500
Di-isopropyl ether	U		0.0924	0.500
Ethylbenzene	U		0.158	0.500
Hexachloro-1,3-butadiene	U		0.157	1.00
2-Hexanone	U		0.757	5.00

Method Blank (MB)

(MB) R3356910-4 10/29/18 16:03

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
n-Hexane	U		0.305	5.00
Iodomethane	U		0.377	10.0
Isopropylbenzene	U		0.126	0.500
p-Isopropyltoluene	U		0.138	0.500
2-Butanone (MEK)	U		1.28	5.00
Methylene Chloride	U		1.07	2.50
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00
Methyl tert-butyl ether	U		0.102	0.500
Naphthalene	U		0.174	2.50
n-Propylbenzene	U		0.162	0.500
Styrene	U		0.117	0.500
1,1,1,2-Tetrachloroethane	U		0.120	0.500
1,1,2,2-Tetrachloroethane	U		0.130	0.500
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500
Tetrachloroethene	U		0.199	0.500
Toluene	U		0.412	0.500
1,2,3-Trichlorobenzene	U		0.164	0.500
1,2,4-Trichlorobenzene	U		0.355	0.500
1,1,1-Trichloroethane	U		0.0940	0.500
1,1,2-Trichloroethane	U		0.186	0.500
Trichloroethene	U		0.153	0.500
Trichlorofluoromethane	U		0.130	2.50
1,2,3-Trichloropropane	U		0.247	2.50
1,2,4-Trimethylbenzene	U		0.123	0.500
1,2,3-Trimethylbenzene	U		0.0739	0.500
1,3,5-Trimethylbenzene	U		0.124	0.500
Vinyl acetate	U		0.645	5.00
Vinyl chloride	U		0.118	0.500
Xylenes, Total	U		0.316	1.50
(S) Toluene-d8	*103*			*80.0-120*
(S) Dibromofluoromethane	*92.3*			*75.0-120*
(S) 4-Bromofluorobenzene	*97.5*			*77.0-126*

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

(LCS) R3356910-1 10/29/18 14:45 • (LCSD) R3356910-2 10/29/18 15:05

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Acetone	125	82.1	80.1	65.7	64.1	19.0-160			2.39	27
Acrylonitrile	125	97.5	96.6	78.0	77.3	55.0-149			0.905	20
Benzene	25.0	22.6	22.3	90.6	89.0	70.0-123			1.70	20
Bromobenzene	25.0	22.6	24.6	90.4	98.4	73.0-121			8.48	20
Bromodichloromethane	25.0	22.4	22.4	89.6	89.5	75.0-120			0.0545	20
Bromochloromethane	25.0	24.3	24.0	97.0	96.0	76.0-122			1.12	20
Bromoform	25.0	26.0	28.8	104	115	68.0-132			10.2	20
Bromomethane	25.0	18.1	21.0	72.5	84.2	10.0-160			14.9	25
n-Butylbenzene	25.0	18.8	20.2	75.2	80.6	73.0-125			6.96	20
sec-Butylbenzene	25.0	21.6	23.6	86.4	94.6	75.0-125			9.00	20
tert-Butylbenzene	25.0	23.0	25.3	91.9	101	76.0-124			9.43	20
Carbon disulfide	25.0	23.7	22.3	95.0	89.3	61.0-128			6.10	20
Carbon tetrachloride	25.0	22.5	22.1	90.0	88.2	68.0-126			1.99	20
Chlorobenzene	25.0	26.1	25.8	104	103	80.0-121			1.01	20
Chlorodibromomethane	25.0	26.1	25.9	104	104	77.0-125			0.649	20
Chloroethane	25.0	19.8	20.4	79.0	81.6	47.0-150			3.18	20
Chloroform	25.0	22.4	22.1	89.8	88.4	73.0-120			1.57	20
2-Chlorotoluene	25.0	23.4	25.4	93.8	102	76.0-123			8.19	20
4-Chlorotoluene	25.0	23.1	25.0	92.4	100	75.0-122			8.07	20
1,2-Dibromo-3-Chloropropane	25.0	19.1	21.9	76.5	87.5	58.0-134			13.4	20
1,2-Dibromoethane	25.0	24.8	24.8	99.2	99.1	80.0-122			0.0468	20
Dibromomethane	25.0	23.0	23.1	92.0	92.5	80.0-120			0.523	20
1,2-Dichlorobenzene	25.0	21.6	23.2	86.2	92.8	79.0-121			7.34	20
1,3-Dichlorobenzene	25.0	22.9	24.6	91.6	98.3	79.0-120			7.06	20
1,4-Dichlorobenzene	25.0	22.2	24.3	88.7	97.4	79.0-120			9.36	20
1,1-Dichloroethane	25.0	21.8	21.4	87.3	85.5	70.0-126			2.04	20
1,2-Dichloroethane	25.0	19.7	19.7	78.9	78.7	70.0-128			0.233	20
1,1-Dichloroethene	25.0	25.0	23.7	100	94.9	71.0-124			5.29	20
cis-1,2-Dichloroethene	25.0	24.1	23.5	96.4	93.8	73.0-120			2.71	20
trans-1,2-Dichloroethene	25.0	23.4	23.0	93.7	92.2	73.0-120			1.63	20
1,2-Dichloropropane	25.0	23.2	23.0	92.8	91.9	77.0-125			0.997	20
1,1-Dichloropropene	25.0	22.3	21.7	89.2	87.0	74.0-126			2.54	20
1,3-Dichloropropane	25.0	24.2	23.7	96.7	94.8	80.0-120			2.03	20
cis-1,3-Dichloropropene	25.0	24.7	24.4	98.8	97.8	80.0-123			1.06	20
trans-1,3-Dichloropropene	25.0	24.4	24.1	97.7	96.6	78.0-124			1.11	20
2,2-Dichloropropane	25.0	21.9	21.3	87.7	85.4	58.0-130			2.69	20
Di-isopropyl ether	25.0	20.5	20.3	82.1	81.0	58.0-138			1.33	20
Ethylbenzene	25.0	25.8	25.5	103	102	79.0-123			1.18	20
Hexachloro-1,3-butadiene	25.0	20.1	23.3	80.4	93.1	54.0-138			14.6	20
2-Hexanone	125	108	108	86.2	86.2	67.0-149			0.0374	20

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

(LCS) R3356910-1 10/29/18 14:45 • (LCSD) R3356910-2 10/29/18 15:05

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
n-Hexane	25.0	20.7	20.3	82.8	81.3	57.0-133			1.85	20
Iodomethane	125	132	125	105	100	33.0-147			5.12	26
Isopropylbenzene	25.0	23.7	25.6	94.7	103	76.0-127			7.88	20
p-Isopropyltoluene	25.0	21.8	23.8	87.1	95.2	76.0-125			8.88	20
2-Butanone (MEK)	125	87.6	86.1	70.1	68.8	44.0-160			1.73	20
Methylene Chloride	25.0	23.2	22.5	92.7	90.1	67.0-120			2.84	20
4-Methyl-2-pentanone (MIBK)	125	100	101	80.3	80.6	68.0-142			0.367	20
Methyl tert-butyl ether	25.0	21.5	20.8	86.1	83.1	68.0-125			3.61	20
Naphthalene	25.0	18.1	19.9	72.3	79.6	54.0-135			9.62	20
n-Propylbenzene	25.0	22.7	24.9	90.9	99.5	77.0-124			9.05	20
Styrene	25.0	24.8	26.8	99.2	107	73.0-130			7.52	20
1,1,1,2-Tetrachloroethane	25.0	27.0	26.9	108	108	75.0-125			0.528	20
1,1,2,2-Tetrachloroethane	25.0	23.7	26.1	94.9	104	65.0-130			9.48	20
1,1,2-Trichlorotrifluoroethane	25.0	24.3	25.4	97.3	102	69.0-132			4.29	20
Tetrachloroethene	25.0	26.8	26.5	107	106	72.0-132			0.926	20
Toluene	25.0	24.8	24.4	99.4	97.5	79.0-120			1.94	20
1,2,3-Trichlorobenzene	25.0	19.4	21.7	77.4	86.8	50.0-138			11.5	20
1,2,4-Trichlorobenzene	25.0	20.0	22.1	80.1	88.3	57.0-137			9.74	20
1,1,1-Trichloroethane	25.0	23.0	22.4	92.0	89.5	73.0-124			2.77	20
1,1,2-Trichloroethane	25.0	25.0	25.0	100	100	80.0-120			0.0538	20
Trichloroethene	25.0	25.2	25.1	101	100	78.0-124			0.315	20
Trichlorofluoromethane	25.0	21.2	21.4	85.0	85.5	59.0-147			0.621	20
1,2,3-Trichloropropane	25.0	24.0	25.5	95.9	102	73.0-130			6.34	20
1,2,4-Trimethylbenzene	25.0	22.6	24.7	90.5	98.8	76.0-121			8.73	20
1,2,3-Trimethylbenzene	25.0	21.4	23.0	85.5	92.2	77.0-120			7.48	20
1,3,5-Trimethylbenzene	25.0	23.7	25.8	94.8	103	76.0-122			8.43	20
Vinyl acetate	125	128	129	103	103	11.0-160			0.600	20
Vinyl chloride	25.0	20.7	20.9	82.8	83.8	67.0-131			1.10	20
Xylenes, Total	75.0	76.3	75.1	102	100	79.0-123			1.59	20
(S) Toluene-d8				*101*	*100*	*80.0-120*				
(S) Dibromofluoromethane				*91.5*	*90.1*	*75.0-120*				
(S) 4-Bromofluorobenzene				*93.2*	*97.5*	*77.0-126*				

Method Blank (MB)

(MB) R3357068-4 11/05/18 10:53

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Benzene	U		0.0896	0.500
Chloromethane	U		0.153	1.25
Dichlorodifluoromethane	U		0.127	2.50
cis-1,2-Dichloroethene	U		0.0933	0.500
trans-1,4-Dichloro-2-butene	U		0.257	5.00
Ethylbenzene	U		0.158	0.500
Naphthalene	U		0.174	2.50
Tetrachloroethene	U		0.199	0.500
Toluene	U		0.412	0.500
Trichloroethene	U		0.153	0.500
1,2,4-Trimethylbenzene	U		0.123	0.500
1,2,3-Trimethylbenzene	U		0.0739	0.500
1,3,5-Trimethylbenzene	U		0.124	0.500
Xylenes, Total	U		0.316	1.50
(S) Toluene-d8	*107*			*80.0-120*
(S) Dibromofluoromethane	*105*			*75.0-120*
(S) 4-Bromofluorobenzene	*107*			*77.0-126*

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

(LCS) R3357068-1 11/05/18 09:32 • (LCSD) R3357068-2 11/05/18 09:52

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Benzene	25.0	23.8	24.4	95.3	97.4	70.0-123			2.25	20
Chloromethane	25.0	22.4	23.6	89.5	94.5	41.0-142			5.45	20
Dichlorodifluoromethane	25.0	28.9	29.1	116	116	51.0-149			0.486	20
cis-1,2-Dichloroethene	25.0	25.5	26.3	102	105	73.0-120			3.20	20
trans-1,4-Dichloro-2-butene	25.0	22.8	23.2	91.3	92.8	33.0-144			1.69	20
Ethylbenzene	25.0	25.2	26.5	101	106	79.0-123			4.97	20
Naphthalene	25.0	19.4	21.1	77.6	84.4	54.0-135			8.45	20
Tetrachloroethene	25.0	26.0	27.8	104	111	72.0-132			6.43	20
Toluene	25.0	24.8	25.8	99.2	103	79.0-120			3.86	20
Trichloroethene	25.0	23.8	24.7	95.2	98.8	78.0-124			3.79	20
1,2,4-Trimethylbenzene	25.0	27.0	27.4	108	110	76.0-121			1.75	20
1,2,3-Trimethylbenzene	25.0	25.1	25.4	101	102	77.0-120			1.25	20
1,3,5-Trimethylbenzene	25.0	25.9	26.2	104	105	76.0-122			1.14	20
Xylenes, Total	75.0	75.6	78.8	101	105	79.0-123			4.15	20
(S) Toluene-d8				*105*	*105*	*80.0-120*				
(S) Dibromofluoromethane				*107*	*106*	*75.0-120*				

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

(LCS) R3357068-1 11/05/18 09:32 • (LCSD) R3357068-2 11/05/18 09:52

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
(S) 4-Bromofluorobenzene				*106*	*106*	*77.0-126*				

Guide to Reading and Understanding Your Laboratory Report

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

Abbreviations and Definitions

MDL	Method Detection Limit.
RDL	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
(S)	Surrogate (Surrogate Standard) - Analytes added to every blank, sample, Laboratory Control Sample/Duplicate and Matrix Spike/Duplicate; used to evaluate analytical efficiency by measuring recovery. Surrogates are not expected to be detected in all environmental media.
U	Not detected at the Reporting Limit (or MDL where applicable).
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.
Dilution	If the sample matrix contains an interfering material, the sample preparation volume or weight values differ from the standard, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor.
Limits	These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges.
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.
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.
Quality Control Summary (Qc)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.

Qualifier	Description
B	The same analyte is found in the associated blank.
J	The identification of the analyte is acceptable; the reported value is an estimate.
J0	J0: Calibration verification outside of acceptance limits. Result is estimated.

Pace National is the only environmental laboratory accredited/certified to support your work nationwide from one location. One phone call, one point of contact, one laboratory. No other lab is as accessible or prepared to handle your needs throughout the country. Our capacity and capability from our single location laboratory is comparable to the collective totals of the network laboratories in our industry. The most significant benefit to our one location design is the design of our laboratory campus. The model is conducive to accelerated productivity, decreasing turn-around time, and preventing cross contamination, thus protecting sample integrity. Our focus on premium quality and prompt service allows us to be YOUR LAB OF CHOICE.
* Not all certifications held by the laboratory are applicable to the results reported in the attached report.
* Accreditation is only applicable to the test methods specified on each scope of accreditation held by Pace National.

State Accreditations

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN-03-2002-34
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey–NELAP	TN002
California	2932	New Mexico [1]	n/a
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina [1]	DW21704
Georgia	NELAP	North Carolina [3]	41
Georgia [1]	923	North Dakota	R-140
Idaho	TN00003	Ohio–VAP	CL0069
Illinois	200008	Oklahoma	9915
Indiana	C-TN-01	Oregon	TN200002
Iowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	LAO00356
Kentucky [1 6]	90010	South Carolina	84004
Kentucky [2]	16	South Dakota	n/a
Louisiana	AI30792	Tennessee [1 4]	2006
Louisiana [1]	LA180010	Texas	T 104704245-17-14
Maine	TN0002	Texas [5]	LAB0152
Maryland	324	Utah	TN00003
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	460132
Minnesota	047-999-395	Washington	C847
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	9980939910
Montana	CERT0086	Wyoming	A2LA

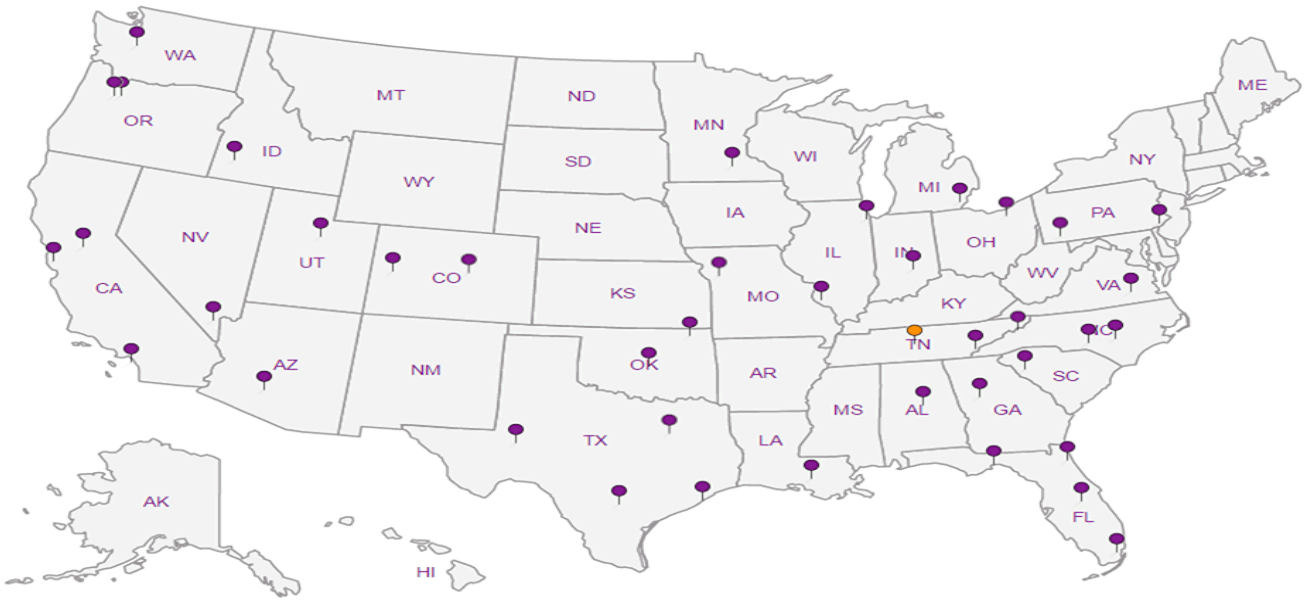
Third Party Federal Accreditations

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

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

Our Locations

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



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

Report to: Bill Haldeman

Email To: bhaldeman@pesenv.com

Project Description: American Linen

City/State Collected:

Phone: 206-529-3980
Fax: 206-529-3985

Client Project # 1413.001.05.601

Lab Project # PESENVSWA-HALDEMAN

Collected by (print): Ben Hecht

Site/Facility ID #

P.O. #

Collected by (signature):

Quote #

Immediately Packed on Ice N ___ Y ✓

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

Date Results Needed

Analysis / Container / Preservative

Pres Chk

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No of Cntrs	V8260C 40mlAmb-HCl	Remarks	Sample # (lab only)
MW-134-102518	Grab	GW	85	10/25/18	12:00	3	X		-01
MW-141-102518		GW	90		13:20	3	X		-02
MW-104-102618		GW	124	10/26/18	08:45	3	X		-03
MW-133-102618		GW	134		11:05	3	X		-04
MW-137-102618		GW	110		13:30	3	X		-05
Rinsate	—	GW	—		12:15	3	X		-06
		GW				3	X		
		GW				3	X		
		GW				3	X		

Chain of Custody Page ___ of ___

Pace Analytical
National Center for Testing & Innovation

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

L# L1038867

H151

Acctnum: PESENVSWA
Template: T141146
Prelogin: P673965
TSR: 110 - Brian Ford
PB:

Shipped Via: FedEX Ground

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

Remarks:

RAD SCREEN: <0.5 mR/hr

pH _____ Temp _____

Flow _____ Other _____

Samples returned via:
__ UPS __ FedEx __ Courier _____

Tracking #

Sample Receipt Checklist
COC Seal Present/Intact: NP Y N
COC Signed/Accurate: Y N
Bottles arrive intact: Y N
Correct bottles used: Y N
Sufficient volume sent: Y N
If Applicable
VOA Zero Headspace: Y N
Preservation Correct/Checked: Y N

Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)
	10/26/18	16:00	
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)

Trip Blank Received: Yes / No
HCL / MeoH
TBR

Temp: °C Bottles Received:
3.4+0=3.4 13 18VD

Date: 10/27/18 Time: 0845

If preservation required by Login: Date/Time

Hold:

Condition: NCF / OK

Pace Analytical®
National Center for Testing & Innovation

ANALYTICAL REPORT

November 06, 2018

PES Environmental, Inc.- WA

Sample Delivery Group:	L1039305
Samples Received:	10/30/2018
Project Number:	14B.001.05
Description:	American Linen
Report To:	Brian O'Neal/Bill Haldeman
	1215 Fourth Ave., Suite 1350
	Seattle, WA 98161

Entire Report Reviewed By:

Brian Ford

Project Manager

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

TABLE OF CONTENTS

MW-136-102918 L1039305-01 GW

Collected by: R. McLaughlin
Collected date/time: 10/29/18 08:30
Received date/time: 10/30/18 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1190352	1	11/02/18 19:24	11/02/18 19:24	JAH
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1188785	1	10/31/18 01:41	10/31/18 01:41	JCP

MW-138-102918 L1039305-02 GW

Collected by: R. McLaughlin
Collected date/time: 10/29/18 10:40
Received date/time: 10/30/18 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1190352	1	11/02/18 19:46	11/02/18 19:46	JAH
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1188785	1	10/31/18 02:03	10/31/18 02:03	JCP

W-MW-01-102918 L1039305-03 GW

Collected by: R. McLaughlin
Collected date/time: 10/29/18 12:10
Received date/time: 10/30/18 08:45

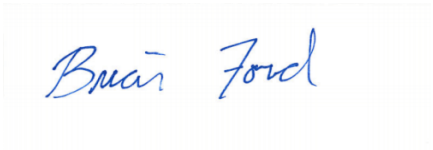
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1190352	1	11/02/18 20:09	11/02/18 20:09	JAH
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1188785	1	10/31/18 02:24	10/31/18 02:24	JCP

TRIP BLANK L1039305-04 GW

Collected by: R. McLaughlin
Collected date/time: 10/29/18 00:00
Received date/time: 10/30/18 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1188785	1	10/30/18 20:00	10/30/18 20:00	JCP

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



Brian Ford
Project Manager

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	31.9	B J	31.6	100	1	11/02/2018 19:24	WG1190352
(S) a,a,a-Trifluorotoluene(FID)	*93.9*			*78.0-120*		*11/02/2018 19:24*	WG1190352

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	1.75	J	1.05	25.0	1	10/31/2018 01:41	WG1188785
Acrylonitrile	U		0.873	5.00	1	10/31/2018 01:41	WG1188785
Benzene	U		0.0896	0.500	1	10/31/2018 01:41	WG1188785
Bromobenzene	U		0.133	0.500	1	10/31/2018 01:41	WG1188785
Bromodichloromethane	U		0.0800	0.500	1	10/31/2018 01:41	WG1188785
Bromochloromethane	U		0.145	0.500	1	10/31/2018 01:41	WG1188785
Bromoform	U		0.186	0.500	1	10/31/2018 01:41	WG1188785
Bromomethane	U		0.157	2.50	1	10/31/2018 01:41	WG1188785
n-Butylbenzene	U		0.143	0.500	1	10/31/2018 01:41	WG1188785
sec-Butylbenzene	U		0.134	0.500	1	10/31/2018 01:41	WG1188785
tert-Butylbenzene	U		0.183	0.500	1	10/31/2018 01:41	WG1188785
Carbon disulfide	U		0.101	0.500	1	10/31/2018 01:41	WG1188785
Carbon tetrachloride	U		0.159	0.500	1	10/31/2018 01:41	WG1188785
Chlorobenzene	U		0.140	0.500	1	10/31/2018 01:41	WG1188785
Chlorodibromomethane	U		0.128	0.500	1	10/31/2018 01:41	WG1188785
Chloroethane	U		0.141	2.50	1	10/31/2018 01:41	WG1188785
Chloroform	U		0.0860	0.500	1	10/31/2018 01:41	WG1188785
Chloromethane	U		0.153	1.25	1	10/31/2018 01:41	WG1188785
2-Chlorotoluene	U		0.111	0.500	1	10/31/2018 01:41	WG1188785
4-Chlorotoluene	U		0.0972	0.500	1	10/31/2018 01:41	WG1188785
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	10/31/2018 01:41	WG1188785
1,2-Dibromoethane	U		0.193	0.500	1	10/31/2018 01:41	WG1188785
Dibromomethane	U		0.117	0.500	1	10/31/2018 01:41	WG1188785
1,2-Dichlorobenzene	U		0.101	0.500	1	10/31/2018 01:41	WG1188785
1,3-Dichlorobenzene	U		0.130	0.500	1	10/31/2018 01:41	WG1188785
1,4-Dichlorobenzene	U		0.121	0.500	1	10/31/2018 01:41	WG1188785
Dichlorodifluoromethane	U		0.127	2.50	1	10/31/2018 01:41	WG1188785
1,1-Dichloroethane	U		0.114	0.500	1	10/31/2018 01:41	WG1188785
1,2-Dichloroethane	U		0.108	0.500	1	10/31/2018 01:41	WG1188785
1,1-Dichloroethene	U		0.188	0.500	1	10/31/2018 01:41	WG1188785
cis-1,2-Dichloroethene	1.44		0.0933	0.500	1	10/31/2018 01:41	WG1188785
trans-1,2-Dichloroethene	U		0.152	0.500	1	10/31/2018 01:41	WG1188785
1,2-Dichloropropane	U		0.190	0.500	1	10/31/2018 01:41	WG1188785
1,1-Dichloropropene	U		0.128	0.500	1	10/31/2018 01:41	WG1188785
1,3-Dichloropropane	U		0.147	1.00	1	10/31/2018 01:41	WG1188785
cis-1,3-Dichloropropene	U		0.0976	0.500	1	10/31/2018 01:41	WG1188785
trans-1,3-Dichloropropene	U		0.222	0.500	1	10/31/2018 01:41	WG1188785
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	10/31/2018 01:41	WG1188785
2,2-Dichloropropane	U		0.0929	0.500	1	10/31/2018 01:41	WG1188785
Di-isopropyl ether	U		0.0924	0.500	1	10/31/2018 01:41	WG1188785
Ethylbenzene	U		0.158	0.500	1	10/31/2018 01:41	WG1188785
Hexachloro-1,3-butadiene	U		0.157	1.00	1	10/31/2018 01:41	WG1188785
2-Hexanone	U		0.757	5.00	1	10/31/2018 01:41	WG1188785
n-Hexane	U		0.305	5.00	1	10/31/2018 01:41	WG1188785
Iodomethane	0.461	B J	0.377	10.0	1	10/31/2018 01:41	WG1188785
Isopropylbenzene	U		0.126	0.500	1	10/31/2018 01:41	WG1188785
p-Isopropyltoluene	U		0.138	0.500	1	10/31/2018 01:41	WG1188785
2-Butanone (MEK)	U		1.28	5.00	1	10/31/2018 01:41	WG1188785

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Methylene Chloride	U		1.07	2.50	1	10/31/2018 01:41	WG1188785
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	10/31/2018 01:41	WG1188785
Methyl tert-butyl ether	U		0.102	0.500	1	10/31/2018 01:41	WG1188785
Naphthalene	U		0.174	2.50	1	10/31/2018 01:41	WG1188785
n-Propylbenzene	U		0.162	0.500	1	10/31/2018 01:41	WG1188785
Styrene	U		0.117	0.500	1	10/31/2018 01:41	WG1188785
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	10/31/2018 01:41	WG1188785
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	10/31/2018 01:41	WG1188785
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	10/31/2018 01:41	WG1188785
Tetrachloroethene	U		0.199	0.500	1	10/31/2018 01:41	WG1188785
Toluene	U		0.412	0.500	1	10/31/2018 01:41	WG1188785
1,2,3-Trichlorobenzene	U		0.164	0.500	1	10/31/2018 01:41	WG1188785
1,2,4-Trichlorobenzene	U		0.355	0.500	1	10/31/2018 01:41	WG1188785
1,1,1-Trichloroethane	U		0.0940	0.500	1	10/31/2018 01:41	WG1188785
1,1,2-Trichloroethane	U		0.186	0.500	1	10/31/2018 01:41	WG1188785
Trichloroethene	0.177	J	0.153	0.500	1	10/31/2018 01:41	WG1188785
Trichlorofluoromethane	U		0.130	2.50	1	10/31/2018 01:41	WG1188785
1,2,3-Trichloropropane	U		0.247	2.50	1	10/31/2018 01:41	WG1188785
1,2,4-Trimethylbenzene	U		0.123	0.500	1	10/31/2018 01:41	WG1188785
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	10/31/2018 01:41	WG1188785
1,3,5-Trimethylbenzene	U		0.124	0.500	1	10/31/2018 01:41	WG1188785
Vinyl acetate	U		0.645	5.00	1	10/31/2018 01:41	WG1188785
Vinyl chloride	0.236	J	0.118	0.500	1	10/31/2018 01:41	WG1188785
Xylenes, Total	U		0.316	1.50	1	10/31/2018 01:41	WG1188785
(S) Toluene-d8	*104*			*80.0-120*		*10/31/2018 01:41*	WG1188785
(S) Dibromofluoromethane	*101*			*75.0-120*		*10/31/2018 01:41*	WG1188785
(S) 4-Bromofluorobenzene	*103*			*77.0-126*		*10/31/2018 01:41*	WG1188785

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	38.5	B J	31.6	100	1	11/02/2018 19:46	WG1190352
(S) a,a,a-Trifluorotoluene(FID)	*93.7*			*78.0-120*		*11/02/2018 19:46*	WG1190352

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	1.23	J	1.05	25.0	1	10/31/2018 02:03	WG1188785
Acrylonitrile	U		0.873	5.00	1	10/31/2018 02:03	WG1188785
Benzene	U		0.0896	0.500	1	10/31/2018 02:03	WG1188785
Bromobenzene	U		0.133	0.500	1	10/31/2018 02:03	WG1188785
Bromodichloromethane	U		0.0800	0.500	1	10/31/2018 02:03	WG1188785
Bromochloromethane	U		0.145	0.500	1	10/31/2018 02:03	WG1188785
Bromoform	U		0.186	0.500	1	10/31/2018 02:03	WG1188785
Bromomethane	U		0.157	2.50	1	10/31/2018 02:03	WG1188785
n-Butylbenzene	U		0.143	0.500	1	10/31/2018 02:03	WG1188785
sec-Butylbenzene	U		0.134	0.500	1	10/31/2018 02:03	WG1188785
tert-Butylbenzene	U		0.183	0.500	1	10/31/2018 02:03	WG1188785
Carbon disulfide	U		0.101	0.500	1	10/31/2018 02:03	WG1188785
Carbon tetrachloride	U		0.159	0.500	1	10/31/2018 02:03	WG1188785
Chlorobenzene	U		0.140	0.500	1	10/31/2018 02:03	WG1188785
Chlorodibromomethane	U		0.128	0.500	1	10/31/2018 02:03	WG1188785
Chloroethane	U		0.141	2.50	1	10/31/2018 02:03	WG1188785
Chloroform	U		0.0860	0.500	1	10/31/2018 02:03	WG1188785
Chloromethane	U		0.153	1.25	1	10/31/2018 02:03	WG1188785
2-Chlorotoluene	U		0.111	0.500	1	10/31/2018 02:03	WG1188785
4-Chlorotoluene	U		0.0972	0.500	1	10/31/2018 02:03	WG1188785
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	10/31/2018 02:03	WG1188785
1,2-Dibromoethane	U		0.193	0.500	1	10/31/2018 02:03	WG1188785
Dibromomethane	U		0.117	0.500	1	10/31/2018 02:03	WG1188785
1,2-Dichlorobenzene	U		0.101	0.500	1	10/31/2018 02:03	WG1188785
1,3-Dichlorobenzene	U		0.130	0.500	1	10/31/2018 02:03	WG1188785
1,4-Dichlorobenzene	U		0.121	0.500	1	10/31/2018 02:03	WG1188785
Dichlorodifluoromethane	U		0.127	2.50	1	10/31/2018 02:03	WG1188785
1,1-Dichloroethane	U		0.114	0.500	1	10/31/2018 02:03	WG1188785
1,2-Dichloroethane	U		0.108	0.500	1	10/31/2018 02:03	WG1188785
1,1-Dichloroethene	U		0.188	0.500	1	10/31/2018 02:03	WG1188785
cis-1,2-Dichloroethene	U		0.0933	0.500	1	10/31/2018 02:03	WG1188785
trans-1,2-Dichloroethene	U		0.152	0.500	1	10/31/2018 02:03	WG1188785
1,2-Dichloropropane	U		0.190	0.500	1	10/31/2018 02:03	WG1188785
1,1-Dichloropropene	U		0.128	0.500	1	10/31/2018 02:03	WG1188785
1,3-Dichloropropane	U		0.147	1.00	1	10/31/2018 02:03	WG1188785
cis-1,3-Dichloropropene	U		0.0976	0.500	1	10/31/2018 02:03	WG1188785
trans-1,3-Dichloropropene	U		0.222	0.500	1	10/31/2018 02:03	WG1188785
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	10/31/2018 02:03	WG1188785
2,2-Dichloropropane	U		0.0929	0.500	1	10/31/2018 02:03	WG1188785
Di-isopropyl ether	U		0.0924	0.500	1	10/31/2018 02:03	WG1188785
Ethylbenzene	U		0.158	0.500	1	10/31/2018 02:03	WG1188785
Hexachloro-1,3-butadiene	U		0.157	1.00	1	10/31/2018 02:03	WG1188785
2-Hexanone	U		0.757	5.00	1	10/31/2018 02:03	WG1188785
n-Hexane	U		0.305	5.00	1	10/31/2018 02:03	WG1188785
Iodomethane	0.609	B J	0.377	10.0	1	10/31/2018 02:03	WG1188785
Isopropylbenzene	U		0.126	0.500	1	10/31/2018 02:03	WG1188785
p-Isopropyltoluene	U		0.138	0.500	1	10/31/2018 02:03	WG1188785
2-Butanone (MEK)	U		1.28	5.00	1	10/31/2018 02:03	WG1188785

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Methylene Chloride	U		1.07	2.50	1	10/31/2018 02:03	WG1188785
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	10/31/2018 02:03	WG1188785
Methyl tert-butyl ether	U		0.102	0.500	1	10/31/2018 02:03	WG1188785
Naphthalene	U		0.174	2.50	1	10/31/2018 02:03	WG1188785
n-Propylbenzene	U		0.162	0.500	1	10/31/2018 02:03	WG1188785
Styrene	0.146	J	0.117	0.500	1	10/31/2018 02:03	WG1188785
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	10/31/2018 02:03	WG1188785
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	10/31/2018 02:03	WG1188785
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	10/31/2018 02:03	WG1188785
Tetrachloroethene	U		0.199	0.500	1	10/31/2018 02:03	WG1188785
Toluene	U		0.412	0.500	1	10/31/2018 02:03	WG1188785
1,2,3-Trichlorobenzene	U		0.164	0.500	1	10/31/2018 02:03	WG1188785
1,2,4-Trichlorobenzene	U		0.355	0.500	1	10/31/2018 02:03	WG1188785
1,1,1-Trichloroethane	U		0.0940	0.500	1	10/31/2018 02:03	WG1188785
1,1,2-Trichloroethane	U		0.186	0.500	1	10/31/2018 02:03	WG1188785
Trichloroethene	U		0.153	0.500	1	10/31/2018 02:03	WG1188785
Trichlorofluoromethane	U		0.130	2.50	1	10/31/2018 02:03	WG1188785
1,2,3-Trichloropropane	U		0.247	2.50	1	10/31/2018 02:03	WG1188785
1,2,4-Trimethylbenzene	U		0.123	0.500	1	10/31/2018 02:03	WG1188785
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	10/31/2018 02:03	WG1188785
1,3,5-Trimethylbenzene	U		0.124	0.500	1	10/31/2018 02:03	WG1188785
Vinyl acetate	U		0.645	5.00	1	10/31/2018 02:03	WG1188785
Vinyl chloride	0.169	J	0.118	0.500	1	10/31/2018 02:03	WG1188785
Xylenes, Total	U		0.316	1.50	1	10/31/2018 02:03	WG1188785
(S) Toluene-d8	*106*			*80.0-120*		*10/31/2018 02:03*	WG1188785
(S) Dibromofluoromethane	*102*			*75.0-120*		*10/31/2018 02:03*	WG1188785
(S) 4-Bromofluorobenzene	*101*			*77.0-126*		*10/31/2018 02:03*	WG1188785

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		31.6	100	1	11/02/2018 20:09	WG1190352
(S) a,a,a-Trifluorotoluene(FID)	*94.1*			*78.0-120*		*11/02/2018 20:09*	WG1190352

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	1.39	J	1.05	25.0	1	10/31/2018 02:24	WG1188785
Acrylonitrile	U		0.873	5.00	1	10/31/2018 02:24	WG1188785
Benzene	U		0.0896	0.500	1	10/31/2018 02:24	WG1188785
Bromobenzene	U		0.133	0.500	1	10/31/2018 02:24	WG1188785
Bromodichloromethane	U		0.0800	0.500	1	10/31/2018 02:24	WG1188785
Bromochloromethane	U		0.145	0.500	1	10/31/2018 02:24	WG1188785
Bromoform	U		0.186	0.500	1	10/31/2018 02:24	WG1188785
Bromomethane	U		0.157	2.50	1	10/31/2018 02:24	WG1188785
n-Butylbenzene	U		0.143	0.500	1	10/31/2018 02:24	WG1188785
sec-Butylbenzene	U		0.134	0.500	1	10/31/2018 02:24	WG1188785
tert-Butylbenzene	U		0.183	0.500	1	10/31/2018 02:24	WG1188785
Carbon disulfide	U		0.101	0.500	1	10/31/2018 02:24	WG1188785
Carbon tetrachloride	U		0.159	0.500	1	10/31/2018 02:24	WG1188785
Chlorobenzene	U		0.140	0.500	1	10/31/2018 02:24	WG1188785
Chlorodibromomethane	U		0.128	0.500	1	10/31/2018 02:24	WG1188785
Chloroethane	U		0.141	2.50	1	10/31/2018 02:24	WG1188785
Chloroform	U		0.0860	0.500	1	10/31/2018 02:24	WG1188785
Chloromethane	U		0.153	1.25	1	10/31/2018 02:24	WG1188785
2-Chlorotoluene	U		0.111	0.500	1	10/31/2018 02:24	WG1188785
4-Chlorotoluene	U		0.0972	0.500	1	10/31/2018 02:24	WG1188785
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	10/31/2018 02:24	WG1188785
1,2-Dibromoethane	U		0.193	0.500	1	10/31/2018 02:24	WG1188785
Dibromomethane	U		0.117	0.500	1	10/31/2018 02:24	WG1188785
1,2-Dichlorobenzene	U		0.101	0.500	1	10/31/2018 02:24	WG1188785
1,3-Dichlorobenzene	U		0.130	0.500	1	10/31/2018 02:24	WG1188785
1,4-Dichlorobenzene	U		0.121	0.500	1	10/31/2018 02:24	WG1188785
Dichlorodifluoromethane	U		0.127	2.50	1	10/31/2018 02:24	WG1188785
1,1-Dichloroethane	U		0.114	0.500	1	10/31/2018 02:24	WG1188785
1,2-Dichloroethane	U		0.108	0.500	1	10/31/2018 02:24	WG1188785
1,1-Dichloroethene	U		0.188	0.500	1	10/31/2018 02:24	WG1188785
cis-1,2-Dichloroethene	0.629		0.0933	0.500	1	10/31/2018 02:24	WG1188785
trans-1,2-Dichloroethene	U		0.152	0.500	1	10/31/2018 02:24	WG1188785
1,2-Dichloropropane	U		0.190	0.500	1	10/31/2018 02:24	WG1188785
1,1-Dichloropropene	U		0.128	0.500	1	10/31/2018 02:24	WG1188785
1,3-Dichloropropane	U		0.147	1.00	1	10/31/2018 02:24	WG1188785
cis-1,3-Dichloropropene	U		0.0976	0.500	1	10/31/2018 02:24	WG1188785
trans-1,3-Dichloropropene	U		0.222	0.500	1	10/31/2018 02:24	WG1188785
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	10/31/2018 02:24	WG1188785
2,2-Dichloropropane	U		0.0929	0.500	1	10/31/2018 02:24	WG1188785
Di-isopropyl ether	U		0.0924	0.500	1	10/31/2018 02:24	WG1188785
Ethylbenzene	U		0.158	0.500	1	10/31/2018 02:24	WG1188785
Hexachloro-1,3-butadiene	U		0.157	1.00	1	10/31/2018 02:24	WG1188785
2-Hexanone	U		0.757	5.00	1	10/31/2018 02:24	WG1188785
n-Hexane	U		0.305	5.00	1	10/31/2018 02:24	WG1188785
Iodomethane	0.659	B J	0.377	10.0	1	10/31/2018 02:24	WG1188785
Isopropylbenzene	U		0.126	0.500	1	10/31/2018 02:24	WG1188785
p-Isopropyltoluene	U		0.138	0.500	1	10/31/2018 02:24	WG1188785
2-Butanone (MEK)	U		1.28	5.00	1	10/31/2018 02:24	WG1188785

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Methylene Chloride	U		1.07	2.50	1	10/31/2018 02:24	WG1188785
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	10/31/2018 02:24	WG1188785
Methyl tert-butyl ether	U		0.102	0.500	1	10/31/2018 02:24	WG1188785
Naphthalene	U		0.174	2.50	1	10/31/2018 02:24	WG1188785
n-Propylbenzene	U		0.162	0.500	1	10/31/2018 02:24	WG1188785
Styrene	0.242	J	0.117	0.500	1	10/31/2018 02:24	WG1188785
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	10/31/2018 02:24	WG1188785
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	10/31/2018 02:24	WG1188785
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	10/31/2018 02:24	WG1188785
Tetrachloroethene	0.220	J	0.199	0.500	1	10/31/2018 02:24	WG1188785
Toluene	U		0.412	0.500	1	10/31/2018 02:24	WG1188785
1,2,3-Trichlorobenzene	U		0.164	0.500	1	10/31/2018 02:24	WG1188785
1,2,4-Trichlorobenzene	U		0.355	0.500	1	10/31/2018 02:24	WG1188785
1,1,1-Trichloroethane	U		0.0940	0.500	1	10/31/2018 02:24	WG1188785
1,1,2-Trichloroethane	U		0.186	0.500	1	10/31/2018 02:24	WG1188785
Trichloroethene	0.696		0.153	0.500	1	10/31/2018 02:24	WG1188785
Trichlorofluoromethane	U		0.130	2.50	1	10/31/2018 02:24	WG1188785
1,2,3-Trichloropropane	U		0.247	2.50	1	10/31/2018 02:24	WG1188785
1,2,4-Trimethylbenzene	U		0.123	0.500	1	10/31/2018 02:24	WG1188785
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	10/31/2018 02:24	WG1188785
1,3,5-Trimethylbenzene	U		0.124	0.500	1	10/31/2018 02:24	WG1188785
Vinyl acetate	U		0.645	5.00	1	10/31/2018 02:24	WG1188785
Vinyl chloride	3.90		0.118	0.500	1	10/31/2018 02:24	WG1188785
Xylenes, Total	U		0.316	1.50	1	10/31/2018 02:24	WG1188785
(S) Toluene-d8	*102*			*80.0-120*		*10/31/2018 02:24*	WG1188785
(S) Dibromofluoromethane	*101*			*75.0-120*		*10/31/2018 02:24*	WG1188785
(S) 4-Bromofluorobenzene	*102*			*77.0-126*		*10/31/2018 02:24*	WG1188785

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	1.48	J	1.05	25.0	1	10/30/2018 20:00	WG1188785
Acrylonitrile	U		0.873	5.00	1	10/30/2018 20:00	WG1188785
Benzene	U		0.0896	0.500	1	10/30/2018 20:00	WG1188785
Bromobenzene	U		0.133	0.500	1	10/30/2018 20:00	WG1188785
Bromodichloromethane	U		0.0800	0.500	1	10/30/2018 20:00	WG1188785
Bromochloromethane	U		0.145	0.500	1	10/30/2018 20:00	WG1188785
Bromoform	U		0.186	0.500	1	10/30/2018 20:00	WG1188785
Bromomethane	U		0.157	2.50	1	10/30/2018 20:00	WG1188785
n-Butylbenzene	U		0.143	0.500	1	10/30/2018 20:00	WG1188785
sec-Butylbenzene	U		0.134	0.500	1	10/30/2018 20:00	WG1188785
tert-Butylbenzene	U		0.183	0.500	1	10/30/2018 20:00	WG1188785
Carbon disulfide	U		0.101	0.500	1	10/30/2018 20:00	WG1188785
Carbon tetrachloride	U		0.159	0.500	1	10/30/2018 20:00	WG1188785
Chlorobenzene	U		0.140	0.500	1	10/30/2018 20:00	WG1188785
Chlorodibromomethane	U		0.128	0.500	1	10/30/2018 20:00	WG1188785
Chloroethane	U		0.141	2.50	1	10/30/2018 20:00	WG1188785
Chloroform	U		0.0860	0.500	1	10/30/2018 20:00	WG1188785
Chloromethane	U		0.153	1.25	1	10/30/2018 20:00	WG1188785
2-Chlorotoluene	U		0.111	0.500	1	10/30/2018 20:00	WG1188785
4-Chlorotoluene	U		0.0972	0.500	1	10/30/2018 20:00	WG1188785
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	10/30/2018 20:00	WG1188785
1,2-Dibromoethane	U		0.193	0.500	1	10/30/2018 20:00	WG1188785
Dibromomethane	U		0.117	0.500	1	10/30/2018 20:00	WG1188785
1,2-Dichlorobenzene	U		0.101	0.500	1	10/30/2018 20:00	WG1188785
1,3-Dichlorobenzene	U		0.130	0.500	1	10/30/2018 20:00	WG1188785
1,4-Dichlorobenzene	U		0.121	0.500	1	10/30/2018 20:00	WG1188785
Dichlorodifluoromethane	U		0.127	2.50	1	10/30/2018 20:00	WG1188785
1,1-Dichloroethane	U		0.114	0.500	1	10/30/2018 20:00	WG1188785
1,2-Dichloroethane	U		0.108	0.500	1	10/30/2018 20:00	WG1188785
1,1-Dichloroethene	U		0.188	0.500	1	10/30/2018 20:00	WG1188785
cis-1,2-Dichloroethene	U		0.0933	0.500	1	10/30/2018 20:00	WG1188785
trans-1,2-Dichloroethene	U		0.152	0.500	1	10/30/2018 20:00	WG1188785
1,2-Dichloropropane	U		0.190	0.500	1	10/30/2018 20:00	WG1188785
1,1-Dichloropropene	U		0.128	0.500	1	10/30/2018 20:00	WG1188785
1,3-Dichloropropane	U		0.147	1.00	1	10/30/2018 20:00	WG1188785
cis-1,3-Dichloropropene	U		0.0976	0.500	1	10/30/2018 20:00	WG1188785
trans-1,3-Dichloropropene	U		0.222	0.500	1	10/30/2018 20:00	WG1188785
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	10/30/2018 20:00	WG1188785
2,2-Dichloropropane	U		0.0929	0.500	1	10/30/2018 20:00	WG1188785
Di-isopropyl ether	U		0.0924	0.500	1	10/30/2018 20:00	WG1188785
Ethylbenzene	U		0.158	0.500	1	10/30/2018 20:00	WG1188785
Hexachloro-1,3-butadiene	U		0.157	1.00	1	10/30/2018 20:00	WG1188785
2-Hexanone	U		0.757	5.00	1	10/30/2018 20:00	WG1188785
n-Hexane	U		0.305	5.00	1	10/30/2018 20:00	WG1188785
Iodomethane	0.869	B J	0.377	10.0	1	10/30/2018 20:00	WG1188785
Isopropylbenzene	U		0.126	0.500	1	10/30/2018 20:00	WG1188785
p-Isopropyltoluene	U		0.138	0.500	1	10/30/2018 20:00	WG1188785
2-Butanone (MEK)	U		1.28	5.00	1	10/30/2018 20:00	WG1188785
Methylene Chloride	U		1.07	2.50	1	10/30/2018 20:00	WG1188785
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	10/30/2018 20:00	WG1188785
Methyl tert-butyl ether	U		0.102	0.500	1	10/30/2018 20:00	WG1188785
Naphthalene	U		0.174	2.50	1	10/30/2018 20:00	WG1188785
n-Propylbenzene	U		0.162	0.500	1	10/30/2018 20:00	WG1188785
Styrene	U		0.117	0.500	1	10/30/2018 20:00	WG1188785
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	10/30/2018 20:00	WG1188785
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	10/30/2018 20:00	WG1188785

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	10/30/2018 20:00	WG1188785
Tetrachloroethene	U		0.199	0.500	1	10/30/2018 20:00	WG1188785
Toluene	U		0.412	0.500	1	10/30/2018 20:00	WG1188785
1,2,3-Trichlorobenzene	U		0.164	0.500	1	10/30/2018 20:00	WG1188785
1,2,4-Trichlorobenzene	U		0.355	0.500	1	10/30/2018 20:00	WG1188785
1,1,1-Trichloroethane	U		0.0940	0.500	1	10/30/2018 20:00	WG1188785
1,1,2-Trichloroethane	U		0.186	0.500	1	10/30/2018 20:00	WG1188785
Trichloroethene	U		0.153	0.500	1	10/30/2018 20:00	WG1188785
Trichlorofluoromethane	U		0.130	2.50	1	10/30/2018 20:00	WG1188785
1,2,3-Trichloropropane	U		0.247	2.50	1	10/30/2018 20:00	WG1188785
1,2,4-Trimethylbenzene	U		0.123	0.500	1	10/30/2018 20:00	WG1188785
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	10/30/2018 20:00	WG1188785
1,3,5-Trimethylbenzene	U		0.124	0.500	1	10/30/2018 20:00	WG1188785
Vinyl acetate	U		0.645	5.00	1	10/30/2018 20:00	WG1188785
Vinyl chloride	U		0.118	0.500	1	10/30/2018 20:00	WG1188785
Xylenes, Total	U		0.316	1.50	1	10/30/2018 20:00	WG1188785
(S) Toluene-d8	*104*			*80.0-120*		*10/30/2018 20:00*	WG1188785
(S) Dibromofluoromethane	*102*			*75.0-120*		*10/30/2018 20:00*	WG1188785
(S) 4-Bromofluorobenzene	*101*			*77.0-126*		*10/30/2018 20:00*	WG1188785

Method Blank (MB)

(MB) R3357030-3 11/02/18 15:29

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Gasoline Range Organics-NWTPH	52.6	J	31.6	100
(S) a,a,a-Trifluorotoluene(FID)	*93.9*			*78.0-120*

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

(LCS) R3357030-1 11/02/18 14:10 • (LCSD) R3357030-2 11/02/18 14:44

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Gasoline Range Organics-NWTPH	5500	5100	5100	92.7	92.8	70.0-124			0.0891	20
(S) a,a,a-Trifluorotoluene(FID)				*98.7*	*98.6*	*78.0-120*				

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

Method Blank (MB)

(MB) R3356994-3 10/30/18 19:04

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Acetone	U		1.05	25.0
Acrylonitrile	U		0.873	5.00
Benzene	U		0.0896	0.500
Bromobenzene	U		0.133	0.500
Bromochloromethane	U		0.145	0.500
Bromodichloromethane	U		0.0800	0.500
Bromoform	U		0.186	0.500
n-Butylbenzene	U		0.143	0.500
Bromomethane	U		0.157	2.50
sec-Butylbenzene	U		0.134	0.500
tert-Butylbenzene	U		0.183	0.500
Carbon disulfide	U		0.101	0.500
Carbon tetrachloride	U		0.159	0.500
Chlorobenzene	U		0.140	0.500
Chlorodibromomethane	U		0.128	0.500
Chloroethane	U		0.141	2.50
2-Chlorotoluene	U		0.111	0.500
4-Chlorotoluene	U		0.0972	0.500
Chloroform	U		0.0860	0.500
1,2-Dibromo-3-Chloropropane	U		0.325	2.50
Chloromethane	U		0.153	1.25
1,2-Dibromoethane	U		0.193	0.500
Dibromomethane	U		0.117	0.500
1,2-Dichlorobenzene	U		0.101	0.500
1,3-Dichlorobenzene	U		0.130	0.500
1,4-Dichlorobenzene	U		0.121	0.500
cis-1,2-Dichloroethene	U		0.0933	0.500
Dichlorodifluoromethane	U		0.127	2.50
1,1-Dichloroethane	U		0.114	0.500
1,1-Dichloropropene	U		0.128	0.500
1,2-Dichloroethane	U		0.108	0.500
1,3-Dichloropropane	U		0.147	1.00
1,1-Dichloroethene	U		0.188	0.500
trans-1,2-Dichloroethene	U		0.152	0.500
trans-1,4-Dichloro-2-butene	U		0.257	5.00
1,2-Dichloropropane	U		0.190	0.500
2,2-Dichloropropane	U		0.0929	0.500
Di-isopropyl ether	U		0.0924	0.500
cis-1,3-Dichloropropene	U		0.0976	0.500
Hexachloro-1,3-butadiene	0.310	J	0.157	1.00

Method Blank (MB)

(MB) R3356994-3 10/30/18 19:04

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
trans-1,3-Dichloropropene	U		0.222	0.500
n-Hexane	U		0.305	5.00
Iodomethane	0.875	J	0.377	10.0
Ethylbenzene	U		0.158	0.500
p-Isopropyltoluene	U		0.138	0.500
2-Hexanone	U		0.757	5.00
Naphthalene	U		0.174	2.50
n-Propylbenzene	U		0.162	0.500
1,1,1,2-Tetrachloroethane	U		0.120	0.500
Isopropylbenzene	U		0.126	0.500
2-Butanone (MEK)	U		1.28	5.00
Methylene Chloride	U		1.07	2.50
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00
Methyl tert-butyl ether	U		0.102	0.500
1,2,3-Trichloropropane	U		0.247	2.50
1,2,4-Trimethylbenzene	U		0.123	0.500
1,2,3-Trimethylbenzene	U		0.0739	0.500
1,3,5-Trimethylbenzene	U		0.124	0.500
Vinyl acetate	U		0.645	5.00
Styrene	U		0.117	0.500
1,1,2,2-Tetrachloroethane	U		0.130	0.500
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500
Tetrachloroethene	U		0.199	0.500
Toluene	U		0.412	0.500
1,2,3-Trichlorobenzene	0.197	J	0.164	0.500
1,2,4-Trichlorobenzene	U		0.355	0.500
1,1,1-Trichloroethane	U		0.0940	0.500
1,1,2-Trichloroethane	U		0.186	0.500
Trichloroethene	U		0.153	0.500
Trichlorofluoromethane	U		0.130	2.50
Vinyl chloride	U		0.118	0.500
Xylenes, Total	U		0.316	1.50
(S) Toluene-d8	*104*			*80.0-120*
(S) Dibromofluoromethane	*103*			*75.0-120*
(S) 4-Bromofluorobenzene	*103*			*77.0-126*

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

(LCS) R3356994-1 10/30/18 18:00 • (LCSD) R3356994-2 10/30/18 18:21

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Bromobenzene	25.0	24.3	24.1	97.3	96.5	73.0-121			0.758	20
Bromochloromethane	25.0	25.5	25.6	102	102	76.0-122			0.290	20
n-Butylbenzene	25.0	25.2	25.1	101	100	73.0-125			0.420	20
sec-Butylbenzene	25.0	25.5	24.8	102	99.4	75.0-125			2.51	20
tert-Butylbenzene	25.0	25.7	25.5	103	102	76.0-124			1.12	20
2-Chlorotoluene	25.0	24.3	24.3	97.4	97.0	76.0-123			0.342	20
4-Chlorotoluene	25.0	24.9	24.1	99.7	96.4	75.0-122			3.43	20
1,2-Dibromo-3-Chloropropane	25.0	24.7	25.8	98.8	103	58.0-134			4.26	20
1,2-Dibromoethane	25.0	25.2	24.3	101	97.2	80.0-122			3.75	20
Dibromomethane	25.0	24.9	24.0	99.5	96.0	80.0-120			3.51	20
cis-1,2-Dichloroethene	25.0	24.3	24.4	97.0	97.7	73.0-120			0.691	20
1,1-Dichloropropene	25.0	26.2	25.2	105	101	74.0-126			4.09	20
1,3-Dichloropropane	25.0	24.8	24.2	99.4	96.8	80.0-120			2.62	20
trans-1,4-Dichloro-2-butene	25.0	24.3	24.7	97.3	98.6	33.0-144			1.39	20
2,2-Dichloropropane	25.0	24.6	23.7	98.2	94.7	58.0-130			3.61	20
Di-isopropyl ether	25.0	24.5	24.1	98.1	96.4	58.0-138			1.71	20
Hexachloro-1,3-butadiene	25.0	23.5	24.0	94.0	96.1	54.0-138			2.21	20
Acetone	125	121	119	96.5	94.9	19.0-160			1.66	27
n-Hexane	25.0	25.8	24.1	103	96.4	57.0-133			6.83	20
Iodomethane	125	132	132	105	105	33.0-147			0.0485	26
Acrylonitrile	125	119	120	95.5	96.4	55.0-149			0.855	20
Benzene	25.0	24.4	24.1	97.4	96.2	70.0-123			1.25	20
p-Isopropyltoluene	25.0	25.7	25.6	103	103	76.0-125			0.355	20
Bromodichloromethane	25.0	25.3	24.5	101	98.0	75.0-120			3.04	20
Bromoform	25.0	25.2	25.8	101	103	68.0-132			2.17	20
Bromomethane	25.0	26.4	25.1	106	100	10.0-160			5.20	25
Naphthalene	25.0	24.2	25.0	96.9	99.9	54.0-135			3.04	20
n-Propylbenzene	25.0	24.9	24.3	99.7	97.0	77.0-124			2.68	20
1,1,1,2-Tetrachloroethane	25.0	24.8	24.0	99.3	96.1	75.0-125			3.25	20
Carbon disulfide	25.0	25.1	23.9	101	95.8	61.0-128			4.93	20
Carbon tetrachloride	25.0	24.9	24.3	99.4	97.3	68.0-126			2.16	20
Chlorobenzene	25.0	24.8	24.0	99.0	96.0	80.0-121			3.10	20
Chlorodibromomethane	25.0	24.6	24.1	98.3	96.5	77.0-125			1.87	20
Chloroethane	25.0	25.5	24.4	102	97.4	47.0-150			4.79	20
Chloroform	25.0	23.6	23.2	94.4	92.7	73.0-120			1.75	20
Chloromethane	25.0	25.3	23.4	101	93.5	41.0-142			7.79	20
1,2,3-Trichloropropane	25.0	24.2	24.3	96.9	97.0	73.0-130			0.0849	20
1,2,4-Trimethylbenzene	25.0	25.0	24.8	100	99.3	76.0-121			0.900	20
1,2,3-Trimethylbenzene	25.0	24.3	24.2	97.3	96.9	77.0-120			0.418	20
1,3,5-Trimethylbenzene	25.0	24.8	24.1	99.2	96.6	76.0-122			2.75	20

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

(LCS) R3356994-1 10/30/18 18:00 • (LCSD) R3356994-2 10/30/18 18:21

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
1,2-Dichlorobenzene	25.0	24.9	24.2	99.7	96.9	79.0-121			2.79	20
Vinyl acetate	125	135	132	108	105	11.0-160			2.43	20
1,3-Dichlorobenzene	25.0	24.5	23.9	97.9	95.8	79.0-120			2.25	20
1,4-Dichlorobenzene	25.0	23.3	23.1	93.1	92.4	79.0-120			0.784	20
Dichlorodifluoromethane	25.0	27.9	25.8	112	103	51.0-149			7.70	20
1,1-Dichloroethane	25.0	25.1	24.3	100	97.2	70.0-126			3.26	20
1,2-Dichloroethane	25.0	24.7	24.3	98.7	97.4	70.0-128			1.32	20
1,1-Dichloroethene	25.0	26.6	25.3	106	101	71.0-124			5.12	20
trans-1,2-Dichloroethene	25.0	25.4	24.2	102	96.8	73.0-120			4.78	20
1,2-Dichloropropane	25.0	25.5	24.7	102	98.9	77.0-125			3.27	20
cis-1,3-Dichloropropene	25.0	24.7	24.1	98.7	96.5	80.0-123			2.29	20
trans-1,3-Dichloropropene	25.0	25.1	24.6	100	98.4	78.0-124			2.09	20
Ethylbenzene	25.0	24.6	23.7	98.5	94.7	79.0-123			3.88	20
2-Hexanone	125	126	123	101	98.4	67.0-149			2.54	20
Isopropylbenzene	25.0	25.3	24.6	101	98.4	76.0-127			2.76	20
2-Butanone (MEK)	125	120	118	96.0	94.8	44.0-160			1.22	20
Methylene Chloride	25.0	23.3	22.9	93.3	91.5	67.0-120			1.90	20
4-Methyl-2-pentanone (MIBK)	125	123	122	98.7	97.8	68.0-142			0.861	20
Methyl tert-butyl ether	25.0	24.5	23.9	98.0	95.7	68.0-125			2.35	20
Styrene	25.0	25.2	25.1	101	100	73.0-130			0.365	20
1,1,2,2-Tetrachloroethane	25.0	24.8	24.4	99.3	97.7	65.0-130			1.68	20
1,1,2-Trichlorotrifluoroethane	25.0	27.0	25.5	108	102	69.0-132			5.64	20
Tetrachloroethene	25.0	25.1	24.6	100	98.4	72.0-132			2.01	20
Toluene	25.0	24.3	23.3	97.3	93.2	79.0-120			4.29	20
1,2,3-Trichlorobenzene	25.0	24.3	25.3	97.2	101	50.0-138			3.89	20
1,2,4-Trichlorobenzene	25.0	25.2	24.6	101	98.5	57.0-137			2.44	20
1,1,1-Trichloroethane	25.0	26.2	24.8	105	99.2	73.0-124			5.46	20
1,1,2-Trichloroethane	25.0	25.5	24.2	102	96.7	80.0-120			5.50	20
Trichloroethene	25.0	25.2	23.7	101	94.7	78.0-124			6.30	20
Trichlorofluoromethane	25.0	26.8	25.9	107	103	59.0-147			3.74	20
Vinyl chloride	25.0	26.7	25.4	107	102	67.0-131			4.81	20
Xylenes, Total	75.0	75.6	72.7	101	96.9	79.0-123			3.91	20
(S) Toluene-d8				*102*	*100*	*80.0-120*				
(S) Dibromofluoromethane				*102*	*99.5*	*75.0-120*				
(S) 4-Bromofluorobenzene				*101*	*104*	*77.0-126*				

Guide to Reading and Understanding Your Laboratory Report

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

Abbreviations and Definitions

MDL	Method Detection Limit.
RDL	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
(S)	Surrogate (Surrogate Standard) - Analytes added to every blank, sample, Laboratory Control Sample/Duplicate and Matrix Spike/Duplicate; used to evaluate analytical efficiency by measuring recovery. Surrogates are not expected to be detected in all environmental media.
U	Not detected at the Reporting Limit (or MDL where applicable).
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.
Dilution	If the sample matrix contains an interfering material, the sample preparation volume or weight values differ from the standard, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor.
Limits	These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges.
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.
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.
Quality Control Summary (Qc)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.

Qualifier	Description
B	The same analyte is found in the associated blank.
J	The identification of the analyte is acceptable; the reported value is an estimate.

Pace National is the only environmental laboratory accredited/certified to support your work nationwide from one location. One phone call, one point of contact, one laboratory. No other lab is as accessible or prepared to handle your needs throughout the country. Our capacity and capability from our single location laboratory is comparable to the collective totals of the network laboratories in our industry. The most significant benefit to our one location design is the design of our laboratory campus. The model is conducive to accelerated productivity, decreasing turn-around time, and preventing cross contamination, thus protecting sample integrity. Our focus on premium quality and prompt service allows us to be YOUR LAB OF CHOICE.
* Not all certifications held by the laboratory are applicable to the results reported in the attached report.
* Accreditation is only applicable to the test methods specified on each scope of accreditation held by Pace National.

State Accreditations

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN-03-2002-34
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey–NELAP	TN002
California	2932	New Mexico [1]	n/a
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina [1]	DW21704
Georgia	NELAP	North Carolina [3]	41
Georgia [1]	923	North Dakota	R-140
Idaho	TN00003	Ohio–VAP	CL0069
Illinois	200008	Oklahoma	9915
Indiana	C-TN-01	Oregon	TN200002
Iowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	LAO00356
Kentucky [1 6]	90010	South Carolina	84004
Kentucky [2]	16	South Dakota	n/a
Louisiana	AI30792	Tennessee [1 4]	2006
Louisiana [1]	LA180010	Texas	T 104704245-17-14
Maine	TN0002	Texas [5]	LAB0152
Maryland	324	Utah	TN00003
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	460132
Minnesota	047-999-395	Washington	C847
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	9980939910
Montana	CERT0086	Wyoming	A2LA

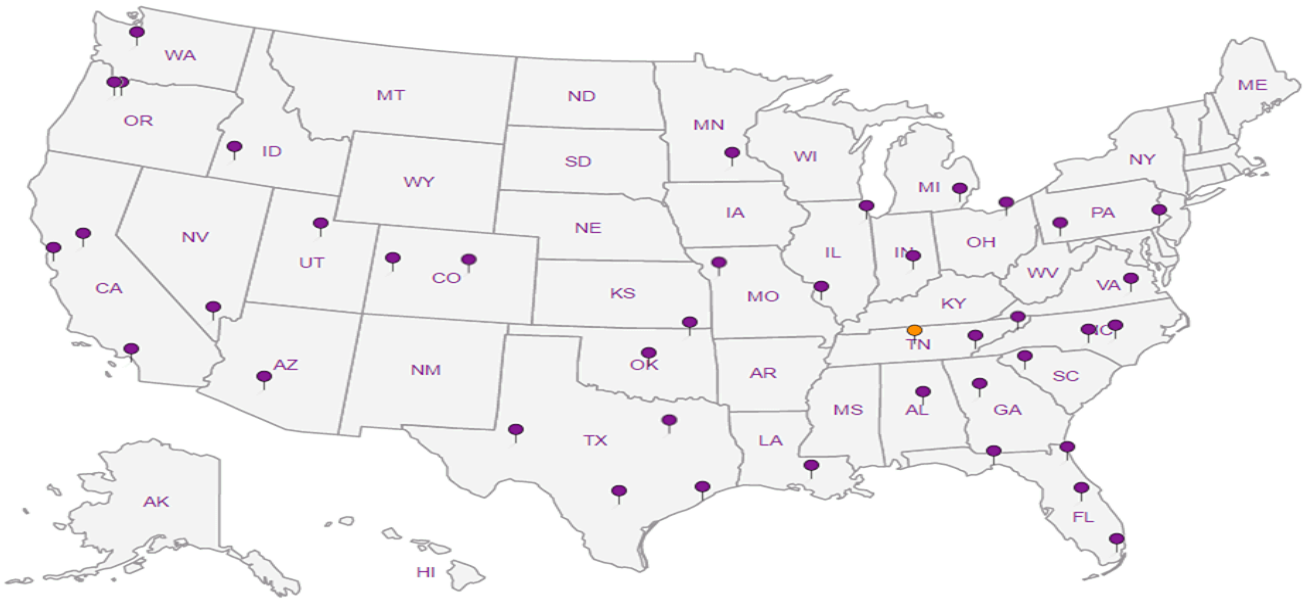
Third Party Federal Accreditations

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

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

Our Locations

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



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

Report to: Bill Haldeman

Email To: bhaldeman@pesenv.com

Project Description: American Linen

City/State Collected: Seattle WA

Phone: 206-529-3980
Fax: 206-529-3985

Client Project # 143.001.05

Lab Project # PESENVSWA-HALDEMAN

Collected by (print): R. McLaughlin

Site/Facility ID #

P.O. #

Collected by (signature): R T McLaughlin

Immediately Packed on Ice N ___ Y X

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

Quote #

Date Results Needed

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	V8260C 40mlAmb-HCl	Remarks	Sample # (lab only)
MW-136-102918	Grab	GW	89	10/29/18	830	3	X		-01
MW-138-102918	↓	GW	110		1040	3	X		-02
W-MW-01-102918	↓	GW	73.5'	↓	1210	3	X		-03
Trip Blank	—	~~GW~~	—	—	—	3	X		-04
		GW				3	X		
		~~GW~~				3	X		
		GW	R. McLaughlin			3	X		
		GW	10/29/18			3	X		
		GW				3	X		

Analysis / Container / Preservative

Chain of Custody Page 1 of 1

Pace Analytical
National Center for Testing & Innovation

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

L# L1039305

B157

Acctnum: PESENVSWA
Template: T141146
Prelogin: P673964
TSR: 110 - Brian Ford
PB:

Shipped Via: FedEX Ground

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

Remarks: RAD SCREEN: <0.5 mR/hr

pH _____ Temp _____

Flow _____ Other _____

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

Tracking # 4196 3258 7810

Sample Receipt Checklist
COC Seal Present/Intact: __NP ✓Y __N
COC Signed/Accurate: ✓Y __N
Bottles arrive intact: ✓Y __N
Correct bottles used: ✓Y __N
Sufficient volume sent: ✓Y __N
If Applicable
VOA Zero Headspace: ✓Y __N
Preservation Correct/Checked: __Y __N

Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)
R T McLaughlin	10/29/18	1305	
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)
			BK Fairs

Trip Blank Received: (Yes) No
1 (HCl) / MeOH
TBR

Temp: +0.1°C Bottles Received: 9
1.9 2.0 #2

Date: 10/30/18 Time: 0845

If preservation required by Login: Date/Time

Hold:

Condition: NCF / (OK)