PES Environmental, Inc.
Engineering & Environmental Services

March 29, 2016

1246.038.02

Gerrity Atlantic Retail Partners II, Inc.
c/o: Gerrity Group, LLC
977 Lomas Santa Fe Drive, Suite A
Solana Beach, California 92075

Attention: Mr. Ron Mourey

SUMMARY OF LIMITED PHASE II INVESTIGATION RESULTS
LAKE STEVENS MARKETPLACE SHOPPING CENTER
LAKE STEVENS, WASHINGTON

Dear Mr. Mourey:

PES Environmental, Inc. (PES) is pleased to present this summary of recent environmental sampling activities associated with the former dry cleaner suite located at 303 91st Avenue NE, Suite C-302, in the Lake Stevens Marketplace Shopping Center, in Lake Stevens, Washington (Site; Plate 1).

SCOPE OF WORK

As part of the investigation, PES evaluated conditions within the former dry cleaner suite by collecting one indoor air sample, one ambient (background) air sample, three sub-slab soil gas samples, and three soil samples. In addition, PES collected two soil samples and two groundwater samples from exterior borings located northeast of the former dry cleaner suite and evaluated the subsurface utilities associated with suite C-302. The purpose of this sampling was to evaluate shallow groundwater in a potentially downgradient direction from the former dry cleaner (northeast), evaluate the vapor intrusion exposure risks, and evaluate the sanitary sewer as a potential release mechanism or preferential contaminant migration pathway.

Indoor Air Sampling

PES collected one indoor air sample (IA-031716) from within the former dry cleaner suite and one ambient air sample (OA-031716) on the northeast corner of the roof of the former dry cleaner building, located upwind of the suite, as shown on the attached Plates 2 and 3. Sampling procedures and methods were performed consistent with the Washington State Department of Ecology's (Ecology's) *"Guidance for Evaluating Soil Vapor Intrusion in Washington State: Investigation and Remedial Action"* ("Ecology's VI Guidance", October 2009). The samples were collected in 6-liter summar canisters over an 8-hour time period on March 17, 2016. The air samples were submitted to ESC Lab Sciences (ESC), of Mt Juliet, Tennessee, a Washington State accredited analytical laboratory, for analysis of volatile organic compounds (VOCs) using

United States Environmental Protection Agency (EPA) Method TO-15 with selective ion monitoring (TO-15-SIM).

Sub-Slab Soil Gas Sampling

Three soil gas samples were collected on March 18, 2016, at locations shown on the attached Plate 2. A small hole was drilled through the concrete slab using a rotohammer drill bit and Teflon tubing was installed through the hole into the soil beneath the slab. The annular space between the sample tubing and concrete was filled with sand, dry bentonite, and sealed at the top with hydrated bentonite. Upon sealing of the surface entry points, the sampling train was connected. A shut-in test was performed to check the sampling train for leaks, and a helium leak test was performed to check for surface air infiltration below the slab. Air was purged from the sampling train prior to sample collection. The sub-slab samples (SV1-031816, SV2-031816, and SV3-031816) were collected in 6-Liter summa canisters with flow regulators set to fill at a rate of 200 milliliters per minute (ml/min). The soil gas samples were submitted to ESC for analysis of VOCs using EPA Method TO-15-SIM.

Utility Location

On March 17, 2016, under subcontract to PES, Applied Professional Services, Inc. (APS), of North Bend, Washington, located the subsurface utilities around the planned drilling locations. APS used radio frequency and Ground Penetrating Radar (GPR) locating equipment to locate conductible utilities in the suite and north and west of the building around the planned drilling locations. On March 18, 2016, APS used a video camera to locate and document the integrity of the sanitary sewer pipeline within the former dry cleaner suite and west to the parking lot.

Soil Borings and Temporary Well Installations

Soil borings TW-1 and TW-2 were installed with a limited access direct-push drill rig northeast of the former dry cleaner building on March 17, 2016; soil borings SV-1 through SV-3 were installed with a hand-auger within the former dry cleaner suite on March 18, 2016. The direct-push borings were installed by PES's subcontractor Environmental Services Network Northwest, Inc. (ESN). The boring locations are shown on Plates 2 and 3.

The hand-auger borings SV-1 through SV-3 first required concrete coring through the 6-inch thick floor slab within the suite, and the direct-push borings were installed within a grassy/vegetated area. Soil samples from the full bore depth of TW-1 and TW-2 were collected during drilling using 4-foot-long core barrels lined with new acetate sleeves. In all locations, the borings were advanced to the maximum depth possible (6 to 9 feet deep for TW-1 and TW-2 and 2 to 2.5 feet for SV-1 through SV-3). PES observed the soil samples for lithologic characterization and field-screened the soil cores for VOCs with a photo-ionization detector (PID). One sample was collected from each boring for analysis of VOCs using EPA Method 8260. Soil samples were collected using syringe samplers consistent with the EPA Method 5035 protocols and placed in laboratory-provided bottles preserved with methanol or sodium bisulfate. Additional sample volume was collected in unpreserved glass soil sample jars

for analysis of soil moisture content. Sample bottles were sealed, labeled, and placed in coolers on ice and shipped under chain-of-custody seal to ESC.

Temporary wells were installed in TW-1 and TW-2. TW-1 was constructed with nominal ¾-inch-diameter, flush-threaded Schedule 40 PVC and a 5-foot-long well screen (from 4 to 9 feet bgs) and TW-2 was constructed with a ¾-inch-diameter pre-pack well screen (from 1 to 6 feet bgs). The annular space around TW-1's well screen was backfilled with sand. The temporary wells were allowed to stabilize for a minimum of one hour prior to purging and sampling. Approximately three pore volumes of water was purged from TW-1 and a sample was collected using low-flow sampling methods (TW-1-W). A peristaltic pump was used to purge and sample the water at a rate less than 100 millimeters per minute (ml/min). Minimal purging was possible in TW-2, due to the very low re-charge rate, and the sample was effectively a grab sample (TW-2-W). New disposable polyethylene tubing (silicon tubing at the pump head) was used, with the sample intakes located at approximately 8 and 6 feet bgs in TW-1 and TW-2, respectively. PES monitored field parameters (pH, temperature, specific conductance, dissolved oxygen [DO], and oxidation-reduction potential [ORP]) during well purging in TW-1.

Groundwater samples were collected from the discharge end of the peristaltic pump tubing. The same pump rate used at the end of well purging was used during sample collection. The volatile organic analysis (VOA) vials were filled by allowing the sample water to pour down the inside of the sample bottles without splashing directly onto the base. All sample containers were prepared and provided by the project laboratory. Following water sample collection, the sample containers were labeled for identification and immediately placed in insulated coolers containing ice. The coolers containing the samples were then delivered under chain-of-custody protocol to the laboratory.

After the temporary well was sampled, the borings were abandoned by filling the boring with bentonite as the PVC was extracted, consistent with Chapter 173-160 Washington Administrative Code (WAC). The top of the abandoned borings within the former dry cleaner suite were completed with concrete. The groundwater samples were submitted to the laboratory for analysis of VOCs by EPA Method 8260.

The boring logs are attached.

Residual Soil and Water Management

Residual soil from investigation drilling was placed in a 30-gallon steel drum, labeled, and stored on the east side (behind) of the building. The drum remains on-site, pending disposal.

DISCUSSION OF RESULTS

Data Validation Review

PES conducted a data quality review of the investigation chemistry data consistent with USEPA data review guidelines. Data completeness, holding times, laboratory instrument calibrations, surrogate recoveries, matrix spike and matrix spike duplicates, laboratory control samples,

quantitation limits, field duplicates, method blanks, and trip blanks were reviewed. PES assigned the following data qualifiers, as needed:

- J qualifier: result is an estimate based on laboratory quality control results.

No data were rejected based on the data validation review, and PES judged all of the data acceptable for use. No VOCs were detected in the trip blank submitted with the soil and water samples. The data validation memorandum is attached.

Sanitary Sewer

The sanitary sewer line was scoped beginning at a cleanout located in the former boiler room in the southeastern portion of the dry cleaner suite, as shown on the attached Plate 2. The sanitary line runs north/south and is constructed of 3-inch diameter ABS piping. The sanitary line connects into 6-inch diameter piping within the bathroom where it makes several turns before running west until it leaves the front of the suite. In the parking lot, it continues for several feet and bends northwest, changing material to PVC. A floor drain west of the bathroom near one of the former dry cleaning unit runs east and tees into the previously described 3-inch diameter sanitary line in the bathroom. The depth of the line within the back portion of the suite was approximately 2.5 to 3 feet bgs. The line slopes down to approximately 5 feet 7 inches toward the front of the suite and slopes to approximately 6 feet within the parking lot in front of the suite. A section of the pipe dips down ("a belly") west of the bathroom. No obvious breaks or joint failures were observed with the video inspection.

A review of Galloway Environmental Inc.'s water elevations in monitoring well MW-1, located immediately west of the former dry cleaner suite indicate depth to water ranges from 6.5 to 10.3 feet below the top of the well casing. This indicates that the sanitary sewer line and backfill within the suite likely does not intersect with the shallow perched water table until under the parking lot, northwest of the suite.

Indoor Air

The results of the indoor and ambient air sampling are summarized in Table 1. A total of five VOCs were detected in the indoor air sample, four of which (benzene, carbon tetrachloride, chloromethane, and toluene) were detected at similar concentrations in the ambient (background) sample. The other VOC (tetrachloroethene; PCE) was not detected in the ambient air sample. As indicated in Table 1, all of these VOC compounds are well below their associated indoor air cleanup levels.

The sub-slab soil gas sample results are summarized in Table 2. A total of eight VOCs were detected in the sub-slab soil gas samples, generally at low levels. PCE was detected at elevated concentrations up to 1,170 micrograms per cubic meter (µg/m3). The concentrations were above Ecology's Method B sub-slab screening levels in samples SV2 and SV3.

Lithology and Hydrogeology Results

The soil types observed during drilling to the maximum drilled depth of 9 feet bgs consisted of gravel, silty sand, silt with sand, sand, and sand with gravel. TW-1 and TW-2 were terminated when refusal was met (9 and 6 feet bgs, respectively). Wet soil was observed at depths of 3 and 5.5 feet bgs in TW-1 and TW-2, respectively, perched on a very dense silty sand unit. Note the ground surface of TW-1 is at a lower elevation than TW-2. Very little water accumulated in the temporary well installed in TW-2 after being allowed to sit for two hours. Depth to water measurements in TW-1 and TW-2 were 3.05 and 4.2 feet bgs, respectively, at the time of purging and sampling.

Field Screening Results

Field PID measurements of the retrieved soil samples were typically less than 20 parts per million (ppm). Field PID measurements and observations are included on the attached boring logs.

Soil Matrix Results

Table 3 summarizes the soil analytical results. Tetrachloroethene was the only VOC detected and was detected at concentrations up to 0.00573 milligrams per kilogram (mg/kg) in the three interior shallow soil samples (SV1-1.5, SV2-1, and SV3-1.5). These concentrations are significantly below Ecology's MTCA Method A CUL of 0.05 mg/kg. VOCs were not detected in the two exterior boring soil samples (TW-1-8 and TW-2-6).

Groundwater Results

Table 3 summarizes the water analytical results. VOCs were not detected in the two groundwater samples collected from temporary wells TW-1 and TW-2.

The laboratory analytical report and data validation memorandum are attached.

CONCLUSIONS

Based on the sampling conducted within and adjacent to the former dry cleaner suite on March 17 and 18, 2016, the following conclusions can be made:

- The measured concentration of PCE in indoor air is well below its risk-based cleanup level; PCE was not detected in the ambient (outdoor) air sample. Other VOCs detected in indoor air are at concentrations similar to those found in the ambient air sample and below their respective risk-based cleanup levels.

- PCE was detected in all three of the sub-slab soil gas samples collected from beneath the suite, and in two of the three at concentrations above the conservative screening levels. As noted above, however, the PCE in the subslab vapors has not resulted in an exceedance of the risk-based indoor air cleanup level. PCE was also detected in shallow

soil samples collected from beneath the slab at concentrations well below its risk-based cleanup level. Future work within the former dry cleaner suite should take care not to damage or penetrate the concrete floor slab.

- No VOCs were detected in either of the water or soil samples collected at the two locations along the eastern property, indicating that the shallow perched groundwater contamination does not appear to extend to the northeast.

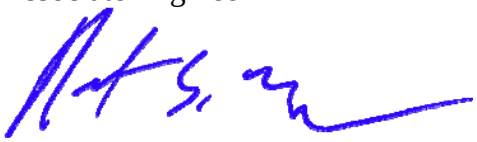
- The sanitary sewer beneath the former dry cleaning suite appeared to be constructed of solvent-welded ABS pipe. The video survey did not identify any obvious issues with the integrity of the sanitary sewer pipe. The pipe appears to be at a depth that would indicate that the pipe trench is not a preferential migration pathway.

If you have any questions, please feel free to contact either of the undersigned.

Very truly yours,

PES ENVIRONMENTAL, INC.

Brian O'Neal, P.E.
Associate Engineer



Robert Creps
Principal Engineer

Attachments: Table 1 – Summary of Detected VOCs in Indoor Air
Table 2 – Summary of Detected VOCs in Sub-Slab Soil Gas
Table 3 – Summary of Soil and Groundwater Analytical Results
Plate 1 – Site Location Map
Plate 2 – Interior Sampling Locations
Plate 3 – Exterior Sampling Locations
Boring Logs
Laboratory Analytical Report
Data Validation Memorandum

Table 1
Summary of Detected VOCs in Indoor Air
Former Dry Cleaner Suite
Lake Stevens Marketplace Shopping Center
Lake Stevens, Washington

Constituent	Indoor Air IA-031716 3/17/2016 8-hour (µg/m^3)	Ambient Air OA-031716 3/17/2016 8-hour (µg/m^3)	Indoor Air Corrected for Ambient 3/17/2016 8-hour (µg/m^3)	Method B Indoor Air Cleanup Level (µg/m3)
Benzene	**0.831**	**0.859**	**NC**	0.321
Carbon Tetrachloride	**0.454**	**0.440**	**0.014**	0.417
Chloromethane	**1.14**	**1.27**	**NC**	41.1
Ethylbenzene	**0.380**	**0.404**	**NC**	457
Tetrachloroethene	**1.04**	0.136 U	**1.04**	9.62

Notes:

1. All results in µg/m^3 (micrograms per cubic meter).
2. Detected VOCs are summarized in this table; see laboratory analytical report for entire VOC analytical results.
3. Volatile Organic Compound (VOC) analysis by EPA Method TO-15-SIM.
4. Detected results shown in **bold**.
5. U = not detected at or above the concentration shown.
6. Method B cleanup levels obtained from Ecology's CLARC database, August 2015.
7. Measured indoor air concentrations corrected for ambient air concentrations consistent Ecology's Draft Vapor Intrusion Guidance, 2009.
8. NC = Not calculable. Indicates measured indoor air concentration less than ambient air concentrations.

Table 2
Summary of Detected VOCs in Sub-Slab Soil Gas
Former Dry Cleaner Suite
Lake Stevens Marketplace Shopping Center
Lake Stevens, Washington

Compound	SV1-031816 3/18/2016 (µg/m3)		SV2-031816 3/18/2016 (µg/m3)		SV3-031816 3/18/2016 (µg/m3)		Sub-Slab Screening Level (µg/m3)
Benzene	**0.241**	**B**	**0.294**	**B**	**2.02**		10.7
Carbon Tetrachloride	**0.429**		**0.429**		**0.391**		13.9
Chloroform	**0.314**		**1.22**		**3.15**		3.62
1,4-Dichlorobenzene	**0.379**		**0.413**		**0.756**		7.58
cis-1,2-Dichloroethene	0.0793	U	**0.336**		**0.821**		NL
Ethylbenzene	**0.819**		**1.54**		52.0	U	15,200
Tetrachloroethene	**75.0**		**515**		**1,170**		321
Trichloroethene	**1.36**		**4.43**		42.9	U	12.3

Notes:

1. All results reported in micrograms per cubic meter (µg/m^3)
2. Detected VOCs are summarized in this table; see laboratory analytical report for entire VOC analytical results.
3. Analyses for volatile ogranic compounds (VOCs) using USEPA Method TO-15-SIM.
4. Detected results shown in **bold**.
5. U = not detected at or above the concentration shown; B = Analyte detected in the associated method blank.
6. Sub-slab screening levels (Method B) obtained from Ecology's CLARC database, August 2015.
7. Concentrations greater than the sub-slab soil vapor screening leve **shaded.**
8. NL = Not listed.

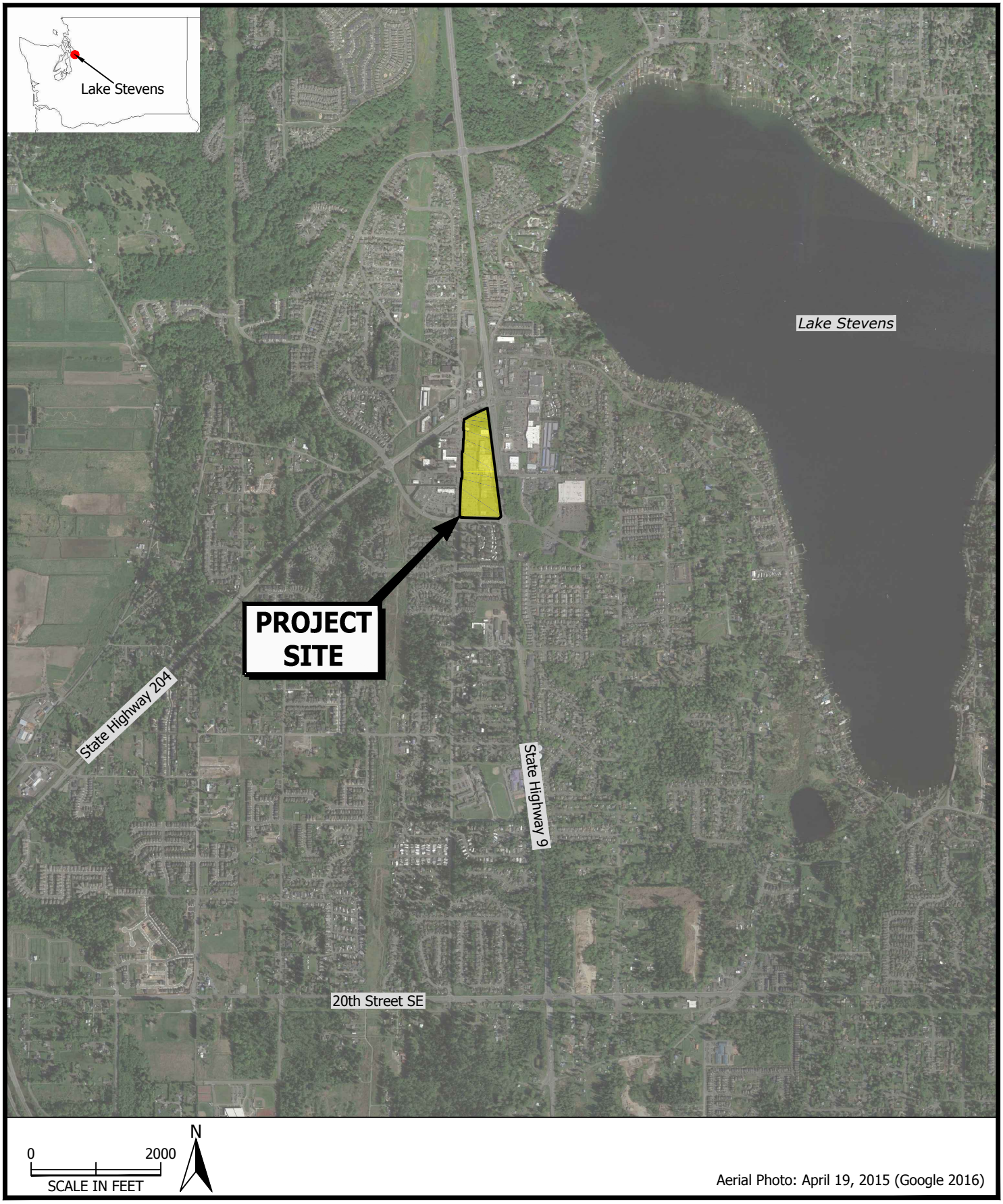
Table 3

Summary of Soil and Groundwater Analytical Results
Lake Stevens Marketplace Shopping Center
Lake Stevens, Washington

Sample	Date Sampled	Sample Depth (feet bgs)	Tetrachloroethene			
			Water (µg/L)		Soil (mg/kg)	
TW-1-W/TW-1-8	3/17/16	8	1.0	U	0.00111	U
TW-2-W/TW-2-6	3/17/16	6	1.0	U	0.00115	U
SV1-1.5	3/18/16	1.5	NS		**0.00167**	
SV2-1	3/18/16	1	NS		**0.00573**	
SV3-1.5	3/18/16	1.5	NS		**0.00442**	
Ecology MTCA Method A Cleanup Levels			5		0.05	

NOTES:

1. bgs = below ground surface.
2. mg/kg = milligram per kilogram (part per million).
3. µg/L = micrograms per liter (parts per billion).
4. U = not detected at or above the concentration shown.
5. NS = not sampled
6. Detected results shown in **bold**.
7. Volatile Organic Compounds (VOCs) analyzed by USEPA Method 8260. Only detected VOCs are summarized, see the laboratory analytical report for the complete analyte list.



Aerial Photo: April 19, 2015 (Google 2016)

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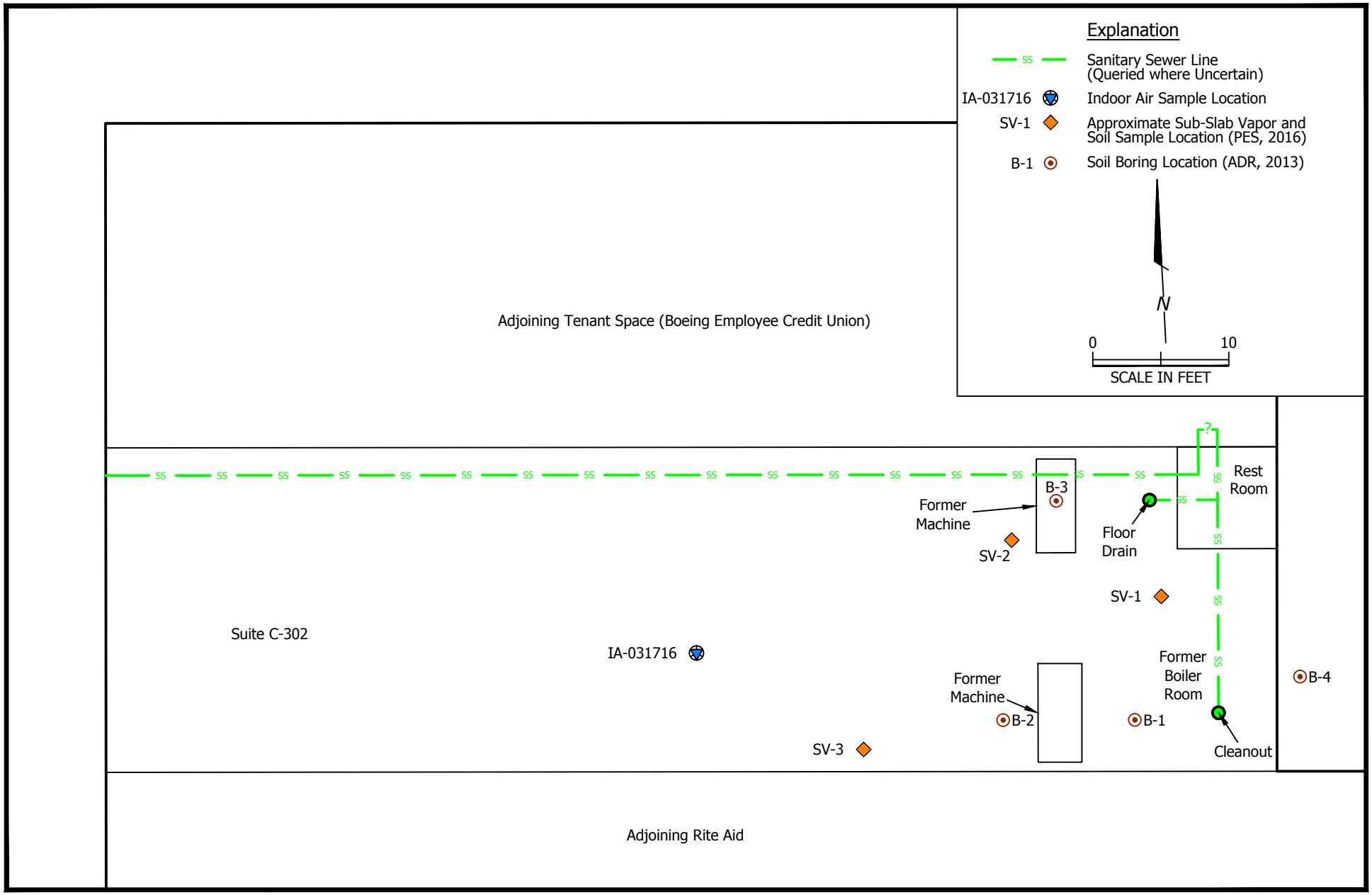
Site Location
Lake Stevens Marketplace Shopping Center
Lake Stevens, Washington

PLATE
1

1246.038.02.002	124603802002_PHII_1-3	BLO	3/16
JOB NUMBER	DRAWING NUMBER	REVIEWED BY	DATE

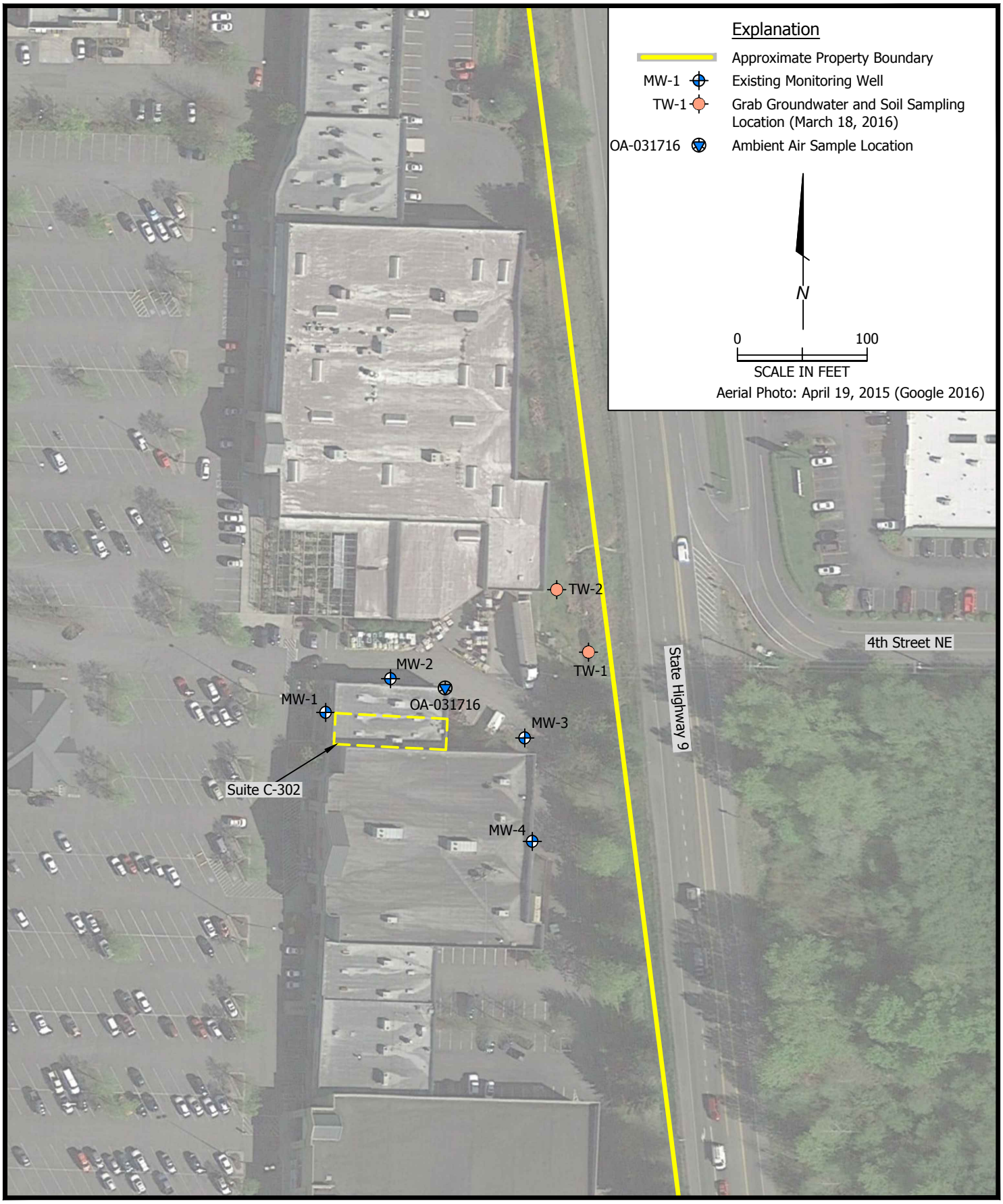


PES Environmental, Inc.
Engineering & Environmental Services

Interior Sampling Locations
Former Dry Cleaners - Suite C-302
Lake Stevens Marketplace Shopping Center
Lake Stevens, Washington

PLATE
2

1246.038.02.002	124603802002_PHII_1-3	BLO	3/16
JOB NUMBER	DRAWING NUMBER	REVIEWED BY	DATE



PES Environmental, Inc.
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Exterior Sampling Locations
Former Dry Cleaners - Suite C-302
Lake Stevens Marketplace Shopping Center
Lake Stevens, Washington

PLATE
3

1246.038.02.002	124603802002_PHII_1-3	BLO	3/16
JOB NUMBER	DRAWING NUMBER	REVIEWED BY	DATE

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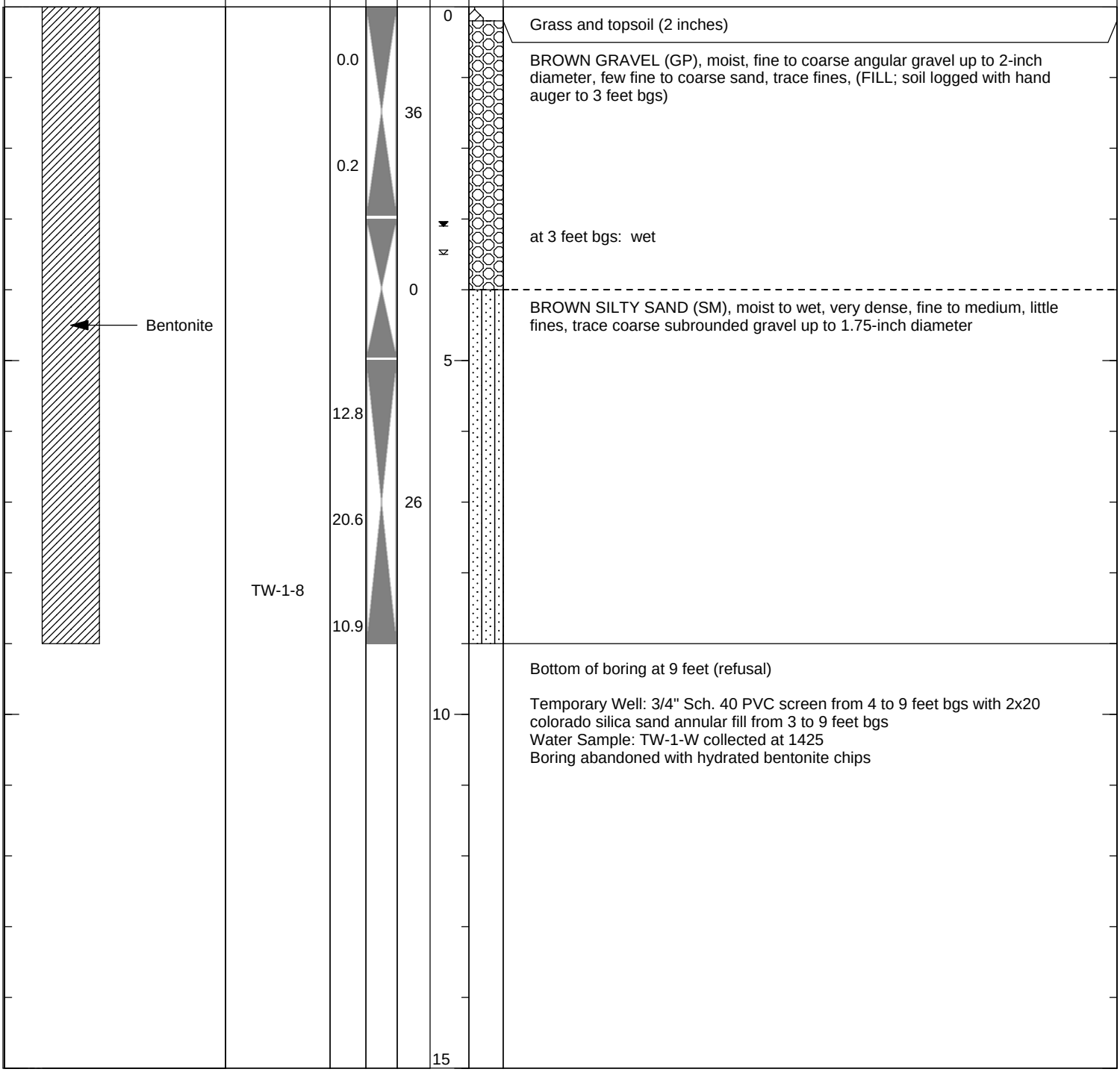
LOG OF BORING: TW-1



Project:	Lake Stevens Due Dilligence	Total Boring Depth:	9 feet
Project Number:	1246.038.02.001	Diameter of Boring:	2.25 inches
Site Location:	Lake Stevens, WA	Date Drilled:	3/17/16
Logged By:	Chris DeBoer	Drilled By:	ESN Northwest,
Sample Method:	Direct Push	Drill Method:	Direct Push

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Engineering & Environmental Services

LOG OF BORING: TW-2

Completion Details	Sample ID	PID (ppm)	Sample Interval	Recovery (Inches)	Depth (Feet)	Symbol	Lithologic Description
					0		BROWN SILT WITH SAND (ML), moist, little fine to medium sand, abundant roots, organic odor, (top soil)
				30			BROWN SILTY SAND (SM), moist, fine to medium, some fines, trace fine to coarse subrounded gravel up to 0.5-inch diameter, (soil logged from hand auger to 2.5 feet bgs)
Bentonite		4.6		30			BROWN-ORANGE SILT WITH SAND (ML), moist, very dense, little fine to coarse sand, non-plastic fines, abundant orange staining
		3.2					
		4.2			5		
		4.0		12			
	TW-2-6	4.8					BROWN SILTY SAND (SM), wet, very dense, fine to coarse, some fines
							Bottom of boring at 6 feet (refusal)
							Temporary Well: 3/4" Sch. 40 PVC pre-pack screen from 1 to 6 feet bgs Water Sample: TW-2-W collected at 1515 Boring abandoned with hydrated bentonite chips
					10		
					15		

Project:	Lake Stevens Due Dilligence	Total Boring Depth:	6 feet
Project Number:	1246.038.02.001	Diameter of Boring:	2.25 inches
Site Location:	Lake Stevens, WA	Date Drilled:	3/17/16
Logged By:	Chris DeBoer	Drilled By:	ESN Northwest,
Sample Method:	Direct Push	Drill Method:	Direct Push

ANALYTICAL REPORT

March 22, 2016

PES Environmental, Inc.- WA

Sample Delivery Group:	L824454
Samples Received:	03/19/2016
Project Number:	
Description:	
Site:	LAKE STEVENS
Report To:	Chris DeBoer 1215 Fourth Ave., Suite 1350 Seattle, WA 98161

Entire Report Reviewed By:

Jarred Willis
Technical Service Representative

SV1-031816 L824454-01 Air

Collected by: CJD | Collected date/time: 03/18/16 09:37 | Received date/time: 03/19/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (MS) by Method TO-15	WG857955	1	03/21/16 12:18	03/21/16 12:18	SNH
Volatile Organic Compounds (MS) by Method TO-15	WG857955	20	03/21/16 19:23	03/21/16 19:23	SNH

SV2-031816 L824454-02 Air

Collected by: CJD | Collected date/time: 03/18/16 09:50 | Received date/time: 03/19/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (MS) by Method TO-15	WG857955	1	03/21/16 12:59	03/21/16 12:59	SNH
Volatile Organic Compounds (MS) by Method TO-15	WG857955	200	03/21/16 19:58	03/21/16 19:58	SNH

SV3-031816 L824454-03 Air

Collected by: CJD | Collected date/time: 03/18/16 10:10 | Received date/time: 03/19/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (MS) by Method TO-15	WG857955	1	03/21/16 13:40	03/21/16 13:40	SNH
Volatile Organic Compounds (MS) by Method TO-15	WG857955	400	03/21/16 20:35	03/21/16 20:35	SNH

TW-1-8 L824454-04 Solid

Collected by: CJD | Collected date/time: 03/17/16 12:10 | Received date/time: 03/19/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG858087	1	03/21/16 15:27	03/21/16 15:36	MEL
Volatile Organic Compounds (GC/MS) by Method 8260C	WG858268	1	03/22/16 02:48	03/22/16 08:59	ACG

TW-2-6 L824454-05 Solid

Collected by: CJD | Collected date/time: 03/17/16 13:10 | Received date/time: 03/19/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG857989	1	03/21/16 11:42	03/21/16 11:50	MEL
Volatile Organic Compounds (GC/MS) by Method 8260C	WG857902	1	03/21/16 13:21	03/22/16 00:29	JAH

SV1-1.5 L824454-06 Solid

Collected by: CJD | Collected date/time: 03/18/16 12:05 | Received date/time: 03/19/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG857989	1	03/21/16 11:42	03/21/16 11:50	MEL
Volatile Organic Compounds (GC/MS) by Method 8260C	WG857902	1	03/21/16 13:21	03/22/16 01:53	JAH

SV2-1 L824454-07 Solid

Collected by: CJD | Collected date/time: 03/18/16 12:30 | Received date/time: 03/19/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG857989	1	03/21/16 11:42	03/21/16 11:50	MEL
Volatile Organic Compounds (GC/MS) by Method 8260C	WG857902	1	03/21/16 13:21	03/22/16 02:13	JAH

SV3-1.5 L824454-08 Solid

Collected by: CJD | Collected date/time: 03/18/16 13:10 | Received date/time: 03/19/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG857989	1	03/21/16 11:42	03/21/16 11:50	MEL
Volatile Organic Compounds (GC/MS) by Method 8260C	WG857902	1	03/21/16 13:21	03/22/16 03:41	JAH

TW-1-W L824454-09 GW

Collected by: CJD | Collected date/time: 03/17/16 14:25 | Received date/time: 03/19/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC/MS) by Method 8260C	WG858242	1	03/22/16 07:10	03/22/16 07:10	DWR
Volatile Organic Compounds (GC/MS) by Method 8260C	WG858383	1	03/22/16 13:41	03/22/16 13:41	JHH

TW-2-W L824454-10 GW

Collected by: CJD | Collected date/time: 03/17/16 15:15 | Received date/time: 03/19/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC/MS) by Method 8260C	WG858242	1	03/22/16 07:30	03/22/16 07:30	DWR
Volatile Organic Compounds (GC/MS) by Method 8260C	WG858383	1	03/22/16 14:02	03/22/16 14:02	JHH

TRIP BLANK L824454-11 GW

Collected by: CJD | Collected date/time: 03/17/16 00:00 | Received date/time: 03/19/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC/MS) by Method 8260C	WG858242	1	03/22/16 06:51	03/22/16 06:51	DWR
Volatile Organic Compounds (GC/MS) by Method 8260C	WG858383	1	03/22/16 12:59	03/22/16 12:59	JHH

IA-031716 L824454-12 Air

Collected by: CJD | Collected date/time: 03/17/16 17:30 | Received date/time: 03/19/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (MS) by Method TO-15	WG857955	1	03/21/16 18:46	03/21/16 18:46	SNH

OA-031716 L824454-13 Air

Collected by: CJD | Collected date/time: 03/17/16 17:37 | Received date/time: 03/19/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (MS) by Method TO-15	WG857955	1	03/21/16 15:04	03/21/16 15:04	SNH

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

Jarred Willis
Technical Service Representative

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
Benzene	71-43-2	78.10	0.0200	0.0639	0.0755	0.241	B	1	WG857955
Carbon tetrachloride	56-23-5	154	0.0200	0.126	0.0681	0.429		1	WG857955
Chloroethane	75-00-3	64.50	0.0400	0.106	ND	ND		1	WG857955
Chloroform	67-66-3	119	0.0200	0.0973	0.0645	0.314		1	WG857955
Chloromethane	74-87-3	50.50	0.0300	0.0620	ND	ND		1	WG857955
1,2-Dibromoethane	106-93-4	188	0.0200	0.154	ND	ND		1	WG857955
1,4-Dichlorobenzene	106-46-7	147	0.0200	0.120	0.0630	0.379		1	WG857955
1,1-Dichloroethane	75-34-3	98	0.0200	0.0802	ND	ND		1	WG857955
1,1-Dichloroethene	75-35-4	96.90	0.0200	0.0793	ND	ND		1	WG857955
cis-1,2-Dichloroethene	156-59-2	96.90	0.0200	0.0793	ND	ND		1	WG857955
trans-1,2-Dichloroethene	156-60-5	96.90	0.0200	0.0793	ND	ND		1	WG857955
1,2-Dichloropropane	78-87-5	113	0.0300	0.139	ND	ND		1	WG857955
cis-1,3-Dichloropropene	10061-01-5	111	0.0200	0.0908	ND	ND		1	WG857955
trans-1,3-Dichloropropene	10061-02-6	111	0.0300	0.136	ND	ND		1	WG857955
Ethylbenzene	100-41-4	106	0.0300	0.130	0.189	0.819		1	WG857955
1,1,2,2-Tetrachloroethane	79-34-5	168	0.0200	0.137	ND	ND		1	WG857955
Tetrachloroethylene	127-18-4	166	0.400	2.72	11.0	75.0		20	WG857955
1,1,1-Trichloroethane	71-55-6	133	0.0200	0.109	ND	ND		1	WG857955
1,1,2-Trichloroethane	79-00-5	133	0.0300	0.163	ND	ND		1	WG857955
Trichloroethylene	79-01-6	131	0.0200	0.107	0.254	1.36		1	WG857955
Vinyl chloride	75-01-4	62.50	0.0200	0.0511	ND	ND		1	WG857955
Vinyl acetate	108-05-4	86.10	0.0200	0.0704	ND	ND		1	WG857955
(S) 1,4-Bromofluorobenzene	*460-00-4*	*175*	*60.0-140*		*107*				WG857955

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
Benzene	71-43-2	78.10	0.0200	0.0639	0.0920	0.294	B	1	WG857955
Carbon tetrachloride	56-23-5	154	0.0200	0.126	0.0682	0.429		1	WG857955
Chloroethane	75-00-3	64.50	0.0400	0.106	ND	ND		1	WG857955
Chloroform	67-66-3	119	0.0200	0.0973	0.250	1.22		1	WG857955
Chloromethane	74-87-3	50.50	0.0300	0.0620	ND	ND		1	WG857955
1,2-Dibromoethane	106-93-4	188	0.0200	0.154	ND	ND		1	WG857955
1,4-Dichlorobenzene	106-46-7	147	0.0200	0.120	0.0688	0.413		1	WG857955
1,1-Dichloroethane	75-34-3	98	0.0200	0.0802	ND	ND		1	WG857955
1,1-Dichloroethene	75-35-4	96.90	0.0200	0.0793	ND	ND		1	WG857955
cis-1,2-Dichloroethene	156-59-2	96.90	0.0200	0.0793	0.0847	0.336		1	WG857955
trans-1,2-Dichloroethene	156-60-5	96.90	0.0200	0.0793	ND	ND		1	WG857955
1,2-Dichloropropane	78-87-5	113	0.0300	0.139	ND	ND		1	WG857955
cis-1,3-Dichloropropene	10061-01-5	111	0.0200	0.0908	ND	ND		1	WG857955
trans-1,3-Dichloropropene	10061-02-6	111	0.0300	0.136	ND	ND		1	WG857955
Ethylbenzene	100-41-4	106	0.0300	0.130	0.356	1.54		1	WG857955
1,1,2,2-Tetrachloroethane	79-34-5	168	0.0200	0.137	ND	ND		1	WG857955
Tetrachloroethylene	127-18-4	166	4.00	27.2	75.8	515		200	WG857955
1,1,1-Trichloroethane	71-55-6	133	0.0200	0.109	ND	ND		1	WG857955
1,1,2-Trichloroethane	79-00-5	133	0.0300	0.163	ND	ND		1	WG857955
Trichloroethylene	79-01-6	131	0.0200	0.107	0.827	4.43		1	WG857955
Vinyl chloride	75-01-4	62.50	0.0200	0.0511	ND	ND		1	WG857955
Vinyl acetate	108-05-4	86.10	0.0200	0.0704	ND	ND		1	WG857955
(S) 1,4-Bromofluorobenzene	*460-00-4*	*175*	*60.0-140*		*109*				WG857955

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
Benzene	71-43-2	78.10	0.0200	0.0639	0.634	2.02		1	WG857955
Carbon tetrachloride	56-23-5	154	0.0200	0.126	0.0621	0.391		1	WG857955
Chloroethane	75-00-3	64.50	0.0400	0.106	ND	ND		1	WG857955
Chloroform	67-66-3	119	0.0200	0.0973	0.647	3.15		1	WG857955
Chloromethane	74-87-3	50.50	0.0300	0.0620	ND	ND		1	WG857955
1,2-Dibromoethane	106-93-4	188	0.0200	0.154	ND	ND		1	WG857955
1,4-Dichlorobenzene	106-46-7	147	0.0200	0.120	0.126	0.756		1	WG857955
1,1-Dichloroethane	75-34-3	98	0.0200	0.0802	ND	ND		1	WG857955
1,1-Dichloroethene	75-35-4	96.90	0.0200	0.0793	ND	ND		1	WG857955
cis-1,2-Dichloroethene	156-59-2	96.90	0.0200	0.0793	0.207	0.821		1	WG857955
trans-1,2-Dichloroethene	156-60-5	96.90	0.0200	0.0793	ND	ND		1	WG857955
1,2-Dichloropropane	78-87-5	113	0.0300	0.139	ND	ND		1	WG857955
cis-1,3-Dichloropropene	10061-01-5	111	0.0200	0.0908	ND	ND		1	WG857955
trans-1,3-Dichloropropene	10061-02-6	111	0.0300	0.136	ND	ND		1	WG857955
Ethylbenzene	100-41-4	106	12.0	52.0	ND	ND		400	WG857955
1,1,2,2-Tetrachloroethane	79-34-5	168	0.0200	0.137	ND	ND		1	WG857955
Tetrachloroethylene	127-18-4	166	8.00	54.3	173	1170		400	WG857955
1,1,1-Trichloroethane	71-55-6	133	0.0200	0.109	ND	ND		1	WG857955
1,1,2-Trichloroethane	79-00-5	133	0.0300	0.163	ND	ND		1	WG857955
Trichloroethylene	79-01-6	131	8.00	42.9	ND	ND		400	WG857955
Vinyl chloride	75-01-4	62.50	0.0200	0.0511	ND	ND		1	WG857955
Vinyl acetate	108-05-4	86.10	0.0200	0.0704	ND	ND		1	WG857955
(S) 1,4-Bromofluorobenzene	*460-00-4*	*175*	*60.0-140*		*110*				WG857955

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	90.4		1	03/21/2016 15:36	WG858087

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

Analyte	Result (dry)	Qualifier	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Acetone	ND		0.0553	1	03/22/2016 08:59	WG858268
Acrylonitrile	ND		0.0111	1	03/22/2016 08:59	WG858268
Benzene	ND		0.00111	1	03/22/2016 08:59	WG858268
Bromobenzene	ND		0.00111	1	03/22/2016 08:59	WG858268
Bromodichloromethane	ND		0.00111	1	03/22/2016 08:59	WG858268
Bromoform	ND		0.00111	1	03/22/2016 08:59	WG858268
Bromomethane	ND		0.00553	1	03/22/2016 08:59	WG858268
n-Butylbenzene	ND		0.00111	1	03/22/2016 08:59	WG858268
sec-Butylbenzene	ND		0.00111	1	03/22/2016 08:59	WG858268
tert-Butylbenzene	ND		0.00111	1	03/22/2016 08:59	WG858268
Carbon tetrachloride	ND		0.00111	1	03/22/2016 08:59	WG858268
Chlorobenzene	ND		0.00111	1	03/22/2016 08:59	WG858268
Chlorodibromomethane	ND		0.00111	1	03/22/2016 08:59	WG858268
Chloroethane	ND		0.00553	1	03/22/2016 08:59	WG858268
2-Chloroethyl vinyl ether	ND		0.0553	1	03/22/2016 08:59	WG858268
Chloroform	ND		0.00553	1	03/22/2016 08:59	WG858268
Chloromethane	ND		0.00277	1	03/22/2016 08:59	WG858268
2-Chlorotoluene	ND		0.00111	1	03/22/2016 08:59	WG858268
4-Chlorotoluene	ND		0.00111	1	03/22/2016 08:59	WG858268
1,2-Dibromo-3-Chloropropane	ND		0.00553	1	03/22/2016 08:59	WG858268
1,2-Dibromoethane	ND		0.00111	1	03/22/2016 08:59	WG858268
Dibromomethane	ND		0.00111	1	03/22/2016 08:59	WG858268
1,2-Dichlorobenzene	ND		0.00111	1	03/22/2016 08:59	WG858268
1,3-Dichlorobenzene	ND		0.00111	1	03/22/2016 08:59	WG858268
1,4-Dichlorobenzene	ND		0.00111	1	03/22/2016 08:59	WG858268
Dichlorodifluoromethane	ND		0.00553	1	03/22/2016 08:59	WG858268
1,1-Dichloroethane	ND		0.00111	1	03/22/2016 08:59	WG858268
1,2-Dichloroethane	ND		0.00111	1	03/22/2016 08:59	WG858268
1,1-Dichloroethene	ND		0.00111	1	03/22/2016 08:59	WG858268
cis-1,2-Dichloroethene	ND		0.00111	1	03/22/2016 08:59	WG858268
trans-1,2-Dichloroethene	ND		0.00111	1	03/22/2016 08:59	WG858268
1,2-Dichloropropane	ND		0.00111	1	03/22/2016 08:59	WG858268
1,1-Dichloropropene	ND		0.00111	1	03/22/2016 08:59	WG858268
1,3-Dichloropropane	ND		0.00111	1	03/22/2016 08:59	WG858268
cis-1,3-Dichloropropene	ND		0.00111	1	03/22/2016 08:59	WG858268
trans-1,3-Dichloropropene	ND		0.00111	1	03/22/2016 08:59	WG858268
2,2-Dichloropropane	ND		0.00111	1	03/22/2016 08:59	WG858268
Di-isopropyl ether	ND		0.00111	1	03/22/2016 08:59	WG858268
Ethylbenzene	ND		0.00111	1	03/22/2016 08:59	WG858268
Hexachloro-1,3-butadiene	ND		0.00111	1	03/22/2016 08:59	WG858268
Isopropylbenzene	ND		0.00111	1	03/22/2016 08:59	WG858268
p-Isopropyltoluene	ND		0.00111	1	03/22/2016 08:59	WG858268
2-Butanone (MEK)	ND		0.0111	1	03/22/2016 08:59	WG858268
Methylene Chloride	ND		0.00553	1	03/22/2016 08:59	WG858268
4-Methyl-2-pentanone (MIBK)	ND		0.0111	1	03/22/2016 08:59	WG858268
Methyl tert-butyl ether	ND		0.00111	1	03/22/2016 08:59	WG858268
Naphthalene	ND		0.00553	1	03/22/2016 08:59	WG858268
n-Propylbenzene	ND		0.00111	1	03/22/2016 08:59	WG858268
Styrene	ND		0.00111	1	03/22/2016 08:59	WG858268
1,1,1,2-Tetrachloroethane	ND		0.00111	1	03/22/2016 08:59	WG858268

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

Analyte	Result (dry) mg/kg	Qualifier	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
1,1,2,2-Tetrachloroethane	ND		0.00111	1	03/22/2016 08:59	WG858268
1,1,2-Trichlorotrifluoroethane	ND		0.00111	1	03/22/2016 08:59	WG858268
Tetrachloroethene	ND		0.00111	1	03/22/2016 08:59	WG858268
Toluene	ND		0.00553	1	03/22/2016 08:59	WG858268
1,2,3-Trichlorobenzene	ND		0.00111	1	03/22/2016 08:59	WG858268
1,2,4-Trichlorobenzene	ND		0.00111	1	03/22/2016 08:59	WG858268
1,1,1-Trichloroethane	ND		0.00111	1	03/22/2016 08:59	WG858268
1,1,2-Trichloroethane	ND		0.00111	1	03/22/2016 08:59	WG858268
Trichloroethene	ND		0.00111	1	03/22/2016 08:59	WG858268
Trichlorofluoromethane	ND		0.00553	1	03/22/2016 08:59	WG858268
1,2,3-Trichloropropane	ND		0.00277	1	03/22/2016 08:59	WG858268
1,2,4-Trimethylbenzene	ND		0.00111	1	03/22/2016 08:59	WG858268
1,2,3-Trimethylbenzene	ND		0.00111	1	03/22/2016 08:59	WG858268
Vinyl chloride	ND		0.00111	1	03/22/2016 08:59	WG858268
1,3,5-Trimethylbenzene	ND		0.00111	1	03/22/2016 08:59	WG858268
Xylenes, Total	ND		0.00332	1	03/22/2016 08:59	WG858268
(S) Toluene-d8	*102*		*88.7-115*		*03/22/2016 08:59*	WG858268
(S) Dibromofluoromethane	*112*		*76.3-123*		*03/22/2016 08:59*	WG858268
(S) 4-Bromofluorobenzene	*97.8*		*69.7-129*		*03/22/2016 08:59*	WG858268

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	87.2		1	03/21/2016 11:50	WG857989

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

Analyte	Result (dry)	Qualifier	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Acetone	ND		0.0573	1	03/22/2016 00:29	WG857902
Acrylonitrile	ND		0.0115	1	03/22/2016 00:29	WG857902
Benzene	ND		0.00115	1	03/22/2016 00:29	WG857902
Bromobenzene	ND		0.00115	1	03/22/2016 00:29	WG857902
Bromodichloromethane	ND		0.00115	1	03/22/2016 00:29	WG857902
Bromoform	ND		0.00115	1	03/22/2016 00:29	WG857902
Bromomethane	ND		0.00573	1	03/22/2016 00:29	WG857902
n-Butylbenzene	ND		0.00115	1	03/22/2016 00:29	WG857902
sec-Butylbenzene	ND		0.00115	1	03/22/2016 00:29	WG857902
tert-Butylbenzene	ND		0.00115	1	03/22/2016 00:29	WG857902
Carbon tetrachloride	ND		0.00115	1	03/22/2016 00:29	WG857902
Chlorobenzene	ND		0.00115	1	03/22/2016 00:29	WG857902
Chlorodibromomethane	ND		0.00115	1	03/22/2016 00:29	WG857902
Chloroethane	ND		0.00573	1	03/22/2016 00:29	WG857902
2-Chloroethyl vinyl ether	ND		0.0573	1	03/22/2016 00:29	WG857902
Chloroform	ND		0.00573	1	03/22/2016 00:29	WG857902
Chloromethane	ND		0.00287	1	03/22/2016 00:29	WG857902
2-Chlorotoluene	ND		0.00115	1	03/22/2016 00:29	WG857902
4-Chlorotoluene	ND		0.00115	1	03/22/2016 00:29	WG857902
1,2-Dibromo-3-Chloropropane	ND		0.00573	1	03/22/2016 00:29	WG857902
1,2-Dibromoethane	ND		0.00115	1	03/22/2016 00:29	WG857902
Dibromomethane	ND		0.00115	1	03/22/2016 00:29	WG857902
1,2-Dichlorobenzene	ND		0.00115	1	03/22/2016 00:29	WG857902
1,3-Dichlorobenzene	ND		0.00115	1	03/22/2016 00:29	WG857902
1,4-Dichlorobenzene	ND		0.00115	1	03/22/2016 00:29	WG857902
Dichlorodifluoromethane	ND		0.00573	1	03/22/2016 00:29	WG857902
1,1-Dichloroethane	ND		0.00115	1	03/22/2016 00:29	WG857902
1,2-Dichloroethane	ND		0.00115	1	03/22/2016 00:29	WG857902
1,1-Dichloroethene	ND		0.00115	1	03/22/2016 00:29	WG857902
cis-1,2-Dichloroethene	ND		0.00115	1	03/22/2016 00:29	WG857902
trans-1,2-Dichloroethene	ND		0.00115	1	03/22/2016 00:29	WG857902
1,2-Dichloropropane	ND		0.00115	1	03/22/2016 00:29	WG857902
1,1-Dichloropropene	ND		0.00115	1	03/22/2016 00:29	WG857902
1,3-Dichloropropane	ND		0.00115	1	03/22/2016 00:29	WG857902
cis-1,3-Dichloropropene	ND		0.00115	1	03/22/2016 00:29	WG857902
trans-1,3-Dichloropropene	ND		0.00115	1	03/22/2016 00:29	WG857902
2,2-Dichloropropane	ND		0.00115	1	03/22/2016 00:29	WG857902
Di-isopropyl ether	ND		0.00115	1	03/22/2016 00:29	WG857902
Ethylbenzene	ND		0.00115	1	03/22/2016 00:29	WG857902
Hexachloro-1,3-butadiene	ND		0.00115	1	03/22/2016 00:29	WG857902
Isopropylbenzene	ND		0.00115	1	03/22/2016 00:29	WG857902
p-Isopropyltoluene	ND		0.00115	1	03/22/2016 00:29	WG857902
2-Butanone (MEK)	ND		0.0115	1	03/22/2016 00:29	WG857902
Methylene Chloride	ND		0.00573	1	03/22/2016 00:29	WG857902
4-Methyl-2-pentanone (MIBK)	ND		0.0115	1	03/22/2016 00:29	WG857902
Methyl tert-butyl ether	ND		0.00115	1	03/22/2016 00:29	WG857902
Naphthalene	ND		0.00573	1	03/22/2016 00:29	WG857902
n-Propylbenzene	ND		0.00115	1	03/22/2016 00:29	WG857902
Styrene	ND		0.00115	1	03/22/2016 00:29	WG857902
1,1,1,2-Tetrachloroethane	ND		0.00115	1	03/22/2016 00:29	WG857902

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

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

Analyte	Result (dry) mg/kg	Qualifier	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
1,1,2,2-Tetrachloroethane	ND	J4	0.00115	1	03/22/2016 00:29	WG857902
1,1,2-Trichlorotrifluoroethane	ND	J3	0.00115	1	03/22/2016 00:29	WG857902
Tetrachloroethene	ND		0.00115	1	03/22/2016 00:29	WG857902
Toluene	ND		0.00573	1	03/22/2016 00:29	WG857902
1,2,3-Trichlorobenzene	ND		0.00115	1	03/22/2016 00:29	WG857902
1,2,4-Trichlorobenzene	ND		0.00115	1	03/22/2016 00:29	WG857902
1,1,1-Trichloroethane	ND		0.00115	1	03/22/2016 00:29	WG857902
1,1,2-Trichloroethane	ND	J4	0.00115	1	03/22/2016 00:29	WG857902
Trichloroethene	ND		0.00115	1	03/22/2016 00:29	WG857902
Trichlorofluoromethane	ND		0.00573	1	03/22/2016 00:29	WG857902
1,2,3-Trichloropropane	ND		0.00287	1	03/22/2016 00:29	WG857902
1,2,4-Trimethylbenzene	ND		0.00115	1	03/22/2016 00:29	WG857902
1,2,3-Trimethylbenzene	ND		0.00115	1	03/22/2016 00:29	WG857902
Vinyl chloride	ND		0.00115	1	03/22/2016 00:29	WG857902
1,3,5-Trimethylbenzene	ND		0.00115	1	03/22/2016 00:29	WG857902
Xylenes, Total	ND		0.00344	1	03/22/2016 00:29	WG857902
(S) Toluene-d8	*102*		*88.7-115*		*03/22/2016 00:29*	WG857902
(S) Dibromofluoromethane	*104*		*76.3-123*		*03/22/2016 00:29*	WG857902
(S) 4-Bromofluorobenzene	*91.4*		*69.7-129*		*03/22/2016 00:29*	WG857902

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	93.6		1	03/21/2016 11:50	WG857989

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

Analyte	Result (dry)	Qualifier	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Acetone	ND		0.0534	1	03/22/2016 01:53	WG857902
Acrylonitrile	ND		0.0107	1	03/22/2016 01:53	WG857902
Benzene	ND		0.00107	1	03/22/2016 01:53	WG857902
Bromobenzene	ND		0.00107	1	03/22/2016 01:53	WG857902
Bromodichloromethane	ND		0.00107	1	03/22/2016 01:53	WG857902
Bromoform	ND		0.00107	1	03/22/2016 01:53	WG857902
Bromomethane	ND		0.00534	1	03/22/2016 01:53	WG857902
n-Butylbenzene	ND		0.00107	1	03/22/2016 01:53	WG857902
sec-Butylbenzene	ND		0.00107	1	03/22/2016 01:53	WG857902
tert-Butylbenzene	ND		0.00107	1	03/22/2016 01:53	WG857902
Carbon tetrachloride	ND		0.00107	1	03/22/2016 01:53	WG857902
Chlorobenzene	ND		0.00107	1	03/22/2016 01:53	WG857902
Chlorodibromomethane	ND		0.00107	1	03/22/2016 01:53	WG857902
Chloroethane	ND		0.00534	1	03/22/2016 01:53	WG857902
2-Chloroethyl vinyl ether	ND		0.0534	1	03/22/2016 01:53	WG857902
Chloroform	ND		0.00534	1	03/22/2016 01:53	WG857902
Chloromethane	ND		0.00267	1	03/22/2016 01:53	WG857902
2-Chlorotoluene	ND		0.00107	1	03/22/2016 01:53	WG857902
4-Chlorotoluene	ND		0.00107	1	03/22/2016 01:53	WG857902
1,2-Dibromo-3-Chloropropane	ND		0.00534	1	03/22/2016 01:53	WG857902
1,2-Dibromoethane	ND		0.00107	1	03/22/2016 01:53	WG857902
Dibromomethane	ND		0.00107	1	03/22/2016 01:53	WG857902
1,2-Dichlorobenzene	ND		0.00107	1	03/22/2016 01:53	WG857902
1,3-Dichlorobenzene	ND		0.00107	1	03/22/2016 01:53	WG857902
1,4-Dichlorobenzene	ND		0.00107	1	03/22/2016 01:53	WG857902
Dichlorodifluoromethane	ND		0.00534	1	03/22/2016 01:53	WG857902
1,1-Dichloroethane	ND		0.00107	1	03/22/2016 01:53	WG857902
1,2-Dichloroethane	ND		0.00107	1	03/22/2016 01:53	WG857902
1,1-Dichloroethene	ND		0.00107	1	03/22/2016 01:53	WG857902
cis-1,2-Dichloroethene	ND		0.00107	1	03/22/2016 01:53	WG857902
trans-1,2-Dichloroethene	ND		0.00107	1	03/22/2016 01:53	WG857902
1,2-Dichloropropane	ND		0.00107	1	03/22/2016 01:53	WG857902
1,1-Dichloropropene	ND		0.00107	1	03/22/2016 01:53	WG857902
1,3-Dichloropropane	ND		0.00107	1	03/22/2016 01:53	WG857902
cis-1,3-Dichloropropene	ND		0.00107	1	03/22/2016 01:53	WG857902
trans-1,3-Dichloropropene	ND		0.00107	1	03/22/2016 01:53	WG857902
2,2-Dichloropropane	ND		0.00107	1	03/22/2016 01:53	WG857902
Di-isopropyl ether	ND		0.00107	1	03/22/2016 01:53	WG857902
Ethylbenzene	ND		0.00107	1	03/22/2016 01:53	WG857902
Hexachloro-1,3-butadiene	ND		0.00107	1	03/22/2016 01:53	WG857902
Isopropylbenzene	ND		0.00107	1	03/22/2016 01:53	WG857902
p-Isopropyltoluene	ND		0.00107	1	03/22/2016 01:53	WG857902
2-Butanone (MEK)	ND		0.0107	1	03/22/2016 01:53	WG857902
Methylene Chloride	ND		0.00534	1	03/22/2016 01:53	WG857902
4-Methyl-2-pentanone (MIBK)	ND		0.0107	1	03/22/2016 01:53	WG857902
Methyl tert-butyl ether	ND		0.00107	1	03/22/2016 01:53	WG857902
Naphthalene	ND		0.00534	1	03/22/2016 01:53	WG857902
n-Propylbenzene	ND		0.00107	1	03/22/2016 01:53	WG857902
Styrene	ND		0.00107	1	03/22/2016 01:53	WG857902
1,1,1,2-Tetrachloroethane	ND		0.00107	1	03/22/2016 01:53	WG857902

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

Analyte	Result (dry) mg/kg	Qualifier	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
1,1,2,2-Tetrachloroethane	ND	J4	0.00107	1	03/22/2016 01:53	WG857902
1,1,2-Trichlorotrifluoroethane	ND	J3	0.00107	1	03/22/2016 01:53	WG857902
Tetrachloroethene	0.00167		0.00107	1	03/22/2016 01:53	WG857902
Toluene	ND		0.00534	1	03/22/2016 01:53	WG857902
1,2,3-Trichlorobenzene	ND		0.00107	1	03/22/2016 01:53	WG857902
1,2,4-Trichlorobenzene	ND		0.00107	1	03/22/2016 01:53	WG857902
1,1,1-Trichloroethane	ND		0.00107	1	03/22/2016 01:53	WG857902
1,1,2-Trichloroethane	ND	J4	0.00107	1	03/22/2016 01:53	WG857902
Trichloroethene	ND		0.00107	1	03/22/2016 01:53	WG857902
Trichlorofluoromethane	ND		0.00534	1	03/22/2016 01:53	WG857902
1,2,3-Trichloropropane	ND		0.00267	1	03/22/2016 01:53	WG857902
1,2,4-Trimethylbenzene	ND		0.00107	1	03/22/2016 01:53	WG857902
1,2,3-Trimethylbenzene	ND		0.00107	1	03/22/2016 01:53	WG857902
Vinyl chloride	ND		0.00107	1	03/22/2016 01:53	WG857902
1,3,5-Trimethylbenzene	ND		0.00107	1	03/22/2016 01:53	WG857902
Xylenes, Total	ND		0.00321	1	03/22/2016 01:53	WG857902
(S) Toluene-d8	*103*		*88.7-115*		*03/22/2016 01:53*	WG857902
(S) Dibromofluoromethane	*105*		*76.3-123*		*03/22/2016 01:53*	WG857902
(S) 4-Bromofluorobenzene	*89.9*		*69.7-129*		*03/22/2016 01:53*	WG857902

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	91.8		1	03/21/2016 11:50	WG857989

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

Analyte	Result (dry)	Qualifier	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Acetone	ND		0.0545	1	03/22/2016 02:13	WG857902
Acrylonitrile	ND		0.0109	1	03/22/2016 02:13	WG857902
Benzene	ND		0.00109	1	03/22/2016 02:13	WG857902
Bromobenzene	ND		0.00109	1	03/22/2016 02:13	WG857902
Bromodichloromethane	ND		0.00109	1	03/22/2016 02:13	WG857902
Bromoform	ND		0.00109	1	03/22/2016 02:13	WG857902
Bromomethane	ND		0.00545	1	03/22/2016 02:13	WG857902
n-Butylbenzene	ND		0.00109	1	03/22/2016 02:13	WG857902
sec-Butylbenzene	ND		0.00109	1	03/22/2016 02:13	WG857902
tert-Butylbenzene	ND		0.00109	1	03/22/2016 02:13	WG857902
Carbon tetrachloride	ND		0.00109	1	03/22/2016 02:13	WG857902
Chlorobenzene	ND		0.00109	1	03/22/2016 02:13	WG857902
Chlorodibromomethane	ND		0.00109	1	03/22/2016 02:13	WG857902
Chloroethane	ND		0.00545	1	03/22/2016 02:13	WG857902
2-Chloroethyl vinyl ether	ND		0.0545	1	03/22/2016 02:13	WG857902
Chloroform	ND		0.00545	1	03/22/2016 02:13	WG857902
Chloromethane	ND		0.00272	1	03/22/2016 02:13	WG857902
2-Chlorotoluene	ND		0.00109	1	03/22/2016 02:13	WG857902
4-Chlorotoluene	ND		0.00109	1	03/22/2016 02:13	WG857902
1,2-Dibromo-3-Chloropropane	ND		0.00545	1	03/22/2016 02:13	WG857902
1,2-Dibromoethane	ND		0.00109	1	03/22/2016 02:13	WG857902
Dibromomethane	ND		0.00109	1	03/22/2016 02:13	WG857902
1,2-Dichlorobenzene	ND		0.00109	1	03/22/2016 02:13	WG857902
1,3-Dichlorobenzene	ND		0.00109	1	03/22/2016 02:13	WG857902
1,4-Dichlorobenzene	ND		0.00109	1	03/22/2016 02:13	WG857902
Dichlorodifluoromethane	ND		0.00545	1	03/22/2016 02:13	WG857902
1,1-Dichloroethane	ND		0.00109	1	03/22/2016 02:13	WG857902
1,2-Dichloroethane	ND		0.00109	1	03/22/2016 02:13	WG857902
1,1-Dichloroethene	ND		0.00109	1	03/22/2016 02:13	WG857902
cis-1,2-Dichloroethene	ND		0.00109	1	03/22/2016 02:13	WG857902
trans-1,2-Dichloroethene	ND		0.00109	1	03/22/2016 02:13	WG857902
1,2-Dichloropropane	ND		0.00109	1	03/22/2016 02:13	WG857902
1,1-Dichloropropene	ND		0.00109	1	03/22/2016 02:13	WG857902
1,3-Dichloropropane	ND		0.00109	1	03/22/2016 02:13	WG857902
cis-1,3-Dichloropropene	ND		0.00109	1	03/22/2016 02:13	WG857902
trans-1,3-Dichloropropene	ND		0.00109	1	03/22/2016 02:13	WG857902
2,2-Dichloropropane	ND		0.00109	1	03/22/2016 02:13	WG857902
Di-isopropyl ether	ND		0.00109	1	03/22/2016 02:13	WG857902
Ethylbenzene	ND		0.00109	1	03/22/2016 02:13	WG857902
Hexachloro-1,3-butadiene	ND		0.00109	1	03/22/2016 02:13	WG857902
Isopropylbenzene	ND		0.00109	1	03/22/2016 02:13	WG857902
p-Isopropyltoluene	ND		0.00109	1	03/22/2016 02:13	WG857902
2-Butanone (MEK)	ND		0.0109	1	03/22/2016 02:13	WG857902
Methylene Chloride	ND		0.00545	1	03/22/2016 02:13	WG857902
4-Methyl-2-pentanone (MIBK)	ND		0.0109	1	03/22/2016 02:13	WG857902
Methyl tert-butyl ether	ND		0.00109	1	03/22/2016 02:13	WG857902
Naphthalene	ND		0.00545	1	03/22/2016 02:13	WG857902
n-Propylbenzene	ND		0.00109	1	03/22/2016 02:13	WG857902
Styrene	ND		0.00109	1	03/22/2016 02:13	WG857902
1,1,1,2-Tetrachloroethane	ND		0.00109	1	03/22/2016 02:13	WG857902

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

Analyte	Result (dry) mg/kg	Qualifier	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
1,1,2,2-Tetrachloroethane	ND	J4	0.00109	1	03/22/2016 02:13	WG857902
1,1,2-Trichlorotrifluoroethane	ND	J3	0.00109	1	03/22/2016 02:13	WG857902
Tetrachloroethene	0.00573		0.00109	1	03/22/2016 02:13	WG857902
Toluene	ND		0.00545	1	03/22/2016 02:13	WG857902
1,2,3-Trichlorobenzene	ND		0.00109	1	03/22/2016 02:13	WG857902
1,2,4-Trichlorobenzene	ND		0.00109	1	03/22/2016 02:13	WG857902
1,1,1-Trichloroethane	ND		0.00109	1	03/22/2016 02:13	WG857902
1,1,2-Trichloroethane	ND	J4	0.00109	1	03/22/2016 02:13	WG857902
Trichloroethene	ND		0.00109	1	03/22/2016 02:13	WG857902
Trichlorofluoromethane	ND		0.00545	1	03/22/2016 02:13	WG857902
1,2,3-Trichloropropane	ND		0.00272	1	03/22/2016 02:13	WG857902
1,2,4-Trimethylbenzene	ND		0.00109	1	03/22/2016 02:13	WG857902
1,2,3-Trimethylbenzene	ND		0.00109	1	03/22/2016 02:13	WG857902
Vinyl chloride	ND		0.00109	1	03/22/2016 02:13	WG857902
1,3,5-Trimethylbenzene	ND		0.00109	1	03/22/2016 02:13	WG857902
Xylenes, Total	ND		0.00327	1	03/22/2016 02:13	WG857902
(S) Toluene-d8	*103*		*88.7-115*		*03/22/2016 02:13*	WG857902
(S) Dibromofluoromethane	*104*		*76.3-123*		*03/22/2016 02:13*	WG857902
(S) 4-Bromofluorobenzene	*90.4*		*69.7-129*		*03/22/2016 02:13*	WG857902

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	94.5		1	03/21/2016 11:50	WG857989

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

Analyte	Result (dry)	Qualifier	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Acetone	ND		0.0529	1	03/22/2016 03:41	WG857902
Acrylonitrile	ND		0.0106	1	03/22/2016 03:41	WG857902
Benzene	ND		0.00106	1	03/22/2016 03:41	WG857902
Bromobenzene	ND		0.00106	1	03/22/2016 03:41	WG857902
Bromodichloromethane	ND		0.00106	1	03/22/2016 03:41	WG857902
Bromoform	ND		0.00106	1	03/22/2016 03:41	WG857902
Bromomethane	ND		0.00529	1	03/22/2016 03:41	WG857902
n-Butylbenzene	ND		0.00106	1	03/22/2016 03:41	WG857902
sec-Butylbenzene	ND		0.00106	1	03/22/2016 03:41	WG857902
tert-Butylbenzene	ND		0.00106	1	03/22/2016 03:41	WG857902
Carbon tetrachloride	ND		0.00106	1	03/22/2016 03:41	WG857902
Chlorobenzene	ND		0.00106	1	03/22/2016 03:41	WG857902
Chlorodibromomethane	ND		0.00106	1	03/22/2016 03:41	WG857902
Chloroethane	ND		0.00529	1	03/22/2016 03:41	WG857902
2-Chloroethyl vinyl ether	ND		0.0529	1	03/22/2016 03:41	WG857902
Chloroform	ND		0.00529	1	03/22/2016 03:41	WG857902
Chloromethane	ND		0.00264	1	03/22/2016 03:41	WG857902
2-Chlorotoluene	ND		0.00106	1	03/22/2016 03:41	WG857902
4-Chlorotoluene	ND		0.00106	1	03/22/2016 03:41	WG857902
1,2-Dibromo-3-Chloropropane	ND		0.00529	1	03/22/2016 03:41	WG857902
1,2-Dibromoethane	ND		0.00106	1	03/22/2016 03:41	WG857902
Dibromomethane	ND		0.00106	1	03/22/2016 03:41	WG857902
1,2-Dichlorobenzene	ND		0.00106	1	03/22/2016 03:41	WG857902
1,3-Dichlorobenzene	ND		0.00106	1	03/22/2016 03:41	WG857902
1,4-Dichlorobenzene	ND		0.00106	1	03/22/2016 03:41	WG857902
Dichlorodifluoromethane	ND		0.00529	1	03/22/2016 03:41	WG857902
1,1-Dichloroethane	ND		0.00106	1	03/22/2016 03:41	WG857902
1,2-Dichloroethane	ND		0.00106	1	03/22/2016 03:41	WG857902
1,1-Dichloroethene	ND		0.00106	1	03/22/2016 03:41	WG857902
cis-1,2-Dichloroethene	ND		0.00106	1	03/22/2016 03:41	WG857902
trans-1,2-Dichloroethene	ND		0.00106	1	03/22/2016 03:41	WG857902
1,2-Dichloropropane	ND		0.00106	1	03/22/2016 03:41	WG857902
1,1-Dichloropropene	ND		0.00106	1	03/22/2016 03:41	WG857902
1,3-Dichloropropane	ND		0.00106	1	03/22/2016 03:41	WG857902
cis-1,3-Dichloropropene	ND		0.00106	1	03/22/2016 03:41	WG857902
trans-1,3-Dichloropropene	ND		0.00106	1	03/22/2016 03:41	WG857902
2,2-Dichloropropane	ND		0.00106	1	03/22/2016 03:41	WG857902
Di-isopropyl ether	ND		0.00106	1	03/22/2016 03:41	WG857902
Ethylbenzene	ND		0.00106	1	03/22/2016 03:41	WG857902
Hexachloro-1,3-butadiene	ND		0.00106	1	03/22/2016 03:41	WG857902
Isopropylbenzene	ND		0.00106	1	03/22/2016 03:41	WG857902
p-Isopropyltoluene	ND		0.00106	1	03/22/2016 03:41	WG857902
2-Butanone (MEK)	ND		0.0106	1	03/22/2016 03:41	WG857902
Methylene Chloride	ND		0.00529	1	03/22/2016 03:41	WG857902
4-Methyl-2-pentanone (MIBK)	ND		0.0106	1	03/22/2016 03:41	WG857902
Methyl tert-butyl ether	ND		0.00106	1	03/22/2016 03:41	WG857902
Naphthalene	ND		0.00529	1	03/22/2016 03:41	WG857902
n-Propylbenzene	ND		0.00106	1	03/22/2016 03:41	WG857902
Styrene	ND		0.00106	1	03/22/2016 03:41	WG857902
1,1,1,2-Tetrachloroethane	ND		0.00106	1	03/22/2016 03:41	WG857902

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

Analyte	Result (dry) mg/kg	Qualifier	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
1,1,2,2-Tetrachloroethane	ND	J4	0.00106	1	03/22/2016 03:41	WG857902
1,1,2-Trichlorotrifluoroethane	ND	J3	0.00106	1	03/22/2016 03:41	WG857902
Tetrachloroethene	0.00442		0.00106	1	03/22/2016 03:41	WG857902
Toluene	ND		0.00529	1	03/22/2016 03:41	WG857902
1,2,3-Trichlorobenzene	ND		0.00106	1	03/22/2016 03:41	WG857902
1,2,4-Trichlorobenzene	ND		0.00106	1	03/22/2016 03:41	WG857902
1,1,1-Trichloroethane	ND		0.00106	1	03/22/2016 03:41	WG857902
1,1,2-Trichloroethane	ND	J4	0.00106	1	03/22/2016 03:41	WG857902
Trichloroethene	ND		0.00106	1	03/22/2016 03:41	WG857902
Trichlorofluoromethane	ND		0.00529	1	03/22/2016 03:41	WG857902
1,2,3-Trichloropropane	ND		0.00264	1	03/22/2016 03:41	WG857902
1,2,4-Trimethylbenzene	ND		0.00106	1	03/22/2016 03:41	WG857902
1,2,3-Trimethylbenzene	ND		0.00106	1	03/22/2016 03:41	WG857902
Vinyl chloride	ND		0.00106	1	03/22/2016 03:41	WG857902
1,3,5-Trimethylbenzene	ND		0.00106	1	03/22/2016 03:41	WG857902
Xylenes, Total	ND		0.00317	1	03/22/2016 03:41	WG857902
(S) Toluene-d8	*103*		*88.7-115*		*03/22/2016 03:41*	WG857902
(S) Dibromofluoromethane	*106*		*76.3-123*		*03/22/2016 03:41*	WG857902
(S) 4-Bromofluorobenzene	*90.4*		*69.7-129*		*03/22/2016 03:41*	WG857902

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

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	ND		50.0	1	03/22/2016 07:10	WG858242
Acrolein	ND		50.0	1	03/22/2016 07:10	WG858242
Acrylonitrile	ND		10.0	1	03/22/2016 07:10	WG858242
Benzene	ND		1.00	1	03/22/2016 07:10	WG858242
Bromobenzene	ND		1.00	1	03/22/2016 07:10	WG858242
Bromodichloromethane	ND		1.00	1	03/22/2016 07:10	WG858242
Bromoform	ND		1.00	1	03/22/2016 07:10	WG858242
Bromomethane	ND		5.00	1	03/22/2016 07:10	WG858242
n-Butylbenzene	ND		1.00	1	03/22/2016 07:10	WG858242
sec-Butylbenzene	ND		1.00	1	03/22/2016 07:10	WG858242
tert-Butylbenzene	ND		1.00	1	03/22/2016 07:10	WG858242
Carbon tetrachloride	ND		1.00	1	03/22/2016 07:10	WG858242
Chlorobenzene	ND		1.00	1	03/22/2016 07:10	WG858242
Chlorodibromomethane	ND		1.00	1	03/22/2016 07:10	WG858242
Chloroethane	ND		5.00	1	03/22/2016 07:10	WG858242
2-Chloroethyl vinyl ether	ND		50.0	1	03/22/2016 13:41	WG858383
Chloroform	ND		5.00	1	03/22/2016 07:10	WG858242
Chloromethane	ND		2.50	1	03/22/2016 07:10	WG858242
2-Chlorotoluene	ND		1.00	1	03/22/2016 07:10	WG858242
4-Chlorotoluene	ND		1.00	1	03/22/2016 07:10	WG858242
1,2-Dibromo-3-Chloropropane	ND		5.00	1	03/22/2016 07:10	WG858242
1,2-Dibromoethane	ND		1.00	1	03/22/2016 07:10	WG858242
Dibromomethane	ND		1.00	1	03/22/2016 07:10	WG858242
1,2-Dichlorobenzene	ND		1.00	1	03/22/2016 07:10	WG858242
1,3-Dichlorobenzene	ND		1.00	1	03/22/2016 07:10	WG858242
1,4-Dichlorobenzene	ND		1.00	1	03/22/2016 07:10	WG858242
Dichlorodifluoromethane	ND		5.00	1	03/22/2016 07:10	WG858242
1,1-Dichloroethane	ND		1.00	1	03/22/2016 07:10	WG858242
1,2-Dichloroethane	ND		1.00	1	03/22/2016 07:10	WG858242
1,1-Dichloroethene	ND		1.00	1	03/22/2016 07:10	WG858242
cis-1,2-Dichloroethene	ND		1.00	1	03/22/2016 07:10	WG858242
trans-1,2-Dichloroethene	ND		1.00	1	03/22/2016 07:10	WG858242
1,2-Dichloropropane	ND		1.00	1	03/22/2016 07:10	WG858242
1,1-Dichloropropene	ND		1.00	1	03/22/2016 07:10	WG858242
1,3-Dichloropropane	ND		1.00	1	03/22/2016 07:10	WG858242
cis-1,3-Dichloropropene	ND		1.00	1	03/22/2016 07:10	WG858242
trans-1,3-Dichloropropene	ND		1.00	1	03/22/2016 07:10	WG858242
2,2-Dichloropropane	ND		1.00	1	03/22/2016 07:10	WG858242
Di-isopropyl ether	ND		1.00	1	03/22/2016 07:10	WG858242
Ethylbenzene	ND		1.00	1	03/22/2016 07:10	WG858242
Hexachloro-1,3-butadiene	ND		1.00	1	03/22/2016 07:10	WG858242
Isopropylbenzene	ND		1.00	1	03/22/2016 07:10	WG858242
p-Isopropyltoluene	ND		1.00	1	03/22/2016 07:10	WG858242
2-Butanone (MEK)	ND		10.0	1	03/22/2016 07:10	WG858242
Methylene Chloride	ND		5.00	1	03/22/2016 07:10	WG858242
4-Methyl-2-pentanone (MIBK)	ND		10.0	1	03/22/2016 07:10	WG858242
Methyl tert-butyl ether	ND		1.00	1	03/22/2016 07:10	WG858242
Naphthalene	ND		5.00	1	03/22/2016 07:10	WG858242
n-Propylbenzene	ND		1.00	1	03/22/2016 07:10	WG858242
Styrene	ND		1.00	1	03/22/2016 07:10	WG858242
1,1,1,2-Tetrachloroethane	ND		1.00	1	03/22/2016 07:10	WG858242
1,1,2,2-Tetrachloroethane	ND		1.00	1	03/22/2016 07:10	WG858242
1,1,2-Trichlorotrifluoroethane	ND		1.00	1	03/22/2016 07:10	WG858242
Tetrachloroethene	ND		1.00	1	03/22/2016 07:10	WG858242
Toluene	ND		5.00	1	03/22/2016 07:10	WG858242
1,2,3-Trichlorobenzene	ND		1.00	1	03/22/2016 07:10	WG858242

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

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
1,2,4-Trichlorobenzene	ND		1.00	1	03/22/2016 07:10	WG858242
1,1,1-Trichloroethane	ND		1.00	1	03/22/2016 07:10	WG858242
1,1,2-Trichloroethane	ND		1.00	1	03/22/2016 07:10	WG858242
Trichloroethene	ND		1.00	1	03/22/2016 07:10	WG858242
Trichlorofluoromethane	ND		5.00	1	03/22/2016 07:10	WG858242
1,2,3-Trichloropropane	ND		2.50	1	03/22/2016 07:10	WG858242
1,2,4-Trimethylbenzene	ND		1.00	1	03/22/2016 07:10	WG858242
1,2,3-Trimethylbenzene	ND		1.00	1	03/22/2016 07:10	WG858242
1,3,5-Trimethylbenzene	ND		1.00	1	03/22/2016 07:10	WG858242
Vinyl chloride	ND		1.00	1	03/22/2016 07:10	WG858242
Xylenes, Total	ND		3.00	1	03/22/2016 07:10	WG858242
(S) Toluene-d8	*105*		*90.0-115*		*03/22/2016 07:10*	WG858242
(S) Dibromofluoromethane	*114*		*79.0-121*		*03/22/2016 07:10*	WG858242
(S) 4-Bromofluorobenzene	*100*		*80.1-120*		*03/22/2016 07:10*	WG858242

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

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	ND		50.0	1	03/22/2016 07:30	WG858242
Acrolein	ND		50.0	1	03/22/2016 07:30	WG858242
Acrylonitrile	ND		10.0	1	03/22/2016 07:30	WG858242
Benzene	ND		1.00	1	03/22/2016 07:30	WG858242
Bromobenzene	ND		1.00	1	03/22/2016 07:30	WG858242
Bromodichloromethane	ND		1.00	1	03/22/2016 07:30	WG858242
Bromoform	ND		1.00	1	03/22/2016 07:30	WG858242
Bromomethane	ND		5.00	1	03/22/2016 07:30	WG858242
n-Butylbenzene	ND		1.00	1	03/22/2016 07:30	WG858242
sec-Butylbenzene	ND		1.00	1	03/22/2016 07:30	WG858242
tert-Butylbenzene	ND		1.00	1	03/22/2016 07:30	WG858242
Carbon tetrachloride	ND		1.00	1	03/22/2016 07:30	WG858242
Chlorobenzene	ND		1.00	1	03/22/2016 07:30	WG858242
Chlorodibromomethane	ND		1.00	1	03/22/2016 07:30	WG858242
Chloroethane	ND		5.00	1	03/22/2016 07:30	WG858242
2-Chloroethyl vinyl ether	ND		50.0	1	03/22/2016 14:02	WG858383
Chloroform	ND		5.00	1	03/22/2016 07:30	WG858242
Chloromethane	ND		2.50	1	03/22/2016 07:30	WG858242
2-Chlorotoluene	ND		1.00	1	03/22/2016 07:30	WG858242
4-Chlorotoluene	ND		1.00	1	03/22/2016 07:30	WG858242
1,2-Dibromo-3-Chloropropane	ND		5.00	1	03/22/2016 07:30	WG858242
1,2-Dibromoethane	ND		1.00	1	03/22/2016 07:30	WG858242
Dibromomethane	ND		1.00	1	03/22/2016 07:30	WG858242
1,2-Dichlorobenzene	ND		1.00	1	03/22/2016 07:30	WG858242
1,3-Dichlorobenzene	ND		1.00	1	03/22/2016 07:30	WG858242
1,4-Dichlorobenzene	ND		1.00	1	03/22/2016 07:30	WG858242
Dichlorodifluoromethane	ND		5.00	1	03/22/2016 07:30	WG858242
1,1-Dichloroethane	ND		1.00	1	03/22/2016 07:30	WG858242
1,2-Dichloroethane	ND		1.00	1	03/22/2016 07:30	WG858242
1,1-Dichloroethene	ND		1.00	1	03/22/2016 07:30	WG858242
cis-1,2-Dichloroethene	ND		1.00	1	03/22/2016 07:30	WG858242
trans-1,2-Dichloroethene	ND		1.00	1	03/22/2016 07:30	WG858242
1,2-Dichloropropane	ND		1.00	1	03/22/2016 07:30	WG858242
1,1-Dichloropropene	ND		1.00	1	03/22/2016 07:30	WG858242
1,3-Dichloropropane	ND		1.00	1	03/22/2016 07:30	WG858242
cis-1,3-Dichloropropene	ND		1.00	1	03/22/2016 07:30	WG858242
trans-1,3-Dichloropropene	ND		1.00	1	03/22/2016 07:30	WG858242
2,2-Dichloropropane	ND		1.00	1	03/22/2016 07:30	WG858242
Di-isopropyl ether	ND		1.00	1	03/22/2016 07:30	WG858242
Ethylbenzene	ND		1.00	1	03/22/2016 07:30	WG858242
Hexachloro-1,3-butadiene	ND		1.00	1	03/22/2016 07:30	WG858242
Isopropylbenzene	ND		1.00	1	03/22/2016 07:30	WG858242
p-Isopropyltoluene	ND		1.00	1	03/22/2016 07:30	WG858242
2-Butanone (MEK)	ND		10.0	1	03/22/2016 07:30	WG858242
Methylene Chloride	ND		5.00	1	03/22/2016 07:30	WG858242
4-Methyl-2-pentanone (MIBK)	ND		10.0	1	03/22/2016 07:30	WG858242
Methyl tert-butyl ether	ND		1.00	1	03/22/2016 07:30	WG858242
Naphthalene	ND		5.00	1	03/22/2016 07:30	WG858242
n-Propylbenzene	ND		1.00	1	03/22/2016 07:30	WG858242
Styrene	ND		1.00	1	03/22/2016 07:30	WG858242
1,1,1,2-Tetrachloroethane	ND		1.00	1	03/22/2016 07:30	WG858242
1,1,2,2-Tetrachloroethane	ND		1.00	1	03/22/2016 07:30	WG858242
1,1,2-Trichlorotrifluoroethane	ND		1.00	1	03/22/2016 07:30	WG858242
Tetrachloroethene	ND		1.00	1	03/22/2016 07:30	WG858242
Toluene	ND		5.00	1	03/22/2016 07:30	WG858242
1,2,3-Trichlorobenzene	ND		1.00	1	03/22/2016 07:30	WG858242

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

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
1,2,4-Trichlorobenzene	ND		1.00	1	03/22/2016 07:30	WG858242
1,1,1-Trichloroethane	ND		1.00	1	03/22/2016 07:30	WG858242
1,1,2-Trichloroethane	ND		1.00	1	03/22/2016 07:30	WG858242
Trichloroethene	ND		1.00	1	03/22/2016 07:30	WG858242
Trichlorofluoromethane	ND		5.00	1	03/22/2016 07:30	WG858242
1,2,3-Trichloropropane	ND		2.50	1	03/22/2016 07:30	WG858242
1,2,4-Trimethylbenzene	ND		1.00	1	03/22/2016 07:30	WG858242
1,2,3-Trimethylbenzene	ND		1.00	1	03/22/2016 07:30	WG858242
1,3,5-Trimethylbenzene	ND		1.00	1	03/22/2016 07:30	WG858242
Vinyl chloride	ND		1.00	1	03/22/2016 07:30	WG858242
Xylenes, Total	ND		3.00	1	03/22/2016 07:30	WG858242
(S) Toluene-d8	*106*		*90.0-115*		*03/22/2016 07:30*	WG858242
(S) Dibromofluoromethane	*113*		*79.0-121*		*03/22/2016 07:30*	WG858242
(S) 4-Bromofluorobenzene	*102*		*80.1-120*		*03/22/2016 07:30*	WG858242

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

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	ND		50.0	1	03/22/2016 06:51	WG858242
Acrolein	ND		50.0	1	03/22/2016 06:51	WG858242
Acrylonitrile	ND		10.0	1	03/22/2016 06:51	WG858242
Benzene	ND		1.00	1	03/22/2016 06:51	WG858242
Bromobenzene	ND		1.00	1	03/22/2016 06:51	WG858242
Bromodichloromethane	ND		1.00	1	03/22/2016 06:51	WG858242
Bromoform	ND		1.00	1	03/22/2016 06:51	WG858242
Bromomethane	ND		5.00	1	03/22/2016 06:51	WG858242
n-Butylbenzene	ND		1.00	1	03/22/2016 06:51	WG858242
sec-Butylbenzene	ND		1.00	1	03/22/2016 06:51	WG858242
tert-Butylbenzene	ND		1.00	1	03/22/2016 06:51	WG858242
Carbon tetrachloride	ND		1.00	1	03/22/2016 06:51	WG858242
Chlorobenzene	ND		1.00	1	03/22/2016 06:51	WG858242
Chlorodibromomethane	ND		1.00	1	03/22/2016 06:51	WG858242
Chloroethane	ND		5.00	1	03/22/2016 06:51	WG858242
2-Chloroethyl vinyl ether	ND		50.0	1	03/22/2016 12:59	WG858383
Chloroform	ND		5.00	1	03/22/2016 06:51	WG858242
Chloromethane	ND		2.50	1	03/22/2016 06:51	WG858242
2-Chlorotoluene	ND		1.00	1	03/22/2016 06:51	WG858242
4-Chlorotoluene	ND		1.00	1	03/22/2016 06:51	WG858242
1,2-Dibromo-3-Chloropropane	ND		5.00	1	03/22/2016 06:51	WG858242
1,2-Dibromoethane	ND		1.00	1	03/22/2016 06:51	WG858242
Dibromomethane	ND		1.00	1	03/22/2016 06:51	WG858242
1,2-Dichlorobenzene	ND		1.00	1	03/22/2016 06:51	WG858242
1,3-Dichlorobenzene	ND		1.00	1	03/22/2016 06:51	WG858242
1,4-Dichlorobenzene	ND		1.00	1	03/22/2016 06:51	WG858242
Dichlorodifluoromethane	ND		5.00	1	03/22/2016 06:51	WG858242
1,1-Dichloroethane	ND		1.00	1	03/22/2016 06:51	WG858242
1,2-Dichloroethane	ND		1.00	1	03/22/2016 06:51	WG858242
1,1-Dichloroethene	ND		1.00	1	03/22/2016 06:51	WG858242
cis-1,2-Dichloroethene	ND		1.00	1	03/22/2016 06:51	WG858242
trans-1,2-Dichloroethene	ND		1.00	1	03/22/2016 06:51	WG858242
1,2-Dichloropropane	ND		1.00	1	03/22/2016 06:51	WG858242
1,1-Dichloropropene	ND		1.00	1	03/22/2016 06:51	WG858242
1,3-Dichloropropane	ND		1.00	1	03/22/2016 06:51	WG858242
cis-1,3-Dichloropropene	ND		1.00	1	03/22/2016 06:51	WG858242
trans-1,3-Dichloropropene	ND		1.00	1	03/22/2016 06:51	WG858242
2,2-Dichloropropane	ND		1.00	1	03/22/2016 06:51	WG858242
Di-isopropyl ether	ND		1.00	1	03/22/2016 06:51	WG858242
Ethylbenzene	ND		1.00	1	03/22/2016 06:51	WG858242
Hexachloro-1,3-butadiene	ND		1.00	1	03/22/2016 06:51	WG858242
Isopropylbenzene	ND		1.00	1	03/22/2016 06:51	WG858242
p-Isopropyltoluene	ND		1.00	1	03/22/2016 06:51	WG858242
2-Butanone (MEK)	ND		10.0	1	03/22/2016 06:51	WG858242
Methylene Chloride	ND		5.00	1	03/22/2016 06:51	WG858242
4-Methyl-2-pentanone (MIBK)	ND		10.0	1	03/22/2016 06:51	WG858242
Methyl tert-butyl ether	ND		1.00	1	03/22/2016 06:51	WG858242
Naphthalene	ND		5.00	1	03/22/2016 06:51	WG858242
n-Propylbenzene	ND		1.00	1	03/22/2016 06:51	WG858242
Styrene	ND		1.00	1	03/22/2016 06:51	WG858242
1,1,1,2-Tetrachloroethane	ND		1.00	1	03/22/2016 06:51	WG858242
1,1,2,2-Tetrachloroethane	ND		1.00	1	03/22/2016 06:51	WG858242
1,1,2-Trichlorotrifluoroethane	ND		1.00	1	03/22/2016 06:51	WG858242
Tetrachloroethene	ND		1.00	1	03/22/2016 06:51	WG858242
Toluene	ND		5.00	1	03/22/2016 06:51	WG858242
1,2,3-Trichlorobenzene	ND		1.00	1	03/22/2016 06:51	WG858242

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

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
1,2,4-Trichlorobenzene	ND		1.00	1	03/22/2016 06:51	WG858242
1,1,1-Trichloroethane	ND		1.00	1	03/22/2016 06:51	WG858242
1,1,2-Trichloroethane	ND		1.00	1	03/22/2016 06:51	WG858242
Trichloroethene	ND		1.00	1	03/22/2016 06:51	WG858242
Trichlorofluoromethane	ND		5.00	1	03/22/2016 06:51	WG858242
1,2,3-Trichloropropane	ND		2.50	1	03/22/2016 06:51	WG858242
1,2,4-Trimethylbenzene	ND		1.00	1	03/22/2016 06:51	WG858242
1,2,3-Trimethylbenzene	ND		1.00	1	03/22/2016 06:51	WG858242
1,3,5-Trimethylbenzene	ND		1.00	1	03/22/2016 06:51	WG858242
Vinyl chloride	ND		1.00	1	03/22/2016 06:51	WG858242
Xylenes, Total	ND		3.00	1	03/22/2016 06:51	WG858242
(S) Toluene-d8	*104*		*90.0-115*		*03/22/2016 06:51*	WG858242
(S) Dibromofluoromethane	*112*		*79.0-121*		*03/22/2016 06:51*	WG858242
(S) 4-Bromofluorobenzene	*101*		*80.1-120*		*03/22/2016 06:51*	WG858242

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
Benzene	71-43-2	78.10	0.0200	0.0639	0.260	0.831		1	WG857955
Carbon tetrachloride	56-23-5	154	0.0200	0.126	0.0721	0.454		1	WG857955
Chloroethane	75-00-3	64.50	0.0400	0.106	ND	ND		1	WG857955
Chloroform	67-66-3	119	0.0200	0.0973	ND	ND		1	WG857955
Chloromethane	74-87-3	50.50	0.0300	0.0620	0.553	1.14		1	WG857955
1,2-Dibromoethane	106-93-4	188	0.0200	0.154	ND	ND		1	WG857955
1,4-Dichlorobenzene	106-46-7	147	0.0200	0.120	ND	ND		1	WG857955
1,1-Dichloroethane	75-34-3	98	0.0200	0.0802	ND	ND		1	WG857955
1,1-Dichloroethene	75-35-4	96.90	0.0200	0.0793	ND	ND		1	WG857955
cis-1,2-Dichloroethene	156-59-2	96.90	0.0200	0.0793	ND	ND		1	WG857955
trans-1,2-Dichloroethene	156-60-5	96.90	0.0200	0.0793	ND	ND		1	WG857955
1,2-Dichloropropane	78-87-5	113	0.0300	0.139	ND	ND		1	WG857955
cis-1,3-Dichloropropene	10061-01-5	111	0.0200	0.0908	ND	ND		1	WG857955
trans-1,3-Dichloropropene	10061-02-6	111	0.0300	0.136	ND	ND		1	WG857955
Ethylbenzene	100-41-4	106	0.0300	0.130	0.0876	0.380		1	WG857955
1,1,2,2-Tetrachloroethane	79-34-5	168	0.0200	0.137	ND	ND		1	WG857955
Tetrachloroethylene	127-18-4	166	0.0200	0.136	0.153	1.04		1	WG857955
1,1,1-Trichloroethane	71-55-6	133	0.0200	0.109	ND	ND		1	WG857955
1,1,2-Trichloroethane	79-00-5	133	0.0300	0.163	ND	ND		1	WG857955
Trichloroethylene	79-01-6	131	0.0200	0.107	ND	ND		1	WG857955
Vinyl chloride	75-01-4	62.50	0.0200	0.0511	ND	ND		1	WG857955
Vinyl acetate	108-05-4	86.10	0.0200	0.0704	ND	ND		1	WG857955
(S) 1,4-Bromofluorobenzene	*460-00-4*	*175*	*60.0-140*		*104*				WG857955

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
Benzene	71-43-2	78.10	0.0200	0.0639	0.269	0.859		1	WG857955
Carbon tetrachloride	56-23-5	154	0.0200	0.126	0.0698	0.440		1	WG857955
Chloroethane	75-00-3	64.50	0.0400	0.106	ND	ND		1	WG857955
Chloroform	67-66-3	119	0.0200	0.0973	ND	ND		1	WG857955
Chloromethane	74-87-3	50.50	0.0300	0.0620	0.617	1.27		1	WG857955
1,2-Dibromoethane	106-93-4	188	0.0200	0.154	ND	ND		1	WG857955
1,4-Dichlorobenzene	106-46-7	147	0.0200	0.120	ND	ND		1	WG857955
1,1-Dichloroethane	75-34-3	98	0.0200	0.0802	ND	ND		1	WG857955
1,1-Dichloroethene	75-35-4	96.90	0.0200	0.0793	ND	ND		1	WG857955
cis-1,2-Dichloroethene	156-59-2	96.90	0.0200	0.0793	ND	ND		1	WG857955
trans-1,2-Dichloroethene	156-60-5	96.90	0.0200	0.0793	ND	ND		1	WG857955
1,2-Dichloropropane	78-87-5	113	0.0300	0.139	ND	ND		1	WG857955
cis-1,3-Dichloropropene	10061-01-5	111	0.0200	0.0908	ND	ND		1	WG857955
trans-1,3-Dichloropropene	10061-02-6	111	0.0300	0.136	ND	ND		1	WG857955
Ethylbenzene	100-41-4	106	0.0300	0.130	0.0933	0.404		1	WG857955
1,1,2,2-Tetrachloroethane	79-34-5	168	0.0200	0.137	ND	ND		1	WG857955
Tetrachloroethylene	127-18-4	166	0.0200	0.136	ND	ND		1	WG857955
1,1,1-Trichloroethane	71-55-6	133	0.0200	0.109	ND	ND		1	WG857955
1,1,2-Trichloroethane	79-00-5	133	0.0300	0.163	ND	ND		1	WG857955
Trichloroethylene	79-01-6	131	0.0200	0.107	ND	ND		1	WG857955
Vinyl chloride	75-01-4	62.50	0.0200	0.0511	ND	ND		1	WG857955
Vinyl acetate	108-05-4	86.10	0.0200	0.0704	ND	ND		1	WG857955
(S) 1,4-Bromofluorobenzene	*460-00-4*	*175*	*60.0-140*		*108*				WG857955

Method Blank (MB)

(MB) 03/21/16 11:50

Analyte	MB Result %	MB Qualifier	MB RDL %
Total Solids	0.000500		

L823954-09 Original Sample (OS) • Duplicate (DUP)

(OS) 03/21/16 11:50 • (DUP) 03/21/16 11:50

Analyte	Original Result %	DUP Result %	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Total Solids	69.9	69.7	1	0.293		5

Laboratory Control Sample (LCS)

(LCS) 03/21/16 11:50

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

Method Blank (MB)

(MB) 03/21/16 15:36

Analyte	MB Result %	MB Qualifier	MB RDL %
Total Solids	0.00100		

L824039-35 Original Sample (OS) • Duplicate (DUP)

(OS) 03/21/16 15:36 • (DUP) 03/21/16 15:36

Analyte	Original Result %	DUP Result %	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Total Solids	73.8	73.8	1	0.0418		5

Laboratory Control Sample (LCS)

(LCS) 03/21/16 15:36

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

Method Blank (MB)

(MB) 03/21/16 11:19

Analyte	MB Result ppbv	MB Qualifier	MB RDL ppbv
Benzene	ND		0.0200
Carbon tetrachloride	ND		0.0200
Chloroethane	ND		0.0400
Chloroform	ND		0.0200
Chloromethane	ND		0.0300
1,2-Dibromoethane	ND		0.0200
1,4-Dichlorobenzene	ND		0.0200
1,1-Dichloroethane	ND		0.0200
1,1-Dichloroethene	ND		0.0200
cis-1,2-Dichloroethene	ND		0.0200
trans-1,2-Dichloroethene	ND		0.0200
1,2-Dichloropropane	ND		0.0300
cis-1,3-Dichloropropene	ND		0.0200
trans-1,3-Dichloropropene	ND		0.0300
Ethylbenzene	ND		0.0300
1,1,2,2-Tetrachloroethane	ND		0.0200
Tetrachloroethylene	ND		0.0200
1,1,1-Trichloroethane	ND		0.0200
1,1,2-Trichloroethane	ND		0.0300
Trichloroethylene	ND		0.0200
Vinyl chloride	ND		0.0200
Vinyl acetate	ND		0.0200
(S) 1,4-Bromofluorobenzene	*99.5*		*60.0-140*

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

(LCS) 03/21/16 09:59 • (LCSD) 03/21/16 10:40

Analyte	Spike Amount ppbv	LCS Result ppbv	LCSD Result ppbv	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Benzene	0.500	0.451	0.449	90.2	89.9	70.0-130			0.370	25
Carbon tetrachloride	0.500	0.475	0.466	94.9	93.2	70.0-130			1.85	25
Chloroethane	0.500	0.501	0.444	100	88.7	70.0-130			12.2	25
Chloroform	0.500	0.469	0.456	93.8	91.1	70.0-130			2.91	25
Chloromethane	0.500	0.489	0.483	97.8	96.6	70.0-130			1.24	25
1,2-Dibromoethane	0.500	0.479	0.472	95.8	94.4	70.0-130			1.43	25
1,4-Dichlorobenzene	0.500	0.507	0.484	101	96.8	70.0-130			4.64	25

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

(LCS) 03/21/16 09:59 • (LCSD) 03/21/16 10:40

Analyte	Spike Amount ppbv	LCS Result ppbv	LCSD Result ppbv	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
1,1-Dichloroethane	0.500	0.489	0.464	97.7	92.9	70.0-130			5.05	25
1,1-Dichloroethene	0.500	0.513	0.444	103	88.9	70.0-130			14.4	25
cis-1,2-Dichloroethene	0.500	0.478	0.468	95.6	93.6	70.0-130			2.13	25
trans-1,2-Dichloroethene	0.500	0.509	0.453	102	90.6	70.0-130			11.6	25
1,2-Dichloropropane	0.500	0.481	0.473	96.3	94.5	70.0-130			1.81	25
cis-1,3-Dichloropropene	0.500	0.490	0.476	97.9	95.1	70.0-130			2.91	25
trans-1,3-Dichloropropene	0.500	0.493	0.485	98.6	96.9	70.0-130			1.74	25
Ethylbenzene	0.500	0.526	0.519	105	104	70.0-130			1.23	25
1,1,2,2-Tetrachloroethane	0.500	0.464	0.462	92.9	92.4	70.0-130			0.480	25
Tetrachloroethylene	0.500	0.481	0.478	96.2	95.5	70.0-130			0.760	25
1,1,1-Trichloroethane	0.500	0.472	0.464	94.3	92.9	70.0-130			1.54	25
1,1,2-Trichloroethane	0.500	0.477	0.472	95.4	94.5	70.0-130			0.920	25
Trichloroethylene	0.500	0.457	0.458	91.3	91.7	70.0-130			0.370	25
Vinyl chloride	0.500	0.478	0.452	95.7	90.3	70.0-130			5.72	25
Vinyl acetate	0.500	0.519	0.526	104	105	70.0-130			1.21	25
(S) 1,4-Bromofluorobenzene				*105*	*104*	*60.0-140*				

Method Blank (MB)

(MB) 03/21/16 20:05

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

Method Blank (MB)

(MB) 03/21/16 20:05

Analyte	MB Result mg/kg	MB Qualifier	MB RDL mg/kg
2,2-Dichloropropane	ND		0.00100
Di-isopropyl ether	ND		0.00100
Ethylbenzene	ND		0.00100
Hexachloro-1,3-butadiene	ND		0.00100
Isopropylbenzene	ND		0.00100
p-Isopropyltoluene	ND		0.00100
2-Butanone (MEK)	ND		0.0100
Methylene Chloride	ND		0.00500
4-Methyl-2-pentanone (MIBK)	ND		0.0100
Methyl tert-butyl ether	ND		0.00100
Naphthalene	ND		0.00500
n-Propylbenzene	ND		0.00100
Styrene	ND		0.00100
1,1,1,2-Tetrachloroethane	ND		0.00100
1,1,2,2-Tetrachloroethane	ND		0.00100
Tetrachloroethene	ND		0.00100
Toluene	ND		0.00500
1,1,2-Trichlorotrifluoroethane	ND		0.00100
1,2,3-Trichlorobenzene	ND		0.00100
1,2,4-Trichlorobenzene	ND		0.00100
1,1,1-Trichloroethane	ND		0.00100
1,1,2-Trichloroethane	ND		0.00100
Trichloroethene	ND		0.00100
Trichlorofluoromethane	ND		0.00500
1,2,3-Trichloropropane	ND		0.00250
1,2,3-Trimethylbenzene	ND		0.00100
1,2,4-Trimethylbenzene	ND		0.00100
1,3,5-Trimethylbenzene	ND		0.00100
Vinyl chloride	ND		0.00100
Xylenes, Total	ND		0.00300
(S) Toluene-d8	*102*		*88.7-115*
(S) Dibromofluoromethane	*98.4*		*76.3-123*
(S) 4-Bromofluorobenzene	*91.8*		*69.7-129*

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

(LCS) 03/21/16 18:27 • (LCSD) 03/21/16 18:46

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCSD Result mg/kg	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Acetone	0.125	0.0755	0.0774	60.4	61.9	25.3-178			2.40	22.9
Acrylonitrile	0.125	0.101	0.100	80.7	80.1	57.8-143			0.780	20
Benzene	0.0250	0.0219	0.0216	87.6	86.5	72.6-120			1.30	20
Bromobenzene	0.0250	0.0204	0.0202	81.4	80.9	80.3-115			0.630	20
Bromodichloromethane	0.0250	0.0204	0.0207	81.7	82.9	75.3-119			1.38	20
Bromoform	0.0250	0.0212	0.0208	84.8	83.4	69.1-135			1.64	20
Bromomethane	0.0250	0.0167	0.0169	66.6	67.5	23.0-191			1.33	20
n-Butylbenzene	0.0250	0.0227	0.0217	90.9	86.6	74.2-134			4.77	20
sec-Butylbenzene	0.0250	0.0225	0.0212	90.1	84.9	77.8-129			6.00	20
tert-Butylbenzene	0.0250	0.0224	0.0216	89.6	86.2	77.2-129			3.90	20
Carbon tetrachloride	0.0250	0.0199	0.0191	79.8	76.6	69.4-129			4.10	20
Chlorobenzene	0.0250	0.0221	0.0216	88.5	86.5	78.9-122			2.29	20
Chlorodibromomethane	0.0250	0.0218	0.0222	87.0	88.8	76.4-126			1.98	20
Chloroethane	0.0250	0.0195	0.0198	78.1	79.1	47.2-147			1.23	20
2-Chloroethyl vinyl ether	0.125	0.121	0.123	96.5	98.6	16.7-162			2.23	23.7
Chloroform	0.0250	0.0211	0.0206	84.3	82.6	73.3-122			2.08	20
Chloromethane	0.0250	0.0210	0.0200	83.9	80.0	53.1-135			4.79	20
2-Chlorotoluene	0.0250	0.0232	0.0225	92.7	90.2	74.6-127			2.79	20
4-Chlorotoluene	0.0250	0.0220	0.0215	87.9	86.2	79.5-123			2.02	20
1,2-Dibromo-3-Chloropropane	0.0250	0.0176	0.0188	70.6	75.2	64.9-131			6.39	20
1,2-Dibromoethane	0.0250	0.0214	0.0217	85.6	87.0	67.2-121			1.53	20
Dibromomethane	0.0250	0.0213	0.0211	85.4	84.2	78.5-117			1.34	20
1,2-Dichlorobenzene	0.0250	0.0228	0.0220	91.1	87.9	83.6-119			3.61	20
1,3-Dichlorobenzene	0.0250	0.0226	0.0221	90.2	88.6	75.9-129			1.88	20
1,4-Dichlorobenzene	0.0250	0.0219	0.0216	87.5	86.3	81.0-115			1.44	20
Dichlorodifluoromethane	0.0250	0.0202	0.0193	80.8	77.2	50.9-139			4.53	20
1,1-Dichloroethane	0.0250	0.0227	0.0221	90.8	88.6	71.7-125			2.48	20
1,2-Dichloroethane	0.0250	0.0203	0.0201	81.1	80.5	67.2-121			0.660	20
1,1-Dichloroethene	0.0250	0.0208	0.0174	83.0	69.6	60.6-133			17.6	20
cis-1,2-Dichloroethene	0.0250	0.0208	0.0204	83.2	81.7	76.1-121			1.92	20
trans-1,2-Dichloroethene	0.0250	0.0205	0.0198	82.1	79.2	70.7-124			3.65	20
1,2-Dichloropropane	0.0250	0.0238	0.0239	95.2	95.6	76.9-123			0.360	20
1,1-Dichloropropene	0.0250	0.0224	0.0219	89.7	87.8	71.2-126			2.21	20
1,3-Dichloropropane	0.0250	0.0232	0.0232	92.7	92.7	80.3-114			0.0500	20
cis-1,3-Dichloropropene	0.0250	0.0220	0.0223	88.2	89.4	77.3-123			1.35	20
trans-1,3-Dichloropropene	0.0250	0.0197	0.0197	78.6	78.8	73.0-127			0.270	20

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

(LCS) 03/21/16 18:27 • (LCSD) 03/21/16 18:46

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCSD Result mg/kg	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
2,2-Dichloropropane	0.0250	0.0201	0.0202	80.5	80.8	61.9-132			0.280	20
Di-isopropyl ether	0.0250	0.0220	0.0215	87.9	86.2	67.2-131			2.01	20
Ethylbenzene	0.0250	0.0220	0.0214	88.0	85.4	78.6-124			2.98	20
Hexachloro-1,3-butadiene	0.0250	0.0247	0.0233	98.9	93.3	69.2-136			5.80	20
Isopropylbenzene	0.0250	0.0220	0.0211	87.8	84.3	79.4-126			4.06	20
p-Isopropyltoluene	0.0250	0.0233	0.0223	93.4	89.2	75.4-132			4.56	20
2-Butanone (MEK)	0.125	0.0881	0.0892	70.5	71.3	44.5-154			1.16	21.3
Methylene Chloride	0.0250	0.0218	0.0216	87.3	86.4	68.2-119			1.04	20
4-Methyl-2-pentanone (MIBK)	0.125	0.0988	0.101	79.0	81.0	61.1-138			2.50	20
Methyl tert-butyl ether	0.0250	0.0196	0.0192	78.4	77.0	70.2-122			1.81	20
Naphthalene	0.0250	0.0210	0.0204	83.9	81.5	69.9-132			2.94	20
n-Propylbenzene	0.0250	0.0225	0.0218	90.2	87.3	80.2-124			3.24	20
Styrene	0.0250	0.0210	0.0210	83.9	83.8	79.4-124			0.130	20
1,1,1,2-Tetrachloroethane	0.0250	0.0215	0.0211	85.9	84.5	76.7-127			1.61	20
1,1,2,2-Tetrachloroethane	0.0250	0.0191	0.0192	76.4	76.9	78.8-124	J4	J4	0.610	20
Tetrachloroethene	0.0250	0.0213	0.0211	85.3	84.3	71.1-133			1.24	20
Toluene	0.0250	0.0214	0.0215	85.4	86.0	76.7-116			0.680	20
1,1,2-Trichlorotrifluoroethane	0.0250	0.0232	0.0185	92.9	73.9	62.6-138		J3	22.8	20
1,2,3-Trichlorobenzene	0.0250	0.0222	0.0218	88.7	87.1	72.5-137			1.83	20
1,2,4-Trichlorobenzene	0.0250	0.0220	0.0213	88.2	85.1	74.0-137			3.53	20
1,1,1-Trichloroethane	0.0250	0.0199	0.0192	79.7	76.7	69.9-127			3.74	20
1,1,2-Trichloroethane	0.0250	0.0199	0.0207	79.7	82.8	81.9-119	J4		3.77	20
Trichloroethene	0.0250	0.0225	0.0219	90.0	87.8	77.2-122			2.48	20
Trichlorofluoromethane	0.0250	0.0185	0.0185	74.1	74.2	51.5-151			0.150	20
1,2,3-Trichloropropane	0.0250	0.0204	0.0212	81.5	84.7	74.0-124			3.85	20
1,2,3-Trimethylbenzene	0.0250	0.0217	0.0207	86.9	82.8	79.4-118			4.84	20
1,2,4-Trimethylbenzene	0.0250	0.0224	0.0212	89.7	84.8	77.1-124			5.59	20
1,3,5-Trimethylbenzene	0.0250	0.0216	0.0209	86.6	83.7	79.0-125			3.37	20
Vinyl chloride	0.0250	0.0210	0.0202	83.9	80.6	58.4-134			3.99	20
Xylenes, Total	0.0750	0.0651	0.0635	86.7	84.6	78.1-123			2.48	20
(S) Toluene-d8				*99.7*	*101*	*88.7-115*				
(S) Dibromofluoromethane				*97.9*	*97.4*	*76.3-123*				
(S) 4-Bromofluorobenzene				*95.4*	*94.4*	*69.7-129*				

L824541-17 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) 03/22/16 00:10 • (MS) 03/21/16 23:12 • (MSD) 03/21/16 23:31

Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MSD Result mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Acetone	0.125	0.0723	0.0697	0.0544	0.000	0.000	1	5.00-182	J6	J6	24.8	31.5
Acrylonitrile	0.125	ND	0.0945	0.0750	75.6	60.0	1	39.3-152			23.0	27.2
Benzene	0.0250	0.000324	0.0220	0.0211	86.8	83.0	1	47.8-131			4.37	22.8
Bromobenzene	0.0250	ND	0.0186	0.0179	74.4	71.7	1	40.0-130			3.69	27.4
Bromodichloromethane	0.0250	ND	0.0201	0.0199	80.5	79.6	1	50.6-128			1.11	22.8
Bromoform	0.0250	ND	0.0182	0.0181	72.8	72.3	1	43.3-139			0.740	25.9
Bromomethane	0.0250	ND	0.0147	0.0138	58.8	55.2	1	5.00-189			6.22	26.7
n-Butylbenzene	0.0250	ND	0.0231	0.0218	92.3	87.2	1	23.6-146			5.73	39.2
sec-Butylbenzene	0.0250	ND	0.0199	0.0194	79.6	77.6	1	31.0-142			2.56	34.7
tert-Butylbenzene	0.0250	ND	0.0202	0.0198	80.9	79.1	1	36.9-142			2.27	31.7
Carbon tetrachloride	0.0250	ND	0.0192	0.0190	76.9	75.8	1	46.0-140			1.41	27.2
Chlorobenzene	0.0250	ND	0.0212	0.0200	84.8	80.2	1	44.1-134			5.58	25.7
Chlorodibromomethane	0.0250	ND	0.0207	0.0202	82.7	80.6	1	49.7-134			2.57	24
Chloroethane	0.0250	ND	0.0181	0.0187	72.4	74.8	1	5.00-164			3.36	28.4
2-Chloroethyl vinyl ether	0.125	ND	0.113	0.116	90.4	92.9	1	5.00-159			2.68	40
Chloroform	0.0250	ND	0.0214	0.0205	85.7	82.2	1	51.2-133			4.21	22.8
Chloromethane	0.0250	ND	0.0189	0.0179	75.5	71.5	1	31.4-141			5.50	24.6
2-Chlorotoluene	0.0250	ND	0.0212	0.0202	84.7	80.8	1	36.1-137			4.76	28.9
4-Chlorotoluene	0.0250	ND	0.0207	0.0196	82.8	78.3	1	35.4-137			5.53	29.8
1,2-Dibromo-3-Chloropropane	0.0250	ND	0.0174	0.0170	69.7	68.2	1	40.4-138			2.23	30.8
1,2-Dibromoethane	0.0250	ND	0.0200	0.0197	80.1	78.8	1	50.2-133			1.58	23.6
Dibromomethane	0.0250	ND	0.0200	0.0208	79.9	83.2	1	52.4-128			4.11	23
1,2-Dichlorobenzene	0.0250	ND	0.0218	0.0209	87.2	83.5	1	34.6-139			4.36	29.9
1,3-Dichlorobenzene	0.0250	ND	0.0191	0.0184	76.2	73.4	1	28.4-142			3.75	31.2
1,4-Dichlorobenzene	0.0250	ND	0.0222	0.0206	88.8	82.3	1	35.0-133			7.59	31.1
Dichlorodifluoromethane	0.0250	ND	0.0173	0.0158	69.1	63.4	1	31.2-144			8.67	30.2
1,1-Dichloroethane	0.0250	ND	0.0232	0.0220	92.8	88.0	1	49.1-136			5.29	22.9
1,2-Dichloroethane	0.0250	ND	0.0204	0.0199	81.5	79.6	1	47.1-129			2.34	22.7
1,1-Dichloroethene	0.0250	ND	0.0205	0.0190	81.8	75.9	1	36.1-142			7.60	25.6
cis-1,2-Dichloroethene	0.0250	ND	0.0206	0.0201	82.4	80.5	1	50.6-133			2.31	23
trans-1,2-Dichloroethene	0.0250	ND	0.0201	0.0188	80.5	75.0	1	43.8-135			7.09	24.8
1,2-Dichloropropane	0.0250	ND	0.0241	0.0232	96.4	93.0	1	50.3-134			3.66	22.7
1,1-Dichloropropene	0.0250	ND	0.0225	0.0212	90.0	84.9	1	43.0-137			5.83	26.4
1,3-Dichloropropane	0.0250	ND	0.0220	0.0219	88.0	87.5	1	51.4-127			0.640	23.1
cis-1,3-Dichloropropene	0.0250	ND	0.0211	0.0207	84.5	82.9	1	48.4-134			1.89	23.6
trans-1,3-Dichloropropene	0.0250	ND	0.0186	0.0184	74.4	73.7	1	46.6-135			0.920	25.3

L824541-17 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) 03/22/16 00:10 • (MS) 03/21/16 23:12 • (MSD) 03/21/16 23:31

Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MSD Result mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
2,2-Dichloropropane	0.0250	ND	0.0216	0.0221	86.4	88.5	1	45.2-141			2.34	26.8
Di-isopropyl ether	0.0250	ND	0.0220	0.0217	87.9	86.8	1	46.7-140			1.24	23.5
Ethylbenzene	0.0250	ND	0.0215	0.0207	86.0	82.7	1	44.8-135			3.88	26.9
Hexachloro-1,3-butadiene	0.0250	ND	0.0163	0.0156	65.1	62.4	1	10.0-149			4.36	40
Isopropylbenzene	0.0250	ND	0.0207	0.0200	82.6	80.0	1	41.9-139			3.23	29.3
p-Isopropyltoluene	0.0250	ND	0.0204	0.0202	81.7	80.9	1	27.3-146			0.950	35.1
2-Butanone (MEK)	0.125	0.00572	0.0785	0.0774	58.3	57.3	1	23.9-170			1.47	28.3
Methylene Chloride	0.0250	ND	0.0221	0.0209	88.2	83.4	1	46.7-125			5.61	22.2
4-Methyl-2-pentanone (MIBK)	0.125	ND	0.0886	0.0922	70.9	73.8	1	42.4-146			4.01	26.7
Methyl tert-butyl ether	0.0250	ND	0.0189	0.0192	75.6	76.9	1	50.4-131			1.69	24.8
Naphthalene	0.0250	0.000267	0.0124	0.0131	48.4	51.5	1	18.4-145			6.03	34
n-Propylbenzene	0.0250	ND	0.0213	0.0203	85.2	81.1	1	35.2-139			4.93	31.9
Styrene	0.0250	ND	0.0195	0.0185	77.8	74.0	1	39.7-137			5.07	28.2
1,1,1,2-Tetrachloroethane	0.0250	ND	0.0205	0.0197	82.1	79.0	1	48.8-136			3.94	25.5
1,1,2,2-Tetrachloroethane	0.0250	ND	0.0169	0.0170	67.5	68.1	1	45.7-140			0.830	26.4
Tetrachloroethene	0.0250	ND	0.0209	0.0199	83.6	79.5	1	37.7-140			4.98	29.2
Toluene	0.0250	0.000185	0.0230	0.0219	91.4	86.9	1	47.8-127			5.03	24.3
1,1,2-Trichlorotrifluoroethane	0.0250	ND	0.0214	0.0199	85.7	79.5	1	35.7-146			7.51	28.8
1,2,3-Trichlorobenzene	0.0250	0.000148	0.0127	0.0128	50.4	50.6	1	10.0-150			0.410	38.5
1,2,4-Trichlorobenzene	0.0250	ND	0.0144	0.0150	57.7	60.2	1	10.0-153			4.27	39.3
1,1,1-Trichloroethane	0.0250	ND	0.0197	0.0195	79.0	77.9	1	49.0-138			1.35	25.3
1,1,2-Trichloroethane	0.0250	ND	0.0192	0.0189	76.7	75.8	1	52.3-132			1.17	23.4
Trichloroethene	0.0250	ND	0.0214	0.0208	85.7	83.0	1	48.0-132			3.13	24.8
Trichlorofluoromethane	0.0250	ND	0.0176	0.0176	70.5	70.5	1	12.8-169			0.0300	29.7
1,2,3-Trichloropropane	0.0250	ND	0.0179	0.0180	71.7	72.0	1	44.4-138			0.420	26.3
1,2,3-Trimethylbenzene	0.0250	ND	0.0227	0.0217	90.8	86.7	1	41.0-133			4.54	27.6
1,2,4-Trimethylbenzene	0.0250	ND	0.0202	0.0199	81.0	79.7	1	32.9-139			1.59	30.6
1,3,5-Trimethylbenzene	0.0250	ND	0.0199	0.0194	79.5	77.6	1	37.1-138			2.37	30.6
Vinyl chloride	0.0250	ND	0.0189	0.0181	75.6	72.3	1	32.0-146			4.41	26.3
Xylenes, Total	0.0750	ND	0.0647	0.0615	86.3	82.0	1	42.7-135			5.09	26.6
(S) Toluene-d8					*100*	*101*		*88.7-115*				
(S) Dibromofluoromethane					*99.3*	*98.0*		*76.3-123*				
(S) 4-Bromofluorobenzene					*86.7*	*87.6*		*69.7-129*				

Method Blank (MB)

(MB) 03/22/16 05:31

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

Method Blank (MB)

(MB) 03/22/16 05:31

Analyte	MB Result mg/l	MB Qualifier	MB RDL mg/l
2,2-Dichloropropane	ND		0.00100
Di-isopropyl ether	ND		0.00100
Ethylbenzene	ND		0.00100
Hexachloro-1,3-butadiene	ND		0.00100
Isopropylbenzene	ND		0.00100
p-Isopropyltoluene	ND		0.00100
2-Butanone (MEK)	ND		0.0100
Methylene Chloride	ND		0.00500
4-Methyl-2-pentanone (MIBK)	ND		0.0100
Methyl tert-butyl ether	ND		0.00100
Naphthalene	ND		0.00500
n-Propylbenzene	ND		0.00100
Styrene	ND		0.00100
1,1,1,2-Tetrachloroethane	ND		0.00100
1,1,2,2-Tetrachloroethane	ND		0.00100
Tetrachloroethene	ND		0.00100
Toluene	ND		0.00500
1,1,2-Trichlorotrifluoroethane	ND		0.00100
1,2,3-Trichlorobenzene	ND		0.00100
1,2,4-Trichlorobenzene	ND		0.00100
1,1,1-Trichloroethane	ND		0.00100
1,1,2-Trichloroethane	ND		0.00100
Trichloroethene	ND		0.00100
Trichlorofluoromethane	ND		0.00500
1,2,3-Trichloropropane	ND		0.00250
1,2,3-Trimethylbenzene	ND		0.00100
1,2,4-Trimethylbenzene	ND		0.00100
1,3,5-Trimethylbenzene	ND		0.00100
Vinyl chloride	ND		0.00100
Xylenes, Total	ND		0.00300
(S) Toluene-d8	*104*		*90.0-115*
(S) Dibromofluoromethane	*111*		*79.0-121*
(S) 4-Bromofluorobenzene	*100*		*80.1-120*

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

(LCS) 03/22/16 04:14 • (LCSD) 03/22/16 04:34

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Acetone	0.125	0.126	0.118	100	94.3	28.7-175			6.33	20.9
Acrolein	0.125	0.108	0.105	86.3	83.7	40.4-172			3.06	20
Acrylonitrile	0.125	0.134	0.126	107	101	58.2-145			5.55	20
Benzene	0.0250	0.0251	0.0249	100	99.6	73.0-122			0.750	20
Bromobenzene	0.0250	0.0239	0.0244	95.4	97.5	81.5-115			2.11	20
Bromodichloromethane	0.0250	0.0243	0.0242	97.1	96.7	75.5-121			0.360	20
Bromoform	0.0250	0.0203	0.0199	81.4	79.7	71.5-131			2.11	20
Bromomethane	0.0250	0.0322	0.0326	129	131	22.4-187			1.33	20
n-Butylbenzene	0.0250	0.0260	0.0262	104	105	75.9-134			0.950	20
sec-Butylbenzene	0.0250	0.0215	0.0221	86.1	88.2	80.6-126			2.42	20
tert-Butylbenzene	0.0250	0.0215	0.0219	86.0	87.6	79.3-127			1.90	20
Carbon tetrachloride	0.0250	0.0246	0.0244	98.2	97.7	70.9-129			0.480	20
Chlorobenzene	0.0250	0.0220	0.0224	88.0	89.5	79.7-122			1.70	20
Chlorodibromomethane	0.0250	0.0217	0.0218	86.7	87.3	78.2-124			0.710	20
Chloroethane	0.0250	0.0274	0.0270	110	108	41.2-153			1.51	20
Chloroform	0.0250	0.0260	0.0260	104	104	73.2-125			0.330	20
Chloromethane	0.0250	0.0257	0.0251	103	100	55.8-134			2.47	20
2-Chlorotoluene	0.0250	0.0218	0.0216	87.0	86.6	76.4-125			0.540	20
4-Chlorotoluene	0.0250	0.0235	0.0238	93.8	95.0	81.5-121			1.26	20
1,2-Dibromo-3-Chloropropane	0.0250	0.0218	0.0213	87.3	85.2	64.8-131			2.48	20
1,2-Dibromoethane	0.0250	0.0231	0.0230	92.2	92.2	79.8-122			0.0300	20
Dibromomethane	0.0250	0.0242	0.0240	96.9	95.9	78.8-119			1.03	20
1,2-Dichlorobenzene	0.0250	0.0238	0.0242	95.0	96.7	84.7-118			1.72	20
1,3-Dichlorobenzene	0.0250	0.0209	0.0214	83.7	85.6	77.6-127			2.30	20
1,4-Dichlorobenzene	0.0250	0.0224	0.0228	89.5	91.0	82.2-114			1.66	20
Dichlorodifluoromethane	0.0250	0.0297	0.0292	119	117	56.0-134			1.43	20
1,1-Dichloroethane	0.0250	0.0265	0.0263	106	105	71.7-127			0.650	20
1,2-Dichloroethane	0.0250	0.0280	0.0277	112	111	79.8-122			1.14	20
1,1-Dichloroethene	0.0250	0.0268	0.0265	107	106	59.9-137			1.19	20
cis-1,2-Dichloroethene	0.0250	0.0251	0.0262	100	105	77.3-122			4.30	20
trans-1,2-Dichloroethene	0.0250	0.0245	0.0244	97.9	97.5	72.6-125			0.370	20
1,2-Dichloropropane	0.0250	0.0242	0.0248	96.7	99.2	77.4-125			2.50	20
1,1-Dichloropropene	0.0250	0.0273	0.0272	109	109	72.5-127			0.270	20
1,3-Dichloropropane	0.0250	0.0243	0.0239	97.2	95.6	80.6-115			1.71	20
cis-1,3-Dichloropropene	0.0250	0.0247	0.0249	98.6	99.7	77.7-124			1.06	20
trans-1,3-Dichloropropene	0.0250	0.0245	0.0247	98.1	98.9	73.5-127			0.800	20

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

(LCS) 03/22/16 04:14 • (LCSD) 03/22/16 04:34

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
2,2-Dichloropropane	0.0250	0.0251	0.0255	101	102	61.3-134			1.45	20
Di-isopropyl ether	0.0250	0.0251	0.0248	100	99.1	65.1-135			1.19	20
Ethylbenzene	0.0250	0.0226	0.0229	90.5	91.5	80.9-121			1.11	20
Hexachloro-1,3-butadiene	0.0250	0.0207	0.0209	82.7	83.6	73.7-133			1.07	20
Isopropylbenzene	0.0250	0.0219	0.0223	87.7	89.1	81.6-124			1.53	20
p-Isopropyltoluene	0.0250	0.0220	0.0224	87.8	89.6	77.6-129			2.04	20
2-Butanone (MEK)	0.125	0.124	0.119	99.3	95.4	46.4-155			4.05	20
Methylene Chloride	0.0250	0.0241	0.0240	96.4	95.8	69.5-120			0.560	20
4-Methyl-2-pentanone (MIBK)	0.125	0.120	0.114	95.9	91.2	63.3-138			5.01	20
Methyl tert-butyl ether	0.0250	0.0260	0.0251	104	101	70.1-125			3.34	20
Naphthalene	0.0250	0.0219	0.0222	87.5	88.9	69.7-134			1.57	20
n-Propylbenzene	0.0250	0.0235	0.0240	94.1	95.8	81.9-122			1.83	20
Styrene	0.0250	0.0225	0.0229	90.2	91.6	79.9-124			1.51	20
1,1,1,2-Tetrachloroethane	0.0250	0.0213	0.0216	85.3	86.3	78.5-125			1.20	20
1,1,2,2-Tetrachloroethane	0.0250	0.0212	0.0208	84.9	83.0	79.3-123			2.20	20
Tetrachloroethene	0.0250	0.0209	0.0212	83.4	84.7	73.5-130			1.53	20
Toluene	0.0250	0.0234	0.0239	93.6	95.5	77.9-116			2.02	20
1,1,2-Trichlorotrifluoroethane	0.0250	0.0255	0.0253	102	101	62.0-141			0.540	20
1,2,3-Trichlorobenzene	0.0250	0.0208	0.0212	83.2	84.7	75.7-134			1.75	20
1,2,4-Trichlorobenzene	0.0250	0.0228	0.0229	91.3	91.5	76.1-136			0.250	20
1,1,1-Trichloroethane	0.0250	0.0254	0.0253	102	101	71.1-129			0.330	20
1,1,2-Trichloroethane	0.0250	0.0230	0.0230	92.0	92.0	81.6-120			0.000	20
Trichloroethene	0.0250	0.0222	0.0230	88.7	91.9	79.5-121			3.50	20
Trichlorofluoromethane	0.0250	0.0251	0.0256	100	102	49.1-157			2.05	20
1,2,3-Trichloropropane	0.0250	0.0227	0.0224	90.7	89.7	74.9-124			1.08	20
1,2,3-Trimethylbenzene	0.0250	0.0239	0.0243	95.8	97.4	79.9-118			1.68	20
1,2,4-Trimethylbenzene	0.0250	0.0219	0.0227	87.8	90.7	79.0-122			3.33	20
1,3,5-Trimethylbenzene	0.0250	0.0216	0.0219	86.3	87.7	81.0-123			1.57	20
Vinyl chloride	0.0250	0.0275	0.0269	110	107	61.5-134			2.20	20
Xylenes, Total	0.0750	0.0650	0.0665	86.7	88.6	79.2-122			2.20	20
(S) Toluene-d8				*106*	*107*	*90.0-115*				
(S) Dibromofluoromethane				*113*	*111*	*79.0-121*				
(S) 4-Bromofluorobenzene				*103*	*102*	*80.1-120*				

Method Blank (MB)

(MB) 03/22/16 05:39

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

Method Blank (MB)

(MB) 03/22/16 05:39

Analyte	MB Result mg/kg	MB Qualifier	MB RDL mg/kg
2,2-Dichloropropane	ND		0.00100
Di-isopropyl ether	ND		0.00100
Ethylbenzene	ND		0.00100
Hexachloro-1,3-butadiene	ND		0.00100
Isopropylbenzene	ND		0.00100
p-Isopropyltoluene	ND		0.00100
2-Butanone (MEK)	ND		0.0100
Methylene Chloride	ND		0.00500
4-Methyl-2-pentanone (MIBK)	ND		0.0100
Methyl tert-butyl ether	ND		0.00100
Naphthalene	ND		0.00500
n-Propylbenzene	ND		0.00100
Styrene	ND		0.00100
1,1,1,2-Tetrachloroethane	ND		0.00100
1,1,2,2-Tetrachloroethane	ND		0.00100
Tetrachloroethene	ND		0.00100
Toluene	ND		0.00500
1,1,2-Trichlorotrifluoroethane	ND		0.00100
1,2,3-Trichlorobenzene	ND		0.00100
1,2,4-Trichlorobenzene	ND		0.00100
1,1,1-Trichloroethane	ND		0.00100
1,1,2-Trichloroethane	ND		0.00100
Trichloroethene	ND		0.00100
Trichlorofluoromethane	ND		0.00500
1,2,3-Trichloropropane	ND		0.00250
1,2,3-Trimethylbenzene	ND		0.00100
1,2,4-Trimethylbenzene	ND		0.00100
1,3,5-Trimethylbenzene	ND		0.00100
Vinyl chloride	ND		0.00100
Xylenes, Total	ND		0.00300
(S) Toluene-d8	*104*		*88.7-115*
(S) Dibromofluoromethane	*103*		*76.3-123*
(S) 4-Bromofluorobenzene	*94.6*		*69.7-129*

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

(LCS) 03/22/16 04:07 • (LCSD) 03/22/16 04:26

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCSD Result mg/kg	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Acetone	0.125	0.0904	0.0891	72.3	71.3	25.3-178			1.45	22.9
Acrylonitrile	0.125	0.114	0.110	91.1	87.6	57.8-143			3.88	20
Benzene	0.0250	0.0222	0.0223	88.9	89.3	72.6-120			0.420	20
Bromobenzene	0.0250	0.0228	0.0236	91.2	94.4	80.3-115			3.40	20
Bromodichloromethane	0.0250	0.0227	0.0232	91.0	92.7	75.3-119			1.86	20
Bromoform	0.0250	0.0220	0.0227	88.1	90.9	69.1-135			3.15	20
Bromomethane	0.0250	0.0343	0.0359	137	143	23.0-191			4.37	20
n-Butylbenzene	0.0250	0.0236	0.0237	94.2	94.8	74.2-134			0.590	20
sec-Butylbenzene	0.0250	0.0230	0.0236	91.9	94.2	77.8-129			2.52	20
tert-Butylbenzene	0.0250	0.0225	0.0237	89.8	94.9	77.2-129			5.46	20
Carbon tetrachloride	0.0250	0.0224	0.0227	89.6	90.7	69.4-129			1.28	20
Chlorobenzene	0.0250	0.0236	0.0244	94.5	97.5	78.9-122			3.09	20
Chlorodibromomethane	0.0250	0.0239	0.0240	95.5	96.0	76.4-126			0.590	20
Chloroethane	0.0250	0.0298	0.0308	119	123	47.2-147			3.29	20
2-Chloroethyl vinyl ether	0.125	0.141	0.143	113	114	16.7-162			0.850	23.7
Chloroform	0.0250	0.0234	0.0237	93.7	94.9	73.3-122			1.20	20
Chloromethane	0.0250	0.0237	0.0238	94.9	95.4	53.1-135			0.530	20
2-Chlorotoluene	0.0250	0.0217	0.0229	86.7	91.7	74.6-127			5.60	20
4-Chlorotoluene	0.0250	0.0240	0.0237	96.0	94.6	79.5-123			1.42	20
1,2-Dibromo-3-Chloropropane	0.0250	0.0214	0.0208	85.6	83.3	64.9-131			2.68	20
1,2-Dibromoethane	0.0250	0.0237	0.0237	94.7	95.0	67.2-121			0.280	20
Dibromomethane	0.0250	0.0233	0.0240	93.3	95.9	78.5-117			2.75	20
1,2-Dichlorobenzene	0.0250	0.0229	0.0233	91.6	93.1	83.6-119			1.69	20
1,3-Dichlorobenzene	0.0250	0.0223	0.0226	89.0	90.6	75.9-129			1.75	20
1,4-Dichlorobenzene	0.0250	0.0233	0.0230	93.1	92.0	81.0-115			1.13	20
Dichlorodifluoromethane	0.0250	0.0290	0.0284	116	113	50.9-139			2.07	20
1,1-Dichloroethane	0.0250	0.0227	0.0228	90.7	91.3	71.7-125			0.620	20
1,2-Dichloroethane	0.0250	0.0231	0.0234	92.4	93.8	67.2-121			1.49	20
1,1-Dichloroethene	0.0250	0.0271	0.0285	109	114	60.6-133			4.97	20
cis-1,2-Dichloroethene	0.0250	0.0234	0.0240	93.8	95.8	76.1-121			2.17	20
trans-1,2-Dichloroethene	0.0250	0.0240	0.0244	96.0	97.5	70.7-124			1.52	20
1,2-Dichloropropane	0.0250	0.0230	0.0227	92.1	90.8	76.9-123			1.43	20
1,1-Dichloropropene	0.0250	0.0245	0.0245	98.0	98.0	71.2-126			0.0100	20
1,3-Dichloropropane	0.0250	0.0229	0.0230	91.5	91.9	80.3-114			0.480	20
cis-1,3-Dichloropropene	0.0250	0.0238	0.0243	95.1	97.0	77.3-123			2.02	20
trans-1,3-Dichloropropene	0.0250	0.0249	0.0242	99.6	96.9	73.0-127			2.73	20

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

(LCS) 03/22/16 04:07 • (LCSD) 03/22/16 04:26

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCSD Result mg/kg	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
2,2-Dichloropropane	0.0250	0.0234	0.0247	93.7	98.9	61.9-132			5.46	20
Di-isopropyl ether	0.0250	0.0224	0.0223	89.8	89.0	67.2-131			0.810	20
Ethylbenzene	0.0250	0.0238	0.0246	95.3	98.5	78.6-124			3.24	20
Hexachloro-1,3-butadiene	0.0250	0.0217	0.0213	87.0	85.2	69.2-136			2.15	20
Isopropylbenzene	0.0250	0.0226	0.0238	90.5	95.0	79.4-126			4.85	20
p-Isopropyltoluene	0.0250	0.0234	0.0240	93.8	96.1	75.4-132			2.50	20
2-Butanone (MEK)	0.125	0.104	0.100	83.0	80.3	44.5-154			3.33	21.3
Methylene Chloride	0.0250	0.0225	0.0228	90.1	91.4	68.2-119			1.38	20
4-Methyl-2-pentanone (MIBK)	0.125	0.117	0.115	93.4	91.7	61.1-138			1.85	20
Methyl tert-butyl ether	0.0250	0.0218	0.0225	87.1	89.8	70.2-122			3.05	20
Naphthalene	0.0250	0.0203	0.0204	81.4	81.5	69.9-132			0.200	20
n-Propylbenzene	0.0250	0.0235	0.0243	94.1	97.3	80.2-124			3.34	20
Styrene	0.0250	0.0236	0.0244	94.2	97.7	79.4-124			3.56	20
1,1,1,2-Tetrachloroethane	0.0250	0.0230	0.0245	92.1	98.0	76.7-127			6.16	20
1,1,2,2-Tetrachloroethane	0.0250	0.0223	0.0231	89.4	92.2	78.8-124			3.14	20
Tetrachloroethene	0.0250	0.0232	0.0236	92.9	94.6	71.1-133			1.78	20
Toluene	0.0250	0.0226	0.0226	90.4	90.4	76.7-116			0.0200	20
1,1,2-Trichlorotrifluoroethane	0.0250	0.0294	0.0294	118	118	62.6-138			0.100	20
1,2,3-Trichlorobenzene	0.0250	0.0212	0.0214	84.7	85.7	72.5-137			1.14	20
1,2,4-Trichlorobenzene	0.0250	0.0220	0.0217	88.0	87.0	74.0-137			1.16	20
1,1,1-Trichloroethane	0.0250	0.0240	0.0241	96.0	96.5	69.9-127			0.500	20
1,1,2-Trichloroethane	0.0250	0.0234	0.0235	93.6	94.1	81.9-119			0.580	20
Trichloroethene	0.0250	0.0230	0.0237	91.8	94.7	77.2-122			3.09	20
Trichlorofluoromethane	0.0250	0.0257	0.0263	103	105	51.5-151			2.28	20
1,2,3-Trichloropropane	0.0250	0.0228	0.0231	91.1	92.2	74.0-124			1.26	20
1,2,3-Trimethylbenzene	0.0250	0.0227	0.0233	90.6	93.0	79.4-118			2.64	20
1,2,4-Trimethylbenzene	0.0250	0.0233	0.0241	93.1	96.3	77.1-124			3.42	20
1,3,5-Trimethylbenzene	0.0250	0.0228	0.0237	91.4	94.7	79.0-125			3.54	20
Vinyl chloride	0.0250	0.0266	0.0263	107	105	58.4-134			1.08	20
Xylenes, Total	0.0750	0.0709	0.0732	94.5	97.5	78.1-123			3.14	20
(S) Toluene-d8				*102*	*104*	*88.7-115*				
(S) Dibromofluoromethane				*101*	*101*	*76.3-123*				
(S) 4-Bromofluorobenzene				*97.9*	*101*	*69.7-129*				

Method Blank (MB)

(MB) 03/22/16 12:37

Analyte	MB Result mg/l	MB Qualifier	MB RDL mg/l
2-Chloroethyl vinyl ether	ND		0.0500

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

(LCS) 03/22/16 11:14 • (LCSD) 03/22/16 11:35

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
2-Chloroethyl vinyl ether	0.125	0.132	0.134	105	107	23.4-162			1.41	23.5

Abbreviations and Definitions

SDG	Sample Delivery Group.
MDL	Method Detection Limit.
RDL	Reported Detection Limit.
ND,U	Not detected at the Reporting Limit (or MDL where applicable).
RPD	Relative Percent Difference.
(dry)	Results are reported based on the dry weight of the sample. [this will only be present on a dry report basis for soils].
Original Sample	The non-spiked sample in the prep batch used to determine the Relative Percent Difference (RPD) from a quality control sample. The Original Sample may not be included within the reported SDG.
(S)	Surrogate (Surrogate Standard) - Analytes added to every blank, sample, Laboratory Control Sample/Duplicate and Matrix Spike/Duplicate; used to evaluate analytical efficiency by measuring recovery. Surrogates are not expected to be detected in all environmental media.
Rec.	Recovery.
SDL	Sample Detection Limit.
MQL	Method Quantitation Limit.
Unadj. MQL	Unadjusted Method Quantitation Limit.

Qualifier	Description
B	The same analyte is found in the associated blank.
J3	The associated batch QC was outside the established quality control range for precision.
J4	The associated batch QC was outside the established quality control range for accuracy.
J6	The sample matrix interfered with the ability to make any accurate determination; spike value is low.

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

State Accreditations

Alabama	40660	Nevada	TN-03-2002-34
Alaska	UST-080	New Hampshire	2975
Arizona	AZ0612	New Jersey–NELAP	TN002
Arkansas	88-0469	New Mexico	TN00003
California	01157CA	New York	11742
Colorado	TN00003	North Carolina	Env375
Conneticut	PH-0197	North Carolina [1]	DW21704
Florida	E87487	North Carolina [2]	41
Georgia	NELAP	North Dakota	R-140
Georgia [1]	923	Ohio–VAP	CL0069
Idaho	TN00003	Oklahoma	9915
Illinois	200008	Oregon	TN200002
Indiana	C-TN-01	Pennsylvania	68-02979
Iowa	364	Rhode Island	221
Kansas	E-10277	South Carolina	84004
Kentucky [1]	90010	South Dakota	n/a
Kentucky [2]	16	Tennessee [1 4]	2006
Louisiana	AI30792	Texas	T 104704245-07-TX
Maine	TN0002	Texas [5]	LAB0152
Maryland	324	Utah	6157585858
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	109
Minnesota	047-999-395	Washington	C1915
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	9980939910
Montana	CERT0086	Wyoming	A2LA
Nebraska	NE-OS-15-05		

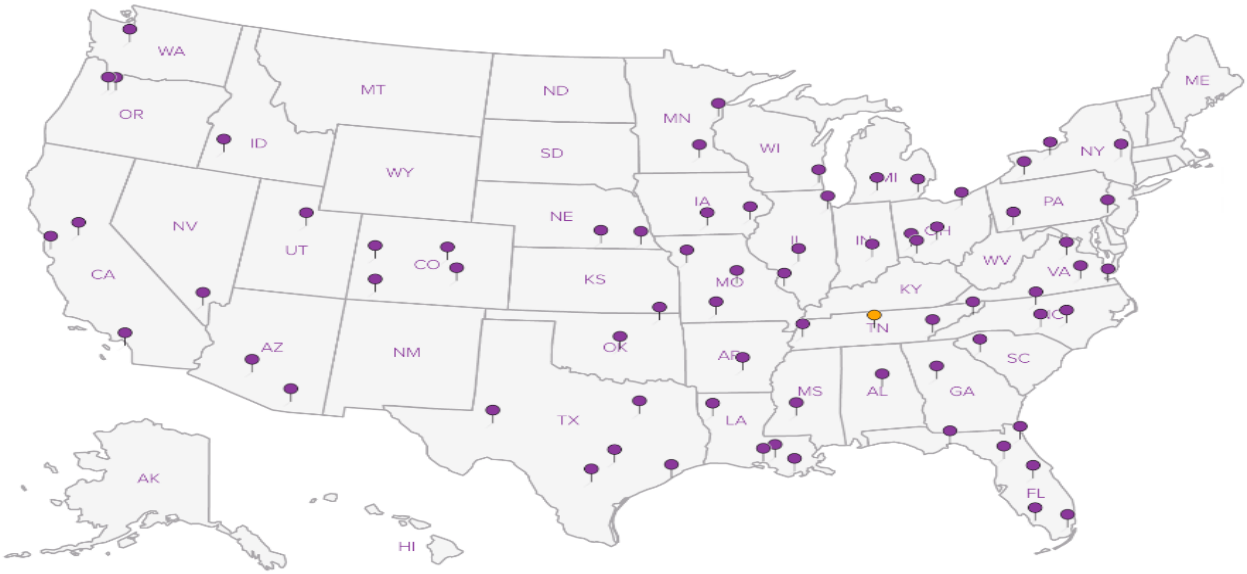
Third Party & Federal Accreditations

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

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

Our Locations

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



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: **Chris DeBoer**

Email To: **CDeBoer@pesenv.com**

Project Description:

City/State Collected:

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

Client Project #

Lab Project # **PESENVSWA-AIR**

Collected by (print): CJD

Site/Facility ID # Lake Stevens

P.O. #

Collected by (signature):

Immediately Packed on Ice N ___ Y X

Rush? (Lab MUST Be Notified)
___ Same Day 200%
X Next Day 100%
___ Two Day 50%
___ Three Day 25%

Date Results Needed

Email? ___No X__Yes
FAX? ___No ___Yes

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	TO-15SIM Summa	V8260C 40ml/NaHSO4/Syr/MeOH	V8260C 40mlAmb-HCl	V8260C- Trip Blank 40mlAmb-HCl-Blk	VOC Screen / TS 4ozClr-NoPres	Rem./Contaminant	Sample # (lab only)
IA-031716	Grab	Air	NA	3/17/16	1730	1	X						-12
OA-031716		Air	NA	3/17/16	1737	1	X						13
SV1-031816		Air	.5	3/18/16	937	1	X						-01
SV2-031816		Air	.5	3/18/16	950	1	X						02
SV3-031816		Air	.5	3/18/16	1010	1	X						03
TW-1-8		Air SS	8	3/17/16	1210	1	X						04
TW-2-6		SS	6	3/17/16	1310	4		X			X		05
SV1-1.5		SS	1.5	3/18/16	1205	4		X			X		06
SV2-1		SS	1	3/18/16	1230	4		X			X		07
SV3-1.5		SS	1.5	3/18/16	1310	4		X			X		08

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

Remarks:

pH _____ Temp _____
Flow _____ Other _____

Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)
	3/18/16	1618	
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)

Samples returned via: ☐ UPS ☒ FedEx ☐ Courier ☐ _____
Temp: 3.2 °C Bottles Received: 3032
Date: 3/19/16 Time: 900

Hold #
Condition: (lab use only) OK
COC Seal Intact: ✓ Y ___N ___NA
pH Checked: NCF: ✓

6617361509 66

Analysis / Container / Preservative

L122

Chain of Custody Page ___ of ___

ESC LAB SCIENCES
YOUR LAB OF CHOICE
12065 Lebanon Rd
Mount Juliet, TN 37122
Phone: 615-758-5858
Phone: 800-767-5859
Fax: 615-758-5859

L# L824454

A097

Acctnum: **PESENVSWA**
Template: **T110587**
Prelogin: **P546003**
TSR: **358 - Jarred Willis**
PB: 3-14-16 JW
Shipped Via: **FedEX 2nd Day**

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: Chris DeBoer

Email To: CDeBoer@pesenv.com

Project Description:

City/State Collected:

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

Client Project #

Lab Project #
PESENVSWA-AIR

Collected by (print): CDB

Site/Facility ID #: Lake Stevens

P.O. #

Collected by (signature): Chris DeBoer

Immediately Packed on Ice N ___ Y X

Rush? (Lab MUST Be Notified)
___ Same Day 200%
X Next Day 100%
___ Two Day 50%
___ Three Day 25%

Date Results Needed

Email? ___No X__Yes
FAX? ___No ___Yes

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	TO-15SIM Summa	V8260C 40ml/NaHSO4/Syr/MeOH	V8260C 40mlAmb-HCl	V8260C- Trip Blank 40mlAmb-HCl-Blk	VOC Screen / TS 4ozClr-NoPres	Rem./Contaminant	Sample # (lab only)
TW-1-W	GRAB	GW	9	3/17/16	1425	3			X				09
TW-2-W		GW	6	3/17/16	1515	3			X				10
		GW				3			X				
TRIP BLANK		GW				1				X			11

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

Remarks:

pH _____ Temp _____

Flow _____ Other _____

Chain of Custody Page ___ of ___

ESC LAB SCIENCES
YOUR LAB OF CHOICE

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

L# L824454

Table #

Acctnum: PESENVSWA

Template: T110587

Prelogin: P546003

TSR: 358 - Jarred Willis

PB: 3-14-16 MJ

Shipped Via: FedEX 2nd Day

Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)
Chris DeBoer	3/18/16	1610	
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)

Samples returned via: ☐ UPS ☒ FedEx ☐ Courier ☐ _____

Temp: 3.2 °C Bottles Received: 30

Date: 3/19/16 Time: 900

Hold #

Condition: (lab use only) GW

COC Seal Intact: ✓ Y ___N ___NA

pH Checked: NCF: ✓

Andy Vann

ESC Lab Sciences
Non-Conformance Form

Login #: L824454	Client: PESENVSWA	Date: 3/19/16	Evaluated by: Jeremy

Non-Conformance (check applicable items)

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

Login Comments:

Client sent SS samples for TW-1-8 has TO-15SIM marked on COC. Please advise

Client informed by:		Call		Email X		Voice Mail		Date: 3/21/16	Time: 1045
TSR Initials: JW	Client Contact: Chris DeBoer								

Login Instructions: **Log sample "TW-1-8" for V8260C and TS. Add to L824454 as R2 due 3/22.**

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	87.2		1	03/21/2016 11:50	WG857989

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

Analyte	Result (dry) mg/kg	Qualifier	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	ND		0.0573	1	03/22/2016 00:29	WG857902
Acrylonitrile	ND		0.0115	1	03/22/2016 00:29	WG857902
Benzene	ND		0.00115	1	03/22/2016 00:29	WG857902
Bromobenzene	ND		0.00115	1	03/22/2016 00:29	WG857902
Bromodichloromethane	ND		0.00115	1	03/22/2016 00:29	WG857902
Bromoform	ND		0.00115	1	03/22/2016 00:29	WG857902
Bromomethane	ND		0.00573	1	03/22/2016 00:29	WG857902
n-Butylbenzene	ND		0.00115	1	03/22/2016 00:29	WG857902
sec-Butylbenzene	ND		0.00115	1	03/22/2016 00:29	WG857902
tert-Butylbenzene	ND		0.00115	1	03/22/2016 00:29	WG857902
Carbon tetrachloride	ND		0.00115	1	03/22/2016 00:29	WG857902
Chlorobenzene	ND		0.00115	1	03/22/2016 00:29	WG857902
Chlorodibromomethane	ND		0.00115	1	03/22/2016 00:29	WG857902
Chloroethane	ND		0.00573	1	03/22/2016 00:29	WG857902
2-Chloroethyl vinyl ether	ND		0.0573	1	03/22/2016 00:29	WG857902
Chloroform	ND		0.00573	1	03/22/2016 00:29	WG857902
Chloromethane	ND		0.00287	1	03/22/2016 00:29	WG857902
2-Chlorotoluene	ND		0.00115	1	03/22/2016 00:29	WG857902
4-Chlorotoluene	ND		0.00115	1	03/22/2016 00:29	WG857902
1,2-Dibromo-3-Chloropropane	ND		0.00573	1	03/22/2016 00:29	WG857902
1,2-Dibromoethane	ND		0.00115	1	03/22/2016 00:29	WG857902
Dibromomethane	ND		0.00115	1	03/22/2016 00:29	WG857902
1,2-Dichlorobenzene	ND		0.00115	1	03/22/2016 00:29	WG857902
1,3-Dichlorobenzene	ND		0.00115	1	03/22/2016 00:29	WG857902
1,4-Dichlorobenzene	ND		0.00115	1	03/22/2016 00:29	WG857902
Dichlorodifluoromethane	ND		0.00573	1	03/22/2016 00:29	WG857902
1,1-Dichloroethane	ND		0.00115	1	03/22/2016 00:29	WG857902
1,2-Dichloroethane	ND		0.00115	1	03/22/2016 00:29	WG857902
1,1-Dichloroethene	ND		0.00115	1	03/22/2016 00:29	WG857902
cis-1,2-Dichloroethene	ND		0.00115	1	03/22/2016 00:29	WG857902
trans-1,2-Dichloroethene	ND		0.00115	1	03/22/2016 00:29	WG857902
1,2-Dichloropropane	ND		0.00115	1	03/22/2016 00:29	WG857902
1,1-Dichloropropene	ND		0.00115	1	03/22/2016 00:29	WG857902
1,3-Dichloropropane	ND		0.00115	1	03/22/2016 00:29	WG857902
cis-1,3-Dichloropropene	ND		0.00115	1	03/22/2016 00:29	WG857902
trans-1,3-Dichloropropene	ND		0.00115	1	03/22/2016 00:29	WG857902
2,2-Dichloropropane	ND		0.00115	1	03/22/2016 00:29	WG857902
Di-isopropyl ether	ND		0.00115	1	03/22/2016 00:29	WG857902
Ethylbenzene	ND		0.00115	1	03/22/2016 00:29	WG857902
Hexachloro-1,3-butadiene	ND		0.00115	1	03/22/2016 00:29	WG857902
Isopropylbenzene	ND		0.00115	1	03/22/2016 00:29	WG857902
p-Isopropyltoluene	ND		0.00115	1	03/22/2016 00:29	WG857902
2-Butanone (MEK)	ND		0.0115	1	03/22/2016 00:29	WG857902
Methylene Chloride	ND		0.00573	1	03/22/2016 00:29	WG857902
4-Methyl-2-pentanone (MIBK)	ND		0.0115	1	03/22/2016 00:29	WG857902
Methyl tert-butyl ether	ND		0.00115	1	03/22/2016 00:29	WG857902
Naphthalene	ND		0.00573	1	03/22/2016 00:29	WG857902
n-Propylbenzene	ND		0.00115	1	03/22/2016 00:29	WG857902
Styrene	ND		0.00115	1	03/22/2016 00:29	WG857902
1,1,1,2-Tetrachloroethane	ND		0.00115	1	03/22/2016 00:29	WG857902

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

Analyte	Result (dry) mg/kg	Qualifier	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
1,1,2,2-Tetrachloroethane	ND VJ	J4	0.00115	1	03/22/2016 00:29	WG857902
1,1,2-Trichlorotrifluoroethane	ND	J3	0.00115	1	03/22/2016 00:29	WG857902
Tetrachloroethene	ND		0.00115	1	03/22/2016 00:29	WG857902
Toluene	ND		0.00573	1	03/22/2016 00:29	WG857902
1,2,3-Trichlorobenzene	ND		0.00115	1	03/22/2016 00:29	WG857902
1,2,4-Trichlorobenzene	ND		0.00115	1	03/22/2016 00:29	WG857902
1,1,1-Trichloroethane	ND		0.00115	1	03/22/2016 00:29	WG857902
1,1,2-Trichloroethane	ND	J4	0.00115	1	03/22/2016 00:29	WG857902
Trichloroethene	ND		0.00115	1	03/22/2016 00:29	WG857902
Trichlorofluoromethane	ND		0.00573	1	03/22/2016 00:29	WG857902
1,2,3-Trichloropropane	ND		0.00287	1	03/22/2016 00:29	WG857902
1,2,4-Trimethylbenzene	ND		0.00115	1	03/22/2016 00:29	WG857902
1,2,3-Trimethylbenzene	ND		0.00115	1	03/22/2016 00:29	WG857902
Vinyl chloride	ND		0.00115	1	03/22/2016 00:29	WG857902
1,3,5-Trimethylbenzene	ND		0.00115	1	03/22/2016 00:29	WG857902
Xylenes, Total	ND		0.00344	1	03/22/2016 00:29	WG857902
(S) Toluene-d8	*102*		*88.7-115*		*03/22/2016 00:29*	WG857902
(S) Dibromofluoromethane	*104*		*76.3-123*		*03/22/2016 00:29*	WG857902
(S) 4-Bromofluorobenzene	*91.4*		*69.7-129*		*03/22/2016 00:29*	WG857902

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Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
	%				
Total Solids	93.6		1	03/21/2016 11:50	WG857989

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

Analyte	Result (dry)	Qualifier	RDL (dry)	Dilution	Analysis date / time	Batch
	mg/kg		mg/kg			
Acetone	ND		0.0534	1	03/22/2016 01:53	WG857902
Acrylonitrile	ND		0.0107	1	03/22/2016 01:53	WG857902
Benzene	ND		0.00107	1	03/22/2016 01:53	WG857902
Bromobenzene	ND		0.00107	1	03/22/2016 01:53	WG857902
Bromodichloromethane	ND		0.00107	1	03/22/2016 01:53	WG857902
Bromoform	ND		0.00107	1	03/22/2016 01:53	WG857902
Bromomethane	ND		0.00534	1	03/22/2016 01:53	WG857902
n-Butylbenzene	ND		0.00107	1	03/22/2016 01:53	WG857902
sec-Butylbenzene	ND		0.00107	1	03/22/2016 01:53	WG857902
tert-Butylbenzene	ND		0.00107	1	03/22/2016 01:53	WG857902
Carbon tetrachloride	ND		0.00107	1	03/22/2016 01:53	WG857902
Chlorobenzene	ND		0.00107	1	03/22/2016 01:53	WG857902
Chlorodibromomethane	ND		0.00107	1	03/22/2016 01:53	WG857902
Chloroethane	ND		0.00534	1	03/22/2016 01:53	WG857902
2-Chloroethyl vinyl ether	ND		0.0534	1	03/22/2016 01:53	WG857902
Chloroform	ND		0.00534	1	03/22/2016 01:53	WG857902
Chloromethane	ND		0.00267	1	03/22/2016 01:53	WG857902
2-Chlorotoluene	ND		0.00107	1	03/22/2016 01:53	WG857902
4-Chlorotoluene	ND		0.00107	1	03/22/2016 01:53	WG857902
1,2-Dibromo-3-Chloropropane	ND		0.00534	1	03/22/2016 01:53	WG857902
1,2-Dibromoethane	ND		0.00107	1	03/22/2016 01:53	WG857902
Dibromomethane	ND		0.00107	1	03/22/2016 01:53	WG857902
1,2-Dichlorobenzene	ND		0.00107	1	03/22/2016 01:53	WG857902
1,3-Dichlorobenzene	ND		0.00107	1	03/22/2016 01:53	WG857902
1,4-Dichlorobenzene	ND		0.00107	1	03/22/2016 01:53	WG857902
Dichlorodifluoromethane	ND		0.00534	1	03/22/2016 01:53	WG857902
1,1-Dichloroethane	ND		0.00107	1	03/22/2016 01:53	WG857902
1,2-Dichloroethane	ND		0.00107	1	03/22/2016 01:53	WG857902
1,1-Dichloroethene	ND		0.00107	1	03/22/2016 01:53	WG857902
cis-1,2-Dichloroethene	ND		0.00107	1	03/22/2016 01:53	WG857902
trans-1,2-Dichloroethene	ND		0.00107	1	03/22/2016 01:53	WG857902
1,2-Dichloropropane	ND		0.00107	1	03/22/2016 01:53	WG857902
1,1-Dichloropropene	ND		0.00107	1	03/22/2016 01:53	WG857902
1,3-Dichloropropane	ND		0.00107	1	03/22/2016 01:53	WG857902
cis-1,3-Dichloropropene	ND		0.00107	1	03/22/2016 01:53	WG857902
trans-1,3-Dichloropropene	ND		0.00107	1	03/22/2016 01:53	WG857902
2,2-Dichloropropane	ND		0.00107	1	03/22/2016 01:53	WG857902
Di-isopropyl ether	ND		0.00107	1	03/22/2016 01:53	WG857902
Ethylbenzene	ND		0.00107	1	03/22/2016 01:53	WG857902
Hexachloro-1,3-butadiene	ND		0.00107	1	03/22/2016 01:53	WG857902
Isopropylbenzene	ND		0.00107	1	03/22/2016 01:53	WG857902
p-Isopropyltoluene	ND		0.00107	1	03/22/2016 01:53	WG857902
2-Butanone (MEK)	ND		0.0107	1	03/22/2016 01:53	WG857902
Methylene Chloride	ND		0.00534	1	03/22/2016 01:53	WG857902
4-Methyl-2-pentanone (MIBK)	ND		0.0107	1	03/22/2016 01:53	WG857902
Methyl tert-butyl ether	ND		0.00107	1	03/22/2016 01:53	WG857902
Naphthalene	ND		0.00534	1	03/22/2016 01:53	WG857902
n-Propylbenzene	ND		0.00107	1	03/22/2016 01:53	WG857902
Styrene	ND		0.00107	1	03/22/2016 01:53	WG857902
1,1,1,2-Tetrachloroethane	ND		0.00107	1	03/22/2016 01:53	WG857902

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

Analyte	Result (dry) mg/kg	Qualifier	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
1,1,2,2-Tetrachloroethane	ND U5	J4	0.00107	1	03/22/2016 01:53	WG857902
1,1,2-Trichlorotrifluoroethane	ND	J3	0.00107	1	03/22/2016 01:53	WG857902
Tetrachloroethene	0.00167		0.00107	1	03/22/2016 01:53	WG857902
Toluene	ND		0.00534	1	03/22/2016 01:53	WG857902
1,2,3-Trichlorobenzene	ND		0.00107	1	03/22/2016 01:53	WG857902
1,2,4-Trichlorobenzene	ND		0.00107	1	03/22/2016 01:53	WG857902
1,1,1-Trichloroethane	ND		0.00107	1	03/22/2016 01:53	WG857902
1,1,2-Trichloroethane	ND	J4	0.00107	1	03/22/2016 01:53	WG857902
Trichloroethene	ND		0.00107	1	03/22/2016 01:53	WG857902
Trichlorofluoromethane	ND		0.00534	1	03/22/2016 01:53	WG857902
1,2,3-Trichloropropane	ND		0.00267	1	03/22/2016 01:53	WG857902
1,2,4-Trimethylbenzene	ND		0.00107	1	03/22/2016 01:53	WG857902
1,2,3-Trimethylbenzene	ND		0.00107	1	03/22/2016 01:53	WG857902
Vinyl chloride	ND		0.00107	1	03/22/2016 01:53	WG857902
1,3,5-Trimethylbenzene	ND		0.00107	1	03/22/2016 01:53	WG857902
Xylenes, Total	ND		0.00321	1	03/22/2016 01:53	WG857902
(S) Toluene-d8	*103*		*88.7-115*		*03/22/2016 01:53*	WG857902
(S) Dibromofluoromethane	*105*		*76.3-123*		*03/22/2016 01:53*	WG857902
(S) 4-Bromofluorobenzene	*89.9*		*69.7-129*		*03/22/2016 01:53*	WG857902

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Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	91.8		1	03/21/2016 11:50	WG857989

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

Analyte	Result (dry) mg/kg	Qualifier	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	ND		0.0545	1	03/22/2016 02:13	WG857902
Acrylonitrile	ND		0.0109	1	03/22/2016 02:13	WG857902
Benzene	ND		0.00109	1	03/22/2016 02:13	WG857902
Bromobenzene	ND		0.00109	1	03/22/2016 02:13	WG857902
Bromodichloromethane	ND		0.00109	1	03/22/2016 02:13	WG857902
Bromoform	ND		0.00109	1	03/22/2016 02:13	WG857902
Bromomethane	ND		0.00545	1	03/22/2016 02:13	WG857902
n-Butylbenzene	ND		0.00109	1	03/22/2016 02:13	WG857902
sec-Butylbenzene	ND		0.00109	1	03/22/2016 02:13	WG857902
tert-Butylbenzene	ND		0.00109	1	03/22/2016 02:13	WG857902
Carbon tetrachloride	ND		0.00109	1	03/22/2016 02:13	WG857902
Chlorobenzene	ND		0.00109	1	03/22/2016 02:13	WG857902
Chlorodibromomethane	ND		0.00109	1	03/22/2016 02:13	WG857902
Chloroethane	ND		0.00545	1	03/22/2016 02:13	WG857902
2-Chloroethyl vinyl ether	ND		0.0545	1	03/22/2016 02:13	WG857902
Chloroform	ND		0.00545	1	03/22/2016 02:13	WG857902
Chloromethane	ND		0.00272	1	03/22/2016 02:13	WG857902
2-Chlorotoluene	ND		0.00109	1	03/22/2016 02:13	WG857902
4-Chlorotoluene	ND		0.00109	1	03/22/2016 02:13	WG857902
1,2-Dibromo-3-Chloropropane	ND		0.00545	1	03/22/2016 02:13	WG857902
1,2-Dibromoethane	ND		0.00109	1	03/22/2016 02:13	WG857902
Dibromomethane	ND		0.00109	1	03/22/2016 02:13	WG857902
1,2-Dichlorobenzene	ND		0.00109	1	03/22/2016 02:13	WG857902
1,3-Dichlorobenzene	ND		0.00109	1	03/22/2016 02:13	WG857902
1,4-Dichlorobenzene	ND		0.00109	1	03/22/2016 02:13	WG857902
Dichlorodifluoromethane	ND		0.00545	1	03/22/2016 02:13	WG857902
1,1-Dichloroethane	ND		0.00109	1	03/22/2016 02:13	WG857902
1,2-Dichloroethane	ND		0.00109	1	03/22/2016 02:13	WG857902
1,1-Dichloroethene	ND		0.00109	1	03/22/2016 02:13	WG857902
cis-1,2-Dichloroethene	ND		0.00109	1	03/22/2016 02:13	WG857902
trans-1,2-Dichloroethene	ND		0.00109	1	03/22/2016 02:13	WG857902
1,2-Dichloropropane	ND		0.00109	1	03/22/2016 02:13	WG857902
1,1-Dichloropropene	ND		0.00109	1	03/22/2016 02:13	WG857902
1,3-Dichloropropane	ND		0.00109	1	03/22/2016 02:13	WG857902
cis-1,3-Dichloropropene	ND		0.00109	1	03/22/2016 02:13	WG857902
trans-1,3-Dichloropropene	ND		0.00109	1	03/22/2016 02:13	WG857902
2,2-Dichloropropane	ND		0.00109	1	03/22/2016 02:13	WG857902
Di-isopropyl ether	ND		0.00109	1	03/22/2016 02:13	WG857902
Ethylbenzene	ND		0.00109	1	03/22/2016 02:13	WG857902
Hexachloro-1,3-butadiene	ND		0.00109	1	03/22/2016 02:13	WG857902
Isopropylbenzene	ND		0.00109	1	03/22/2016 02:13	WG857902
p-Isopropyltoluene	ND		0.00109	1	03/22/2016 02:13	WG857902
2-Butanone (MEK)	ND		0.0109	1	03/22/2016 02:13	WG857902
Methylene Chloride	ND		0.00545	1	03/22/2016 02:13	WG857902
4-Methyl-2-pentanone (MIBK)	ND		0.0109	1	03/22/2016 02:13	WG857902
Methyl tert-butyl ether	ND		0.00109	1	03/22/2016 02:13	WG857902
Naphthalene	ND		0.00545	1	03/22/2016 02:13	WG857902
n-Propylbenzene	ND		0.00109	1	03/22/2016 02:13	WG857902
Styrene	ND		0.00109	1	03/22/2016 02:13	WG857902
1,1,1,2-Tetrachloroethane	ND		0.00109	1	03/22/2016 02:13	WG857902

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

Analyte	Result (dry) mg/kg	Qualifier	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
1,1,2,2-Tetrachloroethane	ND	J4	0.00109	1	03/22/2016 02:13	WG857902
1,1,2-Trichlorotrifluoroethane	ND	J3	0.00109	1	03/22/2016 02:13	WG857902
Tetrachloroethene	0.00573		0.00109	1	03/22/2016 02:13	WG857902
Toluene	ND		0.00545	1	03/22/2016 02:13	WG857902
1,2,3-Trichlorobenzene	ND		0.00109	1	03/22/2016 02:13	WG857902
1,2,4-Trichlorobenzene	ND		0.00109	1	03/22/2016 02:13	WG857902
1,1,1-Trichloroethane	ND		0.00109	1	03/22/2016 02:13	WG857902
1,1,2-Trichloroethane	ND	J4	0.00109	1	03/22/2016 02:13	WG857902
Trichloroethene	ND		0.00109	1	03/22/2016 02:13	WG857902
Trichlorofluoromethane	ND		0.00545	1	03/22/2016 02:13	WG857902
1,2,3-Trichloropropane	ND		0.00272	1	03/22/2016 02:13	WG857902
1,2,4-Trimethylbenzene	ND		0.00109	1	03/22/2016 02:13	WG857902
1,2,3-Trimethylbenzene	ND		0.00109	1	03/22/2016 02:13	WG857902
Vinyl chloride	ND		0.00109	1	03/22/2016 02:13	WG857902
1,3,5-Trimethylbenzene	ND		0.00109	1	03/22/2016 02:13	WG857902
Xylenes, Total	ND		0.00327	1	03/22/2016 02:13	WG857902
(S) Toluene-d8	*103*		*88.7-115*		*03/22/2016 02:13*	WG857902
(S) Dibromofluoromethane	*104*		*76.3-123*		*03/22/2016 02:13*	WG857902
(S) 4-Bromofluorobenzene	*90.4*		*69.7-129*		*03/22/2016 02:13*	WG857902

Cp
Tc
Ss
Cn
Sr
Qc
Gl
Al
Sc

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Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	94.5		1	03/21/2016 11:50	WG857989

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

Analyte	Result (dry) mg/kg	Qualifier	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	ND		0.0529	1	03/22/2016 03:41	WG857902
Acrylonitrile	ND		0.0106	1	03/22/2016 03:41	WG857902
Benzene	ND		0.00106	1	03/22/2016 03:41	WG857902
Bromobenzene	ND		0.00106	1	03/22/2016 03:41	WG857902
Bromodichloromethane	ND		0.00106	1	03/22/2016 03:41	WG857902
Bromoform	ND		0.00106	1	03/22/2016 03:41	WG857902
Bromomethane	ND		0.00529	1	03/22/2016 03:41	WG857902
n-Butylbenzene	ND		0.00106	1	03/22/2016 03:41	WG857902
sec-Butylbenzene	ND		0.00106	1	03/22/2016 03:41	WG857902
tert-Butylbenzene	ND		0.00106	1	03/22/2016 03:41	WG857902
Carbon tetrachloride	ND		0.00106	1	03/22/2016 03:41	WG857902
Chlorobenzene	ND		0.00106	1	03/22/2016 03:41	WG857902
Chlorodibromomethane	ND		0.00106	1	03/22/2016 03:41	WG857902
Chloroethane	ND		0.00529	1	03/22/2016 03:41	WG857902
2-Chloroethyl vinyl ether	ND		0.0529	1	03/22/2016 03:41	WG857902
Chloroform	ND		0.00529	1	03/22/2016 03:41	WG857902
Chloromethane	ND		0.00264	1	03/22/2016 03:41	WG857902
2-Chlorotoluene	ND		0.00106	1	03/22/2016 03:41	WG857902
4-Chlorotoluene	ND		0.00106	1	03/22/2016 03:41	WG857902
1,2-Dibromo-3-Chloropropane	ND		0.00529	1	03/22/2016 03:41	WG857902
1,2-Dibromoethane	ND		0.00106	1	03/22/2016 03:41	WG857902
Dibromomethane	ND		0.00106	1	03/22/2016 03:41	WG857902
1,2-Dichlorobenzene	ND		0.00106	1	03/22/2016 03:41	WG857902
1,3-Dichlorobenzene	ND		0.00106	1	03/22/2016 03:41	WG857902
1,4-Dichlorobenzene	ND		0.00106	1	03/22/2016 03:41	WG857902
Dichlorodifluoromethane	ND		0.00529	1	03/22/2016 03:41	WG857902
1,1-Dichloroethane	ND		0.00106	1	03/22/2016 03:41	WG857902
1,2-Dichloroethane	ND		0.00106	1	03/22/2016 03:41	WG857902
1,1-Dichloroethene	ND		0.00106	1	03/22/2016 03:41	WG857902
cis-1,2-Dichloroethene	ND		0.00106	1	03/22/2016 03:41	WG857902
trans-1,2-Dichloroethene	ND		0.00106	1	03/22/2016 03:41	WG857902
1,2-Dichloropropane	ND		0.00106	1	03/22/2016 03:41	WG857902
1,1-Dichloropropene	ND		0.00106	1	03/22/2016 03:41	WG857902
1,3-Dichloropropane	ND		0.00106	1	03/22/2016 03:41	WG857902
cis-1,3-Dichloropropene	ND		0.00106	1	03/22/2016 03:41	WG857902
trans-1,3-Dichloropropene	ND		0.00106	1	03/22/2016 03:41	WG857902
2,2-Dichloropropane	ND		0.00106	1	03/22/2016 03:41	WG857902
Di-isopropyl ether	ND		0.00106	1	03/22/2016 03:41	WG857902
Ethylbenzene	ND		0.00106	1	03/22/2016 03:41	WG857902
Hexachloro-1,3-butadiene	ND		0.00106	1	03/22/2016 03:41	WG857902
Isopropylbenzene	ND		0.00106	1	03/22/2016 03:41	WG857902
p-Isopropyltoluene	ND		0.00106	1	03/22/2016 03:41	WG857902
2-Butanone (MEK)	ND		0.0106	1	03/22/2016 03:41	WG857902
Methylene Chloride	ND		0.00529	1	03/22/2016 03:41	WG857902
4-Methyl-2-pentanone (MIBK)	ND		0.0106	1	03/22/2016 03:41	WG857902
Methyl tert-butyl ether	ND		0.00106	1	03/22/2016 03:41	WG857902
Naphthalene	ND		0.00529	1	03/22/2016 03:41	WG857902
n-Propylbenzene	ND		0.00106	1	03/22/2016 03:41	WG857902
Styrene	ND		0.00106	1	03/22/2016 03:41	WG857902
1,1,1,2-Tetrachloroethane	ND		0.00106	1	03/22/2016 03:41	WG857902

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

Analyte	Result (dry) mg/kg	Qualifier	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
1,1,2,2-Tetrachloroethane	ND UJ	J4	0.00106	1	03/22/2016 03:41	WG857902
1,1,2-Trichlorotrifluoroethane	ND	J3	0.00106	1	03/22/2016 03:41	WG857902
Tetrachloroethene	0.00442		0.00106	1	03/22/2016 03:41	WG857902
Toluene	ND		0.00529	1	03/22/2016 03:41	WG857902
1,2,3-Trichlorobenzene	ND		0.00106	1	03/22/2016 03:41	WG857902
1,2,4-Trichlorobenzene	ND		0.00106	1	03/22/2016 03:41	WG857902
1,1,1-Trichloroethane	ND		0.00106	1	03/22/2016 03:41	WG857902
1,1,2-Trichloroethane	ND	J4	0.00106	1	03/22/2016 03:41	WG857902
Trichloroethene	ND		0.00106	1	03/22/2016 03:41	WG857902
Trichlorofluoromethane	ND		0.00529	1	03/22/2016 03:41	WG857902
1,2,3-Trichloropropane	ND		0.00264	1	03/22/2016 03:41	WG857902
1,2,4-Trimethylbenzene	ND		0.00106	1	03/22/2016 03:41	WG857902
1,2,3-Trimethylbenzene	ND		0.00106	1	03/22/2016 03:41	WG857902
Vinyl chloride	ND		0.00106	1	03/22/2016 03:41	WG857902
1,3,5-Trimethylbenzene	ND		0.00106	1	03/22/2016 03:41	WG857902
Xylenes, Total	ND		0.00317	1	03/22/2016 03:41	WG857902
(S) Toluene-d8	*103*		*88.7-115*		*03/22/2016 03:41*	WG857902
(S) Dibromofluoromethane	*106*		*76.3-123*		*03/22/2016 03:41*	WG857902
(S) 4-Bromofluorobenzene	*90.4*		*69.7-129*		*03/22/2016 03:41*	WG857902

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MEMORANDUM

TO: Project File **DATE:** March 23, 2016

FROM: Jessie Compeau

SUBJECT: Laboratory Data Validation Review

PROJECT: Lake Stevens Marketplace

PROJECT #: 1246.038.02.002

TASK: March 17-18, 2016 Sampling Event

LAB: ESC Lab Sciences Analytical Report No. L824454

Two groundwater, five soil, three sub-slab vapor, and two air (ambient and an indoor grab) samples along with one trip blank sample were collected March 17 -18, 2016 from the Lake Stevens Marketplace in Snohomish County, Washington. The samples were collected as part of a Limited Phase II Environmental Investigation. The samples were submitted to ESC Lab Sciences (ESC) of Mount Juliet, Tennessee for laboratory analyses. The air and sub-slab vapor samples were analyzed for volatile organic compounds (VOCs) by United States Environmental Protection Agency (USEPA) Method TO-15. Soil and groundwater samples were analyzed for VOCs by USEPA 8260C. Soils were also measured for total solids (percent) by Standard Methods for Water and Wastewater (SM) 2540 Method G (Editorial Revisions, 2011).

The results were reported in laboratory report ESC L824454. The quality assurance review of the laboratory data is summarized below.

DATA QUALIFICATIONS

Guidelines established by USEPA for review of analytical data 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 Organic Data Review (USEPA, 1999).

DATA VALIDATION

Sample Receipt, Preservation and Handling

The laboratory supplied Summa canisters for the air (includes sub-slab vapor samples) samples. The samples were shipped by courier and received in good condition by the laboratory. Summa canisters do not require preservation or cooling. The samples were collected, handled, and delivered in an appropriate manner. No data qualifications were warranted based upon sampling and preservation techniques.

The soil and groundwater samples were delivered to the project laboratory in coolers under standard chain-of-custody protocols with the following discussion:

> Review of ESC's Non-Conformance Form indicated Sample TW-1-8 was recorded on the chain of custody (COC) as an air sample. On March 21, 2016 PES contacted ESC to correct the matrix to read "soil" on the COC. In addition PES clarified the COC analysis request for VOC and total solids analysis on the associated sample.

Review of ESC's Non-Conformance Form and COC indicates that all samples were received in good condition at a cooler temperature of 3.2 degrees Centigrade (°C) within the recommended preservation temperature range of 4.0°C ± 2.0°C. The sample receipt log indicated that the samples in the coolers were received properly stored in a cooler, preserved, and cooled with ice/gel packs and in good condition at the time of laboratory receipt. No data qualifications were assigned due to temperature preservation issues.

Holding Times

USEPA Method TO-15 (VOCs):
The analysis for VOCs was performed within the thirty day recommended holding time limit for air samples collected in a Summa canister. No data was qualified based upon holding times.

USEPA Method 8260C (VOCs):
All samples were analyzed for VOCs within the EPA recommended holding time of 14 days (soils and preserved waters) from the data of sample collection. All holding time criteria were met.

Initial and Continuing Calibration

Initial and continuing calibration data for this project are retained by the laboratory and available for review if necessary. The case narrative did not indicate any issues with calibration; therefore no qualifications were warranted.

Method Blank Results

USEPA Method TO-15 (VOCs):
A laboratory method blank was included with the analytical batch per method requirement. The method blank results did not report any compounds at concentrations at or above the Reported Detection Limit (RDL) with the following discussion:

- Benzene results for sub-slab vapor samples SV1-031816 and SV2-031816 are qualified 'B' by the laboratory indicating that benzene was detected at a low level in the associated blank. ESC indicated that benzene was detected at less than half the Reported Detection Limit (RDL) for benzene (0.02 ppbv). The low level benzene detection in the method blank has no impact on associated sample results for benzene. No action was taken on this basis. No data qualifications were warranted.

USEPA Method 8260C (VOCs):
Laboratory method blanks for soil and water were included with the analytical batches per method requirement. The target analytes were not detected in the method blanks for soil or waters at or above the RDLs. No qualifications of the data were made due to the results of the method blank analyses.

Total Solids by SM 2540 G-2011:
Percent solids were measured at negligible levels in the method blanks. No qualifications of the data were made due to the results of the method blank analyses.

Trip Blank Results

USEPA Method TO-15 (VOCs):

A trip blank was not required for the TO-15 analyses.

USEPA Method 8260C (VOCs):
A trip blank was collected. No compounds were detected in the trip blank at concentrations at or above the RDLs. No data qualifications were warranted.

Field, Rinsate, or Equipment Blank Results

USEPA Method 8260C (VOCs):
No field, rinsate, or equipment blanks were collected.

Laboratory Duplicate Analyses

USEPA Method TO-15 (VOCs):
A laboratory duplicate analysis was not performed. Refer to laboratory control sample and laboratory control sample duplicate results for precision information.

USEPA Method 8260C (VOCs):
Laboratory duplicate analyses were not performed on soils or waters. Refer to laboratory control sample and/or matrix spike data for precision information.

Total Solids by SM 2540 G-2011:
Laboratory duplicate analysis was performed on non-client samples within each analytical batch. The primary/duplicate RPDs were within the laboratory control limit of 5%. Duplicate data are acceptable.

Field Duplicate Analyses

USEPA Method TO-15 (VOCs) and USEPA Method 8260C (VOCs):
Field duplicate samples were not collected. Refer laboratory duplicate results for precision data.

Surrogate Recoveries

USEPA Method TO-15 (VOCs):
The surrogate % R results for the air samples, method blank, and laboratory control samples were within the laboratory surrogate control limits of 70 to 130% R. No data qualifications were warranted.

USEPA Method 8260C (VOCs):
The surrogate recovery results for soil and water samples, associated laboratory control samples, matrix spikes, and method blanks were within the laboratory surrogate control limits for all of the analyses.

Matrix Spike/ Matrix Spike Duplicates

USEPA Method TO-15 (VOCs):
An MS/MSD is not required for the TO-15 method. Refer to laboratory control sample results for accuracy and precision data.

USEPA Method 8260C (VOCs):
A matrix spike (MS) analysis was performed a non-client soil sample within the analytical batch. The MS percent recoveries (%Rs) for all 8260C target analytes were within the laboratory control criteria with the following exceptions:

- MS/MSD (Batch ID WG857902) results for spike compound acetone were not recovered. No action is taken since the spike was performed on a non-client sample. LCS/LCSD acetone spike recoveries were acceptable.

A matrix spike analysis was not performed on water samples. Refer to laboratory control sample results for precision and accuracy data.

Laboratory Control Samples

USEPA Method TO-15 (VOCs):
A laboratory control sample/laboratory control sample duplicate (LCS/LCSD) analyses were performed with the analytical batch. The LCS recovery results for all control compounds met the % R and RPD acceptance criteria (70-130%R and 25% RPD). LCS/LCSD results are acceptable.

USEPA Method 8260C (VOCs):
LCS/LCSD analyses were performed along with each analytical batch for soils and waters. The LCS/LCSD %R's and RPDs for the control analytes (VOCs) were within the laboratory control criteria for soils and waters with the following exceptions:

- LCS/LCSD (Batch ID WG857902) compound 1,1,2,2-tetrachloroethane was recovered slightly below laboratory control limit criteria. **Associated sample 1,1,2,2-tetrachloroethane results (samples TW-2-6, SV1-1.5, SV2-1, and SV3-1.5) are estimated and qualified (UJ) due to slightly low LCS/LCSD recoveries.**

- LCS/LCSD (Batch ID WG857902) compound 1,1,2-trichlorotrifluoroethane RPD is at 23% and above ESC's acceptance criteria of 20%. No action is taken in this case since both LCS/LCSD 1,1,2-trichlorotrifluoroethane recoveries were within ESC's criteria.

- LCS (Batch ID WG857902) compound 1,1,2-trichloroethane was recovered slightly below ESC's laboratory control limit criteria. No action is taken in this case since the LCSD 1,1,2-trichloroethane recovery is within criteria.

Total Solids by SM 2540 G-2011:
An LCS was performed with each analytical batch. The LCS recovery results for the spiked blank met the % R acceptance criteria (85-115%R). LCS results are acceptable.

Quantitation Limits

Results of all analyses were reported based on standard laboratory RDLs. The reported RDLs are considered appropriate for this project. Air samples submitted for VOC analysis via USEPA Method TO-15 were analyzed for 22 VOC compounds. Soil and groundwater samples submitted for VOC analysis via USEPA 8260C were analyzed for 66 VOC compounds. No data qualifiers were warranted based upon standard or dilution-elevated detection limits.

Completeness

The samples were collected and analyzed as requested. The results in all cases were reported based upon standard Reporting Detection Limits (RDLs). Data completeness is 100%.

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 Organic Data Review (USEPA, 1999)

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