

March 19, 2018

Mr. Jay Johnson, Senior Environmental Manager
PRS Group, Inc.
3003 Taylor Way
Tacoma, Washington 98421-4309
jay@prsplant.net

RE: ***Annual Groundwater Compliance Monitoring Data Summary Report***
PRS Services Facility
3003 Taylor Way
Tacoma, Washington 98421-4309
Ecology Facility/Site ID: 1245

Dear Mr. Johnson:

Associated Environmental Group, LLC (AEG) has prepared the enclosed ***Annual Groundwater Compliance Monitoring Data Summary Report*** in accordance with Washington State Department of Ecology (Ecology) Agreed Order DE 11357, and the approved Groundwater Compliance Monitoring Plan, dated May 20, 2015. Groundwater monitoring is currently being conducted annually, in June, and water level measurements are being performed semi-annually, in June and December. Activities performed in 2017, and planned for 2018, are as follows:

WORK PERFORMED [June 13, 2017]:

- Inspected the condition of each monitoring well, and documented any abnormalities with the well monuments or casing.
- Measured the headspace of each well for volatiles using a photoionization detector (PID) upon opening each well.
- Measured depth to groundwater data in nine monitoring wells (SO-2A, MW-3A, MW-2A, CO-3B, CO-3A, MW-1A, MW-1B, SO-4B, and SO-4A).
- Sampled groundwater from monitoring wells; SO-2A, MW-3A, MW-2A, CO-3B, CO-3A, MW-1A, MW-1B, SO-4B, and SO-4A.
- Submitted samples to Spectra Laboratories in Tacoma for analysis.

WORK PERFORMED [December 14, 2017]:

- Inspected the condition of each monitoring well, and documented any abnormalities with the well monuments or casing.
- Measured the headspace of each well for volatiles using a PID upon opening each well.

2017 Annual Groundwater Compliance Monitoring Data Summary Report

PRS Services Tacoma, Washington

AEG Project No. 16-123

March 19, 2018

- Measured depth to groundwater data in nine monitoring wells (SO-2A, MW-3A, MW-2A, CO-3B, CO-3A, MW-1A, MW-1B, SO-4B, and SO-4A).

WORK PLANNED FOR NEXT YEAR [June and December 2018]:

June 2018:

- Inspect the condition of each monitoring well, and document any abnormalities with the well monuments or casing.
- Measure the headspace of each well for volatiles using a photoionization detector (PID) upon opening each well.
- Measure depth to groundwater data in nine monitoring wells (SO-2A, MW-3A, MW-2A, CO-3B, CO-3A, MW-1A, MW-1B, SO-4B, and SO-4A).
- Sample groundwater from monitoring wells; SO-2A, MW-3A, MW-2A, CO-3B, CO-3A, MW-1A, MW-1B, SO-4B, and SO-4A.
- Submit samples to Spectra Laboratories in Tacoma for analysis.

December 2018:

- Inspect the condition of each monitoring well, and document any abnormalities with the well monuments or casing.
- Measure the headspace of each well for volatiles using a PID upon opening each well.
- Measure depth to groundwater data in nine monitoring wells (SO-2A, MW-3A, MW-2A, CO-3B, CO-3A, MW-1A, MW-1B, SO-4B, and SO-4A).

GROUNDWATER MONITORING SUMMARY:

Sampling Event:	June Shallow 2017	June Deep 2017	December Shallow 2017	December Deep 2017	Values
Range of Depths to Groundwater:	2.97 to 4.45	5.79 to 7.08	1.95 to 3.59	5.75 to 7.08	Feet below top of well casing
Range of Groundwater Elevations:	9.84 to 11.20	7.12 to 7.20	11.13 to 12.22	7.12 to 7.21	Feet above Mean Sea Level
Groundwater Gradient: (Direction / Magnitude)	SE/ 0.001735	E/ 0.000958	SE/ 0.020658	E/ 0.000483	Feet per foot (ft/ft)
Measureable NAPL Detected:	No	No	No	No	N/A
Measureable NAPL Thickness:	N/A	N/A	N/A	N/A	N/A

A complete summary of the depth-to-water measurements and corresponding elevations is presented in Table 1, *Summary of Groundwater Elevations*.

The groundwater gradient for the shallow aquifer for June and December 2017 sampling events is primarily towards the southeast with an average gradient of 0.014158 ft/ft. Shallow aquifer gradients are illustrated on Figure 2, *June 2017 Shallow Groundwater Contour Map*, and Figure 4, *December 2017 Shallow Groundwater Contour Map*.

The groundwater gradient for the deep aquifer for June and December 2017 sampling events is primarily towards the east with an average gradient of 0.0007205 ft/ft. Deep aquifer gradients are illustrated on Figure 3, *June 2017 Deep Groundwater Contour Map*, and Figure 5, *December 2017 Deep Groundwater Contour Map*.

During both the June and December 2017 events, all monitoring wells appeared to be in good condition. The field data sheets summarizing monitoring and inspection activities are provided in Appendix B, *Field Data Sheets*.

GROUNDWATER SAMPLING AND ANALYTICAL RESULTS:

The groundwater samples were submitted to Spectra Laboratories, Inc. in Tacoma, Washington for analysis for the following parameters:

- Diesel- and oil-range petroleum hydrocarbons (TPH) using Northwest Method NWPTH-D/Dx.
- Gasoline-range TPH using Northwest Method NWTPH-Gx.
- Volatile organic compounds (VOCs) using EPA Method 8260C.
- Polychlorinated biphenyls (PCBs) using EPA Method 8082A.
- Total metals using EPA Method 6020A.
- Nitrate using Method SM4500-NO3 F.
- Sulfate using Method SM4500-SO4 E.

Constituents of concern were detected above Model Toxics Control Act (MTCA) Method A cleanup levels in monitoring wells CO-3A, MW-1A, MW-2A, MW-3A, SO-2A, SO-4A, MW-1B, CO-3B, and SO-4B. Analytical results for this sampling event, and historical analytical results, are presented in Table 2, *Summary of Groundwater Analytical Results*. An overview of the results is as follows:

VOCs

No VOCs were detected above their respective MTCA Method A or B cleanup levels in any of the wells.

Three VOCs were detected below their respective MTCA Method A or B cleanup levels. Chlorobenzene and cis-1,2-dichloroethylene were detected in SO-4A at 10.8 micrograms per liter ($\mu\text{g/L}$) and 1.3 $\mu\text{g/L}$, respectively. In addition, methyl tert-butyl ether (MTBE) was detected in MW-1A at 3.8 $\mu\text{g/L}$.

Metals

Arsenic was detected in eight of nine wells above the MTCA Method A cleanup level of 5 $\mu\text{g/L}$, which is consistent with previous sampling events. Arsenic concentrations ranged from 3 $\mu\text{g/L}$ in MW-1B to 555 $\mu\text{g/L}$ in SO-4A.

Chromium was detected in all wells below MTCA Method A cleanup levels, which is consistent with previous sampling events.

Lead was not detected in any of the wells above laboratory reporting limits.

Petroleum Hydrocarbons

Diesel- and oil-range TPH were detected above their respective MTCA Method A cleanup levels in MW-1A at 3,200 $\mu\text{g/L}$ and 1,300 $\mu\text{g/L}$, respectively. Oil-range TPH was also detected above the MTCA Method A cleanup level in MW-1B at 620 $\mu\text{g/L}$.

Diesel-range TPH was detected below the MTCA Method A cleanup level in SO-4B at 470 $\mu\text{g/L}$. All other TPH results were non-detect.

PCBs

No PCBs were detected in any of the wells above laboratory reporting limits.

DATA QUALITY VALIDATION SUMMARY

Data validation was completed for this set of compliance groundwater monitoring data as summarized in the Data Validation Report presented in Appendix C. The laboratory followed the specified analytical methods based on the data validation. Accuracy was acceptable, as demonstrated by the surrogate, laboratory control sample (LCS), and matrix spike/matrix spike duplicate (MS/MSD) percent recovery values. Precision was acceptable, as demonstrated by the MS/MSD and laboratory/field duplicate relative percent deviation (RPD) values. The data are acceptable for the intended use.

DISCUSSION:***Arsenic in Shallow and Deep Groundwater***

Arsenic was detected in both the shallow and deep aquifers above the MTCA Method A cleanup level of 5 µg/L, which is consistent with previous sampling events. Arsenic concentrations averaged about 13.6 in the deep aquifer. Arsenic concentrations averaged about 117 µg/L in the shallow aquifer; however, the average concentration decreases to about 29.5 µg/L if you remove the detection of 555 µg/L in SO-4A. Monitoring well SO-4A has fairly consistently had the highest detected concentrations of arsenic at the Site. This well is located adjacent to Taylor Way.

According to previous monitoring reports for this Site, it has been noted that arsenic is a common soil constituent in the Puget Sound region (Ecology, 1994), and that the concentrations found in groundwater may be representative of area-wide background (GeoEngineers, 2016). In addition, the adjacent Arkema Mound site, as well as other nearby sites, is known to have used slag high in arsenic from the former ASARCO smelter as ballast material for logyard operations (DOF, 2015). It has also been speculated that the City of Tacoma has historically used ASARCO slag as roadbed material throughout the tide flats, which may also account for the presence of arsenic in groundwater throughout the area, as well as the elevated concentrations in SO-4A adjacent to Taylor Way.

There are no known sources of arsenic at the PRS facility.

Petroleum Hydrocarbons

Diesel- and/or oil-range TPH were detected above their respective MTCA Method A cleanup levels in MW-1A and MW-1B. Previous recent monitoring of these wells has not detected these constituents. The source of the TPH in these wells is unknown. It's possible they may be a result of surface runoff penetrating the well lid; however, AEG inspected all wells in June and December, and did not identify any abnormalities.

RECOMMENDATIONS:

Groundwater monitoring performed at the Site dating back to at least 2008 has not detected any constituents above MTCA cleanup levels other than arsenic in the majority of the wells at the Site. As such, AEG recommends proposing to Ecology a reduction in the number of wells to be monitored to MW-1A and SO-4A only for the current suite of contaminants. In addition, due to the exceedance of oil-range TPH in MW-1B, this well should continue to be monitored for diesel- and oil-range TPH only.

CLOSING:

Thank you for the opportunity to provide you with environmental consulting services. Should you have questions or require additional information, please contact our office at 360-352-9835.

Sincerely,

Associated Environmental Group, LLC



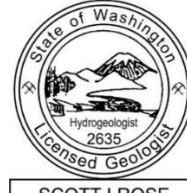
Shawn Lombardini LG
Project Geologist



Shawn Lombardini



Scott Rose, L.H.G.
Senior Hydrogeologist



SCOTT I ROSE

- Attachments: Figure 1 – *Vicinity Map*
Figure 2 – *June 2017 Shallow Groundwater Contour Map*
Figure 3 – *June 2017 Deep Groundwater Contour Map*
Figure 4 – *December 2017 Shallow Groundwater Contour Map*
Figure 5 – *December 2017 Deep Groundwater Contour Map*
Table 1 – *Summary of Groundwater Elevations*
Table 2 – *Summary of Groundwater Analytical Results*
Table 3 – *Summary of Field Parameters*
Appendix A – *Laboratory Datasheets*
Appendix B – *Field Datasheets*
Appendix C – *Data Validation Report*

REFERENCES

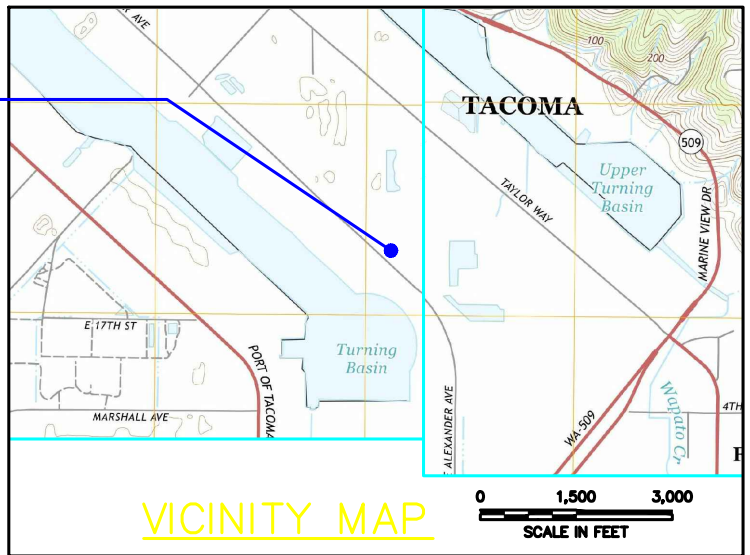
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FIGURES

FILENAME	DRAWN BY	CHECKED BY	APPROVED BY	PROJECT NUMBER
16-120_MASTER 010817.DWG	KCD	1/25/2018	MP	1/25/2018



PROJECT LOCATION

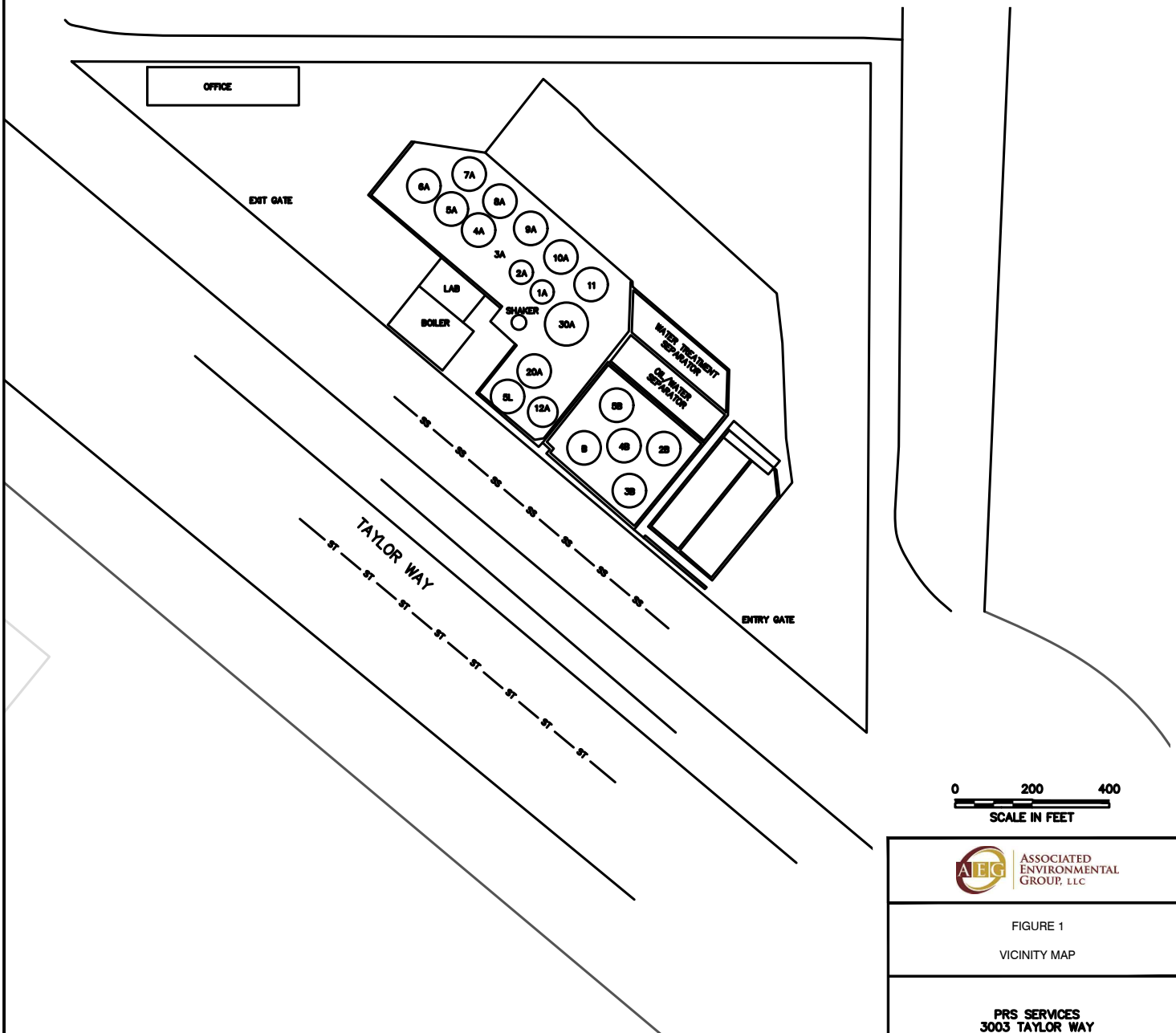


NOTES

1. THE LOCATIONS OF ALL FEATURES SHOWN ARE APPROXIMATE
2. THIS DRAWING IS FOR INFORMATION PURPOSES. IT IS INTENDED TO ASSIST IN SHOWING FEATURES DISCUSSED IN AN ATTACHED DOCUMENT.

REFERENCE

DRAWING CREATED FROM AERIAL PHOTOGRAPH AND NOTES PROVIDED BY AEG, LLC.
VICINITY IMAGE SOURCE: U.S. GEOLOGICAL SURVEY-2014, 7.5 MINUTE QUADRANGLE MAP PROVERTY BAY, WASHINGTON




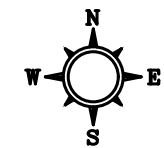
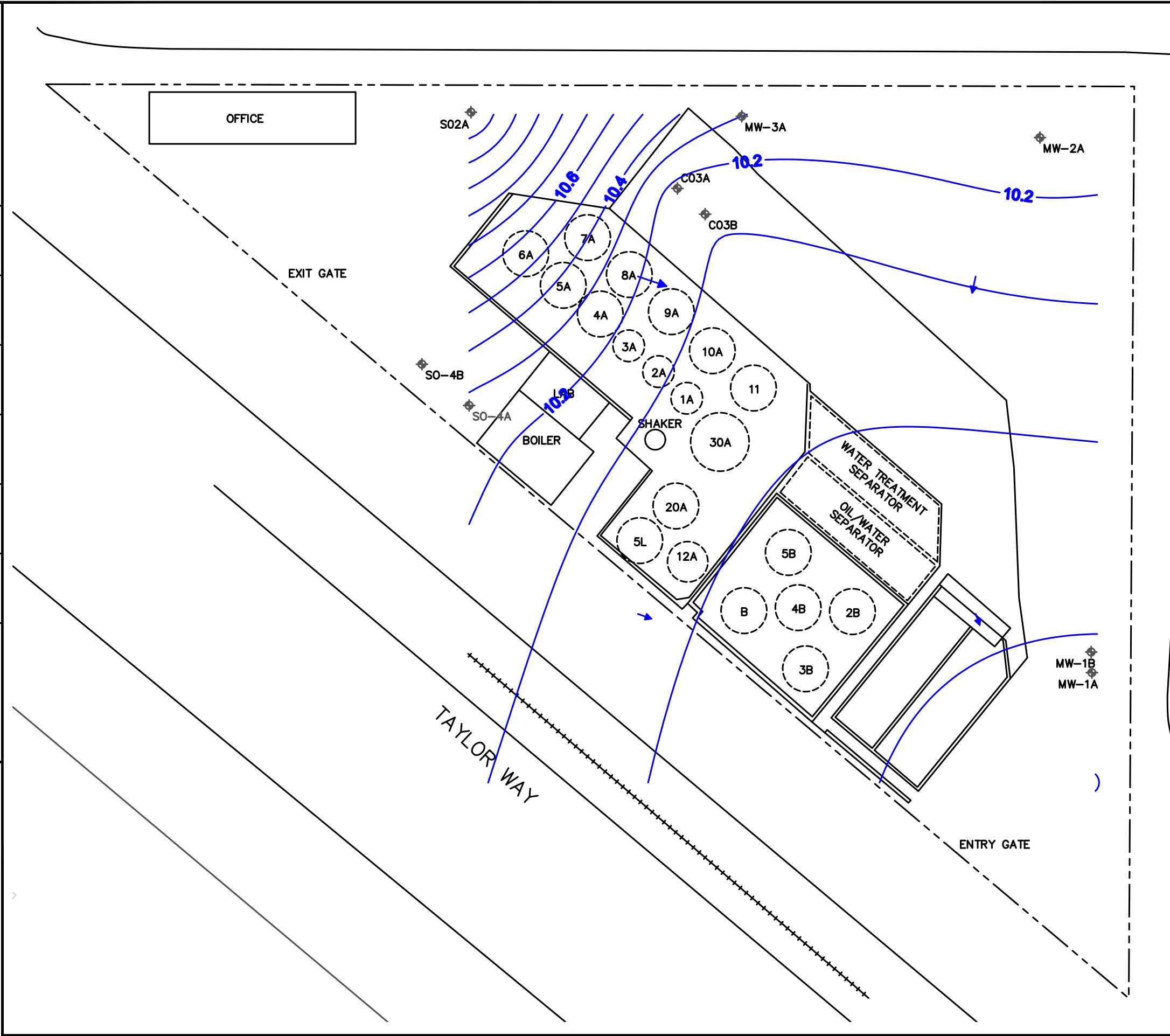

ASSOCIATED ENVIRONMENTAL GROUP, LLC

FIGURE 1
VICINITY MAP

PRS SERVICES
3003 TAYLOR WAY
TACOMA, WASHINGTON

FILENAME 16-120_MASTER_010817.DWG
 DRAWN BY ICD 1/08/2018
 CHECKED BY NP 1/08/2018
 APPROVED BY NP 1/08/2018
 PROJECT NUMBER 16-120



LEGEND

---	PROPERTY LINE
S01A ◆	MONITORING WELLS
+++++	RAILROAD

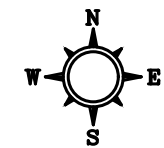
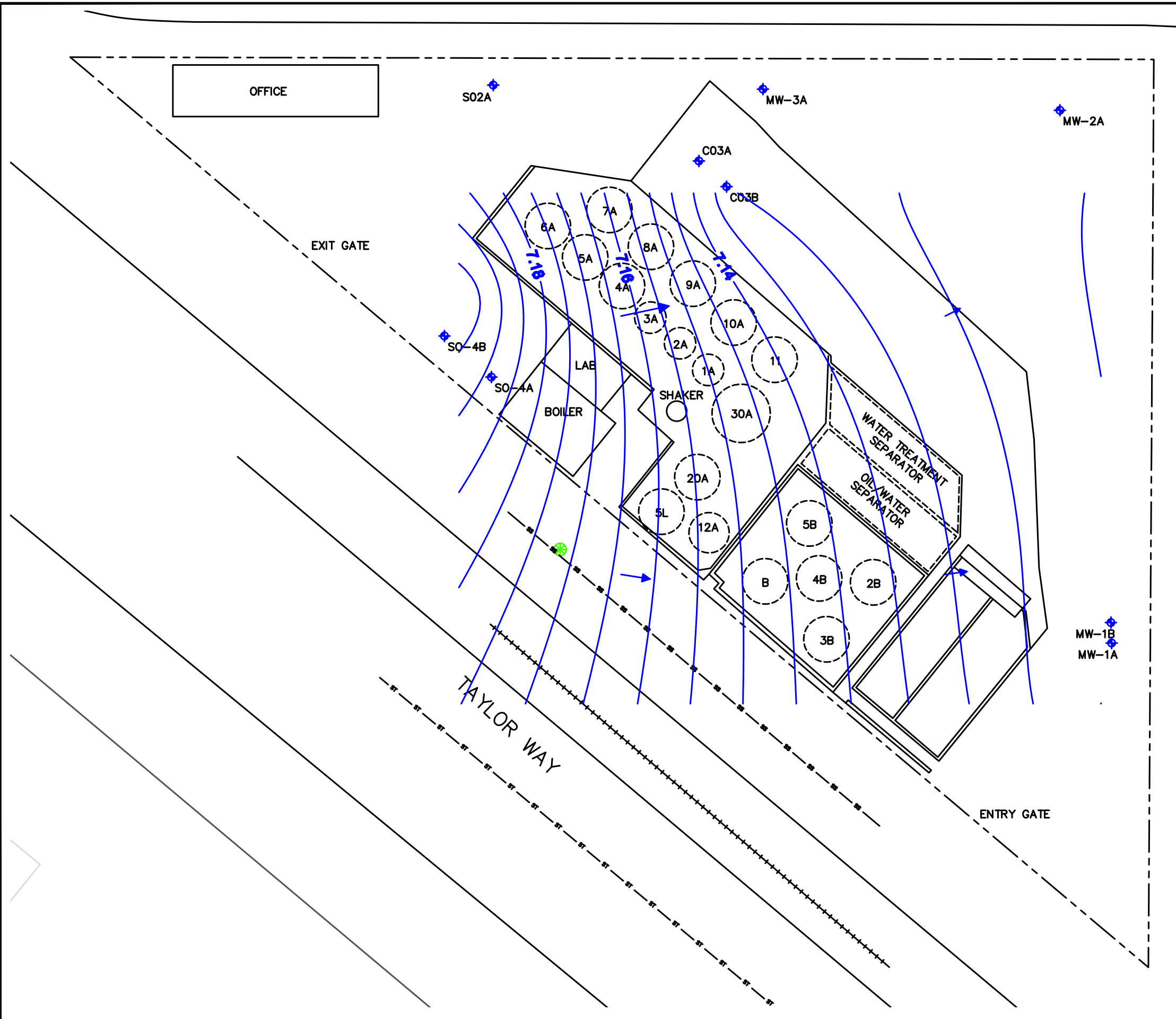
- NOTES**
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REFERENCE
 DRAWING CREATED FROM AERIAL PHOTOGRAPH AND NOTES PROVIDED BY AEG, LLC.



 ASSOCIATED ENVIRONMENTAL GROUP, LLC
FIGURE 2 JUNE 2017 SHALLOW GROUNDWATER CONTOUR MAP
PRS SERVICES 3003 TAYLOR WAY TACOMA, WASHINGTON

FILENAME 16-120_MASTER_010817.DWG
 DRAWN BY ICD 1/08/2018
 CHECKED BY NP 1/08/2018
 APPROVED BY NP 1/08/2018
 PROJECT NUMBER 16-120



LEGEND

---	PROPERTY LINE
S01A ◆	MONITORING WELLS
+++++	RAILROAD
⊗	SANITARY SEWER MANHOLE
—SS—SS—	SANITARY SEWER
—ST—ST—	STORM SEWER

NOTES

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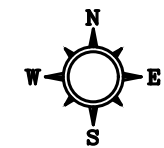
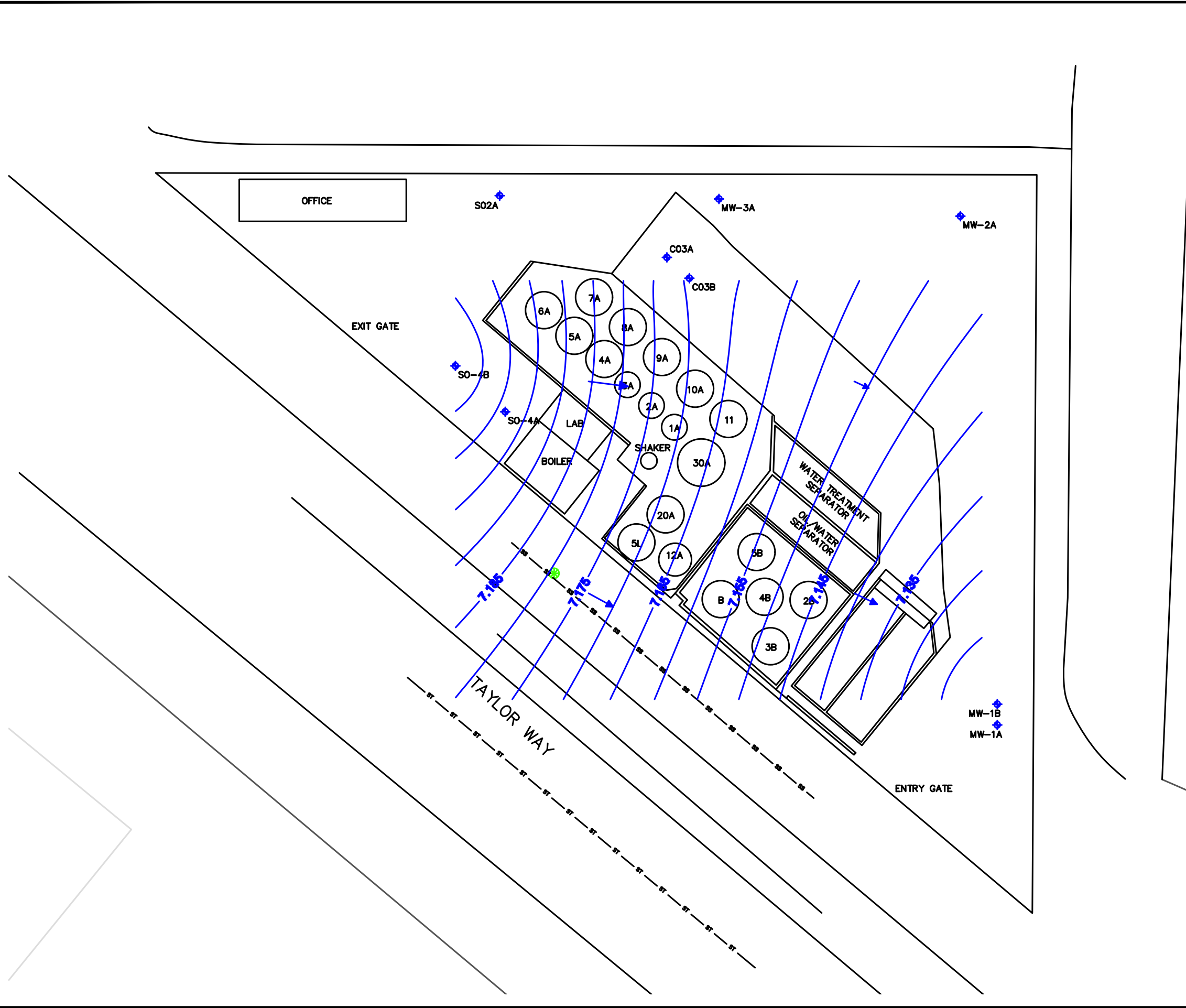


AEG ASSOCIATED ENVIRONMENTAL GROUP, LLC

FIGURE 3
 JUNE 2017
 DEEP GROUNDWATER CONTOUR MAP

PRS SERVICES
 3003 TAYLOR WAY
 TACOMA, WASHINGTON

FILENAME 16-120_MASTER 010817.DWG
 DRAWN BY ICD 1/08/2018
 CHECKED BY NP 1/08/2018
 APPROVED BY NP 1/08/2018
 PROJECT NUMBER 16-120



LEGEND

- PROPERTY LINE
- S01A ◆ MONITORING WELLS
- ++++ RAILROAD
- SANITARY SEWER MANHOLE
- SS — SS — SANITARY SEWER
- ST — ST — STORM SEWER

NOTES

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REFERENCE

DRAWING CREATED FROM AERIAL PHOTOGRAPH AND NOTES PROVIDED BY AEG, LLC.



FIGURE 5
 DECEMBER 2017
 DEEP GROUNDWATER CONTOUR MAP

PRS SERVICES
 3003 TAYLOR WAY
 TACOMA, WASHINGTON

TABLES

Table 1 - Summary of Groundwater Elevations

Petroleum Reclaiming Services Inc.
3003 Taylor Way, Tacoma, Washington

Well No./ TOC Elevation	Date	Depth to Water	Total Depth	Depth to Free Product	Free Product Thickness	Actual Groundwater Elevation	Change in Elevation
SHALLOW AQUIFER							
CO3A 13.10	6/11/2015	3.49	--			9.61	--
	9/8/2015	3.92	--			9.18	-0.43
	12/10/2015	0.92	--			12.18	3.00
	3/8/2016	1.26	--			11.84	-0.34
	6/13/2017	2.97	9.58			10.13	-1.71
	12/14/2017	1.95	9.59			11.15	1.02
SO2A 14.21	6/11/2015	3.55	--			10.66	--
	9/8/2015	4.01	--			10.20	-0.46
	12/10/2015	0.93	--			13.28	3.08
	3/8/2016	1.30	--			12.91	-0.37
	6/13/2017	3.01	11.44			11.20	-1.71
	12/14/2017	1.99	11.39			12.22	1.02
SO4A 14.61	6/11/2015	4.84	--			9.77	--
	9/8/2015	4.80	--			9.81	0.04
	12/10/2015	2.12	--			12.49	2.68
	3/8/2016	2.58	--			12.03	-0.46
	6/13/2017	4.34	11.87			10.27	-1.76
	12/14/2017	3.39	11.87			11.22	0.95
MW-1A 14.21	6/11/2015	4.88	--			9.33	--
	9/8/2015	5.05	--			9.16	-0.17
	12/10/2015	2.74	--			11.47	2.31
	3/8/2016	2.73	--			11.48	0.01
	6/13/2017	4.37	9.85			9.84	-1.64
	12/14/2017	2.54	9.85			11.67	1.83
MW-2A 14.72	6/11/2015	5.03	--			9.69	--
	9/8/2015	5.39	--			9.33	-0.36
	12/10/2015	2.61	--			12.11	2.78
	3/8/2016	2.74	--			11.98	-0.13
	6/13/2017	4.45	9.84			10.27	-1.71
	12/14/2017	3.59	9.84			11.13	0.86
MW-3A 13.91	6/11/2015	4.18	--			9.73	--
	9/8/2015	4.60	--			9.31	-0.42
	12/10/2015	1.72	--			12.19	2.88
	3/8/2016	1.84	--			12.07	-0.12
	6/13/2017	3.61	9.82			10.30	-1.77
	12/14/2017	2.61	9.81			11.30	1.00

Table 1 - Summary of Groundwater Elevations

Petroleum Reclaiming Services Inc.
3003 Taylor Way, Tacoma, Washington

Well No./ TOC Elevation	Date	Depth to Water	Total Depth	Depth to Free Product	Free Product Thickness	Actual Groundwater Elevation	Change in Elevation
DEEP AQUIFER							
CO3B 12.92	6/11/2015	6.57	--			6.35	--
	9/8/2015	6.47	--			6.45	0.10
	12/10/2015	4.19	--			8.73	2.28
	3/8/2016	4.92	--			8.00	-0.73
	6/13/2017	5.79	24.67			7.13	-0.87
	12/14/2017	5.75	24.69			7.17	0.04
SO4B 14.10	6/11/2015	7.58	--			6.52	--
	9/8/2015	7.78	--			6.32	-0.20
	12/10/2015	5.44	--			8.66	2.34
	3/8/2016	6.17	--			7.93	-0.73
	6/13/2017	6.90	28.56			7.20	-0.73
	12/14/2017	6.89	28.55			7.21	0.01
MW1B 14.20	6/11/2015	7.80	--			6.40	--
	9/8/2015	8.11	--			6.09	-0.31
	12/10/2015	5.74	--			8.46	2.37
	3/8/2016	6.33	--			7.87	-0.59
	6/13/2017	7.08	28.56			7.12	-0.75
	12/14/2017	7.08	28.55			7.12	0.00

Notes:

TOC = Top of casing elevation relative to assigned benchmark.

-- = Not measured, not available, or not applicable

* = Ceased groundwater monitoring/sampling activities at this well

Table 2 - Summary of Groundwater Analytical Results

Petroleum Reclaiming Services, Inc.

Tacoma, Washington

Monitoring Well	Sample Date	Total Petroleum Hydrocarbons			Volatile Organic Compounds								Metals			PCBs	
		Gasoline	Diesel	Lube Oil	Benzene	Toluene	Chloro-benzene	MTBE	PCE	TCE	cis-1,2-DCE	Vinyl Chloride	Arsenic	Chromium	Lead		
Shallow Aquifer Wells																	
C03A	4/16/2008	<50	<100	<500	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	16	<7.0	<1.0	<0.1
	1/26/2010	<100	<200	<400	4.9	1.8	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.2	38	<5.0	<5.0	<0.1
	8/5/2010	<100	<200	<400	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.2	19.8	<5.0	<5.0	--
	6/11/2015	<50	<100	<500	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.2	14.6	1.6	<0.5	<0.1
	9/9/2015	<50	<100	<500	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.2	13.3	0.7	<0.5	<0.1
	12/10/2015	<50	<100	<500	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.2	13.1	2.3	<0.5	<0.1
	3/8/2016	<50	<100	<500	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.2	10	0.8	<0.5	<0.1
	6/13/2017	<50	<100	<500	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.2	11	1.2	<0.2	<0.1
MW1A	4/16/2008	<50	<100	<500	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	68	14	<1.0	<0.1
	1/26/2010	<100	<200	<400	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.2	20	6.9	<5.0	<0.1
	8/5/2010	<100	<200	<400	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.2	34	10.7	<5.0	--
	6/11/2015	<50	<100	<500	0.88	<1.0	<1.0	2.24	<1.0	<1.0	<1.0	<1.0	<0.2	46.2	3	<0.5	<0.1
	9/8/2015	<50	<100	<500	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.2	54.3	4.3	<0.5	<0.1
	12/11/2015	<50	<100	<500	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.2	61.1	5	<0.5	<0.1
	3/9/2016	55	<100	<500	9.3	<1.0	<1.0	16.7	<1.0	<1.0	<1.0	<1.0	<0.2	67.1	3.1	<0.5	<0.1
	6/13/2017	<50	3,200	1,300	<1.0	<1.0	<1.0	3.8	<1.0	<1.0	<1.0	<1.0	<0.2	46	3.6	<0.2	<0.1
MW2A	4/16/2008	<50	<100	<500	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	79	<7.0	<1.0	<0.1
	1/26/2010	<100	<200	<400	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.2	<5.0	<5.0	<5.0	<0.1
	8/5/2010	<100	<200	<400	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.2	10.3	<5.0	<5.0	--
	6/11/2015	<50	<100	<500	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.2	26.6	1.6	<0.5	<0.1
	9/8/2015	<50	<100	<500	<1.0	2.3	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.2	39	1.1	<0.5	<0.1
	12/11/2015	<50	<100	<500	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.2	20.6	1.5	<0.5	<0.1
	3/9/2016	<50	<100	<500	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.2	26	0.7	<0.5	<0.1
	6/13/2017	<50	<100	<500	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.2	43	1.1	<0.2	<0.1

Table 2 - Summary of Groundwater Analytical Results

Petroleum Reclaiming Services, Inc.

Tacoma, Washington

Monitoring Well	Sample Date	Total Petroleum Hydrocarbons			Volatile Organic Compounds								Metals			PCBs	
		Gasoline	Diesel	Lube Oil	Benzene	Toluene	Chloro-benzene	MTBE	PCE	TCE	cis-1,2-DCE	Vinyl Chloride	Arsenic	Chromium	Lead		
MW3A	4/16/2008	<50	<100	<500	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	74	<7.0	<1.0	<0.1
	1/26/2010	<100	<200	<400	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.2	51	<5.0	<5.0	<0.1	
	8/5/2010	<100	<200	<400	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.2	59.4	13.4	<5.0	--	
	6/11/2015	<50	<100	<500	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.2	38.2	1.4	<0.5	<0.1	
	9/9/2015	<50	<100	<500	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.2	57.2	1.6	<0.5	<0.1	
	12/11/2015	<50	<100	<500	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.2	47.1	4	0.8	<0.1	
	3/9/2016	<50	<100	<500	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.2	35.2	1.1	<0.5	<0.1	
	6/13/2017	<50	<100	<500	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.2	42	2.2	<0.2	<0.1	
S02A	4/16/2008	<50	<100	<500	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	6	<7.0	<1.0	<0.1	
	1/26/2010	<100	<200	<400	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.2	7.4	<5.0	<5.0	<0.1	
	8/5/2010	<100	<200	<400	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.2	<5.0	<5.0	<5.0	--	
	6/11/2015	<50	<100	<500	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.2	9.9	1.1	<0.5	<0.1	
	9/9/2015	<50	<100	<500	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.2	3.4	0.7	<0.5	<0.1	
	12/10/2015	<50	<100	<500	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.2	5.9	2	<0.5	<0.1	
	3/8/2016	<50	<100	<500	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.2	5.8	0.6	<0.5	<0.1	
	6/13/2017	<50	<100	<500	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.2	5.3	1	<0.2	<0.1	
S04A	4/16/2008	74	<100	<500	<1.0	<1.0	<1.0	<1.0	5	12	28	5	1,300	<7.0	<1.0	<0.1	
	1/26/2010	<100	<200	<400	<1.0	<1.0	<1.0	<1.0	6.8	6.2	8.8	<0.2	217	<5.0	<5.0	<0.1	
	8/5/2010	143	<200	<400	5.4	<1.0	36.5	<1.0	<1.0	<1.0	1.0	0.48	38	<5.0	<5.0	--	
	6/11/2015	50	<100	<500	1.39	<1.0	14.7	<1.0	<1.0	<1.0	2.7	0.9	273	1.2	<0.5	<0.1	
	6/11/2015*	52	<100	<500	1.47	<1.0	15.6	<1.0	<1.0	<1.0	2.86	0.8	280	1.3	<0.5	<0.1	
	9/8/2015	55	<100	<500	1.5	<1.0	15.9	<1.0	<1.0	<1.0	1.9	1.2	46.9	<0.5	<0.5	<0.1	
	12/10/2015	<50	<100	<500	<1.0	<1.0	1.9	<1.0	8.4	<1.0	<1.0	<0.2	197	0.8	<0.5	<0.1	
	12/10/2015*	<50	<100	<500	<1.0	<1.0	2	<1.0	8.9	<1.0	<1.0	<0.2	202	0.8	<0.5	<0.1	
	3/8/2016	76	<100	<500	<1.0	<1.0	1.5	<1.0	6.1	1.2	<1.0	<0.2	519	<0.5	<0.5	<0.1	
6/13/2017	<50	<100	<500	<1.0	<1.0	10.8	<1.0	<1.0	<1.0	1.3	<0.2	555	1.1	<0.2	<0.1		

Table 2 - Summary of Groundwater Analytical Results

Petroleum Reclaiming Services, Inc.

Tacoma, Washington

Monitoring Well	Sample Date	Total Petroleum Hydrocarbons			Volatile Organic Compounds								Metals			PCBs	
		Gasoline	Diesel	Lube Oil	Benzene	Toluene	Chloro-benzene	MTBE	PCE	TCE	cis-1,2-DCE	Vinyl Chloride	Arsenic	Chromium	Lead		
Deep Aquifer Wells																	
MW1B	1/26/2010	<100	<200	<400	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.2	<5.0	16.5	<5.0	<0.1
	8/5/2010	<100	<200	<400	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.2	38	<5.0	<5.0	--
	12/14/2010	<100	<200	<400	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.2	<5.0	16.0	<5.0	--
	6/11/2015	<50	<100	<500	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.2	2.3	12.9	<0.5	<0.1
	9/8/2015	<50	<100	<500	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.2	2.3	14	<0.5	<0.1
	12/11/2015	<50	<100	<500	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.2	3.4	24.9	<0.5	<0.1
	3/9/2016	<50	<100	<500	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.2	<1.0	20.2	<0.5	<0.1
6/13/2017	<50	<100	620	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.2	3	19	<0.2	<0.1	
C03B	4/16/2008	<50	<100	<500	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	2	33	3	<0.1
	1/26/2010	<100	<200	<400	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.2	6.1	<5.0	<5.0	<0.1
	8/5/2010	<100	<200	<400	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.2	38	<5.0	<5.0	--
	12/14/2010	<100	<200	<400	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.2	8.4	4.3	<5.0	--
	6/11/2015	<50	<100	<500	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.2	14.1	5.3	<0.5	<0.1
	9/9/2015	<50	<100	<500	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.2	12.7	3.9	<0.5	<0.1
	12/10/2015	<50	<100	<500	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.2	19.8	8.9	<0.5	<0.1
	3/8/2016	<50	<100	<500	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.2	13.6	3.9	<0.5	<0.1
	3/8/2016*	<50	<100	<500	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.2	14.1	4.1	<0.5	<0.1
6/13/2017	<50	<100	<500	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.2	12	5.6	<0.2	<0.1	
S04B	1/26/2010	<100	<200	<400	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.2	5.8	<5.0	<5.0	<0.1
	8/5/2010	<100	<200	<400	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.2	38	<5.0	<5.0	--
	12/14/2010	<100	<200	<400	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.2	10	8.5	<5.0	--
	6/11/2015	<50	<100	<500	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.2	16.5	8.4	<0.5	<0.1
	9/8/2015	<50	<100	<500	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.2	18.3	8.2	<0.5	<0.1
	12/10/2015	<50	<100	<500	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.2	31.1	16.9	<0.5	<0.1
	3/8/2016	<50	<100	<500	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.2	27.8	10.8	<0.5	<0.1
6/13/2017	<50	470	<500	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.2	26	12	<0.2	<0.1	
PQL		50/100	100/200	400/500	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0/0.2	1.0/5.0	5.0	5.0/0.5	0.1
MTCA Method A Cleanup Levels		1,000/800	500	500	5	1,000	160**	20	5	5	16**	0.2	5	50	15	0.1	

Table 2 - Summary of Groundwater Analytical Results

Petroleum Reclaiming Services, Inc.

Tacoma, Washington

Monitoring Well	Sample Date	Total Petroleum Hydrocarbons			Volatile Organic Compounds								Metals			PCBs
		Gasoline	Diesel	Lube Oil	Benzene	Toluene	Chloro-benzene	MTBE	PCE	TCE	cis-1,2-DCE	Vinyl Chloride	Arsenic	Chromium	Lead	

Notes:

All values are presented in micrograms per liter (µg/L)

*Field duplicate.

**MTCA Method B cleanup level; no Method A cleanup level has been established.

PQL = Practical Quantification Limit (laboratory detection limit)

< = Not detected above laboratory limits

-- = Not analyzed for this constituent

Red Bold indicates the detected concentration exceeds Ecology MTCA Method A cleanup level

Bold indicates the detected concentration is below Ecology MTCA Method A cleanup levels

MTBE = Methyl Tert-Butyl Ether

PCE = Tetrachloroethylene

TCE = Trichloroethylene

DCE = Dichloroethylene

PCBs = Polychlorinated biphenyls

Table 3 - Summary of Field Parameters
 Petroleum Reclaiming Services Inc.
 3003 Taylor Way, Tacoma, Washington

Well Number	Date	Temperature (°C)	Conductivity (mS/cm)	Turbidity (NTU)	Salinity (%)	Dissolved Oxygen (mg/L)	pH	ORP (millivolts)	Ferrous Iron (mg/L)
CO-3A	6/11/2015	16.8	1.45	5.9	--	0.30	6.83	-104.5	2.5
	9/9/2015	20.3	1.53	2.1	--	0.08	6.76	-146.4	--
	12/10/2015	13.2	0.90	3.3	--	0.27	6.62	-177.0	2.0
	3/8/2016	10.9	0.99	5.8	--	0.33	7.18	-175.0	1.5
	6/13/2017	15.6	1.09	--	0.67	0.71	7.61	-202.0	--
MW-1A	6/11/2015	15.3	1.57	1.0	--	0.20	6.62	-45.1	2.5
	9/8/2015	19.3	1.43	1.8	--	0.13	6.63	-141.5	--
	12/11/2015	15.8	1.33	1.2	--	0.24	6.75	-176.0	2.0
	3/9/2016	13.1	1.70	3.8	--	0.33	7.11	-152.0	1.5
	6/13/2017	14.1	1.60	--	1.03	0.61	7.06	-145.5	--
MW-2A	6/12/2015	13.0	0.67	2.5	--	0.14	7.18	-133.7	1.5
	9/8/2015	17.5	0.84	2.0	--	0.13	6.95	-141.0	--
	12/11/2015	8.9	0.63	2.0	--	0.26	6.34	-133.0	1.2
	3/9/2016	9.2	0.76	3.9	--	0.40	6.79	-105.0	1.0
	6/13/2017	12.1	0.58	--	0.38	2.26	6.90	-164.0	--
MW-3A	6/11/2015	16.8	0.90	0.9	--	0.20	6.76	-102.9	2.5
	9/9/2015	20.9	1.19	3.5	--	0.08	6.70	-130.9	--
	12/11/2015	13.0	0.69	2.6	--	0.29	6.46	-155.0	2.0
	3/9/2016	10.6	0.78	4.9	--	0.31	7.06	-136.0	1.5
	6/13/2017	14.5	0.72	--	0.44	1.99	7.26	-187.3	--
SO-2A	6/11/2015	17.4	1.11	2.4	--	0.11	7.03	-100.3	1.5
	9/9/2015	21.3	1.28	1.1	--	0.12	6.84	-111.7	--
	12/10/2015	13.8	0.90	2.7	--	0.29	6.63	-182.0	1.0
	3/8/2016	11.3	0.99	2.3	--	0.31	7.45	-176.0	1.0
	6/13/2017	15.2	0.90	--	0.55	1.37	7.27	-200.1	--
SO-4A	6/11/2015	15.3	0.82	1.6	--	0.20	6.62	-106.3	2.0
	9/8/2015	18.7	1.03	2.0	--	0.08	6.51	-130.1	--
	12/10/2015	12.6	0.47	1.2	--	0.27	6.10	-86.0	1.5
	3/8/2016	11.2	0.49	3.4	--	0.29	6.63	-102.0	1.5
	6/13/2017	13.0	1.01	--	0.66	2.40	6.75	-161.0	--
CO-3B	6/11/2015	14.6	11.18	1.4	--	0.10	7.15	-140.3	4.5
	9/9/2015	14.6	11.58	1.4	--	0.15	7.02	-154.5	--
	12/10/2015	14.2	16.40	2.7	--	0.26	7.03	-193.0	4.0
	3/8/2016	13.9	18.10	3.2	--	0.28	7.86	-206.0	3.5
	6/13/2017	13.4	10.86	--	8.11	1.61	7.83	-210.7	--
MW-1B	6/11/2015	14.8	6.68	0.6	--	0.15	6.94	-17.2	3.0
	9/8/2015	15.8	6.73	4.9	--	0.11	6.79	-108.8	--
	12/11/2015	15.8	8.82	1.3	--	0.25	6.86	-141.0	2.0
	3/9/2016	14.8	10.60	4.8	--	0.29	7.53	-156.0	1.5
	6/13/2017	14.3	6.74	--	4.77	0.62	7.40	-163.6	--
SO-4B	6/11/2015	15.2	9.49	2.3	--	0.14	6.99	-134.1	3.5
	9/8/2015	15.4	9.87	1.1	--	0.13	6.87	-147.8	--
	12/10/2015	12.6	14.20	1.2	--	0.17	6.36	-223.0	3.0
	3/8/2016	14.9	15.20	1.2	--	0.30	8.09	-222.0	3.0
	6/13/2017	14.0	9.02	--	6.54	1.18	7.45	-222.2	--

Notes:

-- = Not Measured

mS/cm = milli Siemens per centimeter

ORP = Oxidation reduction potential

NTU = Nephelometric Turbidity Unit

°C = Degrees Celsius

mg/l = milligrams per liter

APPENDIX A

LABORATORY DATASHEETS

July 25, 2017

Petroleum Reclaiming Services, Inc.
3003 Taylor Way
Tacoma, WA 98421

CASE NARRATIVE

Client Project ID: PRS
Number of Samples: 16
Spectra Project #2017060394
Received Date: 6/14/2017
Sample Identification Summary:

<u>Client Identification</u>	<u>Spectra Laboratory Number</u>
MW-2A	1
MW-3A	2
SO-2A	3
CO-3B	4
CO-3A	5
SO-4B	6
SO-4A	7
MW-1A	8
MW-1B	9
SO-4A	10
Field Blank	11
Trip Blank #1	12
Trip Blank #2	13
Trip Blank #3	14
Trip Blank #5	15
Trip Blank #6	16

Sample Receipt:

Samples were received from the field staff outside of recommended temperature limits for some of the requested analytical methods at 9.6 °C. All samples were packaged in coolers with ice upon receipt. Otherwise, all samples were received intact, within specified holding times, and collected in the correct sampling bottles containing preservative for specified methods.

Sample Analysis:

Samples were prepared and analyzed by the following EPA, State of Washington and Standard methods. Total arsenic, chromium, and lead by EPA 3010B/6020B. Volatile organics by EPA 5030B/8260C. Polychlorinated biphenyls by EPA 3520C/8082B Gasoline and diesel were prepared and analyzed by State of Washington method NWTPH. Sulfate was prepared and analyzed by Standard Method 4500-SO4 E. Nitrate was analyzed by Standard Method 4500-NO3 F.

Prior to analysis samples were stored at <5°C. Due to the amount of time between sample receipt and preparation no additional preservation steps were performed by the laboratory.

Any special notes or deviations to the analytical methods are noted below.

Analytical Comments for EPA method 8260C:

Vinyl chloride has been reported between the laboratories determined method detection limit (MDL) and practical quantitation limit (PQL). All results for vinyl chloride have been "J" flagged in the report.

Analytical Comments for Standard Methods 4500-NO3 F:

Nitrite analysis was performed at Spectra Laboratories-Tacoma prior to the samples being preserved with sulfuric acid and subcontracted to Spectra Laboratories-Kitsap for Nitrate/Nitrite combined analysis. Nitrate has been reported as the difference between the measured nitrate/nitrite and the nitrite results. Nitrite results were performed on 6/15/2017.

Laboratory Quality Control:

Unless otherwise noted all quality control samples were within laboratory limits.

Method 8260C:

Please note that methylene chloride, 1,2,3-trichlorobenzene, and 1,2,4-trichlorobenzene were all above the reporting limit in the laboratory blank associated with analysis date 6/27/2017. The cause of the failure has been investigated and appears to be isolated to the method blank only. Sample data associated with this blank is not affected since all compounds detected in the blank were below the reporting limit.



Jeffrey Cooper
Laboratory Manager

07/25/2017

Petroleum Reclaiming Services, Inc.
3003 Taylor Way
Tacoma, WA 98421


Project: PRS
Client ID: MW-2A
Sample Matrix: Water
Date Sampled: 06/13/2017
Date Received: 06/14/2017
Spectra Project: 2017060394
Spectra Number: 1

Analyte	Result	Units	Method	Analyte	Result	Units	Method
Diesel	<100	µg/L	NWTPH-D	1,2-Dibromoethane (EDB)	<1	µg/L	SW846 8260C
Oil	<500	µg/L	NWTPH-D	1,2-Dichlorobenzene	<1	µg/L	SW846 8260C
Gasoline	<50	µg/L	NWTPH-G	1,2-Dichloroethane	<1	µg/L	SW846 8260C
Nitrate	<0.01 *	mg/L-N	SM 4500-NO3 F	1,2-Dichloropropane	<1	µg/L	SW846 8260C
Sulfate	<2.0	mg/L	SM 4500-SO4 ⁻ E	1,3,5-Trimethylbenzene	<1	µg/L	SW846 8260C
Arsenic	0.043	mg/L	SW846 6020B	1,3-Dichlorobenzene	<1	µg/L	SW846 8260C
Chromium	0.0011	mg/L	SW846 6020B	1,3-Dichloropropane	<1	µg/L	SW846 8260C
Lead	< 0.0002	mg/L	SW846 6020B	1,4-Dichlorobenzene	<1	µg/L	SW846 8260C
PCB	<0.1	µg/L	SW846 8082A	2,2-Dichloropropane	<1	µg/L	SW846 8260C
1,1,1,2-Tetrachloroethane	<1	µg/L	SW846 8260C	2-Butanone (MEK)	<10	µg/L	SW846 8260C
1,1,1-Trichloroethane	<1	µg/L	SW846 8260C	2-Chloroethylvinyl Ether	<10	µg/L	SW846 8260C
1,1,2,2-Tetrachloroethane	<1	µg/L	SW846 8260C	2-Chlorotoluene	<1	µg/L	SW846 8260C
1,1,2-Trichloroethane	<1	µg/L	SW846 8260C	2-Hexanone (MBK)	<10	µg/L	SW846 8260C
1,1-Dichloroethane	<1	µg/L	SW846 8260C	4-Chlorotoluene	<1	µg/L	SW846 8260C
1,1-Dichloroethene	<1	µg/L	SW846 8260C	4-Isopropyltoluene	<1	µg/L	SW846 8260C
1,1-Dichloropropene	<1	µg/L	SW846 8260C	4-methyl-2-pentanone	<10	µg/L	SW846 8260C
1,2,3-Trichlorobenzene	<1	µg/L	SW846 8260C	Acetone	<10	µg/L	SW846 8260C
1,2,3-Trichloropropane	<1	µg/L	SW846 8260C	Acetonitrile	<10	µg/L	SW846 8260C
1,2,4-Trichlorobenzene	<1	µg/L	SW846 8260C	Acrolein	<10	µg/L	SW846 8260C
1,2,4-Trimethylbenzene	<1	µg/L	SW846 8260C	Acrylonitrile	<10	µg/L	SW846 8260C
1,2-Dibromo3Chloropropane	<10	µg/L	SW846 8260C	Benzene	<1	µg/L	SW846 8260C

*Nitrate analysis was subcontracted to Spectra Laboratories-Kitsap.

Surrogate	Recovery	Method	Surrogate	Recovery	Method
p-Terphenyl	90	NWTPH-D	Dibromofluoromethane	75	SW846 8260C
Toluene-d8	139	NWTPH-G	1,2-Dichloroethane-d4	88	SW846 8260C
4-Bromofluorobenzene	113	NWTPH-G	Toluene-d8	134	SW846 8260C
Decachlorobiphenyl	88	SW846 8082A	4-Bromofluorobenzene	121	SW846 8260C

SPECTRA LABORATORIES

 Jeffrey Cooper, Laboratory Manager

a14/jac

07/25/2017

Petroleum Reclaiming Services, Inc.
3003 Taylor Way
Tacoma, WA 98421


Project: PRS
Client ID: MW-2A
Sample Matrix: Water
Date Sampled: 06/13/2017
Date Received: 06/14/2017
Spectra Project: 2017060394
Spectra Number: 1

Analyte	Result	Units	Method	Analyte	Result	Units	Method
Bromobenzene	<1	µg/L	SW846 8260C	Styrene	<1	µg/L	SW846 8260C
Bromochloromethane	<1	µg/L	SW846 8260C	Tetrachloroethene	<1	µg/L	SW846 8260C
Bromodichloromethane	<1	µg/L	SW846 8260C	Toluene	<1	µg/L	SW846 8260C
Bromoform	<1	µg/L	SW846 8260C	Total Xylenes	<1	µg/L	SW846 8260C
Bromomethane	<1	µg/L	SW846 8260C	Trichloroethene	<1	µg/L	SW846 8260C
Carbon Disulfide	<10	µg/L	SW846 8260C	Trichlorofluoromethane	<1	µg/L	SW846 8260C
Carbon Tetrachloride	<1	µg/L	SW846 8260C	Vinyl Acetate	<10	µg/L	SW846 8260C
Chlorobenzene	<1	µg/L	SW846 8260C	Vinyl chloride	<0.2 J	µg/L	SW846 8260C
Chlorodibromomethane	<1	µg/L	SW846 8260C	cis-1,2-Dichloroethene	<1	µg/L	SW846 8260C
Chloroethane	<1	µg/L	SW846 8260C	cis-1,3-Dichloropropene	<1	µg/L	SW846 8260C
Chloroform	<1	µg/L	SW846 8260C	n-Butylbenzene	<1	µg/L	SW846 8260C
Chloromethane	<1	µg/L	SW846 8260C	n-Propylbenzene	<1	µg/L	SW846 8260C
Dibromomethane	<1	µg/L	SW846 8260C	sec-Butylbenzene	<1	µg/L	SW846 8260C
Dichlorodifluoromethane	<1	µg/L	SW846 8260C	tert-Butylbenzene	<1	µg/L	SW846 8260C
Ethylbenzene	<1	µg/L	SW846 8260C	trans-1,2-Dichloroethene	<1	µg/L	SW846 8260C
Hexachlorobutadiene	<1	µg/L	SW846 8260C	trans-1,3-Dichloropropene	<1	µg/L	SW846 8260C
Iodomethane	<10	µg/L	SW846 8260C				
Isopropylbenzene	<1	µg/L	SW846 8260C				
Methyl-tert-Butyl Ether	<1	µg/L	SW846 8260C				
Methylene chloride	<5	µg/L	SW846 8260C				
Naphthalene	<1	µg/L	SW846 8260C				

*Nitrate analysis was subcontracted to Spectra Laboratories-Kitsap.

Surrogate	Recovery	Method	Surrogate	Recovery	Method
p-Terphenyl	90	NWTPH-D	Dibromofluoromethane	75	SW846 8260C
Toluene-d8	139	NWTPH-G	1,2-Dichloroethane-d4	88	SW846 8260C
4-Bromofluorobenzene	113	NWTPH-G	Toluene-d8	134	SW846 8260C
Decachlorobiphenyl	88	SW846 8082A	4-Bromofluorobenzene	121	SW846 8260C

SPECTRA LABORATORIES


Jeffrey Cooper, Laboratory Manager
a14/jac

07/25/2017

Petroleum Reclaiming Services, Inc.
3003 Taylor Way
Tacoma, WA 98421

Project: PRS
Client ID: MW-3A
Sample Matrix: Water
Date Sampled: 06/13/2017
Date Received: 06/14/2017
Spectra Project: 2017060394
Spectra Number: 2


Analyte	Result	Units	Method	Analyte	Result	Units	Method
Diesel	<100	µg/L	NWTPH-D	1,2-Dibromoethane (EDB)	<1	µg/L	SW846 8260C
Oil	<500	µg/L	NWTPH-D	1,2-Dichlorobenzene	<1	µg/L	SW846 8260C
Gasoline	<50	µg/L	NWTPH-G	1,2-Dichloroethane	<1	µg/L	SW846 8260C
Nitrate	<0.01 *	mg/L-N	SM 4500-NO3 F	1,2-Dichloropropane	<1	µg/L	SW846 8260C
Sulfate	6.0	mg/L	SM 4500-SO4 ⁻ E	1,3,5-Trimethylbenzene	<1	µg/L	SW846 8260C
Arsenic	0.042	mg/L	SW846 6020B	1,3-Dichlorobenzene	<1	µg/L	SW846 8260C
Chromium	0.0022	mg/L	SW846 6020B	1,3-Dichloropropane	<1	µg/L	SW846 8260C
Lead	< 0.0002	mg/L	SW846 6020B	1,4-Dichlorobenzene	<1	µg/L	SW846 8260C
PCB	<0.1	µg/L	SW846 8082A	2,2-Dichloropropane	<1	µg/L	SW846 8260C
1,1,1,2-Tetrachloroethane	<1	µg/L	SW846 8260C	2-Butanone (MEK)	<10	µg/L	SW846 8260C
1,1,1-Trichloroethane	<1	µg/L	SW846 8260C	2-Chloroethylvinyl Ether	<10	µg/L	SW846 8260C
1,1,2,2-Tetrachloroethane	<1	µg/L	SW846 8260C	2-Chlorotoluene	<1	µg/L	SW846 8260C
1,1,2-Trichloroethane	<1	µg/L	SW846 8260C	2-Hexanone (MBK)	<10	µg/L	SW846 8260C
1,1-Dichloroethane	<1	µg/L	SW846 8260C	4-Chlorotoluene	<1	µg/L	SW846 8260C
1,1-Dichloroethene	<1	µg/L	SW846 8260C	4-Isopropyltoluene	<1	µg/L	SW846 8260C
1,1-Dichloropropene	<1	µg/L	SW846 8260C	4-methyl-2-pentanone	<10	µg/L	SW846 8260C
1,2,3-Trichlorobenzene	<1	µg/L	SW846 8260C	Acetone	<10	µg/L	SW846 8260C
1,2,3-Trichloropropane	<1	µg/L	SW846 8260C	Acetonitrile	<10	µg/L	SW846 8260C
1,2,4-Trichlorobenzene	<1	µg/L	SW846 8260C	Acrolein	<10	µg/L	SW846 8260C
1,2,4-Trimethylbenzene	<1	µg/L	SW846 8260C	Acrylonitrile	<10	µg/L	SW846 8260C
1,2-Dibromo3Chloropropane	<10	µg/L	SW846 8260C	Benzene	<1	µg/L	SW846 8260C

*Nitrate analysis was subcontracted to Spectra Laboratories-Kitsap.

Surrogate	Recovery	Method
p-Terphenyl	84	NWTPH-D
Toluene-d8	156	NWTPH-G
4-Bromofluorobenzene	119	NWTPH-G
Decachlorobiphenyl	92	SW846 8082A

Surrogate	Recovery	Method
Dibromofluoromethane	71	SW846 8260C
1,2-Dichloroethane-d4	87	SW846 8260C
Toluene-d8	151	SW846 8260C
4-Bromofluorobenzene	125	SW846 8260C

SPECTRA LABORATORIES


Jeffrey Cooper, Laboratory Manager
a14/jac

07/25/2017

Petroleum Reclaiming Services, Inc.
3003 Taylor Way
Tacoma, WA 98421

Project: PRS
Client ID: MW-3A
Sample Matrix: Water
Date Sampled: 06/13/2017
Date Received: 06/14/2017
Spectra Project: 2017060394
Spectra Number:2

Analyte	Result	Units	Method	Analyte	Result	Units	Method
Bromobenzene	<1	µg/L	SW846 8260C	Styrene	<1	µg/L	SW846 8260C
Bromochloromethane	<1	µg/L	SW846 8260C	Tetrachloroethene	<1	µg/L	SW846 8260C
Bromodichloromethane	<1	µg/L	SW846 8260C	Toluene	<1	µg/L	SW846 8260C
Bromoform	<1	µg/L	SW846 8260C	Total Xylenes	<1	µg/L	SW846 8260C
Bromomethane	<1	µg/L	SW846 8260C	Trichloroethene	<1	µg/L	SW846 8260C
Carbon Disulfide	<10	µg/L	SW846 8260C	Trichlorofluoromethane	<1	µg/L	SW846 8260C
Carbon Tetrachloride	<1	µg/L	SW846 8260C	Vinyl Acetate	<10	µg/L	SW846 8260C
Chlorobenzene	<1	µg/L	SW846 8260C	Vinyl chloride	<0.2 J	µg/L	SW846 8260C
Chlorodibromomethane	<1	µg/L	SW846 8260C	cis-1,2-Dichloroethene	<1	µg/L	SW846 8260C
Chloroethane	<1	µg/L	SW846 8260C	cis-1,3-Dichloropropene	<1	µg/L	SW846 8260C
Chloroform	<1	µg/L	SW846 8260C	n-Butylbenzene	<1	µg/L	SW846 8260C
Chloromethane	<1	µg/L	SW846 8260C	n-Propylbenzene	<1	µg/L	SW846 8260C
Dibromomethane	<1	µg/L	SW846 8260C	sec-Butylbenzene	<1	µg/L	SW846 8260C
Dichlorodifluoromethane	<1	µg/L	SW846 8260C	tert-Butylbenzene	<1	µg/L	SW846 8260C
Ethylbenzene	<1	µg/L	SW846 8260C	trans-1,2-Dichloroethene	<1	µg/L	SW846 8260C
Hexachlorobutadiene	<1	µg/L	SW846 8260C	trans-1,3-Dichloropropene	<1	µg/L	SW846 8260C
Iodomethane	<10	µg/L	SW846 8260C				
Isopropylbenzene	<1	µg/L	SW846 8260C				
Methyl-tert-Butyl Ether	<1	µg/L	SW846 8260C				
Methylene chloride	<5	µg/L	SW846 8260C				
Naphthalene	<1	µg/L	SW846 8260C				

*Nitrate analysis was subcontracted to Spectra Laboratories-Kitsap.

Surrogate	Recovery	Method	Surrogate	Recovery	Method
p-Terphenyl	84	NWTPH-D	Dibromofluoromethane	71	SW846 8260C
Toluene-d8	156	NWTPH-G	1,2-Dichloroethane-d4	87	SW846 8260C
4-Bromofluorobenzene	119	NWTPH-G	Toluene-d8	151	SW846 8260C
Decachlorobiphenyl	92	SW846 8082A	4-Bromofluorobenzene	125	SW846 8260C

SPECTRA LABORATORIES


Jeffrey Cooper, Laboratory Manager

a14/jac

07/25/2017

Petroleum Reclaiming Services, Inc.
3003 Taylor Way
Tacoma, WA 98421


Project: PRS
Client ID: SO-2A
Sample Matrix: Water
Date Sampled: 06/13/2017
Date Received: 06/14/2017
Spectra Project: 2017060394
Spectra Number:3

Analyte	Result	Units	Method	Analyte	Result	Units	Method
Diesel	<100	µg/L	NWTPH-D	1,2-Dibromoethane (EDB)	<1	µg/L	SW846 8260C
Oil	<500	µg/L	NWTPH-D	1,2-Dichlorobenzene	<1	µg/L	SW846 8260C
Gasoline	<50	µg/L	NWTPH-G	1,2-Dichloroethane	<1	µg/L	SW846 8260C
Nitrate	3.43 *	mg/L-N	SM 4500-NO3 F	1,2-Dichloropropane	<1	µg/L	SW846 8260C
Sulfate	<2.0	mg/L	SM 4500-SO4 ⁻ E	1,3,5-Trimethylbenzene	<1	µg/L	SW846 8260C
Arsenic	0.0053	mg/L	SW846 6020B	1,3-Dichlorobenzene	<1	µg/L	SW846 8260C
Chromium	0.001	mg/L	SW846 6020B	1,3-Dichloropropane	<1	µg/L	SW846 8260C
Lead	<0.0002	mg/L	SW846 6020B	1,4-Dichlorobenzene	<1	µg/L	SW846 8260C
PCB	<0.1	µg/L	SW846 8082A	2,2-Dichloropropane	<1	µg/L	SW846 8260C
1,1,1,2-Tetrachloroethane	<1	µg/L	SW846 8260C	2-Butanone (MEK)	<10	µg/L	SW846 8260C
1,1,1-Trichloroethane	<1	µg/L	SW846 8260C	2-Chloroethylvinyl Ether	<10	µg/L	SW846 8260C
1,1,2,2-Tetrachloroethane	<1	µg/L	SW846 8260C	2-Chlorotoluene	<1	µg/L	SW846 8260C
1,1,2-Trichloroethane	<1	µg/L	SW846 8260C	2-Hexanone (MBK)	<10	µg/L	SW846 8260C
1,1-Dichloroethane	<1	µg/L	SW846 8260C	4-Chlorotoluene	<1	µg/L	SW846 8260C
1,1-Dichloroethene	<1	µg/L	SW846 8260C	4-Isopropyltoluene	<1	µg/L	SW846 8260C
1,1-Dichloropropene	<1	µg/L	SW846 8260C	4-methyl-2-pentanone	<10	µg/L	SW846 8260C
1,2,3-Trichlorobenzene	<1	µg/L	SW846 8260C	Acetone	<10	µg/L	SW846 8260C
1,2,3-Trichloropropane	<1	µg/L	SW846 8260C	Acetonitrile	<10	µg/L	SW846 8260C
1,2,4-Trichlorobenzene	<1	µg/L	SW846 8260C	Acrolein	<10	µg/L	SW846 8260C
1,2,4-Trimethylbenzene	<1	µg/L	SW846 8260C	Acrylonitrile	<10	µg/L	SW846 8260C
1,2-Dibromo3Chloropropane	<10	µg/L	SW846 8260C	Benzene	<1	µg/L	SW846 8260C

*Nitrate analysis was subcontracted to Spectra Laboratories-Kitsap.

Surrogate	Recovery	Method	Surrogate	Recovery	Method
p-Terphenyl	146	NWTPH-D	Dibromofluoromethane	71	SW846 8260C
Toluene-d8	161	NWTPH-G	1,2-Dichloroethane-d4	87	SW846 8260C
4-Bromofluorobenzene	121	NWTPH-G	Toluene-d8	155	SW846 8260C
Decachlorobiphenyl	91	SW846 8082A	4-Bromofluorobenzene	129	SW846 8260C

SPECTRA LABORATORIES


Jeffrey Cooper, Laboratory Manager

a14/jac

07/25/2017

Petroleum Reclaiming Services, Inc.
3003 Taylor Way
Tacoma, WA 98421


Project: PRS
Client ID: SO-2A
Sample Matrix: Water
Date Sampled: 06/13/2017
Date Received: 06/14/2017
Spectra Project: 2017060394
Spectra Number:3

Analyte	Result	Units	Method	Analyte	Result	Units	Method
Bromobenzene	<1	µg/L	SW846 8260C	Styrene	<1	µg/L	SW846 8260C
Bromochloromethane	<1	µg/L	SW846 8260C	Tetrachloroethene	<1	µg/L	SW846 8260C
Bromodichloromethane	<1	µg/L	SW846 8260C	Toluene	<1	µg/L	SW846 8260C
Bromoform	<1	µg/L	SW846 8260C	Total Xylenes	<1	µg/L	SW846 8260C
Bromomethane	<1	µg/L	SW846 8260C	Trichloroethene	<1	µg/L	SW846 8260C
Carbon Disulfide	<10	µg/L	SW846 8260C	Trichlorofluoromethane	<1	µg/L	SW846 8260C
Carbon Tetrachloride	<1	µg/L	SW846 8260C	Vinyl Acetate	<10	µg/L	SW846 8260C
Chlorobenzene	<1	µg/L	SW846 8260C	Vinyl chloride	<0.2 J	µg/L	SW846 8260C
Chlorodibromomethane	<1	µg/L	SW846 8260C	cis-1,2-Dichloroethene	<1	µg/L	SW846 8260C
Chloroethane	<1	µg/L	SW846 8260C	cis-1,3-Dichloropropene	<1	µg/L	SW846 8260C
Chloroform	<1	µg/L	SW846 8260C	n-Butylbenzene	<1	µg/L	SW846 8260C
Chloromethane	<1	µg/L	SW846 8260C	n-Propylbenzene	<1	µg/L	SW846 8260C
Dibromomethane	<1	µg/L	SW846 8260C	sec-Butylbenzene	<1	µg/L	SW846 8260C
Dichlorodifluoromethane	<1	µg/L	SW846 8260C	tert-Butylbenzene	<1	µg/L	SW846 8260C
Ethylbenzene	<1	µg/L	SW846 8260C	trans-1,2-Dichloroethene	<1	µg/L	SW846 8260C
Hexachlorobutadiene	<1	µg/L	SW846 8260C	trans-1,3-Dichloropropene	<1	µg/L	SW846 8260C
Iodomethane	<10	µg/L	SW846 8260C				
Isopropylbenzene	<1	µg/L	SW846 8260C				
Methyl-tert-Butyl Ether	<1	µg/L	SW846 8260C				
Methylene chloride	<5	µg/L	SW846 8260C				
Naphthalene	<1	µg/L	SW846 8260C				

*Nitrate analysis was subcontracted to Spectra Laboratories-Kitsap.

Surrogate	Recovery	Method	Surrogate	Recovery	Method
p-Terphenyl	146	NWTPH-D	Dibromofluoromethane	71	SW846 8260C
Toluene-d8	161	NWTPH-G	1,2-Dichloroethane-d4	87	SW846 8260C
4-Bromofluorobenzene	121	NWTPH-G	Toluene-d8	155	SW846 8260C
Decachlorobiphenyl	91	SW846 8082A	4-Bromofluorobenzene	129	SW846 8260C

SPECTRA LABORATORIES


Jeffrey Cooper, Laboratory Manager
a14/jac

07/25/2017

Petroleum Reclaiming Services, Inc.
3003 Taylor Way
Tacoma, WA 98421


Project: PRS
Client ID: CO-3B
Sample Matrix: Water
Date Sampled: 06/13/2017
Date Received: 06/14/2017
Spectra Project: 2017060394
Spectra Number: 4

Analyte	Result	Units	Method	Analyte	Result	Units	Method
Diesel	<100	µg/L	NWTPH-D	1,2-Dibromoethane (EDB)	<1	µg/L	SW846 8260C
Oil	<500	µg/L	NWTPH-D	1,2-Dichlorobenzene	<1	µg/L	SW846 8260C
Gasoline	<50	µg/L	NWTPH-G	1,2-Dichloroethane	<1	µg/L	SW846 8260C
Nitrate	0.13 *	mg/L-N	SM 4500-NO3 F	1,2-Dichloropropane	<1	µg/L	SW846 8260C
Sulfate	12.7	mg/L	SM 4500-SO4 ⁻ E	1,3,5-Trimethylbenzene	<1	µg/L	SW846 8260C
Arsenic	0.012	mg/L	SW846 6020B	1,3-Dichlorobenzene	<1	µg/L	SW846 8260C
Chromium	0.0056	mg/L	SW846 6020B	1,3-Dichloropropane	<1	µg/L	SW846 8260C
Lead	< 0.0002	mg/L	SW846 6020B	1,4-Dichlorobenzene	<1	µg/L	SW846 8260C
PCB	<0.1	µg/L	SW846 8082A	2,2-Dichloropropane	<1	µg/L	SW846 8260C
1,1,1,2-Tetrachloroethane	<1	µg/L	SW846 8260C	2-Butanone (MEK)	<10	µg/L	SW846 8260C
1,1,1-Trichloroethane	<1	µg/L	SW846 8260C	2-Chloroethylvinyl Ether	<10	µg/L	SW846 8260C
1,1,2,2-Tetrachloroethane	<1	µg/L	SW846 8260C	2-Chlorotoluene	<1	µg/L	SW846 8260C
1,1,2-Trichloroethane	<1	µg/L	SW846 8260C	2-Hexanone (MBK)	<10	µg/L	SW846 8260C
1,1-Dichloroethane	<1	µg/L	SW846 8260C	4-Chlorotoluene	<1	µg/L	SW846 8260C
1,1-Dichloroethene	<1	µg/L	SW846 8260C	4-Isopropyltoluene	<1	µg/L	SW846 8260C
1,1-Dichloropropene	<1	µg/L	SW846 8260C	4-methyl-2-pentanone	<10	µg/L	SW846 8260C
1,2,3-Trichlorobenzene	<1	µg/L	SW846 8260C	Acetone	<10	µg/L	SW846 8260C
1,2,3-Trichloropropane	<1	µg/L	SW846 8260C	Acetonitrile	<10	µg/L	SW846 8260C
1,2,4-Trichlorobenzene	<1	µg/L	SW846 8260C	Acrolein	<10	µg/L	SW846 8260C
1,2,4-Trimethylbenzene	<1	µg/L	SW846 8260C	Acrylonitrile	<10	µg/L	SW846 8260C
1,2-Dibromo3Chloropropane	<10	µg/L	SW846 8260C	Benzene	<1	µg/L	SW846 8260C

*Nitrate analysis was subcontracted to Spectra Laboratories-Kitsap.

Surrogate	Recovery	Method	Surrogate	Recovery	Method
p-Terphenyl	105	NWTPH-D	Dibromofluoromethane	72	SW846 8260C
Toluene-d8	161	NWTPH-G	1,2-Dichloroethane-d4	92	SW846 8260C
4-Bromofluorobenzene	129	NWTPH-G	Toluene-d8	156	SW846 8260C
Decachlorobiphenyl	100	SW846 8082A	4-Bromofluorobenzene	137	SW846 8260C

SPECTRA LABORATORIES


Jeffrey Cooper, Laboratory Manager
a14/jac

07/25/2017

Petroleum Reclaiming Services, Inc.
3003 Taylor Way
Tacoma, WA 98421


Project: PRS
Client ID: CO-3B
Sample Matrix: Water
Date Sampled: 06/13/2017
Date Received: 06/14/2017
Spectra Project: 2017060394
Spectra Number: 4

Analyte	Result	Units	Method	Analyte	Result	Units	Method
Bromobenzene	<1	µg/L	SW846 8260C	Styrene	<1	µg/L	SW846 8260C
Bromochloromethane	<1	µg/L	SW846 8260C	Tetrachloroethene	<1	µg/L	SW846 8260C
Bromodichloromethane	<1	µg/L	SW846 8260C	Toluene	<1	µg/L	SW846 8260C
Bromoform	<1	µg/L	SW846 8260C	Total Xylenes	<1	µg/L	SW846 8260C
Bromomethane	<1	µg/L	SW846 8260C	Trichloroethene	<1	µg/L	SW846 8260C
Carbon Disulfide	<10	µg/L	SW846 8260C	Trichlorofluoromethane	<1	µg/L	SW846 8260C
Carbon Tetrachloride	<1	µg/L	SW846 8260C	Vinyl Acetate	<10	µg/L	SW846 8260C
Chlorobenzene	<1	µg/L	SW846 8260C	Vinyl chloride	<0.2 J	µg/L	SW846 8260C
Chlorodibromomethane	<1	µg/L	SW846 8260C	cis-1,2-Dichloroethene	<1	µg/L	SW846 8260C
Chloroethane	<1	µg/L	SW846 8260C	cis-1,3-Dichloropropene	<1	µg/L	SW846 8260C
Chloroform	<1	µg/L	SW846 8260C	n-Butylbenzene	<1	µg/L	SW846 8260C
Chloromethane	<1	µg/L	SW846 8260C	n-Propylbenzene	<1	µg/L	SW846 8260C
Dibromomethane	<1	µg/L	SW846 8260C	sec-Butylbenzene	<1	µg/L	SW846 8260C
Dichlorodifluoromethane	<1	µg/L	SW846 8260C	tert-Butylbenzene	<1	µg/L	SW846 8260C
Ethylbenzene	<1	µg/L	SW846 8260C	trans-1,2-Dichloroethene	<1	µg/L	SW846 8260C
Hexachlorobutadiene	<1	µg/L	SW846 8260C	trans-1,3-Dichloropropene	<1	µg/L	SW846 8260C
Iodomethane	<10	µg/L	SW846 8260C				
Isopropylbenzene	<1	µg/L	SW846 8260C				
Methyl-tert-Butyl Ether	<1	µg/L	SW846 8260C				
Methylene chloride	<5	µg/L	SW846 8260C				
Naphthalene	<1	µg/L	SW846 8260C				

*Nitrate analysis was subcontracted to Spectra Laboratories-Kitsap.

Surrogate	Recovery	Method	Surrogate	Recovery	Method
p-Terphenyl	105	NWTPH-D	Dibromofluoromethane	72	SW846 8260C
Toluene-d8	161	NWTPH-G	1,2-Dichloroethane-d4	92	SW846 8260C
4-Bromofluorobenzene	129	NWTPH-G	Toluene-d8	156	SW846 8260C
Decachlorobiphenyl	100	SW846 8082A	4-Bromofluorobenzene	137	SW846 8260C

SPECTRA LABORATORIES


Jeffrey Cooper, Laboratory Manager
a14/jac

07/25/2017

Petroleum Reclaiming Services, Inc.
3003 Taylor Way
Tacoma, WA 98421


Project: PRS
Client ID: CO-3A
Sample Matrix: Water
Date Sampled: 06/13/2017
Date Received: 06/14/2017
Spectra Project: 2017060394
Spectra Number: 5

Analyte	Result	Units	Method	Analyte	Result	Units	Method
Diesel	<100	µg/L	NWTPH-D	1,2-Dibromoethane (EDB)	<1	µg/L	SW846 8260C
Oil	<500	µg/L	NWTPH-D	1,2-Dichlorobenzene	<1	µg/L	SW846 8260C
Gasoline	<50	µg/L	NWTPH-G	1,2-Dichloroethane	<1	µg/L	SW846 8260C
Nitrate	<0.01 *	mg/L-N	SM 4500-NO3 F	1,2-Dichloropropane	<1	µg/L	SW846 8260C
Sulfate	2.0	mg/L	SM 4500-SO4 ⁻ E	1,3,5-Trimethylbenzene	<1	µg/L	SW846 8260C
Arsenic	0.011	mg/L	SW846 6020B	1,3-Dichlorobenzene	<1	µg/L	SW846 8260C
Chromium	0.0012	mg/L	SW846 6020B	1,3-Dichloropropane	<1	µg/L	SW846 8260C
Lead	< 0.0002	mg/L	SW846 6020B	1,4-Dichlorobenzene	<1	µg/L	SW846 8260C
PCB	<0.1	µg/L	SW846 8082A	2,2-Dichloropropane	<1	µg/L	SW846 8260C
1,1,1,2-Tetrachloroethane	<1	µg/L	SW846 8260C	2-Butanone (MEK)	<10	µg/L	SW846 8260C
1,1,1-Trichloroethane	<1	µg/L	SW846 8260C	2-Chloroethylvinyl Ether	<10	µg/L	SW846 8260C
1,1,2,2-Tetrachloroethane	<1	µg/L	SW846 8260C	2-Chlorotoluene	<1	µg/L	SW846 8260C
1,1,2-Trichloroethane	<1	µg/L	SW846 8260C	2-Hexanone (MBK)	<10	µg/L	SW846 8260C
1,1-Dichloroethane	<1	µg/L	SW846 8260C	4-Chlorotoluene	<1	µg/L	SW846 8260C
1,1-Dichloroethene	<1	µg/L	SW846 8260C	4-Isopropyltoluene	<1	µg/L	SW846 8260C
1,1-Dichloropropene	<1	µg/L	SW846 8260C	4-methyl-2-pentanone	<10	µg/L	SW846 8260C
1,2,3-Trichlorobenzene	<1	µg/L	SW846 8260C	Acetone	<10	µg/L	SW846 8260C
1,2,3-Trichloropropane	<1	µg/L	SW846 8260C	Acetonitrile	<10	µg/L	SW846 8260C
1,2,4-Trichlorobenzene	<1	µg/L	SW846 8260C	Acrolein	<10	µg/L	SW846 8260C
1,2,4-Trimethylbenzene	<1	µg/L	SW846 8260C	Acrylonitrile	<10	µg/L	SW846 8260C
1,2-Dibromo3Chloropropane	<10	µg/L	SW846 8260C	Benzene	<1	µg/L	SW846 8260C

*Nitrate analysis was subcontracted to Spectra Laboratories-Kitsap.

Surrogate	Recovery	Method	Surrogate	Recovery	Method
p-Terphenyl	89	NWTPH-D	Dibromofluoromethane	73	SW846 8260C
Toluene-d8	160	NWTPH-G	1,2-Dichloroethane-d4	94	SW846 8260C
4-Bromofluorobenzene	122	NWTPH-G	Toluene-d8	154	SW846 8260C
Decachlorobiphenyl	94	SW846 8082A	4-Bromofluorobenzene	131	SW846 8260C

SPECTRA LABORATORIES


Jeffrey Cooper, Laboratory Manager
a14/jac

07/25/2017

Petroleum Reclaiming Services, Inc.
3003 Taylor Way
Tacoma, WA 98421


Project: PRS
Client ID: CO-3A
Sample Matrix: Water
Date Sampled: 06/13/2017
Date Received: 06/14/2017
Spectra Project: 2017060394
Spectra Number: 5

Analyte	Result	Units	Method	Analyte	Result	Units	Method
Bromobenzene	<1	µg/L	SW846 8260C	Styrene	<1	µg/L	SW846 8260C
Bromochloromethane	<1	µg/L	SW846 8260C	Tetrachloroethene	<1	µg/L	SW846 8260C
Bromodichloromethane	<1	µg/L	SW846 8260C	Toluene	<1	µg/L	SW846 8260C
Bromoform	<1	µg/L	SW846 8260C	Total Xylenes	<1	µg/L	SW846 8260C
Bromomethane	<1	µg/L	SW846 8260C	Trichloroethene	<1	µg/L	SW846 8260C
Carbon Disulfide	<10	µg/L	SW846 8260C	Trichlorofluoromethane	<1	µg/L	SW846 8260C
Carbon Tetrachloride	<1	µg/L	SW846 8260C	Vinyl Acetate	<10	µg/L	SW846 8260C
Chlorobenzene	<1	µg/L	SW846 8260C	Vinyl chloride	<0.2 J	µg/L	SW846 8260C
Chlorodibromomethane	<1	µg/L	SW846 8260C	cis-1,2-Dichloroethene	<1	µg/L	SW846 8260C
Chloroethane	<1	µg/L	SW846 8260C	cis-1,3-Dichloropropene	<1	µg/L	SW846 8260C
Chloroform	<1	µg/L	SW846 8260C	n-Butylbenzene	<1	µg/L	SW846 8260C
Chloromethane	<1	µg/L	SW846 8260C	n-Propylbenzene	<1	µg/L	SW846 8260C
Dibromomethane	<1	µg/L	SW846 8260C	sec-Butylbenzene	<1	µg/L	SW846 8260C
Dichlorodifluoromethane	<1	µg/L	SW846 8260C	tert-Butylbenzene	<1	µg/L	SW846 8260C
Ethylbenzene	<1	µg/L	SW846 8260C	trans-1,2-Dichloroethene	<1	µg/L	SW846 8260C
Hexachlorobutadiene	<1	µg/L	SW846 8260C	trans-1,3-Dichloropropene	<1	µg/L	SW846 8260C
Iodomethane	<10	µg/L	SW846 8260C				
Isopropylbenzene	<1	µg/L	SW846 8260C				
Methyl-tert-Butyl Ether	<1	µg/L	SW846 8260C				
Methylene chloride	<5	µg/L	SW846 8260C				
Naphthalene	<1	µg/L	SW846 8260C				

*Nitrate analysis was subcontracted to Spectra Laboratories-Kitsap.

Surrogate	Recovery	Method	Surrogate	Recovery	Method
p-Terphenyl	89	NWTPH-D	Dibromofluoromethane	73	SW846 8260C
Toluene-d8	160	NWTPH-G	1,2-Dichloroethane-d4	94	SW846 8260C
4-Bromofluorobenzene	122	NWTPH-G	Toluene-d8	154	SW846 8260C
Decachlorobiphenyl	94	SW846 8082A	4-Bromofluorobenzene	131	SW846 8260C

SPECTRA LABORATORIES


Jeffrey Cooper, Laboratory Manager
a14/jac

07/25/2017

Petroleum Reclaiming Services, Inc.
3003 Taylor Way
Tacoma, WA 98421


Project: PRS
Client ID: SO-4B
Sample Matrix: Water
Date Sampled: 06/13/2017
Date Received: 06/14/2017
Spectra Project: 2017060394
Spectra Number:6

Analyte	Result	Units	Method	Analyte	Result	Units	Method
Diesel	470	µg/L	NWTPH-D	1,2-Dibromoethane (EDB)	<1	µg/L	SW846 8260C
Oil	<500	µg/L	NWTPH-D	1,2-Dichlorobenzene	<1	µg/L	SW846 8260C
Gasoline	<50	µg/L	NWTPH-G	1,2-Dichloroethane	<1	µg/L	SW846 8260C
Nitrate	<0.01 *	mg/L-N	SM 4500-NO3 F	1,2-Dichloropropane	<1	µg/L	SW846 8260C
Sulfate	4.8	mg/L	SM 4500-SO4 ⁻ E	1,3,5-Trimethylbenzene	<1	µg/L	SW846 8260C
Arsenic	0.026	mg/L	SW846 6020B	1,3-Dichlorobenzene	<1	µg/L	SW846 8260C
Chromium	0.012	mg/L	SW846 6020B	1,3-Dichloropropane	<1	µg/L	SW846 8260C
Lead	< 0.0002	mg/L	SW846 6020B	1,4-Dichlorobenzene	<1	µg/L	SW846 8260C
PCB	<0.1	µg/L	SW846 8082A	2,2-Dichloropropane	<1	µg/L	SW846 8260C
1,1,1,2-Tetrachloroethane	<1	µg/L	SW846 8260C	2-Butanone (MEK)	<10	µg/L	SW846 8260C
1,1,1-Trichloroethane	<1	µg/L	SW846 8260C	2-Chloroethylvinyl Ether	<10	µg/L	SW846 8260C
1,1,2,2-Tetrachloroethane	<1	µg/L	SW846 8260C	2-Chlorotoluene	<1	µg/L	SW846 8260C
1,1,2-Trichloroethane	<1	µg/L	SW846 8260C	2-Hexanone (MBK)	<10	µg/L	SW846 8260C
1,1-Dichloroethane	<1	µg/L	SW846 8260C	4-Chlorotoluene	<1	µg/L	SW846 8260C
1,1-Dichloroethene	<1	µg/L	SW846 8260C	4-Isopropyltoluene	<1	µg/L	SW846 8260C
1,1-Dichloropropene	<1	µg/L	SW846 8260C	4-methyl-2-pentanone	<10	µg/L	SW846 8260C
1,2,3-Trichlorobenzene	<1	µg/L	SW846 8260C	Acetone	<10	µg/L	SW846 8260C
1,2,3-Trichloropropane	<1	µg/L	SW846 8260C	Acetonitrile	<10	µg/L	SW846 8260C
1,2,4-Trichlorobenzene	<1	µg/L	SW846 8260C	Acrolein	<10	µg/L	SW846 8260C
1,2,4-Trimethylbenzene	<1	µg/L	SW846 8260C	Acrylonitrile	<10	µg/L	SW846 8260C
1,2-Dibromo3Chloropropane	<10	µg/L	SW846 8260C	Benzene	<1	µg/L	SW846 8260C

*Nitrate analysis was subcontracted to Spectra Laboratories-Kitsap.

Surrogate	Recovery	Method	Surrogate	Recovery	Method
p-Terphenyl	95	NWTPH-D	Dibromofluoromethane	73	SW846 8260C
Toluene-d8	156	NWTPH-G	1,2-Dichloroethane-d4	91	SW846 8260C
4-Bromofluorobenzene	122	NWTPH-G	Toluene-d8	151	SW846 8260C
Decachlorobiphenyl	94	SW846 8082A	4-Bromofluorobenzene	131	SW846 8260C

SPECTRA LABORATORIES


Jeffrey Cooper, Laboratory Manager
a14/jac

07/25/2017

Petroleum Reclaiming Services, Inc.
3003 Taylor Way
Tacoma, WA 98421


Project: PRS
Client ID: SO-4B
Sample Matrix: Water
Date Sampled: 06/13/2017
Date Received: 06/14/2017
Spectra Project: 2017060394
Spectra Number: 6

Analyte	Result	Units	Method	Analyte	Result	Units	Method
Bromobenzene	<1	µg/L	SW846 8260C	Styrene	<1	µg/L	SW846 8260C
Bromochloromethane	<1	µg/L	SW846 8260C	Tetrachloroethene	<1	µg/L	SW846 8260C
Bromodichloromethane	<1	µg/L	SW846 8260C	Toluene	<1	µg/L	SW846 8260C
Bromoform	<1	µg/L	SW846 8260C	Total Xylenes	<1	µg/L	SW846 8260C
Bromomethane	<1	µg/L	SW846 8260C	Trichloroethene	<1	µg/L	SW846 8260C
Carbon Disulfide	<10	µg/L	SW846 8260C	Trichlorofluoromethane	<1	µg/L	SW846 8260C
Carbon Tetrachloride	<1	µg/L	SW846 8260C	Vinyl Acetate	<10	µg/L	SW846 8260C
Chlorobenzene	<1	µg/L	SW846 8260C	Vinyl chloride	<0.2 J	µg/L	SW846 8260C
Chlorodibromomethane	<1	µg/L	SW846 8260C	cis-1,2-Dichloroethene	<1	µg/L	SW846 8260C
Chloroethane	<1	µg/L	SW846 8260C	cis-1,3-Dichloropropene	<1	µg/L	SW846 8260C
Chloroform	<1	µg/L	SW846 8260C	n-Butylbenzene	<1	µg/L	SW846 8260C
Chloromethane	<1	µg/L	SW846 8260C	n-Propylbenzene	<1	µg/L	SW846 8260C
Dibromomethane	<1	µg/L	SW846 8260C	sec-Butylbenzene	<1	µg/L	SW846 8260C
Dichlorodifluoromethane	<1	µg/L	SW846 8260C	tert-Butylbenzene	<1	µg/L	SW846 8260C
Ethylbenzene	<1	µg/L	SW846 8260C	trans-1,2-Dichloroethene	<1	µg/L	SW846 8260C
Hexachlorobutadiene	<1	µg/L	SW846 8260C	trans-1,3-Dichloropropene	<1	µg/L	SW846 8260C
Iodomethane	<10	µg/L	SW846 8260C				
Isopropylbenzene	<1	µg/L	SW846 8260C				
Methyl-tert-Butyl Ether	<1	µg/L	SW846 8260C				
Methylene chloride	<5	µg/L	SW846 8260C				
Naphthalene	<1	µg/L	SW846 8260C				

*Nitrate analysis was subcontracted to Spectra Laboratories-Kitsap.

Surrogate	Recovery	Method	Surrogate	Recovery	Method
p-Terphenyl	95	NWTPH-D	Dibromofluoromethane	73	SW846 8260C
Toluene-d8	156	NWTPH-G	1,2-Dichloroethane-d4	91	SW846 8260C
4-Bromofluorobenzene	122	NWTPH-G	Toluene-d8	151	SW846 8260C
Decachlorobiphenyl	94	SW846 8082A	4-Bromofluorobenzene	131	SW846 8260C

SPECTRA LABORATORIES


Jeffrey Cooper, Laboratory Manager
a14/jac

07/25/2017

Petroleum Reclaiming Services, Inc.
3003 Taylor Way
Tacoma, WA 98421


Project: PRS
Client ID: SO-4A
Sample Matrix: Water
Date Sampled: 06/13/2017
Date Received: 06/14/2017
Spectra Project: 2017060394
Spectra Number: 7

Analyte	Result	Units	Method	Analyte	Result	Units	Method
Diesel	<100	µg/L	NWTPH-D	1,2-Dibromoethane (EDB)	<1	µg/L	SW846 8260C
Oil	<500	µg/L	NWTPH-D	1,2-Dichlorobenzene	<1	µg/L	SW846 8260C
Gasoline	<50	µg/L	NWTPH-G	1,2-Dichloroethane	<1	µg/L	SW846 8260C
Nitrate	<0.01 *	mg/L-N	SM 4500-NO3 F	1,2-Dichloropropane	<1	µg/L	SW846 8260C
Sulfate	22.9	mg/L	SM 4500-SO4 ⁻ E	1,3,5-Trimethylbenzene	<1	µg/L	SW846 8260C
Arsenic	0.555	mg/L	SW846 6020B	1,3-Dichlorobenzene	1.3	µg/L	SW846 8260C
Chromium	0.0011	mg/L	SW846 6020B	1,3-Dichloropropane	<1	µg/L	SW846 8260C
Lead	< 0.0002	mg/L	SW846 6020B	1,4-Dichlorobenzene	1.6	µg/L	SW846 8260C
PCB	<0.1	µg/L	SW846 8082A	2,2-Dichloropropane	<1	µg/L	SW846 8260C
1,1,1,2-Tetrachloroethane	<1	µg/L	SW846 8260C	2-Butanone (MEK)	<10	µg/L	SW846 8260C
1,1,1-Trichloroethane	<1	µg/L	SW846 8260C	2-Chloroethylvinyl Ether	<10	µg/L	SW846 8260C
1,1,2,2-Tetrachloroethane	<1	µg/L	SW846 8260C	2-Chlorotoluene	<1	µg/L	SW846 8260C
1,1,2-Trichloroethane	<1	µg/L	SW846 8260C	2-Hexanone (MBK)	<10	µg/L	SW846 8260C
1,1-Dichloroethane	<1	µg/L	SW846 8260C	4-Chlorotoluene	<1	µg/L	SW846 8260C
1,1-Dichloroethene	<1	µg/L	SW846 8260C	4-Isopropyltoluene	<1	µg/L	SW846 8260C
1,1-Dichloropropene	<1	µg/L	SW846 8260C	4-methyl-2-pentanone	<10	µg/L	SW846 8260C
1,2,3-Trichlorobenzene	<1	µg/L	SW846 8260C	Acetone	<10	µg/L	SW846 8260C
1,2,3-Trichloropropane	<1	µg/L	SW846 8260C	Acetonitrile	<10	µg/L	SW846 8260C
1,2,4-Trichlorobenzene	<1	µg/L	SW846 8260C	Acrolein	<10	µg/L	SW846 8260C
1,2,4-Trimethylbenzene	<1	µg/L	SW846 8260C	Acrylonitrile	<10	µg/L	SW846 8260C
1,2-Dibromo3Chloropropane	<10	µg/L	SW846 8260C	Benzene	<1	µg/L	SW846 8260C

*Nitrate analysis was subcontracted to Spectra Laboratories-Kitsap.

Surrogate	Recovery	Method	Surrogate	Recovery	Method
p-Terphenyl	100	NWTPH-D	Dibromofluoromethane	71	SW846 8260C
Toluene-d8	156	NWTPH-G	1,2-Dichloroethane-d4	88	SW846 8260C
4-Bromofluorobenzene	118	NWTPH-G	Toluene-d8	151	SW846 8260C
Decachlorobiphenyl	92	SW846 8082A	4-Bromofluorobenzene	125	SW846 8260C

SPECTRA LABORATORIES


Jeffrey Cooper, Laboratory Manager
a14/jac

07/25/2017

Petroleum Reclaiming Services, Inc.
3003 Taylor Way
Tacoma, WA 98421


Project: PRS
Client ID: SO-4A
Sample Matrix: Water
Date Sampled: 06/13/2017
Date Received: 06/14/2017
Spectra Project: 2017060394
Spectra Number: 7

Analyte	Result	Units	Method	Analyte	Result	Units	Method
Bromobenzene	<1	µg/L	SW846 8260C	Styrene	<1	µg/L	SW846 8260C
Bromochloromethane	<1	µg/L	SW846 8260C	Tetrachloroethene	<1	µg/L	SW846 8260C
Bromodichloromethane	<1	µg/L	SW846 8260C	Toluene	<1	µg/L	SW846 8260C
Bromoform	<1	µg/L	SW846 8260C	Total Xylenes	<1	µg/L	SW846 8260C
Bromomethane	<1	µg/L	SW846 8260C	Trichloroethene	<1	µg/L	SW846 8260C
Carbon Disulfide	<10	µg/L	SW846 8260C	Trichlorofluoromethane	<1	µg/L	SW846 8260C
Carbon Tetrachloride	<1	µg/L	SW846 8260C	Vinyl Acetate	<10	µg/L	SW846 8260C
Chlorobenzene	10.8	µg/L	SW846 8260C	Vinyl chloride	<0.2 J	µg/L	SW846 8260C
Chlorodibromomethane	<1	µg/L	SW846 8260C	cis-1,2-Dichloroethene	1.3	µg/L	SW846 8260C
Chloroethane	<1	µg/L	SW846 8260C	cis-1,3-Dichloropropene	<1	µg/L	SW846 8260C
Chloroform	<1	µg/L	SW846 8260C	n-Butylbenzene	<1	µg/L	SW846 8260C
Chloromethane	<1	µg/L	SW846 8260C	n-Propylbenzene	<1	µg/L	SW846 8260C
Dibromomethane	<1	µg/L	SW846 8260C	sec-Butylbenzene	<1	µg/L	SW846 8260C
Dichlorodifluoromethane	<1	µg/L	SW846 8260C	tert-Butylbenzene	<1	µg/L	SW846 8260C
Ethylbenzene	<1	µg/L	SW846 8260C	trans-1,2-Dichloroethene	<1	µg/L	SW846 8260C
Hexachlorobutadiene	<1	µg/L	SW846 8260C	trans-1,3-Dichloropropene	<1	µg/L	SW846 8260C
Iodomethane	<10	µg/L	SW846 8260C				
Isopropylbenzene	<1	µg/L	SW846 8260C				
Methyl-tert-Butyl Ether	<1	µg/L	SW846 8260C				
Methylene chloride	<5	µg/L	SW846 8260C				
Naphthalene	<1	µg/L	SW846 8260C				

*Nitrate analysis was subcontracted to Spectra Laboratories-Kitsap.

Surrogate	Recovery	Method	Surrogate	Recovery	Method
p-Terphenyl	100	NWTPH-D	Dibromofluoromethane	71	SW846 8260C
Toluene-d8	156	NWTPH-G	1,2-Dichloroethane-d4	88	SW846 8260C
4-Bromofluorobenzene	118	NWTPH-G	Toluene-d8	151	SW846 8260C
Decachlorobiphenyl	92	SW846 8082A	4-Bromofluorobenzene	125	SW846 8260C

SPECTRA LABORATORIES


Jeffrey Cooper, Laboratory Manager
a14/jac

07/25/2017

Petroleum Reclaiming Services, Inc.
3003 Taylor Way
Tacoma, WA 98421


Project: PRS
Client ID: MW-1A
Sample Matrix: Water
Date Sampled: 06/13/2017
Date Received: 06/14/2017
Spectra Project: 2017060394
Spectra Number:8

Analyte	Result	Units	Method	Analyte	Result	Units	Method
Diesel	3200	µg/L	NWTPH-D	1,2-Dibromoethane (EDB)	<1	µg/L	SW846 8260C
Oil	1300	µg/L	NWTPH-D	1,2-Dichlorobenzene	<1	µg/L	SW846 8260C
Gasoline	<50	µg/L	NWTPH-G	1,2-Dichloroethane	<1	µg/L	SW846 8260C
Nitrate	0.06 *	mg/L-N	SM 4500-NO3 F	1,2-Dichloropropane	<1	µg/L	SW846 8260C
Sulfate	58.8	mg/L	SM 4500-SO4 ⁻ E	1,3,5-Trimethylbenzene	<1	µg/L	SW846 8260C
Arsenic	0.046	mg/L	SW846 6020B	1,3-Dichlorobenzene	<1	µg/L	SW846 8260C
Chromium	0.0036	mg/L	SW846 6020B	1,3-Dichloropropane	<1	µg/L	SW846 8260C
Lead	< 0.0002	mg/L	SW846 6020B	1,4-Dichlorobenzene	<1	µg/L	SW846 8260C
PCB	<0.1	µg/L	SW846 8082A	2,2-Dichloropropane	<1	µg/L	SW846 8260C
1,1,1,2-Tetrachloroethane	<1	µg/L	SW846 8260C	2-Butanone (MEK)	<10	µg/L	SW846 8260C
1,1,1-Trichloroethane	<1	µg/L	SW846 8260C	2-Chloroethylvinyl Ether	<10	µg/L	SW846 8260C
1,1,2,2-Tetrachloroethane	<1	µg/L	SW846 8260C	2-Chlorotoluene	<1	µg/L	SW846 8260C
1,1,2-Trichloroethane	<1	µg/L	SW846 8260C	2-Hexanone (MBK)	<10	µg/L	SW846 8260C
1,1-Dichloroethane	<1	µg/L	SW846 8260C	4-Chlorotoluene	<1	µg/L	SW846 8260C
1,1-Dichloroethene	<1	µg/L	SW846 8260C	4-Isopropyltoluene	<1	µg/L	SW846 8260C
1,1-Dichloropropene	<1	µg/L	SW846 8260C	4-methyl-2-pentanone	<10	µg/L	SW846 8260C
1,2,3-Trichlorobenzene	<1	µg/L	SW846 8260C	Acetone	<10	µg/L	SW846 8260C
1,2,3-Trichloropropane	<1	µg/L	SW846 8260C	Acetonitrile	<10	µg/L	SW846 8260C
1,2,4-Trichlorobenzene	<1	µg/L	SW846 8260C	Acrolein	<10	µg/L	SW846 8260C
1,2,4-Trimethylbenzene	<1	µg/L	SW846 8260C	Acrylonitrile	<10	µg/L	SW846 8260C
1,2-Dibromo3Chloropropane	<10	µg/L	SW846 8260C	Benzene	<1	µg/L	SW846 8260C

*Nitrate analysis was subcontracted to Spectra Laboratories-Kitsap.

Surrogate	Recovery	Method	Surrogate	Recovery	Method
p-Terphenyl	86	NWTPH-D	Dibromofluoromethane	72	SW846 8260C
Toluene-d8	158	NWTPH-G	1,2-Dichloroethane-d4	88	SW846 8260C
4-Bromofluorobenzene	121	NWTPH-G	Toluene-d8	153	SW846 8260C
Decachlorobiphenyl	97	SW846 8082A	4-Bromofluorobenzene	127	SW846 8260C

SPECTRA LABORATORIES


Jeffrey Cooper, Laboratory Manager
n14/jac

07/25/2017

Petroleum Reclaiming Services, Inc.
3003 Taylor Way
Tacoma, WA 98421


Project: PRS
Client ID: MW-1A
Sample Matrix: Water
Date Sampled: 06/13/2017
Date Received: 06/14/2017
Spectra Project: 2017060394
Spectra Number: 8

Analyte	Result	Units	Method	Analyte	Result	Units	Method
Bromobenzene	<1	µg/L	SW846 8260C	Styrene	<1	µg/L	SW846 8260C
Bromochloromethane	<1	µg/L	SW846 8260C	Tetrachloroethene	<1	µg/L	SW846 8260C
Bromodichloromethane	<1	µg/L	SW846 8260C	Toluene	<1	µg/L	SW846 8260C
Bromoform	<1	µg/L	SW846 8260C	Total Xylenes	<1	µg/L	SW846 8260C
Bromomethane	<1	µg/L	SW846 8260C	Trichloroethene	<1	µg/L	SW846 8260C
Carbon Disulfide	<10	µg/L	SW846 8260C	Trichlorofluoromethane	<1	µg/L	SW846 8260C
Carbon Tetrachloride	<1	µg/L	SW846 8260C	Vinyl Acetate	<10	µg/L	SW846 8260C
Chlorobenzene	<1	µg/L	SW846 8260C	Vinyl chloride	<0.2 J	µg/L	SW846 8260C
Chlorodibromomethane	<1	µg/L	SW846 8260C	cis-1,2-Dichloroethene	<1	µg/L	SW846 8260C
Chloroethane	<1	µg/L	SW846 8260C	cis-1,3-Dichloropropene	<1	µg/L	SW846 8260C
Chloroform	<1	µg/L	SW846 8260C	n-Butylbenzene	<1	µg/L	SW846 8260C
Chloromethane	<1	µg/L	SW846 8260C	n-Propylbenzene	<1	µg/L	SW846 8260C
Dibromomethane	<1	µg/L	SW846 8260C	sec-Butylbenzene	<1	µg/L	SW846 8260C
Dichlorodifluoromethane	<1	µg/L	SW846 8260C	tert-Butylbenzene	<1	µg/L	SW846 8260C
Ethylbenzene	<1	µg/L	SW846 8260C	trans-1,2-Dichloroethene	<1	µg/L	SW846 8260C
Hexachlorobutadiene	<1	µg/L	SW846 8260C	trans-1,3-Dichloropropene	<1	µg/L	SW846 8260C
Iodomethane	<10	µg/L	SW846 8260C				
Isopropylbenzene	<1	µg/L	SW846 8260C				
Methyl-tert-Butyl Ether	3.8	µg/L	SW846 8260C				
Methylene chloride	<5	µg/L	SW846 8260C				
Naphthalene	<1	µg/L	SW846 8260C				

*Nitrate analysis was subcontracted to Spectra Laboratories-Kitsap.

Surrogate	Recovery	Method	Surrogate	Recovery	Method
p-Terphenyl	86	NWTPH-D	Dibromofluoromethane	72	SW846 8260C
Toluene-d8	158	NWTPH-G	1,2-Dichloroethane-d4	88	SW846 8260C
4-Bromofluorobenzene	121	NWTPH-G	Toluene-d8	153	SW846 8260C
Decachlorobiphenyl	97	SW846 8082A	4-Bromofluorobenzene	127	SW846 8260C

SPECTRA LABORATORIES


Jeffrey Cooper, Laboratory Manager
a14/jac

07/25/2017

Petroleum Reclaiming Services, Inc.
3003 Taylor Way
Tacoma, WA 98421

Project: PRS
Client ID: MW-1B
Sample Matrix: Water
Date Sampled: 06/13/2017
Date Received: 06/14/2017
Spectra Project: 2017060394
Spectra Number: 9

Analyte	Result	Units	Method	Analyte	Result	Units	Method
Diesel	<100	µg/L	NWTPH-D	1,2-Dibromoethane (EDB)	<1	µg/L	SW846 8260C
Oil	620	µg/L	NWTPH-D	1,2-Dichlorobenzene	<1	µg/L	SW846 8260C
Gasoline	<50	µg/L	NWTPH-G	1,2-Dichloroethane	<1	µg/L	SW846 8260C
Nitrate	0.02 *	mg/L-N	SM 4500-NO3 F	1,2-Dichloropropane	<1	µg/L	SW846 8260C
Sulfate	<2.0	mg/L	SM 4500-SO4 ⁻ E	1,3,5-Trimethylbenzene	<1	µg/L	SW846 8260C
Arsenic	0.003	mg/L	SW846 6020B	1,3-Dichlorobenzene	<1	µg/L	SW846 8260C
Chromium	0.019	mg/L	SW846 6020B	1,3-Dichloropropane	<1	µg/L	SW846 8260C
Lead	< 0.0002	mg/L	SW846 6020B	1,4-Dichlorobenzene	<1	µg/L	SW846 8260C
PCB	<0.1	µg/L	SW846 8082A	2,2-Dichloropropane	<1	µg/L	SW846 8260C
1,1,1,2-Tetrachloroethane	<1	µg/L	SW846 8260C	2-Butanone (MEK)	<10	µg/L	SW846 8260C
1,1,1-Trichloroethane	<1	µg/L	SW846 8260C	2-Chloroethylvinyl Ether	<10	µg/L	SW846 8260C
1,1,2,2-Tetrachloroethane	<1	µg/L	SW846 8260C	2-Chlorotoluene	<1	µg/L	SW846 8260C
1,1,2-Trichloroethane	<1	µg/L	SW846 8260C	2-Hexanone (MBK)	<10	µg/L	SW846 8260C
1,1-Dichloroethane	<1	µg/L	SW846 8260C	4-Chlorotoluene	<1	µg/L	SW846 8260C
1,1-Dichloroethene	<1	µg/L	SW846 8260C	4-Isopropyltoluene	<1	µg/L	SW846 8260C
1,1-Dichloropropene	<1	µg/L	SW846 8260C	4-methyl-2-pentanone	<10	µg/L	SW846 8260C
1,2,3-Trichlorobenzene	<1	µg/L	SW846 8260C	Acetone	<10	µg/L	SW846 8260C
1,2,3-Trichloropropane	<1	µg/L	SW846 8260C	Acetonitrile	<10	µg/L	SW846 8260C
1,2,4-Trichlorobenzene	<1	µg/L	SW846 8260C	Acrolein	<10	µg/L	SW846 8260C
1,2,4-Trimethylbenzene	<1	µg/L	SW846 8260C	Acrylonitrile	<10	µg/L	SW846 8260C
1,2-Dibromo3Chloropropane	<10	µg/L	SW846 8260C	Benzene	<1	µg/L	SW846 8260C

*Nitrate analysis was subcontracted to Spectra Laboratories-Kitsap.

Surrogate	Recovery	Method	Surrogate	Recovery	Method
p-Terphenyl	89	NWTPH-D	Dibromofluoromethane	70	SW846 8260C
Toluene-d8	159	NWTPH-G	1,2-Dichloroethane-d4	87	SW846 8260C
4-Bromofluorobenzene	120	NWTPH-G	Toluene-d8	153	SW846 8260C
Decachlorobiphenyl	92	SW846 8082A	4-Bromofluorobenzene	127	SW846 8260C

SPECTRA LABORATORIES

Jeffrey Cooper, Laboratory Manager

a14jac

07/25/2017

Petroleum Reclaiming Services, Inc.
3003 Taylor Way
Tacoma, WA 98421


Project: PRS
Client ID: MW-1B
Sample Matrix: Water
Date Sampled: 06/13/2017
Date Received: 06/14/2017
Spectra Project: 2017060394
Spectra Number:9

Analyte	Result	Units	Method	Analyte	Result	Units	Method
Bromobenzene	<1	µg/L	SW846 8260C	Styrene	<1	µg/L	SW846 8260C
Bromochloromethane	<1	µg/L	SW846 8260C	Tetrachloroethene	<1	µg/L	SW846 8260C
Bromodichloromethane	<1	µg/L	SW846 8260C	Toluene	<1	µg/L	SW846 8260C
Bromoform	<1	µg/L	SW846 8260C	Total Xylenes	<1	µg/L	SW846 8260C
Bromomethane	<1	µg/L	SW846 8260C	Trichloroethene	<1	µg/L	SW846 8260C
Carbon Disulfide	<10	µg/L	SW846 8260C	Trichlorofluoromethane	<1	µg/L	SW846 8260C
Carbon Tetrachloride	<1	µg/L	SW846 8260C	Vinyl Acetate	<10	µg/L	SW846 8260C
Chlorobenzene	<1	µg/L	SW846 8260C	Vinyl chloride	<0.2 J	µg/L	SW846 8260C
Chlorodibromomethane	<1	µg/L	SW846 8260C	cis-1,2-Dichloroethene	<1	µg/L	SW846 8260C
Chloroethane	<1	µg/L	SW846 8260C	cis-1,3-Dichloropropene	<1	µg/L	SW846 8260C
Chloroform	<1	µg/L	SW846 8260C	n-Butylbenzene	<1	µg/L	SW846 8260C
Chloromethane	<1	µg/L	SW846 8260C	n-Propylbenzene	<1	µg/L	SW846 8260C
Dibromomethane	<1	µg/L	SW846 8260C	sec-Butylbenzene	<1	µg/L	SW846 8260C
Dichlorodifluoromethane	<1	µg/L	SW846 8260C	tert-Butylbenzene	<1	µg/L	SW846 8260C
Ethylbenzene	<1	µg/L	SW846 8260C	trans-1,2-Dichloroethene	<1	µg/L	SW846 8260C
Hexachlorobutadiene	<1	µg/L	SW846 8260C	trans-1,3-Dichloropropene	<1	µg/L	SW846 8260C
Iodomethane	<10	µg/L	SW846 8260C				
Isopropylbenzene	<1	µg/L	SW846 8260C				
Methyl-tert-Butyl Ether	<1	µg/L	SW846 8260C				
Methylene chloride	<5	µg/L	SW846 8260C				
Naphthalene	<1	µg/L	SW846 8260C				

*Nitrate analysis was subcontracted to Spectra Laboratories-Kitsap.

Surrogate	Recovery	Method	Surrogate	Recovery	Method
p-Terphenyl	89	NWTPH-D	Dibromofluoromethane	70	SW846 8260C
Toluene-d8	159	NWTPH-G	1,2-Dichloroethane-d4	87	SW846 8260C
4-Bromofluorobenzene	120	NWTPH-G	Toluene-d8	153	SW846 8260C
Decachlorobiphenyl	92	SW846 8082A	4-Bromofluorobenzene	127	SW846 8260C

SPECTRA LABORATORIES


Jeffrey Cooper, Laboratory Manager
a14/jac

07/25/2017

Petroleum Reclaiming Services, Inc.
3003 Taylor Way
Tacoma, WA 98421

Project: PRS
Client ID: SO4A
Sample Matrix: Water
Date Sampled: 06/14/2017
Date Received: 06/14/2017
Spectra Project: 2017060394
Spectra Number:10

Analyte	Result	Units	Method	Analyte	Result	Units	Method
Diesel	290	µg/L	NWTPH-D	1,2-Dibromoethane (EDB)	<1	µg/L	SW846 8260C
Oil	760	µg/L	NWTPH-D	1,2-Dichlorobenzene	<1	µg/L	SW846 8260C
Gasoline	<50	µg/L	NWTPH-G	1,2-Dichloroethane	<1	µg/L	SW846 8260C
Nitrate	0.01 *	mg/L-N	SM 4500-NO3 F	1,2-Dichloropropane	<1	µg/L	SW846 8260C
Sulfate	28.3	mg/L	SM 4500-SO4 ⁻ E	1,3,5-Trimethylbenzene	<1	µg/L	SW846 8260C
Arsenic	0.487	mg/L	SW846 6020B	1,3-Dichlorobenzene	1.4	µg/L	SW846 8260C
Chromium	0.0012	mg/L	SW846 6020B	1,3-Dichloropropane	<1	µg/L	SW846 8260C
Lead	< 0.0002	mg/L	SW846 6020B	1,4-Dichlorobenzene	1.7	µg/L	SW846 8260C
PCB	<0.1	µg/L	SW846 8082A	2,2-Dichloropropane	<1	µg/L	SW846 8260C
1,1,1,2-Tetrachloroethane	<1	µg/L	SW846 8260C	2-Butanone (MEK)	<10	µg/L	SW846 8260C
1,1,1-Trichloroethane	<1	µg/L	SW846 8260C	2-Chloroethylvinyl Ether	<10	µg/L	SW846 8260C
1,1,2,2-Tetrachloroethane	<1	µg/L	SW846 8260C	2-Chlorotoluene	<1	µg/L	SW846 8260C
1,1,2-Trichloroethane	<1	µg/L	SW846 8260C	2-Hexanone (MBK)	<10	µg/L	SW846 8260C
1,1-Dichloroethane	<1	µg/L	SW846 8260C	4-Chlorotoluene	<1	µg/L	SW846 8260C
1,1-Dichloroethene	<1	µg/L	SW846 8260C	4-Isopropyltoluene	<1	µg/L	SW846 8260C
1,1-Dichloropropene	<1	µg/L	SW846 8260C	4-methyl-2-pentanone	<10	µg/L	SW846 8260C
1,2,3-Trichlorobenzene	<1	µg/L	SW846 8260C	Acetone	<10	µg/L	SW846 8260C
1,2,3-Trichloropropane	<1	µg/L	SW846 8260C	Acetonitrile	<10	µg/L	SW846 8260C
1,2,4-Trichlorobenzene	<1	µg/L	SW846 8260C	Acrolein	<10	µg/L	SW846 8260C
1,2,4-Trimethylbenzene	<1	µg/L	SW846 8260C	Acrylonitrile	<10	µg/L	SW846 8260C
1,2-Dibromo3Chloropropane	<10	µg/L	SW846 8260C	Benzene	<1	µg/L	SW846 8260C

*Nitrate analysis was subcontracted to Spectra Laboratories-Kitsap.

Surrogate	Recovery	Method	Surrogate	Recovery	Method
p-Terphenyl	82	NWTPH-D	Dibromofluoromethane	71	SW846 8260C
Toluene-d8	158	NWTPH-G	1,2-Dichloroethane-d4	89	SW846 8260C
4-Bromofluorobenzene	115	NWTPH-G	Toluene-d8	152	SW846 8260C
Decachlorobiphenyl	89	SW846 8082A	4-Bromofluorobenzene	124	SW846 8260C

SPECTRA LABORATORIES


Jeffrey Cooper, Laboratory Manager
a14/jac

07/25/2017

Petroleum Reclaiming Services, Inc.
3003 Taylor Way
Tacoma, WA 98421


Project: PRS
Client ID: SO4A
Sample Matrix: Water
Date Sampled: 06/14/2017
Date Received: 06/14/2017
Spectra Project: 2017060394
Spectra Number: 10

Analyte	Result	Units	Method	Analyte	Result	Units	Method
Bromobenzene	<1	µg/L	SW846 8260C	Styrene	<1	µg/L	SW846 8260C
Bromochloromethane	<1	µg/L	SW846 8260C	Tetrachloroethene	<1	µg/L	SW846 8260C
Bromodichloromethane	<1	µg/L	SW846 8260C	Toluene	<1	µg/L	SW846 8260C
Bromoform	<1	µg/L	SW846 8260C	Total Xylenes	<1	µg/L	SW846 8260C
Bromomethane	<1	µg/L	SW846 8260C	Trichloroethene	<1	µg/L	SW846 8260C
Carbon Disulfide	<10	µg/L	SW846 8260C	Trichlorofluoromethane	<1	µg/L	SW846 8260C
Carbon Tetrachloride	<1	µg/L	SW846 8260C	Vinyl Acetate	<10	µg/L	SW846 8260C
Chlorobenzene	11.3	µg/L	SW846 8260C	Vinyl chloride	<0.2 J	µg/L	SW846 8260C
Chlorodibromomethane	<1	µg/L	SW846 8260C	cis-1,2-Dichloroethene	<1	µg/L	SW846 8260C
Chloroethane	<1	µg/L	SW846 8260C	cis-1,3-Dichloropropene	<1	µg/L	SW846 8260C
Chloroform	<1	µg/L	SW846 8260C	n-Butylbenzene	<1	µg/L	SW846 8260C
Chloromethane	<1	µg/L	SW846 8260C	n-Propylbenzene	<1	µg/L	SW846 8260C
Dibromomethane	<1	µg/L	SW846 8260C	sec-Butylbenzene	<1	µg/L	SW846 8260C
Dichlorodifluoromethane	<1	µg/L	SW846 8260C	tert-Butylbenzene	<1	µg/L	SW846 8260C
Ethylbenzene	<1	µg/L	SW846 8260C	trans-1,2-Dichloroethene	<1	µg/L	SW846 8260C
Hexachlorobutadiene	<1	µg/L	SW846 8260C	trans-1,3-Dichloropropene	<1	µg/L	SW846 8260C
Iodomethane	<10	µg/L	SW846 8260C				
Isopropylbenzene	<1	µg/L	SW846 8260C				
Methyl-tert-Butyl Ether	<1	µg/L	SW846 8260C				
Methylene chloride	<5	µg/L	SW846 8260C				
Naphthalene	<1	µg/L	SW846 8260C				

*Nitrate analysis was subcontracted to Spectra Laboratories-Kitsap.

Surrogate	Recovery	Method	Surrogate	Recovery	Method
p-Terphenyl	82	NWTPH-D	Dibromofluoromethane	71	SW846 8260C
Toluene-d8	158	NWTPH-G	1,2-Dichloroethane-d4	89	SW846 8260C
4-Bromofluorobenzene	115	NWTPH-G	Toluene-d8	152	SW846 8260C
Decachlorobiphenyl	89	SW846 8082A	4-Bromofluorobenzene	124	SW846 8260C

SPECTRA LABORATORIES


Jeffrey Cooper, Laboratory Manager
4/14/jac

07/25/2017

Petroleum Reclaiming Services, Inc.
3003 Taylor Way
Tacoma, WA 98421


Project: PRS
Client ID: Field Blank
Sample Matrix: Water
Date Sampled: 06/14/2017
Date Received: 06/14/2017
Spectra Project: 2017060394
Spectra Number: 11

Analyte	Result	Units	Method	Analyte	Result	Units	Method
Diesel	<100	µg/L	NWTPH-D	1,2-Dibromoethane (EDB)	<1	µg/L	SW846 8260C
Oil	<500	µg/L	NWTPH-D	1,2-Dichlorobenzene	<1	µg/L	SW846 8260C
Gasoline	<50	µg/L	NWTPH-G	1,2-Dichloroethane	<1	µg/L	SW846 8260C
Nitrate	0.01 *	mg/L-N	SM 4500-NO3 F	1,2-Dichloropropane	<1	µg/L	SW846 8260C
Sulfate	<2.0	mg/L	SM 4500-SO4 ⁻ E	1,3,5-Trimethylbenzene	<1	µg/L	SW846 8260C
Arsenic	<0.0002	mg/L	SW846 6020B	1,3-Dichlorobenzene	<1	µg/L	SW846 8260C
Chromium	<0.0005	mg/L	SW846 6020B	1,3-Dichloropropane	<1	µg/L	SW846 8260C
Lead	<0.0002	mg/L	SW846 6020B	1,4-Dichlorobenzene	<1	µg/L	SW846 8260C
PCB	<0.1	µg/L	SW846 8082A	2,2-Dichloropropane	<1	µg/L	SW846 8260C
1,1,1,2-Tetrachloroethane	<1	µg/L	SW846 8260C	2-Butanone (MEK)	<10	µg/L	SW846 8260C
1,1,1-Trichloroethane	<1	µg/L	SW846 8260C	2-Chloroethylvinyl Ether	<10	µg/L	SW846 8260C
1,1,2,2-Tetrachloroethane	<1	µg/L	SW846 8260C	2-Chlorotoluene	<1	µg/L	SW846 8260C
1,1,2-Trichloroethane	<1	µg/L	SW846 8260C	2-Hexanone (MBK)	<10	µg/L	SW846 8260C
1,1-Dichloroethane	<1	µg/L	SW846 8260C	4-Chlorotoluene	<1	µg/L	SW846 8260C
1,1-Dichloroethene	<1	µg/L	SW846 8260C	4-Isopropyltoluene	<1	µg/L	SW846 8260C
1,1-Dichloropropene	<1	µg/L	SW846 8260C	4-methyl-2-pentanone	<10	µg/L	SW846 8260C
1,2,3-Trichlorobenzene	<1	µg/L	SW846 8260C	Acetone	<10	µg/L	SW846 8260C
1,2,3-Trichloropropane	<1	µg/L	SW846 8260C	Acetonitrile	<10	µg/L	SW846 8260C
1,2,4-Trichlorobenzene	<1	µg/L	SW846 8260C	Acrolein	<10	µg/L	SW846 8260C
1,2,4-Trimethylbenzene	<1	µg/L	SW846 8260C	Acrylonitrile	<10	µg/L	SW846 8260C
1,2-Dibromo3Chloropropane	<10	µg/L	SW846 8260C	Benzene	<1	µg/L	SW846 8260C

*Nitrate analysis was subcontracted to Spectra Laboratories-Kitsap.

Surrogate	Recovery	Method	Surrogate	Recovery	Method
p-Terphenyl	104	NWTPH-D	Dibromofluoromethane	72	SW846 8260C
Toluene-d8	158	NWTPH-G	1,2-Dichloroethane-d4	89	SW846 8260C
4-Bromofluorobenzene	117	NWTPH-G	Toluene-d8	152	SW846 8260C
Decachlorobiphenyl	98	SW846 8082A	4-Bromofluorobenzene	125	SW846 8260C

SPECTRA LABORATORIES


Jeffrey Cooper, Laboratory Manager
a14jac

07/25/2017

Petroleum Reclaiming Services, Inc.
3003 Taylor Way
Tacoma, WA 98421


Project: PRS
Client ID: Field Blank
Sample Matrix: Water
Date Sampled: 06/14/2017
Date Received: 06/14/2017
Spectra Project: 2017060394
Spectra Number: 11

Analyte	Result	Units	Method	Analyte	Result	Units	Method
Bromobenzene	<1	µg/L	SW846 8260C	Styrene	<1	µg/L	SW846 8260C
Bromochloromethane	<1	µg/L	SW846 8260C	Tetrachloroethene	<1	µg/L	SW846 8260C
Bromodichloromethane	<1	µg/L	SW846 8260C	Toluene	<1	µg/L	SW846 8260C
Bromoform	<1	µg/L	SW846 8260C	Total Xylenes	<1	µg/L	SW846 8260C
Bromomethane	<1	µg/L	SW846 8260C	Trichloroethene	<1	µg/L	SW846 8260C
Carbon Disulfide	<10	µg/L	SW846 8260C	Trichlorofluoromethane	<1	µg/L	SW846 8260C
Carbon Tetrachloride	<1	µg/L	SW846 8260C	Vinyl Acetate	<10	µg/L	SW846 8260C
Chlorobenzene	<1	µg/L	SW846 8260C	Vinyl chloride	<0.2 J	µg/L	SW846 8260C
Chlorodibromomethane	<1	µg/L	SW846 8260C	cis-1,2-Dichloroethene	<1	µg/L	SW846 8260C
Chloroethane	<1	µg/L	SW846 8260C	cis-1,3-Dichloropropene	<1	µg/L	SW846 8260C
Chloroform	<1	µg/L	SW846 8260C	n-Butylbenzene	<1	µg/L	SW846 8260C
Chloromethane	<1	µg/L	SW846 8260C	n-Propylbenzene	<1	µg/L	SW846 8260C
Dibromomethane	<1	µg/L	SW846 8260C	sec-Butylbenzene	<1	µg/L	SW846 8260C
Dichlorodifluoromethane	<1	µg/L	SW846 8260C	tert-Butylbenzene	<1	µg/L	SW846 8260C
Ethylbenzene	<1	µg/L	SW846 8260C	trans-1,2-Dichloroethene	<1	µg/L	SW846 8260C
Hexachlorobutadiene	<1	µg/L	SW846 8260C	trans-1,3-Dichloropropene	<1	µg/L	SW846 8260C
Iodomethane	<10	µg/L	SW846 8260C				
Isopropylbenzene	<1	µg/L	SW846 8260C				
Methyl-tert-Butyl Ether	<1	µg/L	SW846 8260C				
Methylene chloride	<5	µg/L	SW846 8260C				
Naphthalene	<1	µg/L	SW846 8260C				

*Nitrate analysis was subcontracted to Spectra Laboratories-Kitsap.

Surrogate	Recovery	Method	Surrogate	Recovery	Method
p-Terphenyl	104	NWTPH-D	Dibromofluoromethane	72	SW846 8260C
Toluene-d8	158	NWTPH-G	1,2-Dichloroethane-d4	89	SW846 8260C
4-Bromofluorobenzene	117	NWTPH-G	Toluene-d8	152	SW846 8260C
Decachlorobiphenyl	98	SW846 8082A	4-Bromofluorobenzene	125	SW846 8260C

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07/25/2017

Petroleum Reclaiming Services, Inc.
3003 Taylor Way
Tacoma, WA 98421


Project: PRS
Client ID: Trip Blank #1
Sample Matrix: Water
Date Sampled: 06/14/2017
Date Received: 06/14/2017
Spectra Project: 2017060394
Spectra Number: 12

Analyte	Result	Units	Method	Analyte	Result	Units	Method
Gasoline	<50	µg/L	NWTPH-G	2,2-Dichloropropane	<1	µg/L	SW846 8260C
1,1,1,2-Tetrachloroethane	<1	µg/L	SW846 8260C	2-Butanone (MEK)	<10	µg/L	SW846 8260C
1,1,1-Trichloroethane	<1	µg/L	SW846 8260C	2-Chloroethylvinyl Ether	<10	µg/L	SW846 8260C
1,1,2,2-Tetrachloroethane	<1	µg/L	SW846 8260C	2-Chlorotoluene	<1	µg/L	SW846 8260C
1,1,2-Trichloroethane	<1	µg/L	SW846 8260C	2-Hexanone (MBK)	<10	µg/L	SW846 8260C
1,1-Dichloroethane	<1	µg/L	SW846 8260C	4-Chlorotoluene	<1	µg/L	SW846 8260C
1,1-Dichloroethene	<1	µg/L	SW846 8260C	4-Isopropyltoluene	<1	µg/L	SW846 8260C
1,1-Dichloropropene	<1	µg/L	SW846 8260C	4-methyl-2-pentanone	<10	µg/L	SW846 8260C
1,2,3-Trichlorobenzene	<1	µg/L	SW846 8260C	Acetone	<10	µg/L	SW846 8260C
1,2,3-Trichloropropane	<1	µg/L	SW846 8260C	Acetonitrile	<10	µg/L	SW846 8260C
1,2,4-Trichlorobenzene	<1	µg/L	SW846 8260C	Acrolein	<10	µg/L	SW846 8260C
1,2,4-Trimethylbenzene	<1	µg/L	SW846 8260C	Acrylonitrile	<10	µg/L	SW846 8260C
1,2-Dibromo3Chloropropane	<10	µg/L	SW846 8260C	Benzene	<1	µg/L	SW846 8260C
1,2-Dibromoethane (EDB)	<1	µg/L	SW846 8260C	Bromobenzene	<1	µg/L	SW846 8260C
1,2-Dichlorobenzene	<1	µg/L	SW846 8260C	Bromochloromethane	<1	µg/L	SW846 8260C
1,2-Dichloroethane	<1	µg/L	SW846 8260C	Bromodichloromethane	<1	µg/L	SW846 8260C
1,2-Dichloropropane	<1	µg/L	SW846 8260C	Bromoform	<1	µg/L	SW846 8260C
1,3,5-Trimethylbenzene	<1	µg/L	SW846 8260C	Bromomethane	<1	µg/L	SW846 8260C
1,3-Dichlorobenzene	<1	µg/L	SW846 8260C	Carbon Disulfide	<10	µg/L	SW846 8260C
1,3-Dichloropropane	<1	µg/L	SW846 8260C	Carbon Tetrachloride	<1	µg/L	SW846 8260C
1,4-Dichlorobenzene	<1	µg/L	SW846 8260C	Chlorobenzene	<1	µg/L	SW846 8260C

Surrogate	Recovery	Method
Toluene-d8	159	NWTPH-G
4-Bromofluorobenzene	121	NWTPH-G
Dibromofluoromethane	72	SW846 8260C
1,2-Dichloroethane-d4	88	SW846 8260C

Surrogate	Recovery	Method
Toluene-d8	153	SW846 8260C
4-Bromofluorobenzene	130	SW846 8260C

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07/25/2017

Petroleum Reclaiming Services, Inc.
3003 Taylor Way
Tacoma, WA 98421


Project: PRS
Client ID: Trip Blank #1
Sample Matrix: Water
Date Sampled: 06/14/2017
Date Received: 06/14/2017
Spectra Project: 2017060394
Spectra Number: 12

Analyte	Result	Units	Method	Analyte	Result	Units	Method
Chlorodibromomethane	<1	µg/L	SW846 8260C	cis-1,2-Dichloroethene	<1	µg/L	SW846 8260C
Chloroethane	<1	µg/L	SW846 8260C	cis-1,3-Dichloropropene	<1	µg/L	SW846 8260C
Chloroform	<1	µg/L	SW846 8260C	n-Butylbenzene	<1	µg/L	SW846 8260C
Chloromethane	<1	µg/L	SW846 8260C	n-Propylbenzene	<1	µg/L	SW846 8260C
Dibromomethane	<1	µg/L	SW846 8260C	sec-Butylbenzene	<1	µg/L	SW846 8260C
Dichlorodifluoromethane	<1	µg/L	SW846 8260C	tert-Butylbenzene	<1	µg/L	SW846 8260C
Ethylbenzene	<1	µg/L	SW846 8260C	trans-1,2-Dichloroethene	<1	µg/L	SW846 8260C
Hexachlorobutadiene	<1	µg/L	SW846 8260C	trans-1,3-Dichloropropene	<1	µg/L	SW846 8260C
Iodomethane	<10	µg/L	SW846 8260C				
Isopropylbenzene	<1	µg/L	SW846 8260C				
Methyl-tert-Butyl Ether	<1	µg/L	SW846 8260C				
Methylene chloride	<5	µg/L	SW846 8260C				
Naphthalene	<1	µg/L	SW846 8260C				
Styrene	<1	µg/L	SW846 8260C				
Tetrachloroethene	<1	µg/L	SW846 8260C				
Toluene	<1	µg/L	SW846 8260C				
Total Xylenes	<1	µg/L	SW846 8260C				
Trichloroethene	<1	µg/L	SW846 8260C				
Trichlorofluoromethane	<1	µg/L	SW846 8260C				
Vinyl Acetate	<10	µg/L	SW846 8260C				
Vinyl chloride	<0.2 J	µg/L	SW846 8260C				

Surrogate	Recovery	Method
Toluene-d8	159	NWTPH-G
4-Bromofluorobenzene	121	NWTPH-G
Dibromofluoromethane	72	SW846 8260C
1,2-Dichloroethane-d4	88	SW846 8260C

Surrogate	Recovery	Method
Toluene-d8	153	SW846 8260C
4-Bromofluorobenzene	130	SW846 8260C

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Jeffrey Cooper, Laboratory Manager
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07/25/2017

Petroleum Reclaiming Services, Inc.
3003 Taylor Way
Tacoma, WA 98421

Project: PRS
Client ID: Trip Blank #2
Sample Matrix: Water
Date Sampled: 06/14/2017
Date Received: 06/14/2017
Spectra Project: 2017060394
Spectra Number: 13

Analyte	Result	Units	Method	Analyte	Result	Units	Method
Gasoline	<50	µg/L	NWTPH-G	2,2-Dichloropropane	<1	µg/L	SW846 8260C
1,1,1,2-Tetrachloroethane	<1	µg/L	SW846 8260C	2-Butanone (MEK)	<10	µg/L	SW846 8260C
1,1,1-Trichloroethane	<1	µg/L	SW846 8260C	2-Chloroethylvinyl Ether	<10	µg/L	SW846 8260C
1,1,2,2-Tetrachloroethane	<1	µg/L	SW846 8260C	2-Chlorotoluene	<1	µg/L	SW846 8260C
1,1,2-Trichloroethane	<1	µg/L	SW846 8260C	2-Hexanone (MBK)	<10	µg/L	SW846 8260C
1,1-Dichloroethane	<1	µg/L	SW846 8260C	4-Chlorotoluene	<1	µg/L	SW846 8260C
1,1-Dichloroethene	<1	µg/L	SW846 8260C	4-Isopropyltoluene	<1	µg/L	SW846 8260C
1,1-Dichloropropene	<1	µg/L	SW846 8260C	4-methyl-2-pentanone	<10	µg/L	SW846 8260C
1,2,3-Trichlorobenzene	<1	µg/L	SW846 8260C	Acetone	<10	µg/L	SW846 8260C
1,2,3-Trichloropropane	<1	µg/L	SW846 8260C	Acetonitrile	<10	µg/L	SW846 8260C
1,2,4-Trichlorobenzene	<1	µg/L	SW846 8260C	Acrolein	<10	µg/L	SW846 8260C
1,2,4-Trimethylbenzene	<1	µg/L	SW846 8260C	Acrylonitrile	<10	µg/L	SW846 8260C
1,2-Dibromo3Chloropropane	<10	µg/L	SW846 8260C	Benzene	<1	µg/L	SW846 8260C
1,2-Dibromoethane (EDB)	<1	µg/L	SW846 8260C	Bromobenzene	<1	µg/L	SW846 8260C
1,2-Dichlorobenzene	<1	µg/L	SW846 8260C	Bromochloromethane	<1	µg/L	SW846 8260C
1,2-Dichloroethane	<1	µg/L	SW846 8260C	Bromodichloromethane	<1	µg/L	SW846 8260C
1,2-Dichloropropane	<1	µg/L	SW846 8260C	Bromoform	<1	µg/L	SW846 8260C
1,3,5-Trimethylbenzene	<1	µg/L	SW846 8260C	Bromomethane	<1	µg/L	SW846 8260C
1,3-Dichlorobenzene	<1	µg/L	SW846 8260C	Carbon Disulfide	<10	µg/L	SW846 8260C
1,3-Dichloropropane	<1	µg/L	SW846 8260C	Carbon Tetrachloride	<1	µg/L	SW846 8260C
1,4-Dichlorobenzene	<1	µg/L	SW846 8260C	Chlorobenzene	<1	µg/L	SW846 8260C

Surrogate	Recovery	Method
Toluene-d8	157	NWTPH-G
4-Bromofluorobenzene	117	NWTPH-G
Dibromofluoromethane	71	SW846 8260C
1,2-Dichloroethane-d4	88	SW846 8260C

Surrogate	Recovery	Method
Toluene-d8	151	SW846 8260C
4-Bromofluorobenzene	124	SW846 8260C

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Jeffrey Cooper, Laboratory Manager

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07/25/2017

Petroleum Reclaiming Services, Inc.
3003 Taylor Way
Tacoma, WA 98421


Project: PRS
Client ID: Trip Blank #2
Sample Matrix: Water
Date Sampled: 06/14/2017
Date Received: 06/14/2017
Spectra Project: 2017060394
Spectra Number: 13

Analyte	Result	Units	Method	Analyte	Result	Units	Method
Chlorodibromomethane	<1	µg/L	SW846 8260C	cis-1,2-Dichloroethene	<1	µg/L	SW846 8260C
Chloroethane	<1	µg/L	SW846 8260C	cis-1,3-Dichloropropene	<1	µg/L	SW846 8260C
Chloroform	<1	µg/L	SW846 8260C	n-Butylbenzene	<1	µg/L	SW846 8260C
Chloromethane	<1	µg/L	SW846 8260C	n-Propylbenzene	<1	µg/L	SW846 8260C
Dibromomethane	<1	µg/L	SW846 8260C	sec-Butylbenzene	<1	µg/L	SW846 8260C
Dichlorodifluoromethane	<1	µg/L	SW846 8260C	tert-Butylbenzene	<1	µg/L	SW846 8260C
Ethylbenzene	<1	µg/L	SW846 8260C	trans-1,2-Dichloroethene	<1	µg/L	SW846 8260C
Hexachlorobutadiene	<1	µg/L	SW846 8260C	trans-1,3-Dichloropropene	<1	µg/L	SW846 8260C
Iodomethane	<10	µg/L	SW846 8260C				
Isopropylbenzene	<1	µg/L	SW846 8260C				
Methyl-tert-Butyl Ether	<1	µg/L	SW846 8260C				
Methylene chloride	<5	µg/L	SW846 8260C				
Naphthalene	<1	µg/L	SW846 8260C				
Styrene	<1	µg/L	SW846 8260C				
Tetrachloroethene	<1	µg/L	SW846 8260C				
Toluene	<1	µg/L	SW846 8260C				
Total Xylenes	<1	µg/L	SW846 8260C				
Trichloroethene	<1	µg/L	SW846 8260C				
Trichlorofluoromethane	<1	µg/L	SW846 8260C				
Vinyl Acetate	<10	µg/L	SW846 8260C				
Vinyl chloride	<0.2 J	µg/L	SW846 8260C				

Surrogate	Recovery	Method
Toluene-d8	157	NWTPH-G
4-Bromofluorobenzene	117	NWTPH-G
Dibromofluoromethane	71	SW846 8260C
1,2-Dichloroethane-d4	88	SW846 8260C

Surrogate	Recovery	Method
Toluene-d8	151	SW846 8260C
4-Bromofluorobenzene	124	SW846 8260C

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07/25/2017

Petroleum Reclaiming Services, Inc.
3003 Taylor Way
Tacoma, WA 98421


Project: PRS
Client ID: Trip Blank #3
Sample Matrix: Water
Date Sampled: 06/14/2017
Date Received: 06/14/2017
Spectra Project: 2017060394
Spectra Number: 14

Analyte	Result	Units	Method	Analyte	Result	Units	Method
Gasoline	<50	µg/L	NWTPH-G	2,2-Dichloropropane	<1	µg/L	SW846 8260C
1,1,1,2-Tetrachloroethane	<1	µg/L	SW846 8260C	2-Butanone (MEK)	<10	µg/L	SW846 8260C
1,1,1-Trichloroethane	<1	µg/L	SW846 8260C	2-Chloroethylvinyl Ether	<10	µg/L	SW846 8260C
1,1,2,2-Tetrachloroethane	<1	µg/L	SW846 8260C	2-Chlorotoluene	<1	µg/L	SW846 8260C
1,1,2-Trichloroethane	<1	µg/L	SW846 8260C	2-Hexanone (MBK)	<10	µg/L	SW846 8260C
1,1-Dichloroethane	<1	µg/L	SW846 8260C	4-Chlorotoluene	<1	µg/L	SW846 8260C
1,1-Dichloroethene	<1	µg/L	SW846 8260C	4-Isopropyltoluene	<1	µg/L	SW846 8260C
1,1-Dichloropropene	<1	µg/L	SW846 8260C	4-methyl-2-pentanone	<10	µg/L	SW846 8260C
1,2,3-Trichlorobenzene	<1	µg/L	SW846 8260C	Acetone	<10	µg/L	SW846 8260C
1,2,3-Trichloropropane	<1	µg/L	SW846 8260C	Acetonitrile	<10	µg/L	SW846 8260C
1,2,4-Trichlorobenzene	<1	µg/L	SW846 8260C	Acrolein	<10	µg/L	SW846 8260C
1,2,4-Trimethylbenzene	<1	µg/L	SW846 8260C	Acrylonitrile	<10	µg/L	SW846 8260C
1,2-Dibromo3Chloropropane	<10	µg/L	SW846 8260C	Benzene	<1	µg/L	SW846 8260C
1,2-Dibromoethane (EDB)	<1	µg/L	SW846 8260C	Bromobenzene	<1	µg/L	SW846 8260C
1,2-Dichlorobenzene	<1	µg/L	SW846 8260C	Bromochloromethane	<1	µg/L	SW846 8260C
1,2-Dichloroethane	<1	µg/L	SW846 8260C	Bromodichloromethane	<1	µg/L	SW846 8260C
1,2-Dichloropropane	<1	µg/L	SW846 8260C	Bromoform	<1	µg/L	SW846 8260C
1,3,5-Trimethylbenzene	<1	µg/L	SW846 8260C	Bromomethane	<1	µg/L	SW846 8260C
1,3-Dichlorobenzene	<1	µg/L	SW846 8260C	Carbon Disulfide	<10	µg/L	SW846 8260C
1,3-Dichloropropane	<1	µg/L	SW846 8260C	Carbon Tetrachloride	<1	µg/L	SW846 8260C
1,4-Dichlorobenzene	<1	µg/L	SW846 8260C	Chlorobenzene	<1	µg/L	SW846 8260C

Surrogate	Recovery	Method
Toluene-d8	113	NWTPH-G
4-Bromofluorobenzene	106	NWTPH-G
Dibromofluoromethane	81	SW846 8260C
1,2-Dichloroethane-d4	95	SW846 8260C

Surrogate	Recovery	Method
Toluene-d8	117	SW846 8260C
4-Bromofluorobenzene	123	SW846 8260C

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Jeffrey Cooper, Laboratory Manager
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07/25/2017

Petroleum Reclaiming Services, Inc.
3003 Taylor Way
Tacoma, WA 98421

Project: PRS
Client ID: Trip Blank #3
Sample Matrix: Water
Date Sampled: 06/14/2017
Date Received: 06/14/2017
Spectra Project: 2017060394
Spectra Number: 14


Analyte	Result	Units	Method
Chlorodibromomethane	<1	µg/L	SW846 8260C
Chloroethane	<1	µg/L	SW846 8260C
Chloroform	<1	µg/L	SW846 8260C
Chloromethane	<1	µg/L	SW846 8260C
Dibromomethane	<1	µg/L	SW846 8260C
Dichlorodifluoromethane	<1	µg/L	SW846 8260C
Ethylbenzene	<1	µg/L	SW846 8260C
Hexachlorobutadiene	<1	µg/L	SW846 8260C
Iodomethane	<10	µg/L	SW846 8260C
Isopropylbenzene	<1	µg/L	SW846 8260C
Methyl-tert-Butyl Ether	<1	µg/L	SW846 8260C
Methylene chloride	<5	µg/L	SW846 8260C
Naphthalene	<1	µg/L	SW846 8260C
Styrene	<1	µg/L	SW846 8260C
Tetrachloroethene	<1	µg/L	SW846 8260C
Toluene	<1	µg/L	SW846 8260C
Total Xylenes	<1	µg/L	SW846 8260C
Trichloroethene	<1	µg/L	SW846 8260C
Trichlorofluoromethane	<1	µg/L	SW846 8260C
Vinyl Acetate	<10	µg/L	SW846 8260C
Vinyl chloride	<0.2 J	µg/L	SW846 8260C

Analyte	Result	Units	Method
cis-1,2-Dichloroethene	<1	µg/L	SW846 8260C
cis-1,3-Dichloropropene	<1	µg/L	SW846 8260C
n-Butylbenzene	<1	µg/L	SW846 8260C
n-Propylbenzene	<1	µg/L	SW846 8260C
sec-Butylbenzene	<1	µg/L	SW846 8260C
tert-Butylbenzene	<1	µg/L	SW846 8260C
trans-1,2-Dichloroethene	<1	µg/L	SW846 8260C
trans-1,3-Dichloropropene	<1	µg/L	SW846 8260C

Surrogate	Recovery	Method
Toluene-d8	113	NWTPH-G
4-Bromofluorobenzene	106	NWTPH-G
Dibromofluoromethane	81	SW846 8260C
1,2-Dichloroethane-d4	95	SW846 8260C

Surrogate	Recovery	Method
Toluene-d8	117	SW846 8260C
4-Bromofluorobenzene	123	SW846 8260C

SPECTRA LABORATORIES


Jeffrey Cooper, Laboratory Manager
a14/jac

07/25/2017

Petroleum Reclaiming Services, Inc.
3003 Taylor Way
Tacoma, WA 98421


Project: PRS
Client ID: Trip Blank #4
Sample Matrix: Water
Date Sampled: 06/14/2017
Date Received: 06/14/2017
Spectra Project: 2017060394
Spectra Number: 15

Analyte	Result	Units	Method	Analyte	Result	Units	Method
Gasoline	<50	µg/L	NWTPH-G	2,2-Dichloropropane	<1	µg/L	SW846 8260C
1,1,1,2-Tetrachloroethane	<1	µg/L	SW846 8260C	2-Butanone (MEK)	<10	µg/L	SW846 8260C
1,1,1-Trichloroethane	<1	µg/L	SW846 8260C	2-Chloroethylvinyl Ether	<10	µg/L	SW846 8260C
1,1,2,2-Tetrachloroethane	<1	µg/L	SW846 8260C	2-Chlorotoluene	<1	µg/L	SW846 8260C
1,1,2-Trichloroethane	<1	µg/L	SW846 8260C	2-Hexanone (MBK)	<10	µg/L	SW846 8260C
1,1-Dichloroethane	<1	µg/L	SW846 8260C	4-Chlorotoluene	<1	µg/L	SW846 8260C
1,1-Dichloroethene	<1	µg/L	SW846 8260C	4-Isopropyltoluene	<1	µg/L	SW846 8260C
1,1-Dichloropropene	<1	µg/L	SW846 8260C	4-methyl-2-pentanone	<10	µg/L	SW846 8260C
1,2,3-Trichlorobenzene	<1	µg/L	SW846 8260C	Acetone	<10	µg/L	SW846 8260C
1,2,3-Trichloropropane	<1	µg/L	SW846 8260C	Acetonitrile	<10	µg/L	SW846 8260C
1,2,4-Trichlorobenzene	<1	µg/L	SW846 8260C	Acrolein	<10	µg/L	SW846 8260C
1,2,4-Trimethylbenzene	<1	µg/L	SW846 8260C	Acrylonitrile	<10	µg/L	SW846 8260C
1,2-Dibromo3Chloropropane	<10	µg/L	SW846 8260C	Benzene	<1	µg/L	SW846 8260C
1,2-Dibromoethane (EDB)	<1	µg/L	SW846 8260C	Bromobenzene	<1	µg/L	SW846 8260C
1,2-Dichlorobenzene	<1	µg/L	SW846 8260C	Bromochloromethane	<1	µg/L	SW846 8260C
1,2-Dichloroethane	<1	µg/L	SW846 8260C	Bromodichloromethane	<1	µg/L	SW846 8260C
1,2-Dichloropropane	<1	µg/L	SW846 8260C	Bromoform	<1	µg/L	SW846 8260C
1,3,5-Trimethylbenzene	<1	µg/L	SW846 8260C	Bromomethane	<1	µg/L	SW846 8260C
1,3-Dichlorobenzene	<1	µg/L	SW846 8260C	Carbon Disulfide	<10	µg/L	SW846 8260C
1,3-Dichloropropane	<1	µg/L	SW846 8260C	Carbon Tetrachloride	<1	µg/L	SW846 8260C
1,4-Dichlorobenzene	<1	µg/L	SW846 8260C	Chlorobenzene	<1	µg/L	SW846 8260C

Surrogate	Recovery	Method
Toluene-d8	112	NWTPH-G
4-Bromofluorobenzene	104	NWTPH-G
Dibromofluoromethane	82	SW846 8260C
1,2-Dichloroethane-d4	87	SW846 8260C

Surrogate	Recovery	Method
Toluene-d8	116	SW846 8260C
4-Bromofluorobenzene	121	SW846 8260C

SPECTRA LABORATORIES


Jeffrey Cooper, Laboratory Manager
at4/jac

07/25/2017

Petroleum Reclaiming Services, Inc.
3003 Taylor Way
Tacoma, WA 98421

Project: PRS
Client ID: Trip Blank #4
Sample Matrix: Water
Date Sampled: 06/14/2017
Date Received: 06/14/2017
Spectra Project: 2017060394
Spectra Number:15

Analyte	Result	Units	Method	Analyte	Result	Units	Method
Chlorodibromomethane	<1	µg/L	SW846 8260C	cis-1,2-Dichloroethene	<1	µg/L	SW846 8260C
Chloroethane	<1	µg/L	SW846 8260C	cis-1,3-Dichloropropene	<1	µg/L	SW846 8260C
Chloroform	<1	µg/L	SW846 8260C	n-Butylbenzene	<1	µg/L	SW846 8260C
Chloromethane	<1	µg/L	SW846 8260C	n-Propylbenzene	<1	µg/L	SW846 8260C
Dibromomethane	<1	µg/L	SW846 8260C	sec-Butylbenzene	<1	µg/L	SW846 8260C
Dichlorodifluoromethane	<1	µg/L	SW846 8260C	tert-Butylbenzene	<1	µg/L	SW846 8260C
Ethylbenzene	<1	µg/L	SW846 8260C	trans-1,2-Dichloroethene	<1	µg/L	SW846 8260C
Hexachlorobutadiene	<1	µg/L	SW846 8260C	trans-1,3-Dichloropropene	<1	µg/L	SW846 8260C
Iodomethane	<10	µg/L	SW846 8260C				
Isopropylbenzene	<1	µg/L	SW846 8260C				
Methyl-tert-Butyl Ether	<1	µg/L	SW846 8260C				
Methylene chloride	<5	µg/L	SW846 8260C				
Naphthalene	<1	µg/L	SW846 8260C				
Styrene	<1	µg/L	SW846 8260C				
Tetrachloroethene	<1	µg/L	SW846 8260C				
Toluene	<1	µg/L	SW846 8260C				
Total Xylenes	<1	µg/L	SW846 8260C				
Trichloroethene	<1	µg/L	SW846 8260C				
Trichlorofluoromethane	<1	µg/L	SW846 8260C				
Vinyl Acetate	<10	µg/L	SW846 8260C				
Vinyl chloride	<0.2 J	µg/L	SW846 8260C				

Surrogate	Recovery	Method
Toluene-d8	112	NWTPH-G
4-Bromofluorobenzene	104	NWTPH-G
Dibromofluoromethane	82	SW846 8260C
1,2-Dichloroethane-d4	87	SW846 8260C

Surrogate	Recovery	Method
Toluene-d8	116	SW846 8260C
4-Bromofluorobenzene	121	SW846 8260C

SPECTRA LABORATORIES

Jeffrey Cooper, Laboratory Manager

a14/jac

07/25/2017

Petroleum Reclaiming Services, Inc.
3003 Taylor Way
Tacoma, WA 98421


Project: PRS
Client ID: Trip Blank #5
Sample Matrix: Water
Date Sampled: 06/14/2017
Date Received: 06/14/2017
Spectra Project: 2017060394
Spectra Number: 16

Analyte	Result	Units	Method	Analyte	Result	Units	Method
Gasoline	<50	µg/L	NWTPH-G	2,2-Dichloropropane	<1	µg/L	SW846 8260C
1,1,1,2-Tetrachloroethane	<1	µg/L	SW846 8260C	2-Butanone (MEK)	<10	µg/L	SW846 8260C
1,1,1-Trichloroethane	<1	µg/L	SW846 8260C	2-Chloroethylvinyl Ether	<10	µg/L	SW846 8260C
1,1,2,2-Tetrachloroethane	<1	µg/L	SW846 8260C	2-Chlorotoluene	<1	µg/L	SW846 8260C
1,1,2-Trichloroethane	<1	µg/L	SW846 8260C	2-Hexanone (MBK)	<10	µg/L	SW846 8260C
1,1-Dichloroethane	<1	µg/L	SW846 8260C	4-Chlorotoluene	<1	µg/L	SW846 8260C
1,1-Dichloroethene	<1	µg/L	SW846 8260C	4-Isopropyltoluene	<1	µg/L	SW846 8260C
1,1-Dichloropropene	<1	µg/L	SW846 8260C	4-methyl-2-pentanone	<10	µg/L	SW846 8260C
1,2,3-Trichlorobenzene	<1	µg/L	SW846 8260C	Acetone	<10	µg/L	SW846 8260C
1,2,3-Trichloropropane	<1	µg/L	SW846 8260C	Acetonitrile	<10	µg/L	SW846 8260C
1,2,4-Trichlorobenzene	<1	µg/L	SW846 8260C	Acrolein	<10	µg/L	SW846 8260C
1,2,4-Trimethylbenzene	<1	µg/L	SW846 8260C	Acrylonitrile	<10	µg/L	SW846 8260C
1,2-Dibromo3Chloropropane	<10	µg/L	SW846 8260C	Benzene	<1	µg/L	SW846 8260C
1,2-Dibromoethane (EDB)	<1	µg/L	SW846 8260C	Bromobenzene	<1	µg/L	SW846 8260C
1,2-Dichlorobenzene	<1	µg/L	SW846 8260C	Bromochloromethane	<1	µg/L	SW846 8260C
1,2-Dichloroethane	<1	µg/L	SW846 8260C	Bromodichloromethane	<1	µg/L	SW846 8260C
1,2-Dichloropropane	<1	µg/L	SW846 8260C	Bromoform	<1	µg/L	SW846 8260C
1,3,5-Trimethylbenzene	<1	µg/L	SW846 8260C	Bromomethane	<1	µg/L	SW846 8260C
1,3-Dichlorobenzene	<1	µg/L	SW846 8260C	Carbon Disulfide	<10	µg/L	SW846 8260C
1,3-Dichloropropane	<1	µg/L	SW846 8260C	Carbon Tetrachloride	<1	µg/L	SW846 8260C
1,4-Dichlorobenzene	<1	µg/L	SW846 8260C	Chlorobenzene	<1	µg/L	SW846 8260C

Surrogate	Recovery	Method
Toluene-d8	112	NWTPH-G
4-Bromofluorobenzene	108	NWTPH-G
Dibromofluoromethane	82	SW846 8260C
1,2-Dichloroethane-d4	97	SW846 8260C

Surrogate	Recovery	Method
Toluene-d8	116	SW846 8260C
4-Bromofluorobenzene	124	SW846 8260C

SPECTRA LABORATORIES


Jeffrey Cooper, Laboratory Manager
a14/jac

07/25/2017

Petroleum Reclaiming Services, Inc.
3003 Taylor Way
Tacoma, WA 98421

Project: PRS
Client ID: Trip Blank #5
Sample Matrix: Water
Date Sampled: 06/14/2017
Date Received: 06/14/2017
Spectra Project: 2017060394
Spectra Number:16


Analyte	Result	Units	Method
Chlorodibromomethane	<1	µg/L	SW846 8260C
Chloroethane	<1	µg/L	SW846 8260C
Chloroform	<1	µg/L	SW846 8260C
Chloromethane	<1	µg/L	SW846 8260C
Dibromomethane	<1	µg/L	SW846 8260C
Dichlorodifluoromethane	<1	µg/L	SW846 8260C
Ethylbenzene	<1	µg/L	SW846 8260C
Hexachlorobutadiene	<1	µg/L	SW846 8260C
Iodomethane	<10	µg/L	SW846 8260C
Isopropylbenzene	<1	µg/L	SW846 8260C
Methyl-tert-Butyl Ether	<1	µg/L	SW846 8260C
Methylene chloride	<5	µg/L	SW846 8260C
Naphthalene	<1	µg/L	SW846 8260C
Styrene	<1	µg/L	SW846 8260C
Tetrachloroethene	<1	µg/L	SW846 8260C
Toluene	<1	µg/L	SW846 8260C
Total Xylenes	<1	µg/L	SW846 8260C
Trichloroethene	<1	µg/L	SW846 8260C
Trichlorofluoromethane	<1	µg/L	SW846 8260C
Vinyl Acetate	<10	µg/L	SW846 8260C
Vinyl chloride	<0.2 J	µg/L	SW846 8260C

Analyte	Result	Units	Method
cis-1,2-Dichloroethene	<1	µg/L	SW846 8260C
cis-1,3-Dichloropropene	<1	µg/L	SW846 8260C
n-Butylbenzene	<1	µg/L	SW846 8260C
n-Propylbenzene	<1	µg/L	SW846 8260C
sec-Butylbenzene	<1	µg/L	SW846 8260C
tert-Butylbenzene	<1	µg/L	SW846 8260C
trans-1,2-Dichloroethene	<1	µg/L	SW846 8260C
trans-1,3-Dichloropropene	<1	µg/L	SW846 8260C

Surrogate	Recovery	Method
Toluene-d8	112	NWTPH-G
4-Bromofluorobenzene	108	NWTPH-G
Dibromofluoromethane	82	SW846 8260C
1,2-Dichloroethane-d4	97	SW846 8260C

Surrogate	Recovery	Method
Toluene-d8	116	SW846 8260C
4-Bromofluorobenzene	124	SW846 8260C

SPECTRA LABORATORIES


Jeffrey Cooper, Laboratory Manager
a14/jac



SPECTRA Laboratories - Kitsap

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26276 Twelve Trees Lane, Suite C • Poulsbo, WA 98370 • (360) 779-5141 • Fax (360) 779-5150 • www.spectra-lab.com

Certificate of Analysis

Spectra Laboratories LLC
2221 Ross Way
Tacoma, WA 98421

Date Received: 6/20/2017
Date Reported: 7/25/2017

Project: 2017060394

Sample No.	Sampled	Sample ID	Result	Units	Method	Date Tested	Initials
Nitrate + Nitrite-N							
169224-01	6/13/2017	060394-1	<0.01	mg/L	SM 4500-NO3 F	6/21/2017	EC
169224-02	6/13/2017	060394-2	<0.01	mg/L	SM 4500-NO3 F	6/21/2017	EC
169224-03	6/13/2017	060394-3	3.43	mg/L	SM 4500-NO3 F	6/21/2017	EC
169224-04	6/13/2017	060394-4	0.13	mg/L	SM 4500-NO3 F	6/21/2017	EC
169224-05	6/13/2017	060394-5	<0.01	mg/L	SM 4500-NO3 F	6/21/2017	EC
169224-06	6/13/2017	060394-6	<0.01	mg/L	SM 4500-NO3 F	6/21/2017	EC
169224-07	6/13/2017	060394-7	<0.01	mg/L	SM 4500-NO3 F	6/21/2017	EC
169224-08	6/13/2017	060394-8	0.06	mg/L	SM 4500-NO3 F	6/21/2017	EC
169224-09	6/13/2017	060394-9	0.02	mg/L	SM 4500-NO3 F	6/21/2017	EC
169224-10	6/14/2017	060394-10	0.01	mg/L	SM 4500-NO3 F	6/21/2017	EC
169224-11	6/14/2017	060394-11	0.01	mg/L	SM 4500-NO3 F	6/21/2017	EC

Approved For Release

Nancy Parrott
Nancy Parrott, Laboratory Supervisor

Client Information		Test Parameters												
Company/Client: <u>Spectra</u>		Number of Containers RCRA Metals: As Ba Cd Cr Pb Hg Se Ag Priority Pollutant Metals: Sb As Be Cr Cu Pb Hg Ni Se Ag Ti Zn 503 Regs: As Cd Cu Pb Hg Mo Ni Se Zn Metals (Specify): BOD CBOD COD HEM SGT (Oil & Grease/TPH) Solids: TDS TSS TVS TVSS TS Turbidity pH Nitrate-N Ammonia-N Orthophosphate-P Nitrite-Nitrite-N TKN Total Phosphorous <i>preserved</i> Fecal Coliform: MPN or MF Ag Soil: pH and EC crop:												
Address: <u>2221 Ross Way</u>														
City: <u>Tacoma</u> Zip: <u>98421</u>														
Project Information														
Project Manager/Report To: <u>Marie Holt</u>														
Project Name: <u>2017060394</u>														
Telephone No: <u>253-272-4850</u>														
Fax No: <u>253-572-9838</u>														
Email address: <u>marieh@spectra-lab.com</u>														

Sample ID	Date	Time	Matrix	Hazard	Lab ID	Circle the desired parameters above if multiple tests are listed on the same line																	
1 060394-1	6-13-17		H ₂ O		169224-01																		
2 -2					02																		
3 -3					03																		
4 -4					04																		
5 -5					05																		
6 -6					06																		
7 -7					07																		
8 -8					08																		
9 -9					09																		
10 -10	6-14-17		7-25-17		10																		
11 -11	6-14-17				11																		
12																							

Routine Disposal Hazardous sample disposal
 Return to Client (Cost of disposal will be billed to client)

Special Instructions: MS/MSD on sample #10 please

Sample Receipt:		Relinquished by:		Company		Date		Time	
Total # of containers		<u>Jen Draven</u>	<u>JDD</u>	<u>Spectra-Tac</u>		<u>6-20-17</u>		<u>11:30</u>	
COC seals present? intact?		<u>H. Ferguson</u>	<u>HFF</u>	<u>Spectra</u>		<u>6-20-17</u>		<u>11:50</u>	
Temp at receipt? °C		<u>HFF</u>	<u>HFF</u>	<u>Spectra</u>		<u>6-20-17</u>		<u>11:5</u>	
Samples intact?		<u>AB</u>	<u>AB</u>	<u>Spectra</u>		<u>6/20/17</u>		<u>11:5</u>	
Received Via:									
<input type="checkbox"/> Standard (10 Business days)									
<input type="checkbox"/> Rush (specify date needed):									
<input checked="" type="checkbox"/> Other (specify) <u>6-28-17</u>									
* additional charges may apply									

Samples received after 12 noon will be considered as received the following business day

SPECTRA Laboratories

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2221 Ross Way • Tacoma, WA 98421 • (253) 272-4850 • Fax (253) 572-9838 • www.spectra-lab.com

July 25, 2017

Petroleum Reclaiming Services, Inc.
3003 Taylor Way
Tacoma, WA 98421

Sample matrix: Water

Spectra Project:
Spectra #
Applies to Samples

Date Analyzed: 6/27/2017
Dilution: 1
< = less than
2017060394
Method Blank
#1-12

VOLATILE ORGANIC ANALYSIS

METHOD 624/8260

Compound	ug/L	Compound	ug/L
Acetone	< 10.00	1,2-Dichloropropane	< 1.00
Acrolein	< 10.00	1,3-Dichloropropane	< 1.00
Acrylonitrile	< 10.00	cis-1,3-Dichloropropene	< 1.00
Benzene	< 1.00	trans-1,3-Dichloropropene	< 1.00
Bromobenzene	< 1.00	2,2-Dichloropropane	< 1.00
Bromochloromethane	< 1.00	1,1-Dichloropropene	< 1.00
Bromodichloromethane	< 1.00	Ethylbenzene	< 1.00
Bromoform	< 1.00	2-Hexanone (MBK)	< 10.00
Bromomethane	< 1.00	Hexachlorobutadiene	< 1.00
2-Butanone (MEK)	< 10.00	Iodomethane	< 10.00
n-Butylbenzene	< 1.00	Isopropylbenzene	< 1.00
sec-Butylbenzene	< 1.00	p-Isopropyltoluene	< 1.00
tert-Butylbenzene	< 1.00	*Methylene chloride	6.40
Carbon Disulfide	< 10.00	4-Methyl-2-pentanone (MIBK)	< 10.00
Carbon tetrachloride	< 1.00	MTBE	< 1.00
Chlorobenzene	< 1.00	Naphthalene	< 1.00
Chlorodibromomethane	< 1.00	n-Propylbenzene	< 1.00
Chloroethane	< 1.00	Styrene	< 1.00
2-Chloroethyl Vinyl ether	< 10.00	1,1,1,2-Tetrachloroethane	< 1.00
Chloroform	< 1.00	1,1,2,2-Tetrachloroethane	< 1.00
Chloromethane	< 1.00	Tetrachloroethene	< 1.00
2-Chlorotoluene	< 1.00	Toluene	< 1.00
4-Chlorotoluene	< 1.00	Total Xylenes	< 2.00
1,2-Dibromo-3-Chloropropane (DBCP)	< 10.00	*1,2,3-Trichlorobenzene	1.91
1,2-Dibromoethane (EDB)	< 1.00	*1,2,4-Trichlorobenzene	1.13
Dibromomethane	< 1.00	1,1,1-Trichloroethane	< 1.00
1,2-Dichlorobenzene	< 1.00	1,1,2-Trichloroethane	< 1.00
1,3-Dichlorobenzene	< 1.00	Trichloroethene	< 1.00
1,4-Dichlorobenzene	< 1.00	Trichlorofluoromethane	< 1.00
Dichlorodifluoromethane	< 1.00	1,2,3-Trichloropropane	< 1.00
1,1-Dichloroethane	< 1.00	1,2,4-Trimethylbenzene	< 1.00
1,2-Dichloroethane	< 1.00	1,3,5-Trimethylbenzene	< 1.00
1,1-Dichloroethene	< 1.00	Vinyl Acetate	< 10.00
cis-1,2-Dichloroethene	< 1.00	Vinyl chloride	< 1.00
trans-1,2,-Dichloroethene	< 1.00		

SURROGATE RECOVERIES

Dibromofluoromethane	101	%
1,2-Dichloroethane-d4	13	%
Toluene-d8	97	%
4-Bromofluorobenzene	106	%

*Methylene Chloride, 1,2,3-Trichlorobenzene, and 1,2,4-Trichlorobenzene were detected in the method blank. Associated samples were non-detect and not affected.


Jeremy Cooper
Laboratory Manager

July 25, 2017

Petroleum Reclaiming Services, Inc.
3003 Taylor Way
Tacoma, WA 98421

Sample matrix: Water

Spectra Project:
Spectra #
Applies to Samples

Date Analyzed:
Dilution:
< = less than
2017060394
Method Blank
#13-16

6/28/2017
1


VOLATILE ORGANIC ANALYSIS

METHOD 624/8260

Compound	ug/L	Compound	ug/L
Acetone	< 10.00	1,2-Dichloropropane	< 1.00
Acrolein	< 10.00	1,3-Dichloropropane	< 1.00
Acrylonitrile	< 10.00	cis-1,3-Dichloropropene	< 1.00
Benzene	< 1.00	trans-1,3-Dichloropropene	< 1.00
Bromobenzene	< 1.00	2,2-Dichloropropane	< 1.00
Bromochloromethane	< 1.00	1,1-Dichloropropene	< 1.00
Bromodichloromethane	< 1.00	Ethylbenzene	< 1.00
Bromoform	< 1.00	2-Hexanone (MBK)	< 10.00
Bromomethane	< 1.00	Hexachlorobutadiene	< 1.00
2-Butanone (MEK)	< 10.00	Iodomethane	< 10.00
n-Butylbenzene	< 1.00	Isopropylbenzene	< 1.00
sec-Butylbenzene	< 1.00	p-Isopropyltoluene	< 1.00
tert-Butylbenzene	< 1.00	Methylene chloride	< 5.00
Carbon Disulfide	< 10.00	4-Methyl-2-pentanone (MIBK)	< 10.00
Carbon tetrachloride	< 1.00	MTBE	< 1.00
Chlorobenzene	< 1.00	Naphthalene	< 1.00
Chlorodibromomethane	< 1.00	n-Propylbenzene	< 1.00
Chloroethane	< 1.00	Styrene	< 1.00
2-Chloroethyl Vinyl ether	< 10.00	1,1,1,2-Tetrachloroethane	< 1.00
Chloroform	< 1.00	1,1,2,2-Tetrachloroethane	< 1.00
Chloromethane	< 1.00	Tetrachloroethene	< 1.00
2-Chlorotoluene	< 1.00	Toluene	< 1.00
4-Chlorotoluene	< 1.00	Total Xylenes	< 2.00
1,2-Dibromo-3-Chloropropane (DBCP)	< 10.00	1,2,3-Trichlorobenzene	< 1.00
1,2-Dibromoethane (EDB)	< 1.00	1,2,4-Trichlorobenzene	< 1.00
Dibromomethane	< 1.00	1,1,1-Trichloroethane	< 1.00
1,2-Dichlorobenzene	< 1.00	1,1,2-Trichloroethane	< 1.00
1,3-Dichlorobenzene	< 1.00	Trichloroethene	< 1.00
1,4-Dichlorobenzene	< 1.00	Trichlorofluoromethane	< 1.00
Dichlorodifluoromethane	< 1.00	1,2,3-Trichloropropane	< 1.00
1,1-Dichloroethane	< 1.00	1,2,4-Trimethylbenzene	< 1.00
1,2-Dichloroethane	< 1.00	1,3,5-Trimethylbenzene	< 1.00
1,1-Dichloroethene	< 1.00	Vinyl Acetate	< 10.00
cis-1,2-Dichloroethene	< 1.00	Vinyl chloride	< 1.00
trans-1,2-Dichloroethene	< 1.00		

SURROGATE RECOVERIES

Dibromofluoromethane	100	%
1,2-Dichloroethane-d4	101	%
Toluene-d8	98	%
4-Bromofluorobenzene	96	%



Jennifer Cooper
Laboratory Manager

July 25, 2017

Petroleum Reclaiming Services, Inc.
3003 Taylor Way
Tacoma, WA 98421

Sample Matrix: Water
EPA Method: 624/ 8260C
Spectra Project: 2017060394
Date Analyzed: 6/27/2017
Units: ug/L
Applies to Spectra #'s: #1-16

GCMS VOLATILE ORGANIC ANALYSIS
Laboratory Control Sample (LCS) Results

COMPOUND	SAMPLE RESULT	SPIKE AMOUNT	SPIKE RESULT	LCS %REC
1,1-Dichloroethene	<1	10.00	11.0	110
Benzene	<1	10.00	8.9	89
Trichloroethene	<1	10.00	8.3	83
Toluene	<1	10.00	9.9	99
Chlorobenzene	<1	10.00	9.4	94

Surrogate Recoveries (%)	LCS
Dibromofluoromethane	94
1,2-Dichloroethane-d4	98
Toluene-d8	104
4-Bromofluorobenzene	109



Jeffrey Cooper
Laboratory Manager

July 25, 2017

Petroleum Reclaiming Services, Inc.
3003 Taylor Way
Tacoma, WA 98421

Sample Matrix: Water
EPA Method: 624/8260C
Spectra Project: 2017060394
Date Analyzed: 6/28/2017
Units: ug/L
Applies to Spectra #'s: #1-16
Spiked Sample 2017060394-10

GCMS VOLATILE ORGANIC ANALYSIS
Matrix Spike/ Matrix Spike Duplicate Results

COMPOUND	SAMPLE RESULT	SPIKE AMOUNT	MS RESULT	MS %REC	MSD RESULT	MSD %REC	RPD
1,1-Dichloroethene	<1	10.0	10.3	103	9.8	98	5.0
Benzene	<1	10.0	12.9	129	12.4	124	4.0
Trichloroethene	<1	10.0	10.6	106	10.1	101	4.8
Toluene	<1	10.0	10.2	102	10.0	100	2.0
Chlorobenzene (Results after dilution)	11.30	10.0	24.1	128	23.6	123	4.0

Surrogates	MS	MSD
Dibromofluoromethane	98	100
1,2-Dichloroethane-d4	104	104
Toluene-d8	97	97
4-Bromofluorobenzene	92	91



Jeffrey Cooper
Laboratory Manager

July 25, 2017

Petroleum Reclaiming Services, Inc.
3003 Taylor Way
Tacoma, WA 98421

Method: NWTPH-G
Sample Matrix: Water
Units: ug/L
Spectra Project: 2017060394
Applies to Spectra # 1-12

HYDROCARBON ANALYSIS
QUALITY CONTROL RESULTS

METHOD BLANK


Date Analyzed: 6/27/2017

WTPH-G <50

Surrogate Recoveries:

Toluene-d8	100%
BFB	99%

SPECTRA LABORATORIES



Jeffrey Cooper, Laboratory Manager

July 25, 2017

Petroleum Reclaiming Services, Inc.
3003 Taylor Way
Tacoma, WA 98421

Method: NWTPH-G
Sample Matrix: Water
Units: ug/L
Spectra Project: 2017060394
Applies to Spectra # 13-16

HYDROCARBON ANALYSIS
QUALITY CONTROL RESULTS

METHOD BLANK

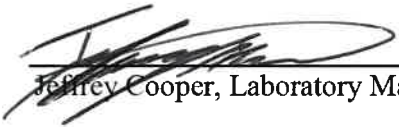
Date Analyzed: 6/28/2017

WTPH-G <50

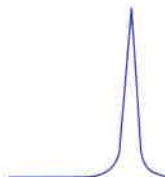
Surrogate Recoveries:

Toluene-d8	113%
BFB	104%

SPECTRA LABORATORIES



Jeffrey Cooper, Laboratory Manager



07/25/2017

Petroleum Reclaiming Services, Inc.
3003 Taylor Way
Tacoma, WA 98421

Spectra Project: 2017060394
Applies to Spectra Samples: 1-12

QUALITY CONTROL RESULTS NWTPH-Gx

Initial Calibration Verification

Date Analyzed: 6/27/2017

Units: ug/L

Analyte	Standard Value	Conc.	%Rec	QC Limit
Gasoline	228	250	91.2%	85-115%

Continuing Calibration Verification

Date Analyzed: 6/27/2017

Units: ug/L

Analyte	Standard Value	Conc.	%Rec	QC Limit
Gasoline	240	250	96.0%	85-115%

Spectra Laboratories



Jeffrey Cooper
Laboratory Manager

07/25/2017

Petroleum Reclaiming Services, Inc.
3003 Taylor Way
Tacoma, WA 98421

Spectra Project: 2017060394
Applies to Spectra Samples: 13-16

QUALITY CONTROL RESULTS NWTPH-Gx

Initial Calibration Verification

Date Analyzed: 6/28/2017

Units: ug/L

Analyte	Standard Value	Conc.	%Rec	QC Limit
Gasoline	280	250	112.0%	85-115%

Continuing Calibration Verification

Date Analyzed: 6/28/2017

Units: ug/L

Analyte	Standard Value	Conc.	%Rec	QC Limit
Gasoline	247	250	98.8%	85-115%

Spectra Laboratories

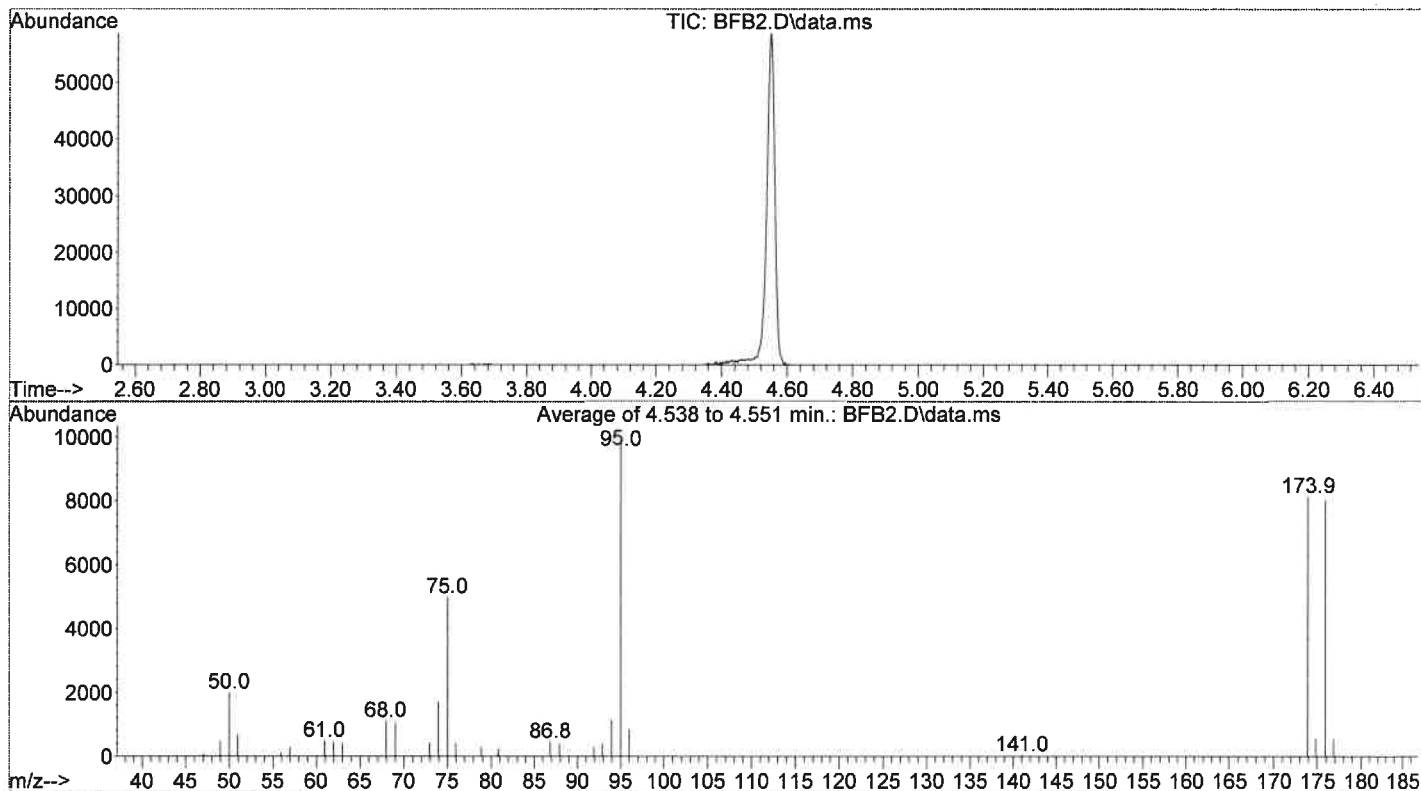


Jeffrey Cooper
Laboratory Manager

Data Path : C:\msdchem\1\DATA\2017 data\06 2017\20170627\
 Data File : BFB2.D
 Acq On : 27 Jun 2017 3:31 pm
 Operator :
 Sample :
 Misc : septum purge on
 ALS Vial : 1 Sample Multiplier: 1

Integration File: rteint.p

Method : C:\msdchem\1\METHODS\5975_quantmethods\VW062617contcal.M
 Title : VOA in Water 5ml Sparge 6/21/13
 Last Update : Mon Jul 24 13:35:39 2017



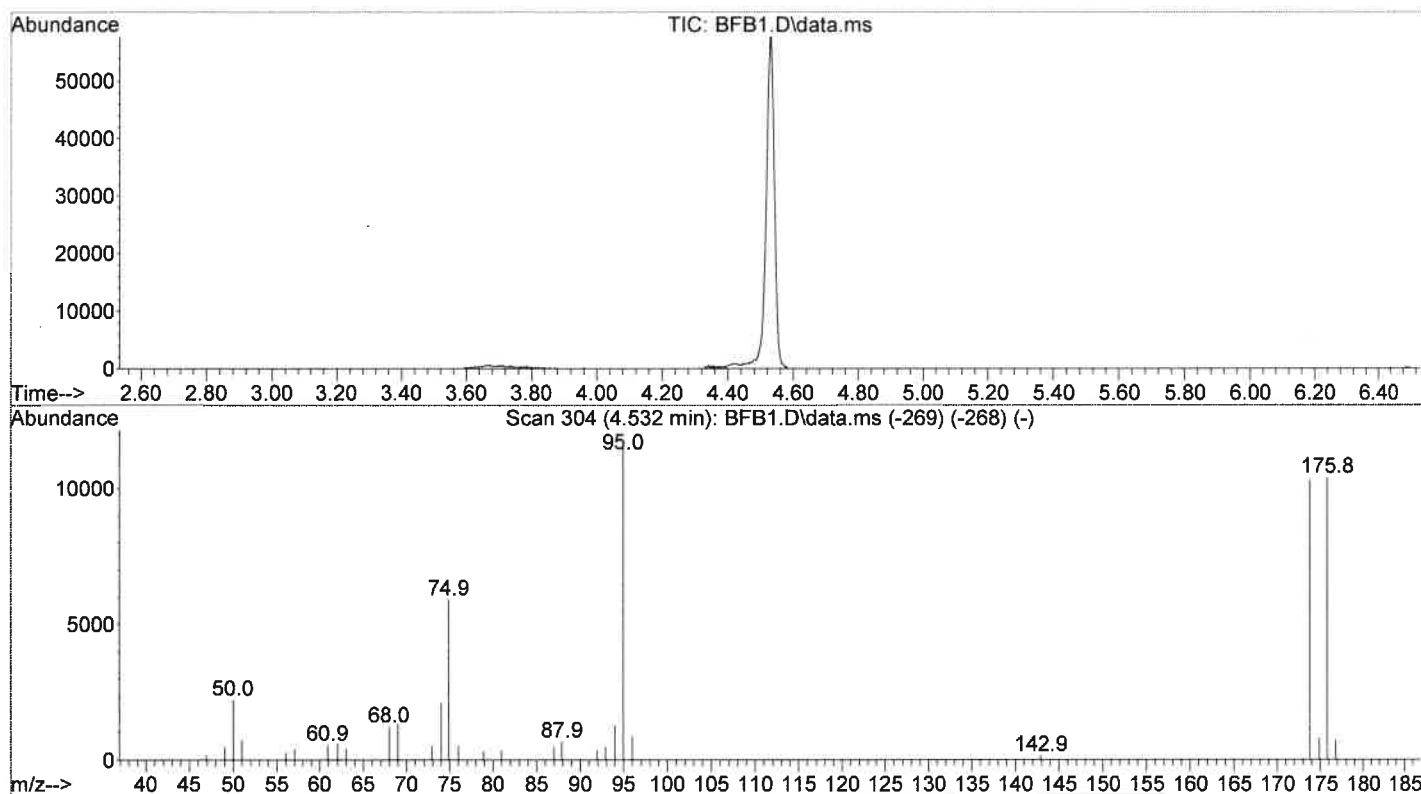
Spectrum Information: Average of 4.538 to 4.551 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result
50	95	15	40	20.2	1995	PASS
75	95	30	60	50.6	4986	PASS
95	95	100	100	100.0	9860	PASS
96	95	5	9	8.4	830	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	100	82.5	8133	PASS
175	174	5	9	6.9	563	PASS
176	174	95	101	98.4	8007	PASS
177	176	5	9	6.7	536	PASS

Data Path : C:\msdchem\1\DATA\2017 data\06 2017\20170628\
 Data File : BFB1.D
 Acq On : 28 Jun 2017 11:50 am
 Operator :
 Sample :
 Misc : septum purge on
 ALS Vial : 16 Sample Multiplier: 1

Integration File: rteint.p

Method : C:\msdchem\1\METHODS\5975_quantmethods\VW062617contcal.M
 Title : VOA in Water 5ml Sparge 6/21/13
 Last Update : Mon Jul 24 13:35:39 2017



Spectrum Information: Scan 304

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result
50	95	15	40	19.1	2215	PASS
75	95	30	60	51.0	5898	PASS
95	95	100	100	100.0	11569	PASS
96	95	5	9	7.3	850	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	100	88.9	10280	PASS
175	174	5	9	7.8	797	PASS
176	174	95	101	100.9	10375	PASS
177	176	5	9	6.6	681	PASS

July 25, 2017

Petroleum Reclaiming Services, Inc.
3003 Taylor Way
Tacoma, WA 98421

Method: NWTPH-Dx
Sample Matrix: Water
Spectra Project: 2017060394
Applies to Spectra #: 8-11

HYDROCARBON ANALYSIS
QUALITY CONTROL RESULTS

METHOD BLANK

Date Extracted: 6/25/2017 Date Analyzed: 7/1/2017
Units: ug/L

Diesel <100
Heavy Oil <500

Surrogate Recoveries:
p-terphenyl 84%

LCS

Spiked Sample: DI Water Date Extracted: 6/25/2017
Units: ug/L Date Analyzed: 6/30/2017

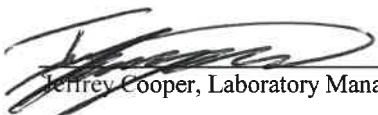
Compound	Spike Amount Added	Spike Amount Found	Percent Recovery
Diesel	2500	3330	133
Surrogate: p-Terphenyl		—	109

MS/MSD

Spiked Sample: 2017060394-10 Date Extracted: 6/25/2017
Units: ug/L Date Analyzed: 7/1/2017

Compound	Sample Result	Spike Amount Added	Spike Amount Found	Percent Recovery	Dup. Spike Amount Found	Percent Recovery	% RPD
Diesel	295	5000	4055	81.1	4158	83.2	2.5
Surrogate: p-Terphenyl			—	78	—	91	

SPECTRA LABORATORIES



Jeffrey Cooper, Laboratory Manager

July 25, 2017

Petroleum Reclaiming Services, Inc.
3003 Taylor Way
Tacoma, WA 98421

Method: NWTPH-Dx
Sample Matrix: Water
Spectra Project: 2017060394
Applies to Spectra #: 1-7

HYDROCARBON ANALYSIS
QUALITY CONTROL RESULTS
METHOD BLANK

Date Extracted: 6/22/2017 Date Analyzed: 7/1/2017
Units: ug/L
Diesel <100
Heavy Oil <500


Surrogate Recoveries:
p-terphenyl 84%

LCS

Spiked Sample: DI Water Date Extracted: 6/22/2017
Units: ug/L Date Analyzed: 7/1/2017

Compound	Spike Amount Added	Spike Amount Found	Percent Recovery
Diesel	5000	4430	88.6
Surrogate: p-Terphenyl		—	96

SPECTRA LABORATORIES



Jeffrey Cooper, Laboratory Manager

7/25/2017

Petroleum Reclaiming Services, Inc.
3003 Taylor Way
Tacoma, WA 98421

Spectra Project: 2017060394
Applies to Spectra Samples: 1-12

QUALITY CONTROL RESULTS NWTPH-Dx

Initial Calibration Verification

Date Analyzed: 6/30/2017

Units: ug/L

Analyte	Standard Value	Conc.	%Rec	QC Limit
Diesel	2800	2500	112.0%	85-115%
Oil	5510	5000	110.2%	85-115%

Continuing Calibration Verification 1

Date Analyzed: 6/30/2017

Units: ug/L

Analyte	Standard Value	Conc.	%Rec	QC Limit
Diesel	2700	2500	108.0%	85-115%
Oil	5750	5000	115.0%	85-115%

Continuing Calibration Verification 2

Date Analyzed: 7/1/2017

Units: ug/L

Analyte	Standard Value	Conc.	%Rec	QC Limit
Diesel	2810	2500	112.4%	85-115%
Oil	5500	5000	110.0%	85-115%


Continuing Calibration Verification 3

Date Analyzed: 7/1/2017

Units: ug/L

Analyte	Standard Value	Conc.	%Rec	QC Limit
Diesel	2670	2500	106.8%	85-115%
Oil	5550	5000	111.0%	85-115%

Spectra Laboratories



Jeffrey Cooper
Laboratory Manager

July 25, 2017

Petroleum Reclaiming Services, Inc.
3003 Taylor Way
Tacoma, WA 98421

Method: 8082A
Sample Matrix: Water
Spectra Project: 2017060394
Applies to Spectra #: 1-5

PCB ANALYSIS
QUALITY CONTROL RESULTS

METHOD BLANK

Date Extracted: 7/2/2017 Date Analyzed: 7/12/2017

PCB's <0.1


Surrogate Recovery:
Decachlorobiphenyl 97%

LCS

Spiked Sample: DI Water Date Extracted: 7/2/2017
Date Analyzed: 7/12/2017

<u>Compound</u>	<u>Sample Result</u>	<u>Spike Amount Added</u>	<u>Spike Amount Found</u>	<u>Percent Recovery</u>
AR1260	<0.1	0.50	0.482	96.4%
Surrogate: Decachlorobiphenyl			—	99%

SPECTRA LABORATORIES



Jeffrey Cooper, Laboratory Manager

July 25, 2017

Petroleum Reclaiming Services, Inc.
3003 Taylor Way
Tacoma, WA 98421

Method: 8082A
Sample Matrix: Water
Spectra Project: 2017060394
Applies to Spectra #: 6-11

PCB ANALYSIS
QUALITY CONTROL RESULTS

METHOD BLANK

Date Extracted: 7/11/2017 Date Analyzed: 7/12/2017

PCB's <0.1

Surrogate Recovery:
Decachlorobiphenyl 100%

LCS

Spiked Sample: DI Water Date Extracted: 7/11/2017
Date Analyzed: 7/12/2017

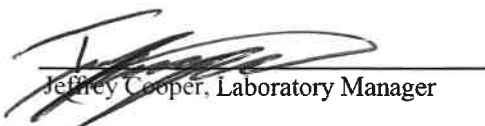
Compound	Sample Result	Spike Amount Added	Spike Amount Found	Percent Recovery
AR1260	<0.1	0.50	0.414	82.8%
Surrogate: Decachlorobiphenyl			—	93%

MS/MSD

Spiked Sample: 2017060394-10 Date Extracted: 7/11/2017
Units: ug/L Date Analyzed: 7/13/2017

Compound	Sample Result	Spike Amount Added	Spike Amount Found	Percent Recovery	Dup. Spike Amount Found	Percent Recovery	% RPD
AR 1260	0.00	0.5	0.474	94.8%	0.466	93.2%	1.7
Surrogate: Decachlorobiphenyl			—	99%	—	99%	

SPECTRA LABORATORIES



Jeffrey Cooper, Laboratory Manager

07/25/2017

Petroleum Reclaiming Services, Inc.
3003 Taylor Way
Tacoma, WA 98421

Spectra Project: 2016060394
Applies to Spectra Samples: #1-12

QUALITY CONTROL RESULTS

Polychlorinated Biphenyls (PCBs) - EPA Method SW846-8082A

Initial Calibration Verification

Date Analyzed: 7/12/2017

Units: ng/mL

Analyte	Standard Value	Conc.	%Rec	QC Limit
Arochlor 1016	111	100	111.0%	80-120%
Arochlor 1260	109	100	109.0%	80-120%

Continuing Calibration Verification 1

Date Analyzed: 7/12/2017

Units: ng/mL

Analyte	Standard Value	Conc.	%Rec	QC Limit
Arochlor 1016	114	100	114.0%	80-120%
Arochlor 1260	120	100	120.0%	80-120%


Continuing Calibration Verification 2

Date Analyzed: 7/13/2017

Units: ng/mL

Analyte	Standard Value	Conc.	%Rec	QC Limit
Arochlor 1016	113	100	113.0%	80-120%
Arochlor 1260	118	100	118.0%	80-120%

Spectra Laboratories



Jeffrey Cooper
Laboratory Manager

6/28/2017

Petroleum Reclaiming Services, Inc.
3003 Taylor Way
Tacoma, WA 98421

Units: ug/L
Spectra Project: 2017060394
Applies to Spectra #'s 1-11
Analyst: SCJ

QUALITY CONTROL RESULTS
ICP-MS Metals - SW846 6020B - Water

Laboratory Reagent Blank (LRB)

Date Digested: 6/28/2017

Date Analyzed: 6/28/2017

<u>Element</u>	<u>CAS #</u>	<u>Result</u>
Arsenic	7440-38-2	< 0.2
Chromium	7440-47-3	< 0.5
Lead	7439-92-1	< 0.2

Laboratory Fortified Blank (LFB)

Date Digested: 6/28/2017

Date Analyzed: 6/28/2017

<u>Element</u>	<u>Spike Added</u>	<u>LCS Conc.</u>	<u>LCS %Rec</u>
Arsenic	100.0	89.06	89.1
Chromium	100.0	97.03	97.0
Lead	100.0	101.50	101.5

LCS Recovery limits 85-115%

Matrix Spike/Matrix Spike Duplicate (MS/MSD)

Date Digested: 6/28/2017

Date Analyzed: 6/28/2017

Sample Spiked: 2017060725-1

<u>Element</u>	<u>Sample Conc.</u>	<u>Spike Conc.</u>	<u>MS Conc.</u>	<u>MS %Rec</u>	<u>MSD Conc.</u>	<u>MSD %Rec</u>	<u>RPD</u>
Arsenic	18.06	100.0	112.80	94.7	116.00	97.9	3.3
Chromium	3.17	100.0	96.27	93.1	100.60	97.4	4.5
Lead	0.79	100.0	97.46	96.7	103.20	102.4	5.8

Recovery Limits 70-130%

RPD Limit 20

SPECTRA LABORATORIES



Jeffrey Cooper
Laboratory Manager

6/28/2017

Petroleum Reclaiming Services, Inc.
3003 Taylor Way
Tacoma, WA 98421

Units: ug/L
Spectra Project: 2017060394
Applies to Spectra #'s 1-11
Analyst: SCJ

QUALITY CONTROL RESULTS ICP-MS Metals - SW846 6020B - Water

Initial Quality Control Standard/Calibration Blank Results

Date Analyzed: 6/28/2017

Element	Standard			QC Limit	Blank Result
	Value	Conc.	%Rec		
Arsenic	100	98.70	98.7	90-110%	< 0.5
Chromium	100	101.50	101.5	90-110%	< 0.5
Lead	100	104.80	104.8	90-110%	< 0.5

Instrument Performance Check/Continuing Calibration Blank Results

Date Analyzed: 6/28/2017

Element	Standard			QC Limit	Blank Result
	Value	Conc.	%Rec		
Arsenic	100	96.50	96.5	90-110%	< 0.5
Chromium	100	94.77	94.8	90-110%	< 0.5
Lead	100	97.21	97.2	90-110%	< 0.5

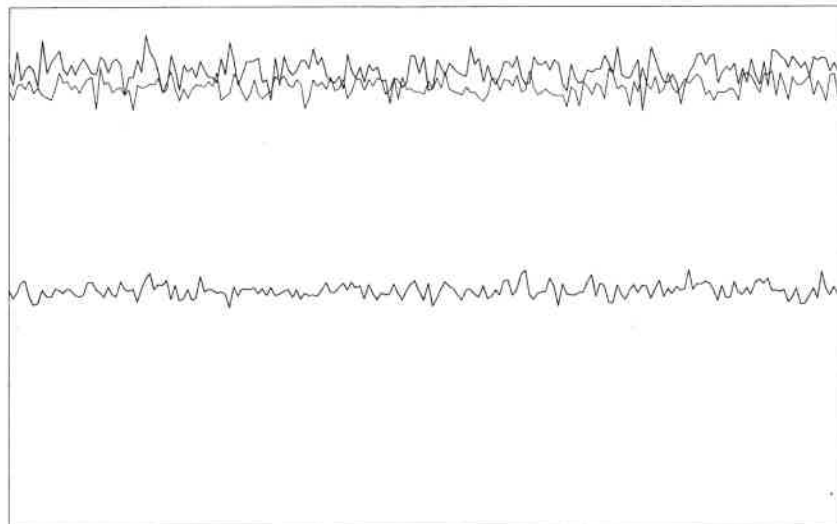
Spectra Laboratories



Jeffrey Cooper
Laboratory Manager

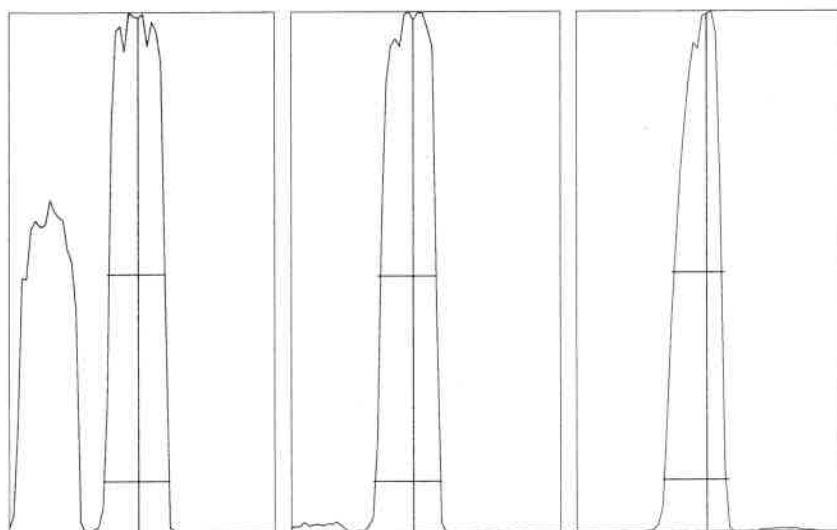
Tune Report

Tune File : nogas.u
 Comment : 6-28-17



Integration Time: 0.1000 sec
 Sampling Period: 0.9200 sec
 n: 200
 Oxide: 156/140 1.6
 Doubly Charged: 70/140 3.2

m/z	Range	Count	Mean	RSD%	Background
7	5,000	2258.0	2284.8	2.96	0.50
89	5,000	4443.0	4393.3	2.70	0.10
205	10,000	8221.0	8448.8	1.99	0.30
70/140	5	3.396%	3.286%	7.85	
156/140	2	1.522%	1.521%	10.38	
12	20,000	13681.0	13820.6	1.02	0.20
56	5,000	3193.0	3232.5	2.52	0.40
80	50,000	23529.0	23404.8	0.91	0.30



m/z: 7 89
 Height: 725 1,398
 Axis: 7.00 88.90
 W-50%: 0.65 0.65
 W-10%: 0.7500 0.7500

Integration Time: 0.0300 sec
 Acquisition Time: 10.5200 sec

Y axis : Linear

Tune Report

Tune File : nogas.u
Comment : 6-28-17

Tuning Parameters

===Plasma Condition===

RF Power : 1550 W
RF Matching : 1.72 V
Smpl Depth : 8 mm
Torch-H : -0.1 mm
Torch-V : -0.2 mm
Carrier Gas : 0.8 L/min
Makeup Gas : 0.2 L/min
Optional Gas : --- %
Nebulizer Pump : 0.1 rps
Sample Pump : --- rps
S/C Temp : 6 degC

===Ion Lenses===

Extract 1 : 0 V
Extract 2 : -179 V
Omega Bias-ce : -26 V
Omega Lens-ce : 1.2 V
Cell Entrance : -34 V
QP Focus : 3 V
Cell Exit : -36 V

===Octopole Parameters===
OctP RF : 180 V
OctP Bias : -9 V

===Q-Pole Parameters===

AMU Gain : 125
AMU Offset : 124
Axis Gain : 0.9999
Axis Offset : -0.05
QP Bias : -6

===Detector Parameters===

Discriminator : 8
Analog HV : 1950
Pulse HV : 1130

===Reaction Cell===

Reaction Mode : OFF
H2 Gas : --- mL/min He Gas : 3 mL/min Optional Gas : ---

July 24, 2017

Petroleum Reclaiming Services, Inc.
3003 Taylor Way
Tacoma, WA 98421

Units: mg/L
Spectra Project: 2017060394
Applies to Samples: 1-11

QUALITY CONTROL RESULTS
Sulfate Method AASHTO T290/375.4/SM 4500E

Method Blank

Date Analyzed: 6/20/17

	<u>Result</u>
Sulfate	<2.0 mg/L

Blank Spike (LCS)

Date Analyzed: 6/20/17

	<u>Spike</u>	<u>LCS</u>	<u>LCS</u>
	<u>Added</u>	<u>Conc.</u>	<u>%Rec</u>
Sulfate	25.0	29.6	118.4


Matrix Spike/Matrix Spike Duplicate (MS/MSD)

Date Analyzed: 6/20/17

Sample Spiked: 2017060394-10

	<u>Sample</u>	<u>Spike</u>	<u>MS</u>	<u>MS</u>	<u>MSD</u>	<u>MSD</u>	
	<u>Conc.</u>	<u>Conc.</u>	<u>Conc.</u>	<u>%Rec</u>	<u>Conc</u>	<u>%Rec</u>	<u>RPD</u>
Sulfate	28.3	25	49.8	86.0	48.8	82.0	4.8

SPECTRA LABORATORIES



Jeffrey Cooper
Laboratory Manager



SPECTRA Laboratories - Kitsap

...Where experience matters

26276 Twelve Trees Lane, Suite C • Poulsbo, WA 98370 • (360) 779-5141 • Fax (360) 779-5150 • www.spectra-lab.com

June 23, 2017

Marie Holt
Spectra Laboratories
2221 Ross Way
Tacoma, WA 98421

Project: 2017060394
Sample Date: 6/13/17

Lab Work Order #: 169224
Sample Received: 6/20/17 1315

Quality Control Report

Blank

Parameter	Blank mg/L	Date Analyzed	Method
Nitrate Nitrogen	<0.01	6/21/17	SM 4500-NO ₃ F

Laboratory Check Standard

Test Parameter	QC Sample ID	True Value mg/L	Result mg/L	% Recovery	Date Analyzed	Method
Nitrate Nitrogen	P232-505	9.70	9.61	99.1	6/21/17	SM 4500-NO ₃ F

Matrix Spike

Test Parameter	Sample ID	Spike Amt. mg/L	Amt. Recovered mg/L	% Recovery
Nitrate+Nitrite Nitrogen	169224-10	1.00	1.03	103

Spike Duplicate Results

Test Parameter	Spike Duplicate Sample ID	Sample Result mg/L	Duplicate Result mg/L	% RPD
Nitrate+Nitrite Nitrogen	169224-10	1.04	1.04	0.0

Approved for Release,

Nancy Parrott
Laboratory Supervisor

WDOE Accreditation #C594

This report is issued solely for the person or company to whom it is addressed. This laboratory accepts responsibility only for the due performance of analysis according to industry accepted practice. Spectra Laboratories - Kitsap LLC or its employees are not responsible for consequential damages in any kind or in any amount.

**Spectra Laboratories
Sample Receiving Checklist**

Client PRS Spectra Project # 2017 _____

Project Name PRS

Date Received: 6/14/17 Time Received: 10:15am By PR

Shipped via: Client Courier UPS USPS FEDEX Other _____

Tracking Number _____

Papers/Coolers:

Type of shipping container: Cooler Box None Other _____

Were custody seals on the shipping container/cooler?.....Yes No N/A

Were custody seals intact?.....Yes No N/A

Container/cooler custody seal info (date/name/label) _____

Were custody seals on the outside of samples/containers?.....Yes No N/A

Were custody seals intact?.....Yes No N/A

Sample custody seal info (date/name/label) _____

Cooler Temperature 3.5 °C Sample Temperature 9.6 °C

If temperature was out of range list the reason why. _____

Were custody papers included?.....Yes No

Were custody papers properly filled out (ink, signed, etc)?.....Yes No N/A

Were all samples on chain of custody accounted for?.....Yes No

Were Papers/Bottle labels legible?.....Yes No N/A

Did all bottle labels and tags agree with custody papers?.....Yes No N/A

Were all samples received within hold time?.....Yes No

Were all of the samples containers received intact?.....Yes No N/A

If No to any of the above, list specifics: note: brought empty

bottles back - (15) Amber Liters, (2) Amber preserved, (5) VOAs, (3) 250 preserved, (3) 250 non

Are samples to be tested for microbiological tests?.....Yes No

What test? Check all that apply:

MPN _____ MF _____ HPC _____
E. coli _____ Fecal Coliform _____ Total Coliform _____ Salmonella _____

Did micro samples arrive within hold time?.....Yes No N/A

Checklist completed by PR Date 6/14/17 Time 10:15am

SPECTRA Laboratories

2221 Ross Way, Tacoma, WA 98421
(253) 272-4850 Fax (253) 572-9838

www.spectra-lab.com info@spectra-lab.com

SPECIAL INSTRUCTIONS/COMMENTS:

CHAIN OF CUSTODY

SPECTRA PROJECT #

2017060394

Return Samples: Y N

Page 1 of 2

STANDARD

RUSH

ADDRESS CHANGE

CLIENT: AEG PPS

ADDRESS:

PROJECT: PPS

CONTACT: SHAWN LOMBARDEI

SAMPLED BY: " (253) 334-4782

PHONE: 360 352 9835 FAX:

e-MAIL: SLOMBARDINI@AEGWA.COM Prefer FAX or e-MAIL

PURCHASE ORDER #

NUMBER OF CONTAINERS

HYDROCARBONS

ORGANICS

METALS

OTHER

NWTPH-HCID	BTEX	BTEX/NWTPH-G	NWTPH-Gx	NWTPH-Dx	1664 SGT-HEM (TPH)	1664 HEM (FOG)
------------	------	--------------	----------	----------	--------------------	----------------

8260/624 VOA	8260 CHLOR SOLVENTS	8270-625 SEMI VOA	8270 PAH/PNA	8082/608 PCB
--------------	---------------------	-------------------	--------------	--------------

TOTAL METALS RCRA 8	TOTAL METALS (SPECIFY)	TCLP METALS RCRA 8	TCLP METALS (SPECIFY)
---------------------	------------------------	--------------------	-----------------------

PH 9040/9045	TX/TX/EOX	TURBIDITY	FLASH POINT	BOD	SOLIDS (SPECIFY)
--------------	-----------	-----------	-------------	-----	------------------

			X	X		
			X	X		
			X	X		
			X	X		
			X	X		
			X	X		
			X	X		
			X	X		
			X	X		
			X	X		

					X	
					X	
					X	
					X	
					X	
					X	
					X	
					X	
					X	
					X	

	SAMPLE ID	DATE SAMPLED	TIME SAMPLED	MATRIX	NUMBER OF CONTAINERS
1	MW-2A	6/13/17	0810	W	6
2	MW-3A		0840	W	6
3	SO-2A		0930	W	6
4	CO-3B		1020	W	6
5	CO-3A		1110	W	6
6	SO-4B		1150	W	6
7	SO-4A		1240	W	6
8	MW-1A		1305	W	6
9	MW-1B		1345	W	6
10	SO4A	6/14/17	0830	W	1B

LAB USE ONLY	SIGNATURE	PRINTED NAME	COMPANY	SL DATE	SL TIME
RELINQUISHED BY		SHAWN LOMBARDEI	AEG	6/13/17	10:10
RECEIVED BY		MARIE HOLT	Spectra	6-14-17	10:15
RELINQUISHED BY					
RECEIVED BY					

Payment Terms: Net 30 days. Past due accounts subject to 1 1/2% per month interest. Customer agrees to pay all costs of collection including reasonable attorney's fees and all other costs of collection regardless of whether suit is filed in Pierce Co., WA venue. Spectra Laboratories, LLC

SPECTRA Laboratories

2221 Ross Way, Tacoma, WA 98421
 (253) 272-4850 Fax (253) 572-9838
 www.spectra-lab.com info@spectra-lab.com

SPECIAL INSTRUCTIONS/COMMENTS:

CHAIN OF CUSTODY

SPECTRA PROJECT #
 2017060394

Return Samples: Y N

Page 2 of 2

STANDARD

RUSH

CLIENT: PPS ADDRESS: ADDRESS CHANGE

PROJECT: PPS
 CONTACT: SHAWN LOMBARDOINE
 SAMPLED BY: '11
 PHONE: 360-352-9835 FAX:
 e-MAIL: SLOMBARDINE@AEGWA.COM
 PURCHASE ORDER #

NUMBER OF CONTAINERS	HYDROCARBONS				ORGANICS				METALS		OTHER													
	NWTPH-HCID	BTEX	BTEX/NWTPH-G	NWTPH-GX	NWTPH-Dx	1664 SGT-HEM (TPH)	1664 HEM (FOG)	8260/624 VOA	8260 CHLOR SOLVENTS	8270-625 SEMI VOA	8270 PAH/PNA	608 PCB	TOTAL METALS RCRA 8	TOTAL METALS (SPECIFY)	TCLP METALS RCRA 8	TCLP METALS (SPECIFY)	PH 9040/9045	TX/TOX/EOX	TURBIDITY	FLASH POINT	BOD	SOLIDS (SPECIFY)		
								VOA 8260						AS, CR, PB									NITRATE EPA 353.3	SULFATE EPA 375.14

	SAMPLE ID	DATE SAMPLED	TIME SAMPLED	MATRIX	NUMBER OF CONTAINERS	NWTPH-HCID	BTEX	BTEX/NWTPH-G	NWTPH-GX	NWTPH-Dx	1664 SGT-HEM (TPH)	1664 HEM (FOG)	8260/624 VOA	8260 CHLOR SOLVENTS	8270-625 SEMI VOA	8270 PAH/PNA	608 PCB	TOTAL METALS RCRA 8	TOTAL METALS (SPECIFY)	TCLP METALS RCRA 8	TCLP METALS (SPECIFY)	PH 9040/9045	TX/TOX/EOX	TURBIDITY	FLASH POINT	BOD	SOLIDS (SPECIFY)		
1	FIELD BLANK	6.14.17	0930	W	7				X	X			X				X		X									X	X
2	TRIP BLANK #1	6.14.17	-	W	1				X				X																
3	TRIP BLANK #2	6.14.17	-	W	1				X				X																
4	TRIP BLANK #3	6.14.17	-	W	1				X				X																
5	TRIP BLANK #4	6.14.17	-	W	1				X				X																
6	TRIP BLANK #5	6.14.17	-	W	1				X				X																

LAB USE ONLY	SIGNATURE	PRINTED NAME	COMPANY	DATE	TIME
RELINQUISHED BY		SHAWN LOMBARDOINE	AEG	6.14.17	1010
RECEIVED BY		MARIE HOLT	Spectra	6-14-17	10:15am
RELINQUISHED BY					
RECEIVED BY					

Payment Terms: Net 30 days. Past due accounts subject to 1 1/2% per month interest. Customer agrees to pay all costs of collection including reasonable attorney's fees and all other costs of collection regardless of whether suit is filed in Pierce Co., WA venue. Spectra Laboratories, LLC

APPENDIX B
FIELD DATA SHEETS



ASSOCIATED ENVIRONMENTAL GROUP, LLC.

WELL MONITORING / SAMPLING
FIELD DATA SHEET

Job Information
 Job Name: PRS Job # _____
 Address: _____ Date: 6.14.17
 City: TACOMA Collector: SPAWN
 Weather Conditions: 55°F overcast

Well Information
 Well # SO4A (DUPLICATE) Well Condition: GOOD
 Well Diameter (inches): 2"
 Depth to Water (feet): 4.38 Time: 0747
 Depth to Product (feet): _____ Notes on Product _____
 Total Depth (ft): 11.87 Notes on bottom: HOARD

Purge/Sample Information
 Purge Volume = x VF () 3 = _____ gal. Volume Factor (VF)
 1" = 0.04 2" = 0.17 3" = 0.38 4" = 0.66 6" = 1.5
 Start Time: 0750 Purged Volume: 24
 Purge Flow Rate: _____ Did Well Dewater Y - N Time: _____
 Sample Time: 0830 Water Color/Odor _____

Time	Temp (°C)	Cond. (mS/cm)	TDS (g/L)	Salinity (%)	DO (mg/L)	pH	ORP (Millivolts)	Cumulative Volume Purged
0750	12.55	944	804	1.62	4.48	6.77	-126.1	0
0800	13.05	865	730	1.56	3.08	6.68	-154.0	7/8
0810	12.92	943	777	1.62	2.67	6.70	-164.8	1 5/8
0820	12.92	1,003	848	1.66	2.34	6.73	-161.2	2 3/8
0825	12.98	1,002	850	1.66	2.37	6.76	-160.1	3 1/8
0830	12.96	1,003	849	1.66	2.40	6.75	-161.0	4

Water quality instrument used (i.e. YSI model and #)
 Purge / sampling equipment:
 Laboratory:
 NOTES:



ASSOCIATED ENVIRONMENTAL GROUP, LLC.

WELL MONITORING / SAMPLING FIELD DATA SHEET

Job Information

Job Name: PRS Job # _____
 Address: _____ Date: 6/13/17
 City: TACOMA Collector: SHAWN
 Weather Conditions: 50°F overcast

Well Information

Well # MW-2A Well Condition: GOOD
 Well Diameter (inches): 3/4"
 Depth to Water (feet): 4.45 Time: 0738
 Depth to Product (feet): _____ Notes on Product _____
 Total Depth (ft): 9.84 Notes on bottom: HIARD

Purge/Sample Information

Purge Volume = x VF () 3 = _____ gal. Volume Factor (VF)
 1"=0.04 2"=0.17 3"=0.38 4"=0.66 6"=1.5
 Start Time: 0730 Purged Volume: ~4.5G
 Purge Flow Rate: 2500 Did Well Dewater Y- Time: _____
 Sample Time: 0818 Water Color/Odor: CLEAR/NONE

Time	Temp (°C)	Cond. (mS/cm)	TDS (g/L)	Salinity (%)	DO (mg/L)	pH	ORP (Millivolts)	Cumulative Volume Purged
0730	12.19	1578	1498	.38	5.81	6.97	15.4	0
0740	12.09	1560	1500	.38	3.41	7.01	-124.6	7/8
0750	12.11	1587	1501	.38	2.33	6.90	-164.0	1 5/8
0800	12.11	1583	1501	.38	2.27	6.92	-165.0	2 3/4
0805	12.11	1582	1501	.38	2.25	6.91	-165.0	3 1/8
0810	12.11	1580	1501	.38	2.26	6.90	-164.0	4

Water quality instrument used (i.e. YSI model and #)

Purge / sampling equipment:

Laboratory:

NOTES:



ASSOCIATED ENVIRONMENTAL GROUP, LLC.

WELL MONITORING / SAMPLING FIELD DATA SHEET

Job Information

Job Name: PRS Job # 11
 Address: _____ Date: 6.13.17
 City: TACOMA Collector: SHAWN
 Weather Conditions: 50°F OVERC

Well Information

Well # MW-3A Well Condition: GOOD
 Well Diameter (inches): 3/4"
 Depth to Water (feet): 3.61 Time: 0738 40
 Depth to Product (feet): _____ Notes on Product _____
 Total Depth (ft): 9.82 Notes on bottom: HARD

Purge/Sample Information

Purge Volume $\frac{2.0}{1} \times VF (.04) 3 = 1.75 \text{ gal.}$ Volume Factor (VF)
 1"=0.04 2"=0.17 3"=0.38 4"=0.66 6"=1.5
 Start Time: 0820 Purged Volume: ~25G
 Purge Flow Rate: 2500 Did Well Dewater Y (N) Time: _____
 Sample Time: 0840 Water Color/Odor clear None

Time	Temp (°C)	Cond. (mS/cm)	TDS (g/L)	Salinity (%)	DO (mg/L)	pH	ORP (Millivolts)	Cumulative Volume Purged
0820	14.46	.720	1.586	1.45	2.0	7.21	-186.8	0
0830	14.62	.718	1.583	1.44	1.98	7.24	-186.3	78
0840	14.52	.718	1.584	1.44	1.99	7.26	-187.3	158

Water quality instrument used (i.e. YSI model and #)
 Purge / sampling equipment:
 Laboratory:
 NOTES:



ASSOCIATED ENVIRONMENTAL GROUP, LLC.

WELL MONITORING / SAMPLING
FIELD DATA SHEET

Job Information	Job Name: <u>PRS</u>	Job # _____
	Address: _____	Date: <u>6.13.17</u>
	City: <u>TACOMA</u>	Collector: <u>SWAN</u>
	Weather Conditions: <u>50°F OVERCAST</u>	
Well Information	Well # <u>SO-2A</u>	Well Condition: <u>GOOD</u>
	Well Diameter (inches): <u>2 1/1</u>	
	Depth to Water (feet): <u>3.01</u>	Time: <u>0742</u>
	Depth to Product (feet): <u>—</u>	Notes on Product <u>—</u>
	Total Depth (ft): <u>11.44</u>	Notes on bottom: <u>HARD</u>
Purge/Sample Information	Purge Volume = <u>1</u> x VF (<u>1.17</u>) <u>3</u> = _____ gal.	
	Start Time: <u>0830</u>	Purged Volume: <u>246AL</u>
	Purge Flow Rate: <u>6500</u>	Did Well Dewater Y - N Time: _____
	Sample Time: <u>0930</u>	Water Color/Odor _____

Volume Factor (VF)
1"=0.04 2"=0.17 3"=0.38 4"=0.66 6"=1.5

Time	Temp (°C)	Cond. (mS/cm)	TDS (g/L)	Salinity (%)	DO (mg/L)	pH	ORP (Millivolts)	Cumulative Volume Purged
0850	13.95	1.073	8.17	1.67	1.70	7.35	-174.3	0
0900	15.01	1.841	1.717	1.55	1.36	7.30	-192.1	7/8
0910	15.19	1.897	1.718	1.55	1.34	7.32	-192.9	15/16
0920	15.1	1.896	1.717	1.55	1.34	7.30	-197.8	23/8
0925	15.20	1.897	1.717	1.55	1.36	7.29	-200	31/8
0930	15.20	1.897	1.718	1.55	1.37	7.27	-200.1	41

Water quality instrument used (i.e. YSI model and #)

Purge / sampling equipment:

Laboratory:

NOTES:



ASSOCIATED ENVIRONMENTAL GROUP, LLC.

WELL MONITORING / SAMPLING FIELD DATA SHEET

Job Information

Job Name: PRS Job # _____
 Address: _____ Date: 6/13/17
 City: TACOMA Collector: SHAWN
 Weather Conditions: 55°F OVERCAST

Well Information

Well # C03B Well Condition: GOOD
 Well Diameter (inches): 2"
 Depth to Water (feet): 5.71' Time: 0.745
 Depth to Product (feet): _____ Notes on Product _____
 Total Depth (ft): 24.67 Notes on bottom: HARD

Purge/Sample Information

Purge Volume = $18.0 \times VF(1.7)3 = 9.67$ gal. Volume Factor (VF)
 1" = 0.04 2" = 0.17 3" = 0.38 4" = 0.66 6" = 1.5
 Start Time: 0940 Purged Volume: _____
 Purge Flow Rate: 1500 Did Well Dewater Y - N Time: _____
 Sample Time: 1020 Water Color/Odor _____

Time	Temp (°C)	Cond. (mS/cm)	TDS (g/L)	Salinity (%)	DO (mg/L)	pH	ORP (Millivolts)	Cumulative Volume Purged
0940	13.39	10.77	8.99	8.03	1.02	7.42	-202.5	0
0950	13.31	10.79	9.027	8.02	1.75	7.70	-211.8	7/8"
1000	13.41	10.82	9.028	8.07	1.48	7.77	-211.0	1 5/8'
1010	13.39	10.82	9.065	8.08	1.49	7.79	-211.1	2 3/8'
1015	13.37	10.84	9.066	8.09	1.56	7.80	-210.9	3 1/8'
1020	13.36	10.86	9.076	8.11	1.61	7.83	-210.7	4'

Water quality instrument used (i.e. YSI model and #)
 Purge / sampling equipment:
 Laboratory:
 NOTES:



ASSOCIATED ENVIRONMENTAL GROUP, LLC.

WELL MONITORING / SAMPLING
FIELD DATA SHEET

Job Information	Job Name: <u>PR3</u>	Job # _____
	Address: _____	Date: <u>6/13/17</u>
	City: <u>TACOMA</u>	Collector: <u>SHAWN</u>
	Weather Conditions: _____	
Well Information	Well # <u>CO3A</u>	Well Condition: _____
	Well Diameter (inches): <u>2"</u>	_____
	Depth to Water (feet): _____	Time: _____
	Depth to Product (feet): _____	Notes on Product _____
	Total Depth (ft): _____	Notes on bottom: _____
Purge/Sample Information	Purge Volume = _____ x VF () 3 = _____ gal.	Volume Factor (VF) 1"=0.04 2"=0.17 3"=0.38 4"=0.66 6"=1.5
	Start Time: _____	Purged Volume: _____
	Purge Flow Rate: _____	Did Well Dewater Y - N Time: _____
	Sample Time: <u>1110</u>	Water Color/Odor _____

Time	Temp (°C)	Cond. (mS/cm)	TDS (g/L)	Salinity (%)	DO (mg/L)	pH	ORP (Millivolts)	Cumulative Volume Purged
1030	14.98	1.121	.907	.70	.89	7.95	-188.6	0
1040	15.10	1.109	1.297	.76	.85	7.80	-189.9	1/8
1050	15.20	1.088	.887	.68	.75	7.71	-195.2	15/8
1100	15.54	1.087	1.082	.67	.70	7.61	-201.5	2 3/8
1105	15.54	1.086	.860	.67	.71	7.61	-202.0	3 1/8
1110								4

Water quality instrument used (i.e. YSI model and #)

Purge / sampling equipment:

Laboratory:

NOTES:



ASSOCIATED ENVIRONMENTAL GROUP, LLC.

WELL MONITORING / SAMPLING
FIELD DATA SHEET

Job Information	Job Name: <u>PRS</u>	Job # _____
	Address: _____	Date: <u>6.13.17</u>
	City: <u>TACOMIA</u>	Collector: <u>SHAWN</u>
	Weather Conditions: <u>60°F overcast</u>	
Well Information	Well # <u>S04 B</u>	Well Condition: <u>GOOD</u>
	Well Diameter (inches): <u>3/4"</u>	
	Depth to Water (feet): <u>6.90</u>	Time: <u>0748</u>
	Depth to Product (feet): _____	Notes on Product _____
	Total Depth (ft): <u>28.50</u>	Notes on bottom: <u>HARD</u>
Purge/Sample Information	Purge Volume = $\frac{21.60}{0.4} \times VF (0.4) 3 = 7.59$ gal.	Volume Factor (VF) 1" = 0.04 2" = 0.17 3" = 0.38 4" = 0.66 6" = 1.5
	Start Time: <u>1120</u>	Purged Volume: <u>2.5</u>
	Purge Flow Rate: <u>4500</u>	Did Well Dewater Y - N Time: _____
	Sample Time: <u>1150</u>	Water Color/Odor _____

Time	Temp (°C)	Cond. (mS/cm)	TDS (g/L)	Salinity (%)	DO (mg/L)	pH	ORP (Millivolts)	Cumulative Volume Purged
1120	14.00	9.054	7.433	6.54	0.72	7.6	-223.0	0
1130	13.99	9.014	7.417	6.53	.75	7.50	-222.0	718
1140	14.00	9.035	7.437	6.55	.87	7.48	-222.4	1318
1150	13.98	9.020	7.425	6.54	1.18	7.45	-222.2	2318

Water quality instrument used (i.e. YSI model and #)

Purge / sampling equipment:

Laboratory:

NOTES:



ASSOCIATED ENVIRONMENTAL GROUP, LLC.

WELL MONITORING / SAMPLING FIELD DATA SHEET

Job Information	Job Name: <u>PRS</u>	Job # _____
	Address: _____	Date: <u>6/13/17</u>
	City: <u>TACOMA</u>	Collector: <u>J. KIMM</u>
	Weather Conditions: _____	
Well Information	Well # <u>S04A</u>	Well Condition: <u>GOOD</u>
	Well Diameter (inches): <u>2"</u>	
	Depth to Water (feet): <u>4.34</u>	Time: <u>07:50</u>
	Depth to Product (feet): _____	Notes on Product _____
	Total Depth (ft): <u>11.87</u>	Notes on bottom: <u>HARD</u>
Purge/Sample Information	Purge Volume = _____ x VF () 3 = _____ gal.	Volume Factor (VF) 1"=0.04 2"=0.17 3"=0.38 4"=0.66 6"=1.5
	Start Time: <u>1200</u>	Purged Volume: <u>24 GAL</u>
	Purge Flow Rate: <u>1500</u>	Did Well Dewater Y <input checked="" type="checkbox"/> N <input type="checkbox"/> Time: _____
	Sample Time: <u>12:40</u>	Water Color/Odor: <u>NONE</u>

Time	Temp (°C)	Cond. (mS/cm)	TDS (g/L)	Salinity (%)	DO (mg/L)	pH	ORP (Millivolts)	Cumulative Volume Purged
1200	13.32	.606	.506	.38	.64	7.67	-116.6	0
1210	13.48	.642	.539	.41	.53	7.37	-149.2	7/8
1220								
1230								

Water quality instrument used (i.e. YSI model and #)

Purge / sampling equipment:

Laboratory:

NOTES:



ASSOCIATED ENVIRONMENTAL GROUP, LLC.

WELL MONITORING / SAMPLING
FIELD DATA SHEET

Job Information

Job Name: PRS Job # _____

Address: _____ Date: 6.13.17

City: TALONNA Collector: JAWW

Weather Conditions: OVERCAST 60°F

Well Information

Well # MW 1A Well Condition: _____

Well Diameter (inches): 3/4"

Depth to Water (feet): 4.37 Time: 0214

Depth to Product (feet): — Notes on Product _____

Total Depth (ft): 9.85 Notes on bottom: FWR

Purge/Sample Information

Purge Volume = $5.48 \times VF (0.16) 3 = 165$ gal. Volume Factor (VF)
 $1" = 0.04$ $2" = 0.17$ $3" = 0.38$ $4" = 0.66$ $6" = 1.5$

Start Time: _____ Purged Volume: 36

Purge Flow Rate: 4500 Did Well Dewater Yes No Time: _____

Sample Time: 1305 Water Color/Odor _____

Time	Temp (°C)	Cond. (mS/cm)	TDS (g/L)	Salinity (%)	DO (mg/L)	pH	ORP (Millivolts)	Cumulative Volume Purged
1240	14.01	1.597	1.314	1.04	.67	7.30	-150.0	0
1250	13.98	1.595	1.313	1.04	.64	7.28	-148.8	718"
1300	13.96	1.594	1.312	1.04	.65	7.19	-149.8	1536"
1305	14.07	1.595	1.310	1.03	.61	7.06	-145.5	2318"

Water quality instrument used (i.e. YSI model and #)

Purge / sampling equipment:

Laboratory:

NOTES:



ASSOCIATED ENVIRONMENTAL GROUP, LLC.

WELL MONITORING / SAMPLING FIELD DATA SHEET

Job Information	Job Name: <u>PRS</u>	Job # _____
	Address: _____	Date: <u>6/3/17</u>
	City: <u>TACOMA</u>	Collector: <u>JUNON</u>
	Weather Conditions: <u>62°F FRESH SWAN</u>	
Well Information	Well # <u>MW-1B</u>	Well Condition: <u>GOOD</u>
	Well Diameter (inches): <u>3/4"</u>	
	Depth to Water (feet): <u>7.08</u>	Time: <u>07:17</u>
	Depth to Product (feet): _____	Notes on Product _____
	Total Depth (ft): <u>28.56</u>	Notes on bottom: <u>HARD</u>
Purge/Sample Information	Purge Volume = <u>21.48</u> x VF () 3 = <u>25</u> gal.	Volume Factor (VF) 1" = 0.04 2" = 0.17 3" = 0.38 4" = 0.66 6" = 1.5
	Start Time: <u>1315</u>	Purged Volume: <u>36</u>
	Purge Flow Rate: <u>1500</u>	Did Well Dewater Y <input checked="" type="radio"/> N <input type="radio"/> Time: _____
	Sample Time: <u>1345</u>	Water Color/Odor _____

Time	Temp (°C)	Cond. (mS/cm)	TDS (g/L)	Salinity (%)	DO (mg/L)	pH	ORP (Millivolts)	Cumulative Volume Purged
1315	14.36	6.740	5.499	4.73	.46	7.51	-176.0	
1325	14.28	6.724	5.477	4.73	.47	7.40	-169.8	7.8 G
1335	14.28	6.730	5.498	4.74	.48	7.40	-167.0	1.58
1340	14.27	6.738	5.501	4.74	.50	7.41	-165.2	2.38
1345	14.27	6.743	5.500	4.77	.62	7.40	-165.6	3.16

Water quality instrument used (i.e. YSI model and #)

Purge / sampling equipment:

Laboratory:

NOTES:

PRS Facility

Water Level Field Form

Field Event: GW LEVEL + SAMPLE

Date (mm/dd/yyyy): 6.13.17

Field Geologist(s): SHAWN LOMBERONE

Organization: AEZ

Well ID	Well Venting		Liquid- Level Measurement		Total Well Depth	Comments
	Time	Headspace PID Reading	Time	Depth to Water		
	(24-h Clock)	(ppm)	(24-h clock)	(Feet)		
✓ MW-1A	0640	0.2	0714	4.37	9.95	
✓ MW-1B	0642	0.3	0717	7.08	28.56	
✓ MW-2A	0646	0.5	0738	4.45	9.84	
✓ MW-3A	0650	0.1	0740	3.61	9.82	
✓ CO3B	0652	0.6	0745	5.79	24.67	
✓ CO3A	0654	0.1	0746	2.97	9.58	
✓ SB2A	0700	0.3	0742	3.01	11.44	
✓ SD4B	0706	0.2	0748	6.90	28.56	
✓ SD4A	0708	0.1	0750	4.34	11.87	

SPECTRA Laboratories

2221 Ross Way, Tacoma, WA 98421
 (253) 272-4850 Fax (253) 572-9838

www.spectra-lab.com info@spectra-lab.com

SPECIAL INSTRUCTIONS/COMMENTS:

CHAIN OF CUSTODY

SPECTRA PROJECT #

Return Samples: Y N

Page 1 of 2

STANDARD

RUSH

CLIENT: AFG PDS ADDRESS: _____ ADDRESS CHANGE

PROJECT: PKS
 CONTACT: SHAWN LOMBARINI
 SAMPLED BY: " 253.334.4782"
 PHONE: 360 352 9835 FAX: _____
 e-MAIL: SLOMBARINI@AFGWA.COM Prefer FAX or e-MAIL
 PURCHASE ORDER # _____

NUMBER OF CONTAINERS	HYDROCARBONS					ORGANICS				METALS			OTHER												
	NWTPH-HCID	BTEX	BTEX/NWTPH-G	NWTPH-G _x	NWTPH-D _x	1664 SGT-HEM (TPH)	1664 HEM (FOG)	8260/624 VOA <u>10L 62605</u>	8260 CHLOR SOLVENTS	8270-625 SEMI VOA	8270 PAH/PNA	8082/608 PCB	TOTAL METALS RCRA 8	TOTAL METALS (SPECIFY)	TCLP METALS RCRA 8	TCLP METALS (SPECIFY)	PH 9040/9045	TX/TOX/EOX	TURBIDITY	FLASH POINT	BOD	SOLIDS (SPECIFY)	RESIDUAL IPA 933.0	RESIDUAL IPA 35.1	VOG

	SAMPLE ID	DATE SAMPLED	TIME SAMPLED	MATRIX	NUMBER OF CONTAINERS	NWTPH-HCID	BTEX	BTEX/NWTPH-G	NWTPH-G _x	NWTPH-D _x	1664 SGT-HEM (TPH)	1664 HEM (FOG)	8260/624 VOA <u>10L 62605</u>	8260 CHLOR SOLVENTS	8270-625 SEMI VOA	8270 PAH/PNA	8082/608 PCB	TOTAL METALS RCRA 8	TOTAL METALS (SPECIFY)	TCLP METALS RCRA 8	TCLP METALS (SPECIFY)	PH 9040/9045	TX/TOX/EOX	TURBIDITY	FLASH POINT	BOD	SOLIDS (SPECIFY)	RESIDUAL IPA 933.0	RESIDUAL IPA 35.1	VOG	MS/MND	
1	MW-2A	6-13-17	0810	W	6			X	X				X					X														
2	MW-3A		0840	W	6			X	X				X					X														
3	SO-2A		0930	W	6			X	X				X					X														
4	CO-3B		1020	W	6			X	X				X					X														
5	CO-3A		1110	W	6			X	X				X					X														
6	SO-4B		1150	W	6			X	X				X					X														
7	SO-4A		1240	W	6			X	X				X					X														
8	MW-1A		1305	W	6			X	X				X					X														
9	MW-1B		1345	W	6			X	X				X					X														
10	SOHA	6-14-17	0830	W	15			X	X				X					X														

LAB USE ONLY

	SIGNATURE	PRINTED NAME	COMPANY	DATE	TIME
RELINQUISHED BY	<i>[Signature]</i>	SHAWN LOMBARINI	AFG	6-13-17	10:10
RECEIVED BY	<i>[Signature]</i>	MARIE HOLT	Spectra	6-14-17	10:15
RELINQUISHED BY					
RECEIVED BY					

Payment Terms: Net 30 days. Past due accounts subject to 1 1/2% per month interest. Customer agrees to pay all costs of collection including reasonable attorney's fees and all other costs of collection regardless of whether suit is filed in Pierce Co., WA venue. Spectra Laboratories, LLC

SPECTRA Laboratories

2221 Ross Way, Tacoma, WA 98421
 (253) 272-4850 Fax (253) 572-9838

www.spectra-lab.com info@spectra-lab.com

SPECIAL INSTRUCTIONS/COMMENTS:

CHAIN OF CUSTODY

SPECTRA PROJECT #

Return Samples: Y N

Page 2 of 2

STANDARD

RUSH

CLIENT: FRS ADDRESS: _____ ADDRESS CHANGE

PROJECT: FRS
 CONTACT: JHANN LOMBARDOINE
 SAMPLED BY: "
 PHONE: 360-357-9835 FAX: _____
 e-MAIL: LOMBARDINE@SPECTRALAB.COM Prefer FAX of e-MAIL
 PURCHASE ORDER # _____

NUMBER OF CONTAINERS	HYDROCARBONS						ORGANICS				METALS				OTHER								
	NWTPH-HCID	BTEX	BTEX/NWTPH-G	NWTPH-GA	NWTPH-DX	1664 SGT-HEM (TPH)	1664 HEM (FOG)	8260/624 VOA <u>VOL. 70008</u>	8260 CHLOR SOLVENTS	8270-625 SEMI VOA	8270 PAH/PNA	8082/608 PCB	TOTAL METALS RCRA 8	TOTAL METALS (SPECIFY) <u>AS, CR, PB</u>	TCLP METALS RCRA 8	TCLP METALS (SPECIFY)	PH 9040/9045	TX/TOX/EOX	TURBIDITY	FLASH POINT	BOD	SOLIDS (SPECIFY)	<u>AMMONIUM NITRATE (IA 37.1)</u>

	SAMPLE ID	DATE SAMPLED	TIME SAMPLED	MATRIX
1	FIELD BLANK	6/14/17	0930	W
2	TRIP BLANK #1	6/14/17	-	-
3	TRIP BLANK #2	6/14/17	-	-
4	TRIP BLANK #3	6/14/17	-	-
5	TRIP BLANK #4	6/14/17	-	W
6	TRIP BLANK #5	6/14/17	-	W
7				
8				
9				
10				

							X	X			X			X										
							X																	
							X																	
							X																	
							X																	

LAB USE ONLY	SIGNATURE	PRINTED NAME	COMPANY	DATE	TIME
RELINQUISHED BY		JHANN LOMBARDOINE	FRS	6/14/17	1010
RECEIVED BY		MARIE HOLT	Spectra	6-14-17	10:15am
RELINQUISHED BY					
RECEIVED BY					

Payment Terms: Net 30 days. Past due accounts subject to 1 1/2% per month interest. Customer agrees to pay all costs of collection including reasonable attorney's fees and all other costs of collection regardless of whether suit is filed in Pierce Co., WA venue. Spectra Laboratories, LLC

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SPECIAL INSTRUCTIONS/COMMENTS:

* TOTAL METALS BY 6020
(Cr, As, Pb)
* GEOTECHNICALS PROJECT #:
019482-002-00

CHAIN of CUSTODY

SPECTRA PROJECT #

2015120254

Return Samples Y N Page 2 of 2

STANDARD RUSH

CLIENT: PRS GROUP

ADDRESS:

ADDRESS CHANGE

PROJECT: GROUND WATER MONITORING

CONTACT: JAY/NICK@GEOTECHNICALS

SAMPLED BY: BRIAN ANDERSON

PHONE: 253-383-4115 FAX:

e-MAIL: JAY@PRSPLANT.NET Prefer FAX
NICK@GEOTECHNICALS or e-MAIL

PURCHASE ORDER #:

SAMPLE ID	DATE SAMPLED	TIME SAMPLED	MATRIX	NUMBER OF CONTAINERS
1 FIELD BLANK #1-121115	12-11-15	1245	W	7
2 TRIP BLANK #1-121115	12-11-15	-	W	1
3 TRIP BLANK #2-121115	12-11-15	-	W	1
4 TRIP BLANK #3-121115	12-11-15	-	W	1
5 TRIP BLANK #4-121115	12-11-15	-	W	1
6 TRIP BLANK #5-121115	12-11-15	-	W	1
7 SO-4A-9-121015	12-10-15	1100	W	7
8				
9				
0				

NWTPH-CID	HYDROCARBONS					ORGANICS				METALS			OTHER										
	BTEX	BTEX/NWTPH-G	NWTPH-G X	NWTPH-DX	1664 SGT-HEM (TPH)	1664 HEM (FOG)	8280/824 VOA	8280 CHLOR SOLVENTS	8270/826 SEMI VOA	8270 PAH/PNA	8082/808 PCB	TOTAL METALS RCRA 8	TOTAL METALS (SPECIFY) <i>SEE NOTE</i>	TCLP METALS RCRA 8	TCLP METALS (SPECIFY)	PH 9040/9045	TX/TOX 9076	TURBIDITY	FLASH POINT	BOD	SOLIDS (SPECIFY)	<i>NITRATE BY EPA 353.3</i>	<i>SULFATE BY EPA 375.4</i>
			X	X			X				X	X										X	X
			X	X			X				X	X										X	X
			X	X			X				X	X										X	X
			X	X			X				X	X										X	X
			X	X			X				X	X										X	X
			X	X			X				X	X										X	X

LAB USE ONLY	SIGNATURE	PRINTED NAME	COMPANY	DATE	TIME
Shipped Via: US Mail <input type="checkbox"/> UPS <input type="checkbox"/> Fed Ex <input type="checkbox"/> Courier <input checked="" type="checkbox"/> <i>Client</i>	RELINQUISHED BY	<i>B. Anderson</i>	B. ANDERSON	GEOTECHNICALS	12-11-15
Shipping Container: <input checked="" type="checkbox"/> Box <input type="checkbox"/> Envelope <input type="checkbox"/> None	RECEIVED BY	<i>Lori Hamilton</i>	Lori Hamilton	Spectra	12-11-15 3:20
Tracking #	RELINQUISHED BY				
Custody Seals: Y <input checked="" type="checkbox"/> N <input type="checkbox"/> Intact: Y <input type="checkbox"/> N <input type="checkbox"/> Cooler Temp. <i>1.9</i> Sample Temp. <i>4.8</i>	RECEIVED BY				

Payment Terms: Net 30 days. Past due accounts subject to 1 1/2 % per month interest. Customer agrees to pay all costs of collection including reasonable attorney's fees and all other costs of collection regardless of whether suit is filed in Pierce Co., WA venue. Spectra Analytical, Inc.

SPECTRA Laboratories

NAME:	Petroleum Reclaiming C/O GeoEngineers, Inc.	DATE:	
		PROJECT:	Groundwater Monitoring
		CONTACT:	Jay Johnson / Jacob Letts
ADDRESS:	3003 Taylor Way Tacoma, WA 98421	PHONE:	253-383-4175
		CELL:	
		EMAIL:	jay@prsplant.net

SHIP <input type="checkbox"/>	UPS <input type="checkbox"/> USPS <input type="checkbox"/> FEDEX <input type="checkbox"/>	DATE: _____	FEE: _____
W/C <input checked="" type="checkbox"/>		DATE: _____	

<input checked="" type="checkbox"/> COOLER	<input type="checkbox"/> BLUE ICE	<input type="checkbox"/> COC	<input type="checkbox"/> CUSTODY SEAL	<input type="checkbox"/> SAMPLING INSTRUCTIONS
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NOTES:	Bottle quantities below cover 9 Samples, 1 - Field Duplicate, 1 - Field Blank, 2 - MS/MSMSD, 1 - Rinsate, 1 - Extra set in case, 2 - Trip Blanks (VOA)
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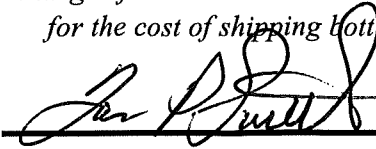
QUANTITY	BOTTLE TYPE	QUANTITY	BOTTLE TYPE	QUANTITY	BOTTLE TYPE
30 *	L Amber	15 **	250ml Poly		4oz Glass Jar
15 **	L Amber Pres HCL	15	250ml Poly Pres HNO3		8oz Glass Jar
	L Amber Pres H2SO4		250ml Poly Pres H2SO4		Bacteria Bottle
	16oz Amber		500ml Poly		Nitrate Bottle
	16oz Amber Pres HCL		500ml Poly Pres NAOH		P-Cup
	L Amber WM		Liter Poly		P-Cup Pres
	L Amber WM Pres HCL		Fuel Bottle	15	VOA (2) Pres HCL
				1 per cooler	TRIP BLANKS

* Spectra will provide one extra unpreserved liter for PCB and Dx backup.
 ** One 250ml non preserved poly is sufficient for both the Nitrate and Sulfate analyses

SAMPLING SUPPLIES		
QUANTITY	ITEM	COST
		Including Tax
	Panpeha pH test strips	\$ 43.80
	Vampire Pump	32.79
	Coring Handle	18.59
	Disp. Coring Syringe	2.19

TEST REQUIREMENTS
VOC
NWTPH-Dx
NWTPH-G
Total Metals (As, Cr, Pb)
PCB's
Nitrate
Sulfate

Spectra Laboratories will provide sample bottles, coolers and ice at no charge, provided that samples are returned for analysis. Clients will be charged for coolers and bottles not returned, bottles returned unused, and for the cost of shipping bottles.

Client Signature: 
Date: 6/9/2017

PRS Facility

Water Level Field Form

Field Event: 12.14.17

Date (mm/dd/yyyy): 12.14.17

Field Geologist(s): SHAWN

Organization: AEG

Well ID	Well Venting		Liquid- Level Measurement		Total Well Depth (Feet)	Comments
	Time (24-h Clock)	Headspace PID Reading (ppm)	Time (24-h clock)	Depth to Water (Feet)		
	SD-2A	0900	0.5	1316		
MW-3A	0905	0.2	1315	2.61	9.81	
MW-2A	0910	0.2	1317	3.59	9.84	
CO-3B	0915	2.0	1339	5.75	24.69	
CO-3A	0920	0.9	1337	1.96	9.59	
MW-1A	0925	1.6	1322	3.54	9.85	
MW-1B	0930	30.3	1326	7.08	28.55	CLEANED WELL CAP
J04B	1300	0.2	1342	6.89	28.55	
SD4A	1305	0.6	1346	3.39	11.87	

PRS Facility

Monitoring Well Inspection Form

PRS Inspector

SHAWN

Date: 12.14.17

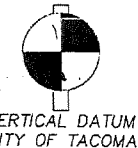
Well ID	Is well labeled?	Surrounding Impacts?	Well/pump condition	Internal condition (is cap secured)	Monument Condition	Well Accessible?	Recent construction in area that may have caused changes?	Other problems	Maintenance Performed
S0-2A	YES	NONE	GOOD	YES	GOOD	YES	NO	N/A	N/A
MW3A	YES	NONE	GOOD	YES	GOOD	YES	NO	N/A	N/A
LV-2A	YES	NONE	GOOD	YES	GOOD	YES	NO	N/A	N/A
C03B	YES	NONE	GOOD	YES	BROKEN TABS	YES	NO	N/A	N/A
C03A	YES	NONE	GOOD	YES	BROKEN TABS	YES	NO	N/A	N/A
MW1A	YES	NONE	GOOD	YES	GOOD	YES	NO	N/A	N/A
MW1B	YES	NONE	GOOD	YES	GOOD	YES	NO	CLEANED WELL CAP	CLEANED WELL CAP
S04B	YES	NONE	GOOD	YES	GOOD	YES	NO	N/A	N/A
S04A	YES	NONE	GOOD	YES	GOOD	YES	NO	N/A	N/A

FIGURE 1

Facility Site Map

PRS GROUP INC.

A PORTION OF THE SW 1/4 OF SECTION 36, TOWNSHIP 21 N, RANGE 3 E, WM,
PIERCE COUNTY, WASHINGTON



B.M.:
X ON NE CORNER BOTTOM STEP
AT 2902 TAYLOR WAY
ELEV. = 10.27

BASIS OF BEARING
PIERCE COUNTY RECORD OF
SURVEY NO. 9604170418
METHOD:
LEVEL LOOP / FIELD TRAVERSE

FIELD EQUIPMENT:
NIKON TOP GUN TOTAL STATION
POS. TOL. = 1:20,000 0.08 FT.

LEGAL DESCRIPTION

BEGINNING AT THE NORTHEAST CORNER OF THE NORTHWEST QUARTER OF THE SOUTHWEST QUARTER OF SECTION 36, TOWNSHIP 21 NORTH, RANGE 3 EAST OF THE WILLAMETTE MERIDIAN, IN PIERCE COUNTY, WASHINGTON; THENCE SOUTHERLY ALONG THE EAST LINE OF THE NORTHWEST QUARTER 215 FEET, MORE OR LESS, TO THE NORTHEASTERLY LINE OF TAYLOR WAY; THENCE N 50°16' W ALONG THE NORTHEASTERLY LINE OF THE SOUTHWEST QUARTER OF SECTION 36; THENCE EAST ALONG SAID NORTH LINE 256.7 FEET, MORE OR LESS, TO THE POINT OF BEGINNING.

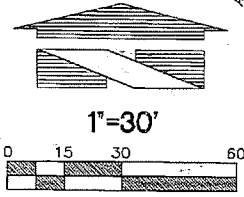
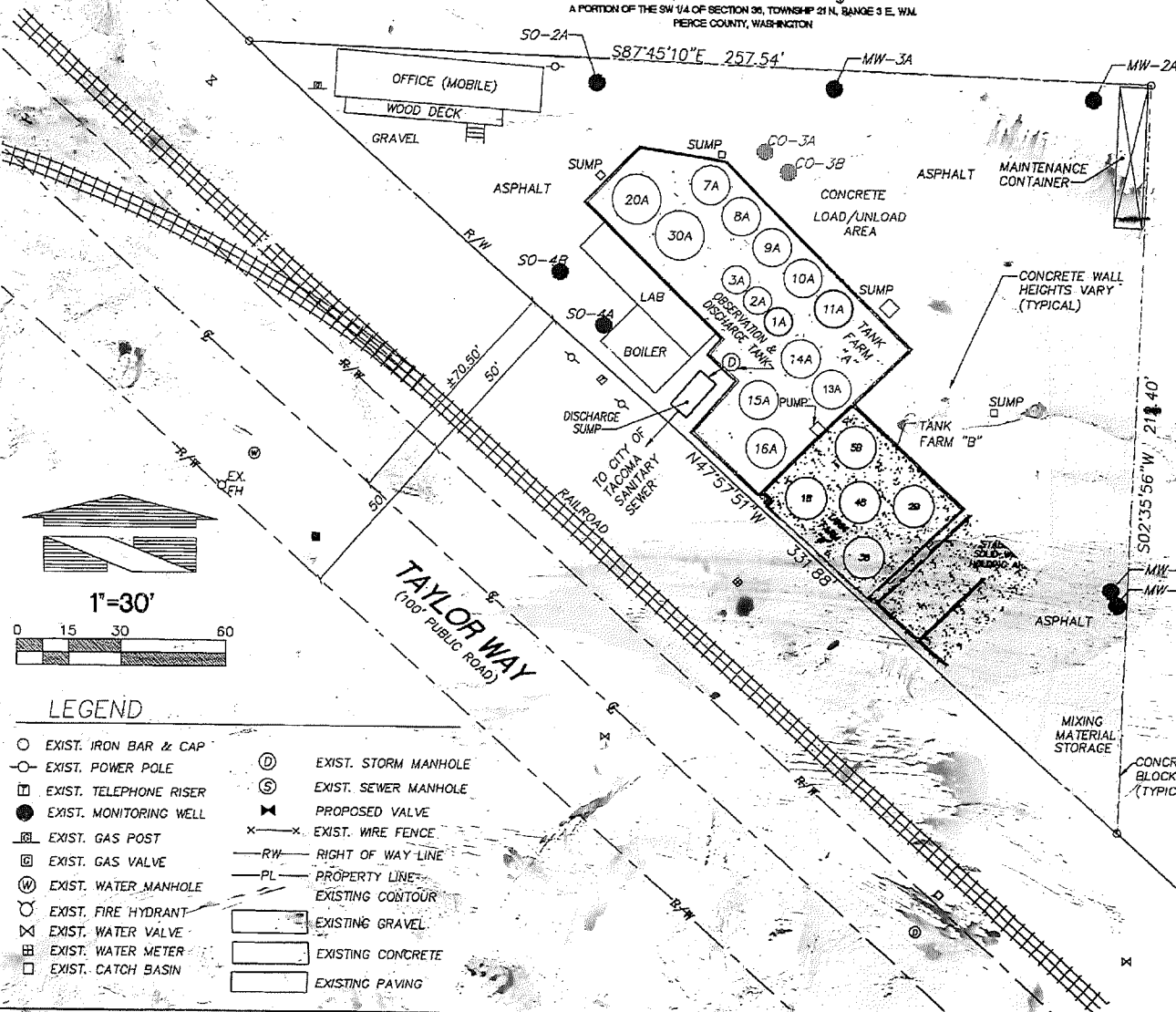
PARCEL NO.'S.

0321363021 & 0321363028

SITE ADDRESS

3003 TAYLOR WAY
TACOMA, WA 98421

Revision	Title: FIGURE 1 Facility Site Map		Scale: Horizontal 1"=30' Vertical W/A
No. Date By Cld. Appr.	For: PRS GROUP INC. 3003 TAYLOR WAY, TACOMA, WA		
Designed AS	Drawn CK	Checked AS	Approved AS
Date 09/21/12	Date 09/21/12	Date 09/21/12	Date 09/21/12
18215 72ND AVENUE SOUTH KENT, WA 98032 (425)251-6222 (425)251-8782 FAX CIVIL ENGINEERING, LAND PLANNING, SURVEYING, ENVIRONMENTAL SERVICES			
Job Number	14145	Sheet	1
File Path: 400000 14145\prshh14145 Fin F-2.dwg Date Plotted: 3/7/2013 4:48 PM Scale: 1"=30' CK: ARN: JTT Xref:			



LEGEND

- | | |
|--------------------------|------------------------|
| ○ EXIST. IRON BAR & CAP | ⊙ EXIST. STORM MANHOLE |
| —○— EXIST. POWER POLE | ⊙ EXIST. SEWER MANHOLE |
| ⊠ EXIST. TELEPHONE RISER | ⊠ PROPOSED VALVE |
| ● EXIST. MONITORING WELL | —x— EXIST. WIRE FENCE |
| ⊠ EXIST. GAS POST | —RW— RIGHT OF WAY LINE |
| ⊠ EXIST. GAS VALVE | —PL— PROPERTY LINE |
| ⊠ EXIST. WATER MANHOLE | —○— EXISTING CONTOUR |
| ⊠ EXIST. FIRE HYDRANT | ▭ EXISTING GRAVEL |
| ⊠ EXIST. WATER VALVE | ▭ EXISTING CONCRETE |
| ⊠ EXIST. WATER METER | ▭ EXISTING PAVING |
| ⊠ EXIST. CATCH BASIN | |

APPENDIX C

DATA VALIDATION REPORT



Data Validation Report Data Validation Review Report-EPA Stage 2B

**Subject: PRS Hazardous Waste Disposal Facility Groundwater Monitoring
Second Quarter (June) 2017 Groundwater Samples**

This validation report summarizes the review of analytical results for five trip blanks, one field blank, and 10 water samples collected June 13-14, 2017. The samples were collected by Associated Environmental Group, LLC (AEG), and submitted to Spectra Laboratories, Inc. (Spectra), located in Tacoma, Washington, and partially subcontracted Spectra Analytical - Kitsap located in Poulsbo, Washington. Spectra sample data group (SDG) number 2017060394 was reviewed in this report. Qualifications made during the data validation process can be found in the Spectra reports included in Appendix A.

CHEMICAL ANALYSES PERFORMED

Spectra performed laboratory analyses on the groundwater samples using the following methods:

- Petroleum Hydrocarbons by Method NWTPH-Dx
- Gasoline-Range Hydrocarbons by Method NWTPH-Gx
- Volatile Organic Compounds (VOCs) by Method SW8260C
- Polychlorinated biphenyls (PCBs) by Method SW8082A
- Total Metals by Method EPA 6020B
- Nitrate + Nitrogen by SM4500-NO3 F
- Sulfate by Method SM4500-SO4 E

DATA VALIDATION AND QUALIFICATIONS

The following comments refer to the laboratory's performance in meeting the quality assurance/quality control (QA/QC) criteria outlined in Appendix B of the Quality Assurance Project Plan.

FIELD DOCUMENTATION

Field documentation was checked for completeness and accuracy. The chain-of-custody forms were signed by AEG and Spectra at the time of sample receipt; the samples were received cold and in good condition. The sample cooler temperature recorded at the laboratory was 9.6 degrees Celsius. The samples collected on June 13, 2017 were preserved on ice during sample collection and then stored in the AEG sample refrigerator overnight. After sample collection was completed on the morning of June 14, 2017, samples were placed in the sample cooler, on ice, and delivered promptly to the laboratory. It was determined through professional judgment that since the samples collected on June 13, 2017 were properly cooled and the

samples collected on June 14, 2017 were received by the laboratory the same day they were collected, this temperature should not affect the sample analytical results.

HOLDING TIMES AND SAMPLE PRESERVATION

Samples were appropriately preserved and analyzed within holding times.

FIELD QUALITY CONTROL

Trip Blanks

Five trip blanks were collected and analyzed for NWTPH-Gx and VOCs in association with these sample sets. All trip blanks were non-detect for all target compounds. No data were qualified based on the trip blank result.

Field Blanks

Field blanks are analyzed to indicate whether any cross contamination may have occurred from sampling equipment or ambient conditions. Field blanks should be collected at a frequency of 1 per 20 samples. One field blank was collected during this sampling event, thus satisfying the criteria.

LABORATORY QUALITY CONTROL

Method Blanks

Method blanks are analyzed to ensure that laboratory procedures and reagents do not introduce measurable concentrations of the analytes of interest. A method blank was analyzed with each batch of samples, at a frequency of 1 per 20 samples. For the sample batches, method blanks were analyzed at the required frequency. Methylene Chloride, 1,2,3-trichlorobenzene, and 1,2,4-trichlorobenzene were detected above the reporting limits in the method blank analyzed on 6-27-17 associated with the SDG 2017060394. Since these compounds were all non-detect in the associated samples, no qualification is needed in the associated data.

Surrogate Recoveries

Surrogate compounds are added to samples, QC samples, and all blanks to monitor the performance of the analytical method. Surrogates are utilized in organic analysis. Surrogates are specifically chosen to be chemically similar to target compounds but unlikely to be found in environmental samples. While all of the surrogate percent recoveries for field samples were within the control limits specified on Table B-2 in the QAPP, several surrogates' percentages were above Spectra's in-house recovery limits found in Table 1 below.



The samples affected are MW-2A, MW-3A, SO-2A, CO-3B, CO-3A, SO-4B, SO-4A, MW-1A, MW-1B, SO-4A Dup, Field Blank, Trip Blank #1, and Trip Blank #2 for VOC and Gx analyses. Samples SO-4A and SO-4A Duplicate had concentrations above the reporting limits for VOCs.

Samples SO-2A, CO-3B, CO-3A, SO-4B had surrogates above Spectra's in-house recovery limits for Dx analyses. All four of these samples were non-detect for diesel- and oil-range hydrocarbons.

The recoveries mentioned are above the specified range of acceptance and a possibility of false positives exists. Non-detect results are considered accurate. And since all recoveries are within the Project Quality Objectives listed in Table B-2 of the QAPP, no data were qualified based on the surrogate recoveries.

Laboratory Control Samples

A laboratory control sample (LCS) is a sample that is not expected to cause analytical interference which is spiked with a known amount of analyte. The percent recovery control limits for LCS analyses can be found in Table 1 below. One LCS analysis should be performed at a minimum of once per batch of up to 20 samples of similar matrix. Laboratory control samples were analyzed at adequate frequency and recovered within specified limits, with the following exception:

- SDGs 2017060394: The percent recovery for Diesel analyzed on 7-1-17 was greater than the control limits in Table B-2 of the QAPP. Field samples MW-1A and MW-1B were analyzed with this analytical batch and had positive results for this target analyte. The concentration values for these two samples may be biased high based on the LCS recovery.

Laboratory Duplicates/Field Duplicates

Internal laboratory duplicate analyses are performed to monitor the precision of the analyses. Two separate aliquots of a sample are analyzed as distinct samples in the laboratory and the relative percent difference (RPD) between the two results is calculated. Duplicate analyses should be performed once per analytical batch. If one or more of the samples used has a concentration less than five times the reporting limit for that sample, the absolute difference is used instead of the RPD. This was the case for Diesel & Oil and cis-1,2-Dichloroethene, which were non-detect in one of the samples, and detected at less than five times the reporting limit. The RPD control limits are specified in Table B-2 of the QAPP. Laboratory duplicates were analyzed at the proper frequency and the specified acceptance criteria were met with the exception of Sulfate with an RPD of 21%. The sample used as a duplicate was collected as a field duplicate and satisfies both requirements.

Instrument Tuning

Instrument tuning for analyses by gas chromatography/mass spectrometry (GC/MS) are performed to ensure that mass resolution, identification, and sensitivity of the analyses are within specification of the analytical method. Instrument tuning is performed at the beginning of each 12-hour period during which samples or standards are analyzed. The frequency and specified acceptance criteria were met for the VOC method.

Continuing Calibrations

The continuing calibrations were performed at proper interval as dictated by the laboratory methods and consisted of the appropriate number of standards. For inorganic analyses, the percent recoveries were within the control limits of 90 and 110 percent. For organic analyses, the percent difference (%D) and relative response factor (RRF) values were within the control limits.

Reporting Limits

The contract required quantitation limits (CRQL) were met by the laboratory for each target analyte throughout this sampling event as specified in Table B-3 of the QAPP.

Table 1 below lists the current recovery limits and RPDs obtained from Spectra on December 28, 2017.

TABLE 1. CURRENT RECOVERY LIMITS AND RPDs

	Analytical Method	LCS % Recovery	MS % Recovery	Surrogate Recovery	MS/MSD RPD	Duplicate RPD
Total Metals	EPA 6020A	85-115	70-130		20	20
TPH-Diesel	NWTPH-Dx	70-130	50-150	70-130	20	20
TPH-Gasoline	NWTPH-Gx	85-115	70-130	70-130	20	20
PCBs	EPA 8082A	70-130	70-130	70-130	20	20
VOCs	SW8260C	85-115	70-130		20	20
1,1-Dichlorethene	SW8260C	85-115	70-130		20	20
Benzene	SW8260C	85-115	70-130		20	20
TCE	SW8260C	85-115	70-130		20	20
Toluene	SW8260C	85-115	70-130		20	20
Chlorobenzene	SW8260C	85-115	70-130		20	20
Dibromofluoromethane (surr)	SW8260C			70-130		
1,4-Difluorobenzene (surr)	SW8260C			70-130		
Toluene-d8 (surr)	SW8260C			70-130		
4-Bromofluorobenzene (surr)	SW8260C			70-130		
Nitrate + Nitrogen	SM4500E	80-120	70-130		20	20
Sulfate	SM4500F	80-120	70-130		20	20

Miscellaneous

The requested analysis methods in Table 1 of the Groundwater Monitoring Plan (PRS 2015) for nitrate and sulfate were Methods EPA 353.3 and 375.4, respectively, are no longer in use at Spectra. Spectra currently uses the SM4500-NO3 F for nitrate analysis and the Method SM4500-SO4 E for sulfate. These methods supersede the requested analysis methods.

OVERALL ASSESSMENT

As was determined by this data validation, the laboratory followed the specified analytical methods. Accuracy was acceptable, as demonstrated by the surrogate, LCS, and MS/MSD percent recovery values, with the exceptions noted above. Precision was acceptable, as demonstrated by the MS/MSD and laboratory/field duplicate RPD values, with the exceptions noted above. The data are acceptable for the intended use.