

SEATAC DEVELOPMENT SITE (MASTERPARK LOT C PROPERTY)

Performance Groundwater Monitoring Report - January 2020 Sampling Event

Prepared for:

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This document has been prepared by SLR International Corporation (SLR). The material and data in this report were prepared under the supervision and direction of the undersigned.



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ACRONYMS

µg/L	micrograms per liter
mg/L	milligrams per liter
Apex	Apex Laboratories, Inc.
BTEX	benzene, toluene, ethylbenzene, and xylenes
DO	dissolved oxygen
DRO	diesel range organics
EDB	1,2-dibromoethane
Golder	Golder Associates, Inc.
GRO	gasoline range organics
IAS/SVE	in-situ air sparging and soil vapor extraction
MDL	method detection limit
MRL	method reporting limit
MSL	mean sea level
ORO	oil-range organics
QA	quality assurance
QC	quality control
SLR	SLR International Corporation

1. INTRODUCTION

On January 29 and 30, 2020, SLR International Corporation (SLR) conducted a semiannual performance groundwater monitoring event at the SeaTac Development Site, which is primarily located at 16025 International Boulevard in SeaTac, Washington (the subject property). The location of the subject property, which is occupied by MasterPark Lot C, is shown on Figure 1.

From approximately May to July 2013 and December 2013 through July 2017, Golder Associates, Inc. (Golder) operated an in-situ air sparging and soil vapor extraction (IAS/SVE) system at the subject property to remediate the petroleum hydrocarbon-impacted groundwater at the site. After the deactivation of the IAS/SVE system in July 2017, performance groundwater monitoring events were conducted on a semiannual basis from November 2017 through July 2019 to monitor any changes in the petroleum hydrocarbon concentrations over time. Since petroleum hydrocarbon concentrations in the groundwater beneath the northwestern part of the subject property were still above the MTCA Method A cleanup levels in July 2019, SLR reactivated the IAS/SVE system on September 5, 2019. The January 2020 groundwater monitoring activities were conducted in accordance with the Compliance Monitoring Plan (Golder 2011) for the site, except that turbidity measurements were not collected during purging.

2. GROUNDWATER SAMPLING EVENT

On January 29 and 30, 2020, SLR personnel collected groundwater samples from monitoring wells MW-06, MW-07, MW-09, MW-12, MW-13, MW-17A, MW-18, MW-19, MW-20, MW-21, MW-22, and PORT-MW-B. The locations of the groundwater monitoring wells that are included in the performance monitoring program are shown on Figure 2. To sample the groundwater under static conditions, SLR deactivated the IAS/SVE system on January 27, 2020, and it was not reactivated until after the groundwater sampling event had been completed.

Prior to collecting each groundwater sample, the depth to groundwater in the monitoring well was measured by using an electronic water level meter. SLR used the existing dedicated submersible bladder pumping system located at each well to purge approximately 1.0 to 1.6 gallons of water from the well. During the purging of each well, pH, specific conductance, temperature, oxidation-reduction potential, and dissolved oxygen (DO) of the extracted water were measured approximately every four minutes. A groundwater sample was collected from each of the wells following the stabilization of the field parameter measurements. The final field parameter readings prior to sample collection are presented in Table 1. The groundwater samples were collected in the appropriate sample containers provided by Apex Laboratories (Apex) of Tigard, Oregon. The groundwater sampling activities were documented on Low-Flow Groundwater Sampling Field Data Sheets, which are presented in Appendix A.

In accordance with the Compliance Monitoring Plan, the groundwater samples were submitted to Apex for analyses of benzene, toluene, ethylbenzene, total xylenes, naphthalene, and n-hexane by EPA Method 8260C; 1,2-dibromoethane (EDB) by EPA Method 8260C SIM; and gasoline-range organics (GRO) by Ecology Method NWTPH-Gx. In addition, selected groundwater samples were analyzed for diesel-range organics (DRO) and oil-range organics (ORO) by Ecology Method NWTPH-Dx after silica gel cleanup to monitor the DRO and ORO concentrations in the wells (MW-07, MW-12, MW-18, and MW-22) that have contained DRO and/or ORO concentrations. The DRO and ORO analyses were conducted after silica gel cleanup because Apex informed SLR that polar organics in the groundwater were affecting the semi-volatile petroleum hydrocarbon concentrations in the July 2019 samples.

The purge water was initially collected into 5-gallon buckets during groundwater sampling activities and transferred into properly labeled 55-gallon drums at the subject property. The water in the drums will be transported to a licensed facility for off-site treatment and disposal.

2.1 GROUNDWATER MONITORING RESULTS

On January 29, 2020 SLR personnel measured the depths to groundwater in all of the monitoring wells at the site. The depths to groundwater in the monitoring wells ranged from 44.26 to 106.60 feet below the top of each well casing, and MW-01 was dry during this sampling event. The groundwater elevations in the wells ranged from 294.23 to 310.75 above mean sea level (MSL). Due to a malfunctioning sensitivity dial on the water level meter at the time of the measurements, the groundwater level data collected on January 29, 2020, was unreliable, and a groundwater elevation contour map was not prepared. The depth to groundwater measurements and groundwater elevations in the monitoring wells on January 29, 2020, are presented in Table 2.

2.2 GROUNDWATER SAMPLE ANALYTICAL RESULTS

The groundwater sample analytical results showed that the sample from MW-22 contained a GRO concentration (4.32 mg/L) that exceeded the MTCA Method A cleanup level (0.8 mg/L when benzene is present). The sample from MW-22 did not contain any other analyte concentrations that exceeded the cleanup levels, method reporting limits (MRLs), or the method detection limits (MDLs); however, the MDL for 1,2-dibromomethane [EDB; 2.5 micrograms per liter ($\mu\text{g/L}$)] exceeded the Method A cleanup level (0.01 $\mu\text{g/L}$). The samples from MW-07, MW-09, and MW-13 did not contain any analyte concentrations that exceeded the cleanup levels, MRLs, or MDLs; however, the MDL for EDB (0.02 $\mu\text{g/L}$) exceeded the cleanup level in the sample collected from MW-07. The samples from MW-06, MW-12, MW-17, MW-18, MW-19, MW-20, and MW-21, did not contain any detected analyte concentrations. The groundwater sample analytical results from the January 2020 sampling event are presented in Table 1, and the GRO, benzene, and DRO concentrations are presented on Figure 2. The groundwater sample analytical results from the January 2020 sampling event, as well as from the previous groundwater sampling events, are presented in data tables and on trend plots in Appendix B. The laboratory reports from the January 2020 sampling event are included in Appendix C.

3. DATA QUALITY ASSURANCE AND VALIDATION

Based on the results of a data validation review, the groundwater sample analytical data were acceptable with the following data qualifications.

- The benzene concentration in the sample from MW-13 was noted with a J qualifier. Apex defined the J qualifier as an estimated result; the result was detected below the lowest point of the calibration curve, but above the specified MDL.
- The DRO concentration in the sample from MW-22 was noted with a F-18 qualifier, which indicates that the diesel result is due to overlap from gasoline or a GRO product.
- The analytical results for the field blank and trip blank samples did not contain any analyte concentrations above the MRL or MDLs, and no data qualifiers were applied to the results.
- The analytical results of the duplicate sample (labelled MW-30-0120) collected from MW-7 were within an acceptable range. The DRO concentration in sample MW-30-0120 was noted with a F-18 qualifier, which indicates that the diesel result is due to overlap from gasoline or a GRO product. The n-hexane concentration in sample MW-30-0120 was noted with a Q-42 qualifier, indicating that a matrix spike and/or duplicate analysis was performed on this sample and the percent recovery was outside of the laboratory control limits.

4. CONCLUSIONS

On January 29 and 30 2020, SLR conducted a semiannual performance groundwater monitoring event at the SeaTac Development Site. After reactivating the IAS/SVE system in September 2019, the objective of the groundwater sampling event was to evaluate the performance of the system operations.

The groundwater sample analytical results showed that the IAS/SVE system operations has reduced the petroleum hydrocarbon concentrations beneath the subject property to below the MTCA Method A cleanup levels. GRO is present in the groundwater to the northwest of the subject property (at MW-22) at a concentration (4.32 mg/L) that exceeds the MTCA Method A cleanup level. MW-22 is located hydraulically cross-gradient of the subject property, and based on a low DO concentration (1.78 mg/L) during the purging of MW-22, the well is located outside of the area of IAS/SVE influence. Tables and trend graphs that show GRO and benzene concentrations over time are presented in Appendix B.

The groundwater samples from the wells (MW-07, MW-12, MW-18, and MW-22) that have contained DRO and ORO concentrations were also analyzed for DRO and ORO (after silica gel cleanup). DRO was not detected above the MTCA Method A groundwater cleanup level or the MRLs in any of the samples, and ORO was not detected above the MRLs. Tables and trend graphs that show DRO concentrations over time are presented in Appendix B.

5. REFERENCES

Golder Associates, Inc. 2011. *Attachment E, Compliance Monitoring Plan, Sea-Tac Development Site, SeaTac, Washington*. November 2.

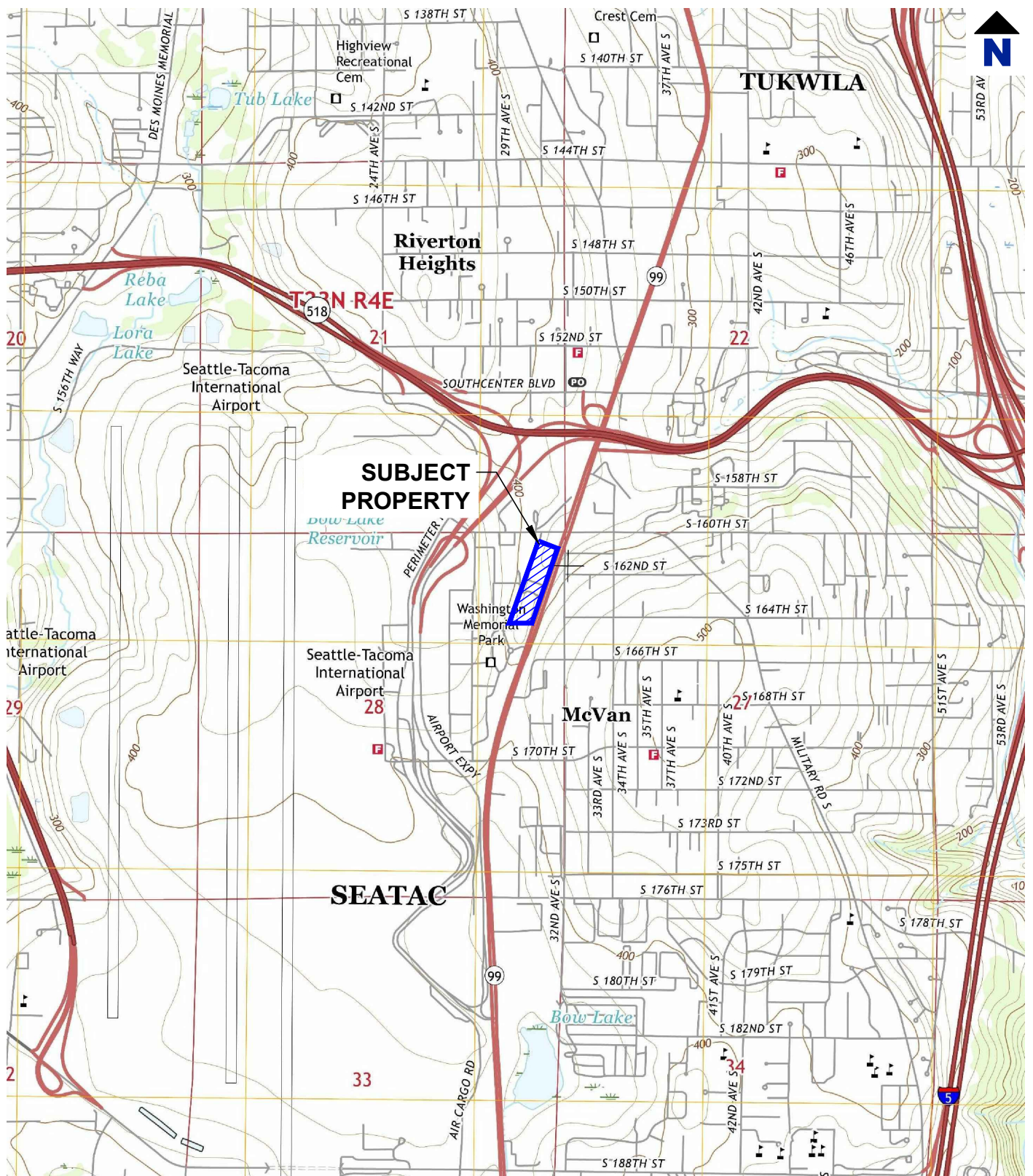
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FIGURES

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REFERENCED FROM :
USGS 7.5 MINUTE QUADRANGLE DES MOINES, 2017

0 2000' 4000'

SEATAC DEVELOPMENT SITE
16025 INTERNATIONAL BLVD
SEATAC, WASHINGTON

Drawing

SUBJECT PROPERTY LOCATION MAP

Date September 19, 2019

Scale AS SHOWN

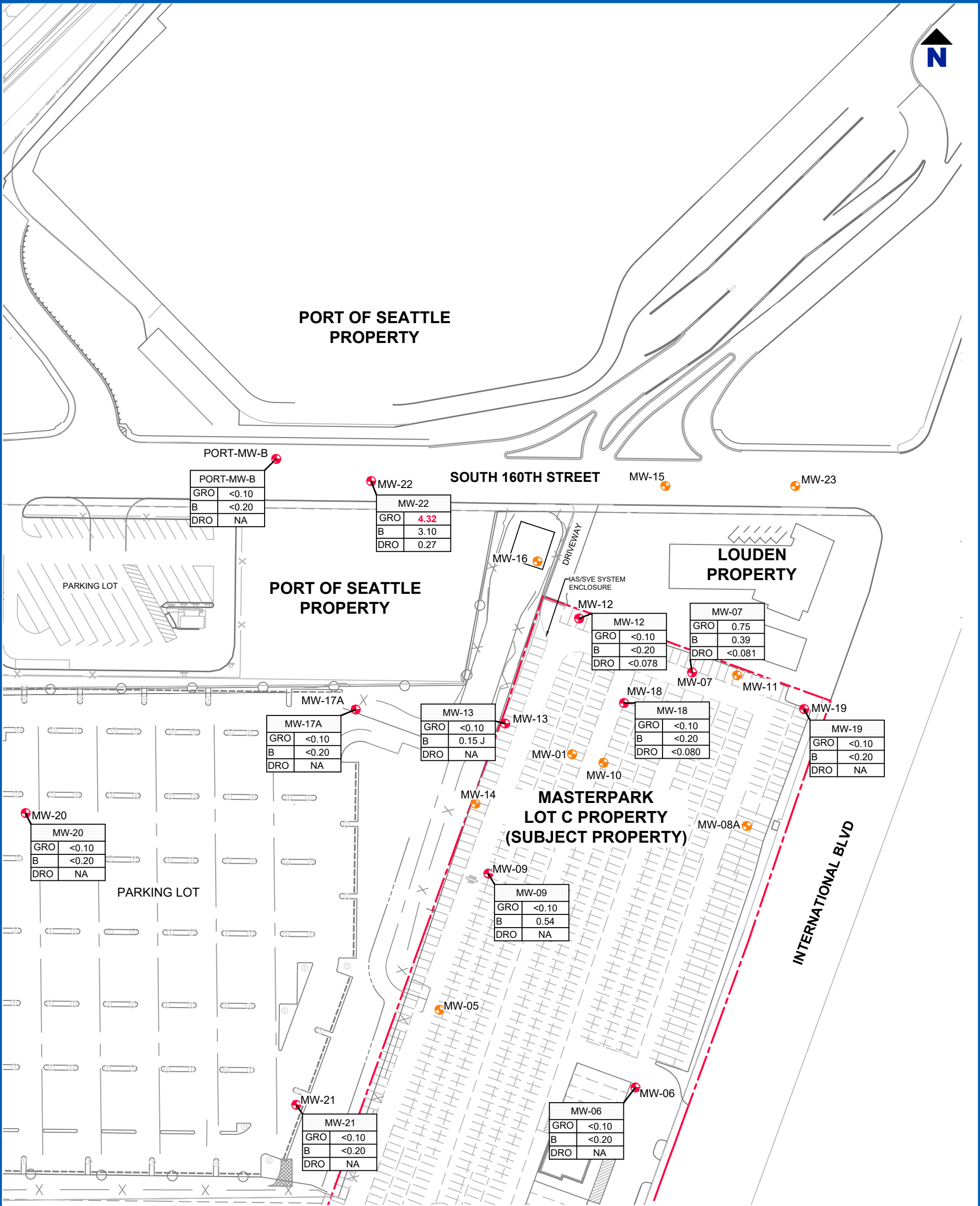
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SEATAC DEVELOPMENT SITE
SEATAC, WASHINGTON

Drawing

GRO, BENZENE, AND DRO CONCENTRATIONS IN
GROUNDWATER SAMPLES - JANUARY 2020

DateFebruary 21, 2020

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TABLES

Table 1
Groundwater Field Parameters and Sample Analytical Data - January 2020
SeaTac Development Site
SeaTac, Washington

Well ID	Date Sampled	Field Parameters							Analytical Data											
		Depth to Groundwater (feet)	pH	Temperature (°C)	Specific Conductance (µmhos/cm)	Dissolved Oxygen (mg/L)	Oxidation-Reduction Potential (mV)	Turbidity (NTU)	GRO ^a (mg/L)	Benzene ^b (µg/L)	Toluene ^b (µg/L)	Ethylbenzene ^b (µg/L)	Total Xylenes ^b (µg/L)	EDB ^c (µg/L)	N-hexane ^b (µg/L)	Naphthalene ^b (µg/L)	DRO ^d (mg/L)	ORO ^d (mg/L)	DRO ^d after Silica Gel Cleanup (mg/L)	ORO ^d after Silica Gel Cleanup (mg/L)
MTCA Method A Groundwater Cleanup Levels ^e									0.8 ^f /1.0 ^g	5.0	1,000	700	1,000	0.01	480 ^h	160	0.5	0.5	0.5	0.5
MW-06	1/30/2020	59.04	6.42	12.5	228	12.56	77.0	NM	<0.10	<0.10	<0.50	<0.25	<0.75	<0.01	<1.0	<1.0	NA	NA	NA	NA
MW-07	1/29/2020	48.12	6.72	14.6	201	0.86	69.4	NM	0.75	0.39	8.1	2.3	11.0	<0.02 ⁱ	6.97	5.08	NA	NA	<0.081	<0.16
MW-07 (duplicate ^k)	1/29/2020	--	--	--	--	--	--	--	0.77	0.36	7.9	2.3	10.6	<0.02 ⁱ	7.05	4.82	NA	NA	0.12 ^j	<0.17
MW-09	1/30/2020	51.45	6.40	12.7	249	0.77	77.2	NM	<0.10	0.54	<0.50	<0.25	<0.75	<0.01	<1.0	<1.0	NA	NA	NA	NA
MW-12	1/29/2020	63.90	7.18	12.6	10	13.47	41.2	NM	<0.10	<0.10	<0.50	<0.25	<0.75	<0.01	<1.0	<1.0	NA	NA	<0.078	<0.16
MW-13	1/30/2020	54.92	7.10	12.9	215	3.28	76.5	NM	<0.10	0.15 J	<0.50	<0.25	<0.75	<0.01	<1.0	<1.0	NA	NA	NA	NA
MW-17A	1/30/2020	84.14	6.38	12.1	161	5.74	81.5	NM	<0.10	<0.10	<0.50	<0.25	<0.75	<0.01	<1.0	<1.0	NA	NA	NA	NA
MW-18	1/30/2020	50.03	7.51	13.5	27	7.14	39.6	NM	<0.10	<0.10	<0.50	<0.25	<0.75	<0.01	<1.0	<1.0	NA	NA	<0.080	<0.16
MW-19	1/30/2020	45.95	6.86	13.1	278	1.95	75.0	NM	<0.10	<0.10	<0.50	<0.25	<0.75	<0.01	<1.0	<1.0	NA	NA	NA	NA
MW-20	1/30/2020	106.60	6.57	13.0	81	8.89	64.0	NM	<0.10	<0.10	<0.50	<0.25	<0.75	<0.01	<1.0	<1.0	NA	NA	NA	NA
MW-21	1/30/2020	102.69	6.37	12.2	180	9.37	83.1	NM	<0.10	<0.10	<0.50	<0.25	<0.75	<0.01	<1.0	<1.0	NA	NA	NA	NA
MW-22	1/29/2020	82.58	6.72	12.8	192	1.78	82.1	NM	4.32	3.1	<5.0	247	335	<2.50 ⁱ	<10.0	130	NA	NA	0.27 ^j	<0.20
PORT-MW-B	1/29/2020	105.60	6.66	12.0	166	8.70	73.7	NM	<0.10	<0.10	<0.50	<0.25	<0.75	<0.01	<1.0	<1.0	NA	NA	NA	NA
Notes: Values in bold and red exceed MTCA Method A or B Cleanup Levels. NM = Not Measured mg/L = Milligrams per liter µg/L = Micrograms per liter µmhos/cm = Micromhos per centimeter NTU = Nephelometric turbidity unit °C = Degrees Celsius J = Laboratory estimated value GRO = Gasoline-range organics DRO = Diesel-range organics ORO = Oil-range organics EDB = 1,2-dibromoethane NA = Not analyzed NS = Not sampled mV = Millivolts ^a Analyzed by Ecology Method NWTPH-Gx. ^b Analyzed by EPA Method 8260C. ^c Analyzed by EPA Method 8260C SIM. ^d Analyzed by Ecology Method NWTPH-Dx. ^e Ecology's Model Toxics Control Act (MTCA) Cleanup Regulation (Chapter 173-340 WAC), Tables 720-1, Method A Cleanup Levels for Groundwater. ^f When benzene is present. ^g When benzene is not present. ^h Method B cleanup level used because Method A cleanup level is not established. Standard formula values, direct contact Method B groundwater cleanup levels as published on Ecology's Cleanup Level and Risk Calculation (CLARC) on-line database (May 2019). ⁱ The analyte was not detected at or above the method detection limit (MDL); however, the MDL exceeded the cleanup level. ^j The laboratory noted that the result for diesel-range organics is due to overlap from gasoline or a gasoline-range product. ^k Duplicate sample named MW-30-0120.																				

Table 2
Groundwater Monitoring Data - January 2020
SeaTac Development Site
SeaTac, Washington

Well Number	Top of Casing Elevation^a (feet)	Approximate Depth of Well Screen (feet bgs)	Date Measured	Depth to Groundwater* (feet)	Groundwater Elevation* (feet)
MW-01	361.38	41 to 51	1/29/2020	Dry	--
MW-05	364.26	48 to 58	1/29/2020	53.84	310.42
MW-06	369.68	50 to 60	1/29/2020	59.04	310.64
MW-07	358.69	43.5 to 53.5	1/29/2020	48.12	310.57
MW-08A	359.16	44 to 54	1/29/2020	48.61	310.55
MW-09	362.13	47.5 to 57	1/29/2020	51.45	310.68
MW-10	360.18	80 to 90	1/29/2020	50.20	309.98
MW-11	357.53	42 to 57	1/29/2020	46.78	310.75
MW-12	364.83	52 to 67	1/29/2020	63.90	300.93
MW-13	365.42	50 to 65	1/29/2020	54.92	310.50
MW-14	363.76	50 to 65	1/29/2020	53.28	310.48
MW-15	364.67	50 to 65	1/29/2020	54.08	310.59
MW-16	377.63	64 to 74	1/29/2020	67.22	310.41
MW-17A	394.44	80 to 95	1/29/2020	84.14	310.30
MW-18	360.45	47 to 62	1/29/2020	50.03	310.42
MW-19	356.61	43 to 58	1/29/2020	45.95	310.66
MW-20	416.61	103 to 113	1/29/2020	106.60	310.01
MW-21	412.85	95 to 110	1/29/2020	102.69	310.16
MW-22	393.31	80 to 95	1/29/2020	82.58	310.73
MW-23	354.94	42.5 to 57.5	1/29/2020	44.26	310.68
PORT-MW-B	399.83	79 to 99	1/29/2020	105.60	294.23

Notes:

NM = Not measured.

* Due to a malfunctioning sensitivity dial on the water level meter at the time of the measurements, the groundwater level data collected on January 29, 2020, is unreliable.

^a The top of well casing elevations were surveyed relative to mean seal level.

APPENDIX A

LOW-FLOW GROUNDWATER SAMPLING FIELD DATA SHEETS



LOW-FLOW GROUNDWATER SAMPLING FIELD DATA SHEET

Project No. 101.02207.00001 Purged By: SML Well I.D.: MW-07
 Project Name: Seafac Development Site Sampled By: SML Sample I.D.: MW-07-0120
 Location: Seafac QA Samples: MW-30-0120 @ 1435

Date Purged: 1/29/20 Start (2400hr): 1411 End (2400hr): 1435
 Date Sampled: 1/29/20 Sample Time (2400hr): 1435

Casing Diameter: 2" K 3" _____ 4" _____ 5" _____ 6" _____ 8" _____ Other _____
 Casing Volume: (gallons per foot) (0.17) (0.38) (0.67) (1.02) (1.50) (2.60) ()

Total depth (feet) = _____ Tubing Volume (gal) = _____
 Depth to water (feet) = 46.12 Minimum Purge (gal) = _____
 Water column height (feet) = _____ Actual Purge (gal) = _____

FIELD MEASUREMENTS									
Volume (Gal)	Time (2400hr)	Temp. (degrees C)	Conductivity (mS/cm)	TDS (g/L)	DO (mg/L)	pH (units)	ORP (mV)	Turbidity (Visual)	Color (Visual)
<u>0</u>	<u>1411</u>	<u>14.39</u>	<u>0.221</u>	<u>0.144</u>	<u>11.21</u>	<u>6.21</u>	<u>106.0</u>	<u>clear</u>	<u>clear</u>
<u>0.2</u>	<u>1415</u>	<u>14.52</u>	<u>0.202</u>	<u>0.131</u>	<u>1.10</u>	<u>6.84</u>	<u>67.0</u>	<u>clear</u>	<u>clear</u>
<u>0.4</u>	<u>1419</u>	<u>14.57</u>	<u>0.199</u>	<u>0.130</u>	<u>0.90</u>	<u>6.83</u>	<u>66.9</u>	<u>clear</u>	<u>clear</u>
<u>0.6</u>	<u>1423</u>	<u>14.56</u>	<u>0.200</u>	<u>0.130</u>	<u>0.91</u>	<u>6.79</u>	<u>68.3</u>	<u>clear</u>	<u>clear</u>
<u>0.8</u>	<u>1427</u>	<u>14.60</u>	<u>0.200</u>	<u>0.130</u>	<u>0.92</u>	<u>6.73</u>	<u>69.4</u>	<u>clear</u>	<u>clear</u>
<u>1.0</u>	<u>1431</u>	<u>14.66</u>	<u>0.200</u>	<u>0.130</u>	<u>0.87</u>	<u>6.72</u>	<u>69.8</u>	<u>clear</u>	<u>clear</u>
<u>1.2</u>	<u>1435</u>	<u>14.59</u>	<u>0.201</u>	<u>0.130</u>	<u>0.85</u>	<u>6.72</u>	<u>69.4</u>	<u>clear</u>	<u>clear</u>

PURGING & SAMPLING EQUIPMENT	SAMPLE VESSELS
☐ Well Wizard Bladder Pump	☐ 40mL VOA
☐ Active Extraction Well Pump	☒ 40mL VOA w/ HCL
☐ Submersible Pump	☐ mL amber glass
☐ Peristaltic Pump	☒ 2 1000mL amber glass w/ HCL
Other: _____	☐ mL HDPE
Pump Intake Depth: _____ (feet)	☐ mL HDPE w/ HNO3
☐ Bailer (disposable)	☐ mL HDPE w/ H2SO4
☐ Bailer (PVC)	
☐ Bailer (Stainless Steel)	
☒ Dedicated <u>tubing</u> <u>baiter</u> <u>pump</u>	

Well Integrity: _____ Odor: No
 Remarks: N/A

Signature: [Signature] Page 1 of 1

LOW-FLOW GROUNDWATER SAMPLING FIELD DATA SHEET

Project No. <u>161.02207.00001</u>		Purged By: <u>SML</u>	Well I.D.: <u>MW-09</u>
Project Name: <u>Seatac Development Site</u>		Sampled By: <u>SML</u>	Sample I.D.: <u>MW-09-0120</u>
Location: <u>Seatac, WA</u>		QA Samples: <u>0</u>	

Date Purged: <u>1/30/20</u>	Start (2400hr): <u>1155</u>	End (2400hr): <u>1218</u>
Date Sampled: <u>1/30/20</u>	Sample Time (2400hr): <u>1218</u>	

Casing Diameter: 2" <u>X</u>	3" _____	4" _____	5" _____	6" _____	8" _____	Other _____
Casing Volume: (gallons per foot) (0.17)	(0.38)	(0.67)	(1.02)	(1.50)	(2.60)	()

Total depth (feet) = _____	Casing Volume (gal) = _____
Depth to water (feet) = <u>51.45</u>	Minimum Purge (gal) = _____
Water column height (feet) = _____	Actual Purge (gal) = _____

FIELD MEASUREMENTS									
Volume (Gal)	Time (2400hr)	Temp. (degrees C)	Conductivity (mS/cm)	TDS (g/L)	DO (mg/L)	pH (units)	ORP (mV)	Turbidity (Visual)	Color (Visual)
<u>0</u>	<u>1155</u>	<u>11.89</u>	<u>0.272</u>	<u>0.177</u>	<u>9.41</u>	<u>6.60</u>	<u>95.6</u>	<u>clear</u>	<u>clear</u>
<u>0.2</u>	<u>1159</u>	<u>12.72</u>	<u>0.282</u>	<u>0.184</u>	<u>6.57</u>	<u>6.67</u>	<u>73.7</u>	<u>clear</u>	<u>clear</u>
<u>0.4</u>	<u>1203</u>	<u>12.66</u>	<u>0.292</u>	<u>0.190</u>	<u>1.59</u>	<u>6.61</u>	<u>71.5</u>	<u>clear</u>	<u>clear</u>
<u>0.6</u>	<u>1207</u>	<u>12.67</u>	<u>0.296</u>	<u>0.192</u>	<u>0.99</u>	<u>6.54</u>	<u>74.2</u>	<u>clear</u>	<u>clear</u>
<u>0.8</u>	<u>1211</u>	<u>12.67</u>	<u>0.298</u>	<u>0.194</u>	<u>0.84</u>	<u>6.39</u>	<u>77.9</u>	<u>clear</u>	<u>clear</u>
<u>1.0</u>	<u>1215</u>	<u>12.74</u>	<u>0.299</u>	<u>0.194</u>	<u>0.80</u>	<u>6.39</u>	<u>77.9</u>	<u>clear</u>	<u>clear</u>
<u>1.2</u>	<u>1214</u>	<u>12.69</u>	<u>0.299</u>	<u>0.194</u>	<u>0.79</u>	<u>6.40</u>	<u>77.4</u>	<u>clear</u>	<u>clear</u>
<u>1.4</u>	<u>1218</u>	<u>12.65</u>	<u>0.299</u>	<u>0.194</u>	<u>0.77</u>	<u>6.40</u>	<u>77.2</u>	<u>clear</u>	<u>clear</u>

PURGING & SAMPLING EQUIPMENT		SAMPLE VESSELS	
☐ Well Wizard Bladder Pump	☐ Bailor (disposable)	☐ 40mL VOA	☐ mL HDPE w/ H2SO4
☐ Active Extraction Well Pump	☐ Bailor (PVC)	<u>5</u> 40mL VOA w/ HCL	
☐ Submersible Pump	☐ Bailor (Stainless Steel)	☐ mL amber glass	
☐ Peristaltic Pump	☒ Dedicated <u>lubing + bladder pump</u>	<u>2</u> 1000 mL amber glass w/ HCL	
Other: _____		☐ mL HDPE	
Pump Intake Depth: _____ (feet)		☐ mL HDPE w/ HNO3	

Well Integrity: <u>Fair - Stripped bolts</u>	Odor: <u>No</u>
Remarks: <u>n/t</u>	

Signature: <u>[Signature]</u>	Page 1 of <u>1</u>
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LOW-FLOW GROUNDWATER SAMPLING FIELD DATA SHEET

Project No. 101.02207.00001 Purged By: SML Well I.D.: MW-12
 Project Name: Seatac Development Site Sampled By: SML Sample I.D.: MW-12-0120
 Location: Seattle, WA QA Samples: 0

Date Purged: 1/29/20 Start (2400hr): 1319 End (2400hr): 1339
 Date Sampled: 1/29/20 Sample Time (2400hr): 1339

Casing Diameter: 2" X 3" 4" 5" 6" 8" Other
 Casing Volume: (gallons per foot) (0.17) (0.38) (0.67) (1.02) (1.50) (2.60) ()

Total depth (feet) =
 Depth to water (feet) = 63.90
 Water column height (feet) =
 Tubing Volume (gal) =
 Minimum Purge (gal) =
 Actual Purge (gal) =

FIELD MEASUREMENTS

Volume (Gal)	Time (2400hr)	Temp. (degrees C)	Conductivity (mS/cm)	TDS (g/L)	DO (mg/L)	pH (units)	ORP (mV)	Turbidity (Visual)	Color (Visual)
<u>0</u>	<u>1319</u>	<u>12.13</u>	<u>0.027</u>	<u>0.017</u>	<u>14.83</u>	<u>7.68</u>	<u>52.3</u>	<u>clear</u>	<u>clear</u>
<u>0.2</u>	<u>1323</u>	<u>12.60</u>	<u>0.006</u>	<u>0.004</u>	<u>12.81</u>	<u>7.75</u>	<u>25.3</u>	<u>clear</u>	<u>clear</u>
<u>0.4</u>	<u>1327</u>	<u>12.62</u>	<u>0.006</u>	<u>0.004</u>	<u>14.13</u>	<u>7.63</u>	<u>26.5</u>	<u>clear</u>	<u>clear</u>
<u>0.6</u>	<u>1331</u>	<u>12.66</u>	<u>0.007</u>	<u>0.005</u>	<u>13.93</u>	<u>7.41</u>	<u>31.9</u>	<u>clear</u>	<u>clear</u>
<u>0.8</u>	<u>1335</u>	<u>12.55</u>	<u>0.008</u>	<u>0.005</u>	<u>13.48</u>	<u>7.21</u>	<u>39.4</u>	<u>clear</u>	<u>clear</u>
<u>1.0</u>	<u>1339</u>	<u>12.59</u>	<u>0.010</u>	<u>0.006</u>	<u>13.47</u>	<u>7.18</u>	<u>41.2</u>	<u>clear</u>	<u>clear</u>

PURGING & SAMPLING EQUIPMENT

☐ Well Wizard Bladder Pump ☐ Bailer (disposable)
☐ Active Extraction Well Pump ☐ Bailer (PVC)
☐ Submersible Pump ☐ Bailer (Stainless Steel)
☐ Peristaltic Pump ☒ Dedicated bladder pump
 Other: _____
 Pump Intake Depth: _____ (feet)

SAMPLE VESSELS

☐ 40mL VOA ☐ mL HDPE w/ H2SO4
☒ 40mL VOA w/ HCL _____
☐ mL amber glass _____
☒ 100mL amber glass w/ HCL _____
☐ mL HDPE _____
☐ mL HDPE w/ HNO3 _____

Well Integrity: Box - missing bolts and sediment in well Odor: N/A
 Remarks: N/A

Signature: [Signature]

LOW-FLOW GROUNDWATER SAMPLING FIELD DATA SHEET

Project No. 101.02207.00001 Purged By: SML Well I.D.: MW-13
 Project Name: SeaTac Development Site Sampled By: SML Sample I.D.: MW-13-0120
 Location: SeaTac WA QA Samples: 0

Date Purged: 1/30/20 Start (2400hr): 1101 End (2400hr): 1129
 Date Sampled: 1/30/20 Sample Time (2400hr): 1129

Casing Diameter: 2" ☒ 3" ☐ 4" ☐ 5" ☐ 6" ☐ 8" ☐ Other ☐
 Casing Volume: (gallons per foot) (0.17) (0.38) (0.67) (1.02) (1.50) (2.60) ()

Total depth (feet) = _____ Casing Volume (gal) = _____
 Depth to water (feet) = 54.92 Minimum Purge (gal) = _____
 Water column height (feet) = _____ Actual Purge (gal) = _____

FIELD MEASUREMENTS

Volume (Gal)	Time (2400hr)	Temp. (degrees C)	Conductivity (mS/cm)	TDS (g/L)	DO (mg/L)	pH (units)	ORP (mV)	Turbidity (Visual)	Color (Visual)
0	1101	11.26	0.198	0.130	11.17	7.24	91.8	clear	clear
0.2	1105	12.71	0.200	0.130	5.35	6.82	97.4	clear	clear
0.4	1109	12.69	0.201	0.131	4.67	7.13	78.7	clear	clear
0.6	1113	12.75	0.203	0.132	4.44	7.12	77.9	clear	clear
0.8	1117	12.76	0.207	0.135	3.93	7.11	77.2	clear	clear
1.0	1121	12.80	0.212	0.138	3.52	7.09	77.2	clear	clear
1.2	1125	12.86	0.214	0.139	3.36	7.10	76.6	clear	clear
1.4	1129	12.91	0.215	0.140	3.28	7.10	76.5	clear	clear

PURGING & SAMPLING EQUIPMENT		SAMPLE VESSELS	
☐ Well Wizard Bladder Pump	☐ Bailor (disposable)	☐ 40mL VOA	☐ mL HDPE w/ H2SO4
☐ Active Extraction Well Pump	☐ Bailor (PVC)	<u>5</u> 40mL VOA w/ HCL	_____
☐ Submersible Pump	☐ Bailor (Stainless Steel)	☐ mL amber glass	_____
☐ Peristaltic Pump	☒ Dedicated tubing & bladder pump	<u>2</u> 1000 mL amber glass w/ HCL	_____
Other: _____		☐ mL HDPE	_____
Pump Intake Depth: _____ (feet)		☐ mL HDPE w/ HNO3	_____

Well Integrity: Fair - stripped well monument bolts Odor: No
 Remarks: N/A

Signature: [Signature] Page 1 of 1

LOW-FLOW GROUNDWATER SAMPLING FIELD DATA SHEET

Project No. 101.02207.00001 Purged By: — Well I.D.: MW-16
 Project Name: Seatac Development Site Sampled By: — Sample I.D.: —
 Location: Seatac, WA QA Samples: —

Date Purged: — Start (2400hr): — End (2400hr): —
 Date Sampled: — Sample Time (2400hr): —

Casing Diameter: 2" X 3" — 4" — 5" — 6" — 8" — Other —
 Casing Volume: (gallons per foot) (0.17) (0.38) (0.67) (1.02) (1.50) (2.60) ()

Total depth (feet) = — Casing Volume (gal) = —
 Depth to water (feet) = 67.22 Minimum Purge (gal) = —
 Water column height (feet) = — Actual Purge (gal) = —

FIELD MEASUREMENTS									
Volume (Gal)	Time (2400hr)	Temp. (degrees C)	Conductivity (mS/cm)	TDS (g/L)	DO (mg/L)	pH (units)	ORP (mV)	Turbidity (Visual)	Color (Visual)
<u>—</u>	<u>1610</u>	<u>12.51</u>	<u>—</u>	<u>—</u>	<u>4.26</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>

PURGING & SAMPLING EQUIPMENT	SAMPLE VESSELS
☐ Well Wizard Bladder Pump	☐ 40mL VOA
☐ Active Extraction Well Pump	☐ 40mL VOA w/ HCL
☐ Submersible Pump	☐ mL amber glass
☐ Peristaltic Pump	☐ mL amber glass w/ HCL
Other: <u>—</u>	☐ mL HDPE
Pump Intake Depth: <u>—</u> (feet)	☐ mL HDPE w/ HNO3
☐ Bailer (disposable)	☐ mL HDPE w/ H2SO4
☐ Bailer (PVC)	
☐ Bailer (Stainless Steel)	
☐ Dedicated	

Well Integrity: Good - Bits partially stripped Odor: —
 Remarks: Measured DO and Temp w/ down-well DO meter. Set approx 3' below water level

Signature: [Signature] Page 1 of 1

LOW-FLOW GROUNDWATER SAMPLING FIELD DATA SHEET

Project No. 101.02207.00001 Purged By: SML Well I.D.: MW-17A
 Project Name: ScaFac Development Site Sampled By: SML Sample I.D.: MW-17A-0120
 Location: ScaFac, WA QA Samples: 0

Date Purged: 1/30/20 Start (2400hr): 1256 End (2400hr): 1324
 Date Sampled: 1/30/20 Sample Time (2400hr): 1324

Casing Diameter: 2" ☒ 3" ☐ 4" ☐ 5" ☐ 6" ☐ 8" ☐ Other ☐
 Casing Volume: (gallons per foot) (0.17) (0.38) (0.67) (1.02) (1.50) (2.60) ()

Total depth (feet) = _____ Casing Volume (gal) = _____
 Depth to water (feet) = 54.14' Minimum Purge (gal) = _____
 Water column height (feet) = _____ Actual Purge (gal) = _____

FIELD MEASUREMENTS

Volume (Gal)	Time (2400hr)	Temp. (degrees C)	Conductivity (mS/cm)	TDS (g/L)	DO (mg/L)	pH (units)	ORP (mV)	Turbidity (Visual)	Color (Visual)
<u>0</u>	<u>1256</u>	<u>10.73</u>	<u>0.172</u>	<u>0.112</u>	<u>11.53</u>	<u>6.94</u>	<u>91.9</u>	<u>clear</u>	<u>clear</u>
<u>0.2</u>	<u>1300</u>	<u>10.99</u>	<u>0.173</u>	<u>0.113</u>	<u>10.54</u>	<u>6.91</u>	<u>92.7</u>	<u>clear</u>	<u>clear</u>
<u>0.4</u>	<u>1304</u>	<u>12.22</u>	<u>0.168</u>	<u>0.109</u>	<u>9.19</u>	<u>6.93</u>	<u>80.1</u>	<u>clear</u>	<u>clear</u>
<u>0.6</u>	<u>1308</u>	<u>12.13</u>	<u>0.164</u>	<u>0.107</u>	<u>7.41</u>	<u>6.86</u>	<u>71.6</u>	<u>clear</u>	<u>clear</u>
<u>0.8</u>	<u>1312</u>	<u>12.08</u>	<u>0.162</u>	<u>0.105</u>	<u>6.29</u>	<u>6.66</u>	<u>74.4</u>	<u>clear</u>	<u>clear</u>
<u>1.0</u>	<u>1316</u>	<u>12.04</u>	<u>0.162</u>	<u>0.105</u>	<u>5.90</u>	<u>6.52</u>	<u>78.1</u>	<u>clear</u>	<u>clear</u>
<u>1.2</u>	<u>1320</u>	<u>11.95</u>	<u>0.162</u>	<u>0.105</u>	<u>5.80</u>	<u>6.44</u>	<u>79.8</u>	<u>clear</u>	<u>clear</u>
<u>1.4</u>	<u>1324</u>	<u>12.10</u>	<u>0.161</u>	<u>0.105</u>	<u>5.74</u>	<u>6.38</u>	<u>81.5</u>	<u>clear</u>	<u>clear</u>

PURGING & SAMPLING EQUIPMENT		SAMPLE VESSELS	
☐ Well Wizard Bladder Pump	☐ Bailer (disposable)	☐ 40mL VOA	☐ mL HDPE w/ H2SO4
☐ Active Extraction Well Pump	☐ Bailer (PVC)	<u>5</u> 40mL VOA w/ HCL	
☐ Submersible Pump	☐ Bailer (Stainless Steel)		
☐ Peristaltic Pump	☒ Dedicated <u>tubing & bladder pump</u>		
Other: _____		<u>2</u> 1000 mL amber glass w/ HCl	
Pump Intake Depth: _____ (feet)			

Well Integrity: Fair - missing two bolts/stripped Odor: None
 Remarks: N/A

Signature: [Signature] Page 1 of 1

LOW-FLOW GROUNDWATER SAMPLING FIELD DATA SHEET



Project No. <u>101.02207.00001</u>		Purged By: <u>SML</u>	Well I.D.: <u>MW-18</u>
Project Name: <u>SeaTac Development Site</u>		Sampled By: <u>SML</u>	Sample I.D.: <u>MW-18-0120</u>
Location: <u>SeaTac, WA</u>		QA Samples: <u>0</u>	

Date Purged: <u>1/30/20</u>	Start (2400hr): <u>1003</u>	End (2400hr): <u>1031</u>
Date Sampled: <u>1/30/20</u>	Sample Time (2400hr): <u>1031</u>	

Casing Diameter: <u>2" X</u>	3" <u> </u>	4" <u> </u>	5" <u> </u>	6" <u> </u>	8" <u> </u>	Other <u> </u>
Casing Volume: (gallons per foot)	(0.17)	(0.38)	(0.67)	(1.02)	(1.50)	(2.60)

Total depth (feet) = <u> </u>	Casing Volume (gal) = <u> </u>
Depth to water (feet) = <u>50.03</u>	Minimum Purge (gal) = <u> </u>
Water column height (feet) = <u> </u>	Actual Purge (gal) = <u> </u>

FIELD MEASUREMENTS									
Volume (Gal)	Time (2400hr)	Temp. (degrees C)	Conductivity (mS/cm)	TDS (g/L)	DO (mg/L)	pH (units)	ORP (mV)	Turbidity (Visual)	Color (Visual)
<u>0</u>	<u>1003</u>	<u>12.17</u>	<u>0.424</u>	<u>0.277</u>	<u>9.85</u>	<u>7.50</u>	<u>110.0</u>	<u>clear</u>	<u>clear</u>
<u>0.2</u>	<u>1007</u>	<u>12.44</u>	<u>0.417</u>	<u>0.270</u>	<u>10.00</u>	<u>8.43</u>	<u>70.0</u>	<u>clear</u>	<u>clear</u>
<u>0.4</u>	<u>1011</u>	<u>13.44</u>	<u>0.150</u>	<u>0.091</u>	<u>8.22</u>	<u>8.54</u>	<u>38.4</u>	<u>clear</u>	<u>clear</u>
<u>0.6</u>	<u>1015</u>	<u>13.46</u>	<u>0.035</u>	<u>0.023</u>	<u>7.42</u>	<u>8.19</u>	<u>28.4</u>	<u>clear</u>	<u>clear</u>
<u>0.8</u>	<u>1019</u>	<u>13.48</u>	<u>0.028</u>	<u>0.018</u>	<u>7.22</u>	<u>7.84</u>	<u>33.3</u>	<u>clear</u>	<u>clear</u>
<u>1.0</u>	<u>1023</u>	<u>13.61</u>	<u>0.027</u>	<u>0.018</u>	<u>7.20</u>	<u>7.65</u>	<u>37.3</u>	<u>clear</u>	<u>clear</u>
<u>1.2</u>	<u>1027</u>	<u>13.53</u>	<u>0.027</u>	<u>0.018</u>	<u>7.12</u>	<u>7.56</u>	<u>39.3</u>	<u>clear</u>	<u>clear</u>
<u>1.4</u>	<u>1031</u>	<u>13.51</u>	<u>0.027</u>	<u>0.017</u>	<u>7.14</u>	<u>7.51</u>	<u>39.6</u>	<u>clear</u>	<u>clear</u>

PURGING & SAMPLING EQUIPMENT		SAMPLE VESSELS	
☐ Well Wizard Bladder Pump	☐ Bailer (disposable)	☐ 40mL VOA	☐ mL HDPE w/ H2SO4
☐ Active Extraction Well Pump	☐ Bailer (PVC)	<u>5</u> 40mL VOA w/ HCL	
☐ Submersible Pump	☐ Bailer (Stainless Steel)	☐ mL amber glass	
☐ Peristaltic Pump	<u>X</u> Dedicated <u>lubing</u>	<u>2</u> <u>100mL</u> mL amber glass w/ HCl	
Other: <u> </u>	<u>bladder pump</u>	☐ mL HDPE	
Pump Intake Depth: <u> </u> (feet)		☐ mL HDPE w/ HNO3	

Well Integrity: <u>Fair - missing bolts</u>	Odor: <u>No</u>
Remarks: <u>N/A</u>	

Signature: <u>[Signature]</u>	Page 1 of 1
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LOW-FLOW GROUNDWATER SAMPLING FIELD DATA SHEET

Project No. 101.02207.00001 Purged By: SML Well I.D.: MW-19 in
 Project Name: ScuTac Development site Sampled By: SML Sample I.D.: MW-19-0120
 Location: ScuTac, WA QA Samples: 0

Date Purged: 1/30/20 Start (2400hr): 0826 End (2400hr): 0846
 Date Sampled: 1/30/20 Sample Time (2400hr): 0846

Casing Diameter: 2" ☒ 3" ☐ 4" ☐ 5" ☐ 6" ☐ 8" ☐ Other ☐
 Casing Volume: (gallons per foot) (0.17) (0.38) (0.67) (1.02) (1.50) (2.60) ()

Total depth (feet) = _____ Tubing Volume (gal) = _____
 Depth to water (feet) = 45.95 Minimum Purge (gal) = _____
 Water column height (feet) = _____ Actual Purge (gal) = _____

FIELD MEASUREMENTS

Volume (Gal)	Time (2400hr)	Temp. (degrees C)	Conductivity (mS/cm)	TDS (g/L)	DO (mg/L)	pH (units)	ORP (mV)	Turbidity (Visual)	Color (Visual)
<u>0</u>	<u>0826</u>	<u>12.51</u>	<u>0.281</u>	<u>0.182</u>	<u>17.32</u>	<u>7.05</u>	<u>116.0</u>	<u>clear</u>	<u>clear</u>
<u>0.20</u>	<u>0830</u>	<u>13.00</u>	<u>0.278</u>	<u>0.180</u>	<u>4.62</u>	<u>7.05</u>	<u>83.4</u>	<u>clear</u>	<u>clear</u>
<u>0.4</u>	<u>0834</u>	<u>13.06</u>	<u>0.276</u>	<u>0.180</u>	<u>2.56</u>	<u>6.98</u>	<u>75.9</u>	<u>clear</u>	<u>clear</u>
<u>0.6</u>	<u>0838</u>	<u>13.13</u>	<u>0.278</u>	<u>0.180</u>	<u>2.08</u>	<u>6.92</u>	<u>75.2</u>	<u>clear</u>	<u>clear</u>
<u>0.8</u>	<u>0842</u>	<u>13.14</u>	<u>0.278</u>	<u>0.181</u>	<u>1.98</u>	<u>6.89</u>	<u>74.7</u>	<u>clear</u>	<u>clear</u>
<u>1.0</u>	<u>0846</u>	<u>13.13</u>	<u>0.278</u>	<u>0.181</u>	<u>1.95</u>	<u>6.86</u>	<u>75.0</u>	<u>clear</u>	<u>clear</u>

PURGING & SAMPLING EQUIPMENT

☐ Well Wizard Bladder Pump ☐ Bailer (disposable)
☐ Active Extraction Well Pump ☐ Bailer (PVC)
☐ Submersible Pump ☐ Bailer (Stainless Steel)
☐ Peristaltic Pump ☒ Dedicated tubing + bladder pump
 Other: _____
 Pump Intake Depth: _____ (feet)

SAMPLE VESSELS

☐ 40mL VOA ☐ _____ mL HDPE w/ H2SO4
☒ 40mL VOA w/ HCL ☐ _____
☐ _____ mL amber glass ☐ _____
☒ 2 100 mL amber glass w/ HCl ☐ _____
☐ _____ mL HDPE ☐ _____
☐ _____ mL HDPE w/ HNO3 ☐ _____

Well Integrity: Fair - missing bolts on monument Odor: No
 Remarks: N/A

Signature: [Signature] [Signature]

LOW-FLOW GROUNDWATER SAMPLING FIELD DATA SHEET

Project No. <u>161.02207.00001</u>		Purged By: <u>SML</u>	Well I.D.: <u>MW-20</u>
Project Name: <u>Seatac Development site</u>		Sampled By: <u>SML</u>	Sample I.D.: <u>MW-20-0120</u>
Location: <u>Seatac, WA</u>		QA Samples: <u>0</u>	

Date Purged: <u>1/30/20</u>	Start (2400hr): <u>1402</u>	End (2400hr): <u>1434</u>
Date Sampled: <u>1/30/20</u>	Sample Time (2400hr): <u>1434</u>	

Casing Diameter: 2" ☒ 3" ☐ 4" ☐ 5" ☐ 6" ☐ 8" ☐ Other ☐
Casing Volume: (gallons per foot) (0.17) (0.38) (0.67) (1.02) (1.50) (2.60) ()

Total depth (feet) = _____	Casing Volume (gal) = _____
Depth to water (feet) = <u>106.60</u>	Minimum Purge (gal) = _____
Water column height (feet) = _____	Actual Purge (gal) = _____

FIELD MEASUREMENTS									
Volume (Gal)	Time (2400hr)	Temp. (degrees C)	Conductivity (mS/cm)	TDS (g/L)	DO (mg/L)	pH (units)	ORP (mV)	Turbidity (Visual)	Color (Visual)
0	1402	12.07	0.187	0.121	9.52	6.51	95.7	clear	clear
0.2	1406	12.37	0.185	0.120	12.45	6.93	70.8	clear	clear
0.4	1410	12.35	0.130	0.081	10.34	6.87	61.2	clear	clear
0.6	1414	11.96	0.102	0.066	10.48	6.83	60.5	clear	clear
0.8	1418	13.07	0.074	0.051	9.92	6.64	62.7	clear	clear
1.0	1422	12.90	0.075	0.049	9.42	6.71	58.1	clear	clear
1.2	1426	12.86	0.077	0.050	8.99	6.66	60.7	clear	clear
1.4	1430	12.92	0.080	0.052	8.96	6.59	62.1	clear	clear
1.6	1434	12.96	0.081	0.055	8.89	6.57	64.0	clear	clear

PURGING & SAMPLING EQUIPMENT	SAMPLE VESSELS
☐ Well Wizard Bladder Pump ☐ Bailer (disposable) ☐ Active Extraction Well Pump ☐ Bailer (PVC) ☐ Submersible Pump ☐ Bailer (Stainless Steel) ☐ Peristaltic Pump ☒ Dedicated <u>injection</u> Other: _____ Pump Intake Depth: _____ (feet)	☐ 40mL VOA _____ mL HDPE w/ H2SO4 ☒ 40mL VOA w/ HCL _____ ☐ _____ mL amber glass _____ ☒ 2 <u>1000</u> mL amber glass w/ HCL _____ ☐ _____ mL HDPE _____ ☐ _____ mL HDPE w/ HNO3 _____

Well Integrity: _____	Odor: <u>No</u>
Remarks: <u>N/A</u>	

Signature: <u>[Signature]</u>	Page 1 of 1
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LOW-FLOW GROUNDWATER SAMPLING FIELD DATA SHEET

Project No. 101-02207-00001 Purged By: SML Well I.D.: MW-21
 Project Name: SeaTac Development Site Sampled By: SML Sample I.D.: MW-21-0120
 Location: SeaTac, WA QA Samples: 0

Date Purged: 1/30/20 Start (2400hr): 1510 End (2400hr): 1538
 Date Sampled: 1/30/20 Sample Time (2400hr): 1538

Casing Diameter: 2" ☒ 3" ☐ 4" ☐ 5" ☐ 6" ☐ 8" ☐ Other ☐
 Casing Volume: (gallons per foot) (0.17) (0.38) (0.67) (1.02) (1.50) (2.60) ()

Total depth (feet) = _____ Casing Volume (gal) = _____
 Depth to water (feet) = 102.69 Minimum Purge (gal) = _____
 Water column height (feet) = _____ Actual Purge (gal) = _____

FIELD MEASUREMENTS

Volume (Gal)	Time (2400hr)	Temp. (degrees C)	Conductivity (mS/cm)	TDS (g/L)	DO (mg/L)	pH (units)	ORP (mV)	Turbidity (Visual)	Color (Visual)
0	1510	12.46	0.185	0.124	9.77	6.33	103.1	clear	clear
0.2	1514	12.44	0.179	0.116	9.25	6.73	73.1	clear	clear
0.4	1518	12.43	0.176	0.114	9.23	6.61	74.3	clear	clear
0.6	1522	12.29	0.180	0.117	9.30	6.43	80.6	clear	clear
0.8	1526	12.27	0.183	0.118	9.38	6.40	81.6	clear	clear
1.0	1530	12.24	0.181	0.118	9.36	6.38	82.7	clear	clear
1.2	1534	12.21	0.180	0.117	9.38	6.38	83.2	clear	clear
1.4	1538	12.23	0.180	0.117	9.37	6.37	83.1	clear	clear

PURGING & SAMPLING EQUIPMENT

___ Well Wizard Bladder Pump ___ Bailer (disposable)
 ___ Active Extraction Well Pump ___ Bailer (PVC)
 ___ Submersible Pump ___ Bailer (Stainless Steel)
 ___ Peristaltic Pump ☒ Dedicated tubing + bladder pump
 Other: _____
 Pump Intake Depth: _____ (feet)

SAMPLE VESSELS

___ 40mL VOA ___ mL HDPE w/ H2SO4
5 40mL VOA w/ HCL
 ___ mL amber glass
2 100mL amber glass w/ HCL
 ___ mL HDPE
 ___ mL HDPE w/ HNO3

Well Integrity: Good - missing on bolt
 Remarks: N/A

Odor: No

Signature: [Signature] [Signature]

LOW-FLOW GROUNDWATER SAMPLING FIELD DATA SHEET

Project No. <u>101.02207.0000</u>	Purged By: <u>SML</u>	Well I.D.: <u>MW-22</u>
Project Name: <u>Seatac Development Site</u>	Sampled By: <u>SML</u>	Sample I.D.: <u>MW-22-0120</u>
Location: <u>Seatac, WA</u>	QA Samples: <u>0</u>	

Date Purged: <u>1/29/20</u>	Start (2400hr): <u>1048</u>	End (2400hr): <u>1112</u>
Date Sampled: <u>1/29/20</u>	Sample Time (2400hr): <u>1112</u>	

Casing Diameter: 2" ☒ 3" ☐ 4" ☐ 5" ☐ 6" ☐ 8" ☐ Other ☐
Casing Volume: (gallons per foot) (0.17) (0.38) (0.67) (1.02) (1.50) (2.60) ()

Total depth (feet) = _____	Tubing Volume (gal) = _____
Depth to water (feet) = <u>82.56</u>	Minimum Purge (gal) = _____
Water column height (feet) = _____	Actual Purge (gal) = _____

FIELD MEASUREMENTS									
Volume (Gal)	Time (2400hr)	Temp. (degrees C)	Conductivity (mS/cm)	TDS (g/L)	DO (mg/L)	pH (units)	ORP (mV)	Turbidity (Visual)	Color (Visual)
<u>0</u>	<u>1048</u>	<u>12.93</u>	<u>0.218</u>	<u>0.142</u>	<u>3.12</u>	<u>7.01</u>	<u>91.1</u>	<u>clear</u>	<u>clear</u>
<u>0.2</u>	<u>1052</u>	<u>12.93</u>	<u>0.205</u>	<u>0.133</u>	<u>3.56</u>	<u>6.59</u>	<u>99.0</u>	<u>clear</u>	<u>clear</u>
<u>0.4</u>	<u>1056</u>	<u>12.89</u>	<u>0.196</u>	<u>0.127</u>	<u>2.39</u>	<u>6.72</u>	<u>90.6</u>	<u>clear</u>	<u>clear</u>
<u>0.6</u>	<u>1100</u>	<u>12.86</u>	<u>0.191</u>	<u>0.124</u>	<u>2.00</u>	<u>6.72</u>	<u>87.4</u>	<u>clear</u>	<u>clear</u>
<u>0.8</u>	<u>1104</u>	<u>12.82</u>	<u>0.190</u>	<u>0.123</u>	<u>1.87</u>	<u>6.72</u>	<u>85.6</u>	<u>clear</u>	<u>clear</u>
<u>1.0</u>	<u>1108</u>	<u>12.75</u>	<u>0.191</u>	<u>0.124</u>	<u>1.81</u>	<u>6.74</u>	<u>83.6</u>	<u>clear</u>	<u>clear</u>
<u>1.2</u>	<u>1112</u>	<u>12.79</u>	<u>0.192</u>	<u>0.125</u>	<u>1.78</u>	<u>6.72</u>	<u>82.1</u>	<u>clear</u>	<u>clear</u>

PURGING & SAMPLING EQUIPMENT	SAMPLE VESSELS
☐ Well Wizard Bladder Pump ☐ Active Extraction Well Pump ☐ Submersible Pump ☐ Peristaltic Pump Other: _____ Pump Intake Depth: _____ (feet)	☐ Bailer (disposable) ☐ Bailer (PVC) ☐ Bailer (Stainless Steel) ☒ Dedicated <u>tubing and bladder pump</u>
	☐ 40mL VOA ☒ 40mL VOA w/ HCL ☐ _____ mL amber glass ☒ <u>2 1000</u> mL amber glass w/ HCl ☐ _____ mL HDPE ☐ _____ mL HDPE w/ HNO3

Well Integrity: <u>Good</u>	Odor: <u>NO</u>
Remarks: <u>NA</u>	

Signature: <u>[Signature]</u>	Page 1 of 1
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LOW-FLOW GROUNDWATER SAMPLING FIELD DATA SHEET

Project No. 10102207.00001 Purged By: SML Well I.D.: PORT-MW-B
 Project Name: Santa Monica Development Site Sampled By: SML Sample I.D.: PORT-MW-B-0120
 Location: Santa Monica, WA QA Samples: 0

Date Purged: 1/29/20 Start (2400hr): 1203 End (2400hr): 1227
 Date Sampled: 1/29/20 Sample Time (2400hr): 1227

Casing Diameter: 2" ☒ 3" ☐ 4" ☐ 5" ☐ 6" ☐ 8" ☐ Other ☐
 Casing Volume: (gallons per foot) (0.17) (0.38) (0.67) (1.02) (1.50) (2.60) ()

Total depth (feet) = 105.60 Tubing Volume (gal) = _____
 Depth to water (feet) = 105.60 Minimum Purge (gal) = _____
 Water column height (feet) = _____ Actual Purge (gal) = _____

FIELD MEASUREMENTS

Volume (Gal)	Time (2400hr)	Temp. (degrees C)	Conductivity (mS/cm)	TDS (g/L)	DO (mg/L)	pH (units)	ORP (mV)	Turbidity (Visual)	Color (Visual)
0	1203	12.08	0.163	0.106	11.30	6.80	60.0	clear	clear
0.2	1207	12.20	0.165	0.107	9.84	6.95	65.9	clear	clear
0.4	1211	12.14	0.165	0.107	9.42	6.93	65.7	clear	clear
0.6	1215	12.05	0.166	0.108	9.14	6.83	68.7	clear	clear
0.8	1219	12.00	0.166	0.108	8.77	6.80	71.5	clear	clear
1.0	1223	11.99	0.166	0.108	8.75	6.69	73.3	clear	clear
1.2	1227	12.03	0.166	0.108	8.70	6.66	73.7	clear	clear

PURGING & SAMPLING EQUIPMENT

☐ Well Wizard Bladder Pump ☐ Bailer (disposable)
☐ Active Extraction Well Pump ☐ Bailer (PVC)
☐ Submersible Pump ☐ Bailer (Stainless Steel)
☐ Peristaltic Pump ☒ Dedicated bladder pump
 Other: _____
 Pump Intake Depth: _____ (feet)

SAMPLE VESSELS

☐ 40mL VOA ☐ _____ mL HDPE w/ H2SO4
☒ 40mL VOA w/ HCL ☐ _____
☐ _____ mL amber glass ☐ _____
☒ 100 mL amber glass w/ HCL ☐ _____
☐ _____ mL HDPE ☐ _____
☐ _____ mL HDPE w/ HNO3 ☐ _____

Well Integrity: Good
 Remarks: N/A

Odor: No

Signature: [Signature]

APPENDIX B

DATA TABLES AND TREND GRAPHS

Table B-1
Summary of Groundwater Sampling Results - Well MW-06
SeaTac Development Site
SeaTac, Washington

Date Sampled	Top of Casing Elevation (feet)	Depth to Groundwater (feet)	Groundwater Elevation (feet)	Field Parameters					Analytical Data											
				pH	Temperature (°C)	Conductivity (µmhos/cm)	Dissolved Oxygen (mg/L)	Turbidity (NTU)	GRO (mg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)	EDB (µg/L)	N-hexane (µg/L)	Naphthalene (µg/L)	DRO (mg/L)	ORO (mg/L)	DRO after Silica Gel Cleanup (mg/L)	ORO after Silica Gel Cleanup (mg/L)
				MTCA Method A Groundwater Cleanup Levels^a					0.8^b/1.0^c	5.0	1,000	700	1,000	0.01	480^d	160	0.5	0.5	0.5	0.5
02/11/14	369.68	59.03	310.65	6.13	12.1	139	0.91	16.4	< 0.10	< 0.25	< 0.25	< 0.25	< 0.50	< 0.08 ^e	< 0.20	< 0.50	< 0.10	< 0.20	NA	NA
05/28/14	369.68	NM	NM	6.14	14.3	454	1.03	3.71	< 0.10	< 0.25	< 0.25	< 0.25	< 0.50	< 0.07 ^e	< 0.20 UJ	< 0.50	< 0.10	< 0.20	NA	NA
09/10/14	369.68	NM	NM	6.27	15.9	312	1.52	11.8	< 0.10	< 0.25	< 0.25	< 0.25	< 0.50	< 0.07 ^e	< 0.20	< 0.50	< 0.10	< 0.20	NA	NA
12/03/14	369.68	NM	NM	6.27	13.6	314	2.14	6.75	< 0.10	< 0.25	< 0.25	< 0.25	< 0.50	< 0.07 ^e	< 0.20	< 0.50	< 0.10	< 0.20	NA	NA
06/17/15	369.68	NM	NM	6.32	14.9	331	3.96	0.75	< 0.25	< 0.20	< 0.20	< 0.20	< 0.40	< 0.07 ^e	< 0.20	< 0.50	< 0.10	< 0.20	NA	NA
12/03/15	369.68	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NA	NA
05/03/16	369.68	61.41	308.27	6.36	13.9	396	10.59	NM	<0.10	<0.20	<0.20	<0.20	<0.40	<0.20 ^e	0.19 J	<0.50	<0.10	<0.20	NA	NA
11/15/16	369.68	59.51	310.17	6.34	13.7	352	7.42	418	0.11	<0.20	<0.20	<0.20	<0.40	<0.20 ^e	0.1 J	<0.50	0.17	<0.20	NA	NA
05/02/17	369.68	59.31	310.37	6.16	14.0	238	7.17	1.21	<0.10	<0.20	<0.20	<0.20	<0.40	<0.20 ^e	<0.20	<0.50	<0.10	<0.20	NA	NA
11/14/17	369.68	58.35	311.33	6.39	12.7	325	9.01	NM	<0.10	<0.20	<0.20	<0.20	<0.40	<0.20 ^e	<0.20	<0.50	<0.10	<0.20	NA	NA
01/16/18	369.68	57.78	311.90	6.13	13.1	244	8.81	0.6	<0.10	<0.20	<0.20	<0.20	<0.40	<0.20 ^e	<0.20	<0.50	<0.10	<0.20	NA	NA
03/09/18	369.68	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
05/15/18	369.68	57.22	312.46	5.94	13.8	200	8.76	0.15	<0.10	<0.20	<0.20	<0.20	<0.40	<0.01	<0.20	<0.50	<0.10	<0.20	NA	NA
11/07/18	369.68	57.41	312.27	6.35	13.6	188.0	8.74	0.4	<0.10	<0.20	<0.20	<0.20	<0.40	<0.01	<0.20	<0.50	<0.10	<0.20	NA	NA
07/29/19	369.68	57.97	311.71	6.28	15.9	244.0	8.13	NM	<0.10	<0.20	<0.20	<0.20	<0.60	<0.003	<0.20	<0.50	<0.10	<0.20	<0.10	<0.20
01/30/20	369.68	59.04	310.64	6.42	12.5	228	12.56	NM	<0.10	<0.10	<0.50	<0.25	<0.75	<0.01	<1.0	<1.0	NA	NA	NA	NA

Notes:
Values in bold and red exceed MTCA Method A Cleanup Levels.
NS = Not sampled
NM = Not measured
NA = Not analyzed
mg/L = Milligrams per liter
µg/L = Micrograms per liter
NTU = Nephelometric turbidity unit
µmhos/cm = Micromhos per centimeter
°C = Degrees Celsius
J = Laboratory estimated value
DRO = Diesel-range organics
ORO = Oil-range organics
GRO = Gasoline-range organics
EDB = 1,2-dibromoethane
^a Ecology's Model Toxics Control Act (MTCA) Cleanup Regulation (Chapter 173-340 WAC), Tables 720-1, Method A Cleanup Levels for Groundwater.
^b When benzene is present.
^c When benzene is not present.
^d Method B cleanup level used because Method A cleanup level is not established. Standard formula values, direct contact Method B groundwater cleanup levels as published on Ecology's Cleanup Level and Risk Calculation (CLARC) on-line database (May 2019).
^e The analyte was not detected at or above the method detection limit (MDL); however, the MDL exceeded the cleanup level.

Table B-2
Summary of Groundwater Sampling Results - Well MW-07
SeaTac Development Site
SeaTac, Washington

Date Sampled	Top of Casing Elevation (feet)	Depth to Groundwater (feet)	Groundwater Elevation (feet)	Field Parameters					Analytical Data											
				pH	Temperature (°C)	Conductivity (µmhos/cm)	Dissolved Oxygen (mg/L)	Turbidity (NTU)	GRO (mg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)	EDB (µg/L)	N-hexane (µg/L)	Naphthalene (µg/L)	DRO (mg/L)	ORO (mg/L)	DRO after Silica Gel Cleanup (mg/L)	ORO after Silica Gel Cleanup (mg/L)
				MTCA Method A Groundwater Cleanup Levels ^a					0.8 ^b /1.0 ^c	5.0	1,000	700	1,000	0.01	480 ^d	160	0.5	0.5	0.5	0.5
03/18/10	358.70	48.69	310.01	6.61	13.3	354	1.41	5.18	26	230	1,100	360	4,630	0.010	160	210	NS	NS	NA	NA
02/13/14	358.69	47.72	310.97	6.56	14.3	131	0.35	3.87	29	25	110	180	2,022	< 3.8 ^e	190	220	11 J	< 0.20	NA	NA
05/29/14	358.69	47.65	311.04	6.65	16.4	379	0.13	2.84	27	14	80	190	1,811	< 1.5 ^e	140	210 B	11 J	< 0.20	NA	NA
09/11/14	358.69	47.95	310.74	6.73	16.5	373	0.35	2.28	36	17	81	260	2,110	< 0.028 ^e	280	300 B J	11	0.41 J	NA	NA
12/04/14	358.69	47.95	310.74	6.70	15.7	333	0.20	2.95	26	21	66	200	1,507	< 0.07 ^e	170	180	11 J	0.32 J	NA	NA
06/18/15	358.69	48.01	310.68	6.64	16.1	371	0.25	1.57	15 J	6.4	28 J	110 J	533 J	< 0.07 ^e	93 J	96 J	5.4	0.24 J	NA	NA
12/03/15	358.69	49.96	308.73	6.44	15.9	526	0.14	2.91	23	77	1,200	270	1,550	< 1.5 ^e	160	69	4.9 J	< 0.20	NA	NA
05/04/16	358.69	49.05	309.64	6.68	16.0	640	1.02	4.57	12	30	500	170	970	<0.20 ^e	150	68 J	6.5 J	0.30 J	NA	NA
11/16/16	358.69	48.50	310.19	6.54	15.9	411	1.39	3.95	8.3	4.3	9.5	40	85	<0.20 ^e	11 J	37	2.4	<0.20	NA	NA
05/03/17	358.69	48.13	310.56	6.38	16.2	188	1.33	3.78	2.9	1.8	0.46	14	21	<0.20 ^e	1.9	32	1.4	0.20	NA	NA
11/14/17	358.69	47.15	311.54	6.39	15.1	278	0.98	NM	2.2	0.70	0.42	1.1	5.9	<0.20 ^e	0.3	11	1.6	0.44	NA	NA
01/18/18	358.69	46.75	311.94	6.21	14.7	270	0.23	2.15	1.9	1.0	0.67	2.04 J	7.3 J	<0.20 ^e	0.5	10	1.5	<0.20	NA	NA
03/09/18	358.69	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
05/16/18	358.69	46.10	312.59	6.15	15.2	248	0.25	2.25	1.8	0.41	0.35	1	3	<0.01	<0.20	6.1	0.78	<0.20	NA	NA
11/08/18	358.69	46.32	312.37	6.67	14.7	220	0.29	1.60	1.4	0.73	0.29	0.78	1.6	<0.01	0.42	4.0	0.74	<0.20	NA	NA
07/26/19	358.69	46.74	311.95	6.45	17.4	281	0.43	NM	0.73	0.30	0.27	0.75	1.13	<0.003	0.29	1.63	0.17	<0.20	<0.10	<0.20
01/29/20	358.69	48.12	310.57	6.72	14.59	201.00	0.86	NM	0.75	0.39	8.07	2.34	11.0	<0.02 ^e	6.97	5.08	NA	NA	<0.081	<0.16

Notes:

Values in bold and red exceed MTCA Method A Cleanup Levels.

NS = Not sampled

NM = Not measured

NA = Not analyzed

mg/L = Milligrams per liter

µg/L = Micrograms per liter

NTU = Nephelometric turbidity unit

µmhos/cm = Micromhos per centimeter

°C = Degrees Celsius

J = Laboratory estimated value

DRO = Diesel-range organics

ORO = Oil-range organics

GRO = Gasoline-range organics

EDB = 1,2-dibromoethane

^a Ecology's Model Toxics Control Act (MTCA) Cleanup Regulation (Chapter 173-340 WAC), Tables 720-1, Method A Cleanup Levels for Groundwater.

^b When benzene is present.

^c When benzene is not present.

^d Method B cleanup level used because Method A cleanup level is not established. Standard formula values, direct contact Method B groundwater cleanup levels as published on Ecology's Cleanup Level and Risk Calculation (CLARC) on-line database (May 2019).

^e The analyte was not detected at or above the method detection limit (MDL); however, the MDL exceeded the cleanup level.

Table B-3
Summary of Groundwater Sampling Results - Well MW-09
SeaTac Development Site
SeaTac, Washington

Date Sampled	Top of Casing Elevation (feet)	Depth to Groundwater (feet)	Groundwater Elevation (feet)	Field Parameters					Analytical Data											
				pH	Temperature (°C)	Conductivity (µmhos/cm)	Dissolved Oxygen (mg/L)	Turbidity (NTU)	GRO (mg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)	EDB (µg/L)	N-hexane (µg/L)	Naphthalene (µg/L)	DRO (mg/L)	ORO (mg/L)	DRO after Silica Gel Cleanup (mg/L)	ORO after Silica Gel Cleanup (mg/L)
MTCA Method A Groundwater Cleanup Levels ^a									0.8 ^b /1.0 ^c	5.0	1,000	700	1,000	0.01	480 ^d	160	0.5	0.5	0.5	0.5
03/19/10	362.14	52.30	309.84	6.19	14.2	294	0.13	7.18	16	170	65	400	1,434	0.016	100	160	NS	NS	NA	NA
02/12/14	362.13	51.45	310.68	6.49	12.6	99.5	0.28	3.10	7.5	30	8.1	150	98	< 0.08 ^e	16	120	1.6 J	< 0.20	NA	NA
05/29/14	362.13	51.41	310.72	6.44	15.0	295	0.14	1.01	7.8	32	9.4	170	112	< 0.37 ^e	5.60	92 B	2.3 J	< 0.20	NA	NA
09/10/14	362.13	NM	NM	6.49	15.7	310	0.20	3.85	5.6	17	4.6	100	47.2	< 0.01	< 0.20	74	2.8	< 0.20	NA	NA
12/03/14	362.13	51.68	310.45	6.47	13.6	307	0.18	2.37	4.1	14	2.8	76	8.8	< 0.07 ^e	< 0.20	44	1.9	< 0.20	NA	NA
06/17/15	362.13	51.67	310.46	6.48	15.1	331	0.18	0.75	1.7	7.2	1.3	40	1.6	< 0.07 ^e	< 0.20	18	1.5	< 0.20	NA	NA
12/03/15	362.13	NM	NM	6.37	14.1	477	0.96	3.91	2.2 J	8.4	1.5 J	73	1.45 J	< 0.07 ^e	< 0.20	5.7	1.0 J	< 0.20	NA	NA
05/03/16	362.13	NM	NM	6.51	18.3	221	4.68	1.08	<0.10	0.15 J	<0.20	0.71	<0.40	<0.20 ^e	<0.20	<0.50	0.22 J	<0.20	NA	NA
11/15/16	362.13	52.15	309.98	5.94	14.5	234	1.41	0.80	<0.10	0.23	0.23	0.56	0.32	<0.20 ^e	<0.20	<0.50	0.20	<0.20	NA	NA
05/03/17	362.13	NM	NM	5.94	15.5	165	3.09	1.43	<0.10	0.23	0.05 J	0.42	<0.40	<0.20 ^e	<0.20	<0.50	0.28	<0.20	NA	NA
11/14/17	362.13	50.74	311.39	5.98	13.9	211	2.14	NM	<0.10	<0.20	<0.20	<0.20	<0.40	<0.20 ^e	<0.20	<0.50	0.22	<0.20	NA	NA
01/16/18	362.13	50.33	311.80	5.94	13.6	202	1.10	1.02	<0.10	<0.20	<0.20	<0.20	<0.40	<0.20 ^e	<0.20	<0.50	0.26	<0.20	NA	NA
03/09/18	362.13	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
05/15/18	362.13	49.68	312.45	5.86	15.0	193	0.67	0.61	<0.10	0.20	<0.20	<0.20	<0.40	<0.01	<0.20	<0.50	0.34	<0.20	NA	NA
11/07/18	362.13	49.86	312.27	6.28	13.8	203	0.32	0.25	<0.10	<0.20	<0.20	<0.20	<0.40	<0.01	<0.20	<0.50	0.28	<0.20	NA	NA
07/29/19	362.13	50.33	311.80	6.32	15.5	285	0.50	NM	<0.10	0.20	<0.20	<0.20	<0.60	<0.003	<0.20	<0.50	0.11	<0.20	<0.10	<0.20
01/30/20	362.13	51.45	310.68	6.40	12.7	249	0.77	NM	<0.10	0.54	<0.50	<0.25	<0.75	<0.01	<1.0	<1.0	NA	NA	NA	NA
Notes:																				
Values in bold and red exceed MTCA Method A Cleanup Levels.																				
NS = Not sampled																				
NM = Not measured																				
NA = Not analyzed																				
mg/L = Milligrams per liter																				
µg/L = Micrograms per liter																				
NTU = Nephelometric turbidity unit																				
µmhos/cm = Micromhos per centimeter																				
°C = Degrees Celsius																				
J = Laboratory estimated value																				
DRO = Diesel-range organics																				
ORO = Oil-range organics																				
GRO = Gasoline-range organics																				
EDB = 1,2-dibromoethane																				
^a Ecology's Model Toxics Control Act (MTCA) Cleanup Regulation (Chapter 173-340 WAC), Tables 720-1, Method A Cleanup Levels for Groundwater.																				
^b When benzene is present.																				
^c When benzene is not present.																				
^d Method B cleanup level used because Method A cleanup level is not established. Standard formula values, direct contact Method B groundwater cleanup levels as published on Ecology's Cleanup Level and Risk Calculation (CLARC) on-line database (May 2019).																				
^e The analyte was not detected at or above the method detection limit (MDL); however, the MDL exceeded the cleanup level.																				

Table B-4
Summary of Groundwater Sampling Results - Well MW-12
SeaTac Development Site
SeaTac, Washington

Date Sampled	Top of Casing Elevation (feet)	Depth to Groundwater (feet)	Groundwater Elevation (feet)	Field Parameters					Analytical Data											
				pH	Temperature (°C)	Conductivity (µmhos/cm)	Dissolved Oxygen (mg/L)	Turbidity (NTU)	GRO (mg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)	EDB (µg/L)	N-hexane (µg/L)	Naphthalene (µg/L)	DRO (mg/L)	ORO (mg/L)	DRO after Silica Gel Cleanup (mg/L)	ORO after Silica Gel Cleanup (mg/L)
MTCA Method A Groundwater Cleanup Levels ^a									0.8 ^b /1.0 ^c	5.0	1,000	700	1,000	0.01	480 ^d	160	0.5	0.5	0.5	0.5
03/15/10	364.88	54.99	309.89	6.38	14.5	472	0.03	40.8	36	230	2,400	1,300	5,140	0.16	210	520	NS	NS	NS	NS
02/13/14	364.83	55.02	309.81	7.76	14.1	125	10.50	3.43	8.6	79	410	79	970	< 3.8 ^e	< 10	25	1.1 J	< 0.20	NA	NA
05/29/14	364.83	51.58	313.25	7.87	16.7	252	11.77	5.99	0.12	2.0	4.3	1.6	4.2	< 0.07 ^e	< 0.20	< 0.50	0.34 J	< 0.20	NA	NA
09/11/14	364.83	54.87	309.96	8.04	18.1	255	11.80	38.8	0.11	2.5	2.6	1.5	5.3	< 0.01	0.78	0.53 B J	0.35	< 0.20	NA	NA
12/04/14	364.83	54.87	309.96	8.04	15.1	258	11.51	153	< 0.10	< 0.25	< 0.25	0.73	6.0	< 0.07 ^e	0.18 J	0.68	0.20	< 0.20	NA	NA
06/18/15	364.83	NM	NM	8.09	16.3	208	9.90	2.44	< 0.25	< 0.20	< 0.20	0.10 J	2.1	< 0.07 ^e	0.26	< 0.50	0.45	< 0.20	NA	NA
12/03/15	364.83	56.74	308.09	NM	NM	NM	NM	NM	< 0.25	< 0.20	< 0.20	< 0.20	< 0.40	< 0.07 ^e	< 0.20	< 0.50	0.29	< 0.20	NA	NA
05/04/16	364.83	55.53	309.30	7.68	15.1	226	7.72	3.48	< 0.10	< 0.20	< 0.20	< 0.20	< 0.40	< 0.20 ^e	< 0.20	< 0.50	0.18 J	< 0.20	NA	NA
11/16/16	364.83	55.20	309.63	7.84	14.9	199	8.45	13.4	< 0.10	< 0.20	< 0.20	< 0.20	< 0.40	< 0.20 ^e	< 0.20	< 0.50	0.16	< 0.20	NA	NA
05/03/17	364.83	59.02	305.81	7.53	15.9	80	8.01	4.96	< 0.10	< 0.20	< 0.20	< 0.20	< 0.40	< 0.20 ^e	< 0.20	< 0.50	0.89	< 0.215	NA	NA
11/15/17	364.83	53.37	311.46	7.69	14.9	301	0.99	18.9	2.2	1.8	18	11	113	< 0.20 ^e	29	33	1.0	0.30	NA	NA
01/18/18	364.83	53.13	311.70	7.29	14.4	314	0.35	30.1	2.2	1.7	12	26	90	< 0.20 ^e	29	30	1.6	< 0.20	NA	NA
03/09/18	364.83	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
05/16/18	364.83	52.31	312.52	7.06	15.3	374	0.27	3.0	2.8	17	2.1	24	43	< 0.01	26	19	2.9	< 0.20	NA	NA
11/08/18	364.83	52.55	312.28	7.98	14.7	354	0.36	6.6	3.6	26	2.5	24	25	< 0.01	48 J	17	< 0.10	< 0.20	NA	NA
07/29/19	364.83	53.01	311.82	7.28	16.0	455	0.89	NM	2.3	8.2	2.9	16	25	< 0.003	8.43	14	1.85	< 0.20	< 0.10	< 0.20
01/29/20	364.83	63.90	300.93	7.18	12.6	10	13.47	NM	< 0.10	< 0.10	< 0.50	< 0.25	< 0.75	< 0.01	< 1.0	< 1.0	NA	NA	< 0.078	< 0.16

Notes:

Values in bold and red exceed MTCA Method A Cleanup Levels.

NS = Not sampled

NM = Not measured

NA = Not analyzed

mg/L = Milligrams per liter

µg/L = Micrograms per liter

NTU = Nephelometric turbidity unit

µmhos/cm = Micromhos per centimeter

°C = Degrees Celsius

J = Laboratory estimated value

DRO = Diesel-range organics

ORO = Oil-range organics

GRO = Gasoline-range organics

EDB = 1,2-dibromoethane

^a Ecology's Model Toxics Control Act (MTCA) Cleanup Regulation (Chapter 173-340 WAC), Tables 720-1, Method A Cleanup Levels for Groundwater.

^b When benzene is present.

^c When benzene is not present.

^d Method B cleanup level used because Method A cleanup level is not established. Standard formula values, direct contact Method B groundwater cleanup levels as published on Ecology's Cleanup Level and Risk Calculation (CLARC) on-line database (May 2019).

^e The analyte was not detected at or above the method detection limit (MDL); however, the MDL exceeded the cleanup level.

Table B-5
Summary of Groundwater Sampling Results - Well MW-13
SeaTac Development Site
SeaTac, Washington

Date Sampled	Top of Casing Elevation (feet)	Depth to Groundwater (feet)	Groundwater Elevation (feet)	Field Parameters					Analytical Data											
				pH	Temperature (°C)	Conductivity (µmhos/cm)	Dissolved Oxygen (mg/L)	Turbidity (NTU)	GRO (mg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)	EDB (µg/L)	N-hexane (µg/L)	Naphthalene (µg/L)	DRO (mg/L)	ORO (mg/L)	DRO after Silica Gel Cleanup (mg/L)	ORO after Silica Gel Cleanup (mg/L)
MTCA Method A Groundwater Cleanup Levels ^a									0.8 ^b /1.0 ^c	5.0	1,000	700	1,000	0.01	480 ^d	160	0.5	0.5	0.5	0.5
03/19/10	365.42	55.66	309.76	6.28	12.8	271	0.16	72.1	33	14	230	890	4,500	0.029	130	410	NS	NS	NS	NS
02/12/14	365.42	54.35	311.07	6.57	13.2	73.3	1.41	4.28	14	< 0.25	3.9	240	2,070	< 0.08 ^e	< 0.20	33	1.4 J	< 0.20	NA	NA
05/29/14	365.42	55.62	309.80	6.84	14.7	182	10.59	4.24	0.14	< 0.25	< 0.25	0.85	19	< 0.07 ^e	0.11 J	< 0.50	0.32	< 0.20	NA	NA
09/10/14	365.42	54.86	310.56	7.06	14.9	137	11.06	2.41	< 0.10	< 0.25	< 0.25	< 0.25	< 0.50	< 0.01	< 0.20	< 0.50	0.29	< 0.20	NA	NA
12/04/14	365.42	54.86	310.56	7.06	13.9	163	10.10	2.32	< 0.10	< 0.25	< 0.25	< 0.25	< 0.50	< 0.07 ^e	< 0.20	< 0.50	0.31	< 0.20	NA	NA
06/18/15	365.42	54.70	310.72	7.13	14.7	174	10.71	1.32	< 0.25	< 0.20	< 0.20	< 0.20	< 0.40	< 0.07 ^e	< 0.20	0.61	0.27	< 0.20	NA	NA
12/02/15	365.42	56.43	308.99	7.27	14.2	164	10.20	0.90	< 0.25	< 0.20	< 0.20	0.23	1.10 J	< 0.07 ^e	< 0.20	< 0.50	0.26	< 0.20	NA	NA
05/03/16	365.42	56.30	309.12	7.79	15.8	194	14.18	1.14	<0.10	<0.20	<0.20	<0.20	0.44	<0.20 ^e	<0.20	<0.50	0.12 J	<0.20	NA	NA
11/15/16	365.42	55.81	309.61	7.25	14.1	195	10.64	0.73	<0.10	<0.20	<0.20	<0.20	0.46	<0.20 ^e	<0.20	<0.50	0.19	<0.20	NA	NA
05/03/17	365.42	55.14	310.28	7.03	14.5	116	10.71	1.45	<0.10	<0.20	<0.20	<0.20	<0.40	<0.20 ^e	<0.20	<0.50	0.18	<0.20	NA	NA
11/14/17	365.42	54.05	311.37	6.75	13.6	136	1.72	NM	<0.10	<0.20	<0.20	<0.20	<0.40	<0.20 ^e	<0.20	<0.50	0.13	<0.20	NA	NA
01/16/18	365.42	53.62	311.80	6.93	13.4	159	0.85	2.02	<0.10	<0.20	<0.20	<0.20	<0.40	<0.20 ^e	<0.20	<0.50	<0.10	<0.20	NA	NA
03/09/18	365.42	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
05/15/18	365.42	52.96	312.46	6.43	14.1	120	1.87	1.14	<0.10	<0.20	<0.20	<0.20	<0.40	<0.01	<0.20	<0.50	<0.10	<0.20	NA	NA
11/07/18	365.42	53.16	312.26	7.10	13.6	141	1.00	0.64	<0.10	<0.20	<0.20	<0.20	<0.40	<0.01	<0.20	<0.50	<0.10	<0.20	NA	NA
07/29/19	365.42	53.59	311.83	6.83	17.0	212	1.85	NM	<0.10	0.07 J	<0.20	<0.20	<0.60	<0.003	<0.20	<0.50	<0.10	<0.20	<0.10	<0.20
01/30/20	365.42	54.92	310.50	7.10	12.9	215	3.28	NM	<0.10	0.15 J	<0.50	<0.25	<0.75	<0.01	<1.0	<1.0	NA	NA	NA	NA
Notes: Values in bold and red exceed MTCA Method A Cleanup Levels. NS = Not sampled NM = Not measured NA = Not analyzed mg/L = Milligrams per liter µg/L = Micrograms per liter NTU = Nephelometric turbidity unit µmhos/cm = Micromhos per centimeter °C = Degrees Celsius J = Laboratory estimated value DRO = Diesel-range organics ORO = Oil-range organics GRO = Gasoline-range organics EDB = 1,2-dibromoethane ^a Ecology's Model Toxics Control Act (MTCA) Cleanup Regulation (Chapter 173-340 WAC), Tables 720-1, Method A Cleanup Levels for Groundwater. ^b When benzene is present. ^c When benzene is not present. ^d Method B cleanup level used because Method A cleanup level is not established. Standard formula values, direct contact Method B groundwater cleanup levels as published on Ecology's Cleanup Level and Risk Calculation (CLARC) on-line database (May 2019). ^e The analyte was not detected at or above the method detection limit (MDL); however, the MDL exceeded the cleanup level.																				

Table B-6
Summary of Groundwater Sampling Results - Well MW-17A
SeaTac Development Site
SeaTac, Washington

Date Sampled	Top of Casing Elevation (feet)	Depth to Groundwater (feet)	Groundwater Elevation (feet)	Field Parameters					Analytical Data											
				pH	Temperature (°C)	Conductivity (µmhos/cm)	Dissolved Oxygen (mg/L)	Turbidity (NTU)	GRO (mg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)	EDB (µg/L)	N-hexane (µg/L)	Naphthalene (µg/L)	DRO (mg/L)	ORO (mg/L)	DRO after Silica Gel Cleanup (mg/L)	ORO after Silica Gel Cleanup (mg/L)
MTCA Method A Groundwater Cleanup Levels ^a									0.8 ^b /1.0 ^c	5.0	1,000	700	1,000	0.01	480 ^d	160	0.5	0.5	0.5	0.5
03/17/10	385.81	76.29	309.52	6.51	9.3	145	0.52	142	1.70	< 1.0	< 1.0	4.0	27	< 0.0095	< 1.0	63	NS	NS	NS	NS
02/11/14	394.00 ^e	83.80	310.20 ^f	6.36	11.3	82.5	1.06	137	< 0.10	< 0.25	< 0.25	< 0.25	< 0.50	< 0.08 ^g	< 0.20	0.74	< 0.10	< 0.20	NA	NA
05/29/14	394.00 ^e	84.00	310.00 ^f	6.22	12.2	175	2.06	39.7	< 0.10	0.25	< 0.25	< 0.25	< 0.50	< 0.07 ^g	< 0.20	0.62 J	< 0.10	< 0.20	NA	NA
09/10/14	394.00 ^e	84.18	309.82 ^f	6.28	12.4	162	1.42	18.8	< 0.10	< 0.25	< 0.25	< 0.25	< 0.50	< 0.07 ^g	< 0.20	0.64 J	< 0.10	< 0.20	NA	NA
12/05/14	394.00 ^e	84.18	309.82 ^f	6.42	11.7	167	1.09	31.8	< 0.10 J	0.54 J	< 0.25 J	< 0.25 J	0.63 J	< 0.07 ^g	< 0.20 J	2.8	< 0.10	< 0.20	NA	NA
06/17/15	394.00 ^e	84.16	309.84 ^f	6.29	12.9	158	3.13	29.6	< 0.25	< 0.20	< 0.20	< 0.20	< 0.40	< 0.07 ^g	< 0.20	< 0.50	< 0.10	< 0.20	NA	NA
12/18/15	394.00 ^e	85.95	308.05 ^f	6.57	11.8	127	0.20	23.7	0.05 J	0.75	< 0.20	0.08 J	< 0.40	< 0.07 ^g	< 0.20	0.98 J	< 0.10	< 0.20	NA	NA
05/03/16	394.00 ^e	85.21	308.79 ^f	6.51	13.1	132	4.60	8.41	< 0.10	0.33	< 0.20	< 0.20	< 0.40	< 0.20 ^g	0.11 J	0.71 J	< 0.10	< 0.20	NA	NA
11/15/16	394.00 ^e	84.57	309.43 ^f	6.46	12.6	122	3.76	10.2	< 0.10	0.14 J	< 0.20	< 0.20	< 0.40	< 0.20 ^g	< 0.20	< 0.50	< 0.10	< 0.20	NA	NA
05/03/17	394.00 ^e	84.24	309.76 ^f	6.08	12.4	76	7.25	7.57	< 0.10	< 0.20	< 0.20	< 0.20	< 0.40	< 0.20 ^g	< 0.20	< 0.50	< 0.10	< 0.20	NA	NA
11/15/17	394.00 ^e	83.17	310.83 ^f	6.62	12.1	105	7.05	NM	< 0.10	< 0.20	< 0.20	< 0.20	< 0.40	< 0.20 ^g	< 0.20	0.54	< 0.10	< 0.20	NA	NA
01/16/18	394.00 ^e	82.95	311.05 ^f	6.27	12.0	111	8.55	4.2	< 0.10	< 0.20	< 0.20	< 0.20	< 0.40	< 0.20 ^g	< 0.20	< 0.50	< 0.10	< 0.20	NA	NA
03/09/18	394.00 ^e	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
05/15/18	394.00 ^e	82.21	311.79 ^f	6.14	12.9	106	8.57	1.4	< 0.10	< 0.20	< 0.20	< 0.20	< 0.40	< 0.01	< 0.20	< 0.50	< 0.10	< 0.20	NA	NA
11/08/18	394.00 ^e	82.49	311.51 ^f	6.48	12.3	116	8.20	3.4	< 0.10	< 0.20	< 0.20	< 0.20	< 0.40	< 0.01	< 0.20	< 0.50	< 0.10	< 0.20	NA	NA
07/29/19	394.00 ^e	82.67	311.33 ^f	6.35	15.4	175	6.90	NM	< 0.10	< 0.20	< 0.20	< 0.20	< 0.60	< 0.003	0.10 J	< 0.50	< 0.10	< 0.20	< 0.10	< 0.20
01/30/20	394.44	84.14	310.30	6.38	12.1	161	5.74	NM	< 0.10	< 0.10	< 0.50	< 0.25	< 0.75	< 0.01	< 1.0	< 1.0	NA	NA	NA	NA
Notes: Values in bold and red exceed MTCA Method A Cleanup Levels. NS = Not sampled NM = Not measured NA = Not analyzed mg/L = Milligrams per liter µg/L = Micrograms per liter NTU = Nephelometric turbidity unit µmhos/cm = Micromhos per centimeter °C = Degrees Celsius J = Laboratory estimated value DRO = Diesel-range organics ORO = Oil-range organics GRO = Gasoline-range organics EDB = 1,2-dibromoethane ^a Ecology's Model Toxics Control Act (MTCA) Cleanup Regulation (Chapter 173-340 WAC), Tables 720-1, Method A Cleanup Levels for Groundwater. ^b When benzene is present. ^c When benzene is not present. ^d Method B cleanup level used because Method A cleanup level is not established. Standard formula values, direct contact Method B groundwater cleanup levels as published on Ecology's Cleanup Level and Risk Calculation (CLARC) on-line database (May 2019). ^e Top of casing elevation was not surveyed; elevation was estimated by Golder Associates, Inc. ^f Estimated elevation. ^g The analyte was not detected at or above the method detection limit (MDL); however, the MDL exceeded the cleanup level.																				

Table B-7
Summary of Groundwater Sampling Results - Well MW-18
SeaTac Development Site
SeaTac, Washington

Date Sampled	Top of Casing Elevation (feet)	Depth to Groundwater (feet)	Groundwater Elevation (feet)	Field Parameters					Analytical Data											
				pH	Temperature (°C)	Conductivity (µmhos/cm)	Dissolved Oxygen (mg/L)	Turbidity (NTU)	GRO (mg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)	EDB (µg/L)	N-hexane (µg/L)	Naphthalene (µg/L)	DRO (mg/L)	ORO (mg/L)	DRO after Silica Gel Cleanup (mg/L)	ORO after Silica Gel Cleanup (mg/L)
MTCA Method A Groundwater Cleanup Levels ^a									0.8 ^b /1.0 ^c	5.0	1,000	700	1,000	0.01	480 ^d	160	0.5	0.5	0.5	0.5
03/18/10	360.45	50.58	309.87	6.69	14.2	586	0.11	5.39	52	2,600	6,000	1,700	6,690	2.5	350	420	NS	NS	NS	NS
02/12/14	360.45	49.01	311.44	7.62	13.8	175	8.11	2.89	1.0	27	13	17	91	< 0.08 ^e	1.1	4.0	0.77 J	<0.20	NA	NA
05/29/14	360.45	49.75	310.70	7.98	15.2	369	10.60	7.95	0.14	6.6	1.5	4.7	9.2	< 0.07 ^e	0.64	0.84 J+	0.33 J	<0.20	NA	NA
09/11/14	360.45	49.83	310.62	8.23	15.2	498	11.23	13.1	< 0.10	0.72	0.27	0.40	0.72	< 0.010	< 0.20	< 0.50	0.14	< 0.20	NA	NA
12/04/14	360.45	49.83	310.62	7.84	14.4	470	10.78	81.6	< 0.10	0.69	< 0.25	0.63	0.93	< 0.07 ^e	0.10 J	< 0.50	0.24	< 0.20	NA	NA
06/18/15	360.45	49.51	310.94	8.05	15.2	515	10.89	49.6	< 0.25	0.67	0.54	0.24	1.1	< 0.07 ^e	< 0.20	< 0.50	0.38	< 0.20	NA	NA
12/03/15	360.45	NM	NM	8.28	14.8	455	10.21	14.6	< 0.25	0.57	4.8	0.34	9.8	< 0.07 ^e	0.25	0.67	0.13	< 0.20	NA	NA
05/04/16	360.45	51.12	309.33	7.27	14.8	513	4.53	4.77	0.22	8.0	5.5	8.2	29	<0.20 ^e	1.5	1.5 J	0.37 J	<0.20	NA	NA
11/16/16	360.45	50.63	309.82	7.55	15.0	503	6.97	2.44	0.12	3.6	1.2	2.1	9.0	<0.20 ^e	0.39	<0.50	0.48	<0.20	NA	NA
05/03/17	360.45	50.12	310.33	7.19	15.6	313	4.54	3.57	0.28	6.9	3.1	6.8	21	<0.20 ^e	1.4	2.7	0.29	0.30	NA	NA
11/14/17	360.45	49.00	311.45	6.78	15.2	454	0.71	NM	1.3	3.6	1.6	7.4	8.7	<0.20 ^e	0.33	<0.50	4.4	0.43	NA	NA
01/16/18	360.45	48.62	311.83	6.12	14.4	22.7	6.23	18.1	<0.10	<0.20	<0.20	<0.20	<0.40	<0.20 ^e	<0.20	<0.50	<0.10	<0.20	NA	NA
03/09/18	360.45	48.35	312.10	6.69	14.4	479	0.28	1.9	1.9	NS	NS	NS	NS	NS	NS	NS	4.66	<0.20	NA	NA
05/16/18	360.45	47.94	312.51	6.42	15.2	405	0.21	1.4	1.5	6.2	2.2	20	19	<0.01	1.3	5.1	2.9	<0.20	NA	NA
11/07/18	360.45	48.14	312.31	6.82	15.1	506	0.17	2.5	1.5	6.6	1.1	24	2.8	<0.01	<0.20	7.0	3.3	<0.20	NA	NA
07/26/19	360.45	48.58	311.87	6.55	17.9	782	0.65	NM	1.2	1.3	0.3	1.2	2.4	<0.003	0.22	4.8	2.8	<0.20	<0.10	<0.20
01/30/20	360.45	50.03	310.42	7.51	13.5	27	7.14	NM	<0.10	<0.10	<0.50	<0.25	<0.75	<0.01	<1.0	<1.0	NA	NA	<0.080	<0.16
Notes: Values in bold and red exceed MTCA Method A Cleanup Levels. NS = Not sampled NM = Not measured NA = Not analyzed mg/L = Milligrams per liter µg/L = Micrograms per liter NTU = Nephelometric turbidity unit µmhos/cm = Micromhos per centimeter °C = Degrees Celsius J = Laboratory estimated value DRO = Diesel-range organics ORO = Oil-range organics GRO = Gasoline-range organics EDB = 1,2-dibromoethane ^a Ecology's Model Toxics Control Act (MTCA) Cleanup Regulation (Chapter 173-340 WAC), Tables 720-1, Method A Cleanup Levels for Groundwater. ^b When benzene is present. ^c When benzene is not present. ^d Method B cleanup level used because Method A cleanup level is not established. Standard formula values, direct contact Method B groundwater cleanup levels as published on Ecology's Cleanup Level and Risk Calculation (CLARC) on-line database (May 2019). ^e The analyte was not detected at or above the method detection limit (MDL); however, the MDL exceeded the cleanup level.																				

Table B-8
Summary of Groundwater Sampling Results - Well MW-19
SeaTac Development Site
SeaTac, Washington

Date Sampled	Top of Casing Elevation (feet)	Depth to Groundwater (feet)	Groundwater Elevation (feet)	Field Parameters					Analytical Data											
				pH	Temperature (°C)	Conductivity (µmhos/cm)	Dissolved Oxygen (mg/L)	Turbidity (NTU)	GRO (mg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)	EDB (µg/L)	N-hexane (µg/L)	Naphthalene (µg/L)	DRO (mg/L)	ORO (mg/L)	DRO after Silica Gel Cleanup (mg/L)	ORO after Silica Gel Cleanup (mg/L)
MTCA Method A Groundwater Cleanup Levels ^a									0.8 ^b /1.0 ^c	5.0	1,000	700	1,000	0.01	480 ^d	160	0.5	0.5	0.5	0.5
03/18/10	356.61	46.60	310.01	7.04	12.5	275	0.07	84.0	1.3	8.9	1.8	43	6.0	< 0.0096	2.8	< 5.0	NS	NS	NS	NS
02/11/14	356.61	45.46	311.15	6.98	12.7	105	0.15	3.20	< 0.10	< 0.25	< 0.25	< 0.25	< 0.50	< 0.08 ^e	4.3	< 0.50	< 0.10	< 0.20	NA	NA
05/29/14	356.61	45.74	310.87	6.96	13.7	290	0.04	0.42	< 0.10	< 0.25	0.40	< 0.25	0.58	< 0.07 ^e	0.30	< 0.50	< 0.10	< 0.20	NA	NA
09/10/14	356.61	45.73	310.88	6.93	14.5	379	0.16	0.30	< 0.10	< 0.25	< 0.25	< 0.25	< 0.50	< 0.07 ^e	< 0.20	< 0.50	< 0.10	< 0.20	NA	NA
12/03/14	356.61	45.73	310.88	6.82	13.3	380	0.20	0.86	< 0.10	< 0.25	< 0.25	< 0.25	< 0.50	< 0.07 ^e	< 0.20	< 0.50	< 0.10	< 0.20	NA	NA
06/17/15	356.61	45.94	310.67	6.75	14.3	400	0.26	0.86	< 0.25	< 0.20	< 0.20	< 0.20	< 0.40	< 0.07 ^e	< 0.20	< 0.50	< 0.10	< 0.20	NA	NA
12/02/15	356.61	47.72	308.89	6.87	13.6	530	0.09	2.60	< 0.25	< 0.20	< 0.20	< 0.20	< 0.40	< 0.07 ^e	< 0.20	< 0.50	< 0.10	< 0.20	NA	NA
05/03/16	356.61	46.81	309.80	6.79	15.2	390	0.87	1.23	<0.10	<0.20	<0.20	<0.20	<0.40	<0.20 ^e	<0.20	<0.50	<0.10	<0.20	NA	NA
11/15/16	356.61	46.15	310.46	6.88	14.1	586	0.37	0.81	<0.10	<0.20	<0.20	<0.20	<0.40	<0.20 ^e	<0.20	<0.50	<0.10	<0.20	NA	NA
05/02/17	356.61	45.90	310.71	6.46	13.9	268	2.04	0.36	<0.10	<0.20	<0.20	<0.20	<0.40	<0.20 ^e	<0.20	<0.50	<0.106	<0.213	NA	NA
11/14/17	356.61	45.04	311.57	6.73	13.7	456	0.98	0.79	<0.10	<0.20	<0.20	<0.20	<0.40	<0.20 ^e	<0.20	<0.50	<0.10	<0.20	NA	NA
01/16/18	356.61	44.57	312.04	6.79	13.5	414	0.20	0.64	<0.10	<0.20	<0.20	<0.20	<0.40	<0.20 ^e	<0.20	<0.50	<0.10	<0.20	NA	NA
03/09/18	356.61	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NA	NA
05/15/18	356.61	43.92	312.69	6.47	14.6	305	0.34	0.49	<0.10	<0.20	<0.20	<0.20	<0.40	<0.01	<0.20	<0.50	<0.10	<0.20	NA	NA
11/08/18	356.61	44.15	312.46	7.00	13.6	314	0.33	0.72	<0.10	<0.20	<0.20	<0.20	<0.40	<0.01	<0.20	<0.50	<0.10	<0.20	NA	NA
07/26/19	356.61	44.63	311.98	6.46	15.1	333	0.51	NM	<0.10	<0.20	<0.20	<0.20	<0.60	<0.003	<0.20	<0.50	<0.10	<0.20	<0.10	<0.20
01/30/20	356.61	45.95	310.66	6.86	13.1	278	1.95	NM	<0.10	<0.10	<0.50	<0.25	<0.75	<0.01	<1.0	<1.0	NA	NA	NA	NA
Notes:																				
Values in bold and red exceed MTCA Method A Cleanup Levels.																				
NS = Not sampled																				
NM = Not measured																				
NA = Not analyzed																				
mg/L = Milligrams per liter																				
µg/L = Micrograms per liter																				
NTU = Nephelometric turbidity unit																				
µmhos/cm = Micromhos per centimeter																				
°C = Degrees Celsius																				
J = Laboratory estimated value																				
DRO = Diesel-range organics																				
ORO = Oil-range organics																				
GRO = Gasoline-range organics																				
EDB = 1,2-dibromoethane																				
^a Ecology's Model Toxics Control Act (MTCA) Cleanup Regulation (Chapter 173-340 WAC), Tables 720-1, Method A Cleanup Levels for Groundwater.																				
^b When benzene is present.																				
^c When benzene is not present.																				
^d Method B cleanup level used because Method A cleanup level is not established. Standard formula values, direct contact Method B groundwater cleanup levels as published on Ecology's Cleanup Level and Risk Calculation (CLARC) on-line database (May 2019).																				
^e The analyte was not detected at or above the method detection limit (MDL); however, the MDL exceeded the cleanup level.																				

Table B-9
Summary of Groundwater Sampling Results - Well MW-20
SeaTac Development Site
SeaTac, Washington

Date Sampled	Top of Casing Elevation (feet)	Depth to Groundwater (feet)	Groundwater Elevation (feet)	Field Parameters					Analytical Data											
				pH	Temperature (°C)	Conductivity (µmhos/cm)	Dissolved Oxygen (mg/L)	Turbidity (NTU)	GRO (mg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)	EDB (µg/L)	N-hexane (µg/L)	Naphthalene (µg/L)	DRO (mg/L)	ORO (mg/L)	DRO after Silica Gel Cleanup (mg/L)	ORO after Silica Gel Cleanup (mg/L)
MTCA Method A Groundwater Cleanup Levels ^a									0.8 ^b /1.0 ^c	5.0	1,000	700	1,000	0.01	480 ^d	160	0.5	0.5	0.5	0.5
03/17/10	430.98	121.79	309.19	6.63	10.8	359	4.82	4.37	< 0.10	< 1.0	< 1.0	< 1.0	< 1.0	< 0.0095	< 1.0	< 5.0	NS	NS	NS	NS
03/20/14	416.61	106.13	310.48	6.74	11.4	377	7.82	3.32	< 0.10	< 0.25	< 0.25	< 0.25	< 0.50	< 0.07 ^e	< 0.20	< 0.50 UJ	< 0.10	< 0.20	NA	NA
05/29/14	416.61	106.66	309.95	6.73	12.3	257	6.37	0.82	< 0.10	< 0.25	< 0.25	< 0.25	< 0.50	< 0.07 ^e	< 0.20	< 0.50	< 0.10	< 0.20	NA	NA
09/10/14	416.61	106.53	310.08	6.83	13.2	355	7.55	0.69	< 0.10	< 0.25	< 0.25	< 0.25	< 0.50	< 0.07 ^e	< 0.20	< 0.50	< 0.10	< 0.20	NA	NA
12/03/14	416.61	106.53	310.08	6.79	12.4	355	7.67	1.30	< 0.10	< 0.25	< 0.25	< 0.25	< 0.50	< 0.07 ^e	< 0.20	< 0.50	< 0.10	< 0.20	NA	NA
06/17/15	416.61	106.68	309.93	6.77	13.3	350	7.41	1.06	< 0.25	< 0.20	< 0.20	< 0.20	< 0.40	< 0.07 ^e	< 0.20	< 0.50	< 0.10	< 0.20	NA	NA
12/03/15	416.61	108.61	308.00	7.66	12.4	290	6.76	4.28	< 0.25	< 0.20	< 0.20	< 0.20	< 0.40	< 0.07 ^e	< 0.20	< 0.50	< 0.10	< 0.20	NA	NA
05/03/16	416.61	107.56	309.05	6.58	13.3	138	5.31	3.55	< 0.10	< 0.20	< 0.20	< 0.20	< 0.40	< 0.20 ^e	< 0.20	< 0.50	< 0.10	< 0.20	NA	NA
11/15/16	416.61	106.97	309.64	6.75	13.0	241	7.12	0.41	< 0.10	< 0.20	< 0.20	< 0.20	< 0.40	< 0.20 ^e	< 0.20	< 0.50	< 0.10	< 0.20	NA	NA
05/03/17	416.61	106.66	309.95	6.63	12.8	118	8.97	1.35	< 0.10	< 0.20	< 0.20	< 0.20	< 0.40	< 0.20 ^e	< 0.20	< 0.50	< 0.10	< 0.20	NA	NA
11/14/17	416.61	105.76	310.85	6.60	12.7	192	9.06	1.76	< 0.10	< 0.20	< 0.20	< 0.20	< 0.40	< 0.20 ^e	< 0.20	< 0.50	< 0.10	< 0.20	NA	NA
01/16/18	416.61	105.48	311.13	6.67	12.8	165	9.46	0.66	< 0.10	< 0.20	< 0.20	< 0.20	< 0.40	< 0.20 ^e	< 0.20	< 0.50	< 0.10	< 0.20	NA	NA
03/09/18	416.61	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NA	NA
05/15/18	416.61	104.65	311.96	6.31	13.0	119	9.63	0.48	< 0.10	< 0.20	< 0.20	< 0.20	< 0.40	< 0.01	< 0.20	< 0.50	< 0.10	< 0.20	NA	NA
11/08/18	416.61	104.98	311.63	6.89	13.2	144	7.83	1.07	< 0.10	< 0.20	< 0.20	< 0.20	< 0.40	< 0.01	< 0.20	< 0.50	< 0.10	< 0.20	NA	NA
07/26/19	416.61	105.29	311.32	6.77	18.3	222	9.68	NM	< 0.10	< 0.20	< 0.20	< 0.20	< 0.60	< 0.003	< 0.20	< 0.50	< 0.10	< 0.20	< 0.10	< 0.20
01/30/20	416.61	106.60	310.01	6.57	13.0	81	8.89	NM	< 0.10	< 0.10	< 0.50	< 0.25	< 0.75	< 0.01	< 1.0	< 1.0	NA	NA	NA	NA
Notes: Values in bold and red exceed MTCA Method A Cleanup Levels. NS = Not sampled NM = Not measured NA = Not analyzed mg/L = Milligrams per liter µg/L = Micrograms per liter NTU = Nephelometric turbidity unit µmhos/cm = Micromhos per centimeter °C = Degrees Celsius J = Laboratory estimated value DRO = Diesel-range organics ORO = Oil-range organics GRO = Gasoline-range organics EDB = 1,2-dibromoethane ^a Ecology's Model Toxics Control Act (MTCA) Cleanup Regulation (Chapter 173-340 WAC), Tables 720-1, Method A Cleanup Levels for Groundwater. ^b When benzene is present. ^c When benzene is not present. ^d Method B cleanup level used because Method A cleanup level is not established. Standard formula values, direct contact Method B groundwater cleanup levels as published on Ecology's Cleanup Level and Risk Calculation (CLARC) on-line database (May 2019). ^e The analyte was not detected at or above the method detection limit (MDL); however, the MDL exceeded the cleanup level.																				

Table B-10
Summary of Groundwater Sampling Results - Well MW-21
SeaTac Development Site
SeaTac, Washington

Date Sampled	Top of Casing Elevation (feet)	Depth to Groundwater (feet)	Groundwater Elevation (feet)	Field Parameters					Analytical Data											
				pH	Temperature (°C)	Conductivity (µmhos/cm)	Dissolved Oxygen (mg/L)	Turbidity (NTU)	GRO (mg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)	EDB (µg/L)	N-hexane (µg/L)	Naphthalene (µg/L)	DRO (mg/L)	ORO (mg/L)	DRO after Silica Gel Cleanup (mg/L)	ORO after Silica Gel Cleanup (mg/L)
				MTCA Method A Groundwater Cleanup Levels ^a					0.8 ^b /1.0 ^c	5.0	1,000	700	1,000	0.01	480 ^d	160	0.5	0.5	0.5	0.5
03/17/10	390.79	81.26	309.53	5.97	11.5	257	3.21	5.13	< 0.10	< 1.0	< 1.0	< 1.0	< 1.0	< 0.0096	< 1.0	< 5.0	NS	NS	NS	NS
02/11/14	412.85	102.34	310.51	6.09	11.9	110	6.31	11.2	< 0.10	< 0.25	< 0.25	< 0.25	< 0.50	< 0.08 ^e	< 0.20	< 0.50	< 0.10	< 0.20	NA	NA
05/29/14	412.85	102.61	310.24	6.15	12.5	277	6.28	1.71	< 0.10	< 0.25	< 0.25	< 0.25	< 0.50	< 0.07 ^e	< 0.20	< 0.50	< 0.10	< 0.20	NA	NA
09/10/14	412.85	102.66	310.19	6.15	13.5	283	6.25	1.95	< 0.10	< 0.25	< 0.25	< 0.25	< 0.50	< 0.07 ^e	< 0.20	< 0.50	< 0.10	< 0.20	NA	NA
12/03/14	412.85	102.66	310.19	6.20	12.3	304	5.54	13.1	< 0.10	< 0.25	< 0.25	< 0.25	< 0.50	< 0.07 ^e	< 0.20	< 0.50	< 0.10	< 0.20	NA	NA
06/17/15	412.85	102.81	310.04	6.12	13.5	326	6.12	1.98	< 0.25	< 0.20	< 0.20	< 0.20	< 0.40	< 0.07 ^e	< 0.20	< 0.50	< 0.10	< 0.20	NA	NA
12/03/15	412.85	104.70	308.15	5.17	12.6	341	6.21	1.39	< 0.25	< 0.20	< 0.20	< 0.20	< 0.40	< 0.07 ^e	< 0.20	< 0.50	< 0.10	< 0.20	NA	NA
05/03/16	412.85	104.40	308.45	6.28	13.7	315	9.30	3.86	< 0.10	< 0.20	< 0.20	< 0.20	< 0.40	< 0.20 ^e	< 0.20	< 0.50	< 0.10	< 0.20	NA	NA
11/15/16	412.85	102.97	309.88	6.30	13.4	290	6.29	4.51	< 0.10	< 0.20	< 0.20	< 0.20	< 0.40	< 0.20 ^e	< 0.20	< 0.50	< 0.10	< 0.20	NA	NA
05/03/17	412.85	102.68	310.17	6.08	13.0	134	7.33	1.12	< 0.10	< 0.20	< 0.20	< 0.20	< 0.40	< 0.20 ^e	< 0.20	< 0.50	< 0.109	< 0.22	NA	NA
11/14/17	412.85	101.84	311.01	6.21	12.9	165	8.39	1.76	< 0.10	< 0.20	< 0.20	< 0.20	< 0.40	< 0.20 ^e	< 0.20	< 0.50	< 0.10	< 0.20	NA	NA
01/16/18	412.85	101.45	311.40	6.19	12.9	157	8.61	1.33	< 0.10	< 0.20	< 0.20	< 0.20	< 0.40	< 0.20 ^e	< 0.20	< 0.50	< 0.10	< 0.20	NA	NA
03/09/18	412.85	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NA	NA
05/15/18	412.85	100.66	312.19	6.00	13.1	116	8.91	0.59	< 0.10	< 0.20	< 0.20	< 0.20	< 0.40	< 0.01	< 0.20	< 0.50	< 0.10	< 0.20	NA	NA
11/08/18	412.85	100.93	311.92	6.47	13.0	127	8.75	0.64	< 0.10	< 0.20	< 0.20	< 0.20	< 0.40	< 0.01	< 0.20	< 0.50	< 0.10	< 0.20	NA	NA
07/26/19	412.85	101.39	311.46	6.34	16.4	216	9.91	NM	< 0.10	< 0.20	< 0.20	< 0.20	< 0.60	< 0.003	< 0.20	< 0.50	< 0.10	< 0.20	NA	NA
01/30/20	412.85	102.69	310.16	6.37	12.2	180	9.37	NM	< 0.10	< 0.10	< 0.50	< 0.25	< 0.75	< 0.01	< 1.0	< 1.0	NA	NA	NA	NA

Notes:
Values in bold and red exceed MTCA Method A Cleanup Levels.
NS = Not sampled
NM = Not measured
NA = Not analyzed
mg/L = Milligrams per liter
µg/L = Micrograms per liter
NTU = Nephelometric turbidity unit
µmhos/cm = Micromhos per centimeter
°C = Degrees Celsius
J = Laboratory estimated value
DRO = Diesel-range organics
ORO = Oil-range organics
GRO = Gasoline-range organics
EDB = 1,2-dibromoethane
^a Ecology's Model Toxics Control Act (MTCA) Cleanup Regulation (Chapter 173-340 WAC), Tables 720-1, Method A Cleanup Levels for Groundwater.
^b When benzene is present.
^c When benzene is not present.
^d Method B cleanup level used because Method A cleanup level is not established. Standard formula values, direct contact Method B groundwater cleanup levels as published on Ecology's Cleanup Level and Risk Calculation (CLARC) on-line database (May 2019).
^e The analyte was not detected at or above the method detection limit (MDL); however, the MDL exceeded the cleanup level.

Table B-11
Summary of Groundwater Sampling Results - Well MW-22
SeaTac Development Site
SeaTac, Washington

Date Sampled	Top of Casing Elevation (feet)	Depth to Groundwater (feet)	Groundwater Elevation (feet)	Field Parameters					Analytical Data											
				pH	Temperature (°C)	Conductivity (µmhos/cm)	Dissolved Oxygen (mg/L)	Turbidity (NTU)	GRO (mg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)	EDB (µg/L)	N-hexane (µg/L)	Naphthalene (µg/L)	DRO (mg/L)	ORO (mg/L)	DRO after Silica Gel Cleanup (mg/L)	ORO after Silica Gel Cleanup (mg/L)
MTCA Method A Groundwater Cleanup Levels ^a									0.8 ^b /1.0 ^c	5.0	1,000	700	1,000	0.01	480 ^d	160	0.5	0.5	0.5	0.5
03/16/10	393.31	83.63	309.68	6.65	12.5	586	0.25	82.0	15	23	74	1,400	2,420	< 0.0095	15	380	NS	NS	NS	NS
03/20/14	393.31	82.93	310.38	6.68	12.2	381	0.87	64.8	17	5.7	12	990	1,503	< 0.07 ^f	7.8	400 J	1.2 J	< 0.20	NA	NA
05/28/14	393.31	82.72	310.59	6.73	13.2	383	0.30	2.26	18	3.9	9.7	940	1,900	< 0.07 ^f	8.6	420 B	1.7 J	< 0.20	NA	NA
09/12/14	393.31	82.98	310.33	6.81	13.7	423	0.29	1.03	16	4.8	9.3	690	1,103	< 1.5 ^f	9.8	460 B J	1.1 J	< 0.20	NA	NA
12/05/14	393.31	82.98	310.33	6.81	12.8	378	0.26	3.71	16	8.7	11	740	1,103	< 1.5 ^f	7.2	380	0.86 J	< 0.20	NA	NA
06/25/15	393.31	82.95	310.36	6.82	13.6	354	0.52	3.34	19	5.9	7.4	750	1,402	< 0.74 ^f	4.7	310	1.0 J	< 0.20	NA	NA
12/02/15	393.31	84.83	308.48	6.87	13.0	325	0.25	3.42	19	4.4	6.2	840	1,503	< 1.5 ^f	3.0 J	240	1.5 J	< 0.20	NA	NA
05/04/16	393.31	83.85	309.46	6.84	13.3	294	0.39	3.61	15	3.8	5.0	780	1,403	<0.20 ^f	8.6	470 Q	2.8 J	<0.20	NA	NA
11/16/16	393.31	83.43	309.88	6.89	13.1	246	1.00	5.50	11	4.0	3.9	631	882	<0.20 ^f	5.9 J	438	1.9	<0.20	NA	NA
05/02/17	393.31	82.95	310.36	6.67	13.3	172	0.41	1.87	13	4.2	4.4	651	960	<0.20 ^f	5.7	389	2.8	<0.222	NA	NA
11/15/17	393.31	81.93	311.38	7.09	13.1	215	1.72	3.72	11	4.2	3.3	481	583	<2.0 ^f	5.4	326	2.4	<0.20	NA	NA
01/18/18	393.31	81.43	311.88	6.67	12.9	196	0.81	3.08	17	4.9	3.9	530	731	<2.0 ^f	7.9	349	2.9	<0.20	NA	NA
03/09/18	393.31	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NA	NA
05/16/18	393.31	80.92	312.39	6.41	13.5	172	3.39	2.94	12	3.0	2.4	340	630	<0.01	4.82	268	2.0	<0.20	NA	NA
11/07/18	393.31	81.22	312.09	6.97	13.4	171	3.92	1.78	8.6	2.3	2.2	198	407	<0.01	4.0	228	1.8 J	0.20 UJ	NA	NA
08/08/19	393.31	81.52	311.79	6.02	14.6	231	5.05	NM	1.9	1.1	0.33	61	76	<0.003	0.47	61	0.77	<0.20	<0.10	<0.20
01/29/20	393.31	82.58	310.73	6.72	12.8	192	1.78	NM	4.3	3.1	<5.0	247	335	<2.50 ^f	<10.0	130	NA	NA	0.27 ^e	<0.20

Notes:

Values in bold and red exceed MTCA Method A Cleanup Levels.

NS = Not sampled

NM = Not measured

NA = Not analyzed

mg/L = Milligrams per liter

µg/L = Micrograms per liter

NTU = Nephelometric turbidity unit

µmhos/cm = Micromhos per centimeter

°C = Degrees Celsius

J = Laboratory estimated value

DRO = Diesel-range organics

ORO = Oil-range organics

GRO = Gasoline-range organics

EDB = 1,2-dibromoethane

^a Ecology's Model Toxics Control Act (MTCA) Cleanup Regulation (Chapter 173-340 WAC), Tables 720-1, Method A Cleanup Levels for Groundwater.

^b When benzene is present.

^c When benzene is not present.

^d Method B cleanup level used because Method A cleanup level is not established. Standard formula values, direct contact Method B groundwater cleanup levels as published on Ecology's Cleanup Level and Risk Calculation (CLARC) on-line database (May 2019).

^e The laboratory noted that the result for diesel-range organics is due to overlap from gasoline or a gasoline-range product.

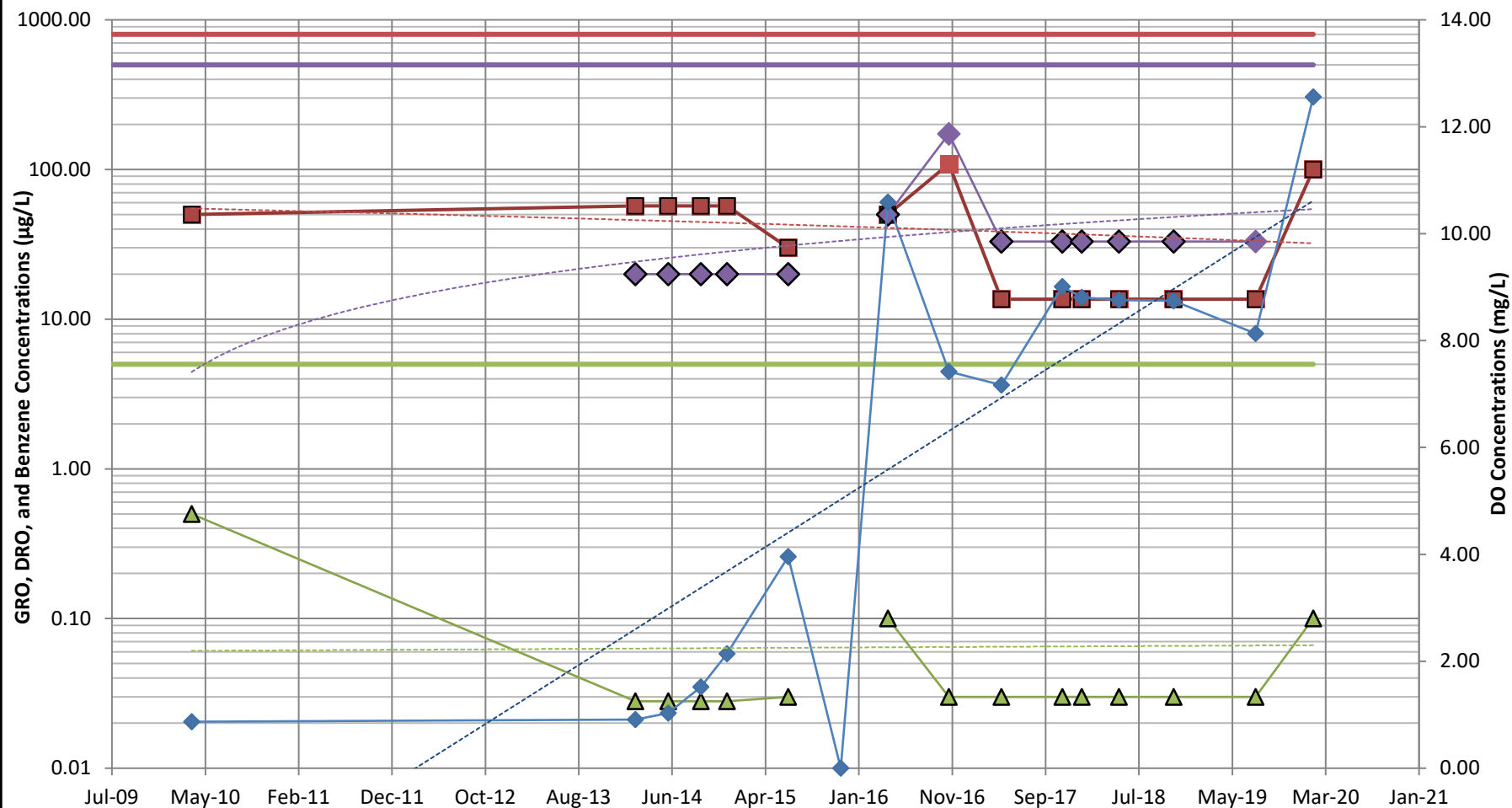
^f The analyte was not detected at or above the method detection limit (MDL); however, the MDL exceeded the cleanup level.

Table B-12
Summary of Groundwater Sampling Results - Well PORT-MW-B
SeaTac Development Site
SeaTac, Washington

Date Sampled	Top of Casing Elevation (feet)	Depth to Groundwater (feet)	Groundwater Elevation (feet)	Field Parameters					Analytical Data												
				pH	Temperature (°C)	Conductivity (µmhos/cm)	Dissolved Oxygen (mg/L)	Turbidity (NTU)	GRO (mg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)	EDB (µg/L)	N-hexane (µg/L)	Napthalene (µg/L)	DRO (mg/L)	ORO (mg/L)	DRO after Silica Gel Cleanup (mg/L)	ORO after Silica Gel Cleanup (mg/L)	
MTCA Method A Groundwater Cleanup Levels ^a									0.8 ^b /1.0 ^c	5.0	1,000	700	1,000	0.01	480 ^d	160	0.5	0.5	0.5	0.5	
08/03/11	400.00 ^e	NM	NM	NM	NM	NM	NM	NM	0.20	1.3	< 1.0	13	3.4	< 0.01	< 1.0	13	0.28	< 0.25	NA	NA	
03/20/14	400.00 ^e	89.70	310.30 ^f	6.55	12.3	267	6.16	NM	< 0.10	< 0.25	< 0.25	< 0.25	< 0.50	< 0.07 ^g	< 0.20	< 0.50 J	< 0.10	< 0.20	NA	NA	
05/28/14	400.00 ^e	89.50	310.50 ^f	6.50	14.2	317	4.63	98.3	< 0.10	< 0.25	< 0.25	< 0.25	< 0.50	< 0.07 ^g	< 0.20	< 0.50	< 0.10	< 0.20	NA	NA	
09/12/14	400.00 ^e	89.71	310.29 ^f	6.56	14.0	266	3.56	6.18	< 0.10	< 0.25	< 0.25	1.1	1.9	< 0.07 ^g	< 0.20	< 0.50	< 0.10	< 0.20	NA	NA	
12/05/14	400.00 ^e	89.71	310.29 ^f	6.57	12.6	265	4.07	84.1	0.11	< 0.25	< 0.25	1.1	1.0	< 0.07 ^g	< 0.20	< 0.50	< 0.10	< 0.20	NA	NA	
06/25/15	400.00 ^e	89.67	310.33 ^f	6.51	14.3	290	3.80	4.2	< 0.25	< 0.20	< 0.20	< 0.20	< 0.40	< 0.07 ^g	< 0.20	< 0.50	< 0.10	< 0.20	NA	NA	
12/02/15	400.00 ^e	91.61	308.39 ^f	6.56	13.0	267	2.34	1.8	< 0.25	< 0.20	< 0.20	0.26	0.40 J	< 0.07 ^g	< 0.20	2.3 J	< 0.10	0.49	NA	NA	
05/04/16	400.00 ^e	90.55	309.45 ^f	6.72	13.2	219	2.59	7.4	<0.10	0.08 J	<0.20	0.74	0.50	<0.20 ^h	<0.20	0.83 J	<0.10	<0.20	NA	NA	
11/16/16	400.00 ^e	90.31	309.69 ^f	6.70	13.1	192	3.97	11.7	<0.10	0.03 J	<0.20	0.04 J	<0.40	<0.20 ^h	<0.20	<0.50	<0.10	<0.20	NA	NA	
05/02/17	400.00 ^e	89.65	310.35 ^f	6.54	12.9	107	3.85	2.6	<0.10	0.21	<0.20	1.2	<0.40	<0.20 ^h	<0.20	1.4	<0.10	<0.20	NA	NA	
11/15/17	400.00 ^e	88.67	311.33 ^f	6.78	13.0	199	5.09	2.4	<0.10	<0.20	<0.20	0.36	<0.40	<0.20 ^h	<0.20	<0.50	<0.10	<0.20	NA	NA	
01/18/18	400.00 ^e	88.17	311.83 ^f	6.82	12.6	173	1.39	3.4	0.15	0.47	<0.20	2.7	<0.40	<0.20 ^h	<0.20	3.2	0.17	<0.20	NA	NA	
03/09/18	400.00 ^e	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NA	NA
05/16/18	400.00 ^e	87.64	312.36 ^f	6.40	13.8	103	3.36	2.4	<0.10	<0.20	<0.20	<0.20	<0.40	<0.01	<0.20	<0.50	<0.10	<0.20	NA	NA	
11/07/18	400.00 ^e	87.91	312.09 ^f	6.80	13.1	103	4.92	1.3	<0.10	<0.20	<0.20	<0.20	<0.40	<0.01	<0.20	<0.50	<0.10	<0.20	NA	NA	
08/08/19	400.00 ^e	105.60	310.73 ^f	6.66	12.0	166	8.70	NM	<0.10	<0.20	<0.20	<0.20	<0.60	<0.003	0.11 J	<0.50	0.14	<0.20	<0.10	<0.20	
01/29/20	399.83	105.60	294.23	6.66	12.0	166	8.70	NM	<0.10	<0.10	<0.50	<0.25	<0.75	<0.01	<1.0	<1.0	NA	NA	NA	NA	

Notes:
Values in bold and red exceed MTCA Method A Cleanup Levels.
NS = Not sampled
NM = Not measured
NA = Not analyzed
mg/L = Milligrams per liter
µg/L = Micrograms per liter
NTU = Nephelometric turbidity unit
µmhos/cm = Micromhos per centimeter
°C = Degrees Celsius
J = Laboratory estimated value
DRO = Diesel-range organics
ORO = Oil-range organics
GRO = Gasoline-range organics
EDB = 1,2-dibromoethane
^a Ecology's Model Toxics Control Act (MTCA) Cleanup Regulation (Chapter 173-340 WAC), Tables 720-1, Method A Cleanup Levels for Groundwater.
^b When benzene is present.
^c When benzene is not present.
^d Method B cleanup level used because Method A cleanup level is not established. Standard formula values, direct contact Method B groundwater cleanup levels as published on Ecology's Cleanup Level and Risk Calculation (CLARC) on-line database (May 2019).
^e Top of casing elevation was not surveyed; elevation was estimated by Golder Associates, Inc.
^f Estimated elevation.
^g The analyte was not detected at or above the method detection limit (MDL); however, the MDL exceeded the cleanup level.

MW-06

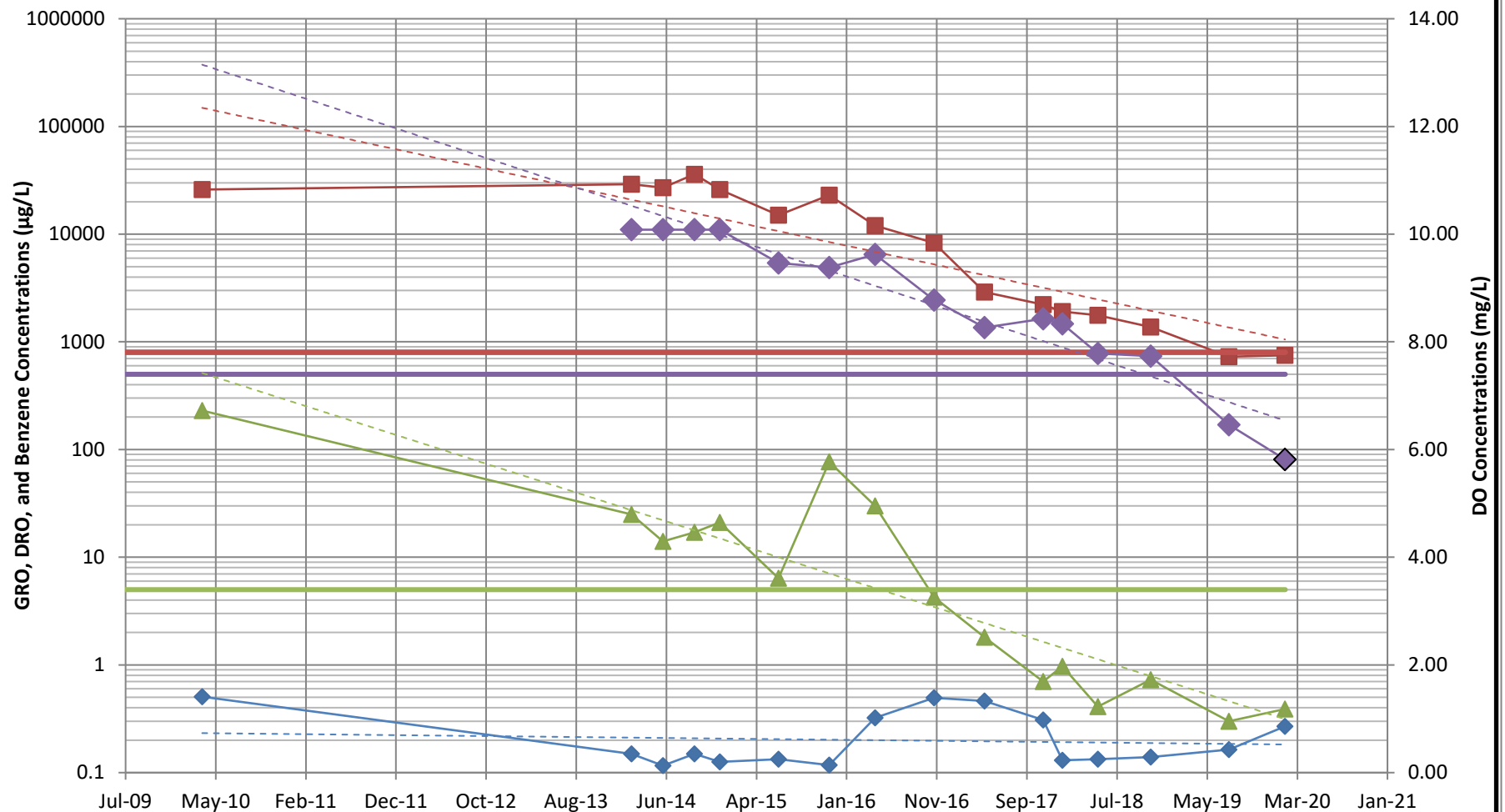


Legend

- GRO Concentrations
- GRO Non-Detects
- GRO Cleanup Level (800 µg/L)
- ◆— DRO Concentrations
- ◆— DRO Non-Detects
- ◆— DRO Cleanup Level (500 µg/L)
- ▲— Benzene Concentrations
- ▲— Benzene Non-Detects
- ▲— Benzene Cleanup Level (5 µg/L)
- ◆— Dissolved Oxygen (DO) Concentrations
- ◆— DO Trendline

FIGURE B-1
GRO, Benzene, & DRO Concentrations in
MW-06
SeaTac Development Site

MW-07



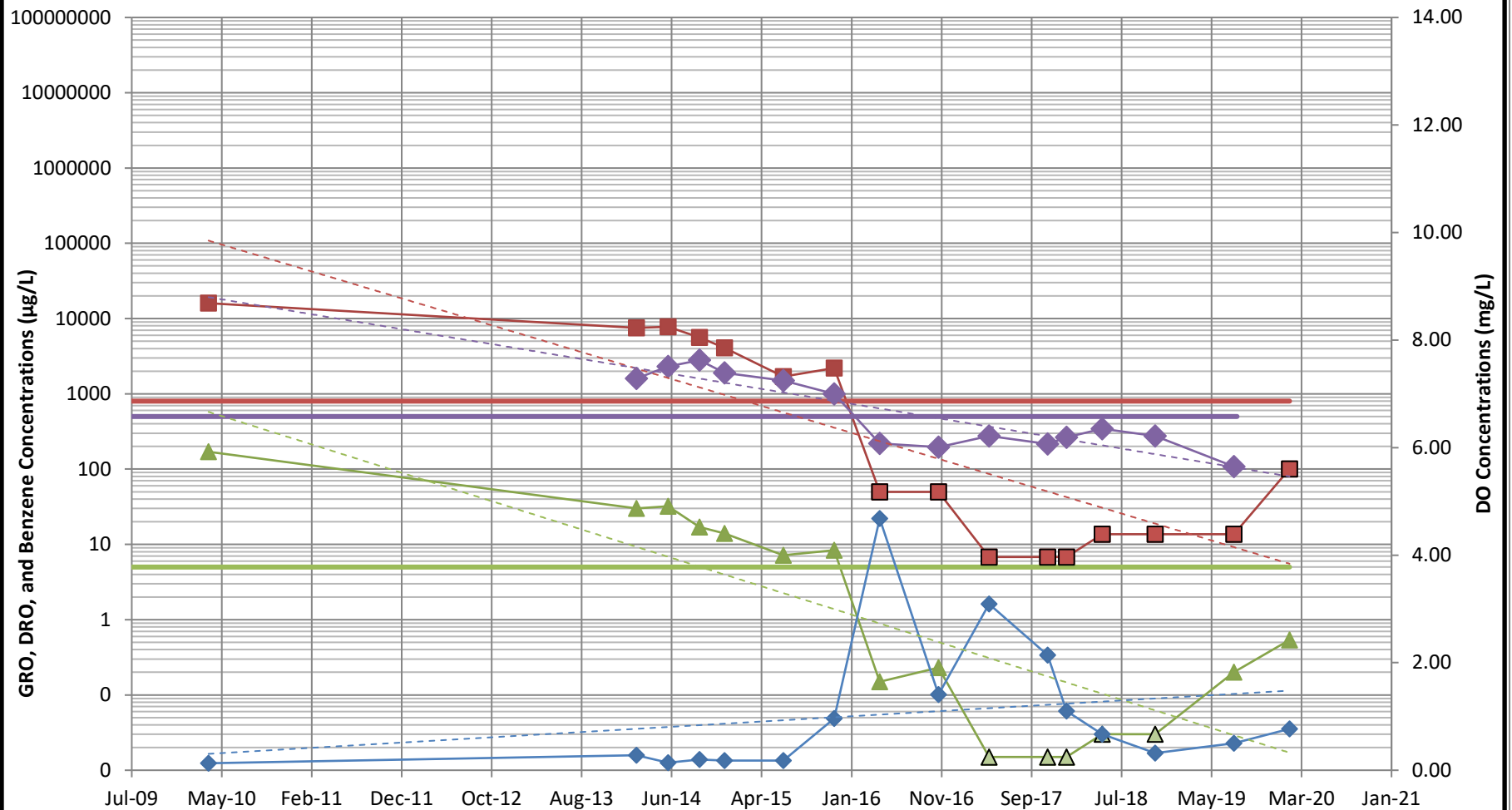
Legend

- GRO Concentrations
- ▲ Benzene Concentrations
- ◆ DRO Concentrations
- ◆ DRO Non-Detects
- GRO Cleanup Level (800 µg/L)
- Benzene Cleanup Level (5 µg/L)
- DRO Cleanup Level (500 µg/L)
- Dissolved Oxygen (DO) Concentrations
- - - GRO Trendline
- - - Benzene Trendline
- - - DRO Trendline
- - - DO Trendline

Note: DRO result for groundwater sample collected in January 2020 was analyzed for DRO after silica gel cleanup.

FIGURE B-2
GRO, Benzene, & DRO Concentrations in MW-07
SeaTac Development Site

MW-09

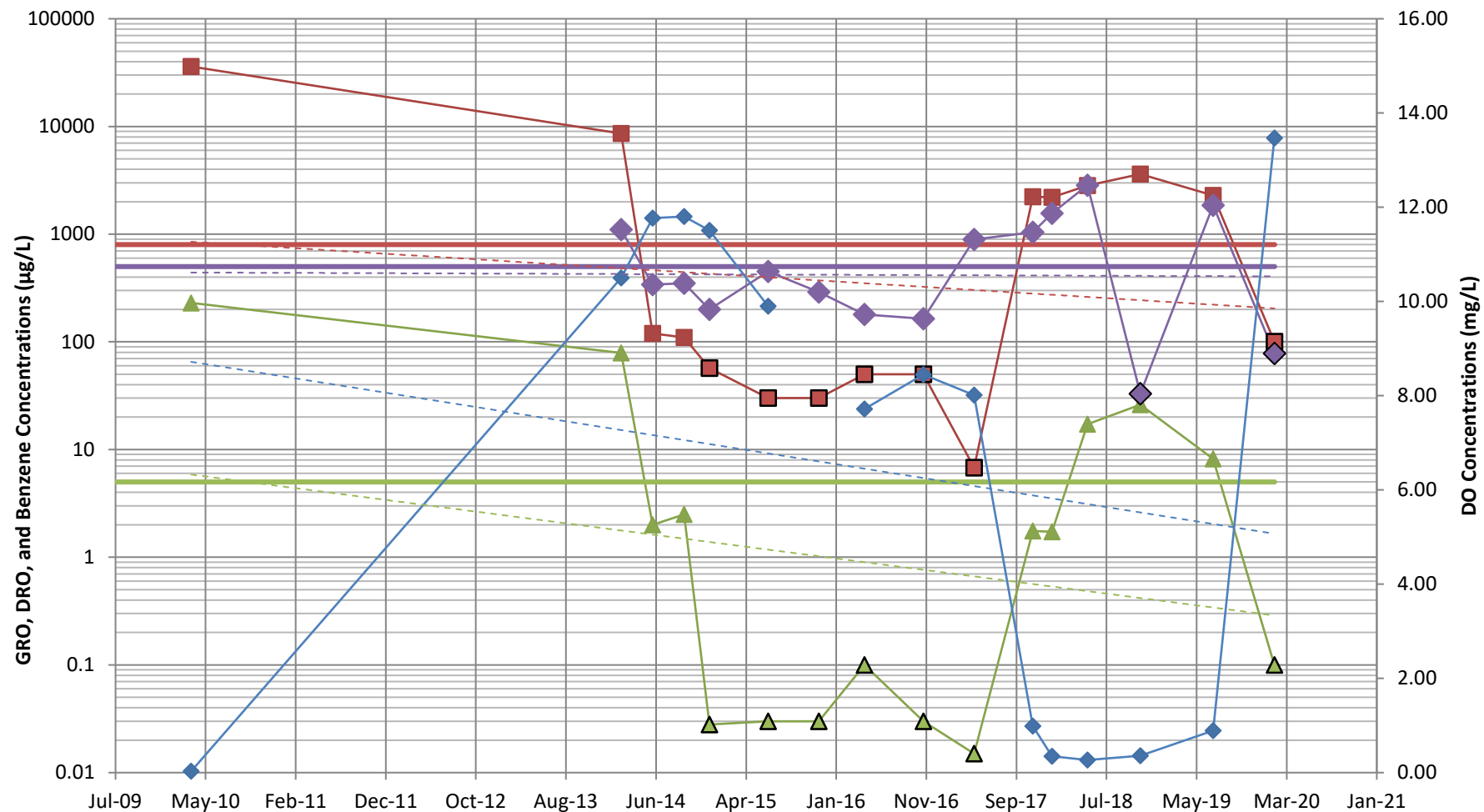


Legend

- GRO Concentrations
- GRO Cleanup Level (800 µg/L)
- △ Benzene Non-Detects
- ◆ DRO Concentrations
- ◆ Dissolved Oxygen (DO) Concentrations
- - Benzene Trendline
- - DO Trendline
- GRO Non-Detects
- △ Benzene Concentrations
- Benzene Cleanup Level (5 µg/L)
- DRO Cleanup Level (500 µg/L)
- - GRO Trendline
- - DRO Trendline

FIGURE B-3
GRO, Benzene, & DRO Concentrations in
MW-09
SeaTac Development Site

MW-12



Legend

- GRO Concentrations
- GRO Non-Detects
- ▲ Benzene Concentrations
- ▲ Benzene Non-Detects
- ◆ DRO Concentrations
- ◆ DRO Non-Detects
- GRO Cleanup Level (800 µg/L)
- Benzene Cleanup Level (5 µg/L)
- DRO Cleanup Level (500 µg/L)
- GRO Trendline
- Benzene Trendline
- DRO Trendline
- DO Trendline

Note:

DRO result for groundwater sample collected in January 2020 was analyzed for DRO after silica gel cleanup.

FIGURE B-4

GRO, Benzene, and DRO Concentrations in MW-12
SeaTac Development Site

MW-13

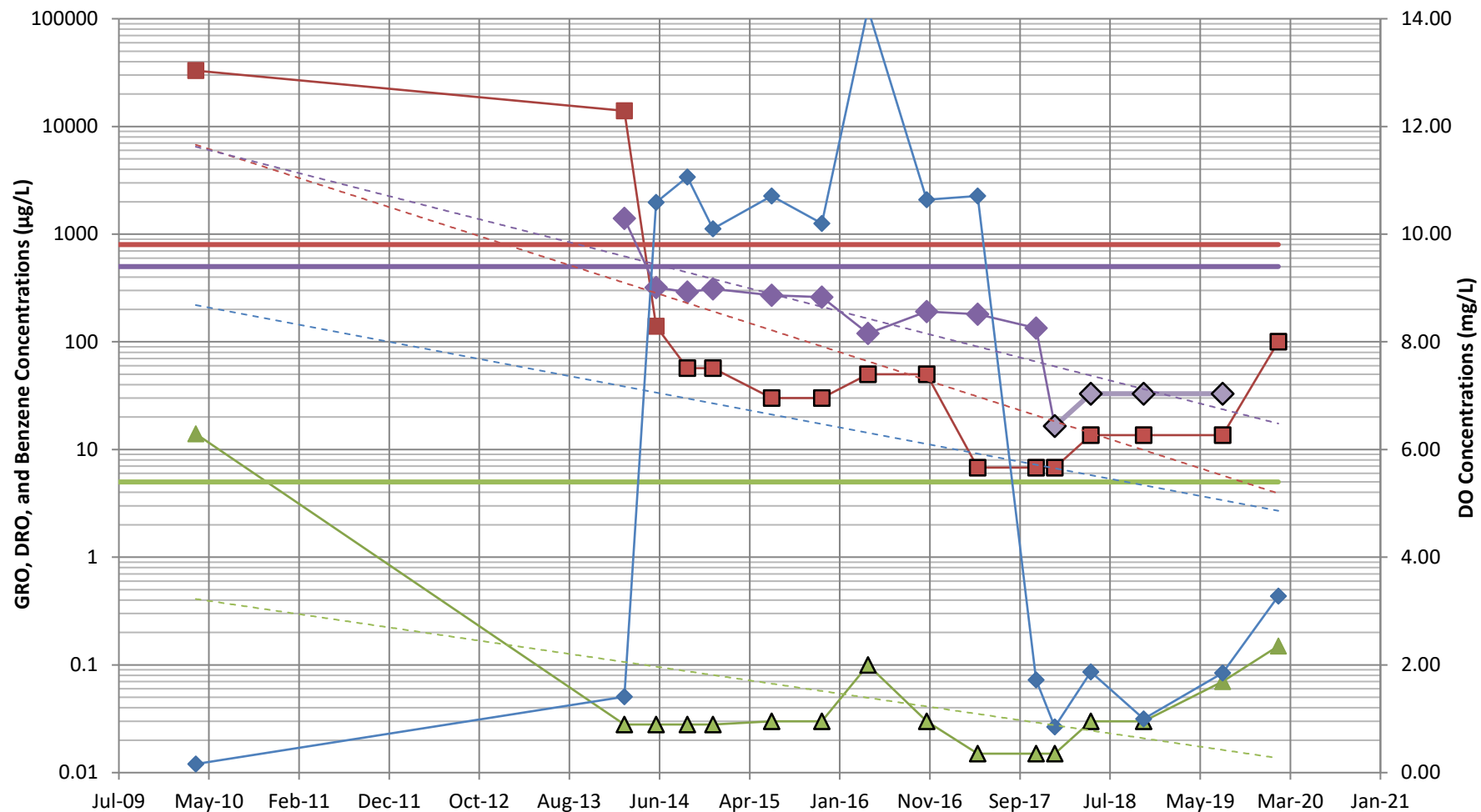
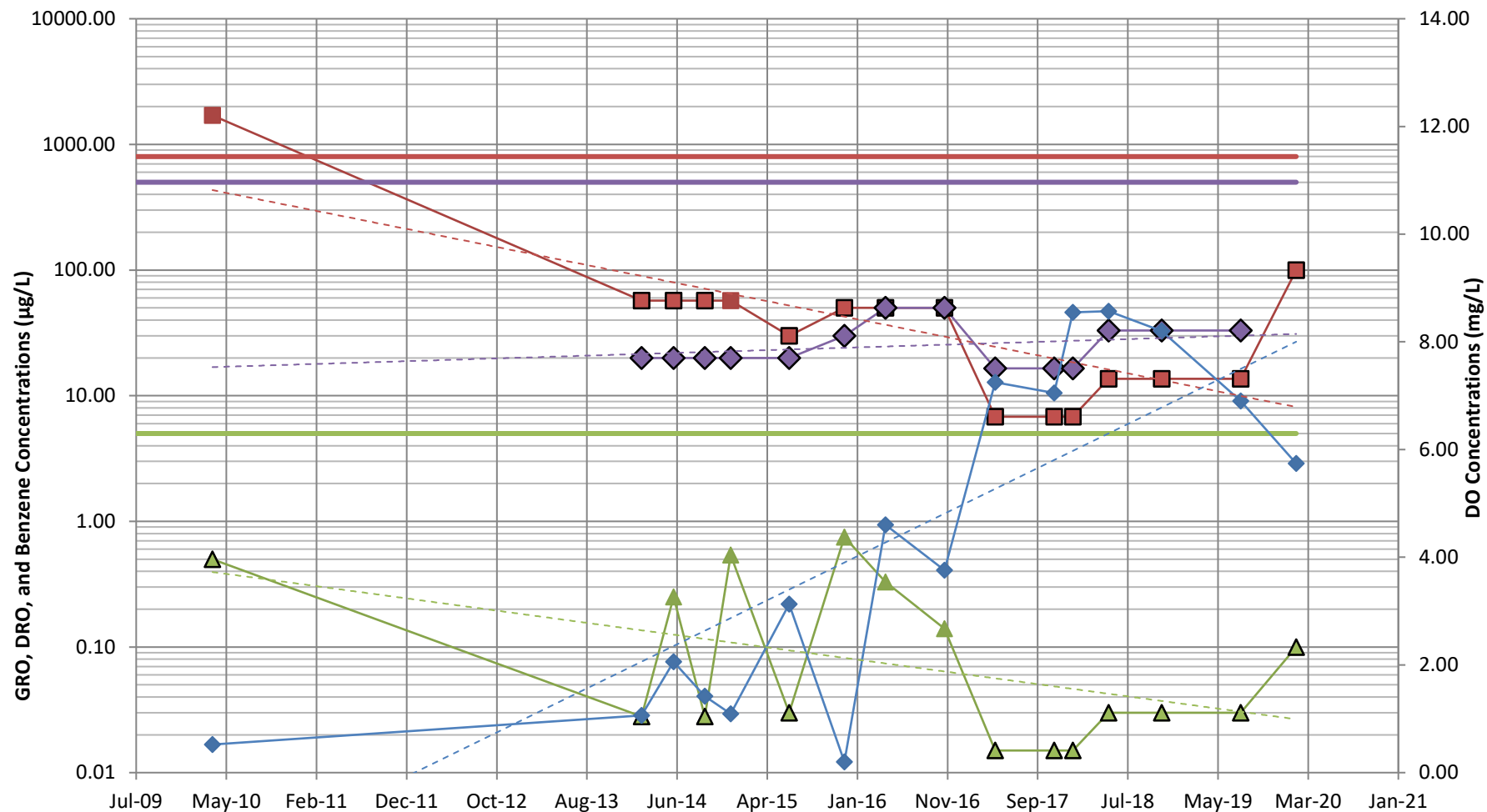


FIGURE B-5
GRO, Benzene, & DRO Concentrations in
MW-13
SeaTac Development Site

MW-17A

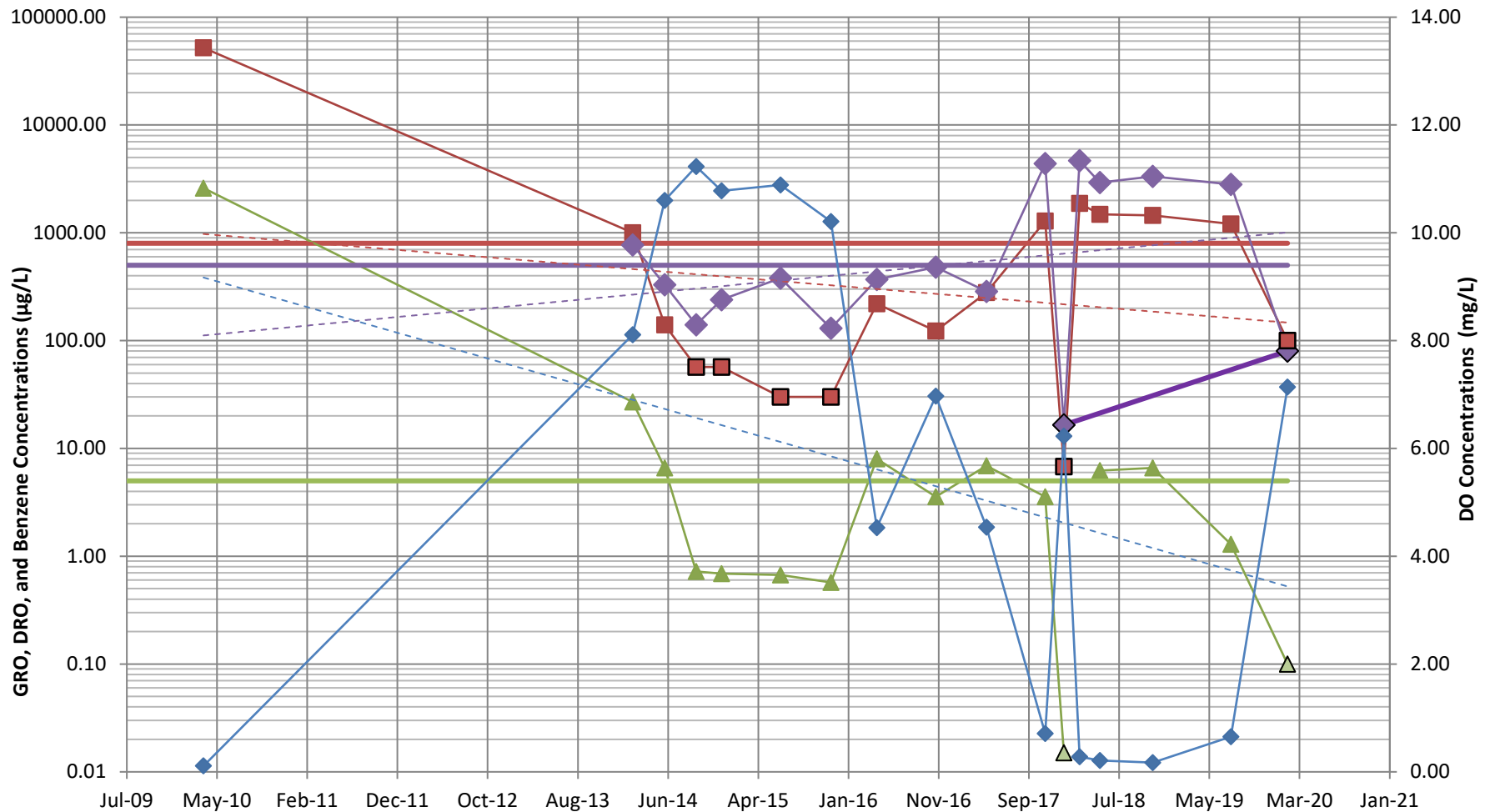


Legend

- GRO Concentrations
- GRO Cleanup Level (800 µg/L)
- ▲ Benzene Non-Detects
- ◆ DRO Concentrations
- DRO Cleanup Level (500 µg/L)
- - - GRO Trendline
- - - DRO Trendline
- GRO Non-Detects
- ▲ Benzene Concentrations
- Benzene Cleanup Level (5 µg/L)
- ◆ DRO Non-Detects
- ◆ Dissolved Oxygen (DO) Concentrations
- - - Benzene Trendline
- - - DO Trendline

FIGURE B-6
GRO, Benzene, & DRO Concentrations in
MW-17A
SeaTac Development Site

MW-18



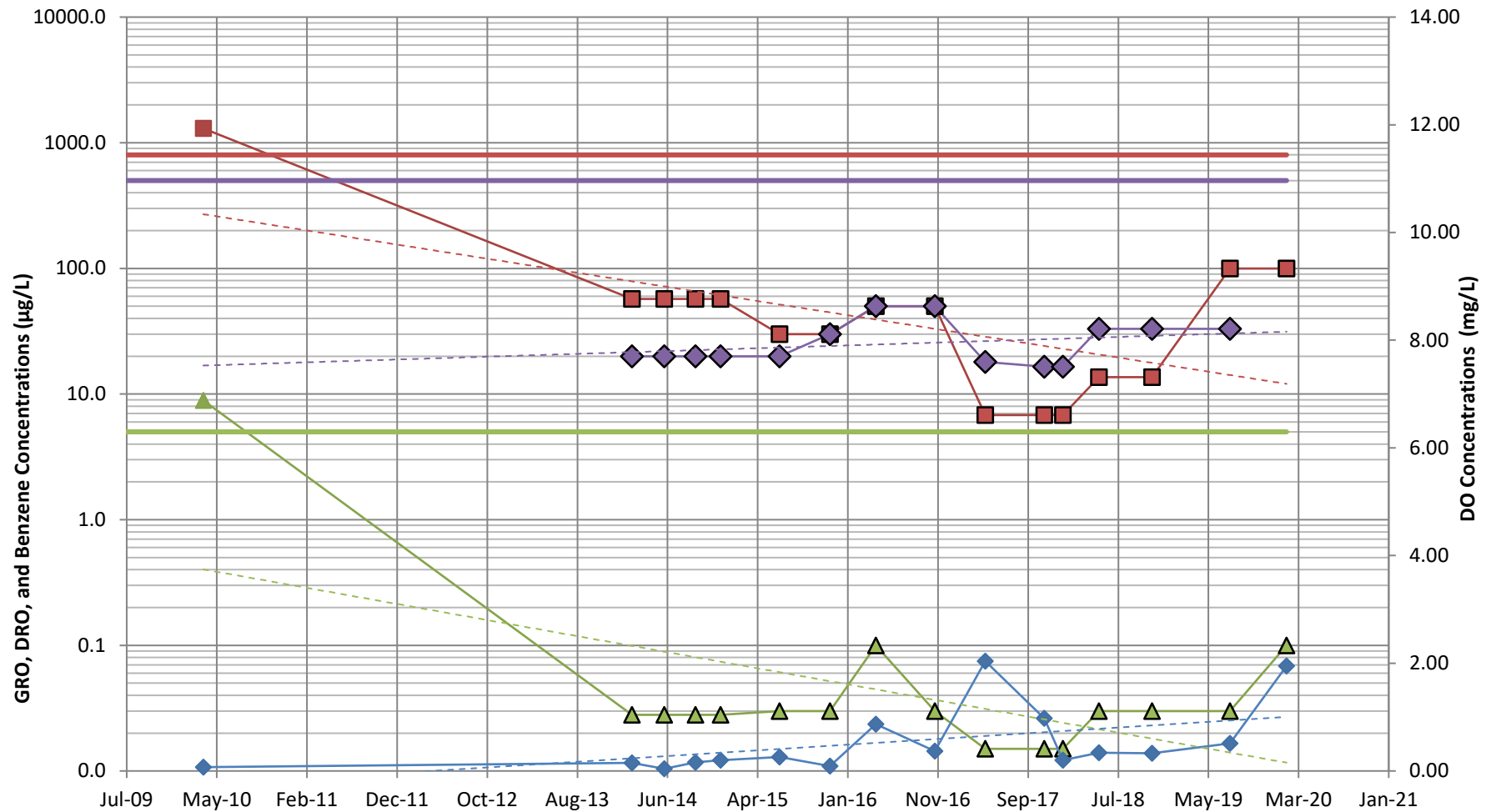
Legend

- GRO Concentrations
- GRO Non-Detects
- GRO Cleanup Level (800 ug/L)
- Benzene Concentrations
- Benzene Non-Detects
- Benzene Cleanup Level (5 ug/L)
- ◆ DRO Concentrations
- ◆ DRO Non-Detects
- DRO Cleanup Level (500 ug/L)
- Dissolved Oxygen (DO) Concentrations
- Benzene Trendline
- DO Trendline
- - - GRO Trendline
- - - DRO Trendline

FIGURE B-7
GRO, Benzene, & DRO Concentrations in
MW-18
SeaTac Development Site

Note: DRO result for groundwater sample collected in January 2020 was analyzed for DRO after silica gel cleanup.

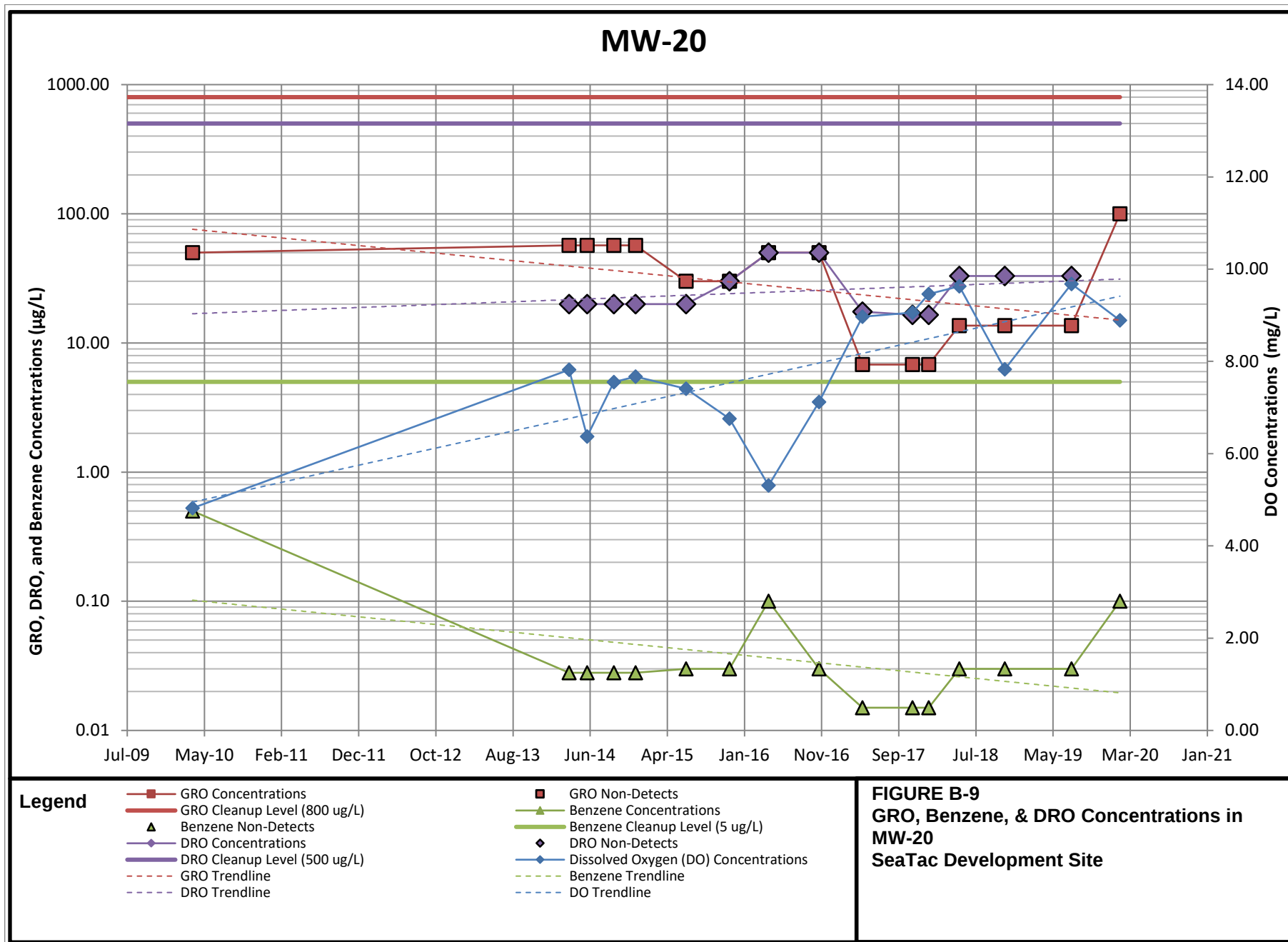
MW-19

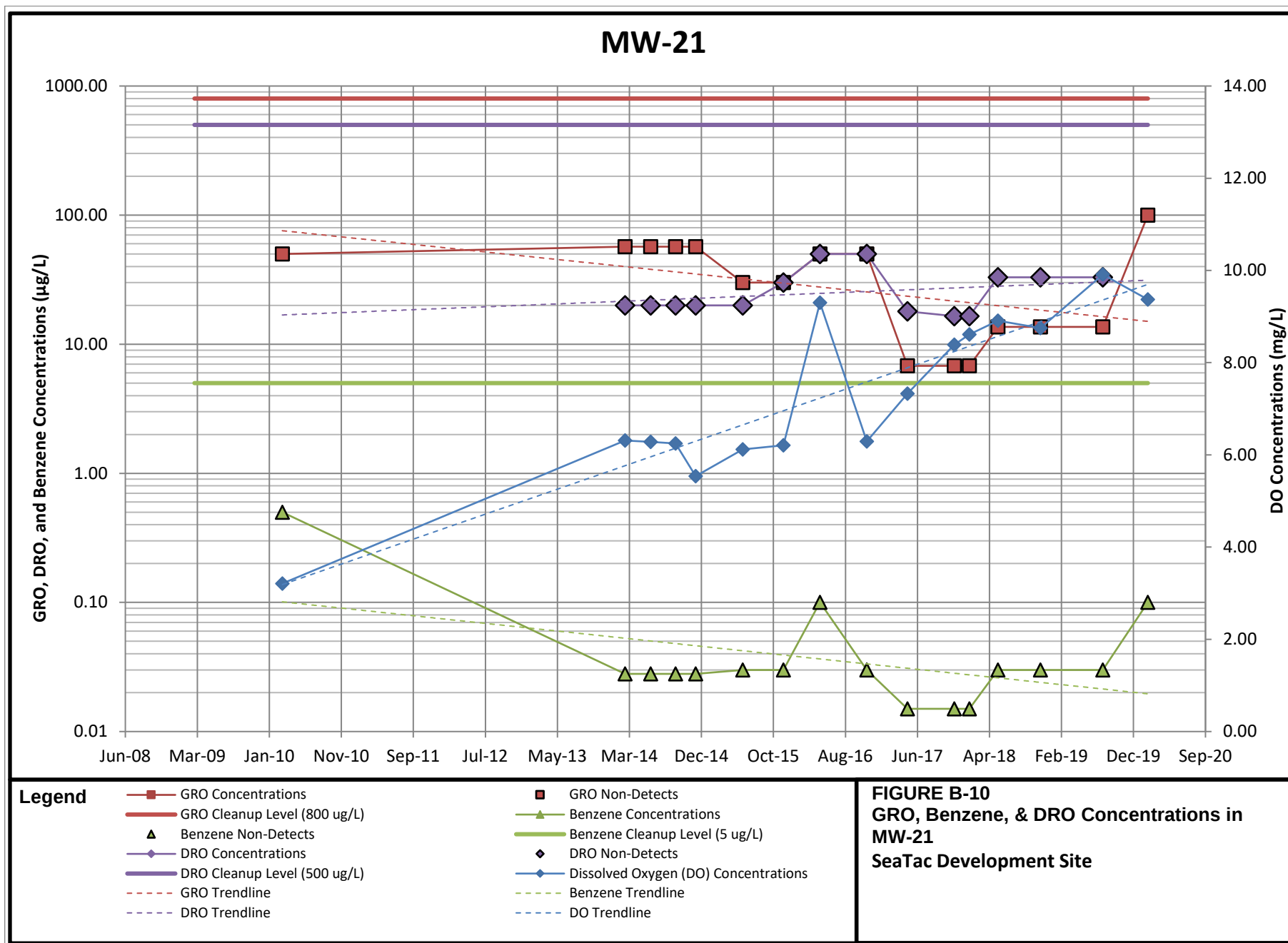


Legend

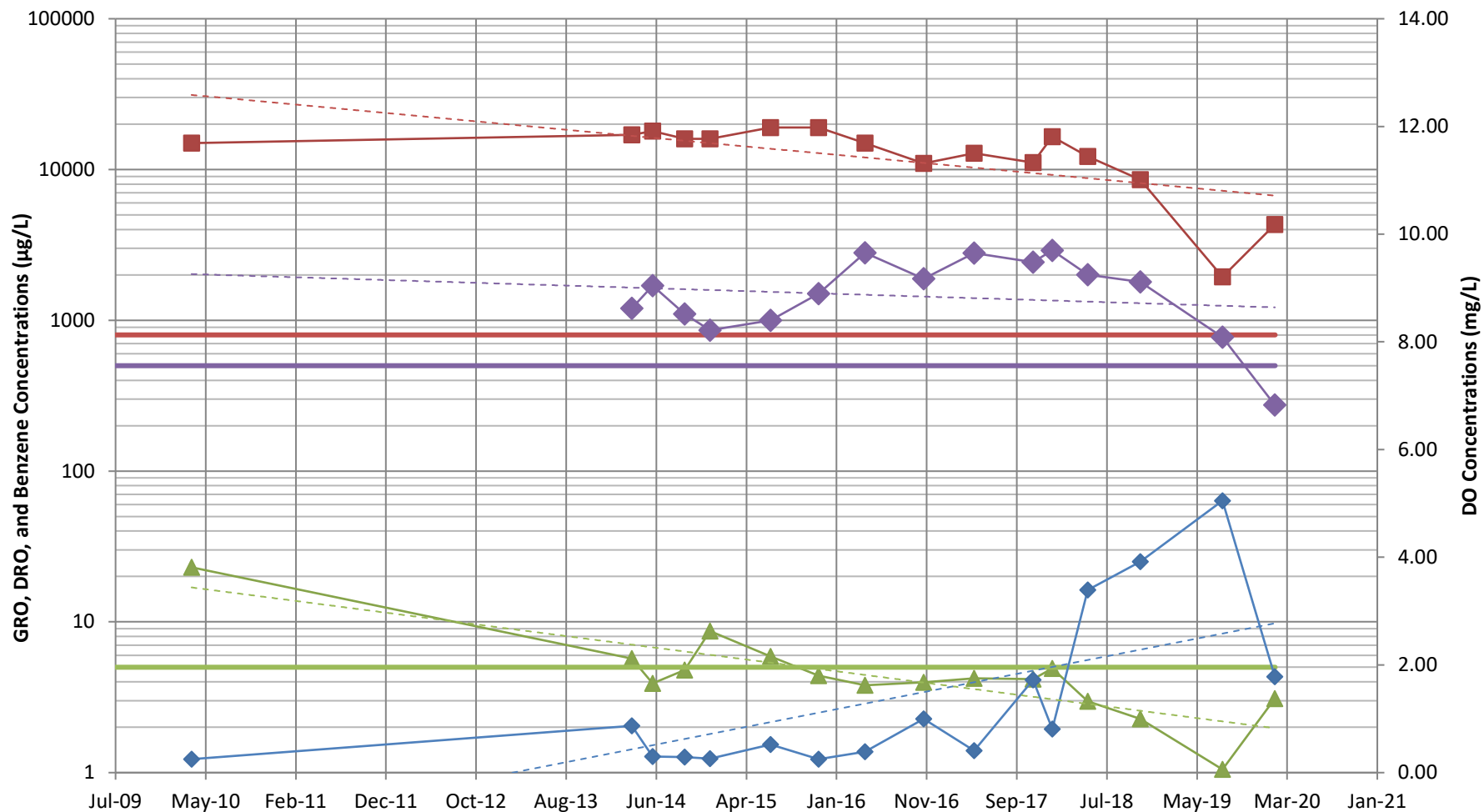
- GRO Concentrations
- GRO Cleanup Level (800 µg/L)
- ▲ Benzene Non-Detects
- ◆ DRO Concentrations
- DRO Cleanup Level (500 µg/L)
- - - GRO Trendline
- - - DRO Trendline
- GRO Non-Detects
- ▲ Benzene Concentrations
- ◆ DRO Non-Detects
- Benzene Cleanup Level (5 µg/L)
- ◆ Dissolved Oxygen (DO) Concentrations
- - - Benzene Trendline
- - - DO Trendline

FIGURE B-8
GRO, Benzene, & DRO Concentrations in MW-19
SeaTac Development Site





MW-22



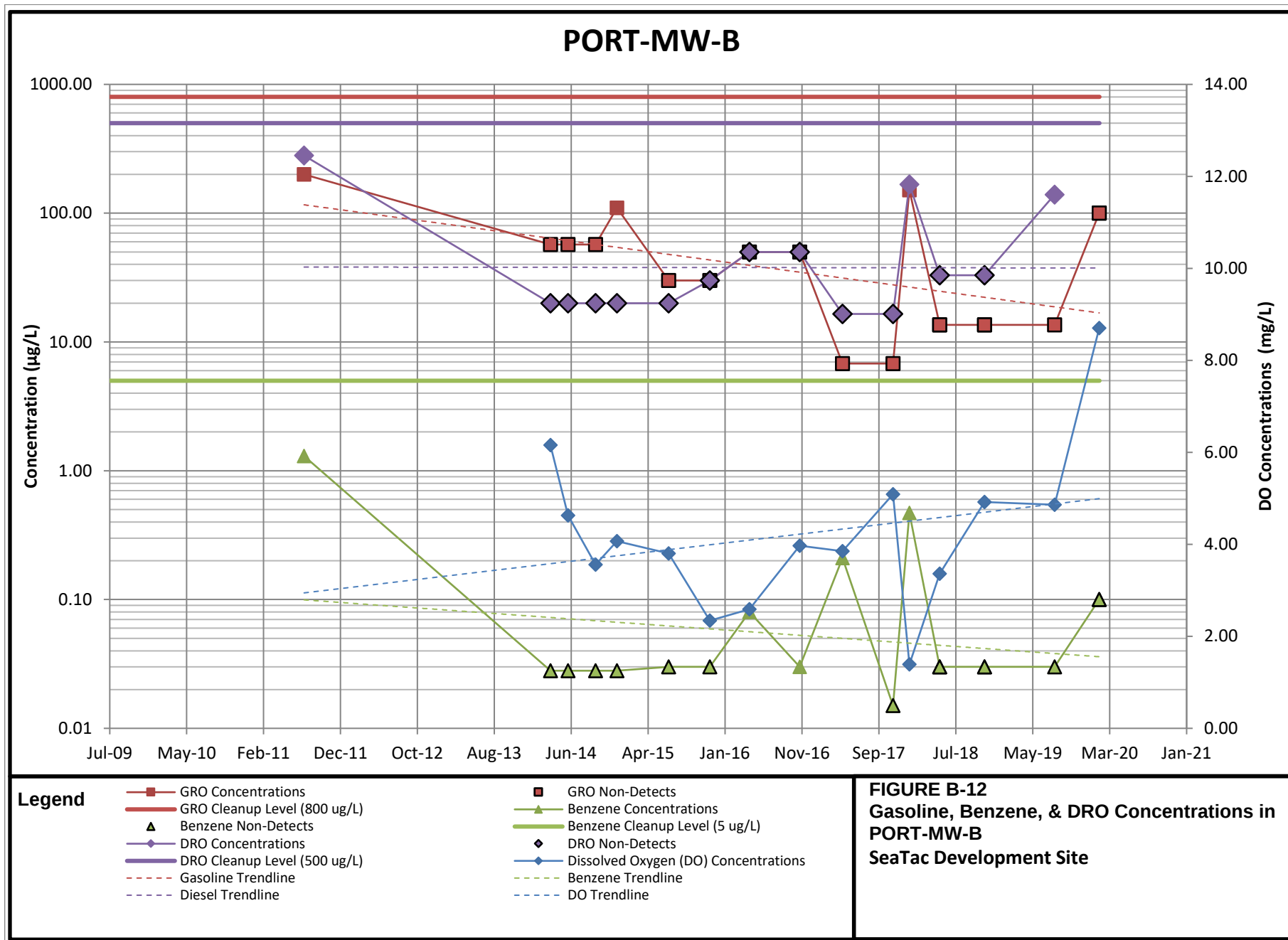
Legend

- GRO Concentrations
- ▲ Benzene Concentrations
- ◆ DRO Concentrations
- ◆ Dissolved Oxygen (DO) Concentrations
- Benzene Trendline
- DO Trendline
- GRO Cleanup Level (800 µg/L)
- Benzene Cleanup Level (5 µg/L)
- DRO Cleanup Level (500 µg/L)
- GRO Trendline
- DRO Trendline

Note:

DRO result for groundwater sample collected in January 2020 was analyzed for DRO after silica gel cleanup.

FIGURE B-11
GRO, Benzene, & DRO Concentrations in
MW-22
SeaTac Development Site



APPENDIX C

LABORATORY REPORT



Apex Laboratories, LLC

6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
EPA ID: OR01039

AMENDED REPORT

Tuesday, February 18, 2020

Mike Staton
SLR Corporation-Bothell
22118 20th Ave SE
Bothell, WA 98021

RE: A0B0009 - Sea-Tac Development Site - 101.02207.00001

Thank you for using Apex Laboratories. We greatly appreciate your business and strive to provide the highest quality services to the environmental industry.

Enclosed are the results of analyses for work order A0B0009, which was received by the laboratory on 2/1/2020 at 11:00:00AM.

If you have any questions concerning this report or the services we offer, please feel free to contact me by email at: ldomenighini@apex-labs.com, or by phone at 503-718-2323.

Please note: All samples will be disposed of within 30 days of sample receipt, unless prior arrangements have been made.

Cooler Receipt Information

(See Cooler Receipt Form for details)

Cooler#1	1.9 degC	Cooler#2	2.3 degC
Cooler#3	3.3 degC	Cooler#4	4.1 degC
Cooler#5	5.1 degC		

This Final Report is the official version of the data results for this sample submission, unless superseded by a subsequent, labeled amended report.

All other deliverables derived from this data, including Electronic Data Deliverables (EDDs), CLP-like forms, client requested summary sheets, and all other products are considered secondary to this report.



Apex Laboratories

Lisa Domenighini, Client Services Manager

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.



Apex Laboratories, LLC

6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
EPA ID: OR01039

AMENDED REPORT

SLR Corporation-Bothell

22118 20th Ave SE
Bothell, WA 98021

Project: **Sea-Tac Development Site**

Project Number: **101.02207.00001**

Project Manager: **Mike Staton**

Report ID:

A0B0009 - 02 18 20 0552

ANALYTICAL REPORT FOR SAMPLES

SAMPLE INFORMATION

Client Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
MW-06-0120	A0B0009-01	Water	01/30/20 09:30	02/01/20 11:00
MW-07-0120	A0B0009-02	Water	01/29/20 14:35	02/01/20 11:00
MW-09-0120	A0B0009-03	Water	01/30/20 12:18	02/01/20 11:00
MW-12-0120	A0B0009-04	Water	01/29/20 13:39	02/01/20 11:00
MW-13-0120	A0B0009-05	Water	01/30/20 11:29	02/01/20 11:00
MW-17A-0120	A0B0009-06	Water	01/30/20 13:24	02/01/20 11:00
MW-18-0120	A0B0009-07	Water	01/30/20 10:31	02/01/20 11:00
MW-19-0120	A0B0009-08	Water	01/30/20 08:46	02/01/20 11:00
MW-20-0120	A0B0009-09	Water	01/30/20 14:34	02/01/20 11:00
MW-21-0120	A0B0009-10	Water	01/30/20 15:38	02/01/20 11:00
MW-22-0120	A0B0009-11	Water	01/29/20 11:12	02/01/20 11:00
Port-MW-B-0120	A0B0009-12	Water	01/29/20 12:27	02/01/20 11:00
MW-30-0120	A0B0009-13	Water	01/29/20 14:35	02/01/20 11:00
Equip-Blank-0120	A0B0009-14	Water	01/30/20 14:45	02/01/20 11:00
Trip Blank	A0B0009-15	Water	01/30/20 00:00	02/01/20 11:00

Apex Laboratories

Lisa Domenighini, Client Services Manager

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.



AMENDED REPORT

Apex Laboratories, LLC

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

EPA ID: OR01039

SLR Corporation-Bothell

22118 20th Ave SE

Bothell, WA 98021

Project: Sea-Tac Development Site

Project Number: **101.02207.00001**

Project Manager: **Mike Staton**

Report ID:

A0B0009 - 02 18 20 0552

ANALYTICAL CASE NARRATIVE

Work Order: A0B0009

Amended Report Revision 2:

Reporting to the Method Detection Limits (MDLs)-

This report supersedes all previous reports.

The final report has been amended to report EPA 8260 Select list samples to the MDLs.

Lisa Domenighini

Client Services Manager

2-18-2020

Amended Report Revision 1:

Missing Analysis-

This report supersedes all previous reports.

The final report has been amended to include the omitted results for EDB by EPA 8260 for sample MW-22-0120

Lisa Domenighini

Client Services Manager

2-17-2020

Apex Laboratories

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Lisa Domenighini, Client Services Manager



Apex Laboratories, LLC

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

EPA ID: OR01039

AMENDED REPORT

SLR Corporation-Bothell

22118 20th Ave SE

Bothell, WA 98021

Project: Sea-Tac Development Site

Project Number: 101.02207.00001

Project Manager: Mike Staton

Report ID:

A0B0009 - 02 18 20 0552

ANALYTICAL SAMPLE RESULTS

Diesel and/or Oil Hydrocarbons by NWTPH-Dx with Silica Gel Column Cleanup

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
MW-07-0120 (A0B0009-02)				Matrix: Water		Batch: 0020114		
Diesel	ND	---	80.8	ug/L	1	02/05/20 23:41	NWTPH-Dx/SGC	
Oil	ND	---	162	ug/L	1	02/05/20 23:41	NWTPH-Dx/SGC	
Surrogate: o-Terphenyl (Surr)		Recovery: 71 %		Limits: 50-150 %	1	02/05/20 23:41	NWTPH-Dx/SGC	
MW-12-0120 (A0B0009-04)				Matrix: Water		Batch: 0020114		
Diesel	ND	---	77.7	ug/L	1	02/06/20 00:02	NWTPH-Dx/SGC	
Oil	ND	---	155	ug/L	1	02/06/20 00:02	NWTPH-Dx/SGC	
Surrogate: o-Terphenyl (Surr)		Recovery: 71 %		Limits: 50-150 %	1	02/06/20 00:02	NWTPH-Dx/SGC	
MW-18-0120 (A0B0009-07)				Matrix: Water		Batch: 0020114		
Diesel	ND	---	80.0	ug/L	1	02/06/20 00:21	NWTPH-Dx/SGC	
Oil	ND	---	160	ug/L	1	02/06/20 00:21	NWTPH-Dx/SGC	
Surrogate: o-Terphenyl (Surr)		Recovery: 88 %		Limits: 50-150 %	1	02/06/20 00:21	NWTPH-Dx/SGC	
MW-22-0120 (A0B0009-11)				Matrix: Water		Batch: 0020114		
Diesel	274	---	76.2	ug/L	1	02/06/20 00:41	NWTPH-Dx/SGC	F-18
Oil	ND	---	152	ug/L	1	02/06/20 00:41	NWTPH-Dx/SGC	
Surrogate: o-Terphenyl (Surr)		Recovery: 91 %		Limits: 50-150 %	1	02/06/20 00:41	NWTPH-Dx/SGC	
MW-30-0120 (A0B0009-13)				Matrix: Water		Batch: 0020114		
Diesel	117	---	86.0	ug/L	1	02/06/20 01:01	NWTPH-Dx/SGC	F-18
Oil	ND	---	172	ug/L	1	02/06/20 01:01	NWTPH-Dx/SGC	
Surrogate: o-Terphenyl (Surr)		Recovery: 75 %		Limits: 50-150 %	1	02/06/20 01:01	NWTPH-Dx/SGC	

Apex Laboratories

Lisa Domenighini, Client Services Manager

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Apex Laboratories, LLC

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

EPA ID: OR01039

AMENDED REPORT

SLR Corporation-Bothell

22118 20th Ave SE

Bothell, WA 98021

Project: Sea-Tac Development Site

Project Number: 101.02207.00001

Project Manager: Mike Staton

Report ID:

A0B0009 - 02 18 20 0552

ANALYTICAL SAMPLE RESULTS

Gasoline Range Hydrocarbons (Benzene through Naphthalene) by NWTPH-Gx

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
MW-06-0120 (A0B0009-01)				Matrix: Water		Batch: 0020099		
Gasoline Range Organics	ND	---	100	ug/L	1	02/05/20 03:51	NWTPH-Gx (MS)	
Surrogate: 4-Bromofluorobenzene (Sur)		Recovery:	97 %	Limits: 50-150 %	1	02/05/20 03:51	NWTPH-Gx (MS)	
1,4-Difluorobenzene (Sur)			96 %	50-150 %	1	02/05/20 03:51	NWTPH-Gx (MS)	
MW-07-0120 (A0B0009-02)				Matrix: Water		Batch: 0020099		
Gasoline Range Organics	751	---	100	ug/L	1	02/05/20 04:18	NWTPH-Gx (MS)	
Surrogate: 4-Bromofluorobenzene (Sur)		Recovery:	102 %	Limits: 50-150 %	1	02/05/20 04:18	NWTPH-Gx (MS)	
1,4-Difluorobenzene (Sur)			96 %	50-150 %	1	02/05/20 04:18	NWTPH-Gx (MS)	
MW-09-0120 (A0B0009-03)				Matrix: Water		Batch: 0020099		
Gasoline Range Organics	ND	---	100	ug/L	1	02/05/20 04:45	NWTPH-Gx (MS)	
Surrogate: 4-Bromofluorobenzene (Sur)		Recovery:	101 %	Limits: 50-150 %	1	02/05/20 04:45	NWTPH-Gx (MS)	
1,4-Difluorobenzene (Sur)			97 %	50-150 %	1	02/05/20 04:45	NWTPH-Gx (MS)	
MW-12-0120 (A0B0009-04RE1)				Matrix: Water		Batch: 0020140		
Gasoline Range Organics	ND	---	100	ug/L	1	02/05/20 18:43	NWTPH-Gx (MS)	
Surrogate: 4-Bromofluorobenzene (Sur)		Recovery:	101 %	Limits: 50-150 %	1	02/05/20 18:43	NWTPH-Gx (MS)	
1,4-Difluorobenzene (Sur)			102 %	50-150 %	1	02/05/20 18:43	NWTPH-Gx (MS)	
MW-13-0120 (A0B0009-05)				Matrix: Water		Batch: 0020099		
Gasoline Range Organics	ND	---	100	ug/L	1	02/05/20 06:06	NWTPH-Gx (MS)	
Surrogate: 4-Bromofluorobenzene (Sur)		Recovery:	101 %	Limits: 50-150 %	1	02/05/20 06:06	NWTPH-Gx (MS)	
1,4-Difluorobenzene (Sur)			101 %	50-150 %	1	02/05/20 06:06	NWTPH-Gx (MS)	
MW-17A-0120 (A0B0009-06)				Matrix: Water		Batch: 0020099		
Gasoline Range Organics	ND	---	100	ug/L	1	02/05/20 06:33	NWTPH-Gx (MS)	
Surrogate: 4-Bromofluorobenzene (Sur)		Recovery:	100 %	Limits: 50-150 %	1	02/05/20 06:33	NWTPH-Gx (MS)	
1,4-Difluorobenzene (Sur)			102 %	50-150 %	1	02/05/20 06:33	NWTPH-Gx (MS)	
MW-18-0120 (A0B0009-07)				Matrix: Water		Batch: 0020099		
Gasoline Range Organics	ND	---	100	ug/L	1	02/05/20 07:00	NWTPH-Gx (MS)	
Surrogate: 4-Bromofluorobenzene (Sur)		Recovery:	99 %	Limits: 50-150 %	1	02/05/20 07:00	NWTPH-Gx (MS)	
1,4-Difluorobenzene (Sur)			101 %	50-150 %	1	02/05/20 07:00	NWTPH-Gx (MS)	
MW-19-0120 (A0B0009-08)				Matrix: Water		Batch: 0020099		
Gasoline Range Organics	ND	---	100	ug/L	1	02/05/20 07:27	NWTPH-Gx (MS)	

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Lisa Domenighini, Client Services Manager



Apex Laboratories, LLC

6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
EPA ID: OR01039

AMENDED REPORT

SLR Corporation-Bothell

22118 20th Ave SE
Bothell, WA 98021

Project: **Sea-Tac Development Site**

Project Number: **101.02207.00001**

Project Manager: **Mike Staton**

Report ID:

A0B0009 - 02 18 20 0552

ANALYTICAL SAMPLE RESULTS

Gasoline Range Hydrocarbons (Benzene through Naphthalene) by NWTPH-Gx

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
MW-19-0120 (A0B0009-08)				Matrix: Water		Batch: 0020099		
Surrogate: 4-Bromofluorobenzene (Sur)		Recovery:	100 %	Limits:	50-150 %	1	02/05/20 07:27	NWTPH-Gx (MS)
1,4-Difluorobenzene (Sur)			103 %		50-150 %	1	02/05/20 07:27	NWTPH-Gx (MS)
MW-20-0120 (A0B0009-09)				Matrix: Water		Batch: 0020099		
Gasoline Range Organics	ND	---	100	ug/L	1	02/05/20 07:54	NWTPH-Gx (MS)	
Surrogate: 4-Bromofluorobenzene (Sur)		Recovery:	102 %	Limits:	50-150 %	1	02/05/20 07:54	NWTPH-Gx (MS)
1,4-Difluorobenzene (Sur)			101 %		50-150 %	1	02/05/20 07:54	NWTPH-Gx (MS)
MW-21-0120 (A0B0009-10)				Matrix: Water		Batch: 0020099		
Gasoline Range Organics	ND	---	100	ug/L	1	02/05/20 08:21	NWTPH-Gx (MS)	
Surrogate: 4-Bromofluorobenzene (Sur)		Recovery:	100 %	Limits:	50-150 %	1	02/05/20 08:21	NWTPH-Gx (MS)
1,4-Difluorobenzene (Sur)			103 %		50-150 %	1	02/05/20 08:21	NWTPH-Gx (MS)
MW-22-0120 (A0B0009-11)				Matrix: Water		Batch: 0020099		
Gasoline Range Organics	4320	---	1000	ug/L	10	02/05/20 08:48	NWTPH-Gx (MS)	
Surrogate: 4-Bromofluorobenzene (Sur)		Recovery:	100 %	Limits:	50-150 %	1	02/05/20 08:48	NWTPH-Gx (MS)
1,4-Difluorobenzene (Sur)			101 %		50-150 %	1	02/05/20 08:48	NWTPH-Gx (MS)
Port-MW-B-0120 (A0B0009-12)				Matrix: Water		Batch: 0020099		
Gasoline Range Organics	ND	---	100	ug/L	1	02/05/20 09:42	NWTPH-Gx (MS)	
Surrogate: 4-Bromofluorobenzene (Sur)		Recovery:	98 %	Limits:	50-150 %	1	02/05/20 09:42	NWTPH-Gx (MS)
1,4-Difluorobenzene (Sur)			102 %		50-150 %	1	02/05/20 09:42	NWTPH-Gx (MS)
MW-30-0120 (A0B0009-13)				Matrix: Water		Batch: 0020099		
Gasoline Range Organics	768	---	100	ug/L	1	02/05/20 10:09	NWTPH-Gx (MS)	
Surrogate: 4-Bromofluorobenzene (Sur)		Recovery:	102 %	Limits:	50-150 %	1	02/05/20 10:09	NWTPH-Gx (MS)
1,4-Difluorobenzene (Sur)			102 %		50-150 %	1	02/05/20 10:09	NWTPH-Gx (MS)
Equip-Blank-0120 (A0B0009-14)				Matrix: Water		Batch: 0020099		
Gasoline Range Organics	ND	---	100	ug/L	1	02/05/20 00:42	NWTPH-Gx (MS)	
Surrogate: 4-Bromofluorobenzene (Sur)		Recovery:	100 %	Limits:	50-150 %	1	02/05/20 00:42	NWTPH-Gx (MS)
1,4-Difluorobenzene (Sur)			100 %		50-150 %	1	02/05/20 00:42	NWTPH-Gx (MS)
Trip Blank (A0B0009-15)				Matrix: Water		Batch: 0020099		
Gasoline Range Organics	ND	---	100	ug/L	1	02/05/20 01:09	NWTPH-Gx (MS)	
Surrogate: 4-Bromofluorobenzene (Sur)		Recovery:	100 %	Limits:	50-150 %	1	02/05/20 01:09	NWTPH-Gx (MS)

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Lisa Domenighini, Client Services Manager



Apex Laboratories, LLC

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Tigard, OR 97223

503-718-2323

EPA ID: OR01039

AMENDED REPORT

SLR Corporation-Bothell

22118 20th Ave SE

Bothell, WA 98021

Project: **Sea-Tac Development Site**

Project Number: **101.02207.00001**

Project Manager: **Mike Staton**

Report ID:

A0B0009 - 02 18 20 0552

ANALYTICAL SAMPLE RESULTS

Gasoline Range Hydrocarbons (Benzene through Naphthalene) by NWTPH-Gx

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
Trip Blank (A0B0009-15)				Matrix: Water		Batch: 0020099		
<i>Surrogate: 1,4-Difluorobenzene (Sur)</i>		<i>Recovery: 100 %</i>	<i>Limits: 50-150 %</i>	<i>1</i>	<i>02/05/20 01:09</i>	<i>NWTPH-Gx (MS)</i>		

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AMENDED REPORT

SLR Corporation-Bothell

22118 20th Ave SE

Bothell, WA 98021

Project: **Sea-Tac Development Site**

Project Number: **101.02207.00001**

Project Manager: **Mike Staton**

Report ID:

A0B0009 - 02 18 20 0552

ANALYTICAL SAMPLE RESULTS

BTEX Compounds by EPA 8260C

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
Trip Blank (A0B0009-15)				Matrix: Water		Batch: 0020099		
Benzene	ND	---	0.200	ug/L	1	02/05/20 01:09	EPA 8260C	
Toluene	ND	---	1.00	ug/L	1	02/05/20 01:09	EPA 8260C	
Ethylbenzene	ND	---	0.500	ug/L	1	02/05/20 01:09	EPA 8260C	
Xylenes, total	ND	---	1.50	ug/L	1	02/05/20 01:09	EPA 8260C	
<i>Surrogate: 1,4-Difluorobenzene (Surr)</i>		<i>Recovery: 115 %</i>		<i>Limits: 80-120 %</i>	<i>1</i>	<i>02/05/20 01:09</i>	<i>EPA 8260C</i>	
<i>Toluene-d8 (Surr)</i>		<i>98 %</i>		<i>80-120 %</i>	<i>1</i>	<i>02/05/20 01:09</i>	<i>EPA 8260C</i>	
<i>4-Bromofluorobenzene (Surr)</i>		<i>104 %</i>		<i>80-120 %</i>	<i>1</i>	<i>02/05/20 01:09</i>	<i>EPA 8260C</i>	

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AMENDED REPORT

SLR Corporation-Bothell

22118 20th Ave SE

Bothell, WA 98021

Project: **Sea-Tac Development Site**Project Number: **101.02207.00001**Project Manager: **Mike Staton****Report ID:****A0B0009 - 02 18 20 0552**

ANALYTICAL SAMPLE RESULTS

Selected Volatile Organic Compounds by EPA 8260C

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
MW-06-0120 (A0B0009-01)				Matrix: Water		Batch: 0020099		
Benzene	ND	0.100	0.200	ug/L	1	02/05/20 03:51	EPA 8260C	
Ethylbenzene	ND	0.250	0.500	ug/L	1	02/05/20 03:51	EPA 8260C	
n-Hexane	ND	1.00	2.00	ug/L	1	02/05/20 03:51	EPA 8260C	
Naphthalene	ND	1.00	2.00	ug/L	1	02/05/20 03:51	EPA 8260C	
Toluene	ND	0.500	1.00	ug/L	1	02/05/20 03:51	EPA 8260C	
Xylenes, total	ND	0.750	1.50	ug/L	1	02/05/20 03:51	EPA 8260C	
Surrogate: 1,4-Difluorobenzene (Surr)		Recovery: 117 %		Limits: 80-120 %	1	02/05/20 03:51	EPA 8260C	
Toluene-d8 (Surr)		96 %		80-120 %	1	02/05/20 03:51	EPA 8260C	
4-Bromofluorobenzene (Surr)		104 %		80-120 %	1	02/05/20 03:51	EPA 8260C	
MW-07-0120 (A0B0009-02)				Matrix: Water		Batch: 0020099		
Benzene	0.388	0.100	0.200	ug/L	1	02/05/20 04:18	EPA 8260C	
Ethylbenzene	2.34	0.250	0.500	ug/L	1	02/05/20 04:18	EPA 8260C	
n-Hexane	6.97	1.00	2.00	ug/L	1	02/05/20 04:18	EPA 8260C	
Naphthalene	5.08	1.00	2.00	ug/L	1	02/05/20 04:18	EPA 8260C	
Toluene	8.07	0.500	1.00	ug/L	1	02/05/20 04:18	EPA 8260C	
Xylenes, total	11.0	0.750	1.50	ug/L	1	02/05/20 04:18	EPA 8260C	
Surrogate: 1,4-Difluorobenzene (Surr)		Recovery: 117 %		Limits: 80-120 %	1	02/05/20 04:18	EPA 8260C	
Toluene-d8 (Surr)		96 %		80-120 %	1	02/05/20 04:18	EPA 8260C	
4-Bromofluorobenzene (Surr)		102 %		80-120 %	1	02/05/20 04:18	EPA 8260C	
MW-09-0120 (A0B0009-03)				Matrix: Water		Batch: 0020099		
Benzene	0.542	0.100	0.200	ug/L	1	02/05/20 04:45	EPA 8260C	
Ethylbenzene	ND	0.250	0.500	ug/L	1	02/05/20 04:45	EPA 8260C	
n-Hexane	ND	1.00	2.00	ug/L	1	02/05/20 04:45	EPA 8260C	
Naphthalene	ND	1.00	2.00	ug/L	1	02/05/20 04:45	EPA 8260C	
Toluene	ND	0.500	1.00	ug/L	1	02/05/20 04:45	EPA 8260C	
Xylenes, total	ND	0.750	1.50	ug/L	1	02/05/20 04:45	EPA 8260C	
Surrogate: 1,4-Difluorobenzene (Surr)		Recovery: 117 %		Limits: 80-120 %	1	02/05/20 04:45	EPA 8260C	
Toluene-d8 (Surr)		96 %		80-120 %	1	02/05/20 04:45	EPA 8260C	
4-Bromofluorobenzene (Surr)		104 %		80-120 %	1	02/05/20 04:45	EPA 8260C	
MW-12-0120 (A0B0009-04RE1)				Matrix: Water		Batch: 0020140		
Benzene	ND	0.100	0.200	ug/L	1	02/05/20 18:43	EPA 8260C	
Ethylbenzene	ND	0.250	0.500	ug/L	1	02/05/20 18:43	EPA 8260C	
n-Hexane	ND	1.00	2.00	ug/L	1	02/05/20 18:43	EPA 8260C	
Naphthalene	ND	1.00	2.00	ug/L	1	02/05/20 18:43	EPA 8260C	

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Lisa Domenighini, Client Services Manager



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Tigard, OR 97223

503-718-2323

EPA ID: OR01039

AMENDED REPORT

SLR Corporation-Bothell

22118 20th Ave SE

Bothell, WA 98021

Project: **Sea-Tac Development Site**

Project Number: **101.02207.00001**

Project Manager: **Mike Staton**

Report ID:

A0B0009 - 02 18 20 0552

ANALYTICAL SAMPLE RESULTS

Selected Volatile Organic Compounds by EPA 8260C

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
MW-12-0120 (A0B0009-04RE1)				Matrix: Water		Batch: 0020140		
Toluene	ND	0.500	1.00	ug/L	1	02/05/20 18:43	EPA 8260C	
Xylenes, total	ND	0.750	1.50	ug/L	1	02/05/20 18:43	EPA 8260C	
Surrogate: 1,4-Difluorobenzene (Surr)		Recovery: 115 %		Limits: 80-120 %	1	02/05/20 18:43	EPA 8260C	
Toluene-d8 (Surr)		99 %		80-120 %	1	02/05/20 18:43	EPA 8260C	
4-Bromofluorobenzene (Surr)		102 %		80-120 %	1	02/05/20 18:43	EPA 8260C	
MW-13-0120 (A0B0009-05)				Matrix: Water		Batch: 0020099		
Benzene	0.152	0.100	0.200	ug/L	1	02/05/20 06:06	EPA 8260C	J
Ethylbenzene	ND	0.250	0.500	ug/L	1	02/05/20 06:06	EPA 8260C	
n-Hexane	ND	1.00	2.00	ug/L	1	02/05/20 06:06	EPA 8260C	
Naphthalene	ND	1.00	2.00	ug/L	1	02/05/20 06:06	EPA 8260C	
Toluene	ND	0.500	1.00	ug/L	1	02/05/20 06:06	EPA 8260C	
Xylenes, total	ND	0.750	1.50	ug/L	1	02/05/20 06:06	EPA 8260C	
Surrogate: 1,4-Difluorobenzene (Surr)		Recovery: 116 %		Limits: 80-120 %	1	02/05/20 06:06	EPA 8260C	
Toluene-d8 (Surr)		99 %		80-120 %	1	02/05/20 06:06	EPA 8260C	
4-Bromofluorobenzene (Surr)		103 %		80-120 %	1	02/05/20 06:06	EPA 8260C	
MW-17A-0120 (A0B0009-06)				Matrix: Water		Batch: 0020099		
Benzene	ND	0.100	0.200	ug/L	1	02/05/20 06:33	EPA 8260C	
Ethylbenzene	ND	0.250	0.500	ug/L	1	02/05/20 06:33	EPA 8260C	
n-Hexane	ND	1.00	2.00	ug/L	1	02/05/20 06:33	EPA 8260C	
Naphthalene	ND	1.00	2.00	ug/L	1	02/05/20 06:33	EPA 8260C	
Toluene	ND	0.500	1.00	ug/L	1	02/05/20 06:33	EPA 8260C	
Xylenes, total	ND	0.750	1.50	ug/L	1	02/05/20 06:33	EPA 8260C	
Surrogate: 1,4-Difluorobenzene (Surr)		Recovery: 117 %		Limits: 80-120 %	1	02/05/20 06:33	EPA 8260C	
Toluene-d8 (Surr)		98 %		80-120 %	1	02/05/20 06:33	EPA 8260C	
4-Bromofluorobenzene (Surr)		103 %		80-120 %	1	02/05/20 06:33	EPA 8260C	
MW-18-0120 (A0B0009-07)				Matrix: Water		Batch: 0020099		
Benzene	ND	0.100	0.200	ug/L	1	02/05/20 07:00	EPA 8260C	
Ethylbenzene	ND	0.250	0.500	ug/L	1	02/05/20 07:00	EPA 8260C	
n-Hexane	ND	1.00	2.00	ug/L	1	02/05/20 07:00	EPA 8260C	
Naphthalene	ND	1.00	2.00	ug/L	1	02/05/20 07:00	EPA 8260C	
Toluene	ND	0.500	1.00	ug/L	1	02/05/20 07:00	EPA 8260C	
Xylenes, total	ND	0.750	1.50	ug/L	1	02/05/20 07:00	EPA 8260C	
Surrogate: 1,4-Difluorobenzene (Surr)		Recovery: 116 %		Limits: 80-120 %	1	02/05/20 07:00	EPA 8260C	
Toluene-d8 (Surr)		99 %		80-120 %	1	02/05/20 07:00	EPA 8260C	

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Lisa Domenighini, Client Services Manager



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Tigard, OR 97223

503-718-2323

EPA ID: OR01039

AMENDED REPORT

SLR Corporation-Bothell

22118 20th Ave SE

Bothell, WA 98021

Project: Sea-Tac Development Site

Project Number: 101.02207.00001

Project Manager: Mike Staton

Report ID:

A0B0009 - 02 18 20 0552

ANALYTICAL SAMPLE RESULTS

Selected Volatile Organic Compounds by EPA 8260C

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
MW-18-0120 (A0B0009-07)				Matrix: Water		Batch: 0020099		
Surrogate: 4-Bromofluorobenzene (Surr)		Recovery: 103 %	Limits: 80-120 %	1	02/05/20 07:00	EPA 8260C		
MW-19-0120 (A0B0009-08)				Matrix: Water		Batch: 0020099		
Benzene	ND	0.100	0.200	ug/L	1	02/05/20 07:27	EPA 8260C	
Ethylbenzene	ND	0.250	0.500	ug/L	1	02/05/20 07:27	EPA 8260C	
n-Hexane	ND	1.00	2.00	ug/L	1	02/05/20 07:27	EPA 8260C	
Naphthalene	ND	1.00	2.00	ug/L	1	02/05/20 07:27	EPA 8260C	
Toluene	ND	0.500	1.00	ug/L	1	02/05/20 07:27	EPA 8260C	
Xylenes, total	ND	0.750	1.50	ug/L	1	02/05/20 07:27	EPA 8260C	
Surrogate: 1,4-Difluorobenzene (Surr)		Recovery: 117 %	Limits: 80-120 %	1	02/05/20 07:27	EPA 8260C		
Toluene-d8 (Surr)		100 %	80-120 %	1	02/05/20 07:27	EPA 8260C		
4-Bromofluorobenzene (Surr)		103 %	80-120 %	1	02/05/20 07:27	EPA 8260C		
MW-20-0120 (A0B0009-09)				Matrix: Water		Batch: 0020099		
Benzene	ND	0.100	0.200	ug/L	1	02/05/20 07:54	EPA 8260C	
Ethylbenzene	ND	0.250	0.500	ug/L	1	02/05/20 07:54	EPA 8260C	
n-Hexane	ND	1.00	2.00	ug/L	1	02/05/20 07:54	EPA 8260C	
Naphthalene	ND	1.00	2.00	ug/L	1	02/05/20 07:54	EPA 8260C	
Toluene	ND	0.500	1.00	ug/L	1	02/05/20 07:54	EPA 8260C	
Xylenes, total	ND	0.750	1.50	ug/L	1	02/05/20 07:54	EPA 8260C	
Surrogate: 1,4-Difluorobenzene (Surr)		Recovery: 119 %	Limits: 80-120 %	1	02/05/20 07:54	EPA 8260C		
Toluene-d8 (Surr)		97 %	80-120 %	1	02/05/20 07:54	EPA 8260C		
4-Bromofluorobenzene (Surr)		103 %	80-120 %	1	02/05/20 07:54	EPA 8260C		
MW-21-0120 (A0B0009-10)				Matrix: Water		Batch: 0020099		
Benzene	ND	0.100	0.200	ug/L	1	02/05/20 08:21	EPA 8260C	
Ethylbenzene	ND	0.250	0.500	ug/L	1	02/05/20 08:21	EPA 8260C	
n-Hexane	ND	1.00	2.00	ug/L	1	02/05/20 08:21	EPA 8260C	
Naphthalene	ND	1.00	2.00	ug/L	1	02/05/20 08:21	EPA 8260C	
Toluene	ND	0.500	1.00	ug/L	1	02/05/20 08:21	EPA 8260C	
Xylenes, total	ND	0.750	1.50	ug/L	1	02/05/20 08:21	EPA 8260C	
Surrogate: 1,4-Difluorobenzene (Surr)		Recovery: 116 %	Limits: 80-120 %	1	02/05/20 08:21	EPA 8260C		
Toluene-d8 (Surr)		101 %	80-120 %	1	02/05/20 08:21	EPA 8260C		
4-Bromofluorobenzene (Surr)		103 %	80-120 %	1	02/05/20 08:21	EPA 8260C		
MW-22-0120 (A0B0009-11)				Matrix: Water		Batch: 0020099		
Benzene	3.10	1.00	2.00	ug/L	10	02/05/20 08:48	EPA 8260C	

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Lisa Domenighini, Client Services Manager



Apex Laboratories, LLC

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

EPA ID: OR01039

AMENDED REPORT

SLR Corporation-Bothell

22118 20th Ave SE

Bothell, WA 98021

Project: **Sea-Tac Development Site**

Project Number: **101.02207.00001**

Project Manager: **Mike Staton**

Report ID:

A0B0009 - 02 18 20 0552

ANALYTICAL SAMPLE RESULTS

Selected Volatile Organic Compounds by EPA 8260C

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
MW-22-0120 (A0B0009-11)				Matrix: Water		Batch: 0020099		
1,2-Dibromoethane (EDB)	ND	2.50	5.00	ug/L	10	02/05/20 08:48	EPA 8260C	
Ethylbenzene	247	2.50	5.00	ug/L	10	02/05/20 08:48	EPA 8260C	
n-Hexane	ND	10.0	20.0	ug/L	10	02/05/20 08:48	EPA 8260C	
Naphthalene	130	10.0	20.0	ug/L	10	02/05/20 08:48	EPA 8260C	
Toluene	ND	5.00	10.0	ug/L	10	02/05/20 08:48	EPA 8260C	
Xylenes, total	335	7.50	15.0	ug/L	10	02/05/20 08:48	EPA 8260C	
Surrogate: 1,4-Difluorobenzene (Surr)		Recovery: 114 %		Limits: 80-120 %	1	02/05/20 08:48	EPA 8260C	
Toluene-d8 (Surr)		101 %		80-120 %	1	02/05/20 08:48	EPA 8260C	
4-Bromofluorobenzene (Surr)		100 %		80-120 %	1	02/05/20 08:48	EPA 8260C	
Port-MW-B-0120 (A0B0009-12)				Matrix: Water		Batch: 0020099		
Benzene	ND	0.100	0.200	ug/L	1	02/05/20 09:42	EPA 8260C	
Ethylbenzene	ND	0.250	0.500	ug/L	1	02/05/20 09:42	EPA 8260C	
n-Hexane	ND	1.00	2.00	ug/L	1	02/05/20 09:42	EPA 8260C	
Naphthalene	ND	1.00	2.00	ug/L	1	02/05/20 09:42	EPA 8260C	
Toluene	ND	0.500	1.00	ug/L	1	02/05/20 09:42	EPA 8260C	
Xylenes, total	ND	0.750	1.50	ug/L	1	02/05/20 09:42	EPA 8260C	
Surrogate: 1,4-Difluorobenzene (Surr)		Recovery: 117 %		Limits: 80-120 %	1	02/05/20 09:42	EPA 8260C	
Toluene-d8 (Surr)		99 %		80-120 %	1	02/05/20 09:42	EPA 8260C	
4-Bromofluorobenzene (Surr)		102 %		80-120 %	1	02/05/20 09:42	EPA 8260C	
MW-30-0120 (A0B0009-13)				Matrix: Water		Batch: 0020099		
Benzene	0.361	0.100	0.200	ug/L	1	02/05/20 10:09	EPA 8260C	Q-42
Ethylbenzene	2.30	0.250	0.500	ug/L	1	02/05/20 10:09	EPA 8260C	
n-Hexane	7.05	1.00	2.00	ug/L	1	02/05/20 10:09	EPA 8260C	
Naphthalene	4.82	1.00	2.00	ug/L	1	02/05/20 10:09	EPA 8260C	
Toluene	7.86	0.500	1.00	ug/L	1	02/05/20 10:09	EPA 8260C	
Xylenes, total	10.6	0.750	1.50	ug/L	1	02/05/20 10:09	EPA 8260C	
Surrogate: 1,4-Difluorobenzene (Surr)		Recovery: 116 %		Limits: 80-120 %	1	02/05/20 10:09	EPA 8260C	
Toluene-d8 (Surr)		100 %		80-120 %	1	02/05/20 10:09	EPA 8260C	
4-Bromofluorobenzene (Surr)		101 %		80-120 %	1	02/05/20 10:09	EPA 8260C	
Equip-Blank-0120 (A0B0009-14)				Matrix: Water		Batch: 0020099		
Benzene	ND	0.100	0.200	ug/L	1	02/05/20 00:42	EPA 8260C	
Ethylbenzene	ND	0.250	0.500	ug/L	1	02/05/20 00:42	EPA 8260C	
n-Hexane	ND	1.00	2.00	ug/L	1	02/05/20 00:42	EPA 8260C	
Naphthalene	ND	1.00	2.00	ug/L	1	02/05/20 00:42	EPA 8260C	

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Lisa Domenighini, Client Services Manager

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Apex Laboratories, LLC

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

EPA ID: OR01039

AMENDED REPORT

SLR Corporation-Bothell

22118 20th Ave SE

Bothell, WA 98021

Project: **Sea-Tac Development Site**

Project Number: **101.02207.00001**

Project Manager: **Mike Staton**

Report ID:

A0B0009 - 02 18 20 0552

ANALYTICAL SAMPLE RESULTS

Selected Volatile Organic Compounds by EPA 8260C

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
Equip-Blank-0120 (A0B0009-14)				Matrix: Water		Batch: 0020099		
Toluene	ND	0.500	1.00	ug/L	1	02/05/20 00:42	EPA 8260C	
Xylenes, total	ND	0.750	1.50	ug/L	1	02/05/20 00:42	EPA 8260C	
<i>Surrogate: 1,4-Difluorobenzene (Surr)</i>		<i>Recovery: 113 %</i>		<i>Limits: 80-120 %</i>	<i>1</i>	<i>02/05/20 00:42</i>	<i>EPA 8260C</i>	
<i>Toluene-d8 (Surr)</i>		<i>99 %</i>		<i>80-120 %</i>	<i>1</i>	<i>02/05/20 00:42</i>	<i>EPA 8260C</i>	
<i>4-Bromofluorobenzene (Surr)</i>		<i>105 %</i>		<i>80-120 %</i>	<i>1</i>	<i>02/05/20 00:42</i>	<i>EPA 8260C</i>	

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AMENDED REPORT

SLR Corporation-Bothell

22118 20th Ave SE

Bothell, WA 98021

Project: **Sea-Tac Development Site**Project Number: **101.02207.00001**Project Manager: **Mike Staton****Report ID:****A0B0009 - 02 18 20 0552**

ANALYTICAL SAMPLE RESULTS

1,2-Dibromoethane (EDB) by EPA 8260C SIM

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
MW-06-0120 (A0B0009-01)		Matrix: Water		Batch: 0020203				
1,2-Dibromoethane (EDB)	ND	0.0100	0.0200	ug/L	1	02/06/20 16:55	EPA 8260C SIM	
Surrogate: 1,4-Difluorobenzene (Surr)		Recovery: 96 %	Limits: 70-130 %	1	02/06/20 16:55	EPA 8260C SIM		
Toluene-d8 (Surr)		100 %	70-130 %	1	02/06/20 16:55	EPA 8260C SIM		
4-Bromofluorobenzene (Surr)		99 %	70-130 %	1	02/06/20 16:55	EPA 8260C SIM		
MW-07-0120 (A0B0009-02)		Matrix: Water		Batch: 0020203				
1,2-Dibromoethane (EDB)	ND	0.0200	0.0200	ug/L	1	02/06/20 22:45	EPA 8260C SIM	
Surrogate: 1,4-Difluorobenzene (Surr)		Recovery: 92 %	Limits: 70-130 %	1	02/06/20 22:45	EPA 8260C SIM		
Toluene-d8 (Surr)		99 %	70-130 %	1	02/06/20 22:45	EPA 8260C SIM		
4-Bromofluorobenzene (Surr)		95 %	70-130 %	1	02/06/20 22:45	EPA 8260C SIM		
MW-09-0120 (A0B0009-03)		Matrix: Water		Batch: 0020203				
1,2-Dibromoethane (EDB)	ND	0.0100	0.0200	ug/L	1	02/06/20 18:16	EPA 8260C SIM	
Surrogate: 1,4-Difluorobenzene (Surr)		Recovery: 95 %	Limits: 70-130 %	1	02/06/20 18:16	EPA 8260C SIM		
Toluene-d8 (Surr)		101 %	70-130 %	1	02/06/20 18:16	EPA 8260C SIM		
4-Bromofluorobenzene (Surr)		98 %	70-130 %	1	02/06/20 18:16	EPA 8260C SIM		
MW-12-0120 (A0B0009-04)		Matrix: Water		Batch: 0020203				
1,2-Dibromoethane (EDB)	ND	0.0100	0.0200	ug/L	1	02/06/20 19:10	EPA 8260C SIM	
Surrogate: 1,4-Difluorobenzene (Surr)		Recovery: 91 %	Limits: 70-130 %	1	02/06/20 19:10	EPA 8260C SIM		
Toluene-d8 (Surr)		100 %	70-130 %	1	02/06/20 19:10	EPA 8260C SIM		
4-Bromofluorobenzene (Surr)		98 %	70-130 %	1	02/06/20 19:10	EPA 8260C SIM		
MW-13-0120 (A0B0009-05)		Matrix: Water		Batch: 0020203				
1,2-Dibromoethane (EDB)	ND	0.0100	0.0200	ug/L	1	02/06/20 23:12	EPA 8260C SIM	
Surrogate: 1,4-Difluorobenzene (Surr)		Recovery: 91 %	Limits: 70-130 %	1	02/06/20 23:12	EPA 8260C SIM		
Toluene-d8 (Surr)		99 %	70-130 %	1	02/06/20 23:12	EPA 8260C SIM		
4-Bromofluorobenzene (Surr)		96 %	70-130 %	1	02/06/20 23:12	EPA 8260C SIM		
MW-17A-0120 (A0B0009-06)		Matrix: Water		Batch: 0020203				
1,2-Dibromoethane (EDB)	ND	0.0100	0.0200	ug/L	1	02/06/20 19:37	EPA 8260C SIM	
Surrogate: 1,4-Difluorobenzene (Surr)		Recovery: 92 %	Limits: 70-130 %	1	02/06/20 19:37	EPA 8260C SIM		
Toluene-d8 (Surr)		99 %	70-130 %	1	02/06/20 19:37	EPA 8260C SIM		
4-Bromofluorobenzene (Surr)		99 %	70-130 %	1	02/06/20 19:37	EPA 8260C SIM		
MW-18-0120 (A0B0009-07)		Matrix: Water		Batch: 0020203				

Apex Laboratories

Lisa Domenighini, Client Services Manager

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Apex Laboratories, LLC

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

EPA ID: OR01039

AMENDED REPORT

SLR Corporation-Bothell

22118 20th Ave SE

Bothell, WA 98021

Project: **Sea-Tac Development Site**

Project Number: **101.02207.00001**

Project Manager: **Mike Staton**

Report ID:

A0B0009 - 02 18 20 0552

ANALYTICAL SAMPLE RESULTS

1,2-Dibromoethane (EDB) by EPA 8260C SIM

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
MW-18-0120 (A0B0009-07)		Matrix: Water		Batch: 0020203				
1,2-Dibromoethane (EDB)	ND	0.0100	0.0200	ug/L	1	02/06/20 20:04	EPA 8260C SIM	
Surrogate: 1,4-Difluorobenzene (Surr)		Recovery:	91 %	Limits:	70-130 %	1	02/06/20 20:04	EPA 8260C SIM
Toluene-d8 (Surr)			99 %		70-130 %	1	02/06/20 20:04	EPA 8260C SIM
4-Bromofluorobenzene (Surr)			99 %		70-130 %	1	02/06/20 20:04	EPA 8260C SIM
MW-19-0120 (A0B0009-08)		Matrix: Water		Batch: 0020203				
1,2-Dibromoethane (EDB)	ND	0.0100	0.0200	ug/L	1	02/06/20 20:31	EPA 8260C SIM	
Surrogate: 1,4-Difluorobenzene (Surr)		Recovery:	96 %	Limits:	70-130 %	1	02/06/20 20:31	EPA 8260C SIM
Toluene-d8 (Surr)			100 %		70-130 %	1	02/06/20 20:31	EPA 8260C SIM
4-Bromofluorobenzene (Surr)			99 %		70-130 %	1	02/06/20 20:31	EPA 8260C SIM
MW-20-0120 (A0B0009-09)		Matrix: Water		Batch: 0020203				
1,2-Dibromoethane (EDB)	ND	0.0100	0.0200	ug/L	1	02/06/20 20:58	EPA 8260C SIM	
Surrogate: 1,4-Difluorobenzene (Surr)		Recovery:	92 %	Limits:	70-130 %	1	02/06/20 20:58	EPA 8260C SIM
Toluene-d8 (Surr)			100 %		70-130 %	1	02/06/20 20:58	EPA 8260C SIM
4-Bromofluorobenzene (Surr)			98 %		70-130 %	1	02/06/20 20:58	EPA 8260C SIM
MW-21-0120 (A0B0009-10)		Matrix: Water		Batch: 0020203				
1,2-Dibromoethane (EDB)	ND	0.0100	0.0200	ug/L	1	02/06/20 21:24	EPA 8260C SIM	
Surrogate: 1,4-Difluorobenzene (Surr)		Recovery:	91 %	Limits:	70-130 %	1	02/06/20 21:24	EPA 8260C SIM
Toluene-d8 (Surr)			100 %		70-130 %	1	02/06/20 21:24	EPA 8260C SIM
4-Bromofluorobenzene (Surr)			99 %		70-130 %	1	02/06/20 21:24	EPA 8260C SIM
Port-MW-B-0120 (A0B0009-12)		Matrix: Water		Batch: 0020203				
1,2-Dibromoethane (EDB)	ND	0.0100	0.0200	ug/L	1	02/06/20 21:51	EPA 8260C SIM	
Surrogate: 1,4-Difluorobenzene (Surr)		Recovery:	95 %	Limits:	70-130 %	1	02/06/20 21:51	EPA 8260C SIM
Toluene-d8 (Surr)			99 %		70-130 %	1	02/06/20 21:51	EPA 8260C SIM
4-Bromofluorobenzene (Surr)			100 %		70-130 %	1	02/06/20 21:51	EPA 8260C SIM
MW-30-0120 (A0B0009-13)		Matrix: Water		Batch: 0020203				
1,2-Dibromoethane (EDB)	ND	0.0200	0.0200	ug/L	1	02/06/20 23:39	EPA 8260C SIM	
Surrogate: 1,4-Difluorobenzene (Surr)		Recovery:	92 %	Limits:	70-130 %	1	02/06/20 23:39	EPA 8260C SIM
Toluene-d8 (Surr)			99 %		70-130 %	1	02/06/20 23:39	EPA 8260C SIM
4-Bromofluorobenzene (Surr)			95 %		70-130 %	1	02/06/20 23:39	EPA 8260C SIM
Equip-Blank-0120 (A0B0009-14)		Matrix: Water		Batch: 0020203				

Apex Laboratories

Lisa Domenighini, Client Services Manager

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Apex Laboratories, LLC

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

EPA ID: OR01039

AMENDED REPORT

SLR Corporation-Bothell

22118 20th Ave SE

Bothell, WA 98021

Project: **Sea-Tac Development Site**

Project Number: **101.02207.00001**

Project Manager: **Mike Staton**

Report ID:

A0B0009 - 02 18 20 0552

ANALYTICAL SAMPLE RESULTS

1,2-Dibromoethane (EDB) by EPA 8260C SIM

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
Equip-Blank-0120 (A0B0009-14)				Matrix: Water		Batch: 0020203		
1,2-Dibromoethane (EDB)	ND	0.0100	0.0200	ug/L	1	02/06/20 22:18	EPA 8260C SIM	
Surrogate: 1,4-Difluorobenzene (Surr)			Recovery: 93 %	Limits: 70-130 %	1	02/06/20 22:18	EPA 8260C SIM	
Toluene-d8 (Surr)			100 %	70-130 %	1	02/06/20 22:18	EPA 8260C SIM	
4-Bromofluorobenzene (Surr)			99 %	70-130 %	1	02/06/20 22:18	EPA 8260C SIM	

Apex Laboratories

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AMENDED REPORT

Apex Laboratories, LLC

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

EPA ID: OR01039

SLR Corporation-Bothell

22118 20th Ave SE

Bothell, WA 98021

Project: Sea-Tac Development Site

Project Number: 101.02207.00001

Project Manager: Mike Staton

Report ID:

A0B0009 - 02 18 20 0552

QUALITY CONTROL (QC) SAMPLE RESULTS

Diesel and/or Oil Hydrocarbons by NWTPH-Dx with Silica Gel Column Cleanup

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 0020114 - EPA 3510C (Fuels/Acid Ext.)						Water						
Blank (0020114-BLK1)		Prepared: 02/05/20 06:57 Analyzed: 02/05/20 21:02										
NWTPH-Dx/SGC												
Diesel	ND	---	72.7	ug/L	1	---	---	---	---	---	---	
Oil	ND	---	145	ug/L	1	---	---	---	---	---	---	
Surr: o-Terphenyl (Surr)		Recovery: 75 %		Limits: 50-150 %		Dilution: 1x						
LCS (0020114-BS1)		Prepared: 02/05/20 06:57 Analyzed: 02/05/20 21:22										
NWTPH-Dx/SGC												
Diesel	338	---	80.0	ug/L	1	500	---	68	58 - 115%	---	---	
Surr: o-Terphenyl (Surr)		Recovery: 77 %		Limits: 50-150 %		Dilution: 1x						
LCS Dup (0020114-BSD1)		Prepared: 02/05/20 06:57 Analyzed: 02/05/20 21:42										
NWTPH-Dx/SGC												
Diesel	344	---	80.0	ug/L	1	500	---	69	58 - 115%	2	20%	
Surr: o-Terphenyl (Surr)		Recovery: 80 %		Limits: 50-150 %		Dilution: 1x						

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503-718-2323
EPA ID: OR01039

AMENDED REPORT

SLR Corporation-Bothell

22118 20th Ave SE
Bothell, WA 98021

Project: Sea-Tac Development Site

Project Number: 101.02207.00001
Project Manager: Mike Staton

Report ID:

A0B0009 - 02 18 20 0552

QUALITY CONTROL (QC) SAMPLE RESULTS

Gasoline Range Hydrocarbons (Benzene through Naphthalene) by NWTPH-Gx

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 0020099 - EPA 5030B							Water					
Blank (0020099-BLK1)		Prepared: 02/04/20 14:30 Analyzed: 02/05/20 00:13										
NWTPH-Gx (MS)												
Gasoline Range Organics	ND	---	100	ug/L	1	---	---	---	---	---	---	
Surr: 4-Bromofluorobenzene (Surr)		Recovery: 72 %		Limits: 50-150 %		Dilution: 1x						
1,4-Difluorobenzene (Surr)		101 %		50-150 %		"						
LCS (0020099-BS2)		Prepared: 02/04/20 14:30 Analyzed: 02/04/20 23:46										
NWTPH-Gx (MS)												
Gasoline Range Organics	424	---	100	ug/L	1	500	---	85	80 - 120%	---	---	
Surr: 4-Bromofluorobenzene (Surr)		Recovery: 102 %		Limits: 50-150 %		Dilution: 1x						
1,4-Difluorobenzene (Surr)		96 %		50-150 %		"						
Duplicate (0020099-DUP1)		Prepared: 02/04/20 14:30 Analyzed: 02/05/20 05:39										
QC Source Sample: MW-12-0120 (A0B0009-04)												
NWTPH-Gx (MS)												
Gasoline Range Organics	ND	---	5000	ug/L	50	---	ND	---	---	---	30%	
Surr: 4-Bromofluorobenzene (Surr)		Recovery: 98 %		Limits: 50-150 %		Dilution: 1x						
1,4-Difluorobenzene (Surr)		100 %		50-150 %		"						
Duplicate (0020099-DUP2)		Prepared: 02/04/20 14:30 Analyzed: 02/05/20 09:15										
QC Source Sample: MW-22-0120 (A0B0009-11)												
NWTPH-Gx (MS)												
Gasoline Range Organics	4140	---	1000	ug/L	10	---	4320	---	---	4	30%	
Surr: 4-Bromofluorobenzene (Surr)		Recovery: 100 %		Limits: 50-150 %		Dilution: 1x						
1,4-Difluorobenzene (Surr)		99 %		50-150 %		"						

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Lisa Domenighini, Client Services Manager

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6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
EPA ID: OR01039

AMENDED REPORT

SLR Corporation-Bothell

22118 20th Ave SE
Bothell, WA 98021

Project: **Sea-Tac Development Site**

Project Number: **101.02207.00001**

Project Manager: **Mike Staton**

Report ID:

A0B0009 - 02 18 20 0552

QUALITY CONTROL (QC) SAMPLE RESULTS

Gasoline Range Hydrocarbons (Benzene through Naphthalene) by NWTPH-Gx

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 0020140 - EPA 5030B						Water						
Blank (0020140-BLK1)		Prepared: 02/05/20 12:00 Analyzed: 02/05/20 14:39										
NWTPH-Gx (MS)												
Gasoline Range Organics	ND	---	100	ug/L	1	---	---	---	---	---	---	
Surr: 4-Bromofluorobenzene (Sur)		Recovery: 100 %		Limits: 50-150 %		Dilution: 1x						
1,4-Difluorobenzene (Sur)		97 %		50-150 %		"						
LCS (0020140-BS1)		Prepared: 02/05/20 12:00 Analyzed: 02/05/20 13:18										
NWTPH-Gx (MS)												
Gasoline Range Organics	419	---	100	ug/L	1	500	---	84	80 - 120%	---	---	
Surr: 4-Bromofluorobenzene (Sur)		Recovery: 102 %		Limits: 50-150 %		Dilution: 1x						
1,4-Difluorobenzene (Sur)		96 %		50-150 %		"						

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AMENDED REPORT

SLR Corporation-Bothell

22118 20th Ave SE

Bothell, WA 98021

Project: **Sea-Tac Development Site**

Project Number: **101.02207.00001**

Project Manager: **Mike Staton**

Report ID:

A0B0009 - 02 18 20 0552

QUALITY CONTROL (QC) SAMPLE RESULTS

BTEX Compounds by EPA 8260C

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 0020099 - EPA 5030B												
Water												
Blank (0020099-BLK1)												
Prepared: 02/04/20 14:30 Analyzed: 02/05/20 00:13												
EPA 8260C												
Benzene	ND	---	0.200	ug/L	1	---	---	---	---	---	---	
Toluene	ND	---	1.00	ug/L	1	---	---	---	---	---	---	
Ethylbenzene	ND	---	0.500	ug/L	1	---	---	---	---	---	---	
Xylenes, total	ND	---	1.50	ug/L	1	---	---	---	---	---	---	
<i>Surr: 1,4-Difluorobenzene (Surr)</i>												
<i>Recovery: 115 % Limits: 80-120 % Dilution: 1x</i>												
<i>Toluene-d8 (Surr)</i>												
<i>119 % 80-120 % "</i>												
<i>4-Bromofluorobenzene (Surr)</i>												
<i>103 % 80-120 % "</i>												

LCS (0020099-BS1)												
Prepared: 02/04/20 14:30 Analyzed: 02/04/20 23:19												
EPA 8260C												
Benzene	20.5	---	0.200	ug/L	1	20.0	---	102	80 - 120%	---	---	
Toluene	18.4	---	1.00	ug/L	1	20.0	---	92	80 - 120%	---	---	
Ethylbenzene	19.1	---	0.500	ug/L	1	20.0	---	96	80 - 120%	---	---	
Xylenes, total	56.1	---	1.50	ug/L	1	60.0	---	94	80 - 120%	---	---	
<i>Surr: 1,4-Difluorobenzene (Surr)</i>												
<i>Recovery: 112 % Limits: 80-120 % Dilution: 1x</i>												
<i>Toluene-d8 (Surr)</i>												
<i>95 % 80-120 % "</i>												
<i>4-Bromofluorobenzene (Surr)</i>												
<i>99 % 80-120 % "</i>												

Duplicate (0020099-DUP1)												
Prepared: 02/04/20 14:30 Analyzed: 02/05/20 05:39												
QC Source Sample: MW-12-0120 (A0B0009-04)												
EPA 8260C												
Benzene	ND	---	10.0	ug/L	50	---	ND	---	---	---	30%	
Toluene	ND	---	50.0	ug/L	50	---	ND	---	---	---	30%	
Ethylbenzene	ND	---	25.0	ug/L	50	---	ND	---	---	---	30%	
Xylenes, total	ND	---	75.0	ug/L	50	---	ND	---	---	---	30%	
<i>Surr: 1,4-Difluorobenzene (Surr)</i>												
<i>Recovery: 114 % Limits: 80-120 % Dilution: 1x</i>												
<i>Toluene-d8 (Surr)</i>												
<i>99 % 80-120 % "</i>												
<i>4-Bromofluorobenzene (Surr)</i>												
<i>103 % 80-120 % "</i>												

Duplicate (0020099-DUP2)												
Prepared: 02/04/20 14:30 Analyzed: 02/05/20 09:15												
QC Source Sample: MW-22-0120 (A0B0009-11)												
EPA 8260C												

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Lisa Domenighini, Client Services Manager



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6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

EPA ID: OR01039

AMENDED REPORT

SLR Corporation-Bothell

22118 20th Ave SE

Bothell, WA 98021

Project: Sea-Tac Development Site

Project Number: 101.02207.00001

Project Manager: Mike Staton

Report ID:

A0B0009 - 02 18 20 0552

QUALITY CONTROL (QC) SAMPLE RESULTS

BTEX Compounds by EPA 8260C

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 0020099 - EPA 5030B							Water					
Duplicate (0020099-DUP2)		Prepared: 02/04/20 14:30		Analyzed: 02/05/20 09:15								
QC Source Sample: MW-22-0120 (A0B0009-11)												
Benzene	2.85	---	2.00	ug/L	10	---	3.10	---	---	8	30%	
Toluene	ND	---	10.0	ug/L	10	---	ND	---	---	---	30%	
Ethylbenzene	233	---	5.00	ug/L	10	---	247	---	---	6	30%	
Xylenes, total	318	---	15.0	ug/L	10	---	335	---	---	5	30%	
Surr: 1,4-Difluorobenzene (Surr)		Recovery: 113 %		Limits: 80-120 %		Dilution: 1x						
Toluene-d8 (Surr)		99 %		80-120 %		"						
4-Bromofluorobenzene (Surr)		101 %		80-120 %		"						

Matrix Spike (0020099-MS1) Prepared: 02/04/20 14:30 Analyzed: 02/05/20 10:36

QC Source Sample: MW-30-0120 (A0B0009-13)												
EPA 8260C												
Benzene	22.0	---	0.200	ug/L	1	20.0	0.361	108	79 - 120%	---	---	
Toluene	27.8	---	1.00	ug/L	1	20.0	7.86	100	80 - 121%	---	---	
Ethylbenzene	22.4	---	0.500	ug/L	1	20.0	2.30	100	79 - 121%	---	---	
Xylenes, total	73.0	---	1.50	ug/L	1	60.0	10.6	104	79 - 121%	---	---	
Surr: 1,4-Difluorobenzene (Surr)		Recovery: 112 %		Limits: 80-120 %		Dilution: 1x						
Toluene-d8 (Surr)		95 %		80-120 %		"						
4-Bromofluorobenzene (Surr)		94 %		80-120 %		"						

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503-718-2323

EPA ID: OR01039

AMENDED REPORT

SLR Corporation-Bothell

22118 20th Ave SE

Bothell, WA 98021

Project: **Sea-Tac Development Site**

Project Number: **101.02207.00001**

Project Manager: **Mike Staton**

Report ID:

A0B0009 - 02 18 20 0552

QUALITY CONTROL (QC) SAMPLE RESULTS

Selected Volatile Organic Compounds by EPA 8260C

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 0020099 - EPA 5030B												
Water												
Blank (0020099-BLK1)												
Prepared: 02/04/20 14:30 Analyzed: 02/05/20 00:13												
EPA 8260C												
Benzene	ND	0.100	0.200	ug/L	1	---	---	---	---	---	---	
Ethylbenzene	ND	0.250	0.500	ug/L	1	---	---	---	---	---	---	
n-Hexane	ND	1.00	2.00	ug/L	1	---	---	---	---	---	---	
Methyl tert-butyl ether (MTBE)	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
Naphthalene	ND	1.00	2.00	ug/L	1	---	---	---	---	---	---	
Toluene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
Xylenes, total	ND	0.750	1.50	ug/L	1	---	---	---	---	---	---	
<i>Surr: 1,4-Difluorobenzene (Surr)</i>												
<i>Recovery: 115 % Limits: 80-120 % Dilution: 1x</i>												
<i>Toluene-d8 (Surr)</i>												
<i>119 % 80-120 % "</i>												
<i>4-Bromofluorobenzene (Surr)</i>												
<i>103 % 80-120 % "</i>												
LCS (0020099-BS1)												
Prepared: 02/04/20 14:30 Analyzed: 02/04/20 23:19												
EPA 8260C												
Benzene	20.5	0.100	0.200	ug/L	1	20.0	---	102	80 - 120%	---	---	
Ethylbenzene	19.1	0.250	0.500	ug/L	1	20.0	---	96	80 - 120%	---	---	
n-Hexane	20.4	1.00	2.00	ug/L	1	20.0	---	102	80 - 120%	---	---	
Methyl tert-butyl ether (MTBE)	19.1	0.500	1.00	ug/L	1	20.0	---	96	80 - 120%	---	---	
Naphthalene	18.0	1.00	2.00	ug/L	1	20.0	---	90	80 - 120%	---	---	
Toluene	18.4	0.500	1.00	ug/L	1	20.0	---	92	80 - 120%	---	---	
Xylenes, total	56.1	0.750	1.50	ug/L	1	60.0	---	94	80 - 120%	---	---	
<i>Surr: 1,4-Difluorobenzene (Surr)</i>												
<i>Recovery: 112 % Limits: 80-120 % Dilution: 1x</i>												
<i>Toluene-d8 (Surr)</i>												
<i>95 % 80-120 % "</i>												
<i>4-Bromofluorobenzene (Surr)</i>												
<i>99 % 80-120 % "</i>												
Duplicate (0020099-DUP1)												
Prepared: 02/04/20 14:30 Analyzed: 02/05/20 05:39												
QC Source Sample: MW-12-0120 (A0B0009-04)												
EPA 8260C												
Benzene	ND	5.00	10.0	ug/L	50	---	ND	---	---	---	30%	
Ethylbenzene	ND	12.5	25.0	ug/L	50	---	ND	---	---	---	30%	
n-Hexane	ND	50.0	100	ug/L	50	---	ND	---	---	---	30%	
Methyl tert-butyl ether (MTBE)	ND	25.0	50.0	ug/L	50	---	ND	---	---	---	30%	
Naphthalene	ND	50.0	100	ug/L	50	---	ND	---	---	---	30%	
Toluene	ND	25.0	50.0	ug/L	50	---	ND	---	---	---	30%	

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Lisa Domenighini, Client Services Manager



AMENDED REPORT

SLR Corporation-Bothell

22118 20th Ave SE

Bothell, WA 98021

Project: **Sea-Tac Development Site**Project Number: **101.02207.00001**Project Manager: **Mike Staton****Report ID:****A0B0009 - 02 18 20 0552**

QUALITY CONTROL (QC) SAMPLE RESULTS

Selected Volatile Organic Compounds by EPA 8260C

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 0020099 - EPA 5030B							Water					
Duplicate (0020099-DUP1)		Prepared: 02/04/20 14:30 Analyzed: 02/05/20 05:39										
QC Source Sample: MW-12-0120 (A0B0009-04)												
Xylenes, total	ND	37.5	75.0	ug/L	50	---	ND	---	---	---	30%	
Surr: 1,4-Difluorobenzene (Surr)		Recovery: 114 %		Limits: 80-120 %		Dilution: 1x						
Toluene-d8 (Surr)		99 %		80-120 %		"						
4-Bromofluorobenzene (Surr)		103 %		80-120 %		"						
Duplicate (0020099-DUP2)		Prepared: 02/04/20 14:30 Analyzed: 02/05/20 09:15										
QC Source Sample: MW-22-0120 (A0B0009-11)												
EPA 8260C												
Benzene	2.85	1.00	2.00	ug/L	10	---	3.10	---	---	8	30%	
Ethylbenzene	233	2.50	5.00	ug/L	10	---	247	---	---	6	30%	
n-Hexane	ND	10.0	20.0	ug/L	10	---	ND	---	---	---	30%	
Methyl tert-butyl ether (MTBE)	ND	5.00	10.0	ug/L	10	---	ND	---	---	---	30%	
Naphthalene	130	10.0	20.0	ug/L	10	---	130	---	---	0.2	30%	
Toluene	ND	5.00	10.0	ug/L	10	---	ND	---	---	---	30%	
Xylenes, total	318	7.50	15.0	ug/L	10	---	335	---	---	5	30%	
Surr: 1,4-Difluorobenzene (Surr)		Recovery: 113 %		Limits: 80-120 %		Dilution: 1x						
Toluene-d8 (Surr)		99 %		80-120 %		"						
4-Bromofluorobenzene (Surr)		101 %		80-120 %		"						
Matrix Spike (0020099-MS1)		Prepared: 02/04/20 14:30 Analyzed: 02/05/20 10:36										
QC Source Sample: MW-30-0120 (A0B0009-13)												
EPA 8260C												
Benzene	22.0	0.100	0.200	ug/L	1	20.0	0.361	108	79 - 120%	---	---	Q-01
Ethylbenzene	22.4	0.250	0.500	ug/L	1	20.0	2.30	100	79 - 121%	---	---	
n-Hexane	37.2	1.00	2.00	ug/L	1	20.0	7.05	151	48 - 143%	---	---	
Methyl tert-butyl ether (MTBE)	24.2	0.500	1.00	ug/L	1	20.0	ND	121	71 - 124%	---	---	
Naphthalene	26.5	1.00	2.00	ug/L	1	20.0	4.82	108	61 - 128%	---	---	
Toluene	27.8	0.500	1.00	ug/L	1	20.0	7.86	100	80 - 121%	---	---	
Xylenes, total	73.0	0.750	1.50	ug/L	1	60.0	10.6	104	79 - 121%	---	---	
Surr: 1,4-Difluorobenzene (Surr)		Recovery: 112 %		Limits: 80-120 %		Dilution: 1x						
Toluene-d8 (Surr)		95 %		80-120 %		"						
4-Bromofluorobenzene (Surr)		94 %		80-120 %		"						

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Lisa Domenighini, Client Services Manager



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AMENDED REPORT

SLR Corporation-Bothell

22118 20th Ave SE

Bothell, WA 98021

Project: **Sea-Tac Development Site**

Project Number: **101.02207.00001**

Project Manager: **Mike Staton**

Report ID:

A0B0009 - 02 18 20 0552

QUALITY CONTROL (QC) SAMPLE RESULTS

Selected Volatile Organic Compounds by EPA 8260C

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 0020099 - EPA 5030B							Water					

Apex Laboratories

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AMENDED REPORT

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22118 20th Ave SE

Bothell, WA 98021

Project: Sea-Tac Development Site

Project Number: 101.02207.00001

Project Manager: Mike Staton

Report ID:

A0B0009 - 02 18 20 0552

QUALITY CONTROL (QC) SAMPLE RESULTS

Selected Volatile Organic Compounds by EPA 8260C

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 0020140 - EPA 5030B						Water						
Blank (0020140-BLK1)		Prepared: 02/05/20 12:00		Analyzed: 02/05/20 14:39								
EPA 8260C												
Benzene	ND	0.100	0.200	ug/L	1	---	---	---	---	---	---	
1,2-Dibromoethane (EDB)	ND	0.250	0.500	ug/L	1	---	---	---	---	---	---	
1,2-Dichloroethane (EDC)	ND	0.250	0.500	ug/L	1	---	---	---	---	---	---	
Ethylbenzene	ND	0.250	0.500	ug/L	1	---	---	---	---	---	---	
n-Hexane	ND	1.00	2.00	ug/L	1	---	---	---	---	---	---	
Isopropylbenzene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
Methyl tert-butyl ether (MTBE)	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
Naphthalene	ND	1.00	2.00	ug/L	1	---	---	---	---	---	---	
Toluene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
1,2,4-Trimethylbenzene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
1,3,5-Trimethylbenzene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
Xylenes, total	ND	0.750	1.50	ug/L	1	---	---	---	---	---	---	
Surr: 1,4-Difluorobenzene (Surr)		Recovery: 118 %		Limits: 80-120 %		Dilution: 1x						
Toluene-d8 (Surr)		98 %		80-120 %		"						
4-Bromofluorobenzene (Surr)		106 %		80-120 %		"						

LCS (0020140-BS2)

Prepared: 02/05/20 12:00 Analyzed: 02/05/20 13:45

EPA 8260C												
Benzene	21.4	0.100	0.200	ug/L	1	20.0	---	107	80 - 120%	---	---	
1,2-Dibromoethane (EDB)	21.8	0.250	0.500	ug/L	1	20.0	---	109	80 - 120%	---	---	
1,2-Dichloroethane (EDC)	18.9	0.250	0.500	ug/L	1	20.0	---	94	80 - 120%	---	---	
Ethylbenzene	18.7	0.250	0.500	ug/L	1	20.0	---	94	80 - 120%	---	---	
n-Hexane	23.5	1.00	2.00	ug/L	1	20.0	---	117	80 - 120%	---	---	
Isopropylbenzene	18.9	0.500	1.00	ug/L	1	20.0	---	95	80 - 120%	---	---	
Methyl tert-butyl ether (MTBE)	19.7	0.500	1.00	ug/L	1	20.0	---	98	80 - 120%	---	---	
Naphthalene	18.8	1.00	2.00	ug/L	1	20.0	---	94	80 - 120%	---	---	
Toluene	18.5	0.500	1.00	ug/L	1	20.0	---	92	80 - 120%	---	---	
1,2,4-Trimethylbenzene	19.6	0.500	1.00	ug/L	1	20.0	---	98	80 - 120%	---	---	
1,3,5-Trimethylbenzene	19.2	0.500	1.00	ug/L	1	20.0	---	96	80 - 120%	---	---	
Xylenes, total	55.2	0.750	1.50	ug/L	1	60.0	---	92	80 - 120%	---	---	
Surr: 1,4-Difluorobenzene (Surr)		Recovery: 114 %		Limits: 80-120 %		Dilution: 1x						
Toluene-d8 (Surr)		94 %		80-120 %		"						
4-Bromofluorobenzene (Surr)		99 %		80-120 %		"						

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Lisa Domenighini

Lisa Domenighini, Client Services Manager



Apex Laboratories, LLC

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

EPA ID: OR01039

AMENDED REPORT

SLR Corporation-Bothell

22118 20th Ave SE

Bothell, WA 98021

Project: **Sea-Tac Development Site**

Project Number: **101.02207.00001**

Project Manager: **Mike Staton**

Report ID:

A0B0009 - 02 18 20 0552

QUALITY CONTROL (QC) SAMPLE RESULTS

Selected Volatile Organic Compounds by EPA 8260C

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 0020140 - EPA 5030B							Water					

Apex Laboratories

Lisa Domenighini, Client Services Manager

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Apex Laboratories, LLC

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

EPA ID: OR01039

AMENDED REPORT

SLR Corporation-Bothell

22118 20th Ave SE

Bothell, WA 98021

Project: Sea-Tac Development Site

Project Number: 101.02207.00001

Project Manager: Mike Staton

Report ID:

A0B0009 - 02 18 20 0552

QUALITY CONTROL (QC) SAMPLE RESULTS

1,2-Dibromoethane (EDB) by EPA 8260C SIM

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 0020203 - EPA 5030B						Water						
Blank (0020203-BLK1)		Prepared: 02/06/20 14:33 Analyzed: 02/06/20 16:28										
EPA 8260C SIM												
1,2-Dibromoethane (EDB)	ND	0.0100	0.0200	ug/L	1	---	---	---	---	---	---	
Surr: 1,4-Difluorobenzene (Surr)		Recovery: 91 %		Limits: 70-130 %		Dilution: 1x						
Toluene-d8 (Surr)		99 %		70-130 %		"						
4-Bromofluorobenzene (Surr)		98 %		70-130 %		"						
LCS (0020203-BS1)		Prepared: 02/06/20 14:33 Analyzed: 02/06/20 16:00										
EPA 8260C SIM												
1,2-Dibromoethane (EDB)	0.210	0.0100	0.0200	ug/L	1	0.200	---	105	80 - 120%	---	---	
Surr: 1,4-Difluorobenzene (Surr)		Recovery: 92 %		Limits: 70-130 %		Dilution: 1x						
Toluene-d8 (Surr)		99 %		70-130 %		"						
4-Bromofluorobenzene (Surr)		95 %		70-130 %		"						
Duplicate (0020203-DUP1)		Prepared: 02/06/20 14:33 Analyzed: 02/06/20 18:43										
QC Source Sample: MW-09-0120 (A0B0009-03)												
EPA 8260C SIM												
1,2-Dibromoethane (EDB)	ND	0.0100	0.0200	ug/L	1	---	ND	---	---	---	30%	
Surr: 1,4-Difluorobenzene (Surr)		Recovery: 91 %		Limits: 70-130 %		Dilution: 1x						
Toluene-d8 (Surr)		100 %		70-130 %		"						
4-Bromofluorobenzene (Surr)		99 %		70-130 %		"						
Matrix Spike (0020203-MS1)		Prepared: 02/06/20 14:33 Analyzed: 02/06/20 17:22										
QC Source Sample: MW-06-0120 (A0B0009-01)												
EPA 8260C SIM												
1,2-Dibromoethane (EDB)	0.159	0.0100	0.0200	ug/L	1	0.200	ND	79	77 - 121%	---	---	
Surr: 1,4-Difluorobenzene (Surr)		Recovery: 94 %		Limits: 70-130 %		Dilution: 1x						
Toluene-d8 (Surr)		101 %		70-130 %		"						
4-Bromofluorobenzene (Surr)		98 %		70-130 %		"						

Apex Laboratories

Lisa A. Domenighini

Lisa Domenighini, Client Services Manager

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AMENDED REPORT

SLR Corporation-Bothell

22118 20th Ave SE

Bothell, WA 98021

Project: Sea-Tac Development Site

Project Number: 101.02207.00001

Project Manager: Mike Staton

Report ID:

A0B0009 - 02 18 20 0552

SAMPLE PREPARATION INFORMATION

Diesel and/or Oil Hydrocarbons by NWTPH-Dx with Silica Gel Column Cleanup

Prep: EPA 3510C (Fuels/Acid Ext.)

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 0020114							
A0B0009-02	Water	NWTPH-Dx/SGC	01/29/20 14:35	02/05/20 06:57			1.01
A0B0009-04	Water	NWTPH-Dx/SGC	01/29/20 13:39	02/05/20 06:57			0.97
A0B0009-07	Water	NWTPH-Dx/SGC	01/30/20 10:31	02/05/20 06:57			1.00
A0B0009-11	Water	NWTPH-Dx/SGC	01/29/20 11:12	02/05/20 06:57			0.95
A0B0009-13	Water	NWTPH-Dx/SGC	01/29/20 14:35	02/05/20 12:48			1.08

Gasoline Range Hydrocarbons (Benzene through Naphthalene) by NWTPH-Gx

Prep: EPA 5030B

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 0020099							
A0B0009-01	Water	NWTPH-Gx (MS)	01/30/20 09:30	02/04/20 14:30	5mL/5mL	5mL/5mL	1.00
A0B0009-02	Water	NWTPH-Gx (MS)	01/29/20 14:35	02/04/20 14:30	5mL/5mL	5mL/5mL	1.00
A0B0009-03	Water	NWTPH-Gx (MS)	01/30/20 12:18	02/04/20 14:30	5mL/5mL	5mL/5mL	1.00
A0B0009-05	Water	NWTPH-Gx (MS)	01/30/20 11:29	02/04/20 14:30	5mL/5mL	5mL/5mL	1.00
A0B0009-06	Water	NWTPH-Gx (MS)	01/30/20 13:24	02/04/20 14:30	5mL/5mL	5mL/5mL	1.00
A0B0009-07	Water	NWTPH-Gx (MS)	01/30/20 10:31	02/04/20 14:30	5mL/5mL	5mL/5mL	1.00
A0B0009-08	Water	NWTPH-Gx (MS)	01/30/20 08:46	02/04/20 14:30	5mL/5mL	5mL/5mL	1.00
A0B0009-09	Water	NWTPH-Gx (MS)	01/30/20 14:34	02/04/20 14:30	5mL/5mL	5mL/5mL	1.00
A0B0009-10	Water	NWTPH-Gx (MS)	01/30/20 15:38	02/04/20 14:30	5mL/5mL	5mL/5mL	1.00
A0B0009-11	Water	NWTPH-Gx (MS)	01/29/20 11:12	02/04/20 14:30	5mL/5mL	5mL/5mL	1.00
A0B0009-12	Water	NWTPH-Gx (MS)	01/29/20 12:27	02/04/20 14:30	5mL/5mL	5mL/5mL	1.00
A0B0009-13	Water	NWTPH-Gx (MS)	01/29/20 14:35	02/04/20 14:30	5mL/5mL	5mL/5mL	1.00
A0B0009-14	Water	NWTPH-Gx (MS)	01/30/20 14:45	02/04/20 14:30	5mL/5mL	5mL/5mL	1.00
A0B0009-15	Water	NWTPH-Gx (MS)	01/30/20 00:00	02/04/20 14:30	5mL/5mL	5mL/5mL	1.00
Batch: 0020140							
A0B0009-04RE1	Water	NWTPH-Gx (MS)	01/29/20 13:39	02/05/20 14:40	5mL/5mL	5mL/5mL	1.00

BTEX Compounds by EPA 8260C

Prep: EPA 5030B

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 0020099							
A0B0009-15	Water	EPA 8260C	01/30/20 00:00	02/04/20 14:30	5mL/5mL	5mL/5mL	1.00

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Lisa Domenighini, Client Services Manager



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Tigard, OR 97223

503-718-2323

EPA ID: OR01039

AMENDED REPORT

SLR Corporation-Bothell

22118 20th Ave SE

Bothell, WA 98021

Project: **Sea-Tac Development Site**

Project Number: **101.02207.00001**

Project Manager: **Mike Staton**

Report ID:

A0B0009 - 02 18 20 0552

SAMPLE PREPARATION INFORMATION

Selected Volatile Organic Compounds by EPA 8260C

Prep: EPA 5030B

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
<u>Batch: 0020099</u>							
A0B0009-01	Water	EPA 8260C	01/30/20 09:30	02/04/20 14:30	5mL/5mL	5mL/5mL	1.00
A0B0009-02	Water	EPA 8260C	01/29/20 14:35	02/04/20 14:30	5mL/5mL	5mL/5mL	1.00
A0B0009-03	Water	EPA 8260C	01/30/20 12:18	02/04/20 14:30	5mL/5mL	5mL/5mL	1.00
A0B0009-05	Water	EPA 8260C	01/30/20 11:29	02/04/20 14:30	5mL/5mL	5mL/5mL	1.00
A0B0009-06	Water	EPA 8260C	01/30/20 13:24	02/04/20 14:30	5mL/5mL	5mL/5mL	1.00
A0B0009-07	Water	EPA 8260C	01/30/20 10:31	02/04/20 14:30	5mL/5mL	5mL/5mL	1.00
A0B0009-08	Water	EPA 8260C	01/30/20 08:46	02/04/20 14:30	5mL/5mL	5mL/5mL	1.00
A0B0009-09	Water	EPA 8260C	01/30/20 14:34	02/04/20 14:30	5mL/5mL	5mL/5mL	1.00
A0B0009-10	Water	EPA 8260C	01/30/20 15:38	02/04/20 14:30	5mL/5mL	5mL/5mL	1.00
A0B0009-11	Water	EPA 8260C	01/29/20 11:12	02/04/20 14:30	5mL/5mL	5mL/5mL	1.00
A0B0009-12	Water	EPA 8260C	01/29/20 12:27	02/04/20 14:30	5mL/5mL	5mL/5mL	1.00
A0B0009-13	Water	EPA 8260C	01/29/20 14:35	02/04/20 14:30	5mL/5mL	5mL/5mL	1.00
A0B0009-14	Water	EPA 8260C	01/30/20 14:45	02/04/20 14:30	5mL/5mL	5mL/5mL	1.00
<u>Batch: 0020140</u>							
A0B0009-04RE1	Water	EPA 8260C	01/29/20 13:39	02/05/20 14:40	5mL/5mL	5mL/5mL	1.00

1,2-Dibromoethane (EDB) by EPA 8260C SIM

Prep: EPA 5030B

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
<u>Batch: 0020203</u>							
A0B0009-01	Water	EPA 8260C SIM	01/30/20 09:30	02/06/20 14:33	5mL/5mL	5mL/5mL	1.00
A0B0009-02	Water	EPA 8260C SIM	01/29/20 14:35	02/06/20 14:33	5mL/5mL	5mL/5mL	1.00
A0B0009-03	Water	EPA 8260C SIM	01/30/20 12:18	02/06/20 14:33	5mL/5mL	5mL/5mL	1.00
A0B0009-04	Water	EPA 8260C SIM	01/29/20 13:39	02/06/20 14:33	5mL/5mL	5mL/5mL	1.00
A0B0009-05	Water	EPA 8260C SIM	01/30/20 11:29	02/06/20 14:33	5mL/5mL	5mL/5mL	1.00
A0B0009-06	Water	EPA 8260C SIM	01/30/20 13:24	02/06/20 14:33	5mL/5mL	5mL/5mL	1.00
A0B0009-07	Water	EPA 8260C SIM	01/30/20 10:31	02/06/20 14:33	5mL/5mL	5mL/5mL	1.00
A0B0009-08	Water	EPA 8260C SIM	01/30/20 08:46	02/06/20 14:33	5mL/5mL	5mL/5mL	1.00
A0B0009-09	Water	EPA 8260C SIM	01/30/20 14:34	02/06/20 14:33	5mL/5mL	5mL/5mL	1.00
A0B0009-10	Water	EPA 8260C SIM	01/30/20 15:38	02/06/20 14:33	5mL/5mL	5mL/5mL	1.00
A0B0009-12	Water	EPA 8260C SIM	01/29/20 12:27	02/06/20 14:33	5mL/5mL	5mL/5mL	1.00
A0B0009-13	Water	EPA 8260C SIM	01/29/20 14:35	02/06/20 14:33	5mL/5mL	5mL/5mL	1.00
A0B0009-14	Water	EPA 8260C SIM	01/30/20 14:45	02/06/20 14:33	5mL/5mL	5mL/5mL	1.00

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EPA ID: OR01039

AMENDED REPORT

SLR Corporation-Bothell

22118 20th Ave SE

Bothell, WA 98021

Project: **Sea-Tac Development Site**

Project Number: **101.02207.00001**

Project Manager: **Mike Staton**

Report ID:

A0B0009 - 02 18 20 0552

QUALIFIER DEFINITIONS

Client Sample and Quality Control (QC) Sample Qualifier Definitions:

Apex Laboratories

- F-18** Result for Diesel (Diesel Range Organics, C12-C24) is due to overlap from Gasoline or a Gasoline Range product.
- J** Estimated Result. Result detected below the lowest point of the calibration curve, but above the specified MDL.
- Q-01** Spike recovery and/or RPD is outside acceptance limits.
- Q-19** Blank Spike Duplicate (BSD) sample analyzed in place of Matrix Spike/Duplicate samples due to limited sample amount available for analysis.
- Q-42** Matrix Spike and/or Duplicate analysis was performed on this sample. % Recovery or RPD for this analyte is outside laboratory control limits. (Refer to the QC Section of Analytical Report.)

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REPORTING NOTES AND CONVENTIONS:

Abbreviations:

DET Analyte DETECTED at or above the detection or reporting limit.
ND Analyte NOT DETECTED at or above the detection or reporting limit.
NR Result Not Reported.
RPD Relative Percent Difference. RPDs for Matrix Spikes and Matrix Spike Duplicates are based on concentration, not recovery.

Detection Limits: Limit of Detection (LOD)

Limits of Detection (LODs) are normally set at a level of one half the validated Limit of Quantitation (LOQ).

If no value is listed ('-----'), then the data has not been evaluated below the Reporting Limit.

Reporting Limits: Limit of Quantitation (LOQ)

Validated Limits of Quantitation (LOQs) are reported as the Reporting Limits for all analyses where the LOQ, MRL, PQL or CRL are requested. The LOQ represents a level at or above the low point of the calibration curve, that has been validated according to Apex Laboratories' comprehensive LOQ policies and procedures.

Reporting Conventions:

Basis: Results for soil samples are generally reported on a 100% dry weight basis.
The Result Basis is listed following the units as "dry", "wet", or " " (blank) designation.

"dry" Sample results and Reporting Limits are reported on a dry weight basis. (i.e. "ug/kg dry")
See Percent Solids section for details of dry weight analysis.

"wet" Sample results and Reporting Limits for this analysis are normally dry weight corrected, but have not been modified in this case.

" " Results without 'wet' or 'dry' designation are not normally dry weight corrected. These results are considered 'As Received'.

QC Source:

In cases where there is insufficient sample provided for Sample Duplicates and/or Matrix Spikes, a Lab Control Sample Duplicate (LCS Dup) may be analyzed to demonstrate accuracy and precision of the extraction batch.

Non-Client Batch QC Samples (Duplicates and Matrix Spike/Duplicates) are not included in this report. Please request a Full QC report if this data is required.

Miscellaneous Notes:

" --- " QC results are not applicable. For example, % Recoveries for Blanks and Duplicates, % RPD for Blanks, Blank Spikes and Matrix Spikes, etc.

" *** " Used to indicate a possible discrepancy with the Sample and Sample Duplicate results when the %RPD is not available. In this case, either the Sample or the Sample Duplicate has a reportable result for this analyte, while the other is Non Detect (ND).

Blanks:

Standard practice is to evaluate the results from Blank QC Samples down to a level equal to ½ the Reporting Limit (RL).
-For Blank hits falling between ½ the RL and the RL (J flagged hits), the associated sample and QC data will receive a 'B-02' qualifier.
-For Blank hits above the RL, the associated sample and QC data will receive a 'B' qualifier, per Apex Laboratories' Blank Policy.
For further details, please request a copy of this document.

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Project Manager: Mike Staton

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REPORTING NOTES AND CONVENTIONS (Cont.):

Blanks (Cont.):

Sample results flagged with a 'B' or 'B-02' qualifier are potentially biased high if the sample results are less than ten times the level found in the blank for inorganic analyses, or less than five times the level found in the blank for organic analyses.

'B' and 'B-02' qualifications are only applied to sample results detected above the Reporting Level.

Preparation Notes:

Mixed Matrix Samples:

Water Samples:

Water samples containing significant amounts of sediment are decanted or separated prior to extraction, and only the water portion analyzed, unless otherwise directed by the client.

Soil and Sediment Samples:

Soil and Sediment samples containing significant amounts of water are decanted prior to extraction, and only the solid portion analyzed, unless otherwise directed by the client.

Sampling and Preservation Notes:

Certain regulatory programs, such as National Pollutant Discharge Elimination System (NPDES), require that activities such as sample filtration (for dissolved metals, orthophosphate, hexavalent chromium, etc.) and testing of short hold analytes (pH, Dissolved Oxygen, etc.) be performed in the field (on-site) within a short time window. In addition, sample matrix spikes are required for some analyses, and sufficient volume must be provided, and billable site specific QC requested, if this is required. All regulatory permits should be reviewed to ensure that these requirements are being met.

Data users should be aware of which regulations pertain to the samples they submit for testing. If related sample collection activities are not approved for a particular regulatory program, results should be considered estimates. Apex Laboratories will qualify these analytes according to the most stringent requirements, however results for samples that are for non-regulatory purposes may be acceptable.

Samples that have been filtered and preserved at Apex Laboratories per client request are listed in the preparation section of the report with the date and time of filtration listed.

Apex Laboratories maintains detailed records on sample receipt, including client label verification, cooler temperature, sample preservation, hold time compliance and field filtration. Data is qualified as necessary, and the lack of qualification indicates compliance with required parameters.

Apex Laboratories

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Project: **Sea-Tac Development Site**

Project Number: **101.02207.00001**

Project Manager: **Mike Staton**

Report ID:

A0B0009 - 02 18 20 0552

LABORATORY ACCREDITATION INFORMATION

TNI Certification ID: OR100062 (Primary Accreditation) - EPA ID: OR01039

All methods and analytes reported from work performed at Apex Laboratories are included on Apex Laboratories' ORELAP Scope of Certification, with the exception of any analyte(s) listed below:

Apex Laboratories

Matrix	Analysis	TNI_ID	Analyte	TNI_ID	Accreditation
<u>All reported analytes are included in Apex Laboratories' current ORELAP scope.</u>					

Secondary Accreditations

Apex Laboratories also maintains reciprocal accreditation with non-TNI states (Washington DOE), as well as other state specific accreditations not listed here.

Subcontract Laboratory Accreditations

Subcontracted data falls outside of Apex Laboratories' Scope of Accreditation.

Please see the Subcontract Laboratory report for full details, or contact your Project Manager for more information.

Field Testing Parameters

Results for Field Tested data are provided by the client or sampler, and fall outside of Apex Laboratories' Scope of Accreditation.

Apex Laboratories

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503-718-2323

EPA ID: OR01039

SLR Corporation-Bothell

22118 20th Ave SE

Bothell, WA 98021

Project: Sea-Tac Development SiteProject Number: 101.02207.00001Project Manager: Mike Staton

Report ID:

A0B0009 - 02 18 20 0552

APEX LABS COOLER RECEIPT FORM

Client: SLR Element WO#: A0 B0009Project/Project #: SeaTac Development Site

Delivery Info:

Date/time received: 2/1/20 @ 11:00 By: NRPDelivered by: Apex ☐ Client ☐ ESS ☐ FedEx ☒ UPS ☐ Swift ☐ Senvoy ☐ SDS ☐ Other ☐Cooler Inspection Date/time inspected: 2/1/20 @ 11:05 By: NRPChain of Custody included? Yes ☒ No ☐ Custody seals? Yes ☐ No ☒Signed/dated by client? Yes ☒ No ☐Signed/dated by Apex? Yes ☒ No ☐

	Cooler #1	Cooler #2	Cooler #3	Cooler #4	Cooler #5	Cooler #6	Cooler #7
Temperature (°C)	<u>1.9</u>	<u>2.3</u>	<u>3.3</u>	<u>4.1</u>	<u>5.1</u>		
Received on ice? (Y/N)	<u>Y</u>	<u>Y</u>	<u>Y</u>	<u>Y</u>	<u>Y</u>		
Temp. blanks? (Y/N)	<u>Y</u>	<u>Y</u>	<u>Y</u>	<u>Y</u>	<u>Y</u>		
Ice type: (Gel/Real/Other)	<u>Real</u>	<u>Real</u>	<u>Real</u>	<u>Real</u>	<u>Real</u>		
Condition:	<u>Good</u>	<u>Good</u>	<u>Good</u>	<u>Good</u>	<u>Good</u>		

Cooler out of temp? (Y/N) Possible reason why:

If some coolers are in temp and some out, were green dots applied to out of temperature samples? Yes/No/NA

Out of temperature samples form initiated? Yes/No/NA

Samples Inspection: Date/time inspected: 2-3-20 @ 12:06 By: TAGAll samples intact? Yes ☒ No ☐ Comments:Bottle labels/COCs agree? Yes ☒ No ☐ Comments:COC/container discrepancies form initiated? Yes ☐ No ☐ NA ☒Containers/volumes received appropriate for analysis? Yes ☒ No ☐ Comments:Do VOA vials have visible headspace? Yes ☐ No ☒ NA ☐

Comments:

Water samples: pH checked: Yes ☒ No ☐ NA ☐ pH appropriate? Yes ☒ No ☐ NA ☐

Comments:

Additional information: TB #2209, 2148, 2233Master # 3900 7849 0470

Labeled by:

TAG

Witness:

AD

Cooler Inspected by:

NRP

See Project Contact Form: Y

Apex Laboratories

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