CONFRIMATIONAL GROUNDWATER MONITORING REPORT
July 2023 Sampling Event

SeaTac Development Site (MasterPark Lot C Property)
SeaTac, Washington

August 30, 2023

Prepared for

SeaTac Investments, LLC
Scarsella Bros., Inc.

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Confirmational Groundwater Monitoring Report
July 2023 Sampling Event
SeaTac Development Site
SeaTac, Washington

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LANDAU ASSOCIATES

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LIST OF ABBREVIATIONS AND ACRONYMS

µg/L ..... micrograms per liter
Apex ..... Apex Laboratories, LLC
BTEX ..... benzene, toluene, ethylbenzene, and xylenes
CMP ..... compliance monitoring plan
COC ..... contaminant of concern
DO ..... dissolved oxygen
Ecology ..... Washington Department of Ecology
EDB 1,2-dibromoethane
EPA ..... US Environmental Protection Agency
ft ..... feet, foot
Golder ..... Golder Associates, Inc.
GRO ..... gasoline-range organics
IAS/SVE ..... *in situ* air sparging and soil vapor extraction
Landau ..... Landau Associates, Inc.
MDL ..... method detection limit
mg/L ..... milligrams per liter
MRL ..... method reporting limit
MSL ..... mean sea level
MTCA ..... Model Toxics Control Act
ORP ..... oxidation reduction potential
Site ..... SeaTac Development Site (MasterPark Lot C Property)
SLR ..... SLR International Corporation
subject property ..... 16025 International Boulevard, SeaTac, Washington

1.0 INTRODUCTION

On July 31 and August 1, 2023, Landau Associates, Inc. (Landau) conducted quarterly confirmational groundwater monitoring at the SeaTac Development Site (Site), which is primarily located at 16025 International Boulevard in SeaTac, Washington (subject property). The location of the subject property, which is occupied by the MasterPark Lot C parking lot, is shown on Figure 1.

An *in situ* air sparging and soil vapor extraction (IAS/SVE) system was operated at the Site by Golder Associates, Inc. (Golder) from approximately May to July 2013, and December 2013 through July 2017 to remediate petroleum hydrocarbon-impacted groundwater. After the IAS/SVE system was deactivated in July 2017, performance groundwater monitoring was conducted on a semiannual basis from November 2017 through July 2019 to monitor changes in the petroleum hydrocarbon concentrations over time. The results of the performance groundwater monitoring showed that petroleum hydrocarbon concentrations in the groundwater beneath the northern and northwestern parts of the subject property remained above the Model Toxics Control Act (MTCA) Method A cleanup levels by July 2019 (SLR International Corporation [SLR] 2019). To reduce the remaining petroleum hydrocarbon concentrations in groundwater, SLR reactivated the IAS/SVE system on September 5, 2019. The system was operated through July 15, 2020, when it was deactivated prior to the July 2020 performance groundwater monitoring event. Based on the results of the January and July 2020 performance groundwater monitoring events (SLR 2020a, b), it appeared that the IAS/SVE system had effectively reduced the petroleum hydrocarbon concentrations in the groundwater beneath the subject property to levels that should naturally attenuate to below cleanup levels within a reasonable time frame. Therefore, the IAS/SVE system was not reactivated after the July 2020 performance groundwater monitoring event.

In accordance with the Compliance Monitoring Plan (CMP; Golder 2011) for the Site, the confirmational groundwater monitoring program has been conducted to evaluate the potential rebound of contaminant concentrations after the deactivation of the IAS/SVE system, and, if there is minimal rebound, to demonstrate that the contaminant concentrations have been reduced to below the cleanup levels or to concentrations that will naturally attenuate to below the cleanup levels within a reasonable time frame. The first four quarterly confirmational groundwater monitoring events were conducted in October 2020, January 2021, April 2021, and July 2021. The groundwater sample analytical results showed that there was some localized rebound of the gasoline-range organics (GRO) concentrations at monitoring wells MW-07, MW-12, and MW-22; however, the GRO concentrations were not at levels that justified reactivation of the IAS/SVE system (SLR 2020d, 2021a, b, c).

The first semiannual confirmational groundwater monitoring event was conducted in January 2022 in accordance with the CMP for the Site, as well as with the modifications to the confirmational groundwater monitoring program (SLR 2020c) that were approved by the Washington State Department of Ecology (Ecology; 2020). The groundwater sample analytical results showed that the sample from well MW-07 contained a GRO concentration that exceeded the MTCA Method A cleanup level. The groundwater samples from the other sampled wells did not contain analyte concentrations greater than the Method A or Method B cleanup levels (SLR 2022a).

The second semiannual confirmational groundwater monitoring event was conducted in July 2022. None of the groundwater samples contained analyte concentrations greater than the MTCA Method A or Method B cleanup levels (SLR 2022b). Because there were no groundwater contaminant of concern (COC) concentrations greater than the Site cleanup levels, SLR verbally requested to Ecology that the confirmational groundwater monitoring proceed on a quarterly basis and that the July 2022 sampling event be considered the first quarterly sampling event, with subsequent sampling events to be conducted in October 2022, January 2023, and April 2023. To support that request, SLR formally requested modifications to the confirmational groundwater monitoring program (Staton 2022). On October 10, 2022, Ecology agreed with the requested changes to the confirmational groundwater monitoring program as long as the groundwater COC concentrations remain below the Site cleanup levels (Atkins 2022).

The groundwater sample analytical results from the October 2022 and January 2023 quarterly monitoring events showed that none of the samples contained analyte concentrations greater than the Site cleanup levels (SLR 2023a, b). The groundwater sample analytical results from the April 2023 quarterly monitoring event showed that samples collected from only one location, MW-12, contained analyte concentrations greater than Site cleanup levels (SLR 2023c). The sample from MW-12 contained a benzene concentration (7.02 micrograms per liter [µg/L]) that exceeded the cleanup level; a duplicate sample collected from MW-12 contained a GRO concentration (0.90 milligrams [mg/L]) and a benzene concentration (8.04 µg/L) that exceeded the cleanup levels. Because the four quarterly confirmational sampling event results showed that the contaminant concentrations have been reduced to below the cleanup levels or, at one localized area, to concentrations that will naturally attenuate to below the cleanup levels within a reasonable time frame, Landau formally requested Ecology's approval to discontinue the groundwater monitoring program at the Site to conclude the confirmational groundwater monitoring phase and proceed with Site closure (Landau 2023). The request letter also emphasized that there is already a restrictive covenant in place for the subject property that states that "No groundwater may be taken for any use from the property excepting for purposes required by possible remedial actions." Ecology agreed to review the request but asked that the July 2023 quarterly confirmational groundwater monitoring event be conducted in the meantime. The results of the July 2023 monitoring event are reported in the following sections.

2.0 JULY 2023 GROUNDWATER MONITORING EVENT

On July 31 and August 1, 2023, Landau personnel collected groundwater samples from monitoring wells MW-07, MW-09, MW-12, MW-13, MW-16, MW-17A, and MW-18. A sample could not be collected from PORT-MW-B due to access restrictions. The locations of the groundwater monitoring wells that are included in the confirmational groundwater monitoring program are shown on Figure 2. Wells MW-15 and MW-22 are only sampled on an annual basis during the January events and were not sampled during this event.

Prior to collecting the groundwater samples, Landau personnel measured the depths to groundwater in Site monitoring wells (with the exception of those located within South 160th Street due to access restrictions) by using an electronic water level meter. During sample collection, Landau used the existing dedicated submersible bladder pumping system located in each well to purge approximately 1.0–2.0 gallons of water from the well. The pH, specific conductance, temperature, oxidation reduction potential (ORP), dissolved oxygen (DO), and turbidity of the extracted water were measured approximately every 3 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, LLC (Apex) of Tigard, Oregon. Landau documented the groundwater purging and sampling activities on Low-Flow Groundwater Sampling Field Data Sheets, which are presented in Appendix A.

In accordance with the CMP and the modifications to the confirmational groundwater monitoring program, the groundwater samples were submitted to Apex for analysis of the groundwater COCs for the Site (benzene, toluene, ethylbenzene, total xylenes [BTEX], naphthalene, and n-hexane by US Environmental Protection Agency [EPA] Method 8260D; 1,2-dibromoethane [EDB] by EPA Method 8260D selected ion monitoring; and GRO by Ecology Method NWTPH-Gx).

The sampling purge water is stored in properly labeled 55-gallon drums at the subject property. The water will be transported to a licensed facility for off-site treatment and disposal.

2.1 Groundwater Monitoring Results

On July 31, 2023, the depths to groundwater in the monitoring wells ranged from 46.53 to 107.20 feet (ft) below the top of each well casing. The groundwater elevations in the wells ranged from 309.41 to 312.65 ft above mean sea level (MSL). The depth to groundwater measurements and groundwater elevations in the monitoring wells on July 31, 2023, are presented in Table 2.

Based on the groundwater elevations on July 31, 2023, the general groundwater flow direction beneath the subject property area was primarily to the west and southwest. Due to an anomalous depth to groundwater measurement, the groundwater elevation in MW-01 was not used to evaluate the groundwater flow direction. MW-01 is screened less than 3 ft below the high seasonal groundwater table and is frequently dry. The groundwater elevation in MW-10 was also not used to evaluate the groundwater flow direction because the top of the well screen was more than 30 ft below the

groundwater table. A groundwater elevation contour map of the data collected on July 31, 2023, is presented on Figure 3.

2.2 Groundwater Sample Analytical Results

The groundwater sample analytical results showed that the sample from MW-12 contained a GRO concentration (1.05 mg/L) that exceeded the MTCA Method A cleanup level (0.80 mg/L when benzene is present); however, a duplicate sample collected from MW-12 contained a GRO concentration (0.76 mg/L) that was below the cleanup level. The groundwater samples from MW-07, MW-09, MW-13, MW-16, MW-17A, and MW-18 did not contain analyte concentrations greater than the MTCA Method A or Method B cleanup levels. A Method B cleanup level was only used if a Method A cleanup level was not available for an analyte.

The groundwater samples collected from wells MW-07, MW-13, and MW-18 contained at least one analyte concentration above the laboratory's method reporting limits (MRLs); however, the detected concentrations were below the MTCA Method A or Method B cleanup levels. The samples collected from wells MW-09, MW-16, and MW-17A did not contain any analyte concentrations greater than the MRLs. EDB was not detected at or above the laboratory's method detection limits (MDLs) in any of the groundwater samples; however, the MDLs exceeded the Method A cleanup level in all samples.

The July 2023 groundwater sample analytical results are presented in Table 1, and the GRO and benzene concentrations are also presented on Figure 2. The groundwater sample analytical results from the July 2023 monitoring event, as well as from the previous groundwater monitoring events (groundwater COCs only), are presented in data tables and on trend plots in Appendix B. The laboratory report from the July 2023 sampling event is included in Appendix C.

3.0 DATA QUALITY ASSURANCE AND VALIDATION

Based on the results of a data validation review, the groundwater sample analytical data were acceptable with data qualifications. The naphthalene and n-hexane results for several samples were J or UJ qualified due to continuing calibration and laboratory control sample recoveries outside control limits. The analytical results of the duplicate sample (MW-32-0723) and its corresponding parent sample (MW-12-0723) were J or UJ qualified for GRO, benzene, toluene, total xylenes, and naphthalene due to high relative percentage differences.

Landau collected an equipment blank sample, and a trip blank sample was provided by the laboratory. Both samples were analyzed for BTEX and GRO. The analytical results showed that the equipment blank and trip blank samples did not contain any analyte concentrations greater than the MDLs, indicating detected concentrations in the samples were not affected by potential field contamination.

4.0 CONCLUSIONS

On July 31 and August 1, 2023, Landau conducted a quarterly confirmational groundwater monitoring event at the SeaTac Development Site. The objectives of the confirmational groundwater monitoring program are to evaluate the potential rebound of contaminant concentrations after the deactivation of the IAS/SVE system in July 2020 and, if there is minimal rebound, to demonstrate that the contaminant concentrations have been reduced to below the cleanup levels or to levels that will naturally attenuate to below the cleanup levels within a reasonable time frame.

The groundwater sample analytical results from the five quarterly confirmational monitoring events indicate localized, seasonal rebound of the GRO and benzene concentrations beneath the northwestern corner of the subject property; however, the previous IAS/SVE operations and natural attenuation have reduced the volatile petroleum hydrocarbon concentrations at the Site to below the cleanup levels or to levels that will naturally attenuate to below the cleanup levels within a reasonable time frame. Furthermore, the localized area of remaining impacted groundwater appears to be stable. Based on the current groundwater conditions and the presence of a restrictive covenant that prevents the use of the groundwater beneath the subject property, Landau recommends the termination of the groundwater monitoring program for the Site.

5.0 USE OF THIS REPORT

This report has been prepared for the exclusive use of SeaTac Investments, LLC and Scarsella Bros., Inc., for specific application to the SeaTac Development Site. No other party is entitled to rely on the information, conclusions, and recommendations included in this document without the express written consent of Landau. Further, the reuse of information, conclusions, and recommendations provided herein for extensions of the project or for any other project, without review and authorization by Landau, shall be at the user's sole risk. Landau warrants that within the limitations of scope, schedule, and budget, our services have been provided in a manner consistent with that level of care and skill ordinarily exercised by members of the profession currently practicing in the same locality under similar conditions as this project. Landau makes no other warranty, either express or implied.

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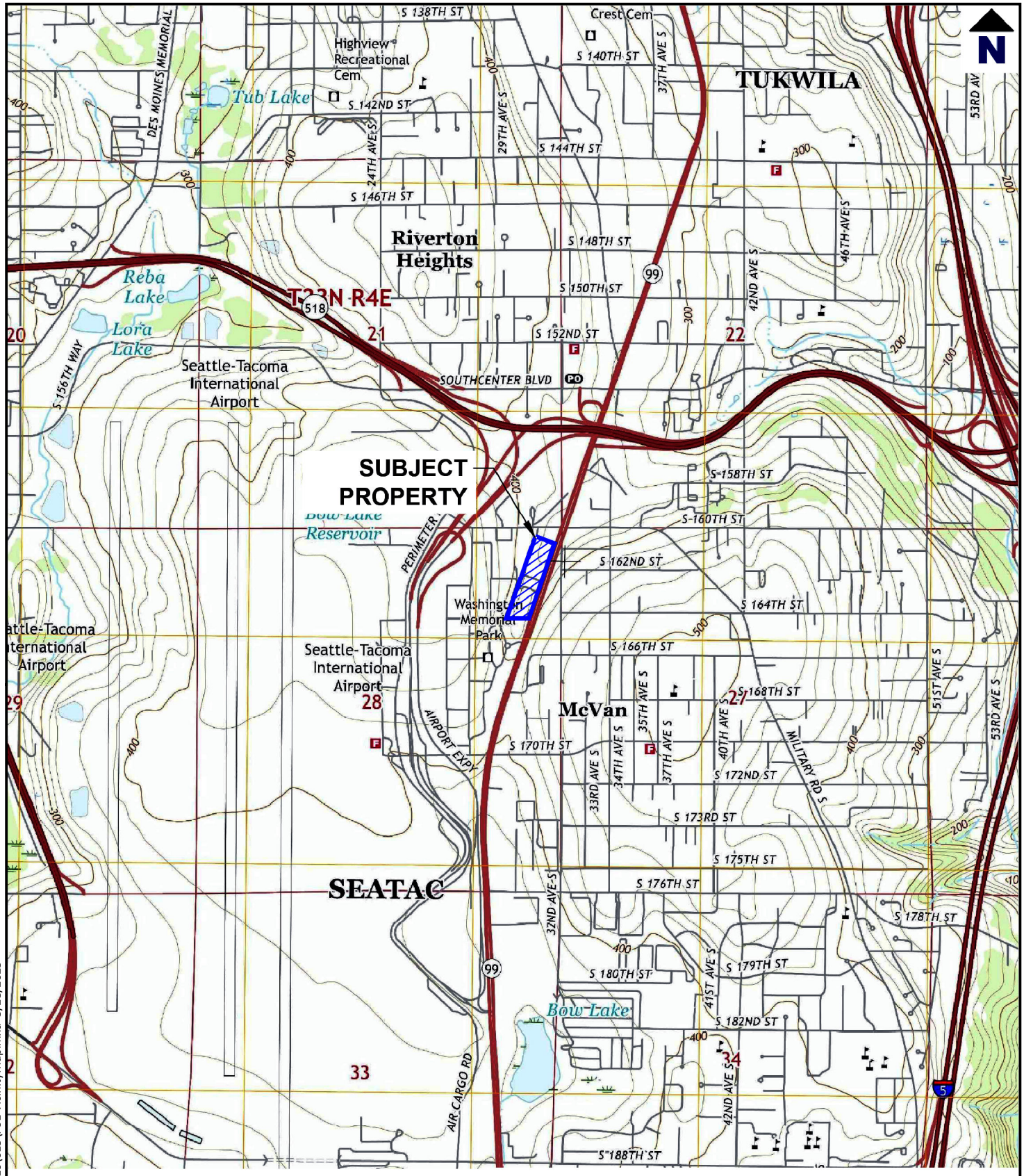

REFERENCED FROM :
USGS 7.5 MINUTE QUADRANGLE DES MOINES, 2017

0 2000' 4000'

G:\Projects\2218\001\010\013\F01 VicinityMap.mxd 8/28/2023

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SeaTac Development Site SeaTac, Washington	**Subject Property Location Map**	Figure 1

N

PORT OF SEATTLE PROPERTY

PORT-MW-B*

MW-22*

SOUTH 160TH STREET

MW-15*

MW-23*

PARKING LOT

PORT OF SEATTLE PROPERTY

MW-16

MW-16	
GRO	<0.1
B	<0.250

IAS/SVE SYSTEM ENCLOSURE

LOUDEN PROPERTY

MW-12

MW-12	
GRO	1.05
B	3.26

MW-07	
GRO	0.725
B	0.58

MW-07

MW-11

MW-19

MW-18

MW-18	
GRO	<0.1
B	0.170

MW-17A

MW-17A	
GRO	<0.1
B	<0.250

MW-13	
GRO	0.27
B	0.190

MW-13

MW-01

MW-10

MW-14

MW-20

MASTERPARK LOT C PROPERTY (SUBJECT PROPERTY)

MW-08A

MW-09	
GRO	<0.1
B	<0.250

MW-09

PARKING LOT

INTERNATIONAL BLVD

MW-05

MW-06

MW-21

Legend

MW-14 SITE MONITORING WELL LOCATION AND DESIGNATION - GROUNDWATER ELEVATIONS MEASURED

MW-09 SITE MONITORING WELL LOCATION AND DESIGNATION - CONFIRMATIONAL MONITORING WELL

SUBJECT PROPERTY LINE

FENCE

MW-07	
GRO	0.23
B	0.25

GASOLINE-RANGE ORGANICS

BENZENE

SAMPLE LOCATION

ANALYTICAL RESULT IN mg/L

ANALYTICAL RESULT IN µg/L

Notes

1. BASE MAP BASED ON IAS AND SVE PIPING LAYOUT FIGURE (12/02/15) AND GROUNDWATER MONITORING LOCATIONS MAP (05/01/19) PRODUCED BY GOLDER ASSOCIATES, INC.
2. CONCENTRATIONS IN **BOLD AND RED** EXCEEDED THE MTCA METHOD A GROUNDWATER CLEANUP LEVEL.
3. mg/L = MILIGRAMS PER LITER
4. µg/L = MICROGRAMS PER LITER
5. DUPLICATE SAMPLE NAMED MW-32-0723 WAS COLLECTED FROM WELL MW-12. RESULTS SHOWN ON THIS FIGURE ARE THE GREATEST OF THE TWO VALUES.
6. * = WELLS DESIGNATED WITH A * WERE NOT MONITORED DURING THE JULY 2023 EVENT DUE TO ACCESS RESTRICTIONS.
7. BLACK AND WHITE REPRODUCTION OF THIS COLOR ORIGINAL MAY REDUCE ITS EFFECTIVENESS AND LEAD TO INCORRECT INTERPRETATION.

Source: SLR, 2023

0 100 200

Scale in Feet

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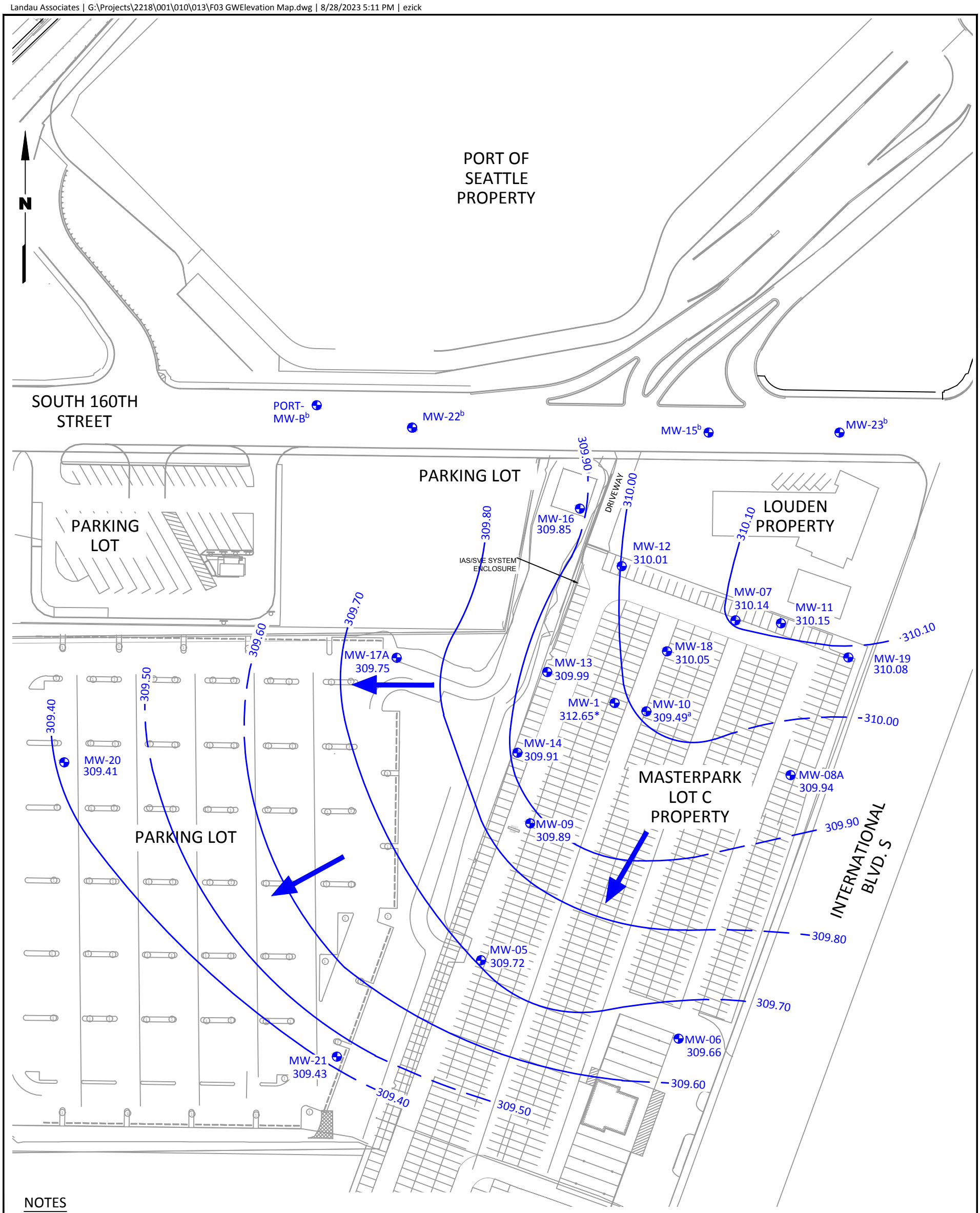
SeaTac Development Site
SeaTac, Washington

GRO and Benzene Concentrations in Groundwater Samples - July 2023

Figure 2



NOTES

1. BASEMAP BASED ON IAS AND SVE PIPING LAYOUT FIGURE (12/02/15) AND GROUNDWATER MONITORING LOCATIONS MAP (05/01/19) PRODUCED BY GOLDER ASSOCIATES, INC.
2. * = DUE TO AN ANOMALOUS DEPTH TO GROUNDWATER MEASUREMENT, THE GROUNDWATER ELEVATION WAS NOT USED FOR CONTOURING.
3. a = SINCE WELL MW-10 IS SCREENED OVER 30 FEET BELOW THE GROUNDWATER TABLE, THE GROUNDWATER ELEVATION IN MW-10 WAS NOT USED FOR CONTOURING.
4. b = DUE TO ACCESS RESTRICTIONS, THE WELL WAS NOT MEASURED DURING THE JULY 2023 EVENT.
5. BLACK AND WHITE REPRODUCTION OF THIS COLOR ORIGINAL MAY REDUCE ITS EFFECTIVENESS AND LEAD TO INCORRECT INTERPRETATION.

LEGEND

MW-21	SITE MONITORING WELL LOCATION AND DESIGNATION
310.17	GROUNDWATER SURFACE ELEVATION (IN FEET ABOVE MEAN SEA LEVEL) ON JULY 31, 2023
310.10'	GROUNDWATER SURFACE ELEVATION CONTOUR LINE (IN FEET ABOVE MEAN SEA LEVEL)
→	GENERAL GROUNDWATER FLOW DIRECTION

Source: SLR, 2023

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SeaTac Development Site
SeaTac, Washington

Groundwater Elevation Contour Map July 2023

Figure 3

Table 1
Groundwater Field Parameters and Sample Analytical Results for Groundwater COCs
July 2023 Sampling Event
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-07	08/01/23	48.55	6.46	15.3	206	0.61	145.1	1.24	0.725	0.58	1.38	2.94	6.78	<0.0500 [i]	<10.0	<4.00	NA	NA	NA	NA
MW-09	08/01/23	52.24	6.12	16.2	177	1.42	148.7	0.12	<0.1	<0.250	<1.00	<0.500	<1.50	<0.0100	<10.0	<4.00	NA	NA	NA	NA
MW-12	07/31/23	54.82	7.41	16.10	248.30	0.53	68.20	1.58	**1.05 J**	3.26 J	4.96 J	44.40	143 J	<0.0100	6.06 J	8.28 J	NA	NA	NA	NA
MW-12 Duplicate[k]	07/31/23	-	-	-	-	-	-	-	0.764 J	2.25 J	3.84 J	36.60	115 J	<0.0100	<10.0	11.5 J	NA	NA	NA	NA
MW-13	08/01/23	55.43	6.62	14.4	250	1.72	139.9	0.01	0.27	0.190 J	<1.00	<0.500	<1.50	<0.360 [i]	<10.0	<4.00	NA	NA	NA	NA
MW-16	07/31/23	67.78	6.86	16.2	207	0.98	124.3	0.76	<0.1	<0.250	<1.00	<0.500	<1.50	<0.0100	<10.0	<4.00	NA	NA	NA	NA
MW-17A	08/01/23	84.70	6.17	14.5	154	4.50	189.1	1.24	<0.1	<0.250	<1.00	<0.500	<1.50	<0.0100	<10.0	<4.00	NA	NA	NA	NA
MW-18	08/01/23	50.40	6.78	16.0	503	0.66	168.3	0.70	<0.1	0.170 J	<1.00	<0.500	<1.50	<0.0100	<10.0	<4.00	NA	NA	NA	NA

Notes:

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

J = The laboratory noted that the reported result is an estimate.

[a] Analyzed by Ecology Method NWTPH-Gx.

[b] Analyzed by EPA Method 8260D.

[c] Analyzed by EPA Method 8260D 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 (January 2023).

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

[j] Daily Continuing Calibration Verification recovery for this analyte failed the +/-20% criteria listed in EPA Method 8260/8270 by +8%. The result is reported as an estimated value.

[k] Duplicate sample named MW-32-0723 and was collected from well MW-12.

Abbreviations and Acronyms:

°C = degrees Celsius
µg/L = micrograms per liter
µmhos/cm = micromhos per centimeter
COCs = contaminants of concern
DRO = diesel-range organics
EDB = 1,2-dibromoethane
GRO = gasoline-range organics
ID = identification
mg/L = milligrams per liter
mV = Millivolts
NA = not analyzed
NTU = nephelometric turbidity unit
ORO = oil-range organics

Table 2
Groundwater Monitoring Data - July 31, 2023
SeaTac Development Site
SeaTac, Washington

Well Number	Top of Casing Elevation[a] (ft)	Approximate Depth of Well Screen (ft bgs)	Date Measured	Depth to Groundwater (ft)	Groundwater Elevation (ft)
MW-01	361.38	41 to 51	07/31/23	48.73	312.65
MW-05	364.26	48 to 58	07/31/23	54.54	309.72
MW-06	369.68	50 to 60	07/31/23	60.02	309.66
MW-07	358.69	43.5 to 53.5	07/31/23	48.55	310.14
MW-08A	359.16	44 to 54	07/31/23	49.22	309.94
MW-09	362.13	47.5 to 57	07/31/23	52.24	309.89
MW-10	360.18	80 to 90	07/31/23	50.69	309.49
MW-11	357.53	42 to 57	07/31/23	47.38	310.15
MW-12	364.83	52 to 67	07/31/23	54.82	310.01
MW-13	365.42	50 to 65	07/31/23	55.43	309.99
MW-14	363.76	50 to 65	07/31/23	53.85	309.91
MW-16	377.63	64 to 74	07/31/23	67.78	309.85
MW-17A	394.44	80 to 95	07/31/23	84.70	309.74
MW-18	360.45	47 to 62	07/31/23	50.40	310.05
MW-19	356.61	43 to 58	07/31/23	46.53	310.08
MW-20	416.61	103 to 113	07/31/23	107.20	309.41
MW-21	412.85	95 to 110	07/31/23	103.42	309.43

Notes:

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

Abbreviations and Acronyms:

bgs = below ground surface

ft = feet

APPENDIX A

Low-Flow Groundwater Sampling Field Data Sheets

// GROUNDWATER SAMPLE COLLECTION FORM

Project Name: SeaTac Development | Project Number: 2218001.010.011
Event: Groundwater Sampling | Well Name: MW-7
Weather: 75, sunny | Sample ID: MW-7 -0723
LAI Representative: Spencer Lo | Date: 8/1/2023 | Time: 910

WELL INFORMATION & PURGE DATA

Top of Screen Depth (ft): | Well Secure? ☐ No ☑ Yes | Damaged? ☑ No ☐ Yes
DTW After Cap Opened (ft): | Time: | Describe: flush mount
Static DTW (ft): | Time: | Flow-Thru Cell Vol.: N/A | WLM No.: Heron #3
Begin Purge - Date/Time: 8/ 1 /2023 @ 914 | End Purge - Date/Time: 8/ 1 /2023 @ 929 | Gallons Purged: 1.25
Water Disposal: ☑ 55-gal drum ☐ Storage tank ☐ Ground ☐ Other:

Time	Temp (°C)	DO (mg/L)	Cond (µS/cm)	pH	ORP (mV)	Turbidity (NTU)	DTW (ft)	Purge Vol. ≥ 1 flow-thru cell vol.	Comments/ Observations
Stabilization →	± 3%	± 10%	± 3%	± 0.1 units	± 10 mV	± 10%	± 0.00 ft	(Yes/No)	
914	16.2	5.84	189	7.10	153.9	15.95	-	yes	
917	15.2	0.71	198	6.42	170.6	11.24	-	yes	
920	15.3	0.65	203	6.40	167.7	3.63	-	yes	
923	15.3	0.62	206	6.47	157.3	3.4	-	yes	
926	15.2	0.61	207	6.47	154.6	3.57	-	yes	
929	15.3	0.61	206	6.47	149.9	0.46	-	yes	

SAMPLE COLLECTION DATA

Collection Method: ☐ Bailer ☑ Pump | Type: Bladder Pump
Material: ☐ Stainless Steel ☑ PVC ☐ Teflon ☐ Polyethylene ☐ Other ☐ Dedicated
Decon Procedure: ☑ Alconox Wash ☐ Tap Rinse ☑ DI Water ☐ Dedicated ☐ Other (describe sequence):
Sample Description (turbidity, color, odor, sheen, etc.): Sampling intake set at 50.95'; Clear

Replicate	Temp (°C)	DO (mg/L)	Cond (uS/cm)	pH	ORP (mV)	Turbidity (NTU)	DTW (ft)	Time	Comments/Observations/Fe2+
1	15.3	0.59	206.3	6.46	146.5	0.89	-	933	
2	15.3	0.62	206.4	6.45	143.7	1.24	-	936	
3									
4									
Average	15.30	0.61	206.35	6.46	145.10	N/A		**Ferrous Iron: N/A**	

Bottles	Analysis Requested (Circle/Bold Applicable)
	(8260) (8260D-SIM) (8010) (8020) (Boeing VOC Short List) (VOC-Boeing 38 list)
	(NWTPH-G) (NWTPH-Gx) (BETX) (NWTPH-HCID) (NWTPH-Dx) (NWTPH-Dx w/SGC) (Naphthalene) (n-Hexane)
	(8270) (PAH) (8081) (8141) (Oil & Grease)
	(pH) (Conductivity) (TDS) (TSS) (BOD) (Turbidity) (Alkalinity) (HCO3/CO3) (Cl) (SO4) (NO3) (NO2) (F)
	(COD) (TOC) (Total PO4) (Total Kiedahl Nitrogen) (NH3) (NO3/NO2)
	(Total Cyanide) (WAD Cyanide) (Free Cyanide)
	(Total 6010) (Total 6020) (Diss 6010) (Diss 6020) (Total 7471)
	(Total Metals) (Dissolved Metals) List:
3-40mL HCl preserved VOAs and 2 1L HCl presereved Ambers	

Duplicate Sample ID: MW-22-0723 @ 1330
Comments:
Signature: Spencer Lo | Date: 8/1/2023

// GROUNDWATER SAMPLE COLLECTION FORM

Project Name: SeaTac Development | Project Number: 2218001.010.011
Event: Groundwater Sampling | Well Name: MW-9
Weather: 75, sunny | Sample ID: MW-9 -0723
LAI Representative: Spencer Lo | Date: 8/1/2023 | Time: 1010

WELL INFORMATION & PURGE DATA

Top of Screen Depth (ft): | Well Secure? ☐ No ☑ Yes | Damaged? ☑ No ☐ Yes
DTW After Cap Opened (ft): | Time: | Describe: flush mount
Static DTW (ft): 52.24 | Time: 1045 | Flow-Thru Cell Vol.: N/A | WLM No.: Heron #3
Begin Purge - Date/Time: 8/1/2023 @ 1018 | End Purge - Date/Time: 8/1/2023 @ 1033 | Gallons Purged: 1.25
Water Disposal: ☑ 55-gal drum ☐ Storage tank ☐ Ground ☐ Other:

Time	Temp (°C)	DO (mg/L)	Cond (µS/cm)	pH	ORP (mV)	Turbidity (NTU)	DTW (ft)	Purge Vol. ≥ 1 flow-thru cell vol.	Comments/ Observations
Stabilization →	± 3%	± 10%	± 3%	± 0.1 units	± 10 mV	± 10%	± 0.00 ft	(Yes/No)	
1018	17.9	9.14	138	6.45	153.7	10.31	-	yes	
1021	16.1	2.91	157	6.27	153.3	4.77	-	yes	
1024	16.1	2.18	165	6.08	158.4	14.3	-	yes	
1027	16.4	1.62	170	6.07	156.1	12.25	-	yes	
1030	16.2	1.54	172	6.10	152.7	0.35	-	yes	
1033	16.1	1.55	173	6.08	152.5	0.67	-	yes	

SAMPLE COLLECTION DATA

Collection Method: ☐ Bailer ☑ Pump | Type: Bladder Pump
Material: ☐ Stainless Steel ☑ PVC ☐ Teflon ☐ Polyethylene ☐ Other ☐ Dedicated
Decon Procedure: ☑ Alconox Wash ☐ Tap Rinse ☑ DI Water ☐ Dedicated ☐ Other (describe sequence):
Sample Description (turbidity, color, odor, sheen, etc.): Sampling intake set at 53.45'; Clear

Replicate	Temp (°C)	DO (mg/L)	Cond (uS/cm)	pH	ORP (mV)	Turbidity (NTU)	DTW (ft)	Time	Comments/Observations/Fe2+
1	16.1	1.45	175.5	6.12	149.3	0.01	-	1036	
2	16.2	1.38	177.8	6.12	148.1	0.12	-	1039	
3									
4									
Average	16.15	1.42	176.65	6.12	148.70	N/A		**Ferrous Iron: N/A**	

Bottles	Analysis Requested (Circle/Bold Applicable)
	(8260) (8260D-SIM) (8010) (8020) (Boeing VOC Short List) (VOC-Boeing 38 list)
	(NWTPH-G) (NWTPH-Gx) (BETX) (NWTPH-HCID) (NWTPH-Dx) (NWTPH-Dx w/SGC) (Naphthalene) (n-Hexane)
	(8270) (PAH) (8081) (8141) (Oil & Grease)
	(pH) (Conductivity) (TDS) (TSS) (BOD) (Turbidity) (Alkalinity) (HCO3/CO3) (Cl) (SO4) (NO3) (NO2) (F)
	(COD) (TOC) (Total PO4) (Total Kiedahl Nitrogen) (NH3) (NO3/NO2)
	(Total Cyanide) (WAD Cyanide) (Free Cyanide)
	(Total 6010) (Total 6020) (Diss 6010) (Diss 6020) (Total 7471)
	(Total Metals) (Dissolved Metals) List:
6-40mL HCl preserved VOAs	

Duplicate Sample ID:
Comments:
Signature: Spencer Lo | Date: 8/1/2023

// GROUNDWATER SAMPLE COLLECTION FORM

Project Name: SeaTac Development | Project Number: 2218001.010.011
Event: Groundwater Sampling | Well Name: MW-12
Weather: 80, Sunny | Sample ID: MW-12 -0723
LAI Representative: Spencer Lo | Date: 7/31/2023 | Time: 1250

WELL INFORMATION & PURGE DATA

Top of Screen Depth (ft): | Well Secure? ☐ No ☑ Yes | Damaged? ☑ No ☐ Yes
DTW After Cap Opened (ft): | Time: | Describe: flush mount
Static DTW (ft): 54.82 | Time: 924 | Flow-Thru Cell Vol.: N/A | WLM No.: Heron #3
Begin Purge - Date/Time: 7/ 31 /2023 @ 1300 | End Purge - Date/Time: 7/ 31 /2023 @ 1312 | Gallons Purged: 1
Water Disposal: ☑ 55-gal drum ☐ Storage tank ☐ Ground ☐ Other:

Time	Temp (°C)	DO (mg/L)	Cond (µS/cm)	pH	ORP (mV)	Turbidity (NTU)	DTW (ft)	Purge Vol. ≥ 1 flow-thru cell vol.	Comments/ Observations
Stabilization →	± 3%	± 10%	± 3%	± 0.1 units	± 10 mV	± 10%	± 0.00 ft	(Yes/No)	
1300	17.5	1.23	229	7.45	101.7	3.18	-	yes	
1303	15.9	0.55	233	7.27	93.6	2.69	-	yes	
1306	16.1	0.45	234	7.34	76.8	2.84	-	yes	
1309	16.1	0.43	235	7.34	69.9	2.33	-	yes	
1312	15.9	0.41	239	7.37	68.7	2.61	-	yes	

SAMPLE COLLECTION DATA

Collection Method: ☐ Bailer ☑ Pump | Type: Bladder Pump
Material: ☐ Stainless Steel ☑ PVC ☐ Teflon ☐ Polyethylene ☐ Other ☐ Dedicated
Decon Procedure: ☑ Alconox Wash ☐ Tap Rinse ☑ DI Water ☐ Dedicated
☐ Other (describe sequence):
Sample Description (turbidity, color, odor, sheen, etc.): Sampling intake set at 57.95'; Clear

Replicate	Temp (°C)	DO (mg/L)	Cond (uS/cm)	pH	ORP (mV)	Turbidity (NTU)	DTW (ft)	Time	Comments/Observations/Fe2+
1	16.1	0.48	241.2	7.39	66.8	1.73	-	1318	
2	16.2	0.5	247.8	7.4	66.4	1.85	-	1322	
3	16	0.55	251.3	7.43	71.7	1.85	-	1324	
4	16.1	0.57	252.9	7.41	67.9	1.58	-	1327	
Average	16.10	0.53	248.30	7.41	68.20	N/A		**Ferrous Iron: N/A**	

Bottles	Analysis Requested (Circle/Bold Applicable)
	(8260) (8260D-SIM) (8010) (8020) (Boeing VOC Short List) (VOC-Boeing 38 list)
	(NWTPH-G) (NWTPH-Gx) (BETX) (NWTPH-HCID) (NWTPH-Dx) (NWTPH-Dx w/SGC) (Naphthalene) (n-Hexane)
	(8270) (PAH) (8081) (8141) (Oil & Grease)
	(pH) (Conductivity) (TDS) (TSS) (BOD) (Turbidity) (Alkalinity) (HCO3/CO3) (Cl) (SO4) (NO3) (NO2) (F)
	(COD) (TOC) (Total PO4) (Total Kiedahl Nitrogen) (NH3) (NO3/NO2)
	(Total Cyanide) (WAD Cyanide) (Free Cyanide)
	(Total 6010) (Total 6020) (Diss 6010) (Diss 6020) (Total 7471)
	(Total Metals) (Dissolved Metals) List:
3-40mL HCl preserved VOAs and 2 1L HCl presereved Ambers	

Duplicate Sample ID: MW-32-0723 @ 1330
Comments:
Signature: Spencer Lo | Date: 7/31/2023

// GROUNDWATER SAMPLE COLLECTION FORM

Project Name: SeaTac Development | Project Number: 2218001.010.011
Event: Groundwater Sampling | Well Name: MW-13
Weather: 75, sunny | Sample ID: MW-13 -0723
LAI Representative: Spencer Lo | Date: 8/1/2023 | Time: 940

WELL INFORMATION & PURGE DATA

Top of Screen Depth (ft): | Well Secure? ☐ No ☑ Yes | Damaged? ☑ No ☐ Yes
DTW After Cap Opened (ft): | Time: | Describe: flush mount
Static DTW (ft): 55.43 | Time: 1019 | Flow-Thru Cell Vol.: N/A | WLM No.: Heron #3
Begin Purge - Date/Time: 8/ 1 /2023 @ 945 | End Purge - Date/Time: 8/ 1 /2023 @ 1006 | Gallons Purged: 1.75
Water Disposal: ☑ 55-gal drum ☐ Storage tank ☐ Ground ☐ Other:

Time	Temp (°C)	DO (mg/L)	Cond (µS/cm)	pH	ORP (mV)	Turbidity (NTU)	DTW (ft)	Purge Vol. ≥ 1 flow-thru cell vol.	Comments/ Observations
Stabilization →	± 3%	± 10%	± 3%	± 0.1 units	± 10 mV	± 10%	± 0.00 ft	(Yes/No)	
945	15.7	8.30	226	6.54	149.3	0.48	-	yes	
948	14.3	3.12	234	6.28	159.1	0.46	-	yes	
951	14.2	3.04	235	6.30	157.7	0.07	-	yes	
954	14.4	2.74	239	6.36	154.3	0	-	yes	
957	14.4	2.21	244	6.45	149.9	0.03	-	yes	
1000	14.3	1.85	248	6.54	145.3	0.01	-	yes	
1003	14.3	1.86	248	6.56	144.1	0	-	yes	
1006	14.3	1.72	248	6.58	142.8	0.02	-	yes	

SAMPLE COLLECTION DATA

Collection Method: ☐ Bailer ☑ Pump | Type: Bladder Pump
Material: ☐ Stainless Steel ☑ PVC ☐ Teflon ☐ Polyethylene ☐ Other ☐ Dedicated
Decon Procedure: ☑ Alconox Wash ☐ Tap Rinse ☑ DI Water ☐ Dedicated ☐ Other (describe sequence):
Sample Description (turbidity, color, odor, sheen, etc.): Sampling intake set at 58.50'; Clear

Replicate	Temp (°C)	DO (mg/L)	Cond (uS/cm)	pH	ORP (mV)	Turbidity (NTU)	DTW (ft)	Time	Comments/Observations/Fe2+
1	14.3	1.73	248.9	6.61	140.4	0.02	-	1009	
2	14.5	1.71	250.4	6.62	139.4	0.01	-	1012	
3									
4									
Average	14.40	1.72	249.65	6.62	139.90	N/A		**Ferrous Iron: N/A**	

Bottles	Analysis Requested (Circle/Bold Applicable)
	(8260) (8260D-SIM) (8010) (8020) (Boeing VOC Short List) (VOC-Boeing 38 list)
	(NWTPH-G) (NWTPH-Gx) (BETX) (NWTPH-HCID) (NWTPH-Dx) (NWTPH-Dx w/SGC) (Naphthalene) (n-Hexane)
	(8270) (PAH) (8081) (8141) (Oil & Grease)
	(pH) (Conductivity) (TDS) (TSS) (BOD) (Turbidity) (Alkalinity) (HCO3/CO3) (Cl) (SO4) (NO3) (NO2) (F)
	(COD) (TOC) (Total PO4) (Total Kiedahl Nitrogen) (NH3) (NO3/NO2)
	(Total Cyanide) (WAD Cyanide) (Free Cyanide)
	(Total 6010) (Total 6020) (Diss 6010) (Diss 6020) (Total 7471)
	(Total Metals) (Dissolved Metals) List:
3-40mL HCl preserved VOAs and 2 1L HCl presereved Ambers	

Duplicate Sample ID:
Comments:
Signature: Spencer Lo | Date: 8/1/2023

// GROUNDWATER SAMPLE COLLECTION FORM

Project Name: SeaTac Development
Project Number: 2218001.010.011
Event: Groundwater Sampling
Well Name: MW-16
Weather: 80, Sunny
Sample ID: MW-16 -0723
LAI Representative: Spencer Lo
Date: 7/31/2023 Time: 1350

WELL INFORMATION & PURGE DATA

Top of Screen Depth (ft): ____ Well Secure? ☐ No ☑ Yes Damaged? ☑ No ☐ Yes
DTW After Cap Opened (ft): ____ Time: ____ Describe: flush mount
Static DTW (ft): 67.78 Time: 1052 Flow-Thru Cell Vol.: N/A WLM No.: Heron #3
Begin Purge - Date/Time: 7/ 31 /2023 @ 1352 End Purge - Date/Time: 7/ 31 /2023 @ 1409 Gallons Purged: 1.5
Water Disposal: ☑ 55-gal drum ☐ Storage tank ☐ Ground ☐ Other: ____

Time	Temp (°C)	DO (mg/L)	Cond (µS/cm)	pH	ORP (mV)	Turbidity (NTU)	DTW (ft)	Purge Vol. ≥ 1 flow-thru cell vol.	Comments/ Observations
Stabilization →	± 3%	± 10%	± 3%	± 0.1 units	± 10 mV	± 10%	± 0.00 ft	(Yes/No)	
1352	16.1	9.12	205	7.50	118.4	2.11	-	yes	
1355	18.3	7.30	209	7.32	126.8	1.31	-	yes	
1358	16.1	4.57	195	7.21	130.3	1.61	-	yes	
1401	16.3	1.71	193	7.01	130.8	1.57	-	yes	
1403	15.9	1.24	193	6.98	129.8	1.11	-	yes	
1406	15.9	1.19	196	6.94	124.7	1.69	-	yes	
1409	15.8	1.13	197	6.89	125.8	2.11	-	yes	

SAMPLE COLLECTION DATA

Collection Method: ☐ Bailer ☑ Pump Type: Bladder Pump
Material: ☐ Stainless Steel ☑ PVC ☐ Teflon ☐ Polyethylene ☐ Other ☐ Dedicated
Decon Procedure: ☑ Alconox Wash ☐ Tap Rinse ☑ DI Water ☐ Dedicated
☐ Other (describe sequence):
Sample Description (turbidity, color, odor, sheen, etc.): Sampling intake set at 71.20'; Clear

Replicate	Temp (°C)	DO (mg/L)	Cond (uS/cm)	pH	ORP (mV)	Turbidity (NTU)	DTW (ft)	Time	Comments/Observations/Fe2+
1	16.1	1.03	204.3	6.9	122.5	0.84	-	1415	
2	16.2	0.98	206.6	6.87	125.6	1.39	-	1417	
3	16.2	0.99	207.5	6.84	125.5	1.85	-	1420	
4	16.3	0.93	209.4	6.83	123.5	0.76	-	1423	
Average	16.20	0.98	206.95	6.86	124.28	N/A		**Ferrous Iron: N/A**	

Bottles	Analysis Requested (Circle/Bold Applicable)
	(8260) (8260D-SIM) (8010) (8020) (Boeing VOC Short List) (VOC-Boeing 38 list)
	(NWTPH-G) (NWTPH-Gx) (BETX) (NWTPH-HCID) (NWTPH-Dx) (NWTPH-Dx w/SGC) (Naphthalene) (n-Hexane)
	(8270) (PAH) (8081) (8141) (Oil & Grease)
	(pH) (Conductivity) (TDS) (TSS) (BOD) (Turbidity) (Alkalinity) (HCO3/CO3) (Cl) (SO4) (NO3) (NO2) (F)
	(COD) (TOC) (Total PO4) (Total Kiedahl Nitrogen) (NH3) (NO3/NO2)
	(Total Cyanide) (WAD Cyanide) (Free Cyanide)
	(Total 6010) (Total 6020) (Diss 6010) (Diss 6020) (Total 7471)
	(Total Metals) (Dissolved Metals) List:
3-40mL HCl preserved VOAs and 2 1L HCl presereved Ambers	

Duplicate Sample ID:
Comments:
Signature: Spencer Lo Date: 7/31/2023

// GROUNDWATER SAMPLE COLLECTION FORM

Project Name: SeaTac Development | Project Number: 2218001.010.011
Event: Groundwater Sampling | Well Name: MW-17A
Weather: 75, sunny | Sample ID: MW-17A -0723
LAI Representative: Spencer Lo | Date: 8/1/2023 | Time: 800

WELL INFORMATION & PURGE DATA

Top of Screen Depth (ft): | Well Secure? ☐ No ☑ Yes | Damaged? ☑ No ☐ Yes
DTW After Cap Opened (ft): | Time: | Describe: flush mount
Static DTW (ft): 84.70 | Time: 1059 | Flow-Thru Cell Vol.: N/A | WLM No.: Heron #3
Begin Purge - Date/Time: 8/ 1 /2023 @ 803 | End Purge - Date/Time: 8/ 1 /2023 @ 821 | Gallons Purged: 1.5
Water Disposal: ☑ 55-gal drum ☐ Storage tank ☐ Ground ☐ Other:

Time	Temp (°C)	DO (mg/L)	Cond (µS/cm)	pH	ORP (mV)	Turbidity (NTU)	DTW (ft)	Purge Vol. ≥ 1 flow-thru cell vol.	Comments/ Observations
Stabilization →	± 3%	± 10%	± 3%	± 0.1 units	± 10 mV	± 10%	± 0.00 ft	(Yes/No)	
803	19.4	8.43	178	7.16	175.5	1.42	-	yes	
806	14.9	7.32	157	6.62	184.5	4.14	-	yes	
809	14.7	5.91	154	6.40	186.4	2.81	-	yes	
812	14.6	5.37	152	6.27	187.8	2.83	-	yes	
815	14.6	5.00	152	6.19	189.6	2.65	-	yes	
818	14.4	4.86	152	6.13	191.2	3.19	-	yes	
821	14.4	4.76	152	6.12	191.3	1.88	-	yes	

SAMPLE COLLECTION DATA

Collection Method: ☐ Bailer ☑ Pump | Type: Bladder Pump
Material: ☐ Stainless Steel ☑ PVC ☐ Teflon ☐ Polyethylene ☐ Other ☐ Dedicated
Decon Procedure: ☑ Alconox Wash ☐ Tap Rinse ☑ DI Water ☐ Dedicated
☐ Other (describe sequence):
Sample Description (turbidity, color, odor, sheen, etc.): Sampling intake set at 89.30'; Clear

Replicate	Temp (°C)	DO (mg/L)	Cond (uS/cm)	pH	ORP (mV)	Turbidity (NTU)	DTW (ft)	Time	Comments/Observations/Fe2+
1	14.5	4.56	153.4	6.15	189.1	1.85	-	825	
2	14.5	4.51	154.4	6.19	188.4	1.24	-	828	
3	14.4	4.43	154.1	6.17	189.9	1.24	-	830	
4									
Average	14.47	4.50	153.97	6.17	189.13	N/A		**Ferrous Iron: N/A**	

Bottles	Analysis Requested (Circle/Bold Applicable)
	(8260) (8260D-SIM) (8010) (8020) (Boeing VOC Short List) (VOC-Boeing 38 list)
	(NWTPH-G) (NWTPH-Gx) (BETX) (NWTPH-HCID) (NWTPH-Dx) (NWTPH-Dx w/SGC) (Naphthalene) (n-Hexane)
	(8270) (PAH) (8081) (8141) (Oil & Grease)
	(pH) (Conductivity) (TDS) (TSS) (BOD) (Turbidity) (Alkalinity) (HCO3/CO3) (Cl) (SO4) (NO3) (NO2) (F)
	(COD) (TOC) (Total PO4) (Total Kiedahl Nitrogen) (NH3) (NO3/NO2)
	(Total Cyanide) (WAD Cyanide) (Free Cyanide)
	(Total 6010) (Total 6020) (Diss 6010) (Diss 6020) (Total 7471)
	(Total Metals) (Dissolved Metals) List:
3-40mL HCl preserved VOAs and 2 1L HCl presereved Ambers	

Duplicate Sample ID:
Comments:
Signature: Spencer Lo | Date: 8/1/2023

// GROUNDWATER SAMPLE COLLECTION FORM

Project Name: SeaTac Development | Project Number: 2218001.010.011
Event: Groundwater Sampling | Well Name: MW-18
Weather: 75, sunny | Sample ID: MW-18 -0723
LAI Representative: Spencer Lo | Date: 8/1/2023 | Time: 840

WELL INFORMATION & PURGE DATA

Top of Screen Depth (ft): | Well Secure? ☐ No ☑ Yes | Damaged? ☑ No ☐ Yes
DTW After Cap Opened (ft): | Time: | Describe: flush mount
Static DTW (ft): 50.40 | Time: 955 | Flow-Thru Cell Vol.: N/A | WLM No.: Heron #3
Begin Purge - Date/Time: 8/ 1 /2023 @ 845 | End Purge - Date/Time: 8/ 1 /2023 @ 857 | Gallons Purged: 1
Water Disposal: ☑ 55-gal drum ☐ Storage tank ☐ Ground ☐ Other:

Time	Temp (°C)	DO (mg/L)	Cond (µS/cm)	pH	ORP (mV)	Turbidity (NTU)	DTW (ft)	Purge Vol. ≥ 1 flow-thru cell vol.	Comments/ Observations
Stabilization →	± 3%	± 10%	± 3%	± 0.1 units	± 10 mV	± 10%	± 0.00 ft	(Yes/No)	
845	18.6	4.83	385	6.13	187.1	0.76	-	yes	
848	16.3	0.80	490	6.56	185.1	0.6	-	yes	
851	16.1	0.77	501	6.62	182.3	0.67	-	yes	
854	15.9	0.75	501	6.67	179.0	0.88	-	yes	
857	15.9	0.70	501	6.71	173.1	0.32	-	yes	

SAMPLE COLLECTION DATA

Collection Method: ☐ Bailer ☑ Pump | Type: Bladder Pump
Material: ☐ Stainless Steel ☑ PVC ☐ Teflon ☐ Polyethylene ☐ Other ☐ Dedicated
Decon Procedure: ☑ Alconox Wash ☐ Tap Rinse ☑ DI Water ☐ Dedicated
☐ Other (describe sequence):
Sample Description (turbidity, color, odor, sheen, etc.): Sampling intake set at 53.05'; Clear

Replicate	Temp (°C)	DO (mg/L)	Cond (uS/cm)	pH	ORP (mV)	Turbidity (NTU)	DTW (ft)	Time	Comments/Observations/Fe2+
1	16	0.67	503	6.75	169.9	0.65	-	900	
2	15.9	0.64	502	6.8	166.7	0.7	-	903	
3									
4									
Average	15.95	0.66	502.50	6.78	168.30	N/A		**Ferrous Iron: N/A**	

Bottles	Analysis Requested (Circle/Bold Applicable)
	(8260) (8260D-SIM) (8010) (8020) (Boeing VOC Short List) (VOC-Boeing 38 list)
	(NWTPH-G) (NWTPH-Gx) (BETX) (NWTPH-HCID) (NWTPH-Dx) (NWTPH-Dx w/SGC) (Naphthalene) (n-Hexane)
	(8270) (PAH) (8081) (8141) (Oil & Grease)
	(pH) (Conductivity) (TDS) (TSS) (BOD) (Turbidity) (Alkalinity) (HCO3/CO3) (Cl) (SO4) (NO3) (NO2) (F)
	(COD) (TOC) (Total PO4) (Total Kiedahl Nitrogen) (NH3) (NO3/NO2)
	(Total Cyanide) (WAD Cyanide) (Free Cyanide)
	(Total 6010) (Total 6020) (Diss 6010) (Diss 6020) (Total 7471)
	(Total Metals) (Dissolved Metals) List:
3-40mL HCl preserved VOAs and 2 1L HCl presereved Ambers	

Duplicate Sample ID:
Comments:
Signature: Spencer Lo | Date: 8/1/2023

APPENDIX B

Data Tables and Trend Graphs

Table B-1
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**
01/05/01	358.70	NM	NM	NM	NM	NM	NM	NM	**80**	**470**	**7,700**	**2,000**	**11,200**	NA	NA	NA	< 0.25	< 0.50	NA	NA
08/16/07	358.70	NM	NM	NM	NM	NM	NM	NM	**68**	**500**	**3,200**	**1,600**	**8,690**	NA	NA	NA	NA	NA	NA	NA
12/07/09	358.70	49.02	309.68	6.89	10.90	347	2.83	NM	**46**	**520**	**5,600**	**1,300**	**6,800**	**0.03**	220	**420**	NA	NA	NA	NA
03/18/10	358.70	48.69	310.01	6.61	13.30	354	1.41	5.18	**26**	**230**	**1,100**	360	**4,630**	**0.01**	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**	<0.020[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	2.0 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	1.1	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	1.1	<0.0030	0.29	1.6	0.17	<0.20	<0.10	<0.20
01/29/20	358.69	48.12	310.57	6.72	14.6	201	0.86	NM	0.75	0.39	8.1	2.3	11	<0.02[e]	7.0	5.1	NA	NA	<0.081	<0.16
07/22/20	358.69	48.43	310.26	6.03	16.1	139	0.29	NM	0.80	<0.20	<1.0	2.2	12	<0.010	<2.0	2.9	NA	NA	NA	NA
10/19/20	358.69	48.79	309.90	6.32	15.6	205	1.73	6.59	**1.74**	0.84	2.50	9.69	15	<0.020[e]	<0.20	5.8	NA	NA	NA	NA
01/18/21	358.69	49.03	309.66	6.32	14.1	266	1.40	2.73	**3.55**	2.66	33	41	200	<0.50[e]	19	16	NA	NA	NA	NA
04/26/21	358.69	48.65	310.04	6.60	15.9	277	0.59	4.54	**1.63**	3.77	3.23	14	26	<0.01	5.3 J	7.8	NA	NA	NA	NA
07/26/21	358.69	48.78	309.91	6.53	16.1	237	0.26	2.66	**2.35**	3.17	7.36	23	77	<0.04[e]	8.43	14	NA	NA	NA	NA
01/24/22	358.69	48.52	310.17	6.55	14.7	247	0.67	45.2	**0.83**	1.95	0.93 J	3.89	4.65	<0.046[e]	<2.5	3.12	NA	NA	NA	NA
07/25/22	358.69	47.61	311.08	5.97	16.6	210	2.29	10.7	0.12	0.36	<1.0	<0.50	<1.50	<0.022[e]	<2.0	<2.0	NA	NA	NA	NA
10/25/22	358.69	47.95	310.74	5.65	15.3	179	0.68	3.7	0.26	0.40	<1.0	0.61	<1.5	<0.022e	<2.0	<2.0	NA	NA	NA	NA
01/30/23	358.69	48.11	310.58	6.43	14.6	172	1.30	2.11	0.23	0.25	<1.0	<0.50	<1.5	<0.025e	<2.0	<2.0	NA	NA	NA	NA
04/11/23	358.69	48.08	310.61	6.37	15.0	162	0.38	38.90	0.27	0.45	<1.0	1.03	2.8	<0.250[e]	<2.0	<2.0	NA	NA	NA	NA
08/01/23	358.69	48.55	310.14	6.46	15.3	206	0.61	1.2	0.725	0.58	1.38	2.94	6.78	<0.0500[e]	<10.0	<4.00	NA	NA	NA	NA

Table B-1
Summary of Groundwater Sampling Results - Well MW-07
SeaTac Development Site
SeaTac, Washington

Notes:

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

J = Laboratory estimated value

[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 (July 2022).

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

Abbreviaitons and Acronyms:

°C = d Celsius
µg/L = micrograms per liter
µmhos/cm = micromhos per centimeter
DRO = diesel-range organics
EDB = 1,2-dibromoethane
GRO = gasoline-range organics
mg/L = milligrams per liter
NA = not analyzed
NM = not measured
NS = not sampled
NTU = nephelometric turbidity unit
ORO = oil-range organics

Table B-2
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**
01/05/01	362.14	NM	NM	NM	NM	NM	NM	NM	**90**	**1,900**	**1,200**	**1,800**	**9,700**	NA	NA	NA	< 0.25	< 0.50	NA	NA
08/16/07	362.14	NM	NM	NM	NM	NM	NM	NM	**34**	**280**	230	**750**	**3,270**	NA	NA	NA	NA	NA	NA	NA
05/19/09	362.14	52.25	309.89	6.17	15.6	290	1.86	2.86	**37**	**240**	220	**810**	**2,910**	NA	NA	NA	NA	NA	NA	NA
12/07/09	362.14	52.67	309.47	6.52	10.7	306	0.43	NM	**19**	**190**	33	**730**	**1,927**	**0.01**	83	**260**	NA	NA	NA	NA
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	< 0.080[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]	5.6	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	< 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	1.5 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	0.050 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	<0.020[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	<0.010	<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	<0.010	<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	<0.0030	<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	<0.20[e]	<1.0	<1.0	NA	NA	NA	NA
01/25/22	362.13	52.05	310.08	7.07	12.5	285	4.23	6.51	<0.05	<0.10	<0.50	<0.25	<0.75	<0.010	<2.50	<1.0	NA	NA	NA	NA
07/25/22	362.13	51.19	310.94	5.67	18.1	175	3.15	1.25	<0.10	<0.20	<1.0	<0.50	<1.50	<0.010	<2.0	<2.0	NA	NA	NA	NA
10/25/22	362.13	51.49	310.64	5.64	14.0	157	2.76	1.46	<0.10	<0.20	<1.0	<0.50	<1.5	<0.010	<2.0	<2.0	NA	NA	NA	NA
01/31/23	362.13	51.65	310.48	6.35	12.1	170	3.00	2.75	<0.10	<0.20	<1.0	<0.50	<1.5	<0.010	<2.0	<2.0	NA	NA	NA	NA
04/11/23	362.13	51.57	310.56	6.34	13.3	104	4.95	38.90	<0.10	<0.20	<1.0	<0.50	<1.5	<0.250[e]	<2.0	<2.0	NA	NA	NA	NA
08/01/23	362.13	52.24	309.89	6.12	16.2	177	1.42	0.12	<0.1	<0.250	<1.00	<0.500	<1.50	<0.0100	<10.0	<4.00	NA	NA	NA	NA

Table B-2
Summary of Groundwater Sampling Results - Well MW-09
SeaTac Development Site
SeaTac, Washington

Notes:

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

J = Laboratory estimated value

[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 (July 2022).

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

Abbreviations and Acronyms:

°C = degrees Celsius
µg/L = micrograms per liter
µmhos/cm = micromhos per centimeter
DRO = diesel-range organics
EDB = 1,2-dibromoethane
GRO = gasoline-range organics
mg/L = milligrams per liter
NM = not measured
NS = not sampled
ORO = oil-range organics

Table B-3
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
08/16/07	364.88	NM	NM	NM	NM	NM	NM	NM	92	710	7,600	1,800	11,000	NA	NA	NA	NA	NA	NA	NA
05/21/09	364.88	54.99	309.87	6.43	17.8	416	0.19	33.7	110	1,600	11,000	2,100	10,000	0.70	< 500[e]	580	NA	NA	NA	NA
12/07/09	364.88	55.29	309.59	7.58	12.0	452	0.06	NM	38	390	2,600	1,200	4,990	0.21	110	540	NA	NA	NA	NA
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	< 0.070[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	< 0.010	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	< 0.070[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	< 0.070[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	<0.020[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	<0.22	NA	NA
11/15/17	364.83	53.37	311.46	7.69	14.9	301	0.99	18.9	2.23	1.75	17.8	10.6	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	2.20	1.72	11.5	25.6	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	3.02	2.82	17	2.05	23.8	43.0	<0.010	26	19	2.9	<0.20	NA	NA
11/08/18	364.83	52.55	312.28	7.98	14.7	354	0.36	6.60	3.61	26	2.48	24.3	25.0	<0.010	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	2.29	8.2	2.90	16.0	25.0	<0.0030	8.4	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	<0.010	<1.0	<1.0	NA	NA	<0.078	<0.16
07/22/20	364.83	54.60	310.23	6.36	15.2	185	0.24	NM	<0.10	<0.20	<1.0	<0.50	<1.50	<0.010	<2.0	<2.0	NA	NA	NA	NA
10/19/20	364.83	54.97	309.86	6.85	15.5	129	1.58	2.87	0.13	<0.20	<1.0	<0.50	6.16	<0.010	2.05	<4.0	NA	NA	NA	NA
01/18/21	364.83	55.23	309.60	6.28	14.3	68	0.48	5.04	0.48	0.37	1.97	3.56	40.3	<0.010	9.68	9.24	NA	NA	NA	NA
04/26/21	364.83	54.85	309.98	7.01	15.1	363	0.28	3.25	0.97	0.61	8.84	42.9	66.8	<0.010	21 J	22.4	NA	NA	NA	NA
07/26/21	364.83	55.05	309.78	7.23	15.8	278	0.24	1.01	3.57	1.95	13.9	114.0	378	<0.020[e]	58	72.2	NA	NA	NA	NA
01/24/22	364.83	54.73	310.10	7.20	14.4	819	0.20	4.75	0.31	4.21	1.70	11.6	28.3	<0.020[e]	<2.5	3.22	NA	NA	NA	NA
07/26/22	364.83	53.89	310.94	6.57	16.1	251	2.19	1.52	0.51	1.03	4.59	28.7	62.9	<0.010	2.6	5.80	NA	NA	NA	NA
10/25/22	364.83	54.23	310.60	5.77	13.1	17	8.47	8.09	<0.10	<0.20	<1.0	<0.50	<1.5	<0.010	<2.0	<2.0	NA	NA	NA	NA
01/31/23	364.83	54.38	310.45	7.13	14.1	188	0.49	0.86	0.34	3.30	2.25	14.9	27.2	<0.020e	<2.0	2.86	NA	NA	NA	NA
04/11/23	364.83	54.09	310.74	7.29	14.5	148	0.40	0.74	0.9[f]	8.04[f]	13.00	30.3	74.5	<0.250[e]	5.83	5.15	NA	NA	NA	NA
07/31/23	364.83	54.82	310.01	7.41	16.1	248	0.53	1.58	1.05 J	3.26 J	4.96 J	44.4	143 J	<0.0100	6.06 J	8.28 J	NA	NA	NA	NA

Table B-3
Summary of Groundwater Sampling Results - Well MW-12
SeaTac Development Site
SeaTac, Washington

Notes:

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

J = Laboratory estimated value

[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 (July 2022).

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

[f] Concentration, which is from a duplicate sample, exceeded the concentration in the designated sample from MW-12.

Abbreviations and Acronyms:

°C = degrees Celsius

µg/L = micrograms per liter

µmhos/cm = micromhos per centimeter

EDB = 1,2-dibromoethane

GRO = gasoline-range organics

mg/L = milligrams per liter

NA = not analyzed

NM = not measured

NS = not sampled

NTU = nephelometric turbidity unit

ORO = oil-range organics

Table B-4
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**
08/16/07	365.42	NM	NM	NM	NM	NM	NM	NM	**92**	**180**	**5,600**	**2,100**	**12,600**	NA	NA	NA	NA	NA	NA	NA
05/20/09	365.42	55.51	309.91	6.29	18.8	474	1.13	4.8	**76**	**51**	**1,400**	**2,100**	**11,000**	**0.067**	< 250	**640**	NA	NA	NA	NA
12/07/09	365.42	55.83	309.59	6.44	12.3	429	0.18	NM	**31**	**20**	310	870	**4,570**	**0.054**	100	**500**	NA	NA	NA	NA
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**	< 0.080[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	< 0.070[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	< 0.070[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	< 0.070[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	1.1 J	<0.020[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	<0.010	<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	<0.010	<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	0.070 J	<0.20	<0.20	<0.60	<0.0030	<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	<0.010	<1.0	<1.0	NA	NA	NA	NA
07/22/20	365.42	55.19	310.23	5.75	14.4	238	0.99	NM	**0.90**	0.34	<1.0	0.74	<1.50	<0.20[e]	5.8	4.6	NA	NA	NA	NA
10/19/20	365.42	55.67	309.75	6.72	14.1	274	2.04	2.17	0.53	0.21	<1.0	<0.50	<1.50	<0.20[e]	<2.0	<2.0	NA	NA	NA	NA
01/18/21	365.42	55.85	309.57	6.56	13.3	277	1.31	0.49	0.53	0.22	1.23	6.58	18.1	<0.010	<2.0	4.7	NA	NA	NA	NA
04/26/21	365.42	55.44	309.98	6.85	14.3	217	6.18	1.69	<0.10	<0.20	<1.0	<0.50	3.73	<0.010	<2.0	<2.0	NA	NA	NA	NA
07/26/21	365.42	55.65	309.77	6.92	14.7	204	5.01	0.68	<0.05	<0.10	<0.50	<0.25	<0.75	<0.020[e]	<2.0	<2.0	NA	NA	NA	NA
01/25/22	365.42	55.30	310.12	6.60	13.5	271	2.91	0.51	<0.05	<0.10	<0.50	<0.25	<0.75	<0.010	<2.5	<1.0	NA	NA	NA	NA
07/26/22	365.42	54.47	310.95	6.18	15.1	335	3.58	3.23	<0.10	<0.20	<1.0	<0.50	<1.5	<0.010	<2.0	<2.0	NA	NA	NA	NA
10/25/22	365.42	54.82	310.60	6.07	14.1	287	1.81	4.04	<0.10	<0.20	<1.0	<0.50	<1.5	<0.010	<2.0	<2.0	NA	NA	NA	NA
01/31/23	365.42	54.99	310.43	6.58	13.4	225	4.04	1.15	<0.10	<0.20	<1.0	<0.50	<1.5	<0.010	<2.0	<2.0	NA	NA	NA	NA
04/11/23	365.42	54.90	310.52	6.43	13.6	193	3.43	0.54	<0.10	<0.20	<1.0	<0.50	<1.5	<0.250[e]	<2.0	<2.0	NA	NA	NA	NA
08/01/23	365.42	55.43	309.99	6.62	14.4	250	1.72	0.01	0.27	0.190 J	<1.00	<0.500	<1.50	<0.360[e]	<10.0	<4.00	NA	NA	NA	NA

Table B-4
Summary of Groundwater Sampling Results - Well MW-13
SeaTac Development Site
SeaTac, Washington

Notes:

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

J = Laboratory estimated value

[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 (July 2022).

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

Abbreviations and Acronyms:

°C = degrees Celsius

µg/L = micrograms per liter

µmhos/cm = micromhos per centimeter

EDB = 1,2-dibromoethane

GRO = gasoline-range organics

mg/L = milligrams per liter

NA = not analyzed

NM = not measured

NS = not sampled

NTU = nephelometric turbidity unit

ORO = oil-range organics

Table B-5
Summary of Groundwater Sampling Results - Well MW-15
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**
11/01/07	364.67	54.19	310.48	NM	NM	NM	NM	NM	**10**	**18**	16	350	418	NA	NA	NA	0.44	NA	NA	NA
05/19/09	364.67	54.76	309.91	6.34	15.2	552	1.58	> 1,000	**7.80**	**9.90**	3.4	200	74	NA	NA	NA	NA	NA	NA	NA
12/07/09	364.67	55.05	309.62	6.61	13.6	484	0.26	NM	**5.90**	**21**	<4.0	420	49	<0.0096	6.3	150	NA	NA	NA	NA
03/16/10	364.67	54.83	309.84	6.44	12.9	565	0.18	21.0	**5.40**	**17**	2.0	310	59	<0.0096	28	120	NA	NA	NA	NA
11/08/18	364.67	52.40	312.27	7.18	14.0	290	2.49	NM	**0.82**	0.48	0.19 J	1.8	0.24 J	NA	NA	NA	**1.0**	<0.20	NA	NA
01/18/21	364.67	54.80	309.87	6.58	13.9	493	0.92	36.6	0.29	0.60	<1.0	0.71	<1.5	<0.010	<2.0	<2.0	NA	NA	NA	NA
01/24/22	364.67	54.54	310.13	6.64	13.7	542	0.72	3.5	0.10	0.19	<0.50	<0.25	<0.75	<0.010	<2.5	<1.0	NA	NA	NA	NA
01/31/23	365.42	54.18	311.24	6.58	13.4	225	4.04	32.0	0.43	0.42	<1.0	0.51	<1.5	<0.250[e]	<2.0	<2.0	NA	NA	NA	NA
04/11/23	365.42	54.09	311.33	6.43	13.6	193	3.43	0.00	0.00	0.00	0.0	0.0	0.0	<0.020[e]	0.00	0.0	0.00	0.00	NA	NA

Notes:

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

J = Laboratory estimated value

[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 (July 2022).

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

Abbreviations and Acronyms:

°C = degrees Celsius
µg/L = micrograms per liter
µmhos/cm = micromhos per centimeter
DRO = diesel-range organics
EDB = 1,2-dibromoethane
GRO = gasoline-range organics
mg/L = milligrams per liter
NA = not analyzed
NM = not measured
NS = not sampled
NTU = nephelometric turbidity unit
ORO = oil-range organics

Table B-6
Summary of Groundwater Sampling Results - Well MW-16
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)
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**
11/13/07	376.36	65.95	310.41	--	--	--	--	--	**26**	**160**	320	**830**	**1,733**	NA	NA	NA	NA	NA
05/22/09	376.36	66.56	309.80	6.33	15.4	440	0.35	3.97	**28**	**180**	67	**1,200**	**1,800**	<0.10[e]	240	**350**	NA	NA
12/07/09	376.36	66.82	309.54	6.50	12.7	473	0.25	NM	**10**	**69**	67	580	490	**0.053**	66	**230**	NA	NA
03/17/10	376.36	66.62	309.74	6.40	11.7	446	0.22	5.14	**6.60**	**51**	15	430	292	**0.044**	38	**170**	NA	NA
07/29/19	377.63	65.95	311.68	6.57	15.6	184	0.45	NM	**1.73**	0.64	0.32	0.45	0.48 J	<0.0030	4.13	1.0	<0.10	<0.20
10/19/20	377.63	68.02	309.61	6.55	13.4	237	2.26	2.54	0.19	0.29	<1.0	<0.50	<1.5	<0.010	<2.0	<2.0	NA	NA
01/18/21	377.63	68.21	309.42	6.37	13.3	248	0.58	1.08	0.41	0.22	<1.0	<0.50	<1.5	<0.010	3.43	<2.0	NA	NA
04/26/21	377.63	67.82	309.81	6.72	14.1	184	1.31	2.13	0.35	<0.20	<1.0	<0.50	<1.5	<0.010	<2.0	<2.0	NA	NA
07/26/21	377.63	68.02	309.61	6.79	15.8	150	0.90	0.49	0.080 J	0.12 J	<0.50	<0.25	<0.75	<0.040[e]	<2.0	<2.0	NA	NA
01/24/22	377.63	67.68	309.95	6.88	12.7	147	1.30	0.81	<0.050	<0.10	<0.50	<0.25	<0.75	<0.020[e]	<2.5	<1.0	NA	NA
07/25/22	377.63	66.81	310.82	6.38	14.8	143	1.35	1.32	<0.10	<0.20	<1.0	<0.50	<1.5	<0.020e	<2.0	<2.0	NA	NA
10/26/22	377.63	67.15	310.48	6.05	13.6	199	3.78	0.71	0.18	<0.20	<1.0	<0.50	<1.5	<0.020e	<2.0	<2.0	NA	NA
01/31/23	377.63	67.34	310.29	6.75	12.0	184	0.86	1.22	0.13	<0.20	<1.0	<0.50	<1.5	<0.020e	<2.0	<2.0	NA	NA
04/11/23	377.63	67.25	310.38	6.58	12.8	166	0.84	2.45	0.13	<0.20	<1.0	<0.50	<1.5	<0.250[e]	<2.0	<2.0	NA	NA
07/31/23	377.63	67.78	309.85	6.86	16.2	207	0.98	0.76	<0.1	<0.250	<1.00	<0.500	<1.50	<0.0100	<10.0	<4.00	NA	NA

Notes:

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

-- = Not avaliable

J = Laboratory estimated value

[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 (July 2022).

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

Abbreviations and Acronyms:

°C = degrees Celsius
µg/L = micrograms per liter
µmhos/cm = micromhos per centimeter
DRO = diesel-range organics
EDB = 1,2-dibromoethane
GRO = gasoline-range organics
mg/L = milligrams per liter
NA = not analyzed
NM = not measured
NS = not sampled
NTU = nephelometric turbidity unit
ORO = oil-range organics

Table B-7
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**
11/13/07	385.81	75.60	310.21	NM	NM	NM	NM	NM	**17**	1.0	5.2	45	507	NA	NA	NA	**7.3**	< 0.50	NA	NA
05/28/09	385.81	76.17	309.64	6.23	18.2	183.9	0.37	4.9	**6.3**	0.70	0.6	13	96	< 0.20[g]	< 5.0	150	NA	NA	NA	NA
12/07/09	385.81	76.49	309.32	6.46	10	166	0.13	NM	**4.5**	< 4.0	7.0	8.8	56	< 0.0095	< 4.0	140	NA	NA	NA	NA
03/17/10	385.81	76.29	309.52	6.51	9.3	145	0.52	142	**1.7**	< 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	< 0.080[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	< 0.070[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	< 0.070[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	< 0.070[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	< 0.070[g]	< 0.20	< 0.50	< 0.10	< 0.20	NA	NA
12/18/15	394.00e	85.95	308.05f	6.57	11.8	127	0.20	23.7	0.050 J	0.75	< 0.20	0.080 J	< 0.40	<0.020[e]	< 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	311.79f	6.14	12.9	106	8.57	1.4	<0.10	<0.20	<0.20	<0.20	<0.40	<0.010	<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	<0.010	<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	<0.0030	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	<0.010	<1.0	<1.0	NA	NA	NA	NA
07/21/20	394.44	84.35	310.09	5.35	13.7	168	1.99	NM	<0.10	<0.20	<1.0	<0.50	<1.5	<0.0100	<2.0	<2.0	NA	NA	NA	NA
10/19/20	394.44	84.93	309.51	5.86	14.3	182	3.02	13.2	<0.10	<0.20	<1.0	<0.50	<1.5	<0.010	<2.0	<2.0	NA	NA	NA	NA
01/18/21	394.44	85.14	309.30	6.23	12.3	179	1.15	1.7	<0.10	0.49	<1.0	<0.50	<1.5	<0.010	<2.0	<2.0	NA	NA	NA	NA
04/26/21	394.44	84.69	309.75	6.29	13.3	180	3.98	94.8	<0.10	<0.20	<1.0	<0.50	<1.5	<0.010	<2.0	<2.0	NA	NA	NA	NA
07/26/21	394.44	84.85	309.59	6.34	16.1	162	3.99	38.1	<0.050	<0.10	<0.50	<0.25	<0.75	<0.010	<2.0	<2.0	NA	NA	NA	NA
01/24/22	394.44	84.68	309.76	6.70	12.4	220	1.50	12.9	<0.050	<0.10	<0.50	<0.25	<0.75	<0.010	<2.5	<1.0	NA	NA	NA	NA
07/25/22	394.44	83.38	311.06	6.12	14.0	189	4.00	33.5	<0.10	<0.20	<1.0	<0.50	<1.5	<0.010	<2.0	<2.0	NA	NA	NA	NA
10/26/22	394.44	83.99	310.45	5.74	13.3	127	6.64	1.5	<0.10	<0.20	<1.0	<0.50	<1.5	<0.010	<2.0	<2.0	NA	NA	NA	NA
01/31/23	394.44	84.19	310.25	6.55	12.7	139	5.30	1.2	<0.10	<0.20	<1.0	<0.50	<1.5	<0.010	<2.0	<2.0	NA	NA	NA	NA
04/11/23	394.44	84.11	310.33	6.32	12.5	135	5.09	6.36	<0.10	<0.20	<1.0	<0.50	<1.5	<0.250[g]	<2.0	<2.0	NA	NA	NA	NA
08/01/23	394.44	84.70	309.74	6.17	14.5	154	4.50	1.24	<0.1	<0.250	<1.00	<0.500	<1.50	<0.0100	<10.0	<4.00	NA	NA	NA	NA

Table B-7
Summary of Groundwater Sampling Results - Well MW-17A
SeaTac Development Site
SeaTac, Washington

Notes:

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

J = Laboratory estimated value

[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 (July 2022).

[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.

Abbreviations and Acronyms:

°C = degrees Celsius
µg/L = micrograms per liter
µmhos/cm = micromhos per centimeter
DRO = diesel-range organics
EDB = 1,2-dibromoethane
GRO = gasoline-range organics
mg/L = milligrams per liter
NA = not analyzed
NM = not measured
NS = not sampled
NTU = nephelometric turbidity unit
ORO = oil-range organics

Table B-8
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
11/28/07	360.45	52.50	307.95	NM	NM	NM	NM	NM	79	2,900	7,500	1,600	6,290	NA	NA	NA	0.66	< 0.50[e]	NA	NA
05/21/09	360.45	54.53	305.92	6.71	17.4	494	0.11	4.58	78	3,100	7,600	2,200	9,600	1.4	500	460	NA	NA	NA	NA
12/07/09	360.45	50.85	309.60	6.80	12.4	587	0.28	NM	44	2,200	5,400	1,600	6,690	1.9	180	380	NA	NA	NA	NA
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	< 0.080[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	< 0.070[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	< 0.070[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	< 0.070[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	<0.020[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	1.89	1.9	NS	NS	NS	NS	NS	NS	NS	4.7	<0.20	NA	NA
05/16/18	360.45	47.94	312.51	6.42	15.2	405	0.21	1.41	1.5	6.2	2.2	20	19	<0.010	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	2.50	1.5	6.6	1.1	24	2.8	<0.010	<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	0.25	1.2	2.4	<0.0030	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	27.0	7.14	NM	<0.10	<0.10	<0.50	<0.25	<0.75	<0.010	<1.0	<1.0	NA	NA	<0.080	<0.16
07/22/20	360.45	50.25	310.20	6.80	16.1	355	1.57	NM	<0.10	<0.20	<1.0	<0.50	<1.50	<0.0100	<2.0	<2.0	NA	NA	NA	NA
10/19/20	360.45	50.68	309.77	7.51	16.4	390	2.34	1.5	<0.10	<0.20	<1.0	<0.50	<1.50	<0.010	<2.0	<2.0	NA	NA	NA	NA
01/18/21	360.45	50.90	309.55	7.49	14.9	378	0.66	0.7	<0.10	0.66	<1.0	<0.50	<1.5	<0.010	<2.0	<2.0	NA	NA	NA	NA
04/26/21	360.45	50.49	309.96	7.65	15.7	378	0.19	0.44	<0.10	0.51	<1.0	<0.50	<1.5	<0.010	<2.0	<2.0	NA	NA	NA	NA
07/26/21	360.45	50.63	309.82	7.65	18.1	308	0.31	0.63	<0.05	0.59	<0.50	<0.25	<0.75	<0.010	<2.0	<2.0	NA	NA	NA	NA
01/25/22	360.45	50.31	310.14	7.01	14.7	622	0.40	0.29	<0.05	0.33	<0.50	<0.25	<0.75	<0.010	<2.5	<1.0	NA	NA	NA	NA
07/26/22	360.45	49.43	311.02	6.92	18.2	496	0.86	1.71	<0.10	0.70	<1.0	<0.50	<1.5	<0.010	<2.0	<2.0	NA	NA	NA	NA
10/25/22	360.45	49.79	310.66	6.36	15.9	530	0.68	0.69	<0.10	<0.20	<1.0	<0.50	<1.5	<0.010	<2.0	<2.0	NA	NA	NA	NA
01/31/23	360.45	49.96	310.49	7.09	13.8	510	0.66	1.12	<0.10	<0.20	<1.0	<0.50	<1.5	<0.010	<2.0	<2.0	NA	NA	NA	NA
04/11/23	360.45	49.90	310.55	6.77	15.1	312	0.80	0.59	<0.10	<0.20	<1.0	<0.50	<1.5	<0.250[e]	<2.0	<2.0	NA	NA	NA	NA
08/01/23	360.45	50.40	310.05	6.78	16.0	503	0.66	0.70	<0.1	0.170 J	<1.00	<0.500	<1.50	<0.0100	<10.0	<4.00	NA	NA	NA	NA

Table B-8
Summary of Groundwater Sampling Results - Well MW-18
SeaTac Development Site
SeaTac, Washington

Notes:

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

J = Laboratory estimated value

[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 (July 2022).

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

Abbreviations and Acronyms:

°C = degrees Celsius
µg/L = micrograms per liter
µmhos/cm = micromhos per centimeter
DRO = diesel-range organics
EDB = 1,2-dibromoethane
GRO = gasoline-range organics
mg/L = milligrams per liter
NA = not analyzed
NM = not measured
NS = not sampled
NTU = nephelometric turbidity unit
ORO = oil-range organics

Table B-9
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**
12/10/09	393.31	83.8	309.51	6.96	11.7	5.66	0.27	NM	**8.0**	**17**	26	**770**	**1,112**	< 0.0095	4.9	**270**	NA	NA	NA	NA
02/12/10	393.31	NM	NM	NM	NM	NM	NM	0.97	**12.0**	**22**	51	**850**	**1,719**	< 0.0096	11	**280**	NA	NA	NA	NA
03/16/10	393.31	83.63	309.68	6.65	12.5	586	0.25	82.0	**15.0**	**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	**17.0**	**5.7**	12	**990**	**1,503**	< 0.070[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	**18.0**	3.90	9.70	**940**	**1,900**	< 0.070[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	**16.0**	4.80	9.30	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	**16.0**	**8.70**	11.0	**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	**19.0**	**5.90**	7.40	**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	**19.0**	4.40	6.20	**840**	**1,503**	<0.020[e]	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	**15.0**	3.80	5.00	**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	**11.0**	3.97	3.93	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	**12.8**	4.22	4.35	651	960	<0.20[f]	5.7	**389**	**2.8**	<0.22	NA	NA
11/15/17	393.31	81.93	311.38	7.09	13.1	215	1.72	3.72	**11.1**	4.17	3.34	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	**16.5**	4.90	3.89	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	**12.2**	2.97	2.4	340	630	<0.010	4.8	**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	**8.56**	2.27	2.2	198	407	<0.010	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	**1.94**	1.05	0.33	61.4	76.3	<0.0030	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	**4.32**	3.10	<5.0	247	335	<2.5[f]	<10	130	NA	NA	0.27[e]	<0.20
07/21/20	393.31	83.04	310.27	5.60	14.8	208	0.96	NM	**4.38**	2.90	<5.0	184	340	<2.5[f]	<10	**175**	NA	NA	NA	NA
01/24/22	393.31	82.79	310.52	7.70	13.0	252	0.54	0.84	0.23	1.51	<0.50	1	<0.75	<0.010	<1.0	13.2	NA	NA	NA	NA
01/30/23	393.31	82.96	310.35	7.72	12.4	204	0.76	2.17	0.10	0.40	<1.0	<0.50	<1.5	<0.010	<2.0	2.8	NA	NA	NA	NA

Table B-9
Summary of Groundwater Sampling Results - Well MW-22
SeaTac Development Site
SeaTac, Washington

Notes:

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

J = Laboratory estimated value

[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 (July 2022).

[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.

Abbreviations and Acronyms:

°C = degrees Celsius
µg/L = micrograms per liter
µmhos/cm = micromhos per centimeter
DRO = diesel-range organics
EDB = 1,2-dibromoethane
GRO = gasoline-range organics
mg/L = milligrams per liter
NA = not analyzed
NM = not measured
NS = not sampled
NTU = nephelometric turbidity unit
ORO = oil-range organics

Table B-10
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)	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
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	< 0.070[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	< 0.070[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	1.10	1.90	< 0.070[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	1.10	1.00	< 0.070[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	4.18	< 0.25	< 0.20	< 0.20	< 0.20	< 0.40	< 0.070[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	1.79	< 0.25	< 0.20	< 0.20	0.26	0.40 J	< 0.070[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	7.38	<0.10	0.080 J	<0.20	0.74	0.50	<0.20[g]	<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	0.030 J	<0.20	0.04 J	<0.40	<0.20[g]	<0.20	<0.50	<0.10	<0.20	NA	NA
05/02/17	400.00e	89.65	310.35f	6.54	12.9	107	3.85	2.63	<0.10	0.21	<0.20	1.16	<0.40	<0.020[e]	<0.20	1.37	<0.10	<0.20	NA	NA
11/15/17	400.00[e]	88.67	311.33[f]	6.78	13.0	199	5.09	2.42	<0.10	<0.20	<0.20	0.36	<0.40	<0.20[g]	<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	3.43	0.15	0.47	<0.20	2.68	<0.40	<0.20[g]	<0.20	3.24	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	NA	NA
05/16/18	400.00[e]	87.64	312.36[f]	6.40	13.8	103	3.36	2.35	<0.10	<0.20	<0.20	<0.20	<0.40	<0.010	<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	1.29	<0.10	<0.20	<0.20	<0.20	<0.40	<0.010	<0.20	<0.50	<0.10	<0.20	NA	NA
08/08/19	400.00[e]	89.52	310.73[f]	7.27	11.7	114	3.73	NM	<0.10	<0.20	<0.20	<0.20	<0.60	<0.0030	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	<0.010	<1.0	<1.0	NA	NA	NA	NA
07/21/20	399.83	89.77	310.06	5.37	14.5	174	3.15	NM	<0.10	<0.20	<1.0	<0.50	<1.5	<0.010	<2.0	<2.0	NA	NA	NA	NA
10/19/20	399.83	90.30	309.53	6.22	15.0	194	1.14	3.27	<0.10	<0.20	<1.0	<0.50	<1.5	<0.010	<2.0	<2.0	NA	NA	NA	NA
01/18/21	399.83	90.61	309.22	6.31	12.3	209	3.75	14.50	<0.10	<0.20	<1.0	<0.50	<1.5	<0.010	<2.0	<2.0	NA	NA	NA	NA
04/26/21	399.83	90.12	309.71	6.80	13.7	228	2.99	62.60	<0.10	0.22	<1.0	<0.50	<1.5	<0.010	<2.0	<2.0	NA	NA	NA	NA
07/26/21	399.83	90.28	309.55	6.88	15.2	185	3.88	2.10	<0.050	<0.10	<0.50	<0.25	<0.75	<0.010	<2.0	<2.0	NA	NA	NA	NA
01/24/22	399.83	90.02	309.81	7.00	12.7	224	2.71	0.64	<0.050	<0.10	<0.50	<0.25	<0.75	<0.010	<1.0	<1.0	NA	NA	NA	NA
07/25/22	399.83	89.11	310.72	6.88	17.8	253	2.01	6.20	<0.10	<0.20	<1.0	<0.50	<1.50	<0.010	<2.0	<2.0	NA	NA	NA	NA
10/25/22	399.83	89.49	310.34	6.14	14.2	152	4.11	12.70	<0.10	<0.20	<1.0	<0.50	<1.5	<0.010	<2.0	<2.0	NA	NA	NA	NA
01/30/23	399.83	89.67	310.16	7.48	11.9	211	1.43	114.00	<0.10	0.40	<1.0	1.2	<1.5	<0.010	<2.0	<2.0	NA	NA	NA	NA
04/11/23	399.83	89.52	310.31	7.27	11.7	114	3.73	18	<0.10	0.13 J	<1.0	<0.50	<1.5	<0.250[g]	<2.0	<2.0	NA	NA	NA	NA

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

Notes:

J = Laboratory estimated value

[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 (July 2022).

[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.

Abbreviations and Acronyms:

°C = degrees Celsius
µg/L = micrograms per liter
µmhos/cm = micromhos per centimeter
DRO = diesel-range organics
EDB = 1,2-dibromoethane
GRO = gasoline-range organics
mg/L = milligrams per liter
NA = not analyzed
NM = not measured
NS = not sampled
NTU = nephelometric turbidity unit
ORO = oil-range organics

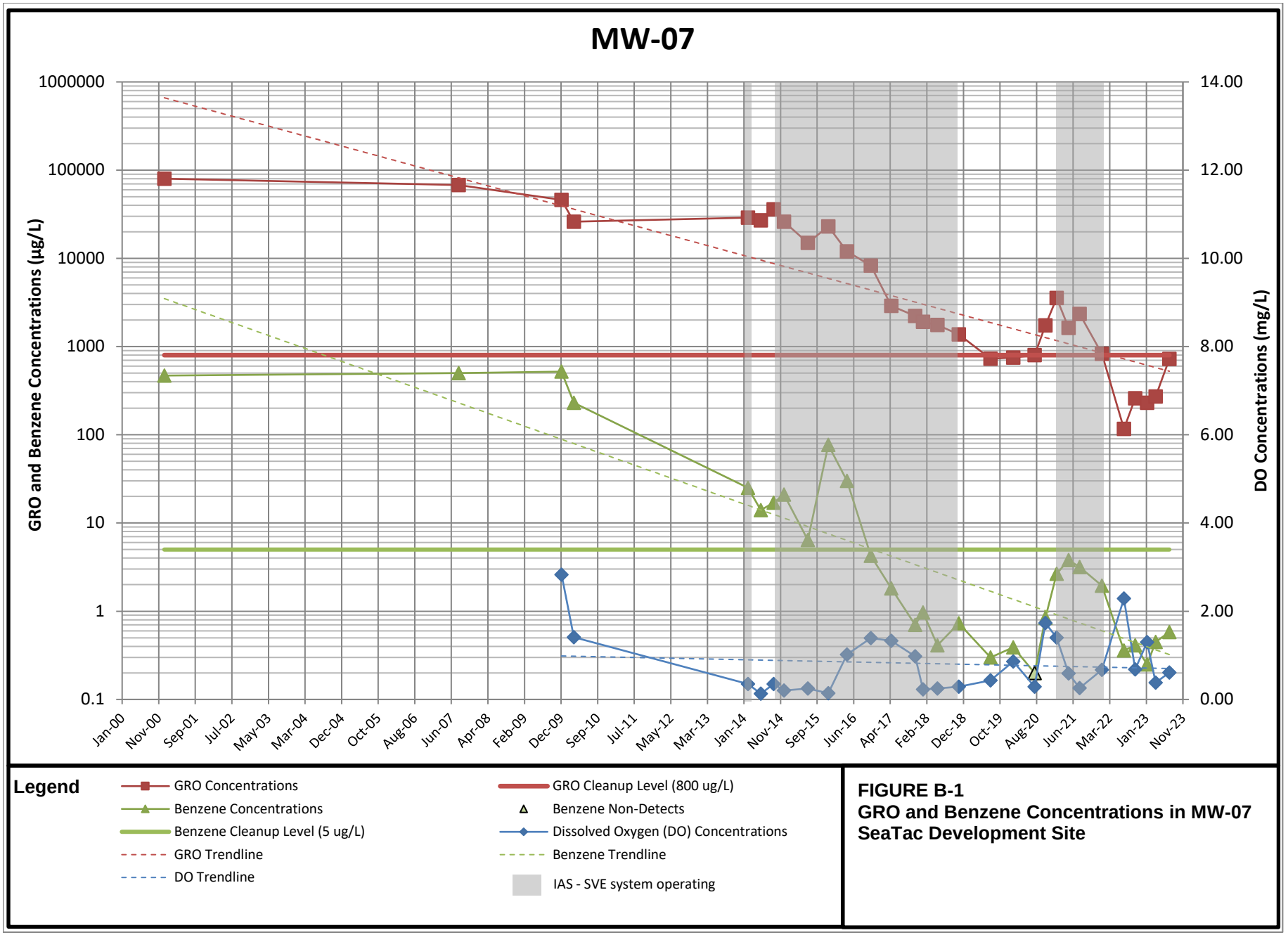

FIGURE B-1
GRO and Benzene Concentrations in MW-07
SeaTac Development Site

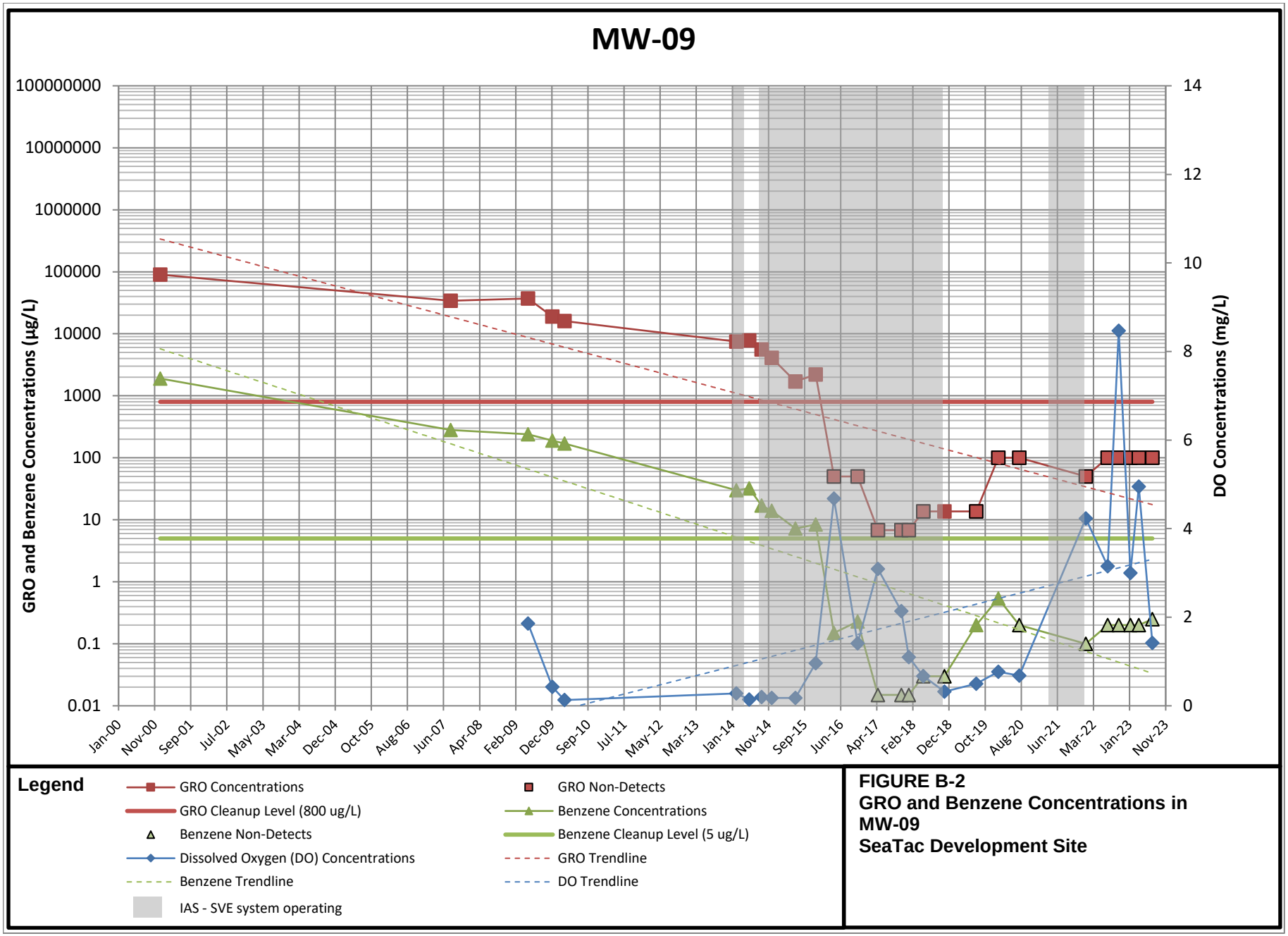

FIGURE B-2
GRO and Benzene Concentrations in MW-09
SeaTac Development Site

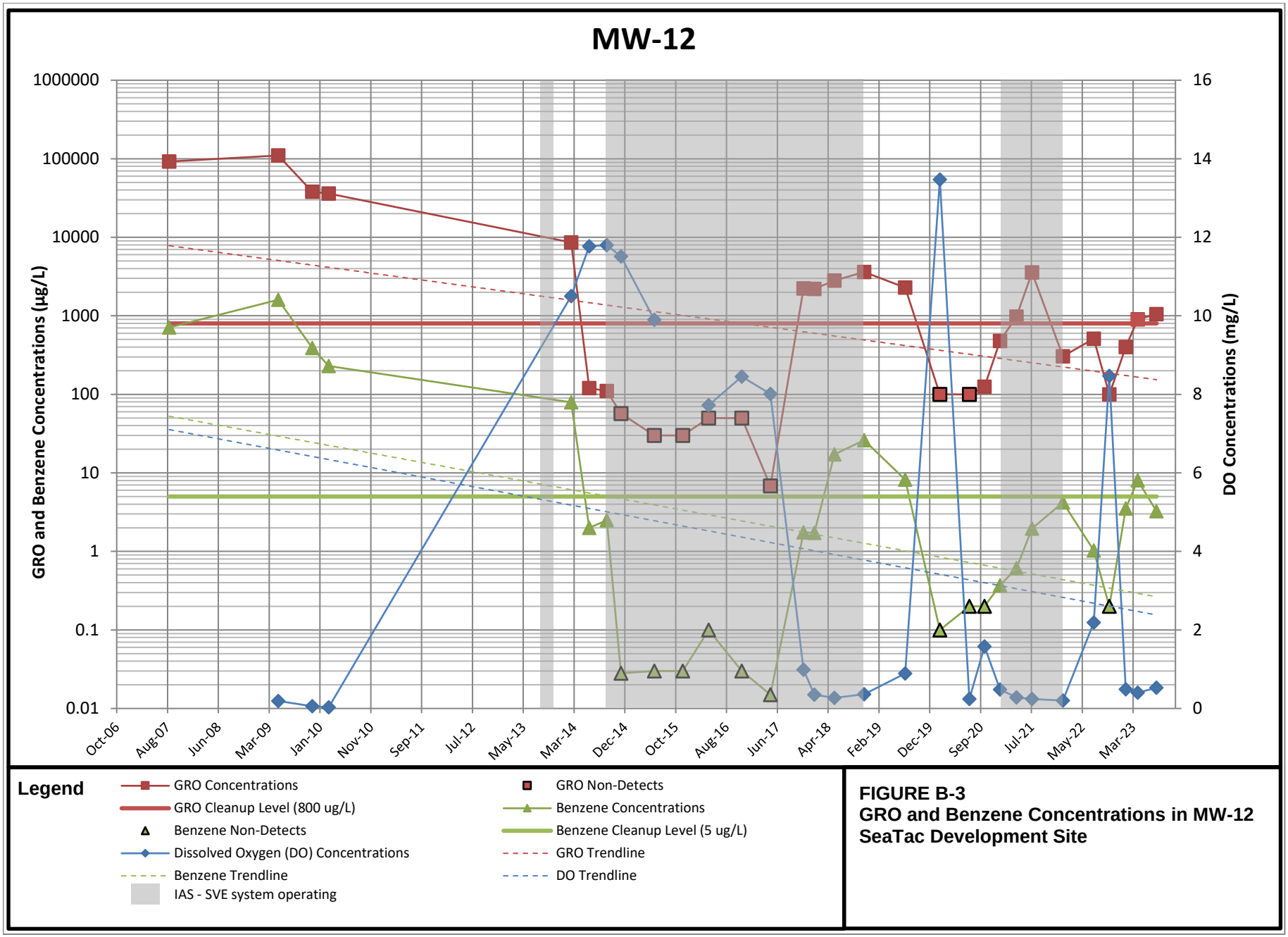

FIGURE B-3
GRO and Benzene Concentrations in MW-12
SeaTac Development Site

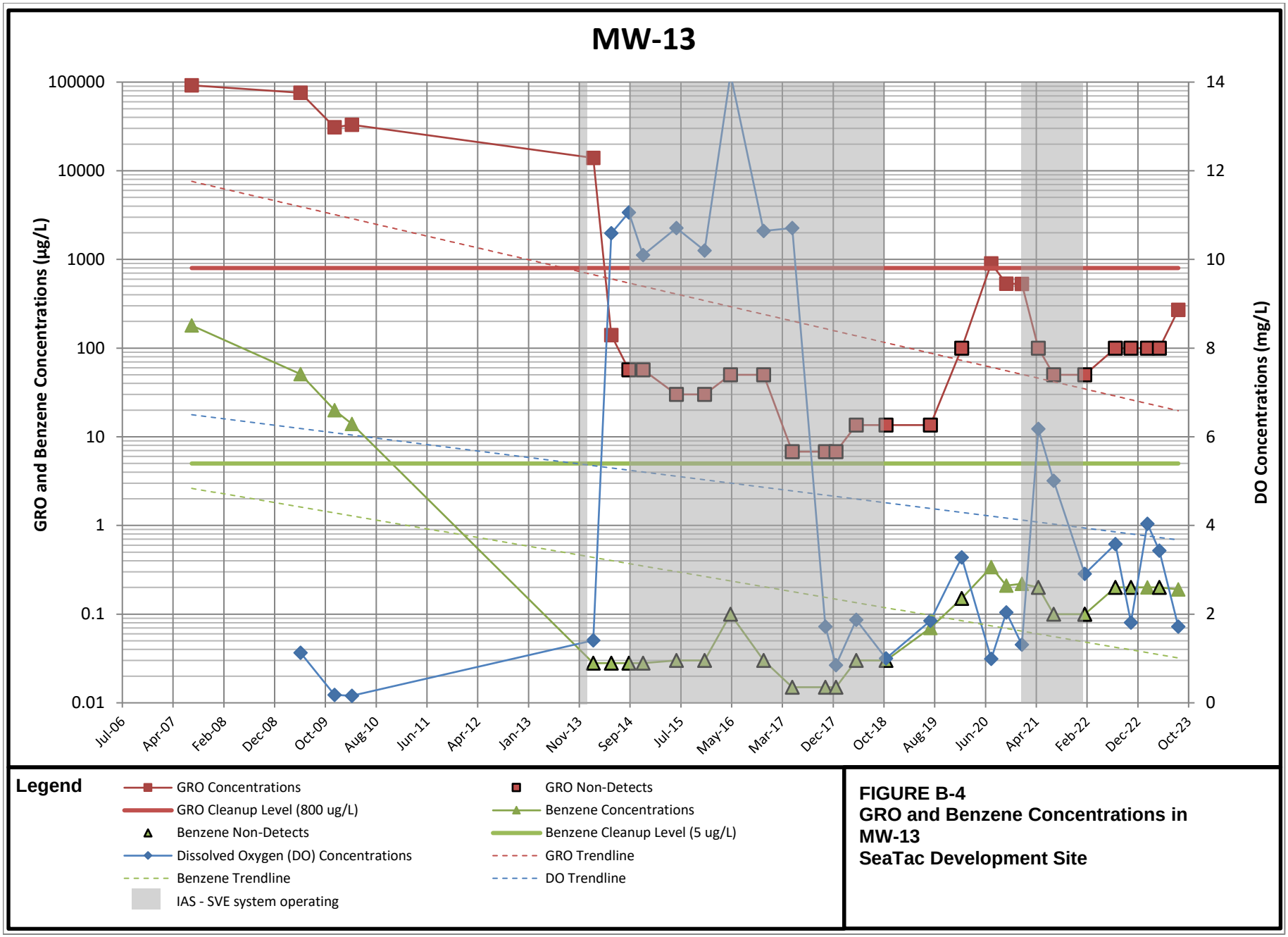

FIGURE B-4
GRO and Benzene Concentrations in MW-13
SeaTac Development Site

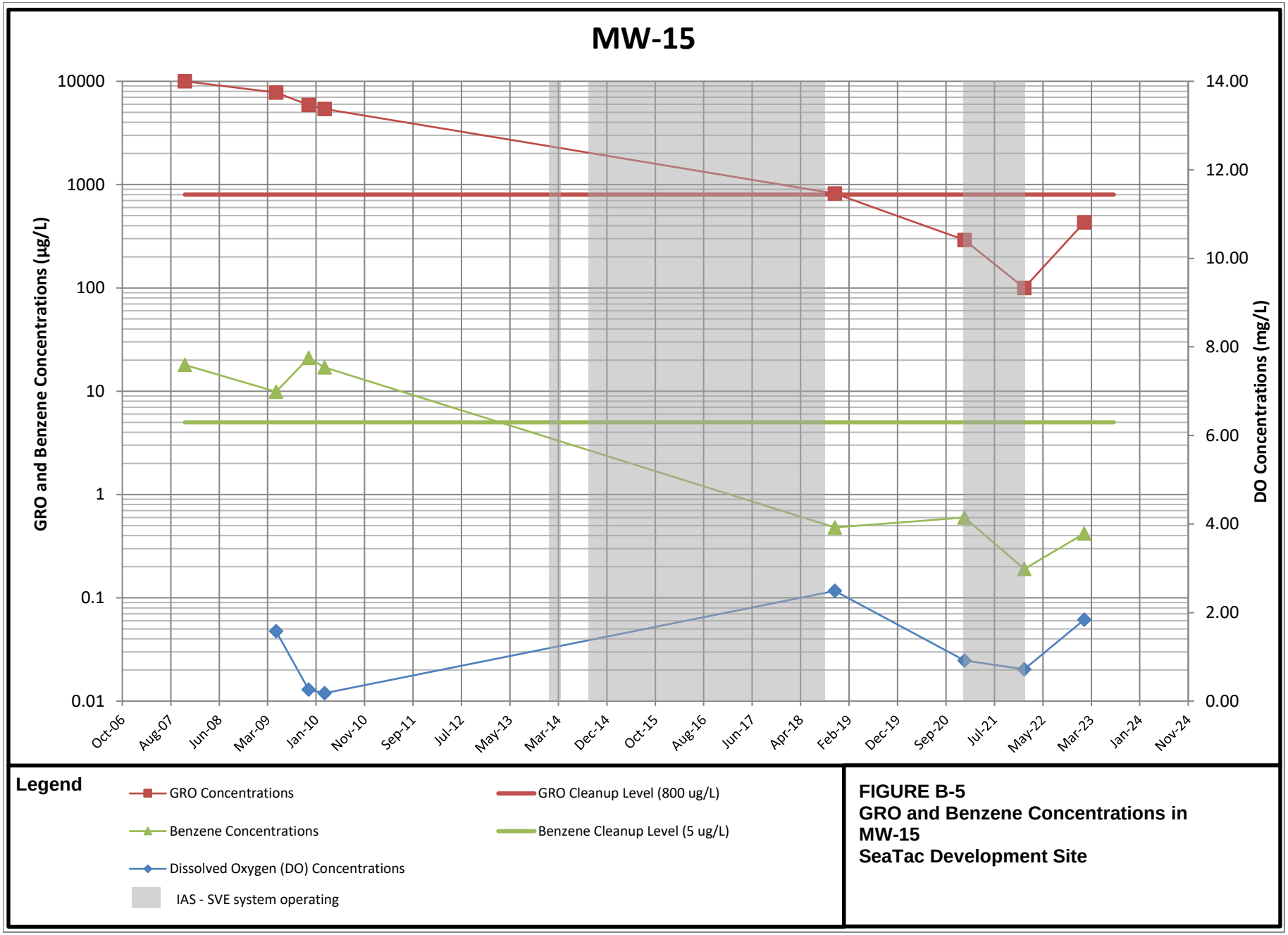

FIGURE B-5
GRO and Benzene Concentrations in MW-15
SeaTac Development Site

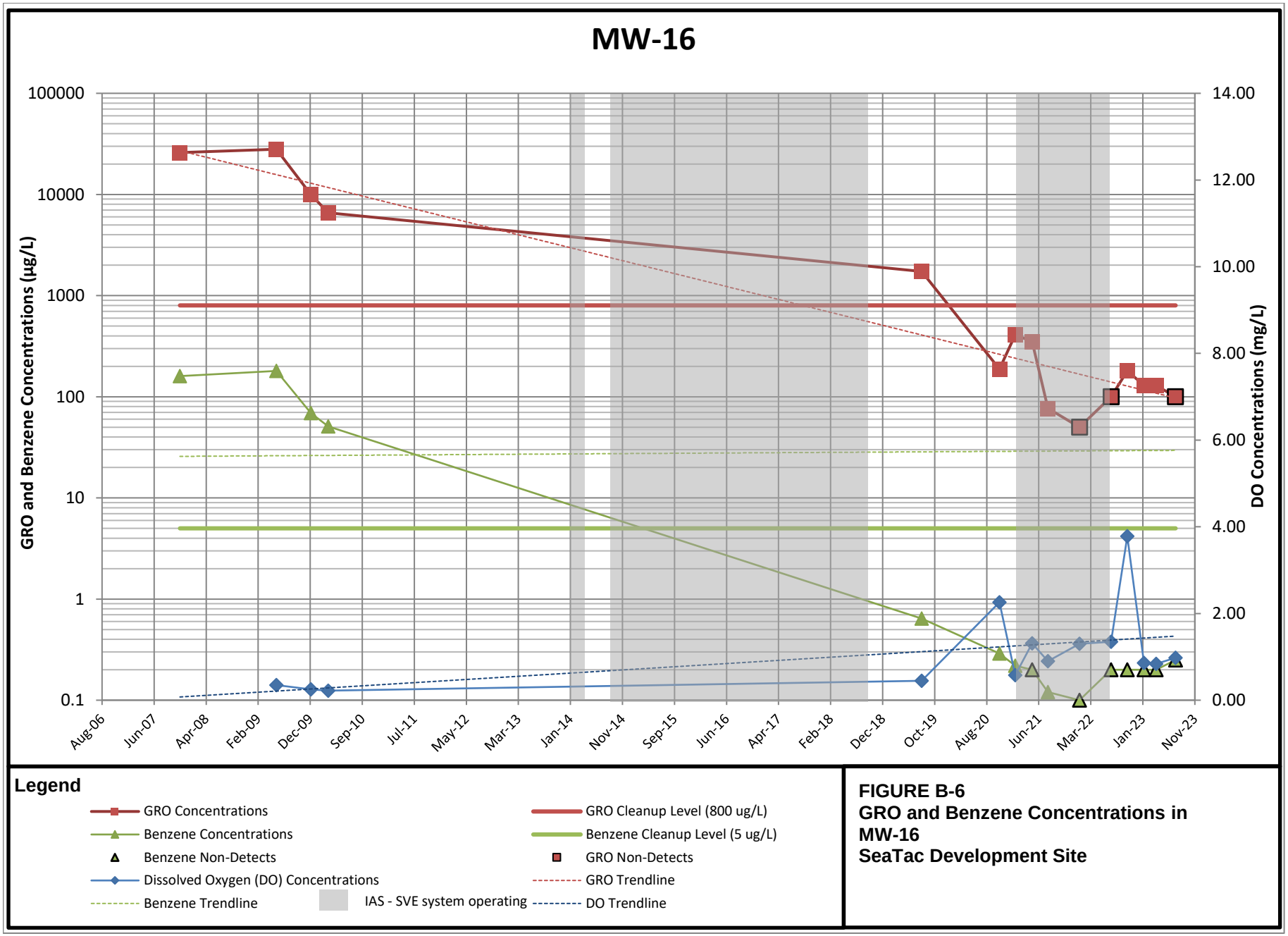

FIGURE B-6
GRO and Benzene Concentrations in MW-16
SeaTac Development Site

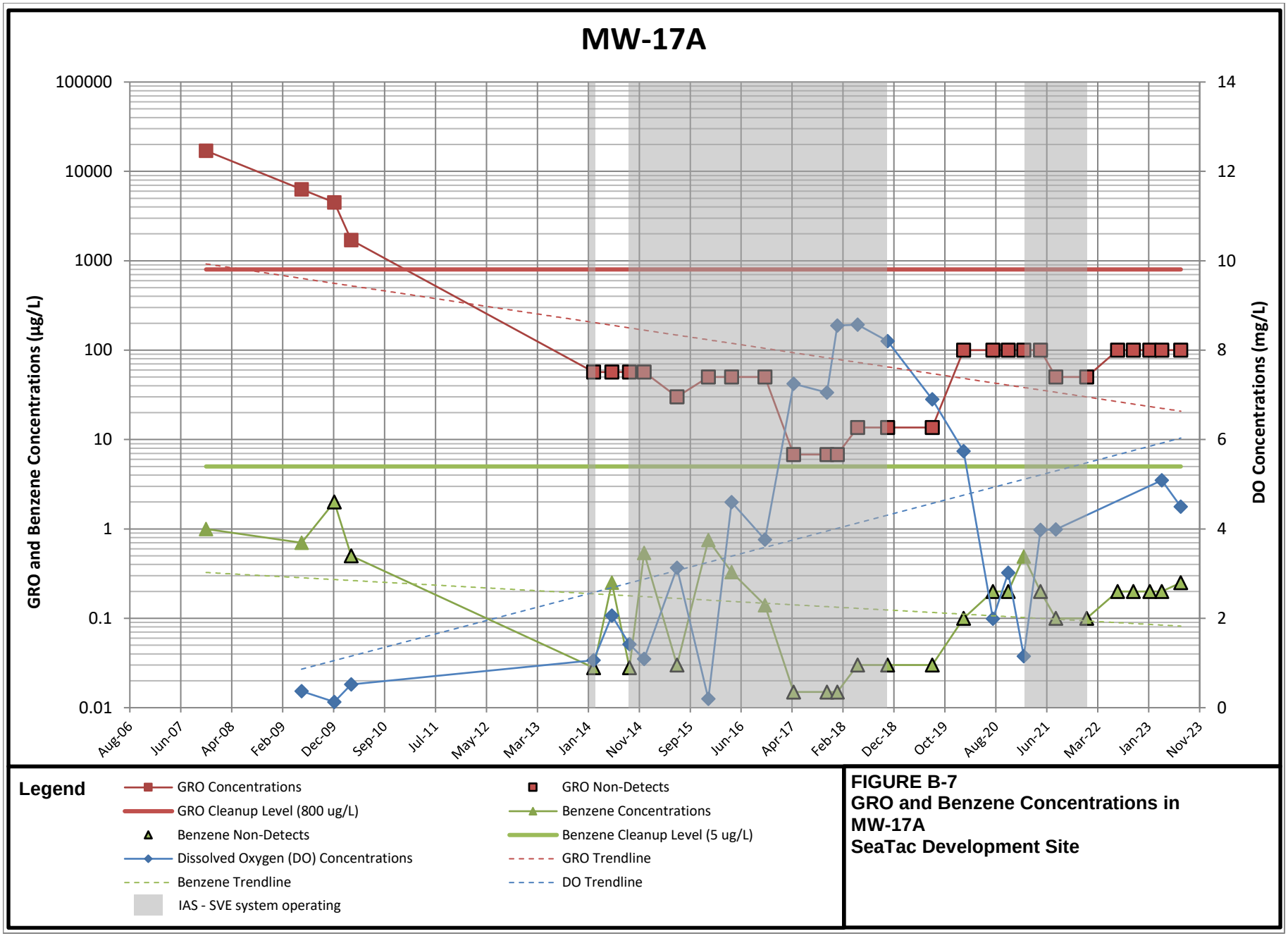

FIGURE B-7
GRO and Benzene Concentrations in MW-17A
SeaTac Development Site

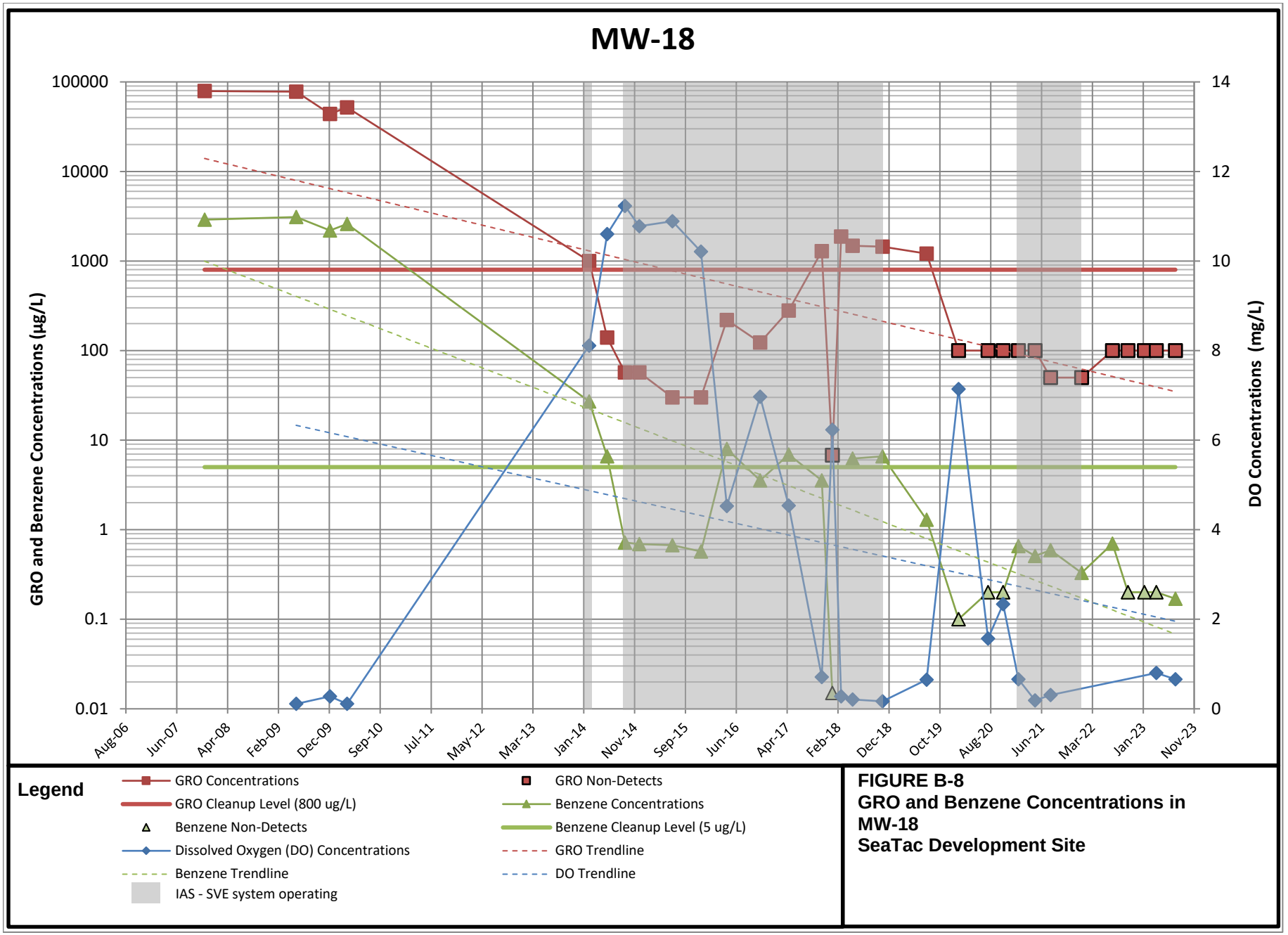

FIGURE B-8
GRO and Benzene Concentrations in MW-18
SeaTac Development Site

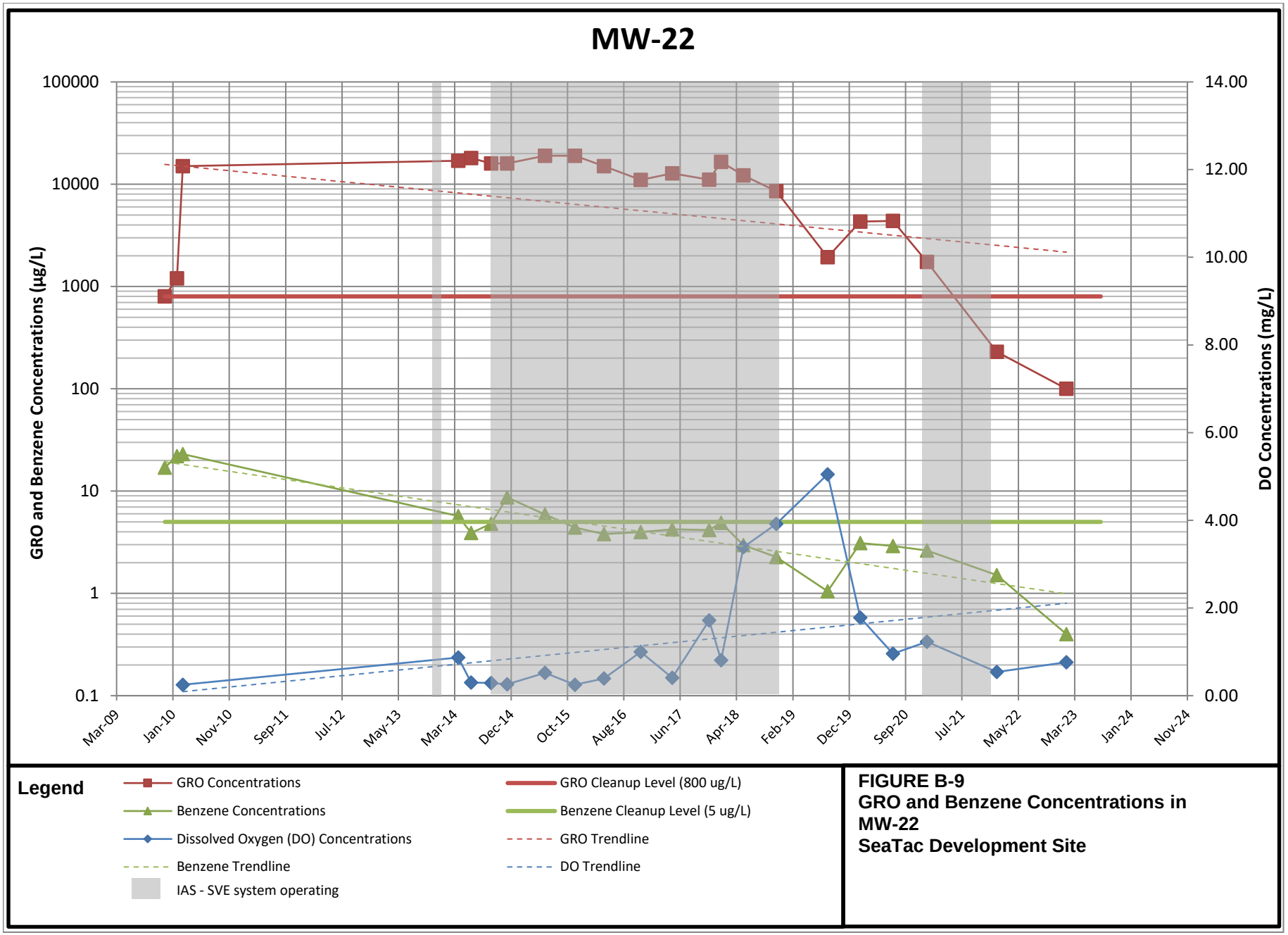

FIGURE B-9
GRO and Benzene Concentrations in MW-22
SeaTac Development Site

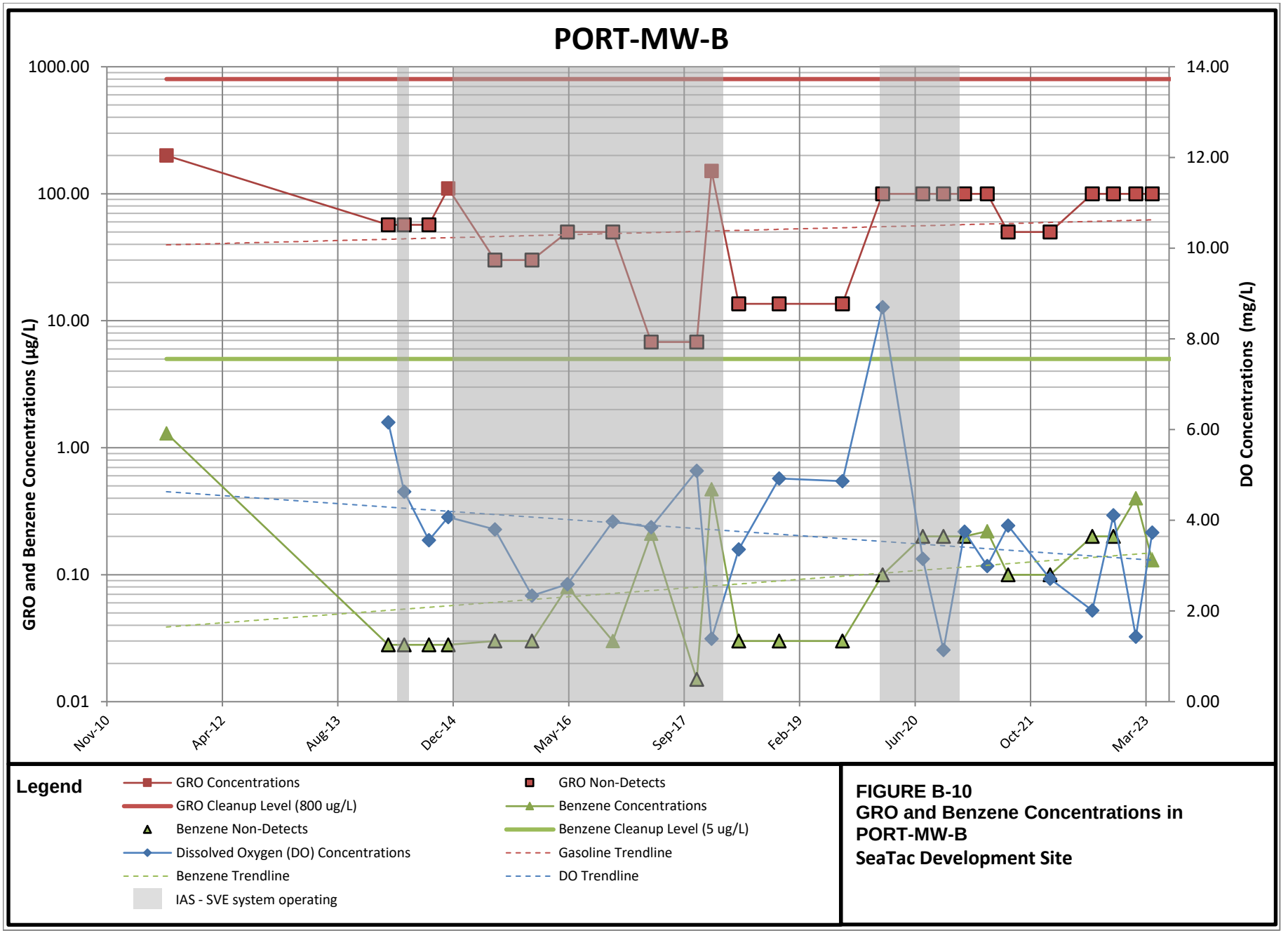

FIGURE B-10
GRO and Benzene Concentrations in PORT-MW-B
SeaTac Development Site

APPENDIX C

Analytical Laboratory Data Report

Apex Laboratories, LLC
6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
ORELAP ID: **OR100062**

ANALYTICAL REPORT

Thursday, August 10, 2023

Mike Staton
Landau Associates (Northgate)
155 NE 100th St #302
Seattle, WA 98125

RE: A3H0772 - Sea-Tac Development Site - 2218001.010.011

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 A3H0772, which was received by the laboratory on 8/3/2023 at 10:50:00AM.

If you have any questions concerning this report or the services we offer, please feel free to contact me by email at: pnerenberg@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)

Default Cooler	3.3	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

Philip Nerenberg

Philip Nerenberg, Lab Director

Apex Laboratories, LLC
6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
ORELAP ID: **OR100062**

ANALYTICAL REPORT

Landau Associates (Northgate)	Project: **Sea-Tac Development Site**	
155 NE 100th St #302	Project Number: **2218001.010.011**	**Report ID:**
Seattle, WA 98125	Project Manager: **Mike Staton**	**A3H0772 - 08 10 23 1724**

ANALYTICAL REPORT FOR SAMPLES

SAMPLE INFORMATION

Client Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
MW-7-0723	A3H0772-01	Water	08/01/23 09:29	08/03/23 10:50
MW-9-0723	A3H0772-02	Water	08/01/23 10:33	08/03/23 10:50
MW-12-0723	A3H0772-03	Water	07/31/23 13:12	08/03/23 10:50
MW-13-0723	A3H0772-04	Water	08/01/23 10:06	08/03/23 10:50
MW-16-0723	A3H0772-05	Water	07/31/23 14:09	08/03/23 10:50
MW-17A-0723	A3H0772-06	Water	08/01/23 08:21	08/03/23 10:50
MW-18-0723	A3H0772-07	Water	08/01/23 08:57	08/03/23 10:50
MW-32-0723	A3H0772-08	Water	07/31/23 13:30	08/03/23 10:50
Equipment Blank-0723	A3H0772-09	Water	08/01/23 08:45	08/03/23 10:50
Trip Blank	A3H0772-10	Water	07/31/23 00:00	08/03/23 10:50

Apex Laboratories

Philip Nerenberg, Lab Director

The results in this report apply to the samples analyzed in accordance with the chain of custody document(s) and updated by any subsequent written communications. This analytical report must be reproduced in its entirety.

Apex Laboratories, LLC
6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
ORELAP ID: OR100062

ANALYTICAL REPORT

Landau Associates (Northgate)	Project: Sea-Tac Development Site	
155 NE 100th St #302	Project Number: 2218001.010.011	Report ID:
Seattle, WA 98125	Project Manager: Mike Staton	A3H0772 - 08 10 23 1724

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-7-0723 (A3H0772-01)				**Matrix: Water**		**Batch: 23H0175**		
Gasoline Range Organics	**725**	50.0	100	ug/L	1	08/04/23 21:55	NWTPH-Gx (MS)	
Surrogate: 4-Bromofluorobenzene (Sur)		*Recovery: 105 %*		*Limits: 50-150 %*	*1*	*08/04/23 21:55*	*NWTPH-Gx (MS)*	
1,4-Difluorobenzene (Sur)			*95 %*	*50-150 %*	*1*	*08/04/23 21:55*	*NWTPH-Gx (MS)*	
MW-9-0723 (A3H0772-02)				**Matrix: Water**		**Batch: 23H0175**		
Gasoline Range Organics	ND	50.0	100	ug/L	1	08/04/23 17:47	NWTPH-Gx (MS)	
Surrogate: 4-Bromofluorobenzene (Sur)		*Recovery: 91 %*		*Limits: 50-150 %*	*1*	*08/04/23 17:47*	*NWTPH-Gx (MS)*	
1,4-Difluorobenzene (Sur)			*104 %*	*50-150 %*	*1*	*08/04/23 17:47*	*NWTPH-Gx (MS)*	
MW-12-0723 (A3H0772-03)				**Matrix: Water**		**Batch: 23H0175**		
Gasoline Range Organics	**1050**	50.0	100	ug/L	1	08/04/23 22:40	NWTPH-Gx (MS)	
Surrogate: 4-Bromofluorobenzene (Sur)		*Recovery: 93 %*		*Limits: 50-150 %*	*1*	*08/04/23 22:40*	*NWTPH-Gx (MS)*	
1,4-Difluorobenzene (Sur)			*96 %*	*50-150 %*	*1*	*08/04/23 22:40*	*NWTPH-Gx (MS)*	
MW-13-0723 (A3H0772-04)				**Matrix: Water**		**Batch: 23H0175**		
Gasoline Range Organics	**270**	50.0	100	ug/L	1	08/04/23 18:10	NWTPH-Gx (MS)	
Surrogate: 4-Bromofluorobenzene (Sur)		*Recovery: 87 %*		*Limits: 50-150 %*	*1*	*08/04/23 18:10*	*NWTPH-Gx (MS)*	
1,4-Difluorobenzene (Sur)			*89 %*	*50-150 %*	*1*	*08/04/23 18:10*	*NWTPH-Gx (MS)*	
MW-16-0723 (A3H0772-05)				**Matrix: Water**		**Batch: 23H0175**		
Gasoline Range Organics	ND	50.0	100	ug/L	1	08/04/23 18:32	NWTPH-Gx (MS)	
Surrogate: 4-Bromofluorobenzene (Sur)		*Recovery: 93 %*		*Limits: 50-150 %*	*1*	*08/04/23 18:32*	*NWTPH-Gx (MS)*	
1,4-Difluorobenzene (Sur)			*107 %*	*50-150 %*	*1*	*08/04/23 18:32*	*NWTPH-Gx (MS)*	
MW-17A-0723 (A3H0772-06)				**Matrix: Water**		**Batch: 23H0175**		
Gasoline Range Organics	ND	50.0	100	ug/L	1	08/04/23 18:55	NWTPH-Gx (MS)	
Surrogate: 4-Bromofluorobenzene (Sur)		*Recovery: 86 %*		*Limits: 50-150 %*	*1*	*08/04/23 18:55*	*NWTPH-Gx (MS)*	
1,4-Difluorobenzene (Sur)			*102 %*	*50-150 %*	*1*	*08/04/23 18:55*	*NWTPH-Gx (MS)*	
MW-18-0723 (A3H0772-07)				**Matrix: Water**		**Batch: 23H0175**		
Gasoline Range Organics	ND	50.0	100	ug/L	1	08/04/23 19:18	NWTPH-Gx (MS)	
Surrogate: 4-Bromofluorobenzene (Sur)		*Recovery: 94 %*		*Limits: 50-150 %*	*1*	*08/04/23 19:18*	*NWTPH-Gx (MS)*	
1,4-Difluorobenzene (Sur)			*108 %*	*50-150 %*	*1*	*08/04/23 19:18*	*NWTPH-Gx (MS)*	

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Philip Nerenberg, Lab Director

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Apex Laboratories, LLC
6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
ORELAP ID: OR100062

ANALYTICAL REPORT

Landau Associates (Northgate)	Project: Sea-Tac Development Site	
155 NE 100th St #302	Project Number: 2218001.010.011	Report ID:
Seattle, WA 98125	Project Manager: Mike Staton	A3H0772 - 08 10 23 1724

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-32-0723 (A3H0772-08)				**Matrix: Water**		**Batch: 23H0175**		
Gasoline Range Organics	**764**	50.0	100	ug/L	1	08/04/23 23:02	NWTPH-Gx (MS)	
Surrogate: 4-Bromofluorobenzene (Sur)		*Recovery:*	*96 %*	*Limits: 50-150 %*	*1*	*08/04/23 23:02*	*NWTPH-Gx (MS)*	
1,4-Difluorobenzene (Sur)			*90 %*	*50-150 %*	*1*	*08/04/23 23:02*	*NWTPH-Gx (MS)*	
Equipment Blank-0723 (A3H0772-09)				**Matrix: Water**		**Batch: 23H0175**		
Gasoline Range Organics	ND	50.0	100	ug/L	1	08/04/23 17:24	NWTPH-Gx (MS)	
Surrogate: 4-Bromofluorobenzene (Sur)		*Recovery:*	*91 %*	*Limits: 50-150 %*	*1*	*08/04/23 17:24*	*NWTPH-Gx (MS)*	
1,4-Difluorobenzene (Sur)			*93 %*	*50-150 %*	*1*	*08/04/23 17:24*	*NWTPH-Gx (MS)*	
Trip Blank (A3H0772-10)				**Matrix: Water**		**Batch: 23H0175**		
Gasoline Range Organics	ND	50.0	100	ug/L	1	08/04/23 17:02	NWTPH-Gx (MS)	
Surrogate: 4-Bromofluorobenzene (Sur)		*Recovery:*	*92 %*	*Limits: 50-150 %*	*1*	*08/04/23 17:02*	*NWTPH-Gx (MS)*	
1,4-Difluorobenzene (Sur)			*96 %*	*50-150 %*	*1*	*08/04/23 17:02*	*NWTPH-Gx (MS)*	

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ANALYTICAL REPORT

Landau Associates (Northgate)	Project: Sea-Tac Development Site	
155 NE 100th St #302	Project Number: 2218001.010.011	Report ID:
Seattle, WA 98125	Project Manager: Mike Staton	A3H0772 - 08 10 23 1724

ANALYTICAL SAMPLE RESULTS

BTEX Compounds by EPA 8260D

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
Equipment Blank-0723 (A3H0772-09)				**Matrix: Water**		**Batch: 23H0175**		
Benzene	ND	0.100	0.200	ug/L	1	08/04/23 17:24	EPA 8260D	
Toluene	ND	0.500	1.00	ug/L	1	08/04/23 17:24	EPA 8260D	
Ethylbenzene	ND	0.250	0.500	ug/L	1	08/04/23 17:24	EPA 8260D	
Xylenes, total	ND	0.750	1.50	ug/L	1	08/04/23 17:24	EPA 8260D	
Surrogate: 1,4-Difluorobenzene (Surr)		*Recovery:*	*98 %*	*Limits: 80-120 %*	*1*	*08/04/23 17:24*	*EPA 8260D*	
Toluene-d8 (Surr)			*98 %*	*80-120 %*	*1*	*08/04/23 17:24*	*EPA 8260D*	
4-Bromofluorobenzene (Surr)			*100 %*	*80-120 %*	*1*	*08/04/23 17:24*	*EPA 8260D*	
Trip Blank (A3H0772-10)				**Matrix: Water**		**Batch: 23H0175**		
Benzene	ND	0.100	0.200	ug/L	1	08/04/23 17:02	EPA 8260D	
Toluene	ND	0.500	1.00	ug/L	1	08/04/23 17:02	EPA 8260D	
Ethylbenzene	ND	0.250	0.500	ug/L	1	08/04/23 17:02	EPA 8260D	
Xylenes, total	ND	0.750	1.50	ug/L	1	08/04/23 17:02	EPA 8260D	
Surrogate: 1,4-Difluorobenzene (Surr)		*Recovery:*	*96 %*	*Limits: 80-120 %*	*1*	*08/04/23 17:02*	*EPA 8260D*	
Toluene-d8 (Surr)			*102 %*	*80-120 %*	*1*	*08/04/23 17:02*	*EPA 8260D*	
4-Bromofluorobenzene (Surr)			*101 %*	*80-120 %*	*1*	*08/04/23 17:02*	*EPA 8260D*	

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Philip Nerenberg, Lab Director

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ANALYTICAL REPORT

Landau Associates (Northgate)	Project: Sea-Tac Development Site	
155 NE 100th St #302	Project Number: 2218001.010.011	Report ID:
Seattle, WA 98125	Project Manager: Mike Staton	A3H0772 - 08 10 23 1724

ANALYTICAL SAMPLE RESULTS

Selected Volatile Organic Compounds by EPA 8260D

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
MW-7-0723 (A3H0772-01)				**Matrix: Water**		**Batch: 23H0175**		
Benzene	**0.580**	0.125	0.250	ug/L	1	08/04/23 21:55	EPA 8260D	
Toluene	**1.38**	0.500	1.00	ug/L	1	08/04/23 21:55	EPA 8260D	
Ethylbenzene	**2.94**	0.250	0.500	ug/L	1	08/04/23 21:55	EPA 8260D	
Xylenes, total	**6.78**	0.750	1.50	ug/L	1	08/04/23 21:55	EPA 8260D	
Naphthalene	ND	4.00	4.00	ug/L	1	08/04/23 21:55	EPA 8260D	
n-Hexane	ND	5.00	10.0	ug/L	1	08/04/23 21:55	EPA 8260D	
Surrogate: 1,4-Difluorobenzene (Surr)		*Recovery: 100 %*		*Limits: 80-120 %*	*1*	*08/04/23 21:55*	*EPA 8260D*	
Toluene-d8 (Surr)			*93 %*	*80-120 %*	*1*	*08/04/23 21:55*	*EPA 8260D*	
4-Bromofluorobenzene (Surr)			*99 %*	*80-120 %*	*1*	*08/04/23 21:55*	*EPA 8260D*	
MW-9-0723 (A3H0772-02)				**Matrix: Water**		**Batch: 23H0175**		
Benzene	ND	0.125	0.250	ug/L	1	08/04/23 17:47	EPA 8260D	
Toluene	ND	0.500	1.00	ug/L	1	08/04/23 17:47	EPA 8260D	
Ethylbenzene	ND	0.250	0.500	ug/L	1	08/04/23 17:47	EPA 8260D	
Xylenes, total	ND	0.750	1.50	ug/L	1	08/04/23 17:47	EPA 8260D	
Naphthalene	ND	4.00	4.00	ug/L	1	08/04/23 17:47	EPA 8260D	
n-Hexane	ND	5.00	10.0	ug/L	1	08/04/23 17:47	EPA 8260D	
Surrogate: 1,4-Difluorobenzene (Surr)		*Recovery: 104 %*		*Limits: 80-120 %*	*1*	*08/04/23 17:47*	*EPA 8260D*	
Toluene-d8 (Surr)			*109 %*	*80-120 %*	*1*	*08/04/23 17:47*	*EPA 8260D*	
4-Bromofluorobenzene (Surr)			*100 %*	*80-120 %*	*1*	*08/04/23 17:47*	*EPA 8260D*	
MW-12-0723 (A3H0772-03)				**Matrix: Water**		**Batch: 23H0175**		
Benzene	**3.26**	0.125	0.250	ug/L	1	08/04/23 22:40	EPA 8260D	
Toluene	**4.96**	0.500	1.00	ug/L	1	08/04/23 22:40	EPA 8260D	
Ethylbenzene	**44.4**	0.250	0.500	ug/L	1	08/04/23 22:40	EPA 8260D	
Xylenes, total	**143**	0.750	1.50	ug/L	1	08/04/23 22:40	EPA 8260D	
n-Hexane	**6.06**	5.00	10.0	ug/L	1	08/04/23 22:40	EPA 8260D	**J**
Surrogate: 1,4-Difluorobenzene (Surr)		*Recovery: 101 %*		*Limits: 80-120 %*	*1*	*08/04/23 22:40*	*EPA 8260D*	
Toluene-d8 (Surr)			*102 %*	*80-120 %*	*1*	*08/04/23 22:40*	*EPA 8260D*	
4-Bromofluorobenzene (Surr)			*99 %*	*80-120 %*	*1*	*08/04/23 22:40*	*EPA 8260D*	
MW-12-0723 (A3H0772-03RE1)				**Matrix: Water**		**Batch: 23H0245**		
Naphthalene	**8.28**	2.00	4.00	ug/L	1	08/07/23 15:56	EPA 8260D	
Surrogate: 1,4-Difluorobenzene (Surr)		*Recovery: 101 %*		*Limits: 80-120 %*	*1*	*08/07/23 15:56*	*EPA 8260D*	

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Philip Nerenberg, Lab Director

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ORELAP ID: OR100062

ANALYTICAL REPORT

Landau Associates (Northgate)	Project: Sea-Tac Development Site	
155 NE 100th St #302	Project Number: 2218001.010.011	Report ID:
Seattle, WA 98125	Project Manager: Mike Staton	A3H0772 - 08 10 23 1724

ANALYTICAL SAMPLE RESULTS

Selected Volatile Organic Compounds by EPA 8260D

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
MW-12-0723 (A3H0772-03RE1)				**Matrix: Water**		**Batch: 23H0245**		
Surrogate: Toluene-d8 (Surr)		*Recovery:*	*100 %*	*Limits: 80-120 %*	*1*	*08/07/23 15:56*	*EPA 8260D*	
4-Bromofluorobenzene (Surr)			*101 %*	*80-120 %*	*1*	*08/07/23 15:56*	*EPA 8260D*	
MW-13-0723 (A3H0772-04)				**Matrix: Water**		**Batch: 23H0175**		
Benzene	**0.190**	0.125	0.250	ug/L	1	08/04/23 18:10	EPA 8260D	**J**
Toluene	ND	0.500	1.00	ug/L	1	08/04/23 18:10	EPA 8260D	
Ethylbenzene	ND	0.250	0.500	ug/L	1	08/04/23 18:10	EPA 8260D	
Xylenes, total	ND	0.750	1.50	ug/L	1	08/04/23 18:10	EPA 8260D	
Naphthalene	ND	4.00	4.00	ug/L	1	08/04/23 18:10	EPA 8260D	
n-Hexane	ND	5.00	10.0	ug/L	1	08/04/23 18:10	EPA 8260D	
Surrogate: 1,4-Difluorobenzene (Surr)		*Recovery:*	*91 %*	*Limits: 80-120 %*	*1*	*08/04/23 18:10*	*EPA 8260D*	
Toluene-d8 (Surr)			*97 %*	*80-120 %*	*1*	*08/04/23 18:10*	*EPA 8260D*	
4-Bromofluorobenzene (Surr)			*96 %*	*80-120 %*	*1*	*08/04/23 18:10*	*EPA 8260D*	
MW-16-0723 (A3H0772-05)				**Matrix: Water**		**Batch: 23H0175**		
Benzene	ND	0.125	0.250	ug/L	1	08/04/23 18:32	EPA 8260D	
Toluene	ND	0.500	1.00	ug/L	1	08/04/23 18:32	EPA 8260D	
Ethylbenzene	ND	0.250	0.500	ug/L	1	08/04/23 18:32	EPA 8260D	
Xylenes, total	ND	0.750	1.50	ug/L	1	08/04/23 18:32	EPA 8260D	
Naphthalene	ND	4.00	4.00	ug/L	1	08/04/23 18:32	EPA 8260D	
n-Hexane	ND	5.00	10.0	ug/L	1	08/04/23 18:32	EPA 8260D	
Surrogate: 1,4-Difluorobenzene (Surr)		*Recovery:*	*103 %*	*Limits: 80-120 %*	*1*	*08/04/23 18:32*	*EPA 8260D*	
Toluene-d8 (Surr)			*101 %*	*80-120 %*	*1*	*08/04/23 18:32*	*EPA 8260D*	
4-Bromofluorobenzene (Surr)			*100 %*	*80-120 %*	*1*	*08/04/23 18:32*	*EPA 8260D*	
MW-17A-0723 (A3H0772-06)				**Matrix: Water**		**Batch: 23H0175**		
Benzene	ND	0.125	0.250	ug/L	1	08/04/23 18:55	EPA 8260D	
Toluene	ND	0.500	1.00	ug/L	1	08/04/23 18:55	EPA 8260D	
Ethylbenzene	ND	0.250	0.500	ug/L	1	08/04/23 18:55	EPA 8260D	
Xylenes, total	ND	0.750	1.50	ug/L	1	08/04/23 18:55	EPA 8260D	
Naphthalene	ND	4.00	4.00	ug/L	1	08/04/23 18:55	EPA 8260D	
n-Hexane	ND	5.00	10.0	ug/L	1	08/04/23 18:55	EPA 8260D	
Surrogate: 1,4-Difluorobenzene (Surr)		*Recovery:*	*104 %*	*Limits: 80-120 %*	*1*	*08/04/23 18:55*	*EPA 8260D*	
Toluene-d8 (Surr)			*110 %*	*80-120 %*	*1*	*08/04/23 18:55*	*EPA 8260D*	

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Philip Nerenberg, Lab Director

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ANALYTICAL REPORT

Landau Associates (Northgate)	Project: Sea-Tac Development Site	
155 NE 100th St #302	Project Number: 2218001.010.011	Report ID:
Seattle, WA 98125	Project Manager: Mike Staton	A3H0772 - 08 10 23 1724

ANALYTICAL SAMPLE RESULTS

Selected Volatile Organic Compounds by EPA 8260D

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
MW-17A-0723 (A3H0772-06)				**Matrix: Water**		**Batch: 23H0175**		
Surrogate: 4-Bromofluorobenzene (Surr)		*Recovery: 101 %*	*Limits: 80-120 %*		*1*	*08/04/23 18:55*	*EPA 8260D*	
MW-18-0723 (A3H0772-07)				**Matrix: Water**		**Batch: 23H0175**		
Benzene	**0.170**	0.125	0.250	ug/L	1	08/04/23 19:18	EPA 8260D	**J**
Toluene	ND	0.500	1.00	ug/L	1	08/04/23 19:18	EPA 8260D	
Ethylbenzene	ND	0.250	0.500	ug/L	1	08/04/23 19:18	EPA 8260D	
Xylenes, total	ND	0.750	1.50	ug/L	1	08/04/23 19:18	EPA 8260D	
Naphthalene	ND	4.00	4.00	ug/L	1	08/04/23 19:18	EPA 8260D	
n-Hexane	ND	5.00	10.0	ug/L	1	08/04/23 19:18	EPA 8260D	
Surrogate: 1,4-Difluorobenzene (Surr)		*Recovery: 104 %*	*Limits: 80-120 %*		*1*	*08/04/23 19:18*	*EPA 8260D*	
Toluene-d8 (Surr)		*105 %*	*80-120 %*		*1*	*08/04/23 19:18*	*EPA 8260D*	
4-Bromofluorobenzene (Surr)		*100 %*	*80-120 %*		*1*	*08/04/23 19:18*	*EPA 8260D*	
MW-32-0723 (A3H0772-08)				**Matrix: Water**		**Batch: 23H0175**		
Benzene	**2.25**	0.125	0.250	ug/L	1	08/04/23 23:02	EPA 8260D	
Toluene	**3.84**	0.500	1.00	ug/L	1	08/04/23 23:02	EPA 8260D	
Ethylbenzene	**36.6**	0.250	0.500	ug/L	1	08/04/23 23:02	EPA 8260D	
Xylenes, total	**115**	0.750	1.50	ug/L	1	08/04/23 23:02	EPA 8260D	
n-Hexane	ND	5.00	10.0	ug/L	1	08/04/23 23:02	EPA 8260D	
Surrogate: 1,4-Difluorobenzene (Surr)		*Recovery: 98 %*	*Limits: 80-120 %*		*1*	*08/04/23 23:02*	*EPA 8260D*	
Toluene-d8 (Surr)		*97 %*	*80-120 %*		*1*	*08/04/23 23:02*	*EPA 8260D*	
4-Bromofluorobenzene (Surr)		*102 %*	*80-120 %*		*1*	*08/04/23 23:02*	*EPA 8260D*	
MW-32-0723 (A3H0772-08RE1)				**Matrix: Water**		**Batch: 23H0245**		
Naphthalene	**11.5**	2.00	4.00	ug/L	1	08/07/23 16:24	EPA 8260D	
Surrogate: 1,4-Difluorobenzene (Surr)		*Recovery: 101 %*	*Limits: 80-120 %*		*1*	*08/07/23 16:24*	*EPA 8260D*	
Toluene-d8 (Surr)		*100 %*	*80-120 %*		*1*	*08/07/23 16:24*	*EPA 8260D*	
4-Bromofluorobenzene (Surr)		*99 %*	*80-120 %*		*1*	*08/07/23 16:24*	*EPA 8260D*	

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Philip Nerenberg

Philip Nerenberg, Lab Director

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ANALYTICAL REPORT

Landau Associates (Northgate)	Project: Sea-Tac Development Site	
155 NE 100th St #302	Project Number: 2218001.010.011	Report ID:
Seattle, WA 98125	Project Manager: Mike Staton	A3H0772 - 08 10 23 1724

ANALYTICAL SAMPLE RESULTS

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

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
MW-7-0723 (A3H0772-01)				**Matrix: Water**		**Batch: 23H0341**		
1,2-Dibromoethane (EDB)	ND	0.0500	0.0500	ug/L	1	08/10/23 01:21	EPA 8260D SIM	R-02
Surrogate: 1,4-Difluorobenzene (Surr)		*Recovery:*	*101 %*	*Limits: 80-120 %*	*1*	*08/10/23 01:21*	*EPA 8260D SIM*	
Toluene-d8 (Surr)			*103 %*	*80-120 %*	*1*	*08/10/23 01:21*	*EPA 8260D SIM*	
4-Bromofluorobenzene (Surr)			*98 %*	*80-120 %*	*1*	*08/10/23 01:21*	*EPA 8260D SIM*	
MW-9-0723 (A3H0772-02)				**Matrix: Water**		**Batch: 23H0341**		
1,2-Dibromoethane (EDB)	ND	0.0100	0.0200	ug/L	1	08/10/23 01:48	EPA 8260D SIM	
Surrogate: 1,4-Difluorobenzene (Surr)		*Recovery:*	*101 %*	*Limits: 80-120 %*	*1*	*08/10/23 01:48*	*EPA 8260D SIM*	
Toluene-d8 (Surr)			*101 %*	*80-120 %*	*1*	*08/10/23 01:48*	*EPA 8260D SIM*	
4-Bromofluorobenzene (Surr)			*103 %*	*80-120 %*	*1*	*08/10/23 01:48*	*EPA 8260D SIM*	
MW-12-0723 (A3H0772-03)				**Matrix: Water**		**Batch: 23H0341**		
1,2-Dibromoethane (EDB)	ND	0.0100	0.0200	ug/L	1	08/10/23 02:14	EPA 8260D SIM	
Surrogate: 1,4-Difluorobenzene (Surr)		*Recovery:*	*102 %*	*Limits: 80-120 %*	*1*	*08/10/23 02:14*	*EPA 8260D SIM*	
Toluene-d8 (Surr)			*100 %*	*80-120 %*	*1*	*08/10/23 02:14*	*EPA 8260D SIM*	
4-Bromofluorobenzene (Surr)			*99 %*	*80-120 %*	*1*	*08/10/23 02:14*	*EPA 8260D SIM*	
MW-13-0723 (A3H0772-04)				**Matrix: Water**		**Batch: 23H0341**		
1,2-Dibromoethane (EDB)	ND	0.360	0.360	ug/L	1	08/10/23 02:41	EPA 8260D SIM	R-02
Surrogate: 1,4-Difluorobenzene (Surr)		*Recovery:*	*101 %*	*Limits: 80-120 %*	*1*	*08/10/23 02:41*	*EPA 8260D SIM*	
Toluene-d8 (Surr)			*101 %*	*80-120 %*	*1*	*08/10/23 02:41*	*EPA 8260D SIM*	
4-Bromofluorobenzene (Surr)			*99 %*	*80-120 %*	*1*	*08/10/23 02:41*	*EPA 8260D SIM*	
MW-16-0723 (A3H0772-05)				**Matrix: Water**		**Batch: 23H0341**		
1,2-Dibromoethane (EDB)	ND	0.0100	0.0200	ug/L	1	08/10/23 03:08	EPA 8260D SIM	
Surrogate: 1,4-Difluorobenzene (Surr)		*Recovery:*	*101 %*	*Limits: 80-120 %*	*1*	*08/10/23 03:08*	*EPA 8260D SIM*	
Toluene-d8 (Surr)			*103 %*	*80-120 %*	*1*	*08/10/23 03:08*	*EPA 8260D SIM*	
4-Bromofluorobenzene (Surr)			*102 %*	*80-120 %*	*1*	*08/10/23 03:08*	*EPA 8260D SIM*	
MW-17A-0723 (A3H0772-06)				**Matrix: Water**		**Batch: 23H0341**		
1,2-Dibromoethane (EDB)	ND	0.0100	0.0200	ug/L	1	08/10/23 03:35	EPA 8260D SIM	
Surrogate: 1,4-Difluorobenzene (Surr)		*Recovery:*	*101 %*	*Limits: 80-120 %*	*1*	*08/10/23 03:35*	*EPA 8260D SIM*	
Toluene-d8 (Surr)			*100 %*	*80-120 %*	*1*	*08/10/23 03:35*	*EPA 8260D SIM*	
4-Bromofluorobenzene (Surr)			*102 %*	*80-120 %*	*1*	*08/10/23 03:35*	*EPA 8260D SIM*	

Apex Laboratories

Philip Nerenberg

Philip Nerenberg, Lab Director

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Apex Laboratories, LLC
6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
ORELAP ID: OR100062

ANALYTICAL REPORT

Landau Associates (Northgate)	Project: Sea-Tac Development Site	
155 NE 100th St #302	Project Number: 2218001.010.011	Report ID:
Seattle, WA 98125	Project Manager: Mike Staton	A3H0772 - 08 10 23 1724

ANALYTICAL SAMPLE RESULTS

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

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
MW-18-0723 (A3H0772-07)				**Matrix: Water**		**Batch: 23H0341**		
1,2-Dibromoethane (EDB)	ND	0.0100	0.0200	ug/L	1	08/10/23 04:02	EPA 8260D SIM	
Surrogate: 1,4-Difluorobenzene (Surr)		*Recovery:*	*102 %*	*Limits: 80-120 %*	*1*	*08/10/23 04:02*	*EPA 8260D SIM*	
Toluene-d8 (Surr)			*100 %*	*80-120 %*	*1*	*08/10/23 04:02*	*EPA 8260D SIM*	
4-Bromofluorobenzene (Surr)			*102 %*	*80-120 %*	*1*	*08/10/23 04:02*	*EPA 8260D SIM*	
MW-32-0723 (A3H0772-08)				**Matrix: Water**		**Batch: 23H0341**		
1,2-Dibromoethane (EDB)	ND	0.0100	0.0200	ug/L	1	08/10/23 04:29	EPA 8260D SIM	
Surrogate: 1,4-Difluorobenzene (Surr)		*Recovery:*	*101 %*	*Limits: 80-120 %*	*1*	*08/10/23 04:29*	*EPA 8260D SIM*	
Toluene-d8 (Surr)			*100 %*	*80-120 %*	*1*	*08/10/23 04:29*	*EPA 8260D SIM*	
4-Bromofluorobenzene (Surr)			*99 %*	*80-120 %*	*1*	*08/10/23 04:29*	*EPA 8260D SIM*	

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Philip Nerenberg, Lab Director

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ANALYTICAL REPORT

Landau Associates (Northgate)	Project: Sea-Tac Development Site	
155 NE 100th St #302	Project Number: 2218001.010.011	Report ID:
Seattle, WA 98125	Project Manager: Mike Staton	A3H0772 - 08 10 23 1724

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 23H0175 - EPA 5030C									Water			
Blank (23H0175-BLK1)			Prepared: 08/04/23 13:04 Analyzed: 08/04/23 16:39									
NWTPH-Gx (MS)												
Gasoline Range Organics	ND	50.0	100	ug/L	1	---	---	---	---	---	---	
Surr: 4-Bromofluorobenzene (Sur)			*Recovery: 91 %*	*Limits: 50-150 %*			*Dilution: 1x*					
1,4-Difluorobenzene (Sur)			*106 %*	*50-150 %*			*"*					
LCS (23H0175-BS2)			Prepared: 08/04/23 13:04 Analyzed: 08/04/23 16:17									
NWTPH-Gx (MS)												
Gasoline Range Organics	462	50.0	100	ug/L	1	500	---	92	80-120%	---	---	
Surr: 4-Bromofluorobenzene (Sur)			*Recovery: 90 %*	*Limits: 50-150 %*			*Dilution: 1x*					
1,4-Difluorobenzene (Sur)			*101 %*	*50-150 %*			*"*					
Duplicate (23H0175-DUP1)			Prepared: 08/04/23 13:04 Analyzed: 08/04/23 22:17									
QC Source Sample: MW-7-0723 (A3H0772-01)												
NWTPH-Gx (MS)												
Gasoline Range Organics	**714**	50.0	100	ug/L	1	---	725	---	---	2	30%	
Surr: 4-Bromofluorobenzene (Sur)			*Recovery: 98 %*	*Limits: 50-150 %*			*Dilution: 1x*					
1,4-Difluorobenzene (Sur)			*100 %*	*50-150 %*			*"*					
Duplicate (23H0175-DUP2)			Prepared: 08/04/23 13:04 Analyzed: 08/05/23 00:09									
QC Source Sample: Non-SDG (A3H0770-01)												
Gasoline Range Organics	ND	500	1000	ug/L	10	---	ND	---	---	---	30%	
Surr: 4-Bromofluorobenzene (Sur)			*Recovery: 87 %*	*Limits: 50-150 %*			*Dilution: 1x*					
1,4-Difluorobenzene (Sur)			*85 %*	*50-150 %*			*"*					

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Philip Nerenberg, Lab Director

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ANALYTICAL REPORT

Landau Associates (Northgate)	Project: Sea-Tac Development Site	
155 NE 100th St #302	Project Number: 2218001.010.011	Report ID:
Seattle, WA 98125	Project Manager: Mike Staton	A3H0772 - 08 10 23 1724

QUALITY CONTROL (QC) SAMPLE RESULTS

BTEX Compounds by EPA 8260D

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 23H0175 - EPA 5030C												**Water**
Blank (23H0175-BLK1)			Prepared: 08/04/23 13:04 Analyzed: 08/04/23 16:39									
EPA 8260D												
Benzene	ND	0.100	0.200	ug/L	1	---	---	---	---	---	---	
Toluene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
Ethylbenzene	ND	0.250	0.500	ug/L	1	---	---	---	---	---	---	
Xylenes, total	ND	0.750	1.50	ug/L	1	---	---	---	---	---	---	
Surr: 1,4-Difluorobenzene (Surr)			*Recovery: 103 %*		*Limits: 80-120 %*			*Dilution: 1x*				
Toluene-d8 (Surr)			*117 %*		*80-120 %*			*"*				
4-Bromofluorobenzene (Surr)			*96 %*		*80-120 %*			*"*				
LCS (23H0175-BS1)			Prepared: 08/04/23 13:04 Analyzed: 08/04/23 15:43									
EPA 8260D												
Benzene	19.7	0.100	0.200	ug/L	1	20.0	---	98	80-120%	---	---	
Toluene	21.9	0.500	1.00	ug/L	1	20.0	---	109	80-120%	---	---	
Ethylbenzene	20.5	0.250	0.500	ug/L	1	20.0	---	103	80-120%	---	---	
Xylenes, total	56.8	0.750	1.50	ug/L	1	60.0	---	95	80-120%	---	---	
Surr: 1,4-Difluorobenzene (Surr)			*Recovery: 98 %*		*Limits: 80-120 %*			*Dilution: 1x*				
Toluene-d8 (Surr)			*111 %*		*80-120 %*			*"*				
4-Bromofluorobenzene (Surr)			*90 %*		*80-120 %*			*"*				
Duplicate (23H0175-DUP1)			Prepared: 08/04/23 13:04 Analyzed: 08/04/23 22:17									
QC Source Sample: MW-7-0723 (A3H0772-01)												
EPA 8260D												
Benzene	**0.610**	0.100	0.200	ug/L	1	---	0.580	---	---	5	30%	
Toluene	**1.36**	0.500	1.00	ug/L	1	---	1.38	---	---	1	30%	
Ethylbenzene	**3.00**	0.250	0.500	ug/L	1	---	2.94	---	---	2	30%	
Xylenes, total	**7.31**	0.750	1.50	ug/L	1	---	6.78	---	---	8	30%	
Surr: 1,4-Difluorobenzene (Surr)			*Recovery: 103 %*		*Limits: 80-120 %*			*Dilution: 1x*				
Toluene-d8 (Surr)			*92 %*		*80-120 %*			*"*				
4-Bromofluorobenzene (Surr)			*97 %*		*80-120 %*			*"*				
Duplicate (23H0175-DUP2)			Prepared: 08/04/23 13:04 Analyzed: 08/05/23 00:09									
QC Source Sample: Non-SDG (A3H0770-01)												
Benzene	ND	1.00	2.00	ug/L	10	---	ND	---	---	---	30%	

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Philip Nerenberg, Lab Director

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ANALYTICAL REPORT

Landau Associates (Northgate)	Project: Sea-Tac Development Site	
155 NE 100th St #302	Project Number: 2218001.010.011	Report ID:
Seattle, WA 98125	Project Manager: Mike Staton	A3H0772 - 08 10 23 1724

QUALITY CONTROL (QC) SAMPLE RESULTS

BTEX Compounds by EPA 8260D

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 23H0175 - EPA 5030C												**Water**
Duplicate (23H0175-DUP2)				Prepared: 08/04/23 13:04 Analyzed: 08/05/23 00:09								
QC Source Sample: Non-SDG (A3H0770-01)												
Toluene	ND	5.00	10.0	ug/L	10	---	ND	---	---	---	30%	
Ethylbenzene	ND	2.50	5.00	ug/L	10	---	ND	---	---	---	30%	
Xylenes, total	ND	7.50	15.0	ug/L	10	---	ND	---	---	---	30%	
Surr: 1,4-Difluorobenzene (Surr)			*Recovery: 90 %*		*Limits: 80-120 %*			*Dilution: 1x*				
Toluene-d8 (Surr)			*96 %*		*80-120 %*			*"*				
4-Bromofluorobenzene (Surr)			*103 %*		*80-120 %*			*"*				
Matrix Spike (23H0175-MS1)				Prepared: 08/04/23 13:04 Analyzed: 08/04/23 20:02								
QC Source Sample: Non-SDG (A3H0717-01)												
EPA 8260D												
Benzene	20.2	0.100	0.200	ug/L	1	20.0	ND	101	79-120%	---	---	
Toluene	19.9	0.500	1.00	ug/L	1	20.0	ND	100	80-121%	---	---	
Ethylbenzene	21.1	0.250	0.500	ug/L	1	20.0	ND	106	79-121%	---	---	
Xylenes, total	57.5	0.750	1.50	ug/L	1	60.0	ND	96	79-121%	---	---	
Surr: 1,4-Difluorobenzene (Surr)			*Recovery: 100 %*		*Limits: 80-120 %*			*Dilution: 1x*				
Toluene-d8 (Surr)			*99 %*		*80-120 %*			*"*				
4-Bromofluorobenzene (Surr)			*92 %*		*80-120 %*			*"*				

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ANALYTICAL REPORT

Landau Associates (Northgate)	Project: Sea-Tac Development Site	
155 NE 100th St #302	Project Number: 2218001.010.011	Report ID:
Seattle, WA 98125	Project Manager: Mike Staton	A3H0772 - 08 10 23 1724

QUALITY CONTROL (QC) SAMPLE RESULTS

Selected Volatile Organic Compounds by EPA 8260D

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 23H0175 - EPA 5030C									Water			
Blank (23H0175-BLK1)			Prepared: 08/04/23 13:04 Analyzed: 08/04/23 16:39									
EPA 8260D												
Benzene	ND	0.125	0.250	ug/L	1	---	---	---	---	---	---	
Toluene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
Ethylbenzene	ND	0.250	0.500	ug/L	1	---	---	---	---	---	---	
Xylenes, total	ND	0.750	1.50	ug/L	1	---	---	---	---	---	---	
Methyl tert-butyl ether (MTBE)	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
Naphthalene	ND	4.00	4.00	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	---	---	---	---	---	---	
Isopropylbenzene	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	---	---	---	---	---	---	
n-Hexane	ND	5.00	10.0	ug/L	1	---	---	---	---	---	---	
Surr: 1,4-Difluorobenzene (Surr)			*Recovery: 103 %*		*Limits: 80-120 %*				*Dilution: 1x*			
Toluene-d8 (Surr)			*117 %*		*80-120 %*				*"*			
4-Bromofluorobenzene (Surr)			*96 %*		*80-120 %*				*"*			
LCS (23H0175-BS1)			Prepared: 08/04/23 13:04 Analyzed: 08/04/23 15:43									
EPA 8260D												
Benzene	19.7	0.125	0.250	ug/L	1	20.0	---	98	80-120%	---	---	
Toluene	21.9	0.500	1.00	ug/L	1	20.0	---	109	80-120%	---	---	
Ethylbenzene	20.5	0.250	0.500	ug/L	1	20.0	---	103	80-120%	---	---	
Xylenes, total	56.8	0.750	1.50	ug/L	1	60.0	---	95	80-120%	---	---	
Methyl tert-butyl ether (MTBE)	21.1	0.500	1.00	ug/L	1	20.0	---	106	80-120%	---	---	
Naphthalene	13.8	4.00	4.00	ug/L	1	20.0	---	**69**	**80-120%**	---	---	Q-55
1,2-Dibromoethane (EDB)	19.3	0.250	0.500	ug/L	1	20.0	---	97	80-120%	---	---	
1,2-Dichloroethane (EDC)	20.5	0.250	0.500	ug/L	1	20.0	---	102	80-120%	---	---	
Isopropylbenzene	18.6	0.500	1.00	ug/L	1	20.0	---	93	80-120%	---	---	
1,2,4-Trimethylbenzene	18.6	0.500	1.00	ug/L	1	20.0	---	93	80-120%	---	---	
1,3,5-Trimethylbenzene	17.5	0.500	1.00	ug/L	1	20.0	---	87	80-120%	---	---	
n-Hexane	25.0	5.00	10.0	ug/L	1	20.0	---	**125**	**80-120%**	---	---	Q-55
Surr: 1,4-Difluorobenzene (Surr)			*Recovery: 98 %*		*Limits: 80-120 %*				*Dilution: 1x*			
Toluene-d8 (Surr)			*111 %*		*80-120 %*				*"*			
4-Bromofluorobenzene (Surr)			*90 %*		*80-120 %*				*"*			

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Philip Nerenberg

Philip Nerenberg, Lab Director

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ANALYTICAL REPORT

Landau Associates (Northgate)	Project: Sea-Tac Development Site	
155 NE 100th St #302	Project Number: 2218001.010.011	Report ID:
Seattle, WA 98125	Project Manager: Mike Staton	A3H0772 - 08 10 23 1724

QUALITY CONTROL (QC) SAMPLE RESULTS

Selected Volatile Organic Compounds by EPA 8260D

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 23H0175 - EPA 5030C												**Water**
Duplicate (23H0175-DUP1)				Prepared: 08/04/23 13:04 Analyzed: 08/04/23 22:17								
QC Source Sample: MW-7-0723 (A3H0772-01)												
EPA 8260D												
Benzene	**0.610**	0.125	0.250	ug/L	1	---	0.580	---	---	5	30%	
Toluene	**1.36**	0.500	1.00	ug/L	1	---	1.38	---	---	1	30%	
Ethylbenzene	**3.00**	0.250	0.500	ug/L	1	---	2.94	---	---	2	30%	
Xylenes, total	**7.31**	0.750	1.50	ug/L	1	---	6.78	---	---	8	30%	
Methyl tert-butyl ether (MTBE)	ND	0.500	1.00	ug/L	1	---	ND	---	---	---	30%	
Naphthalene	ND	4.00	4.00	ug/L	1	---	ND	---	---	---	30%	
1,2-Dibromoethane (EDB)	ND	0.250	0.500	ug/L	1	---	ND	---	---	---	30%	
1,2-Dichloroethane (EDC)	ND	0.250	0.500	ug/L	1	---	ND	---	---	---	30%	
Isopropylbenzene	**0.660**	0.500	1.00	ug/L	1	---	0.640	---	---	3	30%	J
1,2,4-Trimethylbenzene	**8.08**	0.500	1.00	ug/L	1	---	7.03	---	---	14	30%	
1,3,5-Trimethylbenzene	**1.05**	0.500	1.00	ug/L	1	---	0.980	---	---	7	30%	
n-Hexane	ND	5.00	10.0	ug/L	1	---	ND	---	---	---	30%	
Surr: 1,4-Difluorobenzene (Surr)			*Recovery: 103 %*		*Limits: 80-120 %*			*Dilution: 1x*				
Toluene-d8 (Surr)			*92 %*		*80-120 %*			*"*				
4-Bromofluorobenzene (Surr)			*97 %*		*80-120 %*			*"*				
Duplicate (23H0175-DUP2)				Prepared: 08/04/23 13:04 Analyzed: 08/05/23 00:09								
QC Source Sample: Non-SDG (A3H0770-01)												
Benzene	ND	1.25	2.50	ug/L	10	---	ND	---	---	---	30%	
Toluene	ND	5.00	10.0	ug/L	10	---	ND	---	---	---	30%	
Ethylbenzene	ND	2.50	5.00	ug/L	10	---	ND	---	---	---	30%	
Xylenes, total	ND	7.50	15.0	ug/L	10	---	ND	---	---	---	30%	
Methyl tert-butyl ether (MTBE)	ND	5.00	10.0	ug/L	10	---	ND	---	---	---	30%	
Naphthalene	ND	40.0	40.0	ug/L	10	---	ND	---	---	---	30%	
1,2-Dibromoethane (EDB)	ND	2.50	5.00	ug/L	10	---	ND	---	---	---	30%	
1,2-Dichloroethane (EDC)	ND	2.50	5.00	ug/L	10	---	ND	---	---	---	30%	
Isopropylbenzene	ND	5.00	10.0	ug/L	10	---	ND	---	---	---	30%	
1,2,4-Trimethylbenzene	ND	5.00	10.0	ug/L	10	---	ND	---	---	---	30%	
1,3,5-Trimethylbenzene	ND	5.00	10.0	ug/L	10	---	ND	---	---	---	30%	
n-Hexane	ND	50.0	100	ug/L	10	---	ND	---	---	---	30%	
Surr: 1,4-Difluorobenzene (Surr)			*Recovery: 90 %*		*Limits: 80-120 %*			*Dilution: 1x*				

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Philip Nerenberg, Lab Director

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ANALYTICAL REPORT

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155 NE 100th St #302	Project Number: 2218001.010.011	Report ID:
Seattle, WA 98125	Project Manager: Mike Staton	A3H0772 - 08 10 23 1724

QUALITY CONTROL (QC) SAMPLE RESULTS

Selected Volatile Organic Compounds by EPA 8260D

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 23H0175 - EPA 5030C												Water
Duplicate (23H0175-DUP2)				Prepared: 08/04/23 13:04 Analyzed: 08/05/23 00:09								
QC Source Sample: Non-SDG (A3H0770-01)												
Surr: Toluene-d8 (Surr)			*Recovery: 96 %*	*Limits: 80-120 %*			*Dilution: 1x*					
4-Bromofluorobenzene (Surr)			*103 %*	*80-120 %*			*"*					
Matrix Spike (23H0175-MS1)				Prepared: 08/04/23 13:04 Analyzed: 08/04/23 20:02								
QC Source Sample: Non-SDG (A3H0717-01)												
EPA 8260D												
Benzene	20.2	0.125	0.250	ug/L	1	20.0	ND	101	79-120%	---	---	
Toluene	19.9	0.500	1.00	ug/L	1	20.0	ND	100	80-121%	---	---	
Ethylbenzene	21.1	0.250	0.500	ug/L	1	20.0	ND	106	79-121%	---	---	
Xylenes, total	57.5	0.750	1.50	ug/L	1	60.0	ND	96	79-121%	---	---	
Methyl tert-butyl ether (MTBE)	20.6	0.500	1.00	ug/L	1	20.0	ND	103	71-124%	---	---	
Naphthalene	13.0	4.00	4.00	ug/L	1	20.0	ND	65	61-128%	---	---	Q-54a
1,2-Dibromoethane (EDB)	19.4	0.250	0.500	ug/L	1	20.0	ND	97	77-121%	---	---	
1,2-Dichloroethane (EDC)	20.0	0.250	0.500	ug/L	1	20.0	ND	100	73-128%	---	---	
Isopropylbenzene	18.6	0.500	1.00	ug/L	1	20.0	ND	93	72-131%	---	---	
1,2,4-Trimethylbenzene	18.7	0.500	1.00	ug/L	1	20.0	ND	94	76-124%	---	---	
1,3,5-Trimethylbenzene	19.0	0.500	1.00	ug/L	1	20.0	ND	95	75-124%	---	---	
n-Hexane	25.7	5.00	10.0	ug/L	1	20.0	ND	129	48-143%	---	---	Q-54
Surr: 1,4-Difluorobenzene (Surr)			*Recovery: 100 %*	*Limits: 80-120 %*			*Dilution: 1x*					
Toluene-d8 (Surr)			*99 %*	*80-120 %*			*"*					
4-Bromofluorobenzene (Surr)			*92 %*	*80-120 %*			*"*					

Apex Laboratories

Philip Nerenberg

Philip Nerenberg, Lab Director

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Apex Laboratories, LLC
6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
ORELAP ID: OR100062

ANALYTICAL REPORT

Landau Associates (Northgate)	Project: Sea-Tac Development Site	
155 NE 100th St #302	Project Number: 2218001.010.011	Report ID:
Seattle, WA 98125	Project Manager: Mike Staton	A3H0772 - 08 10 23 1724

QUALITY CONTROL (QC) SAMPLE RESULTS

Selected Volatile Organic Compounds by EPA 8260D

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 23H0245 - EPA 5030C												**Water**
Blank (23H0245-BLK1)			Prepared: 08/07/23 10:00 Analyzed: 08/07/23 13:08									
EPA 8260D												
Benzene	ND	0.125	0.250	ug/L	1	---	---	---	---	---	---	
Toluene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
Ethylbenzene	ND	0.250	0.500	ug/L	1	---	---	---	---	---	---	
Xylenes, total	ND	0.750	1.50	ug/L	1	---	---	---	---	---	---	
Methyl tert-butyl ether (MTBE)	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
Naphthalene	ND	2.00	4.00	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	---	---	---	---	---	---	
Isopropylbenzene	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	---	---	---	---	---	---	
Surr: 1,4-Difluorobenzene (Surr)			*Recovery: 101 %*		*Limits: 80-120 %*				*Dilution: 1x*			
Toluene-d8 (Surr)			*101 %*		*80-120 %*				*"*			
4-Bromofluorobenzene (Surr)			*105 %*		*80-120 %*				*"*			
LCS (23H0245-BS1)			Prepared: 08/07/23 10:00 Analyzed: 08/07/23 12:14									
EPA 8260D												
Benzene	18.8	0.125	0.250	ug/L	1	20.0	---	94	80-120%	---	---	
Toluene	18.9	0.500	1.00	ug/L	1	20.0	---	95	80-120%	---	---	
Ethylbenzene	18.8	0.250	0.500	ug/L	1	20.0	---	94	80-120%	---	---	
Xylenes, total	58.8	0.750	1.50	ug/L	1	60.0	---	98	80-120%	---	---	
Methyl tert-butyl ether (MTBE)	19.0	0.500	1.00	ug/L	1	20.0	---	95	80-120%	---	---	
Naphthalene	18.3	2.00	4.00	ug/L	1	20.0	---	92	80-120%	---	---	
1,2-Dibromoethane (EDB)	19.5	0.250	0.500	ug/L	1	20.0	---	98	80-120%	---	---	
1,2-Dichloroethane (EDC)	19.1	0.250	0.500	ug/L	1	20.0	---	95	80-120%	---	---	
Isopropylbenzene	19.2	0.500	1.00	ug/L	1	20.0	---	96	80-120%	---	---	
1,2,4-Trimethylbenzene	19.3	0.500	1.00	ug/L	1	20.0	---	97	80-120%	---	---	
1,3,5-Trimethylbenzene	19.1	0.500	1.00	ug/L	1	20.0	---	96	80-120%	---	---	
Surr: 1,4-Difluorobenzene (Surr)			*Recovery: 101 %*		*Limits: 80-120 %*				*Dilution: 1x*			
Toluene-d8 (Surr)			*99 %*		*80-120 %*				*"*			
4-Bromofluorobenzene (Surr)			*98 %*		*80-120 %*				*"*			
Duplicate (23H0245-DUP1)			Prepared: 08/07/23 12:00 Analyzed: 08/07/23 22:16									

Apex Laboratories

Philip Nerenberg

Philip Nerenberg, Lab Director

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503-718-2323
ORELAP ID: OR100062

ANALYTICAL REPORT

Landau Associates (Northgate)	Project: Sea-Tac Development Site	
155 NE 100th St #302	Project Number: 2218001.010.011	Report ID:
Seattle, WA 98125	Project Manager: Mike Staton	A3H0772 - 08 10 23 1724

QUALITY CONTROL (QC) SAMPLE RESULTS

Selected Volatile Organic Compounds by EPA 8260D

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 23H0245 - EPA 5030C							Water					
Duplicate (23H0245-DUP1)			Prepared: 08/07/23 12:00 Analyzed: 08/07/23 22:16									
QC Source Sample: Non-SDG (A3H0819-06)												
Benzene	ND	0.625	1.25	ug/L	5	---	ND	---	---	---	30%	
Toluene	ND	2.50	5.00	ug/L	5	---	ND	---	---	---	30%	
Ethylbenzene	ND	1.25	2.50	ug/L	5	---	ND	---	---	---	30%	
Xylenes, total	ND	3.75	7.50	ug/L	5	---	ND	---	---	---	30%	
Methyl tert-butyl ether (MTBE)	ND	2.50	5.00	ug/L	5	---	ND	---	---	---	30%	
Naphthalene	ND	10.0	20.0	ug/L	5	---	ND	---	---	---	30%	
1,2-Dibromoethane (EDB)	ND	1.25	2.50	ug/L	5	---	ND	---	---	---	30%	
1,2-Dichloroethane (EDC)	ND	1.25	2.50	ug/L	5	---	ND	---	---	---	30%	
Isopropylbenzene	ND	2.50	5.00	ug/L	5	---	ND	---	---	---	30%	
1,2,4-Trimethylbenzene	ND	2.50	5.00	ug/L	5	---	ND	---	---	---	30%	
1,3,5-Trimethylbenzene	ND	2.50	5.00	ug/L	5	---	ND	---	---	---	30%	
Surr: 1,4-Difluorobenzene (Surr)			*Recovery: 103 %*	*Limits: 80-120 %*			*Dilution: 1x*					
Toluene-d8 (Surr)			*101 %*	*80-120 %*			*"*					
4-Bromofluorobenzene (Surr)			*104 %*	*80-120 %*			*"*					
Matrix Spike (23H0245-MS1)			Prepared: 08/07/23 12:00 Analyzed: 08/07/23 20:28									
QC Source Sample: Non-SDG (A3H0819-08)												
EPA 8260D												
Benzene	20.1	0.125	0.250	ug/L	1	20.0	ND	101	79-120%	---	---	
Toluene	19.7	0.500	1.00	ug/L	1	20.0	ND	99	80-121%	---	---	
Ethylbenzene	19.9	0.250	0.500	ug/L	1	20.0	ND	100	79-121%	---	---	
Xylenes, total	61.7	0.750	1.50	ug/L	1	60.0	ND	103	79-121%	---	---	
Methyl tert-butyl ether (MTBE)	18.6	0.500	1.00	ug/L	1	20.0	ND	93	71-124%	---	---	
Naphthalene	18.1	2.00	4.00	ug/L	1	20.0	ND	90	61-128%	---	---	
1,2-Dibromoethane (EDB)	19.3	0.250	0.500	ug/L	1	20.0	ND	96	77-121%	---	---	
1,2-Dichloroethane (EDC)	19.8	0.250	0.500	ug/L	1	20.0	ND	99	73-128%	---	---	
Isopropylbenzene	20.6	0.500	1.00	ug/L	1	20.0	ND	103	72-131%	---	---	
1,2,4-Trimethylbenzene	19.6	0.500	1.00	ug/L	1	20.0	ND	98	76-124%	---	---	
1,3,5-Trimethylbenzene	19.6	0.500	1.00	ug/L	1	20.0	ND	98	75-124%	---	---	
Surr: 1,4-Difluorobenzene (Surr)			*Recovery: 102 %*	*Limits: 80-120 %*			*Dilution: 1x*					
Toluene-d8 (Surr)			*98 %*	*80-120 %*			*"*					
4-Bromofluorobenzene (Surr)			*97 %*	*80-120 %*			*"*					

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Philip Nerenberg, Lab Director

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ORELAP ID: OR100062

ANALYTICAL REPORT

Landau Associates (Northgate)	Project: Sea-Tac Development Site	
155 NE 100th St #302	Project Number: 2218001.010.011	Report ID:
Seattle, WA 98125	Project Manager: Mike Staton	A3H0772 - 08 10 23 1724

QUALITY CONTROL (QC) SAMPLE RESULTS

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

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 23H0341 - EPA 5030C												**Water**
Blank (23H0341-BLK1)			Prepared: 08/09/23 11:51		Analyzed: 08/10/23 00:27							
EPA 8260D SIM												
1,2-Dibromoethane (EDB)	ND	0.0100	0.0200	ug/L	1	---	---	---	---	---	---	
Surr: 1,4-Difluorobenzene (Surr)			*Recovery: 101 %*		*Limits: 80-120 %*				*Dilution: 1x*			
Toluene-d8 (Surr)			*101 %*		*80-120 %*				*"*			
4-Bromofluorobenzene (Surr)			*103 %*		*80-120 %*				*"*			
LCS (23H0341-BS1)			Prepared: 08/09/23 11:51		Analyzed: 08/09/23 23:33							
EPA 8260D SIM												
1,2-Dibromoethane (EDB)	0.193	0.0100	0.0200	ug/L	1	0.200	---	96	80-120%	---	---	
Surr: 1,4-Difluorobenzene (Surr)			*Recovery: 100 %*		*Limits: 80-120 %*				*Dilution: 1x*			
Toluene-d8 (Surr)			*100 %*		*80-120 %*				*"*			
4-Bromofluorobenzene (Surr)			*101 %*		*80-120 %*				*"*			
Duplicate (23H0341-DUP1)			Prepared: 08/09/23 11:51		Analyzed: 08/10/23 04:56							
QC Source Sample: MW-32-0723 (A3H0772-08)												
EPA 8260D SIM												
1,2-Dibromoethane (EDB)	ND	0.0100	0.0200	ug/L	1	---	ND	---	---	---	30%	
Surr: 1,4-Difluorobenzene (Surr)			*Recovery: 102 %*		*Limits: 80-120 %*				*Dilution: 1x*			
Toluene-d8 (Surr)			*100 %*		*80-120 %*				*"*			
4-Bromofluorobenzene (Surr)			*99 %*		*80-120 %*				*"*			
Matrix Spike (23H0341-MS1)			Prepared: 08/09/23 11:51		Analyzed: 08/10/23 10:18							
QC Source Sample: Non-SDG (A3H0798-03)												
EPA 8260D SIM												
1,2-Dibromoethane (EDB)	0.203	0.0100	0.0200	ug/L	1	0.200	ND	102	77-121%	---	---	
Surr: 1,4-Difluorobenzene (Surr)			*Recovery: 102 %*		*Limits: 80-120 %*				*Dilution: 1x*			
Toluene-d8 (Surr)			*100 %*		*80-120 %*				*"*			
4-Bromofluorobenzene (Surr)			*101 %*		*80-120 %*				*"*			
Matrix Spike Dup (23H0341-MSD1)			Prepared: 08/09/23 11:51		Analyzed: 08/10/23 10:45							
QC Source Sample: Non-SDG (A3H0798-03)												
1,2-Dibromoethane (EDB)	0.201	0.0100	0.0200	ug/L	1	0.200	ND	101	77-121%	1	30%	

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Seattle, WA 98125	Project Manager: Mike Staton	A3H0772 - 08 10 23 1724

QUALITY CONTROL (QC) SAMPLE RESULTS

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

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 23H0341 - EPA 5030C												**Water**
Matrix Spike Dup (23H0341-MSD1)					Prepared: 08/09/23 11:51 Analyzed: 08/10/23 10:45							
QC Source Sample: Non-SDG (A3H0798-03)												
Surr: 1,4-Difluorobenzene (Surr)			*Recovery: 102 %*		*Limits: 80-120 %*							*Dilution: 1x*
Toluene-d8 (Surr)			*100 %*		*80-120 %*							*"*
4-Bromofluorobenzene (Surr)			*101 %*		*80-120 %*							*"*

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155 NE 100th St #302	Project Number: 2218001.010.011	Report ID:
Seattle, WA 98125	Project Manager: Mike Staton	A3H0772 - 08 10 23 1724

SAMPLE PREPARATION INFORMATION

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

Prep: EPA 5030C

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 23H0175							
A3H0772-01	Water	NWTPH-Gx (MS)	08/01/23 09:29	08/04/23 13:04	5mL/5mL	5mL/5mL	1.00
A3H0772-02	Water	NWTPH-Gx (MS)	08/01/23 10:33	08/04/23 13:04	5mL/5mL	5mL/5mL	1.00
A3H0772-03	Water	NWTPH-Gx (MS)	07/31/23 13:12	08/04/23 13:04	5mL/5mL	5mL/5mL	1.00
A3H0772-04	Water	NWTPH-Gx (MS)	08/01/23 10:06	08/04/23 13:04	5mL/5mL	5mL/5mL	1.00
A3H0772-05	Water	NWTPH-Gx (MS)	07/31/23 14:09	08/04/23 13:04	5mL/5mL	5mL/5mL	1.00
A3H0772-06	Water	NWTPH-Gx (MS)	08/01/23 08:21	08/04/23 13:04	5mL/5mL	5mL/5mL	1.00
A3H0772-07	Water	NWTPH-Gx (MS)	08/01/23 08:57	08/04/23 13:04	5mL/5mL	5mL/5mL	1.00
A3H0772-08	Water	NWTPH-Gx (MS)	07/31/23 13:30	08/04/23 13:04	5mL/5mL	5mL/5mL	1.00
A3H0772-09	Water	NWTPH-Gx (MS)	08/01/23 08:45	08/04/23 13:04	5mL/5mL	5mL/5mL	1.00
A3H0772-10	Water	NWTPH-Gx (MS)	07/31/23 00:00	08/04/23 13:04	5mL/5mL	5mL/5mL	1.00

BTEX Compounds by EPA 8260D

Prep: EPA 5030C

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 23H0175							
A3H0772-09	Water	EPA 8260D	08/01/23 08:45	08/04/23 13:04	5mL/5mL	5mL/5mL	1.00
A3H0772-10	Water	EPA 8260D	07/31/23 00:00	08/04/23 13:04	5mL/5mL	5mL/5mL	1.00

Selected Volatile Organic Compounds by EPA 8260D

Prep: EPA 5030C

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 23H0175							
A3H0772-01	Water	EPA 8260D	08/01/23 09:29	08/04/23 13:04	5mL/5mL	5mL/5mL	1.00
A3H0772-02	Water	EPA 8260D	08/01/23 10:33	08/04/23 13:04	5mL/5mL	5mL/5mL	1.00
A3H0772-03	Water	EPA 8260D	07/31/23 13:12	08/04/23 13:04	5mL/5mL	5mL/5mL	1.00
A3H0772-04	Water	EPA 8260D	08/01/23 10:06	08/04/23 13:04	5mL/5mL	5mL/5mL	1.00
A3H0772-05	Water	EPA 8260D	07/31/23 14:09	08/04/23 13:04	5mL/5mL	5mL/5mL	1.00
A3H0772-06	Water	EPA 8260D	08/01/23 08:21	08/04/23 13:04	5mL/5mL	5mL/5mL	1.00
A3H0772-07	Water	EPA 8260D	08/01/23 08:57	08/04/23 13:04	5mL/5mL	5mL/5mL	1.00
A3H0772-08	Water	EPA 8260D	07/31/23 13:30	08/04/23 13:04	5mL/5mL	5mL/5mL	1.00
Batch: 23H0245							
A3H0772-03RE1	Water	EPA 8260D	07/31/23 13:12	08/07/23 12:00	5mL/5mL	5mL/5mL	1.00
A3H0772-08RE1	Water	EPA 8260D	07/31/23 13:30	08/07/23 12:00	5mL/5mL	5mL/5mL	1.00

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ANALYTICAL REPORT

Landau Associates (Northgate)	Project: **Sea-Tac Development Site**	
155 NE 100th St #302	Project Number: **2218001.010.011**	**Report ID:**
Seattle, WA 98125	Project Manager: **Mike Staton**	**A3H0772 - 08 10 23 1724**

SAMPLE PREPARATION INFORMATION

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

Prep: EPA 5030C

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 23H0341							
A3H0772-01	Water	EPA 8260D SIM	08/01/23 09:29	08/09/23 11:52	5mL/5mL	5mL/5mL	1.00
A3H0772-02	Water	EPA 8260D SIM	08/01/23 10:33	08/09/23 11:52	5mL/5mL	5mL/5mL	1.00
A3H0772-03	Water	EPA 8260D SIM	07/31/23 13:12	08/09/23 11:52	5mL/5mL	5mL/5mL	1.00
A3H0772-04	Water	EPA 8260D SIM	08/01/23 10:06	08/09/23 11:52	5mL/5mL	5mL/5mL	1.00
A3H0772-05	Water	EPA 8260D SIM	07/31/23 14:09	08/09/23 11:52	5mL/5mL	5mL/5mL	1.00
A3H0772-06	Water	EPA 8260D SIM	08/01/23 08:21	08/09/23 11:52	5mL/5mL	5mL/5mL	1.00
A3H0772-07	Water	EPA 8260D SIM	08/01/23 08:57	08/09/23 11:52	5mL/5mL	5mL/5mL	1.00
A3H0772-08	Water	EPA 8260D SIM	07/31/23 13:30	08/09/23 11:52	5mL/5mL	5mL/5mL	1.00

Apex Laboratories

Philip Nerenberg

Philip Nerenberg, Lab Director

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155 NE 100th St #302	Project Number: **2218001.010.011**	**Report ID:**
Seattle, WA 98125	Project Manager: **Mike Staton**	**A3H0772 - 08 10 23 1724**

QUALIFIER DEFINITIONS

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

Apex Laboratories

J	Estimated Result. Result detected below the lowest point of the calibration curve, but above the specified MDL.
Q-54	Daily Continuing Calibration Verification recovery for this analyte failed the +/-20% criteria listed in EPA method 8260/8270 by +5%. The results are reported as Estimated Values.
Q-54a	Daily Continuing Calibration Verification recovery for this analyte failed the +/-20% criteria listed in EPA method 8260/8270 by -11%. The results are reported as Estimated Values.
Q-55	Daily CCV/LCS recovery for this analyte was below the +/-20% criteria listed in EPA 8260, however there is adequate sensitivity to ensure detection at the reporting level.
R-02	The Reporting Limit for this analyte has been raised to account for interference from coeluting organic compounds present in the sample.

Apex Laboratories

Philip Nerenberg

Philip Nerenberg, Lab Director

Apex Laboratories, LLC
6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
ORELAP ID: **OR100062**

ANALYTICAL REPORT

Landau Associates (Northgate)	Project: **Sea-Tac Development Site**	
155 NE 100th St #302	Project Number: **2218001.010.011**	**Report ID:**
Seattle, WA 98125	Project Manager: **Mike Staton**	**A3H0772 - 08 10 23 1724**

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'.

Results for Volatiles analyses on soils and sediments that are reported on a “dry weight” basis include the water miscible solvent (WMS) correction referenced in the EPA 8000 Method guidance documents. Solid and Liquid samples reported on an “As Received” basis do not have the WMS correction applied, as dry weight was not performed.

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) may not be 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).

Apex Laboratories

Philip Nerenberg, Lab Director

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REPORTING NOTES AND CONVENTIONS (Cont.):

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.

-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, if results are not reported to the MDL.

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.

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LABORATORY ACCREDITATION INFORMATION

ORELAP 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

All reported analytes are included in Apex Laboratories' current ORELAP scope.

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 provded by the client or sampler, and fall outside of Apex Laboratories' Scope of Accreditation.

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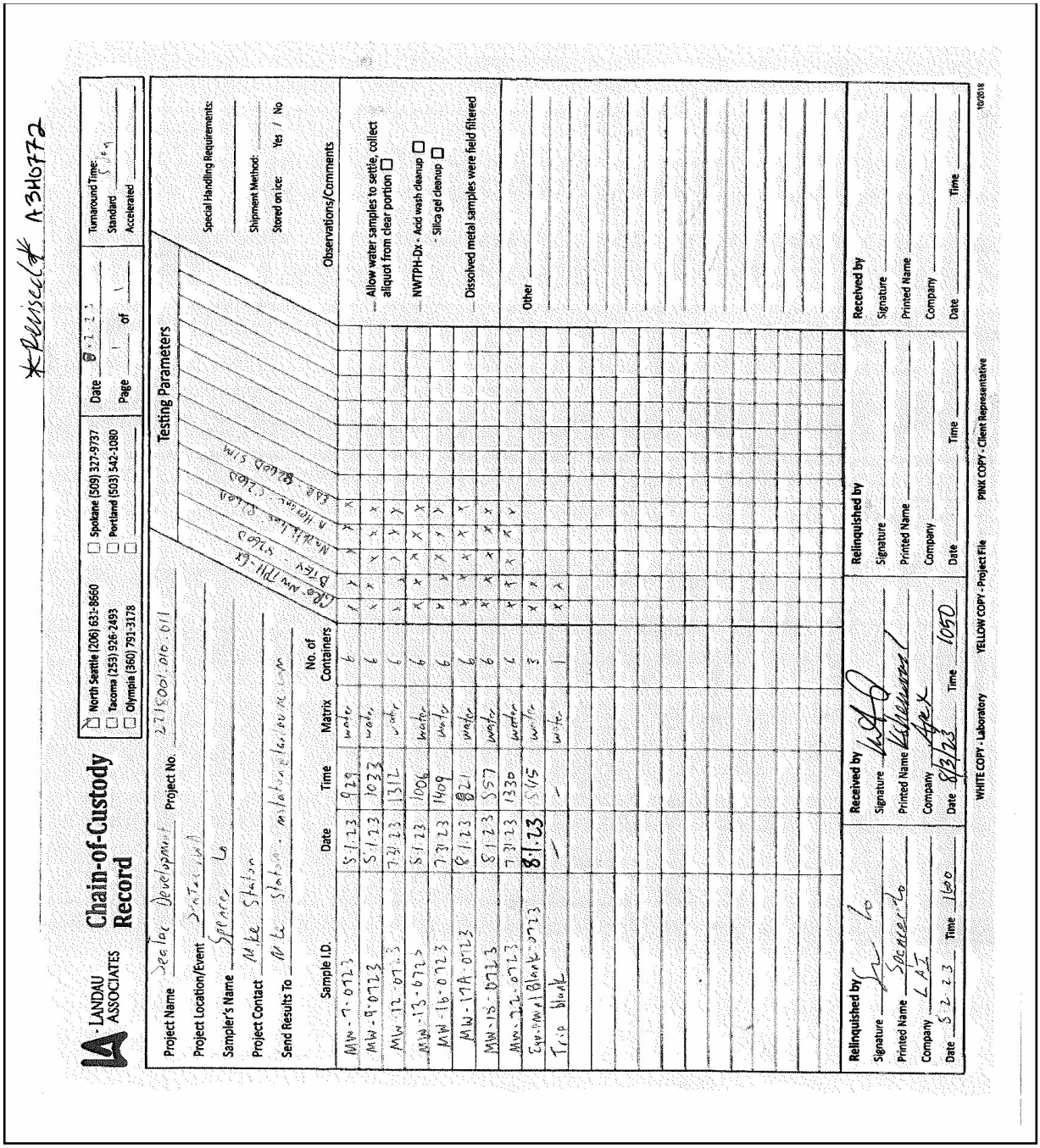

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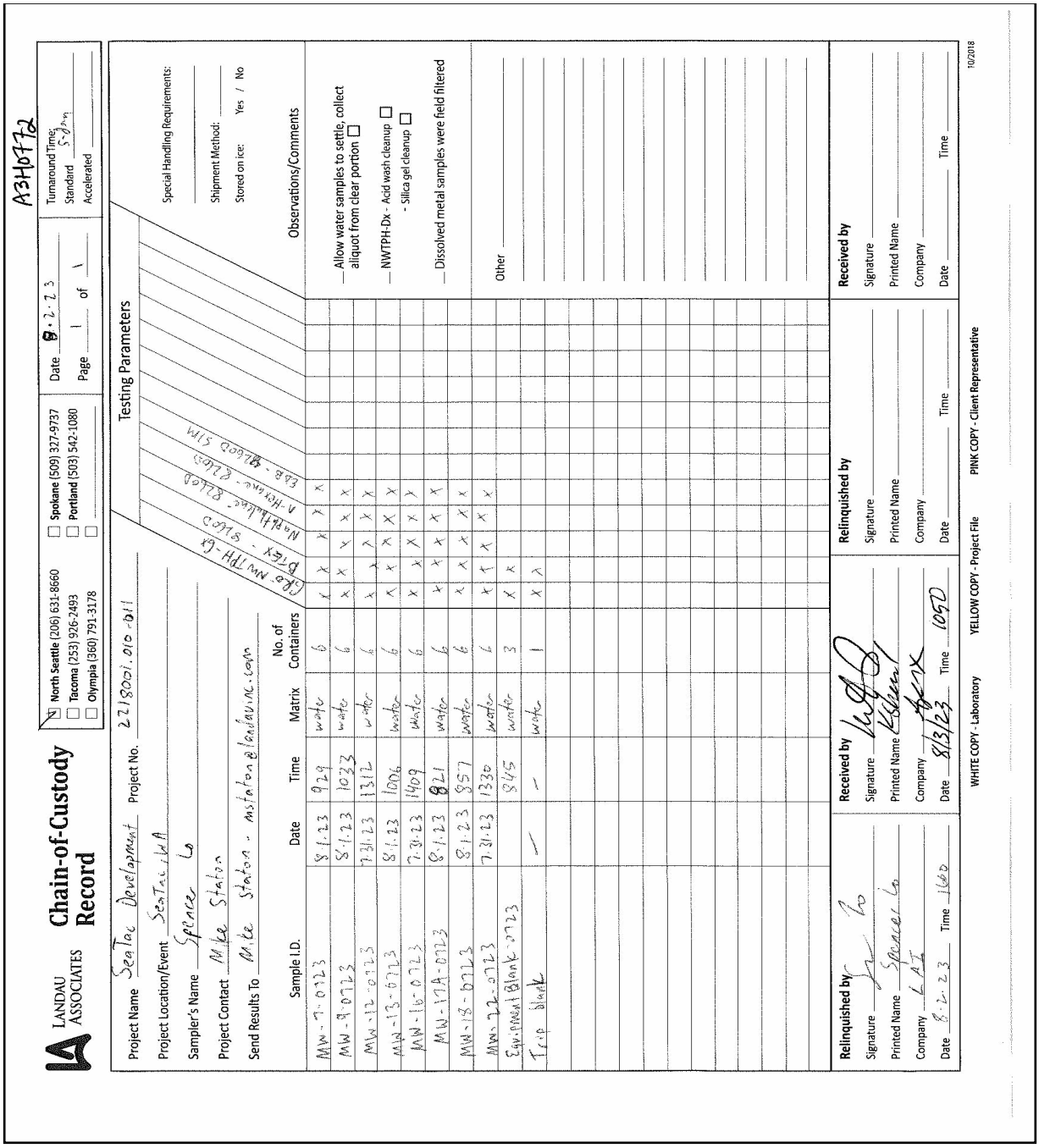

A3H0772

Chain-of-Custody Record

LANDAU ASSOCIATES

☒ North Seattle (206) 631-8660 ☐ Tacoma (253) 926-2493 ☐ Olympia (360) 791-3178 ☐ Spokane (509) 327-9737 ☐ Portland (503) 542-1080 ☐

Date 8.2.23 Page 1 of 1

Turnaround Time: Standard 5 days ☐ Accelerated ☐

Project Name SeaTac Development Project No. 2218001.010.011

Project Location/Event SeaTac, WA

Sampler's Name Spencer Lo

Project Contact Mike Staton

Send Results To Mike Staton - mstaton@landauinc.com

Testing Parameters: BTEX - SW8260D; Naphthalene - SW8260D; N-Hexane - SW8260D; cPAHs - SW8270E SIM; Dissolved Lead - SW6020B; Dissolved Arsenic - SW6020B; NWTPH-Dx

Sample I.D.	Date	Time	Matrix	No. of Containers
MW-7-0723	8.1.23	929	water	6
MW-8-0723	8.1.23	1023	water	6
MW-12-0723	7.31.23	1312	water	6
MW-13-0723	8.1.23	1006	water	6
MW-16-0723	7.31.23	1409	water	6
MW-17A-0723	8.1.23	821	water	6
MW-18-0723	8.1.23	957	water	6
MW-22-0723	7.31.23	1330	water	6
Equipment Blank-0723		845	water	3
Trip Blank	—	—	water	1

Special Handling Requirements:
Shipment Method:
Stored on ice: Yes / No

Observations/Comments

__ Allow water samples to settle, collect aliquot from clear portion ☐
__ NWTPH-Dx - Acid wash cleanup ☐ - Silica gel cleanup ☐
__ Dissolved metal samples were field filtered
Other

Relinquished by	Received by	Relinquished by	Received by
Signature	Signature	Signature	Signature
Printed Name Spencer Lo	Printed Name Kelsey Henox	Printed Name	Printed Name
Company LAA	Company Apex	Company	Company
Date 8.2.23 Time 1600	Date 8/3/23 Time 1050	Date Time	Date Time

WHITE COPY - Laboratory YELLOW COPY - Project File PINK COPY - Client Representative

10/2018

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APEX LABS COOLER RECEIPT FORM

Client: Landau Element WO#: A3H0772

Project/Project #: SeaTac, WA / 2218001.010.011

Delivery Info:

Date/time received: 8/3/23 @ 1050 By: VMO

Delivered by: Apex__Client__ESS__FedEx X UPS__Radio__Morgan__SDS__Evergreen__Other__

Cooler Inspection Date/time inspected: 8/3/23 @ 1050 By: VMO

Chain of Custody included? Yes X No ____

Signed/dated by client? Yes X No ____

	Cooler #1	Cooler #2	Cooler #3	Cooler #4	Cooler #5	Cooler #6	Cooler #7
Temperature (°C)	3.3						
Custody seals? (Y/N)	N						
Received on ice? (Y/N)	Y						
Temp. blanks? (Y/N)	Y						
Ice type: (Gel/Real/Other)	Real						
Condition (In/Out):	In						

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

Green dots applied to out of temperature samples? Yes/No

Out of temperature samples form initiated? Yes/No

Sample Inspection: Date/time inspected: 8/3/23 @ 16:54 By: KAM

All samples intact? Yes X No ___ Comments: ____

Bottle labels/COCs agree? Yes X No ___ Comments: ____

COC/container discrepancies form initiated? Yes ___ No X

Containers/volumes received appropriate for analysis? Yes X No ___ Comments: ____

Do VOA vials have visible headspace? Yes ___ No X NA ____

Comments ____

Water samples: pH checked: Yes___No___NA X pH appropriate? Yes___No___NA X

Comments: ____

Additional information: 4819 8422 3581 TBH 3350

Labeled by: KAM Witness: AAW Cooler Inspected by: KAM

Form Y-003 R-00

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