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June 13, 2025

Stacey Lange
Property Manager
Steinhauer Properties
11400 Southeast 8th Street
Bellevue, Washington 98004

SUBJECT: **2025 GROUNDWATER AND INDOOR AIR MONITORING REPORT**
North Lot Development Site
201 and 255 South King Street, Seattle, Washington
Ecology Site ID: 5378137

Dear Ms. Lange:

EHS-International, Inc. (EHSI) has prepared this letter report to summarize the field activities and results of the 2025 groundwater and indoor air monitoring event completed for the North Lot Development Site, located at 201 and 255 South King Street in Seattle, Washington (the Site; Figure 1). The purpose of the groundwater and indoor air monitoring conducted at the Site was to demonstrate compliance with the specific requirements of the cleanup action completed at the Site pursuant to Consent Decree No. 11-2-27892-1. The groundwater and indoor air monitoring were conducted in accordance with the monitoring requirements set forth in the Washington State Department of Ecology's (Ecology's) letter regarding Compliance Groundwater and Air Monitoring at the North Lot Development Site, dated January 12, 2021 (Ecology 2021 Letter; Ecology 2021) and EHSI's Proposal for Groundwater and Indoor Air Monitoring, dated September 25, 2024 (EHSI 2024).

BACKGROUND

The Site, which is located in the Pioneer Square district of Seattle, Washington, includes two rectangular tax parcels (King County Parcel Nos. 795300-0000 and 766620-4878; Parcels A and B, respectively) that cover a total of approximately 3.87 acres of land. A 2011 remedial investigation conducted by Landau Associates (Landau; Landau 2011b) noted that the Site and surrounding area was originally undeveloped tide flats of Elliott Bay. The Site was filled and developed in the late 1890s and early 1900s with a rail yard that operated until the late 1960s. The Site was initially developed with streets, buildings, and railroad tracks supported on wood pilings. The land was then filled between the pilings. The fill material consisted of remnants of the former rail yard operations and construction debris. Early on-Site structures included engine maintenance buildings, sand houses, coal houses, oil houses, and material storage areas. Several sets of railroad tracks were also present on the Site. King County purchased the Site in the 1970s to facilitate construction of the former Kingdome stadium adjacent to the south. The Kingdome was later replaced by Century Link Field, which was renamed as Lumen Field in 2022. The Site was used as a parking lot from the 1970s until it was redeveloped with the existing high-rise buildings in 2014. King Street LP purchased the eastern parcel (Parcel B) from North Lot Development in 2013 and built the existing high-rise hotel, residential, and commercial/retail buildings with below-grade parking.

Various subsurface investigations were completed at the Site between 2008 and 2014. The subsurface materials encountered consisted of heterogeneous fill material to depths of up to 20 feet below ground surface. The environmental investigations identified total petroleum hydrocarbons (TPH), benzene, arsenic, and carcinogenic polycyclic aromatic hydrocarbons (cPAHs) at concentrations exceeding applicable Site-specific cleanup levels. The Site is defined by the full lateral and vertical extent of TPH, benzene, arsenic, and cPAH contamination resulting from historical filling activities and historical uses of the Site.

The Site was entered into a prospective purchaser consent decree in August 2011. The eastern parcel (Parcel B) was subsequently entered into a different consent decree in 2014 that superseded the earlier prospective purchaser consent decree. Detailed discussions of past investigations, regulatory actions, cleanup, and monitoring requirements are provided in the Cleanup Action Plan (Ecology 2011), Feasibility Study (Landau 2011a), Remedial Investigation Report (Landau 2011b), and the Cleanup Action Plan Addendum (2013 Landau CAP Addendum; Landau 2013). The Site-specific cleanup levels for the contaminants of concern in the media of concern are presented in the 2013 Landau CAP Addendum.

Remedial excavation work was done in 2015 in conjunction with the redevelopment of the Site and mass removal of the soil (Rothman and Associates, Inc. 2019). A total of 57,007 tons of contaminated soil and debris was excavated and disposed of at the Republic Service facility, AAA Monroe Rock, and Waste Management for permitted landfill disposal. Following excavation, a protective cap was constructed across the Site to prevent contact with remaining contaminated soil (if any). To mitigate risks associated with vapor intrusion, the building water barrier was also designed as a vapor barrier, and the foundation was constructed with an impermeable seal-slab floor system.

In accordance with the 2013 Landau CAP Addendum, compliance groundwater monitoring was conducted on a quarterly basis between August 2017 and July 2019. The most recent groundwater monitoring event was conducted in January 2020. In the Ecology 2021 Letter, Ecology concluded that the frequency of groundwater compliance monitoring could be reduced to once every 5 years based on the results of the previous five groundwater monitoring events conducted between September 2018 and January 2020, which demonstrated consistent compliance with the cleanup levels established for the Site.

In accordance with the 2013 Landau CAP Addendum, five indoor air monitoring events have been conducted between March 2018 and January 2020. During each event, indoor air samples were collected from locations in the parking garage and in basement office spaces of the building on Parcel B. Benzene data trends over the five indoor air monitoring events indicated that benzene concentrations were elevated in the parking garage sampling location due to typical parking garage vehicle traffic. Benzene concentrations in indoor air samples collected from basement office spaces have shown a decreasing trend since the initial sampling in March 2018, and benzene concentrations adjusted for ambient air conditions have been compliant with the Washington State Model Toxics Control Act (MTCA) Method B indoor air cleanup level for unrestricted land use since December 2018. In the Ecology 2021 Letter, Ecology concluded that although adjusted benzene concentrations have been below the MTCA Method B indoor air cleanup level, there is still a potential vapor intrusion risk in the hotel office space. Therefore, Ecology has requested additional indoor air sampling at a frequency of once every 5 years in the hotel office space. No further sampling has been requested from the parking garage location.

FIELD ACTIVITIES

Groundwater Monitoring

The 2025 groundwater monitoring event was completed on January 24 and 25, 2025. The monitoring event was conducted in general accordance with Ecology's 2021 Letter, which documents the approved modification to

the groundwater monitoring frequency, and EHSI's Proposal for Groundwater and Indoor Air Monitoring, dated September 25, 2024. Field activities for the 2025 groundwater monitoring event included the following:

- Measuring the depth to groundwater in monitoring wells MW-16D, MW-18D, MW-19, MW-20, MW-21, and MW-22
- Collecting groundwater samples from monitoring wells MW-16D, MW-18D, MW-19, MW-20, MW-21, and MW-22
- Submitting the groundwater samples collected from each well for analysis of the following contaminants of concern:
  - Gasoline-range petroleum hydrocarbons (GRPH) by Northwest Total Petroleum Hydrocarbon (NWTPH) Method NWTPH- Gx
  - Diesel- and oil-range petroleum hydrocarbons (DRPH and ORPH, respectively) by Method NWTPH-Dx (with and without silica gel cleanup at monitoring well MW-22 only)
  - Benzene, toluene, ethylbenzene, and total xylenes (BTEX) by US Environmental Protection Agency (EPA) Method 8021B
  - Dissolved metals (arsenic, cadmium, chromium, copper, lead, mercury, and zinc) by EPA Method 6020B
  - Polycyclic aromatic hydrocarbons (PAHs) by EPA Method 8270E
- Collecting a field duplicate sample from monitoring well MW-22 for quality assurance/quality control (QA/QC) purposes

Upon arrival at the Site, EHSI personnel opened the accessible existing monitoring wells and allowed the water levels to equilibrate with atmospheric pressure for a minimum of 1 hour prior to obtaining groundwater level measurements. Groundwater levels were measured to an accuracy of 0.01 foot using an electronic water level meter.

Purging and sampling of all monitoring wells were performed using a peristaltic pump and dedicated polyethylene tubing at a maximum flow rate of approximately 150 milliliters per minute. The tubing intake was placed approximately 2 to 3 feet below the surface of the groundwater in each monitoring well or at mid-screen if the well screen was submerged. During purging, water quality was monitored using a YSI water-quality meter equipped with a flow-through cell. The water quality parameters that were monitored and recorded included temperature, pH, specific conductivity, dissolved oxygen, turbidity, and oxidation-reduction potential. The Groundwater Purge and Sample Forms from the monitoring event are provided in Attachment A.

Following purging, the groundwater samples and field duplicate sample from monitoring well MW-22 were collected from the pump outlet tubing located upstream of the flow-through cell and placed into laboratory-prepared sample containers in accordance with EPA guidance Low-Flow (Minimal Drawdown) Ground-Water Sampling Procedures dated April 1996 (Puls and Barcelona 1996). The containers were placed in an iced cooler and transported to Friedman & Bruya, Inc., of Seattle, Washington (F&B), under standard chain-of-custody protocols for laboratory analysis of the following:

- GRPH by Method NWTPH-Gx
- DRPH and ORPH by Method NWTPH-Dx
- DRPH and ORPH with silica gel cleanup (monitoring well MW-22 only)

- BTEX by EPA Method 8021B
- Dissolved metals (arsenic, cadmium, chromium, copper, lead, mercury, and zinc) by EPA Method 6020B
- PAHs by EPA Method 8270E

Purge water generated during the monitoring event was placed in a labeled 55-gallon drum and temporarily stored on the Site pending receipt of analytical data and proper disposal.

INDOOR AIR SAMPLING

The 2025 indoor air monitoring event was completed on January 26 and 27, 2025, in general accordance with Ecology's 2021 Letter; EHSI's Proposal for Groundwater and Indoor Air Monitoring, dated September 25, 2024; and Ecology's *Guidance for Evaluating Soil Vapor Intrusion in Washington State: Investigation and Remedial Action*, finalized in March 2022 (Ecology 2022a). The purpose of the indoor air monitoring event was to evaluate whether benzene is present in indoor air within the building on Parcel B as a result of vapor intrusion. In accordance with Ecology's 2021 Letter, the sampling event was conducted during the winter when the building heating system was operational and the vapor intrusion potential was relatively high.

Prior to sampling, EHSI conducted a site visit on January 20, 2025, to identify sample locations and assess whether potential background sources of benzene are present within the building. EHSI also reviewed Material Safety Data Sheets for observed cleaning materials stored within the building to evaluate whether these materials presented a risk of interference with the sampling results. No materials of potential concern were identified during the site visit.

The indoor air sampling event included the collection of one indoor sample (IA01) from the basement hotel office and one ambient air sample (OA01) from the roof of the northern hotel tower. A field duplicate indoor air sample was also collected from the location of indoor air sample IA01 for QA/QC purposes. Additional details regarding each sample location are summarized below:

- Sample OA01-20250126 was collected from the rooftop of the northern hotel tower and beneath an air intake for the building's HVAC system. This sample location was consistent with EHSI's 2020 sample location 11254-03RT.
- Sample IA01-20250126 and field duplicate sample IA99-20250126 were collected inside the basement hotel office and elevated approximately 4 feet off the ground surface within the breathing zone of potential building occupants. This sample location was consistent with EHSI's 2020 sample location 11254-03-HO.

Indoor and outdoor air samples were collected in certified, evacuated, 6-liter SUMMA canisters supplied by the laboratory and fitted with a flow controller calibrated by the laboratory for an 8-hour sample collection. Air sampling canisters were deployed at approximately 10:30 PM and were retrieved at the end of the sampling period approximately 8 hours later. Initial and final vacuum readings for each canister were recorded on the Chain of Custody form. After a sample was collected, the SUMMA canister valve was fully closed, and the end cap was replaced and tightened. The SUMMA canisters were submitted to F&B under standard chain-of-custody protocols for analysis of benzene by EPA Method TO-15.

The January 26 and 27, 2025, sampling locations are depicted on Figure 3. The field sampling data sheets are included in Attachment A.

RESULTS

This section documents the results of the 2025 groundwater and indoor air monitoring event.

Groundwater Monitoring Results

This section presents the findings of the groundwater monitoring event, including groundwater depths and flow direction, and a summary of the analytical results. Groundwater elevations and analytical results are provided in Table 1, and the laboratory analytical report is included as Attachment B. A groundwater contour map and groundwater analytical results for the 2025 monitoring event are depicted on Figure 2.

Measured groundwater depths ranged from 5.23 feet (monitoring well MW-22) to 10.39 feet (monitoring well MW-18D) below the top of the well casings at the time of sampling. Based on the measured groundwater elevations, groundwater beneath the northwestern portion of Parcel A flows in a west-southwesterly direction with an average gradient of approximately 0.008 feet per foot. Groundwater beneath the northeastern portion of Parcel A and beneath Parcel B flows in a northeasterly direction with an average gradient of approximately 0.02 feet per foot.

Groundwater analytical results from the 2025 groundwater monitoring event are discussed below:

- **Petroleum Hydrocarbons.** GRPH, DRPH, and ORPH were not detected at concentrations above laboratory reporting limits in any of the analyzed groundwater samples.
- **BTEX.** BTEX constituents were not detected at concentrations above laboratory reporting limits in any of the analyzed groundwater samples.
- **cPAHs.** cPAHs were not detected at concentrations above laboratory reporting limits or above the Site-specific total cPAH toxicity equivalent in any of the analyzed groundwater samples.
- **Metals.** Metals, including arsenic, were not detected at concentrations above Site-specific cleanup levels in any of the analyzed groundwater samples.

Indoor and Ambient Air Sampling Results

Analytical results for indoor air sample IA01 were adjusted to account for concentrations of benzene detected in outdoor ambient air sample OA01. The adjusted concentrations, which are equal to the concentration detected in each indoor air sample minus the ambient air concentration, were compared with MTCA Method B indoor air cleanup levels for unrestricted land use, in accordance with Ecology's *Guidance for Evaluating Soil Vapor Intrusion in Washington State: Investigation and Remedial Action*, finalized in March 2022 (Ecology 2022a) and the Site-specific cleanup levels established for the Site (Landau 2013).

Results from the indoor and outdoor ambient air samples show that the unadjusted concentration of benzene detected in indoor air sample IA01 (1.1 micrograms per cubic meter [µg/m^3]) exceeded the MTCA Method B indoor air cleanup level of 0.32 µg/m^3. However, a benzene concentration of 0.81 µg/m^3 was detected in outdoor ambient air sample OA01. The presence of benzene in the outdoor ambient air suggests off-site sources of benzene may impact indoor air concentrations. Therefore, the adjusted benzene concentration detected in sample IA01 collected from the basement hotel office was calculated to be 0.29 µg/m^3, which is below the MTCA Method B cleanup level.

Indoor and outdoor air analytical results are summarized on Figure 3 and in Table 2. The laboratory analytical report is included in Attachment B.

Data Quality Review

To meet the objectives of the monitoring event at the Site, EHSI reviewed the laboratory quality control data provided with the laboratory analytical report to evaluate the usability of the analytical results. In addition, the relative percent difference (RPD) was calculated for the field duplicate samples collected by EHSI from monitoring well MW-22 and from indoor air sample location IA01.

The results of EHSI's review of laboratory quality control data indicated that the RPDs for the detected analytes in the parent and duplicate sample from monitoring well MW-22 and from indoor air sample location IA01 were within acceptable limits. The analytical results for the groundwater and indoor air samples are considered to be usable to meet the objectives of the monitoring event.

CONCLUSIONS

The results of the 2025 groundwater monitoring event indicate that concentrations of contaminants of concern for the Site, including TPH, benzene, arsenic, and cPAHs, remain below the Site-specific cleanup levels in groundwater beneath the Site.

The weight of evidence indicates that benzene concentrations in indoor air resulting from vapor intrusion do not exceed the MTCA Method B indoor air cleanup level. Ecology has also established MTCA indoor air screening levels for commercial workers, as documented in Ecology's July 2022 *Vapor Intrusion Screening Levels for Workers* guidance document (Ecology 2022b). Standard Method B cleanup levels assume a residential exposure frequency and are overly conservative for a commercial building. MTCA indoor air screening levels for commercial workers are applicable in situations where adults working inside a commercial space are the primary potential receptors to indoor air contamination caused by vapor intrusion and assume an exposure frequency of a typical work week. Given that the hotel office where indoor air sampling was conducted is for commercial use and is likely to remain so, the detected indoor air benzene concentration can also be evaluated relative to the MTCA indoor air screening level for commercial workers for benzene of 1.5 µg/m^3. Both the adjusted and unadjusted benzene concentrations detected in the indoor air sample collected from the hotel office are below the MTCA indoor air screening level for commercial workers. Therefore, there does not appear to be an indoor air vapor intrusion exposure risk to building occupants at this time. The presence of the vapor barrier installed beneath the underground parking garage sub-slab appears to be effective in inhibiting benzene vapors from impacting indoor air quality.

LIMITATIONS

The services described in this report were performed consistent with generally accepted professional consulting principles and practices. No other warranty, expressed or implied, is made. These services were performed consistent with EHSI's agreement with the client. This report is solely for the use and information of the client unless otherwise noted. Any reliance on this report by a third party is at such party's sole risk.

Opinions and recommendations contained in this report are derived, in part, from data gathered by others, and from conditions evaluated when services were performed, and are intended only for the client, purposes, locations, time frames, and project parameters indicated. EHSI does not warrant and is not responsible for the accuracy or validity of work performed by others, or for the impacts of changes in environmental standards, practices, or regulations subsequent to performance of services. EHSI does not warrant the use of segregated portions of this report.

CLOSING

Thank you for the opportunity to assist you in this matter. If you have any questions regarding the project, please do not hesitate to contact us.

Respectfully submitted,

Dimitri Lominadze
Staff Industrial Hygienist

Clare Tochilin, LG
Senior Geologist

Fred Luck, PE
Principal

Attachments: Figure 1, Site Location Map
Figure 2, Groundwater Contour Map and Analytical Results
Figure 3, Indoor Air Sample Locations and Analytical Results
Table 1, Groundwater Analytical Results
Table 2, Indoor Air Analytical Results
A, Groundwater and Air Sampling Sheets
B, Laboratory Analytical Reports and Chain of Custody

JSC/TJC:dnm/tch

REFERENCES

EHS-International, Inc. (EHSI). 2024. Letter regarding Proposal for Groundwater and Indoor Air Monitoring, North Lot, 201 and 255 South King Street, Seattle, Washington. From Clare Tochilin and Fred Luck. To Stacey Lange, Steinhauer Properties. September 25.

Landau Associates (Landau). 2011a. *Feasibility Study, North Lot Development, Seattle, Washington.* Prepared for North Lot Development, LLC. May 23.

_____. 2011b. *Remedial Investigation Report, North Lot Development, Seattle, Washington.* Prepared for North Lot Development, LLC. May 23.

_____. 2013. *Cleanup Action Plan Addendum, North Lot Property, Seattle, Washington.* Prepared for North Lot Development, LLC and 255 S. King Street LP. September 18.

Puls, Robert W. and Michael J. Barcelona. 1996. "Low-Flow (Minimal Drawdown) Ground-Water Sampling Procedures." *Ground Water Issue*. US Environmental Protection Agency Publication No. EPA/540/S-95/504. April.

Rothman & Associates. 2019. *Cleanup Action Report, East Parcel – North Lot Property, 255 South King Street, Seattle, Washington.* Prepared for 255 S King Street LP. January 10.

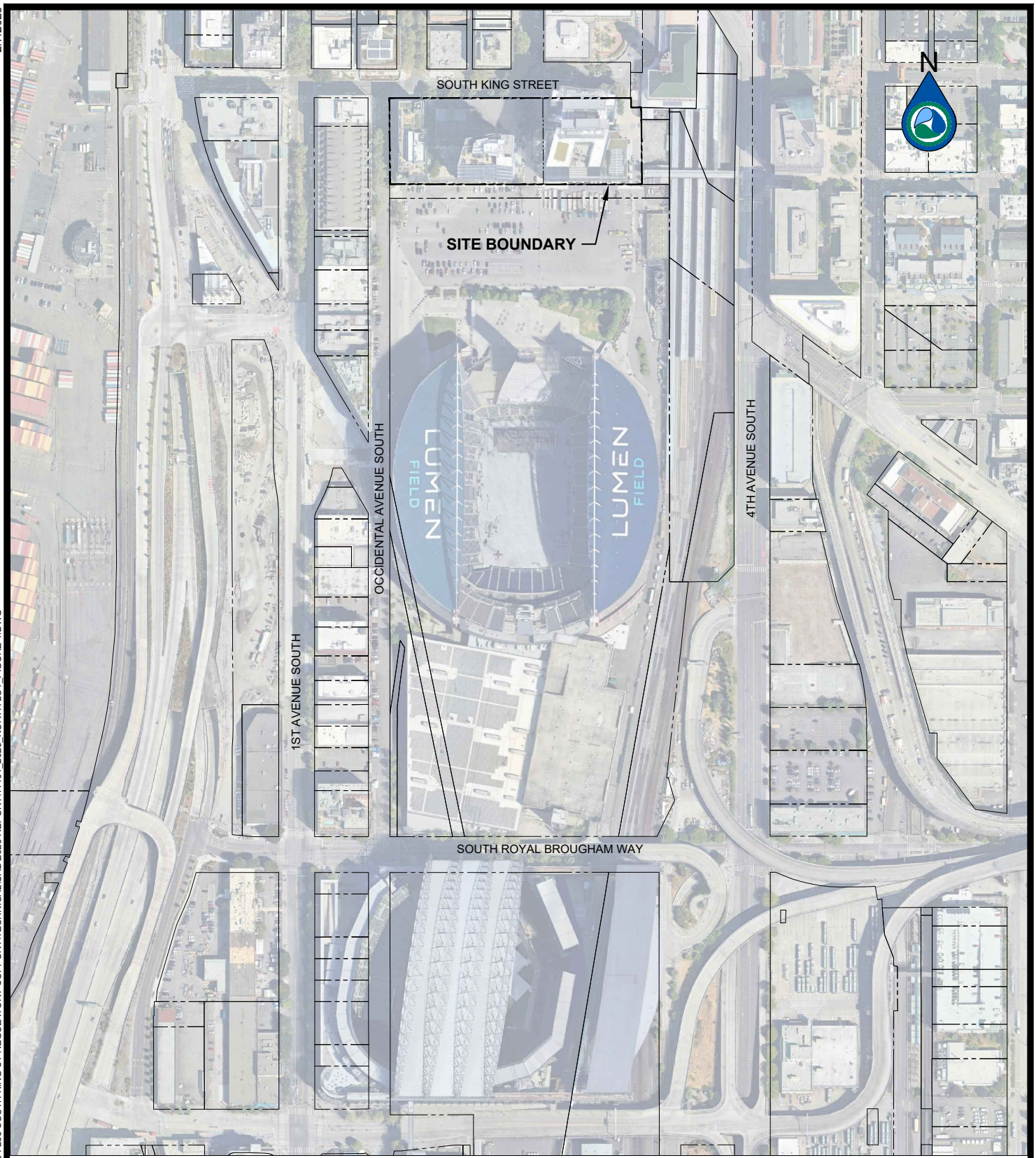
Washington State Department of Ecology (Ecology). 2011. *North Lot Development Site, Final Cleanup Action Plan.* July.

_____. 2021. Letter regarding Compliance Groundwater and Air Monitoring at the North Lot Development Site, 201 and 255 South King Street, Seattle, WA. From Jing Liu. To Krys Svendsen of Daniels Real Estate and Stacey Lange of American Life, Inc. January 12.

_____. 2022a. *Guidance for Evaluating Soil Vapor Intrusion in Washington State: Investigation and Remedial Action.* Publication No. 09-09-047. Finalized March 2022.

_____. 2022b. *Vapor Intrusion Screening Levels for Workers*. July.

FIGURES



LEGEND:

SITE BOUNDARY

PARCEL LINE

0 200 400

APPROXIMATE SCALE IN FEET

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NORTH LOT DEVELOPMENT SITE
201 AND 255 SOUTH KING STREET
SEATTLE, WASHINGTON
EHSI PROJECT #: 11404

SITE LOCATION MAP

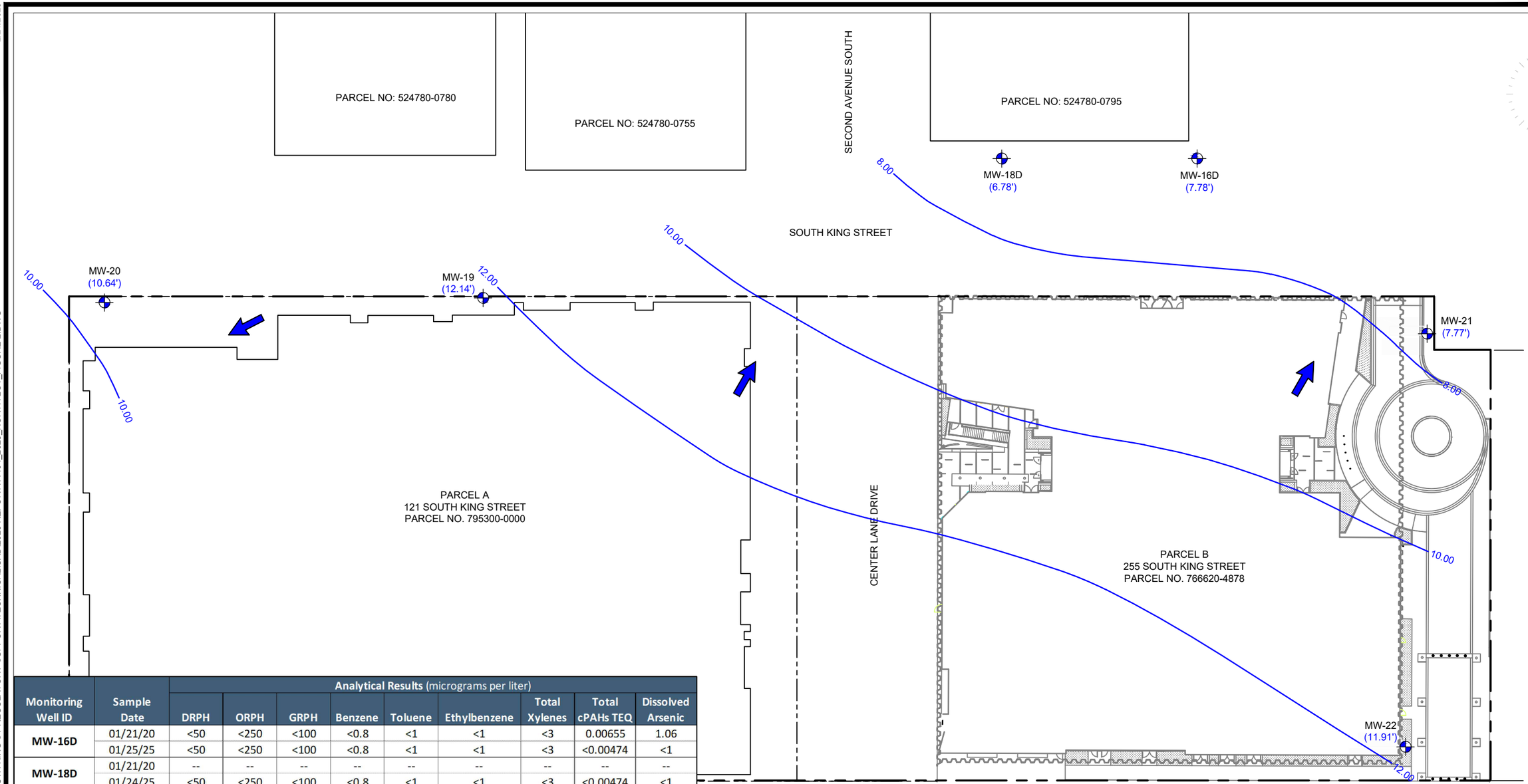
FIGURE 1

PROJECT MANAGER: C. TOCHILIN

DRAWN BY: F. DIMALANTA

2/7/2025

T:\EHSI-PROJECTS\PROJECT #S 11000-11599\11404 255 SOUTH KING ST REGULATORY SUPPORT\TECHNICAL\CAD\2025 REPORT\11404_2025_NORTH LOT_FIGURE 1.DWG



Monitoring Well ID	Sample Date	Analytical Results (micrograms per liter) DRPH	ORPH	GRPH	Benzene	Toluene	Ethylbenzene	Total Xylenes	Total cPAHs TEQ	Dissolved Arsenic
MW-16D	01/21/20	<50	<250	<100	<0.8	<1	<1	<3	0.00655	1.06
	01/25/25	<50	<250	<100	<0.8	<1	<1	<3	<0.00474	<1
MW-18D	01/21/20	--	--	--	--	--	--	--	--	--
	01/24/25	<50	<250	<100	<0.8	<1	<1	<3	<0.00474	<1
MW-19	01/21/20	<50	<250	<100	<0.8	<1	<1	<3	0.00655	2.05
	01/25/25	<50	<250	<100	<0.8	<1	<1	<3	<0.00474	2.2
MW-20	01/21/20	<50	<250	<100	<0.8	<1	<1	<3	0.00655	<1
	01/25/25	<50	<250	<100	<0.8	<1	<1	<3	<0.00474	2.1
MW-21	01/21/20	<50	<250	<100	<0.8	<1	<1	<3	0.00655	1.47
	01/25/25	<50	<250	<100	<0.8	<1	<1	<3	<0.00474	1.2
MW-22	01/21/20	100	<250	<100	<0.8	<1	<1	<3	0.00655	1.27
	01/25/25	<50	<250	<100	<0.8	<1	<1	<3	<0.00474	<1
Site-Specific Cleanup Levels		500	500	800	0.8	80	275	1,600	0.012	5/21.3

LEGEND:

- SITE BOUNDARY
- PARCEL LINE
- MW-22 (11.91') MONITORING WELL WITH GROUNDWATER ELEVATION (01/24/25)
- 2-FOOT INTERVAL GROUNDWATER CONTOUR
- GROUNDWATER FLOW DIRECTION

cPAH	CARCINOGENIC POLYCYCLIC AROMATIC HYDROCARBON
DRPH	DIESEL-RANGE PETROLEUM HYDROCARBONS
GRPH	GASOLINE-RANGE PETROLEUM HYDROCARBONS
ORPH	OIL-RANGE PETROLEUM HYDROCARBONS
TEQ	TOXICITY EQUIVALENT

0 25 50

APPROXIMATE SCALE IN FEET

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NORTH LOT DEVELOPMENT SITE
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SEATTLE, WASHINGTON
EHSI PROJECT #: 11404

PROJECT MANAGER: C.TOCHILIN

GROUNDWATER CONTOUR MAP AND ANALYTICAL RESULTS

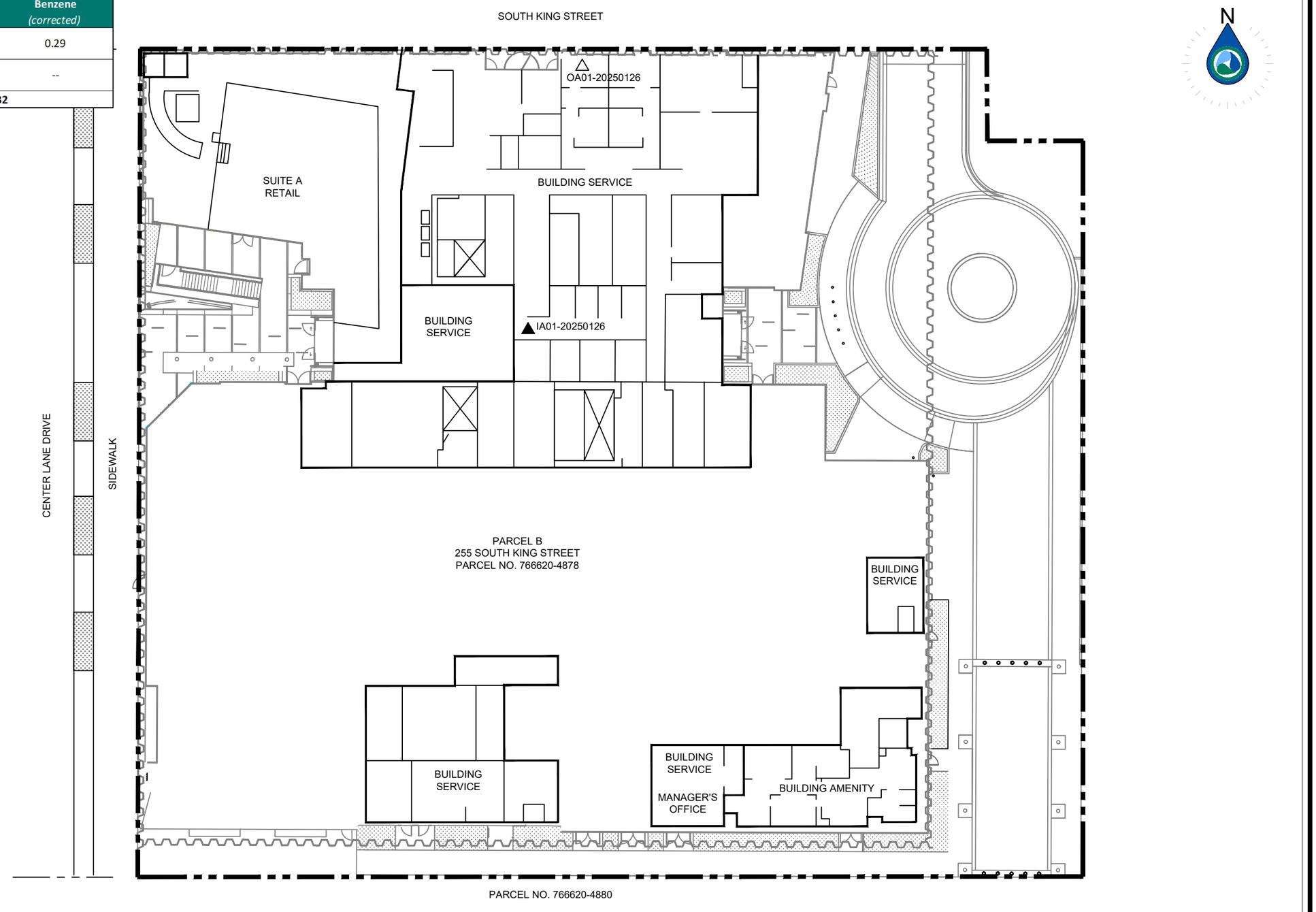
FIGURE 2

DRAWN BY: F.DIMALANTA

2/21/2025

T:\EHSI-PROJECTS\PROJECT #S 11000-11599\11404 255 SOUTH KING ST REGULATORY SUPPORT\TECHNICAL\CAD\2025 REPORT\11404_2025_NORTH LOT_FIGURE 2.DWG

Sample Location	Sample ID	Sample Date	Analytical Results (micrograms per cubic meter) Benzene	Benzene *(corrected)*
Basement Hotel Office	IA01-20250126	01/26/25	1.1	0.29
Northern Side of Roof	OA01-20250126		0.81	--
MTCA Method B Indoor Air Cleanup Level			**0.32**	



LEGEND:

- SITE BOUNDARY
- PARCEL LINE
- △ INDOOR AIR SAMPLE LOCATION (EHSI 2025)
- ▲ OUTDOOR AIR SAMPLE LOCATION (EHSI 2025)

MTCA WASHINGTON STATE MODEL TOXICS CONTROL ACT

0 15 30

APPROXIMATE SCALE IN FEET

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SEATTLE, WASHINGTON
EHSI PROJECT #: 11404

PROJECT MANAGER: C.TOCHILIN

INDOOR AIR SAMPLE LOCATIONS AND ANALYTICAL RESULTS

FIGURE 3

DRAWN BY: F.DIMALANTA

2/21/2025

T:\EHSI-PROJECTS\PROJECT #S 11000-11599\11404 255 SOUTH KING ST REGULATORY SUPPORT\TECHNICAL\CAD\2025 REPORT\11404_2025_NORTH LOT_FIGURE 3.DWG

TABLES

Table 1
Groundwater Analytical Results
North Lot
201 and 255 South King Street
Seattle, Washington

Monitoring Well ID	Sample Date	Depth to Groundwater (feet)	Groundwater Elevation (feet AMSL)	Analytical Results (micrograms per liter)								
				DRPH[1]	ORPH[1]	GRPH[2]	Benzene[3]	Toluene[3]	Ethylbenzene[3]	Total Xylenes[3]	Total cPAHs TEQ[4]	Dissolved Arsenic[5]
MW-16D	08/04/17	10.39	7.21	<50	<250	<100	<0.8	<1	<1	<3	0.0693	<1
TOC: 17.60'	11/08/17	10.12	7.48	<60	<300	<100	<0.8	<1	<1	<3	0.00655	<1
	02/08/18	9.50	8.10	<30	<150	<100	<0.8	1.0	<1	<3	0.00655	<1
	05/10/18	10.15	7.45	<50	<250	<100	<0.8	<1	<1	<3	0.00655	<1
	09/28/18	10.07	7.53	<50	<250	<100	<0.8	<1	<1	<3	0.00655	<1
	12/19/18	9.83	7.77	<50	<250	<100	<0.8	<1	<1	<3	0.00655	<1
	03/20/19	10.11	7.49	--	--	--	--	--	--	--	--	--
	06/20/19	10.15	7.45	--	--	--	--	--	--	--	--	--
	01/21/20	9.81	7.79	<50	<250	<100	<0.8	<1	<1	<3	0.00655	1.06
	01/25/25	9.82	7.78	<50	<250	<100	<0.8	<1	<1	<3	<0.00474	<1
MW-18D	08/02/17	11.09	6.08	<50	<250	<100	<0.8	<1	<1	<3	0.0693	7.01
TOC: 17.17'	11/08/17	10.71	6.46	<50	<250	<100	<0.8	<1	<1	<3	0.00655	2.87
	02/08/18	10.64	6.53	<30	<150	<100	<0.8	1.1	<1	<3	0.00655	1.25
	05/10/18	10.75	6.42	<50	<250	<100	<0.8	<1	<1	<3	0.00655	2.44
	09/28/18	10.66	6.51	<50	<250	<100	<0.8	<1	<1	<3	0.00655	<1
	12/19/18	10.44	6.73	<50	<250	<100	<0.8	<1	<1	<3	0.00655	1.83
	03/20/19	10.79	6.38	--	--	--	--	--	--	--	--	--
	06/20/19	No Access	--	--	--	--	--	--	--	--	--	--
	01/21/20	No Access	--	--	--	--	--	--	--	--	--	--
	01/24/25	10.39	6.78	<50	<250	<100	<0.8	<1	<1	<3	<0.00474	<1
MW-19	08/02/17	6.32	11.17	<50	<250	<100	<0.8	<1	<1	<3	0.0693	2.61
TOC: 17.49'	11/08/17	6.18	11.31	<65	<320	<100	<0.8	<1	<1	<3	***0.01335***	2.14
	02/08/18	7.65	9.84	36[x]	150	<100	<0.8	1.2	<1	<3	***0.02668***	2.42
	05/10/18	6.01	11.48	<50	<250	<100	<0.8	<1	<1	<3	***0.019914***	2.10
	09/28/18	5.99	11.50	<50	<250	<100	<0.8	<1	<1	<3	0.00655	2.10
	12/19/18	5.83	11.66	<50	<250	<100	<0.8	<1	<1	<3	0.00655	2.10
	03/20/19	5.80	11.69	<50	<250	<100	<0.8	<1	<1	<3	0.00655	2.02
	06/20/19	5.84	11.65	<50	<250	<100	<0.8	<1	<1	<3	0.00655	2.01
	01/21/20	5.64	11.85	<50	<250	<100	<0.8	<1	<1	<3	0.00655	2.05
	01/25/25	5.35	12.14	<50	<250	<100	<0.8	<1	<1	<3	<0.00474	2.2
Site-Specific Cleanup Levels for Groundwater[6]				**500**	**500**	**800**	**0.8**	**80**	**275**	**1,600**	**0.012[7]**	**5/21.3[8]**

Table 1
Groundwater Analytical Results
North Lot
201 and 255 South King Street
Seattle, Washington

Monitoring Well ID	Sample Date	Groundwater (feet)	Elevation (feet AMSL)	DRPH[1]	ORPH[1]	GRPH[2]	Benzene[3]	Toluene[3]	Ethylbenzene[3]	Total Xylenes[3]	Total cPAHs TEQ[4]	Dissolved Arsenic[5]
MW-20	08/02/17	7.58	9.93	62[x]	<250	<100	<0.8	<1	<1	<3	0.0693	<1
TOC: 17.51'	11/08/17	7.59	9.92	<75	<380	<100	<0.8	<1	<1	<3	0.00655	<1
	02/08/18	9.45	8.06	42[x]	<150	<100	<0.8	<1	<1	<3	0.00655	<1
	05/10/18	7.33	10.18	92[x]	<250	<100	<0.8	<1	<1	<3	0.00655	<1
	09/28/18	7.49	10.02	<50	<250	<100	<0.8	<1	<1	<3	0.00655	<1
	12/19/18	6.69	10.82	53[x]	<250	<100	<0.8	<1	<1	<3	0.00655	<1
	03/20/19	3.72	13.79	--	--	--	--	--	--	--	--	--
	06/20/19	6.90	10.61	--	--	--	--	--	--	--	--	--
	01/21/20	6.68	10.83	<50	<250	<100	<0.8	<1	<1	<3	0.00655	<1
	01/25/25	6.87	10.64	<50	<250	<100	<0.8	<1	<1	<3	<0.00474	2.1
MW-21	08/02/17	9.73	7.44	<50	<250	<100	<0.8	<1	<1	<3	0.0693	6.23
TOC: 17.17'	11/08/17	9.45	7.72	<60	<300	<100	<0.8	<1	<1	<3	0.00655	4.34
	02/08/18	9.34	7.83	<30	<150	<100	<0.8	1.0	<1	<3	0.00655	1.74
	05/10/18	9.53	7.64	<50	<250	<100	<0.8	<1	<1	<3	0.00655	2.06
	09/28/18	9.43	7.74	<50	<250	<100	<0.8	<1	<1	<3	0.00655	5.42
	12/20/18	9.16	8.01	<50	<250	<100	<0.8	<1	<1	<3	0.00655	2.64
	03/20/19	9.46	7.71	<50	<250	<100	<0.8	<1	<1	<3	0.00655	1.67
	06/20/19	9.49	7.68	<50	<250	<100	<0.8	<1	<1	<3	0.00655	2.96
	01/21/20	9.15	8.02	<50	<250	<100	<0.8	<1	<1	<3	0.00655	1.47
	01/25/25	9.40	7.77	<50	<250	<100	<0.8	<1	<1	<3	<0.00474	1.2

Table 1
Groundwater Analytical Results
North Lot
201 and 255 South King Street
Seattle, Washington

Monitoring Well ID	Sample Date	Groundwater (feet)	Elevation (feet AMSL)	DRPH[1]	ORPH[1]	GRPH[2]	Benzene[3]	Toluene[3]	Ethylbenzene[3]	Total Xylenes[3]	Total cPAHs TEQ[4]	Dissolved Arsenic[5]
MW-22	08/02/17	6.51	10.63	180[x]	<250	<100	<0.8	<1	<1	<3	0.0693	7.21
TOC: 17.14'	11/08/17	6.10	11.04	330	<300	<100	<0.8	<1	<1	<3	0.00655	5.97
	02/08/18	5.27	11.87	***640***	310[x]	<100	<0.8	<1	<1	<3	0.00655	1.72
	05/10/18	5.97	11.17	***520***[x]	480[x]	<100	<0.8	<1	<1	<3	0.00655	1.34
	09/28/18	6.43	10.71	<50	<250	<100	<0.8	<1	<1	<3	0.00655	4.58
	12/20/18	4.76	12.38	180[x]	<250	<100	<0.8	<1	<1	<3	0.00655	1.53
	03/20/19	5.65	11.49	--	--	--	--	--	--	--	--	--
	07/14/19	6.18	10.96	170[x]	<250	<100	<0.8	<1	<1	<3	0.00655	2.07
	01/21/20	5.13	12.01	100[x]	<250	<100	<0.8	<1	<1	<3	0.00655	1.27
	01/25/25	5.23	11.91	<50	<250	<100	<0.8	<1	<1	<3	<0.00474	<1
Site-Specific Cleanup Levels for Groundwater[6]				**500**	**500**	**800**	**0.8**	**80**	**275**	**1,600**	**0.012**[7]	**5/21.3**[8]

NOTES:

Laboratory analyses performed by Friedman & Bruya, Inc. of Seattle, Washington.

TOC elevation (feet) relative to mean sea level as measured by D.R. Strong Consulting Engineers on August 18, 2017.

Bold italics indicates the concentration exceeds the Site-specific cleanup level.

[1]Analyzed by Ecology Method NWTPH-Dx.

[2]Analyzed by Ecology Method NWTPH-Gx.

[3]Analyzed by EPA Method 8021B.

[4]Analyzed by EPA Method 8071D SIM or 8270E SIM.

[5]Analyzed by EPA Method 200.8 or 6020B.

[6]Site-Specific Cleanup Levels established in Cleanup Plan Addendum, North Lot Property, Seattle, Washington, prepared by Landau Associates on September 18, 2013.

[7]The total concentration that all cPAHs meet using the toxicity equivalency methodology in WAC 173-340-708(8). Italics indicate a toxicity equivalency based entirely or in part upon non-detectable concentrations of PAHs. For those PAHs that have not been detected at the site and are below detection limits, a value of 0 was used for the TEF calculations (Ecology guidance document: *Evaluating the Human Health Toxicity of Carcinogenic PAHs (cPAHs) Using Toxicity Equivalency Factors (TEFs) . Implementation Memorandum #10,* April 20, 2015.). Data were corrected relative to the recommendations provided in the memorandum, and the table was updated in May 2018. If concentrations of detected benzo(a)pyrene and/or TEFs of additional detected PAHs exceed the cleanup level, results are presented in ***bold italic*** font.

[8]A cleanup level of 5 µg/L was agreed upon by Ecology for the western portion of the site (MW-19 and MW-20). A background concentration of 21.3 µg/L will be used as the cleanup level for the eastern portion of the site (MW-16D, MW-18D, MW-21, and MW-22).

Laboratory Note:

[x]The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

< = not detected at a concentration exceeding the laboratory reporting limit

-- = not analyzed, not sampled

µg/L = micrograms per liter

AMSL = mean sea level

cPAH = carinogenic polycyclic aromatic hydrocarbon

DRPH = diesel-range petroleum hydrocarbons

Ecology = Washington State Department of Ecology

EPA = US Environmental Protection Agency

GRPH = gasoline-range petroleum hydrocarbons

ORPH = oil-range petroleum hydrocarbons

PAH = polycyclic aromatic hydrocarbon

TEF = toxicity equivalency factor

TEQ = toxicity equivalent

TOC = top of casing

WAC = Washington Administrative Code

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Table 2
Indoor Air Analytical Results
North Lot
201 and 255 South King Street
Seattle, Washington

Sample Location	Sample ID	Sample Type	Sample Date	Sampled By	Analytical Results (µg/m^3)	
					Benzene	Benzene *(corrected)* [3]
Basement Hotel Office	IA01-20250126	Indoor Air	01/26/25	EHSI	1.1	0.29
Northern Side of Roof	OA01-20250126	Outdoor Air			0.81	--
MTCA Method B Indoor Air Cleanup Level					**0.32**[2]	

NOTES:

Sample analysis performed by Friedman & Bruya, Inc. of Seattle, Washington.

[1]Analyzed by EPA Method TO-15.

[2]MTCA Method B Indoor Air Cleanup Levels, Cancer, CLARC database, CLARC Website <https://fortress.wa.gov/ecy/clarc/CLARCHome.aspx>.

[3]Corrected indoor air concentration calculated as indoor air concentration minus ambient air concentration. Ecology. 2022. Guidance for Evaluating Vapor Intrusion in Washington State: Investigation and Remedial Action. Publication No. 09-09-047, Chapter 4.7. Finalized March.

-- = not applicable

µg/m^3 = micrograms per cubic meter

CLARC = Cleanup Levels and Risk Calculation

Ecology = Washington State Department of Ecology

EHSI = EHS International, Inc.

EPA = US Environmental Protection Agency

MTCA = Washington State Model Toxics Control Act

ATTACHMENT A

Groundwater and Air Sampling Sheets

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GROUNDWATER PURGE AND SAMPLE FORM

LOW FLOW PUMP

Sample Date: 1/25/25

General Info

Client: Steinhauer Properties Project #: 11404

Site Name/ #: North Lot Field/Sampling Personnel: Dimitri Lambrakis **Well ID Number:** MW-16D

Well Details

Total Depth (TD)	Depth to Water (DTW) (Immediately Prior to Purging)	Water Column (WC) (=TD-DTW)	Casing Diameter / Volume Conversion Factor (VC)					Casing Volume (=WC x VC)
			0.75"	1"	2"	4"	6"	
27.91 Feet BTOC	9.82 Feet BTOC	18.09 Feet BTOC	0.023	0.041	0.16	0.65	1.44	~2.894 gallons

Screened Interval: 12 to 22 Feet bgs Screen Submerged? ☐ NO ⟹ Place tubing intake 2 to 3 feet below depth to water. ☒ YES ⟹ Place tubing intake at approximate center of screen.

Equipment

Pump Method: ☒ Peristaltic ☐ Other: _____ Owner/ID #: _____ **Water Quality Meter** Brand/Model: YSI Pro Plus Owner/ID #: #4

Water Level Instrument: ☒ WL Meter ☐ Bubbler ☐ Interface ☐ Other: SES #6 Owner/ID #: _____

Sampling

Depth of Tubing Intake: ~17 Feet BTOC Time Start Purge: 10:28

Time (3-5 min intervals)	Water Level (feet) drawdown <0.33 feet	Purge Rate (L/min) 0.1 – 0.5	pH[1] *± 0.1*	Specific Conductivity[1] UNITS: mg/L *± 3%*	Turbidity[1] (NTU) *If ≥10, ±10% if <10, stabilized*	Dissolved Oxygen[1] (mg/L) *If ≥1.00, ± 10% if ≤1.00, ± 0.2*	Temperature (ºC)	ORP (mV)
10:33	10.82	0.135	2.94	0.011	3.45	14.59	8.8	279.0
10:36	10.82	0.120	4.33	0.011	4.80	13.47	9.5	280.1
10:39	10.82	0.135	4.84	0.011	3.25	11.88	10.0	289.9
10:42	10.82	0.150	4.92	0.011	2.66	11.08	10.3	291.7
10:45	10.82	0.150	4.83	0.011	2.27	10.60	10.5	275.4
10:48	10.82	0.150	4.71	0.011	2.01	10.20	10.7	295.5
				Minimum # of Readings				
10:51	10.82	0.135	4.69	0.011	2.47	9.92	10.8	287.9
10:54	10.82	0.150	4.64	0.011	2.58	9.72	10.8	289.8
				DL 1/25/25				

Sample Time: 10:58 Field Duplicate Sample Time: _____ Time Sampling Ended: 11:35

Sampling Comments: _____

Analytical

Sample Number/ID	Number of Containers and Type	Preservative	Field Filtered?			Analysis Request
MW-16D-20250125	2-Amber		No	0.45	0.10	
	2-250mL Metal	HNO3	No	0.45	0.10	
	3-VOA		No	0.45	0.10	
			No	0.45	0.10	
			No	0.45	0.10	
			No	0.45	0.10	

Purge Water

Sheen? ☒ NO ☐ YES **Odor?** ☒ NO ☐ YES ⟹ Describe: _____ Color (describe): Brown/Dark Orange

Total Discharged (1gal = 3.88 liter): _____ gallons Disposal Method: ☒ Drummed ☐ Remediation System ☐ Other: _____

Well Condition

Well/Security Devices in good condition (i.e.: Monument, Bolts, Seals, J-cap, Lock)? ☐ YES ☒ NO ⟹ Describe: No Bolts

Water in Monument? ☒ NO ☐ YES ⟹ Describe: _____

Additional Well Condition Comments or Explanation of any Access Issues: _____

[1]At minimum, pH, specific conductivity, and turbidity or dissolved oxygen must stabilize within the limits (indicated in *italics*) for three successive readings prior to sampling.

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GROUNDWATER PURGE AND SAMPLE FORM

LOW FLOW PUMP

Sample Date: 1/24/25

General Info

Client: Steinhauer Properties | Project #: 11404

Site Name/ #: North Lot | Field/Sampling Personnel: Dimitri Lomnitz | **Well ID Number:** MW-18D

Well Details

Total Depth (TD)	Depth to Water (DTW) (Immediately Prior to Purging)	Water Column (WC) (=TD-DTW)	Casing Diameter Volume Conversion Factor (VC)					Casing Volume (=WC x VC)
			0.75"	1"	2"	4"	6"	
23.14 Feet BTOC	10.39 Feet BTOC	12.75 Feet BTOC	0.023	0.041	0.16	0.65	1.44	2.04 gallons

Screened Interval: 12 to 22 Feet bgs

Screen Submerged? ☐ NO ⟹ Place tubing intake 2 to 3 feet below depth to water. ☒ YES ⟹ Place tubing intake at approximate center of screen.

Equipment

Pump Method: ☒ Peristaltic ☐ Other: _____ Owner/ID #: SES #4

Water Quality Meter Brand/Model: YSI Pro plus Owner/ID #: SES #4

Water Level Instrument: ☒ WL Meter ☐ Bubbler ☐ Interface ☐ Other: _____ Owner/ID #: SES #6

Sampling

Depth of Tubing Intake: 17 Feet BTOC | Time Start Purge: 15:30

Time (3-5 min intervals)	Water Level (feet) drawdown <0.33 feet	Purge Rate (L/min) 0.1 – 0.5	pH[1] ± 0.1	Specific Conductivity[1] UNITS: mS/cm ± 3%	Turbidity[1] (NTU) If ≥10, ±10% if <10, stabilized	Dissolved Oxygen[1] (mg/L) If ≥1.00, ± 10% if ≤1.00, ± 0.2	Temperature (ºC)	ORP (mV)
15:38	10.69	0.105	5.4	0.020	6.20	12.62	11.0	252.8
15:41	10.70	0.105	6.21	0.019	5.84	11.73	11.3	256.7
15:44	10.71	0.105	6.05	0.019	5.52	100.5%/11.11	11.6	255.7
15:47	10.71	0.105	5.76	0.019	4.14	97.6/10.73	11.9	252.4
15:50	10.71	0.105	5.55	0.019	3.48	96.4/10.59	11.9	254.8
15:53	10.71	0.105	5.37	0.019	3.59	93.8/10.32	12.0	261.9
				Minimum # of Readings				
15:56	10.71	0.105	5.30	0.019	3.38	92.2/10.08	12.1	268.9
15:59	10.71	0.105	5.25	0.018	3.74	89.1/9.80	12.3	272.8
			DL	1/24/25				

Sample Time: 1604 | Field Duplicate Sample Time: — | Time Sampling Ended: 16:52

Sampling Comments: _____

Analytical

Sample Number/ID	Number of Containers and Type	Preservative	Field Filtered?			Analysis Request
MW-18D-20250124	2 – 500mL Amb.	–	No	0.45	0.10	
	2 – 500mL Met.	HNO3	No	0.45	0.10	T. & D. Metals
	3 – 50mL VOA	–	No	0.45	0.10	BTEX/Gx
			No	0.45	0.10	
			No	0.45	0.10	
			No	0.45	0.10	

Purge Water

Sheen? ☐ NO ☑ YES **Odor?** ☑ NO ☐ YES ⟹ Describe: _____ Color (describe): Shiny Brown

Total Discharged (1gal = 3.88 liter): _____ gallons Disposal Method: ☒ Drummed ☐ Remediation System ☐ Other: _____

Well Condition

Well/Security Devices in good condition (i.e.: Monument, Bolts, Seals, J-cap, Lock)? ☐ YES ☒ NO ⟹ Describe: No seal

Water in Monument? ☒ NO ☐ YES ⟹ Describe: _____

Additional Well Condition Comments or Explanation of any Access Issues: Hardened oil sheen bordering well (see pictures)

[1]At minimum, pH, specific conductivity, and turbidity or dissolved oxygen must stabilize within the limits (indicated in *italics*) for three successive readings prior to sampling.

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GROUNDWATER PURGE AND SAMPLE FORM
LOW FLOW PUMP

Sample Date: 1/25/25

General Info

Client: Steinhauer Properties | Project #: 11404
Site Name/ #: North Lot | Field/Sampling Personnel: D.L | **Well ID Number:** MW-19

Well Details

Total Depth (TD)	Depth to Water (DTW) (Immediately Prior to Purging)	Water Column (WC) (=TD-DTW)	Casing Diameter Volume Conversion Factor (VC)					Casing Volume (=WC x VC)
			0.75"	1"	2"	4"	6"	
12.95 Feet BTOC	5.36 Feet BTOC	7.59 Feet BTOC	0.023	0.041	0.16	0.65	1.44	N1.214 gallons

Screened Interval: 5 to 15 Feet bgs

Screen Submerged? ☒ NO ⟹ Place tubing intake 2 to 3 feet below depth to water.
☐ YES ⟹ Place tubing intake at approximate center of screen.

Equipment

Pump Method: ☒ Peristaltic ☐ Other: _____ Owner/ID #: SES #4 **Water Quality Meter** Brand/Model: YSI/Pro plus Owner/ID #: #4

Water Level Instrument: ☒ WL Meter ☐ Bubbler ☐ Interface ☐ Other: #6 SES Owner/ID #: _____

Sampling

Depth of Tubing Intake: ~8 Feet BTOC | Time Start Purge: 1240

Time (3-5 min intervals)	Water Level (feet) drawdown <0.33 feet	Purge Rate (L/min) 0.1 – 0.5	pH[1] ± 0.1	Specific Conductivity[1] UNITS: mS/cm ± 3%	Turbidity[1] (NTU) *If ≥10, ±10% if <10, stabilized*	Dissolved Oxygen[1] (mg/L) *If ≥1.00, ± 10% if ≤1.00, ± 0.2*	Temperature (ºC)	ORP (mV)
12:42	5.36	0.120	2.36	0.010	15.0	86.3%	8.2	303.5
12:47	5.36	0.150	5.03	0.009	17.4	84.1%	8.9	296.9
12:50	5.37	0.165	5.20	0.009	13.7	~~81~~ 9.42	9.5	283.7
12:53	5.38	0.135	5.50	0.009	12.9	9.21	9.8	287.9
12:56	5.38	0.135	5.45	0.009	12.9	9.06	10.0	281.9
12:59	5.38	0.150	5.47	0.009	10.7	8.92	10.2	283.0
				Minimum # of Readings				
			DC	1/25/25				

Sample Time: 1304 | Field Duplicate Sample Time: _____ | Time Sampling Ended: _____

Sampling Comments: _____

Analytical

Sample Number/ID	Number of Containers and Type	Preservative	Field Filtered?			Analysis Request
MW-19-20250125	3 - VOA		No	0.45	0.10	
	2 ~~1 liter~~ 250 mL	HNO3	No	0.45	0.10	
	2 - Amber 500ml		No	0.45	0.10	
			No	0.45	0.10	
			No	0.45	0.10	
			No	0.45	0.10	

Purge Water

Sheen? ☒ NO ☐ YES **Odor?** ☒ NO ☐ YES ⟹ Describe: _____ Color (describe): N/A

Total Discharged (1gal = 3.88 liter): _____ gallons Disposal Method: ☒ Drummed ☐ Remediation System ☐ Other: _____

Well Condition

Well/Security Devices in good condition (i.e.: Monument, Bolts, Seals, J-cap, Lock)? ☒ YES ☐ NO ⟹ Describe: _____

Water in Monument? ☒ NO ☐ YES ⟹ Describe: _____

Additional Well Condition Comments or Explanation of any Access Issues: _____

[1]At minimum, pH, specific conductivity, and turbidity or dissolved oxygen must stabilize within the limits (indicated in *italics*) for three successive readings prior to sampling.

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GROUNDWATER PURGE AND SAMPLE FORM

LOW FLOW PUMP

Sample Date: 1/25/25

General Info

Client: Steinhauer Properties | Project #: 11404

Site Name/ #: North Lot | Field/Sampling Personnel: DL | **Well ID Number:** MW-20

Well Details

Total Depth (TD)	Depth to Water (DTW) (Immediately Prior to Purging)	Water Column (WC) (=TD-DTW)	Casing Diameter Volume Conversion Factor (VC)					Casing Volume (=WC x VC)
			0.75"	1"	2"	4"	6"	
~15 Feet BTOC	6.87 Feet BTOC	8.13 Feet BTOC	0.023	0.041	0.16	0.65	1.44	1.301 gallons

Screened Interval: 5 to 15 Feet bgs

Screen Submerged? ☒ NO ⟹ Place tubing intake 2 to 3 feet below depth to water.
☐ YES ⟹ Place tubing intake at approximate center of screen.

Equipment

Pump Method: ☒ Peristaltic ☐ Other: _____ Owner/ID #: SES #4

Water Quality Meter Brand/Model: YSI/ProPlus Owner/ID #: SES #4

Water Level Instrument: ☒ WL Meter ☐ Bubbler ☐ Interface ☐ Other: SES #6 Owner/ID #: _____

Sampling

Depth of Tubing Intake: ~9 Feet BTOC Time Start Purge: 14:04

Time (3-5 min intervals)	Water Level (feet) drawdown <0.33 feet	Purge Rate (L/min) 0.1 – 0.5	pH[1] ± 0.1	Specific Conductivity[1] UNITS: mS/cm ± 3%	Turbidity[1] (NTU) *If ≥10, ±10% if <10, stabilized*	Dissolved Oxygen[1] (mg/L) *If ≥1.00, ± 10% if ≤1.00, ± 0.2*	Temperature (ºC)	ORP (mV)
14:04	6.87	0.150	3.77	0.013	30.0	11.19	9.5	289.4
14:07	6.98	0.150	4.33	0.013	30.9	10.24	10.0	272.0
14:10	7.00	0.150	4.34	0.012	27.4	9.56	10.5	282.6
14:13	7.00	0.150	4.33	0.012	19.4	9.32	10.6	281.7
14:16	7.00	0.150	4.33	0.012	20.0	9.01	10.8	273.7
14:19	7.00	0.150	4.23	0.011	14.7	8.77	10.9	280.5
				Minimum # of Readings				
			DL	1/25/25				

Sample Time: 14:25 Field Duplicate Sample Time: _____ Time Sampling Ended: 14:45

Sampling Comments: _____

Analytical

Sample Number/ID	Number of Containers and Type	Preservative	Field Filtered?			Analysis Request
MW-20-20250125	3-VOA		No	0.45	0.10	
	2-Amb	–	No	0.45	0.10	
	2-metals 250mL	HNO3	No	0.45	0.10	
			No	0.45	0.10	
			No	0.45	0.10	
			No	0.45	0.10	

Purge Water

Sheen? ☒ NO ☐ YES **Odor?** ☒ NO ☐ YES ⟹ Describe: _____ Color (describe): –

Total Discharged (1gal = 3.88 liter): _____ gallons Disposal Method: ☒ Drummed ☐ Remediation System ☐ Other: _____

Well Condition

Well/Security Devices in good condition (i.e.: Monument, Bolts, Seals, J-cap, Lock)? ☒ YES ☐ NO ⟹ Describe: _____

Water in Monument? ☒ NO ☐ YES ⟹ Describe: _____

Additional Well Condition Comments or Explanation of any Access Issues: _____

[1]At minimum, pH, specific conductivity, and turbidity or dissolved oxygen must stabilize within the limits (indicated in *italics*) for three successive readings prior to sampling.

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GROUNDWATER PURGE AND SAMPLE FORM
LOW FLOW PUMP

Sample Date: _____

General Info

Client: Steinhauer Properties | Project #: 11404

Site Name/ #: North Lot | Field/Sampling Personnel: PL | **Well ID Number:** MW-21

Well Details

Total Depth (TD)	Depth to Water (DTW) (Immediately Prior to Purging)	Water Column (WC) (=TD-DTW)	Casing Diameter Volume Conversion Factor (VC)					Casing Volume (=WC x VC)
			0.75"	1"	2"	4"	6"	
~15 Feet BTOC	9.15 Feet BTOC	~5.85 Feet BTOC	0.023	0.041	0.16	0.65	1.44	~0.936 gallons

Screened Interval: 5 to 15 Feet bgs

Screen Submerged? ☒ NO ⟹ Place tubing intake 2 to 3 feet below depth to water.
☐ YES ⟹ Place tubing intake at approximate center of screen.

Equipment

Pump Method: ☒ Peristaltic ☐ Other: ~~SFS~~ Owner/ID #: SFS #6

Water Quality Meter Brand/Model: YSI Pro plus Owner/ID #: #4

Water Level Instrument: ☒ WL Meter ☐ Bubbler ☐ Interface ☐ Other: _____ Owner/ID #: SFS #6

Sampling

Depth of Tubing Intake: ~12 Feet BTOC | Time Start Purge: 16:15

Time (3-5 min intervals)	Water Level (feet) drawdown <0.33 feet	Purge Rate (L/min) 0.1 – 0.5	pH[1] ± 0.1	Specific Conductivity[1] UNITS: mS/cm ± 3%	Turbidity[1] (NTU) *If ≥10, ±10% if <10, stabilized*	Dissolved Oxygen[1] (mg/L) *If ≥1.00, ± 10% if ≤1.00, ± 0.2*	Temperature (ºC)	ORP (mV)
16:20	9.15	0.105	3.14	0.008	2.80	9.40	10.1	282.2
16:23	9.15	0.105	4.08	0.007	2.11	9.18	10.3	285.0
16:26	9.13	0.105	4.45	0.007	1.70	4.03	10.4	281.6
16:29	9.13	0.135	4.61	0.007	1.30	8.70	10.7	283.3
16:32	9.13	0.135	4.77	0.007	1.62	8.53	10.8	281.0
16:35	9.13	0.135	4.79	0.007	0.41	8.40	10.8	241.9
Minimum # of Readings								
16:38	9.13	0.120	4.79	0.007	1.79	8.23	10.9	240.2
				PL 1/25/25				

Sample Time: 16:41 | Field Duplicate Sample Time: _____ | Time Sampling Ended: 17:00

Sampling Comments: _____

Analytical

Sample Number/ID	Number of Containers and Type	Preservative	Field Filtered?			Analysis Request
MW-21-20250125	3- VOA		No	0.45	0.10	
	2- Amber 500ml	—	No	0.45	0.10	
	2- metals 250ml	HNO3	No	0.45	0.10	
			No	0.45	0.10	
			No	0.45	0.10	
			No	0.45	0.10	

Purge Water

Sheen? ☐ NO ☐ YES **Odor?** ☒ NO ☐ YES ⟹ Describe: _____ Color (describe): _____

Total Discharged (1gal = 3.88 liter): _____ gallons Disposal Method: ☐ Drummed ☐ Remediation System ☐ Other: _____

Well Condition

Well/Security Devices in good condition (i.e.: Monument, Bolts, Seals, J-cap, Lock)? ☐ YES ☒ NO ⟹ Describe: Missing bolt

Water in Monument? ~~☒ NO~~ ☒ YES ⟹ Describe: Orange standing water

Additional Well Condition Comments or Explanation of any Access Issues: _____

[1]At minimum, pH, specific conductivity, and turbidity or dissolved oxygen must stabilize within the limits (indicated in *italics*) for three successive readings prior to sampling.

ehsi
A Subsidiary of SoundEarth Strategies

GROUNDWATER PURGE AND SAMPLE FORM

LOW FLOW PUMP

Sample Date: 1/25/25

General Info

Client: Steinhauer Properties | Project #: 11404

Site Name/ #: North Lot | Field/Sampling Personnel: DL | **Well ID Number:** MW-22

Well Details

Total Depth (TD)	Depth to Water (DTW) (Immediately Prior to Purging)	Water Column (WC) (=TD-DTW)	Casing Diameter Volume Conversion Factor (VC)					Casing Volume (=WC x VC)
			0.75"	1"	2"	4"	6"	
15 Feet BTOC	~~6.~~ 5.28 Feet BTOC	9.72 Feet BTOC	0.023	0.041	0.16	0.65	1.44	~1.555 gallons

Screened Interval: 5 DL to 15 Feet bgs

Screen Submerged? ☒ NO ⟹ Place tubing intake 2 to 3 feet below depth to water. ☐ YES ⟹ Place tubing intake at approximate center of screen.

Equipment

Pump Method: ☒ Peristaltic ☐ Other: _____ Owner/ID #: SES #4

Water Quality Meter Brand/Model: YSI Pro Plus Owner/ID #: #4

Water Level Instrument: ☒ WL Meter ☐ Bubbler ☐ Interface ☐ Other: _____ Owner/ID #: SES #6

Sampling

Depth of Tubing Intake: 8 Feet BTOC | Time Start Purge: 1714?

Time (3-5 min intervals)	Water Level (feet) drawdown <0.33 feet	Purge Rate (L/min) 0.1 – 0.5	pH[1] ± 0.1	Specific Conductivity[1] UNITS: mS/cm ± 3%	Turbidity[1] (NTU) *If ≥10, ±10% if <10, stabilized*	Dissolved Oxygen[1] (mg/L) *If ≥1.00, ± 10% if ≤1.00, ± 0.2*	Temperature (ºC)	ORP (mV)
17:44	5.28	0.135	0.32	0.007	10.9	11.79	7.9	269.9
17:49	5.28	0.165	3.32	0.007	10.6	10.66	8.7	253.8
17:52	5.28	0.135	3.74	0.007	9.99	10.36	8.9	264.9
17:55	5.28	0.135	4.02	0.006	~~10.08~~ 9.77	10.08	9.3	261.8
17:58	5.28	0.150	4.06	0.006	10.0~~1~~	9.96	9.3	265.0
18:01	5.28	0.180	4.15	0.006	8.19	9.5~~7~~	9.7	267.0
Minimum # of Readings								
18:05	5.28	0.145	4.22	0.006	5.32	9.33	10.1	268.3
18:08	5.28	0.145	4.24	0.006	4.48	9.17	10.3	271.3

DL 1/25/25

Sample Time: 18:12 | Field Duplicate Sample Time: 1835 | Time Sampling Ended: 1905

Sampling Comments: _____

Analytical

Sample Number/ID	Number of Containers and Type	Preservative	Field Filtered?			Analysis Request
MW-22-20250125	Vial		(No)	0.45	0.10	
	500mL Amb		(No)	0.45	0.10	
	250mL Metals		(No)	(0.45)	0.10	
MW-99-20250125			No	0.45	0.10	
			No	0.45	0.10	
			No	0.45	0.10	

Purge Water

Sheen? ☒ NO ☐ YES **Odor?** ☐ NO ☒ YES ⟹ Describe: ~~Metallic/Rust like~~ DL Color (describe): ~~Orange/Brown~~ DL Clear

Total Discharged (1gal = 3.88 liter): DL gallons Disposal Method: ☐ Drummed ☐ Remediation System ☐ Other: _____

Well Condition

Well/Security Devices in good condition (i.e.: Monument, Bolts, Seals, J-cap, Lock)? ☒ YES ☐ NO ⟹ Describe: _____

Water in Monument? ☐ NO ☒ YES ⟹ Describe: Orange w/ metalic odors

Additional Well Condition Comments or Explanation of any Access Issues: _____

[1]At minimum, pH, specific conductivity, and turbidity or dissolved oxygen must stabilize within the limits (indicated in *italics*) for three successive readings prior to sampling.

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Air Sample Collection Log

		Sample ID:	IA01-20250126
Client:	Steinhauer Properties	Outdoor/Indoor:	Indoor
Project:	North Lot	Sample IntakeHeight:	4.5 ft
Project No:	11404	Tubing Information:	—
Project Location:	201 and 255 South King Street Seattle, Washington	Miscellaneous Equipment:	—
Sampler:	DL	Time On/Off:	10:30 ; 06:16
Sample Point: Location:	Hotel Office, Main Area	Lab Subcontractor/Analyses:	

Readings:

Date	Time DL 10:30	Cannister Vacuum (in. Hg.)	Temp (°F)	Relative Humidity (%)	Wind Speed (mph)	Wind Direction (from)	Barometric Pressure (in. Hg)	PID (ppb)
1/26/25	~~10:27~~	-30 Hg	I: 72°				30.41	0.0
1/26/25	11:02	30 Hg	72°F				30.41	0.0
1/27/25	06:16	7	72°				30.39	0.0

Record canister information at the beginning and end of sampling, at a minimum.

SUMMA Canister Information:

Size (circle one):	400 mL 1L (6L)
Canister ID:	15212 Model: CS1200ES
Flow Controller ID:	F15212
Notes:	

A Subsidiary of SoundEarth Strategies

Air Sample Collection Log

		Sample ID:	IA 99 – 2025d26
Client:	Steinhauer Properties	Outdoor/Indoor:	Indoor
Project:	North Lot	Sample IntakeHeight:	4.5 ft
Project No:	11404	Tubing Information:	—
Project Location:	201 and 255 South King Street Seattle, Washington	Miscellaneous Equipment:	—
Sampler:	DC	Time On/Off:	10:30 ; 06:16
Sample Point: Location:	Hotel office Main Area	Lab Subcontractor/Analyses:	

Readings:

Date	Time	Cannister Vacuum (in. Hg.)	Temp (°F)	Relative Humidity (%)	Wind Speed (mph)	Wind Direction (from)	Barometric Pressure (in. Hg)	PID (ppb)
1/26/25	10:30	-30	~~Indoor 72~~				30.41	0.0
1/26/25	11:02	30	72				30.41	0.0
1/27/25	06:16	3	72				30.39	0.0

Record canister information at the beginning and end of sampling, at a minimum.

SUMMA Canister Information:

Size (circle one):	400 mL 1L (6L)
Canister ID:	06603
Flow Controller ID:	F6603
Notes:	

A Subsidiary of SoundEarth Strategies

Air Sample Collection Log

		Sample ID:	OA01-20250126
Client:	Steinhauer Properties	Outdoor/Indoor:	Outdoor
Project:	North Lot	Sample IntakeHeight:	3.5 ft
Project No:	11404	Tubing Information:	—
Project Location:	201 and 255 South King Street Seattle, Washington	Miscellaneous Equipment:	—
Sampler:	DL	Time On/Off:	10:50 ; 06:47
Sample Point: Location:	North Roof	Lab Subcontractor/Analyses:	

Readings:

Date	Time	Cannister Vacuum (in. Hg.)	Temp (°F)	Relative Humidity (%)	Wind Speed (mph)	Wind Direction (from)	Barometric Pressure (in. Hg)	PID (ppb)
1/26/25	10:50	40	33	81	3 mph	SE	30.41	0.0
1/27/25	06:47	19.5	30	89	3 mph	SE	30.39	0.0

Record canister information at the beginning and end of sampling, at a minimum.

SUMMA Canister Information:

Size (circle one):	400 mL 1L	(6L)
Canister ID:	19499	
Flow Controller ID:	F19499	
Notes:		

ATTACHMENT B

Laboratory Analytical Reports and Chain of Custody

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Elizabeth Webber-Bruya
Ann Webber-Bruya
Michael Erdahl
Vineta Mills
Eric Young

5500 4th Ave South
Seattle, WA 98108-2419
(206) 285-8282
office@friedmanandbruya.com
www.friedmanandbruya.com

February 4, 2025

Clare Tochilin, Project Manager
EHSI
1011 SW Klickitat Way, Suite 104
Seattle, WA 98134

Dear Ms Tochilin:

Included are the results from the testing of material submitted on January 27, 2025 from the North Lot 11404, F&BI 501360 project. There are 7 pages included in this report.

We appreciate this opportunity to be of service to you and hope you will call if you should have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.

Michael Erdahl
Project Manager

Enclosures
c: EHSI A/P, Fred Luck
EHS0204R.DOC

CASE NARRATIVE

This case narrative encompasses samples received on January 27, 2025 by Friedman & Bruya, Inc. from the EHSI North Lot 11404, F&BI 501360 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	EHSI
501360 -01	IA01-20250126
501360 -02	IA99-20250126
501360 -03	OA01-20250126

All quality control requirements were acceptable.

Analysis For Volatile Compounds By Method TO-15

Client Sample ID:	IA01-20250126	Client:	EHSI
Date Received:	01/27/25	Project:	North Lot 11404, F&BI 501360
Date Collected:	01/26/25	Lab ID:	501360-01
Date Analyzed:	01/30/25	Data File:	012924.D
Matrix:	Air	Instrument:	GCMS7
Units:	ug/m3	Operator:	bat

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
4-Bromofluorobenzene	95	70	130

Compounds:	Concentration ug/m3	ppbv
Benzene	1.1	0.36

Analysis For Volatile Compounds By Method TO-15

Client Sample ID:	IA99-20250126	Client:	EHSI
Date Received:	01/27/25	Project:	North Lot 11404, F&BI 501360
Date Collected:	01/26/25	Lab ID:	501360-02
Date Analyzed:	01/30/25	Data File:	012923.D
Matrix:	Air	Instrument:	GCMS7
Units:	ug/m3	Operator:	bat

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
4-Bromofluorobenzene	98	70	130

Compounds:	Concentration ug/m3	ppbv
Benzene	1.2	0.37

Analysis For Volatile Compounds By Method TO-15

Client Sample ID:	OA01-20250126	Client:	EHSI
Date Received:	01/27/25	Project:	North Lot 11404, F&BI 501360
Date Collected:	01/26/25	Lab ID:	501360-03 1/1.9
Date Analyzed:	01/30/25	Data File:	012922.D
Matrix:	Air	Instrument:	GCMS7
Units:	ug/m3	Operator:	bat

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
4-Bromofluorobenzene	94	70	130

Compounds:	Concentration ug/m3	ppbv
Benzene	0.81	0.25

Analysis For Volatile Compounds By Method TO-15

Client Sample ID:	Method Blank	Client:	EHSI
Date Received:	Not Applicable	Project:	North Lot 11404, F&BI 501360
Date Collected:	Not Applicable	Lab ID:	05-0251 MB
Date Analyzed:	01/29/25	Data File:	012911.D
Matrix:	Air	Instrument:	GCMS7
Units:	ug/m3	Operator:	bat

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
4-Bromofluorobenzene	95	70	130

Compounds:	Concentration ug/m3	ppbv
Benzene	<0.32	<0.1

Date of Report: 02/04/25
Date Received: 01/27/25
Project: North Lot 11404, F&BI 501360

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF AIR SAMPLES FOR VOLATILES BY METHOD TO-15

Laboratory Code: 501364-08 (Duplicate)

Analyte	Reporting Units	Sample Result	Duplicate Result	RPD (Limit 25)
Benzene	ug/m3	0.67	0.71	6

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Benzene	ug/m3	43	100	70-130

Data Qualifiers & Definitions

a - The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.

b - The analyte was spiked at a level that was less than five times that present in the sample. Matrix spike recoveries may not be meaningful.

ca - The calibration results for the analyte were outside of acceptance criteria, biased low; or, the calibration results for the analyte were outside of acceptance criteria, biased high, with a detection for the analyte in the sample. The value reported is an estimate.

c - The presence of the analyte may be due to carryover from previous sample injections.

cf - The sample was centrifuged prior to analysis.

d - The sample was diluted. Detection limits were raised and surrogate recoveries may not be meaningful.

dv - Insufficient sample volume was available to achieve normal reporting limits.

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

fc - The analyte is a common laboratory and field contaminant.

hr - The sample and duplicate were reextracted and reanalyzed. RPD results were still outside of control limits. Variability is attributed to sample inhomogeneity.

hs - Headspace was present in the container used for analysis.

ht – The analysis was performed outside the method or client-specified holding time requirement.

ip - Recovery fell outside of control limits due to sample matrix effects.

j - The analyte concentration is reported between the method detection limit and the lowest calibration point. The value reported is an estimate.

J - The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.

jl - The laboratory control sample(s) percent recovery and/or RPD were out of control limits. The reported concentration should be considered an estimate.

js - The surrogate associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

k – The calibration results for the analyte were outside of acceptance criteria, biased high, and the analyte was not detected in the sample.

lc - The presence of the analyte is likely due to laboratory contamination.

L - The reported concentration was generated from a library search.

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

pc - The sample was received with incorrect preservation or in a container not approved by the method. The value reported should be considered an estimate.

ve - The analyte response exceeded the valid instrument calibration range. The value reported is an estimate.

vo - The value reported fell outside the control limits established for this analyte.

x - The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

501360

SAMPLE CHAIN OF CUSTODY

01/27/25

Page # 1 of 1

Report To Clare Tochilin, Fred Luck

Company EHSI

Address 1011 SW Klickitat Way, Suite 104

City, State, ZIP Seattle, WA 98134

Phone 206-306-1900 Email ctochilin@soundearthinc.com

SAMPLERS (signature) Dmitri Lomineadze D. Lom

PROJECT NAME & ADDRESS: North Lot

PO # 11404

NOTES:

INVOICE TO

TURNAROUND TIME: (Standard) RUSH

Rush charges authorized by:

SAMPLE DISPOSAL: Default: Clean following final report delivery. Hold (Fee may apply):

SAMPLE INFORMATION										ANALYSIS REQUESTED						
Sample Name	Lab ID	Canister ID	Flow Cont. ID	Reporting Level: IA=Indoor Air SG=Soil Gas (Circle One)	Date Sampled	Initial Vac. ("Hg)	Field Initial Time	Final Vac. ("Hg)	Field Final Time	TO15 Full Scan	TO15 Benzene	TO15 cVOCs	APH	Helium		Notes
IA01-20250126	01	15212	F15212	(IA) / SG	1/26/25	30	1230	7	0616		X					
IA99-20250126	02	06603	F6603	(IA) / SG	1/26/25	30	2230	3	0616		X					
IA01-20250126	03	19494	F19499	(IA) / SG	1/26/25	40	2250	19.5	0647		X					
				IA / SG												
	Di			IA / SG												
		1/27/25		IA / SG												
				IA / SG												
				IA / SG												

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: D. Lom	Dimitri Lomineadze	EHSI	1/27/25	1427
Received by:	Anh Phan	FBI	01/27/25	14:27
Relinquished by:		Samples received at 18 °C		
Received by:				

Friedman & Bruya, Inc.
5500 4th Avenue South
Seattle, WA 98108
Ph. (206) 285-8282
Fax (206) 283-5044

FORMS\COC\COCTO-15.DOC

SAMPLE CONDITION UPON RECEIPT CHECKLIST

PROJECT # 501360 CLIENT EHSI INITIALS/ DATE: AP 01/27/25

If custody seals are present on cooler, are they intact? ☑ NA ☐ YES ☐ NO

Cooler/Sample temperature 18 °C
Thermometer ID: Fluke 96312917

Were samples received on ice/cold packs? ☐ YES ☑ NO

How did samples arrive?
☑ Over the Counter ☐ Picked up by F&BI ☐ FedEx/UPS/GSO

Is there a Chain-of-Custody* (COC)? ☑ YES ☐ NO Initials/ Date: AP 01/27/25
*or other representative documents, letters, and/or shipping memos

Number of days samples have been sitting prior to receipt at laboratory 1 days

Are the samples clearly identified? (explain "no" answer below) ☐ YES ☑ NO

Were all sample containers received intact (i.e. not broken, leaking etc.)? (explain "no" answer below) ☑ YES ☐ NO

Were appropriate sample containers used? ☑ YES ☐ NO ☐ Unknown

If custody seals are present on samples, are they intact? ☑ NA ☐ YES ☐ NO

Are samples requiring no headspace, headspace free? ☑ NA ☐ YES ☐ NO

Is the following information provided on the COC, and does it match the sample label?
(explain "no" answer below)

Sample ID's	☐ Yes ☑ No	Canister ID on COC do not match with cans	☐ Not on COC/label
Date Sampled	☑ Yes ☐ No		☐ Not on COC/label
Time Sampled	☑ Yes ☐ No		☐ Not on COC/label
# of Containers	☑ Yes ☐ No		
Relinquished	☑ Yes ☐ No		
Requested analysis	☑ Yes ☐ On Hold		

Other comments (use a separate page if needed)

Air Samples: Were any additional canisters/tubes received? ☐ NA ☑ YES ☐ NO

Number of unused TO15 canisters 01 (40706) **Number of unused TO17 tubes** _____

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Elizabeth Webber-Bruya
Ann Webber-Bruya
Michael Erdahl
Vineta Mills
Eric Young

5500 4th Ave South
Seattle, WA 98108-2419
(206) 285-8282
office@friedmanandbruya.com
www.friedmanandbruya.com

February 13, 2025

Clare Tochilin, Project Manager
EHSI
1011 SW Klickitat Way, Suite 104
Seattle, WA 98134

Dear Ms Tochilin:

Included are the amended results from the testing of material submitted on January 27, 2025 from the North Lot 11404, F&BI 501361 project. The reporting limits for benzene and cPAHs were lowered.

We appreciate this opportunity to be of service to you and hope you will call if you should have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.

Michael Erdahl
Project Manager

Enclosures
c: EHSI A/P, Fred Luck
EHS0204R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

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Ann Webber-Bruya
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Vineta Mills
Eric Young

5500 4th Ave South
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office@friedmanandbruya.com
www.friedmanandbruya.com

February 4, 2025

Clare Tochilin, Project Manager
EHSI
1011 SW Klickitat Way, Suite 104
Seattle, WA 98134

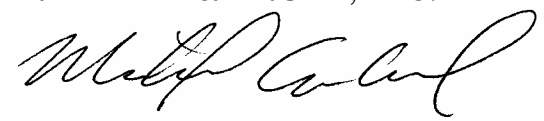
Dear Ms Tochilin:

Included are the results from the testing of material submitted on January 27, 2025 from the North Lot 11404, F&BI 501361 project. There are 26 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days, or as directed by the Chain of Custody document. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

We appreciate this opportunity to be of service to you and hope you will call if you should have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.



Michael Erdahl
Project Manager

Enclosures
c: EHSI A/P, Fred Luck
EHS0204R.DOC

CASE NARRATIVE

This case narrative encompasses samples received on January 27, 2025 by Friedman & Bruya, Inc. from the EHSI North Lot 11404, F&BI 501361 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	EHSI
501361 -01	MW-18D-20250124
501361 -02	MW-16D-20250125
501361 -03	MW-19-20250125
501361 -04	MW-20-20250125
501361 -05	MW-21-20250125
501361 -06	MW-22-20250125
501361 -07	MW-99-20250125

The 6020B zinc calibration standard exceeded the acceptance criteria for several samples. The metal was not detected, therefore this did not represent an out of control condition, and were qualified with a "k" qualifier.

All other quality control requirements were acceptable.

Date of Report: 02/04/25
Date Received: 01/27/25
Project: North Lot 11404, F&BI 501361
Date Extracted: 01/30/25
Date Analyzed: 01/30/25

RESULTS FROM THE ANALYSIS OF WATER SAMPLES FOR BENZENE, TOLUENE, ETHYLBENZENE, XYLENES AND TPH AS GASOLINE USING METHODS 8021B AND NWTPH-Gx

Results Reported as ug/L (ppb)

Sample ID Laboratory ID	Benzene	Toluene	Ethyl Benzene	Total Xylenes	Gasoline Range	Surrogate (% Recovery) (Limit 50-150)
MW-18D-20250124 501361-01	<0.8	<1	<1	<3	<100	85
MW-16D-20250125 501361-02	<0.8	<1	<1	<3	<100	87
MW-19-20250125 501361-03	<0.8	<1	<1	<3	<100	86
MW-20-20250125 501361-04	<0.8	<1	<1	<3	<100	85
MW-21-20250125 501361-05	<0.8	<1	<1	<3	<100	87
MW-22-20250125 501361-06	<0.8	<1	<1	<3	<100	89
MW-99-20250125 501361-07	<0.8	<1	<1	<3	<100	85
Method Blank 05-067 MB	<0.8	<1	<1	<3	<100	87

Date of Report: 02/04/25
Date Received: 01/27/25
Project: North Lot 11404, F&BI 501361
Date Extracted: 01/28/25
Date Analyzed: 01/31/25

RESULTS FROM THE ANALYSIS OF WATER SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AS DIESEL AND MOTOR OIL USING METHOD NWTPH-Dx
Sample Extracts Passed Through a Silica Gel Column Prior to Analysis
Results Reported as ug/L (ppb)

Sample ID Laboratory ID	Diesel Range (C_{10}-C_{25})	Motor Oil Range (C_{25}-C_{36})	Surrogate (% Recovery) (Limit 41-152)
MW-22-20250125 501361-06	<50	<250	126
Method Blank 05-300 MB	<50	<250	119

Date of Report: 02/04/25
Date Received: 01/27/25
Project: North Lot 11404, F&BI 501361
Date Extracted: 01/28/25
Date Analyzed: 01/28/25

RESULTS FROM THE ANALYSIS OF WATER SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AS DIESEL AND MOTOR OIL USING METHOD NWTPH-Dx

Results Reported as ug/L (ppb)

Sample ID Laboratory ID	Diesel Range (C_{10}-C_{25})	Motor Oil Range (C_{25}-C_{36})	Surrogate (% Recovery) (Limit 50-150)
MW-18D-20250124 501361-01	<50	<250	128
MW-16D-20250125 501361-02	<50	<250	134
MW-19-20250125 501361-03	<50	<250	139
MW-20-20250125 501361-04	<50	<250	139
MW-21-20250125 501361-05	<50	<250	131
MW-22-20250125 501361-06	<50	<250	140
MW-99-20250125 501361-07	<50	<250	142
Method Blank 05-300 MB	<50	<250	130

Analysis For Semivolatile Compounds By EPA Method 8270E

Client Sample ID:	MW-18D-20250124	Client:	EHSI
Date Received:	01/27/25	Project:	North Lot 11404, F&BI 501361
Date Extracted:	01/28/25	Lab ID:	501361-01
Date Analyzed:	01/29/25	Data File:	012910.D
Matrix:	Water	Instrument:	GCMS12
Units:	ug/L (ppb)	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Nitrobenzene-d5	86	11	173
2-Fluorobiphenyl	82	25	128
2,4,6-Tribromophenol	93	10	140
Terphenyl-d14	96	50	150

Compounds:	Concentration ug/L (ppb)
Naphthalene	<0.2
2-Methylnaphthalene	<0.2
1-Methylnaphthalene	<0.2
Acenaphthylene	<0.02
Acenaphthene	0.10
Fluorene	0.031
Phenanthrene	0.065
Anthracene	<0.02
Fluoranthene	0.030
Pyrene	0.025
Benz(a)anthracene	<0.02
Chrysene	<0.02
Benzo(a)pyrene	<0.0051 j
Benzo(b)fluoranthene	<0.0047 j
Benzo(k)fluoranthene	<0.0047 j
Indeno(1,2,3-cd)pyrene	<0.0064 j
Dibenz(a,h)anthracene	<0.0059 j
Benzo(g,h,i)perylene	<0.02

Analysis For Semivolatile Compounds By EPA Method 8270E

Client Sample ID:	MW-16D-20250125	Client:	EHSI
Date Received:	01/27/25	Project:	North Lot 11404, F&BI 501361
Date Extracted:	01/28/25	Lab ID:	501361-02
Date Analyzed:	01/29/25	Data File:	012911.D
Matrix:	Water	Instrument:	GCMS12
Units:	ug/L (ppb)	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Nitrobenzene-d5	90	11	173
2-Fluorobiphenyl	87	25	128
2,4,6-Tribromophenol	97	10	140
Terphenyl-d14	92	50	150

Compounds:	Concentration ug/L (ppb)
Naphthalene	<0.2
2-Methylnaphthalene	<0.2
1-Methylnaphthalene	<0.2
Acenaphthylene	<0.02
Acenaphthene	0.15
Fluorene	<0.02
Phenanthrene	0.045
Anthracene	<0.02
Fluoranthene	<0.02
Pyrene	<0.02
Benz(a)anthracene	<0.02
Chrysene	<0.02
Benzo(a)pyrene	<0.0051 j
Benzo(b)fluoranthene	<0.0047 j
Benzo(k)fluoranthene	<0.0047 j
Indeno(1,2,3-cd)pyrene	<0.0064 j
Dibenz(a,h)anthracene	<0.0059 j
Benzo(g,h,i)perylene	<0.02

Analysis For Semivolatile Compounds By EPA Method 8270E

Client Sample ID:	MW-19-20250125	Client:	EHSI
Date Received:	01/27/25	Project:	North Lot 11404, F&BI 501361
Date Extracted:	01/28/25	Lab ID:	501361-03
Date Analyzed:	01/29/25	Data File:	012912.D
Matrix:	Water	Instrument:	GCMS12
Units:	ug/L (ppb)	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Nitrobenzene-d5	97	11	173
2-Fluorobiphenyl	91	25	128
2,4,6-Tribromophenol	95	10	140
Terphenyl-d14	94	50	150

Compounds:	Concentration ug/L (ppb)
Naphthalene	<0.2
2-Methylnaphthalene	<0.2
1-Methylnaphthalene	<0.2
Acenaphthylene	<0.02
Acenaphthene	<0.02
Fluorene	<0.02
Phenanthrene	<0.02
Anthracene	<0.02
Fluoranthene	<0.02
Pyrene	<0.02
Benz(a)anthracene	<0.02
Chrysene	<0.02
Benzo(a)pyrene	<0.0051 j
Benzo(b)fluoranthene	<0.0047 j
Benzo(k)fluoranthene	<0.0047 j
Indeno(1,2,3-cd)pyrene	<0.0064 j
Dibenz(a,h)anthracene	<0.0059 j
Benzo(g,h,i)perylene	<0.02

Analysis For Semivolatile Compounds By EPA Method 8270E

Client Sample ID:	MW-20-20250125	Client:	EHSI
Date Received:	01/27/25	Project:	North Lot 11404, F&BI 501361
Date Extracted:	01/28/25	Lab ID:	501361-04
Date Analyzed:	01/29/25	Data File:	012913.D
Matrix:	Water	Instrument:	GCMS12
Units:	ug/L (ppb)	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Nitrobenzene-d5	95	11	173
2-Fluorobiphenyl	92	25	128
2,4,6-Tribromophenol	98	10	140
Terphenyl-d14	98	50	150

Compounds:	Concentration ug/L (ppb)
Naphthalene	<0.2
2-Methylnaphthalene	<0.2
1-Methylnaphthalene	<0.2
Acenaphthylene	<0.02
Acenaphthene	<0.02
Fluorene	<0.02
Phenanthrene	<0.02
Anthracene	<0.02
Fluoranthene	<0.02
Pyrene	<0.02
Benz(a)anthracene	<0.02
Chrysene	<0.02
Benzo(a)pyrene	<0.0051 j
Benzo(b)fluoranthene	<0.0047 j
Benzo(k)fluoranthene	<0.0047 j
Indeno(1,2,3-cd)pyrene	<0.0064 j
Dibenz(a,h)anthracene	<0.0059 j
Benzo(g,h,i)perylene	<0.02

Analysis For Semivolatile Compounds By EPA Method 8270E

Client Sample ID:	MW-21-20250125	Client:	EHSI
Date Received:	01/27/25	Project:	North Lot 11404, F&BI 501361
Date Extracted:	01/28/25	Lab ID:	501361-05
Date Analyzed:	01/29/25	Data File:	012914.D
Matrix:	Water	Instrument:	GCMS12
Units:	ug/L (ppb)	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Nitrobenzene-d5	77	11	173
2-Fluorobiphenyl	79	25	128
2,4,6-Tribromophenol	99	10	140
Terphenyl-d14	97	50	150

Compounds:	Concentration ug/L (ppb)
Naphthalene	<0.2
2-Methylnaphthalene	<0.2
1-Methylnaphthalene	<0.2
Acenaphthylene	<0.02
Acenaphthene	<0.02
Fluorene	<0.02
Phenanthrene	<0.02
Anthracene	<0.02
Fluoranthene	<0.02
Pyrene	<0.02
Benz(a)anthracene	<0.02
Chrysene	<0.02
Benzo(a)pyrene	<0.0051 j
Benzo(b)fluoranthene	<0.0047 j
Benzo(k)fluoranthene	<0.0047 j
Indeno(1,2,3-cd)pyrene	<0.0064 j
Dibenz(a,h)anthracene	<0.0059 j
Benzo(g,h,i)perylene	<0.02

Analysis For Semivolatile Compounds By EPA Method 8270E

Client Sample ID:	MW-22-20250125	Client:	EHSI
Date Received:	01/27/25	Project:	North Lot 11404, F&BI 501361
Date Extracted:	01/28/25	Lab ID:	501361-06
Date Analyzed:	01/29/25	Data File:	012915.D
Matrix:	Water	Instrument:	GCMS12
Units:	ug/L (ppb)	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Nitrobenzene-d5	91	11	173
2-Fluorobiphenyl	88	25	128
2,4,6-Tribromophenol	91	10	140
Terphenyl-d14	96	50	150

Compounds:	Concentration ug/L (ppb)
Naphthalene	<0.2
2-Methylnaphthalene	<0.2
1-Methylnaphthalene	<0.2
Acenaphthylene	<0.02
Acenaphthene	<0.02
Fluorene	<0.02
Phenanthrene	<0.02
Anthracene	<0.02
Fluoranthene	<0.02
Pyrene	<0.02
Benz(a)anthracene	<0.02
Chrysene	<0.02
Benzo(a)pyrene	<0.0051 j
Benzo(b)fluoranthene	<0.0047 j
Benzo(k)fluoranthene	<0.0047 j
Indeno(1,2,3-cd)pyrene	<0.0064 j
Dibenz(a,h)anthracene	<0.0059 j
Benzo(g,h,i)perylene	<0.02

Analysis For Semivolatile Compounds By EPA Method 8270E

Client Sample ID:	MW-99-20250125	Client:	EHSI
Date Received:	01/27/25	Project:	North Lot 11404, F&BI 501361
Date Extracted:	01/28/25	Lab ID:	501361-07
Date Analyzed:	01/29/25	Data File:	012916.D
Matrix:	Water	Instrument:	GCMS12
Units:	ug/L (ppb)	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Nitrobenzene-d5	95	11	173
2-Fluorobiphenyl	85	25	128
2,4,6-Tribromophenol	90	10	140
Terphenyl-d14	92	50	150

Compounds:	Concentration ug/L (ppb)
Naphthalene	<0.2
2-Methylnaphthalene	<0.2
1-Methylnaphthalene	<0.2
Acenaphthylene	<0.02
Acenaphthene	<0.02
Fluorene	<0.02
Phenanthrene	<0.02
Anthracene	<0.02
Fluoranthene	<0.02
Pyrene	<0.02
Benz(a)anthracene	<0.02
Chrysene	<0.02
Benzo(a)pyrene	<0.0051 j
Benzo(b)fluoranthene	<0.0047 j
Benzo(k)fluoranthene	<0.0047 j
Indeno(1,2,3-cd)pyrene	<0.0064 j
Dibenz(a,h)anthracene	<0.0059 j
Benzo(g,h,i)perylene	<0.02

Analysis For Semivolatile Compounds By EPA Method 8270E

Client Sample ID:	Method Blank	Client:	EHSI
Date Received:	Not Applicable	Project:	North Lot 11404, F&BI 501361
Date Extracted:	01/28/25	Lab ID:	05-0305 mb
Date Analyzed:	01/29/25	Data File:	012909.D
Matrix:	Water	Instrument:	GCMS12
Units:	ug/L (ppb)	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Nitrobenzene-d5	96	11	173
2-Fluorobiphenyl	89	25	128
2,4,6-Tribromophenol	80	10	140
Terphenyl-d14	86	50	150

Compounds:	Concentration ug/L (ppb)
Naphthalene	<0.2
2-Methylnaphthalene	<0.2
1-Methylnaphthalene	<0.2
Acenaphthylene	<0.02
Acenaphthene	<0.02
Fluorene	<0.02
Phenanthrene	<0.02
Anthracene	<0.02
Fluoranthene	<0.02
Pyrene	<0.02
Benz(a)anthracene	<0.02
Chrysene	<0.02
Benzo(a)pyrene	<0.02
Benzo(b)fluoranthene	<0.02
Benzo(k)fluoranthene	<0.02
Indeno(1,2,3-cd)pyrene	<0.02
Dibenz(a,h)anthracene	<0.02
Benzo(g,h,i)perylene	<0.02

Analysis For Dissolved Metals By EPA Method 6020B

Client ID:	MW-18D-20250124	Client:	EHSI
Date Received:	01/27/25	Project:	North Lot 11404, F&BI 501361
Date Extracted:	01/28/25	Lab ID:	501361-01
Date Analyzed:	01/29/25	Data File:	501361-01.215
Matrix:	Water	Instrument:	ICPMS3
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Arsenic	<1
Cadmium	<1
Chromium	<1
Copper	<5
Lead	<1
Mercury	<1
Zinc	<5

Analysis For Dissolved Metals By EPA Method 6020B

Client ID:	MW-16D-20250125	Client:	EHSI
Date Received:	01/27/25	Project:	North Lot 11404, F&BI 501361
Date Extracted:	01/28/25	Lab ID:	501361-02
Date Analyzed:	01/29/25	Data File:	501361-02.218
Matrix:	Water	Instrument:	ICPMS3
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Arsenic	<1
Cadmium	<1
Chromium	<1
Copper	<5
Lead	<1
Mercury	<1
Zinc	<5 k

Analysis For Dissolved Metals By EPA Method 6020B

Client ID:	MW-19-20250125	Client:	EHSI
Date Received:	01/27/25	Project:	North Lot 11404, F&BI 501361
Date Extracted:	01/28/25	Lab ID:	501361-03
Date Analyzed:	01/29/25	Data File:	501361-03.219
Matrix:	Water	Instrument:	ICPMS3
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Arsenic	2.2
Cadmium	<1
Chromium	<1
Copper	<5
Lead	<1
Mercury	<1
Zinc	<5 k

Analysis For Dissolved Metals By EPA Method 6020B

Client ID:	MW-20-20250125	Client:	EHSI
Date Received:	01/27/25	Project:	North Lot 11404, F&BI 501361
Date Extracted:	01/28/25	Lab ID:	501361-04
Date Analyzed:	01/31/25	Data File:	501361-04.075
Matrix:	Water	Instrument:	ICPMS3
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Arsenic	2.1
Cadmium	<1
Chromium	<1
Copper	<5
Lead	<1
Mercury	<1
Zinc	<5

Analysis For Dissolved Metals By EPA Method 6020B

Client ID:	MW-21-20250125	Client:	EHSI
Date Received:	01/27/25	Project:	North Lot 11404, F&BI 501361
Date Extracted:	01/28/25	Lab ID:	501361-05
Date Analyzed:	01/31/25	Data File:	501361-05.081
Matrix:	Water	Instrument:	ICPMS3
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Arsenic	1.2
Cadmium	<1
Chromium	<1
Copper	<5
Lead	<1
Mercury	<1
Zinc	<5

Analysis For Dissolved Metals By EPA Method 6020B

Client ID:	MW-22-20250125	Client:	EHSI
Date Received:	01/27/25	Project:	North Lot 11404, F&BI 501361
Date Extracted:	01/28/25	Lab ID:	501361-06
Date Analyzed:	01/31/25	Data File:	501361-06.083
Matrix:	Water	Instrument:	ICPMS3
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Arsenic	<1
Cadmium	<1
Chromium	<1
Copper	6.0
Lead	<1
Mercury	<1
Zinc	<5

Analysis For Dissolved Metals By EPA Method 6020B

Client ID:	MW-99-20250125	Client:	EHSI
Date Received:	01/27/25	Project:	North Lot 11404, F&BI 501361
Date Extracted:	01/28/25	Lab ID:	501361-07
Date Analyzed:	01/31/25	Data File:	501361-07.085
Matrix:	Water	Instrument:	ICPMS3
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Arsenic	<1
Cadmium	<1
Chromium	<1
Copper	6.7
Lead	<1
Mercury	<1
Zinc	<5

Analysis For Dissolved Metals By EPA Method 6020B

Client ID:	Method Blank	Client:	EHSI
Date Received:	NA	Project:	North Lot 11404, F&BI 501361
Date Extracted:	01/28/25	Lab ID:	I5-72 mb2
Date Analyzed:	01/29/25	Data File:	I5-72 mb2.047
Matrix:	Water	Instrument:	ICPMS3
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Arsenic	<1
Cadmium	<1
Chromium	<1
Copper	<5
Lead	<1
Mercury	<1
Zinc	<5

Date of Report: 02/04/25
Date Received: 01/27/25
Project: North Lot 11404, F&BI 501361

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF WATER SAMPLES FOR BENZENE, TOLUENE, ETHYLBENZENE, XYLENES, AND TPH AS GASOLINE USING EPA METHOD 8021B AND NWTPH-Gx

Laboratory Code: 501361-01 (Duplicate)

Analyte	Reporting Units	Sample Result	Duplicate Result	RPD (Limit 20)
Benzene	ug/L (ppb)	<1	<1	nm
Toluene	ug/L (ppb)	<1	<1	nm
Ethylbenzene	ug/L (ppb)	<1	<1	nm
Xylenes	ug/L (ppb)	<3	<3	nm
Gasoline	ug/L (ppb)	<100	<100	nm

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Benzene	ug/L (ppb)	50	102	70-130
Toluene	ug/L (ppb)	50	102	70-130
Ethylbenzene	ug/L (ppb)	50	102	70-130
Xylenes	ug/L (ppb)	150	100	70-130
Gasoline	ug/L (ppb)	1,000	100	70-130

Date of Report: 02/04/25
Date Received: 01/27/25
Project: North Lot 11404, F&BI 501361

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF WATER SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AS DIESEL EXTENDED USING METHOD NWTPH-Dx

Laboratory Code: Laboratory Control Sample Silica Gel

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Diesel Extended	ug/L (ppb)	2,500	100	104	65-151	4

Date of Report: 02/04/25
Date Received: 01/27/25
Project: North Lot 11404, F&BI 501361

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF WATER SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AS DIESEL EXTENDED USING METHOD NWTPH-Dx

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Diesel Extended	ug/L (ppb)	2,500	100	108	65-151	8

Date of Report: 02/04/25
Date Received: 01/27/25
Project: North Lot 11404, F&BI 501361

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF WATER SAMPLES FOR SEMIVOLATILES BY EPA METHOD 8270E

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Naphthalene	ug/L (ppb)	10	74	85	58-93	14
2-Methylnaphthalene	ug/L (ppb)	10	76	86	63-97	12
1-Methylnaphthalene	ug/L (ppb)	10	78	88	62-99	12
Acenaphthylene	ug/L (ppb)	10	90	96	68-111	6
Acenaphthene	ug/L (ppb)	10	85	93	67-104	9
Fluorene	ug/L (ppb)	10	89	94	70-130	5
Phenanthrene	ug/L (ppb)	10	92	96	70-130	4
Anthracene	ug/L (ppb)	10	92	96	70-130	4
Fluoranthene	ug/L (ppb)	10	93	101	70-130	8
Pyrene	ug/L (ppb)	10	86	98	70-130	13
Benz(a)anthracene	ug/L (ppb)	10	92	96	70-130	4
Chrysene	ug/L (ppb)	10	93	97	70-130	4
Benzo(a)pyrene	ug/L (ppb)	10	85	93	70-130	9
Benzo(b)fluoranthene	ug/L (ppb)	10	84	96	70-130	13
Benzo(k)fluoranthene	ug/L (ppb)	10	81	97	70-130	18
Indeno(1,2,3-cd)pyrene	ug/L (ppb)	10	94	82	70-130	14
Dibenz(a,h)anthracene	ug/L (ppb)	10	94	85	70-130	10
Benzo(g,h,i)perylene	ug/L (ppb)	10	91	81	68-131	12

Date of Report: 02/04/25
Date Received: 01/27/25
Project: North Lot 11404, F&BI 501361

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF WATER SAMPLES FOR DISSOLVED METALS USING EPA METHOD 200.8

Laboratory Code: 501337-01 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Arsenic	ug/L (ppb)	10	1.08	105	101	70-130	4
Cadmium	ug/L (ppb)	5	<1	109	105	70-130	4
Chromium	ug/L (ppb)	20	<1	95	90	70-130	5
Copper	ug/L (ppb)	20	<5	89	86	70-130	3
Lead	ug/L (ppb)	10	<1	103	99	70-130	4
Mercury	ug/L (ppb)	5	<1	98	97	70-130	1
Zinc	ug/L (ppb)	50	<5	95	92	70-130	3

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Arsenic	ug/L (ppb)	10	95	85-115
Cadmium	ug/L (ppb)	5	100	85-115
Chromium	ug/L (ppb)	20	94	85-115
Copper	ug/L (ppb)	20	94	85-115
Lead	ug/L (ppb)	10	93	85-115
Mercury	ug/L (ppb)	5	90	85-115
Zinc	ug/L (ppb)	50	98	85-115

Data Qualifiers & Definitions

a - The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.

b - The analyte was spiked at a level that was less than five times that present in the sample. Matrix spike recoveries may not be meaningful.

ca - The calibration results for the analyte were outside of acceptance criteria, biased low; or, the calibration results for the analyte were outside of acceptance criteria, biased high, with a detection for the analyte in the sample. The value reported is an estimate.

c - The presence of the analyte may be due to carryover from previous sample injections.

cf - The sample was centrifuged prior to analysis.

d - The sample was diluted. Detection limits were raised and surrogate recoveries may not be meaningful.

dv - Insufficient sample volume was available to achieve normal reporting limits.

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

fc - The analyte is a common laboratory and field contaminant.

hr - The sample and duplicate were reextracted and reanalyzed. RPD results were still outside of control limits. Variability is attributed to sample inhomogeneity.

hs - Headspace was present in the container used for analysis.

ht – The analysis was performed outside the method or client-specified holding time requirement.

ip - Recovery fell outside of control limits due to sample matrix effects.

j - The analyte concentration is reported between the method detection limit and the lowest calibration point. The value reported is an estimate.

J - The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.

jl - The laboratory control sample(s) percent recovery and/or RPD were out of control limits. The reported concentration should be considered an estimate.

js - The surrogate associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

k – The calibration results for the analyte were outside of acceptance criteria, biased high, and the analyte was not detected in the sample.

lc - The presence of the analyte is likely due to laboratory contamination.

L - The reported concentration was generated from a library search.

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

pc - The sample was received with incorrect preservation or in a container not approved by the method. The value reported should be considered an estimate.

ve - The analyte response exceeded the valid instrument calibration range. The value reported is an estimate.

vo - The value reported fell outside the control limits established for this analyte.

x - The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

501361

SAMPLE CHAIN OF CUSTODY 01/27/25 C3/J3/VW3

Send Report to Clare Tochilin, Fred Luck

Company EHSI

Address 1011 Southwest Klickitat Way, Suite 104

City, State, ZIP Seattle, Washington 98134

Phone # 206-306-1900 Fax # 206-306-1907

SAMPLERS (signature) D. Cori

PROJECT NAME/NO.: North Lot

PO #: 11404

REMARKS: Metals samples have been field filtered

Page # 1 of 1

TURNAROUND TIME
Standard (2 Weeks)
RUSH
Rush charges authorized by:

SAMPLE DISPOSAL
Dispose after 30 days
Return samples
Will call with instructions

Sample ID	Sample Location	Sample Depth	Lab ID	Date Sampled	Time Sampled	Matrix	# of Jars	ANALYSES REQUESTED: NWTPH-Dx	NWTPH-Dx w/ silica gel cleanup	NWTPH-Gx	BTEX by 8021B	PAHs by 8270	Dissolved MTCA 5 Metals + copper and zinc			Notes
MW-18D-20250124	MW-18D	~17 ft.	01A-G	1/24/25	1604	W	7	X		X	X	X	X		*	Benzene
MW-16D-20250125	MW-16D	~17 ft.	02	1/25/25	1058	W	7	X		X	X	X	X			to <0.8
MW-19-20250125	MW-19	~8 ft	03	1/25/25	1304	W	7	X		X	X	X	X		*	cPAHs
MW-20-20250125	MW-20	~9 ft	04	1/25/25	14:25	W	7	X		X	X	X	X			to MDL
MW-21-20250125	MW-21	~12 ft	05	1/25/25	16:41	W	7	X		X	X	X	X			- ef
MW-22-20250125	MW-22	~8 ft	06	1/25/25	18:12	W	7	X	X	X	X	X	X			02/13/25
MW-99-20250125	MW-22	~8 ft	07	1/25/25	18:35	W	7	X		X	X	X	X			
				DL	1/27/25											

Friedman & Bruya, Inc.
5500 4th Avenue South
Seattle, WA 98134
Ph. (206) 285-8282
Fax (206) 283-5044

FORMS\COC\COC.DOC

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: D Cori	Dmitri Lominadze	EHSI	1/27/25	1424
Received by: [signature]	Anh Phan	FBI	01/27/25	14:24
Relinquished by:		Samples received at 1 °C		
Received by:				

SAMPLE CONDITION UPON RECEIPT CHECKLIST

PROJECT # 501361 CLIENT EHST INITIALS/ DATE: AP 01/27/25

If custody seals are present on cooler, are they intact? ☑ NA ☐ YES ☐ NO

Cooler/Sample temperature 1 °C
Thermometer ID: Fluke 96312917

Were samples received on ice/cold packs? ☑ YES ☐ NO

How did samples arrive?
☑ Over the Counter ☐ Picked up by F&BI ☐ FedEx/UPS/GSO

Is there a Chain-of-Custody* (COC)? ☑ YES ☐ NO Initials/ AP Date: 01/27/25
*or other representative documents, letters, and/or shipping memos

Number of days samples have been sitting prior to receipt at laboratory 2-3 days

Are the samples clearly identified? (explain "no" answer below) ☐ YES ☑ NO

Were all sample containers received intact (i.e. not broken, leaking etc.)? (explain "no" answer below) ☑ YES ☐ NO

Were appropriate sample containers used? ☑ YES ☐ NO ☐ Unknown

If custody seals are present on samples, are they intact? ☑ NA ☐ YES ☐ NO

Are samples requiring no headspace, headspace free? ☐ NA ☑ YES ☐ NO

Is the following information provided on the COC, and does it match the sample label?
(explain "no" answer below)

Sample ID's	☐ Yes ☑ No for MW-19-20250125(-03C). Lab ID based on same bag or other containe	☑ Not on COC/label
Date Sampled	☐ Yes ☑ No	☑ Not on COC/label
Time Sampled	☐ Yes ☑ No	☑ Not on COC/label
# of Containers	☑ Yes ☐ No	
Relinquished	☑ Yes ☐ No	
Requested analysis	☑ Yes ☐ On Hold	

Other comments (use a separate page if needed)

Air Samples: Were any additional canisters/tubes received? ☑ NA ☐ YES ☐ NO

Number of unused TO15 canisters _____ Number of unused TO17 tubes _____