



November 15, 2022

Elton Lee
LMI – West Seattle Holdings, LLC
125 High Street
High Street Tower, 24th Floor
Boston, Massachusetts 02110

Re: Groundwater Monitoring Report, SKS Shell Station Site, Third Quarter 2022

LMI – West Seattle Holdings, LLC, PPCD No. 13-2-27556-2
Facility ID #39196282, Cleanup ID #6015
Project No. 160328

Dear Mr. Lee:

Aspect Consulting, LLC (Aspect) prepared this report to detail field activities and summarize the results of compliance groundwater monitoring occurring in the Third Quarter 2022 for the SKS Shell Station Site (Site; Figure 1) located at 3901 Southwest Alaska Street in Seattle, Washington. Post-cleanup groundwater compliance sampling and reporting has been occurring since cleanup and redevelopment of the Site was completed in 2015, in accordance with Prospective Purchaser Consent Decree (PPCD) No. 13-2-27556-2 and Washington Administrative Code (WAC) Chapter 173-340. This report includes a brief background of the project, a description of the scope of work for compliance well monitoring events, and a summary of the results in comparison to results from prior compliance monitoring events.

Background

Use of the Site property as an auto repair facility and subsequently as multiple generations of gasoline refueling and service stations from 1934 until 2013 resulted in soil and groundwater contamination with gasoline-, diesel-, and heavy oil-range total petroleum hydrocarbons (TPH), benzene, toluene, ethylbenzene, and total xylenes (BTEX) at concentrations above Model Toxics Control Act (MTCA) Method A cleanup levels. The areas in which these contaminants have been found exceeding MTCA cleanup levels constitute the Site.

The Site consists of portions of the property located at 3901 Southwest Alaska Street, as well as the Southwest Alaska Street and Fauntleroy Way Southwest rights-of-way (ROW) adjoining on the north and west, respectively (Figure 2).

Cleanup action activities included remedial excavation that was completed in 2015 concurrently with redevelopment and construction of the existing Whittaker building.¹ Excavation beyond the former SKS property boundary was not feasible, and localized areas of petroleum-contaminated soil remains beneath adjoining ROWs. Refer to the Cleanup Action Report for more detail on the

¹ The new building (known as The Whittaker) was completed in 2016 and extends across the northeast three quarters of the city block that fronts Fauntleroy Way Southwest, south of the Southwest Alaska Street intersection. The Whittaker apartment building complex includes both the former SKS Shell Station and Kennedy-Huling Brothers Sites.



location and depth of residual soil contamination.² Redevelopment was conducted in coordination with cleanup activities and redevelopment at the neighboring Kennedy-Huling Brothers Site (Voluntary Cleanup Program ID #NW2716, which received a property-specific No Further Action [NFA] determination from the Washington State Department of Ecology [Ecology] in March 2019. For more detail on the former SKS property history, extent of contamination, and remedial actions completed at the SKS Shell Station Site, refer to the Cleanup Action Plan³ [CAP] and Cleanup Action Report² [CAR]).

In January 2021, a pilot study for *in situ* chemical oxidation (ISCO) injections was implemented to assess whether ISCO injections would reasonably address the remedial objectives for the Site in accordance with the Ecology-approved work plan.⁴ As part of the ISCO pilot study, tracer dyes were introduced to three existing former dewatering wells in the Fauntleroy Way SW ROW (RW03 to RW05; Figure 2) to evaluate the potential for short circuiting to the Whittaker building under-slab drainage system. Results from the pilot study indicated that the well system is not suitable for injections, as short circuiting to the drainage system occurred during pilot injections and tracer dye was detected in the parking garage drainage collection sump. Detailed results from the pilot study are included in the report, “Groundwater Treatment Injection Pilot Study Results and Updated Monitored Natural Attenuation Analysis⁵,” dated May 3, 2021.

Based on the results of the 2021 pilot study and subsequent groundwater compliance monitoring event in First Quarter 2021, data suggested that the dewatering wells RW01 through RW05 may be creating a condition of continued low-level contamination in groundwater, due to the construction and historical use of these wells as dewatering and petroleum-extraction wells during the remedial excavation and construction. Aspect recommended that the dewatering wells be decommissioned and replaced with an appropriate groundwater monitoring well that follows Ecology’s specifications for compliance groundwater monitoring. This recommendation was approved by Ecology during a meeting on June 2, 2021. This work occurred in First Quarter 2022 in accordance with the “Site Closure Work Plan⁶,” dated July 29, 2021, and approved by Ecology via email on July 30, 2021.

The new well, MW115, was installed in Fauntleroy Way on January 13 and 14, 2022, and was sampled for the first time during the First Quarter 2022 monitoring event. Additional details of the monitoring well decommissioning, installation, and sampling are included in the “2022 Q1 GW

² SoundEarth Strategies, Inc. (SoundEarth), 2016, Cleanup Action Report, SKS Shell Property, 3901 Southwest Alaska Street, Seattle, Washington, October 20, 2016.

³ SoundEarth Strategies, Inc. (SoundEarth), 2016, Cleanup Action Plan, SKS Shell Property, 3901 Southwest Alaska Street, Seattle, Washington, June 16, 2014.

⁴ Aspect Consulting, LLC (Aspect), 2020, Preliminary Monitored Natural Attenuation Analysis and Groundwater Treatment Injections Pilot Study Work Plan, LMI – West Seattle Holdings, LLC, PPCD No. 13-2-27556-2, October 27, 2020.

⁵ Aspect Consulting, LLC (Aspect), 2021, Groundwater Treatment Injection Pilot Study Results and Updated Monitored Natural Attenuation Analysis, LMI – West Seattle Holdings, LLC, PPCD No. 13-2-27556-2, April 16, 2021.

⁶ Aspect Consulting, LLC (Aspect), 2021, Site Closure Work Plan, LMI – West Seattle Holdings, LLC, PPCD No. 13-2-27556-2, July 29, 2021.

Monitoring Report⁷ dated May 17, 2022. The First Quarter 2022 results showed diesel-range TPH at 780 µg/L, above the cleanup level of 500 µg/L. The result was flagged by the laboratory as having a chromatographic pattern not resembling the fuel standard used for quantitation, which has been consistent for all diesel-range TPH detections in the well network since the start of the monitoring period. To evaluate the possibility for contribution by non-polar metabolites due to weathered diesel or naturally occurring sources, the sample was passed through a silica gel column prior to retesting for diesel-range TPH. The resultant concentration of 780 µg/L with silica gel cleanup matched the result of the pre-silica gel cleanup analysis, indicating that there is a negligible contribution from non-polar metabolites to the diesel-range TPH concentrations at MW115. In accordance with Ecology's *Draft Guidance for Silica Gel Cleanup in Washington State*, dated September 2022, the outlined course of action is to continue monitoring for diesel-range TPH, with the additional analysis of silica gel cleanup optional.

Compliance Groundwater Monitoring

Post-cleanup compliance monitoring of groundwater began in March 2016. The original compliance well network consisted of 15 wells (RW02 to RW05, MW101 to MW105, and MW108 to MW113) located in the Southwest Alaska Street ROW and sidewalk, the Fauntleroy Way Southwest ROW and sidewalk, and within a portion of the parking garage of the Whittaker building (Figure 2).

As of First Quarter 2021, Ecology has approved discontinued sampling and decommissioning of six (RW02, RW03, RW04, RW05, MW102, and MW103) of the original 15 compliance wells and approved installation and sampling of the newest standard compliance monitoring well (MW115) in the vicinity of RW03 and RW04.⁸ Per agreement with Ecology, wells MW101, MW104, MW105, MW108, MW109, MW110, MW111, MW112, and MW113 continue to be accessed biannually for water level measurements only, because they have shown no contaminants above the cleanup levels since 2019. MW115 is accessed biannually for both groundwater sampling and water level measurements because the first sampling in First Quarter 2022 showed diesel-range petroleum hydrocarbons above the cleanup level of 500 µg/L. This sampling frequency will continue until contaminants are below cleanup levels in MW115.

The existing compliance well network for the Site now consists of 10 wells for analytical sampling and water level monitoring. The Third Quarter 2022 groundwater monitoring event is the second event since the First Quarter 2021 event and installation of new well MW115. The following sections describe the field and analysis methods and the analytical results. Table 1 presents a

⁷ Aspect Consulting, LLC (Aspect), 2022, Groundwater Monitoring Report, SKS Shell Station Site, First Quarter 2022, LMI – West Seattle Holdings, LLC, PPCD No. 13-2-27556-2, May 17, 2022.

⁸ This footnote summarizes the approvals received by Ecology for changes to the compliance monitoring well network:

- RW02, MW101, and MW102 changes were approved by Dale Myers of Ecology via email to SoundEarth, January 6, 2020;
- MW112 and MW113 changes were approved by Dale Myers of Ecology via email on August 26, 2020;
- MW112 and MW113 changes were approved by Dale Myers of Ecology via email on August 26, 2020;
- MW109, MW110, and MW111 changes were approved by Dale Myers of Ecology via email on January 27, 2021; and
- MW102 and MW103 changes were approved by Dale Myers of Ecology via email on January 11, 2021.

summary of the status and well construction details of the original compliance groundwater monitoring wells for the Site.

Field and Analysis Methods

On September 29, 2022, groundwater levels were measured in nine wells. Each water level measurement was recorded to the hundredth of a foot, relative to the top of the north side of the well casing. Groundwater elevations were calculated using the surveyed top of well casings. Depth to water measurements and water level elevations from the site-wide groundwater monitoring event are shown in Table 1 and on Figure 2. A water level was not measured at MW112 because traffic control was not implemented to allow safe access of the well in the SW Alaska St ROW.

Sampling was completed at one compliance groundwater monitoring well (MW115). The well was sampled using standard low-flow methodology.⁹ Field parameters were collected during groundwater sampling—including depth to water, flow rate, temperature, specific conductivity, dissolved oxygen, pH, oxidation reduction potential, and turbidity—and sampling occurred once all parameters had stabilized.¹⁰ The well screen was fully submerged during sampling and the groundwater sample tubing intake was placed at the midpoint of the screened interval (consistent with past monitoring events).

A groundwater sample was collected in laboratory supplied bottle-ware, transported under standard chain of custody procedures, and submitted to Friedman and Bruya, Inc., of Seattle, Washington, for laboratory chemical analysis of the following:

- Gasoline-, diesel- and oil-range TPH using Northwest Methods NWTPH-Gx and NWTPH-Dx.
- BTEX using U.S. Environmental Protection Agency (EPA) Method 8021B.

Groundwater Monitoring Results

Groundwater Elevations and Flow Direction

Third Quarter 2022 groundwater elevations¹¹ ranged from a low of 239.65 feet (MW110) to a high of 241.24 feet (MW101; Table 1 and Figure 2). Groundwater elevations from the groundwater monitoring event were contoured to show generalized groundwater flow direction at the Site; flow across the Site is generally toward the south and west with localized variability (Figure 2).

Analytical Results

Table A below presents a summary of the chemical analytical results for the Third Quarter 2022 monitoring event.

⁹ United States Environmental Protection Agency (EPA), 1996, Low Flow (Minimal Drawdown) Ground-Water Sampling Procedures, April 1996.

¹⁰ Stabilization consists of the following over no less than 9 minutes: less than 10 percent change in dissolved oxygen and turbidity; less than 3 percent change in specific conductance; less than 10-milivolt change in oxidation-reduction potential; and less than 0.1 change in pH.

¹¹ Elevations in feet relative to North American Vertical Datum of 1988 (NAVD88)

Table A. Summary of Q3 2022 Groundwater Analytical Results

Sample Location	Benzene	Gasoline-Range TPH	Diesel-Range TPH	Heavy Oil-Range TPH
MW115	< 1 U	< 100 U	220 X	< 250 U
MTCA Method A Cleanup Level	5	1000/800 ¹	500	500

Notes:

All concentrations are listed in µg/L (micrograms per liter)

Bold indicates a detected concentration; shading indicates a concentration that exceeds the MTCA Cleanup Level.

¹Gasoline-range TPH is measured against a lower cleanup level when benzene is present.

U – the analyte indicated was not detected above the laboratory reporting limit.

X – chromatographic pattern did not match the standard used for quantification.

No contaminants of concern were detected at concentrations exceeding the MTCA Method A cleanup level (Figure 3). Complete compliance groundwater monitoring data for the well sampled during this event are shown in Table 2, and chemical analytical results are summarized on Figure 3. Laboratory reports are included in Appendix A.

Findings

Groundwater Elevations and Flow Direction

Third Quarter 2022 groundwater elevations ranged from 239.65 feet to 241.24 feet, with the lowest elevation measured at MW110 located on the east edge of the Whittaker building garage. The groundwater flow directions are variable, and are generally to the south and to the west with components of flow to the southwest during the Third Quarter 2022 event. This local variability in groundwater flow direction is attributed to dewatering effects of the footing drains and stormwater sump below the northeast corner of the Whittaker building (Figure 2).

The inferred groundwater flow direction at the Site for the Third Quarter 2022 event and the measured seasonal variation in groundwater elevations are generally consistent with those recorded during previous sampling events occurring since construction of the Whittaker building in 2015 and 2016.

Groundwater flow direction at the Site prior to construction (in 2015) was generally to the northeast, consistent with topography of the neighborhood, based on groundwater elevations measured during four preconstruction monitoring events. Following construction of the Whittaker building and its footing drains and stormwater sump, generalized groundwater flow direction has reversed, and has been observed flowing generally to the south-southwest-southeast (radiating toward a subgrade sump that exists in the northeast corner of the Whittaker parking garage). Average seasonal Site-wide groundwater elevations also dropped relative to preconstruction levels since compliance groundwater monitoring began.

Groundwater Analytical Results

All monitoring wells, with the exception of MW115, have remained below MTCA Method A cleanup levels since Second Quarter 2018, but were not sampled during this event due to the Ecology-approved reduced sampling schedule. In MW115, the concentration of diesel-range TPH was below the MTCA Method A cleanup level. MW115 is completed in proximity to former dewatering wells RW03 and RW04, which consistently showed exceedances of diesel-range TPH between Second Quarter 2018 and First Quarter 2022, when they were decommissioned. This is the first monitoring result (of two) with concentrations in MW115 below the MTCA Method A cleanup level for diesel-range TPH since its installation in First Quarter 2022.

Diesel-range TPH was detected in MW115 at 220 µg/L, a reduction by more than half the concentration from the prior sampling result of 780 µg/L (First Quarter 2022). This seasonal variation in detected concentration has been a consistently observed pattern across the well network since the start of the monitoring period, with higher concentrations observed during wet seasons and lower concentrations observed during dry seasons. When evaluated collectively, the Site-wide diesel-range TPH concentrations show a generally decreasing trend; however, higher concentrations in wet seasons have continued to exceed the cleanup level.

Data Validation

Aspect completed a Stage 2A data validation on the data reported from Friedman and Bruya, Inc., in accordance with EPA guidance¹² and Ecology's guidance. A data validation report is attached as Appendix B.

Although determined to be acceptable for use, the following should be noted when reviewing the remaining diesel-range TPH detections from the Third Quarter 2022 sampling:

- The laboratory flagged all diesel-range TPH detections with an "X" to indicate that the sample chromatographic patterns did not resemble the fuel standard used for quantitation.

Validated data were submitted to Ecology's Environmental Information Management System (EIM) prior to the submittal of this report.

Recommendations

Contaminants of concern were detected at concentrations below the applicable MTCA Method A cleanup levels in groundwater at the one well monitored at the Site (MW115). Increased groundwater monitoring frequency and scope is recommended in order to more fully understand the benefit of installing MW115 in an area that historically appeared to have recalcitrant concentrations of hydrocarbons around large-diameter dewatering wells (which were never intended for final confirmation monitoring purposes). We recommend the following:

- Conducting the next sampling event in Fourth Quarter 2022, to include chemical testing of only MW115 to evaluate the diesel-range TPH concentrations under the wet season conditions (typically, when the highest concentrations have been detected). And, measure water levels at all ten compliance monitoring wells (MW101, MW104, MW105, MW108,

¹² United States Environmental Protection Agency, 2009, Guidance for Labeling Externally Validated Laboratory Analytical Data for Superfund Use, March 5, 2009.

MW109, MW110, MW111, MW112, MW113, and MW115). Fourth Quarter 2022 groundwater monitoring is scheduled to occur in December 2022.

- If the Fourth Quarter 2022 sampling of MW115 shows all contaminants below the MTCA cleanup levels, then Aspect will likely recommend continuing the quarterly monitoring frequency to pursue four consecutive quarters of compliance groundwater sampling for Site closure.
- Ecology has historically indicated that all Site wells will need to be sampled during the four consecutive quarters of compliance groundwater sampling to be eligible for Site closure. Because the other wells in the network have shown no exceedances during quarterly monitoring conducted since 2018, we recommend revisiting this item with Ecology and requesting that compliance data only be collected from MW115 (the only well that has shown exceedances since 2018).

Limitations

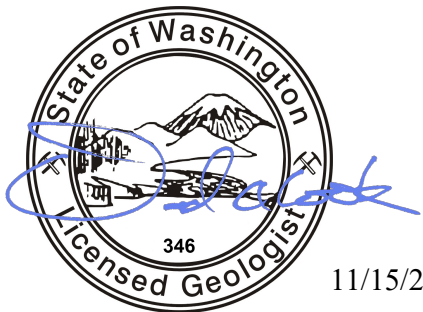
Work for this project was performed for LMI – West Seattle Holdings, LLC (Client), and this letter was prepared in accordance with generally accepted professional practices for the nature and conditions of work completed in the same or similar localities, at the time the work was performed. This letter does not represent a legal opinion. No other warranty, expressed or implied, is made.

All reports prepared by Aspect Consulting for the Client apply only to the services described in the Agreement(s) with the Client. Aspect Consulting’s original files/reports shall govern in the event of any dispute regarding the content of electronic documents furnished to others.

Please refer to Appendix D titled “Report Limitations and Guidelines for Use” for additional information governing the use of this report.

Sincerely,

Aspect consulting, LLC



11/15/2022

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- Attachments:
- Table 1 – Compliance Groundwater Monitoring Well Network
 - Table 2 – Summary of Compliance Groundwater Monitoring Results
 - Figure 1 – Site Location
 - Figure 2 – Compliance Well Network and Groundwater Elevation Contours
 - Figure 3 – Groundwater Analytical Results
 - Appendix A – Laboratory Analytical Reports
 - Appendix B – Data Validation Report
 - Appendix C – Field Forms
 - Appendix D – Report Limitations and Guidelines for Use

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TABLES

Table 1. Compliance Groundwater Monitoring Well Network

Project 160328, SKS Shell Station Site, Seattle, Washington

Well Name ¹	Top of Casing Elevation (ft. NAVD88)	Well Diameter (in.)	Screen Length (ft.)	Total Depth (ft. bgs)	Screened Interval				Status	Last Accessed	Third Quarter 2022 Water Levels ^{2, 3}	
					Top Depth (ft. bgs)	Bottom Depth (ft. bgs)	Top Elevation (ft. NAVD88)	Bottom Elevation (ft. NAVD88)			Depth to Water (ft. BTOC)	Elevation (ft. NAVD88)
MW101	269.54	2	10	30	20 to 30	249.54 to 239.54	Existing	Sep-22	27.55	241.99		
MW104	269.37	2	10	36.5	20 to 30	249.37 to 239.37	Existing	Sep-22	28.81	240.56		
MW105	269.30	2	10	36.5	22 to 32	247.30 to 237.30	Existing	Sep-22	28.36	240.94		
MW108	247.83	0.75	10	12.5	2.5 to 12.5	245.33 to 235.33	Existing	Sep-22	7.5	240.33		
MW109	247.92	0.75	10	13	3 to 13	244.92 to 234.92	Existing	Sep-22	7.72	240.20		
MW110	248.21	1	10	12	2 to 12	246.21 to 236.21	Existing	Sep-22	8.15	240.06		
MW111	270.62	2	15	35	20 to 35	250.62 to 235.62	Existing	Sep-22	29.98	240.64		
MW112	269.32	2	10	36	26 to 36	243.32 to 233.32	Existing	Mar-22	--	--		
MW113	248.06	1	15	20	5 to 20	243.06 to 228.06	Existing	Sep-22	7.9	240.16		
MW115	269.29	2	10	40	30 to 40	239.29 to 229.29	Existing	Sep-22	28.7	240.59		

Notes

¹This table is not an all-inclusive list of all monitoring wells located historically on the Site. Only wells that have been used in post-construction compliance groundwater monitoring are shown. For full list of historical Site groundwater monitoring wells, see the Cleanup Action Report (SES, 2016).

²Synoptic water levels were measured on September 29, 2022.

³MW112 could not be accessed during Q3 2022 due to lack of traffic control.

BTOC = below Top of Casing (North)

ft = feet

NAVD88 = North American Vertical Datum 1988

in = inches

bgs = below ground surface

-- = not measured

Table 2. Summary of Compliance Groundwater Monitoring Results

Project No. 160328, SKS Shell Station Site, Seattle, Washington

Sample Location ¹	Sample Date	Depth to Water (ft. BTOC)	Groundwater Elevation (ft. NAVD88)	BTEX				Total Petroleum Hydrocarbons (TPH)			TPH with Silica Gel			
				Analytes	Benzene	Toluene	Ethylbenzene	Total Xylenes	Gasoline-Range Organics	Diesel-Range Organics	Motor Oil-Range Organics	Diesel-Range Organics	Motor Oil-Range Organics	
				Unit	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	
				MTCA Method A Cleanup Level	5	1000	700	1000	1000 / 800	500	500	500	500	
MW101	3/25/2022	27.55	241.99	< 1 U	< 1 U	< 1 U	< 1 U	< 100 U	120 X	< 250 U	--	--		
MW104	03/17/2016	26.41	242.94	1.2	1.8	2.2	5.7	480	1200 X	< 300 U	--	--		
	06/24/2016	25.16	244.19	2.5	2	3	9.5	940	3200	< 250 U	--	--		
	09/28/2016	25.55	243.80	7.2	< 1 U	3.7	7.4	940	4000 X	340 X	--	--		
	12/23/2016	27.28	242.07	2.1	2.1	17	27	2000	16000	380 X	180	< 250 U		
	03/17/2017	27.55	241.80	< 1 U	< 1 U	8.5	10	1400	7900	< 400 U	290 X	< 400 U		
	06/15/2017	27.92	241.45	< 1 U	< 1 U	4	3.1	700	3000	< 300 U	370	< 250 U		
	9/14/2017	28.21	241.16	< 1 U	< 1 U	1.3	< 3 U	460	2200	< 300 U	230 X	< 250 U		
	12/12/2017	28.86	240.51	< 1 U	1.1	1.3	< 3 U	340	780 X	< 350 U	--	--		
	3/22/2018	28.88	240.49	< 1 U	< 1 U	< 1 U	< 3 U	220	590 X	< 250 U	--	--		
	06/21/2018	28.96	240.41	< 1 U	< 1 U	< 1 U	< 3 U	130	720	< 350 U	--	--		
	09/17/2018	29.27	240.10	< 1 U	< 1 U	< 1 U	< 3 U	< 100 U	480	< 350 U	--	--		
	12/18/2018	29.02	240.35	< 1 U	< 1 U	< 1 U	< 3 U	< 100 U	390	< 250 U	--	--		
	03/14/2019	29.25	240.12	< 1 U	< 1 U	< 1 U	< 3 U	170	690 X	< 300 U	--	--		
	06/06/2019	29.32	240.05	< 1 U	< 1 U	< 1 U	< 3 U	210	750 X	290	--	--		
	09/12/19	Dry	--	--	Insufficient water for sampling								--	--
	12/19/2019	29.01	240.36	< 1 U	< 1 U	< 1 U	< 3 U	< 100 U	310 X	300 X	--	--		
	04/22/2020	28.78	240.59	< 1 U	< 1 U	< 1 U	< 3 U	< 100 U	200 X	< 250 U	--	--		
06/30/2020	29.50	239.87	< 1 U	< 1 U	< 1 U	< 3 U	< 100 U	210 X	< 250 U	--	--			
9/22/2020	29.14	240.23	< 1 U	< 1 U	< 1 U	< 3 U	< 100 U	380 X	< 300 U	--	--			
12/15/2020	29.16	240.21	< 1 U	< 1 U	< 1 U	< 3 U	< 100 U	140 X	< 320 U	--	--			
3/8/2021	29.35	240.02	< 1 U	< 1 U	< 1 U	< 3 U	< 100 U	89 X	< 250 U	--	--			
3/25/2022	28.81	240.56	< 1 U	< 1 U	< 1 U	< 3 U	< 100 U	58 X	< 250 U	--	--			
MW105	06/13/2017	27.36	241.94	< 1 U	< 1 U	< 1 U	< 3 U	< 100 U	< 50 U	< 250 U	--	--		
	9/13/2017	27.96	241.34	< 1 U	< 1 U	< 1 U	< 3 U	< 100 U	< 60 U	< 300 U	--	--		
	12/12/2017	28.41	240.89	< 1 U	< 1 U	< 1 U	< 3 U	< 100 U	< 50 U	< 250 U	--	--		
	3/22/2018	28.45	240.85	< 1 U	< 1 U	< 1 U	< 3 U	< 100 U	< 65 U	< 320 U	--	--		
	06/21/2018	28.56	240.74	< 1 U	< 1 U	< 1 U	< 3 U	< 100 U	< 50 U	< 250 U	--	--		
	09/17/2018	28.96	240.34	< 1 U	< 1 U	< 1 U	< 3 U	< 100 U	< 50 U	< 250 U	--	--		
	12/18/2018	28.9	240.40	< 1 U	< 1 U	< 1 U	< 3 U	< 100 U	< 50 U	< 250 U	--	--		
	03/14/2019	28.66	240.64	< 1 U	< 1 U	< 1 U	< 3 U	< 100 U	< 50 U	< 250 U	--	--		
	06/06/2019	29.06	240.24	< 1 U	< 1 U	< 1 U	< 3 U	< 100 U	96 X	< 250 U	--	--		
	09/12/2019	29.37	239.93	< 1 U	< 1 U	< 1 U	< 3 U	< 100 U	< 50 U	< 250 U	--	--		
	12/18/2019	28.97	240.33	< 1 U	< 1 U	< 1 U	< 3 U	< 100 U	< 50 U	< 250 U	--	--		
	04/21/2020	28.25	241.05	< 1 U	< 1 U	< 1 U	< 3 U	< 100 U	< 50 U	< 250 U	--	--		
	06/29/2020	28.36	240.94	< 1 U	< 1 U	< 1 U	< 3 U	< 100 U	< 50 U	< 250 U	--	--		
	9/21/2020	28.77	240.53	< 1 U	< 1 U	< 1 U	< 3 U	< 100 U	< 50 U	< 250 U	--	--		
12/14/2020	28.82	240.48	< 1 U	< 1 U	< 1 U	< 3 U	< 100 U	< 65 U	< 320 U	--	--			
3/8/2021	29.10	240.20	< 1 U	< 1 U	< 1 U	< 3 U	< 100 U	< 50 U	< 250 U	--	--			
3/25/2022	28.36	240.94	< 1 U	< 1 U	< 1 U	< 3 U	< 100 U	< 50 U	< 250 U	--	--			

Table 2. Summary of Compliance Groundwater Monitoring Results

Project No. 160328, SKS Shell Station Site, Seattle, Washington

Sample Location ¹	Sample Date	Depth to Water (ft. BTOC)	Groundwater Elevation (ft. NAVD88)	BTEX				Total Petroleum Hydrocarbons (TPH)			TPH with Silica Gel		
				Analytes	Benzene	Toluene	Ethylbenzene	Total Xylenes	Gasoline-Range Organics	Diesel-Range Organics	Motor Oil-Range Organics	Diesel-Range Organics	Motor Oil-Range Organics
				Unit	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
				MTCA Method A Cleanup Level	5	1000	700	1000	1000 / 800	500	500	500	500
MW108	03/17/2016	5.52	--	< 1 U	< 1 U	< 1 U	< 3 U	< 100 U	93 X	< 300 U	--	--	
	06/24/2016	3.33	--	< 1 U	< 1 U	< 1 U	< 3 U	< 100 U	< 50 U	< 250 U	--	--	
	09/28/2016	3.85	--	< 1 U	< 1 U	< 1 U	< 3 U	< 100 U	< 60 U	< 300 U	--	--	
	12/23/2016	6.56	--	< 1 U	< 1 U	< 1 U	< 3 U	< 100 U	94 X	< 350 U	< 70 U	< 350 U	
	03/03/2017	6.64	--	< 1 U	< 1 U	< 1 U	< 3 U	< 100 U	< 80 U	< 400 U	< 80 U	< 400 U	
	06/14/2017	7.06	240.77	< 1 U	< 1 U	< 1 U	< 3 U	< 100 U	140 X	< 250 U	--	--	
	9/14/2017	6.69	241.14	< 1 U	< 1 U	< 1 U	< 3 U	< 100 U	160 X	< 250 U	--	--	
	12/12/2017	7.7	240.13	< 1 U	< 1 U	< 1 U	< 3 U	< 100 U	< 50 U	< 250 U	--	--	
	03/23/2018	7.44	240.39	< 1 U	< 1 U	< 1 U	< 3 U	< 100 U	71 X	< 250 U	--	--	
	06/21/2018	7.75	240.08	< 1 U	< 1 U	< 1 U	< 3 U	< 100 U	150 X	< 450 U	--	--	
	09/17/2018	7.83	240.00	< 1 U	< 1 U	< 1 U	< 3 U	< 100 U	110	< 480 U	--	--	
	12/18/2018	7.98	239.85	< 1 U	< 1 U	< 1 U	< 3 U	< 100 U	< 50 U	< 250 U	--	--	
	03/14/2019	7.78	240.05	< 1 U	< 1 U	< 1 U	< 3 U	< 100 U	680 X	< 350 U	--	--	
	06/06/2019	7.87	239.96	< 1 U	< 1 U	< 1 U	< 3 U	< 100 U	590 X	< 250 U	--	--	
	09/12/2019	8.28	239.55	< 1 U	< 1 U	< 1 U	< 3 U	100	1200 X	< 320 U	--	--	
	12/18/2019	7.88	239.95	< 1 U	< 1 U	< 1 U	< 3 U	< 100 U	280	< 250 U	--	--	
	04/22/2020	7.58	240.25	< 1 U	< 1 U	< 1 U	< 3 U	< 100 U	160 X	< 250 U	--	--	
	06/30/2020	11.00	236.83	< 1 U	< 1 U	< 1 U	< 3 U	< 100 U	120 X	< 250 U	--	--	
9/22/2020	8.06	239.77	< 1 U	< 1 U	< 1 U	< 3 U	< 100 U	280 X	< 300 U	--	--		
12/15/2020	8.13	239.70	< 1 U	< 1 U	< 1 U	< 3 U	< 100 U	350 X	< 250 U	--	--		
3/8/2021	8.04	239.79	< 1 U	< 1 U	< 1 U	< 3 U	< 100 U	200 X	< 250 U	--	--		
3/25/2022	7.50	240.33	< 1 U	< 1 U	< 1 U	< 3 U	< 100 U	77 X	< 250 U	--	--		
MW109	03/17/2016	5.42	--	< 1 U	< 1 U	< 1 U	< 3 U	< 100 U	97 X	< 250 U	--	--	
	06/24/2016	3.35	--	< 1 U	< 1 U	< 1 U	< 3 U	< 100 U	160 X	< 250 U	--	--	
	09/28/2016	3.96	--	< 1 U	< 1 U	< 1 U	< 3 U	< 100 U	260 X	< 250 U	--	--	
	12/23/2016	6.59	--	< 1 U	< 1 U	< 1 U	< 3 U	250	430 X	< 250 U	< 50 U	< 250 U	
	03/03/2017	6.7	--	< 1 U	< 1 U	1.2	< 3 U	370	490 X	< 250 U	55 X	< 250 U	
	06/14/2017	6.87	241.05	< 1 U	< 1 U	< 1 U	< 3 U	220	330	< 250 U	--	--	
	09/14/2017	6.84	241.08	< 1 U	< 1 U	< 1 U	< 3 U	< 100 U	140 X	< 250 U	--	--	
	12/12/2017	7.69	240.23	< 1 U	1.1	< 1 U	< 3 U	150	< 50 U	< 250 U	--	--	
	03/23/2018	7.75	240.17	< 1 U	< 1 U	1.3	< 3 U	190	110 X	< 250 U	--	--	
	06/21/2018	7.87	240.05	< 1 U	1.2	< 1 U	< 3 U	190	200	< 250 U	--	--	
	09/17/2018	8.05	239.87	< 1 U	< 1 U	1.8	< 3 U	150	110 X	< 250 U	--	--	
	12/18/2018	7.61	240.31	< 1 U	< 1 U	< 1 U	< 3 U	< 100 U	61 X	< 250 U	--	--	
	03/14/2019	7.94	239.98	< 1 U	< 1 U	< 1 U	< 3 U	140	< 60 U	< 300 U	--	--	
	06/06/2019	8.1	239.82	< 1 U	< 1 U	< 1 U	< 3 U	< 100 U	140 X	< 250 U	--	--	
	09/12/2019	8.39	239.53	< 1 U	< 1 U	< 1 U	< 3 U	110	110 X	< 250 U	--	--	
	12/18/2019	7.67	240.25	< 1 U	< 1 U	< 1 U	< 3 U	< 100 U	< 50 U	< 250 U	--	--	
	04/22/2020	7.84	240.08	< 1 U	< 1 U	< 1 U	< 3 U	< 100 U	100 X	< 250 U	--	--	
	06/30/2020	7.38	240.54	< 1 U	< 1 U	< 1 U	< 3 U	< 100 U	< 50 U	< 250 U	--	--	
9/22/2020	7.89	240.03	< 1 U	< 1 U	< 1 U	< 3 U	< 100 U	70 X	< 250 U	--	--		
12/15/2020	8.03	239.89	< 1 U	< 1 U	< 1 U	< 3 U	< 100 U	69 X	< 260 U	--	--		
3/25/2022	7.72	240.2	< 1 U	< 1 U	< 1 U	< 3 U	< 100 U	< 50 U	< 250 U	--	--		

Table 2. Summary of Compliance Groundwater Monitoring Results

Project No. 160328, SKS Shell Station Site, Seattle, Washington

Sample Location ¹	Sample Date	Depth to Water (ft. BTOC)	Groundwater Elevation (ft. NAVD88)	BTEX				Total Petroleum Hydrocarbons (TPH)			TPH with Silica Gel		
				Analytes	Benzene	Toluene	Ethylbenzene	Total Xylenes	Gasoline-Range Organics	Diesel-Range Organics	Motor Oil-Range Organics	Diesel-Range Organics	Motor Oil-Range Organics
				Unit	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
				MTCA Method A Cleanup Level	5	1000	700	1000	1000 / 800	500	500	500	500
MW110	03/17/2016	5.7	--	< 1 U	< 1 U	< 1 U	< 3 U	< 100 U	< 50 U	< 250 U	--	--	
	06/24/2016	3.56	--	< 1 U	< 1 U	< 1 U	< 3 U	< 100 U	100 X	< 250 U	--	--	
	09/28/2016	4.19	--	< 1 U	< 1 U	< 1 U	< 3 U	< 100 U	590 X	440	--	--	
	12/23/2016	6.96	--	2.3	< 1 U	9.7	18	500	1200	< 300 U	68 X	< 300 U	
	03/03/2017	7.57	--	2.1	< 1 U	9.3	4.7	570	1000 X	< 250 U	110 X	< 250 U	
	06/14/2017	7.78	240.43	< 1 U	< 1 U	2	< 3 U	260	520	< 250 U	--	--	
	9/14/2017	7.44	240.77	< 1 U	< 1 U	< 1 U	< 3 U	< 100 U	150 X	< 250 U	--	--	
	12/12/2017	8.02	240.19	< 1 U	< 1 U	< 1 U	< 3 U	< 100 U	99 X	< 250 U	--	--	
	03/23/2018	8.05	240.16	--	--	--	--	--	73 X	< 250 U	--	--	
	06/21/2018	8.15	240.06	< 1 U	< 1 U	< 1 U	< 3 U	< 100 U	96 X	< 250 U	--	--	
	09/17/2018	8.4	239.81	< 1 U	< 1 U	< 1 U	< 3 U	< 100 U	< 50 U	< 250 U	--	--	
	12/18/2018	7.98	240.23	< 1 U	< 1 U	< 1 U	< 3 U	< 100 U	< 50 U	< 250 U	--	--	
	03/14/2019	8.2	240.01	< 1 U	< 1 U	< 1 U	< 3 U	< 100 U	74 X	< 300 U	--	--	
	06/06/2019	8.3	239.91	< 1 U	< 1 U	< 1 U	< 3 U	< 100 U	91 X	< 250 U	--	--	
	09/12/2019	9.03	239.18	< 1 U	< 1 U	< 1 U	< 3 U	< 100 U	73 X	< 180 U	--	--	
	12/18/2019	7.68	240.53	< 1 U	< 1 U	< 1 U	< 3 U	< 100 U	< 50 U	< 250 U	--	--	
	04/22/2020	8.15	240.06	< 1 U	< 1 U	< 1 U	< 3 U	< 100 U	250 X	< 250 U	--	--	
	06/30/2020	7.52	240.69	< 1 U	< 1 U	< 1 U	< 3 U	< 100 U	< 50 U	< 250 U	--	--	
9/22/2020	8.26	239.95	< 1 U	< 1 U	< 1 U	< 3 U	< 100 U	< 50 U	< 250 U	--	--		
12/15/2020	8.35	239.86	< 1 U	< 1 U	< 1 U	< 3 U	< 100 U	51 X	< 250 U	--	--		
3/25/2022	8.15	240.06	< 1 U	< 1 U	< 1 U	< 3 U	< 100 U	< 50 U	< 250 U	--	--		
MW111	10/09/2018	30.51	240.11	< 1 U	< 1 U	< 1 U	< 3 U	< 100 U	55 X	< 250 U	--	--	
	12/18/2018	29.9	240.72	< 1 U	< 1 U	< 1 U	< 3 U	< 100 U	< 50 U	< 250 U	--	--	
	03/14/2019	30.15	240.47	< 1 U	< 1 U	< 1 U	< 3 U	< 100 U	83 X	< 250 U	--	--	
	06/06/2019	30.5	240.12	< 1 U	< 1 U	< 1 U	< 3 U	< 100 U	84 X	< 250 U	--	--	
	09/13/2019	30.72	239.9	< 1 U	< 1 U	< 1 U	< 3 U	< 100 U	< 50 U	< 250 U	--	--	
	12/18/2019	30.26	240.36	< 1 U	< 1 U	< 1 U	< 3 U	< 100 U	94 X	< 280 U	--	--	
	04/22/2020	30.11	240.51	< 1 U	< 1 U	< 1 U	< 3 U	< 100 U	< 50 U	< 250 U	--	--	
	06/30/2020	30.09	240.53	< 1 U	< 1 U	< 1 U	< 3 U	< 100 U	< 50 U	< 250 U	--	--	
	9/22/2020	30.32	240.3	< 1 U	< 1 U	< 1 U	< 3 U	< 100 U	54 X	< 250 U	--	--	
12/15/2020	30.37	240.25	< 1 U	< 1 U	< 1 U	< 3 U	< 100 U	< 50 U	< 250 U	--	--		
3/25/2022	29.98	240.64	< 1 U	< 1 U	< 1 U	< 3 U	< 100 U	< 50 U	< 250 U	--	--		
MW112	03/14/2019	28.88	240.44	< 1 U	< 1 U	< 1 U	< 3 U	< 100 U	58 X	< 250 U	--	--	
	06/06/2019	29.15	240.17	< 1 U	< 1 U	< 1 U	< 3 U	< 100 U	59 X	< 250 U	--	--	
	09/12/2019	29.44	239.88	< 1 U	< 1 U	< 1 U	< 3 U	< 100 U	< 50 U	< 250 U	--	--	
	12/18/2019	28.65	240.67	< 1 U	< 1 U	< 1 U	< 3 U	< 100 U	58 X	< 250 U	--	--	
	04/21/2020	28.78	240.54	< 1 U	< 1 U	< 1 U	< 3 U	< 100 U	< 50 U	< 250 U	--	--	
	06/29/2020	28.63	240.69	< 1 U	< 1 U	< 1 U	< 3 U	< 100 U	< 50 U	< 250 U	--	--	
3/25/2022	28.69	240.81	< 1 U	< 1 U	< 1 U	< 3 U	< 100 U	< 50 U	< 250 U	--	--		

Table 2. Summary of Compliance Groundwater Monitoring Results

Project No. 160328, SKS Shell Station Site, Seattle, Washington

Sample Location ¹	Sample Date	Depth to Water (ft. BTOC)	Groundwater Elevation (ft. NAVD88)	BTEX				Total Petroleum Hydrocarbons (TPH)			TPH with Silica Gel		
				Analytes	Benzene	Toluene	Ethylbenzene	Total Xylenes	Gasoline-Range Organics	Diesel-Range Organics	Motor Oil-Range Organics	Diesel-Range Organics	Motor Oil-Range Organics
				Unit	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
				MTCA Method A Cleanup Level	5	1000	700	1000	1000 / 800	500	500	500	500
MW113	03/23/2018	7.68	240.38	--	--	--	--	--	93 X	< 250 U	--	--	
	06/21/2018	7.81	240.25	< 1 U	< 1 U	< 1 U	< 3 U	< 100 U	71 X	< 250 U	--	--	
	09/17/2018	8.05	240.01	< 1 U	< 1 U	< 1 U	< 3 U	< 100 U	< 50 U	< 250 U	--	--	
	12/18/2018	7.58	240.48	< 1 U	< 1 U	< 1 U	< 3 U	< 100 U	100 X	< 250 U	--	--	
	03/14/2019	7.98	240.08	< 1 U	< 1 U	< 1 U	< 3 U	< 100 U	79 X	< 250 U	--	--	
	06/06/2019	8.13	239.93	< 1 U	< 1 U	< 1 U	< 3 U	< 100 U	89 X	< 250 U	--	--	
	09/12/2019	8.31	239.75	< 1 U	< 1 U	< 1 U	< 3 U	< 100 U	87 X	< 250 U	--	--	
	12/18/2019	8.04	240.02	< 1 U	< 1 U	< 1 U	< 3 U	< 100 U	80 X	< 250 U	--	--	
	04/21/2020	7.94	240.12	< 1 U	< 1 U	< 1 U	< 3 U	< 100 U	< 50 U	< 250 U	--	--	
	06/30/2020	7.86	240.2	< 1 U	< 1 U	< 1 U	< 3 U	< 100 U	58 X	< 250 U	--	--	
3/25/2022	7.90	240.16	< 1 U	< 1 U	< 1 U	< 3 U	< 100 U	55 X	< 250 U	--	--		
MW115	3/25/2022	28.70	240.99	< 1 U	< 1 U	< 1 U	< 3 U	< 100 U	780 X	< 250 U	780	< 250 U	
	9/29/2022	29.31	240.38	< 1 U	< 1 U	< 1 U	< 3 U	< 100 U	220 X	< 300 U	--	--	
RW03	03/17/2016	26.23	--	41	6.9	51	260	2300	1400 X	< 250 U	--	--	
	06/24/2016	25.4	--	27	4.4	27	59	1600	3600	< 250 U	--	--	
	09/28/2016	25.71	--	6.7	< 1 U	20	45	1100	2400 X	< 300 U	--	--	
	12/23/2016	26.77	--	470	16	380	750	9000	11000	< 300 U	720 X	< 300 U	
	03/02/2017	27.22	--	150	< 10 U	220	190	4900	11000 X	< 250 U	880 X	< 250 U	
	06/14/2017	27.91	241.59	7	< 1 U	32	11	1300	1500	< 250 U	320 X	< 250 U	
	09/14/2017	28.3	241.2	2.8	1.3	15	4.5	560	690 X	< 300 U	140 X	< 300 U	
	12/12/2017	28.82	240.68	8.8	17	39	170	2500	1000 X	< 300 U	--	--	
	03/23/2018	28.85	240.65	3	5.2	29	140	2100	760 X	< 250 U	--	--	
	06/22/2018	28.94	240.56	< 1 U	2.3	31	34	730	740 X	< 250 U	--	--	
	09/17/2018	29.28	240.22	< 1 U	< 1 U	11	15	370	430	< 250 U	--	--	
	12/18/2018	29.05	240.45	6.5	5	75	250	2800	1600	< 250 U	--	--	
	03/15/2019	29.05	240.45	1.9	1.7	46	140	1700	730 X	< 250 U	--	--	
	06/07/2019	29.35	240.15	< 1 U	< 1 U	14	4.3	410	680 X	< 250 U	--	--	
	09/13/2019	29.81	239.69	< 1 U	< 1 U	1.4	3	270	360 X	< 250 U	--	--	
	12/19/2019	29.13	240.37	2.4	< 1 U	36	100	2200	1400 X	< 250 U	--	--	
	04/22/2020	28.58	240.92	< 1 U	< 1 U	77	78	1400	700 X	< 250 U	--	--	
	06/29/2020	28.46	241.04	1.7	1.3	75	41	930	1200 X	< 250 U	--	--	
	9/21/2020	29.13	240.37	< 1 U	1.2	30	4.3	800	780 X	< 250 U	--	--	
12/14/2020	29.25	240.25	< 1 U	1.5	36	11	680	560 X	< 250 U	--	--		
3/8/2021 ²	28.48	241.02	--	--	--	--	--	--	--	--	--	--	

Table 2. Summary of Compliance Groundwater Monitoring Results

Project No. 160328, SKS Shell Station Site, Seattle, Washington

Sample Location ¹	Sample Date	Depth to Water (ft. BTOC)	Groundwater Elevation (ft. NAVD88)	BTEX				Total Petroleum Hydrocarbons (TPH)			TPH with Silica Gel		
				Analytes	Benzene	Toluene	Ethylbenzene	Total Xylenes	Gasoline-Range Organics	Diesel-Range Organics	Motor Oil-Range Organics	Diesel-Range Organics	Motor Oil-Range Organics
				Unit	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
				MTCA Method A Cleanup Level	5	1000	700	1000	1000 / 800	500	500	500	500
RW04	06/14/2017	27.62	241.6	2.5	< 1 U	16	< 3 U	790	400	< 250 U	--	--	
	09/14/2017	27.93	241.29	6.4	< 1 U	26	21	400	330 X	< 250 U	--	--	
	12/12/2017	28.55	240.67	3	1.1	12	5.2	360	200 X	< 300 U	--	--	
	03/22/2018	28.57	240.65	1.5	< 1 U	14	< 3 U	450	500 X	< 250 U	--	--	
	06/21/2018	28.6	240.62	< 1 U	2.6	4.8	4.5	360	400 X	< 250 U	--	--	
	09/17/2018	29.08	240.14	< 1 U	< 1 U	1.5	< 3 U	130	120	< 250 U	--	--	
	12/18/2018	28.74	240.48	< 1 U	< 1 U	1.1	< 3 U	160	510	< 250 U	--	--	
	03/15/2019	28.76	240.46	< 1 U	< 1 U	1.9	< 3 U	300	310 X	< 250 U	--	--	
	06/07/2019	29.05	240.17	< 1 U	< 1 U	< 1 U	< 3 U	240	470 X	< 250 U	--	--	
	09/13/2019	29.44	239.78	< 1 U	< 1 U	< 1 U	< 3 U	180	290 X	< 250 U	--	--	
	12/18/2019	28.86	240.36	< 1 U	< 1 U	< 1 U	< 3 U	160	250 X	< 250 U	--	--	
	04/22/2020	28.34	240.88	2.9	1.2	83	36	1400	700 X	< 250 U	--	--	
	06/29/2020	28.3	240.92	1.5	< 1 U	34	< 3 U	900	730 X	< 250 U	--	--	
	9/21/2020	28.85	240.37	< 1 U	< 1 U	4.9	< 3 U	420	340 X	< 250 U	--	--	
12/14/2020	28.96	240.26	< 1 U	1.7	3.2	< 3 U	420	750 X	< 250 U	--	--		
3/8/2021 ²	28.21	241.01	--	--	--	--	--	--	--	--	--		
RW05	06/14/2017	27.64	241.45	< 1 U	< 1 U	4.4	< 3 U	400	470	< 250 U	--	--	
	09/14/2017	27.91	241.18	< 1 U	1.2	1.5	< 3 U	280	300 X	< 300 U	--	--	
	12/12/2017	28.54	240.55	< 1 U	1.3	1.5	< 3 U	230	170 X	< 300 U	--	--	
	03/22/2018	28.56	240.53	< 1 U	< 1 U	1.4	< 3 U	180	140 X	< 260 U	--	--	
	06/21/2018	28.63	240.46	< 1 U	1.4	1.4	< 3 U	140	180 X	< 250 U	--	--	
	09/17/2018	28.96	240.13	< 1 U	< 1 U	2.1	< 3 U	140	140	< 250 U	--	--	
	12/18/2018	28.75	240.34	< 1 U	< 1 U	1.4	< 3 U	110	160 X	< 250 U	--	--	
	03/14/2019	28.74	240.35	< 1 U	< 1 U	< 1 U	< 3 U	< 100 U	120 X	< 250 U	--	--	
	06/06/2019	29.00	240.09	< 1 U	< 1 U	< 1 U	< 3 U	< 100 U	99 X	< 250 U	--	--	
	09/12/2019	29.33	239.76	< 1 U	< 1 U	< 1 U	< 3 U	< 100 U	190 X	< 250 U	--	--	
	12/19/2019	28.75	240.34	< 1 U	< 1 U	< 1 U	< 3 U	< 100 U	130 X	< 250 U	--	--	
	04/21/2020	28.43	240.66	< 1 U	< 1 U	< 1 U	< 3 U	140	420 X	< 250 U	--	--	
	06/30/2020	28.48	240.61	< 1 U	< 1 U	1.5	< 3 U	160	230 X	< 250 U	--	--	
	9/21/2020	28.80	240.29	< 1 U	< 1 U	< 1 U	< 3 U	100	150 X	< 250 U	--	--	
12/14/2020	28.90	240.19	< 1 U	< 1 U	1.3	< 3 U	130	190 X	< 250 U	--	--		
3/8/2021 ²	28.31	240.78	--	--	--	--	--	--	--	--	--		

Table 2. Summary of Compliance Groundwater Monitoring Results

Project No. 160328, SKS Shell Station Site, Seattle, Washington

Notes

Bold = indicates concentrations of the analyte detected above the reporting limits.

Purple shaded = indicates concentration of the analyte detected above the Model Toxics Control Act (MTCA) Method A Cleanup Level

¹This table is not an all-inclusive list of all monitoring wells located at the Site historically. Only compliance monitoring wells that are currently being accessed for quarterly compliance groundwater sampling are included in this table. Further, Table 2 only presents data from the post-cleanup compliance monitoring events for each well shown. Refer to the Cleanup Action Report (SES, 2016) and the Fourth Quarter 2019 Compliance Groundwater Monitoring Report (SES, 2019) for a full list of all historical Site wells and groundwater analytical data from samples collected prior to the start of compliance monitoring.

²Samples showed residual impacts from January 2021 injections pilot study and were not sampled. Wells were decommissioned in January 2021.

U = indicates analyte not detected at or above reporting limit shown.

J = indicates that the reported or calculated concentration is an estimate.

X = chromatographic pattern does not match fuel standard used for quantitation.

E = result exceeded calibration range. Result usable for qualitative analysis of analyte presence, but numeric value should not be included in quantitate analysis.

ft = feet

BTOC = below top of casing (north)

NAVD88 = North American Vertical Datum 1988

ug/L = micrograms per liter

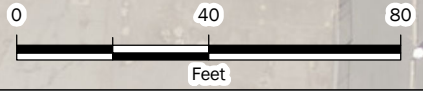
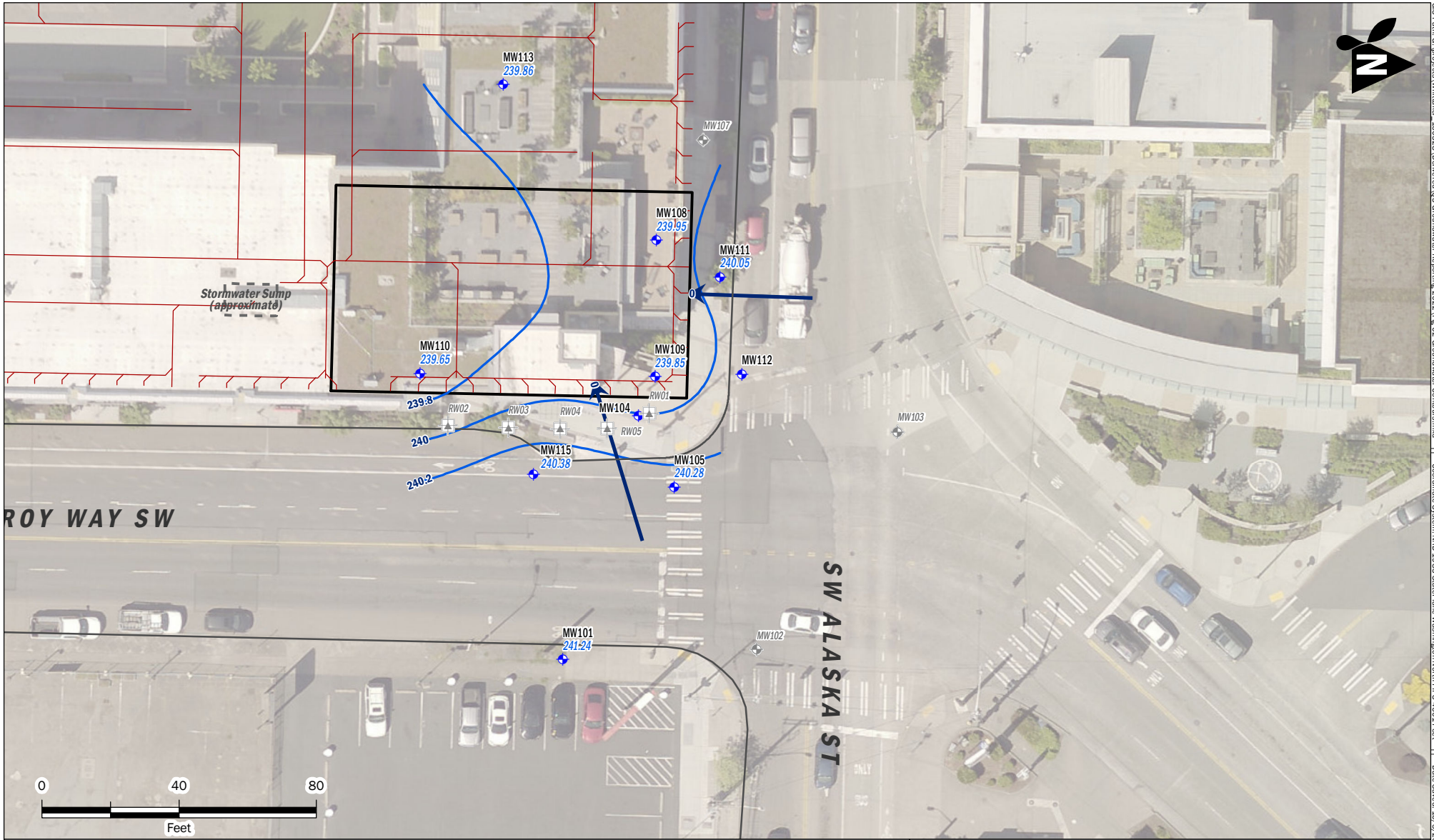
FIGURES



Site Location
 Q3 2022 Groundwater Monitoring Report
 SKS Shell Station Site
 3901 Southwest Alaska Street
 Seattle, Washington

	SEPT-2022	BY: SBM / KB	FIGURE NO. 1
	PROJECT NO. 160328	REVISD BY: ALC / RAP / NLK	

GIS Path: G:\projects\Whittaker_160328\Delivered\Q3 Groundwater Report\2022\FI-01_Victory_Map.mxd | Coordinate System: NAD 1983 StatePlane Washington North FIPS 4601 Feet | Date Saved: 10/3/2022 | User: mcbodie | Print Date: 10/3/2022



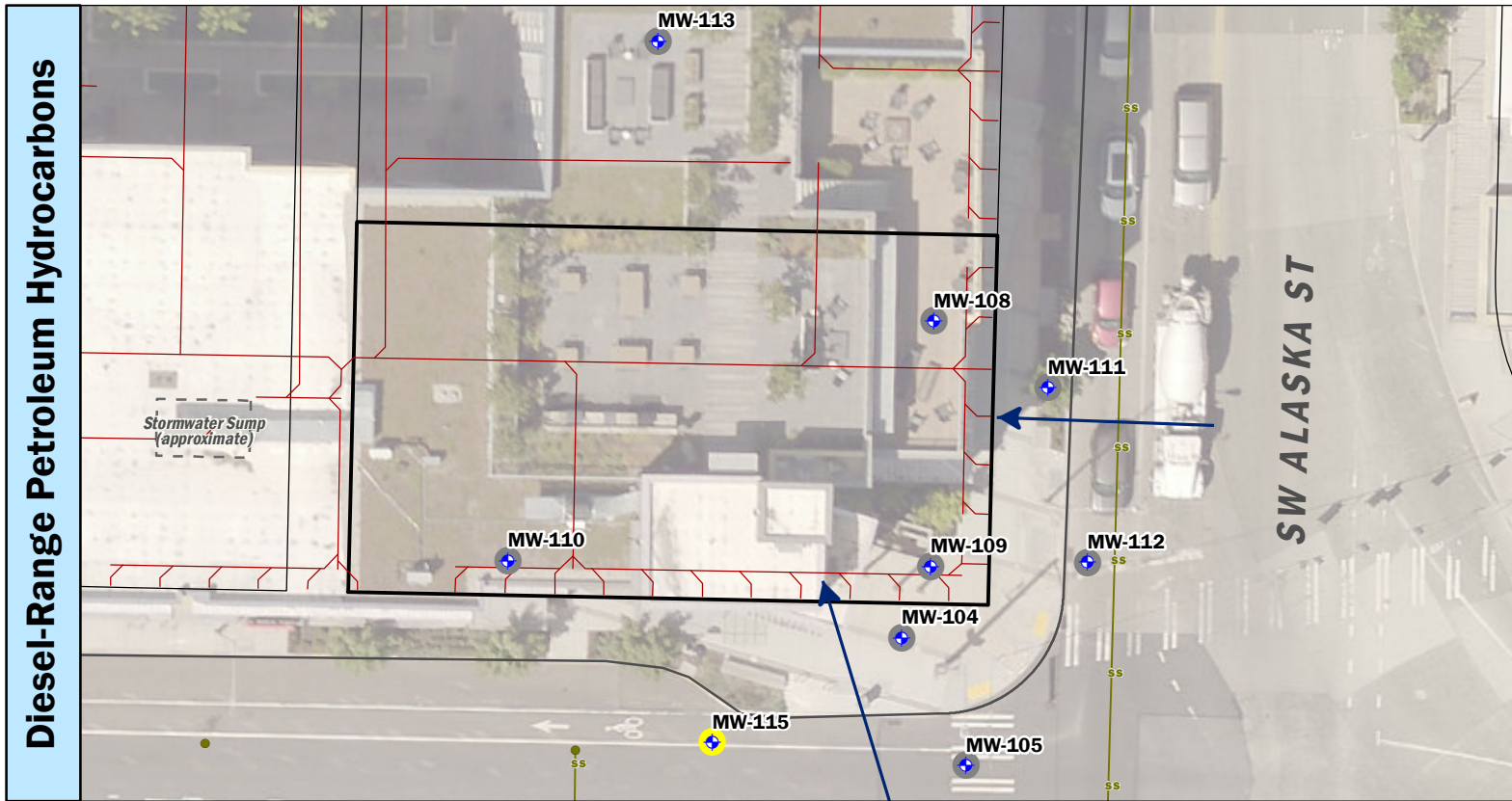
<p>Exploration Name</p> <p>MW113 239.8</p> <p>Groundwater Elevation (ft)</p>	<p>Monitoring Well</p> <p>Decommissioned Monitoring Well</p> <p>Decommissioned Remediation Well</p> <p>Footing Drain</p> <p>Sidewalk Edge</p>	<p>Groundwater Elevation Contour</p> <p>Groundwater Flow Direction</p> <p>SKS Shell Property</p>
--	---	--

Note:
- All features shown are approximate

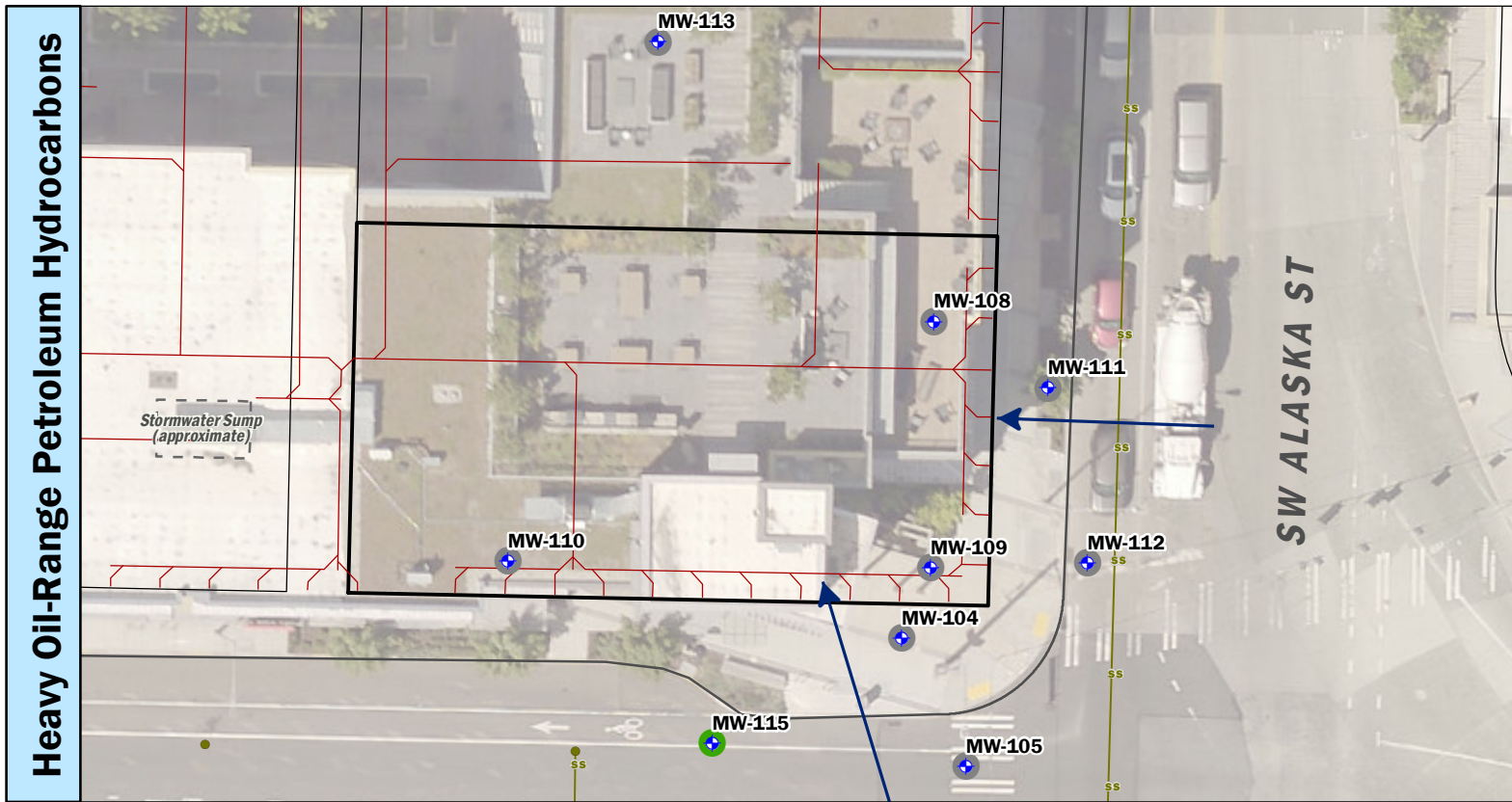
Compliance Well Network and Groundwater Elevation Contours

Q3 2022 Groundwater Monitoring Report
SKS Shell Station Site
3901 Southwest Alaska Street
Seattle, Washington

	SEPT-2022	BY: SBM / BBC	FIGURE NO. 2
	PROJECT NO. 160328	REVISED BY: ALC / NLK	



Gasoline-Range Petroleum Hydrocarbons



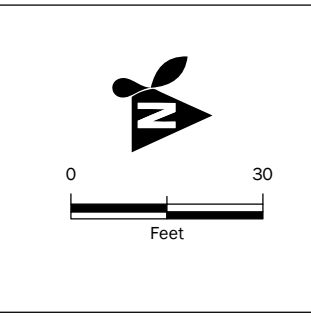
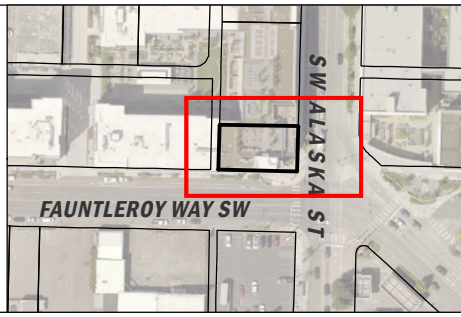
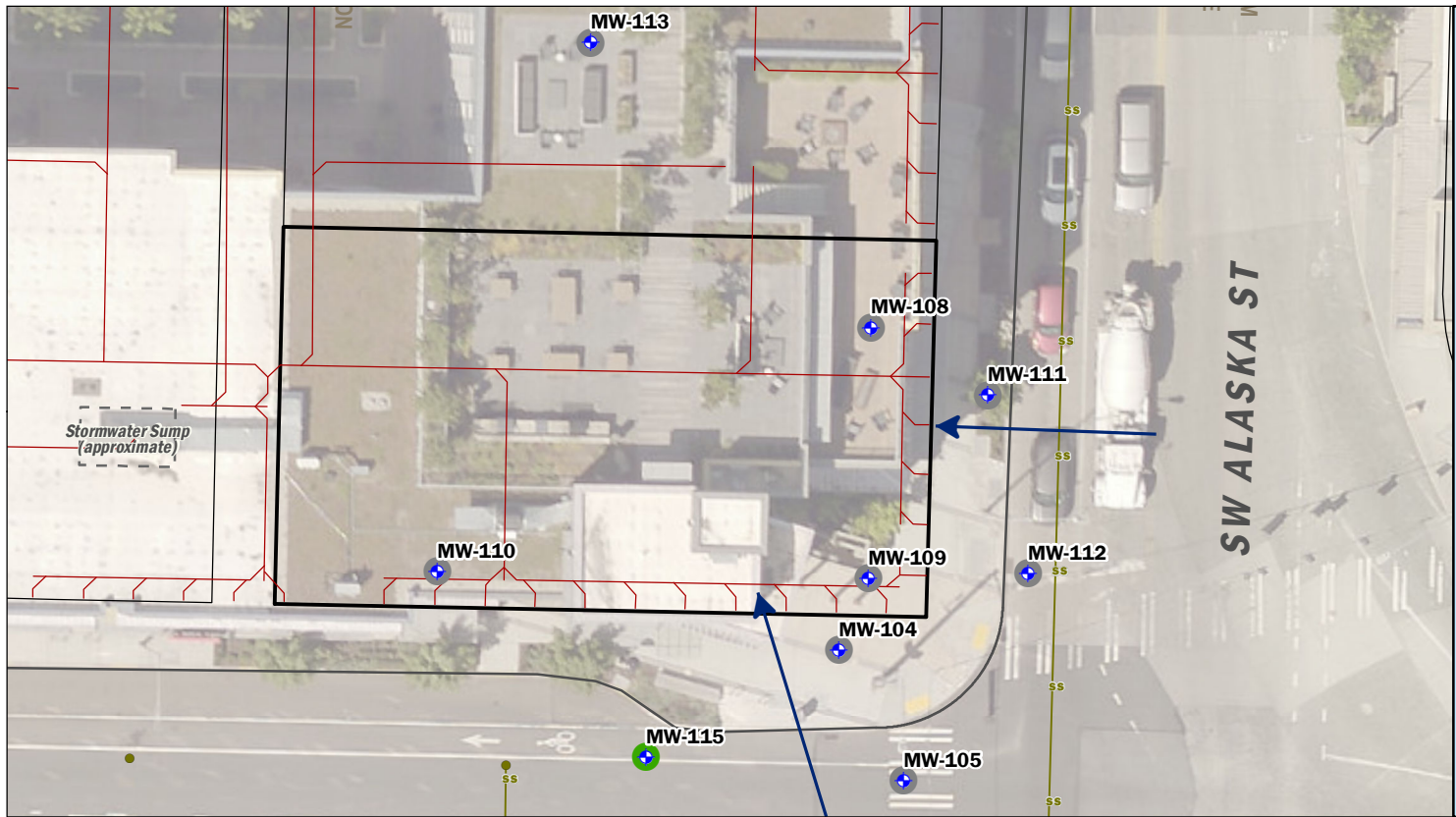
Benzene

Analytical Results

- Contaminant indicated was detected at concentrations less than the MTCA Method A cleanup level.
- Contaminant indicated was not detected.
- Not Sampled

Sample ID → RW03 (780X) ⊕ Monitoring Well
 Maximum Detected Concentration of Contaminant (ug/L) ● Sewer Manhole
— Sanitary Sewer
— Footing Drain
— Sidewalk Edge

➔ Groundwater Flow Direction
 SKS Shell Property
 King County Parcel (2020)



Groundwater Analytical Results			
Q3 2022 Groundwater Monitoring Report			
SKS Shell Station Site			
3901 Southwest Alaska Street			
Seattle, Washington			
	SEPT-2022	BY: SBM / BBC	FIGURE NO. 3
	PROJECT NO. 160328	REVISED BY: ALC / RAP / NLK	

APPENDIX A

Laboratory Analytical Reports

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
Yelena Aravkina, M.S.
Michael Erdahl, B.S.
Vineta Mills, M.S.
Eric Young, B.S.

3012 16th Avenue West
Seattle, WA 98119-2029
(206) 285-8282
fbi@isomedia.com
www.friedmanandbruya.com

October 6, 2022

Ali Cochrane, Project Manager
Aspect Consulting, LLC
710 2nd Ave S, Suite 550
Seattle, WA 98104

Dear Ms Cochrane:

Included are the results from the testing of material submitted on September 29, 2022 from the Whittaker SKS Shell 160328, F&BI 209489 project. There are 6 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 have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.



Michael Erdahl
Project Manager

Enclosures

c: Aspect Data, Baxter Call
ASP1006R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on September 29, 2022 by Friedman & Bruya, Inc. from the Aspect Consulting, LLC Whittaker SKS Shell 160328, F&BI 209489 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u>	<u>Aspect Consulting, LLC</u>
209489 -01	MW-115-092922

All quality control requirements were acceptable.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 10/06/22

Date Received: 09/29/22

Project: Whittaker SKS Shell 160328, F&BI 209489

Date Extracted: 10/04/22

Date Analyzed: 10/04/22

**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)

<u>Sample ID</u> Laboratory ID	<u>Benzene</u>	<u>Toluene</u>	<u>Ethyl Benzene</u>	<u>Total Xylenes</u>	<u>Gasoline Range</u>	<u>Surrogate (% Recovery)</u> (Limit 52-124)
MW-115-092922 209489-01	<1	<1	<1	<3	<100	80
Method Blank 02-2338 MB	<1	<1	<1	<3	<100	85

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 10/06/22

Date Received: 09/29/22

Project: Whittaker SKS Shell 160328, F&BI 209489

Date Extracted: 09/30/22

Date Analyzed: 09/30/22

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

Results Reported as ug/L (ppb)

<u>Sample ID</u> Laboratory ID	<u>Diesel Range</u> (C ₁₀ -C ₂₅)	<u>Motor Oil Range</u> (C ₂₅ -C ₃₆)	<u>Surrogate</u> (% Recovery) (Limit 41-152)
MW-115-092922 209489-01 1/1.2	220 x	<300	132
Method Blank 02-2381 MB	<50	<250	104

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 10/06/22

Date Received: 09/29/22

Project: Whittaker SKS Shell 160328, F&BI 209489

**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: 209489-01 (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	104	65-118
Toluene	ug/L (ppb)	50	104	72-122
Ethylbenzene	ug/L (ppb)	50	104	73-126
Xylenes	ug/L (ppb)	150	101	74-118
Gasoline	ug/L (ppb)	1,000	95	69-134

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 10/06/22

Date Received: 09/29/22

Project: Whittaker SKS Shell 160328, F&BI 209489

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

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	80	76	63-142	5

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

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. 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 below the lowest calibration standard. 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.

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.

SAMPLE CHAIN OF CUSTODY

209489

09/29/22

vw/EO3

Report To Dr. Cochran, Barker Call

Company Aspect Consulting

Address 710 2nd Ave Suite 500

City, State, ZIP Seattle, WA, 98104

Phone _____ Email dr@aspectconsulting.com

SAMPLERS (signature) <u>B Call</u>	PROJECT NAME <u>Whittaker S&S Shell</u>
PO # <u>160328</u>	REMARKS
INVOICE TO	

Page # _____ of _____

TURNAROUND TIME
 Standard turnaround
 RUSH
 Rush charges authorized by: _____

SAMPLE DISPOSAL
 Archive samples
 Other _____

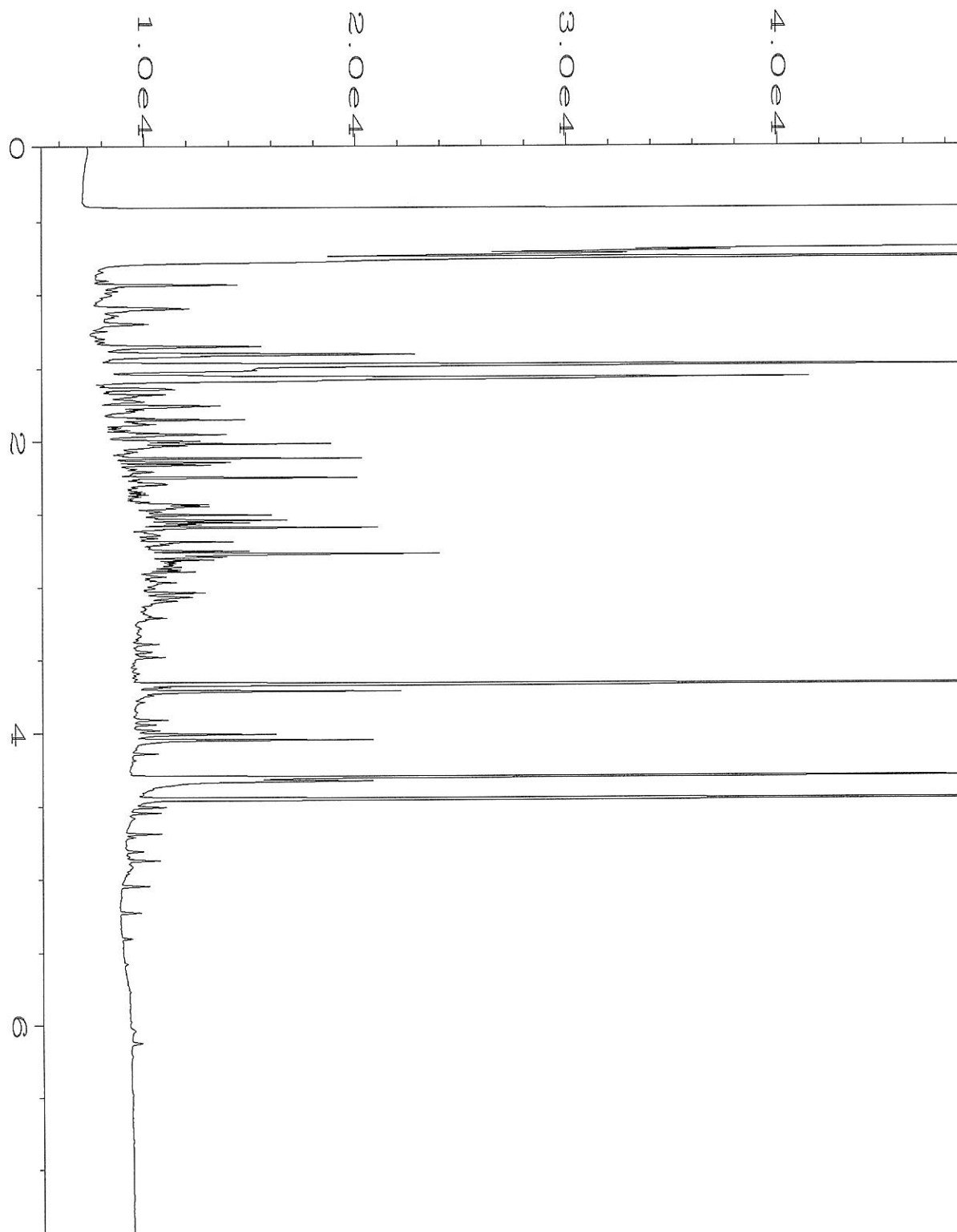
Default: Dispose after 30 days

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	ANALYSES REQUESTED							Notes	
						NWTPH-Dx	NWTPH-Gx	BTEX EPA 8021	NWTPH-HCID	VOCs EPA 8260	PAHs EPA 8270	PCBs EPA 8082		
MW-115-092922	G1A-D	9/29/22	1130	W	4	X	X	X						

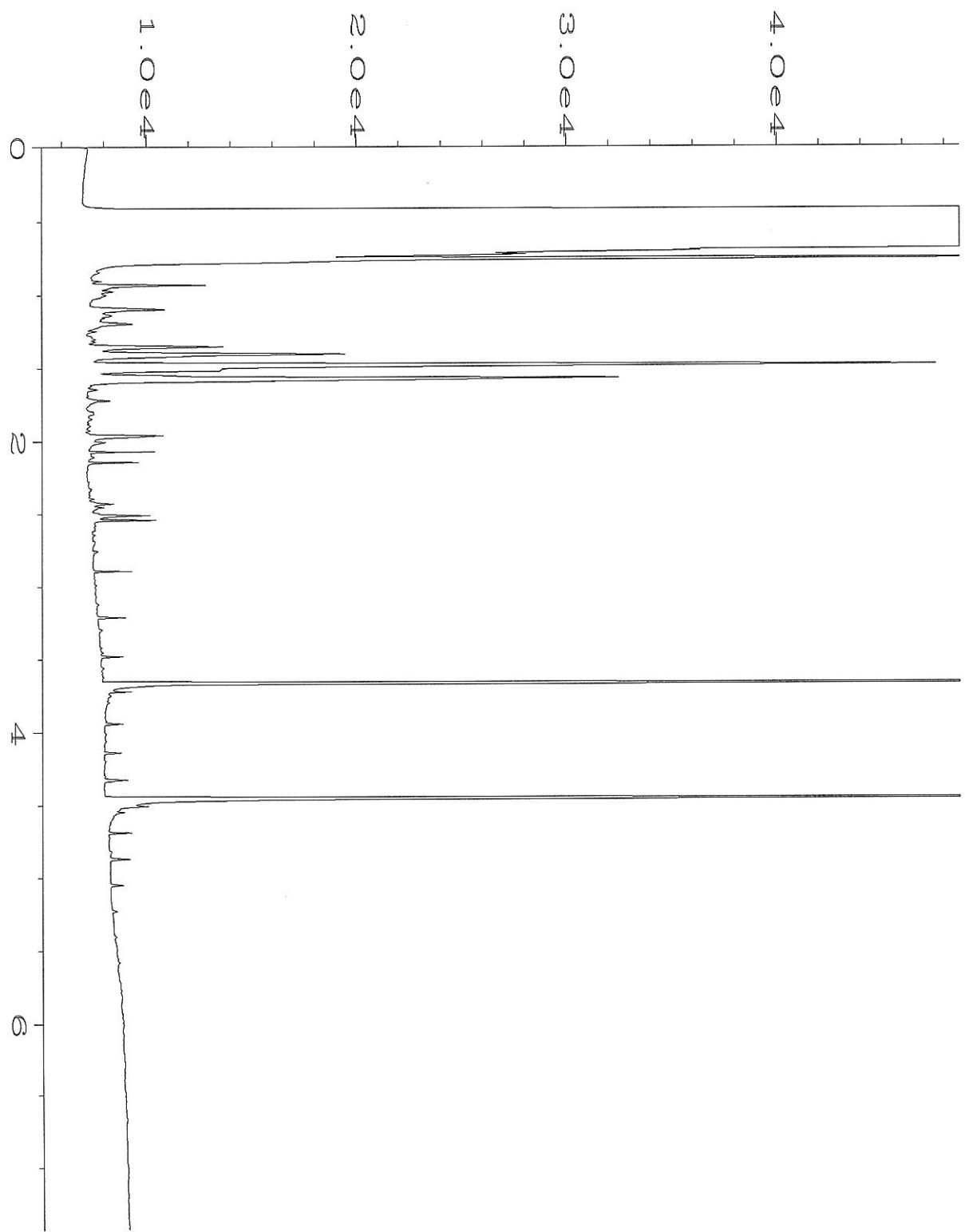
SIGNATURE		PRINT NAME		COMPANY		DATE	TIME
Relinquished by: <u>B Call</u>		<u>Barker Call</u>		<u>Aspect</u>		<u>9/29/22</u>	<u>1415</u>
Received by: <u>[Signature]</u>		<u>Barker Call</u>		<u>EOB</u>		<u>9/29/22</u>	<u>1415</u>
Relinquished by:							
Received by:							

Friedman & Bruya, Inc.
Ph. (206) 285-8282

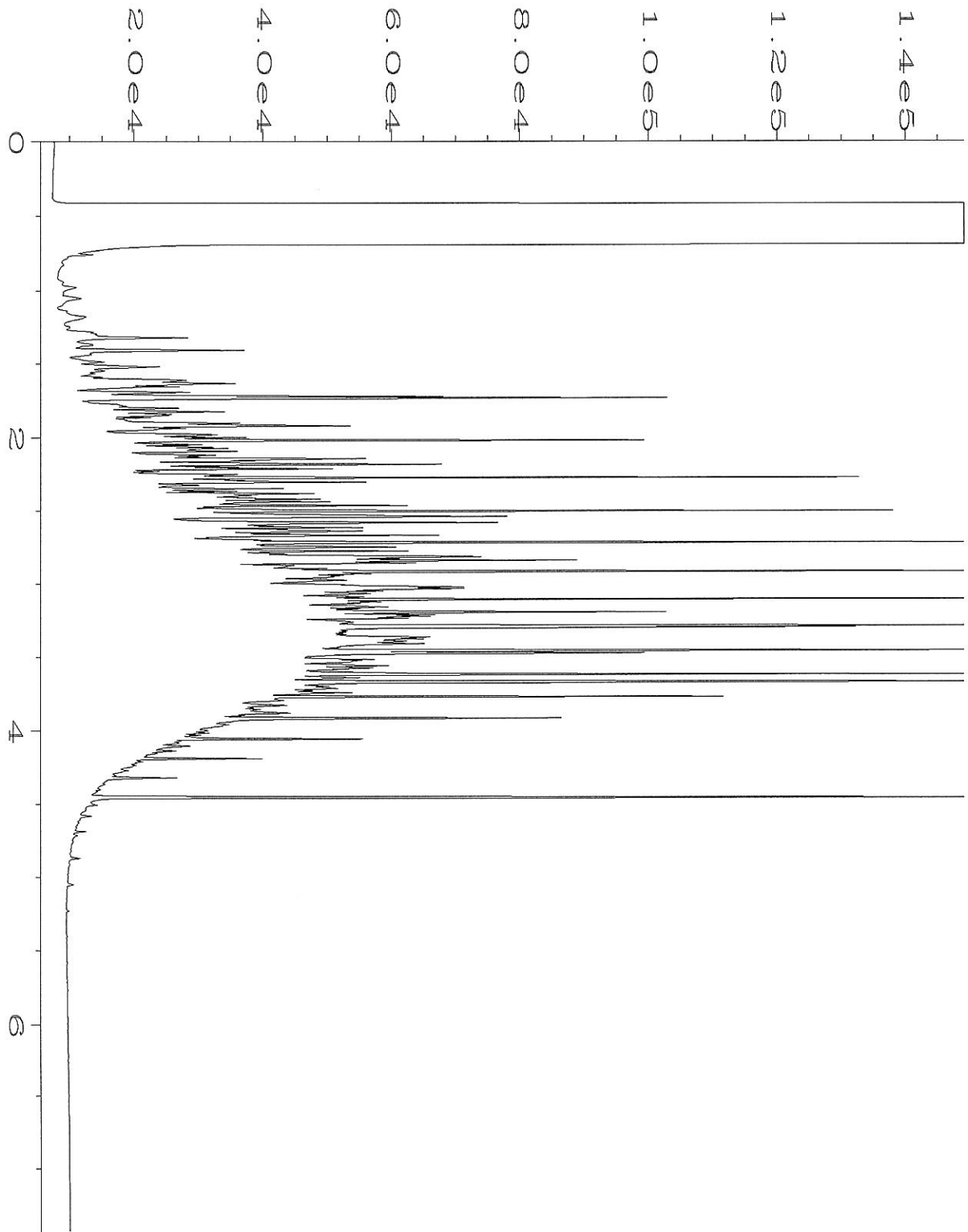
Sampler received at 400



Data File Name	: C:\HPCHEM\1\DATA\09-30-22\062F1101.D	Page Number	: 1
Operator	: TL	Vial Number	: 62
Instrument	: GC1	Injection Number	: 1
Sample Name	: 209489-01	Sequence Line	: 11
Run Time Bar Code:		Instrument Method:	DX.MTH
Acquired on	: 01 Oct 22 01:18 AM	Analysis Method	: DEFAULT.MTH
Report Created on:	04 Oct 22 11:18 AM		



Data File Name	: C:\HPCHEM\1\DATA\09-30-22\024F0501.D	Page Number	: 1
Operator	: TL	Vial Number	: 24
Instrument	: GC1	Injection Number	: 1
Sample Name	: 02-2381 mb	Sequence Line	: 5
Run Time Bar Code:		Instrument Method:	DX.MTH
Acquired on	: 30 Sep 22 02:20 PM	Analysis Method	: DEFAULT.MTH
Report Created on:	04 Oct 22 11:19 AM		



Data File Name	: C:\HPCHEM\1\DATA\09-30-22\003F0201.D	Page Number	: 1
Operator	: TL	Vial Number	: 3
Instrument	: GC1	Injection Number	: 1
Sample Name	: 500 Dx 66-186F	Sequence Line	: 2
Run Time Bar Code:		Instrument Method:	DX.MTH
Acquired on	: 30 Sep 22 06:05 AM	Analysis Method	: DEFAULT.MTH
Report Created on:	04 Oct 22 11:16 AM		

APPENDIX B

Data Validation Report

DATA VALIDATION REPORT

Whittaker Groundwater Sampling
September 2022
Sample Delivery Group 209489

Prepared by:

Aspect Consulting, LLC
710 Second Ave, Suite 550
Seattle, WA 98104

Project No. 160328-B-08 • November 2022

V:\160328 GID – The Whittaker Environmental Review\Deliverables\2022 Q3 GW Report\Appendix B DV Report\DV
Report_Whittaker_202209_WG.docx

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2 Data Validation Findings for SDG 209489 1

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2.3 Diesel and Motor Oil (NWTPH-Dx)2

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 2.3.4 Case Narrative/Laboratory Qualification2

 2.3.5 Overall Assessment3

3 Qualified Data Summary3

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1 Introduction

This report summarizes the findings of the United States Environmental Protection Agency (USEPA) Stage 2A data validation performed on analytical data for groundwater samples collected in September 2022 for the Whittaker Environmental Review Quarterly Groundwater Monitoring. This data quality review is divided into sections by sample delivery group. A complete list of samples and analyses for each SDG is provided in the Sample Index at the beginning of each section.

Samples were sent to Friedman & Bruya in Seattle, Washington for analysis of various parameters. Several parameters were analyzed by subcontracted laboratory, Fremont Analytical. The analytical methods are summarized in Table 1 below:

Table 1. Analytical Methods

SDG	Analysis	Method	Lab	Validation Level
209489	Diesel and Motor Oil Range Organics	NWTPH-DX	Friedman & Bruya	2A
209489	Gasoline Range Organics	NWTPH-GX	Friedman & Bruya	2A
209489	BTEX	SW8021B	Friedman & Bruya	2A

Data assigned a J/UJ qualifier (estimated) may be used for site evaluation purposes but the reasons for qualification should be considered when interpreting sample concentrations. Values without qualification meet all data measurement quality objectives and are suitable for use.

Data qualifier definitions and a summary table of the qualified data are included in the Qualified Data Summary at the end of this report. Data qualifiers have been incorporated into the project chemistry database to reflect the validation in this report.

2 Data Validation Findings for SDG 209489

Groundwater samples in this SDG, and the chemical analyses performed on them, are tabulated below. The sections below describe the results of the data quality review for this SDG by analyte group (analysis).

Table 2. Sample Index

Sample Name	Sample Date	NWTPH-DX	NWTPH-GX	SW8021B
MW-115-092922	9/29/2022	X	X	X

2.1 Sample Receipt and Preservation

Sample receipt and preservation (2-6 degrees C) were acceptable.

2.2 BTEX and Gasoline (SW 8021B and NWTPH-Gx)

2.2.1 Holding Times

Samples were analyzed within the requisite holding time limit.

2.2.2 Method Blanks

Target analytes were not detected at or above the reporting levels in the method blank. No qualification or action was needed.

2.2.3 Laboratory Control Samples/Laboratory Control Sample Duplicates (LCS/LCSD)

All LCS %R were within the laboratory specified control limits. No LCSD sample results available. No qualification or action was needed.

2.2.4 Laboratory Duplicates (LD)

All LD RPD were within the laboratory specified control limits. No qualification or action was needed.

2.2.5 Surrogates

All surrogate %R were within the laboratory specified control limits. No qualification or action was needed.

2.2.6 Overall Assessment

Accuracy was acceptable based on the LCS %R. Precision was acceptable based on the LD RPD values. The data are of known quality and are acceptable for use as qualified.

2.3 Diesel and Motor Oil (NWTPH-Dx)

2.3.1 Holding Times

Samples were analyzed within the requisite holding time limit.

2.3.2 Method Blanks

Target analytes were not detected at or above the reporting levels in the method blank. No qualification or action was needed.

2.3.3 Laboratory Control Samples/Laboratory Control Sample Duplicates (LCS/LCSD)

All LCS and LCSD %R and RPD were within the laboratory specified control limits. No qualification or action was needed.

2.3.4 Case Narrative/Laboratory Qualification

The laboratory noted that the sample had a chromatographic pattern that did not resemble the fuel standard used for quantitation for DRO. The associated detection is qualified (X).

2.3.5 Overall Assessment

Accuracy was acceptable based on the LCS/LCSD and surrogate %R. Precision was acceptable based on the LCS/LCSD RPD values. The data are of known quality and are acceptable for use as qualified.

3 Qualified Data Summary

Qualified sample results are listed below. Results just flagged non-detect (U) by lab with no further qualification necessary are not listed.

Table 3. Qualified Data Summary

Sample	Method	Analyte	Qualifier	Reason
MW-115-092922	CALC	Diesel and Oil Extended Range Organics	X	
MW-115-092922	NWTPH-DX	Diesel Range Organics	X	Chromatographic pattern does not match fuel standard used for quantitation

Table 4. Data Qualifier Definitions

Data Qualifier	Definition
J	The analyte was detected above the reported quantitation limit, and the reported concentration was an estimated value.
R	The sample results are unusable due to the quality of the data generated because certain criteria were not met. The analyte may or may not be present in the sample.
U	The analyte was analyzed for but was considered not detected at the reporting limit or reported value.
UJ	The analyte was analyzed for, and the associated quantitation limit was an estimated value.
XJ	Result does not match the chromatographic pattern for a known petroleum product standard. The analyte was detected above the reported quantitation limit, and the reported concentration was an estimated value.
E	Result exceeded analytical range. A dilution was not possible. Analyte is definitely present, but numeric value is not suitable for quantitative analysis.
X	Result does not match the chromatographic pattern for a known petroleum product standard.
C	Result may be influenced by unconfirmed contamination as part of the analytical process.

4 Acronyms and Definitions

%D – Percent Difference

EPA – Environmental Protection Agency

FB – Field Blank

FD – Field Duplicate

LCS – Laboratory Control Sample

LCSD – Laboratory Control Sample Duplicate

LD – Laboratory Duplicate

MB – Method Blank

MDL – Method Detection Limit

MS – Matrix Spike

MSD – Matrix Spike Duplicate

QC – Quality Control

RL – Reporting Limit

SDG – Sample Delivery Group

SM – Standard Methods

TPH – Total Petroleum Hydrocarbon

APPENDIX C

Field Forms

DAILY REPORT

Date: 9/29/12 Project Name: Whittaker S&S Shell Project Number: 160328 Weather: Sunny 65-75°F Arrival on site: 0815 Departure from site: 1200	Equipment used: In Situ Aqua Tool 500 (Blue) Turbiditymeter (Green) Calibration: On-site.
--	---

0815 Aspect (BBC) on site. Begin calibrating Aqua Tool 500 (Blue)

	Salin	Pre	Post	
PH4	4.00	3.97	4.00	
PH7	7.00	6.95	7.00	
COND (µS/cm)	447	395	447	
ORP (mv)	223	266.3	223	
DO %	100	99.62	100	65°F at time of calibration.

0845 Begin opening exterior wells to allow for equilibration before collecting WL measurements.

0900 Check in with Whittaker Building. Get job for parking garage access.

Begin opening interior wells and allowing to equilibrate.

0930 Begin collecting site wide WLs.

MW ID	DTW ('bTOC)	TD ('bTOC)
MW-101	28.30	30.60
MW-104	Dry	30.00
MW-105	29.02	N/A
MW-108	7.88	12.38
MW-109	8.07	12.05
MW-110	8.56	10.70
MW-111	30.57	35.50
MW-113	8.26	13.45
MW-115	29.31	40.30

* Could not measure MW-112 because it is in Right-of-way, and no traffic control is present. Could not occupy cross walk ^{long} enough to measure TD of MW-105.

1050 Begin purging MW-115.

1130 Collect sample MW-115-092922.

1150 Purge water disposed of in drum (55 gallon) in alley W of Whittaker Building.

Now half full. One other 55 gallon purge water drum in NE corner of parking garage.

1200 Return job to Whittaker Building office. Aspect off site.

GROUNDWATER SAMPLING RECORD

WELL NUMBER: MW-115

Page: 1 of 1

Project Name: Whittaker SkS Shell

Project Number: 160328

Date: 7/29/22

Starting Water Level (ft TOC): 29.31

Sampled by: BBL

Casing Stickup (ft): -0.50

Measuring Point of Well: NTOC

Total Depth (ft TOC): 40.30

Screened Interval (ft. TOC): _____

Casing Diameter (inches): 2

Filter Pack Interval (ft. TOC): _____

Casing Volume 10.99 (ft Water) x 0.62 (Lpf) (gpf) = 6.81 (L) (gal)

Casing volumes: 3/4" = 0.02 gpf 2" = 0.16 gpf 4" = 0.65 gpf 6" = 1.47 gpf
 3/4" = 0.09 Lpf 2" = 0.62 Lpf 4" = 2.46 Lpf 6" = 5.56 Lpf

Sample Intake Depth (ft TOC): Dedicated tubing

PURGING MEASUREMENTS

Time	Cumul. Volume (gal or L)	Purge Rate (gpm or Lpm)	Criteria (for 3 consecutive readings):							Comments
			Typical 0.1-0.5 Lpm	Stable	na	± 3%	± 10%	± 0.1	± 10 mV	
			Water Level (ft)	Temp. (°C)	Specific Conductance (µS/cm)	Dissolved Oxygen (mg/L)	pH	ORP (mv)	Turbidity (NTU)	
1050	0	0.2	29.31							Begin purging
1055	1	0.2	29.45	17.44	450.84	0.93	6.45	162.5	4.64	No odor, no shear
1100	2	0.2	29.47	17.38	448.34	0.66	6.44	139.1	3.77	Air bubbles in
1105	3	0.2	29.48	17.39	447.03	0.52	6.44	119.1	4.28	purge water.
1110	4	0.2	29.50	17.58	444.04	0.47	6.45	93.7	3.73	
1115	5	0.2	29.51	17.80	443.37	0.49	6.46	84.2	4.87	
1120	6	0.2	29.52	17.85	443.95	0.49	6.46	81.8	3.53	
1125	7	0.2	29.53	18.00	443.62	0.52	6.47	74.7	2.74	

Total Gallons Purged: 7.5 Total Casing Volumes Removed: 1.10

Ending Water Level (ft TOC): 29.53 Ending Total Depth (ft TOC): 40.30

SAMPLE INVENTORY

Time	Volume ml	Bottle Type	Quantity	Filtration	Preservation	Appearance		Remarks
						Color	Turbidity & Sediment	
1130	40	VOA	3	N	HCl	-	2.74	
	500							
1130	250	Ambur	1	N	N	-	2.74	

METHODS

Parameters measured with (instrument model & serial number): AT500 (Blue), turbidimeter (green)

Purging Equipment: Penstaltic pump Decon Equipment: Alconox + water

Disposal of Discharged Water: Drum on-site

Observations/Comments: _____

APPENDIX D

Report Limitations and Guidelines for Use

REPORT LIMITATIONS AND USE GUIDELINES

Reliance Conditions for Third Parties

This report was prepared for the exclusive use of the Client. No other party may rely on this report or the product of our services without the express written consent of Aspect Consulting, LLC (Aspect). This limitation is to provide our firm with reasonable protection against liability claims by third parties with whom there would otherwise be no contractual conditions or limitations and guidelines governing their use of the report. Within the limitations of scope, schedule and budget, our services have been executed in accordance with our Agreement with the Client and recognized standards of professionals in the same locality and involving similar conditions.

Services for Specific Purposes, Persons and Projects

Aspect has performed the services in general accordance with the scope and limitations of our Agreement. This report has been prepared for the exclusive use of the Client and their authorized third parties, approved in writing by Aspect. This report is not intended for use by others, and the information contained herein is not applicable to other properties.

This report is not, and should not, be construed as a warranty or guarantee regarding the presence or absence of hazardous substances or petroleum products that may affect the subject property. The report is not intended to make any representation concerning title or ownership to the subject property. If real property records were reviewed, they were reviewed for the sole purpose of determining the subject property's historical uses. All findings, conclusions, and recommendations stated in this report are based on the data and information provided to Aspect, current use of the subject property, and observations and conditions that existed on the date and time of the report.

Aspect structures its services to meet the specific needs of our clients. Because each environmental study is unique, each environmental report is unique, prepared solely for the specific client and subject property. This report should not be applied for any purpose or project except the purpose described in the Agreement.

This Report Is Project-Specific

Aspect considered a number of unique, project-specific factors when establishing the Scope of Work for this project and report. You should not rely on this report if it was:

- Not prepared for you
- Not prepared for the specific purpose identified in the Agreement
- Not prepared for the specific real property assessed
- Completed before important changes occurred concerning the subject property, project or governmental regulatory actions

If changes are made to the project or subject property after the date of this report, Aspect should be retained to assess the impact of the changes with respect to the conclusions contained in the report.

Geoscience Interpretations

The geoscience practices (geotechnical engineering, geology, and environmental science) require interpretation of spatial information that can make them less exact than other engineering and natural science disciplines. It is important to recognize this limitation in evaluating the content of the report. If you are unclear how these "Report Limitations and Use Guidelines" apply to your project or site, you should contact Aspect.

Discipline-Specific Reports Are Not Interchangeable

The equipment, techniques and personnel used to perform an environmental study differ significantly from those used to perform a geotechnical or geologic study and vice versa. For that reason, a geotechnical engineering or geologic report does not usually address any environmental findings, conclusions or recommendations; e.g., about the likelihood of encountering underground storage tanks or regulated contaminants. Similarly, environmental reports are not used to address geotechnical or geologic concerns regarding the subject property.

Environmental Regulations Are Not Static

Some hazardous substances or petroleum products may be present near the subject property in quantities or under conditions that may have led, or may lead, to contamination of the subject property, but are not included in current local, state or federal regulatory definitions of hazardous substances or petroleum products or do not otherwise present potential liability. Changes may occur in the standards for appropriate inquiry or regulatory definitions of hazardous substance and petroleum products; therefore, this report has a limited useful life.

Property Conditions Change Over Time

This report is based on conditions that existed at the time the study was performed. The findings and conclusions of this report may be affected by the passage of time (for example, Phase I ESA reports are applicable for 180 days), by events such as a change in property use or occupancy, or by natural events, such as floods, earthquakes, slope failure or groundwater fluctuations. If more than six months have passed since issuance of our report, or if any of the described events may have occurred following the issuance of the report, you should contact Aspect so that we may evaluate whether changed conditions affect the continued reliability or applicability of our conclusions and recommendations.

Phase I ESAs – Uncertainty Remains After Completion

Aspect has performed the services in general accordance with the scope and limitations of our Agreement and the current version of the “Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process”, ASTM E1527, and U.S. Environmental Protection Agency (EPA)'s Federal Standard 40 CFR Part 312 "Innocent Landowners, Standards for Conducting All Appropriate Inquiries".

No ESA can wholly eliminate uncertainty regarding the potential for recognized environmental conditions in connection with subject property. Performance of an ESA study is intended to reduce, but not eliminate, uncertainty regarding the potential for environmental conditions affecting the subject property. There is always a potential that areas with contamination that were not identified during this ESA exist at the subject property or in the study area. Further evaluation of such potential would require additional research, subsurface exploration, sampling and/or testing.

Historical Information Provided by Others

Aspect has relied upon information provided by others in our description of historical conditions and in our review of regulatory databases and files. The available data does not provide definitive information with regard to all past uses, operations or incidents affecting the subject property or adjacent properties. Aspect makes no warranties or guarantees regarding the accuracy or completeness of information provided or compiled by others.

Exclusion of Mold, Fungus, Radon, Lead, and HBM

Aspect's services do not include the investigation, detection, prevention or assessment of the presence of molds, fungi, spores, bacteria, and viruses, and/or any of their byproducts. Accordingly, this report does not include any interpretations, recommendations, findings, or conclusions regarding the detection, assessment, prevention or abatement of molds, fungi, spores, bacteria, and viruses, and/or any of their byproducts. Aspect's services also do not include the investigation or assessment of hazardous building materials (HBM) such as asbestos, polychlorinated biphenyls (PCBs) in light ballasts, lead based paint, asbestos-containing building materials, urea-formaldehyde insulation in on-site structures or debris or any other HBMs. Aspect's services do not include an evaluation of radon or lead in drinking water, unless specifically requested.