TRANSMITTAL

Project No.: 160328

May 18, 2022

Attn:	Mr. Dale Myers Washington State Department of Ecology 3190 160th Avenue Southeast Bellevue, Washington 98008	**Re:**	SKS Shell Station Site LMI – West Seattle Holdings, LLC PPCD No. 13-2-27556-2 Facility ID #39196282 Cleanup ID #6015

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Qty	Description
1	Groundwater Monitoring Report, First Quarter 2022

Remarks: Electronic and hardcopy versions of this report are being submitted to the Washington State Department of Ecology by Aspect Consulting, LLC, on behalf of LMI – West Seattle Holdings, LLC, pursuant to PPCD No. 13-2-27556-2.

cc:	Elton Lee & Timothy Kinsella, GID William Joyce, JZP	**Sent by:**	Ali Cochrane, LG Senior Geologist, Aspect Consulting, LLC acochrane@aspectconsulting.com

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May 17, 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, First 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 First 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 replacements and monitoring events, and a summary of the results in comparison to results from prior compliance monitoring events. The location of the Site is shown on Figure 1.

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 Plan[3] (CAP) and Cleanup Action Report[2] (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 Analysis," 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 to 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 Plan," dated July 29, 2021, and approved by Ecology via email on July 30, 2021, and is summarized in the following section.

Monitoring Well Installation and Decommissioning

In January 2022 the five remaining dewatering wells (RW01 through RW05) were decommissioned, and a new standard compliance groundwater monitoring well (MW115) was installed in the Fauntleroy Way ROW, in accordance with the Site Closure Work Plan. Location of the newly installed groundwater monitoring well is shown on Figure 2.

Former dewatering wells RW01 to RW05 were decommissioned by Cascade Drilling of Woodinville, Washington on January 12, 2022, in accordance with Revised Code of Washington (RCW) Chapter 18.104. Decommissioned wells were backfilled with hydrated NSF/ANSI 60

[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.

bentonite chips to 2 feet below ground surface (bgs), the monument and top two feet of well casing were removed by concrete coring and the former wells were capped with concrete. RW01 contained a blockage at approximately 25 feet bgs that is presumed to be a dewatering pump that was not removed at the completion of construction. The obstruction was not able to be removed manually or with a mechanical hoist on Cascade's Hollow Stem Auger (HSA) drill rig. The obstruction was advanced to the bottom of the well at roughly 35 feet bgs using the HSA drill rig's percussion hammer until no further downward progress was observed. RW01 was backfilled with bentonite chips and capped with concrete consistent with other well decommissioning. Field documentation of decommissioning activities are included in Appendix C.

The new groundwater monitoring well (MW115) was installed in the Fauntleroy Way ROW in the general vicinity of former dewatering wells RW03 and RW04. Installation was conducted by Cascade Drilling on January 13 and 14, 2022 using a track mounted HSA drill rig, following Ecology's specifications for compliance groundwater monitoring. Aspect field staff oversaw drilling and logged soil samples per the Unified Soil Classification System (USCS), field screening consisted of visual and olfactory observations, as well as PID and sheen testing. The geology observed during drilling was sand and gravel backfill from zero to five feet bgs, and layers of glacial till consisting of sand and silt with some gravel between five feet bgs and the bottom of the boring at 41.5 feet bgs, or 218.5 feet NAVD88[5]. Groundwater was observed during drilling at 30.5 feet bgs, or 229.5 feet NAVD88. MW115 was constructed with a 2 inch Schedule 40 PVC casing and a 10 foot screen set between 229.29 and 239.29 feet NAVD88, a similar screened interval to the former dewatering wells. The top of casing (TOC) was measured at 269.29 feet NAVD88 in a survey using a laser level and comparison to previously surveyed Site features. Well development of MW115 was conducted by Aspect field staff on January 14, and March 9, 2022, two rounds of development were deemed necessary to achieve low turbidity and representative groundwater quality for the new monitoring well during its first post-installation monitoring event. The new well was incorporated into the compliance monitoring program for this quarterly groundwater monitoring event, and will continue to be sampled during subsequent groundwater monitoring events. Boring log, well construction information, and development forms for the new well are included in Appendix C.

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[6] discontinued sampling and decommissioning of six (RW02, RW03, RW04, RW05, MW102, and MW103) of the original 15 compliance wells; and

[5]All elevations are based on North American Vertical Datum 1988.

[6] 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; MW109, MW110, and MW111 changes were approved by Dale Myers of Ecology via email

approved installation and quarterly sampling of an additional standard compliance monitoring well (MW115) in the vicinity of RW03 and RW04. Per agreement with Ecology, wells MW101, MW104, MW105, MW108, MW109, MW110, MW111, MW112, MW113, and MW115 continue to be accessed each quarter for groundwater sampling and water level measurements.

The existing compliance well network for the Site now consists of 10 wells for analytical sampling and water level monitoring. The First Quarter 2022 groundwater monitoring event is the first 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 summary of the status and well construction details of the original compliance groundwater monitoring wells for the Site.

Field and Analysis Methods

On March 24, 2022, groundwater levels were measured in 10 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.

Sampling was completed at ten compliance groundwater monitoring wells (MW101, MW104, MW105, MW108, MW109, MW110, MW111, MW112, MW113, and MW115) located on the Site and in the surrounding ROWs. All ten wells were sampled using standard low-flow methodology.[7] 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.[8] None of the well screens were fully submerged during sampling and the groundwater sample tubing intake was placed at the midpoint of the water column (consistent with past quarterly monitoring events).

Groundwater samples were 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.

on January 27, 2021; and MW102 and MW103 changes were approved by Dale Myers of Ecology via email on January 11, 2021.

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

[8] 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-millivolt change in oxidation-reduction potential; and less than 0.1 change in pH.

Wells MW104 and MW108 were purged dry before field parameters had stabilized. These two wells were purged and allowed to recharge a minimum of three times before sampling was completed. A field duplicate for all analytes was collected at MW105.

Groundwater Monitoring Results

Groundwater Elevations and Flow Direction

First Quarter 2022 groundwater elevations ranged from a low of 240.06 feet NAVD88 (MW110) to a high of 241.99 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. As shown on Figure 2, groundwater flow across the Site area is generally toward the south and west with localized variability.

Analytical Results

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

Table A. Summary of Q1 2022 Groundwater Analytical Results

Sample Location	Benzene	Gasoline-Range TPH	Diesel-Range TPH	Heavy Oil-Range TPH
MW101	< 1 U	< 100 U	**120 X**	< 250 U
MW104	< 1 U	< 100 U	**58 X**	< 250 U
MW105	< 1 U	< 100 U	< 50 U	< 250 U
MW108	< 1 U	< 100 U	**77 X**	< 250 U
MW109	< 1 U	< 100 U	< 50 U	< 250 U
MW110	< 1 U	< 100 U	< 50 U	< 250 U
MW111	< 1 U	< 100 U	< 50 U	< 250 U
MW112	< 1 U	< 100 U	< 50 U	< 250 U
MW113	< 1 U	< 100 U	**55 X**	< 250 U
MW115	< 1 U	< 100 U	**780 X[2]**	< 250 U
MTCA Method A Cleanup Level	5	1000/800[1]	500	500

Notes:
All concentrations are listed in ug/L (micrograms per liter)
Bold indicates a detected concentration; shading indicates a concentration that exceeds the MTCA Cleanup Level.
[1]Gasoline-range TPH is measured against a lower cleanup level when benzene is present.
[2]The result was additionally analyzed for diesel-range TPH using silica gel cleanup, with the same detected concentration of 780 ug/L
U – the analyte indicated was not detected above the laboratory reporting limit.
X – chromatographic pattern did not match the standard used for quantification.

Of the wells that are not completed in areas where potential contaminated soil still remains, no contaminants of concern were detected at concentrations exceeding the MTCA Method A cleanup

level (Figure 3). Complete compliance groundwater monitoring data for the wells 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

First Quarter 2022 groundwater elevations ranged from 240.06 feet to 241.99 feet, with the lowest elevation measured at MW110 located on the east edge of the Whittaker building garage. The groundwater flow directions are variable, are generally to the south and to the west with components of flow to the southwest during the First 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 First 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 including during this most recent sampling event. In MW115, the concentration of diesel-range TPH exceeds the MTCA Method A cleanup level, and is similar to the concentrations that were observed in dewatering wells RW03 and RW04 in First Quarter 2021 (the last event in which these wells were sampled prior to their decommissioning in January 2022). Wells RW03 and RW04 have consistently shown exceedances of diesel-range TPH since Second Quarter 2018.

Diesel-range TPH was detected in MW115 at 780 ug/L. Because all diesel-range TPH concentrations at the Site, including at MW115, have been flagged by the laboratory as having a chromatographic pattern not resembling the fuel standard used for quantitation, additional analysis was performed to assess the potential for contribution of non-polar organics to the MW115 result from naturally occurring sources. The sample was passed through a silica gel column prior to re-testing for diesel range TPH. The resultant concentration of 780 µg/L matched the result of the pre-silica gel cleanup analysis, indicating that there is a negligible contribution from non-polar organics to the diesel-range TPH concentrations at MW115, and the MW115 result is likely reflective of the historical gasoline and diesel fuel release(s) to groundwater in this area of the Site.

Data Validation

Aspect completed a Stage 2A data validation on the data reported from Friedman and Bruya, Inc., in accordance with EPA guidance[9] 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 First 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 above the applicable MTCA Method A cleanup levels in groundwater at one of the ten wells monitored at the Site, continued groundwater monitoring is recommended. Impacts are localized to an area below the Fauntleroy Way ROW, just west of the former refueling station USTs that were removed as part of the cleanup action, and the detected concentration of 780 ug/L only moderately exceeds the cleanup level of 500 ug/L. We recommend conducting the monitoring on a biannual basis, with water levels measured at all wells during each event, and chemical testing at well MW115 only. At the time when contaminants of concern at MW115 are detected below cleanup levels, Aspect recommends increasing sampling frequency to quarterly to pursue four consecutive quarters of compliance groundwater sampling for Site closure. Third Quarter 2022 groundwater monitoring is scheduled to occur in September 2022.

Limitations

Work for this project was performed for the 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.

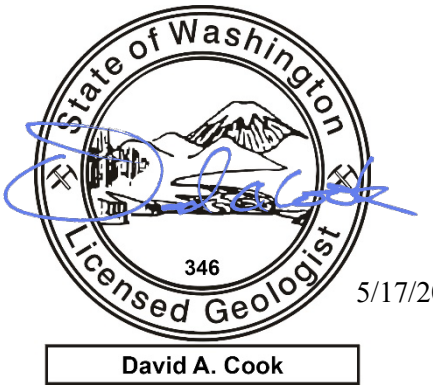
All reports prepared by Aspect Consulting for the Client apply only to the services described in the Agreement(s) with the Client. Aspect Consulting's original files/reports shall govern in the event of any dispute regarding the content of electronic documents furnished to others.

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

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

Sincerely,

Aspect consulting, LLC



5/17/2022

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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	First Quarter 2022 Water Levels[2]	
					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	Mar-22	27.55	241.99
MW104	269.37	2	10	36.5	20 to 30		249.37 to 239.37		Existing	Mar-22	28.81	240.56
MW105	269.30	2	10	36.5	22 to 32		247.30 to 237.30		Existing	Mar-22	28.36	240.94
MW108	247.83	0.75	10	12.5	2.5 to 12.5		245.33 to 235.33		Existing	Mar-22	7.5	240.33
MW109	247.92	0.75	10	13	3 to 13		244.92 to 234.92		Existing	Mar-22	7.72	240.20
MW110	248.21	1	10	12	2 to 12		246.21 to 236.21		Existing	Mar-22	8.15	240.06
MW111	270.62	2	15	35	20 to 35		250.62 to 235.62		Existing	Mar-22	29.98	240.64
MW112	269.32	2	10	36	26 to 36		243.32 to 233.32		Existing	Mar-22	28.69	240.63
MW113	248.06	1	15	20	5 to 20		243.06 to 228.06		Existing	Mar-22	7.9	240.16
MW115	269.29	2	10	40	30 to 40		239.29 to 229.29		Existing	Mar-22	28.7	240.59

Notes

[1]This 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).

[2]Synoptic water levels were measured on March 24, 2022.

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

				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
Sample Location[1]	Sample Date	Depth to Water (ft. BTOC)	Groundwater Elevation (ft. NAVD88)									
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

				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
Sample Location[1]	Sample Date	Depth to Water (ft. BTOC)	Groundwater Elevation (ft. NAVD88)									
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

				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
Sample Location[1]	Sample Date	Depth to Water (ft. BTOC)	Groundwater Elevation (ft. NAVD88)									
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

				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
Sample Location[1]	Sample Date	Depth to Water (ft. BTOC)	Groundwater Elevation (ft. NAVD88)									
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	240.6	< 1 U	< 1 U	< 1 U	< 3 U	< 100 U	**780 X**	< 250 U	**780**	< 250 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

				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
Sample Location[1]	Sample Date	Depth to Water (ft. BTOC)	Groundwater Elevation (ft. NAVD88)									
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	--	--	--	--	--	--	--	--	--

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

[1]This 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.

[2] Samples 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

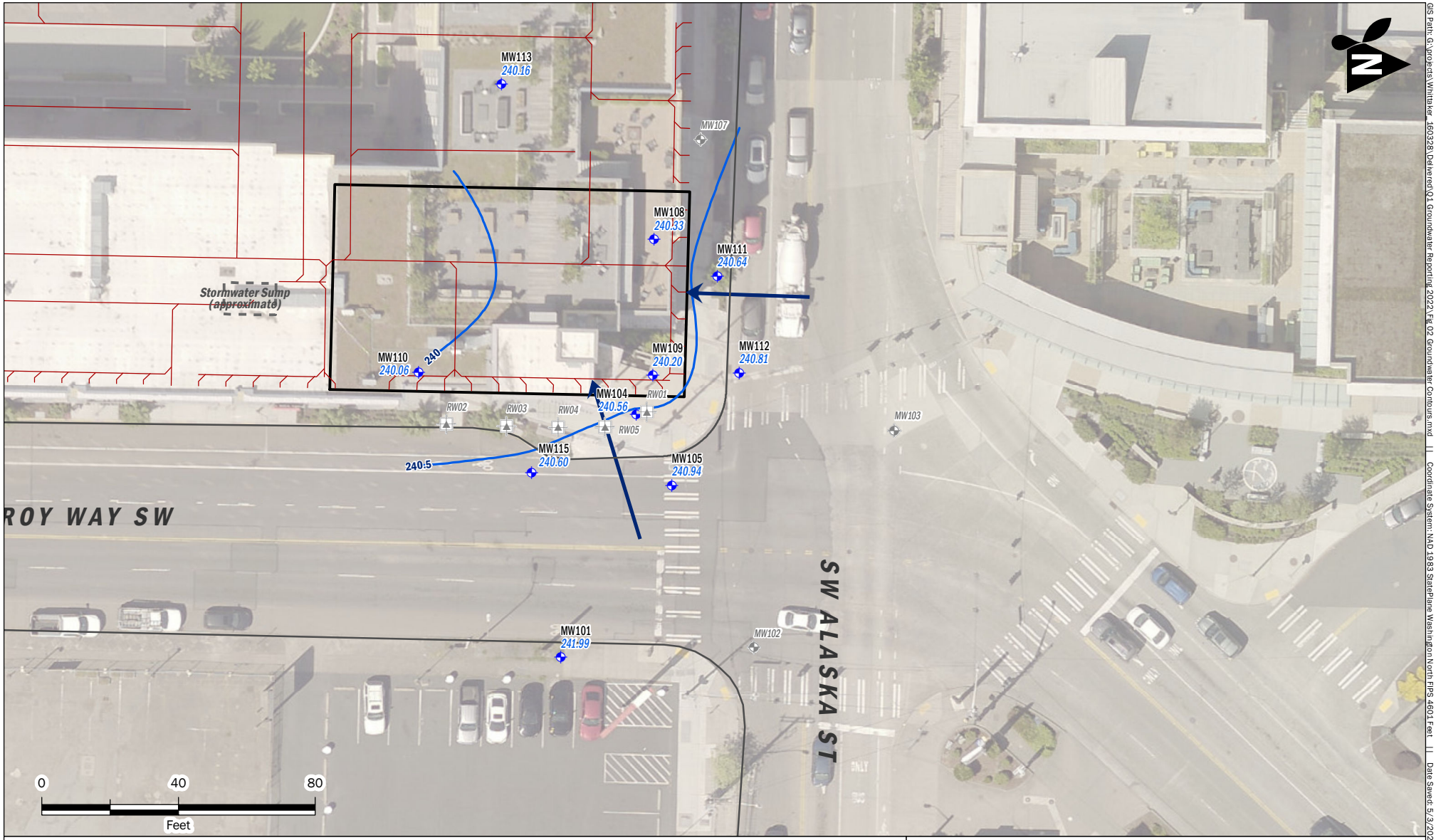
Site Location

Q1 2022 Groundwater Monitoring Report
SKS Shell Station Site
3901 Southwest Alaska Street
Seattle, Washington

Aspect Consulting	APR-2022	BY: SBM / KB	FIGURE NO. 1
	PROJECT NO. 160328	REVISED BY: ALC / RAP / NLK	

Basemap Layer Credits || Esri, HERE, Garmin, (c) OpenStreetMap contributors, and the GIS user community
Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community

GIS Path: G:\projects\Whittaker_160328\Delivered\Q1 Groundwater Reporting 2022\Fig01 Vicinity Map.mxd || Coordinate System: NAD 1983 StatePlane Washington North FIPS 4601 Feet || Date Saved: 4/19/2022 || User: nkochie || Print Date: 4/25/2022



Exploration Name
MW113
239.8
Groundwater Elevation (ft)

Monitoring Well
Decommissioned Monitoring Well
Decommissioned Remediation Well
Footing Drain
Sidewalk Edge
Groundwater Elevation Contour
Groundwater Flow Direction
SKS Shell Property

Note:
- All features shown are approximate

Compliance Well Network and Groundwater Elevation Contours

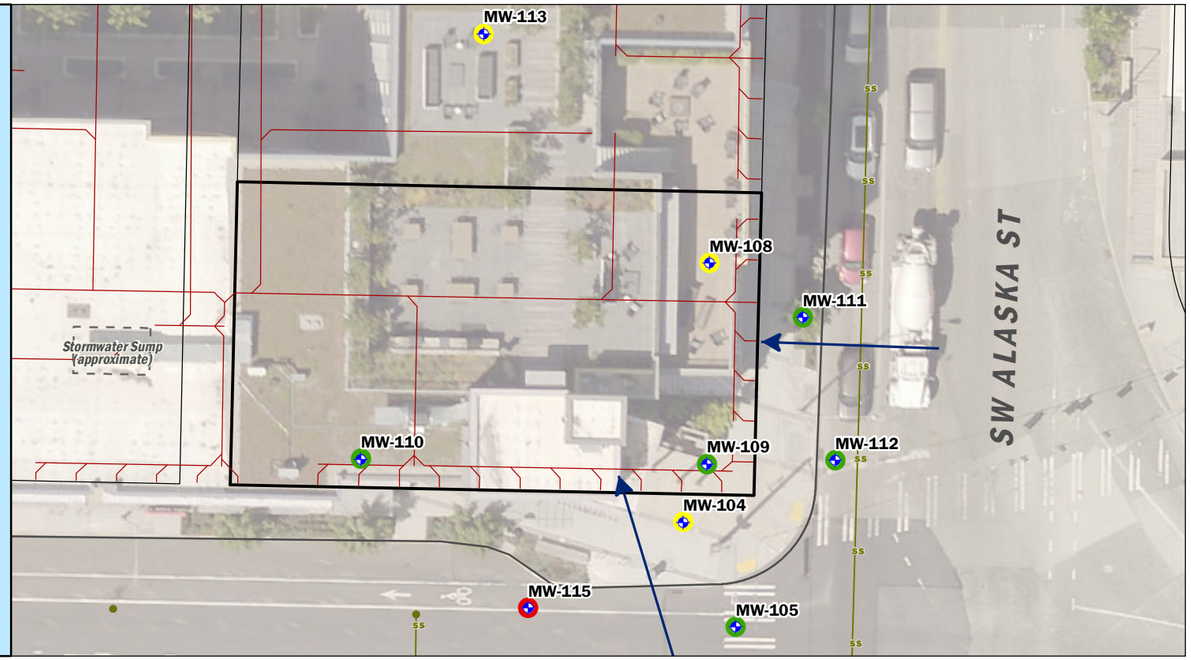
Q1 2022 Groundwater Monitoring Report
SKS Shell Station Site
3901 Southwest Alaska Street
Seattle, Washington

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

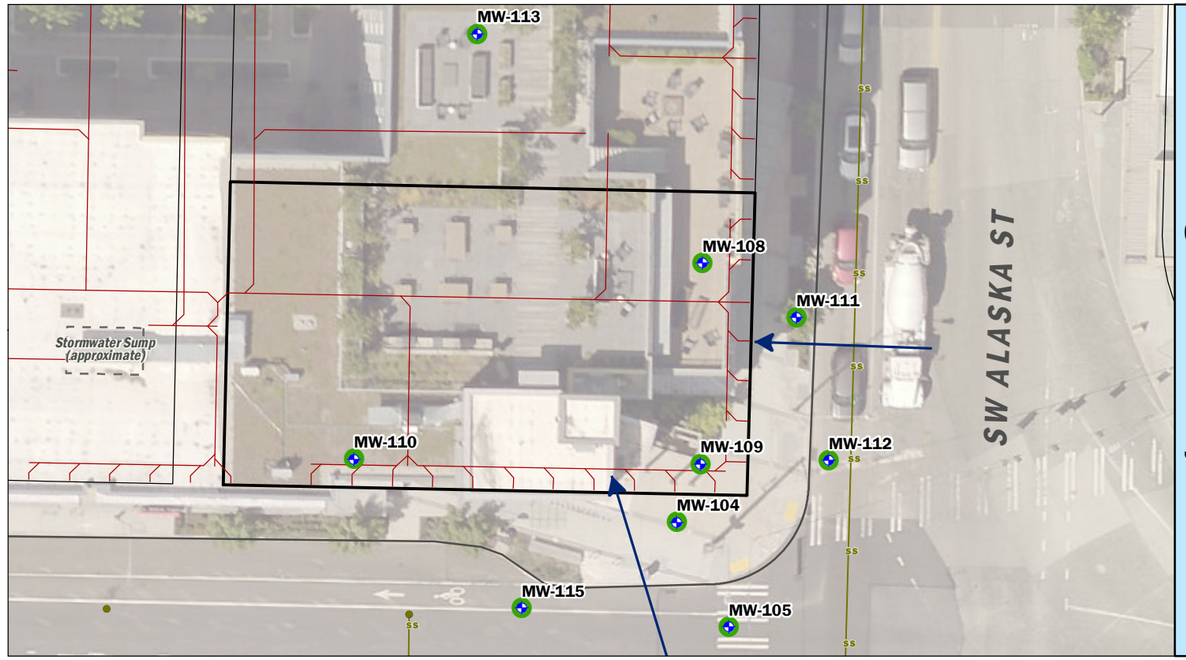
Basemap Layer Credits || EagleView Technologies, Inc.

GIS Path: G:\projects\Whittaker_160328\Delivered\Q1 Groundwater Reporting 2022\Fig 02 Groundwater Contours.mxd || Coordinate System: NAD 1983 StatePlane Washington North FIPS 4601 Feet || Date Saved: 5/3/2022 || User: ikochie || Print Date: 5/3/2022

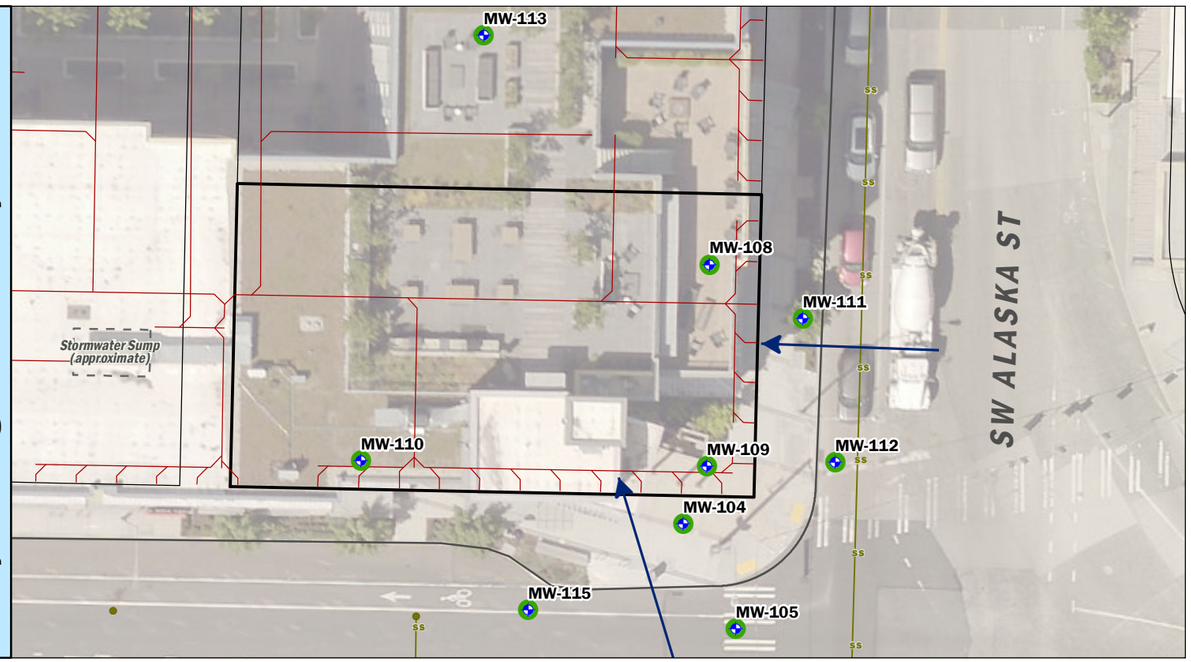
Diesel-Range Petroleum Hydrocarbons



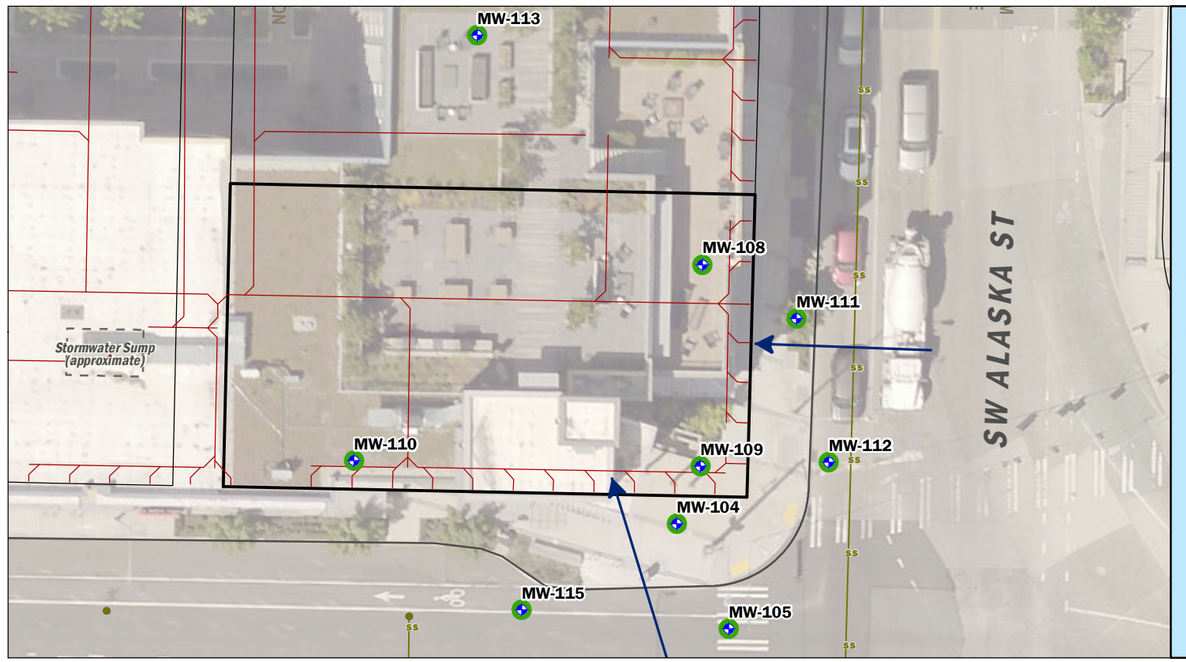
Gasoline-Range Petroleum Hydrocarbons



Heavy Oil-Range Petroleum Hydrocarbons



Benzene

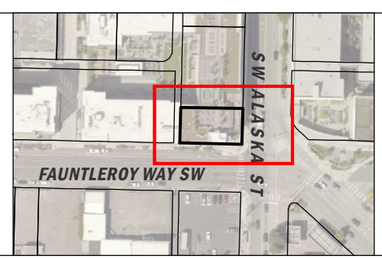


Analytical Results

- Contaminant indicated was detected at a concentration greater than the MTCA Method A cleanup level.
- Contaminant indicated was detected at concentrations less than the MTCA Method A cleanup level.
- Contaminant indicated was not detected.

Sample ID → RW03 (780X) ← Maximum Detected Concentration of Contaminant (ug/L)

- Monitoring Well
- Sewer Manhole
- Sanitary Sewer
- Footing Drain
- Sidewalk Edge
- Groundwater Flow Direction
- SKS Shell Property
- King County Parcel (2020)



N

0 30

Feet

Groundwater Analytical Results

Q1 2022 Groundwater Monitoring Report
SKS Shell Station Site
3901 Southwest Alaska Street
Seattle, Washington

Aspect Consulting	APR-2022	BY: SBM / KB	FIGURE NO. 3
	PROJECT NO. 160328	REVISED BY: ALC / RAP / NLK	

Basemap Layer Credits || EagleView Technologies, Inc.

GIS Path: G:\projects\Whittaker_160328\Deliverables\01 Groundwater Reporting 2022\Fig 03 Groundwater Analytical Results.mxd || Coordinate System: NAD 1983 StatePlane Washington North FIPS 4601 Feet || Date Saved: 4/29/2022 || User: nkochie || Print Date: 4/29/2022

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

April 27, 2022

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

Dear Ms Cochrane:

Included are the additional results from the testing of material submitted on March 25, 2022 from the Whittaker 160328, F&BI 203466 project. There are 4 pages included in this report.

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
ASP0427R.DOC

CASE NARRATIVE

This case narrative encompasses samples received on March 25, 2022 by Friedman & Bruya, Inc. from the Aspect Consulting, LLC Whittaker 160328, F&BI 203466 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	Aspect Consulting, LLC
203466 -01	MW-101-032422
203466 -02	MW-104-032422
203466 -03	MW-105-032422
203466 -04	MW-108-032422
203466 -05	MW-109-032422
203466 -06	MW-110-032422
203466 -07	MW-111-032422
203466 -08	MW-112-032422
203466 -09	MW-113-032422
203466 -10	MW-115-032422
203466 -11	MW-100-032422

All quality control requirements were acceptable.

Date of Report: 04/27/22
Date Received: 03/25/22
Project: Whittaker 160328, F&BI 203466
Date Extracted: 04/25/22
Date Analyzed: 04/25/22

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 47-140)
MW-115-032422 203466-10	780	<250	119
Method Blank 02-749 MB	<50	<250	126

Date of Report: 04/27/22
Date Received: 03/25/22
Project: Whittaker 160328, F&BI 203466

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	132	136	63-142	3

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.

203466

SAMPLE CHAIN OF CUSTODY

ME 03/25/22 VWS/AID/EO4

Page # 1 of 2

Report To Ali Cochrane
Company Aspect Consulting Inc
Address 710 2nd Ave Suite 550
City, State, ZIP Seattle, WA 98104
Phone 206-838-6594 Email a.cochrane@aspectconsulting.com

SAMPLERS (signature) David Mackay
PROJECT NAME Whittaker
PO # 160328
REMARKS
Project specific RLs? - Yes / No
INVOICE TO Aspect

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: NWTPH-Dx	NWTPH-Gx	BTEX EPA 8021B	NWTPH-HCID	VOCs EPA 8260	PAHs EPA 8270	PCBs EPA 8082	Total Alkalinity SM 2320B	Nitrate/Nitrite 300.0	Sulfide/sulfate 376.2 + SM 4500-S2-F	Methane RSK-175	Total and dissolved Mn 6020B	Notes
MW-101-032422	01 A-D	3/24/22	1555	Aq	4	X	X	X										☒-Dx w/ SGC per AG 4/4/22
MW-104-032422	02 V	3/24/22	1505		4	X	X	X										Dissolved metals Field Filtered
MW-105-032422	03 A-K		1055		11	X	X	X					X	X	X	X	X	
MW-108-032422	04 A-D		1445		4	X	X	X										Label time 17:27
MW-109-032422	05		1527		4	X	X	X										
MW-110-032422	06		1610		4	X	X	X										
MW-111-032422	07		1455		4	X	X	X										
MW-112-032422	08 A-K		1115		11	X	X	X	X	X	X	X	X	X	X	X	X	Dissolved metals Field Filtered
MW-113-032422	09 A-D		1235		4	X	X	X										
MW-115-032422	10 A-K	↓	1320	↓	11	X	X	X					X	X	X	X	X	Dissolved metals Field Filtered

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by:	David Mackay	Aspect	3/25/22	1230
Received by:	Nkan Pkan	FedEx	3/25/22	1230
Relinquished by:				
Received by:		Samples received at 4 °C		

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

203466

SAMPLE CHAIN OF CUSTODY

ME 03/25/22 VWS/AD6/E04

Page # 2 of 2

Report To Ali Cochrane

Company Aspect Consulting Inc

Address 710 2nd Ave Suite 550

City, State, ZIP Seattle, WA 98104

Phone 206-487-6594 Email acochrane@aspectconsulting.com

SAMPLERS (signature)

PROJECT NAME: Whittaker

PO #: 160328

REMARKS: Project specific RLs? - Yes / No

INVOICE TO: Aspect

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	NWTPH-Dx	NWTPH-Gx	BTEX EPA 8021	NWTPH-HCID	VOCs EPA 8260	PAHs EPA 8270	PCBs EPA 8082					Notes
						ANALYSES REQUESTED											
MW-100-032422	11 A D	3/24/22	1200	Aq	4	X	X	X									

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by:	David Mackey	Aspect	3/25/22	1230
Received by:	Nhan Phan	FLBT	3/25/22	1230
Relinquished by:				
Received by:		Samples received at 4 °C		

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

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

April 5, 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 March 25, 2022 from the Whittaker 160328, F&BI 203466 project. There are 20 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
ASP0405R.DOC

CASE NARRATIVE

This case narrative encompasses samples received on March 25, 2022 by Friedman & Bruya, Inc. from the Aspect Consulting, LLC Whittaker 160328, F&BI 203466 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	Aspect Consulting, LLC
203466 -01	MW-101-032422
203466 -02	MW-104-032422
203466 -03	MW-105-032422
203466 -04	MW-108-032422
203466 -05	MW-109-032422
203466 -06	MW-110-032422
203466 -07	MW-111-032422
203466 -08	MW-112-032422
203466 -09	MW-113-032422
203466 -10	MW-115-032422
203466 -11	MW-100-032422

Samples MW-105-032422, MW-112-032422, and MW-115-032422 were sent to Fremont Analytical for alkalinity, nitrate and nitrite, sulfate, sulfide, and dissolved methane analyses. The report is enclosed.

All quality control requirements were acceptable.

Date of Report: 04/05/22
Date Received: 03/25/22
Project: Whittaker 160328, F&BI 203466
Date Extracted: 03/30/22
Date Analyzed: 03/30/22

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)

Sample ID Laboratory ID	Benzene	Toluene	Ethyl Benzene	Total Xylenes	Gasoline Range	Surrogate (% Recovery) (Limit 52-124)
MW-101-032422 203466-01	<1	<1	<1	<3	<100	87
MW-104-032422 203466-02	<1	<1	<1	<3	<100	85
MW-105-032422 203466-03	<1	<1	<1	<3	<100	89
MW-108-032422 203466-04	<1	<1	<1	<3	<100	87
MW-109-032422 203466-05	<1	<1	<1	<3	<100	89
MW-110-032422 203466-06	<1	<1	<1	<3	<100	88
MW-111-032422 203466-07	<1	<1	<1	<3	<100	88
MW-112-032422 203466-08	<1	<1	<1	<3	<100	87
MW-113-032422 203466-09	<1	<1	<1	<3	<100	97
MW-115-032422 203466-10	<1	<1	<1	<3	<100	92

Date of Report: 04/05/22
Date Received: 03/25/22
Project: Whittaker 160328, F&BI 203466
Date Extracted: 03/30/22
Date Analyzed: 03/30/22

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)

Sample ID Laboratory ID	Benzene	Toluene	Ethyl Benzene	Total Xylenes	Gasoline Range	Surrogate (% Recovery) (Limit 52-124)
MW-100-032422 203466-11	<1	<1	<1	<3	<100	94
Method Blank 02-625 MB	<1	<1	<1	<3	<100	85

Date of Report: 04/05/22
Date Received: 03/25/22
Project: Whittaker 160328, F&BI 203466
Date Extracted: 03/29/22
Date Analyzed: 03/29/22

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 41-152)
MW-101-032422 203466-01	120 x	<250	144
MW-104-032422 203466-02	58 x	<250	136
MW-105-032422 203466-03	<50	<250	132
MW-108-032422 203466-04	77 x	<250	132
MW-109-032422 203466-05	<50	<250	141
MW-110-032422 203466-06	<50	<250	141
MW-111-032422 203466-07	<50	<250	135
MW-112-032422 203466-08	<50	<250	143
MW-113-032422 203466-09	55 x	<250	ip
MW-115-032422 203466-10	780 x	<250	143
MW-100-032422 203466-11	66 x	<280	145
Method Blank 02-749 MB	<50	<250	135

Analysis For Dissolved Metals By EPA Method 6020B

Client ID:	MW-105-032422	Client:	Aspect Consulting, LLC
Date Received:	03/25/22	Project:	Whittaker 160328, F&BI 203466
Date Extracted:	03/30/22	Lab ID:	203466-03
Date Analyzed:	03/30/22	Data File:	203466-03.077
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Iron	111

Analysis For Dissolved Metals By EPA Method 6020B

Client ID:	MW-105-032422	Client:	Aspect Consulting, LLC
Date Received:	03/25/22	Project:	Whittaker 160328, F&BI 203466
Date Extracted:	03/30/22	Lab ID:	203466-03 x10
Date Analyzed:	03/30/22	Data File:	203466-03 x10.101
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Manganese	1,800

Analysis For Dissolved Metals By EPA Method 6020B

Client ID:	MW-112-032422	Client:	Aspect Consulting, LLC
Date Received:	03/25/22	Project:	Whittaker 160328, F&BI 203466
Date Extracted:	03/30/22	Lab ID:	203466-08
Date Analyzed:	03/30/22	Data File:	203466-08.078
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Iron	212
Manganese	5.07

Analysis For Dissolved Metals By EPA Method 6020B

Client ID:	MW-115-032422	Client:	Aspect Consulting, LLC
Date Received:	03/25/22	Project:	Whittaker 160328, F&BI 203466
Date Extracted:	03/30/22	Lab ID:	203466-10
Date Analyzed:	03/30/22	Data File:	203466-10.079
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Iron	128

Analysis For Dissolved Metals By EPA Method 6020B

Client ID:	MW-115-032422	Client:	Aspect Consulting, LLC
Date Received:	03/25/22	Project:	Whittaker 160328, F&BI 203466
Date Extracted:	03/30/22	Lab ID:	203466-10 x10
Date Analyzed:	03/30/22	Data File:	203466-10 x10.102
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Manganese	720

Analysis For Dissolved Metals By EPA Method 6020B

Client ID:	Method Blank	Client:	Aspect Consulting, LLC
Date Received:	NA	Project:	Whittaker 160328, F&BI 203466
Date Extracted:	03/30/22	Lab ID:	I2-255 mb
Date Analyzed:	03/30/22	Data File:	I2-255 mb.067
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Iron	<50
Manganese	<1

Analysis For Total Metals By EPA Method 6020B

Client ID:	MW-105-032422	Client:	Aspect Consulting, LLC
Date Received:	03/25/22	Project:	Whittaker 160328, F&BI 203466
Date Extracted:	03/29/22	Lab ID:	203466-03
Date Analyzed:	03/29/22	Data File:	203466-03.147
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Iron	182

Analysis For Total Metals By EPA Method 200.8

Client ID:	MW-105-032422	Client:	Aspect Consulting, LLC
Date Received:	03/25/22	Project:	Whittaker 160328, F&BI 203466
Date Extracted:	03/29/22	Lab ID:	203466-03 x10
Date Analyzed:	03/30/22	Data File:	203466-03 x10.056
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Manganese	1,740

Analysis For Total Metals By EPA Method 6020B

Client ID:	MW-112-032422	Client:	Aspect Consulting, LLC
Date Received:	03/25/22	Project:	Whittaker 160328, F&BI 203466
Date Extracted:	03/29/22	Lab ID:	203466-08
Date Analyzed:	03/29/22	Data File:	203466-08.148
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Iron	215
Manganese	15.7

Analysis For Total Metals By EPA Method 6020B

Client ID:	MW-115-032422	Client:	Aspect Consulting, LLC
Date Received:	03/25/22	Project:	Whittaker 160328, F&BI 203466
Date Extracted:	03/29/22	Lab ID:	203466-10
Date Analyzed:	03/29/22	Data File:	203466-10.149
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Iron	187
Manganese	786

Analysis For Total Metals By EPA Method 6020B

Client ID:	Method Blank	Client:	Aspect Consulting, LLC
Date Received:	NA	Project:	Whittaker 160328, F&BI 203466
Date Extracted:	03/29/22	Lab ID:	I2-249 mb
Date Analyzed:	03/29/22	Data File:	I2-249 mb.113
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Iron	<50
Manganese	<1

Date of Report: 04/05/22
Date Received: 03/25/22
Project: Whittaker 160328, F&BI 203466

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: 203466-01 (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	95	65-118
Toluene	ug/L (ppb)	50	95	72-122
Ethylbenzene	ug/L (ppb)	50	104	73-126
Xylenes	ug/L (ppb)	150	102	74-118
Gasoline	ug/L (ppb)	1,000	92	69-134

Date of Report: 04/05/22
Date Received: 03/25/22
Project: Whittaker 160328, F&BI 203466

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	119	112	63-142	8

Date of Report: 04/05/22
Date Received: 03/25/22
Project: Whittaker 160328, F&BI 203466

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF WATER SAMPLES FOR DISSOLVED METALS USING EPA METHOD 6020B

Laboratory Code: 203473-01 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Iron	ug/L (ppb)	100	3,810	157 b	196 b	75-125	22 b
Manganese	ug/L (ppb)	20	3,870	189 b	405 b	75-125	73 b

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Iron	ug/L (ppb)	100	86	80-120
Manganese	ug/L (ppb)	20	97	80-120

Date of Report: 04/05/22
Date Received: 03/25/22
Project: Whittaker 160328, F&BI 203466

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF WATER SAMPLES FOR TOTAL METALS USING EPA METHOD 6020B

Laboratory Code: 203493-01 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Iron	ug/L (ppb)	100	<50	98	104	75-125	6
Manganese	ug/L (ppb)	20	9.18	96	102	75-125	6

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Iron	ug/L (ppb)	100	100	80-120
Manganese	ug/L (ppb)	20	100	80-120

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.

203466

SAMPLE CHAIN OF CUSTODY

ME 03/25/22 VW5/A16/E04

Page # 1 of 2

Report To Ali Cochrane

Company Aspect Consulting Inc

Address 710 2nd Ave Suite 550

City, State, ZIP Seattle, WA 98104

Phone 206-838-6594 Email acochrane@aspectconsulting.com

SAMPLERS (signature) David Mackay

PROJECT NAME: Whittaker

PO #: 160328

REMARKS: Project specific RLs? - Yes / No

INVOICE TO: Aspect

TURNAROUND TIME
- [x] 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	NWTPH-Dx	NWTPH-Gx	BTEX EPA 8021B	NWTPH-HCID	VOCs EPA 8260	PAHs EPA 8270	PCBs EPA 8082	Total Alkalinity SM 2320B	Nitrate/Nitrite 300.0	Sulfide/Sulfate 300.0 + SM 4500-S2-F	Methane RSK-175	Total and dissolved iron and manganese 6020B	Notes
MW-101-032422	01 A-D	3/24/22	1555	Aq	4	X	X	X										
MW-104-032422	02 V	3/24/22	1505		4	X	X	X										
MW-105-032422	03 A-K		1055		11	X	X	X					X	X	X	X	X	Dissolved metals Field filtered
MW-108-032422	04 A-D		1445		4	X	X	X										
MW-109-032422	05		1527		4	X	X	X										Label time 17:27 (DB)
MW-110-032422	06		1610		4	X	X	X										
MW-111-032422	07		1455		4	X	X	X										
MW-112-032422	08 A-K		1115		11	X	X	X	~~X~~ On 3/25	~~X~~	~~X~~	~~X~~	~~X~~ X	X	X	X	X	Dissolved metals Field filtered
MW-113-032422	09 A-D		1235		4	X	X	X										
MW-115-032422	10 A-K		1320		11	X	X	X					X	X	X	X	X	Dissolved metals Field filtered

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: David Mackay	David Mackay	Aspect	3/25/22	1230
Received by: Nkan PKun	Nkan PKun	FEBT	3/25/22	1230
Relinquished by:				
Received by:		Samples received at 4 °C		

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

203466

SAMPLE CHAIN OF CUSTODY

ME 03/25/22 VWS/AI6/E04

Page # 2 of 2

Report To Ali Cochrane

Company Aspect Consulting Inc

Address 710 2nd Ave Suite 550

City, State, ZIP Seattle, WA 98104

Phone 206-838-6594 Email acochrane@aspectconsulting.com

SAMPLERS (*signature*) David Mackay

PROJECT NAME: Whittaker

PO #: 160328

REMARKS: Project specific RLs? - Yes / No

INVOICE TO: Aspect

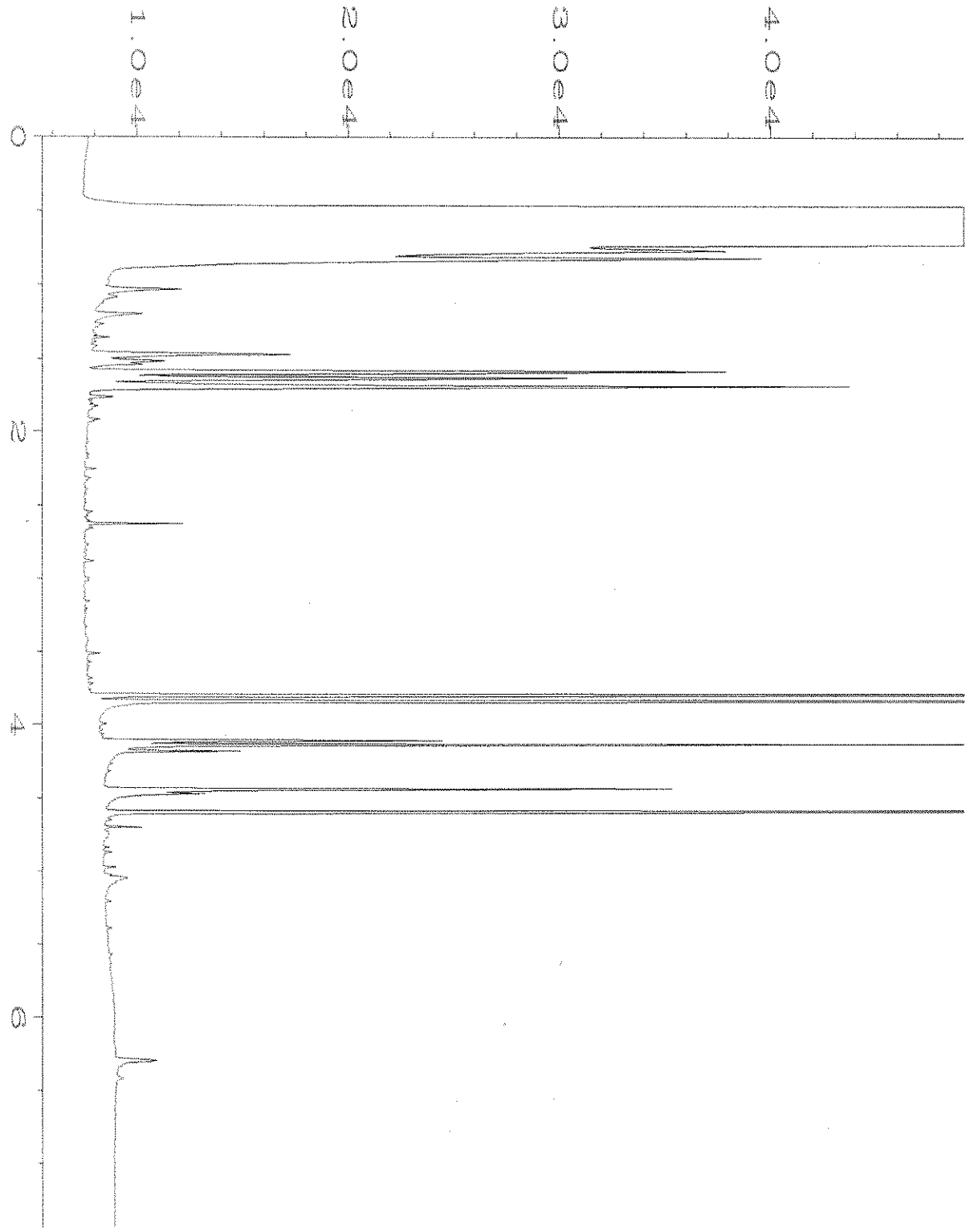
TURNAROUND TIME
- ☒ Standard turnaround
- ☐ RUSH
- Rush charges authorized by:

SAMPLE DISPOSAL
- ☐ Archive samples
- ☐ Other
- Default: Dispose after 30 days

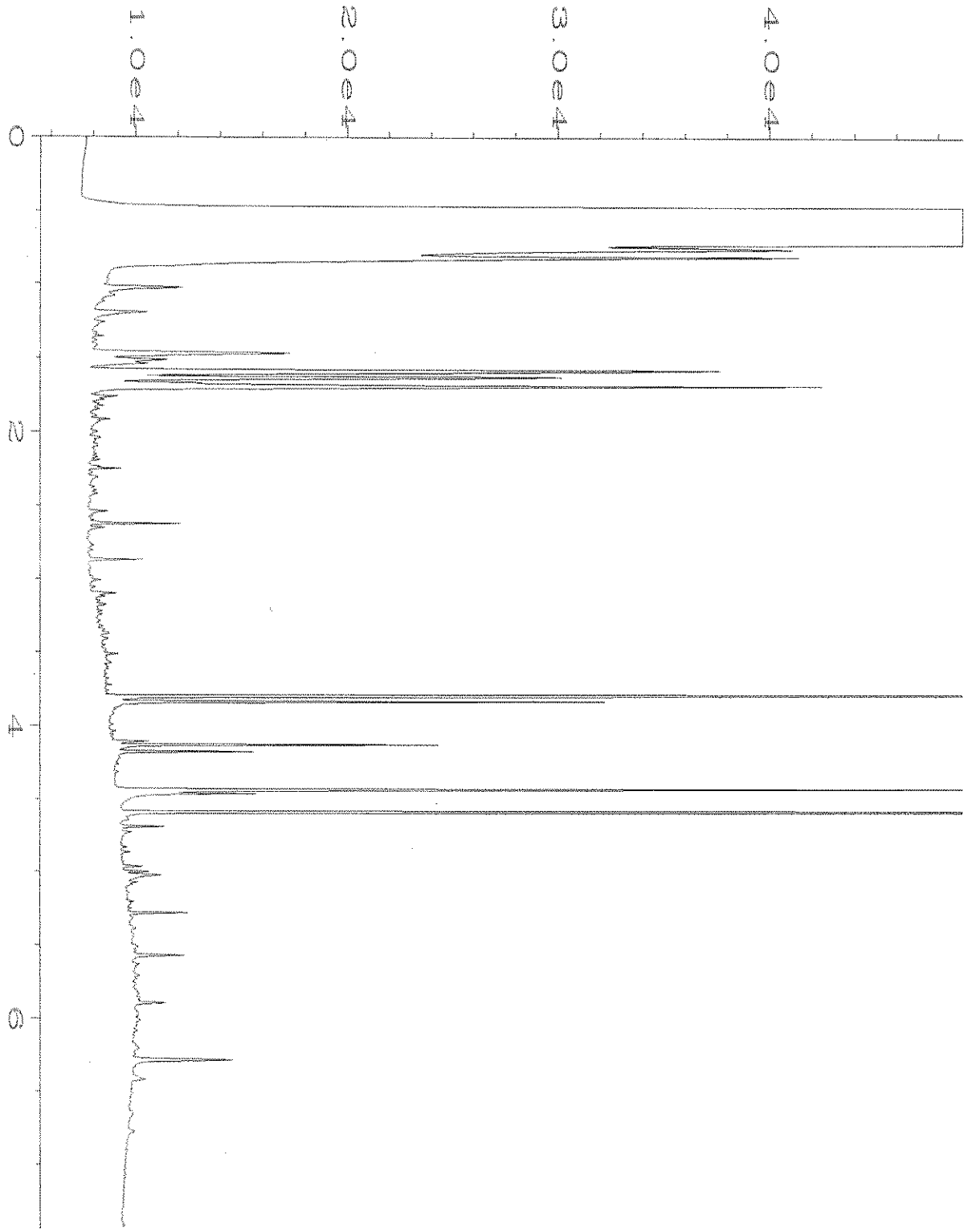
Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	NWTPH-Dx	NWTPH-Gx	BTEX EPA 8021	NWTPH-HCID	VOCs EPA 8260	PAHs EPA 8270	PCBs EPA 8082					Notes
						ANALYSES REQUESTED											
MW-100-032422	11AD	3/24/22	1200	Aq	4	X	X	X									

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: David Mackay	David Mackay	Aspect	3/25/22	1230
Received by: Minh Phan	Minh Phan	FLBT	3/25/22	1230
Relinquished by:				
Received by:		Samples received at 4 °C		

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



Data File Name	: C:\HPCHEM\1\DATA\03-29-22\028F1001.D		
Operator	: TL	Page Number	: 1
Instrument	: GC1	Vial Number	: 28
Sample Name	: 203466-01	Injection Number	: 1
Run Time Bar Code:		Sequence Line	: 10
Acquired on	: 29 Mar 22 06:13 PM	Instrument Method	: DX.MTH
Report Created on	: 30 Mar 22 10:10 AM	Analysis Method	: DEFAULT.MTH



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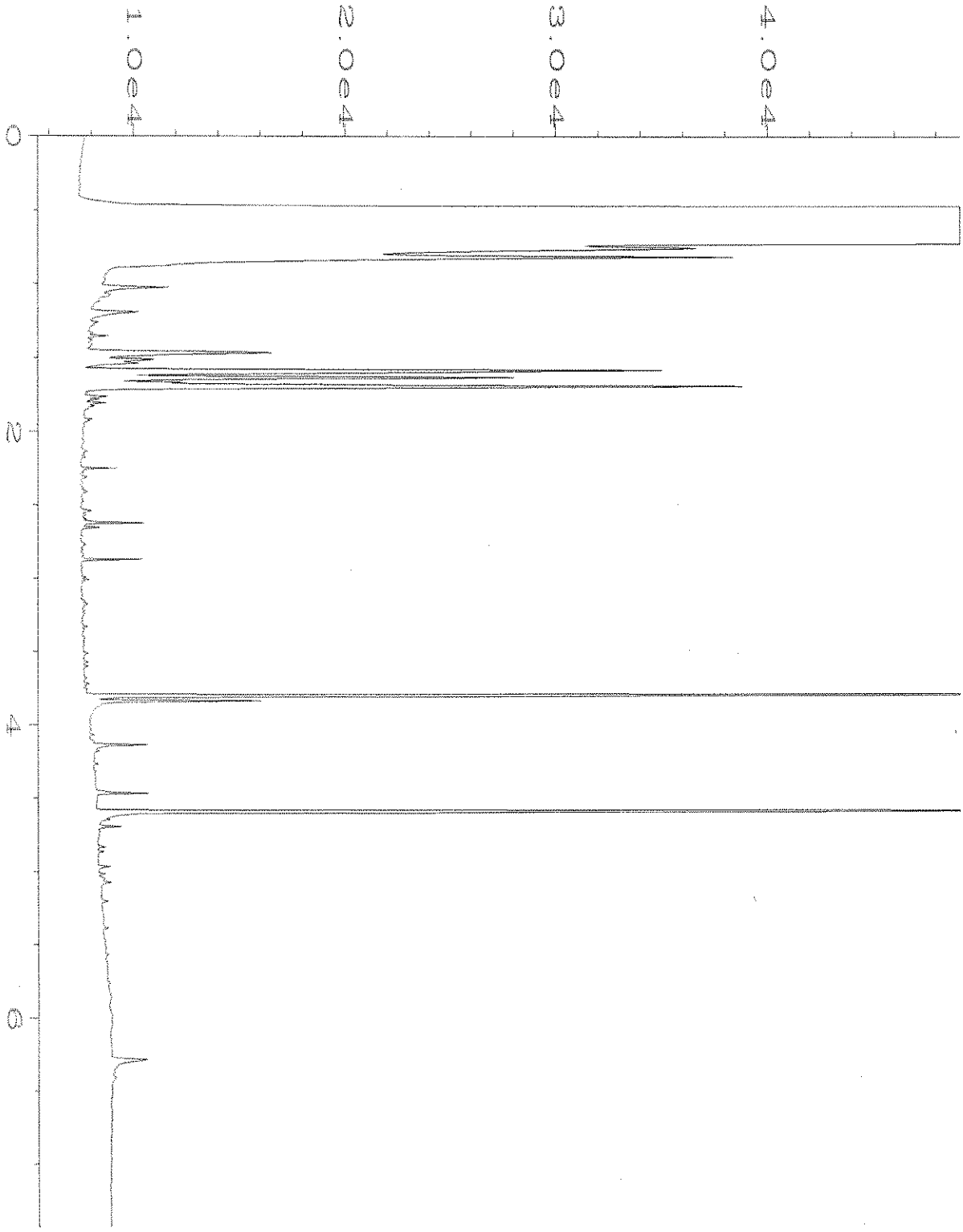
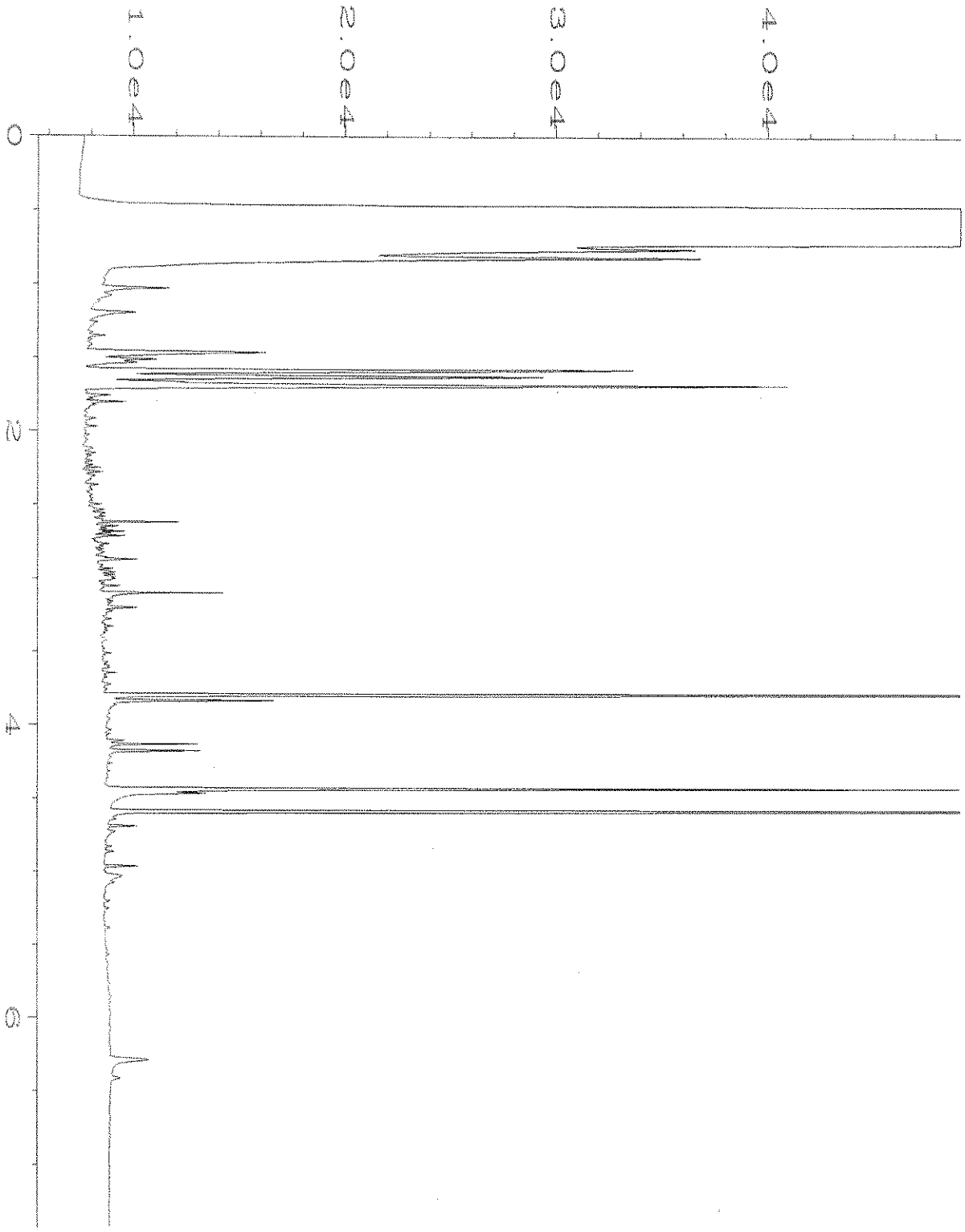
Operator : TL
Instrument : GC1
Sample Name : 203466-02
Run Time Bar Code:
Acquired on : 29 Mar 22 06:28 PM
Report Created on: 30 Mar 22 10:11 AM

Page Number : 1
Vial Number : 29
Injection Number : 1
Sequence Line : 10
Instrument Method: DX.MTH
Analysis Method : DEFAULT.MTH

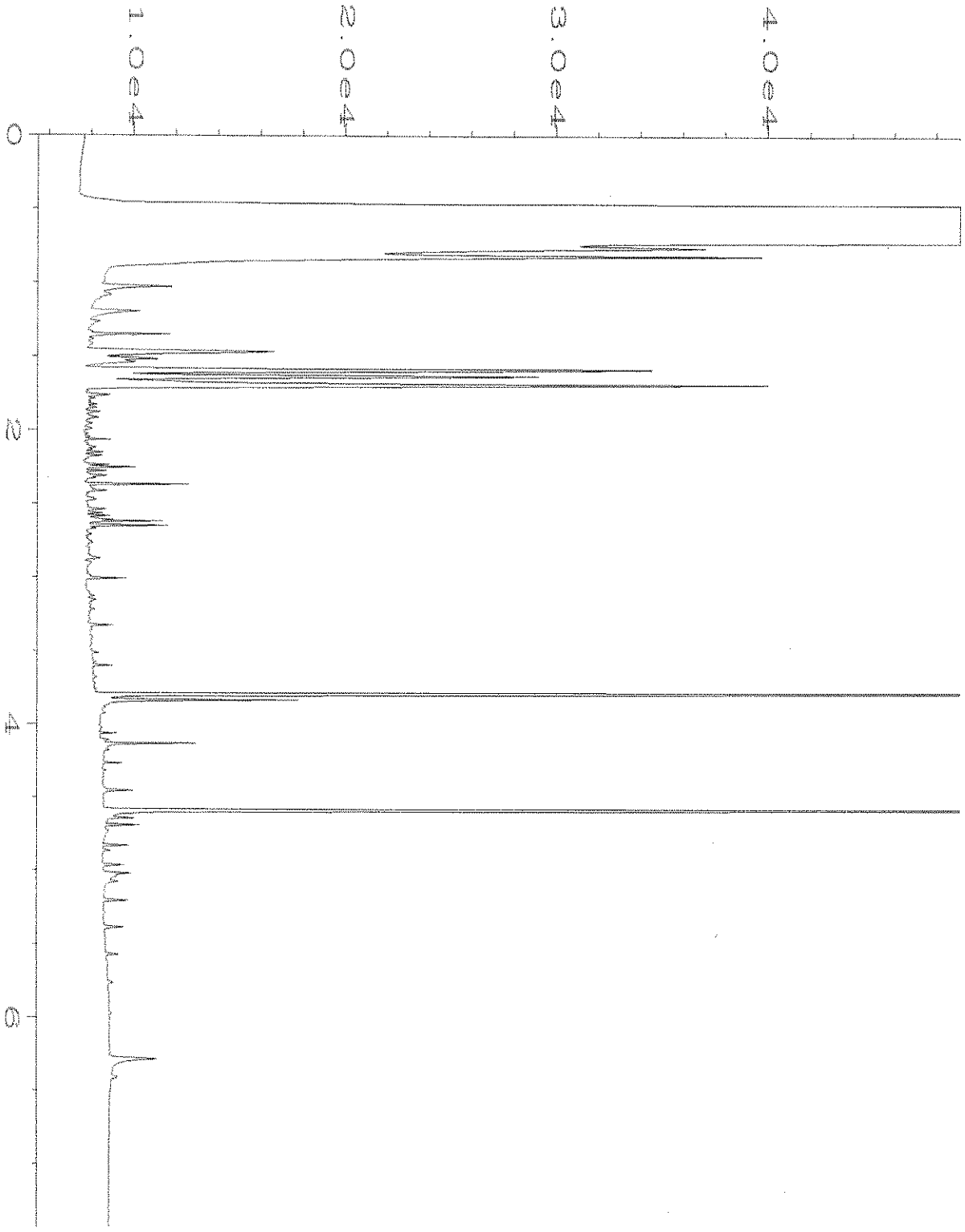


Data File Name : C:\HPCHEM\1\DATA\03-29-22\030F1001.D
Operator : TL
Instrument : GC1
Sample Name : 203466-03
Run Time Bar Code:
Acquired on : 29 Mar 22 06:43 PM
Report Created on: 30 Mar 22 10:11 AM

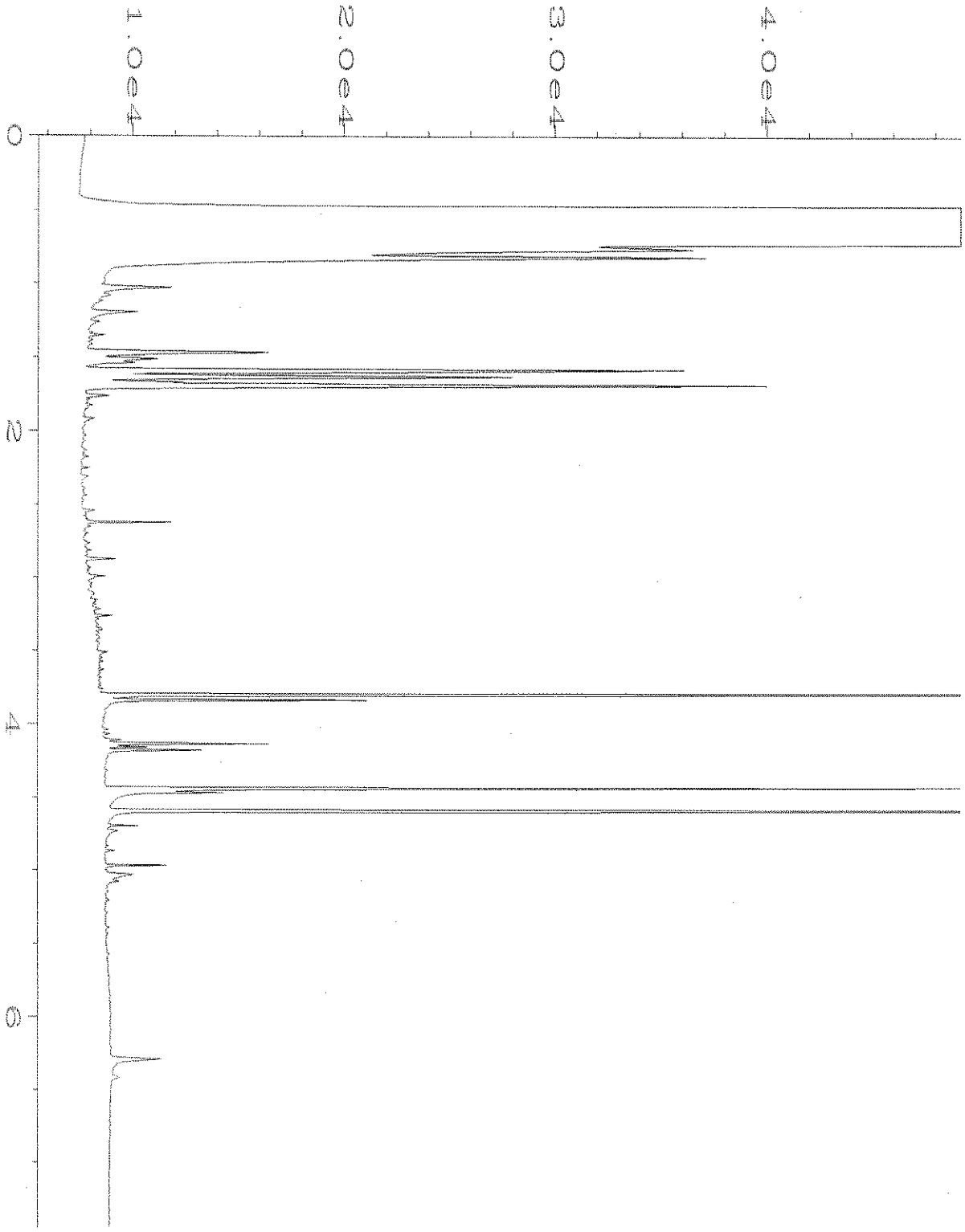
Page Number : 1
Vial Number : 30
Injection Number : 1
Sequence Line : 10
Instrument Method: DX.MTH
Analysis Method : DEFAULT.MTH



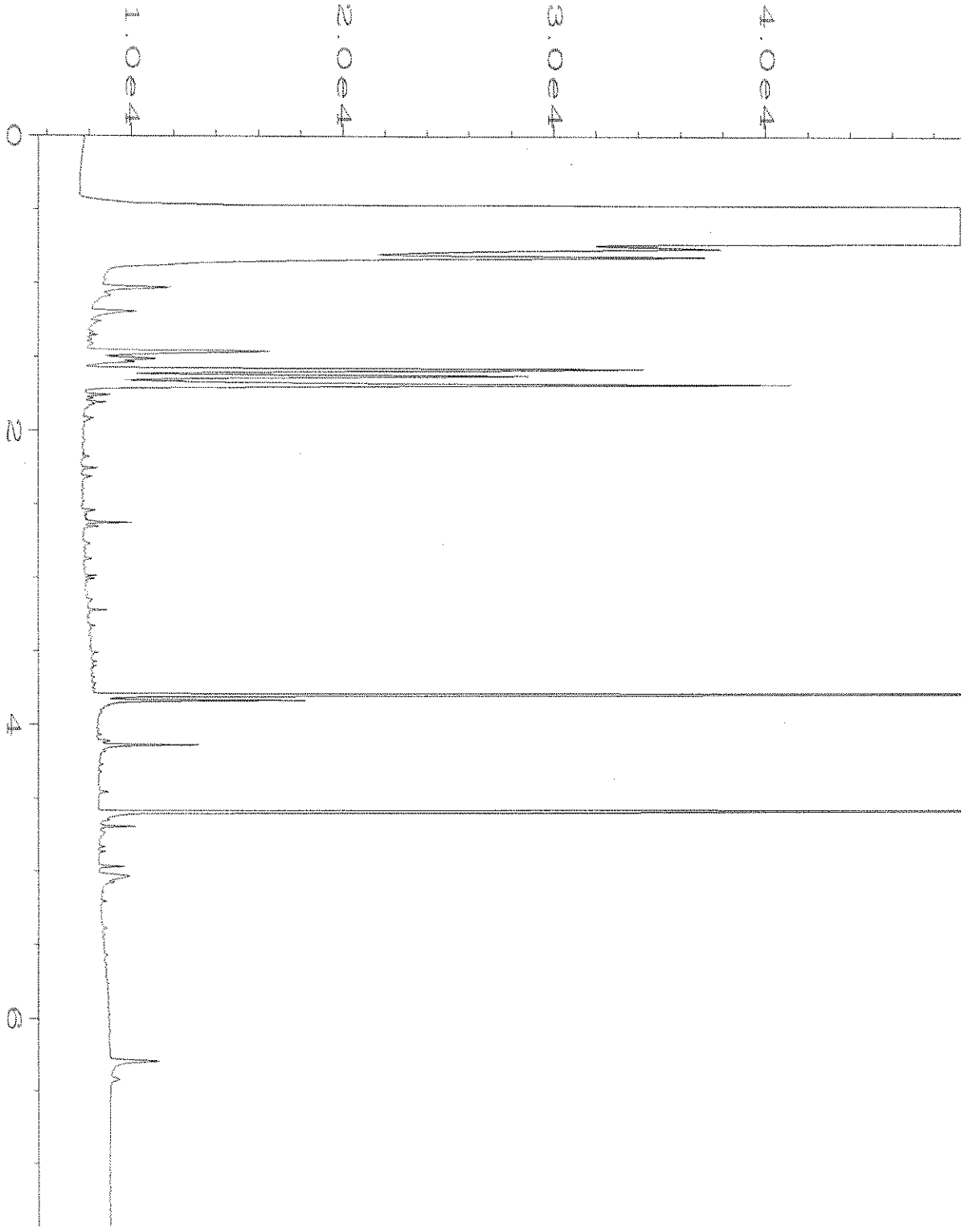
Data File Name	: C:\HPCHEM\1\DATA\03-29-22\031F1001.D		
Operator	: TL	Page Number	: 1
Instrument	: GC1	Vial Number	: 31
Sample Name	: 203466-04	Injection Number	: 1
Run Time Bar Code:		Sequence Line	: 10
Acquired on	: 29 Mar 22 06:58 PM	Instrument Method	: DX.MTH
Report Created on	: 30 Mar 22 10:11 AM	Analysis Method	: DEFAULT.MTH



Data File Name	: C:\HPCHEM\1\DATA\03-29-22\032F1001.D		
Operator	: TL	Page Number	: 1
Instrument	: GC1	Vial Number	: 32
Sample Name	: 203466-05	Injection Number	: 1
Run Time Bar Code:		Sequence Line	: 10
Acquired on	: 29 Mar 22 07:13 PM	Instrument Method	: DX.MTH
Report Created on	: 30 Mar 22 10:11 AM	Analysis Method	: DEFAULT.MTH



Data File Name	: C:\HPCHEM\1\DATA\03-29-22\033F1001.D		
Operator	: TL	Page Number	: 1
Instrument	: GC1	Vial Number	: 33
Sample Name	: 203466-06	Injection Number	: 1
Run Time Bar Code:		Sequence Line	: 10
Acquired on	: 29 Mar 22 07:28 PM	Instrument Method	: DX.MTH
Report Created on	: 30 Mar 22 10:11 AM	Analysis Method	: DEFAULT.MTH



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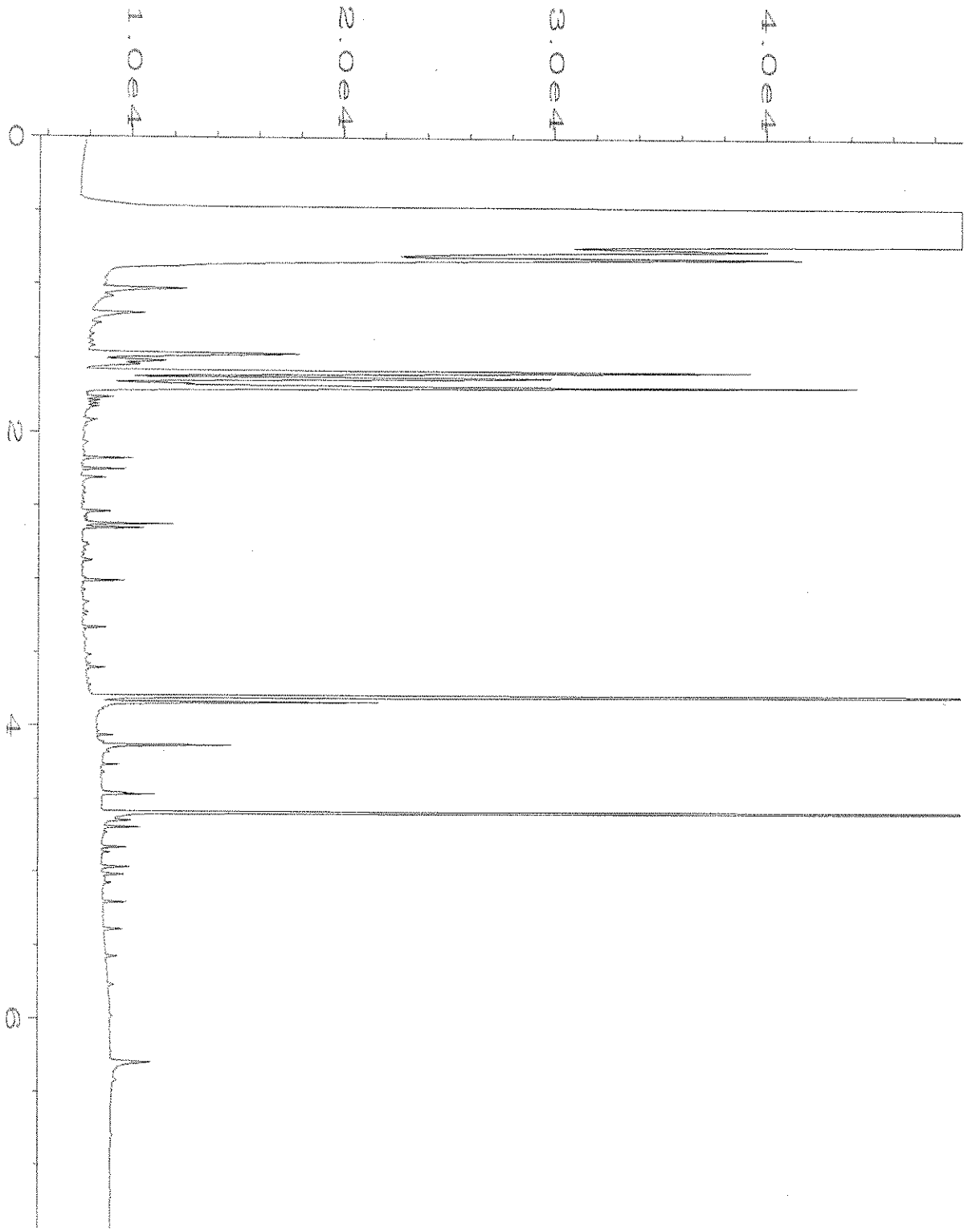
Operator : TL
Instrument : GC1
Sample Name : 203466-07
Run Time Bar Code:
Acquired on : 29 Mar 22 07:43 PM
Report Created on: 30 Mar 22 10:11 AM

Page Number : 1
Vial Number : 34
Injection Number : 1
Sequence Line : 10
Instrument Method: DX.MTH
Analysis Method : DEFAULT.MTH



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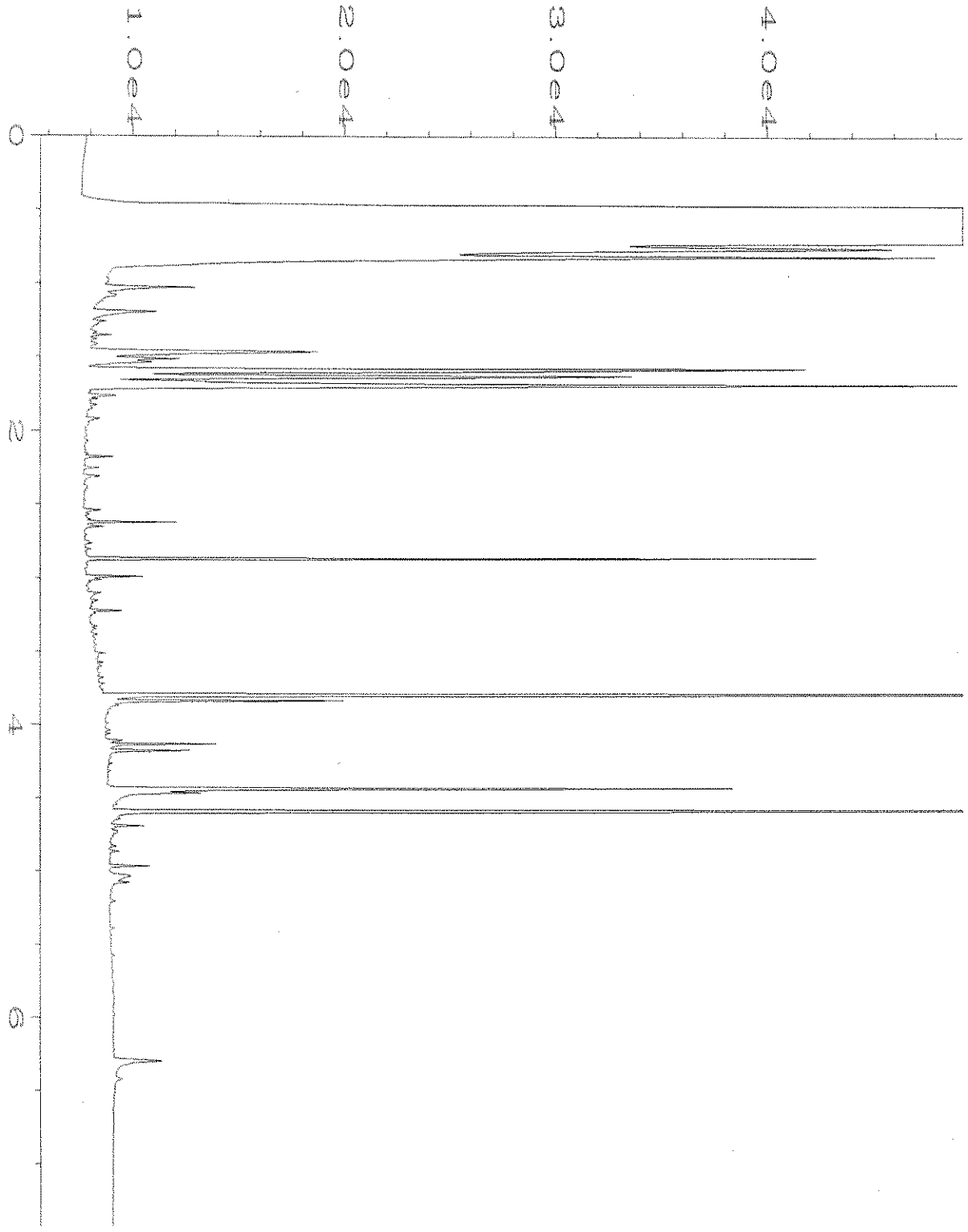
Operator : TL
Instrument : GC1
Sample Name : 203466-08
Run Time Bar Code:
Acquired on : 29 Mar 22 08:27 PM
Report Created on: 30 Mar 22 10:11 AM

Page Number : 1
Vial Number : 35
Injection Number : 1
Sequence Line : 12
Instrument Method: DX.MTH
Analysis Method : DEFAULT.MTH



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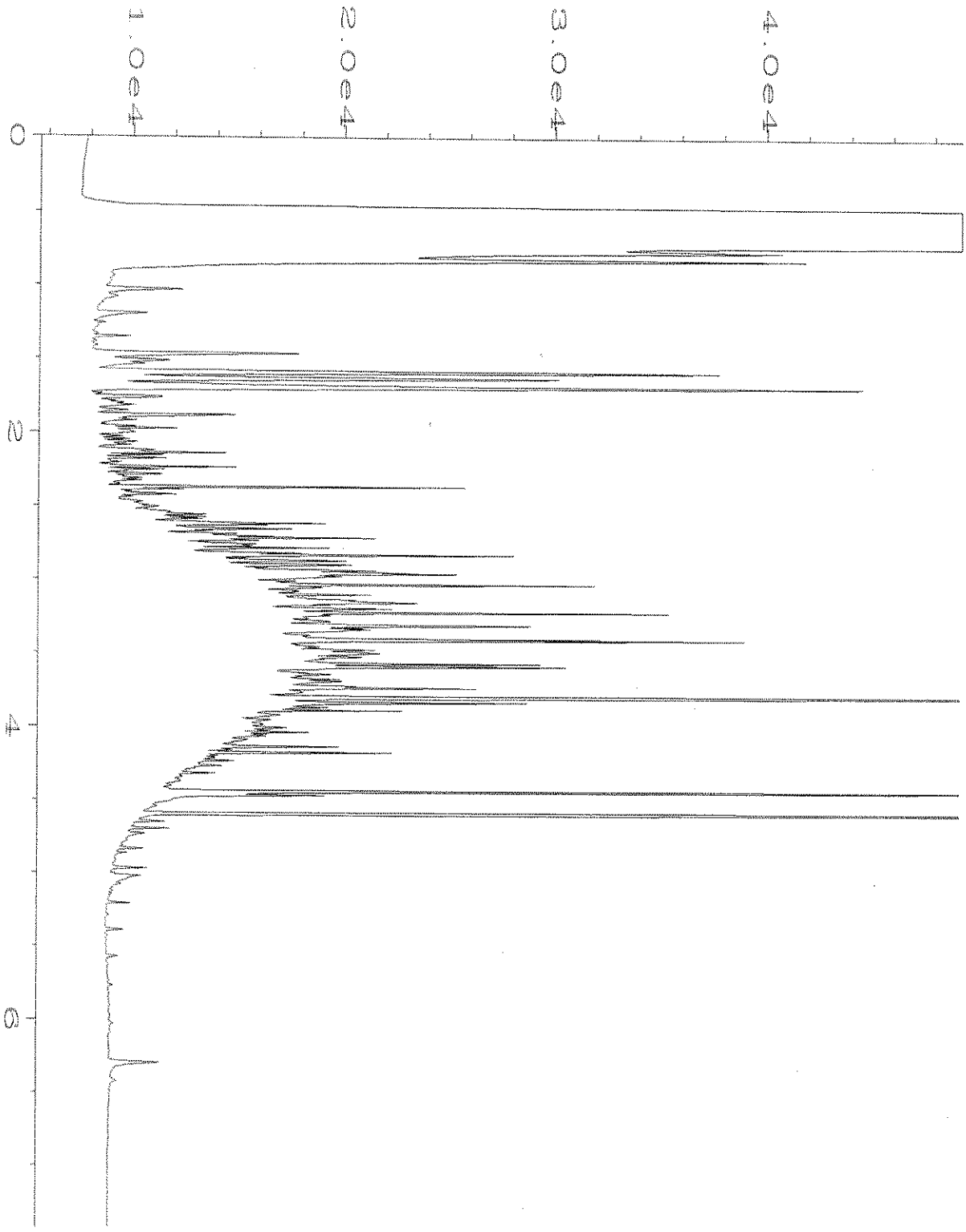
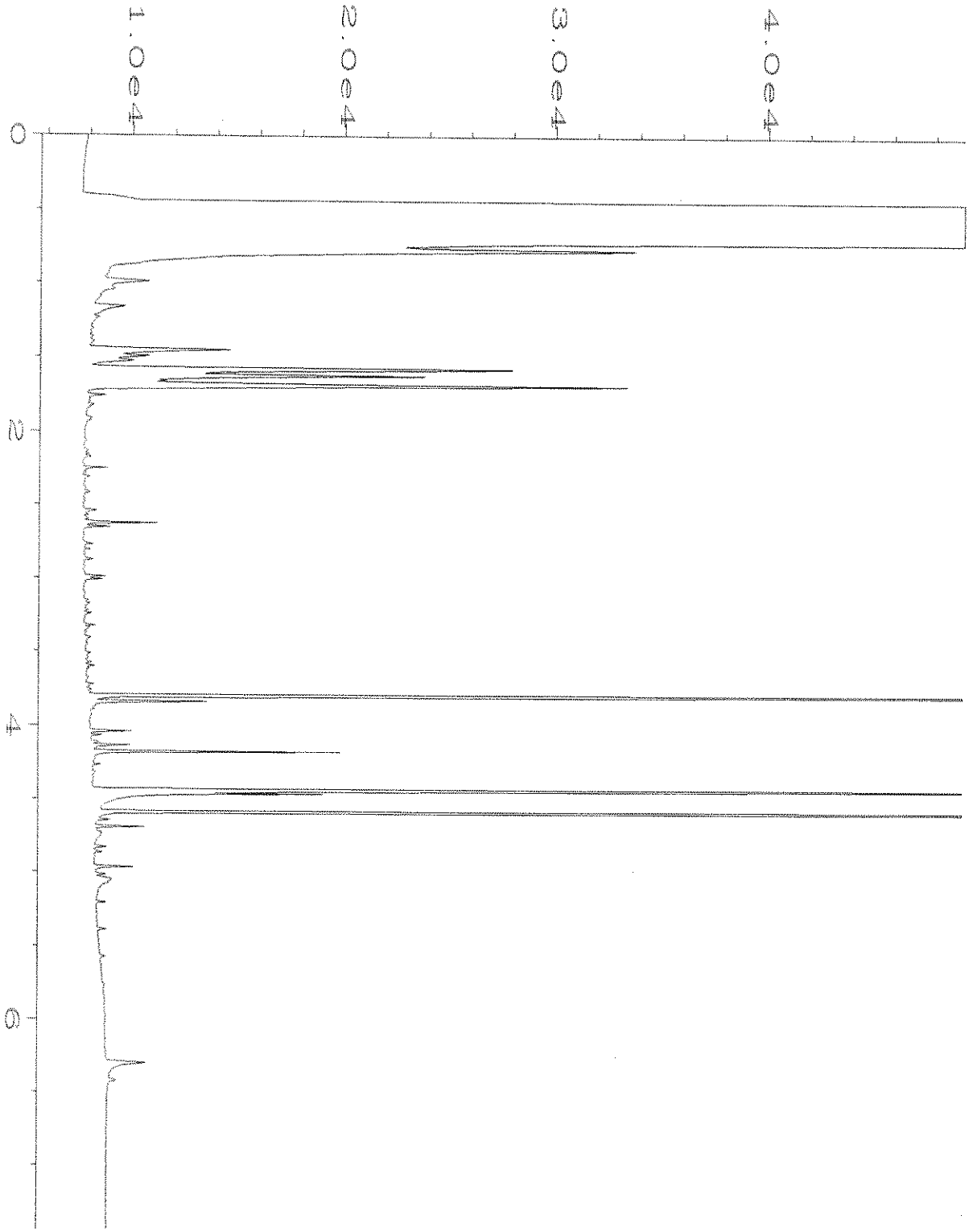
Operator : TL
Instrument : GC1
Sample Name : 203466-09
Run Time Bar Code:
Acquired on : 29 Mar 22 08:42 PM
Report Created on: 30 Mar 22 10:11 AM

Page Number : 1
Vial Number : 36
Injection Number : 1
Sequence Line : 12
Instrument Method: DX.MTH
Analysis Method : DEFAULT.MTH



Data File Name : C:\HPCHEM\1\DATA\03-29-22\037F1201.D
Operator : TL
Instrument : GC1
Sample Name : 203466-10
Run Time Bar Code:
Acquired on : 29 Mar 22 08:57 PM
Report Created on: 30 Mar 22 10:11 AM

Page Number : 1
Vial Number : 37
Injection Number : 1
Sequence Line : 12
Instrument Method: DX.MTH
Analysis Method : DEFAULT.MTH



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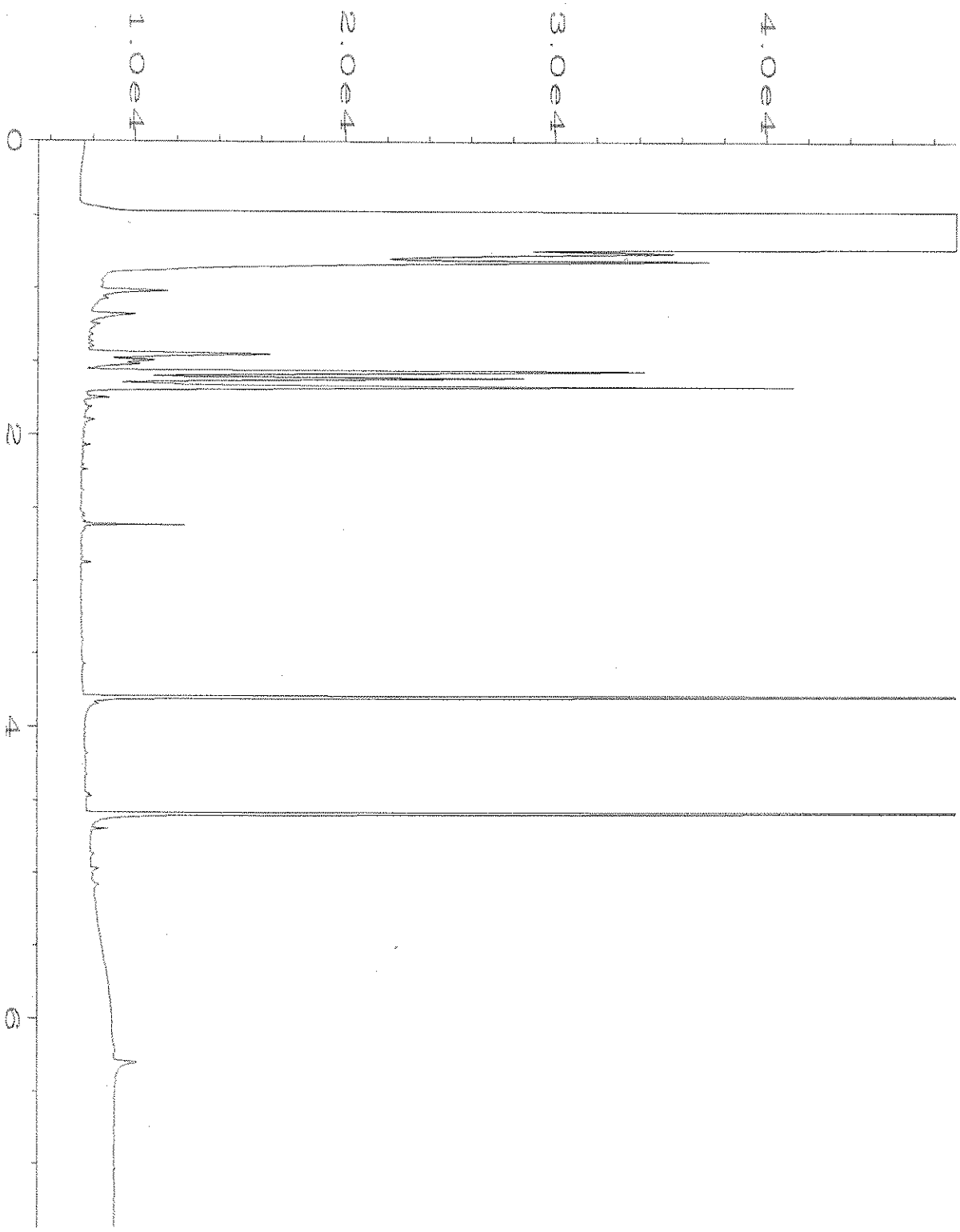
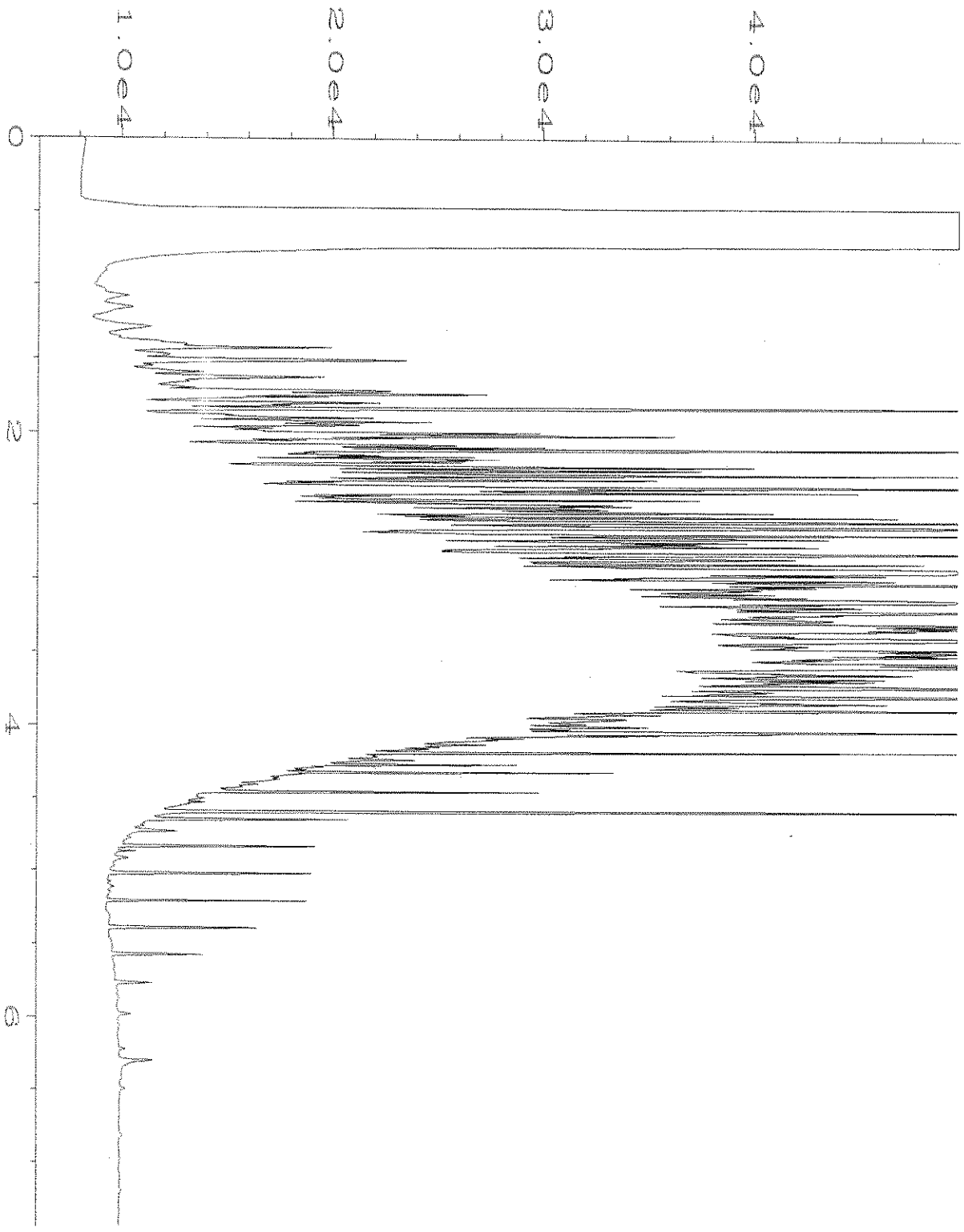
Operator	: TL	Page Number	: 1
Instrument	: GC1	Vial Number	: 38
Sample Name	: 203466-11	Injection Number	: 1
Run Time Bar Code:		Sequence Line	: 12
Acquired on	: 29 Mar 22 09:12 PM	Instrument Method	: DX.MTH
Report Created on	: 30 Mar 22 10:11 AM	Analysis Method	: DEFAULT.MTH



Data File Name : C:\HPCHEM\1\DATA\03-29-22\024F1001.D
Operator : TL
Instrument : GC1
Sample Name : 02-749 mb
Run Time Bar Code:
Acquired on : 29 Mar 22 05:20 PM
Report Created on: 30 Mar 22 10:12 AM

Page Number : 1
Vial Number : 24
Injection Number : 1
Sequence Line : 10
Instrument Method: DX.MTH
Analysis Method : DEFAULT.MTH



Data File Name	: C:\HPCHEM\1\DATA\03-29-22\003F0201.D		
Operator	: TL	Page Number	: 1
Instrument	: GC1	Vial Number	: 3
Sample Name	: 500 Dx 65-27F	Injection Number	: 1
Run Time Bar Code:		Sequence Line	: 2
Acquired on	: 29 Mar 22 06:41 AM	Instrument Method	: DX.MTH
Report Created on:	30 Mar 22 10:12 AM	Analysis Method	: DEFAULT.MTH

3600 Fremont Ave. N.
Seattle, WA 98103
T: (206) 352-3790
F: (206) 352-7178
info@fremontanalytical.com

Friedman & Bruya
Michael Erdahl
3012 16th Ave. W.
Seattle, WA 98119

RE: 203466
Work Order Number: 2203630

April 04, 2022

Attention Michael Erdahl:

Fremont Analytical, Inc. received 3 sample(s) on 3/25/2022 for the analyses presented in the following report.

Dissolved Gases by RSK-175
Ion Chromatography by EPA Method 300.0
Sulfide by SM 4500-S2-F
Total Alkalinity by SM 2320B

This report consists of the following:

- Case Narrative
- Analytical Results
- Applicable Quality Control Summary Reports
- Chain of Custody

All analyses were performed consistent with the Quality Assurance program of Fremont Analytical, Inc. Please contact the laboratory if you should have any questions about the results.

Thank you for using Fremont Analytical.

Sincerely,

Brianna Barnes
Project Manager

Date: *04/04/2022*

CLIENT: Friedman & Bruya
Project: 203466
Work Order: 2203630

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Date/Time Collected	Date/Time Received
2203630-001	MW-105-032422	03/24/2022 10:55 AM	03/25/2022 2:50 PM
2203630-002	MW-112-032422	03/24/2022 11:15 AM	03/25/2022 2:50 PM
2203630-003	MW-115-032422	03/24/2022 1:20 PM	03/25/2022 2:50 PM

Note: If no "Time Collected" is supplied, a default of 12:00AM is assigned

Case Narrative

WO#: **2203630**
Date: **4/4/2022**

CLIENT: Friedman & Bruya
Project: 203466

I. SAMPLE RECEIPT:
Samples receipt information is recorded on the attached Sample Receipt Checklist.

II. GENERAL REPORTING COMMENTS:
Results are reported on a wet weight basis unless dry-weight correction is denoted in the units field on the analytical report ("mg/kg-dry" or "ug/kg-dry").

Matrix Spike (MS) and MS Duplicate (MSD) samples are tested from an analytical batch of "like" matrix to check for possible matrix effect. The MS and MSD will provide site specific matrix data only for those samples which are spiked by the laboratory. The sample chosen for spike purposes may or may not have been a sample submitted in this sample delivery group. The validity of the analytical procedures for which data is reported in this analytical report is determined by the Laboratory Control Sample (LCS) and the Method Blank (MB). The LCS and the MB are processed with the samples and the MS/MSD to ensure method criteria are achieved throughout the entire analytical process.

III. ANALYSES AND EXCEPTIONS:
Exceptions associated with this report will be footnoted in the analytical results page(s) or the quality control summary page(s) and/or noted below.

Qualifiers:

* - Flagged value is not within established control limits
B - Analyte detected in the associated Method Blank
D - Dilution was required
E - Value above quantitation range
H - Holding times for preparation or analysis exceeded
I - Analyte with an internal standard that does not meet established acceptance criteria
J - Analyte detected below Reporting Limit
N - Tentatively Identified Compound (TIC)
Q - Analyte with an initial or continuing calibration that does not meet established acceptance criteria
S - Spike recovery outside accepted recovery limits
ND - Not detected at the Reporting Limit
R - High relative percent difference observed

Acronyms:

%Rec - Percent Recovery
CCB - Continued Calibration Blank
CCV - Continued Calibration Verification
DF - Dilution Factor
DUP - Sample Duplicate
HEM - Hexane Extractable Material
ICV - Initial Calibration Verification
LCS/LCSD - Laboratory Control Sample / Laboratory Control Sample Duplicate
MCL - Maximum Contaminant Level
MB or MBLANK - Method Blank
MDL - Method Detection Limit
MS/MSD - Matrix Spike / Matrix Spike Duplicate
PDS - Post Digestion Spike
Ref Val - Reference Value
REP - Sample Replicate
RL - Reporting Limit
RPD - Relative Percent Difference
SD - Serial Dilution
SGT - Silica Gel Treatment
SPK - Spike
Surr - Surrogate

Analytical Report

Work Order: **2203630**
Date Reported: **4/4/2022**

Client: Friedman & Bruya
Collection Date: 3/24/2022 10:55:00 AM
Project: 203466
Lab ID: 2203630-001
Matrix: Water
Client Sample ID: **MW-105-032422**

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Dissolved Gases by RSK-175				Batch ID: R74518		Analyst: MS
Methane	ND	0.00675		mg/L	1	4/4/2022 12:06:00 PM
Ion Chromatography by EPA Method 300.0				Batch ID: 35889		Analyst: SLL
Nitrate (as N)+Nitrite (as N)	5.08	1.10	D	mg/L	10	3/25/2022 11:21:00 PM
Sulfate	31.1	6.00	D	mg/L	10	3/25/2022 11:21:00 PM
Total Alkalinity by SM 2320B				Batch ID: R74475		Analyst: CH
Alkalinity, Total (As CaCO3)	136	2.50		mg/L	1	4/1/2022 9:07:23 AM
Sulfide by SM 4500-S2-F				Batch ID: R74326		Analyst: SS
Sulfide	ND	0.500		mg/L	1	3/25/2022 2:03:01 PM

Analytical Report

Work Order: **2203630**
Date Reported: **4/4/2022**

Client: Friedman & Bruya
Collection Date: 3/24/2022 11:15:00 AM
Project: 203466
Lab ID: 2203630-002
Matrix: Water
Client Sample ID: **MW-112-032422**

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Dissolved Gases by RSK-175				Batch ID: R74518		Analyst: MS
Methane	ND	0.00675		mg/L	1	4/4/2022 12:18:00 PM
Ion Chromatography by EPA Method 300.0				Batch ID: 35889		Analyst: SLL
Nitrate (as N)+Nitrite (as N)	4.14	1.10	D	mg/L	10	3/25/2022 11:44:00 PM
Sulfate	35.3	6.00	D	mg/L	10	3/25/2022 11:44:00 PM
Total Alkalinity by SM 2320B				Batch ID: R74475		Analyst: CH
Alkalinity, Total (As CaCO3)	123	2.50		mg/L	1	4/1/2022 9:07:23 AM
Sulfide by SM 4500-S2-F				Batch ID: R74326		Analyst: SS
Sulfide	ND	0.500		mg/L	1	3/25/2022 2:03:01 PM

Analytical Report

Work Order: **2203630**
Date Reported: **4/4/2022**

Client: Friedman & Bruya
Collection Date: 3/24/2022 1:20:00 PM
Project: 203466
Lab ID: 2203630-003
Matrix: Water
Client Sample ID: **MW-115-032422**

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Dissolved Gases by RSK-175				Batch ID: R74518		Analyst: MS
Methane	0.0212	0.00675		mg/L	1	4/4/2022 12:20:00 PM
Ion Chromatography by EPA Method 300.0				Batch ID: 35889		Analyst: SLL
Nitrate (as N)+Nitrite (as N)	ND	0.110		mg/L	1	3/29/2022 11:13:00 PM
Sulfate	11.0	0.600		mg/L	1	3/29/2022 11:13:00 PM
Total Alkalinity by SM 2320B				Batch ID: R74475		Analyst: CH
Alkalinity, Total (As CaCO3)	280	2.50		mg/L	1	4/1/2022 9:07:23 AM
Sulfide by SM 4500-S2-F				Batch ID: R74326		Analyst: SS
Sulfide	ND	0.500		mg/L	1	3/25/2022 2:03:01 PM

Work Order: 2203630
CLIENT: Friedman & Bruya
Project: 203466

QC SUMMARY REPORT

Total Alkalinity by SM 2320B

Sample ID: **MB-R74475**	SampType: **MBLK**	Units: **mg/L**	Prep Date: **4/1/2022**	RunNo: **74475**
Client ID: **MBLKW**	Batch ID: **R74475**		Analysis Date: **4/1/2022**	SeqNo: **1527540**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Alkalinity, Total (As CaCO3)	ND	2.50									

Sample ID: **LCS-R74475**	SampType: **LCS**	Units: **mg/L**	Prep Date: **4/1/2022**	RunNo: **74475**
Client ID: **LCSW**	Batch ID: **R74475**		Analysis Date: **4/1/2022**	SeqNo: **1527541**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Alkalinity, Total (As CaCO3)	93.1	2.50	100.0	0	93.1	84	121				

Sample ID: **2203630-001BDUP**	SampType: **DUP**	Units: **mg/L**	Prep Date: **4/1/2022**	RunNo: **74475**
Client ID: **MW-105-032422**	Batch ID: **R74475**		Analysis Date: **4/1/2022**	SeqNo: **1527543**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Alkalinity, Total (As CaCO3)	140	2.50						136.4	2.90	20	

Work Order: 2203630
CLIENT: Friedman & Bruya
Project: 203466

QC SUMMARY REPORT

Ion Chromatography by EPA Method 300.0

Sample ID: **MB-35889**	SampType: **MBLK**			Units: **mg/L**		Prep Date: **3/25/2022**		RunNo: **74407**		
Client ID: **MBLKW**	Batch ID: **35889**					Analysis Date: **3/25/2022**		SeqNo: **1526120**		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate (as N)+Nitrite (as N)	ND	0.110									
Sulfate	ND	0.600									

Sample ID: **LCS-35889**	SampType: **LCS**			Units: **mg/L**		Prep Date: **3/25/2022**		RunNo: **74407**		
Client ID: **LCSW**	Batch ID: **35889**					Analysis Date: **3/25/2022**		SeqNo: **1526121**		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate (as N)+Nitrite (as N)	1.45	0.110	1.500	0	96.7	90	110				
Sulfate	3.58	0.600	3.750	0	95.6	90	110				

Sample ID: **2203580-001BDUP**	SampType: **DUP**			Units: **mg/L**		Prep Date: **3/25/2022**		RunNo: **74407**		
Client ID: **BATCH**	Batch ID: **35889**					Analysis Date: **3/25/2022**		SeqNo: **1526123**		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate (as N)+Nitrite (as N)	ND	0.110						0		20	
Sulfate	9.73	0.600						9.813	0.891	20	

Sample ID: **2203580-001BMS**	SampType: **MS**			Units: **mg/L**		Prep Date: **3/25/2022**		RunNo: **74407**		
Client ID: **BATCH**	Batch ID: **35889**					Analysis Date: **3/25/2022**		SeqNo: **1526124**		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate (as N)+Nitrite (as N)	1.46	0.110	1.500	0.07400	92.1	80	120				
Sulfate	13.5	0.600	3.750	9.813	98.7	80	120				

Work Order: 2203630
CLIENT: Friedman & Bruya
Project: 203466

QC SUMMARY REPORT

Ion Chromatography by EPA Method 300.0

Sample ID: **2203580-001BMSD** SampType: **MSD** Units: **mg/L** Prep Date: **3/25/2022** RunNo: **74407**
Client ID: **BATCH** Batch ID: **35889** Analysis Date: **3/25/2022** SeqNo: **1526125**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate (as N)+Nitrite (as N)	1.48	0.110	1.500	0.07400	93.6	80	120	1.456	1.50	20	
Sulfate	13.6	0.600	3.750	9.813	99.8	80	120	13.52	0.303	20	

Work Order: 2203630
CLIENT: Friedman & Bruya
Project: 203466

QC SUMMARY REPORT

Sulfide by SM 4500-S2-F

Sample ID: **MB-R74326**	SampType: **MBLK**	Units: **mg/L**	Prep Date: **3/25/2022**	RunNo: **74326**
Client ID: **MBLKW**	Batch ID: **R74326**		Analysis Date: **3/25/2022**	SeqNo: **1524509**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sulfide	ND	0.500									

Sample ID: **LCS-R74326**	SampType: **LCS**	Units: **mg/L**	Prep Date: **3/25/2022**	RunNo: **74326**
Client ID: **LCSW**	Batch ID: **R74326**		Analysis Date: **3/25/2022**	SeqNo: **1524510**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sulfide	1.40	0.500	2.000	0	70.0	55.8	124				

Sample ID: **2203535-001BDUP**	SampType: **DUP**	Units: **mg/L**	Prep Date: **3/25/2022**	RunNo: **74326**
Client ID: **BATCH**	Batch ID: **R74326**		Analysis Date: **3/25/2022**	SeqNo: **1524624**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sulfide	ND	0.500						0		30	

Sample ID: **2203535-001BMS**	SampType: **MS**	Units: **mg/L**	Prep Date: **3/25/2022**	RunNo: **74326**
Client ID: **BATCH**	Batch ID: **R74326**		Analysis Date: **3/25/2022**	SeqNo: **1524625**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sulfide	1.20	0.500	2.000	0	60.0	21.5	190				

Sample ID: **2203535-001BMSD**	SampType: **MSD**	Units: **mg/L**	Prep Date: **3/25/2022**	RunNo: **74326**
Client ID: **BATCH**	Batch ID: **R74326**		Analysis Date: **3/25/2022**	SeqNo: **1524626**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sulfide	2.80	0.500	2.000	0	140	21.5	190	1.200	80.0	30	R

NOTES:
R - High RPD observed, spike recovery is within range.

Work Order: 2203630
CLIENT: Friedman & Bruya
Project: 203466

QC SUMMARY REPORT

Dissolved Gases by RSK-175

Sample ID: **MB-R74518**	SampType: **MBLK**	Units: **mg/L**	Prep Date: **4/4/2022**	RunNo: **74518**
Client ID: **MBLKW**	Batch ID: **R74518**		Analysis Date: **4/4/2022**	SeqNo: **1528521**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Methane	ND	0.00675									

Sample ID: **2203630-001AREP**	SampType: **REP**	Units: **mg/L**	Prep Date: **4/4/2022**	RunNo: **74518**
Client ID: **MW-105-032422**	Batch ID: **R74518**		Analysis Date: **4/4/2022**	SeqNo: **1528516**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Methane	ND	0.00675						0		30	

Sample Log-In Check List

Client Name:	**FB**	Work Order Number:	**2203630**
Logged by:	**Clare Griggs**	Date Received:	**3/25/2022 2:50:00 PM**

Chain of Custody

1.	Is Chain of Custody complete?	Yes ☑	No ☐	Not Present ☐
2.	How was the sample delivered?	Client		

Log In

3.	Coolers are present?	Yes ☑	No ☐	NA ☐
4.	Shipping container/cooler in good condition?	Yes ☑	No ☐	
5.	Custody Seals present on shipping container/cooler? (Refer to comments for Custody Seals not intact)	Yes ☐	No ☐	Not Present ☑
6.	Was an attempt made to cool the samples?	Yes ☑	No ☐	NA ☐
7.	Were all items received at a temperature of >2°C to 6°C *	Yes ☑	No ☐	NA ☐
8.	Sample(s) in proper container(s)?	Yes ☑	No ☐	
9.	Sufficient sample volume for indicated test(s)?	Yes ☑	No ☐	
10.	Are samples properly preserved?	Yes ☑	No ☐	
11.	Was preservative added to bottles?	Yes ☑	No ☐	NA ☐ NaOH to C fractions
12.	Is there headspace in the VOA vials?	Yes ☐	No ☐	NA ☑
13.	Did all samples containers arrive in good condition(unbroken)?	Yes ☑	No ☐	
14.	Does paperwork match bottle labels?	Yes ☑	No ☐	
15.	Are matrices correctly identified on Chain of Custody?	Yes ☑	No ☐	
16.	Is it clear what analyses were requested?	Yes ☑	No ☐	
17.	Were all holding times able to be met?	Yes ☑	No ☐	

Special Handling (if applicable)

18.	Was client notified of all discrepancies with this order?	Yes ☐	No ☐	NA ☑

Person Notified: _____ Date: _____

By Whom: _____ Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding: _____

Client Instructions: _____

19. Additional remarks:

Item Information

Item #	Temp ºC
Sample	1.2

* Note: DoD/ELAP and TNI require items to be received at 4°C +/- 2°C

SUBCONTRACT SAMPLE CHAIN OF CUSTODY

2203630

Page # 1 of 1

Send Report To Michael Erdahl

Company Friedman and Bruya, Inc.

Address 3012 16th Ave W

City, State, ZIP Seattle, WA 98119

Phone # (206) 285-8282 Fax # (206) 283-5044

SUBCONTRACTOR Fremont

PROJECT NAME/NO. 203466

PO # C-108

REMARKS

TURNAROUND TIME
- [x] Standard (1 Week)
- [ ] RUSH
- Rush charges authorized by:

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

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Containers	ANALYSES REQUESTED: TOC	Nitrate/Nitrite 300.0	Nitrite	Sulfate/Sulfide 300.0 or SM4500-SO4-E / SM4500-S2-F	Sulfide	Total Alkalinity SM2320B	Ferrous Iron	Methane RSK-175			
MW-105-032422		3/24/22	1055	Aq			X		X		X		X			
MW-112-032422			1115				X		X		X		X			
MW-115-032422			1320				X		X		X		X			

Friedman & Bruya, Inc.
3012 16th Avenue West
Seattle, WA 98119-2029
Ph. (206) 285-8282
Fax (206) 283-5044

	SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by:	Ann Webber-Bruya	Ann Webber-Bruya	Friedman & Bruya	3/25/22	1300
Received by:	Justine Pogue	Justine Pogue	FAT	3/25/22	14:50
Relinquished by:					
Received by:					

FORMS\COC\Subcontract.DOC

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

January 28, 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 January 14, 2022 from the Whittaker Falls 160328, F&BI 201195 project. There are 13 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
ASP0128R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on January 14, 2022 by Friedman & Bruya, Inc. from the Aspect Consulting, LLC Whittaker Falls 160328, F&BI 201195 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	Aspect Consulting, LLC
201195 -01	MW115-10-011422
201195 -02	MW115-20-011422
201195 -03	MW115-30-011422
201195 -04	MW115-40-011422
201195 -05	MW115-Comp

Samples MW115-10-011422, MW115-20-011422, MW115-30-011422, and MW115-40-011422 were composited into a single sample, MW115-Comp.

All quality control requirements were acceptable.

Date of Report: 01/28/22
Date Received: 01/14/22
Project: Whittaker Falls 160328, F&BI 201195
Date Extracted: 01/25/22
Date Analyzed: 01/26/22

RESULTS FROM THE ANALYSIS OF SOIL SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AS GASOLINE USING METHOD NWTPH-Gx

Results Reported on a Dry Weight Basis
Results Reported as mg/kg (ppm)

Sample ID Laboratory ID	Gasoline Range	Surrogate (% Recovery) (Limit 50-150)
MW115-Comp 201195-01,,04	<5	76
Method Blank 02-156 MB2	<5	79

Date of Report: 01/28/22
Date Received: 01/14/22
Project: Whittaker Falls 160328, F&BI 201195
Date Extracted: 01/21/22
Date Analyzed: 01/21/22

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

Results Reported on a Dry Weight Basis
Results Reported as mg/kg (ppm)

Sample ID Laboratory ID	Diesel Range (C_{10}-C_{25})	Motor Oil Range (C_{25}-C_{36})	Surrogate (% Recovery) (Limit 53-144)
MW115-Comp 201195-01,,04	<50	<250	90
Method Blank 02-229 MB	<50	<250	104

Analysis For Total Metals By EPA Method 6020B

Client ID:	MW115-Comp	Client:	Aspect Consulting, LLC
Date Received:	01/14/22	Project:	Whittaker Falls 160328, F&BI 201195
Date Extracted:	01/24/22	Lab ID:	201195-01,,04
Date Analyzed:	01/24/22	Data File:	201195-01,,04.051
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	1.93
Barium	44.0
Cadmium	<1
Chromium	21.7
Lead	1.98
Mercury	<1
Selenium	<1
Silver	<1

Analysis For Total Metals By EPA Method 6020B

Client ID:	Method Blank	Client:	Aspect Consulting, LLC
Date Received:	NA	Project:	Whittaker Falls 160328, F&BI 201195
Date Extracted:	01/24/22	Lab ID:	I2-51 mb
Date Analyzed:	01/24/22	Data File:	I2-51 mb.035
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	<1
Barium	<1
Cadmium	<1
Chromium	<1
Lead	<1
Mercury	<1
Selenium	<1
Silver	<1

Analysis For Volatile Compounds By EPA Method 8260D

Client Sample ID:	MW115-Comp	Client:	Aspect Consulting, LLC
Date Received:	01/14/22	Project:	Whittaker Falls 160328, F&BI 201195
Date Extracted:	01/24/22	Lab ID:	201195-01,,04
Date Analyzed:	01/24/22	Data File:	012408.D
Matrix:	Soil	Instrument:	GCMS4
Units:	mg/kg (ppm) Dry Weight	Operator:	RF

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	97	90	109
Toluene-d8	97	89	112
4-Bromofluorobenzene	100	84	115

Compounds:	Concentration mg/kg (ppm)	Compounds:	Concentration mg/kg (ppm)
Dichlorodifluoromethane	<0.5	1,3-Dichloropropane	<0.05
Chloromethane	<0.5	Tetrachloroethene	<0.025
Vinyl chloride	<0.05	Dibromochloromethane	<0.05
Bromomethane	<0.5	1,2-Dibromoethane (EDB)	<0.05
Chloroethane	<0.5	Chlorobenzene	<0.05
Trichlorofluoromethane	<0.5	Ethylbenzene	<0.05
Acetone	<5	1,1,1,2-Tetrachloroethane	<0.05
1,1-Dichloroethene	<0.05	m,p-Xylene	<0.1
Hexane	<0.25	o-Xylene	<0.05
Methylene chloride	<0.5	Styrene	<0.05
Methyl t-butyl ether (MTBE)	<0.05	Isopropylbenzene	<0.05
trans-1,2-Dichloroethene	<0.05	Bromoform	<0.05
1,1-Dichloroethane	<0.05	n-Propylbenzene	<0.05
2,2-Dichloropropane	<0.05	Bromobenzene	<0.05
cis-1,2-Dichloroethene	<0.05	1,3,5-Trimethylbenzene	<0.05
Chloroform	<0.05	1,1,2,2-Tetrachloroethane	<0.05
2-Butanone (MEK)	<1	1,2,3-Trichloropropane	<0.05
1,2-Dichloroethane (EDC)	<0.05	2-Chlorotoluene	<0.05
1,1,1-Trichloroethane	<0.05	4-Chlorotoluene	<0.05
1,1-Dichloropropene	<0.05	tert-Butylbenzene	<0.05
Carbon tetrachloride	<0.05	1,2,4-Trimethylbenzene	<0.05
Benzene	<0.03	sec-Butylbenzene	<0.05
Trichloroethene	<0.02	p-Isopropyltoluene	<0.05
1,2-Dichloropropane	<0.05	1,3-Dichlorobenzene	<0.05
Bromodichloromethane	<0.05	1,4-Dichlorobenzene	<0.05
Dibromomethane	<0.05	1,2-Dichlorobenzene	<0.05
4-Methyl-2-pentanone	<1	1,2-Dibromo-3-chloropropane	<0.5
cis-1,3-Dichloropropene	<0.05	1,2,4-Trichlorobenzene	<0.25
Toluene	<0.05	Hexachlorobutadiene	<0.25
trans-1,3-Dichloropropene	<0.05	Naphthalene	<0.05
1,1,2-Trichloroethane	<0.05	1,2,3-Trichlorobenzene	<0.25
2-Hexanone	<0.5		

Analysis For Volatile Compounds By EPA Method 8260D

Client Sample ID:	Method Blank	Client:	Aspect Consulting, LLC
Date Received:	Not Applicable	Project:	Whittaker Falls 160328, F&BI 201195
Date Extracted:	01/24/22	Lab ID:	02-201 mb
Date Analyzed:	01/24/22	Data File:	012405.D
Matrix:	Soil	Instrument:	GCMS4
Units:	mg/kg (ppm) Dry Weight	Operator:	RF

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	97	90	109
Toluene-d8	99	89	112
4-Bromofluorobenzene	101	84	115

Compounds:	Concentration mg/kg (ppm)	Compounds:	Concentration mg/kg (ppm)
Dichlorodifluoromethane	<0.5	1,3-Dichloropropane	<0.05
Chloromethane	<0.5	Tetrachloroethene	<0.025
Vinyl chloride	<0.05	Dibromochloromethane	<0.05
Bromomethane	<0.5	1,2-Dibromoethane (EDB)	<0.05
Chloroethane	<0.5	Chlorobenzene	<0.05
Trichlorofluoromethane	<0.5	Ethylbenzene	<0.05
Acetone	<5	1,1,1,2-Tetrachloroethane	<0.05
1,1-Dichloroethene	<0.05	m,p-Xylene	<0.1
Hexane	<0.25	o-Xylene	<0.05
Methylene chloride	<0.5	Styrene	<0.05
Methyl t-butyl ether (MTBE)	<0.05	Isopropylbenzene	<0.05
trans-1,2-Dichloroethene	<0.05	Bromoform	<0.05
1,1-Dichloroethane	<0.05	n-Propylbenzene	<0.05
2,2-Dichloropropane	<0.05	Bromobenzene	<0.05
cis-1,2-Dichloroethene	<0.05	1,3,5-Trimethylbenzene	<0.05
Chloroform	<0.05	1,1,2,2-Tetrachloroethane	<0.05
2-Butanone (MEK)	<1	1,2,3-Trichloropropane	<0.05
1,2-Dichloroethane (EDC)	<0.05	2-Chlorotoluene	<0.05
1,1,1-Trichloroethane	<0.05	4-Chlorotoluene	<0.05
1,1-Dichloropropene	<0.05	tert-Butylbenzene	<0.05
Carbon tetrachloride	<0.05	1,2,4-Trimethylbenzene	<0.05
Benzene	<0.03	sec-Butylbenzene	<0.05
Trichloroethene	<0.02	p-Isopropyltoluene	<0.05
1,2-Dichloropropane	<0.05	1,3-Dichlorobenzene	<0.05
Bromodichloromethane	<0.05	1,4-Dichlorobenzene	<0.05
Dibromomethane	<0.05	1,2-Dichlorobenzene	<0.05
4-Methyl-2-pentanone	<1	1,2-Dibromo-3-chloropropane	<0.5
cis-1,3-Dichloropropene	<0.05	1,2,4-Trichlorobenzene	<0.25
Toluene	<0.05	Hexachlorobutadiene	<0.25
trans-1,3-Dichloropropene	<0.05	Naphthalene	<0.05
1,1,2-Trichloroethane	<0.05	1,2,3-Trichlorobenzene	<0.25
2-Hexanone	<0.5		

Date of Report: 01/28/22
Date Received: 01/14/22
Project: Whittaker Falls 160328, F&BI 201195

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES FOR TPH AS GASOLINE USING METHOD NWTPH-Gx

Laboratory Code: 201314-01 (Duplicate)

Analyte	Reporting Units	Sample Result (Wet Wt)	Duplicate Result (Wet Wt)	RPD (Limit 20)
Gasoline	mg/kg (ppm)	<5	<5	nm

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Gasoline	mg/kg (ppm)	20	115	61-153

Date of Report: 01/28/22
Date Received: 01/14/22
Project: Whittaker Falls 160328, F&BI 201195

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

Laboratory Code: 201269-01 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet Wt)	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Diesel Extended	mg/kg (ppm)	5,000	<50	108	112	63-146	4

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Diesel Extended	mg/kg (ppm)	5,000	92	79-144

Date of Report: 01/28/22
Date Received: 01/14/22
Project: Whittaker Falls 160328, F&BI 201195

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES FOR TOTAL METALS USING EPA METHOD 6020B

Laboratory Code: 201290-01 x5 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet wt)	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Arsenic	mg/kg (ppm)	10	<5	88	93	75-125	6
Barium	mg/kg (ppm)	50	101	92	108	75-125	16
Cadmium	mg/kg (ppm)	10	<5	91	99	75-125	8
Chromium	mg/kg (ppm)	50	11.1	88	92	75-125	4
Lead	mg/kg (ppm)	50	19.1	87	92	75-125	6
Mercury	mg/kg (ppm	5	<5	90	94	75-125	4
Selenium	mg/kg (ppm)	5	<5	82	90	75-125	9
Silver	mg/kg (ppm)	10	<5	90	98	75-125	9

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Arsenic	mg/kg (ppm)	10	85	80-120
Barium	mg/kg (ppm)	50	93	80-120
Cadmium	mg/kg (ppm)	10	94	80-120
Chromium	mg/kg (ppm)	50	97	80-120
Lead	mg/kg (ppm)	50	96	80-120
Mercury	mg/kg (ppm)	5	94	80-120
Selenium	mg/kg (ppm)	5	88	80-120
Silver	mg/kg (ppm)	10	97	80-120

Date of Report: 01/28/22
Date Received: 01/14/22
Project: Whittaker Falls 160328, F&BI 201195

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES FOR VOLATILES BY EPA METHOD 8260D

Laboratory Code: 201309-01 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet wt)	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Dichlorodifluoromethane	mg/kg (ppm)	1	<0.5	20	21	10-142	5
Chloromethane	mg/kg (ppm)	1	<0.5	56	51	10-126	9
Vinyl chloride	mg/kg (ppm)	1	<0.05	53	52	10-138	2
Bromomethane	mg/kg (ppm)	1	<0.5	79	75	10-163	5
Chloroethane	mg/kg (ppm)	1	<0.5	74	70	10-176	6
Trichlorofluoromethane	mg/kg (ppm)	1	<0.5	66	65	10-176	2
Acetone	mg/kg (ppm)	5	<5	90	84	10-163	7
1,1-Dichloroethene	mg/kg (ppm)	1	<0.05	90	85	10-160	6
Hexane	mg/kg (ppm)	1	<0.25	65	63	10-137	3
Methylene chloride	mg/kg (ppm)	1	<0.5	72	68	10-156	6
Methyl t-butyl ether (MTBE)	mg/kg (ppm)	1	<0.05	90	85	21-145	6
trans-1,2-Dichloroethene	mg/kg (ppm)	1	<0.05	92	88	14-137	4
1,1-Dichloroethane	mg/kg (ppm)	1	<0.05	94	88	19-140	7
2,2-Dichloropropane	mg/kg (ppm)	1	<0.05	110	109	10-158	1
cis-1,2-Dichloroethene	mg/kg (ppm)	1	<0.05	99	95	25-135	4
Chloroform	mg/kg (ppm)	1	<0.05	97	92	21-145	5
2-Butanone (MEK)	mg/kg (ppm)	5	<1	92	86	19-147	7
1,2-Dichloroethane (EDC)	mg/kg (ppm)	1	<0.05	98	92	12-160	6
1,1,1-Trichloroethane	mg/kg (ppm)	1	<0.05	93	89	10-156	4
1,1-Dichloropropene	mg/kg (ppm)	1	<0.05	93	89	17-140	4
Carbon tetrachloride	mg/kg (ppm)	1	<0.05	82	79	9-164	4
Benzene	mg/kg (ppm)	1	<0.03	97	93	29-129	4
Trichloroethene	mg/kg (ppm)	1	<0.02	95	89	21-139	7
1,2-Dichloropropane	mg/kg (ppm)	1	<0.05	93	89	30-135	4
Bromodichloromethane	mg/kg (ppm)	1	<0.05	85	81	23-155	5
Dibromomethane	mg/kg (ppm)	1	<0.05	101	96	23-145	5
4-Methyl-2-pentanone	mg/kg (ppm)	5	<1	102	94	24-155	8
cis-1,3-Dichloropropene	mg/kg (ppm)	1	<0.05	95	90	28-144	5
Toluene	mg/kg (ppm)	1	<0.05	110	100	35-130	10
trans-1,3-Dichloropropene	mg/kg (ppm)	1	<0.05	104	92	26-149	12
1,1,2-Trichloroethane	mg/kg (ppm)	1	<0.05	106	94	10-205	12
2-Hexanone	mg/kg (ppm)	5	<0.5	106	94	15-166	12
1,3-Dichloropropane	mg/kg (ppm)	1	<0.05	111	99	31-137	11
Tetrachloroethene	mg/kg (ppm)	1	<0.025	118	106	20-133	11
Dibromochloromethane	mg/kg (ppm)	1	<0.05	93	80	28-150	15
1,2-Dibromoethane (EDB)	mg/kg (ppm)	1	<0.05	114	101	28-142	12
Chlorobenzene	mg/kg (ppm)	1	<0.05	114	102	32-129	11
Ethylbenzene	mg/kg (ppm)	1	<0.05	114	103	32-137	10
1,1,1,2-Tetrachloroethane	mg/kg (ppm)	1	<0.05	100	89	31-143	12
m,p-Xylene	mg/kg (ppm)	2	<0.1	119	107	34-136	11
o-Xylene	mg/kg (ppm)	1	<0.05	113	102	33-134	10
Styrene	mg/kg (ppm)	1	<0.05	113	101	35-137	11
Isopropylbenzene	mg/kg (ppm)	1	<0.05	117	106	31-142	10
Bromoform	mg/kg (ppm)	1	<0.05	88	80	21-156	10
n-Propylbenzene	mg/kg (ppm)	1	<0.05	119	110	23-146	8
Bromobenzene	mg/kg (ppm)	1	<0.05	116	107	34-130	8
1,3,5-Trimethylbenzene	mg/kg (ppm)	1	<0.05	115	106	18-149	8
1,1,2,2-Tetrachloroethane	mg/kg (ppm)	1	<0.05	120	109	28-140	10
1,2,3-Trichloropropane	mg/kg (ppm)	1	<0.05	110	103	25-144	7
2-Chlorotoluene	mg/kg (ppm)	1	<0.05	112	104	31-134	7
4-Chlorotoluene	mg/kg (ppm)	1	<0.05	118	108	31-136	9
tert-Butylbenzene	mg/kg (ppm)	1	<0.05	119	112	30-137	6
1,2,4-Trimethylbenzene	mg/kg (ppm)	1	<0.05	116	107	10-182	8
sec-Butylbenzene	mg/kg (ppm)	1	<0.05	121	112	23-145	8
p-Isopropyltoluene	mg/kg (ppm)	1	<0.05	123	113	21-149	8
1,3-Dichlorobenzene	mg/kg (ppm)	1	<0.05	119	109	30-131	9
1,4-Dichlorobenzene	mg/kg (ppm)	1	<0.05	118	107	29-129	10
1,2-Dichlorobenzene	mg/kg (ppm)	1	<0.05	112	104	31-132	7
1,2-Dibromo-3-chloropropane	mg/kg (ppm)	1	<0.5	91	83	11-161	9
1,2,4-Trichlorobenzene	mg/kg (ppm)	1	<0.25	116	105	22-142	10
Hexachlorobutadiene	mg/kg (ppm)	1	<0.25	132	120	10-142	10
Naphthalene	mg/kg (ppm)	1	<0.05	108	98	14-157	10
1,2,3-Trichlorobenzene	mg/kg (ppm)	1	<0.25	111	105	20-144	6

Date of Report: 01/28/22
Date Received: 01/14/22
Project: Whittaker Falls 160328, F&BI 201195

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES FOR VOLATILES BY EPA METHOD 8260D

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Dichlorodifluoromethane	mg/kg (ppm)	1.0	45	10-150
Chloromethane	mg/kg (ppm)	1.0	68	21-140
Vinyl chloride	mg/kg (ppm)	1.0	68	35-135
Bromomethane	mg/kg (ppm)	1.0	80	20-151
Chloroethane	mg/kg (ppm)	1.0	78	21-147
Trichlorofluoromethane	mg/kg (ppm)	1.0	75	47-143
Acetone	mg/kg (ppm)	5.0	73	13-169
1,1-Dichloroethene	mg/kg (ppm)	1.0	78	49-138
Hexane	mg/kg (ppm)	1.0	78	61-141
Methylene chloride	mg/kg (ppm)	1.0	120	25-146
Methyl t-butyl ether (MTBE)	mg/kg (ppm)	1.0	77	65-129
trans-1,2-Dichloroethene	mg/kg (ppm)	1.0	76	62-126
1,1-Dichloroethane	mg/kg (ppm)	1.0	78	64-131
2,2-Dichloropropane	mg/kg (ppm)	1.0	83	76-150
cis-1,2-Dichloroethene	mg/kg (ppm)	1.0	79	62-127
Chloroform	mg/kg (ppm)	1.0	77	67-129
2-Butanone (MEK)	mg/kg (ppm)	5.0	86	19-171
1,2-Dichloroethane (EDC)	mg/kg (ppm)	1.0	88	73-123
1,1,1-Trichloroethane	mg/kg (ppm)	1.0	79	66-125
1,1-Dichloropropene	mg/kg (ppm)	1.0	78	70-131
Carbon tetrachloride	mg/kg (ppm)	1.0	78	53-135
Benzene	mg/kg (ppm)	1.0	76	70-130
Trichloroethene	mg/kg (ppm)	1.0	84	62-116
1,2-Dichloropropane	mg/kg (ppm)	1.0	79	70-130
Bromodichloromethane	mg/kg (ppm)	1.0	76	70-130
Dibromomethane	mg/kg (ppm)	1.0	79	70-130
4-Methyl-2-pentanone	mg/kg (ppm)	5.0	82	64-137
cis-1,3-Dichloropropene	mg/kg (ppm)	1.0	76	68-137
Toluene	mg/kg (ppm)	1.0	86	70-130
trans-1,3-Dichloropropene	mg/kg (ppm)	1.0	80	70-130
1,1,2-Trichloroethane	mg/kg (ppm)	1.0	81	70-130
2-Hexanone	mg/kg (ppm)	5.0	83	55-145
1,3-Dichloropropane	mg/kg (ppm)	1.0	78	70-130
Tetrachloroethene	mg/kg (ppm)	1.0	85	69-131
Dibromochloromethane	mg/kg (ppm)	1.0	81	61-137
1,2-Dibromoethane (EDB)	mg/kg (ppm)	1.0	80	70-130
Chlorobenzene	mg/kg (ppm)	1.0	80	70-130
Ethylbenzene	mg/kg (ppm)	1.0	81	70-130
1,1,1,2-Tetrachloroethane	mg/kg (ppm)	1.0	80	56-134
m,p-Xylene	mg/kg (ppm)	2.0	82	70-130
o-Xylene	mg/kg (ppm)	1.0	81	70-130
Styrene	mg/kg (ppm)	1.0	88	70-130
Isopropylbenzene	mg/kg (ppm)	1.0	84	67-131
Bromoform	mg/kg (ppm)	1.0	81	70-130
n-Propylbenzene	mg/kg (ppm)	1.0	79	70-130
Bromobenzene	mg/kg (ppm)	1.0	73	70-130
1,3,5-Trimethylbenzene	mg/kg (ppm)	1.0	82	70-130
1,1,2,2-Tetrachloroethane	mg/kg (ppm)	1.0	75	70-130
1,2,3-Trichloropropane	mg/kg (ppm)	1.0	78	70-130
2-Chlorotoluene	mg/kg (ppm)	1.0	80	70-130
4-Chlorotoluene	mg/kg (ppm)	1.0	87	70-130
tert-Butylbenzene	mg/kg (ppm)	1.0	78	70-130
1,2,4-Trimethylbenzene	mg/kg (ppm)	1.0	85	70-130
sec-Butylbenzene	mg/kg (ppm)	1.0	82	68-131
p-Isopropyltoluene	mg/kg (ppm)	1.0	84	70-130
1,3-Dichlorobenzene	mg/kg (ppm)	1.0	78	70-130
1,4-Dichlorobenzene	mg/kg (ppm)	1.0	76	70-130
1,2-Dichlorobenzene	mg/kg (ppm)	1.0	76	70-130
1,2-Dibromo-3-chloropropane	mg/kg (ppm)	1.0	78	70-130
1,2,4-Trichlorobenzene	mg/kg (ppm)	1.0	77	66-140
Hexachlorobutadiene	mg/kg (ppm)	1.0	81	67-141
Naphthalene	mg/kg (ppm)	1.0	75	69-119
1,2,3-Trichlorobenzene	mg/kg (ppm)	1.0	81	66-138

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.

201195

SAMPLE CHAIN OF CUSTODY 01-14-22

A01/VSB1

Page # 1 of 1

Report To: Ali Cochrane

Company: Aspect Consulting

Address: 710 2nd Ave Suite 550

City, State, ZIP: Seattle, WA 98104

Phone: 206.949.7478 Email: acochrane@aspectconsulting.com

SAMPLERS (signature): Monique Rutte

PROJECT NAME	PO #
Whittaker Falls	160328
REMARKS *PER ALC 1/20/22	INVOICE TO
Project specific RLs? - Yes / No	

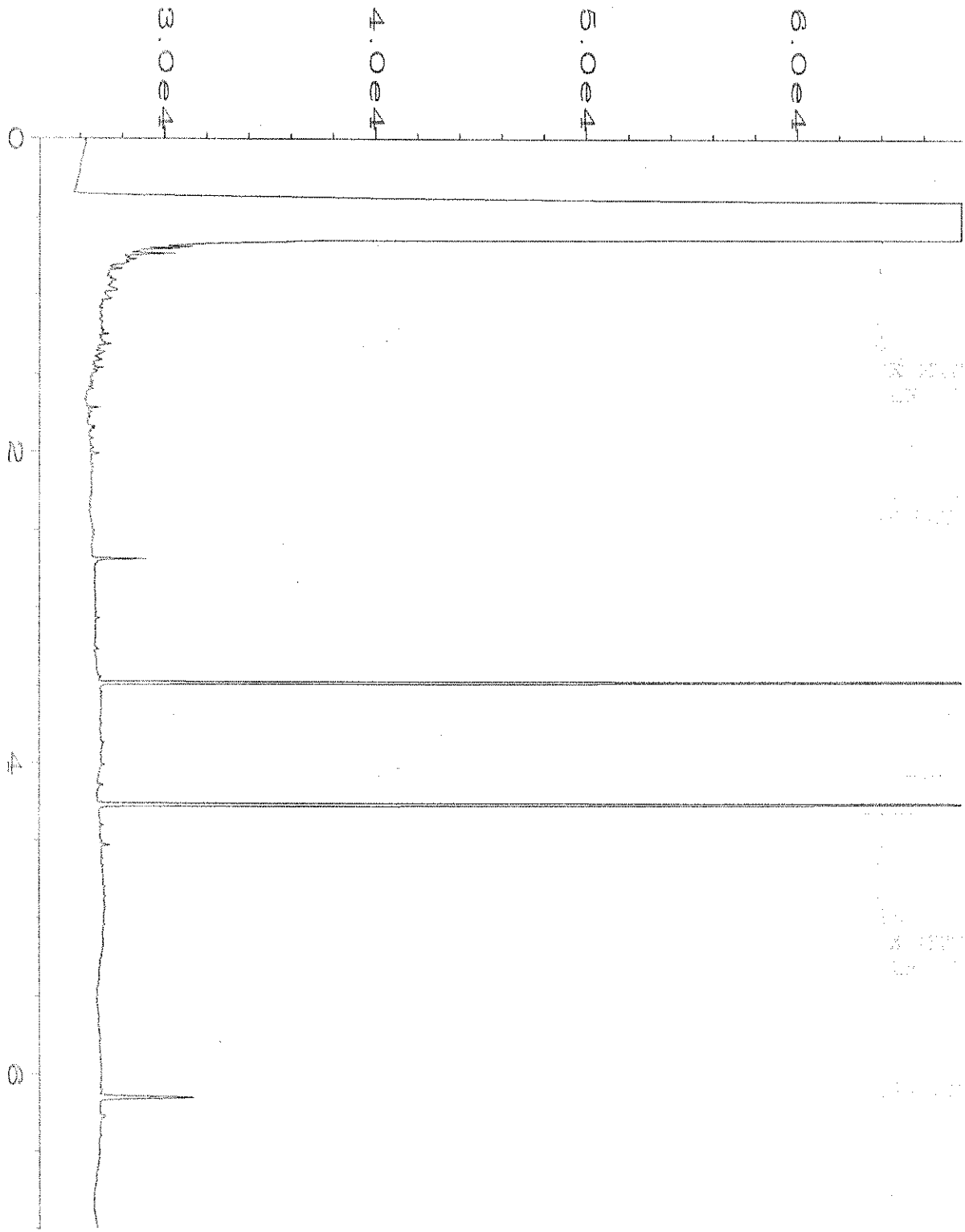
TURNAROUND TIME
- [x] Standard turnaround
- [ ] RUSH
Rush charges authorized by:

SAMPLE DISPOSAL
- [ ] Archive samples
- [ ] Other
Default: Dispose after 30 days

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	NWTPH-Dx	NWTPH-Gx	BTEX EPA 8021	NWTPH-HCID	VOCs EPA 8260	PAHs EPA 8270	PCBs EPA 8082	TOTAL METALS - RCRA 8			Notes
MW115-10-~~011322~~ 011422	01 A-E	~~1/13/22~~ 1/14/22	0945	Soil	5											HOLD
MW115-20-~~011322~~ 011422	02	↓	0955	↓	↓											↓
MW115-30-~~011322~~ 011422	03	↓	1010	↓	↓											↓
MW115-40-~~011322~~ 011422	04 ↓	↓	1020	↓	↓											↓
MW115-COMP						*	*			*			*			COMPOSITE SAMPLES 201195-01-04 [initials] 1/20

Friedman & Bruya, Inc.
3012 16th Avenue West
Seattle, WA 98119-2029
Ph. (206) 285-8282

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: Monique Rutte	Monique Rutte	Aspect	1/14/22	1515
Received by: [signature]	Khoi Hoang	FBI	1/14/22	1515
Relinquished by:				
Received by:		Samples received at 4 °C		



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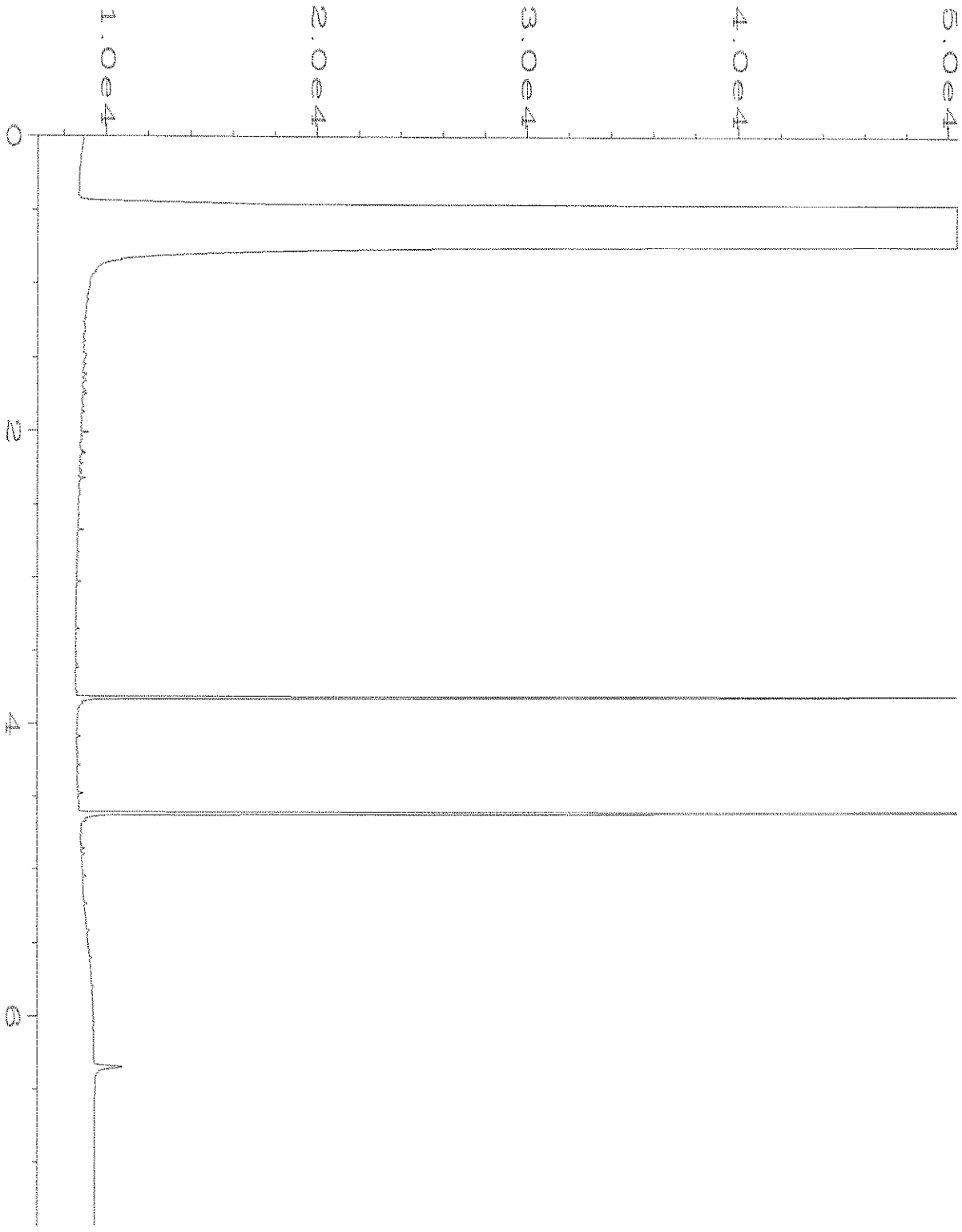
Operator	: TL	Page Number	: 1
Instrument	: GC6	Vial Number	: 41
Sample Name	: 201195-01,,04	Injection Number	: 1
Run Time Bar Code:		Sequence Line	: 10
Acquired on	: 21 Jan 22 06:27 PM	Instrument Method	: DX.MTH
Report Created on	: 24 Jan 22 09:21 AM	Analysis Method	: DEFAULT.MTH



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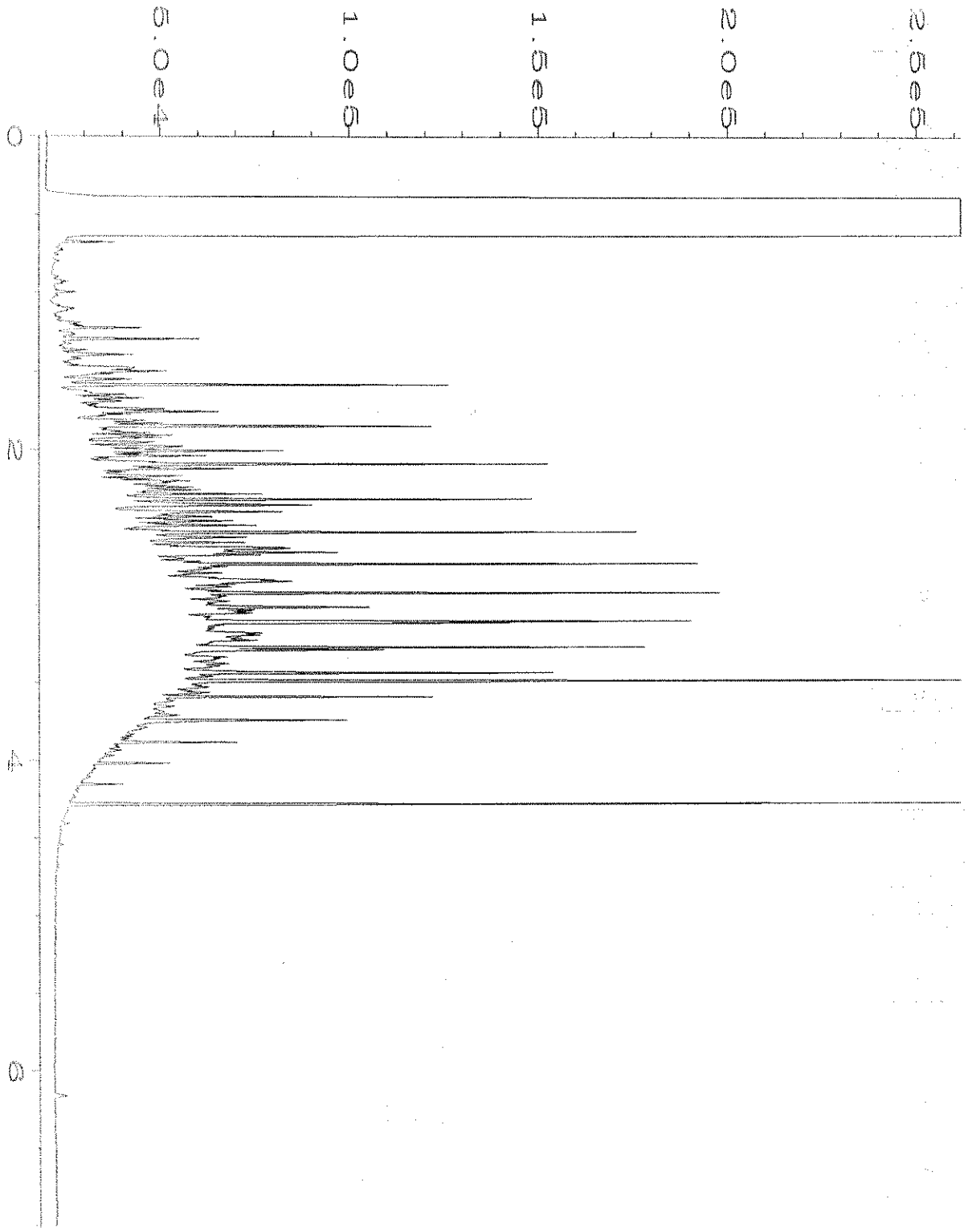
Operator	: TL	Page Number	: 1
Instrument	: GC1	Vial Number	: 7
Sample Name	: 02-229 mb	Injection Number	: 1
Run Time Bar Code:		Sequence Line	: 3
Acquired on	: 21 Jan 22 08:26 AM	Instrument Method	: DX.MTH
Report Created on	: 24 Jan 22 09:18 AM	Analysis Method	: DEFAULT.MTH



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Operator	: TL	Page Number	: 1
Instrument	: GC6	Vial Number	: 3
Sample Name	: 500 Dx 65-27F	Injection Number	: 1
Run Time Bar Code:		Sequence Line	: 2
Acquired on	: 21 Jan 22 06:01 AM	Instrument Method	: DX.MTH
Report Created on	: 24 Jan 22 09:26 AM	Analysis Method	: DEFAULT.MTH

APPENDIX B

Data Validation Report

DATA VALIDATION REPORT

Whittaker Groundwater Sampling
March 2022
Sample Delivery Group 203466

Prepared by:

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

Project No. 160328-B-08 • April 2022

S:\Aspect\InfoServices\Database\EQuIS\Data Projects\Whittaker\2022-03 GW\DV Report_Whittaker_202203_WG.docx

Contents

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 March 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
203466	Diesel and Motor Oil Range Organics	NWTPH-DX	Friedman & Bruya	2A
203466	Gasoline Range Organics	NWTPH-GX	Friedman & Bruya	2A
203466	Metals (iron, manganese)	SW6020B	Friedman & Bruya	2A
203466	BTEX	SW8021B	Friedman & Bruya	2A
203466 - 2203630	Methane	RSK-175	Fremont Analytical	2A
203466 – 2203630	Nitrate-Nitrite, Sulfate	EPA 300.0	Fremont Analytical	2A
203466 – 2203630	Sulfide	SM 4500-S2-F	Fremont Analytical	2A
203466 - 2203630	Total Alkalinity	SM 2320B	Fremont Analytical	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 203466

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	SW6020B	SW8021B
MW-100-032422	3/24/2022	X	X		X
MW-101-032422	3/24/2022	X	X		X
MW-104-032422	3/24/2022	X	X		X
MW-105-032422	3/24/2022	X	X	X	X
MW-108-032422	3/24/2022	X	X		X
MW-109-032422	3/24/2022	X	X		X
MW-110-032422	3/24/2022	X	X		X
MW-111-032422	3/24/2022	X	X		X
MW-112-032422	3/24/2022	X	X	X	X
MW-113-032422	3/24/2022	X	X		X
MW-115-032422	3/24/2022	X	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 Field Duplicates (FD)

Sample MW-100-032422 was a field duplicate of MW-105-032422. All FD RPD were within the 25% control limit. No qualification or action was needed.

2.2.6 Overall Assessment

Accuracy was acceptable based on the LCS/LCSD %R. Precision was acceptable based on the LCS/LCSD and 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 Surrogates

All surrogate %R were within the laboratory specified control limits, with the following exception(s):

MW-113-032422 – Surrogate %R fell outside of laboratory control limits. The laboratory report did not provide the %R for this sample but noted that %R fell outside laboratory control limits due to sample matrix effects. Associated detections are qualified as estimated (J). Non-detections do not require qualification.

2.3.5 Field Duplicates (FD)

Sample MW-100-032422 was a field duplicate of MW-105-032422. All FD RPD were within the 25% control limit or, when parent and duplicate results were less than five times the reporting limit, the difference was less than the reporting limit. No qualifications or action was needed.

2.3.6 Case Narrative/Laboratory Qualification

The laboratory noted that several samples had a chromatographic pattern that did not resemble the fuel standard used for quantitation. Associated detections are qualified (X). Non-detections do not require qualification.

2.3.7 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.

2.4 Metals (SW 6020B)

2.4.1 Holding Times

Samples were analyzed within the requisite holding time limit.

2.4.2 Method Blanks

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

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

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

2.4.4 Matrix Spikes/Matrix Spike Duplicates (MS/MSD)

All MS and MSD %R and RPD were within the laboratory specified control limits, with the following exception(s):

Dissolved Iron – MS and MSD %R above upper control limit and MSD RPD exceeded the control limit. Associated detections are qualified as estimated (J). Non-detections do not require qualification.

Dissolved Manganese – MS and MSD %R above upper control limit and MSD RPD exceeded the control limit. Associated detections are qualified as estimated (J). Non-detections do not require qualification.

2.4.5 Overall Assessment

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

3 Data Validation Findings for SDG 203466-2203630

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 3. Sample Index

Sample Name	Sample Date	EPA300.0	RSK-175	SM2320B	SM4500S2F
MW-105-032422	3/24/2022	X	X	X	X
MW-112-032422	3/24/2022	X	X	X	X
MW-115-032422	3/24/2022	X	X	X	X

3.1 Sample Receipt and Preservation

Sample receipt and preservation (2-6 degrees C) were determined to be acceptable by the laboratory, although it was noted that sample temperature upon arrival was 1.2°C. This is unlikely to have affected the sample results. No qualification or further action was necessary.

3.2 Alkalinity (SM2320B)

3.2.1 Holding Times

Samples were analyzed within the requisite holding time limit.

3.2.2 Method Blanks

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

3.2.3 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.

3.2.4 Laboratory Duplicates (LD)

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

3.2.5 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.

3.3 Methane (RSK-175)

3.3.1 Holding Times

Samples were analyzed within the requisite holding time limit.

3.3.2 Method Blanks

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

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

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

Laboratory Duplicates (LD)

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

3.3.4 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.

3.4 Nitrate + Nitrite and Sulfate (EPA 300.0)

3.4.1 Holding Times

Samples were analyzed within the requisite holding time limit.

3.4.2 Method Blanks

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

3.4.3 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.

3.4.4 Matrix Spike and Matrix Spike Duplicates (MS/MSD)

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

3.4.5 Laboratory Duplicates (LD)

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

3.4.6 Overall Assessment

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

3.5 Sulfide (SM4500-S2-F)

3.5.1 Holding Times

Samples were analyzed within the requisite holding time limit.

3.5.2 Method Blanks

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

3.5.3 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.

3.5.4 Matrix Spike and Matrix Spike Duplicates (MS/MSD)

All MS and MSD %R were within the laboratory specified control limits. The MS/MSD RPD exceeded laboratory specified control limits. Associated detections are qualified as estimated (J). Non-detections do not require qualification.

3.5.5 Laboratory Duplicates (LD)

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

3.5.6 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.

4 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 4. Qualified Data Summary

Sample	Method	Analyte	Qualifier	Reason
MW-101-032422	NWTPH-DX	Diesel Range Organics	X	Chromatographic pattern does not match fuel standard used for quantitation
MW-104-032422	NWTPH-DX	Diesel Range Organics	X	Chromatographic pattern does not match fuel standard used for quantitation
MW-105-032422	SW6020B	Iron	J	MS/MSD %R High and RPD Out
MW-105-032422	SW6020B	Manganese	J	MS/MSD %R High and RPD Out
MW-108-032422	NWTPH-DX	Diesel Range Organics	X	Chromatographic pattern does not match fuel standard used for quantitation
MW-112-032422	SW6020B	Iron	J	MS/MSD %R High and RPD Out
MW-112-032422	SW6020B	Manganese	J	MS/MSD %R High and RPD Out
MW-113-032422	NWTPH-DX	Diesel Range Organics	XJ	Surrogate Out, Chromatographic pattern does not match fuel standard used for quantitation
MW-113-032422	NWTPH-DX	Motor Oil Range Organics	UJ	Surrogate Out
MW-115-032422	NWTPH-DX	Diesel Range Organics	X	Chromatographic pattern does not match fuel standard used for quantitation
MW-115-032422	SW6020B	Iron	J	MS/MSD %R High and RPD Out
MW-115-032422	SW6020B	Manganese	J	MS/MSD %R High and RPD Out

Table 5. 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.

5 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

Aspect CONSULTING

Field Staff: DWU

DAILY REPORT

Date: 1/12/2022 Project Name: Whittaker Project Number: 160328 Weather: 50° F, Intermittent rain Arrival on site: 0845 Departure from site:	Equipment used: Calibration:

0700 - Arrive @ Annex, print forms + pack vehicle

0810 - Depart for Site (Trailer cop)

0845 - Aspect (DWU) onsite, meet Brandy, APS (Steve) Seattle concrete (onsite. National Barricade (Tommy) prepping work area.

0900 - Cascade (Curtis, 2 helpers) onsite. Walk wells for decommission, talk over order of operations

0915 - Conduct Safety meeting. Discussed pedestrian control, housekeeping, potential contaminants.

0920 - Tommy (National Barricade) offsite, will call if needed. Plan for decommissioning RW-04 1st while attempting to remove blockage @ RW-01.

0930 - APS confirms ~~power~~ lines marked directly through RW-02 + -03. MW-115 ~~location~~ proposed location is ~5' from marked gas main and ~1 ft from sewer. Called AL to discuss utility issues. Will attempt to remove monument rings from Jackets to restore surface as best as possible. If Jackets are not easily removable, outer monument lid will be left in place + filled w/ concrete due to proximity to utility. MW-115 will be located closer to curb, to avoid proximity to gas + sewer. APS clears checked all boring and decommissioning locations, but cannot completely clear them due to proximity to utilities.

Well	Bags	~~Bore~~ Depth	Decommissioning steps: Chip well to below
RW-04	||||	~39 ft	Monument, core concrete around well,
RW-02	||||	~38 ft	remove monument, ~~complete~~ chip well
RW-03	||||	39 ft	to ~24 bgs, seal surface w/ concrete.
RW-05	||||	39 ft	
RW-01	~~||||~~		

Aspect CONSULTING

Field Staff: DWU

DAILY REPORT

Date: 1/12/22 Project Name: Whittaker Project Number: 160328 Weather: 50°F, cloudy Arrival on site: 0845 Departure from site:	Equipment used: Calibration:

1000 - Aps offsite
1045 - Attempts to clear blockage @ RW-01 by hand, unsuccessful. Will core concrete around monument and attempt to use rig to pull blockage. If not successful, will overdrill RW-01. Begin surface restoration @ RW-04.
1100 - Chipped RW-02, ~~attempt to~~ removed monument outer ring, fold a socket and seal w/ concrete.
1120 - Chipped RW-03, socket removed.
1140 - mob rig to RW-01 to attempt to remove blockage.
1150 - Concrete corer offsite.
1155 - attached ... tool to end of sample rods, drove point down to blockage @ ~20 ft bgs.
1125 - After hammering on ... tool, blockage moved deeper than 25', remove sample rods + ... well
1235 - Blockage seems freed, top @ 37' bgs. ... AG will attempt to drive assumed dewatering pump to ~58' bgs (bottom of well), chop up well from there.
1255 - Blockage driven to depth of ~57' bgs. No movement downward after ~50 blows. Will chop up well and restore surface w/ concrete.
1345 - Surface completions finished, demob.
1425 - Cascade offsite, National Barricade begins removing TC.
1430 - Aspect offsite
1515 - Arrive @ Annex, unpack + scan forms

DWU 1/12/22

C:\Users\dunruh\Documents\Projects\Field_Forms\Field Note Template.docx

WELL DEVELOPMENT RECORD

WELL NUMBER: MW-115

Project Name:	Whittaker Falls
Date:	1/13/22 - 1/14/22
Developed by:	MMP / Cascade
Measuring Point of Well:	TOC
Screened Interval (ft. BGS):	28-41.5'
Filter Pack Interval (ft. BGS):	30-40'

Project Number:	1160328
Starting Water Level (ft TOC):	~~28.47~~ 28.17
Casing Stickup (ft BGS):	0.3'
Total Depth (ft TOC):	39.74
Casing Diameter (inches):	2"

Casing Volume: 11.27 ft Water x 1.8 gpf = ~18

Casing volumes: 2" = 0.16 gpf 4" = 0.65 gpf 6" = 1.47 gpf

DEVELOPMENT MEASUREMENTS

Elapsed Time (min)	Cumul. Vol. (gallons)	Purge Rate (gpm)	Temp. (C or F)	pH	Specific Conductance (µmhos/cm)	Turbidity (NTU)	Imhoff Cone (ml/L)	Comments
1247	-	-				over		begin development
1250	5	1.67				over		
1253	9	1.3				over		
1256	11	0.67				over		restart pump
1258						-		dry
1302	11	-				over		start again
1305	13	0.67				over		dry
1310	13	-				over		start
1313	16	1				over		dry
1316	16	-				over		start
1318	18	0.67				over		dry
1321	18	-				over		start
1323	20	-				over		dry

Total Discharge (gallons): >20 Total Casing Volumes Removed (gallons): ~10

Ending Water Level (ft TOC): 31.94' Ending Total Depth (ft TOC): 40.21'

METHODS

Cleaning Equipment: alconox / DI water

Development Equipment: cascade pump, WLI (orange/white), turbidimeter (white)

Disposal of Discharged Water: drum on site

Observations/Comments:

WELL DEVELOPMENT RECORD

		WELL NUMBER:	
Project Name:	Whittaker	Project Number:	160328
Date:	3/9/2022	Starting Water Level (ft TOC):	28.62'
Developed by:	DJM	Casing Stickup (ft BGS):	-0.45'
Measuring Point of Well:	NTOC	Total Depth (ft TOC):	~~2~~ 39.47'
Screened Interval (ft. BGS):	30' - 40'	Casing Diameter (inches):	2"
Filter Pack Interval (ft. BGS):	24' - 41.5'		

Casing Volume: 10.85 ft Water x 0.16 gpf = 1.74

Casing volumes: 2" = 0.16 gpf 4" = 0.65 gpf 6" = 1.47 gpf

DEVELOPMENT MEASUREMENTS

Elapsed Time (min)	Cumul. Vol. (gallons)	Purge Rate (gpm)	Temp. (C or F)	pH	Specific Conductance (µmhos/cm)	Turbidity (NTU)	Imhoff Cone (ml/L)	Comments
9:30	0	0.25					OR	No odor No sheen
9:40	2.5	0.25					OR	
950	5	0.25					OR	
1000	7.5	0.25					OR	
1010	10	0.25					OR	
1020	15	0.5					314	
1030	12.5	0.25					60.4	

Total Discharge (gallons): 12.5 Total Casing Volumes Removed (gallons): 10

Ending Water Level (ft TOC): 30.00 Ending Total Depth (ft TOC): 39.7

METHODS

Cleaning Equipment: Alconox Solution and Distilled water

Development Equipment: 3 stage 12v submersible pump, flow regulator, Turbidity (Green)

Disposal of Discharged Water: Drum brought and left onsite

Observations/Comments: Well recharged near same rate when pumping 0.25 gpm but fell ~5 ft when pumping at 0.5 gpm

Aspect CONSULTING	Whittaker - SKS Shell Station - 160328		Monitoring Well Log	
	Project Address & Site Specific Location 3901 SW Alaska St, Seattle, Washington, See Figure 2		*Coordinates (Lat,Lon WGS84)* 47.5608, -122.3815 (est)	*Exploration Number* **MW-115**
Contractor Cascade	*Equipment* HSA	*Sampling Method* Autohammer 18" split spoon	*Ground Surface Elev.* 260' (est)	Ecology Well Tag No. BNC-682
Operator Curtis	*Exploration Method(s)* 8.5" OD X 4.25" ID Hollow-Stem Auger	*Work Start/Completion Dates* 1/13/2022 to 1/14/2022	*Top of Casing Elev.* NA	*Depth to Water (Below GS)* 28.7' (Static)

Depth (feet)	Elev. (feet)	Exploration Notes and Completion Details	Sample Type/ID	Analytical Sample Number & Lab Test(s)	Field Tests	Material Type	Description	Depth (ft)
0	260	Monument in Concrete					ASPHALT; with base course.	0
							FILL SAND WITH GRAVEL (SP); moist, brown; fine to coarse sand; fine gravel.	
5	255	Sealed with 3/8" bentonite chips NSF ANSI 60			PID=0.0 Sheen=None		**GLACIAL TILL** SANDY SILT WITH GRAVEL (ML); moist, brown; low plasticity; fine to medium subrounded to subangular sand; fine subrounded to subangular gravel.	5
10	250			MW115-10-011422	SPT=6,8,10 PID=0.0 Sheen=None		SAND WITH SILT AND GRAVEL (SP-SM); medium dense, moist, gray brown; fine to medium subrounded to subangular sand; fine to coarse subrounded to rounded gravel.	10
15	245				PID=0.0 Sheen=None		SAND WITH GRAVEL (SP); moist, brown; trace silt; fine to coarse subrounded to angular sand; fine subrounded to subangular gravel.	15
							SILT WITH SAND (ML); slightly moist, light brown; low plasticity; fine to medium subrounded to subangular sand; fine subrounded to subangular trace gravel.	
20	240			MW115-20-011422	SPT=14,15,15 PID=0.0 Sheen=None		SAND WITH SILT (SP-SM); medium dense, slightly moist, brown-yellow; fine subrounded to rounded sand.	20
25	235				SPT=7,10,14 PID=0.0 Sheen=None		Becomes moist and blue gray.	25
30	230	3/24/2022 2/12 Silica sand 1/14/2022 0.010" Schedule 40 PVC slotted screen		MW115-30-011422	SPT=8,10,10 PID=0.0 Sheen=None		Becomes wet and brown yellow. Becomes moist.	30
35	225				PID=0.0 Sheen=None		Becomes wet.	35
40	220			MW115-40-011422	SPT=12,15,18 PID=0.0 Sheen=None		Becomes blue gray.	40
							Bottom of exploration at 41.5 ft. bgs. Note: No petroleum-like odor detected. Lab tests for NWTPH-Gx, -DX, VOCs, and Total Metals were run on composite of all environmental samples.	

Legend

Sample Type
- ◯ No Soil Sample Recovery
- ◪ Split Barrel 2" X 1.375" (SPT)

Water Level
- ▼ Static Water Level
- ▽ Water Level ATD

See Exploration Log Key for explanation of symbols

Logged by: MMR
Approved by: AC 3/29/2022

Exploration Log MW-115
Sheet 1 of 1

NEW STANDARD EXPLORATION LOG TEMPLATE P:\GINTW\PROJECTS\WHITTAKER 160328.GPJ April 1, 2022

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.