Post-Remedial Groundwater Monitoring Report

Former Bellevue Chrysler Plymouth Site
At the Bellevue South Project
126 and 200 116th Avenue NE
Bellevue, Washington

Cleanup Site ID 5127 (VCP 3226)

Bellevue 116th Avenue South, LLC
11225 SE 6th Street, Suite 215
Bellevue, Washington 98004
425-450-1550

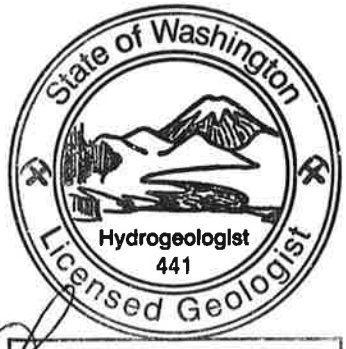
SCS ENGINEERS

04218014.00 | October 5, 2020

2405 140th Avenue NE, Suite 107
Bellevue, WA 98005
425-746-4600

This Post-Remedial Groundwater Monitoring Report for the former Bellevue Chrysler Plymouth Site located at 126 116th Avenue NE, in Bellevue, Washington, was prepared by Brian Doan and Gregory Helland, LHG, of SCS Engineers.

Brian G. Doan, CSP
Senior Project Scientist
SCS ENGINEERS



10/07/2020

Gregory Dennis Helland

Gregory D. Helland, LHG
Project Director
SCS ENGINEERS

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Appendices

1 EXECUTIVE SUMMARY

This report summarizes results of post-remedial groundwater monitoring conducted from June 2019 through August 2020 at the Bellevue Chrysler Plymouth Site (the Site) in Bellevue, Washington (Figure 1). The Site is enrolled in the Department of Ecology (Ecology) voluntary Cleanup Program (VCP) as VCP Project ID NW3226. Groundwater monitoring results collectively demonstrate that soil cleanup actions in 2018 were adequate to protect groundwater quality consistent with Model Toxics Control Act (MTCA) Method A cleanup criteria.

The cleanup Site is situated at the south end of the larger Bellevue South redevelopment, a roughly rectangular, 5.0-acre parcel of commercially-zoned land (the Property) that has been recently redeveloped for commercial and retail businesses. The former dealership address of 126 116th Avenue NE is no longer used. The current address for the Property is 200 116th Avenue NE.

The soil cleanup was reported previously in *Supplemental Remedial Investigation and Soil Cleanup Report, Former Bellevue Chrysler Plymouth Site at the Bellevue South Project, 126 and 200 116th Avenue NE, Bellevue, Washington*; March 19, 2019; SCS Engineers, Bellevue, WA. Site contaminants identified in excess of MTCA Method A cleanup levels were limited to total petroleum hydrocarbons (TPH) in the oil and gasoline ranges (the latter as mineral spirits) in soils and diesel- and oil-range TPH in groundwater. The remedy implemented in 2018 consisted of removal of contaminated soil and water and placement of 877 kg of Oxygen Release Compound (ORC) in various excavations throughout the Site to help remediate any residual petroleum in groundwater. All confirmation soil samples were below MTCA soil cleanup standards for TPH, VOCs, and select heavy metals. No detectable concentrations of PAHs or PCBs were reported by the laboratory.

Post-remedial groundwater monitoring initially utilized three new monitoring wells: MW-1 in the former source area, MW-2 cross-gradient near the south Property boundary, and MW-3 downgradient a short distance west of the soil cleanup area. All groundwater samples met MTCA Method A cleanup standards for TPH. Cleanup standards were also met for typical auto-related heavy metals, such as cadmium, chromium, and lead.

Additional groundwater characterization was prompted by elevated arsenic reported in some groundwater samples. Assessing groundwater arsenic included sampling the building's foundation drain system, installing and sampling two additional groundwater monitoring wells (MW-4 and MW-5), and analyzing samples for fecal coliform bacteria to identify potential impacts from a 72-inch diameter sewer line situated a short distance upslope of the east (upgradient) side of the Property.

Post-remedial groundwater results indicate that the soil cleanup is protective of local groundwater quality and that elevated arsenic in the groundwater is an area-wide issue not related to historical Site activities or the Site cleanup or redevelopment.

2 BACKGROUND INFORMATION

2.1 SITE SETTING

The Property consists of a single tax parcel of approximately 5.0 acres situated east of downtown Bellevue, WA, immediately southeast of the intersection of 116th Avenue NE and NE 4th Street (Figure 1). The Property was formerly two separate tax parcels, with the south parcel occupied by the automotive dealership and service center and the north paved parcel used largely for outdoor vehicle parking.

The land elevation is approximately 100 feet above North American Vertical Datum 1988 (NAVD88). Pre-development topography sloped to the west, with a steep hillslope along the east side of the Property, a relatively flat and level center section, and a lesser slope on the west end down to 116th Avenue NE. The historical building, historical surface topography, soil cleanup areas, and the footprint of the redevelopment building and access drive are included on Figures 2 through 7.

The Property is zoned CB (Community Business). Local land use is chiefly commercial, with auto dealerships and related businesses dominating 116th Avenue NE in the vicinity of the Property. Mercer Slough is situated approximately 0.75 miles south.

2.2 HISTORICAL SUMMARY

The historical automobile dealership at the Property last operated as Eastside Chrysler Jeep, which closed in 2009. The building and associated infrastructure were removed in 2017 and 2018. Redevelopment activities in 2018 included significant earthwork to regrade the Property, followed by construction of a multi-story retail and office building with a three-story parking structure. The lower floor of the parking structure is approximately coincident with the elevation of the former slab-on-grade foundation for the historical auto dealership.

Removal of the dealership building and infrastructure during redevelopment presented an opportunity to identify and remove contaminated soil that had resulted from historical automotive repair and maintenance operations. Remedial actions addressed soil and groundwater impacts from petroleum hydrocarbons and were completed as a model remedy, consistent with WAC 173-340-390.

2.3 GEOLOGY AND HYDROGEOLOGY

Site geology is generally characterized by brown, gravelly, silty sand fill overlying gray Vashon glacial till that consists of compact, fine-grained sands, silts, and clays. The contact zone between these two uppermost units is roughly consistent with pre-development surface topography, sloping down steeply onto the Site from the eastern Property boundary. The thickness of the fill layer varies, with the fill thickness generally increasing towards the west 5 to 10 feet.

Descriptions of Site hydrogeology and soils observations, made both historically and during the 2018 redevelopment and remediation, support the conclusion that the eastern portion of the former dealership building was constructed on low-permeability glacial till by cutting into the eastern hillside and apparently intercepted the shallow water-bearing zone located on top of the glacial till; Groundwater was present directly beneath the slab. When the dealership building was removed, groundwater was encountered perched on the till or the weathered till surface. The moisture content of the till lessened with depth. The Site surface topography that existed from the 1960s to the 2018 is shown on Figure 2, along with the outlines of both the historical dealership building and the

current structure built in 2018. A geologic cross section depicting pre-remedial conditions was included in our 2019 cleanup report cited in Section 1.

Redevelopment soil work in 2018 included cutting further east into the hillside for construction of the much larger retail building (Figure 2). The general configuration of the building provides for retail tenant spaces adjoining the streets (north and west portions of the Property) backed by three levels of parking starting at the ground floor and set into the hillside. All three parking levels are served by a perimeter access road that ascends as it wraps around the south and east sides of the Property. The first floor of the current parking slopes up from the southwest to the northeast, whereas the historical dealership building had a floor that was level, not sloped. Currently, within the footprint of the former dealership, fill material is absent at the south end of the former western service area, increasing to approximately 5 feet thick at the northeast corner. Fill soils for the 2018 redevelopment were obtained from the eastern portion of the Property.

When the redevelopment cut eastward into the hillside, groundwater was encountered perched on the gray Vashon till. Significant on-site flow of perched groundwater continued from the eastern hillside throughout the summer and fall of 2018, despite drought conditions in the area. New construction includes a foundation drain system that captures groundwater along the east wall of the development and conveys it through pipes around the building to the south and west, where it discharges to a City of Bellevue stormwater line.

2.4 REGULATORY CONTEXT

The remedial goal for the Site is the protection of human health and the environment. Groundwater is not considered a significant exposure pathway. No water supply or irrigation wells are located on or near the Property.

MTCA Method A cleanup standards were selected for this project. Method A standards are published in WAC 173-340-900 as Table 720-1, Method A Cleanup Levels for Groundwater, and Table 740-1, Method A Soil Cleanup Levels for Unrestricted Land Uses. Specific cleanup levels are included in the bottom rows of Table 3 (Appendix B). Groundwater monitoring is intended to support a model remedy for the Site, consistent with WAC 173-340-390. The standard point of compliance for groundwater is throughout the Site from the uppermost level of the saturated zone extending vertically to the lowest most depth that could potentially be affected by the Site.

2.5 SUMMARY OF PRIOR RESULTS: SUPPLEMENTAL REMEDIAL INVESTIGATION AND CLEANUP

During the 2018 Site remediation, oil-range TPH and gasoline-range TPH as mineral spirits were the only two contaminants reported in excess of MTCA soil cleanup levels. Mineral spirits were consistently identified in soil samples analyzed for gasoline-range TPH, consistent with odors from the remedial excavations, the absence of any historical gasoline storage at the Site, and similar investigative and remedial findings at another former auto dealership (the Dodge of Bellevue site) situated a short distance to the north.

No exceedances of diesel-range TPH, heavy metals, or VOCs were identified in soils during the supplemental remedial investigation (RI) or the remediation, and no detectible concentrations of benzene, PCBs, or PAHs were identified in soils. Select samples analyzed for heavy metals contained concentrations that were consistent with naturally-occurring background levels.

During the supplemental RI, the only two contaminants reported in excess of MTCA groundwater cleanup levels were TPH in the oil range and, to a lesser degree, in the diesel range. The highest concentrations were reported in the northeast corner of the eastern service area, consistent with historical results. Pre-remedial groundwater samples collected from three monitoring wells at the Property and from eleven direct-push borings did not contain detectible concentrations of gasoline-range TPH or VOCs. During the remediation, SCS installed a total of 877 kg of ORC in various excavations throughout the former Bellevue Chrysler Plymouth Site to help remediate any residual petroleum in the groundwater.

Selected heavy metals were reported in some of the direct-push groundwater samples at slightly elevated concentrations, including arsenic that ranged from 3.7 to 30 µg/L. At the time, the metals results were not considered significant because the detections were consistent with typical sample turbidity for the direct-push method and collecting the samples in acidified containers, as required by Ecology sampling methods. The 2018 arsenic concentrations were consistent with results obtained in 1995 by Northwest Geotech from three groundwater monitoring wells, all of which were situated in the contamination source area (*Remedial Action Plan, Bellevue Chrysler Plymouth, 126 116th Avenue NE, Bellevue, WA*; July 31, 1996; Northwest Geotech, Inc.; Wilsonville, OR). Specifically, the 1995 arsenic results were 10, 20, and 50 µg/L. No other metals sampling was reported for groundwater, either outside the contaminant source area or later in the project. Metals were not listed as a Site contaminant of concern in Ecology's interim and final no-further-action (NFA) letters issued in 2000.

3 GROUNDWATER MONITORING PROGRAM

3.1 WELL INSTALLATION AND DEVELOPMENT

Well installation included utility locating, concrete coring, and using a limited-access drill rig to install five groundwater monitoring wells. The well locations are depicted in Figure 2. Monitoring well MW-1 was installed as near as practical to where the highest groundwater contamination had been identified and confirmed by pre-remedial groundwater investigations. The task also included discussions with the City of Bellevue regarding placement of a downgradient well (MW-5) within the publically-owned planting strip just past the western Property boundary. Groundwater monitoring well construction data are presented in Table 1.

All five wells were drilled and constructed by Washington-licensed drillers. Soil sample analysis from the drilling events reported no detectible concentrations of TPH. Soil samples that were collected for gasoline-range TPH analysis were preserved in the field consistent with EPA Method 5035 to limit the loss of volatile contaminants from the samples.

The wells were completed with steel protective monuments, and their locations and elevations were acquired by a licensed surveyor to allow calculations of groundwater gradient and flow direction. Each well was developed by surging and bailing or pumping to establish a good hydraulic connection to the shallow aquifer.

3.2 WATER LEVEL MEASUREMENTS

Prior to sampling, standing water was bailed out of the well vaults as necessary to allow access to the sealed well casing. The sealing well-casing cap was removed, and water levels were allowed to equilibrate under atmospheric pressure at each monitoring well. Water levels were then measured to the nearest 0.01 foot using an electric water level probe. The probe was decontaminated between each well using a standard three-step process (Alconox detergent wash, tap water rinse, and a distilled water rinse).

3.3 GROUNDWATER SAMPLING

During each monitoring event, SCS staff collected groundwater samples from the Site monitoring wells using low-flow sampling techniques. The following specific sampling procedures were followed at each well:

- Purge the well at a low flow rate (less than 500 ml/minute) with a peristaltic pump.
- Monitor conductivity, temperature, dissolved oxygen, oxidation-reduction potential (Eh), and pH using a closed, in-line, flow-through cell.
- Monitor turbidity using a turbidity meter.
- Once the field parameters stabilize, collect groundwater samples in appropriate containers for subsequent laboratory analyses.
- Store samples in a cooler with ice and transfer to the analytical laboratory under proper chain-of-custody documentation.

New polyethylene tubing was used at each well. The stainless steel tubing-bottom weight was decontaminated between each well using a standard three-step process (Alconox detergent wash, tap water rinse, and a distilled water rinse) when it was utilized. A field duplicate was collected from well MW-1 during each monitoring event starting in August 2019. Copies of the groundwater sampling data sheets are provided in Appendix D.

The groundwater samples were delivered to Onsite Environmental, Inc., in Redmond, WA, which is accredited by Ecology for the analyses performed. All samples collected during the monitoring program were subjected to the following analyses:

- Gasoline-range TPH as mineral spirits by Method NWTPH-Gx
- Diesel- and oil-range TPH by Method NWTPH-Dx
- Total arsenic, cadmium, chromium, lead, selenium, silver, zinc by EPA Method 6010 and mercury by EPA Method 7471B

3.4 EVOLUTION OF THE MONITORING PROGRAM

Over the course of the post-remedial groundwater program, limited adjustments were made to the sampling and analysis plan (SAP):

- Samples from the November 2019 monitoring event were field filtered and analyzed for dissolved metals, as well as total metals, to help evaluate whether groundwater turbidity was contributing to elevated total arsenic detections. The results indicated that filtering and water sample turbidity had no effect on metals concentrations, so field filtering was not performed during subsequent monitoring events.

- Select samples were subject to laboratory sample preparation by silica gel cleanup for NWTPH-Dx analyses to remove biogenic interference.

- Water samples were collected from the building's two foundation drain systems in November 2019 to evaluate arsenic concentrations upgradient (east) of the Site and the monitoring well network that existed at that time (wells MW-1 through MW-3). The two water samples were analyzed for total metals. The foundation drain systems were accessed at cleanout locations shown in Figure 5 (F-15 Cleanout and SE Drain Wall).

- Based on the results of the first three monitoring events (June through November 2019), two additional groundwater monitoring wells were installed. Relative to the former dealership footprint and historic contaminant location, the two additional groundwater monitoring wells were located upgradient (MW-4) and downgradient (MW-5) of the Site. Development of the wells, and completion of the fourth monitoring event, was delayed from March to June 2020, due to restrictions on non-essential activities related to the COVID-19 pandemic and mandated by Governor Inslee.

- Samples from all five monitoring wells were also collected and analyzed for fecal coliform bacteria in May and August 2020 to evaluate a possible groundwater influence by a 6-foot diameter Metro sewer line located in a former railroad right of way adjacent to the upgradient edge of the Property. Samples for fecal coliform analysis were collected in sanitized bottles supplied by AmTest Laboratory in Kirkland, WA.

SCS Engineers maintained communication with the Ecology VCP case worker during this groundwater monitoring program. As the monitoring progressed, descriptions of the planned adjustments to the SAP were presented to Ecology and informal concurrence was obtained before the actions were implemented.

3.5 QUALITY ASSURENCE/QUALITY CONTROL

Field notes, field sampling data sheets (FSDSs), and photographs were maintained to document field activities and sample collection. The water-quality meter used during monitoring well sampling was properly maintained and calibrated daily to a known standard before it was used, consistent with the manufacturers' recommendations. Calibration logs were recorded in the field.

All soil and groundwater samples were kept in a chilled cooler during storage and transport to an Ecology-accredited testing laboratory. The samples were transported and custody transferred using chain-of-custody documentation. Copies of the chain-of-custody forms are included in the analytical reports prepared by the laboratory (Appendix C).

All analyses occurred within the appropriate holding times. Laboratory reports include method blank results, surrogate recovery results, chain-of-custody documents, laboratory duplicate results (when required by the method), and matrix spike or matrix spike duplicate results. The laboratory results were reviewed to assess data quality and acceptability consistent with the project requirements. All of the laboratory results were determined to be of sufficient quality for the purposes of this project. Analytical results of field duplicate samples were consistent with the results of the primary samples.

4 GROUNDWATER MONITORING RESULTS

4.1 GROUNDWATER ELEVATION AND FLOW DIRECTION

Groundwater elevation contours for the five post-remedial monitoring events are presented on Figures 3 through 7. The groundwater flow direction was generally west-northwest across the Site.

The calculated groundwater flow direction is generally consistent with historic groundwater reported by others. Specifically, a 1996 groundwater investigation found that the groundwater flow direction curved from WNW to WSW as it transited the property (Northwest Geotech, Inc.; *Remedial Action Plan*; July 31, 1996). Groundwater elevations remained nearly unchanged at the wells installed through the floor of the garage (MW-1, MW-3, and MW-4), while the cross-gradient well (MW-2) saw limited fluctuations typical of seasonal variations due to precipitation. Wells MW-4 and MW-5 were monitored on only two occasions, which provided insufficient data regarding elevation changes over time.

The measured water level at upgradient well MW-4 was anomalously low during its first monitoring event (May 2020), likely because the water level had not fully recovered from well development and purging five days earlier. (The depth to water was initially 4.28 feet when the well was developed but had recovered to only 9.70 feet when it was monitored.) The anomalous water level was excluded from the May 2020 groundwater contour map (Figure 6).

4.2 FIELD PARAMETERS

A flow-through cell was used to monitor temperature, specific conductance, dissolved oxygen, pH, and oxidation-reduction potential (Eh) during purging, as mentioned above. The field parameter data are summarized in Table 2.

The field parameters were generally consistent from location to location and over the duration of the monitoring program, with a few exceptions. Dissolved oxygen (DO) concentrations were highest in the former contamination source area during the first monitoring event. Specifically, DO was measured at 3.37 mg/L at MW-1 in June 2019, while cross-gradient and downgradient DO values were somewhat lower at 2.75 and 1.62 mg/L, respectively. DO values were lower during subsequent monitoring events, with DO generally near or less than 1 mg/L across the Site.

The pH values recorded during the monitoring program were generally near neutral with marginally lower pH in the downgradient wells (MW-3 and MW-5). Higher pH of approximately 9 was measured at upgradient well MW-4 during May and August 2020, the only events in which the well was monitored.

4.3 PETROLEUM RESULTS

A summary of the laboratory results is presented in Table 3. In all cases, the laboratory detection limits were less than the MTCA Method A cleanup levels for the various potential contaminants of concern (COCs).

Based on historical activities and assessments, and data obtained by SCS in 2018 from a supplemental RI as well as the cleanup activities, the Site COCs for groundwater were limited to oil-range TPH and gasoline-range TPH (calibrated to mineral spirits based on cleanup findings). Groundwater samples collected during the 2018 supplemental RI contained no detectible concentrations of gasoline-range petroleum, BTEX compounds, or VOCs. During the remedial

activities, gasoline-range TPH was identified in the soil as mineral spirits, but no benzene was detected in any of the soil samples. Total RCRA 8 metals were added to the analytical suite at the request of the Ecology manager. Specifically, samples were analyzed for total arsenic, barium, cadmium, chromium, lead, mercury, selenium, and silver.

Over the 15-month duration of the monitoring program, no exceedances of MTCA Method A cleanup levels were reported for TPH in the diesel or oil ranges, or in the gasoline range as mineral spirits. The only laboratory detection of TPH was 0.23 mg/L oil-range TPH reported in the August 2020 sample from well MW-1. The reported detection is only slightly above the method reporting limit of 0.21 mg/L but well below the MTCA Method A cleanup level of 0.50 mg/L for oil-range TPH in groundwater.

Preliminary lab results for the November 2019 monitoring events suggested the presence of diesel-range and oil-range petroleum hydrocarbons in samples from three or more monitoring wells. SCS suspected biogenic interference and requested that the laboratory re-analyze the samples using silica-gel cleanup to remove the polar biogenic organics but retain the non-polar organics, such as petroleum. Biogenic interference in the samples was suspected for the following reasons:

- The first two rounds of groundwater samples had not contained detectible concentrations of any petroleum hydrocarbons.
- Well MW-2 is situated cross gradient to the former contaminant source area, so indications of contaminated groundwater at MW-2 were highly suspect.
- Significant sources of potential biogenic interference, including upslope vegetation and a 6-foot diameter Metro sewer line adjacent to the upgradient (eastern) edge of the Property, had been noted during pre-remedial investigations. During construction excavations in 2018, a sample of groundwater seepage near the eastern edge of the Property, and downslope of the Metro sewer line, identified significantly elevated fecal coliform bacteria on one occasion associated with an unusually heavy rain event. With respect to the results of the current monitoring program, SCS suspected that increased seasonal rainfall might have caused a repeat of the condition documented in 2018.

Re-analysis after silica gel cleanup reported no detectible petroleum hydrocarbons, consistent with results from the first two monitoring events. Silica gel cleanup was utilized again for NWTPH-Dx analysis in May and August 2020.

4.4 ARSENIC RESULTS

Total arsenic was reported in Site groundwater samples at concentrations that exceeded the MTCA Method A cleanup level of 5 µg/L. Given that the historical activities did not suggest a Site source for arsenic, and arsenic had not been identified is Site soils in excess of the soil cleanup level, SCS suspected influence from one or more of the following factors:

- Sample turbidity, given that unfiltered groundwater is collected in bottles that contain an acid preservative (consistent with Ecology requirements for metals sampling at MTCA sites)
- An off-Site, upgradient source of arsenic contamination
- An area-wide condition of elevated arsenic in the groundwater

During the second monitoring event (August 2019), samples for RCRA 8 metals were collected for dissolved (field filtered), as well as total metals (unfiltered), to evaluate whether the exceedances might be artifacts of groundwater turbidity associated with the sampling methodology (collecting unfiltered samples in acidified sample bottles). The laboratory results were very similar for the dissolved and total metals samples, and they did not suggest that turbidity from the sampling was the source of the arsenic detections in the groundwater.

During the third monitoring event (November 2019), samples were collected from building-foundation drainage systems that serve the eastern/upgradient retaining wall (sample "SE Drain Wall") and the eastern/upgradient garage wall (sample "F-15 Clean out"). These samples were collected to provide an indication of groundwater quality upgradient of the Site's groundwater monitoring network to assess the suspected upgradient source or area-wide condition. Arsenic was detected in both samples, with the garage wall drain sample containing 7.4 µg/L arsenic, which exceeds the 5 ppb MTCA Method A groundwater cleanup level.

Based on the November 2019 results, a properly-constructed upgradient monitoring well (MW-4) was installed in the eastern end of the ground-floor parking garage, beyond the footprint of the former building and beyond the eastern limit of former dealership activities. A downgradient well (MW-5) was installed in the city-owned planting strip just beyond the western Property boundary to provide an indication of groundwater quality leaving the Property. The two new wells (installed in February and March 2020, respectively) were included in the June and August 2020 monitoring events. The delay in monitoring was due to COVID-19 restrictions on non-essential activities.

The results for the 2020 monitoring events, including the two, additional, groundwater monitoring wells, indicated that total arsenic was highest at the off-Site, upgradient well (MW-4). In May and August, the arsenic concentrations in MW-4 were 22 µg/L and 46 µg/L, respectively. By comparison, at the downgradient well (MW-5), lower arsenic concentrations were present in May (4.2 µg/L) and August (12 µg/L).

Samples collected during the May and August 2020 monitoring events were also analyzed for fecal coliform bacteria as an indication of possible upgradient groundwater issues. From the May 2020 event, fecal coliform bacteria were reported in the samples from MW-2 and MW-4 at concentrations of 2 and 180 fecal coliform units per 100 milliliters (FCU/100 mL), respectively. These values exceeded the state groundwater quality standard of 1 FCU/100 mL (WAC 173-200). Fecal coliform was not detected in the August 2020 samples above the method reporting limit of 2 FCU/100 mL.

5 DISCUSSION

SCS Engineers has completed a program of post-remedial groundwater monitoring at the former Bellevue Chrysler Plymouth Site, following the removal of petroleum-contaminated soil in 2018. The post-remedial program was initiated in the spring of 2019 with the installation of three monitoring wells situated in the former contaminant source area (MW-1), cross gradient to the south (MW-2), and downgradient to the west beyond the cleanup Site (MW-3). The monitoring wells were installed in May 2019, and the first round of groundwater sampling was completed in June 2019. The monitoring program progressed at roughly quarterly intervals, except for a delay in early 2020, due to state-wide restrictions on non-essential activities during the early stages of the COVID-19 pandemic. A total of five rounds of groundwater monitoring were completed from June 2019 to August 2020.

Groundwater contaminants of concern are TPH in diesel and oil ranges, plus gasoline-range TPH as mineral spirits, as indicated by the past results of historical site assessments by others, a supplemental RI completed by SCS in 2018, and data from the 2018 soil remediation. Total RCRA metals were added to the analytical suite at the request of the Ecology case manager.

No exceedances of MTCA Method A groundwater cleanup levels were reported for any of the TPH ranges from gasoline to oil. Verified laboratory detections of TPH were limited to only one groundwater sample: 0.23 mg/L oil-range TPH was reported in the MW-1 sample from the August 2020 monitoring event. The reported concentration is only slightly higher than the laboratory method reporting limit of 0.21 mg/L and well below the MTCA Method A groundwater cleanup level of 0.5 mg/L. Select samples were subject to silica gel cleanup and reanalysis to remove biogenic organics that had resulted in false positives for diesel and oil-range TPH. Upgradient sources of biogenic organics include upslope vegetation and a 6-foot diameter Metro sewer line adjacent to the eastern edge of the Property.

Over the five rounds of groundwater monitoring, arsenic concentrations exceeded the MTCA Method A groundwater cleanup level of 5 µg/L in samples from the upgradient well (MW-4) and the foundation-drain system that serves the east (upgradient) side of the building, as well as the on-Site well (MW-1) and downgradient wells (MW-3 and MW-5). The highest arsenic concentration was 46 µg/L, reported in the August 2020 sample from upgradient well MW-4. The reported arsenic concentrations are very similar to results obtained in 1995 by others and in 2018 by SCS, as described above in Section 2.5.

No source is known related to historical activities at the Bellevue Chrysler Plymouth Site that would contribute to arsenic in the groundwater. Soil sample results from 2018 did not suggest there would be an issue with arsenic in the groundwater. Arsenic detections in soil were 2.2 mg/kg and less during the supplemental RI and Site cleanup. These results are below the MTCA Method A soil cleanup level of 20 mg/kg, which is intended to be protective of groundwater. Remedial soil data indicated that soils affected by past activities were removed, and this conclusion is supported by the post-remedial groundwater data for the contaminants of concern (TPH gasoline [mineral spirits] and oil).

Field-filtered metals samples for dissolved metals analysis were collected in August 2019, as well as unfiltered samples for total metals analysis. The nearly identical results did not suggest that sample turbidity from Site soils was the source of the arsenic detections.

6 CONCLUSIONS AND RECOMMENDATIONS

Data from the post-remedial groundwater monitoring program indicate that the 2018 Site remediation adequately removed contamination to provide for protection of groundwater quality. Contamination had resulted from historical auto-repair and maintenance operations. Through five monitoring events, hydrocarbon data were consistently below MTCA Method A cleanup levels and were less than the analytical method reporting limits in all but one instance.

SCS concludes that the presence of arsenic in groundwater reflects an area-wide upgradient groundwater issue. The presence of elevated arsenic in the upgradient well (MW-4) and in a sample collected from the building's foundation-drain system demonstrates that historical Site operations were not the cause of elevated arsenic in local groundwater. The presence of fecal coliform bacteria in groundwater samples also indicate that groundwater quality upgradient of the Site is compromised.

Based on these findings, no additional groundwater monitoring is recommended.

SCS recommends that a copy of this report be provided to Ecology for technical review with a request to the VCP case manager for an unrestricted, no-further-action (NFA) designation.

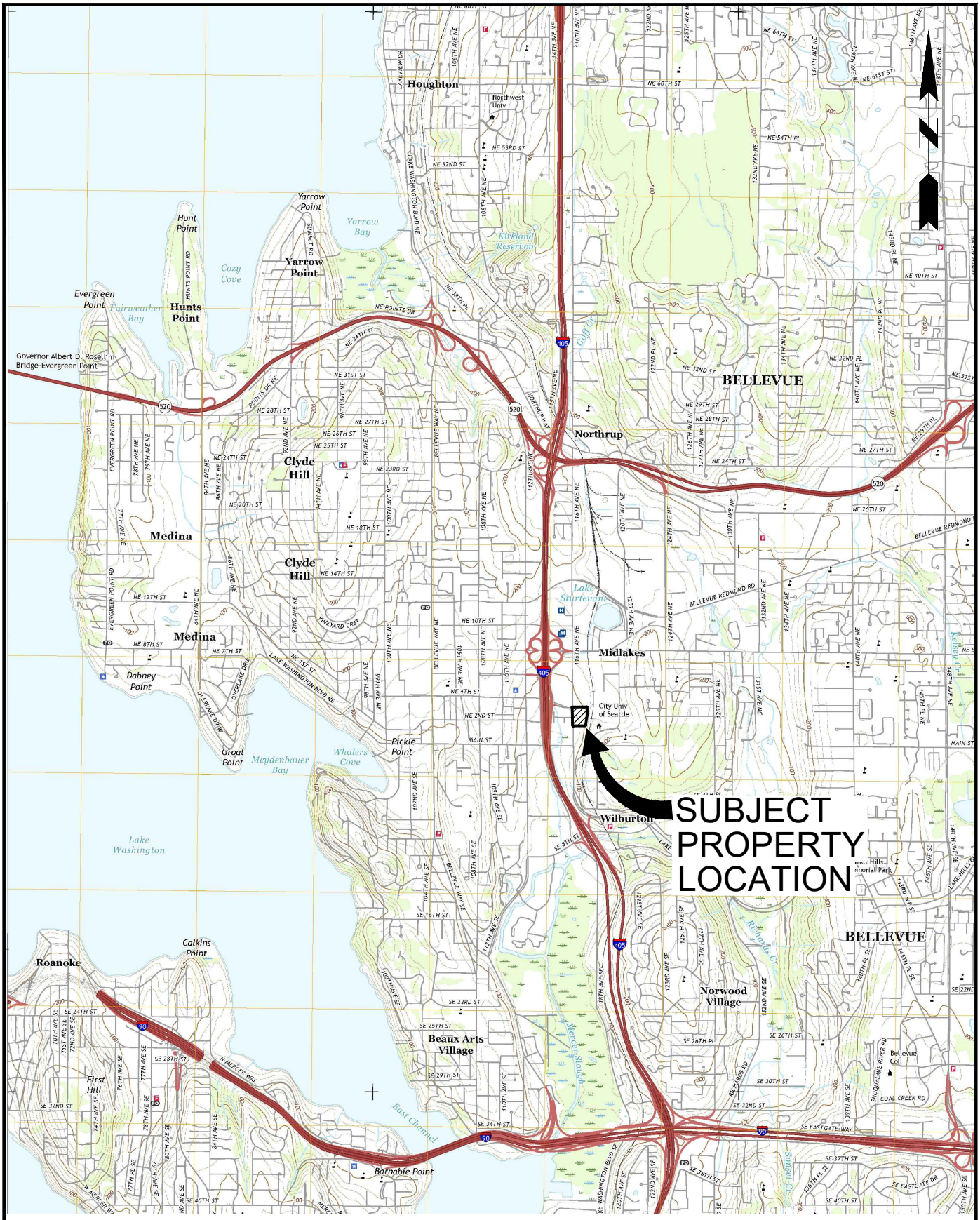
7 REFERENCES

Northwest Geotech, Inc.; *Remedial Action Plan, Bellevue Chrysler Plymouth, 126 116th Avenue NE, Bellevue, WA*; July 31, 1996, Wilsonville, OR.

SCS Engineers. *Supplemental Remedial Investigation and Soil Cleanup Report, Former Bellevue Chrysler Plymouth Site at the Bellevue South Project, 126 and 200 116th Avenue NE, Bellevue, Washington*; March 19, 2019, Bellevue, WA.

Appendix A

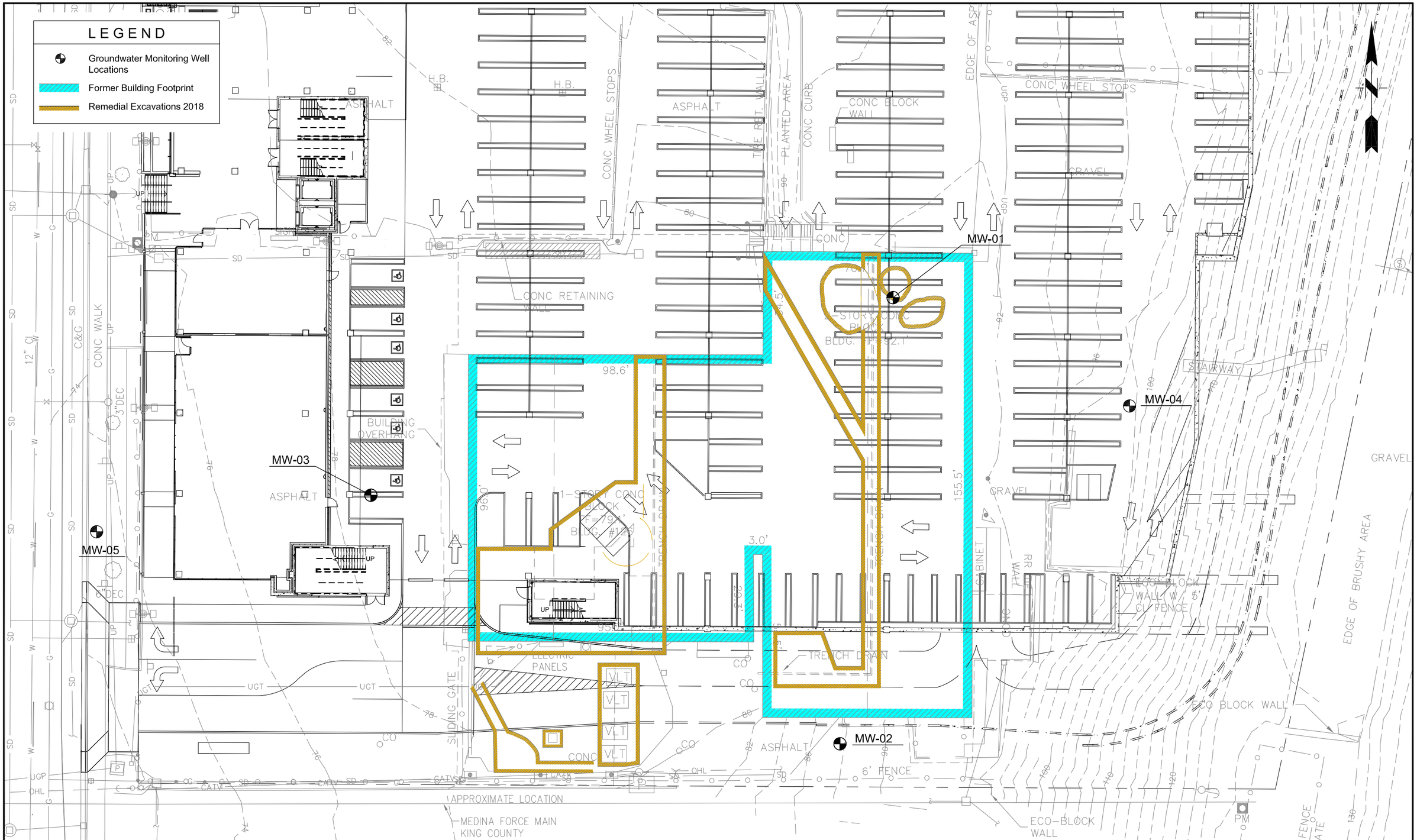
Figures



SOURCE: USGS MAPS

SCS ENGINEERS
Environmental Consultants and Contractors
2405 140th Avenue NE, Suite 107
Bellevue, Washington 98005
(425) 746-4600 FAX: (425) 746-6747

PROJECT NO. 04218014.00	DES BY B.D.	SITE LOCATION MAP	DATE AUGUST 2020
SCALE AS SHOWN	CHK BY B.D.	FORMER BELLEVUE CHRYSLER PLYMOUTH 126 - 200 116TH AVENUE NE BELLEVUE, WASHINGTON 98004	FIGURE 1
CAD FILE FIGURE 1	APP BY G.H.		



SCS ENGINEERS
Environmental Consultants and Contractors
2405 140th Avenue NE, Suite 107
Bellevue, Washington 98005
(425) 746-4600 FAX: (503) 684-6948

GRAPHIC SCALE:
0 10 20 30
SCALE IN FEET

SOURCE: BARGHAUSEN

PROJECT NO. 04218014.00	DES BY B.D.
SCALE AS SHOWN	CHK BY B.D.
CAD FILE FIGURE 2	APP BY G.H.

GROUNDWATER WELLS AND CURRENT & FORMER BUILDINGS

FORMER BELLEVUE CHRYSLER PLYMOUTH
126 - 200 116TH AVENUE NE
BELLEVUE, WASHINGTON 98004

DATE AUGUST 2020

FIGURE 2

LEGEND

- Groundwater Monitoring Well Locations
- 76.5 — Estimated Groundwater Elevation Contours
- Groundwater Flow Direction
- Former Building Footprint
- Remedial Excavations 2018

MW-01
77.42

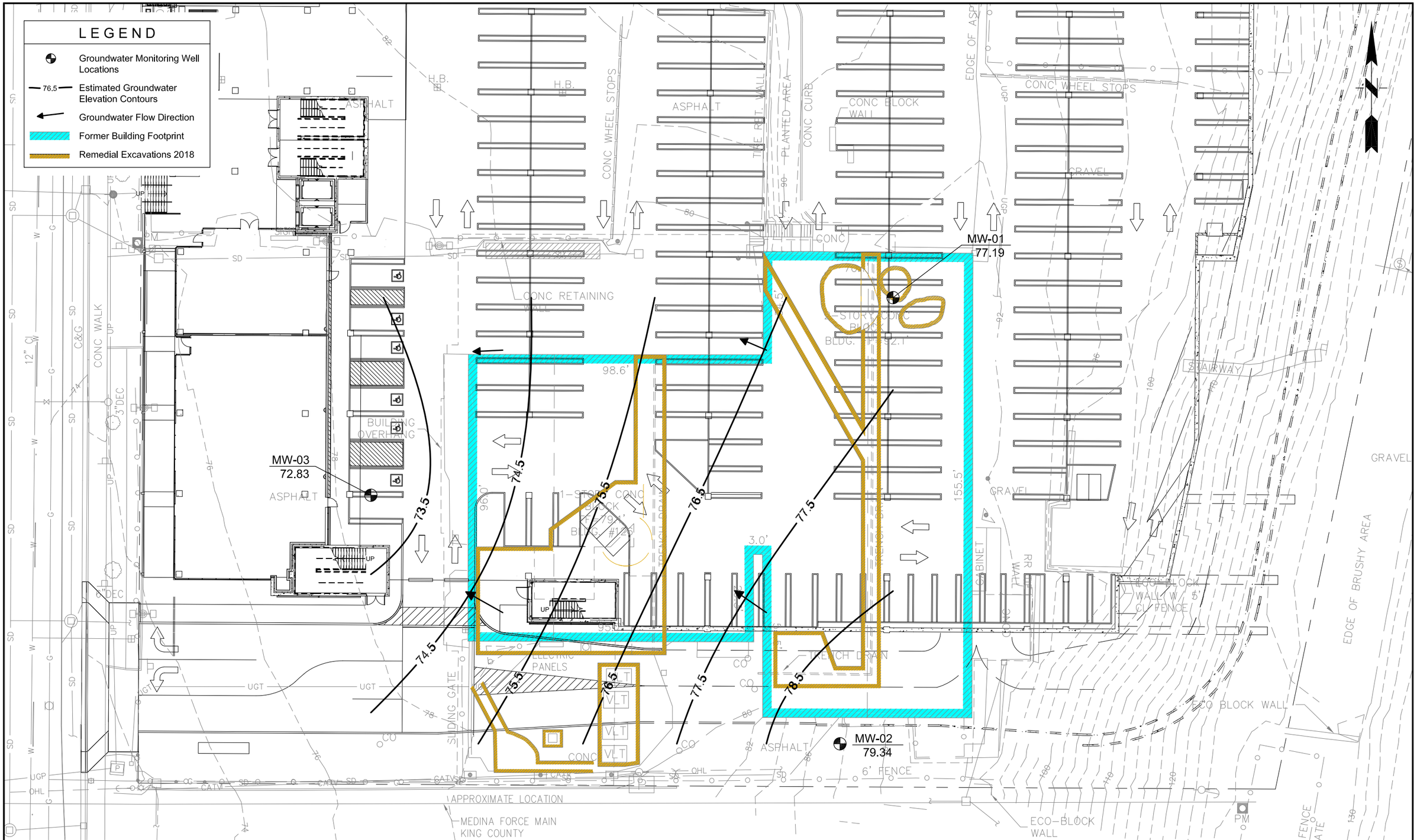
MW-02
79.86

MW-03
72.90

73.5
74.5
75.5
76.5
77.5
78.5

ASPHALT
CONC WHEEL STOPS
CONC BLOCK WALL
CONC CURB
PLANTED AREA
TREE RET. WALL
CONC RETAINING WALL
4-STORY CONC BLOCK BLDG. #1
1-STORY CONC BLOCK BLDG. #12
BUILDING OVERHANG
GRAVEL
STAIRWAY
CONC WALK
C&G
12" CI
3" DEC
ELECTRIC PANELS
TRENCH DRAIN
VLT
UGT
UGP
OHL
CATV
6' FENCE
ECO BLOCK WALL
ECO-BLOCK WALL
EDGE OF BRUSHY AREA
APPROXIMATE LOCATION
MEDINA FORCE MAIN
KING COUNTY

SCS ENGINEERS Environmental Consultants and Contractors 2405 140th Avenue NE, Suite 107 Bellevue, Washington 98005 (425) 746-4600 FAX: (503) 684-6948	GRAPHIC SCALE: 0 10 20 30 SCALE IN FEET	SOURCE: BARGHAUSEN	PROJECT NO. 04218014.00 SCALE AS SHOWN CAD FILE FIGURE 3 DES BY S.G. CHK BY B.D. APP BY G.H.	GROUNDWATER CONTOUR MAP (JUNE 4, 2019) FORMER BELLEVUE CHRYSLER PLYMOUTH 126 - 200 116TH AVENUE NE BELLEVUE, WASHINGTON 98004	DATE AUGUST 2020 FIGURE 3



SCS ENGINEERS Environmental Consultants and Contractors 2405 140th Avenue NE, Suite 107 Bellevue, Washington 98005 (425) 746-4600 FAX: (503) 684-6948	GRAPHIC SCALE: 0 10 20 30 SCALE IN FEET	SOURCE: BARGHAUSEN	PROJECT NO. 04218014.00 · DES BY S.G. SCALE AS SHOWN · CHK BY B.D. CAD FILE FIGURE 4 · APP BY G.H.

GROUNDWATER CONTOUR MAP (AUGUST 29 2019)

FORMER BELLEVUE CHRYSLER PLYMOUTH
126 - 200 116TH AVENUE NE
BELLEVUE, WASHINGTON 98004

DATE AUGUST 2020

FIGURE 4

LEGEND

- Groundwater Monitoring Well Locations
- Building Wall Drain Sampling Locations
- 76 — Estimated Groundwater Elevation Contours
- Groundwater Flow Direction
- Former Building Footprint
- Remedial Excavations 2018

MW-01
76.99

MW-03
72.98

MW-02
81.42

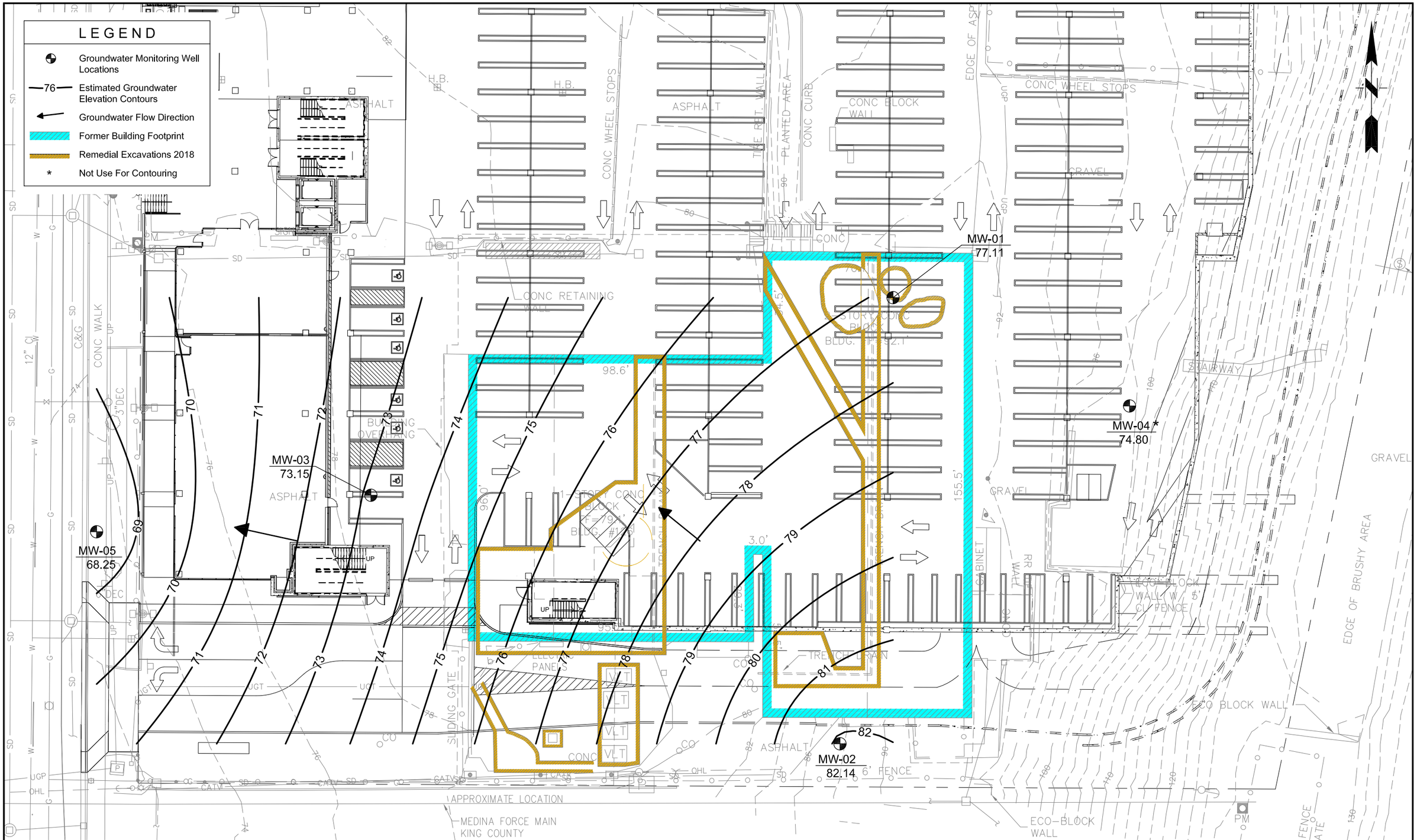
F15 Cleanout

SE Drain Wall

ASPHALT
CONC WHEEL STOPS
CONC RETAINING WALL
CONC BLOCK WALL
PLANTED AREA
CONC CURB
EDGE OF ASP
GRAVEL
STAIRWAY
BUILDING OVERHANG
1-STORY CONC BLOCK BLDG. #126
98.6'
155.5'
3.0'
6' FENCE
ECO BLOCK WALL
EDGE OF BRUSHY AREA
APPROXIMATE LOCATION
MEDINA FORCE MAIN
KING COUNTY

SCS ENGINEERS Environmental Consultants and Contractors 2405 140th Avenue NE, Suite 107 Bellevue, Washington 98005 (425) 746-4600 FAX: (503) 684-6948	GRAPHIC SCALE: 0 10 20 30 SCALE IN FEET
SOURCE: BARGHAUSEN	

PROJECT NO. 04218014.00	DES BY S.G.	GROUNDWATER CONTOUR MAP (NOVEMBER 26, 2019) FORMER BELLEVUE CHRYSLER PLYMOUTH 126 - 200 116TH AVENUE NE BELLEVUE, WASHINGTON 98004	DATE AUGUST 2020
SCALE AS SHOWN	CHK BY B.D.		FIGURE 5
CAD FILE FIGURE 5	APP BY G.H.		



SCS ENGINEERS
Environmental Consultants and Contractors
2405 140th Avenue NE, Suite 107
Bellevue, Washington 98005
(425) 746-4600 FAX: (503) 684-6948

GRAPHIC SCALE:
0 10 20 30
SCALE IN FEET

SOURCE: BARGHAUSEN

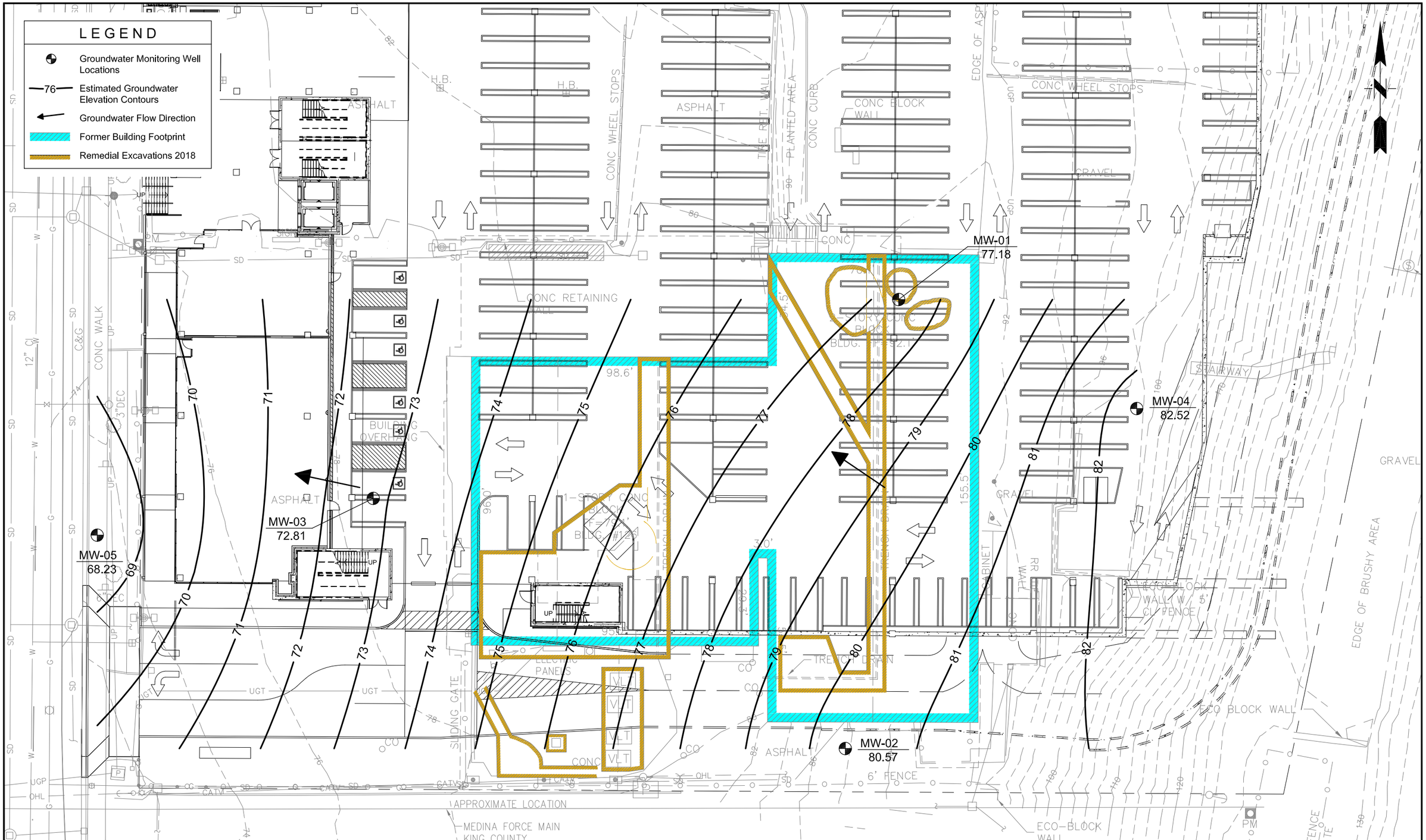
PROJECT NO. 04218014.00	DES BY S.G.
SCALE AS SHOWN	CHK BY B.D.
CAD FILE FIGURE 6	APP BY G.H.

GROUNDWATER CONTOUR MAP (MAY 21, 2020)

FORMER BELLEVUE CHRYSLER PLYMOUTH
126 - 200 116TH AVENUE NE
BELLEVUE, WASHINGTON 98004

DATE AUGUST 2020

FIGURE 6



SCS ENGINEERS Environmental Consultants and Contractors 2405 140th Avenue NE, Suite 107 Bellevue, Washington 98005 (425) 746-4600 FAX: (503) 684-6948	GRAPHIC SCALE: 0 10 20 30 SCALE IN FEET	SOURCE: BARGHAUSEN	PROJECT NO. 04218014.00 · DES BY S.G. SCALE AS SHOWN · CHK BY B.D. CAD FILE FIGURE 7 · APP BY G.H.

GROUNDWATER CONTOUR MAP (AUGUST 3, 2020)

FORMER BELLEVUE CHRYSLER PLYMOUTH
126 - 200 116TH AVENUE NE
BELLEVUE, WASHINGTON 98004

DATE: AUGUST 2020

FIGURE: 7

Appendix B

Tables

TABLE 1: SUMMARY OF WELL CONSTRUCTION AND GROUNDWATER ELEVATION DATA
POST-REMEDIAL GROUNDWATER MONITORING
BELLEVUE SOUTH, FORMER BELLEVUE CHRYSLER PLYMOUTH
BELLEVUE, WASHINGTON

Water Level Elevations in Feet

Date	Well ID	Depth to Water	Water Level Elevation
6/4/2019	MW-1	5.32	77.42
6/4/2019	MW-2	15.66	79.86
6/4/2019	MW-3	5.93	72.90
8/29/2019	MW-1	5.55	77.19
8/29/2019	MW-2	16.18	79.34
8/29/2019	MW-3	6.00	72.83
11/26/2019	MW-1	5.75	76.99
11/26/2019	MW-2	14.1	81.42
11/26/2019	MW-3	5.85	72.98
5/21/2020	MW-1	5.63	77.11
5/21/2020	MW-2	13.38	82.14
5/21/2020	MW-3	5.68	73.15
5/21/2020	MW-4	9.70	74.80
5/21/2020	MW-5	4.72	68.25
8/3/2020	MW-1	5.56	77.18
8/3/2020	MW-2	14.95	80.57
8/3/2020	MW-3	6.02	72.81
8/3/2020	MW-4	1.98	82.52
8/3/2020	MW-5	4.74	68.23

Well Construction Details

Well Name	Easting	Northing	Top of Casing (ft)	Top of Screen (ft)	Bottom of Screen (ft)	Screen Length (ft)
MW-1	1307199.80	226172.17	82.74	77.74	72.74	5
MW-2	1307182.06	226022.88	95.52	90.52	80.52	10
MW-3	1307025.09	226106.06	78.83	73.83	63.83	10
MW-4	1307278.94	226135.93	84.50	79.50	69.50	10
MW-5	1306933.30	226093.83	72.97	67.97	62.97	5

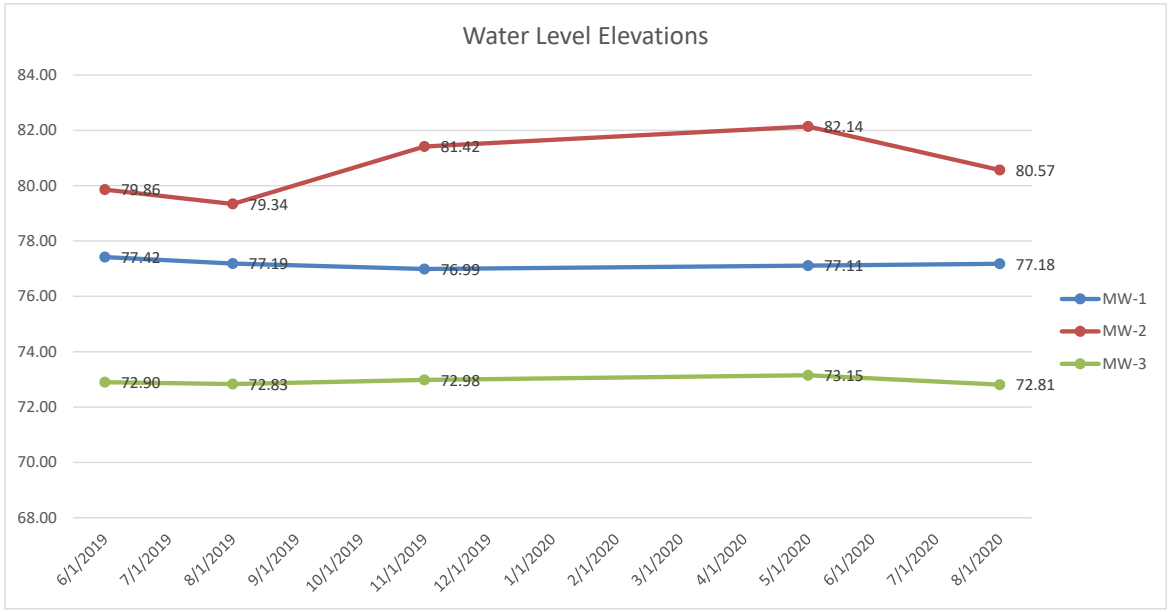


TABLE 2: SUMMARY OF FIELD PARAMETER READINGS
POST-REMEDIAL GROUNDWATER MONITORING
BELLEVUE SOUTH, FORMER BELLEVUE CHRYSLER PLYMOUTH
BELLEVUE, WASHINGTON

MW-1

Date	Temp (°C)	SpC (mS)	DO (mg/L)	pH (units)	Eh (mV)	Turb (ntu)
Jun-19	12.35	382	3.37	7.02	309	41.5
Aug-19	15.00	421	0.34	7.75	-7	5.1
Nov-19	12.47	411	0.38	7.33	105	5.2
May-20	11.37	402	0.42	7.90	-73	2.8
Aug-20	13.93	407	0.4	7.56	-73	2.66

MW-2

Date	Temp (°C)	SpC (mS)	DO (mg/L)	pH (units)	Eh (mV)	Turb (ntu)
Jun-19	14.33	399	2.75	6.95	252	8.5
Aug-19	17.61	377	1.12	6.86	139	14.5
Nov-19	11.91	568	1.38	6.53	248	8.1
May-20	11.47	509	0.49	7.21	185	5.9
Aug-20	16.09	685	0.42	7.00	80	2.3

MW-3

Date	Temp (°C)	SpC (mS)	DO (mg/L)	pH (units)	Eh (mV)	Turb (ntu)
Jun-19	12.61	379	1.62	6.67	44	4.8
Aug-19	15.10	338	0.28	6.86	-51	3.0
Nov-19	13.35	386	0.41	6.95	-69	2.7
May-20	11.59	363	0.51	6.86	-72	3.2
Aug-20	15.02	378	0.38	6.80	-47	1.8

MW-4

Date	Temp (°C)	SpC (mS)	DO (mg/L)	pH (units)	Eh (mV)	Turb (ntu)
Jun-19	--	--	--	--	--	--
Aug-19	--	--	--	--	--	--
Nov-19	--	--	--	--	--	--
May-20	11.13	404	1.53	9.13	59.00	475
Aug-20	13.16	487	0.53	8.92	80.60	26.00

MW-5

Date	Temp (°C)	SpC (mS)	DO (mg/L)	pH (units)	Eh (mV)	Turb (ntu)
Jun-19	--	--	--	--	--	--
Aug-19	--	--	--	--	--	--
Nov-19	--	--	--	--	--	--
May-20	14.56	795	0.63	6.86	-62.50	136.00
Aug-20	18.10	7	0.71	6.71	-66.60	237.00

Temp (°C) Temperature (°C)
SpC (mS) Specific Conductivity (mS)
DO (mg/L) Dissolved Oxygen (mg/L)
Turb (ntu) Turbidity (ntu)
-- Well not monitored (not installed)

TABLE 3: SUMMARY OF ANALYTICAL RESULTS
POST-REMEDIAL GROUNDWATER MONITORING
BELLEVUE SOUTH, FORMER BELLEVUE CHRYSLER PLYMOUTH
BELLEVUE, WASHINGTON

		Total Petroleum Hydrocarbons			RCRA Metals									
		NWTPH-Dx		NWTPH-Gx										
	Sample ID & Date	Diesel-Range Organics (DRO) (mg/L)	Oil-Range Organics (ORO) (mg/L)	Gasoline-Range Organics (GRO)[a] as Mineral Spirits (ug/L)	Total Arsenic (ug/L)	Dissolved Arsenic (ug/L)	Total Barium (ug/L)	Total Cadmium (ug/L)	Total Chromium (ug/L)	Total Lead (ug/L)	Total Mercury (ug/L)	Total Selenium (ug/L)	Total Silver (ug/L)	Total Coliform (CFU/100 mL)
MW-1	MW-1 June 2019	<0.26	<0.41	<100	**11**	--	<28	<4.4	<11	<1.1	<0.5	<5.6	<11	--
	MW-1 August 2019	<0.26	<0.42	<100	**15**	**16**	30	<4.4	<11	<1.1	<0.5	<5.6	<11	--
	MW-1 Nov 2019	<0.20[b]	<0.23[b]	<100	**15**	--	28	<4.4	<11	<1.1	<0.5	<5.6	<11	--
	MW-1 May 2020	<0.22	<0.22	<100	**7.3**	--	<28	<4.4	<11	<1.1	<0.5	<5.6	<11	<2
	MW-1 August 2020	<0.21[b]	0.23[b]	<100	**17**	--	30	<4.4	<11	<1.1	<0.5	<5.6	<11	<2
MW-2	MW-2 June 2019	<0.25	<0.41	<100	<3.3	--	<28	<4.4	<11	<1.1	<0.5	<5.6	<11	--
	MW-2 August 2019	<0.25	<0.40[b]	<100	<3.3	<3	<28	<4.4	<11	<1.1	<0.5	<5.6	<11	--
	MW-2 Nov 2019	<0.20[b]	<0.26[b]	<100	<3.3	--	<28	<4.4	<11	<1.1	<0.5	<5.6	<11	--
	MW-2 May 2020	<0.23[b]	<0.23[b]	<100	<3.3	--	<28	<4.4	<11	<1.1	<0.5	<5.6	<11	**2**
	MW-2 August 2020	<0.21[b]	<0.21[b]	<100	3.4	--	<28	<4.4	<11	<1.1	<0.5	<5.6	<11	<2
MW-3	MW-3 June 2019	<0.25	<0.4	<100	**21**	--	<28	<4.4	<11	<1.1	<0.5	<5.6	<11	--
	MW-3 August 2019	<0.25	<0.41	<100	**35**	**39**	<28	<4.4	<11	<1.1	<0.5	<5.6	<11	--
	MW-3 Nov 2019	<0.20[b]	<0.20[b]	<100	**31**	--	<28	<4.4	<11	<1.1	<0.5	<5.6	<11	--
	MW-3 May 2020	<0.21[b]	<0.21[b]	<100	**12**	--	<28	<4.4	<11	<1.1	<0.5	<5.6	<11	<2
	MW-3 August 2020	<0.21[b]	<0.21[b]	<100	**28**	--	<28	<4.4	<11	<1.1	<0.5	<5.6	<11	<2
MW-4	MW-4 May 2020	<0.22	<0.22	<100	**22**	--	31	<4.4	<11	<1.1	<0.5	<5.6	<11	**180**
	MW-4 August 2020	<0.21[b]	<0.21[b]	<100	**46**	--	32	<4.4	<11	<1.1	<0.5	<5.6	<11	<2
MW-5	MW-5 May 2020	<0.22[b]	<0.22[b]	<100	4.2	--	50	<4.4	13	1.2	<0.5	<5.6	<11	<2
	MW-5 August 2020	<0.22[b]	<0.22[b]	<100	**12**	--	110	<4.4	33	2.7	<0.5	<5.6	<11	<2
Building Wall	F-15 Clean out Nov 2019	NA	NA	NA	**7.4**	--	<28	<4.4	<11	<1.1	<0.5	<5.6	<11	--
Drains	SE Drain Wall Nov 2019	NA	NA	NA	4.0	--	<28	<4.4	<11	<1.1	<0.5	<5.6	<11	--
Ecology MTCA Method A Cleanup Level or Groundwater Quality Standard		0.5	0.5	1000	5	5	None	5	50	15	2	None	None	1[c]

Notes:

a = Analysis calibrated to mineral spirits, not gasoline, consistent with a recommendation by the analyst following a review of chromatographs for contaminated soils in the remedial excavation.

b = Sample analyzed after silica-gel cleanup to remove interference from biogenic (polar, naturally-occurring) organics.

c = State Groundwater Quality Standard (WAC 173-200)

<5 = Not detected at or above the reporting or detection limit indicated

Shaded concentrations exceed the MTCA Method A cleanup level

-- = Not analyzed

MTCA = Model Toxics Control Act

Appendix C

Laboratory Reports

OnSite Environmental Inc.
14648 NE 95th Street, Redmond, WA 98052 • (425) 883-3881

June 13, 2019

Brian Doan
SCS Engineers
2405 140th Avenue NE, Suite 107
Bellevue, WA 98005

Re: Analytical Data for Project 04218014.00
Laboratory Reference No. 1906-028

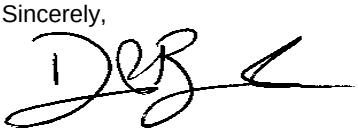
Dear Brian:

Enclosed are the analytical results and associated quality control data for samples submitted on June 5, 2019.

The standard policy of OnSite Environmental, Inc. is to store your samples for 30 days from the date of receipt. If you require longer storage, please contact the laboratory.

We appreciate the opportunity to be of service to you on this project. If you have any questions concerning the data, or need additional information, please feel free to call me.

Sincerely,



David Baumeister
Project Manager

Enclosures

Date of Report: June 13, 2019
Samples Submitted: June 5, 2019
Laboratory Reference: 1906-028
Project: 04218014.00

Case Narrative

Samples were collected on June 4, 2019 and received by the laboratory on June 5, 2019. They were maintained at the laboratory at a temperature of 2°C to 6°C.

Please note that any and all soil sample results are reported on a dry-weight basis, unless otherwise noted below.

General QA/QC issues associated with the analytical data enclosed in this laboratory report will be indicated with a reference to a comment or explanation on the Data Qualifier page. More complex and involved QA/QC issues will be discussed in detail below.

Date of Report: June 13, 2019
Samples Submitted: June 5, 2019
Laboratory Reference: 1906-028
Project: 04218014.00

GASOLINE RANGE ORGANICS
NWTPH-Gx

Matrix: Water
Units: ug/L (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**MW-1**					
Laboratory ID:	06-028-01					
Stoddard Solvent	**ND**	100	NWTPH-Gx	6-11-19	6-11-19	
Surrogate:	*Percent Recovery*	*Control Limits*				
Fluorobenzene	*93*	*59-122*				
Client ID:	**MW-2**					
Laboratory ID:	06-028-02					
Stoddard Solvent	**ND**	100	NWTPH-Gx	6-11-19	6-11-19	
Surrogate:	*Percent Recovery*	*Control Limits*				
Fluorobenzene	*80*	*59-122*				
Client ID:	**MW-3**					
Laboratory ID:	06-028-03					
Stoddard Solvent	**ND**	100	NWTPH-Gx	6-11-19	6-11-19	
Surrogate:	*Percent Recovery*	*Control Limits*				
Fluorobenzene	*79*	*59-122*				

Date of Report: June 13, 2019
Samples Submitted: June 5, 2019
Laboratory Reference: 1906-028
Project: 04218014.00

GASOLINE RANGE ORGANICS
NWTPH-Gx
QUALITY CONTROL

Matrix: Water
Units: ug/L (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0611W3					
Stoddard Solvent	**ND**	100	NWTPH-Gx	6-11-19	6-11-19	
Surrogate:	*Percent Recovery*	*Control Limits*				
Fluorobenzene	*73*	*59-122*				

Analyte	Result		Spike Level		Source Result	Percent Recovery		Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE											
Laboratory ID:	06-028-01										
	ORIG	DUP									
Stoddard Solvent	**ND**	**ND**	NA	NA		NA		NA	NA	30	
Surrogate:											
Fluorobenzene						*93*	*75*	*59-122*			

Date of Report: June 13, 2019
Samples Submitted: June 5, 2019
Laboratory Reference: 1906-028
Project: 04218014.00

DIESEL AND HEAVY OIL RANGE ORGANICS
NWTPH-Dx

Matrix: Water
Units: mg/L (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**MW-1**					
Laboratory ID:	06-028-01					
Diesel Range Organics	**ND**	0.26	NWTPH-Dx	6-10-19	6-11-19	
Lube Oil Range Organics	**ND**	0.41	NWTPH-Dx	6-10-19	6-11-19	
Surrogate:	*Percent Recovery*	*Control Limits*				
o-Terphenyl	*86*	*50-150*				
Client ID:	**MW-2**					
Laboratory ID:	06-028-02					
Diesel Range Organics	**ND**	0.25	NWTPH-Dx	6-10-19	6-11-19	
Lube Oil Range Organics	**ND**	0.41	NWTPH-Dx	6-10-19	6-11-19	
Surrogate:	*Percent Recovery*	*Control Limits*				
o-Terphenyl	*89*	*50-150*				
Client ID:	**MW-3**					
Laboratory ID:	06-028-03					
Diesel Range Organics	**ND**	0.25	NWTPH-Dx	6-10-19	6-11-19	
Lube Oil Range Organics	**ND**	0.40	NWTPH-Dx	6-10-19	6-11-19	
Surrogate:	*Percent Recovery*	*Control Limits*				
o-Terphenyl	*88*	*50-150*				

Date of Report: June 13, 2019
Samples Submitted: June 5, 2019
Laboratory Reference: 1906-028
Project: 04218014.00

DIESEL AND HEAVY OIL RANGE ORGANICS
NWTPH-Dx
QUALITY CONTROL

Matrix: Water
Units: mg/L (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0610W1					
Diesel Range Organics	**ND**	0.25	NWTPH-Dx	6-10-19	6-11-19	
Lube Oil Range Organics	**ND**	0.40	NWTPH-Dx	6-10-19	6-11-19	
Surrogate:	*Percent Recovery*	*Control Limits*				
o-Terphenyl	*72*	*50-150*				

Analyte	Result		Spike Level		Source Result	Percent Recovery		Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE											
Laboratory ID:	SB0610W1										
	ORIG	DUP									
Diesel Fuel #2	**0.829**	**0.763**	NA	NA		NA		NA	8	NA	
Lube Oil Range	**ND**	**ND**	NA	NA		NA		NA	NA	NA	
Surrogate:											
o-Terphenyl						*92*	*82*	*50-150*			

Date of Report: June 13, 2019
Samples Submitted: June 5, 2019
Laboratory Reference: 1906-028
Project: 04218014.00

TOTAL METALS
EPA 200.8/7470A

Matrix: Water
Units: ug/L (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**MW-1**					
Laboratory ID:	06-028-01					
Arsenic	**11**	3.3	EPA 200.8	6-11-19	6-11-19	
Barium	**ND**	28	EPA 200.8	6-11-19	6-11-19	
Cadmium	**ND**	4.4	EPA 200.8	6-11-19	6-11-19	
Chromium	**ND**	11	EPA 200.8	6-11-19	6-11-19	
Lead	**ND**	1.1	EPA 200.8	6-11-19	6-11-19	
Mercury	**ND**	0.50	EPA 7470A	6-11-19	6-11-19	
Selenium	**ND**	5.6	EPA 200.8	6-11-19	6-11-19	
Silver	**ND**	11	EPA 200.8	6-11-19	6-11-19	
Client ID:	**MW-2**					
Laboratory ID:	06-028-02					
Arsenic	**ND**	3.3	EPA 200.8	6-11-19	6-11-19	
Barium	**ND**	28	EPA 200.8	6-11-19	6-11-19	
Cadmium	**ND**	4.4	EPA 200.8	6-11-19	6-11-19	
Chromium	**ND**	11	EPA 200.8	6-11-19	6-11-19	
Lead	**ND**	1.1	EPA 200.8	6-11-19	6-11-19	
Mercury	**ND**	0.50	EPA 7470A	6-11-19	6-11-19	
Selenium	**ND**	5.6	EPA 200.8	6-11-19	6-11-19	
Silver	**ND**	11	EPA 200.8	6-11-19	6-11-19	
Client ID:	**MW-3**					
Laboratory ID:	06-028-03					
Arsenic	**21**	3.3	EPA 200.8	6-11-19	6-11-19	
Barium	**ND**	28	EPA 200.8	6-11-19	6-11-19	
Cadmium	**ND**	4.4	EPA 200.8	6-11-19	6-11-19	
Chromium	**ND**	11	EPA 200.8	6-11-19	6-11-19	
Lead	**ND**	1.1	EPA 200.8	6-11-19	6-11-19	
Mercury	**ND**	0.50	EPA 7470A	6-11-19	6-11-19	
Selenium	**ND**	5.6	EPA 200.8	6-11-19	6-11-19	
Silver	**ND**	11	EPA 200.8	6-11-19	6-11-19	

Date of Report: June 13, 2019
Samples Submitted: June 5, 2019
Laboratory Reference: 1906-028
Project: 04218014.00

TOTAL METALS
EPA 200.8/7470A
QUALITY CONTROL

Matrix: Water
Units: ug/L (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0611WM1					
Arsenic	**ND**	3.3	EPA 200.8	6-11-19	6-11-19	
Barium	**ND**	28	EPA 200.8	6-11-19	6-11-19	
Cadmium	**ND**	4.4	EPA 200.8	6-11-19	6-11-19	
Chromium	**ND**	11	EPA 200.8	6-11-19	6-11-19	
Lead	**ND**	1.1	EPA 200.8	6-11-19	6-11-19	
Selenium	**ND**	5.6	EPA 200.8	6-11-19	6-11-19	
Silver	**ND**	11	EPA 200.8	6-11-19	6-11-19	
Laboratory ID:	MB0611W1					
Mercury	**ND**	0.50	EPA 7470A	6-11-19	6-11-19	

Analyte	Result		Spike Level		Source Result	Percent Recovery	Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE										
Laboratory ID:	06-028-03									
	ORIG	DUP								
Arsenic	**20.6**	**20.3**	NA	NA		NA	NA	1	20	
Barium	**ND**	**ND**	NA	NA		NA	NA	NA	20	
Cadmium	**ND**	**ND**	NA	NA		NA	NA	NA	20	
Chromium	**ND**	**ND**	NA	NA		NA	NA	NA	20	
Lead	**ND**	**ND**	NA	NA		NA	NA	NA	20	
Selenium	**ND**	**ND**	NA	NA		NA	NA	NA	20	
Silver	**ND**	**ND**	NA	NA		NA	NA	NA	20	
Laboratory ID:	06-084-01									
Mercury	**ND**	**ND**	NA	NA		NA	NA	NA	20	
MATRIX SPIKES										
Laboratory ID:	06-028-03									
	MS	MSD	MS	MSD		MS	MSD			
Arsenic	**126**	**130**	111	111	20.6	**95**	**99**	75-125	3	20
Barium	**112**	**116**	111	111	ND	**101**	**105**	75-125	4	20
Cadmium	**101**	**105**	111	111	ND	**91**	**95**	75-125	4	20
Chromium	**100**	**104**	111	111	ND	**90**	**94**	75-125	4	20
Lead	**97.8**	**102**	111	111	ND	**88**	**92**	75-125	4	20
Selenium	**116**	**122**	111	111	ND	**105**	**110**	75-125	4	20
Silver	**107**	**115**	111	111	ND	**97**	**104**	75-125	7	20
Laboratory ID:	06-084-01									
Mercury	**6.25**	**5.50**	6.25	6.25	ND	**100**	**88**	75-125	13	20

OnSite Environmental Inc.

Data Qualifiers and Abbreviations

A - Due to a high sample concentration, the amount spiked is insufficient for meaningful MS/MSD recovery data.

B - The analyte indicated was also found in the blank sample.

C - The duplicate RPD is outside control limits due to high result variability when analyte concentrations are within five times the quantitation limit.

E - The value reported exceeds the quantitation range and is an estimate.

F - Surrogate recovery data is not available due to the high concentration of coeluting target compounds.

H - The analyte indicated is a common laboratory solvent and may have been introduced during sample preparation, and be impacting the sample result.

I - Compound recovery is outside of the control limits.

J - The value reported was below the practical quantitation limit. The value is an estimate.

K - Sample duplicate RPD is outside control limits due to sample inhomogeneity. The sample was re-extracted and re-analyzed with similar results.

L - The RPD is outside of the control limits.

M - Hydrocarbons in the gasoline range are impacting the diesel range result.

M1 - Hydrocarbons in the gasoline range (toluene-naphthalene) are present in the sample.

N - Hydrocarbons in the lube oil range are impacting the diesel range result.

N1 - Hydrocarbons in diesel range are impacting lube oil range results.

O - Hydrocarbons indicative of heavier fuels are present in the sample and are impacting the gasoline result.

P - The RPD of the detected concentrations between the two columns is greater than 40.

Q - Surrogate recovery is outside of the control limits.

S - Surrogate recovery data is not available due to the necessary dilution of the sample.

T - The sample chromatogram is not similar to a typical _____.

U - The analyte was analyzed for, but was not detected above the reported sample quantitation limit.

U1 - The practical quantitation limit is elevated due to interferences present in the sample.

V - Matrix Spike/Matrix Spike Duplicate recoveries are outside control limits due to matrix effects.

W - Matrix Spike/Matrix Spike Duplicate RPD are outside control limits due to matrix effects.

X - Sample extract treated with a mercury cleanup procedure.

X1- Sample extract treated with a sulfuric acid/silica gel cleanup procedure.

Y - The calibration verification for this analyte exceeded the 20% drift specified in methods 8260 & 8270, and therefore the reported result should be considered an estimate. The overall performance of the calibration verification standard met the acceptance criteria of the method.

Z -

ND - Not Detected at PQL
PQL - Practical Quantitation Limit
RPD - Relative Percent Difference

Chain of Custody

Page 1 of 1

OnSite Environmental Inc.
Analytical Laboratory Testing Services
14648 NE 95th Street • Redmond, WA 98052
Phone: (425) 883-3881 • www.onsite-env.com

Company: SCS Engineers
Project Number: 04218014.00
Project Name: Bellevue South
Project Manager: Brian Doan
Sampled by: Sam Graber

Turnaround Request (in working days)
(Check One)
☐ Same Day ☐ 1 Day
☐ 2 Days ☐ 3 Days
☒ Standard (7 Days)
☐ _____ (other)

Laboratory Number: 06-028

Lab ID	Sample Identification	Date Sampled	Time Sampled	Matrix	Number of Containers	NWTPH-HCID	NWTPH-Gx/BTEX	NWTPH-Gx Mineral Spirits	NWTPH-Dx (☐ Acid / SG Clean-up)	Volatiles 8260C	Halogenated Volatiles 8260C	EDB EPA 8011 (Waters Only)	Semivolatiles 8270D/SIM (with low-level PAHs)	PAHs 8270D/SIM (low-level)	PCBs 8082A	Organochlorine Pesticides 8081B	Organophosphorus Pesticides 8270D/SIM	Chlorinated Acid Herbicides 8151A	Total RCRA Metals	Total MTCA Metals	TCLP Metals	HEM (oil and grease) 1664A					% Moisture
1	MW-1	6/4/19	1010	water	6			X	X										X								
2	MW-2	↓	1135	↓	6			↓	↓										↓								
3	MW-3	↓	1326	↓	5			↓	↓										↓								

	Signature	Company	Date	Time
Relinquished	[signature]	SCS	6/5/19	1005
Received	[signature]	ALPHA	6/5/19	10:05
Relinquished	[signature]	ALPHA	6/5/19	10:21
Received	[signature]	OSE	6/5/19	1021
Relinquished				
Received				
Reviewed/Date		Reviewed/Date		

Comments/Special Instructions

Data Package: Standard ☐ Level III ☐ Level IV ☐

Chromatograms with final report ☐ Electronic Data Deliverables (EDDs) ☐

OnSite Environmental Inc.
14648 NE 95th Street, Redmond, WA 98052 • (425) 883-3881

September 6, 2019

Brian Doan
SCS Engineers
2405 140th Avenue NE, Suite 107
Bellevue, WA 98005

Re: Analytical Data for Project 04218014.00
Laboratory Reference No. 1908-379

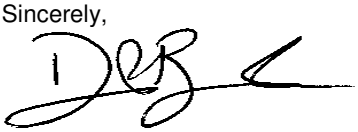
Dear Brian:

Enclosed are the analytical results and associated quality control data for samples submitted on August 29, 2019.

The standard policy of OnSite Environmental, Inc. is to store your samples for 30 days from the date of receipt. If you require longer storage, please contact the laboratory.

We appreciate the opportunity to be of service to you on this project. If you have any questions concerning the data, or need additional information, please feel free to call me.

Sincerely,



David Baumeister
Project Manager

Enclosures

Date of Report: September 6, 2019
Samples Submitted: August 29, 2019
Laboratory Reference: 1908-379
Project: 04218014.00

Case Narrative

Samples were collected on August 29, 2019 and received by the laboratory on August 29, 2019. They were maintained at the laboratory at a temperature of 2°C to 6°C.

Please note that any and all soil sample results are reported on a dry-weight basis, unless otherwise noted below.

General QA/QC issues associated with the analytical data enclosed in this laboratory report will be indicated with a reference to a comment or explanation on the Data Qualifier page. More complex and involved QA/QC issues will be discussed in detail below.

Date of Report: September 6, 2019
Samples Submitted: August 29, 2019
Laboratory Reference: 1908-379
Project: 04218014.00

GASOLINE RANGE ORGANICS
NWTPH-Gx

Matrix: Water
Units: ug/L (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**MW-1**					
Laboratory ID:	08-379-01					
Mineral Spirits	**ND**	100	NWTPH-Gx	9-3-19	9-3-19	
Surrogate:	*Percent Recovery*	*Control Limits*				
Fluorobenzene	*75*	*59-122*				
Client ID:	**MW-2**					
Laboratory ID:	08-379-02					
Mineral Spirits	**ND**	100	NWTPH-Gx	9-3-19	9-3-19	
Surrogate:	*Percent Recovery*	*Control Limits*				
Fluorobenzene	*75*	*59-122*				
Client ID:	**MW-3**					
Laboratory ID:	08-379-03					
Mineral Spirits	**ND**	100	NWTPH-Gx	9-3-19	9-3-19	
Surrogate:	*Percent Recovery*	*Control Limits*				
Fluorobenzene	*74*	*59-122*				
Client ID:	**Dup-1**					
Laboratory ID:	08-379-04					
Mineral Spirits	**ND**	100	NWTPH-Gx	9-3-19	9-3-19	
Surrogate:	*Percent Recovery*	*Control Limits*				
Fluorobenzene	*77*	*59-122*				
Client ID:	**Trip blank**					
Laboratory ID:	08-379-05					
Mineral Spirits	**ND**	100	NWTPH-Gx	9-3-19	9-3-19	
Surrogate:	*Percent Recovery*	*Control Limits*				
Fluorobenzene	*81*	*59-122*				

Date of Report: September 6, 2019
Samples Submitted: August 29, 2019
Laboratory Reference: 1908-379
Project: 04218014.00

GASOLINE RANGE ORGANICS
NWTPH-Gx
QUALITY CONTROL

Matrix: Water
Units: ug/L (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0903W3					
Mineral Spirits	**ND**	100	NWTPH-Gx	9-3-19	9-3-19	
Surrogate:	*Percent Recovery*	*Control Limits*				
Fluorobenzene	*77*	*59-122*				

Analyte	Result		Spike Level		Source Result	Percent Recovery		Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE											
Laboratory ID:	08-379-01										
	ORIG	DUP									
Mineral Spirits	**ND**	**ND**	NA	NA		NA		NA	NA	30	
Surrogate:											
Fluorobenzene						*75*	*75*	*59-122*			

Date of Report: September 6, 2019
Samples Submitted: August 29, 2019
Laboratory Reference: 1908-379
Project: 04218014.00

DIESEL AND HEAVY OIL RANGE ORGANICS
NWTPH-Dx

Matrix: Water
Units: mg/L (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**MW-1**					
Laboratory ID:	08-379-01					
Diesel Range Organics	**ND**	0.26	NWTPH-Dx	9-3-19	9-3-19	
Lube Oil Range Organics	**ND**	0.42	NWTPH-Dx	9-3-19	9-3-19	
Surrogate:	*Percent Recovery*	*Control Limits*				
o-Terphenyl	*69*	*50-150*				
Client ID:	**MW-2**					
Laboratory ID:	08-379-02					
Diesel Range Organics	**ND**	0.25	NWTPH-Dx	9-3-19	9-3-19	
Lube Oil Range Organics	**ND**	0.40	NWTPH-Dx	9-3-19	9-3-19	
Surrogate:	*Percent Recovery*	*Control Limits*				
o-Terphenyl	*66*	*50-150*				
Client ID:	**MW-3**					
Laboratory ID:	08-379-03					
Diesel Range Organics	**ND**	0.25	NWTPH-Dx	9-3-19	9-3-19	
Lube Oil Range Organics	**ND**	0.41	NWTPH-Dx	9-3-19	9-3-19	
Surrogate:	*Percent Recovery*	*Control Limits*				
o-Terphenyl	*65*	*50-150*				
Client ID:	**Dup-1**					
Laboratory ID:	08-379-04					
Diesel Range Organics	**ND**	0.27	NWTPH-Dx	9-3-19	9-3-19	
Lube Oil Range Organics	**ND**	0.43	NWTPH-Dx	9-3-19	9-3-19	
Surrogate:	*Percent Recovery*	*Control Limits*				
o-Terphenyl	*68*	*50-150*				

Date of Report: September 6, 2019
Samples Submitted: August 29, 2019
Laboratory Reference: 1908-379
Project: 04218014.00

DIESEL AND HEAVY OIL RANGE ORGANICS
NWTPH-Dx
QUALITY CONTROL

Matrix: Water
Units: mg/L (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0903W1					
Diesel Range Organics	**ND**	0.25	NWTPH-Dx	9-3-19	9-3-19	
Lube Oil Range Organics	**ND**	0.40	NWTPH-Dx	9-3-19	9-3-19	
Surrogate:	*Percent Recovery*	*Control Limits*				
o-Terphenyl	*66*	*50-150*				

Analyte	Result		Spike Level		Source Result	Percent Recovery		Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE											
Laboratory ID:	SB0903W1										
	ORIG	DUP									
Diesel Fuel #2	**0.922**	**0.848**	NA	NA		NA		NA	8	NA	
Lube Oil Range	**ND**	**ND**	NA	NA		NA		NA	NA	NA	
Surrogate:											
o-Terphenyl						*73*	*67*	*50-150*			

Date of Report: September 6, 2019
Samples Submitted: August 29, 2019
Laboratory Reference: 1908-379
Project: 04218014.00

TOTAL METALS
EPA 200.8/7470A

Matrix: Water
Units: ug/L (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**MW-1**					
Laboratory ID:	08-379-01					
Arsenic	**15**	3.3	EPA 200.8	8-30-19	8-30-19	
Barium	**30**	28	EPA 200.8	8-30-19	8-30-19	
Cadmium	**ND**	4.4	EPA 200.8	8-30-19	8-30-19	
Chromium	**ND**	11	EPA 200.8	8-30-19	8-30-19	
Lead	**ND**	1.1	EPA 200.8	8-30-19	8-30-19	
Mercury	**ND**	0.50	EPA 7470A	9-3-19	9-3-19	
Selenium	**ND**	5.6	EPA 200.8	8-30-19	8-30-19	
Silver	**ND**	11	EPA 200.8	8-30-19	8-30-19	
Client ID:	**MW-2**					
Laboratory ID:	08-379-02					
Arsenic	**ND**	3.3	EPA 200.8	8-30-19	8-30-19	
Barium	**ND**	28	EPA 200.8	8-30-19	8-30-19	
Cadmium	**ND**	4.4	EPA 200.8	8-30-19	8-30-19	
Chromium	**ND**	11	EPA 200.8	8-30-19	8-30-19	
Lead	**ND**	1.1	EPA 200.8	8-30-19	8-30-19	
Mercury	**ND**	0.50	EPA 7470A	9-3-19	9-3-19	
Selenium	**ND**	5.6	EPA 200.8	8-30-19	8-30-19	
Silver	**ND**	11	EPA 200.8	8-30-19	8-30-19	
Client ID:	**MW-3**					
Laboratory ID:	08-379-03					
Arsenic	**35**	3.3	EPA 200.8	8-30-19	8-30-19	
Barium	**ND**	28	EPA 200.8	8-30-19	8-30-19	
Cadmium	**ND**	4.4	EPA 200.8	8-30-19	8-30-19	
Chromium	**ND**	11	EPA 200.8	8-30-19	8-30-19	
Lead	**ND**	1.1	EPA 200.8	8-30-19	8-30-19	
Mercury	**ND**	0.50	EPA 7470A	9-3-19	9-3-19	
Selenium	**ND**	5.6	EPA 200.8	8-30-19	8-30-19	
Silver	**ND**	11	EPA 200.8	8-30-19	8-30-19	

Date of Report: September 6, 2019
Samples Submitted: August 29, 2019
Laboratory Reference: 1908-379
Project: 04218014.00

TOTAL METALS
EPA 200.8/7470A

Matrix: Water
Units: ug/L (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**Dup-1**					
Laboratory ID:	08-379-04					
Arsenic	**15**	3.3	EPA 200.8	8-30-19	8-30-19	
Barium	**31**	28	EPA 200.8	8-30-19	8-30-19	
Cadmium	**ND**	4.4	EPA 200.8	8-30-19	8-30-19	
Chromium	**ND**	11	EPA 200.8	8-30-19	8-30-19	
Lead	**ND**	1.1	EPA 200.8	8-30-19	8-30-19	
Mercury	**ND**	0.50	EPA 7470A	9-3-19	9-3-19	
Selenium	**ND**	5.6	EPA 200.8	8-30-19	8-30-19	
Silver	**ND**	11	EPA 200.8	8-30-19	8-30-19	

Date of Report: September 6, 2019
Samples Submitted: August 29, 2019
Laboratory Reference: 1908-379
Project: 04218014.00

TOTAL METALS
EPA 200.8/7470A
QUALITY CONTROL

Matrix: Water
Units: ug/L (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0830WM1					
Arsenic	**ND**	3.3	EPA 200.8	8-30-19	8-30-19	
Barium	**ND**	28	EPA 200.8	8-30-19	8-30-19	
Cadmium	**ND**	4.4	EPA 200.8	8-30-19	8-30-19	
Chromium	**ND**	11	EPA 200.8	8-30-19	8-30-19	
Lead	**ND**	1.1	EPA 200.8	8-30-19	8-30-19	
Selenium	**ND**	5.6	EPA 200.8	8-30-19	8-30-19	
Silver	**ND**	11	EPA 200.8	8-30-19	8-30-19	
Laboratory ID:	MB0903W1					
Mercury	**ND**	0.50	EPA 7470A	9-3-19	9-3-19	

Analyte	Result		Spike Level		Source Result	Percent Recovery	Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE										
Laboratory ID:	08-349-02									
	ORIG	DUP								
Arsenic	**6.62**	**5.56**	NA	NA		NA	NA	18	20	
Barium	**ND**	**ND**	NA	NA		NA	NA	NA	20	
Cadmium	**ND**	**ND**	NA	NA		NA	NA	NA	20	
Chromium	**ND**	**ND**	NA	NA		NA	NA	NA	20	
Lead	**2.53**	**2.31**	NA	NA		NA	NA	9	20	
Selenium	**ND**	**ND**	NA	NA		NA	NA	NA	20	
Silver	**ND**	**ND**	NA	NA		NA	NA	NA	20	
Laboratory ID:	08-370-12									
Mercury	**ND**	**ND**	NA	NA		NA	NA	NA	20	
MATRIX SPIKES										
Laboratory ID:	08-349-02									
	MS	MSD	MS	MSD		MS	MSD			
Arsenic	**130**	**131**	111	111	6.62	**112**	**112**	75-125	0	20
Barium	**125**	**122**	111	111	ND	**112**	**110**	75-125	2	20
Cadmium	**118**	**113**	111	111	ND	**106**	**102**	75-125	4	20
Chromium	**116**	**116**	111	111	ND	**105**	**105**	75-125	0	20
Lead	**118**	**115**	111	111	2.53	**104**	**102**	75-125	2	20
Selenium	**128**	**124**	111	111	ND	**116**	**112**	75-125	3	20
Silver	**115**	**113**	111	111	ND	**104**	**102**	75-125	2	20
Laboratory ID:	08-370-12									
Mercury	**11.8**	**12.8**	12.5	12.5	ND	**94**	**102**	75-125	8	20

Date of Report: September 6, 2019
Samples Submitted: August 29, 2019
Laboratory Reference: 1908-379
Project: 04218014.00

DISSOLVED METALS
EPA 200.8/7470A

Matrix: Water
Units: ug/L (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**MW-1**					
Laboratory ID:	08-379-01					
Arsenic	**16**	3.0	EPA 200.8		8-30-19	
Barium	**27**	25	EPA 200.8		8-30-19	
Cadmium	**ND**	4.0	EPA 200.8		8-30-19	
Chromium	**ND**	10	EPA 200.8		8-30-19	
Lead	**ND**	1.0	EPA 200.8		8-30-19	
Mercury	**ND**	0.50	EPA 7470A		9-3-19	
Selenium	**ND**	5.0	EPA 200.8		8-30-19	
Silver	**ND**	10	EPA 200.8		8-30-19	
Client ID:	**MW-2**					
Laboratory ID:	08-379-02					
Arsenic	**ND**	3.0	EPA 200.8		8-30-19	
Barium	**ND**	25	EPA 200.8		8-30-19	
Cadmium	**ND**	4.0	EPA 200.8		8-30-19	
Chromium	**ND**	10	EPA 200.8		8-30-19	
Lead	**ND**	1.0	EPA 200.8		8-30-19	
Mercury	**ND**	0.50	EPA 7470A		9-3-19	
Selenium	**ND**	5.0	EPA 200.8		8-30-19	
Silver	**ND**	10	EPA 200.8		8-30-19	
Client ID:	**MW-3**					
Laboratory ID:	08-379-03					
Arsenic	**39**	3.0	EPA 200.8		8-30-19	
Barium	**ND**	25	EPA 200.8		8-30-19	
Cadmium	**ND**	4.0	EPA 200.8		8-30-19	
Chromium	**ND**	10	EPA 200.8		8-30-19	
Lead	**ND**	1.0	EPA 200.8		8-30-19	
Mercury	**ND**	0.50	EPA 7470A		9-3-19	
Selenium	**ND**	5.0	EPA 200.8		8-30-19	
Silver	**ND**	10	EPA 200.8		8-30-19	

Date of Report: September 6, 2019
Samples Submitted: August 29, 2019
Laboratory Reference: 1908-379
Project: 04218014.00

DISSOLVED METALS
EPA 200.8/7470A

Matrix: Water
Units: ug/L (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**Dup-1**					
Laboratory ID:	08-379-04					
Arsenic	**15**	3.0	EPA 200.8		8-30-19	
Barium	**ND**	25	EPA 200.8		8-30-19	
Cadmium	**ND**	4.0	EPA 200.8		8-30-19	
Chromium	**ND**	10	EPA 200.8		8-30-19	
Lead	**ND**	1.0	EPA 200.8		8-30-19	
Mercury	**ND**	0.50	EPA 7470A		9-3-19	
Selenium	**ND**	5.0	EPA 200.8		8-30-19	
Silver	**ND**	10	EPA 200.8		8-30-19	

Date of Report: September 6, 2019
Samples Submitted: August 29, 2019
Laboratory Reference: 1908-379
Project: 04218014.00

DISSOLVED METALS
EPA 200.8/7470A
QUALITY CONTROL

Matrix: Water
Units: ug/L (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0829F1					
Arsenic	**ND**	3.0	EPA 200.8		8-30-19	
Barium	**ND**	25	EPA 200.8		8-30-19	
Cadmium	**ND**	4.0	EPA 200.8		8-30-19	
Chromium	**ND**	10	EPA 200.8		8-30-19	
Lead	**ND**	1.0	EPA 200.8		8-30-19	
Selenium	**ND**	5.0	EPA 200.8		8-30-19	
Silver	**ND**	10	EPA 200.8		8-30-19	
Laboratory ID:	MB0903D1					
Mercury	**ND**	0.50	EPA 7470A		9-3-19	

Analyte	Result		Spike Level		Source Result	Percent Recovery	Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE										
Laboratory ID:	08-363-01									
	ORIG	DUP								
Arsenic	**6.58**	**5.70**	NA	NA		NA	NA	14	20	
Barium	**ND**	**ND**	NA	NA		NA	NA	NA	20	
Cadmium	**ND**	**ND**	NA	NA		NA	NA	NA	20	
Chromium	**ND**	**ND**	NA	NA		NA	NA	NA	20	
Lead	**ND**	**ND**	NA	NA		NA	NA	NA	20	
Selenium	**ND**	**ND**	NA	NA		NA	NA	NA	20	
Silver	**ND**	**ND**	NA	NA		NA	NA	NA	20	
Laboratory ID:	08-379-01									
Mercury	**ND**	**ND**	NA	NA		NA	NA	NA	20	
MATRIX SPIKES										
Laboratory ID:	08-363-01									
	MS	MSD	MS	MSD		MS	MSD			
Arsenic	**84.8**	**83.8**	80.0	80.0	6.58	**98**	**97**	75-125	1	20
Barium	**88.8**	**87.4**	80.0	80.0	ND	**111**	**109**	75-125	2	20
Cadmium	**76.8**	**75.6**	80.0	80.0	ND	**96**	**95**	75-125	2	20
Chromium	**71.4**	**70.2**	80.0	80.0	ND	**89**	**88**	75-125	2	20
Lead	**77.4**	**76.2**	80.0	80.0	ND	**97**	**95**	75-125	2	20
Selenium	**85.6**	**83.0**	80.0	80.0	ND	**107**	**104**	75-125	3	20
Silver	**70.4**	**70.4**	80.0	80.0	ND	**88**	**88**	75-125	0	20
Laboratory ID:	08-379-01									
Mercury	**12.2**	**12.0**	12.5	12.5	ND	**97**	**96**	75-125	2	20

OnSite Environmental Inc.

Data Qualifiers and Abbreviations

A - Due to a high sample concentration, the amount spiked is insufficient for meaningful MS/MSD recovery data.

B - The analyte indicated was also found in the blank sample.

C - The duplicate RPD is outside control limits due to high result variability when analyte concentrations are within five times the quantitation limit.

E - The value reported exceeds the quantitation range and is an estimate.

F - Surrogate recovery data is not available due to the high concentration of coeluting target compounds.

H - The analyte indicated is a common laboratory solvent and may have been introduced during sample preparation, and be impacting the sample result.

I - Compound recovery is outside of the control limits.

J - The value reported was below the practical quantitation limit. The value is an estimate.

K - Sample duplicate RPD is outside control limits due to sample inhomogeneity. The sample was re-extracted and re-analyzed with similar results.

L - The RPD is outside of the control limits.

M - Hydrocarbons in the gasoline range are impacting the diesel range result.

M1 - Hydrocarbons in the gasoline range (toluene-naphthalene) are present in the sample.

N - Hydrocarbons in the lube oil range are impacting the diesel range result.

N1 - Hydrocarbons in diesel range are impacting lube oil range results.

O - Hydrocarbons indicative of heavier fuels are present in the sample and are impacting the gasoline result.

P - The RPD of the detected concentrations between the two columns is greater than 40.

Q - Surrogate recovery is outside of the control limits.

S - Surrogate recovery data is not available due to the necessary dilution of the sample.

T - The sample chromatogram is not similar to a typical _____.

U - The analyte was analyzed for, but was not detected above the reported sample quantitation limit.

U1 - The practical quantitation limit is elevated due to interferences present in the sample.

V - Matrix Spike/Matrix Spike Duplicate recoveries are outside control limits due to matrix effects.

W - Matrix Spike/Matrix Spike Duplicate RPD are outside control limits due to matrix effects.

X - Sample extract treated with a mercury cleanup procedure.

X1- Sample extract treated with a sulfuric acid/silica gel cleanup procedure.

Y - The calibration verification for this analyte exceeded the 20% drift specified in methods 8260 & 8270, and therefore the reported result should be considered an estimate. The overall performance of the calibration verification standard met the acceptance criteria of the method.

Z -

ND - Not Detected at PQL
PQL - Practical Quantitation Limit
RPD - Relative Percent Difference

Chain of Custody

Page 1 of 1

OnSite Environmental Inc.
Analytical Laboratory Testing Services
14648 NE 95th Street • Redmond, WA 98052
Phone: (425) 883-3881 • www.onsite-env.com

Company: SCS Engineers
Project Number: 04218014.00
Project Name: B. South
Project Manager: B. Doan
Sampled by: SEG

Turnaround Request (in working days)
(Check One)
☐ Same Day ☐ 1 Day
☐ 2 Days ☐ 3 Days
☒ Standard (7 Days)
☐ _____ (other)

Laboratory Number: 08-379

Lab ID	Sample Identification	Date Sampled	Time Sampled	Matrix	Number of Containers	NWTPH-HCID	NWTPH-Gx/BTEX	NWTPH-Gx (Mineral Spirits)	NWTPH-Dx (☐ Acid / SG Clean-up)	Volatiles 8260C	Halogenated Volatiles 8260C	EDB EPA 8011 (Waters Only)	Semivolatiles 8270D/SIM (with low-level PAHs)	PAHs 8270D/SIM (low-level)	PCBs 8082A	Organochlorine Pesticides 8081B	Organophosphorus Pesticides 8270D/SIM	Chlorinated Acid Herbicides 8151A	Total RCRA Metals	Total MTCA Metals	TCLP Metals	HEM (oil and grease) 1664A	Dissolved RCRA metals				% Moisture
1	MW-1	8/29/19	1310	water	7			X	X										X				X				
2	MW-2	↓	1156	↓	7			↓	↓										↓				↓				
3	MW-3	↓	1040	↓	7			↓	↓										↓				↓				
4	Dup-1	↓	1320	↓	7			↓	↓										↓				↓				
5	Trip blank	↓	–	↓	3			↓																			

	Signature	Company	Date	Time
Relinquished		SCS	8/29/19	1530
Received		OnSite	8-29-19	1530
Relinquished				
Received				
Relinquished				
Received				
Reviewed/Date		Reviewed/Date		

Comments/Special Instructions

Please include EIM EDD with report deliverable.

Data Package: Standard ☐ Level III ☐ Level IV ☐

Chromatograms with final report ☐ Electronic Data Deliverables (EDDs) ☐

OnSite Environmental Inc.
14648 NE 95th Street, Redmond, WA 98052 • (425) 883-3881

December 9, 2019

Brian Doan
SCS Engineers
2405 140th Avenue NE, Suite 107
Bellevue, WA 98005

Re: Analytical Data for Project 04218014.00
Laboratory Reference No. 1911-269

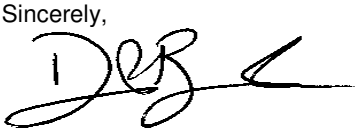
Dear Brian:

Enclosed are the analytical results and associated quality control data for samples submitted on November 26, 2019.

The standard policy of OnSite Environmental, Inc. is to store your samples for 30 days from the date of receipt. If you require longer storage, please contact the laboratory.

We appreciate the opportunity to be of service to you on this project. If you have any questions concerning the data, or need additional information, please feel free to call me.

Sincerely,



David Baumeister
Project Manager

Enclosures

Date of Report: December 9, 2019
Samples Submitted: November 26, 2019
Laboratory Reference: 1911-269
Project: 04218014.00

Case Narrative

Samples were collected on November 26, 2019 and received by the laboratory on November 26, 2019. They were maintained at the laboratory at a temperature of 2°C to 6°C.

Please note that any and all soil sample results are reported on a dry-weight basis, unless otherwise noted below.

General QA/QC issues associated with the analytical data enclosed in this laboratory report will be indicated with a reference to a comment or explanation on the Data Qualifier page. More complex and involved QA/QC issues will be discussed in detail below.

Date of Report: December 9, 2019
Samples Submitted: November 26, 2019
Laboratory Reference: 1911-269
Project: 04218014.00

GASOLINE RANGE ORGANICS
NWTPH-Gx

Matrix: Water
Units: ug/L (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**MW-1**					
Laboratory ID:	11-269-01					
Mineral Spirits	**ND**	100	NWTPH-Gx	12-3-19	12-3-19	
Surrogate:	*Percent Recovery*	*Control Limits*				
Fluorobenzene	*86*	*59-122*				
Client ID:	**MW-2**					
Laboratory ID:	11-269-02					
Mineral Spirits	**ND**	100	NWTPH-Gx	12-3-19	12-3-19	
Surrogate:	*Percent Recovery*	*Control Limits*				
Fluorobenzene	*81*	*59-122*				
Client ID:	**MW-3**					
Laboratory ID:	11-269-03					
Mineral Spirits	**ND**	100	NWTPH-Gx	12-3-19	12-3-19	
Surrogate:	*Percent Recovery*	*Control Limits*				
Fluorobenzene	*81*	*59-122*				
Client ID:	**DUP-1**					
Laboratory ID:	11-269-04					
Mineral Spirits	**ND**	100	NWTPH-Gx	12-3-19	12-3-19	
Surrogate:	*Percent Recovery*	*Control Limits*				
Fluorobenzene	*83*	*59-122*				

Date of Report: December 9, 2019
Samples Submitted: November 26, 2019
Laboratory Reference: 1911-269
Project: 04218014.00

GASOLINE RANGE ORGANICS
NWTPH-Gx
QUALITY CONTROL

Matrix: Water
Units: ug/L (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB1203W1					
Mineral Spirits	**ND**	100	NWTPH-Gx	12-3-19	12-3-19	
Surrogate:	*Percent Recovery*	*Control Limits*				
Fluorobenzene	*86*	*59-122*				

Analyte	Result		Spike Level		Source Result	Percent Recovery		Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE											
Laboratory ID:	11-269-01										
	ORIG	DUP									
Mineral Spirits	**ND**	**ND**	NA	NA		NA		NA	NA	30	
Surrogate:											
Fluorobenzene						*86*	*76*	*59-122*			

Date of Report: December 9, 2019
Samples Submitted: November 26, 2019
Laboratory Reference: 1911-269
Project: 04218014.00

See reanalysis results, Laboratory Reference No. 1911-269B, Dec. 19, 2019.

DIESEL AND HEAVY OIL RANGE ORGANICS
NWTPH-Dx

Matrix: Water
Units: mg/L (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**MW-1**					
Laboratory ID:	11-269-01					
Diesel Range Organics	**0.20**	0.16	NWTPH-Dx	12-2-19	12-3-19	
Lube Oil Range Organics	**0.29**	0.21	NWTPH-Dx	12-2-19	12-3-19	
Surrogate:	*Percent Recovery*	*Control Limits*				
o-Terphenyl	*126*	*50-150*				
Client ID:	**MW-2**					
Laboratory ID:	11-269-02					
Diesel Range Organics	**ND**	0.21	NWTPH-Dx	12-2-19	12-3-19	
Lube Oil Range Organics	**0.28**	0.21	NWTPH-Dx	12-2-19	12-3-19	
Surrogate:	*Percent Recovery*	*Control Limits*				
o-Terphenyl	*124*	*50-150*				
Client ID:	**MW-3**					
Laboratory ID:	11-269-03					
Diesel Range Organics	**0.48**	0.16	NWTPH-Dx	12-2-19	12-3-19	
Lube Oil Range Organics	**0.64**	0.21	NWTPH-Dx	12-2-19	12-3-19	
Surrogate:	*Percent Recovery*	*Control Limits*				
o-Terphenyl	*125*	*50-150*				
Client ID:	**DUP-1**					
Laboratory ID:	11-269-04					
Diesel Range Organics	**0.18**	0.16	NWTPH-Dx	12-2-19	12-3-19	
Lube Oil Range Organics	**0.29**	0.21	NWTPH-Dx	12-2-19	12-3-19	
Surrogate:	*Percent Recovery*	*Control Limits*				
o-Terphenyl	*131*	*50-150*				

Date of Report: December 9, 2019
Samples Submitted: November 26, 2019
Laboratory Reference: 1911-269
Project: 04218014.00

DIESEL AND HEAVY OIL RANGE ORGANICS
NWTPH-Dx
QUALITY CONTROL

Matrix: Water
Units: mg/L (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB1202W1					
Diesel Range Organics	**ND**	0.20	NWTPH-Dx	12-2-19	12-2-19	
Lube Oil Range Organics	**ND**	0.20	NWTPH-Dx	12-2-19	12-2-19	
Surrogate:	*Percent Recovery*	*Control Limits*				
o-Terphenyl	*126*	*50-150*				

Analyte	Result		Spike Level		Source Result	Percent Recovery		Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE											
Laboratory ID:	11-252-01										
	ORIG	DUP									
Diesel Range Organics	**0.717**	**0.571**	NA	NA		NA		NA	23	NA	
Lube Oil Range Organics	**1.03**	**0.795**	NA	NA		NA		NA	26	NA	
Surrogate:											
o-Terphenyl						*133*	*117*	*50-150*			

Date of Report: December 9, 2019
Samples Submitted: November 26, 2019
Laboratory Reference: 1911-269
Project: 04218014.00

TOTAL METALS
EPA 200.8/7470A

Matrix: Water
Units: ug/L (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**MW-1**					
Laboratory ID:	11-269-01					
Arsenic	**15**	3.3	EPA 200.8	12-4-19	12-4-19	
Barium	**28**	28	EPA 200.8	12-4-19	12-4-19	
Cadmium	**ND**	4.4	EPA 200.8	12-4-19	12-4-19	
Chromium	**ND**	11	EPA 200.8	12-4-19	12-4-19	
Lead	**ND**	1.1	EPA 200.8	12-4-19	12-4-19	
Mercury	**ND**	0.50	EPA 7470A	12-4-19	12-4-19	
Selenium	**ND**	5.6	EPA 200.8	12-4-19	12-4-19	
Silver	**ND**	11	EPA 200.8	12-4-19	12-4-19	
Client ID:	**MW-2**					
Laboratory ID:	11-269-02					
Arsenic	**ND**	3.3	EPA 200.8	12-4-19	12-4-19	
Barium	**ND**	28	EPA 200.8	12-4-19	12-4-19	
Cadmium	**ND**	4.4	EPA 200.8	12-4-19	12-4-19	
Chromium	**ND**	11	EPA 200.8	12-4-19	12-4-19	
Lead	**ND**	1.1	EPA 200.8	12-4-19	12-4-19	
Mercury	**ND**	0.50	EPA 7470A	12-4-19	12-4-19	
Selenium	**ND**	5.6	EPA 200.8	12-4-19	12-4-19	
Silver	**ND**	11	EPA 200.8	12-4-19	12-4-19	
Client ID:	**MW-3**					
Laboratory ID:	11-269-03					
Arsenic	**31**	3.3	EPA 200.8	12-4-19	12-4-19	
Barium	**ND**	28	EPA 200.8	12-4-19	12-4-19	
Cadmium	**ND**	4.4	EPA 200.8	12-4-19	12-4-19	
Chromium	**ND**	11	EPA 200.8	12-4-19	12-4-19	
Lead	**ND**	1.1	EPA 200.8	12-4-19	12-4-19	
Mercury	**ND**	0.50	EPA 7470A	12-4-19	12-4-19	
Selenium	**ND**	5.6	EPA 200.8	12-4-19	12-4-19	
Silver	**ND**	11	EPA 200.8	12-4-19	12-4-19	

Date of Report: December 9, 2019
Samples Submitted: November 26, 2019
Laboratory Reference: 1911-269
Project: 04218014.00

TOTAL METALS
EPA 200.8/7470A

Matrix: Water
Units: ug/L (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**DUP-1**					
Laboratory ID:	11-269-04					
Arsenic	**14**	3.3	EPA 200.8	12-4-19	12-4-19	
Barium	**ND**	28	EPA 200.8	12-4-19	12-4-19	
Cadmium	**ND**	4.4	EPA 200.8	12-4-19	12-4-19	
Chromium	**ND**	11	EPA 200.8	12-4-19	12-4-19	
Lead	**ND**	1.1	EPA 200.8	12-4-19	12-4-19	
Mercury	**ND**	0.50	EPA 7470A	12-4-19	12-4-19	
Selenium	**ND**	5.6	EPA 200.8	12-4-19	12-4-19	
Silver	**ND**	11	EPA 200.8	12-4-19	12-4-19	
Client ID:	**F-15 Clean out**					
Laboratory ID:	11-269-05					
Arsenic	**7.4**	3.3	EPA 200.8	12-4-19	12-4-19	
Barium	**ND**	28	EPA 200.8	12-4-19	12-4-19	
Cadmium	**ND**	4.4	EPA 200.8	12-4-19	12-4-19	
Chromium	**ND**	11	EPA 200.8	12-4-19	12-4-19	
Lead	**ND**	1.1	EPA 200.8	12-4-19	12-4-19	
Mercury	**ND**	0.50	EPA 7470A	12-4-19	12-4-19	
Selenium	**ND**	5.6	EPA 200.8	12-4-19	12-4-19	
Silver	**ND**	11	EPA 200.8	12-4-19	12-4-19	
Client ID:	**SE Drain Wall**					
Laboratory ID:	11-269-06					
Arsenic	**4.0**	3.3	EPA 200.8	12-4-19	12-4-19	
Barium	**ND**	28	EPA 200.8	12-4-19	12-4-19	
Cadmium	**ND**	4.4	EPA 200.8	12-4-19	12-4-19	
Chromium	**ND**	11	EPA 200.8	12-4-19	12-4-19	
Lead	**ND**	1.1	EPA 200.8	12-4-19	12-4-19	
Mercury	**ND**	0.50	EPA 7470A	12-4-19	12-4-19	
Selenium	**ND**	5.6	EPA 200.8	12-4-19	12-4-19	
Silver	**ND**	11	EPA 200.8	12-4-19	12-4-19	

Date of Report: December 9, 2019
Samples Submitted: November 26, 2019
Laboratory Reference: 1911-269
Project: 04218014.00

TOTAL METALS
EPA 200.8/7470A
QUALITY CONTROL

Matrix: Water
Units: ug/L (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB1204WM1					
Arsenic	**ND**	3.3	EPA 200.8	12-4-19	12-4-19	
Barium	**ND**	28	EPA 200.8	12-4-19	12-4-19	
Cadmium	**ND**	4.4	EPA 200.8	12-4-19	12-4-19	
Chromium	**ND**	11	EPA 200.8	12-4-19	12-4-19	
Lead	**ND**	1.1	EPA 200.8	12-4-19	12-4-19	
Selenium	**ND**	5.6	EPA 200.8	12-4-19	12-4-19	
Silver	**ND**	11	EPA 200.8	12-4-19	12-4-19	
Laboratory ID:	MB1204W1					
Mercury	**ND**	0.50	EPA 7470A	12-4-19	12-4-19	

Analyte	Result		Spike Level		Source Result	Percent Recovery	Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE										
Laboratory ID:	11-151-10									
	ORIG	DUP								
Arsenic	**ND**	**ND**	NA	NA		NA	NA	NA	20	
Barium	**ND**	**ND**	NA	NA		NA	NA	NA	20	
Cadmium	**ND**	**ND**	NA	NA		NA	NA	NA	20	
Chromium	**ND**	**ND**	NA	NA		NA	NA	NA	20	
Lead	**ND**	**ND**	NA	NA		NA	NA	NA	20	
Selenium	**ND**	**ND**	NA	NA		NA	NA	NA	20	
Silver	**ND**	**ND**	NA	NA		NA	NA	NA	20	
Laboratory ID:	11-269-01									
Mercury	**ND**	**ND**	NA	NA		NA	NA	NA	20	
MATRIX SPIKES										
Laboratory ID:	11-151-10									
	MS	MSD	MS	MSD		MS	MSD			
Arsenic	**119**	**118**	111	111	ND	**107**	**106**	75-125	1	20
Barium	**124**	**125**	111	111	ND	**112**	**113**	75-125	1	20
Cadmium	**114**	**112**	111	111	ND	**103**	**101**	75-125	1	20
Chromium	**113**	**114**	111	111	ND	**102**	**103**	75-125	1	20
Lead	**122**	**123**	111	111	ND	**110**	**111**	75-125	1	20
Selenium	**123**	**128**	111	111	ND	**111**	**115**	75-125	4	20
Silver	**114**	**120**	111	111	ND	**103**	**108**	75-125	4	20
Laboratory ID:	11-269-01									
Mercury	**11.7**	**12.0**	12.5	12.5	ND	**94**	**96**	75-125	2	20

OnSite Environmental Inc.

Data Qualifiers and Abbreviations

A - Due to a high sample concentration, the amount spiked is insufficient for meaningful MS/MSD recovery data.

B - The analyte indicated was also found in the blank sample.

C - The duplicate RPD is outside control limits due to high result variability when analyte concentrations are within five times the quantitation limit.

E - The value reported exceeds the quantitation range and is an estimate.

F - Surrogate recovery data is not available due to the high concentration of coeluting target compounds.

H - The analyte indicated is a common laboratory solvent and may have been introduced during sample preparation, and be impacting the sample result.

I - Compound recovery is outside of the control limits.

J - The value reported was below the practical quantitation limit. The value is an estimate.

K - Sample duplicate RPD is outside control limits due to sample inhomogeneity. The sample was re-extracted and re-analyzed with similar results.

L - The RPD is outside of the control limits.

M - Hydrocarbons in the gasoline range are impacting the diesel range result.

M1 - Hydrocarbons in the gasoline range (toluene-naphthalene) are present in the sample.

N - Hydrocarbons in the lube oil range are impacting the diesel range result.

N1 - Hydrocarbons in diesel range are impacting lube oil range results.

O - Hydrocarbons indicative of heavier fuels are present in the sample and are impacting the gasoline result.

P - The RPD of the detected concentrations between the two columns is greater than 40.

Q - Surrogate recovery is outside of the control limits.

S - Surrogate recovery data is not available due to the necessary dilution of the sample.

T - The sample chromatogram is not similar to a typical _____.

U - The analyte was analyzed for, but was not detected above the reported sample quantitation limit.

U1 - The practical quantitation limit is elevated due to interferences present in the sample.

V - Matrix Spike/Matrix Spike Duplicate recoveries are outside control limits due to matrix effects.

W - Matrix Spike/Matrix Spike Duplicate RPD are outside control limits due to matrix effects.

X - Sample extract treated with a mercury cleanup procedure.

X1- Sample extract treated with a sulfuric acid/silica gel cleanup procedure.

Y - The calibration verification for this analyte exceeded the 20% drift specified in methods 8260 & 8270, and therefore the reported result should be considered an estimate. The overall performance of the calibration verification standard met the acceptance criteria of the method.

Z -

ND - Not Detected at PQL
PQL - Practical Quantitation Limit
RPD - Relative Percent Difference

Chain of Custody

OnSite Environmental Inc.
Analytical Laboratory Testing Services
14648 NE 95th Street • Redmond, WA 98052
Phone: (425) 883-3881 • www.onsite-env.com

Company: SCS Engineers
Project Number: 04218014.00
Project Name: Bellevue South
Project Manager: Brian Doan
Sampled by: Sam Graber

Turnaround Request (in working days)
(Check One)
☐ Same Day ☐ 1 Day
☐ 2 Days ☐ 3 Days
☒ Standard (7 Days)
☐ _____ (other)

Laboratory Number: 11-269

Lab ID	Sample Identification	Date Sampled	Time Sampled	Matrix	Number of Containers	NWTPH-HCID	NWTPH-Gx/BTEX	NWTPH-Gx (Mineral Spirits)	NWTPH-Dx (☐ Acid / SG Clean-up)	Volatiles 8260C	Halogenated Volatiles 8260C	EDB EPA 8011 (Waters Only)	Semivolatiles 8270D/SIM (with low-level PAHs)	PAHs 8270D/SIM (low-level)	PCBs 8082A	Organochlorine Pesticides 8081B	Organophosphorus Pesticides 8270D/SIM	Chlorinated Acid Herbicides 8151A	Total RCRA Metals	Total MTCA Metals	TCLP Metals	HEM (oil and grease) 1664A					% Moisture
1	MW-1	11/26/19	1029	water	6			X	X										X								
2	MW-2	↓	909	↓	6			↓	↓										↓								
3	MW-3		1303		6																						
4	Dup-1	↓	1040	↓	6			↓	↓																		
5	F-15 Cleanout		1133		1																						
6	SE Drain Wall	↓	1218	↓	1														↓								

	Signature	Company	Date	Time
Relinquished		SCS	11/26/2019	16:20
Received		OSE	11/26/19	1620
Relinquished				
Received				
Relinquished				
Received				
Reviewed/Date		Reviewed/Date		

Comments/Special Instructions

Please include EIM EDD w/ report deliverable.

Data Package: Standard ☐ Level III ☐ Level IV ☐

Chromatograms with final report ☐ Electronic Data Deliverables (EDDs) ☒

OnSite Environmental Inc.
14648 NE 95th Street, Redmond, WA 98052 • (425) 883-3881

December 19, 2019

Brian Doan
SCS Engineers
2405 140th Avenue NE, Suite 107
Bellevue, WA 98005

Re: Analytical Data for Project 04218014.00
Laboratory Reference No. 1911-269B

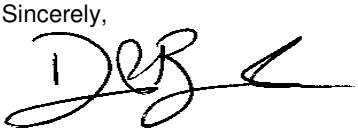
Dear Brian:

Enclosed are the analytical results and associated quality control data for samples submitted on November 26, 2019.

The standard policy of OnSite Environmental, Inc. is to store your samples for 30 days from the date of receipt. If you require longer storage, please contact the laboratory.

We appreciate the opportunity to be of service to you on this project. If you have any questions concerning the data, or need additional information, please feel free to call me.

Sincerely,



David Baumeister
Project Manager

Enclosures

Date of Report: December 19, 2019
Samples Submitted: November 26, 2019
Laboratory Reference: 1911-269B
Project: 04218014.00

Case Narrative

Samples were collected on November 26, 2019 and received by the laboratory on November 26, 2019. They were maintained at the laboratory at a temperature of 2°C to 6°C.

Please note that any and all soil sample results are reported on a dry-weight basis, unless otherwise noted below.

General QA/QC issues associated with the analytical data enclosed in this laboratory report will be indicated with a reference to a comment or explanation on the Data Qualifier page. More complex and involved QA/QC issues will be discussed in detail below.

NWTPH-Dx Analysis

Sample MW-2 (acid cleaned fraction) had a surrogate recovery outside of control limits. Because the recovery showed high bias and the sample was non-detect, no further action was deemed necessary.

Any other QA/QC issues associated with this extraction and analysis will be indicated with a footnote reference and discussed in detail on the Data Qualifier page.

Date of Report: December 19, 2019
Samples Submitted: November 26, 2019
Laboratory Reference: 1911-269B
Project: 04218014.00

DIESEL AND HEAVY OIL RANGE ORGANICS
NWTPH-Dx

Matrix: Water
Units: mg/L (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**MW-1**					
Laboratory ID:	11-269-01					
Diesel Range Organics	**ND**	0.20	NWTPH-Dx	12-2-19	12-13-19	X1
Lube Oil	**ND**	0.23	NWTPH-Dx	12-2-19	12-13-19	X1
Surrogate:	*Percent Recovery*	*Control Limits*				
o-Terphenyl	*148*	*50-150*				
Client ID:	**MW-2**					
Laboratory ID:	11-269-02					
Diesel Range Organics	**ND**	0.20	NWTPH-Dx	12-2-19	12-13-19	X1
Lube Oil	**ND**	0.26	NWTPH-Dx	12-2-19	12-13-19	X1
Surrogate:	*Percent Recovery*	*Control Limits*				
o-Terphenyl	*156*	*50-150*				Q
Client ID:	**MW-3**					
Laboratory ID:	11-269-03					
Diesel Range Organics	**ND**	0.20	NWTPH-Dx	12-2-19	12-13-19	X1
Lube Oil Range Organics	**ND**	0.20	NWTPH-Dx	12-2-19	12-13-19	X1
Surrogate:	*Percent Recovery*	*Control Limits*				
o-Terphenyl	*143*	*50-150*				
Client ID:	**DUP-1**					
Laboratory ID:	11-269-04					
Diesel Range Organics	**ND**	0.16	NWTPH-Dx	12-2-19	12-18-19	X1
Lube Oil Range Organics	**ND**	0.30	NWTPH-Dx	12-2-19	12-18-19	X1
Surrogate:	*Percent Recovery*	*Control Limits*				
o-Terphenyl	*136*	*50-150*				

Date of Report: December 19, 2019
Samples Submitted: November 26, 2019
Laboratory Reference: 1911-269B
Project: 04218014.00

DIESEL AND HEAVY OIL RANGE ORGANICS
NWTPH-Dx
QUALITY CONTROL

Matrix: Water
Units: mg/L (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB1202W1					
Diesel Range Organics	**ND**	0.16	NWTPH-Dx	12-2-19	12-13-19	X1
Lube Oil Range Organics	**ND**	0.20	NWTPH-Dx	12-2-19	12-13-19	X1
Surrogate:	*Percent Recovery*	*Control Limits*				
o-Terphenyl	*139*	*50-150*				

Analyte	Result		Spike Level		Source Result	Percent Recovery		Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE											
Laboratory ID:	11-252-01										
	ORIG	DUP									
Diesel Range	**ND**	**ND**	NA	NA		NA		NA	NA	NA	X1
Lube Oil Range Organics	**0.214**	**ND**	NA	NA		NA		NA	NA	NA	X1
Surrogate:											
o-Terphenyl						*124*	*124*	*50-150*			

OnSite Environmental Inc.

Data Qualifiers and Abbreviations

A - Due to a high sample concentration, the amount spiked is insufficient for meaningful MS/MSD recovery data.

B - The analyte indicated was also found in the blank sample.

C - The duplicate RPD is outside control limits due to high result variability when analyte concentrations are within five times the quantitation limit.

E - The value reported exceeds the quantitation range and is an estimate.

F - Surrogate recovery data is not available due to the high concentration of coeluting target compounds.

H - The analyte indicated is a common laboratory solvent and may have been introduced during sample preparation, and be impacting the sample result.

I - Compound recovery is outside of the control limits.

J - The value reported was below the practical quantitation limit. The value is an estimate.

K - Sample duplicate RPD is outside control limits due to sample inhomogeneity. The sample was re-extracted and re-analyzed with similar results.

L - The RPD is outside of the control limits.

M - Hydrocarbons in the gasoline range are impacting the diesel range result.

M1 - Hydrocarbons in the gasoline range (toluene-naphthalene) are present in the sample.

N - Hydrocarbons in the lube oil range are impacting the diesel range result.

N1 - Hydrocarbons in diesel range are impacting lube oil range results.

O - Hydrocarbons indicative of heavier fuels are present in the sample and are impacting the gasoline result.

P - The RPD of the detected concentrations between the two columns is greater than 40.

Q - Surrogate recovery is outside of the control limits.

S - Surrogate recovery data is not available due to the necessary dilution of the sample.

T - The sample chromatogram is not similar to a typical _____.

U - The analyte was analyzed for, but was not detected above the reported sample quantitation limit.

U1 - The practical quantitation limit is elevated due to interferences present in the sample.

V - Matrix Spike/Matrix Spike Duplicate recoveries are outside control limits due to matrix effects.

W - Matrix Spike/Matrix Spike Duplicate RPD are outside control limits due to matrix effects.

X - Sample extract treated with a mercury cleanup procedure.

X1- Sample extract treated with a sulfuric acid/silica gel cleanup procedure.

Y - The calibration verification for this analyte exceeded the 20% drift specified in methods 8260 & 8270, and therefore the reported result should be considered an estimate. The overall performance of the calibration verification standard met the acceptance criteria of the method.

Z -

ND - Not Detected at PQL
PQL - Practical Quantitation Limit
RPD - Relative Percent Difference

Chain of Custody

Page 1 of 1

OnSite Environmental Inc.
Analytical Laboratory Testing Services
14648 NE 95th Street • Redmond, WA 98052
Phone: (425) 883-3881 • www.onsite-env.com

Company: SCS Engineers
Project Number: 042180014.00
Project Name: Bellevue South
Project Manager: Brian Doan
Sampled by: Sam Graber

Turnaround Request (in working days)
(Check One)
☐ Same Day ☐ 1 Day
☐ 2 Days ☐ 3 Days
☒ Standard (7 Days)
☐ _____ (other)

Laboratory Number: 11-269

Lab ID	Sample Identification	Date Sampled	Time Sampled	Matrix	Number of Containers	NWTPH-HCID	NWTPH-Gx/BTEX	NWTPH-Gx (Mineral Spirits)	NWTPH-Dx (☐ Acid / SG Clean-up)	Volatiles 8260C	Halogenated Volatiles 8260C	EDB EPA 8011 (Waters Only)	Semivolatiles 8270D/SIM (with low-level PAHs)	PAHs 8270D/SIM (low-level)	PCBs 8082A	Organochlorine Pesticides 8081B	Organophosphorus Pesticides 8270D/SIM	Chlorinated Acid Herbicides 8151A	Total RCRA Metals	Total MTCA Metals	TCLP Metals	HEM (oil and grease) 1664A	Dx Ac/SG				% Moisture
1	MW-1	11/26/19	1029	water	6			X	X										X				(X)				
2	MW-2	↓	909	↓	6			↓	↓										↓				(X)				
3	MW-3	↓	1303	↓	6			↓	↓										↓				(X)				
4	Dup-1	↓	1040	↓	6			↓	↓										↓				(X)				
5	F-15 Cleanout	↓	1133	↓	1																						
6	SE Drain Wall	↓	1218	↓	1														↓								

	Signature	Company	Date	Time
Relinquished		SCS	11/26/2019	16:20
Received		CORE	11/26/19	1620
Relinquished				
Received				
Relinquished				
Received				
Reviewed/Date		Reviewed/Date		

Comments/Special Instructions
(X) Added 12/10/19 BC STA
Please include EIM EDD w/ report deliverable.

Data Package: Standard ☐ Level III ☐ Level IV ☐
Chromatograms with final report ☐ Electronic Data Deliverables (EDDs) ☒

OnSite Environmental Inc.
14648 NE 95th Street, Redmond, WA 98052 • (425) 883-3881

June 4, 2020

Brian Doan
SCS Engineers
2405 140th Avenue NE, Suite 107
Bellevue, WA 98005

Re: Analytical Data for Project 04218014.00
Laboratory Reference No. 2005-167

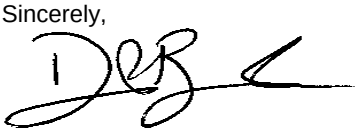
Dear Brian:

Enclosed are the analytical results and associated quality control data for samples submitted on May 21, 2020.

The standard policy of OnSite Environmental, Inc. is to store your samples for 30 days from the date of receipt. If you require longer storage, please contact the laboratory.

We appreciate the opportunity to be of service to you on this project. If you have any questions concerning the data, or need additional information, please feel free to call me.

Sincerely,



David Baumeister
Project Manager

Enclosures

Date of Report: June 4, 2020
Samples Submitted: May 21, 2020
Laboratory Reference: 2005-167
Project: 04218014.00

Case Narrative

Samples were collected on May 21, 2020 and received by the laboratory on May 21, 2020. They were maintained at the laboratory at a temperature of 2°C to 6°C.

Please note that any and all soil sample results are reported on a dry-weight basis, unless otherwise noted below.

General QA/QC issues associated with the analytical data enclosed in this laboratory report will be indicated with a reference to a comment or explanation on the Data Qualifier page. More complex and involved QA/QC issues will be discussed in detail below.

Date of Report: June 4, 2020
Samples Submitted: May 21, 2020
Laboratory Reference: 2005-167
Project: 04218014.00

GASOLINE RANGE ORGANICS
NWTPH-Gx

Matrix: Water
Units: ug/L (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**MW-1**					
Laboratory ID:	05-167-01					
Mineral Spirits	**ND**	100	NWTPH-Gx	5-22-20	5-22-20	
Surrogate:	*Percent Recovery*	*Control Limits*				
Fluorobenzene	*97*	*65-120*				
Client ID:	**MW-2**					
Laboratory ID:	05-167-02					
Mineral Spirits	**ND**	100	NWTPH-Gx	5-22-20	5-22-20	
Surrogate:	*Percent Recovery*	*Control Limits*				
Fluorobenzene	*96*	*65-120*				
Client ID:	**MW-3**					
Laboratory ID:	05-167-03					
Mineral Spirits	**ND**	100	NWTPH-Gx	5-22-20	5-22-20	
Surrogate:	*Percent Recovery*	*Control Limits*				
Fluorobenzene	*96*	*65-120*				
Client ID:	**MW-4**					
Laboratory ID:	05-167-04					
Mineral Spirits	**ND**	100	NWTPH-Gx	5-22-20	5-22-20	
Surrogate:	*Percent Recovery*	*Control Limits*				
Fluorobenzene	*101*	*65-120*				
Client ID:	**MW-5**					
Laboratory ID:	05-167-05					
Mineral Spirits	**ND**	100	NWTPH-Gx	5-22-20	5-22-20	
Surrogate:	*Percent Recovery*	*Control Limits*				
Fluorobenzene	*97*	*65-120*				
Client ID:	**DUP**					
Laboratory ID:	05-167-06					
Mineral Spirits	**ND**	100	NWTPH-Gx	5-22-20	5-22-20	
Surrogate:	*Percent Recovery*	*Control Limits*				
Fluorobenzene	*94*	*65-120*				

Date of Report: June 4, 2020
Samples Submitted: May 21, 2020
Laboratory Reference: 2005-167
Project: 04218014.00

GASOLINE RANGE ORGANICS
NWTPH-Gx
QUALITY CONTROL

Matrix: Water
Units: ug/L (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0522W1					
Mineral Spirits	**ND**	100	NWTPH-Gx	5-22-20	5-22-20	
Surrogate:	*Percent Recovery*	*Control Limits*				
Fluorobenzene	*95*	*65-120*				

Analyte	Result		Spike Level		Source Result	Percent Recovery		Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE											
Laboratory ID:	05-167-01										
	ORIG	DUP									
Mineral Spirits	**ND**	**ND**	NA	NA		NA		NA	NA	30	
Surrogate:											
Fluorobenzene						*97*	*99*	*65-120*			

Date of Report: June 4, 2020
Samples Submitted: May 21, 2020
Laboratory Reference: 2005-167
Project: 04218014.00

See reanalysis results on page 10 of this lab report.

DIESEL AND HEAVY OIL RANGE ORGANICS
NWTPH-Dx

Matrix: Water
Units: mg/L (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**MW-1**					
Laboratory ID:	05-167-01					
Diesel Range Organics	**ND**	0.22	NWTPH-Dx	5-27-20	5-27-20	
Lube Oil Range Organics	**ND**	0.22	NWTPH-Dx	5-27-20	5-27-20	
Surrogate:	*Percent Recovery*	*Control Limits*				
o-Terphenyl	*90*	*50-150*				
Client ID:	**MW-2**					
Laboratory ID:	05-167-02					
Diesel Range Organics	**ND**	0.23	NWTPH-Dx	5-27-20	5-27-20	
Lube Oil Range Organics	**0.38**	0.23	NWTPH-Dx	5-27-20	5-27-20	
Surrogate:	*Percent Recovery*	*Control Limits*				
o-Terphenyl	*81*	*50-150*				
Client ID:	**MW-3**					
Laboratory ID:	05-167-03					
Diesel Range Organics	**0.24**	0.21	NWTPH-Dx	5-27-20	5-27-20	
Lube Oil Range Organics	**0.50**	0.21	NWTPH-Dx	5-27-20	5-27-20	
Surrogate:	*Percent Recovery*	*Control Limits*				
o-Terphenyl	*97*	*50-150*				
Client ID:	**MW-4**					
Laboratory ID:	05-167-04					
Diesel Range Organics	**ND**	0.22	NWTPH-Dx	5-27-20	5-27-20	
Lube Oil Range Organics	**ND**	0.22	NWTPH-Dx	5-27-20	5-27-20	
Surrogate:	*Percent Recovery*	*Control Limits*				
o-Terphenyl	*97*	*50-150*				
Client ID:	**MW-5**					
Laboratory ID:	05-167-05					
Diesel Range Organics	**0.51**	0.22	NWTPH-Dx	5-27-20	5-27-20	
Lube Oil Range Organics	**0.95**	0.22	NWTPH-Dx	5-27-20	5-27-20	
Surrogate:	*Percent Recovery*	*Control Limits*				
o-Terphenyl	*94*	*50-150*				
Client ID:	**DUP**					
Laboratory ID:	05-167-06					
Diesel Range Organics	**ND**	0.21	NWTPH-Dx	5-27-20	5-27-20	
Lube Oil Range Organics	**0.37**	0.21	NWTPH-Dx	5-27-20	5-27-20	
Surrogate:	*Percent Recovery*	*Control Limits*				
o-Terphenyl	*88*	*50-150*				

Date of Report: June 4, 2020
Samples Submitted: May 21, 2020
Laboratory Reference: 2005-167
Project: 04218014.00

DIESEL AND HEAVY OIL RANGE ORGANICS
NWTPH-Dx
QUALITY CONTROL

Matrix: Water
Units: mg/L (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0527W1					
Diesel Range Organics	**ND**	0.20	NWTPH-Dx	5-27-20	5-27-20	
Lube Oil Range Organics	**ND**	0.20	NWTPH-Dx	5-27-20	5-27-20	
Surrogate:	*Percent Recovery*	*Control Limits*				
o-Terphenyl	*108*	*50-150*				

Analyte	Result		Spike Level		Source Result	Percent Recovery		Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE											
Laboratory ID:	SB0527W1										
	ORIG	DUP									
Diesel Fuel #2	**0.564**	**0.519**	NA	NA		NA		NA	8	NA	
Lube Oil Range	**ND**	**ND**	NA	NA		NA		NA	NA	NA	
Surrogate:											
o-Terphenyl						*111*	*107*	*50-150*			

Date of Report: June 4, 2020
Samples Submitted: May 21, 2020
Laboratory Reference: 2005-167
Project: 04218014.00

TOTAL METALS
EPA 200.8/7470A

Matrix: Water
Units: ug/L (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**MW-1**					
Laboratory ID:	05-167-01					
Arsenic	**7.3**	3.3	EPA 200.8	5-26-20	5-26-20	
Barium	**ND**	28	EPA 200.8	5-26-20	5-26-20	
Cadmium	**ND**	4.4	EPA 200.8	5-26-20	5-26-20	
Chromium	**ND**	11	EPA 200.8	5-26-20	5-26-20	
Lead	**ND**	1.1	EPA 200.8	5-26-20	5-26-20	
Mercury	**ND**	0.50	EPA 7470A	5-26-20	5-26-20	
Selenium	**ND**	5.6	EPA 200.8	5-26-20	5-26-20	
Silver	**ND**	11	EPA 200.8	5-26-20	5-26-20	
Client ID:	**MW-2**					
Laboratory ID:	05-167-02					
Arsenic	**ND**	3.3	EPA 200.8	5-26-20	5-26-20	
Barium	**ND**	28	EPA 200.8	5-26-20	5-26-20	
Cadmium	**ND**	4.4	EPA 200.8	5-26-20	5-26-20	
Chromium	**ND**	11	EPA 200.8	5-26-20	5-26-20	
Lead	**ND**	1.1	EPA 200.8	5-26-20	5-26-20	
Mercury	**ND**	0.50	EPA 7470A	5-26-20	5-26-20	
Selenium	**ND**	5.6	EPA 200.8	5-26-20	5-26-20	
Silver	**ND**	11	EPA 200.8	5-26-20	5-26-20	
Client ID:	**MW-3**					
Laboratory ID:	05-167-03					
Arsenic	**12**	3.3	EPA 200.8	5-26-20	5-26-20	
Barium	**ND**	28	EPA 200.8	5-26-20	5-26-20	
Cadmium	**ND**	4.4	EPA 200.8	5-26-20	5-26-20	
Chromium	**ND**	11	EPA 200.8	5-26-20	5-26-20	
Lead	**ND**	1.1	EPA 200.8	5-26-20	5-26-20	
Mercury	**ND**	0.50	EPA 7470A	5-26-20	5-26-20	
Selenium	**ND**	5.6	EPA 200.8	5-26-20	5-26-20	
Silver	**ND**	11	EPA 200.8	5-26-20	5-26-20	

Date of Report: June 4, 2020
Samples Submitted: May 21, 2020
Laboratory Reference: 2005-167
Project: 04218014.00

TOTAL METALS
EPA 200.8/7470A

Matrix: Water
Units: ug/L (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**MW-4**					
Laboratory ID:	05-167-04					
Arsenic	**22**	3.3	EPA 200.8	5-26-20	5-26-20	
Barium	**31**	28	EPA 200.8	5-26-20	5-26-20	
Cadmium	**ND**	4.4	EPA 200.8	5-26-20	5-26-20	
Chromium	**ND**	11	EPA 200.8	5-26-20	5-26-20	
Lead	**ND**	1.1	EPA 200.8	5-26-20	5-26-20	
Mercury	**ND**	0.50	EPA 7470A	5-26-20	5-26-20	
Selenium	**ND**	5.6	EPA 200.8	5-26-20	5-26-20	
Silver	**ND**	11	EPA 200.8	5-26-20	5-26-20	
Client ID:	**MW-5**					
Laboratory ID:	05-167-05					
Arsenic	**4.2**	3.3	EPA 200.8	5-26-20	5-26-20	
Barium	**50**	28	EPA 200.8	5-26-20	5-26-20	
Cadmium	**ND**	4.4	EPA 200.8	5-26-20	5-26-20	
Chromium	**13**	11	EPA 200.8	5-26-20	5-26-20	
Lead	**1.2**	1.1	EPA 200.8	5-26-20	5-26-20	
Mercury	**ND**	0.50	EPA 7470A	5-26-20	5-26-20	
Selenium	**ND**	5.6	EPA 200.8	5-26-20	5-26-20	
Silver	**ND**	11	EPA 200.8	5-26-20	5-26-20	
Client ID:	**DUP**					
Laboratory ID:	05-167-06					
Arsenic	**6.4**	3.3	EPA 200.8	5-26-20	5-26-20	
Barium	**ND**	28	EPA 200.8	5-26-20	5-26-20	
Cadmium	**ND**	4.4	EPA 200.8	5-26-20	5-26-20	
Chromium	**ND**	11	EPA 200.8	5-26-20	5-26-20	
Lead	**ND**	1.1	EPA 200.8	5-26-20	5-26-20	
Mercury	**ND**	0.50	EPA 7470A	5-26-20	5-26-20	
Selenium	**ND**	5.6	EPA 200.8	5-26-20	5-26-20	
Silver	**ND**	11	EPA 200.8	5-26-20	5-26-20	

Date of Report: June 4, 2020
Samples Submitted: May 21, 2020
Laboratory Reference: 2005-167
Project: 04218014.00

TOTAL METALS
EPA 200.8/7470A
QUALITY CONTROL

Matrix: Water
Units: ug/L (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0526WM1					
Arsenic	**ND**	3.3	EPA 200.8	5-26-20	5-26-20	
Barium	**ND**	28	EPA 200.8	5-26-20	5-26-20	
Cadmium	**ND**	4.4	EPA 200.8	5-26-20	5-26-20	
Chromium	**ND**	11	EPA 200.8	5-26-20	5-26-20	
Lead	**ND**	1.1	EPA 200.8	5-26-20	5-26-20	
Selenium	**ND**	5.6	EPA 200.8	5-26-20	5-26-20	
Silver	**ND**	11	EPA 200.8	5-26-20	5-26-20	
Laboratory ID:	MB0526W1					
Mercury	**ND**	0.50	EPA 7470A	5-26-20	5-26-20	

Analyte	Result		Spike Level		Source Result	Percent Recovery	Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE										
Laboratory ID:	05-165-07									
	ORIG	DUP								
Arsenic	**ND**	**ND**	NA	NA		NA	NA	NA	20	
Barium	**ND**	**ND**	NA	NA		NA	NA	NA	20	
Cadmium	**ND**	**ND**	NA	NA		NA	NA	NA	20	
Chromium	**ND**	**ND**	NA	NA		NA	NA	NA	20	
Lead	**ND**	**ND**	NA	NA		NA	NA	NA	20	
Selenium	**ND**	**ND**	NA	NA		NA	NA	NA	20	
Silver	**ND**	**ND**	NA	NA		NA	NA	NA	20	
Laboratory ID:	05-167-01									
Mercury	**ND**	**ND**	NA	NA		NA	NA	NA	20	

MATRIX SPIKES										
Laboratory ID:	05-165-07									
	MS	MSD	MS	MSD		MS	MSD			
Arsenic	**124**	**120**	111	111	ND	**112**	**108**	75-125	4	20
Barium	**142**	**137**	111	111	21.2	**109**	**105**	75-125	3	20
Cadmium	**120**	**115**	111	111	ND	**108**	**104**	75-125	4	20
Chromium	**120**	**117**	111	111	ND	**108**	**105**	75-125	3	20
Lead	**126**	**122**	111	111	ND	**113**	**110**	75-125	3	20
Selenium	**128**	**132**	111	111	ND	**115**	**119**	75-125	3	20
Silver	**133**	**130**	111	111	ND	**120**	**117**	75-125	2	20
Laboratory ID:	05-167-01									
Mercury	**11.9**	**12.0**	12.5	12.5	ND	**95**	**96**	75-125	1	20

Date of Report: June 4, 2020
Samples Submitted: May 21, 2020
Laboratory Reference: 2005-167B
Project: 04218014.00

DIESEL AND HEAVY OIL RANGE ORGANICS
NWTPH-Dx

Matrix: Water
Units: mg/L (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**MW-2**					
Laboratory ID:	05-167-02					
Diesel Range Organics	**ND**	0.23	NWTPH-Dx	5-27-20	6-4-20	X1
Lube Oil Range Organics	**ND**	0.23	NWTPH-Dx	5-27-20	6-4-20	X1
Surrogate:	*Percent Recovery*	*Control Limits*				
o-Terphenyl	*98*	*50-150*				
Client ID:	**MW-3**					
Laboratory ID:	05-167-03					
Diesel Range Organics	**ND**	0.21	NWTPH-Dx	5-27-20	6-4-20	X1
Lube Oil Range Organics	**ND**	0.21	NWTPH-Dx	5-27-20	6-4-20	X1
Surrogate:	*Percent Recovery*	*Control Limits*				
o-Terphenyl	*103*	*50-150*				
Client ID:	**MW-5**					
Laboratory ID:	05-167-05					
Diesel Range Organics	**ND**	0.22	NWTPH-Dx	5-27-20	6-4-20	X1
Lube Oil Range Organics	**ND**	0.22	NWTPH-Dx	5-27-20	6-4-20	X1
Surrogate:	*Percent Recovery*	*Control Limits*				
o-Terphenyl	*101*	*50-150*				
Client ID:	**DUP**					
Laboratory ID:	05-167-06					
Diesel Range Organics	**ND**	0.21	NWTPH-Dx	5-27-20	6-4-20	X1
Lube Oil Range Organics	**ND**	0.21	NWTPH-Dx	5-27-20	6-4-20	X1
Surrogate:	*Percent Recovery*	*Control Limits*				
o-Terphenyl	*111*	*50-150*				

Date of Report: June 4, 2020
Samples Submitted: May 21, 2020
Laboratory Reference: 2005-167B
Project: 04218014.00

DIESEL AND HEAVY OIL RANGE ORGANICS
NWTPH-Dx
QUALITY CONTROL

Matrix: Water
Units: mg/L (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0527W1					
Diesel Range Organics	**ND**	0.20	NWTPH-Dx	5-27-20	6-4-20	X1
Lube Oil Range Organics	**ND**	0.20	NWTPH-Dx	5-27-20	6-4-20	X1
Surrogate:	*Percent Recovery*	*Control Limits*				
o-Terphenyl	*88*	*50-150*				

Analyte	Result		Spike Level		Source Result	Percent Recovery		Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE											
Laboratory ID:	SB0527W1										
	ORIG	DUP									
Diesel Fuel #2	**0.551**	**0.520**	NA	NA		NA		NA	6	NA	X1
Lube Oil Range	**ND**	**ND**	NA	NA		NA		NA	NA	NA	X1
Surrogate:											
o-Terphenyl						*109*	*102*	*50-150*			

OnSite Environmental Inc.

Data Qualifiers and Abbreviations

A - Due to a high sample concentration, the amount spiked is insufficient for meaningful MS/MSD recovery data.

B - The analyte indicated was also found in the blank sample.

C - The duplicate RPD is outside control limits due to high result variability when analyte concentrations are within five times the quantitation limit.

E - The value reported exceeds the quantitation range and is an estimate.

F - Surrogate recovery data is not available due to the high concentration of coeluting target compounds.

H - The analyte indicated is a common laboratory solvent and may have been introduced during sample preparation, and be impacting the sample result.

I - Compound recovery is outside of the control limits.

J - The value reported was below the practical quantitation limit. The value is an estimate.

K - Sample duplicate RPD is outside control limits due to sample inhomogeneity. The sample was re-extracted and re-analyzed with similar results.

L - The RPD is outside of the control limits.

M - Hydrocarbons in the gasoline range are impacting the diesel range result.

M1 - Hydrocarbons in the gasoline range (toluene-naphthalene) are present in the sample.

N - Hydrocarbons in the lube oil range are impacting the diesel range result.

N1 - Hydrocarbons in diesel range are impacting lube oil range results.

O - Hydrocarbons indicative of heavier fuels are present in the sample and are impacting the gasoline result.

P - The RPD of the detected concentrations between the two columns is greater than 40.

Q - Surrogate recovery is outside of the control limits.

S - Surrogate recovery data is not available due to the necessary dilution of the sample.

T - The sample chromatogram is not similar to a typical _____.

U - The analyte was analyzed for, but was not detected above the reported sample quantitation limit.

U1 - The practical quantitation limit is elevated due to interferences present in the sample.

V - Matrix Spike/Matrix Spike Duplicate recoveries are outside control limits due to matrix effects.

W - Matrix Spike/Matrix Spike Duplicate RPD are outside control limits due to matrix effects.

X - Sample extract treated with a mercury cleanup procedure.

X1- Sample extract treated with a sulfuric acid/silica gel cleanup procedure.

Y - The calibration verification for this analyte exceeded the 20% drift specified in methods 8260 & 8270, and therefore the reported result should be considered an estimate. The overall performance of the calibration verification standard met the acceptance criteria of the method.

Z -

ND - Not Detected at PQL
PQL - Practical Quantitation Limit
RPD - Relative Percent Difference

Chain of Custody

Page 1 of 1

OnSite Environmental Inc.
Analytical Laboratory Testing Services
14648 NE 95th Street • Redmond, WA 98052
Phone: (425) 883-3881 • www.onsite-env.com

Laboratory Number: 05-167

Company: SCS Engineers
Project Number: 04213014.00
Project Name: Bellevue South
Project Manager: Brian Down
Sampled by: Sam Graber

Turnaround Request (in working days)
(Check One)
☐ Same Day ☐ 1 Day
☐ 2 Days ☐ 3 Days
☒ Standard (7 Days)
☐ _____ (other)

Lab ID	Sample Identification	Date Sampled	Time Sampled	Matrix	Number of Containers	NWTPH-HCID	NWTPH-Gx/BTEX	NWTPH-Gx Mineral Spirits	NWTPH-Dx (☐ Acid / SG Clean-up)	Volatiles 8260C	Halogenated Volatiles 8260C	EDB EPA 8011 (Waters Only)	Semivolatiles 8270D/SIM (with low-level PAHs)	PAHs 8270D/SIM (low-level)	PCBs 8082A	Organochlorine Pesticides 8081B	Organophosphorus Pesticides 8270D/SIM	Chlorinated Acid Herbicides 8151A	Total RCRA Metals (8 metals)	Total MTCA Metals (8 metals)	TCLP Metals	HEM (oil and grease) 1664A		Acu/SG			% Moisture
1	MW-1	5/21/20	1305	water	6			X	X										X								
2	MW-2		835		6																			⊗			
3	MW-3		955																					⊗			
4	MW-4		1130																								
5	MW-5		1415																					⊗			
6	Dup		1320																					⊗			
7	Trip blank *		-		2																						

	Signature	Company	Date	Time
Relinquished		SCS Engineers	5/21/20	1530
Received		OSE	5/21/20	1530
Relinquished				
Received				
Relinquished				
Received				
Reviewed/Date		Reviewed/Date		

Comments/Special Instructions

* hold trip blank for analysis.

Please include EIM EDD
⊗ Added 6/1/2020. DB (STA)

Data Package: Standard ☐ Level III ☐ Level IV ☐

Chromatograms with final report ☐ Electronic Data Deliverables (EDDs) ☒

Am Test Inc.
13600 NE 126TH PL
Suite C
Kirkland, WA 98034
(425) 885-1664

Professional Analytical Services

May 27 2020
S.C.S. Engineers
2405 140th Ave NE
Suite 107
Bellevue, WA 98005
Attention: BRIAN DOAN

Dear BRIAN DOAN:

Enclosed please find the analytical data for your BELLEVUE SOUTH project.

The following is a cross correlation of client and laboratory identifications for your convenience.

CLIENT ID	MATRIX	AMTEST ID	TEST
MW-1	Water	20-A006821	Micro
MW-2	Water	20-A006822	Micro
MW-3	Water	20-A006823	Micro
MW-4	Water	20-A006824	Micro
MW-5	Water	20-A006825	Micro
DUP	Water	20-A006826	Micro

Your samples were received on Thursday, May 21, 2020. At the time of receipt, the samples were logged in and properly maintained prior to the subsequent analysis.

The analytical procedures used at AmTest are well documented and are typically derived from the protocols of the EPA, USDA, FDA or the Army Corps of Engineers.

Following the analytical data you will find the Quality Control (QC) results.

Please note that the detection limits that are listed in the body of the report refer to the Practical Quantitation Limits (PQL's), as opposed to the Method Detection Limits (MDL's).

If you should have any questions pertaining to the data package, please feel free to contact me.

Sincerely,

Kathy Fugiel
President

Project #: 04218014.00

BACT = Bacteriological
CONV = Conventionals
MET = Metals
ORG = Organics
NUT=Nutrients
DEM=Demand
MIN=Minerals

Am Test Inc.
13600 NE 126TH PL
Suite C
Kirkland, WA 98034
(425) 885-1664
www.amtestlab.com

Professional Analytical Services

ANALYSIS REPORT

S.C.S. Engineers
2405 140th Ave NE
Bellevue, WA 98005
Attention: BRIAN DOAN
Project Name: BELLEVUE SOUTH
Project #: 04218014.00
All results reported on an as received basis.

Date Received: 05/21/20
Date Reported: 5/27/20

AMTEST Identification Number **20-A006821**
Client Identification **MW-1**
Sampling Date **05/21/20, 13:05**

Microbiological

PARAMETER	RESULT	UNITS	Q	D.L.	METHOD	ANALYST	DATE / TIME
Fecal coliform	< 2	CFU/100 ml		2	SM 9222D	JM	05/21/20 16:00

AMTEST Identification Number **20-A006822**
Client Identification **MW-2**
Sampling Date **05/21/20, 08:35**

Microbiological

PARAMETER	RESULT	UNITS	Q	D.L.	METHOD	ANALYST	DATE / TIME
Fecal coliform	2.	CFU/100 ml		2	SM 9222D	JM	05/21/20 16:00

S.C.S. Engineers
Project Name: BELLEVUE SOUTH
AmTest ID: 20-A006823

AMTEST Identification Number **20-A006823**
Client Identification **MW-3**
Sampling Date **05/21/20, 09:55**

Microbiological

PARAMETER	RESULT	UNITS	Q	D.L.	METHOD	ANALYST	DATE / TIME
Fecal coliform	< 2	CFU/100 ml		2	SM 9222D	JM	05/21/20 16:00

AMTEST Identification Number **20-A006824**
Client Identification **MW-4**
Sampling Date **05/21/20, 11:33**

Microbiological

PARAMETER	RESULT	UNITS	Q	D.L.	METHOD	ANALYST	DATE / TIME
Fecal coliform	180	CFU/100 ml		2	SM 9222D	JM	05/21/20 16:00

AMTEST Identification Number **20-A006825**
Client Identification **MW-5**
Sampling Date **05/21/20, 14:15**

Microbiological

PARAMETER	RESULT	UNITS	Q	D.L.	METHOD	ANALYST	DATE / TIME
Fecal coliform	< 2	CFU/100 ml		2	SM 9222D	JM	05/21/20 16:00

S.C.S. Engineers
Project Name: BELLEVUE SOUTH
AmTest ID: 20-A006826

AMTEST Identification Number **20-A006826**
Client Identification **DUP**
Sampling Date **05/21/20, 13:20**

Microbiological

PARAMETER	RESULT	UNITS	Q	D.L.	METHOD	ANALYST	DATE / TIME
Fecal coliform	6.	CFU/100 ml		2	SM 9222D	JM	05/21/20 16:00

Kathy Fugiel
President

Am Test Inc.
13600 NE 126th PL
Suite C
Kirkland, WA, 98034
(425) 885-1664
www.amtestlab.com

Professional Analytical Services

QC Summary for sample numbers: 20-A006821 to 20-A006826

DUPLICATES

SAMPLE #	ANALYTE	UNITS	SAMPLE VALUE	DUP VALUE	RPD
20-A006825	Fecal coliform	CFU/100 ml	< 2	< 2	

BLANKS

ANALYTE	UNITS	RESULT
Fecal coliform	CFU/100 ml	< 1

OnSite Environmental Inc.
14648 NE 95th Street, Redmond, WA 98052 • (425) 883-3881

August 13, 2020

Brian Doan
SCS Engineers
2405 140th Avenue NE, Suite 107
Bellevue, WA 98005

Re: Analytical Data for Project 04218014.00
Laboratory Reference No. 2008-008

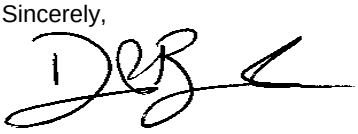
Dear Brian:

Enclosed are the analytical results and associated quality control data for samples submitted on August 3, 2020.

The standard policy of OnSite Environmental, Inc. is to store your samples for 30 days from the date of receipt. If you require longer storage, please contact the laboratory.

We appreciate the opportunity to be of service to you on this project. If you have any questions concerning the data, or need additional information, please feel free to call me.

Sincerely,



David Baumeister
Project Manager

Enclosures

Date of Report: August 13, 2020
Samples Submitted: August 3, 2020
Laboratory Reference: 2008-008
Project: 04218014.00

Case Narrative

Samples were collected on August 3, 2020 and received by the laboratory on August 3, 2020. They were maintained at the laboratory at a temperature of 2°C to 6°C.

Please note that any and all soil sample results are reported on a dry-weight basis, unless otherwise noted below.

General QA/QC issues associated with the analytical data enclosed in this laboratory report will be indicated with a reference to a comment or explanation on the Data Qualifier page. More complex and involved QA/QC issues will be discussed in detail below.

Date of Report: August 13, 2020
Samples Submitted: August 3, 2020
Laboratory Reference: 2008-008
Project: 04218014.00

GASOLINE RANGE ORGANICS
NWTPH-Gx

Matrix: Water
Units: ug/L (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**MW-5**					
Laboratory ID:	08-008-01					
Mineral Spirits	**ND**	100	NWTPH-Gx	8-5-20	8-5-20	
Surrogate:	*Percent Recovery*	*Control Limits*				
Fluorobenzene	*101*	*65-120*				
Client ID:	**MW-2**					
Laboratory ID:	08-008-02					
Mineral Spirits	**ND**	100	NWTPH-Gx	8-5-20	8-5-20	
Surrogate:	*Percent Recovery*	*Control Limits*				
Fluorobenzene	*94*	*65-120*				
Client ID:	**MW-4**					
Laboratory ID:	08-008-03					
Mineral Spirits	**ND**	100	NWTPH-Gx	8-5-20	8-5-20	
Surrogate:	*Percent Recovery*	*Control Limits*				
Fluorobenzene	*86*	*65-120*				
Client ID:	**MW-3**					
Laboratory ID:	08-008-04					
Mineral Spirits	**ND**	100	NWTPH-Gx	8-5-20	8-5-20	
Surrogate:	*Percent Recovery*	*Control Limits*				
Fluorobenzene	*86*	*65-120*				
Client ID:	**MW-1**					
Laboratory ID:	08-008-05					
Mineral Spirits	**ND**	100	NWTPH-Gx	8-5-20	8-5-20	
Surrogate:	*Percent Recovery*	*Control Limits*				
Fluorobenzene	*88*	*65-120*				
Client ID:	**Dup**					
Laboratory ID:	08-008-06					
Mineral Spirits	**ND**	100	NWTPH-Gx	8-5-20	8-5-20	
Surrogate:	*Percent Recovery*	*Control Limits*				
Fluorobenzene	*85*	*65-120*				

Date of Report: August 13, 2020
Samples Submitted: August 3, 2020
Laboratory Reference: 2008-008
Project: 04218014.00

GASOLINE RANGE ORGANICS
NWTPH-Gx
QUALITY CONTROL

Matrix: Water
Units: ug/L (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0805W1					
Mineral Spirits	**ND**	100	NWTPH-Gx	8-5-20	8-5-20	
Surrogate:	*Percent Recovery*	*Control Limits*				
Fluorobenzene	*90*	*65-120*				

Analyte	Result		Spike Level		Source Result	Percent Recovery		Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE											
Laboratory ID:	08-008-01										
	ORIG	DUP									
Mineral Spirits	**ND**	**ND**	NA	NA		NA		NA	NA	30	
Surrogate:											
Fluorobenzene						*101*	*101*	*65-120*			

Date of Report: August 13, 2020
Samples Submitted: August 3, 2020
Laboratory Reference: 2008-008
Project: 04218014.00

See reanalysis results on page 10 of this lab report.

DIESEL AND HEAVY OIL RANGE ORGANICS
NWTPH-Dx

Matrix: Water
Units: mg/L (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**MW-5**					
Laboratory ID:	08-008-01					
Diesel Range Organics	**0.37**	0.22	NWTPH-Dx	8-4-20	8-4-20	
Lube Oil Range Organics	**0.79**	0.22	NWTPH-Dx	8-4-20	8-4-20	
Surrogate:	*Percent Recovery*	*Control Limits*				
o-Terphenyl	*104*	*50-150*				
Client ID:	**MW-2**					
Laboratory ID:	08-008-02					
Diesel Range Organics	**0.23**	0.21	NWTPH-Dx	8-4-20	8-4-20	
Lube Oil Range Organics	**0.56**	0.21	NWTPH-Dx	8-4-20	8-4-20	
Surrogate:	*Percent Recovery*	*Control Limits*				
o-Terphenyl	*108*	*50-150*				
Client ID:	**MW-4**					
Laboratory ID:	08-008-03					
Diesel Range Organics	**ND**	0.21	NWTPH-Dx	8-4-20	8-4-20	
Lube Oil Range Organics	**0.24**	0.21	NWTPH-Dx	8-4-20	8-4-20	
Surrogate:	*Percent Recovery*	*Control Limits*				
o-Terphenyl	*83*	*50-150*				
Client ID:	**MW-3**					
Laboratory ID:	08-008-04					
Diesel Range Organics	**0.23**	0.21	NWTPH-Dx	8-4-20	8-4-20	
Lube Oil Range Organics	**0.32**	0.21	NWTPH-Dx	8-4-20	8-4-20	
Surrogate:	*Percent Recovery*	*Control Limits*				
o-Terphenyl	*113*	*50-150*				
Client ID:	**MW-1**					
Laboratory ID:	08-008-05					
Diesel Range Organics	**ND**	0.21	NWTPH-Dx	8-4-20	8-4-20	
Lube Oil Range Organics	**0.30**	0.21	NWTPH-Dx	8-4-20	8-4-20	
Surrogate:	*Percent Recovery*	*Control Limits*				
o-Terphenyl	*109*	*50-150*				
Client ID:	**Dup**					
Laboratory ID:	08-008-06					
Diesel Range Organics	**ND**	0.21	NWTPH-Dx	8-4-20	8-4-20	
Lube Oil Range Organics	**0.40**	0.21	NWTPH-Dx	8-4-20	8-4-20	
Surrogate:	*Percent Recovery*	*Control Limits*				
o-Terphenyl	*95*	*50-150*				

Date of Report: August 13, 2020
Samples Submitted: August 3, 2020
Laboratory Reference: 2008-008
Project: 04218014.00

DIESEL AND HEAVY OIL RANGE ORGANICS
NWTPH-Dx
QUALITY CONTROL

Matrix: Water
Units: mg/L (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0804W1					
Diesel Range Organics	**ND**	0.20	NWTPH-Dx	8-4-20	8-4-20	
Lube Oil Range Organics	**ND**	0.20	NWTPH-Dx	8-4-20	8-4-20	
Surrogate:	*Percent Recovery*	*Control Limits*				
o-Terphenyl	*102*	*50-150*				

Analyte	Result		Spike Level		Source Result	Percent Recovery		Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE											
Laboratory ID:	08-008-01										
	ORIG	DUP									
Diesel Range Organics	**0.368**	**0.370**	NA	NA		NA		NA	1	NA	
Lube Oil Range Organics	**0.790**	**0.725**	NA	NA		NA		NA	9	NA	
Surrogate:											
o-Terphenyl						*104*	*105*	*50-150*			

Date of Report: August 13, 2020
Samples Submitted: August 3, 2020
Laboratory Reference: 2008-008
Project: 04218014.00

TOTAL METALS
EPA 200.8/7470A

Matrix: Water
Units: ug/L (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**MW-5**					
Laboratory ID:	08-008-01					
Arsenic	**12**	3.3	EPA 200.8	8-4-20	8-4-20	
Barium	**110**	28	EPA 200.8	8-4-20	8-4-20	
Cadmium	**ND**	4.4	EPA 200.8	8-4-20	8-4-20	
Chromium	**33**	11	EPA 200.8	8-4-20	8-4-20	
Lead	**2.7**	1.1	EPA 200.8	8-4-20	8-4-20	
Mercury	**ND**	0.50	EPA 7470A	8-5-20	8-5-20	
Selenium	**ND**	5.6	EPA 200.8	8-4-20	8-4-20	
Silver	**ND**	11	EPA 200.8	8-4-20	8-4-20	
Client ID:	**MW-2**					
Laboratory ID:	08-008-02					
Arsenic	**3.4**	3.3	EPA 200.8	8-4-20	8-4-20	
Barium	**ND**	28	EPA 200.8	8-4-20	8-4-20	
Cadmium	**ND**	4.4	EPA 200.8	8-4-20	8-4-20	
Chromium	**ND**	11	EPA 200.8	8-4-20	8-4-20	
Lead	**ND**	1.1	EPA 200.8	8-4-20	8-4-20	
Mercury	**ND**	0.50	EPA 7470A	8-5-20	8-5-20	
Selenium	**ND**	5.6	EPA 200.8	8-4-20	8-4-20	
Silver	**ND**	11	EPA 200.8	8-4-20	8-4-20	
Client ID:	**MW-4**					
Laboratory ID:	08-008-03					
Arsenic	**46**	3.3	EPA 200.8	8-4-20	8-4-20	
Barium	**32**	28	EPA 200.8	8-4-20	8-4-20	
Cadmium	**ND**	4.4	EPA 200.8	8-4-20	8-4-20	
Chromium	**ND**	11	EPA 200.8	8-4-20	8-4-20	
Lead	**ND**	1.1	EPA 200.8	8-4-20	8-4-20	
Mercury	**ND**	0.50	EPA 7470A	8-5-20	8-5-20	
Selenium	**ND**	5.6	EPA 200.8	8-4-20	8-4-20	
Silver	**ND**	11	EPA 200.8	8-4-20	8-4-20	

Date of Report: August 13, 2020
Samples Submitted: August 3, 2020
Laboratory Reference: 2008-008
Project: 04218014.00

TOTAL METALS
EPA 200.8/7470A

Matrix: Water
Units: ug/L (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**MW-3**					
Laboratory ID:	08-008-04					
Arsenic	**28**	3.3	EPA 200.8	8-4-20	8-4-20	
Barium	**ND**	28	EPA 200.8	8-4-20	8-4-20	
Cadmium	**ND**	4.4	EPA 200.8	8-4-20	8-4-20	
Chromium	**ND**	11	EPA 200.8	8-4-20	8-4-20	
Lead	**ND**	1.1	EPA 200.8	8-4-20	8-4-20	
Mercury	**ND**	0.50	EPA 7470A	8-5-20	8-5-20	
Selenium	**ND**	5.6	EPA 200.8	8-4-20	8-4-20	
Silver	**ND**	11	EPA 200.8	8-4-20	8-4-20	
Client ID:	**MW-1**					
Laboratory ID:	08-008-05					
Arsenic	**17**	3.3	EPA 200.8	8-4-20	8-4-20	
Barium	**30**	28	EPA 200.8	8-4-20	8-4-20	
Cadmium	**ND**	4.4	EPA 200.8	8-4-20	8-4-20	
Chromium	**ND**	11	EPA 200.8	8-4-20	8-4-20	
Lead	**ND**	1.1	EPA 200.8	8-4-20	8-4-20	
Mercury	**ND**	0.50	EPA 7470A	8-5-20	8-5-20	
Selenium	**ND**	5.6	EPA 200.8	8-4-20	8-4-20	
Silver	**ND**	11	EPA 200.8	8-4-20	8-4-20	
Client ID:	**Dup**					
Laboratory ID:	08-008-06					
Arsenic	**18**	3.3	EPA 200.8	8-4-20	8-4-20	
Barium	**30**	28	EPA 200.8	8-4-20	8-4-20	
Cadmium	**ND**	4.4	EPA 200.8	8-4-20	8-4-20	
Chromium	**ND**	11	EPA 200.8	8-4-20	8-4-20	
Lead	**ND**	1.1	EPA 200.8	8-4-20	8-4-20	
Mercury	**ND**	0.50	EPA 7470A	8-5-20	8-5-20	
Selenium	**ND**	5.6	EPA 200.8	8-4-20	8-4-20	
Silver	**ND**	11	EPA 200.8	8-4-20	8-4-20	

Date of Report: August 13, 2020
Samples Submitted: August 3, 2020
Laboratory Reference: 2008-008
Project: 04218014.00

TOTAL METALS
EPA 200.8/7470A
QUALITY CONTROL

Matrix: Water
Units: ug/L (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0804WM1					
Arsenic	**ND**	3.3	EPA 200.8	8-4-20	8-4-20	
Barium	**ND**	28	EPA 200.8	8-4-20	8-4-20	
Cadmium	**ND**	4.4	EPA 200.8	8-4-20	8-4-20	
Chromium	**ND**	11	EPA 200.8	8-4-20	8-4-20	
Lead	**ND**	1.1	EPA 200.8	8-4-20	8-4-20	
Selenium	**ND**	5.6	EPA 200.8	8-4-20	8-4-20	
Silver	**ND**	11	EPA 200.8	8-4-20	8-4-20	
Laboratory ID:	MB0805W1					
Mercury	**ND**	0.50	EPA 7470A	8-5-20	8-5-20	

Analyte	Result		Spike Level		Source Result	Percent Recovery	Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE										
Laboratory ID:	07-267-03									
	ORIG	DUP								
Arsenic	**ND**	**ND**	NA	NA		NA	NA	NA	20	
Barium	**ND**	**ND**	NA	NA		NA	NA	NA	20	
Cadmium	**ND**	**ND**	NA	NA		NA	NA	NA	20	
Chromium	**ND**	**ND**	NA	NA		NA	NA	NA	20	
Lead	**ND**	**ND**	NA	NA		NA	NA	NA	20	
Selenium	**ND**	**ND**	NA	NA		NA	NA	NA	20	
Silver	**ND**	**ND**	NA	NA		NA	NA	NA	20	
Laboratory ID:	07-267-11									
Mercury	**ND**	**ND**	NA	NA		NA	NA	NA	20	

MATRIX SPIKES										
Laboratory ID:	07-267-03									
	MS	MSD	MS	MSD		MS	MSD			
Arsenic	**124**	**121**	111	111	ND	**112**	**109**	75-125	3	20
Barium	**130**	**127**	111	111	ND	**117**	**115**	75-125	2	20
Cadmium	**124**	**119**	111	111	ND	**111**	**108**	75-125	3	20
Chromium	**120**	**116**	111	111	ND	**108**	**105**	75-125	3	20
Lead	**118**	**116**	111	111	ND	**106**	**104**	75-125	2	20
Selenium	**124**	**121**	111	111	ND	**112**	**109**	75-125	3	20
Silver	**122**	**118**	111	111	ND	**110**	**106**	75-125	4	20
Laboratory ID:	07-267-11									
Mercury	**10.3**	**10.5**	12.5	12.5	ND	**82**	**84**	75-125	2	20

Date of Report: August 13, 2020
Samples Submitted: August 3, 2020
Laboratory Reference: 2008-008
Project: 04218014.00

DIESEL AND HEAVY OIL RANGE ORGANICS
NWTPH-Dx

Matrix: Water
Units: mg/L (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**MW-5**					
Laboratory ID:	08-008-01					
Diesel Range Organics	**ND**	0.22	NWTPH-Dx	8-4-20	8-12-20	X1
Lube Oil Range Organics	**ND**	0.22	NWTPH-Dx	8-4-20	8-12-20	X1
Surrogate:	*Percent Recovery*	*Control Limits*				
o-Terphenyl	*109*	*50-150*				
Client ID:	**MW-2**					
Laboratory ID:	08-008-02					
Diesel Range Organics	**ND**	0.21	NWTPH-Dx	8-4-20	8-12-20	X1
Lube Oil Range Organics	**ND**	0.21	NWTPH-Dx	8-4-20	8-12-20	X1
Surrogate:	*Percent Recovery*	*Control Limits*				
o-Terphenyl	*114*	*50-150*				
Client ID:	**MW-4**					
Laboratory ID:	08-008-03					
Diesel Range Organics	**ND**	0.21	NWTPH-Dx	8-4-20	8-12-20	X1
Lube Oil Range Organics	**ND**	0.21	NWTPH-Dx	8-4-20	8-12-20	X1
Surrogate:	*Percent Recovery*	*Control Limits*				
o-Terphenyl	*80*	*50-150*				
Client ID:	**MW-3**					
Laboratory ID:	08-008-04					
Diesel Range Organics	**ND**	0.21	NWTPH-Dx	8-4-20	8-12-20	X1
Lube Oil Range Organics	**ND**	0.21	NWTPH-Dx	8-4-20	8-12-20	X1
Surrogate:	*Percent Recovery*	*Control Limits*				
o-Terphenyl	*111*	*50-150*				
Client ID:	**MW-1**					
Laboratory ID:	08-008-05					
Diesel Range Organics	**ND**	0.21	NWTPH-Dx	8-4-20	8-12-20	X1
Lube Oil Range Organics	**0.23**	0.21	NWTPH-Dx	8-4-20	8-12-20	X1
Surrogate:	*Percent Recovery*	*Control Limits*				
o-Terphenyl	*113*	*50-150*				
Client ID:	**Dup**					
Laboratory ID:	08-008-06					
Diesel Range Organics	**ND**	0.21	NWTPH-Dx	8-4-20	8-12-20	X1
Lube Oil Range Organics	**ND**	0.21	NWTPH-Dx	8-4-20	8-12-20	X1
Surrogate:	*Percent Recovery*	*Control Limits*				
o-Terphenyl	*103*	*50-150*				

Date of Report: August 13, 2020
Samples Submitted: August 3, 2020
Laboratory Reference: 2008-008
Project: 04218014.00

DIESEL AND HEAVY OIL RANGE ORGANICS
NWTPH-Dx
QUALITY CONTROL

Matrix: Water
Units: mg/L (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0804W1					
Diesel Range Organics	**ND**	0.20	NWTPH-Dx	8-4-20	8-12-20	X1
Lube Oil Range Organics	**ND**	0.20	NWTPH-Dx	8-4-20	8-12-20	X1
Surrogate:	*Percent Recovery*	*Control Limits*				
o-Terphenyl	*111*	*50-150*				

Analyte	Result		Spike Level		Source Result	Percent Recovery		Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE											
Laboratory ID:	08-008-01										
	ORIG	DUP									
Diesel Range	**ND**	**ND**	NA	NA		NA		NA	NA	NA	X1
Lube Oil Range	**ND**	**ND**	NA	NA		NA		NA	NA	NA	X1
Surrogate:											
o-Terphenyl						*109*	*110*	*50-150*			

OnSite Environmental Inc.

Data Qualifiers and Abbreviations

A - Due to a high sample concentration, the amount spiked is insufficient for meaningful MS/MSD recovery data.

B - The analyte indicated was also found in the blank sample.

C - The duplicate RPD is outside control limits due to high result variability when analyte concentrations are within five times the quantitation limit.

E - The value reported exceeds the quantitation range and is an estimate.

F - Surrogate recovery data is not available due to the high concentration of coeluting target compounds.

H - The analyte indicated is a common laboratory solvent and may have been introduced during sample preparation, and be impacting the sample result.

I - Compound recovery is outside of the control limits.

J - The value reported was below the practical quantitation limit. The value is an estimate.

K - Sample duplicate RPD is outside control limits due to sample inhomogeneity. The sample was re-extracted and re-analyzed with similar results.

L - The RPD is outside of the control limits.

M - Hydrocarbons in the gasoline range are impacting the diesel range result.

M1 - Hydrocarbons in the gasoline range (toluene-naphthalene) are present in the sample.

N - Hydrocarbons in the lube oil range are impacting the diesel range result.

N1 - Hydrocarbons in diesel range are impacting lube oil range results.

O - Hydrocarbons indicative of heavier fuels are present in the sample and are impacting the gasoline result.

P - The RPD of the detected concentrations between the two columns is greater than 40.

Q - Surrogate recovery is outside of the control limits.

S - Surrogate recovery data is not available due to the necessary dilution of the sample.

T - The sample chromatogram is not similar to a typical _____.

U - The analyte was analyzed for, but was not detected above the reported sample quantitation limit.

U1 - The practical quantitation limit is elevated due to interferences present in the sample.

V - Matrix Spike/Matrix Spike Duplicate recoveries are outside control limits due to matrix effects.

W - Matrix Spike/Matrix Spike Duplicate RPD are outside control limits due to matrix effects.

X - Sample extract treated with a mercury cleanup procedure.

X1- Sample extract treated with a sulfuric acid/silica gel cleanup procedure.

Y - The calibration verification for this analyte exceeded the 20% drift specified in methods 8260 & 8270, and therefore the reported result should be considered an estimate. The overall performance of the calibration verification standard met the acceptance criteria of the method.

Z -

ND - Not Detected at PQL
PQL - Practical Quantitation Limit
RPD - Relative Percent Difference

Chain of Custody

Page 1 of 1

OnSite Environmental Inc.
Analytical Laboratory Testing Services
14648 NE 95th Street • Redmond, WA 98052
Phone: (425) 883-3881 • www.onsite-env.com

Laboratory Number: 08-008

Company:	SCS Engineers
Project Number:	04213014.00
Project Name:	Bellevue South
Project Manager:	Brian Down
Sampled by:	SEB

Turnaround Request (in working days)

(Check One)

☐ Same Day ☐ 1 Day
☐ 2 Days ☐ 3 Days
☒ Standard (7 Days)
☐ _____ (other)

Lab ID	Sample Identification	Date Sampled	Time Sampled	Matrix	Number of Containers	NWTPH-HCID	NWTPH-Gx/BTEX	NWTPH-Gx Mineral Spirits	NWTPH-Dx (☐ Acid / SG Clean-up)	Volatiles 8260C	Halogenated Volatiles 8260C	EDB EPA 8011 (Waters Only)	Semivolatiles 8270D/SIM (with low-level PAHs)	PAHs 8270D/SIM (low-level)	PCBs 8082A	Organochlorine Pesticides 8081B	Organophosphorus Pesticides 8270D/SIM	Chlorinated Acid Herbicides 8151A	Total RCRA Metals (8 metals)	Total MTCA Metals	TCLP Metals	HEM (oil and grease) 1664A	Acu/SG				% Moisture
1	MW-5	8/3/20	920	groundwater	6			X	X										X				X				
2	MW-2		1040																				X				
3	MW-4		1154																				X				
4	MW-3		1300																				X				
5	MW-1		1400																				X				
6	Dup		1415	↓	↓			↓	↓										↓				X				
7	Trip blank *	↓	–	–	3																						

	Signature	Company	Date	Time
Relinquished		SCS Engineers	8/3/20	1530
Received		CTE	8/3/20	1530
Relinquished				
Received				
Relinquished				
Received				
Reviewed/Date		Reviewed/Date		

Comments/Special Instructions

* Hold trip blank for analysis
(X) Added 8/11/20 20.DB (STA)
Please include EIM EDD w/ report deliverable.

Data Package: Standard ☐ Level III ☐ Level IV ☐

Chromatograms with final report ☐ Electronic Data Deliverables (EDDs) ☒

Am Test Inc.
13600 NE 126TH PL
Suite C
Kirkland, WA 98034
(425) 885-1664

Professional Analytical Services

Aug 6 2020
S.C.S. Engineers
2405 140th Ave NE
Suite 107
Bellevue, WA 98005
Attention: BRIAN DOAN

Dear BRIAN DOAN:

Enclosed please find the analytical data for your BELLEVUE SOUTH project.

The following is a cross correlation of client and laboratory identifications for your convenience.

CLIENT ID	MATRIX	AMTEST ID	TEST
MW-5	Water	20-A011560	Micro
MW-2	Water	20-A011561	Micro
MW-4	Water	20-A011562	Micro
MW-3	Water	20-A011563	Micro
MW-1	Water	20-A011564	Micro
DUP	Water	20-A011565	Micro

Your samples were received on Monday, August 3, 2020. At the time of receipt, the samples were logged in and properly maintained prior to the subsequent analysis.

The analytical procedures used at AmTest are well documented and are typically derived from the protocols of the EPA, USDA, FDA or the Army Corps of Engineers.

Following the analytical data you will find the Quality Control (QC) results.

Please note that the detection limits that are listed in the body of the report refer to the Practical Quantitation Limits (PQL's), as opposed to the Method Detection Limits (MDL's).

If you should have any questions pertaining to the data package, please feel free to contact me.

Sincerely,

Kathy Fugiel
President

Project #: 04218014.00

BACT = Bacteriological
CONV = Conventionals
MET = Metals
ORG = Organics
NUT=Nutrients
DEM=Demand
MIN=Minerals

Am Test Inc.
13600 NE 126TH PL
Suite C
Kirkland, WA 98034
(425) 885-1664
www.amtestlab.com

Professional Analytical Services

ANALYSIS REPORT

S.C.S. Engineers
2405 140th Ave NE
Bellevue, WA 98005
Attention: BRIAN DOAN
Project Name: BELLEVUE SOUTH
Project #: 04218014.00
All results reported on an as received basis.

Date Received: 08/03/20
Date Reported: 8/ 6/20

AMTEST Identification Number **20-A011560**
Client Identification **MW-5**
Sampling Date **08/03/20, 09:20**

Microbiological

PARAMETER	RESULT	UNITS	Q	D.L.	METHOD	ANALYST	DATE / TIME
Fecal coliform	< 2	CFU/100 ml		2	SM 9222D	JM	08/03/20 16:00

AMTEST Identification Number **20-A011561**
Client Identification **MW-2**
Sampling Date **08/03/20, 10:40**

Microbiological

PARAMETER	RESULT	UNITS	Q	D.L.	METHOD	ANALYST	DATE / TIME
Fecal coliform	< 2	CFU/100 ml		2	SM 9222D	JM	08/03/20 16:00

S.C.S. Engineers
Project Name: BELLEVUE SOUTH
AmTest ID: 20-A011562

AMTEST Identification Number **20-A011562**
Client Identification **MW-4**
Sampling Date **08/03/20, 11:54**

Microbiological

PARAMETER	RESULT	UNITS	Q	D.L.	METHOD	ANALYST	DATE / TIME
Fecal coliform	< 2	CFU/100 ml		2	SM 9222D	JM	08/03/20 16:00

AMTEST Identification Number **20-A011563**
Client Identification **MW-3**
Sampling Date **08/03/20, 13:00**

Microbiological

PARAMETER	RESULT	UNITS	Q	D.L.	METHOD	ANALYST	DATE / TIME
Fecal coliform	< 2	CFU/100 ml		2	SM 9222D	JM	08/03/20 16:00

AMTEST Identification Number **20-A011564**
Client Identification **MW-1**
Sampling Date **08/03/20, 14:00**

Microbiological

PARAMETER	RESULT	UNITS	Q	D.L.	METHOD	ANALYST	DATE / TIME
Fecal coliform	< 2	CFU/100 ml		2	SM 9222D	JM	08/03/20 16:00

S.C.S. Engineers
Project Name: BELLEVUE SOUTH
AmTest ID: 20-A011565

AMTEST Identification Number **20-A011565**
Client Identification **DUP**
Sampling Date **08/03/20, 14:15**

Microbiological

PARAMETER	RESULT	UNITS	Q	D.L.	METHOD	ANALYST	DATE / TIME
Fecal coliform	< 2	CFU/100 ml		2	SM 9222D	JM	08/03/20 16:00

Kathy Fugiel
President

Am Test Inc.
13600 NE 126th PL
Suite C
Kirkland, WA, 98034
(425) 885-1664
www.amtestlab.com

Professional Analytical Services

QC Summary for sample numbers: 20-A011560 to 20-A011565

DUPLICATES

SAMPLE #	ANALYTE	UNITS	SAMPLE VALUE	DUP VALUE	RPD
20-A011552	Fecal coliform	CFU/100 ml	11.	16.	37.

BLANKS

ANALYTE	UNITS	RESULT
Fecal coliform	CFU/100 ml	< 1

AmTest Chain of Custody Record

AMTEST LABORATORIES
13600 NE 126th PL, Suite C, Kirkland, WA 98034
Ph (425) 885-1664 Fx (425) 820-0245
www.amtestlab.com

Chain of Custody No. [illegible]

Client Name & Address:	Invoice To:
SCS Engineers 2405 140th Avenue NE #107 Bellevue, WA 98005	
Contact Person: Brian Doan	Invoice Contact:
Phone No: 425-766-2487	PO Number:
Fax No:	Invoice Ph/Fax:
E-mail: BDoan@scsengineers.com	Invoice E-mail:
Report Delivery: (Choose all that apply) Mail / Fax / (Email) / Posted Online	Data posted to online account: YES / NO Web Login ID:

Special Instructions: Include EDD please

Requested TAT: **(Rush must be pre-approved by lab)**
(Standard) RUSH (5 Day / 3 Day / 48 HR / 24 HR)

Temperature upon Receipt: 15.0

Project Name: Bellevue South

Project Number: 04218014.00

AmTest ID	Client ID (35 characters max)	Date Sampled	Time Sampled	Matrix	No. of containers	Analysis Requested: Fecal Coliform	QA/QC
11560	MW-5	8/3/20	920	water	1	X	
61	MW-2		1040				
62	MW-4		1154				
63	MW-3		1300				
64	MW-1		1400				
65	Dup		1415				

	Date	Time	Received By:	Date	Time
Collected/Relinquished By:	8/3/20	1515		8/3/20	1515
Relinquished By:	Date	Time	Received By:	Date	Time
Relinquished By:	Date	Time	Received By:	Date	Time

COMMENTS: CLIENT

Appendix D

Documentation

(Field Notes)

SCS ENGINEERS

2405 140th Avenue, Suite 107
Bellevue, WA 98005
Ph: (800) 727-6393 Fax: (206) 746-6747

LOG OF EXPLORATORY BORING

CLIENT/PROJECT Redmond ~~Nike~~ Bellevue South Facility
PROJECT NO ~~04219012.00~~ 042801402
PERSONNEL S.E.G.
DRILLING CONTRACTOR ~~EGM~~ Holocene
DRILLING METHOD Geoprobe HSA CAR
DRILL RIG MODEL Dietrech D-50

BORING NO. MW-1
DATE BEGUN 5/17/19
DATE COMPLETED ↓
TOTAL DEPTH 10'
SHEET 1 OF 2
HOLE DIAMETER 3"
FIELD BORING LOCATION:
GROUND ELEVATION
DATUM:

WATER LEVEL DATA

DEPTH			
DATE			
TIME			
BORING DEPTH			
CASING DEPTH			

OTHER ~~ID~~	BOREHOLE / WELL / PIEZOMETER DETAILS	SAMPLE NUMBER	SAMPLE METHOD	BLOWS/ 6"	RECOVERY	INTERVAL SAMPLED	DEPTH IN FEET	SOIL GROUP USCS SYMBOL	LITHOLOGIC DESCRIPTION
							0		
							1		
							2		
							3		
							4		
							5		Brown Silty sand w/ gravel - wet/moist
0.0			SS	17 ~~28~~ 27	14"	X			
				56			6		transition to grey silt w/ gravel & clay. at 5.5' dry. Hard (till)
							7		
							8		
							9		
				30 17			10		
			SS	29	18"				

REMARKS:

____140# HAMMER ____300# HAMMER ____=1.5" ID SPLIT BARREL SAMPLER ____=3" ID SPLIT BARREL SAMPLER

MW-1-5 @ 950 MW-1-11' @ 1010

SCS ENGINEERS

2405 140th Avenue, Suite 107
Bellevue, WA 98005
Ph: (800) 727-6393 Fax: (206) 746-6747

LOG OF EXPLORATORY BORING

CLIENT/PROJECT B. South Redmond Nike
PROJECT NO ~~04219012.00~~ 0421901H.00
PERSONNEL SEB
DRILLING CONTRACTOR ~~ESM~~ Holocene
DRILLING METHOD ~~Geoprobe~~ HSA LAR
DRILL RIG MODEL

BORING NO. MW-1
DATE BEGUN 5/17/19
DATE COMPLETED ↓
TOTAL DEPTH 10'
SHEET 2 OF 2
HOLE DIAMETER 8"

FIELD BORING LOCATION:

GROUND ELEVATION
DATUM:

WATER LEVEL DATA			
DEPTH			
DATE			
TIME			
BORING DEPTH			
CASING DEPTH			

~~OTHER~~ PID	BOREHOLE / WELL / PIEZOMETER DETAILS	SAMPLE NUMBER	SAMPLE METHOD	BLOWS/ 6"	RECOVERY	INTERVAL SAMPLED	DEPTH IN FEET	SOIL GROUP USCS SYMBOL	LITHOLOGIC DESCRIPTION
0.0						~~XX~~ X	11		Grey silt w/ Clay, dry - hard. (till)
							12		split spoon from 10 - 11.5 Augered down to 10'.
							13		0 - 1.5 concrete 1.5 - 3 bentonite 1 bag 3 - 10' sand 4 bags
							14		screened 5 - 10' bgs.
							15		last split spoon 10 - 11.5'
							16		
							17		
							18		
							19		
							20		

REMARKS:

____140# HAMMER ____300# HAMMER ____=1.5" ID SPLIT BARREL SAMPLER ____=3" ID SPLIT BARREL SAMPLER

SCS ENGINEERS
2405 140th Avenue NW, Suite 107
Bellevue, WA 98005
Ph: (425) 746-4600

LOG OF EXPLORATORY BORING

CLIENT/PROJECT Bellevue Smith
PROJECT # 0421B014.00
PERSONNEL SEG
DRILLING CONTRACTOR Holocene
DRILLER/HELPER RS
DRILLING METHOD HSA LAR

BORING NO. MW-2
DATE BEGUN 5/17/19
DATE COMPLETED ↓
TOTAL DEPTH 15'
SHEET 1 OF 2
HOLE DIAMETER 8"
FIELD BORING LOCATION: 4 1/2 I.D. auger
GROUND ELEVATION _____
DATUM:

WATER LEVEL DATA

DEPTH			
DATE			
TIME			
BORING DEPTH			
CASING DEPTH			

PID / ~~OTHER~~	BOREHOLE / WELL / PIEZOMETER DETAILS	SAMPLE NUMBER	SAMPLE METHOD	BLOWS/ 6"	RECOVERY	INTERVAL SAMPLED	DEPTH IN FEET	SOIL GROUP USCS SYMBOL	OBSERVATIONS
							1		
							2		
							3		
							4		
				10			5		Brown silty sand w/ gravel + organics. - Dry.
				21					
0.0					4"	X	6		
				11					
							7		
							8		
							9		Driller said drilling got harder at 9'
							10		

REMARKS:

_____140# HAMMER _____300# HAMMER _____=1.5" ID SPLIT BARREL SAMPLER _____=3" ID SPLIT BARREL SAMPLER

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Bellevue, WA 98005
Ph: (800) 727-6393 Fax: (206) 746-6747

LOG OF EXPLORATORY BORING

CLIENT/PROJECT Redmond Nike ~~Redmond Nike~~ Bellevue South
PROJECT NO ~~042190012.00~~ 042190014.00
PERSONNEL SEG
DRILLING CONTRACTOR ~~EGM~~ Holocene
DRILLING METHOD ~~Geoprobe~~ HSA CAR
DRILL RIG MODEL Dietrich D 50 turbo

BORING NO. MW-2
DATE BEGUN 5/17/19
DATE COMPLETED ↓
TOTAL DEPTH 15'
SHEET 2 OF 2
HOLE DIAMETER 8"

FIELD BORING LOCATION:

GROUND ELEVATION
DATUM:

WATER LEVEL DATA			
DEPTH			
DATE			
TIME			
BORING DEPTH			
CASING DEPTH			

PID / ~~OTHER~~	BOREHOLE / WELL / PIEZOMETER DETAILS	SAMPLE NUMBER	SAMPLE METHOD	BLOWS/ 6"	RECOVERY	INTERVAL SAMPLED	DEPTH IN FEET	SOIL GROUP USCS SYMBOL	LITHOLOGIC DESCRIPTION
				37			10		Brown sandy silt w/ gravel. slightly moist.
0.0				37		X	11		
				50/4	16"				
							12		
							13		
							14		
				39			15		Grey silt w/ sand & gravel. Dry. dense, but not as dense as till observed at MW-1. Weathered till..?
				50/6					
0.0					14"	X	16		more sand & softer at top of split spoon, more silt at bottom.
									No change in feel of material while drilling from 4'-15'.
							17		
									Screened from 5'-15' bgs
							18		Sand 3'-15'
									bentonite 2'-3'
									concrete 0'-2'
							19		Last split spoon 15'-16.5'
							20		

REMARKS:

____140# HAMMER ____300# HAMMER ____=1.5" ID SPLIT BARREL SAMPLER ____=3" ID SPLIT BARREL SAMPLER

MW-2-6 @ 1425 MW-2-11 @ 1430 MW-2-16 @ 1445

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LOG OF EXPLORATORY BORING

CLIENT/PROJECT Bellevue South Redmond ~~Nike~~ Facility
PROJECT NO ~~04210012~~.00 042190.14
PERSONNEL SEG
DRILLING CONTRACTOR ~~ESM~~ Holocene
DRILLING METHOD Geoprobe 1454 CAR
DRILL RIG MODEL Dietrich D50 turbo

BORING NO. MW-3
DATE BEGUN 5/17/19
DATE COMPLETED "
TOTAL DEPTH 15'
SHEET 1 OF 2
HOLE DIAMETER 8"
FIELD BORING LOCATION:
GROUND ELEVATION
DATUM:

WATER LEVEL DATA			
DEPTH			
DATE			
TIME			
BORING DEPTH			
CASING DEPTH			

PID ~~OVER~~	BOREHOLE / WELL / PIEZOMETER DETAILS	SAMPLE NUMBER	SAMPLE METHOD	BLOWS/ 6"	RECOVERY	INTERVAL SAMPLED	DEPTH IN FEET	SOIL GROUP USCS SYMBOL	LITHOLOGIC DESCRIPTION
							0		
							1		
							2		
							3		Driller said he felt change in drilling at 3'.
							4		
				9			5		
0.0				7	10"	X			Brown silty sand w/ clay & gravel - moist w/ organics & some grey silt.
				5			6		
							7		
							8		
							9		
							10		

REMARKS:

____140# HAMMER ____300# HAMMER ____=1.5" ID SPLIT BARREL SAMPLER ____=3" ID SPLIT BARREL SAMPLER

MW-3-5.5' @ 1135 MW-3-11 @ 1140 MW-3-16 @ 1200

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LOG OF EXPLORATORY BORING

CLIENT/PROJECT Redmond Nike ~~Redmond Nike~~ Bellevue Sq.
PROJECT NO ~~04219012~~.00 042180149.00
PERSONNEL SEB
DRILLING CONTRACTOR ~~ESM~~ Holocene
DRILLING METHOD ~~Geoprobe~~ HSA LAR
DRILL RIG MODEL

BORING NO. MW-3
DATE BEGUN 5/17/19
DATE COMPLETED 5/17/19
TOTAL DEPTH 15'
SHEET 2 OF 2
HOLE DIAMETER 8"
FIELD BORING LOCATION:
GROUND ELEVATION
DATUM:

WATER LEVEL DATA			
DEPTH			
DATE			
TIME			
BORING DEPTH			
CASING DEPTH			

PID ~~OTHER~~	BOREHOLE / WELL / PIEZOMETER DETAILS	SAMPLE NUMBER	SAMPLE METHOD	BLOWS/ 6"	RECOVERY	INTERVAL SAMPLED	DEPTH IN FEET	SOIL GROUP USCS SYMBOL	LITHOLOGIC DESCRIPTION
				13			10		brown fine grained sand w/ silt - wet. - soft.
				13		X			2 grey + gravel. ^ saturated.
0.0				12	14"		11		
									Driller felt difference in drilling (harder) at 11.5'-12'.
							12		
							13		
							14		
				20			15		Grey silt w/ clay + gravel. Hard, dry till. water sloughed in from above. Possibly weathered till.
				37					
0.0						X	16		More gravel at bottom of sample.
				50/5	19"				
							17		Screened 5'-10' 5'-15'
									Filter sand ~~15~~ 3'-15' 6 bags
									bentonite 1.5-3
									concrete 0-1.5
							18		Last split spoon 15'-16.5'
							19		
							20		

REMARKS:

____140# HAMMER ____300# HAMMER ____=1.5" ID SPLIT BARREL SAMPLER ____=3" ID SPLIT BARREL SAMPLER

Upgradient

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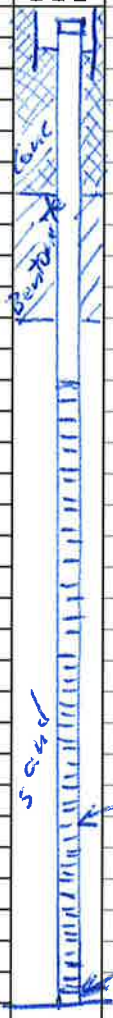
LOG OF EXPLORATORY BORING

PROJECT NO 0421801A.00
PERSONNEL B Dean
DRILLING CONTRACTOR ESN NW
DRILLING METHOD Geoprobe/Auger
DRILL RIG MODEL

BORING NO. MW-4
DATE BEGUN 2-27-2020
DATE COMPLETED
TOTAL DEPTH
SHEET 1 OF
HOLE DIAMETER
FIELD BORING LOCATION:

GROUND ELEVATION
DATUM:

WATER LEVEL DATA			
DEPTH			
DATE			
TIME			
BORING DEPTH			
CASING DEPTH			

OTHER	BOREHOLE / WELL / PIEZOMETER DETAILS	SAMPLE NUMBER	SAMPLE METHOD	BLOWS/ 6"	RECOVERY	INTERVAL SAMPLED	DEPTH IN FEET	SOIL GROUP USCS SYMBOL	LITHOLOGIC DESCRIPTION
							0		From bottom of slab 0-15' Gray clayey silty clay (till) Hard, dry to slightly damp.
							2		Occasional layers 1"-3" thick of gray silt (@ 2') or clayey silt.
							4		Generally the silty clay is hard and dry. The surface will smear w/ thumb pressure, but it is not plastic -> deforms slightly then crumbles. See photos
							6		
							8		Set 15' well 2" PVC w/ 10' screen + 5' blank riser.
							10		Drums of soil: 1 + 0.25 incl. conc. core
							12		Need to label drums + pickup comes
							14		BLC651: Ecology Well ID
							16		
							18		Width of closed RoW = 17' from curb.
							20		

Conc
Bent
Sand
10' 0.010" slot screen
cap
15'

REMARKS:

____140# HAMMER ____300# HAMMER ____=1.5" ID SPLIT BARREL SAMPLER ____=3" ID SPLIT BARREL SAMPLER

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LOG OF EXPLORATORY BORING

PROJECT NO 0421801A.00
PERSONNEL B Doan
DRILLING CONTRACTOR ESN NW
DRILLING METHOD Power Probe LAR
DRILL RIG MODEL

BORING NO. MW 5
DATE BEGUN 3-12-2020
DATE COMPLETED 3-12-20
TOTAL DEPTH 10'
SHEET 1 OF 1
HOLE DIAMETER 3"

WATER LEVEL DATA

DEPTH			
DATE			
TIME			
BORING DEPTH	10		
CASING DEPTH	10		

FIELD BORING LOCATION: In planting strip imm. N of SW site entrance
GROUND ELEVATION
DATUM:

OTHER	BOREHOLE / WELL / PIEZOMETER DETAILS	SAMPLE NUMBER	SAMPLE METHOD	BLOWS/ 6"	RECOVERY	INTERVAL SAMPLED	DEPTH IN FEET	SOIL GROUP USCS SYMBOL	LITHOLOGIC DESCRIPTION
							0		Top soil cover 6"
									Brown coarse sand 6"–12"
							2		Brown sandy silt w/ gravel 1'–5'
									Wet @ 4.5' Standing ▽ ~4.9'
		3'					4		
		5' ~4.5'							
							6		Brown gravelly silty sand 5'–6' wet
									Gray gravelly silty sand 6'–7' wet
							8		Tan/Brown gravelly silty sand 7'–10' wet.
		10'					10		
							12		Hand auger to 53" to clear utilities.
									5' of 2" 0.010 slot screen PVC
									5' of 2" blank riser PVC
							14		10-20 sand to 3' bgs
									Bentonite 3'–1' bgs
									Concrete 1'–0
									Ecology ID BJR 583
							16		~~Geo~~ Power Probe hyd. hammer noise level
									105 to 108 dB @ 10'
									~95 dB @ 20'
							18		
							20		

REMARKS:

____140# HAMMER ____300# HAMMER _____=1.5" ID SPLIT BARREL SAMPLER _____=3" ID SPLIT BARREL SAMPLER

SCS ENGINEERS
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Bellevue, WA 98005 (425) 746-4600

Groundwater Sampling Data Sheet

Project #: 04218014.00
Site: Bellevue South
Well ID: MW-1
Sample ID: MW-1
Date: 6/4/2019
Weather: Sunny

5.32 DTW
TOS
Intake
BOS
9.90 Total Depth

Sampling Method: Dedicated | 1.75" QED SamplePro | Bail | (Peristaltic) | Grab | Other

Meter: MP-20 (YSI)

CONTROL SETTINGS: 1 ft water = 0.62L 1L = 0.26 gallons

Refill
Discharge
Pressure
Flow

One Well Volume (liters)
Total Volume Bailed (liters)
Other:
Flow Setting:

Filtered? Y (N) Locked? Y (N) Water in Protector? Y (N) Damage? Y (N)

Sample Containers:

1000 ml Poly	500 ml Poly	250 ml Poly	125 ml Poly
500 ml HNO3 x2	500 ml H2SO4 x2	40 ml VOA x3 x6	1000 ml Amber
125 ml NaOH			

Notes / Observations (color, odor, anomalies, etc):

tubing 1 foot above TD.

TIME	DTW	Temp.	Sp.Cond.	DO	pH	Eh	Turbidity	Q / Vol.
945	5.62	12.51	406	4.97	5.71	328.4	14.1	
950	5.95	12.36	407	4.21	6.53	322.1		
953	6.27	12.41	365	3.47	6.80	319.0	39.7	
956	6.53	12.38	370	3.22	6.92	315.6		
959	6.95	12.35	382	3.37	7.02	308.8	41.5	1.5 g
1025	7.42	After Sampling.						

Sample time = 1010

Stabilization Parameters: pH/DO ± 0.2, SpC ± 10%, Temp ± 0.5°C, Turb. ± 10% or ≤ 5

SAMPLER: Sam Graber
Printed Name

Signature

SCS ENGINEERS
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Bellevue, WA 98005 (425) 746-4600

Groundwater Sampling Data Sheet

Project #: 04218014.00
Site: Bellevue South
Well ID: MW-2
Sample ID: MW-2
Date: 6/4/2019
Weather: partly cloudy

15.66 DTW
TOS
Intake
BOS
18.65 Total Depth

Sampling Method: Dedicated | 1.75" QED SamplePro | Bail | Peristaltic | Grab | Other
Meter: MP-20 YSI

CONTROL SETTINGS: 1 ft water = 0.62L 1L = 0.26 gallons
Refill
Discharge
Pressure
Flow
One Well Volume (liters)
Total Volume Bailed (liters)
Other:
Flow Setting:

Filtered? Y (N) Locked? (Y) N Water in Protector? Y (N) Damage? Y (N)

Sample Containers:
1000 ml Poly | 500 ml Poly | 250 ml Poly | 125 ml Poly
500 ml HNO3 x2 | 500 ml H2SO4 x2 | 40 ml VOA x3 x6 | 1000 ml Amber
125 ml NaOH

Notes / Observations (color, odor, anomalies, etc):

TIME	DTW	Temp.	Sp.Cond.	DO	pH	Eh	Turbidity	Q / Vol.
1115		14.56	406	6.21	7.31	277.2		
1120	16.11	14.08	400	2.89	6.91	283.3	32.5	
1123	16.25	14.05	411	2.66	6.86	274.6		
1126		14.06	410	2.66	6.87	267.7		
1129	16.50	14.16	405	2.70	6.90	259.6		
1132	16.60	14.33	399	2.75	6.95	252.1	8.53	1 g
	17.13	after sampling.						
1135		Sample time.						

Stabilization Parameters: pH/DO ± 0.2, SpC ± 10%, Temp ± 0.5°C, Turb. ± 10% or ≤ 5

SAMPLER: Sam Gober
Printed Name

Signature

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Groundwater Sampling Data Sheet

Project #: 04218014.00 | Site: Bellevue South | Well ID: MW-3 | Sample ID: MW-3 | Date: 6/4/2019 | Weather: Sunny

5.93 DTW | / TOS | / Intake | BOS | 14.72 Total Depth

Sampling Method: Dedicated | 1.75" QED SamplePro | Bail | **Peristaltic** | Grab | Other

Meter: MP-20 **YSI**

CONTROL SETTINGS: 1 ft water = 0.62L | 1L = 0.26 gallons

Refill / Discharge / Pressure / Flow

One Well Volume (liters) | Total Volume Bailed (liters) | Other: | Flow Setting:

Filtered? Y (N) | Locked? Y (N) | Water in Protector? Y (N) | Damage? Y (N)

Sample Containers:

1000 ml Poly	500 ml Poly	250 ml Poly	125 ml Poly
500 ml HNO3 x2	500 ml H2SO4 x2	40 ml VOA x3 x6	1000 ml Amber
125 ml NaOH			

TIME	DTW	Temp.	Sp.Cond.	DO	pH	Eh	Turbidity	Q / Vol.
1250		12.91	418	4.51	6.86	214.7		
1255	6.67	12.69	337	0.90	6.64	65.9		
1258	6.80	12.73	342	0.72	6.63	42.4	12.5	
1301	6.90	12.63	346	0.87	6.64	35.5		
1304	7.02	12.65	356	1.25	6.63	37.2	12.9	
1307	7.12	12.70	365	1.56	6.64	45.2	16.6	
1310	7.19	12.67	367	1.56	6.63	48.7	9.28	
1313	7.24	12.62	377	1.74	6.64	50.7	7.99	
~~Sample time = 1310~~								
1323	7.35	12.66	391	1.67	6.66	47.4	5.76	
1326	7.38	12.61	379	1.62	6.67	43.6	4.82	2.5 g

Notes / Observations (color, odor, anomalies, etc):

turned pump off @ 1338
DTW = 7.35

DTW @ 1341 = 6.95
"DTW @" 1400 = 6.35
" " 1405 = 6.25

Stabilization Parameters: pH/DO ± 0.2, SpC ± 10%, Temp ± 0.5°C, Turb. ± 10% or ≤ 5

SAMPLER: Sam Gruber
Printed Name

Signature

SCS ENGINEERS

GROUNDWATER SAMPLING INSTRUMENT CALIBRATION DOCUMENTATION FORM

	Conductivity	pH4	pH 7	DO	Turbidity	Comments/Exceptions
Date	6/4/19					
Time	900					
Weather (sky or precip, temp)	sunny					
Type of Calibration	Standard	Standard	Standard	Standard	Standard	
Standard Value	1413	4.01	7.00	100% or ~8.5	1000, 10, 0.2 800, 100, 20, <0.1	
Pre-Cal Reading	1433	3.99	7.15			
Post Cal Reading	1413	4.00	7.00	6.15	791, 98.2, 19.5, 0.21	
Descrepancy	No					
Calib. Successful?	Yes					
Calibration by	SEB					
Instrument Type, ID	MP20 / YSI 556				MicoTPW / HACH2000	
Calibration Location	B. South					

* If Direct Reading is Unavailable, Assume pressure = 760 mm - 2.5 (altitude in ft/100)

SCS ENGINEERS
2405 140th ave NE #107
Bellevue, WA 98005 (425) 746-4600

Groundwater Sampling Data Sheet

Project #: 04218014.00
Site: Bellevue South
Well ID: MW-1
Sample ID:
Date: 8/29/2019
Weather:

5.55 DTW
TOS
Intake
BOS
9.90 Total Depth

Sampling Method: Dedicated | 1.75" QED SamplePro | Bail | (Peristaltic) | Grab | Other

Meter: MP-20 (YSI)

CONTROL SETTINGS: 1 ft water = 0.62L 1L = 0.26 gallons

Refill
Discharge
Pressure
Flow

One Well Volume (liters)
Total Volume Bailed (liters)
Other:
Flow Setting:

Filtered? (Y) N
Locked? Y (N)
Water in Protector? Y (N)
Damage? Y (N)

Sample Containers:

1000 ml Poly	500 ml Poly	250 ml Poly	125 ml Poly
500 ml HNO3 x2	500 ml H2SO4 x2	40 ml VOA x3 x6	1000 ml Amber
125 ml NaOH			

TIME	DTW	Temp.	Sp.Cond.	DO	pH	Eh	Turbidity	Q / Vol.
1250		14.96	438	1.49	7.51	142.0		
1255		15.21	423	0.69	7.55	114.9		
1250		15.20	411	0.58	7.61	86.7		
1301		15.16	406	0.49	7.64	43.2		
1304		15.10	413	0.40	7.70	6.5		
1307		15.06	417	0.37	7.72	-3.2		
1310	8.51	15.00	421	0.34	7.75	-6.9	5.10	

Notes / Observations (color, odor, anomalies, etc):

Dup collected at 1320

Stabilization Parameters: pH/DO ± 0.2, SpC ± 10%, Temp ± 0.5°C, Turb. ± 10% or ≤ 5

SAMPLER: Sam Gabor
Printed Name

Signature

SCS ENGINEERS
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Bellevue, WA 98005 (425) 746-4600

Groundwater Sampling Data Sheet

Project #: 04218014.00
Site: Bellevue South
Well ID: mw-2
Sample ID:
Date: 8/29/2019
Weather: cloudy

16.18 DTW
TOS
Intake
BOS
18.65 Total Depth

Sampling Method: Dedicated | 1.75" QED SamplePro | Bail | (Peristaltic) | Grab | Other

Meter: MP-20 (YSI)

CONTROL SETTINGS: 1 ft water = 0.62L 1L = 0.26 gallons

Refill
Discharge
Pressure
Flow

One Well Volume (liters)
Total Volume Bailed (liters)
Other :
Flow Setting :

Filtered? (Y) N Locked? (Y) N Water in Protector? Y (N) Damage? Y (N)

Sample Containers:

1000 ml Poly	500 ml Poly	250 ml Poly	125 ml Poly
500 ml HNO3 x2	500 ml H2SO4 x2	40 ml VOA x3 x6	1000 ml Amber
125 ml NaOH			

Notes / Observations (color, odor, anomalies, etc):

TIME	DTW	Temp.	Sp.Cond.	DO	pH	Eh	Turbidity	Q / Vol.
1130		17.65	367	2.32	6.92	134.8		
1135		17.31	367	2.01	6.81	138.2		
1138		17.28	368	1.90	6.77	140.2	44.9	
1141		17.30	369	1.67	6.77	140.7		
1144		17.34	368	1.53	6.77	140.8		
1147		17.35	369	1.42	6.76	141.6		
1150		17.36	371	1.41	6.78	141.1	11.9	
1153		17.45	375	1.42	6.82	140.8		
1156	17.35	17.61	377	1.12	6.86	139.3	14.5	

Stabilization Parameters: pH/DO ± 0.2, SpC ± 10%, Temp ± 0.5°C, Turb. ± 10% or ≤ 5

SAMPLER: Sam Graber
Printed Name

Signature

SCS ENGINEERS
2405 140th ave NE #107
Bellevue, WA 98005 (425) 746-4600

Groundwater Sampling Data Sheet

Project #: 04218014.00 | Sampling Method: Dedicated | 1.75" QED SamplePro | Bail | (Peristaltic) | Grab | Other

Site: Bellevue South | Meter: CONTROL SETTINGS: | 1 ft water = 0.62L | 1L = 0.26 gallons

Well ID: MW-3 | MP-20 | Refill | One Well Volume (liters) | Other:

Sample ID: | (YSI) | Discharge | Flow Setting:

Date: 8/29/2019 | Pressure | Total Volume Bailed (liters)

Weather: | Flow

6.00 DTW | TOS | Intake | BOS | 14.72 Total Depth

Filtered? (Y) N | Locked? Y (N) | Water in Protector? Y (N) | Damage? Y (N)

Sample Containers:

1000 ml Poly	500 ml Poly	250 ml Poly	125 ml Poly
500 ml HNO3 x2	500 ml H2SO4 x2	40 ml VOA x3 x6	1000 ml Amber
125 ml NaOH			

TIME	DTW	Temp.	Sp.Cond.	DO	pH	Eh	Turbidity	Q / Vol.
1020		16.00	323	5.10	5.62	187.6		
1025		15.01	317	0.51	6.62	4.1		
1028		15.10	321	0.42	6.71	-11.3		
1031		15.13	327	0.30	6.80	-38.1		
1034		15.12	335	0.34	6.93	-43.7		
1037	7.23	15.11	334	0.28	6.95	-48.3		
1040		15.10	338	0.28	6.96	-50.9	2.98	

Notes / Observations (color, odor, anomalies, etc):

DTW 6.00 @ 957

6.00 @ 1003

Stabilization Parameters: pH/DO ± 0.2, SpC ± 10%, Temp ± 0.5°C, Turb. ± 10% or ≤ 5

SAMPLER: Sam Gruber
Printed Name

Signature

SCS ENGINEERS

GROUNDWATER SAMPLING INSTRUMENT CALIBRATION DOCUMENTATION FORM

	Conductivity	pH4	pH 7	DO	Turbidity	Comments/Exceptions
Date	8/29/19					
Time	930					
Weather (sky or precip, temp)	Sunny					
Type of Calibration	Standard	Standard	Standard	Standard	Standard	
Standard Value	1413	4.01	7.00	100% or ~8.5	1000, 10, 0.2 800, 100, 20, <0.1	
Pre-Cal Reading	1330	3.88	6.85			
Post Cal Reading	1413	4.01	7.00	8.5		
Descrepancy	No					
Calib. Successful?	yes					
Calibration by	SEB					
Instrument Type, ID	MP20 / YSI 556				MicoTPW / HACH2000	
Calibration Location	B. South					

* If Direct Reading is Unavailable, Assume pressure = 760 mm - 2.5 (altitude in ft/100)

SCS ENGINEERS
2405 140th ave NE #107
Bellevue, WA 98005 (425) 746-4600

Groundwater Sampling Data Sheet

Project #: 04218014.00
Site: Bellevue South
Well ID: MW-1
Sample ID:
Date: 11/26/2019
Weather: Inside parking garage

5.75 DTW
TOS
Intake
BOS
9.90 Total Depth

Sampling Method: Dedicated | 1.75" QED SamplePro | Bail | Peristaltic | Grab | Other
Meter: MP-20 YSI
CONTROL SETTINGS: 1 ft water = 0.62L 1L = 0.26 gallons
Refill
Discharge
Pressure
Flow
One Well Volume (liters)
Total Volume Bailed (liters)
Other:
Flow Setting:

Filtered? Y (N) Locked? Y (N) Water in Protector? Y (N) Damage? Y (N)

Sample Containers:

1000 ml Poly	500 ml Poly	250 ml Poly	125 ml Poly
500 ml HNO3 x2	500 ml H2SO4 x2	40 ml VOA x3 x6	1000 ml Amber
125 ml NaOH			

Notes / Observations (color, odor, anomalies, etc):

Dup 1 collected @ 1040

TIME	DTW	Temp.	Sp.Cond.	DO	pH	Eh	Turbidity	Q / Vol.
1012		12.06	430		6.94	268.9		
1017		12.31	431	0.52	7.14	252.0		
1020	6.20	12.32	428	0.47	7.20	233.5		
1023		12.41	426	0.42	7.21	214.5		
1026	6.58	12.45	417	0.38	7.27	165.1		
1029		12.47	411	0.38	7.33	104.6	5.22	

Stabilization Parameters: pH/DO ± 0.2, SpC ± 10%, Temp ± 0.5°C, Turb. ± 10% or ≤ 5

SAMPLER: Sam Graber
Printed Name

Signature

SCS ENGINEERS
2405 140th ave NE #107
Bellevue, WA 98005 (425) 746-4600

Groundwater Sampling Data Sheet

Project #: 04218014.00
Site: Bellevue South
Well ID: MW-2
Sample ID:
Date: 11/26/2019
Weather: rainy

14.10 DTW
TOS
Intake
BOS
18.65 Total Depth

Sampling Method: | Dedicated | 1.75" QED SamplePro | Bail | Peristaltic | Grab | Other

Meter: MP-20 YSI

CONTROL SETTINGS:
Refill
Discharge
Pressure
Flow

1 ft water = 0.62L
1L = 0.26 gallons

One Well Volume (liters)
Total Volume Bailed (liters)
Other:
Flow Setting:

Filtered? Y (N)
Locked? (Y) N
Water in Protector? Y (N)
Damage? Y (N)

Sample Containers:

1000 ml Poly	500 ml Poly	250 ml Poly	125 ml Poly
500 ml HNO3 x2	500 ml H2SO4 x2	40 ml VOA x3 x6	1000 ml Amber
125 ml NaOH			

Notes / Observations (color, odor, anomalies, etc):

DTW
14.15 @ 935

TIME	DTW	Temp.	Sp.Cond.	DO	pH	Eh	Turbidity	Q / Vol.
855		11.74	558	1.73	6.52	256.0		
900		11.83	568	1.57	6.45	250.1		
903		11.80	571	1.53	6.50	249.2		
906	15.53	11.79	572	1.47	6.51	248.7		
909		11.91	568	1.38	6.53	248.1	8.05	

Stabilization Parameters: pH/DO ± 0.2, SpC ± 10%, Temp ± 0.5°C, Turb. ± 10% or ≤ 5

SAMPLER: Sam Grabar
Printed Name

Signature

SCS ENGINEERS
2405 140th ave NE #107
Bellevue, WA 98005 (425) 746-4600

Groundwater Sampling Data Sheet

Project #: 04218014.00
Site: Bellevue South
Well ID: MW-3
Sample ID:
Date: 11/26/2019
Weather: partly cloudy

5.35 DTW
TOS
Intake
BOS
14.72 Total Depth

Sampling Method: Dedicated | 1.75" QED SamplePro | Bail | Peristaltic | Grab | Other

Meter: MP-20 YSI

CONTROL SETTINGS: 1 ft water = 0.62L 1L = 0.26 gallons

Refill
Discharge
Pressure
Flow

One Well Volume (liters)
Total Volume Bailed (liters)
Other:
Flow Setting:

Filtered? Y (N) Locked? Y (N) Water in Protector? Y (N) Damage? Y (N)

Sample Containers:

1000 ml Poly	500 ml Poly	250 ml Poly	125 ml Poly
500 ml HNO3 x2	500 ml H2SO4 x2	40 ml VOA x3 x6	1000 ml Amber
125 ml NaOH			

TIME	DTW	Temp.	Sp.Cond.	DO	pH	Eh	Turbidity	Q / Vol.
1246		13.36	492	2.51	7.21	59.3		
1251		13.30	390	0.74	7.17	-45.2		
1254		13.28	374	0.56	7.07	-60.7		
1257		13.28	377	0.47	7.00	-65.2		
1300		13.32	380	0.44	6.98	-67.2		
1303		13.35	386	0.41	6.95	-69.4	2.72	

Notes / Observations (color, odor, anomalies, etc):

Sediment/material shavings on WL meter after bringing it up.

Stabilization Parameters: pH/DO ± 0.2, SpC ± 10%, Temp ± 0.5°C, Turb. ± 10% or ≤ 5

SAMPLER: Sam Grabow
Printed Name

Signature

SCS ENGINEERS
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Bellevue, WA 98005 (425) 746-4600

Groundwater Sampling Data Sheet

Project #: 04218014.00 | Sampling Method: Dedicated | 1.75" QED SamplePro | Bail | (Peristaltic) | Grab | Other

Site: Bellevue South | DTW: -2.5 | Meter: | CONTROL SETTINGS: | 1 ft water = 0.62L | 1L = 0.26 gallons

Well ID: ~~clean out~~ | TOS: | MP-20 | Refill: / | One Well Volume (liters): | Other:

Sample ID: F.15 clean out | Intake: | (YSI) | Discharge: / | Flow Setting:

Date: 11/26/2019 | BOS: | Pressure: / | Total Volume Bailed (liters):

Weather: | Total Depth: | Flow: /

Filtered? Y (N) | Locked? Y (N) | Water in Protector? Y (N) | Damage? Y (N)

Sample Containers:

1000 ml Poly	500 ml Poly	250 ml Poly	125 ml Poly
500 ml HNO3 x2	500 ml H2SO4 x2	40 ml VOA x3 x6	1000 ml Amber
125 ml NaOH			

TIME	DTW	Temp.	Sp.Cond.	DO	pH	Eh	Turbidity	Q / Vol.
1130		10.76	291	9.25	7.62	180.1		
1133		11.00	293	8.68	7.93	179.8		

Notes / Observations (color, odor, anomalies, etc):

Stabilization Parameters: pH/DO ± 0.2, SpC ± 10%, Temp ± 0.5°C, Turb. ± 10% or ≤ 5

SAMPLER: Sam Schaefer
Printed Name

Signature

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Groundwater Sampling Data Sheet

Project #: ~~04257033.12~~ 04218014.00
Site: ~~Island Co. LF (CSWF)~~ Bellevue 5.
Well ID: SE Drain Wall
Sample ID: ~~1819~~
Date: ~~10/ 10~~ 11/26/19
Weather:

Sampling Method: Dedicated | 1.75" QED SamplePro | Bail | Peristaltic | Grab | Other

Meter: MP-20 (YSI)

DTW
TOS
Intake
BOS
Total Depth

CONTROL SETTINGS:
Refill
Discharge
Pressure
Flow

1 ft water = 0.62L
1L = 0.26 gallons

One Well Volume (liters)
Total Volume Bailed (liters)
Other :
Flow Setting :

Filtered? Y (N) Locked? Y (N) Water in Protector? Y (N) Damage? Y (N)

Sample Containers:

1000 ml Poly	500 ml Poly	250 ml Poly	125 ml Poly
500 ml HNO3 x2	500 ml H2SO4 x2	40 ml VOA x3 x6	1000 ml Amber
125 ml NaOH			

Notes / Observations (color, odor, anomalies, etc):

TIME	DTW	Temp.	Sp.Cond.	DO	pH	Eh	Turbidity	Q / Vol.
1215		11.89	301	10.22	7.64	209.5		
1218		11.92	301	8.70	7.72	206.4		

Stabilization Parameters: pH/DO ± 0.2, SpC ± 10%, Temp ± 0.5°C, Turb. ± 10% or ≤ 5

SAMPLER: Sam Graber
Printed Name

Signature

SCS ENGINEERS

GROUNDWATER SAMPLING INSTRUMENT CALIBRATION DOCUMENTATION FORM

	Conductivity	pH4	pH 7	DO	Turbidity	Comments/Exceptions
Date	11/26/19					
Time	810					
Weather (sky or precip, temp)	cloudy					
Type of Calibration	Standard	Standard	Standard	Standard	Standard	
Standard Value	1413	4.01	7.00	100% or ~8.5	1000, 10, 0.2 800, 100, 20, <0.1	
Pre-Cal Reading	1401	4.21	6.91			
Post Cal Reading	1413	4.01	7.00	8.5		
Descrepancy	No					
Calib. Successful?	Yes					
Calibration by	SEG					
Instrument Type, ID	MP20 / ~~YSI 556~~				MicoTPW / ~~HACH2000~~	
Calibration Location	Bellevue South					

* If Direct Reading is Unavailable, Assume pressure = 760 mm - 2.5 (altitude in ft/100)

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Bellevue, WA 98005 (425) 746-4600

Groundwater Sampling Data Sheet

Project #: 04218014.00
Site: Bellevue South
Well ID: MW-1
Sample ID:
Date: 5/21/20
Weather:

5.63 DTW
TOS
Intake
BOS
9.90 Total Depth

Sampling Method: Dedicated | 1.75" QED SamplePro | Bail | Peristaltic | Grab | Other

Meter: MP-20 YSI

CONTROL SETTINGS: 1 ft water = 0.62L 1L = 0.26 gallons

Refill
Discharge
Pressure
Flow

One Well Volume (liters)
Total Volume Bailed (liters)
Other:
Flow Setting:

Filtered? Y (N) Locked? Y (N) Water in Protector? Y (N) Damage? Y (N)

Sample Containers:

1000 ml Poly	500 ml Poly	250 ml Poly	125 ml Poly
500 ml HNO3 x2	500 ml H2SO4 x2	40 ml VOA x3 x6	1000 ml Amber
125 ml NaOH			

TIME	DTW	Temp.	Sp.Cond.	DO	pH	Eh	Turbidity	Q / Vol.
1245		11.29	417	1.47	8.20	-40.1		
1250		11.35	409	0.78	8.08	-69.9		
1253		11.44	405	0.51	7.96	-98.8		
1256		11.42	402	0.48	7.94	-90.7		
1259	6.90	11.41	400	0.43	7.91	-83.4		
1302		11.39	396	0.45	7.90	-79.9		
1305		11.37	402	0.42	7.90	-73.3	2.78	

Notes / Observations (color, odor, anomalies, etc):

Dup collected @ 1320

Stabilization Parameters: pH/DO ± 0.2, SpC ± 10%, Temp ± 0.5°C, Turb. ± 10% or ≤ 5

SAMPLER: Sam Graber
Printed Name

Signature

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Bellevue, WA 98005 (425) 746-4600

Groundwater Sampling Data Sheet

Project #: 04218014.00
Site: Bellevue South
Well ID: MW-2
Sample ID:
Date: 5/21/20
Weather: Rainy

13.38 DTW
TOS
Intake
BOS
18.65 Total Depth

Sampling Method: Dedicated | 1.75" QED SamplePro | Bail | Peristaltic | Grab | Other

Meter: MP-20 YSI

CONTROL SETTINGS: 1 ft water = 0.62L 1L = 0.26 gallons

Refill
Discharge
Pressure
Flow

One Well Volume (liters)
Total Volume Bailed (liters)
Other :
Flow Setting :

Filtered? Y N
Locked? Y N
Water in Protector? Y N
Damage? Y N

Sample Containers:

1000 ml Poly	500 ml Poly	250 ml Poly	125 ml Poly
500 ml HNO3 x2	500 ml H2SO4 x2	40 ml VOA x3 x6	1000 ml Amber
125 ml NaOH			

Notes / Observations (color, odor, anomalies, etc):

1338 750

TIME	DTW	Temp.	Sp.Cond.	DO	pH	Eh	Turbidity	Q / Vol.
815		11.96	514	8.23	6.56	269.1		
820		11.93	525	0.92	7.23	213.6		
825	14.72	11.72	525	0.52	7.24	205.4		
826		11.67	522	0.69	7.25	143.1	7.06	
829	15.05	11.61	514	0.57	7.24	191.5		
832		11.52	511	0.52	7.22	187.2	5.91	
835		11.47	509	0.49	7.21	184.8		

Stabilization Parameters: pH/DO ± 0.2, SpC ± 10%, Temp ± 0.5°C, Turb. ± 10% or ≤ 5

SAMPLER: Sam Gehr
Printed Name

Signature

SCS ENGINEERS
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Bellevue, WA 98005 (425) 746-4600

Groundwater Sampling Data Sheet

Project #: 04218014.00
Site: Bellevue South
Well ID: MW-3
Sample ID:
Date: 5/21/20
Weather: rainy

5.68 DTW
TOS
Intake
BOS
14.85 Total Depth

Sampling Method: Dedicated | 1.75" QED SamplePro | Bail | Peristaltic | Grab | Other

Meter: MP-20 YSI

CONTROL SETTINGS: 1 ft water = 0.62L 1L = 0.26 gallons

Refill
Discharge
Pressure
Flow

One Well Volume (liters)
Total Volume Bailed (liters)
Other:
Flow Setting:

Filtered? Y (N) Locked? Y (N) Water in Protector? Y (N) Damage? Y (N)

Sample Containers:

1000 ml Poly	500 ml Poly	250 ml Poly	125 ml Poly
500 ml HNO3 x2	500 ml H2SO4 x2	40 ml VOA x3 x6	1000 ml Amber
125 ml NaOH			

TIME	DTW	Temp.	Sp.Cond.	DO	pH	Eh	Turbidity	Q / Vol.
935		11.41	361	4.98	7.10	33.6		
940		11.43	361	1.10	6.97	-56.8		
943		11.46	361	0.78	6.95	-61.2		
946		11.50	361	0.60	6.93	-66.2		
949		11.53	359	0.59	6.92	-70.7		
952		11.53	362	0.48	6.86	-70.2		
955		11.59	363	0.51	6.86	-71.8	3.15	

Notes / Observations (color, odor, anomalies, etc):

5.68 @ 924

Stabilization Parameters: pH/DO ± 0.2, SpC ± 10%, Temp ± 0.5°C, Turb. ± 10% or ≤ 5

SAMPLER: Sam Grater
Printed Name

Signature

SCS ENGINEERS
2405 140th ave NE #107
Bellevue, WA 98005 (425) 746-4600

Groundwater Sampling Data Sheet

Project #: 04218014.00
Site: Bellevue South
Well ID: MW-4
Sample ID:
Date: 5/21/20
Weather: rainy

9.70 DTW
TOS
Intake
BOS
15.05 Total Depth

Sampling Method: Dedicated | 1.75" QED SamplePro | Bail | (Peristaltic) | Grab | Other

Meter: MP-20 (YSI)

CONTROL SETTINGS: 1 ft water = 0.62L 1L = 0.26 gallons

Refill
Discharge
Pressure
Flow

One Well Volume (liters)
Total Volume Bailed (liters)
Other:
Flow Setting:

Filtered? Y (N) Locked? Y (N) Water in Protector? Y (N) Damage? Y (N)

Sample Containers:
1000 ml Poly | 500 ml Poly | 250 ml Poly | 125 ml Poly
500 ml HNO3 x2 | 500 ml H2SO4 x2 | 40 ml VOA x3 x6 | 1000 ml Amber
125 ml NaOH

TIME	DTW	Temp.	Sp.Cond.	DO	pH	Eh	Turbidity	Q / Vol.
1110		11.08	405	3.37	9.02	51.4		
1115	10.32	11.01	412	2.06	9.10	50.2	347	
1118		11.00	431	2.51	9.12	53.9		
1121		10.98	462	2.92	9.15	56.4		
1124		11.10	440	3.11	9.14	60.3		
1127	11.02	11.25	429	3.37	9.13	64.4	536	
(1130)	11.30	11.14	405	1.82	9.14	61.2		
1133	11.50	11.13	404	1.53	9.13	59.0	475	

Notes / Observations (color, odor, anomalies, etc):

9.70 @ 1043

Stabilization Parameters: pH/DO ± 0.2, SpC ± 10%, Temp ± 0.5°C, Turb. ± 10% or ≤ 5

SAMPLER: Sam Graber
Printed Name

Signature

SCS ENGINEERS
2405 140th ave NE #107
Bellevue, WA 98005 (425) 746-4600

Groundwater Sampling Data Sheet

Project #: 04218014.00
Site: Bellevue South
Well ID: MW-5
Sample ID:
Date: 5/21/20
Weather:

4.72 DTW
/ TOS
/ Intake
/ BOS
9.70 Total Depth

Sampling Method : Dedicated | 1.75" QED SamplePro | Bail | (Peristaltic) | Grab | Other
Meter: MP-20 (YSI)
CONTROL SETTINGS: 1 ft water = 0.62L 1L = 0.26 gallons
Refill /
Discharge /
Pressure /
Flow /
One Well Volume (liters)
Total Volume Bailed (liters)
Other :
Flow Setting :

Filtered? Y (N) Locked? Y (N) Water in Protector? Y (N) Damage? Y (N)

Sample Containers:

1000 ml Poly	500 ml Poly	250 ml Poly	125 ml Poly
500 ml HNO3 x2	500 ml H2SO4 x2	40 ml VOA x3 x6	1000 ml Amber
125 ml NaOH			

TIME	DTW	Temp.	Sp.Cond.	DO	pH	Eh	Turbidity	Q / Vol.
1355		14.05	805	2.12	7.00	-75.9		
1400	6.66	14.22	800	0.77	6.95	-72.9		
1403	7.10	14.36	795	0.63	6.96	-62.5	136	
1415	sample time.							

Notes / Observations (color, odor, anomalies, etc):

Stabilization Parameters: pH/DO ± 0.2, SpC ± 10%, Temp ± 0.5°C, Turb. ± 10% or ≤ 5

SAMPLER: Sam Gabor
Printed Name

Signature

SCS ENGINEERS
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Bellevue, WA 98005 (425) 746-4600

Groundwater Sampling Data Sheet

Project #: 04218014.00
Site: Bellevue South
Well ID: F-15 clean out
Sample ID:
Date: 5/21/20
Weather:

DTW
TOS
Intake
BOS
Total Depth

Sampling Method : Dedicated | 1.75" QED SamplePro | Bail | Peristaltic | Grab | Other

Meter: MP-20 YSI

CONTROL SETTINGS:

Refill
Discharge
Pressure
Flow

1 ft water = 0.62L
1L = 0.26 gallons

One Well Volume (liters)
Total Volume Bailed (liters)
Other :
Flow Setting :

Filtered? Y N
Locked? Y N
Water in Protector? Y N
Damage? Y N

Sample Containers:

1000 ml Poly	500 ml Poly	250 ml Poly	125 ml Poly
500 ml HNO3 x2	500 ml H2SO4 x2	40 ml VOA x3 x6	1000 ml Amber
125 ml NaOH			

Notes / Observations (color, odor, anomalies, etc):

TIME	DTW	Temp.	Sp.Cond.	DO	pH	Eh	Turbidity	Q / Vol.
	Depth to bottom 2.6' - Dry							

Stabilization Parameters: pH/DO ± 0.2, SpC ± 10%, Temp ± 0.5°C, Turb. ± 10% or ≤ 5

SAMPLER: Sam Graber
Printed Name

Signature

SCS ENGINEERS

GROUNDWATER SAMPLING INSTRUMENT CALIBRATION DOCUMENTATION FORM

	Conductivity	pH4	pH 7	DO	Turbidity	Comments/Exceptions
Date	5/21/20					
Time	745					
Weather (sky or precip, temp)	rainy					
Type of Calibration	Standard	Standard	Standard	Standard	Standard	
Standard Value	1413	4.01	7.00	100% or ~8.5	~~1000, 10, 0.2~~ 800, 100, 20, <0.1	
Pre-Cal Reading	1441	3.95	6.96			
Post Cal Reading	1413	4.01	7.00	8.5		
Descrepancy	No					
Calib. Successful?	yes					
Calibration by	SEG					
Instrument Type, ID	MP20 / YSI 556				MicoTPW / HACH2000	
Calibration Location	Bellevue South					

* If Direct Reading is Unavailable, Assume pressure = 760 mm - 2.5 (altitude in ft/100)

SCS ENGINEERS
2405 140th ave NE #107
Bellevue, WA 98005 (425) 746-4600

Groundwater Sampling Data Sheet

Project #: 04218014.00
Site: Bellevue South
Well ID: MW-1
Sample ID:
Date: 8/13/20
Weather: Sunny

5.56 DTW
TOS
Intake
BOS
10.00 Total Depth

Sampling Method: Dedicated | 1.75" QED SamplePro | Bail | (Peristaltic) | Grab | Other

Meter: MP-20 (YSI)

CONTROL SETTINGS: 1 ft water = 0.62L 1L = 0.26 gallons

Refill
Discharge
Pressure
Flow

One Well Volume (liters)
Total Volume Bailed (liters)
Other:
Flow Setting:

Filtered? Y (N) Locked? Y (N) Water in Protector? Y (N) Damage? Y (N)

Sample Containers:

1000 ml Poly	500 ml Poly	250 ml Poly	125 ml Poly
500 ml HNO3 x2	500 ml H2SO4 x2	40 ml VOA x3 x6	1000 ml Amber
125 ml NaOH			

TIME	DTW	Temp.	Sp.Cond.	DO	pH	Eh	Turbidity	Q / Vol.
1343		14.52	422	13.35	7.50	38.1		
1348		14.10	410	0.43	7.47	-18.9		
1351		14.09	407	0.41	7.49	-25.6		
1354		14.08	403	0.38	7.52	-33.6		
1357		14.01	404	0.39	7.55	-34.3		
1400	7.26	13.93	407	0.40	7.56	-33.3	2.66	

Notes / Observations (color, odor, anomalies, etc):

Dup collected @ 1415

Stabilization Parameters: pH/DO ± 0.2, SpC ± 10%, Temp ± 0.5°C, Turb. ± 10% or ≤ 5

SAMPLER: Sam Graber
Printed Name

Signature

SCS ENGINEERS
2405 140th ave NE #107
Bellevue, WA 98005 (425) 746-4600

Groundwater Sampling Data Sheet

Project #: 04218014.00
Site: Bellevue South
Well ID: MW-2
Sample ID:
Date: 8/3/20
Weather: Cloudy

14.95 DTW
TOS
Intake
BOS
~18.5 Total Depth

Sampling Method: Dedicated | 1.75" QED SamplePro | Bail | (Peristaltic) | Grab | Other

Meter: MP-20 (YSI)

CONTROL SETTINGS: 1 ft water = 0.62L 1L = 0.26 gallons

Refill
Discharge
Pressure
Flow

One Well Volume (liters)
Total Volume Bailed (liters)
Other:
Flow Setting:

Filtered? Y (N) Locked? (Y) N Water in Protector? Y (N) Damage? Y (N)

Sample Containers:

1000 ml Poly	500 ml Poly	250 ml Poly	125 ml Poly
500 ml HNO3 x2	500 ml H2SO4 x2	40 ml VOA x3 x6	1000 ml Amber
125 ml NaOH			

Notes / Observations (color, odor, anomalies, etc):

TIME	DTW	Temp.	Sp.Cond.	DO	pH	Eh	Turbidity	Q / Vol.
1020		16.13	722	11.44	7.23	102.6		
1025		15.71	728	0.28	6.96	91.6		
1028		15.71	728	0.37	6.96	88.1		
1031	15.60	15.72	727	0.46	6.97	86.6		
1034		15.77	705	0.53	6.97	83.6		
1037		16.04	691	0.44	6.97	81.2		
1040		16.09	685	0.42	7.00	79.8	2.32	

Stabilization Parameters: pH/DO ± 0.2, SpC ± 10%, Temp ± 0.5°C, Turb. ± 10% or ≤ 5

SAMPLER: Sam Graber
Printed Name

Signature

SCS ENGINEERS
2405 140th ave NE #107
Bellevue, WA 98005 (425) 746-4600

Groundwater Sampling Data Sheet

Project #: 04218014.00
Site: Bellevue South
Well ID: MW-3
Sample ID:
Date: 8/3/20
Weather: Sunny

6.02 DTW
TOS
Intake
BOS
14.80 Total Depth

Sampling Method: Dedicated | 1.75" QED SamplePro | Bail | Peristaltic | Grab | Other

Meter: MP-20 YSI

CONTROL SETTINGS: 1 ft water = 0.62L 1L = 0.26 gallons

Refill
Discharge
Pressure
Flow

One Well Volume (liters)
Total Volume Bailed (liters)
Other :
Flow Setting :

Filtered? Y (N) Locked? Y (N) Water in Protector? Y (N) Damage? Y (N)

Sample Containers:

1000 ml Poly	500 ml Poly	250 ml Poly	125 ml Poly
500 ml HNO3 x2	500 ml H2SO4 x2	40 ml VOA x3 x6	1000 ml Amber
125 ml NaOH			

Notes / Observations (color, odor, anomalies, etc):

TIME	DTW	Temp.	Sp.Cond.	DO	pH	Eh	Turbidity	Q / Vol.
1240		14.51	386	2.35	7.59	-61.4		
1245		14.54	377	0.47	6.86	-53.4		
1248		14.61	377	0.44	6.85	-51.0		
1251		14.91	377	0.42	6.83	-49.8		
1254	6.56	14.99	377	0.39	6.79	-46.4		
1257		15.02	378	0.38	6.80	-46.5	1.82	
1300		sample time.						

Stabilization Parameters: pH/DO ± 0.2, SpC ± 10%, Temp ± 0.5°C, Turb. ± 10% or ≤ 5

SAMPLER: Sam Graber
Printed Name

Signature

SCS ENGINEERS
2405 140th ave NE #107
Bellevue, WA 98005 (425) 746-4600

Groundwater Sampling Data Sheet

Project #: 04218014.00
Site: Bellevue South
Well ID: MW-4
Sample ID:
Date: 8/3/20
Weather: cloudy

1.98 DTW
TOS
Intake
BOS
15.00 Total Depth

Sampling Method: Dedicated | 1.75" QED SamplePro | Bail | Peristaltic | Grab | Other

Meter: MP-20 YSI

CONTROL SETTINGS: 1 ft water = 0.62L 1L = 0.26 gallons

Refill
Discharge
Pressure
Flow

One Well Volume (liters)
Total Volume Bailed (liters)
Other:
Flow Setting:

Filtered? Y (N) Locked? Y (N) Water in Protector? Y (N) Damage? Y (N)

Sample Containers:
1000 ml Poly | 500 ml Poly | 250 ml Poly | 125 ml Poly
500 ml HNO3 x2 | 500 ml H2SO4 x2 | 40 ml VOA x3 x6 | 1000 ml Amber
125 ml NaOH

TIME	DTW	Temp.	Sp.Cond.	DO	pH	Eh	Turbidity	Q / Vol.
1134		13.55	504	4.72	8.63	118.0		
1139		13.07	496	0.54	8.78	109.0		
1142		13.08	496	0.46	8.96	98.0		
1145	4.91	13.07	495	0.43	8.91	91.3		
1148		13.09	493	0.42	8.93	85.2		
1151	5.43	13.16	497	0.53	8.92	80.6	26.0	
1154	"	Sample time.						

Notes / Observations (color, odor, anomalies, etc):

Stabilization Parameters: pH/DO ± 0.2, SpC ± 10%, Temp ± 0.5°C, Turb. ± 10% or ≤ 5

SAMPLER: Sam Gabor
Printed Name

Signature

SCS ENGINEERS
2405 140th ave NE #107
Bellevue, WA 98005 (425) 746-4600

Groundwater Sampling Data Sheet

Project #: 04218014.00
Site: Bellevue South
Well ID: MW-5
Sample ID:
Date: 9/3/20
Weather: cloudy

4.74 DTW
TOS
Intake
BOS
9.66 Total Depth

Sampling Method: Dedicated | 1.75" QED SamplePro | Bail | Peristaltic | Grab | Other

Meter: MP-20 YSI

CONTROL SETTINGS: 1 ft water = 0.62L 1L = 0.26 gallons

Refill
Discharge
Pressure
Flow

One Well Volume (liters)
Total Volume Bailed (liters)
Other :
Flow Setting :

Filtered? Y (N) Locked? Y (N) Water in Protector? Y (N) Damage? Y (N)

Sample Containers:

1000 ml Poly	500 ml Poly	250 ml Poly	125 ml Poly
500 ml HNO3 x2	500 ml H2SO4 x2	40 ml VOA x3 x6	1000 ml Amber
125 ml NaOH			

Notes / Observations (color, odor, anomalies, etc):

DTW 4.75 @ 856

TIME	DTW	Temp.	Sp.Cond.	DO	pH	Eh	Turbidity	Q / Vol.
910		18.18	731	2.43	6.50	-27.4		
913		18.28	736	0.82	6.69	-71.5		
916		18.10	742	0.71	6.71	-66.6	237	
920		Sample time						

Stabilization Parameters: pH/DO ± 0.2, SpC ± 10%, Temp ± 0.5°C, Turb. ± 10% or ≤ 5

SAMPLER: Sam Gruber
Printed Name

Signature

SCS ENGINEERS

GROUNDWATER SAMPLING INSTRUMENT CALIBRATION DOCUMENTATION FORM

	Conductivity	pH4	pH 7	DO	Turbidity	Comments/Exceptions
Date	8/13/20					
Time	930					
Weather (sky or precip, temp)	Cloudy					
Type of Calibration	Standard	Standard	Standard	Standard	Standard	
Standard Value	1413	4.00	7.00	100% or ~8.5	1000, 10, 0.2 800, 100, 20, ≤0.1	
Pre-Cal Reading	1417	4.02	6.97			
Post Cal Reading	1417	4.00	7.00	8.5		
Descrepancy	No					
Calib. Successful?	yes					
Calibration by	SEG					
Instrument Type, ID	MP20 / YSI 556				MicoTPW / HACH2000	
Calibration Location	SEB					

* If Direct Reading is Unavailable, Assume pressure = 760 mm - 2.5 (altitude in ft/100)