



**Site Characterization and
Interim Action Report – 7-Eleven
Store 22866
14207 International Boulevard
South, Tukwila, Washington**

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November 17, 2022



**SITE CHARACTERIZATION AND INTERIM ACTION REPORT – 7-ELEVEN STORE 22866
14207 INTERNATIONAL BOULEVARD SOUTH, TUKWILA, WASHINGTON**

Revision Record

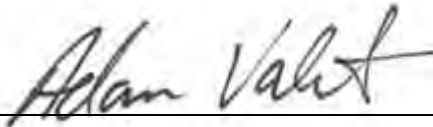
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**SITE CHARACTERIZATION AND INTERIM ACTION REPORT – 7-ELEVEN STORE 22866
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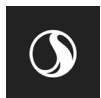
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Abbreviations and Acronyms

7-Eleven	7-Eleven, Inc.
AOC	Area of Concern
bgs	Below ground surface
BTEX	Benzene, toluene, ethylbenzene, and total xylenes
COC	Contaminant of Concern
CSM	Conceptual Site Model
CUL	Cleanup Level
DPE	Dual-phase Extraction
Ecology	Washington Department of Ecology
EDB	1,2-Dibromoethane
EDC	1,2-Dichloroethane
EPA	Environmental Protection Agency
ID	Identification
mg/kg	Milligrams per kilogram
MPE	Multi-phase extraction
MTBE	Methyl tertiary butyl ether
MTCA	Model Toxics Control Act
qHRSC	quantitative High Resolution Site Characterization
Stantec	Stantec Consulting Services Inc.
TEE	Terrestrial Ecological Evaluation
TPH	Total petroleum hydrocarbons
TPH-D	Total petroleum hydrocarbons as diesel
TPH-G	Total petroleum hydrocarbons as gasoline
TPH-O	Total petroleum hydrocarbons as motor oil
µg/l	Micrograms per Liter
UST	Underground Storage Tank
WAC	Washington Administrative Code



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Introduction
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1.0 INTRODUCTION

On behalf of 7-Eleven, Inc. (7-Eleven), Stantec Consulting Services Inc. (Stantec) has prepared this Site Characterization and Interim Action Report to document environmental sampling and remedial action at 7-Eleven Store No. 22866 (the Site). The Site is located at 14207 International Boulevard South (Pacific Highway South) in Tukwila, Washington (the Property; see **Figures 1 and 2**). Fletcher Oil Company, Go-N-Joy, and 7-Eleven previously operated gasoline service stations at the Property. The 7-Eleven gasoline station was permanently removed in 2010, as documented in the *Underground Storage Tank System Removal and Fourth Quarter 2010 Groundwater Monitoring and Sampling Report* (Stantec 2011).

This report includes recent soil and groundwater sampling results collected south of the 7-Eleven building near the former Fletcher Oil loading docks, an area that was previously uncharacterized. Findings indicate petroleum impacts in this area are generally indicative of an old petroleum release consisting of heavier range hydrocarbons. Based on the findings presented in this report and discussions with a prior Washington State Department of Ecology (Ecology) Site manager, contamination associated with the former Fletcher Oil loading docks has been classified as a separate release at the former Fletcher Oil address (14211 International Boulevard South). A separate sub-parcel (Parcel A, **Figure 3**) has been established to administratively distinguish cleanup responsibility going forward.

1.1 SITE INFORMATION

Site and regulatory tracking information is presented in the table below.

Site Name	7-Eleven Store No. 22866
Site Address	14207 International Boulevard South (Pacific Highway South), Tukwila, WA
Parcel Number	King County Parcel # 1610000295, Parcels 7 & 8
Current Property Owner	Robert A. Blew
Project Client	Paula Sime – Manager Environmental Services 7-Eleven, Inc. P.O. Box 711, Dallas, TX 75221-0711
Project Consultant	Paul Fairbairn, Project Manager Stantec Consulting Services Inc. 1687 114th Ave SE, Suite 100 Bellevue, WA 98004
Ecology Site Manager	Michael Warfel
Voluntary Cleanup Program Number	NW2802
Facility Identification (ID) Number	23544274



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A petroleum release was confirmed at the Site in 1995. Since discovery, subsurface investigations have been completed to characterize Site-soil and routine groundwater monitoring and sampling has been ongoing since 1996. A Conceptual Site Model (CSM) was initially presented in the *Remedial Investigation and Interim Action Report* (dated November 7, 2017). An updated CSM based on additional Site characterization (2021) is provided herein. Petroleum vapor intrusion risk has been previously evaluated through sub-slab and indoor/outdoor air sampling as documented in the Site's *Vapor Intrusion Evaluation* (dated January 5, 2022).

1.2 PROJECT RATIONALE

1.2.1 Purpose

The purpose of this report is to document additional Site characterization and carbon-based, BOS-200® remedial injections. A BOS-200 pilot test was performed as an interim action to evaluate the effectiveness and feasibility to achieve Site cleanup goals. Post-injection soil and groundwater sampling results are included within this report to provide an initial evaluation and formulate next steps.

1.2.2 Scope and Rationale

The scope of work and rationale is described below.

Site Characterization – Additional Site characterization was completed in January 2021 to better understand current contaminant distribution and concentrations. Nine (9) soil borings were advanced at the Property (SB-16 through SB-24) and seven (7) new groundwater monitoring wells (MW-11 through MW-17) were installed. Stantec personnel collected 40 soil samples from the 16 borings/wellbores for certified laboratory analysis. An additional 66 soil samples were collected by the remediation subcontractor for quantitative High Resolution Site Characterization (qHRSC). These qHRSC samples were tested by a separate laboratory and results used for the subsequent BOS-200 injection design and load sizing.

BOS-200 Pilot Test – Carbon-based, BOS-200 with supplemental electron acceptors (gypsum) and facultative microbes were injected into the subsurface of the Property via 43 injections points in October 2021. This report documents field activities associated with the remedial injection and provides an evaluation of post-injection sampling results.

Post-injection Soil Sampling – Post-injection compliance soil samples were collected from boring SB-25 at depths of 10- and 19-feet below ground surface (bgs) in October 2021, shortly after the BOS-200 injections. The SB-25 soil samples were collected near the highest residual petroleum impacts as determined from the prior January 2021 investigation.

Groundwater Monitoring and Sampling – Recent groundwater monitoring and sampling results from the first quarter 2021 through second quarter 2022 are documented in our prior separate report (dated September 26, 2022). Groundwater analytical results for this 6-quarter timeframe are also included in this report to evaluate the BOS-200 remedial pilot test.



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2.0 SITE IDENTIFICATION AND BACKGROUND

2.1 SITE DEFINITION

References to the “Property” and the “Site” are made throughout this report. For a better understanding, definitions of these terms are provided below:

- The “Property” refers to the legal parcel leased by 7-Eleven and located at 14207 International Boulevard South (Pacific Highway South) in Tukwila, Washington.
- The “Site” refers to the areas of soil and groundwater that have been impacted with petroleum-hydrocarbons exceeding Model Toxics Control Act (MTCA) Method A Cleanup Levels (CULs).

2.2 RELEASE DISCOVERY AND REGULATORY STATUS

A gasoline release was reported at the Site in 1995 when soil sampling, during a Stage II upgrade of the product piping and dispensers, indicated that total petroleum hydrocarbons characterized as gasoline (TPH-G) were present in soil above MTCA Method A screening levels. TPH-G impacts were identified at the north end of the 7-Eleven dispenser island.

Stantec reviewed Ecology’s electronic databases regarding the regulatory status of the Site. Ecology ID numbers are summarized below:

Facility ID	23544274
Leaking Underground Storage Tank ID	4006
Cleanup Site ID	8378
Underground Storage Tank (UST) Site ID	8603
Voluntary Cleanup Program ID	NW2802
Environmental Report Tracking System IDs	N22402 / 625164

2.3 PROPERTY DESCRIPTION AND SITE DEFINITION

The approximate 23,000-square-foot Property is currently leased by 7-Eleven and is situated at the southwest corner of the intersection of International Boulevard South and South 142nd Street.

The Property is located in King County in Township 23 North, Range 4 East, Section 15 with King County Tax Parcel Number 1610000295, sub-parcels 7 and 8. The Property is occupied by the 7-Eleven convenience store and parking lot. The Property is owned by Robert A. Blew, Trustee of the Katherine Inez Lawrence Trust.



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Under MTCA [Washington Administrative Code (WAC) 173-340-200], a “site” is defined by the nature and extent of contamination associated with one or more releases of hazardous substances prior to any cleanup of that contamination. In this interim action report, the MTCA site (Site) is defined as all affected media resulting from the petroleum release associated with 7-Eleven operations.

2.4 SURROUNDING LAND USE

The Property is in a mixed commercial and residential area (**Figure 2**). Neighboring property use is summarized below:

Direction From Site	Neighboring Property Use
North	South 142 nd Street followed by a retail auto sales business (Washington Cars Inc). Residences are present west of Washington Cars Inc.
South	Strip mall building with parking lot. Businesses include Pacific Laundromat, Bartell Drugs, Wamo Travel Agency, and Juba Restaurant and Café.
East	International Boulevard South (Pacific Highway South, Highway 99) followed by a commercial property (UT&T Auto Services) and vacant property.
West	Parking lot followed by a motel and residences are present west of the motel.

2.5 PHYSIOGRAPHIC SETTING AND TOPOGRAPHY

The Property is located at approximately 289 feet above mean sea level. Surface cover at the Property is primarily asphalt pavement and is generally flat. Local topography generally slopes downward to the northeast towards the Duwamish River.

2.6 ZONING, INFRASTRUCTURE, AND WATER SUPPLY

According to the City of Tukwila Zoning Map, the Property is zoned as Neighborhood Commercial Center. Subsurface utilities present beneath and adjacent to the Property include sanitary sewer, storm water, water, and communications. Additional subsurface utilities may be present but were not identified by Stantec.



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Several catch basins are located along the perimeter of the Property to collect surface water runoff. Additional public storm water catch basins are located north and east of the Property along Tukwila International Boulevard South and South 142nd Street. Catch basins are connected and drain into City of Tukwila's storm water system.

According to the City of Tukwila's website, potable water is supplied entirely from the City of Seattle's water system. Nearly all of the water supplied to Tukwila comes from the Cedar River Watershed through the 60-inch Cedar River Pipeline No. 4 on the south and the 48-inch West Seattle supply line on the north. According to a Site Hazard Assessment from the nearby UT&T Auto Service facility (Ecology Cleanup ID 9337, discussed in **Section 2.6.4**), the Site appears to be located within 2 miles of several water wells used by Seattle Public Utilities, that serve as a backup water source for the City of Tukwila.

2.7 PROPERTY DEVELOPMENT HISTORY AND POTENTIAL SOURCES OF CONTAMINATION

2.7.1 Property Use and Facilities

A summary of the Property history is provided below. King County Assessor Parcel information and historical records provided by Environmental Data Resources, Inc. have been included with prior environmental reports for the Site.

Year	Property History
Prior to 1939 to 1955	The Property is occupied by single-story residence (approximately 560-square feet) with three separate owners during this period.
1955 to 1966	A gasoline service station owned and operated by Fletcher Oil Company was located on the Property from circa 1955 to circa 1966. The gasoline service station consisted of a 760-square foot building with three pump islands located in the central eastern portion of the Property (Figure 3). USTs (presumably containing gasoline, diesel fuel, and oil) were present on the Property but the location and number could not be determined from available records. A fueling dock was located in the southern portion of the Property (approximately 40-feet south of the 7-Eleven building).
1966 to 1980	The Property continued operation in the previous configuration as a Go-N-Joy gas station. Ownership changed to a trust.
1981 to 2010	7-Eleven leased and began operating the Property as a convenience store with gasoline facility in August 1981. Three single-wall, metal 12,000-gallon USTs were installed in the northern portion of the Property with dispensing equipment located immediately east of the tanks (Figure 3). The three 12,000-gallon tanks and dispensing equipment were permanently closed (removed) in 2010.
2010 – present	The Property operates as a 7-Eleven convenience store. The Property is currently owned by Robert A. Blew, Trustee of the Katherine Inez Lawrence trust.



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2.7.2 Underground Storage Tanks

Information concerning the former 7-Eleven USTs previously located on Site is summarized below.

Tank ID	Tank Type & Volume	Substance Stored	Date Installed	Date Decommissioned	Tank Operator
REG	12,000-gallon, single-wall fiberglass	Unleaded Premium	8/1/1981	11/2/2010	7-Eleven, Inc.
NOL	12,000-gallon, single-wall fiberglass	Unleaded Regular	8/1/1981	11/2/2010	7-Eleven, Inc.
SNL	12,000-gallon, single-wall fiberglass	Unleaded Regular	8/1/1981	11/2/2010	7-Eleven, Inc.

The number and location of USTs associated with the Fletcher Oil Company gasoline facility could not be identified during a review of historical records and aerial photographs.

2.7.3 Potential Sources of Contamination

Potential sources of petroleum impacts include gasoline range hydrocarbons from:

- Fuel dispensers;
- Product lines;
- UST filling area, including leaks from overfill spill buckets; and
- USTs.

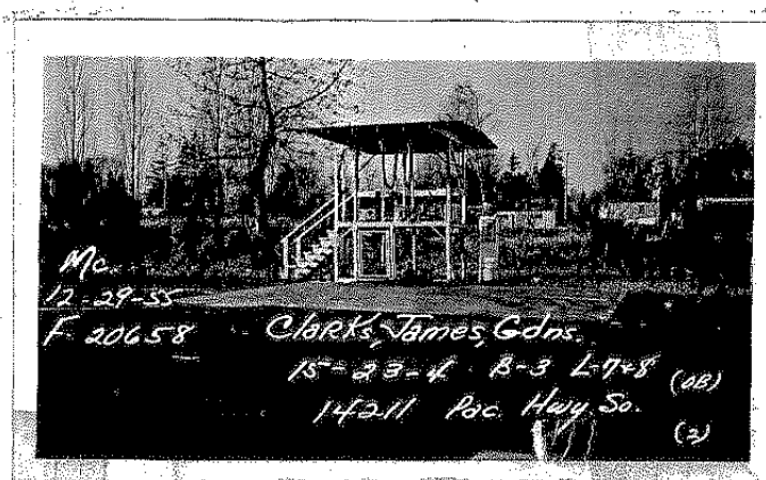
Historical research and the 1955 King County Assessor's report indicate that Fletcher Oil previously operated a bulk oil facility south of the current 7-Eleven building. Based on Site characterization results, heavier range diesel and oil are predominant in this area and indicative of a separate release. Based on Site characterization and the historical assessors report, Ecology (as of July 21, 2022) is classifying the Fletcher Oil release as a separate ERTS at the former Fletcher Oil address of 14211 International Boulevard South. As such, the Property has been divided into two distinct sub-parcels (A and 7/8). The former Fletcher oil fueling docks were located near MW-17 on parcel A with the former 7-Eleven fueling system and current building located on parcel 7/8 (**Figure 3**).



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Historical Photograph of the Fueling Docks Associated with Fletcher Oil (Parcel A)



2.7.4 Potential Sources of Contamination from Neighboring Properties

According to the Ecology database, there are at least five confirmed and suspected contaminated sites within a half-mile radius of the Property. The closest is identified as UT&T Auto Service, located at 14120 International Boulevard South (approximately 250 feet northeast of the Site). The UT&T parcel has confirmed impacts of benzene, toluene, ethylbenzene, and total xylenes (BTEX) and TPH-G in soil and groundwater and is identified as Ecology Cleanup ID 9337. The parcel received a Site Hazard Assessment score of 1 (of 5) in October 2015. A Hazard Assessment score of 1 represents the most risk to human health and the environment. In 2010, a remedial excavation was conducted, and 984 tons of petroleum impacted soil were removed from the UT&T parcel. Confirmation soil and groundwater sampling indicated that petroleum impacts in soil and groundwater remain above MTCA Method A screening levels following the excavation.

Other confirmed or suspected sites located within a half mile radius of the Site are summarized below:

Neighboring Site Name	Ecology Cleanup ID	Approximate Distance and Direction from Site
Exxon 7701	10383	4,000-feet to the south-southwest
Egans Pit Stop	11354	4,000-feet to the southwest
Southgate Texaco	6670	3,500-feet to the south-southwest
Crowell Residence	3377	1,000-feet to the northeast



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3.0 NATURAL CONDITIONS

This section summarizes local geology, surface water, groundwater and potential ecological receptors.

3.1 GEOLOGY

3.1.1 Regional Geology

The Site lies within the Puget Lowland. The lowland is part of a regional north-south trending trough that extends from southwestern British Columbia to near Eugene, Oregon. North of Olympia, Washington, this lowland is glacially carved, with a depositional and erosional history including at least four separate glacial advances/retreats. The Puget Lowland is bounded to the west by the Olympic Mountains and to the east by the Cascade Range. The lowland is filled with glacial and nonglacial sediments consisting of interbedded gravel, sand, silt, till, and peat lenses.

The *Geologic Map of the Des Moines 7.5' Quadrangle, King County, Washington, (2004)* indicates that the Site is underlain by Vashon Glacial Till. The Vashon Till varies in thickness from about 10 to 60 feet within the Des Moines quadrangle. It is comprised of varying quantities of clay, cobbles, and boulders and is typically dense to very dense and relatively impermeable. The *Geologic Map of the Des Moines 7.5' Quadrangle* states “where present at the surface, the till provides a low-permeability cover to underlying aquifers, reducing recharge but also offering protection from surface contaminants.”

The typical geologic stratigraphy of Vashon type soil units in the Puget Sound region includes Vashon Recessional Outwash overlying Vashon Glacial Till. In most areas, the Vashon Glacial Till is underlain by Vashon Advance Outwash. Locally, the till unconformably overlies pre-Fraser deposits.

3.1.2 Site Geology

Soils observed underlying the Site (other than fill areas) are classified as silty sand to sandy silt with gravel (Glacial Till), underlain by poorly graded sand with minor gravel (Advance Outwash). Weathered glacial till extends from the ground surface to approximately 15-feet below bgs, underlain by unweathered glacial till to approximately 35-feet bgs. Standard penetration test blow count n-values (presented in boring logs in **Appendix A**) indicate that the density of the weathered glacial till generally ranges from loose to very dense at the Site depending on depth below ground. Density of the unweathered glacial till is generally classified as very dense. Advance outwash underlies the unweathered glacial till to the maximum depth explored beneath the Site (approximately 44-feet bgs). Standard penetration test blow count n-values, indicate density of the advance outwash at the Site is generally classified as dense to very dense. Geologic cross-sections are presented on **Figure 4A and 4B**.



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3.2 SURFACE WATER

The closest body of surface water to the Site is the Duwamish River, located approximately 1.5-miles northeast of the Site. The Duwamish River flows generally to the northwest near the Site, releasing into Puget Sound approximately 5-miles west of the Site. Surface water at the Property flows into a network of catch basins that discharge into the City of Tukwila storm drain system.

3.3 GROUNDWATER

According to the Ecology well database, there are at least three water wells within a mile of the Site.

1. Well ID AEN238 (Riverton Crest Cemetery) is located approximately 0.4 mile west-northwest of the Site and approximately 70-feet above the Site. Groundwater was encountered at approximately 100-feet below the existing grade during well placement (June 16, 2000).
2. An unknown well located in Section 15, T23N, R4E (possibly at 3415 140th Street) is presumably located approximately 0.21 mile northwest of the Site and whose ground surface is approximately 25-feet above the Site. Groundwater was encountered at approximately 130-feet below the existing parcel surface grade during well placement (December 20, 1931).
3. The third well (Start Card 23-04-21) is located approximately 0.97 mile west-southwest of the Site and whose ground surface is approximately 150-feet above the Site. Groundwater was encountered at approximately 164-feet below the existing parcel surface grade during well placement (November 23, 1988).

Groundwater monitoring at the Site (since 1996) indicates that groundwater historically ranges from approximately 4- to 13-feet bgs and the gradient varies widely in flow direction as shown in the groundwater flow direction rose diagram on **Graph 20**. Documented flow directions include northeast, northwest, southeast, east-southeast, north-northwest, and north-northeast. The high variability in flow direction likely indicates groundwater is perched and flow directions are consistent with upslope and offsite sources laterally migrating onto the Site along the weathered/unweathered glacial till contact and into the deep fill areas within the Site. Over time and seasonally, the direction of perched groundwater changes or becomes unclear as upslope sources vary in contribution to the shallow perched groundwater system.

Based on Stantec's review of available well logs within approximately one mile of the Site, potable groundwater is likely present approximately 100- to 130-feet bgs at the Site. The regional aquifer, which extends below the Site, is likely perched on Pre-Fraser Deposits below the Vashon Advance Outwash materials with locally perched zones on silt/clay interbeds within the Advance Outwash deposits. It is Stantec's opinion that shallow groundwater within the Site is perched on the unweathered glacial till.



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3.4 NATURAL RESOURCES AND ECOLOGICAL RECEPTORS

A Terrestrial Ecological Evaluation form has been previously completed for the Site and submitted to Ecology. The evaluation indicated that there is no risk to ecological receptors from the release at the Site and further evaluation is not required.



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4.0 SITE CHARACTERISTICS

This section summarizes previous Site characterization and includes documentation of previously unreported soil sampling and groundwater well installation completed in 2021.

4.1 PREVIOUSLY REPORTED SITE CHARACTERIZATION

4.1.1 Previously Reported Subsurface Investigations and Soil Sampling

Previously reported subsurface investigations were conducted between 1995 and 2016. These investigations are summarized in **Appendix B** and historical soil analytical results are included in **Table 1**. See **Figure 5** for the location of historical and recent soil sample locations.

Summary of Soil Characterization – Petroleum impacted soil has historically been identified near former 7-Eleven generation USTs and dispensers in the northern area of the Property and the former Fletcher Oil/Go-N-Joy gasoline dispensers (pre-1980) located south of the 7-Eleven building. MTCA Method A exceedances in soil include BTEX, TPH-G, and total naphthalenes. Adsorbed diesel and oil range petroleum hydrocarbons have never been reported above MTCA Method A CULs in Site-soil. However, as discussed further below, dissolved diesel and oil have historically (and currently) exceed MTCA Method A CULs in Site-groundwater.

In 2010, petroleum impacted soil exceeding MTCA Method B CULs was identified near the former 7-Eleven USTs at the southern side wall sample SS-2@12' and stockpile sample SP-3. These impacts were removed during remedial over-excavation for off-Site disposal at an approved treatment facility. More recent characterization results (2021) in this area of the Site indicate petroleum related constituents have been removed or attenuated below MTCA Method A CULs. Additional discussion of the 2021 soil sampling and analytical results is provided in **Section 4.2.1** below.

Historical MTCA Method B soil exceedances are present near the former Fletcher Oil/Go-N-Joy gasoline dispensers. Recent characterization results (2021) indicate all soil in this area of the Site has currently attenuated below MTCA Method B CULs but remains above MTCA Method A CULs. This former dispenser area was the focus of remedial pilot testing as documented in this report.

Site characterization results indicate that petroleum impacted soil is present in weathered glacial till, ranging from approximately 2.5 to 19-feet bgs. Contamination does not extend into the unweathered glacial till.

4.1.2 Previously Reported Groundwater Sampling

Groundwater monitoring and sampling was initiated at the Site in April 1996 and routine sampling continues on a quarterly basis. Cumulative groundwater sampling results through Second Quarter 2022 are presented in **Table 2** and history is summarized in **Appendix B**. Third Quarter 2022 was conducted in late September 2022 and is being reported separately.



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Groundwater Sampling First Quarter 2021 Through Second Quarter 2022 – Recent groundwater sampling results are presented in **Figure 6** and previously documented in the *7-Eleven Store 22866 First Quarter 2021 through Second Quarter 2022 Groundwater Monitoring and Sampling Report* (dated September 26, 2022). Sampling results indicate:

- The highest remaining dissolved phase impacts at the Site are located near the pre-1980 dispensers (MW-13 and DPE-5) and at the separate former Fletcher Oil fueling dock (MW-16, MW-17, and DPE-8).
- Groundwater MTCA Method A exceedances are primarily limited to TPH-G, TPH-D, and TPH-O. As of May 2022, the highest TPH-G (10,200 micrograms per liter [µg/l]) and TPH-D (3,350 µg/l) concentrations were reported at DPE-5 and the highest TPH-O concentration was reported at DPE-8 (820 µg/l).
- Dissolved-phase benzene exceeded the MTCA Method A CUL at only two wells during the reporting period (MW-11 and DPE-5). MW-11 has recently attenuated below the MTCA Method A CULs; however, dissolved benzene at DPE-5 was reported to be 51.4 µg/l in May 2022.
- Dissolved-phase BTEX, TPH-G, and TPH-D near the former 7-Eleven USTs and dispensers has generally attenuated below MTCA Method A CULs. However, some isolated TPH-O exceedances were observed in this area of the Site at DPE-10 (530 µg/l) and DPE-1 (4,080 µg/l) during the 6-quarter reporting timeframe.

Additional discussion of groundwater analytical results and evaluation of the BOS-200 remedial pilot test is provided in **Section 5.2.2**.

4.1.3 Previously Reported Vapor Intrusion Evaluation

Petroleum vapor intrusion risk has been evaluated and was previously documented in the *Vapor Intrusion Evaluation* (dated January 5, 2022). Sampling results indicated that all analytes in sub-slab soil vapor were below screening levels. Benzene was detected inside the 7-Eleven building above the MTCA Method B indoor air CUL; however, based on sub-slab and outdoor air results, Stantec concluded that chemicals in indoor air were likely the result of ambient air entering the building envelope and are not representative of vapor intrusion of subsurface chemicals to indoor air.

4.2 PREVIOUSLY UNREPORTED REMEDIAL SITE CHARACTERIZATION

4.2.1 Soil Sampling and Groundwater Well Installation

Scope of Subsurface Work (January 2021) – Previously unreported Site characterization was completed at the Property from January 5 through 7, 2021. Nine (9) soil borings (SB-16 through SB-24) and seven (7) groundwater monitoring wells (MW-11 through MW-17) were advanced using a 7822 DT GeoProbe/direct



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push drill rig at locations shown on **Figure 5**. Subsurface soils were screened using a MiniRae 3000 photoionization detector and all samples collected from a clean acetate liner using Environmental Protection Agency (EPA) 5035A sampling methods.

A total of forty (40) soil samples were collected from the borings and wellbores by Stantec personnel and submitted to Eurofins TestAmerica in Seattle (a certified laboratory) for chemical analysis. Samples were collected at depths ranging from 2.5- to 19-feet bgs. Wells MW-11 through MW-17 were completed as new 2-inch-diameter, Schedule-40 polyvinyl chlorinated (PVC) groundwater monitoring wells with a traffic-rated well monument. Well screens varied in length as detailed in soil boring logs.

Soil boring logs from this investigation are presented in **Appendix A**. Boring logs contain geologic descriptions; Unified Soil Classification System soil descriptions; drilling methods; and field screening results; and well completion details. Soils encountered during this investigation consisted primarily of silty sand and poorly graded sand with silt.

Additional information regarding the subsurface investigation and sampling is presented in the following appendices:

- **Appendix C** presents standard operating procedures for sample collection
- **Appendix D** presents laboratory analytical reports.
- **Appendix E** presents waste disposal documentation.
- **Appendix F** presents investigation field notes.

Additional Soil and Groundwater “Grab” Sampling Scope of Work (January 2021) – In addition to Stantec’s subsurface characterization described above, BB&A personnel collected an additional 66 soil samples and a grab groundwater sample from each of the same 16 borings/wellbores. The soil and groundwater samples collected by BB&A were part of qHRSC for remedial design and load sizing of the BOS-200 pilot test. BB&A collected soil samples approximately every 2-feet vertically, at depth depending on location and ranging from 6 to 18-feet bgs. Samples were analyzed by Remediation Products Inc. support laboratory in Golden, Colorado. Analytical results as well as 2D and 3D Site diagrams from this additional sampling are provided in **Appendix G**.

Post-Injection Soil Sampling Scope of Work (October 2021) – One post-injection boring (SB-25) was advanced near the pre-1980 dispensers immediately after the BOS-200 injection (see **Section 5.2**). This boring was located approximately 6-feet west of the area with the highest measured adsorbed petroleum impacts in January 2021 (SB-20). Two soil samples were collected for laboratory analysis from depths of 10- and 19 feet bgs. Results are evaluated and provided in **Section 5.2.2**.

4.2.1.1 Soil Laboratory Analytical Methods

Laboratory analytical methods for soil samples collected in January and October 2021 are summarized below. Soil samples collected by Stantec were submitted to Eurofins TestAmerica Laboratories, Inc., of Seattle, Washington for analysis of:



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- BTEX using EPA Method 8260D;
- TPH-G using EPA Method Northwest Total Petroleum Hydrocarbons Characterized as Gasoline (NWTPH-Gx); and
- Diesel and Oil using EPA Method Northwest Total Petroleum Hydrocarbons as Diesel (NWTPH-Dx).

Select soil samples were additionally analyzed for the following:

- Total lead using EPA Method 6010D.
- Methyl tert-butyl ether (MTBE), 1,2-dichloroethane (EDC), and 1,2-dibromoethane (EDB) using EPA Method 8260D; and
- Total naphthalenes using EPA Method 8270E SIM.

4.2.1.2 Soil Analytical Results

Ten (10) of the 42 total soil samples collected by Stantec in January and October 2021, exceeded MTCA Method A CULs. All other samples were reported below laboratory detection limits and/or MTCA Method A CULs. Analytical results are presented in **Table 1** and shown on **Figure 5**. Soil sampling results indicate:

- Former 7-Eleven tanks and dispenser area – Only one soil sample exceeded MTCA Method A CULs near the former 7-Eleven USTs/dispensers. Gasoline range hydrocarbons at MW-11 from 10-feet bgs were reported to be 30.3 milligrams per kilogram (mg/kg), slightly exceeding the MTCA Method A CUL of 30 mg/kg. This sample was collected near historical side wall sample SS-12@12'. Results indicate that since 2010, TPH-G impacts in this area have attenuated from approximately 4,400 mg/kg to 30.3 mg/kg. All other 2021 soil samples collected in the northern portion of the Property indicate 7-Eleven generation impacts have currently attenuated below MTCA Method A CULs.
- Pre-1980 dispenser area – In January 2021, the highest adsorbed concentrations were reported near the pre-1980 dispensers at SB-20 at 10-feet bgs. Benzene and gasoline range hydrocarbons at this location were reported to be 2.86 mg/kg and 1,740 mg/kg, respectively. Lower-level exceedances of TPH-G were reported at SB-21 at 10-feet bgs (103 mg/kg) and SB-24 at 2.5 and 8-feet bgs (157 and 319 mg/kg, respectively).
- Former Fletcher Oil loading docks – Gasoline-range exceedances were reported at MW-17 near the former Fletcher Oil loading docks on parcel A, located south of the 7-Eleven building. The highest TPH-G concentration at this location was reported at 2.5-feet bgs (409 mg/kg). TPH-G concentrations were observed to attenuate below MTCA Method A CULs at the sample collected from 15-feet bgs. TPH-G was the only analyte in soil reported above MTCA Method A CULs in this area.

Additional discussion of pre- and post BOS-200 sampling results is provided in **Section 5.2.2**.



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5.0 INTERIM REMEDIAL ACTIONS

This section summarizes remedial actions performed at the Site. It also documents the previously unreported BOS-200 pilot test injection completed in October 2021.

5.1 PREVIOUSLY REPORTED INTERIM ACTIONS

5.1.1 1995 Soil Excavation and Removal

In October 1995, shallow soil samples were collected by Groundwater Technology, Inc. during a Stage II upgrade of the product piping and dispensers. Based on screening and analytical results, approximately 29-tons of petroleum impacted soil was excavated and removed in the area of the 7-Eleven dispenser island. Based on available records, Stantec was unable to determine the exact lateral and vertical extent of the 1995 over-excavation.

5.1.2 1998 Through 2002 DPE System Operation

A dual-phase extraction (DPE) remediation system operated at the Site intermittently from 1998 through 2002. The system included eight extraction wells (DPE-1 through DPE-8; see **Figure 3**), system piping, regenerative blower, venturi system for groundwater extraction (sump pump, recirculation tank, and injectors), and system compound. The eight DPE wells were screened from 5- to 20-feet bgs. The DPE system shutdown frequently, due to design and operational issues, and was reported to have a low vapor mass removal rate. In 2002, the system compound was damaged by vehicular traffic and the system was shut down permanently. An estimated 650,000-gallons of groundwater was extracted and treated during the approximately 4.5-years of system operation.

5.1.3 2010 UST Removal and Remedial Excavation

In 2010 following removal of the 7-Eleven USTs, Stantec performed a limited remedial over-excavation in the vicinity of the UST basin and dispenser area. A total of approximately 329-tons of petroleum impacted soil was transferred off-Site to an appropriate disposal facility. Based on recent soil sampling (2021), residual petroleum impacted soil near the former 7-Eleven USTs and dispensers has currently attenuated below MTCA Method A CULs.

5.1.4 2016 Multi-Phase Extraction Event

Stantec contracted Cal Clean Inc. to operate a mobile multi-phase extraction (MPE) treatment system at the Site from October 3, 2016, through November 20, 2016. Wells DPE-9 and DPE-10 (see **Figure 3**) were installed at this time. The temporary MPE event was selected as an interim action to evaluate effectiveness of short-term MPE as a remedial option. The mobile treatment system consisted of a 25-horsepower liquid



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ring pump, vapor piping manifold, knockout tank, thermal oxidizer, water storage tanks, bag filters, and granular activated carbon vessels. The treatment system operated 24-hours a day and 7-days a week for approximately 48-days of total runtime. Results of the multi-phase extraction testing events are summarized below.

- Soil vapor and groundwater extraction – Soil vapor and groundwater was extracted from existing Site monitoring well (MW-5B) and extraction wells (DPE-2, DPE-3, DPE-4, DPE-5, DPE-9, and DPE-10). A total of 43,540-gallons of groundwater was extracted and treated during the 48-day event. Well casing vacuums were measured at each of the extraction wells and observation wells throughout the extraction event. The average vacuum radius of influence was approximately 28-feet.
- Influent groundwater – Benzene and TPH-G concentrations in influent system water were observed to increase during the first two weeks of system operation and then decreased significantly during the remainder of the extraction event. TPH-D and TPH-O system water influent concentrations were observed to decrease from approximately 4,700 µg/l to 700 µg/l over the course of the extraction event.
- Mass removal – The average groundwater extraction flowrate was calculated to be approximately 0.6 gallons per minute and an estimated 1.1 pounds of gasoline (TPH-G) was removed via groundwater extraction during the 2016 interim action. The average vapor extraction flow rate was measured to be approximately 123 standard cubic feet per minute. An estimated 762-pounds of gasoline were removed from the subsurface during the interim action.

Based on the relatively low flow and decreasing mass removal rates, additional multi-phase extraction was not recommended to achieve Site cleanup goals.

5.2 PREVIOUSLY UNREPORTED INTERIM ACTIONS

5.2.1 BOS-200® Remedial Pilot Test – October 2021

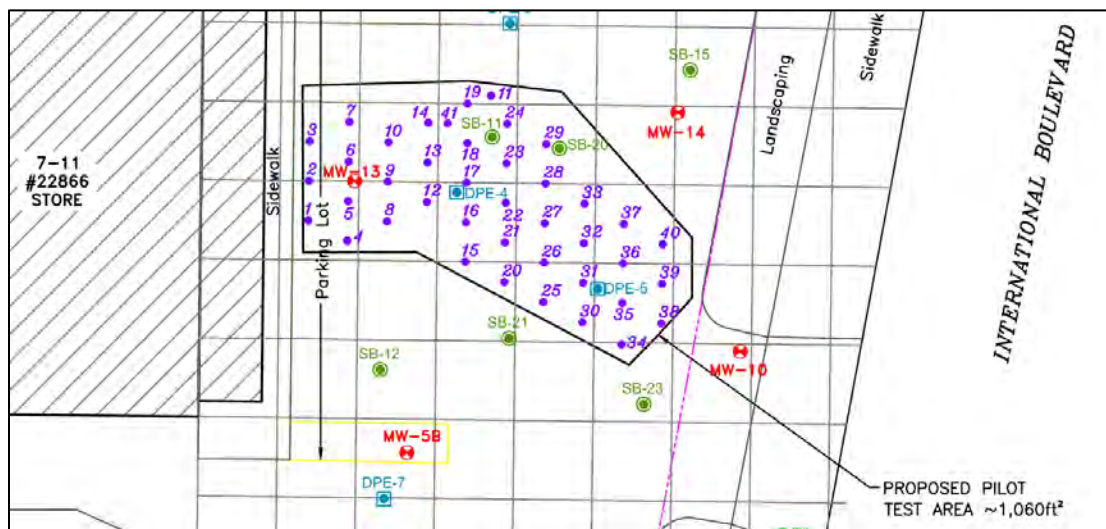
Injection Scope of Work – Stantec supervised in-situ injections of BOS-200 carbon-based slurry with gypsum and facultative microbes at the Site from October 11 through 14, 2021. The treatment area (1,060 square-feet) was located east of the 7-Eleven building, in the area of the highest residual adsorbed and dissolved-phase petroleum impacts. A total of 40-injection borings were planned; however, 43 borings were actually advanced. The 43 holes were advanced using a GeoProbe drill rig with injection points ranging from 5- to 19-feet bgs, interlaced every 2-feet vertically. A screenshot of the 40 planned injection locations (purple dots) and a table summarizing estimated injectate totals is provided below. A full map of the final 43 BOS-200 injection locations is provided in **Appendix F**.



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BOS-200 Planned Injection Locations Map



BOS-200 Injection Estimated Summary Totals

Injection Area	Total Pounds of Carbon	Total Gallons of Bacteria	Total Pounds of Gypsum	Gallons Potable Water
Shallow (5-12' bgs)	4,000	8	3,200	~2,400
Deep (13-19' bgs)	2,400	5	0	~2,400
Total	6,400	13	3,200	~4,800

Additional information regarding the BOS-200 remedial injection is included in the following appendices

- **Appendix F** includes field notes for the injection event and includes detailed injection amounts, locations, and pressures for each injection point.
- A summary of the BOS-200 injection process and supplemental product information is included in **Appendix H**.

5.2.2 Pilot Test Evaluation and Post-Injection Sample Results

5.2.2.1 Post-Injection Soil Sampling Evaluation

As described in **Section 4.2.1**, SB-25 was advanced immediately following the BOS-200 injection and two soil samples were collected from depths of 10- and 19-feet bgs. Post-injection sampling was completed to compare petroleum impacts before and immediately after the remedial injection within the treatment area.

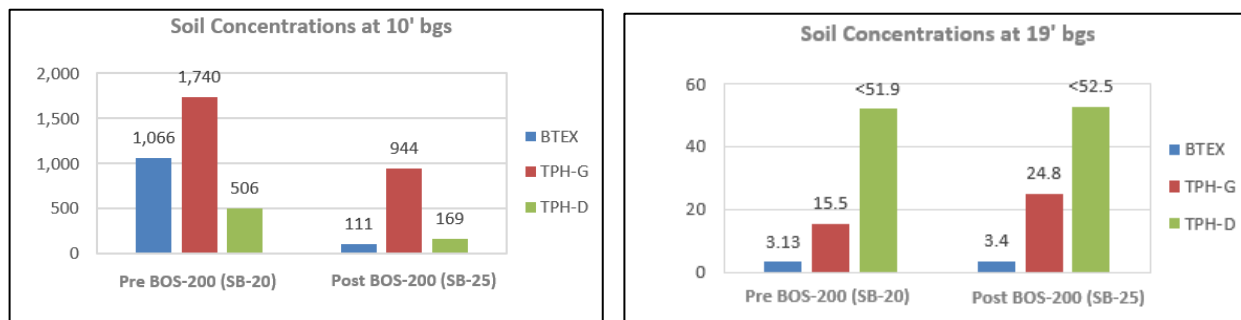


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Pre- and post-injection soil concentrations for BTEX, TPH-G, and TPH-D are shown in the graphs below for 10-feet and 19-feet bgs: SB-20 represents pre-injection data; SB-25 represents post-injection data.

Pre- and Post-BOS-200® Soil Comparison



Post-Injection Soil Results (10-feet bgs) – Adsorbed BTEX, TPH-G, and TPH-D concentrations (SB-25-10') decreased at 10-feet bgs following the remedial injection. Post-injection BTEX concentrations decreased approximately 90-percent, TPH-G by 46-percent, and TPH-D by 67-percent when compared with nearby SB-20 pre-injection concentrations. Preliminary sampling data indicates the BOS-200 injection facilitated immediate reduction of petroleum constituents at this depth interval with on-going microbial degradation occurring. Although immediate contaminant reduction occurred in this area following the remedial injection, ethylbenzene, total xylenes, and TPH-G remain above their respective MTCA Method A CULs as of October 2021. This indicates residual contaminant mass still remains in this area and additional monitoring is needed.

Post-Injection Soil Results (19-feet bgs) – Adsorbed benzene is the only constituent reported above its MTCA Method A CUL either before or after the remedial injection at 19-feet bgs. Preliminary soil results from post-injection probe hole SB-25 at 19-feet bgs indicate adsorbed concentrations of BTEX were approximately the same when compared with SB-20 pre-injection levels. Sampling results indicate that additional time may be needed for benzene attenuation to be observed, or alternatively, the remedial injection may have been less effective due to increased soil density, localized short circuiting, or preferential pathways within this deeper interval. It should be noted that soil density appears to increase with depth as observed in soil boring logs (n-values) and BOS-200 injection pressure field sheets (**Appendix F**). Injection pressures associated with deeper injection points (13 to 20-feet bgs) were approximately twice as high as shallow injections (5 to 12-feet bgs) at many locations during the remedial action.

5.2.2.2 Post-Injection Groundwater Evaluation

Stantec evaluated pre- and post-injection groundwater concentrations and calculated the percent reduction for petroleum analytes exceeding MTCA Method A CULs at wells located within the treatment area (DPE-4, DPE-5, and MW-13).

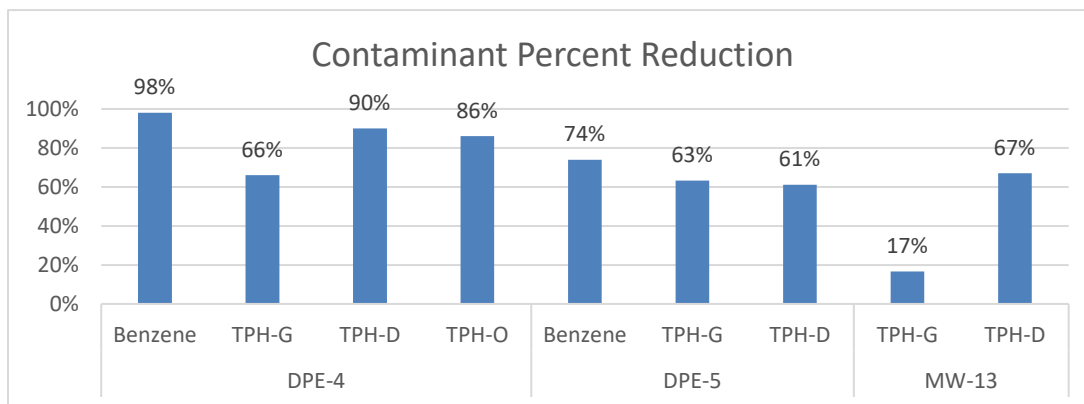


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Pre- and Post-BOS-200 Dissolved Concentration Comparison

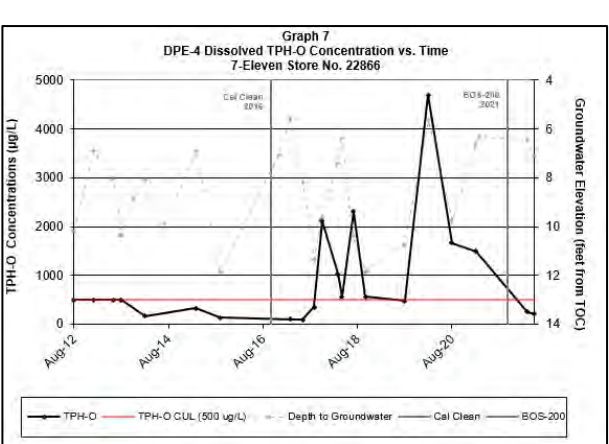
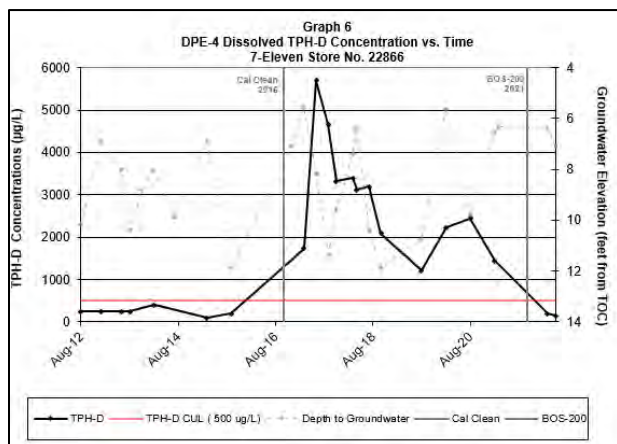
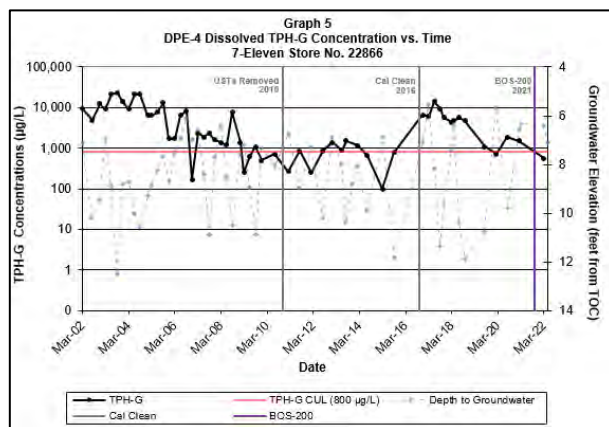
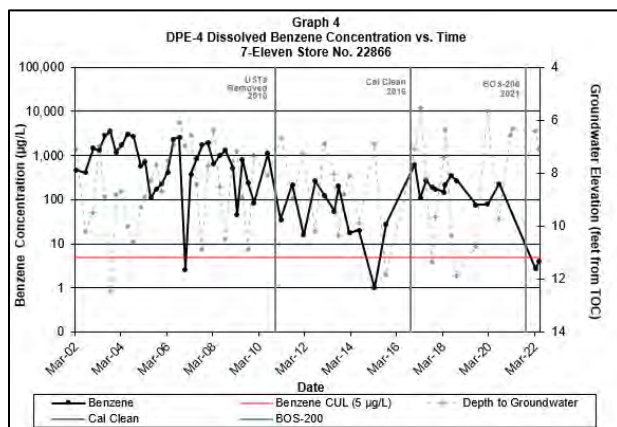
Well ID	Analyte	Pre-Injection Concentration (µg/l)	Post-Injection Concentration (µg/l)	Percent Reduction (%)	Currently Above MTCA Method A CUL?
DPE-4	Benzene	228	3.98	98%	No
	TPH-G	1,540	519	66%	No
	TPH-D	1,440	147	90%	No
	TPH-O	1,490	215	86%	No
DPE-5	Benzene	197	51	74%	Yes
	TPH-G	27,800	10,200	63%	Yes
	TPH-D	8,600	3,350	61%	Yes
MW-13	TPH-G	10,300	8,580	17%	Yes
	TPH-D	5,030	1,660	67%	Yes



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Post-injection dissolved phase analytical results indicate a significant reduction in petroleum concentrations following the remedial injection at all monitoring wells. The greatest reduction was observed at DPE-4 (as shown in **Graphs 4 through 7**, screen shots below). All petroleum related constituents at DPE-4 have been reported below MTCA Method A CULs for two consecutive quarters following the remedial injection.



Petroleum constituents remain above MTCA Method A CULs at DPE-5 and MW-13 following the remedial injection; however, contaminant reductions were observed at both wells as detailed above and concentration trends shown in **Graphs 8 through 15**.



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Updated Conceptual Site Model
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6.0 UPDATED CONCEPTUAL SITE MODEL

A Conceptual Site Model (CSM) was previously developed for the Site in the *Remedial Investigation and Interim Action Report* (dated November 7, 2017). An updated CSM is presented below based on more recent characterization results.

The CSM summarizes technical information about impacted media at the Site and evaluates potential exposure routes. The CSM identifies:

- The Area of Concern (AOC);
- Contaminants of concern;
- Potential sources of contamination;
- Potential migration pathways for contaminants of concern; and
- Potential environmental receptors.

This CSM has been prepared in general accordance with the American Society of Testing and Material Standard Guide E1689-95 (2003) *Developing Conceptual Site Models for Contaminated Sites*. The model is based on the data obtained in Site investigations to date, as described in **Section 4.0**.

6.1 AREA OF CONCERN

The AOC is defined as the lateral and vertical extent of contaminants exceeding MTCA Method A CULs in groundwater and soil beneath the Site. Site investigations indicate the AOC is located in the northern and central-eastern portion of the 7-Eleven Property. Soil and groundwater impacts extend to the south; however, this area (parcel A) is classified by Ecology as a separate release (former Fletcher Oil bulk loading and fueling dock area with former address of 14211 International Boulevard South).

6.2 POTENTIAL SOURCES OF CONTAMINATION

Potential sources of contamination are discussed in **Section 2.6** and briefly summarized below:

Site Operator	Approximate Years of Operation (Dates)	Source
Fletcher Oil	11 years (1955 to 1965)	Dispensing equipment located in the central-eastern portion of the Property. Loading docks were present on parcel A, south of the current 7-Eleven building.



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Site Operator	Approximate Years of Operation (Dates)	Source
Go-N-Joy	14 years (1966 to 1980)	Dispensing equipment located in the central portion of the Property, east of the 7-Eleven building.
7-Eleven	30 years (1981 to 2010)	Gasoline USTs and dispensing equipment located in the northern portion of the Property.

6.3 POTENTIAL CONSTITUENTS OF CONCERN

Potential Constituents of Concern (COCs), based on past and present use of the Site and existing soil and groundwater analytical data, include the compounds listed in the MTCA 173-340-900, Table 830-1 *Required Testing for Petroleum Releases* (Ecology 2007). The following table presents the potential sources of contamination and the corresponding potential COCs for the Site:

Potential Source	Potential COCs
Former 7-Eleven and Fletcher Oil USTs and distribution systems.	• BTEX • TPH-G • TPH-D • TPH-O • Total Lead • MTBE • EDC • EDB • Total Naphthalenes (naphthalene, 1-methylnaphthalene and 2-methylnaphthalene)

All potential COCs have been evaluated in soil and groundwater. COCs for the Site include: BTEX, TPH-G, TPH-D, TPH-O, EDB, and total naphthalenes. Additional detail regarding COCs is presented below.

- EDC and MTBE have never been detected above laboratory reporting limits in soil or groundwater samples. These analytes are not considered COCs for the Site.



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- Total lead has never been detected above MTCA Method A CULs in Site soil and has only been detected above MTCA Method A CULs in isolated groundwater samples. These isolated exceedances are attributed to sediment retained within the groundwater sampling container and not considered representative of actual groundwater quality at the Site. Dissolved lead has also been analyzed and all results have been reported below MTCA Method A CULs, providing further support that total lead is not a COC for the Site.
- TPH-D and TPH-O concentrations have been detected in Site groundwater above MTCA Method A CULs; however, according to historical records, 7-Eleven has never stored diesel fuel or waste oil at the Property. Based on Property history and usage, TPH-D and TPH-O impacts appear to originate from the Fletcher Oil and Go-N-Joy gasoline equipment. TPH-D and TPH-O are considered COCs at the Site.

6.4 CONTAMINANT OCCURRENCE AND MOVEMENT

6.4.1 Soil

Soil sampling indicates that all petroleum related COCs are currently below MTCA Method B CULs. Impacts have generally attenuated below MTCA Method A CULs in the northern portion of the Property but remain above MTCA Method A CULs east of the 7-Eleven building.

Lateral Delineation – Site soil is considered laterally defined to the north, east, and west. Adsorbed impacts to the south on parcel A appear to be undefined to the south. The current lateral extent of adsorbed MTCA Method A exceedances is shown on Figure 5. Lateral delineation for the Site is detailed in the table below.

Direction	Sample Providing Lateral Delineation	Year Collected	Justification for Delineation
North	MW-7	2012	All results non-detect
	SB-16	2021	All results below Method A CULs
	SB-17	2021	All results non-detect
	SB-18	2021	All results non-detect
East	MW-4A/4B	1996	All results non-detect
	SB-19	2021	All results non-detect
	MW-14	2021	All results non-detect
	MW-10	2015	All results below Method A CULs
	SB-23	2021	All results non-detect
West	MW-1A	1996	All results non-detect
	MW-9	2012	All results non-detect



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Vertical Delineation – Soil samples have historically been collected at depths ranging from 2 to 35-feet bgs. Recent sampling results indicate that petroleum related impacts exceeding MTCA Method A CULs are present from approximately 2.5- to 19-feet bgs. All Site-soil has been vertically delineated relative to MTCA Method A CULs, with the exception of two deep soil samples (SB-20-19 and SB-25-19 collected in 2021) which slightly exceeded the benzene MTCA Method A CUL. Given that (1) all Site soil is below Method B CULs, (2) benzene concentrations observed at SB-20 and SB-25 are low-level detections, and (3) nearby deeper soil samples from SB-13 at 20-feet bgs and SB-15 at 35-feet bgs were reported non-detect for all petroleum constituents **Stantec considers Site-soil to be vertically defined.**

Figures 4A and 4B present geologic cross-sections A-A' and B-B' with soil sample locations and analytical results for TPH-G.

6.4.2 Groundwater

Site groundwater is impacted with BTEX, EDB, total naphthalenes, TPH-G, TPH-D, and TPH-O above MTCA Method A CULs. Elevated COCs were first identified in 1996 during initial groundwater sampling at the Site. As observed in **Graphs 2 through 19**, dissolved petroleum concentrations have attenuated significantly since discovery of the release. The highest remaining concentration of dissolved COCs are in DPE-5 and MW-13 located east of the 7-Eleven building, near the pre-1980 dispensers.

Lateral Delineation – Dissolved COCs are defined to the north, east and west. Dissolved-phase impacts to the south are associated with former Fletcher Oil operations.

Direction	Sample Providing Lateral Delineation	Justification
North	MW-7	Every result below laboratory detection limits
	MW-2B	All results below Method A CULs since 2012
East	MW-4B	All results below Method A CULs since 2012
	DPE-2	Every result below laboratory detection limits
	MW-14	Every result below Method A CULs
	MW-10	All results below Method A CULs since July 2018
	DPE-6	Every result below Method A CULs
West	MW-1B	All results below Method A CULs since 2012
	MW-9	Every result below laboratory detection limits

6.4.3 Surface Water and Sediment

The closest body of surface water to the Site is the Duwamish River, located approximately 1.5-miles northeast of the Site. The Duwamish River flows generally to the northwest near the Site, releasing into Puget Sound approximately 5-miles north/northwest of the Site.



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No contaminated media has been identified at the ground surface, where contact with storm water runoff is possible, and all on-Site runoff is directed to catch basins, which are presumed to be connected to the City of Tukwila's sewer system. As such, there is no known impact to surface water resulting from the presence of known contamination on the Site.

6.4.4 Soil Vapor, Indoor Air, and Outdoor Air

Petroleum vapor intrusion risk has been evaluated and was previously reported in the *Vapor Intrusion Evaluation* (dated January 5, 2022). Site sampling included soil vapor, indoor, and outdoor air. Sampling results indicated that all analytes in sub-slab soil vapor were below screening levels. Benzene was detected inside the 7-Eleven building above the MTCA Method B indoor air CUL; however, based on sub-slab and outdoor air results Stantec concluded that chemicals in indoor air were likely the result of ambient air entering the building envelope and are not representative of vapor intrusion of subsurface chemicals to indoor air.

This previous data gap is considered closed and additional soil vapor sampling is not recommended in the future.

6.4.5 Natural Resources and Ecological Receptors

The Site is in an area of commercial and retail use and is covered entirely by a building or paved surfaces, except for a narrow strip of landscaping along the streets on the north and west perimeters. Plants on the Property are limited to grass and landscape shrubs. Similar conditions exist on neighboring developed properties, while undeveloped properties to the north and south feature grass, weeds, and invasive undergrowth. No wildlife species are known to be present at the Site or in the vicinity.

A Terrestrial Ecological Evaluation (TEE) with 500-foot radius map was previously prepared for the Site and submitted to Ecology. The Site is considered exempt from further evaluation and impacts associated with the Site do not present a risk to potential ecological receptors.

6.5 SUMMARY

The initial gasoline release was discovered in 1995. Groundwater sampling has been on-going and multiple characterization events have been completed since that time. Key takeaways summarizing the CSM include:

- Petroleum-related impacts associated with the 7-Eleven release (Site) are considered laterally and vertically defined. Petroleum impacts to the south (parcel A) are associated solely with historical Fletcher Oil operations and are considered a separate release/ERTS by Ecology.
- COC's for the Site include: BTEX, TPH-G, TPH-D, TPH-O, EDB, and total naphthalenes.
- The most recent characterization results (2021) indicate that all Site-soil has attenuated below MTCA Method B CULs.



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- The highest residual petroleum impacts to soil and groundwater remain east of the 7-Eleven building at the location of the pre-1980 dispensers. The 2021 pilot test injection was completed in this area and was successful at reducing both adsorbed and dissolved phase impacts. Dissolved phase impacts continue to exceed MTCA Method A CULs following the BOS-200 injection with the highest concentrations present at DPE-5 and MW-13. The highest remaining dissolved-phase benzene, TPH-G, and TPH-D concentrations are 51.4 µg/l, 10,200 µg/l, and 8,580 µg/l, respectively.
- Isolated dissolved oil concentrations in groundwater continue to exceed MTCA Method A CULs in the northern portion of the Property (near the former 7-Eleven USTs/dispensers), but all other dissolved petroleum constituents in this area have attenuated below MTCA Method A CULs.

Vapor intrusion has been evaluated and does not pose a risk at the Site.



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7.0 CONCLUSIONS AND RECOMMENDATIONS

This report has been prepared to document recent Site characterization and carbon-based, BOS-200 remedial injections. The remedial injections were performed as an interim action pilot test to evaluate the effectiveness of this cleanup approach. The scope of work as described in this report is summarized below.

Site Characterization – Additional site characterization was completed in January 2021 to better understand current contaminant distribution and contaminant concentrations. Sixteen (16) soil borings/wellbores were advanced at the Property and seven new groundwater monitoring wells were installed. Stantec personnel collected forty soil samples for certified laboratory analysis. An additional 66 soil samples were collected by the remediation subcontractor for remedial pilot test design and load sizing. Analytical results are discussed in **Section 4.2.1.2**.

BOS-200 Pilot Test – Carbon-based, BOS-200 with supplemental electron acceptors (gypsum) and facultative microbes were injected into the subsurface of the Property via 43 injections points in October 2021. At total of 6,400 pounds of carbon, 13 gallons of bacteria, and 3,200 pounds of gypsum were injected into the subsurface during the remedial pilot test. The BOS-200 remedial pilot test is discussed in **Section 5.2.1**.

Post-injection Soil Sampling – A post-injection, compliance soil sample was collected from SB-25 at 10- and 19-foot bgs in October 2021, immediately following the BOS-200® injection. This sample was collected near SB-20 which had the highest reported petroleum concentrations during Site characterization in January 2021. Post-injection soil results are discussed in **Sections 5.2.2.1**.

Groundwater Monitoring and Sampling – Groundwater analytical results from the first quarter 2021 through second quarter 2022 are included in this report to evaluate the BOS-200 remedial pilot test. Analytical results are discussed in **Sections 4.1.2** and **5.2.2.2** and are included in **Table 2** and **Figure 6**.

7.1 FINDINGS AND RECOMMENDED NEXT STEPS

- Soil Characterization – Recent characterization results indicate the Site is laterally and vertically defined and all petroleum constituents in soil have attenuated below MTCA Method B CULs. The highest residual soil impacts are located east of the 7-Eleven building. Additional drilling or soil sampling is not recommended at this time.

Soil in the northern area of the Property, near the former 7-Eleven USTs and dispensers, has generally attenuated below MTCA Method A CULs. Additional characterization is not recommended in this area of the Property.



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Gasoline-range MTCA Method A exceedances were reported at MW-17 near the former Fletcher Oil loading docks on parcel A, located south of the 7-Eleven building. Additional characterization may be warranted in this area to better define the lateral extent of impacts. However, based on the Property history this is not considered to be the responsibility of 7-Eleven, as these impacts represent a distinct/separate release and are classified as a separate ERTS site.

- **Remediation:** Additional remediation is recommended at the Site. Post-injection sampling results indicate adsorbed and dissolved phase petroleum constituents decreased following the BOS-200 injection for all target analytes. Post-injection soil sample SB-25-10' results indicated that adsorbed BTEX concentrations decreased approximately 90-percent, adsorbed TPH-G decreased by 46-percent, and adsorbed TPH-D decreased by 67-percent following the remedial injection. Similarly, dissolved phase constituents within the treatment area were reduced by approximately 69% following the remedial injection.

Stantec recommends additional of injections to further reduce contaminant concentrations in an effort to achieve cleanup standards. A similar but expanded injection footprint is recommended. Expansion of the injection footprint to the northern area of the Property (DPE-1 and DPE-10) and further south (DPE-7) will be evaluated to address isolated dissolved diesel and oil exceedances in these areas.

- **Groundwater Sampling** – Continued quarterly groundwater monitoring and sampling is recommended to evaluate dissolved trends and evaluate the long-term effects of the BOS-200 remedial injection. Select monitoring wells in the northern portion of the Property (DPE-1 and DPE-10) will continue to be analyzed for dissolved oil. In wells located east of the 7-Eleven building BTEX, TPH-G, TPH-D, TPH-O, nitrate, and sulfate will continue to be analyzed. Stantec may elect to periodically sample wells on parcel A (former Fletcher Oil loading dock area). If so, recommended analytes in this area would be limited to dissolved diesel and oil.

Soil Vapor: Soil vapor, indoor air and outdoor air have been previously evaluated as summarized in **Section 4.1.3**. Sampling results indicate that petroleum vapor intrusion does not pose a risk at the Site. Additional vapor intrusion assessment is not recommended.



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8.0 REFERENCES

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TABLES

TABLE 1
Soil Analytical Results - Petroleum Related Constituents
 7-Eleven Store No. 22866
 14207 International Boulevard, Tukwila, Washington
All concentrations in milligrams per kilogram (mg/kg)

Sample Description	Sample ID	Date	Depth (feet bgs)	PID reading	Benzene	Toluene	Ethyl- benzene	Total Xylenes	TPH-G	TPH-D	TPH-O	Lead	EDB	EDC	MTBE	Total Naphthalenes			Total Naphthalenes
																Naphthalene	1-Methyl Naph	2-Methyl Naph	
Restore Letter Report, October 1995																			
Stage II Upgrade Samples	D1-2'	10/30/95	2	--	0.57	22	12	120	1,300	--	--	26	--	--	--	--	--	--	--
	D2-2'	10/30/95	2	--	<0.05 ^f	0.45	0.51	1.8	14	--	--	26	--	--	--	--	--	--	--
	LS1-2'	10/30/95	2	--	<0.05 ^f	<0.05	<0.05	0.11	12	--	--	18	--	--	--	--	--	--	--
	TP1-2'	10/30/95	2	--	<0.05 ^f	0.51	<0.05	<0.10	7.9	--	--	15	--	--	--	--	--	--	--
Site Assessment Report, March 1996																			
Groundwater Monitoring Wells	MW-1A-7-8.5	3/26/96	7-8.5	--	<0.05 ^f	<0.05	<0.05	<0.10	<1.0	--	--	<10	--	--	--	--	--	--	--
	MW-1A-32.5-34	3/26/96	32.5-34	--	<0.05 ^f	<0.05	<0.05	<0.10	<1.0	--	--	--	--	--	--	--	--	--	--
	MW-2A-2.5-4	3/27/96	2.5-4	--	<0.05 ^f	<0.05	<0.05	<0.10	<1.0	--	--	<10	--	--	--	--	--	--	--
	MW-2A-32.5-34	3/27/96	32.5-34	--	<0.05 ^f	<0.05	<0.05	<0.10	<1.0	--	--	<10	--	--	--	--	--	--	--
	MW-3A-2.5-4	3/27/96	2.5-4	--	<0.05 ^f	<0.05	<0.05	<0.10	<1.0	--	--	<10	--	--	--	--	--	--	--
	MW-3A-12.5-14	3/27/96	12.5-14	--	<0.05 ^f	<0.05	<0.05	<0.10	<1.0	--	--	<10	--	--	--	--	--	--	--
	MW-3A-32.5-34	3/27/96	32.5-34	--	0.45	<0.05	0.096	0.28	7.4	--	--	<10	--	--	--	--	--	--	--
Site Assessment Report, October 1996																			
Groundwater Monitoring Wells	MW-4B	10/30/96	5-6.5	--	<0.05 ^f	<0.05	<0.05	<0.10	<5.0	--	--	<10	--	--	--	--	--	--	--
	MW-4A	10/30/96	10-11.5	--	<0.05 ^f	<0.05	<0.05	<0.10	<5.0	--	--	<10	--	--	--	--	--	--	--
	MW-4A	10/30/96	15-16.5	--	<0.05 ^f	<0.05	<0.05	<0.10	<5.0	--	--	<10	--	--	--	--	--	--	--
	MW-5B	10/30/96	5-6.5	--	5.41	3.73	34.1	98.1	2,820	--	--	32.5	--	--	--	--	--	--	--
	MW-5B	10/30/96	10-11.5	--	<0.10	<0.10	<0.10	<0.20	<10	--	--	<10	--	--	--	--	--	--	--
	MW-5A	10/30/96	7.5-9	--	<5.0	5.69	33.0	118	3,900	--	--	18.0	--	--	--	--	--	--	--
	MW-5A	10/30/96	12.5-14	--	17.3	66.6	78.2	539	7,910	--	--	14.3	--	--	--	--	--	--	--
	MW-5A	10/30/96	15-16.5	--	0.265	0.265	0.588	3.79	56.0	--	--	11.8	--	--	--	--	--	--	--
IT Corporation, Inc., November 1999																			
Soil Borings	B1	11/29/99	5	--	<0.05 ^f	<0.05	<0.05	<0.05	<10	--	--	--	--	--	--	--	--	--	--
	B1	11/29/99	10	--	<0.05 ^f	0.06	<0.05	<0.05	<10	--	--	--	--	--	--	--	--	--	--
	B2	11/29/99	5	--	<0.05 ^f	0.06	<0.05	<0.05	<10	--	--	--	--	--	--	--	--	--	--
	B2	11/29/99	10	--	<0.05 ^f	<0.05	0.19	0.19	<10	--	--	--	--	--	--	--	--	--	--
	B3	11/29/99	5	--	20	48	100	580	4,300	--	--	--	--	--	--	--	--	--	--
	B3	11/29/99	10	--	4	3.2	11	56	400	--	--	--	--	--	--	--	--	--	--
	B4	11/29/99	5	--	<0.05 ^f	<0.05	<0.05	0.11	<10	--	--	--	--	--	--	--	--	--	--
	B4	11/29/99	10	--	1	1	1.7	6.6	60	--	--	--	--	--	--	--	--	--	--
	B5	11/29/99	5	--	<0.05 ^f	<0.05	<0.050	0.09	<10	--	--	--	--	--	--	--	--	--	--
	B5	11/29/99	10	--	<0.05 ^f	<0.05	<0.05	<0.05	<10	--	--	--	--	--	--	--	--	--	--
	B6	11/29/99	5	--	<0.05 ^f	<0.05	<0.05	<0.05	<10	--	--	--	--	--	--	--	--	--	--
	B6	11/29/99	10	--	<0.05 ^f	<0.05	<0.05	<0.05	<10	--	--	--	--	--	--	--	--	--	--
IT Corporation, Inc., August 2000																			
Soil Boring	B-1-5'	8/17/00	5	--	1.59	10.1	33	173	2,850	--	--	--	--	--	--	--	--	--	--
MTCA Method A Soil CULs for Unrestricted Land Uses				--	0.03	7	6	9	30/100 ^b	2,000	2,000	250	0.005	NR	0.1	5			5
MTCA Method B Soil CULs for Unrestricted Land Uses				--	18.2	6,400	8,000	16,000	2,992			250	0.5	11	0.1	1,600	35	320	5

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 All concentrations in milligrams per kilogram (mg/kg)

Sample Description	Sample ID	Date	Depth (feet bgs)	PID reading	Benzene	Toluene	Ethyl- benzene	Total Xylenes	TPH-G	TPH-D	TPH-O	Lead	EDB	EDC	MTBE	Total Naphthalenes			Total Naphthalenes
																Naphthalene	1-Methyl Naph	2-Methyl Naph	
SECOR International, Inc., December 2004																			
Soil Borings	BH-1	12/14/04	8	--	<0.020	<0.041	<0.041	<0.082	<4.1	--	--	--	--	--	--	--	--	--	--
	BH-2	12/14/04	6	--	0.2	<0.95	12	36.3	1,900	--	--	--	--	--	--	--	--	--	--
	BH-2	12/14/04	8	--	1.8	1.7	73	236 ^a	5,400	--	--	--	--	--	--	--	--	--	--
	BH-3	12/14/04	6	--	<0.020	<0.059	0.23	0.27	95	--	--	--	--	--	--	--	--	--	--
	BH-3	12/14/04	8.5	--	<0.020	<0.048	<0.048	<0.096	14	--	--	--	--	--	--	--	--	--	--
	BH-4	12/14/04	4.5	--	<0.020	<0.048	<0.048	<0.096	<4.8	--	--	--	--	--	--	--	--	--	--
	BH-4	12/14/04	6	--	<0.020	<0.045	<0.045	<0.090	<4.5	--	--	--	--	--	--	--	--	--	--
	BH-4	12/14/04	8	--	<0.020	<0.057	<0.057	<0.114	<5.7	--	--	--	--	--	--	--	--	--	--
	BH-5	12/14/04	4.5	--	0.10	<0.085	1.5	7.0	100	--	--	--	--	--	--	--	--	--	--
	BH-5	12/14/04	7	--	1.7	4.9	49	263	3,300	--	--	--	--	--	--	--	--	--	--
	BH-6	12/14/04	6	--	<0.020	<0.049	<0.049	<0.098	<4.9	--	--	--	--	--	--	--	--	--	--
	BH-6	12/14/04	8	--	<0.020	<0.047	<0.047	<0.094	<4.7	--	--	--	--	--	--	--	--	--	--
BH-7	12/14/04	7	--	0.84	26	5.3	217 ^a	3,100	--	--	--	--	--	--	--	--	--	--	
BH-8	12/14/04	6	--	<0.020	<0.058	<0.058	<0.116	<5.8	--	--	--	--	--	--	--	--	--	--	
UST Removal Activities, Stantec Consulting Corporation, November 2010																			
Sidewall Samples	SS-1@12'	11/2/10	12	276	0.095	<0.05	0.15	0.42	4.1	--	--	--	--	--	--	--	--	--	--
	SS-2@12'	11/3/10	12	2,610	<0.3	<0.5	32	88	4,400	--	--	--	--	--	--	--	--	--	--
	SS-3@12'	11/3/10	12	83.2	0.25	0.078	<0.05	<0.2	6.2	--	--	--	--	--	--	--	--	--	--
	SS-4@12'	11/3/10	12	931	0.23	<0.05	0.84	2.0	260	--	--	--	--	--	--	--	--	--	--
Soil Stockpile Samples	SP-1	10/27/10	--	451	0.19	<0.05	<0.05	<0.2	3.3	--	--	--	--	--	--	--	--	--	--
	SP-2	11/2/10	--	875	1.2	0.94	0.81	6.3	16	--	--	--	--	--	--	--	--	--	--
	SP-3 ^c	11/2/10	--	2,226	<3	<5	40	222	5,000	--	--	--	--	--	--	--	--	--	--
	SP-4	11/2/10	--	475	0.86	0.16	0.083	0.23	12	--	--	--	--	--	--	--	--	--	--
	SP-5	11/2/10	--	275	2.7	0.29	0.23	0.54	17	--	--	--	--	--	--	--	--	--	--
Product Line Samples	PL-1@2'	11/3/10	2	643	0.37	2.5	0.98	5.6	66	--	--	--	--	--	--	--	--	--	--
	PL-2@2'	11/3/10	2	248	0.41	<0.05	0.11	0.17	17	--	--	--	--	--	--	--	--	--	--
Dispenser Island Samples	DP-1@2'	11/3/10	2	25.2	<0.03	<0.05	<0.05	0.16	8.3	--	--	--	--	--	--	--	--	--	--
	DP-2@2'	11/3/10	2	90.6	<0.03	<0.05	<0.05	<0.2	9.4	--	--	--	--	--	--	--	--	--	--
Subsurface Investigation, December 2012																			
Groundwater Monitoring Wells	MW-7@5'	12/13/12	5	0.7	<0.02	<0.02	<0.02	<0.06	<2	<50	<250	--	--	--	--	--	--	--	--
	MW-7@10'	12/14/12	10	0.7	<0.02	<0.02	<0.02	<0.06	<2	<50	<250	--	--	--	--	--	--	--	--
	MW-7@15'	12/14/12	15	0.5	<0.02	<0.02	<0.02	<0.06	<2	<50	<250	--	--	--	--	--	--	--	--
	SB-8@12.5' ^d	12/13/12	12.5	82.5	<0.02	0.07	<0.02	0.52	45	<50	<250	--	<0.005	<0.05	<0.05	<0.01	0.012	0.022	0.034
	MW-9@5'	12/13/12	5	0.6	<0.02	<0.02	<0.02	<0.06	<2	<50	<250	--	--	--	--	--	--	--	--
	MW-9@10'	12/14/12	10	0.2	<0.02	<0.02	<0.02	<0.06	<2	<50	<250	--	--	--	--	--	--	--	--
MW-9@15'	12/14/12	15	0.3		<0.02	<0.02	<0.02	<0.06	<2	<50	<250	--	--	--	--	--	--	--	--
MTCA Method A Soil CULs for Unrestricted Land Uses					0.03	7	6	9	30/100 ^b	2,000	2,000	250	0.005	--	0.1	5			5
MTCA Method B Soil CULs for Unrestricted Land Uses					18.2	6,400	8,000	16,000	2,992			250	0.5	11	0.1	1,600	35	320	5

TABLE 1
Soil Analytical Results - Petroleum Related Constituents
 7-Eleven Store No. 22866
 14207 International Boulevard, Tukwila, Washington
All concentrations in milligrams per kilogram (mg/kg)

Sample Description	Sample ID	Date	Depth (feet bgs)	PID reading	Benzene	Toluene	Ethyl- benzene	Total Xylenes	TPH-G	TPH-D	TPH-O	Lead	EDB	EDC	MTBE	Total Naphthalenes			Total Naphthalenes
																Naphthalene	1-Methyl Naph	2-Methyl Naph	
Subsurface Investigation, November 2015																			
Monitoring Well	MW-10-10'	11/5/15	10	61	0.00230	0.00373	0.00527	0.0174	<4.63	<4.50	<4.50	--	--	--	--	--	--	--	--
	MW-10-15'	11/5/15	15	33	<0.00167	<0.00167	0.00239	0.00855	<4.96	<4.39	<4.39	--	--	--	--	--	--	--	--
Soil Borings	SB-10-6'	11/5/15	6	199	0.0755	0.0184	0.650 ^a	0.144	171	<4.87	12.3	--	--	--	--	--	--	--	--
	SB-10-12'	11/5/15	12	5	0.00418	0.00155	0.00310	0.00640	<5.44	<4.67	<4.67	--	--	--	--	--	--	--	--
	SB-11-10'	11/5/15	10	>5,000	<0.00185	0.0114	5.41	26.2	1,300	30.3	<5.03	--	<0.00185	<0.00185	<0.00185	0.158	0.202	0.369	0.729
	SB-11-15'	11/5/15	15	0	<0.00152	<0.00152	<0.00152	<0.00455	5.11	<4.57	<4.57	--	--	--	--	--	--	--	--
	SB-12-8'	11/5/15	8	1,880	<0.0874 ^f	0.133	19.5	97.9	1,530	32.2	<4.36	--	<0.0874	<0.0874	<0.0874	0.303	0.149	0.285	0.737
	SB-12-15'	11/5/15	15	9	<0.00159	<0.00159	<0.00159	<0.00478	<4.55	<4.40	<4.40	--	--	--	--	--	--	--	--
	SB-13-6'	11/5/15	6	1,575	8.74	210	82.5	456	1,680	35.7	11.5	--	<1.70 ^f	<1.70	<1.70 ^f	0.136	0.0887	0.185	0.4097
	SB-13-12'	11/5/15	12	911	1.09	8.93	4.73	23.2	129	<4.46	<4.46	--	--	--	--	--	--	--	--
	SB-13-20'	11/5/15	20	7	0.00573	<0.00177	0.00388	0.00722	<4.45	<4.34	<4.34	--	--	--	--	--	--	--	--
	SB-14-6'	11/5/15	6	1,524	0.00972	<0.00159	3.41	8.92	632	282	<9.13	--	<0.00159	<0.00159	<0.00159	2.70	2.60	4.25	9.55
	SB-14-12'	11/5/15	12	12	0.00259	<0.00165	0.0221	0.0396	7.22	<4.24	<4.24	--	--	--	--	--	--	--	--
	SB-14-20'	11/5/15	20	15	<0.00167	<0.00167	0.00468	0.0103	<4.95	<4.39	<4.39	--	--	--	--	--	--	--	--
	SB-15-6'	11/5/15	6	8	<0.00172	0.00345	0.00257	0.0110	<3.97	<4.43	5.47	--	--	--	--	--	--	--	--
	SB-15-35'	11/5/15	35	2	0.00200	0.00389	0.00264	0.0109	<6.44	<5.26	<5.26	--	--	--	--	--	--	--	--
Well Decommissioning and Installation, May 2016																			
Well Installation	DPE-9-10'	5/10/16	10	6.3	0.00652	<0.000840	<0.000840	<0.00210	5.22	<3.98	<3.98	4.14	--	--	--	--	--	--	--
	DPE-9-15'	5/10/16	15	3.1	<0.000840	<0.000840	<0.000840	<0.00210	<5.47	<3.94	<3.94	4.62	--	--	--	--	--	--	--
	DPE-10-10'	5/10/16	10	134	0.506	0.0110	0.175	0.0247	91.6	5.17	9.07	12.7	--	--	--	--	--	--	--
	DPE-10-15.5'	5/10/16	15.5	28.4	0.846	0.0124	0.106	0.0415	7.45	<3.99	<3.99	4.22	--	--	--	--	--	--	--
Subsurface Investigation and Well Installation, January 2021																			
Soil Boring and Well Installation Samples	SB-16-10	1/7/21	10	30	0.00249	<0.00768	<0.00154	<0.00768	<3.02	<53.2	<53.2	8.48	<0.000768	<0.000768	<0.00154	<0.00542	0.0101	0.0143	0.0244
	SB-16-17	1/7/21	17	2.2	<0.00186	<0.00929	0.00255	0.0117	<3.51	<53.2	<53.2	--	--	--	--	--	--	--	--
	SB-17-10	1/7/21	10	0.5	<0.00262	<0.0131	<0.00262	<0.0131	<3.12	<56.7	<56.7	--	--	--	--	--	--	--	--
	SB-17-15	1/7/21	15	0.7	<0.00181	<0.00907	<0.00181	<0.00907	<4.73	<53.0	<53.0	--	--	--	--	--	--	--	--
	SB-18-10	1/7/21	10	0.6	<0.00213	<0.0107	<0.00213	<0.0107	<3.71	<55.6	<55.6	--	--	--	--	--	--	--	--
	SB-18-15	1/7/21	15	0.4	<0.00191	<0.00957	<0.00191	<0.00957	<3.52	<53.3	<53.3	--	--	--	--	--	--	--	--
	SB-19-10	1/7/21	10	0.2	<0.00193	<0.00965	<0.00193	<0.00965	<3.64	<53.0	<53.0	--	--	--	--	--	--	--	--
	SB-19-15	1/7/21	15	0.3	<0.00203	<0.0102	<0.00203	<0.0102	<4.28	<57.1	<57.1	--	--	--	--	--	--	--	--
	SB-20-5	1/5/21	5	120	0.00397	<0.0102	0.0438	<0.0102	61.1	66.1	<59.2	10.3	<0.00102	<0.00102	<0.00204	0.898	0.316	0.844	2.058
	SB-20-10	1/6/21	10	3,205	2.86	137	121	805	1,740	506	<56.6	6.93	0.00165	<0.000843	<0.00168	9.35	4.21	8.01	21.57
	SB-20-19	1/6/21	19	165	0.0725	0.376	0.391	2.29	15.5	<51.9	<51.9	2.89	<0.000840	<0.000840	<0.00168	0.121	0.0463	0.105	0.2723
	SB-21-10	1/6/21	10	170	<0.00162	<0.00812	0.00262	0.0121	103	<56.9	<56.9	10.7	<0.000812	<0.000812	<0.00162	0.0630	0.0787	0.0968	0.2385
MTCA Method A Soil CULs for Unrestricted Land Uses					0.03	7	6	9	30/100 ^b	2,000	2,000	250	0.005	--	0.1	5			5
MTCA Method B Soil CULs for Unrestricted Land Uses					18.2	6,400	8,000	16,000	2992 ^a			250	0.5	11	0.1	1,600	35	320	5

TABLE 1
Soil Analytical Results - Petroleum Related Constituents
 7-Eleven Store No. 22866
 14207 International Boulevard, Tukwila, Washington
All concentrations in milligrams per kilogram (mg/kg)

Sample Description	Sample ID	Date	Depth (feet bgs)	PID reading	Benzene	Toluene	Ethyl- benzene	Total Xylenes	TPH-G	TPH-D	TPH-O	Lead	EDB	EDC	MTBE	Total Naphthalenes			Total Naphthalenes
																Naphthalene	1-Methyl Naph	2-Methyl Naph	
Subsurface Investigation and Well Installation, January 2021																			
Soil Boring and Well Installation Samples	SB-21-15	1/6/21	15	1,820	<0.00191	<0.00955	0.263	0.200	28.1	<57.2	<57.2	3.58	<0.000955	<0.000955	<0.00191	0.159	0.227	0.481	0.867
	SB-21-18	1/6/21	18	15	<0.00149	<0.00745	0.00241	<0.00745	<3.31	<51.3	<51.3	--	--	--	--	--	--	--	--
	SB-22-10	1/6/21	10	61	<0.00137	<0.00685	0.00215	0.00887	<3.11	<57.0	<57.0	3.89	<0.000685	<0.000685	<0.00137	0.0905	0.0126	0.0278	0.1309
	SB-22-15	1/6/21	15	2.1	<0.00156	<0.00781	<0.00156	<0.00781	<3.35	<56.1	<56.1	--	--	--	--	--	--	--	--
	SB-23-10	1/6/21	10	2.5	<0.00165	<0.00823	<0.00165	<0.00823	<3.95	<55.6	<55.6	--	--	--	--	--	--	--	--
	SB-23-15	1/6/21	15	1.8	<0.00191	<0.00955	<0.00191	<0.00955	<3.59	<51.0	<51.0	--	--	--	--	--	--	--	--
	SB-24-2.5	1/4/21	2.5	145	0.00470	<0.0114	0.0215	0.0658	157	353	1,510	98.8	<0.00114	<0.00114	<0.00228	0.511	0.563	1.04	2.114
	SB-24-5	1/4/21	5	55	<0.00196	<0.00979	0.00214	0.0157	15.9	<58.1	<58.1	6.67	<0.000979	<0.000979	<0.00196	0.0153	<0.00575	0.00935	0.02465
	SB-24-8	1/5/21	8	147	<0.00161	<0.00806	<0.00161	<0.00806	319	143	<56.9	6.74	<0.000806	<0.000806	<0.00161	0.0404	0.0478	0.0106	0.0988
	SB-24-15	1/5/21	15	1.2	<0.00167	<0.00833	<0.00167	<0.00833	10.1	<59.2	<59.2	--	--	--	--	--	--	--	--
	MW-11-10	1/7/21	10	40	0.00442	<0.0120	0.00310	<0.0120	30.3	<54.8	<54.8	6.78	<0.00120	<0.00120	<0.00239	1.25	0.641	1.49	3.381
	MW-11-15	1/7/21	15	15	0.00671	<0.00967	0.00355	<0.00967	<4.83	<51.3	<51.3	--	--	--	--	--	--	--	--
	MW-11-18	1/7/21	18	10	0.00395	<0.00638	<0.00128	<0.00638	<3.42	<57.5	<57.5	--	--	--	--	--	--	--	--
	MW-12-10	1/7/21	10	1.2	<0.00170	<0.00852	<0.00170	<0.00852	<3.50	<55.3	<55.3	--	--	--	--	--	--	--	--
	MW-12-15	1/7/21	15	0.6	<0.00194	<0.00968	<0.00194	<0.00968	<3.27	<56.3	<56.3	--	--	--	--	--	--	--	--
	MW-13-12	1/6/21	12	420	<0.00137	<0.00686	1.28	1.88	19.6	164	<56.1	4.81	<0.000686	<0.000686	<0.00137	0.615	0.420	0.903	1.938
	MW-13-15	1/6/21	15	56	0.00358	<0.00876	1.96	0.0804	11.4	<51.7	<51.7	2.90	<0.000876	<0.000876	<0.00175	0.428	0.0616	0.114	0.6036
	MW-13-20	1/6/21	20	16	<0.00146	<0.00731	0.0119	0.0184	<3.38	<52.0	<52.0	--	--	--	--	--	--	--	--
	MW-14-10	1/6/21	10	5.5	<0.00151	<0.00755	<0.00151	<0.00755	<3.60	<55.4	<55.4	--	--	--	--	--	--	--	--
	MW-14-15	1/6/21	15	2.5	<0.00179	<0.00893	<0.00179	<0.00893	<8.41	<52.8	<52.8	--	--	--	--	--	--	--	--
	MW-15-10	1/5/21	10	1.0	<0.00165	<0.00823	<0.00165	<0.00823	<3.70	<57.3	<57.3	--	--	--	--	--	--	--	--
	MW-15-15	1/5/21	15	0.5	<0.00305	<0.0152	<0.00305	<0.0152	<4.09	<51.5	<51.5	--	--	--	--	--	--	--	--
	MW-16-11	1/5/21	11	17	<0.00179	<0.00896	<0.00179	<0.00896	44.8	55.2	<54.6	--	--	--	--	--	--	--	--
	MW-16-15	1/5/21	15	1.9	<0.00182	<0.00910	<0.00182	<0.00910	<4.08	<50.4	<50.4	--	--	--	--	--	--	--	--
	MW-17-2.5	1/4/21	2.5	120	<0.00175	<0.00876	<0.00175	<0.00876	409	804	<51.2	5.15	<0.000876	<0.000876	<0.00175	0.0953	1.38	0.436	1.9113
	MW-17-5	1/4/21	5	95	<0.00183	<0.00917	<0.00183	<0.00917	281	591	<57.0	5.01	<0.000917	<0.000917	<0.00183	0.0390	0.230	0.0426	0.3116
	MW-17-12	1/5/21	12	34	<0.00155	<0.00776	<0.00155	<0.00776	224	364	<52.8	--	--	--	--	--	--	--	--
	MW-17-15	1/5/21	15	1.5	<0.00150	<0.00752	<0.00150	<0.00752	5.15	<55.5	<55.5	--	--	--	--	--	--	--	--
Pilot Test September 2021																			
Post-Injection	SB-25-10	10/14/21	10	1520	<0.299	<0.897	16.2	93.2	944	169	<56.5	--	--	--	--	--	--	--	--
Soil Sample	SB-25-19	10/14/21	19	30	0.189	<0.0772	0.636	2.50	24.8	<52.5	<52.5	--	--	--	--	--	--	--	--
MTCA Method A Soil CULs for Unrestricted Land Uses					0.03	7	6	9	30/100 ^b	2,000	2,000	250	0.005	--	0.1	5			5
MTCA Method B Soil CULs for Unrestricted Land Uses					18.2	6,400	8,000	16,000	2992 ^a			250	0.5	11	0.1	1,600	35	320	5

Explanation of Abbreviations:

-- indicates that sample location was removed during excavation.

bgs = below ground surface

TPH = total petroleum hydrocarbons

Naph = Naphthalene

Total Naphthalenes = Sum of naphthalene, 1-methyl naphthalene, and 2-methyl naphthalene

TPH-G = total petroleum hydrocarbons in the gasoline range

< = reported result is below laboratory practical quantitation limit

MTCA = Model Toxics Control Act

CULs = Cleanup levels

TABLE 1
Soil Analytical Results - Petroleum Related Constituents
 7-Eleven Store No. 22866
 14207 International Boulevard, Tukwila, Washington
All concentrations in milligrams per kilogram (mg/kg)

Sample Description	Sample ID	Date	Depth (feet bgs)	PID reading	Benzene	Toluene	Ethyl- benzene	Total Xylenes	TPH-G	TPH-D	TPH-O	Lead	EDB	EDC	MTBE	Total Naphthalenes			Total Naphthalenes
																Naphthalene	1-Methyl Naph	2-Methyl Naph	

Notes:

- ^a = The value reported for m,p-xylene exceeds the quantitation range and is an estimate.
- ^b = Gasoline mixtures without benzene and where the total of ethylbenzene, toluene, and xylene are less than 1% of the gasoline mixture have a cleanup level of 100 mg/kg; all other mixtures are 30 mg/kg.
- ^c = Diluted sample. The original sample results were estimated concentrations calculated for an analyte response above the valid instrument calibration range.
- ^d = MW-8 is equivalent to SB-8.
- ^e = Result exceeded calibration range.
- ^f = Reporting limit exceeded the MTCA Method A CUL
- ^g = The Method B CUL for TPH was calculated using volatile and extractable petroleum hydrocarbon fraction results (Table 1B) and the MTCATPH 11.1 workbook calculator. The calculated value (2,992 mg/kg) represents the combined cleanup level for TPH-G, TPH-D and TPH-O.
- ^h = MS and/or MSD recovery exceeds control limits
- ⁱ = Sample was prepped or analyzed beyond the specified holding time.
- ^j = Due to a Eurofins Test America laboratory sample refrigeration problem, ethylbenzene was detected in the storage blank and may have yielded a biased high result for ethylbenzene in soil sample SB-25-19 (580-106685-2).
- Bold** = results exceed MTCA Method A screening level
- 3,300** = The sample result initially exceeded the Site-specific Method B CUL; however, the sample has been removed from the Site or has since degraded below the Site-specific Method B CUL (as confirmed by more recent soil sampling results).

TABLE 2
GROUNDWATER MONITORING AND ANALYTICAL RESULTS - Petroleum Related Constituents
 7-Eleven Store #22866
 14207 International Boulevard, Tukwila, Washington
 All results in micrograms per liter (µg/L)

Well ID (TOC)	Sample Date	Benzene	Toluene	Ethyl-benzene	Total Xylenes	TPH-G	TPH-D	TPH-O	MTBE	EDB	EDC	Total Naphthalenes	Total Lead	Dissolved Lead	Depth To Groundwater (feet from TOC)	Groundwater Elevation (feet)
MW-1A 299.50	04/10/96	<0.5	<0.5	<0.5	<0.1	<50	---	---	---	---	---	---	<2.0	---	---	---
	05/09/96	---	---	---	---	---	---	---	---	---	---	---	---	---	7.70	291.80
	11/07/96	0.869	2.05	<0.5	<0.1	<50	---	---	---	---	---	---	6.31	---	9.91	289.59
	03/18/97	---	---	---	---	---	---	---	---	---	---	---	---	---	6.99	292.51
	06/10/97	---	---	---	---	---	---	---	---	---	---	---	---	---	7.90	291.80
	09/11/97	---	---	---	---	---	---	---	---	---	---	---	---	---	9.99	289.51
	12/04/97	---	---	---	---	---	---	---	---	---	---	---	---	---	8.80	290.70
	03/17/98	---	---	---	---	---	---	---	---	---	---	---	---	---	7.79	291.71
	06/03/98	---	---	---	---	---	---	---	---	---	---	---	---	---	9.20	290.30
	09/22/98	---	---	---	---	---	---	---	---	---	---	---	---	---	11.06	288.44
	12/08/98	---	---	---	---	---	---	---	---	---	---	---	---	---	8.22	291.28
	03/18/99	---	---	---	---	---	---	---	---	---	---	---	---	---	7.32	292.18
	06/08/99	---	---	---	---	---	---	---	---	---	---	---	---	---	8.45	291.05
	09/30/99	---	---	---	---	---	---	---	---	---	---	---	---	---	10.21	289.29
	12/13/99	---	---	---	---	---	---	---	---	---	---	---	---	---	8.80	290.70
	03/01/00	---	---	---	---	---	---	---	---	---	---	---	---	---	8.10	291.40
	06/06/00	---	---	---	---	---	---	---	---	---	---	---	---	---	8.89	290.61
	08/17/00	---	---	---	---	---	---	---	---	---	---	---	---	---	10.03	289.47
	10/12/00	---	---	---	---	---	---	---	---	---	---	---	---	---	10.76	288.74
	01/17/01	---	---	---	---	---	---	---	---	---	---	---	---	---	9.79	289.71
	02/09/01	---	---	---	---	---	---	---	---	---	---	---	<5*	---	---	---
	04/17/01	---	---	---	---	---	---	---	---	---	---	---	---	---	8.91	290.59
	09/21/01	---	---	---	---	---	---	---	---	---	---	---	---	---	10.07	289.43
	10/23/01	---	---	---	---	---	---	---	---	---	---	---	---	---	10.94	288.56
	12/17/01	---	---	---	---	---	---	---	---	---	---	---	---	---	9.69	289.81
	03/14/02	<0.5	<1.0	<1.0	<1.0	<100	---	---	---	---	---	---	---	---	6.98	292.52
	08/22/02	---	---	---	---	---	---	---	---	---	---	---	---	---	10.85	288.65
	12/23/02	---	---	---	---	---	---	---	---	---	---	---	---	---	10.77	288.73
	03/13/03	<1.0	<1.0	<1.0	<2.0	<100	---	---	---	---	---	---	---	---	7.87	291.63
	06/05/03	---	---	---	---	---	---	---	---	---	---	---	---	---	9.59	289.91
	09/16/03	---	---	---	---	---	---	---	---	---	---	---	---	---	13.16	286.34
	12/05/03	---	---	---	---	---	---	---	---	---	---	---	---	---	9.62	289.88
	03/22/04	5.3	<1.0	<1.0	<2.0	<100	---	---	---	---	---	---	---	---	9.48	290.02
	06/03/04	---	---	---	---	---	---	---	---	---	---	---	---	---	10.70	288.80
	09/22/04	---	---	---	---	---	---	---	---	---	---	---	---	---	11.40	288.10
	01/04/05	---	---	---	---	---	---	---	---	---	---	---	---	---	10.21	289.29
299.02	03/31/05	<1.0	<1.0	<1.0	<2.0	<100	---	---	---	---	---	---	---	---	10.10	288.92
	06/24/05	---	---	---	---	---	---	---	---	---	---	---	---	---	9.84	289.18
	09/12/05	---	---	---	---	---	---	---	---	---	---	---	---	---	8.69	290.33
	03/14/06	<1.0	<1.0	<1.0	<2.0	<100	---	---	---	---	---	---	---	---	8.35	290.67
	06/15/06	---	---	---	---	---	---	---	---	---	---	---	---	---	7.46	291.56
	09/13/06	---	---	---	---	---	---	---	---	---	---	---	---	---	6.11	292.91
	12/13/06	---	---	---	---	---	---	---	---	---	---	---	---	---	8.82	290.20
	03/30/07	---	---	---	---	---	---	---	---	---	---	---	---	---	7.46	291.56
	06/04/07	---	---	---	---	---	---	---	---	---	---	---	---	---	9.70	289.32
	09/13/07	---	---	---	---	---	---	---	---	---	---	---	---	---	11.43	287.59
288.98	12/26/07	---	---	---	---	---	---	---	---	---	---	---	---	---	7.84	291.18
	07/08/10	<1.0	<1.0	<1.0	<2.0	<100	---	---	---	---	---	---	---	---	9.05	289.97
	10/29/10	---	---	---	---	---	---	---	---	---	---	---	---	---	9.26	279.72
	Well Decommissioned in May 2016															
MTCA Method A Cleanup Level		5	1,000	700	1,000	800/1,000 ^b	500	500	20	0.01	5	160	15			

TABLE 2
GROUNDWATER MONITORING AND ANALYTICAL RESULTS - Petroleum Related Constituents
7-Eleven Store #22866
14207 International Boulevard, Tukwila, Washington
All results in micrograms per liter (µg/L)

Well ID (TOC)	Sample Date	Benzene	Toluene	Ethylbenzene	Total Xylenes	TPH-G	TPH-D	TPH-O	MTBE	EDB	EDC	Total Naphthalenes	Total Lead	Dissolved Lead	Depth To Groundwater (feet from TOC)	Groundwater Elevation (feet)
MW-1B 299.74	04/10/96	<0.5	<0.5	<0.5	<0.1	<50	--	--	--	--	--	--	<2.0	--	--	--
	05/09/96	--	--	--	--	--	--	--	--	--	--	--	--	--	6.87	292.87
	11/07/96	1.42	3.28	<0.5	1.73	<50	--	--	--	--	--	--	3.01	--	9.97	289.77
	03/18/97	<0.5	<0.5	<0.5	<1.0	<50	--	--	--	--	--	--	--	--	5.81	293.93
	06/10/97	<0.5	<0.5	<0.5	<1.0	<50	--	--	--	--	--	--	--	--	7.37	292.37
	09/11/97	<0.5	<0.5	<0.5	<1.0	<50	--	--	--	--	--	--	--	--	9.97	289.77
	12/04/97	<0.5	<0.5	<0.5	<1.0	<50	--	--	--	--	--	--	--	--	7.70	292.04
	03/17/98	<0.5	<0.5	<0.5	<1.0	<50	--	--	--	--	--	--	--	--	7.05	292.69
	06/02/98	<0.3	<0.3	<0.5	<0.6	<100	--	--	--	--	--	--	--	--	8.90	290.84
	09/22/98	<0.5	<0.5	<0.5	<1.0	<50	--	--	--	--	--	--	--	--	11.21	288.53
	12/08/98	<0.3	<0.3	<0.5	<0.6	<100	--	--	--	--	--	--	--	--	7.55	292.19
	03/16/99	<0.3	<0.3	<0.5	<0.6	<100	--	--	--	--	--	--	--	--	5.72	294.02
	06/08/99	<0.3	<0.3	<0.5	<0.6	<100	--	--	--	--	--	--	--	--	8.30	291.44
	09/30/99	<0.3	<0.3	<0.5	<0.6	<100	--	--	--	--	--	--	--	--	10.54	289.20
	12/13/99	0.32	1.24	<0.5	<0.6	<100	--	--	--	--	--	--	--	--	7.45	292.29
	03/01/00	<0.3	<0.3	<0.5	<0.6	<100	--	--	--	--	--	--	--	--	6.85	292.89
	06/06/00	<0.5	0.85	<0.5	<1.0	<100	--	--	--	--	--	--	--	--	8.41	291.33
	08/17/00	<0.5	<0.5	<0.5	<1.0	<100	--	--	--	--	--	--	--	--	10.16	289.58
	10/12/00	<0.5	<0.5	<0.5	<1.0	<100	--	--	--	--	--	--	--	--	11.29	288.45
	01/17/01	--	--	--	--	--	--	--	--	--	--	--	--	--	9.18	290.56
	04/17/01	--	--	--	--	--	--	--	--	--	--	--	--	--	8.05	291.59
	09/21/01	--	--	--	--	--	--	--	--	--	--	--	--	--	10.98	288.76
	10/23/01	--	--	--	--	--	--	--	--	--	--	--	--	--	11.40	288.34
	12/17/01	--	--	--	--	--	--	--	--	--	--	--	--	--	6.67	293.07
	03/14/02	<0.5	<1.0	<1.0	<1.0	<100	--	--	--	--	--	--	--	--	8.32	291.42
	08/22/02	--	--	--	--	--	--	--	--	--	--	--	--	--	10.67	289.07
	12/23/02	--	--	--	--	--	--	--	--	--	--	--	--	--	10.45	289.29
	03/13/03	48	2.3	<1.0	<2.0	<100	--	--	--	--	--	--	--	--	7.32	292.42
	06/05/03	48	2.0	<1.0	<2.0	<100	--	--	--	--	--	--	--	--	9.15	290.59
	09/16/03	94	1.0	<1.0	<2.0	<100	--	--	--	--	--	--	--	--	13.22	286.52
	12/05/03	140	2.0	<1.0	<2.0	<100	--	--	--	--	--	--	--	--	9.29	290.45
	03/22/04	68	2.9	1.0	<2.0	<100	--	--	--	--	--	--	--	--	8.69	291.05
	06/03/04	58	1.8	<1.0	<2.0	<100	--	--	--	--	--	--	--	--	10.59	289.15
	09/22/04	88	1.3	3.4	3.2	100	--	--	--	--	--	--	--	--	11.58	288.16
	01/04/05	58	<1.0	<1.0	<2.0	<100	--	--	--	--	--	--	--	--	9.75	289.99
	03/31/05	25	<1.0	<1.0	<2.0	<100	--	--	--	--	--	--	--	--	9.70	289.49
	06/24/05	2.9	<1.0	<1.0	<2.0	130	--	--	--	--	--	--	--	--	8.64	290.55
	09/12/05	<1.0	<1.0	<1.0	<2.0	<100	--	--	--	--	--	--	--	--	7.61	291.58
	03/14/06	5.5	4.9	4.3	<2.6	<100	--	--	--	--	--	--	--	--	7.60	291.59
	06/15/06	68	2.7	3.5	11.1	140	--	--	--	--	--	--	--	--	8.10	291.09
	09/13/06	<1.0	<1.0	<1.0	<2.0	<100	--	--	--	--	--	--	--	--	7.94	291.25
	12/13/06	<1.0	<1.0	<1.0	<2.0	<100	--	--	--	--	--	--	--	--	7.69	291.50
	03/30/07	4.8	<4.0	<4.0	<4.0	<400	--	--	--	--	--	--	--	--	6.35	292.84
	06/04/07	4.7	<1.0	1.2	<4.0	<400	--	--	--	--	--	--	--	--	9.10	290.09
	09/13/07	12	<1.0	<1.0	<2.0	<100	--	--	--	--	--	--	--	--	11.43	287.76
	12/26/07	46	2.3	4.1	2.3	<100	--	--	--	--	--	--	--	--	7.84	291.35
	03/28/08	33	<1.0	1.3	<2.0	<100	--	--	--	--	--	--	--	--	6.41	292.78
	06/25/08	39	<4.0	<4.0	<8.0	<400	--	--	--	--	--	--	--	--	9.23	289.96
	09/25/08	34	<4.0	4.5	7.5	<400	--	--	--	--	--	--	--	--	11.05	288.14
	01/02/09	64	2.0	2.9	1.8	<100	--	--	--	--	--	--	--	--	7.76	291.43
	03/24/09	44	<4.0	<4.0	<8.0	<400	--	--	--	--	--	--	--	--	7.28	291.91
	06/24/09	27	<4.0	<4.0	<8.0	<400	--	--	--	--	--	--	--	--	9.02	290.17
	09/30/09	46	<4.0	<4.0	<8.0	<400	--	--	--	--	--	--	--	--	9.88	289.31
	12/28/09	20	<4.0	<4.0	<8.0	<400	--	--	--	--	--	--	--	--	5.97	293.22
	07/08/10	16	<1.0	<1.0	<2.0	<100	--	--	--	--	--	--	--	--	8.18	291.01
	10/29/10	15	2.6	<1.0	<3.0	190	--	--	--	--	--	--	<1	<1	7.93	291.26
	02/08/11	23	<0.50	<0.50	<0.50	<250	--	--	--	--	--	--	--	--	6.46	292.73
	08/04/11	3.5	<0.50	<0.50	<0.50	<250	--	--	--	--	--	--	--	--	9.30	289.89
	02/06/12	<0.50	<0.50	<0.50	<0.50	<250	--	--	--	--	--	--	--	--	6.96	292.23
	08/27/12	<0.50	<0.50	<0.50	<0.50	<250	<250	<500	--	--	--	--	--	--	10.52	288.67
	01/09/13	<0.50	<0.50	<0.50	<0.50	<250	<250	<500	--	--	--	--	--	--	6.72	282.46
	06/06/13	<0.50	<0.50	<0.50	<0.50	<250	<250	<500	--	--	--	--	--	--	8.15	281.03
	08/15/13	<0.50	<0.50	<0.50	<0.50	<250	<250	<500	--	--	--	--	<5	--	10.76	278.42
	11/19/13	--	--	--	--	--	--	--	--	--	--	--	--	--	8.59	280.59
	02/03/14	--	--	--	--	--	--	--	--	--	--	--	--	--	7.53	281.65
	07/29/14	--	--	--	--	--	--	--	--	--	--	--	--	--	9.79	279.39
	03/03/15	<1.00	<1.00	<1.00	<2.00	<100	137	117	--	--	--	--	--	--	6.53	282.65
	09/30/15	--	--	--	--	--	--	--	--	--	--	--	--	--	12.30	276.90
	06/01/16	--	--	--	--	--	--	--	--	--	--	--	--	--	9.22	279.98
	12/14/16	--	--	--	--	--	--	--	--	--	--	--	--	--	6.28	282.92
	03/23/17	<1.00	<1.00	<1.00	<3.00	<100	--	--	<1.00	<0.00612 ^a	<1.00	<0.324	<2.00	--	4.03	285.17
	06/22/17	<1.00	<1.00	<1.00	<3.00	<100	<96.2	<96.2	<1.00	<0.00619 ^a	<1.00	<0.294	<2.00	--	8.24	280.96
	09/18/17	<1.00	<1.00	<1.00	<3.00	<100	<94.3	<94.3	<1.00	<0.00634 ^a	<1.00	<0.0943	<2.00	--	11.99	277.21
	11/20/17	--	--	--	--	--	--	--	--	--	--	--	--	--	9.86	279.34
	03/07/18	<1.00	<1.00	<1.00	<3.00	<100	107	105	<1.00	<0.00607 ^a	<1.00	<1.155	<2.00	--	7.20	282.00
	04/19/18	--	--	--	--	--	--	--	--	--	--	--	--	--	5.16	284.04
	07/16/18	--	--	--	--	--	--	--	--	--	--	--	--	--	10.81	278.39
	10/18/18	--	--	--	--	--	--	--	--	--	--	--	--	--	12.72	276.48
	07/31/19	--	--	--	--	--	--	--	--	--	--	--	--	--	11.18	278.02
	02/03/20	--	--	--	--	--	--	--	--	--	--	--	--	--	3.58	285.62
	08/04/20	--	--	--	--	--	--	--	--	--	--	--	--	--	10.00	279.20
	02/11/21	--	--	--	--	<250	<109	<346	--	--	--	--	<0.800	--	5.59	283.61
	03/02/21	--	--	--	--	--	--	--	--	--	--	--	--	--	5.30	283.80
	05/25/21	--	--	--	--	--	--	--	--	--	--	--	--	--	9.07	280.03
	08/17/21	--	--	--	--	--	--	--	--	--	--	--	--	--	11.60	277.50
	11/03/21	--	--	--	--	--	--	--	--	--	--	--	--	--	8.83	280.27
	03/17/22	<1.00	<1.00	<1.00	<3.00	<100	<200	<250	--	--	--	--	--	--	5.08	284.02
	05/26/22	--	--	--	--	--	--	--	--	--	--	--	--	--	6.79	282.31
MTCA Method A Cleanup Level		5	1,000	700	1,000	800/1,000 ^b	500	500	20	0.01	5	160	15			

TABLE 2
GROUNDWATER MONITORING AND ANALYTICAL RESULTS - Petroleum Related Constituents
7-Eleven Store #22866
14207 International Boulevard, Tukwila, Washington
All results in micrograms per liter (µg/L)

Well ID (TOC)	Sample Date	Benzene	Toluene	Ethyl-benzene	Total Xylenes	TPH-G	TPH-D	TPH-O	MTBE	EDB	EDC	Total Naphthalenes	Total Lead	Dissolved Lead	Depth To Groundwater (feet from TOC)	Groundwater Elevation (feet)
MW-2A 297.73	04/10/96	0.96	<0.5	<0.5	<0.1	<50	---	---	---	---	---	---	<2.0	---	---	---
	05/09/96	---	---	---	---	---	---	---	---	---	---	---	---	---	6.01	291.72
	11/07/96	1.09	1.94	0.533	1.91	<50	---	---	---	---	---	---	3.98	---	7.95	289.78
	03/18/97	---	---	---	---	---	---	---	---	---	---	---	---	---	5.24	292.49
	06/10/97	---	---	---	---	---	---	---	---	---	---	---	---	---	6.30	291.43
	09/11/97	---	---	---	---	---	---	---	---	---	---	---	---	---	8.36	289.37
	12/04/97	---	---	---	---	---	---	---	---	---	---	---	---	---	6.92	290.81
	03/17/98	---	---	---	---	---	---	---	---	---	---	---	---	---	6.11	291.62
	06/03/98	---	---	---	---	---	---	---	---	---	---	---	---	---	7.28	290.45
	09/22/98	---	---	---	---	---	---	---	---	---	---	---	---	---	9.57	288.16
	12/08/98	---	---	---	---	---	---	---	---	---	---	---	---	---	6.47	291.26
	03/16/99	---	---	---	---	---	---	---	---	---	---	---	---	---	5.15	292.58
	06/08/99	---	---	---	---	---	---	---	---	---	---	---	---	---	6.95	290.78
	09/30/99	---	---	---	---	---	---	---	---	---	---	---	---	---	8.13	289.60
	12/13/99	---	---	---	---	---	---	---	---	---	---	---	---	---	5.84	291.89
	03/01/00	---	---	---	---	---	---	---	---	---	---	---	---	---	6.10	291.63
	06/06/00	---	---	---	---	---	---	---	---	---	---	---	---	---	7.04	290.69
	08/17/00	---	---	---	---	---	---	---	---	---	---	---	---	---	8.39	289.34
	10/12/00	---	---	---	---	---	---	---	---	---	---	---	---	---	9.03	288.70
	01/17/01	---	---	---	---	---	---	---	---	---	---	---	---	---	8.05	289.68
	04/17/01	---	---	---	---	---	---	---	---	---	---	---	---	---	6.95	290.78
	09/21/01	---	---	---	---	---	---	---	---	---	---	---	---	---	8.97	288.76
	10/23/01	---	---	---	---	---	---	---	---	---	---	---	---	---	9.47	288.26
	12/17/01	---	---	---	---	---	---	---	---	---	---	---	---	---	6.85	290.88
	03/14/02	<0.5	<1.0	<1.0	<1.0	<100	---	---	---	---	---	---	---	---	5.96	291.77
	08/22/02	---	---	---	---	---	---	---	---	---	---	---	---	---	9.18	288.55
	12/23/02	---	---	---	---	---	---	---	---	---	---	---	---	---	8.83	288.90
297.21	03/13/03	<1.0	<1.0	<1.0	<2.0	<100	---	---	---	---	---	---	---	---	5.94	291.79
	06/05/03	---	---	---	---	---	---	---	---	---	---	---	---	---	7.55	290.08
	09/16/03	---	---	---	---	---	---	---	---	---	---	---	---	---	11.42	286.31
	12/05/03	---	---	---	---	---	---	---	---	---	---	---	---	---	7.86	289.87
	03/22/04	<1.0	<1.0	<1.0	<2.0	<100	---	---	---	---	---	---	---	---	7.77	289.96
	06/03/04	---	---	---	---	---	---	---	---	---	---	---	---	---	8.90	288.83
	09/22/04	---	---	---	---	---	---	---	---	---	---	---	---	---	9.68	288.05
	01/04/05	---	---	---	---	---	---	---	---	---	---	---	---	---	8.29	289.44
	03/31/05	<1.0	<1.0	<1.0	<2.0	<100	---	---	---	---	---	---	---	---	8.16	289.05
	06/24/05	---	---	---	---	---	---	---	---	---	---	---	---	---	8.10	289.11
	09/12/05	---	---	---	---	---	---	---	---	---	---	---	---	---	7.68	289.53
	12/06/05	---	---	---	---	---	---	---	---	---	---	---	---	---	8.03	289.18
	03/14/06	<1.0	<1.0	<1.0	<2.0	<100	---	---	---	---	---	---	---	---	6.55	290.66
	06/15/06	---	---	---	---	---	---	---	---	---	---	---	---	---	7.98	289.23
	09/13/06	---	---	---	---	---	---	---	---	---	---	---	---	---	6.31	290.90
	12/13/06	---	---	---	---	---	---	---	---	---	---	---	---	---	7.13	290.08
	03/30/07	---	---	---	---	---	---	---	---	---	---	---	---	---	5.90	291.31
	06/04/07	---	---	---	---	---	---	---	---	---	---	---	---	---	7.95	289.26
	09/13/07	---	---	---	---	---	---	---	---	---	---	---	---	---	9.70	287.51
	12/26/07	---	---	---	---	---	---	---	---	---	---	---	---	---	7.08	290.13
	07/08/10	<1.0	<1.0	<1.0	<2.0	<100	---	---	---	---	---	---	---	---	7.29	289.92
	10/29/10	---	---	---	---	---	---	---	---	---	---	---	---	---	7.64	279.56
Well Decommissioned in May 2016																
MTCA Method A Cleanup Level		5	1,000	700	1,000	800/1,000 ^b	500	500	20	0.01	5	160	15			

TABLE 2
GROUNDWATER MONITORING AND ANALYTICAL RESULTS - Petroleum Related Constituents
7-Eleven Store #22866
14207 International Boulevard, Tukwila, Washington
All results in micrograms per liter (µg/L)

Well ID (TOC)	Sample Date	Benzene	Toluene	Ethyl-benzene	Total Xylenes	TPH-G	TPH-D	TPH-O	MTBE	EDB	EDC	Total Naphthalenes	Total Lead	Dissolved Lead	Depth To Groundwater (feet from TOC)	Groundwater Elevation (feet)
MW-2B 297.73	04/10/96	8.1	<0.5	<0.5	1.5	<50	--	--	--	--	--	--	<2.0	--	--	--
	05/09/96	--	--	--	--	--	--	--	--	--	--	--	--	--	5.72	292.01
	11/07/96	1.92	<0.5	<0.5	<1.0	<50	--	--	--	--	--	--	<2.0	--	7.83	289.90
	03/18/97	2.14	<0.5	<0.5	2.4	152	--	--	--	--	--	--	--	--	4.78	292.95
	06/10/97	5.3	0.756	<0.5	1.09	116	--	--	--	--	--	--	--	--	5.64	292.09
	09/11/97	<0.5	<0.5	<0.5	<1.0	<50	--	--	--	--	--	--	--	--	8.08	289.65
	12/04/97	<0.5	<0.5	<0.5	<1.0	55.5	--	--	--	--	--	--	--	--	6.00	291.73
	03/17/98	2.14	<0.5	<0.5	2.4	152	--	--	--	--	--	--	--	--	6.59	291.14
	06/02/98	<0.3	<0.3	<0.5	<0.6	<100	--	--	--	--	--	--	--	--	7.15	290.58
	09/22/98	<0.5	<0.5	<0.5	<1.0	<50	--	--	--	--	--	--	--	--	9.14	288.59
	12/08/98	<0.3	<0.3	<0.5	0.67	<100	--	--	--	--	--	--	--	--	5.97	291.76
	03/16/99	7.61	<0.3	<0.5	<0.6	<100	--	--	--	--	--	--	--	--	5.03	292.70
	06/08/99	65.6	<0.3	<0.5	<0.6	161	--	--	--	--	--	--	--	--	6.60	291.13
	09/30/99	<0.3	0.47	<0.5	0.79	<100	--	--	--	--	--	--	--	--	8.55	289.18
	12/13/99	<0.3	0.47	<0.5	<0.6	<100	--	--	--	--	--	--	--	--	5.90	291.83
	03/01/00	<0.3	<0.3	<0.5	<0.6	<100	--	--	--	--	--	--	--	--	5.85	291.88
	06/06/00	<0.5	0.94	<0.5	<1.0	<100	--	--	--	--	--	--	--	--	6.65	291.08
	08/17/00	<0.5	<0.5	<0.5	<1.0	<100	--	--	--	--	--	--	--	--	8.26	289.47
	10/12/00	<0.5	<0.5	<0.5	<1.0	<100	--	--	--	--	--	--	--	--	9.22	288.51
	01/17/01	--	--	--	--	--	--	--	--	--	--	--	--	--	7.23	290.50
	04/17/01	--	--	--	--	--	--	--	--	--	--	--	--	--	6.30	291.43
	09/21/01	--	--	--	--	--	--	--	--	--	--	--	--	--	9.01	288.72
	10/23/01	--	--	--	--	--	--	--	--	--	--	--	--	--	9.02	288.71
	12/17/01	--	--	--	--	--	--	--	--	--	--	--	--	--	5.44	292.29
	03/14/02	<0.5	<1.0	<1.0	<1.0	<100	--	--	--	--	--	--	--	--	5.65	292.08
	08/22/02	--	--	--	--	--	--	--	--	--	--	--	--	--	8.92	288.81
	12/23/02	--	--	--	--	--	--	--	--	--	--	--	--	--	7.84	289.89
	03/13/03	<1.0	<1.0	<1.0	<2.0	<100	--	--	--	--	--	--	--	--	5.98	291.75
	06/05/03	--	--	--	--	--	--	--	--	--	--	--	--	--	7.56	290.17
	09/16/03	--	--	--	--	--	--	--	--	--	--	--	--	--	11.10	286.53
	12/05/03	--	--	--	--	--	--	--	--	--	--	--	--	--	7.33	290.40
	03/22/04	<1.0	<1.0	<1.0	<2.0	<100	--	--	--	--	--	--	--	--	7.32	290.41
	06/03/04	--	--	--	--	--	--	--	--	--	--	--	--	--	8.40	289.33
	09/22/04	--	--	--	--	--	--	--	--	--	--	--	--	--	8.64	289.09
297.22	01/04/05	--	--	--	--	--	--	--	--	--	--	--	--	--	7.43	290.30
	03/31/05	<1.0	<1.0	<1.0	<2.0	<100	--	--	--	--	--	--	--	--	6.99	290.23
	06/24/05	--	--	--	--	--	--	--	--	--	--	--	--	--	5.87	291.35
	09/12/05	--	--	--	--	--	--	--	--	--	--	--	--	--	4.68	292.54
	12/06/05	--	--	--	--	--	--	--	--	--	--	--	--	--	6.48	290.74
	03/14/06	350	110	2.9	114	780	--	--	--	--	--	--	--	--	6.28	290.94
	06/15/06	--	--	--	--	--	--	--	--	--	--	--	--	--	7.21	290.01
	09/13/06	--	--	--	--	--	--	--	--	--	--	--	--	--	4.68	292.54
	12/13/06	--	--	--	--	--	--	--	--	--	--	--	--	--	4.26	292.96
	03/30/07	--	--	--	--	--	--	--	--	--	--	--	--	--	5.30	291.92
	06/04/07	--	--	--	--	--	--	--	--	--	--	--	--	--	7.30	289.92
	09/13/07	--	--	--	--	--	--	--	--	--	--	--	--	--	9.50	287.72
	12/26/07	--	--	--	--	--	--	--	--	--	--	--	--	--	7.12	290.10
	03/28/08	61	3.8	2.6	1.0	<100	--	--	--	--	--	--	--	--	5.91	291.31
	06/25/08	220	8.4	6.2	4.8	<400	--	--	--	--	--	--	--	--	7.43	289.79
	09/25/08	130	<4.0	<4.0	<8.0	<400	--	--	--	--	--	--	--	--	8.58	288.64
	01/02/09	130	<4.0	6.1	<8.0	<400	--	--	--	--	--	--	--	--	6.98	290.24
	03/25/09	150	2.9	8.8	4.3	120	--	--	--	--	--	--	--	--	5.58	291.64
	09/30/09	370	55	11	8.9	<400	--	--	--	--	--	--	--	--	9.81	287.41
	12/28/09	<1.0	<1.0	<1.0	<2.0	<100	--	--	--	--	--	--	--	--	6.62	290.50
	07/08/10	700	55	29	60	640	--	--	--	--	--	--	--	--	6.47	290.75
	10/29/10	720	29	17	43	2,500	--	--	--	--	--	--	<1	<1	6.98	290.24
	02/08/11	1,300	25	33	64	5,000	--	--	--	--	--	--	--	--	4.94	292.28
	08/04/11	190	1.3	8.4	14	1,000	--	--	--	--	--	--	--	--	7.30	289.92
	02/06/12	1.3	<0.5	<0.5	2.2	<250	--	--	--	--	--	--	--	--	5.58	291.64
	08/27/12	1.1	<0.50	<0.50	<0.50	<250	<250	<500	--	--	--	--	--	--	8.81	288.41
287.20	01/09/13	0.72	<0.50	<0.50	<0.50	<250	<250	<500	--	--	--	--	--	--	5.05	282.15
	06/06/13	<0.50	<0.50	<0.50	<0.50	<250	<250	<500	--	--	--	--	--	--	6.36	290.84
	08/15/13	<0.50	<0.50	<0.50	<0.50	<250	<250	<500	--	--	--	--	<5	--	8.90	278.30
	11/19/13	--	--	--	--	--	--	--	--	--	--	--	--	--	6.56	280.64
	02/03/14	<1.00	<1.00	<1.00	<2.00	<50.0	<50.0	<100	--	--	--	--	--	--	6.33	280.67
	07/29/14	<1.00	<1.00	<1.00	<2.00	<50.0	--	--	--	--	--	--	--	--	7.92	279.28
	03/03/15	<1.00	<1.00	<1.00	<2.00	<100	<96.2	<96.2	--	--	--	--	--	--	5.07	282.13
287.21	09/24/15	<1.00	<1.00	<1.00	<3.00	<100	<100	<100	--	--	--	--	<2.00	--	10.23	276.98
	06/01/16	--	--	--	--	--	--	--	--	--	--	--	--	--	7.46	279.75
	12/14/16	--	--	--	--	--	--	--	--	--	--	--	--	--	5.55	281.66
	03/23/17	<1.00	<1.00	<1.00	<3.00	<100	<108	<108	<1.00	<0.00605 ^g	<1.00	<0.315	<2.00	--	3.55	283.66
	06/22/17	<1.00	<1.00	<1.00	<3.00	<100	<93.0	<93.0	<1.00	<0.00603 ^g	<1.00	<0.2805	<2.00	--	6.68	280.53
	09/19/17	<1.00	<1.00	<1.00	<3.00	<100	<95.7	<95.7	<1.00	<0.00614 ^g	<1.00	<0.100	<2.00	--	10.40	276.81
	11/20/17	--	--	--	--	--	--	--	--	--	--	--	--	--	9.16	278.05
	03/07/18	<1.00	<1.00	<1.00	<3.00	<100	<100	<100	<1.00	<0.00605 ^g	<1.00	<1.155	<2.00	--	5.72	281.49
	04/19/18	--	--	--	--	--	--	--	--	--	--	--	--	--	4.83	282.38
	07/16/18	--	--	--	--	--	--	--	--	--	--	--	--	--	9.21	278.00
	10/18/18	--	--	--	--	--	--	--	--	--	--	--	--	--	10.81	276.40
	07/31/19	--	--	--	--	--	--	--	--	--	--	--	--	--	9.65	277.56
	02/03/20	--	--	--	--	--	--	--	--	--	--	--	--	--	2.73	284.48
	08/04/20	--	--	--	--	--	--	--	--	--	--	--	--	--	8.65	278.56
	03/02/21	--	--	--	--	--	--	--	--	--	--	--	--	--	4.42	282.68
MTCA Method A Cleanup Level		5	1,000	700	1,000	800/1,000 ^b	500	500	20	0.01	5	160	15			

TABLE 2
GROUNDWATER MONITORING AND ANALYTICAL RESULTS - Petroleum Related Constituents
7-Eleven Store #22866
14207 International Boulevard, Tukwila, Washington
All results in micrograms per liter (µg/L)

Well ID (TOC)	Sample Date	Benzene	Toluene	Ethyl-benzene	Total Xylenes	TPH-G	TPH-D	TPH-O	MTBE	EDB	EDC	Total Naphthalenes	Total Lead	Dissolved Lead	Depth To Groundwater (feet from TOC)	Groundwater Elevation (feet)
MW-3A 298.42	04/10/96	54	3.1	59	120	3,000	---	---	---	---	---	---	<2.0	---	---	---
	05/09/96	---	---	---	---	---	---	---	---	---	---	---	---	---	6.60	291.82
	11/07/96	102	2.71	4.12	10.8	171	---	---	---	---	---	---	2.74	---	8.67	289.75
	03/18/97	---	---	---	---	---	---	---	---	---	---	---	---	---	5.57	292.75
	06/10/97	---	---	---	---	---	---	---	---	---	---	---	---	---	6.36	292.66
	09/11/97	---	---	---	---	---	---	---	---	---	---	---	---	---	8.69	289.73
	12/04/97	---	---	---	---	---	---	---	---	---	---	---	---	---	7.70	290.72
	03/17/98	---	---	---	---	---	---	---	---	---	---	---	---	---	6.91	291.51
	06/03/98	---	---	---	---	---	---	---	---	---	---	---	---	---	7.83	290.59
	09/22/98	---	---	---	---	---	---	---	---	---	---	---	---	---	9.77	288.65
	12/08/98	---	---	---	---	---	---	---	---	---	---	---	---	---	7.25	291.17
	03/16/99	---	---	---	---	---	---	---	---	---	---	---	---	---	6.24	292.18
	06/08/99	---	---	---	---	---	---	---	---	---	---	---	---	---	7.30	291.12
	09/30/99	---	---	---	---	---	---	---	---	---	---	---	---	---	9.13	289.29
	12/13/99	---	---	---	---	---	---	---	---	---	---	---	---	---	5.76	292.66
	03/01/00	---	---	---	---	---	---	---	---	---	---	---	---	---	5.43	292.99
	06/06/00	---	---	---	---	---	---	---	---	---	---	---	---	---	8.16	290.26
	08/17/00	---	---	---	---	---	---	---	---	---	---	---	---	---	8.63	289.79
	10/12/00	---	---	---	---	---	---	---	---	---	---	---	---	---	9.12	289.30
	01/17/01	<0.5	<0.5	0.61 ^c	<1.5	<100	---	---	---	---	---	---	---	---	8.63	289.79
	04/17/01	<0.5	<0.5	<0.5	<1.0	<100	---	---	---	---	---	---	---	---	7.89	290.53
	09/21/01	---	---	---	---	---	---	---	---	---	---	---	---	---	9.14	289.28
	10/23/01	---	---	---	---	---	---	---	---	---	---	---	---	---	9.56	288.86
	12/17/01	---	---	---	---	---	---	---	---	---	---	---	---	---	8.49	289.93
	03/14/02	<0.5	<1.0	<1.0	<1.0	<100	---	---	---	---	---	---	---	---	6.55	291.87
	08/22/02	---	---	---	---	---	---	---	---	---	---	---	---	---	8.37	290.05
	12/23/02	---	---	---	---	---	---	---	---	---	---	---	---	---	8.96	289.46
	03/13/03	3.0	<1.0	2.7	1.1	140	---	---	---	---	---	---	---	---	8.12	290.30
	06/05/03	---	---	---	---	---	---	---	---	---	---	---	---	---	7.52	290.60
	09/16/03	<1.0	<1.0	<1.0	<2.0	<100	---	---	---	---	---	---	---	---	11.72	286.70
	12/05/03	---	---	---	---	---	---	---	---	---	---	---	---	---	8.41	290.01
	03/22/04	<1.0	<1.0	<1.0	<2.0	<100	---	---	---	---	---	---	---	---	8.30	290.12
	06/03/04	---	---	---	---	---	---	---	---	---	---	---	---	---	9.36	289.06
	09/22/04	<1.0	<1.0	<1.0	<2.0	<100	---	---	---	---	---	---	---	---	9.87	288.55
	01/04/05	---	---	---	---	---	---	---	---	---	---	---	---	---	9.16	289.26
	03/31/05	<1.0	<1.0	<1.0	<2.0	<100	---	---	---	---	---	---	---	---	8.46	289.45
	06/24/05	---	---	---	---	---	---	---	---	---	---	---	---	---	7.48	290.43
	09/12/05	<1.0	<1.0	<1.0	<2.0	<100	---	---	---	---	---	---	---	---	6.69	291.22
	12/06/05	---	---	---	---	---	---	---	---	---	---	---	---	---	9.00	288.91
	03/14/06	<1.0	<1.0	<1.0	<2.0	<100	---	---	---	---	---	---	---	---	6.85	291.06
	06/15/06	---	---	---	---	---	---	---	---	---	---	---	---	---	7.46	290.45
	09/13/06	<1.0	<1.0	<1.0	<2.0	<100	---	---	---	---	---	---	---	---	6.19	291.72
	03/30/07	<1.0	<1.0	<1.0	<2.0	<100	---	---	---	---	---	---	---	---	6.60	291.31
	06/04/07	---	---	---	---	---	---	---	---	---	---	---	---	---	7.80	290.11
	09/13/07	<1.0	<1.0	<1.0	<2.0	<100	---	---	---	---	---	---	---	---	9.70	288.21
	12/26/07	---	---	---	---	---	---	---	---	---	---	---	---	---	6.42	291.49
	07/08/10	<1.0	<1.0	<1.0	<2.0	<100	---	---	---	---	---	---	---	---	7.70	290.21
	10/29/10	<1.0	<1.0	<1.0	<3.0	<100	---	---	---	---	---	---	---	---	8.44	289.47
	09/30/15	---	---	---	---	---	---	---	---	---	---	---	---	---	11.44	286.47
Well Decommissioned in May 2016																
MTCA Method A Cleanup Level	5	1,000	700	1,000	800/1,000 ^b	500	500	20	0.01	5	160	15				

TABLE 2
GROUNDWATER MONITORING AND ANALYTICAL RESULTS - Petroleum Related Constituents
 7-Eleven Store #22866
 14207 International Boulevard, Tukwila, Washington
 All results in micrograms per liter (µg/L)

Well ID (TOC)	Sample Date	Benzene	Toluene	Ethyl-benzene	Total Xylenes	TPH-G	TPH-D	TPH-O	MTBE	EDB	EDC	Total Naphthalenes	Total Lead	Dissolved Lead	Depth To Groundwater (feet from TOC)	Groundwater Elevation (feet)
MW-3B 298.36	01/10/00	190	3.1	41	190	1,500	--	--	--	--	--	--	<2.0	--	--	--
	05/09/96	--	--	--	--	--	--	--	--	--	--	--	--	--	6.06	292.30
	11/07/96	169	4.5	279	185	3,440	--	--	--	--	--	--	<2.0	--	8.53	289.83
	03/18/97	385	16	710	772	12,200	--	--	--	--	--	--	--	--	5.27	293.09
	06/10/97	291	<12.5	546	568	10,200	--	--	--	--	--	--	--	--	6.54	291.82
	09/11/97	98.9	4.56	117	102	2,190	--	--	--	--	--	--	--	--	8.62	289.74
	12/04/97	352	18.4	647	645	7,180	--	--	--	--	--	--	--	--	6.55	291.81
	03/17/98	385	16	710	772	12,200	--	--	--	--	--	--	--	--	7.87	290.49
	06/02/98	300	31	200	190	2,900	--	--	--	--	--	--	--	--	8.98	289.38
	09/22/98	146	5.04	83.3	22.3	973	--	--	--	--	--	--	--	--	10.65	287.71
	12/08/98	0.453	<0.3	<0.50	56.8	152	--	--	--	--	--	--	--	--	8.39	289.97
	03/16/99	<0.3	1.28	0.97	20.4	109	--	--	--	--	--	--	--	--	4.86	293.50
	06/08/99	<0.3	<0.3	<0.5	<0.6	<100	--	--	--	--	--	--	--	--	7.05	291.31
	09/30/99	<0.3	0.48	<0.5	0.95	<100	--	--	--	--	--	--	--	--	9.08	289.28
	12/13/99	<0.3	0.76	<0.5	<0.6	<100	--	--	--	--	--	--	--	--	6.10	292.26
	03/01/00	<0.3	<0.3	<0.5	<0.6	<100	--	--	--	--	--	--	--	--	5.63	292.73
	06/06/00	<0.5	<0.5	<0.5	<1.0	<100	--	--	--	--	--	--	--	--	7.14	291.22
	08/17/00	<0.5	<0.5	<0.5	<1.0	<100	--	--	--	--	--	--	--	--	8.74	289.62
	10/12/00	<0.5	<0.5	<0.5	<1.0	<100	--	--	--	--	--	--	--	--	9.76	288.60
	01/17/01	<0.5	<0.5	0.57 ^c	<1.5	<100	--	--	--	--	--	--	--	--	7.84	290.52
	04/17/01	--	--	--	--	--	--	--	--	--	--	--	--	--	6.77	291.59
	09/21/01	--	--	--	--	--	--	--	--	--	--	--	--	--	9.61	288.75
	10/23/01	--	--	--	--	--	--	--	--	--	--	--	--	--	9.82	288.54
	12/17/01	--	--	--	--	--	--	--	--	--	--	--	--	--	5.73	292.63
	03/14/02	<0.5	<1.0	<1.0	<1.0	<100	--	--	--	--	--	--	--	--	6.08	292.28
	08/23/02	0.516	<1.0	<1.0	2.19	<100	--	--	--	--	--	--	--	--	9.35	289.01
	12/23/02	--	--	--	--	--	--	--	--	--	--	--	--	--	8.74	289.62
	03/13/03	<1.0	<1.0	<1.0	<2.0	100	--	--	--	--	--	--	--	--	6.13	292.23
	06/05/03	--	--	--	--	--	--	--	--	--	--	--	--	--	7.93	290.43
	09/16/03	<1.0	<1.0	<1.0	<2.0	<100	--	--	--	--	--	--	--	--	11.62	286.74
	12/05/03	--	--	--	--	--	--	--	--	--	--	--	--	--	7.71	290.65
	03/22/04	<1.0	<1.0	5.6	2.0	260	--	--	--	--	--	--	--	--	7.77	290.59
297.84	06/03/04	--	--	--	--	--	--	--	--	--	--	--	--	--	9.12	289.24
	09/22/04	--	--	--	--	--	--	--	--	--	--	--	--	--	9.83	288.53
	01/04/05	--	--	--	--	--	--	--	--	--	--	--	--	--	8.45	289.91
	03/31/05	<1.0	<1.0	<1.0	<2.0	<100	--	--	--	--	--	--	--	--	8.13	289.71
	06/24/05	--	--	--	--	--	--	--	--	--	--	--	--	--	7.10	290.74
	09/12/05	--	--	--	--	--	--	--	--	--	--	--	--	--	7.00	290.84
	12/06/05	--	--	--	--	--	--	--	--	--	--	--	--	--	7.42	290.42
	03/14/06	<1.0	<1.0	<1.0	<2.0	160	--	--	--	--	--	--	--	--	6.59	291.25
	06/15/06	--	--	--	--	--	--	--	--	--	--	--	--	--	5.42	292.42
	09/13/06	--	--	--	--	--	--	--	--	--	--	--	--	--	5.43	292.41
	12/13/06	--	--	--	--	--	--	--	--	--	--	--	--	--	5.86	291.98
	03/30/07	--	--	--	--	--	--	--	--	--	--	--	--	--	5.62	292.22
	06/04/07	--	--	--	--	--	--	--	--	--	--	--	--	--	7.80	290.04
	09/13/07	--	--	--	--	--	--	--	--	--	--	--	--	--	10.15	287.69
	12/26/07	--	--	--	--	--	--	--	--	--	--	--	--	--	6.13	291.71
	07/08/10	<1.0	<1.0	<1.0	<2.0	150	--	--	--	--	--	--	--	--	7.20	290.64
	10/29/10	1.3	1.7	1	<3.0	260	--	--	--	--	--	--	--	--	7.56	290.28
	03/03/15	<1.00	7.76	<1.00	<2.00	<100	3,320	16,800	--	--	--	--	--	--	6.32	291.52
287.80	09/30/15	Well Damaged												--	--	--
	06/01/16	Well Damaged												--	--	--
	03/23/17	Well Damaged												--	--	--
	09/20/17	Well Damaged												--	--	--
	11/20/17	Well Damaged												--	--	--
	03/07/18	38.2	15.3	8.51	35.4	802	1,630	1,210	<1.00	<0.00621 ^d	<1.00	<1.155	0.147 ^b	--	1.39	286.41
	04/16/18	Well Damaged												--	1.46	286.34
	07/16/18	Well Damaged												--	1.44	286.36
	10/18/18	Well Damaged												--	1.49	286.31
	07/31/19	Well Damaged												--	1.56	286.24
287.70	02/03/20	Well Damaged												--	1.67	286.13
	08/04/20	Well Damaged												--	1.66	286.14
MTCA Method A Cleanup Level		5	1,000	700	1,000	800/1,000 ^e	500	500	20	0.01	5	160	15			

TABLE 2
GROUNDWATER MONITORING AND ANALYTICAL RESULTS - Petroleum Related Constituents
7-Eleven Store #22866
14207 International Boulevard, Tukwila, Washington
All results in micrograms per liter (µg/L)

Well ID (TOC)	Sample Date	Benzene	Toluene	Ethyl-benzene	Total Xylenes	TPH-G	TPH-D	TPH-O	MTBE	EDB	EDC	Total Naphthalenes	Total Lead	Dissolved Lead	Depth To Groundwater (feet from TOC)	Groundwater Elevation (feet)
MW-4A 297.83	11/07/96	0.846	1.32	0.866	2.49	<50	--	--	--	--	--	--	2.33	--	8.35	289.48
	03/18/97	--	--	--	--	--	--	--	--	--	--	--	--	--	5.21	292.62
	06/10/97	--	--	--	--	--	--	--	--	--	--	--	--	--	6.33	291.50
	09/11/97	--	--	--	--	--	--	--	--	--	--	--	--	--	8.52	289.31
	12/04/97	--	--	--	--	--	--	--	--	--	--	--	--	--	6.45	291.38
	03/17/98	--	--	--	--	--	--	--	--	--	--	--	--	--	6.23	291.80
	06/03/98	--	--	--	--	--	--	--	--	--	--	--	--	--	7.52	290.31
	09/22/98	--	--	--	--	--	--	--	--	--	--	--	--	--	9.60	288.23
	12/08/98	--	--	--	--	--	--	--	--	--	--	--	--	--	6.37	291.46
	03/16/99	--	--	--	--	--	--	--	--	--	--	--	--	--	5.03	292.80
	06/08/99	--	--	--	--	--	--	--	--	--	--	--	--	--	7.05	290.78
	09/30/99	--	--	--	--	--	--	--	--	--	--	--	--	--	8.79	289.04
	12/13/99	--	--	--	--	--	--	--	--	--	--	--	--	--	5.73	292.10
	03/01/00	--	--	--	--	--	--	--	--	--	--	--	--	--	5.86	291.97
	06/06/00	--	--	--	--	--	--	--	--	--	--	--	--	--	6.75	291.08
	08/17/00	--	--	--	--	--	--	--	--	--	--	--	--	--	8.67	289.16
	10/12/00	--	--	--	--	--	--	--	--	--	--	--	--	--	9.48	288.35
	01/17/01	--	--	--	--	--	--	--	--	--	--	--	--	--	7.55	290.28
	04/17/01	--	--	--	--	--	--	--	--	--	--	--	--	--	6.90	290.93
	09/21/01	--	--	--	--	--	--	--	--	--	--	--	--	--	9.33	288.50
	10/23/01	--	--	--	--	--	--	--	--	--	--	--	--	--	9.58	288.25
	12/17/01	--	--	--	--	--	--	--	--	--	--	--	--	--	6.48	291.35
	03/14/02	<0.5	<1.0	<1.0	<1.0	<100	--	--	--	--	--	--	--	--	5.91	291.92
	08/22/02	--	--	--	--	--	--	--	--	--	--	--	--	--	9.15	288.68
	12/23/02	--	--	--	--	--	--	--	--	--	--	--	--	--	8.33	289.50
	03/13/03	<1.0	<1.0	<1.0	<2.0	<100	--	--	--	--	--	--	--	--	6.37	291.46
	06/05/03	--	--	--	--	--	--	--	--	--	--	--	--	--	8.02	289.81
	09/16/03	--	--	--	--	--	--	--	--	--	--	--	--	--	11.46	286.37
	03/22/04	<1.0	<1.0	<1.0	<2.0	<100	--	--	--	--	--	--	--	--	7.22	290.61
	06/03/04	--	--	--	--	--	--	--	--	--	--	--	--	--	8.00	289.83
	09/22/04	--	--	--	--	--	--	--	--	--	--	--	--	--	9.78	288.05
297.33	01/04/05	--	--	--	--	--	--	--	--	--	--	--	--	--	8.35	289.48
	03/31/05	<1.0	<1.0	<1.0	<2.0	<100	--	--	--	--	--	--	--	--	7.86	289.47
	06/24/05	--	--	--	--	--	--	--	--	--	--	--	--	--	6.93	290.40
	09/12/05	--	--	--	--	--	--	--	--	--	--	--	--	--	6.24	291.09
	12/06/05	--	--	--	--	--	--	--	--	--	--	--	--	--	7.32	290.01
	03/14/06	<1.0	<1.0	<1.0	<2.0	<100	--	--	--	--	--	--	--	--	6.65	290.68
	06/15/06	--	--	--	--	--	--	--	--	--	--	--	--	--	7.71	289.62
	09/13/06	--	--	--	--	--	--	--	--	--	--	--	--	--	4.18	293.15
	12/13/06	--	--	--	--	--	--	--	--	--	--	--	--	--	4.94	292.39
	03/30/07	--	--	--	--	--	--	--	--	--	--	--	--	--	5.70	291.63
	06/04/07	--	--	--	--	--	--	--	--	--	--	--	--	--	8.00	289.33
	09/13/07	--	--	--	--	--	--	--	--	--	--	--	--	--	10.05	287.28
	12/26/07	--	--	--	--	--	--	--	--	--	--	--	--	--	5.06	292.27
	06/24/09	3.2	<1.0	<1.0	<2.0	<100	--	--	--	--	--	--	--	--	8.13	289.20
287.28	07/08/10	<1.0	<1.0	<1.0	<2.0	<100	--	--	--	--	--	--	--	--	7.30	290.03
	10/29/10	--	--	--	--	--	--	--	--	--	--	--	--	--	7.45	279.83
Well Decommissioned in May 2016																
MTCA Method A Cleanup Level		5	1,000	700	1,000	800/1,000 ^b	500	500	20	0.01	5	160	15			

TABLE 2
GROUNDWATER MONITORING AND ANALYTICAL RESULTS - Petroleum Related Constituents
7-Eleven Store #22866
14207 International Boulevard, Tukwila, Washington
All results in micrograms per liter (µg/L)

Well ID (TOC)	Sample Date	Benzene	Toluene	Ethyl-benzene	Total Xylenes	TPH-G	TPH-D	TPH-O	MTBE	EDB	EDC	Total Naphthalenes	Total Lead	Dissolved Lead	Depth To Groundwater (feet from TOC)	Groundwater Elevation (feet)
MW-4B 297.70	11/07/96	<0.5	<0.5	<0.5	<1.0	<50	--	--	--	--	--	--	<2.0	--	8.01	289.69
	03/18/97	28.5	<0.5	<0.5	<1.0	<50	--	--	--	--	--	--	--	--	4.96	292.74
	06/10/97	40.5	<0.5	<0.5	<1.0	66.8	--	--	--	--	--	--	--	--	6.10	291.60
	09/11/97	<0.5	<0.5	<0.5	<1.0	51.9	--	--	--	--	--	--	--	--	7.30	290.40
	12/04/97	1.54	<0.5	<0.5	2.59	<50	--	--	--	--	--	--	--	--	6.20	291.50
	03/17/98	28.5	<0.5	<0.5	<1.0	<50	--	--	--	--	--	--	--	--	6.17	291.53
	06/02/98	<0.3	<0.3	<0.5	<0.6	<100	--	--	--	--	--	--	--	--	7.37	290.33
	09/22/98	<0.5	<0.5	<0.5	<1.0	<50	--	--	--	--	--	--	--	--	9.46	288.24
	12/08/98	0.533	<0.3	<0.5	<0.6	<100	--	--	--	--	--	--	--	--	6.20	291.50
	03/16/99	<0.3	<0.3	<0.5	<0.6	<100	--	--	--	--	--	--	--	--	4.83	292.87
	06/08/99	<0.3	<0.3	<0.5	<0.6	<100	--	--	--	--	--	--	--	--	6.82	290.88
	09/30/99	<0.3	<0.3	<0.5	1.11	<100	--	--	--	--	--	--	--	--	8.75	288.95
	12/13/99	<0.3	<0.3	<0.5	<0.6	<100	--	--	--	--	--	--	--	--	5.90	291.80
	03/01/00	<0.3	<0.3	<0.5	<0.6	<100	--	--	--	--	--	--	--	--	5.61	292.09
	06/06/00	<0.5	<0.5	<0.5	<1.0	<100	--	--	--	--	--	--	--	--	6.89	290.81
	08/17/00	<0.5	<0.5	<0.5	<1.0	<100	--	--	--	--	--	--	--	--	8.51	289.19
	10/12/00	<0.5	<0.5	<0.5	<1.0	<100	--	--	--	--	--	--	--	--	9.41	288.29
	01/17/01	--	--	--	--	--	--	--	--	--	--	--	--	--	7.41	290.29
	04/17/01	--	--	--	--	--	--	--	--	--	--	--	--	--	6.46	291.24
	09/21/01	--	--	--	--	--	--	--	--	--	--	--	--	--	9.29	288.41
	10/23/01	--	--	--	--	--	--	--	--	--	--	--	--	--	9.39	288.31
	12/17/01	--	--	--	--	--	--	--	--	--	--	--	--	--	5.70	292.00
	03/14/02	<0.5	<1.0	<1.0	<1.0	<100	--	--	--	--	--	--	--	--	6.00	291.70
	08/22/02	--	--	--	--	--	--	--	--	--	--	--	--	--	9.10	288.60
	12/23/02	--	--	--	--	--	--	--	--	--	--	--	--	--	8.11	289.59
	03/13/03	<1.0	<1.0	<1.0	<2.0	<100	--	--	--	--	--	--	--	--	5.67	292.03
	06/05/03	--	--	--	--	--	--	--	--	--	--	--	--	--	7.76	289.94
	09/16/03	--	--	--	--	--	--	--	--	--	--	--	--	--	11.29	286.41
	12/05/03	--	--	--	--	--	--	--	--	--	--	--	--	--	7.49	290.21
	03/22/04	<1.0	<1.0	<1.0	<2.0	<100	--	--	--	--	--	--	--	--	7.54	290.16
	06/03/04	--	--	--	--	--	--	--	--	--	--	--	--	--	8.89	289.01
	09/22/04	--	--	--	--	--	--	--	--	--	--	--	--	--	9.30	288.40
297.19	01/04/05	--	--	--	--	--	--	--	--	--	--	--	--	--	7.97	289.73
	04/05/05	<1.0	<1.0	<1.0	<2.0	<100	--	--	--	--	--	--	--	--	7.61	289.58
	06/24/05	--	--	--	--	--	--	--	--	--	--	--	--	--	6.92	290.27
	09/22/05	--	--	--	--	--	--	--	--	--	--	--	--	--	6.10	291.09
	12/06/05	--	--	--	--	--	--	--	--	--	--	--	--	--	6.75	290.44
	03/14/06	1.0	<1.0	1.3	<2.0	<100	--	--	--	--	--	--	--	--	6.40	290.79
	06/15/06	--	--	--	--	--	--	--	--	--	--	--	--	--	9.84	287.35
	09/13/06	--	--	--	--	--	--	--	--	--	--	--	--	--	5.68	291.51
	12/13/06	--	--	--	--	--	--	--	--	--	--	--	--	--	7.00	290.19
	03/30/07	--	--	--	--	--	--	--	--	--	--	--	--	--	5.45	291.74
	06/04/07	--	--	--	--	--	--	--	--	--	--	--	--	--	7.70	289.49
	09/13/07	--	--	--	--	--	--	--	--	--	--	--	--	--	9.90	287.29
	12/26/07	--	--	--	--	--	--	--	--	--	--	--	--	--	6.82	290.37
	06/24/09	5.0	2.4	<1.0	7.0	<100	--	--	--	--	--	--	--	--	7.82	289.37
	07/08/10	<1.0	1.3	1.7	<2.0	<100	--	--	--	--	--	--	--	--	6.94	290.25
	10/29/10	1.9	13	<1.0	20	120	--	--	--	--	--	--	--	--	7.15	290.04
	02/08/11	<0.50	<0.50	<0.50	<0.50	<250	--	--	--	--	--	--	--	--	5.55	291.64
	08/05/11	<0.50	<0.50	<0.50	<0.50	<250	--	--	--	--	--	--	--	--	7.84	289.35
	02/06/12	<0.50	<0.50	<0.50	<0.50	<250	--	--	--	--	--	--	--	--	5.87	291.32
287.16	08/27/12	<0.50	<0.50	<0.50	<0.50	<250	<250	<500	--	--	--	--	--	--	9.10	288.09
	01/08/13	<0.50	<0.50	<0.50	<0.50	<250	<250	<500	--	--	--	--	--	--	5.72	281.44
	06/06/13	<0.50	<0.50	<0.50	<0.50	<250	<250	<500	--	--	--	--	--	--	6.89	280.27
	02/03/14	--	--	--	--	--	--	--	--	--	--	--	--	--	6.76	280.40
	07/29/14	--	--	--	--	--	--	--	--	--	--	--	--	--	8.62	278.54
	03/03/15	--	--	--	--	--	--	--	--	--	--	--	--	--	5.83	281.33
	09/30/15	--	--	--	--	--	--	--	--	--	--	--	--	--	10.74	277.04
	06/01/16	--	--	--	--	--	--	--	--	--	--	--	--	--	8.07	279.71
	12/14/16	--	--	--	--	--	--	--	--	--	--	--	--	--	5.94	281.84
	03/23/17	--	--	--	--	--	--	--	--	--	--	--	--	--	4.66	283.12
287.78	06/22/17	--	--	--	--	--	--	--	--	--	--	--	--	--	7.29	280.49
	09/20/17	--	--	--	--	--	--	--	--	--	--	--	--	--	10.52	277.26
	03/06/18	--	--	--	--	--	--	--	--	--	--	--	--	--	6.95	280.83
	04/19/18	--	--	--	--	--	--	--	--	--	--	--	--	--	5.41	282.37
	07/16/18	--	--	--	--	--	--	--	--	--	--	--	--	--	9.59	278.19
	10/18/18	--	--	--	--	--	--	--	--	--	--	--	--	--	11.00	276.78
	07/31/19	--	--	--	--	--	--	--	--	--	--	--	--	--	9.91	277.87
	02/03/20	--	--	--	--	--	--	--	--	--	--	--	--	--	4.01	283.77
	08/04/20	--	--	--	--	--	--	--	--	--	--	--	--	--	8.96	278.82
	02/11/21	--	--	--	--	<250	<106	<336	--	--	--	--	<0.800	--	5.49	282.29
287.07	03/02/21	--	--	--	--	--	--	--	--	--	--	--	--	--	5.34	281.73
	05/25/21	--	--	--	--	--	--	--	--	--	--	--	--	--	8.03	279.04
	08/17/21	--	--	--	--	--	--	--	--	--	--	--	--	--	10.30	276.77
	11/03/21	--	--	--	--	--	--	--	--	--	--	--	--	--	9.18	277.89
	03/16/22	--	--	--	--	--	--	--	--	--	--	--	--	--	5.68	281.39
	05/26/22	--	--	--	--	--	--	--	--	--	--	--	--	--	6.31	280.76
MTCA Method A Cleanup Level		5	1,000	700	1,000	800/1,000 ^b	500	500	20	0.01	5	160	15			

TABLE 2
GROUNDWATER MONITORING AND ANALYTICAL RESULTS - Petroleum Related Constituents
 7-Eleven Store #22866
 14207 International Boulevard, Tukwila, Washington
 All results in micrograms per liter (µg/L)

Well ID (TOC)	Sample Date	Benzene	Toluene	Ethyl-benzene	Total Xylenes	TPH-G	TPH-D	TPH-O	MTBE	EDB	EDC	Total Naphthalenes	Total Lead	Dissolved Lead	Depth To Groundwater (feet from TOC)	Groundwater Elevation (feet)
MW-SA 299.15	11/07/96	1,580	3,340	1,820	12,300	70,300	---	---	---	---	---	---	10.2	---	9.46	289.69
	03/18/97	---	---	---	---	---	---	---	---	---	---	---	---	---	6.81	292.34
	06/10/97	---	---	---	---	---	---	---	---	---	---	---	---	---	7.12	292.03
	09/11/97	---	---	---	---	---	---	---	---	---	---	---	---	---	9.68	289.47
	03/17/98	---	---	---	---	---	---	---	---	---	---	---	---	---	7.57	291.58
	06/03/98	---	---	---	---	---	---	---	---	---	---	---	---	---	8.90	290.25
	09/22/98	---	---	---	---	---	---	---	---	---	---	---	---	---	10.84	288.31
	12/08/98	---	---	---	---	---	---	---	---	---	---	---	---	---	9.24	289.91
	03/16/99	---	---	---	---	---	---	---	---	---	---	---	---	---	6.93	292.22
	09/30/99	---	---	---	---	---	---	---	---	---	---	---	---	---	9.63	289.52
	12/13/99	---	---	---	---	---	---	---	---	---	---	---	---	---	6.89	292.26
	03/01/00	---	---	---	---	---	---	---	---	---	---	---	---	---	9.13	290.02
	01/17/01	370	58	1,100 ^c	5,200	34,000	---	---	---	---	---	---	---	---	9.65	289.50
	02/09/01	---	---	---	---	---	---	---	---	---	---	---	<5 ^b	---	---	---
	04/17/01	110	36	1,100	3,900	4,000	---	---	---	---	---	---	---	---	8.36	290.79
	09/21/01	180	230	950	5,200	26,000	---	---	---	---	---	---	---	---	9.63	289.52
	10/23/01	150	1,100	75	5,100	28,000	---	---	---	---	---	---	---	---	10.98	288.17
	12/17/01	<50	<50	430	4,100	25,000	---	---	---	---	---	---	---	---	7.93	291.22
	03/14/02	<5	<100	<100	2,040	14,800	---	---	---	---	---	---	---	---	7.22	291.93
298.64	08/23/02	28.1	6.34	118	707.4	4,420	---	---	---	---	---	---	---	---	10.46	288.69
	12/26/02	36.1	8.56	144	819.6	4,700	---	---	---	---	---	---	---	---	9.48	289.67
	03/14/03	130	24	320	1,534	9,900	---	---	---	---	---	---	---	---	8.34	290.81
	06/05/03	290	39	420	1,639	8,900	---	---	---	---	---	---	---	---	8.16	290.99
	09/16/03	380	64	790	3,063	17,000	---	---	---	---	---	---	---	---	12.66	286.49
	12/05/03	200	32	480	1,436	9,700	---	---	---	---	---	---	---	---	10.80	288.35
	03/22/04	160	28	420	1,232	7,900	---	---	---	---	---	---	---	---	9.76	289.39
	06/03/04	190	34	530	1,645	11,000	---	---	---	---	---	---	---	---	9.34	289.81
	09/22/04	170	32	480	1,341	12,000	---	---	---	---	---	---	---	---	10.34	288.81
	01/04/05	180	56	580	1,681	8,500	---	---	---	---	---	---	---	---	9.57	289.58
	03/31/05	180	47	640	1,685	12,000	---	---	---	---	---	---	---	---	7.93	290.71
	06/24/05	92	<1.0	190	96	6,100	---	---	---	---	---	---	---	---	6.23	292.41
	09/12/05	190	55	770	2,985	14,000	---	---	---	---	---	---	---	---	5.87	292.77
	12/06/05	160	30	700	1,632	11,000	---	---	---	---	---	---	---	---	9.30	289.34
	03/14/06	110	100	1,800	6,880	33,000	---	---	---	---	---	---	---	---	8.49	290.15
	06/15/06	21	78	47	320	1,600	---	---	---	---	---	---	---	---	7.72	290.92
	09/13/06	62	32	630	1,943	11,000	---	---	---	---	---	---	---	---	4.19	294.45
	03/30/07	78	38	1,100	2,955	16,000	---	---	---	---	---	---	---	---	6.41	292.23
	06/04/07	91	<50	1,100	2,600	11,000	---	---	---	---	---	---	---	---	8.75	289.89
288.63	09/13/07	83	<50	1,100	2,400	14,000	---	---	---	---	---	---	---	---	10.55	288.09
	12/26/07	82	10	1,100	1,217	9,300	---	---	---	---	---	---	---	---	7.42	291.22
	03/28/08	71	<10	1,400	1,600	11,000	---	---	---	---	---	---	---	---	5.42	293.22
	06/25/08	78	<50	1,300	2,700	15,000	---	---	---	---	---	---	---	---	8.89	289.75
	09/25/08	73	26	1,600	2,847	18,000	---	---	---	---	---	---	---	---	8.91	289.73
	01/02/09	59	6.5	1,200	1,307.2	11,000	---	---	---	---	---	---	---	---	7.31	291.33
	03/24/09	55	5.1	1,100	901.6	8,900	---	---	---	---	---	---	---	---	7.82	290.82
	06/24/09	71	<50	1,300	670	9,600	---	---	---	---	---	---	---	---	6.11	292.53
	09/30/09	36	38	1,700	3,630	23,000	---	---	---	---	---	---	---	---	8.27	290.37
	12/28/09	41	4.3	1,100	370	9,100	---	---	---	---	---	---	---	---	8.65	289.99
288.63	07/09/10	31	2.6	810	122.4	5,000	---	---	---	---	---	---	---	---	8.76	289.88
	10/29/10	---	---	---	---	---	---	---	---	---	---	---	---	---	8.15	290.49
	02/08/11	13	1.3	520	53	4,800	---	---	---	---	---	---	---	---	7.84	290.80
	08/04/11	10	0.6	620	19	5,400	---	---	---	---	---	---	---	---	8.40	290.24
	02/06/12	6.5	0.53	280	8.6	3,800	---	---	---	---	---	---	---	---	7.84	290.80
288.63	08/27/12	4.8	<0.50	160	3.5	2,900	<250	<500	---	---	---	---	---	---	7.98	280.65
	03/03/15	8.25	3.26	747	15	9,660	1,450	<94.8	---	---	---	---	---	---	---	---
	09/30/15	---	---	---	---	---	---	---	---	---	---	---	---	---	12.03	276.80
Well Decommissioned in May 2016																
MTCA Method A Cleanup Level		5	1,000	700	1,000	800/1,000 ^b	500	500	20	0.01	5	160	15			

TABLE 2
GROUNDWATER MONITORING AND ANALYTICAL RESULTS - Petroleum Related Constituents
 7-Eleven Store #22866
 14207 International Boulevard, Tukwila, Washington
 All results in micrograms per liter (µg/L)

Well ID (TOC)	Sample Date	Benzene	Toluene	Ethylbenzene	Total Xylenes	TPH-G	TPH-D	TPH-O	MTBE	EDB	EDC	Total Naphthalenes	Total Lead	Dissolved Lead	Depth To Groundwater (feet from TOC)	Groundwater Elevation (feet)
MW-5B 299.14	11/07/96	3,770	1,020	846	4,310	25,000							3.03		9.43	289.71
	03/18/97	2,660	2,810	815	2,690	27,700									6.14	293.00
	06/10/97	8,900	25,100	2,770	21,100	151,000									7.29	291.85
	09/11/97	7,660	15,440	2,320	16,900	101,000									9.53	289.61
	12/04/97	8,100	16,400	2,970	20,600	110,000									7.45	291.69
	03/17/98	2,660	2,810	815	2,690	27,700									8.70	290.44
	06/02/98	98	11	54	110	940									9.74	289.40
	09/22/98	256	3.62	91.9	57.1	802									10.95	288.19
	12/08/98	202	2.26	53.2	62.3	984									8.01	291.13
	03/16/99	1.61	<0.3	<0.5	<0.6	<100									4.78	294.36
	06/08/99	330	<1.5	<2.5	<3.0	442									7.97	291.17
	09/30/99	685	591	137	1,430	6,080									10.00	289.14
	12/13/99	527	417	236	1,170	4,720									7.18	291.96
	03/01/00	95.2	<0.3	19.4	20.7	434									7.50	291.64
	06/06/00	250	89	180	190	<100									9.17	289.97
	08/17/00	100	<5.0	83	30	630									10.00	289.14
	10/12/00	10	<5.0	21	<10	<1000									10.81	288.33
	01/17/01	59	2.1	32	<1.5	250									9.14	290.00
	04/17/01	27	0.74	8.0	<1.0	220									8.28	290.86
	09/21/01	160	15	71.0	100	1,100									11.57	287.57
	10/23/01	3.2	1.6	2.3	4.4	170									10.81	288.33
	12/17/01	33	<0.5	1.4	<1.5	<100									7.74	291.40
	03/14/02	<0.5	<1.0	<1.0	<1.0	<100									6.92	292.22
	08/23/02	186	4.70	115.0	177.70	1,580									10.26	288.88
	12/26/02	114	2.77	70.4	57.17	853									9.53	289.61
	03/14/03	270	8.9	300	487	4,300									7.00	292.14
	06/05/03	430	18	780	1,411	10,000									8.95	290.19
	09/16/03	360	<10	280	360	3,700									12.55	286.59
	12/05/03	340	10	500	340	4,900									8.84	290.30
	03/22/04	180	7.0	480	463.9	4,600									8.75	290.39
	06/03/04	360	14.0	890	698.3	8,800									10.03	289.11
	09/22/04	330	9.2	700	246	7,100									10.87	288.27
	01/04/05	110	<5.0	210	71	2,000									9.28	289.66
	03/31/05	38	<1.0	95	35	<100									9.23	289.40
	06/24/05	3.2	<1.0	<1.0	<2.0	100									8.41	290.22
	09/12/05	270	<1.0	410	130	4,700									7.61	291.02
	12/06/05	59	<1.0	95	29	1,600									9.51	289.12
	03/14/06	93	<4.0	130	<8.0	1,500									7.55	291.08
	06/15/06	<4.0	<4.0	<4.0	<8.0	<400									8.18	290.45
	09/13/06	<1.0	<1.0	<1.0	<2.0	<100									7.68	290.95
	12/13/06	<1.0	<1.0	<1.0	<2.0	<100									7.00	291.63
	03/30/07	4.7	<1.0	5	<2.0	290									6.31	292.32
	06/04/07	210	2.9	55	9.5	2,800									8.70	289.93
	09/13/07	130	<10	33	<20	1,900									11.05	287.58
	12/26/07	84	10	1,100	1,116	9,700									7.32	291.31
	03/28/08	210	<10	51	<20	2,600									6.96	291.67
	06/25/08	160	<4.0	42	8.4	2,700									8.85	289.78
	09/25/08	56	<4.0	22	7.8	2,000									10.52	288.11
	01/02/09	23	<1.0	9.7	3.2	870									7.16	291.47
03/24/09	76	2.7	28	4.7	1,500									7.20	291.43	
06/24/09	120	<4.0	31	4.1	2,300									4.96	293.67	
09/30/09	3.7	<1.0	2.8	<2.0	180									10.97	287.66	
12/28/09	33	3.4	9.9	4.8	770									7.35	291.28	
07/09/10	27	2	4.9	1.3	460									8.12	290.51	
11/01/10		2010 UST Removal														
02/08/11	<0.50	<0.50	<0.50	<0.50	<250										6.10	292.53
08/04/11	3.9	0.95	2.8	0.69	680										8.94	289.69
02/06/12	<0.50	<0.50	0.92	<0.50	340										7.08	291.55
08/27/12	1.1	1.4	1.9	2.6	660	<250	<500								10.21	288.42
01/09/13	0.98	<0.50	1.7	0.69	550	610	680								6.67	281.94
06/06/13	2.5	0.62	1.0	0.75	600	<250	<500								7.98	280.63
08/15/13	1.4	1.0	1.2	2.8	1,200	<250	<500						<5		10.44	278.17
11/19/13	5.73	2.23	8.02	6.22	3,080	<50.0	380						6.95			
02/03/14	3.70	1.20	3.34	4.22	1,730	479 f	180								8.03	280.58
07/29/14	1.34	<1.00	<1.00	2.09	324										9.67	278.94
03/03/15	<1.00	<1.00	<1.00	<2.00	642	<93.9	<93.9									
09/24/15	<1.00	1.04	1.86	<3.00	1,960	490	<100						<2.00		11.95	276.66
06/01/16	--	--	--	--	--	--	--								9.08	279.53
10/03/16		MPE EVENT (CAL CLEAN)														
10/03/16		MPE EVENT (CAL CLEAN)														
12/15/16	<1.00	<1.00	<1.00	<3.00	<100			<1.00	<0.00605 ^g	<1.00		<0.300	--		7.14	281.47
03/23/17	<1.00	<1.00	<1.00	<3.00	<100	<105	169	<1.00	<0.00603 ^g	<1.00		<0.300	<2.00		4.54	284.07
06/23/17	<1.00	<1.00	<1.00	<3.00	<100	526	<96.2	<1.00	<0.00616 ^g	<1.00		<0.294	<2.00		8.20	280.41
09/20/17	<1.00	<1.00	<1.00	<3.00	<100	880	402	<1.00	<0.00616 ^g	<1.00		<0.0962	<2.00		11.62	276.99
11/20/17	--	--	--	--	--	--	--								9.41	279.20
03/07/18	0.468 ^b	0.346 ^b	7.72	1.06 ^b	458	1,360	310	<1.00	<0.00621 ^g	<1.00		<1.155	1.12 ^b		7.48	281.13
04/20/18	<1.00	<1.00	0.627 ^b	<3.00	366	151	59.3 ^b	<1.00	<0.00602 ^g	<1.00		<0.333	0.938 ^{b,k}		6.10	282.51
07/17/18	<1.00	0.233 ^b	0.944 ^b	<3.00	267	582	127	<1.00	<0.00616 ^g	0.262 ^b		0.2291 ^b	10.5		10.77	277.84
10/19/18	<1.00	0.502 ^b	<1.00	<3.00	146	354	278	--	--	--		0.2259 ^b	0.879 ^b		12.21	276.40
08/01/19	0.221 ^b	0.931 ^b	0.510 ^b	0.888 ^b	482	596	153	--	--	--		--	--		11.04	277.57
02/03/20	<3.00	<2.00	<3.00	<3.00	744	1,120	374	--	--	--		--	--		6.20	282.41
08/04/20	<3.00	<2.00	<3.00	<3.00	648	1,350	430	--	--	--		--	--		9.96	278.65
02/10/21	--	--	--	--	342	436	351	--	--	--		--	1.11		6.60	282.01
03/02/21	--	--	--	--	--	--	--	--	--	--		--	--		6.20	282.30
10/11/21		BCS-200 Injection														
03/16/22	<1.00	<1.00	<1.00	<3.00	169	351	313	--	--	--		--	--		6.75	281.75
05/27/22	<1.00	<1.00	<1.00	<3.00	279 ^g	346	<250	--	--	--		--	--		7.32	281.18
MW-7 288.97	01/08/13	<0.50	<0.50	<0.50	<0.50	<250	<250	<500							6.86	282.11
	06/06/13	<0.50	<0.50	<0.50	<0.50	<250	<250	<500							8.23	280.74
	08/15/13															

TABLE 2
GROUNDWATER MONITORING AND ANALYTICAL RESULTS - Petroleum Related Constituents
 7-Eleven Store #22866
 14207 International Boulevard, Tukwila, Washington
 All results in micrograms per liter (µg/L)

Well ID (TOC)	Sample Date	Benzene	Toluene	Ethylbenzene	Total Xylenes	TPH-G	TPH-D	TPH-O	MTBE	EDB	EDC	Total Naphthalenes	Total Lead	Dissolved Lead	Depth To Groundwater (feet from TOC)	Groundwater Elevation (feet)
MW-9 289.84	01/08/13	<0.50	<0.50	<0.50	<0.50	<250	<250	<500	--	--	--	--	--	--	6.63	283.21
	06/05/13	<0.50	<0.50	<0.50	<0.50	<250	<250	<500	--	--	--	--	--	--	7.93	281.91
NS	08/15/13	<0.50	<0.50	<0.50	<0.50	<250	<250	<500	--	--	--	--	<5	--	10.74	279.10
	11/19/13	--	--	--	--	--	--	--	--	--	--	--	--	--	4.81	285.03
	02/03/14	--	--	--	--	--	--	--	--	--	--	--	--	--	7.05	282.79
	07/29/14	--	--	--	--	--	--	--	--	--	--	--	--	--	9.81	280.03
	03/03/15	--	--	--	--	--	--	--	--	--	--	--	--	--	6.20	283.64
	09/30/15	--	--	--	--	--	--	--	--	--	--	--	--	--	12.54	277.30
	06/01/16	--	--	--	--	--	--	--	--	--	--	--	--	--	9.07	280.77
	12/14/16	--	--	--	--	--	--	--	--	--	--	--	--	--	6.00	283.84
	03/23/17	--	--	--	--	--	--	--	--	--	--	--	--	--	1.90	287.94
	06/22/17	--	--	--	--	--	--	--	--	--	--	--	--	--	7.80	282.04
	09/20/17	--	--	--	--	--	--	--	--	--	--	--	--	--	12.06	277.78
	11/20/17	--	--	--	--	--	--	--	--	--	--	--	--	--	9.43	280.41
	03/06/18	--	--	--	--	--	--	--	--	--	--	--	--	--	6.85	282.99
	04/19/18	--	--	--	--	--	--	--	--	--	--	--	--	--	2.42	287.42
289.71	07/16/18	--	--	--	--	--	--	--	--	--	--	--	--	--	10.78	279.06
	10/18/18	--	--	--	--	--	--	--	--	--	--	--	--	--	13.06	276.78
	07/31/19	--	--	--	--	--	--	--	--	--	--	--	--	--	11.41	278.43
	02/03/20	--	--	--	--	--	--	--	--	--	--	--	--	--	1.58	288.26
	08/04/20	--	--	--	--	--	--	--	--	--	--	--	--	--	10.09	279.75
	03/02/21	--	--	--	--	--	--	--	--	--	--	--	--	--	3.17	286.54
	05/25/21	--	--	--	--	--	--	--	--	--	--	--	--	--	8.96	280.75
	08/17/21	--	--	--	--	--	--	--	--	--	--	--	--	--	11.70	278.01
	11/03/21	--	--	--	--	--	--	--	--	--	--	--	--	--	9.00	280.71
	03/16/22	--	--	--	--	--	--	--	--	--	--	--	--	--	2.70	287.01
MW-10 288.5033	05/26/22	--	--	--	--	--	--	--	--	--	--	--	--	--	6.34	283.37
	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
288.39	03/23/17	<1.00	<1.00	40.6	49.8	665	313	<94.8	<1.00	<0.00603 ^a	<1.00	3.544	<2.00	--	9.18	279.32
	06/23/17	4.64	<1.00	295	329	6,850	1,380	<100	<1.00	0.00720 ^b	<1.00	100.6	2.23	--	8.40	280.10
	09/20/17	<1.00	<1.00	17.5	6.69	201	<94.8	<1.00	<0.00609 ^b	<1.00	1.233	<2.00	--	--	11.57	276.93
	11/20/17	<1.00 ^c	<1.00 ^c	6.82 ^d	15.2 ^e	271	<100	<1.00	<1.00 ^f	<0.00618 ^g	<1.00 ^f	1.065	<2.00	--	9.58	278.92
	03/07/18	13.9	0.525 ^h	585	471	5,690	2,010	88.0 ⁱ	<1.00	<0.00618 ^g	<1.00	68.16	2.03	--	7.60	280.90
	04/20/18	0.389 ^j	<1.00	49.6	46.6	877	262	84.1 ^k	<1.00	<0.00602 ^g	<1.00	8.79	0.672 ^h	--	6.62	281.88
	07/17/18	<1.00	<1.00	16.8	4.35	199	70.8 ^l	63.0 ^m	<1.00	<0.00600 ^g	<1.00	0.9007 ⁿ	0.167 ^h	--	10.64	277.86
	10/19/18	0.639 ^j	<1.00	8.87	<3.00	230	175	69.2 ^o	--	--	--	0.8798 ^p	0.179 ^h	--	12.13	276.37
	08/01/19	<0.400	<1.00	0.625 ^h	<3.00	<150	77.7	44.3 ^q	--	--	--	--	--	--	11.00	277.50
	02/03/20	<3.00	<2.00	<3.00	<3.00	<250	107	<339	--	--	--	--	--	--	6.25	282.25
	08/05/20	<3.00	<2.00	<3.00	<3.00	<250	<106	<338	--	--	--	--	--	--	7.90	280.60
	02/10/21	--	--	--	--	<250	139	<341	--	--	--	--	<0.800	--	6.89	281.61
	03/02/21	--	--	--	--	--	--	--	--	--	--	--	--	--	8.59	281.70
	05/25/21	--	--	--	--	--	--	--	--	--	--	--	--	--	9.16	279.23
	08/17/21	--	--	--	--	--	--	--	--	--	--	--	--	--	11.40	276.99
	11/03/21	--	--	--	--	--	--	--	--	--	--	--	--	--	10.35	278.04
	03/17/22	<1.00	<1.00	<1.00	<3.00	<100	245	<250	--	--	--	--	--	--	7.00	281.39
	05/26/22	0.126 ^b	<1.00	<1.00	<3.00	112 ^a	195 ^b	174 ^a	--	--	--	--	--	--	7.50	280.89
	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-11 288.68	03/02/21	<3.00	<2.00	<3.00	<3.00	294	232	<357	<2.00	<0.00814	<2.00	2.394	<0.400	--	5.90	282.78
	05/25/21	14.7	<1.00	<1.00	<2.00	1,120	786	<357	<1.00	<0.00789	<1.00	30.20	<0.400	--	9.20	279.48
	08/17/21	14.6	<1.00	<10.0	<20.0	341	458	<336	<10.0	<0.00809	<10.0	5.556	<0.400	--	11.55	277.13
	11/03/21	5.81	<1.00	<1.00	<2.00	<250	<446	<1,420	<1.00	<0.00805	<1.00	2.038	<0.400	--	10.55	278.13
	03/16/22	<1.00	<1.00	<1.00	<3.00	<100	<200	<250	--	--	--	--	--	--	6.00	282.68
	05/27/22	<1.00	<1.00	<1.00	<3.00	<100	<200	<250	--	--	--	--	--	--	7.27	281.41
MW-12 287.72	03/03/21	<3.00	<2.00	<3.00	<3.00	<250	<113	<358	<2.00	<0.00800	<2.00	<0.407	0.440	--	5.30	282.42
	05/25/21	<1.00	<1.00	<1.00	<2.00	<250	260	<356	<1.00	<0.00798	<1.00	<0.407	<0.400	--	8.12	279.60
	08/17/21	<1.00	<1.00	7.76	15.5	<250	167	<336	<1.00	<0.00793	<1.00	<0.416	<0.400	--	10.59	277.13
	11/03/21	<50.0	<50.0	<50.0	<100	<250	<441	<1,400	<50.0	<0.00807	<50.0	<0.404	<0.400	--	9.85	277.87
	03/17/22	<1.00	<1.00	<1.00	<3.00	<100	<200	<250	--	--	--	--	--	--	5.52	282.20
	05/26/22	--	--	--	--	--	--	--	--	--	--	--	--	--	6.28	281.44
MW-13 288.84	03/03/21	<3.00	6.00	3,480	2,570	30,100	5,440	<355	<2.00	<0.00809	<2.00	393.7	2.76	--	6.72	282.12
	05/25/21	2.01	9.03	123	355	33,700	10,600	<362	<1.00	<0.00789	<1.00	390.7	3.64	--	9.50	279.34
	08/17/21	<20.0	30.2	2,660	6,010	38,000	5,030	<356	<20.0	<0.00805	<20.0	492.2	4.22	--	11.85	276.99
	11/03/21	<5.00	5.57	344	2,700	10,300	1,100	<1,410	<5.00	<0.00805	<5.00	156.8	2.04	--	10.84	278.00
	10/11/21	BOS-200 Injection														
	10/11/21	BOS-200														
	03/17/22	<1.00	<1.00	25.7	56.8	2,970	1,710	<250	--	--	--	--	--	--	7.13	281.71
	05/26/22	0.699	1.08	210	530	8,580	1,660	136 ^c	--	--	--	--	--	--	7.62	281.22
MW-14 287.85	03/02/21	<3.00	<2.00	<3.00	3.84	<250	148	<358	<2.00	<0.00793	<2.00	0.204	<0.400	--	6.18	281.67
	05/25/21	<1.00	<1.00	<1.00	<2.00	<250	<114	<362	<1.00	<0.00798	<1.00	<0.408	<0.400	--	8.89	278.96
	08/16/21	<1.00	<1.00	<1.00	<2.00	<250	127	<339	<1.00	<0.00798	<1.00	<0.416	<0.400	--	10.94	276.91
	11/03/21	<1.00	<1.00	<1.00	<2.00	<250	<447	<1,420	<1.00	<0.00809	<1.00	<0.403	<0.400	--	9.87	277.98
	03/17/22	<1.00	<1.00	<1.00	<3.00	161	<200	<250	--	--	--	--	--	--	6.53	281.32
	05/26/22	--	--	--	--	--	--	--	--	--	--	--	--	--	7.09	280.76
MTCA Method A Cleanup Level		5	1,000	700	1,000	800/1,000 ^d	500	500	20	0.01	5	160	15			

TABLE 2
GROUNDWATER MONITORING AND ANALYTICAL RESULTS - Petroleum Related Constituents
7-Eleven Store #22866
14207 International Boulevard, Tukwila, Washington
All results in micrograms per liter (µg/L)

Well ID (TOC)	Sample Date	Benzene	Toluene	Ethylbenzene	Total Xylenes	TPH-G	TPH-D	TPH-O	MTBE	EDB	EDC	Total Naphthalenes	Total Lead	Dissolved Lead	Depth To Groundwater (feet from TOC)	Groundwater Elevation (feet)
MW-15 289.45	03/02/21	<3.00	<2.00	<3.00	<3.00	<250	<112	<358	<2.00	<0.00805	<2.00	<0.412	<0.400	--	6.98	282.47
	05/25/21	<1.00	<1.00	<1.00	<2.00	<250	<110	<351	<1.00	<0.00793	<1.00	<0.404	<0.400	--	9.29	280.16
	08/16/21	<1.00	<1.00	<1.00	<2.00	<250	<105	<334	<1.00	<0.00791	<1.00	<0.416	<0.400	--	12.19	277.26
	11/03/21	<1.00	<1.00	<1.00	<2.00	<250	<445	<1,420	<1.00	<0.00795	<1.00	<0.404	<0.400	--	11.21	278.24
	03/16/22	<1.00	<1.00	<1.00	<3.00	<100	<200	<250	--	--	--	--	--	--	5.60	283.85
	05/28/22	--	--	--	--	--	--	--	--	--	--	--	--	--	7.13	282.32
MW-16 290.93	03/02/21	<3.00	<2.00	<3.00	<3.00	404	1,370	462	<2.00	<0.00800	<2.00	7.843	3.12	--	4.75	286.18
	05/25/21	<1.00	<1.00	<1.00	<2.00	390	2,110	694	<1.00	<0.00798	<1.00	9.045	23.1	--	8.01	282.92
	08/16/21	<1.00	<1.00	<1.00	<2.00	286	1,260	608	<1.00	<0.00795	<1.00	9.119	1.27	--	11.28	279.65
	10/11/21	BOS-200 Injection														
	11/02/21	<1.00	<1.00	<1.00	<2.00	263	822	<1,410	<1.00	<0.00805	<1.00	2.901	2.11	--	11.60	279.33
	03/16/22	<1.00	<1.00	<1.00	<3.00	194	1,560	710	--	--	--	--	--	--	5.02	285.91
	05/27/22	<1.00	<1.00	<1.00	<3.00	169 ^a	1,420	682	--	--	--	--	--	--	5.94	284.99
	10/11/21	BOS-200 Injection														
	11/02/21	BOS-200 Injection														
	03/16/22	<1.00	<1.00	<1.00	<3.00	196	1,690	641	--	--	--	--	--	--	4.94	286.10
MW-17 291.04	03/02/21	<3.00	<2.00	<3.00	<3.00	514	1,190	492	<2.00	<0.00795	<2.00	6.919	<0.400	--	4.38	286.66
	05/25/21	<1.00	<1.00	<1.00	<2.00	367	968	443	<1.00	<0.00800	<1.00	2.396	<0.400	--	8.36	282.68
	08/16/21	<1.00	<1.00	<1.00	<2.00	<250	879	378	<1.00	<0.00789	<1.00	0.422	<0.400	--	11.52	279.52
	10/11/21	BOS-200 Injection														
	11/02/21	<5.00	<5.00	<5.00	<10.0	<250	683	<1,430	<5.00	<0.00809	<5.00	0.191	<0.400	--	11.87	279.17
	03/16/22	<1.00	<1.00	<1.00	<3.00	196	1,690	641	--	--	--	--	--	--	4.94	286.10
DPE-1 NS	05/27/22	<1.00	<1.00	<1.00	<3.00	190 ^a	1,310	571	--	--	--	--	--	--	5.84	285.20
	12/04/97	7.97	7.48	64	23.1	1,090	--	--	--	--	--	--	--	--	--	--
	03/15/02	<0.5	<1.0	<1.0	<1.0	<100	--	--	--	--	--	--	--	--	5.67	--
	08/22/02	--	--	--	--	--	--	--	--	--	--	--	--	--	8.98	--
	12/23/02	--	--	--	--	--	--	--	--	--	--	--	--	--	8.18	--
	03/14/03	<1.0	<1.0	<1.0	<2.0	<100	--	--	--	--	--	--	--	--	5.85	--
	06/05/03	--	--	--	--	--	--	--	--	--	--	--	--	--	7.62	--
	09/16/03	--	--	--	--	--	--	--	--	--	--	--	--	--	11.29	--
	12/05/03	--	--	--	--	--	--	--	--	--	--	--	--	--	7.51	--
	03/22/04	<1.0	<1.0	1.9	<2.0	<100	--	--	--	--	--	--	--	--	7.44	--
	06/03/04	--	--	--	--	--	--	--	--	--	--	--	--	--	8.67	--
	09/22/04	--	--	--	--	--	--	--	--	--	--	--	--	--	9.13	--
	01/04/05	--	--	--	--	--	--	--	--	--	--	--	--	--	7.80	--
	03/31/05	<1.0	<1.0	<1.0	<2.0	<100	--	--	--	--	--	--	--	--	7.36	290.00
	06/24/05	--	--	--	--	--	--	--	--	--	--	--	--	--	7.10	290.26
	09/12/05	--	--	--	--	--	--	--	--	--	--	--	--	--	6.98	290.38
	12/06/05	--	--	--	--	--	--	--	--	--	--	--	--	--	6.31	291.05
	03/14/06	1,200	77	3.5	42	480	--	--	--	--	--	--	--	--	6.39	290.97
	06/15/06	--	--	--	--	--	--	--	--	--	--	--	--	--	7.41	289.95
	09/13/06	--	--	--	--	--	--	--	--	--	--	--	--	--	6.94	290.42
	12/13/06	--	--	--	--	--	--	--	--	--	--	--	--	--	5.87	291.49
	03/30/07	--	--	--	--	--	--	--	--	--	--	--	--	--	5.36	292.00
	06/04/07	--	--	--	--	--	--	--	--	--	--	--	--	--	7.50	289.86
	09/13/07	--	--	--	--	--	--	--	--	--	--	--	--	--	9.65	287.71
	12/26/07	--	--	--	--	--	--	--	--	--	--	--	--	--	6.72	290.64
	06/24/09	200	12	<4.0	4.4	<400	--	--	--	--	--	--	--	--	7.56	289.80
	07/08/10	960	24	20	20.7	410	--	--	--	--	--	--	--	--	6.75	290.61
	02/08/11	22	1.0	5.2	7.7	860	--	--	--	--	--	--	--	--	4.85	292.51
287.02	08/05/11	1.6	<0.50	0.93	0.77	<250	--	--	--	--	--	--	--	--	9.86	287.50
	02/06/12	<0.50	<0.50	<0.50	<0.50	<250	--	--	--	--	--	--	--	--	5.64	291.72
	08/27/12	<0.50	0.72	<0.50	<0.50	<250	290	<500	--	--	--	--	--	--	9.04	277.98
	08/15/13	<0.50	1.7	<0.50	<0.50	<250	400 ^a	560	--	--	--	--	--	--	9.18	277.84
	11/19/13	--	--	--	--	--	--	--	--	--	--	--	--	--	6.94	280.08
	03/03/15	<1.00	<1.00	<1.00	<2.00	<100	206	553	--	--	--	--	--	--	5.34	292.02
	09/30/15	--	--	--	--	--	--	--	--	--	--	--	--	--	10.85	276.49
	12/14/16	27.1	<1.00	<1.00	<3.00	<100	<95.2	510	<1.00	--	<1.00	--	--	--	6.62	280.72
	03/23/17	--	--	--	--	--	--	--	--	--	--	--	--	--	3.04	284.30
	06/22/17	<1.00	<1.00	<1.00	<2.00	<100	<100	<100	<1.00	<0.00602 ^a	<1.00	<0.294	<2.00	--	6.47	280.87
287.34	09/20/17	<1.00	<1.00	<1.00	<3.00	<100	<94.3	326	<1.00	<0.00614 ^a	<1.00	<0.0952	5.56	--	10.40	276.94
	11/20/17	--	--	--	--	--	--	--	--	--	--	--	--	--	8.21	279.13
	03/06/18	--	--	--	--	--	--	--	--	--	--	--	--	--	5.69	281.65
	04/20/18	<1.00	<1.00	<1.00	<3.00	<100	56.7 ^b	199	<1.00	<0.00598 ^b	<1.00	<0.300	2.49 ^b	--	4.67	282.67
	07/17/18	<1.00	<1.00	<1.00	<3.00	<100	65.2 ^b	261	<1.00	<0.00609 ^b	<1.00	<0.318	<3.00	--	9.23	278.11
	10/18/18	--	--	--	--	--	--	--	--	--	--	--	--	--	10.87	276.47
	07/31/19	--	--	--	--	--	--	--	--	--	--	--	--	--	9.65	277.89
	02/03/20	--	--	--	--	--	--	--	--	--	--	--	--	--	2.33	285.01
	08/04/20	--	--	--	--	--	--	--	--	--	--	--	--	--	8.67	278.67
	02/11/21	--	--	--	--	<250	<1,060	4,080	--	--	--	--	130	--	4.33	283.01
287.09	03/02/21	--	--	--	--	--	--	--	--	--	--	--	--	--	4.27	282.82
	05/27/22	<1.00	<1.00	<1.00	<3.00	132 ^a	323	463	--	--	--	--	--	--	5.40	281.69
MTCA Method A Cleanup Level		5	1,000	700	1,000	800/1,000 ^b	500	500	20	0.01	5	160	15			

TABLE 2
GROUNDWATER MONITORING AND ANALYTICAL RESULTS - Petroleum Related Constituents
7-Eleven Store #22866
14207 International Boulevard, Tukwila, Washington
All results in micrograms per liter (µg/L)

Well ID (TOC)	Sample Date	Benzene	Toluene	Ethylbenzene	Total Xylenes	TPH-G	TPH-D	TPH-O	MTBE	EDB	EDC	Total Naphthalenes	Total Lead	Dissolved Lead	Depth To Groundwater (feet from TOC)	Groundwater Elevation (feet)
DPE-2 NS	03/15/02	<0.5	<1.0	<1.0	<1.0	<100	--	--	--	--	--	--	--	--	6.05	--
	08/22/02	--	--	--	--	--	--	--	--	--	--	--	--	--	9.40	--
	03/13/03	<1.0	<1.0	<1.0	<2.0	<100	--	--	--	--	--	--	--	--	5.92	--
	06/05/03	--	--	--	--	--	--	--	--	--	--	--	--	--	1.69	--
	09/16/03	--	--	--	--	--	--	--	--	--	--	--	--	--	2.71	--
	12/05/03	--	--	--	--	--	--	--	--	--	--	--	--	--	7.41	--
	03/22/04	<1.0	<1.0	<1.0	<2.0	<100	--	--	--	--	--	--	--	--	7.88	--
	06/03/04	--	--	--	--	--	--	--	--	--	--	--	--	--	9.05	--
	09/22/04	--	--	--	--	--	--	--	--	--	--	--	--	--	9.66	--
	01/04/05	--	--	--	--	--	--	--	--	--	--	--	--	--	8.45	--
297.79	03/31/05	<1.0	<1.0	<1.0	<2.0	<100	--	--	--	--	--	--	--	--	7.64	290.15
	06/24/05	--	--	--	--	--	--	--	--	--	--	--	--	--	7.23	290.56
	09/12/05	--	--	--	--	--	--	--	--	--	--	--	--	--	4.21	293.58
	12/06/05	--	--	--	--	--	--	--	--	--	--	--	--	--	7.33	290.46
	03/14/06	<1.0	<1.0	<1.0	<2.0	<100	--	--	--	--	--	--	--	--	6.70	291.09
	06/15/06	--	--	--	--	--	--	--	--	--	--	--	--	--	9.61	288.18
	09/13/06	--	--	--	--	--	--	--	--	--	--	--	--	--	5.21	292.58
	12/13/06	--	--	--	--	--	--	--	--	--	--	--	--	--	6.03	291.76
	03/30/07	--	--	--	--	--	--	--	--	--	--	--	--	--	5.82	291.97
	06/04/07	--	--	--	--	--	--	--	--	--	--	--	--	--	7.90	289.69
287.89	09/13/07	--	--	--	--	--	--	--	--	--	--	--	--	--	10.20	287.59
	12/26/07	--	--	--	--	--	--	--	--	--	--	--	--	--	6.76	291.03
	07/08/10	<0.50	<0.50	<0.50	<0.50	<250	--	--	--	--	--	--	--	--	6.19	291.60
	08/27/12	<0.50	<0.50	<0.50	<0.50	<250	<250	<500	--	--	--	--	--	--	9.59	288.20
	01/08/13	<0.50	<0.50	<0.50	<0.50	<250	<250	<500	--	--	--	--	--	--	6.54	281.35
	06/06/13	<0.50	<0.50	<0.50	<0.50	<250	<250	<500	--	--	--	--	--	--	7.68	280.21
	11/19/13	--	--	--	--	--	--	--	--	--	--	--	--	--	7.91	279.98
	09/30/15	--	--	--	--	--	--	--	--	--	--	--	--	--	11.22	276.56
	12/14/16	<1.00	<1.00	<1.00	<3.00	<100	<95.2	<95.2	<1.00	<0.00607 ^g	<1.00	<0.2886	--	--	6.02	281.76
	03/02/21	--	--	--	--	--	--	--	--	--	--	--	--	--	5.48	282.04
MTCA Method A Cleanup Level		5	1,000	700	1,000	800/1,000 ^b	500	500	20	0.01	5	160	15			

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GROUNDWATER MONITORING AND ANALYTICAL RESULTS - Petroleum Related Constituents
 7-Eleven Store #22866
 14207 International Boulevard, Tukwila, Washington
All results in micrograms per liter (µg/L)

Well ID (TOC)	Sample Date	Benzene	Toluene	Ethylbenzene	Total Xylenes	TPH-G	TPH-D	TPH-O	MTBE	EDB	EDC	Total Naphthalenes	Total Lead	Dissolved Lead	Depth To Groundwater (feet from TOC)	Groundwater Elevation (feet)
DPE-3 NS	03/15/02	3.15	<1.0	3.89	<1.0	60.1	--	--	--	--	--	--	--	--	6.34	--
	08/23/02	2.6	<1.0	0.614	2.27	<100	--	--	--	--	--	--	--	--	9.81	--
	12/23/02	--	--	--	--	--	--	--	--	--	--	--	--	--	9.23	--
	03/13/03	2.7	<1.0	2.5	<2.0	130	--	--	--	--	--	--	--	--	6.63	--
	06/05/03	--	--	--	--	--	--	--	--	--	--	--	--	--	8.45	--
	09/16/03	--	--	--	--	--	--	--	--	--	--	--	--	--	12.15	--
	12/05/03	--	--	--	--	--	--	--	--	--	--	--	--	--	8.42	--
	03/22/04	3.5	<1.0	6.6	19.5	210	--	--	--	--	--	--	--	--	8.23	--
	06/03/04	--	--	--	--	--	--	--	--	--	--	--	--	--	9.60	--
	09/22/04	--	--	--	--	--	--	--	--	--	--	--	--	--	10.40	--
	01/04/05	--	--	--	--	--	--	--	--	--	--	--	--	--	8.92	--
	03/31/05	<1.0	<1.0	<1.0	<2.0	<100	--	--	--	--	--	--	--	--	8.57	289.69
	06/24/05	--	--	--	--	--	--	--	--	--	--	--	--	--	8.10	290.16
	09/12/05	--	--	--	--	--	--	--	--	--	--	--	--	--	9.26	289.00
	12/06/05	--	--	--	--	--	--	--	--	--	--	--	--	--	7.98	290.28
298.26	03/14/06	<1.0	<1.0	<1.0	<2.0	<100	--	--	--	--	--	--	--	--	7.10	291.16
	06/15/06	--	--	--	--	--	--	--	--	--	--	--	--	--	8.00	290.26
	09/13/06	--	--	--	--	--	--	--	--	--	--	--	--	--	7.10	291.16
	12/13/06	--	--	--	--	--	--	--	--	--	--	--	--	--	7.13	291.13
	03/30/07	--	--	--	--	--	--	--	--	--	--	--	--	--	6.09	292.17
	06/04/07	--	--	--	--	--	--	--	--	--	--	--	--	--	7.90	290.36
	09/13/07	--	--	--	--	--	--	--	--	--	--	--	--	--	10.60	287.66
	12/26/07	--	--	--	--	--	--	--	--	--	--	--	--	--	7.08	291.18
	07/08/10	<1.0	1.1	<1.0	<2.0	<100	--	--	--	--	--	--	--	--	7.66	290.60
	10/29/10	<1.0	<1.0	<1.0	<3.0	<100	--	--	--	--	--	--	--	--	7.89	280.28
	08/15/13	--	--	--	--	--	--	--	--	--	--	--	--	--	8.40	279.77
	11/19/13	--	--	--	--	--	--	--	--	--	--	--	--	--	2.53	285.64
	03/03/15	--	--	--	--	--	--	--	--	--	--	--	--	--	6.92	281.25
	09/30/15	--	--	--	--	--	--	--	--	--	--	--	--	--	11.38	276.76
	12/14/16	--	--	--	--	--	--	--	--	--	--	--	--	--	6.52	281.62
288.17	03/23/17	--	--	--	--	--	--	--	--	--	--	--	--	--	4.28	283.86
	06/23/17	<1.00	<1.00	1.65	31.2	382	164	217	<1.00	<0.00610 ^g	<1.00	<0.300	2.97	--	7.70	280.44
	09/18/17	<1.00	<1.00	1.60	29.5	272	734	407	<1.00	<0.00616 ^g	<1.00	<0.0962	4.71	--	11.05	277.09
	11/20/17	--	--	--	--	--	--	--	--	--	--	--	--	--	6.10	282.04
	03/06/18	--	--	--	--	--	--	--	--	--	--	--	--	--	6.85	281.29
	04/19/18	--	--	--	--	--	--	--	--	--	--	--	--	--	5.75	282.39
	07/17/18	<1.00	2.51	<1.00	1.05 ^h	<100	483	664	<1.00	0.00605 ^h	<1.00	0.0842 ^h	79.3	--	10.07	278.07
	10/19/18	<1.00	0.341 ^h	<1.00	<3.00	<100	1,390	5,410	--	--	--	0.3443 ^h	683	--	11.72	276.42
	08/01/19	0.131 ^h	<1.00	<1.00	0.501 ^h	<150	308	936	--	--	--	--	--	--	10.50	277.64
	02/03/20	<3.00	<2.00	<3.00	<3.00	<250	12,100	71,800	--	--	--	--	194	<0.800	3.41	284.73
	08/04/20	<3.00	<2.00	<3.00	<3.00	<250	<1,050	<3,340	--	--	--	--	16.5	2.48	9.46	278.68
	02/11/21	--	--	--	--	<250	<1,050	<5,750	--	--	--	--	340	--	5.69	282.45
	03/02/21	--	--	--	--	--	--	--	--	--	--	--	--	--	5.50	282.51
	03/17/22	<1.00	<1.00	<1.00	<3.00	<100	<200	579	--	--	--	--	--	--	6.06	281.95
	05/27/22	<1.00	<1.00	<1.00	<3.00	<100	<200	<250	--	--	--	--	--	--	6.73	281.28
DPE-4 NS	03/15/02	468	718	183	1,914	9,600	--	--	--	--	--	--	--	--	7.10	--
	08/23/02	411	131	202	901	4,910	--	--	--	--	--	--	--	--	10.20	--
	12/26/02	1,470	1,550	545	2,220	12,400	--	--	--	--	--	--	--	--	9.47	--
	03/14/03	1,300	130	570	850	9,100	--	--	--	--	--	--	--	--	6.99	--
298.52	06/05/03	2,800	450	1,200	3,040	21,000	--	--	--	--	--	--	--	--	8.87	--
	09/16/03	3,500	240	1,600	3,730	23,000	--	--	--	--	--	--	--	--	12.48	--
	12/05/03	1,200	140	720	2,210	14,000	--	--	--	--	--	--	--	--	8.82	--
	03/22/04	1,700	37	670	1,065	9,100	--	--	--	--	--	--	--	--	8.70	--
	06/03/04	3,100	69	1,500	2,760	21,000	--	--	--	--	--	--	--	--	10.00	--
	09/22/04	2,700	72	1,300	2,100	21,000	--	--	--	--	--	--	--	--	10.59	--
	01/04/05	570	11	600	580	6,500	--	--	--	--	--	--	--	--	9.27	--
	03/31/05	720	150	450	570	6,400	--	--	--	--	--	--	--	--	8.87	289.65
	06/24/05	110	<1.0	220	100	7,700	--	--	--	--	--	--	--	--	8.23	290.29
	09/12/05	170	49	730	2,584	13,000	--	--	--	--	--	--	--	--	7.68	290.84
	12/06/05	230	<1.0	64	28	1,700	--	--	--	--	--	--	--	--	8.70	289.82
	03/14/06	420	7.9	120	15.0	1,700	--	--	--	--	--	--	--	--	7.52	291.00
	06/15/06	2,300	230	230	680	6,500	--	--	--	--	--	--	--	--	6.94	291.58
	09/13/06	2,600	83	360	973	8,500	--	--	--	--	--	--	--	--	6.11	292.41
	12/13/06	2.6	<1.0	<1.0	8.0	170	--	--	--	--	--	--	--	--	6.98	291.54
	03/30/07	380	7.4	64	81	2,400	--	--	--	--	--	--	--	--	6.57	291.95
288.50	06/04/07	870	8.4	30	58.1	1,900	--	--	--	--	--	--	--	--	8.40	290.12
	09/13/07	1,700	12	53	45	2,300	--	--	--	--	--	--	--	--	10.90	287.62
	12/26/07	2,000	18	23	44	1,600	--	--	--	--	--	--	--	--	7.71	290.81
	03/28/08	640	<10	16	19	1,400	--	--	--	--	--	--	--	--	6.38	292.14
	06/25/08	980	5.0	9.3	11	1,200	--	--	--	--	--	--	--	--	8.53	289.99
	09/25/08	1,300	720	260	1,030	7,700	--	--	--	--	--	--	--	--	10.48	288.04
	01/02/09	520	13	34	116	1,400	--	--	--	--	--	--	--	--	7.58	290.94
	03/25/09	46	<1.0	1.2	9.2	250	--	--	--	--	--	--	--	--	7.18	291.34
	06/24/09	810	<4.0	<4.0	6.9	630	--	--	--	--	--	--	--	--	8.94	289.58
	09/30/09	240	18	21	108	1,100	--	--	--	--	--	--	--	--	10.88	287.64
	12/28/09	85	<4.0	9.6	14.8	500	--	--	--	--	--	--	--	--	7.32	291.20
	07/09/10	1,100	9.0	5.1	48.5	710	--	--	--	--	--	--	--	--	8.07	290.45
	11/01/10	2010 UST Removal					--	--	--	--	--	--	--	--	--	--
	02/08/11	35	1.6	3.6	5.0	270	--	--	--	--	--	--	--	--	6.70	291.82
	08/04/11	220	6.5	2.8	19	860	--	--	--	--	--	--	--	--	8.98	289.54
288.51	02/06/12	16	0.74	1.4	1.1	<250	--	--	--	--	--	--	--	--	7.27	291.25
	08/27/12	260	6.4	12	18	860	<250	<500	--	--	--	--	--	--	10.19	288.33
	01/09/13	120	44	76	120	1,400	<250	<500	--	--	--	--	--	--	6.89	281.61
	06/06/13	55	3.9	12	21	890	<250	<500	--	--	--	--	--	--	8.03	280.47
	08/15/13	200	5.1	9.8	22	1,500	<250	<500	--	--	--	--	<5	--	10.38	278.12
	11/19/13	--	--	--	--	--	--	--	--	--	--	--	--	--	8.80	279.70
	02/03/14	18	3.11	4.13	6.22	1,170	398 f	171	--	--	--	--	--	--	8.07	280.43
	07/29/14	20.2	10.1	29.2	26.34	655	--	--	--	--	--	--	--	--	9.88	278.62
	03/03/15	<1.00	<1.00	<1.00	<2.00	<100	98.9	327	--	--	--	--	--	--	6.91	281.59
	09/24/15	28.3	9.55	10.3	24.3	786	193	139	--	--	--	--	<2.00	--	11.85	276.66
	10/03/16	MPE EVENT (CAL CLEAN)					--	--	--	--	--	--	--	--	--	--
	12/15/16	624	62.1	194	937	6,570	--	--	<10	<0.00598 ^g	<10	12.95	--	--	7.08	281.43
	03/23/17	109	9.06	180	675	5,980	1,730									

TABLE 2
GROUNDWATER MONITORING AND ANALYTICAL RESULTS - Petroleum Related Constituents
 7-Eleven Store #22866
 14207 International Boulevard, Tukwila, Washington
 All results in micrograms per liter (µg/L)

Well ID (TOC)	Sample Date	Benzene	Toluene	Ethylbenzene	Total Xylenes	TPH-G	TPH-D	TPH-O	MTBE	EDB	EDC	Total Naphthalenes	Total Lead	Dissolved Lead	Depth To Groundwater (feet from TOC)	Groundwater Elevation (feet)
DPE-5 NS	03/15/02	<0.5	<1.0	<1.0	<1.0	<100	--	--	--	--	--	--	--	--	6.72	--
	08/23/02	856	469	225	1,216	7,170	--	--	--	--	--	--	--	--	9.83	--
298.29	12/23/02	--	--	--	--	--	--	--	--	--	--	--	--	--	9.17	--
	03/14/03	1,100	3,400	1,500	11,400	76,000	--	--	--	--	--	--	--	--	6.78	--
288.27	06/05/03	<1.0	<1.0	<1.0	<2.0	<100	--	--	--	--	--	--	--	--	6.89	--
	09/18/03	2,700	7,000	1,800	10,800	77,000	--	--	--	--	--	--	--	--	12.19	--
288.28	12/05/03	41	39	100	4,300	25,000	--	--	--	--	--	--	--	--	8.34	--
	03/22/04	330	73	75	1,900	19,000	--	--	--	--	--	--	--	--	8.50	--
288.04	06/03/04	1,900	1,600	650	7,100	54,000	--	--	--	--	--	--	--	--	9.75	--
	09/22/04	1,700	2,200	280	1,290	14,000	--	--	--	--	--	--	--	--	10.53	--
288.27	01/04/05	--	--	--	--	--	--	--	--	--	--	--	--	--	9.08	--
	03/31/05	3000	2,300	1,400	8,600	63,000	--	--	--	--	--	--	--	--	8.62	289.67
288.27	08/24/05	3000	110	1,200	4,70	12,000	--	--	--	--	--	--	--	--	7.96	290.33
	09/12/05	4,200	3,300	1,800	12,000	82,000	--	--	--	--	--	--	--	--	6.20	292.09
288.28	12/06/05	2,500	1,800	1,400	8,400	57,000	--	--	--	--	--	--	--	--	9.20	289.09
	03/14/06	1,100	450	910	6,800	45,000	--	--	--	--	--	--	--	--	7.37	290.92
288.27	06/15/06	1,800	120	130	420	3,900	--	--	--	--	--	--	--	--	5.23	293.06
	09/13/06	3,300	2,400	1,500	7,200	43,000	--	--	--	--	--	--	--	--	4.98	293.31
288.27	12/13/06	37	2.8	23	90.1	1,200	--	--	--	--	--	--	--	--	6.43	291.86
	03/30/07	1,200	820	2,300	14,600	87,000	--	--	--	--	--	--	--	--	6.41	291.58
288.27	06/04/07	1,700	1,400	1,700	10,800	40,000	--	--	--	--	--	--	--	--	8.70	289.59
	09/13/07	2,200	2,000	1,700	9,900	62,000	--	--	--	--	--	--	--	--	10.71	287.58
288.28	12/26/07	930	1,600	1,600	9,700	55,000	--	--	--	--	--	--	--	--	7.37	290.92
	03/28/08	790	610	1,900	11,200	51,000	--	--	--	--	--	--	--	--	6.47	291.82
288.27	06/25/08	860	450	1,300	7,700	47,000	--	--	--	--	--	--	--	--	8.85	289.44
	09/25/08	2,200	1,300	1,600	8,800	59,000	--	--	--	--	--	--	--	--	10.03	288.26
288.28	01/02/09	380	170	1,100	5,500	39,000	--	--	--	--	--	--	--	--	7.22	291.07
	03/25/09	44	14	190	1,820	14,000	--	--	--	--	--	--	--	--	7.03	291.26
288.27	06/24/09	440	<100	200	1,460	20,000	--	--	--	--	--	--	--	--	8.79	289.50
	09/30/09	2,100	3,100	1,300	12,400	65,000	--	--	--	--	--	--	--	--	10.71	287.58
288.28	12/28/09	11	<10	16	330	6,000	--	--	--	--	--	--	--	--	7.25	291.04
	07/09/10	150	36	43	340	3,400	--	--	--	--	--	--	--	--	7.96	290.33
288.27	11/01/10	UST Removal				--	--	--	--	--	--	--	--	--	--	--
	02/08/11	57	14	25	360	2,300	--	--	--	--	--	--	--	--	6.60	291.69
288.27	08/04/11	110	55	85	820	2,800	--	--	--	--	--	--	--	--	9.12	289.17
	02/06/12	0.81	<0.50	2.2	28	<250	--	--	--	--	--	--	--	--	7.12	291.17
288.27	08/27/12	160	11	30	160	850	<250	<500	--	--	--	--	--	--	10.04	288.25
	01/09/13	<0.50	<0.50	1.4	27	<250	380	<500	--	--	--	--	--	--	5.52	282.75
288.28	06/06/13	8.8	1.2	1.9	11	290	720	740	--	--	--	--	--	--	7.84	280.43
	08/15/13	230	6.9	33	98	860	<250	<500	--	--	--	--	<5	--	10.20	278.07
288.27	11/19/13	7.66	<1.00	4.19	35.87	533	<50.0	456	--	--	--	--	11.8	--	8.48	279.79
	02/03/14	1.55	<1.00	4.32	19.52	475	126.9'	580	--	--	--	--	--	--	7.78	280.49
288.28	07/29/14	397	13.6	29.8	121.2	1,500	--	--	--	--	--	--	--	--	9.53	278.74
	03/03/15	<1.00	<1.00	1.3	5.4	148	235	841	--	--	--	--	--	--	6.77	281.50
288.28	09/24/15	169	11.2	50.6	121	1,520	574	438	--	--	--	--	6.20	--	11.69	276.59
	10/03/16	MPE EVENT (CAL CLEAN)				--	--	--	--	--	--	--	--	--	--	--
288.04	12/15/16	250	2,880	395	7,270	35,200	1,360	702	<1.00	0.475	<1.00	62.80	--	--	6.92	281.36
	03/24/17	252	1,180	958	7,140	36,900	9,600	<111	<5.00	0.0280 ¹	<5.00	90.90	12.5	--	5.69	282.59
288.04	06/23/17	221	2,110	1,460	7,260	54,300	6,820	107	<1.00	0.0157 ¹	<1.00	203.08	10.1	--	8.07	280.21
	09/20/17	158	223	1,210	6,370	37,700	14,900	337	<1.00	<0.00614 ²	<1.00	188.90	8.74	--	11.22	277.06
288.04	11/20/17	217	329	1,380	10,900	33,500	10,300	626	<25.0	<0.0292 ²	<25.0	113.40	114	--	9.33	278.95
	03/07/18	460	211	2,210	13,800	53,600	10,900	746	<4.25 ³	<0.00621 ³	<5.00 ³	213.6	19.8	--	7.28	281.00
288.04	04/20/18	371	86.1 ⁴	2,010	12,400	60,300	9,960	587	<17.0 ⁴	<0.00602 ⁴	<20.0	225.4	8.88 ⁴	--	6.26	282.02
	07/17/18	370	88.2 ⁵	1,910	9,210	45,700	10,100	302	<100	0.0203 ⁵	<100	276.6	9.82	--	10.28	278.00
288.04	10/19/18	352	134	2,460	9,620	37,700	6,620	1,060	--	--	--	278.2	31.1 ¹	--	11.80	276.48
	08/01/19	462	26.5	2,710	10,300	39,300	10,000	375	--	--	--	185.4	<0.0140	--	10.64	277.64
288.04	02/03/20	262	23.4	1,620	1,550	48,800	8,640	488	<2.00	<0.0229	<2.00	51.99	5.94	5.19	5.86	282.42
	08/05/20	197	8.61	1,500	1,420	22,400	4,570	<1,670	<2.00	<0.00795 ⁶	<2.00	271.5	8.63	5.04	9.67	278.61
288.04	02/11/21	--	--	--	--	27,800	8,600	<1,000	--	--	--	--	9.46	--	6.56	281.72
	03/02/21	--	--	--	--	--	--	--	--	--	--	--	--	--	6.35	281.69
288.04	10/11/21	BOS-200 Injection				--	--	--	--	--	--	--	--	--	--	--
	10/11/21	BOS-200 Injection				--	--	--	--	--	--	--	--	--	--	--
288.04	03/17/22	39.4	1.07	76.2	623	7,710	2,220	464	--	--	--	--	--	--	6.70	281.34
	05/27/22	51.4	1.67	303	964	10,200	3,350	547	--	--	--	--	--	--	7.20	280.84
MTCA Method A Cleanup Level		5	1,000	700	1,000	800/1,000 ⁵	500	500	20	0.01	5	160	15	--	--	--

TABLE 2
GROUNDWATER MONITORING AND ANALYTICAL RESULTS - Petroleum Related Constituents
7-Eleven Store #22866
14207 International Boulevard, Tukwila, Washington
All results in micrograms per liter (µg/L)

Well ID (TOC)	Sample Date	Benzene	Toluene	Ethyl-benzene	Total Xylenes	TPH-G	TPH-D	TPH-O	MTBE	EDB	EDC	Total Naphthalenes	Total Lead	Dissolved Lead	Depth To Groundwater (feet from TOC)	Groundwater Elevation (feet)
DPE-6 NS	03/15/02	<0.5	<1.0	<1.0	<1.0	<100	--	--	--	--	--	--	--	--	6.85	--
	08/23/02	<0.5	<1.0	<1.0	<2.0	<100	--	--	--	--	--	--	--	--	10.24	--
	12/23/02	--	--	--	--	--	--	--	--	--	--	--	--	--	9.53	--
	03/13/03	<1.0	<1.0	<1.0	<2.0	<100	--	--	--	--	--	--	--	--	6.85	--
	06/05/03	--	--	--	--	--	--	--	--	--	--	--	--	--	8.94	--
	09/16/03	--	--	--	--	--	--	--	--	--	--	--	--	--	12.55	--
	12/05/03	--	--	--	--	--	--	--	--	--	--	--	--	--	8.71	--
	03/22/04	<1.0	<1.0	<1.0	<2.0	<100	--	--	--	--	--	--	--	--	8.80	--
	06/03/04	--	--	--	--	--	--	--	--	--	--	--	--	--	10.05	--
	09/22/04	--	--	--	--	--	--	--	--	--	--	--	--	--	10.95	--
288.81	01/04/05	--	--	--	--	--	--	--	--	--	--	--	--	--	9.38	--
	03/31/05	<1.0	<1.0	<1.0	<2.0	<100	--	--	--	--	--	--	--	--	8.91	289.90
	06/24/05	--	--	--	--	--	--	--	--	--	--	--	--	--	7.43	291.38
	09/12/05	--	--	--	--	--	--	--	--	--	--	--	--	--	6.81	292.00
	12/06/05	--	--	--	--	--	--	--	--	--	--	--	--	--	9.52	289.29
	03/14/06	<1.0	<1.0	<1.0	<2.0	<100	--	--	--	--	--	--	--	--	7.55	291.26
	06/15/06	--	--	--	--	--	--	--	--	--	--	--	--	--	6.27	292.54
	09/13/06	--	--	--	--	--	--	--	--	--	--	--	--	--	6.19	292.62
	12/13/06	--	--	--	--	--	--	--	--	--	--	--	--	--	6.97	291.84
	03/30/07	--	--	--	--	--	--	--	--	--	--	--	--	--	6.53	292.28
288.80	06/04/07	--	--	--	--	--	--	--	--	--	--	--	--	--	8.90	289.91
	09/13/07	--	--	--	--	--	--	--	--	--	--	--	--	--	11.15	287.66
	12/26/07	--	--	--	--	--	--	--	--	--	--	--	--	--	7.03	291.78
	06/24/09	<1.0	<1.0	<1.0	<2.0	<100	--	--	--	--	--	--	--	--	9.04	289.77
	09/30/09	<1.0	<1.0	<1.0	<2.0	<100	--	--	--	--	--	--	--	--	11.05	287.76
	07/09/10	<1.0	<1.0	<1.0	<2.0	<100	--	--	--	--	--	--	--	--	8.17	280.63
	08/15/13	<0.50	<0.50	<0.50	<0.50	<250	<250	<500	--	--	--	--	6.5	--	12.50	276.30
	11/19/13	--	--	--	--	--	--	--	--	--	--	--	--	--	8.69	280.11
	02/03/14	--	--	--	--	--	--	--	--	--	--	--	--	--	8.10	280.70
	07/29/14	--	--	--	--	--	--	--	--	--	--	--	--	--	9.85	278.95
288.81	03/03/15	--	--	--	--	--	--	--	--	--	--	--	--	--	6.89	291.92
	09/24/15	<1.0	<1.0	<1.0	<3.0	<100	<100	166	--	--	--	--	21.3	--	12.10	276.71
	12/15/16	--	--	--	--	--	--	--	--	--	--	--	8.69	--	6.84	281.97
	03/23/17	<1.00	<1.00	<1.00	<3.00	<100	<101	<101	<1.00	<0.00605 ^d	<1.00	<0.297	<10.0	--	5.65	283.16
	06/22/17	--	--	--	--	--	--	--	--	--	--	--	--	--	8.22	280.59
	09/20/17	--	--	--	--	--	--	--	--	--	--	--	--	--	11.64	277.17
	11/20/17	--	--	--	--	--	--	--	--	--	--	--	--	--	9.55	279.26
	03/07/18	<1.00	<1.00	<1.00	<3.00	<100	98.8 ^b	468	<1.00	<0.00612 ^d	<1.00	<1.155	75.0	--	7.37	281.44
	04/20/18	<1.00	<1.00	<1.00	<3.00	<100	<100	69.9 ^b	<1.00	<0.00602 ^d	<1.00	<0.2886	1.97 ^{ak}	--	6.25	282.56
	07/17/18	<1.00	<1.00	<1.00	<3.00	<100	<105	71.7 ^b	<1.00	<0.00610 ^d	<1.00	0.0415 ^b	2.76	--	10.66	278.15
288.58	10/18/18	--	--	--	--	--	--	--	--	--	--	--	--	--	12.25	276.59
	07/31/19	--	--	--	--	--	--	--	--	--	--	--	--	--	11.04	277.77
	02/03/20	--	--	--	--	--	--	--	--	--	--	--	3.69	<0.800	5.80	283.01
	08/04/20	--	--	--	--	--	--	--	--	--	--	--	3.15	<0.800	10.04	278.77
	03/02/21	--	--	--	--	--	--	--	--	--	--	--	--	--	6.46	282.12
	05/25/21	--	--	--	--	--	--	--	--	--	--	--	--	--	9.06	279.52
	08/17/21	--	--	--	--	--	--	--	--	--	--	--	--	--	11.51	277.07
	11/03/21	--	--	--	--	--	--	--	--	--	--	--	--	--	10.60	277.98
	03/16/22	<1.00	<1.00	<1.00	<3.00	<100	<200	<250	--	--	--	--	--	--	6.68	281.90
	05/27/22	<1.00	<1.00	<1.00	<3.00	<100	<200	<250	--	--	--	--	--	--	7.34	281.24
MTCA Method A Cleanup Level		5	1,000	700	1,000	800/1,000 ^b	500	500	20	0.01	5	160	15			

TABLE 2
GROUNDWATER MONITORING AND ANALYTICAL RESULTS - Petroleum Related Constituents
7-Eleven Store #22866
14207 International Boulevard, Tukwila, Washington
All results in micrograms per liter (µg/L)

Well ID (TOC)	Sample Date	Benzene	Toluene	Ethyl-benzene	Total Xylenes	TPH-G	TPH-D	TPH-O	MTBE	EDB	EDC	Total Naphthalenes	Total Lead	Dissolved Lead	Depth To Groundwater (feet from TOC)	Groundwater Elevation (feet)
DPE-7 NS	03/15/02	8.33	<2	68.6	215.5	1,120	--	--	--	--	--	--	--	--	7.19	--
	08/23/02	5.4	0.83	100	57.27	1,330	--	--	--	--	--	--	--	--	9.62	--
298.97	12/26/02	0.41	<1.0	<1.0	<3.0	68.1	--	--	--	--	--	--	--	--	9.87	--
	03/14/03	1.8	<1.0	14	5.3	310	--	--	--	--	--	--	--	--	7.30	--
	06/05/03	8.1	1.2	100	26.1	1,400	--	--	--	--	--	--	--	--	9.28	--
	09/16/03	11	<1.0	32	3.8	530	--	--	--	--	--	--	--	--	12.76	--
	12/05/03	5.0	<1.0	45	10.3	840	--	--	--	--	--	--	--	--	9.23	--
	03/22/04	13	<5.0	140	30	1,400	--	--	--	--	--	--	--	--	9.08	--
	06/03/04	10	2.4	180	92	3,000	--	--	--	--	--	--	--	--	10.40	--
	09/22/04	7.0	2.0	84	11.7	1,700	--	--	--	--	--	--	--	--	11.24	--
	01/04/05	71	21	900	2,880	15,000	--	--	--	--	--	--	--	--	9.70	--
	03/31/05	47	8.9	750	1,520	14,000	--	--	--	--	--	--	--	--	9.21	289.78
	06/24/05	330	6.7	140	15	1,700	--	--	--	--	--	--	--	--	8.48	290.49
	09/12/05	19	7.6	150	91	4,200	--	--	--	--	--	--	--	--	7.64	291.33
	12/06/05	6.2	<1.0	29	<1.0	1,200	--	--	--	--	--	--	--	--	9.88	289.09
	03/14/06	8.0	<4.0	110	20	1,900	--	--	--	--	--	--	--	--	7.85	291.12
	06/15/06	790	46	350	191	5,000	--	--	--	--	--	--	--	--	10.11	288.86
	12/13/06	2.6	<1.0	<1.0	8.0	160	--	--	--	--	--	--	--	--	7.11	291.86
	03/30/07	3.3	<1.0	4.6	2.3	720	--	--	--	--	--	--	--	--	6.90	292.07
	06/04/07	2.5	<1.0	2.6	1.3	560	--	--	--	--	--	--	--	--	9.20	289.77
	09/13/07	<4.0	<4.0	<4.0	<8.0	450	--	--	--	--	--	--	--	--	11.35	287.62
	12/26/07	2.8	<1.0	1.4	1.7	460	--	--	--	--	--	--	--	--	7.35	291.62
288.97	03/28/08	2.1	<1.0	<1.0	<2.0	440	--	--	--	--	--	--	--	--	6.98	291.99
	06/25/08	<4.0	<4.0	<4.0	<8.0	<400	--	--	--	--	--	--	--	--	9.33	289.64
	09/25/08	20	3.9	280	978	5,400	--	--	--	--	--	--	--	--	10.90	288.07
	01/02/09	8.3	<1.0	68	192	2,600	--	--	--	--	--	--	--	--	7.18	291.79
	03/24/09	3.5	<1.0	5.6	2.7	870	--	--	--	--	--	--	--	--	8.02	290.95
	06/24/09	<4.0	<4.0	<4.0	<8.0	790	--	--	--	--	--	--	--	--	9.36	289.61
	12/28/09	<4.0	<4.0	10	7.1	1,100	--	--	--	--	--	--	--	--	7.76	291.21
	07/09/10	1.5	<1.0	1.1	<2	560	--	--	--	--	--	--	--	--	8.52	290.45
	02/08/11	0.75	<0.50	3.7	0.57	490	--	--	--	--	--	--	--	--	7.03	291.94
	08/05/11	<0.50	<0.50	<0.50	<0.50	<250	--	--	--	--	--	--	--	--	9.41	289.56
288.98	02/06/12	<0.50	<0.50	<0.50	<0.50	<250	--	--	--	--	--	--	--	--	7.38	291.59
	08/27/12	<0.50	<0.50	<0.50	<0.50	<250	<250	<500	--	--	--	--	--	--	9.60	289.37
	01/08/13	<0.50	5.80	1.20	<0.50	360	<250	<500	--	--	--	--	--	--	7.25	281.72
	06/06/13	<0.50	0.88	5.6	<0.50	520	<250	<500	--	--	--	--	--	--	8.41	280.56
	02/03/14	--	--	--	--	--	--	--	--	--	--	--	--	--	8.35	280.62
	09/30/15	--	--	--	--	--	--	--	--	--	--	--	--	--	12.29	276.69
	MPE EVENT (CAL CLEAN)															
	MPE EVENT (CAL CLEAN)															
	10/03/16															
	06/23/17	<1.00	1.42	<1.00	<3.00	<100	332	224	<1.00	<0.00612 ^g	<1.00	<0.2805	<2.00	--	8.54	280.44
	09/19/17	<1.00	1.32	<1.00	<3.00	<100	3,080	3,170	<1.00	<0.00616 ^g	<1.00	<0.0962	13.1	--	11.39	277.59
288.75	11/20/17	--	--	--	--	--	--	--	--	--	--	--	--	--	7.73	281.25
	03/07/18	--	--	--	--	--	--	--	--	--	--	--	--	--	7.67	281.31
	04/20/18	<1.00	<1.00	<1.00	<3.00	<100	133	267	<1.00	<0.00598 ^g	<1.00	<0.327	2.61 ^h	--	6.27	282.71
	07/17/18	<1.00	10.8	<1.00	<3.00	<100	728	864	<1.00	<0.00616 ^g	<1.00	<0.0391 ^h	0.938 ^h	--	10.87	278.11
	10/19/18	<1.00	0.240 ^h	<1.00	<3.00	<100	369	1,170	--	--	--	0.1562 ^g	<2.00	--	12.40	276.58
	08/01/19	<0.400	0.677 ^h	<1.00	<3.00	<150	427	954	--	--	--	--	--	--	11.22	277.76
	02/03/20	--	--	--	--	--	<2,720	10,700	--	--	--	--	--	--	5.20	283.78
	08/04/20	--	--	--	--	--	253	432	--	--	--	--	--	--	10.21	278.77
	02/10/21	--	--	--	--	<250	110	370	--	--	--	--	3.35	--	6.77	282.21
	03/02/21	--	--	--	--	--	--	--	--	--	--	--	--	--	6.51	282.24
	10/11/21															
	10/11/21															
	03/16/22	<1.00	<1.00	<1.00	<3.00	<100	<200	536	--	--	--	--	--	--	6.90	281.85
	05/27/22	<1.00	<1.00	<1.00	<3.00	<100	532	786	--	--	--	--	--	--	7.54	281.21
MYCA Method A Cleanup Level		5	1,000	700	1,000	800/1,000 ^g	500	500	20	0.01	5	160	15			

TABLE 2
GROUNDWATER MONITORING AND ANALYTICAL RESULTS - Petroleum Related Constituents
 7-Eleven Store #22866
 14207 International Boulevard, Tukwila, Washington
 All results in micrograms per liter (µg/L)

Well ID (TOC)	Sample Date	Benzene	Toluene	Ethylbenzene	Total Xylenes	TPH-G	TPH-D	TPH-O	MTBE	EDB	EDC	Total Naphthalenes	Total Lead	Dissolved Lead	Depth To Groundwater (feet from TOC)	Groundwater Elevation (feet)
DPE-8 NS	03/15/02	<0.5	<1.0	<1.0	<1.0	71.5	--	--	--	--	--	--	--	--	7.25	--
	08/23/02	0.926	<1.0	1.69	<2.0	273	--	--	--	--	--	--	--	--	11.27	--
300.25	12/26/02	<0.5	<1.0	<1.0	<3.0	122	--	--	--	--	--	--	--	--	10.98	--
	03/13/03	<1.0	<1.0	<1.0	<2.0	260	--	--	--	--	--	--	--	--	7.92	--
	06/05/03	<1.0	<1.0	<1.0	<2.0	180	--	--	--	--	--	--	--	--	9.88	--
	09/16/03	<1.0	<1.0	<1.0	<2.0	110	--	--	--	--	--	--	--	--	13.86	--
	12/05/03	<1.0	<1.0	<1.0	<2.0	<100	--	--	--	--	--	--	--	--	10.02	--
	03/22/04	<1.0	<1.0	<1.0	<2.0	<100	--	--	--	--	--	--	--	--	9.12	--
	06/03/04	<1.0	<1.0	<1.0	<2.0	<100	--	--	--	--	--	--	--	--	11.20	--
	09/22/04	<1.0	<1.0	<1.0	<2.0	170	--	--	--	--	--	--	--	--	12.36	--
	01/04/05	<1.0	<1.0	<1.0	<2.0	<100	--	--	--	--	--	--	--	--	10.59	--
	03/31/05	<1.0	<1.0	<1.0	<2.0	<100	--	--	--	--	--	--	--	--	10.14	290.11
	08/24/05	--	--	--	--	--	--	--	--	--	--	--	--	--	9.10	291.15
	09/12/05	--	--	--	--	--	--	--	--	--	--	--	--	--	8.10	292.15
	12/06/05	--	--	--	--	--	--	--	--	--	--	--	--	--	11.00	289.25
	03/14/06	<1.0	<1.0	<1.0	<2.0	<100	--	--	--	--	--	--	--	--	7.83	292.42
	06/15/06	--	--	--	--	--	--	--	--	--	--	--	--	--	8.14	292.11
	09/13/06	--	--	--	--	--	--	--	--	--	--	--	--	--	8.16	292.09
	12/13/06	--	--	--	--	--	--	--	--	--	--	--	--	--	8.68	291.57
	03/30/07	--	--	--	--	--	--	--	--	--	--	--	--	--	6.51	293.74
	06/04/07	--	--	--	--	--	--	--	--	--	--	--	--	--	9.80	290.85
	09/13/07	--	--	--	--	--	--	--	--	--	--	--	--	--	12.15	288.10
	12/26/07	--	--	--	--	--	--	--	--	--	--	--	--	--	6.97	293.28
290.25	03/24/09	<1.0	<1.0	<1.0	<2.0	<100	--	--	--	--	--	--	--	--	7.70	292.55
	07/09/10	<1.0	<1.0	<1.0	<2.0	<100	--	--	--	--	--	--	--	--	8.78	281.47
	02/03/14	--	--	--	--	--	--	--	--	--	--	--	--	--	8.93	281.32
	07/29/14	--	--	--	--	--	--	--	--	--	--	--	--	--	10.58	279.67
290.26	07/29/14	--	--	--	--	--	--	--	--	--	--	--	--	--	10.58	289.67
	09/30/15	--	--	--	--	--	--	--	--	--	--	--	--	--	13.14	277.12
289.77	11/20/17	--	--	--	--	--	--	--	--	--	--	--	--	--	10.90	279.36
	10/19/18	<1.00	<1.00	0.254 ^b	2.44 ^b	<100	1,870	711	--	--	--	0.4753 ^d	0.454 ^{h,k}	--	13.12	277.14
	08/01/19	<0.400	<1.00	<1.00	<3.00	<150	1,090	299	--	--	--	0.0641 ^h	<0.0140	--	11.61	278.65
	02/03/20	--	--	--	--	--	1,790	401	--	--	--	--	--	--	3.83	286.43
	08/05/20	--	--	--	--	--	965	562	--	--	--	--	--	--	10.51	279.75
	02/10/21	--	--	--	--	<250	1,810	1,350	--	--	--	--	1.57	--	5.61	284.65
	03/02/21	--	--	--	--	--	--	--	--	--	--	--	--	--	5.24	284.53
	10/11/21	BOS-200 injection				--	--	--	--	--	--	--	--	--	--	--
	10/11/21	BOS-200 injection				--	--	--	--	--	--	--	--	--	--	--
	03/16/22	<1.00	<1.00	<1.00	<3.00	<250	1,750	1,300	--	--	--	--	--	--	5.69	284.08
	05/27/22	<1.00	<1.00	<1.00	<3.00	<100	1,060	820	--	--	--	--	--	--	6.92	282.85
DPE-9 287.47	06/01/16	<1.00	<1.00	<1.00	<3.00	534	140	<94.3	--	--	--	0.349	<2.00	--	7.66	279.81
	12/14/16	<1.00	<1.00	<1.00	<3.00	<100	125	<100	<1.00	<0.00605 ^g	<1.00	<0.312	--	--	5.87	281.60
	03/23/17	<1.00	<1.00	<1.00	<3.00	<100	<102	<102	<1.00	<0.00602 ^g	<1.00	<0.303	<2.00	--	1.96	285.51
	06/22/17	<1.00	<1.00	<1.00	<3.00	<100	<100	<100	<1.00	<0.00605 ^g	<1.00	<0.300	<2.00	--	6.95	280.52
	09/19/17	<1.00	<1.00	<1.00	<3.00	<100	<96.6	<96.6	<1.00	<0.00612 ^g	<1.00	<0.0962	<2.00	--	10.56	276.91
	11/20/17	--	--	--	--	--	--	--	--	--	--	--	--	--	8.59	278.88
	03/07/18	<1.00	<1.00	<1.00	<3.00	75.7 ^h	31.8 ^h	61.7 ^h	<1.00	<0.00616 ^g	<1.00	<1.155	<2.00	--	6.12	281.35
	04/19/18	--	--	--	--	--	--	--	--	--	--	--	--	--	4.73	282.74
	07/16/18	--	--	--	--	--	--	--	--	--	--	--	--	--	9.41	278.06
	10/18/18	--	--	--	--	--	--	--	--	--	--	--	--	--	11.01	276.46
	07/31/19	--	--	--	--	--	--	--	--	--	--	--	--	--	9.80	277.67
	02/03/20	--	--	--	--	--	--	--	--	--	--	--	--	--	1.13	286.34
	08/04/20	--	--	--	--	--	--	--	--	--	--	--	--	--	8.80	278.67
	03/02/21	--	--	--	--	--	--	--	--	--	--	--	--	--	3.38	283.98
DPE-10 287.79	6/1/16	4.20	12.8	9.60	74.4	572	120	<95.2	--	--	--	0.104	<2.00	--	6.24	281.55
	12/14/16	7.01	1.24	1.21	26.3	318	<98.0	<98.0	<1.00	<0.00602 ^g	<1.00	0.213	--	--	6.04	281.75
	03/23/17	<1.00	<1.00	<1.00	<3.00	<100	<102	<102	<1.00	<0.00603 ^g	<1.00	<0.309	<2.00	--	2.12	285.67
	06/22/17	<1.00	<1.00	<1.00	<3.00	<100	<96.2	<96.2	<1.00	<0.00607 ^g	<1.00	<0.294	<2.00	--	5.83	281.96
	09/20/17	4.15	<1.00	<1.00	<3.00	<100	112	<95.7	<1.00	<0.00609 ^g	<1.00	<0.0962	<2.00	--	10.88	276.91
	11/20/17	--	--	--	--	--	--	--	--	--	--	--	--	--	6.50	281.29
	03/07/18	<1.00	<1.00	<1.00	<3.00	<100	<105	58.1 ^h	<1.00	<0.00600 ^g	<1.00	<1.155	<2.00	--	5.13	282.66
	04/20/18	<1.00	<1.00	<1.00	<3.00	<100	<101	79.6 ^h	<1.00	<0.00595 ^g	<1.00	<0.2886	0.176 ^{h,k}	--	4.61	283.18
	07/17/18	8.76	0.191 ^b	0.558 ^b	0.582 ^b	84.6 ^b	<109	73.4 ^h	<1.00	<0.00609 ^g	<1.00	<0.1313 ^h	42.2	--	9.64	278.15
	10/18/18	--	--	--	--	--	--	--	--	--	--	--	--	--	11.32	276.47
	08/01/19	<0.400	<1.00	<1.00	0.475 ^b	<150	246	1,110	--	--	--	--	--	--	10.20	277.59
	02/03/20	<3.00	<2.00	<3.00	<3.00	--	--	--	--	--	--	--	<0.800	<0.800	1.35	286.44
	08/05/20	5.80	<2.00	4.06	<3.00	--	--	--	--	--	--	--	<0.800	<0.800	7.90	279.89
	02/11/21	--	--	--	--	<250	<107	<339	--	--	--	--	6.55	--	3.75	284.04
	03/02/21	--	--	--	--	--	--	--	--	--	--	--	--	--	3.69	284.00
	05/27/22	<1.00	<1.00	<1.00	<3.00	<100	245	530	--	--	--	--	--	--	5.18	282.51
MTCA Method A Cleanup Level		5	1,000	700	1,000	800/1,000^g	500	500	20	0.01	5	160	15			

Explanation of Abbreviations:

TOC = Top of casing
 TPH-G = total petroleum hydrocarbons as gasoline
 TPH-D = total petroleum hydrocarbons as diesel
 TPH-O = total petroleum hydrocarbons as oil
 MTCA = Model Toxics Control Act
 MTBE = Methyl tert-butyl ether
 EDB = Ethylene dibromide
 EDC = 1,2-dichloroethane
 Total Naphthalenes = Includes naphthalene, 1-methylnaphthalene, and 2-methylnaphthalene
 < = less than the laboratory practical quantitation limit
 -- = not sampled, not measured or not analyzed
 NS = not surveyed

Notes:

Bold values exceed the MTCA Method A Cleanup Level

^a dissolved lead

^b The TPH-G cleanup level is reduced from 1,000 µg/L to 800 µg/L if benzene is present in the sample

^c Method blank contamination (1-17-01)

^d Light-end hydrocarbons outside the defined gasoline range are present in sample (MW-1B on 9-16-03)

^e Higher boiling hydrocarbons present, atypical for Diesel Range Organics

^{fo} Estimated concentration calculated for an analyte response above the valid instrument calibration range. A dilution is required to obtain an accurate quantification of the analyte.

^f Indicates the presence of unresolved compounds eluting from dodecane through tetracosane (C12-C24).

Combined DPE/SVE remediation system operations commenced on February 25, 1998.

^g Indicates the Method Detection Limit is reported since the laboratory reporting limit exceeded the MTCA Method A screening level. The analyte was not detected above the Method Detection Limit.

^h Result is less than the reporting limit but greater than or equal to the method detection limit. The reported concentration is an approximate value.

ⁱ The relative percent difference between the primary and confirmation detector is greater than 40 percent. The lower value has been reported.

^j Sample was prepped or analyzed beyond the specified holding time.

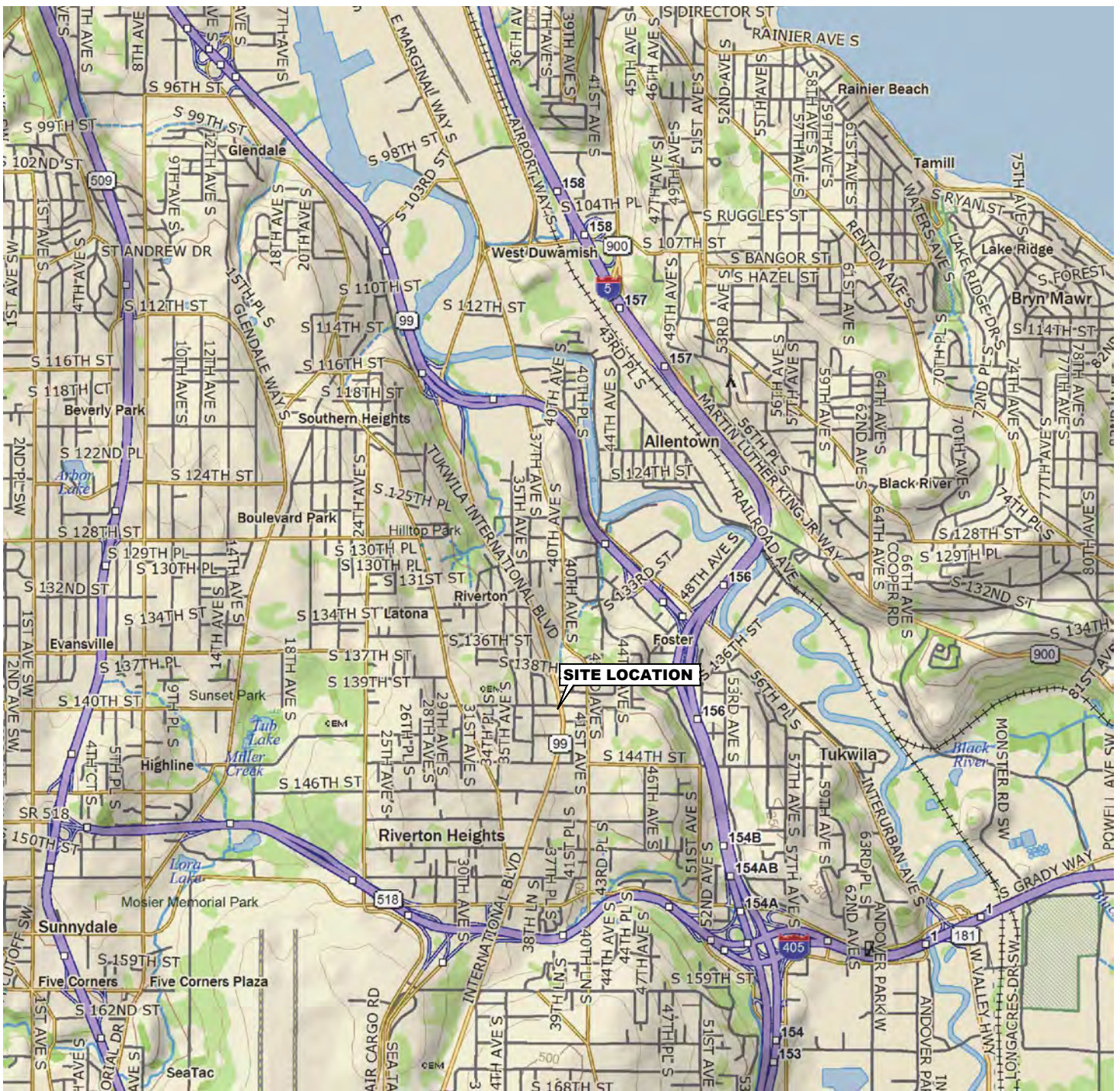
^k Compound was found in the blank and sample.

^l The %RPD between the primary and confirmation column/detector is >40%. The lower value has been reported.

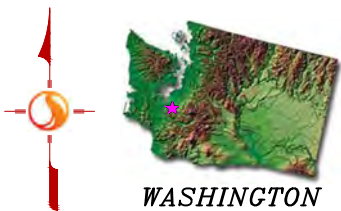
^m LCS/LCSD RPD exceeds the control limits.

ⁿ LCS or LCSD is outside acceptance limits.

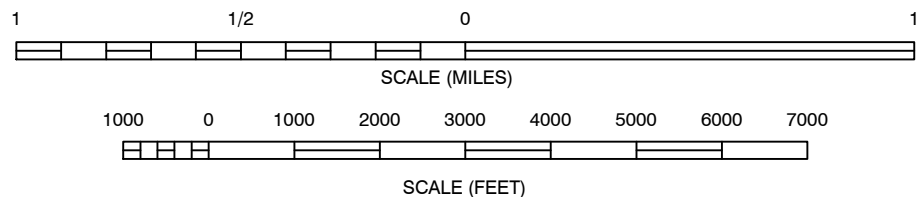
FIGURES



North



WASHINGTON



REFERENCE: USGS 7.5 MINUTE QUADRANGLE, DES MOINES, WASHINGTON



11130 NE 33RD PLACE, SUITE 200
BELLEVUE, WASHINGTON
PHONE: (425) 869-9448 FAX: (425) 869-1190

FOR:



STORE NO. 22866
14207 INTERNATIONAL BLVD/STATE RT 99
TUKWILA, WASHINGTON

JOB NUMBER:
185703896

DRAWN BY:
MDR/STA

CHECKED BY:
AS

APPROVED BY:
PF

FIGURE:

1

SITE LOCATION MAP

DATE:
MAY 2018



LEGEND:

----- SUBJECT PROPERTY

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FOR:



FACILITY NO. 22866
14207 INTERNATIONAL BLVD / STATE RT 99
TUKWILA, WASHINGTON

JOB NUMBER:
185703896

DRAWN BY:
MDR/STA

SITE VICINITY MAP

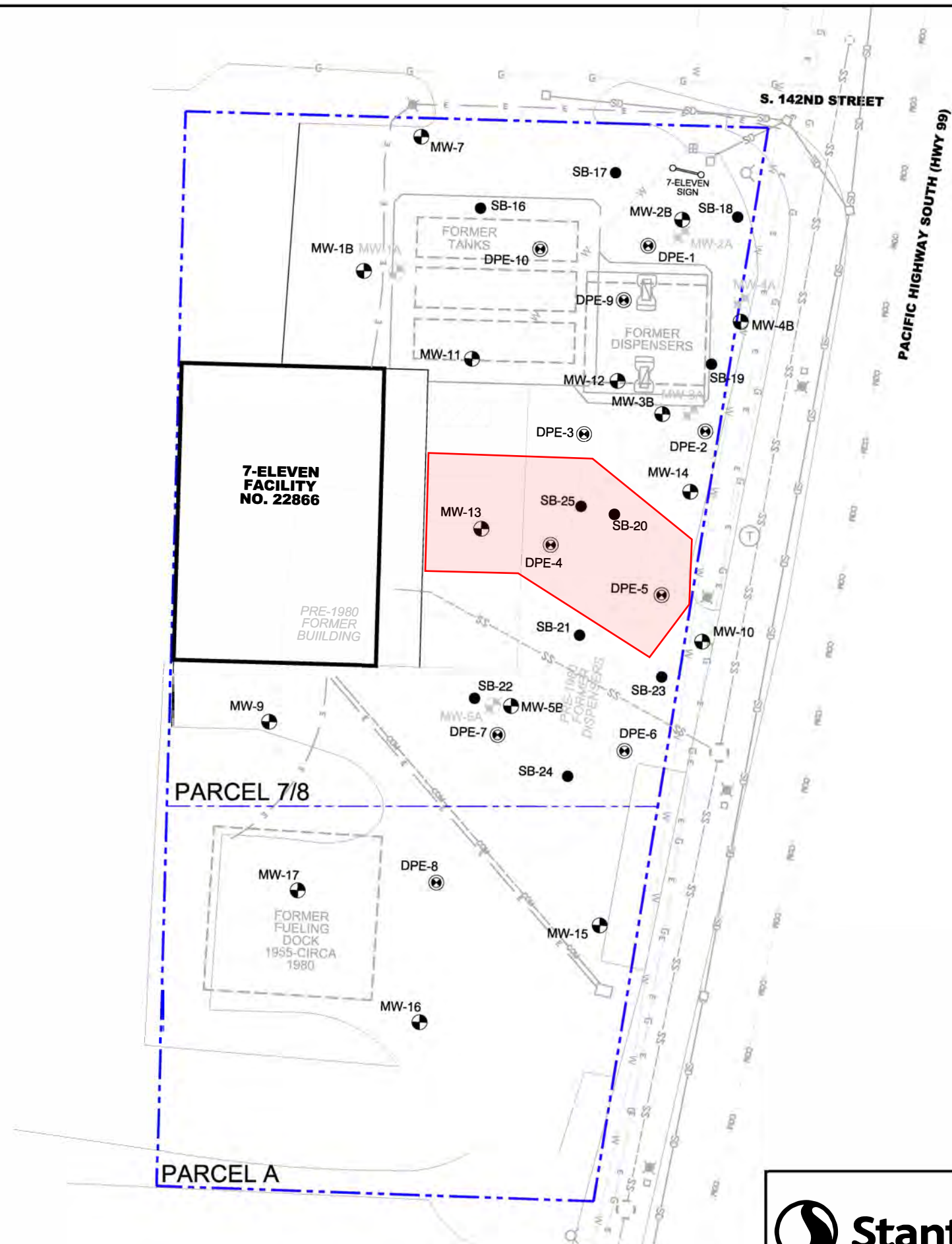
CHECKED BY:
AS

APPROVED BY:
PF

FIGURE:

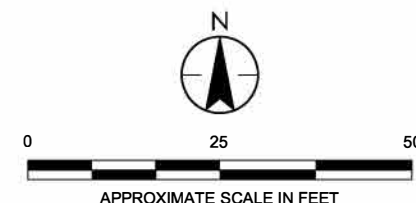
2

DATE:
MAY 2018



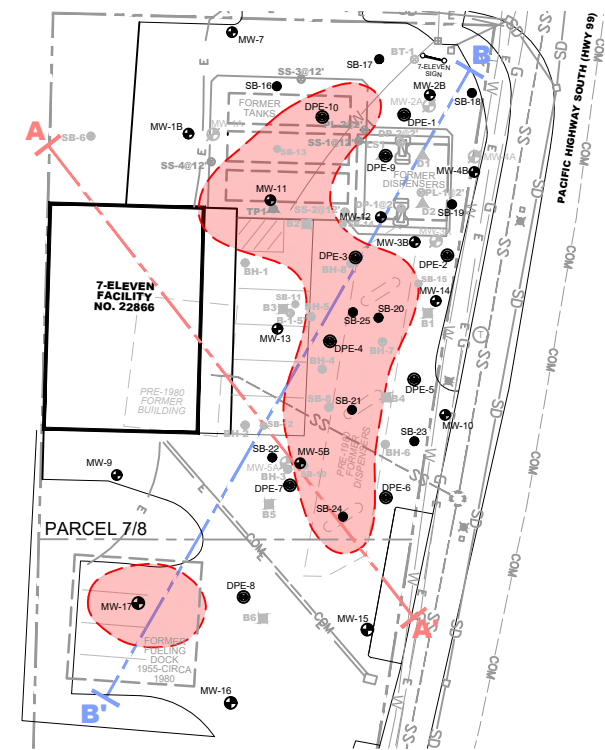
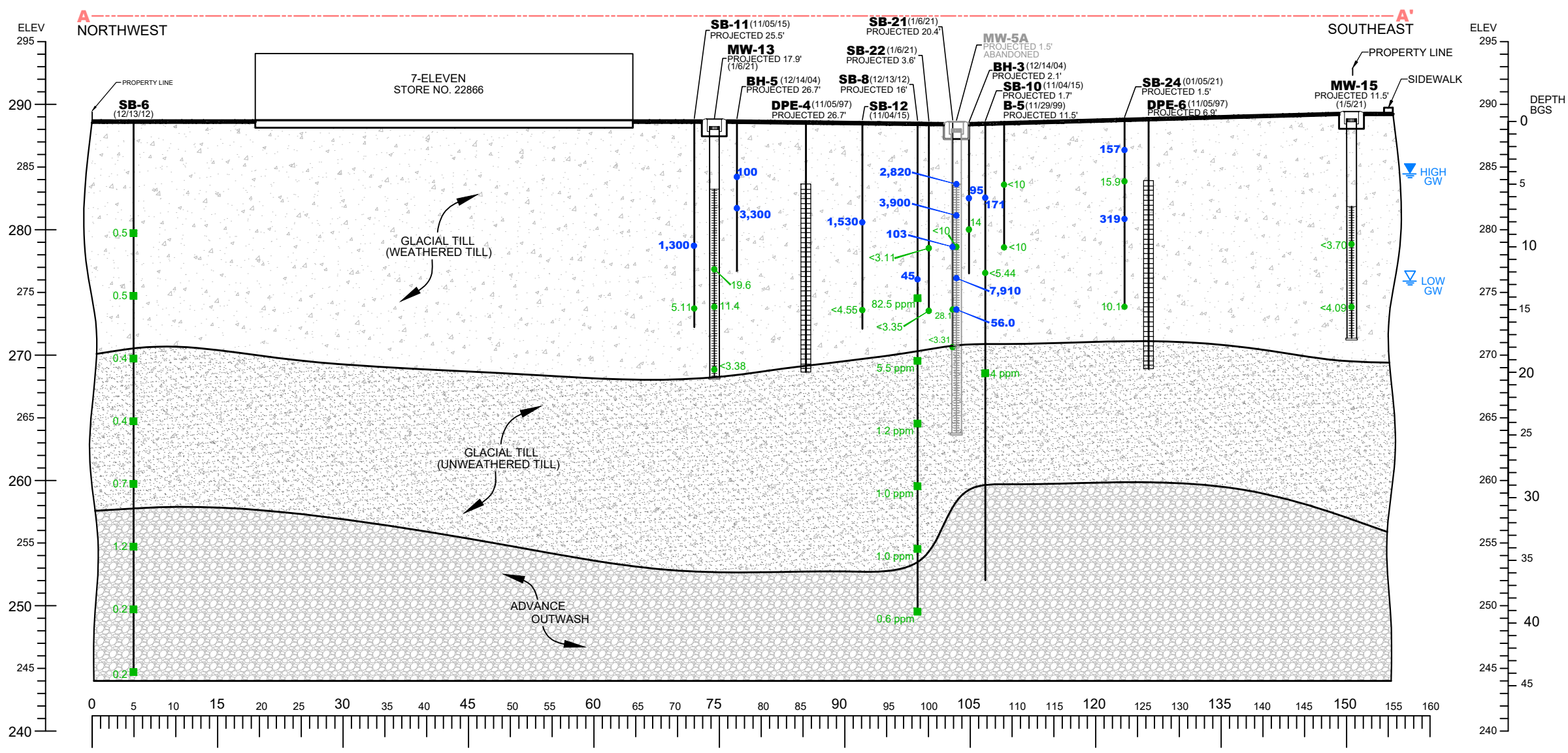
- LEGEND:**
- MW-1A ABANDONED GROUNDWATER MONITORING WELL LOCATION (AS OF MAY 9, 2016)
 - MW-4B GROUNDWATER MONITORING WELL LOCATION
 - DPE-8 DUAL PHASE EXTRACTION WELL
 - SB-17 SOIL BORING LOCATIONS
 - PARCEL LINE
 - ELECTRIC LINE
 - OVERHEAD ELECTRIC LINE
 - WATER LINE
 - WATER METER
 - FIRE HYDRANT
 - COMMUNICATIONS LINE
 - STORM DRAIN
 - CATCH BASIN
 - SANITARY SEWER
 - MANHOLE
 - GAS
 - TELEPHONE MANHOLE
 - LIGHT POLE
 - APPROXIMATE TREATMENT AREA OF BOS-200 INJECTION (2021)

WELLS WERE LAST SURVEYED BY PACE ENGINEERS ON 02/26/2021



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	JOB NUMBER: 185703896	DRAWN BY: MP/CRJ	CHECKED BY: PV	APPROVED BY: PF	DATE: JULY 2022

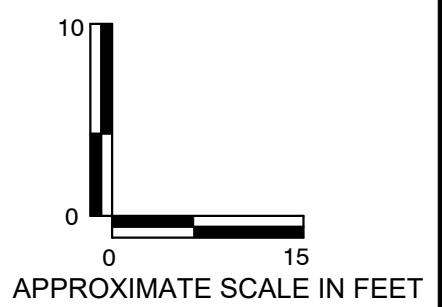


LEGEND:

- MW-5A ABANDONED GROUNDWATER MONITORING WELL LOCATION (AS OF MAY 9, 2016)
- MW-13 GROUNDWATER MONITORING WELL LOCATION
- DPE-4 DUAL PHASE EXTRACTION WELL
- SB-21 SOIL BORING LOCATIONS
- MONITORING WELL WITH SCREEN
- SOIL BORING AND SAMPLE LOCATION WITH REPORTED TPH-G RESULT BELOW MTCA METHOD A CULs (in mg/kg)
- SOIL BORING AND SAMPLE LOCATION WITH REPORTED TPH-G RESULT EXCEEDING MTCA METHOD A CULs (in mg/kg)

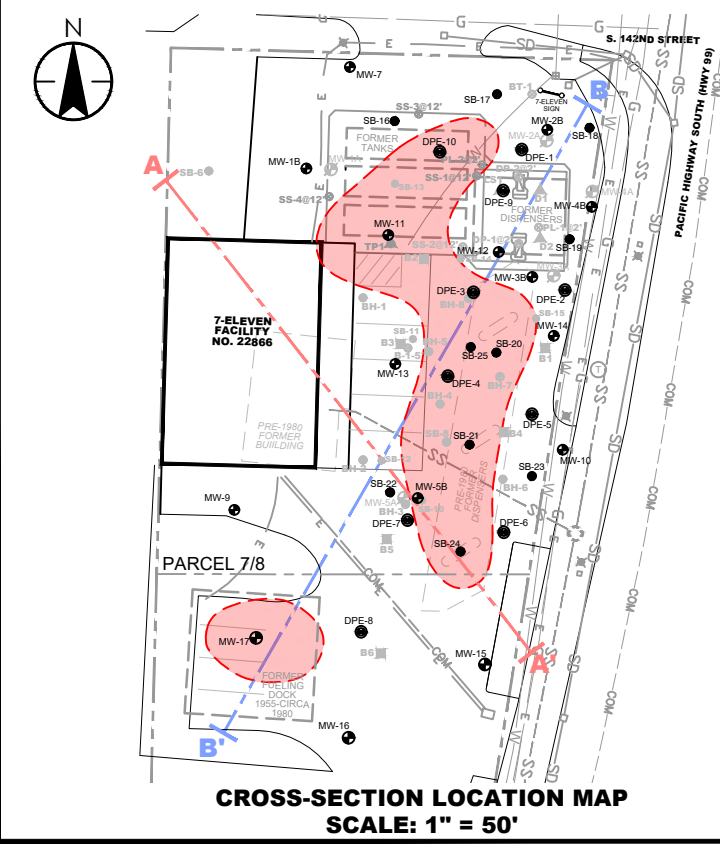
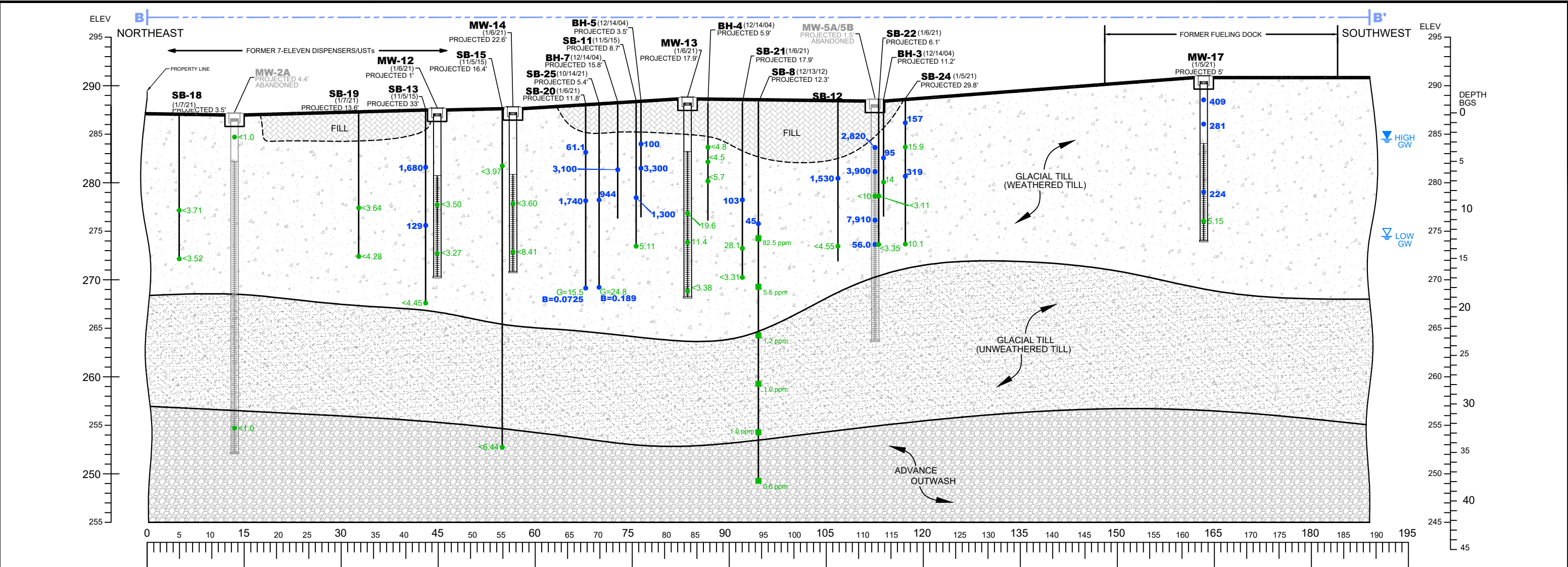
- PHOTOIONIZATION DETECTOR READING (in ppm)
- TPH-G TOTAL PETROLEUM HYDROCARBONS AS GASOLINE
- mg/kg MILLIGRAMS PER KILOGRAM
- ppm PARTS PER MILLION
- CULs CLEANUP LEVELS
- INTERPRETED SOIL STRATIGRAPHIC BOUNDARY
- HISTORICAL HIGH WATER
- HISTORICAL LOW WATER

- SP/WEATHERED GLACIAL TILL
- SM/UNWEATHERED GLACIAL TILL
- SP/ADVANCE OUTWASH



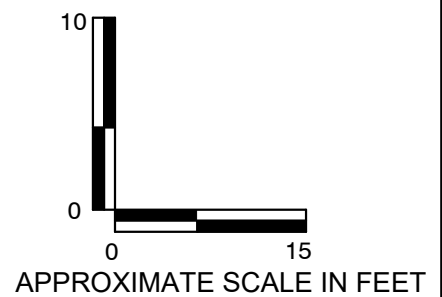
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	JOB NUMBER: 185703896	DRAWN BY: LRP/CRJ	CHECKED BY: PV	APPROVED BY: PF
				DATE: SEPT 2022



LEGEND:

- MW-5A ABANDONED GROUNDWATER MONITORING WELL LOCATION (AS OF MAY 9, 2016)
- MW-13 GROUNDWATER MONITORING WELL LOCATION
- SB-21 SOIL BORING LOCATIONS
- MONITORING WELL WITH SCREEN
- SOIL BORING AND SAMPLE LOCATION WITH REPORTED TPH-G RESULT BELOW MTCA METHOD A CULs (in mg/kg)
- SOIL BORING AND SAMPLE LOCATION WITH REPORTED TPH-G RESULT EXCEEDING MTCA METHOD A CULs (in mg/kg)
- PHOTOIONIZATION DETECTOR READING (in ppm)
- TPH-G TOTAL PETROLEUM HYDROCARBONS AS GASOLINE
- G TPH-G CONCENTRATION (mg/kg)
- B BENZENE CONCENTRATION (mg/kg)
- mg/kg MILLIGRAMS PER KILOGRAM
- ppm PARTS PER MILLION
- CULs CLEANUP LEVELS
- INTERPRETED SOIL STRATIGRAPHIC BOUNDARY
- HISTORICAL HIGH WATER
- HISTORICAL LOW WATER
- FILL
- SP/WEATHERED GLACIAL TILL
- SM/UNWEATHERED GLACIAL TILL
- SP/ADVANCE OUTWASH



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	JOB NUMBER: 185703896	DRAWN BY: LRP/CRJ	CHECKED BY: PV	APPROVED BY: PF
DATE: SEPT 2022				

SB-17		
	1/7/2021	1/7/2021
DEPTH	10	15
PID	0.5	0.7
B	<0.00262	<0.00181
T	<0.0131	<0.00907
E	<0.00262	<0.00181
X	<0.0131	<0.00907
TPH-G	<3.12	<4.73
TPH-D	<56.7	<53.0
TPH-O	<56.7	<53.0

SB-16		
	1/7/2021	1/7/2021
DEPTH	10	17
PID	30	2.2
B	0.00249	<0.00186
T	<0.00768	<0.00929
E	<0.00154	0.00255
X	<0.00768	0.0117
TPH-G	<3.02	<3.51
TPH-D	<53.2	<53.2
TPH-O	<53.2	<53.2
LEAD	8.48	--
EDB	<0.000768	--
EDC	<0.000768	--
MTBE	<0.00154	--
N	<0.00542	--
1-M N	0.0101	--
2-M N	0.0143	--
TOTAL N	0.0244	--

SB-18		
	1/7/2021	1/7/2021
DEPTH	10	15
PID	0.6	0.4
B	<0.00213	<0.00191
T	<0.0107	<0.00957
E	<0.00213	<0.00191
X	<0.0107	<0.00957
TPH-G	<3.71	<3.52
TPH-D	<55.6	<53.3
TPH-O	<55.6	<53.3

SB-19		
	1/7/2021	1/7/2021
DEPTH	10	15
PID	0.2	0.3
B	<0.00193	<0.00203
T	<0.00965	<0.0102
E	<0.00193	<0.00203
X	<0.00965	<0.0102
TPH-G	<3.64	<4.28
TPH-D	<53.0	<57.1
TPH-O	<53.0	<57.1

MW-12		
	1/7/2021	1/7/2021
DEPTH	10	15
PID	1.2	0.6
B	<0.00170	<0.00194
T	<0.00852	<0.00968
E	<0.00170	<0.00194
X	<0.00852	<0.00968
TPH-G	<3.50	<3.27
TPH-D	<55.3	<56.3
TPH-O	<55.3	<56.3

MW-14		
	1/6/2021	1/6/2021
DEPTH	10	15
PID	5.5	2.5
B	<0.00151	<0.00179
T	<0.00755	<0.00893
E	<0.00151	<0.00179
X	<0.00755	<0.00893
TPH-G	<3.60	<8.41
TPG-D	<55.4	<52.8
TPH-O	<55.4	<52.8

SB-25 (POST BOS-200 INJECTION)		
	10/14/2021	10/14/2021
DEPTH	10	19
PID	1,520	30
B	<0.299	0.189
T	<0.897	<0.0772
E	16.2	0.636
X	93.2	2.50
TPH-G	944	24.8
TPG-D	169	<52.5
TPH-O	<56.5	<52.5

SB-23		
	1/6/2021	1/6/2021
DEPTH	10	15
PID	2.5	1.8
B	<0.00165	<0.00191
T	<0.00823	<0.00955
E	<0.00165	<0.00191
X	<0.00823	<0.00955
TPH-G	<3.95	<3.59
TPH-D	<55.6	<51.0
TPH-O	<55.6	<51.0

SB-24				
	1/4/2021	1/4/2021	1/5/2021	1/5/2021
DEPTH	2.5	5	8	15
PID	145	55	147	1.2
B	0.00470	<0.00196	<0.00161	<0.00167
T	<0.0114	<0.00979	<0.00806	<0.00833
E	0.0215	0.00214	<0.00161	<0.00167
X	0.0658	0.0157	<0.00806	<0.00833
TPH-G	157	15.9	319	10.1
TPH-D	353	<58.1	143	<59.2
TPH-O	1,510	<58.1	<56.9	<59.2
LEAD	98.8	6.67	6.74	--
EDB	<0.00114	<0.000979	<0.000806	--
EDC	<0.00114	<0.000979	<0.000806	--
MTBE	<0.00228	<0.00196	<0.00161	--
N	0.511	0.0153	0.0404	--
1-M N	0.563	<0.00575	0.0478	--
2-M N	1.04	0.00935	0.0106	--
TOTAL N	2.114	0.02465	0.0988	--

MW-15		
	1/5/2021	1/5/2021
DEPTH	10	15
PID	1.0	0.5
B	<0.00165	<0.00305
T	<0.00823	<0.0152
E	<0.00165	<0.00305
X	<0.00823	<0.0152
TPH-G	<3.70	<4.09
TPG-D	<57.3	<51.5
TPH-O	<57.3	<51.5

MW-16		
	1/5/2021	1/5/2021
DEPTH	11	15
PID	17	1.9
B	<0.00179	<0.00182
T	<0.00896	<0.00910
E	<0.00179	<0.00182
X	<0.00896	<0.00910
TPH-G	44.8	<4.08
TPG-D	55.2	<50.4
TPH-O	<54.6	<50.4

MW-11			
	1/7/2021	1/7/2021	1/7/2021
DEPTH	10	15	18
PID	40	15	10
B	0.00442	0.00671	0.00395
T	<0.0120	<0.00967	<0.00638
E	0.00310	0.00355	<0.00128
X	<0.0120	<0.00967	<0.00638
TPH-G	30.3	<4.83	<3.42
TPH-D	<54.8	<51.3	<57.5
TPH-O	<54.8	<51.3	<57.5
LEAD	6.78	--	--
EDB	<0.00120	--	--
EDC	<0.00120	--	--
MTBE	<0.00239	--	--
N	1.25	--	--
1-M N	0.641	--	--
2-M N	1.49	--	--
TOTAL N	3.381	--	--

MW-13			
	1/6/2021	1/6/2021	1/6/2021
DEPTH	12	15	20
PID	420	56	16
B	<0.00137	0.00358	<0.00146
T	<0.00686	<0.00876	<0.00731
E	1.28	1.96	0.0119
X	1.88	0.0804	0.0184
TPH-G	19.6	11.4	<3.38
TPH-D	164	<51.7	<52.0
TPH-O	<56.1	<51.7	<52.0
LEAD	4.81	2.90	--
EDB	<0.000686	<0.000876	--
EDC	<0.000686	<0.000876	--
MTBE	<0.00137	<0.00175	--
N	0.615	0.428	--
1-M N	0.420	0.0616	--
2-M N	0.903	0.114	--
TOTAL N	1.938	0.6036	--

SB-21			
	1/6/2021	1/6/2021	1/6/2021
DEPTH	10	15	18
PID	170	1,820	15
B	<0.00162	<0.00191	<0.00149
T	<0.00812	<0.00955	<0.00745
E	0.00262	0.263	0.00241
X	0.0121	0.200	<0.00745
TPH-G	103	28.1	<3.31
TPH-D	<56.9	<57.2	<51.3
TPH-O	<56.9	<57.2	<51.3
LEAD	10.7	3.58	--
EDB	<0.000812	<0.000955	--
EDC	<0.000812	<0.000955	--
MTBE	<0.00162	<0.00191	--
N	0.0630	0.159	--
1-M N	0.0787	0.227	--
2-M N	0.0968	0.481	--
TOTAL N	0.2385	0.867	--

SB-22		
	1/6/2021	1/6/2021
DEPTH	10	15
PID	61	2.1
B	<0.00137	<0.00156
T	<0.00685	<0.00781
E	0.00215	<0.00156
X	0.00887	<0.00781
TPH-G	<3.11	<3.35
TPH-D	<57.0	<56.1
TPH-O	<57.0	<56.1
LEAD	3.89	--
EDB	<0.000685	--
EDC	<0.000685	--
MTBE	<0.00137	--
N	0.0905	--
1-M N	0.0126	--
2-M N	0.0278	--
TOTAL N	0.1309	--

MW-17				
	1/4/2021	1/4/2021	1/5/2021	1/5/2021
DEPTH	2.5	5	12	15
PID	120	95	34	1.5
B	<0.00175	<0.00183	<0.00155	<0.00150
T	<0.00876	<0.00917	<0.00776	<0.00752
E	<0.00175	<0.00183	<0.00155	<0.00150
X	<0.00876	<0.00917	<0.00776	<0.00752
TPH-G	409	281	224	5.15
TPH-D	804	591	364	<55.5
TPH-O	<51.2	<57.0	<52.8	<55.5
LEAD	5.15	5.01	--	--
EDB	<0.000876	<0.000917	--	--
EDC	<0.000876	<0.000917	--	--
MTBE	<0.00175	<0.00183	--	--
N	0.0953	0.0390	--	--
1-M N	1.38	0.230	--	--
2-M N	0.436	0.0426	--	--
TOTAL N	1.9113	0.3116	--	--

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DRAWN BY:
LRP/CRJ

**SOIL CONCENTRATION
SITE MAP
JANUARY AND OCTOBER 2021**

CHECKED BY:
PV

APPROVED BY:
PF

FIGURE:
5
DATE:
AUGUST 2022

LEGEND:

- MW-1A ABANDONED GROUNDWATER MONITORING WELL LOCATION (AS OF MAY 9, 2016)
- MW-4B GROUNDWATER MONITORING WELL LOCATION
- DPE-8 DUAL PHASE EXTRACTION WELL
- SB-17 SOIL BORING LOCATIONS
- PARCEL LINE
- ELECTRIC LINE
- OVERHEAD ELECTRIC LINE
- WATER LINE
- WATER METER
- FIRE HYDRANT
- COMMUNICATIONS LINE
- STORM DRAIN
- CATCH BASIN
- SANITARY SEWER
- MANHOLE
- GAS
- TELEPHONE MANHOLE
- LIGHT POLE

SB-16		
	1/7/2021	
DEPTH	10	— SAMPLE DATE
PID	30	— SAMPLE DEPTH (FEET BGS)
B	0.00249	— PID READING (PPMV)
T	<0.00768	
E	<0.00154	
X	<0.00768	
TPH-G	<3.02	
TPH-D	<53.2	
TPH-O	<53.2	
LEAD	8.48	
EDB	<0.000768	
EDC	<0.000768	
MTBE	<0.00154	
N	<0.00542	
1-M N	0.0101	
2-M N	0.0143	
TOTAL N	0.0244	

ANALYTE LIST:

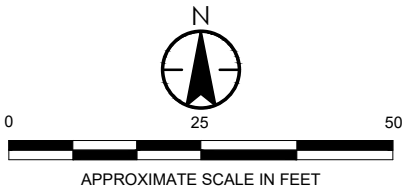
- B BENZENE
- T TOLUENE
- E ETHYLBENZENE
- X TOTAL XYLENES
- TPH-G TOTAL PETROLEUM HYDROCARBONS - GASOLINE
- TPH-D TOTAL PETROLEUM HYDROCARBONS - DIESEL
- TPH-O TOTAL PETROLEUM HYDROCARBONS - OIL
- LEAD LEAD
- EDB 1,2-DIBROMOETHANE
- EDC 1,2-DICHLOROETHANE
- MTBE METHYL TERT-BUTYL ETHER
- NAPTH NAPHTHALENE
- 1-METH NAPTH 1-METHYLNAPHTHALENE
- 2-METH NAPTH 2-METHYLNAPHTHALENE

NOTES:

- < NOT DETECTED AT OR ABOVE THE LABORATORY REPORTING LIMIT

mg/Kg MILLIGRAMS PER KILOGRAM

ESTIMATED EXTENT OF IMPACTED SOIL EXCEEDING MTCA METHOD 4 CULS



DPE-10	2/11/21	5/27/22
BENZENE	--	< 1.00
ETHYLBENZENE	--	< 1.00
TOTAL LEAD	6.55	--
TPH-D	< 107	245
TPH-G	< 250	< 100
TPH-O	< 339	530
TOLUENE	--	< 1.00
TOTAL XYLENES	--	< 3.00

DPE-1	2/11/21	5/27/22
BENZENE	--	< 1.00
ETHYLBENZENE	--	< 1.00
TOTAL LEAD	130	--
TPH-D	< 1,060	323
TPH-G	< 250	132
TPH-O	4,080	463
TOLUENE	--	< 1.00
TOTAL XYLENES	--	< 3.00

MW-11	3/2/21	5/25/21	8/17/21	11/3/21	3/16/22	5/27/22
BENZENE	< 3.00	14.7	14.6	5.81	< 1.00	< 1.00
ETHYLBENZENE	< 3.00	9.89	< 10	< 1.00	< 1.00	< 1.00
TOTAL LEAD	< 0.400	< 0.400	< 0.400	< 0.4	--	--
TPH-D	232	786	458	< 446	< 200	< 200
TPH-G	294	1,120	341	< 250	< 100	< 100
TPH-O	< 357	< 357	< 336	< 1,420	< 250	< 250
TOLUENE	< 2.00	1.18	< 10	< 1.00	< 1.00	< 1.00
TOTAL XYLENES	< 3.00	< 2.00	< 20	< 2.00	< 3.00	< 3.00

DPE-3	2/11/21	3/17/22	5/27/22
BENZENE	--	< 1.00	< 1.00
ETHYLBENZENE	--	< 1.00	< 1.00
TOTAL LEAD	340	--	--
TPH-D	< 1,050	< 200	< 200
TPH-G	< 250	< 100	< 100
TPH-O	5,750	579	< 250
TOLUENE	--	< 1.00	< 1.00
TOTAL XYLENES	--	< 3.00	< 3.00

DPE-4	2/10/21	3/17/22	5/26/22
BENZENE	--	2.75	3.98
ETHYLBENZENE	--	< 1.00	< 1.00
TOTAL LEAD	380	--	--
TPH-D	1,440	< 200	147
TPH-G	1,540	560	519
TPH-O	1,490	< 250	215
TOLUENE	--	< 1.00	< 1.00
TOTAL XYLENES	--	< 3.00	1.23

MW-13	3/3/21	5/25/21	8/17/21	11/3/21	3/17/22	5/26/22
BENZENE	< 3	2.01	< 20	< 5	< 1	0.699
ETHYLBENZENE	3,480	123	2,660	344	25.7	210
TOTAL	2.76	3.64	4.22	2.04	--	--
TPH-D	5,440	10,600	5,030	1,100	1,710	1,660
TPH-G	30,100	33,700	38,000	10,300	2,970	8,580
TPH-O	< 355	< 362	< 356	< 1,410	< 250	136
TOLUENE	6	9.03	30.2	5.57	< 1	1.08
TOTAL XYLENES	2,570	355	6,010	2,700	56.8	530

DPE-5	2/11/21	3/17/22	5/27/22
BENZENE	--	39.4	51.4
ETHYLBENZENE	--	76.2	303
TOTAL LEAD	9.46	--	--
TPH-D	8,600	2,220	3,350
TPH-G	27,800	7,710	10,200
TPH-O	< 1,000	464	547
TOLUENE	--	1.07	1.67
TOTAL XYLENES	--	623	964

DPE-7	2/10/21	3/16/22	5/27/22
BENZENE	--	< 1.00	< 1.00
ETHYLBENZENE	--	< 1.00	< 1.00
TOTAL LEAD	3.35	--	--
TPH-D	110	< 200	532
TPH-G	< 250	< 100	< 100
TPH-O	370	536	786
TOLUENE	--	< 1.00	< 1.00
TOTAL XYLENES	--	< 3.00	< 3.00

MW-16	3/2/21	5/25/21	8/16/21	11/2/21	3/16/22	5/27/22
BENZENE	< 3.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
ETHYLBENZENE	< 3.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
TOTAL LEAD	3.12	23.1	1.27	2.11	--	--
TPH-D	1,370	2,110	1,260	822	1,560	1,420
TPH-G	404	390	286	263	194	169
TPH-O	462	694	608	< 1,410	710	682
TOLUENE	< 2.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
TOTAL XYLENES	< 3.00	< 2.00	< 2.00	< 2.00	< 3.00	< 3.00

DPE-8	2/10/21	3/16/22	5/27/22
BENZENE	--	< 1.00	< 1.00
ETHYLBENZENE	--	< 1.00	< 1.00
TOTAL LEAD	1.57	--	--
TPH-D	1,810	1,750	1,060
TPH-G	< 250	< 100	< 100
TPH-O	1,350	1,300	820
TOLUENE	--	< 1.00	< 1.00
TOTAL XYLENES	--	< 3.00	< 3.00

LEGEND:

MW-1A	ABANDONED GROUNDWATER MONITORING WELL LOCATION (AS OF MAY 9, 2010)
MW-4B	GROUNDWATER MONITORING WELL LOCATION
DPE-8	DUAL PHASE EXTRACTION WELL
SB-17	SOIL BORING LOCATIONS
---	PARCEL LINE
---	ELECTRIC LINE
---	OVERHEAD ELECTRIC LINE
---	WATER LINE
---	WATER METER
---	FIRE HYDRANT
---	COMMUNICATIONS LINE
---	STORM DRAIN
---	CATCH BASIN
---	SANITARY SEWER
---	MANHOLE
---	GAS
---	TELEPHONE MANHOLE
---	LIGHT POLE

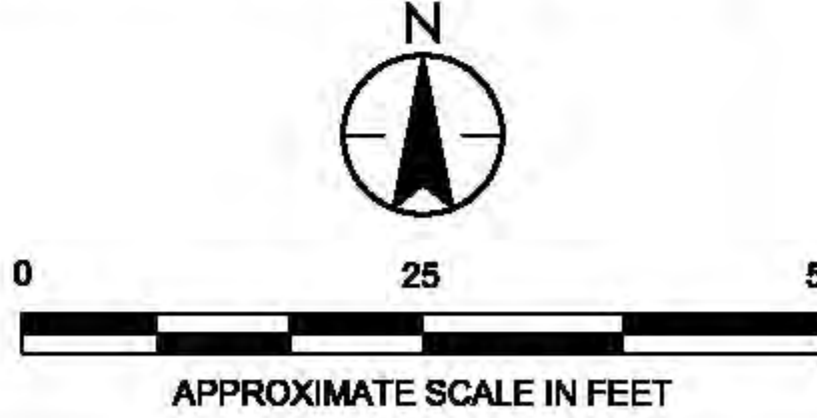
ESTIMATED CURRENT EXTENT OF GROUNDWATER PLUME EXCEEDING MTCA METHOD A CULS.

GENERAL NOTES:

RESULTS ARE ONLY SHOWN FOR MONITORING WELLS WITH DETECTIONS THAT EXCEEDED MTCA METHOD A CLEANUP LEVELS.

SITE DATA COMPARED TO "MTCA METHOD A"	ND NOT DETECTED	BENZENE	5.0 ug/L
	NOT SAMPLED	ETHYLBENZENE	700 ug/L
	SAMPLED & UNDER CRITERION	TOTAL LEAD	15.0 ug/L
	SAMPLED & OVER CRITERION	TPH-D	500 ug/L
	FREE PRODUCT	TPH-G	800 ug/L
	DISPLAYED IN ug/L	TPH-O	500 ug/L
		TOLUENE	1,000 ug/L
		TOTAL XYLENES	1,000 ug/L

WELLS WERE LAST SURVEYED BY PACE ENGINEERS ON 02/28/2021



1687 114TH AVE SE, SUITE 100
BELLEVUE, WASHINGTON
PHONE: (425) 869-9448 FAX: (425) 869-1190

FOR:
FACILITY NO. 22866
14207 INTERNATIONAL BLVD / STATE RT 99
TUKWILA, WASHINGTON

JOB NUMBER: 185703896
DRAWN BY: MP/CRJ

GROUNDWATER ANALYTICAL RESULTS
First Quarter 2021 Through Second Quarter 2022

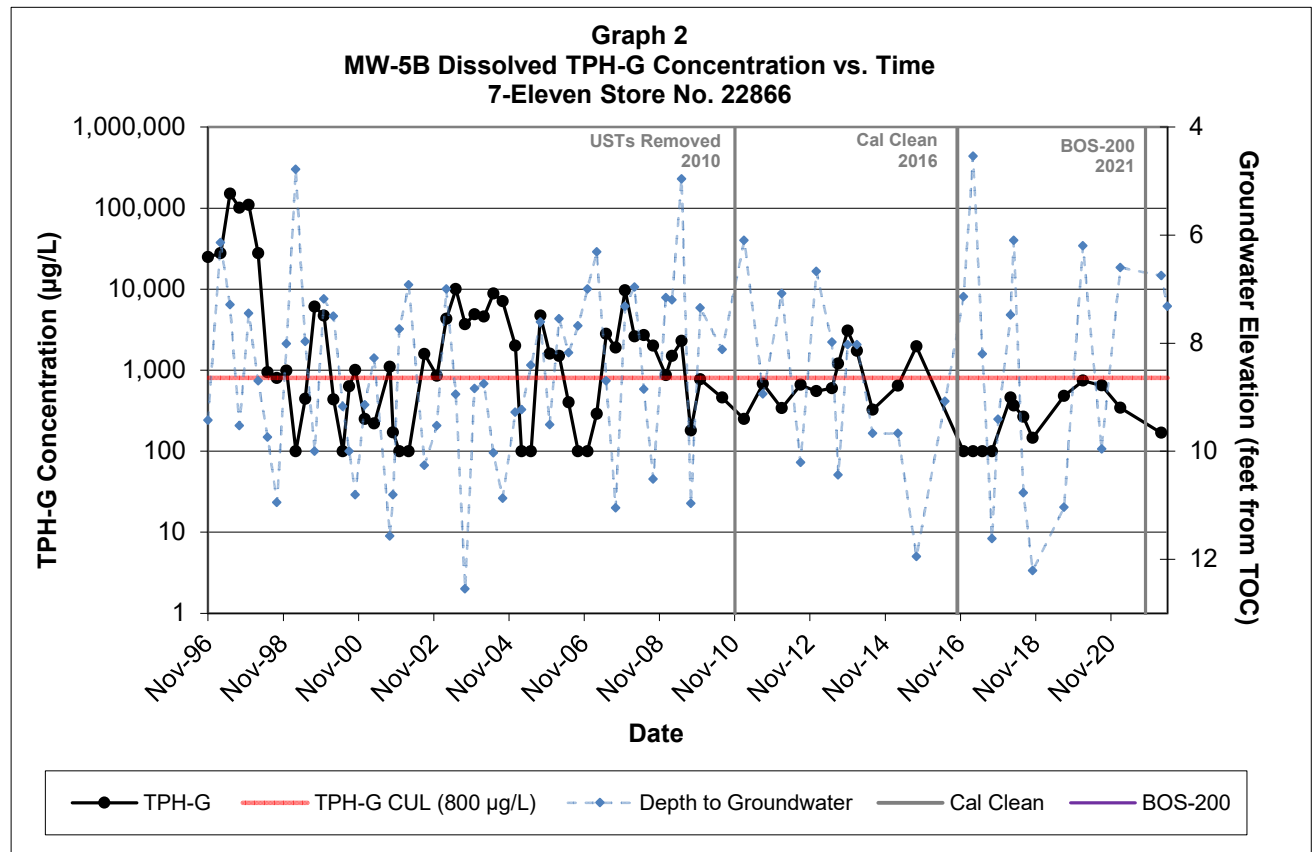
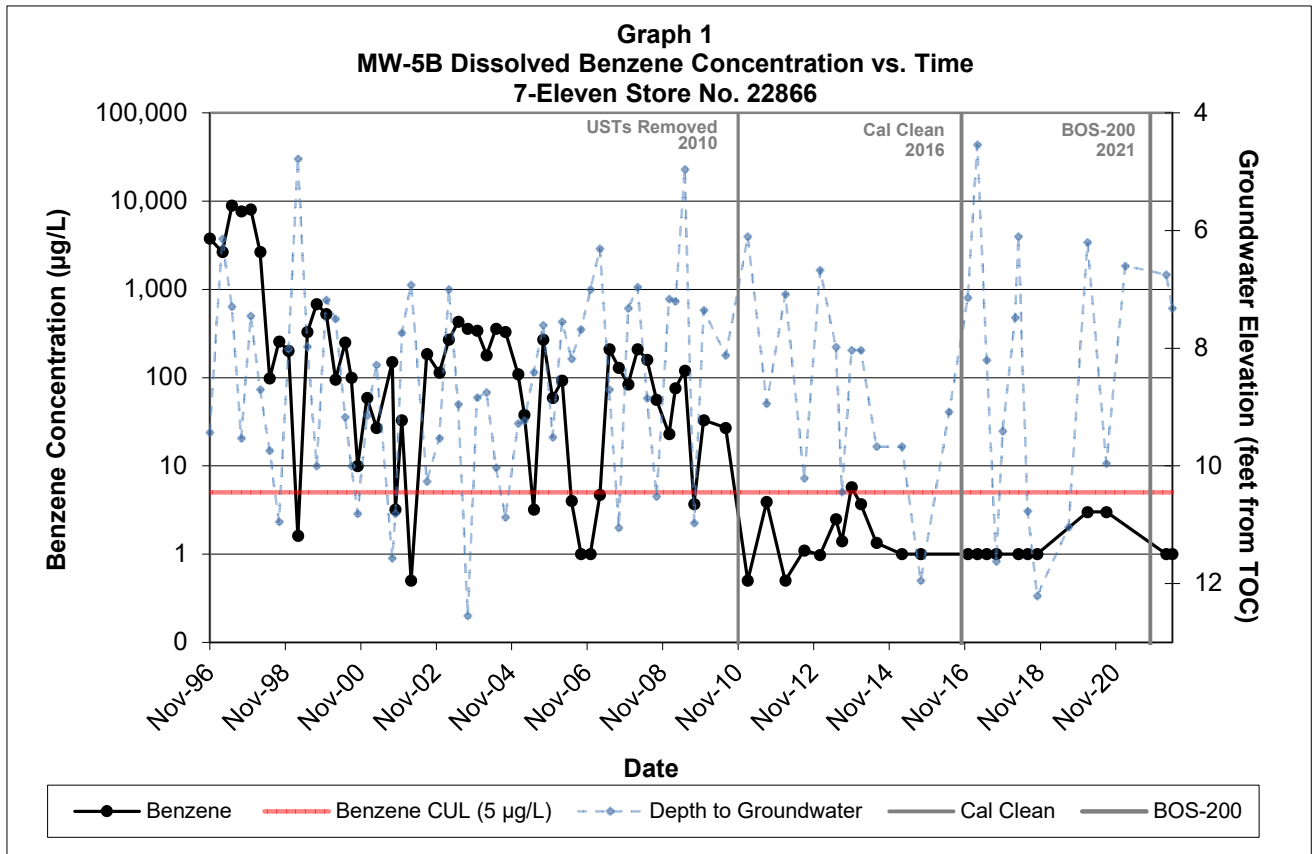
CHECKED BY: PV
APPROVED BY: PF

FIGURE:
6

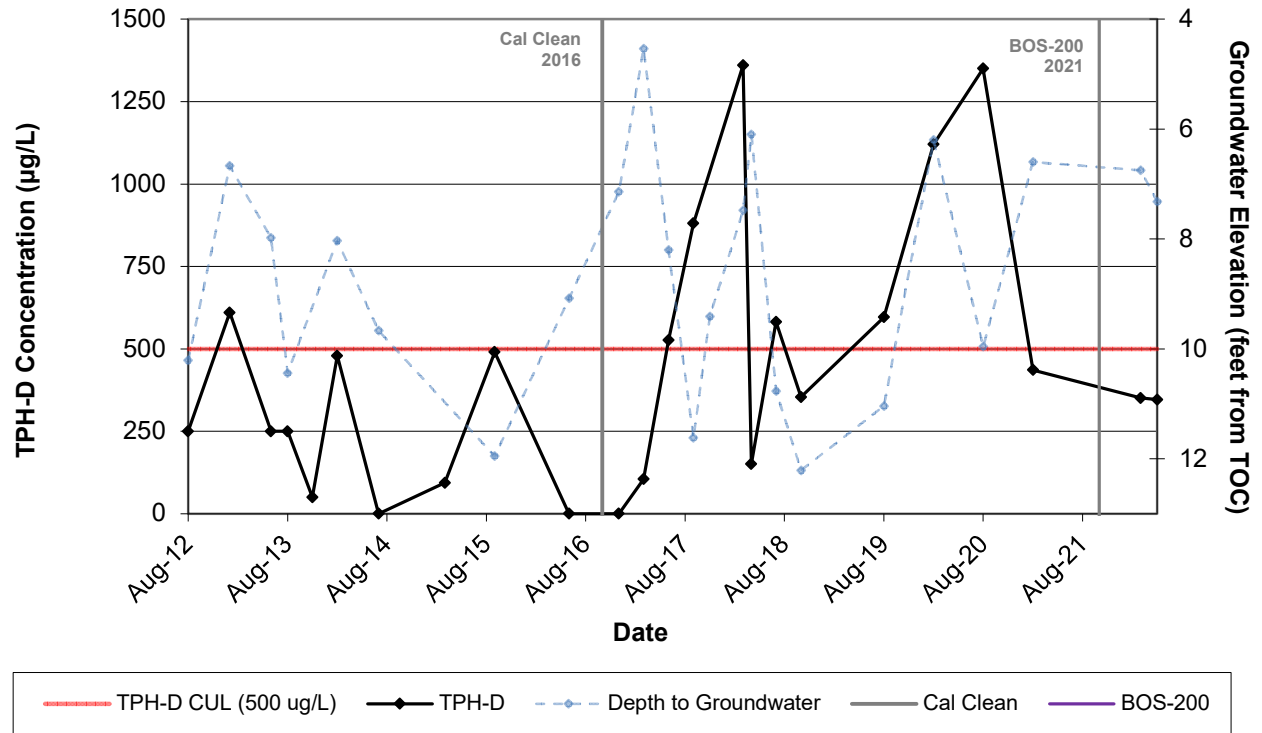
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JULY 2022

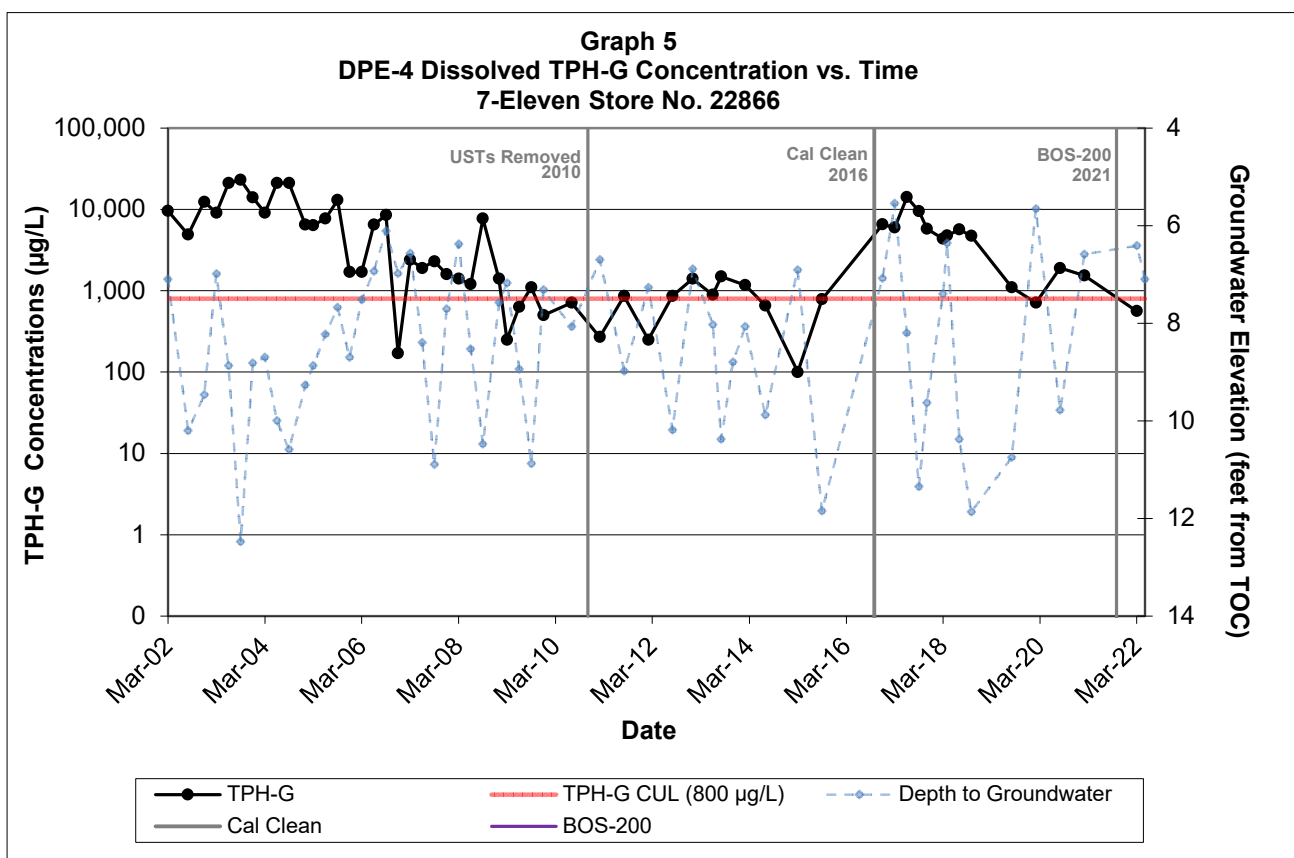
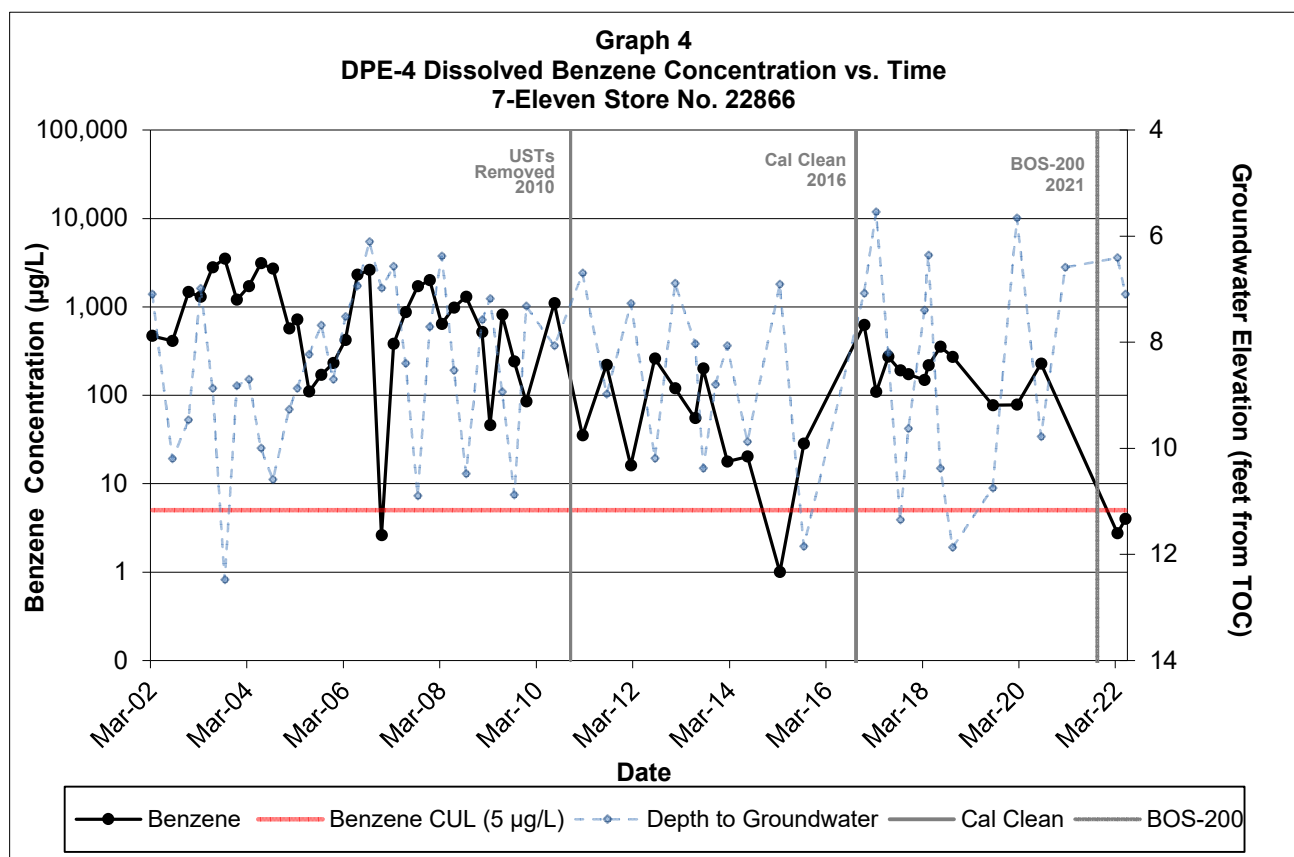
No warranty is made by Stantec Consulting Services Inc. as to the accuracy, reliability, or completeness of these data. Original data were compiled from various sources. This information may not meet National Map Accuracy Standards. This product was developed electronically, and may be updated without notification. Any reproduction may result in a loss of scale and/or information.

GRAPHS

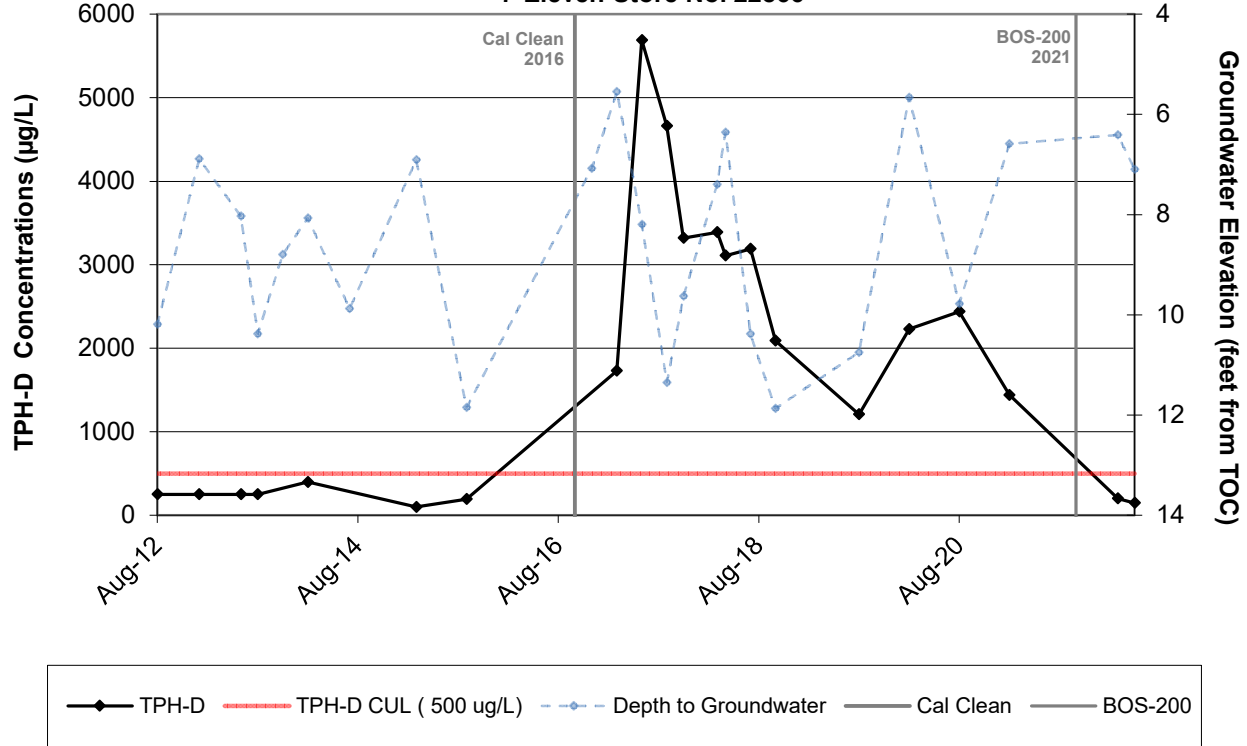


Graph 3
MW-5B Dissolved TPH-D Concentration vs. Time
7-Eleven Store No. 22866

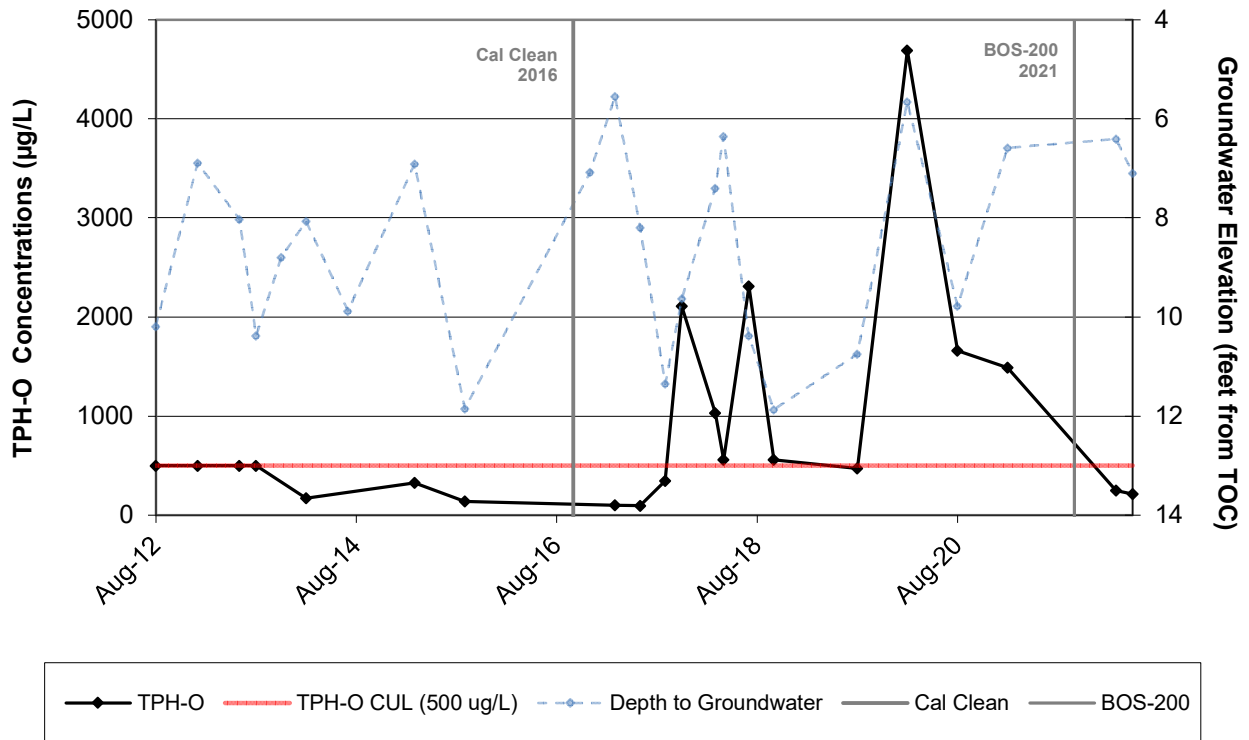




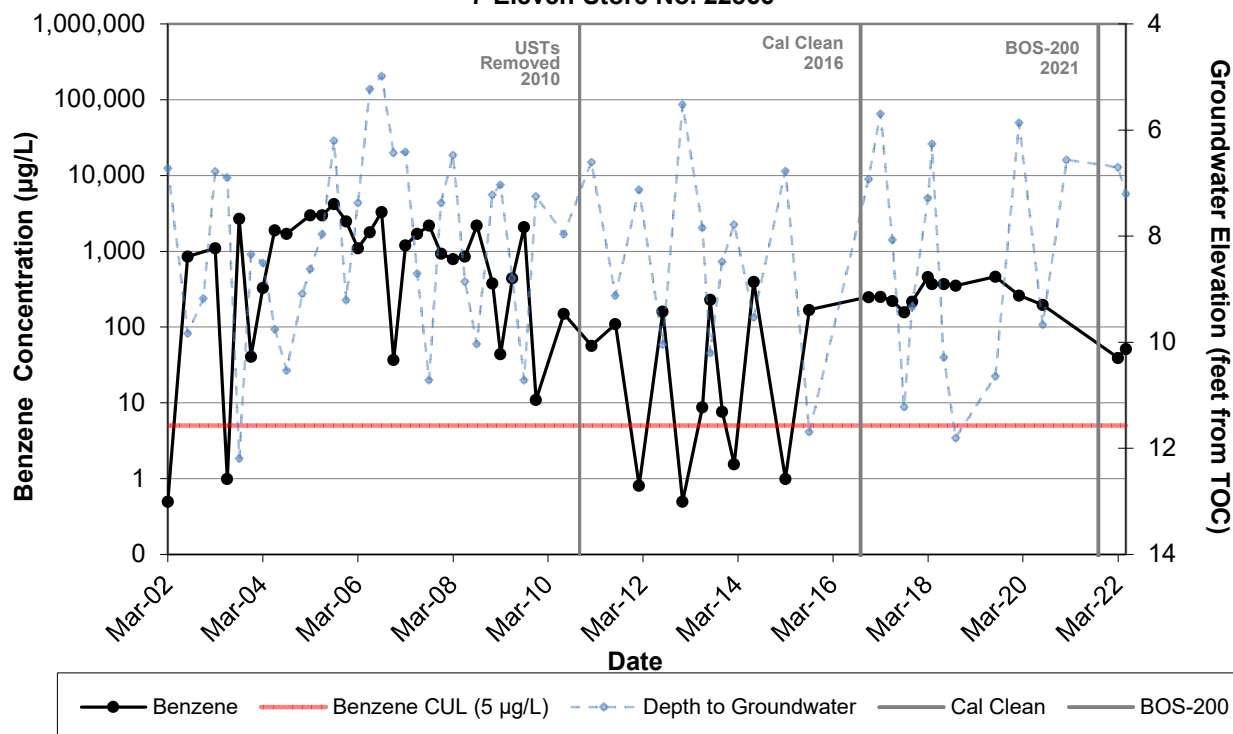
Graph 6
DPE-4 Dissolved TPH-D Concentration vs. Time
7-Eleven Store No. 22866



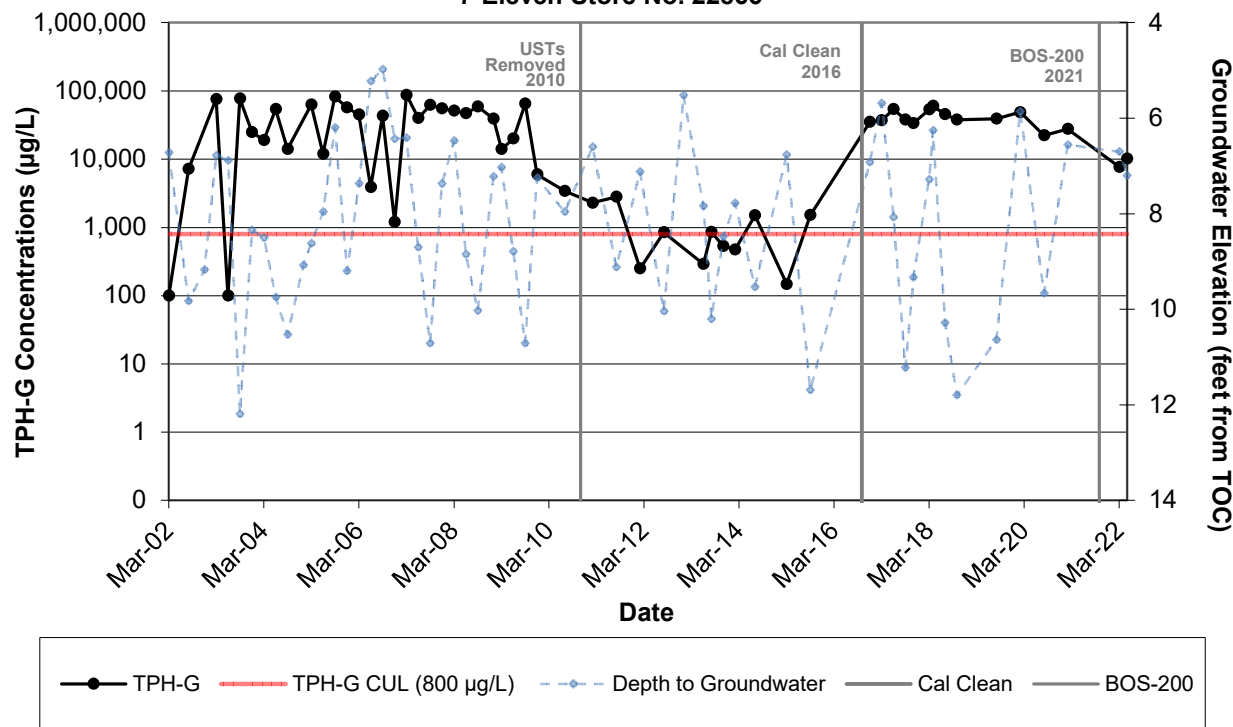
Graph 7
DPE-4 Dissolved TPH-O Concentration vs. Time
7-Eleven Store No. 22866

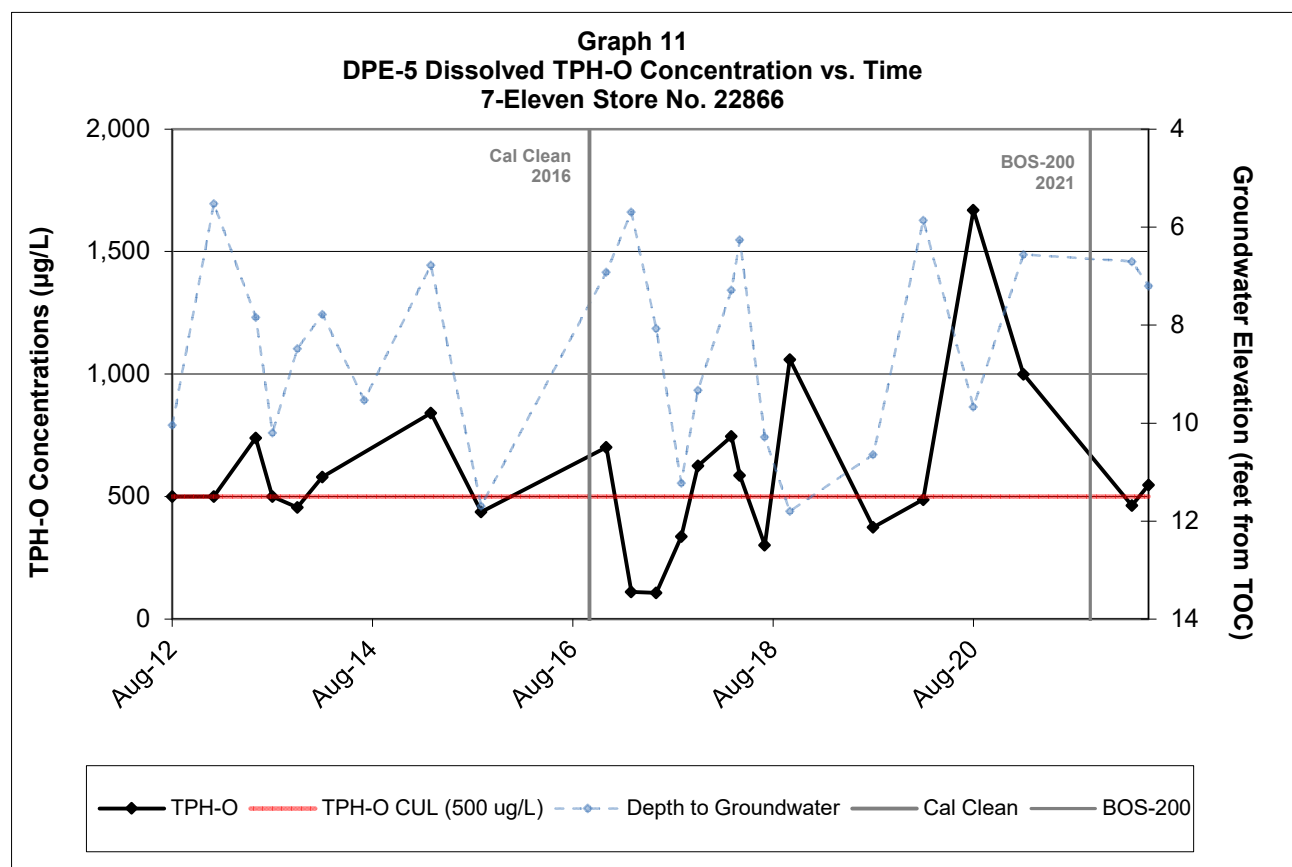
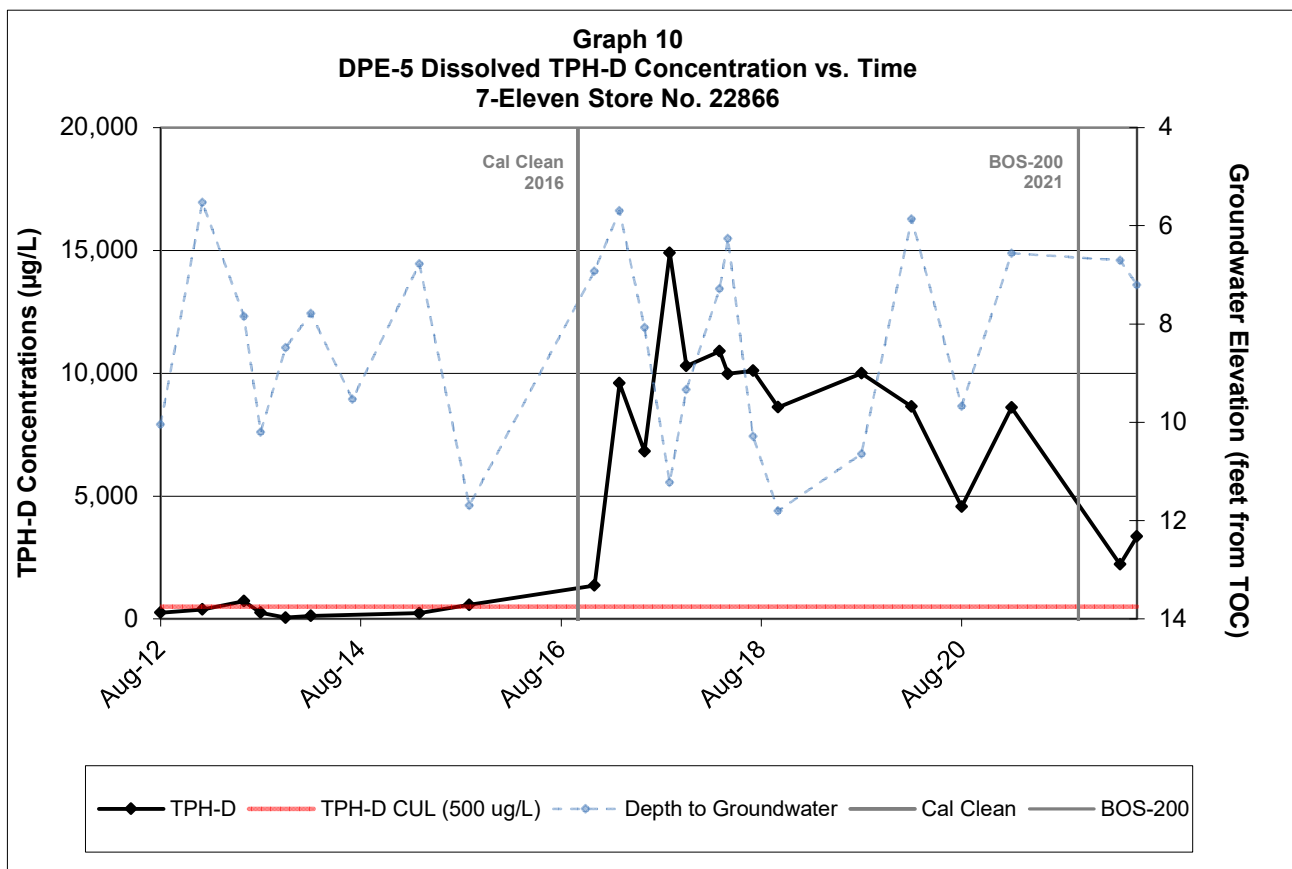


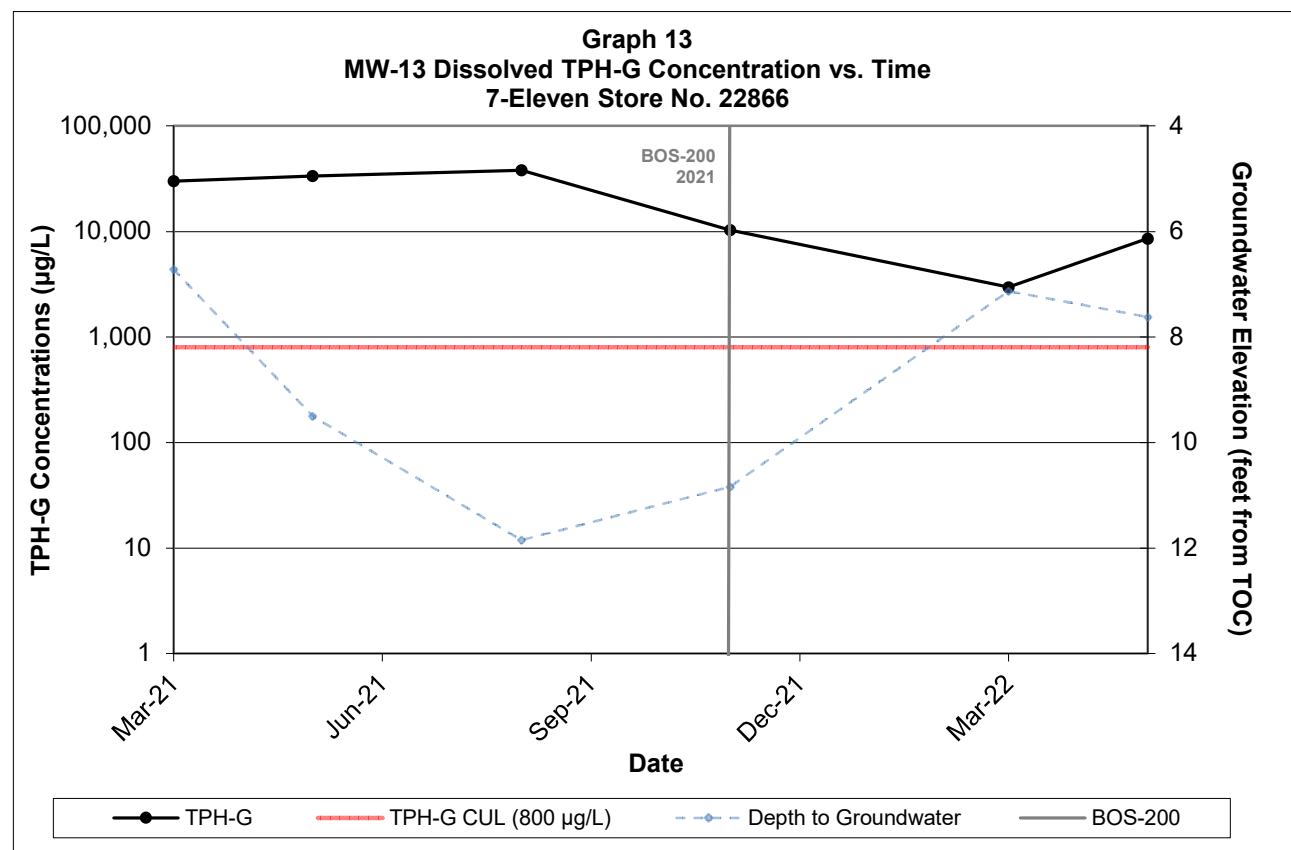
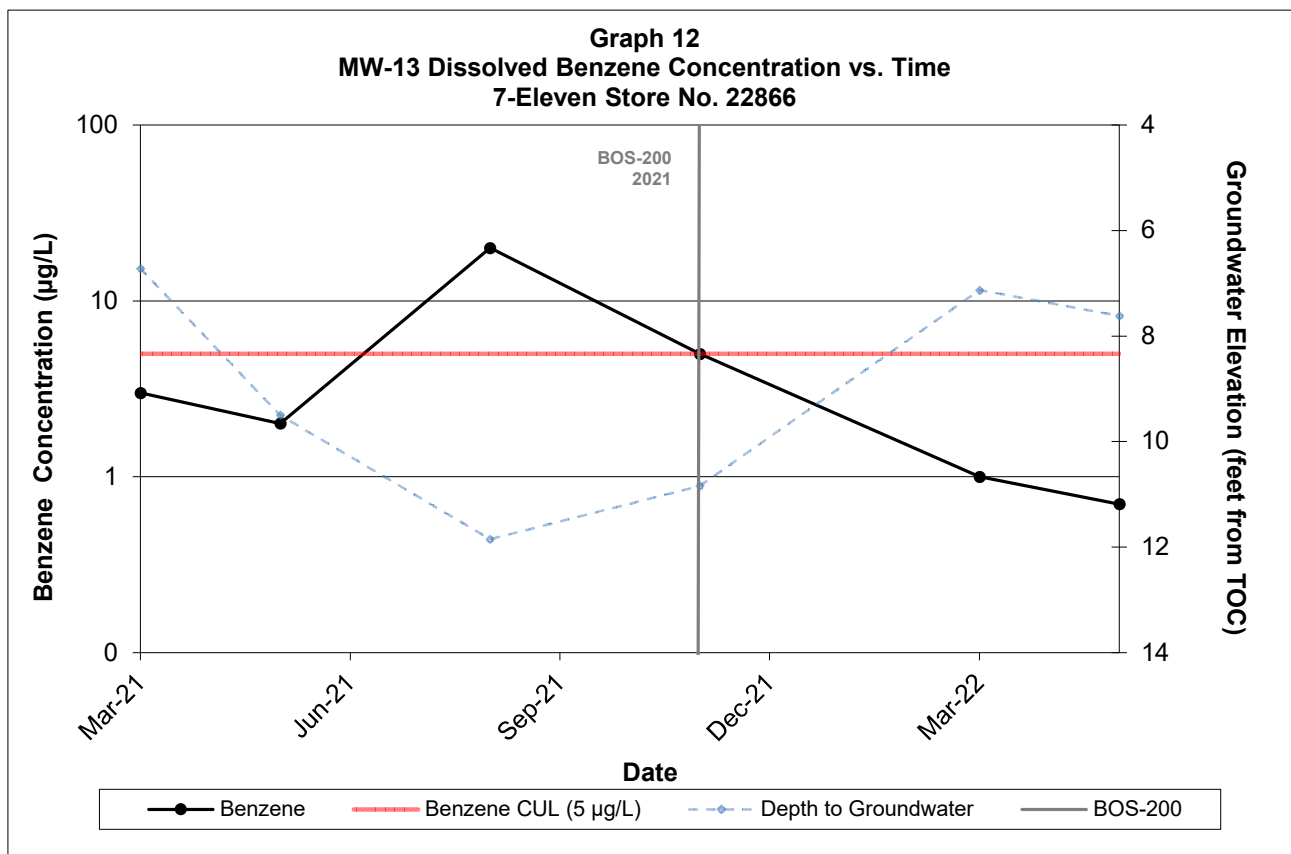
Graph 8
DPE-5 Dissolved Benzene Concentration vs. Time
7-Eleven Store No. 22866



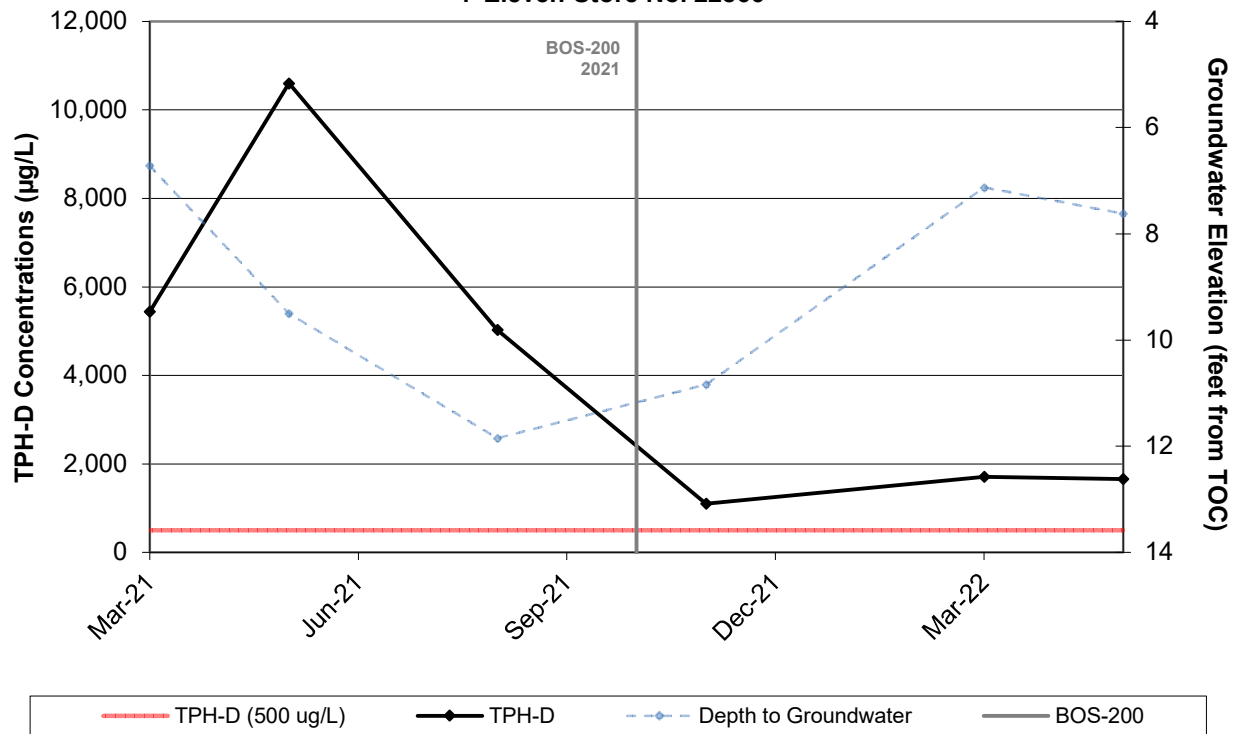
Graph 9
DPE-5 Dissolved TPH-G Concentration vs. Time
7-Eleven Store No. 22866



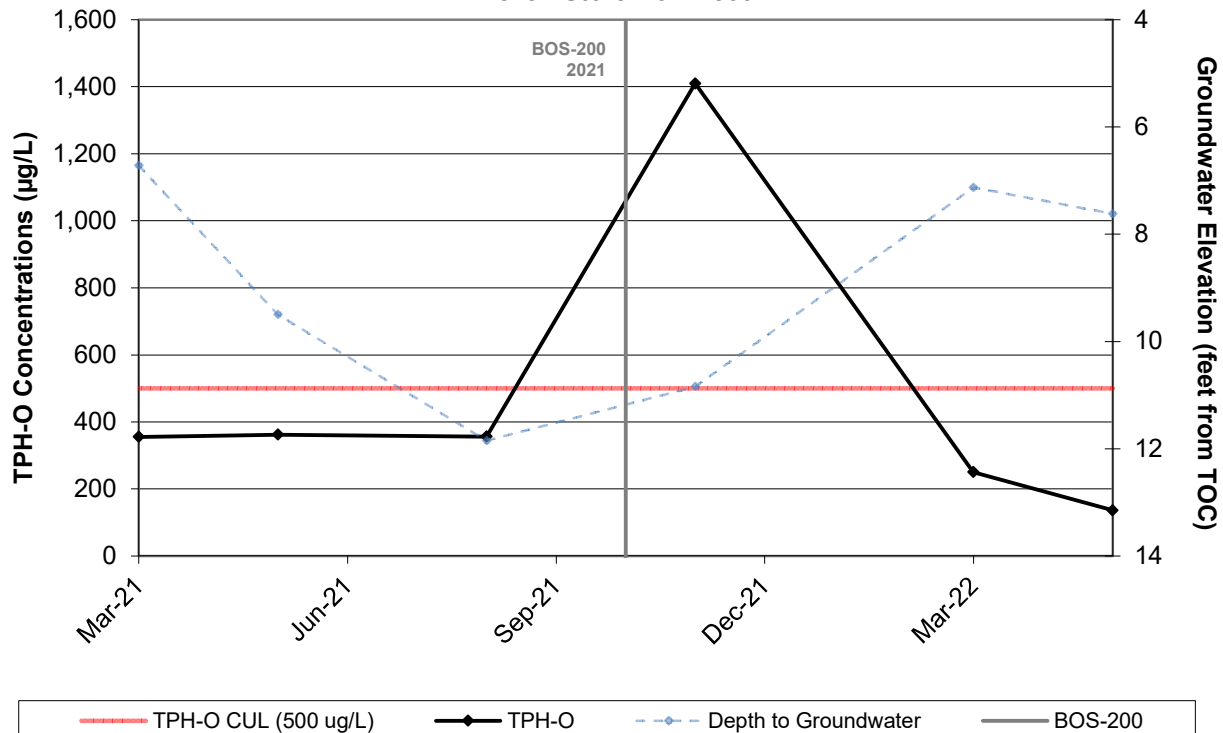


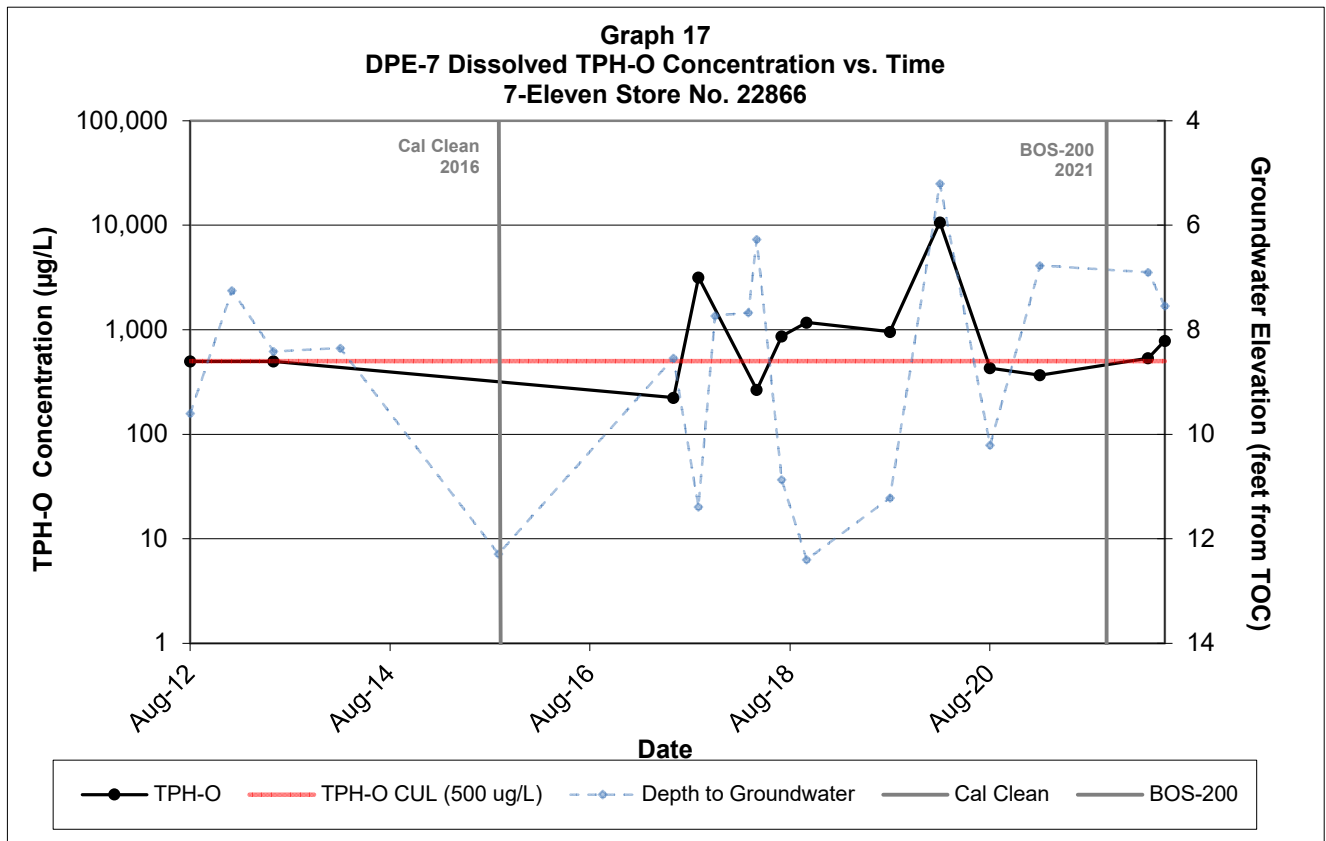
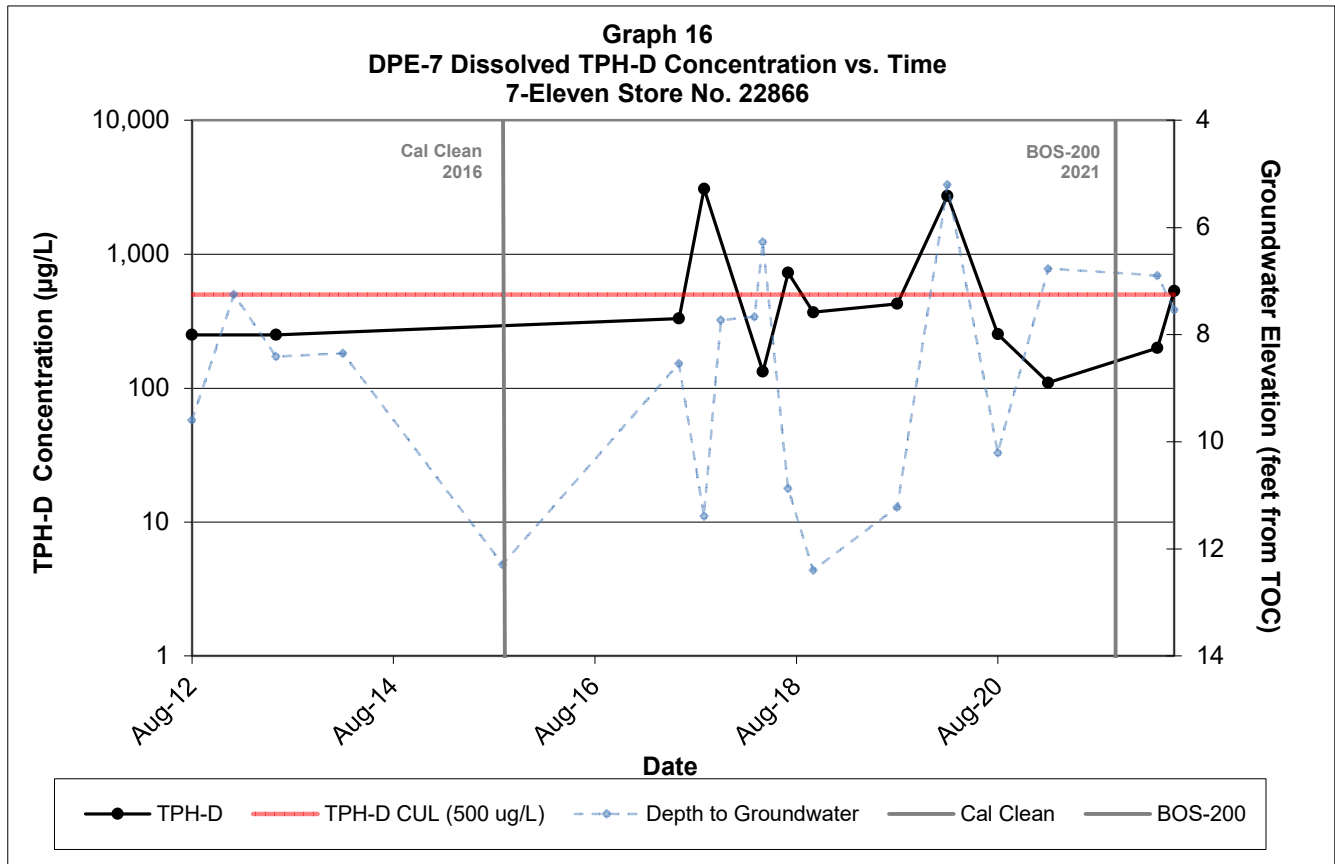


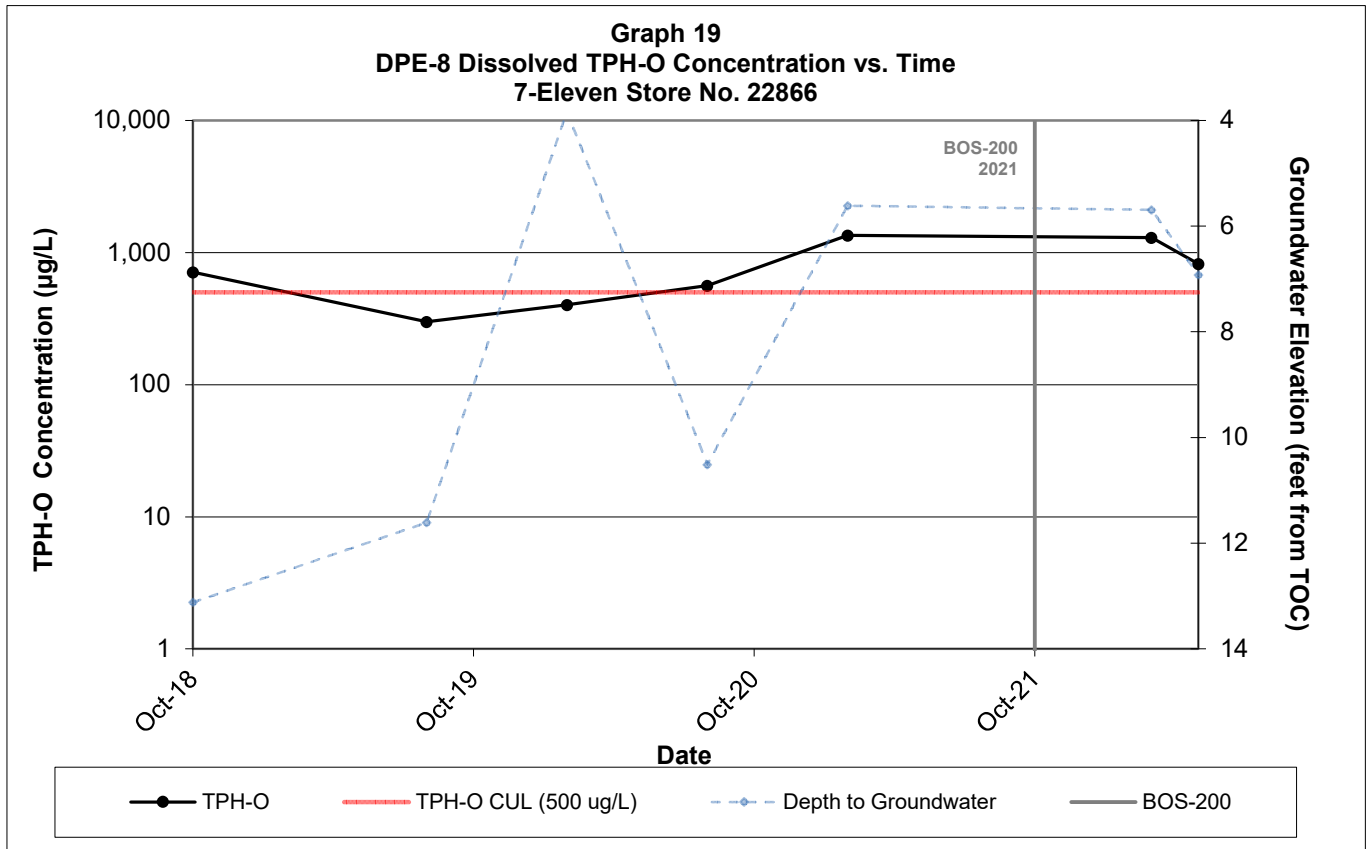
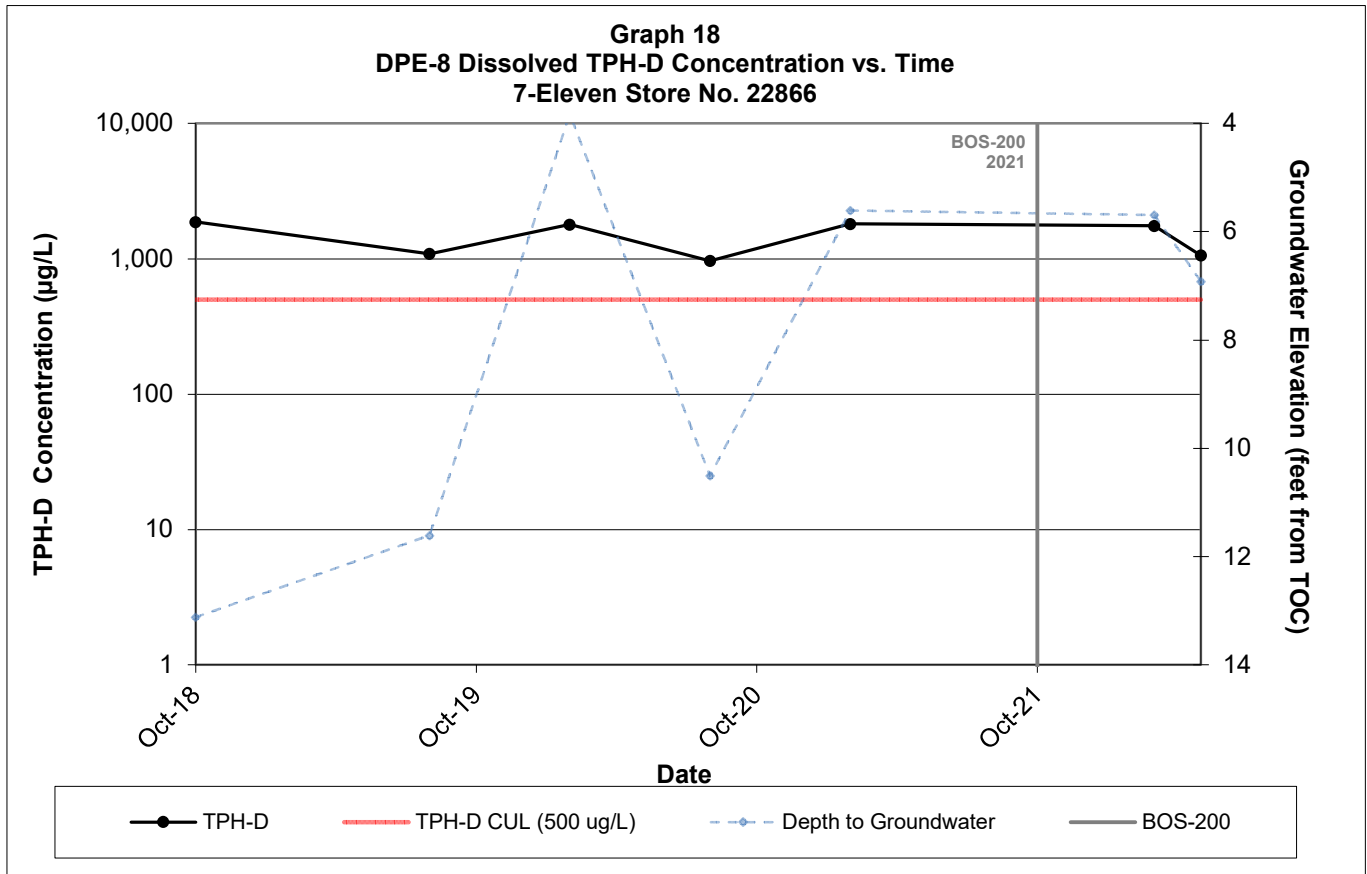
Graph 14
MW-13 Dissolved TPH-D Concentration vs. Time
7-Eleven Store No. 22866



Graph 15
MW-13 Dissolved TPH-O Concentration vs. Time
7-Eleven Store No. 22866

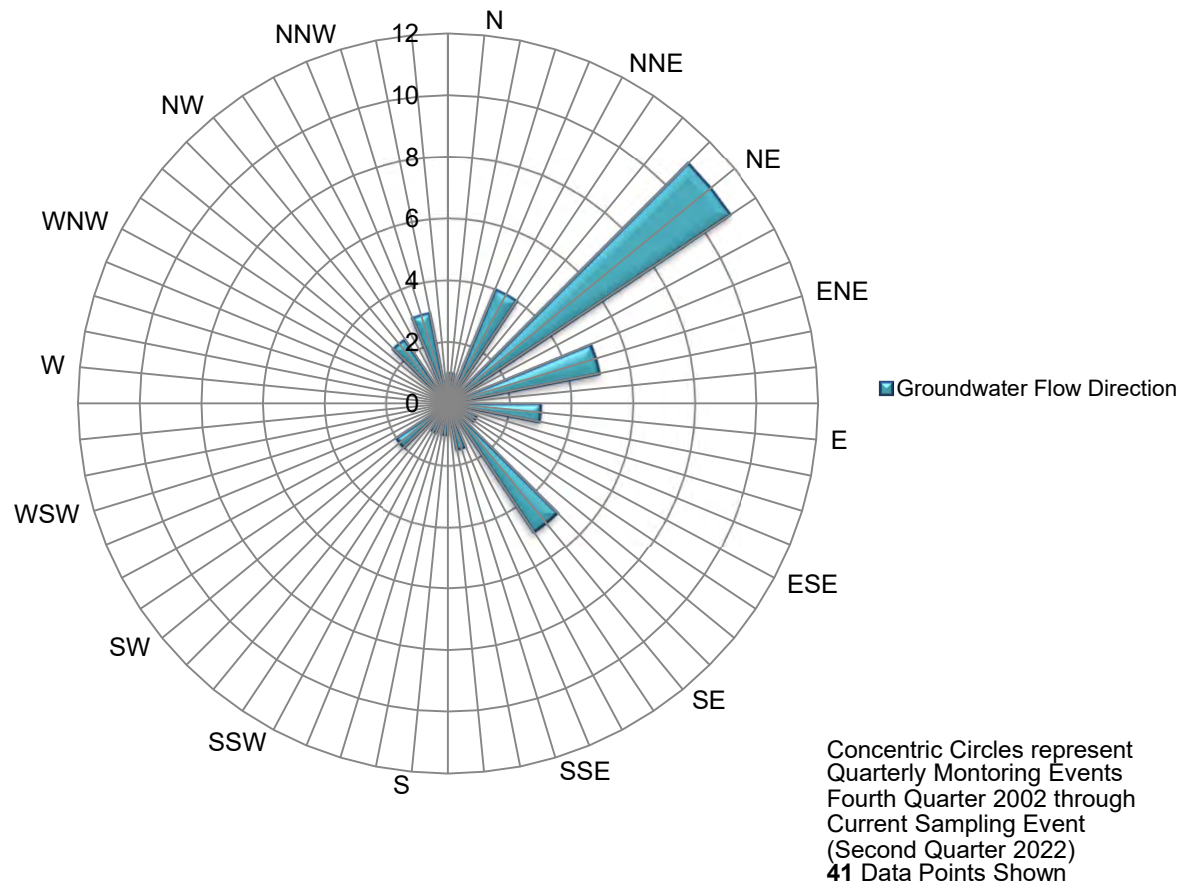






Graph 20 **Groundwater Flow Direction Rose Diagram**

7-Eleven Store No. 22866
 Tukwila, Washington

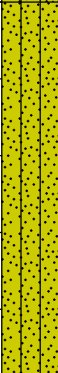


APPENDIX A

Boring Logs

DRILLING: **01/07/21** STARTED: **09:10** COMPLETED: **09:40**
 INSTALLATION: STARTED: COMPLETED:
 DRILLING COMPANY: **BB&A Environmental**
 DRILLING EQUIPMENT: **Geoprobe 7822 DT**
 DRILLING METHOD: **Direct Push - Rotary**
 SAMPLING EQUIPMENT: **Continuous-Acitate liner**

NORTHING (ft):	EASTING (ft):
LATITUDE:	LONGITUDE:
GROUND ELEV (ft):	TOC ELEV (ft):
INITIAL DTW (ft): Not Encountered	BOREHOLE DEPTH (ft): 18
STATIC DTW (ft): 5	WELL DEPTH (ft): 19.40
WELL CASING DIA. (in): 2	BOREHOLE DIA.(in): 8
LOGGED BY: GS	CHECKED BY:

Time & Depth (feet)	Graphic Log	USCS	Description	Sample	Time Sample ID	Measured Recov. (feet)	Blow Count	Headspace PID (units)	Depth (feet)	Well Construction
			Asphalt.							
		SW	SW; Air Knife to 5 ft. Well graded sand, light gray, fine to coarse grained, moist. Few fine to coarse subrounded gravel. Little silt. No TPH odor.							Concrete
5			No recovery.					1.5		Hydrated Bentonite
						1/5				
10		SM	SM; Silty sand, dark gray, fine to medium grained, moist. Few silt. Few fine to coarse subrounded gravel. No odor or visible contamination.		MW-11-10 @ 0920			40	10	
		SM	SM; Silty sand, dark gray gradig to light gray, fine to medium grained, moist to wet. Few silt. Few fine subrounded to subangular gravel. Moderate TPH odor.			3/5		25		2" 0.01" slot PVC Sch. 40
15					MW-11-15 @ 0930			15	15	
		SM	SM; Silty sand, dark gray, fine to medium grained, moist. Few silt. Few fine to coarse subrounded gravel. No to light TPH odor.			3/3		10		
			Borehole terminated at 18 feet.		MW-11-18 @ 0945					Well tag #BHU756

PROJECT: **7 Eleven 22866**
 LOCATION: **14207 International BLVD Tukwila, WA**
 PROJECT NUMBER: **185703896**

WELL / PROBEHOLE / BOREHOLE NO:



PAGE 1 OF 1

MW-12

DRILLING: **01/07/21** STARTED: **11:15** COMPLETED: **11:40**
 INSTALLATION: STARTED: COMPLETED:
 DRILLING COMPANY: **BB&A Environmental**
 DRILLING EQUIPMENT: **Geoprobe 7822 DT**
 DRILLING METHOD: **Direct Push - Rotary**
 SAMPLING EQUIPMENT: **Continuous-Acitate liner**

NORTHING (ft):
 LATITUDE:
 GROUND ELEV (ft):
 INITIAL DTW (ft): **Not Encountered**
 STATIC DTW (ft): **4**
 WELL CASING DIA. (in): **2**
 LOGGED BY: **GS**
 EASTING (ft):
 LONGITUDE:
 TOC ELEV (ft):
 BOREHOLE DEPTH (ft): **15**
 WELL DEPTH (ft): **17.40**
 BOREHOLE DIA.(in): **8**
 CHECKED BY:

Time & Depth (feet)	Graphic Log	USCS	Description	Sample	Time Sample ID	Measured Recov. (feet)	Blow Count	Headspace PID (units)	Depth (feet)	Well Construction
			Asphalt.							
		SW	SW; Air Knife to 5 ft. Well graded sand, gray, fine to coarse grained, moist. Few fine to coarse subrounded gravel. Little silt. No TPH odor.							Concrete
		SM	SM; Silty sand, light brown, fine to medium grained, wet. Few silt. Little fine subrounded gravel. No odor or visible contamination.					1.1		Hydrated Bentonite
5		SP-SM	SP-SM; Poorly graded sand with silt, grading light brown to light gray, fine to medium grained, moist. Few fine subrounded gravel. No odor or visible contamination.					0.3	5	Sand 10/20
			@ 8.5 orange yellowish mottles 6" long.			3/5		0.4		
10		SM	SM; Silty sand, grading gray to dark gray, fine to medium grained, moist to wet. Few silt. Few fine to coarse subrounded to subangular gravel. No odor or visible contamination.		MW-12-10 @ 1130			1.2	10	2" 0.01" slot PVC Sch. 40
			@ 11.5 ft. orange yellowish mottles 5 " long.			4.5/5		0.6		
15			Borehole terminated at 15 feet.		MW-12-15 @ 1140			0.6	15	Well tag #BHU757

PROJECT: **7 Eleven 22866**
 LOCATION: **14207 International BLVD Tukwila, WA**
 PROJECT NUMBER: **185703896**

WELL / PROBEHOLE / BOREHOLE NO:



PAGE 1 OF 1

MW-13

DRILLING: **01/06/21** STARTED: **14:00** COMPLETED: **14:40**
 INSTALLATION: STARTED: COMPLETED:
 DRILLING COMPANY: **BB&A Environmental**
 DRILLING EQUIPMENT: **Geoprobe 7822 DT**
 DRILLING METHOD: **Direct Push - Rotary**
 SAMPLING EQUIPMENT: **Continuous-Acitate liner**

NORTHING (ft):
 LATITUDE:
 GROUND ELEV (ft):
 INITIAL DTW (ft): **Not Encountered**
 STATIC DTW (ft): **6.80**
 WELL CASING DIA. (in): **2**
 LOGGED BY: **GS**
 EASTING (ft):
 LONGITUDE:
 TOC ELEV (ft):
 BOREHOLE DEPTH (ft): **20**
 WELL DEPTH (ft): **19.50**
 BOREHOLE DIA.(in): **8**
 CHECKED BY:

Time & Depth (feet)	Graphic Log	USCS	Description	Sample	Time Sample ID	Measured Recov. (feet)	Blow Count	Headspace PID (units)	Depth (feet)	Well Construction
			Asphalt.							
		SP	SP; Air Knife to 5 ft. Poorly graded sand, gray, fine to medium grained, moist. Little to few fine subrounded gravel. Few silt. Light PH odor.							Concrete
		SM	SM; Silty sand, light brown, fine to medium grained, moist. Few silt. Little fine subrounded gravel. No odor or visible contamination.					25		Hydrated Bentonite
5		SM	SM; Silty sand, dark gray, fine to medium grained, moist. Few silt. Little fine subrounded gravel. Light TPH odor.					2.2	5	Sand 10/20
			@ 8.5 ft. pocket of SP sand 4" long.			4/5		4		
10		SM	SM; Silty sand, dark gray, fine to medium grained, hard, moist to wet. Few silt. Little fine subrounded gravel. Strong TPH odor.					19	10	
			@ 11 ft. pocket of SP sand 6" long.							
				MW-13-12 @ 1430		4/5		420		2" 0.01" slot PVC Sch. 40
15		SM	SM; Silty sand, dark gray, fine to medium grained, hard, moist to wet. Few silt. Few fine subrounded gravel. Moderate TPH odor.					56	15	
			@ 18 ft. grading to light gray.			4/5		26		
				MW-13-15 @ 1435						
				MW-13-20 @ 1440				16		Well tag #BHU755

Borehole terminated at 20 feet.

PROJECT: **7 Eleven 22866**
 LOCATION: **14207 International BLVD Tukwila, WA**
 PROJECT NUMBER: **185703896**

WELL / PROBEHOLE / BOREHOLE NO:



PAGE 1 OF 1

MW-14

DRILLING: **01/06/21** STARTED: **12:25** COMPLETED: **12:45**
 INSTALLATION: STARTED: COMPLETED:
 DRILLING COMPANY: **BB&A Environmental**
 DRILLING EQUIPMENT: **Geoprobe 7822 DT**
 DRILLING METHOD: **Direct Push - Rotary**
 SAMPLING EQUIPMENT: **Continuous-Acitate liner**

NORTHING (ft): EASTING (ft):
 LATITUDE: LONGITUDE:
 GROUND ELEV (ft): TOC ELEV (ft):
 INITIAL DTW (ft): **Not Encountered** BOREHOLE DEPTH (ft): **15**
 STATIC DTW (ft): **6.20** WELL DEPTH (ft): **17.80**
 WELL CASING DIA. (in): **2** BOREHOLE DIA.(in): **8**
 LOGGED BY: **GS** CHECKED BY:

Time & Depth (feet)	Graphic Log	USCS	Description	Sample	Time Sample ID	Measured Recov. (feet)	Blow Count	Headspace PID (units)	Depth (feet)	Well Construction
			Asphalt.							
		SP	SP; Air Knife to 5 ft. Poorly graded sand, dark gray, fine to medium grained, moist. Little fine to coarse subrounded gravel. Little silt. No TPH odor.							Concrete
		SM	SM; Silty sand, light brown, fine to medium grained, moist. Few silt. Little fine subrounded gravel. No odor or visible contamination.					12		Hydrated Bentonite
5		SM	SM; Silty sand, grading dark brown to dark gray, fine to medium grained, moist. Few silt. Few fine subrounded gravel. No odor or visible contamination.					3.5	5	
						3/5		2.5		Sand 10/20
10		SP-SM	SP-SM; Poorly graded sand with silt, dark gray, fine to medium grained, moist to wet. soft. Little silt. Few fine subrounded gravel. No odor or visible contamination.		MW-14-10 @ 1230			5.5	10	
						5/5		3.5		2" 0.01" slot PVC Sch. 40
15			Borehole terminated at 15 feet.		MW-14-15 @ 1240			2.5	15	Well tag #BHU754

PROJECT: **7 Eleven 22866**
 LOCATION: **14207 International BLVD Tukwila, WA**
 PROJECT NUMBER: **185703896**

WELL / PROBEHOLE / BOREHOLE NO:



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MW-15

DRILLING: **01/05/21** STARTED: **14:50** COMPLETED: **15:15**
 INSTALLATION: STARTED: COMPLETED:
 DRILLING COMPANY: **BB&A Environmental**
 DRILLING EQUIPMENT: **Geoprobe 7822 DT**
 DRILLING METHOD: **Direct Push - Rotary**
 SAMPLING EQUIPMENT: **Continuous-Acitate liner**

NORTHING (ft): EASTING (ft):
 LATITUDE: LONGITUDE:
 GROUND ELEV (ft): TOC ELEV (ft):
 INITIAL DTW (ft): **Not Encountered** BOREHOLE DEPTH (ft): **15**
 STATIC DTW (ft): **7** WELL DEPTH (ft): **17.50**
 WELL CASING DIA. (in): **2** BOREHOLE DIA.(in): **8**
 LOGGED BY: **GS** CHECKED BY:

Time & Depth (feet)	Graphic Log	USCS	Description	Sample	Time Sample ID	Measured Recov. (feet)	Blow Count	Headspace PID (units)	Depth (feet)	Well Construction
			Asphalt.							
		SP-SM	SP-SM; Air Knife to 5 ft. Poorly graded sand with silt, light brown, fine to medium grained, damp to moist. Little fine subrounded gravel. Little silt increases downward. No odor visible contamination.					1.2		Concrete
5		SM	SM; Silty sand, light brown, fine to medium grained, moist. Few silt. Little fine to coarse subrounded gravel. No odor or visible contamination.					1.2	5	Hydrated Bentonite
						2/5				Sand 10/20
10		SM	SM; Silty sand, light brown, fine to medium grained, moist. Few silt. Few fine to coarse subrounded to subangular gravel. No odor or visible contamination.		MW-15-10 @ 15:30			1.0	10	
						4/5		1.2		2" 0.01" slot PVC Sch. 40
		SM	SM; Silty sand, dark gray, fine to medium grained, moist. Few silt. Few fine subrounded gravel. No odor or visible contamination.		MW-15-15 @ 15:40			0.5	15	
15			Borehole terminated at 15 feet.							Well tag #BHU753

PROJECT: **7 Eleven 22866**
 LOCATION: **14207 International BLVD Tukwila, WA**
 PROJECT NUMBER: **185703896**

WELL / PROBEHOLE / BOREHOLE NO:



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MW-16

DRILLING: **01/05/21** STARTED: **08:45** COMPLETED: **09:30**
 INSTALLATION: STARTED: COMPLETED:
 DRILLING COMPANY: **BB&A Environmental**
 DRILLING EQUIPMENT: **Geoprobe 7822 DT**
 DRILLING METHOD: **Direct Push - Rotary**
 SAMPLING EQUIPMENT: **Continuous-Acitate liner**

NORTHING (ft): EASTING (ft):
 LATITUDE: LONGITUDE:
 GROUND ELEV (ft): TOC ELEV (ft):
 INITIAL DTW (ft): **Not Encountered** BOREHOLE DEPTH (ft): **15**
 STATIC DTW (ft): **5.80** WELL DEPTH (ft): **15.80**
 WELL CASING DIA. (in): **2** BOREHOLE DIA.(in): **8**
 LOGGED BY: **GS** CHECKED BY:

Time & Depth (feet)	Graphic Log	USCS	Description	Sample	Time Sample ID	Measured Recov. (feet)	Blow Count	Headspace PID (units)	Depth (feet)	Well Construction
			Asphalt.							
		SP-SM	SP-SM; Air Knife to 5 ft. Poorly graded sand with silt, gray, fine to medium grained, moist. Few fine to coarse subrounded gravel. Few silt increases downward. Light TPH odor.					1.2		Concrete
5			No recovery.					15.4	5	Hydrated Bentonite
						0/5				Sand 10/20
10		SP	SP; Poorly graded sand, dark gray, fine to medium grained, wet. Little silt. Little fine subrounded gravel. Light TPH odor. contamination.		MW-16-11 @ 0930			17	10	2" 0.01" slot PVC Sch. 40
		SM	SM; Silty sand, light brown, fine to medium grained, damp to moist. Few silt. Few fine to coarse subrounded gravel. No odor or visible contamination.			5/5		4		
15			Borehole terminated at 15 feet.		MW-16-15 @ 0945			1.9	15	Well tag #BHU751

PROJECT: **7 Eleven 22866**
 LOCATION: **14207 International BLVD Tukwila, WA**
 PROJECT NUMBER: **185703896**

WELL / PROBEHOLE / BOREHOLE NO:



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MW-17

DRILLING: **01/05/21** STARTED: **12:00** COMPLETED: **12:40**
 INSTALLATION: STARTED: COMPLETED:
 DRILLING COMPANY: **BB&A Environmental**
 DRILLING EQUIPMENT: **Geoprobe 7822 DT**
 DRILLING METHOD: **Direct Push - Rotary**
 SAMPLING EQUIPMENT: **Continuous-Acitate liner**

NORTHING (ft): EASTING (ft):
 LATITUDE: LONGITUDE:
 GROUND ELEV (ft): TOC ELEV (ft):
 INITIAL DTW (ft): **Not Encountered** BOREHOLE DEPTH (ft): **15**
 STATIC DTW (ft): **5.70** WELL DEPTH (ft): **17.00**
 WELL CASING DIA. (in): **2** BOREHOLE DIA.(in): **8**
 LOGGED BY: **GS** CHECKED BY:

Time & Depth (feet)	Graphic Log	USCS	Description	Sample	Time Sample ID	Measured Recov. (feet)	Blow Count	Headspace PID (units)	Depth (feet)	Well Construction
			Asphalt.							
		SM	SM; Air Knife to 5 ft. Silty sand, gray to dark gray, fine to medium grained, damp to moist. Few silt. Little fine subrounded gravel. Strong TPH odor. contamination.		MW-17-2.5 1/4/21 @ 1000			120		Concrete
5		SM	SM; Silty sand, dark gray, fine to medium grained, moist to wet. Few silt increases downward. Little fine to coarse subrounded gravel. Strong to moderate TPH odor.		MW-17-5 1/4/21 @ 1015			95	5	Hydrated Bentonite
						3.5/5		12		Sand 10/20
10								26	10	
		SP-SM	SP-SM; Poorly graded sand with silty, light brown, fine to medium grained, moist. Little silt. Little fine subrounded gravel. Light TPH odor. contamination.		MW-17-12 @ 1215	5/5		34		2" 0.01" slot PVC Sch. 40
15			Borehole terminated at 15 feet.		MW-17-15 @ 1230			1.5	15	Well tag #BHU752

PROJECT: **7 Eleven 22866**
 LOCATION: **14207 International BLVD Tukwila, WA**
 PROJECT NUMBER: **185703896**

WELL / PROBEHOLE / BOREHOLE NO:



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SB-16

DRILLING: **01/07/21** STARTED: **08:40** COMPLETED: **09:00**
 INSTALLATION: STARTED: COMPLETED:
 DRILLING COMPANY: **BB&A Environmental**
 DRILLING EQUIPMENT: **Geoprobe 7822 DT**
 DRILLING METHOD: **Direct Push**
 SAMPLING EQUIPMENT: **Continuous-Acitate liner**

NORTHING (ft): EASTING (ft):
 LATITUDE: LONGITUDE:
 GROUND ELEV (ft): TOC ELEV (ft):
 INITIAL DTW (ft): **Not Encountered** BOREHOLE DEPTH (ft): **17**
 STATIC DTW (ft): **5.50** WELL DEPTH (ft):
 WELL CASING DIA. (in): --- BOREHOLE DIA.(in): **2**
 LOGGED BY: **GS** CHECKED BY:

GEO FORM 304 22866_TUKWILA BORING LOGS_1.5/21.GPJ STANTEC ENVIRO TEMPLATE 010509.GDT 2/24/21

Time & Depth (feet)	Graphic Log	USCS	Description	Sample	Time Sample ID	Measured Recov. (feet)	Blow Count	Headspace PID (units)	Depth (feet)
			Asphalt.						
		SW	SW; Air Knife to 5 ft. Well graded sand, light gray to brown, fine to coarse grained, moist to wet. Little silt . Few fine to coarse subrounded gravel. No TPH odor.					1.5	
5		SM	SM; Silty sand, dark gray, fine to medium grained, moist to wet. Few silt increases downward. Few fine to coarse subrounded gravel. Light to moderate TPH odor. @ 5-8 ft. No recovery.			1.8/5		1.8	5
10		SM	SM; Silty sand, grading dark gray to light gray, fine to medium grained, moist to wet. Few silt. Few fine to coarse subrounded gravel. Light TPH odor. @ 13 ft. orange yellowish mottles 6" long.		SB-16-10 @ 0845	3.5/5		3.0	10
15		SP-SM	SP-SM; Poorly graded sand with silt, light brown, fine to medium grained, moist. Little silt. Few fine subrounded gravel. No odor or visibale contamination.			2/2		1.5	15
			Borehole terminated at 17 feet.		SB-16-17 @ 0850			2.2	

PROJECT: 7 Eleven 22866		WELL / PROBEHOLE / BOREHOLE NO:	
LOCATION: 14207 International BLVD Tukwila, WA		PAGE 1 OF 1	
PROJECT NUMBER: 185703896		SB-17	
DRILLING: 01/07/21 STARTED: 10:50 COMPLETED: 11:10		NORTHING (ft):	
INSTALLATION: STARTED: COMPLETED:		EASTING (ft):	
DRILLING COMPANY: BB&A Environmental		LATITUDE:	
DRILLING EQUIPMENT: Geoprobe 7822 DT		LONGITUDE:	
DRILLING METHOD: Direct Push		GROUND ELEV (ft):	
SAMPLING EQUIPMENT: Continuous-Acitate liner		TOC ELEV (ft):	
		INITIAL DTW (ft): Not Encountered	
		BOREHOLE DEPTH (ft): 15	
		STATIC DTW (ft): 5.3	
		WELL DEPTH (ft):	
		WELL CASING DIA. (in): ---	
		BOREHOLE DIA.(in): 2	
		LOGGED BY: GS	
		CHECKED BY:	



Time & Depth (feet)	Graphic Log	USCS	Description	Sample	Time Sample ID	Measured Recov. (feet)	Blow Count	Headspace PID (units)	Depth (feet)
			Asphalt.						
		SM	SM; Air Knife to 5 ft. Silty sand, light brown, fine grained, damp. Few silt. Little fine subrounded gravel. No odor or visible contamination.					1.2	
5		SM	SM; Silty sand, light brown, fine to medium grained, moist. Few silt increases downward. Few fine subrounded gravel. No odor or visible contamination.					1.4	5
						4.5/5		0.3	
10		SP-SM	SP-SM; Poorly graded sand with silty, light brown to dark gray at 12-15 ft. Fine to medium grained, moist. Little silt. Few fine to coarse subrounded gravel. No odor or visible contamination.		SB-17-10 @ 1100			0.5	10
			@ 12 ft. orange yellowish mottles 6" long.			5/5		0.4	
15			Borehole terminated at 15 feet.		SB-17-15 @ 1110			0.7	15

PROJECT: **7 Eleven 22866**
 LOCATION: **14207 International BLVD Tukwila, WA**
 PROJECT NUMBER: **185703896**

WELL / PROBEHOLE / BOREHOLE NO:



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SB-18

DRILLING: **01/07/21** STARTED: **13:00** COMPLETED: **13:15**
 INSTALLATION: STARTED: COMPLETED:
 DRILLING COMPANY: **BB&A Environmental**
 DRILLING EQUIPMENT: **Geoprobe 7822 DT**
 DRILLING METHOD: **Direct Push**
 SAMPLING EQUIPMENT: **Continuous-Acitate liner**

NORTHING (ft): EASTING (ft):
 LATITUDE: LONGITUDE:
 GROUND ELEV (ft): TOC ELEV (ft):
 INITIAL DTW (ft): **Not Encountered** BOREHOLE DEPTH (ft): **15**
 STATIC DTW (ft): **10.75** WELL DEPTH (ft):
 WELL CASING DIA. (in): --- BOREHOLE DIA.(in): **2**
 LOGGED BY: **GS** CHECKED BY:

Time & Depth (feet)	Graphic Log	USCS	Description	Sample	Time Sample ID	Measured Recov. (feet)	Blow Count	Headspace PID (units)	Depth (feet)
			Asphalt.						
		SP	SP; Air Knife to 5 ft. Poorly graded sand, dark gray, fine to medium grained, moist. Little silt. Few fine to coarse subrounded gravel. Light TPH odor.						
		SM	SM; Silty sand, light brown, fine to medium grained, moist. Few silt increases downward. Little fine subrounded gravel. No odor or visible contamination.					13	
5		SM	SM; Silty sand, light brown, fine to medium grained, moist to wet. Few silt. Few fine to coarse subrounded to subangular gravel. No odor or visible contamination.					0.9	5
						4.5/5		0.2	
10		SM	SM; Silty sand, grading from light brown to dark gray at 12-15 ft. fine to medium grained, moist. Few silt. Few fine subrounded gravel. No odor or visible contamination. @ 11.5 ft orange yellowish mottles 4" long.	SB-18-10 @ 1315				0.6	10
						4.5/5		0.5	
15			Borehole terminated at 15 feet.	SB-18-15 @ 1330				0.4	15

PROJECT: **7 Eleven 22866**
 LOCATION: **14207 International BLVD Tukwila, WA**
 PROJECT NUMBER: **185703896**

WELL / PROBEHOLE / BOREHOLE NO:



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SB-19

DRILLING: **01/07/21** STARTED: **13:20** COMPLETED: **13:45**
 INSTALLATION: STARTED: COMPLETED:
 DRILLING COMPANY: **BB&A Environmental**
 DRILLING EQUIPMENT: **Geoprobe 7822 DT**
 DRILLING METHOD: **Direct Push**
 SAMPLING EQUIPMENT: **Continuous-Acitate liner**

NORTHING (ft): EASTING (ft):
 LATITUDE: LONGITUDE:
 GROUND ELEV (ft): TOC ELEV (ft):
 INITIAL DTW (ft): **Not Encountered** BOREHOLE DEPTH (ft): **15**
 STATIC DTW (ft): **5.80** WELL DEPTH (ft):
 WELL CASING DIA. (in): --- BOREHOLE DIA.(in): **2**
 LOGGED BY: **GS** CHECKED BY:

Time & Depth (feet)	Graphic Log	USCS	Description	Sample	Time Sample ID	Measured Recov. (feet)	Blow Count	Headspace PID (units)	Depth (feet)
			Asphalt.						
		SP	SP; Air Knife to 5 ft. Poorly graded sand, gray, fine to medium grained, moist. Little silt. Few fine to coarse subrounded gravel. No odor or visible contamination.						
		SM	SM; Silty sand, light brown, fine grained, moist to wet. Few silt increases downward. Little fine subrounded gravel. No odor or visible contamination.					1.2	
5		SM	SM; Silty sand, grading from light brown to light gray 8-10 ft. fine to medium grained, moist. Few silt. Few fine subrounded to subangular gravel. No odor or visible contamination.					0.5	5
						3.5/5		0.3	
10		SM	SM; Silty sand, grading from light gray to dark gray at 13-15 ft. fine to medium grained, moist to wet. Few silt. Few fine to coarse subrounded gravel. No odor or visible contamination.		SB-19-10 @ 1340			0.2	10
						4.5/5		0.3	
15			Borehole terminated at 15 feet.		SB-19-15 @ 1345			0.3	15

PROJECT: **7 Eleven 22866**
 LOCATION: **14207 International BLVD Tukwila, WA**
 PROJECT NUMBER: **185703896**

WELL / PROBEHOLE / BOREHOLE NO:



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SB-20

DRILLING: **01/06/21** STARTED: **11:05** COMPLETED: **11:45**
 INSTALLATION: STARTED: COMPLETED:
 DRILLING COMPANY: **BB&A Environmental**
 DRILLING EQUIPMENT: **Geoprobe 7822 DT**
 DRILLING METHOD: **Direct Push**
 SAMPLING EQUIPMENT: **Continuous-Acitate liner**

NORTHING (ft): EASTING (ft):
 LATITUDE: LONGITUDE:
 GROUND ELEV (ft): TOC ELEV (ft):
 INITIAL DTW (ft): **Not Encountered** BOREHOLE DEPTH (ft): **19**
 STATIC DTW (ft): **11** WELL DEPTH (ft):
 WELL CASING DIA. (in): --- BOREHOLE DIA.(in): **2**
 LOGGED BY: **GS** CHECKED BY:

GEO FORM 304 22866_TUKWILA BORING LOGS_1.5.21.GPJ STANTEC ENVIRO TEMPLATE 010509.GDT 2/24/21

Time & Depth (feet)	Graphic Log	USCS	Description	Sample	Time Sample ID	Measured Recov. (feet)	Blow Count	Headspace PID (units)	Depth (feet)
			Asphalt.						
		SM	SM; Air Knife to 5 ft. Silty sand, gray, fine to medium grained, moist. Few silt. Few fine to coarse subrounded gravel. Strong PH odor.					105	
5		SM	SM; Silty sand, dark gray grading to light brown, fine to medium grained, moist. Few silt. Few fine to coarse subrounded to subangular gravel. Strong TPH odor.		SB-20-5 @ 1720 1/5/21			120	5
						3.5/5		2580	
10		SM	SM; Silty sand, dark gray, fine to medium grained, moist. Few silt. Few fine to coarse subrounded gravel. Strong TPH odor.		SB-20-10 @ 1130			3025	10
						4/5		210	
15		SM	SM; Silty sand, dark gray, fine to medium grained, hard, moist to wet. Few silt. Few fine subrounded gravel. Moderate TPH odor.					47	15
		SM	SM; Silty sand, dark gray, fine to medium grained, hard, moist. Few silt. Few fine subrounded gravel. Moderate TPH odor.			4/4		130	
			Refusal @ 19 ft. Observed sheen in water.		SB-20-19 @ 1145			165	
			Borehole terminated at 19 feet.						

PROJECT: 7 Eleven 22866		WELL / PROBEHOLE / BOREHOLE NO:	
LOCATION: 14207 International BLVD Tukwila, WA		PAGE 1 OF 1	
PROJECT NUMBER: 185703896		SB-21	
DRILLING: 01/06/21 STARTED: 09:40 COMPLETED: 10:15		NORTHING (ft):	
INSTALLATION: STARTED: COMPLETED:		EASTING (ft):	
DRILLING COMPANY: BB&A Environmental		LATITUDE:	
DRILLING EQUIPMENT: Geoprobe 7822 DT		LONGITUDE:	
DRILLING METHOD: Direct Push		GROUND ELEV (ft):	
SAMPLING EQUIPMENT: Continuous-Acitate liner		TOC ELEV (ft):	
		INITIAL DTW (ft): Not Encountered	
		BOREHOLE DEPTH (ft): 18	
		STATIC DTW (ft): 9	
		WELL DEPTH (ft):	
		WELL CASING DIA. (in): ---	
		BOREHOLE DIA.(in): 2	
		LOGGED BY: GS	
		CHECKED BY:	



Time & Depth (feet)	Graphic Log	USCS	Description	Sample	Time Sample ID	Measured Recov. (feet)	Blow Count	Headspace PID (units)	Depth (feet)
			Asphalt.						
		SP	SP; Air Knife to 5 ft. Poorly graded sand, dark gray, fine to medium grained, moist. Little silt. Few fine subrounded gravel. No odor or visibale contamination.					1.0	
5		SW	SW; Well graded sand, dark brown grading to gray, fine to coarse grained, moist. Little silt. Few fine to coarse subrounded to subangular gravel. No odor or visible contamination.					0.9	5
						3/5		2.1	
10		SM	SM; Silty sand, dark gray, fine to medium grained, moist. Few silt. Little fine subrounded gravel. Light TPH odor.		SB-21-10 @ 1000			170	10
		SM	SM; Silty sand, dark gray, fine to medium grained, moist. Few silt. Few fine subrounded gravel. Moderate TPH odor.						
			@ 10-13.2 ft. No recovery.			1.8/5			
15			@ 14.5 ft. pocket of SP sand 6" long.		SB-21-15 @ 1015			1820	15
		SM	SM; Silty sand, dark gray, fine to medium grained, hard, moist to wet. Few silt. Few fine to coarse subrounded gravel. Strong TPH odor.					178	
			@ 16 ft. pocket of SP sand 6" long.						
			@ 17.5 ft. Orange yellowish mottles 5" long.						
			Refusal @ 18 ft.		SB-21-18 @ 1030	3/3		15	
			Borehole terminated at 18 feet.						

PROJECT: **7 Eleven 22866**
 LOCATION: **14207 International BLVD Tukwila, WA**
 PROJECT NUMBER: **185703896**

WELL / PROBEHOLE / BOREHOLE NO:



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SB-22

DRILLING: **01/06/21** STARTED: **08:45** COMPLETED: **09:15**
 INSTALLATION: STARTED: COMPLETED:
 DRILLING COMPANY: **BB&A Environmental**
 DRILLING EQUIPMENT: **Geoprobe 7822 DT**
 DRILLING METHOD: **Direct Push**
 SAMPLING EQUIPMENT: **Continuous-Acitate liner**

NORTHING (ft): EASTING (ft):
 LATITUDE: LONGITUDE:
 GROUND ELEV (ft): TOC ELEV (ft):
 INITIAL DTW (ft): **Not Encountered** BOREHOLE DEPTH (ft): **15**
 STATIC DTW (ft): **7.80** WELL DEPTH (ft):
 WELL CASING DIA. (in): --- BOREHOLE DIA.(in): **2**
 LOGGED BY: **GS** CHECKED BY:

Time & Depth (feet)	Graphic Log	USCS	Description	Sample	Time Sample ID	Measured Recov. (feet)	Blow Count	Headspace PID (units)	Depth (feet)
			Asphalt.						
		SW	SW; Air Knife to 5 ft. Well graded sand, dark brown, fine to coarse grained, damp to moist. Little silt . Few fine to coarse subrounded gravel. Light TPH odor.					25	
		SM	SM; Silty sand, light brown, fine to medium grained, moist. Few silt increases downward. Trace fine subrounded gravel. Yellowish orange mottles throughout. Light TPH odor.						
5		SM	SM; Silty sand, grading gray to dark gray, fine to medium grained, moist to wet. Few silt. Little to few fine subrounded gravel. Moderate TPH odor.					25	5
			@ 8 ft. yellowish orange mottles 6" long.			3/5		2.5	
10		SM	SM; Silty sand, dark gray, fine to medium grained, moist to wet. Few silt. Little to few fine subrounded gravel. No odor or visibale contamination.		SB-22-10 @ 0900			61	10
			@ 13 ft. pocket of SP sand 6" long.			5/5		5.5	
15			@ 14.5-15 ft. light brown silty sand.		SB-22-15 @ 0915			2.1	15
			Borehole terminated at 15 feet.						

PROJECT: **7 Eleven 22866**
 LOCATION: **14207 International BLVD Tukwila, WA**
 PROJECT NUMBER: **185703896**

WELL / PROBEHOLE / BOREHOLE NO:



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SB-23

DRILLING: **01/06/21** STARTED: **10:30** COMPLETED: **10:45**
 INSTALLATION: STARTED: COMPLETED:
 DRILLING COMPANY: **BB&A Environmental**
 DRILLING EQUIPMENT: **Geoprobe 7822 DT**
 DRILLING METHOD: **Direct Push**
 SAMPLING EQUIPMENT: **Continuous-Acitate liner**

NORTHING (ft): EASTING (ft):
 LATITUDE: LONGITUDE:
 GROUND ELEV (ft): TOC ELEV (ft):
 INITIAL DTW (ft): **Not Encountered** BOREHOLE DEPTH (ft): **15**
 STATIC DTW (ft): **9.5** WELL DEPTH (ft):
 WELL CASING DIA. (in): --- BOREHOLE DIA.(in): **2**
 LOGGED BY: **GS** CHECKED BY:

Time & Depth (feet)	Graphic Log	USCS	Description	Sample	Time Sample ID	Measured Recov. (feet)	Blow Count	Headspace PID (units)	Depth (feet)
			Asphalt.						
		SP	SP; Air Knife to 5 ft. Poorly graded sand, dark brown grading to light brown, fine to medium grained, damp to moist. Little silt . Little fine subrounded gravel. No TPH odor.					2.0	
5		SM	SM; Silty sand, light brown, fine to medium grained, moist. Few silt. Little to few fine subrounded gravel. No odor or visible contamination.			2/5		1.9	5
10		SM	SM; Silty sand, grading dark gray to light brown, fine to medium grained, moist. Few silt. Few fine to coarse subrounded to subangular gravel. No odor or visibale contamination. @ 12 ft. pocket of SP sand 6" long.		SB-23-10 @ 1035			2.5	10
15			Borehole terminated at 15 feet.		SB-23-15 @ 1045	4.5/5		3.0	15

PROJECT: **7 Eleven 22866**
 LOCATION: **14207 International BLVD Tukwila, WA**
 PROJECT NUMBER: **185703896**

WELL / PROBEHOLE / BOREHOLE NO:



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SB-24

DRILLING: **01/05/21** STARTED: **14:20** COMPLETED: **14:45**
 INSTALLATION: STARTED: COMPLETED:
 DRILLING COMPANY: **BB&A Environmental**
 DRILLING EQUIPMENT: **Geoprobe 7822 DT**
 DRILLING METHOD: **Direct Push**
 SAMPLING EQUIPMENT: **Continuous-Acitate liner**

NORTHING (ft): EASTING (ft):
 LATITUDE: LONGITUDE:
 GROUND ELEV (ft): TOC ELEV (ft):
 INITIAL DTW (ft): **Not Encountered** BOREHOLE DEPTH (ft): **15**
 STATIC DTW (ft): **7.5** WELL DEPTH (ft):
 WELL CASING DIA. (in): --- BOREHOLE DIA.(in): **2**
 LOGGED BY: **GS** CHECKED BY:

Time & Depth (feet)	Graphic Log	USCS	Description	Sample	Time Sample ID	Measured Recov. (feet)	Blow Count	Headspace PID (units)	Depth (feet)
			Asphalt.						
		SP	SP; Air Knife to 5 ft. Poorly graded sand, dark brown, fine to medium grained, moist. Little silt . Little to few fine to coarse subrounded gravel. Strong TPH odor.						
		SM	SM; Silty sand, light brown, fine to medium grained, moist. Few silt increases downward. Little fine subrounded gravel. Yellowish orange mottles throughout. Moderate TPH odor.		SB-24-2.5 @ 1200 1/4/21			145	
5		SM	SM; Silty sand, dark gray, fine to medium grained, moist. Few silt. Few fine subrounded gravel. Strong TPH odor.		SB-24-5 @ 1230 1/4/21			55	5
			@ 7 ft. pocket of of silt 6" long.		SB-24-8 @ 1430	3.5/5		147	
10		SM	SM; Silty sand, light brown, fine to medium grained, wet. Few silt. Few fine to coarse subrounded to subangular gravel. Glacial till like. No odor or visibale contamination.					65	10
						5/5		1.8	
15			Borehole terminated at 15 feet.		SB-24-15 @ 1445			1.2	15

PROJECT: 7 Eleven 22866		WELL / PROBEHOLE / BOREHOLE NO:	
LOCATION: 14207 International BLVD Tukwila, WA		PAGE 1 OF 1	
PROJECT NUMBER: 185703896		SB-25	
DRILLING: 10/14/21 STARTED: 08:00 COMPLETED: 08:40		NORTHING (ft):	
INSTALLATION: STARTED: COMPLETED:		EASTING (ft):	
DRILLING COMPANY: BB&A Environmental		LATITUDE:	
DRILLING EQUIPMENT: Geoprobe 7822 DT		GROUND ELEV (ft):	
DRILLING METHOD: Direct Push		INITIAL DTW (ft): 15	
SAMPLING EQUIPMENT: Continuous-Acitate liner		STATIC DTW (ft): Not Encountered	
		WELL CASING DIA. (in): ---	
		LOGGED BY: GS	
		BOREHOLE DIA.(in): 2	
		CHECKED BY:	



Time & Depth (feet)	Graphic Log	USCS	Description	Sample	Time Sample ID	Measured Recov. (feet)	Blow Count	Headspace PID (units)	Depth (feet)
			Asphalt.						
		SM	SM; Silty sand, gray, fine grained, damp to moist. Little fine subrounded gravel. Moderate TPH odor.			2.5/5			
5		SP-SM	SP-SM; Poorly graded sand with sitl, light gray, fine to medium grained, moist. Little silt. Trace to little fine subrounded gravel. Strong TPH odor.			3.5/5		135	5
			@ 10 ft. Trace of black boss staining						
10		SM	SM; Silty sand, light gray, fine grained, moist. Little fine to coarse subrounded to subangular gravel. Strong TPH odor.		SB-25-10 @ 0845			1520	10
						2/5		1310	
15		SP-SM	SP-SM; Poorly graded sand with sitl, dark gray, fine to medium grained, wet @ 15 ft. Little to few silt. Little fine subrounded to subangular gravel. Light TPH odor.					410	15
						4/4		25	
					SB-25-19 @ 0900			30	

APPENDIX B

Previous Site Investigations and Groundwater Sampling

Previous Site Investigations and Groundwater Sampling

7-Eleven Site 22866
14207 International Boulevard South, Tukwila, Washington

1995 Subsurface Investigation

In October 1995, soil samples were collected during a Stage II upgrade of the product piping and dispensers. Analytical results indicated that benzene, toluene, ethylbenzene, and total xylenes (BTEX) and total petroleum hydrocarbons (TPH) as gasoline (TPH-G) were present in subsurface soils at the north end of the dispenser island exceeding Ecology's Model Toxics Control Act (MTCA) Method A cleanup levels (CULs). Benzene was reported at 0.57 milligrams per kilogram (mg/kg) and TPH-G was reported at 1,300 mg/kg in soil sample D1-2'. All soil samples were collected at approximately 2-feet below ground surface (bgs). On November 15, 1995, a report documenting the release was sent to Ecology.

1996 Monitoring Well Installation

In March 1996, groundwater monitoring wells MW-1A through MW-3A (deep wells) and MW-1B through MW-3B (shallow wells) were installed to assess the extent and magnitude of dissolved petroleum hydrocarbons at the Site. Benzene was reported above MTCA Method A CULs in one soil sample (MW-3A), from approximately 32.5 to 34 feet bgs.

Perched groundwater results from the March 1996 investigation indicated that BTEX and TPH-G concentrations were above MTCA Method A CULs in groundwater samples collected from monitoring wells MW-2B, MW-3A, and MW-3B. Total lead was not detected in any of the groundwater samples.

In October 1996, monitoring wells MW-4A, MW-4B, MW-5A, and MW-5B were installed at the Site. Four soil samples exceeded MTCA Method A CULs from boreholes MW-5A and MW-5B. Soil samples that exceeded MTCA Method A CULs beneath the Site ranged from 5- to 16.5-feet bgs. The highest concentrations of benzene (17.3 mg/kg) and TPH-G (7,910 mg/kg) were reported in MW-5A at 12.5- to 14-feet bgs.

1997 Yield Testing

A static yield test was conducted in August 1997 to evaluate the maximum sustainable yield of perched groundwater at the Site. Testing was performed on 4-inch diameter wells MW-4A and MW-4B. Stantec applied a correction factor to convert the maximum well yield to an equivalent 6-inch well per WAC 173-340-720(2)(i). The maximum sustainable yield was calculated to be 0.2 gallons per minute (gpm).

1999 and 2000 Additional Borings

In 1999, six exploratory soil borings (B1 through B6) were advanced at the Site and two soil samples were collected from each boring (approximately 5- and 10-feet bgs). BTEX and TPH-G concentrations were

reported above MTCA Method A CULs in three soil samples (B3, B3, and B4). The highest concentrations of benzene (20 mg/kg) and TPH-G (4,300 mg/kg) were reported in boring B-3 at 5-feet bgs.

In 2000, one soil boring (B-1) was advanced south of the former 7-Eleven USTs. Benzene (1.59 mg/kg) and TPH-G (5,400 mg/kg) were reported above MTCA Method A CULs in this soil boring at 5-feet bgs.

2004 Subsurface Investigation

In 2004, eight soil borings (BH-1 through BH-8) were advanced to 12-feet bgs. Fourteen soil samples and three groundwater samples were submitted for analysis. BTEX and TPH-G were detected above MTCA Method A CULs in the soil samples collected from BH-2, BH-3, BH-5, and BH-7 and in the groundwater samples collected from borings BH-1 and BH-2. Based on the analytical results, petroleum impacted soil and groundwater was identified east and southeast of the 7-Eleven convenience store building. The highest concentrations of benzene (1.8 mg/kg) and TPH-G (5,400 mg/kg) were reported in boring B-3 at 5-feet bgs.

2010 UST Removal and Remedial Excavation

In 2010, Stantec supervised the removal of three 12,000-gallon, single-wall steel USTs, and dispensing equipment at the Site. Upon exposure and visual inspection, all three USTs appeared to be in overall good condition, and no apparent failures were observed. Screening and lab results confirmed that petroleum-impacted soil exceeding MTCA Method A CULs was present at the Site in the area of the former 7-Eleven UST basin and dispenser area.

Following the removal of the 7-Eleven USTs, Stantec performed a limited remedial over-excavation in the vicinity of the UST basin and dispenser area. A total of approximately 329-tons of petroleum impacted soil was removed from the Site.

2012 Site Investigation

In 2012, four borings were advanced on-Site with the completion of two borings as monitoring wells (SB-6, SB-8, MW-7 and MW-9). Seven soil samples were submitted for laboratory analysis. One soil sample exceeded the MTCA Method A CUL for TPH-G (SB-8 @12.5'). SB-8 was advanced in the center of the Site.

2015 Site Investigation

In 2015, seven borings were advanced on-Site with the completion of one as a monitoring well (SB-10 through SB-15, and MW-10). Sixteen soil samples were submitted for laboratory analysis. Six of the soil samples exceeded MTCA Method A CULs for BTEX, TPH-G, and total naphthalenes from approximately 6- to 12-feet bgs. Soil results from this investigation indicated impacts above MTCA Method A CULs were limited from approximately 5- to 16-feet bgs within the weathered glacial till at the Site.

Based on Site-specific data and flex-wall sampling results, the perched groundwater was likely to migrate vertically less than 10-feet in 100 years through the weathered and unweathered glacial till beneath the Site.

Soil degradation rates and dissolved phase trends indicate the leaching pathway to the potable aquifer is likely incomplete.

2016 Well Decommissioning and Dual-Phase Extraction Well Installation

In May 2016, Stantec decommissioned five existing groundwater monitoring wells (MW-1A through MW-5A) and installed two new dual-phase extraction (DPE) wells (DPE-9 and DPE-10) at the Site. MW-1A through MW-5A were previously installed to monitor “deep” groundwater at the Site. However, based on geotechnical (flex-wall) sampling and the conceptual site model, Stantec believed that the “A” and “B” wells are both installed in the same perched groundwater zone. The “A” wells were decommissioned to simplify Site evaluation and reduce the likelihood of a potential surface spill (from on-going customer activity) from reaching perched groundwater/soil. It should be noted that, prior to decommissioning, groundwater concentrations were below MTCA Method A CULs at wells MW-1A through MW-4A. However, groundwater concentrations (benzene, TPH-G, and TPH-D) exceeded MTCA Method A CULs at MW-5A (well screen 20- to 25-feet bgs). Stantec believes nearby wells MW-5B (screened 10- to 15-feet bgs) and DPE-7 (screened 5- to 20-feet bgs) are sufficient to characterize groundwater conditions near former well MW-5A.

A total of four soil samples were submitted to TestAmerica, Inc. in Nashville, Tennessee for laboratory analysis. Two of the soil samples collected during this investigation exceeded Ecology MTCA Method A screening levels for benzene and TPH-G. Soil exceedances were reported in borehole DPE-10 at 10- and 15.5-feet bgs. Benzene was reported at 0.846 mg/kg in DPE-10-15.5'. Additionally, benzene was reported at 0.506 mg/kg and TPH-G at 91.6 mg/kg in DPE-10-10'.

2016 Multi-Phase Extraction

Stantec contracted Cal Clean Inc. to operate a mobile MPE treatment system at the Site from October 3, 2016, through November 20, 2016. The temporary MPE event was selected as an interim action to reduce environmental risk and evaluate the cost and technical effectiveness of short-term MPE as a remedial option. The mobile treatment system consisted of a 25-horsepower liquid ring pump, vapor piping manifold, knockout tank, thermal oxidizer, water storage tanks, bag filters, and granular activated carbon vessels. The treatment system operated 24-hours a day and 7-days a week for approximately 48-days of total runtime.

Soil vapor and groundwater was extracted from existing Site monitoring well (MW-5B) and extraction wells (DPE-2, DPE-3, DPE-4, DPE-5, DPE-9, and DPE-10). Dual-phase extraction wells DPE-9 and DPE-10 were installed prior to the MPE event to facilitate remediation around the former 7-Eleven USTs and dispensers. The average vacuum ROI was approximately 28-feet. Induced vacuums were observed to decrease during the latter half of the extraction event, which may have been a result of increased rainfall during that time.

- Both TPH-D and TPH-O system water influent concentrations were observed to decrease from approximately 4,700 µg/l to 700 µg/l over the course of the extraction event.
- System influent and effluent vapor samples were collected routinely during the 2016 interim action and analyzed by TestAmerica Inc. for BTEX and TPH-G via EPA Method TO-15. Influent TPH-G concentrations were approximately 1,900 parts per million by volume (ppmv) at the beginning of the extraction event and decreased to approximately 75 ppmv by the end of the event.

- The average groundwater extraction flowrate was calculated to be approximately 0.6 gallons per minute and an estimated 1.1 pounds of TPH-G was removed via groundwater extraction during the 2016 interim action.
- The average vapor extraction flow rate was measured to be approximately 123-scfm. An estimated 762-lbs of gasoline were removed from the subsurface during the interim action.

Summary of Groundwater Monitoring and Sampling Summary

Years	Groundwater Monitoring & Sampling Summary
1990's	Groundwater monitoring wells MW-1A/B through MW-5A/B were installed. Remediation wells DPE-1 through DPE-8 were installed in the late 1990's but were generally not sampled until the early 2000's. Analytical results indicated dissolved concentrations of benzene and TPH-G exceeded respective MTCA Method A CULs at MW-1B through MW-4B, MW-5A, and MW-5B. The highest dissolved concentrations were observed in MW-5B, located approximately 12-feet east of the pre-1980 dispenser area. In June 1997, dissolved benzene in MW-5B was reported to be 8,900 micrograms per liter (µg/l) and TPH-G was 151,000 µg/l.
2000's	In 2002, remediation system wells DPE-1 through DPE-8 were included in the groundwater monitoring and sampling program. Wells DPE-1, DPE-4, DPE-5, and DPE-7 contained dissolved concentrations of benzene and TPH-G exceeding respective MTCA Method A CULs.
2010's	Following the removal of the fuel dispensing system in late 2010, BTEX and TPH-G concentrations in wells near the former 7-Eleven USTs and dispensers (MW-1B, MW-2B, MW-3B, and MW-4B), began attenuating below MTCA Method A CULs. Wells MW-3B, DPE-1, DPE-4, and DPE-5 near the pre-1980 dispenser islands, generally remained above MTCA Method A CULs for BTEX, TPH-G, TPH-D, and TPH-O. TPH-D and TPH-O were added to the groundwater sampling program in 2012. MW-10 was installed immediately east of the Property boundary in 2016, and DPE-9 and DPE-10 were installed in the north part of the Site; these three wells were added to the sampling program in 2016/2017.
2020's	Additional groundwater monitoring wells MW-11 through MW-17 were installed and added to the sampling program during Fourth Quarter 2021.

APPENDIX C

Standard Operating Procedures

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1.0 PURPOSE & APPLICABILITY

The purpose of this document is to define the standard operating procedure (SOP) for collecting soil samples when drilling with hollow-stem augers, direct push, and hand auger methods. The ultimate goal of the sampling program is to obtain samples that meet acceptable standards of accuracy, precision, comparability, representativeness, and completeness. All steps that could affect tracking, documentation, or integrity of samples have been explained in sufficient detail to allow different sampling personnel to collect samples that are equally reliable and consistent.

This procedure provides descriptions of equipment, field procedures, sample containers, decontamination, documentation, decontamination, storage, holding times, and field quality assurance (QA) and quality control (QC) procedures necessary to collect soil samples.

While the Project Quality Assurance Project Plan (QAPP) is intended to be strictly followed, it must be recognized that field conditions may force some modifications to the SOP. Any modification to the procedure shall be approved by the Project Manager or Task Leader in advance. Where SOP modification is planned sufficiently in advance, regulatory agency concurrence will be sought prior to conducting the specific activity. When direct contact with regulatory agency staff is not possible, or unscheduled delays will result, such as during field activities, regulatory agency will be notified of deviations from the SOPs, in writing, as soon as possible after the occurrence.

2.0 DEFINITIONS

HASP	Health and Safety Plan
OSHA	Occupational Safety and Health Administration
PID	Photoionization Detector
PPE	Personal Protective Equipment
PVC	Polyvinyl Chloride
QA	Quality Assurance
QC	Quality Control
QAPP	Quality Assurance Project Plan
SAP	Sampling and Analysis Plan
SOP	Standard Operating Procedure
USCS	Unified Soil Classification System
VOA	Volatile Organic Analysis
VOCs	Volatile Organic Compounds

3.0 HEALTH AND SAFETY CONSIDERATIONS

Refer to the site-specific Health and Safety Plan (HASP) for health and safety considerations applicable to soil sampling.

Many hazards should be considered during the soil sampling activities, careful consideration of these hazards by the project team is essential. Some of the hazards include the following:

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- Proper utility clearance must be performed in accordance with the Pre-Drilling/Excavation Checklist and Utility Clearance Log. There must be a minimum clearance of five (5) feet in addition to the diameter of the drilling augers. Client-specific requirements may be more restrictive.
- Traffic control may be required depending on the proximity of soil sampling activities to the roadway. Traffic control plans should be carefully evaluated to adequately delineate the work zone and provide the necessary safety factors.
- Personal protective equipment (PPE) including hard hats, high visibility traffic vest, gloves, hip boots or chest waders and other appropriate clothing;
- Heat and cold stress;
- Biological hazards such as insects and spiders. Appropriate clothing is required such as long-sleeved shirts and long pants.
- Bloodborne pathogens. Some of our sites may have syringes and other drug paraphernalia that must be carefully avoided.
- Chemical exposure on sites with open contamination. Respiratory protection may be necessary. Proper selection of respiratory protection is essential and an understanding of its limitation (i.e., negative pressure respiratory protection does not supply oxygen in an oxygen-deficient atmosphere). Staff should familiarize themselves with exposure limits for contaminants of concern.
- Use of air monitoring instrumentation will likely be necessary. We must be careful to make sure that our instrumentation is appropriate for the airborne contaminants of interest and that our staff understands the limitations of the instrumentation. Staff must also understand and perform calibration including zeroing with zero gas cylinders and appropriate other calibration gases.
- Decontamination of equipment and personnel must be properly designed and constructed to be sure that contamination is kept within the boundaries of the exclusion zone;
- Noise and proper use of hearing protection devices such as ear plugs and muffs.
- Emergency action plan must be carefully coordinated in advance between Stantec, our subcontractors, the client, and emergency responders.

All of these risks and others must be discussed with our subcontractors and clients to be sure they are properly addressed. Once the issues have been addressed at a project management level, they must be communicated to the staff that will actually perform the work. Details of procedures, instrument measurements and calibration, and other activities must be recorded in the field log and/or on data collection forms.

4.0 QUALITY ASSURANCE PLANNING CONSIDERATIONS

Soil sampling shall be done by personnel familiar with the common sources of random and systematic error so appropriate decisions can be made in the field. Some of the

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common phenomena which may degrade the sample quality collected from the well point are listed below.

- **Volatilization.** Volatilization occurs when the sample is in contact with air for an extended time. Typically volatilization occurs if the sample undergoes excessive disturbance during sampling or if air pockets exist at the top of the container. Limiting disturbance during sampling, filling sample containers in order of volatility, and tight capping of bottles immediately after filling will minimize these errors.
- **Adsorption/desorption.** This is the gain or loss of chemicals through exchange across surfaces. Adsorption may occur when the sample comes in contact with large surface areas such as the sampling container. Thorough decontamination of sample collection containers/monitoring equipment probes along with expedient transfer from the sample container to the laboratory container minimizes sorption effects.
- **Chemical reaction.** Dissolved chemical constituents may change due to reactions such as oxidation, hydrolysis, precipitation, etc. Proper preservation and adherence to holding times minimize these reactions.
- **Sample contamination.** Sample contamination is the most common source of errors and can result from several factors, including incomplete decontamination, contact with other samples, and contact with the atmosphere. Careful attention to decontamination, handling, and container sealing minimizes sample contamination.

5.0 RESPONSIBILITIES

The Project Manager or Task Leader will be responsible for assigning project staff to complete soil sampling activities. The Task Leader will also be responsible for assuring that this and any other appropriate procedures are followed by all project personnel.

The project staff assigned to the soil sampling will be responsible for completing their tasks according to this and other appropriate procedures. All staff will be responsible for reporting deviations from the procedure or nonconformance to the Task Leader, Project Manager or Project QA/QC Officer.

6.0 TRAINING AND QUALIFICATIONS

Only qualified personnel shall be allowed to perform this procedure. At a minimum, Stantec employees qualified to perform soil sampling will be required to have:

- Read this SOP.
- Read project-specific QAPP.
- Indicated to the Task Leader that all procedures contained in this SOP are understood.
- Completed the Occupational Safety and Health Administration (OSHA) 40-hour training course, and/or annual 8-hour refresher course, as appropriate.

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- Coordinated any proposed sampling activities with the laboratory to ensure proper sampling procedures.
- Previously performed soil sampling activities generally consistent with those described in this SOP.

Stantec employees who do not have previous experience with soil sampling will be trained on site by a qualified Stantec employee, and will be supervised directly by that employee until they have demonstrated an ability to perform the procedures.

7.0 REQUIRED MATERIALS

The following is a typical list of equipment that may be needed to perform soil sampling:

- Auger rig or direct-push unit with appropriate equipment for sampling, or hand auger.
- Continuous soil sampler (2-½-inch x 18-inch or 2-foot split-spoon sample tube) or direct-push clear acetate or polyvinyl chloride PVC tube (typically 4-foot long).
- Photoionization detector (PID) or other air monitoring instrumentation as required by the HASP.
- 4-mil-thick plastic sheeting or aluminum foil.
- Tape measure.
- Unified Soil Classification System (USCS) based on the Visual-Manual Procedures in ASTM Standards D 2487-00 and D 2488-00.
- 5035 sample containers with lids.
- Terra-cores™ or similar coring sampling device, if required.
- Sample labels.
- Stainless steel trowels, putty knives or similar soil working tool.
- Penetrometer (if available).
- Waterproof marking pens, such as the Staedtler Lumocolor.
- Coolers (with ice) for sample storage and shipment.
- Sample data forms/clip board.
- Decontamination supplies (Alconox™ [or similar detergent], brush, bucket).
- Nitrile gloves, or other specified chemical resistant gloves.
- Work gloves.

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- Camera and film or disks.
- Blank soil borehole logs or a field-logging PDA.
- Personal safety gear (hard hat, steel-toed boots, ear plugs, safety glasses, etc.).

8.0 METHODS

8.1 Hollow-Stem Auger/Direct Push Sampling

Make sure that all equipment and meters have been calibrated to the equipment specifications and the results have been recorded in the field log.

The top five (5) feet of the boreholes will be cleared via air knife, vacuum excavation, ground penetrating radar, hand auger, tile probe or some combination of these methods.

Shallow soil boreholes are typically drilled with hollow-stem augers or geoprobe and sampled at the intervals specified in the work plans. Sampling shall be done in advance of the lead auger to minimize cross-contamination. Samples for laboratory analysis shall be taken with a continuous soil sampler. Standard blow counts shall be recorded for driving the sampler 6 and 12 inches (ASTM Method D 1586-99) if sampler is hammer driven.

Upon retrieval of the sample, the sample will be placed on a clean surface (or lined with disposable aluminum foil or plastic sheeting) and will be screened with a PID for locating potential elevated PID readings. If applicable, a representative grab sample will be collected along with a headspace sample and placed into the appropriately labeled sample container. The sample containers shall be placed in self-sealing plastic or bubble bags in a cooler with ice or frozen ice packs for storage until they are delivered to the analytical laboratory.

The following method is to be used for headspace screening:

- The portion (for headspace screening) should be placed into an appropriately sized re-sealable Ziploc® or equivalent bag;
- Seal and label the bag with the borehole identification and the depth of the sample;
- Allow the bag to equilibrate for approximately ten (10) minutes; and
- Insert the probe tip of the PID into the bag. Obtain a measurement using the PID.

The remainder of the sample shall be logged in accordance with the USCS and recorded on the boring logs according to the following procedure:

1. As much information as possible is to be shown in the heading of each log. This includes, but is not limited to:
 - Project name and project identification number;
 - Identification of borehole;

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- Name of drilling company;
 - Make, model, type, and size of drilling and sampling equipment used;
 - Date and time of start and end of drilling
 - Name of geologist(s) logging boring;
 - End of boring depth; and,
 - Depth to water (if encountered).
2. Each log is to begin with a description of the surface, (i.e., native, paved with asphalt, paved with concrete, and such). If any concrete is cut to open the hole, the thickness will be noted.
 3. Every foot will be accounted for, with no gaps. If an interval is not sampled it will be noted. If an attempt is made to sample an interval, but there is no recovery, it will be noted.
 4. Complete construction details are to be detailed for each well on a standard well construction form. Construction details should include:
 - A description of the type and length of casing i.e., 20' of 2" inner diameter (ID) Schedule 40 PVC casing;
 - Length and depths of the top and bottom of the screened interval;
 - Screen slot size;
 - Depths of the top and bottom of the filter pack;
 - Filter pack materials and sand size;
 - Depths and types of bentonite seals;
 - Detail of the use of grout; and,
 - Detail of the surface completion (i.e., stick up, flush-mounted).
 5. The number of bags of sand, bentonite, and grout used will be counted. These numbers will be compared daily with the driller's daily report.

Soil cuttings will be stockpiled on 4-mil thick plastic sheeting or drummed. The cuttings and other investigation-derived waste will be managed in accordance with the work plan or client-specific directives.

When sampling for volatile organic compounds (VOCs), use USEPA Method 5035. Method 5035 requires ample preservation in the field at the point of collection. The preservative used for the low concentration soil method (0.5 to 200 µg/kg) is sodium bisulfate and the preservative used for the medium/high concentration soil method (>200 µg/kg) is methanol. This field collection and preservation procedure is intended to prevent loss of VOCs during sample transport, handling, and analysis. The holding time for VOC analysis is 14 days.

1. Use the lab provided plunger style sampler (T-handle, syringe with tool, or terra-core™ sampler) to collect a 5g soil sample.
2. Unscrew the lid of the lab provided pre-preserved sodium bisulfate volatile organic analysis (VOA) vials and inject the 5g soil sample.

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3. Tightly seal the VOA vial.
4. Repeat this step with the second sodium bisulfate VOA vial.
5. Then, repeat with the methanol preserved VOA vial.
6. Collect a soil sample in the 4-ounce wide mouth glass jar provided by the lab.
7. Make sure sample containers are labeled and bagged in plastic or bubble bags.
8. Ice the samples.

8.2 Hand Auger Sampling

Shallow soil boreholes less than five (5) feet in depth can be collected using a hand auger. The auger will be advanced until the desired sampling depth is reached. The auger will be removed from the boring, the sample will be extracted from the hand auger and field screened (as appropriate), and representative grab samples will be collected and placed into the appropriate labeled sample container. Decontamination of the auger and extensions will occur after each sample.

Boreholes will be abandoned by backfilling with bentonite chips and hydrating with potable water.

8.3 Excavation

Excavations and test pits will be excavated using a backhoe provided by the subcontractor. The dimensions of individual excavations will vary depending on the strength and stability of the trench walls and the specific purpose of the trench. Excavations greater than four (4) feet deep will not be entered by any personnel unless shoring is performed or the sides are stepped back to the proper angle per OSHA requirements.

When starting an excavation, the backhoe operator will first remove the topsoil or cover (if any) and place it in a discrete mound at least five (5) feet from the edge of the excavation. The excavation will be continued in approximately 6-inch cuts with the backhoe using a horizontal scraping motion rather than a vertical scooping motion. If a visibly-stained or otherwise chemically-affected soil interval is encountered, the affected excavated soils will be placed on 4-mil thick plastic sheeting.

8.3.1 Excavation Sampling

Samples will be collected from the backhoe bucket using a stainless steel trowel or similar. The top layer of soil will be removed prior to collecting the sample. The soil will then be placed in the appropriately labeled sample container and placed inside a chilled cooler.

8.3.2 Excavation Backfilling

The soils will be replaced in the excavation at their original depths to the extent

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practicable so that the soil from the bottom of the trench will be placed on the bottom, and the topsoil will be replaced on the top. The backhoe will be used to backfill and compact the excavation.

Upon completion and subsequent backfilling of each excavation, four corners will be marked with a wooden stake for surveying. If appropriate, a fifth stake will be placed above the location where a soil sample was collected. The points may be surveyed, as needed.

8.4 Decontamination Methods

8.4.1 Sampling Equipment Decontamination

The following steps will be used to decontaminate sampling equipment:

- Ensure that the decontamination process has been carefully designed to be sure that the solutions used are appropriate for the chemicals of interest.
- Ensure that the decontamination area is properly constructed to keep contamination within the contamination reduction and exclusion zones.
- Ensure that the decontamination area is properly constructed to contain the rinse solutions and solids.
- Personnel will dress in suitable safety equipment to reduce personal exposure.
- Smaller equipment that will not be damaged by water will be placed in a wash bucket containing an Alconox™ (or equivalent) solution and scrubbed with a brush or clean cloth. Smaller equipment will be rinsed in water. Change rinse and detergent waters between boreholes, as needed.
- For larger drilling equipment the soil and/or other material will be scraped off with a flat-bladed scraper, and placed within a decontamination (decon) pad. The decon pad will be constructed in a predetermined location, and equipment shall be cleaned with a pressure washer using potable water. Care will be taken to adequately clean the insides of the hollow-stem augers, and cutter heads.
- Equipment that may be damaged by water will be carefully wiped clean using a sponge and detergent water and rinsed in or wiped down with distilled water. Care will be taken to prevent any equipment damage.

Following decontamination, equipment will be placed in a clean area or on clean plastic sheeting to prevent contact with potentially contaminated soil.

Following decontamination, drilling equipment will be placed on the clean drill rig and moved to a clean area. If the equipment is not used immediately, it will be stored in the designated secure, clean area.

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8.4.2 Excavation Decontamination

Decontamination protocols must be carefully designed and constructed to deal with the chemicals of interest and ensure that the rinse solutions and solids are contained within the contamination reduction zone.

The backhoe bucket will be decontaminated prior to excavating each excavation. The entire backhoe, bucket, and tires will be decontaminated at the conclusion of the trenching operation. Decontamination will involve using a steam cleaner with an Alconox™ solution or pressure washer and rinsing using a steam cleaner or pressure washer with potable water. Backhoe decontamination will take place at the decontamination area located adjacent to the maintenance building or at another appropriate location.

The sampling equipment will be decontaminated prior to collecting each sample. Decontamination will consist of washing the equipment with a scrub brush in a bucket with an Alconox™ solution (or equivalent) and rinsing the equipment in a bucket filled with tap water. The date and time of decontamination of the backhoe and sampling equipment will be recorded in the field book and/or data collection forms.

8.5 Sample Containers, Storage, and Holding Times

Refer to the Project Sampling and Analysis Plan (SAP) for project specific instructions on proper containers, storage of samples and allowable holding times.

9.0 QUALITY CONTROL CHECKS AND ACCEPTANCE CRITERIA

Refer to the QAPP and SAP for specific quality control checks and acceptance criteria.

10.0 DOCUMENTATION

A borehole log will be completed for each hollow-stem auger or direct-push borehole. The field notebook and/or data collection forms will contain the following information:

- Project name and number.
- Drilling company's name.
- Date drilling started and finished.
- Type of auger and size (ID & OD).
- Type of equipment for air monitoring (PID or FID).
- Air monitoring calibration and measurements.
- Well completion and graphic log.
- Driller's name.
- Geologist's or engineer's name.

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- Type of drill rig.
- Borehole number.
- Surface elevation (if available).
- Stratigraphic description with depth.
- Classification of the soils according to the USCS.
- Water levels and light non-aqueous phase liquid levels, if applicable.
- Drilling observations.
- Map of borehole or monitoring well location.

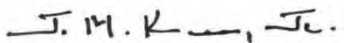
In addition, proper documentation will include observance of the chain of custody procedures as described in the Project QAPP and SAP.

Additional information regarding field documentation for borehole logging for fine- and coarse-grained soils and rocks is provided in Stantec checklists ESPA-603 through ESPA-605.

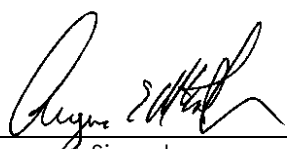
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ACCEPTANCE

Author

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Printed Name	Signature	Date

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John W. McInnes		6/1/2016
Printed Name	Signature	Date

1.0 PURPOSE & APPLICABILITY

The purpose of this document is to define the standard operating procedure (SOP) for collecting low flow groundwater samples. The ultimate goal of the sampling program is to obtain samples that meet acceptable standards of accuracy, precision, comparability, representativeness, and completeness. All steps that could affect tracking, documentation, or integrity of samples have been explained in sufficient detail to allow different sampling personnel to collect samples that are equally reliable and consistent.

This procedure gives descriptions of equipment, field procedures, sample containers, decontamination, documentation, storage and holding times, and field QA/QC procedures necessary to collect soil samples.

This procedure may apply to all sampling by Stantec personnel or their subcontractors by the aforementioned sampling methods.

It must be recognized that field conditions may force some modifications to the SOP. Any modification to the procedure shall be approved by the Project Manager or Task Leader in advance and sufficiently documented so that the reason for the deviation can be clearly articulated to our clients and regulators, as necessary. Where SOP modification is planned sufficiently in advance, regulatory agency concurrence will be sought prior to conducting the specific activity.

2.0 DEFINITIONS

FSP	Field Sampling Plan
HASP	Health and Safety Plan
OSHA	Occupational Safety and Health Administration
QA/QC	Quality Assurance/Quality Control
QAPP	Quality Assurance Project Plan
SOP	Standard Operating Procedure
WP	(Project) Work Plan

3.0 HEALTH AND SAFETY CONSIDERATIONS

Consideration of Health and Safety risks prior to performing this work is paramount. This risk review may be performed by modifying a generic or existing Job Safety Analysis in the HASP. There are many items to be considered. Following is a short list of the items for consideration. Careful review of these items and other site-specific conditions by the project team is essential.

- Traffic guidance and control. Even plans developed by outside traffic control contractors need to be carefully evaluated to make sure they are protective of our staff and contractors.
- Personal protective equipment, including hard hats, high-visibility traffic vest, gloves, appropriate clothing.
- Heat and cold stress.

- Biological hazards such as insects and spiders. Appropriate clothing is required such as long-sleeved shirts and long pants.
- Bloodborne pathogens. Some of our sites may have syringes and other drug paraphernalia that must be carefully avoided.
- Chemical exposure on sites with open contamination. Respiratory protection may be necessary. Proper selection of respiratory protection is essential and an understanding of its limitation (i.e., negative pressure respiratory protection does not supply oxygen in an oxygen-deficient atmosphere). Staff should familiarize themselves with exposure limits for contaminants of concern.
- Emergency action plan must be carefully coordinated in advance between Stantec, our subcontractors, the client, and emergency responders.

All of these risks and others must be discussed with our subcontractors and clients to be sure they are properly addressed. Once the issues have been addressed at a project management level, they must be communicated to the staff that will actually perform the work. Details of procedures, instrument measurements and calibration, and other activities must be recorded in the field log and/or on data collection forms.

4.0 RESPONSIBILITIES

The Project Manager or Task Leader will be responsible for assigning project staff to complete low flow groundwater sampling activities. The Task Leader will also be responsible for assuring that this and any other appropriate procedures are followed by all project personnel.

The project staff assigned to the low flow sampling tasks will be responsible for completing their tasks according to this and other appropriate procedures. All staff will be responsible for reporting deviations from the procedure or nonconformance to the Task Leader, Project Manager, or Project QA/QC Officer.

Only qualified personnel shall be allowed to perform this procedure. At a minimum, Stantec employees qualified to perform groundwater sampling will be required to have:

- Read this SOP.
- Read project-specific QAPP.
- Indicated to the Task Leader that all procedures contained in this SOP are understood.
- Completed the OSHA 40-hour training course and 8-hour refresher course, as appropriate.
- Previously performed low flow groundwater sampling activities generally consistent

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with those described in this SOP.

5.0 TRAINING/QUALIFICATIONS

Stantec employees who do not have previous experience with low flow groundwater sampling will be trained on site by a qualified Stantec employee and supervised directly by that employee until they have demonstrated an ability to perform the procedures.

6.0 REQUIRED MATERIALS

The following is a typical list of equipment that may be needed to perform low flow groundwater sampling:

- Photoionization detector (PID) or other air monitoring instrumentation as needed.
- Sample containers with lids.
- Sample labels.
- Waterproof marking pens, such as the Staedtler Lumocolor.
- Coolers (with ice) for sample storage and shipment.
- Sample data forms/clip board.
- Decontamination supplies.
- Nitrile gloves, or other specified chemical-resistant gloves.
- Work gloves.
- Camera and film or disks.
- Blank groundwater parameter forms or a field-logging PDA.
- Personal safety gear (hard hat, steel-toed boots, etc.).
- Water level indicator or product-water interface probe.
- Centrifugal pump, bladder pump, Grundfos pump (or equivalent).
- Appropriately sized tubing (Teflon or equivalent).
- YSI 556 meter with flow-through cell (or equivalent).
- Turbidity meter, Hatch ferrous iron test kit (or equivalent) as needed.
- Buckets, drums or other containers for purge water.

7.0 METHODS

7.1 Purging Methods

Wells will be purged and sampled according to the following procedures:

- After the water levels and the depth of the wells have been measured, the monitoring wells will be purged at a low-flow rate using a centrifugal pump, bladder pump, Grundfos pump (or equivalent) and dedicated down-hole tubing while measurements of oxygen reduction potential (ORP), dissolved oxygen (DO), standard conductivity (SC), pH, temperature, ferrous iron and/or turbidity (as needed) are monitored using a YSI 556 meter with flow-through cell, appropriate meters and test kits. (The meters will be checked and calibrated prior to use as specified in the operations manuals.) After purging is initiated, the flow will be adjusted to a rate that results in minimal well draw down.
- The pump intake will be located near the middle of the screened interval of each well. Non-dedicated equipment will be decontaminated appropriately before use at each monitoring well.
- Purge rates for low-flow sampling are typically 0.1 - 0.5 liters per minute (L/min). A higher purge rate may be acceptable but this is based on the site hydrology and must be determined at each well location. At no point should the purge rate cause a change in water level of greater than 0.3 feet.
- When using a bladder pump, the pump should be set so that one pulse delivers the entire 40ml vial amount (not mandatory but "best practice").
- Peristaltic pumps should be used with caution. Usage should be based on the intent of the data. If the data is to be used for comparison to clean up goals or groundwater monitoring termination, then peristaltic pump should not be used.
- The well will be purged until water quality parameters (ORP, DO, SC, pH, temperature, and/or turbidity) have stabilized (generally within 10 percent) for three consecutive measurements taken at 3 to 5 minutes intervals or three (3) complete well volumes have been removed. USEPA recommendations for stability parameters are:
 - ❖ Turbidity - 10 percent
 - ❖ DO - 0.3 mg per Liter
 - ❖ Specific Conductance - 3 percent
 - ❖ Temperature - 3 percent
 - ❖ pH - ± 0.1
 - ❖ ORP - $\pm 10\text{mV}$

This information will be recorded in a sampling form or on a field-logging PDA.

- Once the water quality parameters have stabilized, a groundwater sample will be collected in appropriate sample containers, or sampled with the appropriate test kit.

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- Documentation of all purge data, including volumes (both of water purged and water sampled), elapsed times, pump-flow rates, water level and geochemical parameter measurements will be recorded on the sampling form.

7.2 Decontamination Methods

The following steps will be used to decontaminate sampling equipment:

- Ensure that the decontamination process has been carefully designed so that the solutions used are appropriate for the chemicals of concern.
- Personnel will don appropriate safety equipment to reduce personal exposure.
- Equipment that will not be damaged by water will be placed in a wash tub containing an Alconox™ (or equivalent) solution and scrubbed with a brush or clean cloth. Equipment will be rinsed in a second wash tub.
- Equipment that may be damaged by water will be carefully wiped clean using a sponge and detergent water, and wiped with organic-free deionized water. Care will be taken to prevent any equipment damage.

Following decontamination, equipment will be placed in a clean area or on clean plastic sheeting to prevent possible contamination. Single use equipment and consumables will be discarded in an appropriate manner.

8.0 QUALITY CONTROL CHECKS AND ACCEPTANCE CRITERIA

Refer to the Quality Assurance Project Plan for specific quality control checks and acceptance criteria.

9.0 DOCUMENTATION

A monitoring well low-flow groundwater sampling log will be completed for each monitoring well. The field notebook and/or data collection forms will contain the following information:

- Project name and number.
- Field staff/sampler's name.
- Date and time sampling started and finished.
- Type of equipment for air monitoring and air monitoring data (if applicable).
- Type, make and model number of low flow and sampling equipment used.
- YSI meter (or equivalent), calibration and measurements.
- Depth to groundwater, well bottom and dense non-aqueous phase liquid levels, if applicable.

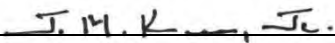
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- Monitoring well purge volume.
- Surface elevation (if available).
- Flow rates.
- ORP, DO, SC, pH, temperature, ferrous Iron and/or turbidity measurements or results and time.
- Additional sample analytical method or analytes and sample identification.
- Sample collection time.
- Sampler's observations.
- Description of monitoring well condition.

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ACCEPTANCE

Author

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Printed Name	Signature	Date

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Angus McGrath		6/1/2016
Printed Name	Signature	Date

Independent Reviewer

John W. McInnes		6/1/2016
Printed Name	Signature	Date

APPENDIX D

Laboratory Analytical Reports and Chain-of-Custody Documentation

ANALYTICAL REPORT

Eurofins TestAmerica, Seattle
5755 8th Street East
Tacoma, WA 98424
Tel: (253)922-2310

Laboratory Job ID: 580-100255-1
Client Project/Site: 7-11 No 22866 (WA)

For:
Stantec Consulting Corp.
11130 NE 33rd Place
Suite 200
Bellevue, Washington 98004-1465

Attn: Paul Fairbairn



Authorized for release by:
1/19/2021 3:43:15 PM

Lauren Evans, Project Manager I
(615)301-5034
Lauren.Evans@Eurofinset.com

LINKS

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results through
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www.eurofinsus.com/Env

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Case Narrative

Client: Stantec Consulting Corp.
Project/Site: 7-11 No 22866 (WA)

Job ID: 580-100255-1

Job ID: 580-100255-1

Laboratory: Eurofins TestAmerica, Seattle

Narrative

Job Narrative 580-100255-1

Comments

No additional comments.

Receipt

The samples were received on 1/5/2021 12:00 PM; the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 3.2° C.

GC/MS VOA

Method 8260D: The continuing calibration verification (CCV) associated with batch 580-347920 recovered above the upper control limit for Ethylbenzene, m-Xylene & p-Xylene, o-Xylene and Toluene. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The associated sample is impacted: (CCVIS 580-347920/3).

Method 8260D: The laboratory control sample (LCS) for preparation batch 580-347904 and analytical batch 580-347920 recovered outside control limits for the following analytes: o-Xylene. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

Method 8260D: Surrogate recovery for the following samples were outside control limits: MW-17-2.5 (580-100255-1) and MW-16-11 (580-100255-5). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

GC/MS Semi VOA

Method 8270E SIM: The method blank for preparation batch 580-347492 and analytical batch 580-347760 contained 2-Methylnaphthalene above the reporting limit (RL). Associated sample(s) were not re-extracted and/or re-analyzed because results were greater than 10X the value found in the method blank.

Method 8270E SIM: The following sample was diluted due to the nature of the sample matrix: SB-24-2.5 (580-100255-3). Elevated reporting limits (RLs) are provided.

Method 8270E SIM: The method blank for preparation batch 580-347492 and analytical batch 580-347876 contained 2-Methylnaphthalene above the method detection limit. This target analyte concentration was less than the reporting limit (RL); therefore, re-extraction and/or re-analysis of samples was not performed.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

GC VOA

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

GC Semi VOA

Method NWTPH-Dx: The following samples contained a hydrocarbon pattern in the diesel range; however, the elution pattern was later than the typical diesel fuel pattern used by the laboratory for quantitative purposes: (580-100190-A-1-A) and (580-100190-A-1-D DU).

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Metals

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

General Chemistry

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Organic Prep

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Case Narrative

Client: Stantec Consulting Corp.
Project/Site: 7-11 No 22866 (WA)

Job ID: 580-100255-1

Job ID: 580-100255-1 (Continued)

Laboratory: Eurofins TestAmerica, Seattle (Continued)

VOA Prep

Method 5035: The following samples were provided to the laboratory with a significantly different initial weight than that required by the reference method: MW-17-2.5 (580-100255-1), MW-17-5 (580-100255-2), SB-24-2.5 (580-100255-3) and SB-24-5 (580-100255-4). Deviations in the weight by more than 20% may affect reporting limits and potentially method performance. The method specifies 10g . The amount provided was below this range.

Method 5035: The following samples were provided to the laboratory with a significantly different initial weight than that required by the reference method: MW-16-11 (580-100255-5) and MW-16-15 (580-100255-6). Deviations in the weight by more than 20% may affect reporting limits and potentially method performance. The method specifies 10g . The amount provided was above this range.

Method 5035: The following samples were provided to the laboratory with a significantly different initial weight than that required by the reference method: MW-17-2.5 (580-100255-1), MW-17-5 (580-100255-2), SB-24-5 (580-100255-4), MW-16-11 (580-100255-5) and MW-16-15 (580-100255-6). Deviations in the weight by more than 20% may affect reporting limits and potentially method performance. The method specifies 5g. The amount provided was above this range.

Method 5035: The following samples were provided to the laboratory with a significantly different initial weight than that required by the reference method: MW-17-5 (580-100255-2), SB-24-2.5 (580-100255-3), SB-24-5 (580-100255-4) and MW-16-11 (580-100255-5). Deviations in the weight by more than 20% may affect reporting limits and potentially method performance. The method specifies 5g. The amount provided was above this range.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Definitions/Glossary

Client: Stantec Consulting Corp.
Project/Site: 7-11 No 22866 (WA)

Job ID: 580-100255-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
S1+	Surrogate recovery exceeds control limits, high biased.

General Chemistry

Qualifier	Qualifier Description
F3	Duplicate RPD exceeds the control limit

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
□	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Client Sample Results

Client: Stantec Consulting Corp.
Project/Site: 7-11 No 22866 (WA)

Job ID: 580-100255-1

Client Sample ID: MW-17-2.5

Lab Sample ID: 580-100255-1

Date Collected: 01/04/21 10:00

Matrix: Solid

Date Received: 01/05/21 12:00

Percent Solids: 88.6

Method: 6010D - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	5.15		1.26		mg/Kg	☼	01/05/21 15:30	01/05/21 20:41	1

Client Sample Results

Client: Stantec Consulting Corp.
Project/Site: 7-11 No 22866 (WA)

Job ID: 580-100255-1

Client Sample ID: MW-17-2.5

Lab Sample ID: 580-100255-1

Date Collected: 01/04/21 10:00

Matrix: Solid

Date Received: 01/05/21 12:00

Percent Solids: 91.5

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00175		0.00175		mg/Kg	☆	01/14/21 11:01	01/14/21 14:01	1
1,2-Dibromoethane	<0.000876		0.000876		mg/Kg	☆	01/14/21 11:01	01/14/21 14:01	1
1,2-Dichloroethane	<0.000876		0.000876		mg/Kg	☆	01/14/21 11:01	01/14/21 14:01	1
Ethylbenzene	<0.00175		0.00175		mg/Kg	☆	01/14/21 11:01	01/14/21 14:01	1
Methyl tert-butyl ether	<0.00175		0.00175		mg/Kg	☆	01/14/21 11:01	01/14/21 14:01	1
Toluene	<0.00876		0.00876		mg/Kg	☆	01/14/21 11:01	01/14/21 14:01	1
Xylenes, Total	<0.00876		0.00876		mg/Kg	☆	01/14/21 11:01	01/14/21 14:01	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	93		80 - 120	01/14/21 11:01	01/14/21 14:01	1
Dibromofluoromethane (Surr)	90		80 - 120	01/14/21 11:01	01/14/21 14:01	1
1,2-Dichloroethane-d4 (Surr)	118		80 - 121	01/14/21 11:01	01/14/21 14:01	1
Toluene-d8 (Surr)	121	S1+	80 - 120	01/14/21 11:01	01/14/21 14:01	1

Method: 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	1.38		0.00531		mg/Kg	☆	01/07/21 16:05	01/13/21 09:50	1
2-Methylnaphthalene	0.436		0.00531		mg/Kg	☆	01/07/21 16:05	01/13/21 09:50	1
Naphthalene	0.0953		0.00531		mg/Kg	☆	01/07/21 16:05	01/13/21 09:50	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Terphenyl-d14	79		42 - 130	01/07/21 16:05	01/13/21 09:50	1

Method: NWTPH-Gx - Northwest - Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics - NWTPH-G	409		7.92		mg/Kg		01/07/21 14:09	01/07/21 22:15	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	147		50 - 150	01/07/21 14:09	01/07/21 22:15	1

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (C10-C24)	804		51.2		mg/Kg	☆	01/07/21 13:21	01/13/21 13:19	1
Motor Oil (C24-C44)	<51.2		51.2		mg/Kg	☆	01/07/21 13:21	01/13/21 13:19	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-Terphenyl	82		50 - 150	01/07/21 13:21	01/13/21 13:19	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	91.5		0.1		%			01/07/21 13:12	1
Percent Moisture	8.5		0.1		%			01/07/21 13:12	1

Client Sample Results

Client: Stantec Consulting Corp.
Project/Site: 7-11 No 22866 (WA)

Job ID: 580-100255-1

Client Sample ID: MW-17-5

Lab Sample ID: 580-100255-2

Date Collected: 01/04/21 10:15

Matrix: Solid

Date Received: 01/05/21 12:00

Percent Solids: 85.0

Method: 6010D - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	5.01		1.34		mg/Kg	☼	01/05/21 15:30	01/05/21 20:44	1

Client Sample Results

Client: Stantec Consulting Corp.
Project/Site: 7-11 No 22866 (WA)

Job ID: 580-100255-1

Client Sample ID: MW-17-5

Lab Sample ID: 580-100255-2

Date Collected: 01/04/21 10:15

Matrix: Solid

Date Received: 01/05/21 12:00

Percent Solids: 85.7

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00183		0.00183		mg/Kg	☆	01/14/21 11:01	01/14/21 14:26	1
1,2-Dibromoethane	<0.000917		0.000917		mg/Kg	☆	01/14/21 11:01	01/14/21 14:26	1
1,2-Dichloroethane	<0.000917		0.000917		mg/Kg	☆	01/14/21 11:01	01/14/21 14:26	1
Ethylbenzene	<0.00183		0.00183		mg/Kg	☆	01/14/21 11:01	01/14/21 14:26	1
Methyl tert-butyl ether	<0.00183		0.00183		mg/Kg	☆	01/14/21 11:01	01/14/21 14:26	1
Toluene	<0.00917		0.00917		mg/Kg	☆	01/14/21 11:01	01/14/21 14:26	1
Xylenes, Total	<0.00917		0.00917		mg/Kg	☆	01/14/21 11:01	01/14/21 14:26	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	93		80 - 120	01/14/21 11:01	01/14/21 14:26	1
Dibromofluoromethane (Surr)	90		80 - 120	01/14/21 11:01	01/14/21 14:26	1
1,2-Dichloroethane-d4 (Surr)	115		80 - 121	01/14/21 11:01	01/14/21 14:26	1
Toluene-d8 (Surr)	106		80 - 120	01/14/21 11:01	01/14/21 14:26	1

Method: 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	0.230		0.00550		mg/Kg	☆	01/07/21 16:05	01/13/21 10:38	1
2-Methylnaphthalene	0.0426		0.00550		mg/Kg	☆	01/07/21 16:05	01/13/21 10:38	1
Naphthalene	0.0390		0.00550		mg/Kg	☆	01/07/21 16:05	01/13/21 10:38	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Terphenyl-d14	82		42 - 130	01/07/21 16:05	01/13/21 10:38	1

Method: NWTPH-Gx - Northwest - Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics - NWTPH-G	281		6.89		mg/Kg		01/07/21 14:09	01/07/21 22:39	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	120		50 - 150	01/07/21 14:09	01/07/21 22:39	1

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (C10-C24)	591		57.0		mg/Kg	☆	01/07/21 13:21	01/13/21 11:39	1
Motor Oil (C24-C44)	<57.0		57.0		mg/Kg	☆	01/07/21 13:21	01/13/21 11:39	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-Terphenyl	75		50 - 150	01/07/21 13:21	01/13/21 11:39	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	85.7		0.1		%			01/07/21 13:12	1
Percent Moisture	14.3		0.1		%			01/07/21 13:12	1

Client Sample Results

Client: Stantec Consulting Corp.
Project/Site: 7-11 No 22866 (WA)

Job ID: 580-100255-1

Client Sample ID: SB-24-2.5

Lab Sample ID: 580-100255-3

Date Collected: 01/04/21 12:00

Matrix: Solid

Date Received: 01/05/21 12:00

Percent Solids: 84.2

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.00470		0.00228		mg/Kg	✱	01/14/21 11:01	01/14/21 14:52	1
1,2-Dibromoethane	<0.00114		0.00114		mg/Kg	✱	01/14/21 11:01	01/14/21 14:52	1
1,2-Dichloroethane	<0.00114		0.00114		mg/Kg	✱	01/14/21 11:01	01/14/21 14:52	1
Ethylbenzene	0.0215		0.00228		mg/Kg	✱	01/14/21 11:01	01/14/21 14:52	1
Methyl tert-butyl ether	<0.00228		0.00228		mg/Kg	✱	01/14/21 11:01	01/14/21 14:52	1
Toluene	<0.0114		0.0114		mg/Kg	✱	01/14/21 11:01	01/14/21 14:52	1
Xylenes, Total	0.0658		0.0114		mg/Kg	✱	01/14/21 11:01	01/14/21 14:52	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	99		80 - 120	01/14/21 11:01	01/14/21 14:52	1
Dibromofluoromethane (Surr)	90		80 - 120	01/14/21 11:01	01/14/21 14:52	1
1,2-Dichloroethane-d4 (Surr)	115		80 - 121	01/14/21 11:01	01/14/21 14:52	1
Toluene-d8 (Surr)	118		80 - 120	01/14/21 11:01	01/14/21 14:52	1

Method: 8260D - Volatile Organic Compounds by GC/MS - RA

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	109		80 - 120	01/14/21 16:51	01/15/21 02:18	1
Dibromofluoromethane (Surr)	105		80 - 120	01/14/21 16:51	01/15/21 02:18	1
1,2-Dichloroethane-d4 (Surr)	112		80 - 121	01/14/21 16:51	01/15/21 02:18	1
Toluene-d8 (Surr)	119		80 - 120	01/14/21 16:51	01/15/21 02:18	1

Method: 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	0.563		0.00579		mg/Kg	✱	01/07/21 16:05	01/14/21 09:23	1
2-Methylnaphthalene	1.04		0.00579		mg/Kg	✱	01/07/21 16:05	01/14/21 09:23	1
Naphthalene	0.511		0.00579		mg/Kg	✱	01/07/21 16:05	01/14/21 09:23	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Terphenyl-d14	90		42 - 130	01/07/21 16:05	01/14/21 09:23	1

Method: NWTPH-Gx - Northwest - Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics - NWTPH-G	157		8.81		mg/Kg		01/07/21 14:09	01/07/21 23:04	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	102		50 - 150	01/07/21 14:09	01/07/21 23:04	1

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (C10-C24)	353		54.4		mg/Kg	✱	01/07/21 13:21	01/13/21 11:59	1
Motor Oil (C24-C44)	1510		54.4		mg/Kg	✱	01/07/21 13:21	01/13/21 11:59	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-Terphenyl	70		50 - 150	01/07/21 13:21	01/13/21 11:59	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	84.2		0.1		%			01/07/21 13:12	1
Percent Moisture	15.8		0.1		%			01/07/21 13:12	1

Eurofins TestAmerica, Seattle

Client Sample Results

Client: Stantec Consulting Corp.
Project/Site: 7-11 No 22866 (WA)

Job ID: 580-100255-1

Client Sample ID: SB-24-2.5

Lab Sample ID: 580-100255-3

Date Collected: 01/04/21 12:00

Matrix: Solid

Date Received: 01/05/21 12:00

Percent Solids: 85.3

Method: 6010D - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	98.8		1.08		mg/Kg	☼	01/05/21 15:30	01/05/21 20:48	1

Client Sample Results

Client: Stantec Consulting Corp.
Project/Site: 7-11 No 22866 (WA)

Job ID: 580-100255-1

Client Sample ID: SB-24-5

Lab Sample ID: 580-100255-4

Date Collected: 01/04/21 12:30

Matrix: Solid

Date Received: 01/05/21 12:00

Percent Solids: 82.9

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00196		0.00196		mg/Kg	✱	01/14/21 11:01	01/14/21 15:18	1
1,2-Dibromoethane	<0.000979		0.000979		mg/Kg	✱	01/14/21 11:01	01/14/21 15:18	1
1,2-Dichloroethane	<0.000979		0.000979		mg/Kg	✱	01/14/21 11:01	01/14/21 15:18	1
Ethylbenzene	0.00214		0.00196		mg/Kg	✱	01/14/21 11:01	01/14/21 15:18	1
Methyl tert-butyl ether	<0.00196		0.00196		mg/Kg	✱	01/14/21 11:01	01/14/21 15:18	1
Toluene	<0.00979		0.00979		mg/Kg	✱	01/14/21 11:01	01/14/21 15:18	1
Xylenes, Total	0.0157		0.00979		mg/Kg	✱	01/14/21 11:01	01/14/21 15:18	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	93		80 - 120	01/14/21 11:01	01/14/21 15:18	1
Dibromofluoromethane (Surr)	94		80 - 120	01/14/21 11:01	01/14/21 15:18	1
1,2-Dichloroethane-d4 (Surr)	116		80 - 121	01/14/21 11:01	01/14/21 15:18	1
Toluene-d8 (Surr)	99		80 - 120	01/14/21 11:01	01/14/21 15:18	1

Method: 8260D - Volatile Organic Compounds by GC/MS - RA

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	102		80 - 120	01/14/21 16:51	01/15/21 02:44	1
Dibromofluoromethane (Surr)	108		80 - 120	01/14/21 16:51	01/15/21 02:44	1
1,2-Dichloroethane-d4 (Surr)	113		80 - 121	01/14/21 16:51	01/15/21 02:44	1
Toluene-d8 (Surr)	94		80 - 120	01/14/21 16:51	01/15/21 02:44	1

Method: 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	<0.00575		0.00575		mg/Kg	✱	01/07/21 16:05	01/13/21 12:16	1
2-Methylnaphthalene	0.00935		0.00575		mg/Kg	✱	01/07/21 16:05	01/13/21 12:16	1
Naphthalene	0.0153		0.00575		mg/Kg	✱	01/07/21 16:05	01/13/21 12:16	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Terphenyl-d14	78		42 - 130	01/07/21 16:05	01/13/21 12:16	1

Method: NWTPH-Gx - Northwest - Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics - NWTPH-G	15.9		7.65		mg/Kg		01/07/21 14:09	01/07/21 23:28	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	85		50 - 150	01/07/21 14:09	01/07/21 23:28	1

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (C10-C24)	<58.1		58.1		mg/Kg	✱	01/07/21 13:21	01/13/21 12:19	1
Motor Oil (C24-C44)	<58.1		58.1		mg/Kg	✱	01/07/21 13:21	01/13/21 12:19	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-Terphenyl	72		50 - 150	01/07/21 13:21	01/13/21 12:19	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	82.9		0.1		%			01/07/21 13:12	1
Percent Moisture	17.1		0.1		%			01/07/21 13:12	1

Eurofins TestAmerica, Seattle

Client Sample Results

Client: Stantec Consulting Corp.
Project/Site: 7-11 No 22866 (WA)

Job ID: 580-100255-1

Client Sample ID: SB-24-5
Date Collected: 01/04/21 12:30
Date Received: 01/05/21 12:00

Lab Sample ID: 580-100255-4
Matrix: Solid
Percent Solids: 83.1

Method: 6010D - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	6.67		1.22		mg/Kg	☼	01/05/21 15:30	01/05/21 20:51	1

Client Sample Results

Client: Stantec Consulting Corp.
Project/Site: 7-11 No 22866 (WA)

Job ID: 580-100255-1

Client Sample ID: MW-16-11

Lab Sample ID: 580-100255-5

Date Collected: 01/05/21 09:30

Matrix: Solid

Date Received: 01/05/21 12:00

Percent Solids: 83.5

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00179		0.00179		mg/Kg	✱	01/14/21 11:01	01/14/21 15:43	1
Ethylbenzene	<0.00179		0.00179		mg/Kg	✱	01/14/21 11:01	01/14/21 15:43	1
Toluene	<0.00896		0.00896		mg/Kg	✱	01/14/21 11:01	01/14/21 15:43	1
Xylenes, Total	<0.00896		0.00896		mg/Kg	✱	01/14/21 11:01	01/14/21 15:43	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	87		80 - 120				01/14/21 11:01	01/14/21 15:43	1
Dibromofluoromethane (Surr)	100		80 - 120				01/14/21 11:01	01/14/21 15:43	1
1,2-Dichloroethane-d4 (Surr)	132	S1+	80 - 121				01/14/21 11:01	01/14/21 15:43	1
Toluene-d8 (Surr)	153	S1+	80 - 120				01/14/21 11:01	01/14/21 15:43	1

Method: NWTPH-Gx - Northwest - Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics - NWTPH-G	44.8		3.17		mg/Kg		01/07/21 14:09	01/08/21 00:17	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	99		50 - 150				01/07/21 14:09	01/08/21 00:17	1

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (C10-C24)	55.2		54.6		mg/Kg	✱	01/07/21 13:21	01/13/21 12:39	1
Motor Oil (C24-C44)	<54.6		54.6		mg/Kg	✱	01/07/21 13:21	01/13/21 12:39	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl	74		50 - 150				01/07/21 13:21	01/13/21 12:39	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	83.5		0.1		%			01/07/21 13:12	1
Percent Moisture	16.5		0.1		%			01/07/21 13:12	1

Client Sample Results

Client: Stantec Consulting Corp.
Project/Site: 7-11 No 22866 (WA)

Job ID: 580-100255-1

Client Sample ID: MW-16-15

Lab Sample ID: 580-100255-6

Date Collected: 01/05/21 09:45

Matrix: Solid

Date Received: 01/05/21 12:00

Percent Solids: 90.6

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00182		0.00182		mg/Kg	☆	01/14/21 11:01	01/14/21 16:09	1
Ethylbenzene	<0.00182		0.00182		mg/Kg	☆	01/14/21 11:01	01/14/21 16:09	1
Toluene	<0.00910		0.00910		mg/Kg	☆	01/14/21 11:01	01/14/21 16:09	1
Xylenes, Total	<0.00910		0.00910		mg/Kg	☆	01/14/21 11:01	01/14/21 16:09	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	94		80 - 120	01/14/21 11:01	01/14/21 16:09	1
Dibromofluoromethane (Surr)	97		80 - 120	01/14/21 11:01	01/14/21 16:09	1
1,2-Dichloroethane-d4 (Surr)	115		80 - 121	01/14/21 11:01	01/14/21 16:09	1
Toluene-d8 (Surr)	99		80 - 120	01/14/21 11:01	01/14/21 16:09	1

Method: NWTPH-Gx - Northwest - Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics - NWTPH-G	<4.08		4.08		mg/Kg		01/07/21 14:09	01/08/21 00:42	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	81		50 - 150	01/07/21 14:09	01/08/21 00:42	1

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (C10-C24)	<50.4		50.4		mg/Kg	☆	01/07/21 13:21	01/13/21 12:59	1
Motor Oil (C24-C44)	<50.4		50.4		mg/Kg	☆	01/07/21 13:21	01/13/21 12:59	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-Terphenyl	69		50 - 150	01/07/21 13:21	01/13/21 12:59	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	90.6		0.1		%			01/07/21 13:12	1
Percent Moisture	9.4		0.1		%			01/07/21 13:12	1

QC Sample Results

Client: Stantec Consulting Corp.
Project/Site: 7-11 No 22866 (WA)

Job ID: 580-100255-1

Method: 8260D - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 580-347904/1-A

Matrix: Solid

Analysis Batch: 347920

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 347904

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200		0.00200		mg/Kg		01/14/21 11:01	01/14/21 13:36	1
1,2-Dibromoethane	<0.00100		0.00100		mg/Kg		01/14/21 11:01	01/14/21 13:36	1
1,2-Dichloroethane	<0.00100		0.00100		mg/Kg		01/14/21 11:01	01/14/21 13:36	1
Ethylbenzene	<0.00200		0.00200		mg/Kg		01/14/21 11:01	01/14/21 13:36	1
Methyl tert-butyl ether	<0.00200		0.00200		mg/Kg		01/14/21 11:01	01/14/21 13:36	1
Toluene	<0.0100		0.0100		mg/Kg		01/14/21 11:01	01/14/21 13:36	1
Xylenes, Total	<0.0100		0.0100		mg/Kg		01/14/21 11:01	01/14/21 13:36	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	91		80 - 120	01/14/21 11:01	01/14/21 13:36	1
Dibromofluoromethane (Surr)	93		80 - 120	01/14/21 11:01	01/14/21 13:36	1
1,2-Dichloroethane-d4 (Surr)	101		80 - 121	01/14/21 11:01	01/14/21 13:36	1
Toluene-d8 (Surr)	109		80 - 120	01/14/21 11:01	01/14/21 13:36	1

Lab Sample ID: LCS 580-347904/2-A

Matrix: Solid

Analysis Batch: 347920

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 347904

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Benzene	0.0200	0.02120		mg/Kg		106	79 - 135
1,2-Dibromoethane	0.0200	0.02425		mg/Kg		121	77 - 123
1,2-Dichloroethane	0.0200	0.01975		mg/Kg		99	76 - 132
Ethylbenzene	0.0200	0.02656		mg/Kg		133	80 - 135
Methyl tert-butyl ether	0.0200	0.02027		mg/Kg		101	77 - 132
Toluene	0.0200	0.02405		mg/Kg		120	75 - 137
Xylenes, Total	0.0400	0.05195		mg/Kg		130	80 - 136

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	102		80 - 120
Dibromofluoromethane (Surr)	88		80 - 120
1,2-Dichloroethane-d4 (Surr)	99		80 - 121
Toluene-d8 (Surr)	105		80 - 120

Lab Sample ID: LCSD 580-347904/3-A

Matrix: Solid

Analysis Batch: 347920

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 347904

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Benzene	0.0200	0.02134		mg/Kg		107	79 - 135	1	31
1,2-Dibromoethane	0.0200	0.02379		mg/Kg		119	77 - 123	2	37
1,2-Dichloroethane	0.0200	0.02107		mg/Kg		105	76 - 132	6	29
Ethylbenzene	0.0200	0.02409		mg/Kg		120	80 - 135	10	37
Methyl tert-butyl ether	0.0200	0.02111		mg/Kg		106	77 - 132	4	25
Toluene	0.0200	0.02284		mg/Kg		114	75 - 137	5	34
Xylenes, Total	0.0400	0.04821		mg/Kg		121	80 - 136	7	19

Eurofins TestAmerica, Seattle

QC Sample Results

Client: Stantec Consulting Corp.
Project/Site: 7-11 No 22866 (WA)

Job ID: 580-100255-1

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCSD 580-347904/3-A

Matrix: Solid

Analysis Batch: 347920

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 347904

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	94		80 - 120
Dibromofluoromethane (Surr)	90		80 - 120
1,2-Dichloroethane-d4 (Surr)	100		80 - 121
Toluene-d8 (Surr)	106		80 - 120

Lab Sample ID: MB 580-347956/1-A

Matrix: Solid

Analysis Batch: 347958

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 347956

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	100		80 - 120	01/14/21 16:51	01/15/21 01:01	1
Dibromofluoromethane (Surr)	104		80 - 120	01/14/21 16:51	01/15/21 01:01	1
1,2-Dichloroethane-d4 (Surr)	108		80 - 121	01/14/21 16:51	01/15/21 01:01	1
Toluene-d8 (Surr)	102		80 - 120	01/14/21 16:51	01/15/21 01:01	1

Lab Sample ID: LCS 580-347956/2-A

Matrix: Solid

Analysis Batch: 347958

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 347956

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	106		80 - 120
Dibromofluoromethane (Surr)	101		80 - 120
1,2-Dichloroethane-d4 (Surr)	105		80 - 121
Toluene-d8 (Surr)	98		80 - 120

Lab Sample ID: LCSD 580-347956/3-A

Matrix: Solid

Analysis Batch: 347958

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 347956

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	103		80 - 120
Dibromofluoromethane (Surr)	102		80 - 120
1,2-Dichloroethane-d4 (Surr)	105		80 - 121
Toluene-d8 (Surr)	97		80 - 120

Method: 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM)

Lab Sample ID: MB 580-347492/1-A

Matrix: Solid

Analysis Batch: 347876

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 347492

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	<0.00500		0.00500		mg/Kg		01/07/21 16:05	01/14/21 08:59	1
2-Methylnaphthalene	<0.00500		0.00500		mg/Kg		01/07/21 16:05	01/14/21 08:59	1
Naphthalene	<0.00500		0.00500		mg/Kg		01/07/21 16:05	01/14/21 08:59	1

Eurofins TestAmerica, Seattle

QC Sample Results

Client: Stantec Consulting Corp.
Project/Site: 7-11 No 22866 (WA)

Job ID: 580-100255-1

Method: 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Lab Sample ID: MB 580-347492/1-A

Matrix: Solid

Analysis Batch: 347876

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 347492

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Terphenyl-d14	95		42 - 130	01/07/21 16:05	01/14/21 08:59	1

Lab Sample ID: LCS 580-347492/2-A

Matrix: Solid

Analysis Batch: 347760

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 347492

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1-Methylnaphthalene	1.00	0.9329		mg/Kg		93	53 - 120
2-Methylnaphthalene	1.00	0.9781		mg/Kg		98	58 - 130
Naphthalene	1.00	0.9886		mg/Kg		99	48 - 120
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
Terphenyl-d14	87		42 - 130				

Method: NWTPH-Gx - Northwest - Volatile Petroleum Products (GC)

Lab Sample ID: MB 580-347482/1-A

Matrix: Solid

Analysis Batch: 347505

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 347482

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics - NWTPH-G	<5.00		5.00		mg/Kg		01/07/21 14:09	01/07/21 15:20	1
Surrogate	MB %Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	82		50 - 150				01/07/21 14:09	01/07/21 15:20	1

Lab Sample ID: LCS 580-347482/2-A

Matrix: Solid

Analysis Batch: 347505

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 347482

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics - NWTPH-G	40.0	42.21		mg/Kg		106	80 - 120
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
4-Bromofluorobenzene (Surr)	92		50 - 150				

Lab Sample ID: LCSD 580-347482/3-A

Matrix: Solid

Analysis Batch: 347505

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 347482

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics - NWTPH-G	40.0	38.51		mg/Kg		96	80 - 120	9	10
Surrogate	LCSD %Recovery	LCSD Qualifier	Limits						
4-Bromofluorobenzene (Surr)	95		50 - 150						

Eurofins TestAmerica, Seattle

QC Sample Results

Client: Stantec Consulting Corp.
Project/Site: 7-11 No 22866 (WA)

Job ID: 580-100255-1

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Lab Sample ID: MB 580-347472/1-A

Matrix: Solid

Analysis Batch: 347768

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 347472

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (C10-C24)	<50.0		50.0		mg/Kg		01/07/21 13:21	01/13/21 10:39	1
Motor Oil (C24-C44)	<50.0		50.0		mg/Kg		01/07/21 13:21	01/13/21 10:39	1
Surrogate	MB %Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl	74		50 - 150				01/07/21 13:21	01/13/21 10:39	1

Lab Sample ID: LCS 580-347472/2-A

Matrix: Solid

Analysis Batch: 347768

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 347472

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Diesel Range Organics (C10-C24)	500	438.2		mg/Kg		88	70 - 125		
Motor Oil (C24-C44)	500	422.2		mg/Kg		84	70 - 129		
Surrogate	LCS %Recovery	LCS Qualifier	Limits						
o-Terphenyl	90		50 - 150						

Lab Sample ID: LCSD 580-347472/3-A

Matrix: Solid

Analysis Batch: 347768

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 347472

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
Diesel Range Organics (C10-C24)	500	426.5		mg/Kg		85	70 - 125	3	16
Motor Oil (C24-C44)	500	403.2		mg/Kg		81	70 - 129	5	16
Surrogate	LCSD %Recovery	LCSD Qualifier	Limits						
o-Terphenyl	86		50 - 150						

Method: 6010D - Metals (ICP)

Lab Sample ID: MB 580-347264/14-A

Matrix: Solid

Analysis Batch: 347320

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 347264

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	<1.50		1.50		mg/Kg		01/05/21 15:30	01/05/21 19:52	1

Lab Sample ID: LCS 580-347264/15-A

Matrix: Solid

Analysis Batch: 347320

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 347264

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Lead	50.0	48.99		mg/Kg		98	80 - 120		

Eurofins TestAmerica, Seattle

QC Sample Results

Client: Stantec Consulting Corp.
Project/Site: 7-11 No 22866 (WA)

Job ID: 580-100255-1

Method: 6010D - Metals (ICP) (Continued)

Lab Sample ID: LCSD 580-347264/16-A

Matrix: Solid

Analysis Batch: 347320

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 347264

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Lead	50.0	48.92		mg/Kg		98	80 - 120	0	20

Method: 2540G - SM 2540G

Lab Sample ID: 580-100255-1 DU

Matrix: Solid

Analysis Batch: 347471

Client Sample ID: MW-17-2.5

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Percent Solids	91.5		89.6		%		2	20
Percent Moisture	8.5		10.4	F3	%		21	20

Lab Chronicle

Client: Stantec Consulting Corp.
Project/Site: 7-11 No 22866 (WA)

Job ID: 580-100255-1

Client Sample ID: MW-17-2.5

Lab Sample ID: 580-100255-1

Date Collected: 01/04/21 10:00

Matrix: Solid

Date Received: 01/05/21 12:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			347482	01/07/21 14:09	JSM	TAL SEA
Total/NA	Analysis	NWTPH-Gx		1	347505	01/07/21 22:15	W1T	TAL SEA
Total/NA	Analysis	2540G		1	347471	01/07/21 13:12	NRS	TAL SEA

Client Sample ID: MW-17-2.5

Lab Sample ID: 580-100255-1

Date Collected: 01/04/21 10:00

Matrix: Solid

Date Received: 01/05/21 12:00

Percent Solids: 88.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			347264	01/05/21 15:30	TMH	TAL SEA
Total/NA	Analysis	6010D		1	347320	01/05/21 20:41	TMH	TAL SEA

Client Sample ID: MW-17-2.5

Lab Sample ID: 580-100255-1

Date Collected: 01/04/21 10:00

Matrix: Solid

Date Received: 01/05/21 12:00

Percent Solids: 91.5

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			347904	01/14/21 11:01	ASJ	TAL SEA
Total/NA	Analysis	8260D		1	347920	01/14/21 14:01	ASJ	TAL SEA
Total/NA	Prep	3546			347492	01/07/21 16:05	S1S	TAL SEA
Total/NA	Analysis	8270E SIM		1	347760	01/13/21 09:50	W1T	TAL SEA
Total/NA	Prep	3546			347472	01/07/21 13:21	S1S	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	347768	01/13/21 13:19	JKM	TAL SEA

Client Sample ID: MW-17-5

Lab Sample ID: 580-100255-2

Date Collected: 01/04/21 10:15

Matrix: Solid

Date Received: 01/05/21 12:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			347482	01/07/21 14:09	JSM	TAL SEA
Total/NA	Analysis	NWTPH-Gx		1	347505	01/07/21 22:39	W1T	TAL SEA
Total/NA	Analysis	2540G		1	347471	01/07/21 13:12	NRS	TAL SEA

Client Sample ID: MW-17-5

Lab Sample ID: 580-100255-2

Date Collected: 01/04/21 10:15

Matrix: Solid

Date Received: 01/05/21 12:00

Percent Solids: 85.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			347264	01/05/21 15:30	TMH	TAL SEA
Total/NA	Analysis	6010D		1	347320	01/05/21 20:44	TMH	TAL SEA

Lab Chronicle

Client: Stantec Consulting Corp.
Project/Site: 7-11 No 22866 (WA)

Job ID: 580-100255-1

Client Sample ID: MW-17-5

Date Collected: 01/04/21 10:15

Date Received: 01/05/21 12:00

Lab Sample ID: 580-100255-2

Matrix: Solid

Percent Solids: 85.7

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			347904	01/14/21 11:01	ASJ	TAL SEA
Total/NA	Analysis	8260D		1	347920	01/14/21 14:26	ASJ	TAL SEA
Total/NA	Prep	3546			347492	01/07/21 16:05	S1S	TAL SEA
Total/NA	Analysis	8270E SIM		1	347760	01/13/21 10:38	W1T	TAL SEA
Total/NA	Prep	3546			347472	01/07/21 13:21	S1S	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	347768	01/13/21 11:39	JKM	TAL SEA

Client Sample ID: SB-24-2.5

Date Collected: 01/04/21 12:00

Date Received: 01/05/21 12:00

Lab Sample ID: 580-100255-3

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			347482	01/07/21 14:09	JSM	TAL SEA
Total/NA	Analysis	NWTPH-Gx		1	347505	01/07/21 23:04	W1T	TAL SEA
Total/NA	Analysis	2540G		1	347471	01/07/21 13:12	NRS	TAL SEA

Client Sample ID: SB-24-2.5

Date Collected: 01/04/21 12:00

Date Received: 01/05/21 12:00

Lab Sample ID: 580-100255-3

Matrix: Solid

Percent Solids: 84.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			347904	01/14/21 11:01	ASJ	TAL SEA
Total/NA	Analysis	8260D		1	347920	01/14/21 14:52	ASJ	TAL SEA
Total/NA	Prep	5035	RA		347956	01/14/21 16:51	ASJ	TAL SEA
Total/NA	Analysis	8260D	RA	1	347958	01/15/21 02:18	ASJ	TAL SEA
Total/NA	Prep	3546			347492	01/07/21 16:05	S1S	TAL SEA
Total/NA	Analysis	8270E SIM		1	347876	01/14/21 09:23	JKM	TAL SEA
Total/NA	Prep	3546			347472	01/07/21 13:21	S1S	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	347768	01/13/21 11:59	JKM	TAL SEA

Client Sample ID: SB-24-2.5

Date Collected: 01/04/21 12:00

Date Received: 01/05/21 12:00

Lab Sample ID: 580-100255-3

Matrix: Solid

Percent Solids: 85.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			347264	01/05/21 15:30	TMH	TAL SEA
Total/NA	Analysis	6010D		1	347320	01/05/21 20:48	TMH	TAL SEA

Client Sample ID: SB-24-5

Date Collected: 01/04/21 12:30

Date Received: 01/05/21 12:00

Lab Sample ID: 580-100255-4

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			347482	01/07/21 14:09	JSM	TAL SEA
Total/NA	Analysis	NWTPH-Gx		1	347505	01/07/21 23:28	W1T	TAL SEA
Total/NA	Analysis	2540G		1	347471	01/07/21 13:12	NRS	TAL SEA

Eurofins TestAmerica, Seattle

Lab Chronicle

Client: Stantec Consulting Corp.
Project/Site: 7-11 No 22866 (WA)

Job ID: 580-100255-1

Client Sample ID: SB-24-5

Lab Sample ID: 580-100255-4

Date Collected: 01/04/21 12:30

Matrix: Solid

Date Received: 01/05/21 12:00

Percent Solids: 82.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			347904	01/14/21 11:01	ASJ	TAL SEA
Total/NA	Analysis	8260D		1	347920	01/14/21 15:18	ASJ	TAL SEA
Total/NA	Prep	5035	RA		347956	01/14/21 16:51	ASJ	TAL SEA
Total/NA	Analysis	8260D	RA	1	347958	01/15/21 02:44	ASJ	TAL SEA
Total/NA	Prep	3546			347492	01/07/21 16:05	S1S	TAL SEA
Total/NA	Analysis	8270E SIM		1	347760	01/13/21 12:16	W1T	TAL SEA
Total/NA	Prep	3546			347472	01/07/21 13:21	S1S	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	347768	01/13/21 12:19	JKM	TAL SEA

Client Sample ID: SB-24-5

Lab Sample ID: 580-100255-4

Date Collected: 01/04/21 12:30

Matrix: Solid

Date Received: 01/05/21 12:00

Percent Solids: 83.1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			347264	01/05/21 15:30	TMH	TAL SEA
Total/NA	Analysis	6010D		1	347320	01/05/21 20:51	TMH	TAL SEA

Client Sample ID: MW-16-11

Lab Sample ID: 580-100255-5

Date Collected: 01/05/21 09:30

Matrix: Solid

Date Received: 01/05/21 12:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			347482	01/07/21 14:09	JSM	TAL SEA
Total/NA	Analysis	NWTPH-Gx		1	347505	01/08/21 00:17	W1T	TAL SEA
Total/NA	Analysis	2540G		1	347471	01/07/21 13:12	NRS	TAL SEA

Client Sample ID: MW-16-11

Lab Sample ID: 580-100255-5

Date Collected: 01/05/21 09:30

Matrix: Solid

Date Received: 01/05/21 12:00

Percent Solids: 83.5

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			347904	01/14/21 11:01	ASJ	TAL SEA
Total/NA	Analysis	8260D		1	347920	01/14/21 15:43	ASJ	TAL SEA
Total/NA	Prep	3546			347472	01/07/21 13:21	S1S	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	347768	01/13/21 12:39	JKM	TAL SEA

Client Sample ID: MW-16-15

Lab Sample ID: 580-100255-6

Date Collected: 01/05/21 09:45

Matrix: Solid

Date Received: 01/05/21 12:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			347482	01/07/21 14:09	JSM	TAL SEA
Total/NA	Analysis	NWTPH-Gx		1	347505	01/08/21 00:42	W1T	TAL SEA
Total/NA	Analysis	2540G		1	347471	01/07/21 13:12	NRS	TAL SEA

Eurofins TestAmerica, Seattle

Lab Chronicle

Client: Stantec Consulting Corp.
Project/Site: 7-11 No 22866 (WA)

Job ID: 580-100255-1

Client Sample ID: MW-16-15

Lab Sample ID: 580-100255-6

Date Collected: 01/05/21 09:45

Matrix: Solid

Date Received: 01/05/21 12:00

Percent Solids: 90.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			347904	01/14/21 11:01	ASJ	TAL SEA
Total/NA	Analysis	8260D		1	347920	01/14/21 16:09	ASJ	TAL SEA
Total/NA	Prep	3546			347472	01/07/21 13:21	S1S	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	347768	01/13/21 12:59	JKM	TAL SEA

Laboratory References:

TAL SEA = Eurofins TestAmerica, Seattle, 5755 8th Street East, Tacoma, WA 98424, TEL (253)922-2310

Accreditation/Certification Summary

Client: Stantec Consulting Corp.
Project/Site: 7-11 No 22866 (WA)

Job ID: 580-100255-1

Laboratory: Eurofins TestAmerica, Seattle

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
Washington	State	C553	02-18-21

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
2540G		Solid	Percent Moisture
2540G		Solid	Percent Solids

Sample Summary

Client: Stantec Consulting Corp.
Project/Site: 7-11 No 22866 (WA)

Job ID: 580-100255-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
580-100255-1	MW-17-2.5	Solid	01/04/21 10:00	01/05/21 12:00	
580-100255-2	MW-17-5	Solid	01/04/21 10:15	01/05/21 12:00	
580-100255-3	SB-24-2.5	Solid	01/04/21 12:00	01/05/21 12:00	
580-100255-4	SB-24-5	Solid	01/04/21 12:30	01/05/21 12:00	
580-100255-5	MW-16-11	Solid	01/05/21 09:30	01/05/21 12:00	
580-100255-6	MW-16-15	Solid	01/05/21 09:45	01/05/21 12:00	

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America

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Login Sample Receipt Checklist

Client: Stantec Consulting Corp.

Job Number: 580-100255-1

Login Number: 100255

List Source: Eurofins TestAmerica, Seattle

List Number: 1

Creator: Blankinship, Tom X

Question	Answer	Comment
Radioactivity wasn't checked or is $\leq$ background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

ANALYTICAL REPORT

Eurofins TestAmerica, Seattle
5755 8th Street East
Tacoma, WA 98424
Tel: (253)922-2310

Laboratory Job ID: 580-100361-1
Client Project/Site: 7-11 No 22866 (WA)

For:
Stantec Consulting Corp.
11130 NE 33rd Place
Suite 200
Bellevue, Washington 98004-1465

Attn: Paul Fairbairn



Authorized for release by:
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This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Case Narrative

Client: Stantec Consulting Corp.
Project/Site: 7-11 No 22866 (WA)

Job ID: 580-100361-1

Job ID: 580-100361-1

Laboratory: Eurofins TestAmerica, Seattle

Narrative

Job Narrative 580-100361-1

Comments

No additional comments.

Receipt

The samples were received on 1/8/2021 10:00 AM; the samples arrived in good condition, and where required, properly preserved and on ice. The temperatures of the 3 coolers at receipt time were 1.5° C, 2.3° C and 3.7° C.

Receipt Exceptions

Although the following samples appear on the Chain-of-Custody (COC) no sample containers were submitted. The sampler was notified and it was discovered that these samples were submitted on a previous day MW-16-11 (580-100361-13) and MW-16-15 (580-100361-14).

The methanol container for the following sample was received broken. This sample was taken to the volatiles laboratory to extract into a new methanol container before the hold time expired. : MW-17-15 (580-100361-16).

GC/MS VOA

Method 8260D: Surrogate recovery for the following samples were outside control limits: MW-13-12 (580-100361-6), MW-14-10 (580-100361-9), MW-17-15 (580-100361-16), SB-20-10 (580-100361-18), SB-21-15 (580-100361-21), SB-22-10 (580-100361-23), SB-22-15 (580-100361-24), SB-16-17 (580-100361-30), SB-17-10 (580-100361-31) and SB-17-15 (580-100361-32). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8260D: The following sample was diluted to bring the concentration of target analytes within the calibration range: SB-20-10 (580-100361-18). Elevated reporting limits (RLs) are provided.

Method 8260D: Reanalysis of the following samples were performed outside of the analytical holding time due to high target hits : MW-13-12 (580-100361-6), MW-13-15 (580-100361-7), SB-20-10 (580-100361-18), SB-20-19 (580-100361-19) and SB-21-15 (580-100361-21).

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

GC/MS Semi VOA

Method 8270E SIM: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 580-348005 and analytical batch 580-348131 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

GC VOA

Method NWTPH-Gx: Surrogate recovery for the following sample was outside control limits: MW-17-12 (580-100361-15), SB-24-8 (580-100361-27). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method NWTPH-Gx: The continuing calibration verification (CCV) associated with batch 580-347759 recovered above the upper control limit for Gasoline Range Organics - NWTPH-G. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The associated samples are impacted: MW-13-20 (580-100361-8), MW-14-10 (580-100361-9), MW-14-15 (580-100361-10), MW-15-10 (580-100361-11), MW-15-15 (580-100361-12) and (CCV 580-347759/25).

Method NWTPH-Gx: The following sample was analyzed at reduced volume due to high concentrations of target analytes: SB-20-10 (580-100361-18). The calculation was performed using an initial volume adjustment rather than a dilution factor. The reporting limits have been elevated by the appropriate factor.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Case Narrative

Client: Stantec Consulting Corp.
Project/Site: 7-11 No 22866 (WA)

Job ID: 580-100361-1

Job ID: 580-100361-1 (Continued)

Laboratory: Eurofins TestAmerica, Seattle (Continued)

GC Semi VOA

Method NWTPH-Dx: The following samples contained a hydrocarbon pattern in the diesel range; however, the elution pattern earlier than the typical diesel fuel pattern used by the laboratory for quantitative purposes: MW-13-12 (580-100361-6), SB-20-5 (580-100361-17) and SB-20-10 (580-100361-18).

Method NWTPH-Dx: The (CCVRT 580-348143/3) recovered slightly high biased for surrogate, o-Terphenyl. Since the recovery % was within control limits, therefore, data have been reported.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Metals

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

General Chemistry

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Organic Prep

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

VOA Prep

Method 5035: The following samples were provided to the laboratory with a significantly different initial weight than that required by the reference method: MW-11-10 (580-100361-1), MW-11-18 (580-100361-3), MW-12-10 (580-100361-4), MW-12-15 (580-100361-5), MW-13-12 (580-100361-6), MW-13-15 (580-100361-7), MW-13-20 (580-100361-8), MW-14-10 (580-100361-9), MW-15-10 (580-100361-11), MW-15-15 (580-100361-12), MW-17-12 (580-100361-15), MW-17-15 (580-100361-16), SB-20-5 (580-100361-17), SB-20-10 (580-100361-18), SB-20-19 (580-100361-19) and SB-21-10 (580-100361-20). Deviations in the weight by more than 20% may affect reporting limits and potentially method performance. The method specifies 10g. The amount provided was above this range.

Method 5035: The following sample was provided to the laboratory with a significantly different initial weight than that required by the reference method: MW-14-15 (580-100361-10). Deviations in the weight by more than 20% may affect reporting limits and potentially method performance. The method specifies 10g. The amount provided was below this range.

Method 5035: The following samples were provided to the laboratory with a significantly different initial weight than that required by the reference method: SB-21-15 (580-100361-21), SB-21-18 (580-100361-22), SB-22-10 (580-100361-23), SB-22-15 (580-100361-24), SB-23-10 (580-100361-25), SB-23-15 (580-100361-26), SB-24-8 (580-100361-27), SB-24-15 (580-100361-28), SB-16-10 (580-100361-29), SB-16-17 (580-100361-30), SB-17-10 (580-100361-31), SB-18-10 (580-100361-33), SB-18-15 (580-100361-34) and SB-19-10 (580-100361-35). Deviations in the weight by more than 20% may affect reporting limits and potentially method performance. The method specifies 10g. The amount provided was above this range.

Method 5035: The following samples were provided to the laboratory with a significantly different initial weight than that required by the reference method: MW-11-10 (580-100361-1), MW-11-18 (580-100361-3), MW-12-10 (580-100361-4), MW-12-15 (580-100361-5), MW-13-15 (580-100361-7), MW-13-20 (580-100361-8), MW-14-10 (580-100361-9), MW-14-15 (580-100361-10), MW-15-10 (580-100361-11), MW-17-12 (580-100361-15) and MW-17-15 (580-100361-16). Deviations in the weight by more than 20% may affect reporting limits and potentially method performance. The method specifies 5g. The amount provided was above this range.

Method 5035: The following samples were provided to the laboratory with a significantly different initial weight than that required by the reference method: SB-20-10 (580-100361-18), SB-20-19 (580-100361-19), SB-21-10 (580-100361-20), SB-21-15 (580-100361-21), SB-21-18 (580-100361-22), SB-22-10 (580-100361-23), SB-23-10 (580-100361-25), SB-24-8 (580-100361-27), SB-24-15 (580-100361-28), SB-16-10 (580-100361-29), SB-16-17 (580-100361-30), SB-17-10 (580-100361-31), SB-17-15 (580-100361-32), SB-18-10 (580-100361-33), SB-18-15 (580-100361-34) and SB-19-10 (580-100361-35). Deviations in the weight by more than 20% may affect reporting limits and potentially method performance. The method specifies 5g. The amount provided was above this range.

Method 5035: The following sample was provided to the laboratory with a significantly different initial weight than that required by the reference method: SB-22-15 (580-100361-24). Deviations in the weight by more than 20% may affect reporting limits and potentially method performance. The method specifies 5g. The amount provided was below this range.

Case Narrative

Client: Stantec Consulting Corp.
Project/Site: 7-11 No 22866 (WA)

Job ID: 580-100361-1

Job ID: 580-100361-1 (Continued)

Laboratory: Eurofins TestAmerica, Seattle (Continued)

Method 5035: The following samples were provided to the laboratory with a significantly different initial weight than that required by the reference method: MW-11-10 (580-100361-1), MW-11-18 (580-100361-3), MW-12-10 (580-100361-4), MW-12-15 (580-100361-5), MW-13-15 (580-100361-7), MW-13-20 (580-100361-8), MW-14-10 (580-100361-9), MW-14-15 (580-100361-10), MW-15-10 (580-100361-11), MW-17-12 (580-100361-15) and MW-17-15 (580-100361-16). Deviations in the weight by more than 20% may affect reporting limits and potentially method performance. The method specifies 5g. The amount provided was above this range.

Method 5035: The following sample was provided to the laboratory with a significantly different initial weight than that required by the reference method: MW-15-15 (580-100361-12). Deviations in the weight by more than 20% may affect reporting limits and potentially method performance. The method specifies 5g. The amount provided was below this range.

Method 5035: The following samples were provided to the laboratory with a significantly different initial weight than that required by the reference method: MW-11-18 (580-100361-3), MW-12-10 (580-100361-4), MW-13-12 (580-100361-6), MW-13-15 (580-100361-7), MW-13-20 (580-100361-8), MW-14-10 (580-100361-9), MW-14-15 (580-100361-10), MW-15-10 (580-100361-11), MW-17-12 (580-100361-15), MW-17-15 (580-100361-16), SB-20-5 (580-100361-17), SB-20-10 (580-100361-18), SB-20-19 (580-100361-19), SB-21-10 (580-100361-20), SB-24-8 (580-100361-27) and SB-24-15 (580-100361-28). Deviations in the weight by more than 20% may affect reporting limits and potentially method performance. The method specifies 5g. The amount provided was above this range.

Method 5035: The following samples were provided to the laboratory with a significantly different initial weight than that required by the reference method: SB-21-18 (580-100361-22), SB-22-10 (580-100361-23), SB-22-15 (580-100361-24), SB-23-10 (580-100361-25), SB-16-10 (580-100361-29), SB-16-17 (580-100361-30) and SB-17-15 (580-100361-32). Deviations in the weight by more than 20% may affect reporting limits and potentially method performance. The method specifies 5g. The amount provided was above this range.

Method 5035: The following samples were provided to the laboratory with a significantly different initial weight than that required by the reference method: MW-13-15 (580-100361-7), SB-20-10 (580-100361-18), SB-20-19 (580-100361-19) and SB-21-15 (580-100361-21). Deviations in the weight by more than 20% may affect reporting limits and potentially method performance. The method specifies 10g. The amount provided was above this range.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Definitions/Glossary

Client: Stantec Consulting Corp.
Project/Site: 7-11 No 22866 (WA)

Job ID: 580-100361-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
H	Sample was prepped or analyzed beyond the specified holding time
S1-	Surrogate recovery exceeds control limits, low biased.
S1+	Surrogate recovery exceeds control limits, high biased.

GC/MS Semi VOA

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.

GC VOA

Qualifier	Qualifier Description
S1+	Surrogate recovery exceeds control limits, high biased.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
□	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Client Sample Results

Client: Stantec Consulting Corp.
Project/Site: 7-11 No 22866 (WA)

Job ID: 580-100361-1

Client Sample ID: MW-11-10

Lab Sample ID: 580-100361-1

Date Collected: 01/07/21 09:20

Matrix: Solid

Date Received: 01/08/21 10:00

Percent Solids: 85.1

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.00442		0.00239		mg/Kg	☼	01/19/21 17:13	01/19/21 23:24	1
1,2-Dibromoethane	<0.00120		0.00120		mg/Kg	☼	01/19/21 17:13	01/19/21 23:24	1
1,2-Dichloroethane	<0.00120		0.00120		mg/Kg	☼	01/19/21 17:13	01/19/21 23:24	1
Ethylbenzene	0.00310		0.00239		mg/Kg	☼	01/19/21 17:13	01/19/21 23:24	1
Methyl tert-butyl ether	<0.00239		0.00239		mg/Kg	☼	01/19/21 17:13	01/19/21 23:24	1
Toluene	<0.0120		0.0120		mg/Kg	☼	01/19/21 17:13	01/19/21 23:24	1
Xylenes, Total	<0.0120		0.0120		mg/Kg	☼	01/19/21 17:13	01/19/21 23:24	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	108		80 - 120	01/19/21 17:13	01/19/21 23:24	1
Dibromofluoromethane (Surr)	102		80 - 120	01/19/21 17:13	01/19/21 23:24	1
1,2-Dichloroethane-d4 (Surr)	115		80 - 121	01/19/21 17:13	01/19/21 23:24	1
Toluene-d8 (Surr)	103		80 - 120	01/19/21 17:13	01/19/21 23:24	1

Method: 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	0.641		0.00579		mg/Kg	☼	01/15/21 12:30	01/19/21 16:00	1
2-Methylnaphthalene	1.49	F1	0.00579		mg/Kg	☼	01/15/21 12:30	01/19/21 16:00	1
Naphthalene	1.25		0.00579		mg/Kg	☼	01/15/21 12:30	01/19/21 16:00	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Terphenyl-d14	93		42 - 130	01/15/21 12:30	01/19/21 16:00	1

Method: NWTPH-Gx - Northwest - Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics - NWTPH-G	30.3		3.91		mg/Kg		01/12/21 20:23	01/12/21 22:31	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	102		50 - 150	01/12/21 20:23	01/12/21 22:31	1
Trifluorotoluene (Surr)				01/12/21 20:23	01/12/21 22:31	1

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (C10-C24)	<54.8		54.8		mg/Kg	☼	01/13/21 12:41	01/16/21 06:33	1
Motor Oil (C24-C44)	<54.8		54.8		mg/Kg	☼	01/13/21 12:41	01/16/21 06:33	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-Terphenyl	70		50 - 150	01/13/21 12:41	01/16/21 06:33	1

Method: 6010D - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	6.78		0.927		mg/Kg	☼	01/14/21 15:53	01/15/21 18:14	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	85.1		0.1		%			01/13/21 17:43	1
Percent Moisture	14.9		0.1		%			01/13/21 17:43	1

Eurofins TestAmerica, Seattle

Client Sample Results

Client: Stantec Consulting Corp.
Project/Site: 7-11 No 22866 (WA)

Job ID: 580-100361-1

Client Sample ID: MW-11-15

Lab Sample ID: 580-100361-2

Date Collected: 01/07/21 09:30

Matrix: Solid

Date Received: 01/08/21 10:00

Percent Solids: 90.2

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.00671		0.00193		mg/Kg	☼	01/19/21 17:13	01/19/21 23:50	1
Ethylbenzene	0.00355		0.00193		mg/Kg	☼	01/19/21 17:13	01/19/21 23:50	1
Toluene	<0.00967		0.00967		mg/Kg	☼	01/19/21 17:13	01/19/21 23:50	1
Xylenes, Total	<0.00967		0.00967		mg/Kg	☼	01/19/21 17:13	01/19/21 23:50	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	95		80 - 120	01/19/21 17:13	01/19/21 23:50	1
Dibromofluoromethane (Surr)	99		80 - 120	01/19/21 17:13	01/19/21 23:50	1
1,2-Dichloroethane-d4 (Surr)	121		80 - 121	01/19/21 17:13	01/19/21 23:50	1
Toluene-d8 (Surr)	97		80 - 120	01/19/21 17:13	01/19/21 23:50	1

Method: NWTPH-Gx - Northwest - Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics - NWTPH-G	<4.83		4.83		mg/Kg		01/12/21 20:23	01/12/21 22:56	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	93		50 - 150	01/12/21 20:23	01/12/21 22:56	1
Trifluorotoluene (Surr)				01/12/21 20:23	01/12/21 22:56	1

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (C10-C24)	<51.3		51.3		mg/Kg	☼	01/13/21 12:41	01/16/21 06:52	1
Motor Oil (C24-C44)	<51.3		51.3		mg/Kg	☼	01/13/21 12:41	01/16/21 06:52	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-Terphenyl	72		50 - 150	01/13/21 12:41	01/16/21 06:52	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	90.2		0.1		%			01/13/21 17:43	1
Percent Moisture	9.8		0.1		%			01/13/21 17:43	1

Client Sample Results

Client: Stantec Consulting Corp.
Project/Site: 7-11 No 22866 (WA)

Job ID: 580-100361-1

Client Sample ID: MW-11-18

Lab Sample ID: 580-100361-3

Date Collected: 01/07/21 09:40

Matrix: Solid

Date Received: 01/08/21 10:00

Percent Solids: 86.6

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.00395		0.00128		mg/Kg	☼	01/19/21 17:13	01/20/21 00:15	1
Ethylbenzene	<0.00128		0.00128		mg/Kg	☼	01/19/21 17:13	01/20/21 00:15	1
Toluene	<0.00638		0.00638		mg/Kg	☼	01/19/21 17:13	01/20/21 00:15	1
Xylenes, Total	<0.00638		0.00638		mg/Kg	☼	01/19/21 17:13	01/20/21 00:15	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	97		80 - 120				01/19/21 17:13	01/20/21 00:15	1
Dibromofluoromethane (Surr)	101		80 - 120				01/19/21 17:13	01/20/21 00:15	1
1,2-Dichloroethane-d4 (Surr)	121		80 - 121				01/19/21 17:13	01/20/21 00:15	1
Toluene-d8 (Surr)	100		80 - 120				01/19/21 17:13	01/20/21 00:15	1

Method: NWTPH-Gx - Northwest - Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics - NWTPH-G	<3.42		3.42		mg/Kg		01/12/21 20:23	01/12/21 23:20	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	92		50 - 150				01/12/21 20:23	01/12/21 23:20	1
Trifluorotoluene (Surr)							01/12/21 20:23	01/12/21 23:20	1

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (C10-C24)	<57.5		57.5		mg/Kg	☼	01/13/21 12:41	01/16/21 07:31	1
Motor Oil (C24-C44)	<57.5		57.5		mg/Kg	☼	01/13/21 12:41	01/16/21 07:31	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl	70		50 - 150				01/13/21 12:41	01/16/21 07:31	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	86.6		0.1		%			01/13/21 17:43	1
Percent Moisture	13.4		0.1		%			01/13/21 17:43	1

Client Sample Results

Client: Stantec Consulting Corp.
Project/Site: 7-11 No 22866 (WA)

Job ID: 580-100361-1

Client Sample ID: MW-12-10

Lab Sample ID: 580-100361-4

Date Collected: 01/07/21 11:30

Matrix: Solid

Date Received: 01/08/21 10:00

Percent Solids: 85.9

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00170		0.00170		mg/Kg	☼	01/19/21 17:13	01/20/21 00:41	1
Ethylbenzene	<0.00170		0.00170		mg/Kg	☼	01/19/21 17:13	01/20/21 00:41	1
Toluene	<0.00852		0.00852		mg/Kg	☼	01/19/21 17:13	01/20/21 00:41	1
Xylenes, Total	<0.00852		0.00852		mg/Kg	☼	01/19/21 17:13	01/20/21 00:41	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	102		80 - 120	01/19/21 17:13	01/20/21 00:41	1
Dibromofluoromethane (Surr)	98		80 - 120	01/19/21 17:13	01/20/21 00:41	1
1,2-Dichloroethane-d4 (Surr)	109		80 - 121	01/19/21 17:13	01/20/21 00:41	1
Toluene-d8 (Surr)	96		80 - 120	01/19/21 17:13	01/20/21 00:41	1

Method: NWTPH-Gx - Northwest - Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics - NWTPH-G	<3.50		3.50		mg/Kg		01/12/21 20:23	01/12/21 23:45	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	85		50 - 150	01/12/21 20:23	01/12/21 23:45	1
Trifluorotoluene (Surr)				01/12/21 20:23	01/12/21 23:45	1

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (C10-C24)	<55.3		55.3		mg/Kg	☼	01/13/21 12:41	01/16/21 07:51	1
Motor Oil (C24-C44)	<55.3		55.3		mg/Kg	☼	01/13/21 12:41	01/16/21 07:51	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-Terphenyl	70		50 - 150	01/13/21 12:41	01/16/21 07:51	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	85.9		0.1		%			01/13/21 17:43	1
Percent Moisture	14.1		0.1		%			01/13/21 17:43	1

Client Sample Results

Client: Stantec Consulting Corp.
Project/Site: 7-11 No 22866 (WA)

Job ID: 580-100361-1

Client Sample ID: MW-12-15

Lab Sample ID: 580-100361-5

Date Collected: 01/07/21 11:40

Matrix: Solid

Date Received: 01/08/21 10:00

Percent Solids: 87.2

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00194		0.00194		mg/Kg	☼	01/19/21 17:13	01/20/21 01:07	1
Ethylbenzene	<0.00194		0.00194		mg/Kg	☼	01/19/21 17:13	01/20/21 01:07	1
Toluene	<0.00968		0.00968		mg/Kg	☼	01/19/21 17:13	01/20/21 01:07	1
Xylenes, Total	<0.00968		0.00968		mg/Kg	☼	01/19/21 17:13	01/20/21 01:07	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	94		80 - 120	01/19/21 17:13	01/20/21 01:07	1
Dibromofluoromethane (Surr)	107		80 - 120	01/19/21 17:13	01/20/21 01:07	1
1,2-Dichloroethane-d4 (Surr)	119		80 - 121	01/19/21 17:13	01/20/21 01:07	1
Toluene-d8 (Surr)	92		80 - 120	01/19/21 17:13	01/20/21 01:07	1

Method: NWTPH-Gx - Northwest - Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics - NWTPH-G	<3.27		3.27		mg/Kg		01/12/21 20:23	01/13/21 00:09	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	93		50 - 150	01/12/21 20:23	01/13/21 00:09	1
Trifluorotoluene (Surr)				01/12/21 20:23	01/13/21 00:09	1

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (C10-C24)	<56.3		56.3		mg/Kg	☼	01/13/21 12:41	01/16/21 08:10	1
Motor Oil (C24-C44)	<56.3		56.3		mg/Kg	☼	01/13/21 12:41	01/16/21 08:10	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-Terphenyl	66		50 - 150	01/13/21 12:41	01/16/21 08:10	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	87.2		0.1		%			01/13/21 17:43	1
Percent Moisture	12.8		0.1		%			01/13/21 17:43	1

Client Sample Results

Client: Stantec Consulting Corp.
Project/Site: 7-11 No 22866 (WA)

Job ID: 580-100361-1

Client Sample ID: MW-13-12

Lab Sample ID: 580-100361-6

Date Collected: 01/06/21 14:30

Matrix: Solid

Date Received: 01/08/21 10:00

Percent Solids: 87.2

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00137		0.00137		mg/Kg	✱	01/19/21 17:13	01/20/21 01:32	1
1,2-Dibromoethane	<0.000686		0.000686		mg/Kg	✱	01/19/21 17:13	01/20/21 01:32	1
1,2-Dichloroethane	<0.000686		0.000686		mg/Kg	✱	01/19/21 17:13	01/20/21 01:32	1
Methyl tert-butyl ether	<0.00137		0.00137		mg/Kg	✱	01/19/21 17:13	01/20/21 01:32	1
Toluene	<0.00686		0.00686		mg/Kg	✱	01/19/21 17:13	01/20/21 01:32	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	124	S1+	80 - 120	01/19/21 17:13	01/20/21 01:32	1
Dibromofluoromethane (Surr)	95		80 - 120	01/19/21 17:13	01/20/21 01:32	1
1,2-Dichloroethane-d4 (Surr)	119		80 - 121	01/19/21 17:13	01/20/21 01:32	1
Toluene-d8 (Surr)	641	S1+	80 - 120	01/19/21 17:13	01/20/21 01:32	1

Method: 8260D - Volatile Organic Compounds by GC/MS - RA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylbenzene	1.28	H	0.0469		mg/Kg	✱	01/21/21 12:43	01/21/21 18:17	1
Xylenes, Total	1.88	H	0.234		mg/Kg	✱	01/21/21 12:43	01/21/21 18:17	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	100		80 - 120	01/21/21 12:43	01/21/21 18:17	1
Dibromofluoromethane (Surr)	96		80 - 120	01/21/21 12:43	01/21/21 18:17	1
1,2-Dichloroethane-d4 (Surr)	100		80 - 121	01/21/21 12:43	01/21/21 18:17	1
Toluene-d8 (Surr)	103		80 - 120	01/21/21 12:43	01/21/21 18:17	1

Method: 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	0.420		0.00572		mg/Kg	✱	01/15/21 12:30	01/19/21 17:07	1
2-Methylnaphthalene	0.903		0.00572		mg/Kg	✱	01/15/21 12:30	01/19/21 17:07	1
Naphthalene	0.615		0.00572		mg/Kg	✱	01/15/21 12:30	01/19/21 17:07	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Terphenyl-d14	80		42 - 130	01/15/21 12:30	01/19/21 17:07	1

Method: NWTPH-Gx - Northwest - Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics - NWTPH-G	19.6		4.47		mg/Kg	-	01/12/21 20:23	01/13/21 00:33	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	98		50 - 150	01/12/21 20:23	01/13/21 00:33	1
Trifluorotoluene (Surr)				01/12/21 20:23	01/13/21 00:33	1

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (C10-C24)	164		56.1		mg/Kg	✱	01/13/21 12:41	01/16/21 08:30	1
Motor Oil (C24-C44)	<56.1		56.1		mg/Kg	✱	01/13/21 12:41	01/16/21 08:30	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-Terphenyl	76		50 - 150	01/13/21 12:41	01/16/21 08:30	1

Method: 6010D - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	4.81		1.20		mg/Kg	✱	01/14/21 15:53	01/15/21 18:17	1

Eurofins TestAmerica, Seattle

Client Sample Results

Client: Stantec Consulting Corp.
Project/Site: 7-11 No 22866 (WA)

Job ID: 580-100361-1

Client Sample ID: MW-13-12

Lab Sample ID: 580-100361-6

Date Collected: 01/06/21 14:30

Matrix: Solid

Date Received: 01/08/21 10:00

Percent Solids: 87.2

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	87.2		0.1		%			01/13/21 17:43	1
Percent Moisture	12.8		0.1		%			01/13/21 17:43	1

Client Sample Results

Client: Stantec Consulting Corp.
Project/Site: 7-11 No 22866 (WA)

Job ID: 580-100361-1

Client Sample ID: MW-13-15

Lab Sample ID: 580-100361-7

Date Collected: 01/06/21 14:35

Matrix: Solid

Date Received: 01/08/21 10:00

Percent Solids: 88.8

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.00358		0.00175		mg/Kg	☼	01/19/21 17:13	01/20/21 01:58	1
1,2-Dibromoethane	<0.000876		0.000876		mg/Kg	☼	01/19/21 17:13	01/20/21 01:58	1
1,2-Dichloroethane	<0.000876		0.000876		mg/Kg	☼	01/19/21 17:13	01/20/21 01:58	1
Ethylbenzene	1.96	H	0.0364		mg/Kg	☼	01/21/21 12:43	01/21/21 15:46	1
Methyl tert-butyl ether	<0.00175		0.00175		mg/Kg	☼	01/19/21 17:13	01/20/21 01:58	1
Toluene	<0.00876		0.00876		mg/Kg	☼	01/19/21 17:13	01/20/21 01:58	1
Xylenes, Total	0.0804		0.00876		mg/Kg	☼	01/19/21 17:13	01/20/21 01:58	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	108		80 - 120	01/19/21 17:13	01/20/21 01:58	1
4-Bromofluorobenzene (Surr)	102		80 - 120	01/21/21 12:43	01/21/21 15:46	1
Dibromofluoromethane (Surr)	95		80 - 120	01/19/21 17:13	01/20/21 01:58	1
Dibromofluoromethane (Surr)	96		80 - 120	01/21/21 12:43	01/21/21 15:46	1
1,2-Dichloroethane-d4 (Surr)	112		80 - 121	01/19/21 17:13	01/20/21 01:58	1
1,2-Dichloroethane-d4 (Surr)	99		80 - 121	01/21/21 12:43	01/21/21 15:46	1
Toluene-d8 (Surr)	101		80 - 120	01/19/21 17:13	01/20/21 01:58	1
Toluene-d8 (Surr)	102		80 - 120	01/21/21 12:43	01/21/21 15:46	1

Method: 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	0.0616		0.00548		mg/Kg	☼	01/15/21 12:30	01/19/21 17:30	1
2-Methylnaphthalene	0.114		0.00548		mg/Kg	☼	01/15/21 12:30	01/19/21 17:30	1
Naphthalene	0.428		0.00548		mg/Kg	☼	01/15/21 12:30	01/19/21 17:30	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Terphenyl-d14	75		42 - 130				01/15/21 12:30	01/19/21 17:30	1

Method: NWTPH-Gx - Northwest - Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics - NWTPH-G	11.4		3.48		mg/Kg		01/12/21 20:23	01/19/21 10:23	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	88		50 - 150				01/12/21 20:23	01/19/21 10:23	1

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (C10-C24)	<51.7		51.7		mg/Kg	☼	01/13/21 12:41	01/16/21 08:50	1
Motor Oil (C24-C44)	<51.7		51.7		mg/Kg	☼	01/13/21 12:41	01/16/21 08:50	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl	69		50 - 150				01/13/21 12:41	01/16/21 08:50	1

Method: 6010D - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	2.90		1.05		mg/Kg	☼	01/14/21 15:53	01/15/21 18:20	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	88.8		0.1		%			01/13/21 17:43	1
Percent Moisture	11.2		0.1		%			01/13/21 17:43	1

Eurofins TestAmerica, Seattle

Client Sample Results

Client: Stantec Consulting Corp.
Project/Site: 7-11 No 22866 (WA)

Job ID: 580-100361-1

Client Sample ID: MW-13-20

Lab Sample ID: 580-100361-8

Date Collected: 01/06/21 14:40

Matrix: Solid

Date Received: 01/08/21 10:00

Percent Solids: 87.9

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00146		0.00146		mg/Kg	☼	01/19/21 17:13	01/20/21 02:24	1
Ethylbenzene	0.0119		0.00146		mg/Kg	☼	01/19/21 17:13	01/20/21 02:24	1
Toluene	<0.00731		0.00731		mg/Kg	☼	01/19/21 17:13	01/20/21 02:24	1
Xylenes, Total	0.0184		0.00731		mg/Kg	☼	01/19/21 17:13	01/20/21 02:24	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	104		80 - 120	01/19/21 17:13	01/20/21 02:24	1
Dibromofluoromethane (Surr)	98		80 - 120	01/19/21 17:13	01/20/21 02:24	1
1,2-Dichloroethane-d4 (Surr)	115		80 - 121	01/19/21 17:13	01/20/21 02:24	1
Toluene-d8 (Surr)	103		80 - 120	01/19/21 17:13	01/20/21 02:24	1

Method: NWTPH-Gx - Northwest - Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics - NWTPH-G	<3.38		3.38		mg/Kg		01/12/21 20:23	01/13/21 01:47	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	88		50 - 150	01/12/21 20:23	01/13/21 01:47	1
Trifluorotoluene (Surr)				01/12/21 20:23	01/13/21 01:47	1

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (C10-C24)	<52.0		52.0		mg/Kg	☼	01/13/21 12:41	01/16/21 09:48	1
Motor Oil (C24-C44)	<52.0		52.0		mg/Kg	☼	01/13/21 12:41	01/16/21 09:48	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-Terphenyl	71		50 - 150	01/13/21 12:41	01/16/21 09:48	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	87.9		0.1		%			01/13/21 17:43	1
Percent Moisture	12.1		0.1		%			01/13/21 17:43	1

Client Sample Results

Client: Stantec Consulting Corp.
Project/Site: 7-11 No 22866 (WA)

Job ID: 580-100361-1

Client Sample ID: MW-14-10

Lab Sample ID: 580-100361-9

Date Collected: 01/06/21 12:30

Matrix: Solid

Date Received: 01/08/21 10:00

Percent Solids: 86.9

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00151		0.00151		mg/Kg	☼	01/19/21 17:13	01/20/21 02:49	1
Ethylbenzene	<0.00151		0.00151		mg/Kg	☼	01/19/21 17:13	01/20/21 02:49	1
Toluene	<0.00755		0.00755		mg/Kg	☼	01/19/21 17:13	01/20/21 02:49	1
Xylenes, Total	<0.00755		0.00755		mg/Kg	☼	01/19/21 17:13	01/20/21 02:49	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	94		80 - 120				01/19/21 17:13	01/20/21 02:49	1
Dibromofluoromethane (Surr)	112		80 - 120				01/19/21 17:13	01/20/21 02:49	1
1,2-Dichloroethane-d4 (Surr)	128	S1+	80 - 121				01/19/21 17:13	01/20/21 02:49	1
Toluene-d8 (Surr)	94		80 - 120				01/19/21 17:13	01/20/21 02:49	1

Method: NWTPH-Gx - Northwest - Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics - NWTPH-G	<3.60		3.60		mg/Kg		01/12/21 20:23	01/13/21 02:12	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	92		50 - 150				01/12/21 20:23	01/13/21 02:12	1
Trifluorotoluene (Surr)							01/12/21 20:23	01/13/21 02:12	1

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (C10-C24)	<55.4		55.4		mg/Kg	☼	01/13/21 12:41	01/16/21 10:08	1
Motor Oil (C24-C44)	<55.4		55.4		mg/Kg	☼	01/13/21 12:41	01/16/21 10:08	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl	70		50 - 150				01/13/21 12:41	01/16/21 10:08	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	86.9		0.1		%			01/13/21 17:43	1
Percent Moisture	13.1		0.1		%			01/13/21 17:43	1

Client Sample Results

Client: Stantec Consulting Corp.
Project/Site: 7-11 No 22866 (WA)

Job ID: 580-100361-1

Client Sample ID: MW-14-15

Lab Sample ID: 580-100361-10

Date Collected: 01/06/21 12:40

Matrix: Solid

Date Received: 01/08/21 10:00

Percent Solids: 90.5

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00179		0.00179		mg/Kg	☼	01/19/21 17:13	01/20/21 03:15	1
Ethylbenzene	<0.00179		0.00179		mg/Kg	☼	01/19/21 17:13	01/20/21 03:15	1
Toluene	<0.00893		0.00893		mg/Kg	☼	01/19/21 17:13	01/20/21 03:15	1
Xylenes, Total	<0.00893		0.00893		mg/Kg	☼	01/19/21 17:13	01/20/21 03:15	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	97		80 - 120				01/19/21 17:13	01/20/21 03:15	1
Dibromofluoromethane (Surr)	98		80 - 120				01/19/21 17:13	01/20/21 03:15	1
1,2-Dichloroethane-d4 (Surr)	113		80 - 121				01/19/21 17:13	01/20/21 03:15	1
Toluene-d8 (Surr)	96		80 - 120				01/19/21 17:13	01/20/21 03:15	1

Method: NWTPH-Gx - Northwest - Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics - NWTPH-G	<8.41		8.41		mg/Kg		01/12/21 20:23	01/13/21 02:36	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	91		50 - 150				01/12/21 20:23	01/13/21 02:36	1
Trifluorotoluene (Surr)							01/12/21 20:23	01/13/21 02:36	1

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (C10-C24)	<52.8		52.8		mg/Kg	☼	01/13/21 12:41	01/16/21 10:28	1
Motor Oil (C24-C44)	<52.8		52.8		mg/Kg	☼	01/13/21 12:41	01/16/21 10:28	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl	70		50 - 150				01/13/21 12:41	01/16/21 10:28	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	90.5		0.1		%			01/13/21 17:43	1
Percent Moisture	9.5		0.1		%			01/13/21 17:43	1

Client Sample Results

Client: Stantec Consulting Corp.
Project/Site: 7-11 No 22866 (WA)

Job ID: 580-100361-1

Client Sample ID: MW-15-10

Lab Sample ID: 580-100361-11

Date Collected: 01/05/21 15:30

Matrix: Solid

Date Received: 01/08/21 10:00

Percent Solids: 85.5

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00165		0.00165		mg/Kg	☼	01/19/21 17:13	01/19/21 20:24	1
Ethylbenzene	<0.00165		0.00165		mg/Kg	☼	01/19/21 17:13	01/19/21 20:24	1
Toluene	<0.00823		0.00823		mg/Kg	☼	01/19/21 17:13	01/19/21 20:24	1
Xylenes, Total	<0.00823		0.00823		mg/Kg	☼	01/19/21 17:13	01/19/21 20:24	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	110		80 - 120				01/19/21 17:13	01/19/21 20:24	1
Dibromofluoromethane (Surr)	106		80 - 120				01/19/21 17:13	01/19/21 20:24	1
1,2-Dichloroethane-d4 (Surr)	119		80 - 121				01/19/21 17:13	01/19/21 20:24	1
Toluene-d8 (Surr)	99		80 - 120				01/19/21 17:13	01/19/21 20:24	1

Method: NWTPH-Gx - Northwest - Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics - NWTPH-G	<3.70		3.70		mg/Kg		01/12/21 20:23	01/13/21 03:00	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	94		50 - 150				01/12/21 20:23	01/13/21 03:00	1
Trifluorotoluene (Surr)							01/12/21 20:23	01/13/21 03:00	1

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (C10-C24)	<57.3		57.3		mg/Kg	☼	01/13/21 12:41	01/16/21 11:07	1
Motor Oil (C24-C44)	<57.3		57.3		mg/Kg	☼	01/13/21 12:41	01/16/21 11:07	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl	64		50 - 150				01/13/21 12:41	01/16/21 11:07	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	85.5		0.1		%			01/13/21 17:43	1
Percent Moisture	14.5		0.1		%			01/13/21 17:43	1

Client Sample Results

Client: Stantec Consulting Corp.
Project/Site: 7-11 No 22866 (WA)

Job ID: 580-100361-1

Client Sample ID: MW-15-15

Lab Sample ID: 580-100361-12

Date Collected: 01/05/21 15:40

Matrix: Solid

Date Received: 01/08/21 10:00

Percent Solids: 92.2

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00305		0.00305		mg/Kg	☼	01/19/21 17:13	01/19/21 20:50	1
Ethylbenzene	<0.00305		0.00305		mg/Kg	☼	01/19/21 17:13	01/19/21 20:50	1
Toluene	<0.0152		0.0152		mg/Kg	☼	01/19/21 17:13	01/19/21 20:50	1
Xylenes, Total	<0.0152		0.0152		mg/Kg	☼	01/19/21 17:13	01/19/21 20:50	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	112		80 - 120	01/19/21 17:13	01/19/21 20:50	1
Dibromofluoromethane (Surr)	101		80 - 120	01/19/21 17:13	01/19/21 20:50	1
1,2-Dichloroethane-d4 (Surr)	117		80 - 121	01/19/21 17:13	01/19/21 20:50	1
Toluene-d8 (Surr)	96		80 - 120	01/19/21 17:13	01/19/21 20:50	1

Method: NWTPH-Gx - Northwest - Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics - NWTPH-G	<4.09		4.09		mg/Kg		01/12/21 20:23	01/13/21 03:25	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	85		50 - 150	01/12/21 20:23	01/13/21 03:25	1
Trifluorotoluene (Surr)				01/12/21 20:23	01/13/21 03:25	1

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (C10-C24)	<51.5		51.5		mg/Kg	☼	01/13/21 12:41	01/16/21 11:27	1
Motor Oil (C24-C44)	<51.5		51.5		mg/Kg	☼	01/13/21 12:41	01/16/21 11:27	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-Terphenyl	64		50 - 150	01/13/21 12:41	01/16/21 11:27	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	92.2		0.1		%			01/13/21 17:43	1
Percent Moisture	7.8		0.1		%			01/13/21 17:43	1

Client Sample Results

Client: Stantec Consulting Corp.
Project/Site: 7-11 No 22866 (WA)

Job ID: 580-100361-1

Client Sample ID: MW-17-12

Lab Sample ID: 580-100361-15

Date Collected: 01/05/21 12:15

Matrix: Solid

Date Received: 01/08/21 10:00

Percent Solids: 86.4

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00155		0.00155		mg/Kg	✱	01/19/21 17:13	01/19/21 21:15	1
Ethylbenzene	<0.00155		0.00155		mg/Kg	✱	01/19/21 17:13	01/19/21 21:15	1
Toluene	<0.00776		0.00776		mg/Kg	✱	01/19/21 17:13	01/19/21 21:15	1
Xylenes, Total	<0.00776		0.00776		mg/Kg	✱	01/19/21 17:13	01/19/21 21:15	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	105		80 - 120	01/19/21 17:13	01/19/21 21:15	1
Dibromofluoromethane (Surr)	102		80 - 120	01/19/21 17:13	01/19/21 21:15	1
1,2-Dichloroethane-d4 (Surr)	114		80 - 121	01/19/21 17:13	01/19/21 21:15	1
Toluene-d8 (Surr)	104		80 - 120	01/19/21 17:13	01/19/21 21:15	1

Method: NWTPH-Gx - Northwest - Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics - NWTPH-G	224		3.97		mg/Kg		01/12/21 20:23	01/19/21 10:47	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	164	S1+	50 - 150	01/12/21 20:23	01/19/21 10:47	1

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (C10-C24)	364		52.8		mg/Kg	✱	01/13/21 12:41	01/16/21 11:47	1
Motor Oil (C24-C44)	<52.8		52.8		mg/Kg	✱	01/13/21 12:41	01/16/21 11:47	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-Terphenyl	72		50 - 150	01/13/21 12:41	01/16/21 11:47	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	86.4		0.1		%			01/13/21 17:43	1
Percent Moisture	13.6		0.1		%			01/13/21 17:43	1

Client Sample Results

Client: Stantec Consulting Corp.
Project/Site: 7-11 No 22866 (WA)

Job ID: 580-100361-1

Client Sample ID: MW-17-15

Lab Sample ID: 580-100361-16

Date Collected: 01/05/21 12:30

Matrix: Solid

Date Received: 01/08/21 10:00

Percent Solids: 85.4

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00150		0.00150		mg/Kg	☼	01/19/21 17:13	01/19/21 21:41	1
Ethylbenzene	<0.00150		0.00150		mg/Kg	☼	01/19/21 17:13	01/19/21 21:41	1
Toluene	<0.00752		0.00752		mg/Kg	☼	01/19/21 17:13	01/19/21 21:41	1
Xylenes, Total	<0.00752		0.00752		mg/Kg	☼	01/19/21 17:13	01/19/21 21:41	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	108		80 - 120				01/19/21 17:13	01/19/21 21:41	1
Dibromofluoromethane (Surr)	105		80 - 120				01/19/21 17:13	01/19/21 21:41	1
1,2-Dichloroethane-d4 (Surr)	124	S1+	80 - 121				01/19/21 17:13	01/19/21 21:41	1
Toluene-d8 (Surr)	92		80 - 120				01/19/21 17:13	01/19/21 21:41	1

Method: NWTPH-Gx - Northwest - Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics - NWTPH-G	5.15		2.29		mg/Kg		01/12/21 20:23	01/19/21 11:11	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	87		50 - 150				01/12/21 20:23	01/19/21 11:11	1

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (C10-C24)	<55.5		55.5		mg/Kg	☼	01/13/21 12:41	01/16/21 12:06	1
Motor Oil (C24-C44)	<55.5		55.5		mg/Kg	☼	01/13/21 12:41	01/16/21 12:06	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl	77		50 - 150				01/13/21 12:41	01/16/21 12:06	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	85.4		0.1		%			01/13/21 18:24	1
Percent Moisture	14.6		0.1		%			01/13/21 18:24	1

Client Sample Results

Client: Stantec Consulting Corp.
Project/Site: 7-11 No 22866 (WA)

Job ID: 580-100361-1

Client Sample ID: SB-20-5

Lab Sample ID: 580-100361-17

Date Collected: 01/05/21 17:20

Matrix: Solid

Date Received: 01/08/21 10:00

Percent Solids: 80.8

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.00397		0.00204		mg/Kg	☼	01/19/21 17:13	01/19/21 22:07	1
1,2-Dibromoethane	<0.00102		0.00102		mg/Kg	☼	01/19/21 17:13	01/19/21 22:07	1
1,2-Dichloroethane	<0.00102		0.00102		mg/Kg	☼	01/19/21 17:13	01/19/21 22:07	1
Ethylbenzene	0.0438		0.00204		mg/Kg	☼	01/19/21 17:13	01/19/21 22:07	1
Methyl tert-butyl ether	<0.00204		0.00204		mg/Kg	☼	01/19/21 17:13	01/19/21 22:07	1
Toluene	<0.0102		0.0102		mg/Kg	☼	01/19/21 17:13	01/19/21 22:07	1
Xylenes, Total	<0.0102		0.0102		mg/Kg	☼	01/19/21 17:13	01/19/21 22:07	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	110		80 - 120	01/19/21 17:13	01/19/21 22:07	1
Dibromofluoromethane (Surr)	103		80 - 120	01/19/21 17:13	01/19/21 22:07	1
1,2-Dichloroethane-d4 (Surr)	115		80 - 121	01/19/21 17:13	01/19/21 22:07	1
Toluene-d8 (Surr)	103		80 - 120	01/19/21 17:13	01/19/21 22:07	1

Method: 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	0.316		0.00607		mg/Kg	☼	01/15/21 12:30	01/19/21 17:52	1
2-Methylnaphthalene	0.844		0.00607		mg/Kg	☼	01/15/21 12:30	01/19/21 17:52	1
Naphthalene	0.898		0.00607		mg/Kg	☼	01/15/21 12:30	01/19/21 17:52	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Terphenyl-d14	75		42 - 130	01/15/21 12:30	01/19/21 17:52	1

Method: NWTPH-Gx - Northwest - Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics - NWTPH-G	61.1		3.84		mg/Kg		01/12/21 20:23	01/19/21 11:36	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	100		50 - 150	01/12/21 20:23	01/19/21 11:36	1

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (C10-C24)	66.1		59.2		mg/Kg	☼	01/13/21 12:41	01/16/21 12:26	1
Motor Oil (C24-C44)	<59.2		59.2		mg/Kg	☼	01/13/21 12:41	01/16/21 12:26	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-Terphenyl	69		50 - 150	01/13/21 12:41	01/16/21 12:26	1

Method: 6010D - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	10.3		1.61		mg/Kg	☼	01/14/21 15:53	01/15/21 18:23	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	80.8		0.1		%			01/13/21 18:24	1
Percent Moisture	19.2		0.1		%			01/13/21 18:24	1

Client Sample Results

Client: Stantec Consulting Corp.
Project/Site: 7-11 No 22866 (WA)

Job ID: 580-100361-1

Client Sample ID: SB-20-10

Lab Sample ID: 580-100361-18

Date Collected: 01/06/21 11:30

Matrix: Solid

Date Received: 01/08/21 10:00

Percent Solids: 86.2

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	2.86	H	0.294		mg/Kg	✱	01/21/21 12:43	01/21/21 14:56	1
1,2-Dibromoethane	0.00165		0.000843		mg/Kg	✱	01/19/21 17:13	01/20/21 03:40	1
1,2-Dichloroethane	<0.000843		0.000843		mg/Kg	✱	01/19/21 17:13	01/20/21 03:40	1
Methyl tert-butyl ether	<0.00169		0.00169		mg/Kg	✱	01/19/21 17:13	01/20/21 03:40	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	49	S1-	80 - 120				01/19/21 17:13	01/20/21 03:40	1
4-Bromofluorobenzene (Surr)	117		80 - 120				01/21/21 12:43	01/21/21 14:56	1
Dibromofluoromethane (Surr)	84		80 - 120				01/19/21 17:13	01/20/21 03:40	1
Dibromofluoromethane (Surr)	97		80 - 120				01/21/21 12:43	01/21/21 14:56	1
1,2-Dichloroethane-d4 (Surr)	1394	S1+	80 - 121				01/19/21 17:13	01/20/21 03:40	1
1,2-Dichloroethane-d4 (Surr)	101		80 - 121				01/21/21 12:43	01/21/21 14:56	1
Toluene-d8 (Surr)	2836	S1+	80 - 120				01/19/21 17:13	01/20/21 03:40	1
Toluene-d8 (Surr)	147	S1+	80 - 120				01/21/21 12:43	01/21/21 14:56	1

Method: 8260D - Volatile Organic Compounds by GC/MS - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylbenzene	121	H	8.38		mg/Kg	✱	01/21/21 12:43	01/21/21 17:51	1
Toluene	137	H	31.4		mg/Kg	✱	01/21/21 12:43	01/21/21 17:51	1
Xylenes, Total	805	H	41.9		mg/Kg	✱	01/21/21 12:43	01/21/21 17:51	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	99		80 - 120				01/21/21 12:43	01/21/21 17:51	1
Dibromofluoromethane (Surr)	100		80 - 120				01/21/21 12:43	01/21/21 17:51	1
1,2-Dichloroethane-d4 (Surr)	100		80 - 121				01/21/21 12:43	01/21/21 17:51	1
Toluene-d8 (Surr)	106		80 - 120				01/21/21 12:43	01/21/21 17:51	1

Method: 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	4.21		0.0808		mg/Kg	✱	01/15/21 12:30	01/20/21 07:07	15
2-Methylnaphthalene	8.01		0.0808		mg/Kg	✱	01/15/21 12:30	01/20/21 07:07	15
Naphthalene	9.35		0.0808		mg/Kg	✱	01/15/21 12:30	01/20/21 07:07	15
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Terphenyl-d14	85		42 - 130				01/15/21 12:30	01/20/21 07:07	15

Method: NWTPH-Gx - Northwest - Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics - NWTPH-G	1740		75.4		mg/Kg	-	01/12/21 20:23	01/19/21 12:49	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	114		50 - 150				01/12/21 20:23	01/19/21 12:49	1

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (C10-C24)	506		56.6		mg/Kg	✱	01/13/21 12:41	01/16/21 12:46	1
Motor Oil (C24-C44)	<56.6		56.6		mg/Kg	✱	01/13/21 12:41	01/16/21 12:46	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl	71		50 - 150				01/13/21 12:41	01/16/21 12:46	1

Eurofins TestAmerica, Seattle

Client Sample Results

Client: Stantec Consulting Corp.
Project/Site: 7-11 No 22866 (WA)

Job ID: 580-100361-1

Client Sample ID: SB-20-10

Lab Sample ID: 580-100361-18

Date Collected: 01/06/21 11:30

Matrix: Solid

Date Received: 01/08/21 10:00

Percent Solids: 86.2

Method: 6010D - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	6.93		1.39		mg/Kg	☼	01/14/21 15:53	01/15/21 18:26	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	86.2		0.1		%			01/13/21 18:24	1
Percent Moisture	13.8		0.1		%			01/13/21 18:24	1

Client Sample Results

Client: Stantec Consulting Corp.
Project/Site: 7-11 No 22866 (WA)

Job ID: 580-100361-1

Client Sample ID: SB-20-19

Lab Sample ID: 580-100361-19

Date Collected: 01/06/21 11:45

Matrix: Solid

Date Received: 01/08/21 10:00

Percent Solids: 88.1

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.0725		0.00168		mg/Kg	☼	01/19/21 17:13	01/20/21 04:06	1
1,2-Dibromoethane	<0.000840		0.000840		mg/Kg	☼	01/19/21 17:13	01/20/21 04:06	1
1,2-Dichloroethane	<0.000840		0.000840		mg/Kg	☼	01/19/21 17:13	01/20/21 04:06	1
Ethylbenzene	0.391	H	0.0351		mg/Kg	☼	01/21/21 12:43	01/21/21 16:11	1
Methyl tert-butyl ether	<0.00168		0.00168		mg/Kg	☼	01/19/21 17:13	01/20/21 04:06	1
Toluene	0.376	H	0.132		mg/Kg	☼	01/21/21 12:43	01/21/21 16:11	1
Xylenes, Total	2.29	H	0.176		mg/Kg	☼	01/21/21 12:43	01/21/21 16:11	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	110		80 - 120	01/19/21 17:13	01/20/21 04:06	1
4-Bromofluorobenzene (Surr)	101		80 - 120	01/21/21 12:43	01/21/21 16:11	1
Dibromofluoromethane (Surr)	96		80 - 120	01/19/21 17:13	01/20/21 04:06	1
Dibromofluoromethane (Surr)	94		80 - 120	01/21/21 12:43	01/21/21 16:11	1
1,2-Dichloroethane-d4 (Surr)	117		80 - 121	01/19/21 17:13	01/20/21 04:06	1
1,2-Dichloroethane-d4 (Surr)	99		80 - 121	01/21/21 12:43	01/21/21 16:11	1
Toluene-d8 (Surr)	118		80 - 120	01/19/21 17:13	01/20/21 04:06	1
Toluene-d8 (Surr)	105		80 - 120	01/21/21 12:43	01/21/21 16:11	1

Method: 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	0.0463		0.00550		mg/Kg	☼	01/15/21 12:30	01/19/21 18:36	1
2-Methylnaphthalene	0.105		0.00550		mg/Kg	☼	01/15/21 12:30	01/19/21 18:36	1
Naphthalene	0.121		0.00550		mg/Kg	☼	01/15/21 12:30	01/19/21 18:36	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Terphenyl-d14	82		42 - 130				01/15/21 12:30	01/19/21 18:36	1

Method: NWTPH-Gx - Northwest - Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics - NWTPH-G	15.5		3.27		mg/Kg		01/12/21 20:23	01/19/21 12:00	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	91		50 - 150				01/12/21 20:23	01/19/21 12:00	1

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (C10-C24)	<51.9		51.9		mg/Kg	☼	01/13/21 12:41	01/16/21 13:06	1
Motor Oil (C24-C44)	<51.9		51.9		mg/Kg	☼	01/13/21 12:41	01/16/21 13:06	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl	148		50 - 150				01/13/21 12:41	01/16/21 13:06	1

Method: 6010D - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	2.89		1.04		mg/Kg	☼	01/14/21 15:53	01/15/21 18:29	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	88.1		0.1		%			01/13/21 18:24	1
Percent Moisture	11.9		0.1		%			01/13/21 18:24	1

Eurofins TestAmerica, Seattle

Client Sample Results

Client: Stantec Consulting Corp.
Project/Site: 7-11 No 22866 (WA)

Job ID: 580-100361-1

Client Sample ID: SB-21-10

Lab Sample ID: 580-100361-20

Date Collected: 01/06/21 10:00

Matrix: Solid

Date Received: 01/08/21 10:00

Percent Solids: 85.4

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00162		0.00162		mg/Kg	☼	01/19/21 17:13	01/20/21 04:32	1
1,2-Dibromoethane	<0.000812		0.000812		mg/Kg	☼	01/19/21 17:13	01/20/21 04:32	1
1,2-Dichloroethane	<0.000812		0.000812		mg/Kg	☼	01/19/21 17:13	01/20/21 04:32	1
Ethylbenzene	0.00262		0.00162		mg/Kg	☼	01/19/21 17:13	01/20/21 04:32	1
Methyl tert-butyl ether	<0.00162		0.00162		mg/Kg	☼	01/19/21 17:13	01/20/21 04:32	1
Toluene	<0.00812		0.00812		mg/Kg	☼	01/19/21 17:13	01/20/21 04:32	1
Xylenes, Total	0.0121		0.00812		mg/Kg	☼	01/19/21 17:13	01/20/21 04:32	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	113		80 - 120	01/19/21 17:13	01/20/21 04:32	1
Dibromofluoromethane (Surr)	101		80 - 120	01/19/21 17:13	01/20/21 04:32	1
1,2-Dichloroethane-d4 (Surr)	113		80 - 121	01/19/21 17:13	01/20/21 04:32	1
Toluene-d8 (Surr)	105		80 - 120	01/19/21 17:13	01/20/21 04:32	1

Method: 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	0.0787		0.00547		mg/Kg	☼	01/15/21 12:30	01/19/21 18:59	1
2-Methylnaphthalene	0.0968		0.00547		mg/Kg	☼	01/15/21 12:30	01/19/21 18:59	1
Naphthalene	0.0630		0.00547		mg/Kg	☼	01/15/21 12:30	01/19/21 18:59	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Terphenyl-d14	79		42 - 130				01/15/21 12:30	01/19/21 18:59	1

Method: NWTPH-Gx - Northwest - Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics - NWTPH-G	103		3.55		mg/Kg		01/12/21 20:23	01/19/21 12:25	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	131		50 - 150				01/12/21 20:23	01/19/21 12:25	1

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (C10-C24)	<56.9		56.9		mg/Kg	☼	01/13/21 12:41	01/16/21 13:25	1
Motor Oil (C24-C44)	<56.9		56.9		mg/Kg	☼	01/13/21 12:41	01/16/21 13:25	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl	72		50 - 150				01/13/21 12:41	01/16/21 13:25	1

Method: 6010D - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	10.7		1.18		mg/Kg	☼	01/14/21 15:53	01/15/21 18:32	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	85.4		0.1		%			01/13/21 18:24	1
Percent Moisture	14.6		0.1		%			01/13/21 18:24	1

Client Sample Results

Client: Stantec Consulting Corp.
Project/Site: 7-11 No 22866 (WA)

Job ID: 580-100361-1

Client Sample ID: SB-21-15

Lab Sample ID: 580-100361-21

Date Collected: 01/06/21 10:15

Matrix: Solid

Date Received: 01/08/21 10:00

Percent Solids: 87.4

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00191		0.00191		mg/Kg	✱	01/19/21 17:32	01/20/21 07:56	1
1,2-Dibromoethane	<0.000955		0.000955		mg/Kg	✱	01/19/21 17:32	01/20/21 07:56	1
1,2-Dichloroethane	<0.000955		0.000955		mg/Kg	✱	01/19/21 17:32	01/20/21 07:56	1
Ethylbenzene	0.263	H	0.0372		mg/Kg	✱	01/21/21 12:43	01/21/21 16:36	1
Methyl tert-butyl ether	<0.00191		0.00191		mg/Kg	✱	01/19/21 17:32	01/20/21 07:56	1
Toluene	<0.00955		0.00955		mg/Kg	✱	01/19/21 17:32	01/20/21 07:56	1
Xylenes, Total	0.200	H	0.186		mg/Kg	✱	01/21/21 12:43	01/21/21 16:36	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	114		80 - 120	01/19/21 17:32	01/20/21 07:56	1
4-Bromofluorobenzene (Surr)	103		80 - 120	01/21/21 12:43	01/21/21 16:36	1
Dibromofluoromethane (Surr)	90		80 - 120	01/19/21 17:32	01/20/21 07:56	1
Dibromofluoromethane (Surr)	95		80 - 120	01/21/21 12:43	01/21/21 16:36	1
1,2-Dichloroethane-d4 (Surr)	113		80 - 121	01/19/21 17:32	01/20/21 07:56	1
1,2-Dichloroethane-d4 (Surr)	97		80 - 121	01/21/21 12:43	01/21/21 16:36	1
Toluene-d8 (Surr)	1396	S1+	80 - 120	01/19/21 17:32	01/20/21 07:56	1
Toluene-d8 (Surr)	110		80 - 120	01/21/21 12:43	01/21/21 16:36	1

Method: 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	0.227		0.00559		mg/Kg	✱	01/15/21 12:30	01/19/21 19:21	1
2-Methylnaphthalene	0.481		0.00559		mg/Kg	✱	01/15/21 12:30	01/19/21 19:21	1
Naphthalene	0.159		0.00559		mg/Kg	✱	01/15/21 12:30	01/19/21 19:21	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Terphenyl-d14	84		42 - 130				01/15/21 12:30	01/19/21 19:21	1

Method: NWTPH-Gx - Northwest - Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics - NWTPH-G	28.1		3.44		mg/Kg		01/12/21 20:32	01/13/21 14:30	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	105		50 - 150				01/12/21 20:32	01/13/21 14:30	1

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (C10-C24)	<57.2		57.2		mg/Kg	☼	01/13/21 12:41	01/16/21 13:45	1
Motor Oil (C24-C44)	<57.2		57.2		mg/Kg	☼	01/13/21 12:41	01/16/21 13:45	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl	73		50 - 150				01/13/21 12:41	01/16/21 13:45	1

Method: 6010D - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	3.58		1.41		mg/Kg	✱	01/14/21 15:53	01/15/21 18:35	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	87.4		0.1		%			01/13/21 18:24	1
Percent Moisture	12.6		0.1		%			01/13/21 18:24	1

Eurofins TestAmerica, Seattle

Client Sample Results

Client: Stantec Consulting Corp.
Project/Site: 7-11 No 22866 (WA)

Job ID: 580-100361-1

Client Sample ID: SB-21-18

Lab Sample ID: 580-100361-22

Date Collected: 01/06/21 10:30

Matrix: Solid

Date Received: 01/08/21 10:00

Percent Solids: 88.8

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00149		0.00149		mg/Kg	☼	01/19/21 17:32	01/20/21 08:22	1
Ethylbenzene	0.00241		0.00149		mg/Kg	☼	01/19/21 17:32	01/20/21 08:22	1
Toluene	<0.00745		0.00745		mg/Kg	☼	01/19/21 17:32	01/20/21 08:22	1
Xylenes, Total	<0.00745		0.00745		mg/Kg	☼	01/19/21 17:32	01/20/21 08:22	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	110		80 - 120				01/19/21 17:32	01/20/21 08:22	1
Dibromofluoromethane (Surr)	103		80 - 120				01/19/21 17:32	01/20/21 08:22	1
1,2-Dichloroethane-d4 (Surr)	119		80 - 121				01/19/21 17:32	01/20/21 08:22	1
Toluene-d8 (Surr)	112		80 - 120				01/19/21 17:32	01/20/21 08:22	1

Method: NWTPH-Gx - Northwest - Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics - NWTPH-G	<3.31		3.31		mg/Kg		01/12/21 20:32	01/13/21 14:54	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	81		50 - 150				01/12/21 20:32	01/13/21 14:54	1

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (C10-C24)	<51.3		51.3		mg/Kg	☼	01/13/21 12:41	01/16/21 14:25	1
Motor Oil (C24-C44)	<51.3		51.3		mg/Kg	☼	01/13/21 12:41	01/16/21 14:25	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl	72		50 - 150				01/13/21 12:41	01/16/21 14:25	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	88.8		0.1		%			01/13/21 18:24	1
Percent Moisture	11.2		0.1		%			01/13/21 18:24	1

Client Sample Results

Client: Stantec Consulting Corp.
Project/Site: 7-11 No 22866 (WA)

Job ID: 580-100361-1

Client Sample ID: SB-22-10

Lab Sample ID: 580-100361-23

Date Collected: 01/06/21 09:00

Matrix: Solid

Date Received: 01/08/21 10:00

Percent Solids: 86.1

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00137		0.00137		mg/Kg	✱	01/19/21 17:32	01/20/21 08:47	1
1,2-Dibromoethane	<0.000685		0.000685		mg/Kg	✱	01/19/21 17:32	01/20/21 08:47	1
1,2-Dichloroethane	<0.000685		0.000685		mg/Kg	✱	01/19/21 17:32	01/20/21 08:47	1
Ethylbenzene	0.00215		0.00137		mg/Kg	✱	01/19/21 17:32	01/20/21 08:47	1
Methyl tert-butyl ether	<0.00137		0.00137		mg/Kg	✱	01/19/21 17:32	01/20/21 08:47	1
Toluene	<0.00685		0.00685		mg/Kg	✱	01/19/21 17:32	01/20/21 08:47	1
Xylenes, Total	0.00887		0.00685		mg/Kg	✱	01/19/21 17:32	01/20/21 08:47	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	99		80 - 120	01/19/21 17:32	01/20/21 08:47	1
Dibromofluoromethane (Surr)	162	S1+	80 - 120	01/19/21 17:32	01/20/21 08:47	1
1,2-Dichloroethane-d4 (Surr)	173	S1+	80 - 121	01/19/21 17:32	01/20/21 08:47	1
Toluene-d8 (Surr)	99		80 - 120	01/19/21 17:32	01/20/21 08:47	1

Method: 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	0.0126		0.00580		mg/Kg	✱	01/15/21 12:30	01/19/21 19:43	1
2-Methylnaphthalene	0.0278		0.00580		mg/Kg	✱	01/15/21 12:30	01/19/21 19:43	1
Naphthalene	0.0905		0.00580		mg/Kg	✱	01/15/21 12:30	01/19/21 19:43	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Terphenyl-d14	82		42 - 130	01/15/21 12:30	01/19/21 19:43	1

Method: NWTPH-Gx - Northwest - Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics - NWTPH-G	<3.11		3.11		mg/Kg		01/12/21 20:32	01/13/21 15:18	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	85		50 - 150	01/12/21 20:32	01/13/21 15:18	1

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (C10-C24)	<57.0		57.0		mg/Kg	✱	01/13/21 14:21	01/19/21 10:14	1
Motor Oil (C24-C44)	<57.0		57.0		mg/Kg	✱	01/13/21 14:21	01/19/21 10:14	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-Terphenyl	69		50 - 150	01/13/21 14:21	01/19/21 10:14	1

Method: 6010D - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	3.89		1.26		mg/Kg	✱	01/14/21 15:53	01/15/21 18:38	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	86.1		0.1		%			01/13/21 18:24	1
Percent Moisture	13.9		0.1		%			01/13/21 18:24	1

Client Sample Results

Client: Stantec Consulting Corp.
Project/Site: 7-11 No 22866 (WA)

Job ID: 580-100361-1

Client Sample ID: SB-22-15

Lab Sample ID: 580-100361-24

Date Collected: 01/06/21 09:15

Matrix: Solid

Date Received: 01/08/21 10:00

Percent Solids: 86.7

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00156		0.00156		mg/Kg	☼	01/19/21 17:32	01/20/21 09:13	1
Ethylbenzene	<0.00156		0.00156		mg/Kg	☼	01/19/21 17:32	01/20/21 09:13	1
Toluene	<0.00781		0.00781		mg/Kg	☼	01/19/21 17:32	01/20/21 09:13	1
Xylenes, Total	<0.00781		0.00781		mg/Kg	☼	01/19/21 17:32	01/20/21 09:13	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	117		80 - 120				01/19/21 17:32	01/20/21 09:13	1
Dibromofluoromethane (Surr)	126	S1+	80 - 120				01/19/21 17:32	01/20/21 09:13	1
1,2-Dichloroethane-d4 (Surr)	124	S1+	80 - 121				01/19/21 17:32	01/20/21 09:13	1
Toluene-d8 (Surr)	89		80 - 120				01/19/21 17:32	01/20/21 09:13	1

Method: NWTPH-Gx - Northwest - Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics - NWTPH-G	<3.35		3.35		mg/Kg		01/12/21 20:32	01/13/21 15:43	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	81		50 - 150				01/12/21 20:32	01/13/21 15:43	1

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (C10-C24)	<56.1		56.1		mg/Kg	☼	01/13/21 14:21	01/19/21 10:34	1
Motor Oil (C24-C44)	<56.1		56.1		mg/Kg	☼	01/13/21 14:21	01/19/21 10:34	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl	72		50 - 150				01/13/21 14:21	01/19/21 10:34	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	86.7		0.1		%			01/13/21 18:24	1
Percent Moisture	13.3		0.1		%			01/13/21 18:24	1

Client Sample Results

Client: Stantec Consulting Corp.
Project/Site: 7-11 No 22866 (WA)

Job ID: 580-100361-1

Client Sample ID: SB-23-10

Lab Sample ID: 580-100361-25

Date Collected: 01/06/21 10:35

Matrix: Solid

Date Received: 01/08/21 10:00

Percent Solids: 86.5

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00165		0.00165		mg/Kg	☼	01/19/21 17:32	01/20/21 09:39	1
Ethylbenzene	<0.00165		0.00165		mg/Kg	☼	01/19/21 17:32	01/20/21 09:39	1
Toluene	<0.00823		0.00823		mg/Kg	☼	01/19/21 17:32	01/20/21 09:39	1
Xylenes, Total	<0.00823		0.00823		mg/Kg	☼	01/19/21 17:32	01/20/21 09:39	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	98		80 - 120	01/19/21 17:32	01/20/21 09:39	1
Dibromofluoromethane (Surr)	98		80 - 120	01/19/21 17:32	01/20/21 09:39	1
1,2-Dichloroethane-d4 (Surr)	111		80 - 121	01/19/21 17:32	01/20/21 09:39	1
Toluene-d8 (Surr)	97		80 - 120	01/19/21 17:32	01/20/21 09:39	1

Method: NWTPH-Gx - Northwest - Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics - NWTPH-G	<3.95		3.95		mg/Kg		01/12/21 20:32	01/13/21 16:07	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	88		50 - 150	01/12/21 20:32	01/13/21 16:07	1

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (C10-C24)	<55.6		55.6		mg/Kg	☼	01/13/21 14:21	01/19/21 10:53	1
Motor Oil (C24-C44)	<55.6		55.6		mg/Kg	☼	01/13/21 14:21	01/19/21 10:53	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-Terphenyl	72		50 - 150	01/13/21 14:21	01/19/21 10:53	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	86.5		0.1		%			01/13/21 18:24	1
Percent Moisture	13.5		0.1		%			01/13/21 18:24	1

Client Sample Results

Client: Stantec Consulting Corp.
Project/Site: 7-11 No 22866 (WA)

Job ID: 580-100361-1

Client Sample ID: SB-23-15

Lab Sample ID: 580-100361-26

Date Collected: 01/06/21 10:45

Matrix: Solid

Date Received: 01/08/21 10:00

Percent Solids: 89.4

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00191		0.00191		mg/Kg	☼	01/19/21 17:32	01/20/21 10:05	1
Ethylbenzene	<0.00191		0.00191		mg/Kg	☼	01/19/21 17:32	01/20/21 10:05	1
Toluene	<0.00955		0.00955		mg/Kg	☼	01/19/21 17:32	01/20/21 10:05	1
Xylenes, Total	<0.00955		0.00955		mg/Kg	☼	01/19/21 17:32	01/20/21 10:05	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	107		80 - 120				01/19/21 17:32	01/20/21 10:05	1
Dibromofluoromethane (Surr)	99		80 - 120				01/19/21 17:32	01/20/21 10:05	1
1,2-Dichloroethane-d4 (Surr)	111		80 - 121				01/19/21 17:32	01/20/21 10:05	1
Toluene-d8 (Surr)	97		80 - 120				01/19/21 17:32	01/20/21 10:05	1

Method: NWTPH-Gx - Northwest - Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics - NWTPH-G	<3.59		3.59		mg/Kg		01/12/21 20:32	01/13/21 16:31	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	87		50 - 150				01/12/21 20:32	01/13/21 16:31	1

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (C10-C24)	<51.0		51.0		mg/Kg	☼	01/13/21 14:21	01/19/21 11:13	1
Motor Oil (C24-C44)	<51.0		51.0		mg/Kg	☼	01/13/21 14:21	01/19/21 11:13	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl	70		50 - 150				01/13/21 14:21	01/19/21 11:13	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	89.4		0.1		%			01/13/21 18:24	1
Percent Moisture	10.6		0.1		%			01/13/21 18:24	1

Client Sample Results

Client: Stantec Consulting Corp.
Project/Site: 7-11 No 22866 (WA)

Job ID: 580-100361-1

Client Sample ID: SB-24-8

Lab Sample ID: 580-100361-27

Date Collected: 01/05/21 14:30

Matrix: Solid

Date Received: 01/08/21 10:00

Percent Solids: 83.3

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00161		0.00161		mg/Kg	☼	01/19/21 17:13	01/19/21 22:32	1
1,2-Dibromoethane	<0.000806		0.000806		mg/Kg	☼	01/19/21 17:13	01/19/21 22:32	1
1,2-Dichloroethane	<0.000806		0.000806		mg/Kg	☼	01/19/21 17:13	01/19/21 22:32	1
Ethylbenzene	<0.00161		0.00161		mg/Kg	☼	01/19/21 17:13	01/19/21 22:32	1
Methyl tert-butyl ether	<0.00161		0.00161		mg/Kg	☼	01/19/21 17:13	01/19/21 22:32	1
Toluene	<0.00806		0.00806		mg/Kg	☼	01/19/21 17:13	01/19/21 22:32	1
Xylenes, Total	<0.00806		0.00806		mg/Kg	☼	01/19/21 17:13	01/19/21 22:32	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	111		80 - 120	01/19/21 17:13	01/19/21 22:32	1
Dibromofluoromethane (Surr)	103		80 - 120	01/19/21 17:13	01/19/21 22:32	1
1,2-Dichloroethane-d4 (Surr)	117		80 - 121	01/19/21 17:13	01/19/21 22:32	1
Toluene-d8 (Surr)	90		80 - 120	01/19/21 17:13	01/19/21 22:32	1

Method: 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	0.0478		0.00584		mg/Kg	☼	01/13/21 16:38	01/15/21 16:40	1
2-Methylnaphthalene	0.0106		0.00584		mg/Kg	☼	01/13/21 16:38	01/15/21 16:40	1
Naphthalene	0.0404		0.00584		mg/Kg	☼	01/13/21 16:38	01/15/21 16:40	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Terphenyl-d14	74		42 - 130	01/13/21 16:38	01/15/21 16:40	1

Method: NWTPH-Gx - Northwest - Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics - NWTPH-G	319		3.44		mg/Kg		01/12/21 20:32	01/13/21 17:20	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	188	S1+	50 - 150	01/12/21 20:32	01/13/21 17:20	1

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (C10-C24)	143		56.9		mg/Kg	☼	01/13/21 14:21	01/19/21 11:33	1
Motor Oil (C24-C44)	<56.9		56.9		mg/Kg	☼	01/13/21 14:21	01/19/21 11:33	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-Terphenyl	70		50 - 150	01/13/21 14:21	01/19/21 11:33	1

Method: 6010D - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	6.74		1.42		mg/Kg	☼	01/14/21 15:54	01/15/21 18:41	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	83.3		0.1		%			01/13/21 18:24	1
Percent Moisture	16.7		0.1		%			01/13/21 18:24	1

Client Sample Results

Client: Stantec Consulting Corp.
Project/Site: 7-11 No 22866 (WA)

Job ID: 580-100361-1

Client Sample ID: SB-24-15

Lab Sample ID: 580-100361-28

Date Collected: 01/05/21 14:45

Matrix: Solid

Date Received: 01/08/21 10:00

Percent Solids: 84.2

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00167		0.00167		mg/Kg	✱	01/19/21 17:13	01/19/21 22:58	1
Ethylbenzene	<0.00167		0.00167		mg/Kg	✱	01/19/21 17:13	01/19/21 22:58	1
Toluene	<0.00833		0.00833		mg/Kg	✱	01/19/21 17:13	01/19/21 22:58	1
Xylenes, Total	<0.00833		0.00833		mg/Kg	✱	01/19/21 17:13	01/19/21 22:58	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	105		80 - 120	01/19/21 17:13	01/19/21 22:58	1
Dibromofluoromethane (Surr)	97		80 - 120	01/19/21 17:13	01/19/21 22:58	1
1,2-Dichloroethane-d4 (Surr)	118		80 - 121	01/19/21 17:13	01/19/21 22:58	1
Toluene-d8 (Surr)	93		80 - 120	01/19/21 17:13	01/19/21 22:58	1

Method: NWTPH-Gx - Northwest - Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics - NWTPH-G	10.1		3.48		mg/Kg		01/12/21 20:32	01/13/21 17:44	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	93		50 - 150	01/12/21 20:32	01/13/21 17:44	1

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (C10-C24)	<59.2		59.2		mg/Kg	✱	01/13/21 14:21	01/19/21 11:52	1
Motor Oil (C24-C44)	<59.2		59.2		mg/Kg	✱	01/13/21 14:21	01/19/21 11:52	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-Terphenyl	70		50 - 150	01/13/21 14:21	01/19/21 11:52	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	84.2		0.1		%			01/13/21 18:24	1
Percent Moisture	15.8		0.1		%			01/13/21 18:24	1

Client Sample Results

Client: Stantec Consulting Corp.
Project/Site: 7-11 No 22866 (WA)

Job ID: 580-100361-1

Client Sample ID: SB-16-10

Lab Sample ID: 580-100361-29

Date Collected: 01/07/21 08:45

Matrix: Solid

Date Received: 01/08/21 10:00

Percent Solids: 87.5

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.00249		0.00154		mg/Kg	✱	01/19/21 17:32	01/20/21 10:31	1
1,2-Dibromoethane	<0.000768		0.000768		mg/Kg	✱	01/19/21 17:32	01/20/21 10:31	1
1,2-Dichloroethane	<0.000768		0.000768		mg/Kg	✱	01/19/21 17:32	01/20/21 10:31	1
Ethylbenzene	<0.00154		0.00154		mg/Kg	✱	01/19/21 17:32	01/20/21 10:31	1
Methyl tert-butyl ether	<0.00154		0.00154		mg/Kg	✱	01/19/21 17:32	01/20/21 10:31	1
Toluene	<0.00768		0.00768		mg/Kg	✱	01/19/21 17:32	01/20/21 10:31	1
Xylenes, Total	<0.00768		0.00768		mg/Kg	✱	01/19/21 17:32	01/20/21 10:31	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	112		80 - 120	01/19/21 17:32	01/20/21 10:31	1
Dibromofluoromethane (Surr)	97		80 - 120	01/19/21 17:32	01/20/21 10:31	1
1,2-Dichloroethane-d4 (Surr)	119		80 - 121	01/19/21 17:32	01/20/21 10:31	1
Toluene-d8 (Surr)	101		80 - 120	01/19/21 17:32	01/20/21 10:31	1

Method: 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	0.0101		0.00542		mg/Kg	✱	01/13/21 16:38	01/15/21 17:03	1
2-Methylnaphthalene	0.0143		0.00542		mg/Kg	✱	01/13/21 16:38	01/15/21 17:03	1
Naphthalene	<0.00542		0.00542		mg/Kg	✱	01/13/21 16:38	01/15/21 17:03	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Terphenyl-d14	80		42 - 130	01/13/21 16:38	01/15/21 17:03	1

Method: NWTPH-Gx - Northwest - Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics - NWTPH-G	<3.02		3.02		mg/Kg		01/12/21 20:32	01/13/21 18:08	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	90		50 - 150	01/12/21 20:32	01/13/21 18:08	1

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (C10-C24)	<53.2		53.2		mg/Kg	✱	01/13/21 14:21	01/19/21 12:12	1
Motor Oil (C24-C44)	<53.2		53.2		mg/Kg	✱	01/13/21 14:21	01/19/21 12:12	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-Terphenyl	65		50 - 150	01/13/21 14:21	01/19/21 12:12	1

Method: 6010D - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	8.48		0.903		mg/Kg	✱	01/14/21 15:54	01/15/21 18:50	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	87.5		0.1		%			01/13/21 18:24	1
Percent Moisture	12.5		0.1		%			01/13/21 18:24	1

Client Sample Results

Client: Stantec Consulting Corp.
Project/Site: 7-11 No 22866 (WA)

Job ID: 580-100361-1

Client Sample ID: SB-16-17

Lab Sample ID: 580-100361-30

Date Collected: 01/07/21 08:50

Matrix: Solid

Date Received: 01/08/21 10:00

Percent Solids: 86.8

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00186		0.00186		mg/Kg	☼	01/19/21 17:32	01/20/21 10:57	1
Ethylbenzene	0.00255		0.00186		mg/Kg	☼	01/19/21 17:32	01/20/21 10:57	1
Toluene	<0.00929		0.00929		mg/Kg	☼	01/19/21 17:32	01/20/21 10:57	1
Xylenes, Total	0.0117		0.00929		mg/Kg	☼	01/19/21 17:32	01/20/21 10:57	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	90		80 - 120	01/19/21 17:32	01/20/21 10:57	1
Dibromofluoromethane (Surr)	91		80 - 120	01/19/21 17:32	01/20/21 10:57	1
1,2-Dichloroethane-d4 (Surr)	131	S1+	80 - 121	01/19/21 17:32	01/20/21 10:57	1
Toluene-d8 (Surr)	93		80 - 120	01/19/21 17:32	01/20/21 10:57	1

Method: NWTPH-Gx - Northwest - Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics - NWTPH-G	<3.51		3.51		mg/Kg		01/12/21 20:32	01/13/21 18:33	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	86		50 - 150	01/12/21 20:32	01/13/21 18:33	1

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (C10-C24)	<53.2		53.2		mg/Kg	☼	01/13/21 14:21	01/19/21 13:31	1
Motor Oil (C24-C44)	<53.2		53.2		mg/Kg	☼	01/13/21 14:21	01/19/21 13:31	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-Terphenyl	75		50 - 150	01/13/21 14:21	01/19/21 13:31	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	86.8		0.1		%			01/13/21 18:26	1
Percent Moisture	13.2		0.1		%			01/13/21 18:26	1

Client Sample Results

Client: Stantec Consulting Corp.
Project/Site: 7-11 No 22866 (WA)

Job ID: 580-100361-1

Client Sample ID: SB-17-10

Lab Sample ID: 580-100361-31

Date Collected: 01/07/21 11:00

Matrix: Solid

Date Received: 01/08/21 10:00

Percent Solids: 86.3

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00262		0.00262		mg/Kg	☼	01/19/21 17:32	01/20/21 11:22	1
Ethylbenzene	<0.00262		0.00262		mg/Kg	☼	01/19/21 17:32	01/20/21 11:22	1
Toluene	<0.0131		0.0131		mg/Kg	☼	01/19/21 17:32	01/20/21 11:22	1
Xylenes, Total	<0.0131		0.0131		mg/Kg	☼	01/19/21 17:32	01/20/21 11:22	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	95		80 - 120	01/19/21 17:32	01/20/21 11:22	1
Dibromofluoromethane (Surr)	105		80 - 120	01/19/21 17:32	01/20/21 11:22	1
1,2-Dichloroethane-d4 (Surr)	140	S1+	80 - 121	01/19/21 17:32	01/20/21 11:22	1
Toluene-d8 (Surr)	84		80 - 120	01/19/21 17:32	01/20/21 11:22	1

Method: NWTPH-Gx - Northwest - Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics - NWTPH-G	<3.12		3.12		mg/Kg		01/12/21 20:32	01/13/21 18:57	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	87		50 - 150	01/12/21 20:32	01/13/21 18:57	1

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (C10-C24)	<56.7		56.7		mg/Kg	☼	01/13/21 14:21	01/19/21 13:51	1
Motor Oil (C24-C44)	<56.7		56.7		mg/Kg	☼	01/13/21 14:21	01/19/21 13:51	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-Terphenyl	72		50 - 150	01/13/21 14:21	01/19/21 13:51	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	86.3		0.1		%			01/13/21 18:26	1
Percent Moisture	13.7		0.1		%			01/13/21 18:26	1

Client Sample Results

Client: Stantec Consulting Corp.
Project/Site: 7-11 No 22866 (WA)

Job ID: 580-100361-1

Client Sample ID: SB-17-15

Lab Sample ID: 580-100361-32

Date Collected: 01/07/21 11:10

Matrix: Solid

Date Received: 01/08/21 10:00

Percent Solids: 88.9

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00181		0.00181		mg/Kg	☼	01/19/21 17:32	01/20/21 11:48	1
Ethylbenzene	<0.00181		0.00181		mg/Kg	☼	01/19/21 17:32	01/20/21 11:48	1
Toluene	<0.00907		0.00907		mg/Kg	☼	01/19/21 17:32	01/20/21 11:48	1
Xylenes, Total	<0.00907		0.00907		mg/Kg	☼	01/19/21 17:32	01/20/21 11:48	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	117		80 - 120				01/19/21 17:32	01/20/21 11:48	1
Dibromofluoromethane (Surr)	100		80 - 120				01/19/21 17:32	01/20/21 11:48	1
1,2-Dichloroethane-d4 (Surr)	127	S1+	80 - 121				01/19/21 17:32	01/20/21 11:48	1
Toluene-d8 (Surr)	98		80 - 120				01/19/21 17:32	01/20/21 11:48	1

Method: NWTPH-Gx - Northwest - Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics - NWTPH-G	<4.73		4.73		mg/Kg		01/12/21 20:32	01/13/21 19:22	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	88		50 - 150				01/12/21 20:32	01/13/21 19:22	1

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (C10-C24)	<53.0		53.0		mg/Kg	☼	01/13/21 14:21	01/19/21 14:10	1
Motor Oil (C24-C44)	<53.0		53.0		mg/Kg	☼	01/13/21 14:21	01/19/21 14:10	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl	75		50 - 150				01/13/21 14:21	01/19/21 14:10	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	88.9		0.1		%			01/13/21 18:26	1
Percent Moisture	11.1		0.1		%			01/13/21 18:26	1

Client Sample Results

Client: Stantec Consulting Corp.
Project/Site: 7-11 No 22866 (WA)

Job ID: 580-100361-1

Client Sample ID: SB-18-10

Lab Sample ID: 580-100361-33

Date Collected: 01/07/21 13:15

Matrix: Solid

Date Received: 01/08/21 10:00

Percent Solids: 87.9

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00213		0.00213		mg/Kg	☼	01/19/21 17:32	01/20/21 12:14	1
Ethylbenzene	<0.00213		0.00213		mg/Kg	☼	01/19/21 17:32	01/20/21 12:14	1
Toluene	<0.0107		0.0107		mg/Kg	☼	01/19/21 17:32	01/20/21 12:14	1
Xylenes, Total	<0.0107		0.0107		mg/Kg	☼	01/19/21 17:32	01/20/21 12:14	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	101		80 - 120				01/19/21 17:32	01/20/21 12:14	1
Dibromofluoromethane (Surr)	107		80 - 120				01/19/21 17:32	01/20/21 12:14	1
1,2-Dichloroethane-d4 (Surr)	118		80 - 121				01/19/21 17:32	01/20/21 12:14	1
Toluene-d8 (Surr)	100		80 - 120				01/19/21 17:32	01/20/21 12:14	1

Method: NWTPH-Gx - Northwest - Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics - NWTPH-G	<3.71		3.71		mg/Kg		01/12/21 20:32	01/13/21 19:46	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	88		50 - 150				01/12/21 20:32	01/13/21 19:46	1

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (C10-C24)	<55.6		55.6		mg/Kg	☼	01/13/21 14:21	01/19/21 14:30	1
Motor Oil (C24-C44)	<55.6		55.6		mg/Kg	☼	01/13/21 14:21	01/19/21 14:30	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl	70		50 - 150				01/13/21 14:21	01/19/21 14:30	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	87.9		0.1		%			01/13/21 18:26	1
Percent Moisture	12.1		0.1		%			01/13/21 18:26	1

Client Sample Results

Client: Stantec Consulting Corp.
Project/Site: 7-11 No 22866 (WA)

Job ID: 580-100361-1

Client Sample ID: SB-18-15

Lab Sample ID: 580-100361-34

Date Collected: 01/07/21 13:30

Matrix: Solid

Date Received: 01/08/21 10:00

Percent Solids: 89.0

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00191		0.00191		mg/Kg	☼	01/19/21 17:32	01/20/21 12:39	1
Ethylbenzene	<0.00191		0.00191		mg/Kg	☼	01/19/21 17:32	01/20/21 12:39	1
Toluene	<0.00957		0.00957		mg/Kg	☼	01/19/21 17:32	01/20/21 12:39	1
Xylenes, Total	<0.00957		0.00957		mg/Kg	☼	01/19/21 17:32	01/20/21 12:39	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	95		80 - 120				01/19/21 17:32	01/20/21 12:39	1
Dibromofluoromethane (Surr)	105		80 - 120				01/19/21 17:32	01/20/21 12:39	1
1,2-Dichloroethane-d4 (Surr)	121		80 - 121				01/19/21 17:32	01/20/21 12:39	1
Toluene-d8 (Surr)	97		80 - 120				01/19/21 17:32	01/20/21 12:39	1

Method: NWTPH-Gx - Northwest - Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics - NWTPH-G	<3.52		3.52		mg/Kg		01/12/21 20:32	01/13/21 20:10	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	88		50 - 150				01/12/21 20:32	01/13/21 20:10	1

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (C10-C24)	<53.3		53.3		mg/Kg	☼	01/13/21 14:21	01/19/21 14:49	1
Motor Oil (C24-C44)	<53.3		53.3		mg/Kg	☼	01/13/21 14:21	01/19/21 14:49	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl	68		50 - 150				01/13/21 14:21	01/19/21 14:49	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	89.0		0.1		%			01/13/21 18:26	1
Percent Moisture	11.0		0.1		%			01/13/21 18:26	1

Client Sample Results

Client: Stantec Consulting Corp.
Project/Site: 7-11 No 22866 (WA)

Job ID: 580-100361-1

Client Sample ID: SB-19-10

Lab Sample ID: 580-100361-35

Date Collected: 01/07/21 13:40

Matrix: Solid

Date Received: 01/08/21 10:00

Percent Solids: 86.4

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00193		0.00193		mg/Kg	☼	01/19/21 17:32	01/20/21 13:05	1
Ethylbenzene	<0.00193		0.00193		mg/Kg	☼	01/19/21 17:32	01/20/21 13:05	1
Toluene	<0.00965		0.00965		mg/Kg	☼	01/19/21 17:32	01/20/21 13:05	1
Xylenes, Total	<0.00965		0.00965		mg/Kg	☼	01/19/21 17:32	01/20/21 13:05	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	100		80 - 120				01/19/21 17:32	01/20/21 13:05	1
Dibromofluoromethane (Surr)	103		80 - 120				01/19/21 17:32	01/20/21 13:05	1
1,2-Dichloroethane-d4 (Surr)	114		80 - 121				01/19/21 17:32	01/20/21 13:05	1
Toluene-d8 (Surr)	99		80 - 120				01/19/21 17:32	01/20/21 13:05	1

Method: NWTPH-Gx - Northwest - Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics - NWTPH-G	<3.64		3.64		mg/Kg		01/12/21 20:32	01/13/21 20:35	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	88		50 - 150				01/12/21 20:32	01/13/21 20:35	1

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (C10-C24)	<53.0		53.0		mg/Kg	☼	01/13/21 14:21	01/19/21 15:09	1
Motor Oil (C24-C44)	<53.0		53.0		mg/Kg	☼	01/13/21 14:21	01/19/21 15:09	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl	77		50 - 150				01/13/21 14:21	01/19/21 15:09	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	86.4		0.1		%			01/13/21 18:26	1
Percent Moisture	13.6		0.1		%			01/13/21 18:26	1

Client Sample Results

Client: Stantec Consulting Corp.
Project/Site: 7-11 No 22866 (WA)

Job ID: 580-100361-1

Client Sample ID: SB-19-15

Lab Sample ID: 580-100361-36

Date Collected: 01/07/21 13:45

Matrix: Solid

Date Received: 01/08/21 10:00

Percent Solids: 85.6

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00203		0.00203		mg/Kg	☼	01/19/21 17:32	01/20/21 13:31	1
Ethylbenzene	<0.00203		0.00203		mg/Kg	☼	01/19/21 17:32	01/20/21 13:31	1
Toluene	<0.0102		0.0102		mg/Kg	☼	01/19/21 17:32	01/20/21 13:31	1
Xylenes, Total	<0.0102		0.0102		mg/Kg	☼	01/19/21 17:32	01/20/21 13:31	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	107		80 - 120	01/19/21 17:32	01/20/21 13:31	1
Dibromofluoromethane (Surr)	101		80 - 120	01/19/21 17:32	01/20/21 13:31	1
1,2-Dichloroethane-d4 (Surr)	120		80 - 121	01/19/21 17:32	01/20/21 13:31	1
Toluene-d8 (Surr)	96		80 - 120	01/19/21 17:32	01/20/21 13:31	1

Method: NWTPH-Gx - Northwest - Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics - NWTPH-G	<4.28		4.28		mg/Kg		01/12/21 20:32	01/13/21 20:59	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	86		50 - 150	01/12/21 20:32	01/13/21 20:59	1

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (C10-C24)	<57.1		57.1		mg/Kg	☼	01/13/21 14:21	01/19/21 15:29	1
Motor Oil (C24-C44)	<57.1		57.1		mg/Kg	☼	01/13/21 14:21	01/19/21 15:29	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-Terphenyl	77		50 - 150	01/13/21 14:21	01/19/21 15:29	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	85.6		0.1		%			01/13/21 18:26	1
Percent Moisture	14.4		0.1		%			01/13/21 18:26	1

QC Sample Results

Client: Stantec Consulting Corp.
Project/Site: 7-11 No 22866 (WA)

Job ID: 580-100361-1

Method: 8260D - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 580-348201/1-A

Matrix: Solid

Analysis Batch: 348260

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 348201

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200		0.00200		mg/Kg		01/19/21 17:13	01/19/21 19:59	1
1,2-Dibromoethane	<0.00100		0.00100		mg/Kg		01/19/21 17:13	01/19/21 19:59	1
1,2-Dichloroethane	<0.00100		0.00100		mg/Kg		01/19/21 17:13	01/19/21 19:59	1
Ethylbenzene	<0.00200		0.00200		mg/Kg		01/19/21 17:13	01/19/21 19:59	1
Methyl tert-butyl ether	<0.00200		0.00200		mg/Kg		01/19/21 17:13	01/19/21 19:59	1
Toluene	<0.0100		0.0100		mg/Kg		01/19/21 17:13	01/19/21 19:59	1
Xylenes, Total	<0.0100		0.0100		mg/Kg		01/19/21 17:13	01/19/21 19:59	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	106		80 - 120	01/19/21 17:13	01/19/21 19:59	1
Dibromofluoromethane (Surr)	104		80 - 120	01/19/21 17:13	01/19/21 19:59	1
1,2-Dichloroethane-d4 (Surr)	106		80 - 121	01/19/21 17:13	01/19/21 19:59	1
Toluene-d8 (Surr)	101		80 - 120	01/19/21 17:13	01/19/21 19:59	1

Lab Sample ID: LCS 580-348201/2-A

Matrix: Solid

Analysis Batch: 348260

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 348201

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	0.0200	0.01887		mg/Kg		94	79 - 135
1,2-Dibromoethane	0.0200	0.02050		mg/Kg		102	77 - 123
1,2-Dichloroethane	0.0200	0.01980		mg/Kg		99	76 - 132
Ethylbenzene	0.0200	0.01733		mg/Kg		87	80 - 135
Methyl tert-butyl ether	0.0200	0.02027		mg/Kg		101	77 - 132
Toluene	0.0200	0.01858		mg/Kg		93	75 - 137
Xylenes, Total	0.0400	0.03744		mg/Kg		94	80 - 136

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	104		80 - 120
Dibromofluoromethane (Surr)	100		80 - 120
1,2-Dichloroethane-d4 (Surr)	101		80 - 121
Toluene-d8 (Surr)	97		80 - 120

Lab Sample ID: LCSD 580-348201/3-A

Matrix: Solid

Analysis Batch: 348260

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 348201

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
Benzene	0.0200	0.01888		mg/Kg		94	79 - 135	0	31
1,2-Dibromoethane	0.0200	0.02097		mg/Kg		105	77 - 123	2	37
1,2-Dichloroethane	0.0200	0.01909		mg/Kg		95	76 - 132	4	29
Ethylbenzene	0.0200	0.01793		mg/Kg		90	80 - 135	3	37
Methyl tert-butyl ether	0.0200	0.01930		mg/Kg		97	77 - 132	5	25
Toluene	0.0200	0.01905		mg/Kg		95	75 - 137	3	34
Xylenes, Total	0.0400	0.03948		mg/Kg		99	80 - 136	5	19

Eurofins TestAmerica, Seattle

QC Sample Results

Client: Stantec Consulting Corp.
Project/Site: 7-11 No 22866 (WA)

Job ID: 580-100361-1

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCSD 580-348201/3-A

Matrix: Solid

Analysis Batch: 348260

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 348201

	LCSD	LCSD	
Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	111		80 - 120
Dibromofluoromethane (Surr)	95		80 - 120
1,2-Dichloroethane-d4 (Surr)	102		80 - 121
Toluene-d8 (Surr)	98		80 - 120

Lab Sample ID: MB 580-348202/1-A

Matrix: Solid

Analysis Batch: 348264

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 348202

	MB	MB							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200		0.00200		mg/Kg		01/19/21 17:32	01/20/21 07:31	1
1,2-Dibromoethane	<0.00100		0.00100		mg/Kg		01/19/21 17:32	01/20/21 07:31	1
1,2-Dichloroethane	<0.00100		0.00100		mg/Kg		01/19/21 17:32	01/20/21 07:31	1
Ethylbenzene	<0.00200		0.00200		mg/Kg		01/19/21 17:32	01/20/21 07:31	1
Methyl tert-butyl ether	<0.00200		0.00200		mg/Kg		01/19/21 17:32	01/20/21 07:31	1
Toluene	<0.0100		0.0100		mg/Kg		01/19/21 17:32	01/20/21 07:31	1
Xylenes, Total	<0.0100		0.0100		mg/Kg		01/19/21 17:32	01/20/21 07:31	1

	MB	MB							
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	105		80 - 120				01/19/21 17:32	01/20/21 07:31	1
Dibromofluoromethane (Surr)	101		80 - 120				01/19/21 17:32	01/20/21 07:31	1
1,2-Dichloroethane-d4 (Surr)	99		80 - 121				01/19/21 17:32	01/20/21 07:31	1
Toluene-d8 (Surr)	100		80 - 120				01/19/21 17:32	01/20/21 07:31	1

Lab Sample ID: LCS 580-348202/2-A

Matrix: Solid

Analysis Batch: 348264

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 348202

	Spike	LCS	LCS						%Rec.
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits		
Benzene	0.0200	0.01823		mg/Kg		91	79 - 135		
1,2-Dibromoethane	0.0200	0.01993		mg/Kg		100	77 - 123		
1,2-Dichloroethane	0.0200	0.01818		mg/Kg		91	76 - 132		
Ethylbenzene	0.0200	0.01803		mg/Kg		90	80 - 135		
Methyl tert-butyl ether	0.0200	0.01908		mg/Kg		95	77 - 132		
Toluene	0.0200	0.01940		mg/Kg		97	75 - 137		
Xylenes, Total	0.0400	0.04290		mg/Kg		107	80 - 136		

	LCS	LCS	
Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	117		80 - 120
Dibromofluoromethane (Surr)	102		80 - 120
1,2-Dichloroethane-d4 (Surr)	99		80 - 121
Toluene-d8 (Surr)	102		80 - 120

QC Sample Results

Client: Stantec Consulting Corp.
Project/Site: 7-11 No 22866 (WA)

Job ID: 580-100361-1

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCSD 580-348202/3-A

Matrix: Solid

Analysis Batch: 348264

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 348202

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits		RPD	Limit
Benzene	0.0200	0.01891		mg/Kg		95	79 - 135		4	31
1,2-Dibromoethane	0.0200	0.01986		mg/Kg		99	77 - 123		0	37
1,2-Dichloroethane	0.0200	0.01902		mg/Kg		95	76 - 132		5	29
Ethylbenzene	0.0200	0.01734		mg/Kg		87	80 - 135		4	37
Methyl tert-butyl ether	0.0200	0.01937		mg/Kg		97	77 - 132		1	25
Toluene	0.0200	0.01818		mg/Kg		91	75 - 137		7	34
Xylenes, Total	0.0400	0.04014		mg/Kg		100	80 - 136		7	19

Surrogate	LCSD LCSD		Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	104		80 - 120
Dibromofluoromethane (Surr)	105		80 - 120
1,2-Dichloroethane-d4 (Surr)	105		80 - 121
Toluene-d8 (Surr)	94		80 - 120

Lab Sample ID: MB 580-348362/1-A

Matrix: Solid

Analysis Batch: 348349

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 348362

Analyte	MB MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Benzene	<0.0300		0.0300		mg/Kg		01/21/21 12:43	01/21/21 14:31	1
1,2-Dibromoethane	<0.0200		0.0200		mg/Kg		01/21/21 12:43	01/21/21 14:31	1
1,2-Dichloroethane	<0.0200		0.0200		mg/Kg		01/21/21 12:43	01/21/21 14:31	1
Ethylbenzene	<0.0400		0.0400		mg/Kg		01/21/21 12:43	01/21/21 14:31	1
Methyl tert-butyl ether	<0.0400		0.0400		mg/Kg		01/21/21 12:43	01/21/21 14:31	1
Toluene	<0.150		0.150		mg/Kg		01/21/21 12:43	01/21/21 14:31	1
Xylenes, Total	<0.200		0.200		mg/Kg		01/21/21 12:43	01/21/21 14:31	1

Surrogate	MB MB		Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
4-Bromofluorobenzene (Surr)	100		80 - 120	01/21/21 12:43	01/21/21 14:31	1
Dibromofluoromethane (Surr)	98		80 - 120	01/21/21 12:43	01/21/21 14:31	1
1,2-Dichloroethane-d4 (Surr)	103		80 - 121	01/21/21 12:43	01/21/21 14:31	1
Toluene-d8 (Surr)	101		80 - 120	01/21/21 12:43	01/21/21 14:31	1

Lab Sample ID: LCS 580-348362/2-A

Matrix: Solid

Analysis Batch: 348349

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 348362

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits	
Benzene	0.800	0.7307		mg/Kg		91	79 - 135	
1,2-Dibromoethane	0.800	0.7494		mg/Kg		94	77 - 123	
1,2-Dichloroethane	0.800	0.7243		mg/Kg		91	76 - 132	
Ethylbenzene	0.800	0.8141		mg/Kg		102	80 - 135	
Methyl tert-butyl ether	0.800	0.7234		mg/Kg		90	77 - 132	
Toluene	0.800	0.7753		mg/Kg		97	75 - 137	
Xylenes, Total	1.60	1.597		mg/Kg		100	80 - 136	

Eurofins TestAmerica, Seattle

QC Sample Results

Client: Stantec Consulting Corp.
Project/Site: 7-11 No 22866 (WA)

Job ID: 580-100361-1

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 580-348362/2-A

Matrix: Solid

Analysis Batch: 348349

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 348362

	LCS	LCS	
Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	99		80 - 120
Dibromofluoromethane (Surr)	99		80 - 120
1,2-Dichloroethane-d4 (Surr)	101		80 - 121
Toluene-d8 (Surr)	99		80 - 120

Lab Sample ID: LCSD 580-348362/3-A

Matrix: Solid

Analysis Batch: 348349

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 348362

			Spike	LCSD	LCSD				%Rec.	RPD	
Analyte			Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Benzene			0.800	0.7433		mg/Kg		93	79 - 135	2	31
1,2-Dibromoethane			0.800	0.7436		mg/Kg		93	77 - 123	1	37
1,2-Dichloroethane			0.800	0.7418		mg/Kg		93	76 - 132	2	29
Ethylbenzene			0.800	0.8173		mg/Kg		102	80 - 135	0	37
Methyl tert-butyl ether			0.800	0.7187		mg/Kg		90	77 - 132	1	25
Toluene			0.800	0.7719		mg/Kg		96	75 - 137	0	34
Xylenes, Total			1.60	1.588		mg/Kg		99	80 - 136	1	19

	LCSD	LCSD	
Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	104		80 - 120
Dibromofluoromethane (Surr)	102		80 - 120
1,2-Dichloroethane-d4 (Surr)	101		80 - 121
Toluene-d8 (Surr)	101		80 - 120

Method: 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM)

Lab Sample ID: MB 580-347854/1-A

Matrix: Solid

Analysis Batch: 347974

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 347854

	MB	MB							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	<0.00500		0.00500		mg/Kg		01/13/21 16:38	01/15/21 15:56	1
2-Methylnaphthalene	<0.00500		0.00500		mg/Kg		01/13/21 16:38	01/15/21 15:56	1
Naphthalene	<0.00500		0.00500		mg/Kg		01/13/21 16:38	01/15/21 15:56	1

	MB	MB				
Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Terphenyl-d14	81		42 - 130	01/13/21 16:38	01/15/21 15:56	1

Lab Sample ID: LCS 580-347854/2-A

Matrix: Solid

Analysis Batch: 347974

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 347854

			Spike	LCS	LCS				
Analyte			Added	Result	Qualifier	Unit	D	%Rec	%Rec. Limits
1-Methylnaphthalene			1.00	0.7772		mg/Kg		78	53 - 120
2-Methylnaphthalene			1.00	0.9198		mg/Kg		92	58 - 130
Naphthalene			1.00	0.8689		mg/Kg		87	48 - 120

Eurofins TestAmerica, Seattle

QC Sample Results

Client: Stantec Consulting Corp.
Project/Site: 7-11 No 22866 (WA)

Job ID: 580-100361-1

Method: 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Lab Sample ID: LCS 580-347854/2-A

Matrix: Solid

Analysis Batch: 347974

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 347854

	LCS	LCS	
Surrogate	%Recovery	Qualifier	Limits
Terphenyl-d14	79		42 - 130

Lab Sample ID: MB 580-348005/1-A

Matrix: Solid

Analysis Batch: 348131

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 348005

	MB	MB								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac	
1-Methylnaphthalene	<0.00484		0.00484		mg/Kg		01/15/21 12:30	01/19/21 15:16	1	
2-Methylnaphthalene	<0.00484		0.00484		mg/Kg		01/15/21 12:30	01/19/21 15:16	1	
Naphthalene	<0.00484		0.00484		mg/Kg		01/15/21 12:30	01/19/21 15:16	1	
	MB	MB								
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac	
Terphenyl-d14	92		42 - 130				01/15/21 12:30	01/19/21 15:16	1	

Lab Sample ID: LCS 580-348005/2-A

Matrix: Solid

Analysis Batch: 348131

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 348005

			Spike	LCS	LCS				%Rec.		
Analyte			Added	Result	Qualifier	Unit	D	%Rec	Limits		
1-Methylnaphthalene			0.991	0.7565		mg/Kg		76	53 - 120		
2-Methylnaphthalene			0.991	0.9158		mg/Kg		92	58 - 130		
Naphthalene			0.991	0.8496		mg/Kg		86	48 - 120		
	LCS	LCS									
Surrogate	%Recovery	Qualifier	Limits								
Terphenyl-d14	79		42 - 130								

Lab Sample ID: 580-100361-1 MS

Matrix: Solid

Analysis Batch: 348131

Client Sample ID: MW-11-10

Prep Type: Total/NA

Prep Batch: 348005

	Sample	Sample	Spike	MS	MS				%Rec.		
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits		
1-Methylnaphthalene	0.641		1.15	1.341		mg/Kg	⊛	61	53 - 120		
2-Methylnaphthalene	1.49	F1	1.15	2.133	F1	mg/Kg	⊛	56	58 - 130		
Naphthalene	1.25		1.15	1.890		mg/Kg	⊛	56	48 - 120		
	MS	MS									
Surrogate	%Recovery	Qualifier	Limits								
Terphenyl-d14	81		42 - 130								

Lab Sample ID: 580-100361-1 MSD

Matrix: Solid

Analysis Batch: 348131

Client Sample ID: MW-11-10

Prep Type: Total/NA

Prep Batch: 348005

	Sample	Sample	Spike	MSD	MSD				%Rec.		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
1-Methylnaphthalene	0.641		1.17	1.345		mg/Kg	⊛	60	53 - 120	0	10
2-Methylnaphthalene	1.49	F1	1.17	2.116	F1	mg/Kg	⊛	54	58 - 130	1	10
Naphthalene	1.25		1.17	1.887		mg/Kg	⊛	55	48 - 120	0	10

Eurofins TestAmerica, Seattle

QC Sample Results

Client: Stantec Consulting Corp.
Project/Site: 7-11 No 22866 (WA)

Job ID: 580-100361-1

Method: 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Lab Sample ID: 580-100361-1 MSD

Matrix: Solid

Analysis Batch: 348131

Client Sample ID: MW-11-10

Prep Type: Total/NA

Prep Batch: 348005

	MSD	MSD	
Surrogate	%Recovery	Qualifier	Limits
Terphenyl-d14	77		42 - 130

Method: NWTPH-Gx - Northwest - Volatile Petroleum Products (GC)

Lab Sample ID: MB 580-347755/1-A

Matrix: Solid

Analysis Batch: 347759

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 347755

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics - NWTPH-G	Result	Qualifier			mg/Kg		01/12/21 20:23	01/12/21 20:54	1
	<5.00		5.00						
Surrogate	MB	MB	Limits				Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier							
4-Bromofluorobenzene (Surr)	95		50 - 150				01/12/21 20:23	01/12/21 20:54	1
Trifluorotoluene (Surr)	113		50 - 150				01/12/21 20:23	01/12/21 20:54	1

Lab Sample ID: LCS 580-347755/2-A

Matrix: Solid

Analysis Batch: 347759

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 347755

Analyte	Spike	LCS	LCS	Unit	D	%Rec	%Rec.
	Added	Result	Qualifier	mg/Kg			Limits
Gasoline Range Organics - NWTPH-G	40.0	38.36				96	80 - 120
Surrogate	LCS	LCS	Limits				
	%Recovery	Qualifier					
4-Bromofluorobenzene (Surr)	96		50 - 150				
Trifluorotoluene (Surr)	108		50 - 150				

Lab Sample ID: LCSD 580-347755/3-A

Matrix: Solid

Analysis Batch: 347759

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 347755

Analyte	Spike	LCSD	LCSD	Unit	D	%Rec	%Rec.	RPD
	Added	Result	Qualifier	mg/Kg			Limits	RPD
Gasoline Range Organics - NWTPH-G	40.0	37.08				93	80 - 120	3
Surrogate	LCSD	LCSD	Limits					
	%Recovery	Qualifier						
4-Bromofluorobenzene (Surr)	98		50 - 150					
Trifluorotoluene (Surr)	107		50 - 150					

Lab Sample ID: MB 580-347756/1-A

Matrix: Solid

Analysis Batch: 347849

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 347756

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier			mg/Kg		01/12/21 20:32	01/13/21 13:17	1
Gasoline Range Organics - NWTPH-G	<5.00		5.00						
Surrogate	MB	MB	Limits				Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier							
4-Bromofluorobenzene (Surr)	73		50 - 150				01/12/21 20:32	01/13/21 13:17	1

Eurofins TestAmerica, Seattle

QC Sample Results

Client: Stantec Consulting Corp.
Project/Site: 7-11 No 22866 (WA)

Job ID: 580-100361-1

Method: NWTPH-Gx - Northwest - Volatile Petroleum Products (GC)

Lab Sample ID: LCS 580-347756/2-A

Matrix: Solid

Analysis Batch: 347849

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 347756

			Spike	LCS	LCS				%Rec.		
Analyte			Added	Result	Qualifier	Unit	D	%Rec	Limits		
Gasoline Range Organics - NWTPH-G			40.0	37.32		mg/Kg		93	80 - 120		
			LCS	LCS							
Surrogate	%Recovery	Qualifier	Limits								
4-Bromofluorobenzene (Surr)	95		50 - 150								

Lab Sample ID: LCSD 580-347756/3-A

Matrix: Solid

Analysis Batch: 347849

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 347756

			Spike	LCSD	LCSD				%Rec.	RPD	
Analyte			Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Gasoline Range Organics - NWTPH-G			40.0	34.27		mg/Kg		86	80 - 120	9	10
			LCSD	LCSD							
Surrogate	%Recovery	Qualifier	Limits								
4-Bromofluorobenzene (Surr)	89		50 - 150								

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Lab Sample ID: MB 580-347819/1-A

Matrix: Solid

Analysis Batch: 348046

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 347819

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Diesel Range Organics (C10-C24)	<50.0		50.0		mg/Kg		01/13/21 12:41	01/16/21 05:34	1
Motor Oil (C24-C44)	<50.0		50.0		mg/Kg		01/13/21 12:41	01/16/21 05:34	1
Surrogate	MB	MB	Limits				Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier							
o-Terphenyl	81		50 - 150				01/13/21 12:41	01/16/21 05:34	1

Lab Sample ID: LCS 580-347819/2-A

Matrix: Solid

Analysis Batch: 348046

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 347819

Analyte			Spike	LCS	LCS	Unit	D	%Rec	%Rec.		
			Added	Result	Qualifier				Limits		
Diesel Range Organics (C10-C24)			500	473.3		mg/Kg		95	70 - 125		
Motor Oil (C24-C44)			500	516.7		mg/Kg		103	70 - 129		

Lab Sample ID: LCSD 580-347819/3-A

Matrix: Solid

Analysis Batch: 348046

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 347819

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Diesel Range Organics (C10-C24)	500	448.5		mg/Kg		90	70 - 125	5	16

Eurofins TestAmerica, Seattle

QC Sample Results

Client: Stantec Consulting Corp.
Project/Site: 7-11 No 22866 (WA)

Job ID: 580-100361-1

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC) (Continued)

Lab Sample ID: LCSD 580-347819/3-A

Matrix: Solid

Analysis Batch: 348046

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 347819

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Motor Oil (C24-C44)	500	459.4		mg/Kg		92	70 - 129	12	16
Surrogate	LCSD %Recovery	LCSD Qualifier	Limits						
o-Terphenyl	92		50 - 150						

Lab Sample ID: 580-100361-7 MS

Matrix: Solid

Analysis Batch: 348046

Client Sample ID: MW-13-15

Prep Type: Total/NA

Prep Batch: 347819

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Diesel Range Organics (C10-C24)	<51.7		557	487.6		mg/Kg	✱	87	70 - 125		
Motor Oil (C24-C44)	<51.7		557	493.0		mg/Kg	✱	88	70 - 129		
Surrogate	MS %Recovery	MS Qualifier	Limits								
o-Terphenyl	83		50 - 150								

Lab Sample ID: 580-100361-22 MS

Matrix: Solid

Analysis Batch: 348046

Client Sample ID: SB-21-18

Prep Type: Total/NA

Prep Batch: 347819

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Diesel Range Organics (C10-C24)	<51.3		519	444.8		mg/Kg	✱	86	70 - 125		
Motor Oil (C24-C44)	<51.3		519	459.3		mg/Kg	✱	88	70 - 129		
Surrogate	MS %Recovery	MS Qualifier	Limits								
o-Terphenyl	85		50 - 150								

Lab Sample ID: 580-100361-7 DU

Matrix: Solid

Analysis Batch: 348046

Client Sample ID: MW-13-15

Prep Type: Total/NA

Prep Batch: 347819

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Diesel Range Organics (C10-C24)	<51.7		<55.6		mg/Kg	✱	NC	35
Motor Oil (C24-C44)	<51.7		<55.6		mg/Kg	✱	NC	35
Surrogate	DU %Recovery	DU Qualifier	Limits					
o-Terphenyl	72		50 - 150					

Lab Sample ID: 580-100361-22 DU

Matrix: Solid

Analysis Batch: 348046

Client Sample ID: SB-21-18

Prep Type: Total/NA

Prep Batch: 347819

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Diesel Range Organics (C10-C24)	<51.3		<55.9		mg/Kg	✱	NC	35
Motor Oil (C24-C44)	<51.3		<55.9		mg/Kg	✱	NC	35

Eurofins TestAmerica, Seattle

QC Sample Results

Client: Stantec Consulting Corp.
Project/Site: 7-11 No 22866 (WA)

Job ID: 580-100361-1

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC) (Continued)

	DU	DU	
Surrogate	%Recovery	Qualifier	Limits
<i>o</i> -Terphenyl	75		50 - 150

Lab Sample ID: MB 580-347826/1-A
Matrix: Solid
Analysis Batch: 348143

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 347826

	MB	MB							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (C10-C24)	<50.0		50.0		mg/Kg		01/13/21 14:21	01/19/21 09:15	1
Motor Oil (C24-C44)	<50.0		50.0		mg/Kg		01/13/21 14:21	01/19/21 09:15	1

	MB	MB							
Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac			
<i>o</i> -Terphenyl	76		50 - 150	01/13/21 14:21	01/19/21 09:15	1			

Lab Sample ID: LCS 580-347826/2-A
Matrix: Solid
Analysis Batch: 348143

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 347826

			Spike	LCS	LCS				%Rec.	
Analyte			Added	Result	Qualifier	Unit	D	%Rec	Limits	
Diesel Range Organics (C10-C24)			500	436.4		mg/Kg		87	70 - 125	
Motor Oil (C24-C44)			500	441.0		mg/Kg		88	70 - 129	

	LCS	LCS	
Surrogate	%Recovery	Qualifier	Limits
<i>o</i> -Terphenyl	90		50 - 150

Lab Sample ID: LCSD 580-347826/3-A
Matrix: Solid
Analysis Batch: 348143

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 347826

			Spike	LCSD	LCSD				%Rec.	RPD	
Analyte			Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Diesel Range Organics (C10-C24)			500	503.2		mg/Kg		101	70 - 125	14	16
Motor Oil (C24-C44)			500	512.8		mg/Kg		103	70 - 129	15	16

	LCSD	LCSD	
Surrogate	%Recovery	Qualifier	Limits
<i>o</i> -Terphenyl	103		50 - 150

Lab Sample ID: 580-100361-29 MS
Matrix: Solid
Analysis Batch: 348143

Client Sample ID: SB-16-10
Prep Type: Total/NA
Prep Batch: 347826

	Sample	Sample	Spike	MS	MS				%Rec.	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Diesel Range Organics (C10-C24)	<53.2		549	470.1		mg/Kg	✱	86	70 - 125	
Motor Oil (C24-C44)	<53.2		549	466.6		mg/Kg	✱	85	70 - 129	

	MS	MS	
Surrogate	%Recovery	Qualifier	Limits
<i>o</i> -Terphenyl	87		50 - 150

Eurofins TestAmerica, Seattle

QC Sample Results

Client: Stantec Consulting Corp.
Project/Site: 7-11 No 22866 (WA)

Job ID: 580-100361-1

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC) (Continued)

Lab Sample ID: 580-100361-36 MS

Matrix: Solid

Analysis Batch: 348143

Client Sample ID: SB-19-15

Prep Type: Total/NA

Prep Batch: 347826

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Diesel Range Organics (C10-C24)	<57.1		563	519.4		mg/Kg	✱	92	70 - 125
Motor Oil (C24-C44)	<57.1		563	537.4		mg/Kg	✱	89	70 - 129
Surrogate	MS %Recovery	MS Qualifier	Limits						
o-Terphenyl	93		50 - 150						

Lab Sample ID: 580-100361-29 DU

Matrix: Solid

Analysis Batch: 348143

Client Sample ID: SB-16-10

Prep Type: Total/NA

Prep Batch: 347826

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Diesel Range Organics (C10-C24)	<53.2		<53.2		mg/Kg	✱	NC	35
Motor Oil (C24-C44)	<53.2		<53.2		mg/Kg	✱	NC	35
Surrogate	DU %Recovery	DU Qualifier	Limits					
o-Terphenyl	68		50 - 150					

Lab Sample ID: 580-100361-36 DU

Matrix: Solid

Analysis Batch: 348143

Client Sample ID: SB-19-15

Prep Type: Total/NA

Prep Batch: 347826

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Diesel Range Organics (C10-C24)	<57.1		<54.0		mg/Kg	✱	NC	35
Motor Oil (C24-C44)	<57.1		<54.0		mg/Kg	✱	13	35
Surrogate	DU %Recovery	DU Qualifier	Limits					
o-Terphenyl	77		50 - 150					

Method: 6010D - Metals (ICP)

Lab Sample ID: MB 580-347951/22-A

Matrix: Solid

Analysis Batch: 348152

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 347951

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	<1.50		1.50		mg/Kg		01/14/21 15:54	01/15/21 17:35	1

Lab Sample ID: LCS 580-347951/23-A

Matrix: Solid

Analysis Batch: 348152

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 347951

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Lead	50.0	51.50		mg/Kg		103	80 - 120

Eurofins TestAmerica, Seattle

QC Sample Results

Client: Stantec Consulting Corp.
Project/Site: 7-11 No 22866 (WA)

Job ID: 580-100361-1

Method: 6010D - Metals (ICP) (Continued)

Lab Sample ID: LCSD 580-347951/24-A
Matrix: Solid
Analysis Batch: 348152

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 347951

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Lead	50.0	51.90		mg/Kg		104	80 - 120	1	20

Method: 2540G - SM 2540G

Lab Sample ID: 580-100361-6 DU
Matrix: Solid
Analysis Batch: 347870

Client Sample ID: MW-13-12
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Percent Solids	87.2		87.4		%		0.2	20
Percent Moisture	12.8		12.6		%		1	20

Lab Sample ID: 580-100361-36 DU
Matrix: Solid
Analysis Batch: 347870

Client Sample ID: SB-19-15
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Percent Solids	85.6		86.4		%		0.9	20
Percent Moisture	14.4		13.6		%		6	20

Lab Chronicle

Client: Stantec Consulting Corp.
Project/Site: 7-11 No 22866 (WA)

Job ID: 580-100361-1

Client Sample ID: MW-11-10

Lab Sample ID: 580-100361-1

Date Collected: 01/07/21 09:20

Matrix: Solid

Date Received: 01/08/21 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			347755	01/12/21 20:23	JSM	TAL SEA
Total/NA	Analysis	NWTPH-Gx		1	347759	01/12/21 22:31	JSM	TAL SEA
Total/NA	Analysis	2540G		1	347870	01/13/21 17:43	S1S	TAL SEA

Client Sample ID: MW-11-10

Lab Sample ID: 580-100361-1

Date Collected: 01/07/21 09:20

Matrix: Solid

Date Received: 01/08/21 10:00

Percent Solids: 85.1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			348201	01/19/21 17:13	ASJ	TAL SEA
Total/NA	Analysis	8260D		1	348260	01/19/21 23:24	ASJ	TAL SEA
Total/NA	Prep	3546			348005	01/15/21 12:30	CCH	TAL SEA
Total/NA	Analysis	8270E SIM		1	348131	01/19/21 16:00	W1T	TAL SEA
Total/NA	Prep	3546			347819	01/13/21 12:41	S1S	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	348046	01/16/21 06:33	T1W	TAL SEA
Total/NA	Prep	3050B			347951	01/14/21 15:53	TMH	TAL SEA
Total/NA	Analysis	6010D		1	348152	01/15/21 18:14	TMH	TAL SEA

Client Sample ID: MW-11-15

Lab Sample ID: 580-100361-2

Date Collected: 01/07/21 09:30

Matrix: Solid

Date Received: 01/08/21 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			347755	01/12/21 20:23	JSM	TAL SEA
Total/NA	Analysis	NWTPH-Gx		1	347759	01/12/21 22:56	JSM	TAL SEA
Total/NA	Analysis	2540G		1	347870	01/13/21 17:43	S1S	TAL SEA

Client Sample ID: MW-11-15

Lab Sample ID: 580-100361-2

Date Collected: 01/07/21 09:30

Matrix: Solid

Date Received: 01/08/21 10:00

Percent Solids: 90.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			348201	01/19/21 17:13	ASJ	TAL SEA
Total/NA	Analysis	8260D		1	348260	01/19/21 23:50	ASJ	TAL SEA
Total/NA	Prep	3546			347819	01/13/21 12:41	S1S	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	348046	01/16/21 06:52	T1W	TAL SEA

Client Sample ID: MW-11-18

Lab Sample ID: 580-100361-3

Date Collected: 01/07/21 09:40

Matrix: Solid

Date Received: 01/08/21 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			347755	01/12/21 20:23	JSM	TAL SEA
Total/NA	Analysis	NWTPH-Gx		1	347759	01/12/21 23:20	JSM	TAL SEA
Total/NA	Analysis	2540G		1	347870	01/13/21 17:43	S1S	TAL SEA

Eurofins TestAmerica, Seattle

Lab Chronicle

Client: Stantec Consulting Corp.
Project/Site: 7-11 No 22866 (WA)

Job ID: 580-100361-1

Client Sample ID: MW-11-18

Lab Sample ID: 580-100361-3

Date Collected: 01/07/21 09:40

Matrix: Solid

Date Received: 01/08/21 10:00

Percent Solids: 86.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			348201	01/19/21 17:13	ASJ	TAL SEA
Total/NA	Analysis	8260D		1	348260	01/20/21 00:15	ASJ	TAL SEA
Total/NA	Prep	3546			347819	01/13/21 12:41	S1S	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	348046	01/16/21 07:31	T1W	TAL SEA

Client Sample ID: MW-12-10

Lab Sample ID: 580-100361-4

Date Collected: 01/07/21 11:30

Matrix: Solid

Date Received: 01/08/21 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			347755	01/12/21 20:23	JSM	TAL SEA
Total/NA	Analysis	NWTPH-Gx		1	347759	01/12/21 23:45	JSM	TAL SEA
Total/NA	Analysis	2540G		1	347870	01/13/21 17:43	S1S	TAL SEA

Client Sample ID: MW-12-10

Lab Sample ID: 580-100361-4

Date Collected: 01/07/21 11:30

Matrix: Solid

Date Received: 01/08/21 10:00

Percent Solids: 85.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			348201	01/19/21 17:13	ASJ	TAL SEA
Total/NA	Analysis	8260D		1	348260	01/20/21 00:41	ASJ	TAL SEA
Total/NA	Prep	3546			347819	01/13/21 12:41	S1S	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	348046	01/16/21 07:51	T1W	TAL SEA

Client Sample ID: MW-12-15

Lab Sample ID: 580-100361-5

Date Collected: 01/07/21 11:40

Matrix: Solid

Date Received: 01/08/21 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			347755	01/12/21 20:23	JSM	TAL SEA
Total/NA	Analysis	NWTPH-Gx		1	347759	01/13/21 00:09	JSM	TAL SEA
Total/NA	Analysis	2540G		1	347870	01/13/21 17:43	S1S	TAL SEA

Client Sample ID: MW-12-15

Lab Sample ID: 580-100361-5

Date Collected: 01/07/21 11:40

Matrix: Solid

Date Received: 01/08/21 10:00

Percent Solids: 87.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			348201	01/19/21 17:13	ASJ	TAL SEA
Total/NA	Analysis	8260D		1	348260	01/20/21 01:07	ASJ	TAL SEA
Total/NA	Prep	3546			347819	01/13/21 12:41	S1S	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	348046	01/16/21 08:10	T1W	TAL SEA

Eurofins TestAmerica, Seattle

Lab Chronicle

Client: Stantec Consulting Corp.
Project/Site: 7-11 No 22866 (WA)

Job ID: 580-100361-1

Client Sample ID: MW-13-12

Lab Sample ID: 580-100361-6

Date Collected: 01/06/21 14:30

Matrix: Solid

Date Received: 01/08/21 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			347755	01/12/21 20:23	JSM	TAL SEA
Total/NA	Analysis	NWTPH-Gx		1	347759	01/13/21 00:33	JSM	TAL SEA
Total/NA	Analysis	2540G		1	347870	01/13/21 17:43	S1S	TAL SEA

Client Sample ID: MW-13-12

Lab Sample ID: 580-100361-6

Date Collected: 01/06/21 14:30

Matrix: Solid

Date Received: 01/08/21 10:00

Percent Solids: 87.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035	RA		348362	01/21/21 12:43	CJB	TAL SEA
Total/NA	Analysis	8260D	RA	1	348349	01/21/21 18:17	TL1	TAL SEA
Total/NA	Prep	5035			348201	01/19/21 17:13	ASJ	TAL SEA
Total/NA	Analysis	8260D		1	348260	01/20/21 01:32	ASJ	TAL SEA
Total/NA	Prep	3546			348005	01/15/21 12:30	CCH	TAL SEA
Total/NA	Analysis	8270E SIM		1	348131	01/19/21 17:07	W1T	TAL SEA
Total/NA	Prep	3546			347819	01/13/21 12:41	S1S	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	348046	01/16/21 08:30	T1W	TAL SEA
Total/NA	Prep	3050B			347951	01/14/21 15:53	TMH	TAL SEA
Total/NA	Analysis	6010D		1	348152	01/15/21 18:17	TMH	TAL SEA

Client Sample ID: MW-13-15

Lab Sample ID: 580-100361-7

Date Collected: 01/06/21 14:35

Matrix: Solid

Date Received: 01/08/21 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			347755	01/12/21 20:23	JSM	TAL SEA
Total/NA	Analysis	NWTPH-Gx		1	348193	01/19/21 10:23	JSM	TAL SEA
Total/NA	Analysis	2540G		1	347870	01/13/21 17:43	S1S	TAL SEA

Client Sample ID: MW-13-15

Lab Sample ID: 580-100361-7

Date Collected: 01/06/21 14:35

Matrix: Solid

Date Received: 01/08/21 10:00

Percent Solids: 88.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			348362	01/21/21 12:43	CJB	TAL SEA
Total/NA	Analysis	8260D		1	348349	01/21/21 15:46	TL1	TAL SEA
Total/NA	Prep	5035			348201	01/19/21 17:13	ASJ	TAL SEA
Total/NA	Analysis	8260D		1	348260	01/20/21 01:58	ASJ	TAL SEA
Total/NA	Prep	3546			348005	01/15/21 12:30	CCH	TAL SEA
Total/NA	Analysis	8270E SIM		1	348131	01/19/21 17:30	W1T	TAL SEA
Total/NA	Prep	3546			347819	01/13/21 12:41	S1S	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	348046	01/16/21 08:50	T1W	TAL SEA
Total/NA	Prep	3050B			347951	01/14/21 15:53	TMH	TAL SEA
Total/NA	Analysis	6010D		1	348152	01/15/21 18:20	TMH	TAL SEA

Eurofins TestAmerica, Seattle

Lab Chronicle

Client: Stantec Consulting Corp.
Project/Site: 7-11 No 22866 (WA)

Job ID: 580-100361-1

Client Sample ID: MW-13-20

Lab Sample ID: 580-100361-8

Date Collected: 01/06/21 14:40

Matrix: Solid

Date Received: 01/08/21 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			347755	01/12/21 20:23	JSM	TAL SEA
Total/NA	Analysis	NWTPH-Gx		1	347759	01/13/21 01:47	JSM	TAL SEA
Total/NA	Analysis	2540G		1	347870	01/13/21 17:43	S1S	TAL SEA

Client Sample ID: MW-13-20

Lab Sample ID: 580-100361-8

Date Collected: 01/06/21 14:40

Matrix: Solid

Date Received: 01/08/21 10:00

Percent Solids: 87.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			348201	01/19/21 17:13	ASJ	TAL SEA
Total/NA	Analysis	8260D		1	348260	01/20/21 02:24	ASJ	TAL SEA
Total/NA	Prep	3546			347819	01/13/21 12:41	S1S	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	348046	01/16/21 09:48	T1W	TAL SEA

Client Sample ID: MW-14-10

Lab Sample ID: 580-100361-9

Date Collected: 01/06/21 12:30

Matrix: Solid

Date Received: 01/08/21 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			347755	01/12/21 20:23	JSM	TAL SEA
Total/NA	Analysis	NWTPH-Gx		1	347759	01/13/21 02:12	JSM	TAL SEA
Total/NA	Analysis	2540G		1	347870	01/13/21 17:43	S1S	TAL SEA

Client Sample ID: MW-14-10

Lab Sample ID: 580-100361-9

Date Collected: 01/06/21 12:30

Matrix: Solid

Date Received: 01/08/21 10:00

Percent Solids: 86.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			348201	01/19/21 17:13	ASJ	TAL SEA
Total/NA	Analysis	8260D		1	348260	01/20/21 02:49	ASJ	TAL SEA
Total/NA	Prep	3546			347819	01/13/21 12:41	S1S	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	348046	01/16/21 10:08	T1W	TAL SEA

Client Sample ID: MW-14-15

Lab Sample ID: 580-100361-10

Date Collected: 01/06/21 12:40

Matrix: Solid

Date Received: 01/08/21 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			347755	01/12/21 20:23	JSM	TAL SEA
Total/NA	Analysis	NWTPH-Gx		1	347759	01/13/21 02:36	JSM	TAL SEA
Total/NA	Analysis	2540G		1	347870	01/13/21 17:43	S1S	TAL SEA

Lab Chronicle

Client: Stantec Consulting Corp.
Project/Site: 7-11 No 22866 (WA)

Job ID: 580-100361-1

Client Sample ID: MW-14-15

Lab Sample ID: 580-100361-10

Date Collected: 01/06/21 12:40

Matrix: Solid

Date Received: 01/08/21 10:00

Percent Solids: 90.5

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			348201	01/19/21 17:13	ASJ	TAL SEA
Total/NA	Analysis	8260D		1	348260	01/20/21 03:15	ASJ	TAL SEA
Total/NA	Prep	3546			347819	01/13/21 12:41	S1S	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	348046	01/16/21 10:28	T1W	TAL SEA

Client Sample ID: MW-15-10

Lab Sample ID: 580-100361-11

Date Collected: 01/05/21 15:30

Matrix: Solid

Date Received: 01/08/21 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			347755	01/12/21 20:23	JSM	TAL SEA
Total/NA	Analysis	NWTPH-Gx		1	347759	01/13/21 03:00	JSM	TAL SEA
Total/NA	Analysis	2540G		1	347870	01/13/21 17:43	S1S	TAL SEA

Client Sample ID: MW-15-10

Lab Sample ID: 580-100361-11

Date Collected: 01/05/21 15:30

Matrix: Solid

Date Received: 01/08/21 10:00

Percent Solids: 85.5

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			348201	01/19/21 17:13	ASJ	TAL SEA
Total/NA	Analysis	8260D		1	348260	01/19/21 20:24	ASJ	TAL SEA
Total/NA	Prep	3546			347819	01/13/21 12:41	S1S	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	348046	01/16/21 11:07	T1W	TAL SEA

Client Sample ID: MW-15-15

Lab Sample ID: 580-100361-12

Date Collected: 01/05/21 15:40

Matrix: Solid

Date Received: 01/08/21 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			347755	01/12/21 20:23	JSM	TAL SEA
Total/NA	Analysis	NWTPH-Gx		1	347759	01/13/21 03:25	JSM	TAL SEA
Total/NA	Analysis	2540G		1	347870	01/13/21 17:43	S1S	TAL SEA

Client Sample ID: MW-15-15

Lab Sample ID: 580-100361-12

Date Collected: 01/05/21 15:40

Matrix: Solid

Date Received: 01/08/21 10:00

Percent Solids: 92.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			348201	01/19/21 17:13	ASJ	TAL SEA
Total/NA	Analysis	8260D		1	348260	01/19/21 20:50	ASJ	TAL SEA
Total/NA	Prep	3546			347819	01/13/21 12:41	S1S	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	348046	01/16/21 11:27	T1W	TAL SEA

Lab Chronicle

Client: Stantec Consulting Corp.
Project/Site: 7-11 No 22866 (WA)

Job ID: 580-100361-1

Client Sample ID: MW-17-12

Lab Sample ID: 580-100361-15

Date Collected: 01/05/21 12:15

Matrix: Solid

Date Received: 01/08/21 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			347755	01/12/21 20:23	JSM	TAL SEA
Total/NA	Analysis	NWTPH-Gx		1	348193	01/19/21 10:47	JSM	TAL SEA
Total/NA	Analysis	2540G		1	347870	01/13/21 17:43	S1S	TAL SEA

Client Sample ID: MW-17-12

Lab Sample ID: 580-100361-15

Date Collected: 01/05/21 12:15

Matrix: Solid

Date Received: 01/08/21 10:00

Percent Solids: 86.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			348201	01/19/21 17:13	ASJ	TAL SEA
Total/NA	Analysis	8260D		1	348260	01/19/21 21:15	ASJ	TAL SEA
Total/NA	Prep	3546			347819	01/13/21 12:41	S1S	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	348046	01/16/21 11:47	T1W	TAL SEA

Client Sample ID: MW-17-15

Lab Sample ID: 580-100361-16

Date Collected: 01/05/21 12:30

Matrix: Solid

Date Received: 01/08/21 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			347755	01/12/21 20:23	JSM	TAL SEA
Total/NA	Analysis	NWTPH-Gx		1	348193	01/19/21 11:11	JSM	TAL SEA
Total/NA	Analysis	2540G		1	347870	01/13/21 18:24	S1S	TAL SEA

Client Sample ID: MW-17-15

Lab Sample ID: 580-100361-16

Date Collected: 01/05/21 12:30

Matrix: Solid

Date Received: 01/08/21 10:00

Percent Solids: 85.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			348201	01/19/21 17:13	ASJ	TAL SEA
Total/NA	Analysis	8260D		1	348260	01/19/21 21:41	ASJ	TAL SEA
Total/NA	Prep	3546			347819	01/13/21 12:41	S1S	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	348046	01/16/21 12:06	T1W	TAL SEA

Client Sample ID: SB-20-5

Lab Sample ID: 580-100361-17

Date Collected: 01/05/21 17:20

Matrix: Solid

Date Received: 01/08/21 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			347755	01/12/21 20:23	JSM	TAL SEA
Total/NA	Analysis	NWTPH-Gx		1	348193	01/19/21 11:36	JSM	TAL SEA
Total/NA	Analysis	2540G		1	347870	01/13/21 18:24	S1S	TAL SEA

Lab Chronicle

Client: Stantec Consulting Corp.
Project/Site: 7-11 No 22866 (WA)

Job ID: 580-100361-1

Client Sample ID: SB-20-5

Lab Sample ID: 580-100361-17

Date Collected: 01/05/21 17:20

Matrix: Solid

Date Received: 01/08/21 10:00

Percent Solids: 80.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			348201	01/19/21 17:13	ASJ	TAL SEA
Total/NA	Analysis	8260D		1	348260	01/19/21 22:07	ASJ	TAL SEA
Total/NA	Prep	3546			348005	01/15/21 12:30	CCH	TAL SEA
Total/NA	Analysis	8270E SIM		1	348131	01/19/21 17:52	W1T	TAL SEA
Total/NA	Prep	3546			347819	01/13/21 12:41	S1S	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	348046	01/16/21 12:26	T1W	TAL SEA
Total/NA	Prep	3050B			347951	01/14/21 15:53	TMH	TAL SEA
Total/NA	Analysis	6010D		1	348152	01/15/21 18:23	TMH	TAL SEA

Client Sample ID: SB-20-10

Lab Sample ID: 580-100361-18

Date Collected: 01/06/21 11:30

Matrix: Solid

Date Received: 01/08/21 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			347755	01/12/21 20:23	JSM	TAL SEA
Total/NA	Analysis	NWTPH-Gx		1	348193	01/19/21 12:49	JSM	TAL SEA
Total/NA	Analysis	2540G		1	347870	01/13/21 18:24	S1S	TAL SEA

Client Sample ID: SB-20-10

Lab Sample ID: 580-100361-18

Date Collected: 01/06/21 11:30

Matrix: Solid

Date Received: 01/08/21 10:00

Percent Solids: 86.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			348362	01/21/21 12:43	CJB	TAL SEA
Total/NA	Analysis	8260D		1	348349	01/21/21 14:56	TL1	TAL SEA
Total/NA	Prep	5035	DL		348362	01/21/21 12:43	CJB	TAL SEA
Total/NA	Analysis	8260D	DL	1	348349	01/21/21 17:51	TL1	TAL SEA
Total/NA	Prep	5035			348201	01/19/21 17:13	ASJ	TAL SEA
Total/NA	Analysis	8260D		1	348260	01/20/21 03:40	ASJ	TAL SEA
Total/NA	Prep	3546			348005	01/15/21 12:30	CCH	TAL SEA
Total/NA	Analysis	8270E SIM		15	348204	01/20/21 07:07	JKM	TAL SEA
Total/NA	Prep	3546			347819	01/13/21 12:41	S1S	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	348046	01/16/21 12:46	T1W	TAL SEA
Total/NA	Prep	3050B			347951	01/14/21 15:53	TMH	TAL SEA
Total/NA	Analysis	6010D		1	348152	01/15/21 18:26	TMH	TAL SEA

Client Sample ID: SB-20-19

Lab Sample ID: 580-100361-19

Date Collected: 01/06/21 11:45

Matrix: Solid

Date Received: 01/08/21 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			347755	01/12/21 20:23	JSM	TAL SEA
Total/NA	Analysis	NWTPH-Gx		1	348193	01/19/21 12:00	JSM	TAL SEA
Total/NA	Analysis	2540G		1	347870	01/13/21 18:24	S1S	TAL SEA

Eurofins TestAmerica, Seattle

Lab Chronicle

Client: Stantec Consulting Corp.
Project/Site: 7-11 No 22866 (WA)

Job ID: 580-100361-1

Client Sample ID: SB-20-19

Lab Sample ID: 580-100361-19

Date Collected: 01/06/21 11:45

Matrix: Solid

Date Received: 01/08/21 10:00

Percent Solids: 88.1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			348362	01/21/21 12:43	CJB	TAL SEA
Total/NA	Analysis	8260D		1	348349	01/21/21 16:11	TL1	TAL SEA
Total/NA	Prep	5035			348201	01/19/21 17:13	ASJ	TAL SEA
Total/NA	Analysis	8260D		1	348260	01/20/21 04:06	ASJ	TAL SEA
Total/NA	Prep	3546			348005	01/15/21 12:30	CCH	TAL SEA
Total/NA	Analysis	8270E SIM		1	348131	01/19/21 18:36	W1T	TAL SEA
Total/NA	Prep	3546			347819	01/13/21 12:41	S1S	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	348046	01/16/21 13:06	T1W	TAL SEA
Total/NA	Prep	3050B			347951	01/14/21 15:53	TMH	TAL SEA
Total/NA	Analysis	6010D		1	348152	01/15/21 18:29	TMH	TAL SEA

Client Sample ID: SB-21-10

Lab Sample ID: 580-100361-20

Date Collected: 01/06/21 10:00

Matrix: Solid

Date Received: 01/08/21 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			347755	01/12/21 20:23	JSM	TAL SEA
Total/NA	Analysis	NWTPH-Gx		1	348193	01/19/21 12:25	JSM	TAL SEA
Total/NA	Analysis	2540G		1	347870	01/13/21 18:24	S1S	TAL SEA

Client Sample ID: SB-21-10

Lab Sample ID: 580-100361-20

Date Collected: 01/06/21 10:00

Matrix: Solid

Date Received: 01/08/21 10:00

Percent Solids: 85.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			348201	01/19/21 17:13	ASJ	TAL SEA
Total/NA	Analysis	8260D		1	348260	01/20/21 04:32	ASJ	TAL SEA
Total/NA	Prep	3546			348005	01/15/21 12:30	CCH	TAL SEA
Total/NA	Analysis	8270E SIM		1	348131	01/19/21 18:59	W1T	TAL SEA
Total/NA	Prep	3546			347819	01/13/21 12:41	S1S	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	348046	01/16/21 13:25	T1W	TAL SEA
Total/NA	Prep	3050B			347951	01/14/21 15:53	TMH	TAL SEA
Total/NA	Analysis	6010D		1	348152	01/15/21 18:32	TMH	TAL SEA

Client Sample ID: SB-21-15

Lab Sample ID: 580-100361-21

Date Collected: 01/06/21 10:15

Matrix: Solid

Date Received: 01/08/21 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			347756	01/12/21 20:32	JSM	TAL SEA
Total/NA	Analysis	NWTPH-Gx		1	347849	01/13/21 14:30	CJ	TAL SEA
Total/NA	Analysis	2540G		1	347870	01/13/21 18:24	S1S	TAL SEA

Lab Chronicle

Client: Stantec Consulting Corp.
Project/Site: 7-11 No 22866 (WA)

Job ID: 580-100361-1

Client Sample ID: SB-21-15

Lab Sample ID: 580-100361-21

Date Collected: 01/06/21 10:15

Matrix: Solid

Date Received: 01/08/21 10:00

Percent Solids: 87.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			348362	01/21/21 12:43	CJB	TAL SEA
Total/NA	Analysis	8260D		1	348349	01/21/21 16:36	TL1	TAL SEA
Total/NA	Prep	5035			348202	01/19/21 17:32	ASJ	TAL SEA
Total/NA	Analysis	8260D		1	348264	01/20/21 07:56	CJ	TAL SEA
Total/NA	Prep	3546			348005	01/15/21 12:30	CCH	TAL SEA
Total/NA	Analysis	8270E SIM		1	348131	01/19/21 19:21	W1T	TAL SEA
Total/NA	Prep	3546			347819	01/13/21 12:41	S1S	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	348046	01/16/21 13:45	T1W	TAL SEA
Total/NA	Prep	3050B			347951	01/14/21 15:53	TMH	TAL SEA
Total/NA	Analysis	6010D		1	348152	01/15/21 18:35	TMH	TAL SEA

Client Sample ID: SB-21-18

Lab Sample ID: 580-100361-22

Date Collected: 01/06/21 10:30

Matrix: Solid

Date Received: 01/08/21 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			347756	01/12/21 20:32	JSM	TAL SEA
Total/NA	Analysis	NWTPH-Gx		1	347849	01/13/21 14:54	CJ	TAL SEA
Total/NA	Analysis	2540G		1	347870	01/13/21 18:24	S1S	TAL SEA

Client Sample ID: SB-21-18

Lab Sample ID: 580-100361-22

Date Collected: 01/06/21 10:30

Matrix: Solid

Date Received: 01/08/21 10:00

Percent Solids: 88.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			348202	01/19/21 17:32	ASJ	TAL SEA
Total/NA	Analysis	8260D		1	348264	01/20/21 08:22	CJ	TAL SEA
Total/NA	Prep	3546			347819	01/13/21 12:41	S1S	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	348046	01/16/21 14:25	T1W	TAL SEA

Client Sample ID: SB-22-10

Lab Sample ID: 580-100361-23

Date Collected: 01/06/21 09:00

Matrix: Solid

Date Received: 01/08/21 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			347756	01/12/21 20:32	JSM	TAL SEA
Total/NA	Analysis	NWTPH-Gx		1	347849	01/13/21 15:18	CJ	TAL SEA
Total/NA	Analysis	2540G		1	347870	01/13/21 18:24	S1S	TAL SEA

Client Sample ID: SB-22-10

Lab Sample ID: 580-100361-23

Date Collected: 01/06/21 09:00

Matrix: Solid

Date Received: 01/08/21 10:00

Percent Solids: 86.1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			348202	01/19/21 17:32	ASJ	TAL SEA
Total/NA	Analysis	8260D		1	348264	01/20/21 08:47	CJ	TAL SEA

Eurofins TestAmerica, Seattle

Lab Chronicle

Client: Stantec Consulting Corp.
Project/Site: 7-11 No 22866 (WA)

Job ID: 580-100361-1

Client Sample ID: SB-22-10

Lab Sample ID: 580-100361-23

Date Collected: 01/06/21 09:00

Matrix: Solid

Date Received: 01/08/21 10:00

Percent Solids: 86.1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			348005	01/15/21 12:30	CCH	TAL SEA
Total/NA	Analysis	8270E SIM		1	348131	01/19/21 19:43	W1T	TAL SEA
Total/NA	Prep	3546			347826	01/13/21 14:21	S1S	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	348143	01/19/21 10:14	JKM	TAL SEA
Total/NA	Prep	3050B			347951	01/14/21 15:53	TMH	TAL SEA
Total/NA	Analysis	6010D		1	348152	01/15/21 18:38	TMH	TAL SEA

Client Sample ID: SB-22-15

Lab Sample ID: 580-100361-24

Date Collected: 01/06/21 09:15

Matrix: Solid

Date Received: 01/08/21 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			347756	01/12/21 20:32	JSM	TAL SEA
Total/NA	Analysis	NWTPH-Gx		1	347849	01/13/21 15:43	CJ	TAL SEA
Total/NA	Analysis	2540G		1	347870	01/13/21 18:24	S1S	TAL SEA

Client Sample ID: SB-22-15

Lab Sample ID: 580-100361-24

Date Collected: 01/06/21 09:15

Matrix: Solid

Date Received: 01/08/21 10:00

Percent Solids: 86.7

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			348202	01/19/21 17:32	ASJ	TAL SEA
Total/NA	Analysis	8260D		1	348264	01/20/21 09:13	CJ	TAL SEA
Total/NA	Prep	3546			347826	01/13/21 14:21	S1S	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	348143	01/19/21 10:34	JKM	TAL SEA

Client Sample ID: SB-23-10

Lab Sample ID: 580-100361-25

Date Collected: 01/06/21 10:35

Matrix: Solid

Date Received: 01/08/21 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			347756	01/12/21 20:32	JSM	TAL SEA
Total/NA	Analysis	NWTPH-Gx		1	347849	01/13/21 16:07	CJ	TAL SEA
Total/NA	Analysis	2540G		1	347870	01/13/21 18:24	S1S	TAL SEA

Client Sample ID: SB-23-10

Lab Sample ID: 580-100361-25

Date Collected: 01/06/21 10:35

Matrix: Solid

Date Received: 01/08/21 10:00

Percent Solids: 86.5

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			348202	01/19/21 17:32	ASJ	TAL SEA
Total/NA	Analysis	8260D		1	348264	01/20/21 09:39	CJ	TAL SEA
Total/NA	Prep	3546			347826	01/13/21 14:21	S1S	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	348143	01/19/21 10:53	JKM	TAL SEA

Eurofins TestAmerica, Seattle

Lab Chronicle

Client: Stantec Consulting Corp.
Project/Site: 7-11 No 22866 (WA)

Job ID: 580-100361-1

Client Sample ID: SB-23-15

Lab Sample ID: 580-100361-26

Date Collected: 01/06/21 10:45

Matrix: Solid

Date Received: 01/08/21 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			347756	01/12/21 20:32	JSM	TAL SEA
Total/NA	Analysis	NWTPH-Gx		1	347849	01/13/21 16:31	CJ	TAL SEA
Total/NA	Analysis	2540G		1	347870	01/13/21 18:24	S1S	TAL SEA

Client Sample ID: SB-23-15

Lab Sample ID: 580-100361-26

Date Collected: 01/06/21 10:45

Matrix: Solid

Date Received: 01/08/21 10:00

Percent Solids: 89.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			348202	01/19/21 17:32	ASJ	TAL SEA
Total/NA	Analysis	8260D		1	348264	01/20/21 10:05	CJ	TAL SEA
Total/NA	Prep	3546			347826	01/13/21 14:21	S1S	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	348143	01/19/21 11:13	JKM	TAL SEA

Client Sample ID: SB-24-8

Lab Sample ID: 580-100361-27

Date Collected: 01/05/21 14:30

Matrix: Solid

Date Received: 01/08/21 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			347756	01/12/21 20:32	JSM	TAL SEA
Total/NA	Analysis	NWTPH-Gx		1	347849	01/13/21 17:20	CJ	TAL SEA
Total/NA	Analysis	2540G		1	347870	01/13/21 18:24	S1S	TAL SEA

Client Sample ID: SB-24-8

Lab Sample ID: 580-100361-27

Date Collected: 01/05/21 14:30

Matrix: Solid

Date Received: 01/08/21 10:00

Percent Solids: 83.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			348201	01/19/21 17:13	ASJ	TAL SEA
Total/NA	Analysis	8260D		1	348260	01/19/21 22:32	ASJ	TAL SEA
Total/NA	Prep	3546			347854	01/13/21 16:38	S1S	TAL SEA
Total/NA	Analysis	8270E SIM		1	347974	01/15/21 16:40	W1T	TAL SEA
Total/NA	Prep	3546			347826	01/13/21 14:21	S1S	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	348143	01/19/21 11:33	JKM	TAL SEA
Total/NA	Prep	3050B			347951	01/14/21 15:54	TMH	TAL SEA
Total/NA	Analysis	6010D		1	348152	01/15/21 18:41	TMH	TAL SEA

Client Sample ID: SB-24-15

Lab Sample ID: 580-100361-28

Date Collected: 01/05/21 14:45

Matrix: Solid

Date Received: 01/08/21 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			347756	01/12/21 20:32	JSM	TAL SEA
Total/NA	Analysis	NWTPH-Gx		1	347849	01/13/21 17:44	CJ	TAL SEA
Total/NA	Analysis	2540G		1	347870	01/13/21 18:24	S1S	TAL SEA

Eurofins TestAmerica, Seattle

Lab Chronicle

Client: Stantec Consulting Corp.
Project/Site: 7-11 No 22866 (WA)

Job ID: 580-100361-1

Client Sample ID: SB-24-15

Lab Sample ID: 580-100361-28

Date Collected: 01/05/21 14:45

Matrix: Solid

Date Received: 01/08/21 10:00

Percent Solids: 84.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			348201	01/19/21 17:13	ASJ	TAL SEA
Total/NA	Analysis	8260D		1	348260	01/19/21 22:58	ASJ	TAL SEA
Total/NA	Prep	3546			347826	01/13/21 14:21	S1S	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	348143	01/19/21 11:52	JKM	TAL SEA

Client Sample ID: SB-16-10

Lab Sample ID: 580-100361-29

Date Collected: 01/07/21 08:45

Matrix: Solid

Date Received: 01/08/21 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			347756	01/12/21 20:32	JSM	TAL SEA
Total/NA	Analysis	NWTPH-Gx		1	347849	01/13/21 18:08	CJ	TAL SEA
Total/NA	Analysis	2540G		1	347870	01/13/21 18:24	S1S	TAL SEA

Client Sample ID: SB-16-10

Lab Sample ID: 580-100361-29

Date Collected: 01/07/21 08:45

Matrix: Solid

Date Received: 01/08/21 10:00

Percent Solids: 87.5

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			348202	01/19/21 17:32	ASJ	TAL SEA
Total/NA	Analysis	8260D		1	348264	01/20/21 10:31	CJ	TAL SEA
Total/NA	Prep	3546			347854	01/13/21 16:38	S1S	TAL SEA
Total/NA	Analysis	8270E SIM		1	347974	01/15/21 17:03	W1T	TAL SEA
Total/NA	Prep	3546			347826	01/13/21 14:21	S1S	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	348143	01/19/21 12:12	JKM	TAL SEA
Total/NA	Prep	3050B			347951	01/14/21 15:54	TMH	TAL SEA
Total/NA	Analysis	6010D		1	348152	01/15/21 18:50	TMH	TAL SEA

Client Sample ID: SB-16-17

Lab Sample ID: 580-100361-30

Date Collected: 01/07/21 08:50

Matrix: Solid

Date Received: 01/08/21 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			347756	01/12/21 20:32	JSM	TAL SEA
Total/NA	Analysis	NWTPH-Gx		1	347849	01/13/21 18:33	CJ	TAL SEA
Total/NA	Analysis	2540G		1	347870	01/13/21 18:26	S1S	TAL SEA

Client Sample ID: SB-16-17

Lab Sample ID: 580-100361-30

Date Collected: 01/07/21 08:50

Matrix: Solid

Date Received: 01/08/21 10:00

Percent Solids: 86.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			348202	01/19/21 17:32	ASJ	TAL SEA
Total/NA	Analysis	8260D		1	348264	01/20/21 10:57	CJ	TAL SEA
Total/NA	Prep	3546			347826	01/13/21 14:21	S1S	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	348143	01/19/21 13:31	JKM	TAL SEA

Eurofins TestAmerica, Seattle

Lab Chronicle

Client: Stantec Consulting Corp.
Project/Site: 7-11 No 22866 (WA)

Job ID: 580-100361-1

Client Sample ID: SB-17-10

Lab Sample ID: 580-100361-31

Date Collected: 01/07/21 11:00

Matrix: Solid

Date Received: 01/08/21 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			347756	01/12/21 20:32	JSM	TAL SEA
Total/NA	Analysis	NWTPH-Gx		1	347849	01/13/21 18:57	CJ	TAL SEA
Total/NA	Analysis	2540G		1	347870	01/13/21 18:26	S1S	TAL SEA

Client Sample ID: SB-17-10

Lab Sample ID: 580-100361-31

Date Collected: 01/07/21 11:00

Matrix: Solid

Date Received: 01/08/21 10:00

Percent Solids: 86.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			348202	01/19/21 17:32	ASJ	TAL SEA
Total/NA	Analysis	8260D		1	348264	01/20/21 11:22	CJ	TAL SEA
Total/NA	Prep	3546			347826	01/13/21 14:21	S1S	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	348143	01/19/21 13:51	JKM	TAL SEA

Client Sample ID: SB-17-15

Lab Sample ID: 580-100361-32

Date Collected: 01/07/21 11:10

Matrix: Solid

Date Received: 01/08/21 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			347756	01/12/21 20:32	JSM	TAL SEA
Total/NA	Analysis	NWTPH-Gx		1	347849	01/13/21 19:22	CJ	TAL SEA
Total/NA	Analysis	2540G		1	347870	01/13/21 18:26	S1S	TAL SEA

Client Sample ID: SB-17-15

Lab Sample ID: 580-100361-32

Date Collected: 01/07/21 11:10

Matrix: Solid

Date Received: 01/08/21 10:00

Percent Solids: 88.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			348202	01/19/21 17:32	ASJ	TAL SEA
Total/NA	Analysis	8260D		1	348264	01/20/21 11:48	CJ	TAL SEA
Total/NA	Prep	3546			347826	01/13/21 14:21	S1S	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	348143	01/19/21 14:10	JKM	TAL SEA

Client Sample ID: SB-18-10

Lab Sample ID: 580-100361-33

Date Collected: 01/07/21 13:15

Matrix: Solid

Date Received: 01/08/21 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			347756	01/12/21 20:32	JSM	TAL SEA
Total/NA	Analysis	NWTPH-Gx		1	347849	01/13/21 19:46	CJ	TAL SEA
Total/NA	Analysis	2540G		1	347870	01/13/21 18:26	S1S	TAL SEA

Lab Chronicle

Client: Stantec Consulting Corp.
Project/Site: 7-11 No 22866 (WA)

Job ID: 580-100361-1

Client Sample ID: SB-18-10

Lab Sample ID: 580-100361-33

Date Collected: 01/07/21 13:15

Matrix: Solid

Date Received: 01/08/21 10:00

Percent Solids: 87.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			348202	01/19/21 17:32	ASJ	TAL SEA
Total/NA	Analysis	8260D		1	348264	01/20/21 12:14	CJ	TAL SEA
Total/NA	Prep	3546			347826	01/13/21 14:21	S1S	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	348143	01/19/21 14:30	JKM	TAL SEA

Client Sample ID: SB-18-15

Lab Sample ID: 580-100361-34

Date Collected: 01/07/21 13:30

Matrix: Solid

Date Received: 01/08/21 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			347756	01/12/21 20:32	JSM	TAL SEA
Total/NA	Analysis	NWTPH-Gx		1	347849	01/13/21 20:10	CJ	TAL SEA
Total/NA	Analysis	2540G		1	347870	01/13/21 18:26	S1S	TAL SEA

Client Sample ID: SB-18-15

Lab Sample ID: 580-100361-34

Date Collected: 01/07/21 13:30

Matrix: Solid

Date Received: 01/08/21 10:00

Percent Solids: 89.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			348202	01/19/21 17:32	ASJ	TAL SEA
Total/NA	Analysis	8260D		1	348264	01/20/21 12:39	CJ	TAL SEA
Total/NA	Prep	3546			347826	01/13/21 14:21	S1S	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	348143	01/19/21 14:49	JKM	TAL SEA

Client Sample ID: SB-19-10

Lab Sample ID: 580-100361-35

Date Collected: 01/07/21 13:40

Matrix: Solid

Date Received: 01/08/21 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			347756	01/12/21 20:32	JSM	TAL SEA
Total/NA	Analysis	NWTPH-Gx		1	347849	01/13/21 20:35	CJ	TAL SEA
Total/NA	Analysis	2540G		1	347870	01/13/21 18:26	S1S	TAL SEA

Client Sample ID: SB-19-10

Lab Sample ID: 580-100361-35

Date Collected: 01/07/21 13:40

Matrix: Solid

Date Received: 01/08/21 10:00

Percent Solids: 86.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			348202	01/19/21 17:32	ASJ	TAL SEA
Total/NA	Analysis	8260D		1	348264	01/20/21 13:05	CJ	TAL SEA
Total/NA	Prep	3546			347826	01/13/21 14:21	S1S	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	348143	01/19/21 15:09	JKM	TAL SEA

Lab Chronicle

Client: Stantec Consulting Corp.
Project/Site: 7-11 No 22866 (WA)

Job ID: 580-100361-1

Client Sample ID: SB-19-15

Lab Sample ID: 580-100361-36

Date Collected: 01/07/21 13:45

Matrix: Solid

Date Received: 01/08/21 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			347756	01/12/21 20:32	JSM	TAL SEA
Total/NA	Analysis	NWTPH-Gx		1	347849	01/13/21 20:59	CJ	TAL SEA
Total/NA	Analysis	2540G		1	347870	01/13/21 18:26	S1S	TAL SEA

Client Sample ID: SB-19-15

Lab Sample ID: 580-100361-36

Date Collected: 01/07/21 13:45

Matrix: Solid

Date Received: 01/08/21 10:00

Percent Solids: 85.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			348202	01/19/21 17:32	ASJ	TAL SEA
Total/NA	Analysis	8260D		1	348264	01/20/21 13:31	CJ	TAL SEA
Total/NA	Prep	3546			347826	01/13/21 14:21	S1S	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	348143	01/19/21 15:29	JKM	TAL SEA

Laboratory References:

TAL SEA = Eurofins TestAmerica, Seattle, 5755 8th Street East, Tacoma, WA 98424, TEL (253)922-2310

Accreditation/Certification Summary

Client: Stantec Consulting Corp.
Project/Site: 7-11 No 22866 (WA)

Job ID: 580-100361-1

Laboratory: Eurofins TestAmerica, Seattle

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
Washington	State	C553	02-18-21

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
2540G		Solid	Percent Moisture
2540G		Solid	Percent Solids

Sample Summary

Client: Stantec Consulting Corp.
Project/Site: 7-11 No 22866 (WA)

Job ID: 580-100361-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
580-100361-1	MW-11-10	Solid	01/07/21 09:20	01/08/21 10:00	
580-100361-2	MW-11-15	Solid	01/07/21 09:30	01/08/21 10:00	
580-100361-3	MW-11-18	Solid	01/07/21 09:40	01/08/21 10:00	
580-100361-4	MW-12-10	Solid	01/07/21 11:30	01/08/21 10:00	
580-100361-5	MW-12-15	Solid	01/07/21 11:40	01/08/21 10:00	
580-100361-6	MW-13-12	Solid	01/06/21 14:30	01/08/21 10:00	
580-100361-7	MW-13-15	Solid	01/06/21 14:35	01/08/21 10:00	
580-100361-8	MW-13-20	Solid	01/06/21 14:40	01/08/21 10:00	
580-100361-9	MW-14-10	Solid	01/06/21 12:30	01/08/21 10:00	
580-100361-10	MW-14-15	Solid	01/06/21 12:40	01/08/21 10:00	
580-100361-11	MW-15-10	Solid	01/05/21 15:30	01/08/21 10:00	
580-100361-12	MW-15-15	Solid	01/05/21 15:40	01/08/21 10:00	
580-100361-15	MW-17-12	Solid	01/05/21 12:15	01/08/21 10:00	
580-100361-16	MW-17-15	Solid	01/05/21 12:30	01/08/21 10:00	
580-100361-17	SB-20-5	Solid	01/05/21 17:20	01/08/21 10:00	
580-100361-18	SB-20-10	Solid	01/06/21 11:30	01/08/21 10:00	
580-100361-19	SB-20-19	Solid	01/06/21 11:45	01/08/21 10:00	
580-100361-20	SB-21-10	Solid	01/06/21 10:00	01/08/21 10:00	
580-100361-21	SB-21-15	Solid	01/06/21 10:15	01/08/21 10:00	
580-100361-22	SB-21-18	Solid	01/06/21 10:30	01/08/21 10:00	
580-100361-23	SB-22-10	Solid	01/06/21 09:00	01/08/21 10:00	
580-100361-24	SB-22-15	Solid	01/06/21 09:15	01/08/21 10:00	
580-100361-25	SB-23-10	Solid	01/06/21 10:35	01/08/21 10:00	
580-100361-26	SB-23-15	Solid	01/06/21 10:45	01/08/21 10:00	
580-100361-27	SB-24-8	Solid	01/05/21 14:30	01/08/21 10:00	
580-100361-28	SB-24-15	Solid	01/05/21 14:45	01/08/21 10:00	
580-100361-29	SB-16-10	Solid	01/07/21 08:45	01/08/21 10:00	
580-100361-30	SB-16-17	Solid	01/07/21 08:50	01/08/21 10:00	
580-100361-31	SB-17-10	Solid	01/07/21 11:00	01/08/21 10:00	
580-100361-32	SB-17-15	Solid	01/07/21 11:10	01/08/21 10:00	
580-100361-33	SB-18-10	Solid	01/07/21 13:15	01/08/21 10:00	
580-100361-34	SB-18-15	Solid	01/07/21 13:30	01/08/21 10:00	
580-100361-35	SB-19-10	Solid	01/07/21 13:40	01/08/21 10:00	
580-100361-36	SB-19-15	Solid	01/07/21 13:45	01/08/21 10:00	

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America

580-100361 Chain of Custody

Client Information					
Client Contact: Paul Fairbairn Company: Stantec Consulting Corp. Address: 11130 NE 33rd Place Suite 200 City: Bellevue State, Zip: WA, 98004-1465 Phone: 425-298-1000(Tel) Email: paul.fairbairn@stantec.com Project Name: 7-11 No 22866 (WA) Site:		Sample: <i>Bhargava Subban</i> Phone: <i>425-368-8574</i> PWSID:		Lab PM: Evans, Lauren R E-Mail: Lauren.Evans@Eurofinset.com State of Origin:	
Analysis Requested					
		Due Date Requested:		Preservation Codes:	
		TAT Requested (days):		A - HCL M - Hexane B - NaOH N - None C - Zn Acetate O - AsNaO2 D - Nitric Acid P - Na2O4S E - NaHSO4 Q - Na2SO3 F - MeOH R - Na2S2O3 G - Amchlor S - H2SO4 H - Ascorbic Acid T - TSP Dodecahydrate I - Ice U - Acetone J - DI Water V - MCAA K - EDTA W - pH 4-5 L - EDA Z - other (specify)	
		Compliance Project: ☐ Yes ☒ No		Other:	
		PO #:			
		Purchase Order Requested			
		WO #:			
		Project #:			
		58014828			
		SSOW#:			
Sample Identification		Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, So=solid, O=waste/oil, BT=Tissue, Air)
MW-11-10	1-7-21	0920	Solid	X X X X	40 ppm
MW-11-15	1-7-21	0930	Solid	X X	15 "
MW-11-18	1-7-21	0940	Solid	X X	10 "
MW-12-10	1-7-21	1130	Solid	X X	1.2 "
MW-12-15	1-7-21	1140	Solid	X X	0.6 "
MW-13-12	1-6-21	1430	Solid	X X X X	420 ppm
MW-13-15	1-6-21	1435	Solid	X X X X	56 "
MW-13-20	1-6-21	1440	Solid	X X	16 "
MW-14-10	1-6-21	1230	Solid	X X	5.5 "
MW-14-15	1-6-21	1240	Solid	X X	2.5 "
Possible Hazard Identification					
☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological					
Deliverable Requested: I, II, III, IV, Other (specify)					
Empty Kit Relinquished by:					
Date:					
Time:					
Method of Shipment:					
Relinquished by: <i>Abdulhannan Subban</i> Date/Time: <i>1-8-21 @ 1000</i> Company: <i>Stantec</i>					
Received by: <i>Juan Jh</i> Date/Time: <i>1/8/21 1000</i> Company: <i>ETA SEA</i>					
Relinquished by:					
Received by:					
Relinquished by:					
Received by:					
Custody Seals Intact:	Cooler Temperature(s) °C and Other Remarks:				
☒ Yes ☐ No					

Environment Testing
America

Client Information		Sample: <i>Chani Shihane</i>		Lab PM: Evans, Lauren R		Carrier Tracking No(s):		COC No: 580-41680-13338.2							
Client Contact: Paul Fairbairn		Phone: <i>425-368-8574</i>		E-Mail: Lauren.Evans@Eurofinset.com		State of Origin:		Page: Page 2 of 5							
Company: Stantec Consulting Corp.		PWSID:		Analysis Requested						Job #:					
Address: 11130 NE 33rd Place Suite 200		Due Date Requested:		Field Filtered Sample (Yes or No) Perform MSMSD (Yes or No) 6010D, NWTPH, Dx NWTPH, Gx - NWTPH-Gx 8260D - BTEXM, EDC, EDB 8270E, SIM, Moisture NWTPH-Dx BTEX 8260 Total Number of Containers						Preservation Codes:					
City: Bellevue		TAT Requested (days):								A - HCL M - Hexane					
State, Zip: WA, 98004-1465		Compliance Project: ☐ Yes ☐ No								B - NaOH N - None					
Phone: 425-298-1000(Tel)		PO #:								C - Zn Acetate O - AsNaO2					
Email: paul.fairbairn@stantec.com		Purchase Order Requested								D - Nitric Acid P - Na2O4S					
Project Name: 7-11 No 22866 (WA)		WO #:		E - NaHSO4 Q - Na2SO3											
Site:		Project #: 58014828		F - MeOH R - Na2S2O3											
		SSOW#:		G - Amchlor S - H2SO4											
				H - Ascorbic Acid T - TSP Dodecahydrate											
				I - Ice U - Acetone											
				J - DI Water V - MCAA											
				K - EDTA W - pH 4-5											
				L - EDA Z - other (specify)											
				Other:											
Sample Identification		Sample Date		Sample Time		Sample Type (C=Comp, G=grab)		Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)		Special Instructions/Note:					
						Preservation Code:									
MW-15-10		1-5-21		1530		Solid				1.0 ppm					
MW-15-15		1-5-21		1540		Solid				0.5 "					
MW-16-11		1-5-21		0930		Solid				17 "					
MW-16-15		1-5-21		0945		Solid				1.9 "					
MW-17-12		1-5-21		1215		Solid				34 "					
MW-17-15		1-5-21		1230		Solid				1.5 "					
SB-20-5		1-5-21		1720		Solid				120 "					
SB-20-10		1-6-21		1130		Solid				3025 "					
SB-20-19		1-6-21		1145		Solid				165 "					
SB-21-10		1-6-21		1000		Solid				170 "					
SB-21-15		1-6-21		1015		Solid				1820 "					
Possible Hazard Identification						Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)									
☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological						☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months									
Deliverable Requested: I, II, III, IV, Other (specify)						Special Instructions/QC Requirements:									
Empty Kit Relinquished by:		Date:		Time:		Method of Shipment:									
Relinquished by: <i>Abdullah Shihane</i>		Date/Time: 1-8-21 @ 1000		Company: Stantec		Received by: <i>Josh Sh</i>		Date/Time: 1/8/21 1000		Company: ETA SEA					
Relinquished by:		Date/Time:		Company:		Received by:		Date/Time:		Company:					
Relinquished by:		Date/Time:		Company:		Received by:		Date/Time:		Company:					
Custody Seals Intact: ☐ Yes ☐ No		Custody Seal No.:		Cooler Temperature(s) °C and Other Remarks:											

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America

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Environment Testing
America

Therm. ID: IR8 Cor: 2.3 ° Unc: 2.5 °
Cooler Desc: LB
Packing: Reg FedEx: _____
Cust. Seal: Yes _____ No X UPS: _____
Blue Ice: Wet, Dry, None Lab Cour: _____
Other: Drop

Therm. ID: IR8 Cor: 1.5 ° Unc: 1.7 °
Cooler Desc: LB
Packing: Reg FedEx: _____
Cust. Seal: Yes _____ No X UPS: _____
Blue Ice: Wet, Dry, None Lab Cour: _____
Other: Drop

Therm. ID: IR8 Cor: 3.7 ° Unc: 3.9 °
Cooler Desc: LB
Packing: Reg FedEx: _____
Cust. Seal: Yes _____ No X UPS: _____
Blue Ice: Wet, Dry, None Lab Cour: _____
Other: Drop

Login Sample Receipt Checklist

Client: Stantec Consulting Corp.

Job Number: 580-100361-1

Login Number: 100361

List Source: Eurofins TestAmerica, Seattle

List Number: 1

Creator: Presley, Kim A

Question	Answer	Comment
Radioactivity wasn't checked or is $\leq$ background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	False	Refer to Job Narrative for details.
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	False	Refer to Job Narrative for details.
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

ANALYTICAL REPORT

Eurofins FGS, Seattle
5755 8th Street East
Tacoma, WA 98424
Tel: (253)922-2310

Laboratory Job ID: 580-106685-1

Laboratory SDG: 14207 Pacific Hwy South, Tukwila, WA
Client Project/Site: 7-11 No 22866 (WA)

For:

Stantec Consulting Corp.
11130 NE 33rd Place
Suite 200
Bellevue, Washington 98004-1465

Attn: Paul Fairbairn



Authorized for release by:
10/31/2021 8:39:58 AM

Marty Edwards, Client Service Manager
(850)471-6227
Marty.Edwards@Eurofinset.com

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This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Case Narrative

Client: Stantec Consulting Corp.
Project/Site: 7-11 No 22866 (WA)

Job ID: 580-106685-1
SDG: 14207 Pacific Hwy South, Tukwila, WA

Job ID: 580-106685-1

Laboratory: Eurofins FGS, Seattle

Narrative

Job Narrative 580-106685-1

Comments

No additional comments.

Receipt

The samples were received on 10/15/2021 10:00 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 1.6° C.

GC/MS VOA

Method 8260D: Surrogate recovery for the following samples were outside control limits: SB-25-10 (580-106685-1) and SB-25-19 (580-106685-2). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8260D: The following sample was analyzed at reduced volume due to high concentrations of target analytes: SB-25-10 (580-106685-1). The calculation was performed using an initial volume adjustment rather than a dilution factor. The reporting limits have been elevated by the appropriate factor.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

GC VOA

Method NWTPH-Gx: Surrogate recovery for the following sample was outside control limits: SB-25-10 (580-106685-1). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

GC Semi VOA

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

General Chemistry

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Organic Prep

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

VOA Prep

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Definitions/Glossary

Client: Stantec Consulting Corp.
Project/Site: 7-11 No 22866 (WA)

Job ID: 580-106685-1
SDG: 14207 Pacific Hwy South, Tukwila, WA

Qualifiers

GC VOA

Qualifier	Qualifier Description
S1+	Surrogate recovery exceeds control limits, high biased.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
□	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Client Sample Results

Client: Stantec Consulting Corp.
Project/Site: 7-11 No 22866 (WA)

Job ID: 580-106685-1
SDG: 14207 Pacific Hwy South, Tukwila, WA

Client Sample ID: SB-25-10

Lab Sample ID: 580-106685-1

Date Collected: 10/14/21 08:45

Matrix: Solid

Date Received: 10/15/21 10:00

Percent Solids: 82.6

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.299		0.299		mg/Kg	☼	10/22/21 10:53	10/22/21 19:33	1
Ethylbenzene	16.2		0.598		mg/Kg	☼	10/22/21 10:53	10/22/21 19:33	1
Toluene	<0.897		0.897		mg/Kg	☼	10/22/21 10:53	10/22/21 19:33	1
Xylenes, Total	93.2		0.598		mg/Kg	☼	10/22/21 10:53	10/22/21 19:33	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	103		80 - 120	10/22/21 10:53	10/22/21 19:33	1
Dibromofluoromethane (Surr)	110		80 - 120	10/22/21 10:53	10/22/21 19:33	1
1,2-Dichloroethane-d4 (Surr)	112		80 - 121	10/22/21 10:53	10/22/21 19:33	1
Toluene-d8 (Surr)	93		80 - 120	10/22/21 10:53	10/22/21 19:33	1

Method: NWTPH-Gx - Northwest - Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics - NWTPH-G	944		6.95		mg/Kg	☼	10/16/21 15:11	10/17/21 06:20	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	349	S1+	50 - 150	10/16/21 15:11	10/17/21 06:20	1

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (C10-C24)	169		56.5		mg/Kg	☼	10/18/21 16:06	10/29/21 15:38	1
Motor Oil (C24-C44)	<56.5		56.5		mg/Kg	☼	10/18/21 16:06	10/29/21 15:38	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-Terphenyl	76		50 - 150	10/18/21 16:06	10/29/21 15:38	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	82.6		0.1		%			10/19/21 18:55	1
Percent Moisture	17.4		0.1		%			10/19/21 18:55	1

Client Sample Results

Client: Stantec Consulting Corp.
Project/Site: 7-11 No 22866 (WA)

Job ID: 580-106685-1
SDG: 14207 Pacific Hwy South, Tukwila, WA

Client Sample ID: SB-25-19

Lab Sample ID: 580-106685-2

Date Collected: 10/14/21 09:00

Matrix: Solid

Date Received: 10/15/21 10:00

Percent Solids: 87.5

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.189		0.0257		mg/Kg	☼	10/22/21 10:53	10/22/21 19:09	1
Ethylbenzene	0.636		0.0515		mg/Kg	☼	10/22/21 10:53	10/22/21 19:09	1
Toluene	<0.0772		0.0772		mg/Kg	☼	10/22/21 10:53	10/22/21 19:09	1
Xylenes, Total	2.50		0.0515		mg/Kg	☼	10/22/21 10:53	10/22/21 19:09	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	103		80 - 120	10/22/21 10:53	10/22/21 19:09	1
Dibromofluoromethane (Surr)	110		80 - 120	10/22/21 10:53	10/22/21 19:09	1
1,2-Dichloroethane-d4 (Surr)	108		80 - 121	10/22/21 10:53	10/22/21 19:09	1
Toluene-d8 (Surr)	91		80 - 120	10/22/21 10:53	10/22/21 19:09	1

Method: NWTPH-Gx - Northwest - Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics - NWTPH-G	24.8		5.92		mg/Kg	☼	10/16/21 15:14	10/17/21 06:45	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	115		50 - 150	10/16/21 15:14	10/17/21 06:45	1

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (C10-C24)	<52.5		52.5		mg/Kg	☼	10/18/21 16:06	10/29/21 16:17	1
Motor Oil (C24-C44)	<52.5		52.5		mg/Kg	☼	10/18/21 16:06	10/29/21 16:17	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-Terphenyl	72		50 - 150	10/18/21 16:06	10/29/21 16:17	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	87.5		0.1		%			10/19/21 18:55	1
Percent Moisture	12.5		0.1		%			10/19/21 18:55	1

QC Sample Results

Client: Stantec Consulting Corp.
Project/Site: 7-11 No 22866 (WA)

Job ID: 580-106685-1
SDG: 14207 Pacific Hwy South, Tukwila, WA

Method: 8260D - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 580-371332/1-A

Matrix: Solid

Analysis Batch: 371358

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 371332

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.0200		0.0200		mg/Kg		10/22/21 10:53	10/22/21 13:08	1
Ethylbenzene	<0.0400		0.0400		mg/Kg		10/22/21 10:53	10/22/21 13:08	1
Toluene	<0.0600		0.0600		mg/Kg		10/22/21 10:53	10/22/21 13:08	1
Xylenes, Total	<0.0400		0.0400		mg/Kg		10/22/21 10:53	10/22/21 13:08	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	99		80 - 120	10/22/21 10:53	10/22/21 13:08	1
Dibromofluoromethane (Surr)	106		80 - 120	10/22/21 10:53	10/22/21 13:08	1
1,2-Dichloroethane-d4 (Surr)	104		80 - 121	10/22/21 10:53	10/22/21 13:08	1
Toluene-d8 (Surr)	92		80 - 120	10/22/21 10:53	10/22/21 13:08	1

Lab Sample ID: LCS 580-371332/2-A

Matrix: Solid

Analysis Batch: 371358

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 371332

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	0.800	0.9150		mg/Kg		114	79 - 135
Ethylbenzene	0.800	0.8713		mg/Kg		109	80 - 135
Toluene	0.800	0.8197		mg/Kg		102	75 - 125
Xylenes, Total	1.60	1.743		mg/Kg		109	80 - 128

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	109		80 - 120
Dibromofluoromethane (Surr)	107		80 - 120
1,2-Dichloroethane-d4 (Surr)	101		80 - 121
Toluene-d8 (Surr)	96		80 - 120

Lab Sample ID: LCSD 580-371332/3-A

Matrix: Solid

Analysis Batch: 371358

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 371332

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	0.800	0.9318		mg/Kg		116	79 - 135	2	20
Ethylbenzene	0.800	0.8583		mg/Kg		107	80 - 135	2	20
Toluene	0.800	0.8062		mg/Kg		101	75 - 125	2	20
Xylenes, Total	1.60	1.700		mg/Kg		106	80 - 128	3	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	105		80 - 120
Dibromofluoromethane (Surr)	107		80 - 120
1,2-Dichloroethane-d4 (Surr)	101		80 - 121
Toluene-d8 (Surr)	93		80 - 120

QC Sample Results

Client: Stantec Consulting Corp.
Project/Site: 7-11 No 22866 (WA)

Job ID: 580-106685-1
SDG: 14207 Pacific Hwy South, Tukwila, WA

Method: NWTPH-Gx - Northwest - Volatile Petroleum Products (GC)

Lab Sample ID: MB 580-370800/1-A

Matrix: Solid

Analysis Batch: 370801

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 370800

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics - NWTPH-G	<5.00		5.00		mg/Kg		10/16/21 14:55	10/16/21 18:31	1
Surrogate	MB %Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	92		50 - 150				10/16/21 14:55	10/16/21 18:31	1

Lab Sample ID: LCS 580-370800/2-A

Matrix: Solid

Analysis Batch: 370801

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 370800

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Gasoline Range Organics - NWTPH-G	40.0	38.73		mg/Kg		97	80 - 120		
Surrogate	LCS %Recovery	LCS Qualifier	Limits						
4-Bromofluorobenzene (Surr)	108		50 - 150						

Lab Sample ID: LCSD 580-370800/3-A

Matrix: Solid

Analysis Batch: 370801

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 370800

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics - NWTPH-G	40.0	39.69		mg/Kg		99	80 - 120	2	10
Surrogate	LCSD %Recovery	LCSD Qualifier	Limits						
4-Bromofluorobenzene (Surr)	105		50 - 150						

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Lab Sample ID: MB 580-370923/1-A

Matrix: Solid

Analysis Batch: 371896

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 370923

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (C10-C24)	<50.0		50.0		mg/Kg		10/18/21 16:06	10/29/21 14:19	1
Motor Oil (C24-C44)	<50.0		50.0		mg/Kg		10/18/21 16:06	10/29/21 14:19	1
Surrogate	MB %Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl	75		50 - 150				10/18/21 16:06	10/29/21 14:19	1

Lab Sample ID: LCS 580-370923/2-A

Matrix: Solid

Analysis Batch: 371896

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 370923

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Diesel Range Organics (C10-C24)	500	394.8		mg/Kg		79	70 - 125		
Motor Oil (C24-C44)	500	412.4		mg/Kg		82	70 - 129		

Eurofins FGS, Seattle

QC Sample Results

Client: Stantec Consulting Corp.
Project/Site: 7-11 No 22866 (WA)

Job ID: 580-106685-1
SDG: 14207 Pacific Hwy South, Tukwila, WA

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC) (Continued)

Lab Sample ID: LCS 580-370923/2-A

Matrix: Solid

Analysis Batch: 371896

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 370923

	LCS	LCS	
Surrogate	%Recovery	Qualifier	Limits
o-Terphenyl	87		50 - 150

Lab Sample ID: LCSD 580-370923/3-A

Matrix: Solid

Analysis Batch: 371896

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 370923

	Spike	LCSD	LCSD						%Rec.		RPD	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit			
Diesel Range Organics (C10-C24)	500	410.4		mg/Kg		82	70 - 125	4	16			
Motor Oil (C24-C44)	500	425.7		mg/Kg		85	70 - 129	3	16			

	LCSD	LCSD	
Surrogate	%Recovery	Qualifier	Limits
o-Terphenyl	89		50 - 150

Lab Sample ID: 580-106685-1 DU

Matrix: Solid

Analysis Batch: 371896

Client Sample ID: SB-25-10

Prep Type: Total/NA

Prep Batch: 370923

	Sample	Sample		DU	DU						RPD	
Analyte	Result	Qualifier		Result	Qualifier	Unit	D				RPD	Limit
Diesel Range Organics (C10-C24)	169			127.1		mg/Kg	✱				28	35
Motor Oil (C24-C44)	<56.5			<59.7		mg/Kg	✱				NC	35

	DU	DU	
Surrogate	%Recovery	Qualifier	Limits
o-Terphenyl	72		50 - 150

Lab Chronicle

Client: Stantec Consulting Corp.
Project/Site: 7-11 No 22866 (WA)

Job ID: 580-106685-1
SDG: 14207 Pacific Hwy South, Tukwila, WA

Client Sample ID: SB-25-10

Lab Sample ID: 580-106685-1

Date Collected: 10/14/21 08:45

Matrix: Solid

Date Received: 10/15/21 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540G		1	371050	10/19/21 18:55	JHR	FGS SEA

Client Sample ID: SB-25-10

Lab Sample ID: 580-106685-1

Date Collected: 10/14/21 08:45

Matrix: Solid

Date Received: 10/15/21 10:00

Percent Solids: 82.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			371332	10/22/21 10:53	ASJ	FGS SEA
Total/NA	Analysis	8260D		1	371358	10/22/21 19:33	CJ	FGS SEA
Total/NA	Prep	5035			370800	10/16/21 15:11	JBT	FGS SEA
Total/NA	Analysis	NWTPH-Gx		1	370801	10/17/21 06:20	JBT	FGS SEA
Total/NA	Prep	3546			370923	10/18/21 16:06	CRC	FGS SEA
Total/NA	Analysis	NWTPH-Dx		1	371896	10/29/21 15:38	ADB	FGS SEA

Client Sample ID: SB-25-19

Lab Sample ID: 580-106685-2

Date Collected: 10/14/21 09:00

Matrix: Solid

Date Received: 10/15/21 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540G		1	371050	10/19/21 18:55	JHR	FGS SEA

Client Sample ID: SB-25-19

Lab Sample ID: 580-106685-2

Date Collected: 10/14/21 09:00

Matrix: Solid

Date Received: 10/15/21 10:00

Percent Solids: 87.5

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			371332	10/22/21 10:53	ASJ	FGS SEA
Total/NA	Analysis	8260D		1	371358	10/22/21 19:09	CJ	FGS SEA
Total/NA	Prep	5035			370800	10/16/21 15:14	JBT	FGS SEA
Total/NA	Analysis	NWTPH-Gx		1	370801	10/17/21 06:45	JBT	FGS SEA
Total/NA	Prep	3546			370923	10/18/21 16:06	CRC	FGS SEA
Total/NA	Analysis	NWTPH-Dx		1	371896	10/29/21 16:17	ADB	FGS SEA

Laboratory References:

FGS SEA = Eurofins FGS, Seattle, 5755 8th Street East, Tacoma, WA 98424, TEL (253)922-2310

Accreditation/Certification Summary

Client: Stantec Consulting Corp.
Project/Site: 7-11 No 22866 (WA)

Job ID: 580-106685-1
SDG: 14207 Pacific Hwy South, Tukwila, WA

Laboratory: Eurofins FGS, Seattle

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
Washington	State	C788	07-13-22

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
2540G		Solid	Percent Moisture
2540G		Solid	Percent Solids

Sample Summary

Client: Stantec Consulting Corp.
Project/Site: 7-11 No 22866 (WA)

Job ID: 580-106685-1
SDG: 14207 Pacific Hwy South, Tukwila, WA

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
580-106685-1	SB-25-10	Solid	10/14/21 08:45	10/15/21 10:00
580-106685-2	SB-25-19	Solid	10/14/21 09:00	10/15/21 10:00

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Login Sample Receipt Checklist

Client: Stantec Consulting Corp.

Job Number: 580-106685-1

SDG Number: 14207 Pacific Hwy South, Tukwila, WA

Login Number: 106685

List Number: 1

Creator: Greene, Ashton R

List Source: Eurofins FGS, Seattle

Question	Answer	Comment
Radioactivity wasn't checked or is $\leq$ background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

APPENDIX E

Waste Disposal

NON-HAZARDOUS WASTE MANIFEST		1. Generator ID Number N/A		2. Page 1 of 1		3. Emergency Response Phone 888-785-7225		4. Waste Tracking Number 280095/D339558	
		5. Generator's Name and Mailing Address 7-Eleven (#22886) Tukwila, c/o Stanlec 1687 114th Avenue SE Suite 100 Seattle, WA 98004 Generator's Phone: 425-283-7204		Generator's Site Address (if different than mailing address) 7-Eleven (#22886) Tukwila 14207 14204 Tukwila International Boulevard Tukwila, WA 98168					
GENERATOR		6. Transporter 1 Company Name Advanced Chemical Transport Inc./DBA ACTenviro						U.S. EPA ID Number CAR000070540	
		7. Transporter 2 Company Name Dillard Environmental Services						U.S. EPA ID Number CAD-982-523-433	
DESIGNATED FACILITY		8. Designated Facility Name and Site Address Environmental Waste Solutions 31815 Industrial Ln. Parker South, AZ 85344 Facility's Phone: 877-227-0189						U.S. EPA ID Number AZR000520478	
		9. Waste Shipping Name and Description		10. Containers		11. Total Quantity	12. Unit Wt./Vol.		
No.	Type								
TRANSPORTER		1 Non-RCRA/Non-DOT Regulated Material Solid (SOIL CUTTINGS)		9	DM	6,300	P		
		2 Non-RCRA/Non-DOT Regulated Material Liquid (GROUNDWATER)		3	DM	1200	P		
		3.							
		4.							
INT'L		13. Special Handling Instructions and Additional Information Project Number 280095 Document #: D339558 1) EWS6830 7-E: <u>AZ-55</u> 2) EWS6831 7-E: <u>AZ-55</u>							
		14. GENERATOR'S CERTIFICATION: I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste. Generator's/Owner's Printed/Typed Name: <u>Jody McKnight on behalf of Generator</u> Signature: _____ Month: <u>2</u> Day: <u>8</u> Year: <u>21</u>							
TRANSPORTER		15. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit: _____ Date leaving U.S.: _____							
		16. Transporter Acknowledgment of Receipt of Materials Transporter 1 Printed/Typed Name: <u>Jody McKnight</u> Signature: _____ Month: <u>2</u> Day: <u>8</u> Year: <u>21</u> Transporter 2 Printed/Typed Name: _____ Signature: _____ Month: _____ Day: _____ Year: _____							
DESIGNATED FACILITY		17. Discrepancy 17a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection Manifest Reference Number: _____							
		17b. Alternate Facility (or Generator) U.S. EPA ID Number: _____ Facility's Phone: _____							
DESIGNATED FACILITY		17c. Signature of Alternate Facility (or Generator) Month: _____ Day: _____ Year: _____							
		18. Designated Facility Owner or Operator: Certification of receipt of materials covered by the manifest except as noted in item 17a							

DESIGN ↓	18. Designated Facility Owner or Operator: Certification of receipt of materials covered by the manifest except as noted in item 17a			
	Printed/Typed Name	Signature	Month	Day Year
DESIGNATED FACILITY TO GENERATOR				

APPENDIX F

Field Notes

Daily Injection Sheet

Site: Stantec - 14207 Internation Blvd, Tukwila

Personel Rob, JD, Cade, Carsen, Randy

Date: 10/11-14/2021

Client: STTUKBOS.21

Equipment:

Page:

S11

		BOS Mix								Pilot Test Area: 40 pts (5' - 20')			
Inj. Point	Depth	Gallons of Water	lbs. of BOS 200	Ozs. of Bacteria	lbs. of Mag Gypsum	lbs. of Mag Sulfate	lbs. of Starch	lbs. of Yeast	Time Start	Water Test Pressure	Injection Pressure	Final Pressure	Notes:
IP-1	5	~15	25.0	7.2	20	0	0	0	11:42 AM		200		
	7	~15	25.0	7.2	20	0	0	0			200		
	9	~15	25.0	7.2	20	0	0	0			220		
	11	~15	25.0	7.2	20	0	0	0			200		
Deep													
	13	~15	15.0	4.3	0	0	0	0					
	15	~15	15.0	4.3	0	0	0	0					
	17	~15	15.0	4.3	0	0	0	0			200		Double Shot
	19	~25	15.0	4.3	0	0	0	0			300		Double Shot
IP-2	6	~15	25.0	7.2	20	0	0	0			200		
	8	~15	25.0	7.2	20	0	0	0			200		
	10	~15	25.0	7.2	20	0	0	0			200		
	12	~15	25.0	7.2	20	0	0	0			200		Surfacing
Deep													
	14	~15	15.0	4.3	0	0	0	0			210		
	16	~15	15.0	4.3	0	0	0	0			210		
	18	~15	15.0	4.3	0	0	0	0			300		
	20	~25	15.0	4.3	0	0	0	0					
IP-3	5	~15	25.0	7.2	20	0	0	0			180		
	7	~15	25.0	7.2	20	0	0	0			200		
	9	~15	25.0	7.2	20	0	0	0			280		
	11	~15	25.0	7.2	20	0	0	0			200		
Deep													
	13	~15	15.0	4.3	0	0	0	0			200		
	15	~25	15.0	4.3	0	0	0	0			200		
	17	~15	15.0	4.3	0	0	0	0			220		
	19	~25	15.0	4.3	0	0	0	0			300		
IP-4	6	~15	25.0	7.2	20	0	0	0	3:40 PM		200		New Mixture Ratio
	8	~15	25.0	7.2	20	0	0	0			200		
	10	~15	25.0	7.2	20	0	0	0			2,260		
	12	~15	25.0	7.2	20	0	0	0			200		
Deep													
	14	~15	15.0	4.3	0	0	0	0			460		
	16	~15	15.0	4.3	0	0	0	0			460		
	18	~15	15.0	4.3	0	0	0	0			500		
	20	~25	15.0	4.3	0	0	0	0					

Daily Injection Sheet

Site: Stantec - 14207 Internation Blvd, Tukwila

Personnel: Rob, JD, Cade, Carsen, Randy

Date: 10/11-14/2021

Client: STTUKBOS.21

Equipment:

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		BOS Mix							Pilot Test Area: 40 pts (5' - 20')				
Inj. Point	Depth	Gallons of Water	lbs. of BOS 200	Ozs. of Bacteria	lbs. of Mag Gypsum	lbs. of Mag Sulfate	lbs. of Starch	lbs. of Yeast	Time Start	Water Test Pressure	Injection Pressure	Final Pressure	Notes:
IP-5	5	~15	25.0	7.2	20	0	0	0			320		
	7	~15	25.0	7.2	20	0	0	0			350		
	9	~15	25.0	7.2	20	0	0	0			310		
	11	~15	25.0	7.2	20	0	0	0			320		
Deep													
	13	~15	15.0	4.3	0	0	0	0			305		
	15	~15	15.0	4.3	0	0	0	0			600		
	17	~15	15.0	4.3	0	0	0	0			500		
	19	~25	15.0	4.3	0	0	0	0					
IP-6	6	~15	25.0	7.2	20	0	0	0	4:00 PM		375		
	8	~15	25.0	7.2	20	0	0	0			400		
	10	~15	25.0	7.2	20	0	0	0			400		Surfacing
	12	~15	25.0	7.2	20	0	0	0			550		
Deep													
	14	~15	15.0	4.3	0	0	0	0			400		
	16	~15	15.0	4.3	0	0	0	0			500		
	18	~15	15.0	4.3	0	0	0	0			900		
	20	~25	15.0	4.3	0	0	0	0					
IP-7	5	~15	25.0	7.2	20	0	0	0			250		10/13/2021
	7	~15	25.0	7.2	20	0	0	0	10:40 AM		250		
	9	~15	25.0	7.2	20	0	0	0			250		
	11	~15	25.0	7.2	20	0	0	0			310		
Deep													
	13	~15	15.0	4.3	0	0	0	0			400		Surfacing
	15	~25	15.0	4.3	0	0	0	0			400		
	17	~15	15.0	4.3	0	0	0	0			500		
	19	~25	15.0	4.3	0	0	0	0					
IP-8	6	~15	25.0	7.2	20	0	0	0	3:35 PM		600		
	8	~15	25.0	7.2	20	0	0	0			500		
	10	~15	25.0	7.2	20	0	0	0			500		
	12	~15	25.0	7.2	20	0	0	0			550		
Deep													
	14	~15	15.0	4.3	0	0	0	0			600		Surfacing
	16	~15	15.0	4.3	0	0	0	0			600		
	18	~15	15.0	4.3	0	0	0	0			500		
	20	~25	15.0	4.3	0	0	0	0					

Daily Injection Sheet

Site: Stantec - 14207 Internation Blvd, Tukwila

Personel Rob, JD, Cade, Carsen, Randy

Date: 10/11-14/2021

Client: STTUKBOS.21

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BOS Mix

Pilto Test Area: 40 pts (5' - 20')

Inj. Point	Depth	Gallons of Water	lbs. of BOS 200	Ozs. of Bacteria	lbs. of Mag Gypsum	lbs. of Mag Sulfate	lbs. of Starch	lbs. of Yeast	Time Start	Water Test Pressure	Injection Pressure	Final Pressure	Notes:
IP-9	5	~15	25.0	7.2	20	0	0	0	3:19 PM		500		
	7	~15	25.0	7.2	20	0	0	0			500		
	9	~15	25.0	7.2	20	0	0	0			500		
	11	~15	25.0	7.2	20	0	0	0			600		
Deep													
	13	~15	15.0	4.3	0	0	0	0			700		
	15	~15	15.0	4.3	0	0	0	0			400		
	17	~15	15.0	4.3	0	0	0	0			400		
	19	~25	15.0	4.3	0	0	0	0					
IP-10	6	~15	25.0	7.2	20	0	0	0	3:00 PM		500		
	8	~15	25.0	7.2	20	0	0	0			500		
	10	~15	25.0	7.2	20	0	0	0			520		
	12	~15	25.0	7.2	20	0	0	0			700		
Deep													
	14	~15	15.0	4.3	0	0	0	0			600		
	16	~15	15.0	4.3	0	0	0	0			900		
	18	~15	15.0	4.3	0	0	0	0			800		
	20	~25	15.0	4.3	0	0	0	0					
IP-11	5	~15	25.0	7.2	20	0	0	0	3:00 PM		525		
	7	~15	25.0	7.2	20	0	0	0			575		
	9	~15	25.0	7.2	20	0	0	0			550		
	11	~15	25.0	7.2	20	0	0	0			600		
Deep													
	13	~15	15.0	4.3	0	0	0	0			600		
	15	~25	15.0	4.3	0	0	0	0			600		
	17	~15	15.0	4.3	0	0	0	0			650		
	19	~25	15.0	4.3	0	0	0	0					
IP-12	6	~15	25.0	7.2	20	0	0	0			450		
	8	~15	25.0	7.2	20	0	0	0	8:45 AM		500		10/14/2021
	10	~15	25.0	7.2	20	0	0	0			450		
	12	~15	25.0	7.2	20	0	0	0			500		
Deep													
	14	~15	15.0	4.3	0	0	0	0			620		
	16	~15	15.0	4.3	0	0	0	0			700		
	18	~15	15.0	4.3	0	0	0	0			400		
	20	~25	15.0	4.3	0	0	0	0					

Daily Injection Sheet

Site: Stantec - 14207 Internation Blvd, Tukwila

Personel Rob, JD, Cade, Carsen, Randy

Date: 10/11-14/2021

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		BOS Mix							Pilot Test Area: 40 pts (5' - 20')				
Inj. Point	Depth	Gallons of Water	lbs. of BOS 200	Ozs. of Bacteria	lbs. of Mag Gypsum	lbs. of Mag Sulfate	lbs. of Starch	lbs. of Yeast	Time Start	Water Test Pressure	Injection Pressure	Final Pressure	Notes:
IP-13	5	~15	25.0	7.2	20	0	0	0	7:30 AM		450		
	7	~15	25.0	7.2	20	0	0	0			450		
	9	~15	25.0	7.2	20	0	0	0			475		
	11	~15	25.0	7.2	20	0	0	0			450		
Deep													
	13	~15	15.0	4.3	0	0	0	0			525		
	15	~15	15.0	4.3	0	0	0	0			600		
	17	~15	15.0	4.3	0	0	0	0			500		
	19	~25	15.0	4.3	0	0	0	0					
IP-14	6	~15	25.0	7.2	20	0	0	0	2:44 PM		475		
	8	~15	25.0	7.2	20	0	0	0			500		
	10	~15	25.0	7.2	20	0	0	0			500		
	12	~15	25.0	7.2	20	0	0	0			500		
Deep													
	14	~15	15.0	4.3	0	0	0	0			650		
	16	~15	15.0	4.3	0	0	0	0			700		
	18	~15	15.0	4.3	0	0	0	0			850		
	20	~25	15.0	4.3	0	0	0	0					
IP-15	5	~15	25.0	7.2	20	0	0	0	9:00 AM		100		
	7	~15	25.0	7.2	20	0	0	0			100		
	9	~15	25.0	7.2	20	0	0	0			100		
	11	~15	25.0	7.2	20	0	0	0			100		
Deep													
	13	~15	15.0	4.3	0	0	0	0			110		
	15	~25	15.0	4.3	0	0	0	0			220		
	17	~15	15.0	4.3	0	0	0	0			300		
	19	~25	15.0	4.3	0	0	0	0					
IP-16	6	~15	25.0	7.2	20	0	0	0	4:30 PM		400		
	8	~15	25.0	7.2	20	0	0	0			410		
	10	~15	25.0	7.2	20	0	0	0			400		
	12	~15	25.0	7.2	20	0	0	0			450		
Deep													
	14	~15	15.0	4.3	0	0	0	0			550		
	16	~15	15.0	4.3	0	0	0	0			600		
	18	~15	15.0	4.3	0	0	0	0			675		
	20	~25	15.0	4.3	0	0	0	0					

Daily Injection Sheet

Site: Stantec - 14207 Internation Blvd, Tukwila

Personel Rob, JD, Cade, Carsen, Randy

Date: 10/11-14/2021

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BOS Mix

Pilto Test Area: 40 pts (5' - 20')

Inj. Point	Depth	Gallons of Water	lbs. of BOS 200	Ozs. of Bacteria	lbs. of Mag Gypsum	lbs. of Mag Sulfate	lbs. of Starch	lbs. of Yeast	Time Start	Water Test Pressure	Injection Pressure	Final Pressure	Notes:
IP-17	5	~15	25.0	7.2	20	0	0	0	2:30 PM		300		
	7	~15	25.0	7.2	20	0	0	0			750		
	9	~15	25.0	7.2	20	0	0	0			750		
	11	~15	25.0	7.2	20	0	0	0			675		
Deep													
	13	~15	15.0	4.3	0	0	0	0			850		
	15	~15	15.0	4.3	0	0	0	0			900		
	17	~15	15.0	4.3	0	0	0	0			950		
	19	~25	15.0	4.3	0	0	0	0					
IP-18	6	~15	25.0	7.2	20	0	0	0	2:00 PM		200		
	8	~15	25.0	7.2	20	0	0	0			200		
	10	~15	25.0	7.2	20	0	0	0			200		
	12	~15	25.0	7.2	20	0	0	0			275		
Deep													
	14	~15	15.0	4.3	0	0	0	0			200		
	16	~15	15.0	4.3	0	0	0	0			500		
	18	~15	15.0	4.3	0	0	0	0			550		
	20	~25	15.0	4.3	0	0	0	0					
IP-19	5	~15	25.0	7.2	20	0	0	0	1:44 PM		600		
	7	~15	25.0	7.2	20	0	0	0			550		
	9	~15	25.0	7.2	20	0	0	0			550		
	11	~15	25.0	7.2	20	0	0	0			575		
Deep													
	13	~15	15.0	4.3	0	0	0	0			600		
	15	~25	15.0	4.3	0	0	0	0			700		
	17	~15	15.0	4.3	0	0	0	0			700		
	19	~25	15.0	4.3	0	0	0	0					
IP-20	6	~15	25.0	7.2	20	0	0	0	10:08 AM		100		
	8	~15	25.0	7.2	20	0	0	0			120		
	10	~15	25.0	7.2	20	0	0	0			100		
	12	~15	25.0	7.2	20	0	0	0			150		
Deep													
	14	~15	15.0	4.3	0	0	0	0			200		
	16	~15	15.0	4.3	0	0	0	0			300		
	18	~15	15.0	4.3	0	0	0	0			300		
	20	~25	15.0	4.3	0	0	0	0					

Daily Injection Sheet

Site: Stantec - 14207 Internation Blvd, Tukwila

Personel Rob, JD, Cade, Carsen, Randy

Date: 10/11-14/2021

Client: STTUKBOS.21

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		BOS Mix								Pilto Test Area: 40 pts (5' - 20')			
Inj. Point	Depth	Gallons of Water	lbs. of BOS 200	Ozs. of Bacteria	lbs. of Mag Gypsum	lbs. of Mag Sulfate	lbs. of Starch	lbs. of Yeast	Time Start	Water Test Pressure	Injection Pressure	Final Pressure	Notes:
IP-21	5	~15	25.0	7.2	20	0	0	0	12:47 PM		450		
	7	~15	25.0	7.2	20	0	0	0			600		
	9	~15	25.0	7.2	20	0	0	0	1:30 PM		600		
	11	~15	25.0	7.2	20	0	0	0			510		
Deep													
	13	~15	15.0	4.3	0	0	0	0			300		
	15	~15	15.0	4.3	0	0	0	0			300		
	17	~15	15.0	4.3	0	0	0	0			300		
	19	~25	15.0	4.3	0	0	0	0					
IP-22	6	~15	25.0	7.2	20	0	0	0	2:46 PM		400		
	8	~15	25.0	7.2	20	0	0	0			500		
	10	~15	25.0	7.2	20	0	0	0			550		
	12	~15	25.0	7.2	20	0	0	0			550		
Deep													
	14	~15	15.0	4.3	0	0	0	0			575		
	16	~15	15.0	4.3	0	0	0	0			600		
	18	~15	15.0	4.3	0	0	0	0			600		
	20	~25	15.0	4.3	0	0	0	0					
IP-23	5	~15	25.0	7.2	20	0	0	0	1:30 PM		500		
	7	~15	25.0	7.2	20	0	0	0			500		
	9	~15	25.0	7.2	20	0	0	0			540		
	11	~15	25.0	7.2	20	0	0	0			400		
Deep													
	13	~15	15.0	4.3	0	0	0	0			520		
	15	~25	15.0	4.3	0	0	0	0			600		
	17	~15	15.0	4.3	0	0	0	0			400		
	19	~25	15.0	4.3	0	0	0	0					
IP-24	6	~15	25.0	7.2	20	0	0	0	1:18 PM		550		
	8	~15	25.0	7.2	20	0	0	0			575		
	10	~15	25.0	7.2	20	0	0	0			575		
	12	~15	25.0	7.2	20	0	0	0			600		
Deep													
	14	~15	15.0	4.3	0	0	0	0			650		
	16	~15	15.0	4.3	0	0	0	0			700		
	18	~15	15.0	4.3	0	0	0	0			700		
	20	~25	15.0	4.3	0	0	0	0					

Daily Injection Sheet

Site: Stantec - 14207 Internation Blvd, Tukwila

Personel Rob, JD, Cade, Carsen, Randy

Date: 10/11-14/2021

Client: STTUKBOS.21

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BOS Mix

Pilto Test Area: 40 pts (5' - 20')

Inj. Point	Depth	Gallons of Water	lbs. of BOS 200	Ozs. of Bacteria	lbs. of Mag Gypsum	lbs. of Mag Sulfate	lbs. of Starch	lbs. of Yeast	Time Start	Water Test Pressure	Injection Pressure	Final Pressure	Notes:
IP-25	5	~15	25.0	7.2	20	0	0	0	8:17 AM		300		
	7	~15	25.0	7.2	20	0	0	0			310		
	9	~15	25.0	7.2	20	0	0	0			320		
	11	~15	25.0	7.2	20	0	0	0			420		
Deep													
	13	~15	15.0	4.3	0	0	0	0			400		
	15	~15	15.0	4.3	0	0	0	0			400		
	17	~15	15.0	4.3	0	0	0	0			300		
	19	~25	15.0	4.3	0	0	0	0					
IP-26	6	~15	25.0	7.2	20	0	0	0	8:49 AM		300		
	8	~15	25.0	7.2	20	0	0	0			250		
	10	~15	25.0	7.2	20	0	0	0			275		
	12	~15	25.0	7.2	20	0	0	0			275		
Deep													
	14	~15	15.0	4.3	0	0	0	0			300		
	16	~15	15.0	4.3	0	0	0	0			400		
	18	~15	15.0	4.3	0	0	0	0			500		
	20	~25	15.0	4.3	0	0	0	0					
IP-27	5	~15	25.0	7.2	20	0	0	0	2:15 PM		600		
	7	~15	25.0	7.2	20	0	0	0			550		
	9	~15	25.0	7.2	20	0	0	0			550		
	11	~15	25.0	7.2	20	0	0	0			550		
Deep													
	13	~15	15.0	4.3	0	0	0	0			600		
	15	~25	15.0	4.3	0	0	0	0			610		
	17	~15	15.0	4.3	0	0	0	0			700		
	19	~25	15.0	4.3	0	0	0	0					
IP-28	6	~15	25.0	7.2	20	0	0	0	3:20 PM		550		
	8	~15	25.0	7.2	20	0	0	0			800		
	10	~15	25.0	7.2	20	0	0	0			720		
	12	~15	25.0	7.2	20	0	0	0			800		
Deep													
	14	~15	15.0	4.3	0	0	0	0			700		
	16	~15	15.0	4.3	0	0	0	0			800		
	18	~15	15.0	4.3	0	0	0	0			750		
	20	~25	15.0	4.3	0	0	0	0					

Daily Injection Sheet

Site: Stantec - 14207 Internation Blvd, Tukwila

Personel Rob, JD, Cade, Carsen, Randy

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		BOS Mix							Pilot Test Area: 40 pts (5' - 20')				
Inj. Point	Depth	Gallons of Water	lbs. of BOS 200	Ozs. of Bacteria	lbs. of Mag Gypsum	lbs. of Mag Sulfate	lbs. of Starch	lbs. of Yeast	Time Start	Water Test Pressure	Injection Pressure	Final Pressure	Notes:
IP-29	5	~15	25.0	7.2	20	0	0	0	11:45 AM		300		
	7	~15	25.0	7.2	20	0	0	0			350		
	9	~15	25.0	7.2	20	0	0	0			350		
	11	~15	25.0	7.2	20	0	0	0			320		
Deep													
	13	~15	15.0	4.3	0	0	0	0			400		
	15	~15	15.0	4.3	0	0	0	0			500		
	17	~15	15.0	4.3	0	0	0	0			510		
	19	~25	15.0	4.3	0	0	0	0					
IP-30	6	~15	25.0	7.2	20	0	0	0	8:00 AM		300		
	8	~15	25.0	7.2	20	0	0	0			300		
	10	~15	25.0	7.2	20	0	0	0			300		
	12	~15	25.0	7.2	20	0	0	0			375		
Deep													
	14	~15	15.0	4.3	0	0	0	0			450		
	16	~15	15.0	4.3	0	0	0	0			400		
	18	~15	15.0	4.3	0	0	0	0			600		
	20	~25	15.0	4.3	0	0	0	0					
IP-31	5	~15	25.0	7.2	20	0	0	0	9:37 AM		250		
	7	~15	25.0	7.2	20	0	0	0			275		
	9	~15	25.0	7.2	20	0	0	0			275		
	11	~15	25.0	7.2	20	0	0	0			300		
Deep												Surfacing	
	13	~15	15.0	4.3	0	0	0	0			400		
	15	~25	15.0	4.3	0	0	0	0			450		
	17	~15	15.0	4.3	0	0	0	0			850		
	19	~25	15.0	4.3	0	0	0	0					
IP-32	6	~15	25.0	7.2	20	0	0	0	1:25 PM		500		
	8	~15	25.0	7.2	20	0	0	0			500		
	10	~15	25.0	7.2	20	0	0	0			300		
	12	~15	25.0	7.2	20	0	0	0			620		
Deep													
	14	~15	15.0	4.3	0	0	0	0			600		
	16	~15	15.0	4.3	0	0	0	0			700		
	18	~15	15.0	4.3	0	0	0	0			600		
	20	~25	15.0	4.3	0	0	0	0					

Daily Injection Sheet

Site: Stantec - 14207 Internation Blvd, Tukwila

Personel Rob, JD, Cade, Carsen, Randy

Date: 10/11-14/2021

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		BOS Mix							Pilot Test Area: 40 pts (5' - 20')				
Inj. Point	Depth	Gallons of Water	lbs. of BOS 200	Ozs. of Bacteria	lbs. of Mag Gypsum	lbs. of Mag Sulfate	lbs. of Starch	lbs. of Yeast	Time Start	Water Test Pressure	Injection Pressure	Final Pressure	Notes:
IP-33	5	~15	25.0	7.2	20	0	0	0	1:10 PM		500		
	7	~15	25.0	7.2	20	0	0	0			500		
	9	~15	25.0	7.2	20	0	0	0			550		
	11	~15	25.0	7.2	20	0	0	0			500		
Deep													
	13	~15	15.0	4.3	0	0	0	0			600		
	15	~15	15.0	4.3	0	0	0	0			700		
	17	~15	15.0	4.3	0	0	0	0			800		
	19	~25	15.0	4.3	0	0	0	0					
IP-34	6	~15	25.0	7.2	20	0	0	0			310		
	8	~15	25.0	7.2	20	0	0	0			350		
	10	~15	25.0	7.2	20	0	0	0			550		
	12	~15	25.0	7.2	20	0	0	0			400		
Deep													
	14	~15	15.0	4.3	0	0	0	0			410		
	16	~15	15.0	4.3	0	0	0	0			550		
	18	~15	15.0	4.3	0	0	0	0			600		
	20	~25	15.0	4.3	0	0	0	0					
IP-35	5	~15	25.0	7.2	20	0	0	0	8:23 AM		310		
	7	~15	25.0	7.2	20	0	0	0			305		
	9	~15	25.0	7.2	20	0	0	0			310		
	11	~15	25.0	7.2	20	0	0	0			300		
Deep													Surfacing
	13	~15	15.0	4.3	0	0	0	0			340		
	15	~25	15.0	4.3	0	0	0	0			340		
	17	~15	15.0	4.3	0	0	0	0			600		
	19	~25	15.0	4.3	0	0	0	0					
IP-36	6	~15	25.0	7.2	20	0	0	0	11:30 AM		300		
	8	~15	25.0	7.2	20	0	0	0			305		
	10	~15	25.0	7.2	20	0	0	0			3,300		
	12	~15	25.0	7.2	20	0	0	0			325		
Deep													
	14	~15	15.0	4.3	0	0	0	0			400		Surfacing
	16	~15	15.0	4.3	0	0	0	0			520		
	18	~15	15.0	4.3	0	0	0	0			600		
	20	~25	15.0	4.3	0	0	0	0					

Daily Injection Sheet

Site: Stantec - 14207 Internation Blvd, Tukwila

Personel Rob, JD, Cade, Carsen, Randy

Date: 10/11-14/2021

Client: STTUKBOS.21

Equipment:

Page:

S11

BOS Mix

Pilto Test Area: 40 pts (5' - 20')

Inj. Point	Depth	Gallons of Water	lbs. of BOS 200	Ozs. of Bacteria	lbs. of Mag Gypsum	lbs. of Mag Sulfate	lbs. of Starch	lbs. of Yeast	Time Start	Water Test Pressure	Injection Pressure	Final Pressure	Notes:
IP-37	5	~15	25.0	7.2	20	0	0	0	1:00 PM		400		
	7	~15	25.0	7.2	20	0	0	0			520		
	9	~15	25.0	7.2	20	0	0	0			580		
	11	~15	25.0	7.2	20	0	0	0			560		
Deep													
	13	~15	15.0	4.3	0	0	0	0			510		
	15	~15	15.0	4.3	0	0	0	0			800		
	17	~15	15.0	4.3	0	0	0	0			910		
	19	~25	15.0	4.3	0	0	0	0					
IP-38	6	~15	25.0	7.2	20	0	0	0	7:36 AM		400		
	8	~15	25.0	7.2	20	0	0	0			350		
	10	~15	25.0	7.2	20	0	0	0			400		
	12	~15	25.0	7.2	20	0	0	0			400		
Deep													
	14	~15	15.0	4.3	0	0	0	0			400		
	16	~15	15.0	4.3	0	0	0	0			600		
	18	~15	15.0	4.3	0	0	0	0			475		
	20	~25	15.0	4.3	0	0	0	0					
IP-39	5	~15	25.0	7.2	20	0	0	0	9:00 AM		320		
	7	~15	25.0	7.2	20	0	0	0			300		
	9	~15	25.0	7.2	20	0	0	0			310		
	11	~15	25.0	7.2	20	0	0	0			310		
Deep													
	13	~15	15.0	4.3	0	0	0	0			320		
	15	~25	15.0	4.3	0	0	0	0			310		
	17	~15	15.0	4.3	0	0	0	0			580		
	19	~25	15.0	4.3	0	0	0	0					
IP-40	6	~15	25.0	7.2	20	0	0	0	11:10 AM		300		
	8	~15	25.0	7.2	20	0	0	0			300		
	10	~15	25.0	7.2	20	0	0	0			300		
	12	~15	25.0	7.2	20	0	0	0			300		
Deep													
	14	~15	15.0	4.3	0	0	0	0			310		
	16	~15	15.0	4.3	0	0	0	0			700		
	18	~15	15.0	4.3	0	0	0	0			700		
	20	~25	15.0	4.3	0	0	0	0					

**Environment Testing
America**

[illegible]

PROJECT: 750VMA 22866
 LOCATION: 14207 FWT BLUP. Tukwila.
 PROJECT NUMBER: 18570

WELL / PROBEHOLE / BOREHOLE NO: SB-25



PAGE 1 OF 1

DRILLING: STARTED 10-14-21 COMPLETED:
 INSTALLATION: STARTED 0800 COMPLETED: 0840
 DRILLING COMPANY: BBA
 DRILLING EQUIPMENT: Geo probe 7822 DT
 DRILLING METHOD: Direct push
 SAMPLING EQUIPMENT: continuous.

NORTHING (ft):
 LATITUDE:
 GROUND ELEV (ft):
 INITIAL DTW (ft): 15
 STATIC DTW (ft): -
 WELL CASING DIAMETER (in): -
 LOGGED BY: CS
 EASTING (ft):
 LONGITUDE:
 TOC ELEV (ft):
 BOREHOLE DEPTH (ft): 19
 WELL DEPTH (ft): -
 BOREHOLE DIAMETER (in): 2
 CHECKED BY:

Time & Depth (feet)	Graphic Log	USCS	Description	Sample	Time Sample ID	Measured Recov. (feet)	Blow Count	Headspace PID (units)	Depth (feet)	Borehole Backfill
			0-0.5' asphalt							
			0.5-5" gray.							
			silty sand. F.			2.5				
			damp to moist			5				
			little F. SR. gravel.							
5			5-10: light gray					135	5	
			poorly graded sand							
			with silt. F-M			3.5				
			grained moist.			5		745	7.5	
			Trace to little F. SR.							
			gravel. little silt.							
10			10-15: light gray.		SB-25-10			1520	10	
			silty sand		0845					
			F. grained. moist.			2				
			little F. SR. gravel			5		1310	12.5	
			trace of b&A @ 10ft.							
15			15-19: DK gray.					410	15	
			poorly graded sand							
			with silt. F-M.			4				
			wet @ 15'. little			4		25	17	
			F. SR - SA. gravel.		SB-25-4					
			little to few. silt.		19					
					0900			30	19	
			End boring @ 19 ft.							



1687 114th Avenue Southeast, Suite 100
Bellevue, Washington 98004
Tel. 425.298.7300
Fax 425.688.8935

DAILY FIELD REPORT

PROJECT NAME: Fellevue 22866 PAGE: 1 of 2
PROJECT LOCATION: 14207 INT BLVD. Tukwila

Name(s): Chari Skboe Date: 10-11-21 Project Manager: Paul F
Arrival Time: 0810 Time of Arrival Call-In: 08 Weather Conditions: cloudy 42-53 °F
Departure Time: 1320 Time of Departure Call-In: 1325 Temperature:

HEALTH AND SAFETY ASSESSMENT

☒ Traffic and delineation	☒ HASP/RMS-1 and hospital directions
☒ PPE	☒ RMS-2
☒ Weather/Cold stress/Heat illnesses	☒ Stop Work Authority
☒ Slips, trips, falls	☒ 12 Critical Risks
☒ Proper tools for each task	☒ SWP/JSA
☒ Equipment Handling	☒ First aid kit
☒ Proper lifting of heavy items	☒ Fire extinguisher

TIME:

INTENDED SCOPE OF WORK

Stantec: BBA performing Boss Injection
Contractor: stantec oversight Boss Injection

DESCRIPTION OF ACTIVITIES ONSITE AND NOTES:

0810: Arrived to the site, put on PPE, checked in with PM and Fellevue store Manager.
0820: Met with BBA crew, had safety meeting and discussed scope of work. Paul was on site and Rob, the other crew are in their way. The Boss product is in its way also it may arrive afternoon. BBA started mobilizing and collecting GWS sample for pre-injection data. MW-13, DTW=12.07, DPE-4, 11.07, DPE-5=11.22.
0915: Two BBA additional crews on site were rig on site, had safety meeting with them and discussed scope of work.
0920: continue mobilizing and setting up.
0945: BBA started marking injection points and breaking concrete area using Grepsbe and start site.
1045: BBA ordered dumpster which arrived and parked on North End of site.
1140: BBA started injecting on P-1-5-7-9-11 interval, injecting 15 galley for each section. see injection table for details.
1150: started injecting on P-2-6-8-10-12.
1205: Began injecting on P-3: 5-7-9-11.
1215: Back to P-10 to inject deeper. 13-15-17-19'.
1230: injected P-2: 14-16-18-20. stop @ 18'.
due to surface
1240: injected P-3: 13-15-17-19. stop @ 18'.

DAILY FIELD REPORT

PROJECT NAME: 7 Bluebird 22866

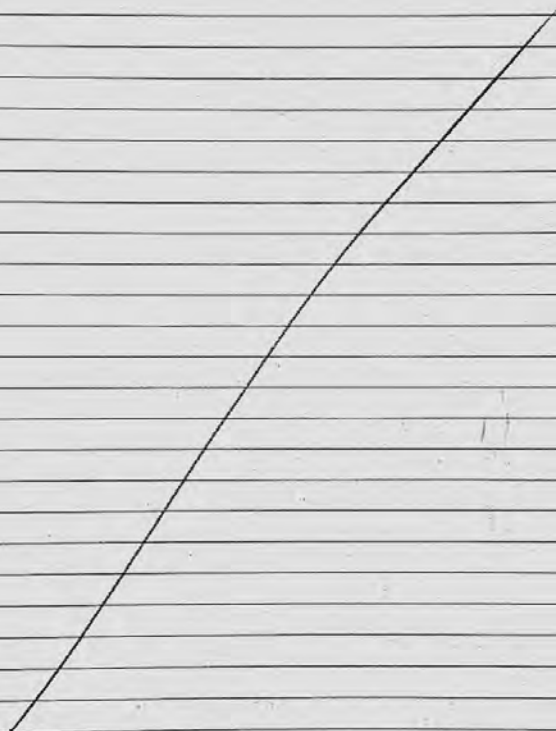
DATE: 10-11-21 PAGE: 2 of 2

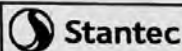
PROJECT LOCATION:

DESCRIPTION OF ACTIVITIES ONSITE AND NOTES:

1300 BBA stop. Injicly and started plugging holes with Red finite and Ksford concrete with patches.

1330: BBA packed up, cleaned up, and left site.





DAILY FIELD REPORT

PROJECT NAME: Fellu & 22866

PROJECT LOCATION: 14207 INT BLVD. Tukwila PAGE: 1

Name(s): Brian Schen Date: 10-12-21 Project Manager: Paul F.

Arrival Time: 1330 Time of Arrival Call-In: 1340 Weather Conditions: cloudy 51

Departure Time: 1730 Time of Departure Call-In: 1725 Temperature:

HEALTH AND SAFETY ASSESSMENT

☒ Traffic and delineation	☒ HASP/RMS-1 and hospital directions
☒ PPE	☒ RMS-2
☒ Weather/Cold stress/Heat illnesses	☒ Stop Work Authority
☒ Slips, trips, falls	☒ 12 Critical Risks
☒ Proper tools for each task	☒ SWP/JSA
☒ Equipment Handling	☒ First aid kit
☒ Proper lifting of heavy items	☒ Fire extinguisher
	Other: <u>HITRA</u>

INTENDED SCOPE OF WORK

Stanec: oversight BOSS injection
Contractor: BBA performs BOSS injection

DESCRIPTION OF ACTIVITIES ONSITE AND NOTES:

1330: Arrived to the site, put on PPE, checked in with PM, and 7/11 Store Manager. met with BBA crew, and had safety meeting and discussed scope of work, waited for BOSS product to arrive.

1430: BOSS arrived to the site in box truck. BBA used Fork lift to unload it.

1450: BBA started setting up to inject on P-4

1515: Began injecting on P-4 BBA & 6'. even & section 6-8-10-12-14-16-18 Ft.

10 gallons for each section was injected

1555: Injected on P-5, odd & 5-7-9-11-13-15-17 Ft. 10 gallons injected in each section

1610: started injecting on P-6. lot of surfacing.

1630: Regan injecting on P-16 away.

From the other injected point. minor-surfacing.

1700: BBA started decommissioning the injected points. P-4-5-6 and 16.

cleaned up, packed up

1730: BBA signed out and left a site.

DAILY FIELD REPORT

PROJECT NAME: **7200th & 228th** DATE: **10-13-21** PAGE: **1**
PROJECT LOCATION: **14207 72nd BLVD. Tukwila** cloudly 54°F
DESCRIPTION OF ACTIVITIES ONSITE AND NOTES: **Ross Injection**

- 0700: Arrived to the site put on PPE, checked in with PM, and the store manager, prepared safety paper work.
- 0715: Met with BBA crew, and had safety meeting with and discussed scope of work, and then started setting up, and mobilizing.
- 0730: BBA started injecting on P-38. injected in Even section 2ft interval 6-8-10-12-14-16-18 ft. 10 gallons of BBS injected in each section.
- 0740: Began injecting on P-34.
- 0805: Started injecting on P-30.
- 0815: Injected on P-25. in odd & section 5-7-9-11-13-15-17 ft.
- 0830: BBA stop injection, and began removing the rods and decom the holes injected using Bentonite chips.
- 0912: BB Matt went to buy Pile Shields for the crew.
- 0912: BBA started injecting on P-39.
- 0922: Began injecting on P-35, 31-26.
- 1005: BBA stop injecting, and began removing rods, and decommission the holes.
- 1040: BBA moved to P-7 to start injecting. lot of surfacing from concrete cracks, completed injection to 11', decom hole and moved to P-11.
- 1110: Began injecting on P-40.
- 1125: Started injection P-36 lot of surfacing.
- 1145: Began injecting on P-29. no surfacing.
- 1200: BBA Decommission holes.
- 1225: BBA took lunch break.
- 1255: BBA back to work and started setting up on P-24. to inject. After preparing batch. surfacing
- 1332: started injecting P-23.
- 1344: Began injecting on P-19. and P-18
- 1415: Removed rods, and decom hole
- 1435: started injection P-14. some surfacing
- 1455: Injected P-10. some surfacing.
- 1520: started inject on P-9. light surfacing.
- 1535: Began injecting on P-8. light surfacing.
- 1550: BBA started removing rods, and decom holes, then began, deep cleaning, packing up.
- 1700: checked out and left a site

DAILY FIELD REPORT

PROJECT NAME: FELDER # 22866
PROJECT LOCATION: 14207 FNT BLVD. Tukwila **PAGE:** 1
Name(s): Orhan Sebhan **Date:** 10-14-21 **Project Manager:** Paul F.
Arrival Time: 0710 **Time of Arrival Call-In:** 0730 **Weather Conditions:** cloudy - 50°F
Departure Time: 1745 **Time of Departure Call-In:** 1740 **Temperature:** _____

HEALTH AND SAFETY ASSESSMENT		TIME:
☒ Traffic and delineation	☒ HASP/RMS-1 and hospital directions	
☒ PPE	☒ RMS-2	
☒ Weather/Cold stress/Heat illnesses	☒ Stop Work Authority	Other:
☒ Slips, trips, falls	☒ 12 Critical Risks	HITRA
☒ Proper tools for each task	☒ SWP/JSA	
☒ Equipment Handling	☒ First aid kit	
☒ Proper lifting of heavy items	☒ Fire extinguisher	

INTENDED SCOPE OF WORK
Stanec: oversight Injection activities.
Contractor: BBA performs Injection

DESCRIPTION OF ACTIVITIES ONSITE AND NOTES:

0710: Arrived to the site, Put on PPE, checked in with PM, and 7/11 store manager.
 0720: met with BBA crew, had safety meeting with them, and discussed scope of work.
 0730: BBA mobilized, started setting up the transfer pump not working, trying troubleshoot.
 0800: Inactive BBA crew. Started drilling boring confirmation close to SB-20.
 0840: completed drilling on boring confirmation and started injecting on P-13. surfacing.
 0855: Began injecting on P-12. lot of surfacing.
 0900: started on P-11, but stop injecting, transfer pump clogged. troubleshoot.
 1000: started injecting on P-15, @ P-11, concrete @ 3ft. stop drilling and moved to P-15.
 1011: Began injecting on P-20. surfacing @ P-12.
 1025: BBA started removing rods, and decom. holes with Bentonite chips.
 1050: BBA began injecting on P-21, but the pump stop working. BBA are troubleshooting pump again.
 1248: BBA started injecting on P-21 again. lot of surfacing @ P-16. stop injecting and moved to P-37.
 1257: injected P-37. no surfacing.
 1308: Began injecting P-33. little surfacing @ P-33.
 1320: injected @ P-32 light surfacing.
 1330: Back to P-21 to inject. no surfacing.
 1345: started removing rods and decom. holes.

DAILY FIELD REPORT

PROJECT NAME: **FEUVER # 22866**

DATE: **2 of 2**

PAGE

PROJECT LOCATION: **14207 FNT BLVD. Tukwila**

10-14-21

DESCRIPTION OF ACTIVITIES ONSITE AND NOTES: **BOSS Injection**

and prepared BOSS batch.

1420: started injecting on P-27. little surfacing

1435: began injecting on P-17.

1440: started injecting on P-22 surfacing on P-21

1508: ^{PPE-4} started injecting on P-11. changed location between P-23 - P-24. no surfacing

1517: started injecting on P-28. some surfacing

1537: began injecting on P-41. lot of surfacing

Stop Injection After injecting 5-7 ft. ~ 20 gal

and began removing rods and decom holes with Bentonite.

1605: started injecting on P-42 located between P-23

P-11 - P-28. lot of surfacing Stop injecting @ 10 ft. 6 gal.

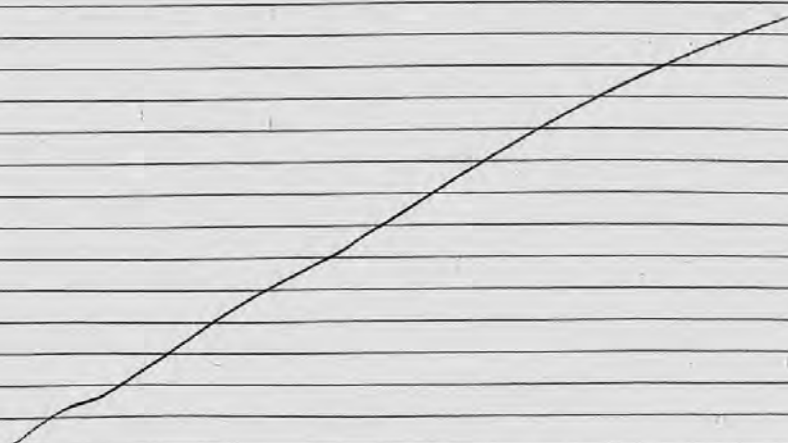
1615: began injecting @ P-43 located between P-40

P-37 - P-36. injected ~ 20 gallon 8-10 ft.

1630: started decom holes, removing rods.

cleaning up packing up. Also collecting 6W sample post-injection.

1745: left a site and signed out.





DAILY FIELD REPORT

PROJECT NAME: 7260000022666
PROJECT LOCATION: 14207 INT BLVD Tukwila PAGE: 1
Name(s): Chas Selton Date: 10-15-21 Project Manager: Paul F.
Arrival Time: 0715 Time of Arrival Call-In: 0730 Weather Conditions: cloudy 46°
Departure Time: 0900 Time of Departure Call-In: 0910 Temperature:

HEALTH AND SAFETY ASSESSMENT		TIME:
☒ Traffic and delineation	☒ HASP/RMS-1 and hospital directions	
☒ PPE	☒ RMS-2	
☒ Weather/Cold stress/Heat illnesses	☒ Stop Work Authority	Other:
☒ Slips, trips, falls	☒ 12 Critical Risks	HITRA
☒ Proper tools for each task	☒ SWP/JSA	
☒ Equipment Handling	☒ First aid kit	
☒ Proper lifting of heavy items	☒ Fire extinguisher	

INTENDED SCOPE OF WORK
Stantec: oversight. Restoration
Contractor: BB&A performs site restoration after Boss Injection

DESCRIPTION OF ACTIVITIES ONSITE AND NOTES:
0715: Arrived to the site, put on PPE, checked in with PM, and met with site manager.
0730: Met with BBA crew, and had safety meeting, and discussed scope of work.
0740: BBA started cleaning up, plugging injection holes with concrete/asphalt.
0900: BBA packed up, and left site.

INJECTION MONITORING FORM

Klorur Injection

7-Eleven Store No. 23020

1522 E. Madison St., Seattle, WA

Bellevue Office

Page 1 of 1

February 2021

Project Name: 7-Eleven Store No. 22866		Project No.: 185703896	Weather: cloudy 50°F
Project Manager: Paul Fairbairn		Lab:	
Name: <u>Shane Seboam</u>	Date: <u>10-11-21</u>		

Address:

Injection Well ID	Date / Time	Gallons Injected	Injection Pressure (psi)	Injection Flow Rate (gal/min)	Interval Injected	Comments
P-1	10-11-21 1140	100	200 220	5-7-11 45-55 gal	5-7-11 11	154 gallons for each section.
P-2	1150	60	200	20 gal/min	6-8-10 12	150 gallons for each section Surfacing
P-3	1205	60	210	28 gal/min	5-7-9-11	155 gallons for each section
P-1	1215	45	300	20	13-15-17 19	Surfacing @ 15 ft.
P-2	1230	45	250	20	14-16-18 20	Surfacing @ 16 ft. stop @ 18'
P-3	1240	45	300	20	13-15-17 19	Surfacing @ 15 ft. stop @ 16'
P-4	10-12-21 1515	70	300 460	20	6-8-10 12-14-16-18	Injected all the 105 gallons way to 18. light surfacing @ 18'.
P-5	10-12-21 1555	70	600 600	25	5-7-9-11 11-13-15-17	lot of surfacing.
P-6	1610	70	500 900	20	6-8-10 12-14-16-18	Surfacing stop for injection @ 12' to let it depressure.
P-16	1630	70	300- 600	20	6-8-10-12 14-16-18	minor surfacing.
P-38	10-13-21 0730	70	400 975	20	6-8-10-12 14-16-18	no surfacing
P-34	0746	70	350 600	20	11	Some surfacing.
P-30	0805	70	300 650	20	6-8-10 12-14-16-18	no surfacing.
P-25	0815	70	300 550	20	5-7-9 11-13-15-17	Some surfacing
P-39	0912	70	300 580	20	5-7-9-11 13-15-17	Some surfacing.
P-35	0922	70	300 600			

Notes:

INJECTION MONITORING FORM

 Klozur Injection
 7-Eleven Store No. 23020
 1522 E. Madison St., Seattle, WA

Project Name: 7-Eleven Store No. 22866	Project No.: 185703896	Weather: <u>cloudy 48°F</u>
Project Manager: Paul Fairbairn	Lab:	
Name: <u>Cheryl Schloer</u>	Date: <u>10-13-21</u>	

Address:

Injection Well ID	Date / Time	Gallons Injected	Injection Pressure (psi)	Injection Flow Rate (gal/min)	Interval Injected	Comments
P-31	10-13-21 0935	70	250 550	25	5-7-9-11 13-15-17	surfacing.
P-26	10-13-21 0950	70	250 800	25	6-8-10 12-14-16-18	lot of surfacing
P-7	10 40	70	250 400	25	5-7-9-11 13-15-17	lot of surfacing.
P-40	1110	70	300 700	25	6-8-10 12-14-16-18	some surfacing.
P-36	1125	70	250 850	25	6-8-10- 12-14-16-18	lot of surfacing.
P-29	1145	70	250 55	25	5-7-9-11 13-15-17	no surfacing.
P-24	1300	70	525 700	25	6-8-10 12-14-16-18	some surfacing lot of
P-23	1332	70	250 900	25		lot of surfacing
P-19	1344	70	300 700	25		no surfacing
P-18	1355	70	225 550	25		no surfacing
P-14	1445	70	200 700	25		some surfacing
P-10	1455	70	500 800	25		some surfacing
P-9	1520	70	400 700	25		some surfacing
P-8	1535	70	500 650	25		lot of surfacing.

Notes:

INJECTION MONITORING FORM

Klorur Injection

7-Eleven Store No. 23020

1522 E. Madison St., Seattle, WA

Bellevue Office

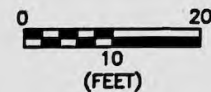
Page 1 of 1

February 2021

Project Name: 7-Eleven Store No. 22866	Project No.: 185703896	Weather: Cloudy 48°F
Project Manager: Paul Fairbairn	Lab:	
Name: Ghoud Selhom	Date: 10-14-21	

Address:

Injection Well ID	Date / Time	Gallons Injected	Injection Pressure (psi)	Injection Flow Rate (gal/min)	Interval Injected	Comments
P-13	10-14-21 0840	70	250 700	25	5-7 9-11 13-15-17	lot of surfacing from P-13 and SB-25.
P-12	0855	70	350 900	25	6-8-10-12 14-16-18	some surfacing. lot of from P-12.
* P-11	0910	70		25		@ 3' concrete. stop drilling.
P-15	0905	70	200 350	25		surfacing @ P-12
P-20	1011	70	120 300	25		surfacing @ P-12
* P-21	1248 ~~1350~~	70		25		surfacing @ P-16
P-37	1257	70	400 910	25		no surfacing
P-33	1308	70	500 600	25		little surfacing @ P-33 hole.
P-32	1320	70	500 700	25		light surfacing
P-27	1420	70	550 700	25		little surfacing
P-17	1435	70	300 700	25		little surfacing on P-17 rod.
P-22	1446	70	400 600	25		surfacing on P-21 and PFE-4
P-11	1508	70	525 650	25		location changed (P-23-P-24) to close to SB-20. SB-25.
P-28	1517	70	550 800	25		location changed between P-24-P-19. no surfacing
P-41	1537	70	800 600	25	8-10	Between P-18-P-19. Surfacing. stop injecting
P-42	1605	20	800 400	25	8-10	Between P-23-P-11-P-28. Surfacing stop
P-43	1615	20	800 400	25	8-10	Between P-40-P-36-P-37. no surfacing



S. 142nd STREET

Sign w/ Bollards

Gravel Area

Parking Lot

MW-1B

Canopy

MW-11

SB-17

DPE-10

DPE-1

SB-18

MW-4B

MW-12

SB-19

7-11
#22868
STORE

MW-13

DPE-3

SB-15

MW-14

Landscaping

Sidewalk

INTERNATIONAL BOULEVARD

JET INN
PROPERTY

Parking Lot

SB-12

DPE-7

MW-5B

SB-23

MW-10

PROPOSED PILOT
TEST AREA ~1,060ft²



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DAILY FIELD REPORT

PROJECT NAME: 7 FLOREN #22866

PROJECT LOCATION: 14207 International Blvd Tukwila

1 of 2

Name(s): Shawn Shuman Date: 1-4-21 Project Manager: Paul F.
Arrival Time: 0800 Time of Arrival Call-In: 0815 Weather Conditions: cloudy/rain. 45°F.
Departure Time: 1645 Time of Departure Call-In: 1645 Temperature:

HEALTH AND SAFETY ASSESSMENT

TIME:

☒ Traffic and delineation	☒ HASP/RMS-1 and hospital directions
☒ PPE	☒ RMS-2
☒ Weather/Cold stress/Heat illnesses	☒ Stop Work Authority
☒ Slips, trips, falls	☒ 12 Critical Risks
☒ Proper tools for each task	☒ SWP/JSA
☒ Equipment Handling	☒ First aid kit
☒ Proper lifting of heavy items	☒ Fire extinguisher

Other:

HITRA

INTENDED SCOPE OF WORK

Stantec: oversight Air knife activities.

Contractor: HOLT performs Airknife operations.

DESCRIPTION OF ACTIVITIES ONSITE AND NOTES:

- 0800: Arrived to the site, Put on PPE, checked in with Paul, and 7 Floren store manager.
- 0815: met with HOLT crew, had safety meeting with them, and discussed scope of work.
- 0845: HOLT started getting up to Air knife on MW-16, and cleared to 5FT. Screened soil at 2.5 and 5 ft. bags using PFD.
- 0930: Completed Air knife on MW-16, and moved to patch the hole with asphalt. the water getting in hole, HOLT put added some pea gravel to be able to patch a hole with asphalt.
- 0945: HOLT started Air knife on MW-17, to 5 ft. bags screened soil, High TPH odor @ 2.5 - 5 ft. collected soil samples.
- 1020: HOLT completed Air knife to 5ft. on MW-17, and moved to MW-15, work: HOLT got some supplies from their office. condle stick cones and pea gravel bags.
- 1100: HOLT started Air knife on MW-15, screened soil.
- 1135: HOLT completed Air knife @ MW-15, clean no odor.
- 1140: HOLT began Air knife @ SB-24.
- 1200: At 3ft. HOLT found metal pipe. 1"Ø. NW. SE; we moved 2ft. SE. to dig another hole.
- 1245: HOLT completed Air knife on SB-24 to 5 ft. Screened soil. and collected samples @ 2.5 - 5 ft. strong TPH odor. back filled hole with sand, bags and patched hole.
- 1300: HOLT took lunch break.
- 1345: Back to work and began Air knife on SB-22

DAILY FIELD REPORT

PROJECT NAME: **FALCON 22866**

DATE: **1-4-21**

PAGE: **2 of 2**

PROJECT LOCATION: **14207 International Blvd Tukwila.**

DESCRIPTION OF ACTIVITIES ONSITE AND NOTES: **Air Knife.**

1415: HOLT recontoured 2"Ø steel pipe @ 3 ft. We moved to West 2 ft. to dig another hole.

1430: HOLT completed Air knife on SB-22, and moved to SB-21, patched hole.

note: Paul on site to check on bring locations.

1500: HOLT started Air knife on SB-21 to 5 ft.

1540: completed Air knife on SB-21, screened soil.

Paul left site.

1550: HOLT started Air knife on SB-23,

1620: HOLT completed Air knife on SB-23, screened soil, started packing up, cleaning up.

patching hole with asphalt.

generated one drum of Soil 5 Gallon,

1635: signed out HOLT off site, Iced, and packed sample.

1645: left site.



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DAILY FIELD REPORT

2 of 2

PROJECT NAME: ~~February 22 866~~

PROJECT LOCATION: 14207 International BLVD Tukwila

1-5-21

1 of 2

Name(s): Ghana Sultan

Date: 1-5-21

Project Manager: Paul F.

Arrival Time: 0800

Time of Arrival Call-In: 0830

Weather Conditions:

rain 45°F

Departure Time:

Time of Departure Call-In:

Temperature:

HEALTH AND SAFETY ASSESSMENT

TIME:

☒ Traffic and delineation	☒ HASP/RMS-1 and hospital directions
☒ PPE	☒ RMS-2
☒ Weather/Cold stress/Heat illnesses	☒ Stop Work Authority
☒ Slips, trips, falls	☒ 12 Critical Risks
☒ Proper tools for each task	☒ SWP/JSA
☒ Equipment Handling	☒ First aid kit
☒ Proper lifting of heavy items	☒ Fire extinguisher

Other:

HITRA

INTENDED SCOPE OF WORK

Stantec:

oversight Air Knife, and Geoprobe drilling.

Contractor:

HOLT performs Air Knife; BBA performs Geoprobe drilling.

DESCRIPTION OF ACTIVITIES ONSITE AND NOTES:

0800: Arrived to the site, Put on PPE, checked in with Paul and February store manager.

0815: Had safety meeting with sub- HOLT and BBA, and discussed scope of work.

0845: HOLT started Air Knife on SB-18, and BBA began drilling on MW-16. Using Geoprobe.

0930: BBA completed drilling to 15 ft. on MW-16. screened and sampled soil.

HOLT completed Air Knife on SB-18. screened soil.

0945: HOLT started Air Knife on SB-19. BBA began well installation.

1000: HOLT encountered 2" Ø steel pipe @ 2 ft. bgs. moved 2 ft. west side to dig another hole.

BBA continue to drill on MW-16, direct push didn't work very hard, and switched to HSA.

1045: HOLT completed Air Knife on SB-19, and moved to SB-17. BBA had rod stuck inside the Auger and trying to pull it up.

1130: BBA completed well construction on MW-16, well screen 5-15 ft. Sand pack from 15 ft bgs. to 1' above screen. Bentonite chips 4-1.5' bgs. Concrete from 1.5' - surface with well box.

HOLT completed Air Knife on SB-17, packed up and moved to next boring. MW-14.

1200: BBA started drilling on MW-17, and HOLT began Air Knife on MW-14.

1240: BBA completed drilling on MW-17 to 15 ft. screened soil and collected soil samples.

DAILY FIELD REPORT

PROJECT NAME: ~~7 ELEVATION~~ 22866

DATE: 1-5-21 PAGE: 2 of 2

DESCRIPTION OF ACTIVITIES ONSITE AND NOTES:

Air knife. Geoprobe drilling.
Holt completed Air knife on MW-14.
1300: Holt moved to SB-16, and BBA began well casing installation on MW-17. Also sub-Evergreen concrete cutting on site to cut concrete on MW-13.
1330: Holt completed Air knife on SB-16, screened soil. BBA continues to work on well construction MW-17. Evergreen concrete cutting finished concrete cutting on MW-13.
1400: Holt emptied Truck vol truck soil into a drum, and started setting up to Air knife on MW-13.
BBA completed well construction MW-17, put well box.
1420: BBA started drilling on SB-24, Holt began Air knife on MW-13.
1445: BBA completed drilling on SB-24 to 15 ft and Holt also finished Air knife on MW-13.
1450: BBA began drilling on MW-14, and Holt started Air knife on MW-11.
1610: Holt completed Air knife at MW-11 and moved to MW-12, and BBA completed drilling on MW-15 and working on well construction, BBA, close
1630: BBA cleaned up, cleaned, Holt began setting up on SB-20
1700: BBA left site, and Holt continues to work on SB-20
1745: Holt completed Air knife on SB-20, screened and collected soil sample, packed up.
1800: left site.



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DAILY FIELD REPORT

PROJECT NAME: Fluor 22866

PROJECT LOCATION: 14207 International Blvd Tukwila:

Name(s): Chantel Rhoads Date: 1-6-21 Project Manager: Paul F.
Arrival Time: 0750 Time of Arrival Call-In: 0820 Weather Conditions: cloudy/rain 45°F
Departure Time: _____ Time of Departure Call-In: _____ Temperature: _____

HEALTH AND SAFETY ASSESSMENT

TIME:

☒ Traffic and delineation	☒ HASP/RMS-1 and hospital directions
☒ PPE	☒ RMS-2
☒ Weather/Cold stress/Heat illnesses	☒ Stop Work Authority
☒ Slips, trips, falls	☒ 12 Critical Risks
☒ Proper tools for each task	☒ SWP/JSA
☒ Equipment Handling	☒ First aid kit
☒ Proper lifting of heavy items	☒ Fire extinguisher

Other:

HITRA

INTENDED SCOPE OF WORK

Stantec: oversight BBA Performs Geoprobe drilling wells Partfall
Contractor: BBA perform Geoprobe drilling and wells installation

DESCRIPTION OF ACTIVITIES ONSITE AND NOTES:

0750: Arrived to the site, put on PPE, checked in with Paul and Fluor Store manager.
0815: Had safety meeting with BBA, and discussed scope of work.
0835: BBA started setting up on SB-22.
0845: BBA began drilling on SB-22 to 15 ft.
0915: completed drilling and removed and sampled soil. BBA set temp well for GW sample.
0940: started drilling on SB-21 to 15 ft.
1015: completed drilling on SB-21, logged soil and collected samples.
1030: began drilling on SB-23.
1045: finished drilling on SB-23, logged soil and collected samples.
1105: started drilling on SB-20.
1145: completed drilling on SB-20 to 19 ft. very contaminated high TPH odor. GW with sheen.
1225: began drilling on MW-14.
1245: started well construction, logged soil and collected sample.
1315: BBA began auger, completed well construction.
1345: started setting up on MW-13.
1400: began drilling on MW-13.
1440: completed drilling, and began well installation, logged soil and collected samples.
1530: completed well construction, started decoupling packing up.
1615: BBA left site.

DAILY FIELD REPORT

PROJECT NAME: Fishers # 22866

PROJECT LOCATION:

PAGE:

Name(s): Orlando Sillman

Date: 1-7-21

Project Manager:

Paul F.

Arrival Time: 0800

Time of Arrival Call-In: 0830

Weather Conditions:

cloudy 45-48°F

Departure Time:

Time of Departure Call-In:

Temperature:

HEALTH AND SAFETY ASSESSMENT

TIME:

☒ Traffic and delineation

☒ PPE

☒ Weather/Cold stress/Heat illnesses

☒ Slips, trips, falls

☒ Proper tools for each task

☒ Equipment Handling

☒ Proper lifting of heavy items

☒ HASP/RMS-1 and hospital directions

☒ RMS-2

☒ Stop Work Authority

☒ 12 Critical Risks

☒ SWP/JSA

☒ First aid kit

☒ Fire extinguisher

Other:

HITRA

INTENDED SCOPE OF WORK

Stantec:

oversight drilling operations

Contractor:

BBA performs Geoprobe drilling, and well installation

DESCRIPTION OF ACTIVITIES ONSITE AND NOTES:

0800: Arrived to the site, put on PPE, checked in with Paul and Fishers store manager.

0815: Had safety meeting with BBA crew and discussed scope of work.

0830: started setting up mobilizing to the north end of the site.

0840: BBA started drilling on SB-16.

0900: completed drilling to 17ft. logs. screened soil and collected samples, BBA collected soil and GW samples.

0910: BBA began drilling on MW-11.

0940: completed drilling to 18ft. refusal, and started well construction using Auger.

1030: Finished well construction, and putting well box.

1115: started drilling on MW-12.

1140: completed drilling to 15ft. screened soil and collected samples BBA began well construction.

1245: Finished well construction, and stacked rebar and well box.

1300: Began drilling on SB-18.

1315: completed drilling, logged soil and collected samples.

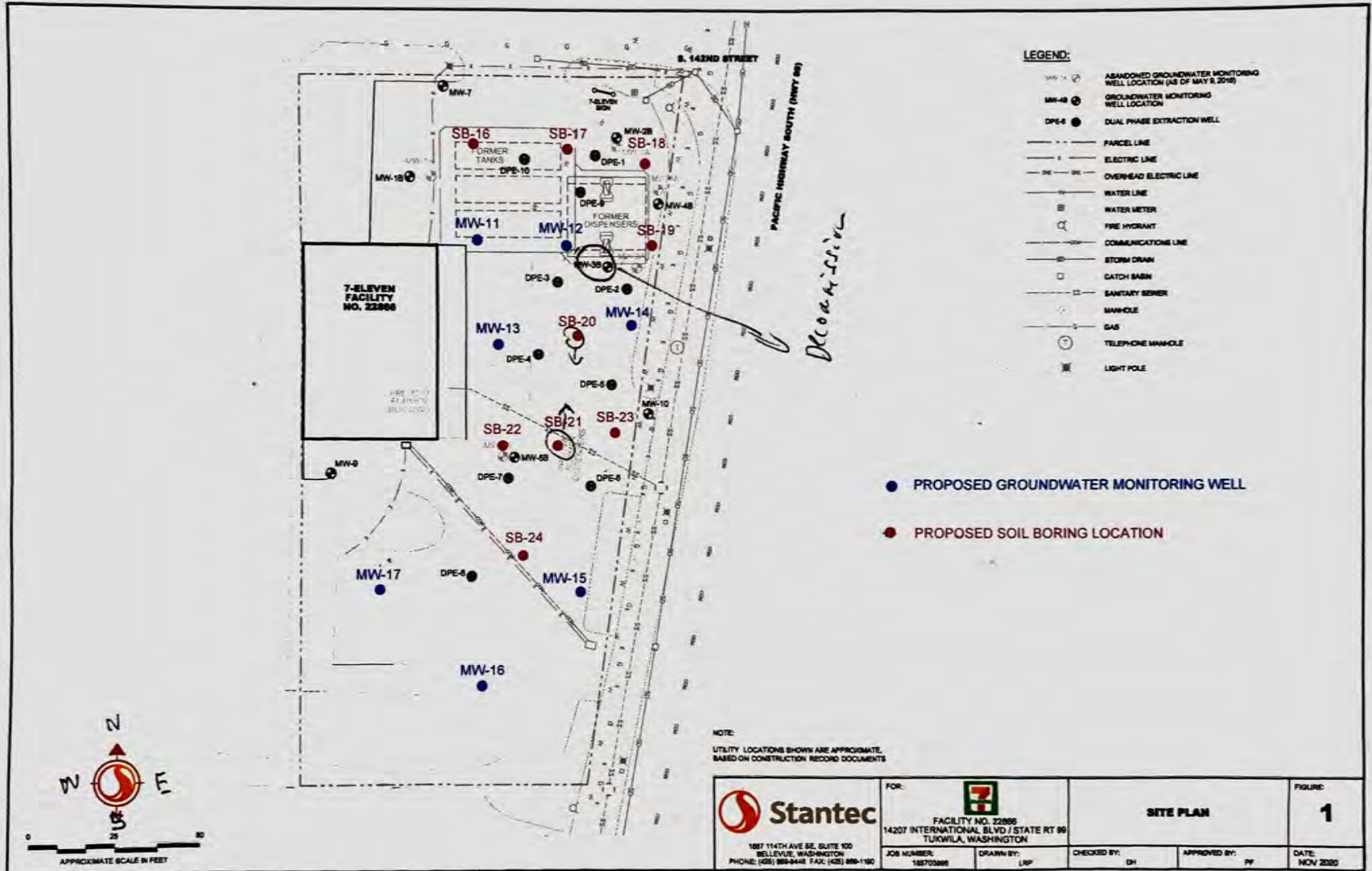
1320: started drilling on SB-19.

1345: Finished drilling, logged soil, and collected samples.

1400: BBA started cleaning, decon, packing up.

1510: BBA signed off and left site, stayed to pump wells, took pictures, and inventory of drums - generated 9 drums of soil (Cup) and 3 drums of decon water, stored south end of site. by dumpster area.

1600: left site.



Stantec		BC 1857 Standard Equipment Form <i>Gas probe drilling</i>				Tracking #	
Project #: <u>185703896</u>		Task #: <u>0660</u>		Start Date: <u>01-04-21</u>		FINANCE USE ONLY	
Project Name: <u>FEWELL 22866</u>		Field Staff: <u>Shawn Saba</u>		End Date:		By: _____	
PM Approval: <u>Paul F.</u>		PM Name:		Equip Billable: <u>Y/N</u>		Date: _____	
Task No.	Unit Description	Quantity	Cost	UOM	Billable	Expenditure Type	
Capital Equipment							
X	Field Vehicle	5	\$ 135.00	Day	\$ -	Usage - Vehicle	
	Field Vehicle - Mileage (Prevailing IRS Rate)		\$ -	Mile	\$ -	Usage - Vehicle	
Disposable Equipment							
	Boiler - Disposable		\$ 10.00	Each	\$ -	Usage - Equipment Charges	
	Boiler - Disposable Weighted		\$ 15.00	Each	\$ -	Usage - Equipment Charges	
	Boiler - Quick E-Boiler System		\$ 85.00	Day	\$ -	Usage - Equipment Charges	
	Boiler - Reusable		\$ 20.00	Day	\$ -	Usage - Equipment Charges	
	Gloves - Colored Cloth		\$ 5.00	Pair	\$ -	Usage - Field Supplies	
	Gloves - Colored Leather		\$ 15.00	Pair	\$ -	Usage - Field Supplies	
X	Gloves - Colored Nitrile	150	\$ 0.25	Pair	\$ -	Usage - Field Supplies	
	Gloved - Kevlar Under Glove		\$ 5.00	Pair	\$ -	Usage - Field Supplies	
	Sampling Supplies		\$ 25.00	Day	\$ -	Usage - Field Supplies	
	Tedlar Bag		\$ 15.00	Each	\$ -	Usage - Field Supplies	
	Well Locks		\$ 8.50	Each	\$ -	Usage - Field Supplies	
Health & Safety							
X	H&S - Level C Safety Equipment	1	\$ 95.00	Day	\$ -	Usage - Equipment Charges	
	H&S - Level D Safety Equipment		\$ 60.00	Day	\$ -	Usage - Equipment Charges	
	H&S - Traffic Control Equipment		\$ 65.00	Day	\$ -	Usage - Equipment Charges	
Meters							
X	Photoionization Detector (PID)	4	\$ 110.00	Day	\$ -	Usage - Equipment Charges	
X	Meter - Water Level Indicator	4	\$ 35.00	Day	\$ -	Usage - Equipment Charges	
	Meter - Oil/Water Interface		\$ 60.00	Day	\$ -	Usage - Equipment Charges	
	Meter - Anemometer		\$ 25.00	Day	\$ -	Usage - Equipment Charges	
	Meter - CO		\$ 65.00	Day	\$ -	Usage - Equipment Charges	
	Meter - Data Logger		\$ 140.00	Day	\$ -	Usage - Equipment Charges	
	Meter - Dissolved Oxygen		\$ 65.00	Day	\$ -	Usage - Equipment Charges	
	Meter - DO/ORP/Temp/Conductivity		\$ 100.00	Day	\$ -	Usage - Equipment Charges	
	Meter - Dosimeter		\$ 45.00	Day	\$ -	Usage - Equipment Charges	
	Meter - Dust Monitor		\$ 120.00	Day	\$ -	Usage - Equipment Charges	
	Meter - Ferrous Iron		\$ 5.00	Day	\$ -	Usage - Equipment Charges	
	Meter - Flow		\$ 30.00	Day	\$ -	Usage - Equipment Charges	
	Meter - H2S Detector		\$ 80.00	Day	\$ -	Usage - Equipment Charges	
	Meter - LEL/O2		\$ 80.00	Day	\$ -	Usage - Equipment Charges	
	Meter - Magnehelic (Gauge)		\$ 35.00	Day	\$ -	Usage - Equipment Charges	
	Meter - Magnetometer		\$ 50.00	Day	\$ -	Usage - Equipment Charges	
	Meter - Manometer		\$ 25.00	Day	\$ -	Usage - Equipment Charges	
	Meter - Measuring Wheel		\$ 10.00	Day	\$ -	Usage - Field Supplies	
	Meter - Metal Detector		\$ 110.00	Day	\$ -	Usage - Equipment Charges	
	Meter - Multimeter		\$ 110.00	Day	\$ -	Usage - Equipment Charges	
	Meter - O2/CO2		\$ 110.00	Day	\$ -	Usage - Equipment Charges	
	Meter - ORP		\$ 25.00	Day	\$ -	Usage - Equipment Charges	
	Meter - Ozone		\$ 25.00	Day	\$ -	Usage - Equipment Charges	
	Meter - pH/Temp/Conductivity		\$ 30.00	Day	\$ -	Usage - Equipment Charges	
	Meter - Turbidity		\$ 70.00	Day	\$ -	Usage - Equipment Charges	
	Meter - Velocity		\$ 25.00	Day	\$ -	Usage - Equipment Charges	
Miscellaneous Equipment							
	Air Sampling Equipment		\$ 65.00	Day	\$ -	Usage - Equipment Charges	
	Digital Camera		\$ 25.00	Day	\$ -	Usage - Equipment Charges	
	Drum - 55 Gallons		\$ 65.00	Each	\$ -	Usage - Field Supplies	
	Flame Ionization Detector (FID)		\$ 145.00	Day	\$ -	Usage - Equipment Charges	
	Locking Well Cap (2')		\$ 18.00	Each	\$ -	Usage - Field Supplies	
	Locking Well Cap (4')		\$ 20.00	Each	\$ -	Usage - Field Supplies	
	Mini RAE		\$ 65.00	Day	\$ -	Usage - Equipment Charges	
	Survey Equipment - Transit/Level		\$ 200.00	Day	\$ -	Usage - Equipment Charges	
	GPS		\$ 15.00	Day	\$ -	Usage - Equipment Charges	
Pumps							
	Grundfos Pump		\$ 50.00	Day	\$ -	Usage - Equipment Charges	
	Portable Ground Sampling Pump		\$ 110.00	Day	\$ -	Usage - Equipment Charges	
	Pump - Air Compressor		\$ 100.00	Day	\$ -	Usage - Equipment Charges	
	Pump - Compressor		\$ 30.00	Day	\$ -	Usage - Equipment Charges	
	Pump - Submersible		\$ 30.00	Day	\$ -	Usage - Equipment Charges	
	Pump - Vacuum Pump		\$ 25.00	Day	\$ -	Usage - Equipment Charges	
	Pump - Well Sampling/Purge		\$ 45.00	Day	\$ -	Usage - Equipment Charges	
	Purge Tubing		\$ 0.25	Foot	\$ -	Usage - Field Supplies	
Equipment							
	Generator		\$ 70.00	Day	\$ -	Usage - Equipment Charges	

APPENDIX G
Quantitative High Resolution Site Characterization
Report



Quantitative High Resolution Site Characterization Report

Client: Stantec

Project Name: 7-11 #22866

Location: Tukwila, WA

Prepared by:

AST Environmental, Inc.

6390 Joyce Drive Suite 150W

Golden, CO 80403

November 15, 2021

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APPENDICES

Appendix A	RPI Project Support Laboratory Soil Results
Appendix B	RPI Project Support Laboratory Groundwater Results
Appendix C	2D and 3D Data Visualization Figures

1.0 INTRODUCTION

This document reports the results of the quantitative High Resolution Site Characterization (qHRSC) services requested by Stantec and performed by BB&A Environmental (BB&A) and AST Environmental, Inc. (AST). Field work was performed by BB&A from January 5th, 2021 to January 7th, 2021 at the 7-11 #22866 store located at 14207 International Blvd in Tukwila, Washington. Stantec requested that AST create 2-Dimensional (2D) and 3-Dimensional (3D) quantitative models based upon the Remedial Design Characterization (RDC) event performed by BB&A.

1.1 Site Description and Location

The site is currently developed as an operating 7-11 convenience store located in a densely developed commercial corridor. The site is paved with asphalt or concrete. All fuel dispensing pumps and underground storage tanks have been removed.

2.0 SCOPE OF WORK

To support a detailed design for the proposed remedial alternative using BOS 200®, Stantec performed the qHRSC with the onsite assistance of BB&A. The following scope of work was completed:

- Sixteen (16) continuous soil borings were advanced to a minimum of 11 feet below ground surface (bgs) and a maximum of 18 ft bgs. The full length of each soil core was examined for evidence of petroleum hydrocarbon impacts and lithological changes to aid in the selection of discrete soil samples collected on approximate 2-foot vertical intervals. A total of 66 soil samples were collected. Seven (7) of the soil boring locations were converted to permanent monitoring wells MW-11 through MW-17. The saturated soil data are presented in Appendix A.
- Groundwater samples were collected from all soil borings to further characterize and quantify the distribution of contaminant mass in groundwater. The samples were collected from selected depth intervals as determined in the field based on qualitative observations made during completion of the borings. A total of 16 groundwater samples were collected. The groundwater data are presented in Appendix B.
- Soil and groundwater samples were analyzed pro bono at the RPI Project Support Laboratory in Golden, Colorado for petroleum hydrocarbons using Method 8260B. Groundwater samples were also analyzed for anions using EPA Method 300.1 and dissolved gases via Method RSK 175. Note that the laboratory analysis is for remedial design use only and is not intended for regulatory compliance.

- AST developed 2D and 3D data visualizations depicting the magnitude and extent of petroleum hydrocarbon impacts at the site based on the qHRSC data and other data provided by the client. A subset of the images created are presented in Appendix C.

Appendix A

RPI Project Support Laboratory Soil Results

Appendix A

RPI Project Support Laboratory

Soil Results

Sample ID. No.	MW-11			MW-11			MW-11			MW-11										
Date Sampled	1/7/2021			1/7/2021			1/7/2021			1/7/2021										
Sample Depth	09'			11'			13'			15'										
		Reporting Limit	Units		Reporting Limit	Units		Reporting Limit	Units		Reporting Limit	Units								
MTBE	ND	0.5	ug/Kg	ND	0.5	ug/Kg	ND	0.5	ug/Kg	ND	0.5	ug/Kg								
Benzene	ND	0.5	ug/Kg	0.80	0.5	ug/Kg	3.42	0.5	ug/Kg	1.62	0.5	ug/Kg								
Toluene	ND	0.5	ug/Kg	0.88	0.5	ug/Kg	2.05	0.5	ug/Kg	1.14	0.5	ug/Kg								
Ethylbenzene	1.50	0.5	ug/Kg	1.82	0.5	ug/Kg	11.0	0.5	ug/Kg	1.91	0.5	ug/Kg								
m/p-Xylene	2.14	0.5	ug/Kg	4.88	0.5	ug/Kg	16.4	0.5	ug/Kg	4.12	0.5	ug/Kg								
o-Xylene	0.77	0.5	ug/Kg	1.31	0.5	ug/Kg	2.87	0.5	ug/Kg	1.13	0.5	ug/Kg								
1,2,4-Trimethylbenzene	0.87	0.5	ug/Kg	2.48	0.5	ug/Kg	6.25	0.5	ug/Kg	1.95	0.5	ug/Kg								
Napthalene	16.9	0.5	ug/Kg	9.11	0.5	ug/Kg	15.3	0.5	ug/Kg	5.11	0.5	ug/Kg								
TVPH	ND	0.5	mg/Kg	1.60	0.5	mg/Kg	ND	0.5	mg/Kg	ND	0.5	mg/Kg								
% Surrogate Recovery																				
1,2-Dichloroethane-d4	84			80			88			87										
d8-Toluene	96			100			94			99										
p-Bromofluorobenzene	91			95			88			93										
Sample ID. No.	MW-12			MW-12			MW-12			MW-12										
Date Sampled	1/7/2021			1/7/2021			1/7/2021			1/7/2021										
Sample Depth	09'			11'			13'			15'										
		Reporting Limit	Units		Reporting Limit	Units		Reporting Limit	Units		Reporting Limit	Units								
MTBE	ND	0.5	ug/Kg	ND	0.5	ug/Kg	ND	0.5	ug/Kg	ND	0.5	ug/Kg								
Benzene	ND	0.5	ug/Kg	ND	0.5	ug/Kg	ND	0.5	ug/Kg	0.58	0.5	ug/Kg								
Toluene	ND	0.5	ug/Kg	ND	0.5	ug/Kg	1.57	0.5	ug/Kg	0.95	0.5	ug/Kg								
Ethylbenzene	ND	0.5	ug/Kg	ND	0.5	ug/Kg	5.50	0.5	ug/Kg	3.63	0.5	ug/Kg								
m/p-Xylene	0.82	0.5	ug/Kg	1.31	0.5	ug/Kg	11.9	0.5	ug/Kg	4.27	0.5	ug/Kg								
o-Xylene	ND	0.5	ug/Kg	ND	0.5	ug/Kg	2.07	0.5	ug/Kg	1.24	0.5	ug/Kg								
1,2,4-Trimethylbenzene	0.65	0.5	ug/Kg	1.31	0.5	ug/Kg	13.4	0.5	ug/Kg	2.19	0.5	ug/Kg								
Napthalene	0.83	0.5	ug/Kg	0.70	0.5	ug/Kg	ND	0.5	ug/Kg	ND	0.5	ug/Kg								
TVPH	ND	0.5	mg/Kg	ND	0.5	mg/Kg	ND	0.5	mg/Kg	ND	0.5	mg/Kg								
% Surrogate Recovery																				
1,2-Dichloroethane-d4	86			92			121			87										
d8-Toluene	99			98			98			102										
p-Bromofluorobenzene	84			90			83			85										

Appendix A

RPI Project Support Laboratory

Soil Results

Sample ID. No.	MW-13			MW-13			MW-13			MW-13			MW-13			MW-13					
Date Sampled	1/6/2021			1/6/2021			1/6/2021			1/6/2021			1/6/2021			1/6/2021					
Sample Depth	08'			10'			12'			14'			16'			18'					
		Reporting Limit	Units		Reporting Limit	Units		Reporting Limit	Units		Reporting Limit	Units		Reporting Limit	Units		Reporting Limit	Units			
MTBE	ND	0.5	ug/Kg	ND	0.5	ug/Kg	ND	10	ug/Kg	ND	10	ug/Kg	ND	0.5	ug/Kg	ND	0.5	ug/Kg			
Benzene	ND	0.5	ug/Kg	ND	0.5	ug/Kg	ND	10	ug/Kg	ND	10	ug/Kg	ND	0.5	ug/Kg	ND	0.5	ug/Kg			
Toluene	ND	0.5	ug/Kg	1.08	0.5	ug/Kg	ND	10	ug/Kg	11.6	10	ug/Kg	ND	0.5	ug/Kg	0.54	0.5	ug/Kg			
Ethylbenzene	1.02	0.5	ug/Kg	211	0.5	ug/Kg	1440	10	ug/Kg	805	10	ug/Kg	28.5	0.5	ug/Kg	2.10	0.5	ug/Kg			
m/p-Xylene	3.10	0.5	ug/Kg	22.5	0.5	ug/Kg	2100	10	ug/Kg	846	10	ug/Kg	8.00	0.5	ug/Kg	3.16	0.5	ug/Kg			
o-Xylene	ND	0.5	ug/Kg	9.25	0.5	ug/Kg	72.7	10	ug/Kg	24.3	10	ug/Kg	1.31	0.5	ug/Kg	0.78	0.5	ug/Kg			
1,2,4-Trimethylbenzene	4.10	0.5	ug/Kg	825	10	ug/Kg	8280	10	ug/Kg	1570	10	ug/Kg	28.7	0.5	ug/Kg	8.26	0.5	ug/Kg			
Napthalene	1.05	0.5	ug/Kg	35.9	0.5	ug/Kg	1730	10	ug/Kg	317	10	ug/Kg	7.78	0.5	ug/Kg	2.31	0.5	ug/Kg			
TVPH	ND	0.5	mg/Kg	48.9	10	mg/Kg	285	10	mg/Kg	ND	10	mg/Kg	2.45	0.5	mg/Kg	ND	0.5	mg/Kg			
% Surrogate Recovery																					
1,2-Dichloroethane-d4	95			91			80			77			89			99					
d8-Toluene	97			154			114			101			102			107					
p-Bromofluorobenzene	93			128			130			94			101			95					
Sample ID. No.	MW-14			MW-14			MW-14														
Date Sampled	1/6/2021			1/6/2021			1/6/2021														
Sample Depth	08'			10'			13'														
		Reporting Limit	Units		Reporting Limit	Units		Reporting Limit	Units												
MTBE	ND	0.5	ug/Kg	ND	0.5	ug/Kg	ND	0.5	ug/Kg												
Benzene	ND	0.5	ug/Kg	ND	0.5	ug/Kg	ND	0.5	ug/Kg												
Toluene	ND	0.5	ug/Kg	ND	0.5	ug/Kg	ND	0.5	ug/Kg												
Ethylbenzene	1.02	0.5	ug/Kg	1.03	0.5	ug/Kg	ND	0.5	ug/Kg												
m/p-Xylene	0.77	0.5	ug/Kg	1.33	0.5	ug/Kg	1.21	0.5	ug/Kg												
o-Xylene	0.86	0.5	ug/Kg	0.62	0.5	ug/Kg	0.80	0.5	ug/Kg												
1,2,4-Trimethylbenzene	0.62	0.5	ug/Kg	1.06	0.5	ug/Kg	ND	0.5	ug/Kg												
Napthalene	ND	0.5	ug/Kg	ND	0.5	ug/Kg	ND	0.5	ug/Kg												
TVPH	ND	0.5	mg/Kg	ND	0.5	mg/Kg	ND	0.5	mg/Kg												
% Surrogate Recovery																					
1,2-Dichloroethane-d4	88			104			117														
d8-Toluene	97			83			101														
p-Bromofluorobenzene	88			85			92														

Appendix A

RPI Project Support Laboratory

Soil Results

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Appendix A
RPI Project Support Laboratory
Soil Results

Sample ID. No.	SB-19			SB-19			SB-19														
Date Sampled	1/6/2021			1/6/2021			1/6/2021														
Sample Depth	09'			11'			13'														
		Reporting Limit	Units		Reporting Limit	Units		Reporting Limit	Units												
MTBE	ND	0.5	ug/Kg	ND	0.5	ug/Kg	ND	0.5	ug/Kg												
Benzene	1.05	0.5	ug/Kg	ND	0.5	ug/Kg	3.65	0.5	ug/Kg												
Toluene	6.57	0.5	ug/Kg	0.53	0.5	ug/Kg	31.1	0.5	ug/Kg												
Ethylbenzene	5.62	0.5	ug/Kg	0.59	0.5	ug/Kg	15.7	0.5	ug/Kg												
m/p-Xylene	7.42	0.5	ug/Kg	1.48	0.5	ug/Kg	27.7	0.5	ug/Kg												
o-Xylene	17.0	0.5	ug/Kg	3.64	0.5	ug/Kg	33.0	0.5	ug/Kg												
1,2,4-Trimethylbenzene	1.42	0.5	ug/Kg	1.84	0.5	ug/Kg	4.44	0.5	ug/Kg												
Naphthalene	ND	0.5	ug/Kg	ND	0.5	ug/Kg	ND	0.5	ug/Kg												
TVPH	ND	0.5	mg/Kg	ND	0.5	mg/Kg	ND	0.5	mg/Kg												
% Surrogate Recovery																					
1,2-Dichloroethane-d4	113			104			106														
d8-Toluene	95			100			104														
p-Bromofluorobenzene	86			93			84														
Sample ID. No.	SB-20			SB-20			SB-20			SB-20			SB-20			SB-20			SB-20		
Date Sampled	1/6/2021			1/6/2021			1/6/2021			1/6/2021			1/6/2021			1/6/2021			1/6/2021		
Sample Depth	06'			08'			10'			12'			14'			16'			18'		
		Reporting Limit	Units		Reporting Limit	Units		Reporting Limit	Units		Reporting Limit	Units		Reporting Limit	Units		Reporting Limit	Units		Reporting Limit	Units
MTBE	ND	0.5	ug/Kg	ND	50	ug/Kg	ND	50	ug/Kg	ND	0.5	ug/Kg	ND	0.5	ug/Kg	ND	0.5	ug/Kg	ND	0.5	ug/Kg
Benzene	12.6	0.5	ug/Kg	ND	50	ug/Kg	2340	50	ug/Kg	4.23	0.5	ug/Kg	58.4	0.5	ug/Kg	37.5	0.5	ug/Kg	4.70	0.5	ug/Kg
Toluene	45.1	0.5	ug/Kg	11100	50	ug/Kg	176000	250	ug/Kg	97.6	0.5	ug/Kg	298	0.5	ug/Kg	78.0	0.5	ug/Kg	15.1	0.5	ug/Kg
Ethylbenzene	109	0.5	ug/Kg	48100	50	ug/Kg	128000	250	ug/Kg	255	0.5	ug/Kg	151	0.5	ug/Kg	74.9	0.5	ug/Kg	28.5	0.5	ug/Kg
m/p-Xylene	211	0.5	ug/Kg	299000	500	ug/Kg	208000	250	ug/Kg	299	10	ug/Kg	594	0.5	ug/Kg	83.2	0.5	ug/Kg	159	0.5	ug/Kg
o-Xylene	61.5	0.5	ug/Kg	45700	50	ug/Kg	193000	250	ug/Kg	213	0.5	ug/Kg	197	0.5	ug/Kg	116	0.5	ug/Kg	65.9	0.5	ug/Kg
1,2,4-Trimethylbenzene	237	0.5	ug/Kg	227000	500	ug/Kg	274000	250	ug/Kg	918	10	ug/Kg	94.5	0.5	ug/Kg	37.0	0.5	ug/Kg	273	0.5	ug/Kg
Naphthalene	31.6	0.5	ug/Kg	14800	50	ug/Kg	23300	50	ug/Kg	122	0.5	ug/Kg	14.4	0.5	ug/Kg	9.89	0.5	ug/Kg	14.2	0.5	ug/Kg
TVPH	3.19	0.5	mg/Kg	1810	50	mg/Kg	1950	50	mg/Kg	22.7	0.5	mg/Kg	1.06	0.5	mg/Kg	ND	0.5	mg/Kg	1.81	0.5	mg/Kg
% Surrogate Recovery																					
1,2-Dichloroethane-d4	98			86			86			107			102			117			91		
d8-Toluene	102			107			105			135			100			98			109		
p-Bromofluorobenzene	112			99			91			141			88			91			90		

Appendix B

RPI Project Support Laboratory Groundwater Results

Appendix B
RPI Project Support Laboratory
Groundwater Results

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Appendix B
RPI Project Support Laboratory
Groundwater Results

Sample ID. No.	MW-14				MW-15				MW-16			
Date Sampled	1/6/2021				1/6/2021				1/6/2021			
		Reporting Limit	Units	Flags		Reporting Limit	Units	Flags		Reporting Limit	Units	Flags
MTBE	ND	0.5	ug/L		ND	0.5	ug/L		ND	0.5	ug/L	
Benzene	1.31	0.5	ug/L		ND	0.5	ug/L		ND	0.5	ug/L	
Toluene	ND	0.5	ug/L		ND	0.5	ug/L		1.86	0.5	ug/L	
Ethylbenzene	1.89	0.5	ug/L		ND	0.5	ug/L		0.74	0.5	ug/L	
m/p-Xylene	2.55	0.5	ug/L		0.66	0.5	ug/L		2.10	0.5	ug/L	
o-Xylene	ND	0.5	ug/L		ND	0.5	ug/L		1.08	0.5	ug/L	
1,2,4-Trimethylbenzene	2.67	0.5	ug/L		0.82	0.5	ug/L		1.32	0.5	ug/L	
Naphthalene	5.13	0.5	ug/L		1.27	0.5	ug/L		2.17	0.5	ug/L	
TVPH	ND	0.5	mg/L		ND	0.5	mg/L		ND	0.5	mg/L	
% Surrogate Recovery												
1,2-Dichloroethane-d4	114				113				112			
d8-Toluene	97				94				90			
p-Bromofluorobenzene	91				96				95			
Lactate	0.36	0.2	mg/L		ND	0.2	mg/L		ND	0.2	mg/L	
Acetate	ND	0.2	mg/L		ND	0.2	mg/L		ND	0.2	mg/L	
Propionate	ND	0.2	mg/L		ND	0.2	mg/L		ND	0.2	mg/L	
Formate/Isobutyrate	ND	0.4	mg/L		ND	0.4	mg/L		ND	0.4	mg/L	
Butyrate	ND	0.2	mg/L		ND	0.2	mg/L		ND	0.2	mg/L	
Pyruvate	ND	0.2	mg/L		ND	0.2	mg/L		ND	0.2	mg/L	
Chloride	30.9	0.2	mg/L		56.4	0.2	mg/L		148	1	mg/L	
Nitrite	ND	0.2	mg/L		ND	0.2	mg/L		ND	0.2	mg/L	
Succinate	ND	1	mg/L		ND	1	mg/L		ND	1	mg/L	
Nitrate	ND	0.2	mg/L		0.30	0.2	mg/L		ND	0.2	mg/L	
Sulfate	45.4	0.2	mg/L		52.7	0.2	mg/L		37.7	0.2	mg/L	
Phosphate	NA	0.2	mg/L		NA	0.2	mg/L		NA	0.2	mg/L	
Sulfide	ND	0.2	mg/L		ND	0.2	mg/L		ND	0.2	mg/L	
Methane	262	20	ug/L		11.5	20	ug/L		149	20	ug/L	
Propane	ND	2	ug/L		ND	2	ug/L		3.96	2	ug/L	
Propylene	ND	2	ug/L		2.61	2	ug/L		6.58	2	ug/L	
Isobutane	ND	2	ug/L		ND	2	ug/L		ND	2	ug/L	
n-Butane	ND	2	ug/L		ND	2	ug/L		ND	2	ug/L	
t-2-Butene	ND	2	ug/L		ND	2	ug/L		2.40	2	ug/L	
1-Butene	ND	2	ug/L		ND	2	ug/L		ND	2	ug/L	
Isobutylene	ND	2	ug/L		ND	2	ug/L		ND	2	ug/L	
cis-2-Butene	ND	2	ug/L		ND	2	ug/L		ND	2	ug/L	
1,3-Butadiene	ND	2	ug/L		ND	2	ug/L		ND	2	ug/L	
Methyl Acetylene	ND	2	ug/L		ND	2	ug/L		ND	2	ug/L	
Carbon Dioxide	74.5	2	mg/L		17.2	2	mg/L		45.5	2	mg/L	

Appendix B
RPI Project Support Laboratory
Groundwater Results

Sample ID. No.	MW-17				SB-16					SB-17			
Date Sampled	1/6/2021				1/7/2021					1/7/2021			
		Reporting Limit	Units	Flags		Reporting Limit	Units	Flags		Reporting Limit	Units	Flags	
MTBE	ND	0.5	ug/L		ND	0.5	ug/L		ND	0.5	ug/L		
Benzene	ND	0.5	ug/L		28.7	0.5	ug/L		ND	0.5	ug/L		
Toluene	0.74	0.5	ug/L		1.90	0.5	ug/L		ND	0.5	ug/L		
Ethylbenzene	ND	0.5	ug/L		27.9	0.5	ug/L		ND	0.5	ug/L		
m/p-Xylene	1.02	0.5	ug/L		18.5	0.5	ug/L		ND	0.5	ug/L		
o-Xylene	ND	0.5	ug/L		2.08	0.5	ug/L		ND	0.5	ug/L		
1,2,4-Trimethylbenzene	0.73	0.5	ug/L		12.7	0.5	ug/L		ND	0.5	ug/L		
Naphthalene	1.23	0.5	ug/L		13.9	0.5	ug/L		ND	0.5	ug/L		
TVPH	ND	0.5	mg/L		0.73	0.5	mg/L		ND	0.5	mg/L		
% Surrogate Recovery													
1,2-Dichloroethane-d4	109				108				108				
d8-Toluene	97				97				101				
p-Bromofluorobenzene	95				101				89				
Lactate	0.82	0.2	mg/L		0.25	0.2	mg/L		ND	0.2	mg/L		
Acetate	ND	0.2	mg/L		ND	0.2	mg/L		ND	0.2	mg/L		
Propionate	ND	0.2	mg/L		ND	0.2	mg/L		ND	0.2	mg/L		
Formate/Isobutyrate	ND	0.4	mg/L		ND	0.4	mg/L		ND	0.4	mg/L		
Butyrate	ND	0.2	mg/L		ND	0.2	mg/L		ND	0.2	mg/L		
Pyruvate	0.35	0.2	mg/L		ND	0.2	mg/L		ND	0.2	mg/L		
Chloride	121	1	mg/L		9.86	0.2	mg/L		6.18	0.2	mg/L		
Nitrite	ND	0.2	mg/L		ND	0.2	mg/L		ND	0.2	mg/L		
Succinate	ND	1	mg/L		ND	1	mg/L		ND	1	mg/L		
Nitrate	0.49	0.2	mg/L		0.59	0.2	mg/L		ND	0.2	mg/L		
Sulfate	50.3	0.2	mg/L		1.81	0.2	mg/L		22.1	0.2	mg/L		
Phosphate	NA	0.2	mg/L		NA	0.2	mg/L		NA	0.2	mg/L		
Sulfide	ND	0.2	mg/L		ND	0.2	mg/L		ND	0.2	mg/L		
Methane	ND	20	ug/L		1920	20	ug/L		39.1	20	ug/L		
Propane	ND	2	ug/L		ND	2	ug/L		ND	2	ug/L		
Propylene	ND	2	ug/L		ND	2	ug/L		ND	2	ug/L		
Isobutane	ND	2	ug/L		3.21	2	ug/L		ND	2	ug/L		
n-Butane	ND	2	ug/L		30.2	2	ug/L		ND	2	ug/L		
t-2-Butene	ND	2	ug/L		ND	2	ug/L		ND	2	ug/L		
1-Butene	ND	2	ug/L		ND	2	ug/L		ND	2	ug/L		
Isobutylene	ND	2	ug/L		ND	2	ug/L		ND	2	ug/L		
cis-2-Butene	ND	2	ug/L		ND	2	ug/L		ND	2	ug/L		
1,3-Butadiene	ND	2	ug/L		ND	2	ug/L		ND	2	ug/L		
Methyl Acetylene	ND	2	ug/L		ND	2	ug/L		ND	2	ug/L		
Carbon Dioxide	40.6	2	mg/L		195	2	mg/L		81.8	2	mg/L		

Appendix B
RPI Project Support Laboratory
Groundwater Results

Sample ID. No.	SB-18				SB-19					SB-20			
Date Sampled	1/7/2021				1/7/2021					1/7/2021			
		Reporting Limit	Units	Flags		Reporting Limit	Units	Flags			Reporting Limit	Units	Flags
MTBE	ND	0.5	ug/L		ND	0.5	ug/L			ND	0.5	ug/L	
Benzene	ND	0.5	ug/L		ND	0.5	ug/L			2410	10	ug/L	
Toluene	ND	0.5	ug/L		ND	0.5	ug/L			6230	10	ug/L	
Ethylbenzene	ND	0.5	ug/L		ND	0.5	ug/L			4560	10	ug/L	
m/p-Xylene	1.08	0.5	ug/L		0.98	0.5	ug/L			14700	50	ug/L	
o-Xylene	ND	0.5	ug/L		ND	0.5	ug/L			5020	10	ug/L	
1,2,4-Trimethylbenzene	1.12	0.5	ug/L		ND	0.5	ug/L			4230	10	ug/L	
Naphthalene	ND	0.5	ug/L		ND	0.5	ug/L			371	0.5	ug/L	
TVPH	ND	0.5	mg/L		ND	0.5	mg/L			41.3	10	mg/L	
% Surrogate Recovery													
1,2-Dichloroethane-d4	115				110					111			
d8-Toluene	103				84					85			
p-Bromofluorobenzene	93				73					60			
Lactate	ND	0.2	mg/L		ND	0.2	mg/L			ND	0.2	mg/L	
Acetate	ND	0.2	mg/L		ND	0.2	mg/L			1.07	0.2	mg/L	
Propionate	ND	0.2	mg/L		ND	0.2	mg/L			ND	0.2	mg/L	
Formate/Isobutyrate	ND	0.4	mg/L		ND	0.4	mg/L			2.08	0.4	mg/L	
Butyrate	ND	0.2	mg/L		ND	0.2	mg/L			ND	0.2	mg/L	
Pyruvate	ND	0.2	mg/L		ND	0.2	mg/L			ND	0.2	mg/L	
Chloride	8.39	0.2	mg/L		26.3	0.2	mg/L			17.4	0.2	mg/L	
Nitrite	ND	0.2	mg/L		ND	0.2	mg/L			ND	0.2	mg/L	
Succinate	ND	1	mg/L		ND	1	mg/L			1.76	1	mg/L	
Nitrate	1.96	0.2	mg/L		1.58	0.2	mg/L			4.99	0.2	mg/L	
Sulfate	15.3	0.2	mg/L		24.6	0.2	mg/L			0.41	0.2	mg/L	
Phosphate	NA	0.2	mg/L		NA	0.2	mg/L			NA	0.2	mg/L	
Sulfide	ND	0.2	mg/L		ND	0.2	mg/L			ND	0.2	mg/L	
Methane	22.8	20	ug/L		ND	20	ug/L			11600	20	ug/L	
Propane	ND	2	ug/L		ND	2	ug/L			ND	2	ug/L	
Propylene	ND	2	ug/L		ND	2	ug/L			ND	2	ug/L	
Isobutane	ND	2	ug/L		ND	2	ug/L			ND	2	ug/L	
n-Butane	ND	2	ug/L		ND	2	ug/L			10.6	2	ug/L	
t-2-Butene	ND	2	ug/L		ND	2	ug/L			ND	2	ug/L	
1-Butene	ND	2	ug/L		ND	2	ug/L			ND	2	ug/L	
Isobutylene	ND	2	ug/L		ND	2	ug/L			ND	2	ug/L	
cis-2-Butene	ND	2	ug/L		ND	2	ug/L			ND	2	ug/L	
1,3-Butadiene	ND	2	ug/L		ND	2	ug/L			ND	2	ug/L	
Methyl Acetylene	ND	2	ug/L		ND	2	ug/L			ND	2	ug/L	
Carbon Dioxide	30.1	2	mg/L		36.4	2	mg/L			443	2	mg/L	

Appendix B
RPI Project Support Laboratory
Groundwater Results

Sample ID. No.	SB-21				SB-22				SB-23			
Date Sampled	1/6/2021				1/6/2021				1/6/2021			
		Reporting Limit	Units	Flags		Reporting Limit	Units	Flags		Reporting Limit	Units	Flags
MTBE	ND	0.5	ug/L		ND	0.5	ug/L		ND	0.5	ug/L	
Benzene	4.44	0.5	ug/L		0.53	0.5	ug/L		ND	0.5	ug/L	
Toluene	6.16	0.5	ug/L		1.67	0.5	ug/L		1.32	0.5	ug/L	
Ethylbenzene	276	0.5	ug/L		1.73	0.5	ug/L		0.87	0.5	ug/L	
m/p-Xylene	48.1	0.5	ug/L		5.34	0.5	ug/L		3.17	0.5	ug/L	
o-Xylene	4.22	0.5	ug/L		1.24	0.5	ug/L		0.71	0.5	ug/L	
1,2,4-Trimethylbenzene	586	0.5	ug/L		3.17	0.5	ug/L		1.33	0.5	ug/L	
Naphthalene	209	0.5	ug/L		4.63	0.5	ug/L		ND	0.5	ug/L	
TVPH	8.86	0.5	mg/L		ND	0.5	mg/L		ND	0.5	mg/L	
% Surrogate Recovery												
1,2-Dichloroethane-d4	107				102				115			
d8-Toluene	121				85				104			
p-Bromofluorobenzene	109				98				92			
Lactate	ND	0.2	mg/L		ND	0.2	mg/L		ND	0.2	mg/L	
Acetate	ND	0.2	mg/L		ND	0.2	mg/L		ND	0.2	mg/L	
Propionate	ND	0.2	mg/L		ND	0.2	mg/L		ND	0.2	mg/L	
Formate/Isobutyrate	1.10	0.4	mg/L		ND	0.4	mg/L		ND	0.4	mg/L	
Butyrate	ND	0.2	mg/L		ND	0.2	mg/L		ND	0.2	mg/L	
Pyruvate	ND	0.2	mg/L		ND	0.2	mg/L		ND	0.2	mg/L	
Chloride	41.4	0.2	mg/L		14.1	0.2	mg/L		8.29	0.2	mg/L	
Nitrite	ND	0.2	mg/L		ND	0.2	mg/L		ND	0.2	mg/L	
Succinate	ND	1	mg/L		ND	1	mg/L		ND	1	mg/L	
Nitrate	3.07	0.2	mg/L		2.88	0.2	mg/L		1.74	0.2	mg/L	
Sulfate	9.34	0.2	mg/L		65.2	0.2	mg/L	E	37.6	0.2	mg/L	
Phosphate	NA	0.2	mg/L		NA	0.2	mg/L		NA	0.2	mg/L	
Sulfide	ND	0.2	mg/L		ND	0.2	mg/L		ND	0.2	mg/L	
Methane	9230	20	ug/L		377	20	ug/L		99.5	20	ug/L	
Propane	ND	2	ug/L		ND	2	ug/L		ND	2	ug/L	
Propylene	ND	2	ug/L		ND	2	ug/L		ND	2	ug/L	
Isobutane	2.52	2	ug/L		ND	2	ug/L		ND	2	ug/L	
n-Butane	9.65	2	ug/L		ND	2	ug/L		ND	2	ug/L	
t-2-Butene	ND	2	ug/L		ND	2	ug/L		ND	2	ug/L	
1-Butene	ND	2	ug/L		ND	2	ug/L		ND	2	ug/L	
Isobutylene	ND	2	ug/L		ND	2	ug/L		ND	2	ug/L	
cis-2-Butene	ND	2	ug/L		ND	2	ug/L		ND	2	ug/L	
1,3-Butadiene	ND	2	ug/L		ND	2	ug/L		ND	2	ug/L	
Methyl Acetylene	ND	2	ug/L		ND	2	ug/L		ND	2	ug/L	
Carbon Dioxide	393	2	mg/L		189	2	mg/L		128	2	mg/L	

Appendix B
RPI Project Support Laboratory
Groundwater Results

Sample ID. No.	SB-24																
Date Sampled	1/5/2021																
		Reporting Limit	Units	Flags													
MTBE	ND	0.5	ug/L														
Benzene	ND	0.5	ug/L														
Toluene	0.80	0.5	ug/L														
Ethylbenzene	0.68	0.5	ug/L														
m/p-Xylene	3.32	0.5	ug/L														
o-Xylene	0.65	0.5	ug/L														
1,2,4-Trimethylbenzene	3.76	0.5	ug/L														
Naphthalene	1.24	0.5	ug/L														
TVPH	ND	0.5	mg/L														
% Surrogate Recovery																	
1,2-Dichloroethane-d4	113																
d8-Toluene	100																
p-Bromofluorobenzene	102																
Lactate	ND	0.2	mg/L														
Acetate	ND	0.2	mg/L														
Propionate	ND	0.2	mg/L														
Formate/Isobutyrate	ND	0.4	mg/L														
Butyrate	ND	0.2	mg/L														
Pyruvate	ND	0.2	mg/L														
Chloride	13.7	0.2	mg/L														
Nitrite	ND	0.2	mg/L														
Succinate	ND	1	mg/L														
Nitrate	9.90	0.2	mg/L														
Sulfate	23.0	0.2	mg/L														
Phosphate	NA	0.2	mg/L														
Sulfide	ND	0.2	mg/L														
Methane	22.5	20	ug/L														
Propane	ND	2	ug/L														
Propylene	ND	2	ug/L														
Isobutane	ND	2	ug/L														
n-Butane	ND	2	ug/L														
t-2-Butene	ND	2	ug/L														
1-Butene	ND	2	ug/L														
Isobutylene	ND	2	ug/L														
cis-2-Butene	ND	2	ug/L														
1,3-Butadiene	ND	2	ug/L														
Methyl Acetylene	ND	2	ug/L														
Carbon Dioxide	171	2	mg/L														

Appendix C

2D and 3D Data Visualization Figures

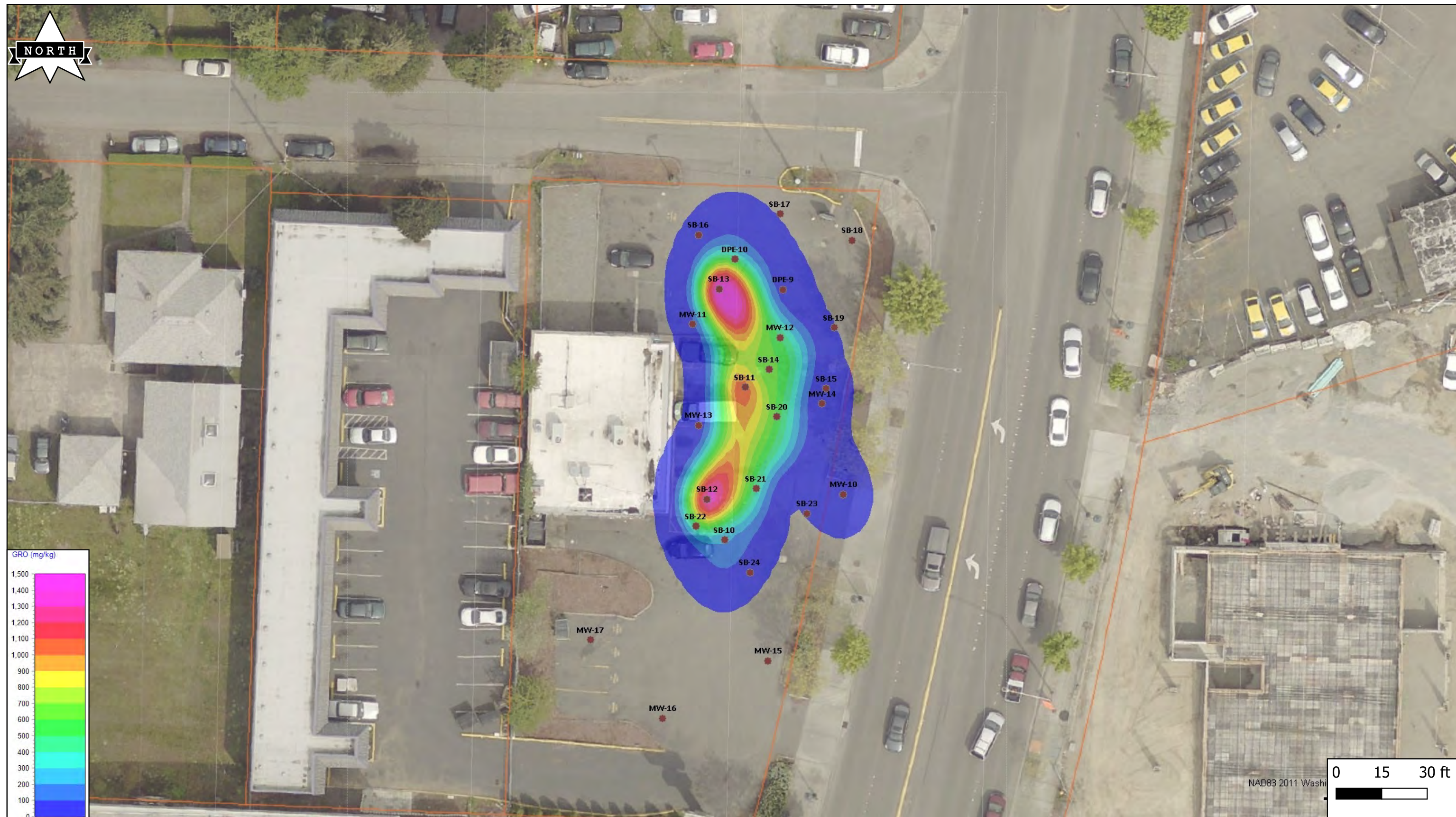


Figure 1: Soil GRO Maximum Values in Soil Collected from November 2015 to May 2016
 7-Eleven #22866
 14207 International Blvd/ SR 99
 Tukwilla, Washington

AST Environmental
 665 McKinney Ave
 Midway, Kentucky 40347
 (859)846-4900





Figure 2: Soil DRO+ORO Maximum Values in Soil Collected from November 2015 to May 2016
 7-Eleven #22866
 14207 International Blvd/ SR 99
 Tukwilla, Washington

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 665 McKinney Ave
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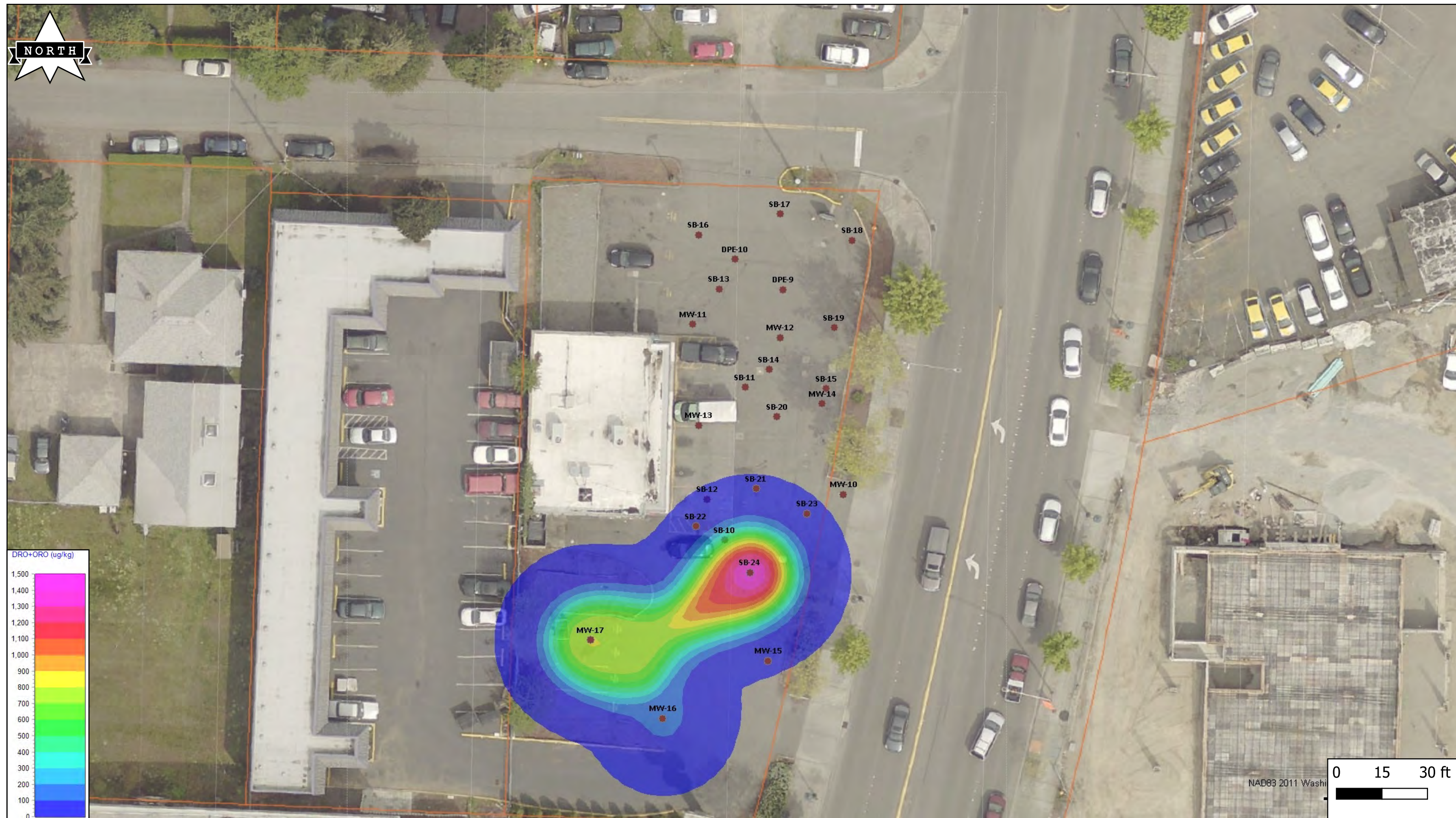




Figure 3: Soil GRO Maximum Values in Soil Collected January 2021
 7-Eleven #22866
 14207 International Blvd/ SR 99
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Figure 4: Soil DRO+ORO Maximum Values in Soil Collected January 2021
7-Eleven #22866
14207 International Blvd/ SR 99
Tukwilla, Washington



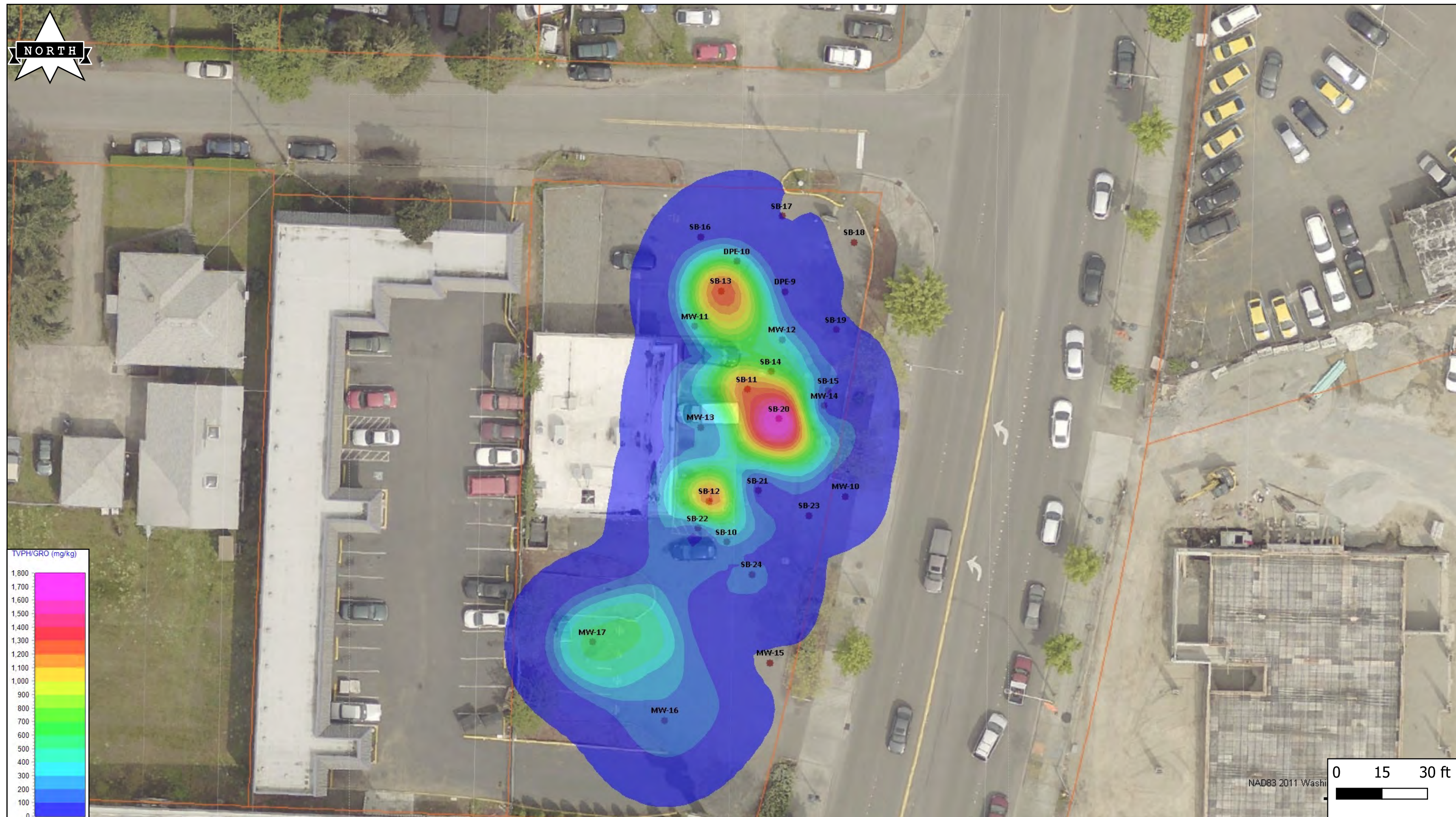


Figure 5: TVPH and GRO in Soil Samples Collected from November 2011 to January 2021
 7-Eleven #22866
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Figure 6: Cross Section Location
7-Eleven #22866
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Tukwilla, Washington



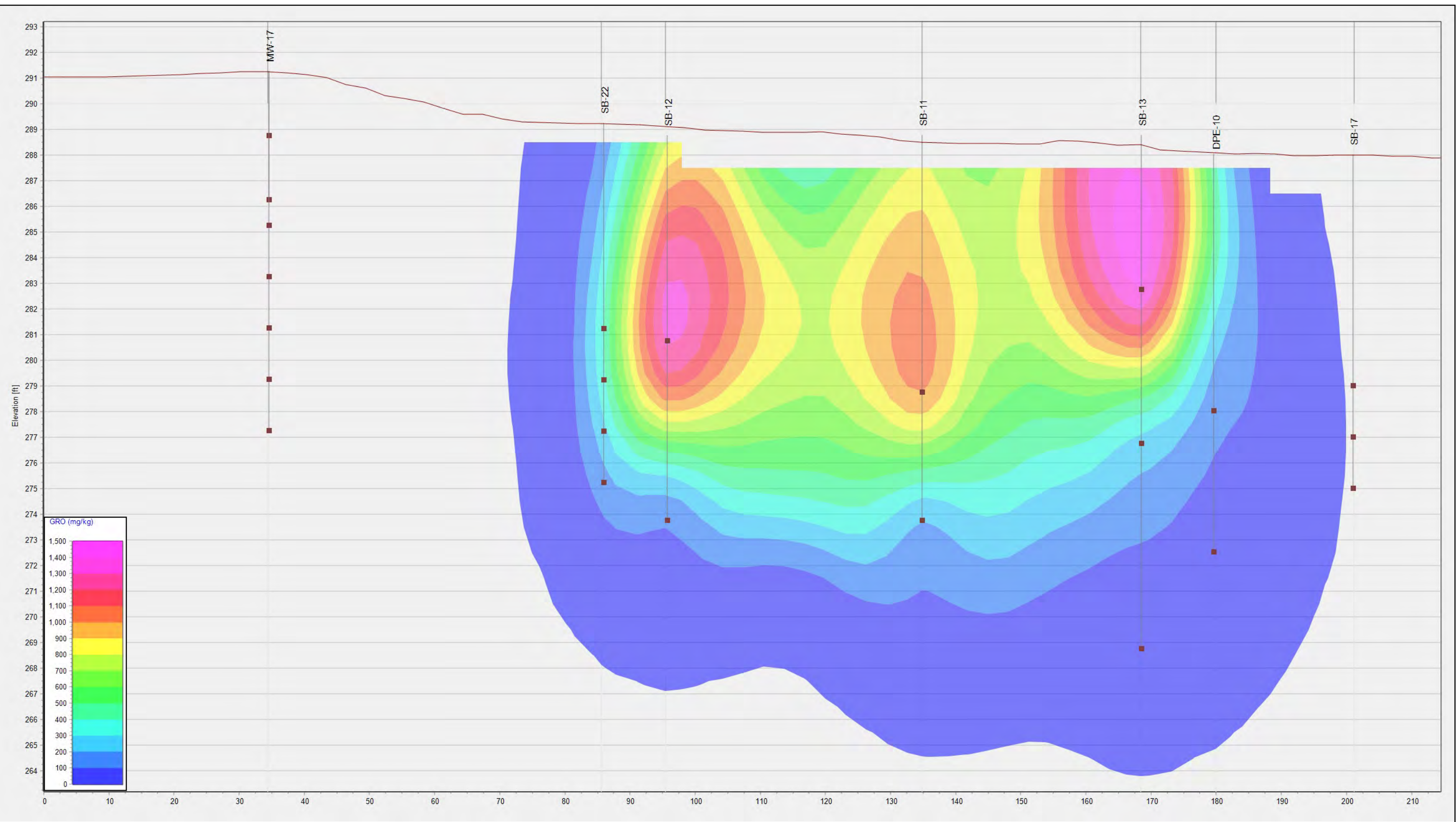


Figure 7: GRO in Soil Samples Collected November 2015 to May 2016
 7-Eleven #22866
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 Tukwilla, Washington

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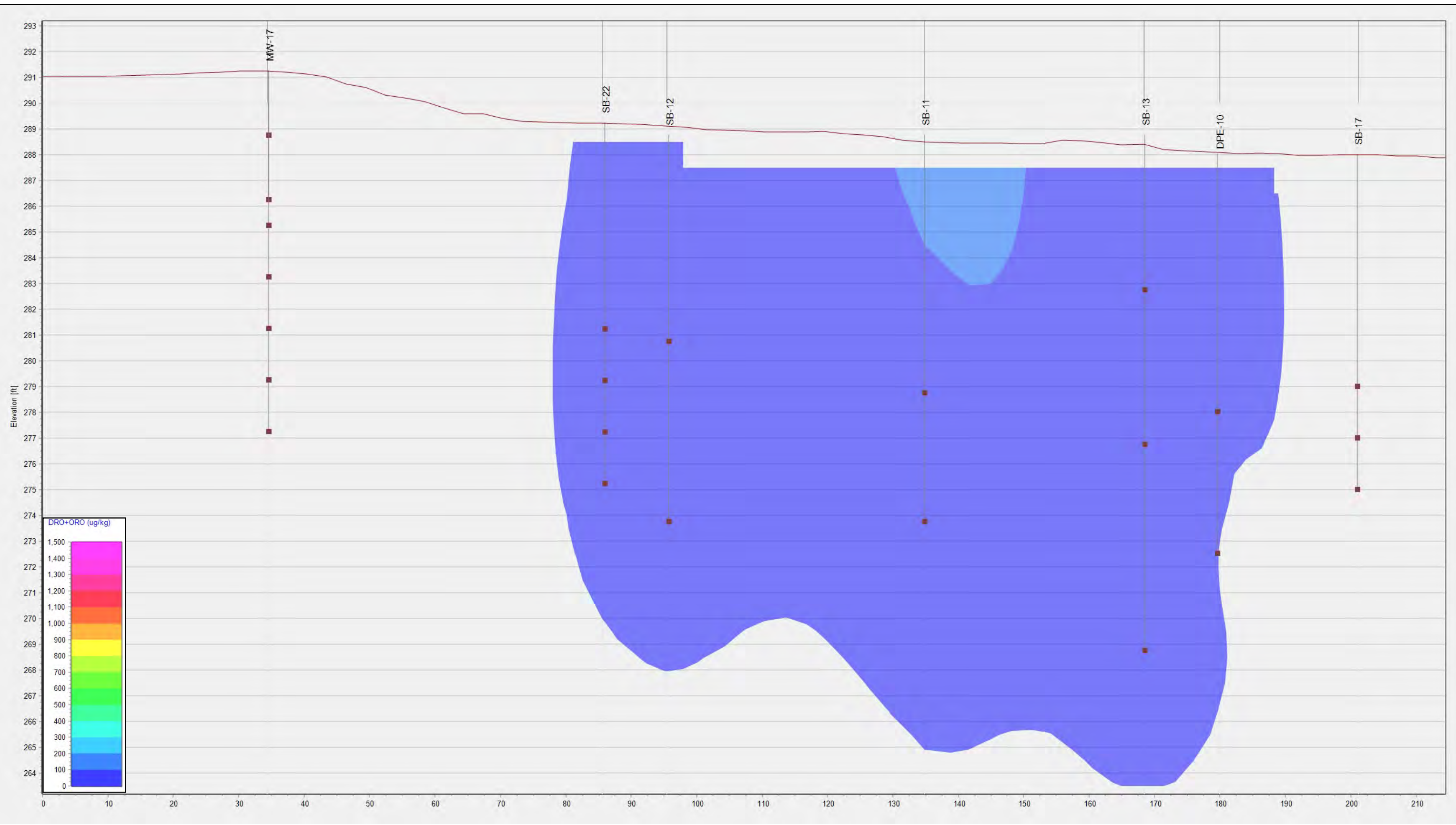
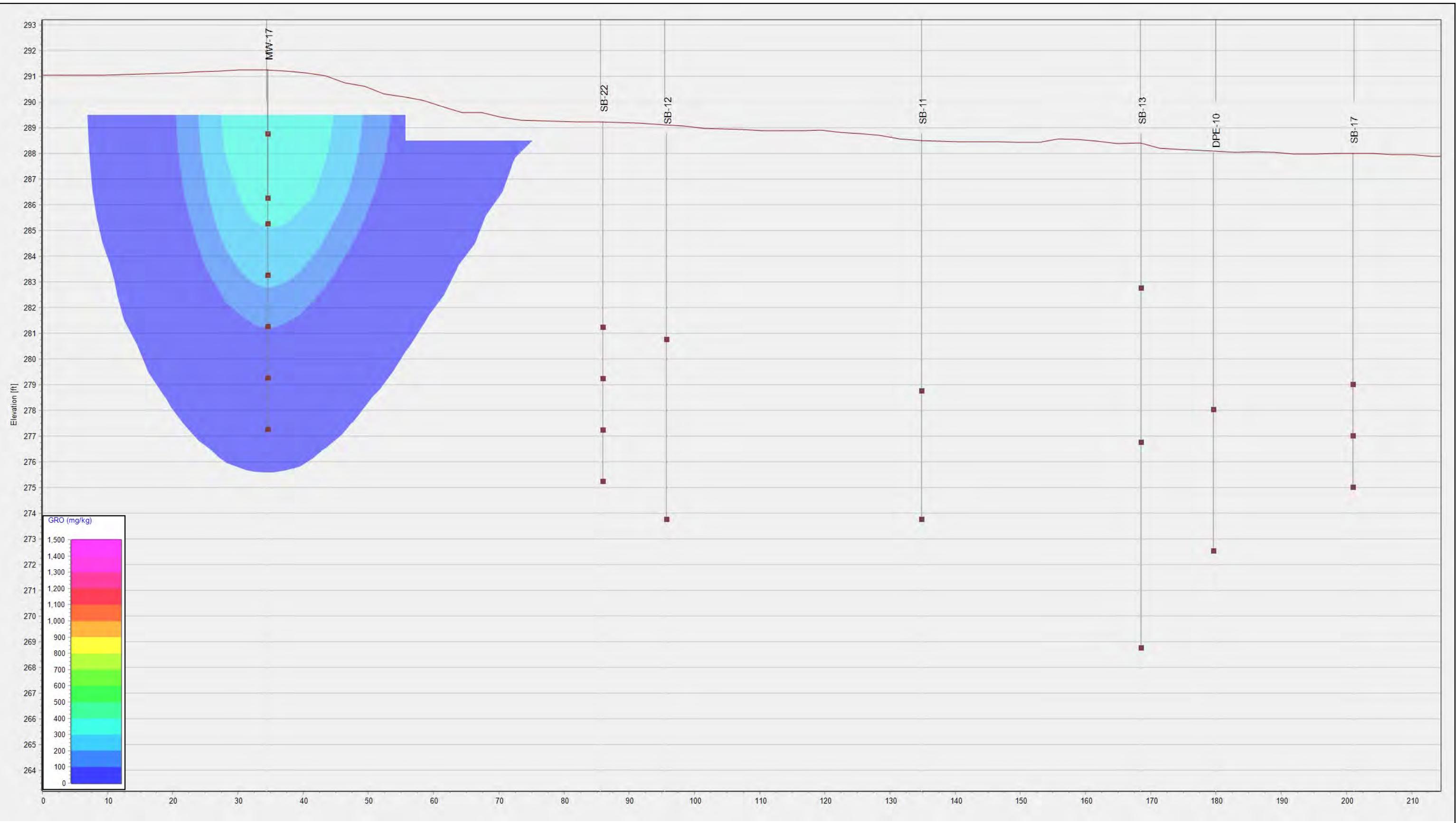


Figure 8: DRO+ORO in Soil Samples Collected November 2015 to May 2016
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Figure 9: GRO in Soil Samples Collected January 2021
7-Eleven #22866
14207 International Blvd/ SR 99
Tukwilla, Washington



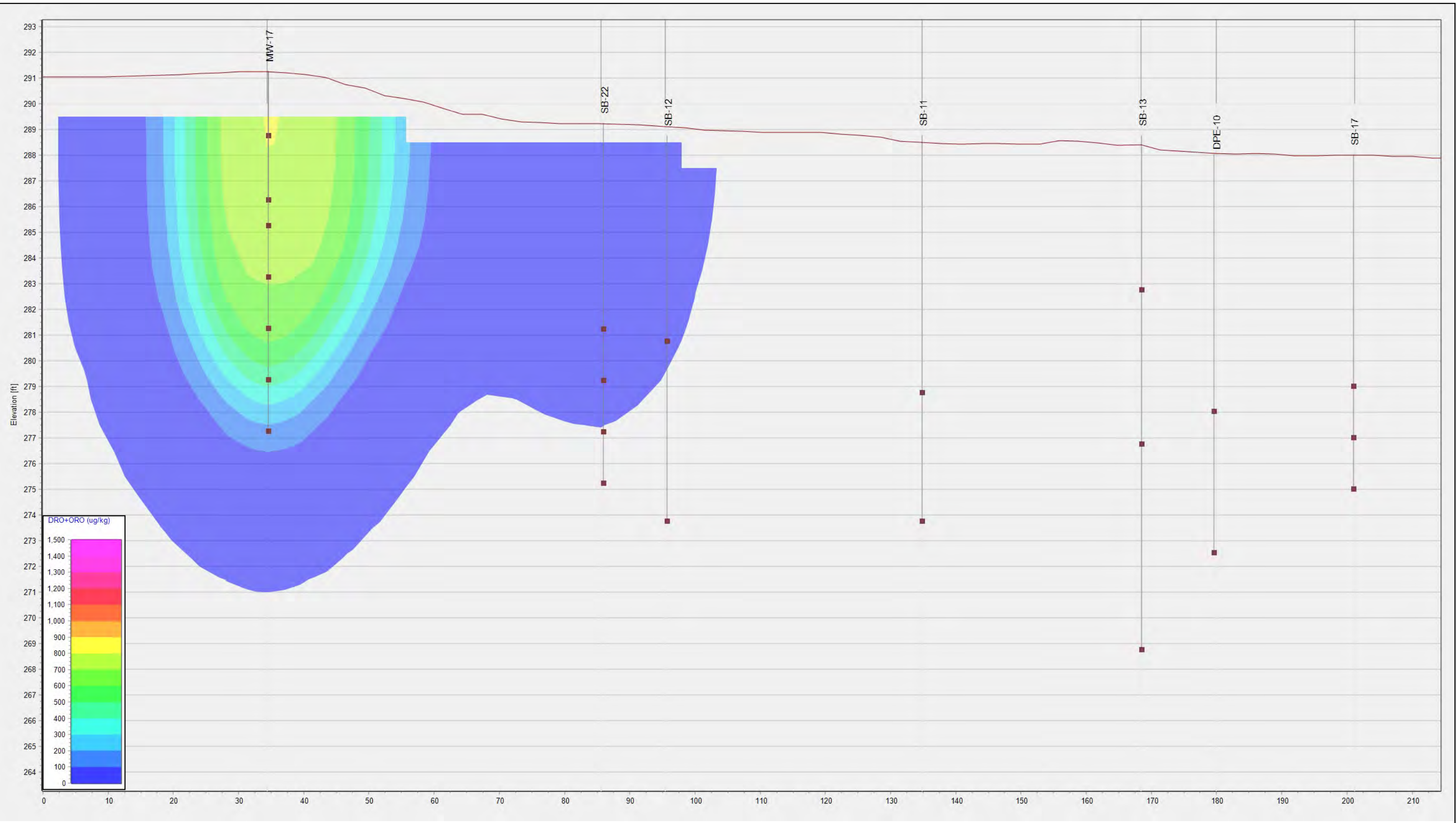


Figure 10: DRO+ORO in Soil Samples Collected January 2021
7-Eleven #22866
14207 International Blvd/ SR 99
Tukwilla, Washington

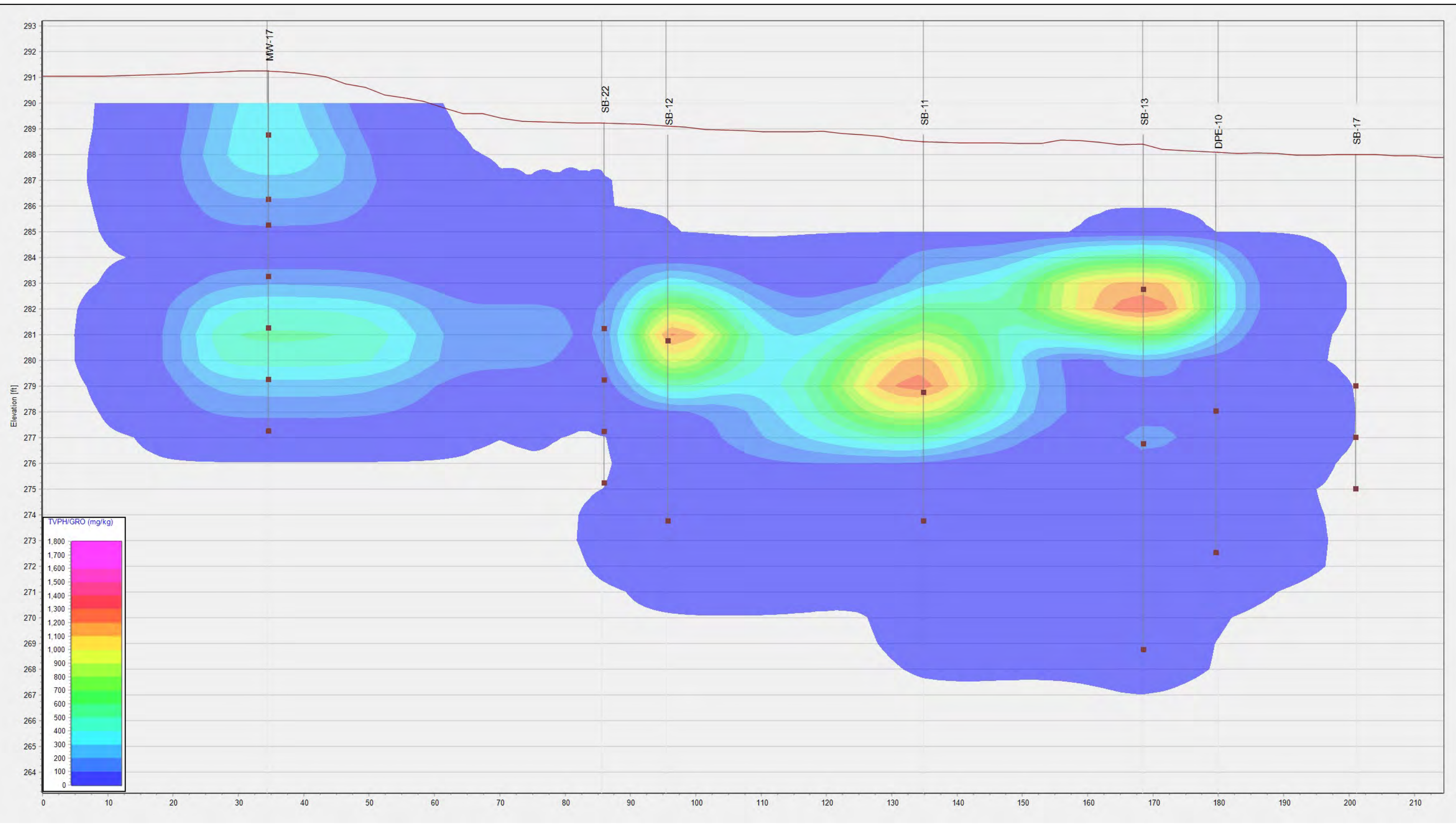


Figure 11: TVPH and GRO in Soil Samples Collected from November 2011 to January 2021
 7-Eleven #22866
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Figure 12: GRO in Groundwater Samples Collected from February to March 2021
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Figure 13: DRO+ORO in Groundwater Samples Collected from February to March 2021
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Figure 14: TVPH in Groundwater Samples Collected January 2021
7-Eleven #22866
14207 International Blvd/ SR 99
Tukwilla, Washington



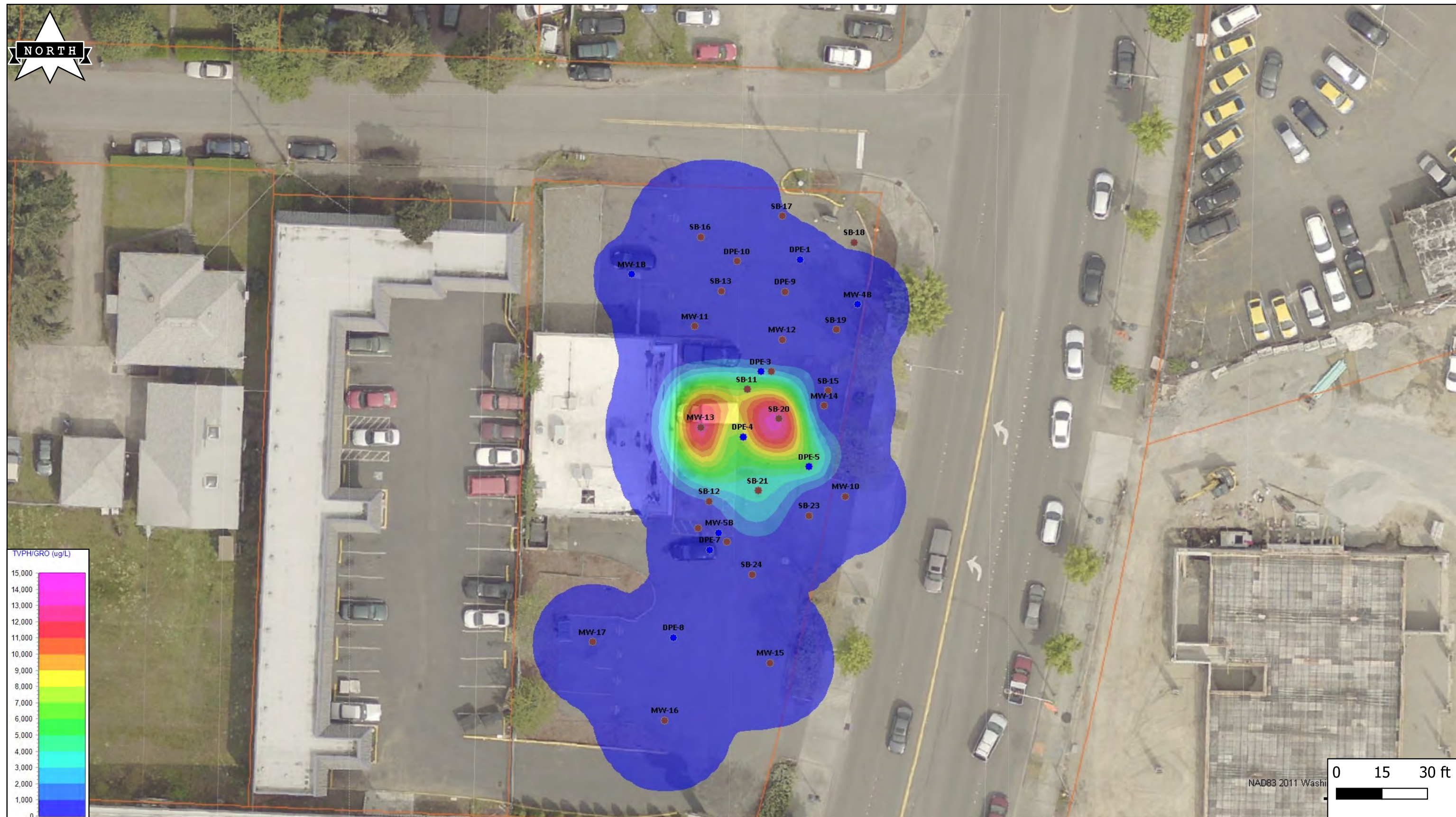


Figure 15: TVPH and GRO in Groundwater Samples Collected January to March 2021
 7-Eleven #22866
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 Tukwilla, Washington

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APPENDIX H

Supplemental BOX-200® Product Information

APPENDIX H

BOS-200 PRODUCT DESCRIPTION

Stantec supervised in-situ injections of BOS-200® carbon-based slurry at the Site from October 11 through 14, 2021. The injection process consisted of preparing a slurry of BOS-200® activated carbon, facultative hydrocarbon degrading bacteria, gypsum, and potable water. The slurry was injected under high pressure at targeted subsurface locations and depths using a direct push Geoprobe® rig. The injection slurry was mixed in the field based on pre-determined loading rates tailored for Site-specific contaminant concentrations. Injection points were staggered (vertically) in adjacent boreholes to facilitate an interlaced and complete dispersal in the subsurface. Injection points were generally completed on a 5-foot triangular grid (horizontally) and based on Site lithology.

The treatment process is considered a “trap and treat” cleanup technology and utilizes a sulfate-enhanced, carbon-based injectate designed for the in-situ treatment of groundwater and soil. The “trap” process occurs immediately upon contact with the contaminants as they are adsorbed by the activated carbon component of the product. Following the stabilization of contaminants, the conditioned bacteria facilitate the metabolic breakdown or “treatment” of contaminants. Biodegradation is encouraged through the incorporation of a large range of electron receptors, including oxygen and a time-released source of sulfate.

BOS 200® product is made from high grade bituminous coal (very low ash content). The feedstock carbon used in the manufacture is Calgon’s Filtersorb 400 product which is a virgin carbon manufactured for use by municipalities to process drinking water. The carbon is manufactured to comply with the stringent extractable metals’ requirements. Additional information regarding the BOS-200® “trap and treat” process and metabolic treatment of petroleum hydrocarbons is included in this appendix below.



TRAP & TREAT® - BOS 200®

Based on years of experience using a variety of injectable technologies, ranging from augmented bioremediation to Fenton chemistry using hydrogen peroxide, it became clear that a better mousetrap was needed. As a consequence of this line of thought, an idealized product was defined having the following characteristics.

1. Can reduce contaminant concentrations quickly to regulatory standards.
2. Works in a variety of soil and groundwater conditions.
3. Is non-toxic and has no adverse impact on soil properties or groundwater quality.
4. Is applicable to a variety of contaminants.
5. Is reasonably cost-effective, at least in comparison to existing remedies.
6. Is a passive system, easily installed using equipment common to the industry.

The above six characteristics are the heart and sole of RPI's Trap & Treat® concept. The trap portion is designed around an immediate and predictable impact, observable in groundwater and soil after installation of the product. This aspect of BOS 200® is due to the presence of activated carbon in the product. In other words, the "Trap" is absorption by the activated carbon. Significant reductions in contaminant concentrations are typically realized in a matter of hours.

BOS 200® does not stop at stabilization of contamination. Absorption is just the first step in the process. Treatment is accomplished through biodegradation of the absorbed contaminants. In general, whenever the following conditions are present,

Microorganisms + Electron Donors + Electron Acceptors + Nutrients.

The result is metabolic by-products + energy + new microorganisms (Wiedemeier, 1999).

In this case, petroleum-degrading microorganisms are the "bugs" and hydrocarbon contaminants are the electron donors. Hydrocarbon degraders are very robust and can thrive under a wide range of conditions. In fact, they have been known to withstand pressures of hundreds of bars, pH conditions ranging from 1 to 10, temperatures from 0° to 75° C, and salinities greater than normal seawater (Freeze and Cherry, 1979). In the last decade, a great deal of research has been conducted on the role and importance of electron acceptors and nutrients within hydrocarbon plumes and the consensus is that the rate of biodegradation is limited by a lack of electron acceptors rather than a lack of nutrients. BOS 200® contains selected nutrients including phosphorus and nitrogen, and it contains a variety of electron acceptors that can be utilized under aerobic or anaerobic conditions.

A complete story of the electron acceptors must begin in the mixing tank. The product is shipped as a dry powder, which is mixed with water in the field to prepare an injectable slurry. One feature of activated carbon is that it has quite an affinity for oxygen. It adsorbs oxygen as the BOS 200® is manufactured, stored, and from the aerated water during the mixing operation. In short, the product is saturated with oxygen before injection into the contaminated formation. The product contains additional electron acceptors in the form of nitrate, ammonia and a time-release source of sulfate. The source of the time-release sulfate is gypsum or calcium sulfate.

Gypsum has been used by farmers for centuries as a soil conditioner and is not very soluble in water. However its solubility is such that a low but persistent concentration of sulfate can be maintained in groundwater for a number of years with a single application. A hidden benefit of this chemistry has to do with phosphorus. During manufacture, a small amount of ammonium phosphate is blended into the mix. This readily dissolves when mixed with water. However, calcium phosphate is virtually insoluble in water and so the available phosphate is rapidly precipitated out of solution, into and onto the activated carbon during the mixing operation. This provides a bio-available form of phosphorus (an essential nutrient) to the microorganisms that cannot be washed out by groundwater seep.

For thermodynamic reasons, microorganisms preferentially utilize those electron acceptors that provide the greatest amount of free energy during respiration (Bower 1992). The driving force for the biodegradation of petroleum hydrocarbons is the transfer of electrons from the donor (hydrocarbon) to the electron acceptor. The organism derives energy from this process and the more energy it can derive, the more attractive the process becomes. The high end of the energy spectrum is represented by aerobic utilization of oxygen as the electron acceptor. An overview of the next stops along the energy path is given by the following.

Nitrate reduction, Fe⁺³ reduction, Sulfate reduction, and the last stop is given by methanogenic respiration.

The concept of respiration is important in that the organism literally breaths nitrate or sulfate while oxidizing hydrocarbons. In each case above, the energy derived decreases as one moves down from nitrate toward methanogenic respiration. It is clear that if oxygen is available, it will be the preferred electron acceptor. The catch is that organisms must be present that can take advantage of prevailing conditions at any given time. When the material is first injected, it is saturated with oxygen. Consequently, no matter what the prevailing condition is within the plume, the prevailing condition within the BOS 200® is initially aerobic. Once the oxygen is consumed, nitrate will become the next favored electron acceptor, finally settling into sulfate reduction along with some methanogenic respiration. This process can be short-circuited by a persistent source of a higher energy acceptor. For example, if a sustainable source of oxygen is available, the dominant mechanism for degradation will remain aerobic.

This points to an important concept. Much discussion in the literature is devoted to the apparent advantage indigenous microorganisms have over cultured bacteria that one might add to the mix. It is widely held that existing organisms have become accustomed to the prevailing condition and already “occupy the niche”. As a result, it is very hard for a new organism to take

over or to even get a foothold in the existing biocosm. In fact, the BOS 200 represents a new niche that is very attractive to bacteria. Bugs love activated carbon. We take advantage of this by mixing bacteria with the product when preparing the injectable slurry. The product is inoculated with bacteria before it is installed. This is an important step because the new niche is already occupied by bacteria designed to degrade hydrocarbons before it is installed. Shortly after installation, hydrocarbons are adsorbed and the niche is full.

RPI recommends and uses a specific blend of microorganisms with its product. It is a customized culture of facultative anaerobes that can take advantage of the wide swing in conditions presented by the installed BOS 200[®]. As a result, there are organisms present that can use the oxygen initially present. Further, there are nitrate reducers, iron reducers, sulfate reducers, fermenters, and methanogens. No matter what condition exists within the activated carbon, there are microorganisms present to take advantage.

Metabolic by-products vary depending on what metabolic pathway is being used for hydrocarbon degradation. Carbon dioxide and water are common although many other compounds are possible, including various alcohols and volatile fatty acids. Acetate turns out to be produced by aerobic conditions as well as by anaerobic fermentation, and under methanogenic respiration. Other products include lactate, formate, butyrate, isobutyrate, pyruvate, and propionate along with methane.

When BOS 200 is mixed with water, the resulting slurry has elevated concentrations of nitrate, sulfate, and chloride. This results in elevated concentrations in the groundwater wherever the material is injected. Under normal conditions, contaminant levels drop literally overnight. Initially, nitrate levels within the treatment area range from 50 ppm to perhaps as high as 250 ppm with sulfate ranging from 200 ppm to 1500 ppm. Chloride is initially somewhere between 50 ppm and 150 ppm. At first, microbes utilize oxygen. When oxygen is depleted, nitrate is the next highest energy electron acceptor. The first step in the de-nitrification is the formation of nitrite. Over the first month or two (post injection), nitrate levels typically drop and low levels of nitrite are often observed. The nitrite and nitrate are normally consumed within the first two months and nitrate falls to levels below regulatory standards. At about the same time, measurable levels of acetate can begin to show up. Finally, fermentation, sulfate reduction, and methanogenic respiration become the dominant pathways.

Regulators often postulate that the disappearance of nitrate is simply due to the natural dispersion from groundwater movement and diffusion. Chloride can be used as an internal measure of these effects as there are no biological demands for this species nor are there chemical demands that are commonly encountered in groundwater plumes. As a result, the behavior of chloride over time is a good indication of natural forces such as groundwater seep and diffusion. It should be noted that neither chloride nor nitrate is adsorbed by activated carbon. In fact, activated carbon is virtually transparent to charged inorganic species. As described above, nitrate typically plummets over the first two months, falling from an initial value of over 100 ppm to less than 5 ppm. Chloride, on the other hand, typically remains fairly stable over this same time period. Given such performance, it is hard to argue that the disappearance of nitrate is not due to its consumption in anaerobic respiration.



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(503) 570-9484

August 12, 2021

Paul Fairbairn
Stantec
11130 NE 33rd Place, Suite 200
Bellevue, WA 98008-1465

RE: **Pilot Test - In-Situ Site Remediation using BOS 200®**

FOR: 7-Eleven Store #22866
14207 International Blvd./State Rt 99, Tukwila, WA

Dear Paul:

Please find enclosed an electronic copy of a proposal to conduct a pilot test at the above referenced property using conditioned activated carbon and biological remediation agents (i.e., BOS 200® and hydrocarbon-degrading microbes) to reduce GROs and VOCs to targeted treatment goals.

Should you have any questions regarding the scope of work or cost proposal, please do not hesitate to contact me at your convenience. Thank you for the opportunity to be of service. We look forward to working on this project with you.

Sincerely,

BB&A Environmental

A handwritten signature in black ink, appearing to read "Randall J. Boese", is written over a light blue circular stamp.

Randall J. Boese, RG/LHG
Principal / President

Enclosures



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32986 Roberts Court, Coburg, OR 97408
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(503) 570-9484

WORK PLAN AND AGREEMENT

Cost Proposal for Pilot Test In-Situ Remediation using BOS 200®

CLIENT INFORMATION

Stantec
11130 NE 33rd Place, Suite 200
Bellevue, WA 98008-1465
Contacts : Paul Fairbairn, Project Manager
Office : (425) 289-7367
Cell : (206) 369-8383
Email : Paul.Fairbairn@stantec.com

SITE LOCATION

7-Eleven Store #22866
14207 International Blvd./State Rt 99, Tukwila, WA

PURPOSE

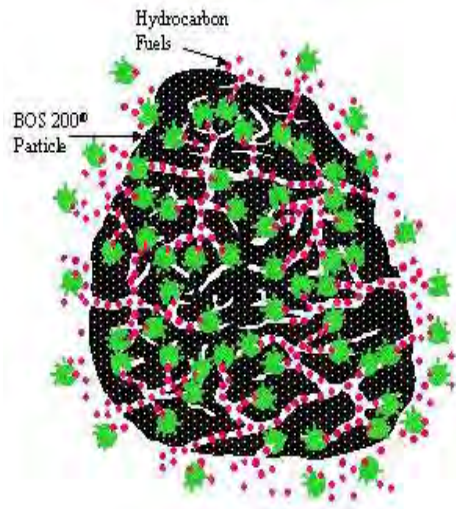
To conduct a Pilot Test in a select area of the site using BOS 200® and bacteria concentrate to reduce contaminant concentrations to target treatment goals.

Overview (Injection Design - Saturated Zone)

BOS 200® utilizes two (2) proven technologies to effectively remediate petroleum hydrocarbon sites. The two technologies are 1) trapping contaminants via carbon adsorption, and 2) subsequent treatment via biological degradation within the BOS 200® matrix as the product incorporates both aerobic and anaerobic biological processes. These two (2) proven and very powerful remediation mechanisms make what is called the "Trap and Treat" process. The "Trap" provides the immediate mass reduction and plume control, while the "Treat" provides the continued long term remedial degradation. The product comes as a fine grained dry material which consists of: carbon, calcium sulfate, nitrate, phosphate, and ammonia in a proprietary blend. BOS 200® is 77% by weight carbon and up to 19% gypsum, the sulfate source. Gypsum is 79% by weight sulfate which translates to approximately 15% by weight sulfate in BOS 200®. The BOS 200® is mixed with water and a facultative blend of microbes (inoculation with aerobic and anaerobic microbes) to create a solids suspension. This is now an ideal environment for the biological process, where hydrocarbons are adsorbed on to BOS 200® particles made up of:

- ▶ Electron Acceptors: oxygen, nitrate, ammonia and sulfate (primary);
- ▶ Nutrients - phosphorus and nitrogen; and
- ▶ Aerobic and anaerobic blend of microbes (over 26 species of microbes);

The success in achieving cleanup goals is not just in the product installed, but the distribution of the product in subsurface. Distribution is controlled by the injection techniques used (i.e., vertical and horizontal spacing is a function of soil type, high pressure injection vs. low pressure injection, and top down vs. bottom up). For this site, given the soil type and contaminant mass, BB&A proposes to optimize the injectate distribution by 1) using top-down techniques; 2) using relatively high pressure injections (enough pressure to provide localized soil lifting and propagation of BOS 200® from the injection tip); and 3) adjusting the horizontal and vertical injection spacing.



It is expected that the injection pressures will vary from 100 to 600 psig (measured at the discharge of the injection pump - the injection system pressure losses are approximately 100 psig – for hoses, valves and injection tips). Additionally, in clay-rich soils there is typically a break pressure (soil lifting pressure) that is sustained momentarily and then the pressure drops off. The discussion of the vertical and horizontal injection spacing is provided below for each of the proposed injection areas.

PILOT TEST BOS 200® INJECTION

1.0 BOS 200® Injection

1.1 Underground Injection Control (UIC) Permitting

An underground injection control (UIC) permit will need to be obtained from the Washington Department of Ecology prior to injection of BOS 200® and bacteria concentrate.

1.2 Target Zones, Injections, and Dosing

Based upon a review of historical and recent analytical data provided by Stantec, the target zone of treatment (vertical distribution of contamination) is estimated to be between five (5) and 20 feet below land surface (BLS). The effectiveness of BOS 200® and bacteria concentrate in this area should be confirmed post injection by followup groundwater monitoring.

2.0 INJECTION DESIGN

2.1 Target Zones, Injections, and Dosing

Based upon a review of analytical data collected from soil borings and monitoring wells provided, the target zone of treatment (vertical distribution of contamination) is estimated to be between seven (7) and 20 feet BLS. Treatment at the site consists of a single target area as described below (see embedded **Figure** for Proposed Treatment Area).



Figure 15: TVPH and GRO in Groundwater Samples Collected January to March 2021
 7-Eleven #22866
 14207 International Blvd/ SR 99
 Tukwilla, Washington

AST Environmental
 665 McKinney Ave
 Midway, Kentucky 40347
 (859)846-4900



Pilot Test Area - Shallow

- ▶ ~1,060 ft², 40 injection points on 5.0' triangular grid
- ▶ Total number of Injections and vertical spacing: 160 injections (alternate 5', 7, 9', & 11' BLS and 6', 8', 10', & 12' BLS) - 2.0 foot vertical spacing
- ▶ Contaminant Mass Average: based on 2,000 mg/kg TPH-GRO in soil
- ▶ BOS 200® loading: ~25 lbs of BOS 200® per injection = 4,000 lbs BOS 200®
- ▶ Supplemental Sulfate (Gypsum) loading: ~20 lbs of Gypsum per injection = 3,200 lbs
- ▶ Bacteria concentrate: 8 gallons
- ▶ ~2,400 gallons of water (~15 gallons/injection)

Pilot Test Area - Deep

- ▶ ~1,060 ft², 40 injection points on 5.0' triangular grid
- ▶ Total number of Injections and vertical spacing: 160 injections (alternate 13', 15', 17', & 19' BLS and 14', 16', 18', & 20' BLS) - 2.0 foot vertical spacing
- ▶ Contaminant Mass Average: based on 500 mg/kg TPH-GRO in soil
- ▶ BOS 200® loading: ~15 lbs of BOS 200® per injection = 2,500 lbs BOS 200®
- ▶ Supplemental Sulfate (Gypsum) loading: None
- ▶ Bacteria concentrate: 5 gallons
- ▶ ~2,400 gallons of water (~15 gallons/injection)

SUMMARY - Totals

Treatment Area ft ² :	1,060 ft ²
Number of Injection Pts:	40
Number of Injections:	320
BOS 200®:	6,400 lbs
Gypsum:	3,200 lbs
Bacteria Concentrate:	15 gallons
Water:	~4,800+ gallons

PROJECT ASSUMPTIONS

For purposes of preparing this work plan and cost estimate, it is assumed that:

- Underground utilities are present in the project area. Those on-site utilities not marked by Utilities Notification Service or privately located will be located by the property owner prior to the beginning of the project;
- By signing this Work Plan and Agreement, the responsible party authorizes BB&A, its employees, and authorized subcontractors to enter the property to complete the assessment activities.
- The injection borings will be backfilled with bentonite and other natural earth materials. Surface restoration will consist of redi-mix concrete or cold patch asphalt depending on surrounding surface materials.
- Work days will be Monday through Saturday.
- Potable water will be provided by the client and are readily available on-site.
- Off-site access to be provided by Stantec.
- UIC permitting by Stantec.
- Injections can be completed with standard Geoprobe (DT 7822 or equivalent).
- Private utility clearance by Stantec.
- Right-of-way access and traffic control (as-necessary) by Stantec.