



REMEDIAL INVESTIGATION/ FEASIBILITY STUDY AND REMEDIAL ACTION REPORT

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RGI PROJECT No. 2016-023A

**REMEDIAL INVESTIGATION/ FEASIBILITY STUDY (RI/FS) AND
REMEDIAL ACTION REPORT**

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1 INTRODUCTION

The Riley Group, Inc. (RGI) is pleased to present this Remedial Investigation/Feasibility Study (RI/FS) and Cleanup Action Report regarding the Sea Mar Community Health Center property located at 9635 Des Moines Memorial Drive South, Seattle, Washington (hereafter referred to as the Property).

The RI/FS was completed to document the nature and extent of soil and groundwater contamination at the Site and evaluate potential cleanup alternatives in accordance with the Model Toxics Control Act (MTCA) Cleanup Regulation (Washington Administration Code (WAC) 173-340).

The remedial activities documented in this report comply with the Model Toxics Control Act (MTCA) and WAC 173-340-515 for conducting Independent Remedial Actions. This RA Report has been prepared in accordance with general guidance provided under the MTCA Cleanup Regulation (WAC 173-340).

1.1 PROJECT OVERVIEW

Since 2007, RGI and/or others have performed subsurface investigations in order to define the nature and extent of contamination resulting from a petroleum release from the Property's former fuel and heating oil underground storage tank (UST) systems, as well as chlorinated solvents that have likely migrated on to the Property from the west adjoining property. The findings associated with these previous environmental investigations have been documented in previous reports and summarized herein.

1.2 REPORT ORGANIZATION

The RI includes a discussion of the following:

- Property development and history.
- Natural conditions (for example, geology, hydrogeology, and surface water).
- Previous environmental investigations and findings.
- Regulatory requirements.
- Preliminary Conceptual Site Model, which will include: (1) potential sources of contamination; (2) potential contaminants of concern (COCs); (3) affected media; (4) screening levels for COCs at the Property; (5) contaminant fate and transport; (6) nature and extent of contamination; and (7) human exposure pathways and receptors.
- Data gaps (for example, soil, groundwater, or soil gas).

1.3 WARRANTY

This report is the property of RGI, Sea Mar Community Health Center (Property Owner), and their authorized representatives or affiliates. This report is intended for specific application to Sea Mar Community Health Center property located at 9635 Des Moines Memorial Drive South, Seattle, Washington.

Work for this project was performed, and this report prepared, in accordance with generally accepted professional practices for the nature and conditions of work completed in same or similar locations at the present time.

The findings, conclusions and any recommendations presented in this report are based upon data obtained by RGI and others at the time of preparing this report. RGI's results and findings do not necessarily reflect subsurface conditions underlying other areas of the Property not investigated.

Conditional changes may occur through time by natural or human-made process on this or adjacent properties. Additional changes may occur in legislative standards, which may or may not be applicable to this report. These changes, beyond RGI's control, may render this report invalid, partially or wholly. If variations appear evident, RGI should be notified and RGI reserves the right to modify its conclusions and/or recommendations as new data and information is made available. No legal or other warranty, expressed or implied, is made.

2 REMEDIAL INVESTIGATION

2.1 PROPERTY IDENTIFICATION AND LOCATION

The Property is defined as a whole tax parcel (King County tax parcel 5624200371) and is approximately 3.49 acres in size. The boundaries of the Property are the same as the boundaries of the tax parcel. The Property is currently occupied by a commercial office building (under extensive renovation) and a grocery store and is currently zoned regional business (RB).

Typical property use in the Property vicinity is a mixture of residential, commercial, and light industrial properties. Current uses of adjoining properties are summarized as follows:

North of the Property: Intersection of Des Moines Memorial Drive South and South 96th Street with a Shell Gasoline Station beyond.

Northeast of the Property: Intersection of Des Moines Memorial Drive South and South 96th Street with Absolute German Autowrecking beyond.

East of the Property: Des Moines Memorial Drive South with a McDonald's Restaurant and AAAA Mini-Storage beyond.

South of the Property: Vacant land with power lines.

Southwest of the Property: Wooldridge Boats.

West of the Property: Beckwith and Kuffel.

Northwest of the Property: South 96th Street with Graffix Integrative Signage beyond.

2.2 CURRENT PROPERTY DEVELOPMENT

The Property is currently occupied by a grocery store and a commercial office building. The grocery store is occupied by Dominic's Red Apple Grocery. The south end of the commercial building is currently partially occupied by offices for Sea Mar Community Health Center. The remainder of the building undergoing extensive renovation and new construction is on-going on the northern portion of the Property.

2.3 HISTORIC PROPERTY DEVELOPMENT

The Property was historically occupied by two former single-family residences, two associated sheds, and was used as agricultural land. The first generation single-family residence was constructed in 1900, according to historical tax assessor records, along with two former sheds. Between 1936 and 1953, the former buildings were removed and the Property was redeveloped with a greenhouse, a produce stand, and a first generation former gasoline station (located on the northern portion of the Property). The second former single-family residence was also constructed during that time.

In the early 1960s, the first generation gasoline service station was replaced with a second-generation gasoline service station and the existing grocery building. The second generation gasoline station was

removed in the late 1970s. The existing commercial building was constructed in approximately 1986. Known tenants include Rascal's Casino, Maytag Laundromat, restaurants, a hair salon, a video store, offices and a youth boxing club.

The second generation single-family residence located on the southern portion of the Property was heated by an approximately 300-gallon heating oil UST. The UST was emptied and tripled rinsed by Marine Vacuum Services (MarVac) on May 9, 2016, and then removed by IO Environmental and Infrastructure (IOEI) on June 14, 2016. The second-generation former residence was demolished on July 6, 2016.

RGI performed a Phase I ESA for the Property in March 2016. Please refer to Section 8.1 of the referenced report for further discussion.

2.4 POTENTIAL FUTURE DEVELOPMENT

The Property Owner (Sea Mar Community Health Center) is redeveloping the northern portion of the Property with an addition to the northern portion of the commercial building on the Property. The building will be occupied by additional Sea Mar offices, classrooms, and meeting space. The southern portion of the Property, to the west of the existing grocery store will be redeveloped with paved parking and a rain garden.

2.5 NATURAL CONDITIONS

2.5.1 Physiographic Setting and Topography

The Property is located approximately 0.15 miles southeast of the City of Seattle. The Property slopes gently to the north, towards South 96th Street.

2.5.2 Surface Water

The Property does not have surface water present. The Duwamish River is located approximately 0.35 miles east of the Property.

2.5.3 Geologic Setting

The *Geologic Map of Seattle – a Progress Report* (Troost, et al., 2005) maps the shallow soil beneath the Property as Vashon Till (map unit Qvt), pre-Olympia aged fine-grained deposits (map unit Qpof), and Hamm Creek formation (map unit Qhc).

The till is described as compact silt, sand, and gravel. In general, till has been encountered during our subsurface investigations.

The pre-Olympia deposits are described as laminated to massive silt and clay with localized sandy interbeds. This unit is characterized as very dense and hard with occasional iron-oxide cemented layers. The Hamm Creek formation is described as interbedded gravel, sand, silt, clay, peat, and tephra beds. Soils encountered are in general accordance with the pre-Olympia deposits

2.5.4 Soils

Based on subsurface investigation findings and remedial excavations by RGI, the north-central portion of the Property is underlain by up to 12 feet of fill material (sand, silt, and gravel including various debris and black stained horizons). The southern end of the Site is underlain by silty sand with trace amounts of gravel.

2.5.5 Groundwater

Groundwater was encountered at depths of 1.3 to 14 feet bgs during drilling activities on the Property. Static water levels (SWLS) ranged from 0.5 to 6 feet bgs after the water was allowed to stabilize. Based

on known shallow water-bearing zone elevations, the groundwater flow direction is to the north (Figure 4). This groundwater flow direction generally agrees with the Property's topographic slope down towards the north.

2.6 PREVIOUS ENVIRONMENTAL REPORTS

Several environmental investigations have been conducted on the Property by RGI. These investigations and actions are documented in the following reports:

- *Phase I Environmental Site Assessment* (Phase I ESA), prepared for Frontier Bank and dated October 10, 2007.
- *Draft Geophysical Survey and Limited Phase II Subsurface Investigation* (Limited Phase II), prepared for Frontier Bank and dated November 12, 2007.
- *Supplemental Phase II and Geophysical Survey* (Supplemental Phase II), prepared for Sea Mar Community Health Center and dated January 30, 2008.
- *Phase I Environmental Site Assessment* (Phase I ESA), prepared for HomeStreet Bank and dated March 14, 2016.
- *Phase II Subsurface Investigation* (Phase II), prepared for HomeStreet Bank and dated March 28, 2016.

A summary of the findings and conclusions presented in the above referenced reports are given below.

For reference, approximate test probe, soil boring, hand auger, test pit, groundwater monitoring well, and soil-gas-sampling implant locations, and analytical results associated with these former subsurface investigations, are shown on the attached Figures and Tables.

2.6.1 Phase I ESA, RGI, October 2007

In 2007, the Property was occupied by Dominic's Red Apple Market, a single-family residence, a casino, offices for Sea Mar, and a Maytag Laundromat. The Phase I (RGI Project No. 2007-234) identified the following RECs for the Property:

- Historical gasoline service station on the northern portion of the Property from approximately the 1940s to the 1970s. No information was found regarding the status (removed, closed in place, abandoned) of the former USTs, or any other underground improvements (hoist, product piping, etc.).
- The heating oil UST used at the former residence, which was likely in use from the 1950s through 2014.
- Contaminated groundwater on the west adjoining property (inferred cross-gradient) with diesel- and oil-range Total Petroleum Hydrocarbons (TPH) impacts exceeding the MTCA Method A Cleanup Levels. However, no map or laboratory analytical reports were provided and actual concentrations detected and soil sample locations were not provided in the report and therefore remain unknown at this time.

2.6.2 Draft Limited Phase II, RGI, November 2007

In October 2007, Frontier Bank authorized RGI to perform a Geophysical Survey and Preliminary Phase II for the Property (RGI Project No. 2007-234B). A geophysical survey was performed at the Property using electromagnetic (EM) and ground penetrating radar (GPR) to traverse the Property across the interpreted area of the former fuel storage tanks associated with the historical gasoline station. A large

storage container located on the northern portion of the Property limited the ability for a complete geophysical survey of all areas of concern.

On October 26, 2007, RGI advanced a total of 10 test probes (SP-01 through SP-10) to maximum depths ranging from 11 to 14 feet below ground surface (bgs), Figure 2. Shallow groundwater was encountered in eight of the 10 test probes advanced at the Property, at depths ranging from 3 to 8.5 feet bgs. A groundwater grab sample was collected from each test probe where groundwater was encountered.

Our findings and conclusions were submitted in our Draft Preliminary Phase II dated November 7, 2007, and are summarized below:

- Soil and groundwater in the vicinity of the residential heating oil UST contained concentrations of diesel- and oil-range TPH above the applicable MTCA Method A Cleanup Levels. The concentration of diesel-range TPH in the groundwater grab sample collected immediately adjacent to the UST contained 1,500,000 micrograms/Liter ($\mu\text{g/L}$) diesel-range TPH, which may represent free-product floating on the groundwater. The extent of the contamination was unknown.
- One of the test probes in the vicinity of the former fuel UST nest and pump islands located on the northern portion of the Property encountered groundwater containing concentrations of gasoline- and diesel-range TPH and benzene at concentrations exceeding their respective MTCA Method A Cleanup Levels. These findings indicated that a release from the former gasoline fuel UST system had occurred. The extent of the contamination was unknown.
- One of the test probes (SP-04) was advanced along the western Property boundary. The west-adjointing property was formerly the Clarklift property. A groundwater grab sample from SP-04 contained elevated concentrations of diesel- and oil-range TPH, cis-1,2-dichloroethene (cis-1,2-DCE), and vinyl chloride (VC), all of which exceeded the applicable MTCA Method A or B Cleanup Levels. The extent of the groundwater contaminant plume was not known. Based on the inferred groundwater flow direction, the potential existed that the west-adjointing property had adversely affected shallow groundwater quality beneath the Property.

No recommendations were provided in our DRAFT Preliminary Phase II.

2.6.3 Supplemental Phase II, RGI, January 2008

Sea Mar Community Health Center authorized RGI to perform a Supplemental Phase II for the Property, including the installation and sampling of seven groundwater monitoring wells and two additional test probes (RGI project No. 2007-234C).

A geophysical survey was performed at the Property, using EM and GPR to traverse the Property in an area previously occupied by a large storage container (in 2007). No anomalies suggestive of abandoned USTs were identified in the geophysical surveyed area.

On January 2 and 3, 2008, RGI advanced a total of nine test probes (B1/MW1 through B7/MW7, B8, and B9) to maximum depths of 10 feet bgs (Figure 2). Seven of the test probes were completed as groundwater monitoring wells. Shallow groundwater was encountered at depths ranging from 1.3 to 8 feet bgs.

Our findings and conclusions were presented in our Supplemental Phase II dated January 30, 2008, and are summarized below:

- Based on the seven groundwater monitoring wells, shallow groundwater flow direction was reported to the northeast.

- The extent of soil and groundwater contamination as a result of a release from the residential heating oil UST on the southern portion of the Property appeared to be limited to the immediate vicinity of the UST. However, free product was likely present in the immediate vicinity of the UST. RGI recommended the removal of the heating oil UST, excavation and off-Property transport of the petroleum impacted soils, periodic dewatering of contaminated groundwater until acceptable levels of TPH were reached, and subsequent compliance groundwater monitoring.
- Shallow soils from two borings in the vicinity of the former gasoline service station located on the northern portion of the Property contained elevated concentrations of diesel- and oil-range TPH, carcinogenic polynuclear aromatic hydrocarbons (cPAHs), and/or metals exceeding the applicable MTCA Method A Cleanup Levels. Two other borings in the vicinity intercepted shallow soils containing either non-detectable levels (below the laboratory detection limit) or concentrations below the applicable cleanup level. RGI recommended remedial excavation and removal of contaminated soils.
- Groundwater in MW7, located close to the eastern Property boundary in the vicinity of the former USTs, and inferred cross-gradient of the former gasoline service station, contained concentrations of benzene and gasoline- and diesel-range TPH that exceeded the applicable MTCA Method A Cleanup Levels. It was considered possible that the groundwater contamination plume associated with the former gasoline station extended, in some degree, off the Property to the north-northeast. RGI recommended additional subsurface investigation to better define the nature and extent of contamination.
- Groundwater encountered in SP-04 and MW4, both located along the western Property boundary, intercepted shallow soil and groundwater with elevated concentrations of diesel- and oil-range TPH, VC, and Halogenated VOCs (HVOCs) that exceeded the applicable MTCA Method A or B Cleanup Levels. Based on the poorly defined groundwater flow direction at MW4, RGI concluded that the source of the HVOCs in groundwater along the Property's western property boundary was unknown.

2.6.4 Phase I ESA, RGI, March 2016

The Property was occupied by Sea Mar Community Health Center offices, Dominic's Red Apple Market, and a vacant single-family residence at the time of the Phase I ESA in 2016.

The 2016 Phase I concluded the following:

- **Historical Gasoline Service Station:** Two generations of former gasoline service stations occupied the Property between at least 1953 through 1978 (25 years). The historical use, handling, storage, and disposal of petroleum products, solvents, and other wastes typically associated with gasoline service stations were unknown. The USTs were likely removed sometime between 1978 and 1988, at which time UST regulations came into effect, although the exact date was unknown. Based on RGI's previous subsurface investigations, a release from the former USTs was identified that impacted soil and groundwater. The release to the groundwater appeared limited, although the extent had not been well defined. The historical gasoline service station and associated soil and groundwater contamination was considered a REC.
- **Heating Oil UST:** A single-family residential heating oil UST vent pipe and fill pipe were observed to the west of the residence. The UST was no longer in use. However, the UST is approximately half full with product. The UST was estimated to be 300-gallons in size. Previous sampling in the

vicinity of the UST indicated that a release had occurred to the soil and groundwater. Based on groundwater samples collected from three monitoring wells in the vicinity of the UST, the contamination appeared to be limited to the immediate vicinity of the UST, although concentrations of TPH in the groundwater were quite high, possibly representing free product floating on the groundwater. The heating oil UST and known soil and groundwater contamination were considered a REC.

- **West-Adjoining Property:** A previous environmental report for the west adjoining (up-gradient/cross-gradient) property identified groundwater contamination on the property. HVOCs, likely associated with a former parts washing area on the southeast corner of the west adjoining property, were detected in the groundwater monitoring well on the Property located closest to the west adjoining property. The HVOCs detected in the groundwater posed a potential risk to the groundwater and soil vapor beneath the Property. RGI considered the west adjoining property as a source of the HVOC contamination encountered beneath the Sea Mar Property.

2.6.5 Phase II, RGI, March 2016

Sea Mar Community Health Center authorized RGI to install and sample three additional groundwater monitoring wells, a soil gas probe, and up to ten additional test probes (RGI Project No. 2016-023).

A geophysical survey was performed at the Property, using EM and GPR to traverse the northern portion of the Property. No anomalies suggestive of abandoned USTs were identified in the geophysical surveyed area.

On March 4, 2016, RGI advanced a total of eight test probes (P1 through P4, MW8 through MW10, and SV1) to maximum depths ranging from 3.5 to 15 feet bgs (Figure 2). Three of the test probes were completed as groundwater monitoring wells. Shallow groundwater was encountered at depths ranging from 3 to 10 feet bgs. One of the test probes was completed as a permanent soil gas sampling point.

Our findings and conclusions were submitted in our Phase II dated March 28, 2016, and are summarized below:

- Petroleum hydrocarbon (as diesel fuel) impacts to the shallow soils and groundwater in the vicinity of the heating oil UST appeared to be limited to the vicinity of the heating oil UST. As of March 2016, the out-of-service heating oil UST was half full of heating oil fuel and water.
- Soil and/or groundwater samples collected in the vicinity of the former gasoline service station had concentrations exceeding the MTCA Method A Cleanup Levels for TPH (as gasoline, diesel, and/or oil), metals (for example, cadmium and lead), and/or benzene. The soil and/or groundwater contamination occurred at the following areas: (1) underlying the former pump island and possible product line locations; and (2) in the vicinity of MW9 (possible former waste oil drum storage area). The vertical extent of soil contamination at these two areas generally appeared limited to depths ranging between 2.5 feet to 4.5 feet bgs.

Soil and/or groundwater samples collected along the western Property boundary, inferred cross- or downgradient of the west-adjointing property, had elevated concentrations of diesel- and oil-range TPH, TCE, VC, and/or cis-1,2-DCE. The contamination along the western boundary of the Property likely originated from the west-adjointing property (with known TPH and HVOC contamination in soil and groundwater).

- The sub-slab soil gas sample collected from the soil vapor well SV1 had a TCE concentration of 140 micrograms per cubic meter ($\mu\text{g}/\text{m}^3$), which exceeds the MTCA Method B Sub-Slab Soil Gas

Screening Level of 12.3 µg/m³. According to Ecology Draft Guidance, the concentration suggested a potential vapor intrusion concern.

2.7 ENVIRONMENTAL INVESTIGATION SUMMARY

A total of 87 discrete soil samples and two composite samples were collected from the 19 test probes/borings and 20 groundwater monitoring wells installed during the environmental investigations. Based on field screening observations, both of the composite samples and 31 of the 87 discrete soil samples were selected for laboratory analysis.

Groundwater grab samples were collected from 11 of the 19 test probes or boring locations. In addition, groundwater samples were periodically (quarterly) collected from all 20 groundwater monitoring wells.

Selected soil and groundwater samples were submitted for one or more of the following analyses:

- Diesel- and oil-range TPH using Northwest Test Method TPH-Dx with or without silica gel cleanup (which removes naturally occurring biogenic material).
- Gasoline-range TPH using Northwest Test Method TPH-Gx.
- Benzene, ethylbenzene, toluene, and xylenes (BTEX) using EPA Test Method 8021B.
- HVOCs using EPA Test Method 8260C.
- Metals using EPA Methods 200.8.
- Toxicity Characteristic Leachate Procedure (TCLP) Metals using EPA Test Method 200.8 and 40 CFR Part 261.

2.7.1 Soil Analytical Results

A total of 87 discrete sample samples were collected from the 19 test probes/borings and 20 groundwater monitoring wells installed during the previous environmental investigations.

Former Single-Family Residence – Southern Portion of Property

A total of five discrete soil samples were submitted for analysis from the two test probes and five monitoring wells located in the vicinity of the former heating oil UST.

Three of the five soil samples (MW1, MW2, and MW3), collected at depths ranging from 4 to 8 feet bgs had concentrations of diesel- and oil-range TPH below the laboratory detection limit (non-detect). Two of the samples collected adjacent to the former UST, SP-01 and SP-02, contained concentrations of 4,900 and 10,000 mg/kg diesel-range TPH, which exceed the MTCA Method A Cleanup Level of 2,000 mg/kg.

Western Property Boundary

A total of 11 discrete soil samples and one composite sample were submitted for analysis from the four test probes and eight monitoring wells located along the western Property boundary.

Gasoline-range TPH was not detected in any of the six samples submitted for analysis (SP-03-8, SP-04-9.5, MW8-5.5, MW14-5, MW14-10, and MW15-11).

BTEX was not detected in any of the five samples submitted for analysis (B4-4, SP-04-9.5, MW14-5, MW14-10, and MW15-11).

HVOCs were not detected in any of the five samples submitted for analysis (MW8-5.5, MW14-5, MW14-10, MW15-7, MW15-11, MW19-7, and MW20-7.5).

VOCs were not detected in the one sample submitted for analysis (B4-4).

The composite soil sample and one discrete soil sample collected from MW13 were submitted for analysis of cadmium and lead. Both samples contained non-detectable concentrations of cadmium. Lead was detected in both samples at concentrations below the MTCA Method A Cleanup Level of 250 mg/kg.

Seven of the eight discrete soil samples submitted for analysis of diesel- and oil-range TPH contained non-detectable concentrations of TPH (MW8 -5.5, MW14-5, MW14-10, MW15 -11, SP-03-8, MW19-7, and MW20-7.5). Two samples, SP-04- 9.5 and P1 -4.5, contained diesel at concentrations of 880 mg/kg and 900 mg/kg, respectively, and oil-range TPH concentrations of 3,900 mg/kg and 2,900 mg/kg, respectively. These concentrations exceed the MTCA Method A Cleanup Level of 2,000 mg/kg.

Former Gasoline Service Stations – Northern Portion of Property

A total of 12 discrete soil samples and one composite soil sample were submitted for analysis from the 10 test probes/borings and five monitoring wells located in the vicinity of the former gasoline service stations and associated pump islands.

Ten of the 12 samples submitted for gasoline-range TPH analysis were either non-detect or contained concentrations below the MTCA Method A Cleanup Level. The other two, MW11-5 and MW9-comp, contained gasoline-range TPH concentrations of 85 mg/kg and 54 mg/kg, respectively. These concentrations exceed the cleanup level of 30 mg/kg.

All eight of the samples submitted for BTEX analysis were non-detect or contained concentrations below the MTCA Method A Cleanup Level.

Eight of the 10 samples submitted for diesel- and oil-range TPH analysis were either non-detect or contained concentrations below the MTCA Method A Cleanup Level. Two samples, MW9-comp and B9-2, contained diesel-range TPH concentrations of 4,900 mg/kg and 16,000 mg/kg, and oil-range TPH concentrations of 14,000 mg/kg and 55,000 mg/kg, respectively. The diesel result from MW9-comp was flagged “x” by Friedman and Bruya, Inc. (F&BI) indicating that “the sample chromatographic pattern does not resemble the fuel standard used for quantification.” According to F&BI, if the diesel-range TPH concentration is flagged and the oil-range concentration is greater than the diesel concentration then the diesel-range TPH concentration is actually oil-range TPH that is overlapped into the diesel-range due to high oil-range concentrations.

Two samples were submitted for VOC analysis. One contained no detectable concentrations of VOCs, and the second contained Acetone at a concentration of 2.4 mg/kg, which is well below the applicable cleanup level of 72,000 mg/kg.

One sample, B9-2, was analyzed for cPAHs. When establishing compliance with MTCA, the mixture of cPAH compounds is considered a single hazardous substance. The toxicity equivalency factor (TEF) methodology was developed by the EPA to evaluate the toxicity and assess the risks of a mixture of structurally related chemicals with a common mechanism of action. A TEF is an estimate of the relative toxicity of a chemical mixture compared to a reference chemical. For mixtures of cPAHs, the reference chemical is benzo(a)pyrene. Therefore, for screening purposes, the calculated total cPAHs (TEF modified) is compared to the MTCA Method A soil table value for benzo(a)pyrene of 0.1 milligrams/kilogram (mg/kg) for soil. Sample B9-2 had a TEF modified cPAH concentration of 1.89 mg/kg, which exceeds the MTCA Method A Soil Cleanup Levels for Unrestricted Land Uses of 0.1 mg/kg.

Five samples were submitted for analysis of the MTCA 5 Metals (As, Cd, Cr, Pb, and Hg). Arsenic, chromium, and mercury were either non-detect, or had concentrations below the applicable MTCA Method A Cleanup Levels in all five samples. Cadmium was not detected in three of the five samples, but

it was detected at concentrations of 4.75 mg/kg and 18.9 mg/kg in samples MW9-comp and B9-2, respectively, which exceed the MTCA Method A Cleanup Level of 2 mg/kg. Lead was detected in all five samples submitted for analysis, although three of the five were at concentrations below the MTCA Method A Cleanup Level. Samples MW9-comp and B9-2 contained lead concentrations of 1,490 mg/kg and 7,090 mg/kg, respectively. Based on having the highest concentration, sample MW9-comp was analyzed for lead using the Toxicity Characteristic Leaching Procedure (TCLP), for characterization of the waste as hazardous or not. The analytical result was 2.53 mg/L, which is below the Dangerous Waste Threshold of 5 mg/L, and is therefore not considered hazardous waste.

2.7.2 Groundwater Investigation

2.7.2.1 Former Single-Family Residence (Area 1)

A groundwater grab sample, SP-01-H2O, was collected from the vicinity of the former heating oil UST in 2007. The sample contained a diesel-range TPH concentration of 1,500,000 µg/L, and oil-range TPH was detected at a concentration of 37,000 µg/L, which both exceed the MTCA Method A Cleanup Level for Ground Water of 500 µg/L. Three monitoring wells, MW1, MW2, and MW3, were installed in the inferred up-gradient and downgradient groundwater flow directions relative to the former heating oil UST. No diesel- or oil- range TPH was detected in any of the three groundwater samples collected from these wells in January 2008. MW10 was installed in March 2016.

In March 2016, MW1, MW2, and MW10 had either non-detectable concentrations of diesel- and oil-range TPH or had concentrations below the cleanup level. MW1 and MW10 were decommissioned in June 2016 due to construction in this area. The sample from MW2 collected in June 2016 contained diesel-range TPH at a concentration below the cleanup level, and non-detectable concentrations of oil-range TPH.

Following the cleanup action in July 2016, MW16 was installed in the location of the former UST. The groundwater sample collected in July 2016 from MW16 contained a concentration of 150x µg/L diesel-range TPH and non-detectable concentration of oil-range TPH. The diesel result from MW16 was flagged (“x”) by F&BI indicating that “the sample chromatographic pattern does not resemble the fuel standard used for quantification.”

RGI was unable to open and sample MW3 until September 2016 (the monitoring well had been partially asphalted over). Samples from MW2, MW3, and MW16 collected in September 2016 contained either non-detectable concentrations of diesel- and oil-range TPH or had concentrations below the cleanup level. A sample collected from MW2 in December 2016 contained diesel-range TPH at a concentration below the cleanup level, and non-detectable concentrations of oil-range TP. Monitoring well MW3 was inaccessible due to a parked vehicle, and MW16 was un-locatable, due to stored construction supplies.

2.7.2.2 Western Property Boundary (Area 2)

Groundwater grab samples were collected from two of the three test probes completed on the western portion of the Property in 2007. Elevated concentrations of cis-1,2-DCE, VC, diesel- and oil-range TPH were detected in SP-04 at concentrations of 18 µg/L, 3.8 µg/L, 3,700 µg/L, and 2,900 µg/L, respectively, which are all above the applicable MTCA cleanup levels. Gasoline-range TPH, BTEX, and TCE were also detected in MW4, but at a concentrations below the MTCA Method A Cleanup Levels. Gasoline- and diesel-range TPH and BTEX were also detected in the grab sample from SP-05, but at concentrations below the MTCA Method A Cleanup Level.

Based on these results, two groundwater monitoring wells, MW4 and MW5, were installed on the western portion of the Property in 2008. MW4, which is located closest to the Property boundary, contained concentrations of TCE, cis-1,2-DCE, and VC which all exceeded the applicable MTCA Cleanup

Levels. Chromium, lead, TPH (as gasoline, diesel, and oil), BTEX, and other VOCs were either not detected or were found at concentrations below the applicable MTCA Cleanup Level in MW4. No contaminants of concern were detected in the sample from MW5. Subsequent quarterly groundwater monitoring performed on these two wells in 2014 indicated continued elevated concentrations of TCE, cis-1,2-DCE and VC in MW4, and non-detectable concentrations of the contaminants of concern in MW5.

One additional groundwater monitoring well (MW8) was installed in March 2016, in order to assess the extent of the contamination in the vicinity of the former wash-pad area on the west adjoining property. Monitoring wells MW4, MW5 and MW8 were sampled in March 2016. Laboratory results indicated that no contaminants of concern were detected in MW5. Diesel-range TPH, cis-1,2-DCE and 1,1-DCE were detected at concentrations below the applicable cleanup levels in MW8. However, TCE was detected in MW8 at a concentration of 20 µg/L, which exceeds the applicable cleanup level. No other HVOCs were detected in the sample. The sample from MW4 contained concentrations of diesel-range TPH and cis-1,2-DCE that were below the applicable cleanup levels. VC was detected at a concentration of 4.9 µg/L, which exceeds the MTCA Method A Cleanup Level of 0.2 µg/L.

In May 2016, monitoring wells MW13, MW14, and MW15 were installed and sampled. Monitoring wells MW14 and MW15 were installed within the building footprint to help define the eastern extent of the chlorinated solvents, likely originating off the Property from the west-adjoining property. Monitoring well MW13 was installed in the northwestern corner of the parking lot to assess possible metals and Cement Kiln Dust (CKD) fill. CKD was reported on the west adjoining property and based on their findings it was possible the CKD extended onto the northwest corner of the Property. CKD was not identified on the Property and no contaminants of concern were detected above any of the applicable cleanup levels in any of the wells.

MW5 was decommissioned in June 2016 as part of the redevelopment. In June 2016, samples were collected from the remaining wells in this area (MW4, MW8, MW13 through MW15). Laboratory results indicated that no contaminants of concern were detected in MW13, MW14, or MW15.

In July 2016 monitoring wells MW17 and MW18 were installed and sampled. Monitoring well MW17 was located within the Area 2 remedial excavation, in the approximate location of the former P1 and SP-04. Monitoring well MW18 was located to the immediate east of the former wash-pad area on the west-adjoining property in order to help define the southern extent of the contamination associated with the chlorinated solvent plume on the west adjoining property.

Diesel was either not detect or was detected at a concentration below the MTCA Method A Cleanup Level in the four samples submitted for analysis (MW4, MW8, MW17 and MW18).

Five of the seven samples submitted for analysis of TCE were either non-detect or contained a concentration below the MTCA Method A Cleanup Level. Two of the wells, MW8 and MW18, contained TCE concentrations of 33 µg/L and 130 µg/L, respectively, both of which exceed the MTCA Method A Cleanup Level. The concentration in MW8 was higher than during the sampling event for the previous quarter.

Vinyl Chloride and cis-1,2-DCE were detected at concentrations of 4.9 µg/L in MW4, which is above cleanup and was a slight increase above the result from the previous quarter.

The sample collected from MW4 also contained cis-1,2-DCE at a concentration above the applicable cleanup level.

No other contaminants of concern were detected above the applicable cleanup levels.

Monitoring wells MW4 and MW8 appear to have been destroyed during renovation activities.

In September 2016, two additional monitoring wells, MW19 and MW20 were installed to the south of MW18, based on the analytical results from MW18 during the second quarter groundwater sampling event. These wells were sampled in September and December 2016, along with MW14, MW15, MW17, and MW18, and the contaminants of concern were either non-detect, or detected at concentrations below the applicable cleanup levels.

2.7.2.3 Former Gasoline Service Station (Areas 3 and 4)

In 2007, groundwater grab samples were collected from four test probes (SP-07 through SP-10) in the vicinity of the two generations of former gasoline service stations and one in the inferred downgradient location (SP-06). Laboratory analytical results indicated that the contaminants of concern (gasoline-, diesel-, and oil-range TPH, and BTEX) were either non-detected in the samples or were detected at concentrations below the applicable cleanup levels, with the exception of the sample collected from SP-07. This sample contained gasoline- and diesel-range TPH and benzene above the applicable cleanup levels.

In January 2008, one soil boring (B8) was completed in the vicinity of the former gasoline service stations. Two groundwater monitoring wells (MW6 and MW7) were also installed at that time. Monitoring well MW6 installed in the inferred down-gradient location of the former gasoline service stations and MW7 was installed in the suspected location of the former fuel USTs. In the sample collected from MW6, contaminants of concern were either not detected or were detected at concentrations below the applicable cleanup levels. The sample from MW7 contained concentrations of gasoline-range TPH, benzene, and dissolved arsenic, 5,500 µg/L, 61µg/L, and 10.8 µg/L, respectively, which all exceeded the applicable cleanup levels. The grab sample from B8 contained dissolved arsenic at a concentration of 6.08 µg/L which also exceeds the cleanup level. Other contaminants of concern were either not detected or were below the cleanup levels.

In March 2016, MW9 was installed in the vicinity of the former service station near the north-central portion of the Property. No contaminants of concern were detected above the cleanup level in MW6. Diesel-range TPH was the only contaminant of concern detected above the cleanup level in MW9. The sample from MW7 contained concentrations of gasoline- and diesel-range TPH and benzene that exceeded the cleanup levels.

In May 2016, two additional monitoring wells, MW11 and MW12, were installed along the eastern Property boundary to assess potential migration of contaminated groundwater off the Property. Samples collected from MW11 and MW12 in May 2016 did not contain any contaminants of concern above the cleanup levels.

Monitoring wells MW6, MW7, and MW9 were decommissioned in June 2016. Monitoring wells MW11 and MW12 were sampled again in June, September, and December 2016, and no contaminants of concern were detected at concentrations above the applicable cleanup levels.

2.7.3 Soil Gas Investigations

One soil gas well was installed along the western Property boundary in March 2016, approximately 15 feet west the building. The well was installed to a depth of 3 feet bgs. The permanent soil gas well was constructed with 0.75-inch diameter well screen (6-inch long screened interval) and 2.5 feet of blank casing. TCE was detected at a concentration of 140 µg/m³. The published Ecology Method B Sub Slab Soil Gas Screening Level¹ is 12.3 µg/m³.

¹ Ecology's Draft *Guidance for Evaluating Soil Vapor Intrusion in Washington State*, dated October 2009 and as subsequently amended.

The soil gas well was damaged or destroyed by others during construction activities and is not locatable.

Vapor intrusion is the migration of volatile hazardous substances in the gas phase from the subsurface to indoor air. The MTCA regulation stipulates that subsurface soil and groundwater contaminant concentrations must be protective of indoor air. Since TCE, VC, and cis-1,2-DCE have been detected in groundwater beneath the Property, RGI recommended further evaluation of the vapor intrusion pathway for the Property.

In 2009, Ecology published the *Draft Guidance For Evaluating Soil Vapor Intrusion In Washington State: Investigation and Remedial* (Ecology VI Guidance). The Ecology VI Guidance, as subsequently amended, provides guidelines for evaluating the vapor intrusion pathway in Washington State and is consistent with MTCA rule requirements.

The Ecology VI Guidance indicates that the vapor intrusion pathway must be evaluated when volatile hazardous substances are present in the subsurface and situated within 100 feet (vertically or laterally) of an existing or future building.

Since the HVOCs observed in groundwater on the Property fall into this category, RGI recommended a vapor intrusion assessment for the Property.

Table B-1 of the Ecology VI Guidance provides groundwater screening levels (VI groundwater screening levels) that are considered protective of MTCA Method B Indoor Air Cleanup Levels. RGI compared concentrations of all compounds detected in groundwater during the RA and previous investigations to the appropriate VI groundwater screening levels. It should be noted that a number of the MTCA Method B Indoor Air Cleanup Levels, from which the VI groundwater screening levels are derived, have been revised since the preparation of the Ecology VI Guidance in 2009. For these compounds, RGI calculated a VI groundwater screening level using the current MTCA Method B Indoor Air Cleanup Level the same methodology utilized in the Ecology VI Guidance to evaluate these compounds. After evaluation of all detected compounds in groundwater, RGI determined that TCE, VC, and cis-1,2-DCE were the only compounds where groundwater concentrations exceeded the established or calculated VI groundwater screening levels.

Other compounds were detected in groundwater that either did not exceed the applicable VI groundwater screening levels or did not have a VI groundwater screening level established and therefore do not require further vapor intrusion assessment.

Additional evaluation is required to assess the potential vapor intrusion concern in the building.

2.7.4 LNAPL Gaging

Free product was not detected in any of the monitoring wells.

2.8 SURFACE WATER INVESTIGATIONS

Surface water was not observed on the Property.

2.9 INTERIM ACTIONS SUMMARY

RGI's interim actions have previously been summarized in Section 2.6.3 and 2.6.5 of this report.

2.10 POTENTIAL SOURCES OF CONTAMINATION

2.10.1 Potential On-Property Sources of Contamination

2.10.1.1 Former Residential Heating Oil UST (Area 1)

Soil and groundwater exceeding the MTCA Method A Cleanup Levels was encountered in the immediate vicinity of the former heating oil UST in 2007. Three monitoring wells in the inferred up-gradient and down-gradient groundwater flow directions were installed and TPH was not encountered in any of them. The former 300-gallon UST, located on the west side of the former single-family residence was removed in June 2016 along with soils exceeding the MTCA Method A Cleanup Level.

2.10.1.2 Former Gasoline Service Station (Areas 3 and 4)

Two generations of former gasoline service stations were located on the northern portion of the Property. Apparent releases from the UST system (USTs, piping, tank overfill), as well as apparent disposal of waste materials to shallow surface soils. Lead and cadmium was discovered in the shallow soils (less than 3 feet bgs) as well as diesel-and oil-range TPH to depths of up to 6 feet bgs at concentrations exceeding the MTCA Method A Cleanup Levels. Additionally, gasoline-, diesel-, and oil-range TPH and benzene were detected in the soils and groundwater at concentrations above the MTCA Method A Cleanup Levels. The exact location, quantity, size, and closure dates for the former USTs are unknown at this time.

2.10.2 Potential Off-Property Sources of Contamination

The west adjoining property, formerly occupied by FMH Material Handling Solutions and Clarklift, had three former USTs removed in the 1990s as well as a former parts washing pad on the southeast corner of the property. The wash pad was located immediately adjacent to the Site. Confirmed releases from the former USTs impacted both soil and groundwater and were reported to Ecology in 1995. However, these USTs were located at least 40 feet from the Property on the west side of the wash pad.

In 2007, diesel- and oil-range TPH was detected in the soil on the Property at a depth of 9 feet in SP-04. A groundwater grab sample collected from SP-04 contained concentrations of diesel-and oil-range TPH, VC, and cis-1,2-DCE that exceeded the applicable cleanup levels. Four monitoring wells were installed on the northern portion of the Property to assess the nature and extent of the contamination. A Remedial Investigation (RI) report was completed by Shannon & Wilson in 2014 for the west-adjoining property, which indicated VC, TCE, and cis-1,2-DCE in groundwater had migrated off the west adjoining property onto the Property. All three contaminants were detected in MW4 on the Property at concentrations exceeding the applicable cleanup levels. Additional groundwater monitoring wells (MW8, MW14, MW15, MW17, and MW18) and one soil vapor well were installed in 2016 by RGI near the western Property boundary to assess how far the contamination may have migrated. TCE was detected in the groundwater at concentrations above the cleanup level in MW8 and MW18, and cis-1,2-DCE and VC were detected in the groundwater at concentrations above the applicable cleanup levels in MW4. TCE was also detected at a concentration above the MTCA Method B Screening Level for soil gas in the soil gas well.

2.11 REGULATORY REQUIREMENTS

In Washington State, the Model Toxics Control Act (RCW 70.105D), mandates that site cleanups protect human health and the environment. The MTCA Cleanup Regulation (WAC173-340) defines the approach for establishing cleanup requirements for individual sites, including the establishment of cleanup standards and selection of cleanup actions.

The MTCA regulation provides three options for establishing generic and site-specific cleanup levels for

soil and groundwater. Method A cleanup levels have been adopted for specific purposes and are intended to provide conservative cleanup levels for sites undergoing routine site characterization or cleanup actions or those sites with relatively few hazardous substances. Method B and C cleanup levels are set using a site risk assessment, which focus on the use of “reasonable maximum exposure” assumptions based on site-specific characteristics and toxicity of the contaminants of concern. Method B and C screening levels were referenced from Ecology’s CLARC database.

2.11.1 Terrestrial Ecological Resources

WAC 174-340-350 requires a Terrestrial Ecological Evaluation (TEE) be conducted as part of a RI to determine the potential impact of the hazardous substances on natural resources and ecological receptors. For the purpose of this RI, the regulation requires that one of the following actions be taken:

- Documenting a TEE exclusion
- Conducting a simplified TEE
- Conducting a site-specific TEE

RGI conducted the necessary steps required for TEE regulations, TEE documentation is included in Appendix A. Based on the available data and cleanup actions performed, the Property qualifies for a TEE exclusion since contaminated soil is, or will be, covered by buildings, paved areas, or other physical barriers that would prevent wildlife or plants from being exposed to the contamination (WAC 173-340-7491).

No further consideration of ecological impacts is required under MTCA.

2.11.2 Contaminants of Concern

Based on the completed environmental investigations the contaminants of concern include the following:

- Gasoline-range TPH
- Diesel- and oil-range TPH
- Benzene
- cPAHs
- Lead
- Cadmium
- Arsenic
- Trichloroethene
- Vinyl chloride
- Cis-1,2-Dichloroethene

2.11.3 Site Cleanup Requirements

The MTCA regulation (Chapter 173-340 WAC) governs site cleanup and defines a two-step approach for establishing cleanup requirement for individual sites:

- Establishing Cleanup Standards.
- Selecting Cleanup Actions (refer to Section 3).

2.11.3.1 Cleanup Standards

- Cleanup Levels (which determine at what level a particular hazardous substance does not threaten human health and the environment).
- Point of Compliance (which designated the location on the Property where the cleanup levels must be met).

2.11.3.2 Cleanup Levels

The MTCA regulation provides three options for establishing generic and Property-specific cleanup levels for soil and groundwater. Method A cleanup levels have been adopted for specific purposes and are intended to provide conservative cleanup levels for sites undergoing routine Site characterization or cleanup actions or those Sites with relatively few hazardous substances. Method B and C cleanup levels are set using a Site risk assessment, which focus on the use of “reasonable maximum exposure” assumptions based on site-specific characteristics and toxicity of the contaminants of concern.

For this project, the MTCA Method A, considered protective of drinking water or direct contact and consumption, was used to establish the cleanup levels. Where no Method A Cleanup Levels were available, Method B Levels were used to establish the cleanup levels. Soil and groundwater cleanup levels and soil vapor screening levels are samples are summarized below and in the attached Tables.

Contaminant	Media	Method A or B Soil Cleanup Level (mg/kg)	Media	Method A or B Groundwater Cleanup Level (µg/L)	Media	Method B Sub Slab Soil Gas Screening Level (µg/m ³)
Gasoline TPH	Soil	30	Groundwater	800	Air	n/a
Diesel TPH	Soil	2,000	Groundwater	500	Air	n/a
Oil TPH	Soil	2,000	Groundwater	500	Air	n/a
Benzene	Soil	0.03	Groundwater	5	Air	10.7
Benzo(a)pyrene	Soil	0.1	Groundwater	0.1	Air	n/a
Lead	Soil	250	Groundwater	15	Air	n/a
Cadmium	Soil	2	Groundwater	5	Air	n/a
Arsenic	Soil	20	Groundwater	5	Air	n/a
Trichloroethene	Soil	0.03	Groundwater	5	Air	12.3
Vinyl chloride	Soil	240	Groundwater	0.2	Air	9.33
Cis-1,2-Dichloroethene	Soil	160	Groundwater	16	Air	n/a

2.11.4 Points of Compliance

Points of compliance consist of “standard” and “conditional” point of compliance. The standard point of compliance is generally defined as throughout the site and cleanup levels must be met at the standard point of compliance for each media (soil, groundwater, surface water, and air). On certain sites, a conditional point of compliance may be granted.

The selected standard point of compliance for soils is throughout the Property (based on protection of groundwater).

The selected standard point of compliance for groundwater is throughout the Property from the uppermost level of the saturated zone extending vertically to the lowest depth which could potentially be affected by the Property.

The standard point of compliance for air is throughout the Property.

2.12 CONTAMINANT NATURE AND EXTENT

This section describes the type of contaminants (nature) present at the Property and the vertical and horizontal distribution of these contaminants (extent).

2.12.1 LNAPL

In 2007, based on the laboratory analytical results of groundwater from a groundwater grab sample from SP-01 in the immediate vicinity of the former residential heating oil UST, LNAPL may have been present. Based on the results of nearby wells and other test probe data, LNAPL was presumed to be located only within the immediate UST installation and tank backfill area.

LNAPL has not been observed during the soil investigation or interim actions performed by RGI, and has not been detected in any of the groundwater monitoring wells.

2.12.2 Soil

RGI encountered soil contamination at several areas on the Property (Areas 1 through 4. See Figure 2 for locations). The first was at test probe locations SP-01 and SP-02 in the vicinity of the former residential heating oil UST. The second was at test probe locations SP-08 and SP-09, boring locations B9, and monitoring well locations MW9 and MW11 in the vicinity of the former gasoline stations. The third was at test probe location SP-04 near the western property boundary. Cross sections are presented in Figures 11 through 15 presenting soil and groundwater concentrations of the COCs discussed above.

2.12.2.1 Former Residential Heating Oil UST (Area 1)

Diesel- and oil-range TPH were detected in soils at concentrations above the MTCA Cleanup level in test probes SP-01 and SP-02, which were completed adjacent to the former UST in 2007.

2.12.2.2 Former Gasoline Station (Areas 3 and 4)

Gasoline-, diesel- and oil-range TPH, benzene, lead, cadmium, and cPAHs were detected in soils at concentrations above the MTCA Cleanup level in the suspected vicinity of the former service garage and pump islands associated with the former two generations of gasoline service stations. Shallow soils in the vicinity of the service garage, collected from B9 and MW9, contained elevated concentrations of lead, cadmium, cPAHs, diesel- and oil-range TPH. Soils in the suspected vicinity of the former USTs and pump islands contained concentrations of gasoline-, diesel- and oil-range TPH, and benzene.

Test probes P3 and P4 were completed in the vicinity of the former service station to define the extent of the contamination detected in B9, but no contaminants of concern were detected above the MTCA Method A Cleanup levels in either P3 or P4.

2.12.2.3 Western Portion of Property (Area 2)

Diesel- and oil-range TPH were detected in soils at concentrations above the MTCA Cleanup level in test probes in test probe SP-04 at a depth of 9.5 feet bgs in 2007 and at a depth of 4.5 feet bgs in test probe P1 in 2016.

No contaminants of concern were detected in the soils analyzed from MW8, MW14, MW15, MW19 or MW20.

2.12.3 Groundwater

Groundwater contamination was first detected in groundwater grab samples collected during a subsurface investigation by RGI in 2007. Groundwater quality in some areas has improved over time, but several contaminants continue to exceed screening levels.

2.12.3.1 Former Residential Heating Oil UST (Area 1)

Diesel-range TPH exceeded the cleanup level in the groundwater grab sample from SP-01. No detections were found above the cleanup level in any of the other monitoring well or test probe locations in the vicinity of the former residence.

2.12.3.2 Former Gasoline Station (Areas 2 and 3)

Gasoline-range TPH was detected above the cleanup level in MW7 during sampling events by RGI (2008 and 2016), as well as the 2007 sample from SP-07. No detections were found in any of the other monitoring well or test probe locations in the vicinity of the former gasoline service station.

Benzene was detected above the cleanup level in MW7 during both groundwater sampling events, as well as the 2007 groundwater grab sample from SP-07. No detections above the cleanup level were found in any of the other monitoring well or test probe locations.

Diesel-range TPH was detected above the cleanup level in groundwater grab samples from MW7, SP-07, and MW9. No detections above the cleanup level were found in any of the other monitoring well or test probe locations.

Arsenic was detected above the cleanup level in the 2008 groundwater grab samples from MW7 and B8. No detections were found in groundwater samples collected from any of the other monitoring well or test probe locations.

2.12.3.3 Western Portion of Property (Area 2)

Diesel- and oil-range TPH were detected above the cleanup level in a groundwater grab sample from SP-04. No detections above the cleanup level were found in any of the other monitoring well or test probe locations.

TCE was detected above the cleanup level in groundwater grab samples from MW4, MW8, and MW18. No detections above the cleanup level were found in any of the other monitoring well or test probe locations.

VC was detected above the cleanup level in groundwater grab samples from MW4 and SP-04. No detections above the cleanup level were found in any of the other monitoring well or test probe locations.

Cis-1,2-DCE has been detected at or above the cleanup level in groundwater grab samples from MW4 and SP-04. No detections above the cleanup level were found in any of the other monitoring well or test probe locations.

2.12.4 Soil Gas

TCE was detected at a concentration above the Screening Level in SV1. Based on the preliminary findings, the potential for vapor intrusion exists and further evaluation is warranted.

2.13 PRELIMINARY CONCEPTUAL SITE MODEL

A Conceptual Site Model (CSM) identifies sources of contamination, affected media, possible fate and transport mechanisms, potential receptors, and exposure pathways. The CSM provides the basis for evaluating and selecting cleanup alternatives.

This section discusses the conceptual Site model developed for the Property based on the previous subsurface investigation findings by RGI and others.

2.13.1 Source Area

The source area is defined as the contaminants of concern that have been released and that have affected soil, groundwater, and/or air at the Property. The attached Figures illustrate the Property's known contaminant source areas, which are discussed below.

2.13.1.1 Former Residential Heating Oil UST (Area 1)

The former heating oil UST was installed in approximately the mid-1950s, and continued to be used through at least 2007. Corrosion of the UST resulted in holes forming, and heating oil fuel leaking into the soil and groundwater beneath.

2.13.1.2 Former Gasoline Station (Areas 3 and 4)

The former USTs and unknown handling practices of fluids and waste products as well as burial of solid waste products associated with the former gasoline service station have contributed as a source area.

2.13.1.3 Western Portion of Property (Area 2)

Soil and groundwater on the western portion of the Property appear to have been impacted by apparent releases from former USTs and a parts washing area located on the west-adjointing property that migrated onto the Property.

2.13.2 Contaminants of Potential Concern and Affected Media

The potential contaminants of concern include lead, cadmium, and arsenic, gasoline TPH and BTEX, diesel and oil TPH, TCE, VC, cis-1,2-DCE, and cPAHs.

The contaminants of concern known to have concentrations that exceed the selected cleanup levels (see 2.10.3.2) and the known affected media are lead (soil only), cadmium (soil only) arsenic (soil and groundwater), gasoline TPH and BTEX (soil and groundwater), diesel and oil TPH (soil and groundwater), TCE (groundwater and soil gas), VC (groundwater only), cis-1,2-DCE (groundwater only), and cPAHs (soil only).

2.13.3 Contaminant Fate and Transport

This section discusses the general fate and transport characteristics of the potential contaminants of concern identified in the affected media at the Property. In particular, the fate and transport characteristics discussed are those considered relevant for evaluating various cleanup actions.

The known contaminants in soil with concentrations above the MTCA Method A Cleanup Levels include lead, cadmium, TPH (gasoline, diesel, and oil), and benzene.

The known contaminants in groundwater with concentrations above the MTCA Method A Cleanup Levels include arsenic, TPH (gasoline, diesel, and oil), benzene, TCE, VC, and cis-1,2-DCE.

The known contaminant in soil gas with concentrations above the MTCA Method B Sub-Slab Soil Gas Screening Levels is TCE. Based on the preliminary soil gas data, additional assessment and evaluation is warranted.

2.13.3.1 Volatiles (VOCs)

The VOC potential contaminants of concern for the Property include TCE, VC, cis-1,2-DCE, benzene, and to a lesser extent, gasoline range TPH. The vertical and lateral distribution of VOC concentrations in the soil is likely the result of:

- Vapor-phase transport by diffusion from the source area via natural barometric changes. Over time, soil in contact with the VOC vapor plume becomes contaminated. The highest soil VOC concentrations will be closest to the source.
- Dissolved-phase transport via groundwater or other water that comes into contact with the VOC (e.g., infiltration by precipitation).

Due to the physical components of natural attenuation (including dispersion, dilution, sorption, and volatilization), the highest VOC concentrations will be found closest to the source.

2.13.3.2 Metals

The total metals in soils (lead and cadmium) identified as Property potential contaminants of concern are considered relatively immobile contaminants in the subsurface soil environment and are relatively insoluble. Therefore, these metals do not typically migrate far from their source.

2.13.3.3 Diesel and Oil TPH

Generally speaking, diesel and oil TPH are considered relatively immobile and insoluble in the subsurface environment. Therefore, these TPH ranges do not typically migrate far from their source.

2.13.4 **Preliminary Exposure Assessment**

The types of potential exposure include terrestrial ecological risk and human health risk. Since the Property qualifies for a TEE exclusion, mitigating the potential human health risk and ecological receptors associated with the potential contaminants of concern in the affected media at the Property will be the primary objective of the selected cleanup option(s). This section presents the evaluation and conclusions pertaining to the exposure pathways at the Property. The goal of this section is to identify potential exposure scenarios.

2.13.4.1 Soil Pathway

The exposure pathways for soils include direct soil contact. Human health exposure pathways via direct soil contact include dermal contact and/or ingestion/inhalation of contaminated soil and dust. Due to planned construction and excavation activities at the Property, the concentrations of inorganic lead and arsenic, BTEX, and TPH (as gasoline, diesel and oil) above Method A Soil Cleanup Levels pose a threat to human health via the direct soil contact pathway.

2.13.4.2 Groundwater Pathway

The exposure pathways for groundwater include the direct contact (such as in a construction worker scenario) and drinking water exposure pathway.

Regarding the Property, there are no drinking water wells located on, or in the vicinity of the Property. The shallow water-bearing zone beneath the Property is not used for drinking water and based on field observations during purging activities (monitoring wells quickly bailed dry) is not considered a possible future source of potable water.

2.13.4.3 Vapor Pathway

As previously discussed in section 2.12.4, the TCE in soil gas concentration detected beneath the Property exceeded the Method B Sub Slab Soil Gas Screening Level. RGI concluded that the additional

evaluation was warranted.

2.14 DATA GAPS

2.14.1 Soil

2.14.1.1 Former Residential Heating Oil UST (Area 1)

Based on our RI findings, no data gaps were identified.

2.14.1.2 Former Gasoline Service Station (Areas 3 and 4)

Based on our RI findings, no data gaps were identified.

2.14.1.3 Western Portion of the Property (Area 2)

Based on our RI findings, no data gaps were identified for the western portion of the Property.

For the west adjoining property, Beckwith and Kuffel (B&K) has retained its own consultant to complete its RI for the B&K property.

2.14.2 Groundwater

2.14.2.1 Former Residential Heating Oil UST (Area 1)

Based on our RI findings, no data gaps were identified.

2.14.2.2 Former Gasoline Service Station (Areas 3 and 4)

The RI determined the extent of the contamination associated with the former gasoline service stations. No off-site migration of contamination to the east or north was identified. Additionally, apparent on Site migration was defined as to its occurrence on the Property. Based on our RI findings, no data gaps were identified.

2.14.2.3 Western Portion of the Property (Area 2)

The RI determined the extent of the apparent migration on to the Property. Based on our RI findings, no data gaps were identified.

For the west adjoining property, B&K has retained its own consultant to complete its RI for the B&K property.

2.14.3 Soil Gas/Indoor Air

The soil vapor sample collected from SV1 contained a concentration of TCE that exceeded the sub-slab soil vapor screening level. However, groundwater collected from two wells installed within the building footprint contained non-detectable concentrations of HVOCs (below laboratory detection limit of 1 µg/L), which is below the Method B Groundwater Screening Level for soil vapor intrusion of 1.231 µg/L.

Further soil gas evaluation and/or engineering controls will need to be evaluated to protect indoor air quality.

2.15 ADDITIONAL SUBSURFACE INVESTIGATION

Based on RGI's recent data evaluation, further characterization and/or additional wells are recommended for the western portion of the Property. RGI proposes the following additional investigation in the following areas at the Property:

- Install three soil vapor sampling points inside the building footprint, along the western wall, up-gradient of the existing MW18 and former MW4 and MW8.

- In addition, several wells that were destroyed during construction should be replaced and included with the quarterly groundwater monitoring program (or as appropriate).

3 FEASIBILITY STUDY

The purpose of this feasibility study (FS) is as follows:

- Describe RGI's previous evaluation of the remedial alternatives (RAs) for the former residential heating oil UST, and our reasons for selecting remedial excavation as the preferred remedial alternative for the former residential UST.
- Describe RGI's previous evaluation of the RAs for the former gasoline service station, and our reasons for selecting remedial excavation as the preferred remedial alternative for the former gasoline service station.

In regards to the west-adjointing property, the consultant for B&K is in the process of evaluating the preferred RA for that property.

This FS is meant to be prepared in general accordance with the requirements of WAC 173-340-350 (8).

The FS is organized in the following order:

- Remedial Action Objectives (Section 3.1)
- Description of Remedial Technologies (Section 3.2)
- Evaluation of Remedial Action Alternatives (Section 3.3)
- MTCA Evaluation of Remedial Alternatives (Section 3.4)
- Feasibility Study Summary and Conclusions (Section 3.5)

3.1 REMEDIAL ACTION OBJECTIVES

In accordance with MTCA, the remedial action objectives (RAOs) must meet requirements that protect human health and the environment.

The RAOs identified for the Property include:

- RAO-1: Prevent or limit risks associated with direct human contact of COCs within soil, groundwater, and/or air.
- RAO-2: Prevent or limit potential risks of groundwater impacting surface water quality and other terrestrial impacts.

The following sections will describe and evaluate the remedial technologies that can accomplish the RAOs listed above and will meet the requirements set forth by Ecology's Threshold Requirements (WAC 173-340-360).

3.2 DESCRIPTION OF REMEDIAL ALTERNATIVES

Reducing the COCs associated with petroleum hydrocarbons in soil, groundwater, and/or soil vapor can be accomplished with the appropriate remedial technology, or combination of technologies.

Remedial options can be divided into the following two main headings: passive and active. Using available data, characteristics, and current and future land use, the remedial options are evaluated based on the following criteria: effectiveness, implementability, cost, anticipated time of completion and compliance with applicable laws and standards.

Passive remediation relies upon the principle that the contaminants of concern will naturally degrade or attenuate over time. Such degradation and/or attenuation can be attributed in part to metabolic and co-metabolic processes occurring between indigenous microorganisms found in the affected media and the contaminants of concern. Under proper circumstances, passive remediation can be an appropriate choice. Due to the presence of elevated concentrations of petroleum hydrocarbons, BTEX, and heavy metals (lead and arsenic) beneath the Property exceeding MTCA Method A Cleanup Levels, and Property's planned redevelopment, passive (no-action) remediation is not considered, in and of itself, a viable option.

Active remediation includes a wide range of physical, mechanical and chemical-injection processes that extract, solidify, or break down the contaminant(s) of concern. Remedial action technologies and processes exist that can be utilized to mitigate petroleum hydrocarbon-affected soil and groundwater. Such technologies and processes are broadly categorized as either *in-situ* or *ex-situ* based upon whether they are applied below or above ground. Choice of a specific remedial action alternative is based in part upon economics, present and future land use, types of media affected (soil, sediment, air, groundwater), geologic and hydrogeologic site characteristics, nature and distribution of the contaminants of concern, safety, convenience, time frames, and specific remediation goals to be attained. Various in-situ and ex-situ technologies evaluated for this project are discussed below.

The RAs evaluated for the Property (former residential heating oil UST and former gasoline service station) are considered *industry standard*, based on subsurface conditions, and known to be effective approaches to remediate sites. A total of three RAs are described and were evaluated for this Property and include the following:

- Alternative 1. Capping, Containment, and Groundwater Compliance Monitoring
- Alternative 2. Excavation
- Alternative 3. Air Sparge and/or Soil Vapor Extraction

3.2.1 Alternative 1 – Capping, Containment, and Groundwater Compliance Monitoring

Capping and containment involve the installation of physical barriers that limit exposure of human and terrestrial ecology receptors to the contaminated media by confining and limiting the mobility of contaminants. These barriers can be either natural or engineered.

Examples of capping and containment include concrete or asphalt pavement, installation of barrier walls, and other engineered improvements.

3.2.2 Alternative 2 - Soil Excavation and Excavation Groundwater Dewatering

Excavation is a common means of soil remediation from a source area by physically removing contaminants (i.e. digging, excavating, and off-site disposal). This approach is generally effective, straightforward, permanent, and comparatively inexpensive.

In our experience excavation is commonly used when soil contamination is relatively shallow, accessible, and groundwater quality is not significantly affected, or groundwater contamination is relatively localized within contaminated source soil areas.

If soil contamination is deeper and/or extends below the groundwater table, the remedial excavation approach will likely require special permitting, temporary shoring design and installation, the potential excavation and extra handling and re-use of clean overburden soils, and dewatering (which also involves contaminated groundwater treatment and disposal).

3.2.3 Alternative 3 - Air Sparge and/or Soil Vapor Extraction

Air sparging (AS) is an in-situ remedial technology that can reduce VOC concentrations that are either adsorbed to soil or dissolved into the groundwater. In addition, AS may enhance the degradation and attenuation of petroleum hydrocarbons (specifically in groundwater), by increasing dissolved oxygen levels within the water bearing zone.

The AS process includes injecting air into the subsurface saturated zone, enabling a phase transfer of hydrocarbons from a dissolved phase into a vapor phase. Vapor/dissolved phase partitioning is a significant factor in determining the rate at which adsorbed or dissolved VOC constituents can be transferred into the vapor phase.

Soil vapor extraction (SVE) is an in-situ remedial technology that reduces VOC concentrations by extracting and recovering the VOC-laden soil vapor from the subsurface. This is accomplished by using a series of vapor extraction wells installed throughout the contaminated areas. The SVE technology includes a wide range of options, or combination of technologies (for example, standard SVE, dual phase extraction, SVE with AS, or SVE with dedicated groundwater extraction pumps). As with AS, increasing the airflow in the subsurface using SVE can also increase the natural biodegradation of some contaminants. SVE is also an effective method to help mitigate the vapor intrusion pathway into buildings of concern.

The effectiveness of both AS and /or SVE are limited by low soil permeability, the presence of stratified soils, and the aquifer or water bearing properties (for example, type of aquifer, low hydraulic conductivity, and low specific yield capacity).

3.3 EVALUATION OF REMEDIAL ACTION ALTERNATIVES

The following section presents an evaluation of the above-described RAs and which RA, or combination of RAs, are considered best suited for the Property areas (based on available information).

3.3.1 Alternative 1 - Capping, Containment, and Groundwater Compliance Monitoring

Much of the surface area within the former gasoline service station area and the western portion of the Property has been paved since it was developed in the 1980s and will be replaced by a building and repaved as part of the planned and on-going redevelopment. The area of the former residential heating oil UST will be located within a planned rain garden, and is covered with dirt. The dirt (permeable) surface area does not, in and of itself, meet the RAOs stated above. RGI considers capping and containment an acceptable method on the northern and western portions of the Property, although not for the area of the former residential heating oil UST.

3.3.2 Alternative 2 - Excavation and Excavation Dewatering

Excavation is a common means of soil remediation from a source area by physically removing contaminants (i.e. digging, scooping and cutting). This approach is generally effective, straightforward, permanent, and comparatively inexpensive. In our experience excavation is commonly used when soil contamination is relatively shallow, accessible, and groundwater quality is not adversely affected. Based on the effectiveness and cost effectiveness of this method, excavation and excavation dewatering were the preferred method.

The Petroleum Contaminated Soils (PCS) encountered on the Site were over-excavated as part of the Remedial Action in June and July 2016. Following the excavation, periodic dewatering took place to remove the localized contaminated water. The water was pumped out using a vacuum truck and transported off Property for disposal.

3.3.3 Alternative 3 - Air Sparge / Soil Vapor Extraction

AS and/or SVE is not considered a feasible RA for Areas 1 through 4 based on the following facts:

- In addition to VOCs and related petroleum hydrocarbons, which generally respond well to this RA, the primary contaminants of concern include metals and cPAHs.

In summary, and based on Property conditions, the costs associated with the AS and/or SVE approach (such as, equipment, engineering, operation and maintenance) will be relatively high, making this alternative not cost-effective.

3.3.4 Enhanced Reductive Dechlorination on the Western Property

RGI understands that B&K's environmental consultant will remediate the cis-1,2-DCE, VC, and TCE in the groundwater in conjunction with its cleanup action.

3.4 MTCA EVALUATION OF REMEDIAL ALTERNATIVES

All the RAs presented above must comply with the MTCA threshold requirements (WAC 173-340-360(2)(a)) prior to implementation of a remedial action.

For the heating oil UST and former gasoline stations, our selected remedy was excavation and periodic excavation dewatering.

3.4.1 Threshold requirements

According to MTCA, all remedial alternatives must meet the following threshold requirements (WAC 173-340-360(2)(a)):

- Protect human health and the environment.
- Comply with cleanup standards.
- Comply with applicable state and federal laws.
- Provide for compliance monitoring.

In addition to the threshold requirements the selected remedial action should also:

- Employ permanent solutions to the maximum practicable.
- Provide a reasonable restoration timeframe.
- Consider public concerns.

Protect Human Health and the Environment

Alternatives 1, 2, and 3 are designed to protect human health and the environment to the maximum extent practical during remedial actions, and compliance monitoring.

Comply with cleanup standards

Alternatives 2 and 3 comply with all MTCA cleanup standards.

Comply with State and Federal Laws

Alternatives 2 and 3 comply with the applicable local and federal standards.

Provide for compliance monitoring

Alternatives 2 and 3 include compliance monitoring to meet requirements that comply with MTCA cleanup standards.

3.4.2 Requirement for a Reasonable Restoration Timeframe

Restoration timeframes for remedial actions consider the following:

- Toxicity of the constituents.
- The current exposure pathways potentially affecting human health and/or the environment.
- Practicability and costing of a shorter restoration timeframe.
- Ability to control and monitor the migration of the contaminants.
- Effectiveness of institutional controls/capping.
- Current use of the surrounding areas.

Alternatives 1, 2, and 3 meet the requirements for a reasonable restoration timeframe.

3.4.3 Permanent Solutions to the Maximum Extent Practicable

Alternatives 2 and 3 are considered permanent because they all considered effective in reducing the COCs below cleanup levels with the intent of obtaining a No Further Action (NFA) determination by Ecology.

3.4.4 Requirement for Consideration of Public Concerns

MTCA states in the regulation (WAC 173-340-600) that public concerns must be considered as part of the RI/FS process. The formal public review and comment period is 30 days. All comments will be considered and addressed as part of the final RI/FS and or Corrective Action Plan (CAP).

3.5 ENVIRONMENTAL BENEFIT COMPARISON

MTCA provides guidance to environmental benefit as specified in WAC 173-340-360. A disproportionate cost analysis (DCA) is not required if Sea Mar and/or Ecology agree on an approved remedial action. Therefore, a DCA has not been performed at this time.

3.6 FEASIBILITY STUDY CONCLUSIONS

Based on the results of this FS, RGI's conclusions and any recommendations regarding the preferred RA, or combination of RAs, for Areas 1 through 5 are provided below.

3.6.1 Former Heating Oil Area (Area 1)

RGI's previous evaluation of the RA for Area 1 selected Excavation and Periodic excavation dewatering as the preferred remedial alternative for Area 1.

As discussed in the RI, the Remedial Excavation of this area was completed in July 2016.

3.6.2 Western Property Boundary (Area 2)

RGI's previous evaluation of the RA for Area 2 selected Excavation and Periodic excavation dewatering as the preferred remedial alternative for Area 2.

3.6.3 Former Gasoline Service Stations and UST Fuel System Area (Areas 3 and 4)

RGI's previous evaluation of the RA for Areas 3 and 4 selected Excavation and Periodic excavation dewatering as the preferred remedial alternative for Areas 3 and 4.

3.6.4 Chlorinated Solvent Plume Area (Area 5)

The preferred RA for the west-adjointing property is to be determined and implemented by B&K (the Potential Liable Party) and their consultant team.

4 REMEDIAL ACTION

The scope of services performed for this RA consisted of the following tasks:

- Decommissioned groundwater monitoring wells in the proposed development area as requested by the General Contractor.
- Coordinated disposal of all investigation derived waste (IDW) generated from previous subsurface investigations on the Property.
- Directed the remedial excavation of four Areas (Areas 1 through 4) where soil contained concentrations of the COCs exceeding applicable cleanup levels.
- Collected and analyzed performance soil samples from the limits of remedial and redevelopment excavations to demonstrate that soil concentrations were below the target soil cleanup levels for a given area.
- Compared soil analytical results to cleanup levels that comply with the MTCA regulation.
- Compared analytical results from groundwater samples to groundwater cleanup levels that comply with the MTCA regulation.
- Prepared this RA Report presenting our observations, findings, conclusions, and recommendations.

4.1 CONTAMINATED SOIL DISPOSAL

4.1.1 Ecology Guidelines for reuse of petroleum-contaminated soil

Ecology has categorized the end uses of petroleum-contaminated soil (PCS) into four separate categories (in regards to petroleum-contaminated sites undergoing cleanup and/or redevelopment). These soil categories are described in the *Guidance for Remediation of Petroleum Contaminated Soils*, dated September 2011 by Ecology. The four soil categories of PCS as defined by Ecology are as follows:

- **Category 1:** Soils with no detectable/quantifiable concentrations of petroleum hydrocarbons or constituents and not suspected of being contaminated with any other hazardous substances.
- **Category 2:** Soils with residual levels of petroleum hydrocarbons that could have adverse impacts on the environment in some circumstances.
- **Category 3:** Soils with moderate levels of residual petroleum contamination that could have adverse impacts on the environment unless re-used in carefully controlled situations.
- **Category 4:** Soils with high levels of petroleum contamination that should not be re-used except in very limited circumstances.

Category 2, 3, and 4 PCS were removed from the Property during the RA.

4.2 METHODOLOGY

4.2.1 Soil Remediation

Soil containing concentrations of COCs exceeding applicable soil screening levels were encountered in four locations on the Property (Areas 1 through 4). These soils required remediation in order to comply with the MTCA regulation. These soils required off-Property disposal at a disposal facility due to the fact that they could not be exported to facilities where only Class I or “clean” soils were permitted.

The selected remedial alternative for remediating contaminated soil on the Property was direct excavation of contaminated soil with off-Property disposal. This approach was selected due to the fact that it was very effective, permanent, had a very short restoration time-frame and resulted in limited interference with redevelopment activities. This method was also cost-effective and assured compliance with the MTCA regulation throughout the Property.

The RA also included necessary performance soil sampling to demonstrate compliance with the MTCA regulation. Performance sampling consisted of collecting soil samples from the limits of each remedial excavation and submitting those soil samples to a mobile or fixed-base analytical laboratory for the analyses deemed appropriate for a given area. In general, sidewall samples were collected at intervals that did not exceed 15 linear feet between samples and at least 1 bottom sample was collected for every 200 square feet of bottom of excavation.

Performance sampling and field screening were used to guide remedial excavation in Areas 1 through 4. Soil samples were collected either directly from the backhoe bucket or directly from the excavation and placed in laboratory approved sampled containers. Field screening consisted of visual and olfactory observations, photoionization detector (PID) readings, and/or sheen testing. Once field screening indicated that all contaminated soils had been removed, soil samples were collected and analyzed. These data guided any additional remedial excavation (if necessary) until analytical data demonstrated that soil concentrations were below the targeted cleanup levels throughout the lateral and vertical limits of each remedial excavation.

4.2.2 Groundwater

Groundwater was encountered at depths between approximately one to 10 feet bgs on the Property during the RA and in previous subsurface investigations. The inferred groundwater flow direction ranges from north-northwest to northerly beneath the Property. During the RA, groundwater containing concentrations of TCE, VC, and cis-1,2-DCE that exceeded the applicable groundwater screening levels was encountered on the western portion of the Property.

Based on the depth of groundwater contamination, which was between six and 10 feet bgs, and the relatively high detections concentrations of TCE as well as the elevated concentrations of VC and cis-1,2-DCE observed, RGI understands that B&K's environmental consultant will evaluate and implement their preferred RA for the chlorinated solvent plume located on the B&K property and the Sea Mar Property.

4.2.3 Underground Storage Tank Assessment and Decommissioning

One UST was removed during the course of the RA. Marine Vacuum Services (MarVac) was contracted to pump and rinse the UST. IO Environmental and Infrastructure (IOEI) was contracted by RGI to remove and dispose of the UST, as well as to manage the handling and remediation of any potential soil contamination.

RGI documented the condition and size of the tank and collect representative soil samples for field screening from the UST excavation after the UST was decommissioned and removed from the excavation. Field screening results (olfactory and visual indications as well as PID data) obtained from soil samples were used to determine the extent of the remedial excavation.

4.2.4 Standard Sampling Protocols & Field Screening

During remedial excavation work, soil conditions encountered were described using the Unified Soil Classification System (USCS). All soil samples collected were field screened using visual and olfactory observations and screened for the presence of VOCs and/or petroleum hydrocarbons using a PID and/or sheen testing. All soil samples collected for potential analyses of VOCs at a fixed-base laboratory were collected using standard EPA Method 5035A sampling methodology.

Groundwater samples were collected from groundwater monitoring wells using dedicated polyethylene tubing and a submersible or peristaltic pump using standard low-flow sampling techniques. Groundwater was purged and monitored for water quality parameters (temperature, pH, and conductivity) to ensure that groundwater had stabilized prior to sampling.

All soil and groundwater samples were collected in accordance with RGI's standard operating and decontamination procedures. Samples were placed in preconditioned, sterilized containers provided by an Ecology-accredited analytical laboratory.

4.3 LABORATORY ANALYSIS

Soil and groundwater samples collected during remedial excavations were submitted to the fixed-base Friedman & Bruya, Inc. laboratory for one or more of the following analyses:

- PCE and associated breakdown compounds using EPA Methods 8260C or 8021B
- VOCs using EPA Method 8260C
- BTEX using EPA Method 8021B
- Diesel and oil-range TPH using Ecology Method NWTPH-Dx with silica gel cleanup (to remove naturally occurring biogenic material) and without silica gel cleanup
- Gasoline-range TPH using Ecology Method NWTPH-Gx
- PAHs using EPA Test Method 8270D Select Ion Monitoring (SIM)
- Total MTCA 5 metals (soil) using EPA Method 200.8 (arsenic [As], cadmium [Cd], chromium [Cr], and lead [Pb]) and mercury [Hg] using EPA Method 1631E

Soil sample analytical results for soil samples collected during the RA are summarized in Table 2 and illustrated on Figures 6 through 10. Groundwater analytical results for all groundwater samples collected during the RA and in previous investigations are summarized in Table 3 and illustrated on Figure 3. Copies of final analytical laboratory reports are included in Appendix B.

4.4 UST ASSESSMENT AND DECOMMISSIONING

One UST was encountered and decommissioned during the RA. The general methodology for UST decommissioning and assessment was provided in Section 4.6.3. The locations of the UST and soil samples are illustrated on Figure 6 and analytical data is summarized in Table 1.

4.4.1 Underground Storage Tank

On June 14, 2016, RGI oversaw the excavation of the approximately 300-gallon heating oil UST on the west side of the former residence (identified as Area 1 on Figure 2). The UST was heavily rusted and several holes were observed in the UST. The UST was removed from the excavation and placed on plastic. Soil removed from the excavation was field screened and if indications of heating oil contamination were observed, the soils were directly loaded into a truck for disposal.

Field screening indicated that soil was contaminated in the excavation beneath the UST. The remedial excavation of Area 1 is discussed in Section 4.11.2.3

4.4.2 Groundwater Analytical Data

One groundwater grab sample was submitted for analyses from the Area 3 excavation (3H2O-1).

Diesel-range TPH (analyzed without silica gel cleanup) was detected in the grab sample at a concentration of 190 µg/L, which is below the groundwater screening level for diesel-range TPH of 500

µg/L. This result was flagged by the laboratory indicating that “the sample chromatographic pattern does not resemble the fuel standard used for quantitation.” RGI contacted the laboratory and the chemist indicated that the flag may be due to the presence of naturally occurring organic material in the sample, which could interfere with the TPH result.

No other contaminants of concern were detected in the groundwater grab sample from the Area 3 excavation.

4.5 SOIL REMEDIAL ACTION

The following section provides detailed descriptions of activities completed prior to and during the RA.

4.5.1 Pre-Remedial Action Activities

Prior to the start of remedial excavation of contaminated soils, several activities were performed, which are discussed below.

4.5.1.1 Permitting

The Property was under redevelopment at the time of the RA. All of the necessary building and grading permits associated with redevelopment were acquired by the general contractor prior to beginning redevelopment of the Property. The activities performed during the RA and discussed herein were consistent with all permitting requirements.

4.5.1.2 Soil Characterization Samples

Soil analytical data from these soil samples along with data from previous subsurface investigations were used to plan remedial excavations and determine which COCs were present in a given area.

4.5.1.3 Soil Profiling

Based on the analytical data obtained from characterization samples and data obtained from previous investigations, RGI coordinated disposal of contaminated soil with IOEI.

The PCS was transported to Waste Management in Seattle, Washington. PCS was classified as Category 2, 3, or 4 soils depending on the concentration (discussed in Section 4.1.1).

4.5.1.4 Investigation Derived Waste

Several 55-gallon drums of soil and groundwater investigation derived waste (IDW) were generated during previous subsurface investigations and subsurface investigations conducted during the RA on the Property. The drums were left on the Property pending their proper disposal.

4.5.2 Soil Remediation

The general methodology for soil remediation was previously described in Section 4.6.1. Specific details pertaining to each excavation area are described below.

The final limits of each excavation area along with locations of performance and characterization soil samples are depicted on Figures 6 through 10. Analytical results for soil samples collected from the remedial excavations are summarized in Table 2. Copies of final laboratory reports are included in Appendix B.

4.5.2.1 Former Single-Family Residence (Area 1) Excavation

Area 1 was located on the southern portion of the Property and related to a petroleum release from the former residential heating oil UST. Soil containing concentrations of diesel-range TPH above the applicable soil cleanup level was identified in previous subsurface investigations.

The excavation of Area 1 commenced on June 14, 2016 in the approximate location of the former heating oil UST. Soil samples were collected from the excavation and field screened for indications of contamination. The excavation of Area 1 was limited by the presence of the former residence and was excavated up to the edge of the former residence on June 15, 2016. The former residence was removed in early July 2016, and the remedial excavation recommenced on July 13, 2016. Field screening and laboratory analytical results indicated the contamination had migrated beneath the former residence, requiring additional remedial excavation. The remedial excavation was completed on July 13, 2016.

The final depth of excavation ranged from approximately 5 feet bgs on the western end of the excavation to 11.5 feet bgs on the northern end of the excavation. A total of 32 performance soil samples were submitted to the fixed-base laboratory for the analysis of diesel-range TPH. Diesel concentrations detected during excavation ranged from 300 mg/kg to 7,900 mg/kg.

A total of 30 cleanup confirmation samples were collected from the terminal limits of the Area 1 excavation. Analytical data from these samples indicated that no COCs were present at concentrations above laboratory detection limits at the final limits of the Area 1 excavation. The soil remedial excavation effort was successful in bringing all soils in Area 1 within compliance with the MTCA Cleanup Regulations.

An estimated 250 cubic yards (cy) (350 tons) of impacted soil were removed from Area 1 and transferred off-Property to the Waste Management facility in Seattle, Washington. The location of the Area 1 remedial excavation and associated performance soil samples are illustrated on Figure 6 and analytical results for all soil samples pertaining to Area 1 are summarized in Table 2.

4.5.2.2 Area 2 Remedial Excavation

Remedial excavation Area 2 was situated in the location of two previous test probes (P1 and SP-04) which both encountered diesel- and oil-range TPH along the western portion of the Property.

The excavation of Area 2 commenced on June 9, 2016. Soil samples were collected from the excavation and field screened for indications of contamination. A previously unknown sewer line at a depth of approximately 6 feet bgs was encountered on the western side of the excavation. Hand tools were used to uncover the sewer pipe. Confirmation samples adjacent to the sewer pipe indicated that no contamination was present adjacent to the pipe. The remedial excavation was completed on June 9, 2016.

The final depth of excavation was approximately 9.5 feet bgs. A total of 21 cleanup confirmation samples were collected from the terminal limits of the Area 2 excavation and submitted to the fixed base laboratory for the analysis of diesel- and oil-range TPH. Analytical data from these samples indicated that no COCs were present at concentrations above laboratory detection limits at the final limits of the Area 2 excavation. The soil remedial excavation effort was successful in bringing all soils in Area 2 within compliance with the MTCA Cleanup Regulations.

An estimated 90 cubic yards (125 tons) of diesel-range TPH-impacted soil were removed from Area 2 and transferred off-Property to the Waste Management facility in Seattle, Washington. The location of the Area 2 remedial excavation and associated performance soil samples are illustrated on Figure 7 and analytical results for all soil samples pertaining to Area 2 are summarized in Table 2.

4.5.2.3 Area 3 Excavation

Area 3 was situated on the northern portion of the Property, in the location of the former gasoline station service garage. Soil containing concentrations of gasoline-, diesel-, and oil-range TPH, lead, cadmium, and cPAHs above the applicable soil screening level were identified in previous subsurface investigations prior to the RA.

The excavation of Area 3 commenced on June 7, 2016. Soil samples were collected from the excavation and field screened for indications of contamination. Excavation activities in Area 3 uncovered a sewer line through the middle of the excavation area as well as a known, active buried water utility to the west side of the excavation. The remedial excavation was completed on July 13, 2016.

In 2008, a soil sample collected from SP-01 at two feet bgs had a high concentration of lead (7,090 mg/kg). The sample was not analyzed using the Toxicity Characteristics Leachate Procedure (TCLP) for characterization as dangerous waste. During RGI's 2016 RI, we attempted to replicate that soil sample during the installation of a monitoring well (MW9). Monitoring well MW9 was installed in order to collect a shallow soil sample in the approximate location as B9 as well as to test the groundwater for any lead impacts in that area. A soil samples collected form MW9 from a depth of two feet bgs contained a total lead concentration of 1,490 mg/kg and was submitted for analysis using the TCLP method. Based on the analytical results, the sample was below the dangerous waste threshold. We believe the detection of lead at 7,090 mg/kg was an isolated occurrence.

Buried garbage, including used oil cans, wood debris, wire, brick, and tires, was encountered in the western portion of the excavation. One sample collected from the western sidewall of the excavation at a depth of 6 feet bgs contained gasoline-range TPH at a concentration of 530 mg/kg, which exceeds the applicable cleanup level. Due to the presence of a high pressure water line, the contractor did not feel comfortable digging within 3 feet of the utilities and therefore a limited volume of contaminated soil was left in place. In order to define the extent of the PCS, a test pit to a depth of 6 feet was completed approximately three feet to the west side of the water utility, due west of the contamination. A soil sample collected at a depth of 6 feet contained no detectable concentrations of contaminants of concern, indicating the contamination did not extend west. Based on these findings, RGI considered the remaining contamination a de minimis condition.

The final depth of excavation ranged from approximately 4 feet bgs on the southern end of the excavation to 7 feet bgs on the northern end of the excavation. A total of 21 cleanup confirmation samples were submitted to the fixed-base laboratory for the analysis of gasoline-, diesel-, and oil-range TPH, BTEX, and MTCA 5 metals.

A total of 21 cleanup confirmation samples were collected from the terminal limits of the Area 3 excavation. Analytical data from these samples indicated that no COCs were present at concentrations above applicable cleanup levels at the final limits of the Area 3 excavation except for the one sample previously discussed, which was determined to be limited in extent.

An estimated 206 cubic yards (288 tons) of impacted soil were removed from Area 3 and transferred off-Property to the Waste Management facility in Seattle, Washington. The location of the Area 3 remedial excavation and associated performance soil samples are illustrated on Figure 8 and analytical results for all soil samples pertaining to Area 3 are summarized in Table 2.

4.5.2.4 Area 4 Excavation

Area 4 was situated on the northeastern portion of the Property, in the location of the former pump islands and USTs associated with the former gasoline service stations. Soil containing concentrations of gasoline-, diesel-, and oil-range TPH above the applicable cleanup level was identified in previous subsurface investigations prior to the RA. Benzene, toluene, ethylbenzene, and xylene were also detected, but not at concentrations above the applicable cleanup levels.

The excavation of Area 4 commenced on June 7, 2016. Soil samples were collected from the excavation and field screened for indications of contamination. A large storm sewer line in the northeastern portion,

parallel to the Property line, was encountered in the excavation. The eastern extent of the Area 4 excavation was limited to within the Property boundaries. The remedial excavation was completed on June 20, 2016.

The final depth of excavation ranged from approximately 6 feet bgs on the western end of the excavation to 16 feet bgs in the central portion of the excavation. A total of 62 performance soil samples were submitted to the fixed-base laboratory for the analysis of gasoline-, diesel-, oil-range TPH, and BTEX. Gasoline concentrations detected during excavation ranged from 2.6 mg/kg to 2,300 mg/kg. Diesel concentrations detected during excavation ranged from 63 mg/kg to 1,100 mg/kg. Oil concentrations detected during excavation ranged from 340 mg/kg to 880 mg/kg. The benzene concentration detected during excavation was 0.5 mg/kg. Toluene concentrations detected during excavation ranged from 0.27 mg/kg to 3.6 mg/kg. Ethylbenzene concentrations detected during excavation ranged from 0.037 mg/kg to 20 mg/kg. Xylene concentrations detected during excavation ranged from 0.15 mg/kg to 34 mg/kg.

A total of 55 cleanup confirmation samples were collected from the terminal limits of the Area 4 excavation. Analytical data from these samples indicated that no COCs were present at concentrations above laboratory detection limits at the final limits of the Area 4 excavation. Gasoline and benzene remain at concentrations above the applicable cleanup levels at the location of MW11 (installed along the Property's west property line). Continued remedial excavation beyond the western Property line was not feasible. However, sidewall samples collected within 5 feet of MW11 on either side contain non-detectable concentrations of gasoline or BTEX. This remaining contamination appears to be an isolated occurrence and is considered de minimis.

A total of approximately 1,040 tons of impacted soil were removed from Area 4 and transferred off-Property to the Waste Management facility in Seattle, Washington. The location of the Area 4 remedial excavation and associated performance soil samples are illustrated on Figure 9 and analytical results for all soil samples pertaining to Area 4 are summarized in Table 2.

4.5.2.5 Area TP Remedial Excavation

Remedial excavation Area TP was situated between Area 3 and Area 4, to the east of the sanitary sewer line encountered in the Area 3 excavation. Test Pit 2 (TP2) was excavated to a depth of 6 feet bgs in this area to evaluate the possible migration of diesel and oil contamination under the sanitary sewer line from Area 3.

The excavation of Area TP commenced on July 13, 2016 between Area 3 and Area 4. Soil samples were collected from the excavation and field screened for indications of contamination. The remedial excavation was completed on July 13, 2016.

The final depth of excavation was approximately 8 feet bgs. A total of 12 final cleanup confirmation samples were collected from the terminal limits of the excavation and submitted to the fixed base laboratory for the analysis of gasoline-, diesel-, and oil-range TPH, and BTEX. Analytical data from these samples indicated that no COCs were present at concentrations above laboratory detection limits at the final limits of the Area TP excavation. The soil remedial excavation effort was successful in bringing all soils in Area TP within compliance with the MTCA Cleanup Regulations.

An estimated 170 cubic yards (239 tons) of diesel-range TPH-impacted soil were removed from Area TP and transferred off-Property to the Waste Management facility in Seattle, Washington. The location of the Area TP remedial excavation and associated performance soil samples are illustrated on Figure 10 and analytical results for all soil samples pertaining to Area TP are summarized in Table 2.

4.5.3 Contaminated Soil Disposal

A total of approximately 1,515 cubic yards (2,042 tons) of contaminated soil were disposed of during the course of the RA. Documentation pertaining to soil disposal is included in Appendix D.

4.6 CONCLUSIONS

The actions documented in this RA Report support the following conclusions:

- The nature and extent of soil and groundwater contamination on the Property has been characterized. This includes the former single-family residence heating oil UST and former gasoline station, and a chlorinated solvent plume originating from the west adjoining property (Areas 1 through 5).
- In general, all soil contamination on the Property has been fully remediated to depths ranging from 4 to 16 feet bgs. The cleanup levels selected for COCs in soil were the MTCA Method A Soil Cleanup Levels for Unrestricted Land Uses (WAC 173-340-740).
- A limited amount of gasoline-range TPH remains on the Property at a depth of approximately 6 feet bgs beneath the location of Area 3 and at a depth of approximately 5 feet bgs at MW11. The contamination in these locations is isolated, and limited in extent, and no longer poses a threat to groundwater quality.
- Groundwater was encountered between approximately 1 to 10 feet bgs on the Property and the inferred groundwater flow direction ranges from the north-northwest to north. TCE, VC, and cis-1, 2-DCE were detected in groundwater at concentrations that exceeded the MTCA Method A Cleanup Levels for Ground Water on the western portion of the Property and the extent of this impacted groundwater appears confined to a relatively small area. Groundwater underlying the former gasoline service station and residential heating oil UST areas have been brought into compliance with MTCA as a result of the completed cleanup.
- A total of approximately 1,515 cubic yards (2,042 tons) of petroleum hydrocarbon contaminated soil were removed from the Property and transferred to the Waste Management facility in Seattle for disposal in accordance with applicable regulations.
- A Vapor Intrusion Assessment is recommended to address the potential for an indoor air quality concern.

Based on the findings and conclusions presented in this RA Report, Sea Mar Community Health Center and RGI respectfully request that Ecology grant a No Further Action (NFA) determination for the Property in regards to the former gasoline station and residential heating oil UST.

In regards to the remaining elevated HVOC concentrations in groundwater underlying the western portion of the Property, the contamination is being evaluated by others, under contract with the B&K property owners (the apparent source of this HVOC contamination).

The soil vapor sample collected from SV1 contained a concentration of TCE that exceeded the Ecology sub-slab soil vapor screening level. Based on this exceedance, a further vapor intrusion assessment for the Property is recommended to evaluate indoor air quality and would be submitted under separate cover.

4.7 LIMITATIONS

This report is the property of RGI, Sea Mar Community Health Center and their authorized representatives and was prepared in a manner consistent with the level of skill and care ordinarily exercised by members of the profession currently practicing in the same locality and under similar conditions. This report is intended for specific application to the Property located at 9635 Des Moines Memorial Drive South, Seattle, Washington. No other warranty, expressed or implied, is made.

The analyses and recommendations presented in this report are based upon data obtained from our review of available information at the time of preparing this report, our soil excavation on the Property, or other noted data sources. Conditional changes may occur through time by natural or human-made process on this or adjacent properties. Additional changes may occur in legislative standards, which may or may not be applicable to this report. These changes, beyond RGI's control, may render this report invalid, partially or wholly. If variations appear evident, RGI should be requested to reevaluate the recommendations in this report

If we may provide you with any additional information or clarification of this work, please contact the undersigned at (425) 415-0551.

Sincerely,

THE RILEY GROUP, INC.

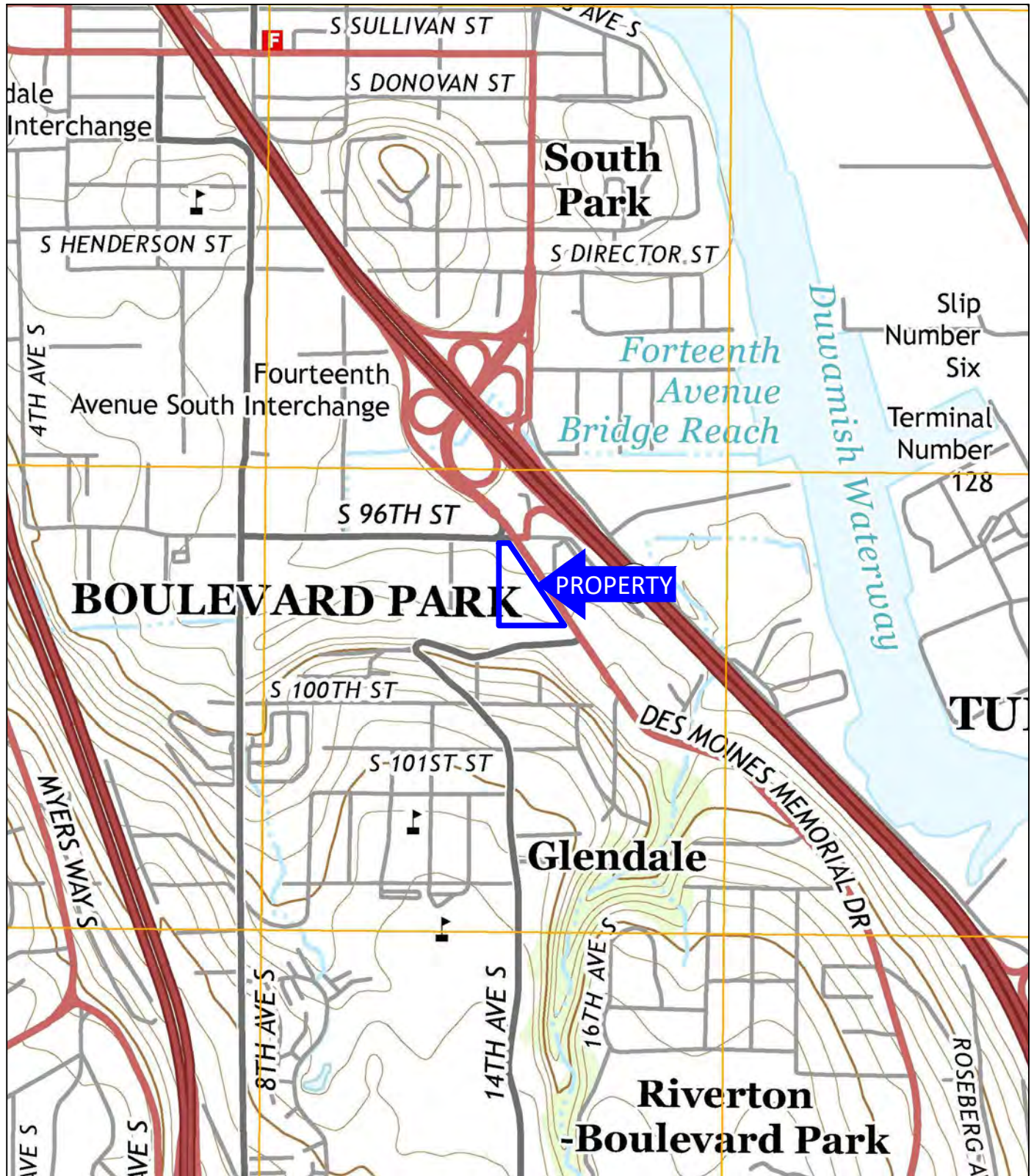


Anna J. Jordan, LG
Project Geologist



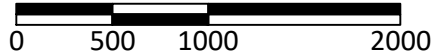
Paul D. Riley, LG, LHG
Principal

Distribution *Mr. Rogelio Riojas, Sea Mar Community Health Center (PDF and one bound copy)*
Mr. Gregory Gratz, HomeStreet Bank (PDF copy)



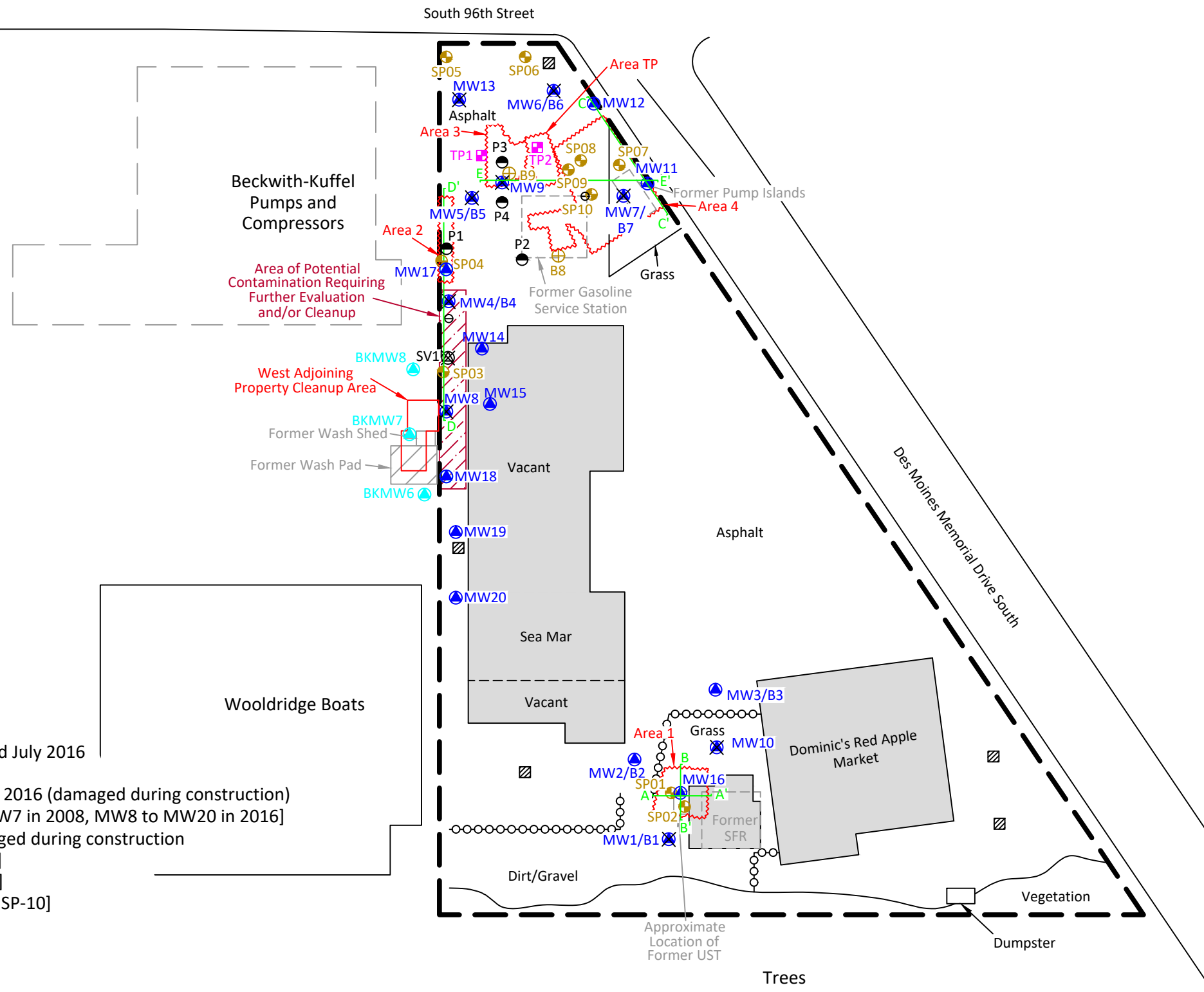
USGS, 2014, Seattle South, Washington
7.5-Minute Quadrangle

Approximate Scale: 1"=1000'



Corporate Office
17522 Bothell Way Northeast
Bothell, Washington 98011
Phone: 425.415.0551
Fax: 425.415.0311

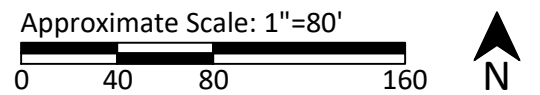
Sea Mar Community Health Center		Figure 1
RGI Project Number 2016-023A	Property Vicinity Map	Date Drawn: 03/2017
Address: 9635 Des Moines Memorial Drive South, Seattle, Washington 98108		



- = Monitoring wells by others
- = Remedial excavation limits, June and July 2016
- = Test pit location by RGI, July 2016
- = Soil vapor sample location by RGI in 2016 (damaged during construction)
- = Monitoring well by RGI [MW1 to MW7 in 2008, MW8 to MW20 in 2016]
- = Decommissioned well and/or damaged during construction
- = Test probe by RGI in 2016 [P1 to P4]
- = Test probe by RGI in 2008 [B1 to B9]
- = Test probe by RGI in 2007 [SP-01 to SP-10]
- = Boring patch
- = Stormwater catch basin
- = Retaining wall
- = Site boundary

Note: MW5, MW6, MW7, and MW9 were decommissioned on 06/08/2016. Other wells were damaged during construction.

Note: West-adjointing property excavation, wash shed, and wash pad drawn from site plans by Shannon & Wilson, October 2014.



	Corporate Office		Sea Mar Community Health Center		Figure 2	
	17522 Bothell Way Northeast		RGI Project Number	Monitoring Well, Test Probe, and Remedial		Date Drawn:
	Bothell, Washington 98011		2016-023A	Excavation Plan		03/2017
Phone: 425.415.0551		Address: 9635 Des Moines Memorial Drive South, Seattle, Washington 98108				
Fax: 425.415.0311						

P3									
Depth	DSL	Oil	Total MTCA 5 Metals						
			As	Cd	Cr	Pb	Hg		
2'	ND	ND	5.29	ND	12.9	37.1	ND		

MW13		
Depth	Cd	Pb
2' to 3'	ND	147
4'	ND	41.0

MW12					
Depth	Gas	BTEX	DSL	Oil	
	5.5'	ND	ND	ND	ND
	10'	ND	ND	ND	ND

B9 (Over-Excavated)											
Depth	Gas	BTEX	DSL	Oil	VOCs	cPAHs	Total MTCA 5 Metals				
							As	Cd	Cr	Pb	Hg
2'	----	----	16,000	55,000	----	0.435	17.6	18.9	28.9	7,090	0.49
8'	3	T=0.04 X=0.08	73x	360	ND	----	----	----	----	----	----

MW9 (Over-Excavated)									
Depth	Gas	DSL	Oil	Total MTCA 5 Metals					
				As	Cd	Cr	Pb	Hg	
1' to 2' (composite)	54	4,900x	14,000	6.58	4.75	16.8	1,490	ND	
4'	----	170x	630	5.96	ND	13.9	70.3	ND	

P4						
Depth	DSL	Oil	Total MTCA 5 Metals			
			As	Cd	Cr	Hg
2.5'	ND	ND	5.95	ND	13.6	40.5

P1 (Over-Excavated)					
Depth	Gas	DSL	Oil	HVOCs	
				B	T
4.5'	ND	880	2,900	ND	ND

SP04 (Over-Excavated)					
Depth	Gas	BTEX	DSL	Oil	
				B	T
9.5'	ND	ND	900	3,900	

B4			
Depth	BTEX	VOCs	
4'	ND	ND	ND

MW14						
Depth	Gas	BTEX	DSL	Oil	HVOCs	
	5'	ND	ND	ND	ND	ND
	10'	ND	ND	ND	ND	ND

SP03				
Depth	Gas	DSL	Oil	
			B	T
8'	ND	ND	ND	ND

MW8				
Depth	DSL	Oil	HVOCs	
			B	T
5.5'	ND	ND	ND	ND

MW20				
Depth	DSL	Oil	HVOCs	
			B	T
7.5'	ND	ND	ND	ND

MW19				
Depth	DSL	Oil	HVOCs	
			B	T
7'	ND	ND	ND	ND

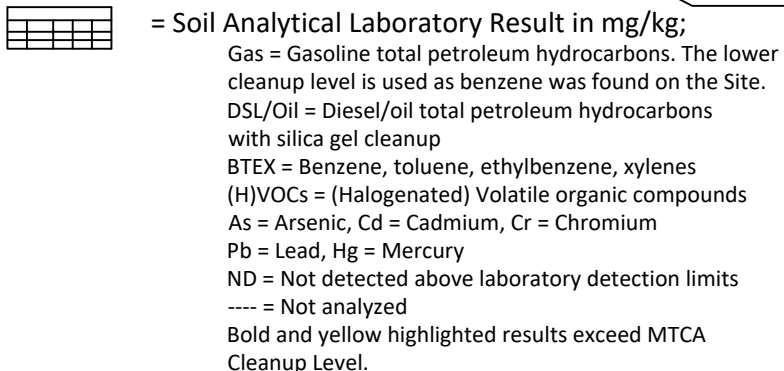
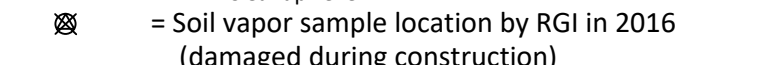
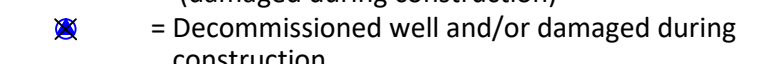
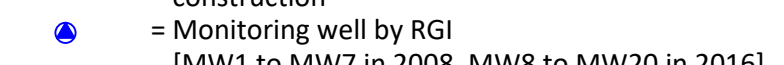
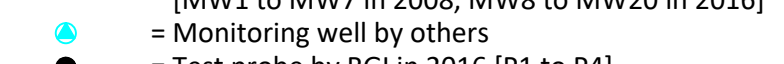
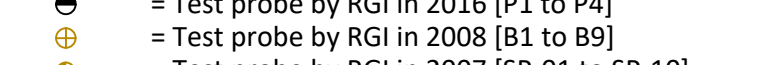
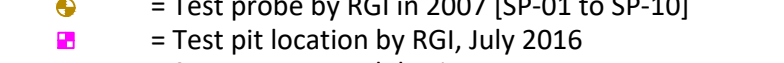
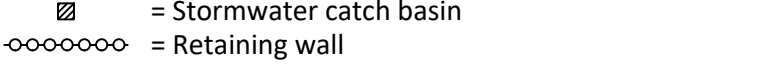
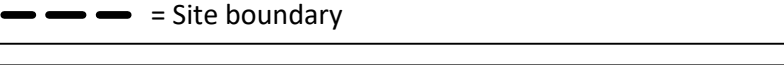


B3			
Depth	DSL	Oil	
		B	T
4'	ND	ND	ND

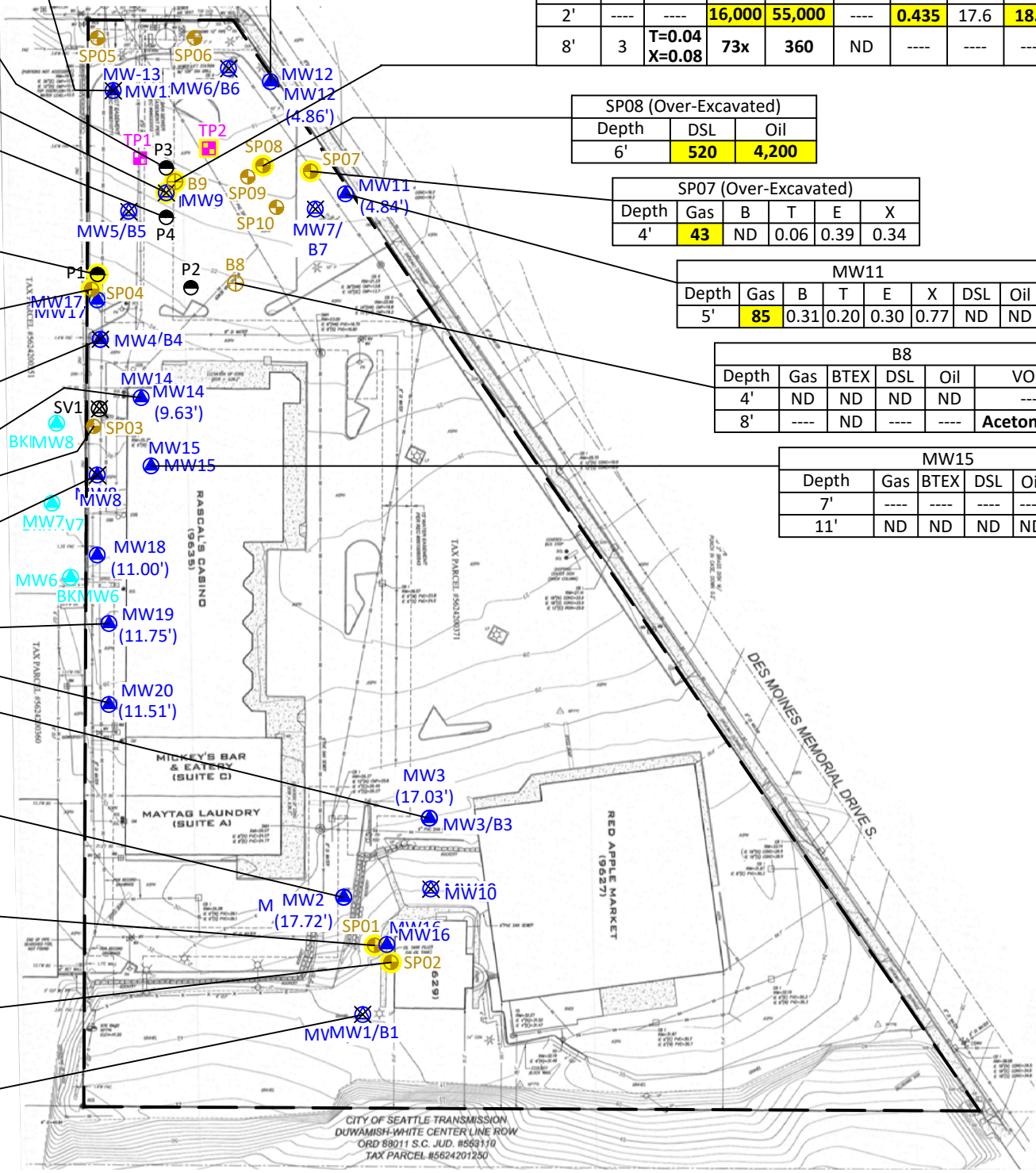
B2			
Depth	DSL	Oil	
		B	T
4'	ND	ND	ND

SP01 (Over-Excavated)			
Depth	DSL	Oil	
		B	T
8'	4,900	ND	ND

SP02 (Over-Excavated)			
Depth	DSL	Oil	
		B	T
5.5'	10,000	ND	ND

B1			
Depth	DSL	Oil	
		B	T
8'	ND	ND	ND

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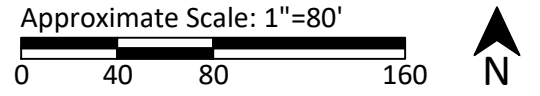
SP08 (Over-Excavated)			
Depth	DSL	Oil	
		B	T
6'	520	4,200	


SP07 (Over-Excavated)						
Depth	Gas	B	T	E	X	
4'	43	ND	0.06	0.39	0.34	

MW11							
Depth	Gas	B	T	E	X	DSL	Oil

B8						
Depth	Gas	BTEX	DSL	Oil	VOCs	
					B	T
					Acetone=2.4	
4'	ND	ND	ND	ND	ND	ND
8'	----	ND	----	----	----	----

MW15						
Depth	Gas	BTEX	DSL	Oil	HVOCs	
					B	T
					ND	
7'	----	----	----	----	ND	ND
11'	ND	ND	ND	ND	ND	ND



	Corporate Office 17522 Bothell Way Northeast Bothell, Washington 98011 Phone: 425.415.0551 Fax: 425.415.0311	Sea Mar Community Health Center		Figure 3
	RGI Project Number 2016-023A	Summary of Monitoring Well and Test Probe Soil Data from 2007-2016		Date Drawn: 03/2017
	Address: 9635 Des Moines Memorial Drive South, Seattle, Washington 98108			

Date	Gas	BTEX	DSL	Oil	HVOCs
03/07/16	----	----	----	----	ND
05/22/14	----	----	----	----	ND
02/20/14	----	----	----	----	ND
05/16/13	----	----	----	----	ND
01/11/08	ND	ND	ND*	ND*	----

Date	Gas	DSL	Oil	HVOCs	Dissolved MTCA 5 Metals					
					Cd	Cr	Pb	Hg		
03/07/16	ND	730x	ND	ND	ND	ND	ND	ND	ND	ND

Date	HVOCs	Total		Dissolved	
		Cd	Pb	Cd	Pb
6/30/16	ND	----	----	ND	ND
5/6/16	ND	ND	5.32	ND	ND

Date	Gas	B	T	E	X
10/26/07	ND	ND	ND	ND	4

Date	Gas	BTEX	DSL	Oil	As _d
03/31/17	ND	ND	ND	ND	1.28
12/15/16	ND	ND	ND	ND	----
09/12/16	ND	ND	80x	ND	----
6/30/16	ND	ND	220x	ND	----
05/06/16	ND	ND	200x	ND	----

Date	Gas	B	T	E	X	DSL*	Oil*	TCE	VC	cis-1,2-DCE	Other HVOCs
10/26/07	370	ND	ND	3	15	3,700	2,900	1.9	3.8	18	ND

Date	Gas	DSL	Oil	HVOCs
03/04/16	ND	300x	ND	ND

Date	Gas	B	T	E	X	DSL*	Oil*
10/26/07	250	ND	ND	2	10	410	ND

Date	Gas	BTEX	DSL	Oil	HVOCs
03/07/16	----	----	200x	ND	----
02/20/14	----	ND	----	----	ND
08/16/13	----	ND	----	----	ND
01/16/08	----	----	ND	ND	----
01/11/08	ND	ND	----	----	ND

Date	Gas	BTEX	DSL*	Oil*
10/26/07	ND	ND	67	ND

Date	Gas	BTEX	DSL	Oil	TCE	VC	cis-1,2-DCE	Other VOCs	Total Metals
06/30/16	----	----	ND	ND	3.9	4.9	16	ND	----
03/07/16	----	----	52x	ND	4.6	7.4	----	----	----
08/21/14	----	----	----	----	7.02	6.43	31.9	ND	----
05/22/14	----	----	----	----	5.35	7.26	16.8	ND	----
02/14/14	----	----	----	----	5.31	ND	15.3	ND	----
08/16/13	----	----	----	----	9.05	14.6	38	ND	----
01/16/08	----	----	----	----	140	9.8	63	EDC=1.0 EC=7.3 1,1-DCA=1.6	As=2.88 Cr=2.44 Pb=8.98
01/11/08	ND	ND	ND*	ND*	150ve	12	70	EDC=1.1	----

Date	Gas	BTEX	DSL	Oil	Naph	HVOCs
12/15/16	----	----	ND	ND	ND	ND
09/12/16	----	----	76x	310	----	ND
07/14/16	ND	ND	230x	ND	----	ND

Date	HVOCs
03/04/16	ND

Date	Gas	B	T	E	X	DSL*	Oil*
10/26/07	1,200	17	6	6	30	740	ND

Date	Gas	B	T	E	X	DSL	Oil	As _d
03/31/17	ND	ND	ND	ND	ND	76x	ND	ND
12/15/16	ND	ND	ND	ND	ND	140x	ND	----
09/12/16	ND	ND	ND	ND	ND	69x	ND	----
6/30/16	ND	ND	ND	ND	ND	190x	ND	----
05/06/16	ND	1.7	ND	ND	ND	200x	ND	----

Date	Gas	BTEX	DSL*	Oil*	HVOCs
10/26/07	ND	ND	76	ND	ND

Date	Gas	DSL*	Oil*
10/26/07	ND	150	ND

Date	Gas	B	T	E	X	DSL	Oil	HVOCs	Total MTCA 5 Metals					
									As	Cd	Cr	Pb	Hg	
03/07/16	2,500	11	ND	3.6	3.8	1,500x	ND	ND	----	----	----	----	----	----
02/20/14	----	----	----	----	----	----	----	ND	----	----	----	----	----	----
08/16/13	----	----	----	----	----	----	----	ND	----	----	----	----	----	----
01/25/08	4,000	43	20	34	27	----	----	----	----	----	----	----	----	----
01/16/08	5,500	61	29	46	45	----	----	----	10.8	ND	2.12	2.83	ND	----
01/11/08	----	----	----	----	----	----	----	890x*	ND*	----	----	----	----	----

Date	PCE	TCE	cis-1,2-DCE	VC	Other HVOCs
09/30/16	ND	62	8.3	ND	ND
08/22/14	ND	615	22.1	ND	EDC=4.87 1,1-DCE=1.05
05/21/14	ND	558	23.1	ND	ND
02/14/14	ND	878	32.0	ND	EDC=7.19 1,1-DCE=1.97

Date	PCE	TCE	cis-1,2-DCE	VC	Other HVOCs
09/30/16	ND	300	50	3.3	EDC=5.6
08/22/14	ND	ND	30.0	8.19	EDC=1.76
05/21/14	ND	ND	143	34.5	EDC=2.79
02/14/14	ND	1.94	297	95.8	EDC=15.7

Date	Gas	BTEX	DSL*	Oil*	HVOCs	Total MTCA 5 Metals				
01/03/08	ND	ND	ND	ND	ND	As	Cd	Cr	Pb	Hg
01/03/08	ND	ND	ND	ND	ND	6.08	ND	1.23	ND	ND

Date	PCE	TCE	cis-1,2-DCE	VC	1,1-DCE
09/30/16	ND	16	ND	ND	ND
08/22/14	ND	88.6	2.99	ND	ND
05/21/14	ND	18.9	ND	ND	ND
02/20/14	ND	85	2.17	ND	ND

Date	DSL	Oil	TCE	cis-1,2-DCE	1,1-DCA
06/30/16	100x	ND	33	7.0	1.7
03/07/16	80x	ND	20	5.5	1.9

Date	HVOCs	As _d
03/31/17	ND	1.31
12/15/16	ND	----
09/12/16	ND	----
06/30/16	ND	----
05/06/16	ND	----

Date	HVOCs
12/15/16	ND
9/12/16	ND
6/30/16	ND
5/6/16	ND

Date	DSL	Oil	As _d
03/31/17	ND	ND	ND
09/12/16	ND	ND	----
01/11/08	ND*	ND*	----

Date	Gas	BTEX	DSL	Oil	PCE	TCE	cis-1,2-DCE	1,1-DCA	As _d
03/31/17	----	----	ND	ND	ND	9.1	1.8	ND	ND
12/15/16	----	----	ND	ND	1.5	ND	ND	ND	----
09/12/16	----	----	ND	ND	2.1	ND	ND	----	----
07/14/16	ND	ND	63x	ND	130	15	1.9	----	----

Date	DSL	Oil
03/07/16	56x	ND

Date	DSL	Oil	As _d
03/31/17	140x	ND	ND
12/15/16	210x	ND	----
09/12/16	200x	ND	----
06/30/16	290x	ND	----
03/07/16	340x	ND	----
01/11/08	ND*	ND*	----

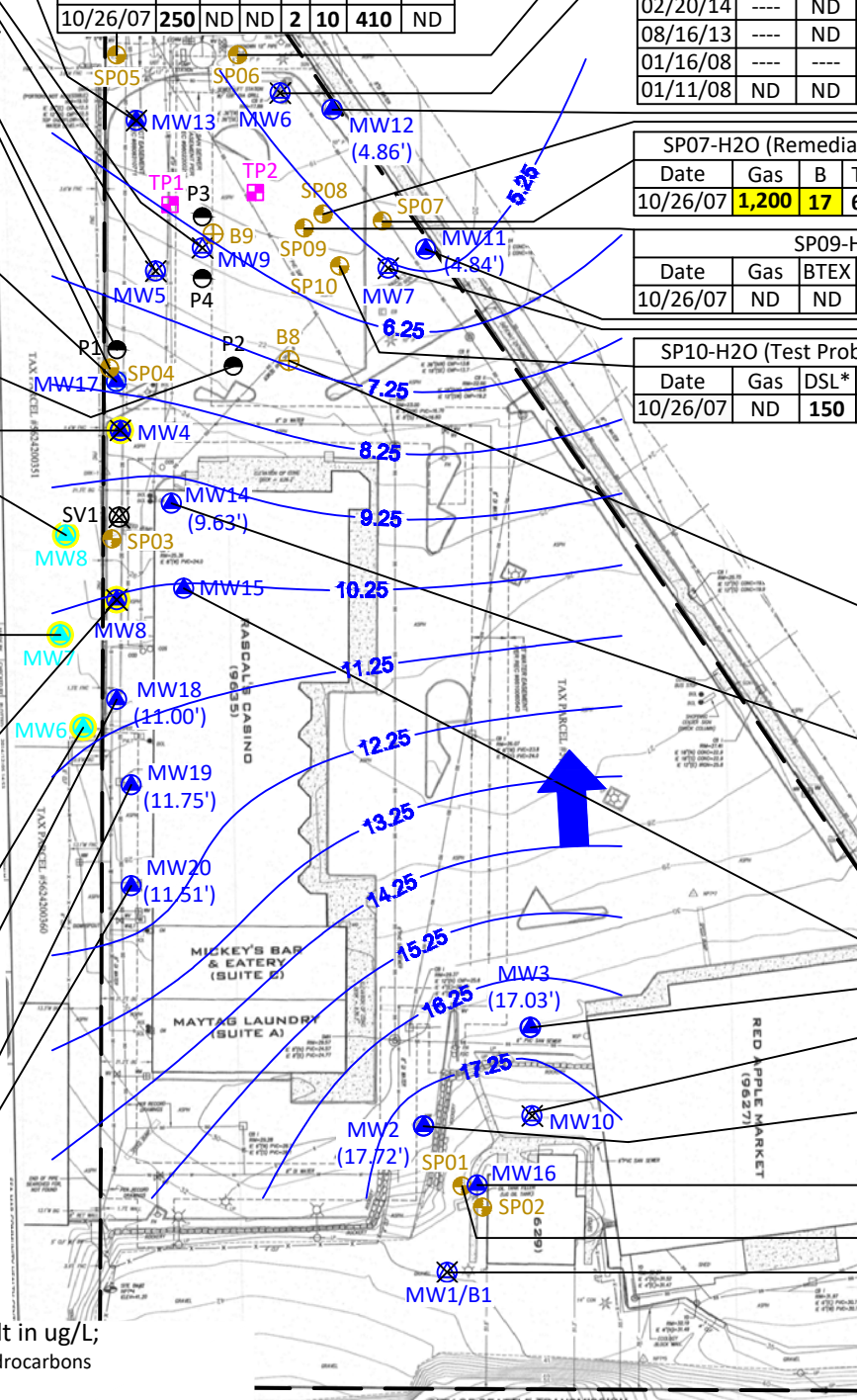
Date	DSL	Oil	TCE	cis-1,2-DCE	1,1-DCE	1,1-DCA	As _d
03/31/17	ND	ND	ND	ND	1.6	ND	ND
12/15/16	ND	ND	ND	ND	2.2	----	----
09/12/16	81x	ND	ND	ND	1.6	----	----

Date	DSL	Oil	HVOCs	As _d
03/31/17	ND	ND	ND	3.36
12/15/16	ND	ND	ND	----
09/12/16	ND	ND	ND	----

Date	DSL	Oil
9/12/16	110x	ND
07/14/16	150x	ND

Date	DSL	Oil
03/07/16	ND	ND
01/11/08	ND*	ND*

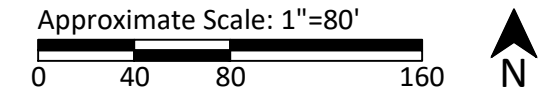
Date	DSL	Oil
10/26/07	1,500,000	37,000



- ⊗ = Decommissioned well and/or damaged during construction
- ⊗ = Soil vapor sample location by RGI in 2016 (damaged during construction)
- = Monitoring well by RGI [MW1 to MW7 in 2008, MW8 to MW20 in 2016]
- = Monitoring well by others [BKMW6 to BKMW8, off-site]
- = Test probe by RGI in 2016 [P1 to P4]
- ⊕ = Test probe by RGI in 2008 [B1 to B9]
- ⊕ = Test probe by RGI in 2007 [SP-01 to SP-10]
- ⊕ = Test pit by RGI, July 2016
- = Stormwater catch basin
- = Retaining wall
- = Site boundary

= Groundwater Analytical Laboratory Result in ug/L;
 Gas/DSL/Oil = Gasoline/diesel/oil total petroleum hydrocarbons
 BTEX = Benzene, toluene, ethylbenzene, xylenes
 (H)VOCs = (Halogenated) Volatile organic compounds
 As = Arsenic (As_d indicates dissolved arsenic), Cd = Cadmium, Cr = Chromium, Pb = Lead, Hg = Mercury
 Naph = Naphthalenes
 PCE/TCE/VC/cis-1,2-DCE = tetrachloroethene, trichloroethene, vinyl chloride, cis-1,2-dichloroethene
 EDC = 1,2-dichloroethane, 1,1-DCA = 1,1-dichloroethane, EC = Chloroethane
 ND = Not detected above laboratory detection limits
 ---- = Not analyzed
 Bold and yellow highlighted results exceed MTCA Cleanup Level.
 *With silica gel cleanup

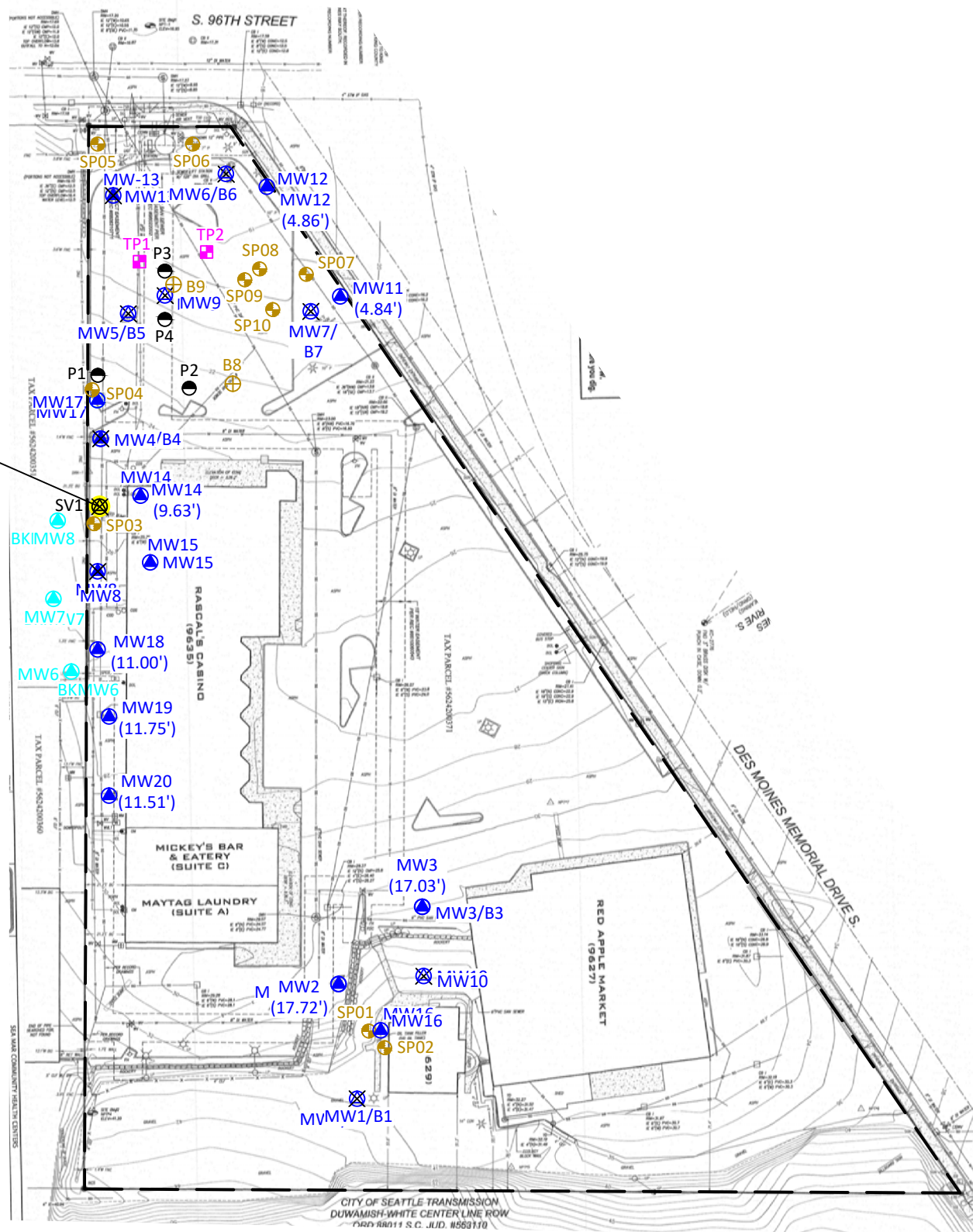
—21— = Groundwater contours generated using Surfer Software. Contours based on March 31, 2017 measurements.
→ = Groundwater flow direction based on March 31, 2017 measurements.

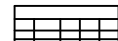













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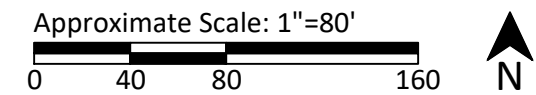
Sea Mar Community Health Center		Figure 4
RGI Project Number	Summary of	


SV1-A (Destroyed During Construction)							
Date	Depth	PCE	TCE	cis-1,2-DCE	trans-1,2-DCE	VC	1,1-DCE
03/07/16	3'	7.9	140	ND	ND	ND	ND



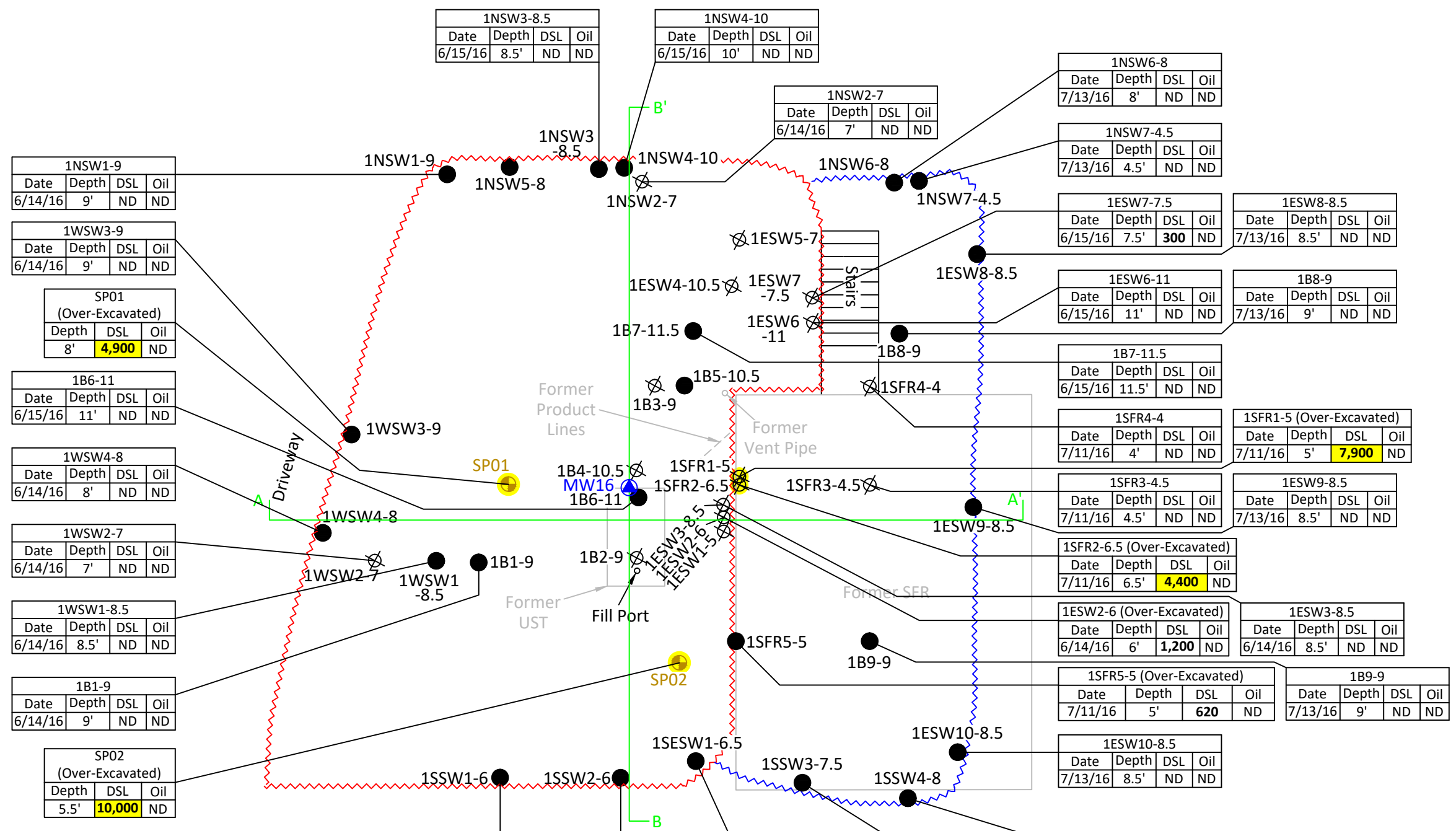
 = Soil Vapor Analytical Laboratory Result in ug/m³;
 VC = Vinyl chloride
 1,1-DCE = 1,1-dichloroethene
 trans-1,2-DCE = trans-1,2-dichloroethene
 cis-1,2-DCE = cis-1,2-dichloroethene
 TCE = trichloroethene
 PCE = tetrachloroethene
 ND = Not Detected Above Laboratory Detection Limits
 ---- = Not Analyzed
 Bold and yellow highlighted results exceed MTCA Method B Sub-Slab Soil Gas Screening Level.

-  = Monitoring well by others
-  = Soil Vapor Sample Location by RGI in 2016 (damaged during construction)
-  = Decommissioned well and/or damaged during construction
-  = Monitoring Well by RGI [MW1 to MW7 in 2008, MW8 to MW20 in 2016]
-  = Test Probe by RGI in 2016 [P1 to P4]
-  = Test Probe by RGI in 2008 [B1 to B9]
-  = Test Probe by RGI in 2007 [SP-01 to SP-10]
-  = Test pit by RGI, July 2016
-  = Stormwater Catch Basin
-  = Retaining Wall
-  = Site Boundary




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Sea Mar Community Health Center		Figure 5
RGI Project Number	Summary of Subsurface Vapor Data	Date Drawn:
2016-023A		03/2017
Address: 9635 Des Moines Memorial Drive South, Seattle, Washington 98108		



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 = Soil Analytical Laboratory Result in mg/kg;
 DSL/Oil = Diesel/oil total petroleum hydrocarbons with silica gel cleanup
 Depth = Feet below ground surface
 ND = Not detected above laboratory detection limits
 Bold and yellow highlighted results, if any, exceed MTCA Cleanup Level.
 ● = Monitoring well by RGI, 2016
 ⊕ = Test probe by RGI, 2007
 ⊗ = Overexcavated (interim sample)
 ● = Sample location by RGI, June - July 2016
 SFR = Single family residence
 ~~~~~ = Area 1 remedial excavation limits, July 2016  
 ~~~~~ = Area 1 remedial excavation limits, June 2016

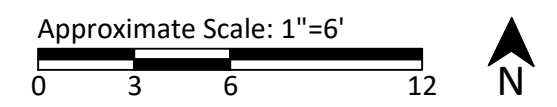
| | | | |
|---------|-------|-----|-----|
| 1SSW1-6 | | | |
| Date | Depth | DSL | Oil |
| 6/14/16 | 6' | ND | ND |

| | | | |
|---------|-------|-----|-----|
| 1SSW2-6 | | | |
| Date | Depth | DSL | Oil |
| 6/14/16 | 6' | ND | ND |

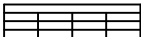






| | | | |
|------------|-------|-----|-----|
| 1SESW1-6.5 | | | |
| Date | Depth | DSL | Oil |
| 6/14/16 | 6.5' | ND | ND |

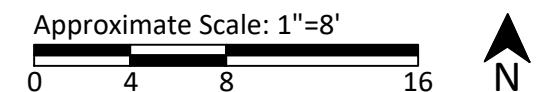
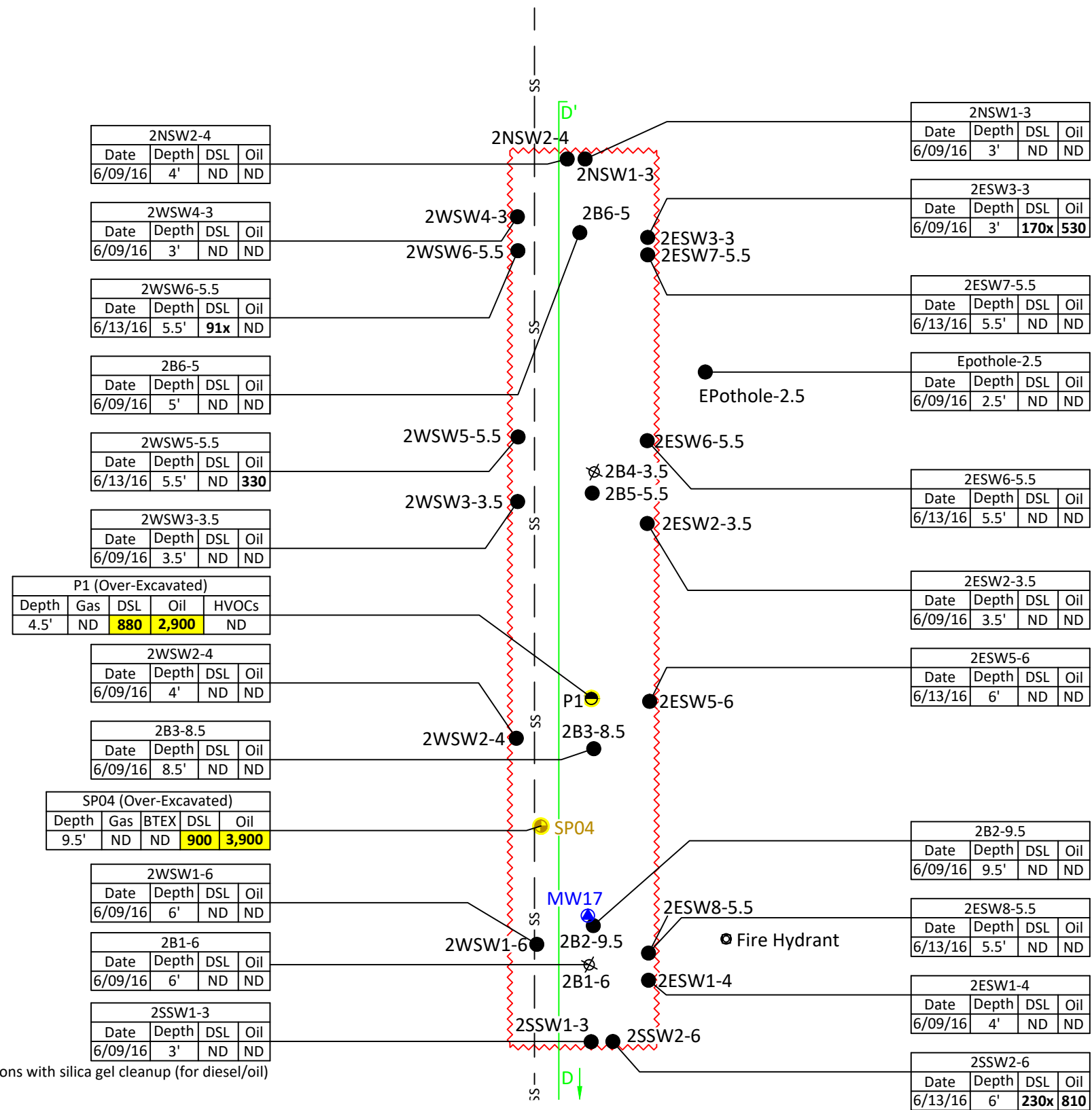
| | | | |
|-----------|-------|-----|-----|
| 1SSW3-7.5 | | | |
| Date | Depth | DSL | Oil |
| 7/13/16 | 7.5' | 950 | ND |

| | | | |
|---------|-------|-----|-----|
| 1SSW4-8 | | | |
| Date | Depth | DSL | Oil |
| 7/13/16 | 8' | ND | ND |



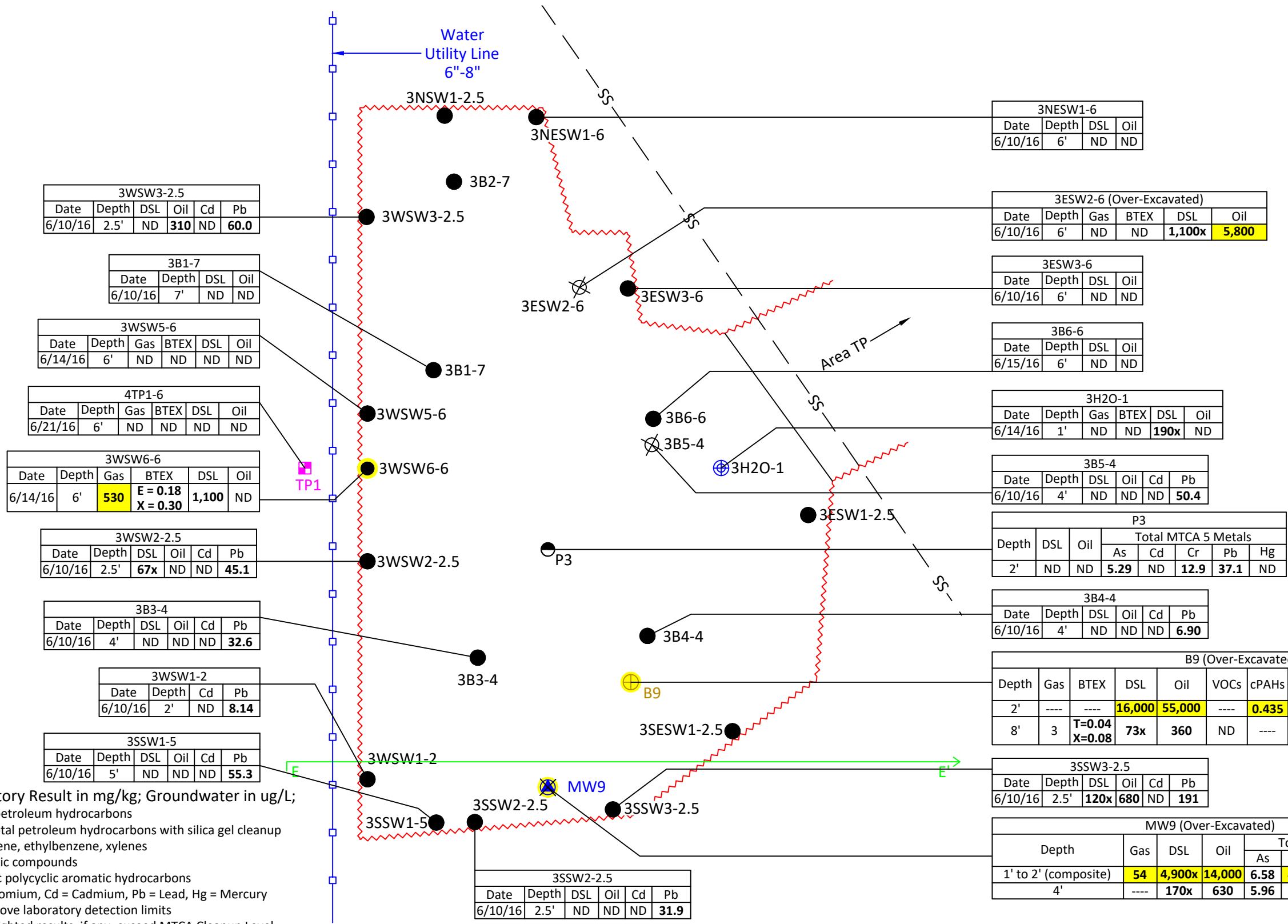
| | | | | | |
|---------------------|-----------------------------|--|---------------------------------|--|-------------|
| | Corporate Office | | Sea Mar Community Health Center | | Figure 6 |
| | 17522 Bothell Way Northeast | | RGI Project Number | Area 1 Remedial Excavation Soil Sample | Date Drawn: |
| | Bothell, Washington 98011 | | 2016-023A | Locations with Analytical Laboratory Results | 03/2017 |
| Phone: 425.415.0551 | | Address: 9635 Des Moines Memorial Drive South, Seattle, Washington 98108 | | | |
| Fax: 425.415.0311 | | | | | |

 = Soil Analytical Laboratory Result in mg/kg;
 Gas/DSL/Oil = Gas/diesel/oil total petroleum hydrocarbons with silica gel cleanup (for diesel/oil)
 BTEX = Benzene, toluene, ethylbenzene, xylenes
 HVOCs = Halogenated volatile organic compounds
 ND = Not detected above laboratory detection limits
 Bold and yellow highlighted results, if any, exceed MTCA Cleanup Level.
 = Test probe by RGI, March 2016
 = Test probe by RGI, 2007
 = Monitoring well by RGI, 2016
 = Overexcavated (interim sample)
 = Sample location by RGI, June 2016
 = Area 2 remedial excavation limits




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| | | |
|--|--|-------------|
| Sea Mar Community Health Center | | Figure 7 |
| RGI Project Number | Area 2 Remedial Excavation Soil Sample | Date Drawn: |
| 2016-023A | Locations with Analytical Laboratory Results | 03/2017 |
| Address: 9635 Des Moines Memorial Drive South, Seattle, Washington 98108 | | |



= Soil Analytical Laboratory Result in mg/kg; Groundwater in ug/L;
 Gas = Gasoline total petroleum hydrocarbons
 DSL/Oil = Diesel/oil total petroleum hydrocarbons with silica gel cleanup
 BTEX = Benzene, toluene, ethylbenzene, xylenes
 VOCs = Volatile organic compounds
 cPAHs = Carcinogenic polycyclic aromatic hydrocarbons
 As = Arsenic, Cr = Chromium, Cd = Cadmium, Pb = Lead, Hg = Mercury
 ND = Not detected above laboratory detection limits
 Bold and yellow highlighted results, if any, exceed MTCA Cleanup Level.
 = Water sample by RGI, June 2016
 = Decommissioned well and/or damaged during construction
 = Test probe by RGI, March 2016
 = Test probe by RGI, 2008
 = Test pit location by RGI, July 2016
 = Overexcavated (interim sample)
 = Sample location by RGI, June 2016
 = Area 3 remedial excavation limits

| 3NESW1-6 | | | |
|----------|-------|-----|-----|
| Date | Depth | DSL | Oil |
| 6/10/16 | 6' | ND | ND |

| 3WSW3-2.5 | | | | | |
|-----------|-------|-----|------------|----|-------------|
| Date | Depth | DSL | Oil | Cd | Pb |
| 6/10/16 | 2.5' | ND | 310 | ND | 60.0 |

| 3ESW2-6 (Over-Excavated) | | | | | |
|--------------------------|-------|-----|------|---------------|--------------|
| Date | Depth | Gas | BTEX | DSL | Oil |
| 6/10/16 | 6' | ND | ND | 1,100x | 5,800 |

| 3B1-7 | | | |
|---------|-------|-----|-----|
| Date | Depth | DSL | Oil |
| 6/10/16 | 7' | ND | ND |

| 3ESW3-6 | | | |
|---------|-------|-----|-----|
| Date | Depth | DSL | Oil |
| 6/10/16 | 6' | ND | ND |

| 3WSW5-6 | | | | | |
|---------|-------|-----|------|-----|-----|
| Date | Depth | Gas | BTEX | DSL | Oil |
| 6/14/16 | 6' | ND | ND | ND | ND |

| 3B6-6 | | | |
|---------|-------|-----|-----|
| Date | Depth | DSL | Oil |
| 6/15/16 | 6' | ND | ND |

| 4TP1-6 | | | | | |
|---------|-------|-----|------|-----|-----|
| Date | Depth | Gas | BTEX | DSL | Oil |
| 6/21/16 | 6' | ND | ND | ND | ND |

| 3H2O-1 | | | | | |
|---------|-------|-----|------|-------------|-----|
| Date | Depth | Gas | BTEX | DSL | Oil |
| 6/14/16 | 1' | ND | ND | 190x | ND |

| 3WSW6-6 | | | | | |
|---------|-------|------------|------------------------------------|--------------|-----|
| Date | Depth | Gas | BTEX | DSL | Oil |
| 6/14/16 | 6' | 530 | E = 0.18
X = 0.30 | 1,100 | ND |

| 3B5-4 | | | | | |
|---------|-------|-----|-----|----|-------------|
| Date | Depth | DSL | Oil | Cd | Pb |
| 6/10/16 | 4' | ND | ND | ND | 50.4 |

| 3WSW2-2.5 | | | | | |
|-----------|-------|------------|-----|----|-------------|
| Date | Depth | DSL | Oil | Cd | Pb |
| 6/10/16 | 2.5' | 67x | ND | ND | 45.1 |

| P3 | | Total MTCA 5 Metals | | | | | |
|-------|-----|---------------------|-------------|----|-------------|-------------|----|
| Depth | DSL | Oil | As | Cd | Cr | Pb | Hg |
| 2' | ND | ND | 5.29 | ND | 12.9 | 37.1 | ND |

| 3B3-4 | | | | | |
|---------|-------|-----|-----|----|-------------|
| Date | Depth | DSL | Oil | Cd | Pb |
| 6/10/16 | 4' | ND | ND | ND | 32.6 |

| 3B4-4 | | | | | |
|---------|-------|-----|-----|----|-------------|
| Date | Depth | DSL | Oil | Cd | Pb |
| 6/10/16 | 4' | ND | ND | ND | 6.90 |

| 3WSW1-2 | | | |
|---------|-------|----|-------------|
| Date | Depth | Cd | Pb |
| 6/10/16 | 2' | ND | 8.14 |

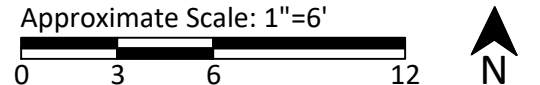
| B9 (Over-Excavated) | | | | | | | | | | | |
|---------------------|------|--------------------------------|---------------|---------------|------|--------------|---------------------|-------------|-------------|--------------|-------------|
| Depth | Gas | BTEX | DSL | Oil | VOCs | cPAHs | Total MTCA 5 Metals | | | | |
| | | | | | | | As | Cd | Cr | Pb | Hg |
| 2' | ---- | ---- | 16,000 | 55,000 | ---- | 0.435 | 17.6 | 18.9 | 28.9 | 7,090 | 0.49 |
| 8' | 3 | T=0.04
X=0.08 | 73x | 360 | ND | ---- | ---- | ---- | ---- | ---- | ---- |

| 3SSW1-5 | | | | | |
|---------|-------|-----|-----|----|-------------|
| Date | Depth | DSL | Oil | Cd | Pb |
| 6/10/16 | 5' | ND | ND | ND | 55.3 |

| 3SSW3-2.5 | | | | | |
|-----------|-------|-------------|------------|----|------------|
| Date | Depth | DSL | Oil | Cd | Pb |
| 6/10/16 | 2.5' | 120x | 680 | ND | 191 |

| 3SSW2-2.5 | | | | | |
|-----------|-------|-----|-----|----|-------------|
| Date | Depth | DSL | Oil | Cd | Pb |
| 6/10/16 | 2.5' | ND | ND | ND | 31.9 |

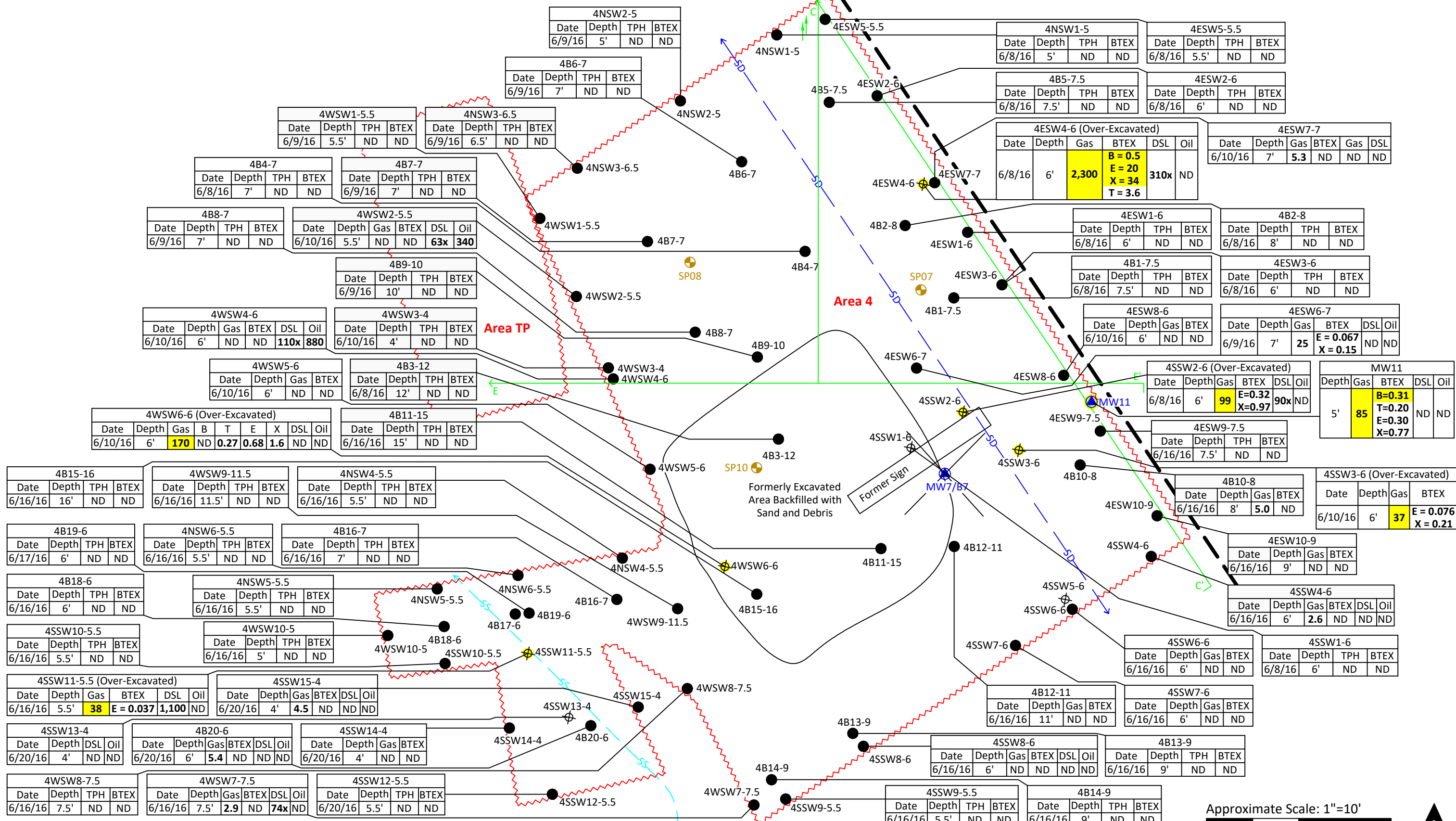
| MW9 (Over-Excavated) | | | | | | | | | |
|----------------------|-----------|---------------|---------------|---------------------|-------------|-------------|--------------|----|--|
| Depth | Gas | DSL | Oil | Total MTCA 5 Metals | | | | | |
| | | | | As | Cd | Cr | Pb | Hg | |
| 1' to 2' (composite) | 54 | 4,900x | 14,000 | 6.58 | 4.75 | 16.8 | 1,490 | ND | |
| 4' | ---- | 170x | 630 | 5.96 | ND | 13.9 | 70.3 | ND | |



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Sea Mar Community Health Center
 RGI Project Number: 2016-023A
 Area 3 Remedial Excavation Soil Sample Locations with Analytical Laboratory Results
 Date Drawn: 03/2017
 Address: 9635 Des Moines Memorial Drive South, Seattle, Washington 98108

Figure 8



- = Monitoring well by RGI
- = Overexcavated (interim sample), June 2016
- = Sample location by RGI, June 2016
- SD = Storm sewer (3 feet in diameter)
- SS = Sanitary sewer
- = Area 4 remedial excavation limits

 = Soil Analytical Laboratory Result in mg/kg;
 Gas = Gasoline Total Petroleum Hydrocarbons
 DSL/Oil = Diesel/Oil Total Petroleum Hydrocarbons with silica gel cleanup
 TPH* = Gas, Diesel, and Oil Total Petroleum Hydrocarbons
 BTEX = Benzene, Toluene, Ethylbenzene, Xylenes
 ND = Not Detected Above Laboratory Detection Limits
 ---- = Not Analyzed
Bold and yellow highlighted results exceed MTCA Cleanup Level.

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| | | |
|--|--|------------------------|
| RGI Project Number
2016-023A | Area 4 Remedial Excavation Soil Sample
Locations with Analytical Laboratory Results | Date Drawn:
03/2017 |
| Address: 9635 Des Moines Memorial Drive South, Seattle, Washington 98108 | | |

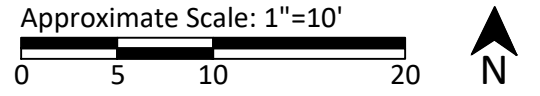
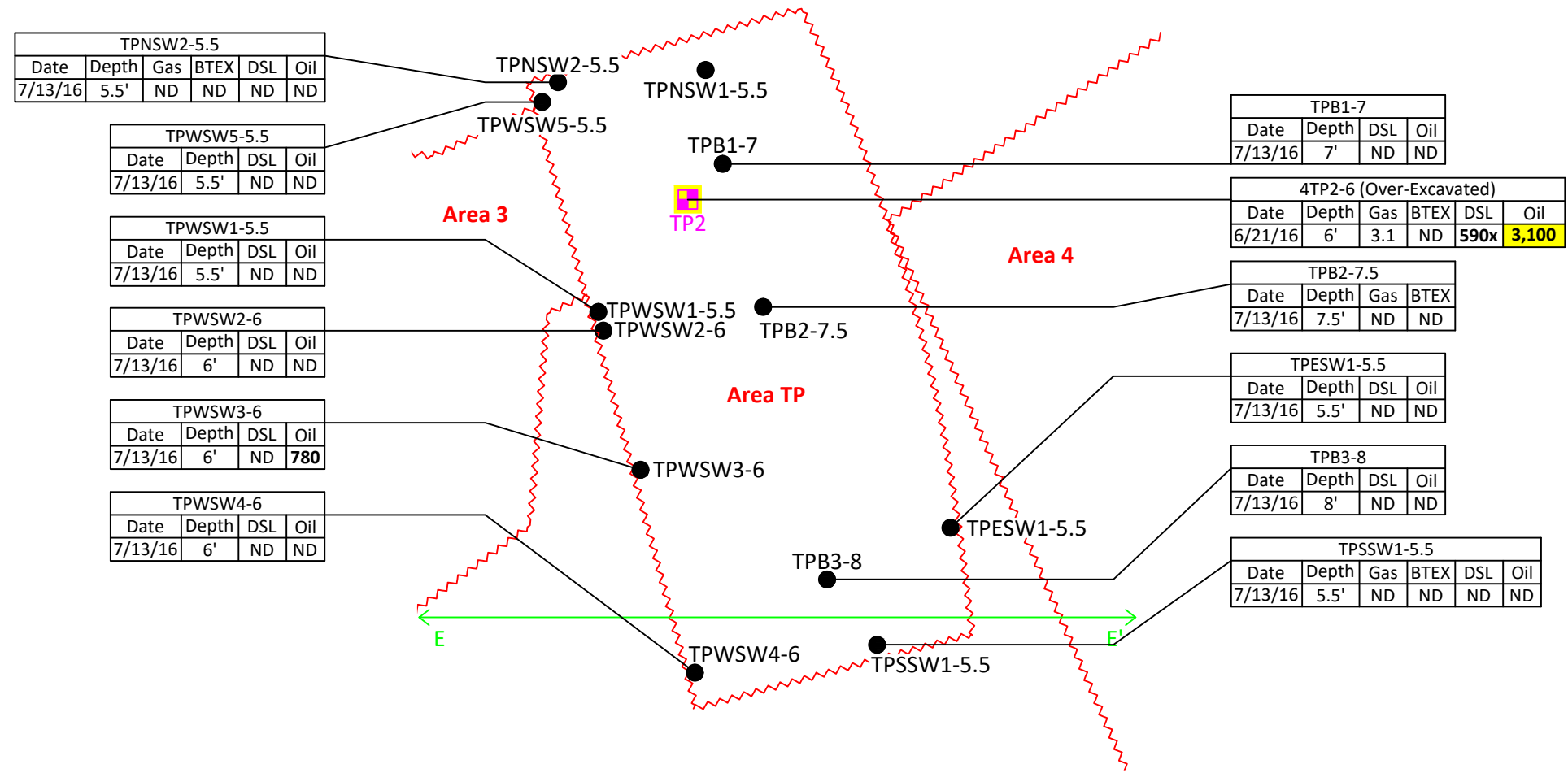
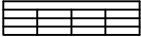



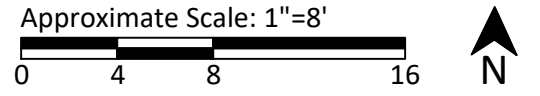



Figure 9



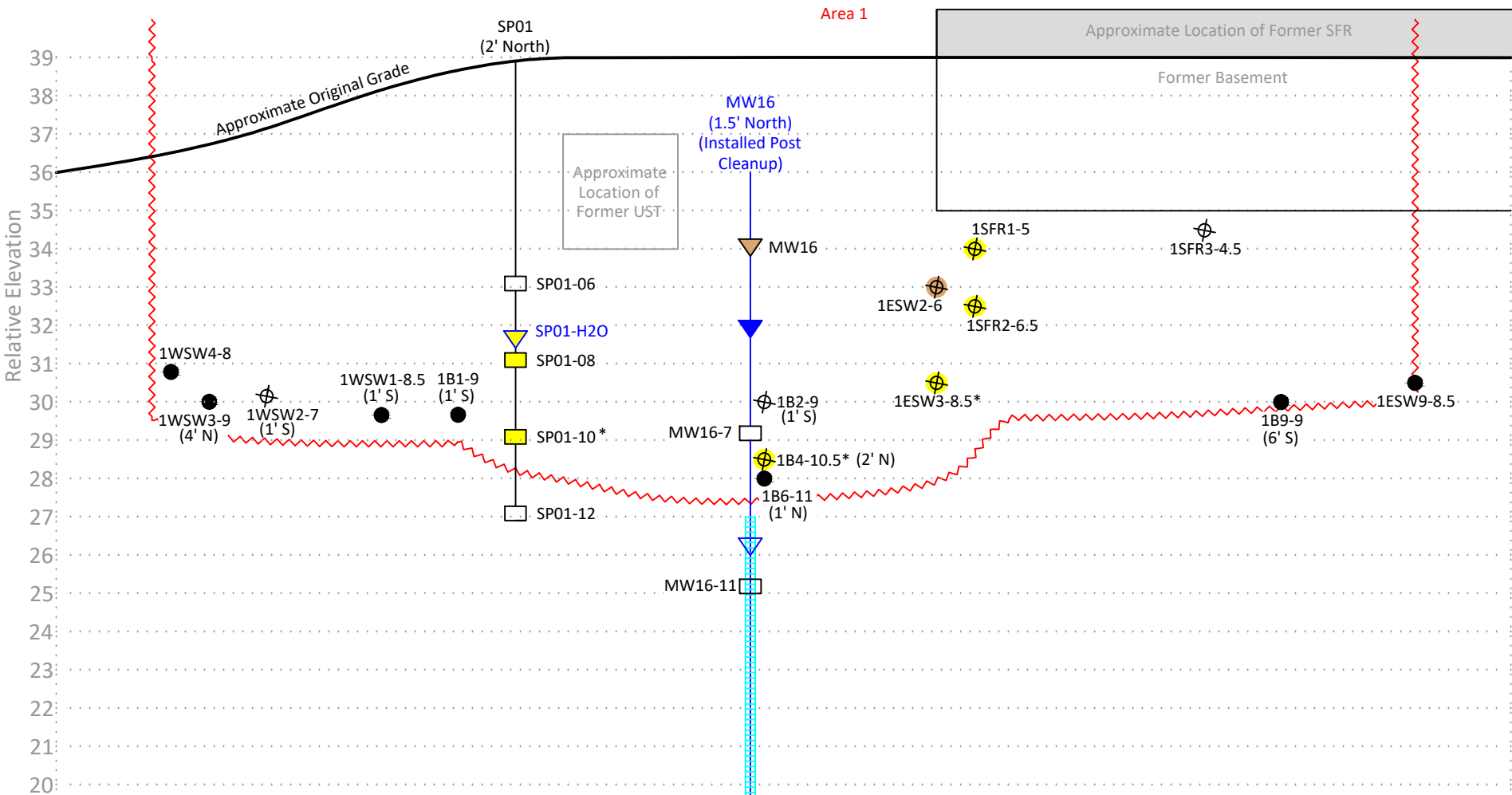
 = Soil Analytical Laboratory Result in mg/kg
 Gas = Gasoline total petroleum hydrocarbons
 BTEX= Benzene, Toluene, Ethylbenzene, Xylenes
 DSL/Oil = Diesel/Oil total petroleum hydrocarbons with silica gel cleanup
 ND = Not Detected Above Laboratory Detection Limits
 Bold and yellow highlighted results, if any, exceed MTCA Cleanup Level.

 = Test pit location by RGI, July 2016
 = Sample location by RGI, July 2016
 = Area TP remedial excavation limits



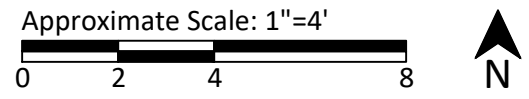
| | | | |
|--|---------------------------------|--|-------------|
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Phone: 425.415.0551
Fax: 425.415.0311 | Sea Mar Community Health Center | | Figure 10 |
| | RGI Project Number | Area TP Remedial Excavation Soil Sample | Date Drawn: |
| | 2016-023A | Locations with Analytical Laboratory Results | 03/2017 |
| Address: 9635 Des Moines Memorial Drive South, Seattle, Washington 98108 | | | |

Looking North



Note: No highlight indicates the sample was not analyzed. A black highlight indicates the sample was analyzed and no contaminants of concern (COCs) were detected. A brown highlight indicates COCs were detected below MTCA Method A and B cleanup levels. A yellow highlight indicates COCs were detected above MTCA Method A and B cleanup levels. A yellow highlight with an asterisk (*) indicates contamination based on field screening/observations.

- ▼ = Static water level
- ▽ = Water level encountered during drilling
- = Performance soil sample location
- ⊕ = Interim soil sample location (overexcavated)
- = Soil sample location
- ~~~~~ = Approximate extent of Area 1's remedial excavation



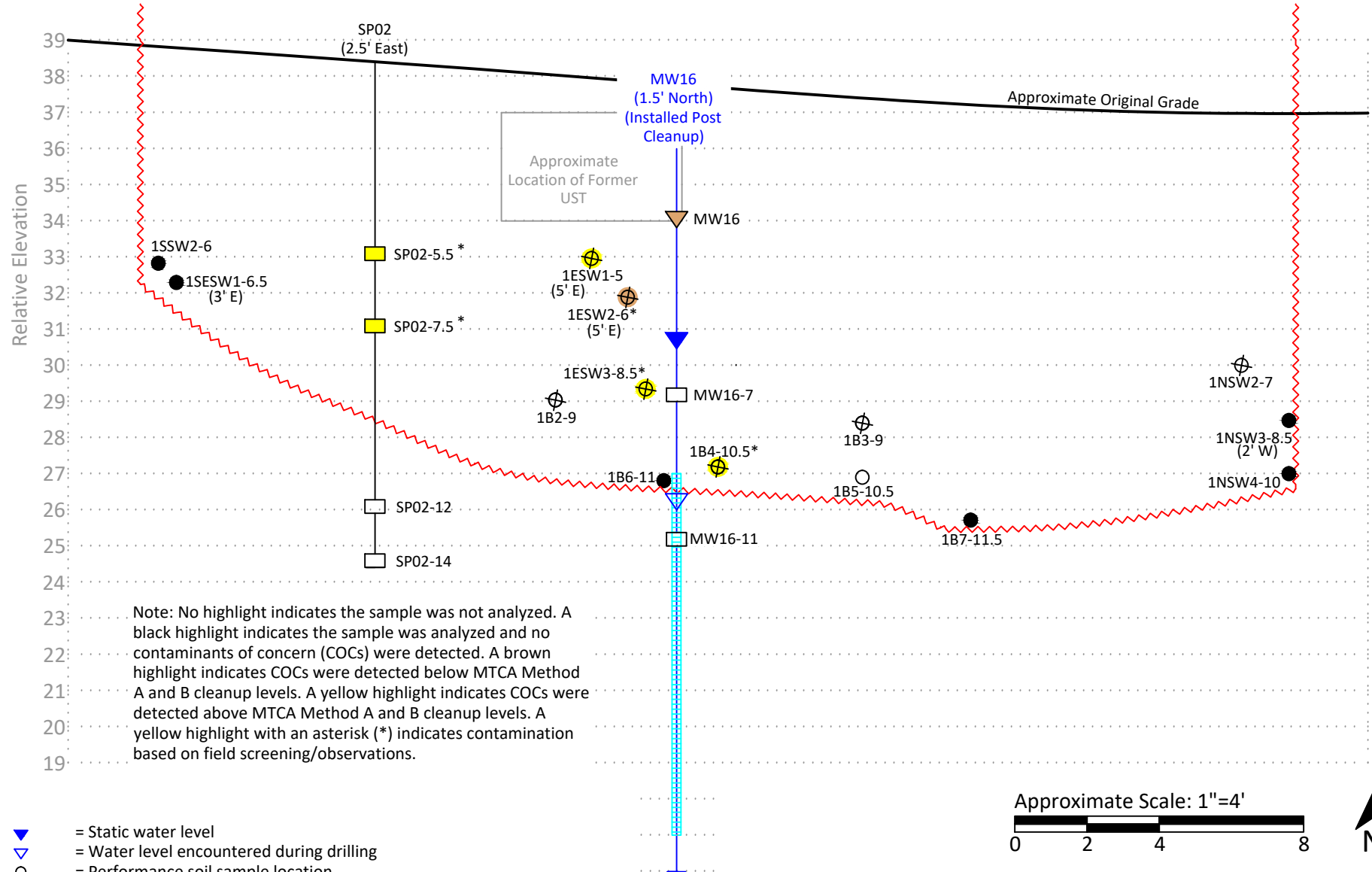
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| | | |
|--|------------------------------|-------------|
| Sea Mar Community Health Center | | Figure 11 |
| RGI Project Number | Cross Section A-A'
Area 1 | Date Drawn: |
| 2016-023A | | 03/2017 |
| Address: 9635 Des Moines Memorial Drive South, Seattle, Washington 98108 | | |

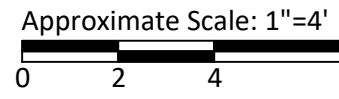
Looking West

B'

Area 1



Note: No highlight indicates the sample was not analyzed. A black highlight indicates the sample was analyzed and no contaminants of concern (COCs) were detected. A brown highlight indicates COCs were detected below MTCA Method A and B cleanup levels. A yellow highlight indicates COCs were detected above MTCA Method A and B cleanup levels. A yellow highlight with an asterisk (*) indicates contamination based on field screening/observations.



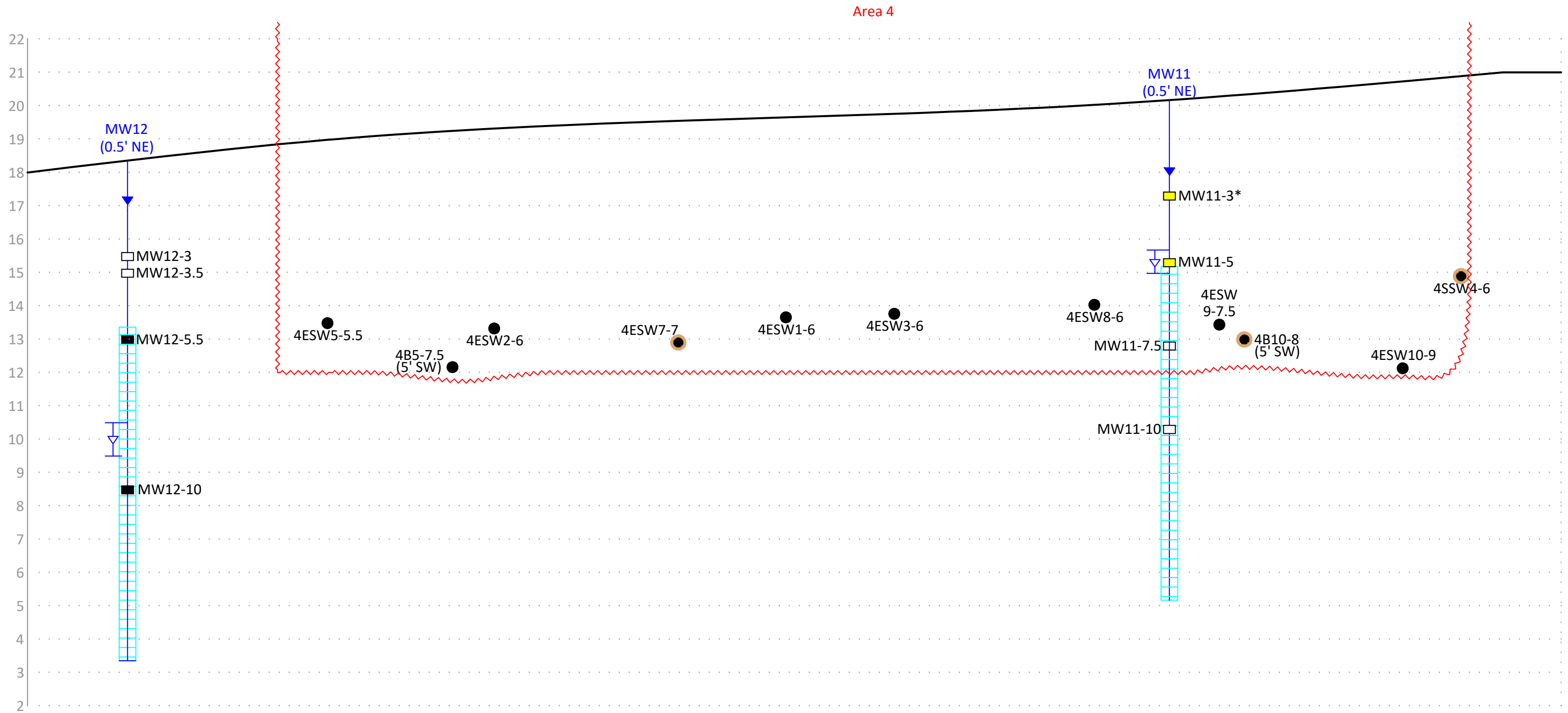
- ▼ = Static water level
- ▽ = Water level encountered during drilling
- = Performance soil sample location
- ⊕ = Interim soil sample location (overexcavated)
- = Soil sample location
- ▽ = Groundwater sample location
- ~~~~~ = Approximate extent of Area 1's remedial excavation

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| | | | |
|--|--------------------|-----------|-------------|
| Sea Mar Community Health Center | | Figure 12 | |
| RGI Project Number | Cross Section B-B' | | Date Drawn: |
| 2016-023A | Area 1 | | 03/2017 |
| Address: 9635 Des Moines Memorial Drive South, Seattle, Washington 98108 | | | |

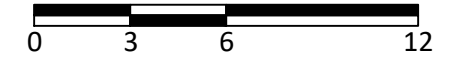
Looking Northeast - Along Eastern Property Line



Note: No highlight indicates the sample was not analyzed. A black highlight indicates the sample was analyzed and no contaminants of concern (COCs) were detected. A brown highlight indicates COCs were detected below MTCA Method A and B cleanup levels. A yellow highlight indicates COCs were detected above MTCA Method A and B cleanup levels. A yellow highlight with an asterisk (*) indicates contamination based on field screening/observations.

- = Range in which groundwater was encountered
- = Static water level
- = Water level encountered during drilling
- = Performance soil sample location
- = Interim soil sample location (overexcavated)
- = Soil sample location
- = Groundwater sample location
- = Approximate extent of Area 4's remedial excavation

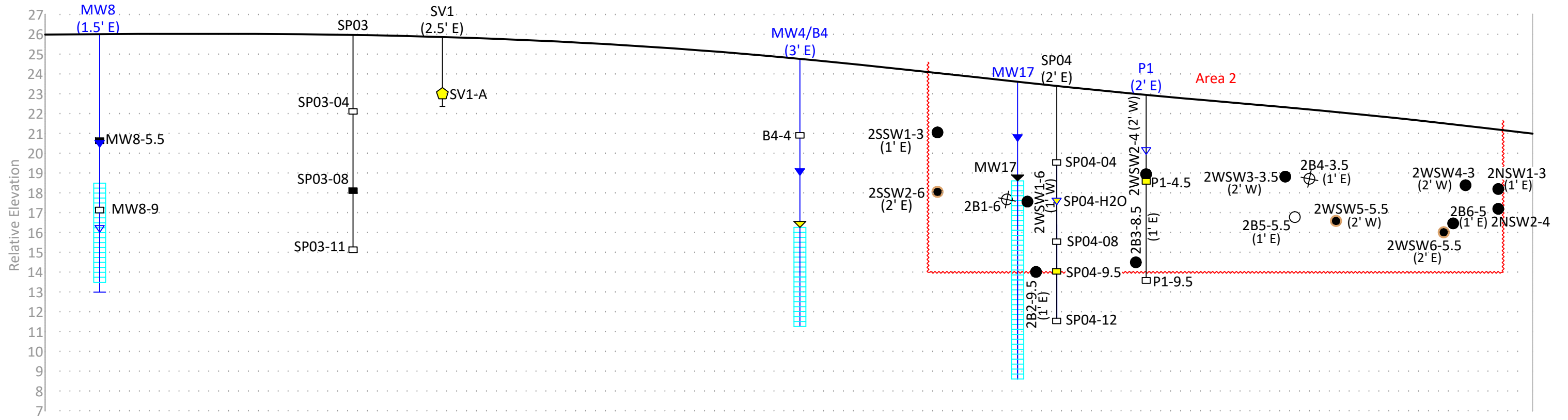
Approximate Scale: 1"=6'



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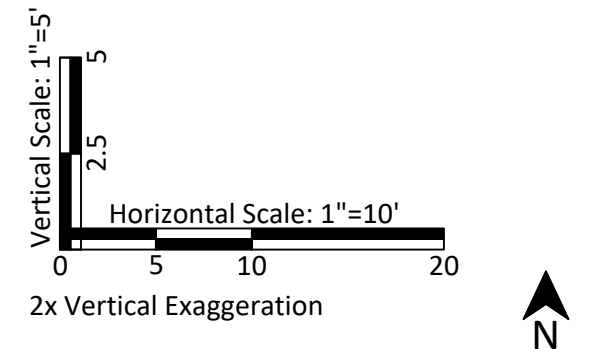
| | | |
|--|------------------------------|-----------|
| Sea Mar Community Health Center | | Figure 13 |
| RGI Project Number | Cross Section C-C'
Area 4 | |
| 2016-023A | Date Drawn:
03/2017 | |
| Address: 9635 Des Moines Memorial Drive South, Seattle, Washington 98108 | | |

Looking West - 3' East of Western Property Line



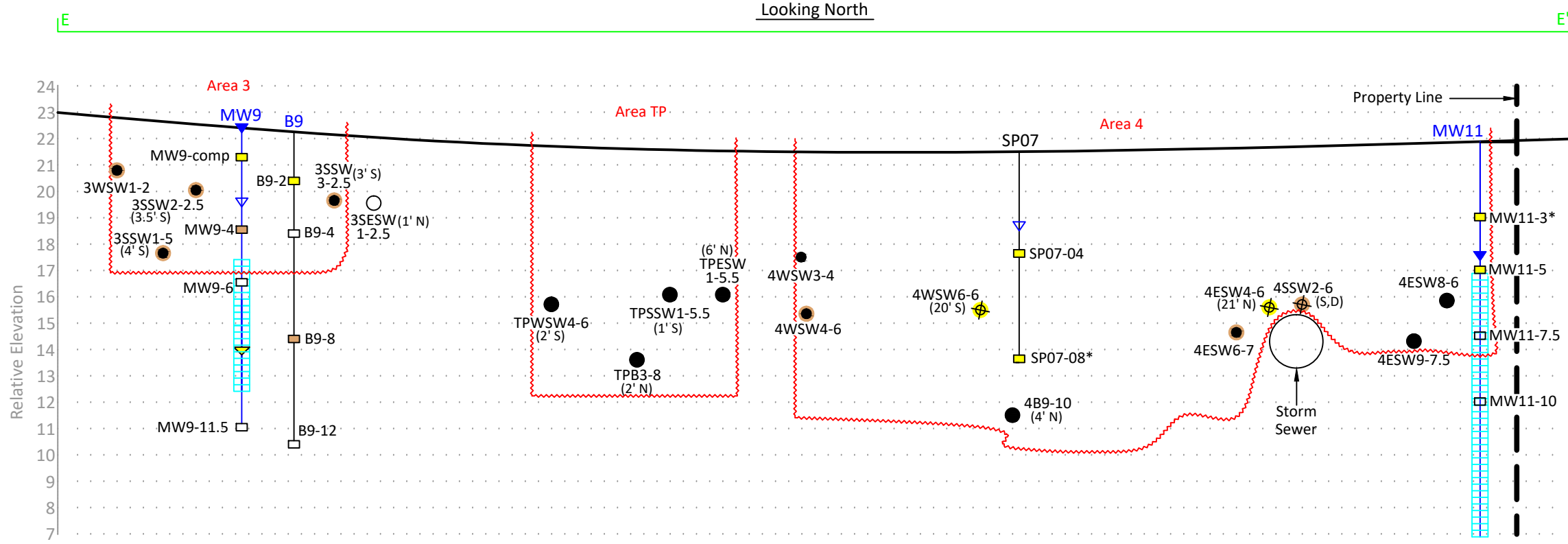
Note: No highlight indicates the sample was not analyzed. A black highlight indicates the sample was analyzed and no contaminants of concern (COCs) were detected. A brown highlight indicates COCs were detected below MTCA Method A and B cleanup levels. A yellow highlight indicates COCs were detected above MTCA Method A and B cleanup levels. A yellow highlight with an asterisk (*) indicates contamination based on field screening/observations.

- = Performance soil sample location
- ⊕ = Interim soil sample location (overexcavated)
- = Soil sample location
- ▽ = Groundwater sample location
- ~~~~ = Approximate extent of Area 2's remedial excavation
- ▼ = Static water level
- ▽ = Water level encountered during drilling
- ◇ = Soil vapor sample location



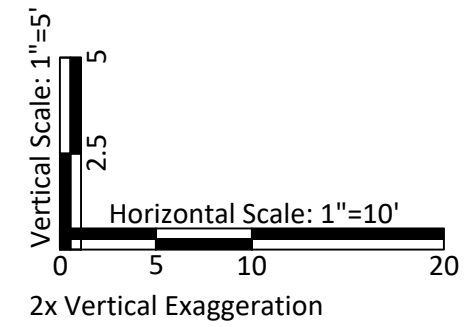
| | | | | | |
|---------------------|-----------------------------|--|---------------------------------|----------------------|-----------|
| | Corporate Office | | Sea Mar Community Health Center | | Figure 14 |
| | 17522 Bothell Way Northeast | | RGI Project Number | Cross Section D - D' | |
| | Bothell, Washington 98011 | | 2016-023A | Area 2 | |
| Phone: 425.415.0551 | | Date Drawn: 03/2017 | | | |
| Fax: 425.415.0311 | | Address: 9635 Des Moines Memorial Drive South, Seattle, Washington 98108 | | | |

Looking North



Note: No highlight indicates the sample was not analyzed. A black highlight indicates the sample was analyzed and no contaminants of concern (COCs) were detected. A brown highlight indicates COCs were detected below MTCA Method A and B cleanup levels. A yellow highlight indicates COCs were detected above MTCA Method A and B cleanup levels. A yellow highlight with an asterisk (*) indicates contamination based on field screening/observations.

- = Performance soil sample location
- ⊕ = Interim soil sample location (overexcavated)
- = Soil sample location
- ▽ = Groundwater sample location
- ~ = Approximate extent of Area 3, Area TP, and Area 4's remedial excavation
- ▼ = Static water level
- ▽ = Water level encountered during drilling



RILEYGROUP
 Corporate Office
 17522 Bothell Way Northeast
 Bothell, Washington 98011
 Phone: 425.415.0551
 Fax: 425.415.0311

| | | |
|--|-----------------------------|------------------------|
| Sea Mar Community Health Center | | Figure 15 |
| RGI Project Number | Cross Section E - E' | |
| 2016-023A | Area 3, Area TP, and Area 4 | |
| Address: 9635 Des Moines Memorial Drive South, Seattle, Washington 98108 | | Date Drawn:
03/2017 |

Table 1, Page 1 of 4. Remedial Investigation: Summary of Soil Sample Analytical Laboratory Results

Sea Mar Community Health Center

9635 Des Moines Memorial Drive South, Seattle, Washington 98108

The Riley Group, Inc. Project No. 2016-023A

| Sample Number | Sample Depth | Sample Date | PID | Sample Status | Gasoline TPH | BTEX | | | | Diesel TPH | Oil TPH | Diesel TPH | Oil TPH | HCID | | | VOCs | HVOCs | cPAHs | Total MTCA 5 Metals | | | | | TCLP Pb ⁴ | |
|---|--------------|-------------|---------|---------------|--------------|---------------------------|-------------|-------------|-------------|---------------|--------------|----------------|-------------------|------------|------------|--------------------|-------------------------|------------------|-----------|---------------------|-----------------------------|------------|----------|-------------|----------------------|------|
| | | | | | | B | T | E | X | w/ silica gel | | w/o silica gel | | Gasoline | Diesel | Oil | | | | As | Cd | Cr | Pb | Hg | | |
| REMEDIAL INVESTIGATION (OCTOBER 2007 - DECEMBER 2016) | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Additional Well Installation (September 2016) | | | | | | | | | | | | | | | | | | | | | | | | | | |
| MW19-7.0 | 7 | 09/08/16 | 0.0 | In-Situ | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ND<50 | ND<250 | ---- | ---- | ---- | ---- | ND | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| MW19-12.5 | 12.5 | 09/08/16 | 0.0 | In-Situ | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| MW19-16.5 | 16.5 | 09/08/16 | 0.0 | In-Situ | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| MW20-2.5 | 2.5 | 09/08/16 | 0.0 | In-Situ | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| MW20-7.5 | 7.5 | 09/08/16 | 0.0 | In-Situ | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ND<50 | ND<250 | ---- | ---- | ---- | ---- | ND | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| MW20-12.0 | 12 | 09/08/16 | 0.0 | In-Situ | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| MW20-15.5 | 15.5 | 09/08/16 | 0.0 | In-Situ | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| Subsurface Investigation (July 2016) | | | | | | | | | | | | | | | | | | | | | | | | | | |
| MW16-7 | 7 | 07/14/16 | ---- | Over-Ex. | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| MW16-11 | 11 | 07/14/16 | ---- | Over-Ex. | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| Subsurface Investigation (March/May 2016) | | | | | | | | | | | | | | | | | | | | | | | | | | |
| MW11-3 | 3 | 05/04/16 | 22.8 | In-Situ | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| MW11-5 | 5 | 05/04/16 | 5.6 | In-Situ | 85 | 0.31 | 0.20 | 0.30 | 0.77 | ND<50 | ND<250 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| MW11-7.5 | 7.5 | 05/04/16 | 0.0 | In-Situ | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| MW11-10 | 10 | 05/04/16 | 0.0 | In-Situ | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| MW12-3 | 3 | 05/04/16 | 0.2 | In-Situ | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| MW12-3.5 | 3.5 | 05/04/16 | 0.2 | In-Situ | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| MW12-5.5 | 5.5 | 05/04/16 | 0.1 | In-Situ | ND<2 | ND<0.02 | ND<0.02 | ND<0.02 | ND<0.06 | ND<50 | ND<250 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| MW12-10 | 10 | 05/04/16 | 0.1 | In-Situ | ND<2 | ND<0.02 | ND<0.02 | ND<0.02 | ND<0.06 | ND<50 | ND<250 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| MW13-2-3 | 2-3 | 05/04/16 | 0.0/0.2 | In-Situ | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ND<1 | ---- | 147 | ---- | ---- |
| MW13-4 | 4 | 05/04/16 | 0.0 | In-Situ | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ND<1 | ---- | 41.0 | ---- | ---- |
| MW13-8 | 8 | 05/04/16 | 0.0 | In-Situ | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| MW14-3 | 3 | 05/04/16 | 0.0 | In-Situ | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| MW14-5 | 5 | 05/04/16 | 0.0 | In-Situ | ND<2 | ND<0.02 | ND<0.02 | ND<0.02 | ND<0.06 | ND<50 | ND<250 | ---- | ---- | ---- | ---- | ---- | ---- | ND | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| MW14-10 | 10 | 05/04/16 | 0.1 | In-Situ | ND<2 | ND<0.02 | ND<0.02 | ND<0.02 | ND<0.06 | ND<50 | ND<250 | ---- | ---- | ---- | ---- | ---- | ---- | ND | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| MW14-14 | 14 | 05/04/16 | ---- | In-Situ | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| MW15-3.5 | 3.5 | 05/04/16 | 0.0 | In-Situ | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| MW15-7 | 7 | 05/04/16 | 0.0 | In-Situ | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ND | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| MW15-11 | 11 | 05/04/16 | 0.0 | In-Situ | ND<2 | ND<0.02 | ND<0.02 | ND<0.02 | ND<0.06 | ND<50 | ND<250 | ---- | ---- | ---- | ---- | ---- | ---- | ND | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| MW15-13 | 13 | 05/04/16 | 0.0 | In-Situ | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| MTCA Method A Soil Cleanup Levels for Unrestricted Land Uses | | | | | --- | 100/30¹ | 0.03 | 7 | 6 | 9 | 2,000 | 2,000 | 800/ 1,000 | 500 | 500 | ---- | Analyte Specific | TEF = 0.1 | 20 | 2 | 19/2,000² | 250 | 2 | --- | --- | |
| MTCA Method B Soil Cleanup Levels for Unrestricted Land Uses³ | | | | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | Ac = 72,000 | --- | --- | --- | --- | --- | --- | --- | --- | --- | |
| Dangerous Waste Threshold for TCLP | | | | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 5 | --- |

Table 1, Page 2 of 4. Remedial Investigation: Summary of Soil Sample Analytical Laboratory Results

Sea Mar Community Health Center

9635 Des Moines Memorial Drive South, Seattle, Washington 98108

The Riley Group, Inc. Project No. 2016-023A

| Sample Number | Sample Depth | Sample Date | PID | Sample Status | Gasoline TPH | BTEX | | | | Diesel TPH | Oil TPH | Diesel TPH | Oil TPH | HCID | | | VOCs | HVOCs | cPAHs | Total MTCA 5 Metals | | | | | TCLP Pb ⁴ | |
|---|--------------|-------------|------|---------------|---------------------|---------|---------|---------|---------|---------------|----------------|------------|---------|------------|------|------|-------------|------------------|-----------|---------------------|------|-----------------------|-------|------|----------------------|------|
| | | | | | | B | T | E | X | w/ silica gel | w/o silica gel | Gasoline | Diesel | Oil | As | Cd | | | | Cr | Pb | Hg | | | | |
| Supplemental Phase II Investigation (March 2016) | | | | | | | | | | | | | | | | | | | | | | | | | | |
| P1-4.5 | 4.5 | 03/04/16 | 0.0 | Over-Ex. | ND<2 | ---- | ---- | ---- | ---- | 880 | 2,900 | ---- | ---- | ---- | ---- | ---- | ND | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| P1-9.5 | 9.5 | 03/04/16 | 0.0 | In-Situ | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| P2-4.5 | 4.5 | 03/04/16 | 0.0 | In-Situ | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| P2-8 | 8 | 03/04/16 | 0.0 | In-Situ | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| P3-2 | 2 | 03/04/16 | 0.0 | Over-Ex. | ---- | ---- | ---- | ---- | ---- | ND<50 | ND<250 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | 5.29 | ND<1 | 12.9 | 37.1 | ND<1 | ---- |
| P3-4.5 | 4.5 | 03/04/16 | 0.0 | Over-Ex. | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| P3-8 | 8 | 03/04/16 | 0.0 | In-Situ | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| P4-2.5 | 2.5 | 03/04/16 | 0.0 | In-Situ | ---- | ---- | ---- | ---- | ---- | ND<50 | ND<250 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | 5.95 | ND<1 | 13.6 | 40.5 | ND<1 | ---- |
| P4-10 | 10 | 03/04/16 | 0.0 | In-Situ | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| P4-15 | 15 | 03/04/16 | 0.0 | In-Situ | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| MW8-5.5 | 5.5 | 03/04/16 | 0.3 | In-Situ | ---- | ---- | ---- | ---- | ---- | ND<50 | ND<250 | ---- | ---- | ---- | ---- | ---- | ND | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| MW8-9 | 9 | 03/04/16 | 0.3 | In-Situ | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| MW9-comp | 1 to 2 | 03/04/16 | 13.1 | Over-Ex. | 54 | ---- | ---- | ---- | ---- | 4,900x | 14,000 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | 6.58 | 4.75 | 16.8 | 1,490 | ND<1 | 2.53 | |
| MW9-4 | 4 | 03/04/16 | 0.0 | Over-Ex. | ---- | ---- | ---- | ---- | ---- | 170x | 630 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | 5.96 | ND<1 | 13.9 | 70.3 | ND<1 | ---- | |
| MW9-6 | 6 | 03/04/16 | 0.0 | In-Situ | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| MW9-11.5 | 11.5 | 03/04/16 | 0.1 | In-Situ | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| MW10-7 | 7 | 03/04/16 | ---- | In-Situ | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| MW10-12 | 12 | 03/04/16 | ---- | In-Situ | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| Preliminary Phase II Investigation (January 2008) | | | | | | | | | | | | | | | | | | | | | | | | | | |
| B1-8 | 8 | 01/02/08 | 0.0 | In-Situ | ---- | ---- | ---- | ---- | ---- | ND<50 | ND<250 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| B2-4 | 4 | 01/02/08 | 0.0 | In-Situ | ---- | ---- | ---- | ---- | ---- | ND<50 | ND<250 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| B3-4 | 4 | 01/02/08 | 0.0 | In-Situ | ---- | ---- | ---- | ---- | ---- | ND<50 | ND<250 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| B4-4 | 4 | 01/02/08 | 0.0 | In-Situ | ---- | ND<0.03 | ND<0.05 | ND<0.05 | ND<0.15 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ND | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| B8-4 | 4 | 01/02/08 | 0.0 | In-Situ | ND<2 | ND<0.02 | ND<0.02 | ND<0.02 | ND<0.06 | ND<50 | ND<250 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| B8-8 | 8 | 01/02/08 | 0.0 | In-Situ | ---- | ND<0.03 | ND<0.05 | ND<0.05 | ND<0.15 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | Ac = 2.4 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| B9-2 | 2 | 01/02/08 | 0.0 | Over-Ex. | ---- | ---- | ---- | ---- | ---- | 16,000 | 55,000 | ---- | ---- | ---- | ---- | ---- | ---- | 0.435 | 17.6 | 18.9 | 28.9 | 7,090 | 0.49 | ---- | ---- | |
| B9-4 | 4 | 01/02/08 | 0.0 | Over-Ex. | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| B9-8 | 8 | 01/02/08 | 0.0 | In-Situ | 3 | ND<0.02 | 0.04 | ND<0.02 | 0.08 | 73x | 360 | ---- | ---- | ---- | ---- | ND | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| B9-12 | 12 | 01/02/08 | 0.0 | In-Situ | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| Preliminary Phase II Investigation (October 2007) | | | | | | | | | | | | | | | | | | | | | | | | | | |
| SP-01-06 | 6 | 10/26/07 | 0.1 | Over-Ex. | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| MTCA Method A Soil Cleanup Levels for Unrestricted Land Uses | | | | --- | 100/30 ¹ | 0.03 | 7 | 6 | 9 | 2,000 | | 2,000 | | 800/ 1,000 | 500 | 500 | ---- | Analyte Specific | TEF = 0.1 | 20 | 2 | 19/2,000 ² | 250 | 2 | --- | |
| MTCA Method B Soil Cleanup Levels for Unrestricted Land Uses³ | | | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | Ac = 72,000 | --- | --- | --- | --- | --- | --- | --- | --- | |
| Dangerous Waste Threshold for TCLP | | | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 5 |

Table 1, Page 3 of 4. Remedial Investigation: Summary of Soil Sample Analytical Laboratory Results

Sea Mar Community Health Center

9635 Des Moines Memorial Drive South, Seattle, Washington 98108

The Riley Group, Inc. Project No. 2016-023A

| Sample Number | Sample Depth | Sample Date | PID | Sample Status | Gasoline TPH | BTEX | | | | Diesel TPH | Oil TPH | Diesel TPH | Oil TPH | HCID | | | VOCs | HVOCs | cPAHs | Total MTCA 5 Metals | | | | | TCLP Pb ⁴ | |
|---|--------------|-------------|-----|---------------|--------------|---------------------|---------|---------|---------|---------------|----------------|------------|------------|-------|-------|-------------|------------------|-----------|-------|---------------------|-----------------------|------|------|------|----------------------|------|
| | | | | | | B | T | E | X | w/ silica gel | w/o silica gel | Gasoline | Diesel | Oil | As | Cd | | | | Cr | Pb | Hg | | | | |
| SP-01-08 | 8 | 10/26/07 | 100 | Over-Ex. | ---- | ---- | ---- | ---- | ---- | 4,900 | ND<250 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| SP-01-10 | 10 | 10/26/07 | 21 | Over-Ex. | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| SP-01-12 | 12 | 10/26/07 | 42 | In-Situ | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| SP-02-5.5 | 5.5 | 10/26/07 | 137 | Over-Ex. | ---- | ---- | ---- | ---- | ---- | 10,000 | ND<250 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| SP-02-7.5 | 7.5 | 10/26/07 | 106 | Over-Ex. | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| SP-02-12 | 12 | 10/26/07 | 78 | In-Situ | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| SP-02-14 | 14 | 10/26/07 | 5 | In-Situ | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| SP-03-04 | 4 | 10/26/07 | 1 | In-Situ | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| SP-03-08 | 8 | 10/26/07 | 0 | In-Situ | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ND<20 | ND<50 | ND<250 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| SP-03-11 | 11 | 10/26/07 | 0 | In-Situ | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| SP-04-04 | 4 | 10/26/07 | 0 | Over-Ex. | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| SP-04-08 | 8 | 10/26/07 | 0 | Over-Ex. | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| SP-04-9.5 | 9.5 | 10/26/07 | 10 | In-Situ | ND<2 | ND<0.02 | ND<0.02 | ND<0.02 | ND<0.06 | 900 | 3,900 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| SP-04-12 | 12 | 10/26/07 | 0 | In-Situ | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| SP-05-08 | 8 | 10/26/07 | 0 | In-Situ | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| SP-05-12 | 12 | 10/26/07 | 0 | In-Situ | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| SP-06-04 | 4 | 10/26/07 | 0 | In-Situ | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| SP-06-08 | 8 | 10/26/07 | 0 | In-Situ | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| SP-06-12 | 12 | 10/26/07 | 1 | In-Situ | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| SP-07-04 | 4 | 10/26/07 | 16 | Over-Ex. | 43 | ND<0.02 | 0.06 | 0.39 | 0.34 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| SP-07-08 | 8 | 10/26/07 | 20 | Over-Ex. | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| SP-08-04 | 4 | 10/26/07 | 0 | Over-Ex. | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| SP-08-06 | 6 | 10/26/07 | 0 | Over-Ex. | ---- | ---- | ---- | ---- | ---- | 520 | 4,200 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| SP-08-07 | 7 | 10/26/07 | 0 | Over-Ex. | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| SP-09-04 | 4 | 10/26/07 | 0 | Over-Ex. | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| SP-09-08 | 8 | 10/26/07 | 1 | Over-Ex. | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| SP-10-04 | 4 | 10/26/07 | 0 | Over-Ex. | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| SP-10-08 | 6 | 10/26/07 | 0 | Over-Ex. | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| MTCA Method A Soil Cleanup Levels for Unrestricted Land Uses | | | | | --- | 100/30 ¹ | 0.03 | 7 | 6 | 9 | 2,000 | 2,000 | 800/ 1,000 | 500 | 500 | ---- | Analyte Specific | TEF = 0.1 | 20 | 2 | 19/2,000 ² | 250 | 2 | --- | --- | |
| MTCA Method B Soil Cleanup Levels for Unrestricted Land Uses³ | | | | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | Ac = 72,000 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Dangerous Waste Threshold for TCLP | | | | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 5 |

Notes:
 All results and detection limits are given in milligrams per kilogram (mg/kg); equivalent to parts per million (ppm).
 Sample Depth = Soil sample depth interval in feet below ground surface (bgs).
 PID = Photoionization detector.
 Over-Excav. = Over-excavated during cleanup, In-Situ = Remaining on-site-in-situ

Table 1, Page 4 of 4. Remedial Investigation: Summary of Soil Sample Analytical Laboratory Results

Sea Mar Community Health Center

9635 Des Moines Memorial Drive South, Seattle, Washington 98108

The Riley Group, Inc. Project No. 2016-023A

Notes continued:

Gasoline TPH (total petroleum hydrocarbons) determined using Northwest Test Method NWTPH-Gx.

BTEX (benzene, toluene, ethylbenzene, and xylenes) determined using EPA Test Method 8021B or 8260C.

Diesel and Oil TPH (total petroleum hydrocarbons) determined using Northwest Test Method NWTPH-Dx with silica gel cleanup.

VOCs (volatile organic compounds) and HVOCs (halogenated volatile organic compounds) determined using EPA Test Method 8260C.

cPAHs (carcinogenic Polynuclear Aromatic Hydrocarbons) determined using EPA Test Method 8270D SIM.

MTCA 5 Metals (As = arsenic, Cd = cadmium, Cr = chromium, Pb = lead, Hg = mercury) determined using EPA Method 200.8 and 1631E.

TCLP = Toxicity Characterisitics Leaching Procedure.

HCID (hydrocarbon identification) determined using Northwest Test Method NWTPH-HCID.

Ac = Acetone

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

ND = Not detected at noted analytical detection limit.

---- = Not analyzed or not applicable.

TEF = Toxicity Equivalency Factor per WAC 173-340-708(8).

Washington State Department of Ecology (Ecology) Model Toxics Control Act (MTCA) Method A Soil Cleanup Levels for Unrestricted Land Uses (WAC 173-340-900, Table 740-1). MTCA Method B Soil Screening Levels from Ecology's Cleanup Level and Risk Calculation (CLARC) database.

¹ The higher cleanup level is allowed if no benzene is detected in the sample and the total of toluene, ethylbenzene and xylenes is less than 1% of the gasoline mixture.

² The higher cleanup level is allowed if no hexavalent chromium (CrVI) is present in the sample.

³ No MTCA Method A Cleanup Level has been established. Therefore, the MTCA Method B Non-Carcinogenic Standard Formula Value is listed for reference.

⁴ Results and detection limits are given in milligrams per liter (mg/L); equivalent to parts per million (ppm).

Bold results indicated concentrations above laboratory detection limits.

Bold and yellow highlighted results indicate concentrations (if any) that exceed MTCA Method A or B Soil Cleanup Levels.

Table 2, Page 1 of 4. Cleanup Action: Summary of Soil Sample Analytical Laboratory Results

Sea Mar Community Health Center

9635 Des Moines Memorial Drive South, Seattle, Washington 98108

The Riley Group, Inc. Project No. 2016-023A

| Sample Number | Sample Depth | Sample Date | PID | Sample Status | Gasoline TPH | BTEX | | | | Diesel TPH
w/ silica gel | Oil TPH | Total MTCA 5 Metals | | | | | |
|---|--------------|-------------|------|---------------|---------------------|---------|---------|---------|---------|-----------------------------|---------|---------------------|-----------------------|-----|-----|-----|--|
| | | | | | | B | T | E | X | | | As | Cd | Cr | Pb | Hg | |
| AREA 1: SINGLE-FAMILY RESIDENCE HEATING OIL UST (JUNE - JULY 2016) | | | | | | | | | | | | | | | | | |
| Area 1 and Single-Family Residence (SFR): July 2016 Excavation | | | | | | | | | | | | | | | | | |
| 1NSW6-8 | 8 | 07/13/16 | --- | In-Situ | --- | --- | --- | --- | --- | ND<50 | ND<250 | --- | --- | --- | --- | --- | |
| 1NSW7-4.5 | 4.5 | 07/13/16 | --- | In-Situ | --- | --- | --- | --- | --- | ND<50 | ND<250 | --- | --- | --- | --- | --- | |
| 1ESW8-8.5 | 8.5 | 07/13/16 | --- | In-Situ | --- | --- | --- | --- | --- | ND<50 | ND<250 | --- | --- | --- | --- | --- | |
| 1ESW9-8.5 | 8.5 | 07/13/16 | --- | In-Situ | --- | --- | --- | --- | --- | ND<50 | ND<250 | --- | --- | --- | --- | --- | |
| 1ESW10-8.5 | 8.5 | 07/13/16 | --- | In-Situ | --- | --- | --- | --- | --- | ND<50 | ND<250 | --- | --- | --- | --- | --- | |
| 1B8-9 | 9 | 07/13/16 | --- | In-Situ | --- | --- | --- | --- | --- | ND<50 | ND<250 | --- | --- | --- | --- | --- | |
| 1B9-9 | 9 | 07/13/16 | --- | In-Situ | --- | --- | --- | --- | --- | ND<50 | ND<250 | --- | --- | --- | --- | --- | |
| 1SSW3-7.5 | 7.5 | 07/13/16 | --- | In-Situ | --- | --- | --- | --- | --- | 950 | ND<250 | --- | --- | --- | --- | --- | |
| 1SSW4-8 | 8 | 07/13/16 | --- | In-Situ | --- | --- | --- | --- | --- | ND<50 | ND<250 | --- | --- | --- | --- | --- | |
| 1SFR1-5 | 5 | 07/11/16 | --- | Over-Ex. | --- | --- | --- | --- | --- | 7,900 | ND<250 | --- | --- | --- | --- | --- | |
| 1SFR2-6.5 | 6.5 | 07/11/16 | --- | Over-Ex. | --- | --- | --- | --- | --- | 4,400 | ND<250 | --- | --- | --- | --- | --- | |
| 1SFR3-4.5 | 4.5 | 07/11/16 | --- | Over-Ex. | --- | --- | --- | --- | --- | ND<50 | ND<250 | --- | --- | --- | --- | --- | |
| 1SFR4-4 | 4 | 07/11/16 | --- | Over-Ex. | --- | --- | --- | --- | --- | ND<50 | ND<250 | --- | --- | --- | --- | --- | |
| 1SFR5-5 | 5 | 07/11/16 | --- | In-Situ | --- | --- | --- | --- | --- | 620 | ND<250 | --- | --- | --- | --- | --- | |
| Area 1: June Excavation | | | | | | | | | | | | | | | | | |
| 1NSW3-8.5 | 8.5 | 06/15/16 | 0.0 | In-Situ | --- | --- | --- | --- | --- | ND<50 | ND<250 | --- | --- | --- | --- | --- | |
| 1NSW4-10 | 10 | 06/15/16 | 0.0 | In-Situ | --- | --- | --- | --- | --- | ND<50 | ND<250 | --- | --- | --- | --- | --- | |
| 1NSW5-8 | 8 | 06/15/16 | 0.0 | In-Situ | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | |
| 1ESW6-11 | 11 | 06/15/16 | 0.0 | Over-Ex. | --- | --- | --- | --- | --- | ND<50 | ND<250 | --- | --- | --- | --- | --- | |
| 1ESW7-7.5 | 7.5 | 06/15/16 | 29.6 | Over-Ex. | --- | --- | --- | --- | --- | 300 | ND<250 | --- | --- | --- | --- | --- | |
| 1B6-11 | 11 | 06/15/16 | 0.0 | In-Situ | --- | --- | --- | --- | --- | ND<50 | ND<250 | --- | --- | --- | --- | --- | |
| 1B7-11.5 | 11.5 | 06/15/16 | 0.0 | In-Situ | --- | --- | --- | --- | --- | ND<50 | ND<250 | --- | --- | --- | --- | --- | |
| 1NSW1-9 | 9 | 06/14/16 | 0.0 | In-Situ | --- | --- | --- | --- | --- | ND<50 | ND<250 | --- | --- | --- | --- | --- | |
| 1NSW2-7 | 7 | 06/14/16 | 1.4 | Over-Ex. | --- | --- | --- | --- | --- | ND<50 | ND<250 | --- | --- | --- | --- | --- | |
| 1ESW1-5 | 5.5 | 06/14/16 | 56 | Over-Ex. | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | |
| 1ESW2-6 | 6 | 06/14/16 | 54 | Over-Ex. | --- | --- | --- | --- | --- | 1,200 | ND<250 | --- | --- | --- | --- | --- | |
| 1ESW3-8.5 | 8.5 | 06/14/16 | 5.3 | Over-Ex. | --- | --- | --- | --- | --- | ND<50 | ND<250 | --- | --- | --- | --- | --- | |
| 1ESW4-10 | 10.5 | 06/14/16 | 6.9 | Over-Ex. | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | |
| 1ESW5-7 | 7 | 06/14/16 | 25.0 | Over-Ex. | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | |
| 1B1-9 | 9 | 06/14/16 | 2.2 | In-Situ | --- | --- | --- | --- | --- | ND<50 | ND<250 | --- | --- | --- | --- | --- | |
| 1B2-9 | 9 | 06/14/16 | 1.9 | Over-Ex. | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | |
| 1B3-9 | 9 | 06/14/16 | 0.2 | Over-Ex. | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | |
| 1B4-10.5 | 10.5 | 06/14/16 | 17.0 | Over-Ex. | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | |
| 1B5-10.5 | 10.5 | 06/14/16 | 1.1 | In-Situ | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | |
| 1SESW1-6.5 | 6.5 | 06/14/16 | 1.1 | In-Situ | --- | --- | --- | --- | --- | ND<50 | ND<250 | --- | --- | --- | --- | --- | |
| 1SSW1-6 | 6 | 06/14/16 | 0.8 | In-Situ | --- | --- | --- | --- | --- | ND<50 | ND<250 | --- | --- | --- | --- | --- | |
| 1SSW2-6 | 6 | 06/14/16 | 0.5 | In-Situ | --- | --- | --- | --- | --- | ND<50 | ND<250 | --- | --- | --- | --- | --- | |
| 1WSW1-8.5 | 8.5 | 06/14/16 | 0.7 | In-Situ | --- | --- | --- | --- | --- | ND<50 | ND<250 | --- | --- | --- | --- | --- | |
| 1WSW2-7 | 7 | 06/14/16 | 0.6 | Over-Ex. | --- | --- | --- | --- | --- | ND<50 | ND<250 | --- | --- | --- | --- | --- | |
| 1WSW3-9 | 9 | 06/14/16 | 0.1 | In-Situ | --- | --- | --- | --- | --- | ND<50 | ND<250 | --- | --- | --- | --- | --- | |
| 1WSW4-8 | 8 | 06/14/16 | 0.3 | In-Situ | --- | --- | --- | --- | --- | ND<50 | ND<250 | --- | --- | --- | --- | --- | |
| Area TP: July 2016 Excavation | | | | | | | | | | | | | | | | | |
| 4TP2-6 | 6 | 06/21/16 | 5.6 | Over-Ex. | 3.1 | ND<0.02 | ND<0.02 | ND<0.02 | ND<0.06 | 590x | 3,100 | --- | --- | --- | --- | --- | |
| TPNSW1-5.5 | 5.5 | 07/13/16 | --- | In-Situ | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | |
| TPNSW2-5.5 | 5.5 | 07/13/16 | --- | In-Situ | ND<2 | ND<0.02 | ND<0.02 | ND<0.02 | ND<0.06 | ND<50 | ND<250 | --- | --- | --- | --- | --- | |
| TPESW1-5.5 | 5.5 | 07/13/16 | --- | In-Situ | --- | --- | --- | --- | --- | ND<50 | ND<250 | --- | --- | --- | --- | --- | |
| TPB1-7 | 7 | 07/13/16 | --- | In-Situ | --- | --- | --- | --- | --- | ND<50 | ND<250 | --- | --- | --- | --- | --- | |
| TPB2-7.5 | 7.5 | 07/13/16 | --- | In-Situ | ND<2 | ND<0.02 | ND<0.02 | ND<0.02 | ND<0.06 | --- | --- | --- | --- | --- | --- | --- | |
| TPB3-8 | 8 | 07/13/16 | --- | In-Situ | --- | --- | --- | --- | --- | ND<50 | ND<250 | --- | --- | --- | --- | --- | |
| MTCA Method A Soil Cleanup Levels for Unrestricted Land Uses | | | | --- | 100/30 ¹ | 0.03 | 7 | 6 | 9 | 2,000 | 20 | 2 | 19/2,000 ² | 250 | 2 | | |
| MTCA Method B Soil Cleanup Levels for Unrestricted Land Uses³ | | | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | |
| Dangerous Waste Threshold for TCLP | | | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | |

Table 2, Page 2 of 4. Cleanup Action: Summary of Soil Sample Analytical Laboratory Results

Sea Mar Community Health Center

9635 Des Moines Memorial Drive South, Seattle, Washington 98108

The Riley Group, Inc. Project No. 2016-023A

| Sample Number | Sample Depth | Sample Date | PID | Sample Status | Gasoline TPH | BTEX | | | | Diesel TPH
w/ silica gel | Oil TPH | Total MTCA 5 Metals | | | | |
|---|--------------|-------------|------|---------------|---------------------------|-------------|----------|-------------|-------------|-----------------------------|--------------|---------------------|----------|-----------------------------|-------------|----------|
| | | | | | | B | T | E | X | | | As | Cd | Cr | Pb | Hg |
| TPSSW1-5.5 | 5.5 | 07/13/16 | ---- | In-Situ | ND<2 | ND<0.02 | ND<0.02 | ND<0.02 | ND<0.06 | ND<50 | ND<250 | ---- | ---- | ---- | ---- | ---- |
| TPWSW1-5.5 | 5.5 | 07/13/16 | ---- | In-Situ | ---- | ---- | ---- | ---- | ---- | ND<50 | ND<250 | ---- | ---- | ---- | ---- | ---- |
| TPWSW2-6 | 6 | 07/13/16 | ---- | In-Situ | ---- | ---- | ---- | ---- | ---- | ND<50 | ND<250 | ---- | ---- | ---- | ---- | ---- |
| TPWSW3-6 | 6 | 07/13/16 | ---- | In-Situ | ---- | ---- | ---- | ---- | ---- | ND<50 | 780 | ---- | ---- | ---- | ---- | ---- |
| TPWSW4-6 | 6 | 07/13/16 | ---- | In-Situ | ---- | ---- | ---- | ---- | ---- | ND<50 | ND<250 | ---- | ---- | ---- | ---- | ---- |
| TPWSW5-5.5 | 5.5 | 07/13/16 | ---- | In-Situ | ---- | ---- | ---- | ---- | ---- | ND<50 | ND<250 | ---- | ---- | ---- | ---- | ---- |
| Area 2: June 2016 Excavation | | | | | | | | | | | | | | | | |
| 2ESW5-6 | 6 | 06/13/16 | 11.2 | In-Situ | ---- | ---- | ---- | ---- | ---- | ND<50 | ND<250 | ---- | ---- | ---- | ---- | ---- |
| 2ESW6-5.5 | 5.5 | 06/13/16 | 3.2 | In-Situ | ---- | ---- | ---- | ---- | ---- | ND<50 | ND<250 | ---- | ---- | ---- | ---- | ---- |
| 2ESW7-5.5 | 5.5 | 06/13/16 | 16.6 | In-Situ | ---- | ---- | ---- | ---- | ---- | ND<50 | ND<250 | ---- | ---- | ---- | ---- | ---- |
| 2ESW8-5.5 | 5.5 | 06/13/16 | 9.1 | In-Situ | ---- | ---- | ---- | ---- | ---- | ND<50 | ND<250 | ---- | ---- | ---- | ---- | ---- |
| 2SSW2-6 | 6 | 06/13/16 | 11.1 | In-Situ | ---- | ---- | ---- | ---- | ---- | 230x | 810 | ---- | ---- | ---- | ---- | ---- |
| 2WSW5-5.5 | 5.5 | 06/13/16 | 13.1 | In-Situ | ---- | ---- | ---- | ---- | ---- | ND<50 | 330 | ---- | ---- | ---- | ---- | ---- |
| 2WSW6-5.5 | 5.5 | 06/13/16 | 1.1 | In-Situ | ---- | ---- | ---- | ---- | ---- | 91x | ND<250 | ---- | ---- | ---- | ---- | ---- |
| 2NSW1-3 | 3 | 06/09/16 | ---- | In-Situ | ---- | ---- | ---- | ---- | ---- | ND<50 | ND<250 | ---- | ---- | ---- | ---- | ---- |
| 2NSW2-4 | 4 | 06/09/16 | ---- | In-Situ | ---- | ---- | ---- | ---- | ---- | ND<50 | ND<250 | ---- | ---- | ---- | ---- | ---- |
| 2ESW1-4 | 4 | 06/09/16 | ---- | In-Situ | ---- | ---- | ---- | ---- | ---- | ND<50 | ND<250 | ---- | ---- | ---- | ---- | ---- |
| 2ESW2-3.5 | 3.5 | 06/09/16 | ---- | In-Situ | ---- | ---- | ---- | ---- | ---- | ND<50 | ND<250 | ---- | ---- | ---- | ---- | ---- |
| 2ESW3-3 | 3 | 06/09/16 | ---- | In-Situ | ---- | ---- | ---- | ---- | ---- | 170x | 530 | ---- | ---- | ---- | ---- | ---- |
| Epothole-2.5 | 2.5 | 06/09/16 | ---- | In-Situ | ---- | ---- | ---- | ---- | ---- | ND<50 | ND<250 | ---- | ---- | ---- | ---- | ---- |
| 2B1-6 | 6 | 06/09/16 | 0.0 | Over-Ex. | ---- | ---- | ---- | ---- | ---- | ND<50 | ND<250 | ---- | ---- | ---- | ---- | ---- |
| 2B2-9.5 | 9.5 | 06/09/16 | 0.1 | In-Situ | ---- | ---- | ---- | ---- | ---- | ND<100 | ND<500 | ---- | ---- | ---- | ---- | ---- |
| 2B3-8.5 | 8.5 | 06/09/16 | 0.5 | In-Situ | ---- | ---- | ---- | ---- | ---- | ND<50 | ND<250 | ---- | ---- | ---- | ---- | ---- |
| 2B4-3.5 | 3.5 | 06/09/16 | 0.0 | Over-Ex. | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| 2B5-5.5 | 5.5 | 06/09/16 | ---- | In-Situ | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| 2B6-5 | 5 | 06/09/16 | ---- | In-Situ | ---- | ---- | ---- | ---- | ---- | ND<50 | ND<250 | ---- | ---- | ---- | ---- | ---- |
| 2SSW1-3 | 3 | 06/09/16 | 0.6 | In-Situ | ---- | ---- | ---- | ---- | ---- | ND<50 | ND<250 | ---- | ---- | ---- | ---- | ---- |
| 2WSW1-6 | 6 | 06/09/16 | 0.3 | In-Situ | ---- | ---- | ---- | ---- | ---- | ND<100 | ND<500 | ---- | ---- | ---- | ---- | ---- |
| 2WSW2-4 | 4 | 06/09/16 | 0.5 | In-Situ | ---- | ---- | ---- | ---- | ---- | ND<50 | ND<250 | ---- | ---- | ---- | ---- | ---- |
| 2WSW3-3.5 | 3.5 | 06/09/16 | ---- | In-Situ | ---- | ---- | ---- | ---- | ---- | ND<50 | ND<250 | ---- | ---- | ---- | ---- | ---- |
| 2WSW4-3 | 3 | 06/09/16 | ---- | In-Situ | ---- | ---- | ---- | ---- | ---- | ND<50 | ND<250 | ---- | ---- | ---- | ---- | ---- |
| Area 3: June 2016 Excavation | | | | | | | | | | | | | | | | |
| 4TP1-6 | 6 | 06/21/16 | ---- | Over-Ex. | ND<2 | ND<0.02 | ND<0.02 | ND<0.02 | ND<0.06 | ND<50 | ND<250 | ---- | ---- | ---- | ---- | ---- |
| 3ESW3-6 | 6 | 06/16/16 | ---- | In-Situ | ---- | ---- | ---- | ---- | ---- | ND<50 | ND<250 | ---- | ---- | ---- | ---- | ---- |
| 3B6-6 | 6 | 06/15/16 | 0.0 | In-Situ | ---- | ---- | ---- | ---- | ---- | ND<100 | ND<500 | ---- | ---- | ---- | ---- | ---- |
| 3ESW2-6 | 6 | 06/14/16 | 0.0 | Over-Ex. | ND<2 | ND<0.02 | ND<0.02 | ND<0.02 | ND<0.06 | 1,100x | 5,800 | ---- | ---- | ---- | ---- | ---- |
| 3WSW5-6 | 6 | 06/14/16 | 88.9 | In-Situ | ND<2 | ND<0.02 | ND<0.02 | ND<0.02 | ND<0.06 | ND<50 | ND<250 | ---- | ---- | ---- | ---- | ---- |
| 3WSW6-6 | 6 | 06/14/16 | 120 | In-Situ | 530 | ND<0.02 | ND<0.02 | 0.18 | 0.30 | 1,100 | ND<250 | ---- | ---- | ---- | ---- | ---- |
| 3NSW1-2.5 | 2.5 | 06/10/16 | 0.0 | In-Situ | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| 3NESW1-6 | 6 | 06/10/16 | 0.0 | In-Situ | ---- | ---- | ---- | ---- | ---- | ND<50 | ND<250 | ---- | ---- | ---- | ---- | ---- |
| 3ESW1-2.5 | 2.5 | 06/10/16 | 0.0 | In-Situ | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| 3B1-7 | 7 | 06/10/16 | 0.0 | In-Situ | ---- | ---- | ---- | ---- | ---- | ND<50 | ND<250 | ---- | ---- | ---- | ---- | ---- |
| 3B2-7 | 7 | 06/10/16 | 0.0 | In-Situ | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| 3B3-4 | 4 | 06/10/16 | 0.0 | In-Situ | ---- | ---- | ---- | ---- | ---- | ND<50 | ND<250 | ---- | ND<1 | ---- | 32.6 | ---- |
| 3B4-4 | 4 | 06/10/16 | 0.1 | In-Situ | ---- | ---- | ---- | ---- | ---- | ND<50 | ND<250 | ---- | ND<1 | ---- | 6.90 | ---- |
| 3B5-4 | 4 | 06/10/16 | 0.2 | Over-Ex. | ---- | ---- | ---- | ---- | ---- | ND<50 | ND<250 | ---- | ND<1 | ---- | 50.4 | ---- |
| 3SESW1-2.5 | 2.5 | 06/10/16 | 0.0 | In-Situ | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| 3SSW1-5 | 5 | 06/10/16 | 0.0 | In-Situ | ---- | ---- | ---- | ---- | ---- | ND<50 | ND<250 | ---- | ND<1 | ---- | 55.3 | ---- |
| 3SSW2-2.5 | 2.5 | 06/10/16 | 0.0 | In-Situ | ---- | ---- | ---- | ---- | ---- | ND<50 | ND<250 | ---- | ND<1 | ---- | 31.9 | ---- |
| 3SSW3-2.5 | 2.5 | 06/10/16 | 0.0 | In-Situ | ---- | ---- | ---- | ---- | ---- | 120x | 680 | ---- | ND<1 | ---- | 191 | ---- |
| 3WSW1-2 | 2 | 06/10/16 | 0.0 | In-Situ | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ND<1 | ---- | 8.14 | ---- |
| MTCA Method A Soil Cleanup Levels for Unrestricted Land Uses | | | | --- | 100/30¹ | 0.03 | 7 | 6 | 9 | 2,000 | | 20 | 2 | 19/2,000² | 250 | 2 |
| MTCA Method B Soil Cleanup Levels for Unrestricted Land Uses³ | | | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Dangerous Waste Threshold for TCLP | | | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |

Table 2, Page 3 of 4. Cleanup Action: Summary of Soil Sample Analytical Laboratory Results

Sea Mar Community Health Center

9635 Des Moines Memorial Drive South, Seattle, Washington 98108

The Riley Group, Inc. Project No. 2016-023A

| Sample Number | Sample Depth | Sample Date | PID | Sample Status | Gasoline TPH | BTEX | | | | Diesel TPH
w/ silica gel | Oil TPH | Total MTCA 5 Metals | | | | |
|---|--------------|-------------|------|---------------|--------------|---------------------|---------|---------|---------|-----------------------------|---------|---------------------|-------|-----------------------|------|------|
| | | | | | | B | T | E | X | | | As | Cd | Cr | Pb | Hg |
| 3WSW2-2.5 | 2.5 | 06/10/16 | 6.3 | In-Situ | ---- | ---- | ---- | ---- | ---- | 67x | ND<250 | ---- | ND<1 | ---- | 45.1 | ---- |
| 3WSW3-2.5 | 2.5 | 06/10/16 | 0.0 | In-Situ | ---- | ---- | ---- | ---- | ---- | ND<50 | 310 | ---- | ND<10 | ---- | 60.0 | ---- |
| Area 4: June 2016 Excavation | | | | | | | | | | | | | | | | |
| 4B20-6 | 6 | 06/20/16 | ---- | In-Situ | 5.4 | ND<0.02 | ND<0.02 | ND<0.02 | ND<0.06 | ND<50 | ND<250 | ---- | ---- | ---- | ---- | ---- |
| 4SSW12-5.5 | 5.5 | 06/20/16 | ---- | In-Situ | ND<2 | ND<0.02 | ND<0.02 | ND<0.02 | ND<0.06 | ND<50 | ND<250 | ---- | ---- | ---- | ---- | ---- |
| 4SSW13-4 | 4 | 06/20/16 | ---- | Over-Ex. | ---- | ---- | ---- | ---- | ---- | ND<50 | ND<250 | ---- | ---- | ---- | ---- | ---- |
| 4SSW14-4 | 4 | 06/20/16 | ---- | In-Situ | ND<2 | ND<0.02 | ND<0.02 | ND<0.02 | ND<0.06 | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| 4SSW15-4 | 4 | 06/20/16 | ---- | In-Situ | 4.5 | ND<0.02 | ND<0.02 | ND<0.02 | ND<0.06 | ND<50 | ND<250 | ---- | ---- | ---- | ---- | ---- |
| 4B19-6 | 6 | 06/17/16 | ---- | In-Situ | ND<2 | ND<0.02 | ND<0.02 | ND<0.02 | ND<0.06 | ND<50 | ND<250 | ---- | ---- | ---- | ---- | ---- |
| 4NSW4-5.5 | 5.5 | 06/16/16 | ---- | In-Situ | ND<2 | ND<0.02 | ND<0.02 | ND<0.02 | ND<0.06 | ND<50 | ND<250 | ---- | ---- | ---- | ---- | ---- |
| 4NSW5-5.5 | 5.5 | 06/16/16 | ---- | In-Situ | ND<2 | ND<0.02 | ND<0.02 | ND<0.02 | ND<0.06 | ND<50 | ND<250 | ---- | ---- | ---- | ---- | ---- |
| 4NSW6-5.5 | 5.5 | 06/16/16 | ---- | In-Situ | ND<2 | ND<0.02 | ND<0.02 | ND<0.02 | ND<0.06 | ND<50 | ND<250 | ---- | ---- | ---- | ---- | ---- |
| 4ESW9-7.5 | 7.5 | 06/16/16 | ---- | In-Situ | ND<2 | ND<0.02 | ND<0.02 | ND<0.02 | ND<0.06 | ND<50 | ND<250 | ---- | ---- | ---- | ---- | ---- |
| 4ESW10-9 | 9 | 06/16/16 | ---- | In-Situ | ND<2 | ND<0.02 | ND<0.02 | ND<0.02 | ND<0.06 | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| 4B10-8 | 8 | 06/16/16 | ---- | In-Situ | 5.0 | ND<0.02 | ND<0.02 | ND<0.02 | ND<0.06 | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| 4B11-15 | 15 | 06/16/16 | ---- | In-Situ | ND<2 | ND<0.02 | ND<0.02 | ND<0.02 | ND<0.06 | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| 4B12-11 | 11 | 06/16/16 | ---- | In-Situ | ND<2 | ND<0.02 | ND<0.02 | ND<0.02 | ND<0.06 | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| 4B13-9 | 9 | 06/16/16 | ---- | In-Situ | ND<4 | ND<0.02j | ND<0.04 | ND<0.04 | ND<0.12 | ND<100 | ND<500 | ---- | ---- | ---- | ---- | ---- |
| 4B14-9 | 9 | 06/16/16 | ---- | In-Situ | ND<4 | ND<0.02j | ND<0.04 | ND<0.04 | ND<0.12 | ND<100 | ND<500 | ---- | ---- | ---- | ---- | ---- |
| 4B15-16 | 16 | 06/16/16 | ---- | In-Situ | ND<2 | ND<0.02 | ND<0.02 | ND<0.02 | ND<0.06 | ND<50 | ND<250 | ---- | ---- | ---- | ---- | ---- |
| 4B16-7 | 7 | 06/16/16 | ---- | In-Situ | ND<4 | ND<0.02j | ND<0.04 | ND<0.04 | ND<0.12 | ND<100 | ND<500 | ---- | ---- | ---- | ---- | ---- |
| 4B17-6 | 6 | 06/16/16 | ---- | In-Situ | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| 4B18-6 | 6 | 06/16/16 | ---- | In-Situ | ND<2 | ND<0.02 | ND<0.02 | ND<0.02 | ND<0.06 | ND<50 | ND<250 | ---- | ---- | ---- | ---- | ---- |
| 4SSW4-6 | 6 | 06/16/16 | ---- | In-Situ | 2.6 | ND<0.02 | ND<0.02 | ND<0.02 | ND<0.06 | ND<50 | ND<250 | ---- | ---- | ---- | ---- | ---- |
| 4SSW5-6 | 6 | 06/16/16 | ---- | Over-Ex. | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| 4SSW6-6 | 6 | 06/16/16 | ---- | In-Situ | ND<2 | ND<0.02 | ND<0.02 | ND<0.02 | ND<0.06 | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| 4SSW7-6 | 6 | 06/16/16 | ---- | In-Situ | ND<2 | ND<0.02 | ND<0.02 | ND<0.02 | ND<0.06 | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| 4SSW8-6 | 6 | 06/16/16 | ---- | In-Situ | ND<2 | ND<0.02 | ND<0.02 | ND<0.02 | ND<0.06 | ND<50 | ND<250 | ---- | ---- | ---- | ---- | ---- |
| 4SSW9-5.5 | 5.5 | 06/16/16 | ---- | In-Situ | ND<2 | ND<0.02 | ND<0.02 | ND<0.02 | ND<0.06 | ND<50 | ND<250 | ---- | ---- | ---- | ---- | ---- |
| 4SSW10-5.5 | 5.5 | 06/16/16 | ---- | In-Situ | ND<2 | ND<0.02 | ND<0.02 | ND<0.02 | ND<0.06 | ND<50 | ND<250 | ---- | ---- | ---- | ---- | ---- |
| 4SSW11-5.5 | 5.5 | 06/16/16 | ---- | Over-Ex. | 38 | ND<0.02 | ND<0.02 | 0.037 | ND<0.06 | 1,100 | ND<250 | ---- | ---- | ---- | ---- | ---- |
| 4WSW7-7.5 | 7.5 | 06/16/16 | ---- | In-Situ | 2.9 | ND<0.02 | ND<0.02 | ND<0.02 | ND<0.06 | 74x | ND<250 | ---- | ---- | ---- | ---- | ---- |
| 4WSW8-7.5 | 7.5 | 06/16/16 | ---- | In-Situ | ND<2 | ND<0.02 | ND<0.02 | ND<0.02 | ND<0.06 | ND<50 | ND<250 | ---- | ---- | ---- | ---- | ---- |
| 4WSW9-11.5 | 11.5 | 06/16/16 | ---- | In-Situ | ND<2 | ND<0.02 | ND<0.02 | ND<0.02 | ND<0.06 | ND<50 | ND<250 | ---- | ---- | ---- | ---- | ---- |
| 4WSW10-5 | 5 | 06/16/16 | ---- | In-Situ | ND<2 | ND<0.02 | ND<0.02 | ND<0.02 | ND<0.06 | ND<50 | ND<250 | ---- | ---- | ---- | ---- | ---- |
| 4ESW7-7 | 7 | 06/10/16 | ---- | In-Situ | 5.3 | ND<0.02 | ND<0.02 | ND<0.02 | ND<0.06 | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| 4ESW8-6 | 6 | 06/10/16 | 0.9 | In-Situ | ND<2 | ND<0.02 | ND<0.02 | ND<0.02 | ND<0.06 | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| 4SSW3-6 | 6 | 06/10/16 | 7.9 | Over-Ex. | 37 | ND<0.02 | ND<0.02 | 0.076 | 0.21 | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| 4WSW2-5.5 | 5.5 | 06/10/16 | 1.5 | In-Situ | ND<2 | ND<0.02 | ND<0.02 | ND<0.02 | ND<0.06 | 63x | 340 | ---- | ---- | ---- | ---- | ---- |
| 4WSW3-4 | 4 | 06/10/16 | 5.4 | In-Situ | ND<2 | ND<0.02 | ND<0.02 | ND<0.02 | ND<0.06 | ND<50 | ND<250 | ---- | ---- | ---- | ---- | ---- |
| 4WSW4-6 | 6 | 06/10/16 | 1.9 | In-Situ | ND<2 | ND<0.02 | ND<0.02 | ND<0.02 | ND<0.06 | 110x | 880 | ---- | ---- | ---- | ---- | ---- |
| 4WSW5-6 | 6 | 06/10/16 | 0.0 | In-Situ | ND<2 | ND<0.02 | ND<0.02 | ND<0.02 | ND<0.06 | ND<50 | ND<250 | ---- | ---- | ---- | ---- | ---- |
| 4WSW6-6 | 6 | 06/10/16 | 68.1 | Over-Ex. | 170 | ND<0.02 | 0.27 | 0.68 | 1.6 | ND<50 | ND<250 | ---- | ---- | ---- | ---- | ---- |
| 4NSW2-5 | 5 | 06/09/16 | ---- | In-Situ | ND<2 | ND<0.02 | ND<0.02 | ND<0.02 | ND<0.06 | ND<50 | ND<250 | ---- | ---- | ---- | ---- | ---- |
| 4NSW3-6.5 | 6.5 | 06/09/16 | ---- | In-Situ | ND<2 | ND<0.02 | ND<0.02 | ND<0.02 | ND<0.06 | ND<50 | ND<250 | ---- | ---- | ---- | ---- | ---- |
| 4ESW6-7 | 7 | 06/09/16 | 0.9 | In-Situ | 25 | ND<0.02 | ND<0.02 | 0.067 | 0.15 | ND<50 | ND<250 | ---- | ---- | ---- | ---- | ---- |
| 4B7-7 | 7 | 06/09/16 | ---- | In-Situ | ND<2 | ND<0.02 | ND<0.02 | ND<0.02 | ND<0.06 | ND<50 | ND<250 | ---- | ---- | ---- | ---- | ---- |
| 4B8-7 | 7 | 06/09/16 | ---- | In-Situ | ND<2 | ND<0.02 | ND<0.02 | ND<0.02 | ND<0.06 | ND<50 | ND<250 | ---- | ---- | ---- | ---- | ---- |
| 4B9-10 | 10 | 06/09/16 | ---- | In-Situ | ND<2 | ND<0.02 | ND<0.02 | ND<0.02 | ND<0.06 | ND<50 | ND<250 | ---- | ---- | ---- | ---- | ---- |
| 4WSW1-5.5 | 5.5 | 06/09/16 | ---- | In-Situ | ND<2 | ND<0.02 | ND<0.02 | ND<0.02 | ND<0.06 | ND<50 | ND<250 | ---- | ---- | ---- | ---- | ---- |
| 4NSW1-5 | 5 | 06/08/16 | 0.1 | In-Situ | ND<2 | ND<0.02 | ND<0.02 | ND<0.02 | ND<0.06 | ND<50 | ND<250 | ---- | ---- | ---- | ---- | ---- |
| 4ESW1-6 | 6 | 06/08/16 | 0.2 | In-Situ | ND<2 | ND<0.02 | ND<0.02 | ND<0.02 | ND<0.06 | ND<50 | ND<250 | ---- | ---- | ---- | ---- | ---- |
| MTCA Method A Soil Cleanup Levels for Unrestricted Land Uses | | | | | --- | 100/30 ¹ | 0.03 | 7 | 6 | 9 | 2,000 | 20 | 2 | 19/2,000 ² | 250 | 2 |
| MTCA Method B Soil Cleanup Levels for Unrestricted Land Uses³ | | | | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Dangerous Waste Threshold for TCLP | | | | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |

Table 2, Page 4 of 4. Cleanup Action: Summary of Soil Sample Analytical Laboratory Results

Sea Mar Community Health Center

9635 Des Moines Memorial Drive South, Seattle, Washington 98108

The Riley Group, Inc. Project No. 2016-023A

| Sample Number | Sample Depth | Sample Date | PID | Sample Status | Gasoline TPH | BTEX | | | | Diesel TPH
w/ silica gel | Oil TPH | Total MTCA 5 Metals | | | | |
|---|--------------|-------------|-------|---------------|---------------------------|-------------|------------|-------------|-------------|-----------------------------|-----------|---------------------|-----------------------------|------------|----------|------|
| | | | | | | B | T | E | X | | | As | Cd | Cr | Pb | Hg |
| 4ESW2-6 | 6 | 06/08/16 | 0.5 | In-Situ | ND<2 | ND<0.02 | ND<0.02 | ND<0.02 | ND<0.06 | ND<50 | ND<250 | ---- | ---- | ---- | ---- | ---- |
| 4ESW3-6 | 6 | 06/08/16 | 0.1 | In-Situ | ND<2 | ND<0.02 | ND<0.02 | ND<0.02 | ND<0.06 | ND<50 | ND<250 | ---- | ---- | ---- | ---- | ---- |
| 4ESW4-6 | 6 | 06/08/16 | 597.4 | Over-Ex. | 2,300 | 0.50 | 3.6 | 20 | 34 | 310x | ND<250 | ---- | ---- | ---- | ---- | ---- |
| 4ESW5-5.5 | 5.5 | 06/08/16 | 0.3 | In-Situ | ND<2 | ND<0.02 | ND<0.02 | ND<0.02 | ND<0.06 | ND<50 | ND<250 | ---- | ---- | ---- | ---- | ---- |
| 4B1-7.5 | 7.5 | 06/08/16 | 0.1 | In-Situ | ND<2 | ND<0.02 | ND<0.02 | ND<0.02 | ND<0.06 | ND<50 | ND<250 | ---- | ---- | ---- | ---- | ---- |
| 4B2-8 | 8 | 06/08/16 | ---- | In-Situ | ND<2 | ND<0.02 | ND<0.02 | ND<0.02 | ND<0.06 | ND<50 | ND<250 | ---- | ---- | ---- | ---- | ---- |
| 4B3-12 | 12 | 06/08/16 | 33.1 | In-Situ | ND<2 | ND<0.02 | ND<0.02 | ND<0.02 | ND<0.06 | ND<50 | ND<250 | ---- | ---- | ---- | ---- | ---- |
| 4B4-7 | 7 | 06/08/16 | 0.6 | In-Situ | ND<2 | ND<0.02 | ND<0.02 | ND<0.02 | ND<0.06 | ND<50 | ND<250 | ---- | ---- | ---- | ---- | ---- |
| 4B5-7.5 | 7.5 | 06/08/16 | 0.2 | In-Situ | ND<2 | ND<0.02 | ND<0.02 | ND<0.02 | ND<0.06 | ND<50 | ND<250 | ---- | ---- | ---- | ---- | ---- |
| 4B6-7 | 7 | 06/08/16 | 0.4 | In-Situ | ND<2 | ND<0.02 | ND<0.02 | ND<0.02 | ND<0.06 | ND<50 | ND<250 | ---- | ---- | ---- | ---- | ---- |
| 4SSW1-6 | 6 | 06/08/16 | 0.7 | Over-Ex. | ND<2 | ND<0.02 | ND<0.02 | ND<0.02 | ND<0.06 | ND<50 | ND<250 | ---- | ---- | ---- | ---- | ---- |
| 4SSW2-6 | 6 | 06/08/16 | 56.7 | Over-Ex. | 99 | ND<0.02 | ND<0.02 | 0.32 | 0.97 | 90x | ND<250 | ---- | ---- | ---- | ---- | ---- |
| MTCA Method A Soil Cleanup Levels for Unrestricted Land Uses | | | | --- | 100/30¹ | 0.03 | 7 | 6 | 9 | 2,000 | 20 | 2 | 19/2,000² | 250 | 2 | |
| MTCA Method B Soil Cleanup Levels for Unrestricted Land Uses³ | | | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Dangerous Waste Threshold for TCLP | | | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |

Notes:

All results and detection limits are given in milligrams per kilogram (mg/kg); equivalent to parts per million (ppm).

Sample Depth = Soil sample depth interval in feet below ground surface (bgs).

PID = Photoionization detector.

Over-Excav. = Over-excavated during cleanup, In-Situ = Remaining on-site-in-situ

Gasoline TPH (total petroleum hydrocarbons) determined using Northwest Test Method NWTPH-Gx.

BTEX (benzene, toluene, ethylbenzene, and xylenes) determined using EPA Test Method 8021B or 8260C.

Diesel and Oil TPH (total petroleum hydrocarbons) determined using Northwest Test Method NWTPH-Dx with silica gel cleanup.

MTCA 5 Metals (As = arsenic, Cd = cadmium, Cr = chromium, Pb = lead, Hg = mercury) determined using EPA Method 200.8 and 1631E.

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

ND = Not detected at noted analytical detection limit.

---- = Not analyzed or not applicable.

TEF = Toxicity Equivalency Factor per WAC 173-340-708(8).

Washington State Department of Ecology (Ecology) Model Toxics Control Act (MTCA) Method A Soil Cleanup Levels for Unrestricted Land Uses (WAC 173-340-900, Table 740-1). MTCA Method B Soil Screening Levels from Ecology's Cleanup Level and Risk Calculation (CLARC) database.

¹ The higher cleanup level is allowed if no benzene is detected in the sample and the total of toluene, ethylbenzene and xylenes is less than 1% of the gasoline mixture.

² The higher cleanup level is allowed if no hexavalent chromium (CrVI) is present in the sample.

³ No MTCA Method A Cleanup Level has been established. Therefore, the MTCA Method B Non-Carcinogenic Standard Formula Value is listed for reference.

⁴ Results and detection limits are given in milligrams per liter (mg/L); equivalent to parts per million (ppm).

Bold results indicated concentrations above laboratory detection limits.

Bold and yellow highlighted results indicate concentrations (if any) that exceed MTCA Method A or B Soil Cleanup Levels.

Table 3, Page 1 of 4. Summary of Groundwater Analytical Laboratory Results

Sea Mar Community Health Center

9635 Des Moines Memorial Drive South, Seattle, Washington 98108

The Riley Group, Inc. Project No. 2016-023A

| Sample Number | Sample Date | Top of Casing (TOC) Elevation | Depth to Water (below TOC) | Groundwater Elevation | Gasoline TPH | BTEX | | | | Diesel TPH w/o silica gel | Oil TPH w/ silica gel | Diesel TPH | Oil TPH | PCE | TCE | cis-1,2-DCE | Trans-1,2-DCE | VC | 1,1-DCE | Other HVOCs | Other VOCs | SVOCs | Total Metals | | | | | Dissolved Metals | | | | | | | | |
|---|-------------|-------------------------------|----------------------------|-----------------------|------------------------|------|-------|------|-------|---------------------------|-----------------------|------------|---------|--------|------|-------------|---------------|------|---------|---------------------------------|-----------------|------------------|--------------|------|------|--------|------|------------------|------|------|------|------|------|------|------|------|
| | | | | | | B | T | E | X | | | | | | | | | | | | | | As | Cd | Cr | Pb | Hg | As | Cd | Cr | Pb | Hg | | | | |
| Monitoring Wells | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| MW1 Screened Interval 5 - 10 ft bgs, Total boring depth 10 ft bgs, MW1 destroyed during construction. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| MW1 | 05/06/16 | 28.3 | 5.40 | 22.9 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | | | |
| MW1-H2O | 03/07/16 | 28.3 | 4.65 | 23.6 | ---- | ---- | ---- | ---- | ND<50 | ND<250 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | | | |
| MW1 | 01/11/08 | 28.3 | 5.70 | 22.59 | ---- | ---- | ---- | ---- | ---- | ---- | ND<50 | ND<250 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | | | |
| MW2 Screened Interval 5 - 10 ft bgs, Total boring depth 9.5 bgs. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| MW2 | 12/15/16 | 19.30 | 1.69 | 17.61 | ---- | ---- | ---- | ---- | 210 x | ND<250 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | | | |
| MW2 | 09/12/16 | 19.30 | 2.30 | 17.00 | ---- | ---- | ---- | ---- | 200 x | ND<300 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | | |
| MW2 | 07/15/16 | 19.30 | 2.05 | 17.25 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | | |
| MW2 | 06/30/16 | 19.30 | 2.02 | 17.28 | ---- | ---- | ---- | ---- | 290x | ND<250 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | | |
| MW2-H2O | 03/07/16 | 19.30 | 1.81 | 17.5 | ---- | ---- | ---- | ---- | 340x | ND<250 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | | |
| MW2 | 01/11/08 | 19.30 | 2.10 | 17.20 | ---- | ---- | ---- | ---- | ---- | ---- | ND<50 | ND<250 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | | |
| MW3 Screened Interval 5 - 10 ft bgs, Total boring depth 12 ft bgs. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| MW3 | 09/12/16 | 20.3 | 5.04 | 15.28 | ---- | ---- | ---- | ---- | ND<60 | ND<300 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | | |
| MW3 | 01/11/08 | 20.3 | 3.66 | 16.66 | ---- | ---- | ---- | ---- | ---- | ---- | ND<50 | ND<250 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | | |
| MW4 Screened Interval 5 - 10 ft bgs, Total boring depth 12 ft bgs, MW4 destroyed during construction. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| MW4 | 07/15/16 | 13.13 | 5.88 | 7.25 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | |
| MW4 | 06/30/16 | 13.13 | 5.84 | 7.29 | ---- | ---- | ---- | ---- | ND<50 | ND<250 | ---- | ---- | ND<1 | 3.9 | 16 | ND<1 | 4.9 | ND<1 | ND | ND | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | | |
| MW4 | 05/06/16 | 13.13 | 5.28 | 7.85 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | |
| MW4-H2O | 03/07/16 | 13.13 | 4.56 | 8.57 | ---- | ---- | ---- | ---- | 52x | ND<250 | ---- | ---- | ND<1 | ND<1 | 7.4 | ND<1 | 4.6 | ND<1 | ND | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | | |
| 82114OS-1:GW | 08/21/14 | 13.13 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ND<1 | 7.02 | 31.9 | ND<1 | 6.43 | ND<1 | ND | ND | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | | |
| 52214OS-1:GW | 05/22/14 | 13.13 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ND<1 | 5.35 | 16.8 | ND<1 | 7.26 | ND<1 | ND | ND | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | | |
| 21414OS-1:GW | 02/14/14 | 13.13 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ND<1 | 5.31 | 15.3 | ND<1 | ND<0.20 | ND<1 | ND | ND | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | | |
| OS-1-81613 | 08/16/13 | 13.13 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ND<1 | 9.05 | 38.0 | ND<1 | 14.6 | ND<1 | ND | ND | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | | |
| MW4 | 01/16/08 | 13.13 | 6.81 | 6.32 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ND<1 | 140 | 63 | ND<1 | 9.8 | ND<1 | ---- | EDC=1.0
CE=7.3
1,3-DB=1.6 | ND<0.1 | 2.88 | ND<1 | 2.44 | 8.98 | ND<0.2 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | | | |
| MW4 | 01/11/08 | 13.13 | 6.81 | 6.32 | ND<100 | ND<1 | ND<1 | ND<3 | ---- | ---- | ND<50 | ND<250 | ND<1 | 150ve | 70 | ND<1 | 12 | ND<1 | ND | EDC=1.1 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | | |
| MW5 Screened Interval 5 - 10 ft bgs, Total boring depth 10 ft bgs, MW5 decommissioned 06/08/16. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| MW5 | 05/06/16 | 10.00 | 2.65 | 7.35 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | | |
| MW5-H2O | 03/07/16 | 10.00 | 2.31 | 7.69 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ND<1 | ND<1 | ND<1 | ND<1 | ND<0.2 | ND<1 | ND | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | | |
| 52214OS-2:GW | 05/22/14 | 10.00 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ND<1 | ND<0.5 | ND<1 | ND<1 | ND<0.2 | ND<1 | ND | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | |
| 022014OS-2:GW | 02/20/14 | 10.00 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ND<1 | ND<0.5 | ND<1 | ND<1 | ND<0.2 | ND<1 | ND | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | |
| OS-2-81613 | 05/16/13 | 10.00 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ND<1 | ND<1 | ND<1 | ND<1 | ND<0.2 | ND<1 | ND | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | |
| MW5 | 01/11/08 | 10.00 | 2.02 | 7.98 | ND<100 | ND<1 | ND<1 | ND<3 | ---- | ---- | ND<50 | ND<250 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | |
| MW6 Screened Interval 5 - 10 ft bgs, Total boring depth 10 ft bgs, MW6 decommissioned 06/08/16. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| MW6 | 05/06/16 | 6.78 | 1.89 | 4.89 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | |
| MW6-H2O | 03/07/16 | 6.78 | 2.695 | 4.09 | ---- | ---- | ---- | ---- | 200x | ND<250 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | |
| 022014OS-4:GW | 02/20/14 | 6.78 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ND<1 | ND<0.5 | ND<1 | ND<1 | ND<0.2 | ND<1 | ND | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | |
| OS-4-81613 | 08/16/13 | 6.78 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ND<1 | ND<1 | ND<1 | ND<1 | ND<0.2 | ND<1 | ND | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | |
| MW6 | 01/16/08 | 6.78 | 2.84 | 3.94 | ---- | ---- | ---- | ---- | ---- | ---- | ND<93 | ND<460 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | |
| MW6 | 01/11/08 | 6.78 | 2.84 | 3.94 | ND<100 | ND<1 | ND<1 | ND<3 | ---- | ---- | ---- | ---- | ND<1 | ND<1 | ND<1 | ND<1 | ND<0.2 | ND<1 | ND | Acetone=22 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | |
| MW7 Screened Interval 5 - 10 ft bgs, Total boring depth 10 ft bgs, MW7 decommissioned 06/08/16. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| MW7 | 05/06/16 | 9.17 | 0 | 9.17 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | |
| MW7-H2O | 03/07/16 | 9.17 | 0.0 | ---- | 2,500 | 11 | ND<1 | 3.6 | 3.8 | 1,500x | ND<250 | ---- | ND<1 | ND<1 | ND<1 | ND<1 | ND<0.2 | ND<1 | ND | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | |
| 022014OS-3:GW | 02/20/14 | 9.17 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ND<1 | ND<0.5 | ND<1 | ND<1 | ND<0.2 | ND<1 | ND | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | |
| MTCA Method A Cleanup Levels for Ground Water | | | | | 800/1,000 ¹ | 5 | 1,000 | 700 | 1,000 | 500 | 500 | 500 | 500 | 5 | 5 | ---- | ---- | 0.2 | ---- | Analyte Specific | EDC = 5 | Analyte Specific | 5 | 5 | 50 | 15 | 2 | 5 | 5 | 50 | 15 | 2 | ---- | ---- | | |
| MTCA Method B Cleanup Levels for Ground Water ² | | | | | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | 16 | 160 | ---- | 400 | ---- | Acetone = 7,200 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |

Table 3, Page 2 of 4. Summary of Groundwater Analytical Laboratory Results

Sea Mar Community Health Center

9635 Des Moines Memorial Drive South, Seattle, Washington 98108

The Riley Group, Inc. Project No. 2016-023A

| Sample Number | Sample Date | Top of Casing (TOC) Elevation | Depth to Water (below TOC) | Groundwater Elevation | Gasoline TPH | BTEX | | | | Diesel TPH w/o silica gel | Oil TPH | Diesel TPH w/ silica gel | Oil TPH | PCE | TCE | cis-1,2-DCE | Trans-1,2-DCE | VC | 1,1-DCE | Other HVOCs | Other VOCs | SVOCs | Total Metals | | | | | Dissolved Metals | | | | | | | | | | | | |
|--|-------------|-------------------------------|----------------------------|-----------------------|------------------------|------|-------|------|-------|---------------------------|---------|--------------------------|---------|------|------|-------------|---------------|------|---------|------------------|------------------|------------------|--------------|------|------|------|------|------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| | | | | | | B | T | E | X | | | | | | | | | | | | | | As | Cd | Cr | Pb | Hg | As | Cd | Cr | Pb | Hg | | | | | | | | |
| OS-3-81613 | 08/16/13 | 9.17 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ND<1 | ND<1 | ND<1 | ND<1 | ND<0.2 | ND<1 | ND | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | |
| MW7 | 01/25/08 | 9.17 | 0.80 | 8.37 | 4,000 | 43 | 20 | 34 | 27 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | | | |
| MW7 | 01/16/08 | 9.17 | 0.80 | 8.37 | 5,500 | 61 | 29 | 46 | 45 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | | |
| MW7 | 01/11/08 | 9.17 | 0.83 | 8.34 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | 890 x | ND<250 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | | |
| MW8 Screened Interval 7.5 - 12.5 ft bgs, Total boring depth 13 ft bgs, MW8 destroyed during construction. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| MW8 | 09/12/16 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | | |
| Well Not Locatable (Buried Under Asphalt) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| MW8 | 07/15/16 | 14.79 | 5.67 | 9.12 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | | |
| MW8 | 06/30/16 | 14.79 | 4.78 | 10.01 | ---- | ---- | ---- | ---- | ---- | 100x | ND<250 | ---- | ND<1 | 33 | 7.0 | ND<1 | ND<0.2 | 1.7 | ND | ND | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | | |
| MW8 | 05/06/16 | 14.79 | 4.53 | 10.26 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | |
| MW8-H2O | 03/07/16 | 14.79 | 4.675 | 10.12 | ---- | ---- | ---- | ---- | ---- | 80x | ND<330 | ---- | ND<1 | 20 | 5.5 | ND<1 | ND<0.2 | 1.9 | ND | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | |
| MW9 Screened Interval 5 - 10 ft bgs, Total boring depth 10 ft bgs, MW9 decommissioned 06/08/16. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| MW9 | 05/06/16 | 8.64 | 0 | 8.64 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | |
| MW9-H2O | 03/07/16 | 8.64 | 0.0 | 8.64 | ND<100 | ---- | ---- | ---- | ---- | 730x | ND<300 | ---- | ND<1 | ND<1 | ND<1 | ND<1 | ND<0.2 | ND<1 | ND | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | |
| MW10 Screened Interval 9 - 14 ft bgs, Total boring depth 14 ft bgs, MW10 decommissioned 06/15/16. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| MW10 | 05/06/16 | 27.36 | 7.84 | 19.52 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | |
| MW10-H2O | 03/07/16 | 27.36 | 5.965 | 21.4 | ---- | ---- | ---- | ---- | ---- | 56x | ND<250 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | |
| MW11 Screened Interval 5 - 15 ft bgs, Total boring depth 15 ft bgs, MW11 damaged during construction. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| MW11 | 12/15/16 | 9.47 | 4.74 | 4.73 | ND<100 | ND<1 | ND<1 | ND<1 | ND<3 | 140x | ND<250 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | |
| MW11 | 09/12/16 | 9.47 | ---- | ---- | ND<100 | ND<1 | ND<1 | ND<1 | ND<3 | 69x | ND<250 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | |
| MW11 | 07/15/16 | 9.47 | 4.51 | 4.96 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | |
| MW11 | 06/30/16 | 9.47 | 5.17 | 4.30 | ND<100 | ND<1 | ND<1 | ND<1 | ND<3 | 190x | ND<250 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| MW11 | 05/06/16 | 9.47 | 4.77 | 4.70 | ND<100 | 1.7 | ND<1 | ND<1 | ND<3 | 200x | ND<250 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | |
| MW12 Screened Interval 5 - 15 ft bgs, Total boring depth 15 ft bgs | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| MW12 | 12/15/16 | 7.64 | 2.47 | 5.17 | ND<100 | ND<1 | ND<1 | ND<1 | ND<3 | ND<80 | ND<400 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | |
| MW12 | 09/12/16 | 7.64 | 3.44 | 4.20 | ND<100 | ND<1 | ND<1 | ND<1 | ND<3 | 80x | ND<250 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | |
| MW12 | 07/15/16 | 7.64 | 2.63 | 5.01 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | |
| MW12 | 06/30/16 | 7.64 | 2.92 | 4.72 | ND<100 | ND<1 | ND<1 | ND<1 | ND<3 | 220x | ND<250 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| MW12 | 05/06/16 | 7.64 | 2.41 | 5.23 | ND<100 | ND<1 | ND<1 | ND<1 | ND<3 | 200x | ND<250 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| MW13 Screened Interval 3.25 - 13.25 ft bgs, Total boring depth 15 ft bgs, MW13 destroyed during construction. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| MW13 | 09/12/16 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | |
| Well Not Locatable | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| MW13 | 07/15/16 | 7.64 | 4.50 | 3.14 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | |
| MW13 | 06/30/16 | 7.64 | 4.34 | 3.30 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ND<1 | ND<1 | ND<1 | ND<1 | ND<0.2 | ND<1 | ND | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ND<1 | ---- | ND<1 | ---- | | |
| MW13 | 05/06/16 | 7.64 | 4.62 | 3.02 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ND<1 | ND<1 | ND<1 | ND<1 | ND<0.2 | ND<1 | ND | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ND<1 | ---- | ND<1 | ---- | 5.32 | | |
| MW14 Screened Interval 5-15 ft bgs, Total boring depth 15.5 ft bgs | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| MW14 | 12/15/16 | 14.65 | 5.03 | 9.62 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ND<1 | ND<1 | ND<1 | ND<1 | ND<0.2 | ND<1 | ND | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | |
| MW14 | 09/12/16 | 14.65 | 5.82 | 8.83 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ND<1 | ND<1 | ND<1 | ND<1 | ND<0.2 | ND<1 | ND | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | |
| MW14 | 07/15/16 | 14.65 | 5.60 | 9.05 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | |
| MW14 | 06/30/16 | 14.65 | 5.11 | 9.54 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ND<1 | ND<1 | ND<1 | ND<1 | ND<0.2 | ND<1 | ND | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | |
| MW14 | 05/06/16 | 14.65 | 4.64 | 10.01 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ND<1 | ND<1 | ND<1 | ND<1 | ND<0.2 | ND<1 | ND | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | |
| MW15 Screened Interval 5.75 - 15.75 ft bgs, Total boring depth 17 ft bgs | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| MW15 | 12/15/16 | 14.73 | 4.39 | 10.34 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ND<1 | ND<1 | ND<1 | ND<1 | ND<0.2 | ND<1 | ND | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | |
| MW15 | 09/12/16 | 14.73 | 5.16 | 9.57 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ND<1 | ND<1 | ND<1 | ND<1 | ND<0.2 | ND<1 | ND | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | |
| MW15 | 07/15/16 | 14.73 | 5.04 | 9.69 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | |
| MW15 | 06/30/16 | 14.73 | 4.65 | 10.08 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ND<1 | ND<1 | ND<1 | ND<1 | ND<0.2 | ND<1 | ND | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | |
| MW15 | 05/06/16 | 14.73 | 4.31 | 10.42 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ND<1 | ND<1 | ND<1 | ND<1 | ND<0.2 | ND<1 | ND | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | |
| MTCA Method A Cleanup Levels for Ground Water | | | | | 800/1,000 ¹ | 5 | 1,000 | 700 | 1,000 | 500 | 500 | 500 | 500 | 5 | 5 | ---- | ---- | 0.2 | ---- | Analyte Specific | Analyte Specific | Analyte Specific | 5 | 5 | 50 | 15 | 2 | 5 | 5 | 50 | 15 | 2 | ---- | ---- | ---- | ---- | | | | |
| MTCA Method B Cleanup Levels for Ground Water² | | | | | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | 16 | 160 | ---- | 400 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | | |

Table 3, Page 3 of 4. Summary of Groundwater Analytical Laboratory Results
Sea Mar Community Health Center
9635 Des Moines Memorial Drive South, Seattle, Washington 98108
The Riley Group, Inc. Project No. 2016-023A

| Sample Number | Sample Date | Top of Casing (TOC) Elevation | Depth to Water (below TOC) | Groundwater Elevation | Gasoline TPH | BTEX | | | | Diesel TPH w/o silica gel | Oil TPH w/ silica gel | PCE | TCE | cis-1,2-DCE | Trans-1,2-DCE | VC | 1,1-DCE | Other HVOCs | Other VOCs | SVOCs | Total Metals | | | | | Dissolved Metals | | | | | | |
|---|-------------|-------------------------------|----------------------------|-----------------------|------------------------|---------|-------|------|-------|---------------------------|-----------------------|-------|--------|-------------|---------------|---------|---------|-------------|------------|------------------|------------------|------------------|------|------|------|------------------|------|--------|------|------|------|---|
| | | | | | | B | T | E | X | | | | | | | | | | | | As | Cd | Cr | Pb | Hg | As | Cd | Cr | Pb | Hg | | |
| MW16 Screened Interval 9 - 19 ft bgs, Total boring depth 20 ft bgs, MW16 destroyed and/or damaged during construction (unlocatable). | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| MW16 | 09/12/16 | 22.03 | 2.24 | 19.79 | ---- | ---- | ---- | ---- | ---- | 110x | ND<250 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | | | | |
| MW16-W | 07/14/16 | 22.03 | 2.10 | 19.93 | ---- | ---- | ---- | ---- | ---- | 150x | ND<250 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | | | | |
| MW17 Screened Interval 5-15 ft bgs, Total boring depth 15 ft bgs, MW17 damaged during construction. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| MW17 | 12/15/16 | 11.52 | 6.00 | 5.52 | ---- | ---- | ---- | ---- | ---- | ND<50 | ND<250 | ---- | ---- | ND<1 | ND<1 | ND<1 | ND<1 | ND<0.2 | ND<1 | ND | ---- | Naph = ND | ---- | ---- | ---- | ---- | ---- | ---- | ---- | | | |
| MW17 | 09/12/16 | 11.52 | 3.01 | 8.51 | ---- | ---- | ---- | ---- | ---- | 76x | 310 | ---- | ---- | ND<1 | ND<1 | ND<1 | ND<1 | ND<0.2 | ND<1 | ND | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | | | |
| MW17-W | 07/14/16 | 11.52 | 3.01 | 8.51 | ND<100 | ND<0.35 | ND<1 | ND<1 | ND<3 | 230x | ND<260 | ---- | ---- | ND<1 | ND<1 | ND<1 | ND<1 | ND<0.2 | ND<1 | ND | ND | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | | | |
| MW18 Screened Interval 10 - 20 ft bgs, Total boring depth 20 ft bgs | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| MW18 | 12/15/16 | 16.41 | 5.85 | 10.56 | ---- | ---- | ---- | ---- | ---- | ND<50 | ND<250 | ---- | ---- | ND<1 | 1.5 | ND<1 | ND<1 | ND<0.2 | ND<1 | ND | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | | | |
| MW18 | 09/12/16 | 16.41 | 6.90 | 9.51 | ---- | ---- | ---- | ---- | ---- | ND<50 | ND<250 | ---- | ---- | ND<1 | 2.1 | ND<1 | ND<1 | ND<0.2 | ND<1 | ND | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | | | |
| MW18-W | 07/14/16 | 16.41 | 6.27 | 10.14 | ND<100 | ND<0.35 | ND<1 | ND<1 | ND<3 | 63x | ND<250 | ---- | ---- | ND<1 | 130 | 15 | ND<1 | ND<0.2 | 1.9 | ND | ND | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | | | |
| MW19 Screened Interval 10 - 20 ft bgs, Total boring depth 20 ft bgs | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| MW19 | 12/15/16 | 15.85 | 4.47 | 11.38 | ---- | ---- | ---- | ---- | ---- | ND<50 | ND<250 | ---- | ---- | ND<1 | ND<1 | ND<1 | ND<1 | ND<0.2 | ND<1 | DCA=2.2 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | | | |
| MW19 | 09/12/16 | 15.85 | 5.54 | 10.31 | ---- | ---- | ---- | ---- | ---- | 81x | ND<250 | ---- | ---- | ND<1 | ND<1 | ND<1 | ND<1 | ND<0.2 | ND<1 | DCA=1.6 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | | | |
| MW19 | 09/08/16 | 15.85 | 8.00 | 7.85 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | | | |
| MW20 Screened Interval 10 - 20 ft bgs, Total boring depth 23 ft bgs | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| MW20 | 12/15/16 | 16.7 | 5.62 | 11.08 | ---- | ---- | ---- | ---- | ---- | ND<50 | ND<250 | ---- | ---- | ND<1 | ND<1 | ND<1 | ND<1 | ND<0.2 | ND<1 | ND | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | | | |
| MW20 | 09/12/16 | 16.7 | 6.55 | 10.15 | ---- | ---- | ---- | ---- | ---- | ND<50 | ND<250 | ---- | ---- | ND<1 | ND<1 | ND<1 | ND<1 | ND<0.2 | ND<1 | ND | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | | | |
| MW20 | 09/08/16 | 16.7 | 8.00 | 8.70 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | | | |
| Monitoring Wells on West-Adjoining Property | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| MW6 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| BK MW6 | 09/30/16 | 16.55 | 6.46 | 10.09 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ND<1 | 16 | ND<1 | ND<1 | ND<0.2 | ND<1 | ND | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | | | |
| 82114MW6:GW | 08/22/14 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ND<1.00 | 88.6 | 2.99 | ND<1.00 | ND<0.200 | ND<1.00 | ND | ND | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | | | |
| 52114-MW6:GW | 05/21/14 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ND<1.00 | 18.9 | ND<1.00 | ND<1.00 | ND<0.200 | ND<1.00 | ND | ND | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | | | |
| 022014MW6:GW | 02/20/14 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ND<1.00 | 85.0 | 2.17 | ND<1.00 | ND<0.200 | ND<1.00 | ND | ND | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | | | |
| MW7 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| BK MW7 | 09/30/16 | 14.38 | 4.45 | 9.93 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ND<1 | 300 | 50 | ND<1 | 3.3 | ND<1 | EDC=5.6 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | | | |
| 82114MW7:GW | 08/22/14 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ND<1.00 | ND<0.500 | 30.0 | ND<1.00 | 8.19 | ND<1.00 | EDC=1.76 | ND | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | | | |
| 52114-MW7:6W | 05/21/14 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ND<1.00 | ND<0.500 | 143 | 1.97 | 34.5 | ND<1.00 | EDC=2.79 | ND | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | | | |
| 21414MW7:GW | 02/14/14 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ND<1.00 | 1.94 | 297 | 3.44 | 95.8 | ND<1.00 | EDC=15.7 | ND | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | | | |
| MW8 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| BK MW8 | 09/30/16 | 13.86 | 4.13 | 9.73 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ND<1 | 62 | 8.3 | ND<1 | ND<0.2 | ND<1 | ND | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | | | |
| 82114MW8:GW | 08/22/14 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ND<1.00 | 615 | 22.1 | ND<1.00 | ND<0.200 | 1.05 | EDC=4.87 | ND | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | | | |
| 52114-MW8:6W | 05/21/14 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ND<1.00 | 558 | 23.1 | ND<1.00 | ND<0.200 | ND<1.00 | ND | ND | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | | | |
| 21414MW8:GW | 02/14/14 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ND<1.00 | 878 | 32.0 | ND<1.00 | ND<0.200 | 1.97 | EDC=7.19 | ND | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | | | |
| Groundwater Grab Samples | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3H2O-1 | 06/14/16 | ---- | ---- | ---- | ND<100 | ND<1 | ND<1 | ND<1 | ND<3 | 190x | ND<250 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | | | |
| P1-H2O | 03/04/16 | ---- | 3 | ---- | ND<100 | ---- | ---- | ---- | ---- | 300x | ND<250 | ---- | ---- | ND<1 | ND<1 | ND<1 | ND<1 | ND<0.2 | ND<1 | ND | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | | | |
| P2-H2O | 03/04/16 | ---- | 7 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ND<1 | ND<1 | ND<1 | ND<1 | ND<0.2 | ND<1 | ND | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | | | |
| P3-H2O | 03/04/16 | ---- | 7 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | | | |
| P4-H2O | 03/04/16 | ---- | 7 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | | | |
| B8-H2O | 01/03/08 | ---- | 7.00 | ---- | ND<100 | ND<1 | ND<1 | ND<1 | ND<3 | ---- | ---- | ND<54 | ND<270 | ND<1 | ND<1 | ND<1 | ND<1 | ND<0.2 | ND<1 | ND | ND | ND<0.1 | ---- | ---- | ---- | ---- | ---- | ---- | | | | |
| B8-H2O-f | 01/03/08 | ---- | 6.50 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | 6.08 | ND<1 | 1.23 | ND<1 | ND<0.2 | | | | |
| MTCA Method A Cleanup Levels for Ground Water | | | | | 800/1,000 ¹ | 5 | 1,000 | 700 | 1,000 | 500 | 500 | 500 | 500 | 5 | 5 | ---- | ---- | 0.2 | ---- | Analyte Specific | Analyte Specific | Analyte Specific | 5 | 5 | 50 | 15 | 2 | 5 | 5 | 50 | 15 | 2 |
| MTCA Method B Cleanup Levels for Ground Water² | | | | | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | 16 | 160 | ---- | 400 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | |

Table 3, Page 4 of 4. Summary of Groundwater Analytical Laboratory Results

Sea Mar Community Health Center

9635 Des Moines Memorial Drive South, Seattle, Washington 98108

The Riley Group, Inc. Project No. 2016-023A

| Sample Number | Sample Date | Top of Casing (TOC) Elevation | Depth to Water (below TOC) | Groundwater Elevation | Gasoline TPH | BTEX | | | | Diesel TPH | Oil TPH | Diesel TPH | Oil TPH | PCE | TCE | cis-1,2-DCE | Trans-1,2-DCE | VC | 1,1-DCE | Other HVOCs | Other VOCs | SVOCs | Total Metals | | | | | Dissolved Metals | | | | | | | | | | | | | |
|--|-------------|-------------------------------|----------------------------|-----------------------|------------------------|-----------|--------------|------------|--------------|------------|------------------|---------------|--------------|----------|------------|-------------|---------------|------------|---------|------------------|------------------|------------------|----------------|---------------|-----------|-----------|----------|------------------|----------|-----------|-----------|----------|------|------|------|------|------|------|------|------|------|
| | | | | | | B | T | E | X | | | | | | | | | | | | | | w/o silica gel | w/ silica gel | As | Cd | Cr | Pb | Hg | As | Cd | Cr | Pb | Hg | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| SP-01-H2O | 10/26/07 | ---- | 7.5 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | 1,500,000 | 37,000 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| SP-04-H2O | 10/26/07 | ---- | 6.0 | ---- | 370 | ND<1 | ND<1 | 3 | 15 | ---- | ---- | 3,700 | 2,900 | ND<1 | 1.9 | 18 | ND<1 | 3.8 | ND<1 | ND | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | | |
| SP-05-H2O | 10/26/07 | ---- | 8.0 | ---- | 250 | ND<1 | ND<1 | 2 | 10 | ---- | ---- | 410 | ND<360 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | |
| SP-06-H2O | 10/26/07 | ---- | 8.5 | ---- | ND<100 | ND<1 | ND<1 | ND<1 | 4 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | |
| SP-07-H2O | 10/26/07 | ---- | 3.0 | ---- | 1,200 | 17 | 6 | 6 | 30 | ---- | ---- | 740x | ND<250 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | |
| SP-08-H2O | 10/26/07 | ---- | 3.5 | ---- | ND<100 | ND<1 | ND<1 | ND<1 | ND<3 | ---- | ---- | 67 | ND<250 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | |
| SP-09-H2O | 10/26/07 | ---- | 3.5 | ---- | ND<100 | ND<1 | ND<1 | ND<1 | ND<3 | ---- | ---- | 76 | ND<250 | ND<1 | ND<1 | ND<1 | ND<1 | ND<1 | ND<1 | ND<1 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| SP-10-H2O | 10/26/07 | ---- | 3.5 | ---- | ND<200* | ---- | ---- | ---- | ---- | ---- | ---- | 150 | ND<250 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | |
| MTCA Method A Cleanup Levels for Ground Water | | | | | 800/1,000 ¹ | 5 | 1,000 | 700 | 1,000 | 500 | 500 | 500 | 500 | 5 | 5 | ---- | ---- | 0.2 | ---- | Analyte Specific | Analyte Specific | Analyte Specific | 5 | 5 | 50 | 15 | 2 | 5 | 5 | 50 | 15 | 2 | ---- | ---- | ---- | ---- | ---- | | | | |
| MTCA Method B Cleanup Levels for Ground Water ² | | | | | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | 16 | 160 | ---- | 400 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | |

Notes:

Samples collected by RGI field staff using a peristaltic pump under low-flow conditions.

Unless otherwise noted, all analytical results are given in micrograms per liter (ug/L), equivalent to parts per billion (ppb).

Gasoline TPH (total petroleum hydrocarbons) determined using Northwest Test Method NWTPH-Gx

BTEX (benzene, toluene, ethylbenzene, and xylenes) determined using EPA Test Method 8021B or 8260C.

Diesel and Oil TPH (total petroleum hydrocarbons) determined using Northwest Test Method NWTPH-Dx with and without silica gel cleanup.

PCE (tetrachloroethene), TCE (trichloroethene), cis-1,2-DCE (cis-1,2-dichloroethene), trans-1,2-DCE (trans-1,2-dichloroethene), VC (vinyl chloride), 1,1-DCE (1,1-dichloroethene), EDC (1,2-dichloroethane), CE = Chloroethane, EDC = 1,2-Dichloroethane, 1,3-DB = 1,3-Dichlorobenzene, DCA = 1,1-dichloroethane, Naph = Naphthalene, and other HVOCs (halogenated volatile organic compounds) determined using EPA Test Method 8260C.

Other VOCs (volatile organic compounds) determined using EPA Test Method 8260C.

Dissolved Metals (As = arsenic, Cd = cadmium, Cr = chromium, Pb = lead, Hg = mercury) determined using EPA Method 200.8 and 1631E.

ND = Not detected above the noted analytical detection limit.

---- = Not analyzed or not applicable.

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

Washington State Department of Ecology (Ecology) Model Toxics Control Act (MTCA) Method A Cleanup Levels for Ground Water (WAC 173-340-900, Table 720-1). MTCA Method B Standard Formula Values for Ground Water from Ecology's Cleanup Level and Risk Calculation (CLARC) database.

¹ The higher cleanup level is applicable if no benzene is detected in groundwater.

² No MTCA Method A Cleanup Level has been established. Therefore, the MTCA Method B Non-Carcinogenic Standard Formula Value is listed for reference.

*TPH results based on Ecology's petroleum hydrocarbon qualitative test method NWTPH-HCID.

Bold results indicated concentrations above laboratory detection limits.

Bold and yellow highlighted results indicate concentrations (if any) that exceed MTCA Method A or B Cleanup Levels for Ground Water.

Table 4. Summary of Sub-Slab Soil Vapor Sample Analytical Results
Sea Mar Community Health Center
9635 Des Moines Memorial Drive South, Seattle, Washington 98108
The Riley Group, Inc. Project No. 2016-023A

| Sample Number | Sample Date | Sample Depth (feet below concrete slab) | PCE | TCE | cis-1,2-DCE | trans-1,2-DCE | VC | 1,1-DCE |
|--|-------------|---|------------|-------------|-------------|---------------|-------------|--------------|
| SV1-A | 03/07/16 | 3' | 7.9 | 140 | ND<4.0 | ND<8.0 | ND<2.6 | ND<4.0 |
| SV1-B | 03/07/16 | 3' | --- | --- | --- | --- | --- | --- |
| MTCA Method B Sub-Slab Soil Gas Screening Level | | | 321 | 12.3 | NVE | NVE | 9.33 | 3,050 |

Notes:

Unless otherwise noted, all analytical results are given in micrograms per cubic meter ($\mu\text{g}/\text{m}^3$).

PCE (tetrachloroethene), TCE (trichloroethene), cis-1,2-DCE (cis-1,2-dichloroethene), trans-1,2-DCE (trans-1,2-dichloroethene), VC (vinyl chloride), and 1,1 DCE (1,1-dichloroethene) determined using EPA Method TO-15.

ND = Not detected above the laboratory detection limit.

NVE = No value established.

---- = Not applicable.

Washington State Department of Ecology (Ecology) Model Toxics Control Act (MTCA) Method B Sub-Slab Soil Gas Screening Levels. Most conservative value referenced.

Bold results indicate concentrations above laboratory detection limits.

Bold and highlighted results indicate any detected soil vapor concentrations that would result in an exceedance to the MTCA cleanup levels.



Voluntary Cleanup Program

Washington State Department of Ecology Toxics Cleanup Program

TERRESTRIAL ECOLOGICAL EVALUATION FORM

Under the Model Toxics Control Act (MTCA), a terrestrial ecological evaluation is necessary if hazardous substances are released into the soils at a Site. In the event of such a release, you must take one of the following three actions as part of your investigation and cleanup of the Site:

1. Document an exclusion from further evaluation using the criteria in WAC 173-340-7491.
2. Conduct a simplified evaluation as set forth in WAC 173-340-7492.
3. Conduct a site-specific evaluation as set forth in WAC 173-340-7493.

When requesting a written opinion under the Voluntary Cleanup Program (VCP), you must complete this form and submit it to the Department of Ecology (Ecology). The form documents the type and results of your evaluation.

Completion of this form is not sufficient to document your evaluation. You still need to document your analysis and the basis for your conclusion in your cleanup plan or report.

If you have questions about how to conduct a terrestrial ecological evaluation, please contact the Ecology site manager assigned to your Site. For additional guidance, please refer to www.ecy.wa.gov/programs/tcp/policies/terrestrial/TEEHome.htm.

Step 1: IDENTIFY HAZARDOUS WASTE SITE

Please identify below the hazardous waste site for which you are documenting an evaluation.

Facility/Site Name: Sea Mar Community Health Center

Facility/Site Address: 9635 Des Moines Memorial Drive South, Seattle, WA 98108

Facility/Site No: 22844

VCP Project No.: N/A

Step 2: IDENTIFY EVALUATOR

Please identify below the person who conducted the evaluation and their contact information.

Name: Anna Jordan

Title: Project Geologist

Organization: The Riley Group

Mailing address: 17522 Bothell Way NE

City: Bothell

State: WA

Zip code: 98011

Phone: 425-415-0551

Fax: 425-415-0311

E-mail: ajordan@riley-group.com

Step 3: DOCUMENT EVALUATION TYPE AND RESULTS

A. Exclusion from further evaluation.

1. Does the Site qualify for an exclusion from further evaluation?

- Yes *If you answered "YES," then answer Question 2.*
- No or Unknown *If you answered "NO" or "UNKNOWN," then skip to Step 3B of this form.*

2. What is the basis for the exclusion? Check all that apply. Then skip to Step 4 of this form.

Point of Compliance: WAC 173-340-7491(1)(a)

- All soil contamination is, or will be,* at least 15 feet below the surface.
- All soil contamination is, or will be,* at least 6 feet below the surface (or alternative depth if approved by Ecology), and institutional controls are used to manage remaining contamination.

Barriers to Exposure: WAC 173-340-7491(1)(b)

- All contaminated soil, is or will be,* covered by physical barriers (such as buildings or paved roads) that prevent exposure to plants and wildlife, and institutional controls are used to manage remaining contamination.

Undeveloped Land: WAC 173-340-7491(1)(c)

- There is less than 0.25 acres of contiguous# undeveloped± land on or within 500 feet of any area of the Site and any of the following chemicals is present: chlorinated dioxins or furans, PCB mixtures, DDT, DDE, DDD, aldrin, chlordane, dieldrin, endosulfan, endrin, heptachlor, heptachlor epoxide, benzene hexachloride, toxaphene, hexachlorobenzene, pentachlorophenol, or pentachlorobenzene.
- For sites not containing any of the chemicals mentioned above, there is less than 1.5 acres of contiguous# undeveloped± land on or within 500 feet of any area of the Site.

Background Concentrations: WAC 173-340-7491(1)(d)

- Concentrations of hazardous substances in soil do not exceed natural background levels as described in WAC 173-340-200 and 173-340-709.

* An exclusion based on future land use must have a completion date for future development that is acceptable to Ecology.

± "Undeveloped land" is land that is not covered by building, roads, paved areas, or other barriers that would prevent wildlife from feeding on plants, earthworms, insects, or other food in or on the soil.

"Contiguous" undeveloped land is an area of undeveloped land that is not divided into smaller areas of highways, extensive paving, or similar structures that are likely to reduce the potential use of the overall area by wildlife.

B. Simplified evaluation.

1. Does the Site qualify for a simplified evaluation?

- Yes *If you answered "YES," then answer **Question 2** below.*
- No or Unknown *If you answered "NO" or "UNKNOWN," then skip to **Step 3C** of this form.*

2. Did you conduct a simplified evaluation?

- Yes *If you answered "YES," then answer **Question 3** below.*
- No *If you answered "NO," then skip to **Step 3C** of this form.*

3. Was further evaluation necessary?

- Yes *If you answered "YES," then answer **Question 4** below.*
- No *If you answered "NO," then answer **Question 5** below.*

4. If further evaluation was necessary, what did you do?

- Used the concentrations listed in Table 749-2 as cleanup levels. *If so, then skip to **Step 4** of this form.*
- Conducted a site-specific evaluation. *If so, then skip to **Step 3C** of this form.*

5. If no further evaluation was necessary, what was the reason? Check all that apply. Then skip to **Step 4** of this form.

Exposure Analysis: WAC 173-340-7492(2)(a)

- Area of soil contamination at the Site is not more than 350 square feet.
- Current or planned land use makes wildlife exposure unlikely. Used Table 749-1.

Pathway Analysis: WAC 173-340-7492(2)(b)

- No potential exposure pathways from soil contamination to ecological receptors.

Contaminant Analysis: WAC 173-340-7492(2)(c)

- No contaminant listed in Table 749-2 is, or will be, present in the upper 15 feet at concentrations that exceed the values listed in Table 749-2.
- No contaminant listed in Table 749-2 is, or will be, present in the upper 6 feet (or alternative depth if approved by Ecology) at concentrations that exceed the values listed in Table 749-2, and institutional controls are used to manage remaining contamination.
- No contaminant listed in Table 749-2 is, or will be, present in the upper 15 feet at concentrations likely to be toxic or have the potential to bioaccumulate as determined using Ecology-approved bioassays.
- No contaminant listed in Table 749-2 is, or will be, present in the upper 6 feet (or alternative depth if approved by Ecology) at concentrations likely to be toxic or have the potential to bioaccumulate as determined using Ecology-approved bioassays, and institutional controls are used to manage remaining contamination.

C. Site-specific evaluation. A site-specific evaluation process consists of two parts: (1) formulating the problem, and (2) selecting the methods for addressing the identified problem. Both steps require consultation with and approval by Ecology. See WAC 173-340-7493(1)(c).

1. Was there a problem? See WAC 173-340-7493(2).

- Yes *If you answered "YES," then answer **Question 2** below.*
- No *If you answered "NO," then identify the reason here and then skip to **Question 5** below:*
- No issues were identified during the problem formulation step.
 - While issues were identified, those issues were addressed by the cleanup actions for protecting human health.

2. What did you do to resolve the problem? See WAC 173-340-7493(3).

- Used the concentrations listed in Table 749-3 as cleanup levels. *If so, then skip to **Question 5** below.*
- Used one or more of the methods listed in WAC 173-340-7493(3) to evaluate and address the identified problem. *If so, then answer **Questions 3 and 4** below.*

3. If you conducted further site-specific evaluations, what methods did you use?

Check all that apply. See WAC 173-340-7493(3).

- Literature surveys.
- Soil bioassays.
- Wildlife exposure model.
- Biomarkers.
- Site-specific field studies.
- Weight of evidence.
- Other methods approved by Ecology. If so, please specify:

4. What was the result of those evaluations?

- Confirmed there was no problem.
- Confirmed there was a problem and established site-specific cleanup levels.

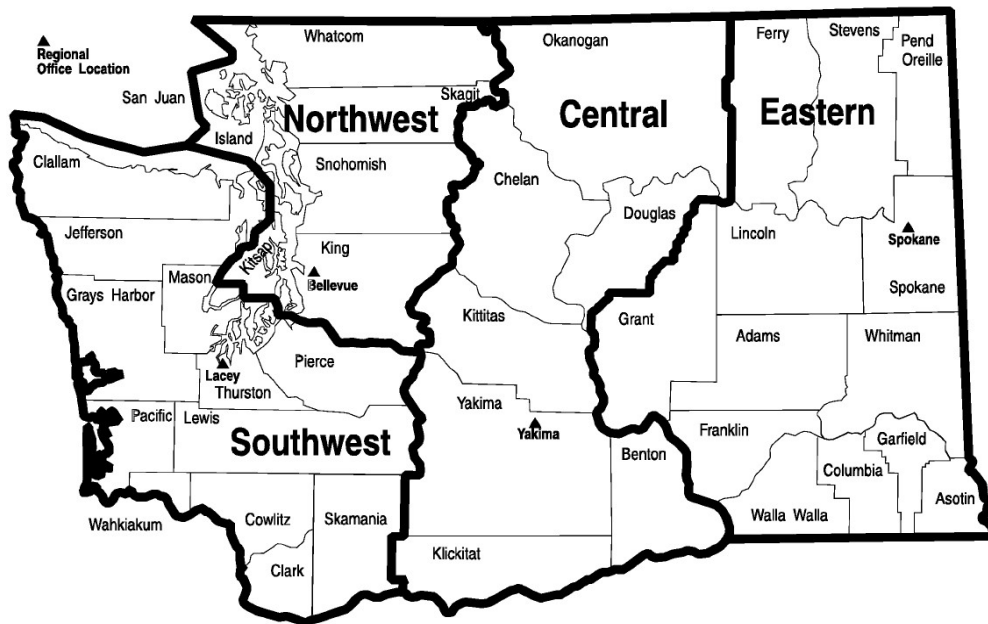
5. Have you already obtained Ecology's approval of both your problem formulation and problem resolution steps?

- Yes *If so, please identify the Ecology staff who approved those steps:*
- No

Step 4: SUBMITTAL

Please mail your completed form to the Ecology site manager assigned to your Site. If a site manager has not yet been assigned, please mail your completed form to the Ecology regional office for the County in which your Site is located.

| | |
|--|---|
| <p>Northwest Region:
 Attn: VCP Coordinator
 3190 160th Ave. SE
 Bellevue, WA 98008-5452</p> | <p>Central Region:
 Attn: VCP Coordinator
 1250 West Alder St.
 Union Gap, WA 98903-0009</p> |
| <p>Southwest Region:
 Attn: VCP Coordinator
 P.O. Box 47775
 Olympia, WA 98504-7775</p> | <p>Eastern Region:
 Attn: VCP Coordinator
 N. 4601 Monroe
 Spokane WA 99205-1295</p> |



FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
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Arina Podnozova, B.S.
Eric Young, B.S.

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

September 19, 2016

Anna Jordan, Project Manager
The Riley Group, Inc.
17522 Bothell Way NE
Bothell, WA 98011

Dear Ms Jordan:

Included are the results from the testing of material submitted on September 9, 2016 from the 2016-023A, F&BI 609163 project. There are 8 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

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

Sincerely,

FRIEDMAN & BRUYA, INC.



Michael Erdahl
Project Manager

Enclosures
TRG0919R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on September 9, 2016 by Friedman & Bruya, Inc. from the The Riley Group 2016-023A, F&BI 609163 project. Samples were logged in under the laboratory ID's listed below.

| <u>Laboratory ID</u> | <u>The Riley Group</u> |
|----------------------|------------------------|
| 609163 -01 | MW19-7.0 |
| 609163 -02 | MW19-12.5 |
| 609163 -03 | MW19-16.5 |
| 609163 -04 | MW20-2.5 |
| 609163 -05 | MW20-7.5 |
| 609163 -06 | MW20-12.0 |
| 609163 -07 | MW20-15.5 |

All quality control requirements were acceptable.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 09/19/16
Date Received: 09/09/16
Project: 2016-023A, F&BI 609163
Date Extracted: 09/12/16
Date Analyzed: 09/12/16

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

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

| <u>Sample ID</u>
Laboratory ID | <u>Diesel Range</u>
(C ₁₀ -C ₂₅) | <u>Motor Oil Range</u>
(C ₂₅ -C ₃₆) | <u>Surrogate</u>
<u>(% Recovery)</u>
(Limit 53-144) |
|-----------------------------------|--|---|---|
| MW19-7.0
609163-01 | <50 | <250 | 71 |
| MW20-7.5
609163-05 | <50 | <250 | 73 |
| Method Blank
06-1885 MB | <50 | <250 | 74 |

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

| | | | |
|-------------------|------------------------|-------------|------------------------|
| Client Sample ID: | MW19-7.0 | Client: | The Riley Group |
| Date Received: | 09/09/16 | Project: | 2016-023A, F&BI 609163 |
| Date Extracted: | 09/09/16 | Lab ID: | 609163-01 |
| Date Analyzed: | 09/10/16 | Data File: | 090927.D |
| Matrix: | Soil | Instrument: | GCMS9 |
| Units: | mg/kg (ppm) Dry Weight | Operator: | JS |

| Surrogates: | % Recovery: | Lower Limit: | Upper Limit: |
|-----------------------|-------------|--------------|--------------|
| 1,2-Dichloroethane-d4 | 101 | 89 | 113 |
| Toluene-d8 | 101 | 64 | 137 |
| 4-Bromofluorobenzen e | 96 | 81 | 119 |

| Compounds: | Concentration
mg/kg (ppm) |
|--------------------------|------------------------------|
| Vinyl chloride | <0.05 |
| Chloroethane | <0.5 |
| 1,1-Dichloroethene | <0.05 |
| Methylene chloride | <0.5 |
| trans-1,2-Dichloroethene | <0.05 |
| 1,1-Dichloroethane | <0.05 |
| cis-1,2-Dichloroethene | <0.05 |
| 1,2-Dichloroethane (EDC) | <0.05 |
| 1,1,1-Trichloroethane | <0.05 |
| Trichloroethene | <0.02 |
| Tetrachloroethene | <0.025 |

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

| | | | |
|-------------------|------------------------|-------------|------------------------|
| Client Sample ID: | MW20-7.5 | Client: | The Riley Group |
| Date Received: | 09/09/16 | Project: | 2016-023A, F&BI 609163 |
| Date Extracted: | 09/09/16 | Lab ID: | 609163-05 |
| Date Analyzed: | 09/10/16 | Data File: | 090928.D |
| Matrix: | Soil | Instrument: | GCMS9 |
| Units: | mg/kg (ppm) Dry Weight | Operator: | JS |

| Surrogates: | % Recovery: | Lower Limit: | Upper Limit: |
|-----------------------|-------------|--------------|--------------|
| 1,2-Dichloroethane-d4 | 101 | 89 | 113 |
| Toluene-d8 | 100 | 64 | 137 |
| 4-Bromofluorobenzene | 94 | 81 | 119 |

| Compounds: | Concentration
mg/kg (ppm) |
|--------------------------|------------------------------|
| Vinyl chloride | <0.05 |
| Chloroethane | <0.5 |
| 1,1-Dichloroethene | <0.05 |
| Methylene chloride | <0.5 |
| trans-1,2-Dichloroethene | <0.05 |
| 1,1-Dichloroethane | <0.05 |
| cis-1,2-Dichloroethene | <0.05 |
| 1,2-Dichloroethane (EDC) | <0.05 |
| 1,1,1-Trichloroethane | <0.05 |
| Trichloroethene | <0.02 |
| Tetrachloroethene | <0.025 |

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

| | | | |
|-------------------|------------------------|-------------|------------------------|
| Client Sample ID: | Method Blank | Client: | The Riley Group |
| Date Received: | Not Applicable | Project: | 2016-023A, F&BI 609163 |
| Date Extracted: | 09/09/16 | Lab ID: | 06-1798 mb |
| Date Analyzed: | 09/09/16 | Data File: | 090915.D |
| Matrix: | Soil | Instrument: | GCMS9 |
| Units: | mg/kg (ppm) Dry Weight | Operator: | JS |

| Surrogates: | % Recovery: | Lower Limit: | Upper Limit: |
|-----------------------|-------------|--------------|--------------|
| 1,2-Dichloroethane-d4 | 101 | 89 | 113 |
| Toluene-d8 | 100 | 64 | 137 |
| 4-Bromofluorobenzene | 97 | 81 | 119 |

| Compounds: | Concentration
mg/kg (ppm) |
|--------------------------|------------------------------|
| Vinyl chloride | <0.05 |
| Chloroethane | <0.5 |
| 1,1-Dichloroethene | <0.05 |
| Methylene chloride | <0.5 |
| trans-1,2-Dichloroethene | <0.05 |
| 1,1-Dichloroethane | <0.05 |
| cis-1,2-Dichloroethene | <0.05 |
| 1,2-Dichloroethane (EDC) | <0.05 |
| 1,1,1-Trichloroethane | <0.05 |
| Trichloroethene | <0.02 |
| Tetrachloroethene | <0.025 |

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 09/19/16

Date Received: 09/09/16

Project: 2016-023A, F&BI 609163

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

Laboratory Code: 609179-01 (Matrix Spike)

| Analyte | Reporting
Units | Spike
Level | Sample
Result
(Wet Wt) | Percent
Recovery
MS | Percent
Recovery
MSD | Acceptance
Criteria | RPD
(Limit 20) |
|-----------------|--------------------|----------------|------------------------------|---------------------------|----------------------------|------------------------|-------------------|
| Diesel Extended | mg/kg (ppm) | 5,000 | <50 | 88 | 91 | 64-133 | 3 |

Laboratory Code: Laboratory Control Sample

| Analyte | Reporting
Units | Spike
Level | Percent
Recovery
LCS | Acceptance
Criteria |
|-----------------|--------------------|----------------|----------------------------|------------------------|
| Diesel Extended | mg/kg (ppm) | 5,000 | 90 | 58-147 |

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 09/19/16

Date Received: 09/09/16

Project: 2016-023A, F&BI 609163

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

Laboratory Code: 609119-03 (Matrix Spike)

| Analyte | Reporting Units | Spike Level | Sample Result (Wet wt) | Percent Recovery MS | Percent Recovery MSD | Acceptance Criteria | RPD (Limit 20) |
|--------------------------|-----------------|-------------|------------------------|---------------------|----------------------|---------------------|----------------|
| Vinyl chloride | mg/kg (ppm) | 2.5 | <0.05 | 42 | 41 | 10-91 | 2 |
| Chloroethane | mg/kg (ppm) | 2.5 | <0.5 | 53 | 51 | 10-101 | 4 |
| 1,1-Dichloroethene | mg/kg (ppm) | 2.5 | <0.05 | 60 | 58 | 11-103 | 3 |
| Methylene chloride | mg/kg (ppm) | 2.5 | <0.5 | 51 | 52 | 14-128 | 2 |
| trans-1,2-Dichloroethene | mg/kg (ppm) | 2.5 | <0.05 | 66 | 65 | 13-112 | 2 |
| 1,1-Dichloroethane | mg/kg (ppm) | 2.5 | <0.05 | 72 | 70 | 23-115 | 3 |
| cis-1,2-Dichloroethene | mg/kg (ppm) | 2.5 | <0.05 | 74 | 73 | 25-120 | 1 |
| 1,2-Dichloroethane (EDC) | mg/kg (ppm) | 2.5 | <0.05 | 76 | 73 | 22-124 | 4 |
| 1,1,1-Trichloroethane | mg/kg (ppm) | 2.5 | <0.05 | 78 | 73 | 27-112 | 7 |
| Trichloroethene | mg/kg (ppm) | 2.5 | <0.02 | 67 | 66 | 30-112 | 2 |
| Tetrachloroethene | mg/kg (ppm) | 2.5 | <0.025 | 58 | 54 | 25-114 | 7 |

Laboratory Code: Laboratory Control Sample

| Analyte | Reporting Units | Spike Level | Percent Recovery LCS | Acceptance Criteria |
|--------------------------|-----------------|-------------|----------------------|---------------------|
| Vinyl chloride | mg/kg (ppm) | 2.5 | 67 | 42-107 |
| Chloroethane | mg/kg (ppm) | 2.5 | 76 | 47-115 |
| 1,1-Dichloroethene | mg/kg (ppm) | 2.5 | 84 | 65-110 |
| Methylene chloride | mg/kg (ppm) | 2.5 | 70 | 50-127 |
| trans-1,2-Dichloroethene | mg/kg (ppm) | 2.5 | 89 | 71-113 |
| 1,1-Dichloroethane | mg/kg (ppm) | 2.5 | 88 | 74-109 |
| cis-1,2-Dichloroethene | mg/kg (ppm) | 2.5 | 88 | 73-110 |
| 1,2-Dichloroethane (EDC) | mg/kg (ppm) | 2.5 | 91 | 73-111 |
| 1,1,1-Trichloroethane | mg/kg (ppm) | 2.5 | 101 | 72-116 |
| Trichloroethene | mg/kg (ppm) | 2.5 | 88 | 72-107 |
| Tetrachloroethene | mg/kg (ppm) | 2.5 | 86 | 73-111 |

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Data Qualifiers & Definitions

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

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

ca - The calibration results for the analyte were outside of acceptance criteria. The value reported is an estimate.

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

cf - The sample was centrifuged prior to analysis.

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

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

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

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

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

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

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

ip - Recovery fell outside of control limits. Compounds in the sample matrix interfered with the quantitation of the analyte.

j - The analyte concentration is reported below the lowest calibration standard. The value reported is an estimate.

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

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

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

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

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

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

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

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

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

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

609163

SAMPLE CHAIN OF CUSTODY

ME 9/9/16 B02/V51

Send Report To ANNA SCROAN
 Company THE RILEY GRAP, INC.
 Address _____
 City, State, ZIP _____
 Phone # _____ Fax # _____

SAMPLERS (signature) [Signature]
 PROJECT NAME/NO. 2016 023A PO # _____
 REMARKS _____

TURNAROUND TIME
 Standard (3 Weeks)
 RUSH
 Rush charges authorized by: _____
SAMPLE DISPOSAL
 Dispose after 90 days
 Return samples
 Will call with instructions

| Sample ID | Lab ID | Date | Time | Sample Type | # of containers | ANALYSES REQUESTED | | | | | | | | | | Notes | | | |
|-----------|--------|--------|-------|-------------|-----------------|--------------------|--------------|---------------|--------------|---------------|-----|--------|-----|-----|-------|-------|-------|--|--|
| | | | | | | TPH-Diesel | TPH-Gasoline | BTEX by 8041B | VOCs by 8260 | SVOCs by 8270 | HPS | PCDD/F | PCB | PAH | Other | | Other | | |
| MW19-7.0 | 01A-E | 9/9/16 | 9:30 | Soil | 5 | X | | | | | | | | | | | | | |
| MW19-12.5 | 02 | | 10:30 | | 5 | | | | | | | | | | | | | | |
| MW19-16.5 | 03 | | 11:00 | | 5 | | | | | | | | | | | | | | |
| MW20-2.5 | 04 | | 1:00 | | 5 | | | | | | | | | | | | | | |
| MW20-7.5 | 05 | | 1:30 | | 5 | X | | | | | | | | | | | | | |
| MW20-12.0 | 06 | | 1:50 | | 1 | | | | | | | | | | | | | | |
| MW20-15.5 | 07A-D | ↓ | 2:05 | ↓ | 4 | | | | | | | | | | | | | | |

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

| SIGNATURE | PRINT NAME | COMPANY | DATE | TIME |
|-------------------------------------|---------------------|-----------|--------|-------|
| Relinquished by: <u>[Signature]</u> | PAUL R. [Signature] | RGE | 9/9/16 | 12:11 |
| Received by: <u>[Signature]</u> | D. Sams | Fedex SPC | 9/9 | 12:11 |
| Relinquished by: _____ | | | | |
| Received by: <u>[Signature]</u> | HONG NGUYEN | FEDEX | 9/9/16 | 14:00 |

Samples received at 6 °C

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

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

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

May 19, 2016

Anna Jordan, Project Manager
The Riley Group, Inc.
17522 Bothell Way NE
Bothell, WA 98011

Dear Ms. Jordan:

Included are the results from the testing of material submitted on May 5, 2016 from the 2016-023A, F&BI 605100 project. There are 16 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

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

Sincerely,

FRIEDMAN & BRUYA, INC.



Michael Erdahl
Project Manager

Enclosures
TRG0519R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on May 5, 2016 by Friedman & Bruya, Inc. from the The Riley Group 2016-023A, F&BI 605100 project. Samples were logged in under the laboratory ID's listed below.

| <u>Laboratory ID</u> | <u>The Riley Group</u> |
|----------------------|------------------------|
| 605100 -01 | MW13-2-3 |
| 605100 -02 | MW13-4 |
| 605100 -03 | MW13-8 |
| 605100 -04 | MW12-3 |
| 605100 -05 | MW12-3.5 |
| 605100 -06 | MW12-5.5 |
| 605100 -07 | MW12-10 |
| 605100 -08 | MW11-3 |
| 605100 -09 | MW11-5 |
| 605100 -10 | MW11-7.5 |
| 605100 -11 | MW11-10 |
| 605100 -12 | MW15-3.5 |
| 605100 -13 | MW15-7 |
| 605100 -14 | MW15-11 |
| 605100 -15 | MW15-13 |
| 605100 -16 | MW14-3 |
| 605100 -17 | MW14-5 |
| 605100 -18 | MW14-10 |
| 605100 -19 | MW14-14 |

Sample MW12-10 was not received in a 5035 sampling container. The NWTPH-Gx and 8021B results were flagged accordingly.

All other quality control requirements were acceptable.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 05/19/16
 Date Received: 05/05/16
 Project: 2016-023A, F&BI 605100
 Date Extracted: 05/10/16
 Date Analyzed: 05/10/16

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

Results Reported on a Dry Weight Basis

Results Reported as mg/kg (ppm)

| <u>Sample ID</u>
Laboratory ID | <u>Benzene</u> | <u>Toluene</u> | <u>Ethyl Benzene</u> | <u>Total Xylenes</u> | <u>Gasoline Range</u> | <u>Surrogate (% Recovery)</u>
(Limit 50-150) |
|-----------------------------------|----------------|----------------|----------------------|----------------------|-----------------------|---|
| MW12-5.5
605100-06 | <0.02 | <0.02 | <0.02 | <0.06 | <2 | 81 |
| MW12-10 pc
605100-07 | <0.02 | <0.02 | <0.02 | <0.06 | <2 | 82 |
| MW11-5
605100-09 1/5 | 0.31 | 0.20 | 0.30 | 0.77 | 85 | 84 |
| MW15-11
605100-14 | <0.02 | <0.02 | <0.02 | <0.06 | <2 | 81 |
| MW14-5
605100-17 | <0.02 | <0.02 | <0.02 | <0.06 | <2 | 79 |
| MW14-10
605100-18 | <0.02 | <0.02 | <0.02 | <0.06 | <2 | 81 |
| Method Blank
06-895 MB | <0.02 | <0.02 | <0.02 | <0.06 | <2 | 81 |

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 05/19/16
Date Received: 05/05/16
Project: 2016-023A, F&BI 605100
Date Extracted: 05/10/16
Date Analyzed: 05/11/16

**RESULTS FROM THE ANALYSIS OF SOIL SAMPLES
FOR TOTAL PETROLEUM HYDROCARBONS AS
DIESEL AND MOTOR OIL
USING METHOD NWTPH-Dx
Sample Extracts Passed Through a
Silica Gel Column Prior to Analysis
Results Reported on a Dry Weight Basis
Results Reported as mg/kg (ppm)**

| <u>Sample ID</u>
Laboratory ID | <u>Diesel Range</u>
(C ₁₀ -C ₂₅) | <u>Motor Oil Range</u>
(C ₂₅ -C ₃₆) | <u>Surrogate</u>
(% Recovery)
(Limit 56-165) |
|-----------------------------------|--|---|--|
| MW12-5.5
605100-06 | <50 | <250 | 103 |
| MW12-10
605100-07 | <50 | <250 | 102 |
| MW11-5
605100-09 | <50 | <250 | 102 |
| MW15-11
605100-14 | <50 | <250 | 110 |
| MW14-5
605100-17 | <50 | <250 | 100 |
| MW14-10
605100-18 | <50 | <250 | 110 |
| Method Blank
06-936 MB | <50 | <250 | 103 |

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

| | | | |
|-----------------|------------------------|-------------|------------------------|
| Client ID: | MW13-2-3 | Client: | The Riley Group |
| Date Received: | 05/05/16 | Project: | 2016-023A, F&BI 605100 |
| Date Extracted: | 05/12/16 | Lab ID: | 605100-01 |
| Date Analyzed: | 05/16/16 | Data File: | 605100-01.042 |
| Matrix: | Soil | Instrument: | ICPMS1 |
| Units: | mg/kg (ppm) Dry Weight | Operator: | SP |

| Analyte: | Concentration
mg/kg (ppm) |
|----------|------------------------------|
| Cadmium | <1 |
| Lead | 147 |

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

| | | | |
|-----------------|------------------------|-------------|------------------------|
| Client ID: | MW13-4 | Client: | The Riley Group |
| Date Received: | 05/05/16 | Project: | 2016-023A, F&BI 605100 |
| Date Extracted: | 05/12/16 | Lab ID: | 605100-02 |
| Date Analyzed: | 05/16/16 | Data File: | 605100-02.043 |
| Matrix: | Soil | Instrument: | ICPMS1 |
| Units: | mg/kg (ppm) Dry Weight | Operator: | SP |

| Analyte: | Concentration
mg/kg (ppm) |
|----------|------------------------------|
| Cadmium | <1 |
| Lead | 41.0 |

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

| | | | |
|-----------------|------------------------|-------------|------------------------|
| Client ID: | Method Blank | Client: | The Riley Group |
| Date Received: | NA | Project: | 2016-023A, F&BI 605100 |
| Date Extracted: | 05/12/16 | Lab ID: | I6-303 mb2 |
| Date Analyzed: | 05/12/16 | Data File: | I6-303 mb2.054 |
| Matrix: | Soil | Instrument: | ICPMS1 |
| Units: | mg/kg (ppm) Dry Weight | Operator: | SP |

| Analyte: | Concentration
mg/kg (ppm) |
|----------|------------------------------|
| Cadmium | <1 |
| Lead | <1 |

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

| | | | |
|-------------------|------------------------|-------------|------------------------|
| Client Sample ID: | MW15-7 | Client: | The Riley Group |
| Date Received: | 05/05/16 | Project: | 2016-023A, F&BI 605100 |
| Date Extracted: | 05/10/16 | Lab ID: | 605100-13 |
| Date Analyzed: | 05/10/16 | Data File: | 051027.D |
| Matrix: | Soil | Instrument: | GCMS4 |
| Units: | mg/kg (ppm) Dry Weight | Operator: | JS |

| Surrogates: | % Recovery: | Lower Limit: | Upper Limit: |
|-----------------------|-------------|--------------|--------------|
| 1,2-Dichloroethane-d4 | 100 | 62 | 142 |
| Toluene-d8 | 103 | 55 | 145 |
| 4-Bromofluorobenzene | 101 | 65 | 139 |

| Compounds: | Concentration
mg/kg (ppm) |
|--------------------------|------------------------------|
| Vinyl chloride | <0.05 |
| Chloroethane | <0.5 |
| 1,1-Dichloroethene | <0.05 |
| Methylene chloride | <0.5 |
| trans-1,2-Dichloroethene | <0.05 |
| 1,1-Dichloroethane | <0.05 |
| cis-1,2-Dichloroethene | <0.05 |
| 1,2-Dichloroethane (EDC) | <0.05 |
| 1,1,1-Trichloroethane | <0.05 |
| Trichloroethene | <0.02 |
| Tetrachloroethene | <0.025 |

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

| | | | |
|-------------------|------------------------|-------------|------------------------|
| Client Sample ID: | MW15-11 | Client: | The Riley Group |
| Date Received: | 05/05/16 | Project: | 2016-023A, F&BI 605100 |
| Date Extracted: | 05/10/16 | Lab ID: | 605100-14 |
| Date Analyzed: | 05/10/16 | Data File: | 051028.D |
| Matrix: | Soil | Instrument: | GCMS4 |
| Units: | mg/kg (ppm) Dry Weight | Operator: | JS |

| Surrogates: | % Recovery: | Lower Limit: | Upper Limit: |
|-----------------------|-------------|--------------|--------------|
| 1,2-Dichloroethane-d4 | 100 | 62 | 142 |
| Toluene-d8 | 105 | 55 | 145 |
| 4-Bromofluorobenzene | 103 | 65 | 139 |

| Compounds: | Concentration
mg/kg (ppm) |
|--------------------------|------------------------------|
| Vinyl chloride | <0.05 |
| Chloroethane | <0.5 |
| 1,1-Dichloroethene | <0.05 |
| Methylene chloride | <0.5 |
| trans-1,2-Dichloroethene | <0.05 |
| 1,1-Dichloroethane | <0.05 |
| cis-1,2-Dichloroethene | <0.05 |
| 1,2-Dichloroethane (EDC) | <0.05 |
| 1,1,1-Trichloroethane | <0.05 |
| Trichloroethene | <0.02 |
| Tetrachloroethene | <0.025 |

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

| | | | |
|-------------------|------------------------|-------------|------------------------|
| Client Sample ID: | MW14-5 | Client: | The Riley Group |
| Date Received: | 05/05/16 | Project: | 2016-023A, F&BI 605100 |
| Date Extracted: | 05/10/16 | Lab ID: | 605100-17 |
| Date Analyzed: | 05/10/16 | Data File: | 051029.D |
| Matrix: | Soil | Instrument: | GCMS4 |
| Units: | mg/kg (ppm) Dry Weight | Operator: | JS |

| Surrogates: | % Recovery: | Lower Limit: | Upper Limit: |
|-----------------------|-------------|--------------|--------------|
| 1,2-Dichloroethane-d4 | 100 | 62 | 142 |
| Toluene-d8 | 104 | 55 | 145 |
| 4-Bromofluorobenzene | 102 | 65 | 139 |

| Compounds: | Concentration
mg/kg (ppm) |
|--------------------------|------------------------------|
| Vinyl chloride | <0.05 |
| Chloroethane | <0.5 |
| 1,1-Dichloroethene | <0.05 |
| Methylene chloride | <0.5 |
| trans-1,2-Dichloroethene | <0.05 |
| 1,1-Dichloroethane | <0.05 |
| cis-1,2-Dichloroethene | <0.05 |
| 1,2-Dichloroethane (EDC) | <0.05 |
| 1,1,1-Trichloroethane | <0.05 |
| Trichloroethene | <0.02 |
| Tetrachloroethene | <0.025 |

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

| | | | |
|-------------------|------------------------|-------------|------------------------|
| Client Sample ID: | MW14-10 | Client: | The Riley Group |
| Date Received: | 05/05/16 | Project: | 2016-023A, F&BI 605100 |
| Date Extracted: | 05/10/16 | Lab ID: | 605100-18 |
| Date Analyzed: | 05/10/16 | Data File: | 051030.D |
| Matrix: | Soil | Instrument: | GCMS4 |
| Units: | mg/kg (ppm) Dry Weight | Operator: | JS |

| Surrogates: | % Recovery: | Lower Limit: | Upper Limit: |
|-----------------------|-------------|--------------|--------------|
| 1,2-Dichloroethane-d4 | 102 | 62 | 142 |
| Toluene-d8 | 104 | 55 | 145 |
| 4-Bromofluorobenzene | 101 | 65 | 139 |

| Compounds: | Concentration
mg/kg (ppm) |
|--------------------------|------------------------------|
| Vinyl chloride | <0.05 |
| Chloroethane | <0.5 |
| 1,1-Dichloroethene | <0.05 |
| Methylene chloride | <0.5 |
| trans-1,2-Dichloroethene | <0.05 |
| 1,1-Dichloroethane | <0.05 |
| cis-1,2-Dichloroethene | <0.05 |
| 1,2-Dichloroethane (EDC) | <0.05 |
| 1,1,1-Trichloroethane | <0.05 |
| Trichloroethene | <0.02 |
| Tetrachloroethene | <0.025 |

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

| | | | |
|-------------------|------------------------|-------------|------------------------|
| Client Sample ID: | Method Blank | Client: | The Riley Group |
| Date Received: | Not Applicable | Project: | 2016-023A, F&BI 605100 |
| Date Extracted: | 05/10/16 | Lab ID: | 06-907 mb |
| Date Analyzed: | 05/10/16 | Data File: | 051026.D |
| Matrix: | Soil | Instrument: | GCMS4 |
| Units: | mg/kg (ppm) Dry Weight | Operator: | JS |

| Surrogates: | % Recovery: | Lower Limit: | Upper Limit: |
|-----------------------|-------------|--------------|--------------|
| 1,2-Dichloroethane-d4 | 100 | 62 | 142 |
| Toluene-d8 | 102 | 55 | 145 |
| 4-Bromofluorobenzene | 101 | 65 | 139 |

| Compounds: | Concentration
mg/kg (ppm) |
|--------------------------|------------------------------|
| Vinyl chloride | <0.05 |
| Chloroethane | <0.5 |
| 1,1-Dichloroethene | <0.05 |
| Methylene chloride | <0.5 |
| trans-1,2-Dichloroethene | <0.05 |
| 1,1-Dichloroethane | <0.05 |
| cis-1,2-Dichloroethene | <0.05 |
| 1,2-Dichloroethane (EDC) | <0.05 |
| 1,1,1-Trichloroethane | <0.05 |
| Trichloroethene | <0.02 |
| Tetrachloroethene | <0.025 |

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 05/19/16

Date Received: 05/05/16

Project: 2016-023A, F&BI 605100

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

Laboratory Code: 605100-07 (Duplicate)

| Analyte | Reporting Units | Sample Result (Wet Wt) | Duplicate Result (Wet Wt) | RPD (Limit 20) |
|--------------|-----------------|------------------------|---------------------------|----------------|
| Benzene | mg/kg (ppm) | <0.02 | <0.02 | nm |
| Toluene | mg/kg (ppm) | <0.02 | <0.02 | nm |
| Ethylbenzene | mg/kg (ppm) | <0.02 | <0.02 | nm |
| Xylenes | mg/kg (ppm) | <0.06 | <0.06 | nm |
| Gasoline | mg/kg (ppm) | <2 | <2 | nm |

Laboratory Code: Laboratory Control Sample

| Analyte | Reporting Units | Spike Level | Percent | |
|--------------|-----------------|-------------|--------------|---------------------|
| | | | Recovery LCS | Acceptance Criteria |
| Benzene | mg/kg (ppm) | 0.5 | 84 | 69-120 |
| Toluene | mg/kg (ppm) | 0.5 | 90 | 70-117 |
| Ethylbenzene | mg/kg (ppm) | 0.5 | 91 | 65-123 |
| Xylenes | mg/kg (ppm) | 1.5 | 90 | 66-120 |
| Gasoline | mg/kg (ppm) | 20 | 100 | 71-131 |

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 05/19/16

Date Received: 05/05/16

Project: 2016-023A, F&BI 605100

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

Laboratory Code: 605162-01 (Matrix Spike) Silica Gel

| Analyte | Reporting
Units | Spike
Level | Sample
Result
(Wet Wt) | Percent
Recovery
MS | Percent
Recovery
MSD | Acceptance
Criteria | RPD
(Limit 20) |
|-----------------|--------------------|----------------|------------------------------|---------------------------|----------------------------|------------------------|-------------------|
| Diesel Extended | mg/kg (ppm) | 5,000 | <50 | 96 | 97 | 63-146 | 1 |

Laboratory Code: Laboratory Control Sample Silica Gel

| Analyte | Reporting
Units | Spike
Level | Percent
Recovery
LCS | Acceptance
Criteria |
|-----------------|--------------------|----------------|----------------------------|------------------------|
| Diesel Extended | mg/kg (ppm) | 5,000 | 109 | 79-144 |

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 05/19/16

Date Received: 05/05/16

Project: 2016-023A, F&BI 605100

**QUALITY ASSURANCE RESULTS
FOR THE ANALYSIS OF SOIL SAMPLES
FOR TOTAL METALS USING EPA METHOD 200.8**

Laboratory Code: 605187-03 x10 (Matrix Spike)

| Analyte | Reporting Units | Spike Level | Sample Result (Wet wt) | Percent Recovery MS | Percent Recovery MSD | Acceptance Criteria | RPD (Limit 20) |
|---------|-----------------|-------------|------------------------|---------------------|----------------------|---------------------|----------------|
| Cadmium | mg/kg (ppm) | 10 | <10 | 95 | 93 | 70-130 | 2 |
| Lead | mg/kg (ppm) | 50 | <10 | 93 | 86 | 70-130 | 8 |

Laboratory Code: Laboratory Control Sample

| Analyte | Reporting Units | Spike Level | Percent Recovery LCS | Acceptance Criteria |
|---------|-----------------|-------------|----------------------|---------------------|
| Cadmium | mg/kg (ppm) | 10 | 107 | 85-115 |
| Lead | mg/kg (ppm) | 50 | 98 | 85-115 |

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 05/19/16

Date Received: 05/05/16

Project: 2016-023A, F&BI 605100

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

Laboratory Code: 605100-13 (Matrix Spike)

| Analyte | Reporting Units | Spike Level | Sample Result (Wet wt) | Percent Recovery MS | Percent Recovery MSD | Acceptance Criteria | RPD (Limit 20) |
|--------------------------|-----------------|-------------|------------------------|---------------------|----------------------|---------------------|----------------|
| Vinyl chloride | mg/kg (ppm) | 2.5 | <0.05 | 56 | 56 | 10-138 | 0 |
| Chloroethane | mg/kg (ppm) | 2.5 | <0.5 | 78 | 74 | 10-176 | 5 |
| 1,1-Dichloroethene | mg/kg (ppm) | 2.5 | <0.05 | 72 | 71 | 10-160 | 1 |
| Methylene chloride | mg/kg (ppm) | 2.5 | <0.5 | 97 | 93 | 10-156 | 4 |
| trans-1,2-Dichloroethene | mg/kg (ppm) | 2.5 | <0.05 | 85 | 83 | 14-137 | 2 |
| 1,1-Dichloroethane | mg/kg (ppm) | 2.5 | <0.05 | 89 | 85 | 19-140 | 5 |
| cis-1,2-Dichloroethene | mg/kg (ppm) | 2.5 | <0.05 | 92 | 90 | 25-135 | 2 |
| 1,2-Dichloroethane (EDC) | mg/kg (ppm) | 2.5 | <0.05 | 86 | 83 | 12-160 | 4 |
| 1,1,1-Trichloroethane | mg/kg (ppm) | 2.5 | <0.05 | 85 | 83 | 10-156 | 2 |
| Trichloroethene | mg/kg (ppm) | 2.5 | <0.02 | 89 | 86 | 21-139 | 3 |
| Tetrachloroethene | mg/kg (ppm) | 2.5 | <0.025 | 84 | 82 | 20-133 | 2 |

Laboratory Code: Laboratory Control Sample

| Analyte | Reporting Units | Spike Level | Percent Recovery LCS | Acceptance Criteria |
|--------------------------|-----------------|-------------|----------------------|---------------------|
| Vinyl chloride | mg/kg (ppm) | 2.5 | 87 | 22-139 |
| Chloroethane | mg/kg (ppm) | 2.5 | 100 | 10-163 |
| 1,1-Dichloroethene | mg/kg (ppm) | 2.5 | 94 | 47-128 |
| Methylene chloride | mg/kg (ppm) | 2.5 | 107 | 42-132 |
| trans-1,2-Dichloroethene | mg/kg (ppm) | 2.5 | 103 | 67-127 |
| 1,1-Dichloroethane | mg/kg (ppm) | 2.5 | 104 | 68-115 |
| cis-1,2-Dichloroethene | mg/kg (ppm) | 2.5 | 107 | 72-113 |
| 1,2-Dichloroethane (EDC) | mg/kg (ppm) | 2.5 | 98 | 56-135 |
| 1,1,1-Trichloroethane | mg/kg (ppm) | 2.5 | 100 | 62-131 |
| Trichloroethene | mg/kg (ppm) | 2.5 | 102 | 64-117 |
| Tetrachloroethene | mg/kg (ppm) | 2.5 | 96 | 72-114 |

Data Qualifiers & Definitions

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

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

ca - The calibration results for the analyte were outside of acceptance criteria. The value reported is an estimate.

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

cf - The sample was centrifuged prior to analysis.

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

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

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

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

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

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

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

ip - Recovery fell outside of control limits. Compounds in the sample matrix interfered with the quantitation of the analyte.

j - The analyte concentration is reported below the lowest calibration standard. The value reported is an estimate.

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

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

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

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

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

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

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

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

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

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

100
605085 (MS)

SAMPLE CHAIN OF CUSTODY ME 05/05/16

105/VB3

Send Report To Anna Jordan
 Company The Riley Group
 Address 17522 Bothell Way NE
 City, State, ZIP Bothell WA
 Phone # 425 415-0551 Fax # _____

| | |
|---|-----|
| SAMPLERS (signature) <u>Anna Jordan</u> | |
| PROJECT NAME/NO.
<u>2016-023A</u> | PO# |
| REMARKS
<u>*silica gel cleanup</u> | |

Page # 1 of 1

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

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

| Sample ID | Lab ID | Date Sampled | Time Sampled | Sample Type | # of containers | ANALYSES REQUESTED | | | | | | | | | | Notes | | | |
|-----------|--------|--------------|--------------|-------------|-----------------|--------------------|--------------|---------------|--------------|---------------|-----|-------|-------|--|--|-------|--|--|--|
| | | | | | | TPH-Diesel | TPH-Gasoline | BTEX by 8021B | VOCs by 8260 | SVOCs by 8270 | HFS | CA+PB | HNOCs | | | | | | |
| MW13-2-3 | 01 | 5/4/16 | 8:41 | SOIL | 1 | | | | | | | | | | | | | | |
| MW13-4 | 02A-E | | 9:00 | | 5 | | | | | | | | | | | | | | |
| MW13-8 | 03 T | | 9:05 | | 5 | | | | | | | | | | | | | | |
| MW12-3 | 04 | | 1105 | | 1 | | | | | | | | | | | | | | |
| MW12-3.5 | 05A-E | | 1110 | | 5 | | | | | | | | | | | | | | |
| MW12-5.5 | 06 T | | 1115 | | 5 | X | X | X | | | | | | | | | | | |
| MW12-10 | 07 | | 1120 | | 1 | X | X | X | | | | | | | | | | | |
| MW11-3 | 08A-E | | 1210 | | 5 | | | | | | | | | | | | | | |
| MW11-5 | 09 T | | 1215 | | 5 | X | X | X | | | | | | | | | | | |
| MW11-7.5 | 10 | | 1220 | | 5 | | | | | | | | | | | | | | |

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

| SIGNATURE | PRINT NAME | COMPANY | DATE | TIME |
|-------------------------------------|--------------------|---------------------|---------------|-------------|
| Relinquished by: <u>Anna Jordan</u> | <u>Anna Jordan</u> | <u>R61</u> | <u>5/5/16</u> | <u>3:35</u> |
| Received by: <u>[Signature]</u> | <u>Excellence</u> | <u>F&B</u> | <u>5/5/16</u> | <u>1559</u> |
| Relinquished by: | | | | |
| Received by: | | Samples received at | <u>F</u> | <u>°C</u> |

100
605088 (m)

SAMPLE CHAIN OF CUSTODY

ME 05/05/16
Page # 2 of 2
WS/V83

Send Report To Anna Jordan
Company The Riley Group
Address _____
City, State, ZIP _____
Phone # 425-45-059 Fax # _____

SAMPLERS (signature) Anna Jordan
PROJECT NAME/NO. 2016-023A PO# _____
REMARKS
*silica gel cleanup

TURNAROUND TIME
 Standard (2 Weeks)
 RUSH
Rush charges authorized by _____
SAMPLE DISPOSAL
 Dispose after 30 days
 Return samples
 Will call with instructions

| Sample ID | Lab ID | Date Sampled | Time Sampled | Sample Type | # of containers | ANALYSES REQUESTED | | | | | | | | | | Notes | | |
|-----------|--------|--------------|--------------|-------------|-----------------|--------------------|--------------|---------------|--------------|---------------|-----|-------|--|--|--|-------|--|--|
| | | | | | | TPH-Diesel | TPH-Gasoline | BTEX by 8021B | VOCs by 8260 | SVOCs by 8270 | HFS | THOCS | | | | | | |
| MW11-10 | 11 | 5/4/16 | 1225 | SOIL | 5 | | | | | | | | | | | | | |
| MW15-3.5 | 12A-E | | 1425 | | 5 | | | | | | | | | | | | | |
| MW15-7 | 13 T | | 1430 | | 5 | | | | | | | | | | | | | |
| MW15-11 | 14 | | 1445 | | 5 | X | X | X | | | | | | | | | | |
| MW15-13 | 15 | | 1500 | | 1 | | | | | | | | | | | | | |
| MW14-3 | 16 | | 1630 | | 1 | | | | | | | | | | | | | |
| MW14-5 | 17A-E | | 1635 | | 5 | X | X | X | | | | | | | | | | |
| MW14-10 | 18 T | | 1645 | | 5 | X | X | X | | | | | | | | | | |
| MW14-14 | 19 | | 1655 | | 5 | | | | | | | | | | | | | |

samples received at 4 °C

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

| SIGNATURE | PRINT NAME | COMPANY | DATE | TIME |
|-------------------------------------|--------------------|----------------|---------------|--------------|
| Relinquished by: <u>Anna Jordan</u> | <u>Anna Jordan</u> | <u>Regl</u> | <u>5/5/16</u> | <u>3:35</u> |
| Received by: <u>[Signature]</u> | <u>Eric Young</u> | <u>F&B</u> | <u>5/5/16</u> | <u>15:35</u> |
| Relinquished by: | | | | |
| Received by: | | | | |

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

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

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

July 20, 2016

Anna Jordan, Project Manager
The Riley Group, Inc.
17522 Bothell Way NE
Bothell, WA 98011

Dear Ms Jordan:

Included are the results from the testing of material submitted on July 15, 2016 from the 2016-023A, F&BI 607229 project. There are 11 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

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

Sincerely,

FRIEDMAN & BRUYA, INC.



Michael Erdahl
Project Manager

Enclosures
TRG0720R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on July 15, 2016 by Friedman & Bruya, Inc. from the The Riley Group 2016-023A, F&BI 607229 project. Samples were logged in under the laboratory ID's listed below.

| <u>Laboratory ID</u> | <u>The Riley Group</u> |
|----------------------|------------------------|
| 607229 -01 | MW16-7 |
| 607229 -02 | MW16-11 |
| 607229 -03 | MW17-W |
| 607229 -04 | MW18-W |
| 607229 -05 | MW16-W |

All quality control requirements were acceptable.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 07/20/16
Date Received: 07/15/16
Project: 2016-023A, F&BI 607229
Date Extracted: 07/15/16
Date Analyzed: 07/15/16

**RESULTS FROM THE ANALYSIS OF WATER SAMPLES
FOR TOTAL PETROLEUM HYDROCARBONS AS GASOLINE
USING METHOD NWTPH-Gx**
Results Reported as ug/L (ppb)

| <u>Sample ID</u>
Laboratory ID | <u>Gasoline Range</u> | Surrogate
<u>(% Recovery)</u>
(Limit 51-134) |
|-----------------------------------|-----------------------|--|
| MW17-W
607229-03 | <100 | 95 |
| MW18-W
607229-04 | <100 | 96 |
| Method Blank
06-1419 MB | <100 | 94 |

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 07/20/16
Date Received: 07/15/16
Project: 2016-023A, F&BI 607229
Date Extracted: 07/18/16
Date Analyzed: 07/18/16

**RESULTS FROM THE ANALYSIS OF WATER SAMPLES
FOR TOTAL PETROLEUM HYDROCARBONS AS
DIESEL AND MOTOR OIL
USING METHOD NWTPH-Dx**
Results Reported as ug/L (ppb)

| <u>Sample ID</u>
Laboratory ID | <u>Diesel Range</u>
(C ₁₀ -C ₂₅) | <u>Motor Oil Range</u>
(C ₂₅ -C ₃₆) | <u>Surrogate</u>
(% Recovery)
(Limit 51-134) |
|-----------------------------------|--|---|--|
| MW17-W
607229-03 | 230 x | <250 | 79 |
| MW18-W
607229-04 | 63 x | <250 | 73 |
| MW16-W
607229-05 | 150 x | <250 | 77 |
| Method Blank
06-1441 MB | <50 | <250 | 73 |

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

| | | | |
|-------------------|------------|-------------|------------------------|
| Client Sample ID: | MW17-W | Client: | The Riley Group |
| Date Received: | 07/15/16 | Project: | 2016-023A, F&BI 607229 |
| Date Extracted: | 07/15/16 | Lab ID: | 607229-03 |
| Date Analyzed: | 07/15/16 | Data File: | 071522.D |
| Matrix: | Water | Instrument: | GCMS9 |
| Units: | ug/L (ppb) | Operator: | JS |

| Surrogates: | % Recovery: | Lower Limit: | Upper Limit: |
|-----------------------|-------------|--------------|--------------|
| 1,2-Dichloroethane-d4 | 99 | 85 | 117 |
| Toluene-d8 | 100 | 91 | 108 |
| 4-Bromofluorobenzene | 99 | 76 | 126 |

| Compounds: | Concentration ug/L (ppb) | Compounds: | Concentration ug/L (ppb) |
|-----------------------------|--------------------------|-----------------------------|--------------------------|
| Dichlorodifluoromethane | <1 | 1,3-Dichloropropane | <1 |
| Chloromethane | <10 | Tetrachloroethene | <1 |
| Vinyl chloride | <0.2 | Dibromochloromethane | <1 |
| Bromomethane | <1 | 1,2-Dibromoethane (EDB) | <1 |
| Chloroethane | <1 | Chlorobenzene | <1 |
| Trichlorofluoromethane | <1 | Ethylbenzene | <1 |
| Acetone | <10 | 1,1,1,2-Tetrachloroethane | <1 |
| 1,1-Dichloroethene | <1 | m,p-Xylene | <2 |
| Hexane | <1 | o-Xylene | <1 |
| Methylene chloride | <5 | Styrene | <1 |
| Methyl t-butyl ether (MTBE) | <1 | Isopropylbenzene | <1 |
| trans-1,2-Dichloroethene | <1 | Bromoform | <1 |
| 1,1-Dichloroethane | <1 | n-Propylbenzene | <1 |
| 2,2-Dichloropropane | <1 | Bromobenzene | <1 |
| cis-1,2-Dichloroethene | <1 | 1,3,5-Trimethylbenzene | <1 |
| Chloroform | <1 | 1,1,2,2-Tetrachloroethane | <1 |
| 2-Butanone (MEK) | <10 | 1,2,3-Trichloropropane | <1 |
| 1,2-Dichloroethane (EDC) | <1 | 2-Chlorotoluene | <1 |
| 1,1,1-Trichloroethane | <1 | 4-Chlorotoluene | <1 |
| 1,1-Dichloropropene | <1 | tert-Butylbenzene | <1 |
| Carbon tetrachloride | <1 | 1,2,4-Trimethylbenzene | <1 |
| Benzene | <0.35 | sec-Butylbenzene | <1 |
| Trichloroethene | <1 | p-Isopropyltoluene | <1 |
| 1,2-Dichloropropane | <1 | 1,3-Dichlorobenzene | <1 |
| Bromodichloromethane | <1 | 1,4-Dichlorobenzene | <1 |
| Dibromomethane | <1 | 1,2-Dichlorobenzene | <1 |
| 4-Methyl-2-pentanone | <10 | 1,2-Dibromo-3-chloropropane | <10 |
| cis-1,3-Dichloropropene | <1 | 1,2,4-Trichlorobenzene | <1 |
| Toluene | <1 | Hexachlorobutadiene | <1 |
| trans-1,3-Dichloropropene | <1 | Naphthalene | <1 |
| 1,1,2-Trichloroethane | <1 | 1,2,3-Trichlorobenzene | <1 |
| 2-Hexanone | <10 | | |

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

| | | | |
|-------------------|------------|-------------|------------------------|
| Client Sample ID: | MW18-W | Client: | The Riley Group |
| Date Received: | 07/15/16 | Project: | 2016-023A, F&BI 607229 |
| Date Extracted: | 07/15/16 | Lab ID: | 607229-04 |
| Date Analyzed: | 07/15/16 | Data File: | 071523.D |
| Matrix: | Water | Instrument: | GCMS9 |
| Units: | ug/L (ppb) | Operator: | JS |

| Surrogates: | % Recovery: | Lower Limit: | Upper Limit: |
|-----------------------|-------------|--------------|--------------|
| 1,2-Dichloroethane-d4 | 98 | 85 | 117 |
| Toluene-d8 | 100 | 91 | 108 |
| 4-Bromofluorobenzene | 99 | 76 | 126 |

| Compounds: | Concentration ug/L (ppb) | Compounds: | Concentration ug/L (ppb) |
|-----------------------------|--------------------------|-----------------------------|--------------------------|
| Dichlorodifluoromethane | <1 | 1,3-Dichloropropane | <1 |
| Chloromethane | <10 | Tetrachloroethene | <1 |
| Vinyl chloride | <0.2 | Dibromochloromethane | <1 |
| Bromomethane | <1 | 1,2-Dibromoethane (EDB) | <1 |
| Chloroethane | <1 | Chlorobenzene | <1 |
| Trichlorofluoromethane | <1 | Ethylbenzene | <1 |
| Acetone | <10 | 1,1,1,2-Tetrachloroethane | <1 |
| 1,1-Dichloroethene | <1 | m,p-Xylene | <2 |
| Hexane | <1 | o-Xylene | <1 |
| Methylene chloride | <5 | Styrene | <1 |
| Methyl t-butyl ether (MTBE) | <1 | Isopropylbenzene | <1 |
| trans-1,2-Dichloroethene | <1 | Bromoform | <1 |
| 1,1-Dichloroethane | 1.9 | n-Propylbenzene | <1 |
| 2,2-Dichloropropane | <1 | Bromobenzene | <1 |
| cis-1,2-Dichloroethene | 15 | 1,3,5-Trimethylbenzene | <1 |
| Chloroform | <1 | 1,1,2,2-Tetrachloroethane | <1 |
| 2-Butanone (MEK) | <10 | 1,2,3-Trichloropropane | <1 |
| 1,2-Dichloroethane (EDC) | <1 | 2-Chlorotoluene | <1 |
| 1,1,1-Trichloroethane | <1 | 4-Chlorotoluene | <1 |
| 1,1-Dichloropropene | <1 | tert-Butylbenzene | <1 |
| Carbon tetrachloride | <1 | 1,2,4-Trimethylbenzene | <1 |
| Benzene | <0.35 | sec-Butylbenzene | <1 |
| Trichloroethene | 130 | p-Isopropyltoluene | <1 |
| 1,2-Dichloropropane | <1 | 1,3-Dichlorobenzene | <1 |
| Bromodichloromethane | <1 | 1,4-Dichlorobenzene | <1 |
| Dibromomethane | <1 | 1,2-Dichlorobenzene | <1 |
| 4-Methyl-2-pentanone | <10 | 1,2-Dibromo-3-chloropropane | <10 |
| cis-1,3-Dichloropropene | <1 | 1,2,4-Trichlorobenzene | <1 |
| Toluene | <1 | Hexachlorobutadiene | <1 |
| trans-1,3-Dichloropropene | <1 | Naphthalene | <1 |
| 1,1,2-Trichloroethane | <1 | 1,2,3-Trichlorobenzene | <1 |
| 2-Hexanone | <10 | | |

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

| | | | |
|-------------------|----------------|-------------|------------------------|
| Client Sample ID: | Method Blank | Client: | The Riley Group |
| Date Received: | Not Applicable | Project: | 2016-023A, F&BI 607229 |
| Date Extracted: | 07/15/16 | Lab ID: | 06-1431 mb |
| Date Analyzed: | 07/15/16 | Data File: | 071512.D |
| Matrix: | Water | Instrument: | GCMS9 |
| Units: | ug/L (ppb) | Operator: | JS |

| Surrogates: | % Recovery: | Lower Limit: | Upper Limit: |
|-----------------------|-------------|--------------|--------------|
| 1,2-Dichloroethane-d4 | 102 | 85 | 117 |
| Toluene-d8 | 100 | 91 | 108 |
| 4-Bromofluorobenzene | 101 | 76 | 126 |

| Compounds: | Concentration ug/L (ppb) | Compounds: | Concentration ug/L (ppb) |
|-----------------------------|--------------------------|-----------------------------|--------------------------|
| Dichlorodifluoromethane | <1 | 1,3-Dichloropropane | <1 |
| Chloromethane | <10 | Tetrachloroethene | <1 |
| Vinyl chloride | <0.2 | Dibromochloromethane | <1 |
| Bromomethane | <1 | 1,2-Dibromoethane (EDB) | <1 |
| Chloroethane | <1 | Chlorobenzene | <1 |
| Trichlorofluoromethane | <1 | Ethylbenzene | <1 |
| Acetone | <10 | 1,1,1,2-Tetrachloroethane | <1 |
| 1,1-Dichloroethene | <1 | m,p-Xylene | <2 |
| Hexane | <1 | o-Xylene | <1 |
| Methylene chloride | <5 | Styrene | <1 |
| Methyl t-butyl ether (MTBE) | <1 | Isopropylbenzene | <1 |
| trans-1,2-Dichloroethene | <1 | Bromoform | <1 |
| 1,1-Dichloroethane | <1 | n-Propylbenzene | <1 |
| 2,2-Dichloropropane | <1 | Bromobenzene | <1 |
| cis-1,2-Dichloroethene | <1 | 1,3,5-Trimethylbenzene | <1 |
| Chloroform | <1 | 1,1,2,2-Tetrachloroethane | <1 |
| 2-Butanone (MEK) | <10 | 1,2,3-Trichloropropane | <1 |
| 1,2-Dichloroethane (EDC) | <1 | 2-Chlorotoluene | <1 |
| 1,1,1-Trichloroethane | <1 | 4-Chlorotoluene | <1 |
| 1,1-Dichloropropene | <1 | tert-Butylbenzene | <1 |
| Carbon tetrachloride | <1 | 1,2,4-Trimethylbenzene | <1 |
| Benzene | <0.35 | sec-Butylbenzene | <1 |
| Trichloroethene | <1 | p-Isopropyltoluene | <1 |
| 1,2-Dichloropropane | <1 | 1,3-Dichlorobenzene | <1 |
| Bromodichloromethane | <1 | 1,4-Dichlorobenzene | <1 |
| Dibromomethane | <1 | 1,2-Dichlorobenzene | <1 |
| 4-Methyl-2-pentanone | <10 | 1,2-Dibromo-3-chloropropane | <10 |
| cis-1,3-Dichloropropene | <1 | 1,2,4-Trichlorobenzene | <1 |
| Toluene | <1 | Hexachlorobutadiene | <1 |
| trans-1,3-Dichloropropene | <1 | Naphthalene | <1 |
| 1,1,2-Trichloroethane | <1 | 1,2,3-Trichlorobenzene | <1 |
| 2-Hexanone | <10 | | |

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 07/20/16

Date Received: 07/15/16

Project: 2016-023A, F&BI 607229

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

Laboratory Code: 607205-01 (Duplicate)

| Analyte | Reporting
Units | Sample
Result | Duplicate
Result | RPD
(Limit 20) |
|----------|--------------------|------------------|---------------------|-------------------|
| Gasoline | ug/L (ppb) | <100 | <100 | nm |

Laboratory Code: Laboratory Control Sample

| Analyte | Reporting
Units | Spike
Level | Percent
Recovery
LCS | Acceptance
Criteria |
|----------|--------------------|----------------|----------------------------|------------------------|
| Gasoline | ug/L (ppb) | 1,000 | 90 | 69-134 |

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 07/20/16

Date Received: 07/15/16

Project: 2016-023A, F&BI 607229

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

Laboratory Code: Laboratory Control Sample

| Analyte | Reporting
Units | Spike
Level | Percent
Recovery
LCS | Percent
Recovery
LCSD | Acceptance
Criteria | RPD
(Limit 20) |
|-----------------|--------------------|----------------|----------------------------|-----------------------------|------------------------|-------------------|
| Diesel Extended | ug/L (ppb) | 2,500 | 83 | 84 | 58-134 | 1 |

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 07/20/16

Date Received: 07/15/16

Project: 2016-023A, F&BI 607229

**QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF WATER
SAMPLES FOR VOLATILES BY EPA METHOD 8260C**

Laboratory Code: 607212-02 (Matrix Spike)

| Analyte | Reporting Units | Spike Level | Sample Result | Percent | Acceptance Criteria |
|-----------------------------|-----------------|-------------|---------------|-------------|---------------------|
| | | | | Recovery MS | |
| Dichlorodifluoromethane | ug/L (ppb) | 50 | <1 | 99 | 55-137 |
| Chloromethane | ug/L (ppb) | 50 | <10 | 89 | 61-120 |
| Vinyl chloride | ug/L (ppb) | 50 | <0.2 | 95 | 61-139 |
| Bromomethane | ug/L (ppb) | 50 | <1 | 120 | 20-265 |
| Chloroethane | ug/L (ppb) | 50 | <1 | 104 | 55-149 |
| Trichlorofluoromethane | ug/L (ppb) | 50 | <1 | 98 | 71-128 |
| Acetone | ug/L (ppb) | 250 | 68 | 37 b | 48-149 |
| 1,1-Dichloroethene | ug/L (ppb) | 50 | <1 | 93 | 71-123 |
| Hexane | ug/L (ppb) | 50 | <1 | 95 | 61-127 |
| Methylene chloride | ug/L (ppb) | 50 | <5 | 97 | 61-126 |
| Methyl t-butyl ether (MTBE) | ug/L (ppb) | 50 | <1 | 87 | 68-125 |
| trans-1,2-Dichloroethene | ug/L (ppb) | 50 | <1 | 93 | 72-122 |
| 1,1-Dichloroethane | ug/L (ppb) | 50 | <1 | 95 | 79-113 |
| 2,2-Dichloropropane | ug/L (ppb) | 50 | <1 | 96 | 58-132 |
| cis-1,2-Dichloroethene | ug/L (ppb) | 50 | 1.7 | 91 | 63-126 |
| Chloroform | ug/L (ppb) | 50 | <1 | 92 | 79-113 |
| 2-Butanone (MEK) | ug/L (ppb) | 250 | 350 | 42 b | 69-123 |
| 1,2-Dichloroethane (EDC) | ug/L (ppb) | 50 | <1 | 96 | 70-119 |
| 1,1,1-Trichloroethane | ug/L (ppb) | 50 | <1 | 93 | 75-121 |
| 1,1-Dichloropropene | ug/L (ppb) | 50 | <1 | 97 | 67-121 |
| Carbon tetrachloride | ug/L (ppb) | 50 | <1 | 91 | 70-132 |
| Benzene | ug/L (ppb) | 50 | <0.35 | 91 | 78-108 |
| Trichloroethene | ug/L (ppb) | 50 | 3.3 | 93 | 75-109 |
| 1,2-Dichloropropane | ug/L (ppb) | 50 | <1 | 93 | 80-111 |
| Bromodichloromethane | ug/L (ppb) | 50 | <1 | 93 | 78-117 |
| Dibromomethane | ug/L (ppb) | 50 | <1 | 92 | 73-125 |
| 4-Methyl-2-pentanone | ug/L (ppb) | 250 | <10 | 84 | 79-123 |
| cis-1,3-Dichloropropene | ug/L (ppb) | 50 | <1 | 99 | 76-120 |
| Toluene | ug/L (ppb) | 50 | <1 | 96 | 73-117 |
| trans-1,3-Dichloropropene | ug/L (ppb) | 50 | <1 | 100 | 75-122 |
| 1,1,2-Trichloroethane | ug/L (ppb) | 50 | <1 | 92 | 81-116 |
| 2-Hexanone | ug/L (ppb) | 250 | <10 | 85 | 74-127 |
| 1,3-Dichloropropane | ug/L (ppb) | 50 | <1 | 95 | 80-113 |
| Tetrachloroethene | ug/L (ppb) | 50 | <1 | 94 | 72-113 |
| Dibromochloromethane | ug/L (ppb) | 50 | <1 | 100 | 69-129 |
| 1,2-Dibromoethane (EDB) | ug/L (ppb) | 50 | <1 | 94 | 79-120 |
| Chlorobenzene | ug/L (ppb) | 50 | <1 | 93 | 75-115 |
| Ethylbenzene | ug/L (ppb) | 50 | <1 | 94 | 71-120 |
| 1,1,1,2-Tetrachloroethane | ug/L (ppb) | 50 | <1 | 100 | 76-130 |
| m,p-Xylene | ug/L (ppb) | 100 | <2 | 92 | 63-128 |
| o-Xylene | ug/L (ppb) | 50 | <1 | 93 | 64-129 |
| Styrene | ug/L (ppb) | 50 | <1 | 91 | 56-142 |
| Isopropylbenzene | ug/L (ppb) | 50 | <1 | 89 | 77-122 |
| Bromoform | ug/L (ppb) | 50 | <1 | 96 | 49-138 |
| n-Propylbenzene | ug/L (ppb) | 50 | <1 | 94 | 74-117 |
| Bromobenzene | ug/L (ppb) | 50 | <1 | 98 | 70-121 |
| 1,3,5-Trimethylbenzene | ug/L (ppb) | 50 | <1 | 90 | 60-138 |
| 1,1,2,2-Tetrachloroethane | ug/L (ppb) | 50 | <1 | 98 | 79-120 |
| 1,2,3-Trichloropropane | ug/L (ppb) | 50 | <1 | 90 | 62-125 |
| 2-Chlorotoluene | ug/L (ppb) | 50 | <1 | 94 | 70-123 |
| 4-Chlorotoluene | ug/L (ppb) | 50 | <1 | 90 | 79-113 |
| tert-Butylbenzene | ug/L (ppb) | 50 | <1 | 93 | 78-124 |
| 1,2,4-Trimethylbenzene | ug/L (ppb) | 50 | <1 | 88 | 74-118 |
| sec-Butylbenzene | ug/L (ppb) | 50 | <1 | 90 | 77-118 |
| p-Isopropyltoluene | ug/L (ppb) | 50 | <1 | 90 | 64-132 |
| 1,3-Dichlorobenzene | ug/L (ppb) | 50 | <1 | 93 | 79-109 |
| 1,4-Dichlorobenzene | ug/L (ppb) | 50 | <1 | 88 | 78-110 |
| 1,2-Dichlorobenzene | ug/L (ppb) | 50 | <1 | 91 | 81-111 |
| 1,2-Dibromo-3-chloropropane | ug/L (ppb) | 50 | <10 | 89 | 69-129 |
| 1,2,4-Trichlorobenzene | ug/L (ppb) | 50 | <1 | 91 | 66-123 |
| Hexachlorobutadiene | ug/L (ppb) | 50 | <1 | 106 | 67-120 |
| Naphthalene | ug/L (ppb) | 50 | <1 | 86 | 62-140 |
| 1,2,3-Trichlorobenzene | ug/L (ppb) | 50 | <1 | 88 | 59-130 |

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 07/20/16

Date Received: 07/15/16

Project: 2016-023A, F&BI 607229

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF WATER SAMPLES FOR VOLATILES BY EPA METHOD 8260C

Laboratory Code: Laboratory Control Sample

| Analyte | Reporting Units | Spike Level | Percent Recovery LCS | Percent Recovery LCSD | Acceptance Criteria | RPD (Limit 20) |
|-----------------------------|-----------------|-------------|----------------------|-----------------------|---------------------|----------------|
| Dichlorodifluoromethane | ug/L (ppb) | 50 | 106 | 108 | 54-149 | 2 |
| Chloromethane | ug/L (ppb) | 50 | 93 | 93 | 67-133 | 0 |
| Vinyl chloride | ug/L (ppb) | 50 | 96 | 97 | 70-119 | 1 |
| Bromomethane | ug/L (ppb) | 50 | 119 | 123 | 62-188 | 3 |
| Chloroethane | ug/L (ppb) | 50 | 104 | 103 | 66-149 | 1 |
| Trichlorofluoromethane | ug/L (ppb) | 50 | 99 | 101 | 70-132 | 2 |
| Acetone | ug/L (ppb) | 250 | 91 | 94 | 44-145 | 3 |
| 1,1-Dichloroethene | ug/L (ppb) | 50 | 95 | 96 | 75-119 | 1 |
| Hexane | ug/L (ppb) | 50 | 97 | 97 | 51-153 | 0 |
| Methylene chloride | ug/L (ppb) | 50 | 99 | 100 | 63-132 | 1 |
| Methyl t-butyl ether (MTBE) | ug/L (ppb) | 50 | 96 | 96 | 70-122 | 0 |
| trans-1,2-Dichloroethene | ug/L (ppb) | 50 | 93 | 94 | 76-118 | 1 |
| 1,1-Dichloroethane | ug/L (ppb) | 50 | 96 | 97 | 80-116 | 1 |
| 2,2-Dichloropropane | ug/L (ppb) | 50 | 108 | 107 | 62-141 | 1 |
| cis-1,2-Dichloroethene | ug/L (ppb) | 50 | 91 | 93 | 80-112 | 2 |
| Chloroform | ug/L (ppb) | 50 | 94 | 95 | 81-109 | 1 |
| 2-Butanone (MEK) | ug/L (ppb) | 250 | 95 | 96 | 53-140 | 1 |
| 1,2-Dichloroethane (EDC) | ug/L (ppb) | 50 | 99 | 100 | 79-109 | 1 |
| 1,1,1-Trichloroethane | ug/L (ppb) | 50 | 97 | 98 | 80-116 | 1 |
| 1,1-Dichloropropene | ug/L (ppb) | 50 | 99 | 100 | 78-112 | 1 |
| Carbon tetrachloride | ug/L (ppb) | 50 | 97 | 97 | 72-128 | 0 |
| Benzene | ug/L (ppb) | 50 | 91 | 92 | 81-108 | 1 |
| Trichloroethene | ug/L (ppb) | 50 | 94 | 94 | 77-108 | 0 |
| 1,2-Dichloropropane | ug/L (ppb) | 50 | 95 | 96 | 82-109 | 1 |
| Bromodichloromethane | ug/L (ppb) | 50 | 93 | 94 | 76-120 | 1 |
| Dibromomethane | ug/L (ppb) | 50 | 96 | 97 | 80-110 | 1 |
| 4-Methyl-2-pentanone | ug/L (ppb) | 250 | 102 | 100 | 59-142 | 2 |
| cis-1,3-Dichloropropene | ug/L (ppb) | 50 | 101 | 101 | 76-128 | 0 |
| Toluene | ug/L (ppb) | 50 | 96 | 97 | 83-108 | 1 |
| trans-1,3-Dichloropropene | ug/L (ppb) | 50 | 102 | 102 | 76-128 | 0 |
| 1,1,2-Trichloroethane | ug/L (ppb) | 50 | 94 | 95 | 82-110 | 1 |
| 2-Hexanone | ug/L (ppb) | 250 | 92 | 91 | 53-145 | 1 |
| 1,3-Dichloropropane | ug/L (ppb) | 50 | 98 | 98 | 83-110 | 0 |
| Tetrachloroethene | ug/L (ppb) | 50 | 94 | 94 | 78-109 | 0 |
| Dibromochloromethane | ug/L (ppb) | 50 | 100 | 102 | 63-140 | 2 |
| 1,2-Dibromoethane (EDB) | ug/L (ppb) | 50 | 94 | 94 | 82-118 | 0 |
| Chlorobenzene | ug/L (ppb) | 50 | 93 | 94 | 84-108 | 1 |
| Ethylbenzene | ug/L (ppb) | 50 | 96 | 96 | 83-111 | 0 |
| 1,1,1,2-Tetrachloroethane | ug/L (ppb) | 50 | 99 | 101 | 76-125 | 2 |
| m,p-Xylene | ug/L (ppb) | 100 | 94 | 94 | 84-112 | 0 |
| o-Xylene | ug/L (ppb) | 50 | 96 | 95 | 81-117 | 1 |
| Styrene | ug/L (ppb) | 50 | 93 | 94 | 83-121 | 1 |
| Isopropylbenzene | ug/L (ppb) | 50 | 92 | 93 | 81-122 | 1 |
| Bromoform | ug/L (ppb) | 50 | 99 | 100 | 40-161 | 1 |
| n-Propylbenzene | ug/L (ppb) | 50 | 97 | 97 | 81-115 | 0 |
| Bromobenzene | ug/L (ppb) | 50 | 98 | 97 | 80-113 | 1 |
| 1,3,5-Trimethylbenzene | ug/L (ppb) | 50 | 93 | 94 | 83-117 | 1 |
| 1,1,2,2-Tetrachloroethane | ug/L (ppb) | 50 | 102 | 100 | 79-118 | 2 |
| 1,2,3-Trichloropropane | ug/L (ppb) | 50 | 94 | 94 | 74-116 | 0 |
| 2-Chlorotoluene | ug/L (ppb) | 50 | 95 | 96 | 79-112 | 1 |
| 4-Chlorotoluene | ug/L (ppb) | 50 | 91 | 92 | 81-113 | 1 |
| tert-Butylbenzene | ug/L (ppb) | 50 | 96 | 97 | 81-119 | 1 |
| 1,2,4-Trimethylbenzene | ug/L (ppb) | 50 | 91 | 92 | 81-121 | 1 |
| sec-Butylbenzene | ug/L (ppb) | 50 | 95 | 95 | 83-123 | 0 |
| p-Isopropyltoluene | ug/L (ppb) | 50 | 94 | 95 | 81-122 | 1 |
| 1,3-Dichlorobenzene | ug/L (ppb) | 50 | 95 | 96 | 82-110 | 1 |
| 1,4-Dichlorobenzene | ug/L (ppb) | 50 | 90 | 90 | 81-105 | 0 |
| 1,2-Dichlorobenzene | ug/L (ppb) | 50 | 93 | 94 | 83-111 | 1 |
| 1,2-Dibromo-3-chloropropane | ug/L (ppb) | 50 | 103 | 103 | 62-133 | 0 |
| 1,2,4-Trichlorobenzene | ug/L (ppb) | 50 | 98 | 100 | 77-117 | 2 |
| Hexachlorobutadiene | ug/L (ppb) | 50 | 94 | 96 | 70-116 | 2 |
| Naphthalene | ug/L (ppb) | 50 | 99 | 99 | 72-131 | 0 |
| 1,2,3-Trichlorobenzene | ug/L (ppb) | 50 | 96 | 99 | 80-114 | 3 |

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Data Qualifiers & Definitions

- a - The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.
- b - The analyte was spiked at a level that was less than five times that present in the sample. Matrix spike recoveries may not be meaningful.
- ca - The calibration results for the analyte were outside of acceptance criteria. The value reported is an estimate.
- c - The presence of the analyte may be due to carryover from previous sample injections.
- cf - The sample was centrifuged prior to analysis.
- d - The sample was diluted. Detection limits were raised and surrogate recoveries may not be meaningful.
- dv - Insufficient sample volume was available to achieve normal reporting limits.
- f - The sample was laboratory filtered prior to analysis.
- fb - The analyte was detected in the method blank.
- fc - The compound is a common laboratory and field contaminant.
- hr - The sample and duplicate were reextracted and reanalyzed. RPD results were still outside of control limits. Variability is attributed to sample inhomogeneity.
- hs - Headspace was present in the container used for analysis.
- ht - The analysis was performed outside the method or client-specified holding time requirement.
- ip - Recovery fell outside of control limits. Compounds in the sample matrix interfered with the quantitation of the analyte.
- j - The analyte concentration is reported below the lowest calibration standard. The value reported is an estimate.
- J - The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.
- jl - The laboratory control sample(s) percent recovery and/or RPD were out of control limits. The reported concentration should be considered an estimate.
- js - The surrogate associated with the analyte is out of control limits. The reported concentration should be considered an estimate.
- lc - The presence of the analyte is likely due to laboratory contamination.
- L - The reported concentration was generated from a library search.
- nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.
- pc - The sample was received with incorrect preservation or in a container not approved by the method. The value reported should be considered an estimate.
- ve - The analyte response exceeded the valid instrument calibration range. The value reported is an estimate.
- vo - The value reported fell outside the control limits established for this analyte.
- x - The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

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

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(206) 285-8282
fbi@isomedia.com
www.friedmanandbruya.com

May 19, 2016

Anna Jordan, Project Manager
The Riley Group, Inc.
17522 Bothell Way NE
Bothell, WA 98011

Dear Ms. Jordan:

Included are the results from the testing of material submitted on May 6, 2016 from the 2016-023, F&BI 605108 project. There are 17 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

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

Sincerely,

FRIEDMAN & BRUYA, INC.



Michael Erdahl
Project Manager

Enclosures
TRG0519R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on May 6, 2016 by Friedman & Bruya, Inc. from the The Riley Group 2016-023, F&BI 605108 project. Samples were logged in under the laboratory ID's listed below.

| <u>Laboratory ID</u> | <u>The Riley Group</u> |
|----------------------|------------------------|
| 605108 -01 | MW11 |
| 605108 -02 | MW12 |
| 605108 -03 | MW13 |
| 605108 -04 | MW14 |
| 605108 -05 | MW15 |

All quality control requirements were acceptable.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 05/19/16
Date Received: 05/06/16
Project: 2016-023, F&BI 605108
Date Extracted: 05/10/16
Date Analyzed: 05/10/16

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

Results Reported as ug/L (ppb)

| <u>Sample ID</u>
Laboratory ID | <u>Benzene</u> | <u>Toluene</u> | <u>Ethyl Benzene</u> | <u>Total Xylenes</u> | <u>Gasoline Range</u> | <u>Surrogate (% Recovery)</u>
(Limit 52-124) |
|-----------------------------------|----------------|----------------|----------------------|----------------------|-----------------------|---|
| MW11
605108-01 | 1.7 | <1 | <1 | <3 | <100 | 83 |
| MW12
605108-02 | <1 | <1 | <1 | <3 | <100 | 86 |
| Method Blank
06-894 MB | <1 | <1 | <1 | <3 | <100 | 80 |

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 05/19/16
Date Received: 05/06/16
Project: 2016-023, F&BI 605108
Date Extracted: 05/12/16
Date Analyzed: 05/12/16

**RESULTS FROM THE ANALYSIS OF WATER SAMPLES
FOR TOTAL PETROLEUM HYDROCARBONS AS
DIESEL AND MOTOR OIL
USING METHOD NWTPH-Dx**
Results Reported as ug/L (ppb)

| <u>Sample ID</u>
Laboratory ID | <u>Diesel Range</u>
(C ₁₀ -C ₂₅) | <u>Motor Oil Range</u>
(C ₂₅ -C ₃₆) | <u>Surrogate</u>
(% Recovery)
(Limit 41-152) |
|-----------------------------------|--|---|--|
| MW11
605108-01 | 200 x | <250 | 92 |
| MW12
605108-02 | 200 x | <250 | 75 |
| Method Blank
06-953 MB2 | <50 | <250 | 100 |

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

| | | | |
|-----------------|------------|-------------|-----------------------|
| Client ID: | MW13 | Client: | The Riley Group |
| Date Received: | 05/06/16 | Project: | 2016-023, F&BI 605108 |
| Date Extracted: | 05/12/16 | Lab ID: | 605108-03 |
| Date Analyzed: | 05/16/16 | Data File: | 605108-03.056 |
| Matrix: | Water | Instrument: | ICPMS1 |
| Units: | ug/L (ppb) | Operator: | SP |

| Analyte: | Concentration
ug/L (ppb) |
|----------|-----------------------------|
| Cadmium | <1 |
| Lead | 5.32 |

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

| | | | |
|-----------------|--------------|-------------|-----------------------|
| Client ID: | Method Blank | Client: | The Riley Group |
| Date Received: | NA | Project: | 2016-023, F&BI 605108 |
| Date Extracted: | 05/12/16 | Lab ID: | I6-304 mb |
| Date Analyzed: | 05/16/16 | Data File: | I6-304 mb.051 |
| Matrix: | Water | Instrument: | ICPMS1 |
| Units: | ug/L (ppb) | Operator: | SP |

| Analyte: | Concentration
ug/L (ppb) |
|----------|-----------------------------|
| Cadmium | <1 |
| Lead | <1 |

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Dissolved Metals By EPA Method 200.8

| | | | |
|-----------------|------------|-------------|-----------------------|
| Client ID: | MW13 | Client: | The Riley Group |
| Date Received: | 05/06/16 | Project: | 2016-023, F&BI 605108 |
| Date Extracted: | 05/16/16 | Lab ID: | 605108-03 f |
| Date Analyzed: | 05/16/16 | Data File: | 605108-03.081 |
| Matrix: | Water | Instrument: | ICPMS1 |
| Units: | ug/L (ppb) | Operator: | SP |

| Analyte: | Concentration
ug/L (ppb) |
|----------|-----------------------------|
| Cadmium | <1 |
| Lead | <1 |

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Dissolved Metals By EPA Method 200.8

| | | | |
|-----------------|--------------|-------------|-----------------------|
| Client ID: | Method Blank | Client: | The Riley Group |
| Date Received: | NA | Project: | 2016-023, F&BI 605108 |
| Date Extracted: | 05/16/16 | Lab ID: | I6-310 mb f |
| Date Analyzed: | 05/16/16 | Data File: | I6-310 mb.079 |
| Matrix: | Water | Instrument: | ICPMS1 |
| Units: | ug/L (ppb) | Operator: | SP |

| Analyte: | Concentration
ug/L (ppb) |
|----------|-----------------------------|
| Cadmium | <1 |
| Lead | <1 |

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID: MW13
Date Received: 05/06/16
Date Extracted: 05/10/16
Date Analyzed: 05/10/16
Matrix: Water
Units: ug/L (ppb)

Client: The Riley Group
Project: 2016-023, F&BI 605108
Lab ID: 605108-03
Data File: 051039.D
Instrument: GCMS4
Operator: JS

| Surrogates: | % Recovery: | Lower Limit: | Upper Limit: |
|-----------------------|-------------|--------------|--------------|
| 1,2-Dichloroethane-d4 | 99 | 57 | 121 |
| Toluene-d8 | 103 | 63 | 127 |
| 4-Bromofluorobenzene | 100 | 60 | 133 |

| Compounds: | Concentration
ug/L (ppb) |
|--------------------------|-----------------------------|
| Vinyl chloride | <0.2 |
| Chloroethane | <1 |
| 1,1-Dichloroethene | <1 |
| Methylene chloride | <5 |
| trans-1,2-Dichloroethene | <1 |
| 1,1-Dichloroethane | <1 |
| cis-1,2-Dichloroethene | <1 |
| 1,2-Dichloroethane (EDC) | <1 |
| 1,1,1-Trichloroethane | <1 |
| Trichloroethene | <1 |
| Tetrachloroethene | <1 |

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

| | | | |
|-------------------|------------|-------------|-----------------------|
| Client Sample ID: | MW14 | Client: | The Riley Group |
| Date Received: | 05/06/16 | Project: | 2016-023, F&BI 605108 |
| Date Extracted: | 05/10/16 | Lab ID: | 605108-04 |
| Date Analyzed: | 05/10/16 | Data File: | 051040.D |
| Matrix: | Water | Instrument: | GCMS4 |
| Units: | ug/L (ppb) | Operator: | JS |

| Surrogates: | % Recovery: | Lower Limit: | Upper Limit: |
|-----------------------|-------------|--------------|--------------|
| 1,2-Dichloroethane-d4 | 102 | 57 | 121 |
| Toluene-d8 | 104 | 63 | 127 |
| 4-Bromofluorobenzene | 100 | 60 | 133 |

| Compounds: | Concentration
ug/L (ppb) |
|--------------------------|-----------------------------|
| Vinyl chloride | <0.2 |
| Chloroethane | <1 |
| 1,1-Dichloroethene | <1 |
| Methylene chloride | <5 |
| trans-1,2-Dichloroethene | <1 |
| 1,1-Dichloroethane | <1 |
| cis-1,2-Dichloroethene | <1 |
| 1,2-Dichloroethane (EDC) | <1 |
| 1,1,1-Trichloroethane | <1 |
| Trichloroethene | <1 |
| Tetrachloroethene | <1 |

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

| | | | |
|-------------------|------------|-------------|-----------------------|
| Client Sample ID: | MW15 | Client: | The Riley Group |
| Date Received: | 05/06/16 | Project: | 2016-023, F&BI 605108 |
| Date Extracted: | 05/10/16 | Lab ID: | 605108-05 |
| Date Analyzed: | 05/10/16 | Data File: | 051041.D |
| Matrix: | Water | Instrument: | GCMS4 |
| Units: | ug/L (ppb) | Operator: | JS |

| Surrogates: | % Recovery: | Lower Limit: | Upper Limit: |
|-----------------------|-------------|--------------|--------------|
| 1,2-Dichloroethane-d4 | 99 | 57 | 121 |
| Toluene-d8 | 102 | 63 | 127 |
| 4-Bromofluorobenzene | 102 | 60 | 133 |

| Compounds: | Concentration
ug/L (ppb) |
|--------------------------|-----------------------------|
| Vinyl chloride | <0.2 |
| Chloroethane | <1 |
| 1,1-Dichloroethene | <1 |
| Methylene chloride | <5 |
| trans-1,2-Dichloroethene | <1 |
| 1,1-Dichloroethane | <1 |
| cis-1,2-Dichloroethene | <1 |
| 1,2-Dichloroethane (EDC) | <1 |
| 1,1,1-Trichloroethane | <1 |
| Trichloroethene | <1 |
| Tetrachloroethene | <1 |

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

| | | | |
|-------------------|----------------|-------------|-----------------------|
| Client Sample ID: | Method Blank | Client: | The Riley Group |
| Date Received: | Not Applicable | Project: | 2016-023, F&BI 605108 |
| Date Extracted: | 05/10/16 | Lab ID: | 06-906 mb |
| Date Analyzed: | 05/10/16 | Data File: | 051005.D |
| Matrix: | Water | Instrument: | GCMS4 |
| Units: | ug/L (ppb) | Operator: | JS |

| Surrogates: | % Recovery: | Lower Limit: | Upper Limit: |
|-----------------------|-------------|--------------|--------------|
| 1,2-Dichloroethane-d4 | 100 | 57 | 121 |
| Toluene-d8 | 101 | 63 | 127 |
| 4-Bromofluorobenzene | 98 | 60 | 133 |

| Compounds: | Concentration
ug/L (ppb) |
|--------------------------|-----------------------------|
| Vinyl chloride | <0.2 |
| Chloroethane | <1 |
| 1,1-Dichloroethene | <1 |
| Methylene chloride | <5 |
| trans-1,2-Dichloroethene | <1 |
| 1,1-Dichloroethane | <1 |
| cis-1,2-Dichloroethene | <1 |
| 1,2-Dichloroethane (EDC) | <1 |
| 1,1,1-Trichloroethane | <1 |
| Trichloroethene | <1 |
| Tetrachloroethene | <1 |

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 05/19/16

Date Received: 05/06/16

Project: 2016-023, F&BI 605108

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

Laboratory Code: 605145-08 (Duplicate)

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

Laboratory Code: Laboratory Control Sample

| Analyte | Reporting Units | Spike Level | Percent | |
|--------------|-----------------|-------------|--------------|---------------------|
| | | | Recovery LCS | Acceptance Criteria |
| Benzene | ug/L (ppb) | 50 | 94 | 65-118 |
| Toluene | ug/L (ppb) | 50 | 85 | 72-122 |
| Ethylbenzene | ug/L (ppb) | 50 | 88 | 73-126 |
| Xylenes | ug/L (ppb) | 150 | 86 | 74-118 |
| Gasoline | ug/L (ppb) | 1,000 | 95 | 69-134 |

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 05/19/16

Date Received: 05/06/16

Project: 2016-023, F&BI 605108

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

Laboratory Code: Laboratory Control Sample

| Analyte | Reporting
Units | Spike
Level | Percent
Recovery
LCS | Percent
Recovery
LCSD | Acceptance
Criteria | RPD
(Limit 20) |
|-----------------|--------------------|----------------|----------------------------|-----------------------------|------------------------|-------------------|
| Diesel Extended | ug/L (ppb) | 2,500 | 94 | 103 | 63-142 | 9 |

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 05/19/16

Date Received: 05/06/16

Project: 2016-023, F&BI 605108

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

Laboratory Code: 605135-01 (Matrix Spike)

| Analyte | Reporting Units | Spike Level | Sample Result | Percent Recovery MS | Percent Recovery MSD | Acceptance Criteria | RPD (Limit 20) |
|---------|-----------------|-------------|---------------|---------------------|----------------------|---------------------|----------------|
| Cadmium | ug/L (ppb) | 5 | <1 | 111 | 108 | 70-130 | 3 |
| Lead | ug/L (ppb) | 10 | 2.08 | 93 | 89 | 70-130 | 4 |

Laboratory Code: Laboratory Control Sample

| Analyte | Reporting Units | Spike Level | Percent Recovery LCS | Acceptance Criteria |
|---------|-----------------|-------------|----------------------|---------------------|
| Cadmium | ug/L (ppb) | 5 | 109 | 85-115 |
| Lead | ug/L (ppb) | 10 | 96 | 85-115 |

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 05/19/16

Date Received: 05/06/16

Project: 2016-023, F&BI 605108

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

Laboratory Code: 605108-03 (Matrix Spike)

| Analyte | Reporting Units | Spike Level | Sample Result | Percent Recovery MS | Percent Recovery MSD | Acceptance Criteria | RPD (Limit 20) |
|---------|-----------------|-------------|---------------|---------------------|----------------------|---------------------|----------------|
| Cadmium | ug/L (ppb) | 5 | <1 | 113 | 104 | 70-130 | 8 |
| Lead | ug/L (ppb) | 10 | <1 | 86 | 80 | 70-130 | 7 |

Laboratory Code: Laboratory Control Sample

| Analyte | Reporting Units | Spike Level | Percent Recovery LCS | Acceptance Criteria |
|---------|-----------------|-------------|----------------------|---------------------|
| Cadmium | ug/L (ppb) | 5 | 108 | 85-115 |
| Lead | ug/L (ppb) | 10 | 92 | 85-115 |

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 05/19/16

Date Received: 05/06/16

Project: 2016-023, F&BI 605108

**QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF WATER
SAMPLES FOR VOLATILES BY EPA METHOD 8260C**

Laboratory Code: 605135-08 (Matrix Spike)

| Analyte | Reporting Units | Spike Level | Sample Result | Percent Recovery MS | Acceptance Criteria |
|--------------------------|-----------------|-------------|---------------|---------------------|---------------------|
| Vinyl chloride | ug/L (ppb) | 50 | <0.2 | 121 | 36-166 |
| Chloroethane | ug/L (ppb) | 50 | <1 | 135 | 46-160 |
| 1,1-Dichloroethene | ug/L (ppb) | 50 | <1 | 107 | 60-136 |
| Methylene chloride | ug/L (ppb) | 50 | <5 | 116 | 67-132 |
| trans-1,2-Dichloroethene | ug/L (ppb) | 50 | <1 | 108 | 72-129 |
| 1,1-Dichloroethane | ug/L (ppb) | 50 | <1 | 108 | 70-128 |
| cis-1,2-Dichloroethene | ug/L (ppb) | 50 | <1 | 109 | 71-127 |
| 1,2-Dichloroethane (EDC) | ug/L (ppb) | 50 | <1 | 99 | 69-133 |
| 1,1,1-Trichloroethane | ug/L (ppb) | 50 | <1 | 105 | 60-146 |
| Trichloroethene | ug/L (ppb) | 50 | <1 | 104 | 66-135 |
| Tetrachloroethene | ug/L (ppb) | 50 | <1 | 98 | 10-226 |

Laboratory Code: Laboratory Control Sample

| Analyte | Reporting Units | Spike Level | Percent Recovery LCS | Percent Recovery LCSD | Acceptance Criteria | RPD (Limit 20) |
|--------------------------|-----------------|-------------|----------------------|-----------------------|---------------------|----------------|
| Vinyl chloride | ug/L (ppb) | 50 | 110 | 114 | 50-154 | 4 |
| Chloroethane | ug/L (ppb) | 50 | 119 | 126 | 58-146 | 6 |
| 1,1-Dichloroethene | ug/L (ppb) | 50 | 98 | 102 | 67-136 | 4 |
| Methylene chloride | ug/L (ppb) | 50 | 106 | 111 | 39-148 | 5 |
| trans-1,2-Dichloroethene | ug/L (ppb) | 50 | 101 | 106 | 68-128 | 5 |
| 1,1-Dichloroethane | ug/L (ppb) | 50 | 100 | 106 | 79-121 | 6 |
| cis-1,2-Dichloroethene | ug/L (ppb) | 50 | 103 | 108 | 80-123 | 5 |
| 1,2-Dichloroethane (EDC) | ug/L (ppb) | 50 | 93 | 98 | 73-132 | 5 |
| 1,1,1-Trichloroethane | ug/L (ppb) | 50 | 98 | 103 | 83-130 | 5 |
| Trichloroethene | ug/L (ppb) | 50 | 99 | 105 | 80-120 | 6 |
| Tetrachloroethene | ug/L (ppb) | 50 | 93 | 96 | 76-121 | 3 |

Data Qualifiers & Definitions

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

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

ca - The calibration results for the analyte were outside of acceptance criteria. The value reported is an estimate.

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

cf - The sample was centrifuged prior to analysis.

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

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

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

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

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

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

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

ip - Recovery fell outside of control limits. Compounds in the sample matrix interfered with the quantitation of the analyte.

j - The analyte concentration is reported below the lowest calibration standard. The value reported is an estimate.

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

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

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

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

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

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

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

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

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

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

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

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

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

July 14, 2016

Anna Jordan, Project Manager
The Riley Group, Inc.
17522 Bothell Way NE
Bothell, WA 98011

Dear Ms Jordan:

Included are the results from the testing of material submitted on July 11, 2016 from the 2016-023A, F&BI 607110 project. There are 4 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

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

Sincerely,

FRIEDMAN & BRUYA, INC.



Michael Erdahl
Project Manager

Enclosures
TRG0714R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on July 11, 2016 by Friedman & Bruya, Inc. from the The Riley Group 2016-023A, F&BI 607110 project. Samples were logged in under the laboratory ID's listed below.

| <u>Laboratory ID</u> | <u>The Riley Group</u> |
|----------------------|------------------------|
| 607110 -01 | ISFR1-5 |
| 607110 -02 | ISFR2-6.5 |
| 607110 -03 | ISFR3-4.5 |
| 607110 -04 | ISFR4-4 |
| 607110 -05 | ISFR5-5 |

All quality control requirements were acceptable.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 07/14/16
Date Received: 07/11/16
Project: 2016-023A, F&BI 607110
Date Extracted: 07/11/16
Date Analyzed: 07/11/16

**RESULTS FROM THE ANALYSIS OF SOIL SAMPLES
FOR TOTAL PETROLEUM HYDROCARBONS AS
DIESEL AND MOTOR OIL
USING METHOD NWTPH-Dx
Sample Extracts Passed Through a
Silica Gel Column Prior to Analysis
Results Reported on a Dry Weight Basis
Results Reported as mg/kg (ppm)**

| <u>Sample ID</u>
Laboratory ID | <u>Diesel Range</u>
(C ₁₀ -C ₂₅) | <u>Motor Oil Range</u>
(C ₂₅ -C ₃₆) | <u>Surrogate</u>
(% Recovery)
(Limit 56-165) |
|-----------------------------------|--|---|--|
| ISFR1-5
607110-01 | 7,900 | <250 | 142 |
| ISFR2-6.5
607110-02 | 4,400 | <250 | 137 |
| ISFR3-4.5
607110-03 | <50 | <250 | 136 |
| ISFR4-4
607110-04 | <50 | <250 | 138 |
| ISFR5-5
607110-05 | 620 | <250 | 134 |
| Method Blank
06-1397 MB | <50 | <250 | 147 |

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 07/14/16

Date Received: 07/11/16

Project: 2016-023A, F&BI 607110

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

Laboratory Code: 607020-02 (Matrix Spike) Silica Gel

| Analyte | Reporting
Units | Spike
Level | Sample
Result
(Wet Wt) | Percent
Recovery
MS | Percent
Recovery
MSD | Acceptance
Criteria | RPD
(Limit 20) |
|-----------------|--------------------|----------------|------------------------------|---------------------------|----------------------------|------------------------|-------------------|
| Diesel Extended | mg/kg (ppm) | 5,000 | <50 | 94 | 100 | 63-146 | 6 |

Laboratory Code: Laboratory Control Sample Silica Gel

| Analyte | Reporting
Units | Spike
Level | Percent
Recovery
LCS | Acceptance
Criteria |
|-----------------|--------------------|----------------|----------------------------|------------------------|
| Diesel Extended | mg/kg (ppm) | 5,000 | 97 | 79-144 |

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Data Qualifiers & Definitions

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

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

ca - The calibration results for the analyte were outside of acceptance criteria. The value reported is an estimate.

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

cf - The sample was centrifuged prior to analysis.

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

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

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

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

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

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

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

ip - Recovery fell outside of control limits. Compounds in the sample matrix interfered with the quantitation of the analyte.

j - The analyte concentration is reported below the lowest calibration standard. The value reported is an estimate.

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

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

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

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

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

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

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

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

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

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

607110

SAMPLE CHAIN OF CUSTODY

ME 07/11/16 of 1 COL

Report To Anna Jordan
 Company The Riley Group
 Address 17522 Bothell Way NE
 City, State, ZIP Bothell, WA 98011
 Phone 425.415.0551 Email 425.415.0311

SAMPLERS (signature) Anna Jordan

PROJECT NAME 2016-023A PO # _____

REMARKS *silicagel cleanup INVOICE TO _____

TURNAROUND TIME
 Standard Turnaround
 RUSH 1 DAY
 Rush charges authorized by: _____

SAMPLE DISPOSAL
 Dispose after 30 days
 Archive Samples
 Other _____

| Sample ID | Lab ID | Date Sampled | Time Sampled | Sample Type | # of Jars | ANALYSES REQUESTED | | | | | | | | | | Notes | |
|-----------|--------|--------------|--------------|-------------|-----------|--------------------|-------------|--------------|---------------|---------------|----------------|----------------|--|--|--|-------|--|
| | | | | | | TPH-HCID | TPH-Diesel* | TPH-Gasoline | BTEX by 8021B | VOCs by 8260C | SVOCs by 8270D | PAHs 8270D SIM | | | | | |
| 1SFR1-5 | 01 | 7/11/16 | 1135 | SOIL | 1 | X | | | | | | | | | | | |
| 1SFR2-6.5 | 02 | ↓ | 1145 | ↓ | ↓ | X | | | | | | | | | | | |
| 1SFR3-4.5 | 03 | ↓ | 1150 | ↓ | ↓ | X | | | | | | | | | | | |
| 1SFR4-4 | 04 | ↓ | 1200 | ↓ | ↓ | X | | | | | | | | | | | |
| 1SFR5-5 | 05 | ↓ | 1205 | ↓ | ↓ | X | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | |
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| | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | |

Samples received at 6 °C

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

| SIGNATURE | PRINT NAME | COMPANY | DATE | TIME |
|-------------------------------------|--------------------|-------------|----------------|-----------------------|
| Relinquished by: <u>Anna Jordan</u> | <u>Anna Jordan</u> | <u>RGL</u> | <u>7/11/16</u> | <u>2⁰⁰</u> |
| Received by: <u>[Signature]</u> | <u>Dhan Phan</u> | <u>FEBT</u> | <u>7/11/16</u> | <u>2⁰⁰</u> |
| Relinquished by: | | | | |
| Received by: | | | | |

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

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

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

July 20, 2016

Anna Jordan, Project Manager
The Riley Group, Inc.
17522 Bothell Way NE
Bothell, WA 98011

Dear Ms Jordan:

Included are the results from the testing of material submitted on July 13, 2016 from the 2016-023A, F&BI 607185 project. There are 7 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

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

Sincerely,

FRIEDMAN & BRUYA, INC.



Michael Erdahl
Project Manager

Enclosures
c: Kris Addis
TRG0720R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on July 13, 2016 by Friedman & Bruya, Inc. from the The Riley Group 2016-023A, F&BI 607185 project. Samples were logged in under the laboratory ID's listed below.

| <u>Laboratory ID</u> | <u>The Riley Group</u> |
|----------------------|------------------------|
| 607185 -01 | TPWSW1-5.5 |
| 607185 -02 | TPWSW2-6 |
| 607185 -03 | TPB1-7 |
| 607185 -04 | TPNSW1-5.5 |
| 607185 -05 | TPWSW3-6 |
| 607185 -06 | TPB2-7.5 |
| 607185 -07 | TPESW1-5.5 |
| 607185 -08 | TPB3-8 |
| 607185 -09 | TPSSW1-5.5 |
| 607185 -10 | TPWSW4-6 |
| 607185 -11 | TPWSW5-5.5 |
| 607185 -12 | TPNSW2-5.5 |
| 607185 -13 | 1SSW3-7.5 |
| 607185 -14 | 1B8-9 |
| 607185 -15 | 1B9-9 |
| 607185 -16 | 1NSW6-8 |
| 607185 -17 | 1NSW7-4.5 |
| 607185 -18 | 1ESW8-8.5 |
| 607185 -19 | 1ESW9-8.5 |
| 607185 -20 | 1ESW10-8.5 |
| 607185 -21 | 1SSW4-8 |

All quality control requirements were acceptable.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 07/20/16
Date Received: 07/13/16
Project: 2016-023A, F&BI 607185
Date Extracted: 07/14/16
Date Analyzed: 07/14/16

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

Results Reported on a Dry Weight Basis

Results Reported as mg/kg (ppm)

| <u>Sample ID</u>
Laboratory ID | <u>Benzene</u> | <u>Toluene</u> | <u>Ethyl Benzene</u> | <u>Total Xylenes</u> | <u>Gasoline Range</u> | <u>Surrogate (% Recovery)</u>
(Limit 50-132) |
|-----------------------------------|----------------|----------------|----------------------|----------------------|-----------------------|---|
| TPB2-7.5
607185-06 | <0.02 | <0.02 | <0.02 | <0.06 | <2 | 88 |
| TPSSW1-5.5
607185-09 | <0.02 | <0.02 | <0.02 | <0.06 | <2 | 87 |
| TPNSW2-5.5
607185-12 | <0.02 | <0.02 | <0.02 | <0.06 | <2 | 88 |
| Method Blank
06-1373 MB2 | <0.02 | <0.02 | <0.02 | <0.06 | <2 | 90 |

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 07/20/16
 Date Received: 07/13/16
 Project: 2016-023A, F&BI 607185
 Date Extracted: 07/14/16
 Date Analyzed: 07/14/16

**RESULTS FROM THE ANALYSIS OF SOIL SAMPLES
 FOR TOTAL PETROLEUM HYDROCARBONS AS
 DIESEL AND MOTOR OIL
 USING METHOD NWTPH-Dx
 Sample Extracts Passed Through a
 Silica Gel Column Prior to Analysis
 Results Reported on a Dry Weight Basis
 Results Reported as mg/kg (ppm)**

| <u>Sample ID</u>
Laboratory ID | <u>Diesel Range</u>
(C ₁₀ -C ₂₅) | <u>Motor Oil Range</u>
(C ₂₅ -C ₃₆) | <u>Surrogate</u>
<u>(% Recovery)</u>
(Limit 48-168) |
|-----------------------------------|--|---|---|
| TPWSW1-5.5
607185-01 | <50 | <250 | 118 |
| TPWSW2-6
607185-02 | <50 | <250 | 114 |
| TPB1-7
607185-03 | <50 | <250 | 127 |
| TPWSW3-6
607185-05 | <50 | 780 | 124 |
| TPESW1-5.5
607185-07 | <50 | <250 | 115 |
| TPB3-8
607185-08 | <50 | <250 | 90 |
| TPSSW1-5.5
607185-09 | <50 | <250 | 117 |
| TPWSW4-6
607185-10 | <50 | <250 | 102 |
| TPWSW5-5.5
607185-11 | <50 | <250 | 101 |
| TPNSW2-5.5
607185-12 | <50 | <250 | 113 |

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 07/20/16
 Date Received: 07/13/16
 Project: 2016-023A, F&BI 607185
 Date Extracted: 07/14/16
 Date Analyzed: 07/14/16

**RESULTS FROM THE ANALYSIS OF SOIL SAMPLES
 FOR TOTAL PETROLEUM HYDROCARBONS AS
 DIESEL AND MOTOR OIL
 USING METHOD NWTPH-Dx
 Sample Extracts Passed Through a
 Silica Gel Column Prior to Analysis
 Results Reported on a Dry Weight Basis
 Results Reported as mg/kg (ppm)**

| <u>Sample ID</u>
Laboratory ID | <u>Diesel Range</u>
(C ₁₀ -C ₂₅) | <u>Motor Oil Range</u>
(C ₂₅ -C ₃₆) | <u>Surrogate</u>
<u>(% Recovery)</u>
(Limit 48-168) |
|-----------------------------------|--|---|---|
| 1SSW3-7.5
607185-13 | 950 | <250 | 99 |
| 1B8-9
607185-14 | <50 | <250 | 107 |
| 1B9-9
607185-15 | <50 | <250 | 110 |
| 1NSW6-8
607185-16 | <50 | <250 | 108 |
| 1NSW7-4.5
607185-17 | <50 | <250 | 101 |
| 1ESW8-8.5
607185-18 | <50 | <250 | 98 |
| 1ESW9-8.5
607185-19 | <50 | <250 | 104 |
| 1ESW10-8.5
607185-20 | <50 | <250 | 111 |
| 1SSW4-8
607185-21 | <50 | <250 | 99 |
| Method Blank
06-1414 MB | <50 | <250 | 112 |

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 07/20/16

Date Received: 07/13/16

Project: 2016-023A, F&BI 607185

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

Laboratory Code: 607176-03 (Duplicate)

| Analyte | Reporting
Units | Sample
Result
(Wet Wt) | Duplicate
Result
(Wet Wt) | RPD
(Limit 20) |
|--------------|--------------------|------------------------------|---------------------------------|-------------------|
| Benzene | mg/kg (ppm) | <0.02 | <0.02 | nm |
| Toluene | mg/kg (ppm) | <0.02 | <0.02 | nm |
| Ethylbenzene | mg/kg (ppm) | <0.02 | <0.02 | nm |
| Xylenes | mg/kg (ppm) | <0.06 | <0.06 | nm |
| Gasoline | mg/kg (ppm) | <2 | <2 | nm |

Laboratory Code: Laboratory Control Sample

| Analyte | Reporting
Units | Spike
Level | Percent | |
|--------------|--------------------|----------------|-----------------|------------------------|
| | | | Recovery
LCS | Acceptance
Criteria |
| Benzene | mg/kg (ppm) | 0.5 | 92 | 66-121 |
| Toluene | mg/kg (ppm) | 0.5 | 97 | 72-128 |
| Ethylbenzene | mg/kg (ppm) | 0.5 | 95 | 69-132 |
| Xylenes | mg/kg (ppm) | 1.5 | 95 | 69-131 |
| Gasoline | mg/kg (ppm) | 20 | 95 | 61-153 |

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 07/20/16

Date Received: 07/13/16

Project: 2016-023A, F&BI 607185

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

Laboratory Code: 607185-01 (Matrix Spike) Silica Gel

| Analyte | Reporting
Units | Spike
Level | Sample
Result
(Wet Wt) | Percent
Recovery
MS | Percent
Recovery
MSD | Acceptance
Criteria | RPD
(Limit 20) |
|-----------------|--------------------|----------------|------------------------------|---------------------------|----------------------------|------------------------|-------------------|
| Diesel Extended | mg/kg (ppm) | 5,000 | <50 | 102 | 113 | 63-146 | 10 |

Laboratory Code: Laboratory Control Sample Silica Gel

| Analyte | Reporting
Units | Spike
Level | Percent
Recovery
LCS | Acceptance
Criteria |
|-----------------|--------------------|----------------|----------------------------|------------------------|
| Diesel Extended | mg/kg (ppm) | 5,000 | 103 | 79-144 |

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Data Qualifiers & Definitions

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

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

ca - The calibration results for the analyte were outside of acceptance criteria. The value reported is an estimate.

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

cf - The sample was centrifuged prior to analysis.

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

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

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

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

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

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

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

ip - Recovery fell outside of control limits. Compounds in the sample matrix interfered with the quantitation of the analyte.

j - The analyte concentration is reported below the lowest calibration standard. The value reported is an estimate.

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

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

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

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

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

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

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

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

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

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

607185

SAMPLE CHAIN OF CUSTODY

ME 7/13/16 C03/US1

Report To Anna Jordan / Kris Addis
 Company The Piley Group
 Address _____
 City, State, ZIP _____
 Phone 25.415.0551 Email kaddis@piley-group.com

SAMPLERS (signature) Anna Jordan
 PROJECT NAME 2016-023A PO # _____
 REMARKS *silica gel INVOICE TO _____

Page # 1 of 3
 TURNAROUND TIME
 Standard Turnaround
 RUSH 24 hr TAT
 Rush charges authorized by: _____
 SAMPLE DISPOSAL
 Dispose after 30 days
 Archive Samples
 Other _____

| Sample ID | Lab ID | Date Sampled | Time Sampled | Sample Type | # of Jars | ANALYSES REQUESTED | | | | | | | | | | Notes | |
|------------|--------|--------------|--------------|-------------|-----------|--------------------|------------|--------------|---------------|---------------|----------------|----------------|--|--|--|-------|-----------|
| | | | | | | TPH-HCID | TPH-Diesel | TPH-Gasoline | BTEX by 8021B | VOCs by 8260C | SVOCs by 8270D | PAHs 8270D SIM | | | | | |
| TPWSW1-5.5 | 01 | 7/13/16 | 1013 | S01L | 1 | | X | | | | | | | | | | |
| TPWSW2-6 | 02 | | 1015 | | 1 | | X | | | | | | | | | | |
| TPB1-7 | 03 | | 1025 | | 1 | | X | | | | | | | | | | |
| TPNSW1-5.5 | 04 | | 1030 | | 1 | | X | | | | | | | | | | |
| TPWSW3-6 | 05 A-E | | 1032 | | 5 | | X | | | | | | | | | | *priority |
| TPB2-7.5 | 06 | | 1040 | | 5 | | X | X | X | | | | | | | | * |
| TPESW1-5.5 | 07 | | 1055 | | 5 | | X | X | X | | | | | | | | * |
| TPB3-8 | 08 | | 1058 | | 1 | | X | | | | | | | | | | |
| TPSSW1-5.5 | 09 A-E | | 1100 | | 5 | | X | X | X | | | | | | | | *priority |
| TPWSW4-6 | 10 | | 1105 | | 5 | | X | | | | | | | | | | * |

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

| SIGNATURE | PRINT NAME | COMPANY | DATE | TIME |
|-------------------------------------|--------------------|----------------|----------------|-------------|
| Relinquished by: <u>Anna Jordan</u> | <u>Anna Jordan</u> | <u>RGI</u> | <u>7/13/16</u> | <u>1535</u> |
| Received by: <u>James Bruya</u> | <u>James Bruya</u> | <u>F&B</u> | <u>7/13</u> | <u>1525</u> |
| Relinquished by: | | | | |
| Received by: | | | | |

Samples received at 5 °C

607185

SAMPLE CHAIN OF CUSTODY

ME 7/13/16 C03/VSI

Report To Anna Jordan / Kristin Addis
 Company The Piley Group
 Address _____
 City, State, ZIP _____
 Phone _____ Email kaddis@pileygroup.com

SAMPLERS (signature) Anna Jordan
 PROJECT NAME 2016-023A PO # _____
 REMARKS *silica gel INVOICE TO _____

Page # 2 of 2
 TURNAROUND TIME
 Standard Turnaround
 RUSH 24 hr
 Rush charges authorized by: _____
 SAMPLE DISPOSAL
 Dispose after 30 days
 Archive Samples
 Other _____

| Sample ID | Lab ID | Date Sampled | Time Sampled | Sample Type | # of Jars | ANALYSES REQUESTED | | | | | | | | | | Notes | |
|------------|--------|--------------|--------------|-------------|-----------|--------------------|------------|--------------|---------------|---------------|----------------|----------------|--|--|--|-------|---------------|
| | | | | | | TPH-HCID | TPH-Diesel | TPH-Gasoline | BTEX by 8021B | VOCs by 8260C | SVOCs by 8270D | PAHs 8270D SIM | | | | | |
| TPNSW5-5.5 | 11 | 7/13/16 | 1135 | SOIL | 1 | X | X | | | | | | | | | | |
| TPNSW2-5.5 | 12 A-E | | 1130 | | 5 | X | X | X | | | | | | | | | * priority |
| 1SSW3-7.5 | 13 | | 1305 | | 1 | X | X | | | | | | | | | | |
| 1B8-9 | 14 | | 1310 | | 1 | X | X | | | | | | | | | | |
| 1B9-9 | 15 | | 1325 | | 1 | X | X | | | | | | | | | | * priority |
| 1NSW6-8 | 16 | | 1340 | | 1 | X | X | | | | | | | | | | ## |
| 1NSW7-4.5 | 17 | | 1345 | | 1 | X | X | | | | | | | | | | |
| 1ESW8-8.5 | 18 | | 1347 | | 1 | X | X | | | | | | | | | | |
| 1ESW9-8.5 | 19 | | 1350 | | 1 | X | X | | | | | | | | | | |
| 1ESW10-8.5 | 20 | | 1353 | | 1 | X | X | | | | | | | | | | * priority |

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

| SIGNATURE | PRINT NAME | COMPANY | DATE | TIME |
|-------------------------------------|--------------------|----------------|---------------------|-------------|
| Relinquished by: <u>Anna Jordan</u> | <u>Anna Jordan</u> | <u>R61</u> | <u>7/13/16</u> | <u>1535</u> |
| Received by: <u>[Signature]</u> | <u>JAMES BRUYA</u> | <u>F&B</u> | <u>7/13</u> | <u>1525</u> |
| Relinquished by: | | | | |
| Received by: | | | Samples received at | <u>5 °C</u> |

SAMPLE CHAIN OF CUSTODY

ME 7/13/16 C03/VSI

Report To Anna Jordan / Kristin Addis
 Company The Riley Group
 Address _____
 City, State, ZIP _____
 Phone 425.415.0551 Email kaddis@riley-group.com

| | | |
|---|------------|--|
| SAMPLERS (signature) <u>Anna Jordan</u> | | Page # <u>5</u> of <u>5</u> |
| PROJECT NAME
<u>2016-028A</u> | PO # | TURNAROUND TIME
<input type="checkbox"/> Standard Turnaround
<input checked="" type="checkbox"/> RUSH <u>24 hr</u>
Rush charges authorized by: |
| REMARKS
<u>*silica gel</u> | INVOICE TO | SAMPLE DISPOSAL
<input checked="" type="checkbox"/> Dispose after 30 days
<input type="checkbox"/> Archive Samples
<input type="checkbox"/> Other |

| Sample ID | Lab ID | Date Sampled | Time Sampled | Sample Type | # of Jars | ANALYSES REQUESTED | | | | | | | | | | Notes | |
|----------------|-----------|----------------|--------------|-------------|-----------|-------------------------------------|------------|--------------|---------------|---------------|----------------|----------------|--|--|--|-------|------------------|
| | | | | | | TPH-HCID | TPH-Diesel | TPH-Gasoline | BTEX by 8021B | VOCs by 8260C | SVOCs by 8270D | PAHs 8270D SIM | | | | | |
| <u>1SSW4-8</u> | <u>21</u> | <u>7/13/16</u> | <u>1400</u> | <u>SOIL</u> | <u>1</u> | <input checked="" type="checkbox"/> | | | | | | | | | | | <u>*priority</u> |
| | | | | | | | | | | | | | | | | | |
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| | | | | | | | | | | | | | | | | | |

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

| SIGNATURE | PRINT NAME | COMPANY | DATE | TIME |
|-------------------------------------|--------------------|----------------|----------------|-------------|
| Relinquished by: <u>Anna Jordan</u> | <u>Anna Jordan</u> | <u>RG</u> | <u>7/13/16</u> | <u>1525</u> |
| Received by: <u>James Bruya</u> | <u>James Bruya</u> | <u>F&B</u> | <u>7/13</u> | <u>1525</u> |
| Relinquished by: | | | | |
| Received by: | | | | |
| Samples received at | | | | <u>5</u> °C |

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

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

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

July 26, 2016

Anna Jordan, Project Manager
The Riley Group, Inc.
17522 Bothell Way NE
Bothell, WA 98011

Dear Ms. Jordan:

Included is the amended report from the testing of material submitted on June 8, 2016 from the 2016-023A, F&BI 606141 project. Sample ID 4NSW-5 has been amended to 4NSW1-5.

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

Sincerely,

FRIEDMAN & BRUYA, INC.



Michael Erdahl
Project Manager

Enclosures
TRG0615R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

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

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

June 15, 2016

Anna Jordan, Project Manager
The Riley Group, Inc.
17522 Bothell Way NE
Bothell, WA 98011

Dear Ms. Jordan:

Included are the results from the testing of material submitted on June 8, 2016 from the 2016-023A, F&BI 606141 project. There are 8 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

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

Sincerely,

FRIEDMAN & BRUYA, INC.



Michael Erdahl
Project Manager

Enclosures
TRG0615R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on June 8, 2016 by Friedman & Bruya, Inc. from the The Riley Group 2016-023A project. Samples were logged in under the laboratory ID's listed below.

| <u>Laboratory ID</u> | <u>The Riley Group</u> |
|----------------------|------------------------|
| 606141 -01 | 4B1-7.5 |
| 606141 -02 | 4ESW1-6 |
| 606141 -03 | 4SSW1-6 |
| 606141 -04 | 4SSW2-6 |
| 606141 -05 | 4ESW2-6 |
| 606141 -06 | 4B2-8 |
| 606141 -07 | 4B3-12 |
| 606141 -08 | 4B4-7 |
| 606141 -09 | 4B5-7.5 |
| 606141 -10 | 4ESW3-6 |
| 606141 -11 | 4ESW4-6 |
| 606141 -12 | 4ESW5-5.5 |
| 606141 -13 | 4NSW1-5 |
| 606141 -14 | 4B6-7 |

All quality control requirements were acceptable.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 06/15/16

Date Received: 06/08/16

Project: 2016-023A, F&BI 606141

: 06/08/16 and 06/10/16

Date Analyzed: 06/08/16, 06/09/16 and 06/10/16

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

Results Reported on a Dry Weight Basis

Results Reported as mg/kg (ppm)

| <u>Sample ID</u>
Laboratory ID | <u>Benzene</u> | <u>Toluene</u> | <u>Ethyl
Benzene</u> | <u>Total
Xylenes</u> | <u>Gasoline
Range</u> | <u>Surrogate
(% Recovery)</u>
(Limit 50-150) |
|-----------------------------------|----------------|----------------|--------------------------|--------------------------|---------------------------|---|
| 4B1-7.5
606141-01 | <0.02 | <0.02 | <0.02 | <0.06 | <2 | 79 |
| 4ESW1-6
606141-02 | <0.02 | <0.02 | <0.02 | <0.06 | <2 | 80 |
| 4SSW1-6
606141-03 | <0.02 | <0.02 | <0.02 | <0.06 | <2 | 77 |
| 4SSW2-6
606141-04 | <0.02 | <0.02 | 0.32 | 0.97 | 99 | 95 |
| 4ESW2-6
606141-05 | <0.02 | <0.02 | <0.02 | <0.06 | <2 | 81 |
| 4B2-8
606141-06 | <0.02 | <0.02 | <0.02 | <0.06 | <2 | 81 |
| 4B3-12
606141-07 | <0.02 | <0.02 | <0.02 | <0.06 | <2 | 80 |
| 4B4-7
606141-08 | <0.02 | <0.02 | <0.02 | <0.06 | <2 | 81 |
| 4B5-7.5
606141-09 | <0.02 | <0.02 | <0.02 | <0.06 | <2 | 80 |
| 4ESW3-6
606141-10 | <0.02 | <0.02 | <0.02 | <0.06 | <2 | 88 |
| 4ESW4-6
606141-11 1/10 | 0.50 | 3.6 | 20 | 34 | 2,300 | 129 |

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 06/15/16

Date Received: 06/08/16

Project: 2016-023A, F&BI 606141

Date Extracted: 06/08/16 and 06/10/16

Date Analyzed: 06/08/16, 06/09/16 and 06/10/16

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

Results Reported on a Dry Weight Basis

Results Reported as mg/kg (ppm)

| <u>Sample ID</u>
Laboratory ID | <u>Benzene</u> | <u>Toluene</u> | <u>Ethyl
Benzene</u> | <u>Total
Xylenes</u> | <u>Gasoline
Range</u> | <u>Surrogate
(% Recovery)</u>
(Limit 50-150) |
|-----------------------------------|----------------|----------------|--------------------------|--------------------------|---------------------------|---|
| 4ESW5-5.5
606141-12 | <0.02 | <0.02 | <0.02 | <0.06 | <2 | 89 |
| 4NSW1-5
606141-13 | <0.02 | <0.02 | <0.02 | <0.06 | <2 | 88 |
| 4B6-7
606141-14 | <0.02 | <0.02 | <0.02 | <0.06 | <2 | 90 |
| Method Blank | <0.02 | <0.02 | <0.02 | <0.06 | <2 | 76 |

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 06/15/16
 Date Received: 06/08/16
 Project: 2016-023A, F&BI 606141
 Date Extracted: 06/09/16 and 06/10/16
 Date Analyzed: 06/09/16 and 06/10/16

**RESULTS FROM THE ANALYSIS OF SOIL SAMPLES
 FOR TOTAL PETROLEUM HYDROCARBONS AS
 DIESEL AND MOTOR OIL
 USING METHOD NWTPH-Dx
 Sample Extracts Passed Through a
 Silica Gel Column Prior to Analysis
 Results Reported on a Dry Weight Basis
 Results Reported as mg/kg (ppm)**

| <u>Sample ID</u>
Laboratory ID | <u>Diesel Range</u>
(C ₁₀ -C ₂₅) | <u>Motor Oil Range</u>
(C ₂₅ -C ₃₆) | <u>Surrogate</u>
<u>(% Recovery)</u>
(Limit 48-168) |
|-----------------------------------|--|---|---|
| 4B1-7.5
606141-01 | <50 | <250 | 113 |
| 4ESW1-6
606141-02 | <50 | <250 | 109 |
| 4SSW1-6
606141-03 | <50 | <250 | 101 |
| 4SSW2-6
606141-04 | 90 x | <250 | 111 |
| 4ESW2-6
606141-05 | <50 | <250 | 98 |
| 4B2-8
606141-06 | <50 | <250 | 98 |
| 4B3-12
606141-07 | <50 | <250 | 109 |
| 4B4-7
606141-08 | <50 | <250 | 111 |
| 4B5-7.5
606141-09 | <50 | <250 | 113 |
| 4ESW3-6
606141-10 | <50 | <250 | 110 |

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 06/15/16
Date Received: 06/08/16
Project: 2016-023A, F&BI 606141
Date Extracted: 06/09/16 and 06/10/16
Date Analyzed: 06/09/16 and 06/10/16

**RESULTS FROM THE ANALYSIS OF SOIL SAMPLES
FOR TOTAL PETROLEUM HYDROCARBONS AS
DIESEL AND MOTOR OIL
USING METHOD NWTPH-Dx
Sample Extracts Passed Through a
Silica Gel Column Prior to Analysis
Results Reported on a Dry Weight Basis
Results Reported as mg/kg (ppm)**

| <u>Sample ID</u>
Laboratory ID | <u>Diesel Range</u>
(C ₁₀ -C ₂₅) | <u>Motor Oil Range</u>
(C ₂₅ -C ₃₆) | <u>Surrogate</u>
<u>(% Recovery)</u>
(Limit 48-168) |
|-----------------------------------|--|---|---|
| 4ESW4-6
606141-11 | 310 x | <250 | 99 |
| 4ESW5-5.5
606141-12 | <50 | <250 | 108 |
| 4NSW1-5
606141-13 | <50 | <250 | 109 |
| 4B6-7
606141-14 | <50 | <250 | 111 |
| Method Blank
06-1163 MB | <50 | <250 | 96 |

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 06/15/16

Date Received: 06/08/16

Project: 2016-023A, F&BI 606141

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

Laboratory Code: 606141-03 (Duplicate)

| Analyte | Reporting Units | Sample Result (Wet Wt) | Duplicate Result (Wet Wt) | RPD (Limit 20) |
|--------------|-----------------|------------------------|---------------------------|----------------|
| Benzene | mg/kg (ppm) | <0.02 | <0.02 | nm |
| Toluene | mg/kg (ppm) | <0.02 | <0.02 | nm |
| Ethylbenzene | mg/kg (ppm) | <0.02 | <0.02 | nm |
| Xylenes | mg/kg (ppm) | <0.06 | <0.06 | nm |
| Gasoline | mg/kg (ppm) | <2 | <2 | nm |

Laboratory Code: Laboratory Control Sample

| Analyte | Reporting Units | Spike Level | Percent | |
|--------------|-----------------|-------------|--------------|---------------------|
| | | | Recovery LCS | Acceptance Criteria |
| Benzene | mg/kg (ppm) | 0.5 | 79 | 69-120 |
| Toluene | mg/kg (ppm) | 0.5 | 86 | 70-117 |
| Ethylbenzene | mg/kg (ppm) | 0.5 | 89 | 65-123 |
| Xylenes | mg/kg (ppm) | 1.5 | 89 | 66-120 |
| Gasoline | mg/kg (ppm) | 20 | 80 | 71-131 |

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 06/15/16

Date Received: 06/08/16

Project: 2016-023A, F&BI 606141

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

Laboratory Code: 606141-03 (Matrix Spike) Silica Gel

| Analyte | Reporting
Units | Spike
Level | Sample
Result
(Wet Wt) | Percent
Recovery
MS | Percent
Recovery
MSD | Acceptance
Criteria | RPD
(Limit 20) |
|-----------------|--------------------|----------------|------------------------------|---------------------------|----------------------------|------------------------|-------------------|
| Diesel Extended | mg/kg (ppm) | 5,000 | <50 | 112 | 116 | 73-135 | 4 |

Laboratory Code: Laboratory Control Sample Silica Gel

| Analyte | Reporting
Units | Spike
Level | Percent
Recovery
LCS | Acceptance
Criteria |
|-----------------|--------------------|----------------|----------------------------|------------------------|
| Diesel Extended | mg/kg (ppm) | 5,000 | 108 | 74-139 |

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Data Qualifiers & Definitions

- a - The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.
- b - The analyte was spiked at a level that was less than five times that present in the sample. Matrix spike recoveries may not be meaningful.
- ca - The calibration results for the analyte were outside of acceptance criteria. The value reported is an estimate.
- c - The presence of the analyte may be due to carryover from previous sample injections.
- cf - The sample was centrifuged prior to analysis.
- d - The sample was diluted. Detection limits were raised and surrogate recoveries may not be meaningful.
- dv - Insufficient sample volume was available to achieve normal reporting limits.
- f - The sample was laboratory filtered prior to analysis.
- fb - The analyte was detected in the method blank.
- fc - The compound is a common laboratory and field contaminant.
- hr - The sample and duplicate were reextracted and reanalyzed. RPD results were still outside of control limits. Variability is attributed to sample inhomogeneity.
- hs - Headspace was present in the container used for analysis.
- ht - The analysis was performed outside the method or client-specified holding time requirement.
- ip - Recovery fell outside of control limits. Compounds in the sample matrix interfered with the quantitation of the analyte.
- j - The analyte concentration is reported below the lowest calibration standard. The value reported is an estimate.
- J - The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.
- jl - The laboratory control sample(s) percent recovery and/or RPD were out of control limits. The reported concentration should be considered an estimate.
- js - The surrogate associated with the analyte is out of control limits. The reported concentration should be considered an estimate.
- lc - The presence of the analyte is likely due to laboratory contamination.
- L - The reported concentration was generated from a library search.
- nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.
- pc - The sample was received with incorrect preservation or in a container not approved by the method. The value reported should be considered an estimate.
- ve - The analyte response exceeded the valid instrument calibration range. The value reported is an estimate.
- vo - The value reported fell outside the control limits established for this analyte.
- x - The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

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

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

June 15, 2016

Anna Jordan, Project Manager
The Riley Group, Inc.
17522 Bothell Way NE
Bothell, WA 98011

Dear Ms Jordan:

Included are the results from the testing of material submitted on June 9, 2016 from the 2016-023A, F&BI 606169 project. There are 5 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

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

Sincerely,

FRIEDMAN & BRUYA, INC.



Michael Erdahl
Project Manager

Enclosures
TRG0615R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on June 9, 2016 by Friedman & Bruya, Inc. from the The Riley Group 2016-023A, F&BI 606169 project. Samples were logged in under the laboratory ID's listed below.

| <u>Laboratory ID</u> | <u>The Riley Group</u> |
|----------------------|------------------------|
| 606169 -01 | 2B1-6 |
| 606169 -02 | 2B2-9.5 |
| 606169 -03 | 2B3-8.5 |
| 606169 -04 | 2B4-3.5 |
| 606169 -05 | 2B5-5.5 |
| 606169 -06 | 2B6-5 |
| 606169 -07 | 2WSW1-6 |
| 606169 -08 | 2WSW2-4 |
| 606169 -09 | 2WSW3-3.5 |
| 606169 -10 | 2WSW4-3 |
| 606169 -11 | 2NSW1-3 |
| 606169 -12 | 2NSW2-4 |
| 606169 -13 | 2ESW2-3.5 |
| 606169 -14 | 2ESW1-4 |
| 606169 -15 | 2ESW3-3 |
| 606169 -16 | 2SSW1-3 |
| 606169 -17 | Epothole-2.5 |

All quality control requirements were acceptable.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 06/15/16
 Date Received: 06/09/16
 Project: 2016-023A, F&BI 606169
 Date Extracted: 06/10/16
 Date Analyzed: 06/10/16

**RESULTS FROM THE ANALYSIS OF SOIL SAMPLES
 FOR TOTAL PETROLEUM HYDROCARBONS AS
 DIESEL AND MOTOR OIL
 USING METHOD NWTPH-Dx
 Sample Extracts Passed Through a
 Silica Gel Column Prior to Analysis
 Results Reported on a Dry Weight Basis
 Results Reported as mg/kg (ppm)**

| <u>Sample ID</u>
Laboratory ID | <u>Diesel Range</u>
(C ₁₀ -C ₂₅) | <u>Motor Oil Range</u>
(C ₂₅ -C ₃₆) | <u>Surrogate</u>
<u>(% Recovery)</u>
(Limit 48-168) |
|-----------------------------------|--|---|---|
| 2B1-6
606169-01 | <50 | <250 | 95 |
| 2B2-9.5
606169-02 | <100 | <500 | 99 |
| 2B3-8.5
606169-03 | <50 | <250 | 99 |
| 2B6-5
606169-06 | <50 | <250 | 89 |
| 2WSW1-6
606169-07 | <100 | <500 | 101 |
| 2WSW2-4
606169-08 | <50 | <250 | 99 |
| 2WSW3-3.5
606169-09 | <50 | <250 | 98 |
| 2WSW4-3
606169-10 | <50 | <250 | 92 |
| 2NSW1-3
606169-11 | <50 | <250 | 89 |
| 2NSW2-4
606169-12 | <50 | <250 | 85 |

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 06/15/16
Date Received: 06/09/16
Project: 2016-023A, F&BI 606169
Date Extracted: 06/10/16
Date Analyzed: 06/10/16

**RESULTS FROM THE ANALYSIS OF SOIL SAMPLES
FOR TOTAL PETROLEUM HYDROCARBONS AS
DIESEL AND MOTOR OIL
USING METHOD NWTPH-Dx
Sample Extracts Passed Through a
Silica Gel Column Prior to Analysis
Results Reported on a Dry Weight Basis
Results Reported as mg/kg (ppm)**

| <u>Sample ID</u>
Laboratory ID | <u>Diesel Range</u>
(C ₁₀ -C ₂₅) | <u>Motor Oil Range</u>
(C ₂₅ -C ₃₆) | <u>Surrogate</u>
<u>(% Recovery)</u>
(Limit 48-168) |
|-----------------------------------|--|---|---|
| 2ESW2-3.5
606169-13 | <50 | <250 | 100 |
| 2ESW1-4
606169-14 | <50 | <250 | 100 |
| 2ESW3-3
606169-15 | 170 x | 530 | 97 |
| 2SSW1-3
606169-16 | <50 | <250 | 87 |
| Epothole-2.5
606169-17 | <50 | <250 | 86 |
| Method Blank
06-1171 MB | <50 | <250 | 91 |

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 06/15/16

Date Received: 06/09/16

Project: 2016-023A, F&BI 606169

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

Laboratory Code: 606169-01 (Matrix Spike) Silica Gel

| Analyte | Reporting
Units | Spike
Level | Sample
Result
(Wet Wt) | Percent
Recovery
MS | Percent
Recovery
MSD | Acceptance
Criteria | RPD
(Limit 20) |
|-----------------|--------------------|----------------|------------------------------|---------------------------|----------------------------|------------------------|-------------------|
| Diesel Extended | mg/kg (ppm) | 5,000 | <50 | 116 | 113 | 73-135 | 3 |

Laboratory Code: Laboratory Control Sample Silica Gel

| Analyte | Reporting
Units | Spike
Level | Percent
Recovery
LCS | Acceptance
Criteria |
|-----------------|--------------------|----------------|----------------------------|------------------------|
| Diesel Extended | mg/kg (ppm) | 5,000 | 116 | 74-139 |

Data Qualifiers & Definitions

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

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

ca - The calibration results for the analyte were outside of acceptance criteria. The value reported is an estimate.

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

cf - The sample was centrifuged prior to analysis.

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

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

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

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

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

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

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

ip - Recovery fell outside of control limits. Compounds in the sample matrix interfered with the quantitation of the analyte.

j - The analyte concentration is reported below the lowest calibration standard. The value reported is an estimate.

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

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

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

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

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

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

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

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

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

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

606169

SAMPLE CHAIN OF CUSTODY

ME 06/09/16

VS2/E04

Report To Anna Jordan / Kris Addis

Company _____

Address _____

City, State, ZIP _____

Phone _____ Email kaddis@viley-group.com

SAMPLERS (signature) Anna Jordan

PROJECT NAME 2016-023A PO # _____

REMARKS *silica gel INVOICE TO _____

Page # _____ of _____

TURNAROUND TIME

Standard Turnaround

RUSH 3 day

Rush charges authorized by: _____

SAMPLE DISPOSAL

Dispose after 30 days

Archive Samples

Other _____

| Sample ID | Lab ID | Date Sampled | Time Sampled | Sample Type | # of Jars | ANALYSES REQUESTED | | | | | | | | Notes | |
|-----------|--------|--------------|------------------|-------------|-----------|--------------------|------------|--------------|---------------|---------------|----------------|----------------|--|-------|--|
| | | | | | | TPH-HCID | TPH-Diesel | TPH-Gasoline | BTEX by 8021B | VOCs by 8260C | SVOCs by 8270D | PAHs 8270D SIM | | | |
| 2B1-6 | 01 A-E | 6/9/16 | 12 ⁰⁰ | SOIL | 5 | X | | | | | | | | | |
| 2B2-9.5 | 02 | | 12 ²⁵ | | | X | | | | | | | | | |
| 2B3-8.5 | 03 | | 12 ⁵⁰ | | | X | | | | | | | | | |
| 2B4-3.5 | 04 | | 13 ¹⁵ | | | | | | | | | | | | |
| 2B5-5.5 | 05 | | 13 ²⁰ | | | | | | | | | | | | |
| 2B6-5 | 06 | | 13 ⁴⁰ | | | X | | | | | | | | | |
| 2WSW1-6 | 07 | | 12 ⁰⁵ | | | X | | | | | | | | | |
| 2WSW2-4 | 08 | | 13 ⁰⁵ | | | X | | | | | | | | | |
| 2WSW3-3.5 | 09 | | 13 ²⁵ | | | X | | | | | | | | | |
| 2WSW4-3 | 10 | | 14 ⁰⁰ | | | X | | | | | | | | | |

Samples received at 5 °C

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

| SIGNATURE | PRINT NAME | COMPANY | DATE | TIME |
|-------------------------------------|-------------|---------|--------|------|
| Relinquished by: <u>Anna Jordan</u> | Anna Jordan | RCI | 6/9/16 | 1525 |
| Received by: <u>James Bruya</u> | James Bruya | F&B | 6/9/16 | 1535 |
| Relinquished by: _____ | | | | |
| Received by: _____ | | | | |

606169

SAMPLE CHAIN OF CUSTODY

ME 06/09/16

V52/E04

Report To Anna Jordan / Kris Addis

Company _____

Address _____

City, State, ZIP _____

Phone _____ Email kaddis@vitek-group.com

SAMPLERS (signature) Anna Jordan

PROJECT NAME 2016-023A PO # _____

REMARKS *Silica gel INVOICE TO _____

Page # _____ of _____

TURNAROUND TIME
 Standard Turnaround
 RUSH 3 day
 Rush charges authorized by: _____

SAMPLE DISPOSAL
 Dispose after 30 days
 Archive Samples
 Other _____

| Sample ID | Lab ID | Date Sampled | Time Sampled | Sample Type | # of Jars | ANALYSES REQUESTED | | | | | | | | | | Notes |
|---------------|--------|--------------|--------------|-------------|-----------|--------------------|------------|--------------|---------------|---------------|----------------|---------------------------------|--|--|--|---|
| | | | | | | TPH-HCID | TPH-Diesel | TPH-Gasoline | BTEX by 8021B | VOCs by 8260C | SVOCs by 8270D | PAHs 8270D SIM | | | | |
| 2NSW1-3 | 11 A-E | 6/9/16 | 1335 | SOIL | 5 | | X | | | | | | | | | } 24 hr TAT
Due 6/10
per MS 6/10/16 |
| 2NSW2-4 | 12 | | 1340 | | | | X | | | | | | | | | |
| 2ESW2-3.5 | 13 | | 1350 | | | | X | | | | | | | | | |
| 2ESW1-4 | 14 | | 1320 | | | | X | | | | | | | | | |
| 2ESW3-3 | 15 | | 1402 | | | | X | | | | | | | | | |
| 2SSW1-3 | 16 | | 1130 | | | | X | | | | | | | | | |
| E-pothole-2.5 | 17 | | 1355 | | 1 | | X | | | | | | | | | |
| | | | | | | | | | | | | Samples received at <u>5</u> °C | | | | |

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

| SIGNATURE | PRINT NAME | COMPANY | DATE | TIME |
|-------------------------------------|-------------|---------|--------|------|
| Relinquished by: <u>Anna Jordan</u> | Anna Jordan | Red | 6/9/16 | 1525 |
| Received by: <u>James Bruya</u> | James Bruya | F&B | 6/9/16 | 1525 |
| Relinquished by: _____ | | | | |
| Received by: _____ | | | | |

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

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

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

June 15, 2016

Anna Jordan, Project Manager
The Riley Group, Inc.
17522 Bothell Way NE
Bothell, WA 98011

Dear Ms Jordan:

Included are the results from the testing of material submitted on June 9, 2016 from the 2016-023A, F&BI 606167 project. There are 6 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

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

Sincerely,

FRIEDMAN & BRUYA, INC.



Michael Erdahl
Project Manager

Enclosures
TRG0615R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on June 9, 2016 by Friedman & Bruya, Inc. from the The Riley Group 2016-023A, F&BI 606167 project. Samples were logged in under the laboratory ID's listed below.

| <u>Laboratory ID</u> | <u>The Riley Group</u> |
|----------------------|------------------------|
| 606167 -01 | 4B7-7 |
| 606167 -02 | 4B8-7 |
| 606167 -03 | 4B9-10 |
| 606167 -04 | 4ESW6-7 |
| 606167 -05 | 4NSW2-5 |
| 606167 -06 | 4NSW3-6.5 |
| 606167 -07 | 4WSW1-5.5 |

All quality control requirements were acceptable.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 06/15/16
 Date Received: 06/09/16
 Project: 2016-023A, F&BI 606167
 Date Extracted: 06/10/16
 Date Analyzed: 06/10/16

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

Results Reported on a Dry Weight Basis

Results Reported as mg/kg (ppm)

| <u>Sample ID</u>
Laboratory ID | <u>Benzene</u> | <u>Toluene</u> | <u>Ethyl Benzene</u> | <u>Total Xylenes</u> | <u>Gasoline Range</u> | <u>Surrogate (% Recovery)</u>
(Limit 50-132) |
|-----------------------------------|----------------|----------------|----------------------|----------------------|-----------------------|---|
| 4B7-7
606167-01 | <0.02 | <0.02 | <0.02 | <0.06 | <2 | 94 |
| 4B8-7
606167-02 | <0.02 | <0.02 | <0.02 | <0.06 | <2 | 92 |
| 4B9-10
606167-03 | <0.02 | <0.02 | <0.02 | <0.06 | <2 | 89 |
| 4ESW6-7
606167-04 | <0.02 | <0.02 | 0.067 | 0.15 | 25 | 93 |
| 4NSW2-5
606167-05 | <0.02 | <0.02 | <0.02 | <0.06 | <2 | 91 |
| 4NSW3-6.5
606167-06 | <0.02 | <0.02 | <0.02 | <0.06 | <2 | 90 |
| 4WSW1-5.5
606167-07 | <0.02 | <0.02 | <0.02 | <0.06 | <2 | 90 |
| Method Blank
06-1132 MB2 | <0.02 | <0.02 | <0.02 | <0.06 | <2 | 92 |

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 06/15/16
 Date Received: 06/09/16
 Project: 2016-023A, F&BI 606167
 Date Extracted: 06/10/16
 Date Analyzed: 06/10/16

**RESULTS FROM THE ANALYSIS OF SOIL SAMPLES
 FOR TOTAL PETROLEUM HYDROCARBONS AS
 DIESEL AND MOTOR OIL
 USING METHOD NWTPH-Dx
 Sample Extracts Passed Through a
 Silica Gel Column Prior to Analysis
 Results Reported on a Dry Weight Basis
 Results Reported as mg/kg (ppm)**

| <u>Sample ID</u>
Laboratory ID | <u>Diesel Range</u>
(C ₁₀ -C ₂₅) | <u>Motor Oil Range</u>
(C ₂₅ -C ₃₆) | <u>Surrogate</u>
(% Recovery)
(Limit 56-165) |
|-----------------------------------|--|---|--|
| 4B7-7
606167-01 | <50 | <250 | 116 |
| 4B8-7
606167-02 | <50 | <250 | 100 |
| 4B9-10
606167-03 | <50 | <250 | 102 |
| 4ESW6-7
606167-04 | <50 | <250 | 113 |
| 4NSW2-5
606167-05 | <50 | <250 | 100 |
| 4NSW3-6.5
606167-06 | <50 | <250 | 114 |
| 4WSW1-5.5
606167-07 | <50 | <250 | 104 |
| Method Blank
06-1168 MB | <50 | <250 | 113 |

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 06/15/16

Date Received: 06/09/16

Project: 2016-023A, F&BI 606167

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

Laboratory Code: 606155-02 (Duplicate)

| Analyte | Reporting Units | Sample Result (Wet Wt) | Duplicate Result (Wet Wt) | RPD (Limit 20) |
|--------------|-----------------|------------------------|---------------------------|----------------|
| Benzene | mg/kg (ppm) | <0.02 | <0.02 | nm |
| Toluene | mg/kg (ppm) | <0.02 | <0.02 | nm |
| Ethylbenzene | mg/kg (ppm) | <0.02 | <0.02 | nm |
| Xylenes | mg/kg (ppm) | <0.06 | <0.06 | nm |
| Gasoline | mg/kg (ppm) | <2 | <2 | nm |

Laboratory Code: Laboratory Control Sample

| Analyte | Reporting Units | Spike Level | Percent | |
|--------------|-----------------|-------------|--------------|---------------------|
| | | | Recovery LCS | Acceptance Criteria |
| Benzene | mg/kg (ppm) | 0.5 | 92 | 69-120 |
| Toluene | mg/kg (ppm) | 0.5 | 95 | 70-117 |
| Ethylbenzene | mg/kg (ppm) | 0.5 | 97 | 65-123 |
| Xylenes | mg/kg (ppm) | 1.5 | 97 | 66-120 |
| Gasoline | mg/kg (ppm) | 20 | 80 | 71-131 |

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 06/15/16

Date Received: 06/09/16

Project: 2016-023A, F&BI 606167

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

Laboratory Code: 606141-02 (Matrix Spike) Silica Gel

| Analyte | Reporting
Units | Spike
Level | Sample
Result
(Wet Wt) | Percent
Recovery
MS | Percent
Recovery
MSD | Acceptance
Criteria | RPD
(Limit 20) |
|-----------------|--------------------|----------------|------------------------------|---------------------------|----------------------------|------------------------|-------------------|
| Diesel Extended | mg/kg (ppm) | 5,000 | <50 | 108 | 117 | 63-146 | 8 |

Laboratory Code: Laboratory Control Sample Silica Gel

| Analyte | Reporting
Units | Spike
Level | Percent
Recovery
LCS | Acceptance
Criteria |
|-----------------|--------------------|----------------|----------------------------|------------------------|
| Diesel Extended | mg/kg (ppm) | 5,000 | 113 | 79-144 |

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Data Qualifiers & Definitions

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

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

ca - The calibration results for the analyte were outside of acceptance criteria. The value reported is an estimate.

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

cf - The sample was centrifuged prior to analysis.

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

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

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

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

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

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

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

ip - Recovery fell outside of control limits. Compounds in the sample matrix interfered with the quantitation of the analyte.

j - The analyte concentration is reported below the lowest calibration standard. The value reported is an estimate.

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

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

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

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

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

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

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

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

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

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

606167

SAMPLE CHAIN OF CUSTODY

ME 06/09/16 VS2/EO2

Report To Anna Jordan

Company The Riley Group

Address _____

City, State, ZIP Bothell

Phone 425-415-051 Email _____

SAMPLERS (signature) Anna Jordan

PROJECT NAME 2016-023A PO # _____

REMARKS *silica gel INVOICE TO _____
*email kristina@kaddis@riley-group.com

Page # _____ of _____

TURNAROUND TIME
 Standard Turnaround
 RUSH 24 hr.
 Rush charges authorized by: _____

SAMPLE DISPOSAL
 Dispose after 30 days
 Archive Samples
 Other _____

| Sample ID | Lab ID | Date Sampled | Time Sampled | Sample Type | # of Jars | ANALYSES REQUESTED | | | | | | | | Notes | | |
|-----------|--------|--------------|--------------|-------------|-----------|--------------------|------------|--------------|---------------|---------------|----------------|----------------|--|-------|--|--|
| | | | | | | TPH-HCID | TPH-Diesel | TPH-Gasoline | BTEX by 8021B | VOCs by 8260C | SVOCs by 8270D | PAHs 8270D SIM | | | | |
| 4B7-7 | 01A-E | 6/9/16 | 1503 | SOIL | 5 | X | X | X | X | X | X | | | | | |
| 4B8-7 | 02 | | 1505 | | | X | X | X | X | X | X | | | | | |
| 4B9-10 | 03 | | 1508 | | | X | X | X | X | X | X | | | | | |
| 4ESW6-7 | 04 | | 1510 | | | X | X | X | X | X | X | | | | | |
| 4NSW2-5 | 05 | | 1455 | | | X | X | X | X | X | X | | | | | |
| 4NSW3-6.5 | 06 | | 1500 | | | X | X | X | X | X | X | | | | | |
| 4NSW1-5.5 | 07 | | 1515 | | | X | X | X | X | X | X | | | | | |

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

| SIGNATURE | PRINT NAME | COMPANY | DATE | TIME |
|-------------------------------------|-------------|---------|--------|-------|
| Relinquished by: <u>Anna Jordan</u> | Anna Jordan | ROI | 6/9/16 | 15:15 |
| Received by: <u>James Bruya</u> | James Bruya | F&B | 6/9 | 15:15 |
| Relinquished by: _____ | | | | |
| Received by: _____ | | | | |

Samples received at 5 °C

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

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

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

July 26, 2016

Anna Jordan, Project Manager
The Riley Group, Inc.
17522 Bothell Way NE
Bothell, WA 98011

Dear Ms Jordan:

Included is the amended report from the testing of material submitted on June 10, 2016 from the 2016-023A, F&BI 606200 project. Per your request, sample 4ESW6-7 has been amended to 4ESW7-7 and sample 4ESW7-6 has been amended to 4ESW8-6.

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

Sincerely,

FRIEDMAN & BRUYA, INC.



Michael Erdahl
Project Manager

Enclosures
TRG0616R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

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

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

June 16, 2016

Anna Jordan, Project Manager
The Riley Group, Inc.
17522 Bothell Way NE
Bothell, WA 98011

Dear Ms Jordan:

Included are the results from the testing of material submitted on June 10, 2016 from the 2016-023A, F&BI 606200 project. There are 23 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

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

Sincerely,

FRIEDMAN & BRUYA, INC.



Michael Erdahl
Project Manager

Enclosures
TRG0616R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on June 10, 2016 by Friedman & Bruya, Inc. from the The Riley Group 2016-023A, F&BI 606200 project. Samples were logged in under the laboratory ID's listed below.

| <u>Laboratory ID</u> | <u>The Riley Group</u> |
|----------------------|------------------------|
| 606200 -01 | 3B1-7 |
| 606200 -02 | 3NESW1-6 |
| 606200 -03 | 3B2-7 |
| 606200 -04 | 3B3-4 |
| 606200 -05 | 3B4-4 |
| 606200 -06 | 3B5-4 |
| 606200 -07 | 3WSW1-2 |
| 606200 -08 | 4SSW3-6 |
| 606200 -09 | 4ESW7-7 |
| 606200 -10 | 4ESW8-6 |
| 606200 -11 | 3WSW2-2.5 |
| 606200 -12 | 3WSW3-2.5 |
| 606200 -13 | 4WSW2-5.5 |
| 606200 -14 | 4WSW3-4 |
| 606200 -15 | 4WSW4-6 |
| 606200 -16 | 4WSW5-6 |
| 606200 -17 | 4WSW6-6 |
| 606200 -18 | 3SSW1-5 |
| 606200 -19 | 3SSW2-2.5 |
| 606200 -20 | 3SSW3-2.5 |
| 606200 -21 | 3NSW1-2.5 |
| 606200 -22 | 3ESW1-2.5 |
| 606200 -23 | 3SESW1-2.5 |

A 200.8 internal standard failed the acceptance criteria for some samples due to matrix interferences. The data were flagged accordingly. The samples were diluted and reanalyzed.

All other quality control requirements were acceptable.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 06/16/16
 Date Received: 06/10/16
 Project: 2016-023A, F&BI 606200
 Date Extracted: 06/13/16
 Date Analyzed: 06/13/16 and 06/14/16

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

Results Reported on a Dry Weight Basis

Results Reported as mg/kg (ppm)

| <u>Sample ID</u>
Laboratory ID | <u>Benzene</u> | <u>Toluene</u> | <u>Ethyl Benzene</u> | <u>Total Xylenes</u> | <u>Gasoline Range</u> | <u>Surrogate (% Recovery)</u>
(Limit 50-132) |
|-----------------------------------|----------------|----------------|----------------------|----------------------|-----------------------|---|
| 4SSW3-6
606200-08 | <0.02 | <0.02 | 0.076 | 0.21 | 37 | 96 |
| 4ESW7-7
606200-09 | <0.02 | <0.02 | <0.02 | <0.06 | 5.3 | 91 |
| 4ESW8-6
606200-10 | <0.02 | <0.02 | <0.02 | <0.06 | <2 | 91 |
| 4WSW2-5.5
606200-13 | <0.02 | <0.02 | <0.02 | <0.06 | <2 | 93 |
| 4WSW3-4
606200-14 | <0.02 | <0.02 | <0.02 | <0.06 | <2 | 93 |
| 4WSW4-6
606200-15 | <0.02 | <0.02 | <0.02 | <0.06 | <2 | 90 |
| 4WSW5-6
606200-16 | <0.02 | <0.02 | <0.02 | <0.06 | <2 | 90 |
| 4WSW6-6
606200-17 | <0.02 | 0.27 | 0.68 | 1.6 | 170 | 109 |
| Method Blank
06-1190 MB | <0.02 | <0.02 | <0.02 | <0.06 | <2 | 74 |

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 06/16/16
 Date Received: 06/10/16
 Project: 2016-023A, F&BI 606200
 Date Extracted: 06/13/16
 Date Analyzed: 06/13/16

**RESULTS FROM THE ANALYSIS OF SOIL SAMPLES
 FOR TOTAL PETROLEUM HYDROCARBONS AS
 DIESEL AND MOTOR OIL
 USING METHOD NWTPH-Dx
 Sample Extracts Passed Through a
 Silica Gel Column Prior to Analysis
 Results Reported on a Dry Weight Basis
 Results Reported as mg/kg (ppm)**

| <u>Sample ID</u>
Laboratory ID | <u>Diesel Range</u>
(C ₁₀ -C ₂₅) | <u>Motor Oil Range</u>
(C ₂₅ -C ₃₆) | <u>Surrogate</u>
<u>(% Recovery)</u>
(Limit 48-168) |
|-----------------------------------|--|---|---|
| 3B1-7
606200-01 | <50 | <250 | 103 |
| 3NESW1-6
606200-02 | <50 | <250 | 100 |
| 3B3-4
606200-04 | <50 | <250 | 93 |
| 3B4-4
606200-05 | <50 | <250 | 104 |
| 3B5-4
606200-06 | <50 | <250 | 99 |
| 3WSW2-2.5
606200-11 | 67 x | <250 | 98 |
| 3WSW3-2.5
606200-12 | <50 | 310 | 102 |
| 4WSW2-5.5
606200-13 | 63 x | 340 | 94 |
| 4WSW3-4
606200-14 | <50 | <250 | 96 |

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 06/16/16
 Date Received: 06/10/16
 Project: 2016-023A, F&BI 606200
 Date Extracted: 06/13/16
 Date Analyzed: 06/13/16

**RESULTS FROM THE ANALYSIS OF SOIL SAMPLES
 FOR TOTAL PETROLEUM HYDROCARBONS AS
 DIESEL AND MOTOR OIL
 USING METHOD NWTPH-Dx
 Sample Extracts Passed Through a
 Silica Gel Column Prior to Analysis
 Results Reported on a Dry Weight Basis
 Results Reported as mg/kg (ppm)**

| <u>Sample ID</u>
Laboratory ID | <u>Diesel Range</u>
(C ₁₀ -C ₂₅) | <u>Motor Oil Range</u>
(C ₂₅ -C ₃₆) | <u>Surrogate</u>
<u>(% Recovery)</u>
(Limit 48-168) |
|-----------------------------------|--|---|---|
| 4WSW4-6
606200-15 | 110 x | 880 | 96 |
| 4WSW5-6
606200-16 | <50 | <250 | 96 |
| 4WSW6-6
606200-17 | <50 | <250 | 96 |
| 3SSW1-5
606200-18 | <50 | <250 | 101 |
| 3SSW2-2.5
606200-19 | <50 | <250 | 90 |
| 3SSW3-2.5
606200-20 | 120 x | 680 | 106 |
| Method Blank
06-1189 MB | <50 | <250 | 93 |

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

| | | | |
|-----------------|------------------------|-------------|------------------------|
| Client ID: | 3B3-4 | Client: | The Riley Group |
| Date Received: | 06/10/16 | Project: | 2016-023A, F&BI 606200 |
| Date Extracted: | 06/13/16 | Lab ID: | 606200-04 |
| Date Analyzed: | 06/13/16 | Data File: | 606200-04.070 |
| Matrix: | Soil | Instrument: | ICPMS1 |
| Units: | mg/kg (ppm) Dry Weight | Operator: | SP |

| Analyte: | Concentration
mg/kg (ppm) |
|----------|------------------------------|
| Cadmium | <1 |
| Lead | 32.6 |

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

| | | | |
|-----------------|------------------------|-------------|------------------------|
| Client ID: | 3B4-4 | Client: | The Riley Group |
| Date Received: | 06/10/16 | Project: | 2016-023A, F&BI 606200 |
| Date Extracted: | 06/13/16 | Lab ID: | 606200-05 |
| Date Analyzed: | 06/13/16 | Data File: | 606200-05.071 |
| Matrix: | Soil | Instrument: | ICPMS1 |
| Units: | mg/kg (ppm) Dry Weight | Operator: | SP |

| Analyte: | Concentration
mg/kg (ppm) |
|----------|------------------------------|
| Cadmium | <1 |
| Lead | 6.90 |

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

| | | | |
|-----------------|------------------------|-------------|------------------------|
| Client ID: | 3B5-4 | Client: | The Riley Group |
| Date Received: | 06/10/16 | Project: | 2016-023A, F&BI 606200 |
| Date Extracted: | 06/13/16 | Lab ID: | 606200-06 |
| Date Analyzed: | 06/13/16 | Data File: | 606200-06.073 |
| Matrix: | Soil | Instrument: | ICPMS1 |
| Units: | mg/kg (ppm) Dry Weight | Operator: | SP |

| Analyte: | Concentration
mg/kg (ppm) |
|----------|------------------------------|
| Cadmium | <1 |
| Lead | 50.4 |

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

| | | | |
|-----------------|------------------------|-------------|------------------------|
| Client ID: | 3WSW1-2 | Client: | The Riley Group |
| Date Received: | 06/10/16 | Project: | 2016-023A, F&BI 606200 |
| Date Extracted: | 06/13/16 | Lab ID: | 606200-07 |
| Date Analyzed: | 06/13/16 | Data File: | 606200-07.074 |
| Matrix: | Soil | Instrument: | ICPMS1 |
| Units: | mg/kg (ppm) Dry Weight | Operator: | SP |

| Analyte: | Concentration
mg/kg (ppm) |
|----------|------------------------------|
|----------|------------------------------|

| | |
|---------|--------|
| Cadmium | <1 |
| Lead | 7.81 J |

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

| | | | |
|-----------------|------------------------|-------------|------------------------|
| Client ID: | 3WSW1-2 | Client: | The Riley Group |
| Date Received: | 06/10/16 | Project: | 2016-023A, F&BI 606200 |
| Date Extracted: | 06/13/16 | Lab ID: | 606200-07 x2 |
| Date Analyzed: | 06/13/16 | Data File: | 606200-07 x2.088 |
| Matrix: | Soil | Instrument: | ICPMS1 |
| Units: | mg/kg (ppm) Dry Weight | Operator: | SP |

| Analyte: | Concentration
mg/kg (ppm) |
|----------|------------------------------|
| Cadmium | <2 |
| Lead | 8.14 |

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

| | | | |
|-----------------|------------------------|-------------|------------------------|
| Client ID: | 3WSW2-2.5 | Client: | The Riley Group |
| Date Received: | 06/10/16 | Project: | 2016-023A, F&BI 606200 |
| Date Extracted: | 06/13/16 | Lab ID: | 606200-11 |
| Date Analyzed: | 06/13/16 | Data File: | 606200-11.075 |
| Matrix: | Soil | Instrument: | ICPMS1 |
| Units: | mg/kg (ppm) Dry Weight | Operator: | SP |

| Analyte: | Concentration
mg/kg (ppm) |
|----------|------------------------------|
|----------|------------------------------|

| | |
|---------|--------|
| Cadmium | <1 |
| Lead | 44.2 J |

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

| | | | |
|-----------------|------------------------|-------------|------------------------|
| Client ID: | 3WSW2-2.5 | Client: | The Riley Group |
| Date Received: | 06/10/16 | Project: | 2016-023A, F&BI 606200 |
| Date Extracted: | 06/13/16 | Lab ID: | 606200-11 x10 |
| Date Analyzed: | 06/13/16 | Data File: | 606200-11 x10.089 |
| Matrix: | Soil | Instrument: | ICPMS1 |
| Units: | mg/kg (ppm) Dry Weight | Operator: | SP |

| Analyte: | Concentration
mg/kg (ppm) |
|----------|------------------------------|
| Cadmium | <10 |
| Lead | 45.1 |

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

| | | | |
|-----------------|------------------------|-------------|------------------------|
| Client ID: | 3WSW3-2.5 | Client: | The Riley Group |
| Date Received: | 06/10/16 | Project: | 2016-023A, F&BI 606200 |
| Date Extracted: | 06/13/16 | Lab ID: | 606200-12 |
| Date Analyzed: | 06/13/16 | Data File: | 606200-12.076 |
| Matrix: | Soil | Instrument: | ICPMS1 |
| Units: | mg/kg (ppm) Dry Weight | Operator: | SP |

| Analyte: | Concentration
mg/kg (ppm) |
|----------|------------------------------|
|----------|------------------------------|

| | |
|---------|--------|
| Cadmium | <1 J |
| Lead | 39.3 J |

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

| | | | |
|-----------------|------------------------|-------------|------------------------|
| Client ID: | 3WSW3-2.5 | Client: | The Riley Group |
| Date Received: | 06/10/16 | Project: | 2016-023A, F&BI 606200 |
| Date Extracted: | 06/13/16 | Lab ID: | 606200-12 x10 |
| Date Analyzed: | 06/13/16 | Data File: | 606200-12 x10.090 |
| Matrix: | Soil | Instrument: | ICPMS1 |
| Units: | mg/kg (ppm) Dry Weight | Operator: | SP |

| Analyte: | Concentration
mg/kg (ppm) |
|----------|------------------------------|
| Cadmium | <10 |
| Lead | 60.0 |

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

| | | | |
|-----------------|------------------------|-------------|------------------------|
| Client ID: | 3SSW1-5 | Client: | The Riley Group |
| Date Received: | 06/10/16 | Project: | 2016-023A, F&BI 606200 |
| Date Extracted: | 06/13/16 | Lab ID: | 606200-18 |
| Date Analyzed: | 06/13/16 | Data File: | 606200-18.077 |
| Matrix: | Soil | Instrument: | ICPMS1 |
| Units: | mg/kg (ppm) Dry Weight | Operator: | SP |

| Analyte: | Concentration
mg/kg (ppm) |
|----------|------------------------------|
|----------|------------------------------|

| | |
|---------|------|
| Cadmium | <1 |
| Lead | 55.3 |

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

| | | | |
|-----------------|------------------------|-------------|------------------------|
| Client ID: | 3SSW2-2.5 | Client: | The Riley Group |
| Date Received: | 06/10/16 | Project: | 2016-023A, F&BI 606200 |
| Date Extracted: | 06/13/16 | Lab ID: | 606200-19 |
| Date Analyzed: | 06/13/16 | Data File: | 606200-19.078 |
| Matrix: | Soil | Instrument: | ICPMS1 |
| Units: | mg/kg (ppm) Dry Weight | Operator: | SP |

| Analyte: | Concentration
mg/kg (ppm) |
|----------|------------------------------|
|----------|------------------------------|

| | |
|---------|--------|
| Cadmium | <1 |
| Lead | 30.6 J |

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

| | | | |
|-----------------|------------------------|-------------|------------------------|
| Client ID: | 3SSW2-2.5 | Client: | The Riley Group |
| Date Received: | 06/10/16 | Project: | 2016-023A, F&BI 606200 |
| Date Extracted: | 06/13/16 | Lab ID: | 606200-19 x10 |
| Date Analyzed: | 06/13/16 | Data File: | 606200-19 x10.091 |
| Matrix: | Soil | Instrument: | ICPMS1 |
| Units: | mg/kg (ppm) Dry Weight | Operator: | SP |

| Analyte: | Concentration
mg/kg (ppm) |
|----------|------------------------------|
| Cadmium | <10 |
| Lead | 31.9 |

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

| | | | |
|-----------------|------------------------|-------------|------------------------|
| Client ID: | 3SSW3-2.5 | Client: | The Riley Group |
| Date Received: | 06/10/16 | Project: | 2016-023A, F&BI 606200 |
| Date Extracted: | 06/13/16 | Lab ID: | 606200-20 |
| Date Analyzed: | 06/13/16 | Data File: | 606200-20.079 |
| Matrix: | Soil | Instrument: | ICPMS1 |
| Units: | mg/kg (ppm) Dry Weight | Operator: | SP |

| Analyte: | Concentration
mg/kg (ppm) |
|----------|------------------------------|
|----------|------------------------------|

| | |
|---------|-------|
| Cadmium | <1 |
| Lead | 190 J |

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

| | | | |
|-----------------|------------------------|-------------|------------------------|
| Client ID: | 3SSW3-2.5 | Client: | The Riley Group |
| Date Received: | 06/10/16 | Project: | 2016-023A, F&BI 606200 |
| Date Extracted: | 06/13/16 | Lab ID: | 606200-20 x10 |
| Date Analyzed: | 06/13/16 | Data File: | 606200-20 x10.092 |
| Matrix: | Soil | Instrument: | ICPMS1 |
| Units: | mg/kg (ppm) Dry Weight | Operator: | SP |

| Analyte: | Concentration
mg/kg (ppm) |
|----------|------------------------------|
| Cadmium | <10 |
| Lead | 191 |

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

| | | | |
|-----------------|------------------------|-------------|------------------------|
| Client ID: | Method Blank | Client: | The Riley Group |
| Date Received: | NA | Project: | 2016-023A, F&BI 606200 |
| Date Extracted: | 06/13/16 | Lab ID: | I6-374 mb |
| Date Analyzed: | 06/13/16 | Data File: | I6-374 mb.058 |
| Matrix: | Soil | Instrument: | ICPMS1 |
| Units: | mg/kg (ppm) Dry Weight | Operator: | SP |

| Analyte: | Concentration
mg/kg (ppm) |
|----------|------------------------------|
| Cadmium | <1 |
| Lead | <1 |

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 06/16/16

Date Received: 06/10/16

Project: 2016-023A, F&BI 606200

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

Laboratory Code: 606210-06 (Duplicate)

| Analyte | Reporting Units | Sample Result (Wet Wt) | Duplicate Result (Wet Wt) | RPD (Limit 20) |
|--------------|-----------------|------------------------|---------------------------|----------------|
| Benzene | mg/kg (ppm) | <0.02 | <0.02 | nm |
| Toluene | mg/kg (ppm) | <0.02 | <0.02 | nm |
| Ethylbenzene | mg/kg (ppm) | <0.02 | <0.02 | nm |
| Xylenes | mg/kg (ppm) | <0.06 | <0.06 | nm |
| Gasoline | mg/kg (ppm) | <2 | <2 | nm |

Laboratory Code: Laboratory Control Sample

| Analyte | Reporting Units | Spike Level | Percent Recovery LCS | Acceptance Criteria |
|--------------|-----------------|-------------|----------------------|---------------------|
| Benzene | mg/kg (ppm) | 0.5 | 79 | 69-120 |
| Toluene | mg/kg (ppm) | 0.5 | 86 | 70-117 |
| Ethylbenzene | mg/kg (ppm) | 0.5 | 88 | 65-123 |
| Xylenes | mg/kg (ppm) | 1.5 | 88 | 66-120 |
| Gasoline | mg/kg (ppm) | 20 | 75 | 71-131 |

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 06/16/16

Date Received: 06/10/16

Project: 2016-023A, F&BI 606200

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

Laboratory Code: 606200-01 (Matrix Spike) Silica Gel

| Analyte | Reporting
Units | Spike
Level | Sample
Result
(Wet Wt) | Percent
Recovery
MS | Percent
Recovery
MSD | Acceptance
Criteria | RPD
(Limit 20) |
|-----------------|--------------------|----------------|------------------------------|---------------------------|----------------------------|------------------------|-------------------|
| Diesel Extended | mg/kg (ppm) | 5,000 | <50 | 114 | 118 | 73-135 | 3 |

Laboratory Code: Laboratory Control Sample Silica Gel

| Analyte | Reporting
Units | Spike
Level | Percent
Recovery
LCS | Acceptance
Criteria |
|-----------------|--------------------|----------------|----------------------------|------------------------|
| Diesel Extended | mg/kg (ppm) | 5,000 | 118 | 74-139 |

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 06/16/16

Date Received: 06/10/16

Project: 2016-023A, F&BI 606200

**QUALITY ASSURANCE RESULTS
FOR THE ANALYSIS OF SOIL SAMPLES
FOR TOTAL METALS USING EPA METHOD 200.8**

Laboratory Code: 606201-02 (Matrix Spike)

| Analyte | Reporting Units | Spike Level | Sample Result (Wet wt) | Percent Recovery MS | Percent Recovery MSD | Acceptance Criteria | RPD (Limit 20) |
|---------|-----------------|-------------|------------------------|---------------------|----------------------|---------------------|----------------|
| Cadmium | mg/kg (ppm) | 10 | <1 | 96 | 93 | 70-130 | 3 |
| Lead | mg/kg (ppm) | 50 | 1.09 | 108 | 101 | 70-130 | 7 |

Laboratory Code: Laboratory Control Sample

| Analyte | Reporting Units | Spike Level | Percent Recovery LCS | Acceptance Criteria |
|---------|-----------------|-------------|----------------------|---------------------|
| Cadmium | mg/kg (ppm) | 10 | 103 | 85-115 |
| Lead | mg/kg (ppm) | 50 | 111 | 85-115 |

Data Qualifiers & Definitions

- a - The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.
- b - The analyte was spiked at a level that was less than five times that present in the sample. Matrix spike recoveries may not be meaningful.
- ca - The calibration results for the analyte were outside of acceptance criteria. The value reported is an estimate.
- c - The presence of the analyte may be due to carryover from previous sample injections.
- cf - The sample was centrifuged prior to analysis.
- d - The sample was diluted. Detection limits were raised and surrogate recoveries may not be meaningful.
- dv - Insufficient sample volume was available to achieve normal reporting limits.
- f - The sample was laboratory filtered prior to analysis.
- fb - The analyte was detected in the method blank.
- fc - The compound is a common laboratory and field contaminant.
- hr - The sample and duplicate were reextracted and reanalyzed. RPD results were still outside of control limits. Variability is attributed to sample inhomogeneity.
- hs - Headspace was present in the container used for analysis.
- ht - The analysis was performed outside the method or client-specified holding time requirement.
- ip - Recovery fell outside of control limits. Compounds in the sample matrix interfered with the quantitation of the analyte.
- j - The analyte concentration is reported below the lowest calibration standard. The value reported is an estimate.
- J - The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.
- jl - The laboratory control sample(s) percent recovery and/or RPD were out of control limits. The reported concentration should be considered an estimate.
- js - The surrogate associated with the analyte is out of control limits. The reported concentration should be considered an estimate.
- lc - The presence of the analyte is likely due to laboratory contamination.
- L - The reported concentration was generated from a library search.
- nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.
- pc - The sample was received with incorrect preservation or in a container not approved by the method. The value reported should be considered an estimate.
- ve - The analyte response exceeded the valid instrument calibration range. The value reported is an estimate.
- vo - The value reported fell outside the control limits established for this analyte.
- x - The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

SAMPLE CHAIN OF CUSTODY

ME 6/10/16 A04/VSZ

Report To 606200
Anna Jordan / Kris Addis
 Company The Riley Group
 Address _____
 City, State, ZIP _____
 Phone _____ Email kaddise@riley-group.com

SAMPLERS (signature) Anna Jordan
 PROJECT NAME 2016-OZZA PO # _____
 REMARKS *silica gel INVOICE TO _____

Page # 3 of BI
 TURNAROUND TIME
 Standard Turnaround
 RUSH 24 hr
 Rush charges authorized by: _____
 SAMPLE DISPOSAL
 Dispose after 30 days
 Archive Samples
 Other _____

| Sample ID | Lab ID | Date Sampled | Time Sampled | Sample Type | # of Jars | ANALYSES REQUESTED | | | | | | | | | | Notes | |
|-----------|--------|--------------|--------------|-------------|-----------|--------------------|------------|--------------|---------------|---------------|----------------|----------------|----|---|--|-------|--------------------------|
| | | | | | | TPH-HCID | TPH-Diesel | TPH-Gasoline | BTEX by 8021B | VOCs by 8260C | SVOCs by 8270D | PAHs 8270D SIM | PH | | | | |
| 381-7 | 01 | 6/10/16 | 925 | SOIL | 1 | | X | | | | | | | | | | |
| 382-7 | 02 | | 1045 | | 1 | | X | | | | | | | | | | |
| 383-4 | 03 | | 1145 | | 1 | | X | | | | | | X | X | | | |
| 384-4 | 05 | | 1311 | | 1 | | X | | | | | | X | X | | | |
| 385-4 | 06 | | 1313 | | 1 | | X | | | | | | X | X | | | |
| 3WSN1-2 | 07 | | 1315 | | 1 | | | | | | | | X | X | | | |
| 4SSN3-6 | 08 AD | | 1250 | | 4 | | | X | X | | | | | | | | |
| 4ESN6-7 | 09 | | 1255 | | 4 | | | X | X | | | | | | | | |
| 4ESN7-10 | 10 | | 1300 | | 4 | | | X | X | | | | | | | | samples received at 4 °C |

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

| SIGNATURE | PRINT NAME | COMPANY | DATE | TIME |
|-------------------------------------|-------------|---------|---------|------|
| Relinquished by: <u>Anna Jordan</u> | Anna Jordan | R61 | 6/10/16 | 1515 |
| Received by: <u>James Bruya</u> | James Bruya | FEB | 6/10 | 1518 |
| Relinquished by: | | | | |
| Received by: | | | | |

SAMPLE CHAIN OF CUSTODY ME 6/10/16 B13/V52

Report To 606200 Anna Jordan / Kris Addis
 Company The Riley Group
 Address _____
 City, State, ZIP _____
 Phone _____ Email kaddis@riley-group.com

SAMPLERS (signature) Anna Jordan
 PROJECT NAME 2016-028A PO # _____
 REMARKS *silicagel INVOICE TO _____

Page # 2 of _____
 TURNAROUND TIME
 Standard Turnaround
 RUSH 24 hr
 Rush charges authorized by: _____
 SAMPLE DISPOSAL
 Dispose after 30 days
 Archive Samples
 Other

| Sample ID | Lab ID | Date Sampled | Time Sampled | Sample Type | # of Jars | ANALYSES REQUESTED | | | | | | | | | | Notes | |
|--------------------------------|--------|--------------|--------------|-------------|-----------|--------------------|------------|--------------|---------------|---------------|----------------|----------------|----|----|---|-------|----------------------------|
| | | | | | | TPH-HCID | TPH-Diesel | TPH-Gasoline | BTEX by 8021B | VOCs by 8260C | SVOCs by 8270D | PAHs 8270D SIM | SA | PO | | | |
| 3WSN2-2.5 | 11 | 6/10/16 | 1320 | SOIL | 1 | | X | | | | | | | X | X | | |
| 3WSN3-2.5 | 12 | | 1322 | | 1 | | X | | | | | | | X | X | | |
| 4WSN2-5.5 | 13 A-E | | 1330 | | 5 | | X | X | X | | | | | | | | |
| 4WSN3-4 | 14 | | 1335 | | 5 | | X | X | X | | | | | | | | |
| 4WSN4-6 | 15 | | 1338 | | 5 | | X | X | X | | | | | | | | |
| 4WSN6-6 | 16 | | 1340 | | 5 | | X | X | X | | | | | | | | |
| 4WSN6-6 | 17 | | 1345 | | 5 | | X | X | X | | | | | | | | |
| 3SSN1-5 | 18 | | 1405 | | 1 | | X | | | | | | X | X | | | |
| 3SSN2-2.5 | 19 | | 1406 | | 1 | | X | | | | | | X | X | | | |
| 3SSN3-2.5 3SSN3-2.5 | 20 | | 1407 | | 1 | | X | | | | | | X | X | | | received at <u>6/10/16</u> |

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

| SIGNATURE | PRINT NAME | COMPANY | DATE | TIME |
|-------------------------------------|-------------|---------|---------|------|
| Relinquished by: <u>Anna Jordan</u> | Anna Jordan | R61 | 6/10/16 | 1515 |
| Received by: <u>James Bruya</u> | James Bruya | FRZ | 6/10 | 1515 |
| Relinquished by: | | | | |
| Received by: | | | | |

SAMPLE CHAIN OF CUSTODY

ME 6/10/16 B13/VSZ

Report To 606200
Anna Jordan / Kris Addis
 Company The Riley Group
 Address _____
 City, State, ZIP _____
 Phone _____ Email kaddis@riley-group.com

SAMPLERS (signature) Anna Jordan

PROJECT NAME 2016-023A PO # _____

REMARKS *silicagel INVOICE TO _____

Page # 3 of 3

TURNAROUND TIME
 Standard Turnaround
 RUSH 24 hr
 Rush charges authorized by: _____

SAMPLE DISPOSAL
 Dispose after 30 days
 Archive Samples
 Other _____

| Sample ID | Lab ID | Date Sampled | Time Sampled | Sample Type | # of Jars | ANALYSES REQUESTED | | | | | | | | | | Notes | | | |
|------------|--------|--------------|--------------|-------------|-----------|--------------------|------------|--------------|---------------|---------------|----------------|----------------|--|--|--|-------|--|--|--|
| | | | | | | TPH-HCID | TPH-Diesel | TPH-Gasoline | BTEX by 8021B | VOCs by 8260C | SVOCs by 8270D | PAHs 8270D SIM | | | | | | | |
| 3NSWI-2.5 | 21 | 6/10/16 | SOIL | 1415 | 1 | | | | | | | | | | | | | | |
| 3ESWI-2.5 | 22 | ↓ | ↓ | 1417 | 1 | | | | | | | | | | | | | | |
| 3SESWI-2.5 | 23 | ↓ | ↓ | 1420 | 1 | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | |

samples received at 4 °C

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

| SIGNATURE | PRINT NAME | COMPANY | DATE | TIME |
|-------------------------------------|--------------------|------------|----------------|-------------|
| Relinquished by: <u>Anna Jordan</u> | <u>Anna Jordan</u> | <u>PGA</u> | <u>6/10/16</u> | <u>1515</u> |
| Received by: <u>[Signature]</u> | <u>Tara Bruya</u> | <u>FTB</u> | <u>6/10</u> | <u>1515</u> |
| Relinquished by: _____ | | | | |
| Received by: _____ | | | | |

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

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

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

June 15, 2016

Anna Jordan, Project Manager
The Riley Group, Inc.
17522 Bothell Way NE
Bothell, WA 98011

Dear Ms Jordan:

Included are the results from the testing of material submitted on June 13, 2016 from the 2016-023A, F&BI 606223 project. There are 4 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

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

Sincerely,

FRIEDMAN & BRUYA, INC.



Michael Erdahl
Project Manager

Enclosures
c: Kris Addis
TRG0615R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on June 13, 2016 by Friedman & Bruya, Inc. from the The Riley Group 2016-023A, F&BI 606223 project. Samples were logged in under the laboratory ID's listed below.

| <u>Laboratory ID</u> | <u>The Riley Group</u> |
|----------------------|------------------------|
| 606223 -01 | 2ESW5-6 |
| 606223 -02 | 2ESW6-5.5 |
| 606223 -03 | 2ESW7-5.5 |
| 606223 -04 | 2WSW5-5.5 |
| 606223 -05 | 2ESW8-5.5 |
| 606223 -06 | 2WSW6-5.5 |
| 606223 -07 | 2SSW2-6 |

All quality control requirements were acceptable.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 06/15/16
 Date Received: 06/13/16
 Project: 2016-023A, F&BI 606223
 Date Extracted: 06/13/16
 Date Analyzed: 06/13/16

**RESULTS FROM THE ANALYSIS OF SOIL SAMPLES
 FOR TOTAL PETROLEUM HYDROCARBONS AS
 DIESEL AND MOTOR OIL
 USING METHOD NWTPH-Dx
 Sample Extracts Passed Through a
 Silica Gel Column Prior to Analysis
 Results Reported on a Dry Weight Basis
 Results Reported as mg/kg (ppm)**

| <u>Sample ID</u>
Laboratory ID | <u>Diesel Range</u>
(C ₁₀ -C ₂₅) | <u>Motor Oil Range</u>
(C ₂₅ -C ₃₆) | <u>Surrogate</u>
(% Recovery)
(Limit 56-165) |
|-----------------------------------|--|---|--|
| 2ESW5-6
606223-01 | <50 | <250 | 110 |
| 2ESW6-5.5
606223-02 | <50 | <250 | 112 |
| 2ESW7-5.5
606223-03 | <50 | <250 | 110 |
| 2WSW5-5.5
606223-04 | <50 | 330 | 121 |
| 2ESW8-5.5
606223-05 | <50 | <250 | 114 |
| 2WSW6-5.5
606223-06 | 91 x | <250 | 115 |
| 2SSW2-6
606223-07 | 230 x | 810 | 126 |
| Method Blank
06-1204 MB | <50 | <250 | 130 |

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 06/15/16

Date Received: 06/13/16

Project: 2016-023A, F&BI 606223

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

Laboratory Code: 606223-01 (Matrix Spike) Silica Gel

| Analyte | Reporting
Units | Spike
Level | Sample
Result
(Wet Wt) | Percent
Recovery
MS | Percent
Recovery
MSD | Acceptance
Criteria | RPD
(Limit 20) |
|-----------------|--------------------|----------------|------------------------------|---------------------------|----------------------------|------------------------|-------------------|
| Diesel Extended | mg/kg (ppm) | 5,000 | <50 | 111 | 112 | 63-146 | 1 |

Laboratory Code: Laboratory Control Sample Silica Gel

| Analyte | Reporting
Units | Spike
Level | Percent
Recovery
LCS | Acceptance
Criteria |
|-----------------|--------------------|----------------|----------------------------|------------------------|
| Diesel Extended | mg/kg (ppm) | 5,000 | 121 | 79-144 |

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Data Qualifiers & Definitions

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

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

ca - The calibration results for the analyte were outside of acceptance criteria. The value reported is an estimate.

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

cf - The sample was centrifuged prior to analysis.

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

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

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

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

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

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

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

ip - Recovery fell outside of control limits. Compounds in the sample matrix interfered with the quantitation of the analyte.

j - The analyte concentration is reported below the lowest calibration standard. The value reported is an estimate.

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

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

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

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

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

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

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

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

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

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

606223

SAMPLE CHAIN OF CUSTODY ME 06-13-16

A02

Report To Anna Jordan / Kaddis
 Company The Riley Group
 Address _____
 City, State, ZIP _____
 Phone 425-450-0511 Email Kaddis@riley-group.com

SAMPLERS (signature) Anna Jordan
 PROJECT NAME 2016-023A PO # _____
 REMARKS * silica gel INVOICE TO _____

Page # 1 of 1
 TURNAROUND TIME
 Standard Turnaround
 RUSH 1 day TAT
 Rush charges authorized by: _____
 SAMPLE DISPOSAL
 Dispose after 30 days
 Archive Samples
 Other _____

| Sample ID | Lab ID | Date Sampled | Time Sampled | Sample Type | # of Jars | ANALYSES REQUESTED | | | | | | | | | | Notes | | | | |
|-----------|--------|--------------|--------------|-------------|-----------|--------------------|------------|--------------|---------------|---------------|----------------|---------------------------------|--|--|--|-------|--|--|--|--|
| | | | | | | TPH-HCID | TPH-Diesel | TPH-Gasoline | BTEX by 8021B | VOCs by 8260C | SVOCs by 8270D | PAHs 8270D SIM | | | | | | | | |
| 2ESW5-6 | 01 | 6/13/16 | 745 | SOIL | 1 | X | | | | | | | | | | | | | | |
| 2ESW6-5.5 | 02 | ↓ | 805 | ↓ | ↓ | X | | | | | | | | | | | | | | |
| 2ESW7-5.5 | 03 | | 810 | | | X | | | | | | | | | | | | | | |
| 2WSW5-5.5 | 04 | | 815 | | | X | | | | | | | | | | | | | | |
| 2ESW8-5.5 | 05 | | 820 | | | X | | | | | | | | | | | | | | |
| 2WSW6-5.5 | 06 | | 825 | | | X | | | | | | | | | | | | | | |
| 2SSW2-6 | 07 | | 830 | | | X | | | | | | | | | | | | | | |
| | | | | | | | | | | | | Samples received at <u>4</u> °C | | | | | | | | |

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

| SIGNATURE | PRINT NAME | COMPANY | DATE | TIME |
|---------------------------------------|--------------------------|------------|----------------|------------------------|
| Relinquished by: <u>Anna Jordan</u> | <u>Anna Jordan</u> | <u>RGI</u> | <u>6/13/16</u> | <u>12⁰⁰</u> |
| Received by: <u>Elizabeth Radford</u> | <u>Elizabeth Radford</u> | <u>F+B</u> | <u>6/13/16</u> | <u>12⁰⁰</u> |
| Relinquished by: | | | | |
| Received by: | | | | |

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

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

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

July 26, 2016

Anna Jordan, Project Manager
The Riley Group, Inc.
17522 Bothell Way NE
Bothell, WA 98011

Dear Ms Jordan:

Included is the amended report from the testing of material submitted on June 14, 2016 from the Sea Mar, PO 2016-023A, F&BI 606248 project. The project ID has been amended and the date received has been corrected to June 14, 2016.

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

Sincerely,

FRIEDMAN & BRUYA, INC.



Michael Erdahl
Project Manager

Enclosures
TRG0621R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

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

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

June 21, 2016

Paul Riley, Project Manager
The Riley Group, Inc.
17522 Bothell Way NE
Bothell, WA 98011

Dear Mr Riley:

Included are the results from the testing of material submitted on June 14, 2016 from the Sea Mar, PO 2016-023A, F&BI 606248 project. There are 10 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

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

Sincerely,

FRIEDMAN & BRUYA, INC.



Michael Erdahl
Project Manager

Enclosures
c: Anna Jordan
TRG0621R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on June 14, 2016 by Friedman & Bruya, Inc. from the The Riley Group Sea Mar, PO 2016-023A, F&BI 606248 project. Samples were logged in under the laboratory ID's listed below.

| <u>Laboratory ID</u> | <u>The Riley Group</u> |
|----------------------|------------------------|
| 606248 -01 | 3WSW5-6 |
| 606248 -02 | 3WSW6-6 |
| 606248 -03 | 3ESW2-6 |
| 606248 -04 | 3H2O-1 |

The NWTPH-Dx matrix spike sample exceeded the acceptance criteria. The laboratory control sample met the acceptance criteria, therefore the result was likely due to matrix effect.

All other quality control requirements were acceptable.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 06/21/16
 Date Received: 06/14/16
 Project: Sea Mar, PO 2016-023A, F&BI 606248
 Date Extracted: 06/15/16
 Date Analyzed: 06/15/16

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

Results Reported on a Dry Weight Basis

Results Reported as mg/kg (ppm)

| <u>Sample ID</u>
Laboratory ID | <u>Benzene</u> | <u>Toluene</u> | <u>Ethyl Benzene</u> | <u>Total Xylenes</u> | <u>Gasoline Range</u> | <u>Surrogate (% Recovery)</u>
(Limit 50-132) |
|-----------------------------------|----------------|----------------|----------------------|----------------------|-----------------------|---|
| 3WSW5-6
606248-01 | <0.02 | <0.02 | <0.02 | <0.06 | <2 | 95 |
| 3WSW6-6
606248-02 | <0.02 | <0.02 | 0.18 | 0.30 | 530 | 97 |
| 3ESW2-6
606248-03 | <0.02 | <0.02 | <0.02 | <0.06 | <2 | 92 |
| Method Blank
06-1174 MB | <0.02 | <0.02 | <0.02 | <0.06 | <2 | 75 |

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 06/21/16
Date Received: 06/14/16
Project: Sea Mar, PO 2016-023A, F&BI 606248
Date Extracted: 06/15/16
Date Analyzed: 06/15/16

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

Results Reported as ug/L (ppb)

| <u>Sample ID</u>
Laboratory ID | <u>Benzene</u> | <u>Toluene</u> | <u>Ethyl Benzene</u> | <u>Total Xylenes</u> | <u>Gasoline Range</u> | <u>Surrogate (% Recovery)</u>
(Limit 52-124) |
|-----------------------------------|----------------|----------------|----------------------|----------------------|-----------------------|---|
| 3H2O-1
606248-04 | <1 | <1 | <1 | <3 | <100 | 95 |
| Method Blank
06-1175 MB | <1 | <1 | <1 | <3 | <100 | 93 |

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 06/21/16
Date Received: 06/14/16
Project: Sea Mar, PO 2016-023A, F&BI 606248
Date Extracted: 06/15/16
Date Analyzed: 06/15/16

**RESULTS FROM THE ANALYSIS OF SOIL SAMPLES
FOR TOTAL PETROLEUM HYDROCARBONS AS
DIESEL AND MOTOR OIL
USING METHOD NWTPH-Dx
Sample Extracts Passed Through a
Silica Gel Column Prior to Analysis
Results Reported on a Dry Weight Basis
Results Reported as mg/kg (ppm)**

| <u>Sample ID</u>
Laboratory ID | <u>Diesel Range</u>
(C ₁₀ -C ₂₅) | <u>Motor Oil Range</u>
(C ₂₅ -C ₃₆) | <u>Surrogate</u>
<u>(% Recovery)</u>
(Limit 48-168) |
|-----------------------------------|--|---|---|
| 3WSW5-6
606248-01 | <50 | <250 | 98 |
| 3WSW6-6
606248-02 | 1,100 | <250 | 106 |
| 3ESW2-6
606248-03 | 1,100 x | 5,800 | 100 |
| Method Blank
06-1214 MB | <50 | <250 | 92 |

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 06/21/16
Date Received: 06/14/16
Project: Sea Mar, PO 2016-023A, F&BI 606248
Date Extracted: 06/15/16
Date Analyzed: 06/15/16

**RESULTS FROM THE ANALYSIS OF WATER SAMPLES
FOR TOTAL PETROLEUM HYDROCARBONS AS
DIESEL AND MOTOR OIL
USING METHOD NWTPH-Dx**
Results Reported as ug/L (ppb)

| <u>Sample ID</u>
Laboratory ID | <u>Diesel Range</u>
(C ₁₀ -C ₂₅) | <u>Motor Oil Range</u>
(C ₂₅ -C ₃₆) | <u>Surrogate</u>
(% Recovery)
(Limit 41-152) |
|-----------------------------------|--|---|--|
| 3H2O-1
606248-04 | 190 x | <250 | 94 |
| Method Blank
06-1209 MB2 | <50 | <250 | 96 |

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 06/21/16

Date Received: 06/14/16

Project: Sea Mar, PO 2016-023A, F&BI 606248

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

Laboratory Code: 606196-02 (Duplicate)

| Analyte | Reporting
Units | Sample
Result
(Wet Wt) | Duplicate
Result
(Wet Wt) | RPD
(Limit 20) |
|--------------|--------------------|------------------------------|---------------------------------|-------------------|
| Benzene | mg/kg (ppm) | <0.02 | <0.02 | nm |
| Toluene | mg/kg (ppm) | <0.02 | <0.02 | nm |
| Ethylbenzene | mg/kg (ppm) | <0.02 | <0.02 | nm |
| Xylenes | mg/kg (ppm) | <0.06 | <0.06 | nm |
| Gasoline | mg/kg (ppm) | <2 | <2 | nm |

Laboratory Code: Laboratory Control Sample

| Analyte | Reporting
Units | Spike
Level | Percent | |
|--------------|--------------------|----------------|-----------------|------------------------|
| | | | Recovery
LCS | Acceptance
Criteria |
| Benzene | mg/kg (ppm) | 0.5 | 84 | 69-120 |
| Toluene | mg/kg (ppm) | 0.5 | 96 | 70-117 |
| Ethylbenzene | mg/kg (ppm) | 0.5 | 98 | 65-123 |
| Xylenes | mg/kg (ppm) | 1.5 | 98 | 66-120 |
| Gasoline | mg/kg (ppm) | 20 | 95 | 71-131 |

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 06/21/16

Date Received: 06/14/16

Project: Sea Mar, PO 2016-023A, F&BI 606248

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

Laboratory Code: 606248-04 (Duplicate)

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

Laboratory Code: Laboratory Control Sample

| Analyte | Reporting Units | Spike Level | Percent | |
|--------------|-----------------|-------------|--------------|---------------------|
| | | | Recovery LCS | Acceptance Criteria |
| Benzene | ug/L (ppb) | 50 | 94 | 65-118 |
| Toluene | ug/L (ppb) | 50 | 95 | 72-122 |
| Ethylbenzene | ug/L (ppb) | 50 | 96 | 73-126 |
| Xylenes | ug/L (ppb) | 150 | 94 | 74-118 |
| Gasoline | ug/L (ppb) | 1,000 | 99 | 69-134 |

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 06/21/16

Date Received: 06/14/16

Project: Sea Mar, PO 2016-023A, F&BI 606248

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

Laboratory Code: 606248-01 (Matrix Spike) Silica Gel

| Analyte | Reporting
Units | Spike
Level | Sample
Result
(Wet Wt) | Percent
Recovery
MS | Percent
Recovery
MSD | Acceptance
Criteria | RPD
(Limit 20) |
|-----------------|--------------------|----------------|------------------------------|---------------------------|----------------------------|------------------------|-------------------|
| Diesel Extended | mg/kg (ppm) | 5,000 | 75 | 137 vo | 123 | 73-135 | 11 |

Laboratory Code: Laboratory Control Sample Silica Gel

| Analyte | Reporting
Units | Spike
Level | Percent
Recovery
LCS | Acceptance
Criteria |
|-----------------|--------------------|----------------|----------------------------|------------------------|
| Diesel Extended | mg/kg (ppm) | 5,000 | 112 | 74-139 |

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 06/21/16

Date Received: 06/14/16

Project: Sea Mar, PO 2016-023A, F&BI 606248

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

Laboratory Code: Laboratory Control Sample

| Analyte | Reporting
Units | Spike
Level | Percent
Recovery
LCS | Percent
Recovery
LCSD | Acceptance
Criteria | RPD
(Limit 20) |
|-----------------|--------------------|----------------|----------------------------|-----------------------------|------------------------|-------------------|
| Diesel Extended | ug/L (ppb) | 2,500 | 101 | 117 | 63-142 | 15 |

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Data Qualifiers & Definitions

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

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

ca - The calibration results for the analyte were outside of acceptance criteria. The value reported is an estimate.

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

cf - The sample was centrifuged prior to analysis.

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

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

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

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

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

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

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

ip - Recovery fell outside of control limits. Compounds in the sample matrix interfered with the quantitation of the analyte.

j - The analyte concentration is reported below the lowest calibration standard. The value reported is an estimate.

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

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

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

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

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

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

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

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

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

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

606248

SAMPLE CHAIN OF CUSTODY NE 6/4/16

VI/VS1/A03

Report To Paul Riley & ANNA JORDAN

Company The Riley Group

Address 17522 Bothell Way NE

City, State, ZIP Bothell WA 98011

Phone 425-415-0551 Email priley@riley-group.com
ajordan@riley-group.com

| | |
|-------------------------------------|-------------------|
| SAMPLERS (signature)
ANNA JORDAN | |
| PROJECT NAME
Sea MAR | PO #
2016-023A |
| REMARKS | INVOICE TO |

Page # 1 of 1

TURNAROUND TIME

Standard Turnaround
 RUSH 24-HR

Rush charges authorized by:

SAMPLE DISPOSAL

Dispose after 30 days
 Archive Samples
 Other

| Sample ID | Lab ID | Date Sampled | Time Sampled | Sample Type | # of Jars | ANALYSES REQUESTED | | | | | | | | | | Notes | | |
|-----------|--------|--------------|--------------|-------------|-----------|--------------------|------------|--------------|---------------|---------------|----------------|----------------|--|--|--|-------|--|--|
| | | | | | | TPH-HCID | TPH-Diesel | TPH-Gasoline | BTEX by 8021B | VOCs by 8260C | SVOCs by 8270D | PAHs 8270D SIM | | | | | | |
| 3WSWS-6 | 01A-E | 6/14/16 | 7:40 | Soil | 5 | (X) | (X) | (X) | | | | | | | | | | |
| 3WSWG-6 | 02 | 6/14/16 | 7:50 | ↓ | ↓ | (X) | (X) | (X) | | | | | | | | | | |
| 3ESW2-6 | 03 | 6/14/16 | 8:30 | ↓ | ↓ | (X) | (X) | (X) | | | | | | | | | | |
| 3H20-1 | 04 ✓ | 6/14/16 | 7:35 | Her | X5 | (X) | (X) | (X) | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | |
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| | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | |

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

| SIGNATURE | PRINT NAME | COMPANY | DATE | TIME |
|---------------------|------------|---------|---------|------|
| | PAUL RILEY | RGT | 6/14/16 | 9:30 |
| | Erik Young | I-AB | 6/14/16 | 9:30 |
| Relinquished by: | | | | |
| Received by: | | | | |
| Relinquished by: | | | | |
| Received by: | | | | |
| Samples received at | | | 4 | °C |

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

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

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

June 16, 2016

Anna Jordan, Project Manager
The Riley Group, Inc.
17522 Bothell Way NE
Bothell, WA 98011

Dear Ms Jordan:

Included are the results from the testing of material submitted on June 14, 2016 from the 2016-023A, F&BI 606250 project. There are 5 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

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

Sincerely,

FRIEDMAN & BRUYA, INC.



Michael Erdahl
Project Manager

Enclosures
c: Kris Addis
TRG0616R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on June 14, 2016 by Friedman & Bruya, Inc. from the The Riley Group 2016-023A, F&BI 606250 project. Samples were logged in under the laboratory ID's listed below.

| <u>Laboratory ID</u> | <u>The Riley Group</u> |
|----------------------|------------------------|
| 606250 -01 | 1ESW1-5 |
| 606250 -02 | 1ESW2-6 |
| 606250 -03 | 1SSW1-6 |
| 606250 -04 | 1SSW2-6 |
| 606250 -05 | 1ESW3-8.5 |
| 606250 -06 | 1B1-9 |
| 606250 -07 | 1B2-9 |
| 606250 -08 | 1WSW1-8.5 |
| 606250 -09 | 1WSW2-7 |
| 606250 -10 | 1SESW1-6.5 |
| 606250 -11 | 1WSW4-8 |
| 606250 -12 | 1WSW3-9 |
| 606250 -13 | 1NSW1-9 |
| 606250 -14 | 1B3-9 |
| 606250 -15 | 1B4-10.5 |
| 606250 -16 | 1B5-10.5 |
| 606250 -17 | 1ESW4-10 |
| 606250 -18 | 1ESW5-7 |
| 606250 -19 | 1NSW2-7 |

The NWTPH-Dx matrix spike sample exceeded the acceptance criteria. The laboratory control sample met the acceptance criteria, therefore the result was likely due to matrix effect.

All other quality control requirements were acceptable.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 06/16/16
Date Received: 06/14/16
Project: 2016-023A, F&BI 606250
Date Extracted: 06/15/16
Date Analyzed: 06/15/16

**RESULTS FROM THE ANALYSIS OF SOIL SAMPLES
FOR TOTAL PETROLEUM HYDROCARBONS AS
DIESEL AND MOTOR OIL
USING METHOD NWTPH-Dx
Sample Extracts Passed Through a
Silica Gel Column Prior to Analysis
Results Reported on a Dry Weight Basis
Results Reported as mg/kg (ppm)**

| <u>Sample ID</u>
Laboratory ID | <u>Diesel Range</u>
(C ₁₀ -C ₂₅) | <u>Motor Oil Range</u>
(C ₂₅ -C ₃₆) | <u>Surrogate</u>
<u>(% Recovery)</u>
(Limit 48-168) |
|-----------------------------------|--|---|---|
| 1ESW2-6
606250-02 | 1,200 | <250 | 109 |
| 1SSW1-6
606250-03 | <50 | <250 | 98 |
| 1SSW2-6
606250-04 | <50 | <250 | 110 |
| 1ESW3-8.5
606250-05 | <50 | <250 | 104 |
| 1B1-9
606250-06 | <50 | <250 | 95 |
| 1WSW1-8.5
606250-08 | <50 | <250 | 104 |
| 1WSW2-7
606250-09 | <50 | <250 | 89 |
| 1SESW1-6.5
606250-10 | <50 | <250 | 99 |

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 06/16/16
Date Received: 06/14/16
Project: 2016-023A, F&BI 606250
Date Extracted: 06/15/16
Date Analyzed: 06/15/16

**RESULTS FROM THE ANALYSIS OF SOIL SAMPLES
FOR TOTAL PETROLEUM HYDROCARBONS AS
DIESEL AND MOTOR OIL
USING METHOD NWTPH-D_x
Sample Extracts Passed Through a
Silica Gel Column Prior to Analysis
Results Reported on a Dry Weight Basis
Results Reported as mg/kg (ppm)**

| <u>Sample ID</u>
Laboratory ID | <u>Diesel Range</u>
(C ₁₀ -C ₂₅) | <u>Motor Oil Range</u>
(C ₂₅ -C ₃₆) | <u>Surrogate</u>
<u>(% Recovery)</u>
(Limit 48-168) |
|-----------------------------------|--|---|---|
| 1WSW4-8
606250-11 | <50 | <250 | 100 |
| 1WSW3-9
606250-12 | <50 | <250 | 98 |
| 1NSW1-9
606250-13 | <50 | <250 | 91 |
| 1NSW2-7
606250-19 | <50 | <250 | 96 |
| Method Blank
06-1214 MB | <50 | <250 | 92 |

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 06/16/16

Date Received: 06/14/16

Project: 2016-023A, F&BI 606250

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

Laboratory Code: 606248-01 (Matrix Spike) Silica Gel

| Analyte | Reporting
Units | Spike
Level | Sample
Result
(Wet Wt) | Percent
Recovery
MS | Percent
Recovery
MSD | Acceptance
Criteria | RPD
(Limit 20) |
|-----------------|--------------------|----------------|------------------------------|---------------------------|----------------------------|------------------------|-------------------|
| Diesel Extended | mg/kg (ppm) | 5,000 | 75 | 137 vo | 123 | 73-135 | 11 |

Laboratory Code: Laboratory Control Sample Silica Gel

| Analyte | Reporting
Units | Spike
Level | Percent
Recovery
LCS | Acceptance
Criteria |
|-----------------|--------------------|----------------|----------------------------|------------------------|
| Diesel Extended | mg/kg (ppm) | 5,000 | 112 | 74-139 |

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Data Qualifiers & Definitions

- a - The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.
- b - The analyte was spiked at a level that was less than five times that present in the sample. Matrix spike recoveries may not be meaningful.
- ca - The calibration results for the analyte were outside of acceptance criteria. The value reported is an estimate.
- c - The presence of the analyte may be due to carryover from previous sample injections.
- cf - The sample was centrifuged prior to analysis.
- d - The sample was diluted. Detection limits were raised and surrogate recoveries may not be meaningful.
- dv - Insufficient sample volume was available to achieve normal reporting limits.
- f - The sample was laboratory filtered prior to analysis.
- fb - The analyte was detected in the method blank.
- fc - The compound is a common laboratory and field contaminant.
- hr - The sample and duplicate were reextracted and reanalyzed. RPD results were still outside of control limits. Variability is attributed to sample inhomogeneity.
- hs - Headspace was present in the container used for analysis.
- ht - The analysis was performed outside the method or client-specified holding time requirement.
- ip - Recovery fell outside of control limits. Compounds in the sample matrix interfered with the quantitation of the analyte.
- j - The analyte concentration is reported below the lowest calibration standard. The value reported is an estimate.
- J - The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.
- jl - The laboratory control sample(s) percent recovery and/or RPD were out of control limits. The reported concentration should be considered an estimate.
- js - The surrogate associated with the analyte is out of control limits. The reported concentration should be considered an estimate.
- lc - The presence of the analyte is likely due to laboratory contamination.
- L - The reported concentration was generated from a library search.
- nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.
- pc - The sample was received with incorrect preservation or in a container not approved by the method. The value reported should be considered an estimate.
- ve - The analyte response exceeded the valid instrument calibration range. The value reported is an estimate.
- vo - The value reported fell outside the control limits established for this analyte.
- x - The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

SAMPLE CHAIN OF CUSTODY

ME 06/14/16

A23

Report To 606250 Anna Jordan / kris Addis
 Company The Riley Group
 Address _____
 City, State, ZIP _____
 Phone _____ Email kaddis@riley-group.com

SAMPLERS (signature) Anna Jordan
 PROJECT NAME 2016-023A PO # _____
 REMARKS *silica gel INVOICE TO _____

Page # 1 of _____
 TURNAROUND TIME
 Standard Turnaround
 RUSH 24 hr. TAT
 Rush charges authorized by: _____
 SAMPLE DISPOSAL
 Dispose after 30 days
 Archive Samples
 Other _____

| Sample ID | Lab ID | Date Sampled | Time Sampled | Sample Type | # of Jars | ANALYSES REQUESTED | | | | | | | | | | Notes | | | |
|------------|--------|--------------|----------------------|-------------|-----------|--------------------|------------|--------------|---------------|---------------|----------------|----------------|--|--|--|-------|--|--|--|
| | | | | | | TPH-HCID | TPH-Diesel | TPH-Gasoline | BTEX by 8021B | VOCs by 8260C | SVOCs by 8270D | PAHs 8270D SIM | | | | | | | |
| IESW1-5 | 01 | 6/14/16 | 1234 955 | SOIL | 1 | | | | | | | | | | | | | | |
| IESW2-6 | 02 | ↓ | 1234 1000 | ↓ | ↓ | | X | | | | | | | | | | | | |
| ISSW1-6 | 03 | | 1234 1233 | | | | X | | | | | | | | | | | | |
| ISSW2-6 | 04 | | 1234 | | | | X | | | | | | | | | | | | |
| IESW3-8.5 | 05 | | 1236 | | | | X | | | | | | | | | | | | |
| IB1-9 | 06 | | 1237 | | | | X | | | | | | | | | | | | |
| IB2-9 | 07 | | 1240 | | | | X | | | | | | | | | | | | |
| IWSW1-8.5 | 08 | | 1241 | | | | X | | | | | | | | | | | | |
| IWSW2-7 | 09 | | 1243 | | | | X | | | | | | | | | | | | |
| ISESW1-6.5 | 10 | | 1248 | | | | X | | | | | | | | | | | | |

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

| SIGNATURE | PRINT NAME | COMPANY | DATE | TIME |
|-------------------------------------|--------------------|----------------|-------------|-------------|
| Relinquished by: <u>Anna Jordan</u> | <u>Anna Jordan</u> | <u>RG1</u> | <u>6/14</u> | <u>1530</u> |
| Received by: <u>James Bruya</u> | <u>James Bruya</u> | <u>F&B</u> | <u>6/14</u> | <u>1530</u> |
| Relinquished by: | | | | |
| Received by: | | | | |

Samples received at 4 °C

SAMPLE CHAIN OF CUSTODY

ME

06/14/16

A03

Report To Anna Jordan / Kris Addis
 Company _____
 Address _____
 City, State, ZIP _____
 Phone _____ Email kaddis@riley-group.com

SAMPLERS (signature) Anna Jordan

PROJECT NAME: 2060-023A PO #: _____

REMARKS: *silica gel INVOICE TO: _____

Page # 2 of _____

TURNAROUND TIME
 Standard Turnaround
 RUSH 24 hr TAT
 Rush charges authorized by: _____

SAMPLE DISPOSAL
 Dispose after 30 days
 Archive Samples
 Other _____

| Sample ID | Lab ID | Date Sampled | Time Sampled | Sample Type | # of Jars | ANALYSES REQUESTED | | | | | | | | | | Notes | | |
|-----------|--------|--------------|--------------|-------------|-----------|--------------------|------------|--------------|---------------|---------------|----------------|----------------|--|--|--|-------|--|------------------------|
| | | | | | | TPH-HCID | TPH-Diesel | TPH-Gasoline | BTEX by 8021B | VOCs by 8260C | SVOCs by 8270D | PAHs 8270D SIM | | | | | | |
| 1NSW4-8 | 11 | 6/14/16 | 1430 | SOIL | 1 | | X | | | | | | | | | | | |
| 1NSW3-9 | 12 | | 1432 | | | | X | | | | | | | | | | | |
| 1NSW1-9 | 13 | | 1435 | | | | X | | | | | | | | | | | |
| 1B3-9 | 14 | | 1440 | | | | | | | | | | | | | | | Labeled 1B3-10 |
| 1B4-10.5 | 15 | | 1458 | | | | X | | | | | | | | | | | Hold per AT 6/15/16 ME |
| 1B5-10.5 | 16 | | 1500 | | | | X | | | | | | | | | | | |
| 1ESW4-10 | 17 | | 1501 | | | | X | | | | | | | | | | | |
| 1ESW5-7 | 18 | | 1503 | | | | X | | | | | | | | | | | |
| 1NSW2-7 | 19 | ↓ | 1505 | ↓ | ↓ | | X | | | | | | | | | | | |

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

| SIGNATURE | PRINT NAME | COMPANY | DATE | TIME |
|-------------------------------------|-------------|---------|---------|------|
| Relinquished by: <u>Anna Jordan</u> | Anna Jordan | RBI | 6/14/16 | 1530 |
| Received by: <u>James Bruya</u> | James Bruya | RBI | 6/14 | 1530 |
| Relinquished by: | | | | |
| Received by: | | | | 4 °C |

Samples received at _____

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

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

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

June 21, 2016

Anna Jordan, Project Manager
The Riley Group, Inc.
17522 Bothell Way NE
Bothell, WA 98011

Dear Ms Jordan:

Included are the results from the testing of material submitted on June 15, 2016 from the 2016-023A, F&BI 606275 project. There are 4 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

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

Sincerely,

FRIEDMAN & BRUYA, INC.



Michael Erdahl
Project Manager

Enclosures
TRG0621R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on June 15, 2016 by Friedman & Bruya, Inc. from the The Riley Group 2016-023A, F&BI 606275 project. Samples were logged in under the laboratory ID's listed below.

| <u>Laboratory ID</u> | <u>The Riley Group</u> |
|----------------------|------------------------|
| 606275 -01 | 1ESW6-11 |
| 606275 -02 | 1NSW3-8.5 |
| 606275 -03 | 1NSW4-10 |
| 606275 -04 | 1B6-11 |
| 606275 -05 | 1B7-11.5 |
| 606275 -06 | 1NSW5-8 |
| 606275 -07 | 1ESW7-7.5 |
| 606275 -08 | 3B6-6 |

All quality control requirements were acceptable.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 06/21/16
 Date Received: 06/15/16
 Project: 2016-023A, F&BI 606275
 Date Extracted: 06/16/16
 Date Analyzed: 06/16/16

**RESULTS FROM THE ANALYSIS OF SOIL SAMPLES
 FOR TOTAL PETROLEUM HYDROCARBONS AS
 DIESEL AND MOTOR OIL
 USING METHOD NWTPH-Dx
 Sample Extracts Passed Through a
 Silica Gel Column Prior to Analysis
 Results Reported on a Dry Weight Basis
 Results Reported as mg/kg (ppm)**

| <u>Sample ID</u>
Laboratory ID | <u>Diesel Range</u>
(C ₁₀ -C ₂₅) | <u>Motor Oil Range</u>
(C ₂₅ -C ₃₆) | <u>Surrogate</u>
<u>(% Recovery)</u>
(Limit 48-168) |
|-----------------------------------|--|---|---|
| 1ESW6-11
606275-01 | <50 | <250 | 103 |
| 1NSW3-8.5
606275-02 | <50 | <250 | 108 |
| 1NSW4-10
606275-03 | <50 | <250 | 104 |
| 1B6-11
606275-04 | <50 | <250 | 107 |
| 1B7-11.5
606275-05 | <50 | <250 | 96 |
| 1ESW7-7.5
606275-07 | 300 | <250 | 107 |
| 3B6-6
606275-08 | <100 | <500 | 106 |
| Method Blank
06-1221 MB | <50 | <250 | 114 |

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 06/21/16

Date Received: 06/15/16

Project: 2016-023A, F&BI 606275

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

Laboratory Code: 606275-01 (Matrix Spike) Silica Gel

| Analyte | Reporting
Units | Spike
Level | Sample
Result
(Wet Wt) | Percent
Recovery
MS | Percent
Recovery
MSD | Acceptance
Criteria | RPD
(Limit 20) |
|-----------------|--------------------|----------------|------------------------------|---------------------------|----------------------------|------------------------|-------------------|
| Diesel Extended | mg/kg (ppm) | 5,000 | <50 | 122 | 135 | 73-135 | 10 |

Laboratory Code: Laboratory Control Sample Silica Gel

| Analyte | Reporting
Units | Spike
Level | Percent
Recovery
LCS | Acceptance
Criteria |
|-----------------|--------------------|----------------|----------------------------|------------------------|
| Diesel Extended | mg/kg (ppm) | 5,000 | 132 | 74-139 |

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Data Qualifiers & Definitions

- a - The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.
- b - The analyte was spiked at a level that was less than five times that present in the sample. Matrix spike recoveries may not be meaningful.
- ca - The calibration results for the analyte were outside of acceptance criteria. The value reported is an estimate.
- c - The presence of the analyte may be due to carryover from previous sample injections.
- cf - The sample was centrifuged prior to analysis.
- d - The sample was diluted. Detection limits were raised and surrogate recoveries may not be meaningful.
- dv - Insufficient sample volume was available to achieve normal reporting limits.
- f - The sample was laboratory filtered prior to analysis.
- fb - The analyte was detected in the method blank.
- fc - The compound is a common laboratory and field contaminant.
- hr - The sample and duplicate were reextracted and reanalyzed. RPD results were still outside of control limits. Variability is attributed to sample inhomogeneity.
- hs - Headspace was present in the container used for analysis.
- ht - The analysis was performed outside the method or client-specified holding time requirement.
- ip - Recovery fell outside of control limits. Compounds in the sample matrix interfered with the quantitation of the analyte.
- j - The analyte concentration is reported below the lowest calibration standard. The value reported is an estimate.
- J - The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.
- jl - The laboratory control sample(s) percent recovery and/or RPD were out of control limits. The reported concentration should be considered an estimate.
- js - The surrogate associated with the analyte is out of control limits. The reported concentration should be considered an estimate.
- lc - The presence of the analyte is likely due to laboratory contamination.
- L - The reported concentration was generated from a library search.
- nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.
- pc - The sample was received with incorrect preservation or in a container not approved by the method. The value reported should be considered an estimate.
- ve - The analyte response exceeded the valid instrument calibration range. The value reported is an estimate.
- vo - The value reported fell outside the control limits established for this analyte.
- x - The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

SAMPLE CHAIN OF CUSTODY

ME 06/15/16

A02

Report To Anna Jordan / Kris Addis
 Company The Riley Group
 Address _____
 City, State, ZIP _____
 Phone 425-415-0551 Email kaddis@riley-group.com

SAMPLERS (signature) Anna Jordan
 PROJECT NAME 2016-023A PO # _____
 REMARKS * silica gel INVOICE TO _____

Page # 1 of _____
TURNAROUND TIME
 Standard Turnaround
 RUSH 24 hr
 Rush charges authorized by: _____
SAMPLE DISPOSAL
 Dispose after 30 days
 Archive Samples
 Other _____

| Sample ID | Lab ID | Date Sampled | Time Sampled | Sample Type | # of Jars | ANALYSES REQUESTED | | | | | | | Notes |
|-----------|--------|--------------|--------------|-------------|-----------|--------------------|------------|--------------|---------------|---------------|----------------|----------------|-------|
| | | | | | | TPH-HCID | TPH-Diesel | TPH-Gasoline | BTEX by 8021B | VOCs by 8260C | SVOCs by 8270D | PAHs 8270D SIM | |
| 1ESW6-11 | 01 | 6/15/16 | 750 | | | X | | | | | | | |
| 1NSW3-8.5 | 02 | | 751 | | | X | | | | | | | |
| 1NSW4-10 | 03 | | 752 | | | X | | | | | | | |
| 1B6-11 | 04 | | 753 | | | X | | | | | | | |
| 1B7-11.5 | 05 | | 755 | | | X | | | | | | | |
| 1NSWS-8 | 06 | | 756 | | | | | | | | | | |
| 1ESW7-7.5 | 07 | | 758 | | | X | | | | | | | |
| 3B6-6 | 08 | | 940 | | | X | | | | | | | |

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

| SIGNATURE | PRINT NAME | COMPANY | DATE | TIME |
|-------------------------------------|-------------|---------------------------------|---------|------|
| Relinquished by: <u>Anna Jordan</u> | Anna Jordan | R61 | 6/15/16 | 3:30 |
| Received by: <u>James Bruya</u> | JAMES BRUYA | F&B | 6/15 | 3:30 |
| Relinquished by: | | | | |
| Received by: | | Samples received at <u>4</u> °C | | |

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

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

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

June 21, 2016

Kristin Addis, Project Manager
The Riley Group, Inc.
17522 Bothell Way NE
Bothell, WA 98011

Dear Ms Addis:

Included are the results from the testing of material submitted on June 16, 2016 from the 2016-023A, F&BI 606307 project. There are 11 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

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

Sincerely,

FRIEDMAN & BRUYA, INC.



Michael Erdahl
Project Manager

Enclosures
TRG0621R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on June 16, 2016 by Friedman & Bruya, Inc. from the The Riley Group 2016-023A, F&BI 606307 project. Samples were logged in under the laboratory ID's listed below.

| <u>Laboratory ID</u> | <u>The Riley Group</u> |
|----------------------|------------------------|
| 606307 -01 | 4B10-8 |
| 606307 -02 | 4ESW9-7.5 |
| 606307 -03 | 4SSW4-6 |
| 606307 -04 | 4SSW5-6 |
| 606307 -05 | 4ESW10-9 |
| 606307 -06 | 4SSW6-6 |
| 606307 -07 | 3ESW3-6 |
| 606307 -08 | 4SSW7-6 |
| 606307 -09 | 4B11-15 |
| 606307 -10 | 4B12-11 |
| 606307 -11 | 4B13-9 |
| 606307 -12 | 4SSW8-6 |
| 606307 -13 | 4WSW7-7.5 |
| 606307 -14 | 4WSW8-7.5 |
| 606307 -15 | 4SSW9-5.5 |
| 606307 -16 | 4NSW4-5.5 |
| 606307 -17 | 4B15-16 |
| 606307 -18 | 4B16-7 |
| 606307 -19 | 4WSW9-11.5 |
| 606307 -20 | 4B18-6 |
| 606307 -21 | 4SSW10-5.5 |
| 606307 -22 | 4WSW10-5 |
| 606307 -23 | 4NSW5-5.5 |
| 606307 -24 | 4NSW6-5.5 |
| 606307 -25 | 4SSW11-5.5 |
| 606307 -26 | 4B14-9 |

The benzene by 8021B reporting limit was lowered for several samples due to elevated moisture content. The data were qualified accordingly.

All quality control requirements were acceptable.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 06/21/16
 Date Received: 06/16/16
 Project: 2016-023A, F&BI 606307
 Date Extracted: 06/17/16
 Date Analyzed: 06/17/16

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

Results Reported on a Dry Weight Basis

Results Reported as mg/kg (ppm)

| <u>Sample ID</u>
Laboratory ID | <u>Benzene</u> | <u>Toluene</u> | <u>Ethyl Benzene</u> | <u>Total Xylenes</u> | <u>Gasoline Range</u> | <u>Surrogate (% Recovery)</u>
(Limit 50-132) |
|-----------------------------------|----------------|----------------|----------------------|----------------------|-----------------------|---|
| 4B10-8
606307-01 | <0.02 | <0.02 | <0.02 | <0.06 | 5.0 | 78 |
| 4ESW9-7.5
606307-02 | <0.02 | <0.02 | <0.02 | <0.06 | <2 | 79 |
| 4SSW4-6
606307-03 | <0.02 | <0.02 | <0.02 | <0.06 | 2.6 | 78 |
| 4ESW10-9
606307-05 | <0.02 | <0.02 | <0.02 | <0.06 | <2 | 76 |
| 4SSW6-6
606307-06 | <0.02 | <0.02 | <0.02 | <0.06 | <2 | 75 |
| 4SSW7-6
606307-08 | <0.02 | <0.02 | <0.02 | <0.06 | <2 | 76 |
| 4B11-15
606307-09 | <0.02 | <0.02 | <0.02 | <0.06 | <2 | 78 |
| 4B12-11
606307-10 | <0.02 | <0.02 | <0.02 | <0.06 | <2 | 94 |
| 4B13-9
606307-11 | <0.02 j | <0.04 | <0.04 | <0.12 | <4 | 98 |
| 4SSW8-6
606307-12 | <0.02 | <0.02 | <0.02 | <0.06 | <2 | 97 |

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 06/21/16
 Date Received: 06/16/16
 Project: 2016-023A, F&BI 606307
 Date Extracted: 06/17/16
 Date Analyzed: 06/17/16

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

Results Reported on a Dry Weight Basis

Results Reported as mg/kg (ppm)

| <u>Sample ID</u>
Laboratory ID | <u>Benzene</u> | <u>Toluene</u> | <u>Ethyl Benzene</u> | <u>Total Xylenes</u> | <u>Gasoline Range</u> | <u>Surrogate (% Recovery)</u>
(Limit 50-132) |
|-----------------------------------|----------------|----------------|----------------------|----------------------|-----------------------|---|
| 4WSW7-7.5
606307-13 | <0.02 | <0.02 | <0.02 | <0.06 | 2.9 | 98 |
| 4WSW8-7.5
606307-14 | <0.02 | <0.02 | <0.02 | <0.06 | <2 | 99 |
| 4SSW9-5.5
606307-15 | <0.02 | <0.02 | <0.02 | <0.06 | <2 | 96 |
| 4NSW4-5.5
606307-16 | <0.02 | <0.02 | <0.02 | <0.06 | <2 | 98 |
| 4B15-16
606307-17 | <0.02 | <0.02 | <0.02 | <0.06 | <2 | 95 |
| 4B16-7
606307-18 | <0.02 j | <0.04 | <0.04 | <0.12 | <4 | 94 |
| 4WSW9-11.5
606307-19 | <0.02 | <0.02 | <0.02 | <0.06 | <2 | 95 |
| 4B18-6
606307-20 | <0.02 | <0.02 | <0.02 | <0.06 | <2 | 94 |
| 4SSW10-5.5
606307-21 | <0.02 | <0.02 | <0.02 | <0.06 | <2 | 97 |
| 4WSW10-5
606307-22 | <0.02 | <0.02 | <0.02 | <0.06 | <2 | 77 |

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 06/21/16
 Date Received: 06/16/16
 Project: 2016-023A, F&BI 606307
 Date Extracted: 06/17/16
 Date Analyzed: 06/17/16

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

Results Reported on a Dry Weight Basis

Results Reported as mg/kg (ppm)

| <u>Sample ID</u>
Laboratory ID | <u>Benzene</u> | <u>Toluene</u> | <u>Ethyl Benzene</u> | <u>Total Xylenes</u> | <u>Gasoline Range</u> | <u>Surrogate (% Recovery)</u>
(Limit 50-132) |
|-----------------------------------|----------------|----------------|----------------------|----------------------|-----------------------|---|
| 4NSW5-5.5
606307-23 | <0.02 | <0.02 | <0.02 | <0.06 | <2 | 95 |
| 4NSW6-5.5
606307-24 | <0.02 | <0.02 | <0.02 | <0.06 | <2 | 93 |
| 4SSW11-5.5
606307-25 | <0.02 | <0.02 | 0.037 | <0.06 | 38 | 80 |
| 4B14-9
606307-26 | <0.02 j | <0.04 | <0.04 | <0.12 | <4 | 94 |
| Method Blank
06-1179 MB | <0.02 | <0.02 | <0.02 | <0.06 | <2 | 76 |
| Method Blank
06-1181 MB | <0.02 | <0.02 | <0.02 | <0.06 | <2 | 91 |

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 06/21/16
 Date Received: 06/16/16
 Project: 2016-023A, F&BI 606307
 Date Extracted: 06/17/16
 Date Analyzed: 06/17/16

**RESULTS FROM THE ANALYSIS OF SOIL SAMPLES
 FOR TOTAL PETROLEUM HYDROCARBONS AS
 DIESEL AND MOTOR OIL
 USING METHOD NWTPH-Dx
 Sample Extracts Passed Through a
 Silica Gel Column Prior to Analysis
 Results Reported on a Dry Weight Basis
 Results Reported as mg/kg (ppm)**

| <u>Sample ID</u>
Laboratory ID | <u>Diesel Range</u>
(C ₁₀ -C ₂₅) | <u>Motor Oil Range</u>
(C ₂₅ -C ₃₆) | <u>Surrogate</u>
<u>(% Recovery)</u>
(Limit 48-168) |
|-----------------------------------|--|---|---|
| 4ESW9-7.5
606307-02 | <50 | <250 | 126 |
| 4SSW4-6
606307-03 | <50 | <250 | 118 |
| 3ESW3-6
606307-07 | <50 | <250 | 120 |
| 4B13-9
606307-11 | <100 | <500 | 119 |
| 4SSW8-6
606307-12 | <50 | <250 | 113 |
| 4WSW7-7.5
606307-13 | 74 x | <250 | 113 |
| 4WSW8-7.5
606307-14 | <50 | <250 | 116 |
| 4SSW9-5.5
606307-15 | <50 | <250 | 120 |
| 4NSW4-5.5
606307-16 | <50 | <250 | 116 |

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 06/21/16
 Date Received: 06/16/16
 Project: 2016-023A, F&BI 606307
 Date Extracted: 06/17/16
 Date Analyzed: 06/17/16

**RESULTS FROM THE ANALYSIS OF SOIL SAMPLES
 FOR TOTAL PETROLEUM HYDROCARBONS AS
 DIESEL AND MOTOR OIL
 USING METHOD NWTPH-Dx
 Sample Extracts Passed Through a
 Silica Gel Column Prior to Analysis
 Results Reported on a Dry Weight Basis
 Results Reported as mg/kg (ppm)**

| <u>Sample ID</u>
Laboratory ID | <u>Diesel Range</u>
(C ₁₀ -C ₂₅) | <u>Motor Oil Range</u>
(C ₂₅ -C ₃₆) | <u>Surrogate</u>
<u>(% Recovery)</u>
(Limit 48-168) |
|-----------------------------------|--|---|---|
| 4B15-16
606307-17 | <50 | <250 | 125 |
| 4B16-7
606307-18 | <100 | <500 | 114 |
| 4WSW9-11.5
606307-19 | <50 | <250 | 115 |
| 4B18-6
606307-20 | <50 | <250 | 127 |
| 4SSW10-5.5
606307-21 | <50 | <250 | 116 |
| 4WSW10-5
606307-22 | <50 | <250 | 127 |
| 4NSW5-5.5
606307-23 | <50 | <250 | 116 |
| 4NSW6-5.5
606307-24 | <50 | <250 | 121 |
| 4SSW11-5.5
606307-25 | 1,100 | <250 | 117 |

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 06/21/16
Date Received: 06/16/16
Project: 2016-023A, F&BI 606307
Date Extracted: 06/17/16
Date Analyzed: 06/17/16

**RESULTS FROM THE ANALYSIS OF SOIL SAMPLES
FOR TOTAL PETROLEUM HYDROCARBONS AS
DIESEL AND MOTOR OIL
USING METHOD NWTPH-Dx
Sample Extracts Passed Through a
Silica Gel Column Prior to Analysis
Results Reported on a Dry Weight Basis
Results Reported as mg/kg (ppm)**

| <u>Sample ID</u>
Laboratory ID | <u>Diesel Range</u>
(C ₁₀ -C ₂₅) | <u>Motor Oil Range</u>
(C ₂₅ -C ₃₆) | <u>Surrogate</u>
<u>(% Recovery)</u>
(Limit 48-168) |
|-----------------------------------|--|---|---|
| 4B14-9
606307-26 | <100 | <500 | 121 |
| Method Blank
06-1231 MB | <50 | <250 | 112 |

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 06/21/16

Date Received: 06/16/16

Project: 2016-023A, F&BI 606307

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

Laboratory Code: 606306-03 (Duplicate)

| Analyte | Reporting
Units | Sample
Result
(Wet Wt) | Duplicate
Result
(Wet Wt) | RPD
(Limit 20) |
|--------------|--------------------|------------------------------|---------------------------------|-------------------|
| Benzene | mg/kg (ppm) | <0.02 | <0.02 | nm |
| Toluene | mg/kg (ppm) | <0.02 | <0.02 | nm |
| Ethylbenzene | mg/kg (ppm) | <0.02 | <0.02 | nm |
| Xylenes | mg/kg (ppm) | <0.06 | <0.06 | nm |
| Gasoline | mg/kg (ppm) | <2 | <2 | nm |

Laboratory Code: Laboratory Control Sample

| Analyte | Reporting
Units | Spike
Level | Percent | |
|--------------|--------------------|----------------|-----------------|------------------------|
| | | | Recovery
LCS | Acceptance
Criteria |
| Benzene | mg/kg (ppm) | 0.5 | 86 | 69-120 |
| Toluene | mg/kg (ppm) | 0.5 | 86 | 70-117 |
| Ethylbenzene | mg/kg (ppm) | 0.5 | 87 | 65-123 |
| Xylenes | mg/kg (ppm) | 1.5 | 86 | 66-120 |
| Gasoline | mg/kg (ppm) | 20 | 95 | 71-131 |

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 06/21/16

Date Received: 06/16/16

Project: 2016-023A, F&BI 606307

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

Laboratory Code: 606323-01 (Duplicate)

| Analyte | Reporting Units | Sample Result (Wet Wt) | Duplicate Result (Wet Wt) | RPD (Limit 20) |
|--------------|-----------------|------------------------|---------------------------|----------------|
| Benzene | mg/kg (ppm) | <0.02 | <0.02 | nm |
| Toluene | mg/kg (ppm) | <0.02 | <0.02 | nm |
| Ethylbenzene | mg/kg (ppm) | <0.02 | <0.02 | nm |
| Xylenes | mg/kg (ppm) | <0.06 | <0.06 | nm |
| Gasoline | mg/kg (ppm) | <2 | <2 | nm |

Laboratory Code: Laboratory Control Sample

| Analyte | Reporting Units | Spike Level | Percent | |
|--------------|-----------------|-------------|--------------|---------------------|
| | | | Recovery LCS | Acceptance Criteria |
| Benzene | mg/kg (ppm) | 0.5 | 77 | 66-121 |
| Toluene | mg/kg (ppm) | 0.5 | 83 | 72-128 |
| Ethylbenzene | mg/kg (ppm) | 0.5 | 83 | 69-132 |
| Xylenes | mg/kg (ppm) | 1.5 | 83 | 69-131 |
| Gasoline | mg/kg (ppm) | 20 | 100 | 61-153 |

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 06/21/16

Date Received: 06/16/16

Project: 2016-023A, F&BI 606307

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

Laboratory Code: 606307-03 (Matrix Spike) Silica Gel

| Analyte | Reporting
Units | Spike
Level | Sample
Result
(Wet Wt) | Percent
Recovery
MS | Percent
Recovery
MSD | Acceptance
Criteria | RPD
(Limit 20) |
|-----------------|--------------------|----------------|------------------------------|---------------------------|----------------------------|------------------------|-------------------|
| Diesel Extended | mg/kg (ppm) | 5,000 | <50 | 121 | 128 | 73-135 | 6 |

Laboratory Code: Laboratory Control Sample Silica Gel

| Analyte | Reporting
Units | Spike
Level | Percent
Recovery
LCS | Acceptance
Criteria |
|-----------------|--------------------|----------------|----------------------------|------------------------|
| Diesel Extended | mg/kg (ppm) | 5,000 | 125 | 74-139 |

Data Qualifiers & Definitions

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

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

ca - The calibration results for the analyte were outside of acceptance criteria. The value reported is an estimate.

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

cf - The sample was centrifuged prior to analysis.

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

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

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

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

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

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

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

ip - Recovery fell outside of control limits. Compounds in the sample matrix interfered with the quantitation of the analyte.

j - The analyte concentration is reported below the lowest calibration standard. The value reported is an estimate.

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

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

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

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

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

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

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

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

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

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

606307

SAMPLE CHAIN OF CUSTODY

ME 06/16/10

US3/A05
3

Report To Anna Jordan / Kris Addis

Company The Riley Group

Address _____

City, State, ZIP _____

Phone _____ Email KAddis@rileygroup.com

SAMPLERS (signature) Anna Jordan Page # _____ of _____

PROJECT NAME 2016-023A PO # _____

REMARKS *silica gel INVOICE TO _____

TURNAROUND TIME

Standard Turnaround

RUSH 24 hr.

Rush charges authorized by: _____

SAMPLE DISPOSAL

Dispose after 30 days

Archive Samples

Other _____

| Sample ID | Lab ID | Date Sampled | Time Sampled | Sample Type | # of Jars | ANALYSES REQUESTED | | | | | | | | | | Notes | |
|-----------|--------|--------------|--------------|-------------|----------------|--------------------|------------|--------------|---------------|---------------|----------------|----------------|--|--|--|-------|--|
| | | | | | | TPH-HCID | TPH-Diesel | TPH-Gasoline | BTEX by 8021B | VOCs by 8260C | SVOCs by 8270D | PAHs 8270D SIM | | | | | |
| 4B10-8 | 01 A-E | | 820 | | 5 | | X | X | X | | | | | | | | |
| 4ESW9-7.5 | 02 | | 825 | | 5 | | X | X | X | | | | | | | | |
| 4SSW4-6 | 03 | | 845 | | 5 | | X | X | X | | | | | | | | |
| 4SSW5-6 | 04 A-C | | 950 | | 4 ³ | | | | | | | | | | | | |
| 4ESW10-9 | 05 A-C | | 955 | | 4 ³ | | | X | X | | | | | | | | |
| 4SSW6-6 | 06 A-D | | 1000 | | 4 | | | X | X | | | | | | | | |
| 3ESW3-6 | 07 | | 1045 | | 1 | | X | | | | | | | | | | |
| 4SSW7-6 | 08 A-E | | 1125 | | 4 ⁵ | | | X | X | | | | | | | | |
| 4B11-15 | 09 A-D | | 1130 | | 4 | | | X | X | | | | | | | | |
| 4B12-11 | 10 A-D | | 1135 | | 4 | | | X | X | | | | | | | | |

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

| SIGNATURE | PRINT NAME | COMPANY | DATE | TIME |
|-------------------------------------|--------------------|----------------|----------------|------------|
| Relinquished by: <u>Anna Jordan</u> | <u>Anna Jordan</u> | <u>R61</u> | <u>6/16/10</u> | <u>340</u> |
| Received by: <u>James Bruya</u> | <u>James Bruya</u> | <u>F&B</u> | <u>6/16</u> | <u>340</u> |
| Relinquished by: _____ | _____ | _____ | _____ | _____ |
| Received by: _____ | _____ | _____ | _____ | _____ |

samples received at 3 °C

606307

SAMPLE CHAIN OF CUSTODY

ME 06/16/16

US3/AS5

Report To Anna Jordan/Kris Addis

SAMPLERS (signature) Anna Jordan

Page # 2 of 3

Company _____

PROJECT NAME
2016-023A

PO #

TURNAROUND TIME
 Standard Turnaround
 RUSH 24 hr
Rush charges authorized by: _____

Address _____

REMARKS
*silica gel

INVOICE TO

SAMPLE DISPOSAL
 Dispose after 30 days
 Archive Samples
 Other _____

City, State, ZIP _____

Phone _____ Email Kaddiseriley-group.com

| Sample ID | Lab ID | Date Sampled | Time Sampled | Sample Type | # of Jars | ANALYSES REQUESTED | | | | | | | | Notes | | |
|------------|--------|--------------|--------------|-------------|-----------|--------------------|------------|--------------|---------------|---------------|----------------|----------------|--|-------|--|-----------------------------|
| | | | | | | TPH-HCID | TPH-Diesel | TPH-Gasoline | BTEX by 8021B | VOCs by 8260C | SVOCs by 8270D | PAHs 8270D SIM | | | | |
| 4B13-2 | 11 A-E | 6/16/16 | 1215 | SOILS | 5 | X | X | X | X | | | | | | | |
| 4SSW8-6 | 12 | | 1300 | | | X | X | X | | | | | | | | |
| 4NSW7-7.5 | 13 | | 1305 | | | X | X | X | | | | | | | | |
| 4NSW8-7.5 | 14 | | 1335 | | | X | X | X | | | | | | | | |
| 4SSW9-5.5 | 15 | | 1355 | | | X | X | X | | | | | | | | |
| 4NSW4-5.5 | 16 | | 1400 | | | X | X | X | | | | | | | | |
| 4B15-16 | 17 | | 1403 | | | X | X | X | | | | | | | | |
| 4B16-7 | 18 | | 1405 | | | X | X | X | | | | | | | | |
| 4NSW9-11.5 | 19 | | 1410 | | | X | X | X | | | | | | | | |
| 4B17-6 | | | 1440 | | | X | X | X | | | | | | | | (RP) 6/16
DO NOT RECEIVE |

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

| SIGNATURE | PRINT NAME | COMPANY | DATE | TIME |
|-------------------------------------|--------------------|---------------------------------|----------------|------------|
| Relinquished by: <u>Anna Jordan</u> | <u>Anna Jordan</u> | <u>RBI</u> | <u>6/16/16</u> | <u>340</u> |
| Received by: <u>James Bruya</u> | <u>James Bruya</u> | <u>F&B</u> | <u>6/16</u> | <u>340</u> |
| Relinquished by: | | | | |
| Received by: | | Samples received at <u>3</u> °C | | |

606307

SAMPLE CHAIN OF CUSTODY ME 06/16/16

053/105

Report To Anna Jordan / Kris Addis

Page # 3 of 3

Company _____

Address _____

City, State, ZIP _____

Phone _____ Email kaddis@viley-group.com

SAMPLERS (signature) Anna Jordan

PROJECT NAME 2016-023A PO # _____

REMARKS *Silicagel INVOICE TO _____

TURNAROUND TIME

Standard Turnaround

RUSH 24 hr

Rush charges authorized by: _____

SAMPLE DISPOSAL

Dispose after 30 days

Archive Samples

Other _____

| Sample ID | Lab ID | Date Sampled | Time Sampled | Sample Type | # of Jars | ANALYSES REQUESTED | | | | | | | | Notes | |
|------------|--------|--------------|--------------|-------------|-----------|--------------------|------------|--------------|---------------|---------------|----------------|----------------|--|-------|------------------------|
| | | | | | | TPH-HCID | TPH-Diesel | TPH-Gasoline | BTEX by 8021B | VOCs by 8260C | SVOCs by 8270D | PAHs 8270D SIM | | | |
| 4B18-6 | 20 A-E | 6/16/16 | 1455 | SOIL | 5 | X | X | X | | | | | | | ✓ per Anna 6/17/16 |
| 4SSW10-S.S | 21 | ↓ | 1500 | ↓ | ↓ | X | X | X | | | | | | | |
| 4WSW10-S | 22 | ↓ | 1505 | ↓ | ↓ | X | X | X | | | | | | | |
| 4NSW5-S.S | 23 | ↓ | 1508 | ↓ | ↓ | X | X | X | | | | | | | |
| 4NSW6-S.S | 24 | ↓ | 1509 | ↓ | ↓ | X | X | X | | | | | | | |
| 4SSW11-S.S | 25 ✓ | ↓ | 1510 | ↓ | ↓ | X | X | X | | | | | | | |
| 4B14-9 | 26 A-E | 6/16/16 | 1330 | SOIL | 5 | ✓ | ✓ | ✓ | | | | | | | (60) 6/16 added at lab |

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

| SIGNATURE | | PRINT NAME | COMPANY | DATE | TIME |
|---------------------------------|--------------------|-------------|---------|---------|------|
| Relinquished by: | <u>Anna Jordan</u> | Anna Jordan | E61 | 6/16/16 | 340 |
| Received by: | <u>James Bruya</u> | James Bruya | F&B | 6/16 | 340 |
| Relinquished by: | | | | | |
| Received by: | | | | | |
| Samples received at <u>7</u> °C | | | | | |

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

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

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

June 22, 2016

Anna Jordan, Project Manager
The Riley Group, Inc.
17522 Bothell Way NE
Bothell, WA 98011

Dear Ms Jordan:

Included are the results from the testing of material submitted on June 17, 2016 from the 2016-023A, F&BI 606323 project. There are 6 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

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

Sincerely,

FRIEDMAN & BRUYA, INC.



Michael Erdahl
Project Manager

Enclosures
c: Kris Addis
TRG0622R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on June 17, 2016 by Friedman & Bruya, Inc. from the The Riley Group 2016-023A project. Samples were logged in under the laboratory ID's listed below.

| <u>Laboratory ID</u> | <u>The Riley Group</u> |
|----------------------|------------------------|
| 606323 -01 | 4B19-6 |

All quality control requirements were acceptable.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 06/22/16
Date Received: 06/17/16
Project: 2016-023A, F&BI 606323
Date Analyzed: 06/17/16

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

Results Reported on a Dry Weight Basis

Results Reported as mg/kg (ppm)

| <u>Sample ID</u>
Laboratory ID | <u>Benzene</u> | <u>Toluene</u> | <u>Ethyl
Benzene</u> | <u>Total
Xylenes</u> | <u>Gasoline
Range</u> | <u>Surrogate
(% Recovery)</u>
(Limit 50-150) |
|-----------------------------------|----------------|----------------|--------------------------|--------------------------|---------------------------|---|
| 4B19-6
606323-01 | <0.02 | <0.02 | <0.02 | <0.06 | <2 | 76 |
| Method Blank
06-17-16 21:42 | <0.02 | <0.02 | <0.02 | <0.06 | <2 | 91 |

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 06/22/16
Date Received: 06/17/16
Project: 2016-023A, F&BI 606323
Date Extracted: 06/17/16
Date Analyzed: 06/17/16

**RESULTS FROM THE ANALYSIS OF SOIL SAMPLES
FOR TOTAL PETROLEUM HYDROCARBONS AS
DIESEL AND MOTOR OIL
USING METHOD NWTPH-Dx
Sample Extracts Passed Through a
Silica Gel Column Prior to Analysis
Results Reported on a Dry Weight Basis
Results Reported as mg/kg (ppm)**

| <u>Sample ID</u>
Laboratory ID | <u>Diesel Range</u>
(C ₁₀ -C ₂₅) | <u>Motor Oil Range</u>
(C ₂₅ -C ₃₆) | <u>Surrogate</u>
<u>(% Recovery)</u>
(Limit 53-144) |
|-----------------------------------|--|---|---|
| 4B19-6
606323-01 | <50 | <250 | 139 |
| Method Blank
06-1230 MB | <50 | <250 | 117 |

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 06/22/16

Date Received: 06/17/16

Project: 2016-023A, F&BI 606323

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

Laboratory Code: 606323-01 (Duplicate)

| Analyte | Reporting
Units | Sample
Result
(Wet Wt) | Duplicate
Result
(Wet Wt) | RPD
(Limit 20) |
|--------------|--------------------|------------------------------|---------------------------------|-------------------|
| Benzene | mg/kg (ppm) | <0.02 | <0.02 | nm |
| Toluene | mg/kg (ppm) | <0.02 | <0.02 | nm |
| Ethylbenzene | mg/kg (ppm) | <0.02 | <0.02 | nm |
| Xylenes | mg/kg (ppm) | <0.06 | <0.06 | nm |
| Gasoline | mg/kg (ppm) | <2 | <2 | nm |

Laboratory Code: Laboratory Control Sample

| Analyte | Reporting
Units | Spike
Level | Percent | |
|--------------|--------------------|----------------|-----------------|------------------------|
| | | | Recovery
LCS | Acceptance
Criteria |
| Benzene | mg/kg (ppm) | 0.5 | 77 | 66-121 |
| Toluene | mg/kg (ppm) | 0.5 | 83 | 72-128 |
| Ethylbenzene | mg/kg (ppm) | 0.5 | 83 | 69-132 |
| Xylenes | mg/kg (ppm) | 1.5 | 83 | 69-131 |
| Gasoline | mg/kg (ppm) | 20 | 100 | 61-153 |

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 06/22/16

Date Received: 06/17/16

Project: 2016-023A, F&BI 606323

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

Laboratory Code: 606306-01 (Matrix Spike) Silica Gel

| Analyte | Reporting
Units | Spike
Level | Sample
Result
(Wet Wt) | Percent
Recovery
MS | Percent
Recovery
MSD | Acceptance
Criteria | RPD
(Limit 20) |
|-----------------|--------------------|----------------|------------------------------|---------------------------|----------------------------|------------------------|-------------------|
| Diesel Extended | mg/kg (ppm) | 5,000 | <50 | 113 | 119 | 64-133 | 5 |

Laboratory Code: Laboratory Control Sample Silica Gel

| Analyte | Reporting
Units | Spike
Level | Percent
Recovery
LCS | Acceptance
Criteria |
|-----------------|--------------------|----------------|----------------------------|------------------------|
| Diesel Extended | mg/kg (ppm) | 5,000 | 116 | 58-147 |

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Data Qualifiers & Definitions

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

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

ca - The calibration results for the analyte were outside of acceptance criteria. The value reported is an estimate.

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

cf - The sample was centrifuged prior to analysis.

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

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

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

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

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

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

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

ip - Recovery fell outside of control limits. Compounds in the sample matrix interfered with the quantitation of the analyte.

j - The analyte concentration is reported below the lowest calibration standard. The value reported is an estimate.

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

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

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

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

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

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

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

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

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

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

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

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

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

June 24, 2016

Anna Jordan, Project Manager
The Riley Group, Inc.
17522 Bothell Way NE
Bothell, WA 98011

Dear Ms Jordan:

Included are the results from the testing of material submitted on June 20, 2016 from the 2016-023A, F&BI 606343 project. There are 6 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

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

Sincerely,

FRIEDMAN & BRUYA, INC.



Michael Erdahl
Project Manager

Enclosures
TRG0624R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on June 20, 2016 by Friedman & Bruya, Inc. from the The Riley Group 2016-023A, F&BI 606343 project. Samples were logged in under the laboratory ID's listed below.

| <u>Laboratory ID</u> | <u>The Riley Group</u> |
|----------------------|------------------------|
| 606343 -01 | 4B20-6 |
| 606343 -02 | 4SSW15-4 |

All quality control requirements were acceptable.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 06/24/16
Date Received: 06/20/16
Project: 2016-023A, F&BI 606343
Date Extracted: 06/21/16
Date Analyzed: 06/21/16

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

Results Reported on a Dry Weight Basis

Results Reported as mg/kg (ppm)

| <u>Sample ID</u>
Laboratory ID | <u>Benzene</u> | <u>Toluene</u> | <u>Ethyl
Benzene</u> | <u>Total
Xylenes</u> | <u>Gasoline
Range</u> | <u>Surrogate
(% Recovery)</u>
(Limit 50-150) |
|-----------------------------------|----------------|----------------|--------------------------|--------------------------|---------------------------|---|
| 4B20-6
606343-01 | <0.02 | <0.02 | <0.02 | <0.06 | 5.4 | 75 |
| 4SSW15-4
606343-02 | <0.02 | <0.02 | <0.02 | <0.06 | 4.5 | 73 |
| Method Blank
06-1242 MB | <0.02 | <0.02 | <0.02 | <0.06 | <2 | 73 |

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 06/24/16
Date Received: 06/20/16
Project: 2016-023A, F&BI 606343
Date Extracted: 06/20/16
Date Analyzed: 06/20/16

**RESULTS FROM THE ANALYSIS OF SOIL SAMPLES
FOR TOTAL PETROLEUM HYDROCARBONS AS
DIESEL AND MOTOR OIL
USING METHOD NWTPH-Dx
Sample Extracts Passed Through a
Silica Gel Column Prior to Analysis
Results Reported on a Dry Weight Basis
Results Reported as mg/kg (ppm)**

| <u>Sample ID</u>
Laboratory ID | <u>Diesel Range</u>
(C ₁₀ -C ₂₅) | <u>Motor Oil Range</u>
(C ₂₅ -C ₃₆) | <u>Surrogate</u>
<u>(% Recovery)</u>
(Limit 53-144) |
|-----------------------------------|--|---|---|
| 4B20-6
606343-01 | <50 | <250 | 88 |
| 4SSW15-4
606343-02 | <50 | <250 | 96 |
| Method Blank
06-1236 MB | <50 | <250 | 98 |

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 06/24/16

Date Received: 06/20/16

Project: 2016-023A, F&BI 606343

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

Laboratory Code: 606317-03 (Duplicate)

| Analyte | Reporting Units | Sample Result (Wet Wt) | Duplicate Result (Wet Wt) | RPD (Limit 20) |
|--------------|-----------------|------------------------|---------------------------|----------------|
| Benzene | mg/kg (ppm) | <0.02 | <0.02 | nm |
| Toluene | mg/kg (ppm) | <0.02 | <0.02 | nm |
| Ethylbenzene | mg/kg (ppm) | <0.02 | <0.02 | nm |
| Xylenes | mg/kg (ppm) | <0.06 | <0.06 | nm |
| Gasoline | mg/kg (ppm) | <2 | <2 | nm |

Laboratory Code: Laboratory Control Sample

| Analyte | Reporting Units | Spike Level | Percent | |
|--------------|-----------------|-------------|--------------|---------------------|
| | | | Recovery LCS | Acceptance Criteria |
| Benzene | mg/kg (ppm) | 0.5 | 82 | 69-120 |
| Toluene | mg/kg (ppm) | 0.5 | 89 | 70-117 |
| Ethylbenzene | mg/kg (ppm) | 0.5 | 93 | 65-123 |
| Xylenes | mg/kg (ppm) | 1.5 | 95 | 66-120 |
| Gasoline | mg/kg (ppm) | 20 | 115 | 71-131 |

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 06/24/16

Date Received: 06/20/16

Project: 2016-023A, F&BI 606343

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

Laboratory Code: 606340-01 (Matrix Spike) Silica Gel

| Analyte | Reporting
Units | Spike
Level | Sample
Result
(Wet Wt) | Percent
Recovery
MS | Percent
Recovery
MSD | Acceptance
Criteria | RPD
(Limit 20) |
|-----------------|--------------------|----------------|------------------------------|---------------------------|----------------------------|------------------------|-------------------|
| Diesel Extended | mg/kg (ppm) | 5,000 | <50 | 104 | 110 | 64-133 | 6 |

Laboratory Code: Laboratory Control Sample Silica Gel

| Analyte | Reporting
Units | Spike
Level | Percent
Recovery
LCS | Acceptance
Criteria |
|-----------------|--------------------|----------------|----------------------------|------------------------|
| Diesel Extended | mg/kg (ppm) | 5,000 | 107 | 58-147 |

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Data Qualifiers & Definitions

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

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

ca - The calibration results for the analyte were outside of acceptance criteria. The value reported is an estimate.

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

cf - The sample was centrifuged prior to analysis.

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

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

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

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

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

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

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

ip - Recovery fell outside of control limits. Compounds in the sample matrix interfered with the quantitation of the analyte.

j - The analyte concentration is reported below the lowest calibration standard. The value reported is an estimate.

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

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

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

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

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

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

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

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

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

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

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

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

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

June 24, 2016

Anna Jordan, Project Manager
The Riley Group, Inc.
17522 Bothell Way NE
Bothell, WA 98011

Dear Ms Jordan:

Included are the results from the testing of material submitted on June 20, 2016 from the 2016-023A, F&BI 606340 project. There are 6 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

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

Sincerely,

FRIEDMAN & BRUYA, INC.



Michael Erdahl
Project Manager

Enclosures:

c:Kris Addis, Paul Riley
TRG0624R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on June 20, 2016 by Friedman & Bruya, Inc. from the The Riley Group 2016-023A, F&BI 606340 project. Samples were logged in under the laboratory ID's listed below.

| <u>Laboratory ID</u> | <u>The Riley Group</u> |
|----------------------|------------------------|
| 606340 -01 | 4SSW12-5.5 |
| 606340 -02 | 4SSW13-4 |
| 606340 -03 | 4SSW14-4 |

All quality control requirements were acceptable.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 06/24/16
Date Received: 06/20/16
Project: 2016-023A, F&BI 606340
Date Extracted: 06/20/16
Date Analyzed: 06/20/16

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

Results Reported on a Dry Weight Basis

Results Reported as mg/kg (ppm)

| <u>Sample ID</u>
Laboratory ID | <u>Benzene</u> | <u>Toluene</u> | <u>Ethyl
Benzene</u> | <u>Total
Xylenes</u> | <u>Gasoline
Range</u> | <u>Surrogate
(% Recovery)</u>
(Limit 50-150) |
|-----------------------------------|----------------|----------------|--------------------------|--------------------------|---------------------------|---|
| 4SSW12-5.5
606340-01 | <0.02 | <0.02 | <0.02 | <0.06 | <2 | 74 |
| 4SSW14-4
606340-03 | <0.02 | <0.02 | <0.02 | <0.06 | <2 | 74 |
| Method Blank
06-1180 MB | <0.02 | <0.02 | <0.02 | <0.06 | <2 | 75 |

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 06/24/16
Date Received: 06/20/16
Project: 2016-023A, F&BI 606340
Date Extracted: 06/20/16
Date Analyzed: 06/20/16

**RESULTS FROM THE ANALYSIS OF SOIL SAMPLES
FOR TOTAL PETROLEUM HYDROCARBONS AS
DIESEL AND MOTOR OIL
USING METHOD NWTPH-Dx
Sample Extracts Passed Through a
Silica Gel Column Prior to Analysis
Results Reported on a Dry Weight Basis
Results Reported as mg/kg (ppm)**

| <u>Sample ID</u>
Laboratory ID | <u>Diesel Range</u>
(C ₁₀ -C ₂₅) | <u>Motor Oil Range</u>
(C ₂₅ -C ₃₆) | <u>Surrogate</u>
<u>(% Recovery)</u>
(Limit 53-144) |
|-----------------------------------|--|---|---|
| 4SSW12-5.5
606340-01 | <50 | <250 | 89 |
| 4SSW13-4
606340-03 | <50 | <250 | 88 |
| Method Blank
06-1236 MB | <50 | <250 | 98 |

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 06/24/16

Date Received: 06/20/16

Project: 2016-023A, F&BI 606340

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

Laboratory Code: 606301-05 (Duplicate)

| Analyte | Reporting Units | Sample Result (Wet Wt) | Duplicate Result (Wet Wt) | RPD (Limit 20) |
|--------------|-----------------|------------------------|---------------------------|----------------|
| Benzene | mg/kg (ppm) | <0.02 | <0.02 | nm |
| Toluene | mg/kg (ppm) | <0.02 | <0.02 | nm |
| Ethylbenzene | mg/kg (ppm) | <0.02 | <0.02 | nm |
| Xylenes | mg/kg (ppm) | <0.06 | <0.06 | nm |
| Gasoline | mg/kg (ppm) | <2 | <2 | nm |

Laboratory Code: Laboratory Control Sample

| Analyte | Reporting Units | Spike Level | Percent | |
|--------------|-----------------|-------------|--------------|---------------------|
| | | | Recovery LCS | Acceptance Criteria |
| Benzene | mg/kg (ppm) | 0.5 | 97 | 69-120 |
| Toluene | mg/kg (ppm) | 0.5 | 98 | 70-117 |
| Ethylbenzene | mg/kg (ppm) | 0.5 | 99 | 65-123 |
| Xylenes | mg/kg (ppm) | 1.5 | 98 | 66-120 |
| Gasoline | mg/kg (ppm) | 20 | 100 | 71-131 |

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 06/24/16

Date Received: 06/20/16

Project: 2016-023A, F&BI 606340

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

Laboratory Code: 606340-01 (Matrix Spike) Silica Gel

| Analyte | Reporting
Units | Spike
Level | Sample
Result
(Wet Wt) | Percent
Recovery
MS | Percent
Recovery
MSD | Acceptance
Criteria | RPD
(Limit 20) |
|-----------------|--------------------|----------------|------------------------------|---------------------------|----------------------------|------------------------|-------------------|
| Diesel Extended | mg/kg (ppm) | 5,000 | <50 | 104 | 110 | 64-133 | 6 |

Laboratory Code: Laboratory Control Sample Silica Gel

| Analyte | Reporting
Units | Spike
Level | Percent
Recovery
LCS | Acceptance
Criteria |
|-----------------|--------------------|----------------|----------------------------|------------------------|
| Diesel Extended | mg/kg (ppm) | 5,000 | 107 | 58-147 |

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Data Qualifiers & Definitions

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

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

ca - The calibration results for the analyte were outside of acceptance criteria. The value reported is an estimate.

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

cf - The sample was centrifuged prior to analysis.

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

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

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

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

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

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

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

ip - Recovery fell outside of control limits. Compounds in the sample matrix interfered with the quantitation of the analyte.

j - The analyte concentration is reported below the lowest calibration standard. The value reported is an estimate.

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

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

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

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

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

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

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

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

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

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

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

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

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

June 24, 2016

Anna Jordan, Project Manager
The Riley Group, Inc.
17522 Bothell Way NE
Bothell, WA 98011

Dear Ms Jordan:

Included are the results from the testing of material submitted on June 21, 2016 from the 2016-023A, F&BI 606370 project. There are 6 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

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

Sincerely,

FRIEDMAN & BRUYA, INC.



Michael Erdahl
Project Manager

Enclosures
TRG0624R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on June 21, 2016 by Friedman & Bruya, Inc. from the The Riley Group 2016-023A, F&BI 606370 project. Samples were logged in under the laboratory ID's listed below.

| <u>Laboratory ID</u> | <u>The Riley Group</u> |
|----------------------|------------------------|
| 606370 -01 | 4TP1-6 |
| 606370 -02 | 4TP2-6 |

All quality control requirements were acceptable.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 06/24/16
Date Received: 06/21/16
Project: 2016-023A, F&BI 606370
Date Extracted: 06/21/16
Date Analyzed: 06/21/16

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

Results Reported on a Dry Weight Basis

Results Reported as mg/kg (ppm)

| <u>Sample ID</u>
Laboratory ID | <u>Benzene</u> | <u>Toluene</u> | <u>Ethyl Benzene</u> | <u>Total Xylenes</u> | <u>Gasoline Range</u> | <u>Surrogate (% Recovery)</u>
(Limit 50-132) |
|-----------------------------------|----------------|----------------|----------------------|----------------------|-----------------------|---|
| 4TP1-6
606370-01 | <0.02 | <0.02 | <0.02 | <0.06 | <2 | 92 |
| 4TP2-6
606370-02 | <0.02 | <0.02 | <0.02 | <0.06 | 3.1 | 95 |
| Method Blank
06-1242 MB | <0.02 | <0.02 | <0.02 | <0.06 | <2 | 73 |

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 06/24/16
Date Received: 06/21/16
Project: 2016-023A, F&BI 606370
Date Extracted: 06/21/16
Date Analyzed: 06/21/16

**RESULTS FROM THE ANALYSIS OF SOIL SAMPLES
FOR TOTAL PETROLEUM HYDROCARBONS AS
DIESEL AND MOTOR OIL
USING METHOD NWTPH-Dx
Sample Extracts Passed Through a
Silica Gel Column Prior to Analysis
Results Reported on a Dry Weight Basis
Results Reported as mg/kg (ppm)**

| <u>Sample ID</u>
Laboratory ID | <u>Diesel Range</u>
(C ₁₀ -C ₂₅) | <u>Motor Oil Range</u>
(C ₂₅ -C ₃₆) | <u>Surrogate</u>
(% Recovery)
(Limit 56-165) |
|-----------------------------------|--|---|--|
| 4TP1-6
606370-01 | <50 | <250 | 121 |
| 4TP2-6
606370-02 | 590 x | 3,100 | 104 |
| Method Blank
06-1236 MB2 | <50 | <250 | 115 |

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 06/24/16

Date Received: 06/21/16

Project: 2016-023A, F&BI 606370

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

Laboratory Code: 606317-03 (Duplicate)

| Analyte | Reporting Units | Sample Result (Wet Wt) | Duplicate Result (Wet Wt) | RPD (Limit 20) |
|--------------|-----------------|------------------------|---------------------------|----------------|
| Benzene | mg/kg (ppm) | <0.02 | <0.02 | nm |
| Toluene | mg/kg (ppm) | <0.02 | <0.02 | nm |
| Ethylbenzene | mg/kg (ppm) | <0.02 | <0.02 | nm |
| Xylenes | mg/kg (ppm) | <0.06 | <0.06 | nm |
| Gasoline | mg/kg (ppm) | <2 | <2 | nm |

Laboratory Code: Laboratory Control Sample

| Analyte | Reporting Units | Spike Level | Percent | |
|--------------|-----------------|-------------|--------------|---------------------|
| | | | Recovery LCS | Acceptance Criteria |
| Benzene | mg/kg (ppm) | 0.5 | 82 | 69-120 |
| Toluene | mg/kg (ppm) | 0.5 | 89 | 70-117 |
| Ethylbenzene | mg/kg (ppm) | 0.5 | 93 | 65-123 |
| Xylenes | mg/kg (ppm) | 1.5 | 95 | 66-120 |
| Gasoline | mg/kg (ppm) | 20 | 115 | 71-131 |

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 06/24/16

Date Received: 06/21/16

Project: 2016-023A, F&BI 606370

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

Laboratory Code: 606340-01 (Matrix Spike) Silica Gel

| Analyte | Reporting
Units | Spike
Level | Sample
Result
(Wet Wt) | Percent
Recovery
MS | Percent
Recovery
MSD | Acceptance
Criteria | RPD
(Limit 20) |
|-----------------|--------------------|----------------|------------------------------|---------------------------|----------------------------|------------------------|-------------------|
| Diesel Extended | mg/kg (ppm) | 5,000 | <50 | 104 | 110 | 64-133 | 6 |

Laboratory Code: Laboratory Control Sample Silica Gel

| Analyte | Reporting
Units | Spike
Level | Percent
Recovery
LCS | Acceptance
Criteria |
|-----------------|--------------------|----------------|----------------------------|------------------------|
| Diesel Extended | mg/kg (ppm) | 5,000 | 107 | 58-147 |

Data Qualifiers & Definitions

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

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

ca - The calibration results for the analyte were outside of acceptance criteria. The value reported is an estimate.

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

cf - The sample was centrifuged prior to analysis.

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

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

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

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

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

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

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

ip - Recovery fell outside of control limits. Compounds in the sample matrix interfered with the quantitation of the analyte.

j - The analyte concentration is reported below the lowest calibration standard. The value reported is an estimate.

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

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

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

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

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

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

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

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

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

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

Boring/Monitoring Well Log

| | | | | | |
|---|-------------------------|---------------------------------------|------------------------------|-------------------------------|--|
| Project Name: Dominic's Plaza Phase III | | | Sheet | | |
| Job No.:
2007-234C | Logged By:
S. Howell | Start Date:
1/2/2008 | Completion Date:
1/2/2008 | Boring No.:
B1/MW-1 | |
| Drilling Contractor:
ESN | | Drilling Method:
Direct Push Probe | | Sampling Method: | |
| Ground Surface Elevation: | | Hole Completion:
Well | | Surface Conditions:
Gravel | |

| PID Reading (ppm) | Sample ID | Sample Interval | Drive Interval | WELL | GW Depth | Depth | Soil Description | Boring Completion |
|-------------------|-----------|-----------------|----------------|------|----------|-------|---------------------------------|-------------------|
| | | | | | | 1 | Brown, silty, gravelly sand | |
| | | | | | | 2 | | |
| | | | | | | 3 | | |
| 0.0 | B1-4 | | | | | 4 | Gray-brown sandy, gravelly silt | |
| | | | | | | 5 | | |
| | | | | ▼ | | 6 | | |
| 0.0 | B1-8 | | | | | 8 | Grey, silty fine sand | |
| | | | | | | 9 | | |
| 0.0 | B1-10 | | | | | 10 | Boring terminated @ 10' bgs | |
| | | | | | | 11 | | |
| | | | | | | 12 | | |
| | | | | | | 13 | | |
| | | | | | | 14 | | |
| | | | | | | 15 | | |
| | | | | | | 16 | | |
| | | | | | | 17 | | |
| | | | | | | 18 | | |
| | | | | | | 19 | | |
| | | | | | | 20 | | |
| | | | | | | | Boring terminated @ 20' bgs | |

Notes: (bgs - below ground surface)
 ▼ - Groundwater encountered during drilling.

The Riley Group, Inc.
 17522 Bothell Way NE, Suite A
 Bothell, Washington 98011
 Phone: 425.415.0551 Fax: 425.415.0311

Boring/Monitoring Well Log

| | | | | | |
|---|----------------------|------------------------------------|---------------------------|-----------------------------|--|
| Project Name: Dominic's Plaza Phase III | | | | Sheet | |
| Job No.: 2007-234C | Logged By: S. Howell | Start Date: 1/2/2008 | Completion Date: 1/2/2008 | Boring No.: B2/MW-2 | |
| Drilling Contractor: ESN | | Drilling Method: Direct Push Probe | | Sampling Method: | |
| Ground Surface Elevation: | | Hole Completion: Well | | Surface Conditions: Asphalt | |

| PID Reading (ppm) | Sample ID | Sample Interval | Drive Interval | WELL | GW Depth | Depth | Soil Description | Boring Completion | |
|-------------------|-----------|-----------------|----------------|------|----------|-------|-----------------------------|----------------------------|--|
| | | | | | | 1 | Gray, sandy silt | | |
| | | | | | 2 | | | | |
| | | | | | 3 | | | | |
| 0.0 | B2-4 | | | | 4 | | | | |
| | | | | | 5 | | | | |
| | | | | | 6 | | | | |
| | | | | | 7 | | | | |
| 0.0 | B2-8 | | | | 8 | | | | |
| | | | | | | | 9 | Boring terminated @ 8' bgs | |
| | | | | | 10 | | | | |
| | | | | | 11 | | | | |
| | | | | | 12 | | | | |
| | | | | | 13 | | | | |
| | | | | | 14 | | | | |
| | | | | | 15 | | | | |
| | | | | | 16 | | | | |
| | | | | | 17 | | | | |
| | | | | | 18 | | | | |
| | | | | | 19 | | | | |
| | | | | | 20 | | | | |
| | | | | | | | Boring terminated @ 20' bgs | | |

Notes: (bgs - below ground surface)
 - Groundwater encountered during drilling.

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Boring/Monitoring Well Log

| | | | | | |
|---|----------------------|--|------------------------------------|---------------------------|-----------------------------|
| Project Name: Dominic's Plaza Phase III | | | | Sheet | |
| Job No.: 2007-234C | Logged By: S. Howell | | Start Date: 1/2/2008 | Completion Date: 1/2/2008 | Boring No.: B3/MW-3 |
| Drilling Contractor: ESN | | | Drilling Method: Direct Push Probe | | Sampling Method: |
| Ground Surface Elevation: | | | Hole Completion: Well | | Surface Conditions: Asphalt |

| PID Reading (ppm) | Sample ID | Sample Interval | Drive Interval | WELL | GW Depth | Depth | Soil Description | Boring Completion |
|-------------------|-----------|-----------------|----------------|------|----------|-----------------------------|----------------------------------|-------------------|
| | | | | | | 1 | Light brown silty, gravelly sand | |
| | | | | | 2 | | | |
| | | | | | 3 | | Grey-brown silty fine sand | |
| 0.0 | B3-4 | | | | 4 | | | |
| | | | | | 5 | | | |
| | | | | | 6 | ▼ | | |
| | | | | | 7 | | | |
| 0.0 | B3-8 | | | | 8 | | Brown silty gravelly sand | |
| | | | | | 9 | | | |
| | | | | | 10 | | | |
| 0.0 | B3-12 | | | | 11 | | | |
| | | | | | 12 | | Boring terminated @ 12' bgs | |
| | | | | 13 | | | | |
| | | | | 14 | | | | |
| | | | | 15 | | | | |
| | | | | 16 | | | | |
| | | | | 17 | | | | |
| | | | | 18 | | | | |
| | | | | 19 | | | | |
| | | | | 20 | | Boring terminated @ 20' bgs | | |

Notes: (bgs - below ground surface)
 ▼ - Groundwater encountered during drilling.

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Boring/Monitoring Well Log

| | | | | | |
|---|----------------------|--|------------------------------------|---------------------------|-----------------------------|
| Project Name: Dominic's Plaza Phase III | | | | Sheet | |
| Job No.: 2007-234C | Logged By: S. Howell | | Start Date: 1/2/2008 | Completion Date: 1/2/2008 | Boring No.: B4/MW-4 |
| Drilling Contractor: ESN | | | Drilling Method: Direct Push Probe | | Sampling Method: |
| Ground Surface Elevation: | | | Hole Completion: Well | | Surface Conditions: Asphalt |

| PID Reading (ppm) | Sample ID | Sample Interval | Drive Interval | WELL | GW Depth | Depth | Soil Description | Boring Completion |
|-------------------|-----------|-----------------|----------------|------|----------|-----------------------------|------------------------------|-------------------|
| | | | | | | 1 | Moist, gray-brown silty sand | |
| | | | | | 2 | | | |
| | | | | | 3 | | | |
| 0.0 | B4-4 | | | | 4 | No Recovery | | |
| | | | | | 5 | | | |
| | | | | | 6 | | | |
| 0.0 | B4-8 | | | | 7 | No Recovery | | |
| | | | | | 8 | | | |
| | | | | | 9 | | | |
| | | | | | 10 | No Recovery | | |
| | | | | | 11 | | | |
| 0.0 | B4-12 | | | | 12 | | Boring terminated @ 12' bgs | |
| | | | | | 13 | | | |
| | | | | | 14 | | | |
| | | | | | 15 | | | |
| | | | | | 16 | | | |
| | | | | | 17 | | | |
| | | | | | 18 | | | |
| | | | | | 19 | | | |
| | | | | | 20 | Boring terminated @ 20' bgs | | |

Notes: (bgs - below ground surface)
 - Groundwater encountered during drilling.


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Boring/Monitoring Well Log

| | | | | | |
|---|-------------------------|---------------------------------------|------------------------------|--------------------------------|--|
| Project Name: Dominic's Plaza Phase III | | | | Sheet | |
| Job No.:
2007-234C | Logged By:
S. Howell | Start Date:
1/2/2008 | Completion Date:
1/2/2008 | Boring No.:
MW-5 | |
| Drilling Contractor:
ESN | | Drilling Method:
Direct Push Probe | | Sampling Method:
N/A | |
| Ground Surface Elevation: | | Hole Completion:
Well | | Surface Conditions:
Asphalt | |

| PID Reading (ppm) | Sample ID | Sample Interval | Drive Interval | WELL | GW Depth | Depth | Soil Description | Boring Completion |
|-------------------|-----------|-----------------|----------------|------|----------|-------|--|-------------------|
| | | | | | | 1 | | |
| | | | | | | 2 | | |
| | | | | | | 3 | | |
| | | | | | | 4 | | |
| | | | | | | 5 | | |
| | | | | | | 6 | | |
| | | | | | | 7 | | |
| | | | | | | 8 | | |
| | | | | | | 9 | | |
| | | | | | | 10 | No samples collected. Well point driven by probe only. | |
| | | | | | | 11 | | |
| | | | | | | 12 | | |
| | | | | | | 13 | | |
| | | | | | | 14 | | |
| | | | | | | 15 | | |
| | | | | | | 16 | | |
| | | | | | | 17 | | |
| | | | | | | 18 | | |
| | | | | | | 19 | | |
| | | | | | | 20 | | |

Boring terminated @ 20' bgs

Notes: (bgs - below ground surface)
 - Groundwater encountered during drilling.


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Boring/Monitoring Well Log

| | | | | | |
|---|----------------------|--|------------------------------------|---------------------------|-----------------------------|
| Project Name: Dominic's Plaza Phase III | | | | Sheet | |
| Job No.: 2007-234C | Logged By: S. Howell | | Start Date: 1/2/2008 | Completion Date: 1/2/2008 | Boring No.: MW-6 |
| Drilling Contractor: ESN | | | Drilling Method: Direct Push Probe | | Sampling Method: N/A |
| Ground Surface Elevation: | | | Hole Completion: Well | | Surface Conditions: Asphalt |

| PID Reading (ppm) | Sample ID | Sample Interval | Drive Interval | WELL | GW Depth | Depth | Soil Description | Boring Completion |
|-------------------|-----------|-----------------|----------------|------|----------|-------|--|-------------------|
| | | | | | | 1 | | |
| | | | | | | 2 | | |
| | | | | | | 3 | | |
| | | | | | | 4 | | |
| | | | | | | 5 | | |
| | | | | | | 6 | | |
| | | | | | | 7 | | |
| | | | | | | 8 | | |
| | | | | | | 9 | | |
| | | | | | | 10 | No samples collected. Well point driven by probe only. | |
| | | | | | | 11 | | |
| | | | | | | 12 | | |
| | | | | | | 13 | | |
| | | | | | | 14 | | |
| | | | | | | 15 | | |
| | | | | | | 16 | | |
| | | | | | | 17 | | |
| | | | | | | 18 | | |
| | | | | | | 19 | | |
| | | | | | | 20 | | |

Boring terminated @ 20' bgs

Notes: (bgs - below ground surface)
 - Groundwater encountered during drilling.


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Boring/Monitoring Well Log

| | | | | | |
|---|-------------------------|---------------------------------------|------------------------------|--------------------------------|--|
| Project Name: Dominic's Plaza Phase III | | | Sheet | | |
| Job No.:
2007-234C | Logged By:
S. Howell | Start Date:
1/2/2008 | Completion Date:
1/2/2008 | Boring No.:
MW-7 | |
| Drilling Contractor:
ESN | | Drilling Method:
Direct Push Probe | | Sampling Method:
N/A | |
| Ground Surface Elevation: | | Hole Completion:
Well | | Surface Conditions:
Asphalt | |

| PID Reading (ppm) | Sample ID | Sample Interval | Drive Interval | WELL | GW Depth | Depth | Soil Description | Boring Completion |
|-------------------|-----------|-----------------|----------------|------|----------|-------|--|-------------------|
| | | | | | | 1 | | |
| | | | | | | 2 | | |
| | | | | | | 3 | | |
| | | | | | | 4 | | |
| | | | | | | 5 | | |
| | | | | | | 6 | | |
| | | | | | | 7 | | |
| | | | | | | 8 | | |
| | | | | | | 9 | | |
| | | | | | | 10 | No samples collected. Well point driven by probe only. | |
| | | | | | | 11 | | |
| | | | | | | 12 | | |
| | | | | | | 13 | | |
| | | | | | | 14 | | |
| | | | | | | 15 | | |
| | | | | | | 16 | | |
| | | | | | | 17 | | |
| | | | | | | 18 | | |
| | | | | | | 19 | | |
| | | | | | | 20 | | |

Boring terminated @ 20' bgs

Notes: (bgs - below ground surface)
 - Groundwater encountered during drilling.

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Boring/Monitoring Well Log

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| Project Name: Dominic's Plaza Phase III | | | | Sheet | |
| Job No.: 2007-234C | Logged By: S. Howell | Start Date: 1/2/2008 | Completion Date: 1/2/2008 | Boring No.: B8 | |
| Drilling Contractor: ESN | | Drilling Method: Direct Push Probe | | Sampling Method: | |
| Ground Surface Elevation: | | Hole Completion: Bentonite | | Surface Conditions: Asphalt | |

| PID Reading (ppm) | Sample ID | Sample Interval | Drive Interval | WELL | GW Depth | Depth | Soil Description | Boring Completion |
|-------------------|-----------|-----------------|----------------|------|----------|-------|--|-----------------------------|
| | | | | | | 1 | Greenish-grey silty, gravelly medium sand | |
| | | | | | | 2 | | |
| | | | | | | 3 | | |
| 0.0 | B8-4 | | | | | 4 | | |
| | | | | | | 5 | | |
| | | | | | | 6 | | |
| | | | | | | 7 | | |
| 0.0 | B8-8 | | | | | 8 | Dark brown sandy silt with fine organic material | |
| | | | | | | 9 | Boring terminated @ 8' bgs | |
| | | | | | | 10 | | |
| | | | | | | 11 | | |
| | | | | | | 12 | | |
| | | | | | | 13 | | |
| | | | | | | 14 | | |
| | | | | | | 15 | | |
| | | | | | | 16 | | |
| | | | | | | 17 | | |
| | | | | | | 18 | | |
| | | | | | | 19 | | |
| | | | | | | 20 | | |
| | | | | | | | | Boring terminated @ 20' bgs |

Notes: (bgs - below ground surface)
 - Groundwater encountered during drilling.

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Boring/Monitoring Well Log

| | | | | | |
|---|----------------------|--|------------------------------------|---------------------------|-----------------------------|
| Project Name: Dominic's Plaza Phase III | | | | Sheet | |
| Job No.: 2007-234C | Logged By: S. Howell | | Start Date: 1/2/2008 | Completion Date: 1/2/2008 | Boring No.: B9 |
| Drilling Contractor: ESN | | | Drilling Method: Direct Push Probe | | Sampling Method: |
| Ground Surface Elevation: | | | Hole Completion: Bentonite | | Surface Conditions: Asphalt |

| PID Reading (ppm) | Sample ID | Sample Interval | Drive Interval | WELL | GW Depth | Depth | Soil Description | Boring Completion |
|-------------------|-----------|-----------------|----------------|------|----------|-------|---|-------------------|
| | | | | | | 1 | Brownish-grey silty sand | |
| 0.0 | B9-2 | | | | | 2 | Black, silty fibrous material, petroleum odor | |
| | | | | | | 3 | | |
| 0.0 | B9-4 | | | | | 4 | | |
| | | | | | | 5 | | |
| | | | | | | 6 | Brownish-grey silty sand | |
| | | | | | | 7 | | |
| 0.0 | B9-8 | | | | ▼ | 8 | | |
| | | | | | | 9 | | |
| | | | | | | 10 | | |
| | | | | | | 11 | Light brown fine sandy silt | |
| 0.0 | B9-12 | | | | | 12 | Boring terminated @ 12' bgs | |
| | | | | | | 13 | | |
| | | | | | | 14 | | |
| | | | | | | 15 | | |
| | | | | | | 16 | | |
| | | | | | | 17 | | |
| | | | | | | 18 | | |
| | | | | | | 19 | | |
| | | | | | | 20 | Boring terminated @ 20' bgs | |

Notes: (bgs - below ground surface)
 ▼ - Groundwater encountered during drilling.

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Boring/Monitoring Well Log

| | | | | | |
|--|---------------|--|------------------------------------|-----------------------------|-----------------------------|
| Project Name: Dominic's Plaza | | | | Sheet 1 of 1 | |
| Job No.: 2007-234B | Logged By: RS | | Start Date: 10/26/2007 | Completion Date: 10/26/2007 | Boring No.: SP-01 |
| Drilling Contractor: ESN | | | Drilling Method: Direct Push Probe | | Sampling Method: Continuous |
| Ground Surface Elevation: Approximately 40 ft. | | | Hole Completion: Bentonite | | Surface Conditions: Grass |

| PID Reading (ppm) | Sample ID | Sample Interval | Drive Interval | SPT | GW Depth | Depth | Soil Description | Boring Completion |
|-------------------|-----------|-----------------|----------------|-----|----------|-------|---|-------------------|
| | | | | | | 1 | Moist, brown, silty-sand with gravels, no odor | |
| 0.0 | SP-01-02 | | | | | 2 | | |
| | | | | | | 3 | | |
| 0.0 | SP-01-04 | | | | | 4 | Dark brown sand | |
| | | | | | | 5 | | |
| 0.1 | SP-01-06 | | | | | 6 | Moist, orange-brown, sandy silt, slight odor | |
| | | | | | | 7 | | |
| 100.0 | SP-01-09 | | | | ▼ | 8 | Moist, gray, sandy silt, has odor
Becomes wet @ 8' | |
| | | | | | | 9 | | |
| 20.7 | SP-01-10 | | | | | 10 | More silt, less sand, wet, odor decreases with depth | |
| | | | | | | 11 | | |
| 42.4 | SP-01-12 | | | | | 12 | | |
| | | | | | | 13 | Bolt groundwater @ 12' bgs
Boring terminated @ 12' bgs | |
| | | | | | | 14 | | |
| | | | | | | 15 | | |
| | | | | | | 16 | | |
| | | | | | | 17 | | |
| | | | | | | 18 | | |
| | | | | | | 19 | | |
| | | | | | | 20 | | |

Notes: (bgs - below ground surface)
 ▼ - Groundwater encountered during drilling.

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Boring/Monitoring Well Log

| | | | | | |
|--|--|------------------------------------|--|---------------------------|-----------------------------|
| Project Name: Dominic's Plaza | | | | Sheet 1 of 1 | |
| Job No.: 2007-234B | | Logged By: RS | | Start Date: 10/26/2007 | Completion Date: 10/26/2007 |
| Drilling Contractor: ESN | | Drilling Method: Direct Push Probe | | Boring No.: SP-02 | |
| Ground Surface Elevation: Approximately 40 ft. | | Hole Completion: Bentonite | | Surface Conditions: Grass | |

| PID Reading (ppm) | Sample ID | Sample Interval | Drive Interval | SPT | GW Depth | Depth | Soil Description | Boring Completion |
|-------------------|-----------|-----------------|----------------|-----|----------|-------|--|-------------------|
| 0.0 | | | | | | 1 | Moist, brown, silty-sand with gravels, no odor | |
| | | | | | | 2 | | |
| 0.3 | | | | | | 3 | | |
| | | | | | | 4 | | |
| 137.0 | SP-02-5.5 | | | | | 5 | Moist, gray, gravelly, silty-sand changes to sandy silt with depth, strong odor. | |
| | | | | | | 6 | | |
| | | | | | | 7 | | |
| 106.0 | SP-02-7.5 | | | | | 8 | Odor decreases with depth | |
| | | | | | | 9 | | |
| | | | | | | 10 | | |
| | | | | | | 11 | | |
| 77.7 | SP-02-12 | | | | | 12 | Moist, gray, medium sand, moderate odor. | |
| | | | | | | 13 | | |
| 5.0 | SP-02-14 | | | | | 14 | Boring stopped @ 14' bgs. No groundwater encountered. | |
| | | | | | | 15 | | |
| | | | | | | 16 | | |
| | | | | | | 17 | | |
| | | | | | | 18 | | |
| | | | | | | 19 | | |
| | | | | | | 20 | | |

Notes: (bgs - below ground surface)
 ▼ - Groundwater encountered during drilling.

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Boring/Monitoring Well Log

| | | | | | |
|--|---------------|--|------------------------------------|-----------------------------|-----------------------------|
| Project Name: Dominic's Plaza | | | | Sheet 1 of 1 | |
| Job No.: 2007-234B | Logged By: RS | | Start Date: 10/26/2007 | Completion Date: 10/26/2007 | Boring No.: SP-03 |
| Drilling Contractor: ESN | | | Drilling Method: Direct Push Probe | | Sampling Method: Continuous |
| Ground Surface Elevation: Approximately 40 ft. | | | Hole Completion: Bentonite | | Surface Conditions: Asphalt |

| PID Reading (ppm) | Sample ID | Sample Interval | Drive Interval | SPT | GW Depth | Depth | Soil Description | Boring Completion |
|-------------------|-----------|-----------------|----------------|-----|----------|-------|---|-------------------|
| | | | | | | 1 | Asphalt & Fill

Moist, gray brown, sandy-silt, no odor | [Shaded] |
| | | | | | | 2 | | |
| | | | | | | 3 | | |
| 0.5 | SP-03-04 | | | | | 4 | | |
| | | | | | | 5 | | |
| | | | | | | 6 | | |
| | | | | | | 7 | | |
| 0.1 | SP-03-08 | | | | | 8 | | |
| | | | | | | 9 | | |
| | | | | | | 10 | | |
| 0.0 | SP-03-11 | | | | | 11 | | |
| | | | | | | 12 | Boring stopped @ 11' bgs due to refusal. No groundwater encountered, no odors | [Shaded] |
| | | | | | | 13 | | |
| | | | | | | 14 | | |
| | | | | | | 15 | | |
| | | | | | | 16 | | |
| | | | | | | 17 | | |
| | | | | | | 18 | | |
| | | | | | | 19 | | |
| | | | | | | 20 | | |

Notes: (bgs - below ground surface)
 ▼ - Groundwater encountered during drilling.

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Boring/Monitoring Well Log

| | | | | | |
|--|--|------------------------------------|--|---------------------------------|-----------------------------|
| Project Name: Dominic's Plaza | | | | Sheet 1 of 1 | |
| Job No.: 2007-234B | | Logged By: RS | | Start Date: 10/26/2007 | Completion Date: 10/26/2007 |
| Drilling Contractor: ESN | | Drilling Method: Direct Push Probe | | Boring No.: SP-04 | |
| Ground Surface Elevation: Approximately 40 ft. | | Hole Completion: Bentonite | | Surface Conditions: Landscaping | |

| PID Reading (ppm) | Sample ID | Sample Interval | Drive Interval | SPT | GW Depth | Depth | Soil Description | Boring Completion |
|-------------------|-----------|-----------------|----------------|-----|----------|-------|--|-------------------|
| | | | | | | 1 | | |
| | | | | | | 2 | | |
| | | | | | | 3 | | |
| 0.0 | SP-04-04 | | | | | 4 | Moist, brown, silty sand with gravels, no odor | |
| | | | | | | 5 | | |
| | | | | | | 6 | | |
| | | | | | | 7 | | |
| 0.0 | SP-04-08 | | | | | 8 | Wet, brown to light gray, silty-sand, no odor | |
| | | | | | | 9 | | |
| 10.0 | SP-04-9.5 | | | | | 10 | Wet, black to dark gray, sand with gravels, petroleum odor from 8'-11' | |
| | | | | | | 11 | | |
| 0.0 | SP-04-12 | | | | | 12 | Moist, gray, fine sandy silt, no odor | |
| | | | | | | 13 | Boring terminated @ 12' bgs | |
| | | | | | | 14 | | |
| | | | | | | 15 | | |
| | | | | | | 16 | | |
| | | | | | | 17 | | |
| | | | | | | 18 | | |
| | | | | | | 19 | | |
| | | | | | | 20 | | |

Notes: (bgs - below ground surface)
 ▼ - Groundwater encountered during drilling.

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Boring/Monitoring Well Log

| | | | | | |
|--|--|------------------------------------|--|------------------------|-----------------------------|
| Project Name: Dominic's Plaza | | | | Sheet 1 of 1 | |
| Job No.: 2007-234B | | Logged By: RS | | Start Date: 10/26/2007 | Completion Date: 10/26/2007 |
| Drilling Contractor: ESN | | Drilling Method: Direct Push Probe | | | Boring No.: SP-05 |
| Ground Surface Elevation: Approximately 40 ft. | | Hole Completion: Bentonite | | | Surface Conditions: Grass |

| PID Reading (ppm) | Sample ID | Sample Interval | Drive Interval | SPT | GW Depth | Depth | Soil Description | Boring Completion |
|-------------------|-----------|-----------------|----------------|-----|----------|-------|--|-------------------|
| | | | | | | 1 | Moist, brown, silty-sand with gravels, no odor | |
| | | | | | | 2 | | |
| | | | | | | 3 | | |
| 0.0 | SP-05-04 | | | | | 4 | Moist to wet, dark brown, sandy silt | |
| | | | | | | 5 | | |
| | | | | | | 6 | | |
| 0.0 | SP-05-08 | | | | ▼ | 8 | Abundant organic material from 5'-12' in soil | |
| | | | | | | 9 | Wet, grayish brown, silt, no odor | |
| | | | | | | 10 | | |
| | | | | | | 11 | | |
| 0.0 | SP-05-12 | | | | | 12 | Boring terminated @ 12' bgs. Groundwater @ 8' | |
| | | | | | | 13 | | |
| | | | | | | 14 | | |
| | | | | | | 15 | | |
| | | | | | | 16 | | |
| | | | | | | 17 | | |
| | | | | | | 18 | | |
| | | | | | | 19 | | |
| | | | | | | 20 | | |

Notes: (bgs - below ground surface)
 ▼ - Groundwater encountered during drilling.

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Boring/Monitoring Well Log

| | | | | | |
|--|--|------------------------------------|--|---------------------------|-----------------------------|
| Project Name: Dominic's Plaza | | | | Sheet 1 of 1 | |
| Job No.: 2007-234B | | Logged By: RS | | Start Date: 10/26/2007 | Completion Date: 10/26/2007 |
| Drilling Contractor: ESN | | Drilling Method: Direct Push Probe | | Boring No.: SP-06 | |
| Ground Surface Elevation: Approximately 40 ft. | | Hole Completion: Bentonite | | Surface Conditions: Grass | |

| PID Reading (ppm) | Sample ID | Sample Interval | Drive Interval | SPT | GW Depth | Depth | Soil Description | Boring Completion |
|-------------------|-----------|-----------------|----------------|-----|----------|-------|--|-------------------|
| | | | | | | 1 | Asphalt 2". Fill Sand & gravel | |
| | | | | | | 2 | | |
| | | | | | | 3 | | |
| 0.1 | SP-06-04 | | | | | 4 | Moist, dark brown, silty-sand with gravels, slight oily odor @ 3'-4' | |
| | | | | | | 5 | | |
| | | | | | | 6 | | |
| | | | | | | 7 | Moist, brown/gray, silt, no odor, abundant organic matter | |
| 0.0 | SP-06-08 | | | | | 8 | | |
| | | | | | | 9 | | |
| | | | | | | 10 | No recovery, shoe only, has slight PCS odor. | |
| | | | | | | 11 | | |
| 0.5 | SP-06-12 | | | | | 12 | | |
| | | | | | | 13 | | |
| | | | | | | 14 | No recovery (12'-16') | |
| | | | | | | 15 | | |
| | | | | | | 16 | Boring terminated @ 16' bgs | |
| | | | | | | 17 | | |
| | | | | | | 18 | | |
| | | | | | | 19 | | |
| | | | | | | 20 | | |

Notes: (bgs - below ground surface)
 ▼ - Groundwater encountered during drilling.

The Riley Group, Inc.
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 Bothell, Washington 98011
 Phone: 425.415.0551 Fax: 425.415.0311

Boring/Monitoring Well Log

| | | | | | |
|--|---------------|--|------------------------------------|-----------------------------|-----------------------------|
| Project Name: Dominic's Plaza | | | | Sheet 1 of 1 | |
| Job No.: 2007-234B | Logged By: RS | | Start Date: 10/26/2007 | Completion Date: 10/26/2007 | Boring No.: SP-07 |
| Drilling Contractor: ESN | | | Drilling Method: Direct Push Probe | | Sampling Method: Continuous |
| Ground Surface Elevation: Approximately 40 ft. | | | Hole Completion: Bentonite | | Surface Conditions: Asphalt |

| PID Reading (ppm) | Sample ID | Sample Interval | Drive Interval | SPT | GW Depth | Depth | Soil Description | Boring Completion |
|-------------------|-----------|-----------------|----------------|-----|----------|-------|---|-------------------|
| | | | | | | 1 | Moist, brown, silty-sand, no odor | [Shaded Column] |
| | | | | | | 2 | | |
| 15.7 | SP-07-04 | | | | ▼ | 3 | Moist to wet, gray, silty-sand, slight odor | |
| | | | | | | 4 | | |
| | | | | | | 5 | | |
| | | | | | | 6 | | |
| | | | | | | 7 | Wet, gray silty-sand, slight odor | |
| 19.8 | SP-07-08 | | | | | 8 | | |
| | | | | | | 9 | | |
| | | | | | | 10 | | |
| | | | | | | 11 | | |
| | | | | | | 12 | | |
| 1.5 | SP-07-12 | | | | | 12 | Boring terminated @ 12' bgs | |
| | | | | | | 13 | | |
| | | | | | | 14 | | |
| | | | | | | 15 | | |
| | | | | | | 16 | | |
| | | | | | | 17 | | |
| | | | | | | 18 | | |
| | | | | | | 19 | | |
| | | | | | | 20 | | |

Notes: (bgs - below ground surface)
 ▼ - Groundwater encountered during drilling.

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Boring/Monitoring Well Log

| | | | | | |
|--|--|------------------------------------|--|-----------------------------|-----------------------------|
| Project Name: Dominic's Plaza | | | | Sheet 1 of 1 | |
| Job No.: 2007-234B | | Logged By: RS | | Start Date: 10/26/2007 | Completion Date: 10/26/2007 |
| Drilling Contractor: ESN | | Drilling Method: Direct Push Probe | | Boring No.: SP-08 | |
| Ground Surface Elevation: Approximately 40 ft. | | Hole Completion: Bentonite | | Surface Conditions: Asphalt | |

| PID Reading (ppm) | Sample ID | Sample Interval | Drive Interval | SPT | GW Depth | Depth | Soil Description | Boring Completion |
|-------------------|-----------|-----------------|----------------|-----|----------|-------|---|-------------------|
| | | | | | | 1 | 4" Asphalt | |
| | | | | | | 2 | Moist, gray, gravelly sand, slight odor @ 3'-4' | |
| | | | | | | 3 | | |
| 0.0 | SP-08-04 | | | | ▼ | 4 | | |
| | | | | | | 5 | Wet, brown, sandy silt, no odor | |
| 0.0 | SP-08-06 | | | | | 6 | Moist, black, gravelly sand, no odor | |
| | | | | | | 7 | Wet, gray, sand, no odor | |
| 0.0 | SP-08-07 | | | | | 8 | Moist, gray/brown, sandy silt with abundant organic debris, no odor | |
| | | | | | | 9 | Boring terminated @ 8' bgs | |
| | | | | | | 10 | | |
| | | | | | | 11 | | |
| | | | | | | 12 | | |
| | | | | | | 13 | | |
| | | | | | | 14 | | |
| | | | | | | 15 | | |
| | | | | | | 16 | | |
| | | | | | | 17 | | |
| | | | | | | 18 | | |
| | | | | | | 19 | | |
| | | | | | | 20 | | |

Notes: (bgs - below ground surface)
 ▼ - Groundwater encountered during drilling.

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Boring/Monitoring Well Log

| | | | | | |
|--|--|------------------------------------|--|------------------------|-----------------------------|
| Project Name: Dominic's Plaza | | | | Sheet 1 of 1 | |
| Job No.: 2007-234B | | Logged By: RS | | Start Date: 10/26/2007 | Completion Date: 10/26/2007 |
| Drilling Contractor: ESN | | Drilling Method: Direct Push Probe | | | Boring No.: SP-09 |
| Ground Surface Elevation: Approximately 40 ft. | | Hole Completion: Bentonite | | | Surface Conditions: Asphalt |

| PID Reading (ppm) | Sample ID | Sample Interval | Drive Interval | SPT | GW Depth | Depth | Soil Description | Boring Completion |
|-------------------|-----------|-----------------|----------------|-----|----------|-------|--|-------------------|
| | | | | | | 1 | Asphalt 3" | |
| | | | | | | 2 | Sandy, gravel fill | |
| | | | | | | 3 | Moist, black to dark gray, silty-sand, very slight odor. | |
| 0.1 | SP-09-04 | | | | ▼ | 4 | ----- | |
| | | | | | | 5 | Wet, black to dark gray, silty-sand, very slight odor | |
| | | | | | | 6 | | |
| | | | | | | 7 | | |
| 1.1 | SP-09-08 | | | | | 8 | Moist, dark brown to gray, silty with abundant organic debris, very slight odor. | |
| | | | | | | 9 | ----- | |
| | | | | | | 10 | No recovery | |
| | | | | | | 11 | | |
| | | | | | | 12 | Boring terminated @ 12' bgs | |
| | | | | | | 13 | | |
| | | | | | | 14 | | |
| | | | | | | 15 | | |
| | | | | | | 16 | | |
| | | | | | | 17 | | |
| | | | | | | 18 | | |
| | | | | | | 19 | | |
| | | | | | | 20 | | |

Notes: (bgs - below ground surface)
 ▼ - Groundwater encountered during drilling.

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Boring/Monitoring Well Log

| | | | | | |
|--|--|------------------------------------|--|---------------------------|-----------------------------|
| Project Name: Dominic's Plaza | | | | Sheet 1 of 1 | |
| Job No.: 2007-234B | | Logged By: RS | | Start Date: 10/26/2007 | Completion Date: 10/26/2007 |
| Boring Contractor: ESN | | Drilling Method: Direct Push Probe | | Boring No.: SP-10 | |
| Ground Surface Elevation: Approximately 40 ft. | | Hole Completion: Bentonite | | Surface Conditions: Grass | |

| PID Reading (ppm) | Sample ID | Sample Interval | Drive Interval | SPT | GW Depth | Depth | Soil Description | Boring Completion |
|-------------------|-----------|-----------------|----------------|-----|----------|-------|---|-------------------|
| | | | | | | 1 | Asphalt 3"
Sandy gravel fill. | |
| | | | | | | 2 | Moist, dark gray, sand with gravel, no odor. | |
| | | | | | | 3 | | |
| 0.1 | SP-10-04 | | | | ▼ | 4 | | |
| | | | | | | 5 | Wet, dark gray, sand with gravel, no odor. | |
| | | | | | | 6 | | |
| | | | | | | 7 | | |
| 0.0 | SP-10-08 | | | | | 8 | | |
| | | | | | | 9 | Moist, dark brown to black/gray, silt with abundant organic debris, no odor | |
| | | | | | | 10 | | |
| | | | | | | 11 | | |
| 0.1 | SP-10-12 | | | | | 12 | Boring terminated @ 12' bgs | |
| | | | | | | 13 | | |
| | | | | | | 14 | | |
| | | | | | | 15 | | |
| | | | | | | 16 | | |
| | | | | | | 17 | | |
| | | | | | | 18 | | |
| | | | | | | 19 | | |
| | | | | | | 20 | | |

Notes: (bgs - below ground surface)
 ▼ - Groundwater encountered during drilling.

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Project Name: **Dominic Plaza (Sea Mar Community Health Center)**

Project Number: **2016-023**

Client: **HomeStreet Bank**



Test Probe No.: **P1**

Sheet 1 of 1

| | | |
|--|--|---|
| Date(s) Drilled: 03/04/16 | Logged By: AJ | Surface Conditions: Asphalt |
| Drilling Method(s): Direct Push | Drill Bit Size/Type: 2.25" Diameter | Total Depth of Borehole: 10 feet bgs |
| Drill Rig Type: Track-Mounted | Drilling Contractor: The Riley Group, Inc. | Approximate Surface Elevation: n/a |
| Groundwater Level: 3' bgs | Sampling Method(s): Continuous | Hammer Data : n/a |
| Borehole Backfill: Bentonite | Location: 9635 Des Moines Memorial Drive South, Seattle, Washington 98108 | |

| PID Reading, ppm | Sample ID | Sample Type | % Recovery | GW Depth | Depth (feet) | MATERIAL DESCRIPTION | Graphic Log |
|------------------|-----------|-------------|------------|----------|--------------|---|-------------|
| 0.0 | P1-4.5 | | | 3' | 0 | Asphalt | |
| | | | | | | Dark brownish-gray, gravelly, fine SAND with silt, dense, moist, no odor, no sheen | |
| | | | | | | Gray, silty, fine SAND with gravel, medium dense, wet, no odor, no sheen | |
| | | | | | | Mottled dark brown and gray, silty, fine to coarse SAND with trace organics (increasing with depth), medium dense, wet, slight petroleum odor, no sheen | |
| 0.0 | P1-9.5 | | | | 10 | Slight sheen | |
| | | | | | | Test probe terminated at 10 feet bgs | |

Project Name: **Dominic Plaza (Sea Mar Community Health Center)**

Project Number: **2016-023**

Client: **HomeStreet Bank**



Test Probe No.: **P2**

Sheet 1 of 1

| | | |
|--|--|--|
| Date(s) Drilled: 03/04/16 | Logged By: AJ | Surface Conditions: Asphalt |
| Drilling Method(s): Direct Push | Drill Bit Size/Type: 2.25" Diameter | Total Depth of Borehole: 8.5 feet bgs |
| Drill Rig Type: Track-Mounted | Drilling Contractor: The Riley Group, Inc. | Approximate Surface Elevation: n/a |
| Groundwater Level: 7' bgs | Sampling Method(s): Continuous | Hammer Data : n/a |
| Borehole Backfill: Bentonite | Location: 9635 Des Moines Memorial Drive South, Seattle, Washington 98108 | |

| PID Reading, ppm | Sample ID | Sample Type | % Recovery | GW Depth | Depth (feet) | MATERIAL DESCRIPTION | Graphic Log |
|------------------|-----------|-------------|------------|----------|--------------|---|-------------|
| 0.0 | P2-4.5 | | | | 0 | Asphalt | |
| | | | | | | Dark brown, fine SAND with gravel, loose to medium dense, moist, no odor, no sheen | |
| | | | | | | Gray, silty, fine to medium SAND with gravel and organics (increasing with depth), medium dense, moist, no odor, no sheen | |
| | | | | | 5 | | |
| | | | | | | Gray, silty, fine SAND with gravel, dense, moist to wet, no odor, no sheen | |
| 0.0 | P2-8 | | | 7' | | | |
| | | | | | | Refusal at 8.5 feet bgs | |
| | | | | | 10 | | |
| | | | | | 15 | | |
| | | | | | 20 | | |

Project Name: **Dominic Plaza (Sea Mar Community Health Center)**

Project Number: **2016-023**

Client: **HomeStreet Bank**



Test Probe No.: **P3**

Sheet 1 of 1

| | | |
|--|--|---|
| Date(s) Drilled: 03/04/16 | Logged By: AJ | Surface Conditions: Asphalt |
| Drilling Method(s): Direct Push | Drill Bit Size/Type: 2.25" Diameter | Total Depth of Borehole: 10 feet bgs |
| Drill Rig Type: Track-Mounted | Drilling Contractor: The Riley Group, Inc. | Approximate Surface Elevation: n/a |
| Groundwater Level: 7' bgs | Sampling Method(s): Continuous | Hammer Data : n/a |
| Borehole Backfill: Bentonite | Location: 9635 Des Moines Memorial Drive South, Seattle, Washington 98108 | |

| PID Reading, ppm | Sample ID | Sample Type | % Recovery | GW Depth | Depth (feet) | MATERIAL DESCRIPTION | Graphic Log |
|------------------|-----------|-------------|------------|----------|--------------|--|-------------|
| 0.0 | P3-2 | | | | 0 | Asphalt
Dark brown, fine SAND with silt and gravel, loose, moist, no odor, no sheen | |
| 0.0 | P3-4.5 | | | | ~3 | Gray SILT with fine sand and a lot of organics, loose, moist to wet, no odor, slight sheen | |
| 0.0 | P3-8 | | | 7' bgs | ~5 | Brown to gray, silty fine SAND with lots of organics, loose, wet, no odor, no sheen | |
| | | | | | 10 | Test probe terminated at 10 feet bgs | |



| PID Reading, ppm | Sample ID | Sample Type | % Recovery | GW Depth | Depth (feet) | MATERIAL DESCRIPTION | Graphic Log |
|------------------|-----------|-------------|------------|----------|--------------|----------------------|-------------|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |

COLUMN DESCRIPTIONS

- | | |
|---|---|
| <p>1 PID Reading, ppm: The reading from a photo-ionization detector, in parts per million.</p> <p>2 Sample ID: Sample identification number.</p> <p>3 Sample Type: Type of soil sample collected at the depth interval shown.</p> <p>4 % Recovery: % Recoverysquare foot.</p> | <p>5 GW Depth: Groundwater depth in feet below the ground surface.</p> <p>6 Depth (feet): Depth in feet below the ground surface.</p> <p>7 MATERIAL DESCRIPTION: Description of material encountered. May include consistency, moisture, color, and other descriptive text.</p> <p>8 Graphic Log: Graphic depiction of the subsurface material encountered.</p> |
|---|---|

FIELD AND LABORATORY TEST ABBREVIATIONS

- | | |
|---|--|
| <p>CHEM: Chemical tests to assess corrosivity</p> <p>COMP: Compaction test</p> <p>CONS: One-dimensional consolidation test</p> <p>LL: Liquid Limit, percent</p> | <p>PI: Plasticity Index, percent</p> <p>SA: Sieve analysis (percent passing No. 200 Sieve)</p> <p>UC: Unconfined compressive strength test, Qu, in ksf</p> <p>WA: Wash sieve (percent passing No. 200 Sieve)</p> |
|---|--|

MATERIAL GRAPHIC SYMBOLS

- | | |
|------------------------------------|--------------------------------------|
| Asphaltic Concrete (AC) | Silty SAND (SM) |
| SILT, SILT w/SAND, SANDY SILT (ML) | Poorly graded SAND (SP) |
| | Poorly graded SAND with Silt (SP-SM) |

TYPICAL SAMPLER GRAPHIC SYMBOLS

- | | |
|-------------------------------------|---|
| Auger sampler | Continuous |
| Bulk Sample | Grab Sample |
| 3-inch-OD California w/ brass rings | 2.5-inch-OD Modified California w/ brass liners |
| CME Sampler | Pitcher Sample |

OTHER GRAPHIC SYMBOLS

- | | |
|---------------------------------------|--|
| 2-inch-OD unlined split spoon (SPT) | Water level (at time of drilling, ATD) |
| Shelby Tube (Thin-walled, fixed head) | Water level (after waiting) |
| | Minor change in material properties within a stratum |
| | Inferred/gradational contact between strata |
| | Queried contact between strata |

GENERAL NOTES

- 1: Soil classifications are based on the Unified Soil Classification System. Descriptions and stratum lines are interpretive, and actual lithologic changes may be gradual. Field descriptions may have been modified to reflect results of lab tests.
- 2: Descriptions on these logs apply only at the specific boring locations and at the time the borings were advanced. They are not warranted to be representative of subsurface conditions at other locations or times.

Project Name: **Sea Mar Community Health Center**

Project Number: **2016-023**

Client: **Sea Mar Community Health Center**



Test Probe/Well No.: **SV1**

Sheet 1 of 1

| | | |
|---|--|---|
| Date(s) Drilled: 03/04/16 | Logged By: AJ | Surface Conditions: Asphalt |
| Drilling Method(s): Direct Push | Drill Bit Size/Type: 2.25" Diameter | Total Depth of Borehole: 2.5 feet bgs |
| Drill Rig Type: Track-Mounted | Drilling Contractor: The Riley Group, Inc. | Approximate Surface Elevation (feet amsl): n/a |
| Groundwater Elevation: Not Encountered | Sampling Method(s): | Hammer Data: n/a |
| Borehole Backfill: Soil Vapor Well | Location: 9635 Des Moines Memorial Drive South, Seattle, Washington 98108 | |

| Elevation (feet) | Depth (feet) | Sample Type | Sample ID | Sampling Resistance, blows/ft | PID Reading, ppm | Recovery (%) | USCS Symbol | Graphic Log | MATERIAL DESCRIPTION | Temporary Well Log | REMARKS AND OTHER TESTS |
|------------------|--------------|-------------|-----------|-------------------------------|------------------|--------------|---------------|-------------|---|--------------------|-------------------------|
| 0 | 0 | | | | | | Asphalt
SM | | Asphalt | | |
| | | | | | | | | | Brown to gray, silty, fine to medium SAND with gravel, medium dense to dense, moist, no odor, no sheen | | |
| | | | | | | | | | Test probe terminated at 3.5 feet bgs | | |
| | | | | | | | | | Note: Solid bit auger (8.25" diameter) advanced to at least 3' bgs in order to install proper bentonite seal. | | |
| 5 | | | | | | | | | | | |
| 10 | | | | | | | | | | | |
| 15 | | | | | | | | | | | |
| 20 | | | | | | | | | | | |
| 25 | | | | | | | | | | | |

Project Name: **Sea Mar Community Health Center**

Project Number: **2016-023**

Client: **Sea Mar Community Health Center**



Test Probe/Well No.: **MW8**

Sheet 1 of 1

| | | |
|---|--|---|
| Date(s) Drilled: 03/04/16 | Logged By: AJ | Surface Conditions: Asphalt |
| Drilling Method(s): Direct Push | Drill Bit Size/Type: 2.25" Diameter | Total Depth of Borehole: 13 feet bgs |
| Drill Rig Type: Track-Mounted | Drilling Contractor: The Riley Group, Inc. | Approximate Surface Elevation (feet amsl): n/a |
| Groundwater Elevation: 10' bgs | Sampling Method(s): Continuous | Hammer Data: n/a |
| Borehole Backfill: Monitoring Well | Location: 9635 Des Moines Memorial Drive South, Seattle, Washington 98108 | |

| Elevation (feet) | Depth (feet) | Sample Type | Sample ID | Sampling Resistance, blows/ft | PID Reading, ppm | Recovery (%) | USCS Symbol | Graphic Log | MATERIAL DESCRIPTION | Temporary Well Log | REMARKS AND OTHER TESTS |
|------------------|--------------|-------------|-----------|-------------------------------|------------------|--------------|-------------|-------------|--|--------------------|-----------------------------------|
| 0 | 0 | | | | | | Asphalt | | Asphalt
No recovery | | Concrete
0 - 1 |
| | | | | | | | | | | | Blank 3/4" PVC |
| | | | | | | | SM | | Dark brown, silty, fine SAND with trace gravel | | Bentonite
1 - 6.5 |
| | 5 | | MW8-5.5 | | 0.3 | | ML | | Gray SILT with very fine to fine sand, stiff, moist to wet, no odor, no sheen | | |
| | | | | | | | SP-SM | | Gray with iron-oxide staining, very fine to medium SAND with silt and trace gravel, dense, moist, no odor, no sheen | | |
| | | | MW8-9 | | 0.3 | | ML | | Gray, silty, very fine SAND, dense, moist, no odor, no sheen | | Prepack Slotted PVC
7.5 - 12.5 |
| | 10 | | | | | | | | No sample | | Silica Sand
6.5 - 13 |
| | | | | | | | | | Test probe terminated at 13 feet bgs.
Note: Solid bit auger (8.25" diameter) advanced to at least 3' bgs in order to install proper bentonite seal. | | |
| | 15 | | | | | | | | | | |
| | 20 | | | | | | | | | | |
| | 25 | | | | | | | | | | |

Project Name: **Sea Mar Community Health Center**

Project Number: **2016-023**

Client: **Sea Mar Community Health Center**



Test Probe/Well No.: **MW9**

Sheet 1 of 1

| | | |
|---|--|---|
| Date(s) Drilled: 03/04/16 | Logged By: AJ | Surface Conditions: Asphalt |
| Drilling Method(s): Direct Push | Drill Bit Size/Type: 2.25" Diameter | Total Depth of Borehole: 10 feet bgs |
| Drill Rig Type: Track-Mounted | Drilling Contractor: The Riley Group, Inc. | Approximate Surface Elevation (feet amsl): n/a |
| Groundwater Elevation: 3' bgs | Sampling Method(s): Continuous | Hammer Data: n/a |
| Borehole Backfill: Monitoring Well | Location: 9635 Des Moines Memorial Drive South, Seattle, Washington 98108 | |

| Elevation (feet) | Depth (feet) | Sample Type | Sample ID | Sampling Resistance, blows/ft | PID Reading, ppm | Recovery (%) | USCS Symbol | Graphic Log | MATERIAL DESCRIPTION | Temporary Well Log | REMARKS AND OTHER TESTS |
|------------------|--------------|-------------|-----------|-------------------------------|------------------|--------------|---------------|-------------|---|--------------------|-------------------------------|
| 0 | 0 | | | | | | Asphalt
SM | | Asphalt
Dark gray, silty, fine SAND with rounded gravel and lots of debris (wire, auto parts, bolts, etc), strong odor, strong sheen | | Concrete
0 - 1 |
| 3 | 3 | | MW9-4 | 0.0 | | | SP-SM | | Gray, fine SAND with silt and organics and trace gravel, medium dense, wet, slight odor, strong sheen | | Blank 3/4" PVC
0 - 5 |
| 5 | 5 | | MW9-6 | 0.0 | | | PT | | Dark brown organics with wood debris, soft, moist to wet, peaty odor, no sheen | | Bentonite
1 - 4 |
| 10 | 10 | | MW9-9.5 | 0.1 | | | ML | | Brown SILT with organics, very soft, moist to wet, peaty odor, slight organic sheen | | Prepack Slotted PVC
5 - 10 |
| | 10 | | | | | | | | Test probe terminated at 10 feet bgs

Note: Solid bit auger (8.25" diameter) advanced to at least 3' bgs in order to install proper bentonite seal. | | Silica Sand
4 - 10 |

Project Name: **Sea Mar Community Health Center**

Project Number: **2016-023**

Client: **Sea Mar Community Health Center**



Test Probe/Well No.: **MW10**

Sheet 1 of 1

| | | |
|---|--|---|
| Date(s) Drilled: 03/04/16 | Logged By: AJ | Surface Conditions: Grass |
| Drilling Method(s): Direct Push | Drill Bit Size/Type: 2.25" Diameter | Total Depth of Borehole: 14 feet bgs |
| Drill Rig Type: Track-Mounted | Drilling Contractor: The Riley Group, Inc. | Approximate Surface Elevation (feet amsl): n/a |
| Groundwater Elevation: 7' bgs | Sampling Method(s): Continuous | Hammer Data: n/a |
| Borehole Backfill: Monitoring Well | Location: 9635 Des Moines Memorial Drive South, Seattle, Washington 98108 | |

| Elevation (feet) | Depth (feet) | Sample Type | Sample ID | Sampling Resistance, blows/ft | PID Reading, ppm | Recovery (%) | USCS Symbol | Graphic Log | MATERIAL DESCRIPTION | Temporary Well Log | REMARKS AND OTHER TESTS |
|------------------|--------------|-------------|-----------|-------------------------------|------------------|--------------|-------------|-------------|---|--------------------|----------------------------------|
| 0 | 0 | | | | | | SM | | Brown, silty, fine to medium SAND with trace gravel | | Concrete
0 - 1 |
| | | | | | | | | | | | Blank 3/4" PVC
0 - 9 |
| | | | | | | | | | | | Bentonite
1 - 8 |
| | 5 | | | | | | SM | | Light brown, silty, fine SAND with trace coarse SAND, medium dense, moist, no odor, no sheen | | |
| | | | MW10-7 | | | | SM | | Dark brown, silty, fine SAND, medium dense, moist, organic odor, no sheen | | |
| | | | | | | | SM | | Dark grayish brown, silty, fine SAND, medium dense, moist to wet, slight organic odor, no sheen | | |
| | 10 | | | | | | SM | | Gray, silty, fine SAND with medium sand, dense, wet, no odor, no sheen | | Prepack
Slotted PVC
9 - 14 |
| | | | MW10-12 | | | | | | | | Silica Sand
8 - 14 |
| | 15 | | | | | | | | Test probe terminated at 14 feet bgs | | |
| | | | | | | | | | Note: Solid bit auger (8.25" diameter) advanced to at least 3' bgs in order to install proper bentonite seal. | | |
| | 20 | | | | | | | | | | |
| | 25 | | | | | | | | | | |

Project Name: **Sea Mar Community Health Center**

Project Number: **2016-023**

Client: **Sea Mar Community Health Center**



Boring Log Key

Sheet 1 of 1

| Elevation (feet) | Depth (feet) | Sample Type | Sample ID | Sampling Resistance, blows/ft | PID Reading, ppm | Recovery (%) | USCS Symbol | Graphic Log | MATERIAL DESCRIPTION | Temporary Well Log | REMARKS AND OTHER TESTS |
|------------------|--------------|-------------|-----------|-------------------------------|------------------|--------------|-------------|-------------|----------------------|--------------------|-------------------------|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |

COLUMN DESCRIPTIONS

- | | |
|---|---|
| <p>1 Elevation (feet): Elevation (MSL, feet).</p> <p>2 Depth (feet): Depth in feet below the ground surface.</p> <p>3 Sample Type: Type of soil sample collected at the depth interval shown.</p> <p>4 Sample ID: Sample identification number.</p> <p>5 Sampling Resistance, blows/ft: Number of blows to advance driven sampler one foot (or distance shown) beyond seating interval using the hammer identified on the boring log.</p> <p>6 PID Reading, ppm: The reading from a photo-ionization detector, in parts per million.</p> <p>7 Recovery (%): Core Recovery Percentage is determined based on a ratio of the length of core sample recovered compared to the cored interval length.</p> <p>8 USCS Symbol: USCS symbol of the subsurface material.</p> | <p>9 Graphic Log: Graphic depiction of the subsurface material encountered.</p> <p>10 MATERIAL DESCRIPTION: Description of material encountered. May include consistency, moisture, color, and other descriptive text.</p> <p>11 Temporary Well Log: Graphical representation of well installed upon completion of drilling and sampling.</p> <p>12 REMARKS AND OTHER TESTS: Comments and observations regarding drilling or sampling made by driller or field personnel.</p> |
|---|---|

FIELD AND LABORATORY TEST ABBREVIATIONS

- | | |
|---|--|
| <p>CHEM: Chemical tests to assess corrosivity</p> <p>COMP: Compaction test</p> <p>CONS: One-dimensional consolidation test</p> <p>LL: Liquid Limit, percent</p> | <p>PI: Plasticity Index, percent</p> <p>SA: Sieve analysis (percent passing No. 200 Sieve)</p> <p>UC: Unconfined compressive strength test, Qu, in ksf</p> <p>WA: Wash sieve (percent passing No. 200 Sieve)</p> |
|---|--|

MATERIAL GRAPHIC SYMBOLS

- | | | | |
|--|------------------------------------|--|--------------------------------------|
| | Asphaltic Concrete (AC) | | Peat |
| | Bentonite | | Silty SAND (SM) |
| | Portland Cement Concrete | | Poorly graded SAND (SP) |
| | SILT, SILT w/SAND, SANDY SILT (ML) | | Poorly graded SAND with Silt (SP-SM) |

TYPICAL SAMPLER GRAPHIC SYMBOLS

- | | | | |
|--|-------------------------------------|--|---|
| | Auger sampler | | Continuous |
| | Bulk Sample | | Grab Sample |
| | 3-inch-OD California w/ brass rings | | 2.5-inch-OD Modified California w/ brass liners |
| | CME Sampler | | Pitcher Sample |

OTHER GRAPHIC SYMBOLS

- | | |
|--|--|
| | Water level (at time of drilling, ATD) |
| | Water level (after waiting) |
| | Minor change in material properties within a stratum |
| | Inferred/gradational contact between strata |
| | Queried contact between strata |

GENERAL NOTES

- Soil classifications are based on the Unified Soil Classification System. Descriptions and stratum lines are interpretive, and actual lithologic changes may be gradual. Field descriptions may have been modified to reflect results of lab tests.
- Descriptions on these logs apply only at the specific boring locations and at the time the borings were advanced. They are not warranted to be representative of subsurface conditions at other locations or times.

Project Name: **Sea Mar Community Health Center**

Project Number: **2016-023A**

Client: **SeaMar Community Health Centers**



Test Probe/Well No.: **MW11**

Sheet 1 of 1

| | | |
|---|--|---|
| Date(s) Drilled: 05/04/16 | Logged By: AJ | Surface Conditions: Grass |
| Drilling Method(s): Direct Push | Drill Bit Size/Type: 2" Diameter | Total Depth of Borehole: 15 feet bgs |
| Drill Rig Type: Track-Mounted | Drilling Contractor: RGI | Approximate Surface Elevation (feet amsl): n/a |
| Groundwater Elevation: 4.3' | Sampling Method(s): Continuous | Hammer Data: n/a |
| Borehole Backfill: Monitoring Well | Location: 9635 Des Moines Memorial Drive South, Seattle, Washington 98108 | |

| Elevation (feet) | Depth (feet) | Sample Type | Sample ID | Sampling Resistance, blows/ft | PID Reading, ppm | Recovery (%) | USCS Symbol | Graphic Log | MATERIAL DESCRIPTION | Well Log | REMARKS AND OTHER TESTS |
|------------------|--------------|-------------|-----------|-------------------------------|------------------|--------------|-------------|-------------|--|----------|---|
| | 0 | | | | | | SM | | Brown, silty, fine SAND with gravel, moist, loose, no odor, slight sheen | | Concrete
0 - 1 |
| | | | MW11-3 | 22.8 | | | SP-SM | | Dark gray, fine SAND with silt and trace organics, moist, loose to medium dense, slight odor, slight sheen | | Blank 0.75"
PVC
0 - 5
Bentonite
1 - 4 |
| | 5 | | MW11-5 | 5.6 | | | | | No odor | | |
| | | | MW11-7.5 | 0.0 | | | SM | | Dark gray, silty, fine SAND with trace organics and gravel, moist, loose to medium dense, no odor, very slight sheen | | Silica Sand
4 - 15 |
| | 10 | | MW11-10 | 0.0 | | | ML | | Brown, very fine sandy SILT with organics, moist to wet, soft, no odor | | 0.75" Prepack
Slotted PVC
5 - 15 |
| | | | | | | | | | No sampling from 10' - 15' | | |
| | 15 | | | | | | | | Boring terminated at 15 feet bgs | | |
| | | | | | | | | | Note: Solid bit auger (8.25" diameter) advanced to at least 3' bgs in order to install proper bentonite seal. | | |
| | 20 | | | | | | | | | | |

Project Name: **Sea Mar Community Health Center**

Project Number: **2016-023A**

Client: **SeaMar Community Health Centers**



Test Probe/Well No.: **MW12**

Sheet 1 of 1

| | | |
|--|--|---|
| Date(s) Drilled: 05/04/16 | Logged By: AJ | Surface Conditions: Grass |
| Drilling Method(s): Direct Push | Drill Bit Size/Type: 2" Diameter | Total Depth of Borehole: 15 feet bgs |
| Drill Rig Type: Track-Mounted | Drilling Contractor: RGI | Approximate Surface Elevation (feet amsl): n/a |
| Groundwater Elevation: 8'6" | Sampling Method(s): Continuous | Hammer Data: n/a |
| Borehole Backfill: Bentonite | Location: 9635 Des Moines Memorial Drive South, Seattle, Washington 98108 | |

| Elevation (feet) | Depth (feet) | Sample Type | Sample ID | Sampling Resistance, blows/ft | PID Reading, ppm | Recovery (%) | USCS Symbol | Graphic Log | MATERIAL DESCRIPTION | Well Log | REMARKS AND OTHER TESTS |
|------------------|--------------|-------------|-----------|-------------------------------|------------------|--------------|-------------|-------------|---|----------|--|
| 0 | | | | | | | ML | | Brown to dark gray-brown SILT with fine sand and organics, moist, loose, no odor, no sheen | | Concrete
0 - 1 |
| | | | | | | | | | | | Blank 0.75"
PVC
0 - 5 |
| | | | | | | | | | | | Bentonite
1 - 4 |
| | 3.5 | MW12-3 | MW12-3.5 | 0.2 | | | SM | | Dark gray to brown, silty, fine SAND with gravel, moist, loose to medium dense, no odor, no sheen | | |
| | 5.5 | MW12-5.5 | | 0.1 | | | SM | | Dark gray, silty, very fine SAND with trace gravel, moist, medium dense, no odor, no sheen | | |
| | | | | | | | PT | | Dark brown PEAT | | |
| | | | | | | | ML | | Gray-brown SILT with very fine sand and trace organics, moist, soft, no odor, no sheen | | Silica Sand
4 - 15 |
| | 10 | MW12-10 | | 0.1 | | | | | No sampling 10' - 15' | | 0.75" Prepack
Slotted PVC
5 - 15 |
| | 15 | | | | | | | | Boring terminated at 15 feet bgs | | |
| | | | | | | | | | Note: Solid bit auger (8.25" diameter) advanced to at least 3' bgs in order to install proper bentonite seal. | | |

Project Name: **Sea Mar Community Health Center**

Project Number: **2016-023A**

Client: **SeaMar Community Health Centers**



Test Probe/Well No.: **MW13**

Sheet 1 of 1

| | | |
|---|--|---|
| Date(s) Drilled: 05/04/16 | Logged By: AJ | Surface Conditions: Asphalt |
| Drilling Method(s): Direct Push | Drill Bit Size/Type: 2" Diameter | Total Depth of Borehole: 15 feet bgs |
| Drill Rig Type: Track-Mounted | Drilling Contractor: RGI | Approximate Surface Elevation (feet amsl): n/a |
| Groundwater Elevation: 4'4" | Sampling Method(s): Continuous | Hammer Data: n/a |
| Borehole Backfill: Monitoring Well | Location: 9635 Des Moines Memorial Drive South, Seattle, Washington 98108 | |

| Elevation (feet) | Depth (feet) | Sample Type | Sample ID | Sampling Resistance, blows/ft | PID Reading, ppm | Recovery (%) | USCS Symbol | Graphic Log | MATERIAL DESCRIPTION | Well Log | REMARKS AND OTHER TESTS |
|------------------|--------------|-------------|-----------|-------------------------------|------------------|--------------|-------------|-------------|---|----------|--|
| 0 | 0 | | | | | | Asphalt | | Asphalt | | Concrete 0 - 1 |
| | | | | | 0.0 | | SM | | Gray-brown, silty, fine SAND with trace medium sand, moist, loose to medium dense, no odor to slight odor at 3', no sheen | | Blank 0.75" PVC 0 - 3.25 |
| | | | MW13-2-3 | | 0.2 | | | | | | Bentonite 1 - 2.5 |
| | | | MW13-4 | | 0.0 | | SM | | Gray, silty, fine SAND with trace gravel, moist, loose, no odor, no sheen | | Silica Sand 2.5 - 15 |
| | | | | | 0.0 | | PT | | Dark brown PEAT, moist to wet, loose, organic odor, no sheen | | 0.75" Prepack Slotted PVC 3.25 - 13.25 |
| | | | MW13-8 | | 0.0 | | ML | | Brown SILT with organics and trace fine sand, soft, moist to wet, no odor, no sheen | | |
| | | | | | | | | | No recovery | | |
| | | | | | | | | | Boring terminated at 15 feet bgs | | |
| | | | | | | | | | Note: Solid bit auger (8.25" diameter) advanced to at least 3' bgs in order to install proper bentonite seal. | | |

Project Name: **Sea Mar Community Health Center**

Project Number: **2016-023A**

Client: **SeaMar Community Health Centers**



Test Probe/Well No.: **MW14**

Sheet 1 of 1

| | | |
|---|--|---|
| Date(s) Drilled: 05/04/16 | Logged By: AJ | Surface Conditions: Concrete |
| Drilling Method(s): Direct Push | Drill Bit Size/Type: 3" Diameter | Total Depth of Borehole: 15.5 feet bgs |
| Drill Rig Type: Track-Mounted | Drilling Contractor: RGI | Approximate Surface Elevation (feet amsl): n/a |
| Groundwater Elevation: 6' | Sampling Method(s): Continuous | Hammer Data: n/a |
| Borehole Backfill: Monitoring Well | Location: 9635 Des Moines Memorial Drive South, Seattle, Washington 98108 | |

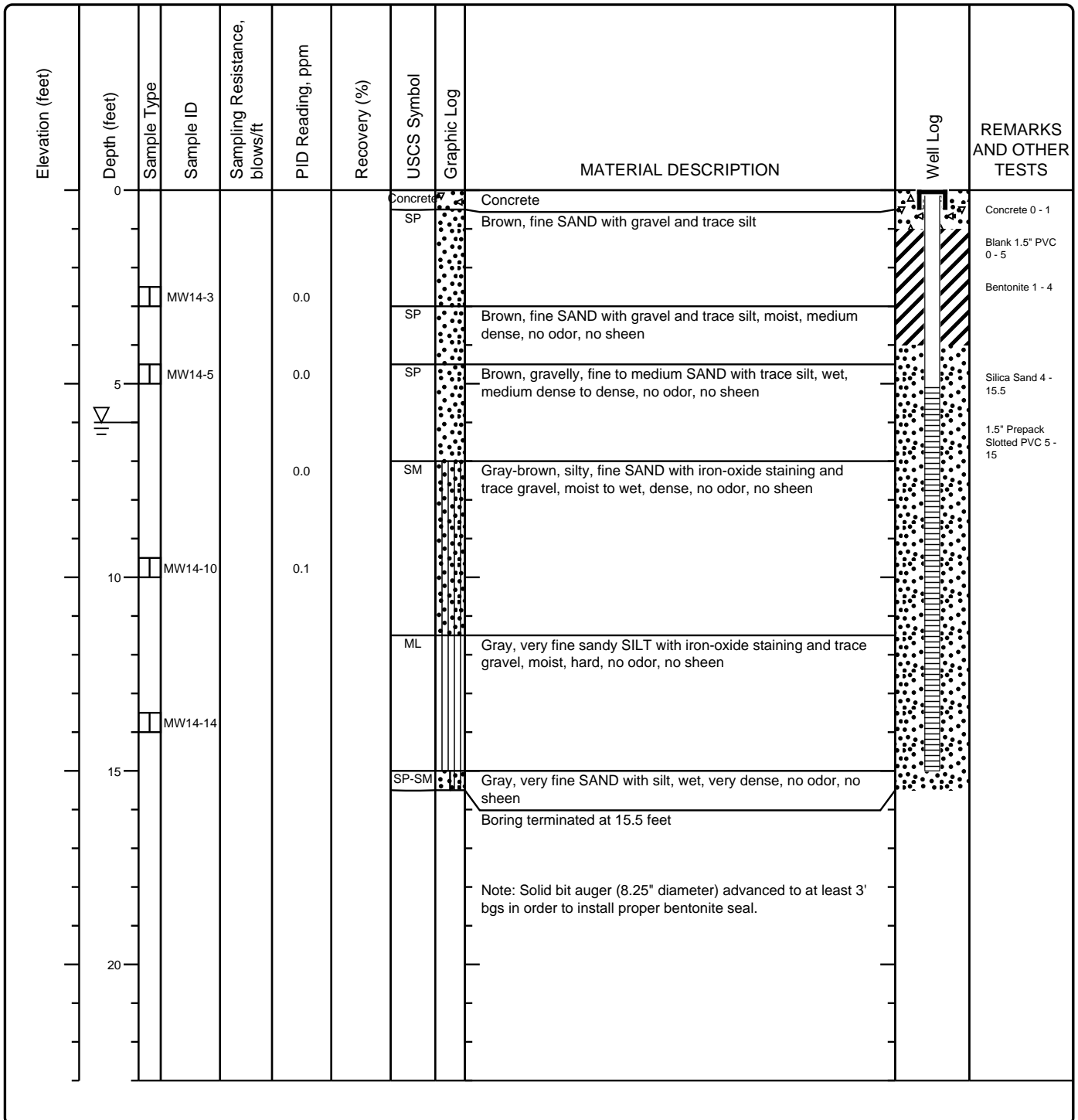


Figure MW14

Project Name: **Sea Mar Community Health Center**

Project Number: **2016-023A**

Client: **SeaMar Community Health Centers**



Test Probe/Well No.: **MW15**

Sheet 1 of 1

| | | |
|---|--|---|
| Date(s) Drilled: 05/04/16 | Logged By: AJ | Surface Conditions: Concrete |
| Drilling Method(s): Direct Push | Drill Bit Size/Type: 3" Diameter | Total Depth of Borehole: 17 feet bgs |
| Drill Rig Type: Track-Mounted | Drilling Contractor: RGI | Approximate Surface Elevation (feet amsl): n/a |
| Groundwater Elevation: 8' | Sampling Method(s): Continuous | Hammer Data: n/a |
| Borehole Backfill: Monitoring Well | Location: 9635 Des Moines Memorial Drive South, Seattle, Washington 98108 | |

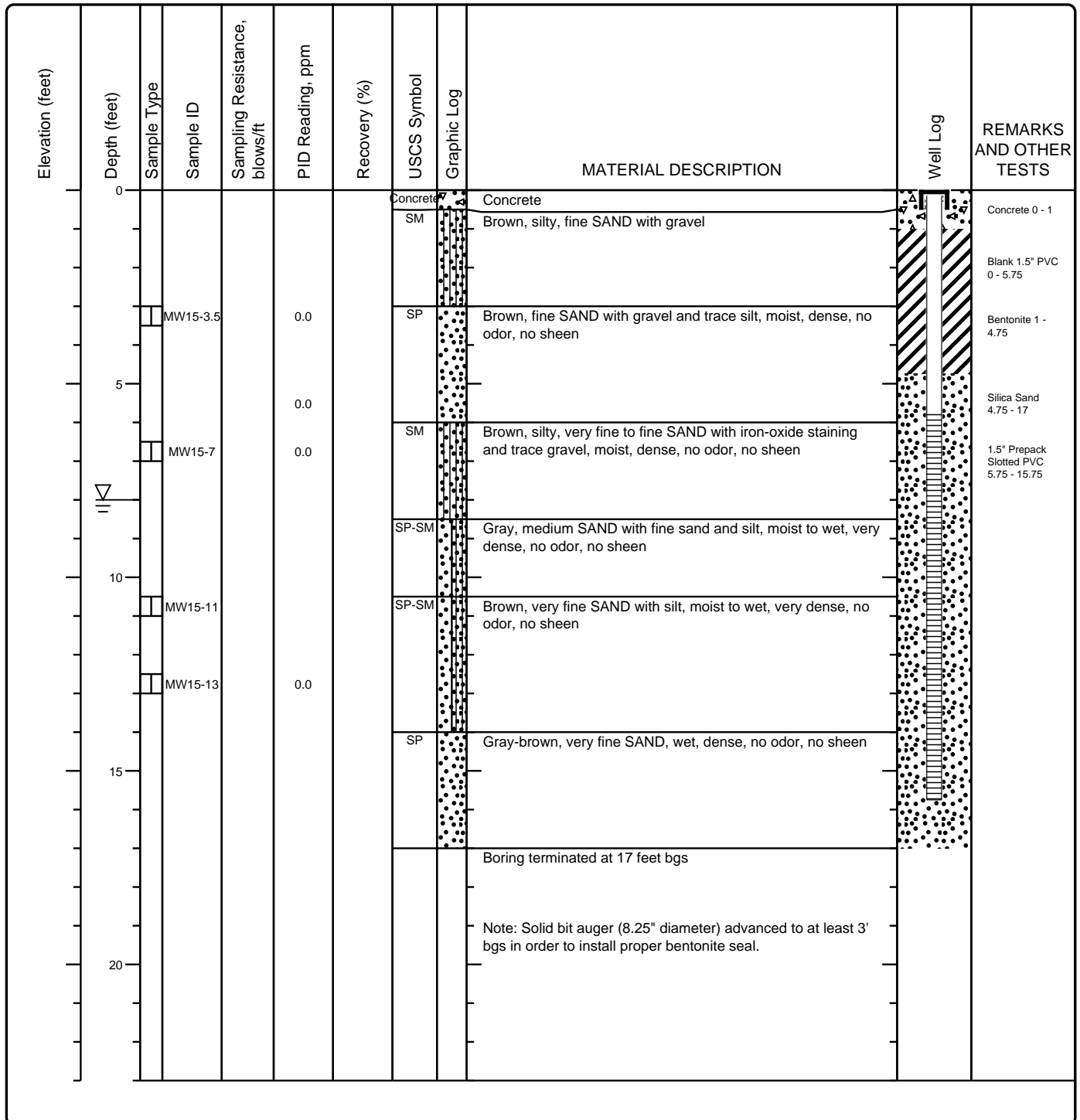


Figure MW15

Project Name: **Sea Mar Community Health Center**

Project Number: **2016-023A**

Client: **SeaMar Community Health Centers**



Test Probe/Well No.: **MW16**

Sheet 1 of 1

| | | |
|---|--|---|
| Date(s) Drilled: 07/14/16 | Logged By: CF | Surface Conditions: Soil |
| Drilling Method(s): Direct Push | Drill Bit Size/Type: 2" Diameter | Total Depth of Borehole: 20 feet bgs |
| Drill Rig Type: Track-Mounted | Drilling Contractor: RGI | Approximate Surface Elevation (feet amsl): n/a |
| Groundwater Elevation: 10' | Sampling Method(s): Continuous | Hammer Data: n/a |
| Borehole Backfill: Monitoring Well | Location: 9635 Des Moines Memorial Drive South, Seattle, Washington 98108 | |

| Elevation (feet) | Depth (feet) | Sample Type | Sample ID | Sampling Resistance, blows/ft | PID Reading, ppm | Recovery (%) | USCS Symbol | Graphic Log | MATERIAL DESCRIPTION | Well Log | REMARKS AND OTHER TESTS |
|------------------|--------------|-------------|-----------|-------------------------------|------------------|--------------|-------------|-------------|---|----------|------------------------------------|
| 0 | 0 | | | | | | Fill | | Fill (remedial excavation backfill) | | Concrete 0 - 1
Bentonite 1 - 7 |
| | 5 | | MW16-7 | | | | ML | | Gray, clayey SILT, hard, dry to moist | | Blank PVC
0 - 9 |
| | 10 | | MW16-11 | | | | SM | | Gray, silty SAND, dry to very dry, wet | | Silica Sand
7 - 20 |
| | 15 | | | | | | ML | | Gray, clayey SILT, hard, moist | | Prepack 3/4" Slotted PVC
9 - 19 |
| | 20 | | | | | | | | Boring terminated at 20 feet bgs | | |
| | | | | | | | | | Note: Solid bit auger (8.25" diameter) advanced to at least 3' bgs in order to install proper bentonite seal. | | |

Project Name: **Sea Mar Community Health Center**

Project Number: **2016-023A**

Client: **SeaMar Community Health Centers**



Test Probe/Well No.: **MW17**

Sheet 1 of 1

| | | |
|---|--|---|
| Date(s) Drilled: 07/14/16 | Logged By: CF | Surface Conditions: Gravel |
| Drilling Method(s): Direct Push | Drill Bit Size/Type: 2" Diameter | Total Depth of Borehole: 15 feet bgs |
| Drill Rig Type: Track-Mounted | Drilling Contractor: RGI | Approximate Surface Elevation (feet amsl): n/a |
| Groundwater Elevation: Not Encountered | Sampling Method(s): None | Hammer Data: n/a |
| Borehole Backfill: Monitoring Well | Location: 9635 Des Moines Memorial Drive South, Seattle, Washington 98108 | |

| Elevation (feet) | Depth (feet) | Sample Type | Sample ID | Sampling Resistance, blows/ft | PID Reading, ppm | Recovery (%) | USCS Symbol | Graphic Log | MATERIAL DESCRIPTION | Well Log | REMARKS AND OTHER TESTS |
|------------------|--------------|-------------|-----------|-------------------------------|------------------|--------------|-------------|-------------|---|----------|---------------------------------|
| 0 | 0 | | | | | | | | Gravel | | Concrete 0 - 1 |
| | | | | | | | | | No samples 0 - 15 | | Blank PVC 0 - 5 |
| | | | | | | | | | | | Bentonite 1 - 3 |
| | | | | | | | | | | | Silica Sand 3 - 15 |
| | 5 | | | | | | | | | | Prepack 3/4" Slotted PVC 5 - 15 |
| | 10 | | | | | | | | | | |
| | 15 | | | | | | | | Boring terminated at 15 feet bgs | | |
| | 20 | | | | | | | | Note: Solid bit auger (8.25" diameter) advanced to at least 3' bgs in order to install proper bentonite seal. | | |

Project Name: **Sea Mar Community Health Center**

Project Number: **2016-023A**

Client: **SeaMar Community Health Centers**



Test Probe/Well No.: **MW18**

Sheet 1 of 1

| | | |
|---|--|---|
| Date(s) Drilled: 07/14/16 | Logged By: CF | Surface Conditions: Asphalt |
| Drilling Method(s): Direct Push | Drill Bit Size/Type: 2" Diameter | Total Depth of Borehole: 20 feet bgs |
| Drill Rig Type: Track-Mounted | Drilling Contractor: RGI | Approximate Surface Elevation (feet amsl): n/a |
| Groundwater Elevation: 10' | Sampling Method(s): None | Hammer Data: n/a |
| Borehole Backfill: Monitoring Well | Location: 9635 Des Moines Memorial Drive South, Seattle, Washington 98108 | |

| Elevation (feet) | Depth (feet) | Sample Type | Sample ID | Sampling Resistance, blows/ft | PID Reading, ppm | Recovery (%) | USCS Symbol | Graphic Log | MATERIAL DESCRIPTION | Well Log | REMARKS AND OTHER TESTS |
|------------------|--------------|-------------|-----------|-------------------------------|------------------|--------------|-------------|-------------|---|----------|----------------------------------|
| | 0 | | | | | | Asphalt | | Asphalt | | Concrete 0 - 1 |
| | | | | | | | | | No samples 0 - 20 | | Blank PVC 0 - 10 |
| | | | | | | | | | | | Bentonite 1 - 8 |
| | 5 | | | | | | | | | | |
| | 10 | | | | | | | | | | Silica Sand 8 - 20 |
| | 15 | | | | | | | | | | Prepack 3/4" Slotted PVC 10 - 20 |
| | 20 | | | | | | | | Boring terminated at 20 feet bgs | | |
| | | | | | | | | | Note: Solid bit auger (8.25" diameter) advanced to at least 3' bgs in order to install proper bentonite seal. | | |

Project Name: **Sea Mar Community Health Center**

Project Number: **2016-023A**

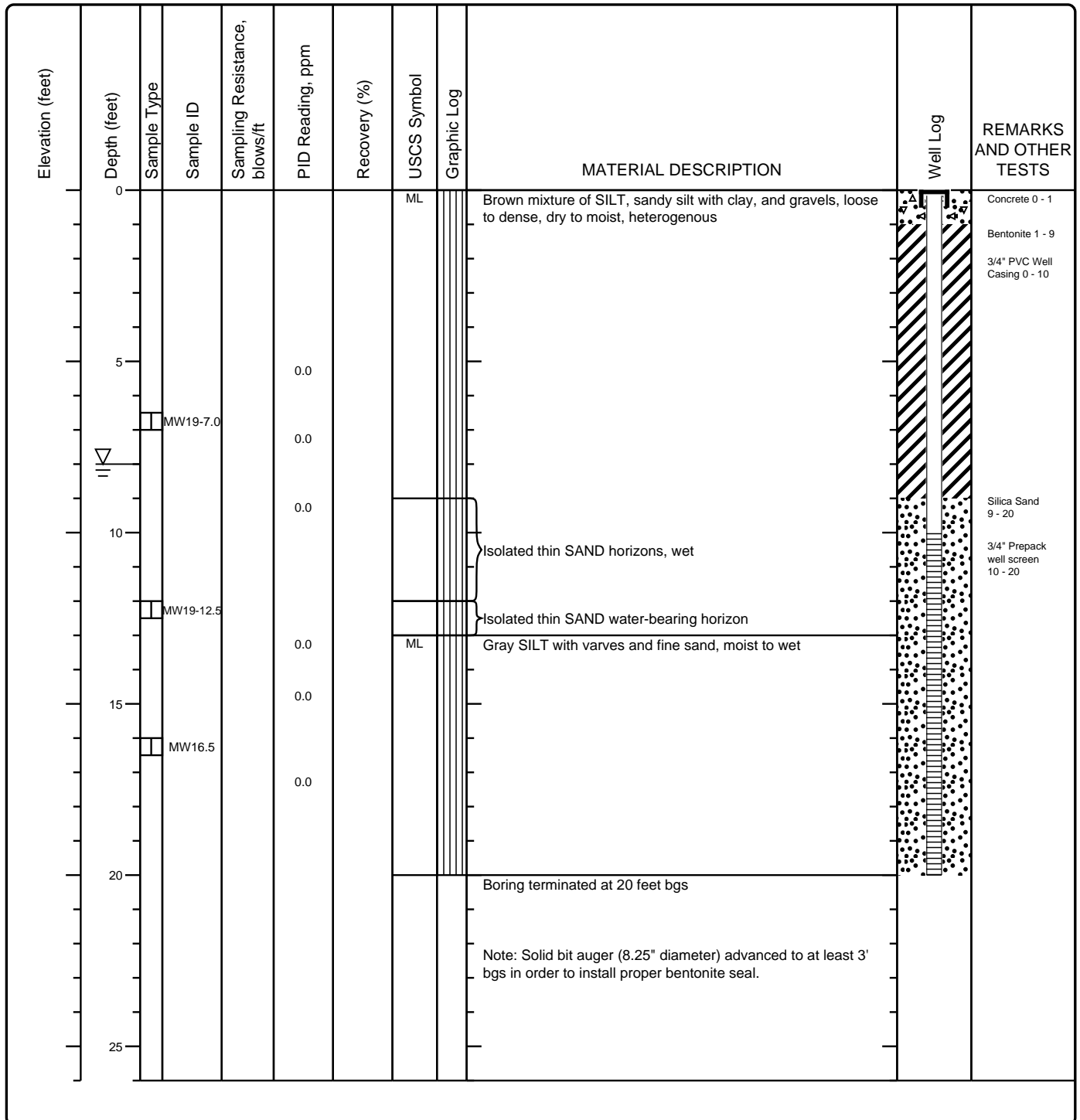
Client: **SeaMar Community Health Centers**



Test Probe/Well No.: **MW19**

Sheet 1 of 1

| | | |
|---|--|---|
| Date(s) Drilled: 09/08/2016 | Logged By: CF | Surface Conditions: Asphalt |
| Drilling Method(s): Direct Push/ Hollow Stem Auger | Drill Bit Size/Type: 3.25" O.D. | Total Depth of Borehole: 20 feet bgs |
| Drill Rig Type: Track-Mounted | Drilling Contractor: RGI | Approximate Surface Elevation (feet amsl): n/a |
| Groundwater Elevation: 8 feet bgs | Sampling Method(s): Continuous | Hammer Data: n/a |
| Borehole Backfill: Monitoring Well | Location: 9635 Des Moines Memorial Drive South, Seattle, Washington 98108 | |



Project Name: **Sea Mar Community Health Center**

Project Number: **2016-023A**

Client: **SeaMar Community Health Centers**



Test Probe/Well No.: **MW20**

Sheet 1 of 1

| | | |
|---|--|---|
| Date(s) Drilled: 09/08/2016 | Logged By: PDR | Surface Conditions: Asphalt |
| Drilling Method(s): Direct Push/ Hollow Stem Auger | Drill Bit Size/Type: 3.25" O.D. | Total Depth of Borehole: 23 feet bgs |
| Drill Rig Type: Track-Mounted | Drilling Contractor: RGI | Approximate Surface Elevation (feet amsl): n/a |
| Groundwater Elevation: 8 feet bgs | Sampling Method(s): Continuous | Hammer Data: n/a |
| Borehole Backfill: Monitoring Well | Location: 9635 Des Moines Memorial Drive South, Seattle, Washington 98108 | |

| Elevation (feet) | Depth (feet) | Sample Type | Sample ID | Sampling Resistance, blows/ft | PID Reading, ppm | Recovery (%) | USCS Symbol | Graphic Log | MATERIAL DESCRIPTION | Well Log | REMARKS AND OTHER TESTS |
|------------------|--------------|-------------|-----------|-------------------------------|------------------|--------------|-------------|-------------|---|----------|--|
| 0 | | | | | | | ML | | Black, discolored SILT with musty odor (brick/ asphalt debris) | | Concrete 0 - 1
Bentonite 1 - 9
3/4" PVC Well Casing 0 - 10 |
| | 2.5 | | MW20-2.5 | | 0.0 | | | | | | |
| | 7.5 | | MW20-7.5 | | 0.0 | | SM-ML | | Brown to gray, heterogenous mixture of silt and dense silty SAND with occasional mottling, dry to moist | | |
| | 12 | | MW20-12 | | 0.0 | | | | Asphalt debris/fills | | |
| | 15.5 | | MW20-15.5 | | 0.0 | | ML | | Gray SILT with sand and sand interbeds, hard, damp | | Silica Sand 9 - 20
3/4" Prepack well screen 10 - 20 |
| | 20 | | | | | | ML | | Gray SILT with fine sand and sand interbeds, hard, wet | | Caved in 20 - 23 |
| | 23 | | | | | | | | Boring terminated at 23 feet bgs
Note: Solid bit auger (8.25" diameter) advanced to at least 3' bgs in order to install proper bentonite seal. | | |

Project Name: **Sea Mar Community Health Center**

Project Number: **2016-023A**

Client: **SeaMar Community Health Centers**



Boring Log Key

Sheet 1 of 1

| Elevation (feet) | Depth (feet) | Sample Type | Sample ID | Sampling Resistance, blows/ft | PID Reading, ppm | Recovery (%) | USCS Symbol | Graphic Log | MATERIAL DESCRIPTION | Well Log | REMARKS AND OTHER TESTS |
|------------------|--------------|-------------|-----------|-------------------------------|------------------|--------------|-------------|-------------|----------------------|----------|-------------------------|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |

COLUMN DESCRIPTIONS

- 1** Elevation (feet): Elevation (MSL, feet).
- 2** Depth (feet): Depth in feet below the ground surface.
- 3** Sample Type: Type of soil sample collected at the depth interval shown.
- 4** Sample ID: Sample identification number.
- 5** Sampling Resistance, blows/ft: Number of blows to advance driven sampler one foot (or distance shown) beyond seating interval using the hammer identified on the boring log.
- 6** PID Reading, ppm: The reading from a photo-ionization detector, in parts per million.
- 7** Recovery (%): Core Recovery Percentage is determined based on a ratio of the length of core sample recovered compared to the cored interval length.
- 8** USCS Symbol: USCS symbol of the subsurface material.
- 9** Graphic Log: Graphic depiction of the subsurface material encountered.
- 10** MATERIAL DESCRIPTION: Description of material encountered. May include consistency, moisture, color, and other descriptive text.
- 11** Well Log: Graphical representation of well installed upon completion of drilling and sampling.
- 12** REMARKS AND OTHER TESTS: Comments and observations regarding drilling or sampling made by driller or field personnel.

FIELD AND LABORATORY TEST ABBREVIATIONS

CHEM: Chemical tests to assess corrosivity
 COMP: Compaction test
 CONS: One-dimensional consolidation test
 LL: Liquid Limit, percent

PI: Plasticity Index, percent
 SA: Sieve analysis (percent passing No. 200 Sieve)
 UC: Unconfined compressive strength test, Qu, in ksf
 WA: Wash sieve (percent passing No. 200 Sieve)

MATERIAL GRAPHIC SYMBOLS

- Asphaltic Concrete (AC)
- Bentonite
- Bentonite chips
- Portland Cement Concrete
- AF
- Gravel
- SILT, SILT w/SAND, SANDY SILT (ML)
- Peat
- Silty SAND (SM)
- Poorly graded SAND (SP)
- Poorly graded SAND with Silt (SP-SM)

TYPICAL SAMPLER GRAPHIC SYMBOLS

- Auger sampler
- Bulk Sample
- 3-inch-OD California w/ brass rings
- CME Sampler
- Continuous
- Grab Sample
- 2.5-inch-OD Modified California w/ brass liners
- Pitcher Sample
- 2-inch-OD unlined split spoon (SPT)
- Shelby Tube (Thin-walled, fixed head)

OTHER GRAPHIC SYMBOLS

- Water level (at time of drilling, ATD)
- Water level (after waiting)
- Minor change in material properties within a stratum
- Inferred/gradational contact between strata
- Queried contact between strata

GENERAL NOTES

- 1: Soil classifications are based on the Unified Soil Classification System. Descriptions and stratum lines are interpretive, and actual lithologic changes may be gradual. Field descriptions may have been modified to reflect results of lab tests.
- 2: Descriptions on these logs apply only at the specific boring locations and at the time the borings were advanced. They are not warranted to be representative of subsurface conditions at other locations or times.



Alaska Street
70 S Alaska Street
Seattle, WA, 98134

PH: 206 763 5025

Customer Name ID ENVIRONMENTAL AND INFRASTR
Ticket Date 06/08/2016
Payment Type Credit Account
Manual Ticket#
Route AK
Hauling Ticket#
Destination
PO# 109542WA

Carrier SELF HAULER *
Vehicle# PGH9T
Container
Driver AARON STINGL
Check#
Billing# 0000313
Grid

Volume
101380 lb
41740 lb
59640 lb
29.82

Time
In 06/08/2016 14:46:26
Out 06/08/2016 14:46:26

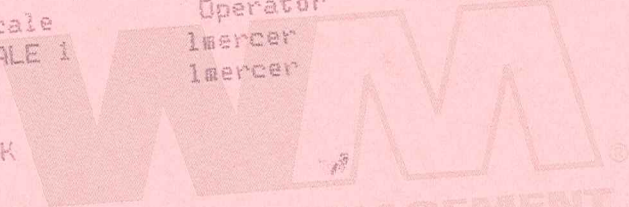
Scale
SCALE 1

Operator
Imercer
Imercer

Inbound

Gross
Tare
Net
Tons

Comments PGM-KF SOUTH PARK



WASTE MANAGEMENT

| Product | LD% | Qty | UOM | Rate | Tax | Amount | Origin |
|----------------------------|-----|-------|------|------|-----|--------|--------|
| 1 Daily Cover-PCB-Tons-Pet | 100 | 29.82 | Tons | | | | KING |
| 2 GONDOLA T/10T MIN-GONDOL | 100 | 29.82 | Tons | | | | |

C. Aaron Hall

Total Tax
Total Ticket

D:203 WM's Signature

Standard Register

CG702188-AD (07/15)



Alaska Street
 70 S Alaska Street
 Seattle, WA, 98134

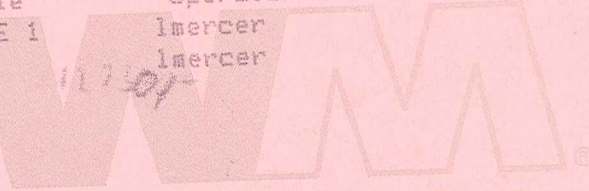
Ph: 206 763 5025

Reprint
 Ticket# 122309

Customer Name IO ENVIRONMENTAL AND INFRASTR Carrier SELF HAULER *
 Ticket Date 06/08/2016 Vehicle# PGH4T Volume
 Payment Type Credit Account Container
 Manual Ticket# Driver BRYAN KAHLER
 Route AK Check#
 Hauling Ticket# 200 Billing# 0000313
 Destination 305 Grid
 PO# 109542WA

| In | Time | Scale | Operator | Inbound | Gross | 101440 lb |
|-----|---------------------|---------|----------|---------|-------|-----------|
| In | 06/08/2016 14:52:19 | SCALE 1 | Imercer | | Tare | 40940 lb |
| Out | 06/08/2016 14:52:19 | | Imercer | | Net | 60500 lb |
| | | | | | Tons | 30.25 |

Comments PGH-KF SOUTH PARK



| Product | LD% | Qty | UDM | Rate | Tax | Amount | Origin |
|----------------------------|-----|-------|------|------|-----|--------|--------|
| 1 Daily Cover-PCS-Tons-Pet | 100 | 30.25 | Tons | | | | KING |
| 2 GONDOLA T/10T MIN-GONDOL | 100 | 30.25 | Tons | | | | |

Total Tax
 Total Ticket

Dr 203 WM's Signature

Standard Register

CC762188-AD (07/15)



Alaska Street
 70 S Alaska Street
 Seattle, WA, 98134

Reprint
 Ticket# 122306
 Ph: 206 763 5025

Customer Name IO ENVIRONMENTAL AND INFRASTR Carrier SELF HAULER *
 Ticket Date 06/08/2016 Vehicle# PGH4T Volume
 Payment Type Credit Account Container
 Manual Ticket# Driver BRYAN KAHLER
 Route AK Check#
 Hauling Ticket# Billing# 0000313
 Destination Grid
 PO# 109542WA

Time Scale Operator Inbound Gross
 In 06/08/2016 14:04:34 SCALE 1 lmercer 104500 lb
 Out 06/08/2016 14:04:34 lmercer Tare 40940 lb
 Net 63560 lb
 Tons 31.78

Comments PGH-KF SOUTH PARK



| Product | LD% | Qty | UOM | Rate | Tax | Amount | Origin |
|----------------------------|-----|-------|------|------|-----|--------|--------|
| 1 Daily Cover-PCS-Tons-Pet | 100 | 31.78 | Tons | | | | KING |
| 2 GONDOLA T/10T MIN-GONDOL | 100 | 31.78 | Tons | | | | |

Total Tax
 Total Ticket

Dr:203 WM's Signature

Standard Register

CCT62195-AD (07/15)



Alaska Street
 70 S Alaska Street
 Seattle, WA, 98134

Reprint
 Ticket# 122303

Ph: 206 763 5025

Customer Name ID ENVIRONMENTAL AND INFRASTR Carrier SELF HAULER *
 Ticket Date 06/08/2016 Vehicle# PGH4T Volume
 Payment Type Credit Account Container
 Manual Ticket# Driver BRYAN KAHLER
 Route AK Check#
 Hauling Ticket# Billing# 0000313
 Destination Grid
 PO# 109542WA

| | Time | Scale | Operator | Inbound | Gross | |
|-----|---------------------|---------|----------|---------|---------------|--|
| In | 06/08/2016 13:15:38 | SCALE 1 | lmerc | | 98760 lb | |
| Out | 06/08/2016 13:15:38 | | lmerc | | Tare 40940 lb | |
| | | | | | Net 57820 lb | |
| | | | | | Tons 28.91 | |

Comments PGH-KF SOUTH PARK



| Product | LD% | Qty | UOM | Rate | Tax | Amount | Origin |
|----------------------------|-----|-------|------|------|-----|--------|--------|
| 1 Daily Cover-PCS-Tons-Pet | 100 | 28.91 | Tons | | | | KING |
| 2 GONDOLA T/10T MIN-GONDOL | 100 | 28.91 | Tons | | | | |

Total Tax
 Total Ticket

Dr203 WM's Signature

Standard Register

CCT62195-AD 07/15



Alaska Street
 70 S Alaska Street
 Seattle, WA, 98134

Reprint
 Ticket# 122297
 Ph: 206 763 5025

| | | | |
|-----------------|-------------------------------|-----------|---------------|
| Customer Name | IO ENVIRONMENTAL AND INFRASTR | Carrier | SELF HAULER * |
| Ticket Date | 06/08/2016 | Vehicle# | PGH4T |
| Payment Type | Credit Account | Container | |
| Manual Ticket# | | Driver | BRYAN KAHLER |
| Route | AK | Check# | |
| Hauling Ticket# | | Billing# | 0000313 |
| Destination | | Grid | |
| PO# | 109542WA | | |

| | Time | Scale | Operator | Inbound | Gross | Volume |
|-----|---------------------|---------|----------|---------|-------|-----------|
| In | 06/08/2016 12:26:59 | SCALE 1 | Imercer | | Tare | 101220 lb |
| Out | 06/08/2016 12:26:59 | | Imercer | | Net | 40940 lb |
| | | | | | Tons | 60280 lb |
| | | | | | | 30.14 |

Comments PGH-KF SOUTH PARK



| Product | LD% | Qty | UOM | Rate | Tax | Amount | Origin |
|----------------------------|-----|-------|------|------|-----|--------|--------|
| 1 Daily Cover-PCS-Tons-Pet | 100 | 30.14 | Tons | | | | KING |
| 2 GONDOLA T/10T MIN-GONDOL | 100 | 30.14 | Tons | | | | |

Total Tax
 Total Ticket

D:203 WM's Signature

Standard Register

CC762198-AD (07/15)



Alaska Street
70 S Alaska Street
Seattle, WA, 98134

Ph: 206 763 5025

Customer Name ID ENVIRONMENTAL AND INFRASTR
Ticket Date 06/08/2016
Payment Type Credit Account
Manual Ticket#
Route AK
Hauling Ticket#
Destination
PO# 109542WA

Carrier SELF HAULER *
Vehicle# PGH4T
Container
Driver BRYAN KAHLER
Check#
Billing# 0000313
Grid

Volume
102640 lb
40940 lb
61700 lb
30.85

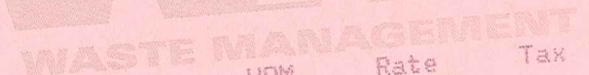
In Time 06/08/2016 11:35:01
Out Time 06/08/2016 11:35:01

Scale SCALE 1

Operator lmercer
lmercer

Inbound Gross
Tare
Net
Tons

Comments PGH-KF SOUTH PARK



| Product | LD% | Qty | UOM | Rate | Tax | Amount | Origin |
|----------------------------|-----|-------|------|------|-----|--------|--------|
| 1 Daily Cover-PCS-Tons-Pet | 100 | 30.85 | Tons | | | | KING |
| 2 GONDOLA T/10T MIN-GONDOL | 100 | 30.85 | Tons | | | | |

Total Tax
Total Ticket

D:203-WM's Signature

Standard Register

CC762 88-AD (07/15)



Alaska Street
70 S Alaska Street
Seattle, WA, 98134

Ph: 206 763 5025

Customer Name IO ENVIRONMENTAL AND INFRASTR
Ticket Date 06/08/2016
Payment Type Credit Account
Manual Ticket#
Route AK
Hauling Ticket#
Destination
PO# 109542WA

Carrier SELF HAULER *
Vehicle# PGH4T
Container
Driver BRYAN KAHLER
Check#
Billing# 0000313
Grid

Volume

In Time 06/08/2016 10:46:15
Out 06/08/2016 10:46:15

Scale SCALE 1

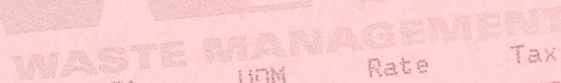
Operator
Imercer
Imercer

Inbound

Gross
Tare
Net
Tons

97840 lb
40940 lb
56900 lb
28.45

Comments PGH-KF SOUTH PARK



| Product | LD% | Qty | UOM | Rate | Tax | Amount | Origin |
|----------------------------|-----|-------|------|------|-----|--------|--------|
| 1 Daily Cover-PCS-Tons-Pet | 100 | 28.45 | Tons | | | | KING |
| 2 GONDOLA T/10T MIN-GONDOL | 100 | 28.45 | Tons | | | | |

Total Tax
Total Ticket

Dr:203 WM's Signature

Standard Register

CC702188-AD (07/15)



Alaska Street
 70 S Alaska Street
 Seattle, WA, 98134

Reprint
 Ticket# 122270
 Ph: 206 763 5025

Customer Name ID ENVIRONMENTAL AND INFRASTR Carrier SELF HAULER *
 Ticket Date 06/08/2016 Vehicle# PGH4T Volume
 Payment Type Credit Account Container
 Manual Ticket# Driver BRYAN KAHLER
 Route AK Check#
 Hauling Ticket# Billing# 0000313
 Destination Grid
 PO# 109542WA

| | Time | Scale | Operator | Inbound | Gross |
|----------|---------------------|---------|----------|---------|---------------|
| In | 06/08/2016 09:30:19 | SCALE 1 | lmercier | | 106740 lb |
| Out | 06/08/2016 09:30:19 | | lmercier | | Tare 40940 lb |
| Comments | PGH-KF | | | | Net 65800 lb |
| | | | | | Tons 32.90 |

WASTE MANAGEMENT

| Product | LD% | Qty | UOM | Rate | Tax | Amount | Origin |
|----------------------------|-----|-------|------|------|-----|--------|--------|
| 1 Daily Cover-PCS-Tons-Pet | 100 | 32.90 | Tons | | | | KING |
| 2 GONDOLA T/10T MIN-GONDOL | 100 | 32.90 | Tons | | | | |

Total Tax
 Total Ticket

D:203 WM's Signature

Standard Register

CC702185-AD (07/15)



Alaska Street
 70 S Alaska Street
 Seattle, WA, 98134

Ph: 206 763 5025

Reprint
 Ticket# 122259

Customer Name ID ENVIRONMENTAL AND INFRASTR Carrier SELF HAULER *
 Ticket Date 06/08/2016 Vehicle# PGH4T
 Payment Type Credit Account Container
 Manual Ticket# Driver BRYAN KAHLER
 Route AK Check#
 Hauling Ticket# Billing# 0000313
 Destination Grid
 PO# 109542WA

Volume

Time
 In 06/08/2016 08:40:48
 Out 06/08/2016 08:40:48

Scale
 SCALE 1

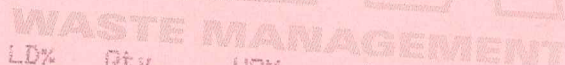
Operator
 Imercer
 Imercer

Inbound

Gross
 Tare
 Net
 Tons

104040 lb
 40940 lb
 63100 lb
 31.55

Comments PGH-KF SOUTH PARK



Product

| LDX | Qty | UDM | Rate | Tax | Amount | Origin |
|-----|--------------------------|-----|-------|------|--------|--------|
| 1 | Daily Cover-PCS-Tons-Pet | 100 | 31.55 | Tons | | |
| 2 | GONDOLA T/10T MIN-GONDOL | 100 | 31.55 | Tons | | KING |

Total Tax
 Total Ticket

D:203 WM's Signature

Standard Register

CCT82185-AD (07/15)



Alaska Street
70 S Alaska Street
Seattle, WA, 98134

Reprint
Ticket# 122252
Ph: 206 763 5025

Customer Name ID ENVIRONMENTAL AND INFRASTR Carrier SELF HAULER *
Ticket Date 06/08/2016 Vehicle# PGH4T Volume
Payment Type Credit Account Container
Manual Ticket# Driver BRYAN KAHLER
Route AK Check#
Hauling Ticket# Billing# 0000313
Destination Grid
PO# 109542WA

| | Time | Scale | Operator | Inbound | Gross |
|-----|---------------------|---------|----------|---------|-------------|
| In | 06/08/2016 07:55:00 | SCALE 1 | lmercer | | 104480 1 |
| Out | 06/08/2016 08:02:47 | SCALE 1 | lmercer | | 40940 1 |
| | | | | | Net 63540 1 |
| | | | | | Tons 31.7 |

Comments PGH-KF SOUTH PARK



| Product | LD% | Qty | UOM | Rate | Tax | Amount | Origin |
|----------------------------|-----|-------|------|------|-----|--------|--------|
| 1 Daily Cover-PCS-Tons-Pet | 100 | 31.77 | Tons | | | | |
| 2 GONDOLA T/10T MIN-GONDOL | 100 | 31.77 | Tons | | | | KING |

Total Tax
Total Ticket

D1203 WM's Signature

Standard Register

CC762195-AD (07/15)



Alaska Street
70 S Alaska Street
Seattle, WA, 98134

Ph: 206 763 5025

Customer Name ID ENVIRONMENTAL AND INFRASTR
Ticket Date 06/08/2016
Payment Type Credit Account
Manual Ticket#
Route AK
Hauling Ticket#
Destination
PO# 109542WA

Carrier SELF HAULER *
Vehicle# PGH9T
Container
Driver AARON STINGL
Check#
Billing# 0000313
Grid

Volume
108720 lb
41740 lb
66980 lb
33.49

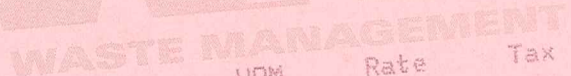
In Time 06/08/2016 08:08:53
Out Time 06/08/2016 08:08:53

Scale SCALE 1

Operator
Imercer
Imercer

Inbound Gross
Tare
Net
Tons

Comments PGH-KF SOUTH PARK



| Product | LDX | Qty | UOM | Rate | Tax | Amount | Origin |
|----------------------------|-----|-------|------|------|-----|--------|--------|
| 1 Daily Cover-PCS-Tons-Pet | 100 | 33.49 | Tons | | | | KING |
| 2 GONDOLA T/10T MIN-GONDOL | 100 | 33.49 | Tons | | | | |

Total Tax
Total Ticket

Dr203 WM's Signature

Standard Register

CC702195-AD (07/15)

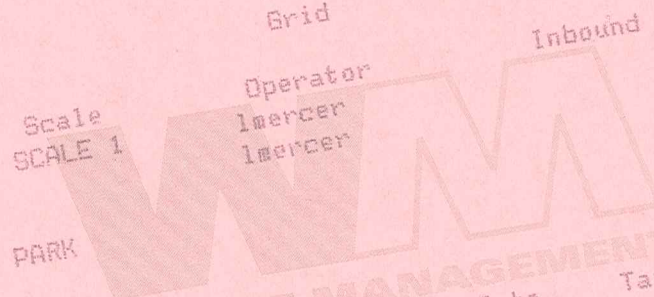


70 S Hill
Seattle, WA, 98134

Customer Name IO ENVIRONMENTAL AND INFRASTR
Ticket Date 05/08/2016
Payment Type Credit Account
Manual Ticket#
Route AK
Hauling Ticket#
Destination
PO# 109542WA

Carrier
Vehicle#
Container
Driver AARON STINGL
Check#
Billing# 0000313
Grid

Weight
110560 lb
41740 lb
68820 lb
34.41



Scale
SCALE 1

Operator
Imercer
Imercer

Inbound

Gross
Tare
Net
Tons

In Time 05/08/2016 09:04:46
Out 06/08/2016 09:04:46

Comments PGH-KF SOUTH PARK

WASTE MANAGEMENT

| Product | LD% | Qty | UOM | Rate | Tax | Amount | Origin |
|----------------------------|-----|-------|------|------|-----|--------|--------|
| 1 Daily Cover-PCS-Tons-Pet | 100 | 34.41 | Tons | | | | |
| 2 GONDOLA T/10T MIN-GONDOL | 100 | 34.41 | Tons | | | | KING |

Total Tax
Total Ticket

D:203 WM's Signature

Standard Register

CC102198-AD (07/16)



Alaska Street
 70 S Alaska Street
 Seattle, WA, 98134

Reprint
 Ticket# 122276
 Ph: 206 763 5025

Customer Name ID ENVIRONMENTAL AND INFRASTR Carrier SELF HAULER *
 Ticket Date 06/08/2016 Vehicle# PGH9T
 Payment Type Credit Account Container
 Manual Ticket# Driver AARON STINGL
 Route AK Check#
 Hauling Ticket# Billing# 0000313
 Destination Grid
 PO# 109542WA

Volume
 Gross 111000 lb
 Tare 41740 lb
 Net 69260 lb
 Tons 34.63

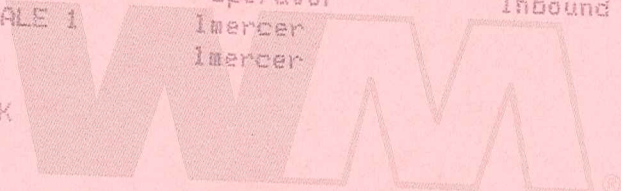
Time
 In 06/08/2016 10:00:59
 Out 06/08/2016 10:00:59

Scale
 SCALE 1

Operator
 Imercer
 Imercer

Inbound

Comments PGH-KF SOUTH PARK



WASTE MANAGEMENT

| Product | LD% | Qty | UOM | Rate | Tax | Amount | Origin |
|----------------------------|-----|-------|------|------|-----|--------|--------|
| 1 Daily Cover-PCS-Tons-Pet | 100 | 34.63 | Tons | | | | |
| 2 GONDOLA T/10T MIN-GONDOL | 100 | 34.63 | Tons | | | | KING |

Total Tax
 Total Ticket

D:203 WM's Signature

Standard Register

CCT02 08/10/07(15)



Alaska Street
 70 S Alaska Street
 Seattle, WA, 98134

Reprint
 Ticket# 122285

Ph: 206 763 5025

Customer Name IO ENVIRONMENTAL AND INFRASTR Carrier SELF HAULER *
 Ticket Date 06/08/2016 Vehicle# PGH9T Volume
 Payment Type Credit Account Container
 Manual Ticket# Driver AARON STINGL
 Route AK Check#
 Hauling Ticket# Billing# 0000313
 Destination Grid
 PO# 109542WA

| | Time | Scale | Operator | Inbound | Gross | |
|-----|---------------------|---------|----------|---------|----------|------|
| In | 06/08/2016 11:04:16 | SCALE 1 | lmerc | | 97540 lb | Tare |
| Out | 06/08/2016 11:04:16 | | lmerc | | 41740 lb | Net |
| | | | | | 55800 lb | Tons |
| | | | | | 27.90 | |

Comments PGH-KF SOUTH PARK



| Product | LD% | Qty | UOM | Rate | Tax | Amount | Origin |
|----------------------------|-----|-------|------|------|-----|--------|--------|
| 1 Daily Cover-PCS-Tons-Pet | 100 | 27.90 | Tons | | | | KING |
| 2 GONDOLA T/10T MIN-GONDOL | 100 | 27.90 | Tons | | | | |

Total Tax
 Total Ticket

D:203WM's Signature

Standard Register

CC762 88-AD (07/15)



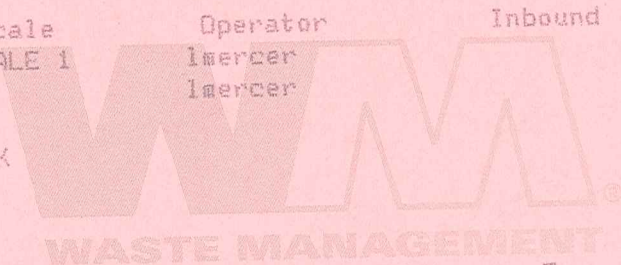
Alaska Street
70 S Alaska Street
Seattle, WA, 98134

Reprint
Ticket# 122295
Ph: 206 763 5025

Customer Name ID ENVIRONMENTAL AND INFRASTR Carrier SELF HAULER *
Ticket Date 06/08/2016 Vehicle# PGH9T Volume
Payment Type Credit Account Container
Manual Ticket# Driver AARON STINGL
Route AK Check#
Hauling Ticket# Billing# 0000313
Destination Grid
PO# 109542WA

| | Time | Scale | Operator | Inbound | Gross |
|-----|---------------------|---------|----------|---------|--------------|
| In | 06/08/2016 11:58:18 | SCALE 1 | lmercier | | 95200 lb |
| Out | 06/08/2016 11:58:18 | | lmercier | | 41740 lb |
| | | | | | Net 53540 lb |
| | | | | | Tons 26.77 |

Comments PGH-KF SOUTH PARK



| Product | LD% | Qty | UOM | Rate | Tax | Amount | Origin |
|----------------------------|-----|-------|------|------|-----|--------|--------|
| 1 Daily Cover-PCS-Tons-Pet | 100 | 26.77 | Tons | | | | KING |
| 2 GONDOLA T/10T MIN-GONDOL | 100 | 26.77 | Tons | | | | |

Total Tax
Total Ticket

D:203 WM's Signature

Standard Register

CC702186-AD (07/15)



Alaska Street
 70 S Alaska Street
 Seattle, WA, 98134

Reprint
 Ticket# 122301
 Ph: 206 763 5025

Customer Name ID ENVIRONMENTAL AND INFRASTR Carrier SELF HAULER *
 Ticket Date 06/08/2016 Vehicle# PGH9T Volume
 Payment Type Credit Account Container
 Manual Ticket# Driver AARON STINGL
 Route AK Check#
 Hauling Ticket# Billing# 0000313
 Destination Grid
 PO# 109542WA

| | Time | Scale | Operator | Inbound | Gross | 94700 lb |
|-----|---------------------|---------|----------|---------|-------|----------|
| In | 06/08/2016 12:50:01 | SCALE 1 | Imercer | | Tare | 41740 lb |
| Out | 06/08/2016 12:50:01 | | Imercer | | Net | 52960 lb |
| | | | | | Tons | 26.48 |

Comments PGH-KF SOUTH PARK

WASTE MANAGEMENT

| Product | LD% | Qty | UDM | Rate | Tax | Amount | Origin |
|----------------------------|-----|-------|------|------|-----|--------|--------|
| 1 Daily Cover-PCS-Tons-Pet | 100 | 26.48 | Tons | | | | KING |
| 2 GONDOLA T/10T MIN-GONDOL | 100 | 26.48 | Tons | | | | KING |

Total Tax
 Total Ticket

D:203-WM's Signature

Standard Register

CCT62198-AD (07/15)



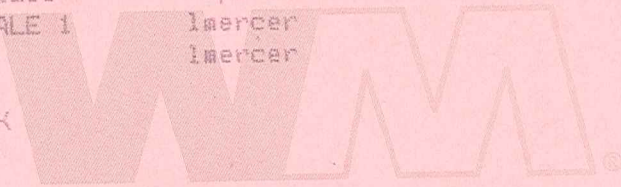
Alaska Street
 70 S Alaska Street
 Seattle, WA, 98134

Reprint
 Ticket# 122305
 Ph: 206 763 5025

Customer Name ID ENVIRONMENTAL AND INFRASTR Carrier SELF HAULER *
 Ticket Date 06/08/2016 Vehicle# PGH9T Volume
 Payment Type Credit Account Container
 Manual Ticket# Driver AARON STINGL
 Route AK Check#
 Hauling Ticket# Billing# 0000313
 Destination Grid
 PO# 109542WA

| | Time | Scale | Operator | Inbound | Gross | |
|-----|---------------------|---------|----------|---------|-----------|----------|
| In | 06/08/2016 13:43:46 | SCALE 1 | Imercer | | 102420 lb | |
| Out | 06/08/2016 13:43:46 | | Imercer | | 41740 lb | |
| | | | | | Net | 60680 lb |
| | | | | | Tons | 30.34 |

Comments PGH-KF SOUTH PARK



WASTE MANAGEMENT

| Product | LD% | Qty | UOM | Rate | Tax | Amount | Origin |
|----------------------------|-----|-------|------|------|-----|--------|--------|
| 1 Daily Cover-PCS-Tons-Pet | 100 | 30.34 | Tons | | | | KING |
| 2 GONDOLA T/10T MIN-GONDOL | 100 | 30.34 | Tons | | | | |

Total Tax
 Total Ticket

Dr:203 WM's Signature

Standard Register

CC782188-AD (07/15)



Alaska Street
70 S Alaska Street
Seattle, WA, 98134

Reprint
Ticket# 122356
Ph: 206 763 5025

Customer Name ID ENVIRONMENTAL AND INFRASTR Carrier SELF HAULER *
Ticket Date 06/09/2016 Vehicle# PGH4T
Payment Type Credit Account Container
Manual Ticket# Driver BRYAN KAHLER
Route AK Check#
Hauling Ticket# Billing# 0000313
Destination Grid
PO# 109542WA

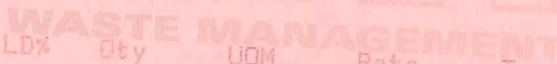
Volume

Time
In 06/09/2016 14:45:21
Out 06/09/2016 14:45:21

Scale Operator
SCALE 1 Inrcer
Imrcer

Inbound Gross 104920 lb
Tare 40940 lb
Net 63980 lb
Tons 31.99

Comments PGH-KF



| Product | LD% | Qty | UOM | Rate | Tax | Amount | Origin |
|----------------------------|-----|-------|------|------|-----|--------|--------|
| 1 Daily Cover-PCS-Tons-Pet | 100 | 31.99 | Tons | | | | |
| 2 GONDOLA T/10T MIN-GONDOL | 100 | 31.99 | Tons | | | | KING |

203 WM's Signature

Total Tax
Total Ticket

Standard Register

AD (07/15)



Alaska Street
70 S Alaska Street
Seattle, WA, 98134

Reprint
Ticket# 122354

Ph: 206 763 5025

Customer Name ID ENVIRONMENTAL AND INFRASTR Carrier SELF HAULER *
Ticket Date 06/09/2016 Vehicle# PGH4T
Payment Type Credit Account Container
Manual Ticket# Driver BRYAN KAHLER
Route AK Check#
Hauling Ticket# Billing# 0000313
Destination Grid
PO# 109542WA

Volume

Time
In 06/09/2016 14:00:14
Out 06/09/2016 14:00:14

Scale Operator
SCALE 1 Inrcer
Inrcer

Inbound Gross 102600 lb
Tare 40940 lb
Net 61660 lb
Tons 30.83

Comments PGH-KF



| Product | LD% | Qty | UDM | Rate | Tax | Amount | Origin |
|----------------------------|-----|-------|------|------|-----|--------|--------|
| 1 Daily Cover-PCS-Tons-Pet | 100 | 30.83 | Tons | | | | |
| 2 GONDOLA T/10T MIN-GONDOL | 100 | 30.83 | Tons | | | | KING |

Total Tax
Total Ticket

203 WM's Signature

Standard Register

3715



Alaska Street
70 S Alaska Street
Seattle, WA, 98134

Ph: 206 763 5025

Reprint
Ticket# 122349

Customer Name ID ENVIRONMENTAL AND INFRASTR Carrier SELF HAULER *
 Ticket Date 06/09/2016 Vehicle# PGH4T
 Payment Type Credit Account Container
 Manual Ticket# Driver BRYAN KAHLER
 Route AK Check#
 Hauling Ticket# Billing# 0000313
 Destination Grid
 PO# 109542WA

Volume

Time
In 06/09/2016 13:19:00
Out 06/09/2016 13:19:00

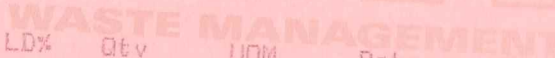
Scale
SCALE 1

Operator
Imercer
Imercer

Inbound

Gross 108760 lb
Tare 40940 lb
Net 67820 lb
Tons 33.91

Comments PGH-KF



| Product | LD% | Qty | UOM | Rate | Tax | Amount | Origin |
|----------------------------|-----|-------|------|------|-----|--------|--------|
| 1 Daily Cover-PCS-Tons-Pet | 100 | 33.91 | Tons | | | | |
| 2 GONDOLA T/10T MIN-GONDOL | 100 | 33.91 | Tons | | | | KING |

Total Tax
Total Ticket

Driver's Signature
203 WM

Standard Register

CC762198-AD (07/15)



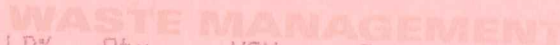
Alaska Street
 70 S Alaska Street
 Seattle, WA, 98134

Reprint
 Ticket# 122345

Ph: 206 763 5025

Customer Name ID ENVIRONMENTAL AND INFRASTR Carrier SELF HAULER *
 Ticket Date 06/09/2016 Vehicle# PGH4T Volume
 Payment Type Credit Account Container
 Manual Ticket# Driver BRYAN KAHLER
 Route AK Check#
 Hauling Ticket# Billing# 0000313
 Destination Grid
 PO# 109542WA

| | Time | Scale | Operator | Inbound | Gross |
|----------|---------------------|---------|----------|---------|--------------|
| In | 06/09/2016 12:12:35 | SCALE 1 | lmencer | | 106680 lb |
| Out | 06/09/2016 12:12:35 | | lmencer | | 40940 lb |
| Comments | PGH-KF | | | | Net 65740 lb |
| | | | | | Tons 32.87 |



| Product | LD% | Qty | UOM | Rate | Tax | Amount | Origin |
|----------------------------|-----|-------|------|------|-----|--------|--------|
| 1 Daily Cover-PCS-Tons-Pet | 100 | 32.87 | Tons | | | | |
| 2 GONDOLA T/10T MIN-GONDOL | 100 | 32.87 | Tons | | | | KING |

Total Tax
 Total Ticket

Driver's Signature
 203 WM

Standard Register

CC762198-AD (07/15)



Alaska Street
70 S Alaska Street
Seattle, WA, 98134

Reprint
Ticket# 122340
Ph: 206 763 5025

Customer Name ID ENVIRONMENTAL AND INFRASTR Carrier SELF HAULER *
 Ticket Date 06/09/2016 Vehicle# PGH4T Volume
 Payment Type Credit Account Container
 Manual Ticket# Driver BRYAN KAHLER
 Route AK Check#
 Hauling Ticket# Billing# 0000313
 Destination Grid
 PO# 109542WA

| | Time | Scale | Operator | Inbound | Gross | |
|-----|---------------------|---------|----------|---------|---------------|--|
| In | 06/09/2016 11:26:47 | SCALE 1 | lmerc | | 109300 lb | |
| Out | 06/09/2016 11:26:47 | | lmerc | | Tare 40940 lb | |
| | | | | | Net 68360 lb | |
| | | | | | Tons 34.18 | |

Comments PGH-KF



| Product | LD% | Qty | UOM | Rate | Tax | Amount | Origin |
|----------------------------|-----|-------|------|------|-----|--------|--------|
| 1 Daily Cover-PCS-Tons-Pet | 100 | 34.18 | Tons | | | | KING |
| 2 GONDOLA T/10T MIN-GONDOL | 100 | 34.18 | Tons | | | | |

Total Tax
Total Ticket

Driver's Signature

Standard Register



Alaska Street
70 S Alaska Street
Seattle, WA, 98134

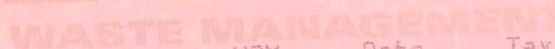
Reprint
Ticket# 122333
Ph: 206 763 5025

Customer Name IO ENVIRONMENTAL AND INFRASTR Carrier SELF HAULER *
Ticket Date 06/09/2016 Vehicle# PGH4T Volume
Payment Type Credit Account Container
Manual Ticket# Driver BRYAN KAHLER
Route AK Check#
Hauling Ticket# Billing# 0000313
Destination Grid
PO# 109542WA

| | Scale | Operator | Inbound | Gross | |
|-----|---------|----------|---------|-----------|-------|
| In | SCALE 1 | Imercer | | 111820 lb | |
| Out | | Imercer | | 40940 lb | |
| | | | | 70880 lb | |
| | | | | | 35.44 |

Comments PGH-KF

122333



| Product | LD% | Qty | UOM | Rate | Tax | Amount | Origin |
|----------------------------|-----|-------|------|------|-----|--------|--------|
| 1 Daily Cover-PCS-Tons-Pet | 100 | 35.44 | Tons | | | | KING |
| 2 GONDOLA T/10T MIN-GONDOL | 100 | 35.44 | Tons | | | | |

Total Tax
Total Ticket

Dr 203 WM's Signature

Standard Register

CC762198-AD (07/15)



Alaska Street
 70 S Alaska Street
 Seattle, WA, 98134

Reprint
 Ticket# 122327

Ph: 206 763 5025

Customer Name IO ENVIRONMENTAL AND INFRASTR Carrier SELF HAULER *
 Ticket Date 06/09/2016 Vehicle# PGH4T Volume
 Payment Type Credit Account Container
 Manual Ticket# Driver BRYAN KAHLER
 Route AK Check#
 Hauling Ticket# Billing# 0000313
 Destination Grid
 PD# 109542WA

| In | Time | Scale | Operator | Inbound | Gross | |
|-----|---------------------|---------|----------|---------|---------------|--|
| In | 06/09/2016 09:29:32 | SCALE 1 | lmercer | | 105200 lb | |
| Out | 06/09/2016 09:29:32 | | lmercer | | Tare 40940 lb | |
| | | | | | Net 64260 lb | |
| | | | | | Tons 32.13 | |

Comments PGH-KF



| Product | LD% | Qty | UOM | Rate | Tax | Amount | Origin |
|----------------------------|-----|-------|------|------|-----|--------|--------|
| 1 Daily Cover-PCS-Tons-Pet | 100 | 32.13 | Tons | | | | KING |
| 2 GONDOLA T/10T MIN-GONDOL | 100 | 32.13 | Tons | | | | |

Total Tax
 Total Ticket

D:203 WM's Signature

Standard Register

CC762188-AD (07/15)



Alaska Street
70 S Alaska Street
Seattle, WA, 98134

Reprint
Ticket# 122320

Ph: 206 763 5025

Customer Name ID ENVIRONMENTAL AND INFRASTR Carrier SELF HAULER *
Ticket Date 06/09/2016 Vehicle# PGH4T Volume
Payment Type Credit Account Container
Manual Ticket# Driver BRYAN KAHLER
Route AK Check#
Hauling Ticket# Billing# 0000313
Destination Grid
PO# 109542WA

| In | Time | Scale | Operator | Inbound | Gross | 102820 lb |
|-----|---------------------|---------|----------|---------|-------|-----------|
| In | 06/09/2016 08:26:00 | SCALE 1 | lmercer | | Tare | 40940 lb |
| Out | 06/09/2016 08:26:00 | | lmercer | | Net | 61880 lb |
| | | | | | Tons | 30.94 |

Comments PGH-KF

11017-2203



| Product | LD% | Qty | UOM | Rate | Tax | Amount | Origin |
|----------------------------|-----|-------|------|------|-----|--------|--------|
| 1 Daily Cover-PCS-Tons-Pet | 100 | 30.94 | Tons | | | | KING |
| 2 GONDOLA T/10T MIN-GONDOL | 100 | 30.94 | Tons | | | | |

Total Tax
Total Ticket

Dr203.WM's Signature

Standard Register

CC702196AD (07/15)



Alaska Street
70 S Alaska Street
Seattle, WA, 98134

Reprint
Ticket# 122319

Ph: 206 763 5025

| | | | |
|-----------------|-------------------------------|-----------|---------------|
| Customer Name | IO ENVIRONMENTAL AND INFRASTR | Carrier | SELF HAULER * |
| Ticket Date | 06/09/2016 | Vehicle# | PGH9T |
| Payment Type | Credit Account | Container | |
| Manual Ticket# | | Driver | AARON STINGL |
| Route | AK | Check# | |
| Hauling Ticket# | | Billing# | 0000313 |
| Destination | | Grid | |
| PO# | 109542WA | | |

| | | | | | | |
|-----|---------------------|---------|----------|---------|-------|-----------|
| | Time | Scale | Operator | Inbound | Gross | 114880 lb |
| In | 06/09/2016 08:22:27 | SCALE 1 | lmercier | | Tare | 41740 lb |
| Out | 06/09/2016 08:22:27 | | lmercier | | Net | 73140 lb |
| | | | | | Tons | 36.57 |

Comments PGH-KF



| Product | LD% | Qty | UOM | Rate | Tax | Amount | Origin |
|----------------------------|-----|-------|------|------|-----|--------|--------|
| 1 Daily Cover-PCS-Tons-Pet | 100 | 36.57 | Tons | | | | KING |
| 2 GONDOLA T/10T MIN-GONDOL | 100 | 36.57 | Tons | | | | |

Total Tax
Total Ticket

D:203 WM's Signature

Standard Register

CCR2198-AD (07/15)



Alaska Street
 70 S Alaska Street
 Seattle, WA, 98134

Reprint
 Ticket# 122324

Ph: 206 763 5025

Customer Name ID ENVIRONMENTAL AND INFRASTR Carrier SELF HAULER *
 Ticket Date 06/09/2016 Vehicle# PGH9T Volume
 Payment Type Credit Account Container
 Manual Ticket# Driver AARON STINGL
 Route AK Check#
 Hauling Ticket# Billing# 0000313
 Destination Grid
 PO# 109542WA

| | Time | Scale | Operator | Inbound | Gross | |
|-----|---------------------|---------|----------|---------|----------|----------|
| In | 06/09/2016 09:12:02 | SCALE 1 | lmercer | | 98920 lb | |
| Out | 06/09/2016 09:12:02 | | lmercer | | Tare | 41740 lb |
| | | | | | Net | 57180 lb |
| | | | | | Tons | 28.59 |

Comments PGH-KF



| Product | LD% | Qty | UDM | Rate | Tax | Amount | Origin |
|----------------------------|-----|-------|------|------|-----|--------|--------|
| 1 Daily Cover-PCS-Tons-Pet | 100 | 28.59 | Tons | | | | KING |
| 2 GONDOLA T/10T MIN-GONDOL | 100 | 28.59 | Tons | | | | KING |

Total Tax
 Total Ticket

D:203 WM's Signature

Standard Register

CCT62185-AD (07/15)



Alaska Street
 70 S Alaska Street
 Seattle, WA, 98134

Reprint
 Ticket# 122332

Ph: 206 763 5025

Customer Name ID ENVIRONMENTAL AND INFRASTR Carrier SELF HAULER *
 Ticket Date 06/09/2016 Vehicle# PGH9T Volume
 Payment Type Credit Account Container
 Manual Ticket# Driver AARON STINGL
 Route AK Check#
 Hauling Ticket# Billing# 0000313
 Destination Grid
 PD# 109542WA

| | Time | Scale | Operator | Inbound | Gross | |
|-----|---------------------|---------|----------|---------|---------------|--|
| In | 06/09/2016 10:10:22 | SCALE 1 | lmerc | | 102090 lb | |
| Out | 06/09/2016 10:10:22 | | lmerc | | Tare 41740 lb | |
| | | | | | Net 60340 lb | |
| | | | | | Tons 30.17 | |

Comments PGH-KF



| Product | LD% | Qty | UCM | Rate | Tax | Amount | Origin |
|----------------------------|-----|-------|------|------|-----|--------|--------|
| 1 Daily Cover-PCS-Tons-Pet | 100 | 30.17 | Tons | | | | KING |
| 2 GONDOLA T/10T MIN-GONDOL | 100 | 30.17 | Tons | | | | KING |

Total Tax
 Total Ticket

Driver's Signature



Alaska Street
70 S Alaska Street
Seattle, WA, 98134

Ph: 206 763 5025

Reprint
Ticket# 122337

Customer Name IO ENVIRONMENTAL AND INFRASTR Carrier SELF HAULER *
Ticket Date 06/09/2016 Vehicle# PGH9T
Payment Type Credit Account Container
Manual Ticket# Driver AARON STINGL
Route AK Check#
Hauling Ticket# Billing# 0000313
Destination Grid
PO# 109542WA

Volume

Time
In 06/09/2016 11:17:24
Out 06/09/2016 11:17:24

Scale
SCALE 1

Operator
Imercer
Imercer

Inbound

Gross 112140 lb
Tare 41740 lb
Net 70400 lb
Tons 35.20

Comments PGH-KF



Product

WASTE MANAGEMENT

| | LD% | Qty | UDM | Rate | Tax | Amount | Origin |
|---|-----|--------------------------|-----|-------|------|--------|--------|
| 1 | | Daily Cover-PCS-Tons-Pet | 100 | 35.20 | Tons | | |
| 2 | | GONDOLA T/10T MIN-GONDOL | 100 | 35.20 | Tons | | KING |

Total Tax
Total Ticket

Driver's Signature

Standard Register

CC702189-AD (07/15)

203 WM



Alaska Street
 70 S Alaska Street
 Seattle, WA, 98134

Reprint
 Ticket# 122347

Ph: 206 763 5025

Customer Name ID ENVIRONMENTAL AND INFRASTR Carrier SELF HAULER *
 Ticket Date 06/09/2016 Vehicle# PGH9T Volume
 Payment Type Credit Account Container
 Manual Ticket# Driver AARON STINGL
 Route AK Check#
 Hauling Ticket# Billing# 0000313
 Destination Grid
 PO# 109542WA

| In | Time | Scale | Operator | Inbound | Gross | 97800 lb |
|-----|---------------------|---------|----------|---------|-------|----------|
| In | 06/09/2016 12:38:55 | SCALE 1 | lmercner | | Tare | 41740 lb |
| Out | 06/09/2016 12:38:55 | | lmercner | | Net | 56060 lb |
| | | | | | Tons | 28.03 |

Comments PGH-KF



| Product | LD% | Qty | UOM | Rate | Tax | Amount | Origin |
|----------------------------|-----|-------|------|------|-----|--------|--------|
| 1 Daily Cover-PCS-Tons-Pet | 100 | 28.03 | Tons | | | | KING |
| 2 GONDOLA T/10T MIN-GONDOL | 100 | 28.03 | Tons | | | | KING |

Total Tax
 Total Ticket

Driver's Signature

203 WM

Standard Register

CC782-888-AD (07/15)



Alaska Street
 70 S Alaska Street
 Seattle, WA, 98134

Reprint
 Ticket# 122353

Ph: 206 763 5025

Customer Name IO ENVIRONMENTAL AND INFRASTR Carrier SELF HAULER *
 Ticket Date 06/09/2016 Vehicle# PGH9T Volume
 Payment Type Credit Account Container
 Manual Ticket# Driver AARON STINGL
 Route AK Check#
 Hauling Ticket# Billing# 0000313
 Destination Grid
 PO# 109542WA

| Time | Scale | Operator | Inbound | Gross | |
|-------------------------|---------|----------|---------|---------------|--|
| In 06/09/2016 13:49:40 | SCALE 1 | lmerc | | 111420 lb | |
| Out 06/09/2016 13:49:40 | | lmerc | | Tare 41740 lb | |
| | | | | Net 69680 lb | |
| | | | | Tons 34.84 | |

Comments PGH-KF



| Product | LD% | Qty | UOM | Rate | Tax | Amount | Origin |
|----------------------------|-----|-------|------|------|-----|--------|--------|
| 1 Daily Cover-PCS-Tons-Pet | 100 | 34.84 | Tons | | | | KING |
| 2 GONDOLA T/10T MIN-GONDOL | 100 | 34.84 | Tons | | | | |

Total Tax
 Total Ticket

Driver's Signature

Standard Register

CCT62196-AD (07/16)



Alaska Street
 70 S Alaska Street
 Seattle, WA, 98134

Reprint
 Ticket# 122355

Ph: 206 763 5025

Customer Name ID ENVIRONMENTAL AND INFRASTR Carrier SELF HAULER *
 Ticket Date 06/09/2016 Vehicle# PGH9T Volume
 Payment Type Credit Account Container
 Manual Ticket# Driver AARON STINGL
 Route AK Check#
 Hauling Ticket# Billing# 0000313
 Destination Grid
 PO# 109542WA

| | | | | | |
|-------------------------|---------|----------|---------|-------|----------|
| Time | Scale | Operator | Inbound | Gross | 99820 lb |
| In 06/09/2016 14:37:06 | SCALE 1 | Imercer | | Tare | 41740 lb |
| Out 06/09/2016 14:37:06 | | Imercer | | Net | 58080 lb |
| Comments PGH-KF | | | | Tons | 29.04 |



| Product | LD% | Qty | UOM | Rate | Tax | Amount | Origin |
|----------------------------|-----|-------|------|------|-----|--------|--------|
| 1 Daily Cover-PCS-Tons-Pet | 100 | 29.04 | Tons | | | | KING |
| 2 GONDOLA T/10T MIN-GONDOL | 100 | 29.04 | Tons | | | | |

Total Tax
 Total Ticket

Driver's Signature

203 WM

Standard Register

CCT62198-AD (07/15)



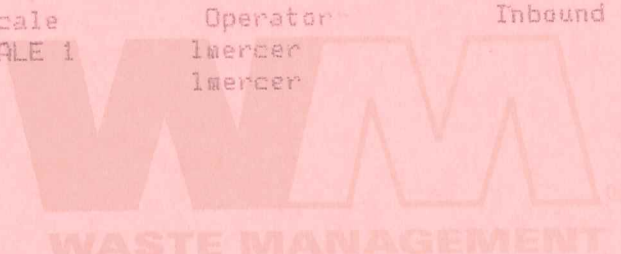
Alaska Street
70 S Alaska Street
Seattle, WA, 98134

Reprint
Ticket# 122375
Ph: 206 763 5025

Customer Name ID ENVIRONMENTAL AND INFRASTR Carrier SELF HAULER *
Ticket Date 06/10/2016 Vehicle# PGH4T Volume
Payment Type Credit Account Container
Manual Ticket# Driver BRYAN KAHLER
Route AK Check#
Hauling Ticket# Billing# 0000313
Destination Grid
PO# 109542WA

| | Time | Scale | Operator | Inbound | Gross | 110560 lb |
|-----|---------------------|---------|----------|---------|-------|-----------|
| In | 06/10/2016 08:27:16 | SCALE 1 | Imercer | | Tare | 40940 lb |
| Out | 06/10/2016 08:27:16 | | Imercer | | Net | 69620 lb |
| | | | | | Tons | 34.81 |

Comments PGH-KF



| Product | LD% | Qty | UOM | Rate | Tax | Amount | Origin |
|----------------------------|-----|-------|------|------|-----|--------|--------|
| 1 Daily Cover-PCS-Tons-Pet | 100 | 34.81 | Tons | | | | KING |
| 2 GONDOLA T/10T MIN-GONDOL | 100 | 34.81 | Tons | | | | |

Total Tax
Total Ticket

Dr203 WM's Signature

Standard Register

CCT62195-AD 07/15



Alaska Street
70 S Alaska Street
Seattle, WA, 98134

Reprint
Ticket# 122385
Ph: 206 763 5025

Customer Name IO ENVIRONMENTAL AND INFRASTR Carrier SELF HAULER *
Ticket Date 06/10/2016 Vehicle# PGH4T Volume
Payment Type Credit Account Container
Manual Ticket# Driver BRYAN KAHLER
Route AK Check#
Hauling Ticket# Billing# 0000313
Destination Grid
PO# 109542WA

| | | | | | | |
|----------|----------------------|---------|----------|---------|-------|-----------|
| | Time | Scale | Operator | Inbound | Gross | 114940 lb |
| In | 06/10/2016 09:31:51 | SCALE 1 | Imarcen | | Tax | 40940 lb |
| Out | 06/10/2016 -09:31:51 | | Imarcen | | Net | 74000 lb |
| Comments | PGH-KF | | | | Tons | 37.00 |



| Product | LD% | Qty | UOM | Rate | Tax | Amount | Origin |
|----------------------------|-----|-------|------|------|-----|--------|--------|
| 1 Daily Cover-PCS-Tons-Pet | 100 | 37.00 | Tons | | | | KING |
| 2 GONDOLA T/10T MIN-GONDOL | 100 | 37.00 | Tons | | | | |

Total Tax
Total Ticket

Driver's Signature
203 WM

Standard Register

CC762108-AD (07/15)



Alaska Street
 70 S Alaska Street
 Seattle, WA, 98134

Reprint
 Ticket# 122396

Ph: 206 763 5025

| | | | |
|-----------------|-------------------------------|-----------|---------------|
| Customer Name | IQ ENVIRONMENTAL AND INFRASTR | Carrier | SELF HAULER * |
| Ticket Date | 06/10/2016 | Vehicle# | PGH4T |
| Payment Type | Credit Account | Container | |
| Manual Ticket# | | Driver | BRYAN KAHLER |
| Route | AK | Check# | |
| Hauling Ticket# | | Billing# | 0000313 |
| Destination | | Grid | |
| PO# | 109542WA | | |

| | | | | | | |
|-----|---------------------|---------|----------|---------|-------|-----------|
| | Time | Scale | Operator | Inbound | Gross | 108440 lb |
| In | 06/10/2016 10:33:49 | SCALE 1 | lmercer | | Tare | 40940 lb |
| Out | 06/10/2016 10:33:49 | | lmercer | | Net | 67500 lb |
| | | | | | Tons | 33.75 |

Comments PGH-KF

111903 - 3375
 111903 - 3498



| Product | LD% | Qty | UOM | Rate | Tax | Amount | Origin |
|----------------------------|-----|-------|------|------|-----|--------|--------|
| 1 Daily Cover-PCS-Tons-Pet | 100 | 33.75 | Tons | | | | KING |
| 2 GONDOLA T/10T MIN-GONDOL | 100 | 33.75 | Tons | | | | |

Total Tax
 Total Ticket

Dr. 203 WM's Signature

Standard Register

CC762198-AD (07/15)



Alaska Street
70 S Alaska Street
Seattle, WA, 98134

Reprint
Ticket# 122403

Ph: 206 763 5025

Customer Name IO ENVIRONMENTAL AND INFRASTR Carrier SELF HAULER *
 Ticket Date 06/10/2016 Vehicle# PGH4T Volume
 Payment Type Credit Account Container
 Manual Ticket# Driver BRYAN KAHLER
 Route AK Check#
 Hauling Ticket# Billing# 0000313
 Destination Grid
 PO# 109542WA

| | | | | | | |
|-----|---------------------|---------|----------|---------|-------|-----------|
| | Time | Scale | Operator | Inbound | Gross | 110100 lb |
| In | 06/10/2016 11:29:40 | SCALE 1 | lmercer | | Tare | 40940 lb |
| Out | 06/10/2016 11:29:40 | | lmercer | | Net | 69160 lb |
| | | | | | Tons | 34.58 |

Comments PGH-KF



| Product | LD% | Qty | UDM | Rate | Tax | Amount | Origin |
|----------------------------|-----|-------|------|------|-----|--------|--------|
| 1 Daily Cover-PCS-Tons-Pet | 100 | 34.58 | Tons | | | | KING |
| 2 GONDOLA T/10T MIN-GONDOL | 100 | 34.58 | Tons | | | | |

Total Tax
Total Ticket

Dr203 WM's Signature

Standard Register

CCT62195-AD (07/15)



Alaska Street
70 S Alaska Street
Seattle, WA, 98134

Reprint
Ticket# 122408

Ph: 206 763 5025

Customer Name ID ENVIRONMENTAL AND INFRASTR Carrier SELF HAULER *
 Ticket Date 06/10/2016 Vehicle# PGH4T Volume
 Payment Type Credit Account Container
 Manual Ticket# Driver BRYAN KAHLER
 Route AK Check#
 Hauling Ticket# Billing# 0000313
 Destination Grid
 PO# 109542WA

| Scale | Operator | Inbound | Gross |
|---------|----------|---------|---------------|
| SCALE 1 | Imercer | | 100440 lb |
| | Imercer | | Tare 40940 lb |
| | | | Net 67500 lb |
| | | | Tons 33.75 |

Comments PGH-KF

| Product | LD% | Qty | UOM | Rate | Tax | Amount | Origin |
|----------------------------|-----|-------|------|------|-----|--------|--------|
| 1 Daily Cover-PCS-Tons-Pet | 100 | 33.75 | Tons | | | | KING |
| 2 GONDOLA T/10T MIN-GONDOL | 100 | 33.75 | Tons | | | | |

Total Tax *Handwritten*
Total Ticket

Driver's Signature
203 WM

Standard Register

CC762198-AD (07/15)



Alaska Street
70 S Alaska Street
Seattle, WA, 98134

Reprint
Ticket# 122412

Ph: 206 763 5025

Customer Name ID ENVIRONMENTAL AND INFRASTR Carrier SELF HAULER *
Ticket Date 06/10/2016 Vehicle# PGH9T Volume
Payment Type Credit Account Container
Manual Ticket# Driver AARON STINGL
Route AK Check#
Hauling Ticket# Billing# 0000313
Destination Grid
PO# 109542WA

| | Time | Scale | Operator | Inbound | Gross | |
|----------|---------------------|---------|----------|---------|-------|----------|
| In | 06/10/2016 12:57:49 | SCALE 1 | lmerc | | | 68660 lb |
| Out | 06/10/2016 12:57:49 | | lmerc | | Tare | 41740 lb |
| Comments | PGH-KF | | | | Net | 26920 lb |
| | | | | | Tons | 13.46 |

WASTE MANAGEMENT

| Product | LD% | Qty | UOM | Rate | Tax | Amount | Origin |
|----------------------------|-----|-------|------|------|-----|--------|--------|
| 1 Daily Cover-PCS-Tons-Pet | 100 | 13.46 | Tons | | | | KING |
| 2 GONDOLA T/10T MIN-GONDOL | 100 | 13.46 | Tons | | | | KING |

Total Tax
Total Ticket

Driver's Signature

203 WM

Standard Register

CCT02198-AD (07/15)



Alaska Street
 70 S Alaska Street
 Seattle, WA, 98134

Ph: 206 763 5025

Reprint
 Ticket# 122407

Customer Name ID ENVIRONMENTAL AND INFRASTR Carrier SELF HAULER *
 Ticket Date 06/10/2016 Vehicle# PGH9T Volume
 Payment Type Credit Account Container
 Manual Ticket# Driver AARON STINGL
 Route AK Check#
 Hauling Ticket# Billing# 0000313
 Destination Grid
 PQ# 109542WA

| Scale | Operator | Inbound | Gross |
|---------|----------|---------|------------|
| SCALE 1 | Imercer | | 110400 lb |
| | Imercer | | 41740 lb |
| | | | 68660 lb |
| | | | 34.33 Tons |

Comments PGH-KF

| Product | LD% | Qty | UOM | Rate | Tax | Amount | Origin |
|----------------------------|-----|-------|------|------|-----|--------|--------|
| 1 Daily Cover-PCS-Tons-Pet | 100 | 34.33 | Tons | | | | KING |
| 2 GONDOLA T/10T MIN-GONDOL | 100 | 34.33 | Tons | | | | |

Total Tax
 Total Ticket

Dr 203 WM's Signature

Standard Register

CCT62198-AD (07/15)



Alaska Street
70 S Alaska Street
Seattle, WA, 98134

Reprint
Ticket# 122398
Ph: 206 763 5025

Customer Name IO ENVIRONMENTAL AND INFRASTR Carrier SELF HAULER *
Ticket Date 06/10/2016 Vehicle# PGH9T Volume
Payment Type Credit Account Container
Manual Ticket# Driver AARON STINGL
Route AK Check#
Hauling Ticket# Billing# 0000313
Destination Grid
PO# 109542WA

| | Time | Scale | Operator | Inbound | Gross | 108820 lb |
|-----|---------------------|---------|----------|---------|-------|-----------|
| In | 06/10/2016 10:46:44 | SCALE 1 | Imercer | | Tare | 41740 lb |
| Out | 06/10/2016 10:46:44 | | Imercer | | Net | 67000 lb |
| | | | | | Tons | 33.54 |

Comments PGH-KF



| Product | LD% | Qty | UOM | Rate | Tax | Amount | Origin |
|----------------------------|-----|-------|------|------|-----|--------|--------|
| 1 Daily Cover-PCS-Tons-Pet | 100 | 33.54 | Tons | | | | KING |
| 2 GONDOLA T/10T MIN-GONDOL | 100 | 33.54 | Tons | | | | KING |

Total Tax
Total Ticket

Driver's Signature

CC702188-AD (07/15)

Standard Register

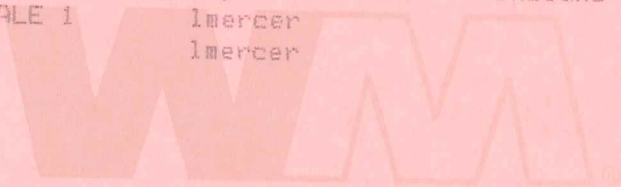


Alaska Street
 70 S Alaska Street
 Seattle, WA, 98134

Reprint
 Ticket# 122386
 Ph: 206 763 5025

Customer Name IO ENVIRONMENTAL AND INFRASTR Carrier SELF HAULER *
 Ticket Date 06/10/2016 Vehicle# PGH9T Volume
 Payment Type Credit Account Container
 Manual Ticket# Driver AARON STINGL
 Route AK Check#
 Hauling Ticket# Billing# 0000313
 Destination Grid
 PD# 109542WA

| Time | Scale | Operator | Inbound | Gross | |
|-------------------------|---------|----------|---------|---------------|--|
| In 06/10/2016 09:40:42 | SCALE 1 | lmerc | | 105180 lb | |
| Out 06/10/2016 09:40:42 | | lmerc | | Tare 41740 lb | |
| | | | | Net 63440 lb | |
| Comments PGH-KF | | | | Tons 31.72 | |



WASTE MANAGEMENT

| Product | LD% | Qty | UOM | Rate | Tax | Amount | Origin |
|----------------------------|-----|-------|------|------|-----|--------|--------|
| 1 Daily Cover-PCS-Tons-Pet | 100 | 31.72 | Tons | | | | |
| 2 GONDOLA T/10T MIN-GONDGL | 100 | 31.72 | Tons | | | | KING |

Total Tax
 Total Ticket

203 WM's Signature

Standard Register

CC762188-AD (07/16)



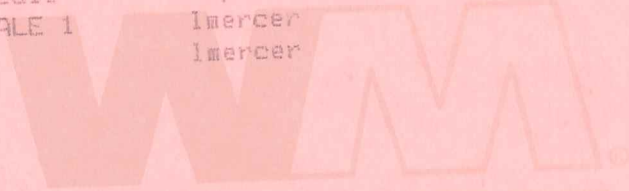
Alaska Street
 70 S Alaska Street
 Seattle, WA, 98134

Reprint
 Ticket# 122376
 Ph: 206 763 5025

Customer Name ID ENVIRONMENTAL AND INFRASTR Carrier SELF HAULER *
 Ticket Date 06/10/2016 Vehicle# PGH9T Volume
 Payment Type Credit Account Container
 Manual Ticket# Driver AARON STINGL
 Route AK Check#
 Hauling Ticket# Billing# 0000313
 Destination Grid
 PO# 109542WA

| | Time | Scale | Operator | Inbound | Gross | |
|-----|---------------------|---------|----------|---------|-------|-----------|
| In | 06/10/2016 08:40:44 | SCALE 1 | Imercer | | | 116200 lb |
| Out | 06/10/2016 08:40:44 | | Imercer | | | 41740 lb |
| | | | | | Net | 74460 lb |
| | | | | | Tons | 37.23 |

Comments PGH-KF



| Product | LDX | Qty | UOM | Rate | Tax | Amount | Origin |
|----------------------------|-----|-----|------|------|-----|--------|--------|
| 1 Daily Cover-PCS-Tons-Pet | | 100 | Tons | | | | KING |
| 2 GONDOLA T/10T MIN-GONDOL | | 100 | Tons | | | | |

Total Tax
 Total Ticket

Dr 203 WM's Signature

Standard Register

CC762198-AD (07/15)



Alaska Street
 70 S Alaska Street
 Seattle, WA, 98134

Reprint
 Ticket# 122366

Ph: 206 763 5025

Customer Name 10 ENVIRONMENTAL AND INFRASTR Carrier SELF HAULER *
 Ticket Date 06/10/2016 Vehicle# PGH9T Volume
 Payment Type Credit Account Container
 Manual Ticket# Driver AARON STINGL
 Route AK Check#
 Hauling Ticket# Billing# 0000313
 Destination Grid
 PO# 109542WA

| | Time | Scale | Operator | Inbound | Gross | |
|-----|---------------------|---------|----------|---------|-----------|---------------|
| In | 06/10/2016 07:46:28 | SCALE 1 | lmerc | | 110780 lb | Tare 41740 lb |
| Out | 06/10/2016 07:46:28 | | lmerc | | | Net 69040 lb |
| | | | | | | Tons 34.52 |

Comments PGH-KF



| Product | LD% | Qty | UOM | Rate | Tax | Amount | Origin |
|----------------------------|-----|-------|------|------|-----|--------|--------|
| 1 Daily Cover-PCS-Tons-Pet | 100 | 34.52 | Tons | | | | KING |
| 2 GONDOLA T/10T MIN-GONDOL | 100 | 34.52 | Tons | | | | |

Total Tax
 Total Ticket

Driver's Signature
 203 WM

Standard Register

CCT62 986-AD (07/15)

MARINE VACUUM SERVICE, INC.

PO BOX 24263
SEATTLE, WA 98124

Phone # 206-762-0240
Fax # 206-763-8084

CHARIESES@MARINEVACUUM.C...

ENTERED MAY 25 2016
RECEIVED MAY 23 2016

INVOICE

| Date | Invoice # |
|-----------|-----------|
| 5/19/2016 | 57817 |

Bill To

THE RILEY GROUP
17522 BOTHEL WAY NE
BOTHELL, WA 98011

Ship To

PUMP AND WASH AS DIRECTED
9635 DES MOINE MEMORIAL DR S
SEATTLE

| P.O. No. | Terms |
|----------|----------------|
| | Due on receipt |

| Quantity | U/M | Description | Rate | Amount |
|----------|-----|--|--------|--------|
| 3 | HR | 5/09/2016***** PUMP & WASH AS DIRECTED | | 0.00 |
| 3 | HR | VAC TRUCK & DRIVER STRAIGHT TIME | 105.00 | 315.00 |
| 50 | GAL | LABOR STRAIGHT TIME | 48.50 | 145.50 |
| 200 | GAL | WASTE WATER | 0.25 | 12.50 |
| | GAL | USED OIL | 0.50 | 100.00 |

| | | |
|------------|---------------------|-------------|
| Project # | Project Name | PM Initials |
| 2016-023A | Dominic's (See Map) | AJ |
| Phase Name | Phase # | Activity |
| | TASK 6 B | VTS |

| | | | | | |
|----------|-----------|------------------|--------|---------------|----------|
| Due Date | 5/19/2016 | Sales Tax (0.0%) | \$0.00 | TOTAL: | \$573.00 |
|----------|-----------|------------------|--------|---------------|----------|

MARINE VACUUM SERVICE, INC.

PO BOX 24263
SEATTLE, WA 98124

Email: CHARIESES@MARINEVACUUM.COM
Phone # 206-762-0240
Fax # 206-763-8084

RECEIVED AUG 03 2016

ENTERED AUG 04 2016

INVOICE

| Date | Invoice # |
|-----------|-----------|
| 7/21/2016 | 58272 |

Bill To

THE RILEY GROUP
17522 BOTHEL WAY NE
BOTHELL, WA 98011

Job Description / Site address

PUMP AS DIRECTED
9635 DES MOINES MEMORIAL DR S
SEATTLE

| P.O. No. | Terms |
|----------|----------------|
| | Due on receipt |

| Quantity | U/M | Description | Rate | Amount |
|----------|-----|-------------------------------------|--------|--------|
| 3 | HR | 7/15/2016***** PUMP AS DIRECTED | 140.00 | 0.00 |
| 1,475 | GAL | VACTOR TRUCK & DRIVER STRAIGHT TIME | 0.25 | 420.00 |
| 25 | GAL | WASTE WATER | 2.00 | 368.75 |
| 1 | EA | SLUDGE/SOLIDS | 50.00 | 50.00 |
| | | WASH OUT | | 0.00 |
| 3 | HR | VACTOR TRUCK & DRIVER STRAIGHT TIME | 140.00 | 420.00 |
| 1,500 | GAL | WASTE WATER | 0.25 | 375.00 |

| | | |
|------------|-------------------|-------------|
| Project # | Project Name | PM Initials |
| 2016-023A | Dominic's Sea Mar | AJ |
| Phase Name | Phase # | Activity |
| | Task 4 | VTS |

| | |
|--------------------|-------------------|
| Subtotal | \$1,683.75 |
| Sales Tax (0.0%) | \$0.00 |
| Payments/Credits | \$0.00 |
| Balance Due | \$1,683.75 |

| | | |
|----------|-----------|---|
| Due Date | 7/21/2016 | Please remit payment for this invoice by the Due Date. A finance charge of 1.5% monthly & 18% annually will be assessed for all late payments. Customer assumes all late charges and reasonable cost of attorney fees in event of collection. |
|----------|-----------|---|

MARINE VACUUM SERVICE, INC.

ENTERED SEP 07 2016

INVOICE

PO BOX 24263
SEATTLE, WA 98124

Email: CHARIESES@MARINEVACUUM.COM
Phone # 206-762-0240
Fax # 206-763-8084

| Date | Invoice # |
|----------|-----------|
| 8/1/2016 | 58582COR |

| |
|---|
| Bill To |
| THE RILEY GROUP
17522 BOTHEL WAY NE
BOTHELL, WA 98011 |

| |
|---|
| Job Description / Site address |
| DEWATER EXCAVATION HOLE
3635 DES MOINES MEMORIAL DR S
SEATTLE |

| P.O. No. | Terms |
|----------|----------------|
| | Due on receipt |

| Quantity | U/M | Description | Rate | Amount | | | | | | |
|---------------|-----------|--|--|------------------------------|----|---------|--|-----|--|--|
| 6 | HR | 7/15/2016***** PUMP AS DIRECTED
LABOR STRAIGHT TIME | 48.50 | 0.00
291.00 | | | | | | |
| | | <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 30%;">2016
-023A</td> <td style="width: 30%;">Dominic's</td> <td style="width: 30%;">AJ</td> </tr> <tr> <td>TASK 6B</td> <td></td> <td>VTS</td> </tr> </table> | 2016
-023A | Dominic's | AJ | TASK 6B | | VTS | | |
| 2016
-023A | Dominic's | AJ | | | | | | | | |
| TASK 6B | | VTS | | | | | | | | |
| Due Date | 8/1/2016 | Please remit payment for this invoice by the Due Date. An initial \$25.00 late fee (on each invoice) and a finance charge of 1.5% monthly or 18% annually will be assessed for all late payments. Customer assumes all late charges and reasonable cost of attorney fees in event of collection. | Subtotal
Sales Tax (0.0%)
Payments/Credits | \$291.00
\$0.00
\$0.00 | | | | | | |
| | | | Balance Due | \$291.00 | | | | | | |