2017 UNDERGROUND STORAGE TANK CLOSURE AND REMEDIAL ACTION REPORT

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SEPTEMBER 12, 2017

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TABLE OF CONTENTS

LIST OF APPENDICES

1.0 Introduction

The Riley Group, Inc. (RGI) is pleased to present this 2017 *Underground Storage Tank Closure and Remedial Action Report* (UST Closure/RA Report) documenting the decommissioning of one UST and the associated remedial action conducted at the Sea Mar Community Health Center property located at 9635 Des Moines Memorial Drive South in Seattle, Washington (herein referred to as the Property).

Previous subsurface investigations documented the presence of soil and groundwater contamination on the Property and remedial actions were conducted on the Property in order to remediate these impacts. These previous activities largely conducted in 2016 are summarized in the *Remedial Investigation/Feasibility Study and Remedial Action Report* (RI/FS/RA Report) dated March 13, 2017. This 2016 cleanup was in regards to a former gasoline station on the northern portion of the Property and a single-family residence on the southern portion of the Property. Cleanup areas were referenced as Areas 1 through 4 and Area TP.

The purpose of this UST Closure/RA Report is to document the closure of one 675-gallon UST and remediation of two areas (Area 5 and Area 6) on the central portion of the Property in 2017. The activities documented in this report comply with the Washington State Department of Ecology (Ecology) Guidelines for Site Checks and Site Assessments for USTs (revised, April 2003), applicable UST regulations (WAC 173-360), and WAC 173-340-515 pertaining to conducting independent remedial actions. This UST Closure/RA Report has been prepared in accordance with requirements and guidance provided under the MTCA Cleanup Regulation (WAC 173-340).

Sea Mar Community Health Centers (hereafter referred to as Client) retained RGI to perform the UST closure and remedial action activities documented herein. The scope of work for this project was performed in accordance with RGI's *Environmental Oversight Proposal* and *Change Order No: 1* dated May 18 and July 11, 2017, respectively.

2.0 Project Background

The following documents have previously been prepared, which document previous investigations and cleanups completed for the Property:

- Four Groundwater Monitoring Reports from August 2016 through May 2017.
- *Remedial Investigation/Feasibility Study and Remedial Action Report* (RI/FS/RA Report), prepared for Sea Mar Community Health Center and dated March 13, 2017 by RGI.
- *Phase II Subsurface Investigation* (Phase II), prepared for HomeStreet Bank and dated March 28, 2016 by RGI.
- *Phase I Environmental Site Assessment* (Phase I ESA), prepared for HomeStreet Bank and dated March 14, 2016 by RGI.
- *Supplemental Phase II and Geophysical Survey* (Supplemental Phase II), prepared for Sea Mar Community Health Centers and dated January 30, 2008 by RGI.
- *Phase I Environmental Site Assessment* (Phase I ESA), prepared for Frontier Bank and dated October 10, 2007 by RGI.

Details pertaining to previous investigations and the history of the Property have been summarized extensively in the aforementioned reports. The RI/FS/RA Report summarizes remedial actions conducted on the Property in 2016 in order to remediate the previously observed soil and/or groundwater impacts encountered in five locations on the Property (Areas 1 through 4 and Area

TP). The reader is directed to refer to previous reports for details pertaining to previous investigations and remedial actions conducted for the Property.

3.0 Scope of Services

The scope of services performed for this UST Closure/RA Report consisted of the following tasks:

- Directed the excavation of test pits and collected characterization soil samples to determine if soil was impacted with contaminants of potential concern (COPCs) in the location of a planned storm water detention vault.
- Performed oversight of the decommissioning and removal of one alleged waste oil 675-gallon UST by Lincoln Construction (Lincoln), the general contractor, and their subcontractors.
- Conducted a UST Site Assessment, which consisted of collecting and analyzing soil samples from the sidewalls of the UST excavation, collecting an excavation water sample in the location of the UST, and documenting the condition of the UST and any evidence of releases from the UST.
- Directed the remedial excavation of two areas (Area 5 and Area 6) where soil was impacted with concentrations of contaminants of potential concern (COPCs) that exceeded applicable soil cleanup levels. This included collecting and analyzing performance soil samples to guide remedial excavation and to demonstrate that soil concentrations of COPCs were in compliance with MTCA regulations at the limits of each remedial excavation.
- Assisted the general contractor with removal of soil impacted with concentrations of COPCs above laboratory detection limits, but below applicable soil cleanup levels within the storm water detention vault construction excavation. These soils required special handling and could not be disposed of or re-used as "clean" soil.
- Assisted the general contractor with the characterization and disposal of excavation water situated within the vault excavation area. This included collecting excavation water samples and submitting them for analysis of COPCs.
- Obtained *General Letter of Authorization No. 40111-01* from King County Wastewater Treatment Division (KCWTD), which allowed for excavation water to be discharged to the sanitary sewer system.
- Prepared UST Closure/RA Report presenting our observations, findings and conclusions.

4.0 Regulatory Analysis of Property Conditions Under MTCA

4.1 MTCA Cleanup Regulation

In Washington State, the Model Toxics Control Act (MTCA, RCW 70.105D), mandates that site cleanups protect human health and the environment. The MTCA Cleanup Regulation (173-340 WAC) 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 standard 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 COPCs.

4.2 CLEANUP LEVELS

RGI selected cleanup levels which were appropriate for compounds detected in soil and UST excavation water on the Property. These cleanup levels are discussed further below.

4.2.1 SOIL CLEANUP LEVELS

The selected soil cleanup levels for soil on the Property are the MTCA Method A Soil Cleanup Levels for Unrestricted Land Uses. RGI's evaluation of soil analytical data obtained from previous investigations and remedial actions indicate that these soil cleanup levels are sufficient for evaluating whether or not soil was adequately remediated in accordance with MTCA regulations throughout the Property.

MTCA Method A Soil Cleanup Levels for Unrestricted Land Uses, also referred to as soil cleanup levels herein, are summarized in the attached Table 1.

4.2.2 CLEANUP LEVELS FOR EVALUATING EXCAVATION WATER

The selected cleanup levels for evaluating water encountered in the storm water detention vault excavation on the Property are the MTCA Method A Cleanup Levels for Groundwater. RGI's evaluation of groundwater analytical data obtained from previous investigations and remedial actions indicate that these groundwater cleanup levels are sufficient to evaluate whether or not concentrations of COPCs in excavation water on the Property were in compliance with MTCA regulations.

Under the MTCA regulation, groundwater cleanup levels must be set at concentrations that are at least as stringent as applicable state and federal laws (Applicable or Relevant and Appropriate Requirements [ARARs], WAC 173-340-700[5][a]). Therefore, when no Method A groundwater cleanup level was available for a given compound, the ARAR was referenced.

The MTCA Method A Cleanup Levels for Groundwater and ARARs, also referred to as groundwater cleanup levels herein, are summarized in Table 2.

4.2.3 MTCA METHOD A TPH CLEANUP LEVELS

During the course of UST Closure/RA, compounds were detected in soil and excavation water that were assessed under the MTCA Method A total petroleum hydrocarbons (TPH) soil and groundwater cleanup levels. These compounds (i.e., isopropylbenzene) were not assessed individually, as the MTCA Method A cleanup levels are sufficient to assess risks associated with these compounds.

4.2.4 cPAH SOIL AND GROUNDWATER CLEANUP LEVELS

Carcinogenic polycyclic aromatic hydrocarbons (cPAHs) were analyzed in soil and groundwater and included benzo(a)anthracene, benzo(b)fluoranthene, benzo(k)fluoranthene, benzo(a)pyrene, chrysene, dibenzo(a,h)anthracene and ideno(1,2,3-cd)pyrene. When detected in soil and/or groundwater, the cPAH concentrations were evaluated and compared to the applicable regulatory using the methodology discussed below.

When establishing compliance with MTCA, the mixture of the 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, when evaluating cPAHs for MTCA compliance, the calculated total cPAHs (TEF modified) is compared to the MTCA Method A soil or groundwater cleanup level for

benzo(a)pyrene of 0.1 milligrams/kilogram (mg/kg) for soil and 0.1 micrograms/liter (μg/L) for groundwater as per WAC 173-340-708(8).

5.0 Methodology

5.1 Soil Remediation

Soil containing concentrations of COPCs exceeding applicable soil cleanup levels were encountered in two separate locations on the Property (Areas 5 and Area 6). Additionally, soil containing concentrations of COPCs above laboratory detection limits, but below applicable soil cleanup levels, were also encountered on the Property within the storm water detention vault excavation. These soils required off-Property disposal at a proper receiving facility due to the fact that they could not be exported or re-used as "clean" soils.

The selected remedial alternative for remediating contaminated soil on the Property was direct excavation with off-Property disposal at a licensed and permitted facility. This approach was selected due to the fact that it was effective, permanent, had a very short restoration time-frame and could be performed in conjunction with storm water vault excavation activities. This method was also considered cost-effective and assured compliance with the MTCA regulation throughout the Property.

Remedial excavation included performance soil sampling to guide remedial excavations and demonstrate that soil was in compliance with MTCA regulations. Performance soil samples were collected from each remedial excavation and submitted to a mobile or fixed-base analytical laboratory for the analyses deemed appropriate for a given location. Final performance samples (or confirmation samples) were collected from the limits of the excavation to evaluate soil conditions and determine if soil complied with MTCA regulations. In general, final performance samples were collected from sidewalls of the excavation and did not exceed 20 linear feet between samples and at least one bottom sample was collected for every 400 square feet of excavation bottom.

Soil in the sidewalls and bottom of remedial excavations was field screened, which consisted of visual and olfactory observations, photoionization detector (PID) readings, and/or sheen testing. In locations where contamination could be detected via field screening, soil samples were collected and analyzed once field screening indicated that all contaminated soils had been removed. The data directed additional remedial excavation (if necessary) until analytical data demonstrated that soil concentrations were below the soil cleanup levels throughout the lateral and vertical limits of each excavation.

All contaminated soil was removed from above the grade of the bottom of the vault excavation required for construction of approximately 12 feet below ground surface (bgs). The maximum depth of remedial excavation was approximately 8 feet bgs.

5.2 Standard Sampling Protocols and Field Screening

During the UST Closure/RA, soil conditions 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 were collected using standard EPA Method 5035A sampling methodology.

Soil samples were either collected directly from the excavation or collected from the track hoe bucket and placed in laboratory supplied sample containers deemed appropriate for the intended analyses.

Excavation water samples were collected using a peristaltic pump by pumping water into laboratory supplied containers either directly from the excavation or from the Baker tank after water had been pumped from the excavation.

Sludge collected from inside the UST was transferred directly to laboratory supplied containers and liquid inside the UST was collected using a bailer then transferred directly to laboratory supplied containers.

All 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 and transported to the laboratory in accordance with standard chain of custody protocols.

6.0 Laboratory Analyses

Soil, excavation water, and samples of UST contents were submitted to either the Friedman & Bruya, Inc. fixed-based laboratory or to the mobile laboratory operated by Libby Environmental for one or more of the following analyses:

- Gasoline-range total petroleum hydrocarbons (TPH) using Method NWTPH-Gx.
- Diesel- and oil-range TPH using Method NWTPH-Dx with and without silica gel cleanup.
- Hydrocarbon Identification using Method NWTPH-HCID.
- Benzene, toluene, ethylbenzene, and xylenes (BTEX) using EPA Method 8260C.
- Volatile organic compounds (VOCs) using EPA Method 8260C.
- CPAHs using EPA Method 8270D Select Ion Monitoring (SIM).
- Total metals (As, Cd, Cr, Pb, and Hg) using EPA Method 6020A and 7010.
- Polychlorinated biphenyls (PCBs) by EPA Method 8082A.
- Total organic halogens (TOX) using SW-846 Test Method 9020.

Soil sample analytical results are summarized in Table 1 and illustrated on Figures 3 and 4. Excavation water analytical results are summarized in Table 2 and illustrated on Figure 3. Analytical data obtained from UST contents are summarized in Table 3. Copies of final analytical laboratory reports for all samples collected during the UST Closure/RA are included in Appendix A.

7.0 UST Assessment and Decommissioning

This section describes activities associated with the decommissioning and removal of one alleged waste oil 675-gallon UST that was discovered in connection with the construction of a storm water detention vault.

7.1 PRE-UST DECOMMISSIONING SERVICES

It was necessary for RGI to perform several tasks prior to commencing with the UST decommissioning and Site Assessment. These activities are summarized in the following sections.

7.1.1 Permitting & Notifications

Prior to UST decommissioning, RGI filed the required 30-Day Notice for Underground Storage Tanks to Ecology to remove one estimated 700-gallon capacity UST (later determined to be 675-gallons) as stipulated under WAC 173-360-200 and 173-360-385. In addition, RGI also requested a waiver to the 30-day waiting period, which was granted by Ecology.

The general contractor obtained *Permit No. FIRP17-0171* from the Seattle Fire Department on May 12, 2017 and acquired all permits necessary for construction prior to commencing with the work.

Copies of UST permitting documentation are included in Appendix B

7.1.2 Utility Locating & Security

Prior to commencing with excavation activities, the general contractor located utilities within the planned excavation areas and fenced off the work area in order to prevent access by the public or other non-qualified personnel.

7.1.3 Characterization of UST Contents

RGI collected samples of sludge and liquid from inside the UST on April 26, May 17, and May 30, 2017. Samples were submitted for analyses of COPCs and other analyses required for waste disposal.

Analytical data obtained from these samples indicated that the UST was used to store petroleum products. The subcontractor referred to the product as "used oil, water and trace sludge" in the waste disposal documentation included in Appendix B. The UST contents did not contain concentrations of metals or VOCs exceeding applicable soil cleanup levels. CPAHs were detected at a concentration slightly above the soil cleanup level. Analytical data pertaining to UST sludge and liquid is summarized on Table 3 and displayed graphically on Figure 4.

7.2 UST Decommissioning & Site Assessment

The UST decommissioning activities commenced on June 13, 2017. The top of the UST had inadvertently been ripped open during previous excavation activities while RGI was not on-Property.

RGI performed oversight of the UST decommissioning, which consisted of pumping, rinsing, and inerting the UST prior to removal. The work was performed by Langseth Environmental (LE) and their subcontractors under subcontract to Lincoln.

Approximately 8.5 inches of fluid was present in the UST at the time of decommissioning. The water had a slight petroleum odor, and a minor sheen was visible. This liquid was pumped from the UST and the UST was subsequently cleaned by Northern Environmental under subcontract to LE. Wastewater was pumped from the UST into a vacuum truck via vacuum hose. UST cleaning consisted of using a pressure washer to remove any accumulated sludge/sediment from the internal walls of the UST and wastewater generated was also pumped to the vacuum truck. A total of approximately 550-gallons of wastewater and 2 tons of sludge were removed from the UST and disposed of off-Property.

Sound Testing (ST) was retained by LE to inert the UST. The Marine Chemist from ST inspected the UST and determined that it was not necessary to inert the UST due to the size of the opening at the top of the UST.

The Seattle Fire Department (SFD) inspected the UST and indicated that it was acceptable to proceed with the removal of the UST. The UST was then removed from the excavation and loaded directly onto a truck operated by LE for off-Property disposal.

Ms. Amelia Oates of RGI (Washington State Site Assessor No. 8708675) performed the UST Site Assessment on June 13, 2017, which consisted of inspecting the UST, documenting the condition and size of the UST, collecting representative soil and excavation water samples from the UST excavation, and documenting any evidence of a release.

The UST was an approximately 675-gallon capacity single-walled steel UST, which appeared rusted with minor pitting. Several holes were observed on the bottom of the UST and it was evident that a release to soil had occurred as soils within the UST excavation exhibited petroleum hydrocarbon contamination based on the results of initial field screening. Soils situated in the UST excavation consisted of approximately 3 feet of sandy gravels with minor silt. RGI collected four soil samples from the bottom and sidewalls of the UST excavation. No water was present beneath the UST at the time of soil sampling.

Water did accumulate in the UST excavation after removal of the UST and one excavation water sample was collected from the former UST location. This water was determined not to be representative of groundwater which was present at approximately 11 feet bgs.

All soil and excavation water samples were submitted for analysis of gasoline-, diesel-, and oil-range TPH, VOCs and/or lead.

Analytical data obtained from these samples indicated that gasoline-range TPH was present in soil in the UST excavation at concentrations exceeding the soil cleanup level ranging from 207 mg/kg to 1,680 mg/kg. Therefore, remedial excavation in this location (Area 6) was required and is discussed further in Section 8.2.2.

No other COPCs were detected in soil or excavation water at concentrations exceeding applicable soil and groundwater cleanup levels.

7.3 WASTE DISPOSAL

During UST decommissioning, approximately 550-gallons of wastewater (generated from pumping and cleaning the UST) and 2 tons of sludge were removed from the Property and transported to the PRS Group, Inc. (PRS) facility in Tacoma, Washington for disposal. Copies of waste disposal documentation are included in Appendix C.

8.0 Remedial Action

The following section provides detailed descriptions of activities completed prior to, during and after the completion of remedial excavations conducted on the Property. These activities included soil remediation related to the identified UST and general soil quality in the storm water detention vault (for soil export).

8.1 PRE-REMEDIAL ACTION AND OTHER ACTIVITIES

Prior to the start of soil remediation, several activities were performed which were not directly related to soil remediation. These activities are discussed below.

8.1.1 Site Preparation & Permitting

Preparation and permitting associated with remedial excavation work was similar to preparation for UST decommissioning discussed in Section 7.1.

8.1.2 Soil Characterization Sampling

On April 17, 26, and 27 and June, 19 2017, RGI directed the excavation of test pits and collected a total of 23 soil samples which were submitted for analyses of COPCs in order to characterize soils situated within the storm water detention vault excavation. The locations of soil characterization samples are illustrated on Figure 3 and analytical data is summarized in Table 1.

Analytical data obtained from soil characterization samples were used to plan remedial excavations and to determine which COPCs were present and required remediation or special handling in a given area. These data were also used to profile soil at the disposal facility

Soil characterization samples indicated that oil-range TPH and cPAHs were present in soil at concentrations exceeding the soil cleanup levels in a location approximately 40 feet south of the UST. This location is referred to as Area 5 and the remedial excavation of Area 5 is discussed further in Section 8.2.1.

Soil analytical data also indicated that soil within the vault excavation contained concentrations of COPCs above laboratory detection limits, but below applicable soil cleanup levels. Therefore, it was necessary to remove this soil from the Property as contaminated soil as it could not be re-used off-Property as "clean soil".

8.1.3 Storm Water Detention Vault Excavation Support

Soil analytical data obtained from soil samples within the vault excavation was used to direct the excavation of soils that were in compliance with MTCA regulations, but required special handling due to the fact they could not be re-used as "clean" soil.

RGI was onsite to oversee the excavation of test pits and collect soil samples on April 17 and 26, 2017. During excavation for construction of the storm water detention vault on April 17, May 5, and May 8, a total of 1,130 tons of soil were removed from the Property as contaminated. Soil disposal was directed by Lincoln and their subcontractors without RGI oversight.

On June 19, 2017, after completion of remedial excavations discussed in Section 8.2, RGI directed the excavation of approximately 295 tons of soil that either contained low concentrations of COPCs or exhibited signs of potential contamination. This work was performed in connection with soil contamination identified in the former 675-gallon UST location.

A total of approximately 1,425 tons of soil were transported off-Property for disposal by Fenix under subcontract to Lincoln in support of storm water vault construction. This soil was disposed of at the Simpson Pit in Stanwood, Washington.

8.1.4 Storm Water Detention Excavation Water Removal Support

Analytical data obtained from the excavation water samples collected in the former UST location during the UST Site Assessment and the west side of the excavation did not contain concentrations of COPCs exceeding applicable groundwater cleanup levels. However, gasoline-range TPH was detected in excavation water in the former UST location at a concentration below the groundwater cleanup level.

It should be noted that this water was not considered representative of groundwater, which was estimated to be present at approximately 11 feet bgs based on observations of water being pumped from the vault excavation after completion of the remedial excavations.

On June 14 and 16, 2017, Marine Vacuum Service, Inc. (Marvac) was retained by the general contractor to pump water from the vault excavation via a vacuum truck. A total of approximately 17,000-gallons of water were pumped from the excavation and transported off-Property for disposal at the Marvac facility.

On June 20, 2017, RGI collected a sample of excavation water pumped from the excavation into a Baker Tank placed on the east side of the Property. This water was pumped from approximately 11 feet below grade and was considered representative of groundwater entering the excavation. No COPCs were detected in the sample at concentrations above laboratory detection limits. Excavation water sample analytical data is illustrated on Figure 3 and summarized in Table 2.

8.2 SOIL REMEDIATION

The general methodology for remediating soil containing concentrations of COPCs exceeding applicable soil cleanup levels was previously described in Section 5.1. Each remedial excavation area is further discussed below.

The final limits of each remedial excavation area along with locations of final performance samples and characterization soil samples used to determine COPCs in a given area are illustrated on Figures 3 and 4. Analytical results for all soil samples pertaining to remedial excavations are summarized in Table 1. Copies of final laboratory reports are included in Appendix A.

8.2.1 Area 5 Remedial Excavation

Area 5 was situated on the central portion of the Property approximately 40 feet south of the former 675-gallon UST location. Previous data obtained from soil sample S2:2 indicated that oil-range TPH and cPAHs were present in soil at concentrations of 3,200 mg/kg and 0.214 mg/kg (TEF modified), which exceeded the applicable soil cleanup levels of 2,000 mg/kg and 0.1 mg/kg, respectively. This soil was situated approximately 40 feet south of the former UST location and not suspected to be associated with the release from the UST. The origin of these impacted soils may be the result of imported fills and the area was of limited extent.

The remedial excavation of Area 5 commenced on June 13, 2017 and was completed on that same date. The final dimensions of the excavation were 5’ by 5’ and extended to a depth of approximately 4’ bgs.

A total of approximately 4 cubic yards (or 6 tons) of contaminated soil were removed from Area 5 and disposed of off-Property in order to bring this area into compliance with MTCA regulations.

No groundwater was encountered during the remedial excavation of Area 5.

8.2.2 Area 6 Remedial Excavation

Area 6 was situated on the central portion of the Property in the former location of a 675-gallon UST where a release of gasoline-range TPH to soil had occurred.

The Area 6 remedial excavation commenced on June 19, 2017 in the location of the former UST and progressed outward laterally in all directions based on the results of field screening and/or performance sample analytical results. Gasoline-range TPH concentrations exceeding the soil cleanup level in Area 6 ranged from 92 mg/kg to 2,310 mg/kg. The final depth of excavation in Area 6 extended to approximately 8 feet bgs and the excavation covered a lateral area of approximately 1,000 square feet.

A total of 21 performance soil samples (13 of which constituted final performance samples) were collected from Area 6. None of the final performance samples collected from the limits of the remedial excavation contained concentrations of COPCs above applicable soil cleanup levels.

A total of approximately 295 cubic yards (or 474 tons) of contaminated soil were removed from Area 6 and disposed of off-Property in order to bring this area into compliance with MTCA regulations.

No groundwater was encountered during the remedial excavation of Area 6.

8.3 CONTAMINATED SOIL AND EXCAVATION WATER DISPOSAL

All disposal of contaminated soil and excavation water was managed by Lincoln and their subcontractors.

On June 19, 2017 RGI performed oversight of the removal of approximately 775 tons of contaminated soil in connection with the remedial excavations of Area 5 and Area 6. Of the total amount, approximately 480 tons were excavated to bring the property into compliance with MTCA regulations and 295 tons were removed in connection with supporting vault construction activities.

On April 17, May 5, and May 8, 2017, approximately 1,238 tons of soil were removed from Property in connection with the vault excavation at the direction of Lincoln and/or their subcontractors without RGI oversight.

A total of approximately 2,013 tons of soil were removed from the Property and disposed of as petroleum contaminated soil at the Simpson Landfill in Stanwood, Washington.

Prior to obtaining authorization to discharge excavation water to the sewer from King County Industrial Wastewater Treatment Division (KCIWTD) discussed in the following section, approximately 1,700-gallons of water were pumped from the vault excavation and transported off-Property for disposal at the Marvac facility.

8.4 POST-REMEDIAL ACTION DEWATERING

After completion of soil remediation and dewatering, the water present in the excavation was considered representative of groundwater entering the excavation and was sampled and submitted for analyses of COPCs. Analytical results from this sample (BT-1) indicated that no COPCs were present in excavation water at concentrations above laboratory detection limits.

RGI coordinated with KCIWTD and Valley View Sewer District in order to obtain the *General Letter of Authorization – Construction #40111-01 for Sea Mar Community Health Centers – Vault Excavation Construction Project to the King County Sanitary Sewer* (KC Discharge Authorization) dated June 27, 2017 by KCIWTD. A copy of the KC Discharge Authorization is included in Appendix D.

This authorization allows for a maximum of 25,000-gallons of excavation water to be pumped from the vault excavation daily into the Baker settling tank and discharged to the sanitary sewer provided that water quality parameters including settleable solids and pH are in compliance the criteria outlined in the KC Discharge Authorization.

RGI is currently assisting Lincoln with regularly testing water quality parameters prior to discharge to ensure that the water is in compliance with the KC Discharge Authorization requirements. Since commencing with dewatering after completion of the remedial action, excavation water has not exhibited any signs of contamination.

9.0 Conclusions

The actions documented in this Remedial Action Report support the following conclusions:

- RGI performed oversight of the decommissioning of a 675-gallon alleged waste oil UST formerly located on the central portion of the Property. UST decommissioning was performed in accordance with applicable UST regulations (WAC 173-360). A total of approximately 550-gallons of product/water mixture and 2 tons of sludge were removed from the UST and disposed of off-Property in connection with UST decommissioning.
- RGI completed a UST Site Assessment in connection with the 675-gallon UST and the UST was determined to be in poor condition and contained holes. Analytical data obtained from soil samples collected within the UST excavation indicated that a release of gasoline-range TPH to soil had occurred. Shallow excavation water situated in the UST excavation and above the groundwater level did not contain concentrations of any COPCs exceeding applicable groundwater cleanup levels.

- The nature and extent of soil contamination in Area 5 and Area 6 on the Property has been well characterized.
- All oil-range TPH and cPAH contaminated soil in Area 5, which was identified during excavation pertaining to the storm water detention vault, has been fully remediated to a maximum depth of 4 feet bgs.
- All gasoline-range TPH contaminated soil in Area 6 associated with the former UST has been fully remediated to a maximum depth of approximately 8 feet bgs.
- The maximum depth of contamination in both Areas 5 and 6 was situated above the groundwater level and soil contamination in these locations has not impacted groundwater. A sample of excavation considered representative of groundwater entering the excavation at approximately 11 feet bgs was collected and analyzed after completion of soil remediation and did not contain concentrations of COPCs above laboratory detection limits.
- A total of approximately 2,013 tons of soil were removed from the Property and disposed of as petroleum contaminated soil at a permitted facility. Of the total amount, approximately 480 tons of contaminated soil were removed from the Property in order to bring Area 5 and Area 6 into compliance with MTCA regulations. An additional approximately 1,533 tons of soil were removed from the Property in support of construction of the storm water detention vault. RGI provided limited sampling and testing of these soils at the request of Lincoln. However, all decisions regarding off-Property soil disposal were made by Lincoln and/or their subcontractors.
- Approximately 1,700-gallons of excavation water containing concentrations of COPCs below applicable groundwater cleanup levels was removed from the vault excavation via vacuum truck and disposed of off-Property. Beginning in late June 2017, excavation water was pumped into a settling tank and discharged to the sanitary sewer in accordance with the KC Discharge Authorization provided by King County Industrial Wastewater Treatment Division.
- No further action is necessary in connection with Area 5 and Area 6 and these areas do not present a threat to human health or the environment.

Based on the findings and conclusions presented in this UST Closure/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 remaining elevated HVOC concentrations in groundwater underlying the western portion of the Property, the contamination is being evaluated by others, under contract with B&K property owners (the apparent source of this HVOC contamination).

10.0 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 in 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 you have any questions, or need additional information, please contact us at (425) 415-0551.

Sincerely,

THE RILEY GROUP, INC.

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Jerry Sawetz
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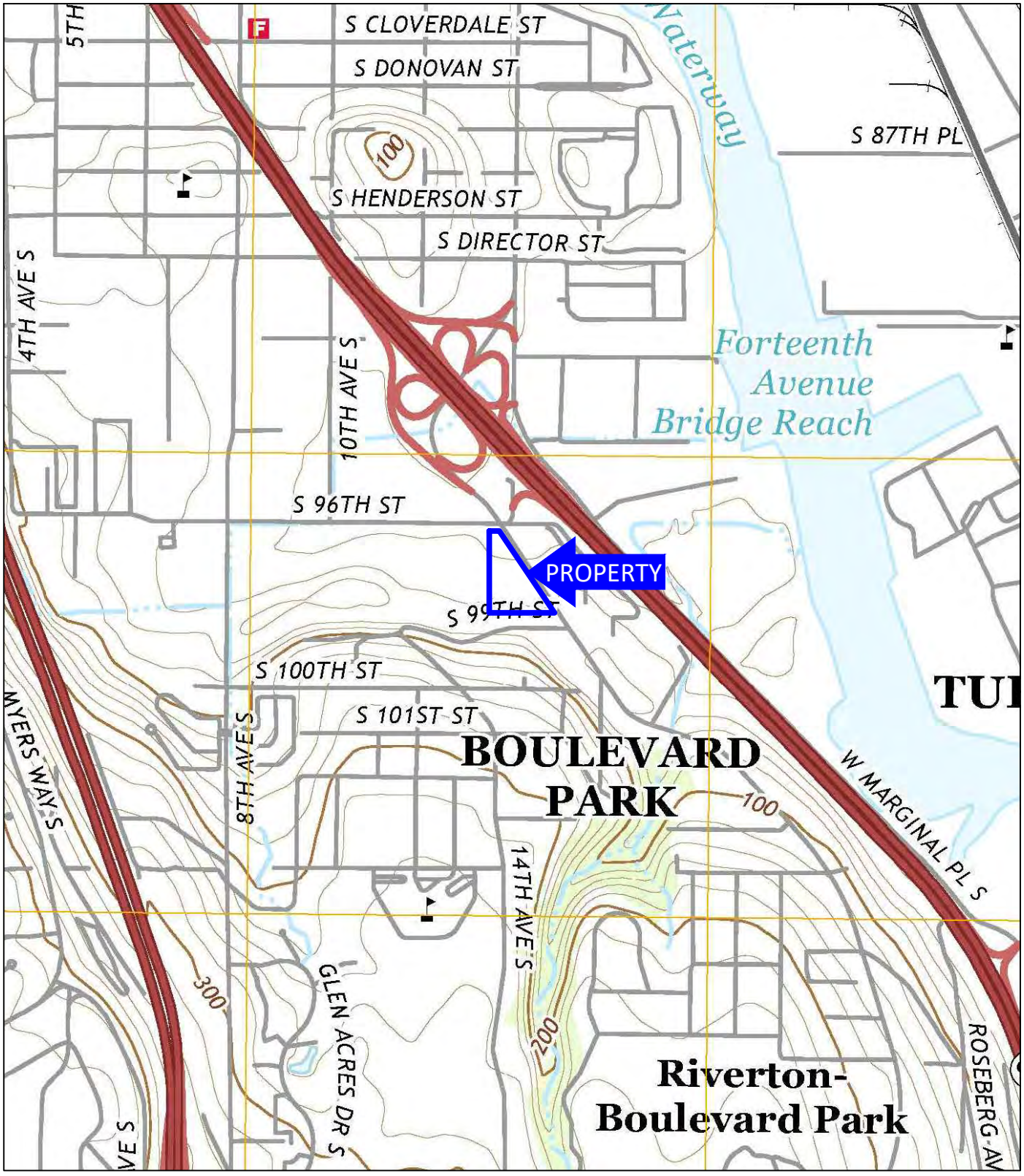
Mr. Michael Leong, Sea Mar Community Health Center (PDF and hard copy)
Mr. Gregory Gratz, HomeStreet Bank (PDF copy)



USGS, 2017, Seattle South, Washington
7.5-Minute Quadrangle

Approximate Scale: 1"=1000'

0 500 1000 2000

N

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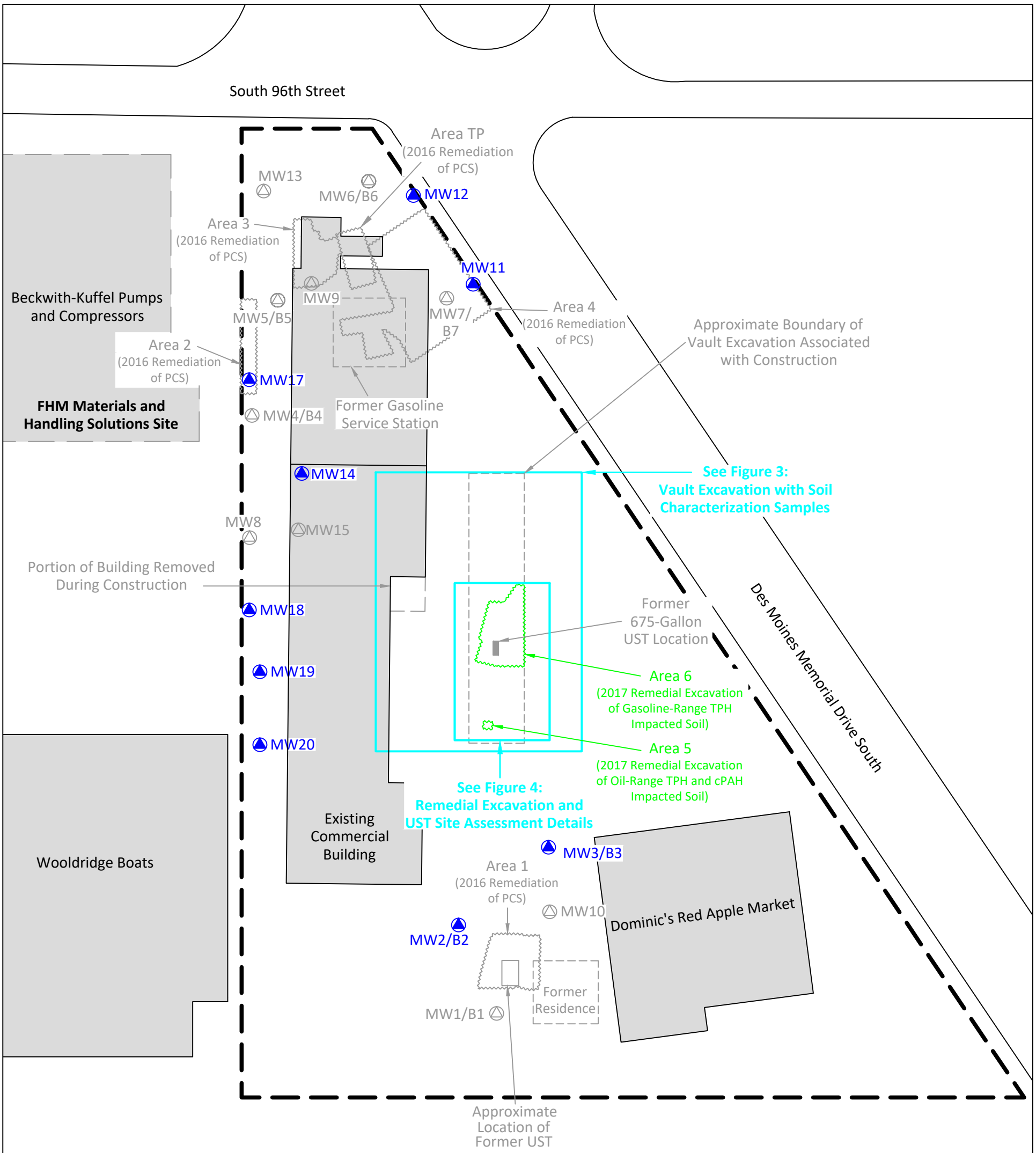
Sea Mar Community Health Center		Figure 1
RGI Project Number 2016-023B	Property Vicinity Map	Date Drawn: 09/2017
Address: 9635 Des Moines Memorial Drive South, Seattle, Washington 98108		



= Monitoring well decommissioned or destroyed during construction
= Monitoring well by RGI
PCS = Petroleum contaminated soil
TPH = Total petroleum hydrocarbons
cPAH = Carcinogenic polycyclic aromatic hydrocarbons
= Remedial excavation limits (June 2017)
= Remedial excavation limits (2016)
= Property boundary

Approximate Scale: 1"=60'
0 30 60 120
N

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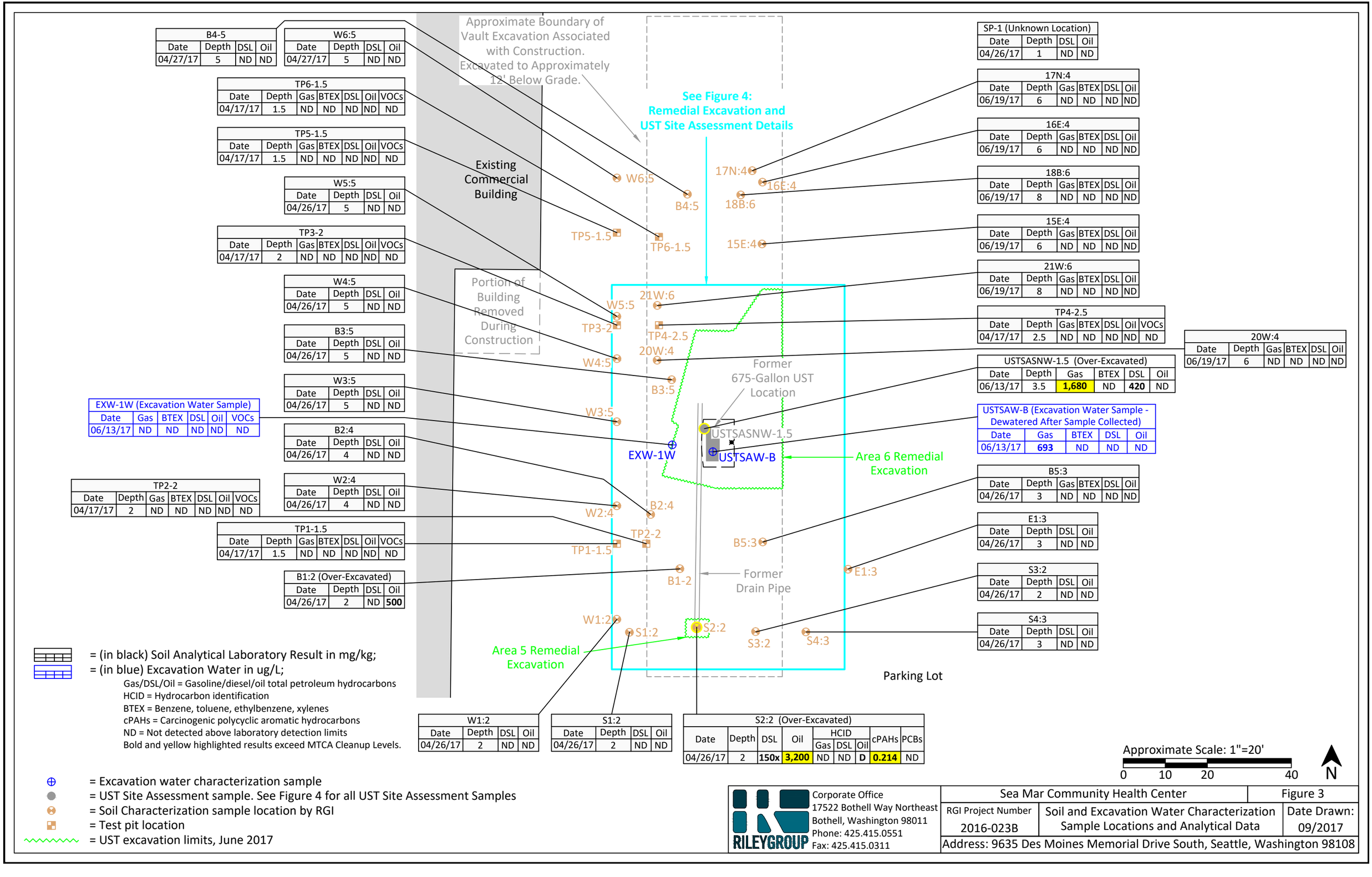
Sea Mar Community Health Center		Figure 2
RGI Project Number 2016-023B	Property Representation Map with Remedial Excavation Areas	Date Drawn: 09/2017
Address: 9635 Des Moines Memorial Drive South, Seattle, Washington 98108		



B4-5

Date	Depth	DSL	Oil
04/27/17	5	ND	ND

W6:5

Date	Depth	DSL	Oil
04/27/17	5	ND	ND

TP6-1.5

Date	Depth	Gas	BTEX	DSL	Oil	VOCs
04/17/17	1.5	ND	ND	ND	ND	ND

TP5-1.5

Date	Depth	Gas	BTEX	DSL	Oil	VOCs
04/17/17	1.5	ND	ND	ND	ND	ND

W5:5

Date	Depth	DSL	Oil
04/26/17	5	ND	ND

TP3-2

Date	Depth	Gas	BTEX	DSL	Oil	VOCs
04/17/17	2	ND	ND	ND	ND	ND

W4:5

Date	Depth	DSL	Oil
04/26/17	5	ND	ND

B3:5

Date	Depth	DSL	Oil
04/26/17	5	ND	ND

W3:5

Date	Depth	DSL	Oil
04/26/17	5	ND	ND

EXW-1W (Excavation Water Sample)

Date	Gas	BTEX	DSL	Oil	VOCs
06/13/17	ND	ND	ND	ND	ND

B2:4

Date	Depth	DSL	Oil
04/26/17	4	ND	ND

W2:4

Date	Depth	DSL	Oil
04/26/17	4	ND	ND

TP2-2

Date	Depth	Gas	BTEX	DSL	Oil	VOCs
04/17/17	2	ND	ND	ND	ND	ND

TP1-1.5

Date	Depth	Gas	BTEX	DSL	Oil	VOCs
04/17/17	1.5	ND	ND	ND	ND	ND

B1:2 (Over-Excavated)

Date	Depth	DSL	Oil
04/26/17	2	ND	**500**

SP-1 (Unknown Location)

Date	Depth	DSL	Oil
04/26/17	1	ND	ND

17N:4

Date	Depth	Gas	BTEX	DSL	Oil
06/19/17	6	ND	ND	ND	ND

16E:4

Date	Depth	Gas	BTEX	DSL	Oil
06/19/17	6	ND	ND	ND	ND

18B:6

Date	Depth	Gas	BTEX	DSL	Oil
06/19/17	8	ND	ND	ND	ND

15E:4

Date	Depth	Gas	BTEX	DSL	Oil
06/19/17	6	ND	ND	ND	ND

21W:6

Date	Depth	Gas	BTEX	DSL	Oil
06/19/17	8	ND	ND	ND	ND

TP4-2.5

Date	Depth	Gas	BTEX	DSL	Oil	VOCs
04/17/17	2.5	ND	ND	ND	ND	ND

20W:4

Date	Depth	Gas	BTEX	DSL	Oil
06/19/17	6	ND	ND	ND	ND

USTSASNW-1.5 (Over-Excavated)

Date	Depth	Gas	BTEX	DSL	Oil
06/13/17	3.5	**1,680**	ND	**420**	ND

USTSAW-B (Excavation Water Sample - Dewatered After Sample Collected)

Date	Gas	BTEX	DSL	Oil
06/13/17	**693**	ND	ND	ND

B5:3

Date	Depth	Gas	BTEX	DSL	Oil
04/26/17	3	ND	ND	ND	ND

E1:3

Date	Depth	DSL	Oil
04/26/17	3	ND	ND

S3:2

Date	Depth	DSL	Oil
04/26/17	2	ND	ND

S4:3

Date	Depth	DSL	Oil
04/26/17	3	ND	ND

W1:2

Date	Depth	DSL	Oil
04/26/17	2	ND	ND

S1:2

Date	Depth	DSL	Oil
04/26/17	2	ND	ND

S2:2 (Over-Excavated)

Date	Depth	DSL	Oil	HCID			cPAHs	PCBs
				Gas	DSL	Oil		
04/26/17	2	**150x**	**3,200**	ND	ND	**D**	**0.214**	ND

= (in black) Soil Analytical Laboratory Result in mg/kg;
= (in blue) Excavation Water in ug/L;

Gas/DSL/Oil = Gasoline/diesel/oil total petroleum hydrocarbons
HCID = Hydrocarbon identification
BTEX = Benzene, toluene, ethylbenzene, xylenes
cPAHs = Carcinogenic polycyclic aromatic hydrocarbons
ND = Not detected above laboratory detection limits
Bold and yellow highlighted results exceed MTCA Cleanup Levels.

= Excavation water characterization sample
= UST Site Assessment sample. See Figure 4 for all UST Site Assessment Samples
= Soil Characterization sample location by RGI
= Test pit location
= UST excavation limits, June 2017

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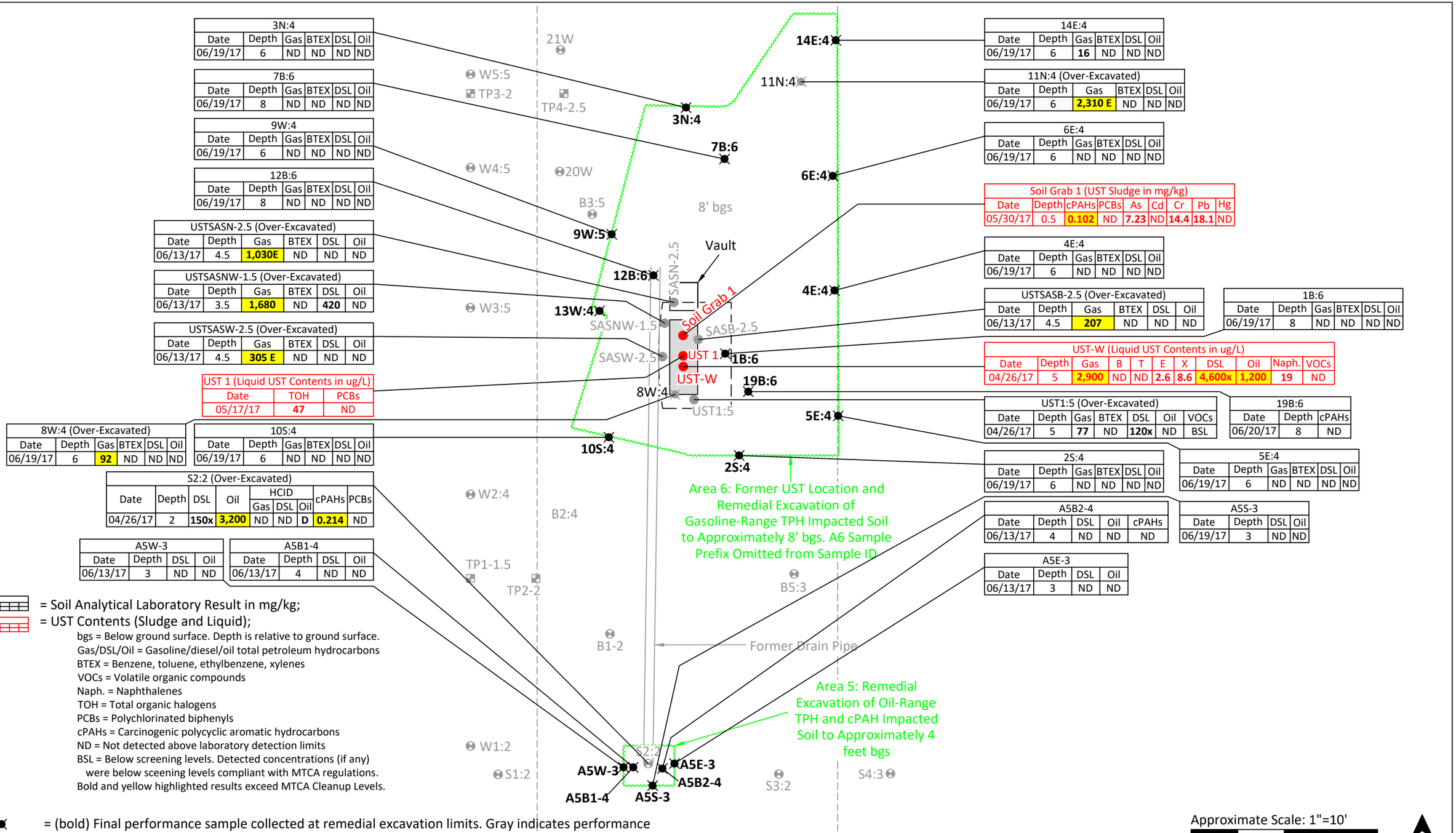
Sea Mar Community Health Center | Figure 3

RGI Project Number: 2016-023B

Soil and Excavation Water Characterization Sample Locations and Analytical Data

Date Drawn: 09/2017

Address: 9635 Des Moines Memorial Drive South, Seattle, Washington 98108



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Sea Mar Community Health Center		Figure 4
RGI Project Number 2016-023B	UST Site Assessment & Remedial Excavation Sample Locations and Analytical Data	Date Drawn: 09/2017
Address: 9635 Des Moines Memorial Drive South, Seattle, Washington 98108		

Table 1, Page 1 of 3. Summary of Soil Sample Analytical Laboratory Results
Sea Mar Community Health Center
9635 Des Moines Memorial Drive South, Sea. le, Washington 98108
The Riley Group, Inc. Project No. 2016-023B

Sample Number	Sample Depth	Sample Date	Soil Status [7]	Final Performance Sample[6]	Gasoline TPH	BTEX				Diesel TPH	Oil TPH	Diesel TPH	Oil TPH	HCID			VOCs[4]	Naph.	cPAHs	PCBs	Total MTCA 5 Metals				
						B	T	E	X	w/ silica gel		w/o silica gel		Gasoline	Diesel	Oil					As	Cd	Cr	Pb	Hg
Area 5 Remedial Excavation																									
A5W-3	3.0	06/13/17	Excavated	√	----	----	----	----	----	----	----	ND<50	ND<250	----	----	----	----	----	----	----	----	----	----	----	----
A5S-3	3.0	06/13/17	Excavated	√	----	----	----	----	----	----	----	ND<50	ND<250	----	----	----	----	----	----	----	----	----	----	----	----
A5E-3	3.0	06/13/17	Excavated	√	----	----	----	----	----	----	----	ND<50	ND<250	----	----	----	----	----	----	----	----	----	----	----	----
A5B1-4	4.0	06/13/17	Excavated	√	----	----	----	----	----	----	----	ND<50	ND<250	----	----	----	----	----	----	----	----	----	----	----	----
A5B2-4	4.0	06/13/17	Excavated	√	----	----	----	----	----	----	----	ND<50	ND<250	----	----	----	----	----	ND<0.01	----	----	----	----	----	----
S2:2[5]	2	04/26/17	Excavated		----	----	----	----	----	----	----	**150 x**	**3,200**	ND<20[HT]	ND<50[HT]	**D>250**[HT]	----	----	**0.214**[HT]	ND<0.2[HT]	----	----	----	----	----
Area 6 UST Assessment Soil Samples																									
UST1-5[5]	5	04/26/17	Excavated		**77**	ND<0.03	ND<0.05	ND<0.05	ND<0.15	----	----	**120 x**	ND<250	----	----	----	ND	**0.060**	----	----	----	----	----	----	----
USTSASN-2.5	2.5	06/13/17	Excavated		**1,030 E**	ND<0.04	ND<0.20	ND<0.10	ND<0.30	----	----	ND<50	ND<250	----	----	----	----	----	----	----	----	----	----	----	----
USTSASB-2.5	3.0	06/13/17	Excavated		**207**	ND<0.02	ND<0.10	ND<0.05	ND<0.15	----	----	ND<50	ND<250	----	----	----	----	----	----	----	----	----	----	----	----
USTSASW-2.5	2.5	06/13/17	Excavated		**305 E**	ND<0.02	ND<0.10	ND<0.05	ND<0.15	----	----	ND<50	ND<250	----	----	----	----	----	----	----	----	----	----	----	----
USTSASNW-1.5	1.5	06/13/17	Excavated		**1,680**	ND<1.0	ND<5.0	ND<2.5	ND<7.5	----	----	**420**	ND<250	----	----	----	ND	----	----	----	----	----	----	**7.49**	----
Area 6 Remedial Excavation																									
A6-1B:6	8	06/19/17	Excavated	√	ND<10	ND<0.02	ND<0.10	ND<0.05	ND<0.15	----	----	ND<50	ND<250	----	----	----	----	----	----	----	----	----	----	----	----
A6-2S:4	6	06/19/17	Excavated	√	ND<10	ND<0.02	ND<0.10	ND<0.05	ND<0.15	----	----	ND<50	ND<250	----	----	----	----	----	----	----	----	----	----	----	----
A6-3N:4	6	06/19/17	Excavated	√	ND<10	ND<0.02	ND<0.10	ND<0.05	ND<0.15	----	----	ND<50	ND<250	----	----	----	----	----	----	----	----	----	----	----	----
A6-4E:4	6	06/19/17	In-Situ	√	ND<10	ND<0.02	ND<0.10	ND<0.05	ND<0.15	----	----	ND<50	ND<250	----	----	----	----	----	----	----	----	----	----	----	----
A6-5E:4	6	06/19/17	In-Situ	√	ND<10	ND<0.02	ND<0.10	ND<0.05	ND<0.15	----	----	ND<50	ND<250	----	----	----	----	----	----	----	----	----	----	----	----
A6-6E:4	6	06/19/17	In-Situ	√	ND<10	ND<0.02	ND<0.10	ND<0.05	ND<0.15	----	----	ND<50	ND<250	----	----	----	----	----	----	----	----	----	----	----	----
A6-7B:6	8	06/19/17	Excavated	√	ND<10	ND<0.02	ND<0.10	ND<0.05	ND<0.15	----	----	ND<50	ND<250	----	----	----	----	----	----	----	----	----	----	----	----
A6-8W:4	6	06/19/17	Excavated		**92**	ND<0.02	ND<0.10	ND<0.05	ND<0.15	----	----	ND<50	ND<250	----	----	----	----	----	----	----	----	----	----	----	----
A6-9W:5	7	06/19/17	Excavated	√	ND<10	ND<0.02	ND<0.10	ND<0.05	ND<0.15	----	----	ND<50	ND<250	----	----	----	----	----	----	----	----	----	----	----	----
A6-10S:4	6	06/19/17	Excavated	√	ND<10	ND<0.02	ND<0.10	ND<0.05	ND<0.15	----	----	ND<50	ND<250	----	----	----	----	----	----	----	----	----	----	----	----
A6-11N:4	6	06/19/17	Excavated		**2,310 E**	ND<0.02	ND<0.10	ND<0.05	ND<0.15	----	----	ND<50	ND<250	----	----	----	----	----	----	----	----	----	----	----	----
A6-12B:6	8	06/19/17	Excavated	√	ND<10	ND<0.02	ND<0.10	ND<0.05	ND<0.15	----	----	ND<50	ND<250	----	----	----	----	----	----	----	----	----	----	----	----
A6-13W:4	6	06/19/17	Excavated	√	ND<10	ND<0.02	ND<0.10	ND<0.05	ND<0.15	----	----	ND<50	ND<250	----	----	----	----	----	----	----	----	----	----	----	----
A6-14E:4	6	06/19/17	In-Situ	√	**16**	ND<0.02	ND<0.10	ND<0.05	ND<0.15	----	----	ND<50	ND<250	----	----	----	----	----	----	----	----	----	----	----	----
A6-15E:4	6	06/19/17	Excavated		ND<10	ND<0.02	ND<0.10	ND<0.05	ND<0.15	----	----	ND<50	ND<250	----	----	----	----	----	----	----	----	----	----	----	----
A6-16E:4	6	06/19/17	Excavated		ND<10	ND<0.02	ND<0.10	ND<0.05	ND<0.15	----	----	ND<50	ND<250	----	----	----	----	----	----	----	----	----	----	----	----
A6-17N:4	6	06/19/17	Excavated		ND<10	ND<0.02	ND<0.10	ND<0.05	ND<0.15	----	----	ND<50	ND<250	----	----	----	----	----	----	----	----	----	----	----	----
A6-18B:6	8	06/19/17	Excavated		ND<10	ND<0.02	ND<0.10	ND<0.05	ND<0.15	----	----	ND<50	ND<250	----	----	----	----	----	----	----	----	----	----	----	----
A6-19B:6	8	06/19/17	Excavated	√	----	----	----	----	----	----	----	----	----	----	----	----	----	----	ND	----	----	----	----	----	----
A6-20W:4	6	06/20/17	Excavated		ND<10	ND<0.02	ND<0.10	ND<0.05	ND<0.15	----	----	ND<50	ND<250	----	----	----	----	----	----	----	----	----	----	----	----
A6-21W:4	6	06/20/17	Excavated		ND<10	ND<0.02	ND<0.10	ND<0.05	ND<0.15	----	----	ND<50	ND<250	----	----	----	----	----	----	----	----	----	----	----	----
Soil Characterization Samples																									
SP-1	1	04/26/17	Excavated		----	----	----	----	----	----	----	ND<50	ND<250	----	----	----	----	----	----	----	----	----	----	----	----
S1:2	2	04/26/17	Excavated		----	----	----	----	----	----	----	ND<50	ND<250	----	----	----	----	----	----	----	----	----	----	----	----
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**	**5**	**0.1[2]**	**1**	**20**	**2**	**19/2,000[3]**	**250**	**2**

Table 1, Page 2 of 3. Summary of Soil Sample Analytical Laboratory Results

Sea Mar Community Health Center

9635 Des Moines Memorial Drive South, Sea. le, Washington 98108

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

Sample Number	Sample Depth	Sample Date	Soil Status [7]	Final Performance Sample[6]	Gasoline TPH	BTEX				Diesel TPH	Oil TPH	Diesel TPH	Oil TPH	HCID			VOCs[4]	Naph.	cPAHs	PCBs	Total MTCA 5 Metals				
						B	T	E	X	w/ silica gel		w/o silica gel		Gasoline	Diesel	Oil					As	Cd	Cr	Pb	Hg
W1:2	2	04/26/17	In-Situ		----	----	----	----	----	----	----	ND<50	ND<250	----	----	----	----	----	----	----	----	----	----	----	----
B1:2	2	04/26/17	Excavated		----	----	----	----	----	----	----	ND<50	**500**	----	----	----	----	----	----	----	----	----	----	----	----
S3:2	2	04/26/17	Excavated		----	----	----	----	----	----	----	ND<50	ND<250	----	----	----	----	----	----	----	----	----	----	----	----
S4:3	3	04/26/17	Excavated		----	----	----	----	----	----	----	ND<50	ND<250	----	----	----	----	----	----	----	----	----	----	----	----
E1:3	3	04/26/17	Excavated		----	----	----	----	----	----	----	ND<50	ND<250	----	----	----	----	----	----	----	----	----	----	----	----
W2:4	4	04/26/17	In-Situ		----	----	----	----	----	----	----	ND<50	ND<250	----	----	----	----	----	----	----	----	----	----	----	----
B2:4	4	04/26/17	Excavated		----	----	----	----	----	----	----	ND<50	ND<250	----	----	----	----	----	----	----	----	----	----	----	----
W3:5	5	04/26/17	In-Situ		----	----	----	----	----	----	----	ND<50	ND<250	----	----	----	----	----	----	----	----	----	----	----	----
W4:5	5	04/26/17	In-Situ		----	----	----	----	----	----	----	ND<50	ND<250	----	----	----	----	----	----	----	----	----	----	----	----
W5:5	5	04/26/17	In-Situ		----	----	----	----	----	----	----	ND<50	ND<250	----	----	----	----	----	----	----	----	----	----	----	----
B3:5	5	04/26/17	Excavated		----	----	----	----	----	----	----	ND<50	ND<250	----	----	----	----	----	----	----	----	----	----	----	----
W6-5	5	04/27/17	Excavated		----	----	----	----	----	----	----	ND<50	ND<250	----	----	----	----	----	----	----	----	----	----	----	----
B4-5	5	04/27/17	Excavated		----	----	----	----	----	----	----	ND<50	ND<250	----	----	----	----	----	----	----	----	----	----	----	----
B5:3	3	06/19/17	Excavated		ND<10	ND<0.02	ND<0.10	ND<0.05	ND<0.15	----	----	ND<50	ND<250	----	----	----	----	----	----	----	----	----	----	----	----
TP1-1.5	1.5	04/17/17	In-Situ		ND<2	ND<0.03	ND<0.05	ND<0.05	ND<0.15	ND<50	ND<250	----	----	----	----	----	ND	ND<0.05	----	----	----	----	----	----	----
TP2-2	2	04/17/17	Excavated		ND<2	ND<0.03	ND<0.05	ND<0.05	ND<0.15	ND<50	ND<250	----	----	----	----	----	ND	ND<0.05	----	----	----	----	----	----	----
TP3-2	2	04/17/17	In-Situ		ND<2	ND<0.03	ND<0.05	ND<0.05	ND<0.15	ND<50	ND<250	----	----	----	----	----	ND	ND<0.05	----	----	----	----	----	----	----
TP4-2.5	2.5	04/17/17	Excavated		ND<2	ND<0.03	ND<0.05	ND<0.05	ND<0.15	ND<50	ND<250	----	----	----	----	----	ND	ND<0.05	----	----	----	----	----	----	----
TP5-1.5	1.5	04/17/17	Excavated		ND<2	ND<0.03	ND<0.05	ND<0.05	ND<0.15	ND<50	ND<250	----	----	----	----	----	ND	ND<0.05	----	----	----	----	----	----	----
TP6-1.5	1.5	04/17/17	Excavated		ND<2	ND<0.03	ND<0.05	ND<0.05	ND<0.15	ND<50	**270**	----	----	----	----	----	ND	ND<0.05	----	----	----	----	----	----	----
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**	**5**	**0.1[2]**	**1**	**20**	**2**	**19/2,000[3]**	**250**	**2**

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). In Area 6, sample IDs were labeled with the depth below the top of the UST which was approximately 2 feet below the ground surface.

PID = Photoionization detector.

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) determined using EPA Test Method 8260C.

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

PCBs (polychlorinated biphenyls) determined using EPA Test Method 8082A.

MTCA 5 Metals (As = arsenic, Cd = cadmium, Cr = chromium, Pb = lead, Hg = mercury) determined using EPA Methods 6020A and 7010.

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

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

E = Indicates result is an estimate because it exceeds the calibration range.

^{HT} = Indicates the analysis was performed outside the method or client-specified holding time requirement.

ND = Not detected at a concentration above the analytical detection limit.

---- = Not analyzed or not applicable.

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

Table 1, Page 3 of 3. 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. 2016-023B

Notes continued:

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 toxicity of the cPAH mixture is compared to the MTCA Method A Cleanup Level for benzo(a)pyrene using the toxicity equivalency methodology described in WAC 173-340-708(8).

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

[4] Only pertains to non-petroleum related VOCs as petroleum related VOCs are assessed under the MTCA Method A TPH Cleanup Levels.

[5] Soil characterization sample applicable to remedial excavation.

[6] Final performance samples were collected from the limits of the remedial excavation to demonstrate compliance with MTCA.

[7] In-situ indicates soil that remains in place on the Property. Excavated indicates soil removed from the Property during remedial excavation or construction related excavation.

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 1. Summary of Vault Excavation Water Analytical Laboratory Results
Sea Mar Community Health Center
9635 Des Moines Memorial Drive South, Seattle, Washington 98108
The Riley Group, Inc. Project No. 2016-023B

Sample Number	Sample Date	Gasoline TPH	B	T	E	X	Diesel TPH	Oil TPH	PCE	TCE	cis-1,2-DCE	trans-1,2-DCE	VC	1,1-DCE	Other VOCs
BT1	06/20/17	ND<100	ND<1.0	ND<2.0	ND<1.0	ND<2.0	ND<200	ND<400	ND<1	ND<1	ND<1	ND<1	ND<0.2	ND<0.5	ND
USTSAW-B	06/13/17	**693**	ND<1.0	ND<2.0	ND<1.0	ND<2.0	ND<200	ND<400	----	----	----	----	----	----	----
EXW-1W	06/13/17	ND<100	ND<1.0	ND<2.0	ND<1.0	ND<2.0	ND<200	ND<400	ND<1	ND<1	ND<1	ND<1	ND<0.2	ND<0.5	ND
MTCA Method A Cleanup Levels for Ground Water		**800/1,000[1]**	**5**	**1,000**	**700**	**1,000**	**500**	**500**	**5**	**5**	**----**	**----**	**0.2**	**----**	**Analyte Specific**
ARAR[2]		**----**	**----**	**----**	**----**	**----**	**----**	**----**	**----**	**----**	**70**	**100**	**----**	**7**	**Analyte Specific**

Notes:

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 8260C.

Diesel and Oil TPH (total petroleum hydrocarbons) determined using Northwest Test Method NWTPH-Dx 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), Naph = Naphthalene, and other VOCs (volatile organic compounds) determined using EPA Test Method 8260C.

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] ARAR = Applicable or Relevant and Appropriate Requirement. ARARs for the Property are the Federal and State Primary Maximum Contaminant Levels (MCLs) as established under the Environmental Protection Agency (EPA) National Primary Drinking Water Regulations.

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 3, Page 1 of 1. Summary of UST Contents Analytical Laboratory Results
Sea Mar Community Health Center
9635 Des Moines Memorial Drive South, Seattle, Washington 98108
The Riley Group, Inc. Project No. 2016-023B

Sample Number	Sample Date	Gasoline TPH	B	T	E	X	Diesel TPH	Oil TPH	PCE	TCE	cis-1,2-DCE	trans-1,2-DCE	VC	1,1-DCE	Other VOCs	TO	Naph.	PCBs	cPAHs[1]	Total MTCA 5 Metals				
																				As	Cd	Cr	Pb	Hg
Sludge (mg/kg)																								
Soil Grab 1	05/30/17	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	ND<0.2	**0.102**	**7.23**	ND<1	**14.4**	**18.1**	ND<1
UST Liquid (ug/L)																								
UST-W	04/26/17	**2,900**	ND<0.35	ND<1	**2.6**	**8.6**	**4,600x**	**1,200**	ND<1	ND<1	ND<1	ND<1	ND<0.2	ND<1	ND	----	**19**	----	----	----	----	----	----	----
UST 1	05/17/17	----	----	----	----	----	----	----	----	----	----	----	----	----	----	**47**	----	ND<0.1	----	----	----	----	----	----

Notes:

Sludge analytical results are given in milligrams per kilogram (mg/kg) and UST liquid results are given in micrograms per liter (ug/L).

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

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

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

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), Naph = Naphthalene, and other VOCs (volatile organic compounds) determined using EPA Test Method 8260C.

TO (total organic halogens) determined using SW846 9020(mod).

PCBs (polychlorinated biphenyls) determined using EPA Test Method 8082A.

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 6020A.

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

TEF = Toxicity Equivalency

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 toxicity of the cPAH mixture using toxicity equivalency methodology described in WAC 173-340908(8).

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.

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 23, 2017

Jerry Sawetz, Project Manager
The Riley Group, Inc.
17522 Bothell Way NE
Bothell, WA 98011

Dear Mr Sawetz:

Included are the results from the testing of material submitted on June 19, 2017 from the 2016-023B, F&BI 706299 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
TRG0623R.DOC

CASE NARRATIVE

This case narrative encompasses samples received on June 19, 2017 by Friedman & Bruya, Inc. from the The Riley Group 2016-023B, F&BI 706299 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	The Riley Group
706299 -01	A6-19B:6

The relative percent difference for indeno(1,2,3-cd)pyrene by 8270D exceeded the acceptance criteria. The laboratory control sample met the acceptance criteria, therefore the results were likely due to matrix effect.

All other quality control requirements were acceptable.

Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID:	A6-19B:6	Client:	The Riley Group
Date Received:	06/19/17	Project:	2016-023B, F&BI 706299
Date Extracted:	06/20/17	Lab ID:	706299-01 1/5
Date Analyzed:	06/20/17	Data File:	062004.D
Matrix:	Soil	Instrument:	GCMS6
Units:	mg/kg (ppm) Dry Weight	Operator:	ya

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	79	31	163
Benzo(a)anthracene-d12	93	24	168

Compounds:	Concentration mg/kg (ppm)
Benz(a)anthracene	<0.01
Chrysene	<0.01
Benzo(a)pyrene	<0.01
Benzo(b)fluoranthene	<0.01
Benzo(k)fluoranthene	<0.01
Indeno(1,2,3-cd)pyrene	<0.01
Dibenz(a,h)anthracene	<0.01

Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID:	Method Blank	Client:	The Riley Group
Date Received:	Not Applicable	Project:	2016-023B, F&BI 706299
Date Extracted:	06/20/17	Lab ID:	07-1315 mb 1/5
Date Analyzed:	06/20/17	Data File:	062003.D
Matrix:	Soil	Instrument:	GCMS6
Units:	mg/kg (ppm) Dry Weight	Operator:	ya

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	85	31	163
Benzo(a)anthracene-d12	97	24	168

Compounds:	Concentration mg/kg (ppm)
Benz(a)anthracene	<0.01
Chrysene	<0.01
Benzo(a)pyrene	<0.01
Benzo(b)fluoranthene	<0.01
Benzo(k)fluoranthene	<0.01
Indeno(1,2,3-cd)pyrene	<0.01
Dibenz(a,h)anthracene	<0.01

Date of Report: 06/23/17
Date Received: 06/19/17
Project: 2016-023B, F&BI 706299

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES FOR PAHS BY EPA METHOD 8270D SIM

Laboratory Code: 706304-01 1/5 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet wt)	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Benz(a)anthracene	mg/kg (ppm)	0.17	<0.01	90	90	23-144	0
Chrysene	mg/kg (ppm)	0.17	<0.01	85	84	32-149	1
Benzo(b)fluoranthene	mg/kg (ppm)	0.17	0.018	87	95	23-176	9
Benzo(k)fluoranthene	mg/kg (ppm)	0.17	<0.01	92	101	42-139	9
Benzo(a)pyrene	mg/kg (ppm)	0.17	0.012	81	85	21-163	5
Indeno(1,2,3-cd)pyrene	mg/kg (ppm)	0.17	<0.01	73	59	23-170	21 vo
Dibenz(a,h)anthracene	mg/kg (ppm)	0.17	<0.01	78	65	31-146	18

Laboratory Code: Laboratory Control Sample 1/5

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Benz(a)anthracene	mg/kg (ppm)	0.17	94	51-115
Chrysene	mg/kg (ppm)	0.17	90	55-129
Benzo(b)fluoranthene	mg/kg (ppm)	0.17	101	56-123
Benzo(k)fluoranthene	mg/kg (ppm)	0.17	99	54-131
Benzo(a)pyrene	mg/kg (ppm)	0.17	91	51-118
Indeno(1,2,3-cd)pyrene	mg/kg (ppm)	0.17	85	49-148
Dibenz(a,h)anthracene	mg/kg (ppm)	0.17	87	50-141

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.

706299. RGI

SAMPLE CHAIN OF CUSTODY ME 6/19/17 B01

Page # 1 of 1

Report To RGI Ld Jerry Sawtz

Company

Address 17522 Bothell Way NE

City, State, ZIP Bothell WA 98011

Phone 425-415-0551 Email @jsawetz@riley-group.com

SAMPLERS (*signature*) Amelia Oates

PROJECT NAME 2016-023B

PO #

REMARKS

INVOICE TO

TURNAROUND TIME
- ☐ Standard Turnaround
- ☐ RUSH 6/20/17
- 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	TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	X CPAHs				Notes
A6-19B:6	01	6/19/17	1500	Soil	1								X				
																	Samples received at ____ °C

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: Amelia Oates	Amelia Oates	RGI	6/19/17	1610
Received by: Hong Nguyen	HONG NGUYEN	FBI	"	"
Relinquished by:				
Received by:				

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

Libby Environmental, Inc.

4139 Libby Road NE • Olympia, WA 98506-2518

June 21, 2017

Jerry Sawetz
The Riley Group
17522 Bothell Way NE, Suite A
Bothell, WA 98011

Dear Mr. Sawetz:

Please find enclosed the analytical data report for the Sea Mar Project located in Seattle, Washington.

The results of the analyses are summarized in the attached tables. Applicable detection limits and QA/QC data are included. The sample(s) will be disposed of in 30 days unless we are contacted to arrange long term storage.

Libby Environmental, Inc. appreciates the opportunity to have provided analytical services for this project. If you have any further questions about the data report, please give me a call. It was a pleasure working with you on this project, and we are looking forward to the next opportunity to work together.

Sincerely,

Sherry L. Chilcutt
Senior Chemist
Libby Environmental, Inc.

Phone (360) 352-2110 • Fax (360) 352-4154 • libbyenv@aol.com

Libby Environmental, Inc.

Chain of Custody Record

www.LibbyEnvironmental.com

4139 Libby Road NE
Olympia, WA 98506
Ph: 360-352-2110
Fax: 360-352-4154

Date: 6/19/17 Page: 1 of 2

Client: RGI

Project Manager: Jerry Sawetz

Address: 17522 Bothell Way NE

Project Name: SeaMar 2016-023B

City: Bothell State: WA Zip: 98011

Location: ~~Seattle~~ 9635 Desmond St City, State: Seattle, WA

Phone: 425-415-0551 Fax:

Collector: Amelia Oates Date of Collection: 6/19/17

Client Project # 2016-023B

Email: JSAWETZ@RILEY-GROUP.COM

	Sample Number	Depth	Time	Sample Type	Container Type	VOC 8260	NWTPH-Gx	BTEX 8021	NWTPH-HCID	NWTPH-Dx	NWTPH-Dx/Dx	c PAH 8270	PAH 8270	Semi Vol 8270	PCB 8082	MTCA 5 Metals	RCRA 8 Metals			Field Notes
1	A6-1B:6	6:00	0805	Soil	1-4oz 2-VOAs		X	X			X									
2	A6-2S:4	4.0	0835	Soil	1-4oz 2-VOAs		X	X			X									
3	A6-3N:4	4.0	0845	Soil	1-4oz 2-VOAs		X	X			X									
4	A6-4E:4	4.0	0935	Soil	1-4oz 2-VOAs		X	X			X									
5	A6-5E:4	4	0945	Soil	"		X	X			X									
6	A6-6E:4	4	0950	Soil	"		X	X			X									
7	A6-7B:6	6	0955	Soil	"		X	X			X									
8	B5:3	3	1030	Soil	"		X	X			X									
9	A6-8W:4	4	1040	Soil	"		X	X			X									
10	A6-9W:5	5	1045	Soil	"		X	X			X									
11	A6-10S:4	4	1110	Soil	"		X	X			X									
12	A6-11N:4	4	1135	Soil	"		X	X			X									
13	A6-12B:6	6	1155	Soil	"		X	X			X									
14	A6-13W:4	4	1200	Soil	"		X	X			X									
15	A6-14E:4	4	1245	Soil	"		X	X			X									
16	A6-15E=4	4	1300	Soil	"		X	X			X									
17	A6-16E:4	4	1405	Soil	"		X	X			X									

Relinquished by:	Date / Time	Received by:	Date / Time
Amelia Oates	6/19/17 1447	[signature] 6/19/17	1447
Relinquished by:	Date / Time	Received by:	Date / Time
Relinquished by:	Date / Time	Received by:	Date / Time

Sample Receipt

Good Condition?	Y	N	
Temp.		°C	
Seals Intact?	Y	N	N/A
Total Number of Containers			

Remarks: ML

TAT: 24HR 48HR 5-DAY

Distribution: White - Lab, Yellow - File, Pink - Originator

Libby Environmental, Inc.

Chain of Custody Record

www.LibbyEnvironmental.com

4139 Libby Road NE
Olympia, WA 98506
Ph: 360-352-2110
Fax: 360-352-4154

Date: 6-19-17 Page: 2 of 2

Client: RGF

Project Manager: Jerry Sawyer

Address:

Project Name: Seamar

City: State: Zip:

Location: City, State: Seattle WA

Phone: Fax:

Collector: Date of Collection: 6-19-17

Client Project # 2016-023B

Email: aoates@riley-group.com

	Sample Number	Depth	Time	Sample Type	Container Type	VOC 8260	NWTPH-Gx	BTEX 8021	NWTPH-HCID	NWTPH-Dx	NWTPH-Dx/Dx	c PAH 8270	PAH 8270	Semi Vol 8270	PCB 8082	MTCA 5 Metals	RCRA 8 Metals			Field Notes
1	A6-17N:4	4	1420	Soil	1-4oz 2 VOAs		X	X			X									
2	A6-18B:6	6	1410	"	"		X	X			X									
3																				
4																				
5																				
6																				
7																				
8																				
9																				
10																				
11																				
12																				
13																				
14																				
15																				
16																				
17																				

Relinquished by:	Date / Time	Received by:	Date / Time
[signature]	6/19/17 1442	[signature]	6/19/17 1447
Relinquished by:	Date / Time	Received by:	Date / Time
Relinquished by:	Date / Time	Received by:	Date / Time

Sample Receipt

Good Condition?	Y	N	
Temp.		°C	
Seals Intact?	Y	N	N/A
Total Number of Containers			

Remarks: ML

TAT: 24HR 48HR 5-DAY

Distribution: White - Lab, Yellow - File, Pink - Originator

Libby Environmental, Inc.

4139 Libby Road NE
Olympia, WA 98506
Phone: (360) 352-2110
FAX: (360) 352-4154
Email: libbyenv@aol.com

SEA MAR PROJECT
The Riley Group, Inc.
Seattle, Washington
Libby Project # L170619-40
Client Project # 2016-023B

Analyses of Gasoline (NWTPH-Gx) & BTEX (EPA Method 8260C) in Soil

Sample Number	Date Analyzed	Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Xylenes (mg/kg)	Gasoline (mg/kg)	Surrogate Recovery (%)
Method Blank	6/19/17	nd	nd	nd	nd	nd	101
LCS	6/19/17	107%	101%				100
A6-1B:6	6/19/17	nd	nd	nd	nd	nd	100
A6-1B:6 Dup	6/19/17	nd	nd	nd	nd	nd	100
A6-2S:4	6/19/17	nd	nd	nd	nd	nd	100
A6-3N:4	6/19/17	nd	nd	nd	nd	nd	100
A6-4E:4	6/19/17	nd	nd	nd	nd	nd	100
A6-5E:4	6/19/17	nd	nd	nd	nd	nd	100
A6-6E:4	6/19/17	nd	nd	nd	nd	nd	100
A6-7B:6	6/19/17	nd	nd	nd	nd	nd	100
B5:3	6/19/17	nd	nd	nd	nd	nd	99
A6-8W:4	6/19/17	nd	nd	nd	nd	92	100
A6-9W:5	6/19/17	nd	nd	nd	nd	nd	102
A6-10S:4	6/19/17	nd	nd	nd	nd	nd	101
A6-11N:4	6/19/17	nd	nd	nd	nd	2310 E	119
A6-12B:6	6/19/17	nd	nd	nd	nd	nd	101
A6-12B:6 Dup	6/19/17	nd	nd	nd	nd	nd	101
A6-13W:4	6/19/17	nd	nd	nd	nd	nd	99
A6-14E:4	6/19/17	nd	nd	nd	nd	16	102
A6-15E:4	6/19/17	nd	nd	nd	nd	nd	119
A6-16E:4	6/19/17	nd	nd	nd	nd	nd	101
A6-17N:4	6/19/17	nd	nd	nd	nd	nd	100
A6-18B:6	6/19/17	nd	nd	nd	nd	nd	101
B5:3 MS	6/19/17	115%	114%				101
B5:3 MSD	6/19/17	112%	112%				103
Practical Quantitation Limit		0.02	0.10	0.05	0.15	10	

"E" Indicates result is an estimate because it exceeds the calibration range.
"nd" Indicates not detected at the listed detection limits.
"int" Indicates that interference prevents determination.

ACCEPTABLE RECOVERY LIMITS FOR SURROGATE (Toluene-d8): 65% TO 135%

ANALYSES PERFORMED BY: Paul Burke

Libby Environmental, Inc.

4139 Libby Road NE
Olympia, WA 98506
Phone: (360) 352-2110
FAX: (360) 352-4154
Email: libbyenv@aol.com

SEA MAR PROJECT
The Riley Group, Inc.
Seattle, Washington
Libby Project # L170619-40
Client Project # 2016-023B

Analyses of Diesel & Oil (NWTPH-Dx/Dx Extended) in Soil

Sample Number	Date Analyzed	Surrogate Recovery (%)	Diesel (mg/kg)	Oil (mg/kg)
Method Blank	6/19/17	93	nd	nd
A6-1B:6	6/19/17	100	nd	nd
A6-1B:6 Dup	6/19/17	105	nd	nd
A6-2S:4	6/19/17	100	nd	nd
A6-3N:4	6/19/17	93	nd	nd
A6-4E:4	6/19/17	94	nd	nd
A6-5E:4	6/19/17	94	nd	nd
A6-6E:4	6/19/17	105	nd	nd
A6-6E:4 Dup	6/19/17	105	nd	nd
A6-7B:6	6/19/17	98	nd	nd
B5:3	6/19/17	96	nd	nd
A6-8W:4	6/19/17	96	nd	nd
A6-9W:5	6/19/17	99	nd	nd
A6-10S:4	6/19/17	106	nd	nd
A6-11N:4	6/19/17	97	nd	nd
A6-12B:6	6/19/17	101	nd	nd
A6-13W:4	6/19/17	104	nd	nd
A6-14E:4	6/19/17	103	nd	nd
A6-15E:4	6/19/17	102	nd	nd
A6-16E:4	6/19/17	106	nd	nd
A6-17N:4	6/19/17	100	nd	nd
A6-18B:6	6/19/17	110	nd	nd
A6-18B:6 Dup	6/19/17	110	nd	nd
Practical Quantitation Limit			50	250

"nd" Indicates not detected at the listed detection limits.
"int" Indicates that interference prevents determination.

ACCEPTABLE RECOVERY LIMITS FOR SURROGATE (2-F Biphenyl): 65% TO 135%

ANALYSES PERFORMED BY: Paul Burke

Libby Environmental, Inc.

4139 Libby Road NE • Olympia, WA 98506-2518

June 21, 2017

Jerry Sawetz
The Riley Group
17522 Bothell Way NE, Suite A
Bothell, WA 98011

Dear Mr. Sawetz:

Please find enclosed the analytical data report for the Sea Mar Project located in Seattle, Washington.

The results of the analyses are summarized in the attached tables. Applicable detection limits and QA/QC data are included. The sample(s) will be disposed of in 30 days unless we are contacted to arrange long term storage.

Libby Environmental, Inc. appreciates the opportunity to have provided analytical services for this project. If you have any further questions about the data report, please give me a call. It was a pleasure working with you on this project, and we are looking forward to the next opportunity to work together.

Sincerely,

Sherry L. Chilcutt
Senior Chemist
Libby Environmental, Inc.

Phone (360) 352-2110 • Fax (360) 352-4154 • libbyenv@aol.com

Libby Environmental, Inc.

Chain of Custody Record

www.LibbyEnvironmental.com

4139 Libby Road NE
Olympia, WA 98506
Ph: 360-352-2110
Fax: 360-352-4154

Date: 6/20/17 Page: 1 of 1

Client: The Riley Group
Address: 17522 Bothell Way NE
City: Bothell State: WA Zip: 98011
Phone: 425-415-0551 Fax:
Client Project # 2016-023B

Project Manager: Jerry Sawetz
Project Name: Sea Mar
Location: A16 Excavation City, State: Seattle WA
Collector: Amelia Oates Date of Collection: 6/20/17
Email: JSAWETZ@RILEY-GROUP.com

	Sample Number	Depth	Time	Sample Type	Container Type	VOC 8260	NWTPH-Gx	BTEX 8021	NWTPH-HCID	NWTPH-Dx	NWTPH-Dx/Dx	c PAH 8270	PAH 8270	Semi Vol 8270	PCB 8082	MTCA 5 Metals	RCRA 8 Metals			Field Notes
1	A16-20W:4	4	0835	Soil	1-4oz 2-VOAs		X	X			X									
2	A16-21W:4	4	0845	Soil	"		X	X			X									
3	BT1	-	0915	water	1-Yel Amber 3-VOAs	X	X				X									
4																				
5																				
6																				
7																				
8																				
9																				
10																				
11																				
12																				
13																				
14																				
15																				
16																				
17																				

Relinquished by:	Date / Time	Received by:	Date / Time
Amelia Oates	6/20/17 1005	Paul Beck	6/20/17 1005
Relinquished by:	Date / Time	Received by:	Date / Time
Relinquished by:	Date / Time	Received by:	Date / Time

Sample Receipt

Good Condition?	Y	N	
Temp.		°C	
Seals Intact?	Y	N	N/A
Total Number of Containers			

Remarks: ML

TAT: 24HR 48HR 5-DAY

Distribution: White - Lab, Yellow - File, Pink - Originator

Libby Environmental, Inc.

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SEA MAR PROJECT
The Riley Group, Inc.
Seattle, Washington
Libby Project # L170620-40
Client Project # 2016-023B

Analyses of Gasoline (NWTPH-Gx) & BTEX (EPA Method 8260C) in Soil

Sample Number	Date Analyzed	Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Xylenes (mg/kg)	Gasoline (mg/kg)	Surrogate Recovery (%)
Method Blank	6/20/17	nd	nd	nd	nd	nd	103
LCS	6/20/17	124%	128%				98
A6-20W:4	6/20/17	nd	nd	nd	nd	nd	100
A6-21W:4	6/20/17	nd	nd	nd	nd	nd	99
A6-21W:4 Dup	6/20/17	nd	nd	nd	nd	nd	100
A6-21W:4 MS	6/20/17	116%	117%				100
A6-21W:4 MSD	6/20/17	113%	115%				99
Practical Quantitation Limit		0.02	0.10	0.05	0.15	10	

"nd" Indicates not detected at the listed detection limits.
"int" Indicates that interference prevents determination.

ACCEPTABLE RECOVERY LIMITS FOR SURROGATE (Toluene-d8): 65% TO 135%

ANALYSES PERFORMED BY: Paul Burke

Libby Environmental, Inc.

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SEA MAR PROJECT
The Riley Group, Inc.
Seattle, Washington
Libby Project # L170620-40
Client Project # 2016-023B

Analyses of Diesel & Oil (NWTPH-Dx/Dx Extended) in Soil

Sample Number	Date Analyzed	Surrogate Recovery (%)	Diesel (mg/kg)	Oil (mg/kg)
Method Blank	6/20/17	100	nd	nd
A6-20W:4	6/20/17	108	nd	nd
A6-21W:4	6/20/17	110	nd	nd
A6-21W:4 Dup	6/20/17	100	nd	nd
Practical Quantitation Limit			50	250

"nd" Indicates not detected at the listed detection limits.
"int" Indicates that interference prevents determination.

ACCEPTABLE RECOVERY LIMITS FOR SURROGATE (2-F Biphenyl): 65% TO 135%

ANALYSES PERFORMED BY: Paul Burke

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SEA MAR PROJECT
The Riley Group, Inc.
Seattle, Washington
Libby Project # L170620-40
Client Project # 2016-023B

Volatile Organic Compounds by EPA Method 8260C in Water

Sample Description		Method Blank	BT1	BT1 Dup
Date Sampled	Reporting	N/A	6/20/17	6/20/17
Date Analyzed	Limits	6/20/17	6/20/17	6/20/17
	(µg/L)	(µg/L)	(µg/L)	(µg/L)
Dichlorodifluoromethane	2.0	nd	nd	nd
Chloromethane	2.0	nd	nd	nd
Vinyl chloride	0.2	nd	nd	nd
Bromomethane	2.0	nd	nd	nd
Chloroethane	2.0	nd	nd	nd
Trichlorofluoromethane	2.0	nd	nd	nd
1,1-Dichloroethene	0.5	nd	nd	nd
Methylene chloride	1.0	nd	nd	nd
Methyl *tert*- Butyl Ether (MTBE)	5.0	nd	nd	nd
trans -1,2-Dichloroethene	1.0	nd	nd	nd
1,1-Dichloroethane	1.0	nd	nd	nd
2,2-Dichloropropane	2.0	nd	nd	nd
cis -1,2-Dichloroethene	1.0	nd	nd	nd
Chloroform	1.0	nd	nd	nd
1,1,1-Trichloroethane (TCA)	1.0	nd	nd	nd
Carbon tetrachloride	1.0	nd	nd	nd
1,1-Dichloropropene	1.0	nd	nd	nd
Benzene	1.0	nd	nd	nd
1,2-Dichloroethane (EDC)	1.0	nd	nd	nd
Trichloroethene (TCE)	1.0	nd	nd	nd
1,2-Dichloropropane	1.0	nd	nd	nd
Dibromomethane	1.0	nd	nd	nd
Bromodichloromethane	1.0	nd	nd	nd
cis-1,3-Dichloropropene	1.0	nd	nd	nd
Toluene	1.0	nd	nd	nd
Trans-1,3-Dichloropropene	1.0	nd	nd	nd
1,1,2-Trichloroethane	1.0	nd	nd	nd
Tetrachloroethene (PCE)	1.0	nd	nd	nd
1,3-Dichloropropane	1.0	nd	nd	nd
Dibromochloromethane	1.0	nd	nd	nd
1,2-Dibromoethane (EDB) *	0.01	nd	nd	nd
Chlorobenzene	1.0	nd	nd	nd
1,1,1,2-Tetrachloroethane	1.0	nd	nd	nd
Ethylbenzene	1.0	nd	nd	nd
Total Xylenes	2.0	nd	nd	nd
Styrene	1.0	nd	nd	nd

Libby Environmental, Inc.

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SEA MAR PROJECT
The Riley Group, Inc.
Seattle, Washington
Libby Project # L170620-40
Client Project # 2016-023B

Volatile Organic Compounds by EPA Method 8260C in Water

Sample Description		Method Blank	BT1	BT1 Dup
Date Sampled	Reporting	N/A	6/20/17	6/20/17
Date Analyzed	Limits	6/20/17	6/20/17	6/20/17
	(µg/L)	(µg/L)	(µg/L)	(µg/L)
Bromoform	1.0	nd	nd	nd
Isopropylbenzene	4.0	nd	nd	nd
1,2,3-Trichloropropane	1.0	nd	nd	nd
Bromobenzene	1.0	nd	nd	nd
1,1,2,2-Tetrachloroethane	1.0	nd	nd	nd
n-Propylbenzene	1.0	nd	nd	nd
2-Chlorotoluene	1.0	nd	nd	nd
4-Chlorotoluene	1.0	nd	nd	nd
1,3,5-Trimethylbenzene	1.0	nd	nd	nd
tert-Butylbenzene	1.0	nd	nd	nd
1,2,4-Trimethylbenzene	1.0	nd	nd	nd
sec-Butylbenzene	1.0	nd	nd	nd
1,3-Dichlorobenzene	1.0	nd	nd	nd
Isopropyltoluene	1.0	nd	nd	nd
1,4-Dichlorobenzene	1.0	nd	nd	nd
1,2-Dichlorobenzene	1.0	nd	nd	nd
n-Butylbenzene	1.0	nd	nd	nd
1,2-Dibromo-3-Chloropropane	1.0	nd	nd	nd
1,2,4-Trichlorolbenzene	2.0	nd	nd	nd
Hexachloro-1,3-butadiene	5.0	nd	nd	nd
Naphthalenes	5.0	nd	nd	nd
1,2,3-Trichlorobenzene	5.0	nd	nd	nd
Surrogate Recovery				
Dibromofluoromethane		90	88	89
1,2-Dichloroethane-d4		103	94	97
Toluene-d8		103	98	111
4-Bromofluorobenzene		104	99	106

"nd" Indicates not detected at listed detection limit.
"int" Indicates that interference prevents determination.

* ANALYZED BY SIM
ACCEPTABLE RECOVERY LIMITS FOR SURROGATE 65% TO 135%

ANALYSES PERFORMED BY: Paul Burke

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SEA MAR PROJECT
The Riley Group, Inc.
Seattle, Washington
Libby Project # L170620-40
Client Project # 2016-023B

QA/QC Data - EPA 8260C Analyses

Sample Identification: BT1							
	Matrix Spike			Matrix Spike Duplicate			RPD
	Spiked Conc. (µg/L)	Measured Conc. (µg/L)	Spike Recovery (%)	Spiked Conc. (µg/L)	Measured Conc. (µg/L)	Spike Recovery (%)	(%)
1,1-Dichloroethene	10	11.6	116	10	12.2	122	5.0
Benzene	10	12.5	125	10	12.7	127	1.6
Toluene	10	12.6	126	10	12.6	126	0.0
Chlorobenzene	10	11.5	115	10	11.8	118	2.6
Trichloroethene (TCE)	10	10.5	105	10	10.8	108	2.8

Surrogate Recovery		
Dibromofluoromethane	87	86
1,2-Dichloroethane-d4	101	95
Toluene-d8	100	99
4-Bromofluorobenzene	103	104

Laboratory Control Sample			
	Spiked Conc. (µg/L)	Measured Conc. (µg/L)	Spike Recovery (%)
1,1-Dichloroethene	10	12.4	124
Benzene	10	12.4	124
Toluene	10	12.8	128
Chlorobenzene	10	12.3	123
Trichloroethene (TCE)	10	10.8	108

Surrogate Recovery	
Dibromofluoromethane	98
1,2-Dichloroethane-d4	117
Toluene-d8	98
4-Bromofluorobenzene	106

ACCEPTABLE RECOVERY LIMITS FOR MATRIX SPIKES: 65%-135%
ACCEPTABLE RPD IS 35%

ANALYSES PERFORMED BY: Paul Burke

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SEA MAR PROJECT
The Riley Group, Inc.
Seattle, Washington
Libby Project # L170620-40
Client Project # 2016-023B

Analyses of Gasoline (NWTPH-Gx) in Water

Sample Number	Date Analyzed	Surrogate Recovery (%)	Gasoline (µg/L)
Method Blank	6/20/17	103	nd
BT1	6/20/17	98	nd
BT1 Dup	6/20/17	111	nd
Practical Quantitation Limit			100

"nd" Indicates not detected at the listed detection limits.
"int" Indicates that interference prevents determination.

ACCEPTABLE RECOVERY LIMITS FOR SURROGATE (Toluene-d8): 65% TO 135%

ANALYSES PERFORMED BY: Paul Burke

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SEA MAR PROJECT
The Riley Group, Inc.
Seattle, Washington
Libby Project # L170620-40
Client Project # 2016-023B

Analyses of Diesel & Oil (NWTPH-Dx/Dx Extended) in Water

Sample Number	Date Analyzed	Surrogate Recovery (%)	Diesel (µg/L)	Oil (µg/L)
Method Blank	6/20/17	100	nd	nd
BT1	6/20/17	106	nd	nd
BT1 Dup	6/20/17	100	nd	nd
Practical Quantitation Limit			200	400

"nd" Indicates not detected at the listed detection limits.
"int" Indicates that interference prevents determination.

ACCEPTABLE RECOVERY LIMITS FOR SURROGATE (2-F Biphenyl): 65% TO 135%

ANALYSES PERFORMED BY: Paul Burke

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, 2017

Jerry Sawetz, Project Manager
The Riley Group, Inc.
17522 Bothell Way NE
Bothell, WA 98011

Dear Mr Sawetz:

Included are the results from the testing of material submitted on June 13, 2017 from the 2016-023B, F&BI 706211 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
TRG0621R.DOC

CASE NARRATIVE

This case narrative encompasses samples received on June 13, 2017 by Friedman & Bruya, Inc. from the The Riley Group 2016-023B, F&BI 706211 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	The Riley Group
706211 -01	EXW-1W
706211 -02	USTSAW-B
706211 -03	A5B1-4.0
706211 -04	A5B2-4.0
706211 -05	USTSASB-3.0

All quality control requirements were acceptable.

Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID:	A5B2-4.0	Client:	The Riley Group
Date Received:	06/13/17	Project:	2016-023B, F&BI 706211
Date Extracted:	06/14/17	Lab ID:	706211-04 1/5
Date Analyzed:	06/14/17	Data File:	061408.D
Matrix:	Soil	Instrument:	GCMS6
Units:	mg/kg (ppm) Dry Weight	Operator:	ya

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	85	31	163
Benzo(a)anthracene-d12	92	24	168

Compounds:	Concentration mg/kg (ppm)
Benz(a)anthracene	<0.01
Chrysene	<0.01
Benzo(a)pyrene	<0.01
Benzo(b)fluoranthene	<0.01
Benzo(k)fluoranthene	<0.01
Indeno(1,2,3-cd)pyrene	<0.01
Dibenz(a,h)anthracene	<0.01

Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID:	Method Blank	Client:	The Riley Group
Date Received:	Not Applicable	Project:	2016-023B, F&BI 706211
Date Extracted:	06/14/17	Lab ID:	07-1275 mb 1/5
Date Analyzed:	06/14/17	Data File:	061407A.D
Matrix:	Soil	Instrument:	GCMS6
Units:	mg/kg (ppm) Dry Weight	Operator:	ya

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	85	31	163
Benzo(a)anthracene-d12	96	24	168

Compounds:	Concentration mg/kg (ppm)
Benz(a)anthracene	<0.01
Chrysene	<0.01
Benzo(a)pyrene	<0.01
Benzo(b)fluoranthene	<0.01
Benzo(k)fluoranthene	<0.01
Indeno(1,2,3-cd)pyrene	<0.01
Dibenz(a,h)anthracene	<0.01

Date of Report: 06/21/17
Date Received: 06/13/17
Project: 2016-023B, F&BI 706211

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES FOR PAHS BY EPA METHOD 8270D SIM

Laboratory Code: 706211-04 1/5 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet wt)	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Benz(a)anthracene	mg/kg (ppm)	0.17	<0.01	90	89	23-144	1
Chrysene	mg/kg (ppm)	0.17	<0.01	88	89	32-149	1
Benzo(b)fluoranthene	mg/kg (ppm)	0.17	<0.01	87	88	23-176	1
Benzo(k)fluoranthene	mg/kg (ppm)	0.17	<0.01	91	92	42-139	1
Benzo(a)pyrene	mg/kg (ppm)	0.17	<0.01	84	86	21-163	2
Indeno(1,2,3-cd)pyrene	mg/kg (ppm)	0.17	<0.01	99	90	23-170	10
Dibenz(a,h)anthracene	mg/kg (ppm)	0.17	<0.01	99	92	31-146	7

Laboratory Code: Laboratory Control Sample 1/5

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Benz(a)anthracene	mg/kg (ppm)	0.17	92	51-115
Chrysene	mg/kg (ppm)	0.17	92	55-129
Benzo(b)fluoranthene	mg/kg (ppm)	0.17	90	56-123
Benzo(k)fluoranthene	mg/kg (ppm)	0.17	96	54-131
Benzo(a)pyrene	mg/kg (ppm)	0.17	87	51-118
Indeno(1,2,3-cd)pyrene	mg/kg (ppm)	0.17	100	49-148
Dibenz(a,h)anthracene	mg/kg (ppm)	0.17	101	50-141

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.

706211

SAMPLE CHAIN OF CUSTODY

ME 06/13/17 VW1/A03

Page # 1 of 1

Report To RE Jerry Sawetz

Company RGI

Address 17522 Bothell Way NE

City, State, ZIP Bothell WA 98021

Phone 425-415-0551 Email jsawetz@riley-group.com

SAMPLERS (*signature*) Amelia Oates

PROJECT NAME: 2016-023B

PO #:

REMARKS:

INVOICE TO:

TURNAROUND TIME
- ☐ Standard Turnaround
- ☑ ~~RUSH~~
- 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	TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	cPAHs by 8270				Notes
EXW-1W	01 A-C	6/13/17	~~1000~~	H_2O	3												Hold
UST SAW-B	02 A-E	6/13/17	1140	H_2O	5												Hold
ASB1-4.0	03	6/13/17	1400	Soil	1												Hold
ASB2-4.0	04	6/13/17	1405	Soil	1								X				
UST SASB-3.0	05	6/13/17	1415	Soil	1												Hold
													Samples received at 2 °C				

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: Amelia Oates	Amelia Oates	RGI	6/13/17	1516
Received by: Khan Phan	Khan Phan	FEBI	6/13/17	1516
Relinquished by:				
Received by:				

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

Libby Environmental, Inc.

4139 Libby Road NE • Olympia, WA 98506-2518

June 19, 2017

Jerry Sawetz
The Riley Group
17522 Bothell Way NE, Suite A
Bothell, WA 98011

Dear Mr. Sawetz:

Please find enclosed the analytical data report for the Sea Mar 2016-023B UST SA Project located in Seattle, Washington.

The results of the analyses are summarized in the attached tables. Applicable detection limits and QA/QC data are included. The sample(s) will be disposed of in 30 days unless we are contacted to arrange long term storage.

Libby Environmental, Inc. appreciates the opportunity to have provided analytical services for this project. If you have any further questions about the data report, please give me a call. It was a pleasure working with you on this project, and we are looking forward to the next opportunity to work together.

Sincerely,

Sherry L. Chilcutt
Senior Chemist
Libby Environmental, Inc.

Phone (360) 352-2110 • Fax (360) 352-4154 • libbyenv@aol.com

Libby Environmental, Inc.

Chain of Custody Record

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Client: RGI
Address: 17522 Bothell WAY NE
City: Bothell State: WA Zip: 98011
Phone: 425-415-0551 Fax:
Client Project #

Date: 6/13/17 Page: 1 of 1
Project Manager: ~~JS~~ Jerry Sawetz
Project Name: Sea Mar 2016 023B UST SA
Location: City, State: Seattle, WA
Collector: Date of Collection: 6-13-17
Email: jsawetz@riley-group.com

	Sample Number	Depth	Time	Sample Type	Container Type	VOC 8260	NWTPH-Gx	BTEX 8021	NWTPH-HCID	NWTPH-Dx	NWTPH-Dx/Dx	c PAH 8270	PAH 8270	Semi Vol 8270	PCB 8082	MTCA 5 Metals	RCRA 8 Metals	Lead	Field Notes
1	USTSASN-2.5	2.5	1020	Soil	1 4oz Jar 2 VOAs		X	X	X	X									
MS 2	USTSASB-3.0	3.0	1015	Soil	1 4oz Jar 2 VOAs		X	X	X	X									
- 3	USTSASW-2.5	2.5	1057	Soil	1 4oz Jar 2 VOAs		X	X	X	X									
4	USTSASNW-1.5	1.5	1115	soil	1 4oz Jar 2 VOAs	⊗	X	X	X	X							⊗		6-13-17 4:02pm
5	USTSAW-B	3.0	1140	water			X	X		X									Add Lead per Jerry via email. RUSH
6																			
7																			
8																			
9																			6-16-17 11:42 am
10																			added VOC per
11																			Jerry via email.
12																			RUSH
13																			
14																			
15																			
16																			
17																			

Relinquished by:	Date / Time	Received by:	Date / Time
[signature]	6/13/17 1448	[signature] 6/13/17	1448
Relinquished by:	Date / Time	Received by:	Date / Time
Relinquished by:	Date / Time	Received by:	Date / Time

Sample Receipt

Good Condition?	Y	N	
Temp.		°C	
Seals Intact?	Y	N	N/A
Total Number of Containers			

Remarks:

ML

TAT: 24HR 48HR 5-DAY

Distribution: White - Lab, Yellow - File, Pink - Originator

Libby Environmental, Inc.

4139 Libby Road NE
Olympia, WA 98506
Phone: (360) 352-2110
FAX: (360) 352-4154
Email: libbyenv@aol.com

SEA MAR 2016-023B PROJECT
Riley Group, Inc.
Seattle, Washington
Libby Project # L170613-40C2

Volatile Organic Compounds by EPA Method 8260C in Soil

Sample Description		Method Blank	USTSASNW-1.5	USTSASNW-1.5 Dup
Date Sampled	Reporting	N/A	6/13/17	6/13/17
Date Analyzed	Limits (mg/kg)	6/16/17 (mg/kg)	6/16/17 (mg/kg)	6/16/17 (mg/kg)
Dichlorodifluoromethane	0.06	nd	nd	nd
Chloromethane	0.06	nd	nd	nd
Vinyl chloride	0.02	nd	nd	nd
Bromomethane	0.09	nd	nd	nd
Chloroethane	0.06	nd	nd	nd
Trichlorofluoromethane	0.05	nd	nd	nd
1,1-Dichloroethene	0.05	nd	nd	nd
Methylene chloride	0.02	nd	nd	nd
Methyl *tert*- Butyl Ether (MTBE)	0.05	nd	nd	nd
trans -1,2-Dichloroethene	0.02	nd	nd	nd
1,1-Dichloroethane	0.03	nd	nd	nd
2,2-Dichloropropane	0.05	nd	nd	nd
cis -1,2-Dichloroethene	0.02	nd	nd	nd
Chloroform	0.02	nd	nd	nd
1,1,1-Trichloroethane (TCA)	0.02	nd	nd	nd
Carbon tetrachloride	0.03	nd	nd	nd
1,1-Dichloropropene	0.02	nd	nd	nd
Benzene	0.02	nd	nd	nd
1,2-Dichloroethane (EDC)	0.03	nd	nd	nd
Trichloroethene (TCE)	0.03	nd	nd	nd
1,2-Dichloropropane	0.02	nd	nd	nd
Dibromomethane	0.04	nd	nd	nd
Bromodichloromethane	0.02	nd	nd	nd
cis-1,3-Dichloropropene	0.02	nd	nd	nd
Toluene	0.10	nd	nd	nd
Trans-1,3-Dichloropropene	0.03	nd	nd	nd
1,1,2-Trichloroethane	0.03	nd	nd	nd
Tetrachloroethene (PCE)	0.02	nd	nd	nd
1,3-Dichloropropane	0.05	nd	nd	nd
Dibromochloromethane	0.03	nd	nd	nd
1,2-Dibromoethane (EDB) *	0.005	nd	nd	nd
Chlorobenzene	0.02	nd	nd	nd
1,1,1,2-Tetrachloroethane	0.03	nd	nd	nd
Ethylbenzene	0.05	nd	nd	nd
Total Xylenes	0.15	nd	nd	nd
Styrene	0.02	nd	nd	nd

Libby Environmental, Inc.

4139 Libby Road NE
Olympia, WA 98506
Phone: (360) 352-2110
FAX: (360) 352-4154
Email: libbyenv@aol.com

SEA MAR 2016-023B PROJECT
Riley Group, Inc.
Seattle, Washington
Libby Project # L170613-40C2

Volatile Organic Compounds by EPA Method 8260C in Soil

Sample Description		Method Blank	USTSASNW-1.5	USTSASNW-1.5 Dup
Date Sampled	Reporting	N/A	6/13/17	6/13/17
Date Analyzed	Limits (mg/kg)	6/16/17 (mg/kg)	6/16/17 (mg/kg)	6/16/17 (mg/kg)
Bromoform	0.03	nd	nd	nd
Isopropylbenzene	0.05	nd	0.12	0.046
1,2,3-Trichloropropane	0.03	nd	nd	nd
Bromobenzene	0.03	nd	nd	nd
1,1,2,2-Tetrachloroethane	0.03	nd	nd	nd
n-Propylbenzene	0.04	nd	0.21	0.12
2-Chlorotoluene	0.03	nd	nd	nd
4-Chlorotoluene	0.03	nd	nd	nd
1,3,5-Trimethylbenzene	0.03	nd	nd	nd
tert-Butylbenzene	0.03	nd	nd	nd
1,2,4-Trimethylbenzene	0.03	nd	nd	nd
sec-Butylbenzene	0.03	nd	0.20	0.10
1,3-Dichlorobenzene	0.03	nd	nd	nd
Isopropyltoluene	0.03	nd	nd	nd
1,4-Dichlorobenzene	0.03	nd	nd	nd
1,2-Dichlorobenzene	0.03	nd	nd	nd
n-Butylbenzene	0.05	nd	0.41	0.22
1,2-Dibromo-3-Chloropropane	0.05	nd	nd	nd
1,2,4-Trichlorolbenzene	0.05	nd	nd	nd
Hexachloro-1,3-butadiene	0.10	nd	nd	nd
Naphthalenes	0.10	nd	nd	nd
1,2,3-Trichlorobenzene	0.10	nd	nd	nd
Surrogate Recovery				
Dibromofluoromethane		105	120	107
1,2-Dichloroethane-d4		108	113	108
Toluene-d8		99	105	96
4-Bromofluorobenzene		106	79	89

"nd" Indicates not detected at listed detection limit.
"int" Indicates that interference prevents determination.

* ANALYZED BY SIM
ACCEPTABLE RECOVERY LIMITS FOR SURROGATE 65% TO 135%

ANALYSES PERFORMED BY: Paul Burke

Libby Environmental, Inc.

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Olympia, WA 98506
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FAX: (360) 352-4154
Email: libbyenv@aol.com

SEA MAR 2016-023B PROJECT
Riley Group, Inc.
Seattle, Washington
Libby Project # L170613-40C2

QA/QC Data - EPA 8260C Analyses

Sample Identification: USTSASNW-1.5

Matrix Spike

	Spiked Conc. (mg/kg)	Measured Conc. (mg/kg)	Spike Recovery (%)
1,1-Dichloroethene	0.50	0.35	70
Benzene	0.50	0.53	106
Toluene	0.50	0.54	108
Chlorobenzene	0.50	0.43	86
Trichloroethene (TCE)	0.50	0.48	96

Surrogate Recovery	
Dibromofluoromethane	104
1,2-Dichloroethane-d4	105
Toluene-d8	105
4-Bromofluorobenzene	82

Laboratory Control Sample

	Spiked Conc. (mg/kg)	Measured Conc. (mg/kg)	Spike Recovery (%)
1,1-Dichloroethene	0.50	0.41	82
Benzene	0.50	0.43	86
Toluene	0.50	0.44	88
Chlorobenzene	0.50	0.42	84
Trichloroethene (TCE)	0.50	0.37	74

Surrogate Recovery	
Dibromofluoromethane	110
1,2-Dichloroethane-d4	107
Toluene-d8	101
4-Bromofluorobenzene	106

ACCEPTABLE RECOVERY LIMITS FOR MATRIX SPIKES: 65%-135%
ACCEPTABLE RPD IS 35%

ANALYSES PERFORMED BY: Paul Burke

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, 2017

Jerry Sawetz, Project Manager
The Riley Group, Inc.
17522 Bothell Way NE
Bothell, WA 98011

Dear Mr Sawetz:

Included are the additional results from the testing of material submitted on April 27, 2017 from the 2016-023B, F&BI 704449 project. There are 3 pages included in this report.

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

Sincerely,

FRIEDMAN & BRUYA, INC.

Michael Erdahl
Project Manager

Enclosures
TRG0616R.DOC

CASE NARRATIVE

This case narrative encompasses samples received on April 27, 2017 by Friedman & Bruya, Inc. from the The Riley Group 2016-023B, F&BI 704449 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	The Riley Group
704449 -01	SP-1
704449 -02	S1:2
704449 -03	W1:2
704449 -04	B1-2
704449 -05	S2:2
704449 -06	S3:2
704449 -07	S4-3
704449 -08	E1-3
704449 -09	W2:4
704449 -10	B2:4
704449 -11	UST 1-5
704449 -12	W3:5
704449 -13	W4:5
704449 -14	UST-W
704449 -15	W5:5
704449 -16	B3:5

The NWTPH-HCID analysis was requested outside of the holding time. The data were flagged accordingly.

All other quality control requirements were acceptable.

Date of Report: 06/16/17
Date Received: 04/27/17
Project: 2016-023B, F&BI 704449
Date Analyzed: 06/14/17

RESULTS FROM THE ANALYSIS OF SOIL SAMPLES FOR GASOLINE, DIESEL AND HEAVY OIL BY NWTPH-HCID

Results Reported on a Dry Weight Basis
Results Reported as Not Detected (ND) or Detected (D)

THE DATA PROVIDED BELOW WAS PERFORMED PER THE GUIDELINES ESTABLISHED BY THE WASHINGTON DEPARTMENT OF ECOLOGY AND WERE NOT DESIGNED TO PROVIDE INFORMATION WITH REGARDS TO THE ACTUAL IDENTIFICATION OF ANY MATERIAL PRESENT

Sample ID Laboratory ID	Gasoline	Diesel	Heavy Oil	Surrogate (% Recovery) (Limit 56-165)
S2:2 ht 704449-05	ND	ND	D	80
Method Blank 07-1274 MB	ND	ND	ND	87

ND - Material not detected at or above 20 mg/kg gas, 50 mg/kg diesel and 250 mg/kg heavy oil.

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.

704449

SAMPLE CHAIN OF CUSTODY

ME 04/27/17 VS/VW1/ 2/ COY

Page # 1 of ___

Report To ~~Anna Jordan~~ Jerry Sawetz ~~& Stafford Larsen~~

Company The Riley Group

Address 17522 Bothell Way NE

City, State, ZIP Bothell WA 98011

Phone ______ Email ______

SAMPLERS (signature) Stafford Larsen

PROJECT NAME 2016-~~022~~ 023 B

PO #

REMARKS

INVOICE TO

TURNAROUND TIME
- ☐ Standard Turnaround
- ☒ RUSH 24 hr

Rush charges authorized by:

SAMPLE DISPOSAL
- ☐ Dispose after 30 days
- ☐ Archive Samples
- ☐ Other ______

ANALYSES REQUESTED

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	CPAHs	PCBs			Notes
SP-1	01	4/26/17	705	Soil	1		X										
S1:2	02	↓	740	↓	↓		X										⊗ - per JS
W1:2	03		745				X										6/9/17
B1-2	04		750				X										ME
S2:7	05		755			✓	X						⊗	⊗			48 hr TAT
S3:2	06		910				X										
S4-3	07		920				X										✓ - per JS
E1-3	08		925				X										6/14/17
W2:4	09		1000				X										
B2:4	10	↓	1005	↓	↓		X										

Samples received at 2 °C

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

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: Stafford Larsen	Stafford Larsen	RGR	4/27/17	
Received by: D Sams	D Sams	FedEx SPC	4/27	10:51
Relinquished by:				
Received by: Nhan Pham	Nhan Pham	FeBT	4/27/17	11:15

704449

SAMPLE CHAIN OF CUSTODY

ME 04/27/17 US1/vw1/ Page # 2 of 2

Report To: Anna Jordan

Company: The Riley Group

Address

City, State, ZIP

Phone Email

SAMPLERS (signature)

PROJECT NAME: 2016-033B

PO #

REMARKS

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	TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM					Notes
UST 1-5	11 A-E	4/26/17	200	soil	5		X	X		X							
W3:5	12	↓	200	↓	1		X										
W4:5	13	↓	210	↓	1		X										
UST-W	14 A-D	↓	220	H2O	4		X	X		X							
W5:5	15	↓	230	soil	1		X										
B3:5	16	↓	330	↓	1		X										

Samples received at 2 °C

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

	SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by:	[signature]	Steffen	RG	4/27/17	
Received by:	[signature]	D Sams	FedEx 30C	4/27	10:15A
Relinquished by:					
Received by:	[signature]	Nhan Phan	FEBT	4/27/17	11:15

Libby Environmental, Inc.
4139 Libby Road NE • Olympia, WA 98506-2518

June 14, 2017

Jerry Sawetz
The Riley Group
17522 Bothell Way NE, Suite A
Bothell, WA 98011

Dear Mr. Sawetz:

Please find enclosed the analytical data report for the 2016-023B Area 5 Project located in Seattle, Washington.

The results of the analyses are summarized in the attached tables. Applicable detection limits and QA/QC data are included. The sample(s) will be disposed of in 30 days unless we are contacted to arrange long term storage.

Libby Environmental, Inc. appreciates the opportunity to have provided analytical services for this project. If you have any further questions about the data report, please give me a call. It was a pleasure working with you on this project, and we are looking forward to the next opportunity to work together.

Sincerely,

Sherry L. Chilcutt
Senior Chemist
Libby Environmental, Inc.

Phone (360) 352-2110 • Fax (360) 352-4154 • libbyenv@aol.com

Libby Environmental, Inc.

Chain of Custody Record

www.LibbyEnvironmental.com

4139 Libby Road NE
Olympia, WA 98506
Ph: 360-352-2110
Fax: 360-352-4154

Date: 6/13/17 Page: 1 of 1

Client: RGI
Project Manager: Jerry Sawetz
Address: 17522 Bothell Way NE
Project Name: 2016-023B Area 5
City: Bothell State: WA Zip: 98011
Location: Area 5 City, State: Seattle, WA
Phone: 425-415-0551 Fax:
Collector: Amelia Oates Date of Collection: 6-13-17
Client Project #
Email: jsawetz@riley-group.com

	Sample Number	Depth	Time	Sample Type	Container Type	VOC 8260	NWTPH-Gx	BTEX 8021	NWTPH-HCID	NWTPH-Dx	NWTPH-Dx/Dx	c PAH 8270	PAH 8270	Semi Vol 8270	PCB 8082	MTCA 5 Metals	RCRA 8 Metals	Field Notes
1	A5W-3	3.0	1245	Soil						~~X~~	~~X~~							Hold
2	A5S-3	3.0	1250	Soil						~~X~~	~~X~~							Hold
3	A5E-3	3.0	1255	Soil						~~X~~	~~X~~							Hold
4	A5B1-4	4.0	1300	Soil							X							
5	A5B2-4	4.0	1305	Soil							X							
6																		
7																		6-14-17
8																		Run DxDx per
9																		Amelia via email
10																		RUSH
11																		
12																		
13																		
14																		
15																		
16																		
17																		

Relinquished by:	Date / Time	Received by:	Date / Time
[signature]	6/13/17 1448	[signature]	6/13/17 1448
Relinquished by:	Date / Time	Received by:	Date / Time
Relinquished by:	Date / Time	Received by:	Date / Time

Sample Receipt

Good Condition?	Y	N	
Temp.		°C	
Seals Intact?	Y	N	N/A
Total Number of Containers			

Remarks:

ML

TAT: 24HR 48HR 5-DAY

Distribution: White - Lab, Yellow - File, Pink - Originator

Libby Environmental, Inc.

4139 Libby Road NE
Olympia, WA 98506
Phone: (360) 352-2110
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Email: libbyenv@aol.com

2016-023B AREA 5 PROJECT
The Riley Group, Inc.
Seattle, Washington
Libby Project # L170613-40A

Analyses of Diesel & Oil (NWTPH-Dx/Dx Extended) in Soil

Sample Number	Date Analyzed	Surrogate Recovery (%)	Diesel (mg/kg)	Oil (mg/kg)
Method Blank	6/13/17	100	nd	nd
A5B1-4	6/13/17	121	nd	nd
A5B2-4	6/13/17	119	nd	nd
Practical Quantitation Limit			50	250

"nd" Indicates not detected at the listed detection limits.
"int" Indicates that interference prevents determination.

ACCEPTABLE RECOVERY LIMITS FOR SURROGATE (2-F Biphenyl): 65% TO 135%

ANALYSES PERFORMED BY: Paul Burke

Libby Environmental, Inc.

4139 Libby Road NE
Olympia, WA 98506
Phone: (360) 352-2110
FAX: (360) 352-4154
Email: libbyenv@aol.com

2016-023B AREA 5 PROJECT
The Riley Group, Inc.
Seattle, Washington
Libby Project # L170613-40A

Analyses of Diesel & Oil (NWTPH-Dx/Dx Extended) in Soil

Sample Number	Date Analyzed	Surrogate Recovery (%)	Diesel (mg/kg)	Oil (mg/kg)
Method Blank	6/14/17	108	nd	nd
A5W-3	6/14/17	118	nd	nd
A5S-3	6/14/17	107	nd	nd
A5E-3	6/14/17	103	nd	nd
Practical Quantitation Limit			50	250

"nd" Indicates not detected at the listed detection limits.
"int" Indicates that interference prevents determination.

ACCEPTABLE RECOVERY LIMITS FOR SURROGATE (2-F Biphenyl): 65% TO 135%

ANALYSES PERFORMED BY: Maria Friedrich

Libby Environmental, Inc.
4139 Libby Road NE • Olympia, WA 98506-2518

June 14, 2017

Jerry Sawetz
The Riley Group
17522 Bothell Way NE, Suite A
Bothell, WA 98011

Dear Mr. Sawetz:

Please find enclosed the analytical data report for the 2016-023B EX GW Project located in Seattle, Washington.

The results of the analyses are summarized in the attached tables. Applicable detection limits and QA/QC data are included. The sample(s) will be disposed of in 30 days unless we are contacted to arrange long term storage.

Libby Environmental, Inc. appreciates the opportunity to have provided analytical services for this project. If you have any further questions about the data report, please give me a call. It was a pleasure working with you on this project, and we are looking forward to the next opportunity to work together.

Sincerely,

Sherry L. Chilcutt
Senior Chemist
Libby Environmental, Inc.

Phone (360) 352-2110 • Fax (360) 352-4154 • libbyenv@aol.com

Libby Environmental, Inc.

Chain of Custody Record

www.LibbyEnvironmental.com

4139 Libby Road NE
Olympia, WA 98506
Ph: 360-352-2110
Fax: 360-352-4154

Date: 6/13/17 Page: 1 of 1

Client: The Riley Group
Project Manager: Jery Sawetz
Address:
Project Name: 2016-023B EX. GW
City: Bothell State: Zip:
Location: 9635 Des Moines City, State: Seattle, WA
Phone: 425-415-0551 Fax:
Collector: Date of Collection: 6-13-17
Client Project #
Email: jsawetz@riley-group.com

Sample Number	Depth	Time	Sample Type	Container Type	VOC 8260	NWTPH-Gx	BTEX 8021	NWTPH-HCID	NWTPH-Dx	NWTPH-Dx/Dx	c PAH 8270	PAH 8270	Semi Vol 8270	PCB 8082	MTCA 5 Metals	RCRA 8 Metals	VOCs 8260		Field Notes
1 ~~USTSAW-TW~~ EXW-1W		1000	EXW		X	X				X									EXW-1W
2 ~~USTSAW-B~~	3.0	1140	EXW	1½L Amber 2 VOAs	~~X~~	~~X~~	~~X~~			~~X~~									
3																			
4																			
5																			
6																			
7																			
8																			
9																			
10																			
11																			
12																			
13																			
14																			
15																			
16																			
17																			

Relinquished by:	Date / Time	Received by:	Date / Time
[signature]	6/13/17 1448	[signature]	6/13/17 1448
Relinquished by:	Date / Time	Received by:	Date / Time
Relinquished by:	Date / Time	Received by:	Date / Time

Sample Receipt

Good Condition?	Y	N	
Temp.		°C	
Seals Intact?	Y	N	N/A
Total Number of Containers			

Remarks: ML

TAT: 24HR 48HR 5-DAY

Distribution: White - Lab, Yellow - File, Pink - Originator

Libby Environmental, Inc.

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Olympia, WA 98506
Phone: (360) 352-2110
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2016-023B EX GW PROJECT
The Riley Group, Inc.
Seattle, Washington
Libby Project # L170613-40B

Volatile Organic Compounds by EPA Method 8260C in Water

Sample Description		Method Blank	EXW-1W	EXW-1W Dup
Date Sampled	Reporting	N/A	6/13/17	6/13/17
Date Analyzed	Limits	6/13/17	6/13/17	6/13/17
	(µg/L)	(µg/L)	(µg/L)	(µg/L)
Dichlorodifluoromethane	2.0	nd	nd	nd
Chloromethane	2.0	nd	nd	nd
Vinyl chloride	0.2	nd	nd	nd
Bromomethane	2.0	nd	nd	nd
Chloroethane	2.0	nd	nd	nd
Trichlorofluoromethane	2.0	nd	nd	nd
1,1-Dichloroethene	0.5	nd	nd	nd
Methylene chloride	1.0	nd	nd	nd
Methyl *tert*- Butyl Ether (MTBE)	5.0	nd	nd	nd
trans -1,2-Dichloroethene	1.0	nd	nd	nd
1,1-Dichloroethane	1.0	nd	nd	nd
2,2-Dichloropropane	2.0	nd	nd	nd
cis -1,2-Dichloroethene	1.0	nd	nd	nd
Chloroform	1.0	nd	nd	nd
1,1,1-Trichloroethane (TCA)	1.0	nd	nd	nd
Carbon tetrachloride	1.0	nd	nd	nd
1,1-Dichloropropene	1.0	nd	nd	nd
Benzene	1.0	nd	nd	nd
1,2-Dichloroethane (EDC)	1.0	nd	nd	nd
Trichloroethene (TCE)	1.0	nd	nd	nd
1,2-Dichloropropane	1.0	nd	nd	nd
Dibromomethane	1.0	nd	nd	nd
Bromodichloromethane	1.0	nd	nd	nd
cis-1,3-Dichloropropene	1.0	nd	nd	nd
Toluene	1.0	nd	nd	nd
Trans-1,3-Dichloropropene	1.0	nd	nd	nd
1,1,2-Trichloroethane	1.0	nd	nd	nd
Tetrachloroethene (PCE)	1.0	nd	nd	nd
1,3-Dichloropropane	1.0	nd	nd	nd
Dibromochloromethane	1.0	nd	nd	nd
1,2-Dibromoethane (EDB) *	0.01	nd	nd	nd
Chlorobenzene	1.0	nd	nd	nd
1,1,1,2-Tetrachloroethane	1.0	nd	nd	nd
Ethylbenzene	1.0	nd	nd	nd
Total Xylenes	2.0	nd	nd	nd
Styrene	1.0	nd	nd	nd

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2016-023B EX GW PROJECT
The Riley Group, Inc.
Seattle, Washington
Libby Project # L170613-40B

Volatile Organic Compounds by EPA Method 8260C in Water

Sample Description		Method Blank	EXW-1W	EXW-1W Dup
Date Sampled	Reporting	N/A	6/13/17	6/13/17
Date Analyzed	Limits	6/13/17	6/13/17	6/13/17
	(µg/L)	(µg/L)	(µg/L)	(µg/L)
Bromoform	1.0	nd	nd	nd
Isopropylbenzene	4.0	nd	nd	nd
1,2,3-Trichloropropane	1.0	nd	nd	nd
Bromobenzene	1.0	nd	nd	nd
1,1,2,2-Tetrachloroethane	1.0	nd	nd	nd
n-Propylbenzene	1.0	nd	nd	nd
2-Chlorotoluene	1.0	nd	nd	nd
4-Chlorotoluene	1.0	nd	nd	nd
1,3,5-Trimethylbenzene	1.0	nd	nd	nd
tert-Butylbenzene	1.0	nd	nd	nd
1,2,4-Trimethylbenzene	1.0	nd	nd	nd
sec-Butylbenzene	1.0	nd	nd	nd
1,3-Dichlorobenzene	1.0	nd	nd	nd
Isopropyltoluene	1.0	nd	nd	nd
1,4-Dichlorobenzene	1.0	nd	nd	nd
1,2-Dichlorobenzene	1.0	nd	nd	nd
n-Butylbenzene	1.0	nd	nd	nd
1,2-Dibromo-3-Chloropropane	1.0	nd	nd	nd
1,2,4-Trichlorolbenzene	2.0	nd	nd	nd
Hexachloro-1,3-butadiene	5.0	nd	nd	nd
Naphthalenes	5.0	nd	nd	nd
1,2,3-Trichlorobenzene	5.0	nd	nd	nd
Surrogate Recovery				
Dibromofluoromethane		108	117	114
1,2-Dichloroethane-d4		77	86	90
Toluene-d8		117	117	113
4-Bromofluorobenzene		110	130	117

"nd" Indicates not detected at listed detection limit.
"int" Indicates that interference prevents determination.

* ANALYZED BY SIM
ACCEPTABLE RECOVERY LIMITS FOR SURROGATE 65% TO 135%

ANALYSES PERFORMED BY: Paul Burke

Libby Environmental, Inc.

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2016-023B EX GW PROJECT
The Riley Group, Inc.
Seattle, Washington
Libby Project # L170613-40B

QA/QC Data - EPA 8260C Analyses

Sample Identification: L170613-40C							
	Matrix Spike			Matrix Spike Duplicate			RPD
	Spiked Conc. (µg/L)	Measured Conc. (µg/L)	Spike Recovery (%)	Spiked Conc. (µg/L)	Measured Conc. (µg/L)	Spike Recovery (%)	(%)
1,1-Dichloroethene	10	8.4	84	10	8.0	80	4.9
Benzene	10	12.8	128	10	12.8	128	0.0
Toluene	10	13.3	133	10	13.2	132	0.8
Chlorobenzene	10	12.3	123	10	11.8	118	4.1
Trichloroethene (TCE)	10	13.3	133	10	13.0	130	2.3

Surrogate Recovery		
Dibromofluoromethane	104	101
1,2-Dichloroethane-d4	85	87
Toluene-d8	112	111
4-Bromofluorobenzene	105	121

Laboratory Control Sample			
	Spiked Conc. (µg/L)	Measured Conc. (µg/L)	Spike Recovery (%)
1,1-Dichloroethene	10	8.8	88
Benzene	10	13.1	131
Toluene	10	13.5	135
Chlorobenzene	10	13.3	133
Trichloroethene (TCE)	10	13.1	131

Surrogate Recovery	
Dibromofluoromethane	113
1,2-Dichloroethane-d4	83
Toluene-d8	108
4-Bromofluorobenzene	101

ACCEPTABLE RECOVERY LIMITS FOR MATRIX SPIKES: 65%-135%
ACCEPTABLE RPD IS 35%

ANALYSES PERFORMED BY: Paul Burke

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2016-023B EX GW PROJECT
The Riley Group, Inc.
Seattle, Washington
Libby Project # L170613-40B

Analyses of Gasoline (NWTPH-Gx) in Water

Sample Number	Date Analyzed	Surrogate Recovery (%)	Gasoline (µg/L)
Method Blank	6/13/17	117	nd
EXW-1W	6/13/17	117	nd
EXW-1W Dup	6/13/17	113	nd
Practical Quantitation Limit			100

"nd" Indicates not detected at the listed detection limits.
"int" Indicates that interference prevents determination.

ACCEPTABLE RECOVERY LIMITS FOR SURROGATE (Trifluorotoluene): 65% TO 135%

ANALYSES PERFORMED BY: Paul Burke

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2016-023B EX GW PROJECT
The Riley Group, Inc.
Seattle, Washington
Libby Project # L170613-40B

Analyses of Diesel & Oil (NWTPH-Dx/Dx Extended) in Water

Sample Number	Date Analyzed	Surrogate Recovery (%)	Diesel (µg/L)	Oil (µg/L)
Method Blank	6/13/17	100	nd	nd
EXW-1W	6/13/17	109	nd	nd
EXW-1W Dup	6/13/17	115	nd	nd
Practical Quantitation Limit			200	400

"nd" Indicates not detected at the listed detection limits.
"int" Indicates that interference prevents determination.

ACCEPTABLE RECOVERY LIMITS FOR SURROGATE (2-F Biphenyl): 65% TO 135%

ANALYSES PERFORMED BY: Paul Burke

Libby Environmental, Inc.
4139 Libby Road NE • Olympia, WA 98506-2518

June 14, 2017

Jerry Sawetz
The Riley Group
17522 Bothell Way NE, Suite A
Bothell, WA 98011

Dear Mr. Sawetz:

Please find enclosed the analytical data report for the Sea Mar 2016-023B UST SA Project located in Seattle, Washington.

The results of the analyses are summarized in the attached tables. Applicable detection limits and QA/QC data are included. The sample(s) will be disposed of in 30 days unless we are contacted to arrange long term storage.

Libby Environmental, Inc. appreciates the opportunity to have provided analytical services for this project. If you have any further questions about the data report, please give me a call. It was a pleasure working with you on this project, and we are looking forward to the next opportunity to work together.

Sincerely,

Sherry L. Chilcutt
Senior Chemist
Libby Environmental, Inc.

Phone (360) 352-2110 • Fax (360) 352-4154 • libbyenv@aol.com

Libby Environmental, Inc.

Chain of Custody Record

www.LibbyEnvironmental.com

4139 Libby Road NE
Olympia, WA 98506
Ph: 360-352-2110
Fax: 360-352-4154

Date: 6/13/17 Page: 1 of 1

Client: RGI

Project Manager: ~~JS~~ Jerry Sawetz

Address: 17522 Bothell WAY NE

Project Name: Sea Mar 2016 023B UST SA

City: Bothell State: WA Zip: 98011

Location: City, State: Seattle, WA

Phone: 425-415-0551 Fax:

Collector: Date of Collection: 6-13-17

Client Project #

Email: jsawetz@riley-group.com

	Sample Number	Depth	Time	Sample Type	Container Type	VOC 8260	NWTPH-Gx	BTEX 8021	NWTPH-HCID	NWTPH-Dx	NWTPH-Dx/Dx	c PAH 8270	PAH 8270	Semi Vol 8270	PCB 8082	MTCA 5 Metals	RCRA 8 Metals	Lead		Field Notes
1	USTSASN-2.5	2.5	1020	Soil	1 4oz Jar 2 VOAs		X	X		X	X									
MS 2	USTSASB ~~3.0~~	3.0	1015	Soil	1 4oz Jar 2 VOAs		X	X		X	X									
* 3	USTSASW-2.5	2.5	1057	Soil	1 4oz Jar 2 VOAs		X	X		X	X									
4	USTSASNW-1.5	1.5	1115	soil	1 4oz Jar 2 VOAs		X	X		X	X						⊗			6-13-17 4:02pm
MS 5	USTSAW-B	3.0	1140	water			X	X			X									Add Lead per Jerry via email. RUSH
6																				
7																				
8																				
9																				
10																				
11																				
12																				
13																				
14																				
15																				
16																				
17																				

Relinquished by:	Date / Time	Received by:	Date / Time
[signature]	6/13/17 1448	[signature] 6/13/17	1449
Relinquished by:	Date / Time	Received by:	Date / Time
Relinquished by:	Date / Time	Received by:	Date / Time

Sample Receipt

Good Condition?	Y	N	
Temp.		°C	
Seals Intact?	Y	N	N/A
Total Number of Containers			

Remarks: ML

TAT: 24HR 48HR 5-DAY

Distribution: White - Lab, Yellow - File, Pink - Originator

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SEA MAR 2016-023B UST SA PROJECT
The Riley Group, Inc.
Seattle, Washington
Libby Project # L170613-40C

Analyses of Gasoline (NWTPH-Gx) & BTEX (EPA Method 8260C) in Soil

Sample Number	Date Analyzed	Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Xylenes (mg/kg)	Gasoline (mg/kg)	Surrogate Recovery (%)
Method Blank	6/13/17	nd	nd	nd	nd	nd	117
LCS	6/13/17	131%	135%				108
USTSASN-2.5	6/13/17	<0.04	<0.20	<0.10	<0.30	1030 E	120
USTSASB-2.5	6/13/17	nd	nd	nd	nd	207	119
USTSASB-2.5 Dup	6/13/17	<0.04	<0.20	<0.10	<0.30	228	121
USTSASW-2.5	6/13/17	nd	nd	nd	nd	305 E	122
USTSASNW-1.5	6/13/17	<1.0	<5.0	<2.5	<7.5	1680	116
USTSASB-2.5 MS	6/13/17	131%	127%				119
USTSASB-2.5 MSD	6/13/17	130%	122%				118
Practical Quantitation Limit		0.02	0.10	0.05	0.15	10	

"E" Indicates result is an estimate because it exceeds the calibration range.
"nd" Indicates not detected at the listed detection limits.
"int" Indicates that interference prevents determination.

ACCEPTABLE RECOVERY LIMITS FOR SURROGATE (Toluene-d8): 65% TO 135%

ANALYSES PERFORMED BY: Paul Burke

Libby Environmental, Inc.

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SEA MAR 2016-023B UST SA PROJECT
The Riley Group, Inc.
Seattle, Washington
Libby Project # L170613-40C

Analyses of Diesel & Oil (NWTPH-Dx/Dx Extended) in Soil

Sample Number	Date Analyzed	Surrogate Recovery (%)	Diesel (mg/kg)	Oil (mg/kg)
Method Blank	6/13/17	100	nd	nd
USTSASN-2.5	6/13/17	105	nd	nd
USTSASB-2.5	6/13/17	107	nd	nd
USTSASW-2.5	6/13/17	109	nd	nd
USTSASW-2.5 Dup	6/13/17	114	nd	nd
USTSASNW-1.5	6/13/17	nd	420	nd
Practical Quantitation Limit			50	250

"nd" Indicates not detected at the listed detection limits.
"int" Indicates that interference prevents determination.

ACCEPTABLE RECOVERY LIMITS FOR SURROGATE (2-F Biphenyl): 65% TO 135%

ANALYSES PERFORMED BY: Paul Burke

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SEA MAR 2016-023B UST SA PROJECT
The Riley Group, Inc.
Seattle, Washington
Libby Project # L170613-40C

Analyses of Total Lead in Soil by EPA Method 7010 Series

Sample Number	Date Analyzed	Lead (mg/kg)
Method Blank	6/14/17	nd
USTSANW-1.5	6/14/17	7.49
Practical Quantitation Limit		5.0

"nd" Indicates not detected at the listed detection limits.

ANALYSES PERFORMED BY: Jamie Deyman

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SEA MAR 2016-023B UST SA PROJECT
The Riley Group, Inc.
Seattle, Washington
Libby Project # L170613-40C

QA/QC for Total Lead in Soil by EPA Method 7010 Series

Sample Number	Date Analyzed	Lead (% Recovery)
LCS	6/14/17	113%
L170607-40 MS	6/14/17	93%
L170607-40 MSD	6/14/17	85%
RPD	6/14/17	9%

ACCEPTABLE RECOVERY LIMITS FOR MATRIX SPIKES: 75%-125%
ACCEPTABLE RPD IS 20%

ANALYSES PERFORMED BY: Jamie Deyman

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SEA MAR 2016-023B UST SA PROJECT
The Riley Group, Inc.
Seattle, Washington
Libby Project # L170613-40C

Analyses of Gasoline (NWTPH-Gx) & BTEX (EPA Method 8260C) in Water

Sample Number	Date Analyzed	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes (µg/L)	Gasoline (µg/L)	Surrogate Recovery (%)
Method Blank	6/13/17	nd	nd	nd	nd	nd	117
LCS	6/13/17	131%	135%				108
USTSAW-B	6/13/17	nd	nd	nd	nd	693	117
USTSAW-B MS	6/13/17	128%	133%				112
USTSAW-B MSD	6/13/17	128%	132%				111
Practical Quantitation Limit		1.0	2.0	1.0	2.0	100	

"nd" Indicates not detected at the listed detection limits.
"int" Indicates that interference prevents determination.

ACCEPTABLE RECOVERY LIMITS FOR SURROGATE (Toluene-d8): 65% TO 135%

ANALYSES PERFORMED BY: Paul Burke

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SEA MAR 2016-023B UST SA PROJECT
The Riley Group, Inc.
Seattle, Washington
Libby Project # L170613-40C

Analyses of Diesel & Oil (NWTPH-Dx/Dx Extended) in Water

Sample Number	Date Analyzed	Surrogate Recovery (%)	Diesel (µg/L)	Oil (µg/L)
Method Blank	6/13/17	100	nd	nd
USTSAW-B	6/13/17	120	nd	nd
Practical Quantitation Limit			200	400

"nd" Indicates not detected at the listed detection limits.
"int" Indicates that interference prevents determination.

ACCEPTABLE RECOVERY LIMITS FOR SURROGATE (2-F Biphenyl): 65% TO 135%

ANALYSES PERFORMED BY: Paul Burke

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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www.friedmanandbruya.com

June 14, 2017

Jerry Sawetz, Project Manager
The Riley Group, Inc.
17522 Bothell Way NE
Bothell, WA 98011

Dear Mr Sawetz:

Included are the additional results from the testing of material submitted on April 27, 2017 from the 2016-023B, F&BI 704449 project. There are 8 pages included in this report.

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

Sincerely,

FRIEDMAN & BRUYA, INC.

Michael Erdahl
Project Manager

Enclosures
TRG0614R.DOC

CASE NARRATIVE

This case narrative encompasses samples received on April 27, 2017 by Friedman & Bruya, Inc. from the The Riley Group 2016-023B, F&BI 704449 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	The Riley Group
704449 -01	SP-1
704449 -02	S1:2
704449 -03	W1:2
704449 -04	B1-2
704449 -05	S2:2
704449 -06	S3:2
704449 -07	S4-3
704449 -08	E1-3
704449 -09	W2:4
704449 -10	B2:4
704449 -11	UST 1-5
704449 -12	W3:5
704449 -13	W4:5
704449 -14	UST-W
704449 -15	W5:5
704449 -16	B3:5

The 8082A aroclor 1016/1260 matrix spike sample and the associated relative percent difference exceeded the acceptance criteria. The laboratory control sample met the acceptance criteria, therefore the results were likely due to matrix effect.

The 8270D SIM analysis was requested outside of the method recommended holding time. The data were qualified accordingly.

All quality control requirements were acceptable.

Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID:	S2:2 ht	Client:	The Riley Group
Date Received:	04/27/17	Project:	2016-023B, F&BI 704449
Date Extracted:	06/12/17	Lab ID:	704449-05 1/50
Date Analyzed:	06/12/17	Data File:	061210.D
Matrix:	Soil	Instrument:	GCMS6
Units:	mg/kg (ppm) Dry Weight	Operator:	ya

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	117 d	31	163
Benzo(a)anthracene-d12	111 d	24	168

Compounds:	Concentration mg/kg (ppm)
Benz(a)anthracene	0.11
Chrysene	0.15
Benzo(a)pyrene	0.16
Benzo(b)fluoranthene	0.26
Benzo(k)fluoranthene	<0.1
Indeno(1,2,3-cd)pyrene	<0.1
Dibenz(a,h)anthracene	<0.1

Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID:	Method Blank	Client:	The Riley Group
Date Received:	Not Applicable	Project:	2016-023B, F&BI 704449
Date Extracted:	06/12/17	Lab ID:	07-1239 mb 1/5
Date Analyzed:	06/12/17	Data File:	061205.D
Matrix:	Soil	Instrument:	GCMS6
Units:	mg/kg (ppm) Dry Weight	Operator:	ya

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	85	31	163
Benzo(a)anthracene-d12	94	24	168

Compounds:	Concentration mg/kg (ppm)
Benz(a)anthracene	<0.01
Chrysene	<0.01
Benzo(a)pyrene	<0.01
Benzo(b)fluoranthene	<0.01
Benzo(k)fluoranthene	<0.01
Indeno(1,2,3-cd)pyrene	<0.01
Dibenz(a,h)anthracene	<0.01

Analysis For PCBs By EPA Method 8082A

Client Sample ID:	S2:2	Client:	The Riley Group
Date Received:	04/27/17	Project:	2016-023B, F&BI 704449
Date Extracted:	06/12/17	Lab ID:	704449-05 1/50
Date Analyzed:	06/12/17	Data File:	061214.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	MP

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	40 d	29	154

Compounds:	Concentration mg/kg (ppm)
Aroclor 1221	<0.2
Aroclor 1232	<0.2
Aroclor 1016	<0.2
Aroclor 1242	<0.2
Aroclor 1248	<0.2
Aroclor 1254	<0.2
Aroclor 1260	<0.2
Aroclor 1262	<0.2
Aroclor 1268	<0.2

Analysis For PCBs By EPA Method 8082A

Client Sample ID:	Method Blank	Client:	The Riley Group
Date Received:	Not Applicable	Project:	2016-023B, F&BI 704449
Date Extracted:	06/12/17	Lab ID:	07-1240 mb 1/50
Date Analyzed:	06/12/17	Data File:	061207.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	MP

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	70 d	29	154

Compounds:	Concentration mg/kg (ppm)
Aroclor 1221	<0.2
Aroclor 1232	<0.2
Aroclor 1016	<0.2
Aroclor 1242	<0.2
Aroclor 1248	<0.2
Aroclor 1254	<0.2
Aroclor 1260	<0.2
Aroclor 1262	<0.2
Aroclor 1268	<0.2

Date of Report: 06/14/17
Date Received: 04/27/17
Project: 2016-023B, F&BI 704449

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES FOR PAHS BY EPA METHOD 8270D SIM

Laboratory Code: Laboratory Control Sample 1/5

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Benz(a)anthracene	mg/kg (ppm)	0.17	94	95	51-115	1
Chrysene	mg/kg (ppm)	0.17	94	95	55-129	1
Benzo(b)fluoranthene	mg/kg (ppm)	0.17	94	98	56-123	4
Benzo(k)fluoranthene	mg/kg (ppm)	0.17	97	98	54-131	1
Benzo(a)pyrene	mg/kg (ppm)	0.17	88	89	51-118	1
Indeno(1,2,3-cd)pyrene	mg/kg (ppm)	0.17	102	102	49-148	0
Dibenz(a,h)anthracene	mg/kg (ppm)	0.17	103	104	50-141	1

Date of Report: 06/14/17
Date Received: 04/27/17
Project: 2016-023B, F&BI 704449

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES FOR POLYCHLORINATED BIPHENYLS AS AROCLOR 1016/1260 BY EPA METHOD 8082A

Laboratory Code: 706040-06 1/50 (Matrix Spike) 1/50

Analyte	Reporting Units	Spike Level	Sample Result (Wet Wt)	Percent Recovery MS	Percent Recovery MSD	Control Limits	RPD (Limit 20)
Aroclor 1016	mg/kg (ppm)	0.8	<0.2	44 vo	62	50-150	34 vo
Aroclor 1260	mg/kg (ppm)	0.8	<0.2	45 vo	62	50-150	32 vo

Laboratory Code: Laboratory Control Sample 1/50

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Aroclor 1016	mg/kg (ppm)	0.8	80	55-130
Aroclor 1260	mg/kg (ppm)	0.8	80	58-133

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.

704449

SAMPLE CHAIN OF CUSTODY

ME 04/27/17 VS/VW1/2/CO4

Report To: ~~Anna Jordan~~ Jerry Saveda ~~& Stafford Larsen~~

Company: The Riley Group

Address: 17522 Bothell Way NE

City, State, ZIP: Bothell WA 98011

Phone: ______ Email: ______

SAMPLERS (signature): Stafford Larsen

PROJECT NAME: 2016-~~022~~ 023 B

PO #:

REMARKS:

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	TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	CPAHs	PCBs			Notes
SP-1	01	4/26/17	705	Soil	1		X										
S1:2	02	↓	740	↓	↓		X										⊗ - per JS
W1:2	03		745				X										6/9/17
B1-2	04		750				X										ME
S2:7	05		755			✓	X						⊗	⊗			48 hr TAT
S3:2	06		910				X										
S4-3	07		920				X										✓ - per JS
E1-3	08		925				X										6/14/17
W2:4	09		1000				X										
B2:4	10		1005				X										Samples received at 2 °C

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

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: [signature]	Stafford Larsen	RGR	4/27/17	
Received by: [signature]	D Sams	FedEx SPC	4/27	10:50
Relinquished by:				
Received by: [signature]	Nhan Pham	FeBI	4/27/17	11:15

704449

SAMPLE CHAIN OF CUSTODY

ME 04/27/17 VS1/VW1/ ax

Report To: Anna Jordan

Company: The Riley Group

Address

City, State, ZIP

Phone Email

SAMPLERS (signature) [signature]

Page # 2 of 2

PROJECT NAME: 2016-023B

PO #

REMARKS

INVOICE TO

TURNAROUND TIME
- ☐ Standard Turnaround
- ☐ RUSH 24 H
- 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	TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM					Notes
UST 1-5	11 A-E	4/26/17	200	soil	5		X	X		X							
W3:5	12	↓	200	↓	1		X										
W4:5	13		210		1		X										
UST-W	14 A-D		220	H2O	4		X	X		X							
W5:5	15		230	soil	1		X										
B3:5	16	↓	330	↓	1		X										
																	Samples received at 2 °C

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

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: [signature]	Steffen	RGI	4/27/17	
Received by: [signature]	D Sams	FedEx 30C	4/27	10:15A
Relinquished by:				
Received by: [signature]	Nhan Phan	FeBI	4/27/17	11:15

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 14, 2017

Jerry Sawetz, Project Manager
The Riley Group, Inc.
17522 Bothell Way NE
Bothell, WA 98011

Dear Mr Sawetz:

Included are the additional results from the testing of material submitted on May 30, 2017 from the SeaMar 2016-024, F&BI 705501 project. There are 9 pages included in this report.

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

Sincerely,

FRIEDMAN & BRUYA, INC.

Michael Erdahl
Project Manager

Enclosures
TRG0614R.DOC

CASE NARRATIVE

This case narrative encompasses samples received on May 30, 2017 by Friedman & Bruya, Inc. from the The Riley Group SeaMar 2016-024, F&BI 705501 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	The Riley Group
705501 -01	Soil Grab 1
705501 -02	Dup 1

An 8270D internal standard failed the acceptance criteria for sample Soil Grab 1 due to matrix interferences. The data were flagged accordingly. The sample was diluted and reanalyzed.

All other quality control requirements were acceptable.

Analysis For Total Metals By EPA Method 6020A

Client ID:	Soil Grab 1	Client:	The Riley Group
Date Received:	05/30/17	Project:	SeaMar 2016-024, F&BI 705501
Date Extracted:	06/09/17	Lab ID:	705501-01
Date Analyzed:	06/09/17	Data File:	705501-01.082
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	7.23
Cadmium	<1
Chromium	14.4
Lead	18.1
Mercury	<1

Analysis For Total Metals By EPA Method 6020A

Client ID:	Method Blank	Client:	The Riley Group
Date Received:	Not Applicable	Project:	SeaMar 2016-024, F&BI 705501
Date Extracted:	06/09/17	Lab ID:	I7-315 mb2
Date Analyzed:	06/09/17	Data File:	I7-315 mb2.081
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

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

Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID:	Soil Grab 1	Client:	The Riley Group
Date Received:	05/30/17	Project:	SeaMar 2016-024, F&BI 705501
Date Extracted:	06/12/17	Lab ID:	705501-01 1/5
Date Analyzed:	06/12/17	Data File:	061211.D
Matrix:	Soil	Instrument:	GCMS6
Units:	mg/kg (ppm) Dry Weight	Operator:	ya

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	86	31	163
Benzo(a)anthracene-d12	99	24	168

Compounds:	Concentration mg/kg (ppm)
Benz(a)anthracene	0.067
Chrysene	0.098
Benzo(a)pyrene	0.074 J
Benzo(b)fluoranthene	0.12 J
Benzo(k)fluoranthene	0.037 J
Indeno(1,2,3-cd)pyrene	0.036 J
Dibenz(a,h)anthracene	<0.01 J

Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID:	Soil Grab 1	Client:	The Riley Group
Date Received:	05/30/17	Project:	SeaMar 2016-024, F&BI 705501
Date Extracted:	06/12/17	Lab ID:	705501-01 1/50
Date Analyzed:	06/12/17	Data File:	061208.D
Matrix:	Soil	Instrument:	GCMS6
Units:	mg/kg (ppm) Dry Weight	Operator:	ya

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	112 d	31	163
Benzo(a)anthracene-d12	103 d	24	168

Compounds:	Concentration mg/kg (ppm)
Benz(a)anthracene	<0.1
Chrysene	0.10
Benzo(a)pyrene	<0.1
Benzo(b)fluoranthene	0.11
Benzo(k)fluoranthene	<0.1
Indeno(1,2,3-cd)pyrene	<0.1
Dibenz(a,h)anthracene	<0.1

Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID:	Method Blank	Client:	The Riley Group
Date Received:	Not Applicable	Project:	SeaMar 2016-024, F&BI 705501
Date Extracted:	06/12/17	Lab ID:	07-1239 mb 1/5
Date Analyzed:	06/12/17	Data File:	061205.D
Matrix:	Soil	Instrument:	GCMS6
Units:	mg/kg (ppm) Dry Weight	Operator:	ya

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	85	31	163
Benzo(a)anthracene-d12	94	24	168

Compounds:	Concentration mg/kg (ppm)
Benz(a)anthracene	<0.01
Chrysene	<0.01
Benzo(a)pyrene	<0.01
Benzo(b)fluoranthene	<0.01
Benzo(k)fluoranthene	<0.01
Indeno(1,2,3-cd)pyrene	<0.01
Dibenz(a,h)anthracene	<0.01

Date of Report: 06/14/17
Date Received: 05/30/17
Project: SeaMar 2016-024, F&BI 705501

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

Laboratory Code: 706124-05 x5 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet wt)	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Arsenic	mg/kg (ppm)	10	<5	87	96	75-125	10
Cadmium	mg/kg (ppm)	10	<5	92	96	75-125	4
Chromium	mg/kg (ppm)	50	18.0	80	87	75-125	8
Lead	mg/kg (ppm)	50	5.11	87	91	75-125	4
Mercury	mg/kg (ppm	5	<5	95	95	75-125	0

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Arsenic	mg/kg (ppm)	10	110	80-120
Cadmium	mg/kg (ppm)	10	105	80-120
Chromium	mg/kg (ppm)	50	109	80-120
Lead	mg/kg (ppm)	50	104	80-120
Mercury	mg/kg (ppm)	5	106	80-120

Date of Report: 06/14/17
Date Received: 05/30/17
Project: SeaMar 2016-024, F&BI 705501

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES FOR PAHS BY EPA METHOD 8270D SIM

Laboratory Code: Laboratory Control Sample 1/5

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Benz(a)anthracene	mg/kg (ppm)	0.17	94	95	51-115	1
Chrysene	mg/kg (ppm)	0.17	94	95	55-129	1
Benzo(b)fluoranthene	mg/kg (ppm)	0.17	94	98	56-123	4
Benzo(k)fluoranthene	mg/kg (ppm)	0.17	97	98	54-131	1
Benzo(a)pyrene	mg/kg (ppm)	0.17	88	89	51-118	1
Indeno(1,2,3-cd)pyrene	mg/kg (ppm)	0.17	102	102	49-148	0
Dibenz(a,h)anthracene	mg/kg (ppm)	0.17	103	104	50-141	1

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.

705501

SAMPLE CHAIN OF CUSTODY

ME 05/30/17 E02

Report To ~~Anna Jordan~~ Jerry Sawetz

Company RGI

Address 17522 Bothell Way NE

City, State, ZIP Bothell, WA 98011

Phone 425-415-0551 Email ajordan@riley-group.com

SAMPLERS (signature) [signature]

PROJECT NAME: Sea Mar 2016-024

PO #

REMARKS

INVOICE TO

Page # 1 of 1

TURNAROUND TIME
- ☐ Standard Turnaround
- ☑ RUSH
- 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	TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	PCBs	MTCA 5	cPAHs		Notes
Soil Grab 1	01	5/30/17	925	soil	1								⊗	✓	✓		✓ - per JS 6/9/17 - 48h TAT ML
Dup 1	02	↓	930	↓	1								⊗				

Samples received at 5 °C

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: [signature]	Amelia Oates	RGI	5/30/17	1034
Received by: [signature]	Nhan Phan	FCBI	5/30/17	1034
Relinquished by:				
Received by:				

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

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 31, 2017

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 30, 2017 from the SeaMar 2016-024, F&BI 705501 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
TRG0531R.DOC

CASE NARRATIVE

This case narrative encompasses samples received on May 30, 2017 by Friedman & Bruya, Inc. from the The Riley Group SeaMar 2016-024, F&BI 705501 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	The Riley Group
705501 -01	Soil Grab 1
705501 -02	Dup 1

All quality control requirements were acceptable.

Analysis For PCBs By EPA Method 8082A

Client Sample ID:	Soil Grab 1	Client:	The Riley Group
Date Received:	05/30/17	Project:	SeaMar 2016-024, F&BI 705501
Date Extracted:	05/30/17	Lab ID:	705501-01 1/50
Date Analyzed:	05/30/17	Data File:	053009.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	MP

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	45 d	29	154

Compounds:	Concentration mg/kg (ppm)
Aroclor 1221	<0.2
Aroclor 1232	<0.2
Aroclor 1016	<0.2
Aroclor 1242	<0.2
Aroclor 1248	<0.2
Aroclor 1254	<0.2
Aroclor 1260	<0.2
Aroclor 1262	<0.2
Aroclor 1268	<0.2

Analysis For PCBs By EPA Method 8082A

Client Sample ID:	Dup 1	Client:	The Riley Group
Date Received:	05/30/17	Project:	SeaMar 2016-024, F&BI 705501
Date Extracted:	05/30/17	Lab ID:	705501-02 1/50
Date Analyzed:	05/30/17	Data File:	053012.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	MP

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	60 d	29	154

Compounds:	Concentration mg/kg (ppm)
Aroclor 1221	<0.2
Aroclor 1232	<0.2
Aroclor 1016	<0.2
Aroclor 1242	<0.2
Aroclor 1248	<0.2
Aroclor 1254	<0.2
Aroclor 1260	<0.2
Aroclor 1262	<0.2
Aroclor 1268	<0.2

Analysis For PCBs By EPA Method 8082A

Client Sample ID:	Method Blank	Client:	The Riley Group
Date Received:	Not Applicable	Project:	SeaMar 2016-024, F&BI 705501
Date Extracted:	05/30/17	Lab ID:	07-1153 mb 1/5
Date Analyzed:	05/30/17	Data File:	053008.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	MP

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	62	29	154

Compounds:	Concentration mg/kg (ppm)
Aroclor 1221	<0.02
Aroclor 1232	<0.02
Aroclor 1016	<0.02
Aroclor 1242	<0.02
Aroclor 1248	<0.02
Aroclor 1254	<0.02
Aroclor 1260	<0.02
Aroclor 1262	<0.02
Aroclor 1268	<0.02

Date of Report: 05/31/17
Date Received: 05/30/17
Project: SeaMar 2016-024, F&BI 705501

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES FOR POLYCHLORINATED BIPHENYLS AS AROCLOR 1016/1260 BY EPA METHOD 8082A

Laboratory Code: 705501-01 1/50 (Matrix Spike) 1/50

Analyte	Reporting Units	Spike Level	Sample Result (Wet Wt)	Percent Recovery MS	Percent Recovery MSD	Control Limits	RPD (Limit 20)
Aroclor 1016	mg/kg (ppm)	0.8	<0.2	67	64	50-150	5
Aroclor 1260	mg/kg (ppm)	0.8	<0.2	75	73	50-150	3

Laboratory Code: Laboratory Control Sample 1/5

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Aroclor 1016	mg/kg (ppm)	0.8	73	55-130
Aroclor 1260	mg/kg (ppm)	0.8	87	58-133

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.

705501

SAMPLE CHAIN OF CUSTODY

ME 05/30/17 EQ2

Page # 1 of 1

Report To Anna Jordan

Company RGI

Address 17522 Bothell Way NE

City, State, ZIP Bothell, WA 98011

Phone 425-415-0551 Email ajordan@riley-group.com

SAMPLERS (*signature*)

PROJECT NAME: Sea Mar 2016-024

PO #

REMARKS

INVOICE TO

TURNAROUND TIME
- ☐ Standard Turnaround
- ☒ RUSH
- 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	TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	PCBs				Notes
Soil Grab 1	01	5/30/17	925	soil	1								X				
Dup 1	02	↓	930	↓	1								X				

Samples received at 5 °C

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: Amelia Oates	Amelia Oates	RGI	5/30/17	1037
Received by:	Nham Phan	FCBI	5/30/17	1039
Relinquished by:				
Received by:				

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

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 24, 2017

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 17, 2017 from the PRP2016-024B, F&BI 705305 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
TRG0524R.DOC

CASE NARRATIVE

This case narrative encompasses samples received on May 17, 2017 by Friedman & Bruya, Inc. from the The Riley Group PRP2016-024B, F&BI 705305 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	The Riley Group
705305 -01	UST 1
705305 -02	Ex Grab 1

Sample UST 1 was sent to Spectra for TOX analysis. The report is enclosed.

The 8082A aroclor 1016 laboratory control sample relative percent differences exceeded the acceptance criteria. This analyte was not detected in the samples, therefore the data were acceptable.

All other quality control requirements were acceptable.

Analysis For PCBs By EPA Method 8082A

Client Sample ID:	UST 1	Client:	The Riley Group
Date Received:	05/17/17	Project:	PRP2016-024B, F&BI 705305
Date Extracted:	05/17/17	Lab ID:	705305-01
Date Analyzed:	05/17/17	Data File:	051721.D
Matrix:	Water	Instrument:	GC7
Units:	ug/L (ppb)	Operator:	MP

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	63	24	127

Compounds:	Concentration ug/L (ppb)
Aroclor 1221	<0.1
Aroclor 1232	<0.1
Aroclor 1016	<0.1
Aroclor 1242	<0.1
Aroclor 1248	<0.1
Aroclor 1254	<0.1
Aroclor 1260	<0.1
Aroclor 1262	<0.1
Aroclor 1268	<0.1

Analysis For PCBs By EPA Method 8082A

Client Sample ID:	Method Blank	Client:	The Riley Group
Date Received:	Not Applicable	Project:	PRP2016-024B, F&BI 705305
Date Extracted:	05/17/17	Lab ID:	07-1081 mb
Date Analyzed:	05/17/17	Data File:	051720.D
Matrix:	Water	Instrument:	GC7
Units:	ug/L (ppb)	Operator:	MP

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	89	24	127

Compounds:	Concentration ug/L (ppb)
Aroclor 1221	<0.1
Aroclor 1232	<0.1
Aroclor 1016	<0.1
Aroclor 1242	<0.1
Aroclor 1248	<0.1
Aroclor 1254	<0.1
Aroclor 1260	<0.1
Aroclor 1262	<0.1
Aroclor 1268	<0.1

Date of Report: 05/24/17
Date Received: 05/17/17
Project: PRP2016-024B, F&BI 705305

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF WATER SAMPLES FOR POLYCHLORINATED BIPHENYLS AS AROCLOR 1016/1260 BY EPA METHOD 8082A

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Aroclor 1016	ug/L (ppb)	2.5	70	90	37-136	25 vo
Aroclor 1260	ug/L (ppb)	2.5	80	95	41-135	17

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.

SPECTRA Laboratories ...*Where experience matters*

2221 Ross Way • Tacoma, WA 98421 • (253) 272-4850 • Fax (253) 572-9838 • www.spectra-lab.com

05/19/2017

Friedman & Bruya, Inc
3012 16th Ave West
Seattle, WA 98119-2029
Attn: Michael Erdahl

P.O.#: E-636
Project: 705305
Client ID: UST1
Sample Matrix: Water
Date Sampled: 05/17/2017
Date Received: 05/17/2017
Spectra Project: 2017050520
Spectra Number: 1
Rush

Analyte	Result	Units	Method
Total Organic Halogens	47	mg/L	SW846 9020(mod)

SPECTRA LABORATORIES

Jeffrey Cooper, Laboratory Manager

a5/krd

SUBCONTRACT SAMPLE CHAIN OF CUSTODY 201705520

Send Report To ~~Michael Erdahl~~ Eric Young

Company Friedman and Bruya, Inc.

Address 3012 16th Ave W

City, State, ZIP Seattle, WA 98119

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

SUBCONTRACTER Spectra

PROJECT NAME/NO. 705305

PO # E-636

REMARKS eyoung@friedmanandbruya.com

Please Email Results

Page # 1 of 1

TURNAROUND TIME

☐ Standard (2 Weeks)

☒ RUSH 24hour

Rush charges authorized by: MK

SAMPLE DISPOSAL

☐ Dispose after 30 days

☐ Return samples

☐ Will call with instructions

Sample ID	Lab ID	Date Sampled	Time Sampled	Matrix	# of jars	ANALYSES REQUESTED: Dioxins/Furans	EPH	VPH	Nitrate	Sulfate	Alkalinity	TOC-9060M	TOX			Notes
UST1		5/17/17	0805	water	1								X			

	SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by:		Michael Erdahl	Friedman and Bruya	5/17/17	10:03
Received by:	Lori Hamilton	Lori Hamilton	Spectra	5-17-17	12:32
Relinquished by:					
Received by:					

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

705305

SAMPLE CHAIN OF CUSTODY

ME

05/17/17 VW1/E04

Page # 1 of 1

Send Report To Anna Jordan
Company The Riley Group
Address 17522 Bothell Way NE
City, State, ZIP Bothell, WA 98011
Phone # 425 415 0551 Fax # 425 415 0311

SAMPLERS (signature)

PROJECT NAME/NO. PRP2016-024B

PO #

REMARKS

TURNAROUND TIME
☐ Standard (2 Weeks)
☒ RUSH 24 hr
Rush charges authorized by:

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

Sample ID	Lab ID	Date	Time	Sample Type	# of containers	ANALYSES REQUESTED: TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260	SVOCs by 8270	HFS	TDX	PCBS				Notes
UST 1	01 A B	5/17/17	0805	H_2O	2							X	X				
EX Grab 1	02 A-E	↓	0830	H_2O	5												

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: Amelia C. Oates	Amelia Oates	RGI	5/17/17	0946
Received by:	Nhan Phan	FEBI	5/17/17	0946
Relinquished by:				
Received by:				

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

FORMS\COC\COC.DOC

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

May 2, 2017

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 April 27, 2017 from the Sea Mar, PO 2016-023B, F&BI 704433 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
TRG0502R.DOC

CASE NARRATIVE

This case narrative encompasses samples received on April 27, 2017 by Friedman & Bruya, Inc. from the The Riley Group Sea Mar, PO 2016-023B, F&BI 704433 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	The Riley Group
704433 -01	W6-5
704433 -02	B4-5

All quality control requirements were acceptable.

Date of Report: 05/02/17
Date Received: 04/27/17
Project: Sea Mar, PO 2016-023B, F&BI 704433
Date Extracted: 04/27/17
Date Analyzed: 04/27/17

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

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

Sample ID Laboratory ID	Diesel Range (C_{10}-C_{25})	Motor Oil Range (C_{25}-C_{36})	Surrogate (% Recovery) (Limit 56-165)
W6-5 704433-01	<50	<250	101
B4-5 704433-02	<50	<250	98
Method Blank Not Applicable	<50	<250	86

Date of Report: 05/02/17
Date Received: 04/27/17
Project: Sea Mar, PO 2016-023B, F&BI 704433

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

Laboratory Code: 704440-01 (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	95	99	63-146	4

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Diesel Extended	mg/kg (ppm)	5,000	90	79-144

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.

433
704 BHP (ND)

SAMPLE CHAIN OF CUSTODY

ME 04/27/17 C01

Page # 1 of 1

Report To Anna Jordan

Company RGI

Address

City, State, ZIP

Phone Email Anna Jordan

SAMPLERS (*signature*) Cliff Nak

PROJECT NAME: Sea Mar

PO #: 2016-023D

REMARKS: 24-hr TAT

INVOICE TO: Anna Jordan

TURNAROUND TIME
- ☐ Standard Turnaround
- ☑ RUSH
- 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	TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM					Notes
						ANALYSES REQUESTED											
W6-S	01	4/27/17	915	Soil	1		X										
B4-S	02	4/27/17	920	Soil	1		X										
													Samples received at 6 °C				

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: Cliff Nak	Cliff Nak	RGI	4/27/17	10:15
Received by: Nhan Phan	Nhan Phan	FEBI	4/27/17	1015
Relinquished by:				
Received by:				

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

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 2, 2017

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 April 27, 2017 from the 2016-023B, F&BI 704449 project. There are 19 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: Stafford Larsen
TRG0502R.DOC

CASE NARRATIVE

This case narrative encompasses samples received on April 27, 2017 by Friedman & Bruya, Inc. from the The Riley Group 2016-023B, F&BI 704449 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	The Riley Group
704449 -01	SP-1
704449 -02	S1:2
704449 -03	W1:2
704449 -04	B1-2
704449 -05	S2:2
704449 -06	S3:2
704449 -07	S4-3
704449 -08	E1-3
704449 -09	W2:4
704449 -10	B2:4
704449 -11	UST 1-5
704449 -12	W3:5
704449 -13	W4:5
704449 -14	UST-W
704449 -15	W5:5
704449 -16	B3:5

Methylene chloride was detected in the method blank associated with sample UST 1-5. The data were flagged accordingly.

The 8260C bromomethane laboratory control sample duplicate exceeded the acceptance criteria. This analyte was not detected in the samples, therefore the data were acceptable.

All other quality control requirements were acceptable.

Date of Report: 05/02/17
Date Received: 04/27/17
Project: 2016-023B, F&BI 704449
Date Extracted: 04/27/17
Date Analyzed: 04/27/17

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

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

Sample ID Laboratory ID	Gasoline Range	Surrogate (% Recovery) (Limit 58-139)
UST 1-5 704449-11 1/5	77	88
Method Blank 07-834 MB	<2	110

Date of Report: 05/02/17
Date Received: 04/27/17
Project: 2016-023B, F&BI 704449
Date Extracted: 04/27/17
Date Analyzed: 04/27/17

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

Results Reported as ug/L (ppb)

Sample ID Laboratory ID	Gasoline Range	Surrogate (% Recovery) (Limit 51-134)
UST-W 704449-14 1/10	2,900	84
Method Blank 07-832 MB	<100	89

Date of Report: 05/02/17
Date Received: 04/27/17
Project: 2016-023B, F&BI 704449
Date Extracted: 04/27/17
Date Analyzed: 04/27/17

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

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

Sample ID Laboratory ID	Diesel Range (C_{10}-C_{25})	Motor Oil Range (C_{25}-C_{36})	Surrogate (% Recovery) (Limit 48-168)
SP-1 704449-01	<50	<250	102
S1:2 704449-02	<50	<250	103
W1:2 704449-03	<50	<250	105
B1-2 704449-04	<50	500	101
S2:2 704449-05	150 x	3,200	99
S3:2 704449-06	<50	<250	104
S4-3 704449-07	<50	<250	104
E1-3 704449-08	<50	<250	106
W2:4 704449-09	<50	<250	102
B2:4 704449-10	<50	<250	90

Date of Report: 05/02/17
Date Received: 04/27/17
Project: 2016-023B, F&BI 704449
Date Extracted: 04/27/17
Date Analyzed: 04/27/17

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

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

Sample ID Laboratory ID	Diesel Range (C_{10}-C_{25})	Motor Oil Range (C_{25}-C_{36})	Surrogate (% Recovery) (Limit 48-168)
UST 1-5 704449-11	120 x	<250	102
W3:5 704449-12	<50	<250	101
W4:5 704449-13	<50	<250	101
W5:5 704449-15	<50	<250	91
B3:5 704449-16	<50	<250	103
Method Blank 07-913 MB	<50	<250	107

Date of Report: 05/02/17
Date Received: 04/27/17
Project: 2016-023B, F&BI 704449
Date Extracted: 04/27/17
Date Analyzed: 04/27/17

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

Results Reported as ug/L (ppb)

Sample ID Laboratory ID	Diesel Range (C_{10}-C_{25})	Motor Oil Range (C_{25}-C_{36})	Surrogate (% Recovery) (Limit 51-134)
UST-W 704449-14	4,600 x	1,200	99
Method Blank 07-897 MB	<50	<250	100

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	UST 1-5	Client:	The Riley Group
Date Received:	04/27/17	Project:	2016-023B, F&BI 704449
Date Extracted:	04/27/17	Lab ID:	704449-11
Date Analyzed:	04/27/17	Data File:	042726.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	102	55	145
4-Bromofluorobenzene	101	65	139

Compounds:	Concentration mg/kg (ppm)	Compounds:	Concentration mg/kg (ppm)
Dichlorodifluoromethane	<0.5	1,3-Dichloropropane	<0.05
Chloromethane	<0.5	Tetrachloroethene	<0.025
Vinyl chloride	<0.05	Dibromochloromethane	<0.05
Bromomethane	<0.5	1,2-Dibromoethane (EDB)	<0.05
Chloroethane	<0.5	Chlorobenzene	<0.05
Trichlorofluoromethane	<0.5	Ethylbenzene	<0.05
Acetone	<0.5	1,1,1,2-Tetrachloroethane	<0.05
1,1-Dichloroethene	<0.05	m,p-Xylene	<0.1
Hexane	<0.25	o-Xylene	<0.05
Methylene chloride	<0.5	Styrene	<0.05
Methyl t-butyl ether (MTBE)	<0.05	Isopropylbenzene	<0.05
trans-1,2-Dichloroethene	<0.05	Bromoform	<0.05
1,1-Dichloroethane	<0.05	n-Propylbenzene	<0.05
2,2-Dichloropropane	<0.05	Bromobenzene	<0.05
cis-1,2-Dichloroethene	<0.05	1,3,5-Trimethylbenzene	<0.05
Chloroform	<0.05	1,1,2,2-Tetrachloroethane	<0.05
2-Butanone (MEK)	<0.5	1,2,3-Trichloropropane	<0.05
1,2-Dichloroethane (EDC)	<0.05	2-Chlorotoluene	<0.05
1,1,1-Trichloroethane	<0.05	4-Chlorotoluene	<0.05
1,1-Dichloropropene	<0.05	tert-Butylbenzene	<0.05
Carbon tetrachloride	<0.05	1,2,4-Trimethylbenzene	<0.05
Benzene	<0.03	sec-Butylbenzene	<0.05
Trichloroethene	<0.02	p-Isopropyltoluene	<0.05
1,2-Dichloropropane	<0.05	1,3-Dichlorobenzene	<0.05
Bromodichloromethane	<0.05	1,4-Dichlorobenzene	<0.05
Dibromomethane	<0.05	1,2-Dichlorobenzene	<0.05
4-Methyl-2-pentanone	<0.5	1,2-Dibromo-3-chloropropane	<0.5
cis-1,3-Dichloropropene	<0.05	1,2,4-Trichlorobenzene	<0.25
Toluene	<0.05	Hexachlorobutadiene	<0.25
trans-1,3-Dichloropropene	<0.05	Naphthalene	0.060
1,1,2-Trichloroethane	<0.05	1,2,3-Trichlorobenzene	<0.25
2-Hexanone	<0.5		

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	Method Blank	Client:	The Riley Group
Date Received:	Not Applicable	Project:	2016-023B, F&BI 704449
Date Extracted:	04/27/17	Lab ID:	07-898 mb
Date Analyzed:	04/27/17	Data File:	042705.D
Matrix:	Soil	Instrument:	GCMS4
Units:	mg/kg (ppm) Dry Weight	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	101	62	142
Toluene-d8	101	55	145
4-Bromofluorobenzene	98	65	139

Compounds:	Concentration mg/kg (ppm)	Compounds:	Concentration mg/kg (ppm)
Dichlorodifluoromethane	<0.5	1,3-Dichloropropane	<0.05
Chloromethane	<0.5	Tetrachloroethene	<0.025
Vinyl chloride	<0.05	Dibromochloromethane	<0.05
Bromomethane	<0.5	1,2-Dibromoethane (EDB)	<0.05
Chloroethane	<0.5	Chlorobenzene	<0.05
Trichlorofluoromethane	<0.5	Ethylbenzene	<0.05
Acetone	<0.5	1,1,1,2-Tetrachloroethane	<0.05
1,1-Dichloroethene	<0.05	m,p-Xylene	<0.1
Hexane	<0.25	o-Xylene	<0.05
Methylene chloride	0.70 lc	Styrene	<0.05
Methyl t-butyl ether (MTBE)	<0.05	Isopropylbenzene	<0.05
trans-1,2-Dichloroethene	<0.05	Bromoform	<0.05
1,1-Dichloroethane	<0.05	n-Propylbenzene	<0.05
2,2-Dichloropropane	<0.05	Bromobenzene	<0.05
cis-1,2-Dichloroethene	<0.05	1,3,5-Trimethylbenzene	<0.05
Chloroform	<0.05	1,1,2,2-Tetrachloroethane	<0.05
2-Butanone (MEK)	<0.5	1,2,3-Trichloropropane	<0.05
1,2-Dichloroethane (EDC)	<0.05	2-Chlorotoluene	<0.05
1,1,1-Trichloroethane	<0.05	4-Chlorotoluene	<0.05
1,1-Dichloropropene	<0.05	tert-Butylbenzene	<0.05
Carbon tetrachloride	<0.05	1,2,4-Trimethylbenzene	<0.05
Benzene	<0.03	sec-Butylbenzene	<0.05
Trichloroethene	<0.02	p-Isopropyltoluene	<0.05
1,2-Dichloropropane	<0.05	1,3-Dichlorobenzene	<0.05
Bromodichloromethane	<0.05	1,4-Dichlorobenzene	<0.05
Dibromomethane	<0.05	1,2-Dichlorobenzene	<0.05
4-Methyl-2-pentanone	<0.5	1,2-Dibromo-3-chloropropane	<0.5
cis-1,3-Dichloropropene	<0.05	1,2,4-Trichlorobenzene	<0.25
Toluene	<0.05	Hexachlorobutadiene	<0.25
trans-1,3-Dichloropropene	<0.05	Naphthalene	<0.05
1,1,2-Trichloroethane	<0.05	1,2,3-Trichlorobenzene	<0.25
2-Hexanone	<0.5		

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	UST-W	Client:	The Riley Group
Date Received:	04/27/17	Project:	2016-023B, F&BI 704449
Date Extracted:	04/28/17	Lab ID:	704449-14
Date Analyzed:	04/28/17	Data File:	042808.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	98	60	133

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	2.6
Acetone	<10	1,1,1,2-Tetrachloroethane	<1
1,1-Dichloroethene	<1	m,p-Xylene	6.8
Hexane	<1	o-Xylene	1.8
Methylene chloride	<5	Styrene	<1
Methyl t-butyl ether (MTBE)	<1	Isopropylbenzene	2.9
trans-1,2-Dichloroethene	<1	Bromoform	<1
1,1-Dichloroethane	<1	n-Propylbenzene	4.8
2,2-Dichloropropane	<1	Bromobenzene	<1
cis-1,2-Dichloroethene	<1	1,3,5-Trimethylbenzene	5.6
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	20
Benzene	<0.35	sec-Butylbenzene	1.8
Trichloroethene	<1	p-Isopropyltoluene	2.1
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	19
1,1,2-Trichloroethane	<1	1,2,3-Trichlorobenzene	<1
2-Hexanone	<10		

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	Method Blank	Client:	The Riley Group
Date Received:	Not Applicable	Project:	2016-023B, F&BI 704449
Date Extracted:	04/28/17	Lab ID:	07-900 mb
Date Analyzed:	04/28/17	Data File:	042807.D
Matrix:	Water	Instrument:	GCMS4
Units:	ug/L (ppb)	Operator:	JS

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

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		

Date of Report: 05/02/17
Date Received: 04/27/17
Project: 2016-023B, F&BI 704449

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

Laboratory Code: 704432-02 (Duplicate)

Analyte	Reporting Units	Sample Result (Wet Wt)	Duplicate Result (Wet Wt)	RPD (Limit 20)
Gasoline	mg/kg (ppm)	<2	<2	nm

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Gasoline	mg/kg (ppm)	20	90	71-131

Date of Report: 05/02/17
Date Received: 04/27/17
Project: 2016-023B, F&BI 704449

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

Laboratory Code: 704434-01 (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	106	69-134

Date of Report: 05/02/17
Date Received: 04/27/17
Project: 2016-023B, F&BI 704449

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

Laboratory Code: 704449-01 (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	89	103	73-135	15

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Diesel Extended	mg/kg (ppm)	5,000	100	74-139

Date of Report: 05/02/17
Date Received: 04/27/17
Project: 2016-023B, F&BI 704449

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	90	105	58-134	15

Date of Report: 05/02/17
Date Received: 04/27/17
Project: 2016-023B, F&BI 704449

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

Laboratory Code: 704436-01 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet wt)	Percent Recovery MS	Acceptance Criteria
Dichlorodifluoromethane	mg/kg (ppm)	2.5	<0.5	26	10-142
Chloromethane	mg/kg (ppm)	2.5	<0.5	57	10-126
Vinyl chloride	mg/kg (ppm)	2.5	<0.05	59	10-138
Bromomethane	mg/kg (ppm)	2.5	<0.5	66	10-163
Chloroethane	mg/kg (ppm)	2.5	<0.5	66	10-176
Trichlorofluoromethane	mg/kg (ppm)	2.5	<0.5	65	10-176
Acetone	mg/kg (ppm)	12.5	<0.5	88	10-163
1,1-Dichloroethene	mg/kg (ppm)	2.5	<0.05	79	10-160
Hexane	mg/kg (ppm)	2.5	<0.25	70	10-137
Methylene chloride	mg/kg (ppm)	2.5	<0.5	81	10-156
Methyl t-butyl ether (MTBE)	mg/kg (ppm)	2.5	<0.05	95	21-145
trans-1,2-Dichloroethene	mg/kg (ppm)	2.5	<0.05	87	14-137
1,1-Dichloroethane	mg/kg (ppm)	2.5	<0.05	90	19-140
2,2-Dichloropropane	mg/kg (ppm)	2.5	<0.05	91	10-158
cis-1,2-Dichloroethene	mg/kg (ppm)	2.5	<0.05	90	25-135
Chloroform	mg/kg (ppm)	2.5	<0.05	89	21-145
2-Butanone (MEK)	mg/kg (ppm)	12.5	<0.5	99	19-147
1,2-Dichloroethane (EDC)	mg/kg (ppm)	2.5	<0.05	89	12-160
1,1,1-Trichloroethane	mg/kg (ppm)	2.5	<0.05	90	10-156
1,1-Dichloropropene	mg/kg (ppm)	2.5	<0.05	90	17-140
Carbon tetrachloride	mg/kg (ppm)	2.5	<0.05	91	9-164
Benzene	mg/kg (ppm)	2.5	<0.03	92	29-129
Trichloroethene	mg/kg (ppm)	2.5	<0.02	88	21-139
1,2-Dichloropropane	mg/kg (ppm)	2.5	<0.05	98	30-135
Bromodichloromethane	mg/kg (ppm)	2.5	<0.05	96	23-155
Dibromomethane	mg/kg (ppm)	2.5	<0.05	96	23-145
4-Methyl-2-pentanone	mg/kg (ppm)	12.5	<0.5	102	24-155
cis-1,3-Dichloropropene	mg/kg (ppm)	2.5	<0.05	100	28-144
Toluene	mg/kg (ppm)	2.5	<0.05	91	35-130
trans-1,3-Dichloropropene	mg/kg (ppm)	2.5	<0.05	97	26-149
1,1,2-Trichloroethane	mg/kg (ppm)	2.5	<0.05	93	10-205
2-Hexanone	mg/kg (ppm)	12.5	<0.5	96	15-166
1,3-Dichloropropane	mg/kg (ppm)	2.5	<0.05	97	31-137
Tetrachloroethene	mg/kg (ppm)	2.5	<0.025	91	20-133
Dibromochloromethane	mg/kg (ppm)	2.5	<0.05	93	28-150
1,2-Dibromoethane (EDB)	mg/kg (ppm)	2.5	<0.05	97	28-142
Chlorobenzene	mg/kg (ppm)	2.5	<0.05	93	32-129
Ethylbenzene	mg/kg (ppm)	2.5	<0.05	92	32-137
1,1,1,2-Tetrachloroethane	mg/kg (ppm)	2.5	<0.05	96	31-143
m,p-Xylene	mg/kg (ppm)	5	<0.1	91	34-136
o-Xylene	mg/kg (ppm)	2.5	<0.05	92	33-134
Styrene	mg/kg (ppm)	2.5	<0.05	95	35-137
Isopropylbenzene	mg/kg (ppm)	2.5	<0.05	93	31-142
Bromoform	mg/kg (ppm)	2.5	<0.05	80	21-156
n-Propylbenzene	mg/kg (ppm)	2.5	<0.05	92	23-146
Bromobenzene	mg/kg (ppm)	2.5	<0.05	92	34-130
1,3,5-Trimethylbenzene	mg/kg (ppm)	2.5	<0.05	92	18-149
1,1,2,2-Tetrachloroethane	mg/kg (ppm)	2.5	<0.05	94	28-140
1,2,3-Trichloropropane	mg/kg (ppm)	2.5	<0.05	94	25-144
2-Chlorotoluene	mg/kg (ppm)	2.5	<0.05	92	31-134
4-Chlorotoluene	mg/kg (ppm)	2.5	<0.05	92	31-136
tert-Butylbenzene	mg/kg (ppm)	2.5	<0.05	93	30-137
1,2,4-Trimethylbenzene	mg/kg (ppm)	2.5	<0.05	93	10-182
sec-Butylbenzene	mg/kg (ppm)	2.5	<0.05	91	23-145
p-Isopropyltoluene	mg/kg (ppm)	2.5	<0.05	92	21-149
1,3-Dichlorobenzene	mg/kg (ppm)	2.5	<0.05	92	30-131
1,4-Dichlorobenzene	mg/kg (ppm)	2.5	<0.05	90	29-129
1,2-Dichlorobenzene	mg/kg (ppm)	2.5	<0.05	93	31-132
1,2-Dibromo-3-chloropropane	mg/kg (ppm)	2.5	<0.5	87	11-161
1,2,4-Trichlorobenzene	mg/kg (ppm)	2.5	<0.25	92	22-142
Hexachlorobutadiene	mg/kg (ppm)	2.5	<0.25	89	10-142
Naphthalene	mg/kg (ppm)	2.5	<0.05	88	14-157
1,2,3-Trichlorobenzene	mg/kg (ppm)	2.5	<0.25	92	20-144

Date of Report: 05/02/17
Date Received: 04/27/17
Project: 2016-023B, F&BI 704449

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL 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	mg/kg (ppm)	2.5	47	47	10-146	0
Chloromethane	mg/kg (ppm)	2.5	79	79	27-133	0
Vinyl chloride	mg/kg (ppm)	2.5	83	83	22-139	0
Bromomethane	mg/kg (ppm)	2.5	89	89	38-114	0
Chloroethane	mg/kg (ppm)	2.5	88	88	10-163	0
Trichlorofluoromethane	mg/kg (ppm)	2.5	89	89	10-196	0
Acetone	mg/kg (ppm)	12.5	95	95	52-141	0
1,1-Dichloroethene	mg/kg (ppm)	2.5	97	97	47-128	0
Hexane	mg/kg (ppm)	2.5	96	96	43-142	0
Methylene chloride	mg/kg (ppm)	2.5	84	84	42-132	0
Methyl t-butyl ether (MTBE)	mg/kg (ppm)	2.5	110	110	60-123	0
trans-1,2-Dichloroethene	mg/kg (ppm)	2.5	105	105	67-127	0
1,1-Dichloroethane	mg/kg (ppm)	2.5	107	107	68-115	0
2,2-Dichloropropane	mg/kg (ppm)	2.5	107	107	52-170	0
cis-1,2-Dichloroethene	mg/kg (ppm)	2.5	106	106	72-113	0
Chloroform	mg/kg (ppm)	2.5	103	103	66-120	0
2-Butanone (MEK)	mg/kg (ppm)	12.5	111	111	57-123	0
1,2-Dichloroethane (EDC)	mg/kg (ppm)	2.5	101	101	56-135	0
1,1,1-Trichloroethane	mg/kg (ppm)	2.5	106	106	62-131	0
1,1-Dichloropropene	mg/kg (ppm)	2.5	105	105	69-128	0
Carbon tetrachloride	mg/kg (ppm)	2.5	108	108	60-139	0
Benzene	mg/kg (ppm)	2.5	106	106	68-114	0
Trichloroethene	mg/kg (ppm)	2.5	100	100	64-117	0
1,2-Dichloropropane	mg/kg (ppm)	2.5	112	112	72-127	0
Bromodichloromethane	mg/kg (ppm)	2.5	108	108	72-130	0
Dibromomethane	mg/kg (ppm)	2.5	109	109	70-120	0
4-Methyl-2-pentanone	mg/kg (ppm)	12.5	113	113	45-145	0
cis-1,3-Dichloropropene	mg/kg (ppm)	2.5	113	113	75-136	0
Toluene	mg/kg (ppm)	2.5	102	102	66-126	0
trans-1,3-Dichloropropene	mg/kg (ppm)	2.5	109	109	72-132	0
1,1,2-Trichloroethane	mg/kg (ppm)	2.5	105	105	75-113	0
2-Hexanone	mg/kg (ppm)	12.5	108	108	33-152	0
1,3-Dichloropropane	mg/kg (ppm)	2.5	108	108	72-130	0
Tetrachloroethene	mg/kg (ppm)	2.5	102	102	72-114	0
Dibromochloromethane	mg/kg (ppm)	2.5	103	103	74-125	0
1,2-Dibromoethane (EDB)	mg/kg (ppm)	2.5	109	109	74-132	0
Chlorobenzene	mg/kg (ppm)	2.5	104	104	76-111	0
Ethylbenzene	mg/kg (ppm)	2.5	104	104	64-123	0
1,1,1,2-Tetrachloroethane	mg/kg (ppm)	2.5	109	109	69-135	0
m,p-Xylene	mg/kg (ppm)	5	103	103	78-122	0
o-Xylene	mg/kg (ppm)	2.5	104	104	77-124	0
Styrene	mg/kg (ppm)	2.5	107	107	74-126	0
Isopropylbenzene	mg/kg (ppm)	2.5	105	105	76-127	0
Bromoform	mg/kg (ppm)	2.5	90	90	56-132	0
n-Propylbenzene	mg/kg (ppm)	2.5	101	101	74-124	0
Bromobenzene	mg/kg (ppm)	2.5	102	102	72-122	0
1,3,5-Trimethylbenzene	mg/kg (ppm)	2.5	103	103	76-126	0
1,1,2,2-Tetrachloroethane	mg/kg (ppm)	2.5	103	103	56-143	0
1,2,3-Trichloropropane	mg/kg (ppm)	2.5	102	102	61-137	0
2-Chlorotoluene	mg/kg (ppm)	2.5	102	102	74-121	0
4-Chlorotoluene	mg/kg (ppm)	2.5	100	100	75-122	0
tert-Butylbenzene	mg/kg (ppm)	2.5	103	103	73-130	0
1,2,4-Trimethylbenzene	mg/kg (ppm)	2.5	103	103	76-125	0
sec-Butylbenzene	mg/kg (ppm)	2.5	101	101	71-130	0
p-Isopropyltoluene	mg/kg (ppm)	2.5	102	102	70-132	0
1,3-Dichlorobenzene	mg/kg (ppm)	2.5	102	102	75-121	0
1,4-Dichlorobenzene	mg/kg (ppm)	2.5	100	100	74-117	0
1,2-Dichlorobenzene	mg/kg (ppm)	2.5	103	103	76-121	0
1,2-Dibromo-3-chloropropane	mg/kg (ppm)	2.5	96	96	58-138	0
1,2,4-Trichlorobenzene	mg/kg (ppm)	2.5	102	102	64-135	0
Hexachlorobutadiene	mg/kg (ppm)	2.5	98	98	50-153	0
Naphthalene	mg/kg (ppm)	2.5	99	99	63-140	0
1,2,3-Trichlorobenzene	mg/kg (ppm)	2.5	103	103	63-138	0

Date of Report: 05/02/17
Date Received: 04/27/17
Project: 2016-023B, F&BI 704449

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

Laboratory Code: 704437-01 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Acceptance Criteria
Dichlorodifluoromethane	ug/L (ppb)	50	<1	112	10-172
Chloromethane	ug/L (ppb)	50	<10	112	25-166
Vinyl chloride	ug/L (ppb)	50	<0.2	109	36-166
Bromomethane	ug/L (ppb)	50	<1	137	47-169
Chloroethane	ug/L (ppb)	50	<1	123	46-160
Trichlorofluoromethane	ug/L (ppb)	50	<1	114	44-165
Acetone	ug/L (ppb)	250	<10	107	10-182
1,1-Dichloroethene	ug/L (ppb)	50	<1	114	60-136
Hexane	ug/L (ppb)	50	<1	109	52-150
Methylene chloride	ug/L (ppb)	50	<5	98	67-132
Methyl t-butyl ether (MTBE)	ug/L (ppb)	50	<1	113	74-127
trans-1,2-Dichloroethene	ug/L (ppb)	50	<1	113	72-129
1,1-Dichloroethane	ug/L (ppb)	50	<1	111	70-128
2,2-Dichloropropane	ug/L (ppb)	50	<1	110	36-154
cis-1,2-Dichloroethene	ug/L (ppb)	50	<1	110	71-127
Chloroform	ug/L (ppb)	50	<1	106	65-132
2-Butanone (MEK)	ug/L (ppb)	250	<10	113	10-129
1,2-Dichloroethane (EDC)	ug/L (ppb)	50	<1	103	69-133
1,1,1-Trichloroethane	ug/L (ppb)	50	<1	110	60-146
1,1-Dichloropropene	ug/L (ppb)	50	<1	109	69-133
Carbon tetrachloride	ug/L (ppb)	50	<1	116	56-152
Benzene	ug/L (ppb)	50	<0.35	107	76-125
Trichloroethene	ug/L (ppb)	50	<1	101	66-135
1,2-Dichloropropane	ug/L (ppb)	50	<1	112	78-125
Bromodichloromethane	ug/L (ppb)	50	<1	114	61-150
Dibromomethane	ug/L (ppb)	50	<1	111	66-141
4-Methyl-2-pentanone	ug/L (ppb)	250	<10	113	10-185
cis-1,3-Dichloropropene	ug/L (ppb)	50	<1	114	72-132
Toluene	ug/L (ppb)	50	<1	102	76-122
trans-1,3-Dichloropropene	ug/L (ppb)	50	<1	110	76-130
1,1,2-Trichloroethane	ug/L (ppb)	50	<1	104	68-131
2-Hexanone	ug/L (ppb)	250	<10	105	10-185
1,3-Dichloropropane	ug/L (ppb)	50	<1	107	71-128
Tetrachloroethene	ug/L (ppb)	50	<1	102	10-226
Dibromochloromethane	ug/L (ppb)	50	<1	113	70-139
1,2-Dibromoethane (EDB)	ug/L (ppb)	50	<1	108	69-134
Chlorobenzene	ug/L (ppb)	50	<1	103	77-122
Ethylbenzene	ug/L (ppb)	50	<1	102	69-135
1,1,1,2-Tetrachloroethane	ug/L (ppb)	50	<1	112	73-137
m,p-Xylene	ug/L (ppb)	100	<2	100	69-135
o-Xylene	ug/L (ppb)	50	<1	103	60-140
Styrene	ug/L (ppb)	50	<1	104	71-133
Isopropylbenzene	ug/L (ppb)	50	<1	104	65-142
Bromoform	ug/L (ppb)	50	<1	105	65-142
n-Propylbenzene	ug/L (ppb)	50	<1	100	58-144
Bromobenzene	ug/L (ppb)	50	<1	100	75-124
1,3,5-Trimethylbenzene	ug/L (ppb)	50	<1	101	66-137
1,1,2,2-Tetrachloroethane	ug/L (ppb)	50	<1	104	51-154
1,2,3-Trichloropropane	ug/L (ppb)	50	<1	101	53-150
2-Chlorotoluene	ug/L (ppb)	50	<1	99	66-127
4-Chlorotoluene	ug/L (ppb)	50	<1	98	65-130
tert-Butylbenzene	ug/L (ppb)	50	<1	101	65-137
1,2,4-Trimethylbenzene	ug/L (ppb)	50	<1	101	59-146
sec-Butylbenzene	ug/L (ppb)	50	<1	99	64-140
p-Isopropyltoluene	ug/L (ppb)	50	<1	100	65-141
1,3-Dichlorobenzene	ug/L (ppb)	50	<1	100	72-123
1,4-Dichlorobenzene	ug/L (ppb)	50	<1	98	69-126
1,2-Dichlorobenzene	ug/L (ppb)	50	<1	101	69-128
1,2-Dibromo-3-chloropropane	ug/L (ppb)	50	<10	108	32-164
1,2,4-Trichlorobenzene	ug/L (ppb)	50	<1	100	66-136
Hexachlorobutadiene	ug/L (ppb)	50	<1	92	60-143
Naphthalene	ug/L (ppb)	50	<1	97	44-164
1,2,3-Trichlorobenzene	ug/L (ppb)	50	<1	100	69-148

Date of Report: 05/02/17
Date Received: 04/27/17
Project: 2016-023B, F&BI 704449

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	102	113	25-158	10
Chloromethane	ug/L (ppb)	50	107	114	45-156	6
Vinyl chloride	ug/L (ppb)	50	104	112	50-154	7
Bromomethane	ug/L (ppb)	50	132	145 vo	55-143	9
Chloroethane	ug/L (ppb)	50	119	127	58-146	7
Trichlorofluoromethane	ug/L (ppb)	250	109	116	50-150	6
Acetone	ug/L (ppb)	250	100	105	53-131	5
1,1-Dichloroethene	ug/L (ppb)	50	110	114	67-136	4
Hexane	ug/L (ppb)	50	102	109	57-137	7
Methylene chloride	ug/L (ppb)	50	95	99	39-148	4
Methyl t-butyl ether (MTBE)	ug/L (ppb)	50	110	118	64-147	7
trans-1,2-Dichloroethene	ug/L (ppb)	50	108	113	68-128	5
1,1-Dichloroethane	ug/L (ppb)	50	108	114	79-121	5
2,2-Dichloropropane	ug/L (ppb)	50	112	120	55-143	7
cis-1,2-Dichloroethene	ug/L (ppb)	50	106	111	80-123	5
Chloroform	ug/L (ppb)	50	103	108	80-121	5
2-Butanone (MEK)	ug/L (ppb)	250	110	118	57-149	7
1,2-Dichloroethane (EDC)	ug/L (ppb)	50	100	105	73-132	5
1,1,1-Trichloroethane	ug/L (ppb)	50	107	114	83-130	6
1,1-Dichloropropene	ug/L (ppb)	50	105	111	77-129	6
Carbon tetrachloride	ug/L (ppb)	50	111	118	75-158	6
Benzene	ug/L (ppb)	50	103	110	69-134	7
Trichloroethene	ug/L (ppb)	50	100	106	80-120	6
1,2-Dichloropropane	ug/L (ppb)	50	108	115	77-123	6
Bromodichloromethane	ug/L (ppb)	50	111	118	81-133	6
Dibromomethane	ug/L (ppb)	50	108	115	82-125	6
4-Methyl-2-pentanone	ug/L (ppb)	250	110	118	65-138	7
cis-1,3-Dichloropropene	ug/L (ppb)	50	114	123	82-132	8
Toluene	ug/L (ppb)	50	100	105	72-122	5
trans-1,3-Dichloropropene	ug/L (ppb)	50	111	119	80-136	7
1,1,2-Trichloroethane	ug/L (ppb)	50	102	108	75-124	6
2-Hexanone	ug/L (ppb)	250	102	112	60-136	9
1,3-Dichloropropane	ug/L (ppb)	50	105	111	76-126	6
Tetrachloroethene	ug/L (ppb)	50	99	104	76-121	5
Dibromochloromethane	ug/L (ppb)	50	112	118	84-133	5
1,2-Dibromoethane (EDB)	ug/L (ppb)	50	106	114	82-125	7
Chlorobenzene	ug/L (ppb)	50	100	107	83-114	7
Ethylbenzene	ug/L (ppb)	50	99	106	77-124	7
1,1,1,2-Tetrachloroethane	ug/L (ppb)	50	108	115	84-127	6
m,p-Xylene	ug/L (ppb)	100	98	104	83-125	6
o-Xylene	ug/L (ppb)	50	100	106	81-121	6
Styrene	ug/L (ppb)	50	102	109	84-119	7
Isopropylbenzene	ug/L (ppb)	50	100	106	85-117	6
Bromoform	ug/L (ppb)	50	106	113	74-136	6
n-Propylbenzene	ug/L (ppb)	50	97	104	74-126	7
Bromobenzene	ug/L (ppb)	50	98	105	80-121	7
1,3,5-Trimethylbenzene	ug/L (ppb)	50	99	106	78-123	7
1,1,2,2-Tetrachloroethane	ug/L (ppb)	50	101	108	66-126	7
1,2,3-Trichloropropane	ug/L (ppb)	50	100	107	67-124	7
2-Chlorotoluene	ug/L (ppb)	50	97	104	77-127	7
4-Chlorotoluene	ug/L (ppb)	50	96	103	78-128	7
tert-Butylbenzene	ug/L (ppb)	50	100	105	80-123	5
1,2,4-Trimethylbenzene	ug/L (ppb)	50	99	106	79-122	7
sec-Butylbenzene	ug/L (ppb)	50	97	103	80-125	6
p-Isopropyltoluene	ug/L (ppb)	50	99	104	81-123	5
1,3-Dichlorobenzene	ug/L (ppb)	50	99	105	85-116	6
1,4-Dichlorobenzene	ug/L (ppb)	50	96	103	84-121	7
1,2-Dichlorobenzene	ug/L (ppb)	50	100	106	85-116	6
1,2-Dibromo-3-chloropropane	ug/L (ppb)	50	109	113	57-141	4
1,2,4-Trichlorobenzene	ug/L (ppb)	50	98	106	72-130	8
Hexachlorobutadiene	ug/L (ppb)	50	97	101	53-141	4
Naphthalene	ug/L (ppb)	50	97	105	64-133	8
1,2,3-Trichlorobenzene	ug/L (ppb)	50	99	107	65-136	8

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.

704449

SAMPLE CHAIN OF CUSTODY

ME 04/27/17 VS/VW1/2/coy

Page # 1 of

Report To: Anna Jordon & Stafford Larsen

Company: The Riley Group

Address: 17522 Bothell Way NE

City, State, ZIP: Bothell WA 98011

Phone ______ Email ______

SAMPLERS (signature): Stafford Larsen

PROJECT NAME: 2016-023 B

PO #

REMARKS

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	TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM					Notes
SP-1	01	4/26/17	705	Soil	1		X										
S1:2	02	↓	740	↓	↓		X										
W1:2	03		745				X										
B1-2	04		750				X										
S2:2	05		755				X										
S3:2	06		910				X										
S4-3	07		920				X										
E1-3	08		925				X										
W2:4	09		1000				X										
B2:4	10		1005				X										Samples received at 2 °C

	SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by:	Stafford Larsen (signature)	Stafford Larsen	RGI	4/27/17	
Received by:	D Sams (signature)	D Sams	FedEx SOC	4/27	10:15A
Relinquished by:					
Received by:	(signature)	Nhan Phan	FeBI	4/27/17	11:15

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

704449

SAMPLE CHAIN OF CUSTODY

ME 04/27/17 VS1/VW1/ cx

Page # 2 of 2

Report To Anna Jordan

Company The Riley Group

Address

City, State, ZIP

Phone Email

SAMPLERS (*signature*)

PROJECT NAME: 2016-033B

PO #

REMARKS

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	TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM					Notes
						ANALYSES REQUESTED											
WST 1-5	11 A-E	4/26/17	200	Soil	5		X	X		X							
W 3:5	12		200		1		X										
W 4:5	13		210		1		X										
WST-W	14 A-D		220	H2O	4		X	X		X							
W 5:5	15		230	Soil	1		X										
B 3:5	16		330		1		X										
																	Samples received at 2 °C

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by:	Staff	FBI	4/27/17	
Received by: DSams	DSams	FedEx SDC	4/27	10:15A
Relinquished by:				
Received by:	Nhan Phan	FCBT	4/27/17	11:15

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

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

April 20, 2017

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 April 17, 2017 from the 2016-023B, F&BI 704271 project. There are 15 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
TRG0420R.DOC

CASE NARRATIVE

This case narrative encompasses samples received on April 17, 2017 by Friedman & Bruya, Inc. from the The Riley Group 2016-023B, F&BI 704271 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	The Riley Group
704271 -01	TP1-1.5
704271 -02	TP2-2
704271 -03	TP3-2
704271 -04	TP4-2.5
704271 -05	TP5-1.5
704271 -06	TP6-1.5

Several 8260C compounds did not meet the acceptance criteria in the matrix spike samples. The laboratory control sample met the acceptance criteria, therefore the data were likely due to sample inhomogeneity.

All other quality control requirements were acceptable.

Date of Report: 04/20/17
Date Received: 04/17/17
Project: 2016-023B, F&BI 704271
Date Extracted: 04/18/17
Date Analyzed: 04/18/17

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

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

Sample ID Laboratory ID	Gasoline Range	Surrogate (% Recovery) (Limit 50-150)
TP1-1.5 704271-01	<2	113
TP2-2 704271-02	<2	114
TP3-2 704271-03	<2	112
TP4-2.5 704271-04	<2	110
TP5-1.5 704271-05	<2	111
TP6-1.5 704271-06	<2	111
Method Blank 07-785 MB	<2	112

Date of Report: 04/20/17
Date Received: 04/17/17
Project: 2016-023B, F&BI 704271
Date Extracted: 04/18/17
Date Analyzed: 04/18/17

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)

Sample ID Laboratory ID	Diesel Range (C_{10}-C_{25})	Motor Oil Range (C_{25}-C_{36})	Surrogate (% Recovery) (Limit 48-168)
TP1-1.5 704271-01	<50	<250	114
TP2-2 704271-02	<50	<250	115
TP3-2 704271-03	<50	<250	114
TP4-2.5 704271-04	<50	<250	114
TP5-1.5 704271-05	<50	<250	111
TP6-1.5 704271-06	<50	270	103
Method Blank 07-814 MB	<50	<250	113

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	TP1-1.5	Client:	The Riley Group
Date Received:	04/17/17	Project:	2016-023B, F&BI 704271
Date Extracted:	04/18/17	Lab ID:	704271-01
Date Analyzed:	04/18/17	Data File:	041812.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	98	55	145
4-Bromofluorobenzene	102	65	139

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

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	TP2-2	Client:	The Riley Group
Date Received:	04/17/17	Project:	2016-023B, F&BI 704271
Date Extracted:	04/18/17	Lab ID:	704271-02
Date Analyzed:	04/18/17	Data File:	041813.D
Matrix:	Soil	Instrument:	GCMS4
Units:	mg/kg (ppm) Dry Weight	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	99	62	142
Toluene-d8	99	55	145
4-Bromofluorobenzene	101	65	139

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

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	TP3-2	Client:	The Riley Group
Date Received:	04/17/17	Project:	2016-023B, F&BI 704271
Date Extracted:	04/18/17	Lab ID:	704271-03
Date Analyzed:	04/18/17	Data File:	041814.D
Matrix:	Soil	Instrument:	GCMS4
Units:	mg/kg (ppm) Dry Weight	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	99	62	142
Toluene-d8	99	55	145
4-Bromofluorobenzene	102	65	139

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

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	TP4-2.5	Client:	The Riley Group
Date Received:	04/17/17	Project:	2016-023B, F&BI 704271
Date Extracted:	04/18/17	Lab ID:	704271-04
Date Analyzed:	04/18/17	Data File:	041818.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	98	55	145
4-Bromofluorobenzene	103	65	139

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

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	TP5-1.5	Client:	The Riley Group
Date Received:	04/17/17	Project:	2016-023B, F&BI 704271
Date Extracted:	04/18/17	Lab ID:	704271-05
Date Analyzed:	04/18/17	Data File:	041819.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	98	55	145
4-Bromofluorobenzene	101	65	139

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

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	TP6-1.5	Client:	The Riley Group
Date Received:	04/17/17	Project:	2016-023B, F&BI 704271
Date Extracted:	04/18/17	Lab ID:	704271-06
Date Analyzed:	04/18/17	Data File:	041820.D
Matrix:	Soil	Instrument:	GCMS4
Units:	mg/kg (ppm) Dry Weight	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	99	62	142
Toluene-d8	99	55	145
4-Bromofluorobenzene	101	65	139

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

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	Method Blank	Client:	The Riley Group
Date Received:	NA	Project:	2016-023B, F&BI 704271
Date Extracted:	04/18/17	Lab ID:	07-807 mb
Date Analyzed:	04/18/17	Data File:	041807.D
Matrix:	Soil	Instrument:	GCMS4
Units:	mg/kg (ppm) Dry Weight	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	99	62	142
Toluene-d8	98	55	145
4-Bromofluorobenzene	102	65	139

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

Date of Report: 04/20/17
Date Received: 04/17/17
Project: 2016-023B, F&BI 704271

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

Laboratory Code: 704123-02 (Duplicate)

Analyte	Reporting Units	Sample Result (Wet Wt)	Duplicate Result (Wet Wt)	RPD (Limit 20)
Gasoline	mg/kg (ppm)	<2	<2	nm

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Gasoline	mg/kg (ppm)	20	90	71-131

Date of Report: 04/20/17
Date Received: 04/17/17
Project: 2016-023B, F&BI 704271

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

Laboratory Code: 704271-03 (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	96	102	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	103	74-139

Date of Report: 04/20/17
Date Received: 04/17/17
Project: 2016-023B, F&BI 704271

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

Laboratory Code: 704292-06 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet wt)	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Dichlorodifluoromethane	mg/kg (ppm)	2.5	<0.5	21	21	10-142	0
Chloromethane	mg/kg (ppm)	2.5	<0.5	51	49	10-126	4
Vinyl chloride	mg/kg (ppm)	2.5	<0.05	49	49	10-138	0
Bromomethane	mg/kg (ppm)	2.5	<0.5	73	64	10-163	13
Chloroethane	mg/kg (ppm)	2.5	<0.5	58	54	10-176	7
Trichlorofluoromethane	mg/kg (ppm)	2.5	<0.5	50	47	10-176	6
Acetone	mg/kg (ppm)	12.5	<0.5	92	88	10-163	4
1,1-Dichloroethene	mg/kg (ppm)	2.5	<0.05	67	65	10-160	3
Hexane	mg/kg (ppm)	2.5	0.47	16	9 vo	10-137	56 vo
Methylene chloride	mg/kg (ppm)	2.5	<0.5	74	73	10-156	1
Methyl t-butyl ether (MTBE)	mg/kg (ppm)	2.5	<0.05	80	81	21-145	1
trans-1,2-Dichloroethene	mg/kg (ppm)	2.5	<0.05	71	70	14-137	1
1,1-Dichloroethane	mg/kg (ppm)	2.5	<0.05	75	73	19-140	3
2,2-Dichloropropane	mg/kg (ppm)	2.5	<0.05	62	59	10-158	5
cis-1,2-Dichloroethene	mg/kg (ppm)	2.5	<0.05	75	74	25-135	1
Chloroform	mg/kg (ppm)	2.5	<0.05	76	74	21-145	3
2-Butanone (MEK)	mg/kg (ppm)	12.5	<0.5	81	77	19-147	5
1,2-Dichloroethane (EDC)	mg/kg (ppm)	2.5	<0.05	75	74	12-160	1
1,1,1-Trichloroethane	mg/kg (ppm)	2.5	<0.05	65	61	10-156	6
1,1-Dichloropropene	mg/kg (ppm)	2.5	<0.05	64	58	17-140	10
Carbon tetrachloride	mg/kg (ppm)	2.5	<0.05	56	52	9-164	7
Benzene	mg/kg (ppm)	2.5	0.21	70	69	29-129	1
Trichloroethene	mg/kg (ppm)	2.5	<0.02	67	61	21-139	9
1,2-Dichloropropane	mg/kg (ppm)	2.5	<0.05	77	74	30-135	4
Bromodichloromethane	mg/kg (ppm)	2.5	<0.05	70	68	23-155	3
Dibromomethane	mg/kg (ppm)	2.5	<0.05	74	72	23-145	3
4-Methyl-2-pentanone	mg/kg (ppm)	12.5	<0.5	79	76	24-155	4
cis-1,3-Dichloropropene	mg/kg (ppm)	2.5	<0.05	75	71	28-144	5
Toluene	mg/kg (ppm)	2.5	9.8	0 b	56 b	35-130	nm
trans-1,3-Dichloropropene	mg/kg (ppm)	2.5	<0.05	77	74	26-149	4
1,1,2-Trichloroethane	mg/kg (ppm)	2.5	<0.05	86	82	10-205	5
2-Hexanone	mg/kg (ppm)	12.5	<0.5	92	89	15-166	3
1,3-Dichloropropane	mg/kg (ppm)	2.5	<0.05	78	75	31-137	4
Tetrachloroethene	mg/kg (ppm)	2.5	<0.025	45	37	20-133	20
Dibromochloromethane	mg/kg (ppm)	2.5	<0.05	70	66	28-150	6
1,2-Dibromoethane (EDB)	mg/kg (ppm)	2.5	<0.05	74	71	28-142	4
Chlorobenzene	mg/kg (ppm)	2.5	<0.05	65	59	32-129	10
Ethylbenzene	mg/kg (ppm)	2.5	6.2	0 b	0 b	32-137	nm
1,1,1,2-Tetrachloroethane	mg/kg (ppm)	2.5	<0.05	64	58	31-143	10
m,p-Xylene	mg/kg (ppm)	5	26	0 b	0 b	34-136	nm
o-Xylene	mg/kg (ppm)	2.5	13	0 b	0 b	33-134	nm
Styrene	mg/kg (ppm)	2.5	<0.05	74	67	35-137	10
Isopropylbenzene	mg/kg (ppm)	2.5	2.8	0 b	0 b	31-142	nm
Bromoform	mg/kg (ppm)	2.5	<0.05	61	57	21-156	7
n-Propylbenzene	mg/kg (ppm)	2.5	7.2	0 b	0 b	23-146	nm
Bromobenzene	mg/kg (ppm)	2.5	<0.05	62	55	34-130	12
1,3,5-Trimethylbenzene	mg/kg (ppm)	2.5	10	0 b	0 b	18-149	nm
1,1,2,2-Tetrachloroethane	mg/kg (ppm)	2.5	<0.05	112	107	28-140	5
1,2,3-Trichloropropane	mg/kg (ppm)	2.5	<0.05	77	72	25-144	7
2-Chlorotoluene	mg/kg (ppm)	2.5	<0.05	161 vo	151 vo	31-134	6
4-Chlorotoluene	mg/kg (ppm)	2.5	<0.05	78	68	31-136	14
tert-Butylbenzene	mg/kg (ppm)	2.5	0.20	29 vo	18 vo	30-137	47 vo
1,2,4-Trimethylbenzene	mg/kg (ppm)	2.5	32	0 b	0 b	10-182	nm
sec-Butylbenzene	mg/kg (ppm)	2.5	4.5	0 b	0 b	23-145	nm
p-Isopropyltoluene	mg/kg (ppm)	2.5	4.1	0 b	0 b	21-149	nm
1,3-Dichlorobenzene	mg/kg (ppm)	2.5	<0.05	48	36	30-131	29 vo
1,4-Dichlorobenzene	mg/kg (ppm)	2.5	<0.05	48	38	29-129	23 vo
1,2-Dichlorobenzene	mg/kg (ppm)	2.5	<0.05	50	40	31-132	22 vo
1,2-Dibromo-3-chloropropane	mg/kg (ppm)	2.5	<0.5	104	97	11-161	7
1,2,4-Trichlorobenzene	mg/kg (ppm)	2.5	<0.25	23	0 vo	22-142	nm
Hexachlorobutadiene	mg/kg (ppm)	2.5	<0.25	20	14	10-142	35 vo
Naphthalene	mg/kg (ppm)	2.5	35	0 b	0 b	14-157	nm
1,2,3-Trichlorobenzene	mg/kg (ppm)	2.5	<0.25	23	17 vo	20-144	30 vo

Date of Report: 04/20/17
Date Received: 04/17/17
Project: 2016-023B, F&BI 704271

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

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Dichlorodifluoromethane	mg/kg (ppm)	2.5	59	10-146
Chloromethane	mg/kg (ppm)	2.5	79	27-133
Vinyl chloride	mg/kg (ppm)	2.5	84	22-139
Bromomethane	mg/kg (ppm)	2.5	83	38-114
Chloroethane	mg/kg (ppm)	2.5	83	10-163
Trichlorofluoromethane	mg/kg (ppm)	2.5	88	10-196
Acetone	mg/kg (ppm)	12.5	127	52-141
1,1-Dichloroethene	mg/kg (ppm)	2.5	103	47-128
Hexane	mg/kg (ppm)	2.5	109	43-142
Methylene chloride	mg/kg (ppm)	2.5	102	42-132
Methyl t-butyl ether (MTBE)	mg/kg (ppm)	2.5	105	60-123
trans-1,2-Dichloroethene	mg/kg (ppm)	2.5	105	67-127
1,1-Dichloroethane	mg/kg (ppm)	2.5	102	68-115
2,2-Dichloropropane	mg/kg (ppm)	2.5	104	52-170
cis-1,2-Dichloroethene	mg/kg (ppm)	2.5	102	72-113
Chloroform	mg/kg (ppm)	2.5	101	66-120
2-Butanone (MEK)	mg/kg (ppm)	12.5	109	57-123
1,2-Dichloroethane (EDC)	mg/kg (ppm)	2.5	100	56-135
1,1,1-Trichloroethane	mg/kg (ppm)	2.5	96	62-131
1,1-Dichloropropene	mg/kg (ppm)	2.5	102	69-128
Carbon tetrachloride	mg/kg (ppm)	2.5	96	60-139
Benzene	mg/kg (ppm)	2.5	102	68-114
Trichloroethene	mg/kg (ppm)	2.5	98	64-117
1,2-Dichloropropane	mg/kg (ppm)	2.5	103	72-127
Bromodichloromethane	mg/kg (ppm)	2.5	96	72-130
Dibromomethane	mg/kg (ppm)	2.5	99	70-120
4-Methyl-2-pentanone	mg/kg (ppm)	12.5	99	45-145
cis-1,3-Dichloropropene	mg/kg (ppm)	2.5	102	75-136
Toluene	mg/kg (ppm)	2.5	108	66-126
trans-1,3-Dichloropropene	mg/kg (ppm)	2.5	107	72-132
1,1,2-Trichloroethane	mg/kg (ppm)	2.5	105	75-113
2-Hexanone	mg/kg (ppm)	12.5	109	33-152
1,3-Dichloropropane	mg/kg (ppm)	2.5	105	72-130
Tetrachloroethene	mg/kg (ppm)	2.5	102	72-114
Dibromochloromethane	mg/kg (ppm)	2.5	99	74-125
1,2-Dibromoethane (EDB)	mg/kg (ppm)	2.5	104	74-132
Chlorobenzene	mg/kg (ppm)	2.5	104	76-111
Ethylbenzene	mg/kg (ppm)	2.5	105	64-123
1,1,1,2-Tetrachloroethane	mg/kg (ppm)	2.5	99	69-135
m,p-Xylene	mg/kg (ppm)	5	105	78-122
o-Xylene	mg/kg (ppm)	2.5	104	77-124
Styrene	mg/kg (ppm)	2.5	104	74-126
Isopropylbenzene	mg/kg (ppm)	2.5	104	76-127
Bromoform	mg/kg (ppm)	2.5	91	56-132
n-Propylbenzene	mg/kg (ppm)	2.5	108	74-124
Bromobenzene	mg/kg (ppm)	2.5	104	72-122
1,3,5-Trimethylbenzene	mg/kg (ppm)	2.5	107	76-126
1,1,2,2-Tetrachloroethane	mg/kg (ppm)	2.5	111	56-143
1,2,3-Trichloropropane	mg/kg (ppm)	2.5	104	61-137
2-Chlorotoluene	mg/kg (ppm)	2.5	109	74-121
4-Chlorotoluene	mg/kg (ppm)	2.5	106	75-122
tert-Butylbenzene	mg/kg (ppm)	2.5	106	73-130
1,2,4-Trimethylbenzene	mg/kg (ppm)	2.5	104	76-125
sec-Butylbenzene	mg/kg (ppm)	2.5	106	71-130
p-Isopropyltoluene	mg/kg (ppm)	2.5	106	70-132
1,3-Dichlorobenzene	mg/kg (ppm)	2.5	105	75-121
1,4-Dichlorobenzene	mg/kg (ppm)	2.5	104	74-117
1,2-Dichlorobenzene	mg/kg (ppm)	2.5	102	76-121
1,2-Dibromo-3-chloropropane	mg/kg (ppm)	2.5	88	58-138
1,2,4-Trichlorobenzene	mg/kg (ppm)	2.5	104	64-135
Hexachlorobutadiene	mg/kg (ppm)	2.5	107	50-153
Naphthalene	mg/kg (ppm)	2.5	92	63-140
1,2,3-Trichlorobenzene	mg/kg (ppm)	2.5	99	63-138

Data Qualifiers & Definitions

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

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

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

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

cf - The sample was centrifuged prior to analysis.

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

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

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

fc - The 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.

704271

SAMPLE CHAIN OF CUSTODY

ME 04/17/17 VS2/CO2

Page # 1 of 1

Report To Anna Jordan

Company Riley Group

Address 17522 Bothell Way NE

City, State, ZIP Bothell, WA 98011

Phone 4254150551 Email AJordan@riley-group.com

SAMPLERS (*signature*) Anna Jordan

PROJECT NAME: 2016-0233

PO #:

REMARKS: *silicagel

INVOICE TO:

TURNAROUND TIME
- ☐ Standard Turnaround
- ☒ RUSH 24hr

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: TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM					Notes
TP1-1.5	01 A-E	4/17/17	3:15	SOIL	5		X	X		X							X - per AJ
TP2-2	02		3:20				X	X		X							4/18/17
TP3-2	03		3:30				X	X		X							MG
TP4-2.5	04		3:35				X	X		X							
TP5-1.5	05		3:45				X	X		X							
TP6-1.5	06		3:50				X	X		X							

Samples received at 11 °C

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: Anna Jordan	Anna Jordan	RGI	4/17/17	4:50
Received by:	Jon Shimmin	FBI	4	4
Relinquished by:				
Received by:				

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

King County
Department of Permitting
and Environmental Review
35030 SE Douglas St., Ste. 210
Snoqualmie, WA 98065-9266
206-296-6600 TTY Relay 711

FIRE PERMIT - SYSTEMS & EVENTS

Permit type, Subtype:	Fire Permit Systems, Tank
Title:	SEAMAR COMMUNITY HEALTH CENTERS UNDERGROUND OIL TANK
Description:	INSTALL (1) 500 GALLON COMMERCIAL UNDERGROUND OIL TANK FOR AN EXISTING HEALTH CENTER
Location:	LOT 21-22 MOORES FIVE-ACRE TRS
List of Parcels:	5624200371
Site Address:	9635 DES MOINES MEMORIAL DR S 98108
Valuation:	$0.00
Applicant Name:	LANGSETH ENVIRONMENTAL SERVICES, INC
Applicant Address:	GAIL LANGSETH 7517 PORTLAND AVE TACOMA, WA 98404

Permit Number:	FIRP17-0171
Date Issued:	05/12/2017
Expiration Date:	5/12/2018
Permit Status:	Permit Issued

Comments and Conditions

1. **Work Subject to Approved Plans and Conditions.** Work Authorized by this permit is subject to the approved plans and corrections shown thereon and the attached conditions of permit approval. Failure to comply with all conditions once construction is begun may necessitate an immediate work stoppage until such time as compliance with the stipulated conditions is attained.

2. **Posting on the job site.** This permit must be posted on the job site at all times in a visible and readily accessible location.

3. **Permit Status & Inspections; Scheduling, Est. Arrival Times* & Results.** (*Building only)

Online: aca.accela.com/kingcounty

Inspection cutoff: 3:00 pm for next day inspections. Fire Inspection and land use requests will be confirmed and scheduled by a return phone call. Additional inspection information including IVR/Web info: http://www.kingcounty.gov/property/permits/info/inspections.aspx. Written inspection results left at the job site will be phased out.

IVR: 1-888-546-7728 - Inspection Help: 206-296-6630

4. **Expiration.** Please note the expiration date on this permit located in the upper right corner. Permits are valid for one year from date of issuance or date of extension. Work must be substantially commenced within two years of permit issuance. Extensions beyond the third year shall only be granted to allow completion of the structure.

5. **Compliance with State and Federal laws and the Endangered Species Act.** The applicant is responsible for making a diligent inquiry regarding the need for concurrent state or federal permits to engage in the Work requested under this permit, and to obtain the required permits prior to issuance of this permit. It is understood that the granting of this permit shall not be construed as satisfying the requirements of other applicable Federal, State or Local laws or regulations. In addition this permit does not authorize the violation of regulations. In addition, the granting of this permit does not authorize the violation such "take" restrictions would be violated by work done pursuant to this permit, and is precluded by Federal law from undertaking work authorized by this permit if that work would violate the "take" restrictions set forth at 16 U.S.C. 8, 50 C.F.R. §17.21, 50 C.F.R. §223 and 50 C.F.R §224.

King County

Department of Permitting
and Environmental Review
35030 SE Douglas St., Ste. 210
Snoqualmie, WA 98065-9266
206-296-6600 TTY Relay 711

Permit: **FIRP17-0171**
Date Issued: 05/12/2017
Expiration Dat 5/12/2018
Permit Status: Permit Issued

FIRE INSPECTION REPORT CARD

New Construction Fire Inspection 24-Hour Request Line **1-888-546-7728**
New Construction Fire Inspection General Information 206-296-6630

APPROVALS: (Followed by 3-digit inspection codes for use with the inspection Request Line)

1. Placement - Tank (291) Removed By: 6-13-17	**2. Device Placement (259)** By:	**3. Nozzle/Head Placement (283)** By:	**4. Flow/Trip Test (273)** By:
5. Device/Panel Test (261) By:	**6. Flush Test (274)** By:	**7. Run Test (191)** By:	**8. Pressure Test (168)** By:
9. Insulation Cover (280) By:	**10. Rack/Pile Inspection (298)** By:	**11. Emergency Shut Off (067)** By:	**12. Underground (235)** By:
13. Hydrant/Watermain (245) By:	**14. Other (134)** By:	**15. Final Acceptance (077)** 6-13-17 By:	

Notes:
Paperwork Provide - being Taken out of King Co

ALL PERMITS:

a) Responsibility for the building's compliance with the provisions of the applicable King County Codes and for maintenance of the building rests exclusively with the permit applicants and their agents and the property owners.

b) King County inspection of the building and real property are spot checks designed to foster and encourage compliance with the applicable codes. Neither the approvals above nor the issuance of a Certificate of Occupancy guarantees or assures compliance with all applicable codes.

c) The Owner/Applicant's copy of any applicable manufacturer's installation instructions, the approved set of plans, and the permit shall be available at the time of inspection.

SOUND TESTING, INC.
206-932-0206
24 HOUR SERVICE

MARINE CHEMIST CERTIFICATE

SERIAL NO. P 007133

Page 1 of 1

LANGSETH ENVIRONMENTAL	—	JUNE 13, 2017
Survey Requested by	Vessel Owner or Agent	Date
675g UST	UST	SEATTLE 9635 DES MOINES. MEM.
Vessel	Type of Vessel	Specific Location of Vessel
HEATING OIL X3	O_2=20.9%, LEL=0%, VISUAL	8:45 AM
Last Three (3) Loadings	Tests Performed	Time Survey Completed

675g UST

SAFE FOR EXCAVATION

SAFE FOR TRANSPORT

TANK IS OPEN TO THE ATMOSPHERE.

In the event of physical or atmospheric changes affecting the STANDARD SAFETY DESIGNATIONS assigned to any of the above spaces, this certificate is voided; spaces not listed on the Certificate are not to be entered unless authorized on another Certificate and/or maintained in accordance with OSHA 29 CFR 1915; or if in any doubt, immediately stop all work and contact the undersigned Marine Chemist. Unless otherwise stated on the Certificate, all spaces and affected adjacent spaces are to be reinspected daily or more often as necessary by the competent person in support of work prior to entry or recommencement of work:

QUALIFICATIONS: Transfer of ballast, cargo, fuel, or manipulation of valves or closure equipment tending to alter conditions in pipelines, tanks, or compartments subject to gas accumulation, unless specifically approved on this Certificate, requires inspection and a new Certificate for spaces so affected. All lines, vents, heating coils, valves, and similar enclosed appurtenances shall be considered "not safe" unless otherwise specifically designated. Movement of the vessel from its specific location voids the Certificate unless shifting of the vessel within the facility has been specifically authorized on this Certificate.

STANDARD SAFETY DESIGNATIONS: (partial list, paraphrased from NFPA 306).

ATMOSPHERE SAFE FOR WORKERS: In the compartment or space so designated (a) the oxygen content of the atmosphere is at least 19.5 percent and not greater than 22 percent by volume; (b) the concentration of flammable materials is below 10 percent of the lower explosive limit; (c) any toxic materials in the atmosphere associated with cargo, fuel, tank coatings, inerting mediums, or fumigants are within permissible concentrations at the time of the inspection.

NOT SAFE FOR WORKERS: In the compartment or space so designated, entry is not permitted.

ENTER WITH RESTRICTIONS: In the compartment or space so designated, entry for work is permitted only if conditions of proper protective equipment, or clothing, or time, or all of the aforementioned, as appropriate, are as specified.

SAFE FOR HOT WORK: In the compartment or space so designated (a) the oxygen content of the atmosphere is not greater than 22 percent by volume; (b) the concentration of flammable materials in the atmosphere is less than 10 percent of the lower explosive limit; (c) the residues, scale, or preservative coatings are cleaned sufficiently to prevent the spread of fire and are not capable of producing a higher concentration than permitted by (a) or (b); (d) all adjacent spaces, containing or having contained flammable or combustible materials shall be sufficiently cleaned of residues, scale, or preservative coatings to prevent the spread of fire, or they are inerted. Ship's fuel tanks, lube tanks, or engine room or fire room bilges, or other machinery spaces, are treated in accordance with the Marine Chemist's requirements.

SAFE FOR LIMITED HOT WORK: In the compartment or space so designated (a) portions of the space meet the requirements for Safe for Hot Work and Partial Cleaning, as applicable, or (b) the space is inerted, adjacent spaces meet the requirements for Safe for Hot Work, and hot work is restricted to specific locations; (c) portions of the space shall meet the requirements for Safe for Hot Work, as applicable, and the nature or type of hot work is limited or restricted.

NOT SAFE FOR HOT WORK: In the compartment or space so designated, hot work is not permitted.

CHEMISTS ENDORSEMENT. This is to certify that I have personally determined that all spaces in the foregoing list are in accordance with NFPA 306 Control of Gas Hazards on Vessels and have found the condition of each to be in accordance with its assigned designation.

"The undersigned acknowledges receipt of this Certificate under NFPA 306 and understands conditions and limitations under which it was issued, and the requirements for maintaining its validity."

This Certificate is based on conditions existing at the time the inspection herein set forth was completed and is issued subject to compliance with all qualifications and instructions.

Signed [signature] TOM LANGSETH — Name — LANGSETH ENVIRONMENTAL — Company — 6/13/17 — Date

Signed [signature] — Marine Chemist — № 706 — Certificate No

POSTING COPY

SOUND TESTING, INC.
206-932-0206

Printed in U.S.A.

Langseth
ENVIRONMENTAL SERVICES, INC.

DISPOSAL CERTIFICATION

June 18, 2017

To: Fenix Earthworks
Gordon Juhl
18275 SR 410, #103
Bonney Lake, WA 98391

To whom it may concern,

This letter is to certify that Langseth Environmental Services, Inc. has received the following tank for cleaning and disposal in accordance with all federal, state, and local rules / regulations.

One (1) 675 - Gallon Underground Waste Oil Storage Tank Sized at 46" X 96"

Date Received:	6-13-17
Date Cleaned:	6-15-17
Date of Disposal:	6-15-17
Method of Disposal:	Scrap Steel (Schnitzer Steel)
Tank Location:	9635 Des Moines Memorial Dr. S Seattle, WA 98108

If you have any questions or request for services, please feel free to contact this office at (253) 536-6961.

Sincerely,

Tom Langseth
Licensed Decommissioning Supervisor
Langseth Environmental Services, Inc.

7517 Portland Avenue, Suite A, Tacoma, WA 98404 • Phone: (253) 536-6961 • Fax: (253) 548-0201
LangsethEnviro@gmail.com

DEPARTMENT OF ECOLOGY
State of Washington

PERMANENT CLOSURE NOTICE
FOR UNDERGROUND STORAGE TANKS

UST ID #: _____

County: _____

This notice certifies that permanent closure activities were performed and conducted in accordance with Chapter 173-360 WAC. Instructions are found on the back page.

I. UST FACILITY		II. OWNER/OPERATOR INFORMATION		
Facility Compliance Tag #:		Owner/Operator Name:		
UST ID #:		Business Name:		
Site Name:		Address:		
Site Address:		City:	State:	Zip:
City:		Phone:		
Phone:		Email:		

III. CERTIFIED UST DECOMMISSIONER				
Company Name: **Langseth Environmental Svcs, Inc.**			Service Provider Name: **Tom Langseth**	
Address: **7517 Portland Ave E**			Certification Type: **ICC**	
City: **Tacoma**	State: **WA**	Zip: **98404**	Cert. No.: **910875**	Exp. Date: **1-20-19**
Provider Phone: **253.536.6961**			Provider Email: **Langsethenviro@gmail.com**	
Provider Signature:			***Date:*** **6-18-17**	

IV. TANK INFORMATION

TANK ID	TANK CAPACITY	LAST SUBSTANCE STORED	CLOSURE METHOD			CLOSURE DATE
			removal	closed-in-place	change-in-service	
	675	**Waste oil**	X	☐	☐	**6-13-17**
			☐	☐	☐	
			☐	☐	☐	
			☐	☐	☐	
			☐	☐	☐	
			☐	☐	☐	

V. REQUIRED SIGNATURE

Signature acknowledges UST(s) comply with UST regulation WAC 173-360-380 Permanent Closure Requirements.

Date	Signature of Tank Owner/Operator or Authorized Representative	Print or Type Name

ECY 020-94 (July 2014)

PERMANENT CLOSURE NOTICE
FOR UNDERGROUND STORAGE TANKS

INSTRUCTIONS

This form must be completed and submitted **within thirty days of completing** permanent closure activities to the following address:

Dept. of Ecology
UST Section
PO Box 47655
Olympia, WA 98504-7655

I./II. UST Facility and Owner/Operator: Fill out these sections completely. If you do not know your UST ID number, include the facility compliance tag number. If all tanks at the site are permanently closed, the facility compliance tag must be returned with this notice.

III. UST Decommissioner: It is the responsibility of the ICC-certified Decommissioner to follow proper tank closure procedures in accordance with WAC 173-360-375. The Decommissioner signature certifies these procedures were followed.

IV. Tank Information: Use the same Tank IDs that are listed on the facility's Business License. List the last substance stored in each tank, the tank sizes, the method by which the tank is being closed, and the date closure activities were conducted. All closure methods require a site assessment be conducted in accordance with Ecology's *Guidance for Site Checks and Site Assessments for Underground Storage Tanks.*

V. Required Signature: The owner and/or operator's signature is required. Also, the owner and/or operator is responsible for reporting confirmed releases to Ecology within 24 hours.

All confirmed releases must be reported to Ecology by the owner immediately and by service providers within 72 hours of the discovery of the condition. If the owner or operator is not immediately available, the report should be made directly to Ecology.

Be sure to contact your local fire marshal and other local jurisdictions. They may have other codes and regulations that apply to a permanent tank closure.

Further questions? *Please contact your regional office below and ask for a tank inspector to assist you.*

Regional Office	Counties Served
Central (509) 575-2490	Benton, Chelan, Douglas, Kittitas, Klickitat, Okanogan, Yakima
Eastern (509) 329-3400	Adams, Asotin, Columbia, Ferry, Franklin, Garfield, Grant, Lincoln, Pend Oreille, Spokane, Stevens, Walla Walla, Whitman
HQ (360) 407-7170	Federal facilities in Western Washington
Northwest (425) 649-7000	Island, King, Kitsap, San Juan, Skagit, Snohomish, Whatcom
Southwest (360) 407-6300	Clallam, Clark, Cowlitz, Grays Harbor, Jefferson, Lewis, Mason, Pacific, Pierce, Skamania, Thurston, Wahkiakum

or find a complete list of UST inspectors at:
www.ecy.wa.gov/programs/tcp/ust-lust/people.html

DEPARTMENT OF ECOLOGY
State of Washington

30-DAY NOTICE
FOR UNDERGROUND STORAGE TANKS

UST ID #: _____
County: _____

This form provides Ecology 30-days' advanced notice for the following projects, as required by Chapter 173-360 WAC. Instructions are found on the back page.

Please ✓ the appropriate box: ☐ Intent to Install ☒ Intent to Close ☐ Change-In-Service

I. SITE INFORMATION	II. OWNER/OPERATOR INFORMATION
Tag or UBI # (if applicable):	Owner/Operator Name:
UST ID # (if applicable):	Business Name: SEA MAR COMMUNITY HEALTH CENTERS
Site Name: SEA MAR COMMUNITY HEALTH CENTER DOMINIC'S PLAZA	Mailing Address: 1040 S HENDERSON ST
Site Address: 9635 DES MOINES MEMORIAL DR S. City: SEATTLE State: WA Zip: 98108	
City: SEATTLE	Phone: 206 · 763 · 5277
Phone:	Email:

III. CERTIFIED SERVICE PROVIDER(S)

Check the appropriate boxes. If more than one service provider is required for this project, fill out both sections.

Note: Individuals performing UST services MUST be ICC-certified or have passed another qualifying exam approved by the Department of Ecology.

1) ☐ Installer ☐ Decommissioner ☒ Site Assessor	
Company Name: THE RILEY GROUP	Certification Type: UST SITE ASSESSOR
Service Provider Name: AMELIA OATES	Cert. No.: 8708675 Exp. Date: 12/2018
Provider Phone: 425 · 415 · 0551	Provider Email: aoates@riley-group.com

2) ☐ Installer ☐ Decommissioner ☐ Site Assessor	
Company Name: LANGSETH ENVIRONMENTAL	Certification Type: UST DECOMMISSIONING
Service Provider Name: THOMAS LANGSETH	Cert. No.: 910875 Exp. Date: 01/2019
Provider Phone: 253 · 536 · 6961	Provider Email: langsetheniro@gmail.com

IV. TANK INFORMATION

TANK ID	SUBSTANCE STORED	TANK CAPACITY	DATE PROJECT IS EXPECTED TO BEGIN	COMMENTS
UST # 1	UNKNOWN	EST. 700 GAL	5/30/2017	This project is approved to proceed immediately. Andrew A. Rankis, Senior UST Inspector 5/16/2017

RILEYGROUP

May 15, 2017

Mr. Drew Imke
Tank Site Inspector
Washington State Department of Ecology
3190 160th Avenue Southeast
Bellevue, Washington 98008-5452

RE: UST Removal 30-Day Notice – Waiver Request
Sea Mar Community Health Center
9635 Des Moines Memorial Drive South
Seattle, Washington 98108
RGI Project No. 2016-023A

Dear Mr. Imke,

On behalf of Sea Mar Community Health Centers, please find attached our completed 30-Day Notice to properly decommission and remove one out-of-service USTs located on the above-referenced Property.

RGI understands that Sea Mar Community Health Center is in the process of renovating and expanding an existing building and the UST needs to be addressed in a timely manner. In addition, RGI understands that Lincoln Construction and Fenix Earthworks are performing/planning the installation of a storm water detention vault in the project area and the sooner the UST can be addressed the better. Therefore, RGI requests a waiver of the 30-Day Notice period.

Lincoln Construction has contracted Langseth Environmental (Langseth) to perform the UST decommissioning and removal services.

Please contact the undersigned at (425) 415-0551 should you have any questions or need additional information.

Sincerely,
THE RILEY GROUP, INC.

Anna J. Jordan

Anna J. Jordan, LG
Project Geologist

Attachment: *UST 30-Day Notice*

cc: *Mr. Mike Leong, Sea Mar Community Health Center (regular U.S. Mail)*

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

www.riley-group.com

Imke, Andrew (ECY)

From: Anna Jordan <AJordan@Riley-Group.com>
Sent: Tuesday, May 16, 2017 10:10 AM
To: Imke, Andrew (ECY)
Subject: 30 Day UST Notice and Waiver request
Attachments: 30 Day notice and waiver request.pdf

Good morning, Mr. Imke,

Please see the attached 30-Day Notice for UST removal as well as a waiver request for the property located at 9635 Des Moines Memorial Drive South, Seattle, WA. An abandoned UST was uncovered during excavation activities as part of the renovation and redevelopment of the property.

Please let me know if you have any questions or need any additional information.

Thank you,

Anna Jordan, LG, RG | Project Geologist | ajordan@riley-group.com
Office: 425-415-0551 | Fax: 425-415-0311 | Cell: 206-949-3010

17522 Bothell Way NE
Bothell, Washington 98011
RILEYGROUP *Dynamic firm. Creative solutions.*

Ro♦Con
Equipment Specialists
P.O. Box 1008 · Black Diamond, WA 98010
Bus: 253-631-7833 Fax: 253-638-1673

DELIVERY NO. 18352

DATE: [illegible]

CUSTOMER: Fenix Sonner

PROJECT: 9635 Diamond Way

PROJECT NO.:

RENTAL CO.:

TRUCK NO.: 23

SOLO:

T&T: [illegible]

LOAD NO#	TIME LOADED	MATERIAL HAULED	MATERIAL LOADED FROM	MATERIAL DELIVERED TO	TIME UNLOADED	LOAD SIZE	STANDBY TIME
1	715	Dirt Contaminated	Fenix	Contaminated		24	

6 HR Min

NOTES: 1. RO-CON EQUIPMENT SPECIALISTS will not be held responsible for damage caused by delivery inside curb line and/or property line.
2. Customer assumes all responsibility for towing cost if truck has to be towed.

Driver: Bill T

Accepted by: [signature]

Time Start | Standby
Time End | Standby

TOTAL HOURS 6

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Equipment Specialists
P.O. Box 1008 · Black Diamond, WA 98010
Bus: 253-631-7833 Fax: 253-638-1673

DELIVERY NO. 18353

DATE: 4/17/17

CUSTOMER: Fenix

PROJECT: 9635 Diamond Meadow

PROJECT NO.:

RENTAL CO.:

TRUCK NO.: 25

SOLO:

T&T: T 25

LOAD NO#	TIME LOADED	MATERIAL HAULED	MATERIAL LOADED FROM	MATERIAL DELIVERED TO	TIME UNLOADED	LOAD SIZE	STANDBY TIME
1	715	Dirt Contaminated	Fenix	Contaminated			

6 HR min

NOTES: 1. RO-CON EQUIPMENT SPECIALISTS will not be held responsible for damage caused by delivery inside curb line and/or property line.
2. Customer assumes all responsibility for towing cost if truck has to be towed.

Driver: Brenner

Accepted by: [signature]

Time Start | Standby
Time End | Standby

TOTAL HOURS 6 HRS

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DELIVERY NO. 18351

DATE: 4/17/17

CUSTOMER: Fenix

PROJECT: 9635 Desmond Dr SE PROJECT NO.: South Park

RENTAL CO. | TRUCK NO.: 27 | SOLO | T&T: T27

LOAD NO#	TIME LOADED	MATERIAL HAULED	MATERIAL LOADED FROM	MATERIAL DELIVERED TO	TIME UNLOADED	LOAD SIZE	STANDBY TIME
1	715	Dirt	Fenix	~~Continental~~		24	
				RCDS 1			
X		~~Dirt~~	~~Fenix~~	~~RCDS~~		~~24~~	
		Load Cancelled					
				6 HRS			
				6 min			

NOTES:
1. RO-CON EQUIPMENT SPECIALISTS will not be held responsible for damage caused by delivery inside curb line and/or property line.
2. Customer assumes all responsibility for towing cost if truck has to be towed.

Driver: Bill T. Anderson	Time Start 715	Standby
Accepted by:	Time End	Standby

TOTAL HOURS: 6

Ro•Con Equipment Specialists

P.O. Box 1008 · Black Diamond, WA 98010
Bus: 253-631-7833 Fax: 253-638-1673

DELIVERY NO. 18354

DATE: 4/17/17

CUSTOMER: Fenix Seamon

PROJECT: 9635 Desmond Dr SE PROJECT NO.:

RENTAL CO. | TRUCK NO.: 18 | SOLO | T&T: Subcontract

LOAD NO#	TIME LOADED	MATERIAL HAULED	MATERIAL LOADED FROM	MATERIAL DELIVERED TO	TIME UNLOADED	LOAD SIZE	STANDBY TIME
1	715	Dirt	Fenix				
		Condemned		Continental			
				6 HR			
				6 Min			

NOTES:
1. RO-CON EQUIPMENT SPECIALISTS will not be held responsible for damage caused by delivery inside curb line and/or property line.
2. Customer assumes all responsibility for towing cost if truck has to be towed.

Driver: Dave	Time Start	Standby
Accepted by:	Time End	Standby

TOTAL HOURS: 6 HR 6 Min

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DELIVERY

NO. 17276

DATE: 4/17/17

CUSTOMER: Fenixx Seamar

PROJECT: 50th Park 9635 DM Dr PROJECT NO.

RENTAL CO. TRUCK NO. 93 SOLO T&T SD

LOAD NO#	TIME LOADED	MATERIAL HAULED	MATERIAL LOADED FROM	MATERIAL DELIVERED TO	TIME UNLOADED	LOAD SIZE	STANDBY TIME
1		Dirt				24	

6 hr.

NOTES: 1. RO-CON EQUIPMENT SPECIALISTS will not be held responsible for damage caused by delivery inside curb line and/or property line.
2. Customer assumes all responsibility for towing cost if truck has to be towed.

Driver: Ron Roehl — Time Start 700 — Standby

Accepted by: [illegible signature] — Time End 100 — Standby

TOTAL HOURS 7.0

Ro♦Con *Equipment Specialists*

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Bus: 253-631-7833 Fax: 253-638-1673

DELIVERY

NO. 18756

DATE: 4-17-17

CUSTOMER: Fenix / Seamar

PROJECT: 9635 Des Moines Dr. PROJECT NO.

RENTAL CO. TRUCK NO. 25 SOLO T&T X

LOAD NO#	TIME LOADED	MATERIAL HAULED	MATERIAL LOADED FROM	MATERIAL DELIVERED TO	TIME UNLOADED	LOAD SIZE	STANDBY TIME
1	7:00	Dirt	Des Moines	RCDS #1			

6 hr Minimum

NOTES: 1. RO-CON EQUIPMENT SPECIALISTS will not be held responsible for damage caused by delivery inside curb line and/or property line.
2. Customer assumes all responsibility for towing cost if truck has to be towed.

Driver: [illegible signature] — Time Start — Standby

Accepted by: [illegible signature] — Time End — Standby

TOTAL HOURS

Ro•Con
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DELIVERY

NO. 23706

P.O. Box 1008 • Black Diamond, WA 98010
Bus: 253-631-7833 Fax: 253-638-1673

DATE: 4-17-17

CUSTOMER: Fenix - SeMAR

PROJECT: 9635 dis Moines DR

PROJECT NO.

RENTAL CO.

TRUCK NO.: 007

SOLO: No

T&T: SD

LOAD NO#	TIME LOADED	MATERIAL HAULED	MATERIAL LOADED FROM	MATERIAL DELIVERED TO	TIME UNLOADED	LOAD SIZE	STANDBY TIME
1		Dirt	dis Moines	RCD 1		24	

NOTES:
1. RO-CON EQUIPMENT SPECIALISTS will not be held responsible for damage caused by delivery inside the curb line and or property line.
2. Customer assumes all responsibility for towing cost if a truck has to be towed.

Driver X: [signature]

Accepted By: [signature]

Time Start: 700 Standby:

Time End: 100 Standby:

TOTAL HOURS: 6.0 M.N

Ro•Con
Equipment Specialists

DELIVERY

NO. 17266

P.O. Box 1008 · Black Diamond, WA 98010
Bus: 253-631-7833 Fax: 253-638-1673

DATE: 4/17/2017

CUSTOMER: Fenix 9635 removal

PROJECT: South Park Semar Drive

PROJECT NO.

RENTAL CO.

TRUCK NO.: (62)

SOLO:

T&T: tnt

LOAD NO#	TIME LOADED	MATERIAL HAULED	MATERIAL LOADED FROM	MATERIAL DELIVERED TO	TIME UNLOADED	LOAD SIZE	STANDBY TIME
1	7:00	Dirt	9635	RCDS	1:00	24yd	
2							
3							
4							
5							
6							

NOTES:
1. RO-CON EQUIPMENT SPECIALISTS will not be held responsible for damage caused by delivery inside curb line and/or property line.
2. Customer assumes all responsibility for towing cost if truck has to be towed.

Driver: Keith Rood

Accepted by: [signature]

Time Start: 7:00 Standby:

Time End: 1:00 Standby:

TOTAL HOURS: 6 hrs

Ro•Con Equipment Specialists

DELIVERY NO. 17080

O. Box 1008 · Black Diamond, WA 98010
ıs: 253-631-7833 Fax: 253-638-1673

DATE: 5-5-2017

TOMER FENIX RGI # 2016-023B

JECT 9635 Des Moines Memorial Dr. S. PROJECT NO.

ITAL CO. TRUCK NO. 23 SOLO T&T

LOAD NO#	TIME LOADED	MATERIAL HAULED	MATERIAL LOADED FROM	MATERIAL DELIVERED TO	TIME UNLOADED	LOAD SIZE	STANDBY TIME
1	7.05	-200 P.P.M.	Des Moines	S. P.	9.30	[illegible]	31.25
2	12.00	-200 P.P.M.	Des Moines	S. P.	1.30	28.61	
3	3.15	-200 P.P.M.	Des Moines	S. P.	5.30	?27.69	

NOTES: 1. RO-CON EQUIPMENT SPECIALISTS will not be held responsible for damage caused by delivery inside curb line and/or property line.
2. Customer assumes all responsibility for towing cost if truck has to be towed.

Driver: John Parker Time Start 7.05 Standby

Accepted by: Time End 5.30 Standby

TOTAL HOURS

Ro•Con Equipment Specialists

DELIVERY NO. 17047

P.O. Box 1008 · Black Diamond, WA 98010
Bus: 253-631-7833 Fax: 253-638-1673

DATE: 5-5-17

CUSTOMER Fenix RGI 2016-023B

PROJECT 9635 Des Moines Memorial DR. S PROJECT NO.

RENTAL CO. TRUCK NO. 18 SOLO T&T

LOAD NO#	TIME LOADED	MATERIAL HAULED	MATERIAL LOADED FROM	MATERIAL DELIVERED TO	TIME UNLOADED	LOAD SIZE	STANDBY TIME
1	700	200 PPM	Des Moines	S P	935	31.85	
2	1150	200 PPM	Des Moines	S P	130	29.47	
3	300	200 PPM	Des Moines	SP	520	30.05	

NOTES: 1. RO-CON EQUIPMENT SPECIALISTS will not be held responsible for damage caused by delivery inside curb line and/or property line.
2. Customer assumes all responsibility for towing cost if truck has to be towed.

Driver: Time Start 700 Standby

Accepted by: Time End 520 Standby

TOTAL HOURS

Ro•Con Equipment Specialists

DELIVERY NO. 19832

P.O. Box 1008 · Black Diamond, WA 98010
Bus: 253-631-7833 Fax: 253-638-1673

DATE: 5/5/17

CUSTOMER: Fenix Const. RGI 2016023b

PROJECT: 9635 Des Moines Drive South PROJECT NO. Seattle

RENTAL CO. | TRUCK NO. 27 | SOLO | T&T —

LOAD NO#	TIME LOADED	MATERIAL HAULED	MATERIAL LOADED FROM	MATERIAL DELIVERED TO	TIME UNLOADED	LOAD SIZE	STANDBY TIME
1	815	Dirt -200PPM	Fenix	SP	1015	28 1/2	
2	1135	-200PPM	Fenix	SP	120	32	
3	245	Dirt -200PPM	Fenix	SP	530	25-28	

NOTES: 1. RO-CON EQUIPMENT SPECIALISTS will not be held responsible for damage caused by delivery inside curb line and/or property line.
2. Customer assumes all responsibility for towing cost if truck has to be towed.

Driver: Bill Thordarson | Time Start 815 | Standby
Accepted by: | Time End 530 | Standby

TOTAL HOURS 9 1/4

Ro•Con Equipment Specialists

DELIVERY NO. 17247

P.O. Box 1008 · Black Diamond, WA 98010
Bus: 253-631-7833 Fax: 253-638-1673

DATE: 5-5-2017

CUSTOMER: Fenix

PROJECT: 9635 Des Moines Memorial Drive S RGI 2016-023 PROJECT NO.

RENTAL CO. | TRUCK NO. 515 | SOLO | T&T

LOAD NO#	TIME LOADED	MATERIAL HAULED	MATERIAL LOADED FROM	MATERIAL DELIVERED TO	TIME UNLOADED	LOAD SIZE	STANDBY TIME
1	7:36	-200 PPMS	RGI 2016-023D	Simpson Pit	9:35	37.15 ton	
2	11:13	-200 PPMS	RGI 2016-023D	SP	12:47	32.92 tons	
3	2:34	-200 PPMS	RGI 2016-023D	SP	5:00	32.77	

NOTES: 1. RO-CON EQUIPMENT SPECIALISTS will not be held responsible for damage caused by delivery inside curb line and/or property line.
2. Customer assumes all responsibility for towing cost if truck has to be towed.

Driver: Brennan | Time Start 7:36 | Standby
Accepted by: | Time End 5:00 | Standby

TOTAL HOURS

Ro•Con Equipment Specialists

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DELIVERY NO. 16007

DATE: 5-8-17

CUSTOMER: FINLEY

PROJECT: 9635 Des Moines Drive — PROJECT NO.: REF20160233

RENTAL CO. — TRUCK NO.: 007 — SOLO: NO — T&T: SP

LOAD NO#	TIME LOADED	MATERIAL HAULED	MATERIAL LOADED FROM	MATERIAL DELIVERED TO	TIME UNLOADED	LOAD SIZE	STANDBY TIME
1	715	-200PPMS	14th	SP	900	29.72	
2	1040	-200PPMS	14th	SP	1208	~~35~~ 30.44T	

NOTES: 1. RO-CON EQUIPMENT SPECIALISTS will not be held responsible for damage caused by delivery inside curb line and/or property line.
2. Customer assumes all responsibility for towing cost if truck has to be towed.

Driver: [signature]
Accepted by:

Time Start: 715 — Standby: 1208
Time End — Standby

TOTAL HOURS

Ro•Con Equipment Specialists

P.O. Box 1008 · Black Diamond, WA 98010
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DELIVERY NO. 19834

DATE: 5/8/17

CUSTOMER: Fenix Const.

PROJECT: 9635 Des Moines Memorial Drive — PROJECT NO.: RGI 20160236

RENTAL CO. — TRUCK NO.: 27 — SOLO — T&T: —

LOAD NO#	TIME LOADED	MATERIAL HAULED	MATERIAL LOADED FROM	MATERIAL DELIVERED TO	TIME UNLOADED	LOAD SIZE	STANDBY TIME
1	700	200 PPM	Fenix	SP	845	32.92	
2	955	-200 PPM	Fenix	SP	1130	37.40	
3	100	-200 PPM	Fenix	SP	230	36.84	

NOTES: 1. RO-CON EQUIPMENT SPECIALISTS will not be held responsible for damage caused by delivery inside curb line and/or property line.
2. Customer assumes all responsibility for towing cost if truck has to be towed.

Driver: Bill Theodorsen
Accepted by:

Time Start: 100 — Standby
Time End: 230 — Standby

TOTAL HOURS: 7 1/2

Ro•Con Equipment Specialists

. Box 1008 · Black Diamond, WA 98010
: 253-631-7833 Fax: 253-638-1673

DELIVERY NO. 17248

DATE: 5-8-2017

OMER Fennix RGI-2016-023D

CT 9635 Des Moiss memorial Dr. S seattle PROJECT NO.

AL CO. TRUCK NO. 625 SOLO T&T

AD #	TIME LOADED	MATERIAL HAULED	MATERIAL LOADED FROM	MATERIAL DELIVERED TO	TIME UNLOADED	LOAD SIZE	STANDBY TIME
	7:10	200ppms	9635 Des Moines Dr. memorial	SP	9:01	31.89 tons	
-	10:30	-200 ppms	Des Moine Dr.	SP	12:00	32.77 tons	
	1:30	-200ppms	Des Moines memorial Dr.S	SP	3:30	33.03 tons	

TES: 1. RO-CON EQUIPMENT SPECIALISTS will not be held responsible for damage caused by delivery inside curb line and/or property line.
2. Customer assumes all responsibility for towing cost if truck has to be towed.

ver: Brennan Mft Time Start 7:10 Standby

cepted by:- Time End 3:30 Standby

TOTAL HOURS

Ro•Con Equipment Specialists

P.O. Box 1008 · Black Diamond, WA 98010
Bus: 253-631-7833 Fax: 253-638-1673

DELIVERY NO. 18813

DATE: 5/8/17

CUSTOMER [redacted] Fennix

PROJECT 9635 desm men Dr PROJECT NO.

RENTAL CO. TRUCK NO. 18 SOLO T&T SD

LOAD NO#	TIME LOADED	MATERIAL HAULED	MATERIAL LOADED FROM	MATERIAL DELIVERED TO	TIME UNLOADED	LOAD SIZE	STANDBY TIME
1	706	200PPM	Seattle	Simpson	845	28.03	
2	1010	200ppm	Seattle	Simpson	1145	34.09	
3	105	200PPM	Seattle	Simpson	230	34.09	

NOTES: 1. RO-CON EQUIPMENT SPECIALISTS will not be held responsible for damage caused by delivery inside curb line and/or property line.
2. Customer assumes all responsibility for towing cost if truck has to be towed.

Driver: RON ROCPS Time Start Standby

Accepted by: Time End Standby

TOTAL HOURS

Ro•Con Equipment Specialists

DELIVERY NO. 17082

O. Box 1008 · Black Diamond, WA 98010
ıs: 253-631-7833 Fax: 253-638-1673

DATE: 5-8-2017

TOMER FENIX RGI #2016-023B

JECT 9635 Des Moines Memorial PROJECT NO. Dr. S.

ITAL CO. | TRUCK NO. 23 | SOLO | T&T ✓

OAD NO#	TIME LOADED	MATERIAL HAULED	MATERIAL LOADED FROM	MATERIAL DELIVERED TO	TIME UNLOADED	LOAD SIZE	STANDBY TIME
1	7.30	200 P.P.M-	Des Moines	S.P.	9.15	27.70	
2	10.45	200 P.P.M	Des Moines	S.P.	12.30	31.96	
3		200 P.P.M	Des Moines	S.P.			

NOTES: 1. RO-CON EQUIPMENT SPECIALISTS will not be held responsible for damage caused by delivery inside curb line and/or property line.
2. Customer assumes all responsibility for towing cost if truck has to be towed.

7.00

Driver: John Burke | Time Start | Standby

Accepted by: | Time End 12.30 | Standby

TOTAL HOURS

Ro•Con Equipment Specialists

DELIVERY NO. 17048

P.O. Box 1008 · Black Diamond, WA 98010
Bus: 253-631-7833 Fax: 253-638-1673

DATE: 5-8-17

CUSTOMER Fenix RGI 2016-023B

PROJECT 9635 Des Moines Memorial Dr PROJECT NO.

RENTAL CO. | TRUCK NO. 093 | SOLO | T&T Sidump

LOAD NO#	TIME LOADED	MATERIAL HAULED	MATERIAL LOADED FROM	MATERIAL DELIVERED TO	TIME UNLOADED	LOAD SIZE	STANDBY TIME
1	7.25	200 PPM	Des Moines	SP	905	28.44	
2	10.45	200 PPM	Des Moines	SP	1230	30.03	
3	canceled due to broken machine					30.05	

NOTES: 1. RO-CON EQUIPMENT SPECIALISTS will not be held responsible for damage caused by delivery inside curb line and/or property line.
2. Customer assumes all responsibility for towing cost if truck has to be towed.

Driver: [signature] | Time Start 7.25 | Standby

Accepted by: [signature] | Time End 2.00 | Standby

TOTAL HOURS

Ro•Con
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DELIVERY NO. 18957

DATE: 6-19-17

CUSTOMER: FeNIX

PROJECT: 9635 Des Moines Memorial Dr. PROJECT NO. RGI-2016-023D

RENTAL CO.: TRUCK NO: 25 SOLO: T&T: X

LOAD NO#	TIME LOADED	MATERIAL HAULED	MATERIAL LOADED FROM	MATERIAL DELIVERED TO	TIME UNLOADED	LOAD SIZE	STANDBY TIME
1	7:25	-200 P.P.M.	9635 Des Moines	RCD SP	9:15	37.12 T	
2	10:45	-200 PPM	9635 Des Moines	RCD SP	12:20	36.33 T	

NOTES: 1. RO-CON EQUIPMENT SPECIALISTS will not be held responsible for damage caused by delivery inside curb line and/or property line.
2. Customer assumes all responsibility for towing cost if truck has to be towed.

Driver: [signature] Time Start: 7:25 Standby:
Accepted by: Time End: Standby:

TOTAL HOURS:

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Equipment Specialists
P.O. Box 1008 · Black Diamond, WA 98010
Bus: 253-631-7833 Fax: 253-638-1673

DELIVERY NO. 16429

DATE: 6/19/2017

CUSTOMER: Fenix

PROJECT: 9635 Desmoinse memorial PROJECT NO. South Seattle

RENTAL CO.: TRUCK NO: 515 SOLO: T&T: tnt

LOAD NO#	TIME LOADED	MATERIAL HAULED	MATERIAL LOADED FROM	MATERIAL DELIVERED TO	TIME UNLOADED	LOAD SIZE	STANDBY TIME
1	8:00	-200PPM	RGI-2016-02D	RCDSP	10:15	42.09 TON	
2	11:25	-200 PPM	RGI-2016-02D	RCDSP	1:30	35.90	
3	3:00	-200 PPM	RGI-206-02D	RCDSP		36.46	

(3 loads)

NOTES: 1. RO-CON EQUIPMENT SPECIALISTS will not be held responsible for damage caused by delivery inside curb line and/or property line.
2. Customer assumes all responsibility for towing cost if truck has to be towed.

Driver: Keith Reed Time Start: 8:00 Standby:
Accepted by: [signature] Time End: 4:15 Standby:

TOTAL HOURS: 8.25

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Bus: 253-631-7833 Fax: 253-638-1673

DELIVERY NO. 18931

DATE: 06/19/17

CUSTOMER: Fenix

PROJECT: 9635 Des Moines Memorial Drive Seattle RGI-2016-023D

PROJECT NO.

RENTAL CO.

TRUCK NO.: 093

SOLO

T&T: 5. dt dump

LOAD NO#	TIME LOADED	MATERIAL HAULED	MATERIAL LOADED FROM	MATERIAL DELIVERED TO	TIME UNLOADED	LOAD SIZE	STANDBY TIME
1	7:30	-200 PPM	9635 Des Moines Drive	RCDSP	9:30	26.67 tons	
2	10:30	-200 PPM	9635 Des Moines	RCDSP	12:30	30.55 tons	
3	2:00	-200 PPM	9635 Des Moines	RCDSP	3:46	30.55 tons	

NOTES: 1. RO-CON EQUIPMENT SPECIALISTS will not be held responsible for damage caused by delivery inside curb line and/or property line.
2. Customer assumes all responsibility for towing cost if truck has to be towed.

Driver: Peter Weeks

Accepted by:

Time Start: 7:30 Standby:

Time End: 6:00 Standby:

TOTAL HOURS:

Ro•Con Equipment Specialists

P.O. Box 1008 · Black Diamond, WA 98010
Bus: 253-631-7833 Fax: 253-638-1673

DELIVERY NO. 16407

DATE: 6/19/17

CUSTOMER: Fenix RGI 2016-023D

PROJECT: 9635 Des Moines Memorial Drive

PROJECT NO.

RENTAL CO.

TRUCK NO.: 27

SOLO

T&T

LOAD ND#	TIME LOADED	MATERIAL HAULED	MATERIAL LOADED FROM	MATERIAL DELIVERED TO	TIME UNLOADED	LOAD SIZE	STANDBY TIME
1	700	-200 PPM	9635 Des Moines DR	RCDSP	900	3578	
2	1015	-200PPM	9635 DES Moines DR	RCDSP	1230	3445	
3	145	-200PPM	9635 DES Moines DR	RCDSP	420	3447	

NOTES: 1. RO-CON EQUIPMENT SPECIALISTS will not be held responsible for damage caused by delivery inside curb line and/or property line.
2. Customer assumes all responsibility for towing cost if truck has to be towed.

Driver: Bill Gardner

Accepted by:

Time Start: 700 Standby:

Time End: 200 Standby:

TOTAL HOURS:

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Equipment Specialists
P.O. Box 1008 · Black Diamond, WA 98010
Bus: 253-631-7833 Fax: 253-638-1673

DELIVERY NO. 19968

DATE: 6-19-17

CUSTOMER: FENIX

PROJECT: 9635 DES MOINES M. DR. RGT-20 PROJECT NO. 2016-0230

RENTAL CO. TRUCK NO. 625 SOLO T&T —

LOAD NO#	TIME LOADED	MATERIAL HAULED	MATERIAL LOADED FROM	MATERIAL DELIVERED TO	TIME UNLOADED	LOAD SIZE	STANDBY TIME
1	7:50	200 PPM	9635 D.M. DRY	RCDSP	9:40	32.37	
2	11:15	200 PPM	D.M. DRY.	RCDSP	1:00	32.45	
3	2:35	200 PPM	D.M. DRY	RCDSP	4:30	32.42	
						35.22	

NOTES: 1. RO-CON EQUIPMENT SPECIALISTS will not be held responsible for damage caused by delivery inside curb line and/or property line.
2. Customer assumes all responsibility for towing cost if truck has to be towed.

Driver: [signature]
Accepted by: [signature]

Time Start 7:00 | Standby
Time End | Standby

TOTAL HOURS 9.5

Ro♦Con
Equipment Specialists
P.O. Box 1008 · Black Diamond, WA 98010
Bus: 253-631-7833 Fax: 253-638-1673

DELIVERY NO. 16044

DATE: 6/19/17

CUSTOMER: Fenix

PROJECT: 9635 Des Moines Dr S PROJECT NO. RGJ20016

RENTAL CO. TRUCK NO. 18 SOLO T&T SD

LOAD NO#	TIME LOADED	MATERIAL HAULED	MATERIAL LOADED FROM	MATERIAL DELIVERED TO	TIME UNLOADED	LOAD SIZE	STANDBY TIME
1	740	200 PPm	9365 Des	RCDPS	936	27.91	
2	1108	200 PPm	9365 Dr Des moines	RCDPS	1249	30.70	
3	220	200 PPm	9365 Des moines	RCDPS	430	30.69	
						32.89	

NOTES: 1. RO-CON EQUIPMENT SPECIALISTS will not be held responsible for damage caused by delivery inside curb line and/or property line.
2. Customer assumes all responsibility for towing cost if truck has to be towed.

Driver: Ron Rack
Accepted by: [signature]

Time Start | Standby
Time End | Standby

TOTAL HOURS

Ro•Con
Equipment Specialists

P.O. Box 1008 · Black Diamond, WA 98010
Bus: 253-631-7833 Fax: 253-638-1673

DELIVERY NO. 17364

DATE: 6-19-2017

CUSTOMER FEMIX RGI-2016-023D

PROJECT 9635 Des Moines Mem. Drive PROJECT NO.

RENTAL CO. RCESP TRUCK NO. 023 SOLO T&T ✓

LOAD NO#	TIME LOADED	MATERIAL HAULED	MATERIAL LOADED FROM	MATERIAL DELIVERED TO	TIME UNLOADED	LOAD SIZE	STANDBY TIME
1	8.00	-200 P.P.M.	Des Moines	SIMPSIN	9.45	29.87	
2	11.00	-200 P.P.M.	Des Moines	SIMPSIN	12.30	24.88	
3	2.00	-200 P.P.M.	Des Moines	SIMPSIN	3.30	24.87	

NOTES: 1. RO-CON EQUIPMENT SPECIALISTS will not be held responsible for damage caused by delivery inside curb line and/or property line.
2. Customer assumes all responsibility for towing cost if truck has to be towed.

Driver: John Rueda

Accepted by:

Time Start 9.00 Standby

Time End Standby 2.00

TOTAL HOURS

FENIX
EARTHWORKS, LLC

PO BOX 677 Buckley, WA 98321
360.893.1821 admin@fenixearthworks.com

Date 6-19-17	Ticket # ✓
Truck # 1	Rate
Trailer # ✓	Rate
Driver DOUG P.	Rate
Start 7:00	Hours
Stop 4:30	Total
Voluntarily Waived Lunch ☒	Lunch

MATERIAL	FROM	TO	COUNT	HOURS
CONTAMINATED	SEA-MAR	RLDDS	1	30.1 TON
11	11	11	1	29 TON
11	11	11	1	31 TON
CLEANISH	SEA MAR	FRANKLIN RIDGE	1	32 TON

Driver Signature

Authorization Signature

Signature of this truck ticket will be considered your notice of our intent to lien this project.

FENIX
EARTHWORKS, LLC

PO BOX 677 Buckley, WA 98321
360.893.1821 admin@fenixearthworks.com

Date	Ticket #
Truck #	Rate
Trailer #	Rate
Driver	Rate
Start	Hours
Stop	Total
Voluntarily Waived Lunch ☐	Lunch

MATERIAL	FROM	TO	COUNT	HOURS

Driver Signature

Authorization Signature

Signature of this truck ticket will be considered your notice of our intent to lien this project.

STRAIGHT BILL OF LADING

ORIGINAL — NOT NEGOTIABLE

Shipper No. 15543

Carrier No.

Date 6/14/17

MARINE VACUUM SERVICE INC.

(Name of carrier) (SCAC)

ments, the letters 'COD' must appear before consignee's name or as otherwise provided in Item 430, Sec 1

ee MARINE VACUUM SERVICE INC

Street 1516 SOUTH GRAHAM STREET

City SEATTLE State WA Zip Code 98108

FROM: Shipper CASH (LINCOLN Construction)

Street 9635 DES MOINES MEMORIAL DR

City Seattle State WA Zip Code

24 hr. Emergency Contact Tel. No. CHEMTEL 1-800-255-3924 CONTRACT MIS3627926

Route

Vehicle Number 207

No. of Units & Container Type	HM	BASIC DESCRIPTION UN or NA Number, Proper Shipping Name, Hazard Class, Packing Group	TOTAL QUANTITY (Weight, Volume, Gallons, etc.)	WEIGHT (Subject to Correction)	RATE	CHARGES (For Carrier Use Only)
1 TT	X	(DOT SPEC TANK REQUIRED) UN1863 FUEL, AVIATION, TURBIN ENGINE, CLASS 3, PG I				
1 TT	X	(DOT SPEC TANK REQUIRED) UN1203 GASOLINE, MIXTURE CLASS 3, PG II				
1 TT	X	(DOT SPEC TANK REQUIRED) UN1203 GASOLINE, CLASS 3, PG II				
1 TT	X	NA1993 DIESEL MIXTURE, CLASS 3, PG III				
1 TT	X	NA1993 DIESEL, CLASS 3, PG III				
1 TT	X	NA1270 PETROLEUM OIL, CLASS 3, PG I				
1 TT	X	NA1270 PETROLEUM OIL, MIXTURE, CLASS 3, PG I				
1 TT		OILY WASTE WATER NON REG BY DOT				
1 TT		WASTE WATER NON REG BY DOT				
1 TT		MARINE VESSEL SEWAGE NON REG BY DOT				
1 TT		STREET WASTE STORM PIPE CLEANING NON REG BY DOT	4800 gals			
			3700 gallons			
			850	Gallons		

PLACARDS TENDERED: YES ☐ NO ☒

Note — (1) Where the rate is dependent on value, shippers are required to state specifically in writing the agreed or declared value of the property, as follows: "The agreed or declared value of the property is hereby specifically stated by the shipper to be not exceeding _____ per _____."
(2) Where the applicable tariff provisions specify a limitation of the carrier's liability absent a release or a value declaration by the shipper and the shipper does not release the carrier's liability or declare a value, the carrier's liability shall be limited to the extent provided by such provisions. See NMFC Item 172.
(3) Commodities requiring special or additional care or attention in handling or stowing must be so marked and packaged as to ensure safe transportation. See Section 2(e) of Item 360, Bills of Lading, Freight Bills and Statements of Charges and Section 1(a) of the Contract Terms and Conditions for a list of such articles.

I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations.

Signature

REMIT C.O.D. TO: ADDRESS

COD Amt: $

C.O.D. FEE: PREPAID ☐ COLLECT ☐ $

TOTAL CHARGES $

Subject to Section 7 of the conditions, if this shipment is to be delivered to the consignee without recourse on the consignor, the consignor shall sign the following statement:
The carrier shall not make delivery of this shipment without payment of freight and all other lawful charges.

(Signature of Consignor)

FREIGHT CHARGES
FREIGHT PREPAID except when box at right is checked ☐ Check box if charges are to be collect

RECEIVED, subject to the classifications and tariffs in effect on the date of the issue of this Bill of Lading, the property described above in apparent good order, except as noted (contents and condition of contents of packages unknown), marked, consigned, and destined as indicated above which said carrier (the word carrier being understood throughout this contract as meaning any person or corporation in possession of the property under the contract) agrees to carry to its usual place of delivery at said destination, if on its route, otherwise to deliver to another carrier on the route to said destination. It is mutually agreed as to each carrier of all or any of, said property over all or any portion of said route to destination and as to each party at any time interested in all or any said property, that every service to be performed hereunder shall be subject to all the bill of lading terms and conditions in the governing classification on the date of shipment.

Shipper hereby certifies that he is familiar with all the lading terms and conditions in the governing classification and the said terms and conditions are hereby agreed to by the shipper and accepted for himself and his assigns.

SHIPPER

PER

DATE

CARRIER Mar Vac

PER

DATE 6/14/17

1

ALAN

Permanent post-office address of shipper

...d by the agent

Shipper No. 1[illegible]

Carrier No.

Date [illegible]

MARINE VACUUM SERVICE INC

(Name of carrier) (SCAC)

"COD" must appear before consignee's name or as otherwise provided in Item 430, Sec 1

MARINE VACUUM SERVICE INC

1516 SOUTH GRAHAM STREET

City SEATTLE State WA Zip Code 98108

Route

FROM:
Shipper CASH LINCOLN CONSTRUCTION
Street [illegible] DES MOINES [illegible]
City Seattle State [illegible] Zip Code

24 hr. Emergency Contact Tel. No. CHEMTEL 1-800-255-3924 CONTRACT MIS3627928

Vehicle Number [illegible]

No. of Units & Container Type	HM	BASIC DESCRIPTION UN or NA Number, Proper Shipping Name, Hazard Class, Packing Group	TOTAL QUANTITY (Weight, Volume, Gallons, etc.)	WEIGHT (Subject to Correction)	RATE	CHARGES (For Carrier Use Only)
1 TT	X	(DOT SPEC TANK REQUIRED) UN1863 FUEL, AVIATION, TURBIN ENGINE, CLASS 3, PG I				
1 TT	X	(DOT SPEC TANK REQUIRED) UN1203 GASOLINE, MIXTURE CLASS 3, PG II				
1 TT	X	(DOT SPEC TANK REQUIRED) UN1203 GASOLINE, CLASS 3, PG II				
1 TT	X	NA1993 DIESEL MIXTURE, CLASS 3, PG III				
1 TT	X	NA1993 DIESEL, CLASS 3, PG III				
1 TT	X	NA1270 PETROLEUM OIL, CLASS 3, PG I				
1 TT	X	NA1270 PETROLEUM OIL, MIXTURE, CLASS 3, PG I				
1 TT		OILY WASTE WATER NON REG BY DOT				
1 TT		WASTE WATER NON REG BY DOT	8500	Gallons		
1 TT		MARINE VESSEL SEWAGE NON REG BY DOT				
1 TT		STREET WASTE STORM PIPE CLEANING NON REG BY DOT				

PLACARDS TENDERED: YES ☐ NO ☒

Note — (1) Where the rate is dependent on value, shippers are required to state specifically in writing the agreed or declared value of the property, as follows: "The agreed or declared value of the property is hereby specifically stated by the shipper to be not exceeding ______ per ______."
(2) Where the applicable tariff provisions specify a limitation of the carrier's liability absent a release or a value declaration by the shipper and the shipper does not release the carrier's liability or declare a value, the carrier's liability shall be limited to the extent provided by such provisions. See NMFC Item 172.
(3) Commodities requiring special or additional care or attention in handling or stowing must be so marked and packaged as to ensure safe transportation. See Section 2(e) of Item 360, Bills of Lading, Freight Bills and Statements of Charges and Section 1(a) of the Contract Terms and Conditions for a list of such articles.

I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name and are classified, packaged, marked and labelled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations.

Signature

REMIT C.O.D. TO: ADDRESS

COD Amt: $ 334.60

C.O.D. FEE: PREPAID ☐ COLLECT ☐ $

Subject to Section 7 of the conditions, if this shipment is to be delivered to the consignee without recourse on the consignor, the consignor shall sign the following statement:
The carrier shall not make delivery of this shipment without payment of freight and all other lawful charges.

(Signature of Consignor)

TOTAL CHARGES $

FREIGHT CHARGES
FREIGHT PREPAID except when box at right is checked
Check box if charges are to be collect ☐

RECEIVED, subject to the classifications and tariffs in effect on the date of the issue of this Bill of Lading, the property described above in apparent good order, except as noted (contents and condition of contents of packages unknown), marked, consigned, and destined as indicated above which said carrier (the word carrier being understood throughout this contract as meaning any person or corporation in possession of the property under the contract) agrees to carry to its usual place of delivery at said destination, if on its route, otherwise to deliver to another carrier on the route to said destination. It is mutually agreed as to each carrier of all or any of, said property over all or any portion of said route to destination and as to each party at any time interested in all or any said property, that every service to be performed hereunder shall be subject to all the bill of lading terms and conditions in the governing classification on the date of shipment.
Shipper hereby certifies that he is familiar with all the lading terms and conditions in the governing classification and the said terms and conditions are hereby agreed to by the shipper and accepted for himself and his assigns.

SHIPPER LINCOLN CONSTRUCTION
PER X [signature] Xavier Martinez

CARRIER MARINE VACUUM SERVICE
PER 1516 SOUTH Graham [illegible]
DATE 6-16-19

2

Permanent post-office address of shipper

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B.O.L. # 3451

SHIPPING PAPER

Northern ENVIRONMENTAL
EPAID# WAH000039211
USDOT# 2133996
253.212.5446

DELIVERY DATE: 06/13/17	WO #: 53687
SHIPPER / CUSTOMER: Tanglewood Environmental	CONTACT NAME:
ADDRESS: 9635 Des Moines Memorial DR S.	PHONE #:
CITY, STATE, ZIP: Seattle WA 98	
CONSIGNEE / FACILITY: P.I.G.S. Group	CONTACT NAME: Jay Johnson
ADDRESS: 3003 Taylor Way	PHONE #: (253) 383 4175
CITY, STATE, ZIP: Tacoma WA 98421	

HM	US DOT Description *(Including Proper Shipping Name, Hazard Class, and ID Number)*	Containers No.	Containers Type	Total Quantity	UOM	CHLOR	pH
A	**MATERIAL NOT REGULATED BY DOT (USED OIL AND WATER)**	01	TT	475	G		
B	**MATERIAL NOT REGULATED BY DOT (SPENT ANTIFREEZE)**			N/A			
C	**MATERIAL NOT REGULATED BY DOT (SPENT OIL ABSORBENTS AND DEBRIS)**			N/A			
D	**COMBUSTIBLE LIQUID N.O.S., 3, NA1993, PGIII, RQ (100) (CONTAINS DIESEL & GASOLINE) ERG 128**			N/A			
E							
F							

Special Handling Instruction and Additional Information:

A. PROFILE # 6253-A

D. PROFILE #

B. PROFILE #

E. PROFILE #

C. PROFILE #

F. PROFILE #

SHIPPER'S CERTIFICATION: "I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packaged, marked and labelled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations." I also certify that all times listed above are true and correct.

		MONTH	DAY	YEAR
(SHIPPER) PRINT OR TYPE NAME: X Tom Carseth	SIGNATURE: X	06	13	17
(CARRIER/TRANSPORTER) PRINT OR TYPE NAME: X Tony Hauser	SIGNATURE: X	06	13	17
(CONSIGNEE/FACILITY) PRINT OR TYPE NAME: X	SIGNATURE: X			

PRS Group, Inc.
3003 Taylor Way
Tacoma, WA 98421

Phone 253-383-4175
Fax 253-383-4531
jay@prsplant.net

GENERATOR'S PROFILE

☐ Sample Provided ☐ MSDS ☑ Analytical Report ☑ Generator Knowledge

Profile Number: 6253-b **Approved By:** Jay Johnson **Date Active:** 6/2/2017

Waste Name: used oil, water and trace sludge	**Process generating waste:** tank rinse

A. Generator Information:

Generator Name: Seamar Comm Health Centers	**PRS Customer Name:** Langseth Enviro
Technical Contact: Anna Jorden	**Technical Contact:** Tom Langseth
Site Address: 9635 Des Moines Memorial Drive South	**Mailing Address:** 7517 Portland Avenue East
City: Seattle **State:** WA **Zip:** 98108	**City:** Tacoma **State:** WA **Zip:** 98404
Phone Number: 206-943-3010	**Phone Number:** 253-536-6981
E Mail Address: ajordan@riley-group.com	**E Mail Address:** langsethenviro@gmail.com

B. PHYSICAL & CHEMICAL CHARACTERISTICS OF WASTE –

Color ☑ black Odor ☑ oily Flash Test ☑ >140F pH ☑ 7-9 Layers ☑ two Chlorinated ☑ 47 PCBs ☑ ND

C. WASTE MATRIX – Estimate percentage

used oil and water	To 90 %
sludge	To 10 %
	To %
	To %
	To %

D. Total Heavy Metals – Complete if you have representative lab data ---- Submit lab data with this form – Date: Various Dates

Arsenic ☐	PPM	Barium ☐	PPM	Cadmium ☐	PPM	Chromium ☐	PPM	Copper ☐	PPM
Lead ☐	PPM	Mercury ☐	PPM	Nickel ☐	PPM	Selenium ☐	PPM	Silver ☐	PPM
Zinc ☐	PPM	Other. Please List NWTPH-DX & Gx; 8260c		No heavy metals suspected ☐		No regulated metals ☐			

E. Shipping Information – Check a box to indicate how material is to be shipped

Containers ☐ **Bulk** ☑ **Quantity to Ship** 1,000 gallons **Frequency** one time event

DOT Shipping Description: Material not regulated by DOT

Generator Certification

I hereby certify, as an authorized representative of the Generator named above, that PRS Group, Inc. has been fully informed about this waste's designation, including but not limited to, the waste's generation process, composition, and physical characteristics, necessary to identify proper treatment and disposal of waste and this information is true and accurate.

If this is an existing profile which is being renewed, I hereby certify that there have been no changes in this waste, chemical, physical or regulatory designation since full characterization by sample testing.

Signature Anna Jordan Printed Name Title Michael Leong, Sr. Vice President Sea Mar Community Health Center Date 6-1-17

PRS Group, Inc.
3003 Taylor Way
Tacoma, WA 98421

Date
6/13/2017

Langseth Environmental
7517 Portland Ave. Suite A
Tacoma, WA 98404

P.O. No.			Profile #	Entry Log
Seamar			6253-b	72918

Item	Qty	Description		
Oily Water	75	Gallons		
Sludge	2	Ton(s)		
		Load hauled by Northern		

Phone #	Fax #	E-mail	Web Site
253-383-4175	253-383-4531	prs@prsplant.net	www.prsplant.net

King County
Wastewater Treatment Division
Industrial Waste Program
Department of Natural Resources and Parks
201 South Jackson Street, Suite 513
Seattle, WA 98104-3855
206-477-5300 Fax 206-263-3001
TTY Relay: 711

June 27, 2017

Rogelio Riojas
Sea Mar Community Health Centers
1040 S. Henderson St.
Seattle,WA 98108

General Letter of Authorization – Construction: # 40111-01 for Sea Mar Community Health Centers - Vault Excavation Construction Project to Discharge to the King County Sanitary Sewer

Dear Mr. Riojas:

In accordance with King County Code 28.84.060, King County Industrial Waste Program (KCIW) authorizes the discharge of construction dewatering/process wastewater to the King County sanitary sewer from the Sea Mar Community Health Centers - Vault Excavation Construction Project located at 9635 Des Moines Memorial Drive South, Seattle,WA 98108. This project is required to meet all the limitations, monitoring requirements, and other conditions specified in this authorization.

This authorization is the only KCIW authorization that will be issued for the project identified in your application. This authorization is issued for the maximum duration of two years. It is valid from June 29, 2017, through June 28, 2019, or the duration of this project, whichever comes first. It is the permittee's responsibility to notify KCIW of project closure or any changes with this project.

This authorization alone does not allow you to discharge to the sanitary sewer. You must contact the local sewer agency to obtain approval along with a discharge location before discharging to the sanitary sewer. Wastewater from this project must be discharged to/at the location(s) specified by the local sewer agency. The local sewer agency will assess sewer charges, set flow rate restrictions and may impose additional requirements.

General Conditions

All discharges and activities approved by this authorization shall be consistent with King County Code 28.84.060 and the terms and conditions outlined in this authorization. A copy of this discharge approval, as well as required daily monitoring records, shall be on site and available for review and reference by KCIW or local sewer agency representatives.
This authorization to discharge is based on your agreement and signed application.

This authorization permits the discharge of up to 25,000 gallons per day (gpd) of construction dewatering from the construction site into the sanitary sewer. Discharging pollutants more frequently or in higher concentrations or quantity than authorized in this letter is a violation of the terms and conditions of this authorization. You must contact KCIW in advance and receive authorization before making changes beyond the terms and conditions of this authorization. Examples of changes include:

- Construction dewatering volume above 25,000 gpd.
- Site's surface area generates contaminated stormwater that exceeds one acre in aggregate.
- Site conditions indicate potential for chemical contamination.
- Substantial changes in the quality of the discharged water.
- Discharge of wastes or contaminants from sources other than those permitted herein.

This permit does not constitute authority for discharge into waters of the state. Any such discharge is subject to enforcement action by the Washington State Department of Ecology.

You must allow authorized representatives of KCIW to enter, inspect, and sample as specified in King County Code 28.84.060.L, "Inspection and Sampling of Industrial Users."

You must install an accessible sampling spigot on the discharge pipe from the last treatment unit of the wastewater treatment system. The sample site shall be representative of all industrial waste streams discharged to the sewer from this project. Each sample site shall be accessible to KCIW representatives when discharge to the sewer is occurring.

You must install a totalizing, non-resettable flow meter on all permitted discharge pipes to the sewer or as approved by your local sewer agency. The meters shall account for all industrial waste streams discharged to the sewer from this site.

Discharge Limitations

Parameter	Limitation
Instantaneous maximum discharge rate	To be determined by local sewer agency. Not to exceed 200 gallons per minute or the sedimentation tank flow restriction, whichever is more stringent.
Maximum daily discharge volume	25,000 gpd
Settleable solids	7.0 mL/L
Nonpolar Fats, Oil & Grease (FOG)	100 mg/L
Instantaneous Minimum pH[1]	5.0 s.u.
Daily Minimum pH[2]	5.5 s.u.
Maximum pH	12 s.u.
Soluble Sulfides (Screening Level)	0.1 mg/L

[1] The instantaneous minimum pH limit is violated whenever any single grab sample or any instantaneous recording is less than pH 5.0.

[2] The daily minimum pH limit is violated whenever any continuous recording of 15 minutes or longer remains below pH 5.5 or when each pH value of four consecutive grab samples collected at 15-minute intervals or longer within a 24-hour period remains below pH 5.5.

The water being discharged will not do the following:

- Violate any discharge standard, limitation, or specific prohibition of King County Code 28.84.060 or local discharge limits applicable on the date of discharge (see Section 28.84.060.D-F of the King County Code).
- Contain the odor of solvent, gasoline, or hydrogen sulfide (rotten egg odor), oil sheen, unusual color, or visible turbidity.
- Cause hydraulic overloading conditions of the sewerage conveyance system. During periods of peak hydraulic loading, KCIW or local sewer agency representatives reserve the authority to request that discharge to the sewer be stopped.

You must stop discharging and notify KCIW, by phone at 206-477-5300 or email at info.KCIW@kingcounty.gov, if you exceed any of the discharge limits, or notice odor of solvent, gasoline, or hydrogen sulfide (rotten egg odor), oil sheen, unusual color, or visible turbidity.

Monitoring Requirements

You shall conduct the following self-monitoring requirements for this authorization.

Parameter	Frequency	Sample Type/Method
Discharge volume	Daily	In-line flow meter
Discharge rate	Daily	In-line flow meter
Settleable solids	Daily	Grab by Imhoff cone[1]

All tests, measurements and analyses shall be performed in accordance with procedures established by the administrator of the U.S. Environmental Protection Agency (EPA) pursuant to section 304(g) of the federal Clean Water Act and contained in 40 CFR Part 136 and amendments thereto or with any other test procedure approved in writing by the EPA administrator, and/or KCIW.

Records Management

You will maintain records relating to all permitted discharges to the King County sewerage system including but not limited to routine maintenance, waste disposal dates, manifests, any analytical lab results, monitoring records, and flow records

All records required must be available for review by KCIW and must be kept through the completion of the project.

[1] The settleable solids field test by Imhoff cone must be performed as follows:
- Fill cone to one-liter mark with well-mixed sample.
- Allow 45 minutes to settle.
- Gently stir sides of cone with a rod or by spinning. Settle 15 minutes longer.
- Record volume of settleable matter in the cone as mL/L.

Special Conditions

You must implement erosion control best management practices to minimize the amount of solids discharged to the sanitary sewer system. As a minimum precaution, the construction dewatering must be pumped to an appropriately sized settling tank prior to entering the sewer system.

The authorization to discharge is based on your agreement and signed application to comply with the minimum standards outlined in *Minimum Standards for Rectangular Sedimentation Tank Design and Technical memorandum* found on county's webpage[1].

The following two sedimentation tank options may be used, depending on site conditions and project requirements:

1. Rectangular Sedimentation Tank (Flow-Through Discharge)

   The minimum required standards for the flow-through system are:

   - Minimum hydraulic retention time: ≥ 90 minutes
   - Minimum length-to-width ratio (length : width): ≥ 4:1
   - Maximum overflow rate (gallons-per-minute per square foot of surface area): ≤ 1.0 gpm/ft^2
   - Maximum sediment accumulation (level of sedimentation tank water column): ≤ 25%
   - Requirement to add additional sedimentation tanks in parallel for higher flow rates[2].

2. Circular Sedimentation Tank (Batch Discharge):

   At some smaller construction sites, process wastewater is produced intermittently. The minimum required standards for batch discharge area as follows:

   - Minimum 5,000 gallon circular tank, which can accommodate a maximum of five batch discharges per day.
   - At least one hour of quiescent (undisturbed) settling must occur in the tank prior to discharge. During this settling time, no additional process wastewater can be added to the sedimentation tank.
   - Maximum sediment accumulation (level of sedimentation tank water column): ≤ 25%

[1] http://www.kingcounty.gov/environment/wastewater/IndustrialWaste/GettingDischargeApproval/Construction/Sedimentation_tanks.aspx.

[2] Example: At 200 gpm flow, to meet the Minimum hydraulic retention time of ≥ 90 minutes, you need a minimum of 18,000 gallons rectangular tank (18,000 gal / 200 gal/min = 90 minute hydraulic retention time). Correspondingly, at 100-gpm flow, you need a 9,000-gallon tank, and at 65 gpm, the tank volume shall be 5850 gallons. If gravity discharge from the tank is not possible, the effective volume of the tank needs to be reduced to the level of the pump intake and under no circumstances can the pump intake be lower than one-half (1/2) of the tank height.

The permittee shall properly operate and maintain all wastewater treatment units to ensure compliance with established discharge limits. Solids accumulation in tanks used for solids settling shall not exceed 25 percent of the tank's working hydraulic capacity. Each tank's working hydraulic capacity is based on the water column height as measured from the bottom of the tank to either the invert elevation of the tank's outlet pipe (gravity discharges) or discharge pump intake (pumped discharges).

General Information

King County Code 28.84 authorizes a fee for each Letter of Authorization issued by the King County Department of Natural Resources and Parks. The current fee for issuance of a Letter of Authorization is $800. King County will send an invoice for this amount.

If you have any questions about this authorization or your construction dewatering discharge, please call us at 206-477-5300, or email us at info.KCIW@kingcounty.gov. You may also visit our program's Internet pages at www.kingcounty.gov/industrialwaste.

Thank you for helping support our mission to protect public health and enhance the environment.

Sincerely,

Despina Strong
Industrial Waste Program Manager

cc: Jim Mahady, Seattle Public Utilities