

UNDERGROUND STORAGE TANK CLOSURE & SITE ASSESSMENT REPORT

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RGI PROJECT No. 2015-019D

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1 Introduction

The Riley Group, Inc. (RGI) is pleased to present this *Underground Storage Tank Closure & Site Assessment Report* (UST Closure Report) documenting the decommissioning and assessment of five USTs at the Silver Bay Logging property located at 7814 8th Avenue South, Seattle, King County, Washington (hereafter referred to as the Property, Figure 1).

The Property consists of four tax parcels which total approximately 2.95 acres and is currently occupied by two vacant light-industrial buildings, a marine dock located on the left bank of the Duwamish River, and one office for Silver Bay Logging. The Property is located north of South Kenyon Street, and east of 8th Avenue South.

The Client (Ms. Betty Buhler) retained RGI to perform the UST closure and assessment activities documented herein. The scope of work for this project was performed in accordance with our *UST Removal and Site Assessment Proposal* dated March 21, 2017. In addition, RGI corresponded with the Client as appropriate during performance of the scope of work.

Previous investigations have been conducted on the Property to characterize known soil and groundwater impacts and are documented under separate cover. Although this UST Closure Report occassionally references analytical data obtained during previous investigations, this data is only provided to supplement UST Site Assessment data and not intended to characterize soil or groundater impacts known to exist on the Property.

All work was performed in general accordance with applicable UST regulations (WAC 173-360) and the Washington State Department of Ecology (Ecology) *Guidance for Site Checks and Site Assessments for Underground Storage Tanks* (90-52, revised April 2003).

2 PROJECT BACKGROUND

Several previous environmental investigations were completed on behalf of Silver Bay Logging and are documented in the following reports:

- ➤ Additional Subsurface Investigation Report (ASI Report), dated November 17, 2016, prepared by RGI (RGI Project No. 2015-019C).
- Preliminary Phase II Environmental Site Assessment (Preliminary Phase II), dated June 25, 2015, prepared by RGI (RGI Project No. 2015-019B).
- Phase I Environmental Site Assessment (2015 Phase I ESA), dated April 15, 2015, prepared by RGI (RGI Project No. 2015-019).
- Phase II Environmental Site Assessment (2004 Phase II), dated February 2004, prepared by RGI.
- Phase I Environmental Site Assessment (2001 Phase I ESA), dated March 14, 2002, prepared by RGI.

A brief summary of significant findings pertaining to these investigations is provided below. The reader is directed to refer to the above-mentioned reports in their entirety for further details pertaining to these investigations. The following information, which is considered pertinent to the UST Closure activities, was obtained during previous investigations:

➤ A former gasoline station was located on the northern portion of the Property from 1929 to approximately 1937. RGI performed a geophysical survey in 2016 in an attempt to determine the locations of potential USTs and no USTs were identified. However, there is



no evidence to suggest the suspect that USTs were removed.

- ➤ In 2015, a geophysical survey identified four USTs on the South Yard portion of the Property. Estimated UST capacities ranged from approximately 2,600-gallon to 14,000-gallon. These USTs were suspected to be associated with a former garage situated on the southern portion of the Property.
- ➤ In 2016, RGI identified one suspect, abandoned, approximately 300-gallon home heating oil UST on the Property's East Yard Area. Analytical data obtained from soil and groundwater samples in the vicinity of the UST did not indicate any evidence of a release.
- Previous investigations identified the presence of diesel- and oil-range total petroleum hydrocarbons (TPH), carcinogenic polycyclic aromatic hydrocarbons (cPAHs), tetrachloroethene (PCE), trichloroethene (TCE), polychlorinated biphenyls (PCBs), arsenic, cadmium, and lead in soil at concentrations exceeding the applicable soil screening levels on the Property.
- Previous investigations identified the presence of diesel- and oil-range TPH, PCE, and vinyl chloride (VC), selenium, arsenic, and lead in groundwater at concentrations exceeding groundwater screening levels on the Property.
- RGI recommended all out-of-service/abandoned USTs be properly decommissioned and removed and/or closed-in place. RGI also recommended a UST Site Assessment be completed for all identified USTs on the Property.

Soil and groundwater analytical data obtained from previous investigations is provided for reference and is summarized in Tables 1 and 2, respectively. Select historical analytical data is also displayed on figures when considered relevant to UST assessment activities.

3 Scope of Services

The scope of services performed in connection with the UST closure activities consisted of, but was not necessarily limited to, the following tasks:

- ➤ Filed a 30 Day Notice for UST decommissioning with the Ecology as required by WAC 173-360-200 and obtained a permit from Seattle Fire Department (SFD) prior to proceeding with the decommissioning.
- Retained the services of IO Environmental & Infrastructure (IO Environmental) to obtain waste profiles necessary for the disposal of UST contents during UST decommissioning.
- Performed public and private utility locating in an attempt to identify the locations of buried utilities in proposed excavation locations.
- Conducted a geophysical survey in the North Yard, East Yard, and South Yard of the Property in order to identify the location and orientation of USTs and underground utilities.
- > Directed the removal of concrete slab overlying the four USTs in the South yard.
- ➤ Directed the decommissioning (pumping, triple rinsing, and inerting) of five USTs ranging in capacity from 300- to 14,000-gallons. All USTs were transported off-Property after decommissioning and disposed of in accordance with applicable regulations.
- Collected and analyzed UST Site Assessment soil samples at each UST excavation. Soil samples were analyzed for contaminants of potential concerns (COPCs) deemed



appropriate for a given area.

- ➤ Directed the excavation of two test pits in an attempt to identify locations of any USTs on the North Yard of the Property. Test pits locations were placed in locations where the 2017 geophysical survey marked anomalies.
- ➤ Directed the restoration of excavated areas in the North Yard, South Yard, and East Yard. This included using structural fill and compaction testing in the South Yard near the warehouse building.
- Prepared this UST Closure Report presenting our observations, findings and conclusions.

4 REGULATORY FRAMEWORK

All activities associated with UST closure were performed in accordance with applicable UST regulations (WAC 173-360) and the Ecology *Guidance for Site Checks and Site Assessments for Underground Storage Tanks* (90-52, revised April 2003).

Washington's hazardous waste cleanup law, the Model Toxics Control Act (MTCA) (70.105D RCW), mandates the necessity for site cleanups to 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 Cleanup Regulation provides three options for establishing generic and site-specific cleanup levels for soil and groundwater. Method A Cleanup Levels (CULs) 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 CULs are set using a site risk assessment, which focus on the use of "reasonable maximum exposure" assumptions based on site-specific characteristics and toxicity of the contaminants of concern.

For the purpose of determining if UST Site Assessment soil analytical data was in compliance with the MTCA relgulation, soil analytical data obtained during this project was compared to MTCA Method A Soil Cleanup Levels for Unrestricted Land Uses.

No MTCA Method A Soil Cleanup Levels have been established for barium, selenium, and silver. Therefore, the MTCA Method B standard formula values that are protective of groundwater at 13 degrees Celsius were referenced for these compounds.

The MTCA Method A and B soil cleanup levels, collectively referred to as soil screening levels herein, are summarized in Table 1.

5 METHODOLOGY

5.1 Underground Storage Tank Decommissioning and Site Assessment

Five USTs were removed during the course of the project. RGI retained the services of IO Environmental to uncover and decommission all five USTs. Decommissioning consisted of pumping, cleaning, inerting, fire department inspection and removal of the USTs from the Property.



In addition, IO Environmental excavated two test pits in the North Yard area to determine if possible abandoned USTs existed or if the anomalies identified in the geophysical survey were based on other debris.

The inerting of the USTs was performed by Northwest Marine Chemist, Inc. under subcontract to IO Environmental and consisted of sealing each UST, pumping carbon dioxide into each tank to displace the UST contents.

The pumping and cleaning of the USTs was conducted by Marine Vacuum Service, Inc. (MarVac) under subcontract to IO Environmental. Product/water was pumped from the USTs 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 USTs and wastewater generated was also pumped to the vacuum truck and ultimately disposed of at the Marvac facility in Seattle, Washington.

Ms. Amelia Oates (Registerd UST Site Assessor) of RGI performed the UST Site Assessment, which consisted of inspecting the USTs and documenting the condition and size of each UST. Soils surrounding each UST excavation were field screened in order to identify the presence of any contamination and RGI collected representative soil samples from the sidewalls and bottoms of UST excavations after the USTs were decommissioned and removed. USTs were staged on-Property temporarily prior to disposal. Details pertaining to each UST are discussed in Section 7.2.

5.2 STANDARD SAMPLING PROTOCOLS AND FIELD SCREENING

During the UST Site Assesment, 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 volatile organic compounds (VOCs) and/or petroleum hydrocarbons using a portable gas analyzer equipped with a photoionization detector (PID) and/or sheen testing. All soil samples collected for potential analyses of VOCs were collected using standard EPA Method 5035A sampling methodology.

All soil samples were collected in accordance with RGI's standard operating and decontamination procedures. All sampling equipment was decontaminated using Alconox® soap and tap water between locations. Samples were placed in preconditioned, sterilized containers provided by an Ecology-accredited analytical laboratory and placed in an iced cooler prior to being transported to the analytical laboratory in accordance with standard chain of custody protocols.

6 ANALYTICAL LABORATORY ANALYSES

A total of 31 soil samples were collected during this UST Site Assessment and submitted to Friedman & Bruya, Inc. of Seattle, Washington for one or more of the following analyses:

- Hydrocarbon Identification by NWTPH-HCID.
- Gasoline-range total petroleum hydrocarbons (TPH) using Northwest Test Method TPH-Gx.
- ➤ Diesel- and oil-range TPH using Northwest Test Method NWTPH-Dx with silica gel cleanup (silica gel cleanup is intended to remove naturally occurring biogenic/organic material).
- Benzene, toluene, ethylbenzene, and xylenes (BTEX) using EPA Test Method 8021B.
- Total Metals using EPA Method 6020A.



Soil analytical results are summarized in Table 3 and displayed on Figures 3 and 4. Analytical results are discussed further in Section 7.2 and copies of final analytical laboratory reports are provided in Appendix C.

7 UST Decommissioning & Site Assessment

This section decribes work performed associated with the decommissioning and assessment of the USTs. The locations of USTs are depicted on Figures 2 through 4.

7.1 Pre-UST Decommissioning Services

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

7.1.1 Permitting & Notifications

RGI filed the required 30-Day Notice for Underground Storage Tanks to Ecology to remove up to six estimated 500-gallon to 14,000-gallon capacity USTs as stipulated under WAC 173-360-200 and 173-360-385.

IO Environmental obtained a *Commercial Tank Removal/Decommissioning Permit* (SFD ID#1310), from the City of Seattle Fire Department on April 27, 2017.

The activities performed and discussed herein were consistent with all permitting requirements. Copies of UST decommissioning documentation are provided in Appendix A.

7.1.2 GEOPHYSICAL SURVEY

On April 21, 2017, RGI retained the services Philip H. Duoos, Geophysicist, to perform a geophysical survey to locate suspect USTs on the Property. The survey consisted of utilizing electromagnetic/ground penatrating radar (EM/GPR) instruments to determine the location, orientation, and approximate size of the known and suspected USTs. The approximate location of the geophysical survey areas are depicted on Figure 2. The geophysical survey identified the following confirmed and potential UST locations:

- 1) One heating oil UST was identified in the East Yard in the vicinity of a former single family residence.
- 2) A UST nest consisting of at least three USTS was identified in the South Yard in the vicinity of a former garage). A large pile of metal fencing situated n top of the survey area likely impeded the survey from identifying the the fourth UST.
- 3) Two suspect USTs locations were identified in the North Yard in the vicinity of a former gas station. However, no distinct UST signatures were identified in this area during the geophysical survey.

The approximate locations of the suspected and known USTs are displayed on Figures 2 through 5. A copy of the geophysical survey report is included in Appendix E.

7.1.3 UTILITY LOCATING

At least 72 hours prior to commencing with any of the intrusive subsurface investigations, RGI contacted One-Call public locate service to locate known public and private underground utilities on the Property. In addition, RGI retained the services of a private utility locating service to determine if utilities were present in proposed excavation areas.



7.1.4 CONCRETE REMOVAL & EXCAVATION

Since the USTs in the South Yard were situated under concrete, it was necessary to remove the approximately 18 inches of concrete on the surface. IO Environmental removed the concrete in approximately 4 foot sections so as not to break concrete underneath the foot print of the warehouse building. Concrete was temporarily stored on Property prior to disposal.

Between April 24 and 26, 2017, RGI directed the excavation of overburden soils situated 2 to 3 feet above the USTs in order to expose the top of the USTs in the South Yard and East Yard excavation areas. The USTs in the South Yard were oriented east/west and UST5 located in the East Yard was oriented north/south. Overburden soils did not appear contaminated based on field observations. Soil was not excavated from the sides of the USTs to prevent any lateral movement of the USTs.

7.2 UST DECOMMISSIONING & SITE ASSESSMENT

This section decribes work performed directly related to the decommissioning and removal of the five USTs in South Yard and East Yard of the Property. The general methodology for UST decommissing and assessment was provided in Section 5.1. Details pertaining to each UST are discussed below. Ms. Amelia Oates of RGI (Washington State Site Assessor No. 8708675) directed UST Site Assessment activities.

The locations of USTs, UST assessment soil samples and select analytical data are displayed on Figures 2 to 4. All soil analytical data obtained during the UST Site Assessment is summarized in Table 3.

7.2.1 UNDERGROUND STORAGE TANK 1 (UST1, SOUTH YARD)

UST1 was an approximately 5,000-gallon capacity, single-walled steel UST (Photographs 12 and 13) that was identified during previous geophysical surveys. The top of UST1 was encountered at approximately 2.5 feet below the concrete surface in this location. UST1 measured approximately 13.8 feet in length and 8.0 feet in diameter and contained approximately 33 inches of water with no observable free product (LNAPL). The water within UST1 had a slight petroleum odor, no noticeable sheen was observed.

UST1 was decommissioned and removed by IO Environmental on April 27, 2017 using the methodology described in Section 5.1. Approximately 3,750 gallons of product and/or rinse wastewater were pumped from UST1 into a vacuum truck and disposed of off-Property. UST1 appeared to be in good condition without any holes or punctures and exhibited no signs of leaking. The origin of the water inside the UST was likely the result of stormwater runoff and poorly filled caps.

Soils within the UST excavation consisted of approximately 1.5 feet of surface gravels, overlying a brown, silty sand to coarse sand to depths of approximately 12 feet bgs. A small amount of water was observed seeping into the excavation at approximately 12 feet bgs. Soils surrounding UST1 were field screened and no evidence of contamination was observed.

RGI collected three soil samples from the sidewalls and bottom of the UST1 excavation, which were submitted for analyses of COPCs. An excavation water sample was not collected due to the minimal amount of water in the excavation and the fact that groundwater grab sample data and/or field observations obtained from P9, P10, and P11 during the ASI indicated that groundwater was not impacted in this location.

Analytical data obtained from soil samples indicated that no COPCs were present in soil at



concentrations exceeding applicable soil screening levels. Toluene, ethylbenzene and xylenes were the only compounds detected in soil at concentrations above the laboratory detection limit. No further work is required in this location in connection with UST1.

7.2.2 UNDERGROUND STORAGE TANK 2 (UST2, SOUTH YARD)

UST2 was an approximately 10,000-gallon capacity, single-walled steel UST (Photographs 14 and 15) that was identified during previous geophysical surveys. The top of UST2 was encountered at approximately 3.0 feet below the concrete surface in this location. UST2 measured approximately 27.6 feet in length and 8.0 feet in diameter and contained approximately 48 inches of fluid and did not have any indications of free product. The water within UST2 did not have a discernable petroleum odor or sheen.

UST2 was decommissioned by IO Environmental and removed on April 27, 2017 using the methodology in Section 5.1. Approximately 11,100 gallons of product and/or rinse wastewater were pumped from UST2 into a vacuum truck and disposed of off-Property. UST2 appeared to be in good condition without any obvious holes, punctures and exhibited no signs of leaking. The origin of the water inside the UST was likely the result of stormwater runoff and poorly filled caps.

Soils within the UST excavation consisted of approximately 2.0 feet of surface gravels, overlying a brown, silty fine sand to coarse sand to depths of approximately 12 feet bgs. Water was observed seeping into the excavation at approximately 12 feet bgs. Soils surrounding UST2 were field screened and no evidence of contamination was observed.

RGI collected five soil samples from the sidewalls and bottom of the UST2 excavation, which were submitted for analyses of COPCs. An excavation water sample was not collected due to the minimal amount of water in the excavation and the fact that groundwater grab sample data and/or field observations obtained from P9, P10, and P11 during the ASI indicated that groundwater was not impacted in this location.

Analytical data obtained from soil samples indicated no COPCs were present in soil at concentrations above compound-specific laboratory detection limits. No further work is required in this location in connection with UST2.

7.2.3 UNDERGROUND STORAGE TANK 3 (UST3, SOUTH YARD)

UST3 was an approximately 5,000-gallon capacity, single-walled steel UST (Photograph 16) that was identified during previous geophysical surveys. The top of UST3 was encountered at approximately 3.0 feet below the concrete surface in this location. UST3 measured approximately 14.2 feet in length and 8.0 feet in diameter and contained approximately 76 inches of fluid and did not have any indications of free product. The water within UST3 did not have a discernable petroleum odor or sheen.

UST3 was decommissioned by IO Environmental and removed on April 27, 2017 using the methodology in Section 5.1. Approximately 5,000 gallons of product and/or rinse wastewater were pumped from UST3 into a vacuum truck and disposed of off-Property. UST3 appeared to be in good condition without any obvious holes, punctures and exhibited no signs of leaking. The origin of the water inside the UST was likely the result of stormwater runoff and poorly filled caps.

Soils witihin the UST excavation consisted of approximately 2.0 feet of surface gravels, overlying a gray, stiff silt down to 6.5 feet bgs and a fine to coarse sand down to 12 feet bgs. Water was observed seeping into the excavation at approximately 12 feet bgs. Soils surrounding UST3 were field screened and no evidence of contamination was observed.



RGI collected five soil samples from the sidewalls and bottom of the UST3 excavation, which were submitted for analyses of COPCs. An excavation water sample was not collected due to the minimal amount of water in the excavation and the fact that groundwater grab sample data and/or field observations obtained from P9, P10, and P11 during the ASI indicated that groundwater was not impacted in this location.

Analytical data obtained from soil samples indicated no COPCs were present in soil at concentrations exceeding applicable soil screening levels. Diesel-range TPH, arsenic, barium, chromium, and lead were the only compounds detected in soil at concentrations above the laboratory detection limit. No further work is required in this location in connection with UST3.

7.2.4 UNDERGROUND STORAGE TANK 4 (UST4)

UST4 was an approximately 10,000-gallon capacity, single-walled steel UST (Photograph 17) that was identified during previous geophysical surveys. The top of UST4 was encountered at approximately 3.0 feet below the concrete surface in this location. UST4 measured approximately 28.4 feet in length and 8.0 feet in diameter and contained approximately 36 inches of fluid and did not have any indications of free product. The water within UST4 did not have a discernable petroleum odor or sheen.

UST4 was decommissioned by IO Environmental on April 27, 2017 and removed on April 28, 2017 using the methodology in Section 5.1. Approximately 3,500 gallons of product and/or rinse wastewater were pumped from UST4 into a vacuum truck and disposed of off-Property. UST4 appeared to be in good condition upon initial inspection and was punctured by the excavator during removal, however no other holes, punctures and exhibited no signs of leaking. No release of product was observed after the hole was punctured in UST4. The origin of the water inside the UST was likely the result of stormwater runoff and poorly filled caps.

Soils within the UST excavation consisted of approximately 2 feet of surface gravels, overlying brown fine to coarse sands with silt down to 12 feet bgs. Water was observed seeping into the excavation at approximately 12 feet bgs. Soils surrounding UST4 were field screened and no evidence of contamination was observed.

RGI collected five soil samples from the sidewalls and bottom of the UST4 excavation, which were submitted for analyses of COPCs. An excavation water sample was not collected due to the minimal amount of water in the excavation and the fact that groundwater grab sample data and/or field observations obtained from P9, P10, and P11 during the ASI indicated that groundwater was not impacted in this location.

Analytical data obtained from soil samples indicated that no COPCs were present in soil at concentrations above compound-specific laboratory detection limits. No further work is required in this location in connection with UST4.

7.2.5 PRODUCT PIPING (SOUTH YARD)

Product piping suspected to be associated with the former garage was observed in the South Yard above UST1 through UST4 in the approximate locations displayed on Figure 3. Soils beneath the former product piping locations were field screened in several locations and no evidence of contamination was observed. RGI collected four soil samples (PP1-1, PP2-1, PP3-1, and PP4-1) from locations beneath the product piping at approximatley 1 foot bgs prior to the removal of the USTs.



This product piping was associated with the former pump islands, which were previously located under the southern extent of the existing warehouse building in the locations displayed on Figure 3. The product piping was observed to continue underneath the current warehouse. Product piping situated above UST1 through UST4 was decommissionned (cut and capped) by IO prior to UST decommissioning.

Analytical data obtained from soil samples collected beneath product piping indicated that no COPCs were present in soil at concentrations above compound-specific laboratory detection limits. No further work was required in connection with the South Yard product piping.

7.2.6 UNDERGROUND STORAGE TANK 5 (UST5)

UST5 was an approximately 300-gallon capacity, single-walled steel UST (Photograph 19), that was identified during previous geophysical surveys and previously stored heating oil. The top of UST5 was encountered at approximately 2 feet below the ground surface in this location. UST5 measured approximately 5.6 feet in length and 3 feet in diameter and did not contain any fluid.

UST5 was decommissioned and removed by IO Environmental on April 27, 2017 using the methodology in Section 5.1. Approximately 100 gallons of rinse wastewater (generated during cleaning of UST5) was pumped into a vacuum truck and disposed of off-Property. UST5 appeared to be in poor condition and heavily corroded with several small holes (<1/2 inch to 4 inch) in diameter located on the sides and bottom.

Soils within the UST excavation consisted of approximately 2 feet of surface soils, overlying brown fine to coarse silty sands with silt down to 8 feet bgs. Elevated PID readings and visible sheen was observed on the soils located directly beneath UST5 at approximately 8 feet bgs indicating that a release of product is suspected to have occurred beneath UST5. No water seepage was observed in the UST5 excavation.

RGI collected five soil samples from the sidewalls and bottom of the UST5 excavation, which were submitted for analyses of COPCs. Field screening indicated the presence of petroleum hydrocarbon contamination immediately beneath and to the north of UST5. RGI opined that this detected soil contaminated was of limited extent based on our previous investigation findings. RGI discussed this field observation with the Client (whom was on-site at the time), and based on our previous subsurface investigation findings and understanding that the cleanup of this area could be performed in conjunction with a more site-wide cleanup effort, the decision was made not to pursue any remedial excavation of contaminated soil at that time.

Analytical data obtained from these samples indicated that diesel-range TPH was detected in soil at concentrations of 6,500 milligrams/kilogram (mg/kg) on the north side of the UST excavation at approximately 3.5 feet bgs (RT-NS-3.5) and 6,000 mg/kg beneath the UST at approximately 8 feet bgs (RT-B1-8). Both of these concentrations exceed the soil screening level for diesel-range TPH of 2,000 mg/kg.

A release has been confirmed in the location of UST5. However, soil analytical data obtained from test probes P18 and P19 during the 2016 ASI did not indicate the presence of soil contamination. Given the proximity of P18 and P19 to the former UST5 location (see Figure 4), the extent of impacts in this area is anticipated to be limited.



7.3 POST-UST DECOMMISSIONING ACTIVITIES

After the decommisioning and removal of the USTs from the South Yard and East Yard, tasks related to restoration of the Property and waste disposal were performed and are discussed in the following sections.

7.3.1 SOIL STOCKPILES (SOUTH YARD & EAST YARD)

Soil removed from the excavation during the removal of UST1 though UST 4 in the South yard was stockpiled on plastic on the west side of the UST excavation. RGI collected soil samples from each stock pile (FTSP1 and FTSP2), which were submitted for analysis of COPCs. No COPCs were detected in soil at concentrations exceeding applicable soil screening levels.

Soil removed from the excavation during the removal of UST5 in the East Yard was stockpiled on plastic in two locations to the west of the UST excavation. RGI collected soil samples from each stock pile (RT-SP1 and RT-SP2), which were submitted for analysis of COPCs. No COPCs were detected in soil at concentrations exceeding applicable soil screening levels.

Stockpiled soil from both the South Yard and East Yard was used for backfilling UST excavations in their respective locations.

7.3.2 Property Restoration

The South Yard UST excavation was situated approximatley 1.0 foot south of the warehouse. Therefore, it was necessary to backfill this area with imported Type 17 structural fill to ensure structural stability of the the warehouse. On May 1, 2017, RGI performed oversight of the backfilling of the soils in this location to approximately 1 foot bgs. RGI also conducted compaction tests of the fill on May 2, 2017. The approximately one foot thick concrete surface was replaced by IO Environmental on May 3, 2017.

Restoration of the East Yard consisted of backfilling the excavation with the stockpiled soil that was removed during the UST5 excavation.

7.3.3 WASTE DISPOSAL

Between April 24 and 26, 2017, a total of approximately 22,400 gallons of product/water mixture were removed during the UST pumping and cleaning of the five USTs. Of this amount, approximately 15,400 gallons was initially pumped from the USTs and an additional 7,000-gallons of wastewater was generated and removed during the cleaning of the USTs. The product/water was pumped directly into a vacuum truck owned and operated by Marvac and later disposed of in accordance with applicable regulations at the Marvac facility in Seattle, Washington. Documentation pertaining to wastewater disposal is included in Appendix D.

A total of approximately 30 cubic yards of concrete was removed from the South Yard of the Property in order to access the USTs in this location. This concreted was tempararily stored on Property until being removed from the Property by Renton Concrete Recyclers on April 27, 2017. Copies of the Recycling Logs are provided in Appendix D.

8 TEST PIT EXPLORATION

On April 27, 2017, RGI directed the excavation of two test pits (TP1 and TP2) in order to locate potential USTs situated in the North Yard of the Property in the location of a former gas station. A previous geophysical survey had identified these areas of the North Yard as possible UST locations (Photographs 21 through 23). Test pit locations are illustrated on Figure 5.



Test pits TP1 and TP2 were excavated to approximately 6 to 7 feet bgs and no USTs were encountered. In each location, the surface consisted of 4 to 6 inches of asphalt overlying approximately 1 foot of pea gravel. Beneath the pea gravel was a blueish-green layer between approximately 1.5 to 2 feet bgs that had a distinct odor. The blueish green layer corresponds to known contamination identified during previous investigations and was therefore not sampled. Additionally, the focus of this project was UST Closure and assessment and not to characterize soil and groundwater impacts on the Property was conducted separately.

Between approximately 2 and 7 feet bgs, fill was encountered and consisted of wood, sheet metal, concrete and brick debris with loose, mottled black, white and brown silty sands with gravel. No water seepage was observed in either test pit.

The stockpile soils removed from each test pit were temporarily stockpile and later used as backfill for each test pit.



10 CONCLUSIONS

Based on the data obtained during project, RGI concludes the following regarding the UST Closure and Site Assessment:

- A geophysical survey intended to identify the presence of USTs was performed in North Yard, East Yard, and South Yard of the Property. The results of the geophysical survey confirmed the presence of a UST nest in the South Yard and one UST in the East Yard (former residence). The geophysical survey did not conclusively identify the presence of any USTs in the North Yard (former gas station location). Subsequent test pitting performed in the North Yard at locations marked as anomalies also did not identify any USTs in this location.
- In April, 2017, RGI directed the decommissioning of five USTs (two approximately 5,000-gallon USTs, two approximately 10,000-gallon USTs in the South Yard, and one 300-gallon heating oil UST in the East Yard) in accordance with applicable UST regulations (WAC 173-360). The UST product piping situated above UST1 through UST4 in the South Yard was also decommissioned (removed and capped at the excavation limits) at the time of UST decommissioning.
- ➤ RGI completed a UST Site Assessment at all five UST locations, which indicated that all four USTs in the South Yard (UST1 through UST4) were in good to fair condition and no evidence of a release was observed in any of these UST locations. Analytical data obtained from soil samples collected within the UST excavations support this conclusion. Therefore no further action is necessary in connection with UST1 through UST4.
- ➤ The results of the UST Site Assessment indicate that a release has occurred at UST5 in the East Yard. This heating oil UST was heavily corroded and visible holes were observed in the UST. Analytical data obtained from soil samples collected from within the UST5 excavation, north and beneath the UST, indicated that diesel-range TPH is present in soil at concentrations exceeding MTCA Method A Soil Cleanup Levels for Unrestricted Land Uses. Soil analytical data obtained during the 2016 ASI from test probes P18 and P19, which were in close proximity to UST5, appear to indicate that the extent of soil impacts in this location is limited.

A copy of this report should be submitted to the Ecology Northwest Regional Office as part of owner/operators UST Site Assessment and release reporting obligations. If requested, RGI will submit a copy of this report to Ecology on your behalf.

12 LIMITATIONS

This report is the property of Silver Bay Logging, Betty Buhler, 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 7814 8th Avenue 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 Site, 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.

Amelia Oates, GIT

Staff Geologist

Jerry Sawetz

Senior Environmental Scientist

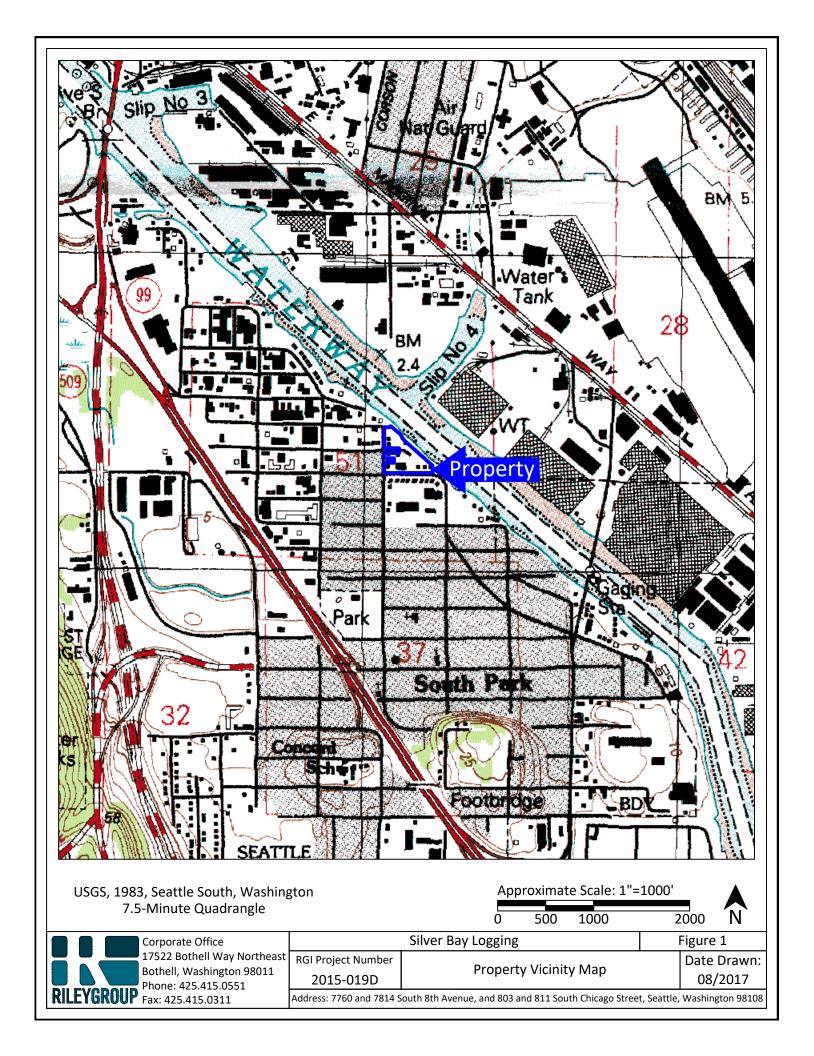
Paul D. Riley, LG, LHG

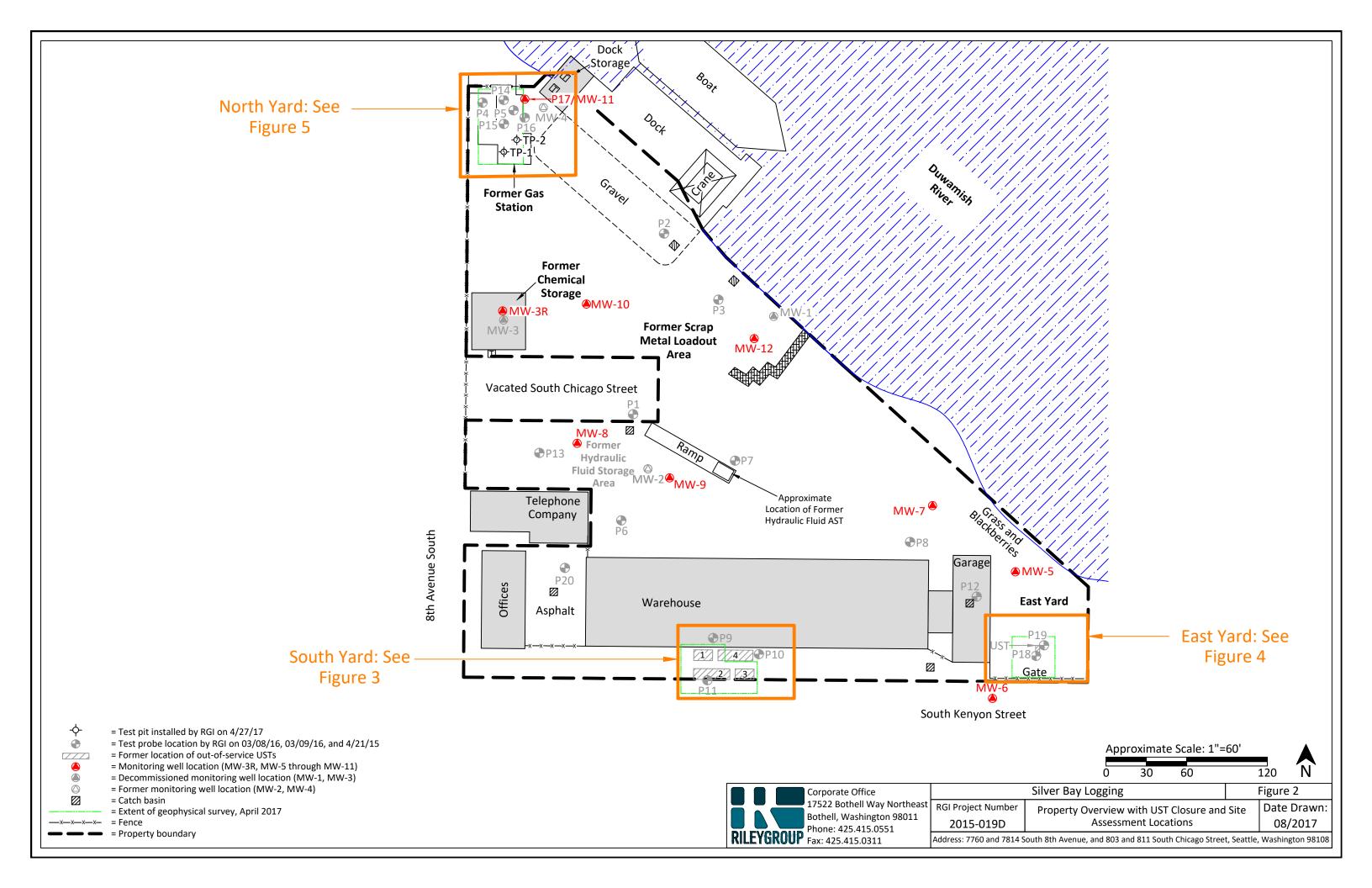
Principal Geologist

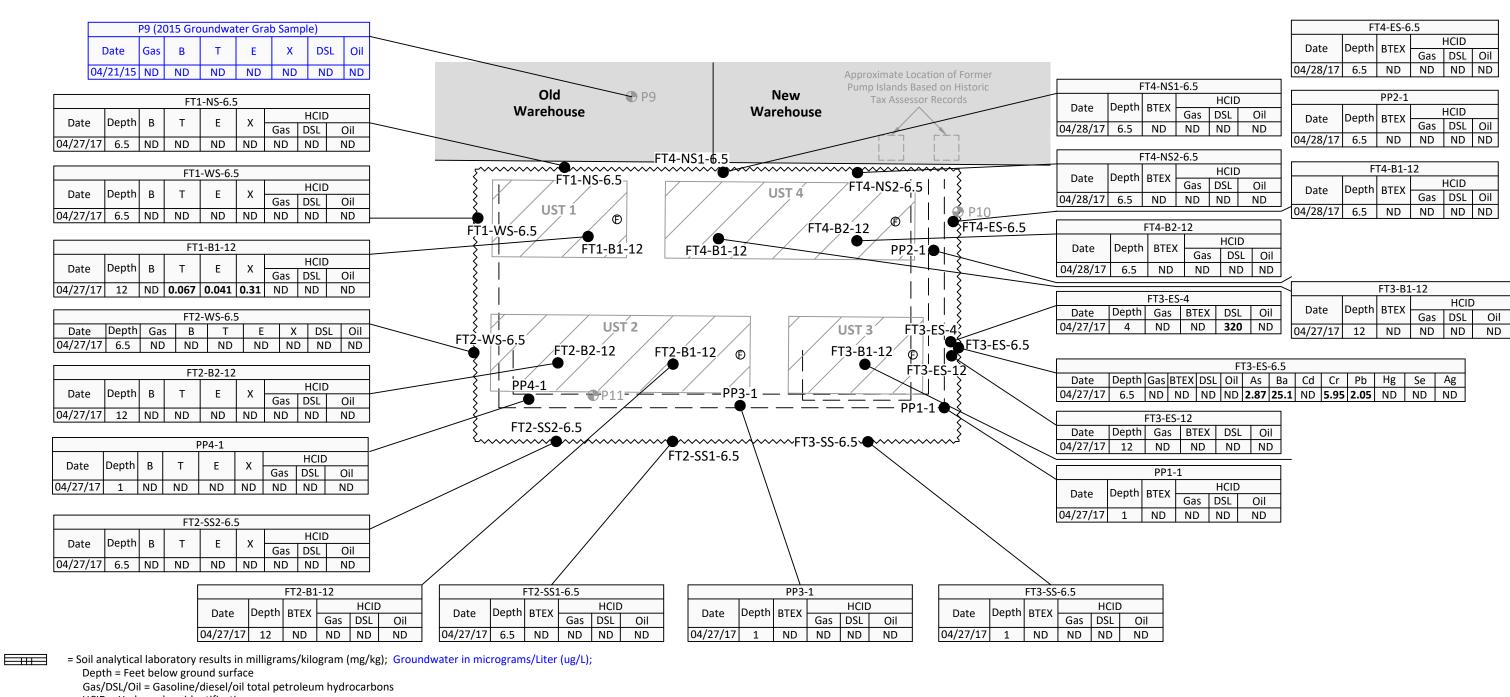


Figures









HCID = Hydrocarbon identification

BTEX = Benzene, toluene, ethylbenzene, xylenes

Ar = Arsenic, Ba = Barium, Cd = Cadmium, Cr = Chromium, Pb = Lead, Hg = Mercury, Ag = Silver

ND = Not detected above laboratory detection limits

---- = Not analyzed

Bold results indicate concentration above the laboratory method detection limit

Yellow and bold highlighted results exceed soil screening levels

= Approximate location of product piping

= UST Site Assessment soil sample location by RGI, 4/27/17 - 4/28/17

= Previous test probe location by RGI, 4/21/15

= Former location of out-of-service USTs decommissioned and removed by RGI, 4/27/17 - 4/28/17

= UST excavation extents, 4/2017



Corporate Office 17522 Bothell Way Northeast | RGI Project Number Bothell, Washington 98011 Phone: 425.415.0551

Silver Bay Logging 2015-019D

South Yard Area with UST1, UST2, UST3, and UST4 Soil and Groundwater Analytical Results

Approximate Scale: 1"=10'

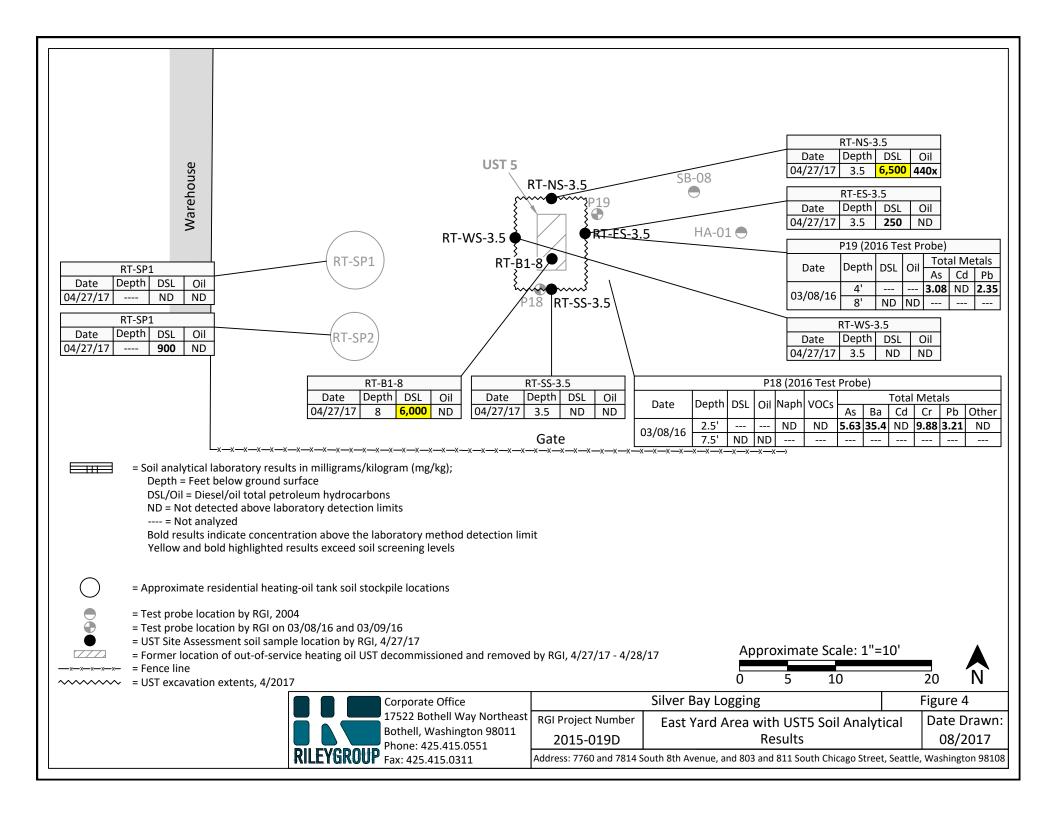
Date Drawn: 08/2017

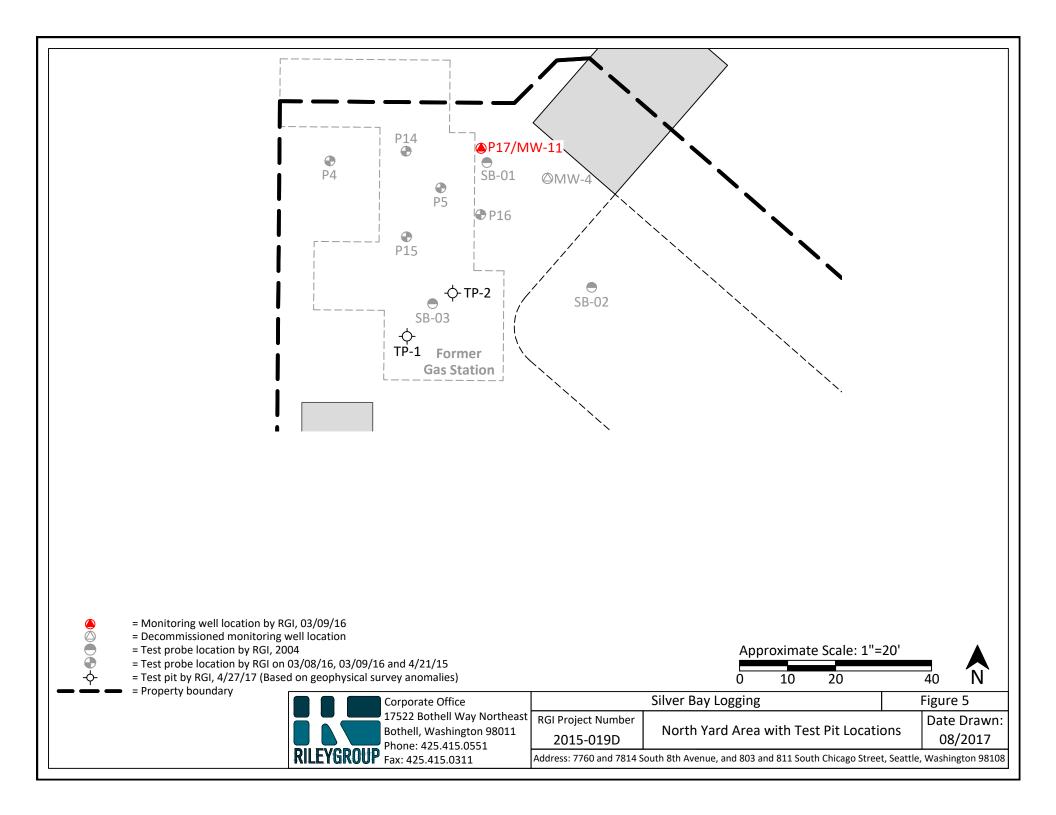
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Figure 3

N

Address: 7760 and 7814 South 8th Avenue, and 803 and 811 South Chicago Street, Seattle, Washington 98108





Tables



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

Silver Bay Logging

7814 8th Avenue South, Seattle, Washington 98108

The Riley Group, Inc. Project No. 2015-019D

The Riley Group, Inc. Project No. 2015-019D VOCs SVOCS Total Metals																												
Sample	Sample	Sample		Gas		Diesel				voc	S					SVOCs					_		Total	Metals				
Number	Depth	Date	PID	TPH	BTEX	TPH	Oil TPH	PCE	TCE	cis-1,2-	vc	1,1-DCE	Other	Naph.	Benzo(a)	cPAH (TEF)	Other SVOCs	PCBs	As	Ва	Cd	Total	CrVI	Pb	TCLP	Hg	Se	Ag
										DCE		-,	VOCs		pyrene	` ,	0		,			Cr	G. 1.		Pb ⁶			
								•							surface Inve	stigation							,					
MW3R-2	2	03/09/16			ND	740x	8,900	ND<0.025	ND<0.02	ND<0.05	ND<0.05	ND<0.05	ND	ND<0.05	0.25	0.3775	BSL/ND	ND<0.02	2.11	26.7	ND<1	8.55		7.28		ND<1	ND<1	ND<1
MW3R-4	4	03/09/16	0.2																									
MW3R-6	6	03/09/16	0.2																									
MW3R-12	12	03/09/16	0.1																									
MW6-5	5	03/08/16	0.0																									
MW6-11	11	03/08/16	0.0																									
MW7-5	5	03/08/16	0.1			ND<50	ND<250												1.82		ND<1			2.07				
MW7-11	3	03/08/16	0.0				ND 4250								0.010	0.0226	DCI /ND		4.02	26.4	ND 41			46.0		ND 41		
MW8-3 MW8-4	4	03/09/16 03/09/16	0.0			ND<50	ND<250								0.018	0.0236	BSL/ND 	ND<0.02	4.93	26.4	ND<1	6.97		46.9		ND<1	ND<1	ND<1
MW8-6	6	03/09/16	0.0															+		1								
MW8-15	15	03/09/16	0.0																									
MW9-2.5	2.5	03/03/16	0.0		ND	ND<50		ND<0.025	ND<0.02	ND<0.05	ND<0.05	ND<0.05		ND<0.05				Aroclor 1254 = 0.18	6.81		ND<1			37.1				
MW9-5.5	5.5	03/08/16	0.2				ND<230			ND<0.03	ND<0.03																	
MW9-10	10	03/08/16	0.1																									
MW10-2.5	2.5	03/08/16	0.3		ND	ND<50		ND<0.025	ND<0.02			ND<0.05		ND<0.05				ND<0.02	2.04	13.5	ND<1	6.07		4.02		ND<1	ND<1	ND<1
MW10-4	4	03/08/16	0.1																									
MW10-11	11	03/08/16	0.1																									
MW10-15	15	03/08/16	0.1																									
MW12-2.5	2.5	03/08/16	0.1			ND<50	ND<250																					
MW12-5	5	03/08/16	0.2																									
MW12-8	8	03/08/16	0.1																									
P14-2	2	03/09/16	0.0			ND<50	ND<250												6.72		20.5			2,040	77.1			
P14-4	4	03/09/16	0.0																					482				
P15-2	2	03/09/16	0.0	ND<2	ND	270x	1,200												16.3		9.83			1,240				
P15-4	4	03/09/16	0.2																					170				
P15-6	6	03/09/16	0.0	ND<2	ND	ND<50	ND<250																					
P16-2	2	03/09/16	0.0			ND<50	ND<250												6.10		7.79			1,700				
P16-4 P17-3	4	03/09/16 03/09/16	0.0			78x	2 200												110		2.02			288 540				
P17-5	5	03/09/16	0.4	ND<2	ND	ND<50	2,200 ND<250												2.39		2.93			1.92				
P17-10	10	03/09/16	0.0			ND<50	ND<250																	1.52				
P17-14.5	14.5	03/09/16	0.0																									
P18-2.5	2.5	03/08/16	0.0		ND			ND<0.025	ND<0.02	ND<0.05	ND<0.05	ND<0.05	ND	ND<0.05					5.63	35.4	ND<1	9.88		3.21		ND<1	ND<1	ND<1
P18-7.5	7.5	03/08/16	0.0			ND<50	ND<250																					
P19-4	4	03/08/16	0.0																3.08		ND<1			2.35				
P19-8	8	03/08/16	0.0			ND<50	ND<250																					
													April 20	015 Subs	urface Inves	stigation												
P1-4	4	04/21/15	0.0			ND<50	ND<250											ND<0.02										
P2-1	1	04/21/15	0.0			150 x	3,000											Aroclor 1260 = 0.028										
P2-4	4	04/21/15	0.0			ND<50	ND<250											ND<0.02										
P3-1	1	04/21/15			ND	1,700 x	_	ND<0.025	ND<0.02	ND<0.05	ND<0.05	ND<0.05	ND	ND<0.05				ND<0.02	14.8	30.0	ND<1	6.72		28.4		ND<1	ND<1	ND<1
P3-5	5	04/21/15				ND<50	ND<250											ND<0.02	2.49	43.5	ND<1	7.17		3.39		ND<1	ND<1	ND<1
P3-10	10	04/21/15																										
P4-3	3	04/21/15																										
P4-8	8	04/21/15		ND<2	ND	ND<50	ND<250												12.6	4.54	47.4	424						
P5-2 P5-8	2	04/21/15		4.0	ND	330 x	2,900												12.6	161	17.4	124	ND<0.059	9(<mark>4,100</mark>	111	ND<1	ND<1	11.5
P5-8 P5-15	8 15	04/21/15 04/21/15																										
13-13	13	04/21/13	0.0															Aroclor 1016 = 2.9						+				
P6-SF	Surface	04/21/15			ND	5,300	10,000	ND<0.025	ND<0.02	ND<0.05	ND<0.0 5	ND<0.05	ND	ND<0.0 5				Aroclor 1248 = 2.9	10.2	150	8.80	183		609		1.51	ND<1	ND<1
NATCA BA-AL LICO	ail Cl	Lavel- f	مارين والم		F 6								0			-DALLEY CO		Aroclor 1254 = 0.93						+		<u> </u>	<u> </u>	<u> </u>
MTCA Method A S	Properties		uustrial	100/30 ¹	E = 6 X = 9	2,0	000	0.05	0.03				Analyte Specific	5	0.1	cPAH Toxicity = 2	Analyte Specific	Total PCB = 1	20		2	2,000 ⁵	19	1,000	5 ⁷	2		
MTCA Metho			for		7-3								эрсспіс						 	1	 		 	++		\vdash	\vdash	
	stricted Land	-								160	0.674	4,000			0.137	NVE	Analyte Specific			16,000							400	400
Unres	stricted Land	uses																							, '	<u> </u>	<u> </u>	I I

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

Silver Bay Logging

7814 8th Avenue South, Seattle, Washington 98108

The Riley Group, Inc. Project No. 2015-019D

The Riley Group, Inc	. Project N	o. 2015-019I	D		1	1	1	T										_	ı									
Sample	Sample	Sample	DID.	Gas	DTEV	Diesel	0.1 2011		1	VOC	is I					SVOCs	I	200		ı			Total	Metals	TO D	1		
Number	Depth	Date	PID	ТРН	BTEX	ТРН	Oil TPH	PCE	TCE	cis-1,2- DCE	vc :	1,1-DCE	Other VOCs	Naph.	Benzo(a) pyrene	cPAH (TEF)	Other SVOCs	PCBs	As	Ва	Cd	Total Cr	CrVI	Pb	TCLP Pb ⁶	Hg	Se	Ag
P6-0	0	04/21/15	4.8		X = 0.098	17,000 x	100,000	0.15	0.044	1.6	0.072	ND<0.05	ND	0.075	ND<2.5	ND	ND	Aroclor 1248 = 0.53 Aroclor 1254 = 0.47	8.58	44.4	4.31	73.2		231		ND<1	ND<1	ND<1
P6-5	5	04/21/15	2.5		ND	210	ND<250	ND<0.025	ND<0.02	ND<0.05	ND<0.0 5	ND<0.05	ND	0.064	0.15	0.2047	BSL/ND	ND<0.02	6.76	49.5	ND<1	9.43		96.4		ND<1	ND<1	ND<1
P6-8	8	04/21/15	0.0			ND<50	ND<250																					
P6-15	15	04/21/15	0.0															Aroclor 1248 = 0.045										
P7-1	1	04/21/15	0.1		ND	1,900 x	14,000	ND<0.025			ND<0.05			ND<0.05				Aroclor 1254 = 0.031	2.03	23.0	ND<1	19.0		19.3		ND<1	ND<1	ND<1
P7-7	7	04/21/15	0.0		 E = 0.10	ND<50	ND<250																					
P8-0	0	04/21/15	0.0	41	E = 0.10 X = 0.22	3,200	7,900												6.68	85.1	4.42	44.6		344		ND<1	ND<1	ND<1
P8-1 P8-3.5	3.5	04/21/15 04/21/15	0.0	ND<2	ND	ND<50	ND<250											ND<0.2 ND<0.02	6.10 5.35	118 54.1	ND<1 ND<1	7.45 7.16		165 34.0		ND<1 ND<1	ND<1 ND<1	ND<1
P8-8	8	04/21/15	0.0		ND																	7.10						
P9-2	2	04/21/15	0.1																									
P9-9.5	9.5	04/21/15	0.2	ND<2	ND	ND<50	ND<250																					
P9-15	15	04/21/15																										
P10-2	2	04/21/15	0.1																									
P10-9	9	04/21/15	0.1																									
P10-15 P11-2	15 2	04/21/15 04/21/15	0.0																									
P11-2	10	04/21/15	0.0																									
P12-2	2	04/21/15	0.0		ND	ND<50	ND<250	ND<0.025	ND<0.02	ND<0.05	ND<0.05 N	ND<0.05	ND	ND<0.05				Aroclor 1262 = 0.022	8.95	222	ND<1	8.05		477	ND<1	ND<1	ND<1	ND<1
P12-5	5	04/21/15	0.0																									
P12-10	10	04/21/15	0.0																									
P13-SF	Surface	04/24/15			ND	13,000 x	45,000	ND<0.025	ND<0.02	ND<0.05	ND<0.05	0.081	ND	ND<0.05				Aroclor 1242= 0.34										
P13-0	0	04/21/15	85		E = 0.24 X = 0.91	6,000	18,000	ND<0.025	ND<0.02	ND<0.05	ND<0.05 N	ND<0.05	ND	0.93				ND<0.2	12.6	77.1	1.96	43.0		112		ND<1	ND<1	ND<1
P13-5	5	04/21/15	37		ND	ND<50	ND<250	ND<0.025	ND<0.02	ND<0.05	ND<0.05 N	ND<0.05	ND	ND<0.05				ND<0.02	1.42	14.4	ND<1	4.66		3.34		ND<1	ND<1	ND<1
P13-10	10	04/21/15	0.2																									
P13-15	15	04/21/15	0.2												 													
SBL-SB-01-3-4	3-4	12/04/03	0.0										Jecembe 		bsurface In	vestigation											T	
SBL-SB-01-6-7	6-7	12/04/03	0.0																									
SBL-SB-02-3-3.5	3-3.5	12/04/03	0.0																									
SBL-SB-02-6-6.5	6-6.5	12/04/03	0.0	ND<3	ND	ND<25	ND<50	ND<0.01	ND<0.01	ND<0.01	ND<0.01 N	ND<0.01	ND											ND<4.2				
SBL-SB-03-3-4	3-4	12/04/03	0.4																									
SBL-SB-03-6-7	6-7	12/04/03	0.4																									
SBL-SB-04-3-4	3-4	12/04/03	0.0	ND<3	ND	41	570							ND<0.6		0.453	ND	ND		64	ND<0.46			38		0.07	 	
SBL-SB-04-6-6.5	6-6.5	12/04/03	0.0					 ND<0.01	 ND<0.01	 ND<0.01	 ND<0.01 N	 JD<0.01		 ND-0 1	 ND<0.1	0.0755												
SBL-SB-05-3-4 SBL-SB-05-5-6	3-4 5-6	12/04/03 12/04/03	0.0					ND<0.01	ND<0.01	ND<0.01	ND<0.01 N	ב אט<0.01	ND 	ND<0.1	ND<0.1	0.0755	ND 											
SBL-SB-06-3-4	3-4	12/04/03	0.4																									
SBL-SB-06-5-6	5-6	12/04/03	0.2					ND<0.01			ND<0.01 N			ND<0.1	ND<0.1	0.0755	ND											
SBL-SB-07-3-4	3-4	12/04/03	0.0																									
SBL-SB-07-7-8	7-8	12/04/03	0.0																									
SBL-SB-08-3-4	3-4	12/04/03	0.0											ND<0.1	ND<0.1	0.0755	2-Eth = 830	ND		66	9.6	79		51		0.67	ND<4.3	ND<3.2
SBL-SB-08-7-8	7-8	12/04/03	0.2																									
SBL-SB-08-8-8.5	8-8.5	12/04/03	0.0	ND<3	ND	ND<25	ND<50											 Arador 1354 = 0.3										
SBL-HA1-3/4 SBL-HA2-3/4	3-4 3-4	01/12/04 01/12/04	0.0					ND<0.01	ND<0.01	ND<0.01	 ND<0.01 N	 JD<0.01	ND					Aroclor 1254 = 0.2										
SBL-SB-09-3-4	3-4	12/04/03	0.0																									
SBL-SB-09-7-8	7-8	12/04/03	0.0																									
MTCA Method A So				100/30 ¹	E = 6 X = 9	2,0	000	0.05	0.03				Analyte Specific	5	0.1	cPAH Toxicity =	Analyte Specific	Total PCB = 1	20		2	2,000 ⁵	19	1,000	5 ⁷	2		
MTCA Method			or							160	0.674	4,000			0.137	NVE	Analyte Specific			16,000							400	400
Unrest	ricted Land	uses																										

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

Silver Bay Logging

7814 8th Avenue South, Seattle, Washington 98108

The Riley Group, Inc. Project No. 2015-019D

										VOC	:s					SVOCs			Total Metals							,		
Sample Number	Sample Depth	Sample Date	PID	Gas TPH	ВТЕХ	Diesel TPH	Oil TPH	PCE	TCE	cis-1,2- DCE	vc	1,1-DCE	Other VOCs	Naph.	Benzo(a) pyrene	cPAH (TEF)	Other SVOCs	PCBs	As	Ва	Cd	Total Cr	CrVI	Pb	TCLP Pb ⁶	Hg	Se	Ag
SBL-SB-09-9-10	9-10	12/04/03	0.0																									
SBL-SB-10-3-4	3-4	12/04/03	0.0																									
SBL-SB-10-7-8	7-8	12/04/03	0.0																									
SBL-SB-10-9.5-10.5	9.5-10.5	12/04/03	0.0																									
SBL-SB-11-3-4	3-4	12/04/03	0.0					ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND	ND<0.1	ND<0.1	0.0755	ND		ND<4.9	62	ND<0.61	13		110		0.10	ND<4.9	ND>3.7
SBL-SB-11-7-8	7-8	12/04/03	0.0																									
SBL-SB-11-9-10	9-10	12/04/03	0.0																									
SBL-SB-12-3-4	3-4	12/04/03	0.0																									
SBL-SB-12-6.5-7.5	6.5-7.5	12/04/03	0.0	ND<3	ND	ND<25	ND<50																-					
SBL-SB-14-3-4	3-4	12/12/03	0.2																									
SBL-SB-14-7-8	7-8	12/12/03	0.2	ND<3	ND	ND<25	ND<50																					
SBL-SB-13-3-4	3-4	12/04/03	0.0																									
SBL-SB-13-7-8	7-8	12/04/03	0.0																									
SBL-SB-13-9.5-10.5	9.5-10.5	12/04/03	0.0																									
MTCA Method A So	il Cleanup Properties		dustrial	100/30 ¹	E = 6 X = 9	2,0	000	0.05	0.03				Analyte Specific	5	0.1	cPAH Toxicity = 2	Analyte Specific	Total PCB = 1	20		2	2,000 ⁵	19	1,000	5 ⁷	2		
MTCA Method Unrest	B Soil Clea	• .	for							160	0.674	4,000			0.137	NVE	Analyte Specific			16,000							400	400

Notes:

All results and detection limits are given in milligrams per kilogram (mg/kg), equivalent to parts per million (ppm), unless otherwise indicated

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

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.

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.

SVOCs (semi-volatile organic compounds) determined using EPA Test Method 8270.

TEF = Toxicity equivalency factor

BSL = Below screening limits

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

2-Eth = Bis(2-Ethylhexy)phthalate

Total Metals (As = Aarsenic, Ba = barium, Cd = cadmium, Cr = chromium, CrVI = hexavalent chromium, Pb = lead, Hg = mercury, Se = selenium, Ag = silver) determined using EPA Method 200.8.

TCLP Pb (toxicity characterisitics leaching procedure lead) determinted using EPA Method 200.8 and CFR Part 261.

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

ND = Not detected at noted analytical detection limit.

NVE = No value established.

---- = Not analyzed or not applicable.

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

- ¹ The higher cleanup level is allowed if no benzene is detected in the sample and the total of toluene, ethylbenzene and xylenes is less than 1% of the gasoline mixture.
- $^{2}\,$ The higher cleanup level is allowed if no hexavalent chromium (CrVI) is present in the sample.
- ³ No MTCA Method A Cleanup Level has been established. Therefore, the MTCA Method B Non-Carcinogenic Standard Formula Value is listed for reference.
- ⁴ Indicates the carcinogenic value was referenced.
- ⁵ Total chromium results are compared to the cleanup levels for trivalent chromium (CrIII).
- ⁶ Results and detection limits are given in milligrams per liter (mg/L); equivalent to parts per million (ppm).
- ⁷ based on Method B Direct Contact
- ⁸ Identified by laboratory as likely lube oil.

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 2. Summary of Historical Groundwater Sample Analytical Laboratory Results Silver Bay Logging 7814 8th Avenue South, Seattle, Washington 98108 The Riley Group, Inc. Project No. 2015-019D

The Riley	Group, Inc	. Project No	. 2015-019D	<u> </u>				-																								
Sample	Sample	Top of Casin	g Depth to	Groundwater	Gasoline		Diesel	Oil			VOCs				Other				_	Total Me	tals							Dissolv	ed Metals			
Number	Date	(TOC)	Water	Elevation	TPH	BTEX	TPH	TPH	PCE	TCE	cis 1,2-	vc	Other	cPAHs	SVOCs	PCBs	As	Ва	Cd	Cr III	Pb	Hg	Se	۸۵	As	Ва	Cd	Cr III	Pb	Hg	Se	Ag
- Tunnet	Dute	Elevation	(bgs)	Lievation					FCL	ICL	DCE	VC	VOCs		37003		AS	Ба	Cu	Ci iii	FU	пg	36	Ag	AS	Ба	Cu	Cilli	FU	пв	36	Ag
MW-1, Scr	eened Inter	val 3 to 8 fee	t bgs, Total D	epth 9 feet bgs																												
MW-1	03/09/16	100.00													\	Vell Deco	ommis	ssioned														
MW-1	04/23/15	100.00	4.39	95.61	ND<100	ND	630 x	1,200	ND<1	ND<1	ND<1	ND<0.2				ND																
MW-1	12/16/03	100.00	3.54	96.46					ND<2	ND<2	ND<2	ND<2	ND		BSL/ND										25	200	ND<5	ND<7	ND<3	ND<0.2	ND<40	ND<30
MW-2, Scr	eened Inter	val 7 to 12 fe	et bgs, Total	Depth 13 feet bgs	5	1	1		·						-		1				1							ı				
MW-2	04/23/16	101.89														Unable	to Lo	cate														
MW-2	12/16/03	101.89	7.26	94.63		ND	ND<130	ND<250	ND<2	ND<2	ND<2	ND<2	BSL/ND		BSL/ND										9	ND<160	ND<40	ND<56	ND<3	ND<0.2	ND<320	ND<240
			feet bgs, Tota	l Depth 20 feet b	gs	ı	1								•			1	1		1	l .										
MW-3R	04/11/16		5.97	95.18	<u> </u>	ND	370x	270x	ND<1	ND<1	ND<1	0.31	ND	ND	ND	ND<0.1	2 12	22.0	ND<1	ND<1	ND-1	ND-1	1 61	ND<1	1 92	22.4	ND<1	ND<1	ND<1	ND<1	4.37	ND<1
						IVD	370%	2707	NDVI	NDVI	NDVI	0.31	IVD	ND	IVD	140 (0.1	2.13	22.3	ND	NOVI	NDVI	ND \I	4.04	NDVI	1.03	22.7	IVD	NDVI	NDVI	IVD	7.57	IVD
			et bgs, rotar	Depth 11 feet bgs	>										,	Vall Dag		- cianad														
MW-3	03/09/16	101.42	6.40	05.03	ND 400	ND	270	ND -250	ND 4	ND 4	ND 4	ND O	LND			Vell Deco	JIIIIIIII	T	1		I	1			0.40	45.5	ND 4	4.24	467	ND 4	4.27	ND 4
MW-3	04/23/15	101.42	6.40	95.02	ND<100	ND T. 2	270 x	ND<250	ND<1	ND<1	ND<1	ND<0.2	ND DCL (ND		ND	ND									8.13	15.5	ND<1	1.24	167	ND<1	1.27	ND<1
MW-3	12/16/03	101.42	7.34	94.08	ND<50	T=3	130>טא	ND<250	ND<2			ND<2	BSL/ND		BSL/ND										ND<5	70	ND<5	ND<7	ND<3	ND<0.2	ND<40	ND<30
-			et bgs, rotal	Depth 11 feet bgs	•											Hagh)	to Le	cata														
MW-4	04/23/15	101.26	6.22	04.03	ND :50	ND	F70	ND :250	ND :2	ND 3	ND :2	ND :2	DCI /NE		DCI /NC	Unable		1							42	ND :4CC	ND :40	ND :50		ND :0.2	ND :222	ND :246
MW-4	12/16/03	101.26	6.33	94.93	ND<50	ND	570	ND<250	ND<2	ND<2	ND<2	ND<2	BSL/ND		BSL/ND										12	ND<160	ND<40	ND<56	4	ND<0.2	ND<320	ND<240
	1			Depth 13 feet bgs	5 	I	1				1		, ,	1														I				
MW-5	04/11/16	103.43	11.04	92.39		ND	ND<50	ND<250	8.0	ND<1	ND<1	ND<0.2	ND		ND		1.56		ND<1		ND<1				1.52		ND<1		ND<1			
MW-5	04/23/15	103.43	9.13	94.30	ND<100	ND	ND<50	ND<250	7.7			ND<0.2	ND		ND	ND									1.59	1.99	ND<1	ND<1	ND<1	ND<1	1.74	ND<1
MW-5	12/16/03	103.43	9.65	93.78		ND			16	2.0	ND<2	ND<2	BSL/ND		BSL/ND										ND<5	ND<20	ND<5	ND<7	ND<3	ND<0.2	ND<40	ND<30
MW-6, Scr	eened Inter	val 5 to 15 fe	et bgs, Total	Depth 15 feet bgs	5																											
MW-6	04/08/16	103.40	10.35	93.05		ND	ND<50	ND<250	14	ND<1	ND<1	ND<0.2	ND		ND		1.03		ND<1		ND<1				1.04		ND<1		ND<1			
MW-7, Scr	eened Inter	val 6 to 21 fe	et bgs, Total	Depth 21 feet bgs	<u>. </u>	1															1				l l			l .				
MW-7	04/08/16	103.56	11.34	92.22		ND	ND<50	ND<250	12	2.0	ND<1	ND<0.2	ND		ND		1.55		ND<1		ND<1				1.37		ND<1		ND<1			
				Depth 20 feet bgs															!!		ļ											
MW-8	04/08/16		5.49	94.61			970x	600x						ND		ND<0.1	7.04		ND<1		ND<1				5.14		ND<1		ND<1			
				1			970X	BUUX						ND		ND<0.1	7.04		ND<1		ND<1				5.14		IND <i< td=""><td></td><td>IND<1</td><td></td><td></td><td></td></i<>		IND<1			
	1			Depth 17 feet bgs	1	1							1															1				
MW-9	04/08/16		7.11	94.45		ND	440x	ND<250	ND<1	ND<1	ND<1	0.30	ND		ND	ND<0.1	10.4		ND<1		ND<1				10.1		ND<1		ND<1			
	1		eet bgs, Tota	l Depth 18 feet be	gs	1			- 1												1	1						ı	1			
MW-10	04/08/16	99.83	6.73	93.10		ND	1,100x	940x	ND<1	ND<1	ND<1	0.46	ND		ND		1.88	18.2	ND<1	1.31	ND<1	ND<1	3.21	ND<1	1.49	17.1	ND<1	1.14	ND<1	ND<1	2.99	ND<1
MW-11, S	reened Inte	erval 5 to 20	feet bgs, Tota	l Depth 20 feet b	gs	•	•										-										•	•				
MW-11	04/08/16	100.92	5.92	95.00			360x	400x								ND<0.1	2.74	44.3	ND<1	ND<1	ND<1	ND<1	7.43	ND<1	2.23	44.2	ND<1	ND<1	ND<1	ND<1	7.15	ND<1
MW-12, S	reened Inte	erval 5 to 20	feet bgs, Tota	l Depth 20 feet b	gs																											
MW-12	04/08/16	99.29	6.88	92.41			1,600x	610x								ND<0.1	5.14		ND<1		ND<1				4.87		ND<1		ND<1			
			•	•	•	•					<u> </u>	2	016 Grab 9	Sample	s During T	est Prob	ing	_									•	•				
P15W	03/09/16		6.06		ND<100	ND	390x	280x	ND<1	ND<1	ND<1	ND<0.2			ND																	
	,,														s During T			1	<u> </u>		1				<u> </u>							
P3-W	04/21/15		3.5		210		1,900 x	560 x																								
P4-W	04/21/15		6																													
P5-W	04/21/15		8		ND<100	T=11	770 x	600 x																								
P6-W	04/21/15		8			ND	190 x	ND<250	ND<1	ND<1	1.9	ND<0.2	BSL/ND		BSL/ND																	
P7-W	04/21/15		7.5				710 x	430 x																								
P9-W	04/21/15		8		ND<100	ND	ND<50	ND<250									<u> </u>	 					-									
	04/21/15		8		145/100	ND	800 x	390 x	ND<1	ND<1	5.3	ND<0.2	BSL/ND		BSL/ND				<u> </u>													
1 13-44	0-721/13		U			ואט	- COO X	330 A	IAD/T	IAD/T	3.3	14070.2	DUCINO		DOL/ ND		l															
847	CV Mother	A Claanus !	ovals for Gra	ınd Water	900/4 0001	T-1000	E00	500	_	_	NI)/E	0.3	Analyte	0.1	Analyte	0.1	_			E0	15	,					_	F0	15	,		
I WII	CA WIETHOO	A Cleanup L	evels for Grou	unu vvater	800/1,000 ¹	1=1000	500	500	5	5	NVE	0.2	Specific	0.1	Specific	0.1	5		5	50	15	2			5		5	50	15	2		
													 					1	igwdow												<u> </u>	
МТ	CA Method	B Cleanun L	vels for Grou	ınd Water ²	NVE	T=640	NVE	NVE	20.8	0.54	16	24	Analyte		Analyte	0.044	0.059	3,200	8	24,000			80	80	0.058	3,200	8	24,000			80	80
""	wictiou	- cicunup L	101 0100		'''-			''''	_0.0	3.54			Specific		Specific	2.0-14		3,200		_ 1,000				55	2.030	-,=50	l	_ 1,000			"	
		Surface Wate	or ARARe		NVE	T=1,300	NIVE	NVE	0.69	2.5	NVE	0.025	Analyte		Analyte	6.40E-05	0 01	2 1 000	0.25	57.2	0.54	0.012	_	0 22	0 010	1,000	0.25	57.2	0.54	0.012	5	0.32
	•	Janace Wdl	. ANANS		INVE	1-1,300	INVE	INVE	0.09	2.5	INVE	0.025	Specific		Specific	v.₩UE-U5	0.018	1,000	0.23	31.2	0.34	0.012		0.32	0.019	1,000	0.25	37.2	0.54	0.012	3	0.32
																															1 1	

Table 2, Page 2 of 2. Summary of Historical Groundwater Sample Analytical Laboratory Results

Silver Bay Logging

7814 8th Avenue South, Seattle, Washington 98108

The Riley Group, Inc. Project No. 2015-019D

Notes:

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

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

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

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

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

PCE (tetrachloroethene), TCE (trichloroethene), cis-1,2-DCE (cis-1,2-dichloroethene), trans-1,2-DCE (trans-1,2-DCE (trans-1,2-

SVOCs (semi-volatile organic compounds) determined using EPA Test Method 8270.

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

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

Metals (As = Arsenic, Ba = barium, Cd = cadmium, Cr III = chromium III, Pb = lead, Hg = mercury, Se = selenium, Ag = silver) determined using EPA Method 200.8.

ND = Not detected above the noted analytical detection limit.

BSL = Below all screening levels

NVE = No value established.

---- = 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.

ARAR = Applicable or Relevant and Appropriate Requirements. Based on the most conservative value for aquatic life, human health for fresh and/or marine waters (Clean Water Act 304; Washington Administrative Code 173-201A; or National Toxics Rule (NTR) 40 CFR 131).

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

² MTCA Method A Cleanup Level was not available. Therefore, the MTCA Method B Carcinogenic or Non-Carcinogenic Cleanup Level is referenced, whichever is less.

³ Indicates the carcinogenic value was referenced.

Bold results indicated concentrations above laboratory detection limits.

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

Bold and blue highlighted results indicate concentrations (if any) that exceed Surface Water ARARs.

Bold and orange highlighted results indicate concentrations (if any) that exceed both MTCA Method A Screening Levels for Ground Water and Surface Water ARARs.

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

Silver Bay Logging

7814 8th Avenue South, Seattle, Washington 98108

The Riley Gro	up, Inc. Proj	ect No. 2015	5-019D																		
Sample	Sample	Sample		Gasoline					Diesel			HCID					Total I	Metals			
Sample Number	Depth		PID	TPH	В	Т	E	Х	TPH	Oil TPH	Gasoline	Diesel	Oil	As	Ва	Cd	Total Cr	Pb	Hg	Se	Ag
								South Ya	rd UST Re	emoval											
UST 1 (5,000-	gallon UST)																				
FT1-WS-6.	5 6.5	04/27/17	2.0		ND<0.02	ND<0.02	ND<0.02	ND<0.06			ND<20	ND<50	ND<250								
FT1-B1-12	2 12	04/27/17	1.5		ND<0.02	0.067	0.041	0.31			ND<20	ND<50	ND<250								
FT1-NS-6.5	5 6.5	04/27/17	0.8		ND<0.02	ND<0.02	ND<0.02	ND<0.06			ND<20	ND<50	ND<250								
UST 2 (10,000	-gallon UST)																				
FT2-SS1-6.	5 6.5	04/27/17	2.5		ND<0.02	ND<0.02	ND<0.02	ND<0.06			ND<20	ND<50	ND<250								
FT2-SS2-6.	5 6.5	04/27/17	0.8		ND<0.02	ND<0.02	ND<0.02	ND<0.06			ND<20	ND<50	ND<250								
FT2-B1-12	2 12	04/27/17	4.3		ND<0.02	ND<0.02	ND<0.02	ND<0.06			ND<20	ND<50	ND<250								
FT2-B2-12	2 12	04/27/17	0.6		ND<0.02	ND<0.02	ND<0.02	ND<0.06			ND<20	ND<50	ND<250								
FT2-WS-6.	5 6.5	04/27/17	47.1	ND<2	ND<0.02	ND<0.02	ND<0.02	ND<0.06	ND<50	ND<250											
UST 3 (5,000-	gallon UST)																				
FT3-SS-6.5	6.5	04/27/17	7.2		ND<0.02	ND<0.02	ND<0.02	ND<0.06			ND<20	ND<50	ND<250								
FT3-ES-6.5	6.5	04/27/17	91.5	ND<2	ND<0.02	ND<0.02	ND<0.02	ND<0.06	ND<50	ND<250				2.87	25.1	ND<1	5.95	2.05	ND<1	ND<1	ND<1
FT3-B1-12	2 12	04/27/17	0.7		ND<0.02	ND<0.02	ND<0.02	ND<0.06			ND<20	ND<50	ND<250								
FT3-ES-4	4	04/27/17	0.5	ND<2	ND<0.02	ND<0.02	ND<0.02	ND<0.06	320	ND<250											
FT3-ES-12	2 12	04/27/17	0.5	ND<2	ND<0.02	ND<0.02	ND<0.02	ND<0.06	ND<50	ND<250											
UST 4 (10,000	-gallon UST)																				
FT4-NS1-6.	.5 6.5	04/28/17			ND<0.02	ND<0.02	ND<0.02	ND<0.06			ND<20	ND<50	ND<250								
FT4-B1-12	2 12	04/28/17			ND<0.02	ND<0.02	ND<0.02	ND<0.06			ND<20	ND<50	ND<250								
FT4-NS2-6.	.5 6.5	04/28/17			ND<0.02	ND<0.02	ND<0.02	ND<0.06			ND<20	ND<50	ND<250								
FT4-B2-12	2 12	04/28/17			ND<0.02	ND<0.02	ND<0.02	ND<0.06			ND<20	ND<50	ND<250								
FT4-ES-6.5	6.5	04/28/17			ND<0.02	ND<0.02	ND<0.02	ND<0.06			ND<20	ND<50	ND<250								
Product Pipin	g																				
PP1-1	1	04/27/17	28.5		ND<0.02	ND<0.02	ND<0.02	ND<0.06			ND<20	ND<50	ND<250								
PP2-1	1	04/27/17	21.8		ND<0.02	ND<0.02	ND<0.02	ND<0.06			ND<20	ND<50	ND<250								
PP3-1	1	04/27/17	30.8		ND<0.02	ND<0.02	ND<0.02	ND<0.06			ND<20	ND<50	ND<250								
PP4-1	1	04/27/17	14.1		ND<0.02	ND<0.02	ND<0.02	ND<0.06			ND<20	ND<50	ND<250								
								East Yar	d UST Re	moval											
UST 5 (300-ga	llon UST)																				
RT-NS-3.5	3.5	04/27/17	5.4						6,500	440x											
Soil eening evels	ITCA Methodels for Unres		•	100/30 ¹	0.03	7	6	9	2,0	000	800/ 1,000 ¹	500	500	20		2	19/2²	250	2		
יי ור אָ, ו	TCA Metho		٠,												1,650					5.2	13.6

Table 3, Page 2 of 2. Summary of UST Site Assessment Soil Sample Analytical Laboratory Results

Silver Bay Logging

7814 8th Avenue South, Seattle, Washington 98108

The Riley Group, Inc. Project No. 2015-019D

52	mple	Sample	Sample		Gasoline					Diesel			HCID					Total I	Vietals			
	mber	Depth	Date	PID	TPH	В	Т	E	Х	TPH	Oil TPH	Gasoline	Diesel	Oil	As	Ва	Cd	Total Cr	Pb	Hg	Se	Ag
RT-	ES-3.5	3.5	04/27/17	3.2						250	ND<250											
RT-	SS-3.5	3.5	04/27/17	5.2		`				ND<50	ND<250											
RT-\	NS-3.5	3.5	04/27/17	3.6						ND<50	ND<250											
RT	-B1-8	8	04/27/17	73.7						6,000	ND<250											
Soil Sto	ck Piles																					
F	TSP1		04/27/17	29.9	12	ND<0.02	0.077	0.037	0.28	ND<50	ND<250											
F	SP2		04/27/17	18.5	ND<2	ND<0.02	ND<0.02	ND<0.02	ND<0.06	66	ND<250											
RT	-SP1		04/27/17							ND<50	ND<250											
RT	-SP2		04/27/17							900	ND<250											
Soil reening			A Soil Clea tricted Land	•	100/30 ¹	0.03	7	6	9	2,0	000	800/ 1,000 ¹	500	500	20		2	19/2²	250	2		
Scree			B Soil Clea ricted Land	٠,												1,650					5.2	13.6

Notes:

All results and detection limits are given in milligrams per kilogram (mg/kg), equivalent to parts per million (ppm), unless otherwise indicated

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

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.

Gasoline, Diesel, and Oil HCID (hydrocarbon identification) determined using Northwest Test Method NWTPH-HCID.

Total Metals (As = Aarsenic, Ba = barium, Cd = cadmium, Cr = chromium, CrVI = hexavalent chromium, Pb = lead, Hg = mercury, Se = selenium, Ag = silver) determined using EPA Method 6020A.

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

ND = Not detected above laboratory analytical detection limit.

---- = Not analyzed or not applicable.

Washington State Department of Ecology (Ecology) Model Toxics Control Act (MTCA) Method A Soil Cleanup Levels for Unrestricted Land Use (Table 740-1). MTCA Method B Soil Cleanup Levels obtained from Ecology's Cleanup Level and Risk Calculation (CLARC) database on May 25, 2017.

Bold results indicated concentrations above the laboratory detection limit.

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

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

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

³ No MTCA Method A Cleanup Level has been established. Therefore, the MTCA Method B Value protective of groundwater at 13° C is listed for reference.

Appendix A





SITE CHECK/SITE ASSESSMENT CHECKLIST FOR UNDERGROUND STORAGE TANKS

UST ID #: _

County: King

This checklist certifies that site check or site assessment activities were performed in accordance with Chapter 173-360 WAC. Instructions are found on the last page.

I. UST FAC	ILITY	II. OWNER/OPE	RATOR INFORMATION
Facility Compliance Tag #:		Owner/Operator Name: N	1s. Betty Buhler
UST ID #:		Business Name:	
Site Name: Silver Bay Lo	ogging	Address: PO BOX	270
Site Address: 7814 84h	AVE South	city: Kelso	State: WA Zip: 98626
City: Seattle		Phone: 360 - 423	
Phone: 360 - 423 - 61	78	Email: betbuhler	a aol.com
	III. CERTIFIED	SITE ASSESSOR	
1120 1110	elia Oates		Riley Group, Inc.
Cell Phone: 425 - 415 - Email:a	batesa niley-group.com	Address: 17522 B	whal way NE
Certification #: 8768675	Exp. Date: 12/2018	city: Bothell	State: WA Zip: 98011
	IV. TANK IN	IFORMATION	
TANK ID	TANK CAPACITY	LAST SUBSTANCE STORED	DATE SITE CHECK OR ASSESSMENT CONDUCTED
UST 1	5,000	Gasoline	4/27/17
UST 2	10,000	Diesel	4/27/17
UST 3	5,000	Gasoline	4/27/17
UST 4	10,000	Diesel.	4/28/17
Residential Tank	300	Diesel	4/27/17
V. REASO	N FOR CONDUCTING SITE	CHECK/SITE ASSESSMENT (ch	eck one)
Release investigation follow	ing permanent UST system	closure (i.e. tank removal or	closure-in-place).
☐ Release investigation follow	ing a failed tank and/or line	e tightness test.	2 276 47.27
☐ Release investigation follow	ing discovery of contamina	ted soil and/or groundwater.	
☐ Release investigation directe	ed by Ecology to determine	if the UST system is the sour	ce of offsite impacts.
UST system is undergoing a gasoline) to storing a non-re		is changing from storing a relater).	gulated substance (e.g.
☐ Directed by Ecology for UST	system permanently close	d or abandoned before 12/22	/1988.
☐ Other (describe):			

	VI. CHECKLIST	
	The site assessor must check each of the following items and include it in the report. Sections referenced below can be found in the Ecology publication Guidance for Site Checks and Site Assessments for Underground Storage Tanks.	YES NO
1.	The location of the UST site is shown on a vicinity map.	
2.	A brief summary of information obtained during the site inspection is provided (Section 3.2)	
3.	A summary of UST system data is provided (Section 3.1)	
4.	The soils characteristics at the UST site are described. (Section 5.2)	
5.	Is there any apparent groundwater in the tank excavation?	
6.	A brief description of the surrounding land use is provided. (Section 3.1)	
7.	The name and address of the laboratory used to perform analyses is provided. The methods used to collect and analyze the samples, including the number and types of samples collected, are also documented in the report. The data from the laboratory is appended to the report.	
8.	The following items are provided in one or more sketches:	Ž.
	Location and ID number for all field samples collected	
	If applicable, groundwater samples are distinguished from soil samples	
	Location of samples collected from stockpiled excavated soil	
	Tank and piping locations and limits of excavation pit	
	Adjacent structures and streets	
	Approximate locations of any on-site and nearby utilities	
9.	If sampling procedures are different from those specified in the guidance, has justification for using these alternative sampling procedures been provided? (Section 3.4)	20
10.	. A table is provided showing laboratory results for each sample collected including; sample ID number, constituents analyzed for and corresponding concentration, analytical method, and detection limit for that method. Any sample exceeding MTCA Method A cleanup standards are highlighted or bolded.	20
11.	. Any factors that may have compromised the quality of the data or validity of the results are described.	
12.	The results of this site check/site assessment indicate that a confirmed release of a regulated substance has occurred. The requirements for reporting confirmed releases can be found in WAC 173-360-372.	80
	VII. REQUIRED SIGNATURES	
	Signature acknowledges the Site Check or Site Assessment complies with UST regulations WAC 173-360-360 through	-395.
+	Imelia C. Oates Quelia C. Cato 4/2	18/17
Pri	nt or Type Name Signature of Certified Site Assessor Date	/

SITE CHECK/SITE ASSESSMENT CHECKLIST

FOR UNDERGROUND STORAGE TANKS

INSTRUCTIONS

This checklist must accompany the results of a Site Check Report, which is performed if a release of petroleum or other regulated substance is suspected. It is also required to accompany a Site Assessment Report, which is required following the permanent closure or "change-in-service" of an underground storage tank system. This form is required to be filled out whether or not contamination is found. This checklist is to be completed by the Site Assessor and submitted within thirty days of completing these activities to the following address:

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

- I./II. UST Facility and Owner/Operator Information: Fill out these sections completely. If you do not know your UST ID number, include the facility compliance tag number.
- III. Service Provider Information: It is the responsibility of the ICC-certified Site Assessor to ensure that sampling and documentation procedures are completed in accordance with Ecology's Guidance for Site Checks and Site Assessment for Underground Storage Tanks.
- IV. Tank Information: Use the same Tank identification numbers listed on the facility's Business License which is based on the most recent UST Addendum on file with Ecology. List the last substance stored in each tank, the tank sizes and the date the site check or site assessment was completed.
- V. Required Signature: The Site Assessor signature certifies these procedures were followed.

All confirmed releases must be reported to Ecology by the owner within 24 hours and by service providers within 72 hours of discovery. A Site Characterization Report must be submitted to Ecology within 90 days after confirming a release.

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/icp/ust-lust/people.html

To request materials in a format for the visually impaired call Ecology at 360-407-7170, Relay Service 711, or TTY 877-833-6341



April 10, 2017

Ms. Annette Ademasu
Tank Site Inspector
Washington State Department of Ecology
3190 160th Avenue Southeast
Bellevue, Washington 98008-5452

RE:

UST Removal 30-Day Notice - Waiver Request

Silver Bay Logging 7814 8th Avenue South Seattle, Washington 98108 RGI Project No. 2015-019D

Dear Ms. Ademasu,

On behalf of the Ms. Betty Buhler and Silver Bay Logging, please find attached our completed 30-Day Notice to properly decommission and remove up to six out-of-service USTs located on the above-referenced Property.

RGI understands that Silver Bay Logging is close to finalizing terms to sell and/or lease the Property and the USTs need to be addressed in a timely manner. In addition, RGI understands that Potelco is performing/planning some utility improvements in the project area and the sooner the USTs can be addressed the better. Therefore, RGI requests a waiver of the 30-Day Notice period.

RGI has contracted IO Environmental and Infrastructure, Inc. (IOE) to perform the UST decommissioning and removal services and the only opening on their schedule is April 24, 20017

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

Sincerely,

THE RILEY GROUP, INC.

Paul Riley, LG, LHG

Principal

Attachment:

UST 30-Day Notice

cc:

Ms. Betty Buhler (regular U.S. Mail)

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



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 app	ropriate box:	Intent to Inst	tall 🔀	Intent	to Close L	Change-in-Serv	ice	
	I. SITE INFORI	MATION			II. OWNER	OPERATOR INFO	RMATI	ON
Tag or UBI # (if a	oplicable):			Owner	/Operator Nam	ne: Ms. BETTY	BUHLE	R
UST ID # (if applic	cable):			Busine	ss Name:			
Site Name: SIL	VER BAY LO	GGING PRUPER	TY	Mailing	g Address:	P.O. Box 2	70	
Site Address: 7	814 8th P	AVENUE SOUT	Н	City:	KELSO	State:	WA	Zip: 98626
City: SE	ATTLE			Phone	: 360-423-	6178		
Phone: 36	0-423-617	18		Email:	betbuhler	e aol.com		
	Check	the appropriate bo		e than or		er is required		
		duals performing her qualifying exc	The state of the s		70	ied or have passed of Ecology.	d	
1) 🗌 Installe	er 🔲 Deco	mmissioner 🛚 🛚	Site Asse	essor				
Company Name:	THE PILEY	GROJA, INC	•			ST SITE ASSES	SOR	
Service Provider I	Name: AMELI	A OATES		Cert. N	lo.i. 8708	675	Exp. Da	te: 12/2018
Provider Phone:	425-415-0)55		Provide	er Email: 🙇 o	ates e riley-	group.	ma:
2) 🔲 Installe	er 🛛 Deco	mmissioner [] Site Asse	ssor				
Company Name:	ID ENVIRUNA	MENTALÉTNER	A STEU CIUR	Certific	cation Type: US	ST OFCOMMISSI	MINO	5.
Service Provider I	Name: Scot o	OVERDICK		Cert. N	lo.: 81789	138	Exp. Da	te: 9/2018
Provider Phone:	425-497-	-9896		Provide	er Email: 500	to e iosdv. con	M	
		1/2 / 2 / 1 / 1 / 1 / 1 / 1 / 1 / 1 / 1	V. TANK IN	NFORM <i>A</i>	ATION			Mark San Trans
TANK ID	SUBSTANCE STORED	TANK CAPACITY	DATE PRO EXPECTE BEGI	D TO		COMMENTS	3,9	
U5T#1	untround	EST. 14,000 G	7/24/2	017	1 1 2	SIONS BASED ON		
VST # 2	unknown	EST. 7,500 G	//		SUPVEY FI	uang. TBD II	O FIE	LB,
UST # 3	unknown	EST. 14,000 G	"					
UST #4	unknown	EST. 2,600 G	11					
UST#5	Heating OIL	EST. 500 6	//					
U5T#6	GASOLINE	EST. 550 G	10					

Marine Vacuum Service, Inc.

GENERAL CONTRACTOR
CONTRACTORS LICENSE # MARINVS097JA

P0. Box 24263 Seattle, Washington 98124

Telephone (206) 762-0240

FAX (206) 763-8084

1-800-540-7491

AST/UST STORAGE TANK PUMP & RINSE CERTIFICATE

Tank Size:	1000 5,000
Last Contents	Gasoline
Tank Location	: 809 S. Kenyon St.
	Seattle, WA
accordance wi 380(I), API 16 accordance wi	m Service, Inc. certifies that the above mentioned tank(s) have been triple rinsed in the industry standard as outlined in 40 CFR PART 280.70, WAC 173-360-604, API 2015 and that all residual product and rinsate has been disposed of in the Federal, State and Local regulations. Tanks listed above are NOT GAS FREE FOR HOT WORK
Tank Owner:	
Contractor:	I o Environmental + Infrastructure
M.V.S. Repres	entative: Call Kirschnen
Date: <u>04-2</u>	5-17
Notes:	

DBE # D4M1302341

EPA # WAD980974521

GENERAL CONTRACTOR
CONTRACTORS LICENSE # MARINVS097JA

P0. Box 24263 Seattle, Washington 98124
Telephone (206) 762-0240
FAX (206) 763-8084
1-800-540-7491

AST/UST STORAGE TANK PUMP & RINSE CERTIFICATE

Tank Size:	3,000
Last Contents	-BICSOLINE
Tank Location	1: 809 S. Kenyon St.
	Seattle, WA.
accordance with 380(I), API 1 accordance with	im Service, Inc. certifies that the above mentioned tank(s) have been triple rinsed in the industry standard as outlined in 40 CFR PART 280.70, WAC 173-360-604, API 2015 and that all residual product and rinsate has been disposed of in the Federal, State and Local regulations. Tanks listed above are NOT GAS FREE FOR HOT WORK
Tank Owner:	
•	
Contractor:	Io Environmental & Infrastructure
M.V.S. Repres	sentative: Carl Minschner
Date: <u>04 - 2</u>	25-17
Notes:	

DBE # D4M1302341

GENERAL CONTRACTOR
CONTRACTORS LICENSE # MARINVS097JA

P0. Box 24263 Seattle, Washington 98124

Telephone (206) 762-0240

FAX (206) 763-8084

1-800-540-7491

AST/UST STORAGE TANK PUMP & RINSE CERTIFICATE

Tank Size:	10,000
Last Contents	Diesel
Tank Location	809 S. Kenyon St.
	Seattle, WA.
accordance wi 380(I), API 10 accordance wi	m Service, Inc. certifies that the above mentioned tank(s) have been triple rinsed in the industry standard as outlined in 40 CFR PART 280.70, WAC 173-360-604, API 2015 and that all residual product and rinsate has been disposed of in the Federal, State and Local regulations. Tanks listed above are NOT GAS FREE FOR HOT WORK
Tank Owner:	
Contractor:	Io Environmental + Infrastructure
M.V.S. Repres	entative: Carl Merschner
Date: <u>04 - 2</u>	15-17
Notes:	

DBE # D4M1302341

GENERAL CONTRACTOR
CONTRACTORS LICENSE # MARINVS097JA

P0. Box 24263 Seattle, Washington 98124
Telephone (206) 762-0240
FAX (206) 763-8084
1-800-540-7491

AST/UST STORAGE TANK PUMP & RINSE CERTIFICATE

Tank Size: 1 - 16,600	
Last Contents Diesel	
Tank Location: 809 S KEYON BT	
Seattle, WA	-
Marine Vacuum Service, Inc. certifies that the above mentioned tank(s) laccordance with the industry standard as outlined in 40 CFR PART 280. 880(I), API 1604, API 2015 and that all residual product and rinsate has accordance with Federal, State and Local regulations. Tanks listed above NOT SAFE FOR HOT WORK	70, WAC 173-360- s been disposed of in
Tank Owner:	
Contractor: TO ENVIRO	
M.V.S. Representative: Aldy	
Date: 4 26 19	
Notes:	

DBE # D4M1302341

GENERAL CONTRACTOR
CONTRACTORS LICENSE # MARINVS097JA

P0. Box 24263 Seattle, Washington 98124

Telephone (206) 762-0240

'FAX (206) 763-8084

1-800-540-7491

AST/UST STORAGE TANK PUMP & RINSE CERTIFICATE

Tank Size: SOO GATION
Last Contents Diesel
Tank Location: 809 S. Kenyon St.
Seattle, WA.
Marine Vacuum Service, Inc. certifies that the above mentioned tank(s) have been triple rinsed is accordance with the industry standard as outlined in 40 CFR PART 280.70, WAC 173-360-380(I), API 1604, API 2015 and that all residual product and rinsate has been disposed of in accordance with Federal, State and Local regulations. Tanks listed above are NOT GAS FREE or NOT SAFE FOR HOT WORK
Tank Owner: MS. Betty Buhler, Silver Bay Logging P.O. Box 270 Kelso, WA 98626
Contractor: <u>Lo Environmental + Infrastructure</u> Inc.
M.V.S. Representative: Call Mischner
Date: 04-25-17
Notes:

DBE#D4M1302341

George D Blair - Northwest Marine Chemist, Inc. P. O. Box 7084, Tacoma, WA 98406

Office: 253-752-0149 Fax: 253-759-3523

Email: gbcmc637@gmail.com

MARINE CHEMIST CERTIFICATE

Serial

637-00696 Page 1 of 1

Time Survey Completed

 I O Environmental
 Silver Bay Lumber Co.
 Apr 28, 2017

 Survey Requested by
 Vessel Owner Agent
 Date

 Tank Farm
 Underground Storage Tanks
 809 S Kenyon

 Vessel
 Type of Vessel
 Specific Location of Vessel

 Gasoline/Diesel
 O₂, LEL, Visual
 14:23

Tests Performed

Inspected Spaces:

Last Three 3 Loadings

Group 1. 2-10,000 Gal. UST's (# 2, and 4) 2-5,000 Gal. UST's (#1, and 3) 1-300 Gal. UST #5

Safety Designations:

NOT SAFE FOR WORKERS SAFE FOR LIMITED HOT WORK LIMITATIONS:

Specific Location: At job site.

Hot Work Type: These tanks have been purged with CO2 to less than 6% Oxygen and are safe for excavation and transportation.

INERTED

Inert Medium: Carbon Dioxide (CO2)

Method for maintaining safe conditions: All openings are and must remain secured.

Measures for safe disposal of Inert gas: Ventilate and test for 20.8% Oxygen to properly dispose of inerting gas.

Other Instructions: Chemist shall remain at job site prior to

Seattle Fire approval of permit.

Instructions

Seattle Fire contacted prior to continuation of tank excavation operations. Modified 6/8 to reflect 300 gal tank.

Test Results

% O2

% LEL

Inspected spaces group 1

<6%% N/A

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 or the authority having jurisdiction as applicable in support of work prior to entry or recommencement of work.

QUALIFICATIONS: Transfer of beliast, 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 NFP 306, Subsections 4.3.1 through 4.3.6)

ATMOSPHERE SAFE FOR WORKERS: In the compartment or space so designated (a) the oxygen content of the atmosphere shall be 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 furnigants are within permissible concentrations at the time of the inspection.

NOT SAFE FOR WORKERS: In the compartment or space so designated, entry shall not be 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 efforementioned, 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 be 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 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 shall be limited or restricted.

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

Scott Overdick on File Apr 28, 2017

I O Environmental

637

Authorized Representative

Date

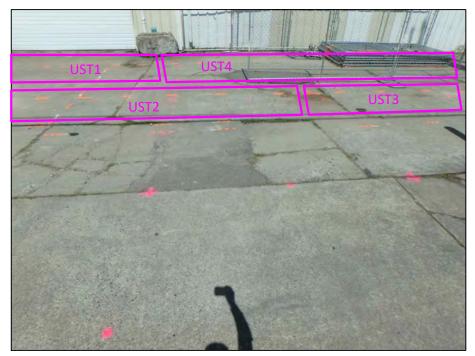
Company

Signed Marine Chemist

CMC No.

Appendix B





Photograph 1: View looking northeast at the South Yard of the Property and the location of the fuel tank excavation. The orange markings denote the four underground storage tank locations (UST1 - UST4).



Photograph 2: View looking west at the residential heating oil tank (RT) excavation, which was situated approximately 35 feet from the eastern edge of the warehouse.

			Corporate Office	Silver Bay Logging		Figure B-1	
			17522 Bothell Way Northeast Bothell, Washington 98011	RGI Project Number	Property Photographs		Date Drawn:
			Phone: 425 415 0551	2015-019D			08/2017
RIL	EYG	ROUP	Fax: 425.415.0311	Address: 7760 and 7814 S	outh 8th Avenue, and 803 and 811 South Chicago Street,	Seattle,	Washington 98108



Photograph 3: View looking northwest at the northern portion of the Property and suspected location of USTs.

The white markings depict suspected UST locations identified during a geophysical survey.



Photograph 4: View looking west at the South Yard excavation location while the USTs were being pumped of fluid in preparation for their removal.

Corporate Office	Silver Bay Logging		Figure B-2
Bothell, Washington 98011	RGI Project Number 2015-019D	Property Photographs	Date Drawn: 08/2017
	Address: 7760 and 7814 S	outh 8th Avenue, and 803 and 811 South Chicago Street,	Seattle, Washington 98108



Photograph 5: Top of the residential heating oil tank located on the eastern portion of the Site. The top of the tank was approximately 2 feet below ground surface.



Photograph 6: Uncovering and removal of three former product lines between the USTs and the former pump island in the South Yard.

	Corporate Office		Silver Bay Logging		Figure B-3		
			17522 Bothell Way Northeast	RGI Project Number	Property Photographs		Date Drawn:
			Bothell, Washington 98011 Phone: 425.415.0551	2015-019D	Property Photographs		08/2017
RILE	EYG	ROUP		Address: 7760 and 7814 S	outh 8th Avenue, and 803 and 811 South Chicago Street,	, Seattle,	Washington 98108



Photograph 7: View of UST3 and UST4's fill ports which were covered by concrete and uncovered during excavation. UST4 is north of UST3 and south of the current warehouse building.



Photograph 8: Location of TP2 in the North Yard where contaminated soil with metal and wood debris was encountered.

	Corporate Office		Silver Bay Logging		Figure B-4		
			17522 Bothell Way Northeast Bothell, Washington 98011 Phone: 425.415.0551	RGI Project Number 2015-019D	Property Photographs		Date Drawn: 08/2017
RIL	EYG	ROUP	Fax: 425.415.0311	Address: 7760 and 7814 S	South 8th Avenue, and 803 and 811 South Chicago Street,	Seattle,	Washington 98108



Photograph 9: Photograph of the interting of UST3 in the South Yard with carbon dioxide. CO₂ tanks were located east of the excavation.



Photograph 10: Photograph showing the interting of UST1 in the South Yard with carbon dioxide. CO₂ tanks were located east of the excavation.

Corporate Office	Silver Bay Logging		Figure B-5	
17522 Bothell Way Northeast Bothell, Washington 98011	RGI Project Number	Property Photographs	Date Drawn:	
Dhono: 425 415 0551	2015-019D	1 Toperty Thotographs	08/2017	
RILEYGROUP Fax: 425.415.0311	Address: 7760 and 7814 S	outh 8th Avenue, and 803 and 811 South Chicago Street,	Seattle, Washington 98108	



Photograph 11: View of a hole observed in the eastern sidewall of UST4 caused by the excavator during removal.

No release of fluids was observed.



Photograph 12: Location of UST1 in the fuel tank nest located in the South Yard on the Property.

Corporate Office	Silver Bay Logging		Figure B-6	
Bothell, Washington 98011	RGI Project Number 2015-019D	Property Photographs	Date Drawn: 08/2017	
	Address: 7760 and 7814 S	outh 8th Avenue, and 803 and 811 South Chicago Street,	Seattle, Washington 98108	



Photograph 13: Side view of UST1 after being removed from the excavation.



Photograph 14: View of UST2 as it was being removed from the excavation.

Corporate Office	Silver Bay Logging		Figure B-7	
Bothell, Washington 98011	RGI Project Number 2015-019D	Property Photographs	Date Drawn: 08/2017	
	Address: 7760 and 7814 S	outh 8th Avenue, and 803 and 811 South Chicago Street, S	Seattle, Washington 98108	



Photograph 15: Side view of UST2 on the truck prior to being transported off-Property. No obvious signs of holes or other evidence of release from UST2 was observed.



Photograph 16: View of UST3 after being removed from the excavation. No obvious signs of punctures or other evidence of a release from UST3 was observed.

	Corporate Office		Silver Bay Logging		Figure B-8	
		17522 Bothell Way Northeast	RGI Project Number	Property Photographs	Date Drawn:	
		Bothell, Washington 98011 Phone: 425.415.0551	2015-019D	Property Priotographs	08/2017	
RILE	YGRO	MHH)	Address: 7760 and 7814 S	outh 8th Avenue, and 803 and 811 South Chicago Street	, Seattle, Washington 98108	



Photograph 17: Side view of UST4 after being removed from the excavation.



Photograph 18: View of the surface above UST5 (residential heating oil tank) during the excavation.



Photograph 19: View of UST5 after being removed from the excavation.



Photograph 20: View of pin holes and visible corrosion on the bottom of UST5 after its removal from the excavation.

	Corporate Office		Figure B-10		
	17522 Bothell Way Northeast	RGI Project Number	Property Photographs	1	Date Drawn:
	Bothell, Washington 98011 Phone: 425.415.0551	2015-019D	Froperty Friotographs		08/2017
RILEYGR	AHHED	Address: 7760 and 7814 S	outh 8th Avenue, and 803 and 811 South Chicago Street,	Seattle, V	Vashington 98108



Photograph 21: Location of TP1 at the white mark labeled 5.



Photograph 22: Cross-section of TP1 showing the blueish-green layer beneath the pea gravel and asphalt. The mottled subsurface soils are also visible. Wood and metal fill was removed from TP1.

			Corporate Office		Figure B-11		
			17522 Bothell Way Northeast	RGI Project Number	Property Photographs		Date Drawn:
		Bothell, Washington 98011 Phone: 425,415,0551		2015-019D	Froperty Friotographs		08/2017
RIL	EYG	ROUP		Address: 7760 and 7814 S	outh 8th Avenue, and 803 and 811 South Chicago Street, S	eattle,	Washington 98108



Photograph 23: Metal debris removed from TP1 and TP2, most likely the result of elevated metal detector readings during the geophysical survey.

2015-019D

Appendix C



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

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

Dear Mr Riley:

Included are the results from the testing of material submitted on April 28, 2017 from the 2015-019C, F&BI 704477 project. There are 5 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

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

Sincerely,

FRIEDMAN & BRUYA, INC.

Michael Erdahl Project Manager

Enclosures c: Amelia Oates TRG0502R.DOC

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on April 28, 2017 by Friedman & Bruya, Inc. from the The Riley Group 2015-019C, F&BI 704477 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u>	The Riley Group
704477 -01	FT4-NS1-6.5
704477 -02	FT4-B1-12
704477 -03	FT4-NS2-6.5
704477 -04	FT4-B2-12
704477 -05	FT4-E5-6.5
704477 -06	Trip Blank

All quality control requirements were acceptable.

ENVIRONMENTAL CHEMISTS

Date of Report: 05/02/17 Date Received: 04/28/17

Project: 2015-019C, F&BI 704477

Date Extracted: 04/28/17 Date Analyzed: 04/28/17

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	<u>Gasoline</u>	<u>Diesel</u>	<u>Heavy Oil</u>	Surrogate (% Recovery) (Limit 53-144)
FT4-NS1-6.5 704477-01	ND	ND	ND	99
FT4-B1-12 704477-02	ND	ND	ND	106
FT4-NS2-6.5 704477-03	ND	ND	ND	106
FT4-B2-12 704477-04	ND	ND	ND	88
FT4-E5-6.5 704477-05	ND	ND	ND	100
Method Blank 07-921 MB	ND	ND	ND	118

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

ENVIRONMENTAL CHEMISTS

Date of Report: 05/02/17 Date Received: 04/28/17

Project: 2015-019C, F&BI 704477

Date Extracted: 04/28/17 Date Analyzed: 04/28/17

RESULTS FROM THE ANALYSIS OF SOIL SAMPLES FOR BENZENE, TOLUENE, ETHYLBENZENE, AND XYLENES USING METHOD 8021B

Sample ID Laboratory ID	Benzene	<u>Toluene</u>	Ethyl <u>Benzene</u>	Total <u>Xylenes</u>	Surrogate (% Recovery) (Limit 50-150)
FT4-NS1-6.5 704477-01	<0.02	<0.02	< 0.02	<0.06	97
FT4-B1-12 704477-02	<0.02	<0.02	<0.02	<0.06	95
FT4-NS2-6.5 704477-03	<0.02	< 0.02	< 0.02	< 0.06	96
FT4-B2-12 704477-04	<0.02	< 0.02	< 0.02	< 0.06	97
FT4-E5-6.5 704477-05	<0.02	<0.02	< 0.02	< 0.06	96
Method Blank 07-837 MB	<0.02	<0.02	<0.02	<0.06	97

ENVIRONMENTAL CHEMISTS

Date of Report: 05/02/17 Date Received: 04/28/17

Project: 2015-019C, F&BI 704477

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES FOR BENZENE, TOLUENE, ETHYLBENZENE, AND XYLENES USING EPA METHOD 8021B

Laboratory Code: 704462-01 (Duplicate)

		\mathbf{Sample}	Duplicate	
	Reporting	Result	Result	RPD
Analyte	Units	(Wet Wt)	(Wet Wt)	(Limit 20)
Benzene	mg/kg (ppm)	< 0.02	< 0.02	nm
Toluene	mg/kg (ppm)	< 0.02	< 0.02	nm
Ethylbenzene	mg/kg (ppm)	< 0.02	< 0.02	nm
Xylenes	mg/kg (ppm)	< 0.06	< 0.06	nm

Laboratory Code: Laboratory Control Sample

			Percent	
	Reporting	Spike	Recovery	Acceptance
Analyte	Units	Level	LCS	Criteria
Benzene	mg/kg (ppm)	0.5	103	69-120
Toluene	mg/kg (ppm)	0.5	98	70 - 117
Ethylbenzene	mg/kg (ppm)	0.5	101	65 - 123
Xylenes	mg/kg (ppm)	1.5	103	66-120

ENVIRONMENTAL CHEMISTS

Data Qualifiers & Definitions

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

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

FT4-B2-12 04

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SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
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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

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

Dear Mr Riley:

Included are the results from the testing of material submitted on April 28, 2017 from the Silver Bay, 2015-019C, F&BI 704473 project. There are 14 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: Amelia Oates TRG0502R.DOC

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on April 28, 2017 by Friedman & Bruya, Inc. from the The Riley Group Silver Bay, 2015-019C, F&BI 704473 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u>	The Riley Group
704473 -01	RT-NS-3.5
704473 -02	RT- ES - 3.5
704473 -03	RT-SS-3.5
704473 -04	RT-WS-3.5
704473 -05	RT-B1-8
704473 -06	RT-SP1
704473 -07	RT-SP2
704473 -08	FT2-SS1-6.5
704473 -09	FT2-SS2-6.5
704473 -10	FT2-B1-12
704473 -11	FT2-B2-12
704473 -12	FT2-WS-6.5
704473 -13	FT1-WS-6.5
704473 -14	FT1-B1-12
704473 -15	FT1-NS-6.5
704473 -16	FTSP1
704473 -17	FTSP2
704473 -18	FT3-SS-6.5
704473 -19	FT3-ES-6.5
704473 -20	FT3-B1-12
704473 -21	FT3-ES-4
704473 -22	FT3-ES-12
704473 -23	PP1-1
704473 -24	PP2-1
704473 -25	PP3-1
704473 -26	PP4-1

The 6020A selenium matrix spike duplicate sample did not meet 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.

ENVIRONMENTAL CHEMISTS

Date of Report: 05/02/17 Date Received: 04/28/17

Project: Silver Bay, 2015-019C, F&BI 704473

Date Extracted: 04/28/17 Date Analyzed: 04/28/17

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	<u>Gasoline</u>	<u>Diesel</u>	<u>Heavy Oil</u>	Surrogate (% Recovery) (Limit 53-144)
FT2-SS1-6.5	ND	ND	ND	101
FT2-SS2-6.5 704473-09	ND	ND	ND	115
FT2-B1-12 704473-10	ND	ND	ND	102
FT2-B2-12 704473-11	ND	ND	ND	104
FT1-WS-6.5 704473-13	ND	ND	ND	103
FT1-B1-12 704473-14	ND	ND	ND	102
FT1-NS-6.5 704473-15	ND	ND	ND	105
FT3-SS-6.5 704473-18	ND	ND	ND	104
FT3-B1-12 704473-20	ND	ND	ND	117

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

ENVIRONMENTAL CHEMISTS

Date of Report: 05/02/17 Date Received: 04/28/17

Project: Silver Bay, 2015-019C, F&BI 704473

Date Extracted: 04/28/17 Date Analyzed: 04/28/17

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	<u>Gasoline</u>	<u>Diesel</u>	<u>Heavy Oil</u>	Surrogate (% Recovery) (Limit 53-144)
PP1-1 704473-23	ND	ND	ND	102
PP2-1 704473-24	ND	ND	ND	98
PP3-1 704473-25	ND	ND	ND	111
PP4-1 704473-26	ND	ND	ND	105
Method Blank 07-921 MB	ND	ND	ND	118

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

ENVIRONMENTAL CHEMISTS

Date of Report: 05/02/17 Date Received: 04/28/17

Project: Silver Bay, 2015-019C, F&BI 704473

Date Extracted: 04/28/17 Date Analyzed: 04/28/17

RESULTS FROM THE ANALYSIS OF SOIL SAMPLES FOR BENZENE, TOLUENE, ETHYLBENZENE, AND XYLENES USING METHOD 8021B

Sample ID Laboratory ID	Benzene	<u>Toluene</u>	Ethyl <u>Benzene</u>	Total <u>Xylenes</u>	Surrogate (% Recovery) (Limit 50-132)
FT2-SS1-6.5 704473-08	< 0.02	< 0.02	< 0.02	< 0.06	91
FT2-SS2-6.5 704473-09	< 0.02	< 0.02	< 0.02	<0.06	89
FT2-B1-12 704473-10	< 0.02	< 0.02	< 0.02	< 0.06	91
FT2-B2-12 704473-11	< 0.02	< 0.02	< 0.02	<0.06	92
FT1-WS-6.5 704473-13	< 0.02	< 0.02	< 0.02	< 0.06	91
FT1-B1-12 704473-14	< 0.02	0.067	0.041	0.31	89
FT1-NS-6.5 704473-15	< 0.02	< 0.02	< 0.02	< 0.06	93
FT3-SS-6.5 704473-18	< 0.02	< 0.02	< 0.02	< 0.06	92
FT3-B1-12 704473-20	< 0.02	< 0.02	< 0.02	< 0.06	90
PP1-1 704473-23	< 0.02	< 0.02	< 0.02	< 0.06	89

ENVIRONMENTAL CHEMISTS

Date of Report: 05/02/17 Date Received: 04/28/17

Project: Silver Bay, 2015-019C, F&BI 704473

Date Extracted: 04/28/17 Date Analyzed: 04/28/17

RESULTS FROM THE ANALYSIS OF SOIL SAMPLES FOR BENZENE, TOLUENE, ETHYLBENZENE, AND XYLENES USING METHOD 8021B

Sample ID Laboratory ID	<u>Benzene</u>	<u>Toluene</u>	Ethyl <u>Benzene</u>	Total <u>Xylenes</u>	Surrogate (% Recovery) (Limit 50-132)
PP2-1 704473-24	< 0.02	< 0.02	<0.02	< 0.06	97
PP3-1 704473-25	<0.02	< 0.02	< 0.02	< 0.06	98
PP4-1 704473-26	< 0.02	< 0.02	< 0.02	< 0.06	97
Method Blank	< 0.02	<0.02	< 0.02	< 0.06	91

ENVIRONMENTAL CHEMISTS

Date of Report: 05/02/17 Date Received: 04/28/17

Project: Silver Bay, 2015-019C, F&BI 704473

Date Extracted: 04/28/17 Date Analyzed: 04/28/17

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

Sample ID Laboratory ID	Benzene	<u>Toluene</u>	Ethyl <u>Benzene</u>	Total <u>Xylenes</u>	Gasoline Range	Surrogate (% Recovery) (Limit 50-132)
FT2-WS-6.5 704473-12	< 0.02	< 0.02	< 0.02	<0.06	<2	91
FTSP1 704473-16	< 0.02	0.077	0.037	0.28	12	88
FTSP2 704473-17	< 0.02	< 0.02	< 0.02	<0.06	<2	88
FT3-ES-6.5 704473-19	< 0.02	< 0.02	< 0.02	<0.06	<2	90
FT3-ES-4 704473-21	< 0.02	< 0.02	< 0.02	<0.06	<2	86
FT3-ES-12 704473-22	< 0.02	< 0.02	< 0.02	<0.06	<2	88
Method Blank 07-838 MB	< 0.02	<0.02	< 0.02	<0.06	<2	91

ENVIRONMENTAL CHEMISTS

Date of Report: 05/02/17 Date Received: 04/28/17

Project: Silver Bay, 2015-019C, F&BI 704473

Date Extracted: 04/28/17 Date Analyzed: 04/28/17

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

Sample ID Laboratory ID	$\frac{\text{Diesel Range}}{(\text{C}_{10}\text{-}\text{C}_{25})}$	$\frac{ ext{Motor Oil Range}}{ ext{(C}_{25} ext{-} ext{C}_{36} ext{)}}$	Surrogate (% Recovery) (Limit 56-165)
RT-NS-3.5 704473-01	6,500	440 x	117
RT-ES-3.5 704473-02	250	<250	107
RT-SS-3.5 704473-03	<50	<250	103
RT-WS-3.5 704473-04	<50	<250	96
RT-B1-8 704473-05	6,000	<250	107
RT-SP1 704473-06	<50	<250	107
RT-SP2 704473-07	900	<250	90
FT2-WS-6.5 704473-12	<50	<250	104
FTSP1 704473-16	<50	<250	102
FTSP2 704473-17	66	<250	108
FT3-ES-6.5 704473-19	<50	<250	93

ENVIRONMENTAL CHEMISTS

Date of Report: 05/02/17 Date Received: 04/28/17

Project: Silver Bay, 2015-019C, F&BI 704473

Date Extracted: 04/28/17 Date Analyzed: 04/28/17

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

Sample ID Laboratory ID	$rac{ ext{Diesel Range}}{ ext{(C}_{10} ext{-C}_{25} ext{)}}$	$\frac{ ext{Motor Oil Range}}{ ext{(C}_{25} ext{-C}_{36} ext{)}}$	Surrogate (% Recovery) (Limit 56-165)
FT3-ES-4 704473-21	320	<250	95
FT3-ES-12 704473-22	<50	<250	109
Method Blank	<50	<250	101

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 6020A

Client ID: FT3-ES-6.5 Client: The Riley Group

 Date Extracted:
 05/01/17
 Lab ID:
 704473-19

 Date Analyzed:
 05/01/17
 Data File:
 704473-19.038

 Matrix:
 Soil
 Instrument:
 ICPMS2

Units: mg/kg (ppm) Dry Weight Operator: SP

Analyte: Concentration mg/kg (ppm)

Arsenic 2.87

 Barium
 25.1

 Cadmium
 <1</td>

 Chromium
 5.95

 Lead
 2.05

 Mercury
 <1</td>

 Selenium
 <1</td>

 Silver
 <1</td>

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 6020A

Client ID: Method Blank Client: The Riley Group

Date Received: NA Project: Silver Bay, 2015-019C, F&BI 704473

Date Extracted:05/01/17Lab ID:I7-230 mbDate Analyzed:05/01/17Data File:I7-230 mb.031Matrix:SoilInstrument:ICPMS2

Units: mg/kg (ppm) Dry Weight Operator: SP

Analyte: Concentration mg/kg (ppm)

Arsenic <1 Barium <1 Cadmium <1 Chromium <1 Lead <1 Mercury <1 Selenium <1 Silver <1

ENVIRONMENTAL CHEMISTS

Date of Report: 05/02/17 Date Received: 04/28/17

Project: Silver Bay, 2015-019C, F&BI 704473

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

Laboratory Code: 704473-08 (Duplicate)

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

Laboratory Code: Laboratory Control Sample

			Percent	
	Reporting	Spike	Recovery	Acceptance
Analyte	Units	Level	LCS	Criteria
Benzene	mg/kg (ppm)	0.5	104	66-121
Toluene	mg/kg (ppm)	0.5	105	72 - 128
Ethylbenzene	mg/kg (ppm)	0.5	108	69-132
Xylenes	mg/kg (ppm)	1.5	109	69-131
Gasoline	mg/kg (ppm)	20	80	61 - 153

ENVIRONMENTAL CHEMISTS

Date of Report: 05/02/17 Date Received: 04/28/17

Project: Silver Bay, 2015-019C, F&BI 704473

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

Laboratory Code: 704473-01 (Matrix Spike) Silica Gel

			Sample	Percent	Percent		
	Reporting	Spike	Result	Recovery	Recovery	Acceptance	RPD
Analyte	Units	Level	(Wet Wt)	MS	MSD	Criteria	(Limit 20)
Diesel Extended	mg/kg (ppm)	5.000	5,100	130	144	63-146	10

Laboratory Code: Laboratory Control Sample Silica Gel

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

ENVIRONMENTAL CHEMISTS

Date of Report: 05/02/17 Date Received: 04/28/17

Project: Silver Bay, 2015-019C, F&BI 704473

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

Laboratory Code: 704487-01 (Matrix Spike)

			Sample	Percent	Percent		
	Reporting	Spike	Result	Recovery	Recovery	Acceptance	RPD
Analyte	Units	Level	(Wet wt)	MS	MSD	Criteria	(Limit 20)
Arsenic	mg/kg (ppm)	10	1.03	88	83	75-125	6
Barium	mg/kg (ppm)	50	8.70	88	83	75 - 125	6
Cadmium	mg/kg (ppm)	10	<1	82	77	75 - 125	6
Chromium	mg/kg (ppm)	50	21.9	90	83	75 - 125	8
Lead	mg/kg (ppm)	50	1.67	81	77	75 - 125	5
Mercury	mg/kg (ppm	5	<1	81	76	75 - 125	6
Selenium	mg/kg (ppm)	5	<1	78	72 vo	75 - 125	8
Silver	mg/kg (ppm)	10	<1	79	75	75 - 125	5

Laboratory Code: Laboratory Control Sample

			$\operatorname{Percent}$	
	Reporting	Spike	Recovery	Acceptance
Analyte	Units	Level	LCS	Criteria
Arsenic	mg/kg (ppm)	10	89	80-120
Barium	mg/kg (ppm)	50	93	80-120
Cadmium	mg/kg (ppm)	10	90	80-120
Chromium	mg/kg (ppm)	50	92	80-120
Lead	mg/kg (ppm)	50	92	80-120
Mercury	mg/kg (ppm)	5	90	80-120
Selenium	mg/kg (ppm)	5	85	80-120
Silver	mg/kg (ppm)	10	92	80-120

ENVIRONMENTAL CHEMISTS

Data Qualifiers & Definitions

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

704473	SAMPLE CHAIN OF	CUSTODY	ME 04/28/1	7 154/6
Report to Paul Riley + Amulia Ontes	SAMPLERS (signature)	r C	7	Page # _ (of
Company KGI Address 17502 Bothell Way NE	PROJECT NAME Silver B ZO15 - 01	ay.	PO#	U Standard Turnaround RUSH 24 hr Rush charges authorized by:
City, State, ZIP Bothell, WA 980 W	REMARKS		INVOICE TO	SAMPLE DISPOSAL Dispose after 30 days
Phone (25) 415-0551 Email acases only-group an				☐ Archive Samples ☐ Other
			ANALYSES REQUE	STED
		Establishe	260C 2270D 2870D	

								ANA	LYSE	SREQ	UEST	ED	
Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	TPH-HCID	TPH-Gasoline BTEX by 8091B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM		Andrea and A	Notes
RT-NS -3.5	OIAE	427/17	1155	liae	١	X							
RT- ES - 3.5	UZ		1052	Soil	١	X							
RT-55-35	03		1158	1	Ì	X							
RT - WS -3.5	04	Monte and the second se	1048		Ì	X							
RT-B1-8	05		1153		Ì	X							
RT-SPI	06		1055		-	Х							
RT-SPZ	07	₩	1056	1	1	X	Andreas and the second and the secon						
FT2-551-6.5	08	4/27/17	1130	5011	5	λ	X		-				
FTZ -SSZ-6.5	09	Ì	1135	4	5	X	X						
FTZ -B1 -12	10 V	V	1230	4	5	X	X						

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

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME	
Relinquished by 19	Amelia Oases	RGI	4 28/17	0730	
Received by: Mulhuw	Nhan Phan	FLBI	4/28/17	-0830	
Relinquished by:					
Received by:		Samples received	at <u>4</u> °	out.	

704473	SAMPLE CHAIN OF	CUSTODY	ME 04/28	117 2 3 154
Report To Paul Riley + Audia Oates	SAMPLERS (signature)	an	CA-	Page #ofTURNAROUND TIME
Company RGI	PROJECT NAME ZOIS -019C		PO#	D Standard Turnaround DRUSH 24 kg.
Address	Silver Bi	arj		Rush charges authorized by:
City, State, ZIPaootes@rileg-group.com Phone 475 - 1/15 - Off Email priley@rileg-group.com	REMARKS	<i>σ</i>	INVOICE TO	SAMPLE DISPOSAL Dispose after 30 days Archive Samples Other
			ANALYSES REQUE	ESTED
		ID Sel	260C 270D 3 SIM	

***************************************					-			A	INAL		REQU	ESTI	ED	
Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	TPH-HCID	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	s by 82	PAHs 8270D SIM	and the second s	ANGERS ANGELS AN	Notes
FT2-B2-12	11 A.E	4/27/17	1235	Soil	5	X	-	X						
FT2-WS-6.5 FT1-WS-6.5	12		1238	ĵ.	5	X	X	X						
FT1-WS-6.5	13		1314	American Services	5	Χ		X						
FT1 -B1 -12	14		1309	***************************************	5	X		X						
FT1 -NS -6.5	15) S	1318		اح	X		X						·
PTSPI	16		1310		5	X	X	X						
FTSPZ	17		1315		5	Х	X	X						
FT3-85-6.5	18	Olevania de la compansión de la compansi	i410		5	Χ		X						
FT3-85-6.5	19	The state of the s	1408	,	5	X X	X	Χ						No ACID
FT3 - B1-12	20 /	V	1415	V	5	X		X						

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

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by	Amelia ontes	RGI	4/28/17	0730
Received by: M/W/6W	When Phan	FUBT	4/28/17	0830
Relinquished by:				
Received by:		Samples received a	M (a)	

704473			SAMPLE	E CHAIN	OF	CUS	TOD	Y	ME	O4	1/2	8/L	7		VS4/ =#_3	Co:	5	
Report To Buil Rilein	+ Analio	on bes						<u>-</u>)_				rage	#_ <i>3</i> RNAROU	of ND T	<u>3</u> ime	-
Report To Paid Rilei, Company RGT	7 1288.6.33		PROJE	SAMPLERS (signature) PROJECT NAME Sher-Bay Zons-0190				PO#				I₽	Standar KUSH_	d Turnar 24	ound		***	
Address 17522 1	Bethell c	day NE		2015-0190				- T-1 -	Rush charges authorized by:									
City, State, ZIP Boff	ell WA	2001	REMAR	lks				***************************************	IN	VOI	CE TO)		Dispose Archive	MPLE DI after 30 o Samples	days	AL	
Phone 425-415-053/ E	pria co	try group.c.	in	· · · · · · · · · · · · · · · · · · ·					STAT	X7C3 T2	c pr	ALTE:	* *	Other_				 ¬
	<u> </u>				T			TT				QUE:	SIL	<u>П</u>			·····	-
Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars		TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	eriterennistenten en e			TO THE PERSON OF THE BOARD STATE OF THE STAT	Note	es	After pysystem of some manufacture of the control o
FT3-ES-4	a A-E	4/27/17	1445	Soil	5	,	XX	X										August in Gammanawa
FT3-ES-12	22	L	1447	4	5	1	X X	X										en e
PPI_I	23	4/27/17	0920	Soil	5	\boxtimes									Adde	<u>d</u>	at la	
PP2-1	24		0930		5	\bigcirc		8										A CONTRACTOR OF THE CONTRACTOR
PP3-1	25		0940		5	8		8									· · · · · · · · · · · · · · · · · · ·	-
PP4-1	26 V		0955		5	\otimes		\otimes							4			
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								-							(8)-f	O PI	R 4/28/	17 1455A
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The land of Day of	SI Palinguished become	GNATURE				NT NA)MP.			DAT	E	TIME	
Friedman & Bruya, Inc. 3012 16 th Avenue West	Relinquished by Received by:	// // r		Ane	7	·		\$				<u>'6</u>			14/28	113	0730	***************************************
Seattle, WA 98119-2029	Relinquished by:	//////////////////////////////////////	<i>A</i>	Nhav	<u> </u>	Nav	1				<u> </u>	lB.			4/28/	17	0830	-

Ph. (206) 285-8282

Received by:

Samples received a

Appendix D



Marine Vacuum Service Inc.

Page ______ of ______

(Name of-carrier)

(SCAC)

Date 04-24-17

TO:		*COD" must appear before consignee's name or as otherwise provided in Item 430, Sec. 1.	Can	ENVIRONME		Infra	structu
		Graham Street	Street 809		State WX	Zip Code	
citySeattle		State WA Zip Code 98108	24 hr. Emergency Co	Constant	Tel 1-800-255 act MIS36279	-3924 926	
Route)		\ ; \;	Vehic Numb	le 20	2
No. of Units & Container Type	НМ	## BASIC DESCRIPTION UN or NA Number, Proper Shipping Name, Hazard Clas	s, Packing Group	TOTAL QUANTITY (Weight, Volume, Gallons, etc.)	WEIGHT (Subject to Correction)	RATE	CHARGES (For Carrier Use Only)
177	х	(DOT Spec Tank Required) UN1863 Fuel, Aviation, Turbin Engine (DOT Spec Tank Required)	Class 3, PG I				
177	X	UN1203 Gasoline, Mixture Class 3, P	G II				
177	Х	(DOT Spec Tenk Required) UN1203 Gasoline, Class 3, PG II				1	
177	Х	NA1993 Diesel Mixture, Class 3, PG III					
177	X	NA1993 Diesel, Class 3, PG III	,				
1 TT	Х	NA1270 Petroleum Oll, Class 3, PG I					
177	X	NA1270 Petroleum Oll, Mixture, Class	g, PG I				
177		Olly Waste Water Non Reg by DOT	**	(_ (-)	ð r	1.1.7	
171		Waste Water Non Reg by DOT		4,800015			
177		Marine Vessel Sewage Non Reg by D	ОТ				
1 TT		Street Waste Storm Pipe Cleaning No	on Reg by DOT				
		NDERED: YES NO D	REMIT C.O.D. TO:				
specifically in writing the a agreed or declared value of be not exceeding	agreed or deck I the property i	ared value of the property, as follows: The consignment are fully and accurate shereby specifically stated by the shipper to t	COD	Amt: ,\$	C.O.D. PREPA	ID 🗆	
a release or a value deci the carrier's liability or deci provided by such provisions (3) Commodities requiring must be so marked and pa	aration by the are a value, the solution by the special or addit ckaged as to er reight Bills and	shipper and, the shipper does not release carrier's liability shall be limited to the extent transport according to applicable transport according to according to according to a possible transport according to a possible transport according to a possible transport according to	Subject to Section 7. of the consignee without recourse or following statement: The carrier shall not make froight and all other lawful charge	onditions, if this shipment is to be del in the consignor, the consignor sh delivery of this shipment without les.	all sign the CHARG	EIGHT CHARG	GES k box if charges are to be
the pr tents (the w posse nation	operty described of packages unli- rord carrier bein ssion of the prop , if on its route,	the classifications and tarilfs in effect on the date of the issue of this Bill of Lading, d above in apparent good order, except as noted (contents and condition of con- known), marked, consigned, and destined as indicated above which said carrier g understood throughout this contract as meaning any person or corporation in borty under the contract) agrees to carry to its usual place of delivery at said desti- ordinate to deliver to another carrier on the route to said destination. It is mutu- icarrier of all or any of, said property over all or any portion of said route to des-	tination and as to each p be performed hereunder s silication on the date of s Shipper hereby ce	ertifies that he is familiar with all and the said terms and conditions	rany said property, that terms and conditions in the the lading terms and c	every service to e governing clas- onditions in the	
SHIPPERTO	Envit	conmental + Infra Structure	CARRIER	ne Vacuu	IM Ser.	VICES	_Insi
PER JIM	De	Her	PER AN MA	hischne	7		_ 2
X Now.		THE COURSE IN STREET STREET	DATE OU	14-17			
Permanent post-office	e address o	of shipper. PRINTED ON RECYCLED PAPER TAINTO WITH USING SOVBEAN HIK SOY INK.	1 STYLE F375-4 © 20	012 LABELMASTER® (80	0) 621-5808 www.	abelmaster.c	om

	1.64	-	7	3 -	
Carrier	No.	d	0	1	

Marine Vacuum Service Inc.

(Name of carrier)

(SCAC)

TO:		CUUM Service Inc.	r as otherwise provided in Item 430, Sec.1.	Street 809	Nironments SKENY	ITI ON	nfras < + .	truc	ture In
Street 1516 S	South	Graham Street		city Seatt	410	State L	NAZ		
ciySeattle		State WA	Zip Code 98108	24 hr. Emergency Co	Comb	nTel 1-8 ract MIS	00-255-3 3362792	6 6	
Route		34			14	1	Vehicle Number	20	7
No. of Units & Container Type	HM		BASIC DESCRIPTION Shipping Name, Hazard Class	Tacking Group	TOTAL QUANTITY (Weight, Volume, Gallons, etc.)	(Sub	IGHT ject to ection)	RATE	CHARGES (For Carrier Use Only)
111	Х	(DOT Spec Tank Regul UN1863 Fuel, Aviat		Class 3, PG I					
1 TT	Х	(DOT Spec Tank Requi UN1203 Gasoline,	ired) Mixture Class 3, Po	i/					
177	X	(DOT Spec Tank Regul UN1203 Gasoline, (
177	X	NA1993 Diesel Mixt	ure, Class 3, PG III						
177	X	NA1993 Diesel, Clas	98 3, PG III						
177	X	NA1270 Petroleum (Oil, Class 3, PG (
177	Х	NA1270 Petroleum (Oil, Mixture, Class Ş	, PGI,				11	
7177		Olly Waste Water N	on Reg by DOT	* *	- , , , , , , , , , , , , , , , , , , ,	7" "			
177		Waste Water Non F	leg by DOT	n.	4,800915				
1 77		Marine Vessel Sewa	age Non Reg by D	ОТ	, ,,				
1 TT		Street Waste Storm	Pipe Cleaning No	n Reg by DOT					
			7						
			, 7,						
			1	V					
Note - (1) Where the rat	e is depender	NDERED: YES NO INTO NO INTO NO	I hereby declare that the contents of this	REMIT C.O.D. TO: ADDRESS					
agreed or declared value of be not exceeding	the property is provisions spe	hereby specifically stated by the shipper to er ecity a limitation of the carrier's liability absent shipper and the shipper does not religise	consignment are fully and accurately described above by the proper shipping name and are classified, packaged, marked and labelled/placarded, and are	COD	Amt: \$		C.O.D. FEE PREPAID COLLECT		
he carner's hability or declar provided by such provisions. 3) Commodities requiring spouse to be so marked and pack	re a value, the See NMFC Iter pecial or additi kaged as to en eight Bills and	carrier's liability shall be limited to the extent m 172. onal care or attention in handling or stowing sure sale transportation. See Section 2(e) of Statements of Charges and Section 1(a) of	in all respects in proper condition for transport according to e-pplicable international and national governmental regulations.	consignee without recourse on following statement: The carrier shall not make freight and all other lawful charge	nditions, if this shipment is to be de the consigner, the consigner st delivery of this shipment without as.	all sign the	TOTAL CHARGES FREIGHT PREP except when bor right is checked	\$ HT CHARG PAID Check	ES box if charges are to be collect
the prop tents of (the wor possess nation, i	perty described packages unking a carrier being don of the proper f on its route, o	the classifications and tariffs in effect on the date above in apparent good order, except as noted nown), marked, consigned, and deslined as indi understood throughout this contract as meanin arry under the contract) agrees to carry to its usual therwise to deliver to another carrier on the therwise to deliver to another carrier on the carrier of all or any of, said property over all or a	(contents and condition of con- cated above which said carrier og any person or corporation in it place of delivery at said desti- to said destination. It is mutu-	tination and as to each p be performed hereunder sh sification on the date of si Shipper hereby cer	arty at any time interested in all o hall be subject to all the bill of lading hipment. tifies that he is familiar with all nd the said terms and conditions	terms and cond the lading ter	perty, that every ditions in the gov	erning clas-	
SHIPPER IO E	nyite	nmental + Infra	structure Inc	CARRIERMarin	na Vacuu	m 50	rVic	15	Ivc:
PER JIM	De	cker		PER GALL /K	ischne	1	-		_ 2
X- Wite	gang articular (1900) at the particular (1900)		\supset	DATE 04-2	4-17				
Permanent post-office	address o	f shipper. PRINTED ON BECYCLED PAPER USING SOYBEAN INK	ER SOY INK	STYLE F375-4 @ 20	12 LABELMASTER® (80	0) 621-5808	3 www.labe	lmaster.co	m

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			14			Carrie	r No.	202	
Page	of	1 —	Marine Vacuum (77. /	(SCAC)		Date 📿	4-2	4.17
TO: Consignee Mari	ne Va	coon must appear before consignee's name or	as otherwise provided in Item 430, Sec.1.	Street 809	Wronment Kenyor			rastri	icluse.
Street 1516 (South	Graham Street State WA	Zip Code 98108	City Sea 4	Chen	State M nTel 1-80 ract MIS	00-255	Zip Code -3924 26	
Route			1	1 .	7.		Vehicle	20	2
No. of Units & Container Type	НМ		BASIC DESCRIPTION Shipping Name, Hazard Class,	, Packing Group	TOTAL QUANTITY (Weight, Volume, Gallons, etc.)		GHT ect to	RATE	CHARGES (For Carrier Use Only)
177	Х	(DOT Spec Tank Requi	ion, Turbin Engine,	Class 3, PG I					
177	X	(DOT Spec Tank Regul UN1203 Gasolins, I (DOT Spec Tank Regul	Mixture Class 3, Po	3 II			-		
177	X	UN1203 Gasoline, 0							
177	Х	NA1993 Diesel Mixtu	ure, Class 3, PG III	1					
177	Х	NA1993 Diesel, Cias	ss 3, PG III						
177	X	NA1270 Petroleum C	Oil, Class 3, PG I						
177	Х	NA1270 Petroleum (Oil, Mixture, Class §	, PG I		i i			
177		Oily Waste Water N	on Reg by DOT			1			- 4. 1
177		Waste Water Non R	leg by DOT		3,75g1s				
1 TT		Marine Vessel Sewa	age Non Reg by D	OT					
177		Street Waste Storm	Pipe Cleaning No	n Reg by DOT			-		
					-				
Note — (1) Where the ra	te is depende	NDERED: YES NO	I hereby declare that the contents of this	REMIT C.O.D. TO: ADDRESS					
agreed or declared value of be not exceeding	the property i	ared value of the property, as follows: "The s hereby specifically stated by the shipper to per specify a limitation of the carrier's liability absent	consignment are fully and accurately described above by the proper shipping name and are classified, packaged, marked and labelled/placarded, and are	COD	Amt: \$		C.O.D. F	EE:	
a release or a value declar the carrier's liability or declar provided by such provisions. (3) Commodities requiring a must be so marked and page	aration by the tre a value, the See NMFC Ite pecial or addit kaged as to en reight Bills and	shipper and the shipper does not release o carrier's liability shall be limited to the extent am 172. lional care or attention in handling or stowing issure sale transportation. See Section 2(e) of 4 Statements of Charges and Section 1(a) of	In all respects in proper condition to transport according to applicable international and national governmental, regulations.	The carrier shall not make freight and all other lawful charg	nddions. If this shipment is to be do the consignor, the consignor s delivery of this shipment without es.		FREIGHT PF except when	GHT CHARG	box if charges are to be
RECE the pro- tonts o (the w	IVED, subject to perty described packages unli ord carrier bein	by the classifications and tariffs in effect on the date of above in apparent good order, except as noted known), marked, consigned, and destined as ind g understood throughout this contract as meaninerly under the contract) agrees to carry to its usus	(contents and condition of con- licated above which said carrier ing any person or corporation in	tination and as to each p be performed hereunder s sification on the date of s Shipper hereby ce	pnature of Consignor) party at any time interested in all in hall be subject to all the bill of lading shipment. riffies that he is familiar with all and the said terms and conditions	the lading te	rms and cor	very service to governing clas- nditions in the	collect

SHIPPER PER

PER

Permanent post-office address of shipper.



PRINTED ON RECYCLED PAPER SOY INK.

	20 Sec. 10	
	771	
Carrier No.	1 1	

Carrier No.	771	
Carrier No.		_

Marine Vacuum Service Inc.

(Name of carrier)

(SCAC)

Date 04-25-17

TO: Consignee Mar	ine Va	cuum Service Inc.			nvironment		raEtr	ucture
Street 1516	South	Graham Street			S. KENYOI	1 St. State WA	Zip Code	
citySeattle		State WA	Zip Code 98108	City Seatt	Chem	Tel 1-800-255 act Mis36278	-3924	
Route						Vehic Numb		1
No. of Units & Container Type	HM		BASIC DESCRIPTION r Shipping Name, Hazard Class	, Packing Group	TOTAL QUANTITY (Weight, Volume, Gallons, etc.)	WEIGHT (Subject to Correction)	RATE	CHARGES (For Carrier Use Only)
1 777	Х	(DOT Spec Tank Requi UN1863 Fuel, Avial	tion, Turbin Engine,	Class 3, PG I				
111	Х	(DOT Spec Tank Requ UN1203 Gasoline,	Mixture Class 3, Po	GII				
_177	X	(DOT Spec Tank Requ UN1203 Gasoline,						
177	X	NA1993 Diesel Mixt	ure, Class 3, PG III			1		1
1 TT	Х	NA1993 Diesel, Cla	ss 3, PG III					
1 TT	Х	NA1270 Petroleum (Oil, Class 3, PG I					
1 TT	Х	NA1270 Petroleum	NA1270 Petroleum Oil, Mixture, Class 3, PG I					
177		Oily Waste Water N						
1 TT		Waste Water Non F		100915				
177		Marine Vessel Sew	age Non Reg by D	OT,				
177		Street Waste Storm	Pipe Cleaning No	n Reg by DOT				
*								
Note - (1) Where the ri	ate is depende	NDERED: YES NO cont on value, shippers are required to state		REMIT C.O.D. TO:				
specifically in writing the a agreed or declared value of be not exceeding	agreed or decl	ared value of the property, as follows: "The is hereby specifically stated by the shipper to per	consignment are fully and accurately described above by the proper shipping name and are classified, packaged,	COD	Amt: \$	C.O.D. F PREPAI	EE:	
a release or a value decline carrier's liability or decliprovided by such provisions	laration by the lare a value, the s. See NMFC Ite	shipper and the shipper does not release a carrier's liability shall be limited to the extent em 172.	marked and labelled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental	Subject to Section 7 of the co	onditions, if this shipment is to be deline the consignor, the consignor sha	vered to the ITOTAL CHARGI		
must be so marked and pa	ckaged as to ele reight Bills and	tional care or attention in handling or stowing neure safe transportation. See Section 2(e) of d Statements of Charges and Section 1(a) of st of such articles.	regulations. Signature	freight and all other lawful charg	delivery of this shipment without pas.		REPAID Check	GES k box if charges are to be collect
the price tents (the will be possed in a control of the will be possed in a control of the price	operty describe of packages unle ord carrier bein ssion of the prop of the property	o the classifications and tariffs in effect on the date d above in apparent good order, except as notect known), marked, consigend, and destined as in g understood throughout this contract as mean porty under the contract) agrees to carry to its use otherwise to deliver to another carrier on the rou carrier of all or any of, sald property over all or	I (contents and condition of con- dicated above which said carrier ing any person or corporation in nal place of delivery at said desti- te to said destination. It is mutu-	tination and as to each be performed hereunder s sification on the date of Shipper hereby co	party at any time interested in all or shall be subject to all the bill of lading to shipment. eritines that he is familiar with all t and the said terms and conditions a	erms and conditions in the he lading terms and co	governing clas- enditions in the	
SHIPPER		nmental + Infra		CARRIER Mario	ne Vacuum S	iet VICES	Twe	
PER TIM	De	CKET	· · · · · · · · · · · · · · · · · · ·	PER CUL 1/4	inschner	, , , , , ,	1 N	2
X	WI			DATE 04 - 2	15-17			
Permanent post-offic	e address o	of shipper.	A	STYLE F375-4 @ 20	012 LABELMASTER® (800) 621-5808 www.la	abelmaster.co	mo

Carrier No.	107	
Carner No.	101	_

- 1	of L	Marine Vacuum	Service Inc.		Date /	74-	24-
Page/	of	(Name of	carrier)	(SCAC)	Date <u>.</u>		~ /
TO:		Cuum Service Inc.		nvironm Lannon		+ IV	fras
Street 1516	South	Graham Street	0	tle		Zip Code	
CitySeattle		State WA Zip Code 98108	24 hr. Emergency C	Chambers .	Tel 1-800-255 act MIS36279	-3924 26	
Route) at		<u> </u>	Vehicl Number	e 10	7
No. of Units & Container Type	НМ	y BASIC DESCRIPTION (1), 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)
177	Х	(DOT Spec Tank Regulred) UN1863 Fuel, Aviation, Turbin Engine,	Class 3, PG I		Solitoning		
111	Х	(DOT Spec Tank Required) UN1203 Gesoline, Mixture Class 3, Po					
177	<u>x</u>	(DOT Spec Tank Required) UN1203 Gasoline, Class 3, PG II					
177	Х	NA1993 Diesel Mixture, Class 3, PG III					
177	X	NA1993 Diesel, Class 3, PG III					
177	X	NA1270 Petroleum Oli, Class 3, PG I	À				
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THINKO LIABILITY COMPRET CHECKER

RENTON CONCRETE RECYCLERS

22121 17th Ave S.E. Suite #117 Bothell, WA 98021 Pit Site: 500 Monster Road S.W. Renton, WA

Business Office: 425-481-9101

Scale House: 206-772-2278

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RENTON CONCRETE RECYCLERS

22121 17th Ave S.E. Suite #117 Bothell, WA 98021 Pit Site: 500 Monster Road S.W. Renton, WA

Business Office: 425-481-9101

Scale House: 206-772-2278

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RENTON CONCRETE RECYCLERS

22121 17th Ave S.E. Suite #117 Bothell, WA 98021

Pit Site: 500 Monster Road S.W. Renton, WA

Business Office: 425-481-9101

Scale House: 206-772-2278

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Appendix E



Amelia Oates

From: GEOPYG@aol.com

Sent: Sunday, April 23, 2017 6:35 PM

To: Amelia Oates

Cc: Paul Riley; GEOPYG@aol.com

Subject: Results map sketches, Silver Bay Logging Site **Attachments:** 1255_riley_silver_bay_geophysics_final_figures.pdf

Hi Amelia:

Please confirm that you received this okay. I will be out in the field Mon - Weds if you have any questions (cell is 425-765-6316).

Here are some sketch maps of the South Warehouse Area (Fig. 1) and the Former Gas Station Area (Fig. 2).

The centerline of the small ust at the former house in the southeast corner of the site was marked with orange paint, and the ends marked with pink survey whiskers nailed into the ground. The axis of the tank is oriented approximately north-south, and is about 5.4' long. The north end is about 3' deep to the top, and the south end is about 3.5 feet deep to the top.

The south end of the tank is 7.7' north and 34' east of the SE corner wall of the large building to the west. The building has a 2-foot overhang on the south side (the 7.7' is from the south wall, so 9.7' from the south edge of the overhang).

FIGURE 1, SOUTH WAREHOUSE

Fig. 1 shows the results of the large UST area. Most of the marks on the map are also plotted in the field. The queried lines are just on the map. The centerlines of the UST's are shown in dashed orange, and the pipes with orange dots. This corresponds to the colors in the field. Reference baselines were marked with pink paint. Coordinate 10E, 10N is located at the corner of one of the concrete slab panels as shown. Detailed GPR data was recorded at 5-foot line spacings and oriented in two directions, and reviewed in the office.

The northern tank probably extends to the east below the fencing, I was getting a possible side-reflection from it along lines south of the fence pile, and it probably makes sense that it would line up with the end of the southern tank. The west end of the northern tank is a little odd - it seems to jump from 2.7' deep (to the top) near 21E, but then there is a strong reflection at only 1.8' deep to the west. This shallower reflection may be due to a pipe above the tank. I don't think it indicates two separate tanks.

There seem to be two tanks end to end to the south of the northern tank. The shorter one to the east is about 2.7 feet deep, and the western UST is sloping, from 3.1' to 2.4' deep.

A possible shallow pipe (about 1.2' deep) runs from near the valve cover and heads east below the concrete slab joint. This shallow pipe seems to head north at about Line 51E, and may head north from the valve as well.

A deeper pipe ranging from 2' to 1.5' deep runs just to the south of the concrete joint, and turns north along Line 23E. It may also turn north along Line 62E.

FIGURE 2, FORMER GAS STATION AREA

A very rough field sketch is provided for the gas station area. We used the metal wall along the north side and the chain link fence along the west side as a reference. The GPR and EM-61 scans were made while running lines both north-south and east-west at about 4 foot line spacings. The data was reviewed in the field looking for possible UST signatures. Only a few example lines were run to record data. The approximate locations of the example lines are shown on Figure 2.

The GPR detected the electrical line at about 3 feet deep. In much of the area there is a strong shallow reflective layer that may prevent the GPR signal from penetrating very deep. This layer was excavated through when installing the electrical line - it is not present above the line. It may be a layer of very fine-grained materials or a layer of slag or fine metal dust.

The GPR did not detect any typical UST signatures. The GPR did detect an area of possible disturbed soils, where the strong, smooth reflective area was disturbed. This may indicate a disturbed zone related to a possible excavation. Or could be a natural disturbance or related to something else. This area was marked on the ground with pink paint and pink whiskers. Probe locations P5 and P15 are within or just on the edge of this disturbed zone. This area seems to be in the vicinity of the previously located anomalous zone described by a previous geophysical survey as "Potential UST Signatures). I am not sure, but I believe only GPR surveying was done previously. My example GPR data is provided on **Figure 3**. Horizontal stations are across the top (each solid while line is 5-feet), and approximate depth in feet on the side.

Because the GPR didn't show much due to the strong reflective layer I ran a EM-61 high-resolution metal detector over the area, also at about 4-foot spacings in both directions. The EM-61 did not detect significant amounts of metal over the GPR disturbed zone, or over the "Potential UST Signature" found by others farther to the north. However, to the south there is a large area with elevated EM-61 data. This broad zone is marked with white paint and red whiskers. Two discrete areas had very high values (500 and 700 ppt). These were highlighted in white, with labels of "5" and "7", and marked with pink whiskers.

This broad zone has values that are large enough in magnitude (above 300 ppt), and broad enough to possibly indicate one or more possible USTs. The discrete zones marked "5" and "7" may indicate an area with shallower metal, or perhaps a vertical fill pipe. A third discrete zone is marked on the map with a "4" and it was marked with white paint on the ground. Although the GPR did not detect anything looking like a UST in this area, the strong reflective layer may have prevented the GPR from penetrating deep enough. The GPR does seem to be obtaining data from 3' to 4' deep in this area, so the top of a possible UST would seem to need to be greater than that to have not been observed by the GPR. Although there are other variables that might be involved (such as the shape of the tank, the condition of the tank, soil conditions, etc.)

Example EM-61 profiles are shown on Figure 4.

Good luck in your further evaluation of the site.

Regards-

Phil

Philip H. Duoos Geophysical Consultant 13503 NE 78th Place Redmond, WA 90852

Ph/Fax: 425-882-2634 Cell: 425-765-6316

