UNDERGROUND STORAGE TANK SITE ASSESSMENT REPORT

PREPARED BY:

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PREPARED FOR:

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RGI PROJECT NO. 2017-015K
AGREED ORDER NO. 16357

UNDERGROUND STORAGE TANK SITE ASSESSMENT REPORT
ROYSTONE REDEVELOPMENT
631 QUEEN ANNE AVENUE NORTH
SEATTLE, WASHINGTON 98109

OCTOBER 1, 2020

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1 INTRODUCTION

The Riley Group, Inc. (RGI) is pleased to present this Underground Storage Tank (UST) Site Assessment Report documenting the decommissioning and removal of three underground storage tanks (USTs) at the Roystone Redevelopment project located at 631 Queen Anne Avenue North in Seattle, Washington (herein referred to as the Property). The general location of the Property is depicted on Figure 1.

The Property is owned by Roystone on Queen Anne, LLC (Roystone) and the Property is identified by King County tax parcel number 38789900425 (Parcel 0425) and occupies approximately 11,070 square feet.

Roystone has entered into Agreed Order No. 16357 with the Washington State Department of Ecology (Ecology) and Chevron Environmental Management Company (CEMC). Under the Agreed Order, Roystone is responsible for the environmental cleanup of the Property and CEMC is responsible for the cleanup of all areas of the Site outside the Property. Remediation work on the Property is currently underway. The location of the Property relative to the Site is displayed on Figure 2.

A description of the Property and Site history, previous investigations and work associated with the Interim Action are described in the *Interim Action Work Plan* (Work Plan) dated August 19, 2020 by RGI. The Interim Action will be described in the forthcoming Interim Action Report.

This UST Site Assessment Report is intended to document the decommissioning, UST Site Assessment, and removal of three USTs and associated fuel system components encountered during the Interim Action. The work has been performed in accordance with applicable UST regulations (WAC 173-360A). The UST decommissioning and Site Assessment work was performed in general accordance with the Work Plan.

2 UNDERGROUND STORAGE TANK REGULATIONS

In Washington State, The Underground Storage Tank Regulations (WAC 173-360A), requires that Site Assessments are necessary to determine if a release has occurred from an UST system (WAC-173-360A-0730).

The activities documented in this report were completed in accordance with Ecology *Guidelines for Site Checks and Site Assessments for USTs* (revised, May 2003) and applicable UST regulations described in WAC 173-360A. RGI also maintained regular communication with Ecology regarding the work associated with the UST Site Assessment.

Soil samples were collected in UST locations where field screening indicated the presence of soil contamination or where contamination was most likely to be present. All soil samples were submitted to an Ecology accredited laboratory for analyses in accordance with WAC 173-340-830 and analyzed in accordance with Model Toxics Control Act (MTCA) Table 830-1. RGI also discussed sample analyses with Ecology prior to submitting samples to the laboratory for analyses.

In locations where releases from USTs or other fuel system components were identified, soil remediation was completed in conjunction with the redevelopment of the Property in accordance with applicable MTCA regulations and RGI's Ecology approved Work Plan. All work associated with remediation of contaminated soil will be documented in the forthcoming *Interim Action Report*.

3 SCOPE OF SERVICES

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

- Performed UST Site Assessment services associated with the decommissioning of the three abandoned in-place USTs, UST piping, and a former dispenser island.
- Filed a 30-Day Notice for decommissioning of three USTs with Ecology in accordance with UST regulations. Ecology waived the 30-Day notice for all three USTs per RGI's written request.
- Documented the decommissioning (pumping, triple rinsing, inerting, and removal) of three USTs (USTA, UST4A, and UST6B). UST decommissioning was completed by Elk Heights under contract with Pavilion Construction (General Contractor [GC])
- Collected soil samples and samples of any UST contents (product/water) in accordance with applicable regulations and submitted samples to the laboratory for analysis of contaminants of concern (COCs).
- Established a waste profile for waste oil in USTA that was classified as hazardous waste and coordinated disposal of this waste with Waste Management. Proper disposal of petroleum waste was managed by the GC.
- Maintained regular communication with Ecology regarding the schedule, UST Site Assessment process, and sample analyses.
- Prepared this UST Site Assessment Report presenting our observations, findings, and conclusions

4 ANALYTICAL LABORATORY ANALYSES

A total of twenty soil samples, two product samples, and one water sample (obtained from inside UST6B) were submitted to Friedman & Bruya, Inc. (FBI), an Ecology-accredited, third-party analytical laboratory, in connection with the UST Site Assessment. Soil samples were submitted for one or more of the following analyses:

- Hydrocarbon Identification using Method NWTPH-HCID.
- Gasoline-range TPH using Method NWTPH-Gx.
- Diesel- and oil-range TPH using Method NWTPH-Dx.
- Benzene, toluene, ethylbenzene and xylenes (BTEX) using EPA Method 8021B.
- Volatile Organic Compounds (VOCs) using EPA Method 8260B.

- Carcinogenic Polycyclic Aromatic Hydrocarbons (cPAHs) using EPA Method 8270C Select Ion Monitoring (SIM).
- Polychlorinated biphenyls (PCBs) by Method 8280.
- MTCA 5 Metals (A = Arsenic, Cd = Cadmium, Cr = Chromium, Pb = Lead, and Hg = Mercury) in soil using EPA Method 200.8.
- Toxicity Characteristic Leaching Procedure (TCLP) for Lead using EPA Method 200.8 and 40 CFR Part 261.

Product samples, soil samples, and the one water sample collected from inside UST6B are summarized in Table 1. Analytical results pertaining to the UST Site Assessment are displayed on Figure 3. Copies of final analytical laboratory reports are included in Appendix B. Note that some of the laboratory reports also contain samples analytical results associated with the project-wide Interim Action, which are not described in this report.

5 UST SITE ASSESSMENT & DECOMMISSIONING ACTIVITIES

This section describes the assessment and removal of dispensers and suspected product piping and the decommissioning, UST Site Assessment and removal of three USTs (USTA, UST4A, UST6B). The locations of USTs and other fuel system components and UST Site Assessment soil sample locations are displayed on Figure 3. Photographs pertaining to the UST Site Assessment are included in Appendix D. Copies of the UST Site Assessment Checklists are included in Appendix E. It should be noted that the decommissioning of other USTs and fuel system components was conducted by others in the 1990s. Therefore, the potential exists that suspected product pipes discussed in this section were not observed in their original locations and were either disturbed or relocated during excavation activities conducted in the 1990s by others.

5.1 DISCOVERY AND ASSESSMENT OF UST PIPING AND DISPENSERS

On March 25, 2020, RGI identified a pump island directly beneath the asphalt in a location west of the reported location of UST6B on the eastern portion of the Property. Remnants of dispensers 1 and 2 and associated product piping were observed in this location. The dispensers and product piping appeared to be associated with former UST5Ba based on the location of UST5B reported in previous reports. However, it was later determined that the piping was more likely associated with UST6B based on the location of UST6B.

RGI collected soil samples from beneath both dispensers (Disp1-0.5 and Disp2-0.5), beneath product piping in a location where the pipe connected to the dispenser (PP2-UST5B-0.5) and where the pipe entered the reported location of former UST5B (PP1-UST5B-2.5). The only location where soil contained concentrations of COCs above applicable MTCA soil cleanup levels was sample location PP1-UST5B-2.5 where gasoline range TPH was detected at a concentration of 130 mg/kg, which exceeded the MTCA soil cleanup level of 30 mg/kg. This was a location where petroleum contaminated soil (PCS) was previously identified and remediation was planned.

On May 6, 2020, a section of suspected product piping was discovered on the north-central portion of the Property near former well MW9. The potential exists that this piping was relocated from another portion of the Property during excavation activities conducted by others in the 1990s. Field screening (photoionization detector [PID] and visual/olfactory observations) did not indicate the presence of contamination beneath the pipe. RGI collected one soil sample beneath the pipe at approximately 2 feet below the original grade of the Property (PP1-NPL-2). This sample was submitted to the laboratory for analyses of COCs. No COCs were detected in soil at concentrations above laboratory detection limits.

On May 7, 2020, suspected product piping was discovered on the southwestern portion of the Property near former boring SSI-P5. The piping extended northeast from this location and it appeared this pipe may have been connected to former UST4. RGI identified soil contamination directly beneath the pipe via field screening. One sample of contaminated soil was collected from beneath the pipe at approximately 2 feet bgs (PP1-UST4-1.5) and submitted to the laboratory for analyses of COCs. Gasoline-range TPH was detected at a concentration of 1,200 mg/kg, which exceeds the applicable MTCA soil cleanup level of 30 mg/kg. This contaminated soil was situated in a location where PCS was previously identified and soil remediation was planned.

On June 5, 2020, suspected product piping was discovered on the east-central portion of the Property near former boring DP-3. The piping was situated approximately 16 feet northeast of the location of former UST10 and may have been associated with UST10. However, this could not be confirmed. Field screening did not indicate the presence of contamination beneath the pipe and RGI collected one soil sample from beneath the pipe at approximately 2.5 feet bgs (UST10- PP1-2.5). This sample was submitted to the laboratory for analyses of COCs and no COCs were detected in soil at concentrations above laboratory detection limits.

All product piping and dispenser remnants were later removed from the Property by Marine Vacuum Services, Inc. (Marvac).

5.2 UST DECOMMISSIONING & SITE ASSESSMENT

This section describes the discovery, decommissioning, UST Site Assessment, and disposal of USTs and associated waste pertaining to USTA, UST4A, and UST6B.

5.2.1 DISCOVER OF USTS

On May 11, 2020, a 1,066-gallon diesel UST (UST4A) and a 317-gallon waste oil UST (USTA) were discovered during mass excavation activities on the west-central and central portions of the Property. The USTs did not appear punctured at the time of discovery. However, top of USTA was bent approximately 6 inches inwards on the southwest side of USTA.

On June 2, 2020, a 3,455-gallon gasoline UST (UST6B) was encountered during drilling activities associated with pile installations on the eastern side of the Property. During drilling, soil caved into the borehole, which exposed the south side of the UST and the

UST was not disturbed or punctured. This UST was suspected to be UST6B, which was described in previous investigations as being abandoned in-place. However, previous reports by others indicated UST6B was 8,000-gallons, which was significantly larger than the capacity observed. The reported location of UST6B was also south of the location where the tank was found. Therefore, it was not possible to confirm whether or not this UST was actually UST6B as discussed in previous reports. Samples collected in connection with this UST were labeled with a UST6B prefix.

5.2.2 PRE-UST DECOMMISSIONING SERVICES

It was necessary for several tasks to be completed prior to commencing with UST decommissioning and UST Site Assessment. These tasks are summarized below.

5.2.2.1 PERMITTING & NOTIFICATIONS

Prior to commencing with UST decommissioning, the GC obtained permits from the Seattle Fire Department (SFD) and RGI submitted 30-Day Notice paperwork to Ecology in accordance with applicable regulations and requested that Ecology grant a waiver for the 30 day notice period for all three USTs. This request was granted by Ecology and copies of 30-Day Notices and the SFD permit pertaining to UST4A and USTA are included in Appendix A.

The decommissioning of USTs was managed by the GC. RGI has requested a copy of SFD permit pertaining to UST6B from the GC's subcontractor (Marvac). Marvac has indicated that they do not have a copy of this permit, but have requested one from the SFD and will send it to RGI as soon as they receive it. RGI will send this permit to Ecology once it is received. A copy of the proof of payment for the permit associated with UST6B is included in Appendix A.

5.2.2.2 WASTE CHARACTERIZATION & PROFILING

Prior to UST decommissioning, RGI obtained product/water samples from USTA, UST4A, and UST6B (USTA-Product, UST4A-Product, and UST6B-1). These samples were submitted to the laboratory for analysis in accordance with MTCA Table 830-1 analyses with the exception of the water sample obtained from inside UST6B (UST6B-1). UST6B was previously decommissioned and was filled with controlled density fill (CDF) and only a small amount of water (<2 liters) was present inside this UST. RGI collected one sample of this water, which was submitted to the laboratory for Hydrocarbon Identification (NWTPH-HCID) analysis. Based on a discussion with Ecology, no further analyses were performed on this water sample.

The product sample obtained from UST4A on May 11, 2020 contained diesel-range TPH and xylenes at concentrations exceeding MTCA soil cleanup levels. Based on this analyses, the GC coordinated disposal of product with Marvac.

The product sample obtained from USTA on May 11, 2020 contained benzene, toluene, ethylbenzene, xylenes, tetrachloroethene (PCE), trichloroethene (TCE), naphthalene, carcinogenic polycyclic aromatic hydrocarbons (cPAHs), and lead at concentrations exceeding MTCA soil cleanup levels. Based on the benzene, PCE, and TCE concentrations

present in the waste oil, the waste oil was classified as F002/D018 listed hazardous waste and required disposal as hazardous waste. RGI coordinated disposal of waste oil with Waste Management under Waste Profile No. OR344922. Copies of the hazardous waste profile and associated waste disposal documentation are included in Appendix C.

The water sample obtained from UST6B on June 2, 2020 contained gasoline-range TPH. This small amount of water was disposed of with the CDF that was excavated from inside the UST. The CDF and water were removed from the Property along with the PCS being removed from the Property during the Interim Action.

5.2.2.3 PUNCTURE OF USTA DURING REDEVELOPMENT

On May 21, 2020, USTA was accidentally punctured by the GC's excavation subcontractor during grading activities and approximately 40 gallons of product were released from the southwest side of the UST at a grade approximately 3.5 feet bgs. The oil was viscous and did not migrate vertically more than a few inches. Groundwater was not impacted by this release as groundwater was situated approximately 15 feet below the grade of the release in this location.

RGI quickly stopped the leak by plugging the UST with native clay. Clean soil was quickly placed on and around the area of the release in order to contain the release and absorb the waste oil in preparation for immediate excavation. This soil and product were excavated from an area that was approximately 7 feet wide by 7 feet long and 3 feet deep (or 6.5 feet below the original grade of the Property). The area of the product release was over excavated to 3 feet to ensure all waste oil was removed. The product and soil were placed on plastic and covered with plastic. Approximately 62 tons of hazardous waste soil were generated during the cleanup of the release. A sample of this impacted soil was submitted to the laboratory for required analyses under MTCA Table 830-1. Analytical data indicated that PCE and TCE where present in the soil at concentrations that required disposal as a F002 listed hazardous waste. This soil was subsequently removed from the Property and disposed of in accordance with applicable regulations. The disposal of this soil will be documented in the forthcoming *Interim Action Report*.

The GC retained Marvac on the same day to drain the remaining waste oil into two 55-gallon drums that were stored on the Property.

RGI reported the release to Ms. Jing Song and Mr. Kale Carlson of Ecology on June 21, 2020 at 5:25 pm.

5.2.3 UST DECOMMISSIONING

The GC retained Marvac to provide the equipment necessary to pump product from the USTs, clean the USTs, and remove rinse water used for cleaning. The GC also coordinated with the SFD and marine chemist prior to commencing with decommissioning.

Between May 21 and 22, 2020, approximately 250 gallons of product and rinse water were pumped from UST4A directly into a vacuum truck by Marvac. An additional 275 gallons of waste oil and rinse water was removed from USTA and stored in five 55-gallon drums. UST cleaning consisted of using detergent in conjunction with water and a

pressure washer to remove diesel from inside UST4A and hazardous waste oil from inside USTA. The cleaning of the USTs included removing accumulated sludge/sediment from the internal walls of the USTs.

UST6B was previously decommissioned and filled with CDF. UST6B also contained less than 2 liters of water. Therefore, no pumping or cleaning services were required for this UST other than the removal of CDF. On June 1, 2020, the marine chemist and the SFD inspected USTA and UST4A, after Marvac had completed the pumping and cleaning of both USTs, and determined that both USTs were in acceptable condition to remove from the Property.

On June 8, 2020, the marine chemist and the SFD inspected UST6B and determined that it was acceptable to remove UST6B from the Property. The UST was removed in several pieces using the excavator to tear apart steel. The CDF inside the UST was then excavated and disposed of with PCS being removed during the Interim Action.

All three USTs were transported off-Property for disposal by Marvac. Documentation associated with UST decommissioning is included in Appendix C.

5.2.4 UST Site Assessment

The UST Site Assessment for USTA, UST4A, and UST6B was performed on June 1 and 8, 2020. Mr. Eric Dunham of RGI (Washington State Site Assessor No. 9261523) performed UST Site Assessment activities. Photographs associated with UST Site Assessment activities are included in Appendix D. Copies of UST Site Assessment Checklists are included in Appendix E.

5.2.4.1 OBSERVATIONS

On June 1, 2020, RGI observed the removal of UST4A and USTA from the excavation and closely inspected each UST.

UST4A was a horizontal cylinder shaped UST with single wall steel construction that was 6 feet with a diameter of 5.5 feet and an approximately 1,066 -gallon capacity. UST4A was previously used to store diesel fuel and appeared to be in relatively good condition and no holes were observed in the UST.

USTA was a horizontal cylinder shaped UST with single wall steel construction that was 6 feet long with a diameter of 3 feet and an approximately 317-gallon capacity. An approximately 3 millimeter hole was observed on the bottom eastern side of USTA with black sludge staining on the outside of the tank. An approximately 0.5-inch hole was also observed at the top eastern side of the UST.

On June 8, 2020, RGI observed the removal of UST6B from the excavation. UST6B was a horizontal cylinder shaped UST with single wall steel construction that was 12 feet long with a diameter of 7 feet and an approximately 3,455-gallon capacity. The UST had been filled with CDF prior to discovery and less than two liters of water was present inside the UST.

Apart from the damage done to tear apart the UST, Evidence of corrosion was observed and a 10-inch diameter circular hole was present on the central portion of the bottom of the UST. This is likely where the UST was cut for the purpose of collecting a soil sample at the time the UST was abandoned in place. However, no records pertaining to previous work regarding UST6B were found.

5.2.4.2 UST SITE ASSESSMENT SAMPLING & ANALYSES

This section describes UST Site Assessment sampling and analysis pertaining to the three USTs.

5.2.4.2.1 UST4A

On May 14, 2020, RGI collected a sample of soil surrounding the fill port of UST4A (UST4A-PP-1-2). This sample was submitted to the laboratory for analysis of COCs and no COCs were detected at concentrations above applicable MTCA soil cleanup levels.

On June 1, 2020 RGI screened soil in the UST4A excavation using a PID and visual and olfactory observations. RGI did not observe any evidence of contaminated soil or a release from UST4A. Soil in the excavation consisted of sand with some silt and gravel. Three samples were collected from the bottom, east, and west sides of the UST excavation (UST4A-SA-1B-8.5, UST4A-SA-2E-7, and UST4A-SA-3W-7) and submitted to the laboratory for analyses. No COCs were detected in soil at concentrations exceeding applicable MTCA soil cleanup levels. RGI concluded that no release occurred from UST4A and no further action was necessary in connection with UST4A.

5.2.4.2.2 USTA

On May 22, 2020 USTA was inadvertently punctured as described in Section 6.2.2.3 and soil sample UST-1W-3 was collected from beneath the area of the release after the release was contained and cleanup was completed. Analytical results from this sample indicated that soil contained gasoline- and oil-range TPH at concentrations exceeding the applicable MTCA soil cleanup levels. This contamination was not suspected to be caused by the release due to the punctured UST, but rather from a previous release from USTA. Analytical data obtained from a sample of the stockpiled soil associated with the release due to the puncture was collected on June 2, 2020 indicated that PCE and TCE where present in soil. PCE and TCE were not detected in sample UST-1W-3.

On June 1, 2020 RGI screened soil in the USTA excavation after the UST was removed using a PID and visual and olfactory observations. Field screening indicated the presence of contamination in the excavation. Soil in the excavation consisted of sand with some silt and gravel. Three samples were collected from the west, bottom, and east sides of the UST excavation (USTA-SA-1W-6, USTA-SA-2B-6, and USTA-SA-3E-4.5) and submitted to the laboratory for analyses of COCs. Benzene was detected in soil at concentrations of 0.19 mg/kg and 0.096 mg/kg, which exceeded MTCA soil cleanup level of 0.03 mg/kg. PCE and TCE were not detected in any of these soil samples, which confirmed that the release caused by the puncture of USTA had been cleaned up. RGI concluded that a release of gasoline- and oil-range TPH and benzene occurred to soil in the location of USTA and remediation was required. The cleanup of this contaminated soil was

completed in accordance with MTCA regulations and will be documented in the forthcoming *Interim Action Report*.

5.2.4.2.3 UST6B

On June 8, 2020 RGI screened soil in the UST6B excavation using a PID and visual and olfactory observations. Field screening indicated that PCS was present directly beneath the 10-inch hole in the UST and the surrounding bottom of excavation. No evidence of contamination was observed in the sidewalls of the excavation. Soil in the excavation consisted of sand with some silt and gravel. Four samples were collected from the bottom, west, north, and east sides of the UST excavation (UST6B-SA-1B-13, UST6B-SA-2W-10, UST6B-SA-3N-10, and UST-SA-4E-10) and submitted these samples to the laboratory for analyses. Gasoline-range TPH was detected in soil beneath the UST at a concentration of 1,900 mg/kg, which exceeds the MTCA soil cleanup level of 30 mg/kg. RGI concluded that a release of gasoline-range TPH occurred to soil in the location of UST6B sometime prior to the UST being filled with CDF. The cleanup of this contaminated soil was completed in accordance with MTCA regulations and will be documented in the forthcoming *Interim Action Report.*

6 WASTE DISPOSAL

On May 22, 2020 a total of approximately 250-gallons of diesel product and associated rinse water were removed from the Property by Marvac via pumping wastewater from UST4A directly into a vacuum truck. This wastewater was transported to Marvac's facility in Seattle, Washington for disposal in accordance with applicable regulations. Disposal of petroleum waste was managed by the GC and their subcontractors.

On June 15, 2020, Waste Management removed at total of seven 55-gallon drums from the Property containing 1.47 tons (or 365-gallons) of waste oil and rinse water classified as F002/D018 listed hazardous waste under Waste Profile No. OR344922. Waste Management will handle the disposal of this hazardous waste, which will require treatment by incineration followed by disposal of the ash at a Subtitle C landfill.

Documentation pertaining to disposal of diesel product, hazardous waste oil and associated wastewater is included in Appendix C.

7 CONCLUSIONS

The actions documented in this UST Site Assessment Report support the following conclusions:

- A 1,066-gallon diesel UST (UST4A) was encountered on the west central portion of the Property and decommissioned in accordance with applicable regulations. No evidence of a release was observed at UST4A during the UST Site Assessment and the UST appeared to be in good condition. UST Site Assessment analytical data obtained from soil situated in the UST4A excavation indicated that no COCs were present in soil at concentrations exceeding applicable MTCA soil cleanup levels. No further action is necessary in connection with UST4A.

- A 317-gallon waste oil UST (USTA) was encountered on the central portion of the Property and decommissioned and removed from the Property in accordance with applicable regulations. During the UST Site Assessment, holes and corrosion were observed on USTA. Field screening indicated the presence of contamination beneath USTA. Analytical data obtained from the contents of USTA (residual product) indicated the presence of benzene, PCE, and TCE. These concentrations classified the waste as a D018/F002 listed hazardous waste. Analytical data obtained from UST Site Assessment soil samples indicated that gasoline- and oil-range TPH and benzene were present in soil beneath USTA at concentrations exceeding applicable MTCA soil cleanup levels. Therefore, a release occurred in the location of USTA. The remediation of contaminated soil associated with USTA has been completed on the Property in accordance with MTCA regulations and will be documented in the forthcoming *Interim Action Report*.
- USTA was inadvertently punctured by the GC's subcontractor during grading activities associate with redevelopment on May 21, 2020. This resulted in a release of approximately 40-gallons of waste oil to soil near the west side of USTA. The release was quickly contained and cleanup up before any significant migration occurred. This release was reported to Ecology on May 21, 2020. Approximately 62 tons of hazardous waste soil were generated during the cleanup of this release. The disposal of hazardous waste soil will be documented in the forthcoming *Interim Action Report*.
- A 3,455-gallon gasoline UST (UST6B), was encountered on the eastern portion of the Property and was previously decommissioned by others (circa 1990). The UST was filled with CDF and contained less than two liters of water. Based on discussions with Ecology, UST6B was decommissioned and removed from the Property in accordance with applicable regulations. During the UST Site Assessment, corrosion was observed on UST6B and a 10-inch circular hole was observed in the central portion of the bottom of UST6B where field screening indicated the presence of contamination. Analytical data obtained from UST Site Assessment soil samples indicated that gasoline-range TPH was present in soil beneath UST6B at concentrations exceeding applicable MTCA soil cleanup levels. A release to soil had likely occurred in this location UST6B sometime prior to the UST being filled with CDF. The remediation of this contaminated soil has been completed on the Property in accordance with MTCA regulations and will be documented in the forthcoming *Interim Action Report*.
- A pump island and four sections of suspected product piping were encountered across the Property. The pipes could not be readily connected to any specific UST. . Analytical data obtained from soil samples in these areas confirmed the presence of PCS on the east and southwest portions of the Property in locations where PCS was known to be present and remediation was planned. USTs and product piping were transported off-Property for disposal by Marvac after decommissioning was completed.

- A total of approximately 1.47 tons (or 685-gallons) of waste oil and rinse water classified as F002/D018 listed hazardous waste were transported off-Property by Waste Management for disposal. The waste will be incinerated and the resulting ash will be transferred to a Subtitle C landfill. A total of approximately 250-gallons of diesel product and associated rinse water were pumped from UST4A directly into a vac truck by Marvac and transported to the Marvac facility in Seattle, Washington for disposal.
- The remediation of all contaminated soil associated with this UST Site Assessment has been completed on the Property during the Interim Action. The work performed during the Interim Action will be documented in detail in the forthcoming *Interim Action Report*.
- No further action is required pertaining to the decommissioning of USTs and other underground improvements discussed in this report.

RGI recommends submitting a copy of the UST Site Assessment Report to Ecology under Agreed Order 16357.

8 LIMITATIONS

This report is the property of Roystone on Queen Anne, LLC 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 631 Queen Anne Avenue North in Seattle, Washington. No other warranty, expressed or implied, is made.

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

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

Sincerely,

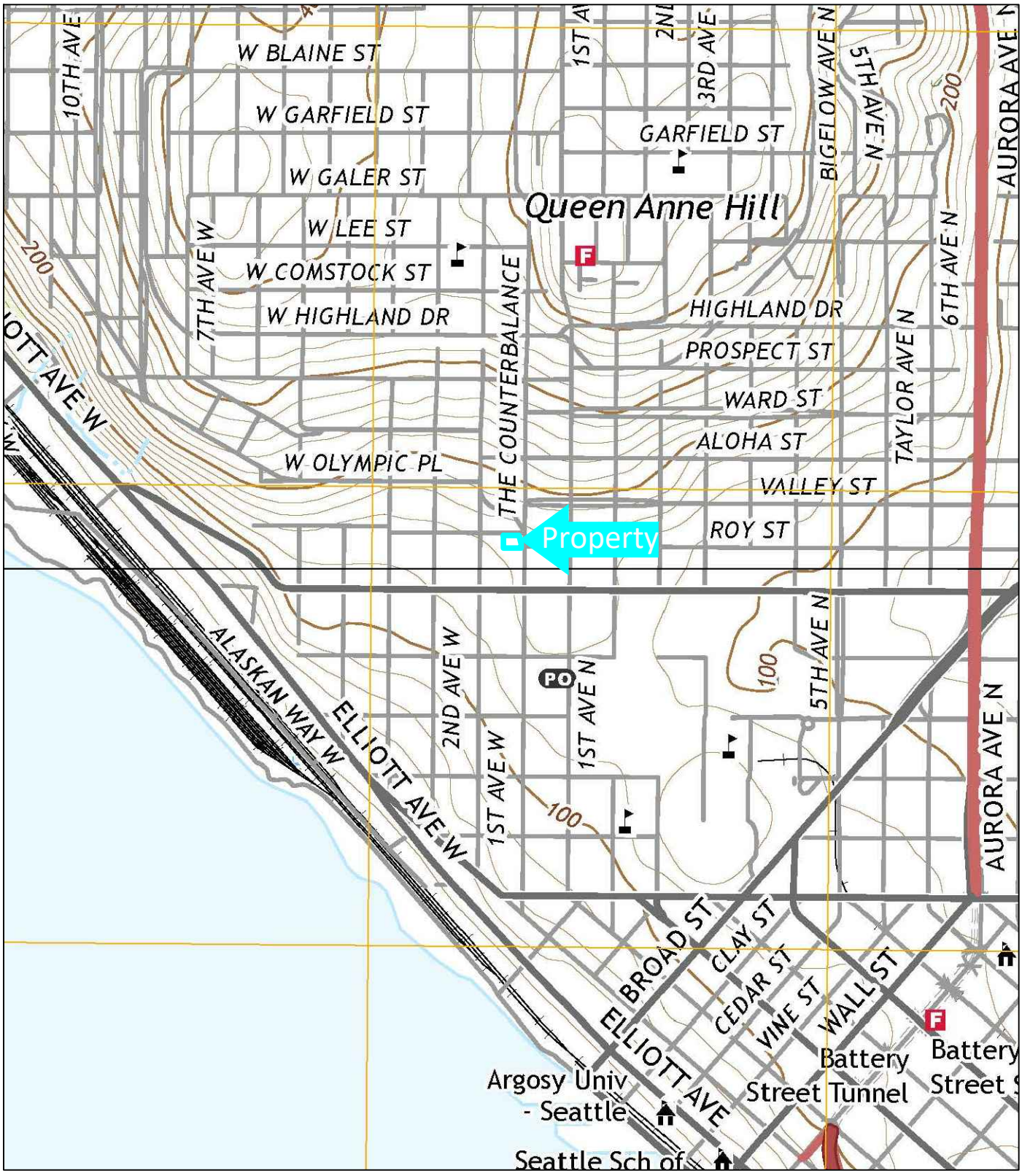
THE RILEY GROUP, INC.

Jerry Sawetz
Senior Environmental Scientist

Eric Dunham
Staff Geologist

Paul D. Riley,

LG, LHG Principal



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

Approximate Scale: 1"=1000'

0 500 1000 2000

N

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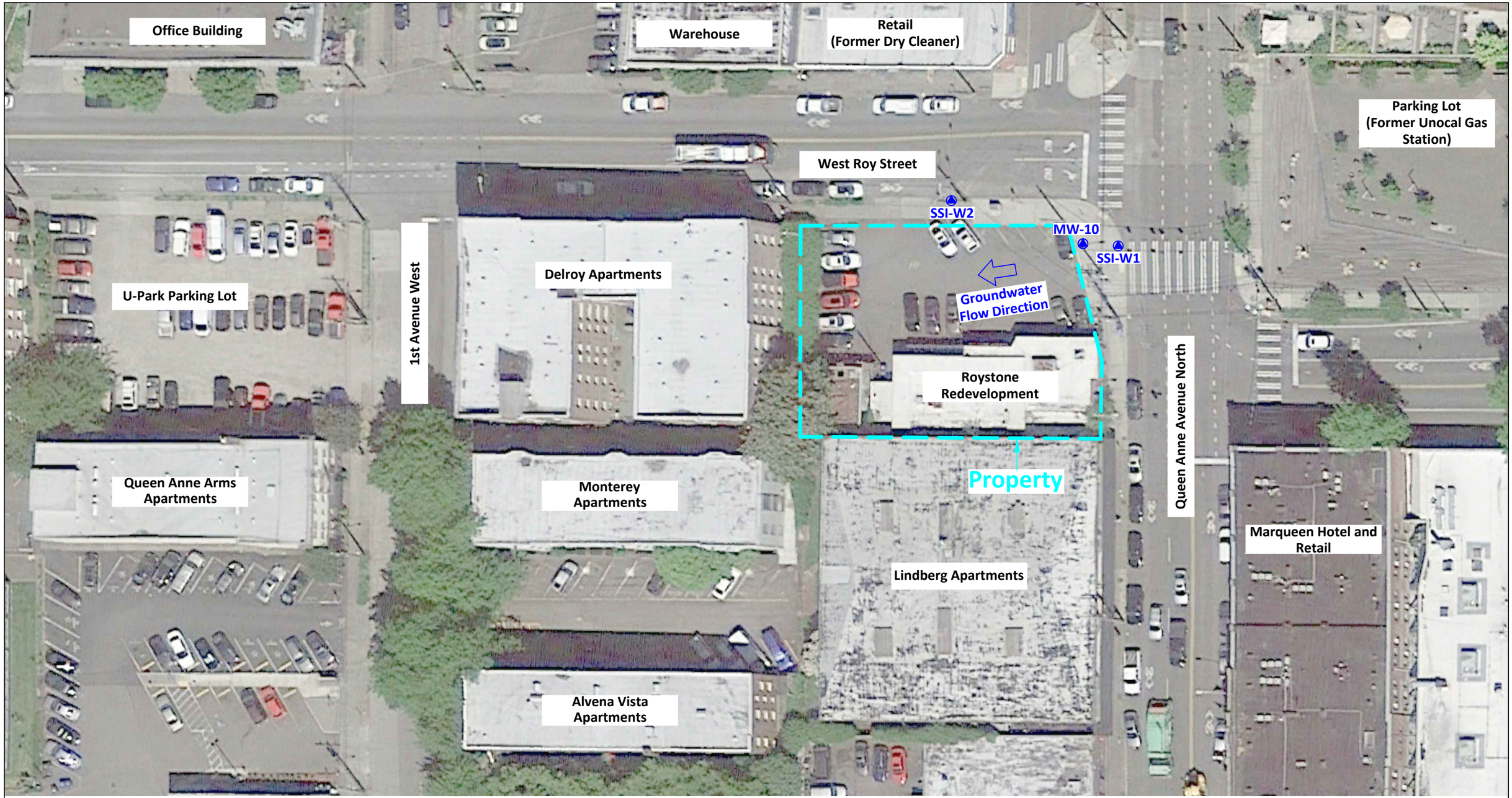
Roystone Redevelopment		Figure 1
RGI Project Number 2017-015K	Property Vicinity Map	Date Drawn: 10/2020
Address: 631 Queen Anne Avenue North, Seattle, Washington 98109		



Approximate Scale: 1"=40'

0 20 40 80

N

= Existing groundwater monitoring well

= Property boundary

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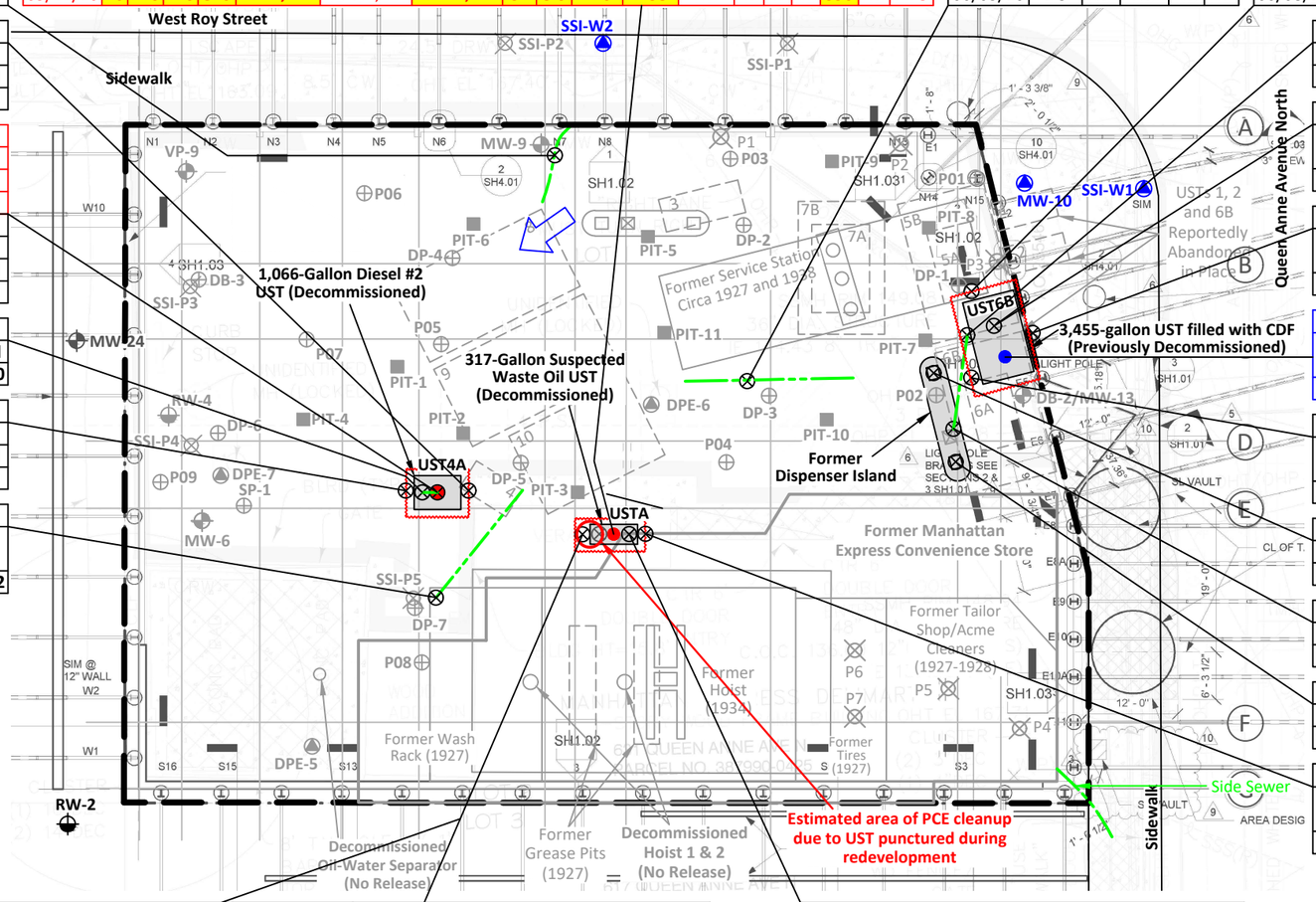
Roystone Redevelopment		Figure 2
RGI Project Number 2017-015K	Property Representation Map	Date Drawn: 10/2020
Address: 631 Queen Anne Avenue North, Seattle, Washington 98109		



UST-A-Product

Date	B	T	E	X	HCID Gas	HCID DSL	HCID Oil	PCE	TCE	Naph.	cPAHs	PCBs	As	Cd	Cr	Pb	Hg	TCLP Pb
05/11/20	26	210	120	870	D>20,000	ND<50,000	D>250,000	31	8.0	420	2.38	ND	ND	ND	ND	390	ND	2.75

PP1-NPL-2

Date	Depth	Gas	BTEX	DSL	Oil
05/06/20	2	ND	ND	ND	ND

UST10-PP1-2.5

Date	Depth	Gas	BTEX	DSL	Oil
06/05/20	2.5	ND	ND	ND	ND

UST6B-SA-3N-10

Date	Depth	B	T	E	X	HCID Gas	HCID DSL	HCID Oil
06/08/20	10	ND	0.026	0.085	0.25	ND	ND	ND

UST4A-SA-2E-7

Date	Depth	BTEX	DSL	Oil	HCID Gas	HCID DSL	HCID Oil
06/01/20	7	ND	ND	ND	ND	ND	ND

PP1-UST5B-2.5

Date	Depth	Gas	B	T	E	X	DSL	Oil
03/26/20	2.5	130	ND	0.41	ND	ND	390	ND

UST-4A-Product

Date	B	T	E	X	HCID Gas	HCID DSL	HCID Oil
05/11/20	ND	3.5	ND	75	ND<20,000	D>50,000	ND<250,000

UST6B-SA-1B-13

Date	Depth	Gas	B	T	E	X	HCID Gas	HCID DSL	HCID Oil	VOCs	Pb
06/08/20	13	1,900	ND	ND	1.9	3.7	D>20	ND	ND	ND	8.54

UST4A-SA-1B-8.5

Date	Depth	BTEX	DSL	Oil	HCID Gas	HCID DSL	HCID Oil
06/01/20	8.5	ND	ND	ND	ND	ND	ND

UST6B-SA-4E-10

Date	Depth	BTEX	HCID Gas	HCID DSL	HCID Oil
06/08/20	10	ND	ND	ND	ND

UST4A-PP-1-2

Date	Depth	Gas	BTEX	DSL	Oil
05/14/20	2	ND	ND	ND	590

UST-6B-1 (water)

Date	HCID Gas	HCID DSL	HCID Oil
06/03/20	D>0.2	D>0.5	ND<0.5

UST4A-SA-3W-7

Date	Depth	BTEX	DSL	Oil	HCID Gas	HCID DSL	HCID Oil
06/01/20	7	ND	ND	95j	ND	D>50	ND

UST6B-SA-2W-10

Date	Depth	BTEX	HCID Gas	HCID DSL	HCID Oil
06/08/20	10	ND	ND	ND	ND

PP1-UST4-1.5

Date	Depth	Gas	BTEX	Oil	HCID Gas	HCID DSL	HCID Oil	VOCs	Naph	Pb
05/07/20	1.5	1,200	ND	1,400	D>20	ND	D>250	ND	0.46	9.62

Disp2-0.5

Date	Depth	Gas	BTEX	DSL	Oil
03/26/20	0.5	ND	ND	ND	ND

PP2-UST5B-0.5

Date	Depth	Gas	BTEX	DSL	Oil
03/26/20	0.5	ND	ND	ND	ND

Disp1-0.5

Date	Depth	Gas	BTEX	DSL	Oil
03/26/20	0.5	ND	ND	ND	ND

USTA-SA-3E-4.5

Date	Depth	BTEX	HCID Gas	HCID DSL	HCID Oil
06/01/20	4.5	ND	ND	ND	ND

USTA-1W-3

Date	Depth	Gas	B	T	E	X	DSL	Oil	PCE	Other VOCs	Naph.	cPAHs	Pb
05/21/20	4	49	ND	0.22	0.18	1.34	180x	2,200	0.039	ND	0.97	0.047	22.5

USTA-SA-1W-6

Date	Depth	BTEX	HCID Gas	HCID DSL	HCID Oil	VOCs
06/01/20	6	B=0.19	ND	ND	ND	ND

USTA-SA-2B-6

Date	Depth	Gas	BTEX	DSL	Oil	VOCs	cPAHs	Pb
06/01/20	6	ND	B=0.096	ND	ND	ND	ND	152

= Soil Analytical Data in mg/kg unless otherwise indicated;
Depth = Feet below ground surface
Gas/DSL/Oil = Gasoline/diesel/oil total petroleum hydrocarbons (TPH)
BTEX = Benzene, toluene, ethylbenzene, xylenes
HCID = Hydrocarbon identifications
VOCs = Volatile organic compounds
Naph. = Naphthalene, cPAHs = Carcinogenic polycyclic aromatic hydrocarbons,
PCBs = Polychlorinated biphenyls
As, Cd, Cr, Pb, Hg = Total arsenic, cadmium, chromium, lead, mercury
ND = Not detected, BM = Below MTCA Cleanup levels, D = Detected
Yellow highlight indicates petroleum related contaminants present in soil at concentrations exceeding MTCA soil levels or that contamination is present based on field screening

= Groundwater flow direction
= Product sample collected from inside UST
= UST6B was previously filled with CDF. The sample obtained from inside the UST was a water sample and the concentrations are reported in milligrams/liter.
= Fuel system decommissioning assessment soil sample location. Samples where MTCA Table 830-1 analyses were performed have black symbols and pertinent data is displayed on the figure. All analytical data is summarized on Table 1.

Note: See Interim Action Work Plan for discussion regarding historic sample locations. Interim action data will be documented in the forthcoming Interim Action Report.

= 2020 UST removal and Site Assessment areas
= Product piping
= Property boundary

= Existing groundwater monitoring well
P4 = RGI test probe location, P1 - P7 drilled May 2017 and SSI-P1 - SSI-P5 drilled December 2017
MW-14 = Former monitoring well by others
DPE-5 = Former extraction well by others
RW-4 = Former recovery well by others
DB,SP&DP = Soil boring by others
P09 = Soil boring (Sound Earth 2012)
Pit-1 = 1993 UST excavation sample

Approximate Scale: 1"=20'
0 10 20 40
N

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

Roystone Redevelopment		Figure 3
RGI Project Number 2017-015K	Property Representation with Summary of UST Site Assessment Data	Date Drawn: 10/2020
Address: 631 Queen Anne Avenue North, Seattle, Washington 98109		

Table 1. Summary of UST Site Assessment Analytical Data
Roystone on Queen Anne, LLC (Arnold's/Former Texaco Service Station No. 211577)
631 Queen Anne Avenue North, Seattle, Washington 98109
The Riley Group, Inc. Project No. 2017-015K Task 7A

Sample Number	Sample Depth	Sample Date	Gasoline TPH	BTEX				Diesel TPH	Oil TPH	HCID			PCE	TCE	Hexane	MTBE	EDC	EDB	Other HVOCs	Other VOCs[4]	Naph.	cPAHs	PCBs	Total Metals					TCLP[7]
				B	T	E	X			Gasoline	Diesel	Heavy Oil												As	Cd	Cr	Pb	Hg	Pb
USTA (317-Gallon Suspected Waste Oil UST)																													
UST-A-Product[9]	----	05/11/20	----	**26**	**210**	**120**	**870**	**----**	**----**	**D>20,000**	ND<50,000	**D>250,000**	**31**	**8.0**	**70**	ND<10	ND<10	ND<10	----	ND	**420**	**2.38**	ND<2	ND<1	ND<1	ND<1	**390**	ND<1	**2.75**
USTA-1W-3[13]	4	05/21/20	**49**	ND<0.03	**0.22**	**0.18**	**1.34**	**180x**	**2,200**	----	----	----	**0.039**	ND<0.02	ND<0.25	ND<0.05	ND<0.05	ND<0.05	----	ND	**0.97**	**0.047**	----	----	----	----	**22.5**	----	**----**
USTA-SA-1W-6	6	06/01/20	----	**0.19**	ND<0.05	ND<0.05	ND<0.15	----	----	ND<20	ND<50	ND<250	ND<0.025	ND<0.02	ND<0.25	ND<0.05	ND<0.05	ND<0.05	----	ND	ND<0.05	----	----	----	----	----	----	----	----
USTA-SA-2B-6	6	06/01/20	ND<5	**0.096**	ND<0.05	ND<0.05	ND<0.15	ND<50	ND<250	----	----	----	ND<0.025	ND<0.02	ND<0.25	ND<0.05	ND<0.05	ND<0.05	----	ND	ND<0.05	ND<0.05	----	----	----	----	**152**	----	----
USTA-SA-3E-4.5	4.5	06/01/20	----	ND<0.02	ND<0.02	ND<0.02	ND<0.06	----	----	ND<20	ND<50	ND<250	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
USTA-SP-1-S[11]	----	06/02/20	**1,400**	**0.51**	**6.0**	**5.5**	**38**	**8,100 x**	**33,000**	----	----	----	**0.61**	**0.14**	----	----	ND<0.05	----	ND	----	----	----	----	----	----	----	----	----	----
UST4A (1,066-Gallon Diesel UST)																													
UST-4A-Product[9]	----	05/11/20	----	ND<0.2	**3.5**	ND<0.2	**75**	**----**	**----**	ND<20,000	**D>50,000**	ND<250,000	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
UST4A-PP-1-2	2	05/14/20	ND<5	ND<0.02	ND<0.02	ND<0.02	ND<0.06	ND<50	**590**	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----			
UST4A-SA-1B-8.5	8.5	06/01/20	----	ND<0.02	ND<0.02	ND<0.02	ND<0.06	ND<50	ND<250	ND<20	ND<50	ND<250	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
UST4A-SA-2E-7	7	06/01/20	----	ND<0.02	ND<0.02	ND<0.02	ND<0.06	ND<50	ND<250	ND<20	ND<50	ND<250	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
UST4A-SA-3W-7	7	06/01/20	----	ND<0.02	ND<0.02	ND<0.02	ND<0.06	ND<50	**95 j**	ND<20	**D>50**	ND<250	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
UST6B (3,455-Gallon Gasoline UST)																													
UST6B-1[10]	----	06/03/20	----	----	----	----	----	----	----	**D>0.2**	**D>0.5 x**	ND<0.5	----	----	----	----	----	----	----	----	----	----	----	----	----	----	**----**	----	----
UST6B-SA-1B-13	13	06/08/20	**1,900**	ND<0.03	ND<0.05	**1.9**	**3.7**	----	----	**D>20**	ND<50	ND<250	----	----	ND<0.25	ND<0.05	ND<0.05	ND<0.05	----	----	ND<0.05	----	----	----	----	----	**8.54**	----	----
UST6B-SA-2W-10	10	06/08/20	----	ND<0.02	ND<0.02	ND<0.02	ND<0.06	----	----	ND<20	ND<50	ND<250	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
UST6B-SA-3N-10	10	06/08/20	----	ND<0.02	**0.026**	**0.085**	**0.25**	----	----	ND<20	ND<50	ND<250	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
UST6B-SA-4E-10	10	06/08/20	----	ND<0.02	ND<0.02	ND<0.02	ND<0.06	----	----	ND<20	ND<50	ND<250	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
UST Piping and Dispensers																													
UST10-PP1-2.5	2.5	06/05/20	ND<5	ND<0.02	ND<0.02	ND<0.02	ND<0.06	ND<50	ND<250	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
PP1-UST4-1.5	1.5	05/07/20	**1,200**	ND<0.03	ND<0.05	ND<0.05	ND<0.15	----	**1,400**	**D>20**	ND<50	**D>250**	----	----	ND<0.25	ND<0.05	ND<0.05	ND<0.05	----	----	**0.46**	----	----	----	----	----	**9.62**	----	----
PP1-NPL-2	2	05/06/20	ND<5	ND<0.02	ND<0.02	ND<0.02	ND<0.06	ND<50	ND<250	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
PP1-UST5B-2.5	2.5	03/26/20	**130**	ND<0.02j	**0.41**	ND<0.1	ND<0.3	**390**	ND<250	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
PP2-UST5B-0.5	0.5	03/26/20	ND<5	ND<0.02	ND<0.02	ND<0.02	ND<0.06	ND<50	ND<250	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
Disp 1-0.5[12]	0.5	03/26/20	ND<5	ND<0.02	ND<0.02	ND<0.02	ND<0.06	ND<50	ND<250	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
Disp 2-0.5[12]	0.5	03/26/20	ND<5	ND<0.02	ND<0.02	ND<0.02	ND<0.06	ND<50	ND<250	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
MTCA Method A Soil Cleanup Levels for Unrestricted Land Uses			**100/30[1]**	**0.03**	**7**	**6**	**9**	**2,000**		**100/30[1]**	**2,000**		**0.05**	**0.03**	**----**	**0.1**	**0.05[5]**	**0.05[5]**	**Analyte Specific**	**Analyte Specific**	**5**	**0.1[6]**	**1**	**20**	**2**	**19/ 2,000[2]**	**250**	**2**	**5**
MTCA Method B Soil Cleanup Levels for Unrestricted Land Uses[3]			**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**----**	**----**	**480**	**----**	**----**	**----**	**----**	**----**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**

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) prior to the start of construction.
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 8260D.
Diesel and Oil TPH (total petroleum hydrocarbons) determined using Northwest Test Method NWTPH-Dx.
Gasoline, Diesel, and Oil HCID (hydrocarbon identification) determined using Northwest Test Method NWTPH-HCID.
Naph. (naphthalene) determined using EPA Test Method 8260D.
PCE (tetrachloroethene), TCE (trichloroethene), Hexane, MTBE (methyl t-butyl ether), EDC (1,2-dichloroethane), EDB (1,2-dibromoethane), other HVCOs (halogenated volatile organic compounds), and other VOCs (volatile organic compounds) determined using EPA Test Method 8260D.
cPAHs (carcinogenic polycyclic aromatic hydrocarbons) determined using EPA Test Method 8270D SIM.
PCBs (polychlorinated biphenyls) determined using EPA Test Method 8082A.
Total Metals (As = arsenic, Cd = cadmium, Cr = chromium, Pb = lead, Hg = mercury) determined using EPA Method 6020B.
TCLP Pb (toxicity characteristic leaching procedure lead) determined using EPA Method 6020B and 1311.
x = The sample chromatographic pattern does not resemble the fuel standard used for quantitation.
D = Detected at a concentration above the analytical detection limit.
ND = Not detected at a concentration above the analytical detection limit.
---- = Not analyzed or not applicable.

Table 1. Summary of Soil Analytical Results for Underground Storage Tanks
Roystone on Queen Anne, LLC (Arnold's/Former Texaco Service Station No. 211577)
631 Queen Anne Avenue North, Seattle, Washington 98109
The Riley Group, Inc. Project No. 2017-015K Task 7A

Notes continued:

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

[1] The higher cleanup level is allowed if no benzene is present in the gasoline mixture and the total concentration 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 applicable MTCA Method B Standard Formula Value obtained from CLARC is referenced.

[4] Petroleum-related VOCs (for example, isopropylbenzene) are factored into the MTCA Method A TPH Cleanup Levels calculations and were not evaluated separately. MTCA TPH cleanup levels are sufficient for assessing these compounds.

[5] The cleanup level is less than the method detection limit. Therefore, the detection limit is referenced.

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

[7] TCLP = Toxicity Characteristic Leaching Potential. Utilized for determining if the lead observed in USTA was classified as hazardous waste. Results and detection limits are given in milligrams per liter (mg/L).

[8] Soil sample was collected from soil surrounding the fill port of UST4A

[9] Product sample collected from inside the UST.

[10] UST6B was filled with controlled density fill and no product was present. Less than 2 liters of water were present in UST6B and the sample consists of water inside the UST6B (concentration is reported in micrograms/liter).

[11] Soil stockpile sample that was analyzed to characterize soil for disposal in location after USTA was inadvertently punctured during redevelopment.

[12] Samples were obtained from beneath remnants of dispenser associated with a dispenser island encountered on the east side of the Property.

[13] The actual depth of this sample was 4 feet below the original grade of the Property.

Bold results indicate concentrations (if any) above laboratory detection limits.

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

APPENDIX A

ECOLOGY 30-DAY NOTICE & SFD PERMIT DOCUMENTATION

RILEYGROUP

DEPARTMENT OF ECOLOGY
State of Washington

30-DAY NOTICE
FOR UNDERGROUND STORAGE TANK SYSTEMS

UST ID #: _____
County: King

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

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

I. SITE INFORMATION	II. OWNER/OPERATOR INFORMATION
Tag or UBI # (if applicable):	Owner/Operator Name: Pui Leung
UST ID # (if applicable):	Business Name: Roystone on Queen Anne LLC
Site Name: Roystone Redevelopment	Mailing Address: 606 Maynard Ave S #104
Site Address: 631 Queen Anne Ave North	City: Seattle State: WA Zip:98104
City: Seattle, Washington	Phone: 425-793-9088
Phone: Not Applicable (under construction)	Email: pleung@vibrantcities.com

III. CERTIFIED SERVICE PROVIDER(S)

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

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

1) ☐ Installer ☒ Decommissioner ☐ Site Assessor

Company Name:Rivers Edge Environmental Services, Inc.	Certification Type: UST Decommissioning
Service Provider Name: Dan Kuhn	Cert. No.: 9291718 Exp. Date: 10/8/21
Provider Phone: 206-962-0323	Provider Email: dkuhn@rivers.city

2) ☐ Installer ☐ Decommissioner ☒ Site Assessor

Company Name: The Riley Group, Inc.	Certification Type: WA State
Service Provider Name: Eric Dunham	Cert. No.: 9261523 Exp. Date: 7/24/21
Provider Phone: 425-415-0551 x303	Provider Email: edunham@riley-group.com

IV. TANK AND/OR PIPING INFORMATION

TANK ID	TANK CAPACITY	SUBSTANCE STORED	PIPING INSTALLATION OR REPLACEMENT ONLY (Y/N)	DATE PROJECT IS EXPECTED TO BEGIN	COMMENTS
UST4A	1066	Petroleum	N	5/12/20	30 day notice Waived. Kale Carlson Department of Ecology UST Inspector 5/11/2020
USTA	317	Unknown	N	5/12/20	

30-DAY NOTICE

FOR UNDERGROUND STORAGE TANK SYSTEMS

GENERAL INSTRUCTIONS

Under WAC 173-360A-0300, 173-360A-0810 and 173-360A-0820, owners and/or operators are required to notify the Department of Ecology (Ecology) **at least 30 days prior** to beginning underground storage tank (UST) and/or piping installation, decommissioning, or change-in-service projects by mailing this notice to the address below. A separate form must be used for each project type (e.g. install, removal). Once this form is received by Ecology, it is date-stamped and returned to the owner/operator listed on the form. Installation and decommissioning projects cannot begin within the first 30 days after the date stamped on this form unless the wait-period has been waived by a regional Ecology UST inspector. If a project cannot meet the deadlines described below, an additional 30-Day Notice may be required.

Department of Ecology
Underground Storage Tank Section
PO Box 47655
Olympia, WA 98504-7655

SITE AND OWNER/OPERATOR INFORMATION

Fill in the site/owner information completely. The contact person listed on this form must confirm the exact date an installation or decommissioning project will begin by contacting the regional UST inspector **at least 3 business days** before proceeding.

INSTALLATION/REPLACEMENT OF TANK AND/OR PIPING

Installation projects must begin within 90 days of the date stamped on this notice. Complete the Tank Information section by assigning Tank ID numbers that have not previously been used at the facility. Once processed, this form allows a one-time drop of product for UST system testing purposes only. The fuel drop is not required to occur within the 90-day period. Once your tank(s) store more than one inch of product, leak detection equipment and monitoring must be in place.

To receive additional deliveries and operate the new tanks/piping, you must submit the Business License application, UST Addendum, and the tank/piping Manufacturer's Installation Checklists to the Department of Revenue (DOR) **within 30 days** of completing the installation. This activates the mailing of your Business License with tank endorsement(s) from DOR and the facility compliance tag from Ecology.

If only piping is being installed or replaced piping, the ICC-certified installer must certify the installation by completing the Retrofit/Repair Checklist with the Manufacturer's Installation Checklist and submitting it to the owner/operator. The form packet must be submitted by the owner/operator to Ecology **within 30 days** of completing the piping installation.

PERMANENT CLOSURE OF TANK AND/OR PIPING

Decommissioning projects must be completed within 90 days after the date stamped on this returned notice. Complete the Tank Information section using Tank ID numbers listed on the Business License. Use the Comments box to include additional information, such as the date when product was removed from both the piping and the tank to less than one inch.

Contact your local fire marshal and planning department prior to tank closure to procure any permits required by county or other local jurisdictions. Compliance with the State Environmental Policy Act (SEPA) Rules, Chapter 197-11 WAC may also apply.

A site assessment is required at the time of closure. If contamination is not discovered, a site assessment report must be submitted to the above address **within 30 days**. If contamination is discovered or confirmed, it must be reported to the appropriate Ecology regional office **within 24 hours** and a site characterization report must be submitted to the above address **within 90 days**.

The following are some examples of tanks that are exempt from the UST regulations.

- Farm or residential tanks, 1,100 gallons or less, used to store motor fuel for personal or farm use only. The fuel must be used for farm purposes and cannot be for resale.
- Tanks used for storing heating oil that is used solely for the purpose of heating the premises.
- Tanks with a capacity of 110 gallons or less.
- Emergency overflow tanks, catch basins, or sumps.

DEPARTMENT OF ECOLOGY
State of Washington

30-DAY NOTICE
FOR UNDERGROUND STORAGE TANK SYSTEMS

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

UST ID #: 100599
County: King

RECEIVED
MAR 06 2020
DEPT OF ECOLOGY
TCP - NWRO

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

I. SITE INFORMATION		II. OWNER/OPERATOR INFORMATION	
Tag or UBI # (if applicable):		Owner/Operator Name: Pui Leung	
UST ID # (if applicable): 100599		Business Name: Roystone on Queen Anne LLC	
Site Name: Roystone Redevelopment		Mailing Address: 606 Maynard Ave S #104	
Site Address: 631 Queen Anne Ave N		City: Seattle	State: WA Zip: 98104
City: Seattle, Washington 98109		Phone: 425-793-9088	
Phone: Not Applicable (vacant)		Email: pleung@vibrantcities.com	

III. CERTIFIED SERVICE PROVIDER(S)

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

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

1) ☐ Installer ☒ Decommissioner ☐ Site Assessor

Company Name: Rivers Edge Environmental Services, Inc.	Certification Type: UST Decommissioning
Service Provider Name: Dan Kuhn	Cert. No.: 9291718 Exp. Date: 10/8/21
Provider Phone: 206-962-0323	Provider Email: dkuhn@rivers.city

2) ☐ Installer ☐ Decommissioner ☒ Site Assessor

Company Name: The Riley Group, Inc.	Certification Type: WA State Site Assessment
Service Provider Name: Logan Chinn	Cert. No.: 8868032 Exp. Date: 1/15/2022
Provider Phone: 425-415-0551 x 303	Provider Email: lchinn@riley-group.com

IV. TANK AND/OR PIPING INFORMATION

TANK ID	TANK CAPACITY	SUBSTANCE STORED	PIPING INSTALLATION OR REPLACEMENT ONLY (Y/N)	DATE PROJECT IS EXPECTED TO BEGIN	COMMENTS
6B	~~8,000 gallon~~ *The actual capacity of the UST6B was 3,455-gallons* *9/25/20*	Diesel	N	3/24/20	UST 6B was reportedly decommissioned and closed in place in the 1990's. However, no official record exists. UST 6B will be decommissioned and removed in accordance with applicable UST regulations.

30-Day Notice Waived!
& certs are current.
3/6/2020
dept. of ecology UST inspector.

30-DAY NOTICE

FOR UNDERGROUND STORAGE TANK SYSTEMS

GENERAL INSTRUCTIONS

Under WAC 173-360A-0300, 173-360A-0810 and 173-360A-0820, owners and/or operators are required to notify the Department of Ecology (Ecology) **at least 30 days prior** to beginning underground storage tank (UST) and/or piping installation, decommissioning, or change-in-service projects by mailing this notice to the address below. A separate form must be used for each project type (e.g. install, removal). Once this form is received by Ecology, it is date-stamped and returned to the owner/operator listed on the form. Installation and decommissioning projects cannot begin within the first 30 days after the date stamped on this form unless the wait-period has been waived by a regional Ecology UST inspector. If a project cannot meet the deadlines described below, an additional 30-Day Notice may be required.

Department of Ecology
Underground Storage Tank Section
PO Box 47655
Olympia, WA 98504-7655

SITE AND OWNER/OPERATOR INFORMATION

Fill in the site/owner information completely. The contact person listed on this form must confirm the exact date an installation or decommissioning project will begin by contacting the regional UST inspector **at least 3 business days** before proceeding.

INSTALLATION/REPLACEMENT OF TANK AND/OR PIPING

Installation projects must begin within 90 days of the date stamped on this notice. Complete the Tank Information section by assigning Tank ID numbers that have not previously been used at the facility. Once processed, this form allows a one-time drop of product for UST system testing purposes only. The fuel drop is not required to occur within the 90-day period. Once your tank(s) store more than one inch of product, leak detection equipment and monitoring must be in place.

To receive additional deliveries and operate the new tanks/piping, you must submit the Business License application, UST Addendum, and the tank/piping Manufacturer's Installation Checklists to the Department of Revenue (DOR) **within 30 days** of completing the installation. This activates the mailing of your Business License with tank endorsement(s) from DOR and the facility compliance tag from Ecology.

If only piping is being installed or replaced piping, the ICC-certified installer must certify the installation by completing the Retrofit/Repair Checklist with the Manufacturer's Installation Checklist and submitting it to the owner/operator. The form packet must be submitted by the owner/operator to Ecology **within 30 days** of completing the piping installation.

PERMANENT CLOSURE OF TANK AND/OR PIPING

Decommissioning projects must be completed within 90 days after the date stamped on this returned notice. Complete the Tank Information section using Tank ID numbers listed on the Business License. Use the Comments box to include additional information, such as the date when product was removed from both the piping and the tank to less than one inch.

Contact your local fire marshal and planning department prior to tank closure to procure any permits required by county or other local jurisdictions. Compliance with the State Environmental Policy Act (SEPA) Rules, Chapter 197-11 WAC may also apply.

A site assessment is required at the time of closure. If contamination is not discovered, a site assessment report must be submitted to the above address **within 30 days**. If contamination is discovered or confirmed, it must be reported to the appropriate Ecology regional office **within 24 hours** and a site characterization report must be submitted to the above address **within 90 days**.

The following are some examples of tanks that are exempt from the UST regulations.

- Farm or residential tanks, 1,100 gallons or less, used to store motor fuel for personal or farm use only. The fuel must be used for farm purposes and cannot be for resale.
- Tanks used for storing heating oil that is used solely for the purpose of heating the premises.
- Tanks with a capacity of 110 gallons or less.
- Emergency overflow tanks, catch basins, or sumps.

From:	Carlson, Kale (ECY)
To:	Jerry Sawetz; Song, Jing (ECY)
Subject:	RE: Roystone Redevelopment UST6B Waiver and Decommissioning of USTA and UST4A (Agreed Order No 16357)
Date:	Tuesday, June 2, 2020 2:26:15 PM
Attachments:	image001.png image002.jpg image004.jpg

Yes Jerry, that is perfectly fine. We know that this is a big job with many wild cards in the mix. Please keep us up to date when there is a plan.

I will archive this email with the 30-day notice as proof of notification.

Thank you,

Kale Carlson
Underground Storage Tank Inspector
Washington State Department of Ecology
p: (425) 649-7290 |cell: (425) 417-6319|
e: KACA461@ecy.wa.gov

From: Jerry Sawetz <JSawetz@Riley-Group.com>
Sent: Tuesday, June 2, 2020 1:34 PM
To: Carlson, Kale (ECY) <KACA461@ECY.WA.GOV>; Song, Jing (ECY) <JISO461@ECY.WA.GOV>
Subject: Roystone Redevelopment UST6B Waiver and Decommissioning of USTA and UST4A (Agreed Order No 16357)

Hi Jing & Kale,

It appears that we found what we suspect is UST6B (8,000-gallon diesel UST) on the eastern portion of the property near the property boundary. Previous reports indicate that this UST was abandoned in place, but we plan to go through the standard decommissioning/site assessment process as previously discussed. The top of the UST is approximately 6 feet below current ground surface and the general contractor will not be in a position to expose the UST until sometime next week. We also have not coordinated the schedule for the decommissioning. We previously requested a waiver for decommissioning UST6B and the approval is attached. Is it acceptable for us to use the attached 30-day notice waiver and notify both of you when we confirm the decommissioning schedule?

Also, we completed the decommissioning/site assessment of USTA and UST4A yesterday. No significant evidence of contamination was observed in either of the UST excavations based on field screening. However, soil beneath UST4A was potentially contaminated and we are waiting on analytical results to confirm. Please let me know if you have any questions.

Thanks,
Jerry Sawetz | Senior Environmental Scientist | The Riley Group, Inc.
Office: 425-415-0551 | Fax: 425-415-0311 | Cell: 425-301-1227

From: Carlson, Kale (ECY) [mailto:KACA461@ECY.WA.GOV]
Sent: Monday, March 09, 2020 2:48 PM
To: Jerry Sawetz <JSawetz@Riley-Group.com>
Subject: RE: Roystone Redevelopment UST (Agreed Order No 16357)

Hi Jerry,

Looks good. Your 30-day notice has been waived. Just a reminder, during the project the correct certificate holders need to be onsite during their respectful parts of their jobs.

Again, just shoot me a heads up on what day the tank will be pulled out of ground when you know.

Thank you and good luck with your project.
Be safe.
Kale Carlson
Underground Storage Tank Inspector
Washington State Department of Ecology
p: (425) 649-7290 |cell: (425) 417-6319|
e: KACA461@ecy.wa.gov

From: Jerry Sawetz <JSawetz@Riley-Group.com>
Sent: Friday, March 6, 2020 3:20 PM
To: Carlson, Kale (ECY) <KACA461@ECY.WA.GOV>
Cc: Song, Jing (ECY) <JISO461@ECY.WA.GOV>
Subject: RE: Roystone Redevelopment UST (Agreed Order No 16357)

Hi Kale,

Attached is the 30-day notice form for the Roystone Development project. We do not know the exact date for this work yet, but estimate it will be in about 2 to 3 weeks. Please let us know if you need any additional information from us and I will update you when we have the date confirmed for the UST decommissioning.

Thanks,

Jerry Sawetz | Senior Environmental Scientist | The Riley Group, Inc.
Office: 425-415-0551 | Fax: 425-415-0311 | Cell: 425-301-1227

From: Carlson, Kale (ECY) [mailto:KACA461@ECY.WA.GOV]
Sent: Wednesday, March 04, 2020 3:48 PM
To: Jerry Sawetz <JSawetz@Riley-Group.com>
Cc: Song, Jing (ECY) <JISO461@ECY.WA.GOV>
Subject: RE: Roystone Redevelopment UST (Agreed Order No 16357)

Hi Jerry,

We will still need you to fill out the 30 day notice form for "intent to close" and send it to me (email works). I will give it a look over, waive the notice, and I will make a copy for you and keep one for myself.

UST ID # 100599

Please follow the rules under permanent closure of tank and/or piping and "Individuals performing UST services MUST be ICC-certified or have passed another qualifying exam approved by the Department of Ecology."

We should be able to accomplish all of this within a timely manner as to not delay the project and all I ask is to please keep me informed of when the tank will be pulled out of the ground.

30 Day notice
https://fortress.wa.gov/ecy/publications/SummaryPages/ECY02095.html

If you have any other questions please fill free to call or email.

Thank you,

Kale Carlson
Underground Storage Tank Inspector
Toxics Cleanup Program, Northwest Regional Office
p: (425) 649-7290 |**cell:** (425) 417-6319|**fax:** (425) 649-7098 |
e: KACA461@ecy.wa.gov | www.ecy.wa.gov
Washington State Department of Ecology
3190 160th Ave SE | Bellevue, Washington 98008-5452
ecylogo-wide-color-small-transp

From: Jerry Sawetz <JSawetz@Riley-Group.com>
Sent: Wednesday, March 4, 2020 3:08 PM
To: Carlson, Kale (ECY) <KACA461@ECY.WA.GOV>
Cc: Song, Jing (ECY) <JISO461@ECY.WA.GOV>
Subject: Roystone Redevelopment UST (Agreed Order No 16357)

Hi Kale,

We have a project located at 631 Queen Anne Ave N in Seattle that is under an Agreed Order with Ecology and Jing Song is the project manager. We have a 6,000-gallon UST that was reportedly closed in place during remediation in the 1990's. However, the UST is not registered with Ecology and Jing indicated that we need to complete the permanent closure requirement. Jing suggested I contact you to request that the 30 day notice period be waived. This project has already been delayed due to city permitting issues and we would like to avoid any further delays. Would you please let me know what paperwork we need to submit to Ecology to bypass the 30 day waiting period for decommissioning, assessment, and removal of this UST? Construction is scheduled to begin in the location of the UST in approximately 3 weeks and we would like to have all the necessary paperwork to Ecology well before then and complete the decommissioning, assessment, and removal of the UST at that time to avoid construction delays. Please feel free to call me if you would like to discuss and I appreciate your assistance with this matter.

Thanks,

Jerry Sawetz | Senior Environmental Scientist | jsawetz@riley-group.com
Office: 425-415-0551 | Fax: 425-415-0311 | Cell: 425-301-1227

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

Mon, 06/01/2020 @ 10:00

Your Seattle Fire Department

APPLICATION FOR TEMPORARY PERMIT

Code 7908 **Commercial Tank Removal/Decommissioning**

Permit Fee: $288.00 **Date Issued:** 6/01/2020

TO BE COMPLETED BY PERMIT APPLICANT **Tank(s) must be removed from site on the same day as permit is issued!**

BUSINESS NAME: Marine Vacuum Service Inc.

MAILING ADDRESS: PO Box 24263 SUITE:

CITY: Seattle STATE: WA ZIP: 98124

JOBSITE ADDRESS: 631 Queen Ann Ave N

CONTACT PERSON: Tom Myler PHONE NUMBER: (206) 953-3907

Number of Tank(s): 2 Tank Size(s): Approx 500 ☐ Aboveground tank

Product(s) Previously Contained: Petroleum ☒ Underground tank

☒ Removal (Marine Chemist inspection and certificate required for all tanks regardless of size or contents)

☐ Abandonment-in-Place (Marine Chemist certificate required for tanks previously containing Class I flammable liquids and/or unknowns)

Hot work being conducted: ☒ No ☐ Yes (If yes, a separate hot work permit is required)

Permit applications may be submitted in person weekdays from 8:00 a.m. to 4:30 p.m., or mailed to:

Seattle Fire Department
Fire Marshal's Office – Permits
220 Third Ave S, 2nd Floor
Seattle, WA 98104-2608

To pay with a Visa or Master Card, email this completed application to us,
THEN CALL US TO CONFIRM RECEIPT AND MAKE PAYMENT.
Tel: (206) 386-1450
E-mail: permits@seattle.gov

Call 206-386-1450, at least 24 hours prior to needed inspection time to arrange for an appointment.
TANKS MAY BE REMOVED/DECOMMISSIONED ONLY AFTER FIRE DEPARTMENT INSPECTION
NO HOT WORK IS ALLOWED ON A TANK SYSTEM PRIOR TO ISSUANCE OF THIS FIRE DEPARTMENT PERMIT!

Permission is hereby granted to remove or decommission the tank(s) identified in this permit in accordance with the attached conditions, all noted special conditions, and all applicable provisions of the Seattle Fire Code, and federal, state, and local regulations. **THIS PERMIT IS NULL AND VOID IF PERMIT CONDITIONS ARE NOT ATTACHED.**

I understand the conditions of this permit and will ensure all tank removal/decommissioning operations are conducted accordingly.
I acknowledge that I received an inspection by a Seattle Fire Department inspector today.

Tom Myler (Print Name) | Tom Myler (Signature) | President (Title)

Special permit conditions: *Tank removal/decommissioning must be performed, or directly supervised, by an ICC certified individual (WAC 173-360-600)*

FMO USE:
Check No.: 00018610060120
Receipt No.: 5-316335
Application ID#: 120534

APPROVED BY:
Inspector: T. WILLIAMS SFD ID#: 1481
Name of Marine Chemist: DON SLY Certificate #: 598-47613
Date: 6/01/2020

(01/19)

Tom Myler

From: permits@seattle.gov
Sent: Friday, June 5, 2020 2:39 PM
To: Tom Myler
Subject: [Seattle Fire Department] Online Payment Confirmation

Hello TOM MYLER,

The following payment for $288.00 was successfully processed on 6/5/2020 2:38:32 PM

Your receipt number is 00018646060520.

Your authorization number is 615083.

This email will serve as your receipt.

TRANSACTION DETAIL

MARINE VACUUM SERVICES
PERMIT CODE 7908
631 QUEEN ANNE AVE N
Amount Charged : $288.00

BILLING ADDRESS

TOM MYLER

PO BOX 24263

SEATTLE, WA 98124

Phone: 206-953-3907

BILLING INFORMATION

Card Name: TOM MYLER

Payment: VS, xxxxxxxxxxxx8546, 01/2025

APPENDIX B

FINAL ANALYTICAL LABORATORY REPORTS

RILEYGROUP

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

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

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

April 1, 2020

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

Dear Mr Sawetz:

Included are the results from the testing of material submitted on March 26, 2020 from the Roystone 2017-015, F&BI 003422 project. There are 6 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days, or as directed by the Chain of Custody document. 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: Logan Chinn
TRG0401R.DOC

CASE NARRATIVE

This case narrative encompasses samples received on March 26, 2020 by Friedman & Bruya, Inc. from the The Riley Group Roystone 2017-015, F&BI 003422 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	The Riley Group
003422 -01	PP1-UST5B-2.5
003422 -02	PP2-UST5B-0.5
003422 -03	Disp 1-0.5
003422 -04	Disp 2-0.5

All quality control requirements were acceptable.

Date of Report: 04/01/20
Date Received: 03/26/20
Project: Roystone 2017-015, F&BI 003422
Date Extracted: 03/26/20
Date Analyzed: 03/27/20

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

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

Sample ID Laboratory ID	Benzene	Toluene	Ethyl Benzene	Total Xylenes	Gasoline Range	Surrogate (% Recovery) (Limit 50-150)
PP1-UST5B-2.5 003422-01 1/5	<0.02 j	0.41	<0.1	<0.3	130	94
PP2-UST5B-0.5 003422-02	<0.02	<0.02	<0.02	<0.06	<5	89
Disp 1-0.5 003422-03	<0.02	<0.02	<0.02	<0.06	<5	91
Disp 2-0.5 003422-04	<0.02	<0.02	<0.02	<0.06	<5	92
Method Blank 00-661 MB2	<0.02	<0.02	<0.02	<0.06	<5	90

Date of Report: 04/01/20
Date Received: 03/26/20
Project: Roystone 2017-015, F&BI 003422
Date Extracted: 03/26/20
Date Analyzed: 03/26/20

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

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

Sample ID Laboratory ID	Diesel Range (C_{10}-C_{25})	Motor Oil Range (C_{25}-C_{36})	Surrogate (% Recovery) (Limit 53-144)
PP1-UST5B-2.5 003422-01	390	<250	85
PP2-UST5B-0.5 003422-02	<50	<250	87
Disp 1-0.5 003422-03	<50	<250	93
Disp 2-0.5 003422-04	<50	<250	89
Method Blank 00-754 MB	<50	<250	83

Date of Report: 04/01/20
Date Received: 03/26/20
Project: Roystone 2017-015, F&BI 003422

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: 003327-04 (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)	<5	<5	nm

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Benzene	mg/kg (ppm)	0.5	104	69-120
Toluene	mg/kg (ppm)	0.5	104	70-117
Ethylbenzene	mg/kg (ppm)	0.5	103	65-123
Xylenes	mg/kg (ppm)	1.5	108	66-120
Gasoline	mg/kg (ppm)	20	100	71-131

Date of Report: 04/01/20
Date Received: 03/26/20
Project: Roystone 2017-015, F&BI 003422

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

Laboratory Code: 003420-01 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet Wt)	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Diesel Extended	mg/kg (ppm)	5,000	<50	116	110	64-133	5

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Diesel Extended	mg/kg (ppm)	5,000	106	58-147

Data Qualifiers & Definitions

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

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

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

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

cf - The sample was centrifuged prior to analysis.

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

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

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

fc - The analyte 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 due to sample matrix effects.

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

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

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

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

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

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

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

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

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

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

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

SAMPLE CHAIN OF CUSTODY

003422 ME 03-26-20

Page # 1 of 1 VSI 801

Report To Jerry Sawete

Company Riley Group Inc

Address 17522 Bothell Way NE

City, State, ZIP Bothell, WA 98011

Phone 425-415-0551 Email jsawete@riley-group.com lchinn@riley-group.com

SAMPLERS (signature)

PROJECT NAME: Roystone

PO #: 2017-015

REMARKS: Project specific RLs? - Yes / No

INVOICE TO

TURNAROUND TIME
- ☑ Standard turnaround
- ☐ RUSH
- Rush charges authorized by:

SAMPLE DISPOSAL
- ☐ Archive samples
- ☐ Other
- Default: Dispose after 30 days

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	NWTPH-Dx	NWTPH-Gx	BTEX EPA 8021	NWTPH-HCID	VOCs EPA 8260	PAHs EPA 8270	PCBs EPA 8082					Notes
PP1-UST5B-2.5	01 A-E	3/26/2020	8:00	Soil	5	X	X	X									
PP2-UST5B-0.5	02	"	8:15	"	"	X	X	X									
Disp 1-0.5	03	"	8:30	"	"	X	X	X									
Disp 2-0.5	04	"	8:45	"	"	X	X	X									
																	Samples received at 4 °C

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by:	Logan Chinn	RGI	3/26/2020	9:45
Received by:	Liz Webber-Bye	FBI	3/26/20	945
Relinquished by:				
Received by:				

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

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

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

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

May 13, 2020

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

Dear Mr Sawetz:

Included are the results from the testing of material submitted on May 7, 2020 from the Roystone Redevelopment 2017-015k, F&BI 005087 project. There are 15 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days, or as directed by the Chain of Custody document. 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: Mingta Lin, Eric Dunham
TRG0513R.DOC

CASE NARRATIVE

This case narrative encompasses samples received on May 7, 2020 by Friedman & Bruya, Inc. from the The Riley Group Roystone Redevelopment 2017-015k, F&BI 005087 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	The Riley Group
005087 -01	WPL-1S-8
005087 -02	PP1-NPL-2
005087 -03	WPL-2S-8
005087 -04	WPL-3S-8
005087 -05	PP1-UST4-1.5

All quality control requirements were acceptable.

Date of Report: 05/13/20
Date Received: 05/07/20
Project: Roystone Redevelopment 2017-015k, F&BI 005087
Date Extracted: 05/07/20
Date Analyzed: 05/07/20

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

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

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

Sample ID Laboratory ID	Gasoline	Diesel	Heavy Oil	Surrogate (% Recovery) (Limit 48-168)
PP1-UST4-1.5 005087-05 05-07-20 14:41	D	ND	D	88
Method Blank 00-1034 MB	ND	ND	ND	106

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

Date of Report: 05/13/20
Date Received: 05/07/20
Project: Roystone Redevelopment 2017-015k, F&BI 005087
Date Extracted: 05/07/20
Date Analyzed: 05/08/20

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

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

Sample ID Laboratory ID	Gasoline Range	Surrogate (% Recovery) (Limit 50-150)
PP1-UST4-1.5 005087-05 1/10	1,200	131
Method Blank 00-877 MB	<5	93

Date of Report: 05/13/20
Date Received: 05/07/20
Project: Roystone Redevelopment 2017-015k, F&BI 005087
Date Extracted: 05/07/20
Date Analyzed: 05/08/20

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

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

Sample ID Laboratory ID	Benzene	Toluene	Ethyl Benzene	Total Xylenes	Gasoline Range	Surrogate (% Recovery) (Limit 50-150)
WPL-1S-8 005087-01	<0.02	<0.02	<0.02	<0.06	<5	82
PP1-NPL-2 005087-02	<0.02	<0.02	<0.02	<0.06	<5	84
WPL-2S-8 005087-03	<0.02	<0.02	<0.02	<0.06	<5	84
WPL-3S-8 005087-04	<0.02	<0.02	<0.02	<0.06	<5	84
Method Blank 00-877 MB	<0.02	<0.02	<0.02	<0.06	<5	84

Date of Report: 05/13/20
Date Received: 05/07/20
Project: Roystone Redevelopment 2017-015k, F&BI 005087
Date Extracted: 05/07/20
Date Analyzed: 05/07/20

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

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

Sample ID Laboratory ID	Diesel Range (C_{10}-C_{25})	Motor Oil Range (C_{25}-C_{36})	Surrogate (% Recovery) (Limit 53-144)
WPL-1S-8 005087-01	<50	<250	92
PP1-NPL-2 005087-02	<50	<250	98
WPL-2S-8 005087-03	<50	750	92
WPL-3S-8 005087-04	<50	<250	81
Method Blank 00-1031 MB	<50	<250	83

Date of Report: 05/13/20
Date Received: 05/07/20
Project: Roystone Redevelopment 2017-015k, F&BI 005087
Date Extracted: 05/07/20
Date Analyzed: 05/07/20

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

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

Sample ID Laboratory ID	Motor Oil Range (C_{25}-C_{36})	Surrogate (% Recovery) (Limit 53-144)
PP1-UST4-1.5 005087-05	1,400	91
Method Blank 00-1031 MB	<50	83

Analysis For Total Metals By EPA Method 6020B

Client ID:	PP1-UST4-1.5	Client:	The Riley Group
Date Received:	05/07/20	Project:	Roystone Redevelopment 2017-015k
Date Extracted:	05/08/20	Lab ID:	005087-05
Date Analyzed:	05/08/20	Data File:	005087-05.034
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Lead	9.62

Analysis For Total Metals By EPA Method 6020B

Client ID:	Method Blank	Client:	The Riley Group
Date Received:	NA	Project:	Roystone Redevelopment 2017-015k
Date Extracted:	05/08/20	Lab ID:	I0-263 mb
Date Analyzed:	05/08/20	Data File:	I0-263 mb.032
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

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

Analysis For Volatile Compounds By EPA Method 8260D

Client Sample ID:	PP1-UST4-1.5	Client:	The Riley Group
Date Received:	05/07/20	Project:	Roystone Redevelopment 2017-015k
Date Extracted:	05/07/20	Lab ID:	005087-05
Date Analyzed:	05/09/20	Data File:	050891.D
Matrix:	Soil	Instrument:	GCMS4
Units:	mg/kg (ppm) Dry Weight	Operator:	MS

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

Compounds:	Concentration mg/kg (ppm)
Hexane	<0.25
Methyl t-butyl ether (MTBE)	<0.05
1,2-Dichloroethane (EDC)	<0.05
Benzene	<0.03
Toluene	<0.05
1,2-Dibromoethane (EDB)	<0.05
Ethylbenzene	<0.05
m,p-Xylene	<0.1
o-Xylene	<0.05
Naphthalene	0.46

Analysis For Volatile Compounds By EPA Method 8260D

Client Sample ID:	Method Blank	Client:	The Riley Group
Date Received:	Not Applicable	Project:	Roystone Redevelopment 2017-015k
Date Extracted:	05/07/20	Lab ID:	00-994 mb
Date Analyzed:	05/07/20	Data File:	050709.D
Matrix:	Soil	Instrument:	GCMS4
Units:	mg/kg (ppm) Dry Weight	Operator:	MS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	104	62	145
Toluene-d8	112	55	145
4-Bromofluorobenzene	100	65	139

Compounds:	Concentration mg/kg (ppm)
Hexane	<0.25
Methyl t-butyl ether (MTBE)	<0.05
1,2-Dichloroethane (EDC)	<0.05
Benzene	<0.03
Toluene	<0.05
1,2-Dibromoethane (EDB)	<0.05
Ethylbenzene	<0.05
m,p-Xylene	<0.1
o-Xylene	<0.05
Naphthalene	<0.05

Date of Report: 05/13/20
Date Received: 05/07/20
Project: Roystone Redevelopment 2017-015k, F&BI 005087

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: 005087-01 (Duplicate)

Analyte	Reporting Units	Sample Result (Wet Wt)	Duplicate Result (Wet Wt)	RPD (Limit 20)
Benzene	mg/kg (ppm)	<0.02	<0.02	nm
Toluene	mg/kg (ppm)	<0.02	<0.02	nm
Ethylbenzene	mg/kg (ppm)	<0.02	<0.02	nm
Xylenes	mg/kg (ppm)	<0.06	<0.06	nm
Gasoline	mg/kg (ppm)	<5	<5	nm

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Benzene	mg/kg (ppm)	0.5	97	69-120
Toluene	mg/kg (ppm)	0.5	97	70-117
Ethylbenzene	mg/kg (ppm)	0.5	96	65-123
Xylenes	mg/kg (ppm)	1.5	101	66-120
Gasoline	mg/kg (ppm)	20	100	71-131

Date of Report: 05/13/20
Date Received: 05/07/20
Project: Roystone Redevelopment 2017-015k, F&BI 005087

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

Laboratory Code: 005072-01 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet Wt)	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Diesel Extended	mg/kg (ppm)	5,000	46,000	180 b	100 b	64-133	57 b

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Diesel Extended	mg/kg (ppm)	5,000	108	58-147

Date of Report: 05/13/20
Date Received: 05/07/20
Project: Roystone Redevelopment 2017-015k, F&BI 005087

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

Laboratory Code: 005087-05 x5 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet wt)	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Lead	mg/kg (ppm)	50	9.05	91	95	75-125	4

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Lead	mg/kg (ppm)	50	103	80-120

Date of Report: 05/13/20
Date Received: 05/07/20
Project: Roystone Redevelopment 2017-015k, F&BI 005087

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

Laboratory Code: 005019-02 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet wt)	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Hexane	mg/kg (ppm)	2.5	<0.25	63	71	10-137	12
Methyl t-butyl ether (MTBE)	mg/kg (ppm)	2.5	<0.05	92	100	21-145	8
1,2-Dichloroethane (EDC)	mg/kg (ppm)	2.5	<0.05	88	96	12-160	9
Benzene	mg/kg (ppm)	2.5	<0.03	89	95	29-129	7
Toluene	mg/kg (ppm)	2.5	<0.05	76	81	35-130	6
1,2-Dibromoethane (EDB)	mg/kg (ppm)	2.5	<0.05	84	90	28-142	7
Ethylbenzene	mg/kg (ppm)	2.5	<0.05	78	84	32-137	7
m,p-Xylene	mg/kg (ppm)	5	<0.1	81	88	34-136	8
o-Xylene	mg/kg (ppm)	2.5	<0.05	81	89	33-134	9
Naphthalene	mg/kg (ppm)	2.5	<0.05	76	85	14-157	11

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Hexane	mg/kg (ppm)	2.5	94	43-142
Methyl t-butyl ether (MTBE)	mg/kg (ppm)	2.5	108	60-123
1,2-Dichloroethane (EDC)	mg/kg (ppm)	2.5	102	56-135
Benzene	mg/kg (ppm)	2.5	104	68-114
Toluene	mg/kg (ppm)	2.5	89	66-126
1,2-Dibromoethane (EDB)	mg/kg (ppm)	2.5	96	74-132
Ethylbenzene	mg/kg (ppm)	2.5	92	64-123
m,p-Xylene	mg/kg (ppm)	5	96	78-122
o-Xylene	mg/kg (ppm)	2.5	97	77-124
Naphthalene	mg/kg (ppm)	2.5	90	63-140

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 analyte 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 due to sample matrix effects.

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

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

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

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

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

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

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

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

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

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

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

005087

SAMPLE CHAIN OF CUSTODY ME 05707/20 VSI/AUR

Report To Jerry Sanetz
Company Riley Group
Address
City, State, ZIP
Phone Email jsanetz@riley-group.com edunham@riley-group.com

SAMPLERS (signature) E R

PROJECT NAME: Roystone Redevelopment
PO #: 2017-015K

REMARKS: ASAP on PPI-UST4-1.5
Project specific RLs? - Yes / No

INVOICE TO

Page # 1 of

TURNAROUND TIME
☒ Standard turnaround
☐ RUSH
Rush charges authorized by:

SAMPLE DISPOSAL
☐ Archive samples
☐ Other
Default: Dispose after 30 days

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	ANALYSES REQUESTED: NWTPH-Dx	NWTPH-Gx	BTEX EPA 8021	NWTPH-HCID	VOCs EPA 8260	PAHs EPA 8270	PCBs EPA 8082	Gas Target VOCs	Lead			Notes
WPL-1S-8	01 A-E	5/5	1530	Soil	5	X	X	X									(X)-per TS
PPI-NPL-2	02	5/6	1300			X	X	X									5/7/20 mc
WPL-2S-8	03	5/6	1500			X	X	X									
WPL-3S-8	04	5/6	1515			X	X	X									
PPI-UST4-1.5	05	5/7	1200			(X)	(X)		X				(X)	(X)			ASAP

Samples received at 4 °C

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: E R	Eric Dunham	Riley Group	5/7	1410
Received by:	ERIC [illegible]	FCB	5/7	1410
Relinquished by:				
Received by:				

Friedman & Bruya, Inc.
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FRIEDMAN & BRUYA, INC.

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May 14, 2020

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

Dear Mr Sawetz:

Included are the results from the testing of material submitted on May 11, 2020 from the Roystone 2017-015K, F&BI 005122 project. There are 23 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days, or as directed by the Chain of Custody document. 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: Eric Dunham, Mingta Lin
TRG0514R.DOC

CASE NARRATIVE

This case narrative encompasses samples received on May 11, 2020 by Friedman & Bruya, Inc. from the The Riley Group Roystone 2017-015K, F&BI 005122 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	The Riley Group
005122 -01	UST-4A-Product
005122 -02	UST-A-Product

An 8270E internal standard failed the acceptance criteria for sample UST-A-Product. The sample was diluted and reanalyzed with acceptable results. Both data sets were reported.

The 8260D laboratory control sample exceeded the acceptance criteria for 2,2-dichloropropane. The compound was not detected, therefore the data were acceptable.

All other quality control requirements were acceptable.

Date of Report: 05/14/20
Date Received: 05/11/20
Project: Roystone 2017-015K, F&BI 005122
Date Extracted: 05/11/20
Date Analyzed: 05/11/20

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

Results Reported as Not Detected (ND) or Detected (D)

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

Sample ID Laboratory ID	Gasoline	Diesel	Heavy Oil	Surrogate (% Recovery) (Limit 53-144)
UST-4A-Product 005122-01 1/10	ND	D	ND	ip
UST-A-Product 005122-02 1/10	D	ND	D	94
Method Blank 00-1043 MB	ND	ND	ND	93

ND - Material not detected at or above 20,000 mg/kg gas, 50,000 mg/kg diesel and 250,000 mg/kg heavy oil.

Date of Report: 05/14/20
Date Received: 05/11/20
Project: Roystone 2017-015K, F&BI 005122
Date Extracted: 05/11/20
Date Analyzed: 05/12/20

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

Results Reported as mg/kg (ppm)

Sample ID Laboratory ID	Benzene	Toluene	Ethyl Benzene	Total Xylenes	Surrogate (% Recovery) (Limit 50-150)
UST-4A-Product 005122-01	<0.2	3.5	<0.2	75	93
Method Blank 00-880 MB	<0.02	<0.02	<0.02	<0.06	85

Analysis For Total Metals By EPA Method 6020B

Client ID:	UST-A-Product	Client:	The Riley Group
Date Received:	05/11/20	Project:	Roystone 2017-015K
Date Extracted:	05/12/20	Lab ID:	005122-02
Date Analyzed:	05/12/20	Data File:	005122-02.037
Matrix:	Soil/Product	Instrument:	ICPMS2
Units:	mg/kg (ppm)	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	<1
Cadmium	<1
Chromium	<1
Lead	409 ve
Mercury	<1

Analysis For Total Metals By EPA Method 6020B

Client ID:	UST-A-Product	Client:	The Riley Group
Date Received:	05/11/20	Project:	Roystone 2017-015K
Date Extracted:	05/12/20	Lab ID:	005122-02 x10
Date Analyzed:	05/13/20	Data File:	005122-02 x10.048
Matrix:	Soil/Product	Instrument:	ICPMS2
Units:	mg/kg (ppm)	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Lead	390

Analysis For Total Metals By EPA Method 6020B

Client ID:	Method Blank	Client:	The Riley Group
Date Received:	NA	Project:	Roystone 2017-015K
Date Extracted:	05/12/20	Lab ID:	I0-270 mb2
Date Analyzed:	05/12/20	Data File:	I0-270 mb2.036
Matrix:	Soil/Product	Instrument:	ICPMS2
Units:	mg/kg (ppm)	Operator:	SP

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

Analysis for TCLP Metals By EPA Method 6020B and 1311

Client ID:	UST-A-Product	Client:	The Riley Group
Date Received:	05/11/20	Project:	Roystone 2017-015K
Date Extracted:	05/12/20	Lab ID:	005122-02
Date Analyzed:	05/13/20 12:19:32	Data File:	005122-02.046
Matrix:	Soil/Solid	Instrument:	ICPMS2
Units:	mg/L (ppm)	Operator:	SP

Analyte:	Concentration mg/L (ppm)	TCLP Limit
Lead	2.75	5.0

Analysis for TCLP Metals By EPA Method 6020B and 1311

Client ID:	Method Blank	Client:	The Riley Group
Date Received:	Not Applicable	Project:	Roystone 2017-015K
Date Extracted:	05/12/20	Lab ID:	I0-273 mb
Date Analyzed:	05/13/20 11:46:04	Data File:	I0-273 mb.039
Matrix:	Soil/Solid	Instrument:	ICPMS2
Units:	mg/L (ppm)	Operator:	SP

Analyte:	Concentration mg/L (ppm)	TCLP Limit
Lead	<1	5.0

Analysis For Volatile Compounds By EPA Method 8260D

Client Sample ID:	UST-A-Product	Client:	The Riley Group
Date Received:	05/11/20	Project:	Roystone 2017-015K
Date Extracted:	05/12/20	Lab ID:	005122-02 1/200
Date Analyzed:	05/13/20	Data File:	051310.D
Matrix:	Soil/Product	Instrument:	GCMS9
Units:	mg/kg (ppm)	Operator:	MS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	103	50	150
Toluene-d8	105	50	150
4-Bromofluorobenzene	104	50	150

Compounds:	Concentration mg/kg (ppm)	Compounds:	Concentration mg/kg (ppm)
Dichlorodifluoromethane	<100	1,3-Dichloropropane	<10
Chloromethane	<100	Tetrachloroethene	31
Vinyl chloride	<10	Dibromochloromethane	<10
Bromomethane	<100	1,2-Dibromoethane (EDB)	<10
Chloroethane	<100	Chlorobenzene	<10
Trichlorofluoromethane	<100	Ethylbenzene	120
Acetone	<1,000	1,1,1,2-Tetrachloroethane	<10
1,1-Dichloroethene	<10	m,p-Xylene	600
Hexane	70	o-Xylene	270
Methylene chloride	<100	Styrene	<10
Methyl t-butyl ether (MTBE)	<10	Isopropylbenzene	41
trans-1,2-Dichloroethene	<10	Bromoform	<10
1,1-Dichloroethane	<10	n-Propylbenzene	100
2,2-Dichloropropane	<10	Bromobenzene	<10
cis-1,2-Dichloroethene	<10	1,3,5-Trimethylbenzene	320
Chloroform	<10	1,1,2,2-Tetrachloroethane	<10
2-Butanone (MEK)	<100	1,2,3-Trichloropropane	<10
1,2-Dichloroethane (EDC)	<10	2-Chlorotoluene	<10
1,1,1-Trichloroethane	<10	4-Chlorotoluene	<10
1,1-Dichloropropene	<10	tert-Butylbenzene	<10
Carbon tetrachloride	<10	1,2,4-Trimethylbenzene	1,100
Benzene	26	sec-Butylbenzene	40
Trichloroethene	8.0	p-Isopropyltoluene	64
1,2-Dichloropropane	<10	1,3-Dichlorobenzene	<10
Bromodichloromethane	<10	1,4-Dichlorobenzene	<10
Dibromomethane	<10	1,2-Dichlorobenzene	<10
4-Methyl-2-pentanone	<100	1,2-Dibromo-3-chloropropane	<100
cis-1,3-Dichloropropene	<10	1,2,4-Trichlorobenzene	<50
Toluene	210	Hexachlorobutadiene	<50
trans-1,3-Dichloropropene	<10	Naphthalene	420
1,1,2-Trichloroethane	<10	1,2,3-Trichlorobenzene	<50
2-Hexanone	<100		

Analysis For Volatile Compounds By EPA Method 8260D

Client Sample ID:	Method Blank	Client:	The Riley Group
Date Received:	Not Applicable	Project:	Roystone 2017-015K
Date Extracted:	05/12/20	Lab ID:	00-1010 mb
Date Analyzed:	05/12/20	Data File:	051210.D
Matrix:	Soil/Product	Instrument:	GCMS4
Units:	mg/kg (ppm)	Operator:	MS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	102	62	145
Toluene-d8	105	55	145
4-Bromofluorobenzene	100	65	139

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

Analysis For Semivolatile Compounds By EPA Method 8270E SIM

Client Sample ID:	UST-A-Product	Client:	The Riley Group
Date Received:	05/11/20	Project:	Roystone 2017-015K
Date Extracted:	05/12/20	Lab ID:	005122-02 1/750
Date Analyzed:	05/12/20	Data File:	051206.D
Matrix:	Soil/Product	Instrument:	GCMS6
Units:	mg/kg (ppm)	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	92	31	163
Benzo(a)anthracene-d12	114	24	168

Compounds:	Concentration mg/kg (ppm)
Benz(a)anthracene	2.8
Chrysene	7.3
Benzo(a)pyrene	1.6 J
Benzo(b)fluoranthene	<1.5 J
Benzo(k)fluoranthene	<1.5 J
Indeno(1,2,3-cd)pyrene	1.5 J
Dibenz(a,h)anthracene	<1.5 J

Analysis For Semivolatile Compounds By EPA Method 8270E SIM

Client Sample ID:	UST-A-Product	Client:	The Riley Group
Date Received:	05/11/20	Project:	Roystone 2017-015K
Date Extracted:	05/12/20	Lab ID:	005122-02 1/7500
Date Analyzed:	05/12/20	Data File:	051205.D
Matrix:	Soil/Product	Instrument:	GCMS6
Units:	mg/kg (ppm)	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	115 d	31	163
Benzo(a)anthracene-d12	131 d	24	168

Compounds:	Concentration mg/kg (ppm)
Benz(a)anthracene	<15
Chrysene	<15
Benzo(a)pyrene	<15
Benzo(b)fluoranthene	<15
Benzo(k)fluoranthene	<15
Indeno(1,2,3-cd)pyrene	<15
Dibenz(a,h)anthracene	<15

Analysis For Semivolatile Compounds By EPA Method 8270E SIM

Client Sample ID:	Method Blank	Client:	The Riley Group
Date Received:	Not Applicable	Project:	Roystone 2017-015K
Date Extracted:	05/12/20	Lab ID:	00-1073 mb 1/5
Date Analyzed:	05/12/20	Data File:	051204.D
Matrix:	Soil/Product	Instrument:	GCMS6
Units:	mg/kg (ppm)	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	79	31	163
Benzo(a)anthracene-d12	103	24	168

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

Analysis For PCBs By EPA Method 8082A

Client Sample ID:	UST-A-Product	Client:	The Riley Group
Date Received:	05/11/20	Project:	Roystone 2017-015K
Date Extracted:	05/12/20	Lab ID:	005122-02
Date Analyzed:	05/12/20	Data File:	051207.D
Matrix:	Product	Instrument:	GC9
Units:	mg/kg (ppm)	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	83	27	106

Compounds:	Concentration mg/kg (ppm)
Aroclor 1221	<2
Aroclor 1232	<2
Aroclor 1016	<2
Aroclor 1242	<2
Aroclor 1248	<2
Aroclor 1254	<2
Aroclor 1260	<2
Aroclor 1262	<2
Aroclor 1268	<2

Analysis For PCBs By EPA Method 8082A

Client Sample ID:	Method Blank	Client:	The Riley Group
Date Received:	Not Applicable	Project:	Roystone 2017-015K
Date Extracted:	05/12/20	Lab ID:	00-1072 mb
Date Analyzed:	05/12/20	Data File:	051206.D
Matrix:	Product	Instrument:	GC9
Units:	mg/kg (ppm)	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	100	27	106

Compounds:	Concentration mg/kg (ppm)
Aroclor 1221	<2
Aroclor 1232	<2
Aroclor 1016	<2
Aroclor 1242	<2
Aroclor 1248	<2
Aroclor 1254	<2
Aroclor 1260	<2
Aroclor 1262	<2
Aroclor 1268	<2

Date of Report: 05/14/20
Date Received: 05/11/20
Project: Roystone 2017-015K, F&BI 005122

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

Laboratory Code: 005115-01 (Duplicate)

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

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Benzene	mg/kg (ppm)	0.5	97	69-120
Toluene	mg/kg (ppm)	0.5	96	70-117
Ethylbenzene	mg/kg (ppm)	0.5	95	65-123
Xylenes	mg/kg (ppm)	1.5	100	66-120

Date of Report: 05/14/20
Date Received: 05/11/20
Project: Roystone 2017-015K, F&BI 005122

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL/PRODUCT SAMPLES FOR TOTAL METALS USING EPA METHOD 6020B

Laboratory Code: 005109-19 x5 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet wt)	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Arsenic	mg/kg (ppm)	10	<5	82	97	75-125	17
Cadmium	mg/kg (ppm)	10	<5	94	96	75-125	2
Chromium	mg/kg (ppm)	50	9.56	96	98	75-125	2
Lead	mg/kg (ppm)	50	6.66	94	95	75-125	1
Mercury	mg/kg (ppm	5	<5	91	95	75-125	4

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Arsenic	mg/kg (ppm)	10	82	80-120
Cadmium	mg/kg (ppm)	10	96	80-120
Chromium	mg/kg (ppm)	50	95	80-120
Lead	mg/kg (ppm)	50	95	80-120
Mercury	mg/kg (ppm)	5	98	80-120

Date of Report: 05/14/20
Date Received: 05/11/20
Project: Roystone 2017-015K, F&BI 005122

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL/SOLID SAMPLES FOR TCLP METALS USING EPA METHODS 6020B AND 1311

Laboratory Code: 005073-01 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Lead	mg/L (ppm)	1.0	<1	87	85	75-125	2

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Lead	mg/L (ppm)	1.0	87	80-120

Date of Report: 05/14/20
Date Received: 05/11/20
Project: Roystone 2017-015K, F&BI 005122

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL/PRODUCT SAMPLES FOR VOLATILES BY EPA METHOD 8260D

Laboratory Code: 005090-06 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet wt)	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Dichlorodifluoromethane	mg/kg (ppm)	2.5	<0.5	39	39	10-142	0
Chloromethane	mg/kg (ppm)	2.5	<0.5	62	61	10-126	2
Vinyl chloride	mg/kg (ppm)	2.5	<0.05	66	67	10-138	2
Bromomethane	mg/kg (ppm)	2.5	<0.5	74	74	10-163	0
Chloroethane	mg/kg (ppm)	2.5	<0.5	72	73	10-176	1
Trichlorofluoromethane	mg/kg (ppm)	2.5	<0.5	75	74	10-176	1
Acetone	mg/kg (ppm)	12.5	<5	78	80	10-163	3
1,1-Dichloroethene	mg/kg (ppm)	2.5	<0.05	83	86	10-160	4
Hexane	mg/kg (ppm)	2.5	<0.25	82	89	10-137	8
Methylene chloride	mg/kg (ppm)	2.5	<0.5	92	94	10-156	2
Methyl t-butyl ether (MTBE)	mg/kg (ppm)	2.5	<0.05	97	99	21-145	2
trans-1,2-Dichloroethene	mg/kg (ppm)	2.5	<0.05	92	93	14-137	1
1,1-Dichloroethane	mg/kg (ppm)	2.5	<0.05	91	95	19-140	4
2,2-Dichloropropane	mg/kg (ppm)	2.5	<0.05	132	135	10-158	2
cis-1,2-Dichloroethene	mg/kg (ppm)	2.5	<0.05	93	96	25-135	3
Chloroform	mg/kg (ppm)	2.5	<0.05	96	98	21-145	2
2-Butanone (MEK)	mg/kg (ppm)	12.5	<0.5	89	89	19-147	0
1,2-Dichloroethane (EDC)	mg/kg (ppm)	2.5	<0.05	91	91	12-160	0
1,1,1-Trichloroethane	mg/kg (ppm)	2.5	<0.05	93	97	10-156	4
1,1-Dichloropropene	mg/kg (ppm)	2.5	<0.05	93	96	17-140	3
Carbon tetrachloride	mg/kg (ppm)	2.5	<0.05	93	96	9-164	3
Benzene	mg/kg (ppm)	2.5	<0.03	92	92	29-129	0
Trichloroethene	mg/kg (ppm)	2.5	<0.02	81	83	21-139	2
1,2-Dichloropropane	mg/kg (ppm)	2.5	<0.05	95	95	30-135	0
Bromodichloromethane	mg/kg (ppm)	2.5	<0.05	98	98	23-155	0
Dibromomethane	mg/kg (ppm)	2.5	<0.05	99	101	23-145	2
4-Methyl-2-pentanone	mg/kg (ppm)	12.5	<0.5	102	102	24-155	0
cis-1,3-Dichloropropene	mg/kg (ppm)	2.5	<0.05	106	106	28-144	0
Toluene	mg/kg (ppm)	2.5	<0.05	85	86	35-130	1
trans-1,3-Dichloropropene	mg/kg (ppm)	2.5	<0.05	96	96	26-149	0
1,1,2-Trichloroethane	mg/kg (ppm)	2.5	<0.05	89	90	10-205	1
2-Hexanone	mg/kg (ppm)	12.5	<0.5	89	87	15-166	2
1,3-Dichloropropane	mg/kg (ppm)	2.5	<0.05	89	87	31-137	2
Tetrachloroethene	mg/kg (ppm)	2.5	<0.025	84	85	20-133	1
Dibromochloromethane	mg/kg (ppm)	2.5	<0.05	90	90	28-150	0
1,2-Dibromoethane (EDB)	mg/kg (ppm)	2.5	<0.05	90	89	28-142	1
Chlorobenzene	mg/kg (ppm)	2.5	<0.05	88	88	32-129	0
Ethylbenzene	mg/kg (ppm)	2.5	<0.05	87	89	32-137	2
1,1,1,2-Tetrachloroethane	mg/kg (ppm)	2.5	<0.05	91	93	31-143	2
m,p-Xylene	mg/kg (ppm)	5	<0.1	89	90	34-136	1
o-Xylene	mg/kg (ppm)	2.5	<0.05	88	91	33-134	3
Styrene	mg/kg (ppm)	2.5	<0.05	91	92	35-137	1
Isopropylbenzene	mg/kg (ppm)	2.5	<0.05	88	90	31-142	2
Bromoform	mg/kg (ppm)	2.5	<0.05	87	89	21-156	2
n-Propylbenzene	mg/kg (ppm)	2.5	<0.05	86	88	23-146	2
Bromobenzene	mg/kg (ppm)	2.5	<0.05	85	86	34-130	1
1,3,5-Trimethylbenzene	mg/kg (ppm)	2.5	0.055	88	89	18-149	1
1,1,2,2-Tetrachloroethane	mg/kg (ppm)	2.5	<0.05	111	110	28-140	1
1,2,3-Trichloropropane	mg/kg (ppm)	2.5	<0.05	86	86	25-144	0
2-Chlorotoluene	mg/kg (ppm)	2.5	<0.05	85	86	31-134	1
4-Chlorotoluene	mg/kg (ppm)	2.5	<0.05	86	88	31-136	2
tert-Butylbenzene	mg/kg (ppm)	2.5	<0.05	85	88	30-137	3
1,2,4-Trimethylbenzene	mg/kg (ppm)	2.5	<0.05	87	89	10-182	2
sec-Butylbenzene	mg/kg (ppm)	2.5	<0.05	87	88	23-145	1
p-Isopropyltoluene	mg/kg (ppm)	2.5	<0.05	88	90	21-149	2
1,3-Dichlorobenzene	mg/kg (ppm)	2.5	<0.05	87	88	30-131	1
1,4-Dichlorobenzene	mg/kg (ppm)	2.5	<0.05	86	89	29-129	3
1,2-Dichlorobenzene	mg/kg (ppm)	2.5	<0.05	86	88	31-132	2
1,2-Dibromo-3-chloropropane	mg/kg (ppm)	2.5	<0.5	87	87	11-161	0
1,2,4-Trichlorobenzene	mg/kg (ppm)	2.5	<0.25	92	96	22-142	4
Hexachlorobutadiene	mg/kg (ppm)	2.5	<0.25	97	99	10-142	2
Naphthalene	mg/kg (ppm)	2.5	<0.05	89	92	14-157	3
1,2,3-Trichlorobenzene	mg/kg (ppm)	2.5	<0.25	92	95	20-144	3

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Project: Roystone 2017-015K, F&BI 005122

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL/PRODUCT SAMPLES FOR VOLATILES BY EPA METHOD 8260D

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Dichlorodifluoromethane	mg/kg (ppm)	2.5	70	10-146
Chloromethane	mg/kg (ppm)	2.5	89	27-133
Vinyl chloride	mg/kg (ppm)	2.5	96	22-139
Bromomethane	mg/kg (ppm)	2.5	108	38-114
Chloroethane	mg/kg (ppm)	2.5	100	9-163
Trichlorofluoromethane	mg/kg (ppm)	2.5	106	10-196
Acetone	mg/kg (ppm)	12.5	108	52-141
1,1-Dichloroethene	mg/kg (ppm)	2.5	110	47-128
Hexane	mg/kg (ppm)	2.5	119	43-142
Methylene chloride	mg/kg (ppm)	2.5	112	42-132
Methyl t-butyl ether (MTBE)	mg/kg (ppm)	2.5	113	60-123
trans-1,2-Dichloroethene	mg/kg (ppm)	2.5	115	67-129
1,1-Dichloroethane	mg/kg (ppm)	2.5	110	68-115
2,2-Dichloropropane	mg/kg (ppm)	2.5	179 vo	52-170
cis-1,2-Dichloroethene	mg/kg (ppm)	2.5	112	72-127
Chloroform	mg/kg (ppm)	2.5	112	66-120
2-Butanone (MEK)	mg/kg (ppm)	12.5	101	72-127
1,2-Dichloroethane (EDC)	mg/kg (ppm)	2.5	102	56-135
1,1,1-Trichloroethane	mg/kg (ppm)	2.5	115	62-131
1,1-Dichloropropene	mg/kg (ppm)	2.5	112	69-128
Carbon tetrachloride	mg/kg (ppm)	2.5	117	60-139
Benzene	mg/kg (ppm)	2.5	107	68-114
Trichloroethene	mg/kg (ppm)	2.5	94	64-117
1,2-Dichloropropane	mg/kg (ppm)	2.5	106	72-127
Bromodichloromethane	mg/kg (ppm)	2.5	110	72-130
Dibromomethane	mg/kg (ppm)	2.5	109	70-120
4-Methyl-2-pentanone	mg/kg (ppm)	12.5	111	45-145
cis-1,3-Dichloropropene	mg/kg (ppm)	2.5	115	75-136
Toluene	mg/kg (ppm)	2.5	98	66-126
trans-1,3-Dichloropropene	mg/kg (ppm)	2.5	106	72-132
1,1,2-Trichloroethane	mg/kg (ppm)	2.5	96	75-113
2-Hexanone	mg/kg (ppm)	12.5	100	33-152
1,3-Dichloropropane	mg/kg (ppm)	2.5	95	72-130
Tetrachloroethene	mg/kg (ppm)	2.5	101	72-114
Dibromochloromethane	mg/kg (ppm)	2.5	101	74-125
1,2-Dibromoethane (EDB)	mg/kg (ppm)	2.5	99	74-132
Chlorobenzene	mg/kg (ppm)	2.5	100	76-111
Ethylbenzene	mg/kg (ppm)	2.5	103	64-123
1,1,1,2-Tetrachloroethane	mg/kg (ppm)	2.5	106	69-135
m,p-Xylene	mg/kg (ppm)	5	103	78-122
o-Xylene	mg/kg (ppm)	2.5	104	77-124
Styrene	mg/kg (ppm)	2.5	105	74-126
Isopropylbenzene	mg/kg (ppm)	2.5	106	76-127
Bromoform	mg/kg (ppm)	2.5	103	56-132
n-Propylbenzene	mg/kg (ppm)	2.5	98	74-124
Bromobenzene	mg/kg (ppm)	2.5	94	72-122
1,3,5-Trimethylbenzene	mg/kg (ppm)	2.5	100	76-126
1,1,2,2-Tetrachloroethane	mg/kg (ppm)	2.5	119	56-143
1,2,3-Trichloropropane	mg/kg (ppm)	2.5	94	61-137
2-Chlorotoluene	mg/kg (ppm)	2.5	96	74-121
4-Chlorotoluene	mg/kg (ppm)	2.5	97	75-122
tert-Butylbenzene	mg/kg (ppm)	2.5	100	73-130
1,2,4-Trimethylbenzene	mg/kg (ppm)	2.5	100	76-125
sec-Butylbenzene	mg/kg (ppm)	2.5	99	71-130
p-Isopropyltoluene	mg/kg (ppm)	2.5	102	70-132
1,3-Dichlorobenzene	mg/kg (ppm)	2.5	99	75-121
1,4-Dichlorobenzene	mg/kg (ppm)	2.5	99	74-117
1,2-Dichlorobenzene	mg/kg (ppm)	2.5	99	76-121
1,2-Dibromo-3-chloropropane	mg/kg (ppm)	2.5	94	58-138
1,2,4-Trichlorobenzene	mg/kg (ppm)	2.5	102	64-135
Hexachlorobutadiene	mg/kg (ppm)	2.5	108	50-153
Naphthalene	mg/kg (ppm)	2.5	101	63-140
1,2,3-Trichlorobenzene	mg/kg (ppm)	2.5	102	63-138

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Project: Roystone 2017-015K, F&BI 005122

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL/PRODUCT SAMPLES FOR PAHS BY EPA METHOD 8270E SIM

Laboratory Code: Laboratory Control Sample 1/5

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Benz(a)anthracene	mg/kg (ppm)	0.17	91	93	51-115	2
Chrysene	mg/kg (ppm)	0.17	90	92	55-129	2
Benzo(b)fluoranthene	mg/kg (ppm)	0.17	77	84	56-123	9
Benzo(k)fluoranthene	mg/kg (ppm)	0.17	81	79	54-131	2
Benzo(a)pyrene	mg/kg (ppm)	0.17	80	79	51-118	1
Indeno(1,2,3-cd)pyrene	mg/kg (ppm)	0.17	93	90	49-148	3
Dibenz(a,h)anthracene	mg/kg (ppm)	0.17	97	94	50-141	3

Date of Report: 05/14/20
Date Received: 05/11/20
Project: Roystone 2017-015K, F&BI 005122

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

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Aroclor 1016	mg/kg (ppm)	25	81	87	70-130	7
Aroclor 1260	mg/kg (ppm)	25	101	96	70-130	5

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 analyte 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 due to sample matrix effects.

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

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

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

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

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

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

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

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

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

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

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

005122

SAMPLE CHAIN OF CUSTODY

ME 05/11/20 1 1A02

Report To Jerry Sandstrom

Company The Riley Group

Address

City, State, ZIP

Phone Email

SAMPLERS (*signature*) E R

PROJECT NAME: Keystone

PO #: 2017-015k

REMARKS

Project specific RLs? - Yes / No

INVOICE TO

Page # of

TURNAROUND TIME

☐ Standard turnaround

~~☐ RUSH~~ ASAP

Rush charges authorized by:

SAMPLE DISPOSAL

☐ Archive samples

☐ Other

Default: Dispose after 30 days

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	NWTPH-Dx	NWTPH-Gx	BTEX EPA 8021	NWTPH-HCID	VOCs EPA 8260	PAHs EPA 8270	PCBs EPA 8082	cPAHs	MTCAS metals	TCLP Lead		Notes
~~VST-4A-245~~																	
VST-4A-Product	01AB	5/11	1200	Product	2			(X)	✓								ASAP
VST-A-Product	02A-C	5/11	1145	Product	3				✓	(X)		(X)	(X)	(X)	◆		ASAP
																	◆ - per JS
																	24 hr TAT ME
							✓										
																	Samples received at 4 °C

ANALYSES REQUESTED

(X) - per JS ASAP TAT ME 5/11/20

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: E R	Eric Dunham	RGI	5/11	1240
Received by:	Eric Flowers	F&B	5/11	1240
Relinquished by:				
Received by:				

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

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

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

3012 16th Avenue West
Seattle, WA 98119-2029
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fbi@isomedia.com
www.friedmanandbruya.com

May 20, 2020

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

Dear Mr Sawetz:

Included are the results from the testing of material submitted on May 15, 2020 from the Roystone Development 2017-015K, F&BI 005203 project. There are 6 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days, or as directed by the Chain of Custody document. 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: Eric Dunham, Mingta Lin
TRG0520R.DOC

CASE NARRATIVE

This case narrative encompasses samples received on May 15, 2020 by Friedman & Bruya, Inc. from the The Riley Group Roystone Development 2017-015K, F&BI 005203 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	The Riley Group
005203 -01	UST4A-PP-1-2

All quality control requirements were acceptable.

Date of Report: 05/20/20
Date Received: 05/15/20
Project: Roystone Development 2017-015K, F&BI 005203
Date Extracted: 05/18/20
Date Analyzed: 05/18/20

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

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

Sample ID Laboratory ID	Benzene	Toluene	Ethyl Benzene	Total Xylenes	Gasoline Range	Surrogate (% Recovery) (Limit 50-150)
UST4A-PP-1-2 005203-01	<0.02	<0.02	<0.02	<0.06	<5	84
Method Blank 00-1094 MB	<0.02	<0.02	<0.02	<0.06	<5	87

Date of Report: 05/20/20
Date Received: 05/15/20
Project: Roystone Development 2017-015K, F&BI 005203
Date Extracted: 05/18/20
Date Analyzed: 05/18/20

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

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

Sample ID Laboratory ID	Diesel Range (C_{10}-C_{25})	Motor Oil Range (C_{25}-C_{36})	Surrogate (% Recovery) (Limit 53-144)
UST4A-PP-1-2 005203-01	<50	590	96
Method Blank 00-1132 MB	<50	<250	92

Date of Report: 05/20/20
Date Received: 05/15/20
Project: Roystone Development 2017-015K, F&BI 005203

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: 005203-01 (Duplicate)

Analyte	Reporting Units	Sample Result (Wet Wt)	Duplicate Result (Wet Wt)	RPD (Limit 20)
Benzene	mg/kg (ppm)	<0.02	<0.02	nm
Toluene	mg/kg (ppm)	<0.02	<0.02	nm
Ethylbenzene	mg/kg (ppm)	<0.02	<0.02	nm
Xylenes	mg/kg (ppm)	<0.06	<0.06	nm
Gasoline	mg/kg (ppm)	<5	<5	nm

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Benzene	mg/kg (ppm)	0.5	94	69-120
Toluene	mg/kg (ppm)	0.5	90	70-117
Ethylbenzene	mg/kg (ppm)	0.5	90	65-123
Xylenes	mg/kg (ppm)	1.5	94	66-120
Gasoline	mg/kg (ppm)	20	90	71-131

Date of Report: 05/20/20
Date Received: 05/15/20
Project: Roystone Development 2017-015K, F&BI 005203

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

Laboratory Code: 005203-01 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet Wt)	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Diesel Extended	mg/kg (ppm)	5,000	370	111	113	64-133	2

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Diesel Extended	mg/kg (ppm)	5,000	108	58-147

Data Qualifiers & Definitions

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

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

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

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

cf - The sample was centrifuged prior to analysis.

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

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

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

fc - The analyte 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 due to sample matrix effects.

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

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

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

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

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

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

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

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

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

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

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

005203

SAMPLE CHAIN OF CUSTODY

MF 05/15/20 VS1/A01

Report To Jerry Sanetz

Company Riley Group

Address

City, State, ZIP

Phone Email jsanetz@riley-group.com edunham

SAMPLERS (*signature*) E Dunham

PROJECT NAME: Raystone Development

PO #: 2017-015K

REMARKS

Project specific RLs? - Yes / No

INVOICE TO

Page # 1 of 1

TURNAROUND TIME
- ☑ Standard turnaround
- ☐ RUSH
- Rush charges authorized by:

SAMPLE DISPOSAL
- ☐ Archive samples
- ☐ Other
- Default: Dispose after 30 days

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	NWTPH-Dx	NWTPH-Gx	BTEX EPA 8021	NWTPH-HCID	VOCs EPA 8260	PAHs EPA 8270	PCBs EPA 8082					Notes
VST4A-PP-1-2	01A-E	5/14	1300	SOIL	5	X	X	X									

ANALYSES REQUESTED

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: E Dunham	Eve Dunham	RGI	5/15	1410
Received by: Mary Lou	Khan Phan	FEBT	5/15/20	1410
Relinquished by:				
Received by:			Samples received at 19 °C	

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Ph. (206) 285-8282

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

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Eric Young, B.S.

3012 16th Avenue West
Seattle, WA 98119-2029
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fbi@isomedia.com
www.friedmanandbruya.com

May 27, 2020

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

Dear Mr Sawetz:

Included are the results from the testing of material submitted on May 21, 2020 from the Roystone, F&BI 005280 project. There are 17 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days, or as directed by the Chain of Custody document. 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: Eric Dunham, Mingta Lin
TRG0527R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on May 21, 2020 by Friedman & Bruya, Inc. from the The Riley Group Roystone, F&BI 005280 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	The Riley Group
005280 -01	USTA-1W-3

An 8270E internal standard failed the acceptance criteria for sample USTA-1W-3. The sample was diluted and reanalyzed with acceptable results. Both data sets were reported.

The 8260D matrix spike and matrix spike sample duplicate failed the relative percent difference for 1,3,5-trimethylbenzene and hexachlorobutadiene. The analytes were not detected in the sample therefore the data were acceptable.

All other quality control requirements were acceptable.

Date of Report: 05/27/20
Date Received: 05/21/20
Project: Roystone, F&BI 005280
Date Extracted: 05/22/20
Date Analyzed: 05/22/20

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

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

Sample ID Laboratory ID	Gasoline Range	Surrogate (% Recovery) (Limit 50-150)
USTA-1W-3 005280-01	49	125
Method Blank 00-1100 MB2	<5	103

Date of Report: 05/27/20
Date Received: 05/21/20
Project: Roystone, F&BI 005280
Date Extracted: 05/22/20
Date Analyzed: 05/22/20

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

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

Sample ID Laboratory ID	Diesel Range (C_{10}-C_{25})	Motor Oil Range (C_{25}-C_{36})	Surrogate (% Recovery) (Limit 53-144)
USTA-1W-3 005280-01	180 x	2,200	96
Method Blank 00-1149 MB2	<50	<250	91

Analysis For Total Metals By EPA Method 6020B

Client ID:	USTA-1W-3	Client:	The Riley Group
Date Received:	05/21/20	Project:	Roystone, F&BI 005280
Date Extracted:	05/22/20	Lab ID:	005280-01
Date Analyzed:	05/22/20	Data File:	005280-01.034
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Lead	22.5

Analysis For Total Metals By EPA Method 6020B

Client ID:	Method Blank	Client:	The Riley Group
Date Received:	NA	Project:	Roystone, F&BI 005280
Date Extracted:	05/22/20	Lab ID:	I0-295 mb2
Date Analyzed:	05/22/20	Data File:	I0-295 mb2.033
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

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

Analysis For Semivolatile Compounds By EPA Method 8270E SIM

Client Sample ID:	USTA-1W-3	Client:	The Riley Group
Date Received:	05/21/20	Project:	Roystone, F&BI 005280
Date Extracted:	05/22/20	Lab ID:	005280-01 1/5
Date Analyzed:	05/22/20	Data File:	052205.D
Matrix:	Soil	Instrument:	GCMS6
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	82	31	163
Benzo(a)anthracene-d12	117	24	168

Compounds:	Concentration mg/kg (ppm)
Benz(a)anthracene	0.039
Chrysene	0.047
Benzo(a)pyrene	0.031 J
Benzo(b)fluoranthene	0.037 J
Benzo(k)fluoranthene	0.013 J
Indeno(1,2,3-cd)pyrene	0.011 J
Dibenz(a,h)anthracene	<0.01 J

Analysis For Semivolatile Compounds By EPA Method 8270E SIM

Client Sample ID:	USTA-1W-3	Client:	The Riley Group
Date Received:	05/21/20	Project:	Roystone, F&BI 005280
Date Extracted:	05/22/20	Lab ID:	005280-01 1/25
Date Analyzed:	05/22/20	Data File:	052209.D
Matrix:	Soil	Instrument:	GCMS6
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	93 d	31	163
Benzo(a)anthracene-d12	101 d	24	168

Compounds:	Concentration mg/kg (ppm)
Benz(a)anthracene	<0.05
Chrysene	<0.05
Benzo(a)pyrene	<0.05
Benzo(b)fluoranthene	<0.05
Benzo(k)fluoranthene	<0.05
Indeno(1,2,3-cd)pyrene	<0.05
Dibenz(a,h)anthracene	<0.05

Analysis For Semivolatile Compounds By EPA Method 8270E SIM

Client Sample ID:	Method Blank	Client:	The Riley Group
Date Received:	Not Applicable	Project:	Roystone, F&BI 005280
Date Extracted:	05/22/20	Lab ID:	00-1177 mb2 1/5
Date Analyzed:	05/22/20	Data File:	052204.D
Matrix:	Soil	Instrument:	GCMS6
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	85	31	163
Benzo(a)anthracene-d12	98	24	168

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

Analysis For Volatile Compounds By EPA Method 8260D

Client Sample ID:	USTA-1W-3	Client:	The Riley Group
Date Received:	05/21/20	Project:	Roystone, F&BI 005280
Date Extracted:	05/22/20	Lab ID:	005280-01
Date Analyzed:	05/22/20	Data File:	052210.D
Matrix:	Soil	Instrument:	GCMS9
Units:	mg/kg (ppm) Dry Weight	Operator:	MS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	103	50	150
Toluene-d8	102	50	150
4-Bromofluorobenzene	105	50	150

Compounds:	Concentration mg/kg (ppm)	Compounds:	Concentration mg/kg (ppm)
Dichlorodifluoromethane	<0.5	1,3-Dichloropropane	<0.05
Chloromethane	<0.5	Tetrachloroethene	0.039
Vinyl chloride	<0.05	Dibromochloromethane	<0.05
Bromomethane	<0.5	1,2-Dibromoethane (EDB)	<0.05
Chloroethane	<0.5	Chlorobenzene	<0.05
Trichlorofluoromethane	<0.5	Ethylbenzene	0.18
Acetone	<5	1,1,1,2-Tetrachloroethane	<0.05
1,1-Dichloroethene	<0.05	m,p-Xylene	0.90
Hexane	<0.25	o-Xylene	0.44
Methylene chloride	<0.5	Styrene	<0.05
Methyl t-butyl ether (MTBE)	<0.05	Isopropylbenzene	0.070
trans-1,2-Dichloroethene	<0.05	Bromoform	<0.05
1,1-Dichloroethane	<0.05	n-Propylbenzene	0.21
2,2-Dichloropropane	<0.05	Bromobenzene	<0.05
cis-1,2-Dichloroethene	<0.05	1,3,5-Trimethylbenzene	0.66
Chloroform	<0.05	1,1,2,2-Tetrachloroethane	<0.05
2-Butanone (MEK)	<0.5	1,2,3-Trichloropropane	<0.05
1,2-Dichloroethane (EDC)	<0.05	2-Chlorotoluene	<0.05
1,1,1-Trichloroethane	<0.05	4-Chlorotoluene	<0.05
1,1-Dichloropropene	<0.05	tert-Butylbenzene	<0.05
Carbon tetrachloride	<0.05	1,2,4-Trimethylbenzene	2.4
Benzene	<0.03	sec-Butylbenzene	0.081
Trichloroethene	<0.02	p-Isopropyltoluene	0.13
1,2-Dichloropropane	<0.05	1,3-Dichlorobenzene	<0.05
Bromodichloromethane	<0.05	1,4-Dichlorobenzene	<0.05
Dibromomethane	<0.05	1,2-Dichlorobenzene	<0.05
4-Methyl-2-pentanone	<0.5	1,2-Dibromo-3-chloropropane	<0.5
cis-1,3-Dichloropropene	<0.05	1,2,4-Trichlorobenzene	<0.25
Toluene	0.22	Hexachlorobutadiene	<0.25
trans-1,3-Dichloropropene	<0.05	Naphthalene	0.97
1,1,2-Trichloroethane	<0.05	1,2,3-Trichlorobenzene	<0.25
2-Hexanone	<0.5		

Analysis For Volatile Compounds By EPA Method 8260D

Client Sample ID:	Method Blank	Client:	The Riley Group
Date Received:	Not Applicable	Project:	Roystone, F&BI 005280
Date Extracted:	05/22/20	Lab ID:	00-1066 mb2
Date Analyzed:	05/22/20	Data File:	052209.D
Matrix:	Soil	Instrument:	GCMS9
Units:	mg/kg (ppm) Dry Weight	Operator:	MS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	103	50	150
Toluene-d8	100	50	150
4-Bromofluorobenzene	105	50	150

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

Date of Report: 05/27/20
Date Received: 05/21/20
Project: Roystone, F&BI 005280

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

Laboratory Code: 005245-01 1/5 (Duplicate)

Analyte	Reporting Units	Sample Result (Wet Wt)	Duplicate Result (Wet Wt)	RPD (Limit 20)
Gasoline	mg/kg (ppm)	250	120	70 a

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Gasoline	mg/kg (ppm)	20	105	71-131

Date of Report: 05/27/20
Date Received: 05/21/20
Project: Roystone, F&BI 005280

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

Laboratory Code: 005271-01 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet Wt)	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Diesel Extended	mg/kg (ppm)	5,000	<50	88	96	73-135	9

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Diesel Extended	mg/kg (ppm)	5,000	86	74-139

Date of Report: 05/27/20
Date Received: 05/21/20
Project: Roystone, F&BI 005280

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

Laboratory Code: 005245-01 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet wt)	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Lead	mg/kg (ppm)	50	1.76	92	94	75-125	2

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Lead	mg/kg (ppm)	50	101	80-120

Date of Report: 05/27/20
Date Received: 05/21/20
Project: Roystone, F&BI 005280

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

Laboratory Code: 005255-01 1/5 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet wt)	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Benz(a)anthracene	mg/kg (ppm)	0.17	0.068	63 b	84 b	23-144	29 b
Chrysene	mg/kg (ppm)	0.17	0.082	55 b	73 b	32-149	28 b
Benzo(b)fluoranthene	mg/kg (ppm)	0.17	0.17 J	66 b J	89 b J	23-176	30 b
Benzo(k)fluoranthene	mg/kg (ppm)	0.17	0.056 J	59 b J	77 b J	42-139	26 b
Benzo(a)pyrene	mg/kg (ppm)	0.17	0.11 J	44 b J	72 b J	21-163	48 b
Indeno(1,2,3-cd)pyrene	mg/kg (ppm)	0.17	0.051 J	44 b J	60 b J	23-170	31 b
Dibenz(a,h)anthracene	mg/kg (ppm)	0.17	0.0094 J	47 J	52 J	31-146	10

Laboratory Code: Laboratory Control Sample 1/5

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Benz(a)anthracene	mg/kg (ppm)	0.17	84	51-115
Chrysene	mg/kg (ppm)	0.17	87	55-129
Benzo(b)fluoranthene	mg/kg (ppm)	0.17	75	56-123
Benzo(k)fluoranthene	mg/kg (ppm)	0.17	77	54-131
Benzo(a)pyrene	mg/kg (ppm)	0.17	67	51-118
Indeno(1,2,3-cd)pyrene	mg/kg (ppm)	0.17	71	49-148
Dibenz(a,h)anthracene	mg/kg (ppm)	0.17	78	50-141

Date of Report: 05/27/20
Date Received: 05/21/20
Project: Roystone, F&BI 005280

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

Laboratory Code: 005251-02 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet wt)	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Dichlorodifluoromethane	mg/kg (ppm)	2.5	<0.5	21	24	10-56	13
Chloromethane	mg/kg (ppm)	2.5	<0.5	45	48	10-90	6
Vinyl chloride	mg/kg (ppm)	2.5	<0.05	42	44	10-91	5
Bromomethane	mg/kg (ppm)	2.5	<0.5	43	49	10-110	13
Chloroethane	mg/kg (ppm)	2.5	<0.5	42	47	10-101	11
Trichlorofluoromethane	mg/kg (ppm)	2.5	<0.5	32	38	10-95	17
Acetone	mg/kg (ppm)	12.5	<5	82	85	11-141	4
1,1-Dichloroethene	mg/kg (ppm)	2.5	<0.05	52	59	22-107	13
Hexane	mg/kg (ppm)	2.5	<0.25	28	33	10-95	16
Methylene chloride	mg/kg (ppm)	2.5	<0.5	86	92	14-128	7
Methyl t-butyl ether (MTBE)	mg/kg (ppm)	2.5	<0.05	90	95	17-134	5
trans-1,2-Dichloroethene	mg/kg (ppm)	2.5	<0.05	71	79	13-112	11
1,1-Dichloroethane	mg/kg (ppm)	2.5	<0.05	85	90	23-115	6
2,2-Dichloropropane	mg/kg (ppm)	2.5	<0.05	80	89	18-117	11
cis-1,2-Dichloroethene	mg/kg (ppm)	2.5	<0.05	81	88	25-120	8
Chloroform	mg/kg (ppm)	2.5	<0.05	82	88	29-117	7
2-Butanone (MEK)	mg/kg (ppm)	12.5	<0.5	91	91	20-133	0
1,2-Dichloroethane (EDC)	mg/kg (ppm)	2.5	<0.05	80	83	22-124	4
1,1,1-Trichloroethane	mg/kg (ppm)	2.5	<0.05	70	79	27-112	12
1,1-Dichloropropene	mg/kg (ppm)	2.5	<0.05	69	75	26-107	8
Carbon tetrachloride	mg/kg (ppm)	2.5	<0.05	62	71	28-126	14
Benzene	mg/kg (ppm)	2.5	<0.03	77	82	26-114	6
Trichloroethene	mg/kg (ppm)	2.5	<0.02	72	79	30-112	9
1,2-Dichloropropane	mg/kg (ppm)	2.5	<0.05	87	91	31-119	4
Bromodichloromethane	mg/kg (ppm)	2.5	<0.05	86	90	31-131	5
Dibromomethane	mg/kg (ppm)	2.5	<0.05	87	93	27-124	7
4-Methyl-2-pentanone	mg/kg (ppm)	12.5	<0.5	96	101	16-147	5
cis-1,3-Dichloropropene	mg/kg (ppm)	2.5	<0.05	86	87	28-137	1
Toluene	mg/kg (ppm)	2.5	<0.05	71	77	34-112	8
trans-1,3-Dichloropropene	mg/kg (ppm)	2.5	<0.05	94	94	30-136	0
1,1,2-Trichloroethane	mg/kg (ppm)	2.5	<0.05	94	96	32-126	2
2-Hexanone	mg/kg (ppm)	12.5	<0.5	107	107	17-147	0
1,3-Dichloropropane	mg/kg (ppm)	2.5	<0.05	92	93	29-125	1
Tetrachloroethene	mg/kg (ppm)	2.5	<0.025	56	64	25-114	13
Dibromochloromethane	mg/kg (ppm)	2.5	<0.05	84	89	32-143	6
1,2-Dibromoethane (EDB)	mg/kg (ppm)	2.5	<0.05	86	89	32-126	3
Chlorobenzene	mg/kg (ppm)	2.5	<0.05	76	82	37-113	8
Ethylbenzene	mg/kg (ppm)	2.5	0.055	67	76	34-115	13
1,1,1,2-Tetrachloroethane	mg/kg (ppm)	2.5	<0.05	81	89	35-126	9
m,p-Xylene	mg/kg (ppm)	5	0.15	64	73	25-125	13
o-Xylene	mg/kg (ppm)	2.5	0.13	65	76	27-126	16
Styrene	mg/kg (ppm)	2.5	<0.05	81	89	39-121	9
Isopropylbenzene	mg/kg (ppm)	2.5	0.054	62	73	34-123	16
Bromoform	mg/kg (ppm)	2.5	<0.05	81	88	18-155	8
n-Propylbenzene	mg/kg (ppm)	2.5	0.15	61	71	31-120	15
Bromobenzene	mg/kg (ppm)	2.5	<0.05	74	81	40-115	9
1,3,5-Trimethylbenzene	mg/kg (ppm)	2.5	0.32	53	69	24-130	26 vo
1,1,2,2-Tetrachloroethane	mg/kg (ppm)	2.5	<0.05	114	115	27-148	1
1,2,3-Trichloropropane	mg/kg (ppm)	2.5	<0.05	100	99	33-123	1
2-Chlorotoluene	mg/kg (ppm)	2.5	<0.05	74	84	39-110	13
4-Chlorotoluene	mg/kg (ppm)	2.5	<0.05	76	83	39-111	9
tert-Butylbenzene	mg/kg (ppm)	2.5	<0.05	62	68	36-116	9
1,2,4-Trimethylbenzene	mg/kg (ppm)	2.5	1.0	37 b	72 b	35-116	64 b
sec-Butylbenzene	mg/kg (ppm)	2.5	0.14	56	67	33-118	18
p-Isopropyltoluene	mg/kg (ppm)	2.5	0.14	49	60	32-119	20
1,3-Dichlorobenzene	mg/kg (ppm)	2.5	<0.05	67	75	38-111	11
1,4-Dichlorobenzene	mg/kg (ppm)	2.5	<0.05	68	75	39-109	10
1,2-Dichlorobenzene	mg/kg (ppm)	2.5	<0.05	75	82	40-111	9
1,2-Dibromo-3-chloropropane	mg/kg (ppm)	2.5	<0.5	96	106	44-112	10
1,2,4-Trichlorobenzene	mg/kg (ppm)	2.5	<0.25	58	68	31-121	16
Hexachlorobutadiene	mg/kg (ppm)	2.5	<0.25	44	55	24-128	22 vo
Naphthalene	mg/kg (ppm)	2.5	0.66	61 b	80 b	24-139	27 b
1,2,3-Trichlorobenzene	mg/kg (ppm)	2.5	<0.25	63	74	35-117	16

Date of Report: 05/27/20
Date Received: 05/21/20
Project: Roystone, F&BI 005280

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

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Dichlorodifluoromethane	mg/kg (ppm)	2.5	68	10-76
Chloromethane	mg/kg (ppm)	2.5	70	34-98
Vinyl chloride	mg/kg (ppm)	2.5	74	42-107
Bromomethane	mg/kg (ppm)	2.5	75	46-113
Chloroethane	mg/kg (ppm)	2.5	72	47-115
Trichlorofluoromethane	mg/kg (ppm)	2.5	68	53-112
Acetone	mg/kg (ppm)	12.5	83	39-147
1,1-Dichloroethene	mg/kg (ppm)	2.5	84	65-110
Hexane	mg/kg (ppm)	2.5	98	55-107
Methylene chloride	mg/kg (ppm)	2.5	110	50-127
Methyl t-butyl ether (MTBE)	mg/kg (ppm)	2.5	101	72-122
trans-1,2-Dichloroethene	mg/kg (ppm)	2.5	101	71-113
1,1-Dichloroethane	mg/kg (ppm)	2.5	108	74-109
2,2-Dichloropropane	mg/kg (ppm)	2.5	109	63-145
cis-1,2-Dichloroethene	mg/kg (ppm)	2.5	100	73-110
Chloroform	mg/kg (ppm)	2.5	99	76-110
2-Butanone (MEK)	mg/kg (ppm)	12.5	93	60-121
1,2-Dichloroethane (EDC)	mg/kg (ppm)	2.5	94	73-111
1,1,1-Trichloroethane	mg/kg (ppm)	2.5	99	72-116
1,1-Dichloropropene	mg/kg (ppm)	2.5	101	72-112
Carbon tetrachloride	mg/kg (ppm)	2.5	97	67-123
Benzene	mg/kg (ppm)	2.5	101	72-106
Trichloroethene	mg/kg (ppm)	2.5	97	72-107
1,2-Dichloropropane	mg/kg (ppm)	2.5	107	74-115
Bromodichloromethane	mg/kg (ppm)	2.5	100	75-126
Dibromomethane	mg/kg (ppm)	2.5	101	76-116
4-Methyl-2-pentanone	mg/kg (ppm)	12.5	98	80-128
cis-1,3-Dichloropropene	mg/kg (ppm)	2.5	98	71-138
Toluene	mg/kg (ppm)	2.5	100	74-111
trans-1,3-Dichloropropene	mg/kg (ppm)	2.5	104	73-124
1,1,2-Trichloroethane	mg/kg (ppm)	2.5	108	76-118
2-Hexanone	mg/kg (ppm)	12.5	107	67-123
1,3-Dichloropropane	mg/kg (ppm)	2.5	107	75-118
Tetrachloroethene	mg/kg (ppm)	2.5	97	73-111
Dibromochloromethane	mg/kg (ppm)	2.5	98	64-152
1,2-Dibromoethane (EDB)	mg/kg (ppm)	2.5	104	77-117
Chlorobenzene	mg/kg (ppm)	2.5	100	76-109
Ethylbenzene	mg/kg (ppm)	2.5	103	75-112
1,1,1,2-Tetrachloroethane	mg/kg (ppm)	2.5	103	75-129
m,p-Xylene	mg/kg (ppm)	5	101	77-115
o-Xylene	mg/kg (ppm)	2.5	100	76-115
Styrene	mg/kg (ppm)	2.5	108	76-119
Isopropylbenzene	mg/kg (ppm)	2.5	101	76-120
Bromoform	mg/kg (ppm)	2.5	93	50-174
n-Propylbenzene	mg/kg (ppm)	2.5	105	77-115
Bromobenzene	mg/kg (ppm)	2.5	98	76-112
1,3,5-Trimethylbenzene	mg/kg (ppm)	2.5	107	77-121
1,1,2,2-Tetrachloroethane	mg/kg (ppm)	2.5	116	74-121
1,2,3-Trichloropropane	mg/kg (ppm)	2.5	110	73-117
2-Chlorotoluene	mg/kg (ppm)	2.5	106	75-113
4-Chlorotoluene	mg/kg (ppm)	2.5	109	77-115
tert-Butylbenzene	mg/kg (ppm)	2.5	101	77-123
1,2,4-Trimethylbenzene	mg/kg (ppm)	2.5	106	77-119
sec-Butylbenzene	mg/kg (ppm)	2.5	105	78-120
p-Isopropyltoluene	mg/kg (ppm)	2.5	98	77-120
1,3-Dichlorobenzene	mg/kg (ppm)	2.5	98	76-112
1,4-Dichlorobenzene	mg/kg (ppm)	2.5	97	74-109
1,2-Dichlorobenzene	mg/kg (ppm)	2.5	98	75-114
1,2-Dibromo-3-chloropropane	mg/kg (ppm)	2.5	105	68-122
1,2,4-Trichlorobenzene	mg/kg (ppm)	2.5	88	75-122
Hexachlorobutadiene	mg/kg (ppm)	2.5	98	74-130
Naphthalene	mg/kg (ppm)	2.5	87	73-122
1,2,3-Trichlorobenzene	mg/kg (ppm)	2.5	92	75-117

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 analyte 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 due to sample matrix effects.

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

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

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

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

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

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

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

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

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

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

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

005280

SAMPLE CHAIN OF CUSTODY

ME 05/21/20 VSI / BI

Page # 1 of 1

Report To Jerry Sawatz

Company

Address

City, State, ZIP

Phone Email Jsawatz@riley-group.com edunham@riley-group.com

SAMPLERS (*signature*) EDL

PROJECT NAME: Roystone

PO #

REMARKS

Project specific RLs? - Yes / No

INVOICE TO

TURNAROUND TIME
- ☐ Standard turnaround
- ☒ RUSH ASAP

Rush charges authorized by:

SAMPLE DISPOSAL
- ☐ Archive samples
- ☐ Other
- Default: Dispose after 30 days

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	ANALYSES REQUESTED: NWTPH-Dx	NWTPH-Gx	BTEX EPA 8021	NWTPH-HCID	VOCs EPA 8260	PAHs EPA 8270	PCBs EPA 8082	CPH	lead			Notes
~~UST 4A~~-1W-3 USTA per JS 5/22/20 ME	01A-E	5/21	1400	soil	5	X	X			X			X	X			

Samples received at 4 °C

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: EDL	Eric Dunham	RAI	5/21	1530
Received by:	Eric Young	FCB	5/21	1530
Relinquished by:				
Received by:				

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

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

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

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www.friedmanandbruya.com

June 16, 2020

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

Dear Mr Sawetz:

Included is the amended report from the testing of material submitted on June 1, 2020 from the Roystone Development PO 2017-015K, F&BI 006013 project. Per your request, sample ID USTA-SA-1W-4.5 has been amended to USTA-SA-1W-6.

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

Sincerely,

FRIEDMAN & BRUYA, INC.

Michael Erdahl
Project Manager

Enclosures
c: Eric Dunham, Mingta Lin
TRG0604R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

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June 4, 2020

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

Dear Mr Sawetz:

Included are the results from the testing of material submitted on June 1, 2020 from the Roystone Development PO 2017-015K, F&BI 006013 project. There are 20 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days, or as directed by the Chain of Custody document. 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: Eric Dunham, Mingta Lin
TRG0604R.DOC

CASE NARRATIVE

This case narrative encompasses samples received on June 1, 2020 by Friedman & Bruya, Inc. from the The Riley Group Roystone Development PO 2017-015K, F&BI 006013 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	The Riley Group
006013 -01	UST4A-SA-1B-8.5
006013 -02	UST4A-SA-2E-7
006013 -03	UST4A-SA-3W-7
006013 -04	USTA-SA-1W-6
006013 -05	USTA-SA-2B-6
006013 -06	USTA-SA-3E-4.5

The 8260D laboratory control sample exceeded the acceptance criteria for bromoform. The compound was not detected, therefore the data were acceptable.

All other quality control requirements were acceptable.

Date of Report: 06/04/20
Date Received: 06/01/20
Project: Roystone Development PO 2017-015K, F&BI 006013
Date Extracted: 06/02/20
Date Analyzed: 06/02/20

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

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

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

Sample ID Laboratory ID	Gasoline	Diesel	Heavy Oil	Surrogate (% Recovery) (Limit 48-168)
UST4A-SA-1B-8.5 006013-01	ND	ND	ND	94
UST4A-SA-2E-7 006013-02	ND	ND	ND	94
UST4A-SA-3W-7 006013-03	ND	D	ND	93
USTA-SA-1W-6 006013-04	ND	ND	ND	94
USTA-SA-3E-4.5 006013-06	ND	ND	ND	93
Method Blank 00-1215 MB	ND	ND	ND	98

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

Date of Report: 06/04/20
Date Received: 06/01/20
Project: Roystone Development PO 2017-015K, F&BI 006013
Date Extracted: 06/02/20
Date Analyzed: 06/02/20

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

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

Sample ID Laboratory ID	Gasoline Range	Surrogate (% Recovery) (Limit 50-150)
USTA-SA-2B-6 006013-05	<5	89
Method Blank 00-1111 MB2	<5	90

Date of Report: 06/04/20
Date Received: 06/01/20
Project: Roystone Development PO 2017-015K, F&BI 006013
Date Extracted: 06/02/20
Date Analyzed: 06/02/20

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

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

Sample ID Laboratory ID	Benzene	Toluene	Ethyl Benzene	Total Xylenes	Surrogate (% Recovery) (Limit 50-150)
USTA-SA-3E-4.5 006013-06	<0.02	<0.02	<0.02	<0.06	81
Method Blank 00-1111 MB2	<0.02	<0.02	<0.02	<0.06	78

Date of Report: 06/04/20
Date Received: 06/01/20
Project: Roystone Development PO 2017-015K, F&BI 006013
Date Extracted: 06/01/20
Date Analyzed: 06/01/20

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

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

Sample ID Laboratory ID	Diesel Range (C_{10}-C_{25})	Motor Oil Range (C_{25}-C_{36})	Surrogate (% Recovery) (Limit 48-168)
USTA-SA-2B-6 006013-05	<50	<250	103
Method Blank 00-1213 MB	<50	<250	107

Analysis For Total Metals By EPA Method 6020B

Client ID:	USTA-SA-2B-6	Client:	The Riley Group
Date Received:	06/01/20	Project:	Roystone Development PO 2017-015K
Date Extracted:	06/02/20	Lab ID:	006013-05
Date Analyzed:	06/02/20	Data File:	006013-05.049
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Lead	152

Analysis For Total Metals By EPA Method 6020B

Client ID:	Method Blank	Client:	The Riley Group
Date Received:	NA	Project:	Roystone Development PO 2017-015K
Date Extracted:	06/02/20	Lab ID:	I0-310 mb2
Date Analyzed:	06/02/20	Data File:	I0-310 mb2.047
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

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

Analysis For Semivolatile Compounds By EPA Method 8270E SIM

Client Sample ID:	USTA-SA-2B-6	Client:	The Riley Group
Date Received:	06/01/20	Project:	Roystone Development PO 2017-015K
Date Extracted:	06/02/20	Lab ID:	006013-05 1/25
Date Analyzed:	06/02/20	Data File:	060204.D
Matrix:	Soil	Instrument:	GCMS6
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	72 d	31	163
Benzo(a)anthracene-d12	72 d	24	168

Compounds:	Concentration mg/kg (ppm)
Benz(a)anthracene	<0.05
Chrysene	<0.05
Benzo(a)pyrene	<0.05
Benzo(b)fluoranthene	<0.05
Benzo(k)fluoranthene	<0.05
Indeno(1,2,3-cd)pyrene	<0.05
Dibenz(a,h)anthracene	<0.05

Analysis For Semivolatile Compounds By EPA Method 8270E SIM

Client Sample ID:	Method Blank	Client:	The Riley Group
Date Received:	Not Applicable	Project:	Roystone Development PO 2017-015K
Date Extracted:	06/01/20	Lab ID:	00-1206 mb 1/5
Date Analyzed:	06/01/20	Data File:	060116.D
Matrix:	Soil	Instrument:	GCMS6
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	71	31	163
Benzo(a)anthracene-d12	99	24	168

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

Analysis For Volatile Compounds By EPA Method 8260D

Client Sample ID:	USTA-SA-1W-6	Client:	The Riley Group
Date Received:	06/01/20	Project:	Roystone Development PO 2017-015K
Date Extracted:	06/02/20	Lab ID:	006013-04
Date Analyzed:	06/02/20	Data File:	060209.D
Matrix:	Soil	Instrument:	GCMS4
Units:	mg/kg (ppm) Dry Weight	Operator:	MS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	104	62	145
Toluene-d8	105	55	145
4-Bromofluorobenzene	100	65	139

Compounds:	Concentration mg/kg (ppm)	Compounds:	Concentration mg/kg (ppm)
Dichlorodifluoromethane	<0.5	1,3-Dichloropropane	<0.05
Chloromethane	<0.5	Tetrachloroethene	<0.025
Vinyl chloride	<0.05	Dibromochloromethane	<0.05
Bromomethane	<0.5	1,2-Dibromoethane (EDB)	<0.05
Chloroethane	<0.5	Chlorobenzene	<0.05
Trichlorofluoromethane	<0.5	Ethylbenzene	<0.05
Acetone	<5	1,1,1,2-Tetrachloroethane	<0.05
1,1-Dichloroethene	<0.05	m,p-Xylene	<0.1
Hexane	<0.25	o-Xylene	<0.05
Methylene chloride	<0.5	Styrene	<0.05
Methyl t-butyl ether (MTBE)	<0.05	Isopropylbenzene	<0.05
trans-1,2-Dichloroethene	<0.05	Bromoform	<0.05
1,1-Dichloroethane	<0.05	n-Propylbenzene	<0.05
2,2-Dichloropropane	<0.05	Bromobenzene	<0.05
cis-1,2-Dichloroethene	<0.05	1,3,5-Trimethylbenzene	<0.05
Chloroform	<0.05	1,1,2,2-Tetrachloroethane	<0.05
2-Butanone (MEK)	<0.5	1,2,3-Trichloropropane	<0.05
1,2-Dichloroethane (EDC)	<0.05	2-Chlorotoluene	<0.05
1,1,1-Trichloroethane	<0.05	4-Chlorotoluene	<0.05
1,1-Dichloropropene	<0.05	tert-Butylbenzene	<0.05
Carbon tetrachloride	<0.05	1,2,4-Trimethylbenzene	<0.05
Benzene	0.19	sec-Butylbenzene	<0.05
Trichloroethene	<0.02	p-Isopropyltoluene	<0.05
1,2-Dichloropropane	<0.05	1,3-Dichlorobenzene	<0.05
Bromodichloromethane	<0.05	1,4-Dichlorobenzene	<0.05
Dibromomethane	<0.05	1,2-Dichlorobenzene	<0.05
4-Methyl-2-pentanone	<0.5	1,2-Dibromo-3-chloropropane	<0.5
cis-1,3-Dichloropropene	<0.05	1,2,4-Trichlorobenzene	<0.25
Toluene	<0.05	Hexachlorobutadiene	<0.25
trans-1,3-Dichloropropene	<0.05	Naphthalene	<0.05
1,1,2-Trichloroethane	<0.05	1,2,3-Trichlorobenzene	<0.25
2-Hexanone	<0.5		

Analysis For Volatile Compounds By EPA Method 8260D

Client Sample ID:	USTA-SA-2B-6	Client:	The Riley Group
Date Received:	06/01/20	Project:	Roystone Development PO 2017-015K
Date Extracted:	06/02/20	Lab ID:	006013-05
Date Analyzed:	06/02/20	Data File:	060210.D
Matrix:	Soil	Instrument:	GCMS4
Units:	mg/kg (ppm) Dry Weight	Operator:	MS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	103	62	145
Toluene-d8	105	55	145
4-Bromofluorobenzene	101	65	139

Compounds:	Concentration mg/kg (ppm)	Compounds:	Concentration mg/kg (ppm)
Dichlorodifluoromethane	<0.5	1,3-Dichloropropane	<0.05
Chloromethane	<0.5	Tetrachloroethene	<0.025
Vinyl chloride	<0.05	Dibromochloromethane	<0.05
Bromomethane	<0.5	1,2-Dibromoethane (EDB)	<0.05
Chloroethane	<0.5	Chlorobenzene	<0.05
Trichlorofluoromethane	<0.5	Ethylbenzene	<0.05
Acetone	<5	1,1,1,2-Tetrachloroethane	<0.05
1,1-Dichloroethene	<0.05	m,p-Xylene	<0.1
Hexane	<0.25	o-Xylene	<0.05
Methylene chloride	<0.5	Styrene	<0.05
Methyl t-butyl ether (MTBE)	<0.05	Isopropylbenzene	<0.05
trans-1,2-Dichloroethene	<0.05	Bromoform	<0.05
1,1-Dichloroethane	<0.05	n-Propylbenzene	<0.05
2,2-Dichloropropane	<0.05	Bromobenzene	<0.05
cis-1,2-Dichloroethene	<0.05	1,3,5-Trimethylbenzene	<0.05
Chloroform	<0.05	1,1,2,2-Tetrachloroethane	<0.05
2-Butanone (MEK)	<0.5	1,2,3-Trichloropropane	<0.05
1,2-Dichloroethane (EDC)	<0.05	2-Chlorotoluene	<0.05
1,1,1-Trichloroethane	<0.05	4-Chlorotoluene	<0.05
1,1-Dichloropropene	<0.05	tert-Butylbenzene	<0.05
Carbon tetrachloride	<0.05	1,2,4-Trimethylbenzene	<0.05
Benzene	0.096	sec-Butylbenzene	<0.05
Trichloroethene	<0.02	p-Isopropyltoluene	<0.05
1,2-Dichloropropane	<0.05	1,3-Dichlorobenzene	<0.05
Bromodichloromethane	<0.05	1,4-Dichlorobenzene	<0.05
Dibromomethane	<0.05	1,2-Dichlorobenzene	<0.05
4-Methyl-2-pentanone	<0.5	1,2-Dibromo-3-chloropropane	<0.5
cis-1,3-Dichloropropene	<0.05	1,2,4-Trichlorobenzene	<0.25
Toluene	<0.05	Hexachlorobutadiene	<0.25
trans-1,3-Dichloropropene	<0.05	Naphthalene	<0.05
1,1,2-Trichloroethane	<0.05	1,2,3-Trichlorobenzene	<0.25
2-Hexanone	<0.5		

Analysis For Volatile Compounds By EPA Method 8260D

Client Sample ID:	Method Blank	Client:	The Riley Group
Date Received:	Not Applicable	Project:	Roystone Development PO 2017-015K
Date Extracted:	06/02/20	Lab ID:	00-1165 mb2
Date Analyzed:	06/02/20	Data File:	060208.D
Matrix:	Soil	Instrument:	GCMS4
Units:	mg/kg (ppm) Dry Weight	Operator:	MS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	105	62	145
Toluene-d8	104	55	145
4-Bromofluorobenzene	100	65	139

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

Date of Report: 06/04/20
Date Received: 06/01/20
Project: Roystone Development PO 2017-015K, F&BI 006013

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

Laboratory Code: 005395-01 (Duplicate)

Analyte	Reporting Units	Sample Result (Wet Wt)	Duplicate Result (Wet Wt)	RPD (Limit 20)
Gasoline	mg/kg (ppm)	<5	<5	nm

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Gasoline	mg/kg (ppm)	20	100	71-131

Date of Report: 06/04/20
Date Received: 06/01/20
Project: Roystone Development PO 2017-015K, F&BI 006013

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

Laboratory Code: 005395-01 (Duplicate)

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

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Benzene	mg/kg (ppm)	0.5	92	69-120
Toluene	mg/kg (ppm)	0.5	89	70-117
Ethylbenzene	mg/kg (ppm)	0.5	90	65-123
Xylenes	mg/kg (ppm)	1.5	93	66-120

Date of Report: 06/04/20
Date Received: 06/01/20
Project: Roystone Development PO 2017-015K, F&BI 006013

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

Laboratory Code: 005394-03 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet Wt)	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Diesel Extended	mg/kg (ppm)	5,000	310	89	88	73-135	1

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Diesel Extended	mg/kg (ppm)	5,000	88	74-139

Date of Report: 06/04/20
Date Received: 06/01/20
Project: Roystone Development PO 2017-015K, F&BI 006013

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

Laboratory Code: 005400-18 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet wt)	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Lead	mg/kg (ppm)	50	29.0	99	97	75-125	2

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Lead	mg/kg (ppm)	50	102	80-120

Date of Report: 06/04/20
Date Received: 06/01/20
Project: Roystone Development PO 2017-015K, F&BI 006013

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

Laboratory Code: 005400-12 1/5 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet wt)	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Benz(a)anthracene	mg/kg (ppm)	0.17	<0.01	80	81	23-144	1
Chrysene	mg/kg (ppm)	0.17	<0.01	77	78	32-149	1
Benzo(b)fluoranthene	mg/kg (ppm)	0.17	<0.01	83	82	23-176	1
Benzo(k)fluoranthene	mg/kg (ppm)	0.17	<0.01	76	81	42-139	6
Benzo(a)pyrene	mg/kg (ppm)	0.17	<0.01	77	78	21-163	1
Indeno(1,2,3-cd)pyrene	mg/kg (ppm)	0.17	<0.01	47	47	23-170	0
Dibenz(a,h)anthracene	mg/kg (ppm)	0.17	<0.01	45	45	31-146	0

Laboratory Code: Laboratory Control Sample 1/5

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Benz(a)anthracene	mg/kg (ppm)	0.17	92	51-115
Chrysene	mg/kg (ppm)	0.17	93	55-129
Benzo(b)fluoranthene	mg/kg (ppm)	0.17	89	56-123
Benzo(k)fluoranthene	mg/kg (ppm)	0.17	82	54-131
Benzo(a)pyrene	mg/kg (ppm)	0.17	81	51-118
Indeno(1,2,3-cd)pyrene	mg/kg (ppm)	0.17	83	49-148
Dibenz(a,h)anthracene	mg/kg (ppm)	0.17	85	50-141

Date of Report: 06/04/20
Date Received: 06/01/20
Project: Roystone Development PO 2017-015K, F&BI 006013

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

Laboratory Code: 005366-04 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet wt)	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Dichlorodifluoromethane	mg/kg (ppm)	2.5	<0.5	28	33	10-142	16
Chloromethane	mg/kg (ppm)	2.5	<0.5	66	70	10-126	6
Vinyl chloride	mg/kg (ppm)	2.5	<0.05	68	71	10-138	4
Bromomethane	mg/kg (ppm)	2.5	<0.5	82	84	10-163	2
Chloroethane	mg/kg (ppm)	2.5	<0.5	79	82	10-176	4
Trichlorofluoromethane	mg/kg (ppm)	2.5	<0.5	76	79	10-176	4
Acetone	mg/kg (ppm)	12.5	<5	95	103	10-163	8
1,1-Dichloroethene	mg/kg (ppm)	2.5	<0.05	78	83	10-160	6
Hexane	mg/kg (ppm)	2.5	<0.25	80	82	10-137	2
Methylene chloride	mg/kg (ppm)	2.5	<0.5	92	94	10-156	2
Methyl t-butyl ether (MTBE)	mg/kg (ppm)	2.5	<0.05	91	94	21-145	3
trans-1,2-Dichloroethene	mg/kg (ppm)	2.5	<0.05	85	86	14-137	1
1,1-Dichloroethane	mg/kg (ppm)	2.5	<0.05	94	97	19-140	3
2,2-Dichloropropane	mg/kg (ppm)	2.5	<0.05	93	94	10-158	1
cis-1,2-Dichloroethene	mg/kg (ppm)	2.5	<0.05	91	93	25-135	2
Chloroform	mg/kg (ppm)	2.5	<0.05	94	98	21-145	4
2-Butanone (MEK)	mg/kg (ppm)	12.5	<0.5	94	99	19-147	5
1,2-Dichloroethane (EDC)	mg/kg (ppm)	2.5	<0.05	89	92	12-160	3
1,1,1-Trichloroethane	mg/kg (ppm)	2.5	<0.05	92	94	10-156	2
1,1-Dichloropropene	mg/kg (ppm)	2.5	<0.05	96	98	17-140	2
Carbon tetrachloride	mg/kg (ppm)	2.5	<0.05	96	99	9-164	3
Benzene	mg/kg (ppm)	2.5	<0.03	93	96	29-129	3
Trichloroethene	mg/kg (ppm)	2.5	<0.02	89	92	21-139	3
1,2-Dichloropropane	mg/kg (ppm)	2.5	<0.05	97	100	30-135	3
Bromodichloromethane	mg/kg (ppm)	2.5	<0.05	104	106	23-155	2
Dibromomethane	mg/kg (ppm)	2.5	<0.05	96	99	23-145	3
4-Methyl-2-pentanone	mg/kg (ppm)	12.5	<0.5	105	107	24-155	2
cis-1,3-Dichloropropene	mg/kg (ppm)	2.5	<0.05	97	99	28-144	2
Toluene	mg/kg (ppm)	2.5	<0.05	85	90	35-130	6
trans-1,3-Dichloropropene	mg/kg (ppm)	2.5	<0.05	87	90	26-149	3
1,1,2-Trichloroethane	mg/kg (ppm)	2.5	<0.05	89	92	10-205	3
2-Hexanone	mg/kg (ppm)	12.5	<0.5	92	96	15-166	4
1,3-Dichloropropane	mg/kg (ppm)	2.5	<0.05	89	93	31-137	4
Tetrachloroethene	mg/kg (ppm)	2.5	<0.025	85	87	20-133	2
Dibromochloromethane	mg/kg (ppm)	2.5	<0.05	94	95	28-150	1
1,2-Dibromoethane (EDB)	mg/kg (ppm)	2.5	<0.05	91	95	28-142	4
Chlorobenzene	mg/kg (ppm)	2.5	<0.05	88	89	32-129	1
Ethylbenzene	mg/kg (ppm)	2.5	<0.05	88	91	32-137	3
1,1,1,2-Tetrachloroethane	mg/kg (ppm)	2.5	<0.05	92	97	31-143	5
m,p-Xylene	mg/kg (ppm)	5	<0.1	88	91	34-136	3
o-Xylene	mg/kg (ppm)	2.5	<0.05	89	93	33-134	4
Styrene	mg/kg (ppm)	2.5	<0.05	89	93	35-137	4
Isopropylbenzene	mg/kg (ppm)	2.5	<0.05	88	91	31-142	3
Bromoform	mg/kg (ppm)	2.5	<0.05	101	102	21-156	1
n-Propylbenzene	mg/kg (ppm)	2.5	<0.05	90	92	23-146	2
Bromobenzene	mg/kg (ppm)	2.5	<0.05	89	93	34-130	4
1,3,5-Trimethylbenzene	mg/kg (ppm)	2.5	<0.05	89	91	18-149	2
1,1,2,2-Tetrachloroethane	mg/kg (ppm)	2.5	<0.05	94	100	28-140	6
1,2,3-Trichloropropane	mg/kg (ppm)	2.5	<0.05	88	91	25-144	3
2-Chlorotoluene	mg/kg (ppm)	2.5	<0.05	88	90	31-134	2
4-Chlorotoluene	mg/kg (ppm)	2.5	<0.05	89	91	31-136	2
tert-Butylbenzene	mg/kg (ppm)	2.5	<0.05	89	91	30-137	2
1,2,4-Trimethylbenzene	mg/kg (ppm)	2.5	<0.05	88	90	10-182	2
sec-Butylbenzene	mg/kg (ppm)	2.5	<0.05	90	93	23-145	3
p-Isopropyltoluene	mg/kg (ppm)	2.5	<0.05	89	91	21-149	2
1,3-Dichlorobenzene	mg/kg (ppm)	2.5	<0.05	86	89	30-131	3
1,4-Dichlorobenzene	mg/kg (ppm)	2.5	<0.05	85	87	29-129	2
1,2-Dichlorobenzene	mg/kg (ppm)	2.5	<0.05	88	90	31-132	2
1,2-Dibromo-3-chloropropane	mg/kg (ppm)	2.5	<0.5	92	91	11-161	1
1,2,4-Trichlorobenzene	mg/kg (ppm)	2.5	<0.25	91	92	22-142	1
Hexachlorobutadiene	mg/kg (ppm)	2.5	<0.25	91	92	10-142	1
Naphthalene	mg/kg (ppm)	2.5	<0.05	88	90	14-157	2
1,2,3-Trichlorobenzene	mg/kg (ppm)	2.5	<0.25	91	92	20-144	1

Date of Report: 06/04/20
Date Received: 06/01/20
Project: Roystone Development PO 2017-015K, F&BI 006013

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

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Dichlorodifluoromethane	mg/kg (ppm)	2.5	68	10-146
Chloromethane	mg/kg (ppm)	2.5	109	27-133
Vinyl chloride	mg/kg (ppm)	2.5	89	22-139
Bromomethane	mg/kg (ppm)	2.5	82	38-114
Chloroethane	mg/kg (ppm)	2.5	96	9-163
Trichlorofluoromethane	mg/kg (ppm)	2.5	92	10-196
Acetone	mg/kg (ppm)	12.5	103	52-141
1,1-Dichloroethene	mg/kg (ppm)	2.5	88	47-128
Hexane	mg/kg (ppm)	2.5	95	43-142
Methylene chloride	mg/kg (ppm)	2.5	104	42-132
Methyl t-butyl ether (MTBE)	mg/kg (ppm)	2.5	97	60-123
trans-1,2-Dichloroethene	mg/kg (ppm)	2.5	92	67-129
1,1-Dichloroethane	mg/kg (ppm)	2.5	99	68-115
2,2-Dichloropropane	mg/kg (ppm)	2.5	102	52-170
cis-1,2-Dichloroethene	mg/kg (ppm)	2.5	96	72-127
Chloroform	mg/kg (ppm)	2.5	98	66-120
2-Butanone (MEK)	mg/kg (ppm)	12.5	97	72-127
1,2-Dichloroethane (EDC)	mg/kg (ppm)	2.5	95	56-135
1,1,1-Trichloroethane	mg/kg (ppm)	2.5	99	62-131
1,1-Dichloropropene	mg/kg (ppm)	2.5	102	69-128
Carbon tetrachloride	mg/kg (ppm)	2.5	107	60-139
Benzene	mg/kg (ppm)	2.5	98	68-114
Trichloroethene	mg/kg (ppm)	2.5	95	64-117
1,2-Dichloropropane	mg/kg (ppm)	2.5	97	72-127
Bromodichloromethane	mg/kg (ppm)	2.5	117	72-130
Dibromomethane	mg/kg (ppm)	2.5	102	70-120
4-Methyl-2-pentanone	mg/kg (ppm)	12.5	99	45-145
cis-1,3-Dichloropropene	mg/kg (ppm)	2.5	103	75-136
Toluene	mg/kg (ppm)	2.5	99	66-126
trans-1,3-Dichloropropene	mg/kg (ppm)	2.5	100	72-132
1,1,2-Trichloroethane	mg/kg (ppm)	2.5	97	75-113
2-Hexanone	mg/kg (ppm)	12.5	92	33-152
1,3-Dichloropropane	mg/kg (ppm)	2.5	94	72-130
Tetrachloroethene	mg/kg (ppm)	2.5	99	72-114
Dibromochloromethane	mg/kg (ppm)	2.5	122	74-125
1,2-Dibromoethane (EDB)	mg/kg (ppm)	2.5	97	74-132
Chlorobenzene	mg/kg (ppm)	2.5	95	76-111
Ethylbenzene	mg/kg (ppm)	2.5	97	64-123
1,1,1,2-Tetrachloroethane	mg/kg (ppm)	2.5	117	69-135
m,p-Xylene	mg/kg (ppm)	5	96	78-122
o-Xylene	mg/kg (ppm)	2.5	103	77-124
Styrene	mg/kg (ppm)	2.5	94	74-126
Isopropylbenzene	mg/kg (ppm)	2.5	101	76-127
Bromoform	mg/kg (ppm)	2.5	154 vo	56-132
n-Propylbenzene	mg/kg (ppm)	2.5	102	74-124
Bromobenzene	mg/kg (ppm)	2.5	99	72-122
1,3,5-Trimethylbenzene	mg/kg (ppm)	2.5	104	76-126
1,1,2,2-Tetrachloroethane	mg/kg (ppm)	2.5	110	56-143
1,2,3-Trichloropropane	mg/kg (ppm)	2.5	98	61-137
2-Chlorotoluene	mg/kg (ppm)	2.5	101	74-121
4-Chlorotoluene	mg/kg (ppm)	2.5	98	75-122
tert-Butylbenzene	mg/kg (ppm)	2.5	107	73-130
1,2,4-Trimethylbenzene	mg/kg (ppm)	2.5	101	76-125
sec-Butylbenzene	mg/kg (ppm)	2.5	106	71-130
p-Isopropyltoluene	mg/kg (ppm)	2.5	103	70-132
1,3-Dichlorobenzene	mg/kg (ppm)	2.5	95	75-121
1,4-Dichlorobenzene	mg/kg (ppm)	2.5	93	74-117
1,2-Dichlorobenzene	mg/kg (ppm)	2.5	99	76-121
1,2-Dibromo-3-chloropropane	mg/kg (ppm)	2.5	123	58-138
1,2,4-Trichlorobenzene	mg/kg (ppm)	2.5	103	64-135
Hexachlorobutadiene	mg/kg (ppm)	2.5	102	50-153
Naphthalene	mg/kg (ppm)	2.5	105	63-140
1,2,3-Trichlorobenzene	mg/kg (ppm)	2.5	106	63-138

Data Qualifiers & Definitions

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

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

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

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

cf - The sample was centrifuged prior to analysis.

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

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

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

fc - The analyte 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 due to sample matrix effects.

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

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

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

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

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

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

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

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

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

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

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

006013

SAMPLE CHAIN OF CUSTODY

ME 06/01/20 VS4 / BI2

Page # ___ of ___

Report To Jerry Squatz

Company Riley Group

Address

City, State, ZIP

Phone Email jsquatz@rileygroup.com edunham

SAMPLERS (signature) E Dunham

PROJECT NAME: Keystone Redevelopment

PO #: 2017-015K

REMARKS

Project specific RLs? - Yes / No

INVOICE TO

TURNAROUND TIME
- ☐ Standard turnaround
- ☑ RUSH ASAP
- Rush charges authorized by:

SAMPLE DISPOSAL
- ☐ Archive samples
- ☐ Other
- Default: Dispose after 30 days

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	NWTPH-Dx	NWTPH-Gx	BTEX EPA 8021	NWTPH-HCID	VOCs EPA 8260	PAHs EPA 8270	PCBs EPA 8082	RCRA (8)	cPAHs	Pb	ANALYSES REQUESTED
VST4A-SA-1B-8.5	01 A-E	6/1	1130	soil	5	◆		⊗	X							⊗ per TS 6/9/20 ASAP Notes TAT ◆ per TS 6/8/20 PB
VST4A-SA-2E-7	02		1200			◆		⊗	X							ASAP
VST4A-SA-3W-7	03		1215			⊗	X	⊗	X							
VSTA-SA-1W-6.5	04		1300						X	X						10 analytes per TS 6/8/20 MG
VSTA-SA-2B-6	05		1100			X	X			X				X	X	
VSTA-SA-3E-4.5	06		415					X	X							

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: E Dunham	Eric Dunham	RGI	6/1	1450
Received by: Nhan Phan	Nhan Phan	F & BI	6/1/20	1450
Relinquished by:				
Received by:		Samples received at 6 °C		

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Seattle, WA 98119-2029
Ph. (206) 285-8282

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

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

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

June 8, 2020

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

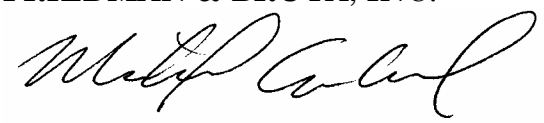
Dear Mr Sawetz:

Included are the results from the testing of material submitted on June 3, 2020 from the Roystone Development PO 2017-015K, F&BI 006059 project. There are 3 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days, or as directed by the Chain of Custody document. 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: Eric Dunham, Mingta Lin
TRG0608R.DOC

CASE NARRATIVE

This case narrative encompasses samples received on June 3, 2020 by Friedman & Bruya, Inc. from the The Riley Group Roystone Development PO 2017-015K, F&BI 006059 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	The Riley Group
006059 -01	UST6B-1

All quality control requirements were acceptable.

Date of Report: 06/08/20
Date Received: 06/03/20
Project: Roystone Development PO 2017-015K, F&BI 006059
Date Extracted: 06/04/20
Date Analyzed: 06/04/20

RESULTS FROM THE ANALYSIS OF WATER SAMPLES FOR GASOLINE, DIESEL AND HEAVY OIL BY NWTPH-HCID
Results Reported as Not Detected (ND) or Detected (D)

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

Sample ID Laboratory ID	Gasoline	Diesel	Heavy Oil	Surrogate (% Recovery) (Limit 56-165)
UST6B-1 006059-01	D	D x	ND	ip
Method Blank 00-1220 MB2	ND	ND	ND	77

ND - Material not detected at or above 0.2 mg/L gas, 0.5 mg/L diesel and 0.5 mg/L heavy oil.

Data Qualifiers & Definitions

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

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

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

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

cf - The sample was centrifuged prior to analysis.

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

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

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

fc - The analyte 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 due to sample matrix effects.

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

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

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

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

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

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

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

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

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

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

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

006059

SAMPLE CHAIN OF CUSTODY ME 06/03/20

VW1

Page # 1 of 1

Report To Jerry Sanetz

Company Riley Group

Address

City, State, ZIP

Phone Email

SAMPLERS (*signature*) E RL

PROJECT NAME: Raystone Development

PO #: 2017-015K

REMARKS

Project specific RLs? - Yes / No

INVOICE TO

TURNAROUND TIME
- ☐ Standard turnaround
- ☒ RUSH ASAP

Rush charges authorized by:

SAMPLE DISPOSAL
- ☐ Archive samples
- ☐ Other

Default: Dispose after 30 days

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	NWTPH-Dx	NWTPH-Gx	BTEX EPA 8021	NWTPH-HCID	VOCs EPA 8260	PAHs EPA 8270	PCBs EPA 8082					Notes
						ANALYSES REQUESTED											
UST6B-1	01A-D	6/3	1500	Water	4				X								ASAP

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: E RL	Eric Dunham	Riley Group	6/3	1615
Received by: RL	Khoi Hoang	FBI	6/3/20	1615
Relinquished by:				
Received by:		Samples received at 18 °C		

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FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

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Yelena Aravkina, M.S.
Michael Erdahl, B.S.
Arina Podnozova, B.S.
Eric Young, B.S.

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fbi@isomedia.com
www.friedmanandbruya.com

June 11, 2020

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

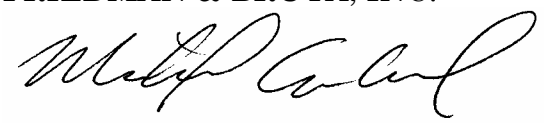
Dear Mr Sawetz:

Included are the results from the testing of material submitted on June 5, 2020 from the Roystone PO 2017-015K, F&BI 006103 project. There are 6 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days, or as directed by the Chain of Custody document. 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: Eric Dunham, Mingta Lin
TRG0611R.DOC

CASE NARRATIVE

This case narrative encompasses samples received on June 5, 2020 by Friedman & Bruya, Inc. from the The Riley Group Roystone PO 2017-015K, F&BI 006103 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	The Riley Group
006103 -01	UST10-PP1-2.5

All quality control requirements were acceptable.

Date of Report: 06/11/20
Date Received: 06/05/20
Project: Roystone PO 2017-015K, F&BI 006103
Date Extracted: 06/08/20
Date Analyzed: 06/09/20

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

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

Sample ID Laboratory ID	Benzene	Toluene	Ethyl Benzene	Total Xylenes	Gasoline Range	Surrogate (% Recovery) (Limit 50-150)
UST10-PP1-2.5 006103-01	<0.02	<0.02	<0.02	<0.06	<5	85
Method Blank 00-1124 MB	<0.02	<0.02	<0.02	<0.06	<5	84

Date of Report: 06/11/20
Date Received: 06/05/20
Project: Roystone PO 2017-015K, F&BI 006103
Date Extracted: 06/08/20
Date Analyzed: 06/08/20

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

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

Sample ID Laboratory ID	Diesel Range (C_{10}-C_{25})	Motor Oil Range (C_{25}-C_{36})	Surrogate (% Recovery) (Limit 53-144)
UST10-PP1-2.5 006103-01	<50	<250	98
Method Blank 00-1252 MB	<50	<250	89

Date of Report: 06/11/20
Date Received: 06/05/20
Project: Roystone PO 2017-015K, F&BI 006103

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: 006105-01 (Duplicate)

Analyte	Reporting Units	Sample Result (Wet Wt)	Duplicate Result (Wet Wt)	RPD (Limit 20)
Benzene	mg/kg (ppm)	<0.02	<0.02	nm
Toluene	mg/kg (ppm)	<0.02	<0.02	nm
Ethylbenzene	mg/kg (ppm)	<0.02	<0.02	nm
Xylenes	mg/kg (ppm)	<0.06	<0.06	nm
Gasoline	mg/kg (ppm)	<5	<5	nm

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Benzene	mg/kg (ppm)	0.5	94	69-120
Toluene	mg/kg (ppm)	0.5	92	70-117
Ethylbenzene	mg/kg (ppm)	0.5	93	65-123
Xylenes	mg/kg (ppm)	1.5	97	66-120
Gasoline	mg/kg (ppm)	20	105	71-131

Date of Report: 06/11/20
Date Received: 06/05/20
Project: Roystone PO 2017-015K, F&BI 006103

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

Laboratory Code: 006103-01 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet Wt)	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Diesel Extended	mg/kg (ppm)	5,000	86	108	110	64-133	2

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Diesel Extended	mg/kg (ppm)	5,000	108	58-147

Data Qualifiers & Definitions

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

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

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

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

cf - The sample was centrifuged prior to analysis.

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

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

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

fc - The analyte 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 due to sample matrix effects.

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

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

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

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

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

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

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

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

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

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

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

006103

SAMPLE CHAIN OF CUSTODY

ME 06/05/20

VS-D4

Page # 1 of 1 COC

Report To Jerry Sametz

Company Riley Group

Address

City, State, ZIP

Phone Email Jsametzer-ley-group.com edunham

SAMPLERS (*signature*) E

PROJECT NAME: Roystone

PO #: 2017-015K

REMARKS

Project specific RLs? - Yes / No

INVOICE TO

TURNAROUND TIME
- ☒ Standard turnaround
- ☐ RUSH
- Rush charges authorized by:

SAMPLE DISPOSAL
- ☐ Archive samples
- ☐ Other
- Default: Dispose after 30 days

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	NWTPH-Dx	NWTPH-Gx	BTEX EPA 8021	NWTPH-HCID	VOCs EPA 8260	PAHs EPA 8270	PCBs EPA 8082					Notes
						ANALYSES REQUESTED											
VST10-PP1-2.5	01 A-E	6/5	1400	SOIL		X	X	X									
													Samples received at 16°C				

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: E	Eric Dunham	RGI	6/5	1440
Received by:	Khai Hoang	FBI	06/05	1440
Relinquished by:				
Received by:				

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FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

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

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fbi@isomedia.com
www.friedmanandbruya.com

June 16, 2020

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

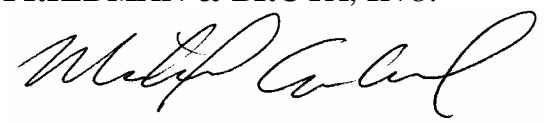
Dear Mr Sawetz:

Included are the results from the testing of material submitted on June 8, 2020 from the Roystone 2017-015K, F&BI 006120 project. There are 14 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days, or as directed by the Chain of Custody document. 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: Mingta Lin, Eric Dunham
TRG0616R.DOC

CASE NARRATIVE

This case narrative encompasses samples received on June 8, 2020 by Friedman & Bruya, Inc. from the The Riley Group Roystone 2017-015K, F&BI 006120 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	The Riley Group
006120 -01	UST6B-SA-1B-13
006120 -02	UST6B-SA-2W-10
006120 -03	UST6B-SA-3N-10
006120 -04	UST6B-SA-4E-10
006120 -05	SPL-6S-8

All quality control requirements were acceptable.

Date of Report: 06/16/20
Date Received: 06/08/20
Project: Roystone 2017-015K, F&BI 006120
Date Extracted: 06/09/20
Date Analyzed: 06/09/20

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

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

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

Sample ID Laboratory ID	Gasoline	Diesel	Heavy Oil	Surrogate (% Recovery) (Limit 48-168)
UST6B-SA-1B-13 006120-01	D	ND	ND	96
UST6B-SA-2W-10 006120-02	ND	ND	ND	92
UST6B-SA-3N-10 006120-03	ND	ND	ND	92
UST6B-SA-4E-10 006120-04	ND	ND	ND	99
Method Blank 00-1253 MB2	ND	ND	ND	98

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

Date of Report: 06/16/20
Date Received: 06/08/20
Project: Roystone 2017-015K, F&BI 006120
Date Extracted: 06/09/20
Date Analyzed: 06/09/20

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

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

Sample ID Laboratory ID	Benzene	Toluene	Ethyl Benzene	Total Xylenes	Surrogate (% Recovery) (Limit 50-150)
UST6B-SA-2W-10 006120-02	<0.02	<0.02	<0.02	<0.06	80
UST6B-SA-3N-10 006120-03	<0.02	0.026	0.085	0.25	87
UST6B-SA-4E-10 006120-04	<0.02	<0.02	<0.02	<0.06	79
Method Blank 00-1124 MB2	<0.02	<0.02	<0.02	<0.06	83

Date of Report: 06/16/20
Date Received: 06/08/20
Project: Roystone 2017-015K, F&BI 006120
Date Extracted: 06/09/20
Date Analyzed: 06/09/20

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

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

Sample ID Laboratory ID	Benzene	Toluene	Ethyl Benzene	Total Xylenes	Gasoline Range	Surrogate (% Recovery) (Limit 50-150)
UST6B-SA-1B-13 006120-01 1/20	<0.4	<0.4	1.9	3.7	1,900	89
SPL-6S-8 006120-05	<0.02	<0.02	<0.02	<0.06	<5	80
Method Blank 00-1124 MB2	<0.02	<0.02	<0.02	<0.06	<5	83

Date of Report: 06/16/20
Date Received: 06/08/20
Project: Roystone 2017-015K, F&BI 006120
Date Extracted: 06/09/20
Date Analyzed: 06/09/20

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

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

Sample ID Laboratory ID	Diesel Range (C_{10}-C_{25})	Motor Oil Range (C_{25}-C_{36})	Surrogate (% Recovery) (Limit 48-168)
SPL-6S-8 006120-05	<50	<250	98
Method Blank 00-1300 MB	<50	<250	94

Analysis For Total Metals By EPA Method 6020B

Client ID:	UST6B-SA-1B-13	Client:	The Riley Group
Date Received:	06/08/20	Project:	Roystone 2017-015K, F&BI 006120
Date Extracted:	06/10/20	Lab ID:	006120-01
Date Analyzed:	06/11/20	Data File:	006120-01.052
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Lead	8.54

Analysis For Total Metals By EPA Method 6020B

Client ID:	Method Blank	Client:	The Riley Group
Date Received:	NA	Project:	Roystone 2017-015K, F&BI 006120
Date Extracted:	06/10/20	Lab ID:	I0-332 mb2
Date Analyzed:	06/10/20	Data File:	I0-332 mb2.036
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

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

Analysis For Volatile Compounds By EPA Method 8260D

Client Sample ID:	UST6B-SA-1B-13	Client:	The Riley Group
Date Received:	06/08/20	Project:	Roystone 2017-015K, F&BI 006120
Date Extracted:	06/10/20	Lab ID:	006120-01
Date Analyzed:	06/10/20	Data File:	061028.D
Matrix:	Soil	Instrument:	GCMS4
Units:	mg/kg (ppm) Dry Weight	Operator:	MS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	103	62	145
Toluene-d8	98	55	145
4-Bromofluorobenzene	97	65	139

Compounds:	Concentration mg/kg (ppm)
Hexane	<0.25
Methyl t-butyl ether (MTBE)	<0.05
1,2-Dichloroethane (EDC)	<0.05
Benzene	<0.03
Toluene	<0.05
1,2-Dibromoethane (EDB)	<0.05
Ethylbenzene	<0.05
m,p-Xylene	<0.1
o-Xylene	<0.05
Naphthalene	<0.05

Analysis For Volatile Compounds By EPA Method 8260D

Client Sample ID:	Method Blank	Client:	The Riley Group
Date Received:	Not Applicable	Project:	Roystone 2017-015K, F&BI 006120
Date Extracted:	06/10/20	Lab ID:	00-1262 mb
Date Analyzed:	06/10/20	Data File:	061011.D
Matrix:	Soil	Instrument:	GCMS4
Units:	mg/kg (ppm) Dry Weight	Operator:	MS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	100	62	145
Toluene-d8	103	55	145
4-Bromofluorobenzene	96	65	139

Compounds:	Concentration mg/kg (ppm)
Hexane	<0.25
Methyl t-butyl ether (MTBE)	<0.05
1,2-Dichloroethane (EDC)	<0.05
Benzene	<0.03
Toluene	<0.05
1,2-Dibromoethane (EDB)	<0.05
Ethylbenzene	<0.05
m,p-Xylene	<0.1
o-Xylene	<0.05
Naphthalene	<0.05

Date of Report: 06/16/20
Date Received: 06/08/20
Project: Roystone 2017-015K, F&BI 006120

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

Laboratory Code: 006105-01 (Duplicate)

Analyte	Reporting Units	Sample Result (Wet Wt)	Duplicate Result (Wet Wt)	RPD (Limit 20)
Benzene	mg/kg (ppm)	<0.02	<0.02	nm
Toluene	mg/kg (ppm)	<0.02	<0.02	nm
Ethylbenzene	mg/kg (ppm)	<0.02	<0.02	nm
Xylenes	mg/kg (ppm)	<0.06	<0.06	nm
Gasoline	mg/kg (ppm)	<5	<5	nm

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Benzene	mg/kg (ppm)	0.5	94	69-120
Toluene	mg/kg (ppm)	0.5	92	70-117
Ethylbenzene	mg/kg (ppm)	0.5	93	65-123
Xylenes	mg/kg (ppm)	1.5	97	66-120
Gasoline	mg/kg (ppm)	20	105	71-131

Date of Report: 06/16/20
Date Received: 06/08/20
Project: Roystone 2017-015K, F&BI 006120

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

Laboratory Code: 006104-01 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet Wt)	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Diesel Extended	mg/kg (ppm)	5,000	94,000	1 b	1 b	73-135	0 b

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Diesel Extended	mg/kg (ppm)	5,000	90	74-139

Date of Report: 06/16/20
Date Received: 06/08/20
Project: Roystone 2017-015K, F&BI 006120

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

Laboratory Code: 006138-32 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet wt)	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Lead	mg/kg (ppm)	50	22.1	85	87	75-125	2

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Lead	mg/kg (ppm)	50	99	80-120

Date of Report: 06/16/20
Date Received: 06/08/20
Project: Roystone 2017-015K, F&BI 006120

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

Laboratory Code: 006120-01 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet wt)	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Hexane	mg/kg (ppm)	2.5	<0.25	77	77	10-137	0
Methyl t-butyl ether (MTBE)	mg/kg (ppm)	2.5	<0.05	99	99	21-145	0
1,2-Dichloroethane (EDC)	mg/kg (ppm)	2.5	<0.05	94	94	12-160	0
Benzene	mg/kg (ppm)	2.5	<0.03	94	94	29-129	0
Toluene	mg/kg (ppm)	2.5	<0.05	90	90	35-130	0
1,2-Dibromoethane (EDB)	mg/kg (ppm)	2.5	<0.05	95	95	28-142	0
Ethylbenzene	mg/kg (ppm)	2.5	<0.05	92	92	32-137	0
m,p-Xylene	mg/kg (ppm)	5	<0.1	94	94	34-136	0
o-Xylene	mg/kg (ppm)	2.5	<0.05	97	97	33-134	0
Naphthalene	mg/kg (ppm)	2.5	<0.05	100	100	14-157	0

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Hexane	mg/kg (ppm)	2.5	80	43-142
Methyl t-butyl ether (MTBE)	mg/kg (ppm)	2.5	89	60-123
1,2-Dichloroethane (EDC)	mg/kg (ppm)	2.5	87	56-135
Benzene	mg/kg (ppm)	2.5	87	68-114
Toluene	mg/kg (ppm)	2.5	84	66-126
1,2-Dibromoethane (EDB)	mg/kg (ppm)	2.5	88	74-132
Ethylbenzene	mg/kg (ppm)	2.5	85	64-123
m,p-Xylene	mg/kg (ppm)	5	89	78-122
o-Xylene	mg/kg (ppm)	2.5	89	77-124
Naphthalene	mg/kg (ppm)	2.5	90	63-140

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 analyte 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 due to sample matrix effects.

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

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

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

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

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

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

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

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

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

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

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

006120

SAMPLE CHAIN OF CUSTODY

ME 06/08/20 VSI/COI

Page # 1 of 1

Report To Jerry Sawetz

Company Riley Group

Address

City, State, ZIP

Phone Email Jsawetz@riley-group.com edunham

SAMPLERS (*signature*) E R

PROJECT NAME: Roystone

PO #: 2017-015K

REMARKS: Project specific RLs? - Yes / No

INVOICE TO

TURNAROUND TIME
- [x] Standard turnaround
- [ ] RUSH
- Rush charges authorized by:

SAMPLE DISPOSAL
- [ ] Archive samples
- [ ] Other
- Default: Dispose after 30 days

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	ANALYSES REQUESTED: NWTPH-Dx	NWTPH-Gx	BTEX EPA 8021	NWTPH-HCID	VOCs EPA 8260	PAHs EPA 8270	PCBs EPA 8082	Gas Target VOCs	Lead			Notes
~~UST6B-1B-~~																	
UST6B-SA-1B-13	01 A-E	6/8/20 (NP)	6/8/20 10:00	Soil	5			X	X				⊗	⊗			Sample titled (NP) UST6B-SA-1B-10
UST6B-SA-2W-10	02		10:05		5			X	X								
UST6B-SA-3N-10	03		10:20		5			X	X								
UST6B-SA-4E-10	04		10:10		5			X	X								
SPL-6S-8	05		1030		5	X	X	X									

⊗ - per JS 6/10/20 mt

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: E R	Eric Dunham	RGI	6/8	1430
Received by:	Nhan Pham	FEBT	6/8/20	1430
Relinquished by:				
Received by:		Samples received at 12 °C		

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

JWD v19

APPENDIX C

DECOMMISSIONING & DISPOSAL DOCUMENTATION

RILEYGROUP

WASTE MANAGEMENT

EZ Profile™

Requested Facility: Chemical Waste Management (Hazardous Waste Facility) ☐ Unsure Profile Number: OR344922

☐ Multiple Generator Locations (Attach Locations) ☑ Request Certificate of Disposal ☐ Renewal? Original Profile Number: _____

A. GENERATOR INFORMATION (MATERIAL ORIGIN)

1. Generator Name: Roystone on Queen Anne, LLC
2. Site Address: 631 Queen Anne Avenue N
   (City, State, ZIP) Seattle WA 98109
3. County: King
4. Contact Name: Pui Leung
5. Email: pleung@vibrantcities.com
6. Phone: (206) 659-5750 7. Fax: _____
8. Generator EPA ID: WAD988483384 ☐ N/A
9. State ID: _____ ☑ N/A

B. BILLING INFORMATION ☐ SAME AS GENERATOR

1. Billing Name: Roystone on Queen Anne, LLC
2. Billing Address: 606 Maynard Avenue South Suite 251
   (City, State, ZIP) Seattle WA 98104
3. Contact Name: Pui Leung
4. Email: pleung@vibrantcities.com
5. Phone: (206) 659-5750 6. Fax: _____
7. WM Hauled? ☐ Yes ☑ No
8. P.O. Number: 2017-015K
9. Payment Method: ☑ Credit Account ☐ Cash ☐ Credit Card

C. MATERIAL INFORMATION

1. Common Name: INC02 F002-D018 Listed Waste Oil
   Describe Process Generating Material: ☐ See Attached
   Waste oil solution encountered inside UST discovered during construction.
2. Material Composition and Contaminants: ☐ See Attached

1. Oil Water Mixture	100 %
2.	
3.	
4.	
Total comp. must be equal to or greater than 100%	≥100%

3. State Waste Codes: _____ ☑ N/A
4. Color: black
5. Physical State at 70°F: ☐ Solid ☑ Liquid ☐ Other: _____
6. Free Liquid Range Percentage: 100 to 100 ☐ N/A
7. pH: _____ to _____ ☑ N/A
8. Strong Odor: ☑ Yes ☐ No Describe: sweet
9. Flash Point: ☐ <140°F ☐ 140°–199°F ☑ ≥200° ☐ N/A

D. REGULATORY INFORMATION

1. EPA Hazardous Waste? ☑ Yes* ☐ No
   Code: D018, F002
2. State Hazardous Waste? ☐ Yes ☑ No
   Code: _____
3. Is this material non-hazardous due to Treatment, Delisting, or an Exclusion? ☐ Yes* ☑ No
4. Contains Underlying Hazardous Constituents? ☑ Yes* ☐ No
5. From an industry regulated under Benzene NESHAP? ☐ Yes* ☑ No
6. Facility remediation subject to 40 CFR 63 GGGGG? ☐ Yes* ☑ No
7. CERCLA or State-mandated clean-up? ☐ Yes* ☑ No
8. NRC or State-regulated radioactive or NORM waste? ☐ Yes* ☑ No

***If Yes, see Addendum (page 2) for additional questions and space.**

9. Contains PCBs? → If Yes, answer a, b and c. ☐ Yes ☑ No
   a. Regulated by 40 CFR 761? ☐ Yes ☐ No
   b. Remediation under 40 CFR 761.61 (a)? ☐ Yes ☐ No
   c. Were PCB imported into the US? ☐ Yes ☐ No
10. Regulated and/or Untreated Medical/Infectious Waste? ☐ Yes ☑ No
11. Contains Asbestos? ☐ Yes ☑ No
    → If Yes: ☐ Non-Friable ☐ Non-Friable – Regulated ☐ Friable

E. ANALYTICAL AND OTHER REPRESENTATIVE INFORMATION

1. Analytical attached ☑ Yes
   Please identify applicable samples and/or lab reports:
   Sample UST-A-Product applies to the waste
2. Other information attached (such as MSDS)? ☐ Yes

F. SHIPPING AND DOT INFORMATION

1. ☑ One-Time Event ☐ Repeat Event/Ongoing Business
2. Estimated Quantity/Unit of Measure: 7
   ☐ Tons ☐ Yards ☑ Drums ☐ Gallons ☐ Other: _____
3. Container Type and Size: 55-gallon drums
4. USDOT Proper Shipping Name: ☑ N/A
   _____

G. GENERATOR CERTIFICATION (PLEASE READ AND CERTIFY BY SIGNATURE)

By signing this EZ Profile™ form, I hereby certify that all information submitted in this and all attached documents contain true and accurate descriptions of this material, and that all relevant information necessary for proper material characterization and to identify known and suspected hazards has been provided. Any analytical data attached was derived from a sample that is representative as defined in 40 CFR 261 - Appendix 1 or by using an equivalent method. All changes occurring in the character of the material (i.e., changes in the process or new analytical) will be identified by the Generator and be disclosed to Waste Management prior to providing the material to Waste Management.

☑ I am an Authorized Agent signing on behalf of the Generator, and I have confirmed with the Generator that information contained in this profile, as well as supporting documents provided, are accurate and complete.

Name (Print): Pui Leung Date: 6/10/2020

Title: Manager

Company: Roystone On Queen Anne LLC

Certification Signature

EZ Profile™ Addendum

Only complete this Addendum if prompted by responses on EZ Profile™ (page 1) or to provide additional information. Sections and question numbers correspond to EZ Profile™.

Profile Number: OR344922

C. MATERIAL INFORMATION

Describe Process Generating Material (Continued from page 1): If more space is needed, please attach additional pages.

Material Composition and Contaminants (Continued from page 1): If more space is needed, please attach additional pages.

5.	
6.	
7.	
8.	
9.	
Total composition must be equal to or greater than 100%	≥100%

D. REGULATORY INFORMATION

Only questions with a "Yes" response in Section D on the EZ Profile™ form (page 1) need to be answered here.

1. EPA Hazardous Waste
   a. Please list all USEPA listed and characteristic waste code numbers:
   b. Is the material subject to the Alternative Debris standards (40 CFR 268.45)? ❑ Yes ☑ No
   c. Is the material subject to the Alternative Soil standards (40 CFR 268.49)? → If Yes, complete question 4. ❑ Yes ☑ No
   d. Is the material exempt from Subpart CC Controls (40 CFR 264.1083)? ❑ Yes ☑ No
      → If Yes, please check **one** of the following:
      ❑ Waste meets LDR or treatment exemptions for organics (40 CFR 264.1082(c)(2) or (c)(4))
      ❑ Waste contains VOCs that average <500 ppmw (CFR 264.1082(c)(1)) – will require annual update.
2. State Hazardous Waste → Please list all state waste codes: _____
3. For material that is Treated, Delisted, or Excluded → Please indicate the category, below:
   ❑ Delisted Hazardous Waste ❑ Excluded Waste under 40 CFR 261.4 → Specify Exclusion: _____
   ❑ Treated Hazardous Waste Debris ❑ Treated Characteristic Hazardous Waste → If checked, complete question 4.
4. Underlying Hazardous Constituents → Please list all Underlying Hazardous Constituents:
   toluene, ethylbenzene, xylene, naphthalene and chrysene
5. Industries regulated under Benzene NESHAP include petroleum refineries, chemical manufacturing plants, coke by-product recovery plants, and TSDFs.
   a. Are you a TSDF? → If yes, please complete Benzene NESHAP questionnaire. If not, continue. ❑ Yes ❑ No
   b. Does this material contain benzene? ❑ Yes ❑ No
      1. If yes, what is the flow weighted average concentration? _____ ppmw
   c. What is your facility's current total annual benzene quantity in Megagrams? ❑ <1 Mg ❑ 1–9.99 Mg ❑ ≥10 Mg
   d. Is this waste soil from a remediation? ❑ Yes ❑ No
      1. If yes, what is the benzene concentration in remediation waste? _____ ppmw
   e. Does the waste contain >10% water/moisture? ❑ Yes ❑ No
   f. Has material been treated to remove 99% of the benzene or to achieve <10 ppmw? ❑ Yes ❑ No
   g. Is material exempt from controls in accordance with 40 CFR 61.342? ❑ Yes ❑ No
      → If yes, specify exemption: _____
   h. Based on your knowledge of your waste and the BWON regulations, do you believe that this waste stream is subject to treatment and control requirements at an off-site TSDF? ❑ Yes ❑ No
6. 40 CFR 63 GGGGG → Does the material contain <500 ppmw VOHAPs at the point of determination? ❑ Yes ❑ No
7. CERCLA or State-Mandated clean up → Please submit the Record of Decision or other documentation with process information to assist others in the evaluation for proper disposal. A "Determination of Acceptability" may be needed for CERCLA wastes not going to a CERCLA approved facility.
8. NRC or state regulated radioactive or NORM Waste → Please identify Isotopes and pCi/g: _____

Revised June 30, 2015

Additional Profile Information

Profile Number: OR344922

C. MATERIAL INFORMATION

Material Composition and Contaminants (Continued from page 2): If more space is needed, please attach additional pages.

10.	
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31.	
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35.	
36.	
37.	
38.	
39.	
40.	
Total composition must be equal to or greater than 100%	≥100%

D. REGULATORY INFORMATION

1. EPA Hazardous Waste
   a. Please list all USEPA listed and characteristic waste code numbers (Continued from page 2):

2. Form Code: W113

3. Source Code: G45

LAND DISPOSAL RESTRICTION (LDR) NOTIFICATION AND CERTIFICATION FORM (PHASE IV)

WASTE MANAGEMENT

Generator Name: Roystone on Queen Anne, LLC

Profile Number: OR344922 Manifest Number: _____

Ref. #	2. US EPA HAZARDOUS WASTE CODE(s)	3. SUBCATEGORY ENTER THE SUBCATEGORY DESCRIPTION (If not applicable, simply check NONE)		4. HOW MUST THE WASTE BE MANAGED? ENTER LETTER FROM BELOW
		DESCRIPTION	NONE	
1.	D018	N/A	☑	A
2.	F002	N/A	☑	A
3.			☐	
4.			☐	

1. Is this waste a non-wastewater or wastewater? (See 40 CFR 268.2) Check ONE: ☑ Non-Wastewater ☐ Wastewater
   For hazardous debris meeting the definition of debris and subject to the alternate treatment standards in 268.45, check here: ☐
2. In **column 2**, identify ALL USEPA hazardous waste codes that apply to this waste shipment, as defined by 40 CFR 261.
   - To list additional waste code(s) use Land Disposal Notification/Certification Supplemental Form (CWM-2005-D) and check here: ☐
3. In **column 3**, for each waste code, identify the subcategory if one applies, or check NONE if the waste code has no subcategory.
4. In **column 4**, enter the letter from the list below (A. – D.) that describes how the waste must be managed to comply with the land disposal restriction regulations in 40 CFR 268. Please note that if you enter B.1, B.3, B.6 or D, you are certifying that the waste meets all the Land Disposal Restrictions and may be landfilled without further treatment. If you enter B.4, you are certifying that the waste has been decharacterized, but still requires treatment for UHCs. (States authorized by EPA to manage the LDR program may have regulatory citations different from the 40 CFR citations listed on this form. Where these regulatory citations differ, your form will be deemed to refer to those state citations as well as 40 CFR.)
5. Constituents of concern for waste codes F001-F005 and F039 and underlying hazardous constituents (UHCs) for D001-D043, must be identified unless the treatment facility will monitor for all constituents. **If any of these codes apply, check appropriate box below:**
   - To identify constituents of concern for F001-F005, F039 and UHCs, use the Identification of Constituents of Concern Form (CWM-2007) and check here: ☑
   - If UHCs are applicable, but none are present at the point of generation, check here: ☐
   - If incineration facility will monitor for all constituents of concern (except dioxins), check here: ☐

MANAGEMENT METHODS

A RESTRICTED WASTE REQUIRES TREATMENT
This waste must be treated to the applicable treatment standards set forth in 40 CFR 268.40.

B.1 RESTRICTED WASTE TREATED TO PERFORMANCE STANDARDS
"I certify under penalty of law that I personally have examined and am familiar with the treatment technology and operation of the treatment process used to support this certification. Based on my inquiry of those individuals immediately responsible for obtaining this information, I believe that the treatment process had been operated and maintained properly so as to comply with the treatment standards specified in 40 CFR 268.40 without impermissible dilution of the prohibited waste. I am aware there are significant penalties for submitting a false certification including the possibility of fine and imprisonment."

B.3 GOOD FAITH ANALYTICAL CERTIFICATION FOR INCINERATED ORGANICS
"I certify under penalty of law that I have personally examined and am familiar with the treatment technology and operation of the treatment process used to support this certification. Based on my inquiry of those individuals immediately responsible for obtaining this information, I believe that the non-wastewater organic constituents have been treated by combustion units as specified in 268.42 Table 1. I have been unable to detect the non-wastewater organic constituents despite having used best faith efforts to analyze for such constituents. I am aware that there are significant penalties for submitting a false certification, including the possibility of fine and imprisonment."

B.4 DECHARACTERIZED WASTE REQUIRES TREATMENT FOR UNDERLYING HAZARDOUS CONSTITUENTS
"I certify under penalty of law that the waste has been treated in accordance with the requirements of 40 CFR 268.40 or 268.49, to remove the hazardous characteristic. This de-characterized waste contains underlying hazardous constituents that require further treatment to meet treatment standards. I am aware that there are significant penalties for submitting a false certification, including the possibility of fine and imprisonment."

B.6 RESTRICTED DEBRIS TREATED TO ALTERNATE PERFORMANCE STANDARDS
"I certify under penalty of law that the debris has been treated in accordance with the requirements of 40CFR 268.45. I am aware that there are significant penalties for making a false certification, including the possibility of fine and imprisonment."

C. RESTRICTED WASTE SUBJECT TO A VARIANCE
This waste is subject to a national capacity variance, a treatability variance, or a case-by-case extension. Enter the effective date of prohibition in column (4) above.

D. RESTRICTED WASTE CAN BE LAND DISPOSED WITHOUT FURTHER TREATMENT
"I certify under penalty of law I personally have examined and am familiar with the waste through analysis and testing or through knowledge of the waste to support this certification that the waste complies with the treatment standards specified in 40 CFR Part 268 Subpart D and LAC 33: V. 2223-2233. I believe that the information I submitted is true, accurate and complete. I am aware that there are significant penalties for submitting a false certification, including the possibility of fine and imprisonment."

I hereby certify that all information submitted in this and all associated documents is complete and accurate to the best of my knowledge and information.

Name: (Print) Pui Leung Title: Manager

Signature: _____ Date: 6/10/2020

Hazardous WAM Approval

Requested Management Facility: Chemical Waste Management (Hazardous Waste Facility)

Profile Number: OR344922 Waste Approval Expiration Date: 06/09/2021

APPROVAL DETAILS

Hazardous Classification: RCRA Hazardous Profile Renewal: ☐ Yes ☑ No

Management Method: Transship for Alternate Treatment

Generator Name: Roystone on Queen Anne, LLC

Material Name: INC02 F002-D018 Listed Waste Oil

Management Facility Precautions, Special Handling Procedures or Limitation on approval:

Generator Conditions

- Must meet applicable OSHA, DOT packaging, labeling, shipping and manifesting requirements per 49 CFR.
- An EPA form 8700-22 must be used for all hazardous shipments and may be ordered from an authorized vendor or your TSC.
- The WM decision is based on specific parameters defined within this waste profile. Waste received that is non-conforming in any way will need to be re-evaluated and managed in accordance with all RCRA and State regulations. If alternative treatment is not available and the waste cannot be managed it will be rejected back to the generator.
- Approval number must accompany shipment.
- A signed Land Ban Notification/Certification must accompany the first shipment to the disposal facility. A new certification must be provided upon any change in the wastestream.
- Drummed waste must be marked with profile number on top & side of the containers & bear only the appropriate labeling under RCRA and/or DOT provisions
- Chemical Waste Management has all the necessary permits and licenses for the waste that has been characterized and identified by this approved profile.
- Approved for non-bulk packaging only.

Must be scheduled. Please contact Bob Mulholland (rmulholl@wm.com) or Tina Weiser (tweiser@wm.com).

WM Authorization Name: Leslie Fichera Title: Waste Approval Manager

WM Authorization Signature: Leslie Fichera Date: 06/09/2020

Agency Authorization (if Required): Date:

Transaction Detail Report
Ticket Created Criteria: 06/01/2020 12:00 AM to 08/25/2020 11:59 PM
Business Unit Name: Chem Waste Landfill - S04273 (USA)
User: messig
Date: Aug 25 2020, 3:17:38 PM - Central Standard Time
Operation Type: All
Customer Name: ROYSTONE ON QUEEN ANNE LLC (Roystone on Queen Anne, LLC)
Ticket Type: All
Customer Type: All
PMT Category: All
Profile:

Ticket Creation Date	Time In	Time Out	Oper. In	Oper. Out	Ticket	Customer	Carrier	Vehicle	Manual Ticket No	Manifest	Profile	Material	Rate	Rate Unit	Tons
7/1/2020 10:09	6/30/2020 10:06	6/30/2020 10:06	nfletche	nfletche	30257	Roystone on Queen Anne, LLC	CRL	RAIL	476893	013792690FLE	OR343850 / LF04 - PCE/TCE IMPACTED SOIL	RCRA Disp-Tons	$105.00	TON	16.47
7/1/2020 16:34	6/30/2020 16:30	6/30/2020 16:30	nfletche	nfletche	30292	Roystone on Queen Anne, LLC	CRL	RAIL	476928	013792689FLE	OR343850 / LF04 - PCE/TCE IMPACTED SOIL	RCRA Disp-Tons	$105.00	TON	15.41
7/14/2020 13:30	7/14/2020 13:30	7/14/2020 13:30	nfletche	nfletche	30387	Roystone on Queen Anne, LLC	CRL	RAIL	476927	013792691FLE	OR343850 / LF04 - PCE/TCE IMPACTED SOIL	RCRA Disp-Tons	$105.00	TON	18.19
7/15/2020 8:58	7/15/2020 8:58	7/15/2020 8:58	nfletche	nfletche	30426	Roystone on Queen Anne, LLC	CRL	RAIL	476947	019236396JJK	OR344922 / INC02 F002-D018 Listed Waste Oil	RCRA Outb-Each DM55	$435.00	EA	1.47
8/19/2020 11:31	8/19/2020 11:30	8/19/2020 11:30	nfletche	nfletche	31356	Roystone on Queen Anne, LLC	CRL	RAIL	476954	013792683FLE	OR343850 / LF04 - PCE/TCE IMPACTED SOIL	RCRA Disp-Tons	$105.00	TON	11.22
Total															**62.76**

STRAIGHT BILL OF LADING

ORIGINAL — NOT NEGOTIABLE

Shipper No. 07807

Carrier No.

Page 1 of 4

MARINE VACUUM SERVICE INC.

(Name of carrier) (SCAC)

Date May-22-20

On Collect on Delivery shipments the letters "COD" must appear before consignee's name or as otherwise provided in Item 430, Sec 1

TO:

Consignee MARINE VACUUM SERVICE INC

Street 1516 SOUTH GRAHAM STREET

City SEATTLE State WA Zip Code 98108

FROM:

Shipper ELK HEIGHT

Street 631 Queen Anne Ave N

City Seattle State WA Zip Code

CHEMTEL 1-800-255-3924

CONTRACT MIS3627926

24 hr Emergency Contact Tel. No.

Route

Vehicle Number VOL

No. of Units & Container Type	HM	BASIC DESCRIPTION UN or NA Number, Proper Shipping Name, Hazard Class, Packing Group	TOTAL QUANTITY (Weight, Volume, Gallons, etc.)	WEIGHT (Subject to Correction)	RATE	CHARGES (For Carrier Use Only)
1 TT	X	(DOT SPEC TANK REQUIRED) UN1863 FUEL, AVIATION, TURBIN ENGINE, CLASS 3, PG I				
1 TT	X	(DOT SPEC TANK REQUIRED) UN1203 GASOLINE, MIXTURE CLASS 3, PG II				
1 TT	X	(DOT SPEC TANK REQUIRED) UN1203 GASOLINE, CLASS 3, PG II				
1 TT	X	NA1993 DIESEL MIXTURE, CLASS 3, PG III				
1 TT	X	NA1993 DIESEL, CLASS 3, PG III				
1 TT	X	NA1270 PETROLEUM OIL, CLASS 3, PG I				
1 TT	X	NA1270 PETROLEUM OIL, MIXTURE, CLASS 3, PG I				
1 TT		OILY WASTE WATER NON REG BY DOT	250	gallon		
1 TT		WASTE WATER NON REG BY DOT				
1 TT		MARINE VESSEL SEWAGE NON REG BY DOT				
1 TT		STREET WASTE STORM PIPE CLEANING NON REG BY DOT				

PLACARDS TENDERED: YES ☐ NO ☒

Note — (1) Where the rate is dependent on value, shippers are required to state specifically in writing the agreed or declared value of the property as follows: "The agreed or declared value of the property is hereby specifically stated by the shipper to be not exceeding ____ ____ per ____."
(2) Where the applicable tariff provisions specify a limitation of the carrier's liability absent a release or a value declaration by the shipper and the shipper does not release the carrier's liability or declare a value, the carrier's liability shall be limited to the extent provided by such provisions. See NMFC Item 172.
(3) Commodities requiring special or additional care or attention in handling or stowing must be so marked and packaged as to ensure safe transportation. See Section 2(e) of Item 360, Bills of Lading, Freight Bills and Statements of Charges and Section 1(a) of the Contract Terms and Conditions for a list of such articles.

I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations.

Signature

REMIT C.O.D. TO. ADDRESS

COD Amt: $

Subject to Section 7 of the conditions, if this shipment is to be delivered to the consignee without recourse on the consignor, the consignor shall sign the following statement:
The carrier shall not make delivery of this shipment without payment of freight and all other lawful charges.

(Signature of Consignor)

C.O.D. FEE: PREPAID ☐ COLLECT ☐ $

TOTAL CHARGES $

FREIGHT CHARGES

FREIGHT PREPAID except when box at right is checked ☐ Check box if charges are to be collect

RECEIVED, subject to the classifications and tariffs in effect on the date of the issue of this Bill of Lading the property described above in apparent good order, except as noted (contents and condition of contents of packages unknown), marked, consigned, and destined as indicated above which said carrier (the word carrier being understood throughout this contract as meaning any person or corporation in possession of the property under the contract) agrees to carry to its usual place of delivery at said destination, if on its route, otherwise to deliver to another carrier on the route to said destination. It is mutually agreed as to each carrier of all or any of said property over all or any portion of said route to destination and as to each party at any time interested in all or any said property, that every service to be performed hereunder shall be subject to all the bill of lading terms and conditions in the governing classification on the date of shipment.

Shipper hereby certifies that he is familiar with all the lading terms and conditions in the governing classification and the said terms and conditions are hereby agreed to by the shipper and accepted for himself and his assigns.

SHIPPER ELK Height

PER

May-22-20

CARRIER M/V

PER

DATE May-22-20

1

Permanent post-office address of shipper

BILL OF LADING

N° 00769

PRODUCT TRANSPORT MANIFEST

MARINE VACUUM SERVICE, INC.

24 HOUR EMERGENCY PHONE NUMBER (206) 762-0240

FAX NUMBER 206-763-8084

TRUCK NUMBER 127 DATE 6-8-20

TO
DESTINATION
NAME Metro
STREET 1836 S Graham St
CITY/STATE Seattle, WA 98108

FROM
SHIPPER
NAME Elks Heights CK
STREET 631 Queen Anne Ave N
CITY/STATE Seattle, WA 98109

QUANTITY	PROPER SHIPPING NAME	UN (PLACARD) NUMBER
1	3000 Gal UST for Disposal	Fill w/ Concrete
	SLUDGE	

RECEIVER Tim DATE 6-8-20 SHIPPER DATE 6-8-20

NOTE.

Customer warrants that the waste petroleum products being transferred by the above collector do not contain any contaminates including without limitations pesticides, chlorinated solvents at concentrations greater than 1000 PPM, any detectable levels of PCBs, or any other material classified as dangerous or hazardous waste by 40 CFR Part 261, Subpart C and D (implementing the Federal Resource Conservation and Recover Act), or by any equivalent state dangerous or hazardous substance classification programs. Should laboratory tests find this waste not in compliance with 40 CFR Part 261, customer (generator) agrees to pay for all disposal costs incurred.

BILL OF LADING

PRODUCT TRANSPORT MANIFEST

MARINE VACUUM SERVICE, INC.

24 HOUR EMERGENCY PHONE NUMBER (206) 762-0240

FAX NUMBER 206-763-8084

TRUCK NUMBER 422 DATE 6/1/20

N° 00745

TO
DESTINATION
NAME Marine Vacuum Service
STREET 1516 E Graham St
CITY/STATE Seattle, WA

FROM
SHIPPER
NAME ELK HEIGHTS
STREET 123 Queen Ann Ave N
CITY/STATE Seattle, WA

QUANTITY	PROPER SHIPPING NAME	UN (PLACARD) NUMBER
2 USTs	500 gallon UST for disposal	
	SLUDGE	

RECEIVER R.B. Allen DATE

SHIPPER DATE 6-1-20

NOTE

Customer warrants that the waste petroleum products being transferred by the above collector do not contain any contaminates including without limitations, pesticides, chlorinated solvents at concentrations greater than 1000 PPM, any detectable levels of PCBs, or any other material classified as dangerous or hazardous waste by 40 CFR Part 261, Subpart C and D (implementing the Federal Resource Conservation and Recover Act), or by any equivalent state dangerous or hazardous substance classification programs. Should laboratory tests find this waste not in compliance with 40 CFR Part 261, customer (generator) agrees to pay for all disposal costs incurred.

SOUND TESTING, INC.
P.O. BOX 16204 SEATTLE, WA 98116
(206) 932-0206 FAX (206) 937-3848
WWW.SOUNDTESTINGINC.COM

MARINE CHEMIST CERTIFICATE

SERIAL Nº 47613

MARINE VACUUM Survey Requested by	MARINE VACUUM Vessel Owner or Agent	JUNE 1 2020 Date
PLEASE SEE BELOW Vessel	STEEL CYLINDRICA UNDERGROUND TANKS Type of Vessel	 Specific Location of Vessel
HEATING FUEL Last Three (3) Loadings	0, LEL VISUAL Tests Performed	10 AM Time Survey Completed

HOME HEATING OIL 600-GAL (WEST)

BOILER FUEL-WASTE OIL - 500-GAL (EAST)

BOTH TANKS FREE OF COMBUSTIBLE GAS. MAY BE SAFELY TRANSPORTED ON PUBLIC HIGHWAYS.

BOTH TANKS: 0% LEL
21% OXYGEN

MAY BE LOADED AND SECURED FOR TRANSPORT.

BERM EAST TANK - HAS SEVERAL OPENINGS.

In the event of changes adversely affecting conditions in the above spaces, or if in any doubt, immediately stop all work and contact the undersigned Marine Chemist.

Qualifications: Manipulation of valves or devices tending to alter conditions in pipe lines or tanks noted above, unless specifically approved in this certificate, will require re-inspection and a new Certificate for spaces so affected. All piping, heating coils, pumps and floating roof gaskets attached to or contained within spaces listed above shall be considered "NOT SAFE" unless otherwise specifically designated.

STANDARD SAFETY DESIGNATIONS

(These detail the minimum conditions for Safe Entry and Hot Work.) The Marine Chemist may request additional measures if workplace conditions so dictate.

ATMOSPHERE SAFE FOR WORKERS means that in a space (a) the oxygen content is between 19.5% and 22% by volume, and (b) combustible gas is less than 10% of the Lower Explosive Limit, and (c) airborne toxic materials are within permissible concentrations as listed in OSHA's Subpart Z or in ACGIH's current list of Threshold Limit Values.

SAFE FOR HOT WORK means that (a) oxygen within the space is less than 22% by volume; and (b) the combustible gas is less than 10% of the Lower Explosive Limit; and (c) cargo residues within the space will not combust during hot work; and (d) pipes that can deliver hazardous materials to the workspace have been separated, blanked, or locked out, and nearby hazardous spaces have been evaluated and noted on the certificate.

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

"The undersigned acknowledges receipt of this Certificate and understands conditions and limitations under which it was issued."

Signed _____
Name Company Date

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

Signed Don Sly Nº 598
Marine Chemist Certificate No.

POSTING

SOUND TESTING, INC.
P.O. BOX 16204 SEATTLE, WA 98116
(206) 932-0206 FAX (206) 937-3848
WWW.SOUNDTESTINGINC.COM

MARINE CHEMIST CERTIFICATE

SERIAL No. 47593

MARINE VACUUM — — JUNE 8, 2020
Survey Requested by | Vessel Owner or Agent | Date

UST — UST — 681 QUEEN ANNE SEATTLE WA
Vessel | Type of Vessel | Specific Location of Vessel

SLURRY FILL — O_2=20.9%, LEL=0%, VISUAL — 9:15 AM
Last Three (3) Loadings | Tests Performed | Time Survey Completed

SAFE FOR EXCAVATION

N2500g UST

SAFE FOR TRANSPORTATION

TANK IS SLURRY-FILLED + OPEN TO ATMOSPHERE.

In the event of changes adversely affecting conditions in the above spaces, or if in any doubt, immediately stop all work and contact the undersigned Marine Chemist.

Qualifications: Manipulation of valves or devices tending to alter conditions in pipe lines or tanks noted above, unless specifically approved in this certificate, will require re-inspection and a new Certificate for spaces so affected. All piping, heating coils, pumps and floating roof gaskets attached to or contained within spaces listed above shall be considered "NOT SAFE" unless otherwise specifically designated.

STANDARD SAFETY DESIGNATIONS

(These detail the minimum conditions for Safe Entry and Hot Work.) The Marine Chemist may request additional measures if workplace conditions so dictate.

ATMOSPHERE SAFE FOR WORKERS means that in a space (a) the oxygen content is between 19.5% and 22% by volume, and (b) combustible gas is less than 10% of the Lower Explosive Limit, and (c) airborne toxic materials are within permissible concentrations as listed in OSHA's Subpart Z or in ACGIH's current list of Threshold Limit Values.

SAFE FOR HOT WORK means that (a) oxygen within the space is less than 22% by volume; and (b) the combustible gas is less than 10% of the Lower Explosive Limit; and (c) cargo residues within the space will not combust during hot work; and (d) pipes that can deliver hazardous materials to the workspace have been separated, blanked, or locked out, and nearby hazardous spaces have been evaluated and noted on the certificate.

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

"The undersigned acknowledges receipt of this Certificate and understands conditions and limitations under which it was issued."

Signed _____ Name MARVAC 6/8/20 Company Date

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

Signed _____ Marine Chemist N°70p Certificate No.

POSTING

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: 3000 GALLON

Last Contents Hydro CARBON

Tank Location: 631 QUEEN ANNE AVE N

SEATTLE, WA 98109

Marine Vacuum Service, Inc. certifies that the above mentioned tank(s) have been triple rinsed in 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: S Tolleson LLC
1110 32nd AVE E
SEATTLE, WA 98112

Contractor: ELK HEIGHTS EXCAVATION
22710 SE LAKE FRANCIS RD
MAPLE VALLEY, WA 98038

M.V.S. Representative:

Date: 6-8-2020

Notes:

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

STORAGE TANK

CERTIFICATE OF DESTRUCTION

DATE: 06/08/2020

TANK OWNER: S TOLLER LLC

TANK LOCATION: 631 QUEEN ANNE AVE N SEATTLE, WA 98109

TANK DESCRIPTION: 3000 GALLON UST

LAST CONTENTS HELD IN TANKS: HYDRO CARBON.

Marine Vacuum Service, Inc certifies that the tank mentioned above was pumped of all liquid materials and washed clean with a high-pressure washer and soap solution. The tank and contents therein have been disposed of according to all Local, State and Federal Regulations.

Thank you,

Marine Vacuum Service, Inc.

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: 2-500 gallon

Last Contents Hydro Carbon

Tank Location: 631 Queen Anne Ave N
Seattle, WA 98109

Marine Vacuum Service, Inc. certifies that the above mentioned tank(s) have been triple rinsed in 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: S Toller LLC
1110 32nd Ave E
Seattle, WA

Contractor: Elk Heights Excavation
22710 SE Lake Francis Rd
Maple Valley, WA 98038

M.V.S. Representative: DS

Date: 5/22/2020

Notes:

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

TANK DISPOSAL CERTIFICATE

DATE: September 25, 2020

CUSTOMER: Elk Heights Excavation
OWNER:
631Quen Ann Ave. N
Seattle WA

Tank Size: Two Approximately 500 gallons

Last product: Heating Oil

DATE DESTRUCTED: 6/3/20

Marine Vacuum Service Inc. certifies that the above-mentioned tank has been cleaned and disposed of by metal reclaiming in accordance with federal, state and local regulations by Marine Vacuum Service Inc.

Marine Vacuum Service Inc. Representative

Tom Myler
Project Manager

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

TANK DISPOSAL CERTIFICATE

DATE: September 25, 2020

CUSTOMER: Elk Heights Excavation
OWNER:
631Quen Ann Ave. N
Seattle WA

Tank Size: Two Approximately 500 gallons

Last product: Heating Oil

DATE DESTRUCTED: 6/3/20

Marine Vacuum Service Inc. certifies that the above-mentioned tank has been cleaned and disposed of by metal reclaiming in accordance with federal, state and local regulations by Marine Vacuum Service Inc.

Marine Vacuum Service Inc. Representative

Tom Myler
Project Manager

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

STORAGE TANK

CERTIFICATE OF DESTRUCTION

DATE: 06/08/2020

TANK OWNER: S TOLLER LLC

TANK LOCATION: 631 QUEEN ANNE AVE N SEATTLE, WA 98109

TANK DESCRIPTION: 3000 GALLON UST

LAST CONTENTS HELD IN TANKS: HYDRO CARBON.

Marine Vacuum Service, Inc certifies that the tank mentioned above was pumped of all liquid materials and washed clean with a high-pressure washer and soap solution. The tank and contents therein have been disposed of according to all Local, State and Federal Regulations.

Thank you,

Marine Vacuum Service, Inc.

MARINE VACUUM SERVICE,INC.

P. O. BOX 24263
SEATTLE, WA 98124

Email: AR@MARINEVACUUM.COM
Phone # 206-762-0240 (main) 206-745-3667
Fax # 206-763-8084

INVOICE

Date	Invoice #
5/5/2020	70097

Bill To

ELK HEIGHTS EXCAVATION
22710 SE LAKE FRANCIS RD
MAPLE VALLEY, WA 98038

Job Description / Site address

DISPOSAL @ MARVAC
BOL # 31115

P.O. No.	Terms

Quantity	U/M	Description	Rate	Amount
		5/5/2020****** DISPOSAL @ MARVAC		0.00
1	EA	DISPOSE OF CONTAMINATED SCRAP METAL + trucking	454.00	454.00

Due Date	6/4/2020	*Please remit payment for this invoice by the Due Date. An initial $25.00 late fee (on each invoice) and a finance charge of 1.5% monthly or 18% annually will be assessed for all late payments. Customer assumes all late charges and reasonable cost of attorney fees in event of collection.*	Subtotal	$454.00
			Sales Tax (0.0%)	$0.00
			Payments/Credits	$0.00
			Balance Due	**$454.00**

ZK

Elk Heights EXCAVATION, LLC

CUSTOMER Pavillion Construction
Keystone Apts
631 Queen Anne Ave N Seattle
Product piping handling

No. 12549

5-13-20 Wed
DATE

22710 SE Lake Francis Rd • Maple Valley, WA 98038 • Office 425-432-5040 • Fax 425-432-5162 • ELKHEHE891JL • office@elkheightsexcavation.com

QUANTITY	DESCRIPTION	PRICE	AMOUNT
1 hr	320 Excavator	$170.00/hr	$170.00
1 hr	Foreman	$65.00/hr	$65.00
2 hrs	Dump Truck Solo (Price TBD)	$125—	$250—
	MarVac Dump Fee (Price TBD		
	Load product piping into Solo truck per geotech requests. Export Solo to MarVac		
		Total	

SIGNATURE OF BUYER Rogen Wood

Signature of this invoice will be considered your notice of our intent to lien this project, if necessary. Interest at 1.5% per month will be charged on all past due accounts.
Charging due by the tenth of the month following date of this billing.

Elk Heights
EXCAVATION, LLC

Invoice

Bill To
Pavilion Construction NW, LLC 15455 SW Hallmark Drive, STE 200 Lake Oswego, OR 97035

Date	Invoice #
7/9/2020	3843

PROJECT
ROYSTONE APARTMENTS

Quantity	Description	Rate	Amount
	T/M PAVILION CONSTRUCTION - Roystone Apartments C/O request		
	UST Pipe Removal		
1.25	6-29-20 Mon Inv 12695 Solo 1.25hrs	125.00	156.25
1	10% Markup: Labor / Equipment	15.63	15.63
1	MarVac Onsite	454.00	454.00
1	15% Markup: SubTier Work	68.10	68.10
4.5	6-16-20 Tues STAND-BY-TIME 4.5hrs	145.00	652.50
1	15% Markup: SubTier Work	97.88	97.88
	SUB TOTAL		1,444.36
		0.00%	0.00
		Total	$1,444.36

Terms Net 30 days. **We appreciate your business.**

22710 SE Lake Francis Rd. Maple Valley, WA 98038 P: 425.432.5040 F: 425.432.5162 office@elkheightsexcavation.com

Elk Heights EXCAVATION, LLC

CUSTOMER Pawlion

Key Stone

UST Pipe Removal, MarVac

USE

No. 12695

Mon

6-29-20

DATE

22710 SE Lake Francis Rd • Maple Valley, WA 98038 • Office 425-432-5040 • Fax 425-432-5162 • ELKHEHE891JL • office@elkheightsexcavation.com

QUANTITY	DESCRIPTION	PRICE	AMOUNT
~~1 Hour~~	~~320 Excavator~~	~~$170.00~~	~~$170.00~~
1.25 hrs	Solo Load of Expert Pipe on site	$125.00	$156.25
	Disposals Per MarVac		
	MarVac invoice 70504	$454.00	
	worked on Loading Pipe's From Fuel		
	Tanks		

SIGNATURE OF BUYER Roger A Wood

Signature of this invoice will be considered your notice of our intent to lien this project, if necessary. Interest at 1.5% per month will be charged on all past due accounts.
Charging due by the tenth of the month following date of this billing.

APPENDIX D

UST SITE ASSESSMENT PHOTOGRAPHS

RILEYGROUP

Photograph 1: View of the removal of 1,066-gallon diesel UST4A situated on the west-central portion of the Property. No evidence of holes or a release were encountered.

Photograph 2: View of the removal of 317-gallon waste oil USTA situated on the central portion of the Property. Holes were observed in UST and a release of gasoline- and oil-range TPH and benzene occurred at this location.

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

Roystone Redevelopment		Figure D-1
RGI Project Number 2017-015K	UST Site Assessment Photographs	Date Drawn: 10/2020
Address: 631 Queen Anne Avenue North, Seattle, Washington 98109		

Photograph 3: View of the approximately 0.5-inch hole located on the top east side of USTA.

Photograph 4: View of the approximately 3 millimeter hole located on the bottom east side of USTA.

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Roystone Redevelopment		Figure D-2
RGI Project Number 2017-015K	UST Site Assessment Photographs	Date Drawn: 10/2020
Address: 631 Queen Anne Avenue North, Seattle, Washington 98109		

Photograph 5: View of a large hole on the top of UST6B where the UST was likely cut prior to filling the UST with CDF.

Photograph 6: View of the removal of 3,455-gallon UST6B, which appeared to have been previously decommissioned. An approximately 10-inch hole was observed on the bottom of UST6B. This is likely where the UST was cut for the purpose of collecting a soil sample prior to filling the UST with CDF. However, no records pertaining to previous work at UST6B were found. A release of gasoline-range TPH likely occurred in this location prior to the UST being filled with CDF.

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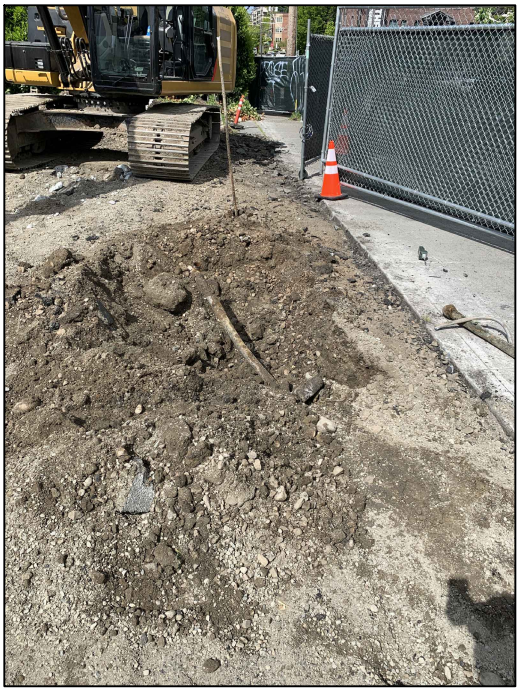
Roystone Redevelopment		Figure D-3
RGI Project Number 2017-015K	UST Site Assessment Photographs	Date Drawn: 10/2020
Address: 631 Queen Anne Avenue North, Seattle, Washington 98109		

Photograph 7: View of CDF being excavated from inside UST6B.

Photograph 8: View of suspected product piping encountered on the east-central portion of the Property near former boring DP3. It was not confirmed which UST this pipe belonged to.

Photograph 9: View of a former pump island and associated product pipe situated on the east-central portion of the Property, which may have been associated with UST6B.



Photograph 10: View of suspected product pipe located on the north-central portion of the Property near former well MW9. The pipe was originally oriented north-northeast south-southwest and was moved by the excavator prior to the photograph. It was not confirmed which UST this pipe belonged to.

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Roystone Redevelopment		Figure D-5
RGI Project Number 2017-015K	UST Site Assessment Photographs	Date Drawn: 10/2020
Address: 631 Queen Anne Avenue North, Seattle, Washington 98109		

Photograph 11: View of suspected product pipe situated on the southwest portion of the Property, which may have been associated with former UST4.

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Roystone Redevelopment		Figure D-6
RGI Project Number 2017-015K	UST Site Assessment Photographs	Date Drawn: 10/2020
Address: 631 Queen Anne Avenue North, Seattle, Washington 98109		

APPENDIX E

UST SITE ASSESSMENT CHECKLIST

RILEYGROUP

DEPARTMENT OF ECOLOGY
State of Washington

UST ID #: _____

County: King

SITE CHECK/SITE ASSESSMENT CHECKLIST

FOR UNDERGROUND STORAGE TANKS

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

I. UST FACILITY	II. OWNER/OPERATOR INFORMATION
Facility Compliance Tag #:	Owner/Operator Name: Mr. Pui Leung
UST ID #: UST4A	Business Name: Roystone on Queen Anne, LLC
Site Name: Roystone Redevelopment	Address: 606 Maynard Avenue South #251
Site Address: 631 Queen Anne Avenue North	City: Seattle State: WA Zip: 98104
City: Seattle, Washington 98109	Phone: 206-659-5750
Phone:	Email: pleung@vibrantcities.com

III. CERTIFIED SITE ASSESSOR

Service Provider Name: Eric Dunham		Company Name: The Riley Group, Inc.	
Cell Phone: 425-415-0551	Email: Edunham@riley-group.com	Address: 17522 Bothell Way Northeast	
Certification #: 9261523	Exp. Date: 07/24/2020	City: Bothell	State: WA Zip: 98011

IV. TANK INFORMATION

TANK ID	TANK CAPACITY	LAST SUBSTANCE STORED	DATE SITE CHECK OR ASSESSMENT CONDUCTED
UST4A	1066 gallons	Diesel	06/01/2020

V. REASON FOR CONDUCTING SITE CHECK/SITE ASSESSMENT (check one)

- [X] Release investigation following permanent UST system closure (i.e. tank removal or closure-in-place).
- [ ] Release investigation following a failed tank and/or line tightness test.
- [ ] Release investigation following discovery of contaminated soil and/or groundwater.
- [ ] Release investigation directed by Ecology to determine if the UST system is the source of offsite impacts.
- [ ] UST system is undergoing a "change-in-service", which is changing from storing a regulated substance (e.g. gasoline) to storing a non-regulated substance (e.g. water).
- [ ] Directed by Ecology for UST system permanently closed 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. **(See Figure 1)**	☒	☐
2. A brief summary of information obtained during the site inspection is provided **(Section 5.4.1)**	☒	☐
3. A summary of UST system data is provided **(Section 5.2.4)**	☒	☐
4. The soils characteristics at the UST site are described. **(Section 5.2.4.2)**	☒	☐
5. Is there any apparent groundwater in the tank excavation?	☐	☒
6. A brief description of the surrounding land use is provided. **(see Figure 2)**	☒	☐
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. **(See Appendix B)**	☒	☐
8. The following items are provided in one or more sketches: **(see Figures 1-3)**		
• Location and ID number for all field samples collected **(See Figure 3)**	☒	☐
• If applicable, groundwater samples are distinguished from soil samples (**Not Applicable)**	☐	☐
• Location of samples collected from stockpiled excavated soil **(See forthcoming Interim Action Report)**	☐	☐
• Tank and piping locations and limits of excavation pit **(See Figure 3)**	☒	☐
• Adjacent structures and streets **(See Figure 2)**	☒	☐
• Approximate locations of any on-site and nearby utilities **(Not applicable. The Property was under redevelopment and no utilities were present in UST locations)**	☐	☐
9. If sampling procedures are different from those specified in the guidance, has justification for using these alternative sampling procedures been provided? **(Not Applicable)**	☐	☐
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. **(See Table 1)**	☒	☐
11. Any factors that may have compromised the quality of the data or validity of the results are described. **Not Applicable**	☐	☐
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.	☐	☒

VII. REQUIRED SIGNATURES

Signature acknowledges the Site Check or Site Assessment complies with UST regulations WAC 173-360A-0730 through 0750.

Eric Dunham		9/25/2020
Print 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/tcp/ust-lust/people.html

DEPARTMENT OF ECOLOGY
State of Washington

UST ID #: _____

County: King

SITE CHECK/SITE ASSESSMENT CHECKLIST

FOR UNDERGROUND STORAGE TANKS

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

I. UST FACILITY	II. OWNER/OPERATOR INFORMATION
Facility Compliance Tag #:	Owner/Operator Name: Mr. Pui Leung
UST ID #: UST6B	Business Name: Roystone on Queen Anne, LLC
Site Name: Roystone Redevelopment	Address: 606 Maynard Avenue South #251
Site Address: 631 Queen Anne Avenue North	City: Seattle State: WA Zip: 98104
City: Seattle, Washington 98109	Phone: 206-659-5750
Phone:	Email: pleung@vibrantcities.com

III. CERTIFIED SITE ASSESSOR

Service Provider Name: Eric Dunham		Company Name: The Riley Group, Inc.	
Cell Phone: 425-415-0551	Email: Edunham@riley-group.com	Address: 17522 Bothell Way Northeast	
Certification #: 9261523	Exp. Date: 07/24/2020	City: Bothell	State: WA Zip: 98011

IV. TANK INFORMATION

TANK ID	TANK CAPACITY	LAST SUBSTANCE STORED	DATE SITE CHECK OR ASSESSMENT CONDUCTED
UST6B	3455 gallons	Gasoline	06/08/2020

V. REASON FOR CONDUCTING SITE CHECK/SITE ASSESSMENT (check one)

- [X] Release investigation following permanent UST system closure (i.e. tank removal or closure-in-place).
- [ ] Release investigation following a failed tank and/or line tightness test.
- [ ] Release investigation following discovery of contaminated soil and/or groundwater.
- [ ] Release investigation directed by Ecology to determine if the UST system is the source of offsite impacts.
- [ ] UST system is undergoing a "change-in-service", which is changing from storing a regulated substance (e.g. gasoline) to storing a non-regulated substance (e.g. water).
- [ ] Directed by Ecology for UST system permanently closed 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. **(See Figure 1)**	☒	☐
2. A brief summary of information obtained during the site inspection is provided **(Section 5.4.1)**	☒	☐
3. A summary of UST system data is provided **(Section 5.2.4)**	☒	☐
4. The soils characteristics at the UST site are described. **(Section 5.2.4.2)**	☒	☐
5. Is there any apparent groundwater in the tank excavation?	☐	☒
6. A brief description of the surrounding land use is provided. **(see Figure 2)**	☒	☐
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. **(See Appendix B)**	☒	☐
8. The following items are provided in one or more sketches: **(see Figures 1-3)**		
• Location and ID number for all field samples collected **(See Figure 3)**	☒	☐
• If applicable, groundwater samples are distinguished from soil samples (**Not Applicable)**	☐	☐
• Location of samples collected from stockpiled excavated soil **(See forthcoming Interim Action Report)**	☐	☐
• Tank and piping locations and limits of excavation pit **(See Figure 3)**	☒	☐
• Adjacent structures and streets **(See Figure 2)**	☒	☐
• Approximate locations of any on-site and nearby utilities (**Not applicable. The Property was under redevelopment and no utilities were present in UST locations**)	☐	☐
9. If sampling procedures are different from those specified in the guidance, has justification for using these alternative sampling procedures been provided? **Not Applicable**	☐	☐
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. **(See Table 1)**	☒	☐
11. Any factors that may have compromised the quality of the data or validity of the results are described. (**Not Applicable)**	☐	☐
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. (**It appeared that this UST had previously been abandoned in place prior to the assessment. The release likely occurred prior to the UST being abandoned.)**	☒	☐

VII. REQUIRED SIGNATURES

Signature acknowledges the Site Check or Site Assessment complies with UST regulations WAC 173-360A-0730 through 0750.

Eric Dunham		9/25/2020
Print or Type Name	Signature of Certified Site Assessor	Date

SITE CHECK/SITE ASSESSMENT CHECKLIST
FOR UNDERGROUND STORAGE TANKS

INSTRUCTIONS

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Olympia, WA 98504-7655

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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

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DEPARTMENT OF ECOLOGY
State of Washington

UST ID #: _____

County: King

SITE CHECK/SITE ASSESSMENT CHECKLIST

FOR UNDERGROUND STORAGE TANKS

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Site Address: 631 Queen Anne Avenue North	City: Seattle State: WA Zip: 98104
City: Seattle, Washington 98109	Phone: 206-659-5750
Phone:	Email: pleung@vibrantcities.com

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Cell Phone: 425-415-0551	Email: Edunham@riley-group.com	Address: 17522 Bothell Way Northeast	
Certification #: 9261523	Exp. Date: 07/24/2020	City: Bothell	State: WA Zip: 98011

IV. TANK INFORMATION

TANK ID	TANK CAPACITY	LAST SUBSTANCE STORED	DATE SITE CHECK OR ASSESSMENT CONDUCTED
USTA	317 gallons	Gasoline	06/01/2020

V. REASON FOR CONDUCTING SITE CHECK/SITE ASSESSMENT (check one)

- [X] Release investigation following permanent UST system closure (i.e. tank removal or closure-in-place).
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- [ ] Release investigation following discovery of contaminated soil and/or groundwater.
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4. The soils characteristics at the UST site are described. **(Section 5.2.4.2)**	☒	☐
5. Is there any apparent groundwater in the tank excavation?	☐	☒
6. A brief description of the surrounding land use is provided. **(see Figure 2)**	☒	☐
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. **(See Appendix B)**	☒	☐
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• Location of samples collected from stockpiled excavated soil **(See forthcoming Interim Action Report)**	☐	☐
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• Adjacent structures and streets **(See Figure 2)**	☒	☐
• Approximate locations of any on-site and nearby utilities (**Not applicable. The Property was under redevelopment and no utilities were present in UST locations**)	☐	☐
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11. Any factors that may have compromised the quality of the data or validity of the results are described. (**Not Applicable)**	☐	☐
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.	☒	☐

VII. REQUIRED SIGNATURES

Signature acknowledges the Site Check or Site Assessment complies with UST regulations WAC 173-360A-0730 through 0750.

Eric Dunham		9/25/2020
Print or Type Name	Signature of Certified Site Assessor	Date

SITE CHECK/SITE ASSESSMENT CHECKLIST
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INSTRUCTIONS

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HQ (360) 407-7170	Federal facilities in Western Washington
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Southwest (360) 407-6300	Clallam, Clark, Cowlitz, Grays Harbor, Jefferson, Lewis, Mason, Pacific, Pierce, Skamania, Thurston, Wahkiakum

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