FINAL INTERIM ACTION REPORT

PREPARED BY:

THE RILEY GROUP, INC.
17522 BOTHELL WAY NORTHEAST
BOTHELL, WASHINGTON 98011

PREPARED FOR:

MR. PUI LEUNG
ROYSTONE ON QUEEN ANNE, LLC
606 MAYNARD AVENUE SOUTH #104
SEATTLE, WASHINGTON 98104

RGI PROJECT NO. 2017-015K
ECOLOGY AGREED ORDER NO. 16537

ROYSTONE REDEVELOPMENT
TEXACO 211577 MONTEREY SITE
631 QUEEN ANNE AVENUE NORTH
SEATTLE, WASHINGTON 98109

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Corporate Office
17522 Bothell Way Northeast
Bothell, Washington 98011
Phone 425.415.0551 ♦ Fax 425.415.0311
www.riley-group.com

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1.0 Introduction

The Riley Group, Inc. (RGI) is pleased to present this Interim Action Report (IA Report) documenting the IA conducted at the Roystone Redevelopment property located at 631 Queen Anne Avenue North in Seattle, Washington (herein referred to as the Property).

The Property is owned by Roystone on Queen Anne LLC (Roystone) and is identified by the King County Assessor as tax parcel 38789900425 (Parcel 0425). Petroleum releases associated with one or more of the former gasoline service stations and related underground improvements located on the Property have been confirmed and documented in previous investigations.

The Property is part of a larger Site identified by the Washington Department of Ecology (Ecology) as the Texaco 211577 Monterey Site (CSID 6663). Ecology determined that Roystone and Chevron Environmental Management Company (CEMC) were Potentially Liable Parties (PLPs) for the Site in 2019. On August 19, 2020, Roystone, CEMC, and Ecology entered into Agreed Order (AO) No. 16537. A copy of the executed AO is included in Appendix A.

Under AO 16537, Roystone and CEMC have designated lead roles for work associated with the cleanup of the Site. Roystone is responsible for the cleanup of the portion of the Site situated within the Property boundaries and the cleanup of the remainder of the Site, outside the Property boundaries, is the responsibility of CEMC. The location of the Property and the Site is displayed on Figure 2.

This IA Report documents the remediation of petroleum impacted soil (PCS) and groundwater present throughout the Property and was completed in general accordance with the *Interim Action Work Plan* (Work Plan) dated August 20, 2019, which was approved by Ecology. RGI and Ecology frequently corresponded during the course of the IA to ensure that the work conducted complied with Ecology requirements under the AO. This IA Report is being submitted to Ecology in support of a request for a letter from Ecology indicating that the IA was completed to Ecology's satisfaction under AO 16537.

The activities documented in this IA Report comply with Model Toxics Control Act (MTCA) and WAC 173-340-430 for conducting Interim Actions.

2.0 Property History

The following sections summarize the historical ownership of the Property, business operations, and history of underground storage tanks (USTs) on the Property. The locations of pertinent historical features including the known former service stations, USTs, pump islands, and other related underground improvements are depicted on Figure 3.

2.1 OWNERSHIP HISTORY

In 1927, the Property was owned by the James Estate and leased the Property to the California Petroleum Corporation (CalPet). CalPet opened the first gasoline service station on the Property and subsequently subleased the business to other operators. The Texaco Corporation (Texaco) acquired CalPet in 1929 and entered into a sublease.

In 1954, Texaco purchased the Property and demolished the first generation service station and constructed a new fuel station on the southern portion of the Property. In 1967, Texaco remodeled the service station. Texaco owned the Property through 1977 at which time the Property was purchased by the Arnolds Family Estate (Arnolds). Arnolds continued to operate as a Texaco-branded gasoline service station. Arnolds sold the Property to John Hee Yoo in 1989, but the sales agreement was rescinded in 1993 and ownership of the Property was transferred back to Arnolds in 1993. At that time, the gasoline service station was decommissioned by Arnolds and began

operating as a convenience store/deli. The Property operated as a convenience store from 1993 to 2018.

Arnolds owned the Property through 2017 at which time the Property was sold to Roystone (current Property owner).

2.2 PROPERTY HISTORY

The history of the Property, UST systems, and related underground improvements are described below and pertinent historical features are depicted on Figure 3.

The Property was depicted on historical Sanborn maps as being occupied by stores and dwellings in 1893 and 1905. In the 1917 map, the Property was depicted as vacant.

The first record of a fuel station being present on the Property was in 1927 when CalPet opened a gasoline service station consisting of two 550-gallon USTs (USTs 1 and 2), which were reportedly constructed of concrete and installed beneath the sidewalk adjacent to Queen Anne Avenue North near the northeast corner of the Property. These USTs were reportedly abandoned in-place sometime prior to 1934. Eight 50-gallon lube oil USTs were reportedly installed on both sides of the building on the central portion of the Property (four on the north side of the building and four on the south side of the building). The exact locations of these lube oil USTs were not provided in previous reports. In 1934, two 4,000-gallon USTs (USTs 5A and 6A) were installed on the eastern portion of the Property. Sometime prior to 1934, Texaco installed one 550-gallon UST and one 1,000-gallon UST (USTs 3 and 4) on the north-central and southwestern portions of the Property, respectively.

From 1927 to 1954, the southern portion of the Property was historically occupied by a gasoline service station, which included a wash rack, hoists, grease pits, and a lube service bay. A tire shop, tailor shop/Acme Cleaners, and an accessory store occupied this portion of the Property at that time. Archived assessor records indicated that the southeastern portion of the Property was occupied by the Acme Cleaners in 1927 (a possible dry cleaning facility). This area of the Property was occupied by a tailor shop and possibly Acme Cleaners, in 1934. It is unknown if the Acme Cleaners was in fact a dry cleaners, or how long the Acme Cleaners operated on the Property, but does not appear to be more than nine years. A service station building was present on the central portion of the Property from approximately 1927 to 1954.

In 1954, Texaco purchased the Property and the service station on the central portion of the Property was demolished and a new fuel station was constructed on the southern portion of the Property. It is suspected that the eight 50-gallon lube oil USTs associated with the former service station were removed (these USTs were not encountered during the IA). A dispenser island was installed on the northern portion of the Property and a 4,000-gallon UST (UST 7A) was installed to the west of UST 5A.

Texaco remodeled the station in 1967 and two 10,000-gallon USTs (USTs 8 and 9) were installed on the western portion of the Property. Canopies were also installed on the north-central and east-central portions of the Property. In 1971, one 6,000-gallon UST (UST 10) was installed when Texaco introduced leaded gasoline.

In 1978, apparent petroleum hydrocarbon odors were detected at the southwest-adjoining Monterey Apartments, which initiated a series of environmental investigations and remedial actions at the Property and off-Property. Previous environmental investigations conducted on the Property are summarized in Section 3. Previous environmental investigations completed on- and off-Property are discussed by others in various reports. A list of all previous reports pertaining to the Property is included in Appendix B.

In 1982, Arnolds replaced UST 7A with a 6,000-gallon UST (UST 7B) and USTs 5A and 6A were replaced with two 8,000-gallon USTs (5B and 6B), which were intended to store diesel fuel. The eastern dispensers and lube service bay were removed in 1986 and replaced by restrooms and a deli.

In 1993, seven USTs (USTs 3, 4, 5B, 7B, 8, 9, and 10) were reportedly removed from the Property and the Property began operating as a convenience store/deli until 2018.

Based on information reported in previous reports by others, several USTs were suspected to be present on the Property prior to the start of the IA. Concrete USTs 1 and 2 (beneath the sidewalk adjacent to Queen Anne Avenue North) were reported as abandoned in-place and there is no record of the removal of these USTs. UST 6B (on the eastern portion of the Property) was also reported as abandoned in-place. A previously decommissioned UST was encountered on the eastern portion of the Property and presumed to be UST6B.

The eight 50-gallon USTs surrounding the former service station on the central portion of the Property were suspected to be removed during demolition of the service station in 1954, but no official record of their removal was encountered. These USTs were not encountered during the IA.

3.0 Previous Investigations

The following documents have previously been prepared, which document environmental conditions for the Property:

- *Interim Action Work Plan* (Work Plan) dated August 20, 2019 by RGI
- *Groundwater Monitoring – 4th Quarter 2018 dated January 15, 2019* by RGI.
- *Supplemental Subsurface Investigation Report* (SSI Report) dated December 26, 2017 by RGI.
- *Second Semi-annual Groundwater Monitoring Report* dated March 26, 2014 by Liedos.
- *Limited Subsurface Investigation Report* (LSI) dated July 10, 2012 by Sound Earth Strategies (SES).
- *Final Remedial Investigation and Site Summary Report* (RI) dated August 20, 2007 by Science Applications International Corporation (SAIC).
- *Conceptual Site Model, Risk Assessment, and Supplemental Investigation Proposal* dated August 21, 2002 by Delta Environmental Consultants (Delta).

Summaries of the above-referenced documents are provided below. The summaries below include only information considered relevant to the Property, which includes investigation/remedial action work conducted on the Property, or in close proximity to the Property boundaries. Additionally, numerous groundwater monitoring events took place on the Property from 1986 to 2017. Therefore, the numerous routine groundwater monitoring events conducted during this timeframe are not summarized below.

The locations of historical features and sample locations are depicted on Figures 3 and 4. All historical soil and groundwater analytical data pertaining to the Property, as reported by RGI and others, are summarized in Tables 1 and 3, respectively. Copies of borelogs and monitoring well construction logs obtained from previous investigations associated with the Property are included in Appendix C.

For additional details, the reader should refer to the original documents in their entirety and the complete list of previous reports pertaining to the Property are provided in Appendix B.

3.1 PREVIOUS INVESTIGATIONS

The following sections summarized previous environmental investigations conducted on the Property.

3.1.1 CITY OF SEATTLE FIRE DEPARTMENT 1978

A Seattle Fire Department investigation identified apparent petroleum hydrocarbon odors after receiving complaints from the southwest adjoining Monterey Apartments building. Light non-aqueous phase liquid (LNAPL), determined to be gasoline, was identified in a basement sump reportedly connected to the building footing draining system. This finding initiated investigation of the Property as a potential source of this contamination.

3.1.2 GEOENGINEERS 1986

In 1986, Geoengineers conducted a subsurface investigation on the Site at the request of Ecology. Groundwater monitoring wells MW-6 and MW-9 were installed on the Property and MW-10 was installed off-Property, and up-gradient, in close proximity to the northeast corner of the Property. No groundwater contamination was identified at MW-10. Evidence of petroleum hydrocarbon contamination was observed in wells MW-6 and MW-9 located on the Property. In addition, approximately two feet of LNAPL was observed in MW-6. Groundwater flow direction across the Property was determined to be to the west-southwest.

3.1.3 ECOLOGY 1989 SUMMARY OF INVESTIGATIONS

In 1989, Ecology prepared a summary of previous investigations. Ecology noted problems with the installation of MW-10 in 1986 and indicated that initial installation attempts encountered and punctured what was described as a concrete tank. A strong gasoline odor was noted after breaking through the concrete. Ecology thought the tanks may be related to the 1927 USTs (USTs 1 and 2) that were reported as abandoned in-place. Groundwater concentrations of contaminants have been below MTCA cleanup levels for the past 16 years in well MW-10. No soil analytical data was obtained from MW-10 during installation.

Ecology indicated that recovery well RW2 was installed in 1986 during work on the adjoining Monterey Apartments property. RW2 is situated off-Property, but very close to the southwest corner of the Property. The well was reportedly inactivated due to its ineffectiveness at removing LNAPL.

3.1.4 ECOLOGY & ENVIRONMENT SEPTEMBER 1990

During an investigation of the Site, Ecology and Environment (E&E) conducted a soil gas survey, which included collecting six soil vapor samples near the western and southern Property boundaries, respectively. These locations were reported to have the highest BTEX soil gas concentrations reported in the survey. However, no soil gas analytical data was provided in the reports reviewed by RGI.

E&E also collected and analyzed a sample of LNAPL from MW-6. Analytical results indicated that the LNAPL consisted of relatively non-degraded gasoline with approximately 20% diesel #2. It was also indicated that LNAPL was observed in well RW2.

3.1.5 ECOLOGY & ENVIRONMENT 1991

During the first phase of a Remedial Investigation of the Site, E&E concluded that the point source for the petroleum hydrocarbon vapors present on Monterey Apartments property was the Property. They concluded these vapors would persist indefinitely unless the source contamination located beneath the Property was reduced or removed.

E&E collected groundwater samples throughout the Site, which included Property wells MW-6 and MW-9 and off-Property wells RW2 and MW-10. Analytical results indicated widespread petroleum hydrocarbon groundwater contamination was present that extended from the Property to the west beyond 1st Avenue west. E&E estimated approximately 4,800 gallons of LNAPL were present beneath the Property.

E&E advanced 25 soil gas probes across the Site including soil gas probe 19 on the southeastern portion of the Property and soil gas probes 21 and 22 on the northwestern portion of the Property. Analytical results indicated that BTEX and TPH soil vapor impacts from beneath the Property may have extended as far as 2nd Avenue West. No actual soil vapor analytical data was provided in the reports obtained and reviewed by RGI.

3.1.6 SAIC/Glacier Field Notes 1993

In 1993, UST closure activities were conducted on the Property. However, no report documenting this work was encountered. Information found in field notes/maps obtained from the appendices of previous reports indicated that significant soil contamination was encountered at an eastern dispenser island. A hand drawn map of the excavation area displayed 11 soil sample locations throughout the excavation area (PIT-1 through PIT-11). The notes also indicated that a significant amount of PCS was encountered in the UST excavations and that this contaminated soil was used to backfill the excavation. In other words, it appears that the excavated contaminated soils was not transported off-Property for proper disposal in 1993.

The notes also indicated that a soil vapor extraction (SVE) and a groundwater recovery system were installed with a *spray aeration vacuum extraction (SAVE) treatment system*. The SAVE system operated on the Property and the southwest-adjoining Monterrey Apartments property. The SAVE system was also connected to horizontal extraction piping situated 8 to 10 feet deep in the former UST excavation area. The SAVE system was presumably installed prior to backfilling the 1993 remedial excavation.

SAIC installed vapor extraction well VP-9 on the northwest portion of the Property and recovery well RW4 on the west central portion of the Property in 1993. Soil samples were submitted for analyses from RW4.

3.1.7 Groundwater Technologies, Inc. 1996

In April 1996, Groundwater Technologies, Inc. replaced the SAVE system with a catalytic oxidizer in conjunction with the installation of vapor extraction wells. The system reportedly operated intermittently between September 1996 and December 1997, when the system was shut down. No remediation system as-built drawings or other reports relating to the operation and maintenance of this system were available.

3.1.8 Ecology May 1998

Between October 1995 and November 1997, Ecology periodically sampled groundwater at the Site. Wells sampled on, or close to, the Property included MW-6, MW-9, MW-10, and RW2. Ecology noted that the LNAPL thickness in well MW-6 averaged from one foot to a maximum thickness of three feet.

3.1.9 Farallon Consulting, December 1999 to July 2001 Groundwater Monitoring

In December 1999 and June 2000, Farallon Consulting sampled wells MW-9, MW-10, and VP9 and installed absorbent socks in wells MW-6 and RW-2. The absorbent socks were reportedly changed on a monthly basis.

3.1.10 DELTA, SEPTEMBER 2002

In September of 2002, Delta advanced direct push probes DP-1 to DP-7 and hollow stem auger borings DB-2 (completed as well MW-13) and DB-3 on the Property. All wells were developed and surveyed and soil and groundwater samples were submitted for analyses.

3.1.11 SAIC 2003 SVE SYSTEM UPGRADE

In 2003, SAIC modified the non-operational SVE system primarily to create a negative pressure in soils beneath the southwest-adjoining Monterrey Apartments property. The system did remove a limited amount of soil vapor. In 2005, the system was shut down.

CEMC enrolled the Site into the VCP in 2003 and a Dual Phase Extraction (DPE) system was designed to extract groundwater and soil vapor beneath the Property and the southwest-adjoining Monterrey Apartments Property. Contaminants removed from the subsurface were treated on-Property by thermal oxidation and carbon filtration. Treated groundwater was presumably discharged on the Property to the sanitary sewer.

3.1.12 SAIC (MARCH 2004 –SEPTEMBER 2006)

In March of 2004, SAIC advanced soil boring SP1 on the west-central portion of the Property and soil samples were submitted for analyses.

In October of 2004, SAIC installed well MW-24 off-Property in close proximity to the western Property boundary. The well was developed and surveyed and soil and groundwater samples were submitted for analyses.

In October 2005, SAIC initiated the installation of the DPE system, which included installing extraction wells DPE-5, DPE-6, and DPE-7 on the Property. All three wells were developed and surveyed and soil and groundwater samples were submitted for analyses. Pneumatic groundwater extraction pumps were installed in all three wells. The full system, which was designed to remediate the Property and the southwest-adjoining Monterrey Apartments property, began operation in November 2007. The system was shut down on April 2, 2008 after reportedly removing approximately 45,000 pounds of petroleum hydrocarbons.

3.1.13 SOUND EARTH STRATEGIES LIMITED SUBSURFACE INVESTIGATION (2012)

In 2012, SES conducted a Limited Subsurface Investigation (LSI) and advanced nine test probes (P01 through P09) across the Property. Soil samples were submitted to the laboratory for analyses from each location.

Soil analytical data obtained during the LSI indicated that soil containing concentrations of petroleum related contaminants of concern (COCs) exceeding applicable MTCA soil cleanup levels was present beneath two thirds of the Property. SES concluded that the thickness of petroleum contaminated soil extended from five feet thick on the eastern portion of the Property to 15 feet thick on the western portion of the Property.

SES also performed a Ground Penetrating Radar (GPR) Survey on the Property in an attempt to identify locations of remediation piping. However, the results of the GPR survey were inconclusive.

3.1.14 RGI SUPPLEMENTAL SUBSURFACE INVESTIGATION 2017

In 2017, RGI conducted a Supplemental Subsurface Investigation (SSI) and advanced eight test probes (P1, P2, P3 and SSIP1 through SSIP5) throughout the Property and installed groundwater monitoring wells off-Property to the north (SSI-W2) and east (SSI-W1). Soil and groundwater samples were submitted to the laboratory for analyses.

Soil and groundwater analytical data indicated that soil and/or groundwater contamination likely extended off-Property to the north and east beneath the adjoining sidewalks along West Roy Street and Queen Anne Avenue North. However, groundwater analytical data indicated that groundwater impacts did not extend beyond the northernmost and easternmost portions of the sidewalks where wells SSI-W1 and SSI-W2 were installed.

3.1.15 RGI 2018 AND 2020 GROUNDWATER MONITORING

In November of 2018, RGI collected the final round of groundwater samples prior to the decommissioning all wells located on the Property. Groundwater samples were collected from wells MW-6, MW-9, DPE-5, DPE-6, DPE-7, and VP-9 and off-Property wells MW-10, SSI-W1, and SSI-W2.

Groundwater monitoring well MW-13 was not sampled during this event due to the fact that there was an insufficient volume of water in the well to collect a groundwater sample. MW-13 appeared to be screened such that the bottom of the screen corresponded to the top of the groundwater table. Therefore, MW-13 was dry at certain periods of the year when the water table was lower. RGI attempted to sample well RW4. However, a large steel plate covered the well that could not be removed by RGI.

Concentrations of diesel- and/or oil-range TPH exceeded the applicable groundwater cleanup levels at on-Property wells MW-6, DPE-5, DPE-6, and DPE-7. No COCs were detected at concentrations above the laboratory detection limits at on-Property wells MW-9 and VP-9 and off-Property wells MW-10, SSI-W1 and SSI-W2.

The top of casing (TOC) elevation for wells MW-6, MW-9, MW-13, VP-9, MW-10, SSI-W1, and SSI-W2 were surveyed by a licensed surveyor in December of 2018. Groundwater elevations for the wells that were surveyed ranged from 124.38’ to 136.91’. Groundwater flow direction was determined to be to the west-southwest with an approximate hydraulic gradient of 0.08 ft/ft (MW-10 to MW-6). This data was consistent with groundwater elevation data observed in numerous previous groundwater events.

In March of 2020, RGI collected groundwater samples from off Property wells MW-10, SSI-W1, and SSI-W2 and submitted samples for analyses of COCs. No COCs were detected at concentrations above the applicable groundwater cleanup levels. A copy of the laboratory report pertaining to this sampling event is included in Appendix D and analytical data is summarized in Table 4.

3.1.16 RGI GEOPHYSICAL SURVEY 2019

On March 6, 2019, RGI retained the services of Phil Duos (Geophysicist) to conduct an electromagnetic/ground penetrating radar (EM/GPR) survey to explore the subsurface for any USTs and product piping that remain in-place beneath the asphalt in the northeast portion of the Property and beneath the sidewalks along West Roy Street and Queen Anne Avenue North. The survey area was investigated using a Geonics EM-61 high resolution metal detector to obtain electromagnetic data and a GSSI SIR 3000 Digital Radar with a 400 MHz antenna to obtain GPR data.

In summary, UST6B, which was reported as closed in-place, was identified on the central eastern portion of the Property near the Property boundary at a depth of approximately 6’ bgs. No other USTs were identified in the survey area. During the IA, UST6B was encountered north of the location depicted in the geophysical survey.

The geophysicist indicated that the two 550-gallon concrete USTs 1 and 2 may be located further south and east than depicted in previous reports. If these USTs were closed in-place and filled with sand or controlled density fill (CDF), the instruments used during the survey may not have identified them due to interference caused by concrete and rebar in the sidewalk. A copy of the *Geophysical Investigation Report* dated March 16, 2019 by Phillip H. Duoos is included in Appendix E.

3.1.17 INTERIM ACTION WORK PLAN

RGI prepared the Work Plan dated August 20, 2019. The Work Plan included a summary of all previous environmental investigations on the Property, the Conceptual Site Model (CSM), Property cleanup requirements, and the methodology for completing all work associated with the IA. The Work Plan was reviewed and approved by Ecology prior to commencing with the IA.

4.0 Scope of Services

The scope of services performed for this IA consisted of the following:

- Decommissioned all groundwater monitoring wells situated on-Property prior to and during the IA. These wells included MW-13 (DB-2), DPE-5, DPE-6, DPE-7, RW-4, MW-6, MW-9, and VP-9.
- Performed oversight of the decommissioning and removal of three USTs by the general contractor (GC), Pavilion Construction. The GC also decommissioned one oil water separator (OWS), dispensers, product piping and two hoists encountered during the IA.
- Conducted UST Site Assessments at three UST locations and assessed soil conditions in the location of the OWS, hoists, product piping, and dispenser islands.
- Directed the excavation of test pits and collected soil characterization samples during the IA to guide remedial excavation activities.
- Advanced two test probes (NETP1 and NETP2) at the northeast corner of the Property to assess the depth of the soil contamination in this location where it became necessary to offset the shoring onto the Property in order to protect the integrity of a utility pole. RGI also directed the remedial excavation in this location, which was backfilled with controlled density fill (CDF).
- Directed the remedial excavation of all soil on the Property containing concentrations of COCs that exceeded applicable soil cleanup levels.
- Directed the excavation of soil containing concentrations of COCs below soil cleanup levels. These marginally impacted soils were generally located at shallower depths in the location of the parking garage. These soils required special handling and could not be disposed of as clean soil.
- Assisted the GC with coordinating disposal of PCS.
- Managed disposal of waste oil and soil that was classified as hazardous waste. This included working with Ecology to transfer RCRA ID No. WAD98843384 number from Chevron to Roystone.
- Collected and analyzed confirmation soil samples from the limits the remedial excavation to demonstrate that all soil containing concentrations of COCs above soil cleanup levels had been removed from the Property and to document soil conditions at the Property boundaries. Soil samples collected at the Property boundaries were considered representative of soil that remains in place off-Property.
- Oversaw the partial installation of six groundwater monitoring wells (MW-A, MW-B, MW-C, MW-D, MW-E, and MW-F) on-Property. This work will be documented in a forthcoming report after the well casings adjustments, well monument completions, well surveying, and post IA groundwater sampling are completed in June of 2021.
- Documented installation of the subslab depressurization (SSD) system piping installed by

the GC.

- Prepare this IA Report presenting our observations, findings, conclusions, and recommendations.

5.0 Regulatory Analysis of Property Conditions Under MTCA

5.1 MTCA Cleanup Regulation

In Washington State, the Model Toxics Control Act (MTCA, RCW 70.105D), mandates that site cleanups protect human health and the environment. The MTCA Cleanup Regulation (173-340 WAC) defines the approach for establishing cleanup requirements for individual sites, including the establishment of cleanup standards and selection of cleanup actions.

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

5.2 Cleanup Levels & Screening Levels

Prior to commencing with the IA, RGI selected cleanup levels which were appropriate for evaluating compounds detected in soil and groundwater on the Property.

Groundwater and vapor intrusion were not evaluated during the IA. Therefore, cleanup levels and soil vapor/indoor air screening levels are not discussed herein. The evaluation of post IA groundwater data and the vapor intrusion assessment will be documented in a future report after the installation of the groundwater monitoring wells and associated groundwater sampling are completed in June of 2021.

Soil cleanup levels used to evaluate soil concentrations of COCs in soil during the IA are discussed below.

5.2.1 Soil Cleanup Levels

The selected soil cleanup levels for the Property were the MTCA Method A Soil Cleanup Levels for Unrestricted Land Uses. RGI's evaluation of soil analytical data obtained during the IA and previous investigations indicate that these soil cleanup levels were sufficient to evaluate soil for compliance with MTCA regulations throughout the Property.

During the course of the IA, compounds were detected in soil that are factored into the MTCA Method A TPH soil cleanup level calculations. These compounds (for example, 1,2,4-trimethylbenzene, 1,3,5-trimethylbenzene, and isopropylbenzene) were not assessed individually, as the MTCA Method A cleanup levels are sufficient to assess risks associated with these compounds.

Carcinogenic polycyclic aromatic hydrocarbons (cPAHs) were analyzed in soil and product samples during the IA. CPAHs included benzo(a)anthracene, benzo(b)fluoranthene, benzo(k)fluoranthene, benzo(a)pyrene, chrysene, dibenzo(a,h)anthracene and ideno(1,2,3-cd)pyrene.

When evaluating cPAHs, the mixture of the cPAH compounds is considered a single hazardous substance. The toxicity equivalency factor (TEF) methodology was developed by the EPA to evaluate the toxicity and assess the risks of a mixture of structurally related chemicals with a common mechanism of action. A TEF is an estimate of the relative toxicity of a chemical mixture compared

to a reference chemical. For mixtures of cPAHs, the reference chemical is benzo(a)pyrene. Therefore, when evaluating these compounds for MTCA compliance, the calculated total cPAHs (TEF modified) is compared to the MTCA Method A soil cleanup for benzo(a)pyrene of 0.1 milligrams/kilogram (mg/kg) as per WAC 173-340-708(8).

When no MTCA Method A soil cleanup level had been established for a given compound, the MTCA Method B soil cleanup level obtained from the Ecology Cleanup Level and Risk Calculation (CLARC) database was referenced.

MTCA Method A and B soil cleanup Levels, collectively referred to as soil cleanup levels herein, are summarized in Tables 1 and 2.

6.0 Methodology

6.1 SOIL REMEDIATION

Soil containing concentrations of COCs exceeding applicable soil cleanup levels were encountered throughout the Property. Additionally, soil containing concentrations of COCs below applicable soil screening levels were also encountered on the Property. Marginally "impacted" soils required off-Property disposal at a proper receiving facility due to the fact that they could not be exported or re-used as "clean" soils.

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

Multiple historical releases have occurred on the Property, which resulted in PCS being present in soil throughout the Property at various depths. Therefore, the excavation of PCS up to the four Property boundaries was considered one remedial excavation.

The IA included collection and analysis of soil samples to demonstrate compliance with MTCA cleanup levels for soil and to guide the remedial excavation. Soil characterization samples were collected and analyzed from 10 test pits throughout the Property including locations of historical fuel station improvements. Soil samples were submitted to a fixed-based analytical laboratory for analyses of COCs. Data obtained from these samples was used to guide the remedial excavation and to characterize soil for disposal. Soil samples were either collected directly from the excavation or collected from the trackhoe bucket and placed directly into laboratory supplied sample containers deemed appropriate for the intended analyses. Locations of soil characterization samples and test pits are displayed on Figures 7 through 10.

Confirmation soil samples were collected from the limits of the remedial excavation to verify that all soil containing concentrations of COCs above applicable soil cleanup levels had been removed from within the Property boundaries and to document soil conditions at the Property boundaries, which remains in place off-Property. In general, confirmation samples were collected from the lateral limits of the remedial excavation (Property boundaries) at a distance that did not exceed 20 linear feet apart. At least one confirmation sample was collected at the bottom of the remedial excavation for every 400 square feet of excavation bottom. A mobile laboratory was used to analyze confirmation samples collected from the bottom of excavation in order to minimize the amount of contaminated soil removed from the Property.

The shoring was offset from the Property boundary approximately at varying intervals ranging from one to thirty inches along the west and south Property boundaries and the southern portion of the

east Property boundary. Therefore, soil in planned shoring locations was field screened prior to installation. In locations where soil was not contaminated, soil samples were collected at the location of the shoring wall prior to installation of wood lagging. In locations where contaminated soil was present, soil was excavated up to the Property boundary. PCS was removed from the area between the shoring wall and the Property boundary using an excavator and a pressurized handheld demolition hammer was used to remove PCS from locations behind piles. After all PCS was removed up to the Property boundary, a confirmation soil sample was collected at the Property boundary. The wood lagging was then installed and a hole cut in the lagging. CDF was then pumped through the hole into the area between the lagging and the Property boundary.

Field screening was performed during all soil sampling and consisted of visual and olfactory observations, photoionization detector (PID) readings, and/or sheen testing. In locations where low concentrations of benzene or tetrachloroethene (PCE) was present or suspected to be present, a PID that provided measurements in parts per billion (ppb) was utilized and calibrated to the appropriate compound. Once field screening indicated that all contaminated soils had been removed from a given location or the Property boundary was reached, soil samples were collected and submitted for analyses of COCs. These data directed additional remedial excavation (if necessary) until analytical data demonstrated that all soil containing concentrations of COCs above applicable soil cleanup levels was removed from within the Property boundaries.

Contaminated soil extended to a depth greater than the redevelopment subgrade, which extended to elevations of approximately 127’ on the western portion of the Property in the location of the elevator pit footing and elevation 133’’ on the eastern portion of the Property in the location of the matt slab. Therefore, once analytical data demonstrated that all contaminated soil had been removed to the vertical and lateral extent of the remedial excavation, the Property was backfilled with clean Type 17 fill up to the redevelopment subgrade.

6.2 DECOMMISSIONING OF USTS AND OTHER SERVICE STATION IMPROVEMENTS

During the course of the IA, USTs, hoists, an OWS, dispenser islands, and product piping were encountered. Decommissioning of fuel station improvements was completed by the GC and their subcontractors and documented by RGI. The GC retained Marine Vacuum Services, Inc (Marvac), to decommission all USTs.

In general, when a UST or other fuel station improvement was encountered during redevelopment, the GC would notify RGI. The GC and their subcontractors performed the decommissioning activities which consisted of pumping contents, cleaning, inerting tanks, coordinating with the Seattle Fire Department (SFD), marine chemist inspections, and removal and disposal of the underground improvements.

UST Site Assessments were conducted at each UST location by Eric Dunham of RGI (Washington State Site Assessor No. 9261523), which consisted of inspection, sampling contents of the underground improvement, documenting the condition and size of the improvement, and collecting representative soil samples from the excavation after the improvement was decommissioned and removed to determine if a release had occurred. Fuel and service station improvements were staged on-Property on plastic prior to disposal.

The decommissioning of USTs, dispenser islands, and product piping during the IA were previously documented in detail in the *UST Site Assessment Report* dated September 25, 2020 by RGI, which was submitted to Ecology. The decommissioning and removal of all fuel station improvements is summarized in Section 8.

6.3 GROUNDWATER DEWATERING, TREATMENT & DISCHARGE

Groundwater containing concentrations of COCs above applicable groundwater cleanup levels was historically detected throughout the Property in groundwater monitoring wells and former remediation system wells (MW-6, MW-9, RW-2, RW-4, DPE-5, DPE-6, and DPE-7). The last on-Property groundwater sampling event was in December of 2018 (prior to the IA). Pre Interim Action groundwater elevations ranged from approximately elevations 124' to 136'.

The selected remedial alternative for groundwater on the Property was dewatering of contaminated groundwater via a dewatering system in conjunction with source removal discussed in section 6.2. The remedial alternative also included the installation of groundwater monitoring wells in order to monitor post IA groundwater conditions on the Property. These wells were partially constructed during the IA and the modifications to well casings and well monument completions are scheduled to be completed in June of 2021. Post IA well installations are discussed in Section 11.

Dewatering was managed by the GC and their subcontractors and consisted of a network of dewatering wells, which were installed along the perimeter of the Property and discharged water to a 4,000-gallon settling tank. Water was then routed from the settling tank through two 55-gallon granular activated charcoal drums and a duplex bog filter system containing virgin coconut shell activated carbon 830 and a 25 micron filter. Water was then routed into another 4,000-gallon poly settling tank. Water was then discharged to the sanitary sewer in accordance with *Issuance of Wastewater Discharge Authorization No. 4490-01 to Roystone Apartments* (DA 4490-01) dated May 14, 2019 by King Country Industrial Wastewater Treatment Division (KCIWTD).

The dewatering system was installed on the Property to lower the groundwater table on the Property in order to allow for construction of the parking garage and also to allow for remedial excavation of PCS to depths of up to approximately 31' bgs.

7.0 Laboratory Analyses

A total of 190 soil samples were submitted to either Friedman & Bruya, Inc. (FBI) or to the mobile analytical laboratory operated by Libby Environmental for one or more of the following analyses:

- Diesel and oil-range TPH using Northwest test method NWTPH-Dx.
- Gasoline-range TPH using Northwest test method NWTPH-Gx.
- Hydrocarbon Identification using Northwest test method NWTPH-HCID.
- VOCs using EPA Method 8260D.
- Semivolatile Compounds by EPA Method 8270E SIM.
- Benzene, toluene, ethylbenzene, and xylenes (BTEX) using EPA Method 8021B.
- PAHs using EPA Method 8270 Select Ion Monitoring (SIM).
- Metals (arsenic [As], barium [Ba], cadmium [Cd], chromium [Cr], copper [Cu], lead [Hg], mercury (Hg), nickel [Ni] selenium [Se], silver [Ag], and zinc [Zn]) using EPA Method 200.8.
- Polychlorinated biphenyls (PCBs) by EPA Method 8082A.
- Toxicity Characteristic Leaching Procedure (TCLP) for Lead using EPA Method 200.8 and 40 CFR Part 261.
- Dangerous Waste Characterization using *Oncorhynchus mykiss* bioassay analysis.

In addition, one water sample collected from the contents of UST6B was submitted to FBI for the following analysis:

- Diesel and oil-range TPH using Northwest test method NWTPH-Dx.
- Gasoline-range TPH using Northwest test method NWTPH-Gx.
- Benzene, toluene, ethylbenzene, and xylenes (BTEX) using EPA Method 8021B.

All analytical data obtained during the IA was submitted to a third party data validator (Pyron Environmental) for EPA Level 2A data validation as required by Ecology. Pyron determined that QA/QC procedures were in accordance with EPA established methods and all data collected during the IA was determined to be usable.

All soil analytical data obtained during the IA are summarized in Table 2. Confirmation soil sample analytical data is data is summarized on Table 3 and soil analytical data is displayed graphically on Figures 7 through 10. Copies of final analytical laboratory reports pertaining to soil samples and one water sample collected from inside UST6B are included in Appendix D. Copies of the Data Validation Reports for all samples analyzed during the IA are included in Appendix F.

8.0 Decommissioning of USTs and Service Station Improvements

Three USTs, two hydraulic hoists, one OWS, dispensers, and product piping were encountered during the IA. The general methodology for decommissioning and assessment of USTs and other underground improvements was provided in Section 6.2. The decommissioning and UST Site Assessment Pertaining to UST4, UST4A, UST6B and product piping, and dispensers encountered on the Property was documented in detail in the *Underground Storage Tank Site Assessment Report* (Site Assessment Report) dated October 1, 2020 by RGI and a brief summary is provided below. The reader is directed to refer to the UST Site Assessment Report for further details.

Details pertaining to the decommissioning and assessment of two hoists and an OWS that were not documented in the UST Site Assessment Report are provided below. The locations of USTs and other improvements associated with former fuel stations along with analytical data are illustrated on Figure 5. Analytical data pertaining to all samples collected during the IA is summarized in Tables 2 and 3 and laboratory reports are included in Appendix D.

8.1 Hydraulic Hoists

On March 23, 2020, RGI discovered two hydraulic hoists (Hoist 1 and Hoist 2) beneath the concrete slab in the location of the former auto repair facility on the south central portion of the Property. Hoist 1 was approximately 7.5'long and one foot diameter with an approximately 44-gallon capacity and Hoist 2 was approximately 8.5' long and one foot diameter with an approximately 50-gallon capacity. Both hoists were filled with concrete and residual oil in the hoists was minimal. RGI collected one sample of the contents of each hoist, which confirmed that a minor amount of oil was present inside the hoists.

Marvac was retained by the GC to pump the remaining oil from the hoists and dispose of the hoists off-Property. RGI collected and analyzed soil samples for COCs from each hoist excavation, which indicated that no releases had occurred in the location of the hoists. No further action was necessary in relation to Hoist 1 and Hoist 2.

8.2 Oil Water Separator

On March 24, 2020, an OWS with two chambers was encountered near the southwest corner of the Property. A bluish liquid with sheen was observed inside both of the chambers and sludge was present at the bottom. RGI collected one sample of the sludge inside the OWS, which was submitted

to the laboratory. Analytical data indicated that gasoline, oil, arsenic, cadmium, and lead were present in the sludge at concentrations that required further evaluation to determine if the waste would be classified as hazardous waste. In accordance the Ecology protocols, the sludge sample was later submitted to the laboratory for a Dangerous Waste Characterization (DWC) using the test organism *Oncorhynchus mykiss*. The results of the DWC indicated that hazardous waste was not present in the sludge sample.

On May 1, 2020, Marvac was retained by the GC to pump approximately 15-gallons of sludge and wastewater from the OWS and clean the OWS prior to transporting off-Property. Approximately 55-gallons of sludge and wastewater were disposed of off-Property by Marvac. RGI collected and analyzed soil samples from the OWS excavation, which indicated that no release had occurred in the location of the OWS. No further action was necessary in relation to the OWS.

8.3 DISPENSERS AND PRODUCT PIPING

On March 25, 2020, RGI identified a pump island and remnants of dispensers 1 and 2 directly beneath the asphalt in a location west of the reported location of UST6B on the eastern portion of the Property. The dispensers and product piping initially appeared to be associated with UST5B, but were later attributed to UST6B. RGI collected and analyzed soil samples from beneath the two dispensers (Disp1-0.5 and Disp2-0.5) and from beneath product piping locations (PP1-UST5B-2.5 and PP2-UST5B-0.5). 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. This contaminated soil was situated in a location where PCS was previously identified and remediation of contaminated soil in this location is discussed in Section 9.2.

On May 6, 2020, a section of suspected product piping was discovered on the north-central portion of the Property near former well MW-9. 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 did not indicate the presence of contamination beneath the pipe and RGI collected one soil sample beneath the pipe at approximately 2’ bgs (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, a suspected product piping was discovered on the southwestern portion of the Property near previous test probe location SSI-P5. The piping appeared to be associated with 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’ 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. This contaminated soil was situated in a location where PCS was previously identified and remediation of contaminated soil in this location is discussed in Section 9.2.

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’ northeast of the location of former UST10 and may have been associated with UST10. However, this could not be confirmed and the potential exists that this pipe was relocated from another portion of the Property during excavation activities conducted by others in the 1990s. 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’ 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. No COCs were detected in soil at concentrations above laboratory detection limits.

All product piping and dispenser remnants ultimately disposed of off-Property by Marvac.

8.4 UNDERGROUND STORAGE TANK 4A

On May 11, 2020, 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. 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 was considered necessary in connection with UST4A.

8.5 UNDERGROUND STORAGE TANK A

On May 11, 2020, a 317-gallon waste oil UST (USTA) was encountered on the central portion of the Property and RGI obtained a sample of the waste oil inside the UST. Analytical data obtained from this sample indicated that waste oil contained concentrations of diesel and oil-range TPH, BTEX, PCE, trichloroethene (TCE), naphthalenes, cPAHs, and lead that exceeded applicable MTCA soil cleanup levels. In addition, the concentrations of PCE, TCE, and benzene in the waste oil required disposal as an F002/D018 listed hazardous waste.

On May 21, 2020, USTA was accidentally punctured by the GC's excavation subcontractor during grading activities prior to decommissioning of the UST. Approximately 40 gallons of product were released from the southwest side of the UST at a grade approximately 3.5' 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' below the grade of the release in this location.

RGI quickly stopped the leak by plugging the UST with native clay. Clean soil was then placed on and around the area 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' x 7'x 3' deep (or 6.5' below the original grade of the Property). The area of the product release was over excavated 3' to ensure all waste oil was removed. The product and soil were placed on plastic and covered with plastic.

RGI reported the release to Ms. Jing Song and Mr. Kale Carlson of Ecology on May 21, 2020 at 5:25 pm and informed Ecology that the release was quickly contained before significant impacts could occur and that groundwater was not impacted by this release.

Approximately 61 tons of hazardous waste soil were generated during the cleanup and over excavation of soil in the area of the release. A sample of this impacted soil was submitted to the laboratory for analyses. Analytical data indicated that PCE and TCE where present in soil at concentrations that required disposal as F002 listed hazardous waste. This soil was stockpiled on plastic and covered with plastic prior to arranging disposal as hazardous waste.

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. All the liquid and wastewater were pumped into a vacuum truck and into two 55-gallons drums that were stored on the northwest corner of the Property. Five additional 55-gallon drums were filled with wastewater from cleaning the inside of the vacuum truck, and also stored on the northwest corner of the Property. The disposal of hazardous waste oil and soil generated during the decommissioning of USTA and cleanup of the release is discussed in Section 10.

The results of the UST Site Assessment for USTA determined that a release of gasoline-range and oil-range TPH and benzene to soil had occurred in the location of USTA prior to the inadvertent

puncturing of the UST discussed above. The cleanup of PCS associated with this release is discussed in Section 9.2.

8.6 UNDERGROUND STORAGE TANK 6B

On June 2, 2020, a 3,455-gallon gasoline UST (UST6B), was encountered on the eastern portion of the Property and observed to be previously decommissioned. 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. This hole was suspected to be a location where a hole was cut in the UST in order to sample soil during the original decommissioning of the UST6B. 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 the location UST6B sometime prior to the UST being filled with CDF. The remediation of this contaminated soil is discussed in Section 9.2

9.0 Remedial Action

The following section provides detailed descriptions of activities completed prior to and during the IA on the Property.

9.1 PRE-REMEDIAL ACTION AND OTHER ACTIVITIES

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

9.1.1 Permitting

The Property was undergoing redevelopment at the time of the IA. All of the necessary building and grading permits and dewatering permits associated with redevelopment were acquired by the GC prior to commencing with the redevelopment of the Property. The activities performed during the IA and discussed herein were consistent with all permitting requirements.

Roystone obtained DA 4490-01 dated May 14, 2019 by KCIWTD. DA 4490-01 set for the requirements for construction dewatering, which was managed by the GC and their subcontractors.

9.1.2 Groundwater Monitoring Well Decommissioning

Prior to construction, a total of four non-standard groundwater monitoring wells (wells constructed prior to the implementation of the current Ecology well regulations), which consisted of wells MW-6, MW-9, VP-9, and RW4) and four standard groundwater monitoring wells (wells constructed in accordance with the current Ecology well regulations), which consisted of wells MW-13, DPE-5, DPE-6, and DPE-7. All of these wells were located on-Property and were decommissioned by a licensed well driller.

On January 30, 2020, the four standard wells MW--13, DPE-5, DPE-6, and DPE-7 (well screen and casing) were decommissioned with bentonite chips hydrated with water.

In May of 2020, the four non-standard wells MW-6, MW-9, VP-9, and RW-4 were decommissioned by their over-excavation during the IA. The entire well screen and casing were fully over-excavated and removed in their entirety.

Another three groundwater monitoring wells are located in the sidewalk right-of-way north and east of the Property (wells SSI-W1, SSI-W2, and MW-10). At the time of this writing, these wells

remain active and have not been decommissioned. These wells are now the responsibility of other consultants (and not the responsibility of Roystone).

In regards to monitoring well MW-10, RGI requested a variance to decommission groundwater monitoring well MW-10. Well MW-10 is located in the sidewalk right-of-way and also located beneath overhead power. The variance was approved by Ecology March 9, 2020 and expired on December 31, 2020. At the time the variance was requested, it appeared that construction activities may destroy well MW-10. However, that was not the case and it was therefore not necessary to decommission well MW-10 and this well is currently active.

A copy of decommissioned well reports submitted to Ecology, well variance and related documentation for MW-10 are included in Appendix I.

9.1.3 Site Preparation

Underground utilities were decommissioned by the GC prior to the start of redevelopment. The Property was also fenced to restrict unauthorized personnel from entering the work areas.

RGI also installed two signs on the Property prior to commencing with the IA to notify the public regarding the proposed work associated with the IA and the schedule.

9.1.4 Soil Characterization and Assessment Sampling

Prior to the remedial excavation, field screening and analytical data obtained from soil characterization samples were used to strategically plan remedial excavations and to determine which COCs were present and required remediation in a given area. These activities consisted of the following:

1) After the building was demolished, RGI observed the removal of the concrete slab and asphalt and screened soils in locations where contamination was suspected to be present. This included screening soil in the southeast corner of the Property where a former dry cleaner was suspected to be present with a PID that provided readings in ppb.

2) RGI excavated 10 test pits across the Property and the locations test pits and associated soil samples are depicted on Figures 7 through 10. Soil was screened during test pit excavations and samples were collected and analyzed in locations where soil appeared clean to a depth of approximately 7’ bgs (TP-1, TP-2, TP-3, and TP-4) to determine the depth of clean overburden in these locations. In locations where soil appeared contaminated based on field screening (TP-5, TP-6, TP-7, TP-8, and TP-9), soil samples were not analyzed and previous analytical data was considered sufficient to characterize these soil impacts. The only exception was TP-10 where a contaminated soil sample was analyzed in order to determine the bottom extent of soil contamination at the northeast portion of the Property where the shoring needed to be modified and drilling was planned (see Section 9.1.5). Analytical data and field screening data obtained from test pits were used to strategically plan the remedial excavation.

3) Collected samples in locations of USTs and other fuel station improvements to determine if a release had occurred, which was discussed in Section 8.

4) Field screened soil during drilling installation of piles along the perimeter of the Property. This data was used to assess the depth of soil contamination in a given area.

RGI utilized data obtained from the above mention activities along with soil data from previous investigations to strategically plan excavation and characterize soil for disposal.

9.1.5 Subsurface Investigation at Northeast Corner of Property

Due to the presence of a utility pole near the northeast corner of the Property, it was necessary to modify the shoring design to offset the shoring onto the Property in this location. Therefore, RGI conducted a subsurface investigation in order to characterize the lateral and vertical extent of soil contamination in this location prior to installation of the shoring in order to plan remedial excavation of contaminated soil prior to installing the shoring.

On May 27, 2020, RGI retained Cascade Drilling Inc. (Cascade) to advance two test probes (NETP1) and NETP2) on the northeast portion of the Property in the locations displayed on Figure 8. Test probes were advanced to approximately 20' where the clay layer was observed. RGI screened soil during drilling using a PID and visual and olfactory observations. Borelogs depicting subsurface conditions and field screening results are included in Appendix C.

Four soil samples (NETP1-8, NETP1-12, NETP2-5, and NETP2-8) were submitted to the laboratory for analysis of gasoline-, diesel-, and oil-range TPH and BTEX. Analytical data obtained from these soil samples indicated that petroleum impacted soil extended to approximately 8' bgs in this location. Soil analytical data is summarized in Tables 2 and 3 and a copy of laboratory analytical report is included in Appendix D.

The remedial excavation of PCS in this location is described in the following section.

9.2 SOIL REMEDIATION

The general methodology for remediating soil containing concentrations of COCs exceeding applicable soil cleanup levels was previously described in Section 6.1.

Petroleum impacted soil was encountered across the entire and extended to a maximum of depth of approximately 31' bgs. The remedial excavation of contaminated soil within the Property boundaries was therefore considered one remedial excavation.

All soil sample locations are displayed on Figure 6 and zoomed in figures presenting the final limits of the remedial excavation along with locations of confirmation samples and characterization soil samples used to determine COCs in a given area are illustrated on Figures 7 through 10. Figure 11 presents all confirmation soil samples and associated analytical data with the approximate of remedial excavation bottom elevations.

Analytical results for all soil samples pertaining to the remedial excavation across the Property are summarized in Tables 2 and 3. Copies of final laboratory reports are included in Appendix D.

9.2.1 Remedial Excavation of Petroleum Contaminated Soils

Several petroleum releases to soil and groundwater have been documented at the Property related to the historical presence of several fuel stations and associated USTs and other fuel system components that were present on the Property from at least 1927 through 1993. These releases have impacted soil and groundwater throughout the Property. Soil was impacted either directly by the release or via a smear zone created by the historical presence of light phase non aqueous liquid (LNAPL) contaminating soil as the elevation of the groundwater table fluctuated throughout the year.

The remedial excavation commenced on April 28, 2021 and was completed on August 24, 2020. RGI was onsite full time to oversee remedial excavation activities. RGI field screened soil and assisted the GC with segregating clean soil and contaminated soil, collected soil samples, and directed remedial excavation activities using the methodologies discussed in Section 6. RGI also oversaw the decommissioning of USTs and other fuel station improvements, which was discussed in Section 8.

The locations of pertinent features associated with the remedial excavation are displayed on Figures 6 through 11 and soil analytical data is summarized in Tables 2 and 3.

The remedial excavation began on the south and west portions of the Property and initially extended to a depth of 7' bgs where retaining walls were encountered. Clean overburden extended to a maximum depth of 7' bgs across the Property. Clean overburden was characterized based soil data obtained during previous investigations, data obtained from soil characterization samples, and field screening. It should be noted a portion of the clean overburden situated on the southern portion of the Property was removed as PCS due to the fact that the segregation of clean and contaminated soil was slowing down construction to the point where it was no longer cost effective. This decision was made based on discussions between Roystone, RGI, and the GC.

The retaining walls were removed from along the southern and western Property boundaries, which allowed for shoring piles to be installed along the perimeter of the Property. RGI screened soil cuttings from piles during drilling in order to assess the depth of contamination and plan the remedial excavation. RGI's geotechnical department oversaw the installation of piles and other geotechnical aspects of the project.

After pile installation was completed, the remedial excavation generally progressed in four-foot lifts and wood lagging was installed at each lift. Since the shoring was offset from the Property boundary from one to thirty inches, RGI screened soil in all shoring locations along the perimeter of the Property and removed soil exhibiting any sign of contamination based on field screening and/or analytical data. In locations where soil was removed from behind the shoring wall, the area between the shoring wall and the Property boundary was backfilled with CDF after confirmation soil samples were collected at the Property boundary. In areas where soil was clean in the shoring location, RGI collected a confirmation sample at the location of the wood lagging prior to installation of the wood lagging.

A utility pole was present on the northeastern corner of the Property, which required modifying the shoring design to support the utility pole. The shoring was modified in a manner that offset the shoring onto the Property as displayed on Figures 5 through 11. This resulted in leaving an approximately 70 square foot area of the Property behind the shoring wall in the northeast corner.

As discussed in Section 9.1.5, RGI conducted a subsurface investigation at the northeast corner of the Property to assess the vertical and horizontal extent of contamination in this location and develop a plan for removing all contaminated soil from this location. Data obtained from the subsurface investigation indicated that PCS extended to 8' bgs within the 70 square foot area where the shoring was offset from the Property boundary. On May 29, 2020, all PCS was excavated from the surface to 8' bgs, which was the depth where soil analytical data demonstrated that soil was clean. The remedial excavation was backfilled with CDF prior to installation of the shoring.

The remedial excavation reached in the bottom in July 2020 on the east side of the Property and in August 2020 on the west side of the Property. RGI utilized a mobile laboratory operated by Libby Environmental to analyze confirmation soil samples collected from the bottom of the remedial investigation. At most locations on the Property, no concentrations of COCs were detected at the clay layer, which started at approximately 17.5' bgs (or elevation 131') on the eastern portion of the Property and 24.5' bgs (or elevation 122') on the western portion of the Property. However, analytical data obtained from samples collected at the bottom of the excavation indicated that benzene extended into the clay layer at the central and western portions of the Property at concentrations above the MTCA cleanup level in the vicinity of USTA (samples B-17W-30.5 and B-21W-25) and former well RW4 (samples RW-4C-30 and B-32W-28), respectively. The presence of benzene required that remedial excavation extend to depths greater than originally planned in

these locations. RGI directed the excavation of test pits in these locations to assess how deep remedial excavation would be required and data obtained from test pit samples indicated that benzene was present up to a depth of approximately 31' bgs (or elevation 115.5') in the location of former well RW4.

Vertical migration of contamination was generally limited by the presence of the clay layer, which undulated across the Property. In most locations, soil contamination did not extend more than couple of feet into the clay layer. The only exceptions were at the central portion and western portions of the Property. In the vicinity of USTA on the central portion of the property, the clay layer was observed to begin between approximately elevations 119' and 122' and low concentrations of benzene extended into the clay layer to a maximum depth of approximately 31' bgs (or elevation 116') as demonstrated by data obtained from soil samples B-17W-28, B-17W-30.5, B-17W-31.5, B-40W-30.5, and B-41W-30.5. On the western portion of the Property, in the location of former well RW4, the clay layer was encountered at approximately elevation 24.5' bgs (or 122') and benzene impacted soil extended to a maximum depth of approximately 31' bgs (or elevation 115.5') as demonstrated by data obtained from soil samples RW-4C-30 and RW-4C-32.

Discontinuous zones of shallow perched groundwater were observed on the Property during the IA. However, the amount of water present was not significant and did not require dewatering. However, on August 3, 2020, a relatively significant volume of groundwater had accumulated to elevation 125' in the location of former well RW4 where benzene was known to be present to a depth of 31' bgs (or elevation 115'). Therefore, the GC installed four additional dewatering wells along the west Property boundary, which were installed at greater depths in order to decrease the groundwater level in this location. Groundwater continued to remain elevated in this location. On August 12, 2020, RGI directed excavation of a test pit in the location of former well RW4 down to approximately elevation 110' and a 12' diameter slotted PVC pipe was place in the test pit at elevation 110'. Groundwater was dewatered from the PVC pipe, which decreased the elevation of groundwater to a level that made it feasible to complete the remedial excavation in this location. The remedial excavation and all confirmation soil sampling was completed on August 24, 2020.

After the remedial excavation was completed, the GC backfilled the Property with type 17 fill to bring the grade back up to the redevelopment subgrade. RGI geotechnical personnel was on-Property to oversee backfilling and compacting of fill.

9.2.1.1 Confirmation Soil Sample Analytical Results

Analytical data obtained from soil confirmation samples collected from the limits of the remedial excavation demonstrated that all soil containing concentrations of COCs above MTCA soil cleanup levels had been removed from within the Property boundaries. Historical and IA soil data is displayed on Figures 7 through 10 and the final limits of the remedial excavation and confirmation soil analytical data is displayed on Figure 11. Cross sections depicting locations of confirmation soil samples are presented on Figures 12 and 13. All historical and IA soil analytical data are summarized in Tables 1 and 2, respectively. Table 3 summarizes soil analytical data for confirmation samples only.

On the eastern third of the Property, the bottom elevation of the remedial excavation ranged from approximately 18' to 25' bgs (or elevations 130' to 123') in most locations except for a 70 square foot area situated outside the shoring in the northeast corner where remedial excavation extended to 8' bgs (or elevation 140'). On the western two thirds of the Property, the bottom elevation of the remedial excavation generally extended to depths ranging from 19' to 28' bgs (or elevations 128' to 119') except for the location in the vicinity of former USTA and along the northern portion of the

west Property boundary in the location of former well RW4 where remedial excavation extended to depths ranging from 28' to 32' bgs (or elevations 118' to 114').

Data obtained from confirmation bottom samples demonstrated that no COCs were present in soil at concentrations exceeding applicable soil cleanup levels at the bottom of the remedial excavation.

Data obtained from confirmation sidewall samples collected at the north Property boundary indicated that soil containing concentrations of gasoline and diesel-range TPH, ethylbenzene, and/or xylenes exceeding applicable soil cleanup levels and extended off-Property across the entire sidewall at depths ranging from approximately 3' to 26' bgs (or elevations 144' to 121').

Data obtained from confirmation sidewall samples collected along the east Property boundary indicated that soil containing concentrations of gasoline-range TPH, benzene, toluene, ethylbenzene, and/or xylenes extended off-Property at depths ranging from approximately 4' to 16' bgs (or elevations 144' to 132') along the northern and southern portions of this sidewall.

Data obtained from confirmation sidewall samples collected along the south Property boundary indicated that soil containing concentrations of gasoline-range TPH, benzene, toluene, ethylbenzene, and/or xylenes extended off-Property across the entire sidewall at depths ranging from approximately 9' to 25' bgs (or elevations 142' to 122').

Data obtained from confirmation sidewall samples collected along the northern portion of the west Property boundary indicated that soil containing concentrations of gasoline-range TPH and/or benzene extend off-Property at depths ranging from approximately 9' to 28' bgs (or elevations 139' to 120'). Gasoline-range TPH impacted soil extended off-Property at depths ranging from approximately 9' to 24' bgs (or elevations 139' to 124') at the southernmost portion of the west Property boundary.

10.0 Waste Disposal

During the IA it was necessary to disposal of PCS, F002 listed soil, and F002/D018 listed hazardous waste oil in accordance with applicable regulations and these activities are discussed below. Documentation pertaining to disposal of this waste is included in Appendix G.

10.1 Petroleum Contaminated Soil Disposal

The disposal of PCS was managed by the GC and their subcontractors. RGI assisted the GC with coordinating disposal of PCS with disposal facilities when requested.

From April through August of 2020, a total of approximately 16,745 tons of PCS was removed from the Property as PCS. Of the total, 15,725 tons of PCS were transported to the Cadman facility in Everett, Washington for disposal under waste profile 41026823. The remaining 1,020 tons of PCS were transported to the Republic Services disposal facility in Seattle, Washington under waste profile TB-10751.

10.2 Hazardous Waste Disposal

As discussed in Section 8.5, the waste oil in USTA contained PCE, TCE, and benzene at concentrations classified as a F002/D018 listed hazardous waste. The inadvertent puncturing of the UST by the GC's excavation contractor resulted in the need to dispose of soil listed as a F002 hazardous waste, which otherwise would have been clean soil.

In order to dispose of hazardous waste, it was necessary to obtain a RCRA ID number for the Property. Therefore, RGI worked with Ecology to transfer RCRA ID No. WAD98843384 number from Chevron to Roystone for use as a one time hazardous waste disposal prior to coordinating disposal with Waste Management (WM).

A total of 3,500 pounds (or 1.5 tons) of F002/D018 listed hazardous waste oil, which was stored in seven 55-gallon drums was removed from the Property by WM under waste profile OR344922. Waste oil was ultimately transported to the Chemical Waste Management facility in Arlington, OR for disposal via incineration.

Soil generated during the cleanup of the release at USTA contained PCE and TCE at concentrations that required disposal as F002 listed hazardous waste. A total of 122,580 pounds (or 61 tons) of PCE/TCE-impacted soil was removed from the Property by WM under waste profile OR343850. Soil was ultimately transported to the Chemical Waste Management facility in Arlington, OR for disposal.

10.3 WATER DISPOSAL

The general methodology and dewatering system used to remove groundwater containing concentrations of COCs exceeding applicable groundwater cleanup levels was previously described in Section 6.3. All work associated with dewatering was managed by the GC and their subcontractors.

The dewatering system operated on the Property from July 20, 2020 through September 5, 2020 and approximately 604,900 gallons of water was pumped, treated, and discharged to the sanitary sewer. Additionally, four vacuum trucks pumped out an additional 6,000 gallons of water during the IA that was also discharged into the sanitary sewer. A total of approximately 610,900 gallons was dewatered from the Property. Based on concentrations of COCs in groundwater prior to the IA, a substantial amount of this water was presumed to be impacted with petroleum related COCs.

11.0 Post Remediation Well Installation

RGI partially installed groundwater monitoring wells on the Property in order to assess post IA groundwater conditions on the Property. The locations of partially completed groundwater monitoring wells are illustrated on Figure 14.

Final groundwater monitoring well installation and well construction logs will be documented a forthcoming report after the modifications of the well casings and monuments are completed in June of 2021. However, a summary of the work completed is provided below.

On September 17 and 18, 2020, RGI retained Cascade to install wells MW-A, MW-B, MW-C, MW-D, MW-E, and MW-F. The purpose of these wells is to assess post IA groundwater concentrations of COCs after all impacted soil and a substantial amount of impacted groundwater had been removed from the Property.

Groundwater monitoring wells were installed prior to the concrete pour for the garage slab. This consisted on an approximately 3’ matt slab on the eastern portion of the Property in locations of wells MW-A, MW-C, MW-E, and MW-F and the construction of two slabs on the western portion of the Property in the locations of wells MW-B and MW-D. It was necessary to install the wells in a manner that would allow the concrete to be poured around each well after the well casing and screen was installed. The grade of the Property the time the wells were installed was elevation 131.5’ (or 14’ bgs) on the western half of the Property and 132.5’ (or 16’ bgs) on the eastern half of the Property.

All wells were installed using standard hollow stem auger (HSA) drilling techniques. Each borehole was advanced to a depth that corresponded to approximately three feet into the clay layer. MW-A was advanced to approximately elevation 115.5’ (approximately 17’ below the redevelopment subgrade) with the screened interval between elevations 115.5’ and 130.5’. MW-B was advanced to approximately elevation 114.5’ (approximately 17’ below the redevelopment subgrade) with the screened interval between elevation 114.5’ and 129.5’. MW-C was advanced to approximately

elevation 118.5' (or approximately 14' below the redevelopment subgrade) with the screened interval between elevation 118.5' and 130.5'. MW-D was advanced to approximately elevation 117' (approximately 14.5' below the redevelopment subgrade) with the screened interval between elevation 117' and 129.5'. MW-E was advanced to approximately elevation 118.5' (or approximately 14' below the redevelopment subgrade) with the screened interval between elevation 118.5' and 130.5'. MW-F was advanced to approximately elevation 117.5' (approximately 15' below the redevelopment subgrade) with the screened interval between elevation 117.5' and 130.5'.

Groundwater was encountered in wells MW-A, MW-B, and MW-E at approximately elevation 119' during drilling.

After the 2-inch well casing was installed at each location, a j-plug was used to seal the casing and a 6-inch PVC pipe was placed over the 2-inch well in order to protect the well during construction of the slab. Sand was poured inside the PVC pipe around the well screen and casing up to approximately one foot above the well screen. One foot of hydrated bentonite was placed above the sand. The 6-inch PVC was capped with two inches of concrete to protect the wells until installations are completed.

The well installations were completed in June of 2021. The modifications to well casings, monument completion, development, and surveying of groundwater monitoring wells, post remediation IA groundwater sampling, and the Vapor Intrusion Assessment (VIA) will be documented in detail in a report RGI is currently working on.

12.0 Vapor Intrusion Mitigation

Due to the fact that compounds that have the potential to pose a vapor intrusion threat for the Property, such as benzene, have historically been present in soil and groundwater on the Property. Roystone retained EPRO to install a PreTak chemical vapor barrier/waterproofing system beneath the concrete slab, along the outside walls of the parking garage, and in locations where groundwater monitoring wells penetrated the vapor barrier. The PreTak system is formulated to resist VOCs and petroleum-related compounds in soil and groundwater and to prevent these compounds from entering indoor air in the building via soil vapor. The installation of the PreTak system was managed by Roystone and their GC.

The PreTak system has an estimated 100 year lifespan and was installed in the following locations:

- PreTak sheet and E Drain 6000 were installed along all the underground parking garage walls (approximately 6,389 square feet).
- PreTak sheet was installed beneath the entire underground parking garage floor slab (approximately 10,511 square feet).
- All six groundwater monitoring well casings were sealed to the PreTak beneath the slab using PreTak, PreTape, BentoTak, and Estop GU.

The locations where the PreTak system was installed are depicted on Figure 14. Details pertaining to the products used in the PreTak system are included in the specification sheets in Appendix H.

In addition, the GC installed perforated horizontal pipe, which connects to a vent along the western portion of the Property. This piping is part of a passive subslab depressurization system (SSD) that is intended to mitigate potential vapor intrusion impacts to the future building (if necessary). The location of the SSD system piping and vent are depicted on Figure 14.

Note that post IA groundwater quality and the vapor intrusion risk for the Property have not been evaluated. The VIA and groundwater evaluation will be documented in a forthcoming report after post IA groundwater conditions are evaluated.

13.0 Conclusions & Recommendations

The Interim Action Report findings support the following conclusions:

- The nature and extent of soil and groundwater contamination on the Property has been well characterized.
- Analytical data obtained from soil confirmation samples collected from the limits of the remedial excavation demonstrate that all soil containing concentrations of COCs exceeding applicable MTCA soil cleanup levels has been removed from within the Property boundaries. The remedial excavation extended vertically to depths ranging from 8' to 32' bgs (or elevations 140' to 114') and laterally to the Property boundaries.
- Soil containing concentrations of gasoline-range TPH, diesel-range TPH, and/or BTEX exceeding applicable MTCA soil cleanup levels is present at the north, east, south, and west Property boundaries and extends off-Property.
- The dewatering system removed and treated approximately 610,900 gallons of water via the network of dewatering wells and vacuum trucks. Water was ultimately discharged to the sanitary side sewer in accordance with *Issuance of Wastewater Discharge Authorization No. 4490-01 to Roystone Apartments* (DA 4490-01) dated May 14, 2019 by King Country Industrial Wastewater Treatment Division (KCIWTD). Source removal and dewatering is anticipated to have a significant impact on reducing concentrations of COCs in groundwater underlying the Property and the Site.
- A total of three USTs (USTA, UST4, and UST6B) were decommissioned and removed from the Property. Two hoists, one OWS, product piping, and dispensers were also decommissioned, assessed and removed during the IA.
- A total of approximately 16,745 tons of contaminated soil was removed from the Property during the IA and transferred to either the Cadman or Republic Services disposal facilities for disposal in accordance with applicable regulations.
- A total of 122,580 pounds (or 61 tons) of soil containing concentrations of PCE and TCE requiring disposal as F002 listed hazardous waste were removed from the Property by Waste Management for disposal in accordance with applicable regulations.
- A total of 3,500 pounds (or 1.5 tons) of PCE, TCE, and benzene impacted waste oil classified as F002/D018 listed hazardous waste was removed from the Property by Waste Management for disposal in accordance with applicable regulations.
- Six groundwater monitoring wells (MW-A, MW-B, MW-C, MW-D, MW-E, and MW-F) were installed in ground floor of the parking garage. Post IA groundwater conditions will be documented in a forthcoming report.
- The GC installed PreTak chemical resistant vapor barrier/waterproofing system beneath the entire garage floor slab and along all the subgrade walls. The PreTak system is designed to resist chemicals in soil and groundwater and prevent vapor intrusion via contaminated soil vapor. The GC also installed pipe associated with a subslab depressurization (SSD) system beneath the slab on the western portion of the Property. The SSD system was installed to mitigate potential vapor intrusion impacts to the future building (if necessary).
- Post IA groundwater concentrations of COCs and the vapor intrusion risk for the building were not evaluated during the IA. These evaluations will be completed will be documented in a forthcoming report.

In addition, RGI makes the following recommendations:

- Submit a copy of this Interim Action Report to Ecology under AO No. 16537 and work with Ecology to finalize the report.
- Continue quarterly groundwater monitoring, which commenced in July of 2021.
- Complete a Vapor Intrusion Assessment (VIA) using soil analytical data obtained during the IA and post IA groundwater analytical data.
- Prepare a Post Interim Action Groundwater Investigation & Vapor Intrusion Assessment Report documenting the VIA, well installation, quarterly groundwater sampling results, and well surveying and submit the report to Ecology under AO No. 16537.

14.0 Limitations

This report is the property of RGI, 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.

State of Washington
1284
Licensed Geologist
Paul D. Riley

Jerry Sawetz
Senior Environmental Scientist

Paul D. Riley, LG, LHG
Principal Geologist

Report Distribution
Mr. Pui Leung, Roystone on Queen Anne (1 pdf copy)
Ms. Jing Song, Washington Department of Ecology (1 pdf copy)

USGS, 2020, Seattle North, Washington
USGS, 2020, Seattle South, Washington
7.5-Minute Quadrangle

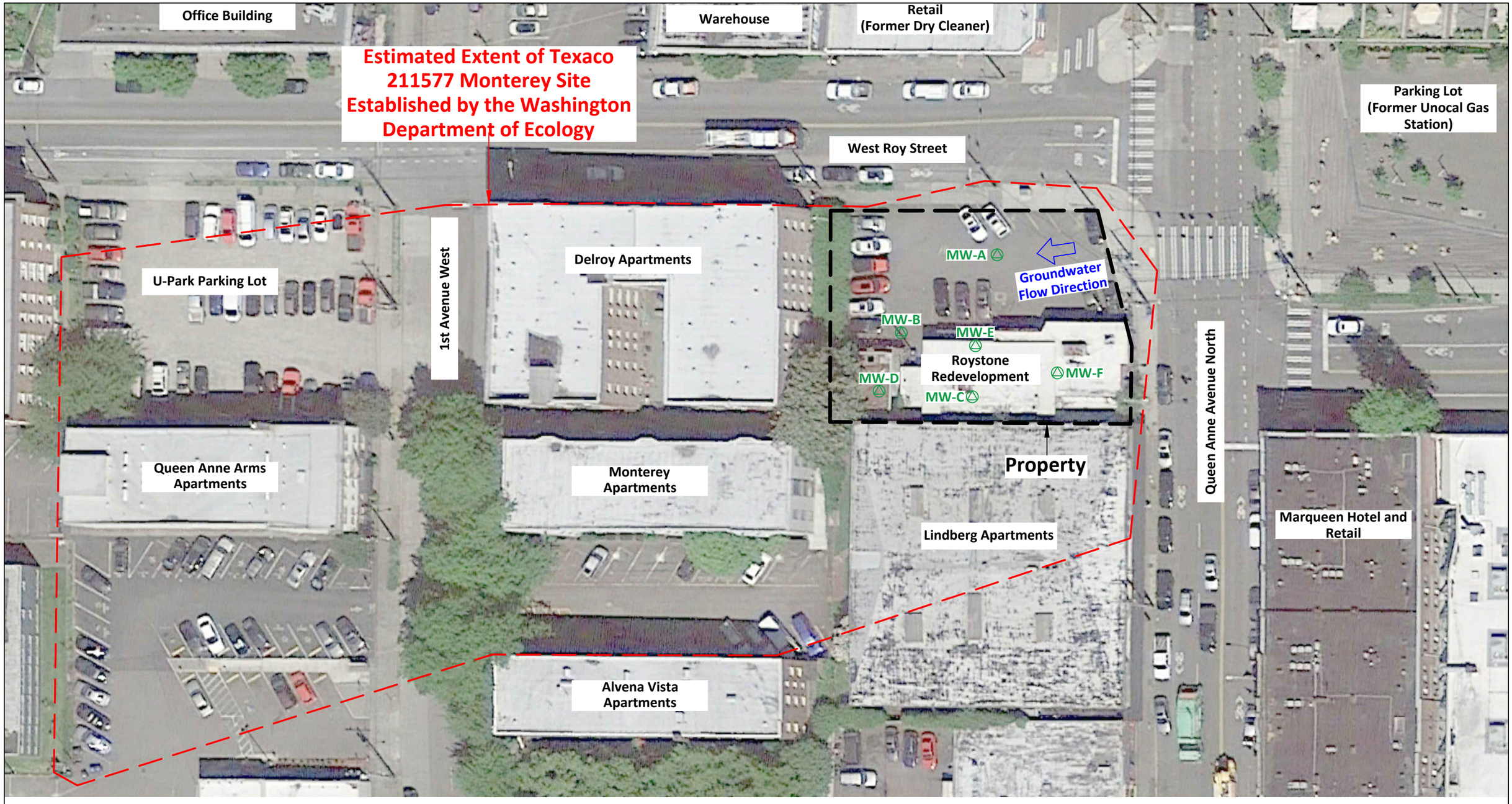
Approximate Scale: 1"=1000'

0 500 1000 2000

N

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

Roystone Redevelopment		Figure 1
RGI Project Number 2017-015K	Property Vicinity Map	Date Drawn: 03/2022
Address: 631 Queen Anne Avenue North, Seattle, Washington 98109		



Note: Other existing remediation wells and previous subsurface investigation locations on- and off-Property are not shown here. Off-Property contamination associated with the Site is being managed by Others.

Approximate Scale: 1"=40'

0 20 40 80

N

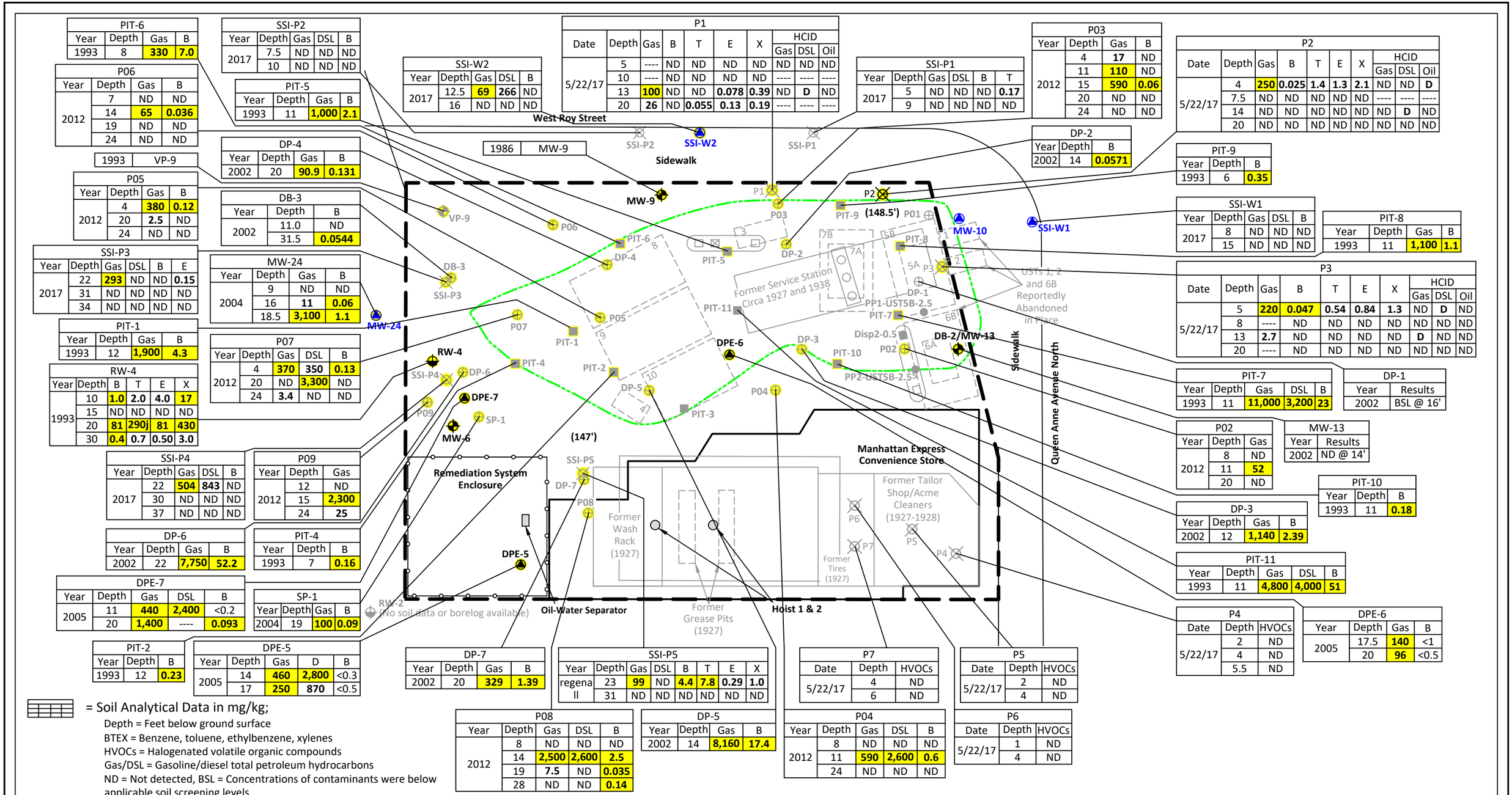
= Completed groundwater monitoring well location located on the ground floor of the one-level parking garage. Wells were completed in June 2021.

= (in red) Site boundary

= Property boundary

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

Roystone Redevelopment		Figure 2
RGI Project Number 2017-015K	Property Representation with Site Location	Date Drawn: 03/2022
Address: 631 Queen Anne Avenue North, Seattle, Washington 98109		



PIT-6			
Year	Depth	Gas	B
1993	8	**330**	**7.0**

P06			
Year	Depth	Gas	B
2012	7	ND	ND
	14	**65**	**0.036**
	19	ND	ND
	24	ND	ND

1993	VP-9

P05			
Year	Depth	Gas	B
2012	4	**380**	**0.12**
	20	**2.5**	ND
	24	ND	ND

SSI-P3					
Year	Depth	Gas	DSL	B	E
2017	22	**293**	ND	ND	**0.15**
	31	ND	ND	ND	ND
	34	ND	ND	ND	ND

PIT-1			
Year	Depth	Gas	B
1993	12	**1,900**	**4.3**

RW-4					
Year	Depth	B	T	E	X
1993	10	**1.0**	**2.0**	**4.0**	**17**
	15	ND	ND	ND	ND
	20	**81**	**290j**	**81**	**430**
	30	**0.4**	**0.7**	**0.50**	**3.0**

SSI-P4				
Year	Depth	Gas	DSL	B
2017	22	**504**	**843**	ND
	30	ND	ND	ND
	37	ND	ND	ND

DP-6			
Year	Depth	Gas	B
2002	22	**7,750**	**52.2**

DPE-7				
Year	Depth	Gas	DSL	B
2005	11	**440**	**2,400**	<0.2
	20	**1,400**	----	**0.093**

PIT-2		
Year	Depth	B
1993	12	**0.23**

DPE-5				
Year	Depth	Gas	D	B
2005	14	**460**	**2,800**	<0.3
	17	**250**	**870**	<0.5

SSI-P2				
Year	Depth	Gas	DSL	B
2017	7.5	ND	ND	ND
	10	ND	ND	ND

PIT-5			
Year	Depth	Gas	B
1993	11	**1,000**	**2.1**

DP-4			
Year	Depth	Gas	B
2002	20	**90.9**	**0.131**

DB-3		
Year	Depth	B
2002	11.0	ND
	31.5	**0.0544**

MW-24			
Year	Depth	Gas	B
2004	9	ND	ND
	16	**11**	**0.06**
	18.5	**3,100**	**1.1**

P07				
Year	Depth	Gas	DSL	B
2012	4	**370**	**350**	**0.13**
	20	ND	**3,300**	ND
	24	**3.4**	ND	ND

P09		
Year	Depth	Gas
2012	12	ND
	15	**2,300**
	24	**25**

PIT-4		
Year	Depth	B
1993	7	**0.16**

SP-1			
Year	Depth	Gas	B
2004	19	**100**	**0.09**

SSI-W2				
Year	Depth	Gas	DSL	B
2017	12.5	**69**	**266**	ND
	16	ND	ND	ND

1986	MW-9

P1									
Date	Depth	Gas	B	T	E	X	HCID		
							Gas	DSL	Oil
5/22/17	5	----	ND	ND	ND	ND	ND	ND	ND
	10	----	ND	ND	ND	ND	----	----	----
	13	**100**	ND	ND	**0.078**	**0.39**	ND	**D**	ND
	20	**26**	ND	**0.055**	**0.13**	**0.19**	----	----	----

SSI-P1					
Year	Depth	Gas	DSL	B	T
2017	5	ND	ND	ND	**0.17**
	9	ND	ND	ND	ND

P03			
Year	Depth	Gas	B
2012	4	**17**	ND
	11	**110**	ND
	15	**590**	**0.06**
	20	ND	ND
	24	ND	ND

DP-2		
Year	Depth	B
2002	14	**0.0571**

P2									
Date	Depth	Gas	B	T	E	X	HCID		
							Gas	DSL	Oil
5/22/17	4	**250**	**0.025**	**1.4**	**1.3**	**2.1**	ND	ND	**D**
	7.5	ND	ND	ND	ND	ND	----	----	----
	14	ND	ND	ND	ND	ND	ND	**D**	ND
	20	ND	ND	ND	ND	ND	ND	ND	ND

PIT-9		
Year	Depth	B
1993	6	**0.35**

SSI-W1				
Year	Depth	Gas	DSL	B
2017	8	ND	ND	ND
	15	ND	ND	ND

PIT-8			
Year	Depth	Gas	B
1993	11	**1,100**	**1.1**

P3									
Date	Depth	Gas	B	T	E	X	HCID		
							Gas	DSL	Oil
5/22/17	5	**220**	**0.047**	**0.54**	**0.84**	**1.3**	ND	**D**	ND
	8	----	ND	ND	ND	ND	ND	ND	ND
	13	**2.7**	ND	ND	ND	ND	**D**	ND	ND
	20	----	ND	ND	ND	ND	ND	ND	ND

PIT-7				
Year	Depth	Gas	DSL	B
1993	11	**11,000**	**3,200**	**23**

DP-1	
Year	Results
2002	BSL @ 16'

P02		
Year	Depth	Gas
2012	8	ND
	11	**52**
	20	ND

MW-13	
Year	Results
2002	ND @ 14'

PIT-10		
Year	Depth	B
1993	11	**0.18**

DP-3			
Year	Depth	Gas	B
2002	12	**1,140**	**2.39**

PIT-11				
Year	Depth	Gas	DSL	B
1993	11	**4,800**	**4,000**	**51**

P4		
Date	Depth	HVOCs
5/22/17	2	ND
	4	ND
	5.5	ND

DPE-6			
Year	Depth	Gas	B
2005	17.5	**140**	<1
	20	**96**	<0.5

DP-7			
Year	Depth	Gas	B
2002	20	**329**	**1.39**

SSI-P5							
Year	Depth	Gas	DSL	B	T	E	X
regena ll	23	**99**	ND	**4.4**	**7.8**	**0.29**	**1.0**
	31	ND	ND	ND	ND	ND	ND

P08				
Year	Depth	Gas	DSL	B
2012	8	ND	ND	ND
	14	**2,500**	**2,600**	**2.5**
	19	**7.5**	ND	**0.035**
	28	ND	ND	**0.14**

DP-5			
Year	Depth	Gas	B
2002	14	**8,160**	**17.4**

P7		
Date	Depth	HVOCs
5/22/17	4	ND
	6	ND

P04				
Year	Depth	Gas	DSL	B
2012	8	ND	ND	ND
	11	**590**	**2,600**	**0.6**
	24	ND	ND	ND

P5		
Date	Depth	HVOCs
5/22/17	2	ND
	4	ND

P6		
Date	Depth	HVOCs
5/22/17	1	ND
	4	ND

= Soil Analytical Data in mg/kg;

Depth = Feet below ground surface
BTEX = Benzene, toluene, ethylbenzene, xylenes
HVOCs = Halogenated volatile organic compounds
Gas/DSL = Gasoline/diesel total petroleum hydrocarbons
ND = Not detected, BSL = Concentrations of contaminants were below applicable soil screening levels
Bold and yellow highlight indicates concentrations above MTCA soil screening levels. Highlighted symbol indicates location that contains, or is suspected to contain, concentrations of COCs above soil MTCA Cleanup levels.

8 = UST identification number reported in previous reports, Note: Alleged USTs 1 and 2 were not encountered during IA

= Fence

= (in green) Approximate location of 1993 UST excavation boundary

= Property boundary

P4 = RGI test probe location, P1 - P7 drilled May 2017 and SSI-P1 - SSI-P5 drilled December 2017

SSI-W1 = (in blue) Existing groundwater monitoring well location. SSI-W1 & SSI-W2 installed by RGI in December 2017

MW-14 = Monitoring well by others

DPE-5 = Extraction well by others

RW-4 = Recovery well by others

DB,SP,DP,P09 = Soil boring by others

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

Summary of Pre-Interim Action Soil Analytical Data (1993-2017) and Historical Features

Date Drawn: 03/2022

Address: 631 Queen Anne Avenue North, Seattle, Washington 98109

MW-9													
Date	LNAPL	Gas	DSL	Oil	DSL*	Oil*	B	T	E	X	cPAHs	HVOCs	VOCs
11/13/18	----	ND	**440x**	ND	**140**	ND	ND	ND	ND	ND	ND	----	ND
08/15/17	ND	----	**1,500x**	**490x**	----	----	----	----	----	----	----	----	----
04/06/17	ND	**480**	----	----	----	----	ND	**2.2**	**1.8**	**3.4**	----	ND	----
03/1991	**0.17**	----	----	----	----	----	----	----	----	----	----	----	----

SSI-P2 (Grab Sample)					
Date	LNAPL	Gas	DSL	Oil	BTEX
12/02/17	ND	ND	ND	ND	ND

SSI-W2					
Date	LNAPL	Gas	DSL	Oil	BTEX
03/02/20	----	ND	**69x**	ND	ND
11/13/18	----	ND	ND	ND	ND
12/06/17	ND	ND	ND	ND	ND

P1-W (Grab Sample)								
Date	LNAPL	Gas	DSL	Oil	B	T	E	X
05/22/17	ND	**7,100**	**110,000ve**	**3,800x**	ND	**12**	**5.4**	**27**

SSI-P1 (Grab Sample)					
Date	LNAPL	Gas	DSL	Oil	BTEX
12/02/17	ND	ND	ND	ND	ND

P2-W (Grab Sample)								
Date	LNAPL	Gas	DSL	Oil	B	T	E	X
05/22/17	ND	ND	ND	ND	ND	ND	ND	ND

VP-9					
Date	LNAPL	Gas	DSL	Oil	BTEX
11/13/18	----	ND	ND	ND	ND
01/2005	ND	**100**	ND	ND	ND

RW-4	LNAPL Last observed 07/2004

MW-24							
Date	LNAPL	Gas	DSL	Oil	B	PCE	TCE
01/2005	ND	ND	ND	ND	ND	ND	ND

SSI-W1					
Date	LNAPL	Gas	DSL	Oil	BTEX
03/02/20	----	ND	**62x**	ND	ND
11/13/18	----	ND	ND	ND	ND
12/06/17	ND	ND	ND	ND	ND

MW-10											
Date	LNAPL	Gas	DSL	Oil	B	T	E	X	PCE	TCE	HVOCs
03/02/20	----	ND	**68x**	ND	ND	ND	ND	ND	----	----	----
11/13/18	----	ND	ND	ND	ND	ND	ND	ND	----	----	----
04/06/17	ND	ND	----	----	ND	ND	ND	ND	ND	ND	ND
11/13/13	ND	ND	ND	ND	ND	----	----	----	----	----	----

DPE-7													
Date	LNAPL	Gas	DSL	Oil	DSL*	Oil*	B	Naph	cPAHs	PCE	TCE	HVOCs	Pb
11/13/18	----	**700**	**4,100x**	**850x**	**430x**	ND	**3.3**	**1.3**	ND	----	----	----	ND
04/06/17	ND	----	----	----	----	----	----	----	----	ND	ND	ND	----
11/03/08	**0.01**	----	----	----	----	----	----	----	----	----	----	----	----
04/2008	ND	ND	**6,100**	ND	----	----	**7**	----	----	----	----	----	----

MW-6												
Date	LNAPL	Gas	DSL	Oil	DSL*	Oil*	B	T	E	X	cPAHs	VOCs
11/13/18	----	**110**	**1,000x**	ND	**570x**	ND	**0.89**	ND	ND	ND	ND	BSL
11/13/13	ND	**94**	**340**	ND	----	----	**3**	ND	**0.6**	**0.5**	----	----
04/2004	**0.02**	----	----	----	----	----	----	----	----	----	----	----

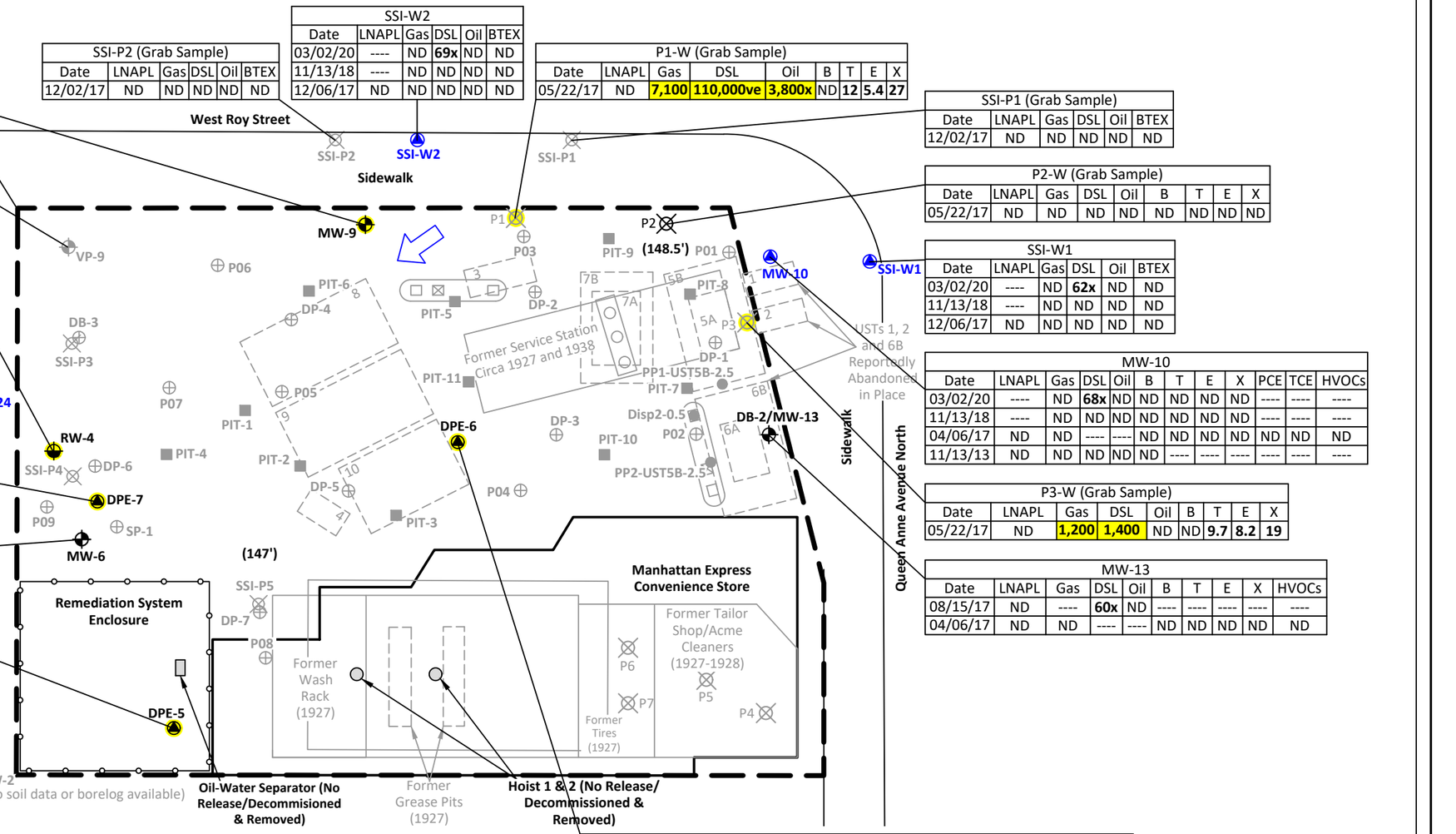
DPE-5											
Date	LNAPL	Gas	DSL	Oil	DSL*	Oil*	B	PCE	TCE	HVOCs	Pb
11/13/18	----	ND	**1,300x**	**420x**	**99**	ND	**1.6**	----	----	----	**1.37**
04/07/17	ND	----	----	----	----	----	----	ND	ND	ND	----
11/13/13	ND	**5,400**	**150**	ND	----	----	**44**	----	----	----	----
01/2006	**0.05**	----	----	----	----	----	----	----	----	----	----

RW-2								
Date	LNAPL	Gas	DSL	Oil	B	T	E	X
11/13/13	ND	ND	ND	ND	**2**	ND	ND	ND
03/1991	**0.08**	----	----	----	**19,000**	**46,000**	**2,500**	**120,000**

P3-W (Grab Sample)								
Date	LNAPL	Gas	DSL	Oil	B	T	E	X
05/22/17	ND	**1,200**	**1,400**	ND	ND	**9.7**	**8.2**	**19**

MW-13									
Date	LNAPL	Gas	DSL	Oil	B	T	E	X	HVOCs
08/15/17	ND	----	**60x**	ND	----	----	----	----	----
04/06/17	ND	ND	----	----	ND	ND	ND	ND	ND

DPE-6												
Date	LNAPL	Gas	DSL	Oil	DSL*	Oil*	B	PCE	TCE	HVOCs	VOCs	Pb
11/13/18	----	ND	**3,300x**	**610x**	**180**	ND	ND	ND	ND	----	ND	ND
04/06/17	ND	----	----	----	----	----	----	ND	ND	ND	----	----
11/13/13	ND	**140**	**1,100**	ND	----	----	**7**	----	----	----	----	----



= Groundwater Analytical Data in micrograms per liter (ug/L);

LNAPL = Light non-aqueous phase liquid. If LNAPL was historically detected in the well, the most recent date LNAPL was detected is displayed along with the thickness of LNAPL observed in feet. ND indicates LNAPL was not observed.
Gas/DSL/Oil = Gasoline/diesel/oil total petroleum hydrocarbons. An asterisk (*) indicates the sample was analyzed using silica gel cleanup.
BTEX = Benzene, toluene, ethylbenzene, xylenes
Naph = Napthalenes, cPAHs = Carcinogenic polycyclic aromatic hydrocarbons
PCE, TCE, HVOCs, VOCs = Tetrachloroethene, trichloroethene, halogenated volatile organic compounds, volatile organic compounds
Pb = Dissolved lead
x = The sample chromatographic pattern does not resemble the fuel standard used for quantitation.
ND = Not detected, ---- = Not sampled or not applicable
Bold and yellow highlight (if any) indicates concentrations above MTCA Groundwater cleanup levels.
BSL = Either not detected at a concentration above the laboratory detection limit or detected at a concentration below the groundwater screening level

Note: This figure includes the most recent groundwater results, not all historical data is shown here. See Table 1 for a summary of all pre-Interim Action groundwater data pertaining to the Property.

= Groundwater flow direction
8 = UST identification number reported in previous reports, Note: Alleged USTs 1 and 2 were not encountered during IA
= Fence
= Property boundary

P4 = RGI test probe location, P1 - P7 drilled May 2017 and SSI-P1 - SSI-P5 drilled December 2017
SSI-W1 = (in blue) Existing groundwater monitoring well location. SSI-W1 & SSI-W2 installed by RGI in December 2017
MW-14 = Monitoring well by others
DPE-5 = Extraction well by others
RW-4 = Recovery well by others
DB,SP,DP,P09 = Soil boring by others
Pit-1 = 1993 UST excavation sample

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

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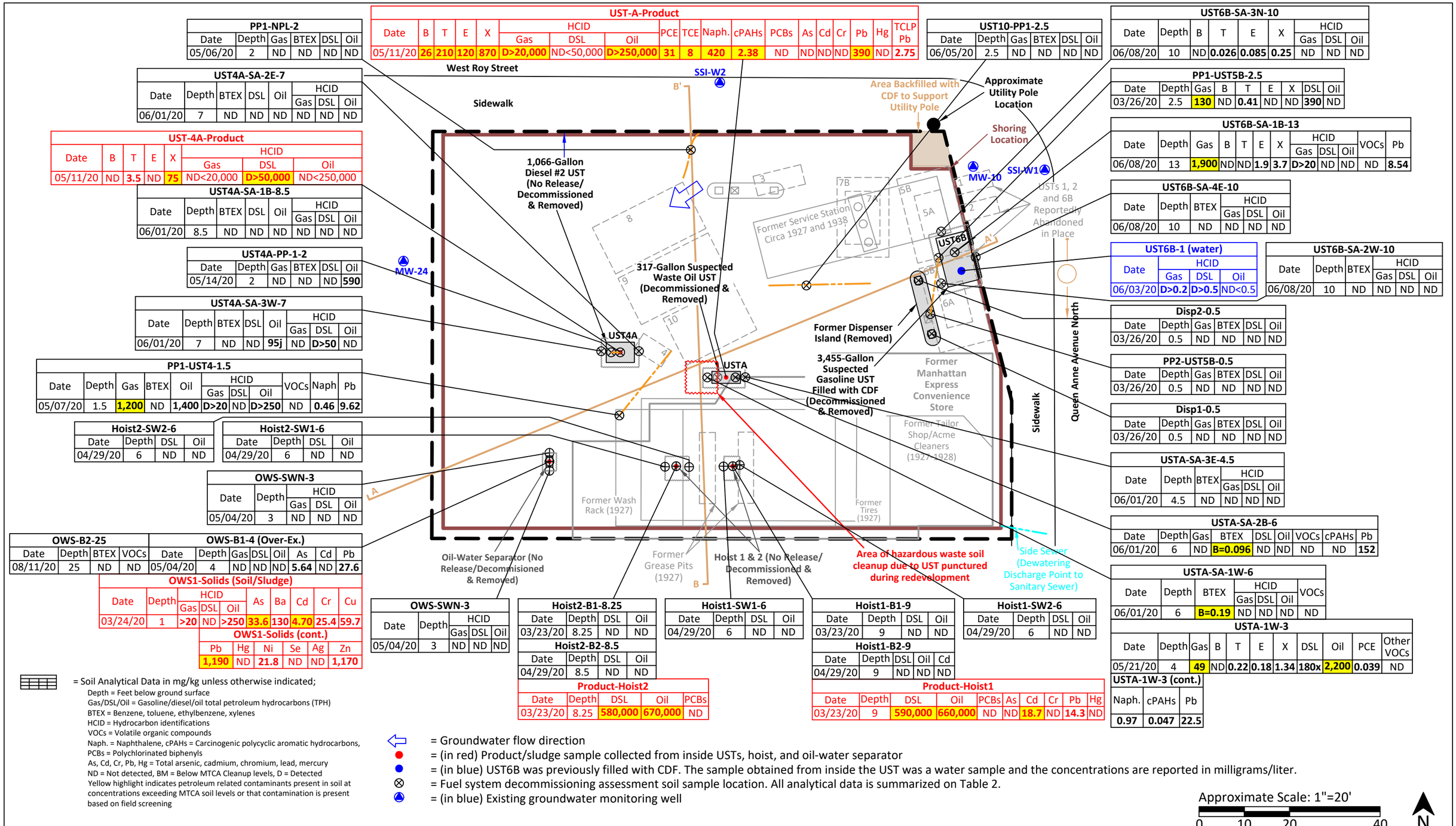
Roystone Redevelopment		Figure 4
RGI Project Number 2017-015K	Summary of Select Pre-Interim Action Groundwater Analytical Data (1991-2020) with Historical LNAPL Results	Date Drawn: 03/2022
Address: 631 Queen Anne Avenue North, Seattle, Washington 98109		



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	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

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

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

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

UST4A-PP-1-2

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

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

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

Hoist2-SW2-6

Date	Depth	DSL	Oil
04/29/20	6	ND	ND

Hoist2-SW1-6

Date	Depth	DSL	Oil
04/29/20	6	ND	ND

OWS-SWN-3

Date	Depth	HCID Gas	HCID DSL	HCID Oil
05/04/20	3	ND	ND	ND

OWS-B2-25

Date	Depth	BTEX	VOCs
08/11/20	25	ND	ND

OWS-B1-4 (Over-Ex.)

Date	Depth	Gas	DSL	Oil	As	Cd	Pb
05/04/20	4	ND	ND	ND	5.64	ND	27.6

OWS1-Solids (Soil/Sludge)

Date	Depth	HCID Gas	HCID DSL	HCID Oil	As	Ba	Cd	Cr	Cu
03/24/20	1	>20	ND	>250	33.6	130	4.70	25.4	59.7

OWS1-Solids (cont.)

Pb	Hg	Ni	Se	Ag	Zn
1,190	ND	21.8	ND	ND	1,170

OWS-SWN-3

Date	Depth	HCID Gas	HCID DSL	HCID Oil
05/04/20	3	ND	ND	ND

Hoist2-B1-8.25

Date	Depth	DSL	Oil
03/23/20	8.25	ND	ND

Hoist2-B2-8.5

Date	Depth	DSL	Oil
04/29/20	8.5	ND	ND

Product-Hoist2

Date	Depth	DSL	Oil	PCBs
03/23/20	8.25	580,000	670,000	ND

Hoist1-SW1-6

Date	Depth	DSL	Oil
04/29/20	6	ND	ND

Hoist1-B1-9

Date	Depth	DSL	Oil	Cd
03/23/20	9	ND	ND	

Hoist1-B2-9

Date	Depth	DSL	Oil	Cd
04/29/20	9	ND	ND	ND

Product-Hoist1

Date	Depth	DSL	Oil	PCBs	As	Cd	Cr	Pb	Hg
03/23/20	9	590,000	660,000	ND	ND	18.7	ND	14.3	ND

Hoist1-SW2-6

Date	Depth	DSL	Oil
04/29/20	6	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

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

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

UST6B-SA-4E-10

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

UST6B-1 (water)

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

UST6B-SA-2W-10

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

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-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

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-1W-3

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

USTA-1W-3 (cont.)

Naph.	cPAHs	Pb
0.97	0.047	22.5

= 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
= (in red) Product/sludge sample collected from inside USTs, hoist, and oil-water separator
= (in blue) 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. All analytical data is summarized on Table 2.
= (in blue) Existing groundwater monitoring well

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

= Indicates USTs, pump island, oil-water separator, and hoists encountered during 2020 IA
= Cross section location
= 2020 UST, hoist, or oil-water separator excavation
= (in orange) Product piping
= Property boundary

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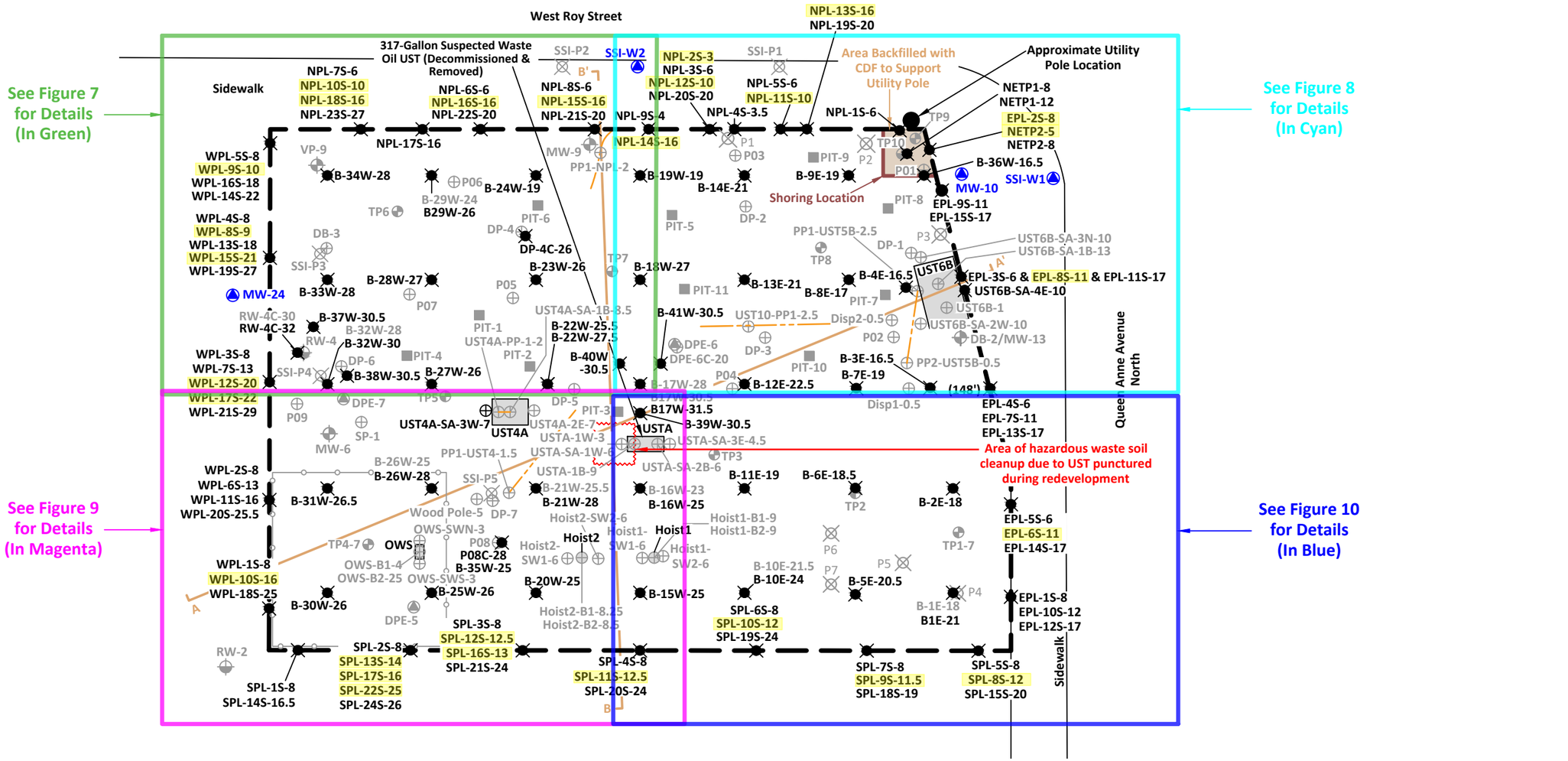
Bothell, Washington 98011
Phone: 425.415.0551
Fax: 425.415.0311

Roystone Redevelopment		Figure 5
RGI Project Number 2017-015K	Summary of 2020 Fuel System & OWS Decommissioning and Assessment Data	Date Drawn: 03/2022
Address: 631 Queen Anne Avenue North, Seattle, Washington 98109		



USTA: 317-Gallon Suspected Waste Oil UST (Decommissioned & Removed)
UST4A: 1,066-Gallon Diesel #2 UST (No Release/ Decommissioned & Removed)
UST6B: 3,455-Gallon Suspected Gasoline UST Filled with CDF (Decommissioned & Removed)
Hoist 1 & 2: No Release/Decommissioned & Removed
OWS: Oil-Water Separator (No Release/Decommisioned & Removed)

= Underground improvement/fuel system decommissioning assessment soil sample location. All analytical data is summarized on Table 1.
= Final confirmation soil sample location indicating location where soil remains in place. Highlighted sample ID indicates a location where soil containing concentrations of contaminants above applicable MTCA soil cleanup levels remains in place at the property boundary. Sample IDs pertaining to over excavated soil are not highlighted yellow.
= Test pit/characterization sample
= (in blue) Existing groundwater monitoring well
= RGI test probe location, P1 - P7 drilled May 2017 and SSI-P1 - SSI-P5 drilled December 2017
= Former monitoring well by others (decommissioned)
= Former extraction well by others (decommissioned)
= Former recovery well by others (decommissioned)
= Soil boring by others
= 1993 UST excavation sample

= Cross section location
= (in orange) Product piping
= Former remediation system enclosure
= Property boundary

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

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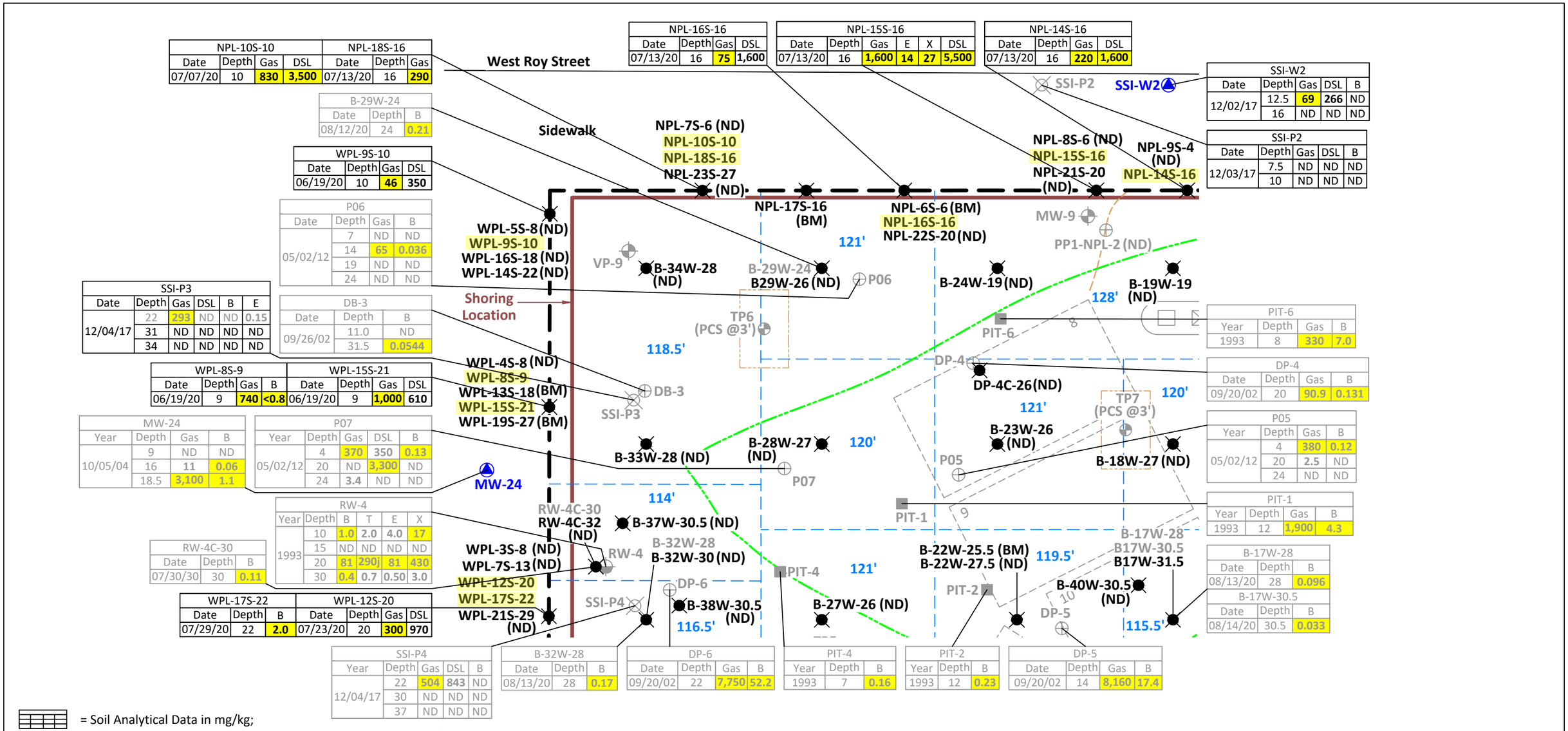
Roystone Redevelopment		Figure 6
RGI Project Number 2017-015K	Interim Action and Historical Soil Sample Locations	Date Drawn: 03/2022
Address: 631 Queen Anne Avenue North, Seattle, Washington 98109		



= Soil Analytical Data in mg/kg;
Gray data box indicates location where soil was removed during Interim Action
Depth = Feet below ground surface
Over-Ex. = Indicates sample was over-excavated and removed from the Property
Gas/DSL/Oil = Gasoline/diesel/oil total petroleum hydrocarbons (TPH)
BTEX = Benzene, toluene, ethylbenzene, xylenes
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

8 = UST identification number reported in previous reports

120.5'-121' = (in blue) Approximate bottom elevation of remedial excavation at indicated location

= (in orange) Product piping

= (in green) Approximate location of 1993 UST excavation boundary

= Property boundary

PCS@3' = Location of test pit used to characterize soil prior to excavation

= Petroleum contaminated soil was present in test pit at indicated depth based on field screening.

= Underground improvement/fuel system decommissioning assessment soil sample location.

= Final confirmation soil sample location indicating location where soil remains in place. Highlighted sample ID indicates a location where soil containing concentrations of contaminants above applicable MTCA soil cleanup levels remains in place at the property boundary. Sample IDs pertaining to over excavated soil are not highlighted yellow.

= Test pit/characterization sample

P4 = (in blue) Existing off-Property groundwater monitoring well

MW-14 = RGI test probe location, P1 - P7 drilled May 2017 and SSI-P1 - SSI-P5 drilled December 2017

RW-4 = Former monitoring well by others (decommissioned)

= Former recovery well by others (decommissioned)

DB,SP,DP,P09 = Soil boring by others

Pit-1 = 1993 UST excavation sample

Approximate Scale: 1"=10'

0 5 10 20

N

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Bothell, Washington 98011
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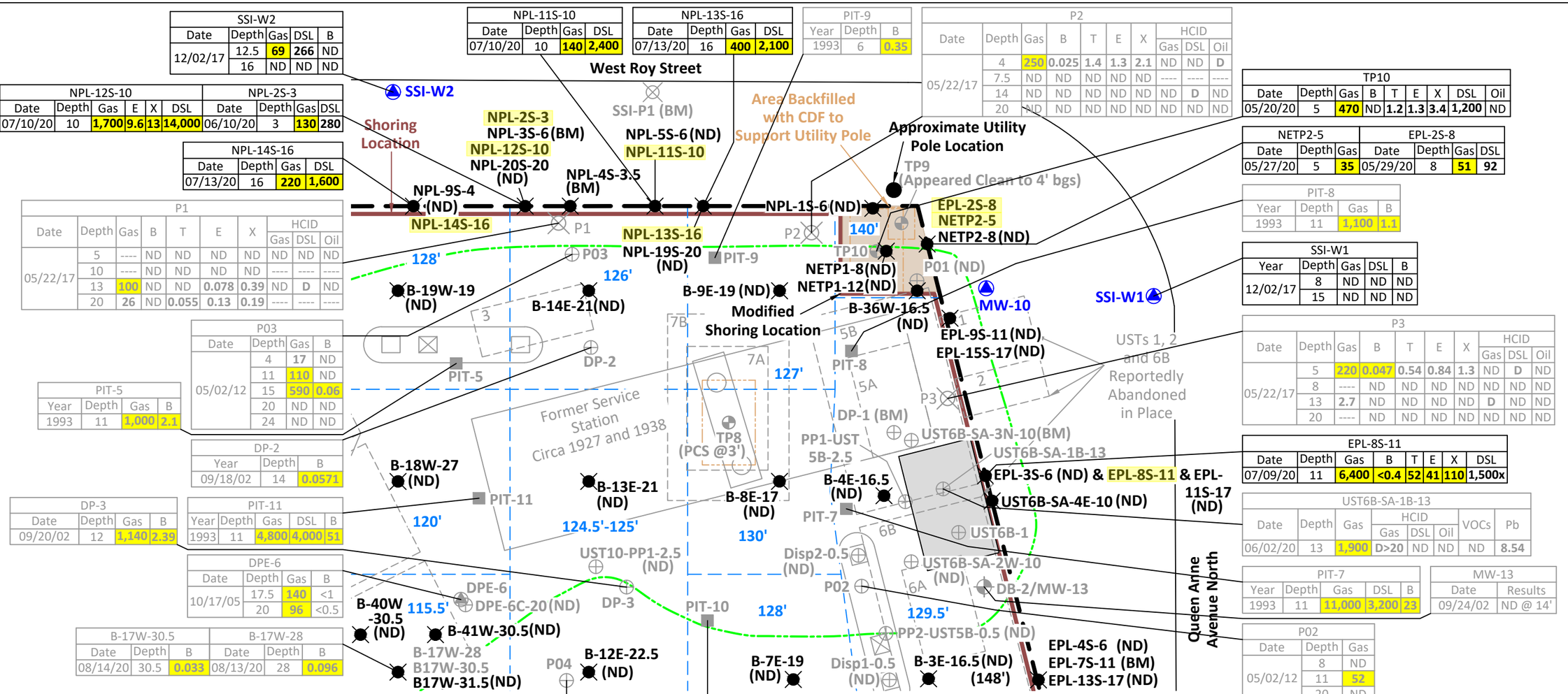
Roystone Redevelopment | Figure 7

RGI Project Number: 2017-015K

Northwest Corner Interim Action Confirmation Soil Sample Locations with Select Soil Analytical Data

Date Drawn: 03/2022

Address: 631 Queen Anne Avenue North, Seattle, Washington 98109



UST6B: 3,455-Gallon Suspected Gasoline UST Filled with CDF (Decommissioned & Removed)

= Soil Analytical Data in mg/kg;
Gray data box indicates location where soil was removed during Interim Action
Depth = Feet below ground surface
Over-Ex. = Indicates sample was over-excavated and removed from the Property
Gas/DSL/Oil = Gasoline/diesel/oil total petroleum hydrocarbons (TPH)
BTEX = Benzene, toluene, ethylbenzene, xylenes
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

8 = UST identification number reported in previous reports

120.5'-121' = (in blue) Approximate bottom elevation of remedial excavation at indicated location

= (in orange) Product piping

= Former remediation system enclosure

= (in green) Approximate location of 1993 UST excavation boundary

= Property boundary

PCS@3' = Location of test pit used to characterize soil prior to excavation

= Petroleum contaminated soil was present in test pit at indicated depth based on field screening.

= Underground improvement/fuel system decommissioning assessment soil sample location.

= Final confirmation soil sample location indicating location where soil remains in place. Highlighted sample ID indicates a location where soil containing concentrations of contaminants above applicable MTCA soil cleanup levels remains in place at the property boundary. Sample IDs pertaining to over excavated soil are not highlighted yellow.

= Test pit/characterization sample

= (in blue) Existing off-Property 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 (decommissioned)

DPE-5 = Former extraction well by others (decommissioned)

DB,SP,DP,P09 = Soil boring by others

Pit-1 = 1993 UST excavation sample

Approximate Scale: 1"=10'
0 5 10 20
N

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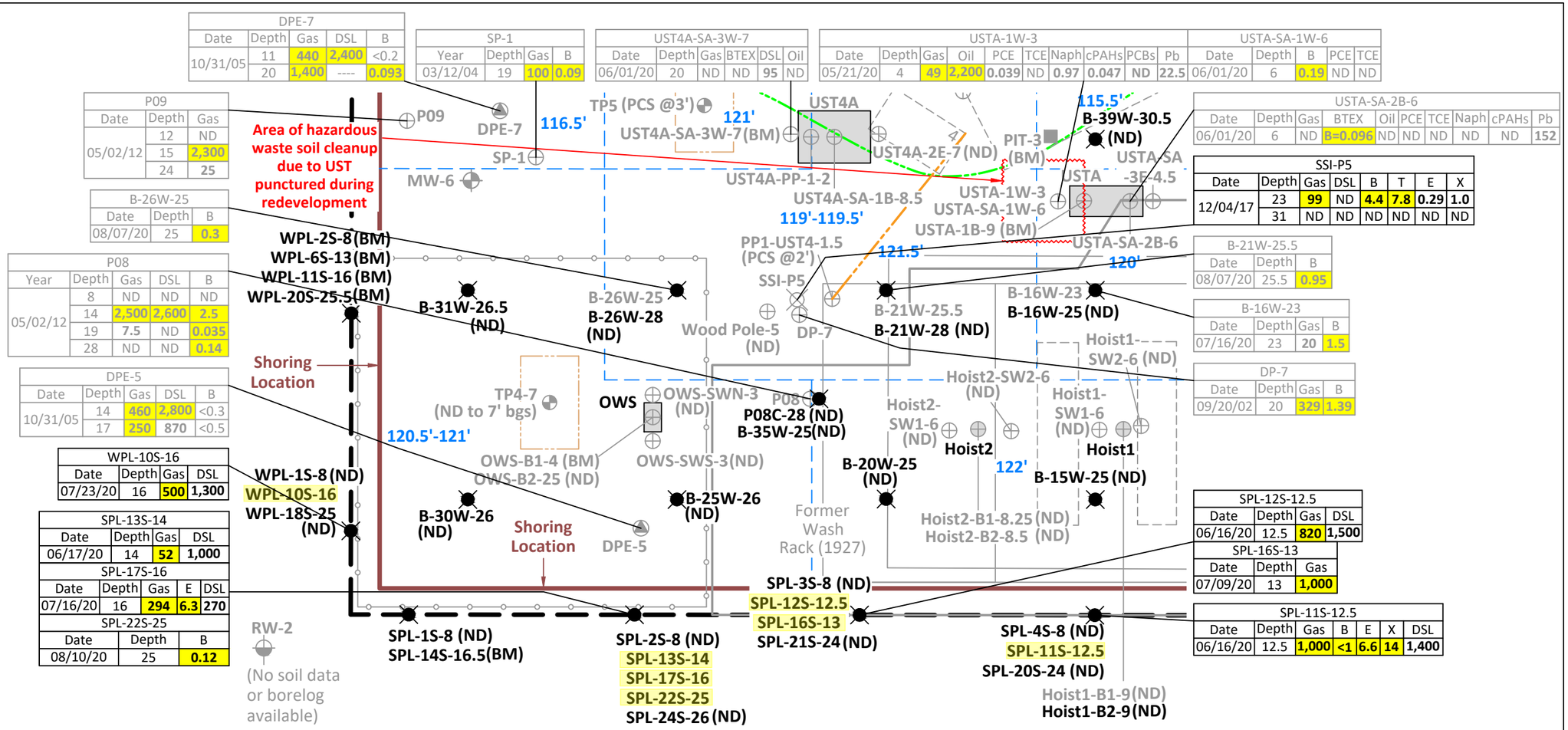
Roystone Redevelopment | Figure 8

RGI Project Number 2017-015K

Northeast Corner Interim Action Confirmation Soil Sample Locations with Select Soil Analytical Data

Date Drawn: 03/2022

Address: 631 Queen Anne Avenue North, Seattle, Washington 98109



USTA: 317-Gallon Suspected Waste Oil UST (Decommissioned & Removed)
UST4A: 1,066-Gallon Diesel #2 UST (No Release/ Decommissioned & Removed)
Hoist 1 & 2: No Release/Decommissioned & Removed
OWS: Oil-Water Separator (No Release/Decommisioned & Removed)

= Soil Analytical Data in mg/kg;
Gray data box indicates location where soil was removed during Interim Action
Depth = Feet below ground surface
Over-Ex. = Indicates sample was over-excavated and removed from the Property
Gas/DSL/Oil = Gasoline/diesel/oil total petroleum hydrocarbons (TPH)
BTEX = Benzene, toluene, ethylbenzene, xylenes
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

8 = UST identification number reported in previous reports

120.5'-121' = (in blue) Approximate bottom elevation of remedial excavation at indicated location

= (in orange) Product piping

= Former remediation system enclosure

= (in green) Approximate location of 1993 UST excavation boundary

= Property boundary

PCS@3' = Location of test pit used to characterize soil prior to excavation

= Petroleum contaminated soil was present in test pit at indicated depth based on field screening.

= Underground improvement/fuel system decommissioning assessment soil sample location.

= Final confirmation soil sample location indicating location where soil remains in place. Highlighted sample ID indicates a location where soil containing concentrations of contaminants above applicable MTCA soil cleanup levels remains in place at the property boundary. Sample IDs pertaining to over excavated soil are not highlighted yellow.

= Test pit/characterization sample

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 (decommissioned)

DPE-5 = Former extraction well by others (decommissioned)

RW-4 = Former recovery well by others (decommissioned)

DB,SP,DP,P09 = Soil boring by others

Pit-1 = 1993 UST excavation sample

Approximate Scale: 1"=10'
0 5 10 20
N

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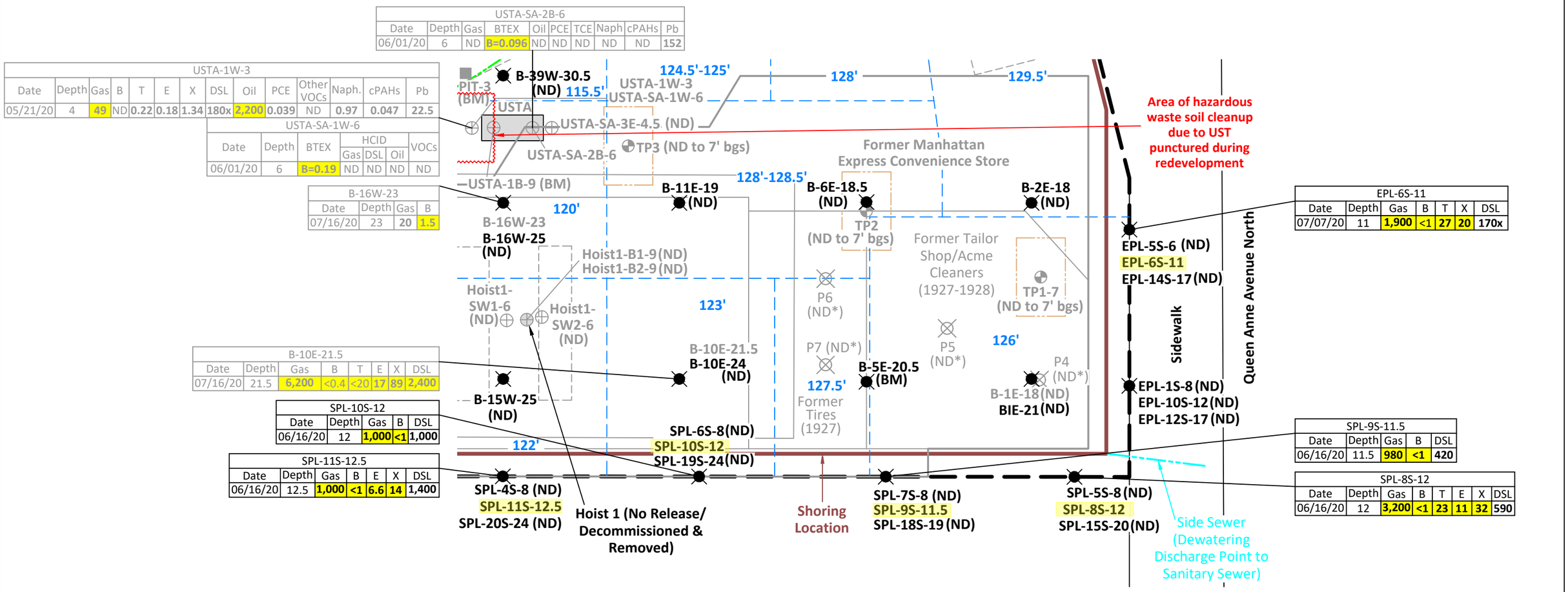
Roystone Redevelopment		Figure 9
RGI Project Number 2017-015K	Southwest Corner Interim Action Confirmation Soil Sample Locations with Select Soil Analytical Data	Date Drawn: 03/2022
Address: 631 Queen Anne Avenue North, Seattle, Washington 98109		



USTA: 317-Gallon Suspected Waste Oil UST (Decommissioned & Removed)

= Soil Analytical Data in mg/kg;
Gray data box indicates location where soil was removed during Interim Action
Depth = Feet below ground surface
Over-Ex. = Indicates sample was over-excavated and removed from the Property
Gas/DSL/Oil = Gasoline/diesel/oil total petroleum hydrocarbons (TPH)
BTEX = Benzene, toluene, ethylbenzene, xylenes
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

120.5'-121' = (in blue) Approximate bottom elevation of remedial excavation at indicated location

= (in orange) Product piping

= (in green) Approximate location of 1993 UST excavation boundary

= Property boundary

= Location of test pit used to characterize soil prior to excavation

(ND*) = Soil sample analyzed for HVOCs

PCS@3' = Petroleum contaminated soil was present in test pit at indicated depth based on field screening.

= Underground improvement/fuel system decommissioning assessment soil sample location.

= Final confirmation soil sample location indicating location where soil remains in place. Highlighted sample ID indicates a location where soil containing concentrations of contaminants above applicable MTCA soil cleanup levels remains in place at the property boundary. Sample IDs pertaining to over excavated soil are not highlighted yellow.

P4 = Test pit/characterization sample

MW-14 = RGI test probe location, P1 - P7 drilled May 2017 and SSI-P1 - SSI-P5 drilled December 2017

= Former monitoring well by others (decommissioned)

DB,SP,DP,P09 = Soil boring by others

Pit-1 = 1993 UST excavation sample

Approximate Scale: 1"=10'

0 5 10 20

N

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Bothell, Washington 98011
Phone: 425.415.0551
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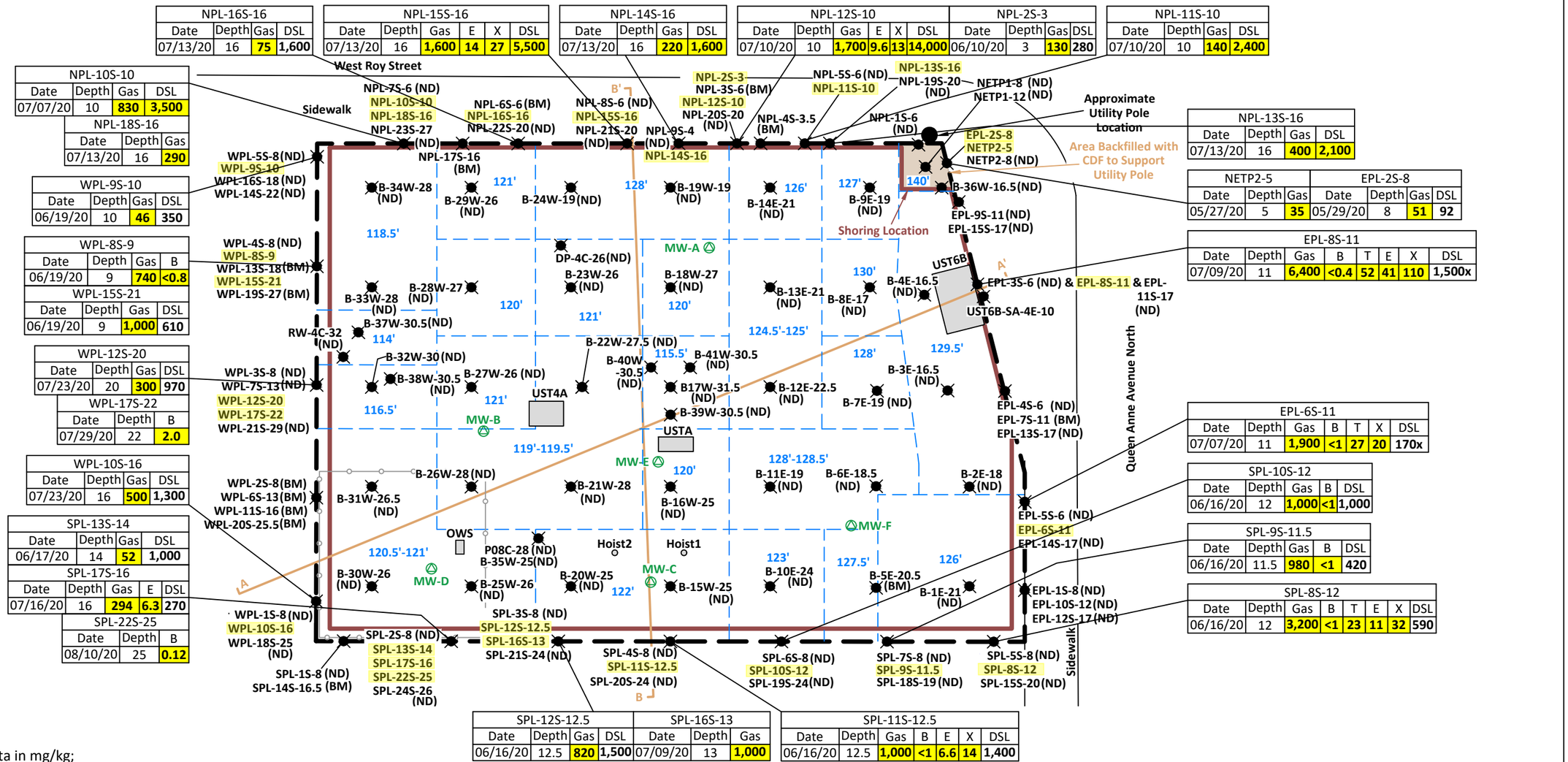
Roystone Redevelopment | Figure 10

RGI Project Number 2017-015K

Southeast Corner Interim Action Confirmation Soil Sample Locations with Select Soil Analytical Data

Date Drawn: 03/2022

Address: 631 Queen Anne Avenue North, Seattle, Washington 98109



= Soil Analytical Data in mg/kg;
Depth = Feet below ground surface
Gas/DSL/Oil = Gasoline/diesel/oil total petroleum hydrocarbons (TPH)
BTEX = Benzene, toluene, ethylbenzene, xylenes
ND = Not detected, BM = Below MTCA Cleanup levels, D = Detected
Yellow highlight indicates petroleum related contaminants present in soil at concentrations exceeding MTCA soil cleanup levels

Note: Prior to IA, approximate surface elevation ranged from 146.5' on the west side of the Property to 148.5' on the east side.

= Partially completed groundwater monitoring well location located on the ground floor of the future parking garage (see Figure 14). Final well completion is scheduled for June 2021.

120.5'-121' = (in blue) Approximate bottom elevation of remedial excavation at indicated location

= Final confirmation soil sample location indicating location where soil remains in place. Highlighted sample ID indicates a location where soil containing concentrations of contaminants above applicable MTCA soil cleanup levels remains in place at the property boundary.

= Property boundary

USTA: 317-Gallon Suspected Waste Oil UST (Decommissioned & Removed)
UST4A: 1,066-Gallon Diesel #2 UST (No Release/ Decommissioned & Removed)
UST6B: 3,455-Gallon Suspected Gasoline UST Filled with CDF (Decommissioned & Removed)
Hoist 1 & 2: No Release/Decommissioned & Removed
OWS: Oil-Water Separator (No Release/Decommisioned & Removed)

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

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Bothell, Washington 98011
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Fax: 425.415.0311

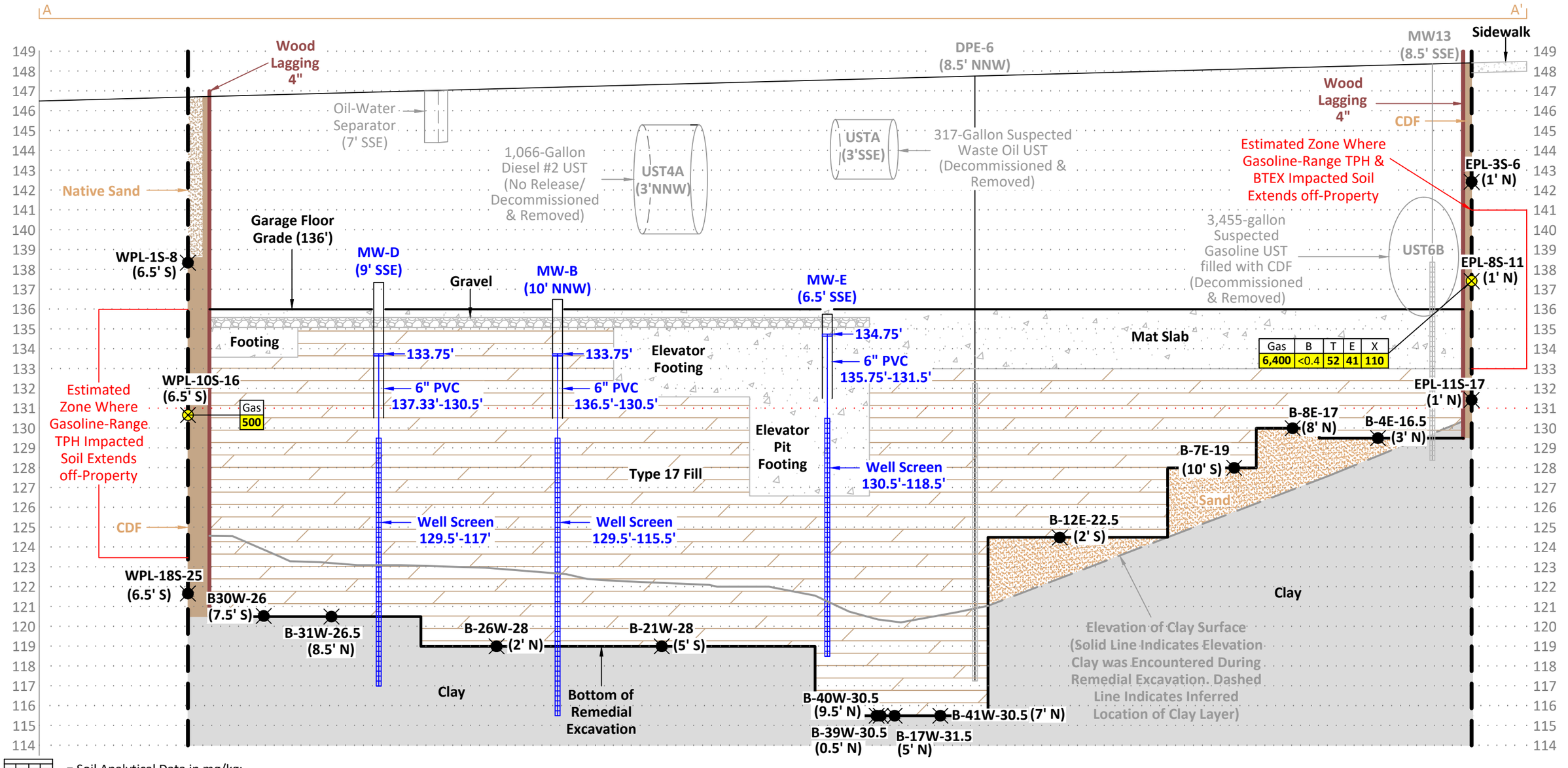
Roystone Redevelopment | Figure 11

RGI Project Number: 2017-015K

Interim Action Confirmation Soil Sample Locations with Select Soil Analytical Data

Date Drawn: 03/2022

Address: 631 Queen Anne Avenue North, Seattle, Washington 98109



= Soil Analytical Data in mg/kg;
Gas = Gasoline total petroleum hydrocarbons (TPH)
BTEX = Benzene, toluene, ethylbenzene, xylenes
Yellow highlight indicates petroleum related contaminants present in soil at concentrations exceeding MTCA soil cleanup levels

Approximate Scale:
Horizontal: 1" = 10'
Vertical: 1" = 5'
Vertical Exaggeration: 2x

Soil Samples
= Contaminants of concern detected at concentrations above applicable MTCA Soil cleanup levels
= No COCs detected at concentrations above laboratory detection limits

Note:
B-40W-30.5 - Last number in sample ID represents estimated depth below the original surface grade, which varied across the Property. Soil sample locations are displayed at the elevation collected, which is considered more accurate as the elevation is based on surveyed elevations.

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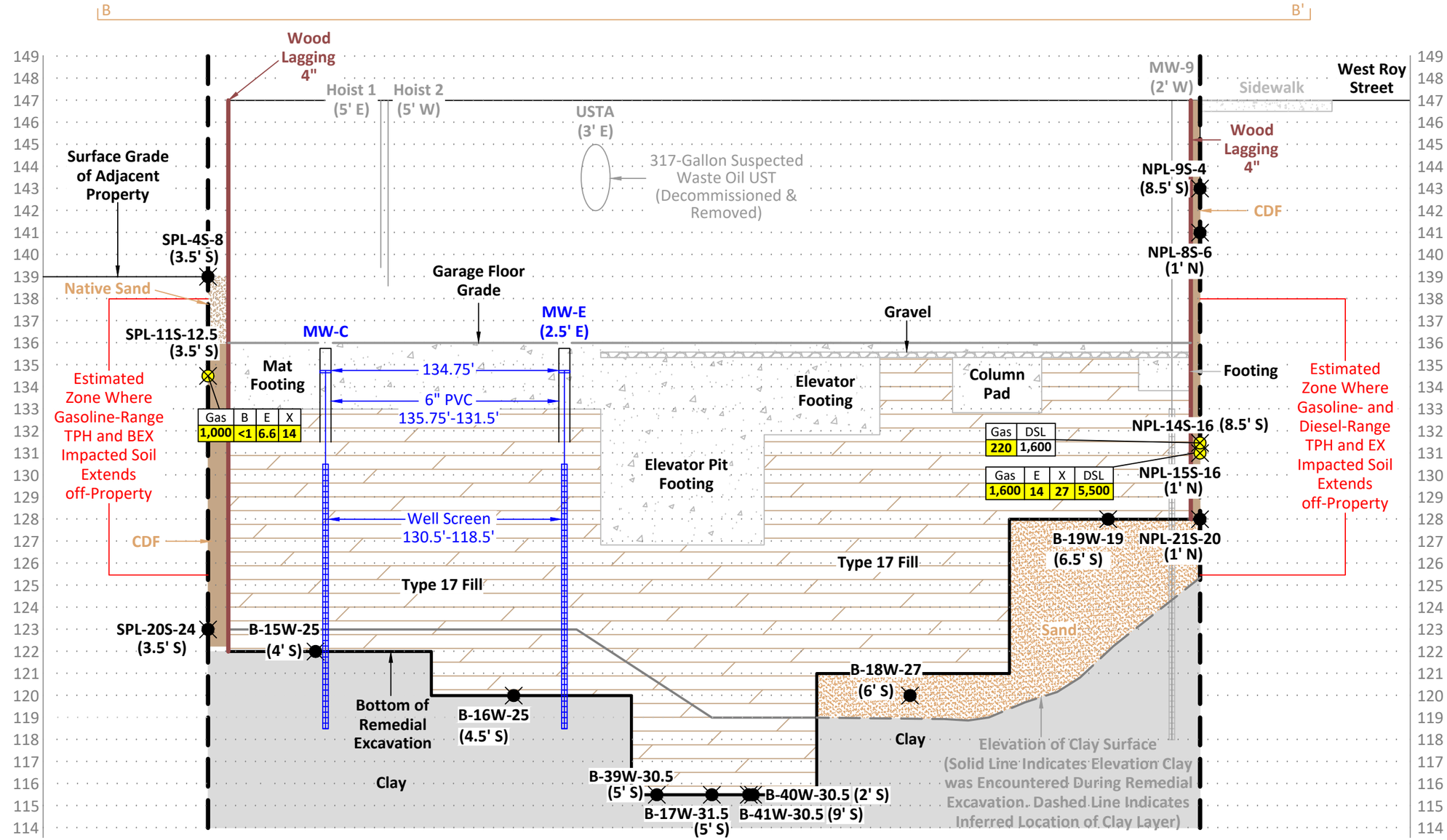
Roystone Redevelopment		Figure 12
RGI Project Number 2017-015K	Cross Section A - A' with Confirmation Soil Samples and Well Locations	Date Drawn: 03/2022
Address: 631 Queen Anne Avenue North, Seattle, Washington 98109		



= Soil Analytical Data in mg/kg;
Gas = Gasoline total petroleum hydrocarbons (TPH)
BTEX = Benzene, toluene, ethylbenzenes, xylenes
Yellow highlight indicates petroleum related contaminants present in soil at concentrations exceeding MTCA soil cleanup levels

Approximate Scale:
Horizontal: 1" = 10'
Vertical: 1" = 5'
Vertical Exaggeration: 2x

5 2.5 0
0 5 10 20

Soil Samples
= Contaminants of concern detected at concentrations above applicable MTCA Soil cleanup levels
= No COCs detected at concentrations above laboratory detection limits

Note:
B-40W-30.5 - Last number in sample ID represents estimated depth below the original surface grade, which varied across the Property. Soil sample locations are displayed at the elevation collected, which is considered more accurate as the elevation is based on surveyed elevations.

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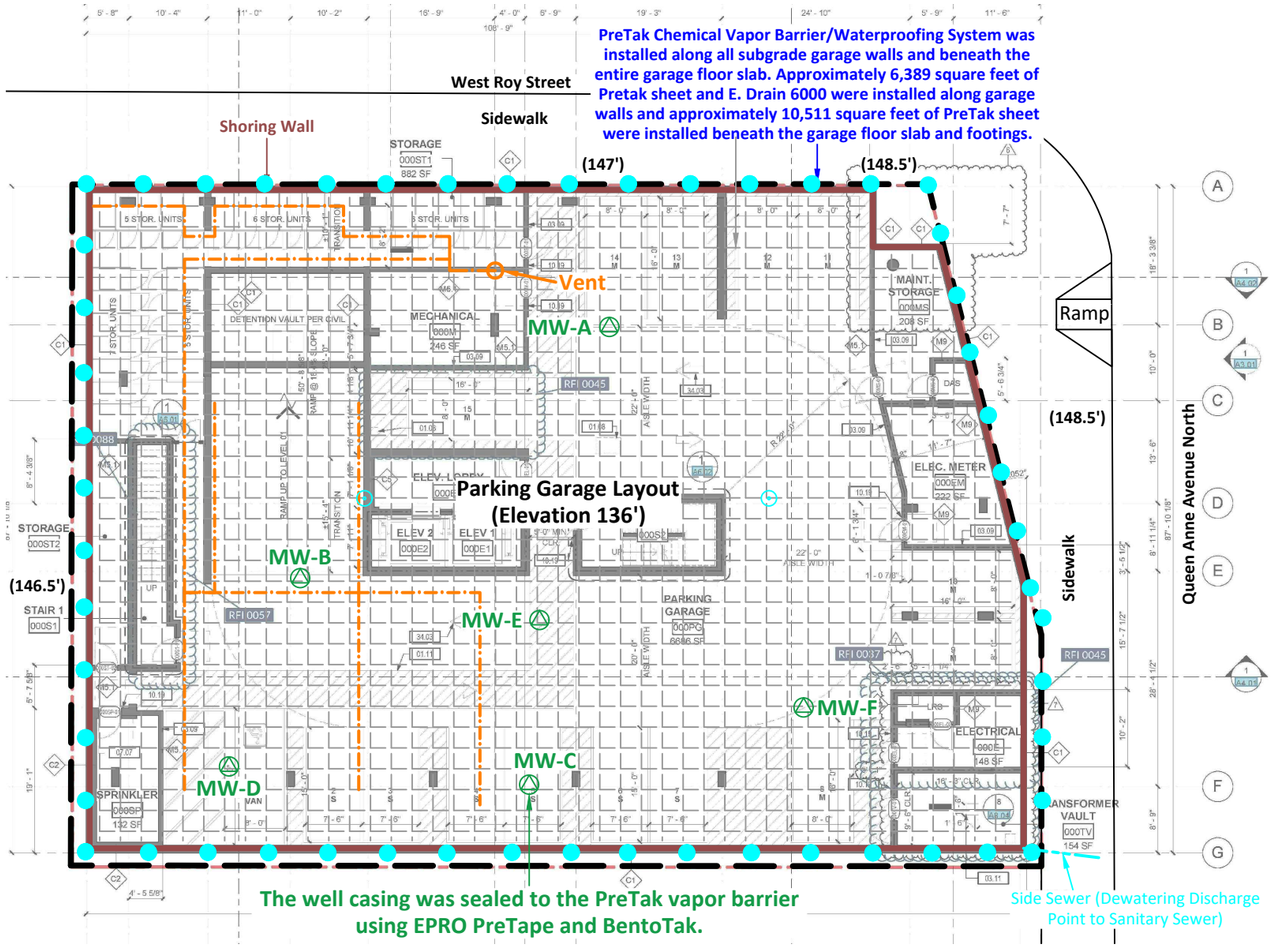
Roystone Redevelopment		Figure 13
RGI Project Number 2017-015K	Cross Section B - B' with Confirmation Soil Samples and Well Locations	Date Drawn: 03/2022
Address: 631 Queen Anne Avenue North, Seattle, Washington 98109		



*Base map obtained from Vibrant Cities: Roystone Apartments plan set (Sheet A2.00) dated 04/06/20 by Jackson Main Architecture.

Note: The PreTak Chemical Vapor Barrier/Waterproofing System consists of Pretak sheet, E. Drain 6000, PreTape, BentoTak, and Estop GU. See Appendix H for specification sheets.

- = Partially completed groundwater monitoring well location located on the ground floor of the future parking garage. Final well completion is scheduled for June 2021.
- = (in cyan) Dewatering well
- = (in orange) Subslab depressurization pipe layout beneath concrete slab
- (147') = Approximate surface elevation
- = Property boundary

Approximate Scale: 1"=20'

0 10 20 40

N

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Roystone Redevelopment		Figure 14
RGI Project Number 2017-015K	Subslab Depressurization System Pipe Layout with Vapor Barrier and Dewatering Well Locations	Date Drawn: 03/2022
Address: 631 Queen Anne Avenue North, Seattle, Washington 98109		

Table 1, Page 1 of 5. Summary of Pre-Interim Action Soil Analytical Data
Roystone Redevelopment (Texaco 211577 Monterey Site/Agreed Order No. 16537)
631 Queen Anne Avenue North, Seattle, Washington 98109
The Riley Group, Inc. Project No. 2017-015K

Sample Number	Sample Depth	Sample Date	Gasoline TPH	BTEX				Diesel TPH	Oil TPH	HCID			Naph.	cPAHs	MTBE	EDB	EDC	Other VOCs[4]	As	Ba	Cd	Cr	Pb	Hg	Se	Ag
				B	T	E	X			Gasoline	Diesel	Oil															
RGI Supplemental Subsurface Investigation (December 2017)																											
SS1-P1-5	5	12/02/17	ND<10	ND<0.02	**0.17**	ND<0.05	ND<0.15	ND<50	ND<250	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
SS1-P1-9	9	12/02/17	ND<10	ND<0.02	ND<0.10	ND<0.05	ND<0.15	ND<50	ND<250	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
SS1-P1-14	14	12/02/17	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
SS1-P1-17	17	12/02/17	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
SS1-P1-19	19	12/02/17	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
SS1-P1-19.5	19.5	12/02/17	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
SS1-P2-7.5	7.5	12/03/17	ND<10	ND<0.02	ND<0.10	ND<0.05	ND<0.15	ND<50	ND<250	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
SS1-P2-10	10	12/03/17	ND<10	ND<0.02	ND<0.10	ND<0.05	ND<0.15	ND<50	ND<250	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
SS1-P2-15	15	12/03/17	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
SS1-P2-15.5	15.5	12/03/17	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
SS1-P2-18	18	12/03/17	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
SS1-P3-5	5	12/04/17	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
SS1-P3-10	10	12/04/17	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
SS1-P3-12	12	12/04/17	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
SS1-P3-17	17	12/04/17	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
SS1-P3-22	22	12/04/17	**293**	ND<0.02	ND<0.10	**0.15**	ND<0.15	ND<50	ND<250	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
SS1-P3-27	27	12/04/17	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
SS1-P3-31	31	12/04/17	ND<10	ND<0.02	ND<0.10	ND<0.05	ND<0.15	ND<50	ND<250	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
SS1-P3-34	34	12/04/17	ND<10	ND<0.02	ND<0.10	ND<0.05	ND<0.15	ND<50	ND<250	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
SS1-P3-35	35	12/04/17	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
SS1-P4-5	5	12/04/17	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
SS1-P4-7	7	12/04/17	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
SS1-P4-7.5	7.5	12/04/17	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
SS1-P4-10	10	12/04/17	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
SS1-P4-11	11	12/04/17	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
SS1-P4-14	14	12/04/17	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
SS1-P4-17	17	12/04/17	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
SS1-P4-18	18	12/04/17	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
SS1-P4-19	19	12/04/17	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
SS1-P4-22	22	12/04/17	**504**	ND<0.02	ND<0.10	ND<0.05	ND<0.15	**843**	ND<250	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
SS1-P4-27	27	12/04/17	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
SS1-P4-30	30	12/04/17	ND<10	ND<0.02	ND<0.10	ND<0.05	ND<0.15	ND<50	ND<250	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
SS1-P4-35	35	12/04/17	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
SS1-P4-37	37	12/04/17	ND<10	ND<0.02	ND<0.10	ND<0.05	ND<0.15	ND<50	ND<250	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
SS1-P5-8	8	12/04/17	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
SS1-P5-12.5	12.5	12/04/17	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
SS1-P5-17	17	12/04/17	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
SS1-P5-20	20	12/04/17	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
SS1-P5-23	23	12/04/17	**99**	**4.4**	**7.8**	**0.29**	**1.0**	ND<50	ND<250	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
SS1-P5-28	28	12/04/17	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
SS1-P5-31	31	12/04/17	ND<10	ND<0.02	ND<0.10	ND<0.05	ND<0.15	ND<50	ND<250	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
SS1-W1-8	8	12/02/17	ND<10	ND<0.02	ND<0.10	ND<0.05	ND<0.15	ND<50	ND<250	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
SS1-W1-15	15	12/02/17	ND<10	ND<0.02	ND<0.10	ND<0.05	ND<0.15	ND<50	ND<250	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
SS1-W1-18	18	12/02/17	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
SS1-W1-21	21	12/02/17	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
SS1-W2-9	9	12/02/17	ND<10	ND<0.02	ND<0.10	ND<0.05	ND<0.15	ND<50	ND<250	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
SS1-W2-12.5	12.5	12/02/17	**69**	ND<0.02	**0.12**	**0.56**	**0.84**	**266**	ND<250	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
SS1-W2-16	16	12/02/17	ND<10	ND<0.02	ND<0.10	ND<0.05	ND<0.15	ND<50	ND<250	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
SS1-W2-19.5	19.5	12/02/17	ND<10	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
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**		**5**	**0.1[3]**	**0.1**	**0.05[5]**	**0.05[5]**	**Analyte Specific**	**20**	**----**	**2**	**19/ 2,000[2]**	**250**	**2**	**----**	**----**
MTCA Method B Soil Cleanup Levels for Unrestricted Land Uses[2]			**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**----**	**----**	**Analyte Specific**	**---**	**1,600**	**---**	**---**	**---**	**---**	**5.2**	**14**

Table 1, Page 2 of 5. Summary of Pre-Interim Action Soil Analytical Data
Roystone Redevelopment (Texaco 211577 Monterey Site/Agreed Order No. 16537)
631 Queen Anne Avenue North, Seattle, Washington 98109
The Riley Group, Inc. Project No. 2017-015K

Sample Number	Sample Depth	Sample Date	Gasoline TPH	BTEX				Diesel TPH	Oil TPH	HCID			Naph.	cPAHs	MTBE	EDB	EDC	Other VOCs[4]	As	Ba	Cd	Cr	Pb	Hg	Se	Ag
				B	T	E	X			Gasoline	Diesel	Oil														
RGI Subsurface Investigation (May 2017)																										
P1-5	5	05/22/17	----	ND<0.02	ND<0.02	ND<0.02	ND<0.06	----	----	ND<20	ND<50	ND<250	----	----	----	----	----	----	----	----	----	----	----	----	----	----
P1-10	10	05/22/17	----	ND<0.02	ND<0.02	ND<0.02	ND<0.06	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
P1-13	13	05/22/17	**100**	ND<0.02	ND<0.02	**0.078**	**0.39**	----	----	ND<20	**D>50**	ND<250	----	----	----	----	----	----	----	----	----	----	----	----	----	----
P1-20	20	05/22/17	**26**	ND<0.02	**0.055**	**0.13**	**0.19**	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
P2-4	4	05/22/17	**250**	**0.025**	**1.4**	**1.3**	**2.1**	----	----	ND<20	ND<50	**D>250**	----	----	----	----	----	----	----	----	----	----	----	----	----	----
P2-7.5	7.5	05/22/17	ND<2	ND<0.02	ND<0.02	ND<0.02	ND<0.06	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
P2-14	14	05/22/17	ND<2	ND<0.02	ND<0.02	ND<0.02	ND<0.06	----	----	ND<20	ND<50	ND<250	----	----	----	----	----	----	----	----	----	----	----	----	----	----
P2-17	17	05/22/17	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
P2-20	20	05/22/17	ND<2	ND<0.02	ND<0.02	ND<0.02	ND<0.06	----	----	ND<20	ND<50	ND<250	----	----	----	----	----	----	----	----	----	----	----	----	----	----
P3-5	5	05/22/17	**220**	**0.047**	**0.54**	**0.84**	**1.3**	----	----	ND<20	**D>50**	ND<250	----	----	----	----	----	----	----	----	----	----	----	----	----	----
P3-8	8	05/22/17	----	ND<0.02	ND<0.02	ND<0.02	ND<0.06	----	----	ND<20	ND<50	ND<250	----	----	----	----	----	----	----	----	----	----	----	----	----	----
P3-13	13	05/22/17	**2.7**	ND<0.02	ND<0.02	ND<0.02	ND<0.06	----	----	**D>20**	ND<50	ND<250	----	----	----	----	----	----	----	----	----	----	----	----	----	----
P3-20	20	05/22/17	----	ND<0.02	ND<0.02	ND<0.02	ND<0.06	----	----	ND<20	ND<50	ND<250	----	----	----	----	----	----	----	----	----	----	----	----	----	----
P4-2	2	05/22/17	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	ND	----	----	----	----	----	----	----	----
P4-4	4	05/22/17	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	ND	----	----	----	----	----	----	----	----
P4-5.5	5.5	05/22/17	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	ND	----	----	----	----	----	----	----	----
P5-2	2	05/22/17	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	ND	----	----	----	----	----	----	----	----
P5-4	4	05/22/17	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	ND	----	----	----	----	----	----	----	----
P6-1	1	05/22/17	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	ND	----	----	----	----	----	----	----	----
P6-4	4	05/22/17	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	ND	----	----	----	----	----	----	----	----
P7-2	2	05/22/17	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
P7-4	4	05/22/17	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	ND	----	----	----	----	----	----	----	----
P7-6	6	05/22/17	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	ND	----	----	----	----	----	----	----	----
Sound Earth Strategies Limited Subsurface Investigation (May 2012)																										
P01-04	4	05/02/12	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
P01-06	6	05/02/12	ND<2	ND<0.02	ND<0.02	ND<0.02	ND<0.06	ND<50	ND<250	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
P01-11	11	05/02/12	ND<2	ND<0.02	ND<0.02	ND<0.02	ND<0.06	ND<50	ND<250	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
P01-14	14	05/02/12	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
P01-20	20	05/02/12	ND<2	ND<0.02	ND<0.02	ND<0.02	ND<0.06	ND<50	ND<250	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
P01-24	24	05/02/12	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
P02-04	4	05/02/12	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
P02-08	8	05/02/12	ND<2	ND<0.02	ND<0.02	ND<0.02	ND<0.06	ND<50	ND<250	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
P02-11	11	05/02/12	**52**	ND<0.02	**0.18**	**0.37**	**0.53**	**120**	ND<250	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
P02-16	16	05/02/12	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
P02-20	20	05/02/12	ND<2	ND<0.02	ND<0.02	ND<0.02	ND<0.06	ND<50	ND<250	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
P02-24	24	05/02/12	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
P03-04	4	05/02/12	**17**	ND<0.02	ND<0.02	ND<0.02	ND<0.06	**67 x**	ND<250	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
P03-08	8	05/02/12	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
P03-11	11	05/02/12	**110**	ND<0.02	ND<0.02	**0.026**	**0.090**	**1,800**	ND<250	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
P03-15	15	05/02/12	**590**	**0.06**	**0.82**	**2.3**	**8.6**	**1,500**	ND<250	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
P03-20	20	05/02/12	ND<2	ND<0.02	ND<0.02	ND<0.02	ND<0.06	ND<50	ND<250	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
P03-24	24	05/02/12	ND<2	ND<0.02	ND<0.02	ND<0.02	ND<0.06	ND<50	ND<250	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
P04-04	4	05/02/12	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
P04-08	8	05/02/12	ND<2	ND<0.02	ND<0.02	ND<0.02	ND<0.06	ND<50	ND<250	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
P04-11	11	05/02/12	**590**	**0.60**	**1.8**	**2.0**	**4.6**	**2,600**	ND<250	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
P04-15	15	05/02/12	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
P04-20	20	05/02/12	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
P04-24	24	05/02/12	ND<2	ND<0.02	ND<0.02	ND<0.02	ND<0.06	ND<50	ND<250	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
P05-04	4	05/02/12	**380**	**0.12**	**0.82**	**3.1**	**3.1**	**530**	**360**	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
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**		**5**	**0.1[3]**	**0.1**	**0.05[5]**	**0.05[5]**	**Analyte Specific**	**20**	**----**	**2**	**19/ 2,000[2]**	**250**	**2**	**----**	**----**
MTCA Method B Soil Cleanup Levels for Unrestricted Land Uses[2]			**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**----**	**----**	**Analyte Specific**	**---**	**1,600**	**---**	**---**	**---**	**---**	**5.2**	**14**

Table 1, Page 3 of 5. Summary of Pre-Interim Action Soil Analytical Data
Roystone Redevelopment (Texaco 211577 Monterey Site/Agreed Order No. 16537)
631 Queen Anne Avenue North, Seattle, Washington 98109
The Riley Group, Inc. Project No. 2017-015K

Sample Number	Sample Depth	Sample Date	Gasoline TPH	BTEX				Diesel TPH	Oil TPH	HCID			Naph.	cPAHs	MTBE	EDB	EDC	Other VOCs[4]	As	Ba	Cd	Cr	Pb	Hg	Se	Ag
				B	T	E	X			Gasoline	Diesel	Oil															
P05-08	8	05/02/12	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
P05-11	11	05/02/12	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
P05-15	15	05/02/12	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
P05-20	20	05/02/12	**2.5**	ND<0.02	ND<0.02	ND<0.02	ND<0.06	ND<50	ND<250	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
P05-24	24	05/02/12	ND<2	ND<0.02	ND<0.02	ND<0.02	ND<0.06	ND<50	ND<250	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
P06-04	4	05/02/12	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
P06-07	7	05/02/12	ND<2	ND<0.02	ND<0.02	ND<0.02	ND<0.06	ND<50	ND<250	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
P06-11	11	05/02/12	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
P06-14	14	05/02/12	**65**	**0.036**	**0.22**	**0.64**	**1.5**	**1,000 x**	ND<250	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
P06-19	19	05/02/12	ND<2	ND<0.02	ND<0.02	ND<0.02	ND<0.06	ND<50	ND<250	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
P06-24	24	05/02/12	ND<2	ND<0.02	ND<0.02	ND<0.02	ND<0.06	ND<50	ND<250	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
P07-04	4	05/02/12	**370**	**0.13**	**0.77**	**3.0**	**2.7**	**350**	ND<250	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
P07-08	8	05/02/12	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
P07-11	11	05/02/12	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
P07-14	14	05/02/12	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
P07-20	20	05/02/12	ND<2	ND<0.02	ND<0.02	ND<0.02	ND<0.06	**3,300**	ND<250	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
P07-24	24	05/02/12	**3.4**	ND<0.02	ND<0.02	ND<0.02	ND<0.06	ND<50	ND<250	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
P08-08	8	05/02/12	ND<2	ND<0.02	ND<0.02	ND<0.02	ND<0.06	ND<50	ND<250	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
P08-11	11	05/02/12	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
P08-14	14	05/02/12	**2,500**	**2.5**	**6.4**	**26**	**160**	**2,600**	ND<250	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
P08-16	16	05/02/12	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
P08-19	19	05/02/12	**7.5**	**0.035**	ND<0.02	ND<0.02	ND<0.06	ND<50	ND<250	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
P08-28	28	05/02/12	ND<2	**0.14**	ND<0.02	ND<0.02	ND<0.06	ND<50	ND<250	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
P09-03	3	05/02/12	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
P09-08	8	05/02/12	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
P09-12	12	05/02/12	ND<2	ND<0.02	ND<0.02	ND<0.02	ND<0.06	ND<50	ND<250	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
P09-15	15	05/02/12	**2,300**	ND<0.02j	**18**	**16**	**27**	ND<50	ND<250	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
P09-20	20	05/02/12	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
P09-24	24	05/02/12	**25**	ND<0.02	ND<0.02	ND<0.02	ND<0.06	**210**	ND<250	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
SAIC Subsurface Investigation (October 2005).																										
DPE-5-14	14	10/31/05	**460**	ND<0.3	ND<0.3	**5.3**	ND<1.5	**2,800**	ND<200	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
DPE-5-17	17	10/31/05	**250**	ND<0.5	ND<1.0	**4.8**	**24**	**870**	ND<100	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
DPE-6-17.5	17.5	10/17/05	**140**	ND<1.0	**1.8**	**2.4**	**13**	**420**	ND<50	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
DPE-6-20	20	10/17/05	**96**	ND<0.5	**0.5**	**0.4**	**2.1**	**360**	ND<50	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
DPE-7-11	11	10/21/05	**440**	ND<0.2	**0.5**	**1.6**	**6**	**2,400**	ND<120	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
DPE-7-20	20	10/21/05	**1,400**	**0.093**	**0.771**	**9.9**	**16**	**----**	----	----	----	----	----	ND	ND<0.022	----	ND<0.043	----	----	----	----	----	----	----	----	----
SAIC Subsurface Investigation (2004)																										
SB-24/MW-24-9	9	10/05/04	ND<1.0	ND<0.0005	ND<0.001	ND<0.001	ND<0.001	ND<3.0	ND<10	----	----	----	----	----	ND<0.0005	----	----	----	----	----	----	----	----	----	----	----
SB-24/MW-24-16	16	10/05/04	**11**	**0.060**	**0.082**	**0.077**	**0.41**	**6.3**	ND<10	----	----	----	----	----	ND<0.0005	----	----	----	----	----	----	----	----	----	----	----
SB-24/MW-24-18.5	18.5	10/05/04	**3,100**	**1.1**	**11**	**6.0**	**40**	**64**	ND<10	----	----	----	----	----	ND<0.062	----	----	----	----	----	----	----	----	----	----	----
SP-1	1	03/12/04	**100**	**0.09**	**0.3**	**0.6**	**3.6**	**88**	ND<10	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
P08-16	16	05/02/12	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
P08-19	19	05/02/12	**7.5**	**0.035**	ND<0.02	ND<0.02	ND<0.06	ND<50	ND<250	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
P08-28	28	05/02/12	ND<2	**0.14**	ND<0.02	ND<0.02	ND<0.06	ND<50	ND<250	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
P09-03	3	05/02/12	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
P09-08	8	05/02/12	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
P09-12	12	05/02/12	ND<2	ND<0.02	ND<0.02	ND<0.02	ND<0.06	ND<50	ND<250	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
P09-15	15	05/02/12	**2,300**	ND<0.02j	**18**	**16**	**27**	ND<50	ND<250	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
P09-20	20	05/02/12	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
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**		**5**	**0.1[3]**	**0.1**	**0.05[5]**	**0.05[5]**	**Analyte Specific**	**20**	**----**	**2**	**19/ 2,000[2]**	**250**	**2**	**----**	**----**
MTCA Method B Soil Cleanup Levels for Unrestricted Land Uses[2]			**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**----**	**----**	**Analyte Specific**	**---**	**1,600**	**---**	**---**	**---**	**---**	**5.2**	**14**

Table 1, Page 4 of 5. Summary of Pre-Interim Action Soil Analytical Data
Roystone Redevelopment (Texaco 211577 Monterey Site/Agreed Order No. 16537)
631 Queen Anne Avenue North, Seattle, Washington 98109
The Riley Group, Inc. Project No. 2017-015K

Sample Number	Sample Depth	Sample Date	Gasoline TPH	BTEX				Diesel TPH	Oil TPH	HCID			Naph.	cPAHs	MTBE	EDB	EDC	Other VOCs[4]	As	Ba	Cd	Cr	Pb	Hg	Se	Ag
				B	T	E	X			Gasoline	Diesel	Oil															
P09-24	24	05/02/12	**25**	ND<0.02	ND<0.02	ND<0.02	ND<0.06	**210**	ND<250	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
SAIC Subsurface Investigation (October 2005).																										
DPE-5-14	14	10/31/05	**460**	ND<0.3	ND<0.3	**5.3**	ND<1.5	**2,800**	ND<200	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
DPE-5-17	17	10/31/05	**250**	ND<0.5	ND<1.0	**4.8**	**24**	**870**	ND<100	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
DPE-6-17.5	17.5	10/17/05	**140**	ND<1.0	**1.8**	**2.4**	**13**	**420**	ND<50	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
DPE-6-20	20	10/17/05	**96**	ND<0.5	**0.5**	**0.4**	**2.1**	**360**	ND<50	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
DPE-7-11	11	10/21/05	**440**	ND<0.2	**0.5**	**1.6**	**6**	**2,400**	ND<120	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
DPE-7-20	20	10/21/05	**1,400**	**0.093**	**0.771**	**9.9**	**16**	**----**	----	----	----	----	----	ND	ND<0.022	----	ND<0.043	----	----	----	----	----	----	----	----	----
SAIC Subsurface Investigation (2004)																										
SB-24/MW-24-9	9	10/05/04	ND<1.0	ND<0.0005	ND<0.001	ND<0.001	ND<0.001	ND<3.0	ND<10	----	----	----	----	----	ND<0.0005	----	----	----	----	----	----	----	----	----	----	----
SB-24/MW-24-16	16	10/05/04	**11**	**0.060**	**0.082**	**0.077**	**0.41**	**6.3**	ND<10	----	----	----	----	----	ND<0.0005	----	----	----	----	----	----	----	----	----	----	----
SB-24/MW-24-18.5	18.5	10/05/04	**3,100**	**1.1**	**11**	**6.0**	**40**	**64**	ND<10	----	----	----	----	----	ND<0.062	----	----	----	----	----	----	----	----	----	----	----
SP-1	1	03/12/04	**100**	**0.09**	**0.3**	**0.6**	**3.6**	**88**	ND<10	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
SAIC Subsurface Investigation (September 2002)																										
DP-1-16	16	09/18/02	ND<5.00	**0.004**	ND<0.0500	**0.0568**	**0.121**	ND<10	ND<25.0	----	----	----	ND<0.005	ND	ND<0.00100	ND<0.00500	ND<0.00200	----	**2.33**	**57.1**	ND<0.5	**30.5**	**1.92**	ND<0.2	ND<0.5	ND<0.5
DP-2-14	14	09/18/02	ND<5.00	**0.0571**	ND<0.0500	ND<0.0500	ND<0.100	ND<10	ND<25.0	----	----	----	ND<0.1	ND	ND<0.00100	ND<0.00500	ND<0.100	----	**3.58**	**83.9**	ND<0.5	**36.2**	**2.39**	ND<0.2	ND<0.5	ND<0.5
DP-2-20	20	09/20/02	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	**1.85**	----	----	----
DP-3-12	12	09/20/02	**1,140**	**2.39**	**2.01**	**10.3**	**20.3**	**1,060**	ND<25.0	----	----	----	ND<0.1	ND	ND<0.00100	ND<0.00500	ND<0.100	----	**2.66**	**79.0**	**0.572**	**29.5**	**4.15**	ND<0.2	ND<0.5	ND<0.5
DP-4-18	18	09/20/02	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	**3.36**	----	----	----
DP-4-20	20	09/20/02	**90.9**	**0.131**	**0.248**	**0.851**	**3.34**	**18.4**	ND<25.0	----	----	----	**0.421**	ND	ND<0.00100	ND<0.00500	ND<0.100	----	**1.69**	**29.0**	ND<0.5	**12.0**	**1.78**	ND<0.2	ND<0.5	ND<0.5
DP-5-14	14	09/20/02	**8,160**	**17.4**	**98.2**	**97.2**	**569**	**1,200**	ND<25.0	----	----	----	**13.7**	ND	ND<0.00100	ND<0.00500	ND<0.100	----	----	----	----	----	**3.53**	----	----	----
DP-6-14	14	09/20/02	**----**	**----**	**----**	**----**	**----**	**----**	**----**	**----**	**----**	**----**	**----**	**----**	**----**	**----**	**----**	**----**	----	----	----	----	**5.13**	----	----	----
DP-6-22	22	09/20/02	**7,750**	**52.2**	**448**	**112**	**629**	**88.7**	ND<25.0	----	----	----	**42.7**	ND	ND<0.0100	ND<0.0500	ND<1.00	----	**1.65**	**60.4**	**0.873**	**22.6**	**4.74**	ND<0.2	ND<0.5	ND<0.5
DP-7-10	10	09/20/02	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	**5.40**	----	----	----
DP-7-20	20	09/20/02	**329**	**1.39**	**9.49**	**4.83**	**27.9**	**788**	ND<25.0	----	----	----	**2.88**	ND	ND<0.00100	ND<0.00500	ND<0.100	----	**2.14**	**74.9**	ND<0.5	**29.6**	**9.48**	ND<0.2	ND<0.5	ND<0.5
DB-2/MW-13	14	09/24/02	ND<5.00	ND<0.030	ND<0.0500	ND<0.0500	ND<0.100	ND<10	ND<25.0	----	----	----	ND<0.005	ND	----	----	----	----	**4.53**	**80.2**	ND<0.5	**48.6**	**2.61**	ND<0.2	**0.935**	ND<0.5
DB-2/MW-13	16.5	09/24/02	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	**2.56**	----	----	----
DB-3-11.0	11	09/26/02	**8.3**	ND<0.030	ND<0.050	**0.0602**	**0.176**	**10.5**	ND<25.0	----	----	----	ND<0.05	ND	----	----	----	----	**2.27**	**49.6**	ND<0.5	**29.2**	**6.89**	ND<0.2	ND<0.5	ND<0.5
DB-3-31.5	31.5	09/26/02	**5.74**	**0.0544**	**0.309**	**0.160**	**0.840**	ND<10	ND<25.0	----	----	----	----	----	----	----	----	----	----	----	----	----	**6.46**	----	----	----
SAIC/Glaceir UST Excavation/Recovery Well Installation (1993)																										
RW-4	10	05/25/93	----	**1.0**	**2.0**	**4.0**	**17**	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
RW-4	15	05/25/93	----	ND<0.1	ND<0.10	ND>0.1	ND<0.3	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
RW-4	20	05/25/93	----	**81**	**290 J**	**81**	**430**	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
RW-4	30	05/25/93	----	**0.4**	**0.7**	**0.50**	**3.0**	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
PIT-1	12	1993	**1,900**	**4.3**	**8.1**	**24**	**130**	**270**	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
PIT-2	12	1993	**3.3**	**0.23**	ND	**0.030**	**0.12**	**34**	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
PIT-3	5	1993	**19**	ND	**0.11**	**0.11**	**0.70**	**36**	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
PIT-4	7	1993	**25**	**0.16**	**0.13**	**0.09**	**0.79**	**47**	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
PIT-5	11	1993	**1,000**	**2.1**	**2**	**8.2**	**62**	**610**	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
PIT-6	8	1993	**330**	**7**	**4**	**5.1**	**22**	**45**	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
PIT-7	11	1993	**11,000**	**23**	**16**	**80**	**240**	**3,200**	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
PIT-8	11	1993	**1,100**	**1.1**	ND	**1.7**	**4.7**	**600**	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
PIT-9	6	1993	**17**	**0.35**	**0.12**	**0.16**	**0.72**	**67**	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
PIT-10	----	1993	**4.4**	**0.18**	ND	**0.1**	**0.42**	**34**	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
PIT-11	6	1993	**4,800**	**51**	**16**	**65**	**190**	**4,000**	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
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**		**5**	**0.1[3]**	**0.1**	**0.05[5]**	**0.05[5]**	**Analyte Specific**	**20**	**----**	**2**	**19/ 2,000[2]**	**250**	**2**	**----**	**----**
MTCA Method B Soil Cleanup Levels for Unrestricted Land Uses[2]			**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**----**	**----**	**Analyte Specific**	**---**	**1,600**	**---**	**---**	**---**	**---**	**5.2**	**14**

Table 1, Page 5 of 5. Summary of Pre-Interim Action Soil Analytical Data
Roystone Redevelopment (Texaco 211577 Monterey Site/Agreed Order No. 16537)
631 Queen Anne Avenue North, Seattle, Washington 98109
The Riley Group, Inc. Project No. 2017-015K

Notes:

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

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

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

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

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

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

Naph. (naphthalene) determined using EPA Methods 8260 or 8270.

cPAHs (carcinogenic polycyclic aromatic hydrocarbons) determined using EPA Method 8270.

MTBE (methyl tert-butyl ether), EDB (1,2-Dibromoethane), EDC (1,2-Dichloroethane), and other VOCs (volatile organic compounds) determined using EPA Test Method 8260.

As (arsenic), Ba (barium), Cd (cadmium), Cr (chromium), Pb (lead), Hg (mercury), Se (selenium), and Ag (silver) determined using EPA 6000/7000 Series Methods.

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

j = The result is below normal detection limits. The value reported is an estimate.

ND = Not detected above noted analytical detection limit.

NVE = No value established.

---- = Not analyzed or not applicable.

Washington State Department of Ecology (Ecology) Model Toxics Control Act (MTCA) Method A Soil Cleanup Levels for 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 on December 15, 2017.

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

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

[3] 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).

[4] Other VOCs does not include petroleum-related VOCs that were not assessed independently due to the fact that they are factored into the MTCA Method A TPH Cleanup Levels.

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

Bold results indicated concentrations above laboratory detection limits.

Bold and yellow highlighted results indicate concentrations (if any) that the applicable soil screening level.

Table 2, Page 1 of 4. Summary of Interim Action Product and Soil Analytical Results
Roystone Redevelopment (Texaco 211577 Monterey Site/Agreed Order No. 16537)
631 Queen Anne Avenue North, Seattle, Washington 98109
The Riley Group, Inc. Project No. 2017-015K

Sample Number	Sample Depth	Sample Date	Sample Status[12]	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]	DWC[13]
					B	T	E	X			Gasoline	Diesel	Heavy Oil												As	Ba	Cd	Cr	Cu	Pb	Hg	Ni	Se	Ag	Zn	Pb	
Product, Sludge, and Water Analytical Data Pertaining to Underground Improvement Contents																																					
UST6B-1[10]	----	06/03/20		----	----	----	----	----	**----**	**----**	**D>200[10]**	**D>500 x [10]**	ND<500[10]	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
UST-4A-Product	----	05/11/20		----	ND<0.2	**3.5**	ND<0.2	**75**	**----**	**----**	ND<20,000	**D>50,000**	ND<250,000	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
UST-A-Product[8]	----	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**	----
Product-Hoist1	----	03/23/20		----	----	----	----	----	**590,000x**	**660,000**	----	----	----	----	----	----	----	----	----	----	----	----	----	ND<2	ND<1	----	**18.7**	ND<1	----	**14.3**	ND<1	**----**	**----**	**----**	----	----	----
Product-Hoist2	----	03/23/20		----	----	----	----	----	**580,000x**	**670,000**	----	----	----	----	----	----	----	----	----	----	----	----	----	ND<2	ND<1	----	ND<1	ND<1	----	ND<1	ND<1	----	----	----	----	----	----
OWS1-Solids	----	03/24/20		----	----	----	----	----	----	----	**D>20**	ND<50	**D>250**	----	----	----	----	----	----	----	----	----	----	----	**33.6**	**130**	**4.70**	**25.4**	**59.7**	**1,190**	ND<1	**21.8**	ND<1	ND<1	**1,170**	----	**NH**
Soil Analytical Data Pertaining to UST Site Assessments, Fuel System Decommissioning, Soil Characterization, and Confirmation Samples																																					
B-39W-30.5	30.5	08/19/20	X	----	ND<0.02	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
B-40W-30.5	30.5	08/19/20	X	----	ND<0.02	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
B-41W-30.5	30.5	08/19/20	X	----	ND<0.02	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
NPL-23S-27	27	08/14/20	X	ND<10	ND<0.02	ND<0.10	ND<0.05	ND<0.15	ND<50	ND<250	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
NPL-23S-27 Dup	27	08/14/20		ND<10	ND<0.02	ND<0.10	ND<0.05	ND<0.15	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
WPL-19S-27	27	08/14/20	X	ND<10	**0.026**	ND<0.10	ND<0.05	ND<0.15	ND<50	ND<250	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
WPL-19S-27 Dup	27	08/14/20		----	----	----	----	----	ND<50	ND<250	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
B-17W-30.5	30.5	08/14/20		----	**0.033**	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
WPL-20S-25.5	25.5	08/14/20	X	ND<10	**0.028**	ND<0.10	ND<0.05	ND<0.15	ND<50	ND<250	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
B-17W-31.5	31.5	08/14/20	X	----	ND<0.02	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
B-37W-30.5	30.5	08/14/20	X	----	ND<0.02	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
WPL-21S-29	29	08/14/20	X	ND<10	ND<0.02	ND<0.10	ND<0.05	ND<0.15	ND<50	ND<250	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
B-38W-30.5	30.5	08/14/20	X	----	ND<0.02	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
B-38W-30.5 Dup	30.5	08/14/20		----	ND<0.02	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
NPL-21S-20	20	08/14/20	X	ND<10	ND<0.02	ND<0.10	ND<0.05	ND<0.15	ND<50	ND<250	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
NPL-22S-20	20	08/14/20	X	ND<10	ND<0.02	ND<0.10	ND<0.05	ND<0.15	ND<50	ND<250	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
NPL-22S-20 Dup	20	08/14/20		ND<10	ND<0.02	ND<0.10	ND<0.05	ND<0.15	ND<50	ND<250	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
B-32W-28	28	08/13/20		ND<10	**0.10**	ND<0.10	ND<0.05	ND<0.15	ND<50	ND<250	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
B-32W-28 Dup	28	08/13/20		ND<10	**0.17**	ND<0.10	ND<0.05	ND<0.15	ND<50	ND<250	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
B-33W-28	28	08/13/20	X	ND<10	ND<0.02	ND<0.10	ND<0.05	ND<0.15	ND<50	ND<250	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
B-34W-28	28	08/13/20	X	ND<10	ND<0.02	ND<0.10	ND<0.05	ND<0.15	ND<50	ND<250	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
DPE-6C-20	20	08/13/20		ND<10	ND<0.02	ND<0.10	ND<0.05	ND<0.15	ND<50	ND<250	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
B-28W-27	27	08/13/20	X	ND<10	ND<0.02	ND<0.10	ND<0.05	ND<0.15	ND<50	ND<250	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
B-23W-26	26	08/13/20	X	ND<10	ND<0.02	ND<0.10	ND<0.05	ND<0.15	ND<50	ND<250	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
DP-4C-26	26	08/13/20	X	ND<10	ND<0.02	ND<0.10	ND<0.05	ND<0.15	ND<50	ND<250	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
B-18W-27	27	08/13/20	X	ND<10	ND<0.02	ND<0.10	ND<0.05	ND<0.15	ND<50	ND<250	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
B-18W-27 Dup	27	08/13/20		ND<10	ND<0.02	ND<0.10	ND<0.05	ND<0.15	ND<50	ND<250	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
B-17W-28	28	08/13/20		ND<10	**0.096**	ND<0.10	ND<0.05	ND<0.15	ND<50	ND<250	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
B-36W-16.5	16.5	08/13/20	X	ND<10	ND<0.02	ND<0.10	ND<0.05	ND<0.15	ND<50	ND<250	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
NPL-19S-20	20	08/13/20	X	ND<10	ND<0.02	ND<0.10	ND<0.05	ND<0.15	ND<50	ND<250	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
NPL-20S-20	20	08/13/20	X	ND<10	ND<0.02	ND<0.10	ND<0.05	ND<0.15	ND<50	ND<250	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
B-22W-27.5	27.5	08/13/20	X	----	ND<0.02	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
B-32W-30	30	08/13/20	X	----	ND<0.02	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
SPL-24S-26	26	08/13/20	X	----	ND<0.02	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
B-14E-21	21	08/12/20	X	ND<10	ND<0.02	ND<0.10	ND<0.05	ND<0.15	ND<50	ND<250	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
B-19W-19	19	08/12/20	X	ND<10	ND<0.02	ND<0.10	ND<0.05	ND<0.15	ND<50	ND<250	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
B-19W-19 Dup	19	08/12/20		----	----	----	----	----	ND<50	ND<250	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
B-29W-24	24	08/12/20		ND<10	**0.21**	ND<0.10	ND<0.05	ND<0.15	ND<50	ND<250	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
B-24W-19	19	08/12/20	X	ND<10	ND<0.02	ND<0.10	ND<0.05	ND<0.15	ND<50	ND<250	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
B-26W-28	28	08/12/20	X	----	ND<0.02	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
B-21W-28	28	08/12/20	X	----	ND<0.02	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
B-27W-26	26	08/12/20	X	ND<10	ND<0.02	ND<0.10	ND<0.05	ND<0.15	ND<50	ND<250	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
B-22W-25.5	25.5	08/12/20		ND<10	ND<0.02	ND<0.10	ND<0.05	ND<0.15	**52**	ND<250	----	----	----	----	----	----	----	----	----	----	----	ND<0.10	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
B-22W-25.5 Dup	25.5	08/12/20		ND<10	ND<0.02	ND<0.10	ND<0.05	ND<0.15	ND<50	ND<250	----	----	----	----	----	----	----	----	----	----	----	ND<0.10	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
B-29W-26	26	08/12/20	X	----	ND<0.02	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
WPL-18S-25	25	08/11/20	X	ND<10	ND<0.02	ND<0.10	ND<0.05	ND<0.15	ND<50	ND<250	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
OWS-B2-25	25	08/11/20		----	ND<0.02	ND<0.10	ND<0.03	ND<0.15	----	----	----	----	----	ND<0.02	ND<0.02	----	ND<0.05	ND<0.03	ND<0.005	----	ND	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
RW-4C-32	32	08/11/20	X	ND<10	ND<0.02	ND<0.10	ND<0.05	ND<0.15	ND<50	ND<250	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
B-16W-25	25	08/11/20	X	ND<10	ND<0.02	ND<0.10	ND<0.05	ND<0.15	ND<50	ND<250	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
B-16W-25 Dup	25	08/11/20		----	----	----	----	----	ND<50	ND<250	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
SPL-20S-24	24	08/10/20	X	ND<10	ND<0.02	ND<0.10	ND<0.05	ND<0.15	ND<50	ND<250	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
SPL-21S-24	24	08/10/20	X	ND<10	ND<0.02	ND<0.10	ND<0.05	ND<0.15	ND<50	ND<250	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
SPL-22S-25	25	08/10/20	X	ND<10	**0.12**	ND<0.10	ND<0.05	ND<0.15	ND<50	ND<250	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
B-15W-25	25	08/07/20	X	ND<10	ND<0.02	ND<0.10	ND<0.05	ND<0.15	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]				**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**----**	**----**	**400**	**----**	**----**	**----**	**----**	**----**	**---**	**---**	**---**	**---**	**1,600**	**---**	**---**	**280**	**---**	**---**	**130**	**5.2**	**14**	**6,000**	**---**	**---**

Table 2, Page 2 of 4. Summary of Interim Action Product and Soil Analytical Results
Roystone Redevelopment (Texaco 211577 Monterey Site/Agreed Order No. 16537)
631 Queen Anne Avenue North, Seattle, Washington 98109
The Riley Group, Inc. Project No. 2017-015K

Sample Number	Sample Depth	Sample Date	Sample Status[12]	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]	DWC[13]
					B	T	E	X			Gasoline	Diesel	Heavy Oil											As	Ba	Cd	Cr	Cu	Pb	Hg	Ni	Se	Ag	Zn	Pb	
B-15W-25 Dup	25	08/07/20		ND<10	ND<0.02	ND<0.10	ND<0.05	ND<0.15	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
B-20W-25	25	08/07/20	X	ND<10	ND<0.02	ND<0.10	ND<0.05	ND<0.15	ND<50	ND<250	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
SPL-15S-20	20	08/07/20	X	ND<10	ND<0.02	ND<0.10	ND<0.05	ND<0.15	ND<50	ND<250	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
B-10E-24	24	08/07/20	X	ND<10	ND<0.02	ND<0.10	ND<0.05	ND<0.15	ND<50	ND<250	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
B-30W-26	26	08/07/20	X	ND<10	ND<0.02	ND<0.10	ND<0.05	ND<0.15	ND<50	ND<250	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
B-35W-25	25	08/07/20	X	ND<10	ND<0.02	ND<0.10	ND<0.05	ND<0.15	ND<50	ND<250	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
P08C-28	28	08/07/20	X	ND<10	ND<0.02	ND<0.10	ND<0.05	ND<0.15	ND<50	ND<250	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
B-25W-26	26	08/07/20	X	ND<10	ND<0.02	ND<0.10	ND<0.05	ND<0.15	ND<50	ND<250	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
B-25W-26 Dup	26	08/07/20		----	----	----	----	----	ND<50	ND<250	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
B-31W-26.5	26.5	08/07/20	X	ND<10	ND<0.02	ND<0.10	ND<0.05	ND<0.15	ND<50	ND<250	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
B-31W-26.5 Dup	26.5	08/07/20		ND<10	ND<0.02	ND<0.10	ND<0.05	ND<0.15	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
SPL-19S-24	24	08/07/20	X	ND<10	ND<0.02	ND<0.10	ND<0.05	ND<0.15	ND<50	ND<250	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
SPL-18S-19	19	08/07/20	X	ND<10	ND<0.02	ND<0.10	ND<0.05	ND<0.15	ND<50	ND<250	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
B-26W-25	25	08/07/20		ND<10	**0.30**	ND<0.10	ND<0.05	ND<0.15	ND<50	ND<250	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
B-21W-25.5	25.5	08/07/20		ND<10	**0.95**	ND<0.10	ND<0.05	ND<0.15	ND<50	ND<250	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
B-1E-21	21	08/06/20	X	ND<10	ND<0.02	ND<0.10	ND<0.05	ND<0.15	ND<50	ND<250	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
EPL-15S-17	17	08/06/20	X	ND<10	ND<0.02	ND<0.10	ND<0.05	ND<0.15	ND<50	ND<250	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
EPL-15S-17 Dup	17	08/06/20		----	----	----	----	----	ND<50	ND<250	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
WPL-17S-22	22	07/29/20	X	ND<5	**2.0**	**0.029**	ND<0.02	ND<0.06	ND<50	ND<250	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
WPL-15S-21	21	07/29/20	X	**1,000**	ND<0.02j	ND<0.1	**0.13**	ND<0.3	**610 x**	ND<250	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
WPL-14S-22	22	07/29/20	X	ND<5	ND<0.02	ND<0.02	ND<0.02	ND<0.06	ND<50	ND<250	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
WPL-16S-18	18	07/30/30	X	ND<5	ND<0.02	ND<0.02	ND<0.02	ND<0.06	ND<50	ND<250	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
RW-4C-30	30	07/30/30		ND<5	**0.11**	ND<0.05	ND<0.05	ND<0.15	ND<50	ND<250	----	----	----	----	----	----	----	----	----	----	----	ND<0.05	----	----	----	----	----	----	----	----	----	----	----	----	----	----
EPL-11S-17	17	07/22/20	X	ND<5	ND<0.02	ND<0.02	ND<0.02	ND<0.06	ND<50	ND<250	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
EPL-12S-17	17	07/22/20	X	ND<5	ND<0.02	ND<0.02	ND<0.02	ND<0.06	ND<50	ND<250	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
EPL-13S-17	17	07/22/20	X	ND<5	ND<0.02	ND<0.02	ND<0.02	ND<0.06	ND<50	ND<250	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
EPL-14S-17	17	07/22/20	X	ND<5	ND<0.02	ND<0.02	ND<0.02	ND<0.06	ND<50	ND<250	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
WPL-10S-16	16	07/23/20	X	**500**	ND<0.02j	ND<0.1	ND<0.1	ND<0.3	**1,300**	ND<250	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
WPL-11S-16	16	07/23/20	X	**25**	ND<0.02	**0.052**	**0.099**	**0.20**	**160 x**	ND<250	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
WPL-12S-20	20	07/23/20	X	**300**	ND<0.02j	**0.36**	**0.76**	ND<0.3	**970**	ND<250	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
WPL-13S-18	18	07/23/20	X	ND<5	ND<0.02	**0.024**	ND<0.02	ND<0.06	ND<50	ND<250	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
B-1E-18	18	07/16/20		ND<10	ND<0.02	ND<0.10	ND<0.05	ND<0.15	ND<50	ND<250	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
B-2E-18	18	07/16/20	X	ND<10	ND<0.02	ND<0.10	ND<0.05	ND<0.15	ND<50	ND<250	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
B-3E-16.5	16.5	07/16/20	X	ND<10	ND<0.02	ND<0.10	ND<0.05	ND<0.15	ND<50	ND<250	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
B-3E-16.5 Dup	16.5	07/16/20		ND<10	ND<0.02	ND<0.10	ND<0.05	ND<0.15	ND<50	ND<250	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
B-4E-16.5	16.5	07/16/20	X	ND<10	ND<0.02	ND<0.10	ND<0.05	ND<0.15	ND<50	ND<250	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
B-5E-20.5	20.5	07/16/20	X	**11**	ND<0.02	ND<0.10	ND<0.05	ND<0.15	ND<50	ND<250	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
B-10E-21.5	21.5	07/16/20		**6,200 E**	**ND<0.4**	ND<2.0	**17**	**89**	**2,400**	ND<250	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
SPL-17S-16	16	07/16/20	X	**290 E**	ND<0.02	ND<0.10	**6.3**	ND<0.15	**270**	ND<250	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
B-8E-17	17	07/16/20	X	ND<10	ND<0.02	ND<0.10	ND<0.05	ND<0.15	ND<50	ND<250	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
B-6E-18.5	18.5	07/16/20	X	ND<10	ND<0.02	ND<0.10	ND<0.05	ND<0.15	ND<50	ND<250	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
B7E-19	19	07/16/20	X	ND<10	ND<0.02	ND<0.10	ND<0.05	ND<0.15	ND<50	ND<250	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
B-11E-19	19	07/16/20	X	ND<10	ND<0.02	ND<0.10	ND<0.05	ND<0.15	ND<50	ND<250	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
B-12E-22.5	22.5	07/16/20	X	ND<10	ND<0.02	ND<0.10	ND<0.05	ND<0.15	ND<50	ND<250	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
B-12E-22.5 Dup	22.5	07/16/20		ND<10	ND<0.02	ND<0.10	ND<0.05	ND<0.15	ND<50	ND<250	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
B-9E-19	19	07/16/20	X	ND<10	ND<0.02	ND<0.10	ND<0.05	ND<0.15	ND<50	ND<250	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
B-13E-21	21	07/16/20	X	ND<10	ND<0.02	ND<0.10	ND<0.05	ND<0.15	ND<50	ND<250	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
B-16W-23	23	07/16/20		**20**	**1.5**	**3.4**	**0.57**	**3.8**	ND<50	ND<250	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
B-16W-23 Dup	23	07/16/20		**21**	**1.3**	**3.4**	**0.62**	**4.2**	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
NPL-13S-16	16	07/13/20	X	**400**	ND<0.02 j	ND<0.1	**0.84**	**0.90**	**2,100**	ND<250	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
NPL-14S-16	16	07/13/20	X	**220**	ND<0.02 j	**0.25**	**0.80**	**1.5**	**1,600**	ND<250	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
NPL-15S-16	16	07/13/20	X	**1,600**	ND<0.02 j	**5.2**	**14**	**27**	**5,500**	ND<250	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
NPL-16S-16	16	07/13/20	X	**75**	ND<0.02	ND<0.02	**0.044**	ND<0.06	**1,600**	ND<250	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
NPL-17S-16	16	07/13/20	X	ND<5	ND<0.02	ND<0.02	ND<0.02	ND<0.06	**440**	ND<250	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
NPL-18S-16	16	07/13/20	X	**290**	ND<0.02 j	**0.20**	**1.1**	**2.1**	ND<50	ND<250	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
NPL-11S-10	10	07/10/20	X	**140**	ND<0.02	ND<0.02	ND<0.02	ND<0.06	**2,400**	ND<250	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
NPL-12S-10	10	07/10/20	X	**1,700**	ND<0.2	**1.5**	**9.6**	**13**	**14,000**	ND<250	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
EPL-9S-11	11	07/09/20	X	ND<5	ND<0.02	ND<0.02	ND<0.02	ND<0.06	ND<50	ND<250	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
EPL-10S-12	12	07/09/20	X	ND<5	ND<0.02	ND<0.02	ND<0.02	ND<0.06	ND<50	ND<250	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
EPL-8S-11	11	07/09/20	X	**6,400**	**ND<0.4**	**52**	**41**	**110**	**1,500 x**	ND<250	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
SPL-16S-13	13	07/09/20	X	**1,000**	ND<0.02	**0.091**	ND<0.02	**5.4**	ND<50	ND<250	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
EPL-7S-11	11	07/09/20	X	ND<5	ND<0.02	**0.025**	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]				**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**----**	**----**	**400**	**----**	**----**	**----**	**----**	**----**	**---**	**---**	**---**	**---**	**1,600**	**---**	**---**	**280**	**---**	**---**	**130**	**5.2**	**14**	**6,000**	**---**	**---**

Table 2, Page 3 of 4. Summary of Interim Action Product and Soil Analytical Results
Roystone Redevelopment (Texaco 211577 Monterey Site/Agreed Order No. 16537)
631 Queen Anne Avenue North, Seattle, Washington 98109
The Riley Group, Inc. Project No. 2017-015K

Sample Number	Sample Depth	Sample Date	Sample Status[12]	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]	DWC[13]
					B	T	E	X			Gasoline	Diesel	Heavy Oil											As	Ba	Cd	Cr	Cu	Pb	Hg	Ni	Se	Ag	Zn	Pb	
NPL-10S-10	10	07/07/20	X	**830**	ND<0.02 j	**0.34**	**3.8**	**2.4**	**3,500**	ND<250	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
EPL-6S-11	11	07/07/20	X	**1,900**	**ND<1**	**27**	**4.0**	**20**	**170 x**	ND<250	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
NPL-8S-6	6	06/22/20	X	ND<5	ND<0.02	ND<0.02	ND<0.02	ND<0.06	ND<50	ND<250	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
NPL-9S-4	4	06/22/20	X	ND<5	ND<0.02	ND<0.02	ND<0.02	ND<0.06	ND<50	ND<250	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
WPL-8S-9	9	06/19/20	X	**740**	**ND<0.8**	ND<0.8	**5.3**	**4.5**	**270 x**	ND<250	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
NPL-3S-6	6	06/19/20	X	**6.1**	ND<0.02	ND<0.02	ND<0.02	ND<0.06	ND<50	ND<250	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
NPL-4S-3.5	3.5	06/19/20	X	**9.5**	ND<0.02	ND<0.02	ND<0.02	ND<0.06	ND<50	ND<250	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
NPL-5S-6	6	06/19/20	X	ND<5	ND<0.02	ND<0.02	ND<0.02	ND<0.06	ND<50	ND<250	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
EPL-3S-6	6	06/19/20	X	ND<5	ND<0.02	ND<0.02	ND<0.02	ND<0.06	ND<50	ND<250	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
EPL-4S-6	6	06/19/20	X	ND<5	ND<0.02	ND<0.02	ND<0.02	ND<0.06	ND<50	ND<250	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
EPL-5S-6	6	06/19/20	X	ND<5	ND<0.02	ND<0.02	ND<0.02	ND<0.06	ND<50	ND<250	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
WPL-9S-10	10	06/19/20	X	**46**	ND<0.02	ND<0.02	**0.82**	**0.63**	**350 x**	ND<250	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
NPL-6S-6	6	06/19/20	X	**6.5**	ND<0.02	ND<0.02	**0.15**	**0.084**	ND<50	ND<250	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
NPL-7S-6	6	06/19/20	X	ND<5	ND<0.02	ND<0.02	ND<0.02	ND<0.06	ND<50	ND<250	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
WPL-6S-13	13	06/18/20	X	**14**	ND<0.02	ND<0.02	ND<0.02	ND<0.06	**81**	ND<250	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
WPL-7S-13	13	06/18/20	X	ND<5	ND<0.02	ND<0.02	ND<0.02	ND<0.06	ND<50	ND<250	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
SPL-13S-14	14	06/17/20	X	**52**	ND<0.02	**0.098**	**0.12**	**0.15**	**1,000**	ND<250	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
SPL-14S-16.5	16.5	06/17/20	X	**10**	ND<0.02	**0.037**	ND<0.02	**0.080**	**290**	ND<250	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
SPL-8S-12*	12	06/16/20	X	**3,200**	**ND<1**	**23**	**11**	**32**	**590 x**	ND<250	----	----	----	----	----	ND<0.25	ND<0.05	ND<0.05	ND<0.05	----	----	ND<0.05	----	----	----	----	ND<1	**14.5**	----	**6.15**	----	----	----	----	----	----
SPL-9S-11.5	11.5	06/16/20	X	**980**	**ND<1**	**3.8**	**3.9**	**5.4**	**420**	ND<250	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
SPL-10S-12	12	06/16/20	X	**1,000**	**ND<1**	**7.0**	**3.9**	**4.5**	**1,000**	ND<250	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
SPL-11S-12.5	12.5	06/16/20	X	**1,000**	**ND<1**	**5.7**	**6.6**	**14**	**1,400**	ND<250	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
SPL-12S-12.5	12.5	06/16/20	X	**820**	ND<0.02	**1.1**	**3.3**	**6.0**	**1,500**	ND<250	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
SPL-7S-8	8	06/10/20	X	ND<5	ND<0.02	ND<0.02	ND<0.02	ND<0.06	ND<50	ND<250	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
NPL-2S-3	3	06/10/20	X	**130**	ND<0.02j	**0.29**	**0.30**	ND<0.3	**280**	ND<250	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
UST6B-SA-1B-13	13	06/08/20		**1,900**	ND<0.03[5]	ND<0.05[5]	**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	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
SPL-6S-8	8	06/08/20	X	ND<5	ND<0.02	ND<0.02	ND<0.02	ND<0.06	ND<50	ND<250	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
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	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
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	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
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	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
EPL-2S-8	8	05/29/20	X	**51**	ND<0.02	**0.092**	**0.10**	**0.20**	**92**	ND<250	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
NPL-1S-6	6	05/29/20	X	ND<5	ND<0.02	ND<0.02	ND<0.02	ND<0.06	ND<50	ND<250	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
EPL-1S-8	8	05/28/20	X	ND<5	ND<0.03	ND<0.05	ND<0.05	ND<0.15	ND<50	ND<250	ND<20	ND<50	ND<250	ND<0.025	ND<0.02	----	----	ND<0.05	----	ND	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
SPL-5S-8	8	05/28/20	X	ND<5	ND<0.03	ND<0.05	ND<0.05	ND<0.15	ND<50	ND<250	ND<20	ND<50	ND<250	ND<0.025	ND<0.02	----	----	ND<0.05	----	ND	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
NETP1-8	8	05/27/20	X	ND<5	ND<0.02	ND<0.02	ND<0.02	ND<0.06	ND<50	ND<250	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
NETP1-12	12	05/27/20	X	ND<5	ND<0.02	ND<0.02	ND<0.02	ND<0.06	ND<50	ND<250	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
NETP2-5	5	05/27/20	X	**35**	ND<0.02	**0.046**	**0.046**	**0.11**	ND<50	ND<250	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
NETP2-8	8	05/27/20	X	ND<5	ND<0.02	ND<0.02	ND<0.02	ND<0.06	ND<50	ND<250	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
USTA-1B-9	9	05/22/20		----	----	----	----	----	----	----	ND<20	**D>50**	ND<250	ND<0.025	ND<0.02	----	----	ND<0.05	----	ND	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
USTA-1W-3	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**	----	----	----	----	----	----	----
TP10-5	5	05/20/20		**470**	ND<0.02j	**1.2**	**1.3**	**3.4**	**1,200**	ND<250	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
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**	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
WPL-4S-8	8	05/12/20	X	ND<5	ND<0.02	ND<0.02	ND<0.02	ND<0.06	ND<50	ND<250	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
WPL-5S-8	8	05/12/20	X	ND<5	ND<0.02	ND<0.02	ND<0.02	ND<0.06	ND<50	ND<250	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
Wood Pole-5	5	05/12/20		----	----	----	----	----	----	----	ND<20	ND<50	ND<250	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
WPL-1S-8	8	05/05/20	X	ND<5	ND<0.02	ND<0.02	ND<0.02	ND<0.06	ND<50	ND<250	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
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	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
WPL-2S-8	8	05/06/20	X	ND<5	ND<0.02	ND<0.02	ND<0.02	ND<0.06	ND<50	**750**	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
WPL-3S-8	8	05/06/20	X	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**	----	----	----	----	----	----	----
OWS-B1-4	4	05/04/20		ND<5	----	----	----	----	ND<50	ND<250	----	----	----	----	----	----	----	----	----	----	----	----	----	**5.64**	----	ND<1	----	----	**27.6**	----	----	----	----	----	----	----
OWS-SWN-3	3	05/04/20		----	----	----	----	----	----	----	ND<20	ND<50	ND<250	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
OWS-SWS-3	3	05/04/20		----	----	----	----	----	----	----	ND<20	ND<50	ND<250	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
SPL-1S-8	8	04/30/20	X	ND<5	ND<0.02	ND<0.02	ND<0.02	ND<0.06	ND<50	ND<250	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
SPL-2S-8	8	04/30/20	X	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]				**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**----**	**----**	**400**	**----**	**----**	**----**	**----**	**----**	**---**	**---**	**---**	**---**	**1,600**	**---**	**---**	**280**	**---**	**---**	**130**	**5.2**	**14**	**6,000**	**---**	**---**

Table 2, Page 4 of 4. Summary of Interim Action Product and Soil Analytical Results
Roystone Redevelopment (Texaco 211577 Monterey Site/Agreed Order No. 16537)
631 Queen Anne Avenue North, Seattle, Washington 98109
The Riley Group, Inc. Project No. 2017-015K

Sample Number	Sample Depth	Sample Date	Sample Status[12]	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]	DWC[13]
					B	T	E	X			Gasoline	Diesel	Heavy Oil												As	Ba	Cd	Cr	Cu	Pb	Hg	Ni	Se	Ag	Zn	Pb	
SPL-3S-8	8	04/30/20	X	ND<5	ND<0.02	ND<0.02	ND<0.02	ND<0.06	ND<50	ND<250	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
SPL-4S-8	8	04/30/20	X	ND<5	ND<0.02	ND<0.02	ND<0.02	ND<0.06	ND<50	ND<250	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
Hoist2-B2-8.5	8.5	04/29/20		----	----	----	----	----	ND<50	ND<250	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
Hoist2-SW1-6	6	04/29/20		----	----	----	----	----	ND<50	ND<250	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
Hoist2-SW2-6	6	04/29/20		----	----	----	----	----	ND<50	ND<250	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
Hoist1-B2-9	9	04/29/20		----	----	----	----	----	ND<50	ND<250	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
Hoist1-SW1-6	6	04/29/20		----	----	----	----	----	ND<50	ND<250	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
Hoist1-SW2-6	6	04/29/20		----	----	----	----	----	ND<50	ND<250	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
TP1-7	7	04/29/20		ND<5	ND<0.02	ND<0.02	ND<0.02	ND<0.06	ND<50	ND<250	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
TP2-7	7	04/29/20		ND<5	ND<0.02	ND<0.02	ND<0.02	ND<0.06	ND<50	ND<250	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
TP3-7	7	04/29/20		ND<5	ND<0.02	ND<0.02	ND<0.02	ND<0.06	ND<50	ND<250	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
TP4-7	7	04/29/20		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	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	0.5	03/26/20		ND<5	ND<0.02	ND<0.02	ND<0.02	ND<0.06	ND<50	ND<250	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
Hoist1-B1-9	9	03/23/20		----	----	----	----	----	ND<50	ND<250	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
Hoist2-B1-8.25	8.25	03/23/20		----	----	----	----	----	ND<50	ND<250	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
Soil Stockpile Samples																																				
USTA-SP-1-S	----	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	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
USTA-SP-2-N	----	06/02/20		**280**	**0.026**	**0.56**	**1.0**	**5.3**	**470 x**	**2,300**	----	----	----	**0.080**	ND<0.02	----	----	ND<0.05	----	ND	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
E12-SP2	----	05/29/20		**300**	**0.032**	ND<0.02	**1.5**	ND<1.5	**350**	ND<250	**D>20**	**D>50**	ND<250	ND<0.025	ND<0.02	**0.45**	ND<0.05	ND<0.05	ND<0.05	----	ND	**2.0**	----		----	----	----	----	----	----	----	----	----	----	----	----
E12-SP	----	05/28/20		----	ND<0.03	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	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
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]				**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**----**	**----**	**400**	**----**	**----**	**----**	**----**	**----**	**---**	**---**	**---**	**---**	**1,600**	**---**	**---**	**280**	**---**	**---**	**130**	**5.2**	**14**	**6,000**	**---**	**---**

Notes:
All results and detection limits are given in milligrams per kilogram (mg/kg); equivalent to parts per million (ppm).
Sample Depth = Soil sample depth interval in feet below ground surface (bgs) 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 and 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 HVOCs (halogenated volatile organic compounds), and other VOCs 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, Ba = barium, Cd = cadmium, Cr = chromium, Cu = copper, Pb = lead, Hg = mercury, Ni = nickel, Se = selenium, Ag = silver, Zn = zinc) 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.
j = The analyte concentration is reported below the lowest calibration standard. The value reported is an estimate.
* = Soil sample SPL-8S-12 was initially mislabeled as SPL-15S-12. The sample ID was later revised to SPL-8S-12 after the laboratory report was issued.
E = Indicates reported result is an estimate because it exceeds the calibration range.
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.
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 Cleanup 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 consisted of water inside the UST6B (concentration is reported in micrograms/liter).
[11] Soil stockpile sample that was analyzed to characterize soil in the immediate vicinity of USTA after the UST was inadvertently punctured during mass excavation.
[12] X denotes confirmation soil sample collected from the limits of remedial excavation where soil remains in place. Soil associated with all remaining samples (without an X) was removed from the Property.
[13] DWC = Dangerous Waste Characterization. Sludge sample OWS1-Solids was submitted to Rainier Environmental Laboratory for a fish bioassay using the test organism *Oncorhynchus mykiss* to determine if hazardous waste was present in the sludge sample. The analysis was completed following Ecology Publication 80-12. "NH" indicates the sample was determined to be non-hazardous and did not designate as dangerous or extremely hazardous waste.
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.

Table 3, Page 1 of 5. Summary of Confirmation Soil Sample Analytical Data
Roystone Redevelopment (Texaco 211577 Monterey Site/Agreed Order No. 16537)
631 Queen Anne Avenue North, Seattle, Washington 98109
The Riley Group, Inc. Project No. 2017-015K

Sample Number	Sample Depth	Sample Date	Gasoline TPH	BTEX				Diesel TPH	Oil TPH	HCID			PCE	TCE	Hexane	MTBE	EDC	EDB	Other HVOCs	Naph.	Total Pb
				B	T	E	X			Gasoline	Diesel	Heavy Oil									
Soil Analytical Data Pertaining to UST Site Assessments, Fuel System Decommissioning, Soil Characterization, and Confirmation Samples																					
B-39W-30.5	30.5	08/19/20	----	ND<0.02	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
B-40W-30.5	30.5	08/19/20	----	ND<0.02	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
B-41W-30.5	30.5	08/19/20	----	ND<0.02	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
NPL-23S-27	27	08/14/20	ND<10	ND<0.02	ND<0.10	ND<0.05	ND<0.15	ND<50	ND<250	----	----	----	----	----	----	----	----	----	----	----	----
WPL-19S-27	27	08/14/20	ND<10	**0.026**	ND<0.10	ND<0.05	ND<0.15	ND<50	ND<250	----	----	----	----	----	----	----	----	----	----	----	----
WPL-20S-25.5	25.5	08/14/20	ND<10	**0.028**	ND<0.10	ND<0.05	ND<0.15	ND<50	ND<250	----	----	----	----	----	----	----	----	----	----	----	----
B-17W-31.5	31.5	08/14/20	----	ND<0.02	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
B-37W-30.5	30.5	08/14/20	----	ND<0.02	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
WPL-21S-29	29	08/14/20	ND<10	ND<0.02	ND<0.10	ND<0.05	ND<0.15	ND<50	ND<250	----	----	----	----	----	----	----	----	----	----	----	----
B-38W-30.5	30.5	08/14/20	----	ND<0.02	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
NPL-21S-20	20	08/14/20	ND<10	ND<0.02	ND<0.10	ND<0.05	ND<0.15	ND<50	ND<250	----	----	----	----	----	----	----	----	----	----	----	----
NPL-22S-20	20	08/14/20	ND<10	ND<0.02	ND<0.10	ND<0.05	ND<0.15	ND<50	ND<250	----	----	----	----	----	----	----	----	----	----	----	----
B-33W-28	28	08/13/20	ND<10	ND<0.02	ND<0.10	ND<0.05	ND<0.15	ND<50	ND<250	----	----	----	----	----	----	----	----	----	----	----	----
B-34W-28	28	08/13/20	ND<10	ND<0.02	ND<0.10	ND<0.05	ND<0.15	ND<50	ND<250	----	----	----	----	----	----	----	----	----	----	----	----
B-28W-27	27	08/13/20	ND<10	ND<0.02	ND<0.10	ND<0.05	ND<0.15	ND<50	ND<250	----	----	----	----	----	----	----	----	----	----	----	----
B-23W-26	26	08/13/20	ND<10	ND<0.02	ND<0.10	ND<0.05	ND<0.15	ND<50	ND<250	----	----	----	----	----	----	----	----	----	----	----	----
DP-4C-26	26	08/13/20	ND<10	ND<0.02	ND<0.10	ND<0.05	ND<0.15	ND<50	ND<250	----	----	----	----	----	----	----	----	----	----	----	----
B-18W-27	27	08/13/20	ND<10	ND<0.02	ND<0.10	ND<0.05	ND<0.15	ND<50	ND<250	----	----	----	----	----	----	----	----	----	----	----	----
B-36W-16.5	16.5	08/13/20	ND<10	ND<0.02	ND<0.10	ND<0.05	ND<0.15	ND<50	ND<250	----	----	----	----	----	----	----	----	----	----	----	----
NPL-19S-20	20	08/13/20	ND<10	ND<0.02	ND<0.10	ND<0.05	ND<0.15	ND<50	ND<250	----	----	----	----	----	----	----	----	----	----	----	----
NPL-20S-20	20	08/13/20	ND<10	ND<0.02	ND<0.10	ND<0.05	ND<0.15	ND<50	ND<250	----	----	----	----	----	----	----	----	----	----	----	----
B-22W-27.5	27.5	08/13/20	----	ND<0.02	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
B-32W-30	30	08/13/20	----	ND<0.02	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
SPL-24S-26	26	08/13/20	----	ND<0.02	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
B-14E-21	21	08/12/20	ND<10	ND<0.02	ND<0.10	ND<0.05	ND<0.15	ND<50	ND<250	----	----	----	----	----	----	----	----	----	----	----	----
B-19W-19	19	08/12/20	ND<10	ND<0.02	ND<0.10	ND<0.05	ND<0.15	ND<50	ND<250	----	----	----	----	----	----	----	----	----	----	----	----
B-24W-19	19	08/12/20	ND<10	ND<0.02	ND<0.10	ND<0.05	ND<0.15	ND<50	ND<250	----	----	----	----	----	----	----	----	----	----	----	----
B-26W-28	28	08/12/20	----	ND<0.02	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
B-21W-28	28	08/12/20	----	ND<0.02	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
B-27W-26	26	08/12/20	ND<10	ND<0.02	ND<0.10	ND<0.05	ND<0.15	ND<50	ND<250	----	----	----	----	----	----	----	----	----	----	----	----
B-29W-26	26	08/12/20	----	ND<0.02	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
WPL-18S-25	25	08/12/20	ND<10	ND<0.02	ND<0.10	ND<0.05	ND<0.15	ND<50	ND<250	----	----	----	----	----	----	----	----	----	----	----	----
RW-4C-32	32	08/11/20	ND<10	ND<0.02	ND<0.10	ND<0.05	ND<0.15	ND<50	ND<250	----	----	----	----	----	----	----	----	----	----	----	----
B-16W-25	25	08/11/20	ND<10	ND<0.02	ND<0.10	ND<0.05	ND<0.15	ND<50	ND<250	----	----	----	----	----	----	----	----	----	----	----	----
SPL-20S-24	24	08/10/20	ND<10	ND<0.02	ND<0.10	ND<0.05	ND<0.15	ND<50	ND<250	----	----	----	----	----	----	----	----	----	----	----	----
SPL-21S-24	24	08/10/20	ND<10	ND<0.02	ND<0.10	ND<0.05	ND<0.15	ND<50	ND<250	----	----	----	----	----	----	----	----	----	----	----	----
SPL-22S-25	25	08/10/20	ND<10	**0.12**	ND<0.10	ND<0.05	ND<0.15	ND<50	ND<250	----	----	----	----	----	----	----	----	----	----	----	----
B-15W-25	25	08/07/20	ND<10	ND<0.02	ND<0.10	ND<0.05	ND<0.15	ND<50	ND<250	----	----	----	----	----	----	----	----	----	----	----	----
B-20W-25	25	08/07/20	ND<10	ND<0.02	ND<0.10	ND<0.05	ND<0.15	ND<50	ND<250	----	----	----	----	----	----	----	----	----	----	----	----
SPL-15S-20	20	08/07/20	ND<10	ND<0.02	ND<0.10	ND<0.05	ND<0.15	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[3]**	**0.05[3]**	**Analyte Specific**	**5**	**250**
MTCA Method B Soil Cleanup Levels for Unrestricted Land Uses[2]			---	---	---	---	---	---	---	---	---	---	----	----	**400**	----	----	----	----	---	---

Table 3, Page 2 of 5. Summary of Confirmation Soil Sample Analytical Data
Roystone Redevelopment (Texaco 211577 Monterey Site/Agreed Order No. 16537)
631 Queen Anne Avenue North, Seattle, Washington 98109
The Riley Group, Inc. Project No. 2017-015K

Sample Number	Sample Depth	Sample Date	Gasoline TPH	BTEX				Diesel TPH	Oil TPH	HCID			PCE	TCE	Hexane	MTBE	EDC	EDB	Other HVOCs	Naph.	Total Pb
				B	T	E	X			Gasoline	Diesel	Heavy Oil									
B-10E-24	24	08/07/20	ND<10	ND<0.02	ND<0.10	ND<0.05	ND<0.15	ND<50	ND<250	----	----	----	----	----	----	----	----	----	----	----	----
B-30W-26	26	08/07/20	ND<10	ND<0.02	ND<0.10	ND<0.05	ND<0.15	ND<50	ND<250	----	----	----	----	----	----	----	----	----	----	----	----
B-35W-25	25	08/07/20	ND<10	ND<0.02	ND<0.10	ND<0.05	ND<0.15	ND<50	ND<250	----	----	----	----	----	----	----	----	----	----	----	----
P08C-28	28	08/07/20	ND<10	ND<0.02	ND<0.10	ND<0.05	ND<0.15	ND<50	ND<250	----	----	----	----	----	----	----	----	----	----	----	----
B-25W-26	26	08/07/20	ND<10	ND<0.02	ND<0.10	ND<0.05	ND<0.15	ND<50	ND<250	----	----	----	----	----	----	----	----	----	----	----	----
B-31W-26.5	26.5	08/07/20	ND<10	ND<0.02	ND<0.10	ND<0.05	ND<0.15	ND<50	ND<250	----	----	----	----	----	----	----	----	----	----	----	----
SPL-19S-24	24	08/07/20	ND<10	ND<0.02	ND<0.10	ND<0.05	ND<0.15	ND<50	ND<250	----	----	----	----	----	----	----	----	----	----	----	----
SPL-18S-19	19	08/07/20	ND<10	ND<0.02	ND<0.10	ND<0.05	ND<0.15	ND<50	ND<250	----	----	----	----	----	----	----	----	----	----	----	----
BIE-21	21	08/06/20	ND<10	ND<0.02	ND<0.10	ND<0.05	ND<0.15	ND<50	ND<250	----	----	----	----	----	----	----	----	----	----	----	----
EPL-15S-17	17	08/06/20	ND<10	ND<0.02	ND<0.10	ND<0.05	ND<0.15	ND<50	ND<250	----	----	----	----	----	----	----	----	----	----	----	----
WPL-17S-22	22	07/29/20	ND<5	**2.0**	**0.029**	ND<0.02	ND<0.06	ND<50	ND<250	----	----	----	----	----	----	----	----	----	----	----	----
WPL-15S-21	21	07/29/20	**1,000**	ND<0.02j	ND<0.1	**0.13**	ND<0.3	**610 x**	ND<250	----	----	----	----	----	----	----	----	----	----	----	----
WPL-14S-22	22	07/29/20	ND<5	ND<0.02	ND<0.02	ND<0.02	ND<0.06	ND<50	ND<250	----	----	----	----	----	----	----	----	----	----	----	----
WPL-16S-18	18	07/30/30	ND<5	ND<0.02	ND<0.02	ND<0.02	ND<0.06	ND<50	ND<250	----	----	----	----	----	----	----	----	----	----	----	----
EPL-11S-17	17	07/22/20	ND<5	ND<0.02	ND<0.02	ND<0.02	ND<0.06	ND<50	ND<250	----	----	----	----	----	----	----	----	----	----	----	----
EPL-12S-17	17	07/22/20	ND<5	ND<0.02	ND<0.02	ND<0.02	ND<0.06	ND<50	ND<250	----	----	----	----	----	----	----	----	----	----	----	----
EPL-13S-17	17	07/22/20	ND<5	ND<0.02	ND<0.02	ND<0.02	ND<0.06	ND<50	ND<250	----	----	----	----	----	----	----	----	----	----	----	----
EPL-14S-17	17	07/22/20	ND<5	ND<0.02	ND<0.02	ND<0.02	ND<0.06	ND<50	ND<250	----	----	----	----	----	----	----	----	----	----	----	----
WPL-10S-16	16	07/23/20	**500**	ND<0.02j	ND<0.1	ND<0.1	ND<0.3	**1,300**	ND<250	----	----	----	----	----	----	----	----	----	----	----	----
WPL-11S-16	16	07/23/20	**25**	ND<0.02	**0.052**	**0.099**	**0.20**	**160 x**	ND<250	----	----	----	----	----	----	----	----	----	----	----	----
WPL-12S-20	20	07/23/20	**300**	ND<0.02j	**0.36**	**0.76**	ND<0.3	**970**	ND<250	----	----	----	----	----	----	----	----	----	----	----	----
WPL-13S-18	18	07/23/20	ND<5	ND<0.02	**0.024**	ND<0.02	ND<0.06	ND<50	ND<250	----	----	----	----	----	----	----	----	----	----	----	----
B-2E-18	18	07/16/20	ND<10	ND<0.02	ND<0.10	ND<0.05	ND<0.15	ND<50	ND<250	----	----	----	----	----	----	----	----	----	----	----	----
B-3E-16.5	16.5	07/16/20	ND<10	ND<0.02	ND<0.10	ND<0.05	ND<0.15	ND<50	ND<250	----	----	----	----	----	----	----	----	----	----	----	----
B-4E-16.5	16.5	07/16/20	ND<10	ND<0.02	ND<0.10	ND<0.05	ND<0.15	ND<50	ND<250	----	----	----	----	----	----	----	----	----	----	----	----
B-5E-20.5	20.5	07/16/20	**11**	ND<0.02	ND<0.10	ND<0.05	ND<0.15	ND<50	ND<250	----	----	----	----	----	----	----	----	----	----	----	----
SPL-17S-16	16	07/16/20	**294 E**	ND<0.02	ND<0.10	**6.3**	ND<0.15	**270**	ND<250	----	----	----	----	----	----	----	----	----	----	----	----
B-8E-17	17	07/16/20	ND<10	ND<0.02	ND<0.10	ND<0.05	ND<0.15	ND<50	ND<250	----	----	----	----	----	----	----	----	----	----	----	----
B-6E-18.5	18.5	07/16/20	ND<10	ND<0.02	ND<0.10	ND<0.05	ND<0.15	ND<50	ND<250	----	----	----	----	----	----	----	----	----	----	----	----
B7E-19	19	07/16/20	ND<10	ND<0.02	ND<0.10	ND<0.05	ND<0.15	ND<50	ND<250	----	----	----	----	----	----	----	----	----	----	----	----
B-11E-19	19	07/16/20	ND<10	ND<0.02	ND<0.10	ND<0.05	ND<0.15	ND<50	ND<250	----	----	----	----	----	----	----	----	----	----	----	----
B-12E-22.5	22.5	07/16/20	ND<10	ND<0.02	ND<0.10	ND<0.05	ND<0.15	ND<50	ND<250	----	----	----	----	----	----	----	----	----	----	----	----
B-9E-19	19	07/16/20	ND<10	ND<0.02	ND<0.10	ND<0.05	ND<0.15	ND<50	ND<250	----	----	----	----	----	----	----	----	----	----	----	----
B-13E-21	21	07/16/20	ND<10	ND<0.02	ND<0.10	ND<0.05	ND<0.15	ND<50	ND<250	----	----	----	----	----	----	----	----	----	----	----	----
NPL-13S-16	16	07/13/20	**400**	ND<0.02 j	ND<0.1	**0.84**	**0.90**	**2,100**	ND<250	----	----	----	----	----	----	----	----	----	----	----	----
NPL-14S-16	16	07/13/20	**220**	ND<0.02 j	**0.25**	**0.80**	**1.5**	**1,600**	ND<250	----	----	----	----	----	----	----	----	----	----	----	----
NPL-15S-16	16	07/13/20	**1,600**	ND<0.02 j	**5.2**	**14**	**27**	**5,500**	ND<250	----	----	----	----	----	----	----	----	----	----	----	----
NPL-16S-16	16	07/13/20	**75**	ND<0.02	ND<0.02	**0.044**	ND<0.06	**1,600**	ND<250	----	----	----	----	----	----	----	----	----	----	----	----
NPL-17S-16	16	07/13/20	ND<5	ND<0.02	ND<0.02	ND<0.02	ND<0.06	**440**	ND<250	----	----	----	----	----	----	----	----	----	----	----	----
NPL-18S-16	16	07/13/20	**290**	ND<0.02 j	**0.20**	**1.1**	**2.1**	ND<50	ND<250	----	----	----	----	----	----	----	----	----	----	----	----
NPL-11S-10	10	07/10/20	**140**	ND<0.02	ND<0.02	ND<0.02	ND<0.06	**2,400**	ND<250	----	----	----	----	----	----	----	----	----	----	----	----
NPL-12S-10	10	07/10/20	**1,700**	ND<0.2	**1.5**	**9.6**	**13**	**14,000**	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[3]**	**0.05[3]**	**Analyte Specific**	**5**	**250**
MTCA Method B Soil Cleanup Levels for Unrestricted Land Uses[2]			---	---	---	---	---	---	---	---	---	---	----	----	**400**	----	----	----	----	---	---

Table 3, Page 3 of 5. Summary of Confirmation Soil Sample Analytical Data
Roystone Redevelopment (Texaco 211577 Monterey Site/Agreed Order No. 16537)
631 Queen Anne Avenue North, Seattle, Washington 98109
The Riley Group, Inc. Project No. 2017-015K

Sample Number	Sample Depth	Sample Date	Gasoline TPH	BTEX				Diesel TPH	Oil TPH	HCID			PCE	TCE	Hexane	MTBE	EDC	EDB	Other HVOCs	Naph.	Total Pb
				B	T	E	X			Gasoline	Diesel	Heavy Oil									
EPL-9S-11	11	07/09/20	ND<5	ND<0.02	ND<0.02	ND<0.02	ND<0.06	ND<50	ND<250	----	----	----	----	----	----	----	----	----	----	----	----
EPL-10S-12	12	07/09/20	ND<5	ND<0.02	ND<0.02	ND<0.02	ND<0.06	ND<50	ND<250	----	----	----	----	----	----	----	----	----	----	----	----
EPL-8S-11	11	07/09/20	**6,400**	ND<0.4	**52**	**41**	**110**	**1,500 x**	ND<250	----	----	----	----	----	----	----	----	----	----	----	----
SPL-16S-13	13	07/09/20	**1,000**	ND<0.02	**0.091**	ND<0.02	**5.4**	ND<50	ND<250	----	----	----	----	----	----	----	----	----	----	----	----
EPL-7S-11	11	07/09/20	ND<5	ND<0.02	**0.025**	ND<0.02	ND<0.06	ND<50	ND<250	----	----	----	----	----	----	----	----	----	----	----	----
NPL-10S-10	10	07/07/20	**830**	ND<0.02 j	**0.34**	**3.8**	**2.4**	**3,500**	ND<250	----	----	----	----	----	----	----	----	----	----	----	----
EPL-6S-11	11	07/07/20	**1,900**	ND<1	**27**	**4.0**	**20**	**170 x**	ND<250	----	----	----	----	----	----	----	----	----	----	----	----
NPL-8S-6	6	06/22/20	ND<5	ND<0.02	ND<0.02	ND<0.02	ND<0.06	ND<50	ND<250	----	----	----	----	----	----	----	----	----	----	----	----
NPL-9S-4	4	06/22/20	ND<5	ND<0.02	ND<0.02	ND<0.02	ND<0.06	ND<50	ND<250	----	----	----	----	----	----	----	----	----	----	----	----
WPL-8S-9	9	06/19/20	**740**	ND<0.8	ND<0.8	**5.3**	**4.5**	**270 x**	ND<250	----	----	----	----	----	----	----	----	----	----	----	----
NPL-3S-6	6	06/19/20	**6.1**	ND<0.02	ND<0.02	ND<0.02	ND<0.06	ND<50	ND<250	----	----	----	----	----	----	----	----	----	----	----	----
NPL-4S-3.5	3.5	06/19/20	**9.5**	ND<0.02	ND<0.02	ND<0.02	ND<0.06	ND<50	ND<250	----	----	----	----	----	----	----	----	----	----	----	----
NPL-5S-6	6	06/19/20	ND<5	ND<0.02	ND<0.02	ND<0.02	ND<0.06	ND<50	ND<250	----	----	----	----	----	----	----	----	----	----	----	----
EPL-3S-6	6	06/19/20	ND<5	ND<0.02	ND<0.02	ND<0.02	ND<0.06	ND<50	ND<250	----	----	----	----	----	----	----	----	----	----	----	----
EPL-4S-6	6	06/19/20	ND<5	ND<0.02	ND<0.02	ND<0.02	ND<0.06	ND<50	ND<250	----	----	----	----	----	----	----	----	----	----	----	----
EPL-5S-6	6	06/19/20	ND<5	ND<0.02	ND<0.02	ND<0.02	ND<0.06	ND<50	ND<250	----	----	----	----	----	----	----	----	----	----	----	----
WPL-9S-10	10	06/19/20	**46**	ND<0.02	ND<0.02	**0.82**	**0.63**	**350 x**	ND<250	----	----	----	----	----	----	----	----	----	----	----	----
NPL-6S-6	6	06/19/20	**6.5**	ND<0.02	ND<0.02	**0.15**	**0.084**	ND<50	ND<250	----	----	----	----	----	----	----	----	----	----	----	----
NPL-7S-6	6	06/19/20	ND<5	ND<0.02	ND<0.02	ND<0.02	ND<0.06	ND<50	ND<250	----	----	----	----	----	----	----	----	----	----	----	----
WPL-6S-13	13	06/18/20	**14**	ND<0.02	ND<0.02	ND<0.02	ND<0.06	**81**	ND<250	----	----	----	----	----	----	----	----	----	----	----	----
WPL-7S-13	13	06/18/20	ND<5	ND<0.02	ND<0.02	ND<0.02	ND<0.06	ND<50	ND<250	----	----	----	----	----	----	----	----	----	----	----	----
SPL-13S-14	14	06/17/20	**52**	ND<0.02	**0.098**	**0.12**	**0.15**	**1,000**	ND<250	----	----	----	----	----	----	----	----	----	----	----	----
SPL-14S-16.5	16.5	06/17/20	**10**	ND<0.02	**0.037**	ND<0.02	**0.080**	**290**	ND<250	----	----	----	----	----	----	----	----	----	----	----	----
SPL-8S-12*	12	06/16/20	**3,200**	ND<1	**23**	**11**	**32**	**590 x**	ND<250	----	----	----	----	----	ND<0.25	ND<0.05	ND<0.05	ND<0.05	----	ND<0.05	**6.15**
SPL-9S-11.5	11.5	06/16/20	**980**	ND<1	**3.8**	**3.9**	**5.4**	**420**	ND<250	----	----	----	----	----	----	----	----	----	----	----	----
SPL-10S-12	12	06/16/20	**1,000**	ND<1	**7.0**	**3.9**	**4.5**	**1,000**	ND<250	----	----	----	----	----	----	----	----	----	----	----	----
SPL-11S-12.5	12.5	06/16/20	**1,000**	ND<1	**5.7**	**6.6**	**14**	**1,400**	ND<250	----	----	----	----	----	----	----	----	----	----	----	----
SPL-12S-12.5	12.5	06/16/20	**820**	ND<0.02	**1.1**	**3.3**	**6.0**	**1,500**	ND<250	----	----	----	----	----	----	----	----	----	----	----	----
SPL-7S-8	8	06/10/20	ND<5	ND<0.02	ND<0.02	ND<0.02	ND<0.06	ND<50	ND<250	----	----	----	----	----	----	----	----	----	----	----	----
NPL-2S-3	3	06/10/20	**130**	ND<0.02j	**0.29**	**0.30**	ND<0.3	**280**	ND<250	----	----	----	----	----	----	----	----	----	----	----	----
SPL-6S-8	8	06/08/20	ND<5	ND<0.02	ND<0.02	ND<0.02	ND<0.06	ND<50	ND<250	----	----	----	----	----	----	----	----	----	----	----	----
EPL-2S-8	8	05/29/20	**51**	ND<0.02	**0.092**	**0.10**	**0.20**	**92**	ND<250	----	----	----	----	----	----	----	----	----	----	----	----
NPL-1S-6	6	05/29/20	ND<5	ND<0.02	ND<0.02	ND<0.02	ND<0.06	ND<50	ND<250	----	----	----	----	----	----	----	----	----	----	----	----
EPL-1S-8	8	05/28/20	ND<5	ND<0.03	ND<0.05	ND<0.05	ND<0.15	ND<50	ND<250	ND<20	ND<50	ND<250	ND<0.025	ND<0.02	----	----	ND<0.05	----	ND	----	----
SPL-5S-8	8	05/28/20	ND<5	ND<0.03	ND<0.05	ND<0.05	ND<0.15	ND<50	ND<250	ND<20	ND<50	ND<250	ND<0.025	ND<0.02	----	----	ND<0.05	----	ND	----	----
NETP1-8	8	05/27/20	ND<5	ND<0.02	ND<0.02	ND<0.02	ND<0.06	ND<50	ND<250	----	----	----	----	----	----	----	----	----	----	----	----
NETP1-12	12	05/27/20	ND<5	ND<0.02	ND<0.02	ND<0.02	ND<0.06	ND<50	ND<250	----	----	----	----	----	----	----	----	----	----	----	----
NETP2-5	5	05/27/20	**35**	ND<0.02	**0.046**	**0.046**	**0.11**	ND<50	ND<250	----	----	----	----	----	----	----	----	----	----	----	----
NETP2-8	8	05/27/20	ND<5	ND<0.02	ND<0.02	ND<0.02	ND<0.06	ND<50	ND<250	----	----	----	----	----	----	----	----	----	----	----	----
WPL-4S-8	8	05/12/20	ND<5	ND<0.02	ND<0.02	ND<0.02	ND<0.06	ND<50	ND<250	----	----	----	----	----	----	----	----	----	----	----	----
WPL-5S-8	8	05/12/20	ND<5	ND<0.02	ND<0.02	ND<0.02	ND<0.06	ND<50	ND<250	----	----	----	----	----	----	----	----	----	----	----	----
WPL-1S-8	8	05/05/20	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[3]**	**0.05[3]**	**Analyte Specific**	**5**	**250**
MTCA Method B Soil Cleanup Levels for Unrestricted Land Uses[2]			---	---	---	---	---	---	---	---	---	---	----	----	**400**	----	----	----	----	---	---

Table 3, Page 4 of 5. Summary of Confirmation Soil Sample Analytical Data
Roystone Redevelopment (Texaco 211577 Monterey Site/Agreed Order No. 16537)
631 Queen Anne Avenue North, Seattle, Washington 98109
The Riley Group, Inc. Project No. 2017-015K

Sample Number	Sample Depth	Sample Date	Gasoline TPH	BTEX				Diesel TPH	Oil TPH	HCID			PCE	TCE	Hexane	MTBE	EDC	EDB	Other HVOCs	Naph.	Total Pb
				B	T	E	X			Gasoline	Diesel	Heavy Oil									
WPL-2S-8	8	05/06/20	ND<5	ND<0.02	ND<0.02	ND<0.02	ND<0.06	ND<50	**750**	----	----	----	----	----	----	----	----	----	----	----	----
WPL-3S-8	8	05/06/20	ND<5	ND<0.02	ND<0.02	ND<0.02	ND<0.06	ND<50	ND<250	----	----	----	----	----	----	----	----	----	----	----	----
SPL-1S-8	8	04/30/20	ND<5	ND<0.02	ND<0.02	ND<0.02	ND<0.06	ND<50	ND<250	----	----	----	----	----	----	----	----	----	----	----	----
SPL-2S-8	8	04/30/20	ND<5	ND<0.02	ND<0.02	ND<0.02	ND<0.06	ND<50	ND<250	----	----	----	----	----	----	----	----	----	----	----	----
SPL-3S-8	8	04/30/20	ND<5	ND<0.02	ND<0.02	ND<0.02	ND<0.06	ND<50	ND<250	----	----	----	----	----	----	----	----	----	----	----	----
SPL-4S-8	8	04/30/20	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[3]**	**0.05[3]**	**Analyte Specific**	**5**	**250**
MTCA Method B Soil Cleanup Levels for Unrestricted Land Uses[2]			**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**----**	**----**	**400**	**----**	**----**	**----**	**----**	**---**	**---**

Notes:
Confirmation soil sample = Soil sample collected from the limits of the remedial excavation and/or the Property boundary. Data obtained from these samples are representative of soil that remains in place.
All results and detection limits are given in milligrams per kilogram (mg/kg); equivalent to parts per million (ppm).
Sample Depth = Soil sample depth interval in feet below ground surface (bgs) 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 and 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.
PCE (tetrachloroethene), TCE (trichloroethene), Hexane, MTBE (methyl t-butyl ether), EDC (1,2-dichloroethane), EDB (1,2-dibromoethane), and other HVOCs (halogenated volatile organic compounds) determined using EPA Test Method 8260D.
Naph. (naphthalene) determined using EPA Test Method 8260D.
Total Pb (lead) determined using EPA Method 6020B.
x = The sample chromatographic pattern does not resemble the fuel standard used for quantitation.
* = Soil sample SPL-8S-12 was initially mislabeled as SPL-15S-12. The sample ID was later revised to SPL-8S-12 after the laboratory report was issued.
j = The analyte concentration is reported below the lowest calibration standard. The value reported is an estimate.
ND = Not detected at a concentration above the analytical detection limit.
---- = Not analyzed or not applicable.
Washington State Department of Ecology (Ecology) Model Toxics Control Act (MTCA) Method A Soil Cleanup Levels for Unrestricted Land Uses (WAC 173-340-900, Table 740-1). MTCA Method B Soil Cleanup Levels from Ecology's Cleanup Level and Risk Calculation (CLARC) database.

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

[2] No MTCA Method A Cleanup Level has been established. Therefore, the applicable MTCA Method B Standard Formula Value obtained from CLARC is referenced.

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

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.

Table 4, Page 1 of 6. Summary of Pre-Interim Action Groundwater Analytical Data
Roystone Redevelopment (Texaco 211577 Monterey Site/Agreed Order No. 16537)
631 Queen Anne Avenue North, Seattle, Washington 98109
The Riley Group, Inc. Project No. 2017-015K

Sample Number	Sample Date	TOC Elevation (ft)	Depth to Water Below Well TOC (ft)	LNAPL Thickness (ft)	Groundwater Elevation (ft)	Gasoline TPH	BTEX				Diesel TPH	Oil TPH	Diesel TPH	Oil TPH	Naph.	cPAHs	MTBE	EDB	EDC	PCE	TCE	cis-1,2-DCE	Other VOCs[7]	Total Pb	Dissolved Pb	Dissolved As	Other Metals
							B	T	E	X	without silica gel		with silica gel														
Groundwater Monitoring Wells																											
MW-6	**Screened Interval 15-29 feet bgs, 2-Inch Diameter Casing (Decommissioned)**																										
MW-6	11/13/18	146.05	20.70	0.00	125.35	110	0.89	ND<1	ND<1	ND<3	1,000 x	ND<250	570 x	ND<250	ND<0.8	ND	ND<1	ND<1	ND<1	ND<1	ND<1	ND<1	ND	----	----	----	----
	11/11-13/13[3]	146.05	19.87	0.00	126.18	94	3	ND<0.5	0.6	0.5	----	----	340	ND<70	----	----	----	----	----	----	----	----	----	----	----	----	----
	05/20-22/13[3]	146.05	18.47	0.00	127.58	280	5	ND<0.5	0.5	0.6	600	ND<71	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
	11/12-14/12[3]	146.05	19.74	0.00	126.31	370	9	1	2	3	1,600	190	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
	05/07-08/12[3]	146.05	18.50	0.00	127.55	250	1	ND<0.5	ND<0.5	ND<0.5	540	ND<70	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
	05/10-12/11[3]	146.05	18.32	0.00	127.73	600	12	0.7	1	0.9	12,000	1,500	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
	01/17-20/11[3]	146.05	18.24	0.00	127.81	130	4	ND<0.5	ND<0.5	ND<0.5	12,000	4,600	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
	04/19-22/10[3]	146.05	18.83	0.00	127.22	650	24	0.9	0.6	1	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
	10/12-15/09[3]	146.05	20.28	0.00	125.77	1,200	16	1	0.5	2	5,100	ND<660	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
	04/13-16/09[3]	146.05	20.18	0.00	125.87	1,100	31	0.8	2	3	26,000	3,000	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
	11/10/08[3]	146.05	20.93	0.00	125.12	ND<50.0	0.6	ND<0.5	ND<0.5	ND<0.5	----	----	3,200	ND<660	----	----	----	----	----	----	----	----	----	----	----	----	----
	04/28-05/01/08	146.05	22.28	0.00	123.77	360	3	0.7	5	3	----	----	8,600	1,200	----	----	----	----	----	----	----	----	----	----	----	----	----
	08/09/06	113.32[6]	25.85	0.00	87.47	15,000	1,900	1,000	590	1,700	----	----	14,000	ND<2,300	----	----	----	----	----	----	----	----	----	----	----	----	----
	04/18-21/05	113.32[6]	20.31	0.00	93.01	3,600	1,000	120	110	360	7,700	ND<1,000	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
	01/24-31/05	113.32[6]	20.38	0.00	92.94	5,600	220	60	110	310	11,000	ND<480	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
	10/28-11/01/04	113.32[6]	20.93	0.00	92.39	24,000	8,600	2,800	690	3,100	9,200	ND<96	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
	7/15-16/04	113.32[6]	20.48	0.00	92.84	46,600	9,610	3,190	758	3,060	3,800	ND<500	----	----	----	----	----	----	----	----	----	----	----	----	1.69	----	----
	4/29-30/04	113.32[6]	20.22	0.02	93.12	Not sampled due to the presence of LNAPL																					
	10/01-02/03	113.32[6]	23.07	0.03	90.27	Not sampled due to the presence of LNAPL																					
	06/30-07/01/03	113.32[6]	21.41	0.03	91.93	Not sampled due to the presence of LNAPL																					
	4/23-24/03	113.32[6]	20.91	0.03	92.43	Not sampled due to the presence of LNAPL																					
	01/21/03	113.32[6]	21.74	0.03	91.60	Not sampled due to the presence of LNAPL																					
	10/17-18/02	113.32[6]	20.69	0.05	92.67	Not sampled due to the presence of LNAPL																					
	07/24/02	113.32[6]	19.76	0.00	93.56	31,000	8,900	1,600	820	4,200	29,000	ND<10,000	----	----	----	----	----	----	----	----	----	----	----	----	5.1	----	----
	01/1997	113.38[6]	----	----	----	54,000	7,290	12,400	2,340	19,800	----	----	----	----	----	----	----	----	----	ND<1,000	ND<1,000	ND<1,000	----	----	61.9	----	----
	10/1995	113.38[6]	----	----	----	62,000	12,000	13,800	920	5,690	----	----	----	----	----	----	----	----	----	1.6	2.3	2.9	----	----	33.3	----	----
	07/07/93	113.38[6]	22.30	1.60	92.36	Not sampled due to the presence of LNAPL																					
	03/26-28/91	113.38[6]	21.22	0.67	92.70	----	25,000	29,000	2,500	19,000	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
	09/1990	113.38[6]	21.95	0.81	92.08	Not sampled due to the presence of LNAPL																					
	11/03/86	113.71[6]	24.29	2.26	91.23	Not sampled due to the presence of LNAPL																					
MW-9	**Screened Interval 14-29 feet bgs, 2-Inch Diameter Casing (Decommissioned)**																										
MW-9	11/13/18	147.18	21.17	0.00	126.01	ND<100	ND<1	ND<1	ND<1	ND<3	440 x	ND<250	140	ND<250	ND<0.4	ND	ND<1	ND<1	ND<1	ND<1	ND<1	ND<1	ND	----	----	----	----
	08/15/17	147.18	19.63	0.00	127.55	----	----	----	----	----	1,500 x	490 x	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
	04/06/17	147.18	17.93	0.00	129.25	480	ND<1	2.2	1.8	3.4	----	----	----	----	----	----	----	----	----	ND<1	ND<1	ND<1	ND	----	----	----	----
	11/11-13/13	147.18	20.21	0.00	126.97	180	ND<0.5	ND<0.5	ND<0.5	ND<0.5	400	ND<71	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
	05/20-22/13	147.18	18.19	0.00	128.99	240	ND<0.5	ND<0.5	ND<0.5	ND<0.5	1,400	ND<68	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
	11/12-14/12	147.18	20.09	0.00	127.09	190	ND<0.5	ND<0.5	ND<0.5	ND<0.5	2,700	150	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
	05/07-08/12	147.18	18.88	0.00	128.30	230	ND<0.5	ND<0.5	ND<0.5	ND<0.5	1,500	ND<67	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
	05/10-12/11	147.18	18.68	0.00	128.50	160	ND<0.5	ND<0.5	ND<0.5	ND<0.5	2,200	260	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
	01/17-20/11	147.18	18.65	0.00	128.53	280	ND<0.5	ND<0.5	ND<0.5	ND<0.5	6,400	1,400	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
	04/19-22/10	147.18	19.04	0.00	128.14	130	1	ND<0.5	ND<0.5	ND<0.5	1,200	190	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
	10/12-15/09	147.18	20.67	0.00	126.51	83	ND<0.5	ND<0.5	ND<0.5	ND<0.5	960	ND<66	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
	04/13-16/09	147.18	24.60	0.00	122.58	160	0.7	ND<0.5	ND<0.5	ND<0.5	1,100	69	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
	11/10/08	147.18	21.29	0.00	125.89	130	0.5	ND<0.5	ND<0.5	ND<0.5	----	----	2,000	97	----	----	----	----	----	----	----	----	----	----	----	----	----
	12/04-05/07	147.18	23.15	0.00	124.03	ND<50.0	ND<0.5	ND<0.5	ND<0.5	ND<1.5	2,200	280	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
	08/09/06	147.18	22.80	0.00	124.38	450	66	1.9	0.8	47	----	----	2,700	ND<540	----	----	----	----	----	----	----	----	----	----	----	----	----
	04/18-21/05	147.18	20.59	0.00	126.59	480	1.4	ND<1.0	5.7	3.1	14,000	ND<630	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
	01/24-31/05	147.18	20.66	0.00	126.52	730	1.7	ND<1.0	2.7	ND<6.0	140,000	ND<5,300	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
	10/28-11/01/04	147.18	21.22	0.00	125.96	300	1.4	0.5	1.9	ND<3.0	3,900	420	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
	7/15-16/04	147.18	20.71	0.00	126.47	9,540	3.84	10.4	25.9	31.6	2,540	ND<500	----	----	----	----	----	----	----	----	----	----	----	----	2.54	----	----
	4/29-30/04	147.18	20.38	0.00	126.80	1,200	2	1.2	10	7.8	92,000	ND<5,000	----	----	----	----	----	----	----	----	----	----	----	----	4.8	----	----
	1/21-23/04	147.18	20.36	0.00	126.82	2,300	7.2	2.4	45	19	100,000	ND<5,100	----	----	----	----	----	----	----	----	----	----	----	----	5.5	----	----
	10/1-02/03	147.18	21.26	0.00	125.92	3,500	110	30	100	ND<100	33,000	ND<5,000	----	----	----	----	----	----	----	----	----	----	----	----	3.9	----	----
	4/23-24/03	147.18	20.04	0.00	127.14	6,760	388	15.9	277	105	3,680	ND<500	----	----	----	----	----	----	----	----	----	----	----	----	1.31	----	----
	10/17-18/02	147.18	20.88	0.00	126.30	6,380	493	13.0	230	107	43,600	671[4]	----	----	----	----	----	----	----	----	----	----	----	----	2.66	----	----
	06/14/00	147.18	----	----	----	4,740	786	26.0	274	156	6,070	ND<500	----	----	----	----	----	----	----	----	----	----	----	7.86	1.59	----	----
MTCA Method A Cleanup Levels for Ground Water						800/1,000[1]	5	1,000	700	1,000	500	500	500	500	160	0.1	20	0.01	5	5	5	NVE	Analyte Specific	15	15	5	Analyte Specific
Applicable or Relevant and Appropriate Requirements (ARARs)[2]						----	5	1,000	700	10,000	----	----	----	----	----	----	----	0.05	5	5	5	70	Analyte Specific	15	15	10	Analyte Specific

Table 4, Page 2 of 6. Summary of Pre-Interim Action Groundwater Analytical Data
Roystone Redevelopment (Texaco 211577 Monterey Site/Agreed Order No. 16537)
631 Queen Anne Avenue North, Seattle, Washington 98109
The Riley Group, Inc. Project No. 2017-015K

Sample Number	Sample Date	TOC Elevation (ft)	Depth to Water Below Well TOC (ft)	LNAPL Thickness (ft)	Groundwater Elevation (ft)	Gasoline TPH	BTEX				Diesel TPH	Oil TPH	Diesel TPH	Oil TPH	Naph.	cPAHs	MTBE	EDB	EDC	PCE	TCE	cis-1,2-DCE	Other VOCs[7]	Total Pb	Dissolved Pb	Dissolved As	Other Metals
							B	T	E	X	without silica gel		with silica gel														
MW-9	12/15/99	147.18	----	----	----	4,460	831	22.4	274	138	8,510	ND<500	----	----	----	----	----	----	----	----	----	----	----	15	1.03	----	----
	11/1997	147.18	----	----	----	5,000	2,010	80	334	400	----	----	----	----	----	----	----	----	----	ND<1	ND<1	ND<1	----	3.3	----	----	----
	07/1997	147.18	----	----	----	2,200 J	2,680	127	460	620 J	----	----	----	----	----	----	----	----	----	ND<200	ND<200	ND<200	----	8.6 j	----	----	----
	04/1997	147.18	----	----	----	9,100	2,980	173	413	674	----	----	----	----	----	----	----	----	----	ND<1	ND<1	ND<1	----	6.8	----	----	----
	01/01/97	147.18	----	----	----	4,400	2,600	53	310	285	----	----	----	----	----	----	----	----	----	----	----	----	----	4.6 P	----	----	----
	10/01/95	147.18	----	----	----	3,400	3,520	70 J	ND<200	312 J	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
	03/26-28/91	114.65[6]	20.44	0.17	94.18	----	1,600	2,900	250	3,100	----	----	----	----	----	----	----	----	----	ND<250	ND<250	----	----	----	1.03	----	----
MW-13	**Screened Interval 10-20 feet bgs, 2-Inch Diameter Casing (Decommissioned)**																										
MW-13	11/13/18	147.88	----	----	Dry well																						
	08/15/17	147.88	18.04	----	129.84	----	----	----	----	----	60 x	ND<250	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
	04/06/17	147.88	16.26	----	131.62	ND<100	ND<1	ND<1	ND<1	ND<3	----	----	----	----	----	----	----	----	----	ND<1	ND<1	ND<1	ND	----	----	----	----
	2002-2013	147.88	----	0.00	Not Sampled																						
RW-4	**Screened Interval 17-32 feet bgs, 8-Inch Diameter Casing (Decommissioned)**																										
RW-4 (Product Recovery Well)	10/18/06	110.82[6]	23.64	0.00	87.18	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
	07/15-16/04	110.82[6]	18.20	0.22	92.84	Not sampled due to the presence of LNAPL																					
	01/21/03	110.82[6]	17.88	0.00	92.94	689	0.991	ND<0.500	2.37	7.03	2,830	ND<500	----	----	----	----	----	----	----	----	----	----	----	----	ND<1.00	----	----
	10/17-18/02	110.82[6]	19.29	0.00	91.53	3,160	59.8	2.50	40.4	15.6	8,930	939	----	----	----	----	----	----	----	----	----	----	----	----	1.23	----	----
	07/24/02	110.82[6]	18.30	0.00	92.52	990	62	1.3	32	7.0	15,000	ND<2,000	----	----	5.0	----	ND<2	----	ND<2	ND<1	ND<1	ND<1	----	3.3	6.1	----	----
	07/07/93	110.82[6]	21.65	0.00	89.17	14,000	6,500	2,800	370	2,000	----	----	----	----	----	----	----	----	----	----	----	----	----	45	----	----	----
DPE-5	**Screened Interval 14-24 feet bgs, 4-Inch Diameter Casing (Decommissioned)**																										
DPE-5 (Dual Phase Extraction Well)	11/21/18	113.81[6]	17.28	0.00	96.53	ND<100	1.6	ND<1	ND<1	ND<3	1,300 x	420 x	99	ND<250	ND<1	----	ND<1	ND<1	ND<1	ND<1	ND<1	ND<1	ND	----	1.37	----	----
	04/06/17	113.81[6]	13.37	0.00	100.44	----	----	----	----	----	----	----	----	----	----	----	----	----	----	ND<1	ND<1	ND<1	ND	----	----	----	----
	11/11-13/13	113.81[6]	16.68	0.00	97.14	5,400	44	20	690	290	----	----	150	ND<72	----	----	----	----	----	----	----	----	----	----	----	----	----
	05/20-22/13	113.81[6]	16.65	0.00	97.17	5,700	41	22	620	550	120	ND<67	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
	11/12-14/12	113.81[6]	15.35	0.00	98.47	580	5	2	56	46	260	ND<72	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
	05/07-08/12	113.81[6]	14.08	0.00	99.74	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<29	ND<67	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
	05/10-12/11	113.81[6]	16.16	0.00	97.66	520	18	4	30	63	1,900	270	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
	01/17-20/11	113.81[6]	13.99	0.00	99.83	ND<50	ND<0.5	ND<0.5	2	1	540	230	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
	04/19-22/10	113.81[6]	15.92	0.00	97.90	78	2	ND<0.5	ND<0.5	0.5	530	95	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
	10/12-15/09	113.81[6]	18.60	0.00	95.22	490	22	2	19	10	25,000	ND<1,400	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
	04/13-16/09	113.81[6]	14.63	0.00	99.19	110	2	ND<0.5	1	3	690	83	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
	11/03/08	113.82[6]	22.45	0.00	91.37	460	77	7	4	17	----	----	12,000	ND<3,500	----	----	----	----	----	----	----	----	----	----	----	----	----
	04/29-29/08[3]	113.82[6]	18.93	0.00	94.89	ND<250	32	4	3	22	----	----	11,000	ND<2,500	----	----	----	----	----	----	----	----	----	----	----	----	----
	12/04-06/07	113.81[6]	23.72	0.00	90.09	180	0.6	0.5	0.6	4.3	4,000	ND<470	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
	04/17-19/07	113.81[6]	23.78	0.00	90.03	200	17	2.6	1.6	11	4,600	ND<470	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
	04/17/06	113.81[6]	----	----	----	19,000	1,100	1,400	160	2,900	----	----	4,800	ND<190	----	----	----	----	----	----	----	----	----	----	----	----	----
	01/23/06	113.81[6]	16.75	0.05	96.61	Not sampled due to the presence of LNAPL																					
	11/28/05	----	----	----	----	36,000	----	----	----	----	5,300	ND<1,000	----	----	----	----	ND<0.5	----	ND<0.5	ND<0.8	ND<1	ND<0.8	----	----	----	----	----
DPE-6	**Screened Interval 15.5-30.5 feet bgs, 4-Inch Diameter Casing (Decommissioned)**																										
DPE-6 (Dual Phase Extraction Well)	11/13/18	113.32[6]	20.93	0.00	92.39	ND<100	ND<1	1.1	ND<1	ND<3	3,300 x	610 x	180	ND<250	ND<1	----	ND<1	ND<1	ND<1	ND<1	ND<1	ND<1	ND	----	ND<2	----	----
	04/06/17	113.32[6]	17.75	0.00	95.57	----	----	----	----	----	----	----	----	----	----	----	----	----	----	ND<1	ND<1	ND<1	ND	----	----	----	----
	11/11-13/13	114.14[6]	20.04	0.00	94.10	140	7	ND<0.5	ND<0.5	ND<0.5	----	----	1,100	ND<70	----	----	----	----	----	----	----	----	----	----	----	----	----
	05/20-22/13	114.14[6]	18.62	0.00	95.52	570	3	2	2	8	170	ND<71	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
	11/12-14/12	114.14[6]	19.90	0.00	94.24	220	4	ND<0.5	ND<0.5	1	94	ND<71	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
	05/07-08/12	114.14[6]	18.80	0.00	95.43	360	9	1	1	4	1,000	ND<66	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
	05/10-12/11	114.14[6]	18.44	0.00	95.70	510	16	2	5	14	8,300	1,300	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
	01/17-20/11	114.14[6]	18.61	0.00	95.53	520	42	2	4	6	16,000	27,000	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
	04/19-22/10	114.14[6]	19.02	0.00	95.12	680	44	3	13	13	10,000	2,000	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
	10/12-15/09	114.14[6]	20.51	0.00	93.63	490	18	3	8	9	3,600	ND<680	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
	04/13-16/09	114.14[6]	20.60	0.00	93.54	900	100	6	16	24	16,000	880	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
	11/04/08	114.14[6]	21.30	0.00	92.84	870	16	12	7	63	----	----	11,000	ND<1,300	----	----	----	----	----	----	----	----	----	----	----	----	----
	04/28-29/08[3]	114.14[6]	22.81	0.00	91.33	460	1	6	2	32	----	----	8,500	ND<480	----	----	----	----	----	----	----	----	----	----	----	----	----
	12/04-05/07	113.32[6]	28.51	0.00	84.81	160	ND<2.0	0.6	ND<2.0	3.8	1,100	ND<190	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
	04/17/07	113.32[6]	29.83	0.00	83.49	5,400	27	39	35	350	110,000	ND<9,300	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
MTCA Method A Cleanup Levels for Ground Water						800/1,000[1]	5	1,000	700	1,000	500	500	500	500	160	0.1	20	0.01	5	5	5	NVE	Analyte Specific	15	15	5	Analyte Specific
Applicable or Relevant and Appropriate Requirements (ARARs)[2]						----	5	1,000	700	10,000	----	----	----	----	----	----	----	0.05	5	5	5	70	Analyte Specific	15	15	10	Analyte Specific

Table 4, Page 3 of 6. Summary of Pre-Interim Action Groundwater Analytical Data
Roystone Redevelopment (Texaco 211577 Monterey Site/Agreed Order No. 16537)
631 Queen Anne Avenue North, Seattle, Washington 98109
The Riley Group, Inc. Project No. 2017-015K

Sample Number	Sample Date	TOC Elevation (ft)	Depth to Water Below Well TOC (ft)	LNAPL Thickness (ft)	Groundwater Elevation (ft)	Gasoline TPH	BTEX				Diesel TPH	Oil TPH	Diesel TPH	Oil TPH	Naph.	cPAHs	MTBE	EDB	EDC	PCE	TCE	cis-1,2-DCE	Other VOCs[7]	Total Pb	Dissolved Pb	Dissolved As	Other Metals
							B	T	E	X	without silica gel		with silica gel														
DPE-6	04/17/06	113.32[6]	----	0.00	----	**38,000**	**3,000**	**5,400**	**690**	**4,900**	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
	11/28/05	----	----	----	----	**280**	----	----	----	----	**170**	ND<100	----	----	----	----	ND<0.5	----	ND<0.5	ND<0.8	ND<1	**8**	----	----	----	----	----
DPE-7 Screened Interval 11-29 feet bgs, 4-Inch Diameter Casing (Decommissioned)																											
DPE-7 (Dual Phase Extraction Well)	11/13/18	113.15[6]	20.52	0.00	92.63	**700**	**3.3**	**8.1**	**2.3**	**30**	**4,100 x**	**850 x**	**430 x**	ND<250	**1.3**	ND	----	----	----	----	----	----	----	----	ND<2	----	----
	04/06/17	113.15[6]	17.28	0.00	95.87	----	----	----	----	----	----	----	----	----	----	----	----	----	----	ND<1	ND<1	ND<1	ND	----	----	----	----
	11/03/08	113.15[6]	20.96	**0.01**	92.18	Not sampled due to the presence of LNAPL																					
	04/28-29/08	113.15[6]	22.26	0.00	90.87	ND<250	**7**	**2**	**2**	**6**	----	----	**6,300**	ND<980	----	----	----	----	----	----	----	----	----	----	----	----	----
	12/04-05/07	113.15[6]	27.52	0.00	85.63	**760**	**44**	**1.7**	**28**	**15**	**120,000**	ND<9,900	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
	04/17/07	113.15[6]	27.00	0.00	86.15	**3,800**	**78**	**40**	**97**	**180**	**22,000**	ND<4,700	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
	04/17/06	113.15[6]	----	----	----	**29,000**	**4,500**	**1,800**	**470**	**4,200**	----	----	**8,600**	ND<500	----	----	----	----	----	----	----	----	----	----	----	----	----
	11/28/05	----	----	----	----	**17,000**	----	----	----	----	**6,200**	ND<1,000	----	----	----	----	ND<0.5	----	ND<0.5	ND<0.8	ND<1	ND<0.8	----	----	----	----	----
VP-9 Screened Interval 4.5-14.5 feet bgs, 2-Inch Diameter Casing (Decommissioned)																											
VP-9 (Soil Vapor Extraction Well)	11/13/18	145.22	9.54	0.00	135.68	ND<100	ND<1	ND<1	ND<1	ND<3	ND<250	ND<250	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
	01/24-31/05	145.22	10.30	0.00	134.92	**100**	ND<0.5	ND<0.5	ND<0.5	ND<1.5	ND<250	ND<250	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
	10/28-11/01/04	145.22	9.82	0.00	135.40	**610**	ND<0.5	ND<0.5	ND<0.5	ND<1.5	ND<800	ND<1,000	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
	7/15-16/04	145.22	11.15	0.00	134.07	**1,270**	**1.67**	**0.699**	**2.79**	**5.77**	**259**	ND<500	----	----	----	----	----	----	----	----	----	----	----	----	ND<1.00	----	----
	4/29-30/04	145.22	9.58	0.00	135.64	**750**	**0.8**	ND<0.500	**13**	ND<1.5	**1,500**	ND<1,000	----	----	----	----	----	----	----	----	----	----	----	----	ND<0.99	----	----
	10/01-02/03	145.22	11.72	0.00	133.50	**1,600**	**5.3**	**1.4**	**2.3**	ND<10	**5,400**	**1,300**	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
	6/30-07/01/03	145.22	9.74	0.00	135.48	**681**	**1.22**	**0.735**	**5.07**	**3.28**	ND<250	ND<500	----	----	----	----	----	----	----	----	----	----	----	----	ND<1.00	----	----
	4/23-24/03	145.22	8.28	0.00	136.94	ND<50.0	ND<0.500	ND<0.500	ND<0.500	ND<1.00	ND<250	ND<500	----	----	----	----	----	----	----	----	----	----	----	----	ND<1.00	----	----
	10/17-18/02	145.22	11.90	0.00	133.32	**1,910**	**11.3**	**2.62**	**8.86**	**14.7**	**13,200**	**786[4]**	----	----	----	----	----	----	----	----	----	----	----	----	ND<1.00	----	----
	06/14/00	145.22	----	----	----	**474**	**4.97**	ND<1.30	**55.6**	**4.48**	**1,420**	ND<1,130	----	----	----	----	----	----	----	----	----	----	----	**15.2**	ND<1.00	----	----
	12/15/99	145.22	----	----	----	**118**	ND<0.500	ND<0.500	ND<0.500	ND<1.00	ND<250	ND<500	----	----	----	----	----	----	----	----	----	----	----	**5.72**	ND<1.00	----	----
Off-Property Wells Situated in Close Proximity to Property Boundary																											
SS1-W1 Screened Interval 10-20 feet bgs, 1.5-Inch Diameter Casing																											
SS1-W1	03/02/20	148.83	10.88	----	137.95	ND<100	ND<1	ND<1	ND<1	ND<3	**62 x**	ND<250	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
	11/13/18	148.83	11.92	----	136.91	ND<100	ND<1	ND<1	ND<1	ND<3	ND<50	ND<250	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
	12/06/17	148.83	10.75	----	138.08	ND<100	ND<1.0	ND<2.0	ND<1.0	ND<3.0	ND<200	ND<400	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
SS1-W2 Screened Interval 12-22 feet bgs, 1.5-Inch Diameter Casing																											
SS1-W2	03/02/20	146.93	12.11	----	134.82	ND<100	ND<1	ND<1	ND<1	ND<3	**69 x**	ND<250	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
	11/13/18	146.93	14.54	----	132.39	ND<100	ND<1	ND<1	ND<1	ND<3	ND<50	ND<250	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
	12/06/17	146.93	13.65	----	133.28	ND<100	ND<1.0	ND<2.0	ND<1.0	ND<3.0	ND<200	ND<400	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
MW-10 Screened Interval 10-30 feet bgs, 2-Inch Diameter Casing																											
MW-10	03/02/20	148.16	12.37	0.00	135.79	ND<100	ND<1	ND<1	ND<1	ND<3	**68 x**	ND<300	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
	11/13/18	148.16	13.33	0.00	134.83	ND<100	ND<1	ND<1	ND<1	ND<3	ND<50	ND<250	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
	04/06/17	148.16	11.43	0.00	136.73	ND<100	ND<1	ND<1	ND<1	ND<3	----	----	----	----	----	----	----	----	----	ND<1	ND<1	ND<1	ND	----	----	----	----
	11/11-13/13	148.16	12.54	0.00	135.62	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	----	----	ND<31	ND<73	----	----	----	----	----	----	----	----	----	----	----	----	----
	05/20-22/13	148.16	12.35	0.00	135.81	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<29	ND<68	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
	11/12-14/12	148.16	12.28	0.00	135.88	**180**	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<30	**230**	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
	05/07-08/12	148.16	11.92	0.00	136.24	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<30	ND<70	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
	05/10-12/11	148.16	12.02	0.00	136.14	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<30	ND<69	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
	01/17-20/11	148.16	10.62	0.00	137.54	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<59[19]	**250[5]**	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
	04/19-22/10	148.16	11.93	0.00	136.23	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<31	ND<73	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
	10/12-15/09	148.16	12.23	0.00	135.93	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<29	ND<67	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
	04/13-16/09	148.16	12.11	0.00	136.05	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<29	ND<67	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
	11/10/08	148.16	12.66	0.00	135.50	ND<50	**0.7**	ND<0.5	ND<0.5	ND<0.5	----	----	ND<30	ND<69	----	----	----	----	----	----	----	----	----	----	----	----	----
	04/28-05/01/08	148.16	12.71[5]	0.00	135.45	ND<50	**0.8**	ND<0.5	ND<0.5	ND<0.5	----	----	ND<77	ND<97	----	----	----	----	----	----	----	----	----	----	----	----	----
	12/04-05/07	148.16	14.33	0.00	133.83	**150**	**2.0**	ND<2.0	**0.9**	ND<5.0	ND<78	ND<98	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
	04/17-19/07	148.16	13.05	0.00	135.11	**100**	**1.4**	ND<0.5	ND<0.5	ND<1.5	ND<75	ND<94	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
	01/24-31/05	148.16	12.36	0.00	135.80	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.5	ND<250	ND<250	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
	10/21-11/01/04	148.16	13.31	0.00	134.85	**210**	**4.1**	ND<0.5	**1.2**	**2.1**	ND<82	ND<00	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
	07/15-16/04	148.16	13.44	0.00	134.72	**362**	**2.75**	ND<0.500	**0.549**	**3.45**	ND<250	ND<500	----	----	----	----	----	----	----	----	----	----	----	----	ND<1.00	----	----
	04/29-30/04	148.16	13.23	0.00	134.93	ND<50	1.5	ND<0.5	ND<0.5	ND<1.5	ND<250	ND<250	----	----	----	----	----	----	----	----	----	----	----	----	ND<0.99	----	----
	01/21-23/04	148.16	11.99	0.00	136.17	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.5	ND<250	ND<250	----	----	----	----	----	----	----	----	----	----	----	----	ND<1.2	----	----
	10/01-02/03	148.16	13.68	0.00	134.48	**190**	**2.6**	ND<0.5	**0.5**	ND<3.0	ND<250	ND<250	----	----	----	----	----	----	----	----	----	----	----	----	ND<1.2	----	----
	06/30-07/01/03	148.16	12.91	0.00	135.25	**255**	**2.01**	ND<0.500	**0.535**	**2.53**	ND<250	ND<500	----	----	----	----	----	----	----	----	----	----	----	----	ND<1.00	----	----
MTCA Method A Cleanup Levels for Ground Water						**800/1,000[1]**	**5**	**1,000**	**700**	**1,000**	**500**	**500**	**500**	**500**	**160**	**0.1**	**20**	**0.01**	**5**	**5**	**5**	**NVE**	**Analyte Specific**	**15**	**15**	**5**	**Analyte Specific**
Applicable or Relevant and Appropriate Requirements (ARARs)[2]						----	**5**	**1,000**	**700**	**10,000**	----	----	----	----	----	----	----	**0.05**	**5**	**5**	**5**	**70**	**Analyte Specific**	**15**	**15**	**10**	**Analyte Specific**

Table 4, Page 4 of 6. Summary of Pre-Interim Action Groundwater Analytical Data
Roystone Redevelopment (Texaco 211577 Monterey Site/Agreed Order No. 16537)
631 Queen Anne Avenue North, Seattle, Washington 98109
The Riley Group, Inc. Project No. 2017-015K

Sample Number	Sample Date	TOC Elevation (ft)	Depth to Water Below Well TOC (ft)	LNAPL Thickness (ft)	Groundwater Elevation (ft)	Gasoline TPH	BTEX				Diesel TPH	Oil TPH	Diesel TPH	Oil TPH	Naph.	cPAHs	MTBE	EDB	EDC	PCE	TCE	cis-1,2-DCE	Other VOCs[7]	Total Pb	Dissolved Pb	Dissolved As	Other Metals
							B	T	E	X	without silica gel		with silica gel														
MW-10	04/23-24/03	148.16	11.76	0.00	136.40	ND<50.0	ND<0.500	ND<0.500	ND<0.500	ND<1.00	----	----	----	----	----	----	----	----	----	----	----	----	----	----	ND<1.00	----	----
	01/21/03	148.16	12.46	0.00	135.70	**416**	**3.44**	**0.55**	**0.519**	**3.24**	ND<250	ND<500	----	----	----	----	----	----	----	----	----	----	----	----	ND<1.00	----	----
	10/17-18/02	148.16	13.59	0.00	134.57	**490**	**3.42**	ND<0.500	**1.34**	**5.00**	**667**	ND<500	----	----	----	----	----	----	----	----	----	----	----	----	ND<1.00	----	----
	7/24/02[3]	148.16	13.14	0.00	135.02	**240**	**2.5**	ND<0.500	ND<1.0	ND<1.5	**320**	**600**	----	----	ND<2	----	ND<2	----	ND<2	ND<1	ND<1	**15**	----	----	**1.3**	**4.1**	----
	06/14/00	148.16	----	----	----	**99.2**	**1.56**	ND	ND	ND	ND<250	ND<500	----	----	----	----	----	----	----	----	----	----	----	ND	ND	----	----
	12/15/99	148.16	----	----	----	**618**	**7.02**	ND<0.910	ND<0.850	ND<4.22	**353**	ND<500	----	----	----	----	----	----	----	----	----	----	----	ND<1	ND<1.00	----	----
	11/1997	148.16	----	----	----	**1,000**	**4.2**	**2**	**4.8**	**2.2 J**	----	----	----	----	----	----	----	----	----	----	----	----	----	**4.9**	----	----	----
	07/1997	148.16	----	----	----	**1,100**	**10**	**2.1**	**2.4**	**4.34 J**	----	----	----	----	----	----	----	----	----	----	----	----	----	**1.2 j**	----	----	----
	04/1997	148.16	----	----	----	**420**	**5.1**	**1**	ND<1	**2.0 J**	----	----	----	----	----	----	----	----	----	----	----	----	----	ND<1	----	----	----
	01/1997	148.16	----	----	----	**180**	**1.5**	ND<1	ND<1	ND<2	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
	10/1995	148.16	----	----	----	**780**	**1.8**	**2.9**	**0.82 J**	**5.6**	----	----	----	----	----	----	----	----	----	ND<1	**0.7**	ND<1	----	ND<1	----	----	----
	07/07/93	115.75[6]	13.81	0.00	101.94	**380**	**13**	ND<5.0	**11**	**24**	----	----	----	----	----	----	----	----	----	----	----	----	----	**8**	----	----	----
	03/26-28/91[3]	115.75[6]	13.14	0.00	102.61	----	ND<5	ND<5	ND<5	ND<5	----	----	----	----	----	----	----	ND<0.01	ND<5	ND<5.0	ND<5.0	----	----	----	**12 j**	**21**	BSL
MW-24	**Screened Interval 4.2-14.2 feet bgs, 0.75-Inch Diameter Casing**																										
MW-24	01/24-31/05	107.95[6]	5.58	0.00	102.37	ND<50	ND<0.5	**0.6**	ND<0.5	**1.6**	ND<250	ND<250	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
	10/26-27/04	107.95[6]	----	----	----	**500**	----	----	----	----	ND<800	ND<1,000	----	----	----	----	ND<0.5	ND<0.5	ND<0.5	ND<0.8	ND<1	ND<0.8	----	----	----	----	----
RW-2	**Screened Interval Unknown, 8-Inch Diameter Casing**																										
RW-2 (Product Recovery Well)	11/11-13/13	106.63[6]	14.36	0.00	92.27	ND<50	**2**	ND<0.5	ND<0.5	ND<0.5	----	----	ND<31	ND<73	----	----	----	----	----	----	----	----	----	----	----	----	----
	5/20-22/13	106.63[6]	12.57	0.00	94.06	ND<50	**1**	ND<0.5	ND<0.5	ND<0.5	ND<30	ND<69	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
	11/12-14/12	106.63[6]	13.50	0.00	93.13	**87**	**5**	ND<0.5	ND<0.5	**0.9**	ND<29	ND<67	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
	05/07-08/12	106.63[6]	11.40	0.00	95.23	ND<50	ND<0.5	ND<0.5	**2**	**3**	ND<30	ND<69	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
RW-2 (Product Recovery Well)	05/10-12/11	106.63[6]	11.96	0.00	94.67	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	**230**	**91**	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
	01/17-20/11	106.63[6]	9.70	0.00	96.93	**150**	ND<0.5	ND<0.5	**8**	**16**	**270**	**190**	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
	04/19-22/10	106.63[6]	12.56	0.00	94.07	**160**	**9**	0.7	ND<0.5	ND<0.5	**430**	**240**	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
	10/12-15/09	106.63[6]	14.75	0.00	91.88	**1,100**	**35**	**4**	**7**	**11**	**4,300**	ND<680	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
	4/13-16/09	106.63[6]	13.80	0.00	92.83	**340**	**21**	**0.9**	**1**	**1**	**840**	ND<65	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
	11/04/08	106.63[6]	15.66	0.00	90.97	**890**	**82**	**9**	**14**	**6**	----	----	**1,000**	ND<66	----	----	----	----	----	----	----	----	----	----	----	----	----
	04/28-29/08	106.63[6]	15.84	0.00	90.79	**190**	**12**	**1**	**0.9**	**2**	**890**	ND<95	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
	12/04-06/07	106.63[6]	15.21	0.00	91.42	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.5	**400**	ND<100	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
	04/17-18/07	106.63[6]	17.12	0.00	89.51	**650**	**54**	**12**	**10**	**35**	**15,000**	ND<1,900	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
	04/18-21/05	106.63[6]	9.18	0.00	97.45	**130**	**0.8**	ND<0.5	**2.3**	**6.1**	**260**	ND<250	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
	01/24-31/05	106.63[6]	11.57	0.00	95.06	**94**	ND<0.5	ND<0.5	ND<2.0	**2.5**	ND<250	ND<250	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
	10/28-11/01/04	106.63[6]	14.68	0.00	91.95	**26,000**	**410**	**63**	**470**	**950**	**280,000**	ND<40,000	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
	07/15-16/04	106.63[6]	14.41	0.00	92.22	**634**	**25.7**	**2.39**	**6.18**	**3.55**	ND<250	ND<500	----	----	----	----	----	----	----	----	----	----	----	----	ND<1.00	----	----
	04/29-30/04	106.63[6]	13.31	0.00	93.32	**81**	**11**	**0.9**	**2.0**	**1.9**	**270**	ND<250	----	----	----	----	----	----	----	----	----	----	----	----	ND<0.99	----	----
	01/21-23/04	106.63[6]	10.22	0.00	96.41	**53**	**1.2**	**0.7**	**1.3**	**8.9**	ND<250	ND<250	----	----	----	----	----	----	----	----	----	----	----	----	ND<1.2	----	----
	10/01-02/03	106.63[6]	15.05	0.00	91.58	**2,300**	**75**	**7.3**	**29**	**33**	**1,400**	ND<250	----	----	----	----	----	----	----	----	----	----	----	----	**4.9**	----	----
	06/30-07/01/03	106.63[6]	13.72	0.00	92.91	**2,380**	**53.5**	**8.72**	**39.8**	**43.2**	**505**	ND<500	----	----	----	----	----	----	----	----	----	----	----	----	**1.43**	----	----
	04/23-24/03	106.63[6]	10.30	0.00	96.33	**55.7**	ND<0.500	ND<0.500	**0.642**	**2.64**	ND<250	ND<500	----	----	----	----	----	----	----	----	----	----	----	----	ND<1.00	----	----
	01/21/03	106.63[6]	10.61	0.00	96.02	**126**	**33.5**	**0.859**	**1.28**	**4.11**	ND<250	ND<500	----	----	----	----	----	----	----	----	----	----	----	----	ND<1.00	----	----
	10/17-18/02	106.63[6]	14.44	0.00	92.19	**1,380**	**90.5**	**8.05**	**29.2**	**31.5**	**988**	ND<500	----	----	----	----	----	----	----	----	----	----	----	----	**2.23**	----	----
	11/1997	104.54[6]	----	----	----	**4,400**	**3,140**	**1,200**	**338**	**2,265**	----	----	----	----	----	----	----	----	----	ND<1	ND<1	ND<1	----	----	**15.4**	----	----
	07/1997	104.54[6]	----	----	----	**24,000**	**4,230**	**2,490**	**398**	**2,732**	----	----	----	----	----	----	----	----	----	ND<25	ND<25	ND<50	----	----	**47.2**	----	----
	04/1997	104.54[6]	----	----	----	**11,000**	**189**	**243**	**99**	**743**	----	----	----	----	----	----	----	----	----	ND<1	ND<1	ND<1	----	----	**18.2**	----	----
	01/1997	104.54[6]	----	----	----	**390**	**31**	**14**	**6**	**49**	----	----	----	----	----	----	----	----	----	ND<1	ND<1	ND<1	----	----	**11**	----	----
	3/26-28/91	104.54[6]	10.21	**0.08**	94.39	----	**19,000**	**46,000**	**2,500**	**120,000**	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
	09/1990	104.54[6]	12.72	**0.04**	91.85	Not sampled due to the presence of LNAPL																					
Groundwater Grab Samples																											
P1-W	05/22/17	----	13.00	----	----	**7,100**	ND<5	**12**	**5.4**	**27**	**110,000ve**	**3,800 x**	----	----	----	----	----	----	----	----	----	----	**----**	**----**	----	----	----
P2-W	05/22/17	----	14.00	----	----	ND<100	ND<1	ND<1	ND<1	ND<3	ND<60	ND<300	----	----	----	----	----	----	----	----	----	----	**----**	**----**	----	----	----
P3-W	05/22/17	----	13.00	----	----	**1,200**	ND<5	**9.7**	**8.2**	**19**	**1,400**	ND<300	----	----	----	----	----	----	----	----	----	----	**----**	**----**	----	----	----
Off Property Groundwater Grab Samples																											
SS1-P1	12/02/17	----	----	----	----	ND<100	ND<1.0	ND<2.0	ND<1.0	ND<2.0	ND<200	ND<400	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
SS1-P2	12/02/17	----	----	----	----	ND<100	ND<1.0	ND<2.0	ND<1.0	ND<2.0	ND<200	ND<400	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
MTCA Method A Cleanup Levels for Ground Water						**800/1,000[1]**	**5**	**1,000**	**700**	**1,000**	**500**	**500**	**500**	**500**	**160**	**0.1**	**20**	**0.01**	**5**	**5**	**5**	**NVE**	**Analyte Specific**	**15**	**15**	**5**	**Analyte Specific**
Applicable or Relevant and Appropriate Requirements (ARARs)[2]						**----**	**5**	**1,000**	**700**	**10,000**	**----**	**----**	**----**	**----**	**----**	**----**	**----**	**0.05**	**5**	**5**	**5**	**70**	**Analyte Specific**	**15**	**15**	**10**	**Analyte Specific**

Table 4, Page 4 of 6. Summary of Pre-Interim Action Groundwater Analytical Data
Roystone Redevelopment (Texaco 211577 Monterey Site/Agreed Order No. 16537)
631 Queen Anne Avenue North, Seattle, Washington 98109
The Riley Group, Inc. Project No. 2017-015K

Samples collected in 2017 by RGI field staff using a peristaltic pump under low-flow conditions. Groundwater samples collected prior to 2017 were obtained by others.
Unless otherwise noted, all analytical results are given in micrograms per liter (ug/L), equivalent to parts per billion (ppb).
TOC = Top of casing
Gasoline-range TPH (total petroleum hydrocarbons) determined using Northwest Test Method NWTPH-Gx.
Diesel- and Oil-range TPH (total petroleum hydrocarbons) determined using Northwest Test Method NWTPH-Dx.
BTEX (benzene, toluene, ethylbenzene, and xylenes) determined using EPA Test Method 8021B.
Naph. (naphthalene), MTBE (methyl tert-butyl ethere), EDB (1,2-dibromoethane), EDC (1,2-dichloroethane), PCE (tetrachloroethene), TCE (trichloroethene), cis-1,2-DCE (cis-1,2-dichloroethene), and other VOCs (volatile organic compounds) determined using EPA Test Method 8260.
LNAPL = Light non-aqueous phase liquid.
Pb (lead), As (arsenic) and other metals determined using EPA 6000/7000 Series Methods.
ve = The analyte response exceeded the valid instrument calibration range. The value reported is an estimate.
x = The sample chromatographic pattern does not resemble the fuel standard used for quantitation.
j = The analyte was positively identified. The reported value is an estimate.
P = The analyte was detected above the instrument detection limit, but below the established minimum quantitation limit.
ND = Not detected above the noted analytical detection limit.
NVE = No value established
---- = Not analyzed or not applicable.
Silica gel = Sample extract passed through a silica gel column prior to analysis. The silica gel column removes naturally occuring biogenic material that can interfere with TPH results when present.
Washington State Department of Ecology (Ecology) Model Toxics Control Act (MTCA) Method A Cleanup Levels for Ground Water (WAC 173-340-900, Table 720-1). Federal and State ARARs obtained from Ecology's Cleanup Level and Risk Calculation (CLARC) database.
ARAR = Applicable or Relevant and Appropriate Requirement. ARARs for the Property are the Federal and State Primary Maximum Contaminant Levels (MCLs) as established under the Environmental Protection Agency (EPA) National Primary Drinking Water Regulations.
[1] The higher cleanup level is applicable if no benzene is detected in groundwater.
[2] No MTCA Method A Cleanup Level has been established. Therefore, the Federal and State ARAR is referenced.
[3] Indicates a duplicate sample was collected. The highest concentration for each analyte was reported.
[4] Laboratory report indicates heavy range organics are due to hydrocarbons primarily in the diesel range.
[5] The reporting limits were raised due to interference in the sample matrix.
[6] Top of casing elevation and groundwater elevation based on arbitrary datum. Not actual elevations.
[7] Only VOCs not factored into the MTCA Method A TPH cleanup levels are reported.
[8] Top of casing elevations for wells MW-6, MW-9, MW-13, VP9, SSI-W1, SSI-W2, and MW-10 were surveyed using actual elevation data in December 2018. Reports prepared prior to this time present top of casing elevations based on arbitrary datum.
Bold results indicated concentrations above laboratory detection limits or LNAPL detected in well.
Bold and yellow highlighted results indicate concentrations (if any) that exceed the applicable groundwater screening level.

APPENDIX A

Executed Agreed Order No. 16357

RILEYGROUP

STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY

In the Matter of Remedial Action by:	AGREED ORDER
ROYSTONE ON QUEEN ANNE, LLC CHEVRON ENVIRONMENTAL MANAGEMENT COMPANY[1]	No. 16537

TO: MR. PUI LEUNG
ROYSTONE ON QUEEN ANNE, LLC
606 MAYNARD AVENUE SOUTH #251
SEATTLE, WA 98104

MR. ERIC HETRICK
CHEVRON ENVIRONMENTAL MANAGEMENT COMPANY
DOWNSTREAM BUSINESS UNIT
6001 BOLLINGER CANYON ROAD
SAN RAMON, CA 94583

[1] Chevron Environmental Management Company is acting for itself and as attorney-in-fact for Texaco Inc. under this Order. *See* Section VI.F, *infra*.

TABLE OF CONTENTS

I. INTRODUCTION

The mutual objective of the State of Washington, Department of Ecology (Ecology), Roystone on Queen Anne, LLC (Roystone), and Chevron Environmental Management Company (CEMC), a California corporation acting for itself and as attorney-in-fact for Texaco Inc. (Texaco) (collectively the "Parties") under this Agreed Order (Order) is to provide for remedial action at a facility where there has been a release or threatened release of hazardous substances. This Order requires Roystone and CEMC to conduct an interim action to be performed during development construction, to complete a Site Remedial Investigation (RI), Feasibility Study (FS), and prepare a preliminary Draft Cleanup Action Plan (DCAP) for the Site located at 631 Queen Anne Avenue North in Seattle, Washington. Ecology believes the actions required by this Order are in the public interest.

II. JURISDICTION

This Agreed Order is issued pursuant to the Model Toxics Control Act (MTCA), RCW 70.105D.050(1).

III. PARTIES BOUND

This Agreed Order shall apply to and be binding upon the Parties to this Order, their successors and assigns. The undersigned representative of each party hereby certifies that he or she is fully authorized to enter into this Order and to execute and legally bind such party to comply with this Order. Roystone and CEMC agree to undertake all actions required by the terms and conditions of this Order. No change in ownership or corporate status shall alter Roystone's and CEMC's responsibility under this Order. Roystone and CEMC shall provide a copy of this Order to all agents, contractors, and subcontractors retained to perform work required by this Order, and shall ensure that all work undertaken by such agents, contractors, and subcontractors complies with this Order.

IV. DEFINITIONS

Unless otherwise specified herein, the definitions set forth in RCW 70.105D and WAC 173-340 shall control the meanings of the terms in this Order.

A. Site: The Site is referred to as Texaco 211577 Monterey. The Site constitutes a facility under RCW 70.105D.020(8). The Site is defined by where a hazardous substance, other than a consumer product in consumer use, has been deposited, stored, disposed of, or placed, or otherwise come to be located. Based upon factors currently known to Ecology, the Site is generally located at 631 Queen Anne Avenue North in Seattle, Washington, 98109, as shown in the Site Location Diagram (Exhibit A).

B. Parties: Refers to the State of Washington Department of Ecology, Roystone, and CEMC.

C. Potentially Liable Persons (PLPs): Refers to Roystone, Texaco, CEMC, and the Estates of William F. Arnold and Erma R. Arnold, as identified by Ecology.

D. Property: Refers to King County parcel number 3879900425, which covers 11,070 square feet.

E. Subject PLPs: Refers to PLPs subject to this Order, Roystone and CEMC.

F. Agreed Order or Order: Refers to this Order and each of the exhibits to this Order. All exhibits are integral and enforceable parts of this Order.

G. Light Non-aqueous Phase Liquids (LNAPL): A hazardous substance that is present in the soil, bedrock, groundwater or surface water as a liquid not dissolved in water. An LNAPL is one of a group of organic substances that are relatively insoluble in water and are less dense than water. LNAPLs, such as oil, tend to spread across the surface of the water table and form a layer on top of the water table.

V. FINDINGS OF FACT

Ecology makes the following findings of fact, without any express or implied admissions of such facts by Subject PLPs:

A. Based upon factors currently known to Ecology, the Site is generally located at 631 Queen Anne Avenue North in Seattle, Washington, as shown in the Site Location Diagram (Exhibit A). The Property is located within the Site.

B. Texaco owned and/or operated a gasoline service station at the Property from 1927 until May 1977.

C. William Arnold and Erma Arnold (Arnolds) purchased the Property in 1977. The Arnolds operated the service station until they sold the Property to John Yoo and Young Yoo in 1989. The sale was rescinded in 1993 because of the presence of petroleum hydrocarbon contamination. Roystone acquired the Property in October 2017.

D. From 1927 to 1993, a total of seven generations of underground storage tanks (USTs)/fuel systems/service station/convenience store configurations have existed at the Property, from which, or in relation to which, releases to the environment occurred. In 1993, Ecology ordered the Arnolds to stop selling gasoline and contracted to have the USTs and associated gasoline dispensing equipment removed from the Property. Seven USTs were removed from the Property and one UST was abandoned in place.

E. From 1993 to 2018, a convenience store (Manhattan Express Deli) operated on the Property. The Property is currently occupied by a vacant convenience store building and a paved parking lot.

F. In February 1978, the basement of the southwest-neighboring Monterey Apartment building was noted to have gasoline odors, which were investigated by the Seattle Fire Department. In 1986, Ecology began investigating the source of gasoline odors in the Monterey Apartment building. Environmental investigations revealed that the source of the gasoline odors present in the Monterey Apartment building was the Property. Releases of petroleum hydrocarbons associated with service station operations at the Property have resulted in petroleum hydrocarbons being present in the soil, in soil gas, in indoor air, dissolved in groundwater, and as LNAPL floating on the groundwater.

G. In 1993, Ecology installed and operated a soil vapor extraction (SVE) and groundwater recovery system with a spray aeration vacuum extraction (SAVE) treatment system at the Site. In 1996, the SAVE system was replaced with a catalytic oxidizer, and the SVE system continued operations intermittently until December 1997. In April 2003, CEMC upgraded the SVE system and restarted operations with few interruptions until July 2005. In 2006, CEMC replaced the SVE system with a Dual Phase Extraction system and operated it until April 2008.

H. LNAPL was detected floating on the groundwater surface in several well locations at the Site from 1986 to 2008. An LNAPL sample collected in 1991 indicated the LNAPL consisted of gasoline and diesel. The maximum LNAPL thickness was 2.26 feet, detected in November 1986. LNAPL was not detected in Site wells during the most recent groundwater sampling events, which occurred in 2018 (for the portion of the Site on the Property) and 2013 (for the off-Property areas of the Site).

I. Gasoline, diesel-, and oil range petroleum hydrocarbons, benzene, toluene, ethylbenzene, xylenes (BTEX), and naphthalene have been detected in soil and groundwater samples collected from the Site at concentrations above MTCA cleanup levels. Lead and arsenic have been detected in groundwater samples collected from the Site at concentrations above MTCA cleanup levels. BTEX, and 1,2,4-trimethybenzene have been detected in sub-slab soil gas samples collected from the Site at concentrations above MTCA cleanup levels. These contaminants are hazardous substances under WAC 173-340-200, and may pose a threat to human health and the environment.

J. From 1991 to 2004, tetrachloroethene (PCE) and trichloroethene (TCE) were detected at concentrations above MTCA cleanup levels in groundwater samples collected in wells located west, southwest, and southeast of the Property. PCE has been detected in sub-slab soil gas samples at concentrations above MTCA cleanup levels southwest of the Property. PCE concentrations in the most recent sub-slab soil gas and indoor air samples collected in 2009 were below the MTCA cleanup levels. Based on direction of groundwater flow to the southwest, these

contaminants are suspected to be from an upgradient source—a former dry cleaners located northeast of the Property, at 14 Roy Street in Seattle, Washington.

VI. ECOLOGY DETERMINATIONS

Ecology makes the following determinations, without any express or implied admissions of such determinations (and underlying facts) by Subject PLPs.

A. Roystone is an "owner or operator" as defined in RCW 70.105D.020(22) of a "facility" as defined in RCW 70.105D.020(8).

B. Texaco was an "owner or operator" as defined in RCW 70.105D.020(22) of a "facility" as defined in RCW 70.105D.020(8) at the time of disposal or release of the hazardous substances.

C. Based upon all factors known to Ecology, a "release" or "threatened release" of "hazardous substance(s)" as defined in RCW 70.105D.020(32) and (13), respectively, has occurred at the Site.

D. Based upon credible evidence, Ecology issued a PLP Notice letter to Roystone dated March 26, 2019, pursuant to RCW 70.105D.040, .020(26), and WAC 173-340-500. By letter dated March 27, 2019, Roystone voluntarily waived its rights to notice and comment and accepted Ecology's determination that Roystone is a PLP under RCW 70.105D.040. Ecology issued a determination by letter dated April 1, 2019.

E. Based upon credible evidence, Ecology issued a PLP Notice letter to Equiva Services LLC (intended for Texaco Inc.) dated April 27, 1999, pursuant to RCW 70.105D.040, .020(26), and WAC 173-340-500. After providing for notice and opportunity for comment, reviewing comments submitted on August 5, 1999, and concluding that credible evidence supported a finding of potential liability, Ecology issued a determination that Texaco is a PLP under RCW 70.105D.040 by letter dated September 1, 1999.

F. As of the effective date of this Order, Texaco is a corporate subsidiary of the Chevron Corporation (Chevron). CEMC, which is also a subsidiary of Chevron, is a signatory to

this Order both for itself and as attorney-in-fact for Texaco, managing environmental matters on Texaco's behalf. By signing this Order, CEMC voluntarily accepts status as a PLP for the Site. Ecology accepts CEMC as a signatory and Subject PLP under this Order at the request of Texaco and its corporate successor(s) without waiving any statutory authority it may have with respect to Texaco or any corporate successor of Texaco, including enforcement against Texaco and any such successors in the event of noncompliance with this Order.

G. Pursuant to RCW 70.105D.030(1) and .050(1), Ecology may require Subject PLPs to investigate or conduct other remedial actions with respect to any release or threatened release of hazardous substances, whenever it believes such action to be in the public interest. Based on the foregoing facts, Ecology believes the remedial actions required by this Order are in the public interest.

H. Under WAC 173-340-430, an interim action is a remedial action that is technically necessary to reduce a threat to human health or the environment by eliminating or substantially reducing one or more pathways for exposure to a hazardous substance, that corrects a problem that may become substantially worse or cost substantially more to address if the remedial action is delayed, or that is needed to provide for completion of a site hazard assessment, remedial investigation/feasibility study, or design of a cleanup action plan. The Property is planned for a redevelopment in August 2019, and an interim action is proposed in conjunction with the Property redevelopment. Based on these circumstances, Ecology has determined that an interim action is warranted under WAC 173-340-430. Either party may propose an additional interim action under this Order. If the Parties are in agreement concerning the additional interim action, the Parties will follow the process in Section VII.I. If the Parties are not in agreement, Ecology reserves its authority to require additional interim action(s) under a separate order or other enforcement action under RCW 70.105D, or to undertake the interim action(s) itself.

VII. WORK TO BE PERFORMED

Based on the Findings of Fact and Ecology Determinations, it is hereby ordered that Subject PLPs take the following remedial actions at the Site. These remedial actions must be conducted in accordance with WAC 173-340:

A. To effectuate the work to be performed under this Order in the most efficient manner, the Subject PLPs have elected to designate lead roles in performing various aspects of the work required under this Order, with Roystone responsible for tasks relating to the Property and CEMC responsible for tasks involving the remaining off-Property areas of the Site. Therefore, CEMC will be the lead PLP for all deliverables under this Order other than the interim action described in Section VII.B below. However, except with respect to the interim action described in Section VII.B below, the Subject PLPs remain strictly, jointly, and severally liable for the performance of any and all obligations under this Order. In the event the party identified as a lead should fail to timely and properly complete performance of all or any portion of its work, all Subject PLPs must perform that remaining work, if any, regardless of designations in this Order.

B. Roystone will prepare an Interim Action Work Plan (IAWP) in accordance with the schedule and as specified in Task 2 of Exhibit B, Scope of Work, for an interim action planned to occur in conjunction with planned redevelopment of the Property. Ecology will provide public notice and opportunity to comment on the IAWP in accordance with WAC 173-340-600(16). Roystone shall not conduct the interim action until Ecology approves the IAWP. Upon approval by Ecology, the IAWP becomes an integral and enforceable part of this Order, and Roystone is required to conduct the interim action in accordance with the approved IAWP. The objective of the IAWP shall be to remediate the Property so that no further on-Property remedial action is required. Upon completion of the IAWP, Roystone shall submit an Agency Review Draft Interim Action Report. Ecology shall review the Draft Interim Action Report and confirm whether Roystone has complied with the IAWP. No later than 30 days after Ecology's approval of the

Agency Review Draft Interim Action Report, Roystone shall submit to Ecology a Final Interim Action Report.

C. Subject PLPs shall submit an Agency Review Draft RI Work Plan to update the RI. In 1990 and 1991, a first phase of RI (Phase I RI) was initiated and performed at the Site by Ecology. The results of the Phase I RI were documented in a Phase I RI Report dated August 1991. CEMC reinitiated RI activities independently in 2002 through 2007 under the Ecology Voluntary Cleanup Program (VCP). The results were documented in a Final RI and Site Summary Report dated August 20, 2007. Groundwater monitoring and additional limited investigation were conducted from 2007 to 2015 by CEMC. The Site was then entered into the VCP by Roystone, which implemented groundwater monitoring and supplemental subsurface investigation. Subject PLPs shall prepare a RI Work Plan based on the prior RI and Site investigation data, and data available from the subsequent interim action by Roystone, to gather current Site data to fully characterize the extent of contamination in all environmental media. After approval of the Final RI Work Plan by Ecology, Subject PLPs shall implement the Final RI Work Plan and complete the investigation in accordance with the requirement of WAC 173-340-350. Subject PLPs shall conduct an FS according to the requirements of WAC 173-340-350(8); the FS shall include a reasonable number and type of cleanup option alternatives for the cleanup action at the Site following the interim action by Roystone. Subject PLPs shall provide Ecology with an Agency Review Draft RI Report and an Agency Review Draft FS Report. These Reports may be submitted together as an Agency Review Draft RI/FS Report. After Ecology has approved the RI and FS Report as a Public Review Draft document, Subject PLPs will prepare a preliminary DCAP. These deliverables will be prepared in accordance with Exhibit B, Scope of Work, which is incorporated by reference as an enforceable part of this Order.

D. The schedule of work performance and list of deliverables is described in Exhibit C, Schedule of Deliverables, and is incorporated by reference as an enforceable part of this Order.

E. All plans or other deliverables submitted by Subject PLPs for Ecology's review and approval under the Scope of Work and Schedule (Exhibits B and C) shall, upon Ecology's approval, become integral and enforceable parts of this Order.

F. If Subject PLPs learn of a significant change in conditions at the Site, including but not limited to a statistically significant increase in contaminant and/or chemical concentrations in soil, groundwater, and/or air, Subject PLPs, within seven (7) days of learning of the change in condition, shall notify Ecology in writing of said change and provide Ecology with any reports or records (including laboratory analyses, sampling results) relating to the change in conditions.

G. Subject PLPs shall submit to Ecology written quarterly Progress Reports that describe the actions taken during the previous quarter to implement the requirements of this Order. All Progress Reports shall be submitted by the tenth (10th) day of the month in which they are due after the effective date of this Order. Unless otherwise specified by Ecology, Progress Reports and any other documents submitted pursuant to this Order shall be sent by certified mail, return receipt requested, to Ecology's project coordinator. The Progress Reports shall include the following:

1. A list of on-site activities that have taken place during the quarter to comply with the AO.

2. Detailed description of any deviations from required tasks not otherwise documented in approved work plans or amendment requests.

3. Description of all deviations from the Scope of Work and Schedule (Exhibits B and C) during the current quarter and any planned deviations in the upcoming quarter.

4. For any deviations in schedule, a plan for recovering lost time and maintaining compliance with the schedule.

5. All raw data (including laboratory analyses) received during the previous quarter (if not previously submitted to Ecology), together with a detailed description of the underlying samples collected.

6. A list of deliverables for the upcoming quarter if different from the schedule.

7. Summaries of contacts with representatives of the local community, public interest groups, press, and federal, state, or tribal government.

8. Changes in key personnel.

H. All plans or other deliverables submitted by Subject PLPs for Ecology's review and approval under the Scope of Work and Schedule (Exhibits B and C) shall, upon Ecology's approval, become integral and enforceable parts of this Order.

I. If the Parties agree on an additional interim action under Section VI.G, Subject PLPs shall prepare and submit to Ecology an Interim Action Work Plan, including a scope of work and schedule, by the date determined by Ecology. Ecology will provide public notice and opportunity to comment on the Interim Action Work Plan in accordance with WAC 173-340-600(16). The Subject PLPs shall not conduct the additional interim action until Ecology approves the Interim Action Work Plan. Upon approval by Ecology, the Interim Action Work Plan becomes an integral and enforceable part of this Order, and the Subject PLPs are required to conduct the interim action in accordance with the approved Interim Action Work Plan.

J. If Ecology determines that a Subject PLP has failed to make sufficient progress or failed to implement the remedial action, in whole or in part, Ecology may, after notice to Subject PLPs, perform any or all portions of the remedial action or at Ecology's discretion allow the Subject PLPs opportunity to correct. In an emergency, Ecology is not required to provide notice to Subject PLPs, or an opportunity for dispute resolution. Subject PLPs shall reimburse Ecology for the costs of doing such work in accordance with Section VIII.A (Payment of Remedial Action Costs). Ecology reserves the right to enforce requirements of this Order under Section X (Enforcement).

K. Except where necessary to abate an emergency situation or where required by law, the Subject PLPs shall not perform any remedial actions at the Site outside those remedial actions

required by this Order to address the contamination that is the subject of this Order, unless Ecology concurs, in writing, with such additional remedial actions pursuant to Section VIII.J (Amendment of Order). In the event of an emergency, or where actions are taken as required by law, Subject PLPs must notify Ecology in writing of the event and remedial action(s) planned or taken as soon as practical but no later than within twenty-four (24) hours of the discovery of the event.

VIII. TERMS AND CONDITIONS

A. Payment of Remedial Action Costs

Subject PLPs shall pay to Ecology costs incurred by Ecology pursuant to this Order and consistent with WAC 173-340-550(2). These costs shall include work performed by Ecology or its contractors for, or on, the Site under RCW 70.105D, including remedial actions and Order preparation, negotiation, oversight, and administration. These costs shall include work performed both prior to and subsequent to the issuance of this Order. Ecology's costs shall include costs of direct activities and support costs of direct activities as defined in WAC 173-340-550(2). Ecology has accumulated approximately $12,000 in remedial action costs related to this Site as of May 31, 2019. For all Ecology costs incurred, Subject PLPs shall pay the required amount within thirty (30) days of receiving from Ecology an itemized statement of costs that includes a summary of costs incurred, an identification of involved staff, and the amount of time spent by involved staff members on the project. A general statement of work performed will be provided upon request. Itemized statements shall be prepared quarterly. Pursuant to WAC 173-340-550(4), failure to pay Ecology's costs within ninety (90) days of receipt of the itemized statement of costs will result in interest charges at the rate of twelve percent (12%) per annum, compounded monthly.

In addition to other available relief, pursuant to RCW 19.16.500, Ecology may utilize a collection agency and/or, pursuant to RCW 70.105D.055, file a lien against real property subject to the remedial actions to recover unreimbursed remedial action costs.

B. Designated Project Coordinators

The project coordinator for Ecology is:

Jing Song
Washington Department of Ecology
Northwest Regional Office
Toxics Cleanup Program
3190 160th Avenue SE
Bellevue, WA 98008
Telephone: (425) 649-7109
Fax: (425) 649-7161
Jing.song@ecy.wa.gov

The project coordinators for Subject PLPs are:

Pui Leung
Principal
Vibrant Cities
606 Maynard Avenue South, #251
Seattle, WA 98104
Telephone: (425) 793-9088
pleung@vibrantcities.com

Eric Hetrick
Project Manager
Chevron Environmental Management Company
Downstream Environmental Management
6001 Bollinger Canyon Road
San Ramon, CA 94583
Telephone: (925) 842-2418
ehetrick@chevron.com

Each project coordinator shall be responsible for overseeing the implementation of this Order. Ecology's project coordinator will be Ecology's designated representative for the Site. To the maximum extent possible, communications between Ecology and Subject PLPs, and all documents, including reports, approvals, and other correspondence concerning the activities performed pursuant to the terms and conditions of this Order shall be directed through the project coordinators. The project coordinators may designate, in writing, working level staff contacts for all or portions of the implementation of the work to be performed required by this Order.

Any party may change its respective project coordinator. Written notification shall be given to the other party at least ten (10) calendar days prior to the change.

C. Performance

All geologic and hydrogeologic work performed pursuant to this Order shall be under the supervision and direction of a geologist or hydrogeologist licensed by the State of Washington or under the direct supervision of an engineer registered by the State of Washington, except as otherwise provided for by RCW 18.43 and 18.220.

All engineering work performed pursuant to this Order shall be under the direct supervision of a professional engineer registered by the State of Washington, except as otherwise provided for by RCW 18.43.130.

All construction work performed pursuant to this Order shall be under the direct supervision of a professional engineer or a qualified technician under the direct supervision of a professional engineer. The professional engineer must be registered by the State of Washington, except as otherwise provided for by RCW 18.43.130.

Any documents submitted containing geologic, hydrogeologic, or engineering work shall be under the seal of an appropriately licensed professional as required by RCW 18.43 and 18.220.

Subject PLPs shall notify Ecology in writing of the identity of any engineer(s) and geologist(s), contractor(s) and subcontractor(s), and others to be used in carrying out the terms of this Order, in advance of their involvement at the Site.

D. Access

Ecology or any Ecology authorized representative shall have access to enter and freely move about all property at the Site that Subject PLPs either own, control, or have access rights to at all reasonable times for the purposes of, *inter alia*: inspecting records, operation logs, and contracts related to the work being performed pursuant to this Order; reviewing Subject PLPs' progress in carrying out the terms of this Order; conducting such tests or collecting such samples as Ecology may deem necessary; using a camera, sound recording, or other documentary type equipment to record work done pursuant to this Order; and verifying the data submitted to Ecology by Subject PLPs. Subject PLPs shall make all reasonable efforts to secure access rights for those

properties within the Site not owned or controlled by Subject PLPs where remedial activities or investigations will be performed pursuant to this Order. Ecology or any Ecology authorized representative shall give reasonable notice before entering any Site property owned or controlled by Subject PLPs unless an emergency prevents such notice. All persons who access the Site pursuant to this section shall comply with any applicable health and safety plan(s). Ecology employees and their representatives shall not be required to sign any liability release or waiver as a condition of Site property access.

E. Sampling, Data Submittal, and Availability

With respect to the implementation of this Order, Subject PLPs shall make the results of all sampling, laboratory reports, and/or test results generated by it or on its behalf available to Ecology. Pursuant to WAC 173-340-840(5), all sampling data shall be submitted to Ecology in both printed and electronic formats in accordance with Section VII (Work to be Performed), Ecology's Toxics Cleanup Program Policy 840 (Data Submittal Requirements), and/or any subsequent procedures specified by Ecology for data submittal.

If requested by Ecology, Subject PLPs shall allow Ecology and/or its authorized representative to take split or duplicate samples of any samples collected by Subject PLPs pursuant to implementation of this Order. Subject PLPs shall notify Ecology seven (7) days in advance of any sample collection or work activity at the Site. Ecology shall, upon request, allow Subject PLPs and/or its authorized representative to take split or duplicate samples of any samples collected by Ecology pursuant to the implementation of this Order, provided that doing so does not interfere with Ecology's sampling. Without limitation on Ecology's rights under Section VIII.D (Access), Ecology shall notify Subject PLPs prior to any sample collection activity unless an emergency prevents such notice.

In accordance with WAC 173-340-830(2)(a), all hazardous substance analyses shall be conducted by a laboratory accredited under WAC 173-50 for the specific analyses to be conducted, unless otherwise approved by Ecology.

F. Public Participation

A Public Participation Plan is required for this Site. Ecology shall review any existing Public Participation Plan to determine its continued appropriateness and whether it requires amendment, or if no plan exists, Ecology shall develop a Public Participation Plan alone or in conjunction with Subject PLPs.

Ecology shall maintain the responsibility for public participation at the Site. However, Subject PLPs shall cooperate with Ecology, and shall:

1. If agreed to by Ecology, develop appropriate mailing lists and prepare drafts of public notices and fact sheets at important stages of the remedial action, such as the submission of work plans, remedial investigation/feasibility study reports, cleanup action plans, and engineering design reports. As appropriate, Ecology will edit, finalize, and distribute such fact sheets and prepare and distribute public notices of Ecology's presentations and meetings.

2. Notify Ecology's project coordinator prior to the preparation of all press releases and fact sheets, and before meetings related to remedial action work to be performed at the Site with the interested public and/or local governments. Likewise, Ecology shall notify Subject PLPs prior to the issuance of all press releases and fact sheets related to the Site, and before meetings related to the Site with the interested public and local governments. For all press releases, fact sheets, meetings, and other outreach efforts by Subject PLPs that do not receive prior Ecology approval, Subject PLPs shall clearly indicate to its audience that the press release, fact sheet, meeting, or other outreach effort was not sponsored or endorsed by Ecology.

3. When requested by Ecology, participate in public presentations on the progress of the remedial action at the Site. Participation may be through attendance at public meetings to assist in answering questions or as a presenter.

4. When requested by Ecology, arrange and/or continue information repositories to be located at the following locations:

a. Seattle Public Library
Queen Anne Branch
400 W. Garfield Street
Seattle, WA 98119

b. Ecology's Northwest Regional Office
3190 160th Avenue SE
Bellevue, WA 98008

At a minimum, copies of all public notices, fact sheets, and documents relating to public comment periods shall be promptly placed in these repositories. A copy of all documents related to this Site shall be maintained in the repository at Ecology's Northwest Regional Office in Bellevue, Washington.

G. Retention of Records

During the pendency of this Order, and for ten (10) years from the date of completion of work performed pursuant to this Order, Subject PLPs shall preserve all records, reports, documents, and underlying data in its possession relevant to the implementation of this Order and shall insert a similar record retention requirement into all contracts with project contractors and subcontractors. Upon request of Ecology, Subject PLPs shall make all records available to Ecology and allow access for review within a reasonable time.

Nothing in this Order is intended to waive any right Subject PLPs may have under applicable law to limit disclosure of documents protected by the attorney work-product privilege and/or the attorney-client privilege. If Subject PLP(s) withholds any requested records based on an assertion of privilege, Subject PLPs shall provide Ecology with a privilege log specifying the records withheld and the applicable privilege. No Site-related data collected pursuant to this Order shall be considered privileged.

H. Resolution of Disputes

1. In the event that Subject PLPs elect to invoke dispute resolution Subject PLPs must utilize the procedure set forth below.

a. Upon the triggering event (receipt of Ecology's project coordinator's written decision or an itemized billing statement), Subject PLPs have fourteen (14) calendar days within which to notify Ecology's project coordinator in writing of its dispute (Informal Dispute Notice).

b. The Parties' project coordinators shall then confer in an effort to resolve the dispute informally. The parties shall informally confer for up to fourteen (14) calendar days from receipt of the Informal Dispute Notice. If the project coordinators cannot resolve the dispute within those 14 calendar days, then within seven (7) calendar days Ecology's project coordinator shall issue a written decision (Informal Dispute Decision) stating: the nature of the dispute; the Subject PLPs' position with regards to the dispute; Ecology's position with regards to the dispute; and the extent of resolution reached by informal discussion.

c. Subject PLPs may then request regional management review of the dispute. This request (Formal Dispute Notice) must be submitted in writing to the Northwest Region Toxics Cleanup Section Manager within seven (7) calendar days of receipt of Ecology's Informal Dispute Decision. The Formal Dispute Notice shall include a written statement of dispute setting forth: the nature of the dispute; the disputing Party's position with respect to the dispute; and the information relied upon to support its position.

d. The Section Manager shall conduct a review of the dispute and shall issue a written decision regarding the dispute (Decision on Dispute) within thirty (30) calendar days of receipt of the Formal Dispute Notice. The Decision on Dispute shall be Ecology's final decision on the disputed matter.

2. The Parties agree to only utilize the dispute resolution process in good faith and agree to expedite, to the extent possible, the dispute resolution process whenever it is used.

3. Implementation of these dispute resolution procedures shall not provide a basis for delay of any activities required in this Order, unless Ecology agrees in writing to a schedule extension.

4. In case of a dispute, failure to either proceed with the work required by this Order or timely invoke dispute resolution may result in Ecology's determination that insufficient progress is being made in preparation of a deliverable and may result in Ecology undertaking the work under Section VII (Work to be Performed) or initiating enforcement under Section X (Enforcement).

I. Extension of Schedule

1. Subject PLPs' request for an extension of schedule shall be granted only when a request for an extension is submitted in a timely fashion, generally at least thirty (30) days prior to expiration of the deadline for which the extension is requested, and good cause exists for granting the extension. All extensions shall be requested in writing. The request shall specify:

a. The deadline that is sought to be extended.

b. The length of the extension sought.

c. The reason(s) for the extension.

d. Any related deadline or schedule that would be affected if the extension were granted.

2. The burden shall be on Subject PLPs to demonstrate to the satisfaction of Ecology that the request for such extension has been submitted in a timely fashion and that good cause exists for granting the extension. Good cause may include, but may not be limited to:

a. Circumstances beyond the reasonable control and despite the due diligence of Subject PLPs including delays caused by unrelated third parties or Ecology, such as (but not limited to) delays by Ecology in reviewing, approving, or modifying documents submitted by Subject PLPs.

b. Acts of God, including fire, flood, blizzard, extreme temperatures, storm, or other unavoidable casualty.

c. Endangerment as described in Section VIII.K (Endangerment).

However, neither increased costs of performance of the terms of this Order nor changed economic circumstances shall be considered circumstances beyond the reasonable control of Subject PLPs.

3. Ecology shall act upon any Subject PLPs' written request for extension in a timely fashion. Ecology shall give Subject PLPs written notification of any extensions granted pursuant to this Order. A requested extension shall not be effective until approved by Ecology. Unless the extension is a substantial change, it shall not be necessary to amend this Order pursuant to Section VIII.J (Amendment of Order) when a schedule extension is granted.

4. At Subject PLPs' request, an extension shall only be granted for such period of time as Ecology determines is reasonable under the circumstances. Ecology may grant schedule extensions exceeding ninety (90) days only as a result of one of the following:

a. Delays in the issuance of a necessary permit which was applied for in a timely manner.

b. Other circumstances deemed exceptional or extraordinary by Ecology.

c. Endangerment as described in Section VIII.K (Endangerment).

J. Amendment of Order

The project coordinators may verbally agree to minor changes to the work to be performed without formally amending this Order. Minor changes will be documented in writing by Ecology within seven (7) days of verbal agreement.

Except as provided in Section VIII.L (Reservation of Rights), substantial changes to the work to be performed shall require formal amendment of this Order. This Order may only be formally amended by the written consent of both Ecology and Subject PLPs. Ecology will provide its written consent to a formal amendment only after public notice and opportunity to comment on the formal amendment.

When requesting a change to the Order, Subject PLPs shall submit a written request to Ecology for approval. Ecology shall indicate its approval or disapproval in writing and in a timely manner after the written request is received. If Ecology determines that the change is substantial, then the Order must be formally amended. Reasons for the disapproval of a proposed change to this Order shall be stated in writing. If Ecology does not agree to a proposed change, the disagreement may be addressed through the dispute resolution procedures described in Section VIII.H (Resolution of Disputes).

K. Endangerment

In the event Ecology determines that any activity being performed at the Site under this Order is creating or has the potential to create a danger to human health or the environment on or surrounding the Site, Ecology may direct Subject PLPs to cease such activities for such period of time as it deems necessary to abate the danger. Subject PLPs shall immediately comply with such direction.

In the event Subject PLPs determine that any activity being performed at the Site under this Order is creating or has the potential to create a danger to human health or the environment, Subject PLPs may cease such activities. Subject PLPs shall notify Ecology's project coordinator as soon as possible, but no later than twenty-four (24) hours after making such determination or ceasing such activities. Upon Ecology's direction, Subject PLPs shall provide Ecology with documentation of the basis for the determination or cessation of such activities. If Ecology disagrees with Subject PLPs' cessation of activities, it may direct Subject PLPs to resume such activities.

If Ecology concurs with or orders a work stoppage pursuant to this section, Subject PLPs' obligations with respect to the ceased activities shall be suspended until Ecology determines the danger is abated, and the time for performance of such activities, as well as the time for any other work dependent upon such activities, shall be extended in accordance with Section VIII.I

(Extension of Schedule) for such period of time as Ecology determines is reasonable under the circumstances.

Nothing in this Order shall limit the authority of Ecology, its employees, agents, or contractors to take or require appropriate action in the event of an emergency.

L. Reservation of Rights

This Order is not a settlement under RCW 70.105D. Ecology's signature on this Order in no way constitutes a covenant not to sue or a compromise of any of Ecology's rights or authority. Ecology will not, however, bring an action against Subject PLPs to recover remedial action costs paid to and received by Ecology under this Order. In addition, Ecology will not take additional enforcement actions against Subject PLPs regarding remedial actions required by this Order, provided Subject PLPs comply with this Order.

Ecology nevertheless reserves its rights under RCW 70.105D, including the right to require additional or different remedial actions at the Site should it deem such actions necessary to protect human health or the environment, and to issue orders requiring such remedial actions. Ecology also reserves all rights regarding the injury to, destruction of, or loss of natural resources resulting from the release or threatened release of hazardous substances at the Site.

By entering into this Order, Subject PLPs do not admit to any liability for the Site. Although Subject PLPs are committing to conducting the work required by this Order under the terms of this Order, Subject PLPs expressly reserve all rights available under law, including but not limited to the right to seek cost recovery or contribution against third parties, and the right to assert any defenses to liability in the event of enforcement.

M. Transfer of Interest in Property

No voluntary conveyance or relinquishment of title, easement, leasehold, or other interest in any portion of the Site shall be consummated by Subject PLPs without provision for continued implementation of all requirements of this Order and implementation of any remedial actions found to be necessary as a result of this Order.

Prior to Subject PLPs' transfer of any interest in all or any portion of the Site, and during the effective period of this Order, Subject PLPs shall provide a copy of this Order to any prospective purchaser, lessee, transferee, assignee, or other successor in said interest; and, at least thirty (30) days prior to any transfer, Subject PLPs shall notify Ecology of said transfer. Upon transfer of any interest, Subject PLPs shall notify all transferees of the restrictions on the activities and uses of the property under this Order and incorporate any such use restrictions into the transfer documents.

N. Compliance with Applicable Laws

1. *Applicable Laws.* All actions carried out by Subject PLPs pursuant to this Order shall be done in accordance with all applicable federal, state, and local requirements, including requirements to obtain necessary permits or approvals, except as provided in RCW 70.105D.090. At this time, no federal, state, or local requirements have been identified as being applicable to the actions required by this Order. Subject PLPs have a continuing obligation to identify additional applicable federal, state, and local requirements which apply to actions carried out pursuant to this Order, and to comply with those requirements. As additional federal, state, and local requirements are identified by Ecology or Subject PLPs, Ecology will document in writing if they are applicable to actions carried out pursuant to this Order, and Subject PLP(s) must implement those requirements.

2. *Relevant and Appropriate Requirements.* All actions carried out by Subject PLPs pursuant to this Order shall be done in accordance with relevant and appropriate requirements identified by Ecology. At this time, no relevant and appropriate requirements have been identified as being applicable to the actions required by this Order. If additional relevant and appropriate requirements are identified by Ecology or Subject PLPs, Ecology will document in writing if they are applicable to actions carried out pursuant to this Order and Subject PLPs must implement those requirements.

3. Pursuant to RCW 70.105D.090(1), Subject PLPs may be exempt from the procedural requirements of RCW 70.94, 70.95, 70.105, 77.55, 90.48, and 90.58 and of any laws requiring or authorizing local government permits or approvals. However, Subject PLPs shall comply with the substantive requirements of such permits or approvals. For permits and approvals covered under RCW 70.105D.090(1) that have been issued by local government, the Parties agree that Ecology has the non-exclusive ability under this Order to enforce those local government permits and/or approvals. At this time, no state or local permits or approvals have been identified as being applicable but procedurally exempt under this section

4. Subject PLPs have a continuing obligation to determine whether additional permits or approvals addressed in RCW 70.105D.090(1) would otherwise be required for the remedial action under this Order. In the event either Ecology or Subject PLPs determine that additional permits or approvals addressed in RCW 70.105D.090(1) would otherwise be required for the remedial action under this Order, it shall promptly notify the other party of its determination. Ecology shall determine whether Ecology or Subject PLPs shall be responsible to contact the appropriate state and/or local agencies. If Ecology so requires, Subject PLPs shall promptly consult with the appropriate state and/or local agencies and provide Ecology with written documentation from those agencies of the substantive requirements those agencies believe are applicable to the remedial action. Ecology shall make the final determination on the additional substantive requirements that must be met by Subject PLPs and on how Subject PLPs must meet those requirements. Ecology shall inform Subject PLPs in writing of these requirements. Once established by Ecology, the additional requirements shall be enforceable requirements of this Order. Subject PLP(s) shall not begin or continue the remedial action potentially subject to the additional requirements until Ecology makes its final determination.

Pursuant to RCW 70.105D.090(2), in the event Ecology determines that the exemption from complying with the procedural requirements of the laws referenced in RCW 70.105D.090(1) would result in the loss of approval from a federal agency that is necessary for the state to

administer any federal law, the exemption shall not apply and Subject PLPs shall comply with both the procedural and substantive requirements of the laws referenced in RCW 70.105D.090(1), including any requirements to obtain permits or approvals.

O. Indemnification

Subject PLPs agree to indemnify and save and hold the State of Washington, its employees, and agents harmless from any and all claims or causes of action (1) for death or injuries to persons, or (2) for loss or damage to property, to the extent arising from or on account of acts or omissions of Subject PLPs, their officers, employees, agents, or contractors in entering into and implementing this Order. However, Subject PLPs shall not indemnify the State of Washington nor save nor hold its employees and agents harmless from any claims or causes of action to the extent arising out of the negligent acts or omissions of the State of Washington, or the employees or agents of the State, in entering into or implementing this Order.

IX. SATISFACTION OF ORDER

The provisions of this Order shall be deemed satisfied upon Subject PLPs' receipt of written notification from Ecology that Subject PLPs have completed the remedial activity required by this Order, as amended by any modifications, and that Subject PLPs have complied with all other provisions of this Agreed Order.

X. ENFORCEMENT

Pursuant to RCW 70.105D.050, this Order may be enforced as follows:

A. The Attorney General may bring an action to enforce this Order in a state or federal court.

B. The Attorney General may seek, by filing an action, if necessary, to recover amounts spent by Ecology for investigative and remedial actions and orders related to the Site.

C. A liable party who refuses, without sufficient cause, to comply with any term of this Order will be liable for:

1. Up to three (3) times the amount of any costs incurred by the State of Washington as a result of its refusal to comply.

2. Civil penalties of up to twenty-five thousand dollars ($25,000) per day for each day it refuses to comply.

D. This Order is not appealable to the Washington Pollution Control Hearings Board. This Order may be reviewed only as provided under RCW 70.105D.060.

Effective date of this Order: 8-21-19

ROYSTONE ON QUEEN ANNE, LLC

_____

Date: _____

Title:
ROYSTONE ON QUEEN ANNE, LLC
606 MAYNARD AVENUE SOUTH #251
SEATTLE, WA 98104

STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY

_____

Date: 8-21-19

ROBERT W. WARREN
SECTION MANAGER
TOXICS CLEANUP PROGRAM
NORTHWEST REGIONAL OFFICE
3190 160th AVENUE SE
BELLEVUE, WA 98008
TELEPHONE: (425) 649-7054

CHEVRON ENVIRONMENTAL MANAGEMENT COMPANY
for itself and as Attorney-in-Fact for
TEXACO INC.

_____

Date: _____

Title:
CHEVRON ENVIRONMENTAL MANAGEMENT COMPANY
6001 BOLLINGER CANYON ROAD
SAN RAMON, CA 94583

1. Up to three (3) times the amount of any costs incurred by the State of Washington as a result of its refusal to comply.

2. Civil penalties of up to twenty-five thousand dollars ($25,000) per day for each day it refuses to comply.

D. This Order is not appealable to the Washington Pollution Control Hearings Board. This Order may be reviewed only as provided under RCW 70.105D.060.

Effective date of this Order: 8-21-19

ROYSTONE ON QUEEN ANNE, LLC

Date: 6-12-2019

Title: Manager
ROYSTONE ON QUEEN ANNE, LLC
606 MAYNARD AVENUE SOUTH #251
SEATTLE, WA 98104

STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY

Date: 8/21/19

ROBERT W. WARREN
SECTION MANAGER
TOXICS CLEANUP PROGRAM
NORTHWEST REGIONAL OFFICE
3190 160th AVENUE SE
BELLEVUE, WA 98008
TELEPHONE: (425) 649-7054

CHEVRON ENVIRONMENTAL
MANAGEMENT COMPANY
for itself and as Attorney-in-Fact for
TEXACO INC.

Date:

Title:
CHEVRON ENVIRONMENTAL MANAGEMENT COMPANY
6001 BOLLINGER CANYON ROAD
SAN RAMON, CA 94583

1. Up to three (3) times the amount of any costs incurred by the State of Washington as a result of its refusal to comply.

2. Civil penalties of up to twenty-five thousand dollars ($25,000) per day for each day it refuses to comply.

D. This Order is not appealable to the Washington Pollution Control Hearings Board. This Order may be reviewed only as provided under RCW 70.105D.060.

Effective date of this Order: 8-21-19

ROYSTONE ON QUEEN ANNE, LLC

Date: _____

Title:
ROYSTONE ON QUEEN ANNE, LLC
606 MAYNARD AVENUE SOUTH #251
SEATTLE, WA 98104

STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY

Date: 8/21/19

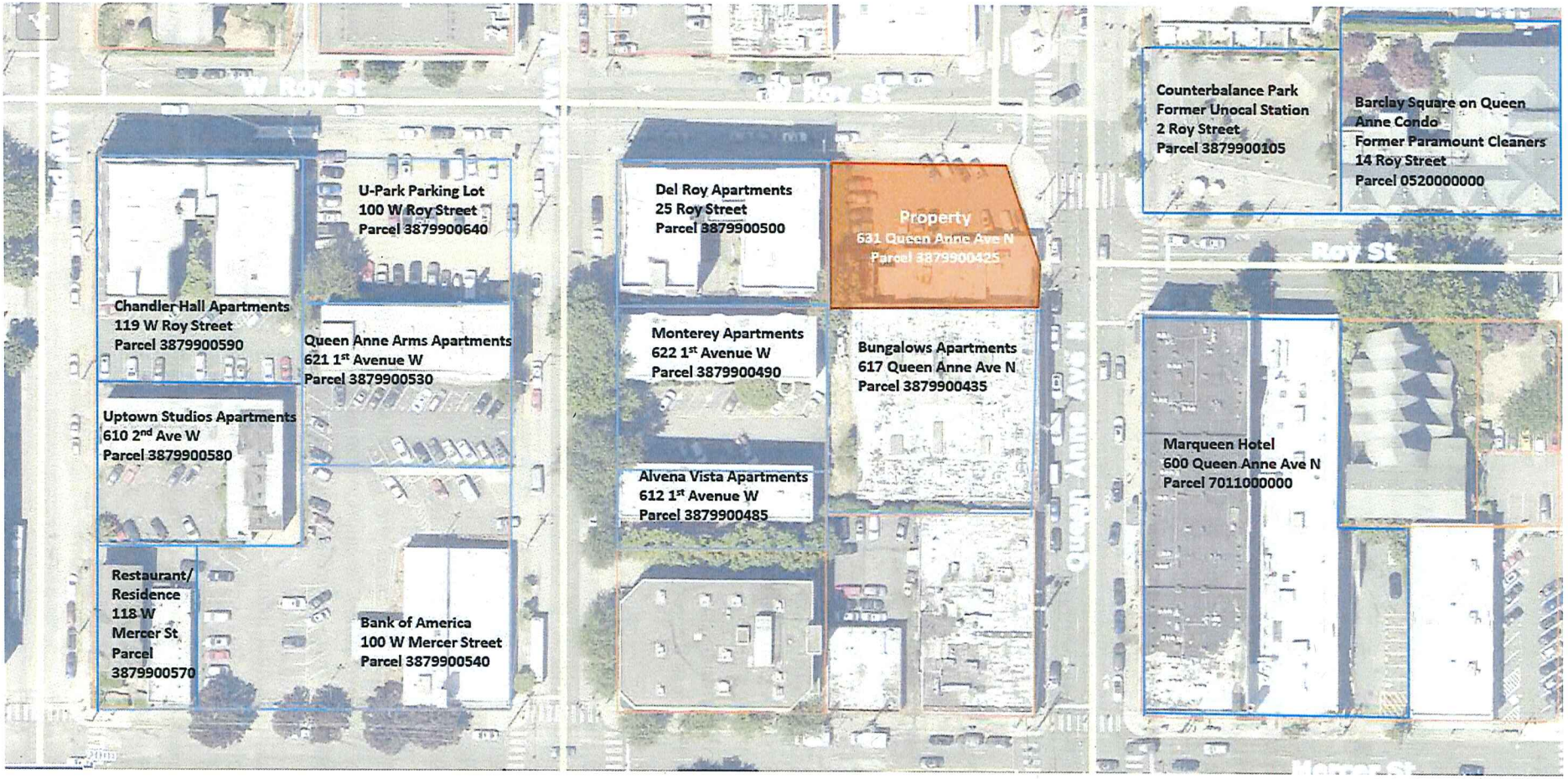
ROBERT W. WARREN
SECTION MANAGER
TOXICS CLEANUP PROGRAM
NORTHWEST REGIONAL OFFICE
3190 160th AVENUE SE
BELLEVUE, WA 98008
TELEPHONE: (425) 649-7054

CHEVRON ENVIRONMENTAL
MANAGEMENT COMPANY
for itself and as Attorney-in-Fact for
TEXACO INC.

Date: June 13, 2019

Title: Assistant Secretary
CHEVRON ENVIRONMENTAL MANAGEMENT COMPANY
6001 BOLLINGER CANYON ROAD
SAN RAMON, CA 94583

EXHIBIT A – Site Vicinity Map
631 Queen Anne Avenue North, Seattle, WA



Site Vicinity Map
631 Queen Anne Avenue North, Seattle, WA

EXHIBIT B – SCOPE OF WORK
631 Queen Anne Avenue North, Seattle, WA

PURPOSE

The scope of work (SOW) under this Agreed Order (AO) involves conducting a Remedial Investigation (RI) and Feasibility Study (FS), conducting interim action(s), and preparing a preliminary Draft Cleanup Action Plan (DCAP) to select a cleanup alternative. The purpose of the RI, FS and preliminary DCAP is to provide sufficient data, analysis, and evaluations to enable the Washington State Department of Ecology (Ecology) to select a final cleanup alternative for the Site.

The Subject PLPs shall coordinate with Ecology throughout the work under this AO, and will keep Ecology informed of any changes, issues, or problems as they develop.

The SOW is divided into eight major tasks as follows:

Task 1. Implementation of Interim Action Work Plan
Task 2. RI Work Plan
Task 3. Additional Interim Action(s), if any
Task 4. Remedial Investigation
Task 5. Feasibility Study
Task 6. SEPA Compliance
Task 7. Public Participation
Task 8. Preliminary DCAP
Task 9. Progress Reports

To assist with preparation of these documents, Ecology's Toxics Cleanup Program (TCP) has developed checklists, which the Subject PLPs shall use for the following remedial action reports and plans.

- Remedial Investigation Report Checklist
- Feasibility Study Report Checklist
- Cleanup Action Plan Checklist

The Subject PLPs can download the checklists directly from the following website: https://ecology.wa.gov/Spills-Cleanup/Contamination-cleanup/Cleanup-process/Cleanup-options/Voluntary-cleanup-program/Reporting-requirements

Policy 840 Environmental Information Management System (EIM): Ecology has updated Policy 840 related to data submittal requirements for TCP sites. Policy 840 requires environmental monitoring data collected at TCP sites as part of site investigations and cleanups to be submitted into EIM at the time of submittal for Ecology review of any report containing this data.

Following Ecology's Lean Process there are five mandatory meetings:

1. Kickoff meeting held prior to commencement of AO negotiations with the principal contacts for Subject PLPs and Ecology.
2. RI planning and scoping meeting with Ecology Cleanup Project manager and Subject PLPs' consultants.
3. RI pre-report meeting occurs after the completion of RI field activities and prior to writing the RI Report; this will ensure the report can be reviewed and approved by Ecology after one review cycle.
4. FS planning meeting to discuss overall approach and contents of the FS to ensure the report can be reviewed and approved by Ecology after one review cycle. If appropriate, this meeting may be combined with the RI pre-report check-in.
5. DCAP planning meeting held prior to writing the Preliminary DCAP to discuss the contents of the DCAP and to identify the preferred Remedial Alternative.

The first of these Key Project Meeting with be held prior to commencement of AO negotiations. During the meeting Ecology will establish communication protocols, expectations related to Key Project Documents and the timing and purpose of Key Project Meetings.

TASK 1. IMPLEMENTATION OF INTERIM ACTION WORK PLAN

Remedial actions implemented prior to completion of the RI/FS, including those that:

- are technically necessary to reduce a threat to human health or the environment by eliminating or substantially reducing one or more pathways for exposure to a hazardous substance;
- correct a problem that may become substantially worse or cost substantially more to address if the remedial action is delayed; or
- are needed to provide for completion of the remedial investigation/feasibility study or design of the cleanup action

will be considered interim actions, will be implemented in accordance with WAC 173-340-430 and the AO, and will be designed in a manner that will not foreclose reasonable alternatives for any final cleanup action that may be required.

Based upon available information, interim actions pursuant to WAC 173-340-430 will need to be implemented by Roystone on Queen Anne, LLC (Roystone) to remove contaminated soil and groundwater in conjunction with planned Property redevelopment.

The scope of the interim actions include typical source control or containment elements, including but not limited to:

- Contaminant soil removal
- Contaminant groundwater removal and remediation

- Repair, slip lining, replacement, or closure of stormwater conveyances or other structures such as conduit, vaults, catch basins, etc.
- Removal of underground storage tank, hoists, and other service station underground facilities, if discovered
- Proper abandonment of old wells
- Removal of contaminated building or other structural material
- Construction of additional monitoring wells
- Installation of physical barriers to prevent recontamination of on-Property soil and groundwater
- Installation of a vapor barrier and a vapor intrusion mitigation system
- Vapor intrusion pathway evaluation

Attached to the AO is the Public Review Draft Interim Action Work Plan (IAWP) that is subject to public comment and approved by Ecology as part of the AO. After the public notice and comment period, incorporating Ecology's and the public's comments on the Public Review IAWP, and after Ecology approval, Roystone shall prepare three (3) copies of the Final IAWP and submit them, including one electronic copy each in Word (.doc) and Adobe (.pdf) formats. Roystone shall conduct the interim actions in accordance with the approved Final IAWP.

Upon successful completion of the interim actions, Roystone shall submit an Agency Review Draft Interim Action Report as a separate deliverable. Roystone shall prepare two (2) copies of the Agency Review Draft Interim Action Report and submit them, including one electronic copy each in Word (.doc) and Adobe (.pdf) formats, to Ecology for review and approval. Ecology shall review the Draft Interim Action Report and confirm whether Roystone has complied with the IAWP. After incorporating Ecology's comments on the Agency Review Draft Interim Action Report and after Ecology approval, Roystone shall prepare three (3) copies of the Final Interim Action Report and submit them, including one electronic copy each in Word (.doc) and Adobe (.pdf) formats, to Ecology.

TASK 2. RI WORK PLAN

No later than 120 days after the AO is effective, Subject PLPs shall prepare an RI Work Plan (Work Plan).

Two phases of RI activities have been performed at the Site, in 1990 through 1991 by Ecology, and independently in 2002 through 2007 by CEMC. These RI activities and results were documented in a Phase I RI Report dated August 1991, and a Final RI and Site Summary Report dated August 20, 2007, respectively. The RI Work Plan for this AO shall be developed based on the previous RI reports and current data gathered to complete the Site characterization both on and off Property.

The RI Work Plan shall include an overall description and schedule of all RI activities. The Work Plan shall clearly describe the project management strategy for implementing

and reporting on RI activities. The responsibility and authority of all organizations and key personnel involved in conducting the RI will be outlined.

The second Key Project Meeting will be held prior to submittal of the RI Work Plan. The purpose of the RI Planning Meeting is to review requirements for the Work Plan and plan RI field work, discuss the preliminary conceptual site model, and identify project data needs and preliminary plans for on-Property interim action. The RI Work Plan shall be completed for the Site and approved by Ecology prior to the submission of additional IAWPs, if applicable.

The RI Work Plan shall describe general facility information; site history and conditions; including previous operations; past field investigations, including any data collection and analysis of soils, air, groundwater, and surface water; a conceptual site model showing contaminants, migration pathways in all environmental media, potential receptors, and screening levels based on the conceptual site model; geology and groundwater system characteristics; past, current, and future land use; identification of natural resources and ecological receptors; hazardous substances and their sources, etc., in compliance with Washington Administrative Code (WAC)173-340-350 and WAC 173-204-560.

As part of the project background, existing environmental data on site soil, groundwater, soil gas, and indoor air will be compiled and evaluated for data gaps. The data gaps will be used as the basis for conducting additional site investigations, if necessary. The Work Plan will also identify specific data collection procedures in a Sampling and Analysis Plan (SAP) and Quality Assurance Project Plan (QAPP) as part of the Work Plan in compliance with WAC 173-340-820 and WAC 173-204-600 for defining the nature and extent of contamination. The Subject PLPs will also submit a copy of the Health and Safety Plan (HASP) for the project.

The SAP identifies the proposed number and location of all environmental samples and methods, including soil borings, groundwater monitoring wells, soil, groundwater, soil gas, indoor air, stormwater, catch basin, approximate depths, and includes a quality assurance project plan. The SAP will describe the sampling objectives, the rationale for the sampling approach (based upon the identified data gaps), and plans for data use, and shall provide a detailed description of sampling tasks. The SAP shall describe specifications for sample identifiers; sampling equipment; the type, number, and location of samples to be collected; the analyses to be performed; descriptions of sampling equipment and methods to be used; sample documentation; sample containers, collection and handling; data and records management; and schedule.

The Quality Assurance Project Plan (QAPP) will be prepared in accordance with the Guidance for Preparation of Quality Assurance Project Plans, EPA Region 10, Quality Data Management Program, QA/R-5 and requirements of the EPA Contract Laboratory Program. The QAPP will also follow Ecology's Guidelines for Preparing Quality Assurance Project Plans for Environmental Studies (July 2004)[1]. Laboratories must meet

[1] Found at https://fortress.wa.gov/ecy/publications/documents/0403030.pdf

the accreditation standards established in WAC 173-50. Data quality objectives will reflect the criteria or threshold values used for the source control evaluation.

The SAP, including the QAPP, will be submitted to Ecology for review and approval. As with all environmental work at the Site, work may not begin without written approval from Ecology. The plan shall provide seven (7) days' notice to Ecology prior to beginning sampling. Ecology may obtain split samples.

The Subject PLPs or their contractors shall submit all new sampling data generated under this SAP and any other recently collected data to Ecology for entry into the Environmental Information Management System (EIM) in accordance with WAC 173-340-840(5) and Ecology's Toxics Cleanup Program Policy 840: Data Submittal Requirements. Only validated data will be entered into the EIM database within 30 days of submittal.

RI Work Plan tasks and subtasks will include, but are not limited to, soil, groundwater, soil gas, indoor air, seep, and surface water sampling and analysis as necessary to address data gaps identified in the Work Plan. In addition, the following must be included in the Work Plan:

- Develop a preliminary conceptual site model for the Site including evaluation of all potential pathways and potential receptors that may exist for contaminants of concern at the Site.
- Define the nature and extent of contamination based on screening levels protective of all receptors at and downgradient of the Site.

The Subject PLPs will provide Ecology with an Agency Review Draft Work Plan. Once Ecology reviews and approves the Work Plan, it will be considered the Final Work Plan. The Work Plan shall not be implemented until approved by Ecology. Once approved by Ecology, the Subject PLPs will implement the Final Work Plan according to the schedule contained in Exhibit C. Ecology expects one iteration between preliminary draft and final drafts of the RI Work Plan, RI Report, FS Report, and DCAP.

The Subject PLPs shall prepare two (2) copies of the Agency Review Draft RI Work Plan and submit them, including one electronic copy each in Word (.doc) and Adobe (.pdf) formats, to Ecology for review and comment. After incorporating Ecology's comments on the Agency Review Draft Work Plan and after Ecology approval, the Subject PLPs shall prepare three (3) copies of the Final Work Plan and submit them, including one electronic copy each in Word (.doc) and Adobe (.pdf) formats, to Ecology.

TASK 3. ADDITIONAL INTERIM ACTION(S), IF ANY

Additional interim actions deemed necessary by the Subject PLPs or Ecology shall be conducted commensurate with this task description.

During the second Key Project Meeting (RI planning and scoping meeting), the results of historic and current investigations and preliminary plans may be discussed for additional interim action(s), if necessary. No later than 60 days after the RI Work Plan has been approved by Ecology, the Subject PLPs will prepare and submit for Ecology approval an Agency Review Draft IAWP with detail commensurate with the work to be performed. The Agency Review Draft IAWP shall include, as appropriate:

- Description of the interim action including its purpose, general requirements, and relationship to the (final) cleanup action (to the extent known);
- Summary of relevant RI/FS information, including at a minimum existing site conditions and alternative interim actions considered;
- Information regarding design and construction requirements, including a proposed schedule and personnel roles and responsibilities;
- Compliance Monitoring Plan;
- SAP/QAPP;
- Permits required.

The Subject PLPs will also submit a copy of the HASP for the project. The Subject PLPs will be responsible for complying with the State Environmental Policy Act (SEPA) Rules, including preparing and submitting an environmental checklist for the interim action, and will assist Ecology with presentations at any additional meetings or hearings that might be necessary for SEPA compliance or as part of the Public Participation Plan.

No later than 30 days after receipt of Ecology's comments, the Subject PLPs will incorporate Ecology's required changes into the IAWP and provide Ecology with a Public Review Draft IAWP. After a public notice and comment period for the Public Review Draft IAWP (and SEPA determination), Ecology will approve the IAWP (if appropriate) and the document will be considered Final. Once approved by Ecology, the Subject PLPs will implement the interim action according to the schedule contained in the Final IAWP.

The Subject PLPs shall prepare two (2) copies of the Agency Review Draft IAWP and submit them, including one electronic copy each in Word (.doc) and Adobe (.pdf) formats, to Ecology for review. The Subject PLPs shall incorporate Ecology's comments and then prepare two (2) copies of the Public Review Draft IAWP and submit them, including one electronic copy each in Word (.doc) and Adobe (.pdf) formats, to Ecology. After the public notice and comment period, incorporating Ecology's and the public's comments on the Public Review IAWP, and after Ecology approval, the Subject PLPs shall prepare three (3) copies of the Final IAWP and submit them, including one electronic copy each in Word (.doc) and Adobe (.pdf) formats.

Upon successful completion of the work, an Agency Review Draft Interim Action Report will be prepared as a separate deliverable. The Subject PLPs shall prepare two (2) copies of the Agency Review Draft Interim Action Report and submit them, including one electronic copy each in Word (.doc) and Adobe (.pdf) formats, to Ecology for review and approval. After incorporating Ecology's comments on the Agency Review Draft Interim

Action Report and after Ecology approval, The Subject PLPs shall prepare three (3) copies of the Final Interim Action Report and submit them, including one electronic copy each in Word (.doc) and Adobe (.pdf) formats, to Ecology.

TASK 4. REMEDIAL INVESTIGATION

The Subject PLPs shall conduct an RI that meets the requirements of WAC 173-340-350(7) and WAC 173-204-560 according to the Work Plan approved by Ecology (Task 2). The RI will determine the nature and extent of contamination exceeding preliminary Model Toxics Control Act (MTCA) cleanup levels, and any other regulatory requirements. The RI will provide sufficient data and information to define the nature and extent of contamination. The Final RI Work Plan (Task 1) will be included as an appendix to the RI Report.

Field sampling and analysis will be completed in general accordance with the SAP and QAPP. Deviation(s) from the approved SAP and QAPP must be communicated to Ecology immediately and documented as required by Ecology.

The Subject PLPs shall provide interim data reports and updates to Ecology as new site data and information become available. Laboratory analysis data shall also be provided in electronic format when it has been validated. Raw laboratory data will be provided to Ecology upon request.

Prior to submittal of the Agency Review Draft RI Report, the third Key Project Meeting will be held. During the RI Pre-Report Check-In, Ecology and the Subject PLPs will review available data and an updated conceptual site model and discuss the content and organization of the Draft RI Report. Ecology expects one iteration between the preliminary draft and final draft of the RI report, the FS report, and the DCAP.

The Subject PLPs shall compile the results of the Site investigation into an Agency Review Draft RI Report. The Subject PLPs shall prepare two (2) copies of the Agency Review Draft RI Report and submit them, including one electronic copy each in Word (.doc) and Adobe (.pdf) formats, to Ecology for review and comment.

After incorporating Ecology's comments on the Agency Review Draft RI Report, The Subject PLPs shall prepare three (3) copies of a Public Review Draft RI Report and submit them, including one electronic copy each in Word (.doc) and Adobe (.pdf) formats, to Ecology for distribution and public comment. Electronic survey data for monitoring locations, electronic lab data, and GIS maps of contaminant distribution shall also be provided for both the Agency Review Draft RI Report and Public Review Draft RI Reports. The RI Report will not be considered Final until after a public review and comment period. The Agency Review Draft RI Report and/or Public Review Draft RI Reports may be submitted in conjunction with the Agency Review Draft FS Report and/or Public Review Draft FS Reports, discussed in Task 4 below.

If the data collected during this investigation is insufficient to define the full nature and extent of contamination, and to select a cleanup action plan, an additional phase of investigation shall be conducted to define the extent of contamination.

TASK 5. FEASIBILITY STUDY

The Subject PLPs shall use the information obtained in the RI to prepare an Agency Review Draft FS Report that meets the applicable requirements of WAC 173-340-350(8) according to the approved Work Plan Schedule (Exhibit C). The Agency Review Draft FS Report will evaluate remedial alternatives for site cleanup, consistent with MTCA to ensure protection of human health and the environment by eliminating, reducing, or otherwise controlling risk posed through each exposure pathway and migration route.

Prior to beginning the FS, the fourth Key Project Meeting will be held to review applicable or relevant and appropriate requirements (ARARs), potential remedial alternatives, and points of compliance. If appropriate this Key Project Meeting may be held in conjunction with the RI Pre-Report Planning Key Project Meeting.

The Agency Review Draft FS Report will provide a detailed analysis of each remedial alternative according to the applicable requirements of WAC 173-340-350. The remedial alternatives will take into account the completed on-Property interim action, and will be evaluated for compliance with the applicable requirements of WAC 173-340-360 and WAC 173-204-560(4), including a detailed evaluation of remedial alternatives relative to the following criteria:

- Compliance with Cleanup Standards and Applicable Laws;
- Protection of Human Health and the Environment;
- Provision for a Reasonable Restoration Time Frame;
- Use of Permanent Solutions to the Maximum Extent Practicable;
- The Degree to which Recycling, Reuse, and Waste Minimization are Employed;
- Short-Term Effectiveness;
- Long-Term Effectiveness;
- Net Environmental Benefit;
- Implementability;
- Provision for Compliance Monitoring;
- Cost-Effectiveness; and
- Prospective Community Acceptance.

The remedial alternative that is judged to best satisfy the evaluation criteria will be identified. Justification for the selection will be provided, and the recommended remedial alternative further developed, in the FS Report.

The Subject PLPs shall prepare two (2) copies of an Agency Review Draft FS Report and submit them, including one electronic copy in Word (.doc) and Adobe (.pdf) formats, to Ecology for review and comment.

After incorporating Ecology's comments on the Agency Review Draft FS Report, the Subject PLPs will prepare three (3) copies of a Public Review Draft FS Report and submit them, along with one electronic copy in Word (.doc) and Adobe (.pdf) formats, to Ecology for distribution and public comment.

The FS Report will not be considered final until after the public review and comment period. After that period, the Subject PLPs will incorporate Ecology's and the public's comments on the Public Review Draft FS Report and, after Ecology approval, will prepare three (3) copies of the Final FS Report and submit them along with one electronic copy in Word (.doc) and Adobe (.pdf) formats.

TASK 6. SEPA COMPLIANCE

The Subject PLPs shall be responsible for complying with the SEPA Rules including preparing and submitting an environmental checklist, if required. If the result of the threshold determination is a determination of significance (DS), the Subject PLPs shall be responsible for the preparation of Draft and Final Environmental Impact Statements. The Subject PLPs shall assist Ecology with coordinating SEPA public involvement requirements with MTCA public involvement requirements whenever possible, such that public comment periods and meetings or hearings, as applicable, can be held concurrently.

TASK 7. PUBLIC PARTICIPATION

The Subject PLPs shall assist Ecology to prepare a draft Public Participation Plan that complies with the provisions of WAC 173-340-600(9).

The Subject PLPs shall support Ecology in presenting the Public Review Draft RI Report and the Public Review Draft FS Report and SEPA evaluations at one public meeting or hearing. The Subject PLPs will assist Ecology with presentations at any additional meetings or hearings that might be necessary for SEPA compliance or as part of the Public Participation Plan.

After the public comment periods are completed, at Ecology's request, the Subject PLPs shall prepare a Draft Responsiveness Summary that addresses public comments and if necessary, prepare a second Public Review Draft RI/FS Report that addresses public comments. The Subject PLPs shall prepare two (2) copies of the Draft Responsiveness Summary and if necessary, second Public Review Draft RI/FS Report and submit them to Ecology for review and approval, including one electronic copy each in Word (.doc) and Adobe (.pdf) formats, to Ecology.

After incorporating Ecology's comments and after Ecology approval, the Subject PLPs shall prepare three (3) copies of the Final Responsiveness Summary after public comments are incorporated and submit them to Ecology for distribution, including one electronic copy each in Word (.doc) and Adobe (.pdf) formats.

TASK 8. PRELIMINARY DRAFT CLEANUP ACTION PLAN

Upon Ecology approval of the Public Review Draft RI/FS Report, the fifth Key Project Meeting will be held to discuss the contents of the DCAP and to identify the preferred remedial alternative. The DCAP will address all remedial actions required to be completed subsequent to the on-Property interim action(s).

The Subject PLPs shall prepare an Agency Review preliminary DCAP in accordance with WAC 173-340-380. The Agency Review preliminary DCAP will include a general description of the proposed remedial actions, cleanup standards developed from the RI/FS and rationale regarding their selection, a schedule for implementation, description of any institutional controls proposed, and a summary of applicable local, state, and federal laws pertinent to the proposed cleanup actions.

The Subject PLPs will prepare two (2) copies of the Agency Review preliminary DCAP and submit them, along with one electronic copy in Word (.doc) and Adobe (.pdf) formats, for Ecology review and approval.

After receiving Ecology's comments on the Agency Review preliminary DCAP, if any, the Subject PLPs shall revise the preliminary DCAP to address Ecology's comments and submit three (3) copies of the Public Review DCAP including one electronic copy each in Word (.doc) and Adobe (.pdf) formats.

TASK 9. QUARTERLY PROGRESS REPORTS

The Subject PLPs will submit Progress Reports at a quarterly frequency to Ecology until satisfaction of the AO, in accordance with Section VII.(G) of the AO. In addition, during implementation of the RI field investigations and on-Property interim action(s), the Subject PLPs will provide weekly email status updates to Ecology.

Progress Reports will be submitted to the Ecology project coordinator by the tenth (10^{th}) of the month following the reporting period. If this day is a weekend or holiday, Progress Reports will be submitted to Ecology on the next business day.

EXHIBIT C – SCHEDULE OF DELIVERABLES
631 Queen Anne Avenue North, Seattle, WA

The schedule for notifications to Ecology or submission of major deliverables to Ecology for this Schedule of Deliverables (SOD) is described below. If the date for submission of any item or notification required by this SOD occurs on a weekend, state or federal holiday, the date for submission of that item or notification is extended to the next business day following the weekend or holiday. Where a deliverable due date is triggered by Ecology notification, comments or approval, the starting date for the period shown is the date Subject PLPs received such notification, comments or approval by certified mail, return receipt requested, unless otherwise noted below. Where triggered by Ecology receipt of a deliverable, the starting date for the period shown is the date Ecology receives the deliverable by certified mail, return receipt requested, or the date of Ecology signature on a hand-delivery form.

Table 1 - Schedule for Submission of Major Deliverables

Table 2 - Schedule for Roystone's Submission of Interim Action Deliverables

Table 1

Schedule for Submission of Major Deliverables

	Deliverable	***Due Date[a]***
1.	Agency Review Draft Remedial Investigation (RI) Work Plan	No later than 120 days after the AO[b] effective date
2.	Final Remedial Investigation Work Plan	No later than 45 days after receipt of Ecology comments
3.	Remedial Investigation Field Activities Completed	No later than 180 days after Ecology approval of Final Remedial Investigation Work Plan
4.	Agency Review Draft Remedial Investigation Report	No later than 90 days following receipt of remedial investigation analytical validated data
5.	Public Review Draft Remedial Investigation Report	No later than 45 days after receipt of Ecology comments
6.	Final Remedial Investigation Report	No later than 45 days after receipt of Ecology comments, subsequent to public comment[c]
7.	Agency Review Draft Feasibility Study Report	No later than 90 days following Ecology approval of Public Review Remedial Investigation Report
8.	Public Review Draft Feasibility Study Report	No later than 45 days following Ecology approval of Agency Review Draft Feasibility Study Report
9.	Final Feasibility Study Report	No later than 45 days after receipt of Ecology comments, subsequent to public comment[c]
10.	Agency Review preliminary Draft Cleanup Action Plan (DCAP)	No later than 90 days following approval of Final Feasibility Study
11.	Public Review Draft Cleanup Action Plan	No later than 45 days after receipt of Ecology comments
12.	Quarterly Progress Reports	No later than 10th day of the month following the reporting period

[a] Due dates shown are for initial draft and final deliverables. This schedule assumes only a single revised document will be submitted following receipt of comments from Ecology. Documents become final only upon approval by Ecology.
[b] AO (Agreed Order) is effective upon signature by both Ecology and Subject PLPs.
[c] These public comment periods can be combined.

Table 2

Schedule for Roystone's Submission of Interim Action Deliverables

	Deliverable	*Due Date*[a]
1.	Agency Review Draft Interim Action Work Plan (IAWP)	Completed
2.	Public Review Draft Interim Action Work Plan and SEPA Checklist for the interim action	Completed
3.	Final Interim Action Work Plan	No later than 30 days after public notice and comment period closes
4.	Implement Final Interim Action Work Plan	Initiated no later than 30 days following Ecology approval of Final Interim Action Work Plan, subsequent to public comment.
5.	Agency Review Draft Interim Action Report	No later than 60 days following Roystone's receipt of interim action validated analytical data
6.	Final Interim Action Report	No later than 30 days after Ecology's approval of the Agency Review Draft Interim Action Report.

[a] *Due dates shown are for initial draft and final deliverables. This schedule assumes only a single revised document will be submitted following receipt of comments from Ecology. Documents become final only upon approval by Ecology.*
[b] *AO (Agreed Order) is effective upon signature by both Ecology and Subject PLPs.*

APPENDIX B

List of Previous Reports Pertaining to the Property

RILEYGROUP

APPENDIX A PREVIOUS REPORTS

The Site was previously enrolled in the VCP and identified as "Texaco Downstream #211577" (VCP No. 211577). Based on RGI's review of the Final Remedial Investigation & Site Summary Report dated August 20, 2007 by SAIC, the following reports are anticipated to be present in the Ecology file for the Texaco Downstream #211577:

1) SAIC, 2007. Final Remedial Investigation and Site Summary Report, August 20.
2) Delta Environmental Consultants (Delta), 2002. *Conceptual Site Model, Risk Assessment, and Supplemental Investigation Proposal, Former Texaco Station No. 211577, 631 Queen Anne Avenue North, Seattle, Washington*, August 21.
3) Delta, 2003. *Agency Draft, Remedial Investigation Report, Former Texaco Service Station No.211577, 631 Queen Anne Avenue North, Seattle, Washington,* March 3.
4) Ecology & Environment (E&E), 1990. *Monterey Apartments Site - Soil-Gas Pilot Study Summary,* September 11.
5) E&E, 1991. *Monterey Apartments Site, Phase 1 Remedial Investigation Work Plan.* January 14.
6) E&E, 1991. *Phase 1 Remedial Investigation Sampling and Analysis Plan,* March 4.
7) E&E, 1991. *Trip Report, Manhattan Express Tank Integrity Testing – Monterey Apartments Phase I Remedial Investigation*, April 23.
8) E&E, 1991. *Final Phase 1 Remedial Investigation,* May 15.
9) E&E, 1991. *Phase 1 Remedial Investigation Report, Monterey Apartments, Seattle Washington,* August.
10) Farallon Consulting (Farallon), 2000. *December 1999 Groundwater Sampling Analytical Results, Queen Anne Texaco, Seattle, Washington*, January 11.
11) Farallon, 2000. *Scope of Work, Queen Anne Texaco, Seattle, Washington.* February 8.
12) Farallon, 2000. *Pilot Test Summary Report, Queen Anne Texaco, Seattle, Washington,* July 19.
13) Farallon 2000. *December 1999 and June 2000 Groundwater Summary Report, Queen Anne Texaco, Seattle, Washington,* July 21.
14) Farallon, 2000. *Draft Work Plan, Additional Site Investigation, Queen Anne Texaco, Seattle, Washington*, November 30.
15) Farallon, 2001. *Draft Work Plan, Site Investigation, Queen Anne Texaco, Seattle, Washington,* January.
16) Science Applications International Corporation (SAIC), 1993. *Baseline Groundwater Monitoring Report, Monterey Apartments.*
17) SAIC, 1993. *Work Assignment #60 – Monterey Apartments, Seattle Task II - Construction Oversight Weekly Report, 17-21 May 1993,* May 23.
18) SAIC, 1993. *Work Assignment #60 - Monterey Apartments, Seattle Task II - Construction Oversight Weekly Report, 24-28 May 1993,* June 7.
19) SAIC, 1993. *Work Assignment #60 – Monterey Apartments, Seattle Task II - Construction Oversight Weekly Report, 1-4 June 1993,* June 17.
20) SAIC, 1993. *Work Assignment #60 – Monterey Apartments, Seattle Task II - Construction Oversight Weekly Report, 14-18 June 1993,* June 22.
21) SAIC, 1993. *Work Assignment #60 – Monterey Apartments, Seattle Task II - Construction*

Oversight Weekly Report, 21-25 June 1993, June 30.
22) SAIC, 1993. Work Assignment #60 - Monterey Apartments, Seattle Task II - Construction
23) Oversight Weekly Report, 28-30 June 1993, July 8.
24) SAIC, 2006a. Remediation System Startup and First Quarter 2006 Operations Report, Former Texaco Service Station No. 211577, 631 Queen Anne Avenue North, Seattle, Washington, May 19.
25) SAIC, 2006b. DPE Remediation System, Second Quarter 2006 Operations Report, Former Texaco Service Station No. 211577, 631 Queen Anne Avenue North, Seattle, Washington, August 30.
26) SAIC, 2007a. DPE Remediation System, Third Quarter 2006 Operations Report, Former Texaco Service Station No. 211577, 631 Queen Anne Avenue North, Seattle, Washington, January 8.
27) SAIC, 2007b. DPE Remediation System, Fourth Quarter 2006 Operations Report, Former
28) Texaco Service Station No. 211577, 631 Queen Anne Avenue North, Seattle, Washington, March 8.
29) Texaco Inc., September 2000, Background Investigation Report.
30) Washington State Department of Ecology (WDOE), 1989. Monterey Apartments, Internal
31) Report, March
32) WDOE, 1989. Request for Proposal to Provide Technical Services at the Monterey Apartments, Queen Anne District, March 17.
33) WDOE Letter, 1991. Re: Underground Storage Tank (UST) Compliance Schedule, July 8.
34) WDOE, 1998. Monterey Apartments Ground Water Monitoring, October 1995 – November, 1997, May.

APPENDIX C

Borelogs & Monitoring Well Construction Logs

RILEYGROUP

Project Name: **Roystone Redevelopment**
Project Number: **2017-015K**
Client: **Roystone on Queen Anne LLC**

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Boring No.: NETP1

Sheet 1 of 1

Date(s) Drilled: **03/27/20**	Logged By: **ED**	Surface Conditions: **Sand**
Drilling Method(s): **Direct Push**	Drill Bit Size/Type:	Total Depth of Borehole: **21 feet bgs**
Drill Rig Type: **Truck-Mounted Geoprobe**	Drilling Contractor: **Cascade Drilling**	Approximate Surface Elevation: **n/a**
Groundwater Level: **Not encountered**	Sampling Method(s): **Continuous**	Hammer Data : **n/a**
Borehole Backfill: **Bentonite**	Location: **631 Queen Anne Avenue North, Seattle, Washington 98109**	

PID Reading, ppm	Sample ID	Sample Type	Sampling Resistance, blows/ft	GW Depth	Depth (feet)	MATERIAL DESCRIPTION	USCS Symbol	Graphic Log
					0	Brown/blueish, silty SAND with gravel (backfill from previous excavation), moist, moderate petroleum odor	SM	
17.5	NETP1-5				5			
8.0	NETP1-8							
5.0					10			
2.9	NETP1-12					Brown, SAND, moist, no odor, no sheen	SP	
					15			
1.1	NETP1-17							
					20	Blueish-gray, CLAY, no odor, no sheen	CL	
						Boring terminated 21 feet bgs		
					25			

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Project Name: **Roystone Redevelopment** Project Number: **2017-015K** Client: **Roystone on Queen Anne LLC**	RILEYGROUP Boring No.: **NETP2** **Sheet 1 of 1**

Date(s) Drilled: **03/27/20**	Logged By: **ED**	Surface Conditions: **Sand**
Drilling Method(s): **Direct Push**	Drill Bit Size/Type:	Total Depth of Borehole: **21 feet bgs**
Drill Rig Type: **Truck-Mounted Geoprobe**	Drilling Contractor: **Cascade Drilling**	Approximate Surface Elevation: **n/a**
Groundwater Level: **Not encountered**	Sampling Method(s): **Continuous**	Hammer Data : **n/a**
Borehole Backfill: **Bentonite**	Location: **631 Queen Anne Avenue North, Seattle, Washington 98109**	

PID Reading, ppm	Sample ID	Sample Type	Sampling Resistance, blows/ft	GW Depth	Depth (feet)	MATERIAL DESCRIPTION	USCS Symbol	Graphic Log
0.0					0	Brown, silty SAND with gravel, moist, no odor, no sheen	SM	
34.0								
						Blue, silty SAND with gravel, strong petroleum odor	SM	
34.0	NETP2-5				5			
34.0	NETP2-7							
0.3	NETP2-8					Brown, silty SAND with gravel, no odor, no sheen	SM	
					10			
0.4	NETP2-12					Brown, SAND, wet, no odor, no sheen	SP	
					15			
0.3	NETP2-17							
0.2					20	Blueish, CLAY, no odor, no sheen	CL	
						Boring terminated 21 feet bgs		
					25			

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Project Name: **Roystone Redevelopment**

Project Number: **2017-015K**

Client: **Roystone on Queen Anne LLC**

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Boring Log Key

Sheet 1 of 1

PID Reading, ppm	Sample ID	Sample Type	Sampling Resistance, blows/ft	GW Depth	Depth (feet)	MATERIAL DESCRIPTION	USCS Symbol	Graphic Log
1	2	3	4	5	6	7	8	9

COLUMN DESCRIPTIONS

1. PID Reading, ppm: The reading from a photo-ionization detector, in parts per million.
2. Sample ID: Sample identification number.
3. Sample Type: Type of soil sample collected at the depth interval shown.
4. Sampling Resistance, blows/ft: Number of blows to advance driven sampler one foot (or distance shown) beyond seating interval using the hammer identified on the boring log.
5. GW Depth: Groundwater depth in feet below the ground surface.
6. Depth (feet): Depth in feet below the ground surface.
7. MATERIAL DESCRIPTION: Description of material encountered. May include consistency, moisture, color, and other descriptive text.
8. USCS Symbol: USCS symbol of the subsurface material.
9. Graphic Log: Graphic depiction of the subsurface material encountered.

FIELD AND LABORATORY TEST ABBREVIATIONS

CHEM: Chemical tests to assess corrosivity
COMP: Compaction test
CONS: One-dimensional consolidation test
LL: Liquid Limit, percent
PI: Plasticity Index, percent
SA: Sieve analysis (percent passing No. 200 Sieve)
UC: Unconfined compressive strength test, Qu, in ksf
WA: Wash sieve (percent passing No. 200 Sieve)

MATERIAL GRAPHIC SYMBOLS


Lean CLAY, CLAY w/SAND, SANDY CLAY (CL)


Silty SAND (SM)


Poorly graded SAND (SP)

TYPICAL SAMPLER GRAPHIC SYMBOLS


Auger sampler


Bulk Sample


3-inch-OD California w/ brass rings


CME Sampler


Grab Sample


2.5-inch-OD Modified California w/ brass liners


Pitcher Sample


2-inch-OD unlined split spoon (SPT)


Shelby Tube (Thin-walled, fixed head)

OTHER GRAPHIC SYMBOLS


Water level (at time of drilling, ATD)


Water level (after waiting)


Minor change in material properties within a stratum

Inferred/gradational contact between strata

Queried contact between strata

GENERAL NOTES

1: Soil classifications are based on the Unified Soil Classification System. Descriptions and stratum lines are interpretive, and actual lithologic changes may be gradual. Field descriptions may have been modified to reflect results of lab tests.
2: Descriptions on these logs apply only at the specific boring locations and at the time the borings were advanced. They are not warranted to be representative of subsurface conditions at other locations or times.

Project Name: **Arnold's/Former Texaco Service Station No. 211577**	Test Probe/Well No.: **SSI-W1**
Project Number: **2017-015D**	**Sheet 1 of 1**
Client: **Vibrant Cities**	

RILEYGROUP

Date(s) Drilled: **12/02/17**	Logged By: **LC**	Surface Conditions: **Concrete**
Drilling Method(s): **Direct Push**	Drill Bit Size/Type: **3.25" Diameter**	Total Depth of Borehole: **21 feet bgs**
Drill Rig Type: **Geoprobe**	Drilling Contractor: **RGI**	Approximate Surface Elevation (feet amsl): **115'**
Groundwater Level: **10.75' on 12/06/17**	Sampling Method(s): **Continuous**	Hammer Data : **n/a**
Borehole Backfill: **Bentonite**	Location: **631 Queen Anne Avenue North,Seattle, Washington 98109**	

Elevation (feet)	Depth (feet)	Sample Type	Sample ID	Sampling Resistance, blows/ft	PID Reading, ppm	Recovery (%)	USCS Symbol	Graphic Log	MATERIAL DESCRIPTION	Well Log	REMARKS AND OTHER TESTS
	0						Concrete		Concrete		Concrete 0 - 1
							SM		Brown, silty SAND to SAND with some silt, medium dense, damp (fill)		Blank 1.5" PVC 0 - 10
											Bentonite 1 - 3
							ML		Gray, SILT with trace sand and gravel, stiff, damp		
	5										
			SS1-W1-6		0.0	50%					
							SP-SM		Light brown to blue-gray, SAND with some silt and trace gravel to silty SAND with some gravel, dense, moist to wet, hydrocarbon odor		
	10	▼									Prepack Slotted 1.5" PVC 10 - 20
			SS1-W1-15		0.1	95%					
	15										
			SSW-W1-18		0.0	90%	CL		Light brown to blue-gray, silty CLAY with some gravel and trace sand, very stiff, damp		
	20								No gravel or sand		
			SS1-W1-21		0.0	100%					
									Boring terminated 21 feet bgs		

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Project Name: **Arnold's/Former Texaco Service Station No. 211577**
Project Number: **2017-015D**
Client: **Vibrant Cities**

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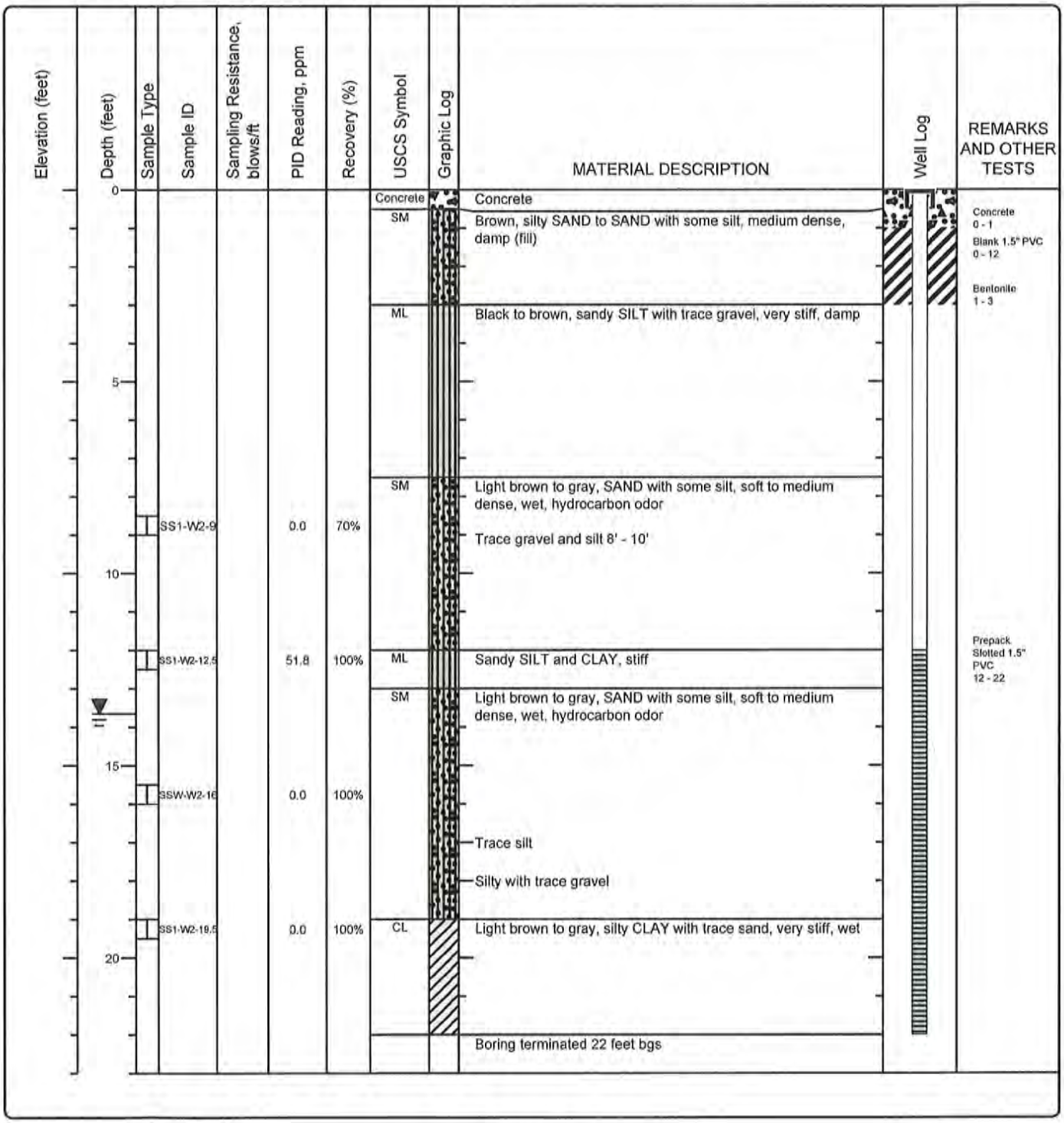
Test Probe/Well No.: **SSI-W2**
Sheet 1 of 1

Date(s) Drilled: **12/02/17**	Logged By: **LC**	Surface Conditions: **Concrete**
Drilling Method(s): **Direct Push**	Drill Bit Size/Type: **3.25" Diameter**	Total Depth of Borehole: **22 feet bgs**
Drill Rig Type: **Geoprobe**	Drilling Contractor: **RGI**	Approximate Surface Elevation (feet amsl): **114'**
Groundwater Level: **13.65' on 12/06/17**	Sampling Method(s): **Continuous**	Hammer Data : **n/a**
Borehole Backfill: **Bentonite**	Location: **631 Queen Anne Avenue North,Seattle, Washington 98109**	



Project Name: **Arnold's/Former Texaco Service Station No. 211577**
Project Number: **2017-015D**
Client: **Vibrant Cities**

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Test Probe No.: SSI-P1

Sheet 1 of 1

Date(s) Drilled: **12/02/17**	Logged By: **LC**	Surface Conditions: **Concrete**
Drilling Method(s): **Direct Push**	Drill Bit Size/Type: **3.25" Diameter**	Total Depth of Borehole: **23 feet bgs**
Drill Rig Type: **Geoprobe**	Drilling Contractor: **RGI**	Approximate Surface Elevation: **114.5'**
Groundwater Level: **12.37' on 12/3**	Sampling Method(s): **Continuous**	Hammer Data : **n/a**
Borehole Backfill: **Bentonite**	Location: **631 Queen Anne Avenue North, Seattle, Washington 98109**	

PID Reading, ppm	Sample ID	Sample Type	% Recovery	GW Depth	Depth (feet)	MATERIAL DESCRIPTION	Graphic Log
					0	Concrete	
						Light brown to gray, silty SAND with trace gravel, medium dense, damp to moist	
						Light brown to gray, sandy SILT with trace gravel, medium dense, damp to moist	
0.0	SSI-P1-5		60%		5	Light brown to gray, SILT with trace gravel, medium dense, damp to moist	
0.0	SSI-P1-9		60%		10	Less gravel	
0.0	SSI-P1-14		100%	▼		Light brown to gray, SAND with trace to some silt, medium dense, wet	
1.0	SSI-P1-17		66%		15		
0.0	SSI-P1-19		100%			Silty sand	
0.0	SSI-P1-19.5		100%		20	Gray, silty CLAY, very stiff, damp	
						Boring terminated 23 feet bgs	
					25		

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Project Name: **Arnold's/Former Texaco Service Station No. 211577**
Project Number: **2017-015D**
Client: **Vibrant Cities**

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Test Probe No.: SSI-P2

Sheet 1 of 1

Date(s) Drilled: **12/02/17**	Logged By: **LC**	Surface Conditions: **Concrete**
Drilling Method(s): **Direct Push**	Drill Bit Size/Type: **3.25" Diameter**	Total Depth of Borehole: **22 feet bgs**
Drill Rig Type: **Geoprobe**	Drilling Contractor: **RGI**	Approximate Surface Elevation: **114**
Groundwater Level: **19.17' on 12/2**	Sampling Method(s): **Continuous**	Hammer Data : **n/a**
Borehole Backfill: **Bentonite**	Location: **631 Queen Anne Avenue North, Seattle, Washington 98109**	

PID Reading, ppm	Sample ID	Sample Type	% Recovery	GW Depth	Depth (feet)	MATERIAL DESCRIPTION	Graphic Log
					0	Concrete	
						Light brown to gray, silty SAND with trace gravel and some silt, medium dense, damp, hydrocarbon odor	
					5		
0.0	SSI-P2-7.5		50%				
						Light brown to gray, gravelly SAND with some silt, medium dense, damp	
0.0	SSI-P2-10		75%		10	Wet, loose	
0.0	SSI-P2-15		100%		15	Light brown/black, medium to coarse SAND, medium dense, wet, hydrocarbon odor	
0.0	SSI-P2-15.5		100%			Light brown, SILT with trace sand, very stiff, damp, hydrocarbon odor	
0.0	SSI-P2-18		100%			Gray, silty CLAY, very stiff, damp	
				▽	20		
						Boring terminated 22 feet bgs	
					25		

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Project Name: **Arnold's/Former Texaco Service Station No. 211577**
Project Number: **2017-015D**
Client: **Vibrant Cities**

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Test Probe No.: SSI-P3

Sheet 1 of 2

Date(s) Drilled: **12/04/17**	Logged By: **LC**	Surface Conditions: **Asphalt**
Drilling Method(s): **Direct Push**	Drill Bit Size/Type: **3.25" Diameter**	Total Depth of Borehole: **35 feet bgs**
Drill Rig Type: **Geoprobe**	Drilling Contractor: **RGI**	Approximate Surface Elevation: **113.5'**
Groundwater Level: **Not measured**	Sampling Method(s): **Continuous**	Hammer Data : **n/a**
Borehole Backfill: **Bentonite**	Location: **631 Queen Anne Avenue North, Seattle, Washington 98109**	

PID Reading, ppm	Sample ID	Sample Type	% Recovery	GW Depth	Depth (feet)	MATERIAL DESCRIPTION	Graphic Log
					0	Asphalt	
						Fill	
						Light brown to gray, silty SAND to sandy SILT with some gravel, dense, damp, hydrocarbon odor	
0.1	SSI-P3-5		60%		5	Light brown to gray, silty SAND to SAND with trace silt and gravel, dense, damp, hydrocarbon odor	
0.1	SSI-P3-10		80%		10		
2.3	SSI-P3-12		100%			Light brown to gray, SAND with trace silt and gravel, soft, wet, hydrocarbon odor	
0.1	SSI-P3-17		100%		15		
						Less gravel	
					20	Some gravel	
69.7	SSI-P3-22		90%			Slight sheen potentially related to groundwater contamination	
					25		

Project Name: **Arnold's/Former Texaco Service Station No. 211577**
Project Number: **2017-015D**
Client: **Vibrant Cities**

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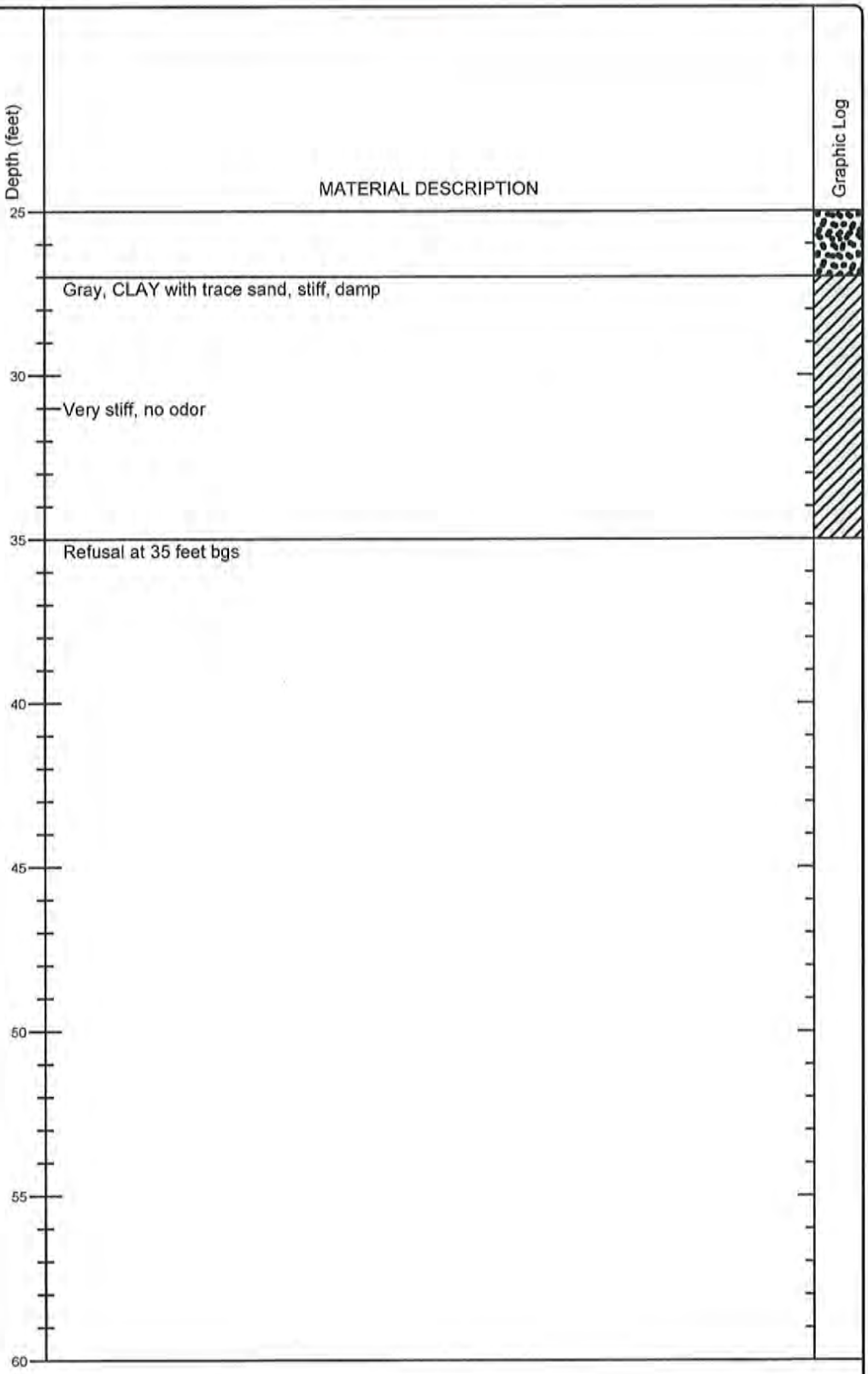
Test Probe No.: SSI-P3

Sheet 2 of 2

PID Reading, ppm	Sample ID	Sample Type	% Recovery	GW Depth
0.1	SSI-P3-27		100%	
0.1	SSI-P3-31		100%	
0.1	SSI-P3-34		100%	
0.1	SSI-P3-35		100%	



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Project Name: **Arnold's/Former Texaco Service Station No. 211577**
Project Number: **2017-015D**
Client: **Vibrant Cities**

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Test Probe No.: SSI-P4

Sheet 1 of 2

Date(s) Drilled: **12/04/17**	Logged By: **LC**	Surface Conditions: **Asphalt**
Drilling Method(s): **Direct Push**	Drill Bit Size/Type: **3.25" Diameter**	Total Depth of Borehole: **37 feet bgs**
Drill Rig Type: **Geoprobe**	Drilling Contractor: **RGI**	Approximate Surface Elevation: **113'**
Groundwater Level: **Not measured**	Sampling Method(s): **Continuous**	Hammer Data : **n/a**
Borehole Backfill: **Bentonite**	Location: **631 Queen Anne Avenue North, Seattle, Washington 98109**	

PID Reading, ppm	Sample ID	Sample Type	% Recovery	GW Depth	Depth (feet)	MATERIAL DESCRIPTION	Graphic Log
					0	Asphalt	
						Light to medium brown/black, sandy SILT, medium stiff, damp, hydrocarbon odor	
						SAND	
						Light to medium brown/black, sandy SILT, medium stiff, damp, hydrocarbon odor	
0.0	SSI-P4-5		60%		5	Light brown to black, silty SAND, medium dense, damp, odor	
						Gravelly, asphaltic lens	
0.0	SSI-P4-7		100%			Light brown to black, silty SAND, medium dense, damp, odor	
0.0	SSI-P4-7.5		66%			Light brown to brick red to black, sandy SILT, medium stiff, damp to moist	
						Light brown, SAND with some silt and trace sand, medium dense, damp, odor	
0.0	SSI-P4-10		66%		10	Light brown to gray, sandy SILT to silty SAND with trace gravel, medium stiff, dense, no odor	
0.0	SSI-P4-11		50%				
3.4	SSI-P4-14		100%			Light brown to dark gray, SAND with trace to some silt, loose to medium dense, wet, hydrocarbon odor	
					15	Trace gravel	
19	SSI-P4-17		100%				
0.2	SSI-P4-18		100%			Strong sheen 18' to 23' bgs. Hydrocarbon odor to 28' bgs	
17.5	SSI-P4-19		100%		20		
27.4	SSI-P4-22		100%		25		

Project Name: **Arnold's/Former Texaco Service Station No. 211577**
Project Number: **2017-015D**
Client: **Vibrant Cities**

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Test Probe No.: SSI-P4

Sheet 2 of 2

PID Reading, ppm	Sample ID	Sample Type	% Recovery	GW Depth	Depth (feet)	MATERIAL DESCRIPTION	Graphic Log
0.1	SSI-P4-27		100%		25		
						Light brown, sandy SILT, medium stiff, damp, slight hydrocarbon odor	
0.1	SSI-P4-30		100%		30	Gray, CLAY with trace to no sand, very stiff, damp, no odor	
0.1	SSI-P4-35		100%		35		
0.1	SSI-P4-37		100%			Refusal at 37 feet bgs	
					40		
					45		
					50		
					55		
					60		

Project Name: **Arnold's/Former Texaco Service Station No. 211577**
Project Number: **2017-015D**
Client: **Vibrant Cities**

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Test Probe No.: SSI-P5

Sheet 1 of 2

Date(s) Drilled: **12/04/17**	Logged By: **LC**	Surface Conditions: **Asphalt**
Drilling Method(s): **Direct Push**	Drill Bit Size/Type: **3.25" Diameter**	Total Depth of Borehole: **31 feet bgs**
Drill Rig Type: **Geoprobe**	Drilling Contractor: **RGI**	Approximate Surface Elevation: **113'**
Groundwater Level: **Not encountered**	Sampling Method(s): **Continuous**	Hammer Data : **n/a**
Borehole Backfill: **Bentonite**	Location: **631 Queen Anne Avenue North, Seattle, Washington 98109**	

PID Reading, ppm	Sample ID	Sample Type	% Recovery	GW Depth	Depth (feet)	MATERIAL DESCRIPTION	Graphic Log
					0	Asphalt	
						Light to medium brown/gray to black, silty SAND with some gravel, medium dense, damp (fill)	
0.1	SSI-P5-8		50%		5		
815	SSI-P5-12.5		95%		10	Light brown to gray, medium SAND with trace silt and gravel, medium dense, moist, strong hydrocarbon odor, strong sheen 10' to 20' bgs	
195	SSI-P5-17		100%		15	Loose, damp	
145	SSI-P5-20		100%		20		
						Gray, CLAY, very stiff, damp, no odor	
5.2	SSI-P5-23		100%		25		

Project Name: **Arnold's/Former Texaco Service Station No. 211577**
Project Number: **2017-015D**
Client: **Vibrant Cities**

RILEYGROUP

Test Probe No.: **SSI-P5**
Sheet 2 of 2

PID Reading, ppm	Sample ID	Sample Type	% Recovery	GW Depth	Depth (feet)	MATERIAL DESCRIPTION	Graphic Log
					25	Gray, CLAY, very stiff, damp, no odor	
0.2	SSI-P5-28		100%		30		
0.1	SSI-P5-31					Refusal at 31 feet bgs	
					35		
					40		
					45		
					50		
					55		
					60		

Project Name: **Arnold's/Former Texaco Service Station No. 211577** Project Number: **2017-015C** Client: **Vibrant Cities**	RILEYGROUP **Test Probe No.: P1** **Sheet 1 of 1**

Date(s) Drilled: **05/22/17**	Logged By: **SL**	Surface Conditions: **Asphalt**
Drilling Method(s): **Direct Push**	Drill Bit Size/Type: **2" Probe**	Total Depth of Borehole: **20 feet bgs**
Drill Rig Type: **Truck-Mounted**	Drilling Contractor: **Holocene**	Approximate Surface Elevation: **114'**
Groundwater Level: **13' bgs**	Sampling Method(s): **Continuous**	Hammer Data : **n/a**
Borehole Backfill: **Bentonite**	Location: **631 Queen Anne Avenue North, Seattle, Washington 98109**	

PID Reading, ppm	Sample ID	Sample Type	% Recovery	GW Depth	Depth (feet)	MATERIAL DESCRIPTION	Graphic Log
					0	Asphalt	
						Grayish brown, silty SAND, dense, moist, no odor, no sheen	
			75				
0.051	P1-5				5		
			80				
0.029	P1-10				10		
31	P1-13		70	▽		Gray, silty SAND, dense, wet, strong odor, sheen	
					15		
			70				
33	P1-20				20	Boring terminated 20 feet bgs	
					25		

Project Name: **Arnold's/Former Texaco Service Station No. 211577**
Project Number: **2017-015C**
Client: **Vibrant Cities**

RILEYGROUP

Test Probe No.: P2

Sheet 1 of 1

Date(s) Drilled: **05/22/17**	Logged By: **SL**	Surface Conditions: **Asphalt**
Drilling Method(s): **Direct Push**	Drill Bit Size/Type: **2" Probe**	Total Depth of Borehole: **20 feet bgs**
Drill Rig Type: **Truck-Mounted**	Drilling Contractor: **Holocene**	Approximate Surface Elevation: **114.5'**
Groundwater Level: **14' bgs**	Sampling Method(s): **Continuous**	Hammer Data : **n/a**
Borehole Backfill: **Bentonite**	Location: **631 Queen Anne Avenue North, Seattle, Washington 98109**	

PID Reading, ppm	Sample ID	Sample Type	% Recovery	GW Depth	Depth (feet)	MATERIAL DESCRIPTION	Graphic Log
					0	Asphalt	
			70			Grayish brown, silty SAND, dense, moist, strong odor, slight sheen	
42	P2-4						
			85		5		
41	P2-7.5						
						Compact density fill (CDF) or concrete	
						Brown, silty SAND, dense, moist, slight odor, slight sheen	
			75		10		
25	P2-14			▽			
						Gray, silty SAND, dense, moist, strong odor, sheen	
0.021	P2-17		90		15		
0.031	P2-20				20	Boring terminated 20 feet bgs	
					25		

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Project Name: **Arnold's/Former Texaco Service Station No. 211577**
Project Number: **2017-015C**
Client: **Vibrant Cities**

RILEYGROUP

Test Probe No.: P3

Sheet 1 of 1

Date(s) Drilled: **05/22/17**	Logged By: **SL**	Surface Conditions: **Asphalt**
Drilling Method(s): **Direct Push**	Drill Bit Size/Type: **2" Probe**	Total Depth of Borehole: **20 feet bgs**
Drill Rig Type: **Truck-Mounted**	Drilling Contractor: **Holocene**	Approximate Surface Elevation: **114'**
Groundwater Level: **13' bgs**	Sampling Method(s): **Continuous**	Hammer Data : **n/a**
Borehole Backfill: **Bentonite**	Location: **631 Queen Anne Avenue North, Seattle, Washington 98109**	

PID Reading, ppm	Sample ID	Sample Type	% Recovery	GW Depth	Depth (feet)	MATERIAL DESCRIPTION	Graphic Log
					0	Asphalt	
			60			Brown, silty SAND, medium dense, moist, no odor, no sheen	
7.032	P3-5				5	Gray, silty SAND, medium dense, moist, strong odor, slight sheen	
			85				
0.15	P3-8					Brown, silty SAND, moist, no odor, no sheen	
					10		
			75				
30	P3-13			▽		Gray, silty SAND, medium dense, odor, slight sheen	
						Wet	
					15		
						No odor	
			90				
25	P3-20				20	Boring terminated 20 feet bgs	
					25		

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Project Name: **Arnold's/Former Texaco Service Station No. 211577**
Project Number: **2017-015C**
Client: **Vibrant Cities**

RILEYGROUP

Test Probe No.: P4

Sheet 1 of 1

Date(s) Drilled: **05/22/17**	Logged By: **SL**	Surface Conditions: **Concrete**
Drilling Method(s): **Direct Push**	Drill Bit Size/Type: **2" Probe**	Total Depth of Borehole: **5.5 feet bgs**
Drill Rig Type: **Track-Mounted, Limited Access**	Drilling Contractor: **Holocene**	Approximate Surface Elevation: **114'**
Groundwater Level: **Not Encountered**	Sampling Method(s): **Continuous**	Hammer Data : **n/a**
Borehole Backfill: **Bentonite**	Location: **631 Queen Anne Avenue North, Seattle, Washington 98109**	

PID Reading, ppm	Sample ID	Sample Type	% Recovery	GW Depth	Depth (feet)	MATERIAL DESCRIPTION	Graphic Log
					0	Concrete	
			80			Light brown, silty SAND, medium dense, moist, no odor, no sheen	
0.013	P4-2						
			80				
0.01	P4-4						
			70		5		
0.01	P4-5.5					Boring refusal at 5.5 feet bgs	
					10		
					15		
					20		
					25		

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

Project Name: **Arnold's/Former Texaco Service Station No. 211577**
Project Number: **2017-015C**
Client: **Vibrant Cities**

RILEYGROUP

Test Probe No.: P5

Sheet 1 of 1

Date(s) Drilled: **05/22/17**	Logged By: **SL**	Surface Conditions: **Concrete**
Drilling Method(s): **Direct Push**	Drill Bit Size/Type: **2" Probe**	Total Depth of Borehole: **6 feet bgs**
Drill Rig Type: **Track-Mounted, Limited Access**	Drilling Contractor: **Holocene**	Approximate Surface Elevation: **114'**
Groundwater Level: **Not Encountered**	Sampling Method(s): **Continuous**	Hammer Data : **n/a**
Borehole Backfill: **Bentonite**	Location: **631 Queen Anne Avenue North, Seattle, Washington 98109**	

PID Reading, ppm	Sample ID	Sample Type	% Recovery	GW Depth	Depth (feet)	MATERIAL DESCRIPTION	Graphic Log
					0	Concrete	
			80			Light brown, silty SAND, dense, moist, no odor, no sheen	
0.013	P5-2						
			45				
0.011	P5-4				5		
			0			Boring refusal at 6 feet bgs	
					10		
					15		
					20		
					25		

Project Name: **Arnold's/Former Texaco Service Station No. 211577**
Project Number: **2017-015C**
Client: **Vibrant Cities**

RILEYGROUP

Test Probe No.: P6

Sheet 1 of 1

Date(s) Drilled: **05/22/17**	Logged By: **SL**	Surface Conditions: **Concrete**
Drilling Method(s): **Direct Push**	Drill Bit Size/Type: **2" Probe**	Total Depth of Borehole: **4 feet bgs**
Drill Rig Type: **Track-Mounted, Limited Access**	Drilling Contractor: **Holocene**	Approximate Surface Elevation: **114'**
Groundwater Level: **Not Encountered**	Sampling Method(s): **Continuous**	Hammer Data : **n/a**
Borehole Backfill: **Bentonite**	Location: **631 Queen Anne Avenue North, Seattle, Washington 98109**	

PID Reading, ppm	Sample ID	Sample Type	% Recovery	GW Depth	Depth (feet)	MATERIAL DESCRIPTION	Graphic Log
					0	Concrete	
0.021	P6-1		80			Light brown, silty SAND with gravel, dense, moist, no odor, no sheen	
0.017	P6-4		75			Boring refusal at 4 feet bgs	
					5		
					10		
					15		
					20		
					25		

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

Project Name: **Arnold's/Former Texaco Service Station No. 211577**
Project Number: **2017-015C**
Client: **Vibrant Cities**

RILEYGROUP

Test Probe No.: P7

Sheet 1 of 1

Date(s) Drilled: **05/22/17**	Logged By: **SL**	Surface Conditions: **Concrete**
Drilling Method(s): **Direct Push**	Drill Bit Size/Type: **2" Probe**	Total Depth of Borehole: **6 feet bgs**
Drill Rig Type: **Track-Mounted, Limited Access**	Drilling Contractor: **Holocene**	Approximate Surface Elevation: **114'**
Groundwater Level: **Not Encountered**	Sampling Method(s): **Continuous**	Hammer Data : **n/a**
Borehole Backfill: **Bentonite**	Location: **631 Queen Anne Avenue North, Seattle, Washington 98109**	

PID Reading, ppm	Sample ID	Sample Type	% Recovery	GW Depth	Depth (feet)	MATERIAL DESCRIPTION	Graphic Log
					0	Concrete	
			80			Light brown, silty SAND, dense, moist, no odor, no sheen	
0.009	P7-2						
			75				
0.010	P7-4				5		
			70				
0.011	P7-6					Boring refusal at 6 feet bgs	
					10		
					15		
					20		
					25		

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

Project Name: **Arnold's/Former Texaco Service Station No. 211577**
Project Number: **2017-015D**
Client: **Vibrant Cities**

RILEYGROUP

Boring Log Key

Sheet 1 of 1

PID Reading, ppm	Sample ID	Sample Type	% Recovery	GW Depth	Depth (feet)	MATERIAL DESCRIPTION	Graphic Log
1	2	3	4	5	6	7	8

COLUMN DESCRIPTIONS

1. PID Reading, ppm: The reading from a photo-ionization detector, in parts per million.
2. Sample ID: Sample identification number.
3. Sample Type: Type of soil sample collected at the depth interval shown.
4. % Recovery: % Recoverysquare foot.
5. GW Depth: Groundwater depth in feet below the ground surface.
6. Depth (feet): Depth in feet below the ground surface.
7. MATERIAL DESCRIPTION: Description of material encountered. May include consistency, moisture, color, and other descriptive text.
8. Graphic Log: Graphic depiction of the subsurface material encountered.

FIELD AND LABORATORY TEST ABBREVIATIONS

CHEM: Chemical tests to assess corrosivity
COMP: Compaction test
CONS: One-dimensional consolidation test
LL: Liquid Limit, percent
PI: Plasticity Index, percent
SA: Sieve analysis (percent passing No. 200 Sieve)
UC: Unconfined compressive strength test, Qu, in ksf
WA: Wash sieve (percent passing No. 200 Sieve)

MATERIAL GRAPHIC SYMBOLS

- Asphaltic Concrete (AC)
- Lean CLAY, CLAY w/SAND, SANDY CLAY (CL)
- Portland Cement Concrete
- AF
- Poorly graded GRAVEL (GP)
- SILT, SILT w/SAND, SANDY SILT (ML)
- Silty SAND (SM)
- Silty SAND to Sandy SILT (SM-ML)
- Poorly graded SAND (SP)
- Poorly graded SAND with Silt (SP-SM)

TYPICAL SAMPLER GRAPHIC SYMBOLS

- Auger sampler
- Bulk Sample
- 3-inch-OD California w/ brass rings
- CME Sampler
- Grab Sample
- 2.5-inch-OD Modified California w/ brass liners
- Pitcher Sample
- 2-inch-OD unlined split spoon (SPT)
- Shelby Tube (Thin-walled, fixed head)

OTHER GRAPHIC SYMBOLS

- Water level (at time of drilling, ATD)
- Water level (after waiting)
- Minor change in material properties within a stratum
- Inferred/gradational contact between strata
- Queried contact between strata

GENERAL NOTES

1: Soil classifications are based on the Unified Soil Classification System. Descriptions and stratum lines are interpretive, and actual lithologic changes may be gradual. Field descriptions may have been modified to reflect results of lab tests.
2: Descriptions on these logs apply only at the specific boring locations and at the time the borings were advanced. They are not warranted to be representative of subsurface conditions at other locations or times.

Project Name: **Arnold's/Former Texaco Service Station No. 211577**
Project Number: **2017-015C**
Client: **Vibrant Cities**

RILEYGROUP

Boring Log Key

Sheet 1 of 1

PID Reading, ppm	Sample ID	Sample Type	% Recovery	GW Depth	Depth (feet)	MATERIAL DESCRIPTION	Graphic Log
1	2	3	4	5	6	7	8

COLUMN DESCRIPTIONS

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2. Sample ID: Sample identification number.
3. Sample Type: Type of soil sample collected at the depth interval shown,
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UC: Unconfined compressive strength test, Qu, in ksf
WA: Wash sieve (percent passing No. 200 Sieve)

MATERIAL GRAPHIC SYMBOLS

Asphaltic Concrete (AC)

Portland Cement Concrete

Silty SAND (SM)

TYPICAL SAMPLER GRAPHIC SYMBOLS

Auger sampler

Bulk Sample

3-inch-OD California w/ brass rings

CME Sampler

Grab Sample

2.5-inch-OD Modified California w/ brass liners

Pitcher Sample

2-inch-OD unlined split spoon (SPT)

Shelby Tube (Thin-walled, fixed head)

OTHER GRAPHIC SYMBOLS

Water level (at time of drilling, ATD)

Water level (after waiting)

Minor change in material properties within a stratum

Inferred/gradational contact between strata

Queried contact between strata

GENERAL NOTES

1: Soil classifications are based on the Unified Soil Classification System. Descriptions and stratum lines are interpretive, and actual lithologic changes may be gradual. Field descriptions may have been modified to reflect results of lab tests.
2: Descriptions on these logs apply only at the specific boring locations and at the time the borings were advanced. They are not warranted to be representative of subsurface conditions at other locations or times.

SoundEarth Strategies

Project:	Arnold's Property
Project Number:	0320-001
Logged by:	RAH
Date Started:	5/2/12
Surface Conditions:	Asphalt
Well Location N/S:	3.6' S of MW10
Well Location E/W:	4.2' W of MW10
Reviewed by:	RKB
Date Completed:	5/2/12

BORING LOG | P01

Site Address: 631 Queen Anne Avenue North, Seattle, Washington

Water Depth At Time of Drilling: 11 feet bgs
Water Depth After Completion: -- feet bgs

Depth (feet bgs)	Interval	Blow Count	% Recovery	PID (ppmv)	Sample ID	USCS Class	Graphic	Lithologic Description	Well Construction Detail
0			80	1.0		SP		**Asphalt at surface.** **Damp to moist, medium to fine SAND with silt and gravel, light brown, no hydrocarbon odor (10-80-10).**	
				1.1	P01-04				
5			80	3.8	P01-06	SM		**Damp, dense, silty SAND with gravel, dark brown, no hydrocarbon odor (20-70-10).**	
				1.9		SP		**Moist, dense, medium to fine SAND with silt and gravel, brown, no hydrocarbon odor (10-85-5).**	
10			70	4.3					
				11.1	P01-11			**Wet, dense, medium to fine SAND with silt and gravel, reddish-brown, no hydrocarbon odor (10-85-5).**	
			100	44	P01-14			**Wet, dense, medium to fine SAND with silt, brownish gray to gray, slight to moderate hydrocarbon odor (5-95-0).**	
15									

Drilling Co./Driller:	ESN/Don		**Well/Auger Diameter:**	--/2	inches	**Notes/Comments:**
Drilling Equipment:	Direct Push		**Well Screened Interval:**	--	feet bgs	
Sampler Type:	--		**Screen Slot Size:**	--	inches	
Hammer Type/Weight:	--	lbs	**Filter Pack Used:**	--		
Total Boring Depth:	24	feet bgs	**Surface Seal:**	Asphalt		
Total Well Depth:	--	feet bgs	**Annular Seal:**	Bentonite		
State Well ID No.:	--		**Monument Type:**	--		

SoundEarth Strategies

Project:	Arnold's Property
Project Number:	0320-001
Logged by:	RAH
Date Started:	5/2/12
Surface Conditions:	Asphalt
Well Location N/S:	3.6' S of MW10
Well Location E/W:	4.2' W of MW10
Reviewed by:	RKB
Date Completed:	5/2/12

BORING LOG | P01

Site Address: 631 Queen Anne Avenue North
Seattle, Washington

Water Depth At Time of Drilling: 11 feet bgs
Water Depth After Completion: -- feet bgs

Depth (feet bgs)	Interval	Blow Count	% Recovery	PID (ppmv)	Sample ID	USCS Class	Graphic	Lithologic Description	Well Construction Detail
15				3.8					
			100	2.1		ML		**Damp, dense, SILT with fine sand, brown, no hydrocarbon odor (60-40-0).**	
20				2.1	P01-20				
				1.0				**Damp, dense, SILT with fine sand, gray, no hydrocarbon odor (60-40-0).**	
			100						
				1.0	P01-24				
25								**Boring terminated at 24' bgs.**	
30									

Drilling Co./Driller:	ESN/Don		**Well/Auger Diameter:**	--/2	inches	**Notes/Comments:**
Drilling Equipment:	Direct Push		**Well Screened Interval:**	--	feet bgs	
Sampler Type:	--		**Screen Slot Size:**	--	inches	
Hammer Type/Weight:	--	lbs	**Filter Pack Used:**	--		
Total Boring Depth:	24	feet bgs	**Surface Seal:**	Asphalt		
Total Well Depth:	--	feet bgs	**Annular Seal:**	Bentonite		
State Well ID No.:	--		**Monument Type:**	--		

SoundEarth Strategies

Project:	Arnold's Property
Project Number:	0320-001
Logged by:	RAH
Date Started:	5/2/12
Surface Conditions:	Asphalt
Well Location N/S:	0' S of MW13
Well Location E/W:	11.5' W of MW13
Reviewed by:	RKB
Date Completed:	5/2/12

BORING LOG | P02

Site Address: 631 Queen Anne Avenue North, Seattle, Washington

Water Depth At Time of Drilling: 11 feet bgs
Water Depth After Completion: -- feet bgs

Depth (feet bgs)	Interval	Blow Count	% Recovery	PID (ppmv)	Sample ID	USCS Class	Graphic	Lithologic Description	Well Construction Detail
0						SM		**Asphalt at surface.**	
			80	1.0				**Damp, dense, silty SAND with gravel, brown, no hydrocarbon odor (20-75-5).**	
				1.3	P02-04			**Moist, dense, silty SAND with gravel, brown, no hydrocarbon odor (20-75-5).**	
5			80	1.0					
				0.8	P02-08	SP		**Moist, dense, medium to fine SAND with silt and gravel, brown, no hydrocarbon odor (10-85-5).**	
				2.4					
10			90						
				24.7	P02-11			**Wet, dense, medium to fine SAND with silt and gravel, brown, moderate hydrocarbon odor (10-85-5).**	
				4.3					
			100						
15									

Drilling Co./Driller:	ESN/Don		**Well/Auger Diameter:**	--/2	inches	**Notes/Comments:**
Drilling Equipment:	Direct Push		**Well Screened Interval:**	--	feet bgs	
Sampler Type:	--		**Screen Slot Size:**	--	inches	
Hammer Type/Weight:	--	lbs	**Filter Pack Used:**	--		
Total Boring Depth:	24	feet bgs	**Surface Seal:**	Asphalt		
Total Well Depth:	--	feet bgs	**Annular Seal:**	Bentonite		
State Well ID No.:	--		**Monument Type:**	--		

SoundEarth Strategies

Project:	Arnold's Property
Project Number:	0320-001
Logged by:	RAH
Date Started:	5/2/12
Surface Conditions:	Asphalt
Well Location N/S:	0' S of MW13
Well Location E/W:	11.5' W of MW13
Reviewed by:	RKB
Date Completed:	5/2/12

BORING LOG | P02

Site Address: 631 Queen Anne Avenue North, Seattle, Washington

Water Depth At Time of Drilling: 11 feet bgs
Water Depth After Completion: -- feet bgs

Depth (feet bgs)	Interval	Blow Count	% Recovery	PID (ppmv)	Sample ID	USCS Class	Graphic	Lithologic Description	Well Construction Detail
15				4.3	P02-16				
				1.9					
			--						
20				2.4	P02-20				
				1.0		ML		**Damp, dense, SILT with fine sand, gray, no hydrocarbon odor (60-40-0).**	
			--						
				0.5	P02-24				
								Boring terminated at 24' bgs.	
25									
30									

Drilling Co./Driller:	ESN/Don		**Well/Auger Diameter:**	--/2	inches	**Notes/Comments:**
Drilling Equipment:	Direct Push		**Well Screened Interval:**	--	feet bgs	
Sampler Type:	--		**Screen Slot Size:**	--	inches	
Hammer Type/Weight:	--	lbs	**Filter Pack Used:**	--		
Total Boring Depth:	24	feet bgs	**Surface Seal:**	Asphalt		
Total Well Depth:	--	feet bgs	**Annular Seal:**	Bentonite		
State Well ID No.:	--		**Monument Type:**	--		

SoundEarth Strategies

Project:	Arnold's Property
Project Number:	0320-001
Logged by:	RAH
Date Started:	5/2/12
Surface Conditions:	Asphalt
Well Location N/S:	2.0' S of MW09
Well Location E/W:	75.2' E of MW09
Reviewed by:	RKB
Date Completed:	5/2/12

BORING LOG | P03

Site Address: 631 Queen Anne Avenue North, Seattle, Washington

Water Depth At Time of Drilling: 11 feet bgs
Water Depth After Completion: -- feet bgs

Depth (feet bgs)	Interval	Blow Count	% Recovery	PID (ppmv)	Sample ID	USCS Class	Graphic	Lithologic Description	Well Construction Detail
0						SM		**Asphalt at surface.**	
								Damp, dense, silty SAND with gravel, brown, no hydrocarbon odor (20-70-10).	
			80	1.9					
				34.5	P03-04			**Damp, dense, silty SAND with gravel, dark brown, moderate hydrocarbon odor (20-75-5).**	
5								**Damp, dense, silty SAND with gravel, brown, no hydrocarbon odor (20-70-10).**	
			80	4.9					
				2.9	P03-08	SP		**Moist, dense, medium to fine SAND with silt and gravel, brown, no hydrocarbon odor (5-90-5).**	
				4.6					
10			100						
				100.2	P03-11			**Wet, dense, medium to fine SAND with silt and gravel, gray to brownish gray, moderate to strong hydrocarbon odor (5-90-5).**	
				23.6					
			100						
15									

Drilling Co./Driller:	ESN/Don		**Well/Auger Diameter:**	--/2	inches	**Notes/Comments:**
Drilling Equipment:	Direct Push		**Well Screened Interval:**	--	feet bgs	
Sampler Type:	--		**Screen Slot Size:**	--	inches	
Hammer Type/Weight:	--	lbs	**Filter Pack Used:**	--		
Total Boring Depth:	24	feet bgs	**Surface Seal:**	Asphalt		
Total Well Depth:	--	feet bgs	**Annular Seal:**	Bentonite		
State Well ID No.:	--		**Monument Type:**	--		

SoundEarth Strategies

Project:	Arnold's Property
Project Number:	0320-001
Logged by:	RAH
Date Started:	5/2/12
Surface Conditions:	Asphalt
Well Location N/S:	2.0' S of MW09
Well Location E/W:	75.2' E of MW09
Reviewed by:	RKB
Date Completed:	5/2/12

BORING LOG | P03

Site Address: 631 Queen Anne Avenue North, Seattle, Washington

Water Depth At Time of Drilling: 11 feet bgs
Water Depth After Completion: -- feet bgs

Depth (feet bgs)	Interval	Blow Count	% Recovery	PID (ppmv)	Sample ID	USCS Class	Graphic	Lithologic Description	Well Construction Detail
15				203.5	P03-15				
						ML		**Damp, dense, SILT with fine sand, dark brown, no hydrocarbon odor (60-40-0).**	
				648		SP		**Wet, dense, medium to fine SAND with silt and gravel, gray, strong hydrocarbon odor (10-80-10).**	
			100						
								Wet, dense, medium to fine SAND with silt and gravel, gray, no hydrocarbon odor (10-80-10).	
20				4.0	P03-20			**Wet, dense, medium to fine SAND with silt and gravel, brown, no hydrocarbon odor (10-80-10).**	
				4.0					
			--						
				2.7	P03-24				
								Boring terminated at 24' bgs.	
25									
30									

Drilling Co./Driller:	ESN/Don		**Well/Auger Diameter:**	--/2	inches	**Notes/Comments:**
Drilling Equipment:	Direct Push		**Well Screened Interval:**	--	feet bgs	
Sampler Type:	--		**Screen Slot Size:**	--	inches	
Hammer Type/Weight:	--	lbs	**Filter Pack Used:**	--		
Total Boring Depth:	24	feet bgs	**Surface Seal:**	Asphalt		
Total Well Depth:	--	feet bgs	**Annular Seal:**	Bentonite		
State Well ID No.:	--		**Monument Type:**	--		

SoundEarth Strategies

Project:	Arnold's Property
Project Number:	0320-001
Logged by:	RAH
Date Started:	5/2/12
Surface Conditions:	Asphalt
Well Location N/S:	7.6' S of DPE-G
Well Location E/W:	10.0' E of DPE-C
Reviewed by:	RKB
Date Completed:	5/2/12

BORING LOG | P04

Site Address: 631 Queen Anne Avenue North, Seattle, Washington

Water Depth At Time of Drilling: 11 feet bgs
Water Depth After Completion: -- feet bgs

Depth (feet bgs)	Interval	Blow Count	% Recovery	PID (ppmv)	Sample ID	USCS Class	Graphic	Lithologic Description	Well Construction Detail
0						SM		**Asphalt at surface.**	
								Damp, dense, silty SAND with gravel, light brown, no hydrocarbon odor (20-70-10).	
			90	1.0					
				1.9	P04-04			**Damp, dense, silty SAND with gravel, light brown, no hydrocarbon odor (20-75-5).**	
5									
			90	2.1					
				3.8	P04-08			**Damp, dense, silty SAND with gravel, light brown, no hydrocarbon odor (20-70-10).**	
				4.6		SP		**Moist, dense, medium to fine SAND with silt and gravel, grayish-brown, no hydrocarbon odor (10-80-10).**	
10			--						
				567	P04-11			**Wet, dense, medium to fine SAND with silt and gravel, gray, strong hydrocarbon odor (10-80-10).**	
			--						
15									

Drilling Co./Driller:	ESN/Don		**Well/Auger Diameter:**	--/2	inches	**Notes/Comments:**
Drilling Equipment:	Direct Push		**Well Screened Interval:**	--	feet bgs	
Sampler Type:	--		**Screen Slot Size:**	--	inches	
Hammer Type/Weight:	--	lbs	**Filter Pack Used:**	--		
Total Boring Depth:	24	feet bgs	**Surface Seal:**	Asphalt		
Total Well Depth:	--	feet bgs	**Annular Seal:**	Bentonite		
State Well ID No.:	--		**Monument Type:**	--		

SoundEarth Strategies

Project:	Arnold's Property
Project Number:	0320-001
Logged by:	RAH
Date Started:	5/2/12
Surface Conditions:	Asphalt
Well Location N/S:	7.6' S of DPE-G
Well Location E/W:	10.0' E of DPE-C
Reviewed by:	RKB
Date Completed:	5/2/12

BORING LOG | P04

Site Address: 631 Queen Anne Avenue North, Seattle, Washington

Water Depth At Time of Drilling: 11 feet bgs
Water Depth After Completion: -- feet bgs

Depth (feet bgs)	Interval	Blow Count	% Recovery	PID (ppmv)	Sample ID	USCS Class	Graphic	Lithologic Description	Well Construction Detail
15				76.2	P04-15			**Wet, dense, medium to fine SAND with silt and gravel, brownish-gray, slight hydrocarbon odor (5-85-10).**	
				63.2					
			100						
								Wet, dense, medium to fine SAND with silt and gravel, brown, no hydrocarbon odor (5-95-0).	
20				9.5	P04-20				
				3.9					
				2.4	P04-24				
								Boring terminated at 24' bgs.	
25									
30									

Drilling Co./Driller:	ESN/Don		**Well/Auger Diameter:**	--/2	inches	**Notes/Comments:**
Drilling Equipment:	Direct Push		**Well Screened Interval:**	--	feet bgs	
Sampler Type:	--		**Screen Slot Size:**	--	inches	
Hammer Type/Weight:	--	lbs	**Filter Pack Used:**	--		
Total Boring Depth:	24	feet bgs	**Surface Seal:**	Asphalt		
Total Well Depth:	--	feet bgs	**Annular Seal:**	Bentonite		
State Well ID No.:	--		**Monument Type:**	--		

SoundEarth Strategies

Project:	Arnold's Property
Project Number:	0320-001
Logged by:	RAH
Date Started:	5/2/12
Surface Conditions:	Asphalt
Well Location N/S:	8' N of DPE-6
Well Location E/W:	27.8' W of DPE-6
Reviewed by:	RKB
Date Completed:	5/2/12

BORING LOG | P05

Site Address: 631 Queen Anne Avenue North, Seattle, Washington

Water Depth At Time of Drilling: 11 feet bgs
Water Depth After Completion: -- feet bgs

Depth (feet bgs)	Interval	Blow Count	% Recovery	PID (ppmv)	Sample ID	USCS Class	Graphic	Lithologic Description	Well Construction Detail
0			100	1.6		SP		**Asphalt at surface.** **Damp, dense, medium to fine SAND with gravel and silt, light brown, no hydrocarbon odor (10-80-10).**	
5			80	29.1	P05-04	SM		**Damp, dense, silty SAND with gravel, dark brown, moderate hydrocarbon odor (20-75-5).**	
				30.0				**Damp, dense, silty SAND with gravel, dark brown, brick fragments and fill debris towards bottom, no hydrocarbon odor (20-70-10).**	
				2.4	P05-08				
10			--	6.0					
				6.2	P05-11	SP		**Wet, dense, medium to fine SAND with silt and gravel, dark brown to dark gray, slight hydrocarbon odor (10-85-5).**	
				10.3				**Wet, dense, medium to fine SAND with silt, dark brown to dark gray, slight hydrocarbon odor (10-90-0).**	
15			--						

Drilling Co./Driller:	ESN/Don		**Well/Auger Diameter:**	--/2	inches	**Notes/Comments:**
Drilling Equipment:	Direct Push		**Well Screened Interval:**	--	feet bgs	
Sampler Type:	--		**Screen Slot Size:**	--	inches	
Hammer Type/Weight:	--	lbs	**Filter Pack Used:**	--		
Total Boring Depth:	24	feet bgs	**Surface Seal:**	Asphalt		
Total Well Depth:	--	feet bgs	**Annular Seal:**	Bentonite		
State Well ID No.:	--		**Monument Type:**	--		

SoundEarth Strategies

Project:	Arnold's Property
Project Number:	0320-001
Logged by:	RAH
Date Started:	5/2/12
Surface Conditions:	Asphalt
Well Location N/S:	8' N of DPE-6
Well Location E/W:	27.8' W of DPE-6
Reviewed by:	RKB
Date Completed:	5/2/12

BORING LOG | P05

Site Address: 631 Queen Anne Avenue North, Seattle, Washington

Water Depth At Time of Drilling: 11 feet bgs
Water Depth After Completion: -- feet bgs

Depth (feet bgs)	Interval	Blow Count	% Recovery	PID (ppmv)	Sample ID	USCS Class	Graphic	Lithologic Description	Well Construction Detail
15				12.5	P05-15			**Wet, dense, medium to fine SAND with silt, brown, no hydrocarbon odor (5-95-0).**	
				12.5				**Moist, dense, medium to fine SAND with gravel and silt, brown, no hydrocarbon odor (10-80-10).**	
			--						
								Wet, dense, medium to fine SAND, dark gray, strong hydrocarbon odor (5-95-0).	
20				827	P05-20				
								Wet, dense, medium to fine SAND with silt, grayish-brown, slight hydrocarbon odor (5-95-0).	
			100	46.8					
								Wet, dense, medium to fine SAND with silt, brown, no hydrocarbon odor (5-95-0).	
				3.5	P05-24				
25								**Boring terminated at 24' bgs.**	
30									

Drilling Co./Driller:	ESN/Don		**Well/Auger Diameter:**	--/2	inches	**Notes/Comments:**
Drilling Equipment:	Direct Push		**Well Screened Interval:**	--	feet bgs	
Sampler Type:	--		**Screen Slot Size:**	--	inches	
Hammer Type/Weight:	--	lbs	**Filter Pack Used:**	--		
Total Boring Depth:	24	feet bgs	**Surface Seal:**	Asphalt		
Total Well Depth:	--	feet bgs	**Annular Seal:**	Bentonite		
State Well ID No.:	--		**Monument Type:**	--		

SoundEarth Strategies

Project:	Arnold's Property
Project Number:	0320-001
Logged by:	RAH
Date Started:	5/2/12
Surface Conditions:	Asphalt
Well Location N/S:	6.6' S of MW09
Well Location E/W:	23.3' W of MW09
Reviewed by:	RKB
Date Completed:	5/2/12

BORING LOG | P06

Site Address: 631 Queen Anne Avenue North, Seattle, Washington

Water Depth At Time of Drilling: 11 feet bgs
Water Depth After Completion: -- feet bgs

Depth (feet bgs)	Interval	Blow Count	% Recovery	PID (ppmv)	Sample ID	USCS Class	Graphic	Lithologic Description	Well Construction Detail
0			90	1.0		SM		**Asphalt at surface.** **Damp, dense, silty SAND with gravel and brick fragments, light brown, no hydrocarbon odor (20-70-10).**	
				1.0	P06-04	ML		**Damp, dense SILT with gravel and fine sand, dark brown, no hydrocarbon odor (40-50-10).**	
5			--	1.0		SP		**Damp, dense, medium to fine SAND, light brown, no hydrocarbon odor (5-95-0).**	
				0.8	P06-07	ML		**Damp, dense, SILT with fine sand and wood fragments, dark brown, no hydrocarbon odor (40-50-10).**	
						SP		**Moist, dense, medium to fine SAND with silt, brown, no hydrocarbon odor (5-95-0).**	
10			--	4.3					
				74.3	P06-11			**Wet, dense, medium to fine SAND with silt brownish grey, slight hydrocarbon odor (10-80-10).**	
			--	116	P06-14				
15									

Drilling Co./Driller:	ESN/Don		**Well/Auger Diameter:**	--/2	inches	**Notes/Comments:**
Drilling Equipment:	Direct Push		**Well Screened Interval:**	--	feet bgs	
Sampler Type:	--		**Screen Slot Size:**	--	inches	
Hammer Type/Weight:	--	lbs	**Filter Pack Used:**	--		
Total Boring Depth:	24	feet bgs	**Surface Seal:**	Asphalt		
Total Well Depth:	--	feet bgs	**Annular Seal:**	Bentonite		
State Well ID No.:	--		**Monument Type:**	--		

SoundEarth Strategies

Project:	Arnold's Property
Project Number:	0320-001
Logged by:	RAH
Date Started:	5/2/12
Surface Conditions:	Asphalt
Well Location N/S:	6.6' S of MW09
Well Location E/W:	23.3' W of MW09
Reviewed by:	RKB
Date Completed:	5/2/12

BORING LOG | P06

Site Address: 631 Queen Anne Avenue North
Seattle, Washington

Water Depth At Time of Drilling: 11 feet bgs
Water Depth After Completion: -- feet bgs

Depth (feet bgs)	Interval	Blow Count	% Recovery	PID (ppmv)	Sample ID	USCS Class	Graphic	Lithologic Description	Well Construction Detail
15				28.7				**Wet, dense, medium to fine SAND with gravel and silt, brownish gray to gray, slight to moderate hydrocarbon odor (10-80-10).**	
			--						
				PID inoperable	P06-19				
20								**Wet, dense, medium SAND with silt and gravel, gray, no hydrocarbon odor (5-90-5).**	
			--						
				PID inoperable	P06-24				
								Boring terminated at 24' bgs.	
25									
30									

Drilling Co./Driller:	ESN/Don		**Well/Auger Diameter:**	-/2	inches	**Notes/Comments:**
Drilling Equipment:	Direct Push		**Well Screened Interval:**	--	feet bgs	
Sampler Type:	--		**Screen Slot Size:**	--	inches	
Hammer Type/Weight:	--	lbs	**Filter Pack Used:**	--		
Total Boring Depth:	24	feet bgs	**Surface Seal:**	Asphalt		
Total Well Depth:	--	feet bgs	**Annular Seal:**	Bentonite		
State Well ID No.:	--		**Monument Type:**	--		

SoundEarth Strategies

Project:	Arnold's Property
Project Number:	0320-001
Logged by:	RAH
Date Started:	5/2/12
Surface Conditions:	Asphalt
Well Location N/S:	26' S of MW09
Well Location E/W:	31' W of MW09
Reviewed by:	RKB
Date Completed:	5/2/12

BORING LOG | P07

Site Address: 631 Queen Anne Avenue North, Seattle, Washington

Water Depth At Time of Drilling: 11 feet bgs
Water Depth After Completion: -- feet bgs

Depth (feet bgs)	Interval	Blow Count	% Recovery	PID (ppmv)	Sample ID	USCS Class	Graphic	Lithologic Description	Well Construction Detail
0						SM		**Asphalt at surface.**	
			90					**Damp, dense, silty SAND with gravel, light brown, no hydrocarbon odor (20-70-10).**	
				PID Inoperable	P07-04			**Damp, dense, silty SAND with gravel, dark brown, slight hydrocarbon odor (20-75-5).**	
5			90						
				PID Inoperable	P07-08			**Damp, dense, silty SAND with gravel and asphalt debris, dark brown, strong hydrocarbon odor (20-75-5).**	
								Damp, dense, silty SAND with gravel, dark brown, slight hydrocarbon odor (20-75-5).	
10			80			SP		**Wet, dense, medium to fine SAND with silt, dark gray, slight hydrocarbon odor (5-95-0).**	
				PID Inoperable	P07-11				
								Wet, dense, medium to fine SAND, dark gray, strong hydrocarbon odor (5-95-0).	
			100	315	P07-14				
15									

Drilling Co./Driller:	ESN/Don		**Well/Auger Diameter:**	--/2	inches	**Notes/Comments:**
Drilling Equipment:	Direct Push		**Well Screened Interval:**	--	feet bgs	
Sampler Type:	--		**Screen Slot Size:**	--	inches	
Hammer Type/Weight:	--	lbs	**Filter Pack Used:**	--		
Total Boring Depth:	24	feet bgs	**Surface Seal:**	Asphalt		
Total Well Depth:	--	feet bgs	**Annular Seal:**	Bentonite		
State Well ID No.:	--		**Monument Type:**	--		

SoundEarth Strategies

Project:	Arnold's Property
Project Number:	0320-001
Logged by:	RAH
Date Started:	5/2/12
Surface Conditions:	Asphalt
Well Location N/S:	26' S of MW09
Well Location E/W:	31' W of MW09
Reviewed by:	RKB
Date Completed:	5/2/12

BORING LOG | P07

Site Address: 631 Queen Anne Avenue North
Seattle, Washington

Water Depth At Time of Drilling: 11 feet bgs
Water Depth After Completion: -- feet bgs

Depth (feet bgs)	Interval	Blow Count	% Recovery	PID (ppmv)	Sample ID	USCS Class	Graphic	Lithologic Description	Well Construction Detail
15				326				**Wet, dense, medium to fine SAND, reddish-brown, slight hydrocarbon odor (5-95-0).**	
				7.2					
			--					**Silt lens.**	
								Wet, dense, medium to fine SAND, dark gray, strong hydrocarbon odor (5-95-0).	
20				476	P07-20				
			--	285					
				4.2	P07-24			**Wet, dense, medium to fine SAND, gray, slight hydrocarbon odor (5-95-0).**	
								Boring terminated at 24' bgs.	
25									
30									

Drilling Co./Driller:	ESN/Don		**Well/Auger Diameter:**	-/2	inches	**Notes/Comments:**
Drilling Equipment:	Direct Push		**Well Screened Interval:**	--	feet bgs	
Sampler Type:	--		**Screen Slot Size:**	--	inches	
Hammer Type/Weight:	--	lbs	**Filter Pack Used:**	--		
Total Boring Depth:	24	feet bgs	**Surface Seal:**	Asphalt		
Total Well Depth:	--	feet bgs	**Annular Seal:**	Bentonite		
State Well ID No.:	--		**Monument Type:**	--		

SoundEarth Strategies

Project:	Arnold's Property
Project Number:	0320-001
Logged by:	RAH
Date Started:	5/2/12
Surface Conditions:	Asphalt
Well Location N/S:	4.4' S of NW corner of ramp
Well Location E/W:	4.8' W of NW corner of ramp
Reviewed by:	RKB
Date Completed:	5/2/12

BORING LOG | P08

Site Address: 631 Queen Anne Avenue North, Seattle, Washington

Water Depth At Time of Drilling: 11 feet bgs
Water Depth After Completion: -- feet bgs

Depth (feet bgs)	Interval	Blow Count	% Recovery	PID (ppmv)	Sample ID	USCS Class	Graphic	Lithologic Description	Well Construction Detail
0			--			Blank		**Asphalt at surface.** **Rotten log.**	
5			50						
				0.2	P08-08	SM		**Damp, loose, silty SAND with gravel, dark brown, no hydrocarbon odor (20-75-5).** **Moist, dense, silty SAND with gravel, dark brown, no hydrocarbon odor (20-75-5).**	
10			80	0.3		SP		**Wet, dense, medium to fine SAND with silt, brownish-gray, no hydrocarbon odor (5-95-0).**	
				3.7	P08-11				
			75	662	P08-14			**Wet, medium to fine SAND with silt, gray, strong hydrocarbon hydrocarbon odor (5-95-0).**	
15									

Drilling Co./Driller:	ESN/Don		**Well/Auger Diameter:**	--/2	inches	**Notes/Comments:**
Drilling Equipment:	Direct Push		**Well Screened Interval:**	--	feet bgs	
Sampler Type:	--		**Screen Slot Size:**	--	inches	
Hammer Type/Weight:	--	lbs	**Filter Pack Used:**	--		
Total Boring Depth:	28	feet bgs	**Surface Seal:**	Asphalt		
Total Well Depth:	--	feet bgs	**Annular Seal:**	Bentonite		
State Well ID No.:	--		**Monument Type:**	--		

SoundEarth Strategies

Project:	Arnold's Property
Project Number:	0320-001
Logged by:	RAH
Date Started:	5/2/12
Surface Conditions:	Asphalt
Well Location N/S:	4.4' S of NW corner of ramp
Well Location E/W:	4.8' W of NW corner of ramp
Reviewed by:	RKB
Date Completed:	5/2/12

BORING LOG | P08

Site Address: 631 Queen Anne Avenue North, Seattle, Washington

Water Depth At Time of Drilling: 11 feet bgs
Water Depth After Completion: -- feet bgs

Depth (feet bgs)	Interval	Blow Count	% Recovery	PID (ppmv)	Sample ID	USCS Class	Graphic	Lithologic Description	Well Construction Detail
15				36.0	P08-16			**Wet, dense, medium to fine SAND, gray, no hydrocarbon odor (5-95-0).**	
				237				**Moist, dense, medium to fine SAND, brown, strong hydrocarbon odor (5-95-0).**	
			90						
				298	P08-19				
20								**Wet, dense, medium to fine SAND, brown, strong hydrocarbon odor (5-95-0).**	
			--	277					
				30.1		ML		**Damp, dense, SILT with fine sand, brown, moderate hydrocarbon odor (60-40-0).**	
25			--	7.0				**Damp, dense, SILT with fine sand, gray, no hydrocarbon odor (70-30-0).**	
				2.4	P08-28				
								Boring terminated at 28' bgs.	
30									

Drilling Co./Driller:	ESN/Don		**Well/Auger Diameter:**	--/2	inches	**Notes/Comments:**
Drilling Equipment:	Direct Push		**Well Screened Interval:**	--	feet bgs	
Sampler Type:	--		**Screen Slot Size:**	--	inches	
Hammer Type/Weight:	--	lbs	**Filter Pack Used:**	--		
Total Boring Depth:	28	feet bgs	**Surface Seal:**	Asphalt		
Total Well Depth:	--	feet bgs	**Annular Seal:**	Bentonite		
State Well ID No.:	--		**Monument Type:**	--		

SoundEarth Strategies

Project:	Arnold's Property
Project Number:	0320-001
Logged by:	RAH
Date Started:	5/2/12
Surface Conditions:	Asphalt
Well Location N/S:	0' N of DPE-7
Well Location E/W:	8.7' W of DPE-7
Reviewed by:	RKB
Date Completed:	5/2/12

BORING LOG | P09

Site Address: 631 Queen Anne Avenue North, Seattle, Washington

Water Depth At Time of Drilling: 12 feet bgs
Water Depth After Completion: -- feet bgs

Depth (feet bgs)	Interval	Blow Count	% Recovery	PID (ppmv)	Sample ID	USCS Class	Graphic	Lithologic Description	Well Construction Detail
0						SM		**Asphalt at surface.** **Damp, loose, silty SAND with gravel, dark brown, no hydrocarbon odor (20-75-5).**	
			90	0.9		SP		**Damp, loose, medium to fine SAND with silt, light brown, no hydrocarbon odor (5-95-0).**	
5			100	0.8 0.8 1.5	P09-03 P09-08	SM		**Damp, loose, silty SAND with gravel, dark brown, no hydrocarbon odor (20-75-5).**	
10			--	1.6 6.5 16	P09-12	SP		**Moist, dense, medium to fine SAND with silt, light brown, no hydrocarbon odor (5-95-0).** **Wet, dense, medium to fine SAND with silt, light brown, no hydrocarbon odor (5-95-0).**	
15			--						

Drilling Co./Driller:	ESN/Don		**Well/Auger Diameter:**	--/2	inches	**Notes/Comments:**
Drilling Equipment:	Direct Push		**Well Screened Interval:**	--	feet bgs	
Sampler Type:	--		**Screen Slot Size:**	--	inches	
Hammer Type/Weight:	--	lbs	**Filter Pack Used:**	--		
Total Boring Depth:	24	feet bgs	**Surface Seal:**	Asphalt		
Total Well Depth:	--	feet bgs	**Annular Seal:**	Bentonite		
State Well ID No.:	--		**Monument Type:**	--		

SoundEarth Strategies

Project:	Arnold's Property
Project Number:	0320-001
Logged by:	RAH
Date Started:	5/2/12
Surface Conditions:	Asphalt
Well Location N/S:	0' N of DPE-7
Well Location E/W:	8.7' W of DPE-7
Reviewed by:	RKB
Date Completed:	5/2/12

BORING LOG | P09

Site Address: 631 Queen Anne Avenue North, Seattle, Washington

Water Depth At Time of Drilling: 12 feet bgs
Water Depth After Completion: -- feet bgs

Depth (feet bgs)	Interval	Blow Count	% Recovery	PID (ppmv)	Sample ID	USCS Class	Graphic	Lithologic Description	Well Construction Detail
15				177	P09-15			**Wet, dense, medium to fine SAND, dark gray, strong hydrocarbon odor (5-95-0).**	
								Wet, dense, medium to fine SAND, brown.	
				2.3					
			90						
								Wet, dense, medium to fine SAND with silt, gray, moderate hydrocarbon odor (5-95-0).	
20				42.3	P09-20				
				4.7				**Wet, dense, medium to fine SAND with silt, light gray to gray, no hydrocarbon odor (5-95-0).**	
			-						
				4.4	P09-24				
								Boring terminated at 24' bgs.	
25									
30									

Drilling Co./Driller:	ESN/Don		**Well/Auger Diameter:**	--/2	inches	**Notes/Comments:**
Drilling Equipment:	Direct Push		**Well Screened Interval:**	--	feet bgs	
Sampler Type:	--		**Screen Slot Size:**	--	inches	
Hammer Type/Weight:	--	lbs	**Filter Pack Used:**	--		
Total Boring Depth:	24	feet bgs	**Surface Seal:**	Asphalt		
Total Well Depth:	--	feet bgs	**Annular Seal:**	Bentonite		
State Well ID No.:	--		**Monument Type:**	--		

BORING LOG Page 1 of 3

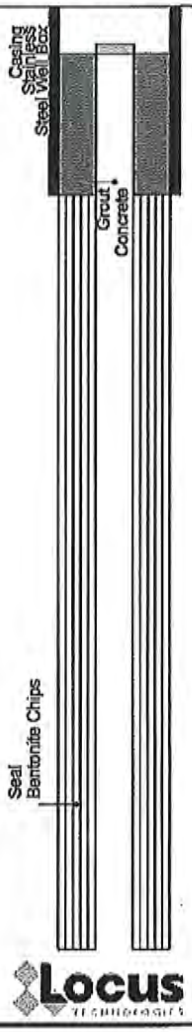
From Science to Solutions™

Well No: DPE-5
Chevron Site No: 211577
Site Location: 631 QUEEN ANNE AVE N SEATTLE WA
Date: 10/26/2005 - 10/31/2005

Well Diameter: 4 in	Driller: Cascade Drilling, Inc.	Total Depth: 28.0 Ft
Well Depth: 28 Ft	Drilling Method: Sonic Drilling	GW Depth: 18.0 Ft
Well Screen: 14-24 Ft 10 Slot	Consultant: SAIC	
Filter Pack: 16/30 Colorado Snd	Well Casing: Sch 40 PVC Elevation (TOC): 146.68 Ft	

Recov.	Depth Ft	Moist.	Blow Cnt	PPM	Soil Code	Soil Pattern	Soil Description
	0						Concrete and Asphalt. Airknife to 10 feet bgs.
		Moist			SW		Brown, very dense, fine to coarse SAND with silt and gravel.
	5						
		Moist			SP		Brown, dense, fine to medium SAND.
	10						

Well Construction



Locus

BORING LOG

From Science to Solutions™

Well No: DPE-5
Chevron Site No: 211577
Site Location: 631 QUEEN ANNE AVE N SEATTLE WA
Date: 10/26/2005 - 10/31/2005

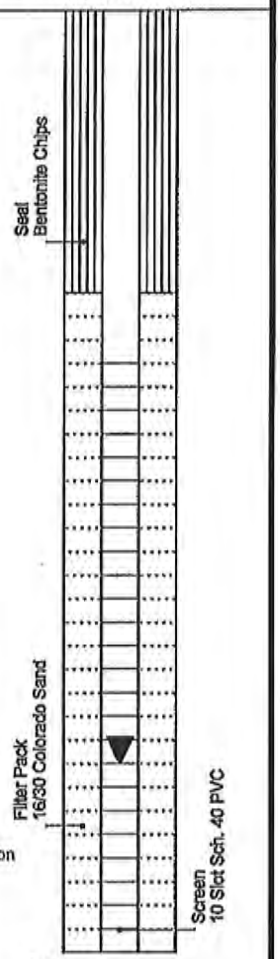
Well Diameter: 4 In
Well Depth: 28 Ft
Well Screen: 14-24 Ft 10 Slot
Filter Pack: 16/30 Colorado Snd

Driller: Cascade Drilling, Inc.
Drilling Method: Sonic Drilling
Consultant: SAIC
Well Casing: Sch 40 PVC
Elevation (TOC): 146.68 Ft

Total Depth: 28.0 Ft
GW Depth: 18.0 Ft

Recov.	Depth Ft	Moist.	Blow Cnt	PPM	Soil Code	Soil Pattern	Soil Description
	10	Moist		45.1	SW		Brown to gray, dense, fine to coarse SAND with 10% gravel and 5% silt; no odor; no sheen.
		Moist		86.9			Same as above; moderate odor; strong sheen.
		Moist		215	SP		Gray, fine to medium SAND with 10% silt and no gravel; strong odor; moderate sheen.
	15			1908			
		Moist		2073			Gray, fine to medium SAND, no gravel, no silt; strong odor; moderate sheen.
		Wet		2214	SM-SP		Gray, fine to medium SAND with two 2-inch silt layers interbedded; no gravel; strong odor; moderate sheen.
		Moist		2806	ML		Brown, reddish, sandy silt with 15% fine to medium sand and 5% gravel; dropstones and iron oxidation present; slight HC odor; slight sheen. (TILL?)
		Moist		1656			
	20			1165	SP		

Well Construction



Locus Technologies

BORING LOG

From Science to Solutions™

Well No: DPE-5
Chevron Site No: 211577
Site Location: 631 QUEEN ANNE AVE N SEATTLE WA
Date: 10/26/2005 - 10/31/2005

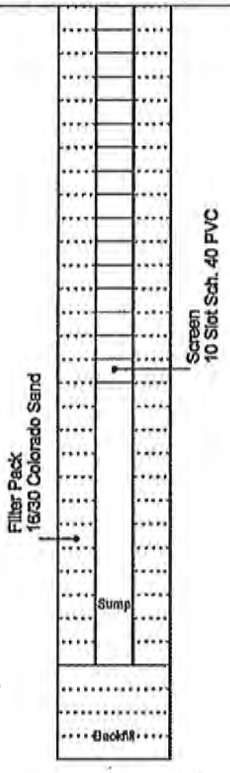
Well Diameter: 4 in
Well Depth: 28 Ft
Well Screen: 14-24 Ft 10 Slot
Filter Pack: 16/30 Colorado Snd

Driller: Cascade Drilling, Inc.
Drilling Method: Sonic Drilling
Consultant: SAIC
Well Casing: Sch 40 PVC Elevation (TOC): 146.68 Ft

Total Depth: 28.0 Ft
GW Depth: 18.0 Ft

Recov.	Depth Ft	Moist.	Blow Cnt	PPM	Soil Code	Soil Pattern	Soil Description
	20	Moist		1569	SP		Gray, fine to coarse SAND with 5% silt and 10% gravel; moderate HC odor; moderate sheen.
		Wet		1412	ML		Gray, fine sandy SILT with 15% SAND; moderate HC odor; strong sheen.
		Wet		2107	SP-SM		Brown to slightly gray, fine to coarse SAND with 15% gravel and 10% silt; strong HC odor; strong sheen.
				782			
				852			
				176			
	25						
		Dry		217	ML/CL		Gray, SILT with moderate plasticity and 10% gravel in upper 1.5 feet; no odor; no sheen.
				29			
				31.8			
				40.0			
	28.0						

Well Construction



Locus Technologies

BORING LOG

From Science to Solutions™

Well No: DPE-6
Chevron Site No: 211577
Site Location: 631 Queen Anne Ave N, Seattle, WA
Date: 10/17/2005

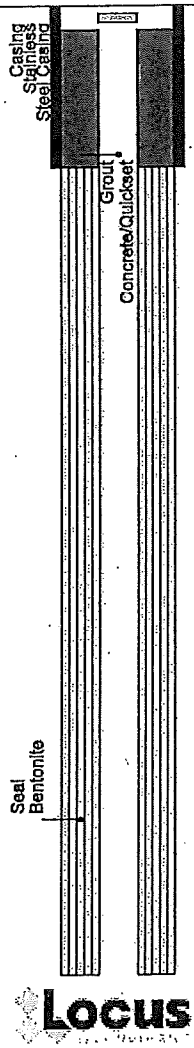
Well Diameter: 4 inches
Well Depth: 33.5 ft
Well Screen: 15.5-30.5 ft 10-Slot
Filter Pack: 16/30 Colorado Snd

Driller: Cascade Drilling, Inc.
Method: AirPercussion, Hollow Stem
Consultant: Gabriel Cisneros (SAIC, Bothell)
Well Casing: Sch 40 PVC Elevation (TOC): 146.19 msl

Total Depth: 33.5 Ft
GW Depth: 19.5 Ft

Recov.	Depth Ft	Moist.	Blow Cnt	OVM	Soil Code	Soil Pattern	Soil Description
	0	Moist			SW		Asphalt top 2-inches. Airknifed to 8 feet bgs. FILL: Brown, silty, gravelly SAND with chunks of concrete.
	5	Moist			SP-SM		Gray to brown, silty, fine to medium SAND with a silt layer at 8.25 feet and organics, no gravel; no odor; no sheen.
		Moist	8/13/16				Brown, fine to coarse SAND with thin interbeds of silt; less than 5% silt in sand beds, no gravel; slight odor; moderate sheen.
	10	Moist	15/50				Brown to gray, fine to medium, SAND interbedded with thin, organic, gray silt layers; no gravel and less than 5% silt in sandy layers; slight odor; moderate sheen in sandy layers.
		Moist					
	12						

Well Construction



Locus

BORING LOG

SAIC From Science to Solutions™

Well No: DPE-6
Chevron Site No: 211577
Site Location: 631 Queen Anne Ave N, Seattle, WA
Date: 10/17/2005

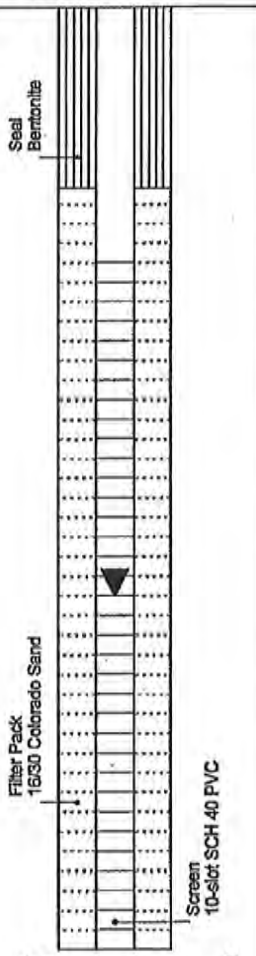
Well Diameter: 4 Inches
Well Depth: 33.5 ft
Well Screen: 15.5-30.5 ft 10-Slot
Filter Pack: 16/30 Colorado Snd

Driller: Cascade Drilling, Inc.
Method: AirPercussion, Hollow Stem
Consultant: Gabriel Cisneros (SAIC, Bothell)
Well Casing: Sch 40 PVC Elevation (TOC): 146.19 msl

Total Depth: 33.5 Ft
GW Depth: 19.5 Ft

Recov	Depth Ft	Moist.	Blow Cnt	OVM	Soil Code	Soil Pattern	Soil Description
	12	Moist					Same as above; moderate odor; moderate sheen.
			50				Same as above.
	15	Moist			SP-SM		Same as above; Brown to gray, fine to medium SAND with a 2-inch silt layer at top and 1-inch silt layer at bottom; 10% silt in sand layers; HC odor; moderate sheen.
		Moist	50				Same as above.
		Moist					Same as above; moderate HC odor; moderate sheen.
			16/50		SP		Orangish brown; fine to medium SAND; no silt; no gravel; no odor; no sheen.
	20	Moist			SP-SM		Gray, silty, fine to medium SAND with 30% silt and an organic silt layer at top; strong HC odor; moderate sheen.
			13/32/50		SP		Gray, fine to medium SAND with 5% silt; moderate HC odor; moderate sheen.
		Moist			SM		Gray, fine, silty SAND with 30% silt; moderate odor; no sheen.
		Wet					Same as above.
		Wet	50		SP		Orangish brown, fine to coarse SAND with 5% silt; no gravel; slight HC odor; slight sheen.
	24						

Well Construction



Locus Technologies

BORING LOG

From Science to Solutions™

Well No: DPE-6
Chevron Site No: 211577
Site Location: 631 Queen Anne Ave N, Seattle, WA
Date: 10/17/2005

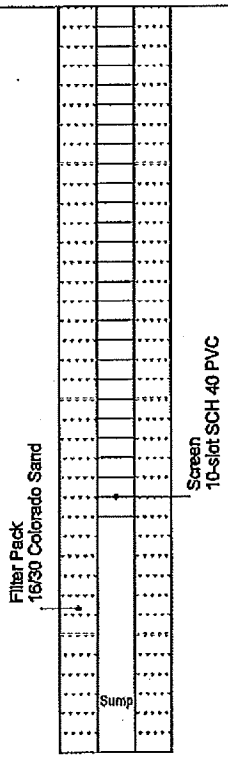
Well Diameter: 4 inches
Well Depth: 33.5 ft
Well Screen: 15.5-30.5 ft 10-Slot
Filter Pack: 16/30 Colorado Snd

Driller: Cascade Drilling, Inc.
Method: AirPercussion, Hollow Stem
Consultant: Gabriel Cisneros (SAIC, Bothell)
Well Casing: Sch 40 PVC Elevation (TOC): 146.19 msl

Total Depth: 33.5 Ft
GW Depth: 19.5 Ft

Recov.	Depth Ft	Moist.	Blow Cnt	OVM	Soil Code	Soil Pattern	Soil Description
	24	Wet			SP		
	25	Sat	50				Same as above; no odor; no sheen.
		Sat.	50				Gray, fine to medium SAND; no silt; no gravel; no odor; no sheen.
	30	Sat.					Same as above; no odor; no sheen.
		Moist	13/22/37		ML/CL		Gray, hard, SILT with low plasticity; no odor; no sheen.

Well Construction



Locus Technologies

BORING LOG

From Science to Solutions™

Well No: DPE-7
Chevron Site No: 211577
Site Location: 631 Queen Anne N, Seattle, WA
Date: 10/17/2005 - 10/21/2005

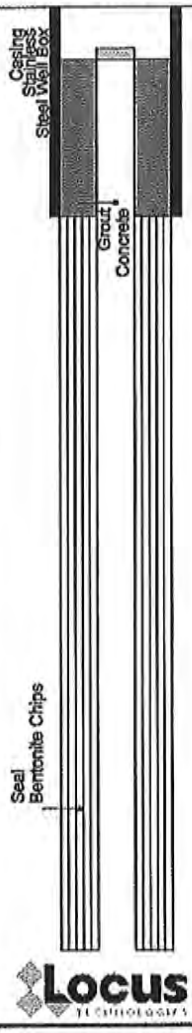
Well Diameter: 4 Inches
Well Depth: 32 ft
Well Screen: 11-29 ft 10-Slot
Filter Pack: 16/30 Colorado Snd

Driller: Cascade Drilling, Inc.
Method: AirPercussion, Hollow Stem
Consultant: Gabriel Cisneros (SAIC, Bothell)
Well Casing: Sch 40 PVC Elevation (TOC): 146.02 msl

Total Depth: 33.5 Ft
GW Depth: 23.0 Ft

Recov.	Depth Ft	Moist.	Blow Cnt	OVM	Soil Code	Soil Pattern	Soil Description
	0	Moist			SW		Asphalt top 2-inchesSilty, gravelly, fine to coarse SAND with blocks of concrete and large rocks; (FILL). Airknifed down to 8 feet bgs.
	5				SM		Silty, hard SAND (Till?)
		Moist	3/4/8	7.5			Gray, dark brown, silty fine-grained SAND with 13% silt and large angular clasts of silt; no odor; no sheen.
	9						

Well Construction



Locus Technologies

BORING LOG

SAIC® From Science to Solutions™

Well No: DPE-7
Chevron Site No: 211577
Site Location: 631 Queen Anne N, Seattle, WA
Date: 10/17/2005 - 10/21/2005

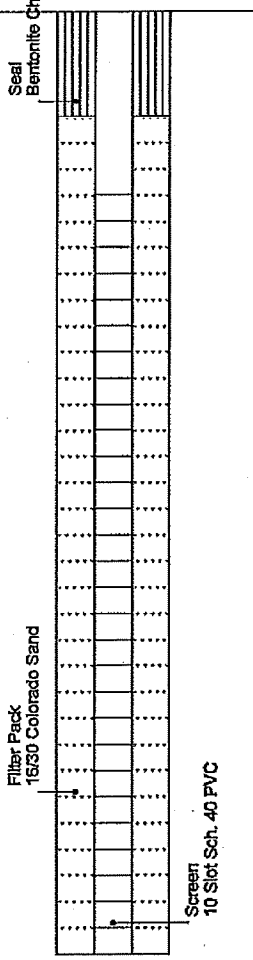
Well Diameter: 4 inches
Well Depth: 32 ft
Well Screen: 11-29 ft 10-Slot
Filter Pack: 16/30 Colorado Snd

Driller: Cascade Drilling, Inc.
Method: AirPercussion, Hollow Stem
Consultant: Gabriel Cisneros (SAIC, Bothell)
Well Casing: Sch 40 PVC Elevation (TOC): 146.02 msl

Total Depth: 33.5 Ft
GW Depth: 23.0 Ft

Recov	Depth Ft	Moist.	Blow Cnt	OVM	Soil Code	Soil Pattern	Soil Description
	9	Moist	3/4/8	7.5	SM		Gray, dark brown, silty fine-grained SAND with 13% silt and large angular clasts of silt; no odor; no sheen.
	10		5/8	8.3			
		Moist	11	722	SP		Gray to dark gray, fine to medium SAND with 5% silt, no gravel; strong HC odor; moderate sheen.
		Moist	8/11	182			Light brown, fine to medium SAND with no silt and no gravel; slight odor; slight sheen.
		Moist	11	16.7	SM		Light brown to gray, silty fine SAND with 20% silt and no gravel; slight HC odor; slight sheen.
	15	Moist			SM-SP		Light gray to brown, fine to medium SAND with 10% silt, no gravel; moderate HC odor; slight sheen.
		Moist	2/11	573			Same as above but with 5% silt and a 2-inch thick silt/clay layer interbedded within fine SAND; slight HC odor; slight sheen.
		Wet	16	17.6	SP		Brown, fine to coarse SAND with no silt and no gravel; slight odor; moderate sheen.
	18		14/14	231			

Well Construction



Locus Technologies

BORING LOG

From Science to Solutions™

Well No: DPE-7
Chevron Site No: 211577
Site Location: 631 Queen Anne N, Seattle, WA
Date: 10/17/2005 - 10/21/2005

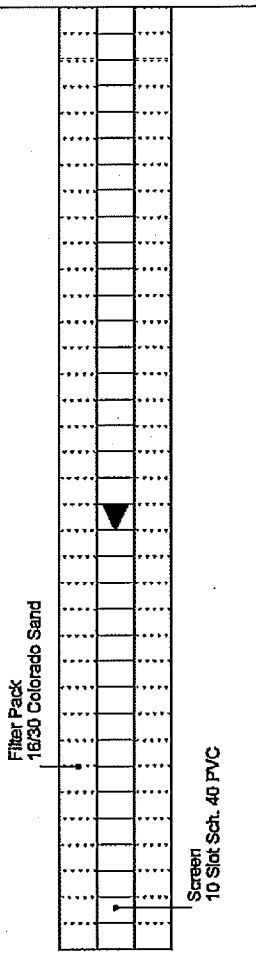
Well Diameter: 4 inches
Well Depth: 32 ft
Well Screen: 11-29 ft 10-Slot
Filter Pack: 16/30 Colorado Snd

Driller: Cascade Drilling, Inc.
Method: AirPercussion, Hollow Stem
Consultant: Gabriel Cisneros (SAIC, Bothell)
Well Casing: Sch 40 PVC Elevation (TOC): 146.02 msl

Total Depth: 33.5 Ft
GW Depth: 23.0 Ft

Recov.	Depth Ft	Moist.	Blow Cnt	OVM	Soil Code	Soil Pattern	Soil Description
	18	Wet	14/14	231	SP		Brown, fine to coarse SAND with no silt and no gravel; slight odor; moderate sheen.
		Wet					Gray, fine medium SAND with 5% silt; no gravel; slight odor; moderate sheen.
	20		12/16	17			
			22	580			
		Wet					Same as above but with a 2-inch silt layer interbedded within the sand at 20.5' bgs; strong HC odor; strong sheen.
			13/18	527			
			18	630			
		Wet			ML		Gray, stiff SILT with moderate plasticity; moderate HC odor; strong sheen.
	25	Sat.	22/50	590	SP		Gray, fine to medium SAND with no silt and no gravel; strong HC odor; moderate to heavy sheen.
	27						

Well Construction



Locus Technologies

BORING LOG

From Science to Solutions™

Well No: DPE-7
Chevron Site No: 211577
Site Location: 631 Queen Anne N, Seattle, WA
Date: 10/17/2005 - 10/21/2005

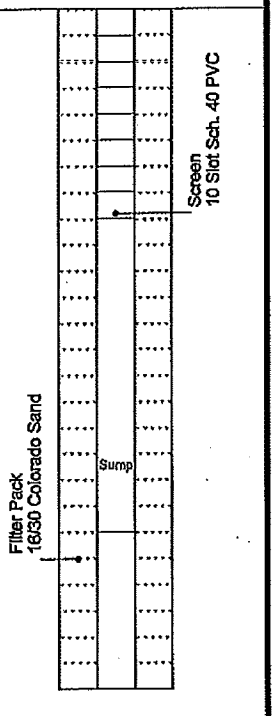
Well Diameter: 4 inches
Well Depth: 32 ft
Well Screen: 11-29 ft 10-Slot
Filter Pack: 16/30 Colorado Snd

Driller: Cascade Drilling, Inc.
Method: AirPercussion, Hollow Stem
Consultant: Gabriel Cisneros (SAIC, Bothell)
Well Casing: Sch 40 PVC Elevation (TOC): 146.02 msl

Total Depth: 33.5 Ft
GW Depth: 23.0 Ft

Recov	Depth Ft	Moist.	Blow Cnt	OVM	Soil Code	Soil Pattern	Soil Description
	27						
		Sat.	10/30	450	SP		Gray, fine to coarse SAND with no silt and 5% gravel; moderate HC odor; no sheen.
			48	384			
	30						
			7/9	402			
		Moist	11	15.8	ML/CL		Gray, clayey SILT with moderate to high plasticity; slight odor; very slight sheen at bottom.

Well Construction



Locus Technologies

BORING LOG

From Science to Solutions™

Well No: DPE-6
Chevron Site No: 211577
Site Location: 631 Queen Anne Ave N, Seattle, WA
Date: 10/17/2005

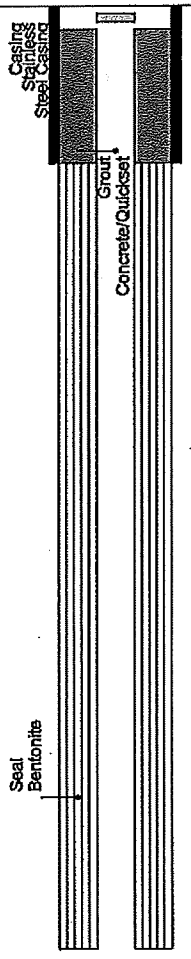
Well Diameter: 4 inches
Well Depth: 33.5 ft
Well Screen: 15.5-30.5 ft 10-Slot
Filter Pack: 16/30 Colorado Snd

Driller: Cascade Drilling, Inc.
Method: AirPercussion, Hollow Stem
Consultant: Gabriel Cisneros (SAIC, Bothell)
Well Casing: Sch 40 PVC Elevation (TOC): 146.19 msl

Total Depth: 33.5 Ft
GW Depth: 19.5 Ft

Recov.	Depth Ft	Moist.	Blow Cnt	OVM	Soil Code	Soil Pattern	Soil Description
	0	Moist			SW		Asphalt top 2-Inches. Airknifed to 8 feet bgs. FILL: Brown, silty, gravelly SAND with chunks of concrete.
	5	Moist	8/13/16		SP-SM		Gray to brown, silty, fine to medium SAND with a silt layer at 8.25 feet and organics, no gravel; no odor; no sheen.
		Moist					Brown, fine to coarse SAND with thin interbeds of silt; less than 5% silt in sand beds, no gravel; slight odor; moderate sheen.
	10	Moist	15/50				Brown to gray, fine to medium, SAND interbedded with thin, organic, gray silt layers; no gravel and less than 5% silt in sandy layers; slight odor; moderate sheen in sandy layers.
		Moist					
	12						

Well Construction



Locus

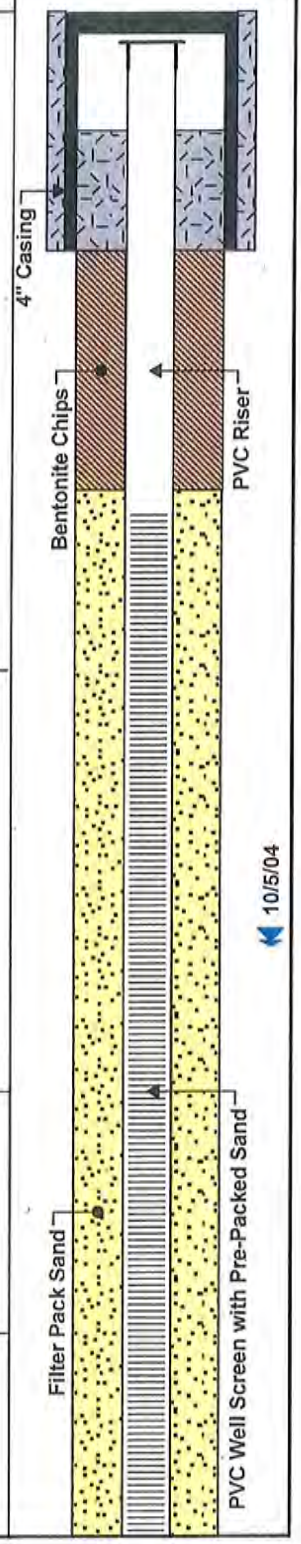
BORING/MONITORING WELL LOG: SB-24/MW-24

SITE No: 211577
LOCATION: 631 Queen Ave, Seattle
CLIENT: Chevron
DATE: 10/5/04
LOGGED BY: G. Cisneros

DRILLER: Cascade
DRILL METHOD: Limited-Access Geoprobe
SAMPLE METHOD: Geoprobe
HOLE DIAMETER: 2"
HOLE DEPTH: 20.5

WELL DIAMETER: 0.75"
SCREEN INTERVAL: 4.2-14.2
WELL CASING: Sch. 40 PVC
FILTER PACK: 10/20 Colorado Sand
TOC ELEVATION: 107.95'

MOISTURE	PID (ppm)	DEPTH	DESCRIPTION
		0	Ground Surface
			Airknifed to 8' Layer of bricks at 6-inches. Gravelly SAND
		1	
		2	
		3	
Moist	0.4	4	**SAND (SW)** Dark brown, gravelly SAND with 15-20% gravel and 5% silt; no odor; no sheen.
		5	
Moist	0.0	6	**SAND (SP)** Dark brown, fine to medium SAND with 5% gravel; no odor; no sheen.
		7	
Wet	5.5	8	**8-9' SAND (SP)** Brown to light gray, fine to medium SAND; no silt; no gravel; no odor; no sheen.
Sat	1.5	9	**9-10' SAND (SP-SM)** Light brown, very dense, fine to medium SAND with silt layers interbedded (15-20% silt); no odor; no sheen.
Sat	7.1	10	**10-11' SAND (SP-SM)** Same as above; no odor; no sheen.
Wet	1.0	11	**11-12' Silty SAND (SM)** Light brown, very dense, fine to medium SAND with 25% silt and 15% gravel; slight odor, no sheen.
Moist	8.9	12	**12-13' Silty SAND (SM)** Same as above; slight odor; no sheen.



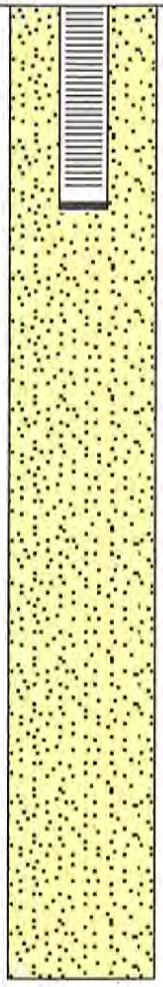
BORING/MONITORING WELL LOG: SB-24/MW-24

SAIC — An Employee Owned Company

SITE No: 211577	DRILLER: Cascade	WELL DIAMETER: 0.75"
LOCATION: 631 Queen Ave, Seattle	DRILL METHOD: Limited-Access Geoprobe	SCREEN INTERVAL: 4.2-14.2
CLIENT: Chevron	SAMPLE METHOD: Geoprobe	WELL CASING: Sch. 40 PVC
DATE: 10/5/04	HOLE DIAMETER: 2"	FILTER PACK: 10/20 Colorado Sand
LOGGED BY: G. Cisneros	HOLE DEPTH: 20.5	TOC ELEVATION: 107.95'

MOISTURE	PID (ppm)	DEPTH	DESCRIPTION
Moist	14.8	13	**13-14' Silty SAND (SM)** Same as above; slight odor; no sheen.
Moist	16.4	14	**14-15' SAND (SP-SM)** Brown to gray, very dense, fine to medium SAND with 2-inch silty SAND layers; slight odor; no sheen.
Moist	6.9	15	**15-16' SAND (SP-SM)** Same as above; no odor; no sheen.
Wet	205.8	16	**16-17' SAND (SP-SM)** Gray, fine to medium SAND with a 1-inch silty sand layer at 16.5 feet; strong odor; moderate sheen.
Moist	>4506	17	**17-18' SAND (SP)** Same as above; strong odor; moderate sheen.
Moist	>4506	18	**18-19.5' SAND (SP)** Gray, dense, medium to coarse SAND; no silt; no gravel; strong odor; moderate sheen.
Moist	177.8	19	
Moist	48.3	20	**19.5-20' Silty SAND (SM)** Gray to brown, very dense SAND with 15% silt, no gravel; moderate odor; slight sheen.
Moist	11.8		**20-20.5' Clayey SILT (ML-CL)** Very hard, clayey SILT with moderate plasticity; slight odor; no sheen.
		21	
		22	
		23	
		24	
		25	

Sloughed Sand



An Employee Owned Company

BORING LOG: SP-1

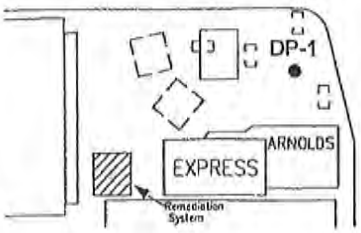
SHEET 1 of 1

SITE No: 211577
LOCATION: 631 Queen Anne Ave, Seattle
CLIENT: Chevron/Texaco
DATE: 3/12/04
LOGGED BY: GC

DRILLER: Cascade
DRILL METHOD: Geoprobe
SAMPLE METHOD: Split-Spoon with Liner
HOLE DIAMETER: 2"
HOLE DEPTH: 22'

MOISTURE	PID (ppm)	DEPTH	GRAPHIC LOG	SAMPLE INTERVAL	DESCRIPTION
		0			Ground Surface
		1			Airknifed to 8' Asphalt from 0-3"
		2			
		3			
		4			
		5			SAND (SM) Dark brown, very dense, well-graded, gravelly, silty, SAND.
		6			
		7			
		8			SAND (SM) Dark brown, well-graded, very dense, medium to coarse sand with 15% gravel and 15% silt; slight hydrocarbon odor; no sheen.
Dry to Moist	0	9			
	0	10			
	0	11			SAND and SILT (SM) Dark gray to black SAND with thin silt layers; hydrocarbon odor; no sheen.
Moist	1553	12			
	1674	13			SAND (SP) Brownish gray to dark gray, poorly graded, very dense SAND with <5% silt.
	1569	14			
	>4040	15			
	850.2	16			
	>4040	17			SAND (SP) Brownish gray, poorly graded, very dense SAND; increasing silt content with depth.
Moist to Wet	238.0	18			
	1.4	19			Groundwater at 19.5'
Wet to Sat	2928	20			SAND (SP-SM) Same as above; more silty with depth; HC odor; no sheen.
Sat	>4040	21			Silty SAND (SM) Brownish gray, well-graded, very dense, fine to medium silty SAND.
	>4040	22			

WELL/BORING LOCATION MAP



Delta Environmental Consultants, Inc.

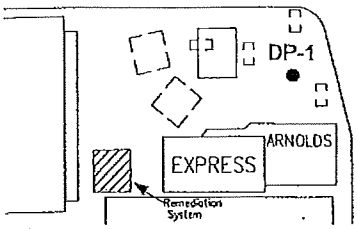
WELL/BORING: DP-1

INSTALLATION DATE: 9/18/02	DRILLING METHOD: Geo Probe
PROJECT: TW21577	SAMPLING METHOD: Sleeve
CLIENT: Chevron 21-1577	BORING DIAMETER: 1 "
LOCATION: 631 Queen Anne Ave No.	BORING DEPTH: 24'
CITY: Seattle	WELL CASING: NA
STATE: WA	WELL SCREEN: NA
DRILLER: Cascade	SAND PACK: NA

CASING ELEVATION
SURVEY DATE:
DTW:

WELL/BORING COMPLETION	FIRST	STABILIZED	MOISTURE	PID (ppm)	DEPTH (FEET)	RECOVERY	SAMPLE INTERVAL	USCS SYMBOL	GRAPHIC	DESCRIPTION/LOGGED BY: SHAWN MADISON
Asphalt / Bentonite					1			SM		SILTY SAND: grayish brown; 20% fines; fine to medium sand; 15% gravel; no odor.
			DP	2.7	2					
					3					
			DP	59.0	4			SM		SILTY SAND: brownish gray; 10% fines; fine to medium sand; 25% gravel; odor.
					5					
			DP	23.0	6					SILTY SAND: dark gray; 15% fines; medium to coarse sand; 10% gravel; odor.
					7					
			DP	11.0	8					Same as above.
					9					
			DP	14.5	10			SP		SAND: gray; <5% fines; fine sand; no odor.
	▽				11					
			WT	33.3	12					Same as above with odor.
					13					
			DP	0	14			SP		SAND: grayish brown; medium to coarse sand; no odor.
					15					
			DP	70.1	16					Same as above.
	▽				17					
			WT	0	18			SM		SILTY SAND: grayish brown; 15% fines; fine to medium sand; no odor.
					19					
			WT	5.7	20					SILTY SAND: gray; 20% fines; fine to medium sand; 30% gravel; no odor.
					21					
			WT	1.2	22			SM		Same as above.

WELL/BORING LOCATION MAP



Delta Environmental Consultants, Inc.

WELL/BORING: DP-1

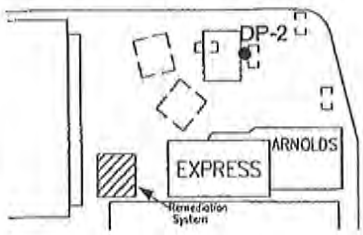
INSTALLATION DATE: 9/18/02	DRILLING METHOD: Geo Probe
PROJECT: TW21577	SAMPLING METHOD: Sleeve
CLIENT: Chevron 21-1577	BORING DIAMETER: 1 "
LOCATION: 631 Queen Anne Ave No.	BORING DEPTH: 24'
CITY: Seattle	WELL CASING: NA
STATE: WA	WELL SCREEN: NA
DRILLER: Cascade	SAND PACK: NA

CASING ELEVATION	
SURVEY DATE:	
DTW:	

DESCRIPTION/LOGGED BY: SHAWN MADISON

WELL/BORING COMPLETION	FIRST ▽	STABILIZED ▼	MOISTURE	PID (ppm)	DEPTH (FEET)	RECOVERY	SAMPLE INTERVAL	USCS SYMBOL	GRAPHIC	DESCRIPTION
Bentonite			WT	0.6	23			SM		SILTY SAND: gray; 20% fines; fine to medium sand; 30% gravel; no odor.
			DP		24			CL		CLAY: gray; medium plasticity; stiff; no odor.
					25					
					26					
					27					
					28					
					29					
					30					
					31					
					32					
					33					
					34					
					35					
					36					
					37					
					38					
					39					
					40					
					41					
					42					
					43					
					44					
					45					

WELL/BORING LOCATION MAP



Delta Environmental Consultants, Inc.

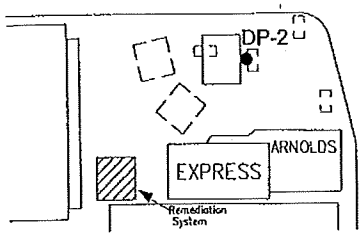
WELL/BORING: DP-2

INSTALLATION DATE: 9/18/02	DRILLING METHOD: Geo Probe
PROJECT: TW21577	SAMPLING METHOD: Sleeve
CLIENT: Chevron 21-1577	BORING DIAMETER: 1 "
LOCATION: 631 Queen Anne Ave No.	BORING DEPTH: 24'
CITY: Seattle	WELL CASING: NA
STATE: WA	WELL SCREEN: NA
DRILLER: Cascade	SAND PACK: NA

CASING ELEVATION:
SURVEY DATE:
DTW:

WELL/BORING COMPLETION	FIRST ▽	STABILIZED ▼	MOISTURE	PID (ppm)	DEPTH (FEET)	RECOVERY	SAMPLE INTERVAL	USCS SYMBOL	GRAPHIC	DESCRIPTION/LOGGED BY: SHAWN MADISON
Asphalt					1			SM		
			DP	0	2					SILTY SAND: grayish brown; 20% fines; fine to medium sand 30% gravel; no odor.
					3					
			DP	0	4					Same as above with odor.
					5					
			DP	672	6					SILTY SAND: dark gray; 20% fines; fine to medium sand; 10% gravel; odor.
					7					
			DP	238	8					Same as above but very dark gray.
					9			SM		
Bentonite			DP	1340	10					Same as above but dark greenish gray; 2% wood debris.
					11					
			DP	1875	12					SILTY SAND: dark gray; 10% fines; fine to medium sand; 10% gravel; odor; minimal recovery. * See Page 2 of well log for note.
					13					
			DP	2000	14					Same as above; minimal recovery * See Page 2 of well log for note.
					15					
			DP	5.3	16					SILTY SAND: dark gray; 10% fines; medium to coarse sand; 5% gravel; odor.
					17					
			DP	7.1	18			SP		SAND: brown; medium sand; odor.
					19					
	▽		DP	10.2	20					Same as above.
					21					
			WT	21.7	22			SP		SAND: grayish brown; fine to medium sand; no odor.

WELL/BORING LOCATION MAP



Delta Environmental Consultants, Inc.

WELL/BORING: DP-2

INSTALLATION DATE: 9/18/02	DRILLING METHOD: Geo Probe
PROJECT: TW21577	SAMPLING METHOD: Sleeve
CLIENT: Chevron 21-1577	BORING DIAMETER: 1 "
LOCATION: 631 Queen Anne Ave No.	BORING DEPTH: 24'
CITY: Seattle	WELL CASING: NA
STATE: WA	WELL SCREEN: NA
DRILLER: Cascade	SAND PACK: NA

CASING ELEVATION	
SURVEY DATE:	
DTW:	

DESCRIPTION/LOGGED BY: SHAWN MADISON

WELL/BORING COMPLETION	FIRST ▽	STABILIZED ▼	MOISTURE	PID (ppm)	DEPTH (FEET)	RECOVERY	SAMPLE INTERVAL	USCS SYMBOL	GRAPHIC
Bentonite			WT		23			SP	
								CL	
			DP	0	24				
					25				
					26				
					27				
					28				
					29				
					30				
					31				
					32				
					33				
					34				
					35				
					36				
					37				
					38				
					39				
					40				
					41				
					42				
					43				
					44				
					45				

SAND: grayish brown; fine to medium sand; no odor.

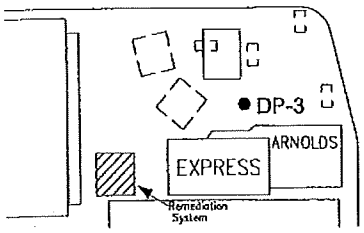
CLAY: yellowish brown; medium plasticity; stiff; no odor.

* Redrilled 1 foot north to get recovery for the 12 and 14 foot intervals.

10'-12' SILTY SAND: dark gray; 10% fines; fine to medium sand; 10% gravel; odor; P.I.D. reading 2000.

12'-14' SILTY SAND: dark gray; 10% fines; fine to medium sand; 10% gravel; odor; P.I.D. reading 2000.

WELL/BORING LOCATION MAP



Delta Environmental Consultants, Inc.

WELL/BORING: DP-3

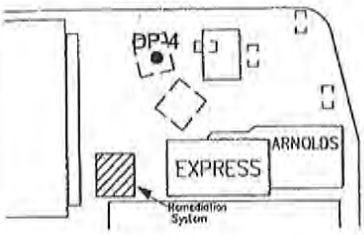
INSTALLATION DATE: 9/20/02	DRILLING METHOD: Geo Probe
PROJECT: TW21577	SAMPLING METHOD: Sleeve
CLIENT: Chevron 21-1577	BORING DIAMETER: 1 "
LOCATION: 631 Queen Anne Ave No.	BORING DEPTH: 18'
CITY: Seattle	WELL CASING: NA
STATE: WA	WELL SCREEN: NA
DRILLER: Cascade	SAND PACK: NA

CASING ELEVATION	
SURVEY DATE:	
DTW:	

DESCRIPTION/LOGGED BY: SHAWN MADISON

WELL/BORING COMPLETION	FIRST ▽	STABILIZED ▼	MOISTURE	PID (ppm)	DEPTH (FEET)	RECOVERY	SAMPLE INTERVAL	USCS SYMBOL	GRAPHIC	DESCRIPTION
Asphalt					1			SM		SILTY SAND: brown; 30% fines; very fine to fine sand; no odor.
				0	2					Same as above with construction debris; no odor.
					3					Same as above.
				0	4					
					5					
				0	6					Same as above without construction debris.
Bentonite					7					
				0	8					Same as above with 2% wood debris; very dark brown with color.
					9			SM		
				48.3	10					SILTY SAND: dark brownish gray; 10% fines; fine sand; 5% gravel; odor.
	▽				11					
			WT	2000	12					@11.5' SILT: dark gray; fines; 25% very fine to fine sand; stiff; odor.
					13					
			WT	2000	14					
					15					
			WT	1557	16					@15.5' SILTY SAND: dark gray; 15% fines; fine sand; odor.
					17					
			DP	146	18			CL		@17.5' CLAY: reddish brown with gray streaks; medium plasticity; stiff; odor.
					19					
					20					
					21					
					22					

WELL/BORING LOCATION MAP



Delta Environmental Consultants, Inc.

WELL/BORING: DP-4

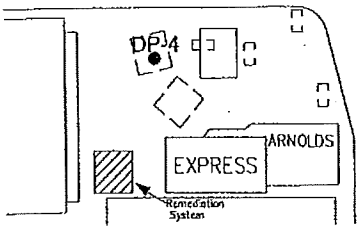
INSTALLATION DATE: 9/20/02	DRILLING METHOD: Geo Probe
PROJECT: TW21577	SAMPLING METHOD: Sleeve
CLIENT: Chevron 21-1577	BORING DIAMETER: 1 "
LOCATION: 631 Queen Anne Ave No.	BORING DEPTH: 28'
CITY: Seattle	WELL CASING: NA
STATE: WA	WELL SCREEN: NA
DRILLER: Cascade	SAND PACK: NA

CASING ELEVATION:
SURVEY DATE:
DTW:

DESCRIPTION/LOGGED BY: SHAWN MADISON

WELL/BORING COMPLETION	FIRST	STABILIZED	MOISTURE	PID (ppm)	DEPTH (FEET)	USCS SYMBOL	DESCRIPTION
Asphalt					1	SM	
			DRY	0	2		SILTY SAND: gray; 30% fines; fine sand; 10% gravel; no odor.
					3		
			DP	801	4		Same as above with light odor.
					5		
			DP	49.4	6		SILTY SAND: dark gray; 10% fines; fine to medium sand; light odor.
					7		
			DP	0	8		Same as above with 5% gravel.
Bentonite					9	SM	
			DP	0	10		Same as above with 15% gravel.
					11		
			DP	8.3	12		SILTY SAND: very dark gray; 10% fines; medium to coarse sand; light odor; encountered PVC well screen at 12 feet.
					13		
			DP	174	14		SAND: dark gray to brown; fine to medium sand; no odor.
					15		15 to 15.5' SILTY SAND: 30% fine; fine to medium sand; no odor.
			DP	219	16		@15.5' SAND: brownish gray; <5% fines; fine to medium sand; 15% coarse sand; no odor.
					17		
			DP	58.4	18	SP	
	▽				19		SAND: gray; fine sand; odor.
			WT	2000	20		
					21		
				21.7	22		Same sand grades to medium sand; odor.

WELL/BORING LOCATION MAP



Delta Environmental Consultants, Inc.

WELL/BORING: DP-4

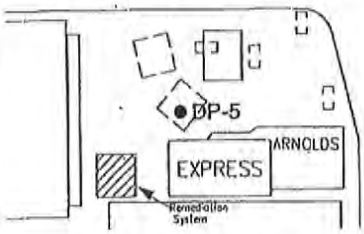
INSTALLATION DATE: 9/20/02	DRILLING METHOD: Geo Probe
PROJECT: TW21577	SAMPLING METHOD: Sleeve
CLIENT: Chevron 21-1577	BORING DIAMETER: 1 "
LOCATION: 631 Queen Anne Ave No.	BORING DEPTH: 28'
CITY: Seattle	WELL CASING: NA
STATE: WA	WELL SCREEN: NA
DRILLER: Cascade	SAND PACK: NA

CASING ELEVATION	
SURVEY DATE:	
DTW:	

DESCRIPTION/LOGGED BY: SHAWN MADISON

WELL/BORING COMPLETION	FIRST ▽	STABILIZED ▼	MOISTURE	PID (ppm)	DEPTH (FEET)	RECOVERY	SAMPLE INTERVAL	USCS SYMBOL	GRAPHIC	DESCRIPTION
Bentonite			WT	1	23–24			SP		SAND: brownish gray; <5% fines; medium to coarse sand; odor.
			DP	0	25–26					
					26			CL		@26.25' CLAY: reddish brown with gray molting; medium plasticity; stiff; no odor.
			WT	0	27–28			SP		@27.0" SAND: gray; coarse sand; no odor.
					29					
					30					
					31					
					32					
					33					
					34					
					35					
					36					
					37					
					38					
					39					
					40					
					41					
					42					
					43					
					44					
					45					

WELL/BORING LOCATION MAP



Delta Environmental Consultants, Inc.

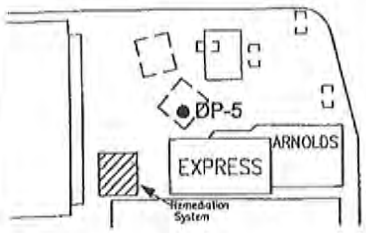
WELL/BORING: DP-5

INSTALLATION DATE: 9/20/02	DRILLING METHOD: Geo Probe
PROJECT: TW21577	SAMPLING METHOD: Sleeve
CLIENT: Chevron 21-1577	BORING DIAMETER: 1 "
LOCATION: 631 Queen Anne Ave No.	BORING DEPTH: 24'
CITY: Seattle	WELL CASING: NA
STATE: WA	WELL SCREEN: NA
DRILLER: Cascade	SAND PACK: NA

CASING ELEVATION	
SURVEY DATE:	
DTW:	

WELL/BORING COMPLETION	FIRST	STABILIZED	MOISTURE	PID (ppm)	DEPTH (FEET)	USCS SYMBOL	DESCRIPTION/LOGGED BY: SHAWN MADISON
Asphalt					1	SM	
Bentonite			DP	0	2		SILTY SAND: brown; 15% fines; fine to medium sand; no odor.
					3		
			DP	77.0	4		Same as above grades to grayish brown.
					5		
			DP	77.4	6		Same as above; gray to dark gray; construction debris (Brick); no odor.
					7		
			DP	8.0	8		Same as above with construction debris (Asphalt); no odor.
					9	SM	
			DP	0	10		Same as above with Asphalt and wood debris.
					11		
			DP	166	12		SILTY SAND: dark gray; 15% fines; fine sand; odor.
	▽				13		
			WT	2000	14		Same as above; 30% fines; odor.
					15		
			WT	2000	16		SILTY SAND: gray to brownish gray; 20% fines; very fine to fine sand; odor.
					17		
			WT	1345	18	SP	SAND: brownish gray; <5% fines; fine to medium sand; odor.
					19		
			WT	2000	20		Same as above.
					21		
			WT	1162	22		Same as above.

WELL/BORING LOCATION MAP



Delta Environmental Consultants, Inc.

WELL/BORING: DP-5

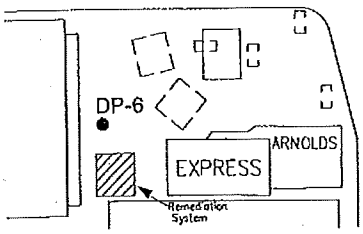
INSTALLATION DATE: 9/20/02	DRILLING METHOD: Geo Probe
PROJECT: TW21577	SAMPLING METHOD: Sleeve
CLIENT: Chevron 21-1577	BORING DIAMETER: 1 "
LOCATION: 631 Queen Anne Ave No.	BORING DEPTH: 24'
CITY: Seattle	WELL CASING: NA
STATE: WA	WELL SCREEN: NA
DRILLER: Cascade	SAND PACK: NA

CASING ELEVATION	
SURVEY DATE:	
DTW:	

DESCRIPTION/LOGGED BY: SHAWN MADISON

WELL/BORING COMPLETION	FIRST ▽	STABILIZED ▼	MOISTURE	PID (ppm)	DEPTH (FEET)	RECOVERY	SAMPLE INTERVAL	USCS SYMBOL	GRAPHIC	DESCRIPTION
Bentonite			WT		23			SP		SAND: brownish gray; <5% fines; fine to medium sand; coarse sand; odor.
			DP	3.1	24			CL		@23.5' CLAY: brown; medium plasticity; stiff; no odor.
					25					
					26					
					27					
					28					
					29					
					30					
					31					
					32					
					33					
					34					
					35					
					36					
					37					
					38					
					39					
					40					
					41					
					42					
					43					
					44					
					45					

WELL/BORING LOCATION MAP



Delta Environmental Consultants, Inc.

WELL/BORING: DP-6

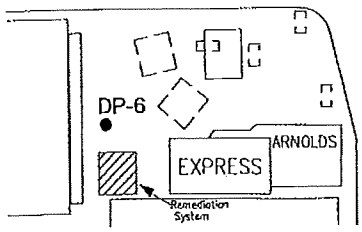
INSTALLATION DATE: 9/20/02	DRILLING METHOD: Geo Probe
PROJECT: TW21577	SAMPLING METHOD: Sleeve
CLIENT: Chevron 21-1577	BORING DIAMETER: 1 "
LOCATION: 631 Queen Anne Ave No.	BORING DEPTH: 26'
CITY: Seattle	WELL CASING: NA
STATE: WA	WELL SCREEN: NA
DRILLER: Cascade	SAND PACK: NA

CASING ELEVATION	
SURVEY DATE:	
DTW:	

DESCRIPTION/LOGGED BY: SHAWN MADISON

WELL/BORING COMPLETION	FIRST	STABILIZED	MOISTURE	PID (ppm)	DEPTH (FEET)	RECOVERY	SAMPLE INTERVAL	USCS SYMBOL	GRAPHIC	DESCRIPTION
Asphalt / Bentonite	▽	▼			1			SM		SILTY SAND: brownish gray; 40% fines; fine to medium sand; 10% gravel; 5% construction debris (Brick); no odor.
			DP	0	2					
					3					SILTY SAND: dark brownish gray; 25% fines; fine sand; 10% medium sand; no odor.
			DP	0	4					
					5					@5.5' SILTY SAND: very dark gray; 15% fines; medium to coarse sand; no odor.
			DP	0	6					
					7					@7.5' CLAY: very dark gray; medium plasticity; 10% very fine to fine sand; no odor.
			DP	7.4	8					
					9			SM		@9.0' SILTY SAND: 15% fines; 40% fine sand; medium to coarse and; no odor; minimal recovery.
			DP	6.9	10					
					11					Same as above.
	▽		DP	67.4	12					Minimal Recovery
					13					
			WT	231	14			SP		SAND: grayish brown; <5% fines; very fine to fine sand; odor.
					15					
			WT	72	16					Same as above.
					17					
			WT	4.2	18					@17.5' SAND: grayish brown; <5% fines; 30% medium sand; coarse sand; odor.
					19			CL		19.25' to 19.5' CLAY: yellowish brown; stiff; sand stringers; very fine sand; odor.
			WT	341	20			SM		@19.5' SILTY SAND: brownish gray; 30% fines; very fine to fine sand; odor.
					21					
			WT	2000	22					Same as above.

WELL/BORING LOCATION MAP



Delta Environmental Consultants, Inc.

WELL/BORING: DP-6

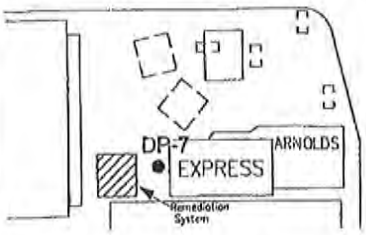
INSTALLATION DATE: 9/20/02	DRILLING METHOD: Geo Probe
PROJECT: TW21577	SAMPLING METHOD: Sleeve
CLIENT: Chevron 21-1577	BORING DIAMETER: 1 "
LOCATION: 631 Queen Anne Ave No.	BORING DEPTH: 26'
CITY: Seattle	WELL CASING: NA
STATE: WA	WELL SCREEN: NA
DRILLER: Cascade	SAND PACK: NA

CASING ELEVATION	
SURVEY DATE:	
DTW:	

DESCRIPTION/LOGGED BY: SHAWN MADISON

WELL/BORING COMPLETION	FIRST ▽	STABILIZED ▼	MOISTURE	PID (ppm)	DEPTH (FEET)	RECOVERY	SAMPLE INTERVAL	USCS SYMBOL	GRAPHIC	DESCRIPTION
Bentonite					23			SM		SILTY SAND: brownish gray; 30% fines; very fine to fine sand; odor.
			WT	2000	24			SP		SAND: brownish gray; <5% fines; very fine to fine sand; odor.
					25					
			DP	33.4	26			CL		@25.4' CLAY: brownish yellow; medium plasticity; stiff; odor.
					27					
					28					
					29					
					30					
					31					
					32					
					33					
					34					
					35					
					36					
					37					
					38					
					39					
					40					
					41					
					42					
					43					
					44					
					45					

WELL/BORING LOCATION MAP



Delta Environmental Consultants, Inc.

WELL/BORING: DP-7

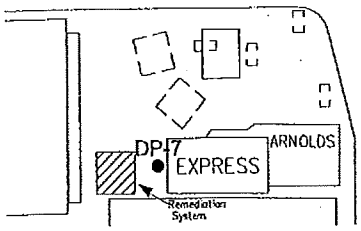
INSTALLATION DATE: 9/20/02	DRILLING METHOD: Geo Probe
PROJECT: TW21577	SAMPLING METHOD: Sleeve
CLIENT: Chevron 21-1577	BORING DIAMETER: 1 "
LOCATION: 631 Queen Anne Ave No.	BORING DEPTH: 24'
CITY: Seattle	WELL CASING: NA
STATE: WA	WELL SCREEN: NA
DRILLER: Cascade	SAND PACK: NA

CASING ELEVATION	
SURVEY DATE:	
DTW:	

DESCRIPTION/LOGGED BY: SHAWN MADISON

WELL/BORING COMPLETION	FIRST	STABILIZED	MOISTURE	PID (ppm)	DEPTH (FEET)	RECOVERY	SAMPLE INTERVAL	USCS SYMBOL	GRAPHIC	DESCRIPTION
Asphalt					1			SM		SILTY SAND: brown; 20% fines; fine to medium sand; 10% gravel; no odor.
			DRY	0	2					
					3					Same but brown to dark brown with construction debris (Brick); no odor.
			DP	0	4					
					5					
			DP	0	6					SILTY SAND: brownish gray; 10% fines; fine to medium sand; no odor.
					7					@7.5' SILTY SAND: dark brown; 35% fines; fine to medium sand; 10% coarse sand; no odor.
			DP	0	8					
Bentonite	▽				9			SM		@9.5' Grades to brown in color; odor.
			WT	110	10					@10.5' grades to gray; 10% fines; odor.
					11					
			WT	193	12					
					13			SP		SAND; gray; fine sand; odor.
			WT	307	14					
					15					
			WT	126	16					SAND: brownish gray; fine sand; odor.
					17					SAND: brownish gray; fine to medium sand; odor.
			WT	355	18					
					19					
			WT	2000	20					@20' Grades to very fine sand.
					21					
			WT	2000	22					@22' Grades to fine to medium sand; odor.

WELL/BORING LOCATION MAP



Delta Environmental Consultants, Inc.

WELL/BORING: DP-7

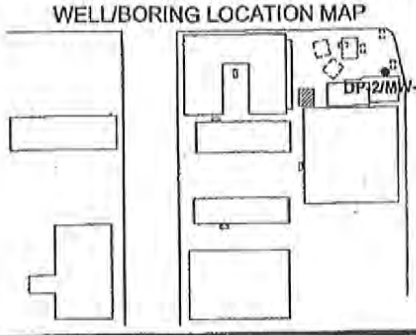
INSTALLATION DATE: 9/20/02	DRILLING METHOD: Geo Probe
PROJECT: TW21577	SAMPLING METHOD: Sleeve
CLIENT: Chevron 21-1577	BORING DIAMETER: 1 "
LOCATION: 631 Queen Anne Ave No.	BORING DEPTH: 24'
CITY: Seattle	WELL CASING: NA
STATE: WA	WELL SCREEN: NA
DRILLER: Cascade	SAND PACK: NA

CASING ELEVATION	
SURVEY DATE:	
DTW:	

DESCRIPTION/LOGGED BY: SHAWN MADISON

WELL/BORING COMPLETION	FIRST ▽	STABILIZED ▼	MOISTURE	PID (ppm)	DEPTH (FEET)	RECOVERY	SAMPLE INTERVAL	USCS SYMBOL	GRAPHIC	DESCRIPTION
Bentonite			DP	18.2	23			CL		@23' CLAY: yellowish brown with gray streaks; medium plasticity; stiff; no odor.
					24					
					25					
					26					
					27					
					28					
					29					
					30					
					31					
					32					
					33					
					34					
					35					
					36					
					37					
					38					
					39					
					40					
					41					
					42					
					43					
					44					
					45					

WELL/BORING LOCATION MAP



Delta Environmental Consultants, Inc.

WELL/BORING: DB-2
MW-13

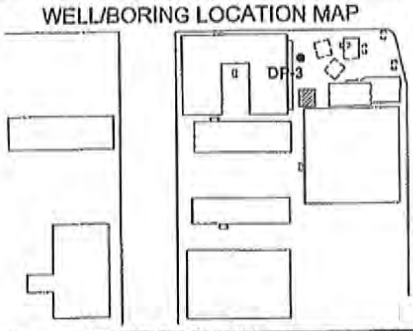
INSTALLATION DATE: 9/24/02	DRILLING METHOD: Hollow Stem Auger
PROJECT: TW21577	SAMPLING METHOD: DM Split Spoon
CLIENT: Chevron 21-1577	BORING DIAMETER: 8 "
LOCATION: 631 Queen Anne Ave No.	BORING DEPTH: 21.5'
CITY: Seattle	WELL CASING: SCH 40 PVC 2"
STATE: WA	WELL SCREEN: 10-20' (0.010")
DRILLER: Cascade	SAND PACK: 7-21.5' (2 X12)

CASING ELEVATION	114.80
SURVEY DATE:	9/26/02
DTW:	19.0

DESCRIPTION/LOGGED BY: MATT MILLER

WELL/BORING COMPLETION	FIRST	STABILIZED	MOISTURE	PID (ppm)	DENSITY BLOWS / 6"	DEPTH (FEET)	RECOVERY	SAMPLE INTERVAL	USCS SYMBOL	GRAPHIC	DESCRIPTION
Concrete						0					Asphalt/concrete surface
Bentonite						1			SP		SAND: brown to gray; trace to 5% fines;
						2					
						3					
						4					
						5					
						6					
						7					
						8					
						9			SM		
					15	10					
					25						
					27	11					@11.5' No recovery.
						12					
			DP	277	21	13					SILTY SAND: dark gray; 5% fines; fine sand; thin interbedded clay lense (<0.5"); very dense; strong hydrocarbon odor; sheen.
					50-5"	14					
						15					
	▽		WT	68	11	16					@16.5'; as above; iron oxide staining; trace to 10% gravel; very dense.
					21						
					30	17					
			MST	14	50-6"	18					
		▼				19					
						20					
			DP	11	19				CL		CLAY: dark gray; low plasticity; very hard; no hydrocarbon odor.
					29	21					
Sand					50						
						22					

WELL/BORING LOCATION MAP



Delta Environmental Consultants, Inc.

WELL/BORING: DB-3

INSTALLATION DATE: 9/26/02	DRILLING METHOD: Hollow Stem Auger
PROJECT: TW21577	SAMPLING METHOD: DM Split Spoon
CLIENT: Chevron 21-1577	BORING DIAMETER: 8 "
LOCATION: 631 Queen Anne Ave No.	BORING DEPTH: 31.5'
CITY: Seattle	WELL CASING: NA
STATE: WA	WELL SCREEN: NA
DRILLER: Cascade	SAND PACK: NA

CASING ELEVATION	
SURVEY DATE:	
DTW:	

WELL/BORING COMPLETION	FIRST ▽	STABILIZED ▼	MOISTURE	PID (ppm)	DENSITY BLOWS / 6"	DEPTH (FEET)	RECOVERY	SAMPLE INTERVAL	USCS SYMBOL	GRAPHIC	DESCRIPTION/LOGGED BY: MATT MILLER
Backfilled with Bentonite			WT	89	50 50	23			SM		SILTY SAND: very dark gray; 10% fines; fine to coarse sand; trace gravel; very dense; hydrocarbon odor.
						24					
						25					
						26					
						27					
						28					
						29					
						30					
			WT	33	14 15 19	31			CL		CLAY: dark gray; low plasticity; hard; no hydrocarbon odor.
						32					
						33					
						34					
						35					
						36					
						37					
						38					
						39					
						40					
						41					
						42					
						43					
						44					

First Page missing from report

5-17-93

Changed 6/10/93 ~~VP-8~~ VP9

1300 Move Rig a/ VP-1. Load up supplies → Changed to VP-9 on 6/10/93

1315 Move Rig To ~~VP-8.~~ Set up & plumb Rig. Doug Pearman back on site Excavating crew on lunch

1324 Begin Drilling, break up asphalt

Surface sample - ~2-5" asphalt
sand & gravel - fill
loose
10YR 3/3

Gravelly to 2.5'

1335 Sample @ 2.5'
BC = 3/1/1
10YR 4/1
Med - coarse SAND w/ Gravel FILL
some brick fragments
1" gravels
Dry, loose
SW-SP

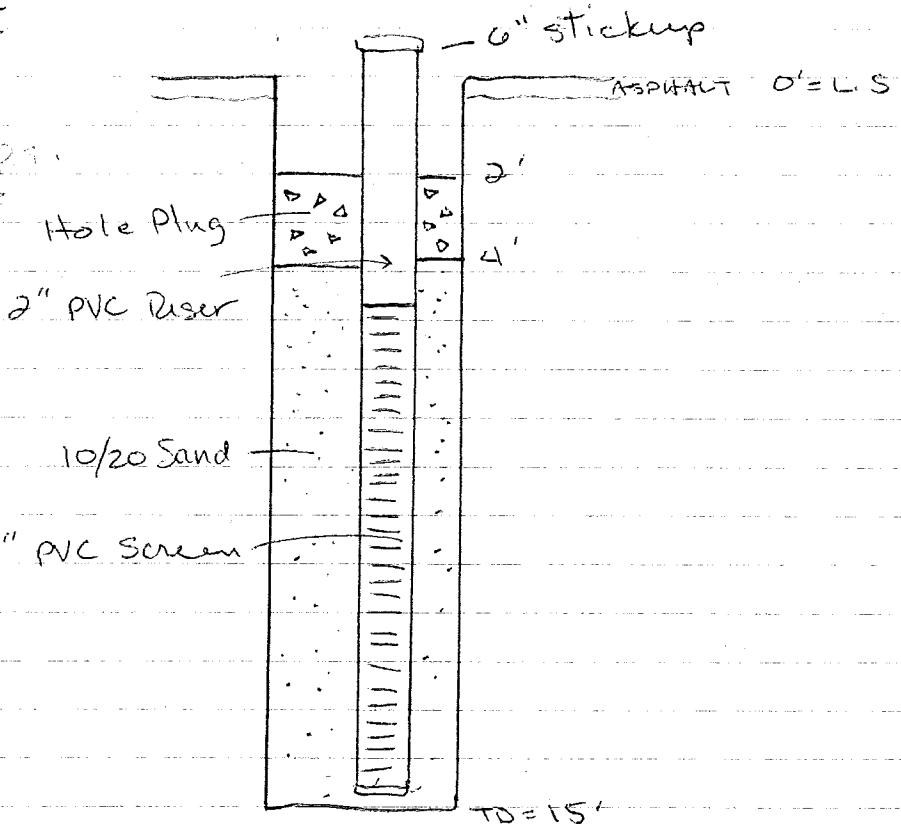
1342 Sample @ 7.5'
BC = 5/6/7
5Y 4/1
SAND - med w/ little silt
moist to sl-wet, loose
SP-SW/SM

5-17-93

As-Built

VP-8

VP-9



1445 Drillers deconning augers.

1530 Signed dailys.
Drillers off site for the day

GES securing site

1535 Pouring dry ice down the UST

1350 Ecology folks off-site for the day

5-25-93 RW-4

1615

1530 Begin Drilling, break asphalt

1540 Sample @ 5'
BC = 35/21/16
color = 10YR 7/1
dry
rubble, fill, concrete
GM

Gravel (rock) @ 4'

1622

Grab from cuttings @ 7'
high organic, soft, molds, clayey silt & fine Sand
2.5Y 2/0 Sl. moist
OL org. & fuel smell

1555 Sample @ 10'
BC 5/3/5
5Y 4/1
Sand fine-coarse w/ little gravel & some silt
V. moist
loose H.S. pid = 264 ppm
SP-SM

- Collected the last samples from the pit #9, 10, 11.
- Pump the last of H_2O out of RW-1
- Last VES tree going in

4

1615 Sample @ 12.5
BC 3/4/4
5Y 4/2 (12.5-13.5') to 5Y 4/1 (13.5-14')
fine to Med Sand w/ Silt
(rock) grades to more silt @ 13.5-14' (finer sand)
V moist, ~~loose~~ compact
SP-SM
no water yet

1622 Sample @ 15'
BC 2/4/10
(15-16') → (5Y 4/1 to 5Y 4/3) w/ 2.5Y 5/6 intermixed w/ 16-17'
silt & fine Sand
Fine mud SAND w/ a 2" Silt layer at 16'
↳ gray w/ iron streaks
V. moist to wet above silt layer
compact to loose
SP-SM

gravel

Sample @ 17.5
2.5Y 5/6 (17.5-18')
5Y 5/3 (18-19')

Med SAND (17.5-18') grades to fine Sand 18-19'
silt
Gravel at top of sample 17-17.5 thicker

Sl. moist compact to loose
str. HC odor

SP

5-25-93

1645 Sample @ 20'
BC 1/5/8
PID on sample = 1200 ppm !

ML dense, silt layer @ 20-20.5', soft
2.5Y 5/3
SM fine sand w/ silt 20.5-21.5'
5Y 5/2

1700 Augers at 22'. Shut down Rig. Secure site.

1745

Glacier securing/covering pit

label, pack up & transfer Pit samples to Rig. in Glacier's apart./office.

Chung-Pi: since RW-1 seems to be recovering, he really would like RW-4 moved north ~ 10' feet also so to have both wells recovering, spread out a bit

Will continue to sample this hole looking for that confining clayer

1725 Tried telephoning D. Pearman at Bothell office to update - not in

5-24-93 RW-4

weather: p. cloudy 60°, hi 70°
geologists V. Metcalfe
drillers: Charles, Tom

0715 leave home for Site

0750 Arrive at Site

Pack up Samples for lab Pick-up

0845 Dulles arrive
(RW-4) *
SWL - 20.3' BLS

0850 Sample @ 22.5'
BC = 2/5/5
5Y 5/2
wet
strong HC odor
SAND - fine-med w/ little silt
PID = 770 ppm

0905 Sample @ 25'
BC = 3/5/9 PID = 270-300 ppm

Same as above
w/ some gravel (26-26.5')
slightly coarser sand

0915

0925

1005

1020

5-26-93

0915 Sample @ 27.5' wet
PID = 95 ppm
change at 28' from same as above to a fine SAND (5Y 4/3) w/ silt
trace silt at tip of shoe.
iron streak at tip

0925 Sample @ 30'
BC: 1/2/3 wet
silt/clay at 31'
dense, molds
SAND (30-31') fine-med w/ silt

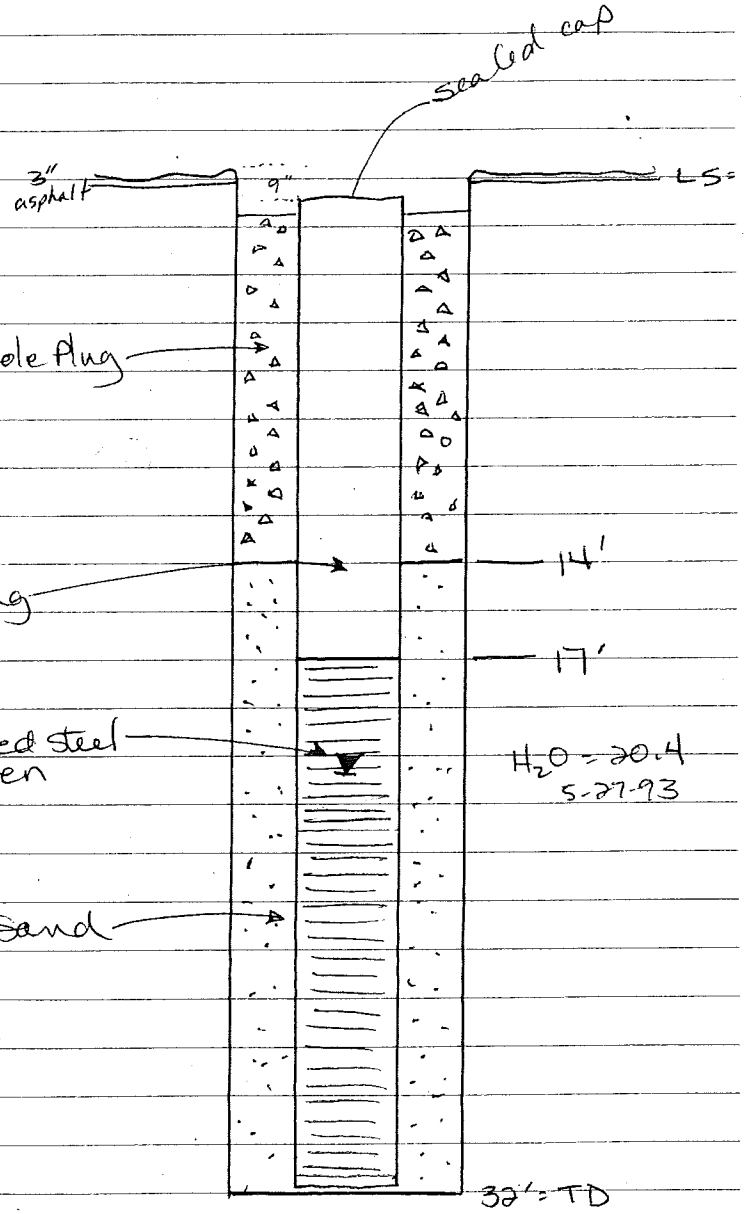
~~Plug~~ Bit is in the auger - try & retrieve

1005 going to set the well here. TD = 32'
Screen from 17-32'.

1020 Start getting things together to weld screen

As-built

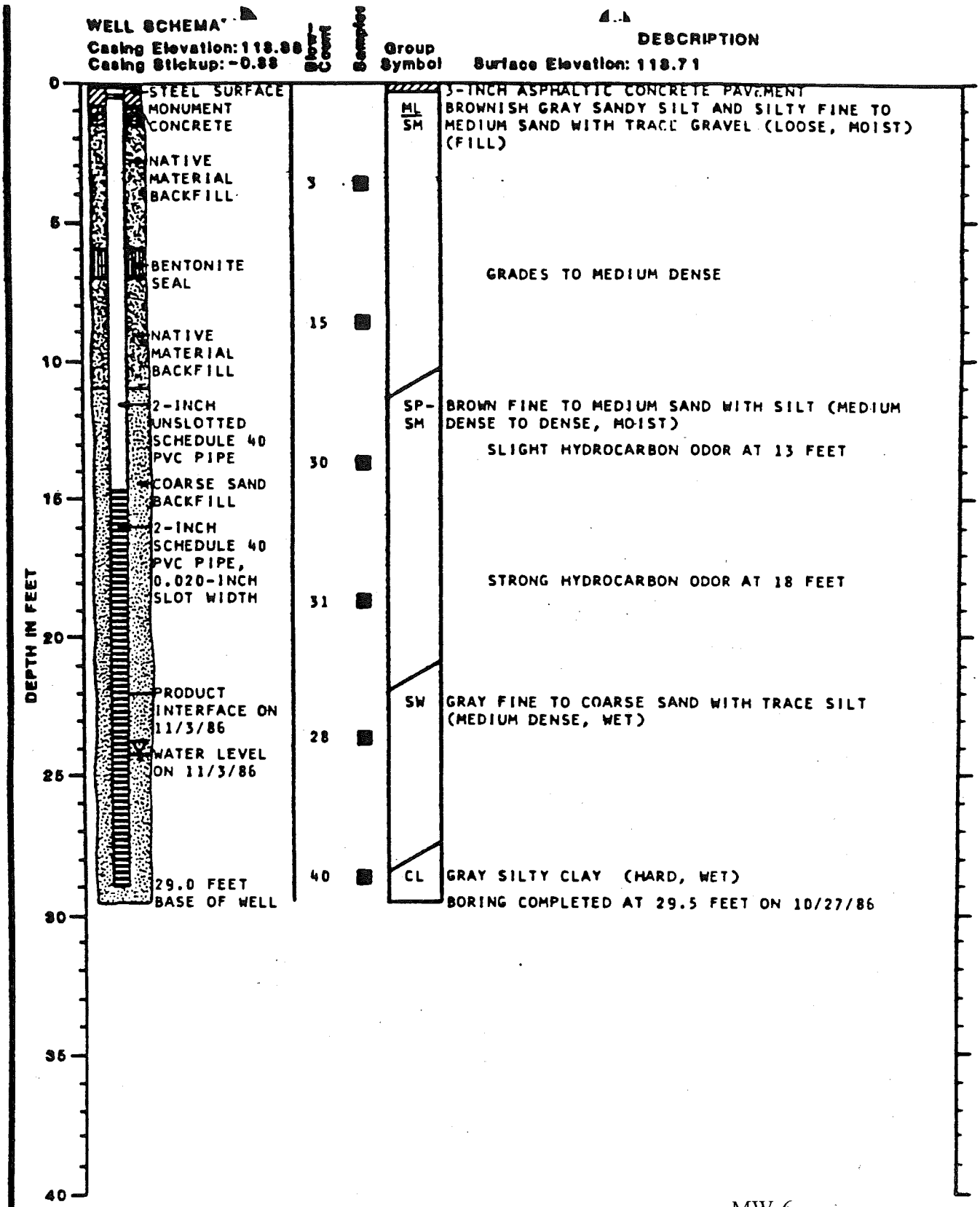
RW-4



1630 Clean up Site. Lower Mast.

Mom Rig -to Dcon

DRAFT



504-04 JAM:DMP 11-13-86

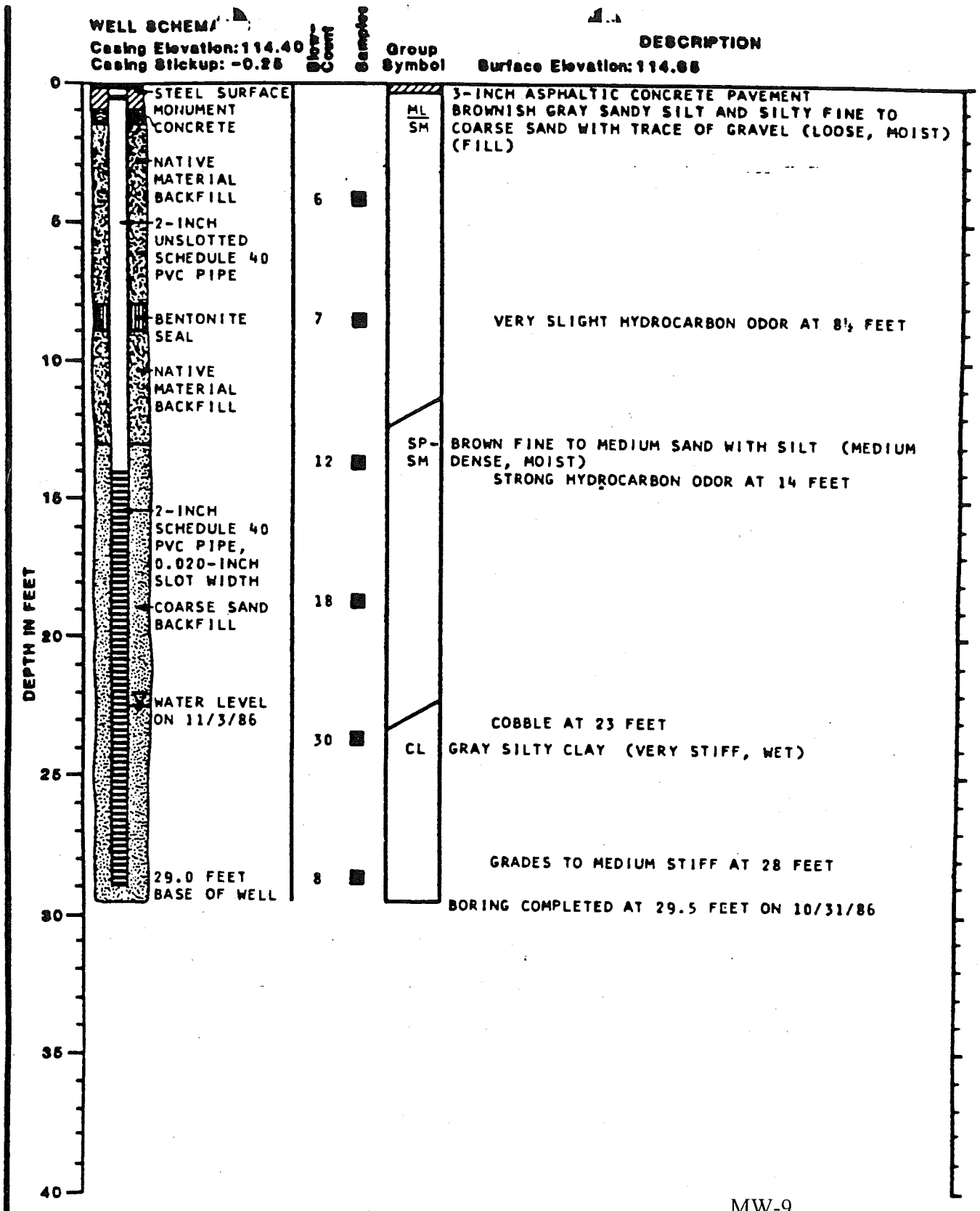
MW-6

GeoEngineers Incorporated

LOG OF MONITOR WELL

FIGURE 7

DRAFT



504-04 JAM:DMP 11-13-86

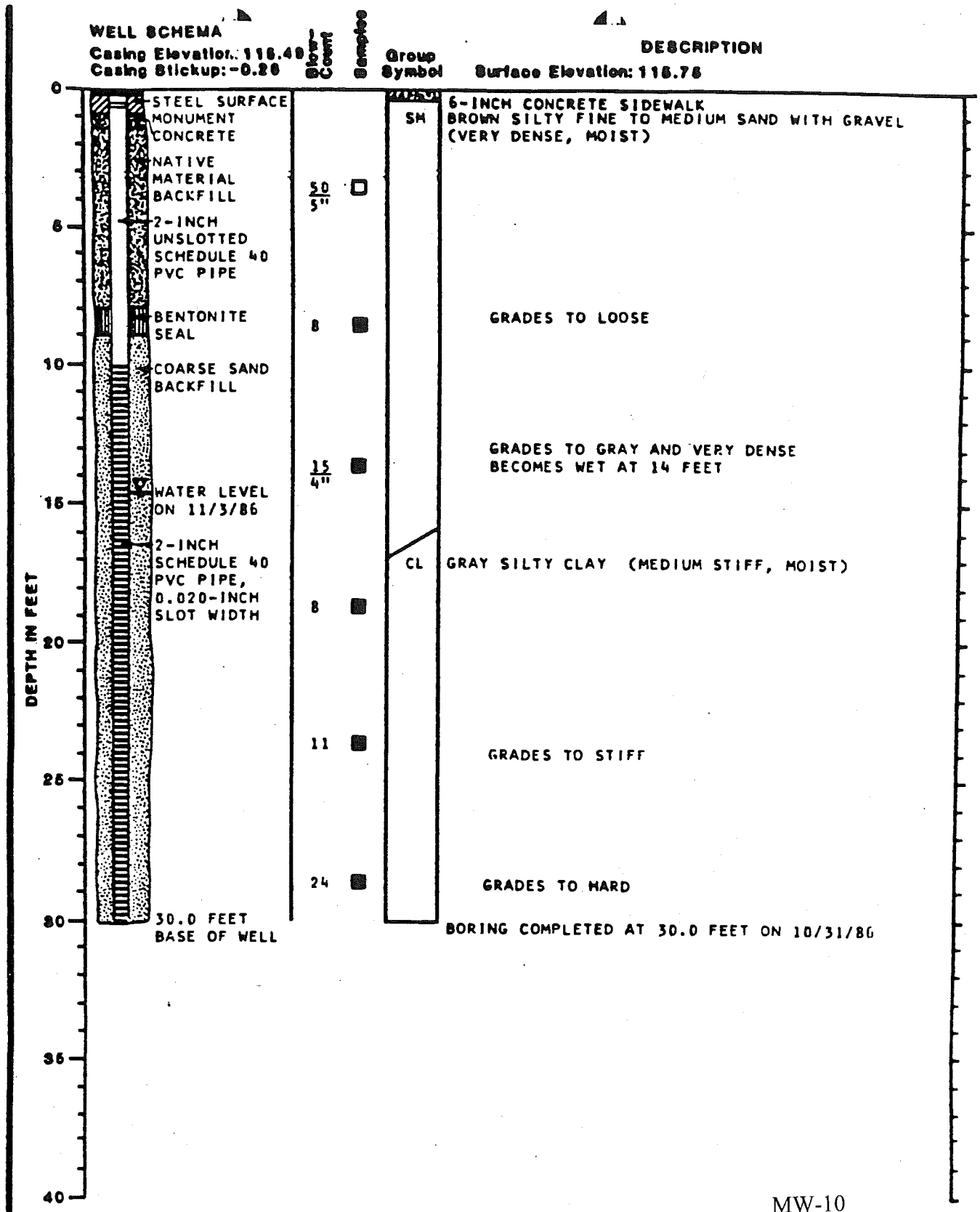
MW-9

GeoEngineers Incorporated

LOG OF MONITOR WELL

FIGURE 10

DRAFT



MW-10

SG4-04 JAM:DMP 11-13-86

GeoEngineers Incorporated

LOG OF MONITOR WELL

FIGURE 11

APPENDIX D

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

August 19, 2020

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

Dear Mr Sawetz:

Included are the additional results from the testing of material submitted on July 9, 2020 from the Roystone Redevelopment PO 2017-015K, F&BI 007142 project. There are 5 pages included in this report.

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

Sincerely,

FRIEDMAN & BRUYA, INC.

Michael Erdahl
Project Manager

Enclosures
TRG0819R.DOC

CASE NARRATIVE

This case narrative encompasses samples received on July 9, 2020 by Friedman & Bruya, Inc. from the The Riley Group Roystone Redevelopment PO 2017-015K project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	The Riley Group
007142 -01	EPL-9S-11
007142 -02	EPL-10S-12
007142 -03	EPL-8S-11
007142 -04	SPL-16S-13
007142 -05	SPL-8S-12
007142 -06	EPL-7S-11

All quality control requirements were acceptable.

Analysis For Total Metals By EPA Method 6020B

Client ID:	SPL-8S-12	Client:	The Riley Group
Date Received:	07/09/20	Project:	Roystone 2017-015K, F&BI 007142
Date Extracted:	07/14/20	Lab ID:	007142-05
Date Analyzed:	07/14/20	Data File:	007142-05.059
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Cadmium	<1
Chromium	14.5

Analysis For Total Metals By EPA Method 6020B

Client ID:	Method Blank	Client:	The Riley Group
Date Received:	Not Applicable	Project:	Roystone 2017-015K, F&BI 007142
Date Extracted:	07/14/20	Lab ID:	I0-414 mb2
Date Analyzed:	07/14/20	Data File:	I0-414 mb2.058
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

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

Date of Report: 08/19/20
Date Received: 07/09/20
Project: Roystone Redevelopment PO 2017-015K, F&BI 007142

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

Laboratory Code: 007188-25 x5 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet wt)	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Cadmium	mg/kg (ppm)	10	<5	103	96	75-125	7
Chromium	mg/kg (ppm)	50	20.3	90	84	75-125	7

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Cadmium	mg/kg (ppm)	10	103	80-120
Chromium	mg/kg (ppm)	50	100	80-120

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.

007142

SAMPLE CHAIN OF CUSTODY

ME 07-09-20 [redacted] Page # 1 of 1 VS1

Report To: Jerry Sawetz
Company: Riley Group
Address
City, State, ZIP
Phone ____ Email: Jsawetz / edunham

SAMPLERS (signature): E. D.

PROJECT NAME	PO #
Roystone Redevelopment	2017-015 K
REMARKS	INVOICE TO
Project specific RLs? - Yes / No	

TURNAROUND TIME
- ☒ Standard turnaround A02
- ☐ RUSH
- Rush charges authorized by:

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

ANALYSES REQUESTED

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	CAS TAL 8260	Lead	Cd, Cr	Notes (V - per ED 7/9)
EPL-9S-11	01A-E	7/9	0930	Soil	5	X	X	X								(1) - per JS, ASAP ef 8/18
EPL-10S-12	02	7/9	1000													
EPL-8S-11	03	7/9	0900													
SPL-16S-13	04	7/9	1200													
SPL-8S-12 ~~SPL-15S-12~~	05	7/9	1100										✓	✓	(✓)	
EPL-7S-11	06	7/8	1200	↓	↓	↓	↓	↓								
Fixed per JS/ED 8/4/20 ME																

Samples received at 4 °C

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

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: E. D.	Eric Dunham	RGI	7/9	1250
Received by: [signature]	Eric Young	F&B	7/9	1250
Relinquished by:				
Received by:				

Libby Environmental, Inc.

3322 South Bay Road NE • Olympia, WA 98506-2957

August 18, 2020

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

Dear Mr. Sawetz:

Please find enclosed the analytical data report for the Roystone Redevelopment Project located in Seattle, Washington.

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

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

Sincerely,

Sherry L. Chilcutt
Senior Chemist
Libby Environmental, Inc.

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

Libby Environmental, Inc.

Chain of Custody Record

www.LibbyEnvironmental.com

3322 South Bay Road NE
Olympia, WA 98506
Ph: 360-352-2110
Fax: 360-352-4154

Date: 8/14/2020 Page: 1 of 1

Client: The Riley Group

Project Manager: Jerry Sawetz

Address:

Project Name: Roystone Redevelopment

City: State: Zip:

Location: 631 Queen Anne Ave N City, State: Seattle, WA

Phone: 425-415-0551 Fax:

Collector: Eric Dunham Date of Collection: 8/13 & 8/14/2020

Client Project # 2017-015K

Email: jsawetz@riley-group.com

	Sample Number	Depth	Time	Sample Type	Container Type	VOC 8260	NWTPH-Gx	BTEX 8021	NWTPH-HCID	NWTPH-Dx	NWTPH-Dx/Dx	c PAH 8270	PAH 8270	Semi Vol 8270	PCB 8082	MTCA 5 Metals	RCRA 8 Metals			Field Notes
MW	1 NPL-21S-20	20	0740	SOIL	2VOA/1402		X	X		X	X									8-13-20
D	2 NPL-22S-20	20	0720				X	X			X									8-13-20
	3 NPL-23S-27	27	0905				X	X			X									
	4 NPL-19S-27	27	0900				X	X			X									
	5 B-17W-30.5	30.5	1100					X												Benzene only
	6 NPL-20S-25.5	25.5	1130				X	X			X									
	7 B-17W-31.5	31.5	1230					X												Benzene only
	8 B-37W-30.5	30.5	1330					X												Benzene only
	9 NPL-21S-29	29	1350				X	X		X	X									~~Benzene only~~ (ED)
D	10 B-38W-30.5	30.5	1445					X												Benzene only
	11																			
	12																			
	13																			
	14																			
	15																			
	16																			
	17																			

Relinquished by:	Date / Time	Received by:	Date / Time
[signature]	8/14/2020 1532	[signature]	8/14/20 1532
Relinquished by:	Date / Time	Received by:	Date / Time
Relinquished by:	Date / Time	Received by:	Date / Time

Sample Receipt

Good Condition?	Y	N
Cooler Temp.		°C
Sample Temp.		°C
Total Number of Containers		

Remarks:

ML

TAT: 24HR 48HR 5-DAY

LEGAL ACTION CLAUSE: *In the event of default of payment and/or failure to pay, Client agrees to pay the costs of collection including court costs and reasonable attorney fees to be determined by a cout of law.*

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

Libby Environmental, Inc.

3322 South Bay Road NE
Olympia, WA 98506
Phone: (360) 352-2110
FAX: (360) 352-4154
Email: libbyenv@gmail.com

ROYSTONE REDEVELOPMENT PROJECT
The Riley Group
Seattle, Washington
Libby Project # L200814-40
Client Project # 2017-015K

Analyses of Gasoline (NWTPH-Gx), BTEX (EPA Method 8260D) in Soil

Sample Description		Method Blank	NPL-21S-20	NPL-22S-20	NPL-22S-20 Dup	NPL-23S-27	NPL-23S-27 Dup
Date Sampled		N/A	8/13/2020	8/13/2020	8/13/2020	8/14/2020	8/14/2020
Date Analyzed	PQL (mg/kg)	8/14/2020 (mg/kg)	8/14/2020 (mg/kg)	8/14/2020 (mg/kg)	8/14/2020 (mg/kg)	8/14/2020 (mg/kg)	8/14/2020 (mg/kg)
Benzene	0.02	nd	nd	nd	nd	nd	nd
Toluene	0.10	nd	nd	nd	nd	nd	nd
Ethylbenzene	0.05	nd	nd	nd	nd	nd	nd
Total Xylenes	0.15	nd	nd	nd	nd	nd	nd
Gasoline	10	nd	nd	nd	nd	nd	nd
Surrogate Recovery							
Dibromofluoromethane		97	82	111	108	83	105
1,2-Dichloroethane-d4		99	87	111	119	88	113
Toluene-d8		93	67	92	90	67	88
4-Bromofluorobenzene		84	84	84	85	88	84

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

ACCEPTABLE RECOVERY LIMITS FOR SURROGATE : 65% TO 135%

ANALYSES PERFORMED BY: Paul Burke

Libby Environmental, Inc.

3322 South Bay Road NE
Olympia, WA 98506
Phone: (360) 352-2110
FAX: (360) 352-4154
Email: libbyenv@gmail.com

ROYSTONE REDEVELOPMENT PROJECT
The Riley Group
Seattle, Washington
Libby Project # L200814-40
Client Project # 2017-015K

Analyses of Gasoline (NWTPH-Gx), BTEX (EPA Method 8260D) in Soil

Sample Description		WPL-19S-27	WPL-20S-25.5	WPL-21S-29
Date Sampled		8/14/2020	8/14/2020	8/14/2020
Date Analyzed	PQL	8/14/2020	8/14/2020	8/14/2020
	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
Benzene	0.02	0.026	0.028	nd
Toluene	0.10	nd	nd	nd
Ethylbenzene	0.05	nd	nd	nd
Total Xylenes	0.15	nd	nd	nd
Gasoline	10	nd	nd	nd
Surrogate Recovery				
Dibromofluoromethane		82	82	83
1,2-Dichloroethane-d4		86	90	88
Toluene-d8		69	67	69
4-Bromofluorobenzene		88	85	83

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

ACCEPTABLE RECOVERY LIMITS FOR SURROGATE : 65% TO 135%

ANALYSES PERFORMED BY: Paul Burke

Libby Environmental, Inc.

3322 South Bay Road NE
Olympia, WA 98506
Phone: (360) 352-2110
FAX: (360) 352-4154
Email: libbyenv@gmail.com

ROYSTONE REDEVELOPMENT PROJECT
The Riley Group
Seattle, Washington
Libby Project # L200814-40
Client Project # 2017-015K

Analyses of Benzene (EPA Method 8260D) in Soil

Sample Description		Method Blank	B-17W-30.5	B-17W-31.5	B-37W-30.5	B-38W-30.5	B-38W-30.5 Dup
Date Sampled		N/A	8/14/2020	8/14/2020	8/14/2020	8/14/2020	8/14/2020
Date Analyzed	PQL	8/14/2020	8/14/2020	8/14/2020	8/14/2020	8/14/2020	8/14/2020
	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
Benzene	0.02	nd	0.033	nd	nd	nd	nd
Surrogate Recovery							
Dibromofluoromethane		97	82	83	83	83	82
1,2-Dichloroethane-d4		99	88	93	90	89	93
Toluene-d8		93	70	66	74	75	66
4-Bromofluorobenzene		84	85	86	84	85	87

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

ACCEPTABLE RECOVERY LIMITS FOR SURROGATE : 65% TO 135%

ANALYSES PERFORMED BY: Paul Burke

Libby Environmental, Inc.

3322 South Bay Road NE
Olympia, WA 98506
Phone: (360) 352-2110
FAX: (360) 352-4154
Email: libbyenv@gmail.com

ROYSTONE REDEVELOPMENT PROJECT
The Riley Group
Seattle, Washington
Libby Project # L200814-40
Client Project # 2017-015K

QA/QC for Gasoline (NWTPH-Gx) & BTEX (EPA Method 8260D) in Soil

Matrix Spike Sample Identification: NPL-21S-20

	Spiked Conc. (mg/kg)	MS Response (mg/kg)	MSD Response (mg/kg)	MS Recovery (%)	MSD Recovery (%)	RPD (%)	Limits Recovery (%)	Data Flag
Benzene	0.25	0.25	0.25	100	100	0.0	65-135	
Toluene	0.25	0.23	0.22	92	88	4.4	65-135	
Ethylbenzene	0.25	0.23	0.23	92	92	0.0	65-135	
Total Xylenes	0.75	0.65	0.62	87	83	4.7	65-135	

Surrogate Recovery (%)	MS	MSD	
Dibromofluoromethane	109	111	65-135
1,2-Dichloroethane-d4	112	111	65-135
Toluene-d8	95	97	65-135
4-Bromofluorobenzene	105	109	65-135

ACCEPTABLE RPD IS 35%

ANALYSES PERFORMED BY: Paul Burke

Laboratory Control Sample

	Spiked Conc. (mg/kg)	LCS Response (mg/kg)	LCS Recovery (%)	LCS Recovery Limits (%)	Data Flag
Benzene	0.25	0.21	84	80-120	
Toluene	0.25	0.27	108	80-120	
Ethylbenzene	0.25	0.26	104	80-120	
Total Xylenes	0.75	0.72	95	80-120	

Surrogate Recovery		
Dibromofluoromethane	87	65-135
1,2-Dichloroethane-d4	98	65-135
Toluene-d8	105	65-135
4-Bromofluorobenzene	105	65-135

ANALYSES PERFORMED BY: Paul Burke

Libby Environmental, Inc.

3322 South Bay Road NE
Olympia, WA 98506
Phone: (360) 352-2110
FAX: (360) 352-4154
Email: libbyenv@gmail.com

ROYSTONE REDEVELOPMENT PROJECT
The Riley Group
Seattle, Washington
Libby Project # L200814-40
Client Project # 2017-015K

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

Sample Number	Date Analyzed	Surrogate Recovery (%)	Diesel (mg/kg)	Oil (mg/kg)
Method Blank	8/14/2020	107	nd	nd
NPL-21S-20	8/14/2020	112	nd	nd
NPL-22S-20	8/14/2020	89	nd	nd
NPL-22S-20 Dup	8/14/2020	88	nd	nd
NPL-23S-27	8/14/2020	124	nd	nd
WPL-19S-27	8/14/2020	114	nd	nd
WPL-19S-27 Dup	8/14/2020	86	nd	nd
WPL-20S-25.5	8/14/2020	114	nd	nd
WPL-21S-29	8/14/2020	111	nd	nd
Practical Quantitation Limit			50	250

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

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

ANALYSES PERFORMED BY: Paul Burke

Libby Environmental, Inc.
3322 South Bay Road NE • Olympia, WA 98506-2957

August 17, 2020

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

Dear Mr. Sawetz:

Please find enclosed the analytical data report for the Roystone Redevelopment Project located in Seattle, Washington.

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

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

Sincerely,

Sherry L. Chilcutt
Senior Chemist
Libby Environmental, Inc.

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

Libby Environmental, Inc.

Chain of Custody Record

www.LibbyEnvironmental.com

3322 South Bay Road NE
Olympia, WA 98506
Ph: 360-352-2110
Fax: 360-352-4154

Client: Riley Group
Address:
City: State: Zip:
Phone: 425-415-0551 Fax:
Client Project # 2017-015K

Date: 8/13/2020 Page: 1 of 1
Project Manager: Jerry Sawetz
Project Name: Roystone Redevelopment
Location: 631 Queen Anne Ave N City, State: Seattle, WA
Collector: Eric Dunham Date of Collection: 8/13/2020
Email: Jsawetz@riley-group.com
edunham " "

Sample Number	Depth	Time	Sample Type	Container Type	VOC 8260	NWTPH-Gx	BTEX 8021	NWTPH-HCID	NWTPH-Dx	NWTPH-Dx/Dx	cPAH 8270	PAH 8270	Semi Vol 8270	PCB 8082	MTCA 5 Metals	RCRA 8 Metals	Benzene		Field Notes
1 B-22W-27.5	27.5	0800	2VOA 1402	SOIL													X		Benzene only
2 B-32W-28	28	0830	SOIL	2VOA 1402		X	X			X									
3 B-33W-28	28	0845				X	X			X									
4 B-34W-28	28	0900				X	X			X									
5 B-32W-30	30	1015															X		Benzene only
6 DPE-6C-20	20	1030				X	X			X									
7 B-28W-27	27	1100				X	X			X									
8 SPL-24S-26	26	1130															X		Benzene only
9 B-23W-26	26	1230				X	X			X									
10 DP-4C-26	26	1245				X	X			X									
11 B-18W-27	27	1430				X	X			X									
12 B-17W-28	28	1515				X	X			X									
13 B-36W-16.5	16.5	1545				X	X			X									
14 NPL-19S-20	20	0905				X	X			X									
15 NPL-20S-20	20	0730				X	X			X									
16																			
17																			

Relinquished by:	Date / Time	Received by:	Date / Time
ERL	8/13/2020	JLy CAT	8-13-20
Relinquished by:	Date / Time	Received by:	Date / Time
Relinquished by:	Date / Time	Received by:	Date / Time

Sample Receipt

Good Condition?	Y	N
Cooler Temp.		°C
Sample Temp.		°C
Total Number of Containers		

Remarks: ML

TAT: 24HR 48HR 5-DAY

LEGAL ACTION CLAUSE: *In the event of default of payment and/or failure to pay, Client agrees to pay the costs of collection including court costs and reasonable attorney fees to be determined by a cout of law.*

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

Libby Environmental, Inc.

3322 South Bay Road NE
Olympia, WA 98506
Phone: (360) 352-2110
FAX: (360) 352-4154
Email: libbyenv@gmail.com

ROYSTONE REDEVELOPMENT PROJECT
The Riley Group
Seattle, Washington
Libby Project # L200813-10
Client Project # 2017-015K

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

Sample Description		Method Blank	B-32W-28	B-32W-28 Dup	B-33W-28	B-34W-28	DPE-6C-20
Date Sampled		N/A	8/13/2020	8/13/2020	8/13/2020	8/13/2020	8/13/2020
Date Analyzed	PQL (mg/kg)	8/13/2020 (mg/kg)	8/13/2020 (mg/kg)	8/13/2020 (mg/kg)	8/13/2020 (mg/kg)	8/13/2020 (mg/kg)	8/13/2020 (mg/kg)
Benzene	0.02	nd	0.10	0.17	nd	nd	nd
Toluene	0.10	nd	nd	nd	nd	nd	nd
Ethylbenzene	0.05	nd	nd	nd	nd	nd	nd
Total Xylenes	0.15	nd	nd	nd	nd	nd	nd
Gasoline	10	nd	nd	nd	nd	nd	nd
Surrogate Recovery							
Dibromofluoromethane		132	123	120	135	124	129
1,2-Dichloroethane-d4		108	107	89	107	95	123
Toluene-d8		91	89	88	91	88	94
4-Bromofluorobenzene		91	86	83	87	87	87

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

ACCEPTABLE RECOVERY LIMITS FOR SURROGATE : 65% TO 135%

ANALYSES PERFORMED BY: Sherry Chilcutt

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Phone: (360) 352-2110
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ROYSTONE REDEVELOPMENT PROJECT
The Riley Group
Seattle, Washington
Libby Project # L200813-10
Client Project # 2017-015K

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

Sample Description		B-28W-27	B-23W-26	DP-4C-26	B-18W-27	B-18W-27 Dup	B-17W-28
Date Sampled		8/13/2020	8/13/2020	8/13/2020	8/13/2020	8/13/2020	8/13/2020
Date Analyzed	PQL	8/13/2020	8/13/2020	8/13/2020	8/13/2020	8/13/2020	8/13/2020
	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
Benzene	0.02	nd	nd	nd	nd	nd	0.096
Toluene	0.10	nd	nd	nd	nd	nd	nd
Ethylbenzene	0.05	nd	nd	nd	nd	nd	nd
Total Xylenes	0.15	nd	nd	nd	nd	nd	nd
Gasoline	10	nd	nd	nd	nd	nd	nd
Surrogate Recovery							
Dibromofluoromethane		116	121	120	130	122	126
1,2-Dichloroethane-d4		97	134	110	135	118	126
Toluene-d8		92	98	91	91	91	95
4-Bromofluorobenzene		87	89	105	93	86	89

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ACCEPTABLE RECOVERY LIMITS FOR SURROGATE : 65% TO 135%

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ROYSTONE REDEVELOPMENT PROJECT
The Riley Group
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Libby Project # L200813-10
Client Project # 2017-015K

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

Sample Description		B-36W-16.5	NPL-19S-20	NPL-20S-20
Date Sampled		8/13/2020	8/13/2020	8/13/2020
Date Analyzed	PQL (mg/kg)	8/13/2020 (mg/kg)	8/13/2020 (mg/kg)	8/13/2020 (mg/kg)
Benzene	0.02	nd	nd	nd
Toluene	0.10	nd	nd	nd
Ethylbenzene	0.05	nd	nd	nd
Total Xylenes	0.15	nd	nd	nd
Gasoline	10	nd	nd	nd
Surrogate Recovery				
Dibromofluoromethane		132	120	123
1,2-Dichloroethane-d4		120	118	132
Toluene-d8		91	74	92
4-Bromofluorobenzene		89	87	86

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ACCEPTABLE RECOVERY LIMITS FOR SURROGATE : 65% TO 135%

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ROYSTONE REDEVELOPMENT PROJECT
The Riley Group
Seattle, Washington
Libby Project # L200813-10
Client Project # 2017-015K

Analyses of Benzene (EPA Method 8260D) in Soil

Sample Description		Method Blank	B-22W-27.5	B-32W-30	SPL-24S-26
Date Sampled		N/A	8/13/2020	8/13/2020	8/13/2020
Date Analyzed	PQL	8/13/2020	8/13/2020	8/13/2020	8/13/2020
	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
Benzene	0.02	nd	nd	nd	nd
Surrogate Recovery					
Dibromofluoromethane		132	130	127	125
1,2-Dichloroethane-d4		108	100	115	110
Toluene-d8		91	88	92	92
4-Bromofluorobenzene		91	89	88	88

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ACCEPTABLE RECOVERY LIMITS FOR SURROGATE : 65% TO 135%

ANALYSES PERFORMED BY: Sherry Chilcutt

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Olympia, WA 98506
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ROYSTONE REDEVELOPMENT PROJECT
The Riley Group
Seattle, Washington
Libby Project # L200813-10
Client Project # 2017-015K

QA/QC for Gasoline (NWTPH-Gx) & BTEX (EPA Method 8260D) in Soil

Matrix Spike Sample Identification: B-28W-27

	Spiked Conc. (mg/kg)	MS Response (mg/kg)	MSD Response (mg/kg)	MS Recovery (%)	MSD Recovery (%)	RPD (%)	Limits Recovery (%)	Data Flag
Benzene	0.25	0.19	0.20	75	81	8.2	65-135	
Toluene	0.25	0.20	0.22	81	88	9.0	65-135	
Ethylbenzene	0.25	0.23	0.25	93	101	8.7	65-135	
Total Xylenes	0.75	0.67	0.73	89	97	9.3	65-135	

Surrogate Recovery (%)	MS	MSD	
Dibromofluoromethane	120	125	65-135
1,2-Dichloroethane-d4	110	116	65-135
Toluene-d8	97	98	65-135
4-Bromofluorobenzene	113	116	65-135

ACCEPTABLE RPD IS 35%

ANALYSES PERFORMED BY: Sherry Chilcutt

Laboratory Control Sample

	Spiked Conc. (mg/kg)	LCS Response (mg/kg)	LCS Recovery (%)	LCS Recovery Limits (%)	Data Flag
Benzene	0.25	0.24	95	80-120	
Toluene	0.25	0.20	80	80-120	
Ethylbenzene	0.25	0.24	96	80-120	
Total Xylenes	0.75	0.66	89	80-120	

Surrogate Recovery		
Dibromofluoromethane	132	65-135
1,2-Dichloroethane-d4	103	65-135
Toluene-d8	97	65-135
4-Bromofluorobenzene	112	65-135

ANALYSES PERFORMED BY: Sherry Chilcutt

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ROYSTONE REDEVELOPMENT PROJECT
The Riley Group
Seattle, Washington
Libby Project # L200813-10
Client Project # 2017-015K

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

Sample Number	Date Analyzed	Surrogate Recovery (%)	Diesel (mg/kg)	Oil (mg/kg)
Method Blank	8/13/2020	97	nd	nd
B-32W-28	8/13/2020	69	nd	nd
B-32W-28 Dup	8/13/2020	98	nd	nd
B-33W-28	8/13/2020	67	nd	nd
B-34W-28	8/13/2020	99	nd	nd
DPE-6C-20	8/13/2020	81	nd	nd
B-28W-27	8/13/2020	69	nd	nd
B-23W-26	8/13/2020	114	nd	nd
DP-4C-26	8/13/2020	75	nd	nd
B-18W-27	8/13/2020	69	nd	nd
B-18W-27 Dup	8/13/2020	100	nd	nd
B-17W-28	8/13/2020	69	nd	nd
B-36W-16.5	8/13/2020	75	nd	nd
NPL-19S-20	8/13/2020	80	nd	nd
NPL-20S-20	8/13/2020	86	nd	nd
Practical Quantitation Limit			50	250

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"int" Indicates that interference prevents determination.

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

ANALYSES PERFORMED BY: Sherry Chilcutt

Libby Environmental, Inc.
3322 South Bay Road NE • Olympia, WA 98506-2957

August 17, 2020

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

Dear Mr. Sawetz:

Please find enclosed the analytical data report for the Roystone Redevelopment Project located in Seattle, Washington.

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

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

Sincerely,

Sherry L. Chilcutt
Senior Chemist
Libby Environmental, Inc.

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

Libby Environmental, Inc.

Chain of Custody Record

www.LibbyEnvironmental.com

3322 South Bay Road NE
Olympia, WA 98506
Ph: 360-352-2110
Fax: 360-352-4154

Client: Riley Group
Address:
City: State: Zip:
Phone: 425-415-0551 Fax:
Client Project # 2017-015K

Date: 08/07/2020 Page: 1 of 1
Project Manager: Jerry Sawetz
Project Name: Roystone Redevelopment
Location: 631 Queen Anne Ave N City, State: Seattle, WA
Collector: Eric Dunham Date of Collection: 08/06/2020 &
Email: jsawetz@riley-group.com, edunham@riley-group.com 08/07/2020

	Sample Number	Depth	Time	Sample Type	Container Type	VOC 8260	NWTPH-Gx	BTEX 8021	NWTPH-HCID	NWTPH-Dx	NWTPH-Dx/Dx	c PAH 8270	PAH 8270	Semi Vol 8270	PCB 8082	MTCA 5 Metals	RCRA 8 Metals			Field Notes
1	B1E-21	21	0800	S	4oz UA		X	X			X									8/6 collected
2	EPL-15S-17	17	0900																	8/6 collected
3	B-15W-25	25	0900																	8/7 collected
4	B-20W-25	25	0945																	
5	SPL-15S-20	20	1000																	
6	B-10E-24	24	1015																	
7	B-30W-26	26	1115																	
8	B-35W-25	25	1245																	
9	POBC-28	28	1310																	
10	B-25W-26	26	1330																	
11	B-31W-26.5	26.5	1345																	
12	~~B~~ SPL-19S-24	24	1300																	
13	SPL-18S-19	19	1100																	
14	B-26W-25	25	1400																	
15	B-21W-25.5	25.5	1415																	
16																				
17																				

Relinquished by:	Date / Time	Received by:	Date / Time
[signature]	08/07 1545	[signature] UA	8-7-20 1545
Relinquished by:	Date / Time	Received by:	Date / Time
Relinquished by:	Date / Time	Received by:	Date / Time

Sample Receipt

Good Condition?	Y	N
Cooler Temp.		°C
Sample Temp.		°C
Total Number of Containers		

Remarks:

TAT: 24HR 48HR 5-DAY

LEGAL ACTION CLAUSE: *In the event of default of payment and/or failure to pay, Client agrees to pay the costs of collection including court costs and reasonable attorney fees to be determined by a cout of law.*

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ROYSTONE REDEVELOPMENT PROJECT
The Riley Group
Seattle, Washington
Libby Project # L200807-10
Client Project # 2017-015K

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

Sample Description		Method Blank	B-IE-21	EPL-15S-17	B-15W-25	B-15W-25 Dup	B-20W-25
Date Sampled		N/A	8/6/2020	8/6/2020	8/7/2020	8/7/2020	8/7/2020
Date Analyzed	PQL	8/7/2020	8/7/2020	8/7/2020	8/7/2020	8/7/2020	8/7/2020
	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
Benzene	0.02	nd	nd	nd	nd	nd	nd
Toluene	0.10	nd	nd	nd	nd	nd	nd
Ethylbenzene	0.05	nd	nd	nd	nd	nd	nd
Total Xylenes	0.15	nd	nd	nd	nd	nd	nd
Gasoline	10	nd	nd	nd	nd	nd	nd
Surrogate Recovery							
Dibromofluoromethane		123	126	126	126	120	135
1,2-Dichloroethane-d4		101	95	82	94	98	87
Toluene-d8		91	89	89	89	91	92
4-Bromofluorobenzene		99	93	90	99	95	98

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

ACCEPTABLE RECOVERY LIMITS FOR SURROGATE : 65% TO 135%

ANALYSES PERFORMED BY: Sherry Chilcutt

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ROYSTONE REDEVELOPMENT PROJECT
The Riley Group
Seattle, Washington
Libby Project # L200807-10
Client Project # 2017-015K

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

Sample Description		SPL-15S-20	B-10E-24	B-30W-26	B-35W-25	P08C-28	B-25W-26
Date Sampled		8/7/2020	8/7/2020	8/7/2020	8/7/2020	8/7/2020	8/7/2020
Date Analyzed	PQL	8/7/2020	8/7/2020	8/7/2020	8/7/2020	8/7/2020	8/7/2020
	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
Benzene	0.02	nd	nd	nd	nd	nd	nd
Toluene	0.10	nd	nd	nd	nd	nd	nd
Ethylbenzene	0.05	nd	nd	nd	nd	nd	nd
Total Xylenes	0.15	nd	nd	nd	nd	nd	nd
Gasoline	10	nd	nd	nd	nd	nd	nd
Surrogate Recovery							
Dibromofluoromethane		132	130	127	125	131	119
1,2-Dichloroethane-d4		94	72	73	111	91	120
Toluene-d8		91	90	92	92	89	90
4-Bromofluorobenzene		95	89	84	93	96	94

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ACCEPTABLE RECOVERY LIMITS FOR SURROGATE : 65% TO 135%

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ROYSTONE REDEVELOPMENT PROJECT
The Riley Group
Seattle, Washington
Libby Project # L200807-10
Client Project # 2017-015K

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

Sample Description		B-31W-26.5	B-31W-26.5 Dup	SPL-19S-24	SPL-18S-19	B-26W-25	B-21W-25.5
Date Sampled		8/7/2020	8/7/2020	8/7/2020	8/7/2020	8/7/2020	8/7/2020
Date Analyzed	PQL	8/7/2020	8/7/2020	8/7/2020	8/7/2020	8/7/2020	8/7/2020
	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
Benzene	0.02	nd	nd	nd	nd	0.30	0.95
Toluene	0.10	nd	nd	nd	nd	nd	nd
Ethylbenzene	0.05	nd	nd	nd	nd	nd	nd
Total Xylenes	0.15	nd	nd	nd	nd	nd	nd
Gasoline	10	nd	nd	nd	nd	nd	nd
Surrogate Recovery							
Dibromofluoromethane		135	123	130	129	126	131
1,2-Dichloroethane-d4		127	94	99	99	117	100
Toluene-d8		88	92	96	91	90	92
4-Bromofluorobenzene		95	94	94	96	98	91

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ACCEPTABLE RECOVERY LIMITS FOR SURROGATE : 65% TO 135%

ANALYSES PERFORMED BY: Sherry Chilcutt

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ROYSTONE REDEVELOPMENT PROJECT
The Riley Group
Seattle, Washington
Libby Project # L200807-10
Client Project # 2017-015K

QA/QC for Gasoline (NWTPH-Gx) & BTEX (EPA Method 8260D) in Soil

Matrix Spike Sample Identification: B-15W-25

	Spiked Conc. (mg/kg)	MS Response (mg/kg)	MSD Response (mg/kg)	MS Recovery (%)	MSD Recovery (%)	RPD (%)	Limits Recovery (%)	Data Flag
Benzene	0.25	0.22	0.18	88	71	21.1	65-135	
Toluene	0.25	0.19	0.24	75	96	23.9	65-135	
Ethylbenzene	0.25	0.23	0.27	94	108	14.7	65-135	
Total Xylenes	0.75	0.63	0.75	84	99	16.9	65-135	

Surrogate Recovery (%)	MS	MSD	
Dibromofluoromethane	127	132	65-135
1,2-Dichloroethane-d4	92	99	65-135
Toluene-d8	97	100	65-135
4-Bromofluorobenzene	113	121	65-135

ACCEPTABLE RPD IS 35%

ANALYSES PERFORMED BY: Sherry Chilcutt

Laboratory Control Sample

	Spiked Conc. (mg/kg)	LCS Response (mg/kg)	LCS Recovery (%)	LCS Recovery Limits (%)	Data Flag
Benzene	0.25	0.21	85	80-120	
Toluene	0.25	0.26	103	80-120	
Ethylbenzene	0.25	0.29	115	80-120	
Total Xylenes	0.75	0.76	101	80-120	

Surrogate Recovery		
Dibromofluoromethane	128	65-135
1,2-Dichloroethane-d4	105	65-135
Toluene-d8	112	65-135
4-Bromofluorobenzene	116	65-135

ANALYSES PERFORMED BY: Sherry Chilcutt

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ROYSTONE REDEVELOPMENT PROJECT
The Riley Group
Seattle, Washington
Libby Project # L200807-10
Client Project # 2017-015K

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

Sample Number	Date Analyzed	Surrogate Recovery (%)	Diesel (mg/kg)	Oil (mg/kg)
Method Blank	8/7/2020	77	nd	nd
B-IE-21	8/7/2020	69	nd	nd
EPL-15S-17	8/7/2020	70	nd	nd
EPL-15S-17 Dup	8/7/2020	85	nd	nd
B-15W-25	8/7/2020	73	nd	nd
B-20W-25	8/7/2020	69	nd	nd
SPL-15S-20	8/7/2020	83	nd	nd
B-10E-24	8/7/2020	71	nd	nd
B-30W-26	8/7/2020	73	nd	nd
B-35W-25	8/7/2020	78	nd	nd
P08C-28	8/7/2020	75	nd	nd
B-25W-26	8/7/2020	67	nd	nd
B-25W-26 Dup	8/7/2020	68	nd	nd
B-31W-26.5	8/7/2020	66	nd	nd
SPL-19S-24	8/7/2020	73	nd	nd
SPL-18S-19	8/7/2020	81	nd	nd
B-26W-25	8/7/2020	78	nd	nd
B-21W-25.5	8/7/2020	77	nd	nd
Practical Quantitation Limit			50	250

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

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

ANALYSES PERFORMED BY: Sherry Chilcutt

Libby Environmental, Inc.

3322 South Bay Road NE • Olympia, WA 98506-2957

August 14, 2020

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

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Sincerely,

Sherry L. Chilcutt
Senior Chemist
Libby Environmental, Inc.

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

Libby Environmental, Inc.

Chain of Custody Record

www.LibbyEnvironmental.com

3322 South Bay Road NE
Olympia, WA 98506
Ph: 360-352-2110
Fax: 360-352-4154

Client: Riley Group
Address:
City: State: Zip:
Phone: 425-415-0551 Fax:
Client Project # 2017-015K

Date: 8/12/2020 Page: 1 of 1
Project Manager: Jerry Sawetz
Project Name: Roystone Redevelopment
Location: 631 Queen Anne Ave N City, State: Seattle, WA
Collector: Eric Dunham Date of Collection: 8/10, 8/11, 8/12
Email: jsawetz@riley-group.com edunham"

	Sample Number	Depth	Time	Sample Type	Container Type	VOC 8260	NWTPH-Gx	BTEX 8021	NWTPH-HCID	NWTPH-Dx	NWTPH-Dx/Dx	c PAH 8270	PAH 8270	Semi Vol 8270	PCB 8082	MTCA 5 Metals	RCRA 8 Metals	Naph	Field Notes
1	SPL-20S-24	24	0900	SOIL	2VOA;4oz		X	X			X								8/10 ~~HOLD~~
2	SPL-21S-24	24	0930				X	X			X								~~HOLD~~
3	SPL-22S-25	25	1000				X	X			X								~~HOLD~~
4	SPL-23S-25	25	1100																HOLD
5	RW-4C-32	32	1400				X	X			X								8/11
6	B-16W-25	25	1300				X	X			X								8/11
7	B-14E-21	21	0845				X	X			X								8/12
MS 8	B-19W-19	19	0900				X	X			X								
9	B-29W-24	24	1000				X	X			X								
10	B-24W-19	19	1030				X	X			X								
11	B-26W-28	28	1130				X	X			X								Benzene only
12	B-21W-28	28	1140				X	X			X								Benzene Only
13	B-27W-26	26	1300				X	X			X								
D 14	B-22W-25.5	25.5	1335				X	X			X					X			
15	B-29W-26	26	1400				X	X			X								Benzene only
16	WPL-18S-25	25	0900				X	X			X								8/11
D 17	OWS-B2-25	25	1200	↓	↓	X	X	X			X								2-day RUSH 8/11

Relinquished by: Date / Time
Received by: Date / Time 8/12/20 1633

Relinquished by: Date / Time
Received by: Date / Time

Relinquished by: Date / Time
Received by: Date / Time

Sample Receipt

Good Condition?	Y	N
Cooler Temp.		°C
Sample Temp.		°C
Total Number of Containers		

Remarks:
2-day RUSH on OWS-B2-25
ML

TAT: 24HR 48HR 5-DAY

LEGAL ACTION CLAUSE: *In the event of default of payment and/or failure to pay, Client agrees to pay the costs of collection including court costs and reasonable attorney fees to be determined by a cout of law.*

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

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ROYSTONE REDEVELOPMENT PROJECT
The Riley Group
Seattle, Washington
Libby Project # L200812-40
Client Project # 2017-015K

Volatile Organic Compounds by EPA Method 8260D in Soil

Sample Description		Method Blank	OWS-B2-25
Date Sampled	Reporting	N/A	8/11/2020
Date Analyzed	Limits (mg/kg)	8/12/2020 (mg/kg)	8/12/2020 (mg/kg)
Dichlorodifluoromethane	0.06	nd	nd
Chloromethane	0.06	nd	nd
Vinyl chloride	0.02	nd	nd
Bromomethane	0.09	nd	nd
Chloroethane	0.06	nd	nd
Trichlorofluoromethane	0.05	nd	nd
1,1-Dichloroethene	0.05	nd	nd
Methylene chloride	0.02	nd	nd
Methyl *tert*- Butyl Ether (MTBE)	0.05	nd	nd
trans -1,2-Dichloroethene	0.02	nd	nd
1,1-Dichloroethane	0.03	nd	nd
2,2-Dichloropropane	0.05	nd	nd
cis -1,2-Dichloroethene	0.02	nd	nd
Chloroform	0.02	nd	nd
1,1,1-Trichloroethane (TCA)	0.02	nd	nd
Carbon tetrachloride	0.03	nd	nd
1,1-Dichloropropene	0.02	nd	nd
Benzene	0.02	nd	nd
1,2-Dichloroethane (EDC)	0.03	nd	nd
Trichloroethene (TCE)	0.02	nd	nd
1,2-Dichloropropane	0.02	nd	nd
Dibromomethane	0.04	nd	nd
Bromodichloromethane	0.02	nd	nd
cis-1,3-Dichloropropene	0.02	nd	nd
Toluene	0.10	nd	nd
Trans-1,3-Dichloropropene	0.03	nd	nd
1,1,2-Trichloroethane	0.03	nd	nd
Tetrachloroethene (PCE)	0.02	nd	nd
1,3-Dichloropropane	0.05	nd	nd
Dibromochloromethane	0.03	nd	nd
1,2-Dibromoethane (EDB) *	0.005	nd	nd
Chlorobenzene	0.02	nd	nd
Ethylbenzene	0.03	nd	nd
1,1,1,2-Tetrachloroethane	0.05	nd	nd
Total Xylenes	0.15	nd	nd
Styrene	0.02	nd	nd

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Volatile Organic Compounds by EPA Method 8260D in Soil

Sample Description		Method Blank	OWS-B2-25
Date Sampled	Reporting	N/A	8/11/2020
Date Analyzed	Limits (mg/kg)	8/12/2020 (mg/kg)	8/12/2020 (mg/kg)
Bromoform	0.03	nd	nd
Isopropylbenzene	0.05	nd	nd
1,1,2,2-Tetrachloroethane	0.05	nd	nd
Bromobenzene	0.03	nd	nd
n-Propylbenzene	0.03	nd	nd
1,2,3-Trichloropropane	0.04	nd	nd
2-Chlorotoluene	0.03	nd	nd
1,3,5-Trimethylbenzene	0.03	nd	nd
4-Chlorotoluene	0.03	nd	nd
tert-Butylbenzene	0.03	nd	nd
1,2,4-Trimethylbenzene	0.03	nd	nd
sec-Butylbenzene	0.03	nd	nd
p-Isopropyltoluene	0.03	nd	nd
1,3-Dichlorobenzene	0.03	nd	nd
1,4-Dichlorobenzene	0.03	nd	nd
n-Butylbenzene	0.03	nd	nd
1,2-Dichlorobenzene	0.05	nd	nd
1,2-Dibromo-3-Chloropropane	0.05	nd	nd
1,2,4-Trichlorolbenzene	0.05	nd	nd
Hexachloro-1,3-butadiene	0.10	nd	nd
Naphthalenes	0.10	nd	nd
1,2,3-Trichlorobenzene	0.10	nd	nd
Surrogate Recovery			
Dibromofluoromethane		81	109
1,2-Dichloroethane-d4		89	117
Toluene-d8		77	88
4-Bromofluorobenzene		80	86

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

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

ANALYSES PERFORMED BY: Paul Burke

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ROYSTONE REDEVELOPMENT PROJECT
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Client Project # 2017-015K

QA/QC for Volatile Organic Compounds by EPA Method 8260D in Soil

Matrix Spike Sample Identification: B-19W-19

	Spiked Conc. (mg/kg)	MS Response (mg/kg)	MSD Response (mg/kg)	MS Recovery (%)	MSD Recovery (%)	RPD (%)	Limits Recovery (%)	Data Flag
Dichlorodifluoromethane	0.25	0.21	0.21	84	84	0.0	65-135	
Chloromethane	0.25	0.21	0.21	84	84	0.0	65-135	
Vinyl chloride	0.25	0.22	0.22	88	88	0.0	65-135	
Bromomethane	0.25	0.28	0.27	112	108	3.6	65-135	
Chloroethane	0.25	0.28	0.25	112	100	11.3	65-135	
Trichlorofluoromethane	0.25	0.11	0.11	44	44	0.0	65-135	S
1,1-Dichloroethene	0.25	0.23	0.25	92	100	8.3	65-135	
Methylene chloride	0.25	0.25	0.23	100	92	8.3	65-135	
Methyl *tert*- Butyl Ether (MTBE)	0.25	0.21	0.23	84	92	9.1	65-135	
trans -1,2-Dichloroethene	0.25	0.22	0.23	88	92	4.4	65-135	
1,1-Dichloroethane	0.25	0.24	0.23	96	92	4.3	65-135	
2,2-Dichloropropane	0.25	0.22	0.22	88	88	0.0	65-135	
cis -1,2-Dichloroethene	0.25	0.21	0.21	84	84	0.0	65-135	
Chloroform	0.25	0.23	0.22	92	88	4.4	65-135	
1,1,1-Trichloroethane (TCA)	0.25	0.23	0.23	92	92	0.0	65-135	
Carbon tetrachloride	0.25	0.24	0.24	96	96	0.0	65-135	
1,1-Dichloropropene	0.25	0.21	0.22	84	88	4.7	65-135	
Benzene	0.25	0.23	0.22	92	88	4.4	65-135	
1,2-Dichloroethane (EDC)	0.25	0.25	0.26	100	104	3.9	65-135	
Trichloroethene (TCE)	0.25	0.28	0.28	112	112	0.0	65-135	
1,2-Dichloropropane	0.25	0.29	0.30	116	120	3.4	65-135	
Dibromomethane	0.25	0.31	0.32	124	128	3.2	65-135	
Bromodichloromethane	0.25	0.26	0.26	104	104	0.0	65-135	
cis-1,3-Dichloropropene	0.25	0.29	0.28	116	112	3.5	65-135	
Toluene	0.25	0.23	0.23	92	92	0.0	65-135	
Trans-1,3-Dichloropropene	0.25	0.31	0.35	124	140	12.1	65-135	S
1,1,2-Trichloroethane	0.25	0.36	0.39	144	156	8.0	65-135	S
Tetrachloroethene (PCE)	0.25	0.39	0.44	156	176	12.0	65-135	S
1,3-Dichloropropane	0.25	0.27	0.29	108	116	7.1	65-135	
Dibromochloromethane	0.25	0.39	0.40	156	160	2.5	65-135	S
1,2-Dibromoethane (EDB)	0.25	0.32	0.35	128	140	9.0	65-135	S
Chlorobenzene	0.25	0.29	0.31	116	124	6.7	65-135	
Ethylbenzene	0.25	0.25	0.25	100	100	0.0	65-135	
1,1,1,2-Tetrachloroethane	0.25	0.25	0.35	100	140	33.3	65-135	S
Total Xylenes	0.75	0.83	0.71	111	95	15.6	65-135	
Styrene	0.25	0.20	0.20	80	80	0.0	65-135	

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ROYSTONE REDEVELOPMENT PROJECT
The Riley Group
Seattle, Washington
Libby Project # L200812-40
Client Project # 2017-015K

QA/QC for Volatile Organic Compounds by EPA Method 8260D in Soil

Matrix Spike Sample Identification: B-19W-19

	Spiked Conc. (mg/kg)	MS Response (mg/kg)	MSD Response (mg/kg)	MS Recovery (%)	MSD Recovery (%)	RPD (%)	Limits Recovery (%)	Data Flag
Bromoform	0.25	0.31	0.31	124	124	0.0	65-135	
Isopropylbenzene	0.25	0.19	0.20	76	80	5.1	65-135	
1,1,2,2-Tetrachloroethane	0.25	0.28	0.30	112	120	6.9	65-135	
Bromobenzene	0.25	0.26	0.25	104	100	3.9	65-135	
n-Propylbenzene	0.25	0.20	0.21	80	84	4.9	65-135	
1,2,3-Trichloropropane	0.25	0.29	0.34	116	136	15.9	65-135	S
2-Chlorotoluene	0.25	0.20	0.20	80	80	0.0	65-135	
1,3,5-Trimethylbenzene	0.25	0.20	0.20	80	80	0.0	65-135	
4-Chlorotoluene	0.25	0.20	0.21	80	84	4.9	65-135	
tert-Butylbenzene	0.25	0.17	0.18	68	72	5.7	65-135	
1,2,4-Trimethylbenzene	0.25	0.20	0.20	80	80	0.0	65-135	
sec-Butylbenzene	0.25	0.20	0.20	80	80	0.0	65-135	
Isopropyltoluene	0.25	0.17	0.18	68	72	5.7	65-135	
1,3-Dichlorobenzene	0.25	0.26	0.26	104	104	0.0	65-135	
1,4-Dichlorobenzene	0.25	0.27	0.27	108	108	0.0	65-135	
n-Butylbenzene	0.25	0.18	0.20	72	80	10.5	65-135	
1,2-Dichlorobenzene	0.25	0.24	0.24	96	96	0.0	65-135	
1,2-Dibromo-3-Chloropropane	0.25	0.17	0.22	68	88	25.6	65-135	
1,2,4-Trichlorolbenzene	0.25	0.21	0.22	84	88	4.7	65-135	
Hexachloro-1,3-butadiene	0.25	0.25	0.23	100	92	8.3	65-135	
Naphthalenes	0.25	0.18	0.22	72	88	20.0	65-135	
1,2,3-Trichlorobenzene	0.25	0.23	0.25	92	100	8.3	65-135	

Surrogate Recovery (%)	MS	MSD	
Dibromofluoromethane	86	82	65-135
1,2-Dichloroethane-d4	92	93	65-135
Toluene-d8	102	99	65-135
4-Bromofluorobenzene	103	108	65-135

ACCEPTABLE RPD IS 35%

"S" Spike compound recovery is outside acceptance limits.

ANALYSES PERFORMED BY: Paul Burke

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ROYSTONE REDEVELOPMENT PROJECT
The Riley Group
Seattle, Washington
Libby Project # L200812-40
Client Project # 2017-015K

Laboratory Control Sample

	Spiked Conc. (mg/kg)	LCS Response (mg/kg)	LCS Recovery (%)	LCS Recovery Limits (%)	Data Flag
Dichlorodifluoromethane	0.25	0.21	84	80-120	
Chloromethane	0.25	0.21	84	80-120	
Vinyl chloride	0.25	0.23	92	80-120	
Bromomethane	0.25	0.28	112	80-120	
Chloroethane	0.25	0.29	116	80-120	
Trichlorofluoromethane	0.25	0.24	96	80-120	
1,1-Dichloroethene	0.25	0.24	96	80-120	
Methylene chloride	0.25	0.25	100	80-120	
Methyl *tert*- Butyl Ether (MTBE)	0.25	0.24	96	80-120	
trans -1,2-Dichloroethene	0.25	0.23	92	80-120	
1,1-Dichloroethane	0.25	0.24	96	80-120	
2,2-Dichloropropane	0.25	0.23	92	80-120	
cis -1,2-Dichloroethene	0.25	0.23	92	80-120	
Chloroform	0.25	0.23	92	80-120	
1,1,1-Trichloroethane (TCA)	0.25	0.24	96	80-120	
Carbon tetrachloride	0.25	0.24	96	80-120	
1,1-Dichloropropene	0.25	0.23	92	80-120	
Benzene	0.25	0.23	92	80-120	
1,2-Dichloroethane (EDC)	0.25	0.25	100	80-120	
Trichloroethene (TCE)	0.25	0.30	120	80-120	
1,2-Dichloropropane	0.25	0.24	96	80-120	
Dibromomethane	0.25	0.26	104	80-120	
Bromodichloromethane	0.25	0.23	92	80-120	
cis-1,3-Dichloropropene	0.25	0.22	88	80-120	
Toluene	0.25	0.21	84	80-120	
Trans-1,3-Dichloropropene	0.25	0.22	88	80-120	
1,1,2-Trichloroethane	0.25	0.29	116	80-120	
Tetrachloroethene (PCE)	0.25	0.29	116	80-120	
1,3-Dichloropropane	0.25	0.25	100	80-120	
Dibromochloromethane	0.25	0.27	108	80-120	
1,2-Dibromoethane (EDB)	0.25	0.31	124	80-120	
Chlorobenzene	0.25	0.27	108	80-120	
Ethylbenzene	0.25	0.24	96	80-120	
1,1,1,2-Tetrachloroethane	0.25	0.28	112	80-120	
Total Xylenes	0.75	0.69	92	80-120	
Styrene	0.25	0.21	84	80-120	

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ROYSTONE REDEVELOPMENT PROJECT
The Riley Group
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Libby Project # L200812-40
Client Project # 2017-015K

Laboratory Control Sample

	Spiked Conc. (mg/kg)	LCS Response (mg/kg)	LCS Recovery (%)	LCS Recovery Limits (%)	Data Flag
Bromoform	0.25	0.29	116	80-120	
Isopropylbenzene	0.25	0.20	80	80-120	
1,1,2,2-Tetrachloroethane	0.25	0.29	116	80-120	
Bromobenzene	0.25	0.27	108	80-120	
n-Propylbenzene	0.25	0.24	96	80-120	
1,2,3-Trichloropropane	0.25	0.28	112	80-120	
2-Chlorotoluene	0.25	0.24	96	80-120	
1,3,5-Trimethylbenzene	0.25	0.24	96	80-120	
4-Chlorotoluene	0.25	0.23	92	80-120	
tert-Butylbenzene	0.25	0.22	88	80-120	
1,2,4-Trimethylbenzene	0.25	0.23	92	80-120	
sec-Butylbenzene	0.25	0.25	100	80-120	
Isopropyltoluene	0.25	0.22	88	80-120	
1,3-Dichlorobenzene	0.25	0.29	116	80-120	
1,4-Dichlorobenzene	0.25	0.28	112	80-120	
n-Butylbenzene	0.25	0.22	88	80-120	
1,2-Dichlorobenzene	0.25	0.27	108	80-120	
1,2-Dibromo-3-Chloropropane	0.25	0.24	96	80-120	
1,2,4-Trichlorolbenzene	0.25	0.25	100	80-120	
Hexachloro-1,3-butadiene	0.25	0.29	116	80-120	
Naphthalenes	0.25	0.23	92	80-120	
1,2,3-Trichlorobenzene	0.25	0.27	108	80-120	

Surrogate Recovery			
Dibromofluoromethane	81	65-135	
1,2-Dichloroethane-d4	92	65-135	
Toluene-d8	78	65-135	
4-Bromofluorobenzene	91	65-135	

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ROYSTONE REDEVELOPMENT PROJECT
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Analyses of Gasoline (NWTPH-Gx), BTEX (EPA Method 8260D) & Naphthalene in Soil

Sample Description		Method Blank	SPL-20S-24	SPL-21S-24	SPL-22S-25	RW-4C-32	B-16W-25
Date Sampled		N/A	8/10/2020	8/10/2020	8/10/2020	8/11/2020	8/11/2020
Date Analyzed	PQL	8/12/2020	8/12/2020	8/12/2020	8/12/2020	8/12/2020	8/12/2020
	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
Benzene	0.02	nd	nd	nd	0.12	nd	nd
Toluene	0.10	nd	nd	nd	nd	nd	nd
Ethylbenzene	0.05	nd	nd	nd	nd	nd	nd
Total Xylenes	0.15	nd	nd	nd	nd	nd	nd
Naphthalene	0.10	--	--	--	--	--	--
Gasoline	10	nd	nd	nd	nd	nd	nd
Surrogate Recovery							
Dibromofluoromethane		81	84	83	83	82	85
1,2-Dichloroethane-d4		89	94	88	91	89	90
Toluene-d8		77	67	68	75	110	72
4-Bromofluorobenzene		80	83	89	85	81	87

"--" Indicates analyte was not analyzed.
"nd" Indicates not detected at listed detection limit.
"int" Indicates that interference prevents determination.

ACCEPTABLE RECOVERY LIMITS FOR SURROGATE : 65% TO 135%

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Analyses of Gasoline (NWTPH-Gx), BTEX (EPA Method 8260D) & Naphthalene in Soil

Sample Description		B-14E-21	B-19W-19	B-29W-24	B-24W-19	B-26W-28	B-21W-28
Date Sampled		8/12/2020	8/12/2020	8/12/2020	8/12/2020	8/12/2020	8/12/2020
Date Analyzed	PQL	8/12/2020	8/12/2020	8/12/2020	8/12/2020	8/12/2020	8/12/2020
	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
Benzene	0.02	nd	nd	0.21	nd	nd	nd
Toluene	0.10	nd	nd	nd	nd	--	--
Ethylbenzene	0.05	nd	nd	nd	nd	--	--
Total Xylenes	0.15	nd	nd	nd	nd	--	--
Naphthalene	0.10	--	--	--	--	--	--
Gasoline	10	nd	nd	nd	nd	--	--
Surrogate Recovery							
Dibromofluoromethane		82	86	83	83	81	82
1,2-Dichloroethane-d4		93	93	90	91	87	88
Toluene-d8		110	101	106	112	72	78
4-Bromofluorobenzene		72	83	78	77	90	82

"--" Indicates analyte was not analyzed.
"nd" Indicates not detected at listed detection limit.
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ACCEPTABLE RECOVERY LIMITS FOR SURROGATE : 65% TO 135%

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ROYSTONE REDEVELOPMENT PROJECT
The Riley Group
Seattle, Washington
Libby Project # L200812-40
Client Project # 2017-015K

Analyses of Gasoline (NWTPH-Gx), BTEX (EPA Method 8260D) & Naphthalene in Soil

Sample Description		B-27W-26	B-22W-25.5	B-22W-25.5 Dup	B-29W-26	WPL-18S-25
Date Sampled		8/12/2020	8/12/2020	8/12/2020	8/12/2020	8/11/2020
Date Analyzed	PQL	8/12/2020	8/12/2020	8/12/2020	8/12/2020	8/12/2020
	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
Benzene	0.02	nd	nd	nd	nd	nd
Toluene	0.10	nd	nd	nd	--	nd
Ethylbenzene	0.05	nd	nd	nd	--	nd
Total Xylenes	0.15	nd	nd	nd	--	nd
Naphthalene	0.10	--	nd	nd	--	--
Gasoline	10	nd	nd	nd	--	nd
Surrogate Recovery						
Dibromofluoromethane		82	99	83	83	82
1,2-Dichloroethane-d4		86	105	92	91	90
Toluene-d8		70	83	69	68	75
4-Bromofluorobenzene		87	89	90	83	83

"--" Indicates analyte was not analyzed.
"nd" Indicates not detected at listed detection limit.
"int" Indicates that interference prevents determination.

ACCEPTABLE RECOVERY LIMITS FOR SURROGATE : 65% TO 135%

ANALYSES PERFORMED BY: Paul Burke

Libby Environmental, Inc.

3322 South Bay Road NE
Olympia, WA 98506
Phone: (360) 352-2110
FAX: (360) 352-4154
Email: libbyenv@gmail.com

ROYSTONE REDEVELOPMENT PROJECT
The Riley Group
Seattle, Washington
Libby Project # L200812-40
Client Project # 2017-015K

QA/QC for Gasoline (NWTPH-Gx) & BTEX (EPA Method 8260D) in Soil

Matrix Spike Sample Identification: B-19W-19

	Spiked Conc. (mg/kg)	MS Response (mg/kg)	MSD Response (mg/kg)	MS Recovery (%)	MSD Recovery (%)	RPD (%)	Limits Recovery (%)	Data Flag
Benzene	0.25	0.23	0.22	92	88	4.4	65-135	
Toluene	0.25	0.23	0.23	92	92	0.0	65-135	
Ethylbenzene	0.25	0.25	0.25	100	100	0.0	65-135	
Total Xylenes	0.75	0.69	0.71	92	95	2.9	65-135	
Naphthalene	0.25	0.18	0.22	72	88	20.0	65-135	

Surrogate Recovery (%)	MS	MSD	
Dibromofluoromethane	86	82	65-135
1,2-Dichloroethane-d4	92	93	65-135
Toluene-d8	102	99	65-135
4-Bromofluorobenzene	103	108	65-135

ACCEPTABLE RPD IS 35%

ANALYSES PERFORMED BY: Paul Burke

Laboratory Control Sample

	Spiked Conc. (mg/kg)	LCS Response (mg/kg)	LCS Recovery (%)	LCS Recovery Limits (%)	Data Flag
Benzene	0.25	0.23	92	80-120	
Toluene	0.25	0.21	84	80-120	
Ethylbenzene	0.25	0.24	96	80-120	
Total Xylenes	0.75	0.69	92	80-120	
Naphthalene	0.25	0.23	92	80-120	

Surrogate Recovery			
Dibromofluoromethane	81	65-135	
1,2-Dichloroethane-d4	92	65-135	
Toluene-d8	78	65-135	
4-Bromofluorobenzene	91	65-135	

ANALYSES PERFORMED BY: Paul Burke

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ROYSTONE REDEVELOPMENT PROJECT
The Riley Group, Inc.
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Libby Project # L200812-40
Client Project # 2017-015K

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

Sample Number	Date Analyzed	Surrogate Recovery (%)	Diesel (mg/kg)	Oil (mg/kg)
Method Blank	8/12/2020	106	nd	nd
SPL-20S-24	8/12/2020	93	nd	nd
SPL-21S-24	8/12/2020	119	nd	nd
SPL-22S-25	8/12/2020	78	nd	nd
RW-4C-32	8/12/2020	102	nd	nd
B-16W-25	8/12/2020	123	nd	nd
B-16W-25 Dup	8/12/2020	132	nd	nd
B-14E-21	8/12/2020	89	nd	nd
B-19W-19	8/12/2020	112	nd	nd
B-19W-19 Dup	8/12/2020	86	nd	nd
B-29W-24	8/12/2020	79	nd	nd
B-24W-19	8/12/2020	108	nd	nd
B-27W-26	8/12/2020	122	nd	nd
B-22W-25.5	8/12/2020	89	52	nd
WPL-18S-25	8/12/2020	116	nd	nd
Practical Quantitation Limit			50	250

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

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

ANALYSES PERFORMED BY: Paul Burke

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

August 5, 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 July 9, 2020 from the Roystone Redevelopment PO 2017-015K, F&BI 007142 project. Per your request, sample ID SPL-15S-12 has been amended to SPL-8S-12.

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
TRG0717R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

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July 17, 2020

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

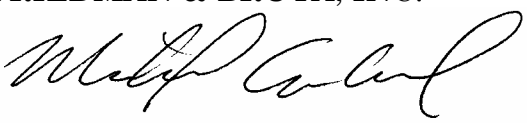
Dear Mr Sawetz:

Included are the results from the testing of material submitted on July 9, 2020 from the Roystone Redevelopment PO 2017-015K, F&BI 007142 project. There are 12 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
TRG0717R.DOC

CASE NARRATIVE

This case narrative encompasses samples received on July 9, 2020 by Friedman & Bruya, Inc. from the The Riley Group Roystone Redevelopment PO 2017-015K, F&BI 007142 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	The Riley Group
007142 -01	EPL-9S-11
007142 -02	EPL-10S-12
007142 -03	EPL-8S-11
007142 -04	SPL-16S-13
007142 -05	SPL-8S-12
007142 -06	EPL-7S-11

Hexane failed below the acceptance criteria in the 8260D matrix spike samples. The laboratory control sample met the acceptance criteria, therefore the data were likely due to sample matrix effect.

All other quality control requirements were acceptable.

Date of Report: 07/17/20
Date Received: 07/09/20
Project: Roystone Redevelopment PO 2017-015K, F&BI 007142
Date Extracted: 07/10/20
Date Analyzed: 07/13/20

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 50-132)
EPL-9S-11 007142-01	<0.02	<0.02	<0.02	<0.06	<5	91
EPL-10S-12 007142-02	<0.02	<0.02	<0.02	<0.06	<5	92
EPL-8S-11 007142-03 1/20	<0.4	52	41	110	6,400	134
SPL-16S-13 007142-04	<0.02	0.091	<0.02	5.4	1,000	150
EPL-7S-11 007142-06	<0.02	0.025	<0.02	<0.06	<5	89
Method Blank 00-1335 MB2	<0.02	<0.02	<0.02	<0.06	<5	90

Date of Report: 07/17/20
Date Received: 07/09/20
Project: Roystone Redevelopment PO 2017-015K, F&BI 007142
Date Extracted: 07/13/20
Date Analyzed: 07/13/20

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)
EPL-9S-11 007142-01	<50	<250	89
EPL-10S-12 007142-02	<50	<250	99
EPL-8S-11 007142-03	1,500 x	<250	90
SPL-16S-13 007142-04	<50	<250	89
EPL-7S-11 007142-06	<50	<250	91
Method Blank 00-1585 MB	<50	<250	91

Analysis For Total Metals By EPA Method 6020B

Client ID:	SPL-8S-12	Client:	The Riley Group
Date Received:	07/09/20	Project:	Roystone Redevelopment
Date Extracted:	07/14/20	Lab ID:	007142-05
Date Analyzed:	07/14/20	Data File:	007142-05.059
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Lead	6.15

Analysis For Total Metals By EPA Method 6020B

Client ID:	Method Blank	Client:	The Riley Group
Date Received:	NA	Project:	Roystone Redevelopment
Date Extracted:	07/14/20	Lab ID:	I0-414 mb2
Date Analyzed:	07/14/20	Data File:	I0-414 mb2.058
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:	SPL-8S-12	Client:	The Riley Group
Date Received:	07/09/20	Project:	Roystone Redevelopment
Date Extracted:	07/15/20	Lab ID:	007142-05
Date Analyzed:	07/15/20	Data File:	071521.D
Matrix:	Soil	Instrument:	GCMS11
Units:	mg/kg (ppm) Dry Weight	Operator:	MS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	100	50	150
Toluene-d8	140	50	150
4-Bromofluorobenzene	140	50	150

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 Redevelopment
Date Extracted:	07/15/20	Lab ID:	00-1523 mb
Date Analyzed:	07/15/20	Data File:	071511.D
Matrix:	Soil	Instrument:	GCMS11
Units:	mg/kg (ppm) Dry Weight	Operator:	MS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	97	50	150
Toluene-d8	99	50	150
4-Bromofluorobenzene	106	50	150

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: 07/17/20
Date Received: 07/09/20
Project: Roystone Redevelopment PO 2017-015K, F&BI 007142

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: 007114-01 (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)	10	<5	nm

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Benzene	mg/kg (ppm)	0.5	106	66-121
Toluene	mg/kg (ppm)	0.5	108	72-128
Ethylbenzene	mg/kg (ppm)	0.5	111	69-132
Xylenes	mg/kg (ppm)	1.5	112	69-131
Gasoline	mg/kg (ppm)	20	105	61-153

Date of Report: 07/17/20
Date Received: 07/09/20
Project: Roystone Redevelopment PO 2017-015K, F&BI 007142

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

Laboratory Code: 007173-01 (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	94	92	73-135	2

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Diesel Extended	mg/kg (ppm)	5,000	92	74-139

Date of Report: 07/17/20
Date Received: 07/09/20
Project: Roystone Redevelopment PO 2017-015K, F&BI 007142

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

Laboratory Code: 007188-25 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	341	26 b	0 b	75-125	200 b

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: 07/17/20
Date Received: 07/09/20
Project: Roystone Redevelopment PO 2017-015K, F&BI 007142

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

Laboratory Code: 007183-02 (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)	1.0	<0.25	28 vo	26 vo	50-150	7
Methyl t-butyl ether (MTBE)	mg/kg (ppm)	1.0	<0.05	79	74	50-150	7
1,2-Dichloroethane (EDC)	mg/kg (ppm)	1.0	<0.05	74	67	50-150	10
Benzene	mg/kg (ppm)	1.0	<0.03	70	64	50-150	9
Toluene	mg/kg (ppm)	1.0	<0.05	70	65	50-150	7
1,2-Dibromoethane (EDB)	mg/kg (ppm)	1.0	<0.05	81	72	50-150	12
Ethylbenzene	mg/kg (ppm)	1.0	<0.05	74	66	50-150	11
m,p-Xylene	mg/kg (ppm)	2.0	<0.1	74	66	50-150	11
o-Xylene	mg/kg (ppm)	1.0	0.051	73	67	50-150	9
Naphthalene	mg/kg (ppm)	1.0	0.19	82	82	50-150	0

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Hexane	mg/kg (ppm)	1.0	99	70-130
Methyl t-butyl ether (MTBE)	mg/kg (ppm)	1.0	104	70-130
1,2-Dichloroethane (EDC)	mg/kg (ppm)	1.0	97	73-123
Benzene	mg/kg (ppm)	1.0	99	70-130
Toluene	mg/kg (ppm)	1.0	100	70-130
1,2-Dibromoethane (EDB)	mg/kg (ppm)	1.0	99	70-130
Ethylbenzene	mg/kg (ppm)	1.0	100	70-130
m,p-Xylene	mg/kg (ppm)	2.0	98	70-130
o-Xylene	mg/kg (ppm)	1.0	100	70-130
Naphthalene	mg/kg (ppm)	1.0	105	70-130

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

007142 ME 07-09-20 Page # 1 of 1 VS1

Report To Jerry Sawyer
Company Riley Group
Address
City, State, ZIP
Phone Email jsawyer edunham

SAMPLERS (signature) ERL

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

REMARKS
Project specific RLs? - Yes / No

INVOICE TO

TURNAROUND TIME
☑ Standard turnaround A02
☐ 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	GRO, TPH, 8260	Lead			Notes
						ANALYSES REQUESTED											V - per ED 7/9
EPL-95-11	01A-E	7/9	0930	SOIL	5	X	X	X									
EPL-105-12	02	7/9	1000														
EPL-85-11	03	7/9	0900														
SPL-165-13	04	7/9	1200														
SPL-85-12 ~~SPL-155-12~~	05	7/9	1100										✓	✓			
EPL-75-11	00	7/8	1200														
Fixed per JS/ED																	
8/4/20 ME																	

Samples received at 4 °C

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: ERL	Eric Dunham	RGF	7/9	1250
Received by:	Eric Downer	EGR	7/9	1250
Relinquished by:				
Received by:				

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

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

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Seattle, WA 98119-2029
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fbi@isomedia.com
www.friedmanandbruya.com

August 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 July 30, 2020 from the Roystone Redevelopment PO 2017-015K, F&BI 007521 project. There are 10 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
TRG0804R.DOC

CASE NARRATIVE

This case narrative encompasses samples received on July 30, 2020 by Friedman & Bruya, Inc. from the The Riley Group Roystone Redevelopment PO 2017-015K, F&BI 007521 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	The Riley Group
007521 -01	WPL-17S-22
007521 -02	WPL-15S-21
007521 -03	WPL-14S-22
007521 -04	WPL-16S-18
007521 -05	RW-4C-30

The 8260D matrix spike and matrix spike duplicate failed the relative percent difference for several compounds. The results were likely due to matrix effect.

All other quality control requirements were acceptable.

Date of Report: 08/04/20
Date Received: 07/30/20
Project: Roystone Redevelopment PO 2017-015K, F&BI 007521
Date Extracted: 07/31/20
Date Analyzed: 07/31/20

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)
RW-4C-30 007521-05	<5	95
Method Blank 00-1392 MB	<5	92

Date of Report: 08/04/20
Date Received: 07/30/20
Project: Roystone Redevelopment PO 2017-015K, F&BI 007521
Date Extracted: 07/31/20
Date Analyzed: 07/31/20

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-17S-22 007521-01	2.0	0.029	<0.02	<0.06	<5	86
WPL-15S-21 007521-02 1/5	<0.02 j	<0.1	0.13	<0.3	1,000	91
WPL-14S-22 007521-03	<0.02	<0.02	<0.02	<0.06	<5	86
WPL-16S-18 007521-04	<0.02	<0.02	<0.02	<0.06	<5	85
Method Blank 00-1392 MB	<0.02	<0.02	<0.02	<0.06	<5	87

Date of Report: 08/04/20
Date Received: 07/30/20
Project: Roystone Redevelopment PO 2017-015K, F&BI 007521
Date Extracted: 07/31/20
Date Analyzed: 07/31/20

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-17S-22 007521-01	<50	<250	89
WPL-15S-21 007521-02	610 x	<250	88
WPL-14S-22 007521-03	<50	<250	97
WPL-16S-18 007521-04	<50	<250	90
RW-4C-30 007521-05	<50	<250	89
Method Blank 00-1713 MB	<50	<250	89

Analysis For Volatile Compounds By EPA Method 8260D

Client Sample ID:	RW-4C-30	Client:	The Riley Group
Date Received:	07/30/20	Project:	Roystone Redevelopment
Date Extracted:	07/31/20	Lab ID:	007521-05
Date Analyzed:	07/31/20	Data File:	073120.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	101	55	145
4-Bromofluorobenzene	98	65	139

Compounds:	Concentration mg/kg (ppm)
Benzene	0.11
Toluene	<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 Redevelopment
Date Extracted:	07/31/20	Lab ID:	00-1718 mb
Date Analyzed:	07/31/20	Data File:	073110.D
Matrix:	Soil	Instrument:	GCMS4
Units:	mg/kg (ppm) Dry Weight	Operator:	MS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	101	62	145
Toluene-d8	97	55	145
4-Bromofluorobenzene	93	65	139

Compounds:	Concentration mg/kg (ppm)
Benzene	<0.03
Toluene	<0.05
Ethylbenzene	<0.05
m,p-Xylene	<0.1
o-Xylene	<0.05
Naphthalene	<0.05

Date of Report: 08/04/20
Date Received: 07/30/20
Project: Roystone Redevelopment PO 2017-015K, F&BI 007521

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: 007511-01 (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	86	69-120
Toluene	mg/kg (ppm)	0.5	88	70-117
Ethylbenzene	mg/kg (ppm)	0.5	89	65-123
Xylenes	mg/kg (ppm)	1.5	90	66-120
Gasoline	mg/kg (ppm)	20	95	71-131

Date of Report: 08/04/20
Date Received: 07/30/20
Project: Roystone Redevelopment PO 2017-015K, F&BI 007521

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

Laboratory Code: 007493-04 (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	114	110	64-133	4

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Diesel Extended	mg/kg (ppm)	5,000	104	58-147

Date of Report: 08/04/20
Date Received: 07/30/20
Project: Roystone Redevelopment PO 2017-015K, F&BI 007521

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

Laboratory Code: 007477-01 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet wt)	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Benzene	mg/kg (ppm)	2.5	<0.03	78	62	29-129	23 vo
Toluene	mg/kg (ppm)	2.5	<0.05	77	61	35-130	23 vo
Ethylbenzene	mg/kg (ppm)	2.5	0.075	78	62	32-137	23 vo
m,p-Xylene	mg/kg (ppm)	5	1.2	74 b	58 b	34-136	24 b
o-Xylene	mg/kg (ppm)	2.5	0.061	85	67	33-134	24 vo
Naphthalene	mg/kg (ppm)	2.5	1.8	73 b	50 b	14-157	37 b

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Benzene	mg/kg (ppm)	2.5	104	68-114
Toluene	mg/kg (ppm)	2.5	101	66-126
Ethylbenzene	mg/kg (ppm)	2.5	104	64-123
m,p-Xylene	mg/kg (ppm)	5	105	78-122
o-Xylene	mg/kg (ppm)	2.5	108	77-124
Naphthalene	mg/kg (ppm)	2.5	109	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.

00752 |

SAMPLE CHAIN OF CUSTODY ME 07/30/20

B02 / VS-D3

Page # 1 of 1

Report To: Jerry Sawetz

Company: Riley Group, Inc

Address:

City, State, ZIP:

Phone: Email: edunham / Jsawetz@riley-group.com

SAMPLERS (signature)	
PROJECT NAME: Roystone Redevelopment	PO #: 2017-015K
REMARKS: email Jerry for TAT	INVOICE TO
Project specific RLs? - Yes / No	

TURNAROUND TIME

☐ Standard turnaround

☒ RUSH 8/13/20 ME

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	BTEX+N				Notes
WPL-17S-22	01A-E	7/29	1315	SOIL	5	X	X	X									⊗ - per JS
WPL-15S-21	02	7/29	1200	↓	↓	X	X	X									7/31/20
WPL-14S-22	03	7/29	1100			X	X	X									
WPL-16S-18	04	7/30	0900			X	X	X									
~~B-16W-A-34~~ (ED)																	
RW-4C-30	05A-E	7/30	1430	↓	↓	X	X	~~X~~					⊗				
																	Samples received at 4 °C

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

	SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by:	[signature]	Eric Dunham	RGI	7/30	15:35
Received by:	[signature]	Khoi Hoang	FBI	7/30/20	15:35
Relinquished by:					
Received by:					

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

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

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

July 29, 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 July 23, 2020 from the Roystone Redevelopment PO 2017-015K, F&BI 007391 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
TRG0729R.DOC

CASE NARRATIVE

This case narrative encompasses samples received on July 23, 2020 by Friedman & Bruya, Inc. from the The Riley Group Roystone Redevelopment PO 2017-015K, F&BI 007391 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	The Riley Group
007391 -01	EPL-11S-17
007391 -02	EPL-12S-17
007391 -03	EPL-13S-17
007391 -04	EPL-14S-17
007391 -05	WPL-10S-16
007391 -06	WPL-11S-16
007391 -07	WPL-12S-20
007391 -08	WPL-13S-18

All quality control requirements were acceptable.

Date of Report: 07/29/20
Date Received: 07/23/20
Project: Roystone Redevelopment PO 2017-015K, F&BI 007391
Date Extracted: 07/24/20
Date Analyzed: 07/27/20

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)
EPL-11S-17 007391-01	<0.02	<0.02	<0.02	<0.06	<5	87
EPL-12S-17 007391-02	<0.02	<0.02	<0.02	<0.06	<5	89
EPL-13S-17 007391-03	<0.02	<0.02	<0.02	<0.06	<5	81
EPL-14S-17 007391-04	<0.02	<0.02	<0.02	<0.06	<5	89
WPL-10S-16 007391-05 1/5	<0.02 j	<0.1	<0.1	<0.3	500	90
WPL-11S-16 007391-06	<0.02	0.052	0.099	0.20	25	92
WPL-12S-20 007391-07 1/5	<0.02 j	0.36	0.76	<0.3	300	92
WPL-13S-18 007391-08	<0.02	0.024	<0.02	<0.06	<5	87
Method Blank 00-1379 MB	<0.02	<0.02	<0.02	<0.06	<5	89

Date of Report: 07/29/20
Date Received: 07/23/20
Project: Roystone Redevelopment PO 2017-015K, F&BI 007391
Date Extracted: 07/24/20
Date Analyzed: 07/24/20

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)
EPL-11S-17 007391-01	<50	<250	99
EPL-12S-17 007391-02	<50	<250	91
EPL-13S-17 007391-03	<50	<250	91
EPL-14S-17 007391-04	<50	<250	92
WPL-10S-16 007391-05	1,300	<250	90
WPL-11S-16 007391-06	160 x	<250	90
WPL-12S-20 007391-07	970	<250	97
WPL-13S-18 007391-08	<50	<250	92
Method Blank 00-1673 MB	<50	<250	90

Date of Report: 07/29/20
Date Received: 07/23/20
Project: Roystone Redevelopment PO 2017-015K, F&BI 007391

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: 007391-01 (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	84	69-120
Toluene	mg/kg (ppm)	0.5	86	70-117
Ethylbenzene	mg/kg (ppm)	0.5	86	65-123
Xylenes	mg/kg (ppm)	1.5	87	66-120
Gasoline	mg/kg (ppm)	20	90	71-131

Date of Report: 07/29/20
Date Received: 07/23/20
Project: Roystone Redevelopment PO 2017-015K, F&BI 007391

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

Laboratory Code: 007391-01 (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	92	94	73-135	2

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Diesel Extended	mg/kg (ppm)	5,000	102	74-139

Data Qualifiers & Definitions

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

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

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

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

cf - The sample was centrifuged prior to analysis.

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

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

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

fc - The 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.

(NP)
~~007390~~

SAMPLE CHAIN OF CUSTODY

Report To Jerry Sawetz 007391

Company Riley Group

Address

City, State, ZIP

Phone Email Jsawetz@riley-group.com

SAMPLERS (signature) E D ME 07/23/20

PROJECT NAME: Keystone Redevelopment

PO #: 2017-015 K

REMARKS

Project specific RLs? - Yes / No

INVOICE TO

Page # 1 of 1 VS2 B32

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
EPL-11S-17	01 A-E	7/22	1100	SOIL	5	X	X	X					
EPL-12S-17	02		1130										
EPL-13S-17	03		1200										
EPL-14S-17	04		1230										
WPL-10S-16	05	7/23	0800										
WPL-11S-16	06		0830										
WPL-12S-20	07		0900										
WPL-13S-18	08		1000										

Samples received at 5 °C

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: E D	Eric Dunham	RGI	7/23	1400
Received By:	Eric Dunham	F&B	7/23	1400
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

July 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 July 10, 2020 from the Roystone PO 2017-015K, F&BI 007169 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
TRG0720R.DOC

CASE NARRATIVE

This case narrative encompasses samples received on July 10, 2020 by Friedman & Bruya, Inc. from the The Riley Group Roystone PO 2017-015K, F&BI 007169 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	The Riley Group
007169 -01	NPL-11S-10
007169 -02	NPL-12S-10

All quality control requirements were acceptable.

Date of Report: 07/20/20
Date Received: 07/10/20
Project: Roystone PO 2017-015K, F&BI 007169
Date Extracted: 07/14/20
Date Analyzed: 07/15/20

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)
NPL-11S-10 007169-01	<0.02	<0.02	<0.02	<0.06	140	95
NPL-12S-10 007169-02 1/10	<0.2	1.5	9.6	13	1,700	115
Method Blank 00-1367 MB	<0.02	<0.02	<0.02	<0.06	<5	94

Date of Report: 07/20/20
Date Received: 07/10/20
Project: Roystone PO 2017-015K, F&BI 007169
Date Extracted: 07/13/20
Date Analyzed: 07/13/20

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 56-165)
NPL-11S-10 007169-01	2,400	<250	92
NPL-12S-10 007169-02	14,000	<250	83
Method Blank 00-1590 MB	<50	<250	94

Date of Report: 07/20/20
Date Received: 07/10/20
Project: Roystone PO 2017-015K, F&BI 007169

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: 007169-01 (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	0.040	nm
Xylenes	mg/kg (ppm)	<0.06	0.080	nm
Gasoline	mg/kg (ppm)	82	89	8

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Benzene	mg/kg (ppm)	0.5	86	69-120
Toluene	mg/kg (ppm)	0.5	86	70-117
Ethylbenzene	mg/kg (ppm)	0.5	84	65-123
Xylenes	mg/kg (ppm)	1.5	87	66-120
Gasoline	mg/kg (ppm)	20	95	71-131

Date of Report: 07/20/20
Date Received: 07/10/20
Project: Roystone PO 2017-015K, F&BI 007169

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

Laboratory Code: 007174-01 (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	105	100	63-146	5

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Diesel Extended	mg/kg (ppm)	5,000	98	79-144

Data Qualifiers & Definitions

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

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

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

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

cf - The sample was centrifuged prior to analysis.

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

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

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

fc - The 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.

007169

SAMPLE CHAIN OF CUSTODY

ME 07-10-20 1401

Page 1 of 1

Report To Jerry Sawetz

Company Riley Group

Address

City, State, ZIP

Phone Email jsawetz@riley-group.com edunham

SAMPLERS (*signature*) CDR

PROJECT NAME Royston

PO # 2017-015K

REMARKS

Project specific RLs? - Yes / No

INVOICE TO

TURNAROUND TIME VS

☑ 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											
NPL-115-10	01 A-E	7/10	1200	Soil	5	X	X	X									
NPL-125-10	02 V	7/10	1230	Soil	5	X	X	X									
																	Samples received at 6 °C

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: CDR	Eric Dunham	RGI	7/10	1230
Received by:	Nhan Phan	FEBI	7/10/20	1230
Relinquished by:				
Received by:				

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

Libby Environmental, Inc.

3322 South Bay Road NE • Olympia, WA 98506-2957

July 17, 2020

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

Dear Mr. Sawetz:

Please find enclosed the analytical data report for the Roystone Redevelopment Project located in Seattle, Washington.

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

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

Sincerely,

Sherry L. Chilcutt
Senior Chemist
Libby Environmental, Inc.

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

Libby Environmental, Inc.

Chain of Custody Record

www.LibbyEnvironmental.com

3322 South Bay Road NE
Olympia, WA 98506
Ph: 360-352-2110
Fax: 360-352-4154

Date: 07/16/2020 Page: 1 of 1

Client: Riley Group

Project Manager: Jerry Sawetz jsawetz@riley-group.com AND edunham@" "

Address:

Project Name: Roystone Redevelopment

City: State: Zip:

Location: 631 Queen Anne Ave N City, State: Seattle, WA

Phone: Fax:

Collector: Eric Dunham Date of Collection: 7-16-2020

Client Project # 2017-015K

Email: jsawetz@riley-group.com

	Sample Number	Depth	Time	Sample Type	Container Type	VOC 8260	NWTPH-Gx	BTEX 8021	NWTPH-HCID	NWTPH-Dx	NWTPH-Dx/Dx	cPAH 8270	PAH 8270	Semi Vol 8270	PCB 8082	MTCA 5 Metals	RCRA 8 Metals			Field Notes
1	B-1E-18	18	1000	SOIL	4VOA 1JAR		X	X		X	X									7-15-20 collection
2	B-2E-18	18	1030																	
3	B-3E-16.5	16.5	1100																	
4	B-4E-16.5	16.5	1130																	
5	B-5E-20.5	20.5	0900																	
6	B-10E-21.5	21.5	0930																	
7	SPL-175-16	16	1000																	
8	B-8E-17	17	1045																	
9	B-6E-18.5	18.5	1100																	
10	B-7E-19	19	1130																	
11	B-11E-19	19	1135																	
12	B-12E-22.5	22.5	1200																	
13	B-9E-19	19	1300																	
14	B-13E-21	21	1315																	
15	B-~~14W~~-23 (16W)	23	1400																	ch.
16																				
17																				

Relinquished by:	Date / Time	Received by:	Date / Time
[signature]	7-16-2020/1448	[signature] 7/16/20	1448
Relinquished by:	Date / Time	Received by:	Date / Time
Relinquished by:	Date / Time	Received by:	Date / Time

Sample Receipt

Good Condition?	Y	N
Cooler Temp.		°C
Sample Temp.		°C
Total Number of Containers		

Remarks:

TAT: 24HR 48HR 5-DAY

LEGAL ACTION CLAUSE: *In the event of default of payment and/or failure to pay, Client agrees to pay the costs of collection including court costs and reasonable attorney fees to be determined by a cout of law.*

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

Libby Environmental, Inc.

3322 South Bay Road NE
Olympia, WA 98506
Phone: (360) 352-2110
FAX: (360) 352-4154
Email: libbyenv@gmail.com

ROYSTONE REDEVELOPMENT PROJECT
Riley Group
Seattle, Washington
Libby Project # L200716-40
Client Project # 2017-015K

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

Sample Description		Method Blank	B-1E-18	B-2E-18	B-3E-16.5	B-3E-16.5 Dup	B-4E-16.5
Date Sampled		N/A	7/15/2020	7/15/2020	7/15/2020	7/15/2020	7/15/2020
Date Analyzed	PQL (mg/kg)	7/16/2020 (mg/kg)	7/16/2020 (mg/kg)	7/16/2020 (mg/kg)	7/16/2020 (mg/kg)	7/16/2020 (mg/kg)	7/16/2020 (mg/kg)
Benzene	0.02	nd	nd	nd	nd	nd	nd
Toluene	0.10	nd	nd	nd	nd	nd	nd
Ethylbenzene	0.05	nd	nd	nd	nd	nd	nd
Total Xylenes	0.15	nd	nd	nd	nd	nd	nd
Gasoline	10	nd	nd	nd	nd	nd	nd
Surrogate Recovery							
Dibromofluoromethane		129	132	128	131	121	119
1,2-Dichloroethane-d4		116	128	130	126	105	101
Toluene-d8		76	71	74	71	86	84
4-Bromofluorobenzene		95	94	92	93	105	101

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

ACCEPTABLE RECOVERY LIMITS FOR SURROGATE : 65% TO 135%

ANALYSES PERFORMED BY: Paul Burke

Libby Environmental, Inc.

3322 South Bay Road NE
Olympia, WA 98506
Phone: (360) 352-2110
FAX: (360) 352-4154
Email: libbyenv@gmail.com

ROYSTONE REDEVELOPMENT PROJECT
Riley Group
Seattle, Washington
Libby Project # L200716-40
Client Project # 2017-015K

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

Sample Description		B-5E-20.5	B-10E-21.5	SPL-17S-16	B-8E-17	B-6E-18.5	B-7E-19
Date Sampled		7/16/2020	7/16/2020	7/16/2020	7/16/2020	7/16/2020	7/16/2020
Date Analyzed	PQL	7/16/2020	7/16/2020	7/16/2020	7/16/2020	7/16/2020	7/16/2020
	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
Benzene	0.02	nd	<0.4	nd	nd	nd	nd
Toluene	0.10	nd	<2.0	nd	nd	nd	nd
Ethylbenzene	0.05	nd	17	6.3	nd	nd	nd
Total Xylenes	0.15	nd	89	nd	nd	nd	nd
Gasoline	10	11	6200 E	290 E	nd	nd	nd
Surrogate Recovery							
Dibromofluoromethane		120	126	115	120	123	132
1,2-Dichloroethane-d4		108	130	117	105	112	123
Toluene-d8		81	86	94	79	74	72
4-Bromofluorobenzene		101	101	105	98	95	93

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

ACCEPTABLE RECOVERY LIMITS FOR SURROGATE : 65% TO 135%

ANALYSES PERFORMED BY: Paul Burke

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Olympia, WA 98506
Phone: (360) 352-2110
FAX: (360) 352-4154
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ROYSTONE REDEVELOPMENT PROJECT
Riley Group
Seattle, Washington
Libby Project # L200716-40
Client Project # 2017-015K

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

Sample Description		B-11E-19	B-12E-22.5	B-12E-22.5 Dup	B-9E-19	B-13E-21	B-16W-23
Date Sampled		7/16/2020	7/16/2020	7/16/2020	7/16/2020	7/16/2020	7/16/2020
Date Analyzed	PQL	7/16/2020	7/16/2020	7/16/2020	7/16/2020	7/16/2020	7/16/2020
	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
Benzene	0.02	nd	nd	nd	nd	nd	1.5
Toluene	0.10	nd	nd	nd	nd	nd	3.4
Ethylbenzene	0.05	nd	nd	nd	nd	nd	0.57
Total Xylenes	0.15	nd	nd	nd	nd	nd	3.8
Gasoline	10	nd	nd	nd	nd	nd	20
Surrogate Recovery							
Dibromofluoromethane		128	123	126	126	124	12
1,2-Dichloroethane-d4		123	112	119	122	121	123
Toluene-d8		71	71	71	70	68	83
4-Bromofluorobenzene		93	101	97	94	93	100

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

ACCEPTABLE RECOVERY LIMITS FOR SURROGATE : 65% TO 135%

ANALYSES PERFORMED BY: Paul Burke

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Olympia, WA 98506
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ROYSTONE REDEVELOPMENT PROJECT
Riley Group
Seattle, Washington
Libby Project # L200716-40
Client Project # 2017-015K

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

Sample Description		B-16W-23 Dup
Date Sampled		7/16/2020
Date Analyzed	PQL (mg/kg)	7/16/2020 (mg/kg)
Benzene	0.02	1.3
Toluene	0.10	3.4
Ethylbenzene	0.05	0.62
Total Xylenes	0.15	4.2
Gasoline	10	21
Surrogate Recovery		
Dibromofluoromethane		126
1,2-Dichloroethane-d4		123
Toluene-d8		72
4-Bromofluorobenzene		99

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

ACCEPTABLE RECOVERY LIMITS FOR SURROGATE : 65% TO 135%

ANALYSES PERFORMED BY: Paul Burke

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3322 South Bay Road NE
Olympia, WA 98506
Phone: (360) 352-2110
FAX: (360) 352-4154
Email: libbyenv@gmail.com

ROYSTONE REDEVELOPMENT PROJECT
Riley Group
Seattle, Washington
Libby Project # L200716-40
Client Project # 2017-015K

QA/QC for Gasoline (NWTPH-Gx) & BTEX (EPA Method 8260D) in Soil

Matrix Spike Sample Identification: B-3E-16.5

	Spiked Conc. (mg/kg)	MS Response (mg/kg)	MSD Response (mg/kg)	MS Recovery (%)	MSD Recovery (%)	RPD (%)	Limits Recovery (%)	Data Flag
Benzene	0.25	0.24	0.23	96	92	4.3	65-135	
Toluene	0.25	0.16	0.20	66	82	21.7	65-135	
Ethylbenzene	0.25	0.22	0.20	86	82	5.7	65-135	
Total Xylenes	0.75	0.60	0.59	80	79	1.7	65-135	

Surrogate Recovery (%)	MS	MSD	
Dibromofluoromethane	127	128	65-135
1,2-Dichloroethane-d4	123	118	65-135
Toluene-d8	69	71	65-135
4-Bromofluorobenzene	102	72	65-135

ACCEPTABLE RPD IS 35%

ANALYSES PERFORMED BY: Paul Burke

Laboratory Control Sample

	Spiked Conc. (mg/kg)	LCS Response (mg/kg)	LCS Recovery (%)	LCS Recovery Limits (%)	Data Flag
Benzene	0.25	0.28	112	80-120	
Toluene	0.25	0.25	100	80-120	
Ethylbenzene	0.25	0.26	104	80-120	
Total Xylenes	0.75	0.75	101	80-120	

Surrogate Recovery		
Dibromofluoromethane	131	65-135
1,2-Dichloroethane-d4	134	65-135
Toluene-d8	95	65-135
4-Bromofluorobenzene	104	65-135

ANALYSES PERFORMED BY: Paul Burke

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ROYSTONE REDEVELOPMENT PROJECT
Riley Group
Seattle, Washington
Libby Project # L200716-40
Client Project # 2017-015K

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

Sample Number	Date Analyzed	Surrogate Recovery (%)	Diesel (mg/kg)	Oil (mg/kg)
Method Blank	7/16/2020	106	nd	nd
B-1E-18	7/16/2020	117	nd	nd
B-2E-18	7/16/2020	113	nd	nd
B-3E-16.5	7/16/2020	68	nd	nd
B-3E-16.5 Dup	7/16/2020	116	nd	nd
B-4E-16.5	7/16/2020	94	nd	nd
B-5E-20.5	7/16/2020	121	nd	nd
B-10E-21.5	7/16/2020	int	2400	nd
SPL-17S-16	7/16/2020	int	270	nd
B-8E-17	7/16/2020	123	nd	nd
B-6E-18.5	7/16/2020	100	nd	nd
B-7E-19	7/16/2020	120	nd	nd
B-11E-19	7/16/2020	90	nd	nd
B-12E-22.5	7/16/2020	94	nd	nd
B-12E-22.5 Dup	7/16/2020	96	nd	nd
B-9E-19	7/16/2020	120	nd	nd
B-13E-21	7/16/2020	87	nd	nd
B-16W-23	7/16/2020	116	nd	nd
Practical Quantitation Limit			50	250

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

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

ANALYSES PERFORMED BY: Paul Burke

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

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

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

July 17, 2020

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

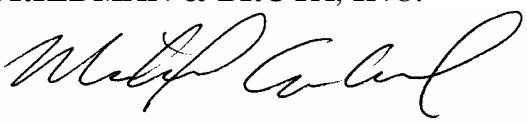
Dear Mr Sawetz:

Included are the results from the testing of material submitted on July 13, 2020 from the Roystone PO 2017-015K, F&BI 007203 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
TRG0717R.DOC

CASE NARRATIVE

This case narrative encompasses samples received on July 13, 2020 by Friedman & Bruya, Inc. from the The Riley Group Roystone PO 2017-015K, F&BI 007203 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	The Riley Group
007203 -01	NPL-13s-16
007203 -02	NPL-14s-16
007203 -03	NPL-15s-16
007203 -04	NPL-16s-16
007203 -05	NPL-17s-16
007203 -06	NPL-18s-16
007203 -07	NPL-19s-16
007203 -08	NPL-20s-16

All quality control requirements were acceptable.

Date of Report: 07/17/20
Date Received: 07/13/20
Project: Roystone PO 2017-015K, F&BI 007203
Date Extracted: 07/14/20
Date Analyzed: 07/15/20

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 50-132)
NPL-13s-16 007203-01 1/5	<0.02 j	<0.1	0.84	0.90	400	90
NPL-14s-16 007203-02 1/5	<0.02 j	0.25	0.80	1.5	220	88
NPL-15s-16 007203-03 1/5	<0.02 j	5.2	14	27	1,600	109
NPL-16s-16 007203-04	<0.02	<0.02	0.044	<0.06	75	86
NPL-17s-16 007203-05	<0.02	<0.02	<0.02	<0.06	<5	90
NPL-18s-16 007203-06 1/5	<0.02 j	0.20	1.1	2.1	290	94
Method Blank 00-1363 MB2	<0.02	<0.02	<0.02	<0.06	<5	91

Date of Report: 07/17/20
Date Received: 07/13/20
Project: Roystone PO 2017-015K, F&BI 007203
Date Extracted: 07/14/20
Date Analyzed: 07/14/20

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)
NPL-13s-16 007203-01	2,100	<250	91
NPL-14s-16 007203-02	1,600	<250	91
NPL-15s-16 007203-03	5,500	<250	98
NPL-16s-16 007203-04	1,600	<250	89
NPL-17s-16 007203-05	440	<250	85
NPL-18s-16 007203-06	<50	<250	87
Method Blank 00-1589 MB2	<50	<250	83

Date of Report: 07/17/20
Date Received: 07/13/20
Project: Roystone PO 2017-015K, F&BI 007203

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: 007087-01 (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	6	nm

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Benzene	mg/kg (ppm)	0.5	87	69-120
Toluene	mg/kg (ppm)	0.5	88	70-117
Ethylbenzene	mg/kg (ppm)	0.5	85	65-123
Xylenes	mg/kg (ppm)	1.5	88	66-120
Gasoline	mg/kg (ppm)	20	100	71-131

Date of Report: 07/17/20
Date Received: 07/13/20
Project: Roystone PO 2017-015K, F&BI 007203

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

Laboratory Code: 007181-01 (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	88	73-135	0

Laboratory Code: Laboratory Control Sample

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

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.

007203 [redacted]

SAMPLE CHAIN OF CUSTODY

ME 07/13/20 [redacted] Page # 1 of ~~VS3~~ VS4

Report To: Jerry Smith

Company: The Riley Group

Address:

City, State, ZIP:

Phone: Email:

SAMPLERS (signature): [signature]

PROJECT NAME: Roy Stone

PO #: 2017-015K

REMARKS

Project specific RLs? - Yes / No

INVOICE TO

TURNAROUND TIME A03

☒ 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
NPL-135-16	01 A-E	7/13		Soil	5	X	X	X									
NPL-145-16	02					X	X	X									
NPL-155-16	03					X	X	X									
NPL-165-16	04					X	X	X									
NPL-175-16	05					X	X	X									
NPL-185-16	06					X	X	X									
NPL-195-16	07																Hold
NPL-205-16	08																Hold
																	~~Hold~~

Samples received at 6 °C

	SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by:	[signature]	Stafford Larser	RGI	7/13	1438
Received by:	[signature]	Liz Webber-Bruya	F&B	7/13/20	1438
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

July 15, 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 July 8, 2020 from the Roystone Redevelopment PO 2017-015K, F&BI 007093 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
TRG0715R.DOC

CASE NARRATIVE

This case narrative encompasses samples received on July 8, 2020 by Friedman & Bruya, Inc. from the The Riley Group Roystone Redevelopment PO 2017-015K, F&BI 007093 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	The Riley Group
007093 -01	NPL-10S-10
007093 -02	EPL-6S-11

All quality control requirements were acceptable.

Date of Report: 07/15/20
Date Received: 07/08/20
Project: Roystone Redevelopment PO 2017-015K, F&BI 007093
Date Extracted: 07/10/20
Date Analyzed: 07/13/20

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 50-132)
NPL-10S-10 007093-01 1/5	<0.02 j	0.34	3.8	2.4	830	101
EPL-6S-11 007093-02 1/50	<1	27	4.0	20	1,900	85
Method Blank 00-1335 MB2	<0.02	<0.02	<0.02	<0.06	<5	90

Date of Report: 07/15/20
Date Received: 07/08/20
Project: Roystone Redevelopment PO 2017-015K, F&BI 007093
Date Extracted: 07/08/20
Date Analyzed: 07/08/20

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 48-168)
NPL-10S-10 007093-01	3,500	<250	88
EPL-6S-11 007093-02	170 x	<250	88
Method Blank 00-1562 MB	<50	<250	89

Date of Report: 07/15/20
Date Received: 07/08/20
Project: Roystone Redevelopment PO 2017-015K, F&BI 007093

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: 007114-01 (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)	10	<5	nm

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Benzene	mg/kg (ppm)	0.5	106	66-121
Toluene	mg/kg (ppm)	0.5	108	72-128
Ethylbenzene	mg/kg (ppm)	0.5	111	69-132
Xylenes	mg/kg (ppm)	1.5	112	69-131
Gasoline	mg/kg (ppm)	20	105	61-153

Date of Report: 07/15/20
Date Received: 07/08/20
Project: Roystone Redevelopment PO 2017-015K, F&BI 007093

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

Laboratory Code: 007043-01 (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	84	82	73-135	2

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Diesel Extended	mg/kg (ppm)	5,000	84	74-139

Data Qualifiers & Definitions

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

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

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

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

cf - The sample was centrifuged prior to analysis.

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

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

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

fc - The 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.

007093

SAMPLE CHAIN OF CUSTODY

ME 07/08/20

VSI/A01 1

Page # 1 of 1

Report To Jerry Sametz

Company Riley Group

Address

City, State, ZIP

Phone Email Jsametz@rileygroup.com edunham

SAMPLERS (*signature*) E DL

PROJECT NAME	PO #
Raystone Redevelopment	2017-015K
REMARKS	INVOICE TO
Project specific RLs? - Yes / No	

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											
NPL-10S-10	01A-E	7/7	0908	Soil	5	X	X	X									
EPL-6S-11	02A-E	7/7	1100	Soil	5	X	X	X									
													Samples received at 4 °C				

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: E DL	Eric Dunham	RGF	7/8	0930
Received by:	Michael Erdahl	FGB	↓	↓
Relinquished by:				
Received by:				

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

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fbi@isomedia.com
www.friedmanandbruya.com

July 8, 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 May 28, 2020 from the 2017-015K, F&BI 005367 project. Per your request, BTEX was included in the VOC results.

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
TRG0601R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
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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 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 May 28, 2020 from the 2017-015K, F&BI 005367 project. There are 7 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
TRG0601R.DOC

CASE NARRATIVE

This case narrative encompasses samples received on May 28, 2020 by Friedman & Bruya, Inc. from the The Riley Group 2017-015K, F&BI 005367 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	The Riley Group
005367 -01	EPL-1S-8
005367 -02	SPL-5S-8

All quality control requirements were acceptable.

Date of Report: 06/01/20
Date Received: 05/28/20
Project: 2017-015K, F&BI 005367
Date Extracted: 05/28/20
Date Analyzed: 05/28/20

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)
EPL-1S-8 005367-01	ND	ND	ND	85
SPL-5S-8 005367-02	ND	ND	ND	87
Method Blank 00-1197 MB	ND	ND	ND	96

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

Analysis For Volatile Compounds By EPA Method 8260D

Client Sample ID:	EPL-1S-8	Client:	The Riley Group
Date Received:	05/28/20	Project:	2017-015K, F&BI 005367
Date Extracted:	05/28/20	Lab ID:	005367-01
Date Analyzed:	05/28/20	Data File:	052827.D
Matrix:	Soil	Instrument:	GCMS4
Units:	mg/kg (ppm) Dry Weight	Operator:	MS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	102	62	145
Toluene-d8	98	55	145
4-Bromofluorobenzene	103	65	139

Compounds:	Concentration mg/kg (ppm)
Vinyl chloride	<0.05
Chloroethane	<0.5
1,1-Dichloroethene	<0.05
Methylene chloride	<0.5
trans-1,2-Dichloroethene	<0.05
1,1-Dichloroethane	<0.05
cis-1,2-Dichloroethene	<0.05
1,2-Dichloroethane (EDC)	<0.05
1,1,1-Trichloroethane	<0.05
Benzene	<0.03
Trichloroethene	<0.02
Toluene	<0.05
Tetrachloroethene	<0.025
Ethylbenzene	<0.05
m,p-Xylene	<0.1
o-Xylene	<0.05

Analysis For Volatile Compounds By EPA Method 8260D

Client Sample ID:	SPL-5S-8	Client:	The Riley Group
Date Received:	05/28/20	Project:	2017-015K, F&BI 005367
Date Extracted:	05/28/20	Lab ID:	005367-02
Date Analyzed:	05/28/20	Data File:	052828.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	99	55	145
4-Bromofluorobenzene	102	65	139

Compounds:	Concentration mg/kg (ppm)
Vinyl chloride	<0.05
Chloroethane	<0.5
1,1-Dichloroethene	<0.05
Methylene chloride	<0.5
trans-1,2-Dichloroethene	<0.05
1,1-Dichloroethane	<0.05
cis-1,2-Dichloroethene	<0.05
1,2-Dichloroethane (EDC)	<0.05
1,1,1-Trichloroethane	<0.05
Benzene	<0.03
Trichloroethene	<0.02
Toluene	<0.05
Tetrachloroethene	<0.025
Ethylbenzene	<0.05
m,p-Xylene	<0.1
o-Xylene	<0.05

Analysis For Volatile Compounds By EPA Method 8260D

Client Sample ID:	Method Blank	Client:	The Riley Group
Date Received:	Not Applicable	Project:	2017-015K, F&BI 005367
Date Extracted:	05/28/20	Lab ID:	00-1158 mb
Date Analyzed:	05/28/20	Data File:	052810.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	99	55	145
4-Bromofluorobenzene	102	65	139

Compounds:	Concentration mg/kg (ppm)
Vinyl chloride	<0.05
Chloroethane	<0.5
1,1-Dichloroethene	<0.05
Methylene chloride	<0.5
trans-1,2-Dichloroethene	<0.05
1,1-Dichloroethane	<0.05
cis-1,2-Dichloroethene	<0.05
1,2-Dichloroethane (EDC)	<0.05
1,1,1-Trichloroethane	<0.05
Benzene	<0.03
Trichloroethene	<0.02
Toluene	<0.05
Tetrachloroethene	<0.025
Ethylbenzene	<0.05
m,p-Xylene	<0.1
o-Xylene	<0.05

Date of Report: 06/01/20
Date Received: 05/28/20
Project: 2017-015K, F&BI 005367

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

Laboratory Code: 005346-01 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet wt)	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Vinyl chloride	mg/kg (ppm)	2.5	<0.05	39	40	10-138	3
Chloroethane	mg/kg (ppm)	2.5	<0.5	49	52	10-176	6
1,1-Dichloroethene	mg/kg (ppm)	2.5	<0.05	52	56	10-160	7
Methylene chloride	mg/kg (ppm)	2.5	<0.5	68	72	10-156	6
trans-1,2-Dichloroethene	mg/kg (ppm)	2.5	<0.05	59	63	14-137	7
1,1-Dichloroethane	mg/kg (ppm)	2.5	<0.05	70	73	19-140	4
cis-1,2-Dichloroethene	mg/kg (ppm)	2.5	<0.05	69	72	25-135	4
1,2-Dichloroethane (EDC)	mg/kg (ppm)	2.5	<0.05	75	79	12-160	5
1,1,1-Trichloroethane	mg/kg (ppm)	2.5	<0.05	70	73	10-156	4
Benzene	mg/kg (ppm)	2.5	<0.03	74	77	29-129	4
Trichloroethene	mg/kg (ppm)	2.5	<0.02	74	78	21-139	5
Toluene	mg/kg (ppm)	2.5	<0.05	78	81	35-130	4
Tetrachloroethene	mg/kg (ppm)	2.5	<0.025	76	79	20-133	4
Ethylbenzene	mg/kg (ppm)	2.5	<0.05	78	81	32-137	4
m,p-Xylene	mg/kg (ppm)	5	<0.1	77	81	34-136	5
o-Xylene	mg/kg (ppm)	2.5	<0.05	79	83	33-134	5

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Vinyl chloride	mg/kg (ppm)	2.5	74	22-139
Chloroethane	mg/kg (ppm)	2.5	79	9-163
1,1-Dichloroethene	mg/kg (ppm)	2.5	84	47-128
Methylene chloride	mg/kg (ppm)	2.5	93	42-132
trans-1,2-Dichloroethene	mg/kg (ppm)	2.5	84	67-129
1,1-Dichloroethane	mg/kg (ppm)	2.5	93	68-115
cis-1,2-Dichloroethene	mg/kg (ppm)	2.5	89	72-127
1,2-Dichloroethane (EDC)	mg/kg (ppm)	2.5	88	56-135
1,1,1-Trichloroethane	mg/kg (ppm)	2.5	93	62-131
Benzene	mg/kg (ppm)	2.5	91	68-114
Trichloroethene	mg/kg (ppm)	2.5	87	64-117
Toluene	mg/kg (ppm)	2.5	91	66-126
Tetrachloroethene	mg/kg (ppm)	2.5	91	72-114
Ethylbenzene	mg/kg (ppm)	2.5	92	64-123
m,p-Xylene	mg/kg (ppm)	5	91	78-122
o-Xylene	mg/kg (ppm)	2.5	96	77-124

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.

005367

SAMPLE CHAIN OF CUSTODY

ME 05/28/20 VSI/B01

Report To Jerry Sowers

Company The Riley Group

Address

City, State, ZIP

Phone Email

SAMPLERS (*signature*)

PROJECT NAME: 2017-015K

PO #

REMARKS

Project specific RLs? - Yes / No

INVOICE TO

Page # 1 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	HVOC's	HCID			Notes
EPL-1S-8	01A-E	5/28	2:20	Soil	5			X					X	X			X-per TS
SPL-5S-8	02A-E	↓	2:25	↓	↓			X					X	X			6/3/20 ME
													Samples received at 4 °C				

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by:	Stafford Larsen	RGI	5/28/20	14:58
Received by:	Nhan Phan	FEBI	5/28/20	1458
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

June 26, 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 23, 2020 from the Roystone Redevelopment PO 2017-015K, F&BI 006380 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
TRG0626R.DOC

CASE NARRATIVE

This case narrative encompasses samples received on June 23, 2020 by Friedman & Bruya, Inc. from the The Riley Group Roystone Redevelopment PO 2017-015K, F&BI 006380 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	The Riley Group
006380 -01	NPL-8S-6
006380 -02	NPL-9S-4

All quality control requirements were acceptable.

Date of Report: 06/26/20
Date Received: 06/23/20
Project: Roystone Redevelopment PO 2017-015K, F&BI 006380
Date Extracted: 06/23/20
Date Analyzed: 06/24/20

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)
NPL-8S-6 006380-01	<0.02	<0.02	<0.02	<0.06	<5	87
NPL-9S-4 006380-02	<0.02	<0.02	<0.02	<0.06	<5	85
Method Blank 00-1318 MB2	<0.02	<0.02	<0.02	<0.06	<5	86

Date of Report: 06/26/20
Date Received: 06/23/20
Project: Roystone Redevelopment PO 2017-015K, F&BI 006380
Date Extracted: 06/24/20
Date Analyzed: 06/24/20

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)
NPL-8S-6 006380-01	<50	<250	96
NPL-9S-4 006380-02	<50	<250	97
Method Blank 00-1461 MB	<50	<250	96

Date of Report: 06/26/20
Date Received: 06/23/20
Project: Roystone Redevelopment PO 2017-015K, F&BI 006380

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: 006326-01 1/40 (Duplicate)

Analyte	Reporting Units	Sample Result (Wet Wt)	Duplicate Result (Wet Wt)	RPD (Limit 20)
Benzene	mg/kg (ppm)	<0.8	<0.8	nm
Toluene	mg/kg (ppm)	<0.8	<0.8	nm
Ethylbenzene	mg/kg (ppm)	3.8	7.1	62 a
Xylenes	mg/kg (ppm)	3.2	6.5	67 a
Gasoline	mg/kg (ppm)	530	630	17

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Benzene	mg/kg (ppm)	0.5	91	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	91	66-120
Gasoline	mg/kg (ppm)	20	100	71-131

Date of Report: 06/26/20
Date Received: 06/23/20
Project: Roystone Redevelopment PO 2017-015K, F&BI 006380

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

Laboratory Code: 006380-01 (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	108	106	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.

SAMPLE CHAIN OF CUSTODY

006380

ME 06-23-20

Page # 1 of 1 DAI

Report To Jerry Sametz

Company Riley Group

Address

City, State, ZIP

Phone Email jsametz@riley-group.com edunham

SAMPLERS (*signature*)

PROJECT NAME: Poststone Redevelopment

PO #: 2017-015K

REMARKS

Project specific RLs? - Yes / No

INVOICE TO

TURNAROUND TIME JSI

~~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
NPL-85-6	01A-E	6/22	1100	SOIL	5	X	X	X									
NPL-95-4	02	↓	1115	↓	↓	X	X	X									
																	Samples received at 11°C

ANALYSES REQUESTED

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by:	Eve Dunham	RGI	6/23	1150
Received by:	TCWell	FedEx	6/25	1150
Relinquished by:	Liz Webber-Bruya	F?B	6/23/20	1220
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

June 25, 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 19, 2020 from the Roystone Redevelopment PO 2017-015K, F&BI 006326 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
TRG0625R.DOC

CASE NARRATIVE

This case narrative encompasses samples received on June 19, 2020 by Friedman & Bruya, Inc. from the The Riley Group Roystone Redevelopment PO 2017-015K, F&BI 006326 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	The Riley Group
006326 -01	WPL-8S-9
006326 -02	NPL-3S-6
006326 -03	NPL-4S-3.5
006326 -04	NPL-5S-6
006326 -05	EPL-3S-6
006326 -06	EPL-4S-6
006326 -07	EPL-5S-6
006326 -08	WPL-9S-10
006326 -09	NPL-6S-6
006326 -10	NPL-7S-6

All quality control requirements were acceptable.

Date of Report: 06/25/20
Date Received: 06/19/20
Project: Roystone Redevelopment PO 2017-015K, F&BI 006326
Date Extracted: 06/22/20
Date Analyzed: 06/23/20

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-8S-9 006326-01 1/40	<0.8	<0.8	5.3	4.5	740	92
NPL-3S-6 006326-02	<0.02	<0.02	<0.02	<0.06	6.1	85
NPL-4S-3.5 006326-03	<0.02	<0.02	<0.02	<0.06	9.5	86
NPL-5S-6 006326-04	<0.02	<0.02	<0.02	<0.06	<5	86
EPL-3S-6 006326-05	<0.02	<0.02	<0.02	<0.06	<5	84
EPL-4S-6 006326-06	<0.02	<0.02	<0.02	<0.06	<5	87
EPL-5S-6 006326-07	<0.02	<0.02	<0.02	<0.06	<5	85
WPL-9S-10 006326-08	<0.02	<0.02	0.82	0.63	46	100
NPL-6S-6 006326-09	<0.02	<0.02	0.15	0.084	6.5	89
NPL-7S-6 006326-10	<0.02	<0.02	<0.02	<0.06	<5	87
Method Blank 00-1318 MB	<0.02	<0.02	<0.02	<0.06	<5	87

Date of Report: 06/25/20
Date Received: 06/19/20
Project: Roystone Redevelopment PO 2017-015K, F&BI 006326
Date Extracted: 06/19/20
Date Analyzed: 06/19/20

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-8S-9 006326-01	270 x	<250	100
NPL-3S-6 006326-02	<50	<250	102
NPL-4S-3.5 006326-03	<50	<250	90
NPL-5S-6 006326-04	<50	<250	100
EPL-3S-6 006326-05	<50	<250	101
EPL-4S-6 006326-06	<50	<250	92
EPL-5S-6 006326-07	<50	<250	95
WPL-9S-10 006326-08	350 x	<250	101
NPL-6S-6 006326-09	<50	<250	103
NPL-7S-6 006326-10	<50	<250	99
Method Blank 00-1423 MB	<50	<250	99

Date of Report: 06/25/20
Date Received: 06/19/20
Project: Roystone Redevelopment PO 2017-015K, F&BI 006326

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: 006326-01 1/40 (Duplicate)

Analyte	Reporting Units	Sample Result (Wet Wt)	Duplicate Result (Wet Wt)	RPD (Limit 20)
Benzene	mg/kg (ppm)	<0.8	<0.8	nm
Toluene	mg/kg (ppm)	<0.8	<0.8	nm
Ethylbenzene	mg/kg (ppm)	3.8	7.1	62 a
Xylenes	mg/kg (ppm)	3.2	6.5	67 a
Gasoline	mg/kg (ppm)	530	630	17

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Benzene	mg/kg (ppm)	0.5	91	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	91	66-120
Gasoline	mg/kg (ppm)	20	100	71-131

Date of Report: 06/25/20
Date Received: 06/19/20
Project: Roystone Redevelopment PO 2017-015K, F&BI 006326

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

Laboratory Code: 006324-01 (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	500	93 b	116 b	64-133	22 b

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Diesel Extended	mg/kg (ppm)	5,000	96	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.

006326

SAMPLE CHAIN OF CUSTODY ME 6/19/20 D02/V$2

[redacted] of

[redacted] Jerry Sametz

Company Riley Group

Address

City, State, ZIP

Phone Email jsametz@riley-group.com edunham "

SAMPLERS (signature)	E D
PROJECT NAME	Roystone Redevelopment
PO #	2017-015K
REMARKS	
INVOICE TO	
Project specific RLs? - Yes / No	

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
WPL-8S-9	01 A-E	6/19	0900	SOIL	5	X	X	X									
NPL-3S-6	02		0845														
NPL-4S-3.5	03		0915														
NPL-5S-6	04		0930														
EPL-3S-6	05		1200														
EPL-4S-6	06		1215														
EPL-5S-6	07		1300														
WPL-9S-10	08		1230														
NPL-6S-6	09		1245														
NPL-7S-6	10	↓	1250	↓	↓	↓	↓	↓									

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

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: E D	Eric Dunham	RGI	6/19	1330
Received by:	Eric Young	F&B	6/19/20	1330
Relinquished by:				
Received by:				

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

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

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

June 24, 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 18, 2020 from the Roystone Redevelopment 2017-015K, F&BI 006295 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
TRG0624R.DOC

CASE NARRATIVE

This case narrative encompasses samples received on June 18, 2020 by Friedman & Bruya, Inc. from the The Riley Group Roystone Redevelopment 2017-015K, F&BI 006295 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	The Riley Group
006295 -01	WPL-6S-13
006295 -02	WPL-7S-13

All quality control requirements were acceptable.

Date of Report: 06/24/20
Date Received: 06/18/20
Project: Roystone Redevelopment 2017-015K, F&BI 006295
Date Extracted: 06/19/20
Date Analyzed: 06/19/20

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 50-132)
WPL-6S-13 006295-01	<0.02	<0.02	<0.02	<0.06	14	90
WPL-7S-13 006295-02	<0.02	<0.02	<0.02	<0.06	<5	89
Method Blank 00-1314 MB2	<0.02	<0.02	<0.02	<0.06	<5	89

Date of Report: 06/24/20
Date Received: 06/18/20
Project: Roystone Redevelopment 2017-015K, F&BI 006295
Date Extracted: 06/19/20
Date Analyzed: 06/19/20

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-6S-13 006295-01	81	<250	104
WPL-7S-13 006295-02	<50	<250	94
Method Blank 00-1419 MB	<50	<250	93

Date of Report: 06/24/20
Date Received: 06/18/20
Project: Roystone Redevelopment 2017-015K, F&BI 006295

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: 006286-01 (Duplicate)

Analyte	Reporting Units	Sample Result (Wet Wt)	Duplicate Result (Wet Wt)	RPD (Limit 20)
Benzene	mg/kg (ppm)	<0.1	<0.1	nm
Toluene	mg/kg (ppm)	<0.1	<0.1	nm
Ethylbenzene	mg/kg (ppm)	0.62	<0.1	nm
Xylenes	mg/kg (ppm)	0.40	<0.3	nm
Gasoline	mg/kg (ppm)	<5	13	nm

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Benzene	mg/kg (ppm)	0.5	90	69-120
Toluene	mg/kg (ppm)	0.5	88	70-117
Ethylbenzene	mg/kg (ppm)	0.5	89	65-123
Xylenes	mg/kg (ppm)	1.5	90	66-120
Gasoline	mg/kg (ppm)	20	90	71-131

Date of Report: 06/24/20
Date Received: 06/18/20
Project: Roystone Redevelopment 2017-015K, F&BI 006295

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

Laboratory Code: 006295-01 (Matrix Spike)
07:31

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	61	108	111	64-133	3

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Diesel Extended	mg/kg (ppm)	5,000	110	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.

006295

SAMPLE CHAIN OF CUSTODY

ME 06-18-20

Page # 1 of 1 VSI Doi

Report To Jerry Sametz

Company Riley Group

Address

City, State, ZIP

Phone Email Jsametz@rileygroup.com edunham

SAMPLERS (*signature*) E R

PROJECT NAME: Raystone Redevelopment

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											
WPL-65-13	01 A-E	6/18	1000	SOIL	5	X	X	X									
WPL-75-13	02 V	6/18	1030	SOIL	5	X	X	X									
							√										

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: E R	Eric Dunham	RGF	6/18	1330
Received by:	Nhan Pham	FEBI	6/18/20	1330
Relinquished by:				
Received by:		Samples received at 18°C		

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

June 24, 2020

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

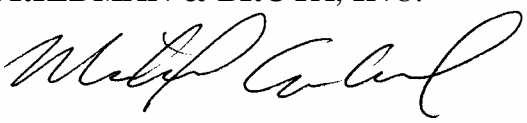
Dear Mr Sawetz:

Included are the results from the testing of material submitted on June 17, 2020 from the Roystone Development 2017-015K, F&BI 006273 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
TRG0624R.DOC

CASE NARRATIVE

This case narrative encompasses samples received on June 17, 2020 by Friedman & Bruya, Inc. from the The Riley Group Roystone Development 2017-015K, F&BI 006273 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	The Riley Group
006273 -01	SPL-13S-14
006273 -02	SPL-14S-16.5

All quality control requirements were acceptable.

Date of Report: 06/24/20
Date Received: 06/17/20
Project: Roystone Development 2017-015K, F&BI 006273
Date Extracted: 06/19/20
Date Analyzed: 06/22/20

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)
SPL-13S-14 006273-01	<0.02	0.098	0.12	0.15	52	89
SPL-14S-16.5 006273-02	<0.02	0.037	<0.02	0.080	10	87
Method Blank 00-1316 MB	<0.02	<0.02	<0.02	<0.06	<5	85

Date of Report: 06/24/20
Date Received: 06/17/20
Project: Roystone Development 2017-015K, F&BI 006273
Date Extracted: 06/18/20
Date Analyzed: 06/18/20

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 48-168)
SPL-13S-14 006273-01	1,000	<250	104
SPL-14S-16.5 006273-02	290	<250	99
Method Blank 00-1412 MB2	<50	<250	89

Date of Report: 06/24/20
Date Received: 06/17/20
Project: Roystone Development 2017-015K, F&BI 006273

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: 006277-01 (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	92	69-120
Toluene	mg/kg (ppm)	0.5	92	70-117
Ethylbenzene	mg/kg (ppm)	0.5	92	65-123
Xylenes	mg/kg (ppm)	1.5	93	66-120
Gasoline	mg/kg (ppm)	20	100	71-131

Date of Report: 06/24/20
Date Received: 06/17/20
Project: Roystone Development 2017-015K, F&BI 006273

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

Laboratory Code: 006250-01 (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	480	112	102	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	98	74-139

Data Qualifiers & Definitions

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

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

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

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

cf - The sample was centrifuged prior to analysis.

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

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

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

fc - The 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.

006273

SAMPLE CHAIN OF CUSTODY

ME 06/17/20

Page # 1 of 1 VSI

Report To Jerry Sawtz

Company Riley Group

Address

City, State, ZIP

Phone Email jsawtz@riley-group.com edunham

SAMPLERS (*signature*)

PROJECT NAME: Roys Store Redevelopment

PO #: 2017-015K

REMARKS

Project specific RLs? - Yes / No

INVOICE TO

TURNAROUND TIME: 1 Day

☐ 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											
SPL-13S-14	01 A-E	6/17	1300	SOIL	5	X	X	X									Ready By Wed 6/24 Next
SPL-14S-16.5	02	6/17	1315	SOIL	5	X	X	X									
							✓										
													Samples received at 4 °C				

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by:	Eve Dunham	RGI	6/17	1505
Received by:	Khai Hoang	FBE	6/17/20	15:05
Relinquished by:				
Received by:				

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

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

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Seattle, WA 98119-2029
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fbi@isomedia.com
www.friedmanandbruya.com

June 24, 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 16, 2020 from the Roystone Redevelopment PO 2017-015K, F&BI 006250 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
TRG0624R.DOC

CASE NARRATIVE

This case narrative encompasses samples received on June 16, 2020 by Friedman & Bruya, Inc. from the The Riley Group Roystone Redevelopment PO 2017-015K, F&BI 006250 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	The Riley Group
006250 -01	SPL-8S-12
006250 -02	SPL-9S-11.5
006250 -03	SPL-10S-12
006250 -04	SPL-11S-12.5
006250 -05	SPL-12S-12.5

All quality control requirements were acceptable.

Date of Report: 06/24/20
Date Received: 06/16/20
Project: Roystone Redevelopment PO 2017-015K, F&BI 006250
Date Extracted: 06/17/20
Date Analyzed: 06/18/20

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)
SPL-8S-12 006250-01 1/50	<1	23	11	32	3,200	97
SPL-9S-11.5 006250-02 1/50	<1	3.8	3.9	5.4	980	96
SPL-10S-12 006250-03 1/50	<1	7.0	3.9	4.5	1,000	95
SPL-11S-12.5 006250-04 1/50	<1	5.7	6.6	14	1,000	94
SPL-12S-12.5 006250-05 1/10	<0.2	1.1	3.3	6.0	820	100
Method Blank 00-1312 MB	<0.02	<0.02	<0.02	<0.06	<5	92

Date of Report: 06/24/20
Date Received: 06/16/20
Project: Roystone Redevelopment PO 2017-015K, F&BI 006250
Date Extracted: 06/17/20
Date Analyzed: 06/17/20

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-8S-12 006250-01	590 x	<250	95
SPL-9S-11.5 006250-02	420	<250	98
SPL-10S-12 006250-03	1,000	<250	92
SPL-11S-12.5 006250-04	1,400	<250	95
SPL-12S-12.5 006250-05	1,500	<250	100
Method Blank 00-1412 MB	<50	<250	90

Date of Report: 06/24/20
Date Received: 06/16/20
Project: Roystone Redevelopment PO 2017-015K, F&BI 006250

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: 006250-05 1/10 (Duplicate)

Analyte	Reporting Units	Sample Result (Wet Wt)	Duplicate Result (Wet Wt)	RPD (Limit 20)
Benzene	mg/kg (ppm)	<0.2	<0.2	nm
Toluene	mg/kg (ppm)	0.91	0.99	8
Ethylbenzene	mg/kg (ppm)	2.7	2.7	0
Xylenes	mg/kg (ppm)	4.9	1.5	106 hr
Gasoline	mg/kg (ppm)	670	560	17

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Benzene	mg/kg (ppm)	0.5	86	69-120
Toluene	mg/kg (ppm)	0.5	84	70-117
Ethylbenzene	mg/kg (ppm)	0.5	84	65-123
Xylenes	mg/kg (ppm)	1.5	87	66-120
Gasoline	mg/kg (ppm)	20	90	71-131

Date of Report: 06/24/20
Date Received: 06/16/20
Project: Roystone Redevelopment PO 2017-015K, F&BI 006250

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

Laboratory Code: 006250-01 (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	480	112	102	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	98	74-139

Data Qualifiers & Definitions

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

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

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

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

cf - The sample was centrifuged prior to analysis.

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

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

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

fc - The 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.

006250

SAMPLE CHAIN OF CUSTODY ME 6-16-20

Page # 1 of 002

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

SAMPLERS (signature) E R

PROJECT NAME: Raystone Redevelopment
PO #: 2017-015k

REMARKS
Project specific RLs? - Yes / No

INVOICE TO

TURNAROUND TIME
☐ Standard turnaround VSI
☐ 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
SPL-85-12	01 A-E	6/16	1100	SOIL	5	X	X	X									Need by
SPL-95-11.5	02		1115			X	X	X									Next
SPL-105-12	03		1130			X	X	X									Wednesday
SPL-115-12.5	04		1145			X	X	X									6/24/2020
SPL-125-12.5	05		1200			X	X	X									
							✓										

Samples received at 4 °C

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: E R	Eric Dunham	RGF	6/16	1540
Received by:	Isaac Lessig	FBI	6/16	15:40
Relinquished by:				
Received by:				

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

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

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June 18, 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 15, 2020 from the Roystone Development PO 2017-015K, F&BI 006227 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
TRG0618R.DOC

CASE NARRATIVE

This case narrative encompasses samples received on June 15, 2020 by Friedman & Bruya, Inc. from the The Riley Group Roystone Development PO 2017-015K, F&BI 006227 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	The Riley Group
006227 -01	EPL-1S-8
006227 -02	SPL-5S-8

All quality control requirements were acceptable.

Date of Report: 06/18/20
Date Received: 06/15/20
Project: Roystone Development PO 2017-015K, F&BI 006227
Date Extracted: 06/16/20
Date Analyzed: 06/16/20

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 58-139)
EPL-1S-8 006227-01	<5	94
SPL-5S-8 006227-02	<5	94
Method Blank 00-1310 MB	<5	96

Date of Report: 06/18/20
Date Received: 06/15/20
Project: Roystone Development PO 2017-015K, F&BI 006227
Date Extracted: 06/16/20
Date Analyzed: 06/16/20

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)
EPL-1S-8 006227-01	<50	<250	93
SPL-5S-8 006227-02	<50	<250	94
Method Blank 00-1352 MB2	<50	<250	104

Date of Report: 06/18/20
Date Received: 06/15/20
Project: Roystone Development PO 2017-015K, F&BI 006227

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

Laboratory Code: 006227-01 (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	61-153

Date of Report: 06/18/20
Date Received: 06/15/20
Project: Roystone Development PO 2017-015K, F&BI 006227

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

Laboratory Code: 006085-03 (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	<50	96	96	73-135	0

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Diesel Extended	mg/kg (ppm)	5,000	92	74-139

Data Qualifiers & Definitions

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

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

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

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

cf - The sample was centrifuged prior to analysis.

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

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

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

fc - The 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.

006 227

SAMPLE CHAIN OF CUSTODY ME 6-15-20

VS1/G01

Report To Jerry Sawatz

Company Riley Group

Address

City, State, ZIP

Phone Email Jsawatz@riley-group.com edunham "

SAMPLERS (*signature*) E RL

PROJECT NAME: Raystone Redevelopment

PO #: 2017-015K

REMARKS

Project specific RLs? - Yes / No

INVOICE TO

Page # ____ 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	NWTPH-Dx	NWTPH-Gx	BTEX EPA 8021	NWTPH-HCID	VOCs EPA 8260	PAHs EPA 8270	PCBs EPA 8082					Notes
EPL-1S-8	01A-E	6/15	1000	SOIL	5	X	X										Resample
SPL-5S-8	02A-E	6/15	1015	↓	↓	X	X										Resample
ED Sewer-1B-12		6/15	1200														

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: E RL	Eric Dunham	Riley Group	6/15	1458
Received by:	Khan Phan	FEBT	6/15/20	1458
Relinquished by:				
Received by:				

Samples received at 18 °C

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

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 11, 2020 from the Roystone Redevelopment PO 2017-015K, F&BI 006189 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
TRG0616R.DOC

CASE NARRATIVE

This case narrative encompasses samples received on June 11, 2020 by Friedman & Bruya, Inc. from the The Riley Group Roystone Redevelopment PO 2017-015K, F&BI 006189 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	The Riley Group
006189 -01	SPL-7S-8
006189 -02	NPL-2S-3

All quality control requirements were acceptable.

Date of Report: 06/16/20
Date Received: 06/11/20
Project: Roystone Redevelopment PO 2017-015K, F&BI 006189
Date Extracted: 06/12/20
Date Analyzed: 06/12/20

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)
SPL-7S-8 006189-01	<0.02	<0.02	<0.02	<0.06	<5	86
NPL-2S-3 006189-02 1/5	<0.02 j	0.29	0.30	<0.3	130	84
Method Blank 00-1303 MB2	<0.02	<0.02	<0.02	<0.06	<5	81

Date of Report: 06/16/20
Date Received: 06/11/20
Project: Roystone Redevelopment PO 2017-015K, F&BI 006189
Date Extracted: 06/12/20
Date Analyzed: 06/12/20

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)
SPL-7S-8 006189-01	<50	<250	91
NPL-2S-3 006189-02	280	<250	85
Method Blank 00-1350 MB	<50	<250	85

Date of Report: 06/16/20
Date Received: 06/11/20
Project: Roystone Redevelopment PO 2017-015K, F&BI 006189

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: 006148-05 (Duplicate)

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

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Benzene	mg/kg (ppm)	0.5	99	69-120
Toluene	mg/kg (ppm)	0.5	98	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	105	71-131

Date of Report: 06/16/20
Date Received: 06/11/20
Project: Roystone Redevelopment PO 2017-015K, F&BI 006189

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

Laboratory Code: 006189-01 (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	106	112	64-133	6

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Diesel Extended	mg/kg (ppm)	5,000	104	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.

006189

SAMPLE CHAIN OF CUSTODY

ME 06-11-20

Page 1 of 1 VSI COI

Report To Jerry Sawtz

Company Riley Group

Address

City, State, ZIP

Phone Email Jsawtz@riley-group.com edunham

SAMPLERS (*signature*) E R

PROJECT NAME: Raystone Redevelopment

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
SPL-7S-8	01 A-E	6/10	1045	Soil	5	X	X	X									
NPL-2S-3	02	6/11	1000	Soil	5	X	X	X									
																	Samples received at 4 °C

ANALYSES REQUESTED

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: E R	Eric Dunham	RGL	6/11	1500
Received by: D. M	Liz Webber-Bruya	F&B	6/11/20	1500
Relinquished by:				
Received by:				

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

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

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Eric Young, B.S.

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Seattle, WA 98119-2029
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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	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 - Notes

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 6/9

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

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

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

June 16, 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

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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/B22

Page # ___ of ___

Report To Jerry Sawetz

Company Riley Group

Address

City, State, ZIP

Phone ... Email jsawetz@rileygroup.com edunham

SAMPLERS (signature)	
E D	
PROJECT NAME	PO #
Keystone Redevelopment	2017-015K
REMARKS	INVOICE TO
Project specific RLs? - Yes / No	

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

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

ANALYSES REQUESTED

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	HCIDs	cPAHs	Pb	Notes (X) per JS 6/4/20 ASAP TAT ◆ per JS 6/8/20
UST4A-SA-1B-8.5	01 A-E	6/1	1130	soil	5	◆		(X)	X							ASAP
UST4A-SA-2E-7	02	↓	1200	↓	↓	◆		(X)	X							↓
UST4A-SA-3W-7	03	↓	1215	↓	↓	(X)		(X)	X							↓
USTA-SA-1W-6	04	↓	1300	↓	↓				X	X						ID amended per JS 6/2/20 MG
USTA-SA-2B-6	05	↓	1100	↓	↓	X	X			X				X	X	↓
USTA-SA-3E-4.5	06	↓	1115	↓	↓			X	X							↓

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

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: E D	Eric Dunham	RGI	6/1	1430
Received by: Nhan Phan	Nhan Phan	F&BI	6/1/20	1450
Relinquished by:				
Received by:		Samples received at 6 °C		

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

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

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

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
TRG0608R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

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

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

June 8, 2020

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

Dear Mr Sawetz:

Included are the additional results from the testing of material submitted on June 1, 2020 from the Roystone Development PO 2017-015K, F&BI 006013 project. There are 6 pages included in this report.

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

Sincerely,

FRIEDMAN & BRUYA, INC.

Michael Erdahl
Project Manager

Enclosures
c: Eric Dunham, Mingta Lin
TRG0608R.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

All quality control requirements were acceptable.

Date of Report: 06/08/20
Date Received: 06/01/20
Project: Roystone Development PO 2017-015K, F&BI 006013
Date Extracted: 06/04/20
Date Analyzed: 06/05/20

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)
UST4A-SA-1B-8.5 006013-01	<0.02	<0.02	<0.02	<0.06	80
UST4A-SA-2E-7 006013-02	<0.02	<0.02	<0.02	<0.06	79
UST4A-SA-3W-7 006013-03	<0.02	<0.02	<0.02	<0.06	81
Method Blank 00-1120 MB	<0.02	<0.02	<0.02	<0.06	80

Date of Report: 06/08/20
Date Received: 06/01/20
Project: Roystone Development PO 2017-015K, F&BI 006013
Date Extracted: 06/05/20
Date Analyzed: 06/05/20

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-SA-3W-7 006013-03	<50	95 j	95
Method Blank 00-1247 MB	<50	<250	94

Date of Report: 06/08/20
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: 006013-01 (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	93	69-120
Toluene	mg/kg (ppm)	0.5	92	70-117
Ethylbenzene	mg/kg (ppm)	0.5	91	65-123
Xylenes	mg/kg (ppm)	1.5	95	66-120

Date of Report: 06/08/20
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: 006013-03 (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	60	104	102	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	102	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.

006013

SAMPLE CHAIN OF CUSTODY

ME 06/01/20 VS4/B22

Page # ___ of ___

Report To: Jerry Sawetz

Company: Riley Group

Address:

City, State, ZIP:

Phone: ___ Email: jsawetz@rileygroup.com edunham

SAMPLERS (signature): E D

PROJECT NAME: Roystone Redevelopment

PO #: 2017-015K

REMARKS:

INVOICE TO:

Project specific RLs? - Yes / No

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	[illegible] (Co)	cPAHs	Pb		Notes (X)-per JS 6/4/20 ASW TAT ◆ per TS 6/8/20
VST4A-SA-1B-8.5	01 A-E	6/1	1130	soil	5	◆		(X)	X								ASAP
VST4A-SA-2E-7	02	↓	1200	↓	↓	◆		(X)	X								↓
VST4A-SA-3W-7	03	↓	1215	↓	↓	(X)		(X)	X								↓
VSTA-SA-1W-6	04	↓	1300	↓	↓				X	X							↓ ID amended per JS 6/2/20 MG
VSTA-SA-2B-6	05	↓	1100	↓	↓	X	X			X				X	X		↓
VSTA-SA-3E-4.5	06	↓	1115	↓	↓			X	X								↓

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

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: E D	Eric Dunham	RGI	6/1	1430
Received by: [signature]	Nhan Phan	F&BI	6/1/20	1450
Relinquished by:				
Received by:		Samples received at 6 °C		

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

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

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

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@riley-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:				

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

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

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fbi@isomedia.com
www.friedmanandbruya.com

June 10, 2020

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

Dear Mr Sawetz:

Included are the additional results from the testing of material submitted on June 1, 2020 from the Roystone Development PO 2017-015K, F&BI 006013 project. There are 4 pages included in this report.

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

Sincerely,

FRIEDMAN & BRUYA, INC.

Michael Erdahl
Project Manager

Enclosures
c: Eric Dunham, Mingta Lin
TRG0610R.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

All quality control requirements were acceptable.

Date of Report: 06/10/20
Date Received: 06/01/20
Project: Roystone Development PO 2017-015K, F&BI 006013
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 48-168)
UST4A-SA-1B-8.5 006013-01	<50	<250	98
UST4A-SA-2E-7 006013-02	<50	<250	98
Method Blank 00-1259 MB	<50	<250	95

Date of Report: 06/10/20
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: 006114-01 (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	140,000	1 b	133 b	73-135	197 b

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

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/B2

Page # ___ of ___

Report To: Jerry Sawetz

Company: Riley Group

Address

City, State, ZIP

Phone ________ Email: jsawetz@riley-group.com edunham " "

SAMPLERS (signature): E D

PROJECT NAME: Roystone Redevelopment

PO #: 2017-015K

REMARKS

INVOICE TO

Project specific RLs? - Yes / No

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	Hexa (Co)	cPAHs	Pb		Notes: ⊗ per TS 6/4/20 ASAP TAT; ◆ per TS 6/8/20
VST4A-SA-1B-8.5	01 A-E	6/1	1130	soil	5	◆		⊗	X								ASAP
VST4A-SA-2E-7	02	↓	1200	↓	↓	◆		⊗	X								↓
VST4A-SA-3W-7	03	↓	1215	↓	↓	⊗		⊗	X								↓
VSTA-SA-1W-~~4.5~~ 6	04	↓	1300	↓	↓				X	X							↓
VSTA-SA-2B-6	05	↓	1100	↓	↓	X	X			X				X	X		↓
VSTA-SA-3E-4.5	06	↓	1415	↓	↓			X	X								↓

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

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: E D	Eric Dunham	RGI	6/1	1450
Received by: [signature]	Nhan Phan	F&BI	6/1/20	1950
Relinquished by:				
Received by:		Samples received at 6 °C		

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

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

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

June 9, 2020

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

Dear Mr Sawetz:

Included are the additional results from the testing of material submitted on June 2, 2020 from the Roystone Redevelopment, F&BI 006023 project. There are 6 pages included in this report.

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

Sincerely,

FRIEDMAN & BRUYA, INC.

Michael Erdahl
Project Manager

Enclosures
c: Eric Dunham, Mingta Lin
TRG0609R.DOC

CASE NARRATIVE

This case narrative encompasses samples received on June 2, 2020 by Friedman & Bruya, Inc. from the The Riley Group Roystone Redevelopment, F&BI 006023 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	The Riley Group
006023 -01	USTA-SP-1-S
006023 -02	USTA-SP-2-N

All quality control requirements were acceptable.

Date of Report: 06/09/20
Date Received: 06/02/20
Project: Roystone Redevelopment, F&BI 006023
Date Extracted: 06/04/20
Date Analyzed: 06/05/20 and 06/08/20

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)
USTA-SP-1-S 006023-01 1/5	0.51	6.0	5.5	38	1,400	109
USTA-SP-2-N 006023-02	0.026	0.56	1.0	5.3	280	133
Method Blank 00-1116 MB2	<0.02	<0.02	<0.02	<0.06	<5	79

Date of Report: 06/09/20
Date Received: 06/02/20
Project: Roystone Redevelopment, F&BI 006023
Date Extracted: 06/03/20
Date Analyzed: 06/03/20 and 06/04/20

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-SP-1-S 006023-01 1/10	8,100 x	33,000	97
USTA-SP-2-N 006023-02	470 x	2,300	91
Method Blank 00-1225 MB	<50	<250	94

Date of Report: 06/09/20
Date Received: 06/02/20
Project: Roystone Redevelopment, F&BI 006023

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: 006039-01 (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	92	66-121
Toluene	mg/kg (ppm)	0.5	96	72-128
Ethylbenzene	mg/kg (ppm)	0.5	100	69-132
Xylenes	mg/kg (ppm)	1.5	100	69-131
Gasoline	mg/kg (ppm)	20	95	61-153

Date of Report: 06/09/20
Date Received: 06/02/20
Project: Roystone Redevelopment, F&BI 006023

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

Laboratory Code: 006035-02 (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	96	92	73-135	4

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

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.

006023

SAMPLE CHAIN OF CUSTODY

ME 06/02/20

VSI/CT

Page # 1 of 1

Report To Jerry Sametz

Company Riley Group

Address

City, State, ZIP

Phone Email Jsametz@riley-group.com edunham " "

SAMPLERS (*signature*) E DK

PROJECT NAME: Raystone Redevelopment

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	NWTPH-Dx	NWTPH-Gx	BTEX EPA 8021	NWTPH-HCID	VOCs EPA 8260	PAHs EPA 8270	PCBs EPA 8082	HVOCs 8260				Notes
						ANALYSES REQUESTED											
UST A-SP-1-S	01 A-E	6/2	1200	soil	5	X	X	X					X				ASAP
UST A-SP-2-N	02	6/2	1215	soil	5	X	X	X					X				ASAP
																	X-std TAT
																	per TS 6/3/20
																	ME

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: E	Eric Dunham		6/2/2020	1245
Received by:	Anna Webber Bruya	F&B	6/2/20	1245
Relinquished by:				
Received by:				

Samples received at 4 °C

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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Seattle, WA 98119-2029
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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		

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

June 5, 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 2, 2020 from the Roystone Redevelopment, F&BI 006023 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
TRG0605R.DOC

CASE NARRATIVE

This case narrative encompasses samples received on June 2, 2020 by Friedman & Bruya, Inc. from the The Riley Group Roystone Redevelopment, F&BI 006023 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	The Riley Group
006023 -01	USTA-SP-1-S
006023 -02	USTA-SP-2-N

All quality control requirements were acceptable.

Analysis For Volatile Compounds By EPA Method 8260D

Client Sample ID:	USTA-SP-1-S	Client:	The Riley Group
Date Received:	06/02/20	Project:	Roystone Redevelopment
Date Extracted:	06/02/20	Lab ID:	006023-01
Date Analyzed:	06/02/20	Data File:	060232.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	104	55	145
4-Bromofluorobenzene	107	65	139

Compounds:	Concentration mg/kg (ppm)
Vinyl chloride	<0.05
Chloroethane	<0.5
1,1-Dichloroethene	<0.05
Methylene chloride	<0.5
trans-1,2-Dichloroethene	<0.05
1,1-Dichloroethane	<0.05
cis-1,2-Dichloroethene	<0.05
1,2-Dichloroethane (EDC)	<0.05
1,1,1-Trichloroethane	<0.05
Trichloroethene	0.14
Tetrachloroethene	0.61

Analysis For Volatile Compounds By EPA Method 8260D

Client Sample ID:	USTA-SP-2-N	Client:	The Riley Group
Date Received:	06/02/20	Project:	Roystone Redevelopment
Date Extracted:	06/02/20	Lab ID:	006023-02
Date Analyzed:	06/02/20	Data File:	060231.D
Matrix:	Soil	Instrument:	GCMS4
Units:	mg/kg (ppm) Dry Weight	Operator:	MS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	102	62	145
Toluene-d8	103	55	145
4-Bromofluorobenzene	98	65	139

Compounds:	Concentration mg/kg (ppm)
Vinyl chloride	<0.05
Chloroethane	<0.5
1,1-Dichloroethene	<0.05
Methylene chloride	<0.5
trans-1,2-Dichloroethene	<0.05
1,1-Dichloroethane	<0.05
cis-1,2-Dichloroethene	<0.05
1,2-Dichloroethane (EDC)	<0.05
1,1,1-Trichloroethane	<0.05
Trichloroethene	<0.02
Tetrachloroethene	0.080

Analysis For Volatile Compounds By EPA Method 8260D

Client Sample ID:	Method Blank	Client:	The Riley Group
Date Received:	Not Applicable	Project:	Roystone Redevelopment
Date Extracted:	06/02/20	Lab ID:	00-1167 mb
Date Analyzed:	06/02/20	Data File:	060214.D
Matrix:	Soil	Instrument:	GCMS4
Units:	mg/kg (ppm) Dry Weight	Operator:	MS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	101	62	145
Toluene-d8	106	55	145
4-Bromofluorobenzene	103	65	139

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

Date of Report: 06/05/20
Date Received: 06/02/20
Project: Roystone Redevelopment, F&BI 006023

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

Laboratory Code: 006023-01 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet wt)	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Vinyl chloride	mg/kg (ppm)	2.5	<0.05	56	56	10-138	0
Chloroethane	mg/kg (ppm)	2.5	<0.5	71	69	10-176	3
1,1-Dichloroethene	mg/kg (ppm)	2.5	<0.05	67	69	10-160	3
Methylene chloride	mg/kg (ppm)	2.5	<0.5	92	92	10-156	0
trans-1,2-Dichloroethene	mg/kg (ppm)	2.5	<0.05	74	75	14-137	1
1,1-Dichloroethane	mg/kg (ppm)	2.5	<0.05	86	87	19-140	1
cis-1,2-Dichloroethene	mg/kg (ppm)	2.5	<0.05	86	86	25-135	0
1,2-Dichloroethane (EDC)	mg/kg (ppm)	2.5	<0.05	84	85	12-160	1
1,1,1-Trichloroethane	mg/kg (ppm)	2.5	<0.05	81	81	10-156	0
Trichloroethene	mg/kg (ppm)	2.5	0.13	79	80	21-139	1
Tetrachloroethene	mg/kg (ppm)	2.5	0.54	58 b	56 b	20-133	4 b

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Vinyl chloride	mg/kg (ppm)	2.5	91	22-139
Chloroethane	mg/kg (ppm)	2.5	98	9-163
1,1-Dichloroethene	mg/kg (ppm)	2.5	98	47-128
Methylene chloride	mg/kg (ppm)	2.5	107	42-132
trans-1,2-Dichloroethene	mg/kg (ppm)	2.5	100	67-129
1,1-Dichloroethane	mg/kg (ppm)	2.5	108	68-115
cis-1,2-Dichloroethene	mg/kg (ppm)	2.5	104	72-127
1,2-Dichloroethane (EDC)	mg/kg (ppm)	2.5	104	56-135
1,1,1-Trichloroethane	mg/kg (ppm)	2.5	106	62-131
Trichloroethene	mg/kg (ppm)	2.5	103	64-117
Tetrachloroethene	mg/kg (ppm)	2.5	98	72-114

Data Qualifiers & Definitions

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

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

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

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

cf - The sample was centrifuged prior to analysis.

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

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

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

fc - The 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.

006023

SAMPLE CHAIN OF CUSTODY

ME 06/02/20

VSI/CT

Page # 1 of 1

Report To Jerry Sametz

Company Riley Group

Address

City, State, ZIP

Phone Email Jsametz@riley-group.com edunham " "

SAMPLERS (*signature*) E DK

PROJECT NAME: Raystone Redevelopment

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	NWTPH-Dx	NWTPH-Gx	BTEX EPA 8021	NWTPH-HCID	VOCs EPA 8260	PAHs EPA 8270	PCBs EPA 8082	HVOCs 8260				Notes
						ANALYSES REQUESTED											
UST A-SP-1-S	01 A-E	6/2	1200	soil	5	X	X	X					X				ASAP
UST A-SP-2-N	02	6/2	1215	soil	5	X	X	X					X				ASAP
																	X-std TAT
																	per TS 6/3/20
																	ME

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: E	Eric Dunham		6/2/2020	1245
Received by:	Anna Webber Bruya	F&B	6/2/20	1245
Relinquished by:				
Received by:				

Samples received at 4 °C

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

June 3, 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 29, 2020 from the 2012-015, F&BI 005394 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
TRG0603R.DOC

CASE NARRATIVE

This case narrative encompasses samples received on May 29, 2020 by Friedman & Bruya, Inc. from the The Riley Group 2012-015, F&BI 005394 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	The Riley Group
005394 -01	EPL-2S-8
005394 -02	NPL-1S-6
005394 -03	E12-SP2

Several compounds in the 8260D laboratory control sample exceeded the acceptance criteria. The analytes were not detected in the sample, therefore the data were acceptable.

All other quality control requirements were acceptable.

Date of Report: 06/03/20
Date Received: 05/29/20
Project: 2012-015, F&BI 005394
Date Extracted: 05/29/20
Date Analyzed: 05/29/20

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 56-165)
E12-SP2 005394-03	D	D	ND	79
Method Blank 00-1205 MB	ND	ND	ND	80

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

Date of Report: 06/03/20
Date Received: 05/29/20
Project: 2012-015, F&BI 005394
Date Extracted: 06/01/20
Date Analyzed: 06/01/20

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)
E12-SP2 005394-03 1/10	300	109
Method Blank 00-1111 MB	<5	94

Date of Report: 06/03/20
Date Received: 05/29/20
Project: 2012-015, F&BI 005394
Date Extracted: 05/29/20
Date Analyzed: 06/01/20

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)
EPL-2S-8 005394-01	<0.02	0.092	0.10	0.20	51	85
NPL-1S-6 005394-02	<0.02	<0.02	<0.02	<0.06	<5	81
Method Blank 00-1107 MB2	<0.02	<0.02	<0.02	<0.06	<5	80

Date of Report: 06/03/20
Date Received: 05/29/20
Project: 2012-015, F&BI 005394
Date Extracted: 05/29/20 and 06/01/20
Date Analyzed: 05/29/20 and 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)
EPL-2S-8 005394-01	92	<250	94
NPL-1S-6 005394-02	<50	<250	103
E12-SP2 005394-03	350	<250	105
Method Blank 00-1204 MB	<50	<250	96
Method Blank 00-1213 MB	<50	<250	107

Analysis For Volatile Compounds By EPA Method 8260D

Client Sample ID:	E12-SP2	Client:	The Riley Group
Date Received:	05/29/20	Project:	2012-015, F&BI 005394
Date Extracted:	05/29/20	Lab ID:	005394-03
Date Analyzed:	05/29/20	Data File:	052929.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	101	55	145
4-Bromofluorobenzene	102	65	139

Compounds:	Concentration mg/kg (ppm)	Compounds:	Concentration mg/kg (ppm)
Dichlorodifluoromethane	<0.5	1,3-Dichloropropane	<0.05
Chloromethane	<0.5	Tetrachloroethene	<0.025
Vinyl chloride	<0.05	Dibromochloromethane	<0.05
Bromomethane	<0.5	1,2-Dibromoethane (EDB)	<0.05
Chloroethane	<0.5	Chlorobenzene	<0.05
Trichlorofluoromethane	<0.5	Ethylbenzene	1.5
Acetone	<5	1,1,1,2-Tetrachloroethane	<0.05
1,1-Dichloroethene	<0.05	m,p-Xylene	<0.1
Hexane	0.45	o-Xylene	<0.05
Methylene chloride	<0.5	Styrene	<0.05
Methyl t-butyl ether (MTBE)	<0.05	Isopropylbenzene	0.37
trans-1,2-Dichloroethene	<0.05	Bromoform	<0.05
1,1-Dichloroethane	<0.05	n-Propylbenzene	1.9
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	0.82
Benzene	0.032	sec-Butylbenzene	0.41
Trichloroethene	<0.02	p-Isopropyltoluene	0.11
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	2.0
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:	2012-015, F&BI 005394
Date Extracted:	05/29/20	Lab ID:	00-1161 mb
Date Analyzed:	05/29/20	Data File:	052926.D
Matrix:	Soil	Instrument:	GCMS4
Units:	mg/kg (ppm) Dry Weight	Operator:	MS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	102	62	145
Toluene-d8	102	55	145
4-Bromofluorobenzene	103	65	139

Compounds:	Concentration mg/kg (ppm)	Compounds:	Concentration mg/kg (ppm)
Dichlorodifluoromethane	<0.5	1,3-Dichloropropane	<0.05
Chloromethane	<0.5	Tetrachloroethene	<0.025
Vinyl chloride	<0.05	Dibromochloromethane	<0.05
Bromomethane	<0.5	1,2-Dibromoethane (EDB)	<0.05
Chloroethane	<0.5	Chlorobenzene	<0.05
Trichlorofluoromethane	<0.5	Ethylbenzene	<0.05
Acetone	<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: 06/03/20
Date Received: 05/29/20
Project: 2012-015, F&BI 005394

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: 06/03/20
Date Received: 05/29/20
Project: 2012-015, F&BI 005394

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: 005357-02 (Duplicate)

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

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Benzene	mg/kg (ppm)	0.5	93	69-120
Toluene	mg/kg (ppm)	0.5	92	70-117
Ethylbenzene	mg/kg (ppm)	0.5	90	65-123
Xylenes	mg/kg (ppm)	1.5	95	66-120
Gasoline	mg/kg (ppm)	20	100	71-131

Date of Report: 06/03/20
Date Received: 05/29/20
Project: 2012-015, F&BI 005394

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

Laboratory Code: 005391-01 (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	12,000	144 b	130 b	73-135	10 b

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Diesel Extended	mg/kg (ppm)	5,000	92 b	74-139

Date of Report: 06/03/20
Date Received: 05/29/20
Project: 2012-015, F&BI 005394

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: 06/03/20
Date Received: 05/29/20
Project: 2012-015, F&BI 005394

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

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)
Dichlorodifluoromethane	mg/kg (ppm)	2.5	<0.5	25	25	10-142	0
Chloromethane	mg/kg (ppm)	2.5	<0.5	50	50	10-126	0
Vinyl chloride	mg/kg (ppm)	2.5	<0.05	50	51	10-138	2
Bromomethane	mg/kg (ppm)	2.5	<0.5	65	66	10-163	2
Chloroethane	mg/kg (ppm)	2.5	<0.5	62	64	10-176	3
Trichlorofluoromethane	mg/kg (ppm)	2.5	<0.5	57	59	10-176	3
Acetone	mg/kg (ppm)	12.5	<5	85	94	10-163	10
1,1-Dichloroethene	mg/kg (ppm)	2.5	<0.05	66	72	10-160	9
Hexane	mg/kg (ppm)	2.5	0.41	48	52	10-137	8
Methylene chloride	mg/kg (ppm)	2.5	<0.5	83	87	10-156	5
Methyl t-butyl ether (MTBE)	mg/kg (ppm)	2.5	<0.05	86	91	21-145	6
trans-1,2-Dichloroethene	mg/kg (ppm)	2.5	<0.05	73	78	14-137	7
1,1-Dichloroethane	mg/kg (ppm)	2.5	<0.05	84	88	19-140	5
2,2-Dichloropropane	mg/kg (ppm)	2.5	<0.05	74	75	10-158	1
cis-1,2-Dichloroethene	mg/kg (ppm)	2.5	<0.05	82	86	25-135	5
Chloroform	mg/kg (ppm)	2.5	<0.05	88	92	21-145	4
2-Butanone (MEK)	mg/kg (ppm)	12.5	<0.5	91	93	19-147	2
1,2-Dichloroethane (EDC)	mg/kg (ppm)	2.5	<0.05	89	88	12-160	1
1,1,1-Trichloroethane	mg/kg (ppm)	2.5	<0.05	85	87	10-156	2
1,1-Dichloropropene	mg/kg (ppm)	2.5	<0.05	87	89	17-140	2
Carbon tetrachloride	mg/kg (ppm)	2.5	<0.05	88	92	9-164	4
Benzene	mg/kg (ppm)	2.5	0.028	88	90	29-129	2
Trichloroethene	mg/kg (ppm)	2.5	<0.02	91	94	21-139	3
1,2-Dichloropropane	mg/kg (ppm)	2.5	<0.05	94	95	30-135	1
Bromodichloromethane	mg/kg (ppm)	2.5	<0.05	108	105	23-155	3
Dibromomethane	mg/kg (ppm)	2.5	<0.05	97	94	23-145	3
4-Methyl-2-pentanone	mg/kg (ppm)	12.5	<0.5	105	106	24-155	1
cis-1,3-Dichloropropene	mg/kg (ppm)	2.5	<0.05	93	87	28-144	7
Toluene	mg/kg (ppm)	2.5	<0.05	87	90	35-130	3
trans-1,3-Dichloropropene	mg/kg (ppm)	2.5	<0.05	89	85	26-149	5
1,1,2-Trichloroethane	mg/kg (ppm)	2.5	<0.05	98	97	10-205	1
2-Hexanone	mg/kg (ppm)	12.5	<0.5	113	118	15-166	4
1,3-Dichloropropane	mg/kg (ppm)	2.5	<0.05	96	94	31-137	2
Tetrachloroethene	mg/kg (ppm)	2.5	<0.025	86	88	20-133	2
Dibromochloromethane	mg/kg (ppm)	2.5	<0.05	102	98	28-150	4
1,2-Dibromoethane (EDB)	mg/kg (ppm)	2.5	<0.05	96	95	28-142	1
Chlorobenzene	mg/kg (ppm)	2.5	<0.05	91	92	32-129	1
Ethylbenzene	mg/kg (ppm)	2.5	1.4	67 b	77 b	32-137	14 b
1,1,1,2-Tetrachloroethane	mg/kg (ppm)	2.5	<0.05	98	101	31-143	3
m,p-Xylene	mg/kg (ppm)	5	<0.1	88	91	34-136	3
o-Xylene	mg/kg (ppm)	2.5	<0.05	92	96	33-134	4
Styrene	mg/kg (ppm)	2.5	<0.05	93	96	35-137	3
Isopropylbenzene	mg/kg (ppm)	2.5	0.34	84	91	31-142	8
Bromoform	mg/kg (ppm)	2.5	<0.05	112	103	21-156	8
n-Propylbenzene	mg/kg (ppm)	2.5	1.7	62 b	68 b	23-146	9 b
Bromobenzene	mg/kg (ppm)	2.5	<0.05	95	93	34-130	2
1,3,5-Trimethylbenzene	mg/kg (ppm)	2.5	<0.05	93	93	18-149	0
1,1,2,2-Tetrachloroethane	mg/kg (ppm)	2.5	<0.05	97	94	28-140	3
1,2,3-Trichloropropane	mg/kg (ppm)	2.5	<0.05	95	94	25-144	1
2-Chlorotoluene	mg/kg (ppm)	2.5	<0.05	92	92	31-134	0
4-Chlorotoluene	mg/kg (ppm)	2.5	<0.05	92	92	31-136	0
tert-Butylbenzene	mg/kg (ppm)	2.5	<0.05	96	97	30-137	1
1,2,4-Trimethylbenzene	mg/kg (ppm)	2.5	0.74	68 b	69 b	10-182	1 b
sec-Butylbenzene	mg/kg (ppm)	2.5	0.37	89	90	23-145	1
p-Isopropyltoluene	mg/kg (ppm)	2.5	0.097	90	90	21-149	0
1,3-Dichlorobenzene	mg/kg (ppm)	2.5	<0.05	89	91	30-131	2
1,4-Dichlorobenzene	mg/kg (ppm)	2.5	<0.05	88	90	29-129	2
1,2-Dichlorobenzene	mg/kg (ppm)	2.5	<0.05	90	92	31-132	2
1,2-Dibromo-3-chloropropane	mg/kg (ppm)	2.5	<0.5	110	104	11-161	6
1,2,4-Trichlorobenzene	mg/kg (ppm)	2.5	<0.25	98	98	22-142	0
Hexachlorobutadiene	mg/kg (ppm)	2.5	<0.25	100	98	10-142	2
Naphthalene	mg/kg (ppm)	2.5	1.8	66 b	67 b	14-157	2 b
1,2,3-Trichlorobenzene	mg/kg (ppm)	2.5	<0.25	102	101	20-144	1

Date of Report: 06/03/20
Date Received: 05/29/20
Project: 2012-015, F&BI 005394

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	53	10-146
Chloromethane	mg/kg (ppm)	2.5	87	27-133
Vinyl chloride	mg/kg (ppm)	2.5	87	22-139
Bromomethane	mg/kg (ppm)	2.5	98	38-114
Chloroethane	mg/kg (ppm)	2.5	97	9-163
Trichlorofluoromethane	mg/kg (ppm)	2.5	96	10-196
Acetone	mg/kg (ppm)	12.5	105	52-141
1,1-Dichloroethene	mg/kg (ppm)	2.5	101	47-128
Hexane	mg/kg (ppm)	2.5	102	43-142
Methylene chloride	mg/kg (ppm)	2.5	120	42-132
Methyl t-butyl ether (MTBE)	mg/kg (ppm)	2.5	118	60-123
trans-1,2-Dichloroethene	mg/kg (ppm)	2.5	110	67-129
1,1-Dichloroethane	mg/kg (ppm)	2.5	118 vo	68-115
2,2-Dichloropropane	mg/kg (ppm)	2.5	120	52-170
cis-1,2-Dichloroethene	mg/kg (ppm)	2.5	115	72-127
Chloroform	mg/kg (ppm)	2.5	117	66-120
2-Butanone (MEK)	mg/kg (ppm)	12.5	86	72-127
1,2-Dichloroethane (EDC)	mg/kg (ppm)	2.5	99	56-135
1,1,1-Trichloroethane	mg/kg (ppm)	2.5	118	62-131
1,1-Dichloropropene	mg/kg (ppm)	2.5	113	69-128
Carbon tetrachloride	mg/kg (ppm)	2.5	124	60-139
Benzene	mg/kg (ppm)	2.5	106	68-114
Trichloroethene	mg/kg (ppm)	2.5	100	64-117
1,2-Dichloropropane	mg/kg (ppm)	2.5	101	72-127
Bromodichloromethane	mg/kg (ppm)	2.5	115	72-130
Dibromomethane	mg/kg (ppm)	2.5	102	70-120
4-Methyl-2-pentanone	mg/kg (ppm)	12.5	98	45-145
cis-1,3-Dichloropropene	mg/kg (ppm)	2.5	85	75-136
Toluene	mg/kg (ppm)	2.5	108	66-126
trans-1,3-Dichloropropene	mg/kg (ppm)	2.5	86	72-132
1,1,2-Trichloroethane	mg/kg (ppm)	2.5	101	75-113
2-Hexanone	mg/kg (ppm)	12.5	84	33-152
1,3-Dichloropropane	mg/kg (ppm)	2.5	93	72-130
Tetrachloroethene	mg/kg (ppm)	2.5	108	72-114
Dibromochloromethane	mg/kg (ppm)	2.5	114	74-125
1,2-Dibromoethane (EDB)	mg/kg (ppm)	2.5	96	74-132
Chlorobenzene	mg/kg (ppm)	2.5	104	76-111
Ethylbenzene	mg/kg (ppm)	2.5	109	64-123
1,1,1,2-Tetrachloroethane	mg/kg (ppm)	2.5	140 vo	69-135
m,p-Xylene	mg/kg (ppm)	5	108	78-122
o-Xylene	mg/kg (ppm)	2.5	121	77-124
Styrene	mg/kg (ppm)	2.5	104	74-126
Isopropylbenzene	mg/kg (ppm)	2.5	123	76-127
Bromoform	mg/kg (ppm)	2.5	126	56-132
n-Propylbenzene	mg/kg (ppm)	2.5	112	74-124
Bromobenzene	mg/kg (ppm)	2.5	103	72-122
1,3,5-Trimethylbenzene	mg/kg (ppm)	2.5	118	76-126
1,1,2,2-Tetrachloroethane	mg/kg (ppm)	2.5	114	56-143
1,2,3-Trichloropropane	mg/kg (ppm)	2.5	101	61-137
2-Chlorotoluene	mg/kg (ppm)	2.5	113	74-121
4-Chlorotoluene	mg/kg (ppm)	2.5	104	75-122
tert-Butylbenzene	mg/kg (ppm)	2.5	116	73-130
1,2,4-Trimethylbenzene	mg/kg (ppm)	2.5	116	76-125
sec-Butylbenzene	mg/kg (ppm)	2.5	121	71-130
p-Isopropyltoluene	mg/kg (ppm)	2.5	117	70-132
1,3-Dichlorobenzene	mg/kg (ppm)	2.5	102	75-121
1,4-Dichlorobenzene	mg/kg (ppm)	2.5	100	74-117
1,2-Dichlorobenzene	mg/kg (ppm)	2.5	112	76-121
1,2-Dibromo-3-chloropropane	mg/kg (ppm)	2.5	126	58-138
1,2,4-Trichlorobenzene	mg/kg (ppm)	2.5	128	64-135
Hexachlorobutadiene	mg/kg (ppm)	2.5	114	50-153
Naphthalene	mg/kg (ppm)	2.5	131	63-140
1,2,3-Trichlorobenzene	mg/kg (ppm)	2.5	133	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.

005394

SAMPLE CHAIN OF CUSTODY ME 05-29-20

VS1 / B01

Page # 1 of

Report To: Jerry Sawetz

Company: Riley Group

Address: 17522 Bothell Way NE

City, State, ZIP: Bothell WA 98011

Phone: Email:

SAMPLERS (signature): [signature]

PROJECT NAME: 2012-015

PO #:

REMARKS:

Project specific RLs? - Yes / No

INVOICE TO:

TURNAROUND TIME
- X Standard turnaround
- X RUSH 24 hour
- Rush charges authorized by: JS/ME 5/29/20

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

ANALYSES REQUESTED

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	CVOCs				Notes (X-per JS 5/29/20 ME)
EPL-25-8 (~~25-6~~)	01 A-E	5/21	800	Soil	5	X	X	X									Std TAT
NPL-15-6	02	↓	815	↓	↓	X	X	X									↓
E12-SP2	03	↓	830	↓	↓	✓	✓		X				X				Rush TAT; ✓-per JS 6/1

Samples received at 4 °C

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

	SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by:	[signature]	G Steffen	RGI	5/29/20	1210
Received by:	[signature]	Eric Young	F&B	5/29/20	1210
Relinquished by:					
Received by:					

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

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

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

June 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 May 28, 2020 from the 2017-015K, F&BI 005346 project. There are 7 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
TRG0601R.DOC

CASE NARRATIVE

This case narrative encompasses samples received on May 28, 2020 by Friedman & Bruya, Inc. from the The Riley Group 2017-015K, F&BI 005346 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	The Riley Group
005346 -01	E12-SP

All quality control requirements were acceptable.

Date of Report: 06/01/20
Date Received: 05/28/20
Project: 2017-015K, F&BI 005346
Date Extracted: 05/28/20
Date Analyzed: 05/28/20

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)
E12-SP 005346-01	ND	ND	ND	106
Method Blank 00-1197 MB	ND	ND	ND	96

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

Analysis For Volatile Compounds By EPA Method 8260D

Client Sample ID:	E12-SP	Client:	The Riley Group
Date Received:	05/28/20	Project:	2017-015K, F&BI 005346
Date Extracted:	05/28/20	Lab ID:	005346-01
Date Analyzed:	05/28/20	Data File:	052816.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	101	55	145
4-Bromofluorobenzene	109	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 Volatile Compounds By EPA Method 8260D

Client Sample ID:	Method Blank	Client:	The Riley Group
Date Received:	Not Applicable	Project:	2017-015K, F&BI 005346
Date Extracted:	05/28/20	Lab ID:	00-1158 mb
Date Analyzed:	05/28/20	Data File:	052810.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	99	55	145
4-Bromofluorobenzene	102	65	139

Compounds:	Concentration mg/kg (ppm)	Compounds:	Concentration mg/kg (ppm)
Dichlorodifluoromethane	<0.5	1,3-Dichloropropane	<0.05
Chloromethane	<0.5	Tetrachloroethene	<0.025
Vinyl chloride	<0.05	Dibromochloromethane	<0.05
Bromomethane	<0.5	1,2-Dibromoethane (EDB)	<0.05
Chloroethane	<0.5	Chlorobenzene	<0.05
Trichlorofluoromethane	<0.5	Ethylbenzene	<0.05
Acetone	<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: 06/01/20
Date Received: 05/28/20
Project: 2017-015K, F&BI 005346

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

Laboratory Code: 005346-01 (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	20	10-142	5
Chloromethane	mg/kg (ppm)	2.5	<0.5	42	42	10-126	0
Vinyl chloride	mg/kg (ppm)	2.5	<0.05	39	40	10-138	3
Bromomethane	mg/kg (ppm)	2.5	<0.5	52	56	10-163	7
Chloroethane	mg/kg (ppm)	2.5	<0.5	49	52	10-176	6
Trichlorofluoromethane	mg/kg (ppm)	2.5	<0.5	43	46	10-176	7
Acetone	mg/kg (ppm)	12.5	<5	72	85	10-163	17
1,1-Dichloroethene	mg/kg (ppm)	2.5	<0.05	52	56	10-160	7
Hexane	mg/kg (ppm)	2.5	<0.25	40	42	10-137	5
Methylene chloride	mg/kg (ppm)	2.5	<0.5	68	72	10-156	6
Methyl t-butyl ether (MTBE)	mg/kg (ppm)	2.5	<0.05	73	77	21-145	5
trans-1,2-Dichloroethene	mg/kg (ppm)	2.5	<0.05	59	63	14-137	7
1,1-Dichloroethane	mg/kg (ppm)	2.5	<0.05	70	73	19-140	4
2,2-Dichloropropane	mg/kg (ppm)	2.5	<0.05	63	66	10-158	5
cis-1,2-Dichloroethene	mg/kg (ppm)	2.5	<0.05	69	72	25-135	4
Chloroform	mg/kg (ppm)	2.5	<0.05	74	77	21-145	4
2-Butanone (MEK)	mg/kg (ppm)	12.5	<0.5	81	88	19-147	8
1,2-Dichloroethane (EDC)	mg/kg (ppm)	2.5	<0.05	75	79	12-160	5
1,1,1-Trichloroethane	mg/kg (ppm)	2.5	<0.05	70	73	10-156	4
1,1-Dichloropropene	mg/kg (ppm)	2.5	<0.05	71	74	17-140	4
Carbon tetrachloride	mg/kg (ppm)	2.5	<0.05	74	76	9-164	3
Benzene	mg/kg (ppm)	2.5	<0.03	74	77	29-129	4
Trichloroethene	mg/kg (ppm)	2.5	<0.02	74	78	21-139	5
1,2-Dichloropropane	mg/kg (ppm)	2.5	<0.05	81	85	30-135	5
Bromodichloromethane	mg/kg (ppm)	2.5	<0.05	87	91	23-155	4
Dibromomethane	mg/kg (ppm)	2.5	<0.05	82	85	23-145	4
4-Methyl-2-pentanone	mg/kg (ppm)	12.5	<0.5	87	91	24-155	4
cis-1,3-Dichloropropene	mg/kg (ppm)	2.5	<0.05	85	88	28-144	3
Toluene	mg/kg (ppm)	2.5	<0.05	78	81	35-130	4
trans-1,3-Dichloropropene	mg/kg (ppm)	2.5	<0.05	83	88	26-149	6
1,1,2-Trichloroethane	mg/kg (ppm)	2.5	<0.05	87	90	10-205	3
2-Hexanone	mg/kg (ppm)	12.5	<0.5	85	90	15-166	6
1,3-Dichloropropane	mg/kg (ppm)	2.5	<0.05	85	89	31-137	5
Tetrachloroethene	mg/kg (ppm)	2.5	<0.025	76	79	20-133	4
Dibromochloromethane	mg/kg (ppm)	2.5	<0.05	84	88	28-150	5
1,2-Dibromoethane (EDB)	mg/kg (ppm)	2.5	<0.05	85	89	28-142	5
Chlorobenzene	mg/kg (ppm)	2.5	<0.05	80	82	32-129	2
Ethylbenzene	mg/kg (ppm)	2.5	<0.05	78	81	32-137	4
1,1,1,2-Tetrachloroethane	mg/kg (ppm)	2.5	<0.05	85	88	31-143	3
m,p-Xylene	mg/kg (ppm)	5	<0.1	77	81	34-136	5
o-Xylene	mg/kg (ppm)	2.5	<0.05	79	83	33-134	5
Styrene	mg/kg (ppm)	2.5	<0.05	80	84	35-137	5
Isopropylbenzene	mg/kg (ppm)	2.5	<0.05	77	81	31-142	5
Bromoform	mg/kg (ppm)	2.5	<0.05	88	88	21-156	0
n-Propylbenzene	mg/kg (ppm)	2.5	<0.05	83	85	23-146	2
Bromobenzene	mg/kg (ppm)	2.5	<0.05	86	90	34-130	5
1,3,5-Trimethylbenzene	mg/kg (ppm)	2.5	<0.05	84	87	18-149	4
1,1,2,2-Tetrachloroethane	mg/kg (ppm)	2.5	<0.05	89	92	28-140	3
1,2,3-Trichloropropane	mg/kg (ppm)	2.5	<0.05	87	89	25-144	2
2-Chlorotoluene	mg/kg (ppm)	2.5	<0.05	83	86	31-134	4
4-Chlorotoluene	mg/kg (ppm)	2.5	<0.05	84	87	31-136	4
tert-Butylbenzene	mg/kg (ppm)	2.5	<0.05	86	88	30-137	2
1,2,4-Trimethylbenzene	mg/kg (ppm)	2.5	<0.05	82	85	10-182	4
sec-Butylbenzene	mg/kg (ppm)	2.5	<0.05	84	87	23-145	4
p-Isopropyltoluene	mg/kg (ppm)	2.5	<0.05	82	84	21-149	2
1,3-Dichlorobenzene	mg/kg (ppm)	2.5	<0.05	80	82	30-131	2
1,4-Dichlorobenzene	mg/kg (ppm)	2.5	<0.05	78	82	29-129	5
1,2-Dichlorobenzene	mg/kg (ppm)	2.5	<0.05	82	86	31-132	5
1,2-Dibromo-3-chloropropane	mg/kg (ppm)	2.5	<0.5	84	86	11-161	2
1,2,4-Trichlorobenzene	mg/kg (ppm)	2.5	<0.25	78	81	22-142	4
Hexachlorobutadiene	mg/kg (ppm)	2.5	<0.25	81	84	10-142	4
Naphthalene	mg/kg (ppm)	2.5	<0.05	80	84	14-157	5
1,2,3-Trichlorobenzene	mg/kg (ppm)	2.5	<0.25	80	85	20-144	6

Date of Report: 06/01/20
Date Received: 05/28/20
Project: 2017-015K, F&BI 005346

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	60	10-146
Chloromethane	mg/kg (ppm)	2.5	72	27-133
Vinyl chloride	mg/kg (ppm)	2.5	74	22-139
Bromomethane	mg/kg (ppm)	2.5	82	38-114
Chloroethane	mg/kg (ppm)	2.5	79	9-163
Trichlorofluoromethane	mg/kg (ppm)	2.5	81	10-196
Acetone	mg/kg (ppm)	12.5	86	52-141
1,1-Dichloroethene	mg/kg (ppm)	2.5	84	47-128
Hexane	mg/kg (ppm)	2.5	88	43-142
Methylene chloride	mg/kg (ppm)	2.5	93	42-132
Methyl t-butyl ether (MTBE)	mg/kg (ppm)	2.5	92	60-123
trans-1,2-Dichloroethene	mg/kg (ppm)	2.5	84	67-129
1,1-Dichloroethane	mg/kg (ppm)	2.5	93	68-115
2,2-Dichloropropane	mg/kg (ppm)	2.5	91	52-170
cis-1,2-Dichloroethene	mg/kg (ppm)	2.5	89	72-127
Chloroform	mg/kg (ppm)	2.5	92	66-120
2-Butanone (MEK)	mg/kg (ppm)	12.5	92	72-127
1,2-Dichloroethane (EDC)	mg/kg (ppm)	2.5	88	56-135
1,1,1-Trichloroethane	mg/kg (ppm)	2.5	93	62-131
1,1-Dichloropropene	mg/kg (ppm)	2.5	94	69-128
Carbon tetrachloride	mg/kg (ppm)	2.5	98	60-139
Benzene	mg/kg (ppm)	2.5	91	68-114
Trichloroethene	mg/kg (ppm)	2.5	87	64-117
1,2-Dichloropropane	mg/kg (ppm)	2.5	94	72-127
Bromodichloromethane	mg/kg (ppm)	2.5	95	72-130
Dibromomethane	mg/kg (ppm)	2.5	92	70-120
4-Methyl-2-pentanone	mg/kg (ppm)	12.5	98	45-145
cis-1,3-Dichloropropene	mg/kg (ppm)	2.5	92	75-136
Toluene	mg/kg (ppm)	2.5	91	66-126
trans-1,3-Dichloropropene	mg/kg (ppm)	2.5	90	72-132
1,1,2-Trichloroethane	mg/kg (ppm)	2.5	96	75-113
2-Hexanone	mg/kg (ppm)	12.5	93	33-152
1,3-Dichloropropane	mg/kg (ppm)	2.5	93	72-130
Tetrachloroethene	mg/kg (ppm)	2.5	91	72-114
Dibromochloromethane	mg/kg (ppm)	2.5	85	74-125
1,2-Dibromoethane (EDB)	mg/kg (ppm)	2.5	95	74-132
Chlorobenzene	mg/kg (ppm)	2.5	91	76-111
Ethylbenzene	mg/kg (ppm)	2.5	92	64-123
1,1,1,2-Tetrachloroethane	mg/kg (ppm)	2.5	101	69-135
m,p-Xylene	mg/kg (ppm)	5	91	78-122
o-Xylene	mg/kg (ppm)	2.5	96	77-124
Styrene	mg/kg (ppm)	2.5	93	74-126
Isopropylbenzene	mg/kg (ppm)	2.5	94	76-127
Bromoform	mg/kg (ppm)	2.5	81	56-132
n-Propylbenzene	mg/kg (ppm)	2.5	95	74-124
Bromobenzene	mg/kg (ppm)	2.5	93	72-122
1,3,5-Trimethylbenzene	mg/kg (ppm)	2.5	97	76-126
1,1,2,2-Tetrachloroethane	mg/kg (ppm)	2.5	101	56-143
1,2,3-Trichloropropane	mg/kg (ppm)	2.5	93	61-137
2-Chlorotoluene	mg/kg (ppm)	2.5	94	74-121
4-Chlorotoluene	mg/kg (ppm)	2.5	93	75-122
tert-Butylbenzene	mg/kg (ppm)	2.5	99	73-130
1,2,4-Trimethylbenzene	mg/kg (ppm)	2.5	95	76-125
sec-Butylbenzene	mg/kg (ppm)	2.5	98	71-130
p-Isopropyltoluene	mg/kg (ppm)	2.5	95	70-132
1,3-Dichlorobenzene	mg/kg (ppm)	2.5	90	75-121
1,4-Dichlorobenzene	mg/kg (ppm)	2.5	88	74-117
1,2-Dichlorobenzene	mg/kg (ppm)	2.5	94	76-121
1,2-Dibromo-3-chloropropane	mg/kg (ppm)	2.5	83	58-138
1,2,4-Trichlorobenzene	mg/kg (ppm)	2.5	93	64-135
Hexachlorobutadiene	mg/kg (ppm)	2.5	98	50-153
Naphthalene	mg/kg (ppm)	2.5	93	63-140
1,2,3-Trichlorobenzene	mg/kg (ppm)	2.5	96	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.

005346

SAMPLE CHAIN OF CUSTODY ME 5/28/20

VS1 B011

Page # ______ of ______

Report To: Jerry Sawetz

Company: The Riley Group

Address

City, State, ZIP

Phone   Email

SAMPLERS (signature)	
PROJECT NAME: 2017-015K	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	NWTPH-Dx	NWTPH-Gx	BTEX EPA 8021	NWTPH-HCID	VOCs EPA 8260	PAHs EPA 8270	PCBs EPA 8082	HCID	~~VOCs~~	Full list VOCs per JS AP 6/1/20		Notes
E12-SP	01A-E	5/28	800	soil	5								X	X			

Samples received at 0 °C

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

	SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by:	[signature]	Stephen Lim	RGI	5/28/	805
Received by:	[signature]	Ann Walker Bruya	F&B	5/28	805
Relinquished by:					
Received by:					

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

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

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

May 29, 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 27, 2020 from the Roystone Redevelopment PO 2017-015K, F&BI 005335 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
TRG0529R.DOC

CASE NARRATIVE

This case narrative encompasses samples received on May 27, 2020 by Friedman & Bruya, Inc. from the The Riley Group Roystone Redevelopment PO 2017-015K, F&BI 005335 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	The Riley Group
005335 -01	NETP1-8
005335 -02	NETP1-12
005335 -03	NETP1-17
005335 -04	NETP1-20
005335 -05	NETP2-5
005335 -06	NETP2-7
005335 -07	NETP2-8
005335 -08	NETP2-12
005335 -09	NETP2-17
005335 -10	NETP2-18

All quality control requirements were acceptable.

Date of Report: 05/29/20
Date Received: 05/27/20
Project: Roystone Redevelopment PO 2017-015K, F&BI 005335
Date Extracted: 05/27/20
Date Analyzed: 05/27/20

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 50-132)
NETP1-8 005335-01	<0.02	<0.02	<0.02	<0.06	<5	94
NETP1-12 005335-02	<0.02	<0.02	<0.02	<0.06	<5	94
NETP2-5 005335-05	<0.02	0.046	0.046	0.11	35	92
NETP2-8 005335-07	<0.02	<0.02	<0.02	<0.06	<5	92
Method Blank 00-1105 MB	<0.02	<0.02	<0.02	<0.06	<5	91

Date of Report: 05/29/20
Date Received: 05/27/20
Project: Roystone Redevelopment PO 2017-015K, F&BI 005335
Date Extracted: 05/27/20
Date Analyzed: 05/27/20

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)
NETP1-8 005335-01	<50	<250	94
NETP1-12 005335-02	<50	<250	98
NETP2-5 005335-05	<50	<250	84
NETP2-8 005335-07	<50	<250	96
Method Blank 00-1189 MB	<50	<250	82

Date of Report: 05/29/20
Date Received: 05/27/20
Project: Roystone Redevelopment PO 2017-015K, F&BI 005335

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: 005335-01 (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	100	66-121
Toluene	mg/kg (ppm)	0.5	98	72-128
Ethylbenzene	mg/kg (ppm)	0.5	104	69-132
Xylenes	mg/kg (ppm)	1.5	104	69-131
Gasoline	mg/kg (ppm)	20	105	61-153

Date of Report: 05/29/20
Date Received: 05/27/20
Project: Roystone Redevelopment PO 2017-015K, F&BI 005335

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

Laboratory Code: 005322-01 (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	98	100	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	98	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.

005335

SAMPLE CHAIN OF CUSTODY

ME 05/27/20

~~B02 / VS3~~ B04 / VS3

Page # 1 of 1

Report To Jerry Sametz

Company Riley Group

Address

City, State, ZIP

Phone Email jsametz@riley-group.com; edunham

SAMPLERS (*signature*)	
PROJECT NAME: Royalstone Redevelopment	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	ANALYSES REQUESTED: NWTPH-Dx	NWTPH-Gx	BTEX EPA 8021	NWTPH-HCID	VOCs EPA 8260	PAHs EPA 8270	PCBs EPA 8082					Notes
NETP1-8	01 A-E	5/27	1000	Soil	5	X	X	X									ASAP
NETP1-12	02		1015			X	X	X									ASAP
NETP1-17	03		1030														
NETP1-20	04		1045														
NETP2-5	05		1115			X	X	X									Standard TAT
NETP2-7	06		1100														
NETP2-8	07		1130			X	X	X									Standard TAT
NETP2-12	08		1145														
NETP2-17	09		1200														
NETP2-18	10		1210														Samples received at 4 °C

	SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by:		S Ruffalo	RGI	5/27	1200
Received by:		Khoi Hoang	FBI	5/27/20	12:00
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 27, 2020

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

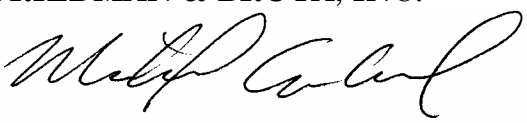
Dear Mr Sawetz:

Included are the results from the testing of material submitted on May 22, 2020 from the Roystone PO 2017-015 K, F&BI 005299 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
TRG0527R.DOC

CASE NARRATIVE

This case narrative encompasses samples received on May 22, 2020 by Friedman & Bruya, Inc. from the The Riley Group Roystone PO 2017-015 K, F&BI 005299 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	The Riley Group
005299 -01	USTA-1B-9

All quality control requirements were acceptable.

Date of Report: 05/27/20
Date Received: 05/22/20
Project: Roystone PO 2017-015 K, F&BI 005299
Date Extracted: 05/26/20
Date Analyzed: 05/26/20

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 56-165)
USTA-1B-9 005299-01	ND	D	ND	95
Method Blank 00-1185 MB	ND	ND	ND	86

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

Analysis For Volatile Compounds By EPA Method 8260D

Client Sample ID:	USTA-1B-9	Client:	The Riley Group
Date Received:	05/22/20	Project:	Roystone PO 2017-015 K, F&BI 005299
Date Extracted:	05/26/20	Lab ID:	005299-01
Date Analyzed:	05/26/20	Data File:	052613.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	102	55	145
4-Bromofluorobenzene	101	65	139

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

Analysis For Volatile Compounds By EPA Method 8260D

Client Sample ID:	Method Blank	Client:	The Riley Group
Date Received:	Not Applicable	Project:	Roystone PO 2017-015 K, F&BI 005299
Date Extracted:	05/26/20	Lab ID:	00-1152 mb
Date Analyzed:	05/26/20	Data File:	052612.D
Matrix:	Soil	Instrument:	GCMS4
Units:	mg/kg (ppm) Dry Weight	Operator:	MS

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

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

Date of Report: 05/27/20
Date Received: 05/22/20
Project: Roystone PO 2017-015 K, F&BI 005299

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

Laboratory Code: 005299-01 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet wt)	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Vinyl chloride	mg/kg (ppm)	2.5	<0.05	41	38	10-138	8
Chloroethane	mg/kg (ppm)	2.5	<0.5	56	51	10-176	9
1,1-Dichloroethene	mg/kg (ppm)	2.5	<0.05	57	53	10-160	7
Methylene chloride	mg/kg (ppm)	2.5	<0.5	74	70	10-156	6
trans-1,2-Dichloroethene	mg/kg (ppm)	2.5	<0.05	66	61	14-137	8
1,1-Dichloroethane	mg/kg (ppm)	2.5	<0.05	74	69	19-140	7
cis-1,2-Dichloroethene	mg/kg (ppm)	2.5	<0.05	73	68	25-135	7
1,2-Dichloroethane (EDC)	mg/kg (ppm)	2.5	<0.05	75	71	12-160	5
1,1,1-Trichloroethane	mg/kg (ppm)	2.5	<0.05	75	70	10-156	7
Trichloroethene	mg/kg (ppm)	2.5	<0.02	74	69	21-139	7
Tetrachloroethene	mg/kg (ppm)	2.5	<0.025	75	70	20-133	7

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Vinyl chloride	mg/kg (ppm)	2.5	86	22-139
Chloroethane	mg/kg (ppm)	2.5	95	9-163
1,1-Dichloroethene	mg/kg (ppm)	2.5	98	47-128
Methylene chloride	mg/kg (ppm)	2.5	112	42-132
trans-1,2-Dichloroethene	mg/kg (ppm)	2.5	103	67-129
1,1-Dichloroethane	mg/kg (ppm)	2.5	107	68-115
cis-1,2-Dichloroethene	mg/kg (ppm)	2.5	104	72-127
1,2-Dichloroethane (EDC)	mg/kg (ppm)	2.5	96	56-135
1,1,1-Trichloroethane	mg/kg (ppm)	2.5	110	62-131
Trichloroethene	mg/kg (ppm)	2.5	100	64-117
Tetrachloroethene	mg/kg (ppm)	2.5	102	72-114

Data Qualifiers & Definitions

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

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

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

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

cf - The sample was centrifuged prior to analysis.

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

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

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

fc - The 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.

005299

ME 05/22/20

VS1/B01

SAMPLE CHAIN OF CUSTODY

Report To Jerry SaweAz

Company Riley Group

Address

City, State, ZIP

Phone Email jsawetz@riley-group.com edunham " "

SAMPLERS (signature) ERL

PROJECT NAME	PO #
Roystone	2017-015K
REMARKS	INVOICE TO
Project specific RLs? - Yes / No	

Page # 1 of 1

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	HVOCs 8260				Notes
USTA-IB-9	01 A-E	5/22	1200	SOIL	5				X				X				

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

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: ERL	Eric Dunham	RGI	5/22/20	1505
Received by: KH	Khoi Hoang	FBT	5/22/20	1505
Relinquished by:				
Received by:		Samples received at 20 °C		

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

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

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

May 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
~~VST4A~~-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.

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

May 26, 2020

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

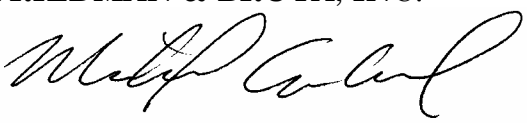
Dear Mr Sawetz:

Included are the results from the testing of material submitted on May 20, 2020 from the Roystone Development PO 2017-015K, F&BI 005260 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
TRG0526R.DOC

CASE NARRATIVE

This case narrative encompasses samples received on May 20, 2020 by Friedman & Bruya, Inc. from the The Riley Group Roystone Development PO 2017-015K, F&BI 005260 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	The Riley Group
005260 -01	TP10-5

All quality control requirements were acceptable.

Date of Report: 05/26/20
Date Received: 05/20/20
Project: Roystone Development PO 2017-015K, F&BI 005260
Date Extracted: 05/21/20
Date Analyzed: 05/21/20

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 50-132)
TP10-5 005260-01 1/5	<0.02 j	1.2	1.3	3.4	470	100
Method Blank 00-1097 MB2	<0.02	<0.02	<0.02	<0.06	<5	92

Date of Report: 05/26/20
Date Received: 05/20/20
Project: Roystone Development PO 2017-015K, F&BI 005260
Date Extracted: 05/21/20
Date Analyzed: 05/21/20

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)
TP10-5 005260-01	1,200	<250	96
Method Blank 00-1147 MB2	<50	<250	85

Date of Report: 05/26/20
Date Received: 05/20/20
Project: Roystone Development PO 2017-015K, F&BI 005260

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: 005236-03 (Duplicate)

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

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Benzene	mg/kg (ppm)	0.5	93	66-121
Toluene	mg/kg (ppm)	0.5	92	72-128
Ethylbenzene	mg/kg (ppm)	0.5	90	69-132
Xylenes	mg/kg (ppm)	1.5	95	69-131
Gasoline	mg/kg (ppm)	20	95	61-153

Date of Report: 05/26/20
Date Received: 05/20/20
Project: Roystone Development PO 2017-015K, F&BI 005260

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

Laboratory Code: 005257-01 (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	110	88	97	73-135	10

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Diesel Extended	mg/kg (ppm)	5,000	98	74-139

Data Qualifiers & Definitions

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

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

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

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

cf - The sample was centrifuged prior to analysis.

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

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

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

fc - The 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.

005260

SAMPLE CHAIN OF CUSTODY

ME 05/20/20 VS-D1 1 of 1 B01

Page # 1 of 1

Report To Jerry Sawtz

Company

Address

City, State, ZIP

Phone Email Jsawtz@rileygroup.com edunham

SAMPLERS (*signature*) E R L

PROJECT NAME: Roystone Development

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
TP10-5	01A-E	5/20	1300	SOIL	5	X	X	X									

ANALYSES REQUESTED

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: E R L	Erik Dunham	Riley Group	5/20	1418
Received by: Nhan Phan	Nhan Phan	FEBT	5/20/20	1418
Relinquished by:				
Received by:		Samples received at 19 °C		

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 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

ME 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)	
[signature]	
PROJECT NAME	PO #
Roystone Development	2017-015K
REMARKS	INVOICE TO
Project specific RLs? - Yes / No	

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								

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

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: [signature]	Eric Dunham	RGI	5/15	1410
Received by: [signature]	Nhan Phan	FeBI	5/15/20	1410
Relinquished by:				
Received by:		Samples received at 19 °C		

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

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

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

May 15, 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 12, 2020 from the Roystone Redevelopment 2017-015k, F&BI 005142 project. There are 7 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
TRG0515R.DOC

CASE NARRATIVE

This case narrative encompasses samples received on May 12, 2020 by Friedman & Bruya, Inc. from the The Riley Group Roystone Redevelopment 2017-015k, F&BI 005142 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	The Riley Group
005142 -01	WPL-4S-8
005142 -02	WPL-5S-8
005142 -03	Wood Pole-5

All quality control requirements were acceptable.

Date of Report: 05/15/20
Date Received: 05/12/20
Project: Roystone Redevelopment 2017-015k, F&BI 005142
Date Extracted: 05/13/20
Date Analyzed: 05/13/20

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 53-144)
Wood Pole-5 005142-03	ND	ND	ND	92
Method Blank 00-1084 MB	ND	ND	ND	85

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

Date of Report: 05/15/20
Date Received: 05/12/20
Project: Roystone Redevelopment 2017-015k, F&BI 005142
Date Extracted: 05/13/20
Date Analyzed: 05/13/20

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-4S-8 005142-01	<0.02	<0.02	<0.02	<0.06	<5	86
WPL-5S-8 005142-02	<0.02	<0.02	<0.02	<0.06	<5	86
Method Blank 00-884 MB	<0.02	<0.02	<0.02	<0.06	<5	84

Date of Report: 05/15/20
Date Received: 05/12/20
Project: Roystone Redevelopment 2017-015k, F&BI 005142
Date Extracted: 05/12/20
Date Analyzed: 05/12/20

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-4S-8 005142-01	<50	<250	91
WPL-5S-8 005142-02	<50	<250	86
Method Blank 00-1080 MB	<50	<250	92

Date of Report: 05/15/20
Date Received: 05/12/20
Project: Roystone Redevelopment 2017-015k, F&BI 005142

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: 005142-01 (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	96	69-120
Toluene	mg/kg (ppm)	0.5	96	70-117
Ethylbenzene	mg/kg (ppm)	0.5	96	65-123
Xylenes	mg/kg (ppm)	1.5	100	66-120
Gasoline	mg/kg (ppm)	20	100	71-131

Date of Report: 05/15/20
Date Received: 05/12/20
Project: Roystone Redevelopment 2017-015k, F&BI 005142

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

Laboratory Code: 005142-01 (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	112	102	64-133	9

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Diesel Extended	mg/kg (ppm)	5,000	98	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.

005142

SAMPLE CHAIN OF CUSTODY

ME 05/12/20

VSI/A01

Page # 1 of 1

Report To Jerry Sametz

Company Riley Group

Address

City, State, ZIP

Phone Email Jsametz@riley-group.com edunham

SAMPLERS (*signature*) E D

PROJECT NAME: Roystone Redevelopment

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	NWTPH-Dx	NWTPH-Gx	BTEX EPA 8021	NWTPH-HCID	VOCs EPA 8260	PAHs EPA 8270	PCBs EPA 8082					Notes
WPL-4S-8	01AE	5/12	1100	SOIL	5	X	X	X									
WPL-5S-8	02		1115			X	X	X									
Wood Pole-5	03		1130						X								

ANALYSES REQUESTED

Samples received at 8 °C

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by:	Eve Dunham	RGI	5/12	1440
Received by:	VINH	FBI	5/12/20	1440
Relinquished by:				
Received by:				

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

R 0C

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 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

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: 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

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 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 A02

Page # 1 of 1

Report To: Jerry Savetz
Company: The Riley Group
Address:
City, State, ZIP:
Phone: Email:

SAMPLERS (signature): EK

PROJECT NAME: Keystone

PO #: 2017-015k

REMARKS: Project specific RLs? - Yes / No

INVOICE TO:

TURNAROUND TIME
☐ Standard turnaround
~~X~~ 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	MTCA5 metals	TCLP Lead		Notes (ⓧ - per JS ASAP TAT ME 5/11/20)
~~VST4A-1145~~																	
VST-4A-Product	01 A B	5/11	1200	Product	2			ⓧ	✓								ASAP
VST-A-Product	02 A-C	5/11	1145	Product	3				✓	ⓧ		ⓧ	ⓧ	ⓧ	◆		ASAP
																	◆ - per JS 24L TAT ME

Samples received at 4 °C

	SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by:	EK	Eric Dunham	RGI	5/11	1240
Received by:	[signature]	Eric Young	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
(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 05107/20 VSI/AUR

Report To Jerry Sametz

Company Riley Group

Address

City, State, ZIP

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

SAMPLERS (signature) E R

PROJECT NAME Royalstone Redevelopment

PO # 2017-015K

REMARKS ASAP on PPI-VST4-1.5

Project specific RLs? - Yes / No

INVOICE TO

Page # 1 of

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
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-VST4-1.5	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.
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 12, 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 8, 2020 from the Roystone Redevelopment 2017-015k, F&BI 005105 project. There is 1 page 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
TRG0512R.DOC

CASE NARRATIVE

This case narrative encompasses samples received on May 8, 2020 by Friedman & Bruya, Inc. from the The Riley Group Roystone Redevelopment 2017-015k, F&BI 005105 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	The Riley Group
005105 -01	Wood-Pole

The sample Wood-Pole was extracted, but the testing was canceled prior to analysis.

005105

SAMPLE CHAIN OF CUSTODY

ME 05/08/20 1 1 A01

Page # 1 of 1

Report To Jerry Sawetz

Company

Address

City, State, ZIP

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

SAMPLERS (*signature*) E R

PROJECT NAME: Raystone 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	cPAHs and phenols	8270 SIM			Notes
Wood - Pole	01	5/8	1100	Wood	1								X				
							✓										
								↓									
								"									
																	Samples received at 4 °C

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: E R	Eric Dunham	Riley Group	5/8	1145
Received by:	Eric Hanner	EAS	5/8	1145
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 8, 2020

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

Dear Mr Sawetz:

Included are the additional results from the testing of material submitted on April 30, 2020 from the Roystone 2017-015K, F&BI 004362 project. There are 5 pages included in this report.

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

Sincerely,

FRIEDMAN & BRUYA, INC.

Michael Erdahl
Project Manager

Enclosures
c: Mingta Lin
TRG0508R.DOC

CASE NARRATIVE

This case narrative encompasses samples received on April 30, 2020 by Friedman & Bruya, Inc. from the The Riley Group Roystone 2017-015K, F&BI 004362 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	The Riley Group
004362 -01	Hoist2-B2-8.5
004362 -02	Hoist2-SW1-6
004362 -03	Hoist2-SW2-6
004362 -04	Hoist1-B2-9
004362 -05	Hoist1-SW1-6
004362 -06	Hoist1-SW2-6
004362 -07	TP1-7
004362 -08	TP2-7
004362 -09	TP3-7
004362 -10	TP4-7

All quality control requirements were acceptable.

Analysis For Total Metals By EPA Method 6020B

Client ID:	Hoist1-B2-9	Client:	The Riley Group
Date Received:	04/30/20	Project:	Roystone 2017-015K, F&BI 004362
Date Extracted:	05/06/20	Lab ID:	004362-04
Date Analyzed:	05/06/20	Data File:	004362-04.035
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

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

Analysis For Total Metals By EPA Method 6020B

Client ID:	Method Blank	Client:	The Riley Group
Date Received:	Not Applicable	Project:	Roystone 2017-015K, F&BI 004362
Date Extracted:	05/06/20	Lab ID:	I0-256 mb
Date Analyzed:	05/06/20	Data File:	I0-256 mb.033
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

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

Date of Report: 05/08/20
Date Received: 04/30/20
Project: Roystone 2017-015K, F&BI 004362

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

Laboratory Code: 004362-04 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet wt)	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Cadmium	mg/kg (ppm)	10	<1	90	90	75-125	0

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Cadmium	mg/kg (ppm)	10	98	80-120

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.

004362

SAMPLE CHAIN OF CUSTODY ME 04/30/20 VS4/D03 (ED) 2 1

Page # 1 of 2

Report To Jerry Sawetz

Company Riley Group

Address

City, State, ZIP

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

SAMPLERS (*signature*) E D

PROJECT NAME: Roystone

PO #: 2017-015K

REMARKS: Standard 24-hr for Dx

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	NWTPH-Dx	NWTPH-Gx	BTEX EPA 8021	NWTPH-HCID	VOCs EPA 8260	PAHs EPA 8270	PCBs EPA 8082	Cadmium				Notes
						ANALYSES REQUESTED											
Horst 2 - B2 - 8.5	01 A-E	4/29	1003	SOIL	5	X											(X) per TS 5/5/20 ME
Horst 2 - SW1 - 6	02	4/29	1015			X											
Horst 2 - SW2 - 6	03	4/29	1030			X											
Horst 1 - B2 - 9	04	4/29	1045			X							(X)				JS 5/5/20
Horst 1 - SW1 - 6	05	4/29	1100			X											
Horst 1 - SW2 - 6	06	4/29	1115			X											
TP1-7	07	4/30	0800			X	X	X									
TP2-7	08	4/30	0815			X	X	X									
TP3-7	09	4/30	0830			X	X	X									
TP4-7	10	4/30	0845	↓	↓	X	X	X									Samples received at 4 °C

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: E D	Eric Dunham	Riley Group	4/30	1230
Received by:	Eric Jones	F&B	4/30	1230
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 7, 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 4, 2020 from the Roystone Development 2017-015k, F&BI 005031 project. There are 10 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
TRG0507R.DOC

CASE NARRATIVE

This case narrative encompasses samples received on May 4, 2020 by Friedman & Bruya, Inc. from the The Riley Group Roystone Development 2017-015k, F&BI 005031 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	The Riley Group
005031 -01	OWS-B1-4
005031 -02	OWS-SWN-3
005031 -03	OWS-SWS-3

All quality control requirements were acceptable.

Date of Report: 05/07/20
Date Received: 05/04/20
Project: Roystone Development 2017-015k, F&BI 005031
Date Extracted: 05/04/20
Date Analyzed: 05/04/20

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 56-165)
OWS-SWN-3 005031-02	ND	ND	ND	87
OWS-SWS-3 005031-03	ND	ND	ND	87
Method Blank 00-1021 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: 05/07/20
Date Received: 05/04/20
Project: Roystone Development 2017-015k, F&BI 005031
Date Extracted: 05/04/20
Date Analyzed: 05/04/20

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)
OWS-B1-4 005031-01	<5	103
Method Blank 00-872 mb	<5	104

Date of Report: 05/07/20
Date Received: 05/04/20
Project: Roystone Development 2017-015k, F&BI 005031
Date Extracted: 05/04/20
Date Analyzed: 05/04/20

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)
OWS-B1-4 005031-01	<50	<250	102
Method Blank 00-1022 MB	<50	<250	90

Analysis For Total Metals By EPA Method 6020B

Client ID:	OWS-B1-4	Client:	The Riley Group
Date Received:	05/04/20	Project:	Roystone Development 2017-015k
Date Extracted:	05/04/20	Lab ID:	005031-01
Date Analyzed:	05/04/20	Data File:	005031-01.079
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	5.64
Cadmium	<1
Lead	27.6

Analysis For Total Metals By EPA Method 6020B

Client ID:	Method Blank	Client:	The Riley Group
Date Received:	NA	Project:	Roystone Development 2017-015k
Date Extracted:	05/04/20	Lab ID:	I0-253 mb
Date Analyzed:	05/04/20	Data File:	I0-253 mb.043
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

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

Date of Report: 05/07/20
Date Received: 05/04/20
Project: Roystone Development 2017-015k, F&BI 005031

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

Laboratory Code: 005014-02 (Duplicate)

Analyte	Reporting Units	Sample Result (Wet Wt)	Duplicate Result (Wet Wt)	RPD (Limit 20)
Gasoline	mg/kg (ppm)	6	<5	nm

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Gasoline	mg/kg (ppm)	20	110	71-131

Date of Report: 05/07/20
Date Received: 05/04/20
Project: Roystone Development 2017-015k, F&BI 005031

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

Laboratory Code: 005027-01 (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	80	90	100	73-135	11

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: 05/07/20
Date Received: 05/04/20
Project: Roystone Development 2017-015k, F&BI 005031

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

Laboratory Code: 005010-01 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	26.4	91 b	113 b	75-125	22 b
Cadmium	mg/kg (ppm)	10	<5	95	98	75-125	3
Lead	mg/kg (ppm)	50	33.6	77 b	126 b	75-125	48 b

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Arsenic	mg/kg (ppm)	10	92	80-120
Cadmium	mg/kg (ppm)	10	108	80-120
Lead	mg/kg (ppm)	50	102	80-120

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.

005031

SAMPLE CHAIN OF CUSTODY

ME 5/4/20 # BI, VSI

Page # 1 of 1

Report To Jerry Sawetz

Company Riley group

Address

City, State, ZIP

Phone Email Jsawetz@riley-group.com, Edunham@riley-group.com

SAMPLERS (signature) E D

PROJECT NAME: Bayston 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	EPA 8270	lead, cadmium, arsenic			Notes
						ANALYSES REQUESTED											
OWS-BI-4	01 A E	5/4	1000	Soil	5	X	X			X			X	X			X - VOCs + PAHs cancel per JS 5/4/20 ME
OWS-SWN-3	02 A E	5/4	1015	↓	↓				X								
OWS-SWS-3	03 A E	5/4	1030	↓	↓				X								
																	Dx, Gx, HCID same day, metals next day per JS 5/4/20 ME
																	Samples received at 4 °C

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: E D	Eric Dunham	Riley Group	5/4	1312
Received by:	Eric Young	F&B	5/4	1312
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 6, 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 1, 2020 from the Roystone Redevelopment 2017-015K, F&BI 005013 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
TRG0506R.DOC

CASE NARRATIVE

This case narrative encompasses samples received on May 1, 2020 by Friedman & Bruya, Inc. from the The Riley Group Roystone Redevelopment 2017-015K, F&BI 005013 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	The Riley Group
005013 -01	SPL-1S-8
005013 -02	SPL-2S-8
005013 -03	SPL-3S-8
005013 -04	SPL-4S-8

All quality control requirements were acceptable.

Date of Report: 05/06/20
Date Received: 05/01/20
Project: Roystone Redevelopment 2017-015K, F&BI 005013
Date Extracted: 05/01/20
Date Analyzed: 05/04/20

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)
SPL-1S-8 005013-01	<0.02	<0.02	<0.02	<0.06	<5	96
SPL-2S-8 005013-02	<0.02	<0.02	<0.02	<0.06	<5	97
SPL-3S-8 005013-03	<0.02	<0.02	<0.02	<0.06	<5	90
SPL-4S-8 005013-04	<0.02	<0.02	<0.02	<0.06	<5	97
Method Blank 00-870 MB	<0.02	<0.02	<0.02	<0.06	<5	97

Date of Report: 05/06/20
Date Received: 05/01/20
Project: Roystone Redevelopment 2017-015K, F&BI 005013
Date Extracted: 05/01/20
Date Analyzed: 05/01/20

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)
SPL-1S-8 005013-01	<50	<250	87
SPL-2S-8 005013-02	<50	<250	87
SPL-3S-8 005013-03	<50	<250	86
SPL-4S-8 005013-04	<50	<250	88
Method Blank 00-1016 MB	<50	<250	91

Date of Report: 05/06/20
Date Received: 05/01/20
Project: Roystone Redevelopment 2017-015K, F&BI 005013

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: 004332-01 (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)	0.11	0.099	11
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	94	70-117
Ethylbenzene	mg/kg (ppm)	0.5	92	65-123
Xylenes	mg/kg (ppm)	1.5	100	66-120
Gasoline	mg/kg (ppm)	20	100	71-131

Date of Report: 05/06/20
Date Received: 05/01/20
Project: Roystone Redevelopment 2017-015K, F&BI 005013

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

Laboratory Code: 005003-01 (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	90	90	73-135	0

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

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

005013 ME 05/01/20 VSI/1401 1

Page # 1 of 1

Report To Jerry Sametz

Company Riley Group

Address

City, State, ZIP

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

SAMPLERS (*signature*) E D

PROJECT NAME: Roystone Redevelopment

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
SPL-1S-8	01 A-E	4/30	1500	Soil	5	X	X	X									
SPL-2S-8	02	4/30	1400			X	X	X									
SPL-3S-8	03	4/30	1415			X	X	X									
SPL-4S-8	04	4/30	1430			X	X	X									
																	Samples received at 10 °C

ANALYSES REQUESTED

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: E D	Eric Dunham	Riley Group	5/1	1040
Received by: Nhan Phan	Nhan Phan	FEBT	5/1/20	1040
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 5, 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 April 30, 2020 from the Roystone 2017-015K, F&BI 004362 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
TRG0505R.DOC

CASE NARRATIVE

This case narrative encompasses samples received on April 30, 2020 by Friedman & Bruya, Inc. from the The Riley Group Roystone 2017-015K, F&BI 004362 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	The Riley Group
004362 -01	Hoist2-B2-8.5
004362 -02	Hoist2-SW1-6
004362 -03	Hoist2-SW2-6
004362 -04	Hoist1-B2-9
004362 -05	Hoist1-SW1-6
004362 -06	Hoist1-SW2-6
004362 -07	TP1-7
004362 -08	TP2-7
004362 -09	TP3-7
004362 -10	TP4-7

All quality control requirements were acceptable.

Date of Report: 05/05/20
Date Received: 04/30/20
Project: Roystone 2017-015K, F&BI 004362
Date Extracted: 04/30/20
Date Analyzed: 05/01/20

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)
TP1-7 004362-07	<0.02	<0.02	<0.02	<0.06	<5	94
TP2-7 004362-08	<0.02	<0.02	<0.02	<0.06	<5	94
TP3-7 004362-09	<0.02	<0.02	<0.02	<0.06	<5	96
TP4-7 004362-10	<0.02	<0.02	<0.02	<0.06	<5	95
Method Blank 00-869 MB	<0.02	<0.02	<0.02	<0.06	<5	94

Date of Report: 05/05/20
Date Received: 04/30/20
Project: Roystone 2017-015K, F&BI 004362
Date Extracted: 04/30/20
Date Analyzed: 04/30/20

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)
Hoist2-B2-8.5 004362-01	<50	<250	104
Hoist2-SW1-6 004362-02	<50	<250	95
Hoist2-SW2-6 004362-03	<50	<250	94
Hoist1-B2-9 004362-04	<50	<250	92
Hoist1-SW1-6 004362-05	<50	<250	92
Hoist1-SW2-6 004362-06	<50	<250	92
TP1-7 004362-07	<50	<250	95
TP2-7 004362-08	<50	<250	93
TP3-7 004362-09	<50	<250	93
TP4-7 004362-10	<50	<250	100
Method Blank 00-984 MB	<50	<250	92

Date of Report: 05/05/20
Date Received: 04/30/20
Project: Roystone 2017-015K, F&BI 004362

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: 004347-05 (Duplicate)

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

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Benzene	mg/kg (ppm)	0.5	102	69-120
Toluene	mg/kg (ppm)	0.5	100	70-117
Ethylbenzene	mg/kg (ppm)	0.5	98	65-123
Xylenes	mg/kg (ppm)	1.5	107	66-120
Gasoline	mg/kg (ppm)	20	100	71-131

Date of Report: 05/05/20
Date Received: 04/30/20
Project: Roystone 2017-015K, F&BI 004362

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

Laboratory Code: 004346-03 (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	<50	92	98	73-135	6

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

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.

004362

SAMPLE CHAIN OF CUSTODY

ME 04/30/20 VS4/D03 ED

Page # 1 of 2

Report To Jerry Sawetz

Company Riley Group

Address

City, State, ZIP

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

SAMPLERS (*signature*) ER

PROJECT NAME: Roystone

PO #: 2017-015K

REMARKS: Standard 24-hr for Dx

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	NWTPH-Dx	NWTPH-Gx	BTEX EPA 8021	NWTPH-HCID	VOCs EPA 8260	PAHs EPA 8270	PCBs EPA 8082					Notes
Hoist2-B2-8.5	01 A-E	4/29	1009	SOIL	5	X											
Hoist2-SW1-6	02	4/29	1015			X											
Hoist2-SW2-6	03	4/29	1030			X											
Hoist1-B2-9	04	4/29	1045			X											
Hoist1-SW1-6	05	4/29	1100			X											
Hoist1-SW2-6	06	4/29	1115			X	✓										
TP1-7	07	4/30	0800			X	X	X									
TP2-7	08	4/30	0815			X	X	X									
TP3-7	09	4/30	0830			X	X	X									
TP4-7	10	4/30	0845	↓	↓	X	X	X									Samples received at 4 °C

ANALYSES REQUESTED

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: ER	Eric Dunham	Riley Group	4/30	1230
Received by:	Eric Dunham	FedEx	4/30	1230
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 1, 2020

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

Dear Mr Sawetz:

Included are the additional results from the testing of material submitted on March 24, 2020 from the Roystone 2017-015, F&BI 003393 project. There is 1 page included in this report.

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

Sincerely,

FRIEDMAN & BRUYA, INC.

Michael Erdahl
Project Manager

Enclosures
TRG0501R.DOC

CASE NARRATIVE

This case narrative encompasses samples received on March 24, 2020 by Friedman & Bruya, Inc. from the The Riley Group Roystone 2017-015, F&BI 003393 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	The Riley Group
003393 -01	OWS1-Solids

Sample OWS1-Solids was sent to Rainier Environmental for dangerous waste by fish bioassay analysis. The report is enclosed.

Rainier ENVIRONMENTAL

Dangerous Waste Characterization

Sample ID: OWS1-Solids

Report date: April 29, 2020

Submitted to:

Freidman and Bruya, Inc.
3012 16th Ave W
Seattle, WA 98119

Rainier Environmental
5013 Pacific Hwy East
Suite 20
Tacoma, WA 98424

1.0 INTRODUCTION

A dangerous waste characterization using the test organism *Oncorhynchus mykiss* (rainbow trout) was conducted on one sample submitted by Friedman and Bruya, Inc. to Rainier Environmental. Testing was conducted following the Washington State Department of Ecology Publication 80-12.

2.0 METHODS

The sample, identified as OWS1-Solids was received in the laboratory on April 24, 2020. Upon arrival at the laboratory the sample was inspected and contents verified against information provided on the chain-of-custody form. The sample was stored at 4°C in the dark until use. The test procedure is outlined in Table 1.

Table 1. Summary of Dangerous Waste Characterization Test Conditions

Parameter	Standard Fish Toxicity Test
Test number	2004-038
Sample ID	OWS1-Solids
Test initiation date; time	4/25/2020; 1300h
Test termination date; time	4/29/2020; 1210h
Endpoint	Mortality at 96-hours
Test chamber	7.5 L plastic tank
Test temperature	12 ± 1°C
Dilution water	Moderately hard synthetic water
Test solution volume	6 L
Test concentrations (mg/L)	100, 10, 0
Number of organisms/chamber	10
Number of replicates	3
Test organism	*Oncorhynchus mykiss* (rainbow trout)
Feeding	No feeding during test
Photoperiod	16 hours light/ 8 hours dark
Extraction	Rotary agitation (30 +/- 2 rpm) for 18 hours
Reference Toxicant	Copper sulfate
Deviations	None

The test organisms used in the test are outlined in Table 2. The samples were tested using fish received on March 25, 2020.

Table 2. Test organisms (*Oncorhynchus mykiss*)

Test organism age	61 days post swim-up (hatch date 2/3/2020)
Mean weight	0.35 g
Mean length	34 mm
Ratio of longest to shortest	1.2
Loading	0.58 g/L
Test organism source	Trout Lodge; Sumner, WA

3.0 RESULTS

A summary of results for the dangerous waste characterization conducted on sample OWS1-Solids is contained in Table 3. There was no mortality during the test. Based on these results, the sample does not designate as either a dangerous or extremely hazardous waste. Copies of the laboratory bench sheets, statistical summaries of reference toxicant tests, and chain-of-custody form are provided in Appendices A through C.

Table 3. Summary of Results

Sample ID	Concentration (mg/L)	Survival (# fish, N=30)	Percent Mortality	Dangerous Waste Designation
Control	0	30	0	NA
OWS1-Solids	10	30	0	None
	100	30	0	

4.0 QUALITY ASSURANCE

The most recently completed reference toxicant test was initiated April 1, 2020. The LC_{50} of 191 g/L copper fell within the acceptable range of mean ± two standard deviations of historical test results indicating that the test organisms were of an appropriate degree of sensitivity. The coefficient of variation (CV) for the last 20 tests was 28.6 percent, which is considered excellent by the Biomonitoring Science Advisory Board.

5.0 REFERENCES

WDOE. 2016. Laboratory Guidance and Whole Effluent Toxicity Test Review Criteria. Washington State Department of Ecology. Water Quality Program. Publication number: WQ-R-95-80, Revised June 2016.

WDOE. 2009. Biological Testing Methods 80-12 for the Designation of Dangerous Waste. Washington State Department of Ecology. Hazardous Waste and Toxics Reduction Program. Publication number: 80-12, Revised June 2009.

Appendix A
Oncorhynchus mykiss Dangerous Waste Toxicity Test
Raw Bench Sheets

Dangerous Waste Toxicity Test

Client: FRIEDMAN AND BRUYA
Sample ID: OWS 1- SOLIDS
Test #: 2004-038
Log In #: T20-114

Start Date & Time: 4/25/2020 1300
End Date & Time: 4/29/2020 1210
Test Organism: *Oncorhynchus mykiss*
Test Protocol: **Washington State Department of Ecology Publ. 80-12**

Rep	Conc.	Cont #	Number of Live Organisms 0	24	48	72	96	Dissolved Oxygen (mg/L) 0	24	48	72	96	pH (units) 0	24	48	72	96	Conductivity (umhos/cm) 0	24	48	72	96	Temperature (°C) 0	24	48	72	96	Percent Survival
1	CON	5	10	10	10	10	10	8.9	8.6	8.4	8.0	7.8	7.81	7.44	7.37	7.21	7.09	317				321	12.3	11.8	12.2	12.1	12.0	
2		8	10	10	10	10	10	9.1	8.7	8.2	7.9	7.5	7.75	7.45	7.35	7.19	7.13	321				322						
3		12	10	10	10	10	10	9.1	8.8	8.1	7.7	7.3	7.72	7.42	7.31	7.24	7.07	320				324						
1	10 PPM	10	10	10	10	10	10	9.0	8.5	8.0	7.5	7.1	7.68	7.41	7.28	7.17	7.08	322				325	12.3	12.1	12.4	12.1	12.0	
2		3	10	10	10	10	10	9.1	8.4	7.9	7.8	7.3	7.65	7.37	7.32	7.20	7.10	318				328						
3		14	10	10	10	10	10	9.0	8.7	8.4	7.9	7.5	7.69	7.39	7.33	7.16	7.09	321				326						
1	100PPM	4	10	10	10	10	10	8.8	8.4	8.0	7.6	7.0	7.68	7.35	7.30	7.21	7.12	321				324	12.1	12.0	12.3	11.9	12.4	
2		7	10	10	10	10	10	9.1	8.5	8.2	7.8	7.5	7.65	7.39	7.27	7.20	7.13	319				326						
3		11	10	10	10	10	10	9.1	8.4	7.9	7.4	7.1	7.67	7.37	7.29	7.18	7.07	320				325						
1																												
2																												
3																												
1																												
2																												
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1																												
2																												
3																												
Technician Initials			[illegible]	[illegible]	AL	AL	AL	[illegible]	[illegible]	AL	AL	AL																

Sample	Alk. (init.)	Hard. (init.)	Alk. (fin.)	Hard. (fin.)	Chlorine
	(mg/L as CaCO3)				(mg/L Cl2)
Control	64	88	64	88	<0.03
100PPM	64	88	64	88	

Animal Source: Troutlodge
Date Received: 3/25/2020
Test Volume: 6.0 L
Date of Hatch: 2/3/2020
Date of Swim up: 2/24/2020

Weights (g): .37 .34 .34 .35 .32 .34 .38 .32 .36 .37 μ = .35
Lengths(mm): 36 33 35 32 31 36 37 33 34 36 μ = 34
Length max/min: 37/31 1.2 Loading: 0.58 g/L

Rainier Environmental
Washington Laboratory
5013 Pacific HWY E Suite 20
Tacoma, WA 98424

Dilution Water Source: MHSW 032 QA Check [illegible]

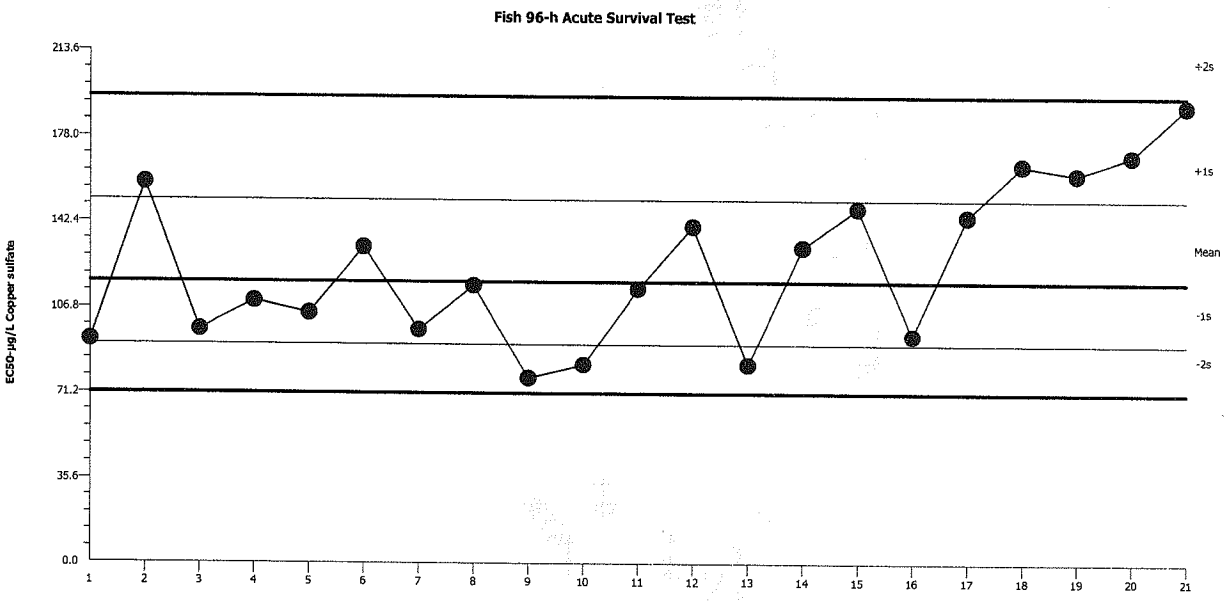
Appendix B
Reference Toxicant Test
Control Chart and Statistical Summary

CETIS QC Plot

Report Date: 06 Apr-20 14:00 (1 of 1)

Fish 96-h Acute Survival Test — **Rainier Environmental Laboratory**

Test Type: Survival (96h) **Organism:** Oncorhynchus mykiss (Rainbow Tro **Material:** Copper sulfate
Protocol: Not Applicable **Endpoint:** 96h Survival Rate **Source:** Reference Toxicant-REF



Mean: 117.8 **Count:** 20 **-1s Warning Limit:** 91.59 **-2s Action Limit:** 71.21
Sigma: NA **CV:** 28.60% **+1s Warning Limit:** 151.5 **+2s Action Limit:** 194.9

Quality Control Data

Point	Year	Month	Day	QC Data	Delta	Sigma	Warning	Action	Test ID	Analysis ID
1	2018	Jun	20	93.3	-24.5	-0.9263			05-6858-8909	21-3433-5668
2		Jul	25	158.7	40.94	1.185	(+)		03-7661-5860	05-4916-3169
3		Aug	30	97.72	-20.09	-0.7427			01-6631-0399	00-2872-0274
4		Oct	5	109.7	-8.119	-0.2837			09-8718-1650	14-5303-2875
5		Nov	6	104.7	-13.07	-0.4673			20-5282-8357	01-3690-0719
6		Dec	5	132	14.15	0.4507			01-4499-1094	07-5652-1457
7	2019	Jan	7	97.72	-20.09	-0.7427			03-9395-5944	09-6087-0434
8		Feb	9	116.1	-1.658	-0.05631			13-6349-4914	05-5573-8325
9		Mar	12	77.56	-40.24	-1.661	(-)		03-9582-1391	08-0363-8342
10		Apr	19	83.12	-34.68	-1.385	(-)		16-0727-4914	09-8538-6220
11		May	21	114.9	-2.932	-0.1001			13-0213-5670	12-8044-7071
12		Jun	21	140.6	22.84	0.704			18-7198-9789	02-0902-1290
13		Jul	23	83.12	-34.68	-1.385	(-)		09-5504-5129	09-5466-8341
14		Aug	23	132	14.15	0.4507			06-2129-4986	03-1480-8200
15		Sep	20	148.1	30.31	0.9096			14-9775-6582	02-8526-9159
16		Oct	22	95.48	-22.32	-0.8345			08-2604-9852	04-5996-4554
17		Nov	25	144.7	26.93	0.8178			19-0900-7567	17-7816-6246
18		Dec	26	166.2	48.45	1.369	(+)		18-0718-4325	01-1522-2292
19	2020	Jan	27	162.5	44.65	1.277	(+)		15-7428-0290	09-7189-2054
20		Feb	28	170.1	52.33	1.46	(+)		09-4267-7927	12-7910-1452
21		Apr	1	191	73.17	1.919	(+)		13-6543-5000	21-3363-8866

CETIS Summary Report

Fish 96-h Acute Survival Test — **Rainier Environmental Laboratory**

Batch ID:	16-9985-3191	**Test Type:**	Survival (96h)	**Analyst:**	Eric Tollefson
Start Date:	01 Apr-20 15:45	**Protocol:**	Not Applicable	**Diluent:**	Mod-Hard Synthetic Water
Ending Date:	05 Apr-20 15:30	**Species:**	Oncorhynchus mykiss	**Brine:**	
Duration:	96h	**Source:**	Trout Lodge Fish Farm	**Age:**	36d

Sample ID:	15-3577-7110	**Code:**	RA040120OM	**Client:**	Internal Lab
Sample Date:	01 Apr-20	**Material:**	Copper sulfate	**Project:**	
Receive Date:	01 Apr-20	**Source:**	Reference Toxicant		
Sample Age:	16h	**Station:**	In House		

Comparison Summary

Analysis ID	Endpoint	NOEL	LOEL	TOEL	PMSD	TU	Method
01-8002-1357	96h Survival Rate	50	100	70.71	14.3%		Dunnett Multiple Comparison Test

Point Estimate Summary

Analysis ID	Endpoint	Level	µg/L	95% LCL	95% UCL	TU	Method
21-3363-8866	96h Survival Rate	LC50	191	163	223.8		Spearman-Kärber

96h Survival Rate Summary

C-µg/L	Control Type	Count	Mean	95% LCL	95% UCL	Min	Max	Std Err	Std Dev	CV%	%Effect
0	Dilution Water	3	1	1	1	1	1	0	0	0.0%	0.0%
25		3	1	1	1	1	1	0	0	0.0%	0.0%
50		3	1	1	1	1	1	0	0	0.0%	0.0%
100		3	0.8	0.7627	0.8373	0.7	0.9	0.05774	0.1	12.5%	20.0%
200		3	0.6333	0.5556	0.7111	0.4	0.8	0.1202	0.2082	32.87%	36.67%
400		3	0	0	0	0	0	0	0		100.0%

96h Survival Rate Detail

C-µg/L	Control Type	Rep 1	Rep 2	Rep 3
0	Dilution Water	1	1	1
25		1	1	1
50		1	1	1
100		0.7	0.8	0.9
200		0.7	0.4	0.8
400		0	0	0

96h Survival Rate Binomials

C-µg/L	Control Type	Rep 1	Rep 2	Rep 3
0	Dilution Water	10/10	10/10	10/10
25		10/10	10/10	10/10
50		10/10	10/10	10/10
100		7/10	8/10	9/10
200		7/10	4/10	8/10
400		0/10	0/10	0/10

Appendix C
Chain-of-Custody Form

SUBCONTRACT SAMPLE CHAIN OF CUSTODY

Send Report To Michael Erdahl

Company Friedman and Bruya, Inc.

Address 3012 16th Ave W

City, State, ZIP Seattle, WA 98119

Phone # (206) 285-8282 merdahl@friedmanandbruya.com

SUBCONTRACTER Rainier Environmental

PROJECT NAME/NO.	PO #
003393	B-190

REMARKS

TURNAROUND TIME
- ☐ Standard TAT
- ☐ RUSH
- Rush charges authorized by:

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

Sample ID	Lab ID	Date Sampled	Time Sampled	Matrix	# of jars	ANALYSES REQUESTED: Dioxins/Furans	EPH	VPH	Fish Bioassay							Notes
OWS1-Solids		3/24/20	1230	sludge					X							
																Login # T20-114

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

	SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
~~Relinquished by:~~		Michael Erdahl	Friedman & Bruya	4/24/20	1006
Received by:	Eric Tollefson	ERIC TOLLEFSON	RAINIER	4/24/20	1300
Relinquished by:					
Received by:					

SAMPLE CHAIN OF CUSTODY

003393 ME 03/24/20

Page # 1 of 1 BI

Report To Jerry Sawetz

Company The Riley Group

Address 17522 Bothell Way NE

City, State, ZIP Bothell, WA 98011

Phone 425-415-0551 Email jsawetz@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	RCRA-8, All Metals Ni, Cr, Zn, Cd				Notes
OWS1 - Solids	01A,B	3/24/2020	12:30	Sludge	2				X				X				

Samples received at 4 °C

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by:	Logan Chinn	RGT	3/24/2020	15:15
Received by:	Eric Bruya	FAB	3/24/20	1515
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

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 Sawete

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

ANALYSES REQUESTED

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

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Eric Young, B.S.

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

March 27, 2020

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

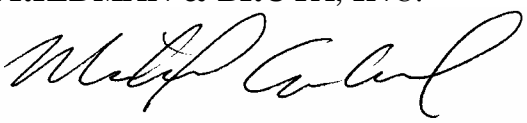
Dear Mr Sawetz:

Included are the results from the testing of material submitted on March 24, 2020 from the Roystone 2017-015, F&BI 003393 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
TRG0327R.DOC

CASE NARRATIVE

This case narrative encompasses samples received on March 24, 2020 by Friedman & Bruya, Inc. from the The Riley Group Roystone 2017-015, F&BI 003393 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	The Riley Group
003393 -01	OWS1-Solids

All quality control requirements were acceptable.

Date of Report: 03/27/20
Date Received: 03/24/20
Project: Roystone 2017-015, F&BI 003393
Date Extracted: 03/25/20
Date Analyzed: 03/25/20

RESULTS FROM THE ANALYSIS OF SOIL/SLUDGE 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)
OWS1-Solids 003393-01	D	ND	D	86
Method Blank 00-747 MB	ND	ND	ND	90

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

Analysis For Total Metals By EPA Method 6020B

Client ID:	OWS1-Solids	Client:	The Riley Group
Date Received:	03/24/20	Project:	Roystone 2017-015, F&BI 003393
Date Extracted:	03/25/20	Lab ID:	003393-01 and 003393-01 x10
Date Analyzed:	03/25/20	Data File:	003393-01.052 and 003393-01 x10.072
Matrix:	Soil/Sludge	Instrument:	ICPMS2
Units:	mg/kg (ppm)	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	33.6
Barium	130
Cadmium	4.70
Chromium	25.4
Copper	59.7
Lead	1,190
Mercury	<1
Nickel	21.8
Selenium	<1
Silver	<1
Zinc	1,170

Analysis For Total Metals By EPA Method 6020B

Client ID:	Method Blank	Client:	The Riley Group
Date Received:	NA	Project:	Roystone 2017-015, F&BI 003393
Date Extracted:	03/25/20	Lab ID:	I0-176 mb2
Date Analyzed:	03/25/20	Data File:	I0-176 mb2.048
Matrix:	Soil/Sludge	Instrument:	ICPMS2
Units:	mg/kg (ppm)	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	<1
Barium	<1
Cadmium	<1
Chromium	<1
Copper	<5
Lead	<1
Mercury	<1
Nickel	<1
Selenium	<1
Silver	<1
Zinc	<5

Date of Report: 03/27/20
Date Received: 03/24/20
Project: Roystone 2017-015, F&BI 003393

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

Laboratory Code: 003363-06 (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	7.18	128 b	99 b	75-125	26 b
Barium	mg/kg (ppm)	50	19.8	115	119	75-125	3
Cadmium	mg/kg (ppm)	10	<1	104	109	75-125	5
Chromium	mg/kg (ppm)	50	36.0	80	94	75-125	16
Copper	mg/kg (ppm)	50	30.0	93	93	75-125	0
Lead	mg/kg (ppm)	50	7.83	96	99	75-125	3
Mercury	mg/kg (ppm	5	<1	101	105	75-125	4
Nickel	mg/kg (ppm)	25	70.9	133 b	114 b	75-125	15 b
Selenium	mg/kg (ppm)	5	<1	105	108	75-125	3
Silver	mg/kg (ppm)	10	<1	104	111	75-125	7
Zinc	mg/kg (ppm)	50	27.3	96	94	75-125	2

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Arsenic	mg/kg (ppm)	10	89	80-120
Barium	mg/kg (ppm)	50	107	80-120
Cadmium	mg/kg (ppm)	10	107	80-120
Chromium	mg/kg (ppm)	50	103	80-120
Copper	mg/kg (ppm)	50	107	80-120
Lead	mg/kg (ppm)	50	102	80-120
Mercury	mg/kg (ppm)	5	95	80-120
Nickel	mg/kg (ppm)	25	107	80-120
Selenium	mg/kg (ppm)	5	101	80-120
Silver	mg/kg (ppm)	10	105	80-120
Zinc	mg/kg (ppm)	50	102	80-120

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

003393 ME 03/24/20

Page # 1 of 1 BI

Report To Jerry Sawetz

Company The Riley Group

Address 17522 Bothell Way NE

City, State, ZIP Bothell, WA 98011

Phone 425-415-0551 Email jsawetz@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	RCRA-8, All Metals Ni, Cr, Zn, Cd				Notes
OWS1 - Solids	01A,B	3/24/2020	12:30	Sludge	2				X				X				

Samples received at 4 °C

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by:	Logan Chinn	RGT	3/24/2020	15:15
Received by:	Eric Bruya	FAB	3/24/20	1515
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

March 26, 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 23, 2020 from the Roystone 2017-015, F&BI 003374 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
TRG0326R.DOC

CASE NARRATIVE

This case narrative encompasses samples received on March 23, 2020 by Friedman & Bruya, Inc. from the The Riley Group Roystone 2017-015, F&BI 003374 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	The Riley Group
003374 -01	Product-Hoist1
003374 -02	Product-Hoist2
003374 -03	Hoist1-B1-9
003374 -04	Hoist2-B1-8.25

All quality control requirements were acceptable.

Date of Report: 03/26/20
Date Received: 03/23/20
Project: Roystone 2017-015, F&BI 003374
Date Extracted: 03/24/20
Date Analyzed: 03/24/20

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

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)
Product-Hoist1 003374-01 1/200	590,000 x	660,000	ip
Product-Hoist2 003374-02 1/200	580,000 x	670,000	ip
Method Blank 00-742 MB	<50	<250	86

Date of Report: 03/26/20
Date Received: 03/23/20
Project: Roystone 2017-015, F&BI 003374
Date Extracted: 03/24/20
Date Analyzed: 03/24/20

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)
Hoist1-B1-9 003374-03	<50	<250	85
Hoist2-B1-8.25 003374-04	<50	<250	88
Method Blank 00-742 MB	<50	<250	86

Analysis For Total Metals By EPA Method 6020B

Client ID:	Product-Hoist1	Client:	The Riley Group
Date Received:	03/23/20	Project:	Roystone 2017-015
Date Extracted:	03/24/20	Lab ID:	003374-01
Date Analyzed:	03/24/20	Data File:	003374-01.031
Matrix:	Soil/Product	Instrument:	ICPMS2
Units:	mg/kg (ppm)	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	<1
Cadmium	18.7
Chromium	<1
Lead	14.3
Mercury	<1

Analysis For Total Metals By EPA Method 6020B

Client ID:	Product-Hoist2	Client:	The Riley Group
Date Received:	03/23/20	Project:	Roystone 2017-015
Date Extracted:	03/24/20	Lab ID:	003374-02
Date Analyzed:	03/24/20	Data File:	003374-02.032
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 Total Metals By EPA Method 6020B

Client ID:	Method Blank	Client:	The Riley Group
Date Received:	NA	Project:	Roystone 2017-015
Date Extracted:	03/24/20	Lab ID:	I0-175 mb2
Date Analyzed:	03/24/20	Data File:	I0-175 mb2.030
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 PCBs By EPA Method 8082A

Client Sample ID:	Product-Hoist1	Client:	The Riley Group
Date Received:	03/23/20	Project:	Roystone 2017-015
Date Extracted:	03/24/20	Lab ID:	003374-01
Date Analyzed:	03/24/20	Data File:	032407.D
Matrix:	Product	Instrument:	GC7
Units:	mg/kg (ppm)	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	84	50	150

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:	Product-Hoist2	Client:	The Riley Group
Date Received:	03/23/20	Project:	Roystone 2017-015
Date Extracted:	03/24/20	Lab ID:	003374-02
Date Analyzed:	03/24/20	Data File:	032408.D
Matrix:	Product	Instrument:	GC7
Units:	mg/kg (ppm)	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	85	50	150

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 2017-015
Date Extracted:	03/24/20	Lab ID:	00-739 mb
Date Analyzed:	03/24/20	Data File:	032406.D
Matrix:	Product	Instrument:	GC7
Units:	mg/kg (ppm)	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	117	50	150

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: 03/26/20
Date Received: 03/23/20
Project: Roystone 2017-015, F&BI 003374

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

Laboratory Code: 003374-03 (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	<50	110	98	64-133	12

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

Date of Report: 03/26/20
Date Received: 03/23/20
Project: Roystone 2017-015, F&BI 003374

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

Laboratory Code: 003374-03 (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	<50	110	98	64-133	12

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

Date of Report: 03/26/20
Date Received: 03/23/20
Project: Roystone 2017-015, F&BI 003374

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

Laboratory Code: 003335-01 (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	1.68	105	99	75-125	6
Cadmium	mg/kg (ppm)	5	<1	103	100	75-125	3
Chromium	mg/kg (ppm)	20	11.6	98	86	75-125	13
Lead	mg/kg (ppm)	10	2.00	97	92	75-125	5
Mercury	mg/kg (ppm	5	<1	96	88	75-125	9

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Arsenic	mg/kg (ppm)	10	98	80-120
Cadmium	mg/kg (ppm)	5	103	80-120
Chromium	mg/kg (ppm)	20	103	80-120
Lead	mg/kg (ppm)	10	98	80-120
Mercury	mg/kg (ppm)	5	101	80-120

Date of Report: 03/26/20
Date Received: 03/23/20
Project: Roystone 2017-015, F&BI 003374

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	124	128	60-151	3
Aroclor 1260	mg/kg (ppm)	25	140	144	53-144	3

Data Qualifiers & Definitions

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

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

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

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

cf - The sample was centrifuged prior to analysis.

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

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

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

fc - The 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.

003374

SAMPLE CHAIN OF CUSTODY

ME 03/23/20 VSI / B02

Page # 1 of

Report To Jerry Sawetz

Company Riley Group Inc

Address 17522 Bothell Way NE

City, State, ZIP Bothell, WA 98011

Phone 425-415-0551 Email: sawetz@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	ANALYSES REQUESTED: NWTPH-Dx	NWTPH-Gx	BTEX EPA 8021	NWTPH-HCID	VOCs EPA 8260	PAHs EPA 8270	PCBs EPA 8082	MTCA 5 metals				Notes
Product - Hoist 1	01	3/23/2020	12:00	Product	1	X						X	X				
Product - Hoist 2	02	3/23/2020	12:05	Product	1	X						X	X				
Hoist 1 - B1 - 9	03A-F	3/23/2020	12:30	Soil	6	X						X	X				Dx
Hoist 2 - B1 - 8.25	04A-F	3/23/2020	13:00	Soil	6		X					X	X				Dx
																	Samples received at 4 °C

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by:	Logan Chinn	RGT	14:45 3/23	14:45
Received by:	Khanh Phan	FCBT	3/23/20	1445
Relinquished by:				
Received by:				

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

APPENDIX E

Geophysical Investigation Report

RILEYGROUP

GEOPHYSICAL INVESTIGATION REPORT

631 QUEEN ANNE AVENUE NORTH SITE
SEATTLE, WASHINGTON

FOR

THE RILEY GROUP, INC.
BOTHELL, WASHINGTON

MARCH 6, 2019

PHILIP H. DUOOS
GEOPHYSICAL CONSULTANT

Philip H. Duoos **Geophysical Consultant**

March 6, 2019 Our Ref.: 1322-19

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

REVISED REPORT: Geophysical Investigation
631 Queen Anne Avenue North Site
Seattle, Washington

Dear Mr. Sawetz:

This letter report summarizes the results of the investigation that I performed on February 18. The primary purpose of the investigation was to locate possible underground storage tanks (USTs) and perhaps fuel lines associated with the USTs as well as other utilities. A comprehensive utility locating survey was beyond the scope of work.

The survey area was investigated using electromagnetic (EM-61) and ground penetrating radar (GPR) techniques. A brief description of the methods is attached.

The large UST (UST 6B) is interpreted to remain in place. The survey did not identify any other USTs. However, the potential exists for USTs 1 and 2 to be present as they may not have been detected due to the fact that they are constructed of concrete and reported to have been abandoned in place and filled with some material such as sand or cement. Disturbed soils due to the sidewalk and electrical utility construction may also have masked the small concrete tanks. Numerous linear features were interpreted from the data and may be pipes or utilities.

INTERPRETATION RESULTS

Figure 1 is a sketch map which shows the interpretation results as well as various reference features including the building, sidewalk, visible utility features, monitoring wells and changes in the asphalt parking lot such as the edge of a probable large patch as well as cracks in the asphalt.

The results of the survey indicate the location of a large probable UST which is probably the 8,000 gallon UST labelled 6B on your site map (**Figure 3**). The approximate depth to the top of the UST is estimated at six feet deep. This is approximate and based on the GPR data. This location also has a large EM anomaly which correlates to the metal construction of the UST. The delineation of this UST using the GPR is more difficult because the UST has been filled with material. Care should be taken in excavating or construction until the exact depth and dimensions of the UST are determined.

The electrical power lines running between the various electrical vaults and power poles were interpreted from the GPR data. These locations correlate fairly well with the existing marks on the ground made by others. Below the east sidewalk there are two power lines that are parallel to each other and run north-south. The GPR loses the target for the eastern power line to the north, and it may bend to the west and combine with the deeper powerline. In this area there are marks for the powerline that run midway between the two interpreted locations.

Two probable pipes or utilities are shown by the pink dashed lines running east-west along about Line 35N and along Line 12N. Possible pipes/utilities are shown that connect strong GPR targets of similar depths. These features are less distinct and are often over fairly short distances. They may indicate former buried foundations or other linear features; or they may just be random objects of fill material (cobbles, debris, etc.) that just seem to form a linear pattern. This area contains numerous PVC pipes used for the remediation of the site, and I imagine that many of these interpreted possible pipes are related to that system. The pink open circles indicate discreet GPR targets of moderate strength and may indicate a small object.

Philip H. Duoos
PH/FAX: (425) 882-2634
13503 NE 78th Place, Redmond, Washington, 98052
Email: geopyg@aol.com

Near the east edge of the asphalt parking lot, and below the sidewalk just to the east, there are two zones with shallow GPR reflections indicating a flat surface (blue shaded areas). When I first observed these reflections in the data I thought they might indicate the tops of the flat, rectangular concrete tanks that were reportedly abandoned in place (550-gallon USTs, #1 and #2). However, these reflections are only about 1 foot to 1.5 feet to the tops of the layers, and the large zone in the parking lot is in an area that has been excavated. This shallow layer is also above the interpreted location of the large UST.

These layer reflections may be related to a change in soil conditions such as increased moisture and/or finer grained materials. It may be related to activities related to abandoning the USTs in place – in which case the smaller zone below the sidewalk may give some indication of the location of the two concrete tanks. The small concrete tanks were not interpreted from the data. The EM method only detects metal objects, and the GPR method often cannot delineate a buried concrete slab with soil above and below it. The shallow soils have been disturbed by the numerous utilities and the sidewalk reconfiguration making it impossible to recognize disturbed soil layers associated with the small tanks.

The EM-61 data (**Figure 2**) responds to nearby metal. The data is complicated by buildings, utility vaults and poles, monitoring well covers and other features. The high values near coordinate 25E, 25N are interpreted to be caused by the large metal UST. Higher EM values also seem to correlate with the possible pipe/utility running north along about Line 15E near the south end of the survey area.

METHODOLOGY

The geophysical surveys were referenced to numerous reference baselines that were marked at 5-foot intervals using tape measures and pink spray paint. Line 30E runs along the east edge of the asphalt parking lot, with Station 0 North located at the NE corner of the building.

The electromagnetic survey was performed using a Geonics EM-61 High Resolution Metal Detector with data digitally recorded and downloaded to a laptop computer. EM-61 data were recorded at approximate 1-foot intervals along each survey line. EM-61 survey lines were spaced 5 feet apart and oriented in two directions over most of the site.

GPR data were obtained using a GSSI SIR 3000 Digital Radar with a 400 MHz antenna along lines spaced 5 feet apart and oriented in two directions (north-south and east-west) over the entire site. Over the vicinity of the suspected small concrete tanks, GPR lines were spaced 2.5 feet apart and oriented in two directions. The GPR obtained depths of penetration of about six to seven feet over most of the site.

The use of these techniques provided a rapid and non-intrusive means of investigating the area of interest for possible USTs and utilities. However, because of the numerous variables involved in geophysical investigations, there is a possibility that some features may not have been detected. Only direct observations using test pits or other means can ultimately characterize subsurface conditions.

Please contact me if you have any questions or comments regarding this information, or if you require further assistance. I appreciated the opportunity to work with you on this project and look forward to providing you with geophysical services in the future.

Sincerely,

Philip H. Duoos
Geophysical Consultant

State of Washington 561 Licensed Geologist Philip H. Duoos

Attachments:

Description of Methods
Figure 1: Interpretation Results Map
Figure 2: EM-61 Data Contour Map
Figure 3: Historical Property Features Map (Riley)

DESCRIPTION OF METHODS

ELECTROMAGNETICS (EM-61)

The EM-61 is a high-resolution metal detector that can detect both ferrous and non-ferrous metallic objects. It is a rapid, wheel-mounted system requiring one operator, and digitally records data at a high density (usually at 1-foot intervals or less along a survey line).

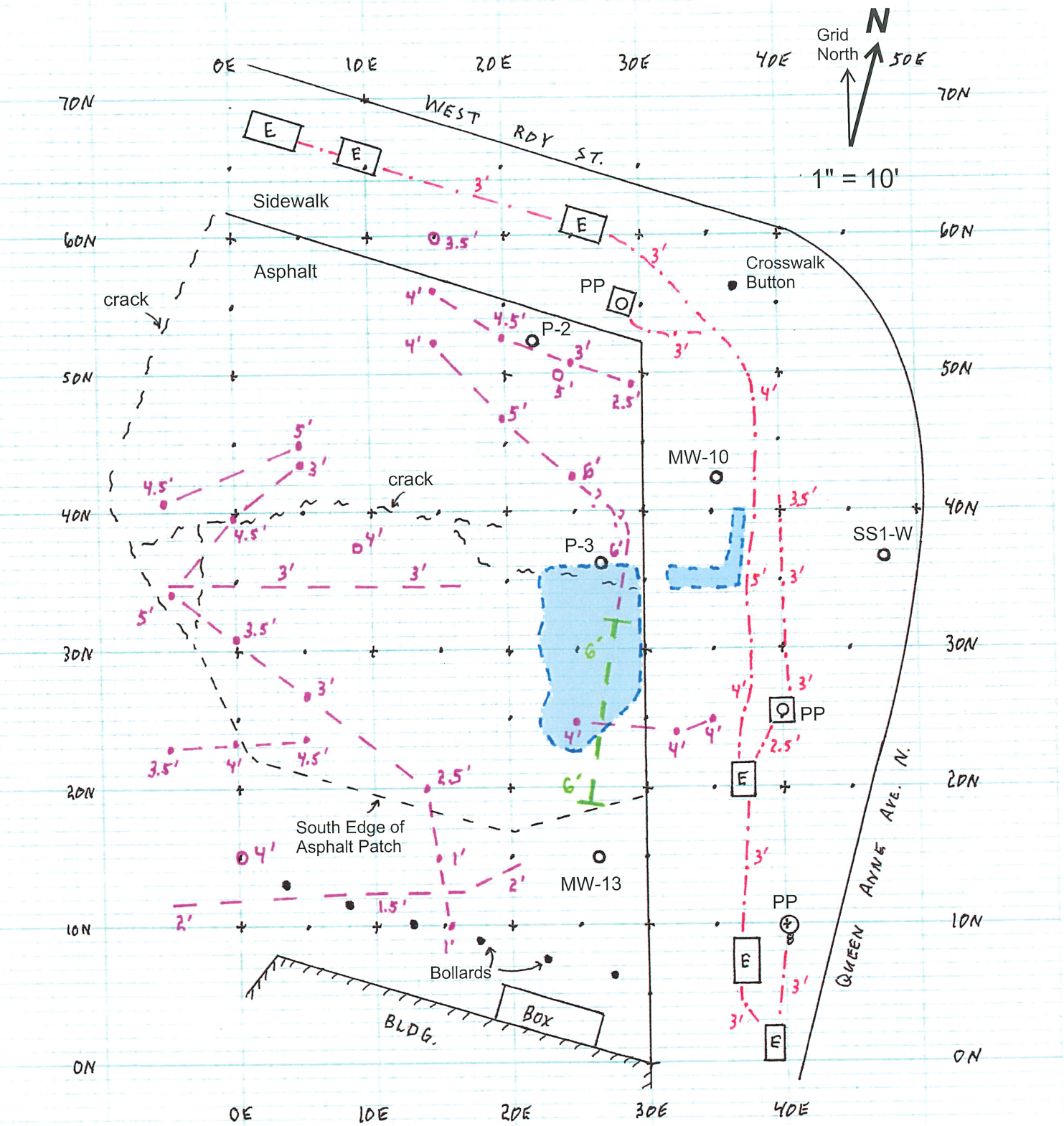
The EM-61 utilizes time-domain EM theory, and uses a pulsed primary magnetic field to induce EM currents in metallic objects below the instrument. The decay of these currents over time is measured by two receiver coils, and digitally recorded for further processing. The relative response of the anomalies on the two coils can often be evaluated to provide a depth estimate of the buried metal. The EM-61 can detect a 55-gallon drums at depths of over 5 feet, and will also respond to small shallow objects only inches in diameter.

The EM-61 is not affected by changes in subsurface conductivity due to soil and moisture conditions. It is also less sensitive than other methods to surface metal such as buildings, fences, and vehicles as it is focused to detect objects directly below (and above) the receiver coils. However, this also requires that spacing between survey lines should be small to provide adequate coverage.

GROUND PENETRATING RADAR

Some of the uses of GPR include locating buried tanks and drums, delineating boundaries of landfills and trenches, and defining voids and geologic stratigraphy. Although other techniques can also provide this information, GPR is less affected by cultural interferences such as overhead powerlines, buildings, and fences. GPR can also provide higher resolution of the target in many cases. A variety of antennas can be used depending on subsurface conditions and the objective of the survey. Resolution of shallow objects requires higher frequencies, while lower frequencies work better for deeper investigations.

Several factors can affect the effectiveness of the GPR method including reinforced concrete at the surface, the presence of highly conductive materials (such as clays and water), the size, depth, and physical property of the target and; in stratigraphic investigations, the conductivity contrast between stratigraphic units. The presence of numerous buried objects may mask objects and/or stratigraphy below.



Centerline of Probable UST
Electrical Utility
Probable Pipe/ Utility
Possible Pipe/ Utility
Strong GPR Target
Moderate GPR Target
Shallow, Flat GPR Layer (1 foot to top)

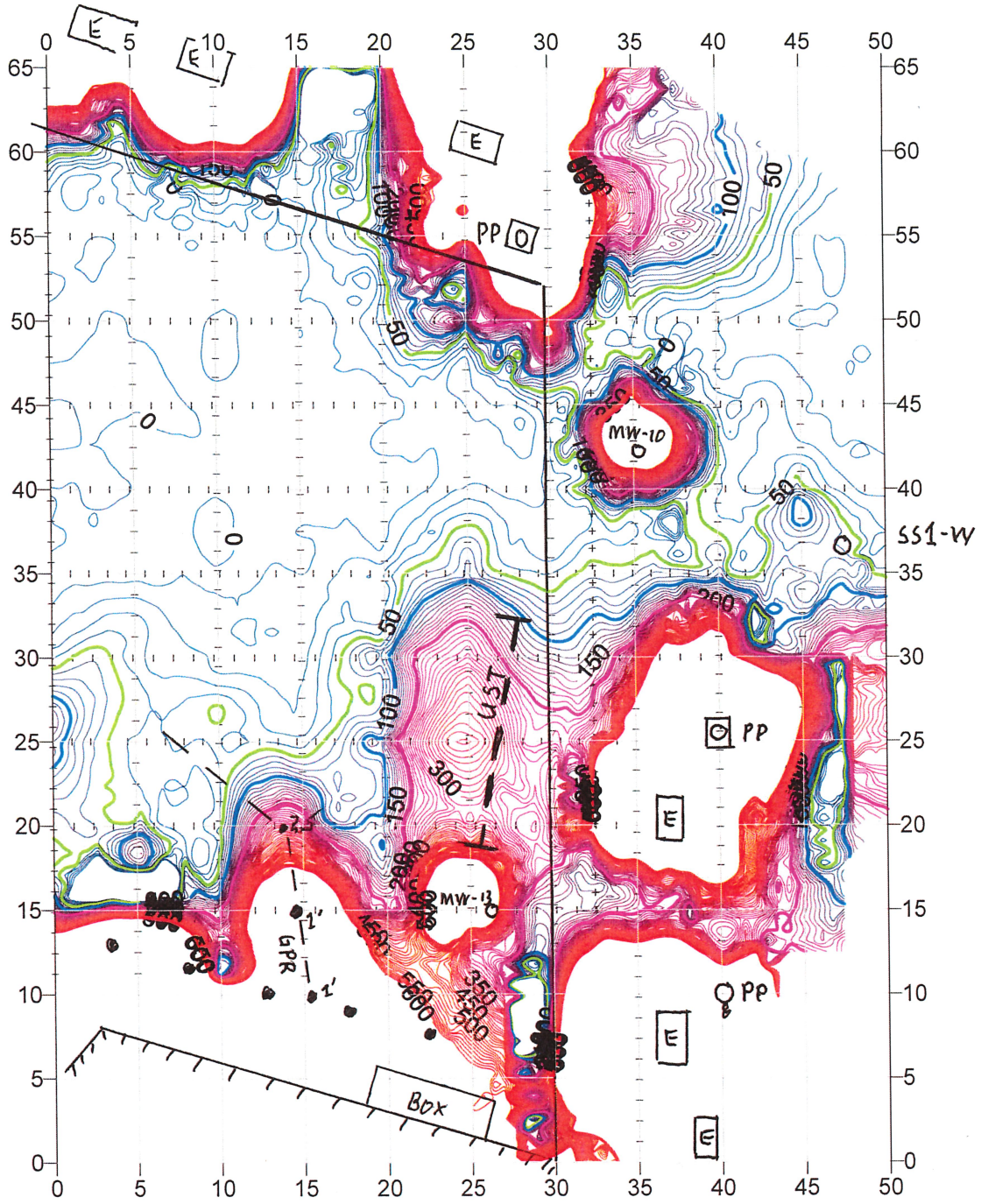
Depths (ft.) shown to tops of features.

INTERPRETATION RESULTS MAP

631 Queen Anne Avenue North Site
Seattle, Washington

P. Duoos, Geophysical Consultant
March 6, 2019 PN 1322-19

Fig. 1



Data Range: 0 - 600 ppt
Contour Interval: 10 ppt

Grid North

1 inch = 10 feet

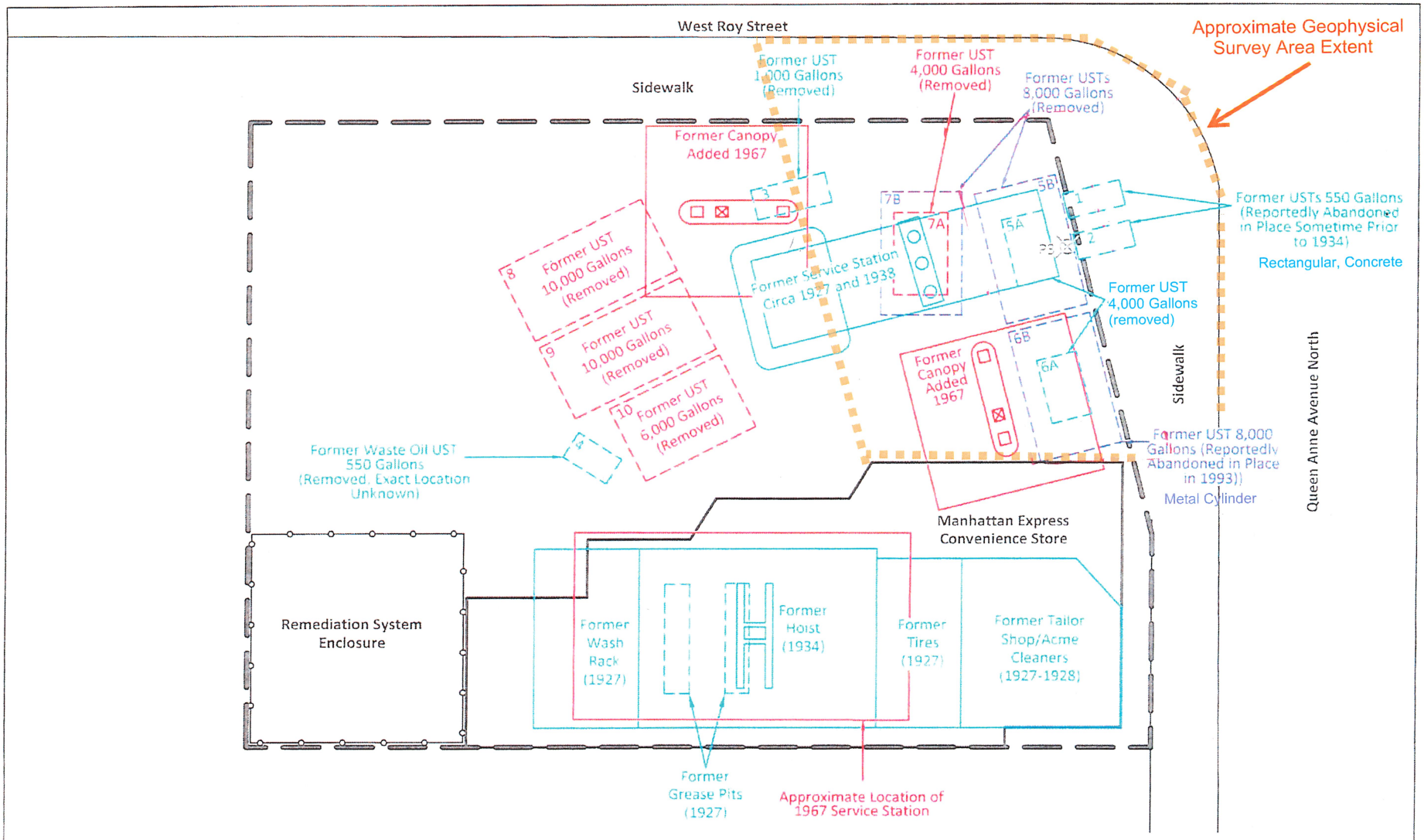
EM-61 DATA CONTOUR MAP

631 Queen Anne Ave. North Site
Seattle, Washington

PN 1322-19, March 6, 2019

FIG. 2

Philip H. Duoos, Geophysical Consultant



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

Roystone on Queen Anne		Figure 3
RGI Project Number 2017-015E	Historical Property Features	Date Drawn: 11/2018
Address: 631 Queen Anne Avenue North, Seattle, Washington 98109		

APPENDIX F

Data Validation Reports

Data Validation Report

Roystone Redevelopment Interim Action
July and August 2020 Soil Sampling

Prepared for:

The Riley Group, Inc.
17522 Bothell Way Northeast
Bothell, Washington 98011

Prepared by:

Pyron Environmental, Inc.
3530 32nd Way, NW
Olympia, WA 98502

Approved By: _____ Date: ***May/5/2021***
Mingta Lin

ACRONYMS

%R	percent recovery
CLP	U.S. EPA Contract Laboratory Program
COC	chain-of-custody
EPA	U.S. Environmental Protection Agency
GC/FID	gas chromatograph/flame ionization detector
GC/MS	gas chromatograph/mass spectrometer
GC/PID	gas chromatograph/photo ionization detector
LCS	laboratory control sample
MDL	method detection limit
MS	matrix spike
MSD	matrix spike duplicate
NFGs	CLP National Functional Guidelines for Data Review (EPA 2017a)
QA/QC	quality assurance/quality control
RL	reporting limit
RPD	relative percent difference
SDG	sample delivery group
VOCs	volatile organic compounds

INTRODUCTION

This report presents and discusses findings of the data validation performed on analytical data for soil samples collected during July and August 2020 for the referenced project. The laboratory reports validated herein were submitted by Libby Environmental, Inc., in Olympia, Washington.

A Stage 2a (as defined in EPA 2009) data validation was performed on these laboratory reports. The validation followed the procedures specified in USEPA CLP Functional Guidelines ([NFGs], EPA 2017), with modifications to accommodate project and analytical method requirements. The numerical quality assurance/quality control (QA/QC) criteria applied to the validation were in accordance with the current performance-based control limits established by the laboratory (laboratory control limits) and the Interim Action Work Plan ([Work Plan]; The Riley Group, Inc.; 2019). The frequency of QC analyses and analytical sequence requirements were evaluated against the respective analytical methods.

Validation findings are discussed in each section pertinent to the QC parameter for each type of analysis. Qualified data with applied data qualifiers are summarized in the **SUMMARY** section at the end of this report. Samples and the associated analyses validated herein are summarized as follows:

Field Sample ID	Laboratory Project No.	Sampling Date	Sample Type	Analysis		
				BTEX	TPH	VOCs
B-15W-25	L200807-10	08/07/20	Soil	X	X	
B-20W-25	L200807-10	08/07/20	Soil	X	X	
SPL-15S-20	L200807-10	08/07/20	Soil	X	X	
B-10E-24	L200807-10	08/07/20	Soil	X	X	
B-30W-26	L200807-10	08/07/20	Soil	X	X	
B-35W-25	L200807-10	08/07/20	Soil	X	X	
P08C-28	L200807-10	08/07/20	Soil	X	X	
B-25W-26	L200807-10	08/07/20	Soil	X	X	
B-31W-26.5	L200807-10	08/07/20	Soil	X	X	
SPL-19S-24	L200807-10	08/07/20	Soil	X	X	
SPL-18S-19	L200807-10	08/07/20	Soil	X	X	
B-26W-25	L200807-10	08/07/20	Soil	X	X	
B-21W-25.5	L200807-10	08/07/20	Soil	X	X	
BIE-21	L200807-10	08/07/20	Soil	X	X	
EPL-15S-17	L200807-10	08/07/20	Soil	X	X	
B-4E-16.5	L200807-10	08/07/20	Soil	X	X	
B-5E-20.5	L200807-10	08/07/20	Soil	X	X	
B-10E-21.5	L200807-10	08/07/20	Soil	X	X	
SPL-17S-16	L200807-10	08/07/20	Soil	X	X	

Field Sample ID	Laboratory Project No.	Sampling Date	Sample Type	Analysis		
				BTEX	TPH	VOCs
B-8E-17	L200807-10	08/07/20	Soil	X	X	
B-6E-18.5	L200807-10	08/07/20	Soil	X	X	
B7E-19	L200807-10	08/07/20	Soil	X	X	
B-11E-19	L200807-10	08/07/20	Soil	X	X	
B-12E-22.5	L200807-10	08/07/20	Soil	X	X	
B-9E-19	L200807-10	08/07/20	Soil	X	X	
B-13E-21	L200807-10	08/07/20	Soil	X	X	
B-16W-23	L200807-10	08/07/20	Soil	X	X	
B-16W-23	L200807-10	08/07/20	Soil	X	X	
B-16W-23	L200807-10	08/07/20	Soil	X	X	
OWS-B2-25	L200812-40	08/11/20	Soil	X	X	
SPL-20S-24	L200812-40	08/10/20	Soil	X	X	
SPL-21S-24	L200812-40	08/10/20	Soil	X	X	
SPL-22S-25	L200812-40	08/10/20	Soil	X	X	
RW-4C-32	L200812-40	08/11/20	Soil	X	X	
B-16W-25	L200812-40	08/11/20	Soil	X	X	
B-14E-21	L200812-40	08/12/20	Soil	X	X	
B-19W-19	L200812-40	08/12/20	Soil	X	X	X
B-29W-24	L200812-40	08/12/20	Soil	X	X	
B-24W-19	L200812-40	08/12/20	Soil	X	X	
B-27W-26	L200812-40	08/12/20	Soil	X	X	
B-22W-25.5	L200812-40	08/12/20	Soil	X	X	
WPL-18S-25	L200812-40	08/12/20	Soil	X	X	
B-26W-28	L200812-40	08/12/20	Soil	X[(1)]		
B-21W-28	L200812-40	08/12/20	Soil	X[(1)]		
B-29W-26	L200812-40	08/12/20	Soil	X[(1)]		
B-22W-25.5	L200812-40	08/12/20	Soil	X[(2)]	X	
B-32W-28	L200813-10	08/13/20	Soil	X	X	
B-33W-28	L200813-10	08/13/20	Soil	X	X	
B-34W-28	L200813-10	08/13/20	Soil	X	X	
DPE-6C-20	L200813-10	08/13/20	Soil	X	X	
B-28W-27	L200813-10	08/13/20	Soil	X	X	
B-23W-26	L200813-10	08/13/20	Soil	X	X	
DP-4C-26	L200813-10	08/13/20	Soil	X	X	
B-18W-27	L200813-10	08/13/20	Soil	X	X	
B-17W-28	L200813-10	08/13/20	Soil	X	X	
B-36W-16.5	L200813-10	08/13/20	Soil	X	X	
NPL-19S-20	L200813-10	08/13/20	Soil	X	X	
NPL-20S-20	L200813-10	08/13/20	Soil	X	X	

Field Sample ID	Laboratory Project No.	Sampling Date	Sample Type	Analysis		
				BTEX	TPH	VOCs
B-22W-27.5	L200813-10	08/12/20	Soil	X(1)		
B-32W-30	L200813-10	08/12/20	Soil	X(1)		
SPL-24S-26	L200813-10	08/12/20	Soil	X(1)		
NPL-21S-20	L200814-40	08/14/20	Soil	X	X	
NPL-22S-20	L200814-40	08/14/20	Soil	X	X	
NPL-23S-27	L200814-40	08/14/20	Soil	X	X	
WPL-19S-27	L200814-40	08/14/20	Soil	X	X	
WPL-20S-25.5	L200814-40	08/14/20	Soil	X	X	
WPL-21S-29	L200814-40	08/14/20	Soil	X	X	
B-17W-30.5	L200814-40	08/14/20	Soil	X(1)		
B-17W-31.5	L200814-40	08/14/20	Soil	X(1)		
B-37W-30.5	L200814-40	08/14/20	Soil	X(1)		
B38W-30.5	L200814-40	08/14/20	Soil	X(1)		
B-39W-30.5	L200819-40	08/19/20	Soil	X(1)		
B-40W-30.5	L200819-40	08/19/20	Soil	X(1)		
B-41W-30.5	L200819-40	08/19/20	Soil	X(1)		
B-1E-18	L200716-40	07/15/20	Soil	X	X	
B-2E-18	L200716-40	07/15/20	Soil	X	X	
B-3E-16.5	L200716-40	07/15/20	Soil	X	X	
B-4E-16.5	L200716-40	07/15/20	Soil	X	X	
B-5E-20.5	L200716-40	07/16/20	Soil	X	X	
B-10E-21.5	L200716-40	07/16/20	Soil	X	X	
SPL-17S-16	L200716-40	07/16/20	Soil	X	X	
B-8E-17	L200716-40	07/16/20	Soil	X	X	
B-6E-18.5	L200716-40	07/16/20	Soil	X	X	
B7E-19	L200716-40	07/16/20	Soil	X	X	
B-11E-19	L200716-40	07/16/20	Soil	X	X	
B-12E-22.5	L200716-40	07/16/20	Soil	X	X	
B-9E-19	L200716-40	07/16/20	Soil	X	X	
B-13E-21	L200716-40	07/16/20	Soil	X	X	
B-16W-23	L200716-40	07/16/20	Soil	X	X	

Notes:

Dx – Sample was analyzed for diesel and motor oil range TPH, analyzed with Method NWTPH-Dx.
Gx – Sample was analyzed for gasoline range TPH, analyzed with Method NWTPH-Gx
(1) – Benzene only
(2) – BTEX and naphthalene
TPH – Total petroleum hydrocarbons, including Gx and Dx
VOCs – Volatile organic compounds (project specific)
X - The analysis was requested and performed on the sample.

The analytical parameters requested for the samples, the respective analytical methods, and the analytical laboratories are summarized below:

Parameter	Analytical Method	Analytical Laboratory
Volatile Organic Compounds (VOCs)	SW846 Method 8260D	Libby Environmental, Inc. Olympia, WA 98502
BTEX & Naphthalene	SW846 Method 8260D	
TPH - Diesel & Motor Oil Range	NWTPH-Dx	
TPH - Gasoline Range	NWTPH-Gx	

Notes:

1. SW846 - *USEPA Test Methods for Evaluating Solid Waste, Physical/Chemical Methods,* SW-846, Third Edition, December 1996.
2. NWTPH Methods – *Washington State Department of Ecology, Analytical Methods for Petroleum Hydrocarbons*, Publication No. ECY 97-602, June 1997.

DATA VALIDATION FINDINGS

1. VOCs by GC/MS (EPA Method SW 8260D)

1.1 Sample Management and Holding Time

Samples were received in the laboratory intact and in consistence with the accompanying chain-of-custody (COC) documentation based on sample receipt documentation. In some cases where cooler temperature was outside the 4±2°C criteria. Samples were hand-delivered to the laboratory the same day of collection; the cooler temperature exceedance had no significant effects on data quality. No other anomalies were identified in relation to sample preservation, handling, and transport.

Soil samples should be preserved to pH <2 at the time of collection; soil samples should be prepared and preserved following Method SW 5035B. Preserved water and soil samples should be analyzed within 14 days of collection. All samples were preserved and analyzed within the required holding times.

1.2 Method Blanks

Method blanks were prepared and analyzed as required. Target compounds were not detected at or above the method detection limits (MDL).

1.3 Laboratory Control Sample (LCS)

LCS analyses were prepared and analyzed as required by the method. Percent recovery (%R) values either met the project control limits, or the outliers had no adverse effects on data usability (*e.g.,* biased high recovery for a compound not detected in samples).

1.4 Surrogate Spikes

Surrogate spikes were added to all samples as required by the method. All surrogate spike %R values were either within the project control limits or the outliers had no effects on data quality (*e.g.,* biased high recovery for a compound not detected in samples).

1.5 Matrix Spike (MS) and MS Duplicate (MSD)

MS and/or MSD analyses were performed on project at the proper frequency (≥5% of the samples analyzed for VOCs). All %R and relative percent difference (RPD) values were within the project control limits, or the outliers had no adverse effects on data usability (*e.g.,* biased high recovery for a compound not detected in samples), Except for the following:

Spiked Sample ID	Compound	MS %R	MSD %R	Control Limit	RPD	Affected Sample	Data Qualifier
B-19W-19 (L200812-40)	Trichlorofluoromethane	44%	44%	65-135%	0%	B-19W-19	**UJ**

Note: RPD criteria is ≤35%

1.6 Method Reporting Limits

Sample specific RLs met the Work Plan requirements for VOCs analyses.

1.7 Overall Assessment of VOCs Data Usability

Based on the information provided by the laboratory, VOCs data are of known quality at the level of quality evaluation (*i.e.,* Stage 2A) and acceptable for use.

2. BTEX and Naphthalene by GC/PID (EPA Method SW 8021B)

2.1 Holding Times

Water samples should be preserved to pH <2 at the time of collection; soil samples should be prepared and preserved following Method SW 5035B. Preserved water and soil samples should be analyzed within 14 days of collection. All samples were preserved and analyzed within the required holding times.

2.2 Method Blanks

Method blanks were prepared and analyzed as required. Target compounds were not detected at or above the MDLs in the method blanks.

2.3 Surrogate Spikes

Surrogate spikes were added to all samples as required by the method. The %R values were within the laboratory control limits.

2.4 Matrix Spike (MS) and MS Duplicate (MSD)

MS and/or MSD analyses were performed on project at the proper frequency (≥5% of the samples analyzed for BTEX). All %R and relative percent difference (RPD) values were within the project control limits, or the outliers had no adverse effects on data usability (*e.g.,* biased high recovery for a compound not detected in samples).

2.5 Laboratory Control Sample (LCS)

LCS analyses were performed as required by the method. The %R values were within the laboratory control limits.

2.6 Laboratory Duplicate Analysis

Laboratory duplicate analyses were performed project samples at a frequency of approximate one per 10 samples. The RPD or concentration difference values were within the laboratory control limits.

2.7 Method Reporting Limits

Sample specific RLs met the Work Plan requirements for BTEX and naphthalene analyses.

2.8 Overall Assessment of BTEX and Naphthalene Data Usability

Based on the information provided by the laboratory, BTEX and naphthalene data are of known quality at the level of quality evaluation (*i.e.,* Stage 2A) and acceptable for use.

3. TPH-Diesel & Motor Oil by GC/FID (Method NWTPH-Dx)

3.1 Holding Times

Acid-preserved water samples and soil samples should be extracted within 14 days and extracts should be analyzed within 40 days of extraction. All samples were extracted and analyzed within the recommended holding times.

3.2 Method Blanks

Method blanks were prepared and analyzed as required. Target compounds were not detected at or above the RLs in the method blanks.

3.3 Surrogate Spikes

Surrogate spikes were added to all samples as required by the method. All surrogate spike %R values were either within the project control limits or the outliers were due to sample matrix effects and not indicative of insufficient extraction.

3.4 Matrix Spike (MS) and MS Duplicate (MSD)

MS/MSD analyses were not reported.

3.5 Laboratory Duplicate Analyses

Laboratory duplicate analyses were performed project samples at a frequency of approximate one per 10 samples. The RPD or concentration difference values were within the laboratory control limits.

3.6 Method Reporting Limits

Sample specific RLs met the Work Plan requirements for TPH-Dx analyses.

3.7 Overall Assessment of TPH-Diesel and Motor Oil Data Usability

Based on the information provided by the laboratory, TPH-Diesel and Motor Oil data are of known quality at the level of quality evaluation (*i.e.,* Stage 2A) and acceptable for use.

4. TPH-Gasoline by GC/FID (Method NWTPH-Gx)

4.1 Holding Times

Water samples should be preserved to pH <2 at the time of collection; soil samples should be prepared and preserved following Method SW 5035B. Preserved water and soil samples should be analyzed within 14 days of collection. All samples were preserved and analyzed within the required holding times.

4.2 Method Blanks

Method blanks were prepared and analyzed as required. TPH-Gasoline was not detected at or above the MDLs in the method blank.

4.3 Surrogate Spikes

Surrogate spikes were added to all samples as required by the method. All surrogate spike %R values were either within the project control limits or the outliers were due to sample matrix effects and not indicative of insufficient extraction.

4.4 Matrix Spike (MS) and MS Duplicate (MSD)

MS/MSD analyses were not reported.

4.5 Laboratory Control Sample (LCS)

LCS analyses were not reported for NWTPH-Gx analyses.

4.6 Laboratory Duplicate Analysis

Laboratory duplicate analyses were performed project samples at a frequency of approximate one per 10 samples. The RPD or concentration difference values were within the laboratory control limits.

4.7 Method Reporting Limits

Sample specific RLs met the Work Plan requirements for TPH-Gasoline analyses.

4.8 Overall Assessment of TPH-Gasoline Data Usability

The reported values for samples B-10E-21.5 and SPL-17S-16 exceeded the instrument calibration range and should be qualified (J) and considered as estimated values. Based on the information provided by the laboratory, TPH-Gasoline data are of known quality at the level of quality evaluation (*i.e.,* Stage 2A) and acceptable for use.

SUMMARY

Table I. Data Affected by QC Anomalies:

Laboratory Project ID	Sample ID	Analytical Method	Analyte	Data Qualifier	Reason Code
L200812-40	B-19W-19	SW8260D	Trichlorofluoromethane	**UJ**	MSL, MSDL
L200716-40	B-10E-21.5	NWTPH-Gx	TPH-Gasoline	**J**	OVR
L200716-40	SPL-17S-16	NWTPH-Gx	TPH-Gasoline	**J**	OVR

Table II. Data Qualifiers

Data Qualifier	Definition
J	The analyte was detected above the reported quantitation limit, and the reported concentration was an estimated value.
UJ	The analyte was analyzed for, and the associated quantitation limit was an estimated value.

Table III. Data Qualification Reason Codes

Reason Code	Definition
LCS_0	Associated LCS was not reported.
MSL	The matrix spike percent recovery was less than the lower control limit.
MSDL	The matrix spike duplicate percent recovery was less than the lower control limit.
OVR	The reported value exceeded the instrument calibration range.

EFERENCES

United States Environmental Protection Agency (USEPA). *Contract Laboratory Program National Functional Guidelines for Organic Superfund Data Review.* Office of Superfund Remediation and Technical Innovation. January 2017. OLEM 9355.0-136. EPA-540-R-2017-002.

USEPA. 2009. *Guidance for Labeling Externally Validated Laboratory Analytical Data for Superfund Use*. January 13, 2009. USEPA 540-R-08-005.

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Ecology (Washington State Department of). 1997. *Analytical Methods for Petroleum Hydrocarbons.* Publication No. ECY 97-602. June 1997.

The Riley Group, Inc. 2019. *Interim Action Work Plan, Roystone Redevelopment.* The Riley Group, Inc., Bothell, Washington. Prepared for Roystone On Queen Anne, LLC. August 29, 2019.

Data Validation Report

Roystone Redevelopment Interim Action
April - July 2020 Soil and Groundwater Sampling

Prepared for:

The Riley Group, Inc.
17522 Bothell Way Northeast
Bothell, Washington 98011

Prepared by:

Pyron Environmental, Inc.
3530 32nd Way, NW
Olympia, WA 98502

Approved By: _____ Date: ***May/1/2021***

Mingta Lin

ACRONYMS

%R	percent recovery
CLP	U.S. EPA Contract Laboratory Program
COC	chain-of-custody
CVAA	cold vapor atomic absorption spectrometry
EPA	U.S. Environmental Protection Agency
GC/ECD	gas chromatograph/electron capture detector
GC/FID	gas chromatograph/flame ionization detector
GC/MS	gas chromatograph/mass spectrometer
GC/PID	gas chromatograph/photo ionization detector
ICP/MS	inductively coupled plasma/ mass spectrometer
LCS	laboratory control sample
LCSD	laboratory control sample duplicate
MDL	method detection limit
µg/L	microgram per liter
mg/L	milligram per liter
MRL	method reporting limit
MS	matrix spike
MSD	matrix spike duplicate
NFGs	CLP National Functional Guidelines for Data Review (EPA 2017a – Inorganics; EPA 2017b – Organics)
PAHs	polycyclic aromatic hydrocarbons
PCBs	polychlorinated biphenyls
PRG	primary remediation goal
QA/QC	quality assurance/quality control
RL	reporting limit
RPD	relative percent difference
SDG	sample delivery group
SIM	selective ion monitoring
TCLP	toxicity characteristics leaching procedure
VOCs	volatile organic compounds

INTRODUCTION

This report presents and discusses findings of the data validation performed on analytical data for soil samples collected during April through July 2020 for the referenced project. The laboratory reports validated herein were submitted by Friedman & Bruya, Inc. in Seattle, Washington.

A level II (or Level 2a as defined in EPA 2009) data validation was performed on these laboratory reports. The validation followed the procedures specified in USEPA CLP Functional Guidelines ([NFGs], EPA 2017a for Organics and EPA 2017b for Inorganics), with modifications to accommodate project and analytical method requirements. The numerical quality assurance/quality control (QA/QC) criteria applied to the validation were in accordance with the current performance-based control limits established by the laboratory (laboratory control limits) and the Interim Action Work Plan ([Work Plan]; The Riley Group, Inc.; 2019). The frequency of QC analyses and analytical sequence requirements were evaluated against the respective analytical methods.

Validation findings are discussed in each section pertinent to the QC parameter for each type of analysis. Qualified data with applied data qualifiers are summarized in the **SUMMARY** section at the end of this report. Samples and the associated analyses validated herein are summarized as follows:

Field Sample ID	Laboratory Sample ID	Sampling Date	Sample Type	Analysis				
				BTEX	TPH	Metals	VOCs	Miscellaneous
MW10	003023-01	03/02/20	Water	X	X			
SS-W1	003023-01	03/02/20	Water	X	X			
SS-W2	003023-01	03/02/20	Water	X	X			
Product-Hoist1	003374-01	03/23/20	Product		Dx	X(1)		PCBs
Product-Hoist2	003374-02	03/23/20	Product		Dx	X(1)		PCBs
Hoist1-B1-9	003374-03	03/23/20	Soil		Dx			
Hoist2-B1-8.25	003374-04	03/23/20	Soil		Dx			
OWS1-Solids	003393-01	03/24/20	Soil		HCID	X(2)		
PP1-UST5B-2.5	003422-01	03/26/20	Soil	X	X			
PP2-UST5B-0.5	003422-02	03/26/20	Soil	X	X			
Disp 1-0.5	003422-03	03/26/20	Soil	X	X			
Disp 2-0.5	003422-04	03/26/20	Soil	X	X			
Hoist2-B2-8.5	004362 -01	04/29/20	Soil		Dx			
Hoist2-SW1-6	004362 -02	04/29/20	Soil		Dx			
Hoist2-SW2-6	004362 -03	04/29/20	Soil		Dx			
Hoist1-B2-9	004362 -04	04/29/20	Soil		Dx			Cadmium
Hoist1-SW1-6	004362 -05	04/29/20	Soil		Dx			
Hoist1-SW2-6	004362 -06	04/29/20	Soil		Dx			

Field Sample ID	Laboratory Sample ID	Sampling Date	Sample Type	Analysis				
				BTEX	TPH	Metals	VOCs	Miscellaneous
TP1-7	004362 -07	04/29/20	Soil		X			
TP2-7	004362 -08	04/29/20	Soil		X			
TP3-7	004362 -09	04/29/20	Soil		X			
TP4-7	004362 -10	04/29/20	Soil		X			
SPL-1S-8	005013-01	04/30/20	Soil	X	X			
SPL-2S-8	005013-02	04/30/20	Soil	X	X			
SPL-3S-8	005013-03	04/30/20	Soil	X	X			
SPL-4S-8	005013-04	04/30/20	Soil	X	X			
OWS-B1-4	005031-01	05/04/20	Soil		X	X(3)		
OWS-SWN-3	005031-02	05/04/20	Soil		HCID			
OWS-SWS-3	005031-03	05/04/20	Soil		HCID			
WPL-1S-8	005087-01	05/05/20	Soil	X	X			
PP1-NPL-2	005087-02	05/06/20	Soil	X	X			
WPL-2S-8	005087-03	05/06/20	Soil	X	X			
WPL-3S-8	005087-04	05/06/20	Soil	X	X			
PP1-UST4-1.5	005087-05	05/07/20	Soil		X(4)	Lead	X	
UST-4A-Product	005122-01	05/11/20	Product	X	HCID			
UST-A-Product	005122-02	05/11/20	Product		HCID	X(5)	X	PAHs, PCBs
WPL-4S-8	005142-01	05/12/20	Soil	X	X			
WPL-5S-8	005142-02	05/12/20	Soil	X	X			
Wood Pole-5	005142-03	05/12/20	Soil		HCID			
UST4A-PP-1-2	005203-01	05/14/20	Soil	X	X			
TP10-5	005260-01	05/20/20	Soil	X	X			
USTA-1W-3	005280-01	05/21/20	Soil		X	Lead	X	PAHs
USTA-1B-9	005299-01	05/22/20	Soil		HCID		X	
NETP1-8	005335-01	05/27/20	Soil	X	X			
NETP1-12	005335-02	05/27/20	Soil	X	X			
NETP2-5	005335-05	05/27/20	Soil	X	X			
NETP2-8	005335-07	05/27/20	Soil	X	X			
E12-SP	005346-01	05/28/20	Soil		HCID		X	
EPL-1S-8	005367-01	05/28/20	Soil		HCID		X	
SPL-5S-8	005367-02	05/28/20	Soil		HCID		X	
EPL-2S-8	005394-01	05/29/20	Soil	X	X			
NPL-1S-6	005394-02	05/29/20	Soil	X	X			
E12-SP2	005394-03	05/29/20	Soil		X(4)		X	
UST4A-SA-1B-8.5	006013-01	06/01/20	Soil	X	Dx(4)			

Field Sample ID	Laboratory Sample ID	Sampling Date	Sample Type	Analysis				
				BTEX	TPH	Metals	VOCs	Miscellaneous
UST4A-SA-2E-7	006013-02	06/01/20	Soil	X	Dx[(4)]			
UST4A-SA-3W-7	006013-03	06/01/20	Soil	X	Dx[(4)]			
USTA-SA-1W-6	006013-04	06/01/20	Soil		HCID		X	
USTA-SA-2B-6	006013-05	06/01/20	Soil		Gx[(4)]	Lead	X	PAHs
USTA-SA-3E-4.5	006013-06	06/01/20	Soil	X	HCID			
USTA-SP-1-S	006023-01	06/02/20	Soil	X	X		X	
USTA-SP-2-N	006023-02	06/02/20	Soil	X	X		X	
UST6B-1	006059-01	06/03/20	Soil		HCID			
UST10-PP1-2.5	006103-01	06/05/20	Soil		X			
UST6B-SA-1B-13	006120-01	06/08/20	Soil					
UST6B-SA-2W-10	006120-02	06/08/20	Soil					
UST6B-SA-3N-10	006120-03	06/08/20	Soil					
UST6B-SA-4E-10	006120-04	06/08/20	Soil					
SPL-6S-8	006120-05	06/08/20	Soil					
SPL-7S-8	006189-01	06/10/20	Soil	X	X			
NPL-2S-3	006189-02	06/11/20	Soil	X	X			
EPL-1S-8	006227-01	06/15/20	Soil		X			
SPL-5S-8	006227-02	06/15/20	Soil		X			
SPL-8S-12	006250-01	06/16/20	Soil	X	X			
SPL-9S-11.5	006250-02	06/16/20	Soil	X	X			
SPL-10S-12	006250-03	06/16/20	Soil	X	X			
SPL-11S-12.5	006250-04	06/16/20	Soil	X	X			
SPL-12S-12.5	006250-05	06/16/20	Soil	X	X			
SPL-13S-14	006273-01	06/17/20	Soil	X	X			
SPL-14S-16.5	006273-02	06/17/20	Soil	X	X			
WPL-6S-13	006295-01	06/18/20	Soil	X	X			
WPL-7S-13	006295-02	06/18/20	Soil	X	X			
WPL-8S-9	006326-01	06/19/20	Soil	X	X			
NPL-3S-6	006326-02	06/19/20	Soil	X	X			
NPL-4S-3.5	006326-03	06/19/20	Soil	X	X			
NPL-5S-6	006326-04	06/19/20	Soil	X	X			
EPL-3S-6	006326-05	06/19/20	Soil	X	X			
EPL-4S-6	006326-06	06/19/20	Soil	X	X			
EPL-5S-6	006326-07	06/19/20	Soil	X	X			
WPL-9S-10	006326-08	06/19/20	Soil	X	X			

Field Sample ID	Laboratory Sample ID	Sampling Date	Sample Type	Analysis				
				BTEX	TPH	Metals	VOCs	Miscellaneous
NPL-6S-6	006326-09	06/19/20	Soil	X	X			
NPL-7S-6	006326-10	06/19/20	Soil	X	X			
NPL-8S-6	006380-01	06/22/20	Soil	X	X			
NPL-9S-4	006380-02	06/22/20	Soil	X	X			
NPL-10S-10	007093-01	07/07/20	Soil	X	X			
EPL-6S-11	007093-02	07/07/20	Soil	X	X			
EPL-7S-11	007142 -06	07/08/20	Soil	X	Dx			
EPL-9S-11	007142 -01	07/09/20	Soil	X	Dx			
EPL-10S-12	007142 -02	07/09/20	Soil	X	Dx			
EPL-8S-11	007142 -03	07/09/20	Soil	X	Dx			
SPL-16S-13	007142 -04	07/09/20	Soil	X	Dx			
SPL-8S-12	007142 -05	07/09/20	Soil			X(4)	X	
NPL-11S-10	007169-01	07/10/20	Soil	X	X			
NPL-12S-10	007169-02	07/10/20	Soil	X	X			
NPL-13Ss-16	007203-01	07/13/20	Soil	X	X			
NPL-14S-16	007203-02	07/13/20	Soil	X	X			
NPL-15S-16	007203-03	07/13/20	Soil	X	X			
NPL-16S-16	007203-04	07/13/20	Soil	X	X			
NPL-17S-16	007203-05	07/13/20	Soil	X	X			
NPL-18S-16	007203-06	07/13/20	Soil	X	X			
EPL-11S-17	007391-01	07/22/20	Soil	X	X			
EPL-12S-17	007391-02	07/22/20	Soil	X	X			
EPL-13S-17	007391-03	07/22/20	Soil	X	X			
EPL-14S-17	007391-04	07/22/20	Soil	X	X			
WPL-10S-16	007391-05	07/23/20	Soil	X	X			
WPL-11S-16	007391-06	07/23/20	Soil	X	X			
WPL-12S-20	007391-07	07/23/20	Soil	X	X			
WPL-13S-18	007391-08	07/23/20	Soil	X	X			
WPL-17S-22	007521-01	07/29/20	Soil	X	X			
WPL-15S-21	007521-02	07/29/20	Soil	X	X			
WPL-14S-22	007521-03	07/29/20	Soil	X	X			
WPL-16S-18	007521-04	07/30/20	Soil	X	X			
RW-4C-30	007521-05	07/30/20	Soil		X		X	

Notes:

Dx – Sample was analyzed for diesel and motor oil range TPH, analyzed with Method NWTPH-Dx.
Gx - Sample was analyzed for gasoline range TPH, analyzed with Method NWTPH-Gx

HCID – Hydrocarbon identification analyzed with Method NWTPH-HCID.
Lead – The sample was analyzed for lead with EPA Method 6020B
Metals**(1)** – Arsenic, cadmium, chromium, lead, and mercury
Metals**(2)** – Arsenic, barium, cadmium, chromium, copper, mercury, nickel, selenium, silver, lead, and zinc
Metals**(3)** – Arsenic, cadmium, and lead
Metals(4) – Cadmium, chromium, and lead
Metals(5) – Arsenic, cadmium, chromium, mercury, lead and TCLP/Lead
PAHs – Polycyclic aromatic hydrocarbon
PCB – Polychlorinated biphenyl
TPH – Total petroleum hydrocarbons, including Gx and Dx
TPH**(4)** – Including HCID
VOCs – Volatile organic compounds (project specific)
X - The analysis was requested and performed on the sample.

The analytical parameters requested for the samples, the respective analytical methods, and the analytical laboratories are summarized below:

Parameter	**Analytical Method**	**Analytical Laboratory**
Volatile Organic Compounds (VOCs)	SW846 Method 8260D	Friedman & Bruya, Inc. Seattle, WA
Polycyclic Aromatic Hydrocarbons (PAHs)	SW846 Method 8270E – SIM	
Polychlorinated Biphenyls (PCBs)	SW846 Method 8082B	
Hydrocarbon Identification	NWTPH-HCID	
Toxicity Characteristics Leaching Procedure (TCLP)	SW846 Method 1311	
TPH - Diesel & Motor Oil Range	NWTPH-Dx	
TPH - Gasoline Range	NWTPH-Gx	
Metals	SW846 Method 6020B	
Mercury (Soil)	SW846 Method 7471A	

Notes:
1. SW846 - *USEPA Test Methods for Evaluating Solid Waste, Physical/Chemical Methods,* SW-846, Third Edition, December 1996.
2. NWTPH Methods – *Washington State Department of Ecology, Analytical Methods for Petroleum Hydrocarbons*, Publication No. ECY 97-602, June 1997.

DATA VALIDATION FINDINGS

1. VOCs by GC/MS (EPA Method SW 8260D)

1.1 Sample Management and Holding Time

Samples were received in the laboratory intact and in consistence with the accompanying chain-of-custody (COC) documentation based on sample receipt documentation. In some cases where cooler temperature was outside the 4±2°C criteria. Samples were hand-delivered to the laboratory the same day of collection; the cooler temperature exceedance had no significant effects on data quality. No other anomalies were identified in relation to sample preservation, handling, and transport.

Water samples should be preserved to pH <2 at the time of collection; soil samples should be prepared and preserved following Method SW 5035B. Preserved water and soil samples should be analyzed within 14 days of collection. All samples were preserved and analyzed within the required holding times.

1.2 Method Blanks

Method blanks were prepared and analyzed as required. Target compounds were not detected at or above the method detection limits (MDL).

1.3 Laboratory Control Sample (LCS) and LCS Duplicate (LCSD)

LCS and LCSD were prepared and analyzed as required by the method. Percent recovery (%R) and relative percent difference (RPD) values either met the project control limits, or the outliers had no adverse effects on data usability (*e.g.,* biased high recovery for a compound not detected in samples).

1.4 Surrogate Spikes

Surrogate spikes were added to all samples as required by the method. All surrogate spike %R values were either within the project control limits or the outliers had no effects on data quality (*e.g.,* biased high recovery for a compound not detected in samples).

1.5 Matrix Spike (MS) and MS Duplicate (MSD)

MS and/or MSD analyses were performed on project or batch QC samples at the proper frequency (≥5% of the samples analyzed for VOCs). All %R and/or RPD values were within the project control limits, or the outliers had no adverse effects on data usability (*e.g.,* biased high recovery for a compound not detected in samples), except for the following:

Sample ID	Compound	MS%R	MSD%R	Control Limit	Affected Sample	Data Qualifier
SPL-8S-12 (Lab ID: 007142-05)	Hexane	28%	26%	50-150%%	SPL-8S-12	**UJ**

1.6 Method Reporting Limits

Sample specific RLs met the Work Plan requirements for VOCs analyses.

1.7 Overall Assessment of VOCs Data Usability

Based on the information provided by the laboratory, VOCs data are of known quality at the level of quality evaluation (*i.e.,* Stage 2A) and acceptable for use, as qualified.

2. PAHs by GC/MS (EPA Method SW 8270E - SIM)

2.1 Holding Times

Soil samples should be extracted within 14 days of collection and extracts be analyzed within 40 days of extraction. The sample was extracted and analyzed within the required holding times.

2.2 Method Blank

Method blanks were prepared and analyzed as required. Target compounds were not detected at or above the MDLs in the method blank.

2.3 Surrogate Spikes

Surrogate spikes were added to all samples as required by the method. All surrogate spike %R values were within the project control limits.

2.4 Matrix Spike (MS) and MS Duplicate (MSD)

MS and/or MSD analyses were performed on a batch QC sample. All %R and/or RPD values were within the project control limits.

2.5 Laboratory Control Sample (LCS) and LCS Duplicate (LCSD)

LCS and LCSD were prepared and analyzed as required by the method. All %R and RPD values either met the laboratory control criteria, or the outliers had no adverse effects on

data usability (*e.g.,* biased high %R or RPD value for a compound that was not detected in samples).

2.6 Method Reporting Limits

Sample specific RLs met the Work Plan requirements for PAHs analyses.

2.7 Overall Assessment of PAHs Data Usability

As noted by the laboratory, the recovery for one of the internal standards in samples USTA-1W-3 (Lab ID: 005280-01) and UST-A-Product (Lab ID: 005122-02) was outside the control limits. As a conservative measure, results for affected compounds were qualified (J) for detects and (UJ) for non-detects (see Summary at the end of this report).

Based on the information provided by the laboratory, PAHs data are of known quality at the level of quality evaluation (*i.e.,* Stage 2A) and acceptable for use as mqualified.

3. PCBs by GC/ECD (EPA Method SW 8082B)

3.1 Holding Times

Soil samples should be extracted within 14 days of collection and extracts be analyzed within 40 days of extraction. All samples extracted and analyzed within the required holding times.

3.2 Method Blanks

Method blanks were prepared and analyzed as required. Target compounds were not detected at or above the MDLs in the method blank.

3.3 Surrogate Spikes

Surrogate spikes were added to all samples as required by the method. The %R values were within the laboratory control limits.

3.4 Matrix Spike (MS) and MS Duplicate (MSD)

MS/MSD analyses were not performed on project samples. The accuracy and precision associated with sample analyses were evaluated using LCS and LCSD results (see discussion in Section 4.5).

3.5 Laboratory Control Sample (LCS) and LCS Duplicate (LCSD)

LCS and LCSD analyses were performed as required by the method. The %R and RPD values were within the laboratory control limits.

3.6 Method Reporting Limits

The Work Plan does not specify detection limit requirements for PCBs.

3.7 Overall Assessment of PCBs Data Usability

Based on the information provided by the laboratory, PCBs data are of known quality at the level of quality evaluation (*i.e.,* Stage 2A) and acceptable for use.

4. BTEX by GC/PID (EPA Method SW 8021B)

4.1 Holding Times

Water samples should be preserved to pH <2 at the time of collection; soil samples should be prepared and preserved following Method SW 5035B. Preserved water and soil samples should be analyzed within 14 days of collection. All samples were preserved and analyzed within the required holding times.

4.2 Method Blanks

Method blanks were prepared and analyzed as required. Target compounds were not detected at or above the MDLs in the method blanks.

4.3 Surrogate Spikes

Surrogate spikes were added to all samples as required by the method. The %R values were within the laboratory control limits.

4.4 Laboratory Duplicate Analysis

Laboratory duplicate analyses were performed on project samples. The relative percent difference (RPD) values met the laboratory control criteria, except for the following:

Sample ID	Compound	RPD	Control Limit	Affected Sample	Data Qualifier
WPL-8S-9 (Lab ID: 006326-01)	Ethylbenzene Xylenes	29% 36%	20%	WPL-8S-9	**J** **J**

4.5 Laboratory Control Sample (LCS)

LCS analyses were performed as required by the method. The %R values were within the laboratory control limits.

4.6 Method Reporting Limits

Sample specific RLs met the Work Plan requirements for BTEX analyses.

4.7 Overall Assessment of EDB Data Usability

Based on the information provided by the laboratory, BTEX data are of known quality at the level of quality evaluation (*i.e.,* Stage 2A) and acceptable for use.

5. TPH Identification and TPH-Diesel & Motor Oil by GC/FID (Methods NWTPH-HCID and NWTPH-Dx)

5.1 Holding Times

Acid-preserved water samples and soil samples should be extracted within 14 days and extracts should be analyzed within 40 days of extraction. All samples were extracted and analyzed within the recommended holding times.

5.2 Method Blanks

Method blanks were prepared and analyzed as required. Target compounds were not detected at or above the RLs in the method blanks.

5.3 Surrogate Spikes

Surrogate spikes were added to all samples as required by the method. All surrogate spike %R values were either within the project control limits or the outliers were due to sample matrix effects and not indicative of insufficient extraction, with the exception of the following:

Sample ID	Surrogate Spike	%R	Control Limit	Affected Compound	Data Qualifier
UST6B-1 (Lab ID: 006059-01)	*o*-Terphenyl (NWTPH-HCID)	45%	53 - 144%	Gasoline Diesel Heavy Oil	**J** **J** **UJ**

5.4 Matrix Spike (MS) and MS Duplicate (MSD)

MS/MSD analyses were performed on project samples. The %R and RPD values met the laboratory control criteria.

5.5 Laboratory Control Sample (LCS) and LCS Duplicate (LCSD)

LCS and LCSD analyses were performed as required by the method. All %R and RPD values were within the laboratory control limits.

5.6 Method Reporting Limits

Sample specific RLs met the Work Plan requirements for TPH-HCID and TPH-Dx analyses.

5.7 Overall Assessment of TPH-HCID, TPH-Diesel and TPH- Motor Oil Data Usability

Based on the information provided by the laboratory, TPH-HCID, TPH-Diesel and TPH-Motor Oil data are of known quality at the level of quality evaluation (*i.e.,* Stage 2A) and acceptable for use.

6. TPH-Gasoline by GC/FID (Method NWTPH-Gx)

6.1 Holding Times

Water samples should be preserved to pH <2 at the time of collection; soil samples should be prepared and preserved following Method SW 5035B. Preserved water and soil samples should be analyzed within 14 days of collection. All samples were preserved and analyzed within the required holding times.

6.2 Method Blanks

Method blanks were prepared and analyzed as required. TPH-Gasoline was not detected at or above the MDLs in the method blank.

6.3 Surrogate Spikes

Surrogate spikes were added to all samples as required by the method. All surrogate spike %R values were within the project control limits.

6.4 Matrix Spike (MS) and MS Duplicate (MSD)

MS/MSD analyses were not performed on project samples. The accuracy and precision associated with sample analyses were evaluated using LCS and LCSD results (see discussion in Section 5.5).

6.5 Laboratory Control Sample (LCS) and LCS Duplicate (LCSD)

LCS and LCSD analyses were performed as required by the method. All %R and RPD values were within the laboratory control limits, or at levels that had no adverse effects on data quality (*e.g.,* biased-high recovery for compounds that were not detected in samples).

6.6 Method Reporting Limits

Sample specific RLs met the Work Plan requirements for TPH-Gasoline analyses.

6.7 Overall Assessment of TPH-Gasoline Data Usability

Based on the information provided by the laboratory, TPH-Gasoline data are of known quality at the level of quality evaluation (*i.e.,* Stage 2A) and acceptable for use.

7. Total Metals by ICP/MS and CVAA (EPA Method SW 6020B and SW 7471A)

7.1 Holding Times

Soil and water samples should be analyzed within 180 days for metals and 28 days for mercury. Samples were analyzed within the required holding times.

7.2 Method Blanks

Method blanks were prepared and analyzed as required. Target analytes were either not detected at or above the RLs in the preparation blanks, or sample results were greater than 10X the detection in the associated blank.

7.3 Laboratory Control Sample (LCS)

LCS analyses were performed as required by the method. All %R values were within the project control limits, or the exceedance had no adverse effects on data usability (e.g., high-bias %R value where the target compound was not detected in associated sample).

7.4 Matrix Spike (MS) and Matrix Spike Duplicate (MSD)

MS and MSD analyses were performed on project and batch QC samples at the adequate frequency (>5% of field sample). The %R and RPD values either met the laboratory control limits or the outliers were not applicable for matrix effect evaluation (e.g. sample concentration > 4x spiking level).

7.5 Method Reporting Limits

Sample specific RLs met the Work Plan requirements for metals and mercury analyses.

7.6 Overall Assessment of Metals and Mercury Data Usability

Based on the information provided by the laboratory, metals and mercury data are of known quality at the level of quality evaluation (*i.e.,* Stage 2A) and acceptable for use.

SUMMARY

Table I. Data Affected by QC Anomalies:

Laboratory ID	Sample ID	Analytical Method	Analyte	Data Qualifier	Reason Code
005280-01	USTA-1W-3	SW8270-SIM	Benzo(a)pyrene Benzo(b)fluoranthene Benzo(k)fluoranthene Indeno(1,2,3-cd)pyrene Dibenz(a,h)anthracene	**J** **J** **J** **J** **UJ**	ISL
005122-02	UST-A-Product	SW8270-SIM	Benzo(a)pyrene Benzo(b)fluoranthene Benzo(k)fluoranthene Indeno(1,2,3-cd)pyrene Dibenz(a,h)anthracene	**J** **UJ** **UJ** **J** **UJ**	ISL
006326-01	WPL-8S-9	SW8021B	Ethylbenzene	**J**	RPD_LD
006326-01	WPL-8S-9	SW8021B	Xylenes	**J**	RPD_LD
006059-01	UST6B-1	NWTPH_HCID	TPH-Gasoline	**J**	SSL
006059-01	UST6B-1	NWTPH_HCID	TPH-Diesel	**J**	SSL
006059-01	UST6B-1	NWTPH_HCID	TPH-Heavy Oil	**UJ**	SSL
007142-05	SPL-8S-12	SW8260C	Hexane	**UJ**	MSL,MSDL

Table II. Data Qualifiers

Data Qualifier	Definition
J	The analyte was detected above the reported quantitation limit, and the reported concentration was an estimated value.
UJ	The analyte was analyzed for, and the associated quantitation limit was an estimated value.

Table III. Data Qualification Reason Codes

Reason Code	Definition
ISL	Internal standard recovery low
MSL	Matrix spike %R value was < lower control limit
MSDL	Matrix spike duplicate %R value was < lower control limit
RPD_LD	Relative percent difference value was outside the control criteria for laboratory duplicate analysis
SSL	Surrogate spike %R value was < lower control limit

EFERENCES

United States Environmental Protection Agency (USEPA). 2017a. *Contract Laboratory Program National Functional Guidelines for Inorganic Superfund Methods Data Review.* Office of Superfund Remediation and Technical Innovation. January 2017. OLEM 9355.0-135. EPA-540-R-201 7-001.

USEPA. 2017b. *Contract Laboratory Program National Functional Guidelines for Organic Superfund Data Review.* Office of Superfund Remediation and Technical Innovation. January 2017. OLEM 9355.0-136. EPA-540-R-2017-002.

USEPA. 2009. *Guidance for Labeling Externally Validated Laboratory Analytical Data for Superfund Use*. January 13, 2009. USEPA 540-R-08-005.

USEPA. 1996. *Test Methods for Evaluating Solid Waste, Physical/Chemical Methods,* SW-846, Third Edition, December 1996.

Ecology (Washington State Department of). 1997. *Analytical Methods for Petroleum Hydrocarbons.* Publication No. ECY 97-602. June 1997.

The Riley Group, Inc. 2019. *Interim Action Work Plan, Roystone Redevelopment.* The Riley Group, Inc., Bothell, Washington. Prepared for Roystone On Queen Anne, LLC. August 29, 2019.

APPENDIX G

Waste Disposal Documentation

RILEYGROUP

HISTORY TICKET INQUIRY

BEGIN DATE	5/7/2020	LOCATION	98846900
END DATE	8/24/2020	CUSTOMER	9849596
SELL/BUY/TR/	ALL	ORDER	64139
SHIP/RECEIVE	ALL		

Ticket	Date	Time	Customer	Order	Product	Vehicle	Qty	Unit
1124505745	5/7/2020	2:10:44 PM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	FIS27TT	35.76	Ton
1124505746	5/7/2020	2:19:58 PM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	FIS21TT	36.04	Ton
1124505752	5/11/2020	8:13:23 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	FIS10TT	38.04	Ton
1124505754	5/11/2020	8:29:11 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	FIS23TT	32.58	Ton
1124505756	5/11/2020	9:09:37 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	FIS18TT	28.81	Ton
1124505757	5/11/2020	9:19:52 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	RST10TT	24.58	Ton
1124505758	5/11/2020	9:32:00 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	RST14TT	29.16	Ton
1124505759	5/11/2020	9:59:41 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	FIS10TT	29.90	Ton
1124505760	5/11/2020	10:07:19 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	ONE180TT	30.68	Ton
1124505761	5/11/2020	10:11:51 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	FIS23TT	29.52	Ton
1124505762	5/11/2020	10:59:31 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	FIS21TT	27.81	Ton
1124505763	5/11/2020	11:11:53 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	RST10TT	21.76	Ton
1124505765	5/11/2020	11:22:55 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	RST14TT	26.63	Ton
1124505766	5/11/2020	12:00:46 PM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	FIS27TT	27.32	Ton
1124505767	5/11/2020	12:12:14 PM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	ONE180TT	29.66	Ton
1124505768	5/11/2020	12:20:46 PM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	FIS10TT	32.14	Ton
1124505769	5/11/2020	12:33:03 PM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	FIS23TT	28.76	Ton
1124505770	5/11/2020	1:46:17 PM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	FIS18TT	23.84	Ton
1124505772	5/11/2020	2:11:08 PM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	FIS10TT	29.78	Ton
1124505773	5/11/2020	2:38:29 PM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	FIS23TT	31.85	Ton
1124505820	5/20/2020	10:56:03 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	FIS23TT	33.88	Ton
1124505821	5/20/2020	11:09:46 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	FIS20TT	31.42	Ton
1124505822	5/20/2020	11:22:47 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	FIS22TT	31.32	Ton
1124505827	5/20/2020	1:53:27 PM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	FIS23TT	32.38	Ton
1124505828	5/20/2020	1:53:55 PM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	FIS20TT	27.18	Ton
1124505829	5/20/2020	1:54:20 PM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	FIS22TT	31.29	Ton
1124505843	5/26/2020	6:58:37 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	FIS21TT	33.79	Ton
1124505844	5/26/2020	6:59:09 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	FIS10TT	33.69	Ton
1124505845	5/26/2020	6:59:25 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	FIS23TT	31.10	Ton
1124505846	5/26/2020	6:59:41 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	FIS26TT	34.29	Ton
1124505847	5/26/2020	6:59:58 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	FIS27TT	33.54	Ton
1124505848	5/26/2020	7:00:13 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	FIS21TT	28.99	Ton
1124505849	5/26/2020	7:00:27 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	FIS10TT	27.81	Ton
1124505850	5/26/2020	7:00:57 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	FIS23TT	31.01	Ton
1124505851	5/26/2020	7:01:11 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	FIS26TT	28.90	Ton
1124505852	5/26/2020	7:01:24 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	FIS27TT	28.02	Ton
1124505853	5/26/2020	7:01:36 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	FIS21TT	32.24	Ton
1124505854	5/26/2020	7:01:48 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	FIS10TT	30.52	Ton
1124505855	5/26/2020	7:02:05 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	FIS23TT	29.63	Ton
1124505856	5/26/2020	7:02:23 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	FIS26TT	30.82	Ton
1124505857	5/26/2020	7:02:38 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	FIS27TT	30.49	Ton
1124505876	6/4/2020	8:03:52 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	FIS24TT	29.59	Ton
1124505877	6/4/2020	8:20:10 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	RST14TT	27.19	Ton
1124505879	6/4/2020	8:33:56 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	SPR32TT	23.70	Ton
1124505880	6/4/2020	9:16:36 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	SPR32TT	0.00	Ton
1124505881	6/4/2020	9:17:01 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	SPR30TT	29.19	Ton
1124505882	6/4/2020	9:29:32 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	SPR39TT	30.17	Ton
1124505883	6/4/2020	9:34:52 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	PPI95TT	25.30	Ton
1124505884	6/4/2020	9:36:20 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	PPI9TT	30.87	Ton
1124505885	6/4/2020	10:14:22 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	FIS24TT	31.76	Ton
1124505887	6/4/2020	10:26:53 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	SPR32TT	23.41	Ton
1124505888	6/4/2020	10:41:40 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	RST14TT	28.08	Ton
1124505890	6/4/2020	11:07:57 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	SPR30TT	29.59	Ton
1124505891	6/4/2020	11:23:17 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	PPI95TT	28.71	Ton
1124505892	6/4/2020	11:38:17 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	PPI9TT	31.62	Ton
1124505893	6/4/2020	11:51:40 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	SPR39TT	33.29	Ton
1124505894	6/4/2020	11:58:12 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	FIS24TT	31.39	Ton
1124505895	6/4/2020	12:11:33 PM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	SPR32TT	22.81	Ton
1124505897	6/4/2020	1:09:13 PM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	SPR30TT	31.54	Ton
1124505898	6/4/2020	1:17:53 PM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	PPI95TT	28.33	Ton
1124505899	6/4/2020	1:28:59 PM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	PPI9TT	27.70	Ton
1124505900	6/4/2020	1:42:53 PM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	SPR39TT	29.99	Ton
1124505901	6/4/2020	1:54:56 PM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	FIS24TT	24.51	Ton
1124505902	6/4/2020	2:05:06 PM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	SPR32TT	22.11	Ton
1124505903	6/5/2020	7:47:46 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	FIS24TT	26.69	Ton

1124505904	6/5/2020	8:02:15 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	PPI95TT	26.00	Ton
1124505905	6/5/2020	8:08:09 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	SPR32TT	24.37	Ton
1124505906	6/5/2020	8:20:05 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	SPR30TT	25.55	Ton
1124505907	6/5/2020	8:22:39 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	PPI9TT	27.33	Ton
1124505908	6/5/2020	8:31:13 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	SPR39TT	30.07	Ton
1124505909	6/5/2020	9:23:46 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	FIS24TT	30.44	Ton
1124505910	6/5/2020	9:34:51 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	PPI95TT	28.88	Ton
1124505911	6/5/2020	9:43:56 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	SPR32TT	25.70	Ton
1124505912	6/5/2020	9:54:41 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	SPR30TT	26.47	Ton
1124505913	6/5/2020	10:02:51 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	PPI9TT	26.42	Ton
1124505914	6/5/2020	10:11:08 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	SPR39TT	28.38	Ton
1124505915	6/5/2020	10:58:22 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	FIS24TT	30.63	Ton
1124505916	6/5/2020	11:11:32 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	PPI95TT	27.69	Ton
1124505917	6/5/2020	11:26:41 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	SPR32TT	26.07	Ton
1124505918	6/5/2020	11:42:53 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	SPR30TT	28.16	Ton
1124505919	6/5/2020	11:51:11 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	SPR39TT	29.61	Ton
1124505920	6/5/2020	12:03:39 PM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	PPI9TT	26.09	Ton
1124506107	6/11/2020	8:04:06 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	RST17TT	35.51	Ton
1124506109	6/11/2020	8:07:24 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	ELK1TT	29.70	Ton
1124506115	6/11/2020	8:20:50 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	SCO5TT	24.65	Ton
1124506138	6/11/2020	9:57:52 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	RST17TT	26.39	Ton
1124506139	6/11/2020	9:59:04 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	ELK1TT	22.78	Ton
1124506146	6/11/2020	10:14:18 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	SCO5TT	22.52	Ton
1124506164	6/11/2020	11:37:30 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	ELK1TT	25.56	Ton
1124506167	6/11/2020	11:43:22 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	RST17TT	27.98	Ton
1124506182	6/11/2020	12:30:55 PM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	SCO5TT	26.01	Ton
1124506194	6/11/2020	1:27:00 PM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	ELK1TT	27.21	Ton
1124506199	6/11/2020	1:38:52 PM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	RST17TT	32.44	Ton
1124506214	6/11/2020	2:25:14 PM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	SCO5TT	24.60	Ton
1124506234	6/12/2020	7:55:07 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	FIS18TT	30.03	Ton
1124506238	6/12/2020	8:02:13 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	SAL5TT	31.58	Ton
1124506240	6/12/2020	8:05:54 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	ELK1TT	27.49	Ton
1124506285	6/12/2020	9:45:59 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	FIS18TT	26.37	Ton
1124506287	6/12/2020	9:50:22 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	SAL5TT	26.06	Ton
1124506291	6/12/2020	9:59:21 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	ELK1TT	25.87	Ton
1124506330	6/12/2020	11:28:48 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	FIS18TT	23.90	Ton
1124506333	6/12/2020	11:33:45 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	SAL5TT	28.28	Ton
1124506338	6/12/2020	11:40:36 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	ELK1TT	26.04	Ton
1124506372	6/12/2020	1:20:24 PM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	FIS18TT	27.19	Ton
1124506380	6/12/2020	1:41:03 PM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	SAL5TT	27.03	Ton
1124506412	6/15/2020	7:47:13 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	ELK1TT	28.44	Ton
1124506417	6/15/2020	8:00:43 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	FIS18TT	29.23	Ton
1124506421	6/15/2020	8:13:27 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	SAL5TT	30.33	Ton
1124506425	6/15/2020	8:18:22 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	RST10TT	23.19	Ton
1124506453	6/15/2020	9:28:26 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	ELK1TT	27.27	Ton
1124506457	6/15/2020	9:41:40 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	FIS18TT	28.07	Ton
1124506459	6/15/2020	9:52:08 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	SAL5TT	31.11	Ton
1124506468	6/15/2020	10:08:55 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	RST10TT	24.92	Ton
1124506489	6/15/2020	11:17:42 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	ELK1TT	27.96	Ton
1124506495	6/15/2020	11:29:29 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	FIS18TT	29.09	Ton
1124506497	6/15/2020	11:33:16 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	SAL5TT	30.37	Ton
1124506502	6/15/2020	11:49:01 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	RST10TT	24.95	Ton
1124506547	6/15/2020	1:13:36 PM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	FIS18TT	29.19	Ton
1124506549	6/15/2020	1:27:17 PM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	RST10TT	25.76	Ton
1124506550	6/15/2020	1:30:51 PM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	SAL5TT	31.88	Ton
1124506577	6/16/2020	7:56:31 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	FIS18TT	31.09	Ton
1124506578	6/16/2020	7:58:57 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	SAL5TT	34.03	Ton
1124506579	6/16/2020	8:00:36 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	ELK1TT	29.83	Ton
1124506581	6/16/2020	8:12:07 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	RST10TT	27.54	Ton
1124506584	6/16/2020	8:24:54 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	RST11TT	28.07	Ton
1124506585	6/16/2020	8:54:28 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	LII8TT	30.09	Ton
1124506586	6/16/2020	9:21:04 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	FIS23TT	31.96	Ton
1124506587	6/16/2020	9:37:01 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	ELK1TT	30.58	Ton
1124506589	6/16/2020	9:48:24 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	FIS18TT	34.66	Ton
1124506590	6/16/2020	9:50:42 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	SAL5TT	31.83	Ton
1124506591	6/16/2020	9:52:07 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	RST10TT	24.36	Ton
1124506594	6/16/2020	10:09:22 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	RST11TT	25.28	Ton
1124506598	6/16/2020	11:13:11 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	FIS25TT	26.81	Ton
1124506599	6/16/2020	11:20:52 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	ELK1TT	29.99	Ton
1124506600	6/16/2020	11:26:28 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	FIS23TT	27.53	Ton
1124506601	6/16/2020	11:28:13 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	RST10TT	26.03	Ton
1124506604	6/16/2020	11:43:13 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	SAL5TT	31.92	Ton
1124506605	6/16/2020	11:45:56 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	FIS18TT	28.60	Ton
1124506606	6/16/2020	11:49:25 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	RST11TT	27.98	Ton
1124506611	6/16/2020	12:36:18 PM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	ELK1TT	0.00	Ton
1124506613	6/16/2020	12:58:01 PM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	ELK7TT	26.12	Ton

1124506614	6/16/2020	1:03:38 PM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	FIS25TT	25.19	Ton
1124506615	6/16/2020	1:12:02 PM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	ELK1TT	29.27	Ton
1124506616	6/16/2020	1:21:09 PM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	FIS23TT	28.24	Ton
1124506618	6/16/2020	1:34:09 PM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	SAL5TT	30.85	Ton
1124506620	6/16/2020	1:52:49 PM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	FIS18TT	29.99	Ton
1124506621	6/17/2020	7:51:20 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	FIS27TT	30.42	Ton
1124506622	6/17/2020	7:59:13 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	FIS24TT	24.82	Ton
1124506624	6/17/2020	8:09:07 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	FIS18TT	30.53	Ton
1124506625	6/17/2020	8:10:53 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	SAL5TT	32.21	Ton
1124506632	6/17/2020	9:29:08 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	FIS27TT	27.81	Ton
1124506634	6/17/2020	9:43:38 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	FIS24TT	27.83	Ton
1124506637	6/17/2020	9:55:49 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	FIS18TT	31.86	Ton
1124506638	6/17/2020	9:57:45 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	SAL5TT	31.56	Ton
1124506652	6/17/2020	2:14:26 PM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	FIS24TT	27.99	Ton
1124506654	6/17/2020	2:34:25 PM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	SAL5TT	30.82	Ton
1124506655	6/17/2020	2:48:11 PM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	FIS18TT	30.63	Ton
1124506657	6/18/2020	7:44:36 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	FIS27TT	29.96	Ton
1124506658	6/18/2020	7:59:29 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	FIS26TT	32.85	Ton
1124506659	6/18/2020	8:09:14 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	SAL5TT	32.69	Ton
1124506662	6/18/2020	8:16:35 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	FIS18TT	32.23	Ton
1124506665	6/18/2020	8:24:19 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	LII8TT	30.92	Ton
1124506668	6/18/2020	9:42:46 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	FIS27TT	30.79	Ton
1124506670	6/18/2020	9:45:05 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	ELK1TT	32.23	Ton
1124506671	6/18/2020	9:49:12 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	FIS26TT	31.18	Ton
1124506672	6/18/2020	9:59:08 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	SAL5TT	33.37	Ton
1124506674	6/18/2020	10:10:21 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	FIS18TT	33.88	Ton
1124506676	6/18/2020	10:13:21 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	LII8TT	33.53	Ton
1124506678	6/18/2020	11:21:13 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	FIS27TT	29.74	Ton
1124506679	6/18/2020	11:29:48 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	ELK1TT	33.61	Ton
1124506680	6/18/2020	11:31:27 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	FIS26TT	30.29	Ton
1124506682	6/18/2020	11:41:03 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	SAL5TT	32.73	Ton
1124506683	6/18/2020	11:56:07 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	FIS18TT	30.11	Ton
1124506685	6/18/2020	12:03:17 PM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	LII8TT	32.85	Ton
1124506686	6/18/2020	1:44:30 PM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	FIS18TT	27.15	Ton
1124506688	6/18/2020	1:47:25 PM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	FIS27TT	31.96	Ton
1124506689	6/18/2020	1:47:38 PM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	ELK1TT	26.13	Ton
1124506690	6/18/2020	1:47:53 PM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	FIS26TT	29.08	Ton
1124506691	6/18/2020	1:48:04 PM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	SAL5TT	29.96	Ton
1124506694	6/18/2020	1:53:33 PM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	LII8TT	28.95	Ton
1124506900	6/24/2020	7:48:02 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	ELK1TT	31.31	Ton
1124506901	6/24/2020	7:55:24 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	ELK7TT	32.54	Ton
1124506902	6/24/2020	8:03:38 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	FIS21TT	35.22	Ton
1124506906	6/24/2020	8:14:10 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	FIS16TT	32.43	Ton
1124506911	6/24/2020	8:24:19 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	SAL5TT	30.93	Ton
1124506914	6/24/2020	8:32:27 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	FIS18TT	31.53	Ton
1124506919	6/24/2020	8:42:31 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	FIS10TT	35.63	Ton
1124506923	6/24/2020	8:57:58 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	RST14TT	27.73	Ton
1124506924	6/24/2020	9:28:16 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	ELK1TT	26.92	Ton
1124506925	6/24/2020	9:39:30 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	ELK7TT	30.03	Ton
1124506927	6/24/2020	9:43:04 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	FIS21TT	26.72	Ton
1124506931	6/24/2020	9:50:38 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	FIS16TT	28.17	Ton
1124506934	6/24/2020	10:04:41 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	SAL5TT	32.91	Ton
1124506939	6/24/2020	10:19:21 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	FIS10TT	28.83	Ton
1124506943	6/24/2020	10:33:23 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	FIS18TT	27.28	Ton
1124506944	6/24/2020	10:47:42 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	RST14TT	23.53	Ton
1124506955	6/24/2020	12:02:56 PM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	ELK7TT	30.25	Ton
1124506956	6/24/2020	12:08:08 PM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	FIS21TT	28.99	Ton
1124506957	6/24/2020	12:21:18 PM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	FIS16TT	30.39	Ton
1124506958	6/24/2020	12:30:27 PM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	SAL5TT	28.02	Ton
1124506959	6/24/2020	12:39:12 PM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	FIS10TT	32.77	Ton
1124506960	6/24/2020	12:45:35 PM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	FIS18TT	26.19	Ton
1124506961	6/24/2020	12:49:26 PM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	RST14TT	25.06	Ton
1124506963	6/24/2020	1:46:53 PM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	ELK7TT	29.91	Ton
1124506964	6/24/2020	1:56:52 PM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	FIS21TT	30.25	Ton
1124506965	6/24/2020	2:06:31 PM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	FIS16TT	34.25	Ton
1124506966	6/24/2020	2:15:57 PM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	SAL5TT	30.81	Ton
1124506967	6/24/2020	2:24:57 PM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	FIS10TT	34.46	Ton
1124506968	6/24/2020	2:35:03 PM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	FIS18TT	28.82	Ton
1124506969	6/24/2020	2:42:02 PM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	RST14TT	25.03	Ton
1124506970	6/25/2020	7:56:52 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	ELK7TT	30.82	Ton
1124506973	6/25/2020	8:01:41 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	FIS21TT	29.29	Ton
1124507016	6/25/2020	9:41:35 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	ELK7TT	32.71	Ton
1124507019	6/25/2020	9:46:03 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	FIS21TT	32.98	Ton
1124507068	6/25/2020	11:39:25 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	FIS21TT	28.61	Ton
1124507113	6/25/2020	1:36:44 PM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	ELK7TT	28.82	Ton
1124507114	6/25/2020	1:41:03 PM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	FIS21TT	33.42	Ton

1124507174	6/26/2020	7:57:05 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	FIS18TT	29.80	Ton
1124507209	6/26/2020	9:45:32 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	FIS18TT	31.60	Ton
1124507241	6/26/2020	11:38:29 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	FIS18TT	30.24	Ton
1124507272	6/26/2020	1:39:57 PM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	FIS18TT	31.19	Ton
1124507998	7/9/2020	7:57:02 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	ELK1TT	33.67	Ton
1124507999	7/9/2020	8:02:28 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	ELK7TT	32.75	Ton
1124508000	7/9/2020	8:05:03 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	FIS16TT	32.69	Ton
1124508001	7/9/2020	8:10:35 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	FIS22TT	29.46	Ton
1124508005	7/9/2020	8:20:54 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	SAL5TT	34.37	Ton
1124508010	7/9/2020	8:32:15 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	FIS20TT	31.47	Ton
1124508015	7/9/2020	8:45:15 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	FIS18TT	32.42	Ton
1124508029	7/9/2020	9:30:18 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	ELK1TT	28.85	Ton
1124508030	7/9/2020	9:36:10 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	ELK7TT	29.82	Ton
1124508031	7/9/2020	9:44:35 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	FIS16TT	29.33	Ton
1124508034	7/9/2020	9:51:39 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	FIS22TT	30.88	Ton
1124508037	7/9/2020	10:00:14 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	SAL5TT	30.32	Ton
1124508041	7/9/2020	10:12:05 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	FIS20TT	29.39	Ton
1124508049	7/9/2020	10:34:36 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	FIS18TT	27.07	Ton
1124508059	7/9/2020	11:12:23 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	ELK7TT	31.39	Ton
1124508061	7/9/2020	11:21:46 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	FIS16TT	34.34	Ton
1124508064	7/9/2020	11:32:58 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	FIS22TT	33.37	Ton
1124508066	7/9/2020	11:38:55 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	SAL5TT	33.22	Ton
1124508071	7/9/2020	11:57:56 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	FIS20TT	32.83	Ton
1124508081	7/9/2020	12:25:36 PM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	FIS18TT	32.84	Ton
1124508089	7/9/2020	1:00:33 PM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	ELK7TT	31.87	Ton
1124508091	7/9/2020	1:12:30 PM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	FIS22TT	28.65	Ton
1124508095	7/9/2020	1:28:00 PM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	SAL5TT	31.12	Ton
1124508102	7/9/2020	1:45:06 PM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	FIS20TT	28.38	Ton
1124508110	7/9/2020	2:08:44 PM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	FIS18TT	30.50	Ton
1124508152	7/10/2020	6:55:09 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	FIS16TT	31.74	Ton
1124508157	7/10/2020	7:45:20 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	ELK1TT	29.25	Ton
1124508158	7/10/2020	7:58:56 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	ELK7TT	33.78	Ton
1124508166	7/10/2020	8:13:51 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	FIS18TT	31.03	Ton
1124508169	7/10/2020	8:20:45 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	SAL5TT	29.77	Ton
1124508199	7/10/2020	9:22:40 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	ELK1TT	29.63	Ton
1124508207	7/10/2020	9:39:59 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	ELK7TT	25.82	Ton
1124508208	7/10/2020	9:41:09 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	SAL5TT	0.00	Ton
1124508213	7/10/2020	9:51:09 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	FIS18TT	29.74	Ton
1124508216	7/10/2020	9:55:54 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	SAL5TT	32.03	Ton
1124508250	7/10/2020	11:12:24 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	ELK1TT	30.69	Ton
1124508258	7/10/2020	11:26:36 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	ELK7TT	29.83	Ton
1124508263	7/10/2020	11:36:08 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	FIS18TT	31.14	Ton
1124508268	7/10/2020	11:47:08 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	SAL5TT	32.50	Ton
1124508308	7/10/2020	1:18:40 PM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	ELK7TT	34.69	Ton
1124508312	7/10/2020	1:30:54 PM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	FIS18TT	31.65	Ton
1124508314	7/10/2020	1:35:28 PM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	SAL5TT	34.42	Ton
1124508441	7/13/2020	1:21:50 PM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	FIS22	17.10	Ton
1124508480	7/13/2020	3:03:29 PM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	FIS22	15.87	Ton
1124508580	7/16/2020	7:48:19 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	FIS18TT	35.21	Ton
1124508584	7/16/2020	8:09:40 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	PPD19TT	30.92	Ton
1124508591	7/16/2020	8:40:26 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	BRO10TT	32.14	Ton
1124508595	7/16/2020	8:50:47 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	COA4TT	29.83	Ton
1124508596	7/16/2020	8:52:28 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	SSB102TT	29.47	Ton
1124508600	7/16/2020	9:05:13 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	K&A306TT	29.30	Ton
1124508606	7/16/2020	9:32:47 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	FIS18TT	27.64	Ton
1124508607	7/16/2020	9:39:17 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	FIS26TT	35.48	Ton
1124508608	7/16/2020	9:39:38 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	FIS26TT	26.67	Ton
1124508611	7/16/2020	9:59:32 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	PPD19TT	26.84	Ton
1124508622	7/16/2020	10:20:38 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	BRO10TT	28.91	Ton
1124508626	7/16/2020	10:31:53 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	SSB102TT	29.37	Ton
1124508629	7/16/2020	10:40:46 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	COA4TT	29.78	Ton
1124508635	7/16/2020	11:19:39 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	FIS18TT	33.47	Ton
1124508636	7/16/2020	11:21:43 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	FIS26TT	34.92	Ton
1124508639	7/16/2020	11:39:58 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	PPD19TT	30.56	Ton
1124508646	7/16/2020	12:05:27 PM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	BRO10TT	32.10	Ton
1124508649	7/16/2020	12:13:46 PM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	K&A306TT	28.06	Ton
1124508650	7/16/2020	12:14:20 PM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	K&A306TT	32.16	Ton
1124508653	7/16/2020	12:19:44 PM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	SSB102TT	32.28	Ton
1124508655	7/16/2020	12:22:28 PM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	COA4TT	34.10	Ton
1124508662	7/16/2020	1:06:46 PM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	FIS26TT	30.68	Ton
1124508664	7/16/2020	1:10:39 PM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	FIS18TT	31.00	Ton
1124508669	7/16/2020	1:24:47 PM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	PPD19TT	29.38	Ton
1124508673	7/16/2020	1:53:17 PM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	BRO10TT	33.85	Ton
1124508676	7/16/2020	2:02:31 PM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	K&A306TT	31.11	Ton
1124508678	7/16/2020	2:11:16 PM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	SSB102TT	29.93	Ton
1124508683	7/16/2020	2:20:22 PM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	COA4TT	34.39	Ton

1124508690	7/16/2020	2:52:51 PM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	FIS26TT	32.25	Ton
1124508695	7/16/2020	3:12:12 PM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	FIS18TT	31.62	Ton
1124508704	7/17/2020	7:50:09 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	FIS18TT	34.59	Ton
1124508705	7/17/2020	7:54:30 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	SAL5TT	33.63	Ton
1124508706	7/17/2020	8:03:26 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	PPD19TT	30.18	Ton
1124508710	7/17/2020	8:13:39 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	COA4TT	27.64	Ton
1124508712	7/17/2020	8:19:47 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	BRO10TT	0.00	Ton
1124508720	7/17/2020	8:38:52 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	SSB102TT	29.97	Ton
1124508731	7/17/2020	9:34:06 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	FIS18TT	32.48	Ton
1124508732	7/17/2020	9:39:33 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	SAL5TT	32.86	Ton
1124508736	7/17/2020	9:48:29 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	PPD19TT	31.17	Ton
1124508741	7/17/2020	10:02:54 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	BRO7TT	30.73	Ton
1124508742	7/17/2020	10:03:21 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	BRO7TT	28.54	Ton
1124508746	7/17/2020	10:12:50 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	COA4TT	30.79	Ton
1124508749	7/17/2020	10:24:16 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	SSB102TT	31.50	Ton
1124508761	7/17/2020	11:18:32 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	SAL5TT	31.48	Ton
1124508766	7/17/2020	11:32:46 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	FIS18TT	30.51	Ton
1124508768	7/17/2020	11:39:22 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	PPD19TT	28.42	Ton
1124508771	7/17/2020	11:45:37 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	BRO7TT	30.08	Ton
1124508776	7/17/2020	11:58:05 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	COA4TT	31.14	Ton
1124508778	7/17/2020	12:01:53 PM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	SSB102TT	30.38	Ton
1124508790	7/17/2020	1:13:30 PM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	ELK1TT	30.39	Ton
1124508792	7/17/2020	1:17:41 PM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	SAL5TT	32.70	Ton
1124508795	7/17/2020	1:34:26 PM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	PPD19TT	30.08	Ton
1124508797	7/17/2020	1:43:48 PM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	FIS18TT	33.11	Ton
1124508799	7/17/2020	1:47:52 PM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	BRO7TT	30.23	Ton
1124508801	7/17/2020	1:50:43 PM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	SSB102TT	30.73	Ton
1124508804	7/17/2020	1:59:22 PM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	COA4TT	30.88	Ton
1124508823	7/20/2020	7:49:41 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	ELK7TT	35.32	Ton
1124508824	7/20/2020	8:00:56 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	FIS18TT	32.43	Ton
1124508825	7/20/2020	8:09:40 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	FIS24TT	32.04	Ton
1124508826	7/20/2020	8:22:41 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	COA4TT	30.22	Ton
1124508827	7/20/2020	9:26:31 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	ELK7TT	28.32	Ton
1124508828	7/20/2020	9:46:17 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	FIS18TT	32.78	Ton
1124508829	7/20/2020	9:50:47 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	FIS24TT	32.30	Ton
1124508830	7/20/2020	10:05:54 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	COA4TT	30.02	Ton
1124508834	7/20/2020	10:44:02 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	PPD19TT	31.46	Ton
1124508835	7/20/2020	11:07:27 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	ELK7TT	31.72	Ton
1124508838	7/20/2020	11:27:43 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	FIS18TT	31.37	Ton
1124508840	7/20/2020	11:37:14 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	FIS24TT	32.77	Ton
1124508842	7/20/2020	11:45:32 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	COA4TT	28.55	Ton
1124508848	7/20/2020	12:30:05 PM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	PPD19TT	27.32	Ton
1124508849	7/20/2020	12:41:32 PM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	ELK7TT	34.78	Ton
1124508850	7/20/2020	1:10:56 PM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	FIS18TT	31.06	Ton
1124508851	7/20/2020	1:25:19 PM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	FIS24TT	29.99	Ton
1124508852	7/20/2020	1:30:09 PM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	COA4TT	27.15	Ton
1124508853	7/20/2020	2:20:08 PM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	PPD19TT	29.06	Ton
1124508854	7/20/2020	2:40:28 PM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	ELK7TT	32.37	Ton
1124508923	7/27/2020	7:43:03 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	ELK1TT	29.58	Ton
1124508924	7/27/2020	7:51:01 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	ELK7TT	30.19	Ton
1124508925	7/27/2020	8:00:53 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	FIS24TT	0.00	Ton
1124508926	7/27/2020	8:02:02 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	FIS25TT	28.71	Ton
1124508928	7/27/2020	8:11:10 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	SAL5TT	31.40	Ton
1124508929	7/27/2020	8:14:56 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	RST14TT	26.79	Ton
1124508932	7/27/2020	8:29:36 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	PLA03TT	28.88	Ton
1124508940	7/27/2020	9:13:41 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	ELK1TT	28.92	Ton
1124508941	7/27/2020	9:30:36 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	ELK7TT	31.72	Ton
1124508942	7/27/2020	9:39:11 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	FIS25TT	30.82	Ton
1124508943	7/27/2020	9:49:45 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	SAL5TT	31.43	Ton
1124508944	7/27/2020	10:01:09 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	RST14TT	26.51	Ton
1124508946	7/27/2020	10:08:10 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	PLA03TT	30.80	Ton
1124508954	7/27/2020	10:54:34 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	ELK1TT	31.39	Ton
1124508955	7/27/2020	11:08:02 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	ELK7TT	34.49	Ton
1124508956	7/27/2020	11:12:09 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	FIS25TT	33.56	Ton
1124508957	7/27/2020	11:28:32 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	SAL5TT	35.67	Ton
1124508958	7/27/2020	11:42:11 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	RST14TT	28.33	Ton
1124508959	7/27/2020	11:47:48 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	PLA03TT	33.28	Ton
1124508960	7/27/2020	12:33:21 PM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	ELK1TT	30.39	Ton
1124508961	7/27/2020	12:49:56 PM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	ELK7TT	33.74	Ton
1124508962	7/27/2020	12:54:31 PM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	FIS25TT	30.84	Ton
1124508963	7/27/2020	1:07:12 PM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	SAL5TT	30.98	Ton
1124508964	7/27/2020	1:23:14 PM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	RST14TT	28.02	Ton
1124508966	7/27/2020	1:39:18 PM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	PLA03TT	29.12	Ton
1124508967	7/27/2020	2:24:35 PM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	ELK1TT	30.07	Ton
1124508968	7/27/2020	2:31:59 PM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	FIS25TT	33.51	Ton
1124508971	7/27/2020	2:41:12 PM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	ELK7TT	32.35	Ton

1124508972	7/27/2020	2:54:11 PM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	SAL5TT	33.43	Ton
1124508973	7/28/2020	7:43:02 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	ELK1TT	31.84	Ton
1124508974	7/28/2020	7:50:53 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	FIS25TT	32.19	Ton
1124508976	7/28/2020	8:02:26 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	NWS21TT	34.16	Ton
1124508977	7/28/2020	8:04:24 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	FIS24TT	0.00	Ton
1124508981	7/28/2020	8:13:30 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	FIS24TT	0.00	Ton
1124508983	7/28/2020	8:27:21 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	PPI7TT	34.04	Ton
1124508990	7/28/2020	9:22:14 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	COA77TT	28.69	Ton
1124508991	7/28/2020	9:24:37 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	ELK1TT	27.61	Ton
1124508992	7/28/2020	9:27:38 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	RAMEX2TT	31.98	Ton
1124508993	7/28/2020	9:31:25 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	FIS25TT	35.23	Ton
1124508996	7/28/2020	9:41:15 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	NWS21TT	36.52	Ton
1124509002	7/28/2020	10:15:20 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	ELK7TT	31.97	Ton
1124509004	7/28/2020	10:30:25 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	PPI7TT	30.25	Ton
1124509011	7/28/2020	11:18:09 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	ELK1TT	31.63	Ton
1124509012	7/28/2020	11:24:05 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	RAMEX2TT	32.31	Ton
1124509014	7/28/2020	11:31:10 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	FIS25TT	30.37	Ton
1124509017	7/28/2020	11:35:24 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	COA77TT	30.26	Ton
1124509019	7/28/2020	11:45:29 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	NWS21TT	35.79	Ton
1124509022	7/28/2020	12:01:28 PM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	ELK7TT	32.68	Ton
1124509024	7/28/2020	12:09:58 PM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	PPI7TT	29.95	Ton
1124509029	7/28/2020	12:52:03 PM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	ELK1TT	31.92	Ton
1124509032	7/28/2020	1:02:33 PM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	RAMEX2TT	32.10	Ton
1124509033	7/28/2020	1:06:21 PM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	FIS25TT	35.26	Ton
1124509037	7/28/2020	1:14:55 PM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	COA77TT	29.32	Ton
1124509040	7/28/2020	1:26:22 PM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	NWS21TT	37.27	Ton
1124509044	7/28/2020	1:56:52 PM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	PPI7TT	31.48	Ton
1124509047	7/28/2020	2:31:25 PM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	ELK1TT	29.68	Ton
1124509048	7/28/2020	2:46:12 PM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	HAR19TT	33.01	Ton
1124509050	7/28/2020	2:57:51 PM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	RAMEX2TT	35.19	Ton
1124509052	7/28/2020	3:03:40 PM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	FIS25TT	32.57	Ton
1124509053	7/28/2020	3:12:48 PM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	COA77TT	32.32	Ton
1124509054	7/28/2020	3:22:52 PM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	NWS21TT	34.77	Ton
1124509056	7/29/2020	7:49:07 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	NWS21TT	35.39	Ton
1124509066	7/29/2020	8:27:40 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	KIN10TT	32.62	Ton
1124509072	7/29/2020	9:31:44 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	NWS21TT	33.59	Ton
1124509086	7/29/2020	10:21:41 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	KIN10TT	30.62	Ton
1124509096	7/29/2020	11:25:32 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	NWS21TT	33.37	Ton
1124509103	7/29/2020	11:56:04 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	NWS21TT	32.89	Ton
1124509113	7/29/2020	12:26:00 PM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	KIN10TT	29.47	Ton
1124509636	8/7/2020	7:49:30 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	FIS23TT	32.58	Ton
1124509637	8/7/2020	8:03:50 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	FIS20TT	32.67	Ton
1124509638	8/7/2020	8:11:53 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	FIS23TT	0.00	Ton
1124509640	8/7/2020	8:24:37 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	SAL5TT	36.37	Ton
1124509641	8/7/2020	8:28:47 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	FIS10TT	36.11	Ton
1124509642	8/7/2020	8:36:18 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	FIS18TT	33.71	Ton
1124509643	8/7/2020	8:51:26 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	FIS26TT	0.00	Ton
1124509644	8/7/2020	9:35:14 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	FIS22TT	0.00	Ton
1124509645	8/7/2020	9:35:52 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	FIS23TT	34.01	Ton
1124509646	8/7/2020	9:48:56 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	FIS20TT	30.16	Ton
1124509647	8/7/2020	10:00:07 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	FIS24TT	29.27	Ton
1124509648	8/7/2020	10:01:08 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	FIS24TT	33.29	Ton
1124509649	8/7/2020	10:03:49 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	SAL5TT	31.24	Ton
1124509652	8/7/2020	10:17:35 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	FIS10TT	31.78	Ton
1124509653	8/7/2020	10:28:26 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	FIS18TT	32.30	Ton
1124509654	8/7/2020	10:32:11 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	FIS26TT	0.00	Ton
1124509655	8/7/2020	11:18:34 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	FIS23TT	29.49	Ton
1124509656	8/7/2020	11:37:02 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	FIS20TT	31.62	Ton
1124509657	8/7/2020	11:47:42 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	FIS24TT	30.22	Ton
1124509659	8/7/2020	11:51:57 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	SAL5TT	34.17	Ton
1124509660	8/7/2020	12:02:19 PM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	FIS10TT	33.61	Ton
1124509661	8/7/2020	12:13:17 PM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	FIS18TT	31.51	Ton
1124509662	8/7/2020	12:15:03 PM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	FIS26TT	0.00	Ton
1124509663	8/7/2020	1:08:51 PM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	FIS23TT	28.53	Ton
1124509664	8/7/2020	1:37:40 PM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	FIS20TT	30.96	Ton
1124509665	8/7/2020	1:46:28 PM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	FIS24TT	29.80	Ton
1124509666	8/7/2020	1:52:18 PM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	SAL5TT	31.63	Ton
1124509667	8/7/2020	2:01:00 PM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	FIS26TT	31.68	Ton
1124509668	8/7/2020	2:01:43 PM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	FIS26TT	29.34	Ton
1124509669	8/7/2020	2:02:12 PM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	FIS26TT	28.45	Ton
1124509670	8/7/2020	2:08:35 PM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	FIS10TT	30.44	Ton
1124509671	8/7/2020	2:25:17 PM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	ELK7TT	32.79	Ton
1124509672	8/7/2020	2:40:45 PM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	FIS18TT	31.22	Ton
1124509673	8/7/2020	2:57:43 PM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	FIS26TT	29.64	Ton
1124509675	8/10/2020	7:55:57 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	FIS25TT	31.07	Ton
1124509676	8/10/2020	8:13:21 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	FIS26TT	31.22	Ton

1124509677	8/10/2020	9:07:22 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	ELK7TT	30.29	Ton
1124509679	8/10/2020	10:19:49 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	FIS26TT	34.44	Ton
1124509680	8/10/2020	10:25:44 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	FIS25TT	34.79	Ton
1124509681	8/10/2020	10:58:25 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	ELK7TT	32.32	Ton
1124509682	8/10/2020	11:18:13 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	ELK1TT	30.82	Ton
1124509683	8/10/2020	11:56:53 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	FIS26TT	29.83	Ton
1124509684	8/10/2020	12:01:22 PM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	FIS25TT	29.66	Ton
1124509687	8/10/2020	12:42:18 PM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	ELK7TT	34.19	Ton
1124509689	8/10/2020	12:57:47 PM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	ELK1TT	31.05	Ton
1124509692	8/10/2020	1:36:06 PM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	FIS26TT	32.69	Ton
1124509693	8/10/2020	1:43:45 PM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	FIS25TT	31.95	Ton
1124509694	8/10/2020	2:27:47 PM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	ELK7TT	30.46	Ton
1124509696	8/11/2020	8:00:41 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	FIS25TT	33.93	Ton
1124509698	8/11/2020	8:08:21 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	ELK1TT	30.60	Ton
1124509700	8/11/2020	8:26:19 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	FIS26TT	39.36	Ton
1124509701	8/11/2020	8:37:06 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	MLC02TT	30.37	Ton
1124509702	8/11/2020	8:51:07 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	JST732TT	29.89	Ton
1124509703	8/11/2020	8:58:39 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	RST14TT	29.45	Ton
1124509704	8/11/2020	9:09:29 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	RST17TT	30.51	Ton
1124509706	8/11/2020	9:47:30 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	FIS25TT	31.19	Ton
1124509707	8/11/2020	9:53:13 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	ELK1TT	26.48	Ton
1124509708	8/11/2020	10:09:23 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	FIS26TT	31.09	Ton
1124509711	8/11/2020	10:24:47 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	MLC02TT	29.97	Ton
1124509713	8/11/2020	10:38:51 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	JST732TT	27.62	Ton
1124509714	8/11/2020	10:43:38 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	RST14TT	26.92	Ton
1124509715	8/11/2020	11:23:59 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	ELK7TT	33.08	Ton
1124509716	8/11/2020	11:33:53 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	FIS25TT	31.20	Ton
1124509717	8/11/2020	11:42:10 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	ELK1TT	28.28	Ton
1124509718	8/11/2020	11:56:59 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	FIS26TT	31.53	Ton
1124509719	8/11/2020	12:08:19 PM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	MLC02TT	28.09	Ton
1124509720	8/11/2020	12:17:13 PM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	JST732TT	30.79	Ton
1124509722	8/11/2020	12:27:23 PM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	RST14TT	28.78	Ton
1124509723	8/11/2020	12:37:38 PM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	RST17TT	27.98	Ton
1124509724	8/11/2020	1:11:15 PM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	ELK7TT	33.47	Ton
1124509725	8/11/2020	1:19:20 PM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	FIS25TT	30.59	Ton
1124509726	8/11/2020	1:30:56 PM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	ELK1TT	28.72	Ton
1124509727	8/11/2020	1:47:34 PM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	FIS26TT	31.71	Ton
1124509728	8/11/2020	2:01:46 PM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	MLC02TT	28.73	Ton
1124509729	8/11/2020	2:09:47 PM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	JST732TT	28.76	Ton
1124509730	8/11/2020	2:19:13 PM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	RST14TT	28.65	Ton
1124509731	8/11/2020	2:38:09 PM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	RST17TT	23.25	Ton
1124509867	8/18/2020	7:57:51 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	FIS25TT	31.22	Ton
1124509869	8/18/2020	8:16:25 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	FIS24TT	32.34	Ton
1124509873	8/18/2020	8:34:54 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	RST17TT	30.32	Ton
1124509875	8/18/2020	8:41:38 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	RST4TT	31.05	Ton
1124509876	8/18/2020	9:45:02 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	FIS25TT	28.89	Ton
1124509878	8/18/2020	10:01:56 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	FIS24TT	26.06	Ton
1124509880	8/18/2020	10:19:15 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	RST4TT	28.69	Ton
1124509883	8/18/2020	10:31:25 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	RST17TT	27.11	Ton
1124509885	8/18/2020	11:25:36 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	FIS25TT	29.43	Ton
1124509886	8/18/2020	11:45:57 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	FIS24TT	31.90	Ton
1124509888	8/18/2020	11:57:45 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	RST4TT	29.61	Ton
1124509889	8/18/2020	12:11:52 PM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	RST17TT	27.83	Ton
1124509895	8/18/2020	1:12:13 PM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	FIS25TT	32.78	Ton
1124509896	8/18/2020	1:32:18 PM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	FIS24TT	28.16	Ton
1124509897	8/18/2020	1:39:31 PM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	RST4TT	26.01	Ton
1124509898	8/18/2020	2:49:49 PM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	RST17TT	29.13	Ton
1124509900	8/19/2020	7:54:33 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	FIS25TT	31.90	Ton
1124509905	8/19/2020	8:05:30 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	FIS24TT	31.22	Ton
1124509912	8/19/2020	8:16:31 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	RST4TT	31.84	Ton
1124509917	8/19/2020	8:27:43 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	RST17TT	34.59	Ton
1124509931	8/19/2020	9:02:22 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	SCH5TT	32.01	Ton
1124509934	8/19/2020	9:10:06 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	SCH1TT	33.07	Ton
1124509936	8/19/2020	9:16:24 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	JOS3TT	29.12	Ton
1124509942	8/19/2020	9:45:01 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	FIS25TT	35.66	Ton
1124509946	8/19/2020	9:54:40 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	FIS24TT	33.52	Ton
1124509950	8/19/2020	10:08:13 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	RST4TT	35.21	Ton
1124509955	8/19/2020	10:18:49 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	RST17TT	32.24	Ton
1124509967	8/19/2020	10:57:59 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	SCH1TT	32.24	Ton
1124509968	8/19/2020	11:11:09 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	SCH5TT	32.86	Ton
1124509971	8/19/2020	11:22:06 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	JOS3TT	27.80	Ton
1124509975	8/19/2020	11:30:57 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	FIS25TT	31.96	Ton
1124509980	8/19/2020	11:44:54 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	FIS24TT	30.56	Ton
1124509983	8/19/2020	11:52:18 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	RST4TT	28.02	Ton
1124509990	8/19/2020	12:11:03 PM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	RST17TT	24.98	Ton
1124510003	8/19/2020	12:49:33 PM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	SCH1TT	30.37	Ton

1124510009	8/19/2020	1:10:30 PM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	SCH5TT	32.96	Ton
1124510014	8/19/2020	1:20:47 PM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	JOS3TT	29.11	Ton
1124510019	8/19/2020	1:34:01 PM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	FIS25TT	28.51	Ton
1124510027	8/19/2020	1:53:34 PM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	FIS24TT	31.14	Ton
1124510028	8/19/2020	2:00:27 PM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	RST4TT	30.22	Ton
1124510032	8/19/2020	2:13:52 PM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	RST17TT	31.93	Ton
1124510054	8/24/2020	7:52:23 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	ELK1TT	29.73	Ton
1124510056	8/24/2020	8:11:22 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	NOR76TT	0.00	Ton
1124510103	8/24/2020	10:01:53 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	ELK1TT	28.40	Ton
1124510110	8/24/2020	10:15:24 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	PLA14TT	30.81	Ton
1124510140	8/24/2020	11:45:23 AM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	ELK1TT	28.21	Ton
1124510148	8/24/2020	12:12:15 PM	ROYSTONE ON QUEEN ANNE LLC	64139	CLASS 3 SOILS (TN)	PLA14TT	31.52	Ton

Tickets 533 15,758.35

Detail Customer Activity Report

August 20, 2020 to August 21, 2020

Specific Customer(s) : 333650

333650- Vibrant Cities LLC

Ticket Date	Facility & Ticket Number	Contract	Truck #	Container	Material	Material Rate	Billing Quantity	Material Total	Tax Total	Total
08/20/2020 I	01 987084	TB-10751	25 FISCHER		SW-CONT W/FUEL	53.50 F	30.51 TN	$1,632.29	$0.00	$1,632.29
08/20/2020 I	01 987087	TB-10751	24 FISCHER		SW-CONT W/FUEL	53.50 F	32.99 TN	$1,764.97	$0.00	$1,764.97
08/20/2020 I	01 987094	TB-10751	25 FISCHER		SW-CONT W/FUEL	53.50 F	33.91 TN	$1,814.19	$0.00	$1,814.19
08/20/2020 I	01 987098	TB-10751	24 FISCHER		SW-CONT W/FUEL	53.50 F	31.75 TN	$1,698.63	$0.00	$1,698.63
08/21/2020 I	01 987132	TB-10751	7 ELK HEIGHTS		SW-CONT W/FUEL	53.50 F	33.71 TN	$1,803.49	$0.00	$1,803.49
08/21/2020 I	01 987136	TB-10751	25 FISCHER		SW-CONT W/FUEL	53.50 F	35.33 TN	$1,890.16	$0.00	$1,890.16
08/21/2020 I	01 987140	TB-10751	24 FISCHER		SW-CONT W/FUEL	53.50 F	32.19 TN	$1,722.17	$0.00	$1,722.17
08/21/2020 I	01 987141	TB-10751	17 RST		SW-CONT W/FUEL	53.50 F	36.86 TN	$1,972.01	$0.00	$1,972.01
08/21/2020 I	01 987143	TB-10751	7 ELK HEIGHTS		SW-CONT W/FUEL	53.50 F	30.92 TN	$1,654.22	$0.00	$1,654.22
08/21/2020 I	01 987148	TB-10751	25 FISCHER		SW-CONT W/FUEL	53.50 F	32.44 TN	$1,735.54	$0.00	$1,735.54
08/21/2020 I	01 987152	TB-10751	24 FISCHER		SW-CONT W/FUEL	53.50 F	32.35 TN	$1,730.73	$0.00	$1,730.73
08/21/2020 I	01 987155	TB-10751	17 RST		SW-CONT W/FUEL	53.50 F	31.17 TN	$1,667.60	$0.00	$1,667.60
08/21/2020 I	01 987159	TB-10751	7 ELK HEIGHTS		SW-CONT W/FUEL	53.50 F	29.32 TN	$1,568.62	$0.00	$1,568.62
08/21/2020 I	01 987162	TB-10751	25 FISCHER		SW-CONT W/FUEL	53.50 F	33.51 TN	$1,792.79	$0.00	$1,792.79
08/21/2020 I	01 987165	TB-10751	24 FISCHER		SW-CONT W/FUEL	53.50 F	33.34 TN	$1,783.69	$0.00	$1,783.69
08/21/2020 I	01 987167	TB-10751	17 RST		SW-CONT W/FUEL	53.50 F	32.50 TN	$1,738.75	$0.00	$1,738.75
08/21/2020 I	01 987168	TB-10751	7 ELK HEIGHTS		SW-CONT W/FUEL	53.50 F	35.34 TN	$1,890.69	$0.00	$1,890.69
08/21/2020 I	01 987171	TB-10751	25 FISCHER		SW-CONT W/FUEL	53.50 F	32.20 TN	$1,722.70	$0.00	$1,722.70
08/21/2020 I	01 987175	TB-10751	24 FISCHER		SW-CONT W/FUEL	53.50 F	31.16 TN	$1,667.06	$0.00	$1,667.06
08/21/2020 I	01 987176	TB-10751	17 RST		SW-CONT W/FUEL	53.50 F	32.40 TN	$1,733.40	$0.00	$1,733.40
08/21/2020 I	01 987179	TB-10751	25 FISCHER		SW-CONT W/FUEL	53.50 F	34.32 TN	$1,836.12	$0.00	$1,836.12
08/21/2020 I	01 987181	TB-10751	7 ELK HEIGHTS		SW-CONT W/FUEL	53.50 F	33.60 TN	$1,797.60	$0.00	$1,797.60
08/21/2020 I	01 987187	TB-10751	24 FISCHER		SW-CONT W/FUEL	53.50 F	34.39 TN	$1,839.87	$0.00	$1,839.87
08/21/2020 I	01 987190	TB-10751	17 RST		SW-CONT W/FUEL	53.50 F	33.35 TN	$1,784.23	$0.00	$1,784.23
08/21/2020 I	01 987193	TB-10751	25 FISCHER		SW-CONT W/FUEL	53.50 F	33.20 TN	$1,776.20	$0.00	$1,776.20
08/21/2020 I	01 987199	TB-10751	24 FISCHER		SW-CONT W/FUEL	53.50 F	32.19 TN	$1,722.17	$0.00	$1,722.17
08/21/2020 I	01 987200	TB-10751	17 RST		SW-CONT W/FUEL	53.50 F	30.66 TN	$1,640.31	$0.00	$1,640.31
08/21/2020 I	01 987201	TB-10751	25 FISCHER		SW-CONT W/FUEL	53.50 F	32.56 TN	$1,741.96	$0.00	$1,741.96
08/21/2020 I	01 987211	TB-10751	24 FISCHER		SW-CONT W/FUEL	53.50 F	34.10 TN	$1,824.35	$0.00	$1,824.35
08/21/2020 I	01 987212	TB-10751	17 RST		SW-CONT W/FUEL	53.50 F	35.69 TN	$1,909.42	$0.00	$1,909.42
08/21/2020 I	01 987213	TB-10751	25 FISCHER		SW-CONT W/FUEL	53.50 F	32.08 TN	$1,716.28	$0.00	$1,716.28
							Customer Totals:	$54,572.21	$0.00	$54,572.21

Tickets Reported: 31 Items Reported: 31

Detail Customer Activity Report

August 20, 2020 to August 21, 2020

Specific Customer(s) : 333650

Material Summary	Weight Inbound	Weight Outbound	Volume Inbound	Volume Outbound	Count Inbound	Count Outbound	Billing Quantity	Material Total	Tax Total	Total
VH - SW-CONT W/FUEL	1,020.04	0.00 TN	0.00	0.00 YD	0.00	0.00	1,020.04 TN	$54,572.21	$0.00	$54,572.21

			Cash Totals:			
			Invoice Totals:	$54,572.21	$0.00	$54,572.21
Tickets Reported: 31	Items Reported: 31		Report Totals:	$54,572.21	$0.00	$54,572.21

SITE
REGIONAL DISPOSAL INTERMODAL 425-977-4127
3rd and lander Seattle, WA

CUSTOMER 333650
Vibrant Cities LLC
DBA Roystone on Queen Anne LLC
Seattle, WA 98104

Contract:TB-10751

SITE	TICKET #	CELL
01	987084	

WEIGHMASTER: Florence D.

DATE/TIME IN	DATE/TIME OUT
8/20/20 9:39 am	8/20/20 9:50 am

VEHICLE	CONTAINER
25 FISCHER	

REFERENCE

BILL OF LADING

SCALE IN	GROSS WEIGHT	103,620	NET TONS	30.51	INBOUND
SCALE OUT	TARE WEIGHT	42,600	NET WEIGHT	61,020	INVOICE

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
0.00	YD	Tracking QTY				
30.51	tn	SW-CONT W/FUEL Origin:SEATTLE/KING 100%				

Signature Dustin

NET AMOUNT

TENDERED

CHANGE

CHECK#

The undersigned individual signing this document on behalf of Customer acknowledges that he or she has read and understands the terms and conditions on the reverse side and that he or she has the authority to sign this document on behalf of the customer.

RS-F042UPR (04/19)

SIGNATURE _____

SITE
REGIONAL DISPOSAL INTERMODAL 425-977-4127
3rd and lander Seattle, WA

CUSTOMER 333650
Vibrant Cities LLC
DBA Roystone on Queen Anne LLC
Seattle, WA 98104
Contract:TB-10751

SITE	TICKET #	CELL
01	987087	

WEIGHMASTER: IN - Florence D. OUT - Kelly F.

DATE/TIME IN	DATE/TIME OUT
8/20/20 9:53 am	8/20/20 10:05 am

VEHICLE	CONTAINER
24 FISCHER	

REFERENCE

BILL OF LADING

SCALE IN GROSS WEIGHT 108,460 NET TONS 32.99 INBOUND
SCALE OUT TARE WEIGHT 42,480 NET WEIGHT 65,980 INVOICE

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
0.00	YD	Tracking QTY				
32.99	tn	SW-CONT W/FUEL Origin:SEATTLE/KING 100%				

Signature_____

NET AMOUNT
TENDERED
CHANGE
CHECK#

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RS-F042UPR (04/19)

SIGNATURE Miriam

SITE
REGIONAL DISPOSAL INTERMODAL 425-977-4127
3rd and lander Seattle, WA

CUSTOMER 333650
Vibrant Cities LLC
DBA Roystone on Queen Anne LLC
Seattle, WA 98104
Contract:TB-10751

SITE	TICKET #	CELL
01	987094	

WEIGHMASTER: IN - Florence D. OUT - Kelly F.

DATE/TIME IN	DATE/TIME OUT
8/20/20 10:47 am	8/20/20 10:58 am

VEHICLE: 25 FISCHER
CONTAINER:
REFERENCE:
BILL OF LADING:

SCALE IN	GROSS WEIGHT 108,260	NET TONS 33.91		INBOUND
SCALE OUT	TARE WEIGHT 40,440	NET WEIGHT 67,820		INVOICE

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
0.00	YD	Tracking QTY				
33.91	tn	SW-CONT W/FUEL Origin:SEATTLE/KING 100%				

Signature_____

NET AMOUNT
TENDERED
CHANGE
CHECK#

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SIGNATURE Dustin

RS-F042UPR (04/19)

SITE **REGIONAL DISPOSAL INTERMODAL 425-977-4127**
3rd and lander -Seattle, WA

CUSTOMER 333650
Vibrant Cities LLC
DBA Roystone on Queen Anne LLC
Seattle, WA 98104
Contract:TB-10751

SITE 01	TICKET # 987098	CELL
WEIGHMASTER	IN - Florence D. OUT - Kelly F.	
DATE/TIME IN 8/20/20 11:04 am	DATE/TIME OUT 8/20/20 11:29 am	
VEHICLE 24 FISCHER	CONTAINER	
REFERENCE		
BILL OF LADING		

SCALE IN GROSS WEIGHT 110,080 NET TONS 31.75
SCALE OUT TARE WEIGHT 46,580 NET WEIGHT 63,500

INBOUND
INVOICE

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
0.00	YD	Tracking QTY				
31.75	tn	SW-CONT W/FUEL Origin:SEATTLE/KING 100%				

Signature _____

NET AMOUNT
TENDERED
CHANGE
CHECK#

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SIGNATURE Miriam

RS-F042UPR (04/19)

SITE
REGIONAL DISPOSAL INTERMODAL 425-977-4127
3rd and lander Seattle, WA

CUSTOMER 333650
Vibrant Cities LLC
DBA Roystone on Queen Anne LLC
Seattle, WA 98104

Contract:TB-10751

SITE	TICKET #	CELL
01	987132	

WEIGHMASTER: Florence D.

DATE/TIME IN	DATE/TIME OUT
8/21/20 6:53 am	8/21/20 7:05 am

VEHICLE	CONTAINER
7 ELK HEIGHTS	

REFERENCE

BILL OF LADING

SCALE IN	GROSS WEIGHT	110,860	NET TONS	33.71	INBOUND
SCALE OUT	TARE WEIGHT	43,440	NET WEIGHT	67,420	INVOICE

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
0.00	YD	Tracking QTY				
33.71	tn	SW-CONT W/FUEL Origin:SEATTLE/KING 100%				

Signature William S.

NET AMOUNT
TENDERED
CHANGE
CHECK#

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RS-F042UPR (04/19)

SIGNATURE _____

SITE
REGIONAL DISPOSAL INTERMODAL 425-977-4127
3rd and lander Seattle, WA

CUSTOMER 333650
Vibrant Cities LLC
DBA Roystone on Queen Anne LLC
Seattle, WA 98104

Contract:TB-10751

SITE	TICKET #	CELL
01	987136	

WEIGHMASTER: Florence D.

DATE/TIME IN	DATE/TIME OUT
8/21/20 7:31 am	8/21/20 7:50 am

VEHICLE	CONTAINER
25 FISCHER	

REFERENCE

BILL OF LADING

SCALE IN	GROSS WEIGHT	110,660	NET TONS	35.33	INBOUND
SCALE OUT	TARE WEIGHT	40,000	NET WEIGHT	70,660	INVOICE

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
0.00	YD	Tracking QTY				
35.33	tn	SW-CONT W/FUEL Origin:SEATTLE/KING 100%				

Signature Dustin

NET AMOUNT

TENDERED

CHANGE

CHECK#

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RS-F042UPR (04/19)

SIGNATURE _____

SITE **REGIONAL DISPOSAL INTERMODAL 425-977-4127**
3rd and lander -Seattle, WA

CUSTOMER 333650
Vibrant Cities LLC
DBA Roystone on Queen Anne LLC
Seattle, WA 98104

Contract:TB-10751

SITE 01	TICKET # 987140	CELL	
WEIGHMASTER	IN - Florence D. OUT - Karyn B.		
DATE/TIME IN 8/21/20 7:44 am		DATE/TIME OUT 8/21/20 8:01 am	
VEHICLE 24 FISCHER		CONTAINER	
REFERENCE			
BILL OF LADING			

SCALE IN	GROSS WEIGHT	107,800	NET TONS	32.19
SCALE OUT	TARE WEIGHT	43,420	NET WEIGHT	64,380

INBOUND
INVOICE

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
0.00	YD	Tracking QTY				
32.19	tn	SW-CONT W/FUEL Origin:SEATTLE/KING 100%				

Signature_____

NET AMOUNT
TENDERED
CHANGE
CHECK#

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RS-F042UPR (04/19)

SIGNATURE Miriam

SITE **REGIONAL DISPOSAL INTERMODAL 425-977-4127**
3rd and lander -Seattle, WA

CUSTOMER 333650
Vibrant Cities LLC
DBA Roystone on Queen Anne LLC
Seattle, WA 98104

Contract:TB-10751

SITE 01	TICKET # 987141	CELL	
WEIGHMASTER	IN - Florence D. OUT - Karyn B.		
DATE/TIME IN	8/21/20 7:56 am	DATE/TIME OUT	8/21/20 8:04 am
VEHICLE	17 RST	CONTAINER	
REFERENCE			
BILL OF LADING			

SCALE IN	GROSS WEIGHT	112,140	NET TONS	36.86
SCALE OUT	TARE WEIGHT	38,420	NET WEIGHT	73,720

INBOUND
INVOICE

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
0.00	YD	Tracking QTY				
36.86	tn	SW-CONT W/FUEL Origin:SEATTLE/KING 100%				

Signature _____

NET AMOUNT
TENDERED
CHANGE
CHECK#

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SIGNATURE Colton

RS-F042UPR (04/19)

SITE
REGIONAL DISPOSAL INTERMODAL 425-977-4127
3rd and lander -Seattle, WA

CUSTOMER 333650
Vibrant Cities LLC
DBA Roystone on Queen Anne LLC
Seattle, WA 98104

Contract:TB-10751

SITE 01	TICKET # 987143	CELL	
WEIGHMASTER	IN - Florence D. OUT - Karyn B.		
DATE/TIME IN	8/21/20 8:08 am	DATE/TIME OUT	8/21/20 8:23 am
VEHICLE	7 ELK HEIGHTS	CONTAINER	
REFERENCE			
BILL OF LADING			

SCALE IN	GROSS WEIGHT	108,560	NET TONS	30.92
SCALE OUT	TARE WEIGHT	46,720	NET WEIGHT	61,840

INBOUND
INVOICE

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
0.00	YD	Tracking QTY				
30.92	tn	SW-CONT W/FUEL Origin:SEATTLE/KING 100%				

Signature _____

NET AMOUNT
TENDERED
CHANGE
CHECK#

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RS-F042UPR (04/19)

SIGNATURE William

SITE **REGIONAL DISPOSAL INTERMODAL 425-977-4127**
3rd and lander -Seattle, WA

CUSTOMER 333650
Vibrant Cities LLC
DBA Roystone on Queen Anne LLC
Seattle, WA 98104

Contract:TB-10751

SITE 01	TICKET # 987148	CELL	
WEIGHMASTER	IN - Florence D. OUT - Karyn B.		
DATE/TIME IN	8/21/20 8:43 am	DATE/TIME OUT	8/21/20 8:52 am
VEHICLE	25 FISCHER	CONTAINER	
REFERENCE			
BILL OF LADING			

SCALE IN	GROSS WEIGHT	105,000	NET TONS	32.44
SCALE OUT	TARE WEIGHT	40,120	NET WEIGHT	64,880

INBOUND
INVOICE

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
0.00	YD	Tracking QTY				
32.44	tn	SW-CONT W/FUEL Origin:SEATTLE/KING 100%				

Signature_____

NET AMOUNT
TENDERED
CHANGE
CHECK#

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RS-F042UPR (04/19)

SIGNATURE Justin

SITE

REGIONAL DISPOSAL INTERMODAL 425-977-4127
3rd and lander Seattle, WA

CUSTOMER

333650
Vibrant Cities LLC
DBA Roystone on Queen Anne LLC
Seattle, WA 98104

Contract:TB-10751

SITE	TICKET #	CELL
01	987152	

WEIGHMASTER Florence D.

DATE/TIME IN	DATE/TIME OUT
8/21/20 8:58 am	8/21/20 8:58 am

VEHICLE 24 FISCHER

CONTAINER

REFERENCE

BILL OF LADING

SCALE IN GROSS WEIGHT 108,120 NET TONS 32.35 INBOUND
TARE OUT TARE WEIGHT 43,420 NET WEIGHT 64,700 INVOICE

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
0.00	YD	Tracking QTY				
32.35	tn	SW-CONT W/FUEL Origin:SEATTLE/KING 100%				

Signature Miriam

NET AMOUNT

TENDERED

CHANGE

CHECK#

The undersigned individual signing this document on behalf of Customer acknowledges that he or she has read and understands the terms and conditions on the reverse side and that he or she has the authority to sign this document on behalf of the customer.

RS-F042UPR (04/19)

SIGNATURE _____

SITE
REGIONAL DISPOSAL INTERMODAL 425-977-4127
3rd and lander -Seattle, WA

CUSTOMER 333650
Vibrant Cities LLC
DBA Roystone on Queen Anne LLC
Seattle, WA 98104

Contract:TB-10751

SITE 01	TICKET # 987155	CELL	
WEIGHMASTER	Florence D.		
DATE/TIME IN	8/21/20 9:02 am	DATE/TIME OUT	8/21/20 9:15 am
VEHICLE	17 RST	CONTAINER	
REFERENCE			
BILL OF LADING			

SCALE IN	GROSS WEIGHT	100,700	NET TONS	31.17
SCALE OUT	TARE WEIGHT	38,360	NET WEIGHT	62,340

INBOUND
INVOICE

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
0.00	YD	Tracking QTY				
31.17	tn	SW-CONT W/FUEL Origin:SEATTLE/KING 100%				

Signature Colton

NET AMOUNT
TENDERED
CHANGE
CHECK#

The undersigned individual signing this document on behalf of Customer acknowledges that he or she has read and understands the terms and conditions on the reverse side and that he or she has the authority to sign this document on behalf of the customer.

RS-F042UPR (04/19)

SIGNATURE _____

SITE **REGIONAL DISPOSAL INTERMODAL 425-977-4127**
3rd and lander -Seattle, WA

CUSTOMER 333650
Vibrant Cities LLC
DBA Roystone on Queen Anne LLC
Seattle, WA 98104

Contract:TB-10751

SITE 01	TICKET # 987159	CELL	
WEIGHMASTER	IN - Florence D. OUT - Karyn B.		
DATE/TIME IN	8/21/20 9:10 am	DATE/TIME OUT	8/21/20 9:35 am
VEHICLE	7 ELK HEIGHTS	CONTAINER	
REFERENCE			
BILL OF LADING			

SCALE IN GROSS WEIGHT 101,820 NET TONS 29.32 INBOUND
SCALE OUT TARE WEIGHT 43,180 NET WEIGHT 58,640 INVOICE

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
0.00	YD	Tracking QTY				
29.32	tn	SW-CONT W/FUEL Origin:SEATTLE/KING 100%				

Signature _____

NET AMOUNT
TENDERED
CHANGE
CHECK#

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RS-F042UPR (04/19)

SIGNATURE William

SITE

REGIONAL DISPOSAL INTERMODAL 425-977-4127
3rd and lander Seattle, WA

CUSTOMER

333650
Vibrant Cities LLC
DBA Roystone on Queen Anne LLC
Seattle, WA 98104

Contract:TB-10751

SITE	TICKET #	CELL
01	987162	

WEIGHMASTER Florence D.

DATE/TIME IN	DATE/TIME OUT
8/21/20 9:51 am	8/21/20 9:51 am

VEHICLE 25 FISCHER

CONTAINER

REFERENCE

BILL OF LADING

SCALE IN GROSS WEIGHT 107,140 NET TONS 33.51 INBOUND
TARE OUT TARE WEIGHT 40,120 NET WEIGHT 67,020 INVOICE

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
0.00	YD	Tracking QTY				
33.51	tn	SW-CONT W/FUEL Origin:SEATTLE/KING 100%				

Signature Dustin

NET AMOUNT

TENDERED

CHANGE

CHECK#

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RS-F042UPR (04/19)

SIGNATURE _____

SITE
REGIONAL DISPOSAL INTERMODAL 425-977-4127
3rd and lander Seattle, WA

CUSTOMER
333650
Vibrant Cities LLC
DBA Roystone on Queen Anne LLC
Seattle, WA 98104

Contract:TB-10751

SITE	TICKET #	CELL
01	987165	

WEIGHMASTER Florence D.

DATE/TIME IN	DATE/TIME OUT
8/21/20 10:03 am	8/21/20 10:03 am

VEHICLE	CONTAINER
24 FISCHER	

REFERENCE

BILL OF LADING

SCALE IN	GROSS WEIGHT	110,100	NET TONS	33.34	INBOUND
TARE OUT	TARE WEIGHT	43,420	NET WEIGHT	66,680	INVOICE

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
0.00	YD	Tracking QTY				
33.34	tn	SW-CONT W/FUEL Origin:SEATTLE/KING 100%				

Signature Miriam

NET AMOUNT

TENDERED

CHANGE

CHECK#

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RS-F042UPR (04/19)

SIGNATURE _____

SITE **REGIONAL DISPOSAL INTERMODAL 425-977-4127**
3rd and lander -Seattle, WA

CUSTOMER 333650
Vibrant Cities LLC
DBA Roystone on Queen Anne LLC
Seattle, WA 98104

Contract:TB-10751

SITE 01	TICKET # 987167	CELL	
WEIGHMASTER	IN - Florence D. OUT - Karyn B.		
DATE/TIME IN	8/21/20 10:13 am	DATE/TIME OUT	8/21/20 10:26 am
VEHICLE	17 RST	CONTAINER	
REFERENCE			
BILL OF LADING			

SCALE IN	GROSS WEIGHT	103,460	NET TONS	32.50
SCALE OUT	TARE WEIGHT	38,460	NET WEIGHT	65,000

INBOUND
INVOICE

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
0.00	YD	Tracking QTY				
32.50	tn	SW-CONT W/FUEL Origin:SEATTLE/KING 100%				

Signature_____

NET AMOUNT
TENDERED
CHANGE
CHECK#

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RS-F042UPR (04/19)

SIGNATURE Colton

SITE **REGIONAL DISPOSAL INTERMODAL 425-977-4127**
3rd and lander -Seattle, WA

CUSTOMER 333650
Vibrant Cities LLC
DBA Roystone on Queen Anne LLC
Seattle, WA 98104

Contract:TB-10751

SITE 01	TICKET # 987168	CELL	
WEIGHMASTER	IN - Florence D. OUT - Karyn B.		
DATE/TIME IN	8/21/20 10:22 am	DATE/TIME OUT	8/21/20 10:30 am
VEHICLE	7 ELK HEIGHTS	CONTAINER	
REFERENCE			
BILL OF LADING			

SCALE IN	GROSS WEIGHT	114,420	NET TONS 35.34	INBOUND
SCALE OUT	TARE WEIGHT	43,740	NET WEIGHT 70,680	INVOICE

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
0.00	YD	Tracking QTY				
35.34	tn	SW-CONT W/FUEL Origin:SEATTLE/KING 100%				

Signature_____

NET AMOUNT
TENDERED
CHANGE
CHECK#

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RS-F042UPR (04/19)

SIGNATURE William

SITE

REGIONAL DISPOSAL INTERMODAL 425-977-4127
3rd and lander Seattle, WA

CUSTOMER

333650
Vibrant Cities LLC
DBA Roystone on Queen Anne LLC
Seattle, WA 98104

Contract:TB-10751

SITE	TICKET #	CELL
01	987171	

WEIGHMASTER: Florence D.

DATE/TIME IN	DATE/TIME OUT
8/21/20 10:41 am	8/21/20 10:41 am

VEHICLE: 25 FISCHER

CONTAINER:

REFERENCE:

BILL OF LADING:

SCALE IN GROSS WEIGHT 104,520 NET TONS 32.20 INBOUND
TARE OUT TARE WEIGHT 40,120 NET WEIGHT 64,400 INVOICE

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
0.00	YD	Tracking QTY				
32.20	tn	SW-CONT W/FUEL Origin:SEATTLE/KING 100%				

Signature Dustin

NET AMOUNT

TENDERED

CHANGE

CHECK#

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RS-F042UPR (04/19)

SIGNATURE

SITE
REGIONAL DISPOSAL INTERMODAL 425-977-4127
3rd and lander Seattle, WA

CUSTOMER
333650
Vibrant Cities LLC
DBA Roystone on Queen Anne LLC
Seattle, WA 98104
Contract:TB-10751

SITE	TICKET #	CELL
01	987175	

WEIGHMASTER Kelly F.

DATE/TIME IN	DATE/TIME OUT
8/21/20 11:14 am	8/21/20 11:14 am

VEHICLE	CONTAINER
24 FISCHER	

REFERENCE

BILL OF LADING

SCALE IN GROSS WEIGHT 105,740 NET TONS 31.16 INBOUND
TARE OUT TARE WEIGHT 43,420 NET WEIGHT 62,320 INVOICE

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
0.00	YD	Tracking QTY				
31.16	tn	SW-CONT W/FUEL Origin:SEATTLE/KING 100%				

Signature _____

NET AMOUNT
TENDERED
CHANGE
CHECK#

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RS-F042UPR (04/19)

SIGNATURE Miriam

SITE
REGIONAL DISPOSAL INTERMODAL 425-977-4127
3rd and lander Seattle, WA

CUSTOMER 333650
Vibrant Cities LLC
DBA Roystone on Queen Anne LLC
Seattle, WA 98104

Contract:TB-10751

SITE	TICKET #	CELL
01	987176	

WEIGHMASTER: IN - Kelly F. OUT - Karyn B.

DATE/TIME IN	DATE/TIME OUT
8/21/20 11:20 am	8/21/20 11:29 am

VEHICLE	CONTAINER
17 RST	

REFERENCE

BILL OF LADING

SCALE IN	GROSS WEIGHT	103,460	NET TONS	32.40	INBOUND
SCALE OUT	TARE WEIGHT	38,660	NET WEIGHT	64,800	INVOICE

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
0.00	YD	Tracking QTY				
32.40	tn	SW-CONT W/FUEL Origin:SEATTLE/KING 100%				

Signature_____

NET AMOUNT

TENDERED

CHANGE

CHECK#

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RS-F042UPR (04/19)

SIGNATURE Colton

SITE
REGIONAL DISPOSAL INTERMODAL 425-977-4127
3rd and lander -Seattle, WA

CUSTOMER 333650
Vibrant Cities LLC
DBA Roystone on Queen Anne LLC
Seattle, WA 98104
Contract:TB-10751

SITE 01	TICKET # 987179	CELL
WEIGHMASTER	Kelly F.	
DATE/TIME IN 8/21/20 11:49 am		DATE/TIME OUT 8/21/20 11:49 am
VEHICLE 25 FISCHER		CONTAINER
REFERENCE		
BILL OF LADING		

SCALE IN GROSS WEIGHT 108,760 NET TONS 34.32
TARE OUT TARE WEIGHT 40,120 NET WEIGHT 68,640

INBOUND
INVOICE

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
0.00	YD	Tracking QTY				
34.32	tn	SW-CONT W/FUEL Origin:SEATTLE/KING 100%				

Signature _____

NET AMOUNT
TENDERED
CHANGE
CHECK#

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RS-F042UPR (04/19)

SIGNATURE Dustin

SITE
REGIONAL DISPOSAL INTERMODAL 425-977-4127
3rd and lander Seattle, WA

CUSTOMER 333650
Vibrant Cities LLC
DBA Roystone on Queen Anne LLC
Seattle, WA 98104

Contract:TB-10751

SITE	TICKET #	CELL
01	987181	

WEIGHMASTER: IN - Kelly F. OUT - Karyn B.

DATE/TIME IN	DATE/TIME OUT
8/21/20 11:37 am	8/21/20 11:59 am

VEHICLE	CONTAINER
7 ELK HEIGHTS	

REFERENCE

BILL OF LADING

SCALE IN	GROSS WEIGHT	110,240	NET TONS	33.60	INBOUND
SCALE OUT	TARE WEIGHT	43,040	NET WEIGHT	67,200	INVOICE

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
0.00	YD	Tracking QTY				
33.60	tn	SW-CONT W/FUEL Origin:SEATTLE/KING 100%				

Signature_____

NET AMOUNT
TENDERED
CHANGE
CHECK#

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RS-F042UPR (04/19)

SIGNATURE William

SITE
REGIONAL DISPOSAL INTERMODAL 425-977-4127
3rd and lander -Seattle, WA

CUSTOMER 333650
Vibrant Cities LLC
DBA Roystone on Queen Anne LLC
Seattle, WA 98104
Contract:TB-10751

SITE 01	TICKET # 987187	CELL
WEIGHMASTER	Kelly F.	
DATE/TIME IN 8/21/20 12:21 pm		DATE/TIME OUT 8/21/20 12:21 pm
VEHICLE 24 FISCHER		CONTAINER
REFERENCE		
BILL OF LADING		

SCALE IN GROSS WEIGHT 112,200 NET TONS 34.39 INBOUND
TARE OUT TARE WEIGHT 43,420 NET WEIGHT 68,780 INVOICE

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
0.00	YD	Tracking QTY				
34.39	tn	SW-CONT W/FUEL Origin:SEATTLE/KING 100%				

Signature _____

NET AMOUNT
TENDERED
CHANGE
CHECK#

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RS-F042UPR (04/19)

SIGNATURE Miriam

SITE
REGIONAL DISPOSAL INTERMODAL 425-977-4127
3rd and lander Seattle, WA

CUSTOMER 333650
Vibrant Cities LLC
DBA Roystone on Queen Anne LLC
Seattle, WA 98104
Contract:TB-10751

SITE	TICKET #	CELL
01	987190	

WEIGHMASTER: Kelly F.

DATE/TIME IN	DATE/TIME OUT
8/21/20 12:29 pm	8/21/20 12:43 pm

VEHICLE	CONTAINER
17 RST	

REFERENCE

BILL OF LADING

SCALE IN GROSS WEIGHT 105,300 NET TONS 33.35
SCALE OUT TARE WEIGHT 38,600 NET WEIGHT 66,700

INBOUND
INVOICE

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
0.00	YD	Tracking QTY				
33.35	tn	SW-CONT W/FUEL Origin:SEATTLE/KING 100%				

Signature Colton

NET AMOUNT
TENDERED
CHANGE
CHECK#

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RS-F042UPR (04/19)

SIGNATURE _____

SITE
REGIONAL DISPOSAL INTERMODAL 425-977-4127
3rd and lander Seattle, WA

CUSTOMER
333650
Vibrant Cities LLC
DBA Roystone on Queen Anne LLC
Seattle, WA 98104
Contract:TB-10751

SITE	TICKET #	CELL
01	987193	

WEIGHMASTER: Kelly F.

DATE/TIME IN	DATE/TIME OUT
8/21/20 12:46 pm	8/21/20 12:46 pm

VEHICLE: 25 FISCHER
CONTAINER:
REFERENCE:
BILL OF LADING:

SCALE IN GROSS WEIGHT 106,520 NET TONS 33.20 INBOUND
TARE OUT TARE WEIGHT 40,120 NET WEIGHT 66,400 INVOICE

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
0.00	YD	Tracking QTY				
33.20	tn	SW-CONT W/FUEL Origin:SEATTLE/KING 100%				

Signature_____

NET AMOUNT
TENDERED
CHANGE
CHECK#

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RS-F042UPR (04/19)

SIGNATURE Dustin

SITE **REGIONAL DISPOSAL INTERMODAL 425-977-4127**
3rd and lander -Seattle, WA

CUSTOMER 333650
Vibrant Cities LLC
DBA Roystone on Queen Anne LLC
Seattle, WA 98104
Contract:TB-10751

SITE 01	TICKET # 987199	CELL	
WEIGHMASTER	Kelly F.		
DATE/TIME IN	8/21/20 1:27 pm	DATE/TIME OUT	8/21/20 1:27 pm
VEHICLE	24 FISCHER	CONTAINER	
REFERENCE			
BILL OF LADING			

SCALE IN GROSS WEIGHT 107,800 NET TONS 32.19 INBOUND
TARE OUT TARE WEIGHT 43,420 NET WEIGHT 64,380 INVOICE

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
0.00	YD	Tracking QTY				
32.19	tn	SW-CONT W/FUEL Origin:SEATTLE/KING 100%				

Signature_____

NET AMOUNT
TENDERED
CHANGE
CHECK#

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SIGNATURE Miriam

RS-F042UPR (04/19)

SITE **REGIONAL DISPOSAL INTERMODAL 425-977-4127**
3rd and lander -Seattle, WA

CUSTOMER 333650
Vibrant Cities LLC
DBA Roystone on Queen Anne LLC
Seattle, WA 98104
Contract:TB-10751

SITE 01	TICKET # 987200	CELL	
WEIGHMASTER	Kelly F.		
DATE/TIME IN	8/21/20 1:25 pm	DATE/TIME OUT	8/21/20 1:31 pm
VEHICLE	17 RST	CONTAINER	
REFERENCE			
BILL OF LADING			

SCALE IN	GROSS WEIGHT	99,940	NET TONS 30.66	INBOUND
SCALE OUT	TARE WEIGHT	38,620	NET WEIGHT 61,320	INVOICE

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
0.00	YD	Tracking QTY				
30.66	tn	SW-CONT W/FUEL Origin:SEATTLE/KING 100%				

Signature CONTON

NET AMOUNT
TENDERED
CHANGE
CHECK#

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RS-F042UPR (04/19)

SIGNATURE _____

SITE

REGIONAL DISPOSAL INTERMODAL 425-977-4127
3rd and lander Seattle, WA

CUSTOMER

333650
Vibrant Cities LLC
DBA Roystone on Queen Anne LLC
Seattle, WA 98104

Contract:TB-10751

SITE	TICKET #	CELL
01	987201	

WEIGHMASTER Karyn B.

DATE/TIME IN	DATE/TIME OUT
8/21/20 1:42 pm	8/21/20 1:42 pm

VEHICLE 25 FISCHER

CONTAINER

REFERENCE

BILL OF LADING

SCALE IN GROSS WEIGHT 105,240 NET TONS 32.56 INBOUND
TARE OUT TARE WEIGHT 40,120 NET WEIGHT 65,120 INVOICE

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
0.00	YD	Tracking QTY				
32.56	tn	SW-CONT W/FUEL Origin:SEATTLE/KING 100%				

Signature_____

NET AMOUNT

TENDERED

CHANGE

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RS-F042UPR (04/19)

SIGNATURE Dustin

SITE

REGIONAL DISPOSAL INTERMODAL 425-977-4127
3rd and lander Seattle, WA

CUSTOMER

333650
Vibrant Cities LLC
DBA Roystone on Queen Anne LLC
Seattle, WA 98104

Contract:TB-10751

SITE	TICKET #	CELL
01	987211	

WEIGHMASTER Karyn B.

DATE/TIME IN	DATE/TIME OUT
8/21/20 2:38 pm	8/21/20 2:38 pm

VEHICLE 24 FISCHER

CONTAINER

REFERENCE

BILL OF LADING

SCALE IN GROSS WEIGHT 111,620 NET TONS 34.10 INBOUND
TARE OUT TARE WEIGHT 43,420 NET WEIGHT 68,200 INVOICE

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
0.00	YD	Tracking QTY				
34.10	tn	SW-CONT W/FUEL Origin:SEATTLE/KING 100%				

Signature _____

NET AMOUNT

TENDERED

CHANGE

CHECK#

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RS-F042UPR (04/19)

SIGNATURE Miriam

SITE **REGIONAL DISPOSAL INTERMODAL 425-977-4127**
3rd and lander -Seattle, WA

CUSTOMER 333650
Vibrant Cities LLC
DBA Roystone on Queen Anne LLC
Seattle, WA 98104
Contract:TB-10751

SITE 01	TICKET # 987212	CELL	
WEIGHMASTER	IN - Karyn B. OUT - Kelly F.		
DATE/TIME IN	8/21/20 2:25 pm	DATE/TIME OUT	8/21/20 2:39 pm
VEHICLE	17 RST	CONTAINER	
REFERENCE			
BILL OF LADING			

SCALE IN GROSS WEIGHT 109,980 NET TONS 35.69 INBOUND
SCALE OUT TARE WEIGHT 38,600 NET WEIGHT 71,380 INVOICE

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
0.00	YD	Tracking QTY				
35.69	tn	SW-CONT W/FUEL Origin:SEATTLE/KING 100%				

Signature _____

NET AMOUNT
TENDERED
CHANGE
CHECK#

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RS-F042UPR (04/19)

SIGNATURE Colton

SITE

REGIONAL DISPOSAL INTERMODAL 425-977-4127
3rd and lander Seattle, WA

CUSTOMER

333650
Vibrant Cities LLC
DBA Roystone on Queen Anne LLC
Seattle, WA 98104

Contract:TB-10751

SITE	TICKET #	CELL
01	987213	

WEIGHMASTER: Karyn B.

DATE/TIME IN	DATE/TIME OUT
8/21/20 2:41 pm	8/21/20 2:41 pm

VEHICLE: 25 FISCHER

CONTAINER:

REFERENCE:

BILL OF LADING:

SCALE IN GROSS WEIGHT 104,280 NET TONS 32.08 INBOUND
TARE OUT TARE WEIGHT 40,120 NET WEIGHT 64,160 INVOICE

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
0.00	YD	Tracking QTY				
32.08	tn	SW-CONT W/FUEL Origin:SEATTLE/KING 100%				

Signature

NET AMOUNT

TENDERED

CHANGE

CHECK#

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SIGNATURE Dustin

RS-F042UPR (04/19)

Please print or type. 4760954 6/23 CWMI

Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Manifest Tracking Number
WAD988483384	2	(800)424-9300	013792683 FLE

GENERATOR

5. Generator's Name and Mailing Address
ROYSTONE ON QUEEN ANNE, LLC
631 QUEEN AVENUE NORTH
SEATTLE WA 98109
Generator's Phone: (206)659-5750

Generator's Site Address (if different than mailing address)

6. Transporter 1 Company Name
NRC
U.S. EPA ID Number: CAR000030114

7. Transporter 2 Company Name
UNION PACIFIC RAIL ROAD
U.S. EPA ID Number: NED017929 10

8. Designated Facility Name and Site Address
CHEMICAL WASTE MANAGEMENT, INC.
17629 CEDAR SPRINGS LANE
ARLINGTON OR 97812-9709
Facility's Phone: (541)454-2643
U.S. EPA ID Number: ORD089452353

9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes		
X	1. UN3077,ENVIRONMENTALLY HAZARDOUS SUBSTANCE,SOLID, N.O.S,9,III,TETRACHLOROETHENE	~~CM~~ 1	~~DT~~ CM	22440 mw 6-25-20	P	F002		
	2.	gm 7-1-2020						
	3.							
	4.							

14. Special Handling Instructions and Additional Information
1. PROFILE OR343850;LF04-PCE/TCE impacted soil; ERG=171;RQ=171
E/R/P=CHEMTREC#CCN24117 CONTAINER # WMXU300201
22440p.

15. **GENERATOR'S/OFFEROR'S CERTIFICATION:** 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. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent.
I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.

Generator's/Offeror's Printed/Typed Name: Eric Dunham
Signature: E D
Month 06 Day 22 Year 2020

INT'L

16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter signature (for exports only): Date leaving U.S.:

TRANSPORTER

17. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name: Chad Bublitz
Signature: Chad B
Month 06 Day 22 Year 20

Transporter 2 Printed/Typed Name: JR
Signature:
Month 6 Day 22 Year 20

DESIGNATED FACILITY

18. Discrepancy

18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection

Manifest Reference Number:

18b. Alternate Facility (or Generator) U.S. EPA ID Number
Facility's Phone:

18c. Signature of Alternate Facility (or Generator) Month Day Year

19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)

1.	2.	3.	4.
H132			

20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a

Printed/Typed Name: morgan Wolf
Signature: MWolf
Month 06 Day 25 Year 20

EPA Form 8700-22 (Rev. 12-17) Previous editions are obsolete.

DESIGNATED FACILITY TO EPA's e-MANIFEST SYSTEM

gm

Please print or type. 4760954

CWMI

Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST (Continuation Sheet)

21. Generator ID Number: WAD988483384

22. Page 2 of 2

23. Manifest Tracking Number: 013792683FLE

24. Generator's Name: ROYSTONE ON QUEEN ANNE, LLC

25. Transporter 3 Company Name: COLUMBIA RIDGE LANDFILL — U.S. EPA ID Number: ORD987173457

26. Transporter _____ Company Name — U.S. EPA ID Number

27a. HM	27b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	28. Containers No.	28. Containers Type	29. Total Quantity	30. Unit Wt./Vol.	31. Waste Codes		

32. Special Handling Instructions and Additional Information

TRANSPORTER

33. Transporter _____ Acknowledgment of Receipt of Materials
Printed/Typed Name: Chad Bublitz — Signature: Chad B — Month 06 Day 22 Year 20
pm 7-1-2020 he is transporter 1

34. Transporter 3 Acknowledgment of Receipt of Materials
Printed/Typed Name: Jennifer Williams — Signature: [signature] — Month 6 Day 29 Year 20

DESIGNATED FACILITY

35. Discrepancy

36. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)

EPA Form 8700-22A (Rev. 12-17) Previous editions are obsolete.

DESIGNATED FACILITY TO EPA's e-MANIFEST SYSTEM

CWMI

Please print or type: 4760928 mw 06-24-20 Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator ID Number: WAD988483384
2. Page 1 of: 2 of
3. Emergency Response Phone: (800)424-9300
4. Manifest Tracking Number: 013792689 FLE

GENERATOR

5. Generator's Name and Mailing Address
ROYSTONE ON QUEEN ANNE, LLC
631 QUEEN AVENUE NORTH
SEATTLE WA 98109
Generator's Phone: (206)659-5750
Generator's Site Address (if different than mailing address)

6. Transporter 1 Company Name: NRC
U.S. EPA ID Number: CAR000030114

7. Transporter 2 Company Name: UNION PACIFIC RAIL ROAD
U.S. EPA ID Number: NED001792910

8. Designated Facility Name and Site Address
CHEMICAL WASTE MANAGEMENT, INC.
17629 CEDAR SPRINGS LANE
ARLINGTON OR 97812-9709
Facility's Phone: (541)454-2643
U.S. EPA ID Number: ORD089452353

9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes
X	1. UN3077,ENVIRONMENTALLY HAZARDOUS SUBSTANCE,SOLID, N.O.S.,9,III,TETRACHLOROETHENE	CM	01	30820 MW 6-25-20	P	F002
	2.					
	3. Truck-411-117 Chassis-37095					
	4. In:0950 Out:1025					

30820 p.

14. Special Handling Instructions and Additional Information
1. PROFILE OR343850;LF04-PCE/TCE impacted soil; ERG=171;RQ=171
E/R/P=CHEMTREC#CCN24117 CONTAINER # WMXH300162

15. **GENERATOR'S/OFFEROR'S CERTIFICATION:** 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. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent.
I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.

Generator's/Offeror's Printed/Typed Name: Roger Woods For Owner
Signature: Roger Woods
Month Day Year: 6 16 20

INT'L

16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter signature (for exports only): Date leaving U.S.:

TRANSPORTER

17. Transporter Acknowledgment of Receipt of Materials
Transporter 1 Printed/Typed Name: Michael Courtney
Signature:
Month Day Year: 6 16 20
Transporter 2 Printed/Typed Name: Heather Mabe
Signature: Heather Mabe
Month Day Year: 6 16 20

DESIGNATED FACILITY

18. Discrepancy
18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection
Manifest Reference Number:
18b. Alternate Facility (or Generator) U.S. EPA ID Number
Facility's Phone:
18c. Signature of Alternate Facility (or Generator) Month Day Year

19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)
1. H132 2. 3. 4.

20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a
Printed/Typed Name: Morgan Wolf
Signature:
Month Day Year: 06 25 20

EPA Form 8700-22 (Rev. 12-17) Previous editions are obsolete. **DESIGNATED FACILITY TO EPA's e-MANIFEST SYSTEM**

9m

Please print or type: 476928 Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST (Continuation Sheet)

21. Generator ID Number: WAD988483384 | 22. Page: 2-2 | 23. Manifest Tracking Number: 013792689 FLE

24. Generator's Name: Raystone on Queen Anne LLC

25. Transporter 3 Company Name: CRC | U.S. EPA ID Number: ORD987178457

26. Transporter _____ Company Name | U.S. EPA ID Number:

27a. HM	27b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	28. Containers No.	28. Containers Type	29. Total Quantity	30. Unit Wt./Vol.	31. Waste Codes

32. Special Handling Instructions and Additional Information: B CWM# 300162

GENERATOR

TRANSPORTER

33. Transporter 2 Acknowledgment of Receipt of Materials
Printed/Typed Name: gm 6-26-2020 | Signature: | Month | Day | Year

34. Transporter 3 Acknowledgment of Receipt of Materials
Printed/Typed Name: Jennifer Williams | Signature: JWilliams | Month: 6 | Day: 24 | Year: 20

DESIGNATED FACILITY

35. Discrepancy: Per JW gm 6-26-2020

36. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)

EPA Form 8700-22A (Rev. 12-17) Previous editions are obsolete. DESIGNATED FACILITY TO EPA's e-MANIFEST SYSTEM

Please print or type. 476893 mw 6-25-20 6/8 CWMI

Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator ID Number: WAD988483384
2. Page 1 of: 2X
3. Emergency Response Phone: (800)424-9300
4. Manifest Tracking Number: 013792690 FLE

GENERATOR

5. Generator's Name and Mailing Address
ROYSTONE ON QUEEN ANNE, LLC
631 QUEEN AVENUE NORTH
SEATTLE WA 98109
Generator's Phone: (206)659-5750
Generator's Site Address (if different than mailing address)

6. Transporter 1 Company Name: NRC
U.S. EPA ID Number: CAR000030114

7. Transporter 2 Company Name: UNION PACIFIC RAIL ROAD
U.S. EPA ID Number: NED017929910

8. Designated Facility Name and Site Address
CHEMICAL WASTE MANAGEMENT, INC.
17629 CEDAR SPRINGS LANE
ARLINGTON OR 97812-9709
Facility's Phone: (541)454-2643
U.S. EPA ID Number: ORD089452353

9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes		
X	1. UN3077,ENVIRONMENTALLY HAZARDOUS SUBSTANCE,SOLID, N.O.S,9,III,TETRACHLOROETHENE	1 ~~CM~~	~~CY~~ CM	32940	P	F002		
	2.	gm 1-2020						
	3. Truck: 411407 chassis 37095							
	4. In: 1150 Out: 1215							

14. Special Handling Instructions and Additional Information
1. PROFILE OR343850;LF04-PCE/TCE impacted soil; ERG=171;RQ=171
E/R/P=CHEMTREC#CCN24117 CONTAINER # WMXU 300014

15. **GENERATOR'S/OFFEROR'S CERTIFICATION:** 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. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent.
I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.

Generator's/Offeror's Printed/Typed Name: Roger A Wood 4 owner
Signature: Roger a Wood
Month 1 Day 16 Year 20

INT'L

16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter signature (for exports only): Date leaving U.S.:

TRANSPORTER

17. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name: Michael Courtney
Signature:
Month 1 Day 16 Year 20

Transporter 2 Printed/Typed Name: Heather Mallo
Signature: H. Mallo
Month 1 Day 16 Year 20

DESIGNATED FACILITY

18. Discrepancy

18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection

Manifest Reference Number:

18b. Alternate Facility (or Generator) U.S. EPA ID Number
Facility's Phone:

18c. Signature of Alternate Facility (or Generator) Month Day Year

19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)

1.	2.	3.	4.
H132			

20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a

Printed/Typed Name: morgan hoff
Signature: M Hoff
Month 10 Day 25 Year 20

EPA Form 8700-22 (Rev. 12-17) Previous editions are obsolete.

DESIGNATED FACILITY TO EPA's e-MANIFEST SYSTEM

gm

Please print or type. 476893

Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST (Continuation Sheet)	21. Generator ID Number	22. Page	23. Manifest Tracking Number
	WAD988483384	2-2	013792690 FLE

24. Generator's Name: Roystone on Queen Anne LLC

25. Transporter 3 Company Name: CRC — U.S. EPA ID Number: ORD 987173457

26. Transporter _____ Company Name — U.S. EPA ID Number:

27a. HM	27b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	28. Containers No.	28. Containers Type	29. Total Quantity	30. Unit Wt./Vol.	31. Waste Codes

32. Special Handling Instructions and Additional Information

X CUMYU 300014

GENERATOR

TRANSPORTER

33. Transporter 3 Acknowledgment of Receipt of Materials
Printed/Typed Name: gm 6-30-2020 — Signature: — Month Day Year

34. Transporter 3 Acknowledgment of Receipt of Materials
Printed/Typed Name: Jennifer Williams — Signature: JWilliams — Month 6 Day 19 Year 20

DESIGNATED FACILITY

35. Discrepancy

36. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)

EPA Form 8700-22A (Rev. 12-17) Previous editions are obsolete.

DESIGNATED FACILITY TO EPA's e-MANIFEST SYSTEM

CWMI

Please print or type. 476927 MW 6-24-20 Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator ID Number: WAD988483384
2. Page 1 of: 2 of 4
3. Emergency Response Phone: (800)424-9300
4. Manifest Tracking Number: 013792691 FLE

GENERATOR

5. Generator's Name and Mailing Address
ROYSTONE ON QUEEN ANNE, LLC
631 QUEEN AVENUE NORTH
SEATTLE WA 98109
Generator's Phone: (206)659-5750
Generator's Site Address (if different than mailing address)

6. Transporter 1 Company Name: NRC
U.S. EPA ID Number: CAR000030114

7. Transporter 2 Company Name: UNION PACIFIC RAIL ROAD
U.S. EPA ID Number: NED001792910

8. Designated Facility Name and Site Address
CHEMICAL WASTE MANAGEMENT, INC.
17629 CEDAR SPRINGS LANE
ARLINGTON OR 97812-9709
Facility's Phone: (541)454-2643
U.S. EPA ID Number: ORD089452353

9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes		
X	1. UN3077,ENVIRONMENTALLY HAZARDOUS SUBSTANCE,SOLID, N.O.S,9,III,TETRACHLOROETHENE	CM	01	36380 MW 6-25-20	P	F002		
	2.							
	3. Truck: 411-417 Chassis: 37095							
	4. In: 1350 Out: 1510							

14. Special Handling Instructions and Additional Information
1. PROFILE OR343850;LF04-PCE/TCE impacted soil; ERG=171;RQ=171
E/R/P=CHEMTREC#CCN24117 CONTAINER # JMXH300045

15. **GENERATOR'S/OFFEROR'S CERTIFICATION:** 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. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent. I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.

Generator's/Offeror's Printed/Typed Name: Roger Woods For Owner
Signature: Roger A Woods
Month 6 Day 16 Year 20
KR 6/30/20

INT'L

16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter signature (for exports only): Date leaving U.S.:

TRANSPORTER

17. Transporter Acknowledgment of Receipt of Materials
Transporter 1 Printed/Typed Name: Michael Country
Signature:
Month 6 Day 16 Year 20
Transporter 2 Printed/Typed Name: Stephen Holbrook
Signature:
Month 6 Day 16 Year 20

DESIGNATED FACILITY

18. Discrepancy
18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection
Manifest Reference Number:
18b. Alternate Facility (or Generator) U.S. EPA ID Number
Facility's Phone:
18c. Signature of Alternate Facility (or Generator) Month Day Year

19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)
1. H132 2. 3. 4.

20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a
Printed/Typed Name: Morgan Wolf
Signature: M Wolf
Month 10 Day 25 Year 20

EPA Form 8700-22 (Rev. 12-17) Previous editions are obsolete. **DESIGNATED FACILITY TO EPA's e-MANIFEST SYSTEM**

Please print or type. 476927 84

Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST (Continuation Sheet)

21. Generator ID Number: WAD988483342 | 22. Page: 2 | 23. Manifest Tracking Number: 013792691 FLE

gm 6-26-2020

24. Generator's Name: Raystone on Queen Anne LLC

25. Transporter 3 Company Name: CRC | U.S. EPA ID Number: ORD987173457

26. Transporter _____ Company Name | U.S. EPA ID Number

GENERATOR

27a. HM	27b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	28. Containers No.	28. Containers Type	29. Total Quantity	30. Unit Wt./Vol.	31. Waste Codes

32. Special Handling Instructions and Additional Information

B UMXU 300045

TRANSPORTER

33. Transporter 3 Acknowledgment of Receipt of Materials
Printed/Typed Name: gm 6-26-2020 | Signature | Month Day Year

34. Transporter 3 Acknowledgment of Receipt of Materials
Printed/Typed Name: Jennifer Williams | Signature: Jennifer Williams | Month Day Year: 6 24 20
Per JW
gm 6-26-2020

DESIGNATED FACILITY

35. Discrepancy

36. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)

EPA Form 8700-22A (Rev. 12-17) Previous editions are obsolete.

DESIGNATED FACILITY TO EPA's e-MANIFEST SYSTEM

ESP CWMI

476947

Please print or type.

Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator ID Number WAD988483384	2. Page 1 of 2	3. Emergency Response Phone (800)424-9300	4. Manifest Tracking Number 019236396 JJK

5. Generator's Name and Mailing Address
ROYSTONE ON QUEEN ANNE, LLC
631 QUEEN AVENUE NORTH
SEATTLE WA 98109
Generator's Phone: (206)659-5750

Generator's Site Address (if different than mailing address)

6. Transporter 1 Company Name: CHEMICAL WASTE MANAGEMENT, INC. — U.S. EPA ID Number: ORD089452353

7. Transporter 2 Company Name: UPRR — U.S. EPA ID Number: NED001792910

8. Designated Facility Name and Site Address
CHEMICAL WASTE MANAGEMENT, INC.
17629 CEDAR SPRINGS LANE
ARLINGTON OR 97812-9709
Facility's Phone: (541)454-2643
U.S. EPA ID Number: ORD089452353

9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes	
X	1. NA3082,HAZARDOUS WASTE,LIQUID,N.O.S.(OILY WATER),9,PGIII OR344922	7	DM	3,500	P	D018	F002
	2.						
	3.						
	4.						

14. Special Handling Instructions and Additional Information
1. ~~OR377822~~-INC02
OR344922 KR 6/25/2020

WMXU 970223

15. **GENERATOR'S/OFFEROR'S CERTIFICATION:** 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. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent.
I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.

Generator's/Offeror's Printed/Typed Name: Eric Dunham — Signature: [signature] — Month 06 Day 15 Year 2020

16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter signature (for exports only): Date leaving U.S.:

17. Transporter Acknowledgment of Receipt of Materials
Transporter 1 Printed/Typed Name: PETE LAVAN — Signature: [signature] — Month 6 Day 15 Year 20
Transporter 2 Printed/Typed Name: G Altheimer — Signature: GA — Month 6 Day 15 Year 20

18. Discrepancy
18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection
Manifest Reference Number:
18b. Alternate Facility (or Generator) — U.S. EPA ID Number
Facility's Phone:
18c. Signature of Alternate Facility (or Generator) — Month Day Year

19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)
1. H040 2. 3. 4.

20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a
Printed/Typed Name: Dawn Dulp — Signature: [signature] — Month 6 Day 24 Year 20

EPA Form 8700-22 (Rev. 12-17) Previous editions are obsolete.
DESIGNATED FACILITY TO EPA's e-MANIFEST SYSTEM

GENERATOR / INT'L / TRANSPORTER / DESIGNATED FACILITY

DDL-24-20

476942 476947

ESP CWMI

Please print or type. Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST (Continuation Sheet)

21. Generator ID Number: WAD988483384

22. Page 2 of 2

23. Manifest Tracking Number: 019236396JJK

24. Generator's Name: ROYSTONE ON QUEEN ANNE LLC

25. Transporter 3 Company Name: COLUMBIA RIDGE LANDFILL — U.S. EPA ID Number: ORD987173457

26. Transporter _____ Company Name — U.S. EPA ID Number:

27a. HM	27b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	28. Containers No.	28. Containers Type	29. Total Quantity	30. Unit Wt./Vol.	31. Waste Codes		

32. Special Handling Instructions and Additional Information

WWXU 970223

GENERATOR

33. Transporter _____ Acknowledgment of Receipt of Materials

Printed/Typed Name | Signature | Month | Day | Year

34. Transporter 3 Acknowledgment of Receipt of Materials

Printed/Typed Name: Jennifer Williams | Signature | Month: 10 | Day: 22 | Year: 20

TRANSPORTER

35. Discrepancy

DESIGNATED FACILITY

36. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)

EPA Form 8700-22A (Rev. 12-17) Previous editions are obsolete.

DESIGNATED FACILITY TO EPA's e-MANIFEST SYSTEM

APPENDIX H

Vapor Barrier Documentation

RILEYGROUP

PreTak

Product Description

Basic Use: PreTak is utilized as a pre-applied sheet membrane for blindside vertical wall waterproofing and pre-applied underslab waterproofing and methane gas protection for horizontal applications. PreTak can be applied directly to a wide variety of substrates and utilizes high density polyethylene (HDPE) sheet that once installed provides a tough and durable waterproofing membrane. Combined with a Pressure Sensitive Adhesive (PSA), PreTak becomes fully adhered when freshly placed concrete or shotcrete is applied to directly to it, eliminating the potential for lateral water migration.

Installation is efficient and reliable with a manufacturer marked adhesive selvedge allowing for an watertight bond at seam overlaps. PreTak delivers superior performance in harsh conditions without the need for specialized equipment, heat, or power.

Utilizing heat welded seams, PreTak is LADBS-approved as a gas and methane barrier (LARR #26164) and for shotcrete.

Composition: PreTak (46 mil/1.2mm) is a fully adhered waterproofing sheet membrane comprised of a long fiber HDPE film coated with a PSA gel and protected by a plastic release liner. The edges of PreTak are treated with a 3-inch (70mm) wide pre-adhered seam (selvedge). PreTak HD is a 60 mil thicker version of PreTak and is available upon request.

Benefits

- Proven and effective, PreTak has an over 25-year successful track record of performance on projects around the world.
- PreTak is suitable for a variety of critical building envelope applications, challenging site conditions, and contaminated soils.
- Not affected by rain or ponding water.
- Surpasses other fully adhered HDPE membrane systems by achieving the ideal blend between value and performance.
- Prevents lateral water migration by forming a continuous adhesive bond to poured-in-place concrete.
- Versatile seam options for hydrostatic, non-hydrostatic, and shotcrete applications.

Limitations

- Limited to underslab and single-sided formwork.
- Do not leave exposed for longer than 60 days.
- Remove excessive substrate moisture prior to application.

Technical Data

Properties: See physical properties table.

Coverages: One roll covers 258 square feet (24 square meters), not including overlaps or waste.
Wider and thicker roll sizes are available upon request.

Storage and Handling: Store raised off the floor away from sun and moisture, between 40-90°F (5-32°C), maximum 5 rolls high.

Specification Writer: Contact EPRO before writing specifications on this product. PreTak HDPE Pre-Applied Waterproofing System should be reviewed in order to meet project specific site conditions.

Installation

Preparation: Please refer to manufacturer's specifications for substrate requirements. Rolls should be inspected for cosmetic damage prior to application.

Application: Please refer to manufacturer's specifications.
Side laps, end laps, and cut ends have several seaming options depending on the application.

Installation: Roll PreTak out with the release liner facing the concrete pour. Line up the sheet edges and overlap a minimum of 3-inches (75 mm) for cut ends and endlap taped seams. For seldvedge seams, line up top sheet to pre-adhered selvedge guideline. Remove release liner and roll to adhere seam.

Heat Weld Seams: For guidance on the heat welding option of PreTak,consult manufacturer's specifications.

Availability and Packaging

Contact EPRO sales representative for local distributors or authorized applicators (www.eproinc.com).

Roll Size: 46 mil (1.2 mm), 3'11" x 65'-6" (1.2 x 20 m), 75 lbs (34 kg)

Warranty

Limited Warranty: EPRO Services, Inc. believes to the best of its knowledge that performance tables are accurate and reliable. EPRO warrants this product to be free from defects. EPRO makes no other warranties with respect to this product, express or implied, including without limitation the implied warranties of MERCHANTABILITY OR FITNESS FOR PARTICULAR PURPOSE. EPRO's liability shall be limited in all events to supplying sufficient product to retreat the specific areas to which defective product has been applied. EPRO shall have no other liability, including liability for incidental or resultant damages, whether due to breach of warranty or negligence. This warranty may not be modified or extended by representatives of EPRO or its distributors.

Equipment

Seaming: 4" heavy seam roller.

Heat Welding: Leister, Hot air wedge welder, extrusion weld, etc.

Underslab Smoke Testing: EPRO Smoke Test Machine.

Technical Services and Information

Complete technical services and information are available by contacting EPRO at 800.882.1896 or www.eproinc.com.

This product was formally known as Pre-tak by Kingfield Construction Products.

PreTak

Physical Property	Test Method	Value
Material		HDPE
Color		White
Thickness		46 Mil
Resistance to Hydrostatic Head	ASTM D 751	431 ft (131 m)
Tensile Strength, Film	ASTM D 412	4742 psi (32.7 MPa) Force
Elongation	ASTM D 412	722%
Puncture Resistance	ASTM E 154	276 lbs (1227 N)
Resistance to Lateral Water Migration	ASTM D 5385	Pass at 231 ft (71 m) of HH pressure
Peel Adhesion to Concrete	ASTM D 903	23 lbs/in. (4028 N/m)
Permeance to Water Vapor Transmission	ASTM E 96, method B	0.087 perms (4.97 ng/(Pa x s x m2))
Bonded Seam Strength (Heat Weld)	ASTM D 6392	Pass (Break in Sheet)
Dead Load Seam Strength (Heat Weld)*	ASTM D 751	Pass
Microorganism Resistance (Soil Burial)*	ASTM D 4068	Pass
Methane Permeability*	ASTM D 1434	Pass
Oil Resistance*	ASTM D 543	Pass
Heat Resistance*	ASTM D 4068	Pass
Environmental Stress Cracking*	ASTM D 1693	Pass

*Tested to City of Los Angeles Department of Building and Safety Methane Testing Criteria.

Dimensions: Standard: 3'-11" x 65'-6" (1.2 m x 20 m), XL: 7'-10" x 65'-6" (2.4 m x 20 m)
Weight: Standard: 75 lbs (34 kg), XL: 150 lbs (68 kg)

e.drain 6000

Product Description

Basic Use: e.drain 6000 is applied in negative side applications to blindside shoring walls, in positive side applications to over excavated walls, and over plaza decks. e.drain 6000 prefabricated drainage composite is designed to protect the E.Series system assembly, while effectively eliminating the buildup and ponding of water against the membrane assembly.

Composition: e.drain 6000 features a lightweight three-dimensional, high-compressive strength polypropylene core and bonded non-woven geotextile fabric. The bonded filter fabric allows water to pass freely into the molded drain while preventing soil particles from entering and clogging the core structure.

Benefits

- Provides extremely high compressive strength to meet a wide variety of project conditions
- Polypropylene provides greater chemical resistance than traditional polystyrene
- Maintains flexibility in freezing temperatures

Limitations

- Long-term UV exposure is not recommended

Technical Data

Properties: See physical properties table

Coverages: 6’ x 50’ roll covers 300 square feet; 8’ x 50’ roll covers 400 square feet, not including overlaps or waste

Specification Writer: Contact EPRO before writing specifications on this product. E.Series system assemblies should be reviewed in order to meet project specific site conditions.

Installation

Preparation: Please refer to manufacturer’s specifications for substrate requirements. Rolls should be inspected for cosmetic damage prior to application. Substrate must be inspected prior to application to make certain it is in accordance with manufacturer’s requirements.

Application: Please refer to manufacturer’s specifications. Drainage panels may run horizontally or vertically. In blindside shoring applications, secure e.drain to shoring using 2-inch flat washer fasteners every 24 inches on center on seams and terminations and a minimum of every 48 inches on center in the field.

Availability and Packaging

Contact EPRO sales representative for local distributors or authorized applicators (www.eproinc.com).

Roll: 6' x 50', 8' X 50'

Weight: 6' rolls = 64 lbs, 8' rolls = 81 lbs

Warranty

Limited Warranty: EPRO Services, Inc. believes to the best of its knowledge that performance tables are accurate and reliable. EPRO warrants this product to be free from defects. EPRO makes no other warranties with respect to this product, express or implied, including without limitation the implied warranties of MERCHANTABILITY OR FITNESS FOR PARTICULAR PURPOSE. EPRO’s liability shall be limited in all events to supplying sufficient product to retreat the specific areas to which defective product has been applied. EPRO shall have no other liability, including liability for incidental or resultant damages, whether due to breach of warranty or negligence. This warranty may not be modified or extended by representatives of EPRO or its distributors.

Equipment

Secure with shot pins using power-actuated fastener or by hand.

Technical Services and Information

Complete technical services and information are available by contacting EPRO at 800.882.1896 or www.eproinc.com.

This product was formally known as Ecodrain-S6000.

e.drain 6000

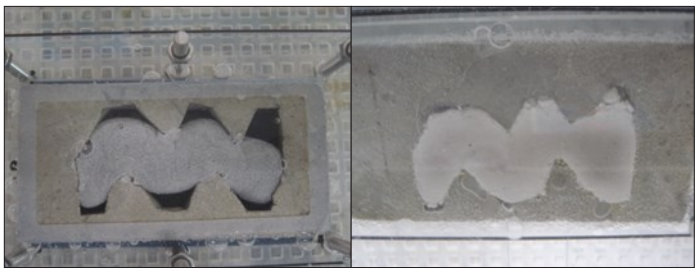
Typical Physical Properties

Physical Property	Test Method	Value
Dimpled Core		
Core Material		Polypropylene
Color		Black
Dimple Height	ASTM D1777	0.4" (10.16 mm)
Compressive Strength	ASTM D1621	16,500 psf (790 kN/m²)
Flow rate	ASTM D4716	21 gal/min/ft
Filter Fabric		
Grab Tensile	ASTM D4632	100 lbs
CBR Puncture Resistance	ASTM D6241	250 lbs
Apparent Operating Size	ASTM D4751	70 US Sieve (.0212mm)
Water Flow Rate	ASTM D4491	140 gpm/ft² (5704 l/min/m²)
UV Resistance	ASTM D4355	70% (500 hrs)

Dimensions: 6' x 50', 8' X 50'
Weight: 6' rolls = 64 lbs, 8' rolls = 81 lbs

BentoTak

Delayed-swell hydrophilic polymer modified bentonite waterstop strip
Self-adhesive, swelling, water tight for construction joints and penetrations



Day 1 Day 4

4 days post submersion demonstrates BenoTak's superior hydrophilic swelling ability to seal and prevent the passage of water.

BentoTak self-adhesive water stop strip

BentoTak is a self-adhesive, delayed swell hydrophilic polymer modified bentonite waterstop strip specially blended from the highest grade Wyoming sodium bentonite and mineral oils. Suitable for application in construction joints and around penetrations, after wetting **BentoTak's** self adhesive film, the waterstop strip will adhere and conform to the substrate without the use of additional adhesives or mechanical fastening. **BentoTak** is not only effective in fresh water hydrostatic conditions, but also salt water and contaminated soils conditions.

Productive and effective

- **Self-adhesive coating.** Application is fast and simple. No need for mechanical fastening or adhesives. BentoTak's water soluble adhesive coating makes application as easy as **"Dip it and Stick it."**
- **Hydrophilic swelling ability.** Unlike typical rubber gasket style water stops, BentoTak's hydrophilic swelling bentonite infiltrates and fills gaps and cracks in concrete to stop the passage of water.
- **Naturally chemically resistant.** As a bentonite based product, BentoTak is naturally resistant to many hydrocarbons and organic solvents.
- **Adheres to multiple substrates.** Pliable physical characteristic makes BentoTak adhere and conform well to rough substrates reducing surface prep and speeding application.
- **Rain and ponding water resistant.** Unlike most bentonite based waterstops, BentoTak's delayed swell bentonite polymer blend can withstand up to 7-days of ponding water.

epro **EPRO Services Inc.** Kansas City, MO 64129
www.eproinc.com tel 800.882.1896

EPRO_BentoTak_V1.10.20.SS © Copyright 2020 EPRO Services, Inc. All rights reserved

e.stop gu

Product Description

Basic Use: e.stop gu is a self-adhering gunnable expanding waterstop paste designed to stop water infiltration through cast-in-place concrete at construction joints and penetrations. It expands upon contact with water to form a positive seal against the concrete. The key to e.stop gu's effectiveness is that it is highly expansive, which seals and fills voids in cracks and concrete, and is easy to apply using caulking equipment.

e.stop gu can be applied over rough and smooth concrete, steel piles, dowels and Nelson Studs, and on iron or PVC pipes.

For shotcrete applications, e.stop gu requires a double layer application with a minimum 1-inch separation.

Composition: e.stop gu is a gray hydrophilic expanding urethane waterstop sealant.

Benefits

- Active swelling waterstop is fully encased in concrete to seal off water ingress.
- Self-adhering over concrete, iron, steel, and PVC.
- Fast and easy installation.
- Conforms to irregular surfaces.
- Seals around pipe penetrations.
- Ideal when pouring against existing concrete.
- High resistance to hydrostatic pressure.

Limitations

- Not an expansion joint sealant.
- It is designed for structural concrete with a minimum of 2,600 psi compressive strength.
- Requires a minimum of 3-inch (75 mm) of concrete coverage depending on the size of the bead used.
- Must be fully cured before concrete pour.
- Not resistant to pre-hydration.

Technical Data

Properties: See physical properties table.

Coverages: Coverage is dependent on the size of application bead. Applied material skins over after two hours and moisture cures in ten hours.

Minimum bead size and estimated linear coverage:

- 1/2" x 1/2": 6'-6" (2 m)
- 3/8" x 3/4": 5'-11" (1.8 m)

Storage and Handling: Store raised off the floor, away from moisture and sun, between 55-80°F (13-27°C).

Shelf Life: 12 months.

Specification Writer: Contact EPRO before writing specifications on this product. EPRO System selection should be reviewed in order to meet project specific site conditions.

Installation

Preparation: Please refer to manufacturer's specifications for substrate requirements. Tubes should be inspected for cosmetic damage prior to application.

Application: Please refer to manufacturer's specifications. Substrate Preparation: Wipe substrates to receive e.stop gu clean to remove any dirt, dust, or moisture. Clean the surface of penetrations or protrusions with a wire brush to remove dirt, dust, rust, and loose particles. Surface must be free of frost or ice. No priming is necessary.

Installation: e.stop gu is used as a waterstop for penetrations, piles, dowels, and all concrete construction joints.

Availability and Packaging

Contact EPRO sales representative for local distributors or authorized applicators (www.eproinc.com).

Tube Size: 10.8 oz (320 ml), 0.68 lbs (0.31 kg)
Case Size: 24 tubes, 16.2 lbs (7.35 kg)

Warranty

Limited Warranty: EPRO Services, Inc. believes to the best of its knowledge that performance tables are accurate and reliable. EPRO warrants this product to be free from defects. EPRO makes no other warranties with respect to this product, express or implied, including without limitation the implied warranties of MERCHANTABILITY OR FITNESS FOR PARTICULAR PURPOSE. EPRO's liability shall be limited in all events to supplying sufficient product to retreat the specific areas to which defective product has been applied. EPRO shall have no other liability, including liability for incidental or resultant damages, whether due to breach of warranty or negligence. This warranty may not be modified or extended by representatives of EPRO or its distributors.

Equipment

Caulking gun (10.8 oz. tube capactiy).

Technical Services and Information

Complete technical services and information are available by contacting EPRO at 800.882.1896 or www.eproinc.com.

This product was formally known as SepaSeal SH-100 by Kingfield Construction Products.

Physical Properties	
Hydrostatic Head Resistance	
1/2 x 1/2	100 feet (43 psi / 30.5 m)
3/8 x 3/4	150 feet (65 psi / 46 m)

PreTape D

Product Description

Basic Use: PreTape D is a seaming, detailing, and repair tape that is used for sandwich seam applications. PreTak seams and detailing patches are adhered to both sides of the tape to form a continuous and integral seal to the structure eliminating lateral water migration.

PreTape D is a double-sided thick adhesive tape formulated with an aggressive adhesive that bonds strongly to HDPE, PSA, metal, penetrations, protrusions, and detailing and repairing PreTak membranes and is protected with a release liner.

PreTape D can be used to seal seam overlaps, end laps, penetrations, details, damage to the membrane, adhere to soldier pile flanges, and more.

Composition: PreTape D is 15-mil (0.4 mm) tape comprised of a single layer of aggressive adhesive protected with a release liner.

Benefits

- Dual sided adhesive tape for high strength sandwich seams and penetration detailing.
- Forms a continuous adhesive bond to prevent lateral water migration.
- Chemical resistant - effective in most types of soils, including hydrocarbon-laden soils.
- Strong HDPE adhesive prevents seam popping due to environmental exposure.
- Easy to apply, fully-adhered, watertight adhesive seams .
- Provides a barrier to water, moisture, gas, and vapor.
- Flexible and easily applied for detailing and seaming.

Limitations

- Surfaces must be clean and dry.
- Do not leave exposed for longer than 60 days.

Technical Data

Coverages: One roll covers 164 linear feet (50 linear meters), not including overlaps or waste.

Storage and Handling: Store raised off the floor away from sun and moisture, between 40-90°F (5-32°C).

Specification Writer: Contact EPRO before writing specifications on this product. PreTak HDPE Pre-Applied Waterproofing System should be reviewed in order to meet project specific site conditions.

Installation

Preparation: Please refer to manufacturer's specifications for substrate requirements. Rolls should be inspected for cosmetic damage prior to application.

Application: Please refer to manufacturer's specifications.

Substrate Preparation: Wipe substrates to receive PreTape D clean to remove any dirt, dust, or moisture. Clean the surface of penetrations or protrusions with a wire brush to remove dirt, dust, rust, and loose particles.

Installation: Unroll the tape and adhere to the exposed PSA surface of the PreTak membrane or exposed surface of the penetration. The release liner protected top surface of the tape should face toward the lap seam or detail patch. Line the top sheet or patch over the tape and adhere to the tape by removing the release liner and use a heavy roller to maximize adhesion. Ensure the plastic release liner is removed from all areas of the applied PreTape D prior to the concrete pour.

Availability and Packaging

Contact EPRO sales representative for local distributors or authorized applicators (www.eproinc.com).

Roll Size: 15 mil (0.4 mm), 3.15" x 164' (80 mm x 50 m), 6 lbs (2.7 kg)
Box Size: 12 rolls, 72 lbs (32.4 kg)

Warranty

Limited Warranty: EPRO Services, Inc. believes to the best of its knowledge that performance tables are accurate and reliable. EPRO warrants this product to be free from defects. EPRO makes no other warranties with respect to this product, express or implied, including without limitation the implied warranties of MERCHANTABILITY OR FITNESS FOR PARTICULAR PURPOSE. EPRO's liability shall be limited in all events to supplying sufficient product to retreat the specific areas to which defective product has been applied. EPRO shall have no other liability, including liability for incidental or resultant damages, whether due to breach of warranty or negligence. This warranty may not be modified or extended by representatives of EPRO or its distributors.

Equipment

Seaming: 4" heavy seam roller.

Technical Services and Information

Complete technical services and information are available by contacting EPRO at 800.882.1896 or www.eproinc.com.

This product was formally known as Pre-tak Tape DS by Kingfield Construction Products.

PreTape

Product Description

Basic Use: PreTape is a seaming, detailing, and repair tape that is used for positive applications. Concrete is cast directly against the tape and the aggressive adhesive layers work together to form a continuous and integral seal to the structure eliminating lateral water migration.

PreTape is an HDPE reinforced tape with an aggressive adhesive that bonds strongly to HDPE, PSA, metal, PVC, and other subtrates. The top side of the tape is coated with PreTak's weather resistant pressure sensitive adhesive (PSA) and is designed to bond drectly to concrete.

PreTape can be used to reinforce manufacture adhesive seam overlaps, end laps, penetrations, details, damage to the membrane, adhere to soldier pile flanges, and more.

Composition: PreTape is a 15 mil (0.4 mm) triple layer tape comprised of a PSA coated HDPE reinforcement membrane with a tenacious adhesive protected with a release liner.

Benefits

- Dual sided adhesive tape: PSA for concrete adhesion, HDPE adhesive for seam and penetration detailing.
- PreTape forms a continuous adhesive bond to poured-in-place concrete to prevent lateral water migration.
- Strong HDPE adhesive prevents seam popping due to environmental exposure.
- PreTape is easy to apply and creates fully-adhered, watertight adhesive seams.
- PreTape is flexible and easily applied for detailing and seaming.

Limitations

- Surfaces must by clean and dry.
- Do not leave exposed for longer than 60 days.

Technical Data

Coverages: One roll covers 164 linear feet (50 linear meters), not including overlaps or waste.

Storage and Handling: Store raised off the floor away from sun and moisture, between 40-90°F (5-32°C).

Specification Writer: Contact EPRO before writing specifications on this product. PreTak HDPE Pre-Applied Waterproofing System should be reviewed in order to meet project specific site conditions.

Installation

Preparation: Please refer to manufacturer's specifications for substrate requirements. Rolls should be inspected for cosmetic damage prior to application.

Application: Please refer to manufacturer's specifications.

Substrate Preparation: Wipe substrates to receive PreTape clean to remove any dirt, dust, or moisture. Clean the surface of penetrations or protrusions with a wire brush to remove dirt, dust, rust, and loose particles.

Installation: Unroll the tape and adhere centered along the top of the lap seam, to the exposed PSA surface to the PreTak detail patch, or penetration. The release liner protected PSA top surface of the tape should face toward the concrete pour. The use of heavy rollers is required to maximize adhesion. Remove the release liner during application and ensure the plastic release liner is removed from all areas of the applied PreTape prior to the concrete pour.

Availability and Packaging

Contact EPRO sales representative for local distributors or authorized applicators (www.eproinc.com).

Roll Size: 15 mil (0.4 mm), 4.7" x 164' (120 mm x 50 m), 3.75 lbs (1.7 kg)
Box Size: 8 rolls, 30 lbs (13.6 kg)

Warranty

Limited Warranty: EPRO Services, Inc. believes to the best of its knowledge that performance tables are accurate and reliable. EPRO warrants this product to be free from defects. EPRO makes no other warranties with respect to this product, express or implied, including without limitation the implied warranties of MERCHANTABILITY OR FITNESS FOR PARTICULAR PURPOSE. EPRO's liability shall be limited in all events to supplying sufficient product to retreat the specific areas to which defective product has been applied. EPRO shall have no other liability, including liability for incidental or resultant damages, whether due to breach of warranty or negligence. This warranty may not be modified or extended by representatives of EPRO or its distributors.

Equipment

Seaming: 4" heavy seam roller.

Technical Services and Information

Complete technical services and information are available by contacting EPRO at 800.882.1896 or www.eproinc.com.

This product was formally known as Pre-tak Tape by Kingfield Construction Products.

APPENDIX I

Well Decommissioning Documentation

RILEYGROUP

Please print, sign and return to the Department of Ecology

RESOURCE PROTECTION WELL REPORT

CURRENT Notice of Intent No. AE58967

(SUBMIT ONE WELL REPORT PER WELL INSTALLED)

Construction/Decommission *("x" in box)*

- ☐ Construction
- ☒ Decommission

ORIGINAL INSTALLATION Notice of Intent Number: R062375

Consulting Firm The Riley Group, Inc. (RGI)

Unique Ecology Well IDTag No. AHF 805

WELL CONSTRUCTION CERTIFICATION: I constructed and/or accept responsibility for construction of this well, and its compliance with all Washington well construction standards. Materials used and the information reported above are true to my best knowledge and belief.

☒ Driller ☐ Engineer ☐ Trainee

Name (Print Last, First Name) Riley, Paul

Driller/Engineer /Trainee Signature

Driller or Trainee License No. 2247

If trainee, licensed driller's Signature and License Number:

Type of Well *("x in box)*

- ☒ Resource Protection
- ☐ Geotech Soil Boring

Property Owner Vibrant Cities

Site Address 631 Queen Anne Avenue North

City Seattle County King

Location SE 1/4-1/4 NE 1/4 Sec 25 Twn 25N R 3E

EWM ☒ or WWM ☐

Lat/Long (s, t, r still REQUIRED) Lat Deg 47 Min 37 Sec 31.93

Long Deg 122 Min 21 Sec 24.81

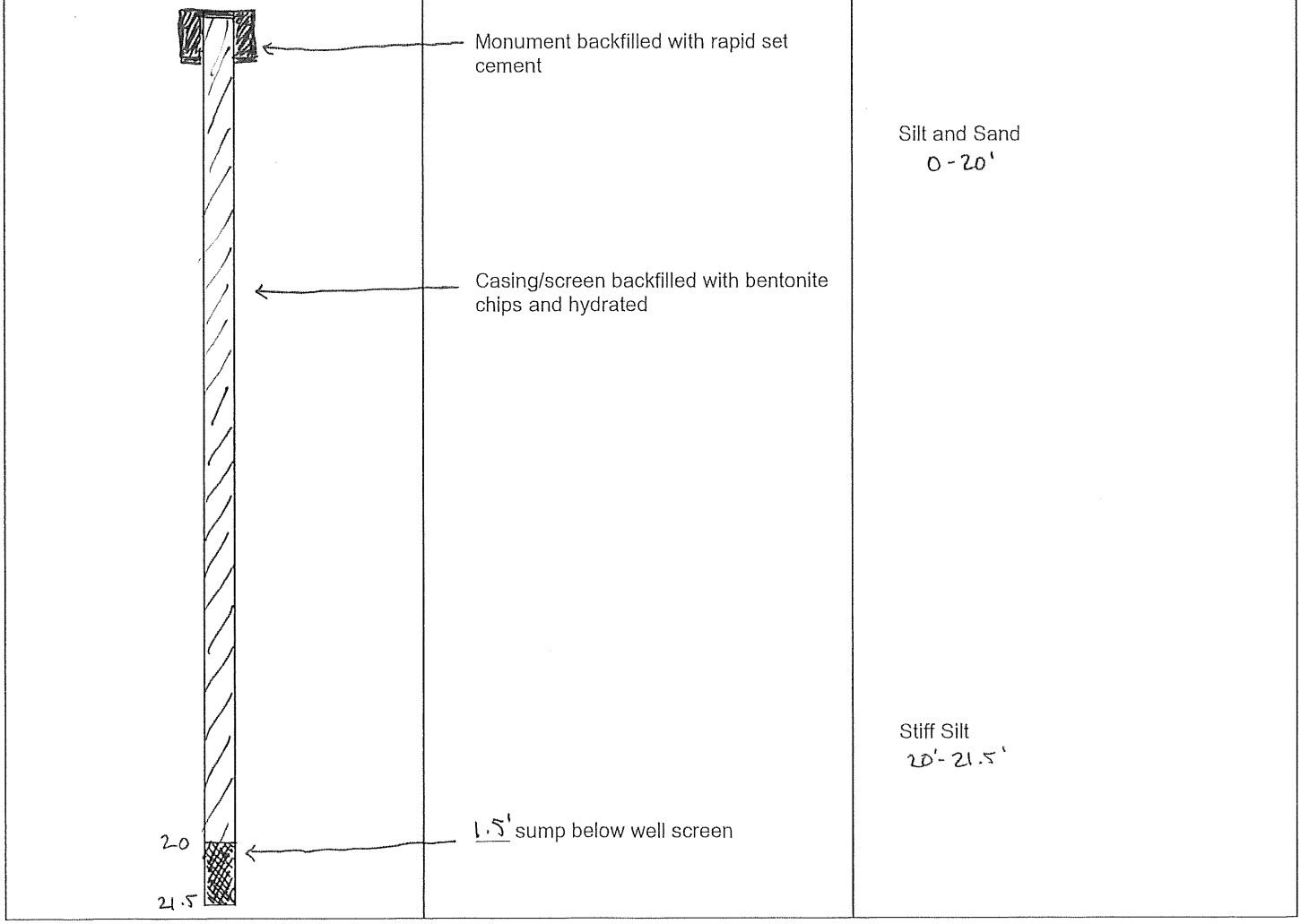
Tax Parcel No. 3879900425

Cased or Uncased Diameter 2" Static Level ~18'

Work/Decommission Start Date 01/30/2020

Work/Decommission Completed Date 01/30/2020

Construction Design | Well Data - MW 13 (DB2) | Formation Description



SCALE: 1"= _____ PAGE _____ OF _____

Please print, sign and return to the Department of Ecology

RESOURCE PROTECTION WELL REPORT

CURRENT Notice of Intent No. AE58967

(SUBMIT ONE WELL REPORT PER WELL INSTALLED)

Construction/Decommission *("x" in box)*

☐ Construction

☒ Decommission

ORIGINAL INSTALLATION Notice of Intent Number: RE01346

Consulting Firm The Riley Group, Inc. (RGI)

Unique Ecology Well IDTag No. APN 050

WELL CONSTRUCTION CERTIFICATION: I constructed and/or accept responsibility for construction of this well, and its compliance with all Washington well construction standards. Materials used and the information reported above are true to my best knowledge and belief.

☒ Driller ☐ Engineer ☐ Trainee

Name (Print Last, First Name) Riley, Paul

Driller/Engineer /Trainee Signature

Driller or Trainee License No. 2247

If trainee, licensed driller's Signature and License Number:

Type of Well *("x in box)*

☒ Resource Protection

☐ Geotech Soil Boring

Property Owner Vibrant Cities

Site Address 631 Queen Anne Avenue North

City Seattle County King

Location SE 1/4-1/4 NE 1/4 Sec 25 Twn 25N R 3E

EWM ☒ or WWM ☐

Lat/Long (s, t, r still REQUIRED) Lat Deg 47 Min 37 Sec 31.52

Long Deg 122 Min 21 Sec 26.16

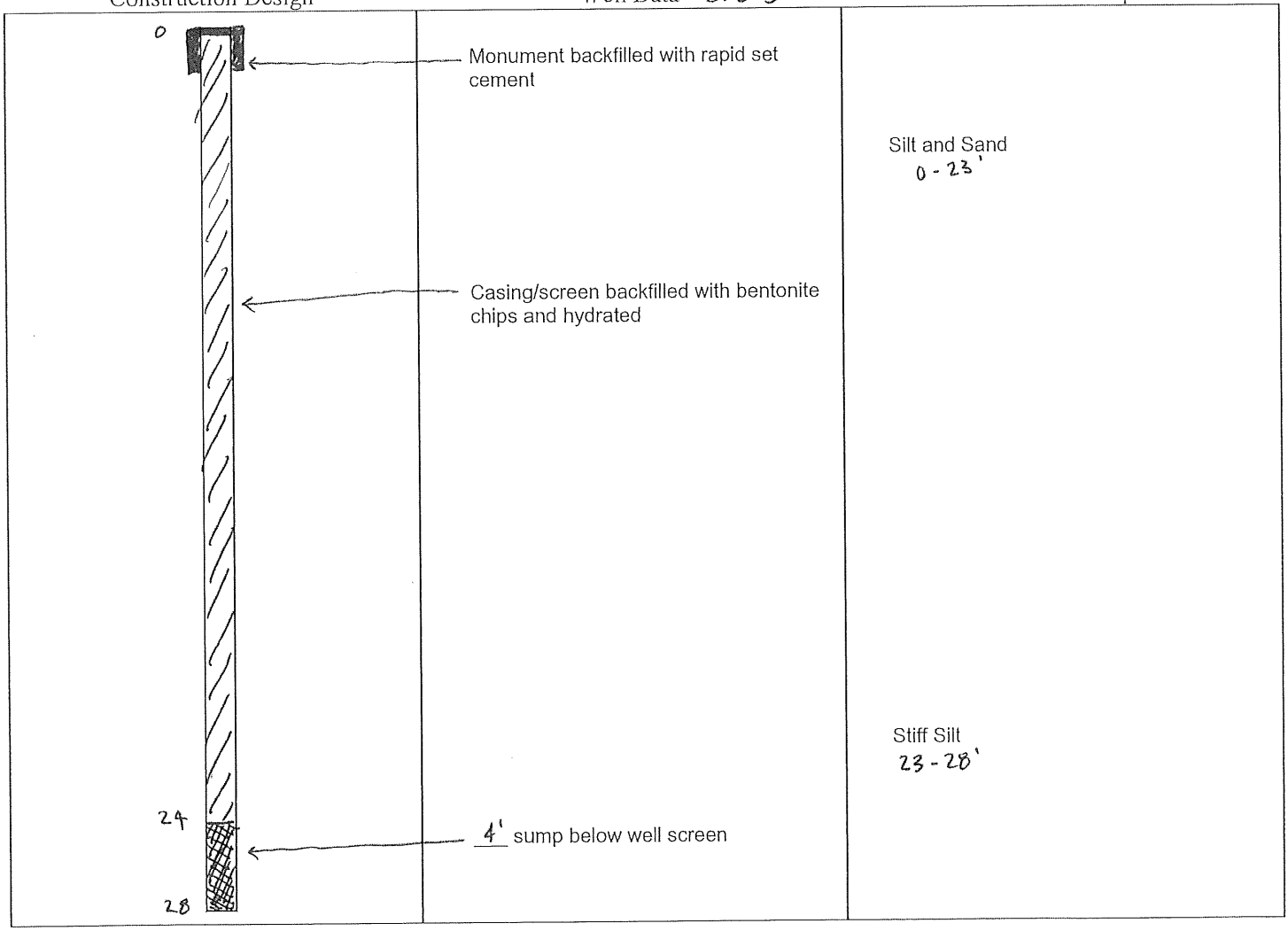
Tax Parcel No. 3879900425

Cased or Uncased Diameter 4" Static Level ~14'

Work/Decommission Start Date 01/30/2020

Work/Decommission Completed Date 01/30/2020

Construction Design | Well Data - DPE-5 | Formation Description



SCALE: 1"= _____ PAGE _____ OF _____

Please print, sign and return to the Department of Ecology

RESOURCE PROTECTION WELL REPORT

CURRENT Notice of Intent No. AE58967

(SUBMIT ONE WELL REPORT PER WELL INSTALLED)

Construction/Decommission *("x" in box)*

☐ Construction

☒ Decommission

ORIGINAL INSTALLATION Notice of Intent Number: RO66986

Consulting Firm The Riley Group, Inc. (RGI)

Unique Ecology Well IDTag No. APN 475

WELL CONSTRUCTION CERTIFICATION: I constructed and/or accept responsibility for construction of this well, and its compliance with all Washington well construction standards. Materials used and the information reported above are true to my best knowledge and belief.

☒ Driller ☐ Engineer ☐ Trainee

Name (Print Last, First Name) Riley, Paul

Driller/Engineer /Trainee Signature

Driller or Trainee License No. 2247

If trainee, licensed driller's Signature and License Number:

Type of Well *("x in box)*

☒ Resource Protection

☐ Geotech Soil Boring

Property Owner Vibrant Cities

Site Address 631 Queen Anne Avenue North

City Seattle County King

Location SE 1/4-1/4 NE 1/4 Sec 25 Twn 25N R 3E

EWM ☒ or WWM ☐

Lat/Long (s, t, r still REQUIRED) Lat Deg 47 Min 37 Sec 31.95

Long Deg 122 Min 21 Sec 25.36

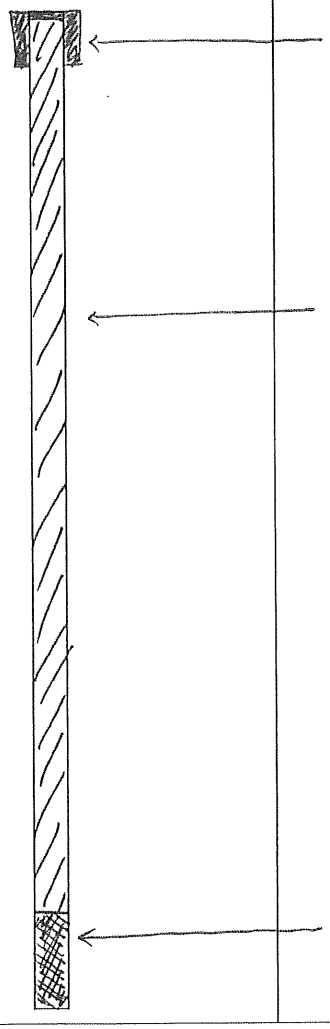
Tax Parcel No. 3879900425

Cased or Uncased Diameter 4" Static Level ~18'

Work/Decommission Start Date 01/30/2020

Work/Decommission Completed Date 01/30/2020

Construction Design | Well Data - DPE-6 | Formation Description



Monument backfilled with rapid set cement

Casing/screen backfilled with bentonite chips and hydrated

3' sump below well screen

Silt and Sand
0-31'

Stiff Silt
31'-33.5'

SCALE: 1"= _____ PAGE _____ OF _____

Please print, sign and return to the Department of Ecology

RESOURCE PROTECTION WELL REPORT

CURRENT Notice of Intent No. AE58967

(SUBMIT ONE WELL REPORT PER WELL INSTALLED)

Construction/Decommission *("x" in box)*

☐ Construction

☒ Decommission

ORIGINAL INSTALLATION Notice of Intent Number: RO66986

Consulting Firm The Riley Group, Inc. (RGI)

Unique Ecology Well IDTag No. APN 476

Type of Well *("x in box)*

☒ Resource Protection

☐ Geotech Soil Boring

Property Owner Vibrant Cities

Site Address 631 Queen Anne Avenue North

City Seattle County King

Location SE 1/4-1/4 NE 1/4 Sec 25 Twn 25N R 3E

EWM ☒ or WWM ☐

Lat/Long (s, t, r still REQUIRED) Lat Deg 47 Min 37 Sec 31.80

Long Deg 122 Min 21 Sec 26.29

Tax Parcel No. 3879900425

Cased or Uncased Diameter 4" Static Level ~20'

Work/Decommission Start Date 01/30/2020

Work/Decommission Completed Date 01/30/2020

WELL CONSTRUCTION CERTIFICATION: I constructed and/or accept responsibility for construction of this well, and its compliance with all Washington well construction standards. Materials used and the information reported above are true to my best knowledge and belief.

☒ Driller ☐ Engineer ☐ Trainee

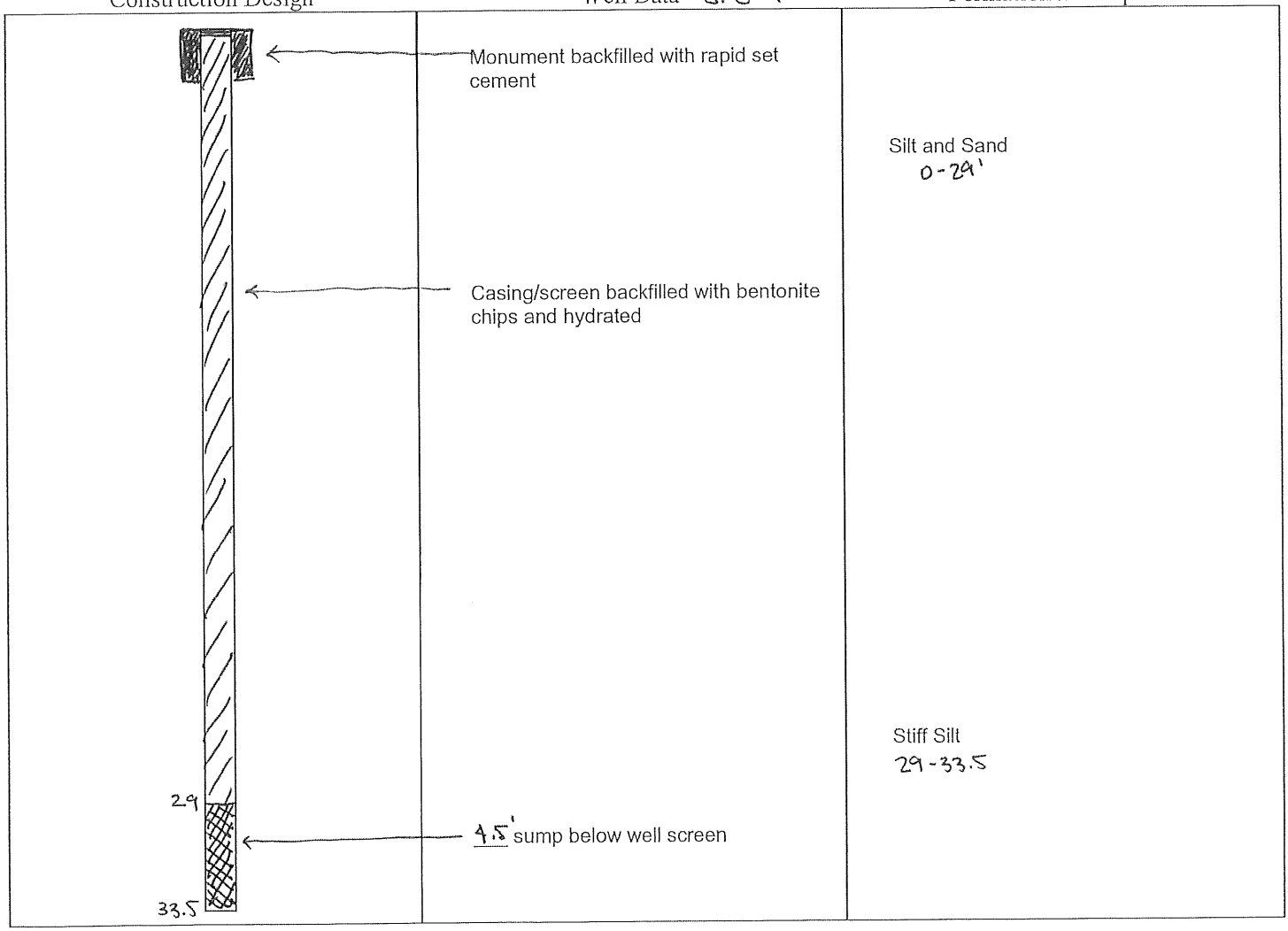
Name (Print Last, First Name) Riley, Paul

Driller/Engineer /Trainee Signature

Driller or Trainee License No. 2247

If trainee, licensed driller's Signature and License Number:

Construction Design | Well Data ~ DPE-7 | Formation Description



SCALE: 1"= _____ PAGE _____ OF _____

Please print, sign and return to the Department of Ecology

RESOURCE PROTECTION WELL REPORT

CURRENT Notice of Intent No. AE60653

(SUBMIT ONE WELL REPORT PER WELL INSTALLED)

Construction/Decommission *("x" in box)*

☐ Construction
☒ Decommission

ORIGINAL INSTALLATION Notice of Intent Number:
n/a

Consulting Firm The Riley Group, Inc. (RGI)

Unique Ecology Well IDTag No. n/a

WELL CONSTRUCTION CERTIFICATION: I constructed and/or accept responsibility for construction of this well, and its compliance with all Washington well construction standards. Materials used and the information reported above are true to my best knowledge and belief.

☒ Driller ☐ Engineer ☐ Trainee
Name (Print Last, First Name) Riley, Paul
Driller/Engineer /Trainee Signature
Driller or Trainee License No. 2247

If trainee, licensed driller's Signature and License Number:

Type of Well *("x in box)*

☒ Resource Protection
☐ Geotech Soil Boring

Property Owner Vibrant Cities
Site Address 631 Queen Anne Avenue North
City Seattle County King
Location SE 1/4-1/4 NE 1/4 Sec 25 Twn 25N R 3E
EWM ☒ or WWM ☐
Lat/Long (s, t, r still REQUIRED) Lat Deg 47 Min 37 Sec 31.93
Long Deg 122 Min 21 Sec 24.81
Tax Parcel No. 3879900425
Cased or Uncased Diameter 2" Static Level N/A
Work/Decommission Start Date 05/20/20
Work/Decommission Completed Date 05/20/20

VP-9

Construction Design	Well Data	Formation Description
0 15	Well screen and casing fully removed during excavations of underground parking/ remedial excavation effort	Silt and Sand 0 - 1 5

SCALE: 1"= _____ PAGE _____ OF _____

Please print, sign and return to the Department of Ecology

RESOURCE PROTECTION WELL REPORT

CURRENT Notice of Intent No. AE60653

(SUBMIT ONE WELL REPORT PER WELL INSTALLED)

Construction/Decommission *("x" in box)*

☐ Construction
☒ Decommission

ORIGINAL INSTALLATION Notice of Intent Number: n/a

Consulting Firm: The Riley Group, Inc. (RGI)

Unique Ecology Well IDTag No.: n/a

WELL CONSTRUCTION CERTIFICATION: I constructed and/or accept responsibility for construction of this well, and its compliance with all Washington well construction standards. Materials used and the information reported above are true to my best knowledge and belief.

☒ Driller ☐ Engineer ☐ Trainee

Name (Print Last, First Name): Riley, Paul

Driller/Engineer /Trainee Signature:

Driller or Trainee License No.: 2247

If trainee, licensed driller's Signature and License Number:

Type of Well *("x in box)*

☒ Resource Protection
☐ Geotech Soil Boring

Property Owner: Vibrant Cities

Site Address: 631 Queen Anne Avenue North

City: Seattle County: King

Location: SE 1/4-1/4 NE 1/4 Sec 25 Twn 25N R 3E

EWM ☒ or WWM ☐

Lat/Long (s, t, r still REQUIRED): Lat Deg 47 Min 37 Sec 31.93

Long Deg 122 Min 21 Sec 24.81

Tax Parcel No.: 3879900425

Cased or Uncased Diameter: 4" Static Level: 20

Work/Decommission Start Date: 05/04/20

Work/Decommission Completed Date: 06/15/20

RW-4

Construction Design	Well Data	Formation Description
0 32.5	Well screen and casing fully removed during the remedial excavation to 32.5 feet below ground surface	Silt and Sand 0 - 2 0 Silty Clay 20 - 32.5

SCALE: 1"= _____ PAGE _____ OF _____

Please print, sign and return to the Department of Ecology

RESOURCE PROTECTION WELL REPORT

CURRENT Notice of Intent No. AE60653

(SUBMIT ONE WELL REPORT PER WELL INSTALLED)

Construction/Decommission *("x" in box)*

☐ Construction

☒ Decommission

ORIGINAL INSTALLATION Notice of Intent Number:

n/a

Consulting Firm The Riley Group, Inc. (RGI)

Unique Ecology Well IDTag No. n/a

WELL CONSTRUCTION CERTIFICATION: I constructed and/or accept responsibility for construction of this well, and its compliance with all Washington well construction standards. Materials used and the information reported above are true to my best knowledge and belief.

☒ Driller ☐ Engineer ☐ Trainee

Name (Print Last, First Name) Riley, Paul

Driller/Engineer /Trainee Signature

Driller or Trainee License No. 2247

If trainee, licensed driller's Signature and License Number:

Type of Well *("x in box)*

☒ Resource Protection

☐ Geotech Soil Boring

Property Owner Vibrant Cities

Site Address 631 Queen Anne Avenue North

City Seattle County King

Location SE 1/4-1/4 NE 1/4 Sec 25 Twn 25N R 3E

EWM ☒ or WWM ☐

Lat/Long (s, t, r still REQUIRED) Lat Deg 47 Min 37 Sec 31.93

Long Deg 122 Min 21 Sec 24.81

Tax Parcel No. 3879900425

Cased or Uncased Diameter 2" Static Level 22.5'

Work/Decommission Start Date 05/15/20

Work/Decommission Completed Date 05/15/20

MW-9

Construction Design	Well Data	Formation Description
0		Silt and Sand 0 - 23
	Well screen and casing removed. Borehole remained open and borehole was decommissioned with hydrated bentonite chips	
29		Silty Clay 23 - 29

SCALE: 1"= _____ PAGE _____ OF _____

ECY 050-12 (Rev 02-2011) To request ADA accommodation including materials in a format for the visually impaired, call Ecology Water Resources Program at 360-407-6872. Persons with impaired hearing may call Washington Relay Service at 711. Persons with speech disability may call TTY at 877-833-6341.

Please print, sign and return to the Department of Ecology

RESOURCE PROTECTION WELL REPORT

CURRENT Notice of Intent No. AE60653

(SUBMIT ONE WELL REPORT PER WELL INSTALLED)

Construction/Decommission *("x" in box)*

☐ Construction
☒ Decommission

ORIGINAL INSTALLATION Notice of Intent Number: n/a

Consulting Firm: The Riley Group, Inc. (RGI)

Unique Ecology Well IDTag No.: n/a

WELL CONSTRUCTION CERTIFICATION: I constructed and/or accept responsibility for construction of this well, and its compliance with all Washington well construction standards. Materials used and the information reported above are true to my best knowledge and belief.

☒ Driller ☐ Engineer ☐ Trainee

Name (Print Last, First Name): Riley, Paul

Driller/Engineer /Trainee Signature: Paul

Driller or Trainee License No.: 2247

If trainee, licensed driller's Signature and License Number:

Type of Well *("x in box)*

☒ Resource Protection
☐ Geotech Soil Boring

Property Owner: Vibrant Cities

Site Address: 631 Queen Anne Avenue North

City: Seattle County: King

Location: SE 1/4-1/4 NE 1/4 Sec 25 Twn 25N R 3E

EWM ☒ or WWM ☐

Lat/Long (s, t, r still REQUIRED)

Lat Deg 47 Min 37 Sec 31.93

Long Deg 122 Min 21 Sec 24.81

Tax Parcel No.: 3879900425

Cased or Uncased Diameter: 2" Static Level: 24

Work/Decommission Start Date: 05/15/20

Work/Decommission Completed Date: 05/15/20

MW-6

Construction Design	Well Data	Formation Description
0		Silt and Sand 0 - 25
	Well screen and casing removed. Borehole remained open and borehole was decommissioned with hydrated bentonite chips	
29		Silty Clay 25 - 29

SCALE: 1"= _____ PAGE _____ OF _____

ECY 050-12 (Rev 02-2011) To request ADA accommodation including materials in a format for the visually impaired, call Ecology Water Resources Program at 360-407-6872. Persons with impaired hearing may call Washington Relay Service at 711. Persons with speech disability may call TTY at 877-833-6341.

STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY
Northwest Regional Office • 3190 160th Ave SE • Bellevue, WA 98008-5452 • 425-649-7000
711 for Washington Relay Service • Persons with a speech disability can call 877-833-6341

MAR 0 9 2020

Vibrant Cities, LLC
c/o Paul Riley
The Riley Group, Inc.
17522 Bothell Way NE
Bothell, WA 98011

RE: Variance request from Washington Administrative Code (WAC) 173-160-460. The property address is 631 Queen Ave. North, Seattle in the NE ¼ SE ¼ of Section 25, Township 25 North, Range 03 East, W.M., on Tax Parcel 3879900425 in King County.

Dear Paul Riley:

The Department of Ecology (Ecology) received your variance request via email January 23, 2020. The request states that strict compliance with WAC 173-160-460, which details decommissioning standards for resource protection wells, is impractical because power lines are too close to the site, presenting dangerous conditions for a drilling rig tower to be raised. You propose sealing the well with bentonite and concrete.

The variance you requested to WAC 173-160-460 is **granted**, in accordance with WAC 173-160-106, to decommission the well and **expires December 31, 2020**. This variance is granted only for decommissioning of the single resource protection well in the manner and location referenced in the variance request. Any licensed resource protection well driller can execute the decommissioning of the well according to the variance request, subject to the provisions listed below:

1. A "Notice of Intent to Decommission a Well" and fees shall be submitted to Ecology at PO Box 47611, Olympia, WA, 98504-7611.

2. All other minimum construction standards found in WAC 173-160 shall be followed to prevent degradation of the groundwater resource.

3. A well report containing the details required by WAC 173-160-141 shall be submitted to Ecology at 3190 160th Ave SE, Bellevue, WA 98008, within 30 days of completion of work on the well. Attach a copy of this variance to the well report.

4. With the exception of the specific provisions set forth (above) in this variance, all federal, state, and local requirements shall apply.

5. This variance **expires December 31, 2020**. After this date, approval of a new request for variance or an extension must be requested in writing for the work proposed.

Your Right To Appeal

You have a right to appeal this Order to the Pollution Control Hearings Board (PCHB) within 30 days of the date of receipt of this Order. The appeal process is governed by chapter 43.21B RCW and chapter 371-08 WAC. "Date of receipt" is defined in RCW 43.21B.001(2).

To appeal, you must do the following within 30 days of the date of receipt of the Order:

- File your appeal and a copy of this Order with the PCHB (see addresses below). Filing means actual receipt by the PCHB during regular business hours.

- Serve a copy of your appeal and this Order to Ecology in paper form - by mail or in person (see addresses below). E-mail is not accepted.

You must also comply with other applicable requirements in chapter 43.21B RCW and chapter 371-08 WAC.

Street Addresses	Mailing Addresses
Department of Ecology Attn: Appeals Processing Desk 300 Desmond Drive SE Lacey, WA 98503	**Department of Ecology** Attn: Appeals Processing Desk PO Box 47608 Olympia, WA 98504-7608
Pollution Control Hearings Board 1111 Israel RD SW, Ste 301 Tumwater, WA 98501	**Pollution Control Hearings Board** PO Box 40903 Olympia, WA 98504-0903

For additional information, visit the Environmental Hearings Office Website: http://www.eho.wa.gov. To find laws and agency rules, visit the Washington State Legislature Website: http://www1.leg.wa.gov/CodeReviser.

Your attention to these laws and regulations, and cooperation with the Department of Ecology in this matter, is appreciated. Please telephone Noel S. Philip at (425) 649-7044 or email him at noel.philip@ecy.wa.gov if you have any questions concerning this variance.

DATED this 9 day of March, 2020, at Bellevue, Washington.

Sincerely,

Ria Berns
Section Manager
Water Resources Program

By Certified Mail: 9171 9690 0935 0214 2448 84

Enclosure: *Your Right to be Heard*

ecc: Noel S. Philip, LHG, Well Construction Coordinator

STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY
Northwest Regional Office • 3190 160th Ave SE • Bellevue, WA 98008-5452 • 425-649-7000
711 for Washington Relay Service • Persons with a speech disability can call 877-833-6341

MAR 0 9 2020

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c/o Paul Riley
The Riley Group, Inc.
17522 Bothell Way NE
Bothell, WA 98011

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2. All other minimum construction standards found in WAC 173-160 shall be followed to prevent degradation of the groundwater resource.

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Pollution Control Hearings Board 1111 Israel RD SW, Ste 301 Tumwater, WA 98501	**Pollution Control Hearings Board** PO Box 40903 Olympia, WA 98504-0903

For additional information, visit the Environmental Hearings Office Website: http://www.eho.wa.gov. To find laws and agency rules, visit the Washington State Legislature Website: http://www1.leg.wa.gov/CodeReviser.

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DATED this 9 day of March, 2020, at Bellevue, Washington.

Sincerely,

Ria Berns
Section Manager
Water Resources Program

By Certified Mail: 9171 9690 0935 0214 2448 84

Enclosure: *Your Right to be Heard*

ecc: Noel S. Philip, LHG, Well Construction Coordinator

DEPARTMENT OF ECOLOGY
State of Washington

Water Resources Program

Variance Request- Minimum Standards for Well Construction

WAC173-160-106(1) allows you to request a variance from the Department of Ecology when strict compliance with state well construction standards is impractical. The variance request must propose comparable alternative specifications that will provide equal or greater human health and resource protection than the minimum standards. You must apply for a variance in writing and receive approval before constructing or decommissioning the well. (All fields must be completed.)

Requested by: Paul Riley - The Riley Group, INC.

Mailing Address: 17522 Bothell Way NE City: Bothell State: WA Zip: 98011

Daytime Phone: 425 415 0551 ext 322 Date: 1/22/2020

Property Owner (if different): Vibrant Cities LLC

Site Location: NE ¼ SE ¼ Section: 25 Township: 25 Range: 3 ☒E or ☐WWM

Tax Parcel Number: 3879900425

Well Address: 631 Queen Ave North, Seattle, WA 98109

Well Driller/Company (if known): PAUL RILEY / The Riley Group, INC. #2247

Check one: ☐ Water Well ☒ Resource Protection Well ☐ Dewatering Well

MW10

What construction standard cannot be met?

Groundwater monitoring well constructed prior to 1989 (current well regs) - see attached

Describe the reason why standard cannot be met. Include site map and distances from all known potential sources of contamination if setback variance is being requested.

Standard cannot be met due to overhead power and electric tracks for Metro Transit buses.

Describe the alternative construction method that will provide equal or greater protections than those provided by the minimum standard.

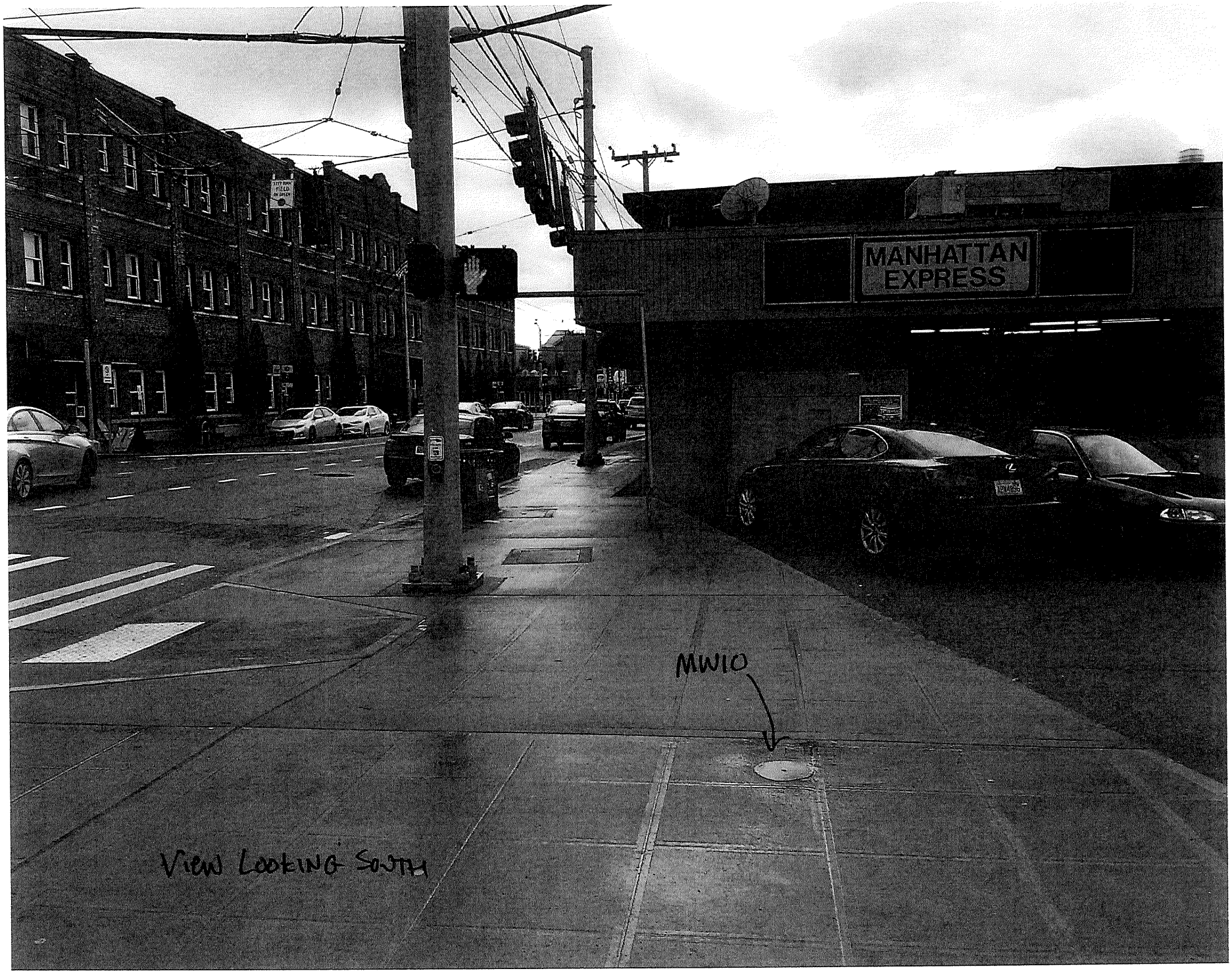
Proposed alternative decom. method includes sealing the well screen and casing w/ hydrated bentonite and concrete at surface (to match existing grade)

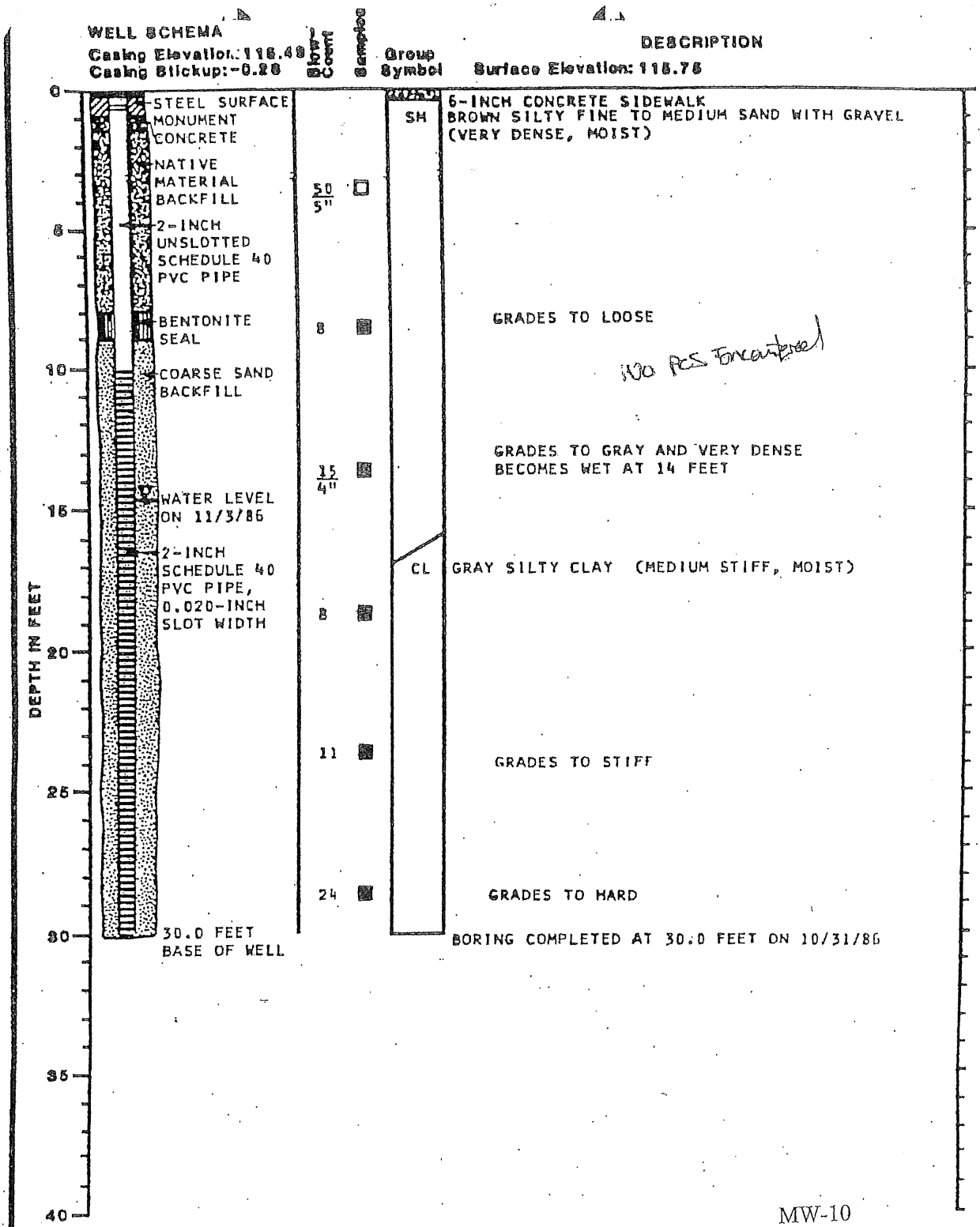
(Attach additional pages if necessary.) Complete and return with your site map to the appropriate regional office:

Northwest Regional Office	Southwest Regional Office	Eastern Regional Office	Central Regional Office
ATTN: Noel Philip	ATTN: John Pearch	ATTN: Mark Ader	ATTN: Avery Richardson
3190 160th Avenue SE	PO Box 47775	N 4601 Monroe	1250 W Alder St.
Bellevue, WA 98008	Olympia, WA 98504	Spokane, WA 99205	Union Gap, WA 98903
425-649-7044	360-407-0297	509-329-3544	509-575-2639
Fax: 425-649-7098	Fax: 360-407-6305	Fax: 509-329-3529	Fax: 509-454-7830
nphi461@ecy.wa.gov	jope461@ecy.wa.gov	made461@ecy.wa.gov	aric461@ecy.wa.gov


POWER & OVERHEAD ELECTRICAL FOR METRO TRANSIT BUSES
ADA RAMP
ADA RAMP
MW10
Looking SOUTHEAST


MW10
ADA RAMP
ADA RAMP
VIEW LOOKING NORTH


MANHATTAN
EXPRESS
MW10
View Looking South



560-04 JAM:DHP 11-13-86

GeoEngineers Incorporated

LOG OF MONITOR WELL

FIGURE 11

TABLE 1

GROUNDWATER MONITORING DATA AND ANALYTICAL RESULTS[1]

FORMER TEXACO SERVICE STATION NO. 211577

631 Queen Anne Avenue North

Seattle, Washington

Well ID/ Date	TOC[2] (ft.)	DTP (ft.)	DTW (ft.)	SPHT (ft.)	GWE[3] (ft.)	TPH-DRO (µg/L)	TPH-HRO (µg/L)	TPH-GRO (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	D. Lead (µg/L)
MW-10 (cont.)													
10/17/06	115.28	--	14.68	0.00	100.60	--	--	--	--	--	--	--	--
04/17-19/07	115.28	--	13.05	0.00	102.23	<75	<94	100	1.4	<0.5	<0.5	<1.5	--
12/04-05/07	115.28	--	14.33	0.00	100.95	<78	<98	150	2.0	<2.0	0.9	<5.0	--
04/28-05/01/08	115.28	--	12.71[5]	0.00	102.57	<77	<97	<50	0.8	<0.5	<0.5	<0.5	--
11/10/08	115.28	--	12.66	0.00	102.62	<30	<69	<50	0.7	<0.5	<0.5	<0.5	--
04/13-16/09	115.28	--	12.11	0.00	103.17	<29	<67	<50	<0.5	<0.5	<0.5	<0.5	--
10/12-15/09	115.28	--	12.23	0.00	103.05	<29	<67	<50	<0.5	<0.5	<0.5	<0.5	--
04/19-22/10	115.28	--	11.93	0.00	103.35	<31	<73	<50	<0.5	<0.5	<0.5	<0.5	--
01/17-20/11	115.28	--	10.62	0.00	104.66	<59[19]	250[19]	<50	<0.5	<0.5	<0.5	<0.5	--
05/10-12/11	115.28	--	12.02	0.00	103.26	<30	<69	<50	<0.5	<0.5	<0.5	<0.5	--
05/07-08/12	115.28	--	11.92	0.00	103.36	<30	<70	<50	<0.5	<0.5	<0.5	<0.5	--
11/12-14/12	115.28	--	12.28	0.00	103.00	<30	230	180	<0.5	<0.5	<0.5	<0.5	--
5/20-22/13	115.28	--	12.35	0.00	102.93	<29	<68	<50	<0.5	<0.5	<0.5	<0.5	--
11/11-13/13	115.28	--	12.54	0.00	102.74	<31	<73	<50	<0.5	<0.5	<0.5	<0.5	--
MW-11													
03/26-28/91	97.32	--	11.70	0.00	85.62	--	--	--	<5	<5	<5	<5	--
07/24/02	--	--	11.16	0.00	--	<250	<250	<50	<0.50	<0.50	<0.50	<1.5	<1.2
10/17-18/02	--	--	11.43	0.00	--	<250	<500	<50.0	<0.500	<0.500	<0.500	<1.00	<1.00
01/21/03	--	--	11.29	0.00	--	<250	<500	<50.0	<0.500	<0.500	<0.500	<1.00	<1.00
04/23-24/03	--	--	11.09	0.00	--	<250	<500	<50.0	<0.500	<0.500	<0.500	<1.00	<1.00[13]
06/30-07/01/03	--	--	11.39	0.00	--	<250	<500	<50.0	<0.500	<0.500	<0.500	<1.00	<1.00[13]
10/01-02/03	--	--	12.10	0.00	--	<250	<250	<50	<0.5	<0.5	<0.5	<1.5	<1.2[13]
01/21-23/04	--	--	11.69	0.00	--	<250	<250	<50	<0.5	<0.5	<0.5	<1.5	<1.2[13]
04/29-30/04	--	--	11.41	0.00	--	<250	<250	<50	<0.5	<0.5	<0.5	<1.5	<0.99[13]
07/15-16/04	--	--	11.58	0.00	--	<250	<500	<50.0	<0.500	<0.500	<0.500	<1.00	<1.00[13]
08/03/04	97.32	--	11.65	0.00	85.67	NOT SAMPLED		--	--	--	--	--	--
10/28-11/01/04	97.32	--	11.73	0.00	85.59	<78	<98	<50	<0.5	<0.5	<0.5	<1.5	--
01/24-31/05	97.32	--	11.35	0.00	85.97	NOT SAMPLED		--	--	--	--	--	--
04/18-21/05	97.32	--	11.41	0.00	85.91	NOT SAMPLED		--	--	--	--	--	--
07/27-28/05	97.32	--	11.44	0.00	85.88	NOT SAMPLED		--	--	--	--	--	--
11/08-10/05	97.32	--	11.52	0.00	85.80	--	--	--	--	--	--	--	--
04/17/06	97.32	--	11.29	0.00	86.03	--	--	--	--	--	--	--	--
08/08/06	97.32	--	11.26	0.00	86.06	--	--	--	--	--	--	--	--
10/17/06	97.32	--	11.39	0.00	85.93	--	--	--	--	--	--	--	--
04/17/07	97.32	--	11.29	0.00	86.03	--	--	--	--	--	--	--	--
12/04/07	97.32	NOT SAMPLED, OBSTRUCTION IN WELL AT 10.98 FEET BGS						--	--	--	--	--	--

leidos