



May 3, 2022

Erika Malone
City of Seattle, Office of Housing
700 5th Avenue, Suite 5700
Seattle, Washington 98104

**RE: Preliminary Phase II Subsurface Investigation
Kenyon Street Vacant Lot, Site 5
4203 South Kenyon Street and 7908 Martin Luther King Jr. Way South
Seattle, Washington 98118
RGI Project No. 2021-552-11**

Dear Ms. Malone:

The Riley Group, Inc. (RGI) is pleased to present our Preliminary Phase II Subsurface Investigation (Phase II) for the above-referenced Kenyon Street Vacant Lot, Site 5 located at 4203 South Kenyon Street and 7908 Martin Luther King Jr. Way South in Seattle, Washington (hereafter referred to as the Property, Figure 1). Authorization for this project was provided by Ms. Laurie Olson of the City of Seattle on March 2, 2022.

PROJECT BACKGROUND

RGI completed, on behalf of the City of Seattle, Office of Housing, a Phase I Environmental Site Assessment (ESA) on September 30, 2021 (RGI project number 2021-552-3). Based on our Phase I ESA findings, the following recognized environmental conditions (RECs) were identified:

- **Former Oil Burners and Heating Oil USTs:** Three heating oil underground storage tanks (USTs) and at least four oil burners are known to have been historically present on the Property. There is a potential that abandoned heating oil USTs are present at the Property associated with the four historical oil burners. No environmental sampling and testing of soils adjacent to the former USTs is known to have been performed. Therefore, the soil and shallow groundwater quality in the vicinity of the former USTs is unknown. The former heating oil USTs and potential of abandoned heating oil USTs on the Property was considered a REC.
- **Auto Repairs on Property:** A previous Phase I ESA provided to RGI by the Client indicated that auto repair activities were observed in the garage of the former southern duplex located at 7908 and 7910 Martin Luther King Jr. Way South on the Property. No environmental sampling and testing of soils beneath the former garage used for auto repair is known to have been performed. Therefore, the soil and shallow groundwater quality in the vicinity of the former garage are unknown. The former auto repair activities on the Property was considered a REC.

RGI recommended a Preliminary Phase II Subsurface Investigation in the vicinity of the former USTs and former garage to evaluate the potential impacts to soil and shallow groundwater quality for the above-referenced RECs. In addition, RGI recommended conducting a Geophysical Survey in an effort to locate any abandoned, decommissioned, or former heating oil UST locations at the Property.

At the request of the City of Seattle, Office of Housing (hereafter referred to as the Client), RGI has prepared this Phase II report to evaluate the above summarized potential environmental concerns.

SCOPE OF WORK

The scope of work for this project was performed in accordance with our proposal, dated March 1, 2022 and included the following:

- Performed public and private utility locating in an attempt to identify the location(s) of buried utility lines servicing the building on the Property.
- Performed a geophysical survey of the Property in an attempt to locate any existing abandoned or decommissioned-in-place UST(s).
- Relied on information developed for the Phase I ESA of the Property as well as information developed during the geophysical survey in order to determine test pit location placement in relation to areas of potential contamination.
- Advanced seven test probes (TP1 through TP7) throughout the Property, to a maximum depth of 24 feet below ground surface (bgs).
- Submitted select soil and groundwater samples for laboratory analysis of potential contaminants of concern.
- Compared analytical results to the Washington State Department of Ecology (Ecology) Model Toxics Control Act (MTCA) Method A Soil Cleanup Levels (CULs) for Unrestricted Land Use and MTCA Method A CULs for Groundwater (WAC 173-340). In instances where no MTCA Method A CULs were published for particular analytes, MTCA Method B CULs were utilized.
- Prepared this report presenting our findings, observations, conclusions, and recommendations.

SUBSURFACE INVESTIGATION AND SAMPLING

Private and Public Utility Locate

At least 48 hours prior to commencing our subsurface investigation, RGI contacted One-Call to locate known public underground utilities near, or on, the Property. Public underground utilities located included electric, natural gas, telecommunications, water, sewer, and cable.

RGI also retained a private utility locator to locate private water, natural gas, electric, and other metallic underground utility conduits potentially located in the proposed test probe locations.

Geophysical Survey

RGI supervised a contractor to perform the geophysical survey in an attempt to locate any existing abandoned or decommissioned-in-place UST(s), any remaining product or vent piping, or other underground metallic anomalies. The geophysical survey utilized electromagnetic (EM) and ground-penetrating radar (GPR) units to traverse the Property on approximately 5- to 10-foot-line spacing.

The geophysical survey uncovered near surface buried metal debris as well as potential historical utility piping however no anomalies suggestive of USTs or associated piping were identified.

Subsurface Investigation

On April 6, 2022, seven test probes (TP1 through TP7) were advanced to depths ranging from approximately 9 to 24 feet bgs depending on subsurface material density encountered. Test probes were

advanced using a Geoprobe 7730 hydraulic drill. Test probe locations are shown on Figures 2 and 3 and described below.

Test probe TP1 was placed at the approximate southern portion of the former southernmost residence which previously was located on the Property. Test probe TP2 was located in the south-central portion of the Property where a former AST had been previously located. TP3 was installed at the northern portion of the historical southern residence. TP4 and TP5 were placed at the approximate northwest and northeast portions of the former northern on-Property residence. Finally, TP6 and TP7 were installed to the southwest of TP1 in an effort to define the extent of odors observed in soils at TP1. TP6 and TP7 were also placed adjacent to each other as subsurface density at TP6 prevented exploration beyond 7.5 feet bgs.

Subsurface Conditions

Soil conditions encountered were described using the Unified Soil Classification System (USCS). Shallow soils encountered between the ground surface and between 10 to 15 feet in depth generally consisted of sands, sandy silt, and/or silty sands with occasional gravels. Materials below the silty sands generally consisted of brown/grey/black sands, sandy silt with density increasing with depth. Petroleum odors accompanied by were observed in materials at TP1 between 7.5 to approximately 22 feet bgs (with the strongest odors between 12 to 14 feet bgs) as well as at TP5 between 6 to 19 feet bgs (with strongest odors at approximately 10 feet bgs). While moist conditions were noted at several of the test probe locations, recoverable groundwater was only encountered at TP5. Test probe logs are included in Appendix A.

Soil Sampling

Discrete soil samples from test probes were generally collected at approximately 2.5 to 5-foot intervals, inspected, and field screened for the presence of volatile organic compounds (VOCs) and/or total petroleum hydrocarbons (TPH) using a portable gas photoionization detector (PID) and water sheen test. As noted above, petroleum odors accompanied by sheens/elevated PID readings were observed in materials at TP1 between 7.5 to approximately 22 feet bgs (with the strongest odors/readings between 12 to 14 feet bgs) as well as at TP5 between 6 to 19 feet bgs (with strongest odors at approximately 10 feet bgs). These odors correspond with the approximate garage level of the former residence where auto service work reportedly occurred. PID field screening results are given in Table 1.

Groundwater Grab Sampling

Groundwater grab samples were collected from test probe TP5. Groundwater was not encountered at the remaining test probe locations. The groundwater samples were collected through a 1-inch-diameter temporary well screen down the hole using a peristaltic pump and disposable plastic tubing under low-flow conditions. Groundwater was encountered at approximately 15 feet bgs at that location.

Shallow groundwater grab samples collected from the test probes may not be representative of groundwater conditions or quality. To obtain samples that are definitively representative of shallow groundwater, the installation, development, and sampling of shallow groundwater from permanent monitoring wells would need to be installed at the Property. The objective of this investigation was to determine if groundwater had been impacted by the potential contaminants of concern. Groundwater sampling satisfied these project objectives and provided useful information regarding subsurface conditions at the Property.

Sampling Protocols

All samples were collected in accordance with our standard operating and decontamination procedures. Samples were placed in preconditioned, sterilized containers provided by an Ecology-accredited analytical laboratory. If soil samples were collected for analysis of VOCs, they were collected using the Environmental Protection Agency's Method 5035 sampling method. The samples were placed in a chilled cooler throughout the field program, with all subsequent transportation and transfer accomplished in strict accordance with RGI's chain-of-custody procedures. Analytical test certificates, including quality control, data, and chain-of-custody documentation for all samples submitted to the analytical testing laboratory by RGI as part of this Phase II are included in Appendix B. All soil sample locations were backfilled with excavated material.

REGULATORY FRAMEWORK

Washington's hazardous waste cleanup law, the Model Toxics Control Act (Chapter 70.105D RCW), mandates the necessity for site cleanups to protect human health and the environment. The MTCA Cleanup Regulation (Chapter 173-340 WAC) defines the approach for establishing cleanup requirements for individual sites, including the establishment of cleanup standards and selection of cleanup actions.

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

For purposes of comparison, analytical laboratory data for this project are compared to the *MTCA Method A Soil CULs for Unrestricted Land Uses* and *MTCA Methods A CULs for Groundwater* (except in instances where no MTCA Method A CULs were published for particular analytes, MTCA Method B CULs were utilized), summarized in the attached Tables 1 and 2.

ANALYTICAL LABORATORY ANALYSIS

Soil and groundwater grab samples were submitted to Friedman & Bruya, Inc. (FBI), an Ecology-accredited, third-party analytical laboratory for the requested analyses.

Select soil and groundwater grab samples were submitted for laboratory analysis. The samples were analyzed for one or more of the following contaminants of concern:

- Diesel- and oil-range TPH using Northwest Test Method NWTPH-Dx (11 soil samples and 1 groundwater sample).
- Gasoline-range TPH using Northwest Test Method NWTPH-Gx (11 soil samples and 1 groundwater sample).
- VOCs using EPA Test Method 8260 (8 soil samples and 1 groundwater sample).
- Semi volatile organic compounds (SVOCs) by EPA Test Method 8270E (1 soil sample).
- Total Lead using EPA Test Method 6020B (2 soil samples).

ANALYTICAL RESULTS

Analytical results and field screening data, summarized in the attached Tables 1 and 2 and Figures 2 and 3, are discussed below. Copies of the analytical laboratory reports and associated sample chain-of-custody forms are included in Appendix B.

Soil Analytical Results

Soil from TP1 at a depth of 14 feet bgs as well as soil sampled from TP5 at a depth of 10 feet bgs reported detections of gasoline TPH at concentrations of 940 mg/kg and 1,700 mg/kg, respectively. The TP1-14 sample also reported a concentration of diesel TPH at 5,700 mg/kg. Both of the gasoline TPH detections and the diesel TPH detection are above their applicable MTCA Method A Cleanup Levels for those analytes. Additional testing of soils from TP1 at depths of 7.5, 21.5, and 24 feet bgs did not report detections of gasoline or diesel TPH indicating that the detections at 14 feet bgs are vertically limited at that test probe location.

The samples which contained gasoline TPH from TP1 (at 14 feet bgs) and TP5 (at 10 feet bgs) were further analyzed for total lead. Lead was detected at concentrations of 2.43 mg/kg at TP1-14 and 3.32 mg/kg at TP5-10. Those concentrations are below (i.e. compliant with) their applicable MTCA Method A cleanup level.

Soils sampled from TP1-14 (at a depth of 14 feet bgs), and TP5-10 (at a depth of 10 feet bgs) were also found to contain various VOCs including n-propylbenzene, 1,2,4-trimethylbenzene, sec-butylbenzene, p-isopropyltoluene, 1,2,5-trimethylbenzene, or naphthalene however the reported concentrations were each below (i.e. compliant with) their applicable MTCA Method A (or B if no A is published) cleanup levels.

Additional testing of soil from sample TP1-14 for SVOCs revealed detections of 1-methylnaphthalene, 2-methylnaphthalene, acenaphthene, fluorene, phenanthrene, fluoranthene, and pyrene below their applicable MTCA cleanup levels.

Analytical lab results for the remaining soil samples tested indicate concentrations for selected analyses were not detected above laboratory analytical detection limits (i.e., non-detect).

Groundwater Analytical Results

During this project, recoverable groundwater was only encountered within test probe TP5. Groundwater sampled from TP5 contained diesel TPH at 150x µg/L, which is below the MTCA Method A cleanup level of 500 µg/L for that analyte. The analytical chemist flagged "x" on the diesel and oil-range TPH detections. The flagged "x" by the laboratory chemist indicates that *"the sample chromatographic pattern does not resemble the fuel standard used for quantification"*. In other words, the reported concentrations of diesel-range TPH in groundwater could be a highly degraded petroleum hydrocarbon and/or a naturally occurring biogenic material (such as peat or other organic material).

Various VOCs including xylenes, 1,3,5-trimethylbenzene, 1,2,4-trimethylbenzene, and naphthalene were also detected in groundwater sampled from TP5 however the reported detections were all below their applicable MTCA Method A (or Method B if no Method A is published) cleanup levels.

CONCLUSIONS & RECOMMENDATIONS

Based on our findings to-date, RGI concludes and/or recommends the following:

- Soil contamination by gasoline and/or diesel TPH above MTCA Method A CULs was encountered in test probes TP1 and TP5. Based on the results of soil testing at other localities and depths, the petroleum contamination at TP1 appears to be somewhat vertically limited to depths between 7.5 to 21.5 feet bgs and horizontally limited between TP7, TP2, and TP3. Soil contamination at TP5 appears vertically limited to depths above 17.5 feet bgs. Additional drilling would be required if further delineation is desired by the Client.
- While no evidence of heating oil USTs was discovered during RGI's geophysical survey, acknowledging the history of heating oil UST use, if a heating oil UST is discovered during the

course of future construction/Property redevelopment, if during the course of future site development/construction activities, an underground heating oil tank is encountered, RGI recommends it be properly decommissioned and removed in accordance with the applicable city, county, and/or state requirements and with the Ecology *Guidance for Site Checks and Site Assessment for Underground Storage Tanks*. As a component of such decommissioning activity, it would be RGI's further recommendation that soil and/or groundwater samples be obtained by a licensed professional from appropriate localities within such a tank excavation and submitted for laboratory analysis in an effort to ascertain whether or not subsurface environmental conditions at the time of removal are consistent with Ecology cleanup standards in effect at that time.

- Based on the discovery of contamination during this Phase II, RGI recommends that the owner of the Property notify Ecology of the discovered contamination as promulgated under WAC 173-340-300. Under WAC 173-340-300, the owner or operator of the Site shall report such information regarding this encountered contamination to Ecology within 90 days of discovery. On written request, RGI can contact, or submit a copy of this report to Ecology on behalf of the owner.

PROJECT LIMITATIONS

This report is the property of the City of Seattle, Office of Housing, and their authorized representatives or affiliates 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 Kenyon Street Vacant Lot, Site 5 Property located at 4203 South Kenyon Street and 7908 Martin Luther King Jr. Way South, Seattle, King County, Washington. No warranty or guarantee, 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, test borings drilled on the Property, or other noted data sources. The findings and conclusions of this study are based upon the results of laboratory testing of selected samples obtained from separated boring/probe locations and conditions may vary between those localities or at other locations, depths, media, or date. 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.

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

Sincerely,
THE RILEY GROUP, INC.



Eric Zuern
Project Geologist



Megan Poysnick, LG
Senior Environmental Manager

Attachments:

Figure 1, Property Vicinity Map

Figure 2, Property Representation with Soil Analytical Data

Figure 3, Property Representation with Groundwater Analytical Data

Table 1, Summary of Soil Sample Analytical Laboratory Results

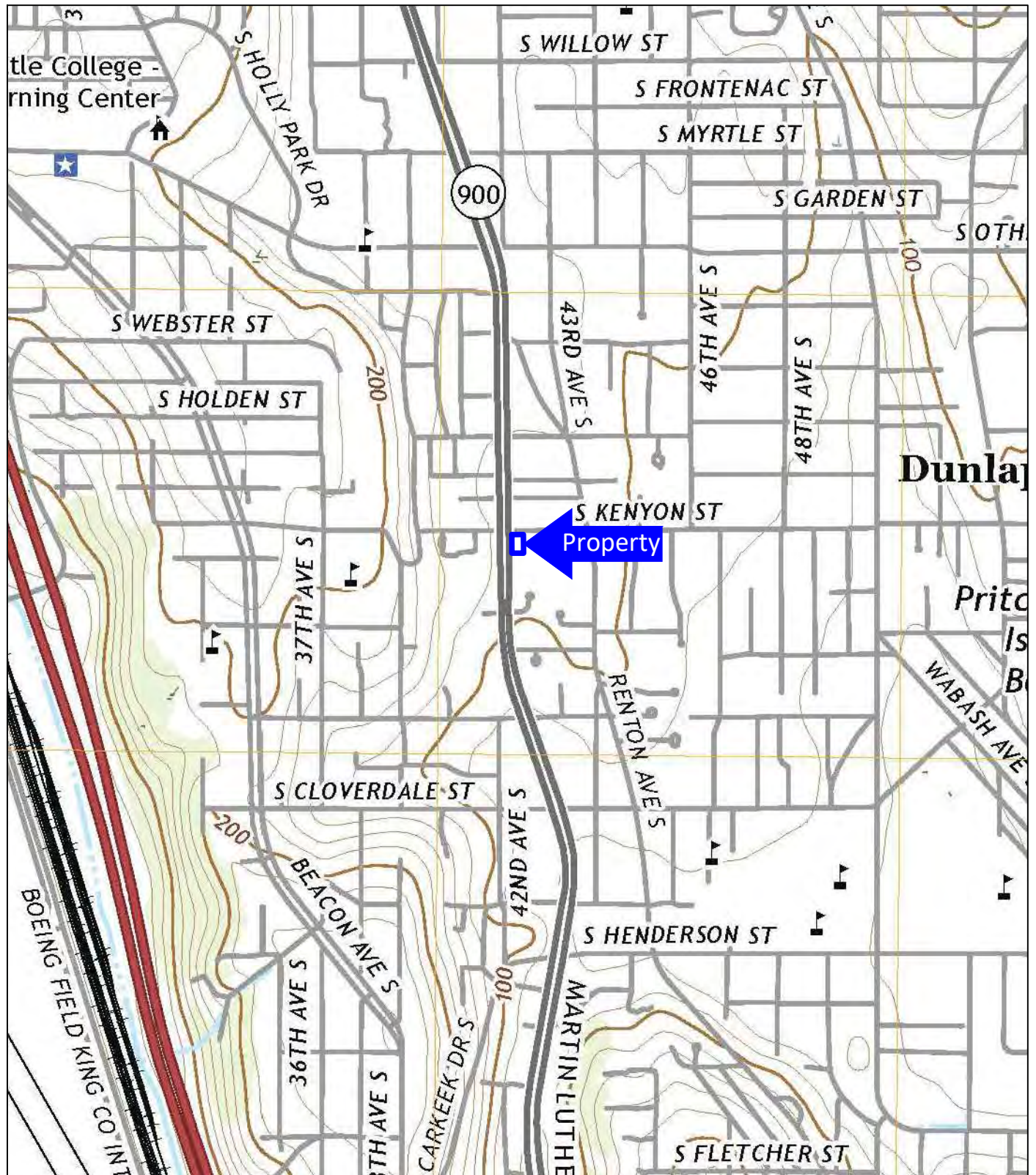
Table 2, Summary of Groundwater Grab Sample Analytical Laboratory Results

Appendix A, Test Probe Logs

Appendix B, Analytical Laboratory Reports and Chains of Custody

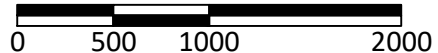
Distribution:

Ms. Erika Malone, City of Seattle Office of Housing (PDF)



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

Approximate Scale: 1"=1000'



Corporate Office
17522 Bothell Way Northeast
Bothell, Washington 98011
Phone: 425.415.0551
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Kenyon Street Vacant Lot - Site 5

RGI Project Number:
2021-552-11

Property Vicinity Map

Figure 1

Date Drawn:
05/2022

Address: 4203 South Kenyon Street and 7908 MLK Jr. Way South, Seattle, Washington 98118

South Kenyon Street

Parcel #: 4006000319

Parcel #: 4006000322

Martin Luther King/Jr. Way South

Link Light Rail Tracks

SFR

TP4							
Date	Depth	Gas	BTEX	DSL	OIL	Naph.	Other VOCs
04/06/22	10	ND	ND	ND	ND	ND	ND


TP3							
Date	Depth	Gas	BTEX	DSL	OIL	Naph.	Other VOCs
04/06/22	16.5	ND	ND	ND	ND	ND	ND






TP2							
Date	Depth	Gas	BTEX	DSL	OIL	Naph.	Other VOCs
04/06/22	7.5	ND	ND	ND	ND	ND	ND
04/06/22	15	ND	---	ND	ND	---	---

TP5									
Date	Depth	Gas	BTEX	DSL	OIL	Naph.	Other VOCs		Pb
04/06/22	10	1,700	ND	ND	ND	0.19	sec-Butylbenzene = 0.066 1,2,4 - Trimethylbenzene = 6.5 p-Isopropyltouene = 0.33 1,3,5 - Trimethylbenzene = 0.11		3.32
04/06/22	17.5	ND	ND	ND	ND	ND	ND		---

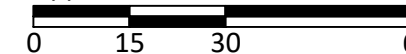
TP1												
Date	Depth	Gas	BTEX	DSL	OIL	Naph.	Other VOCs		cPAH	Other SVOCs		Pb
04/06/22	7.5	ND	---	ND	ND	---	---		---	---		---
04/06/22	14	940	ND	5,700	ND	ND	sec-Butylbenzene = 0.083 1,2,4 - Trimethylbenzene = 0.37 p-Isopropyltouene = 0.052 n-Propylbenzene = 0.12		ND	2-Methylnaphthalene = 0.098 1-Methylnaphthalene = 0.34 Acenaphthene = 0.51 Fluorene = 1.3 Phenanthrene = 2.4 Fluoranthen = 0.039 Pyrene = 0.10		2.43
04/06/22	21.5	ND	---	ND	ND	---	---		---	---		---
04/06/22	24	ND	ND	ND	ND	ND	ND		---	---		---


TP7							
Date	Depth	Gas	BTEX	DSL	OIL	Naph.	Other VOCs
04/06/22	14	ND	ND	ND	ND	ND	ND

 = Soil Analytical Results in mg/kg;
 Depth = Feet below ground surface
 Gas = Gasoline total petroleum hydrocarbons (TPH)
 BTEX = Benzene, toluene, ethylbenzene, xylenes
 DSL/Oil = Diesel/oil TPH
 VOCs = Volatile organic compounds
 Naph. = Naphthalene
 SVOCs = Semi-volatile organic compounds
 cPAH = Carcinogenic polycyclic aromatic hydrocarbons
 Pb = Lead
 ND = Not detected above laboratory detection limits
 Bold results indicate concentrations above laboratory detection limits
 Bold and highlighted results (if any) indicate concentrations above MTCA Soil Cleanup Levels

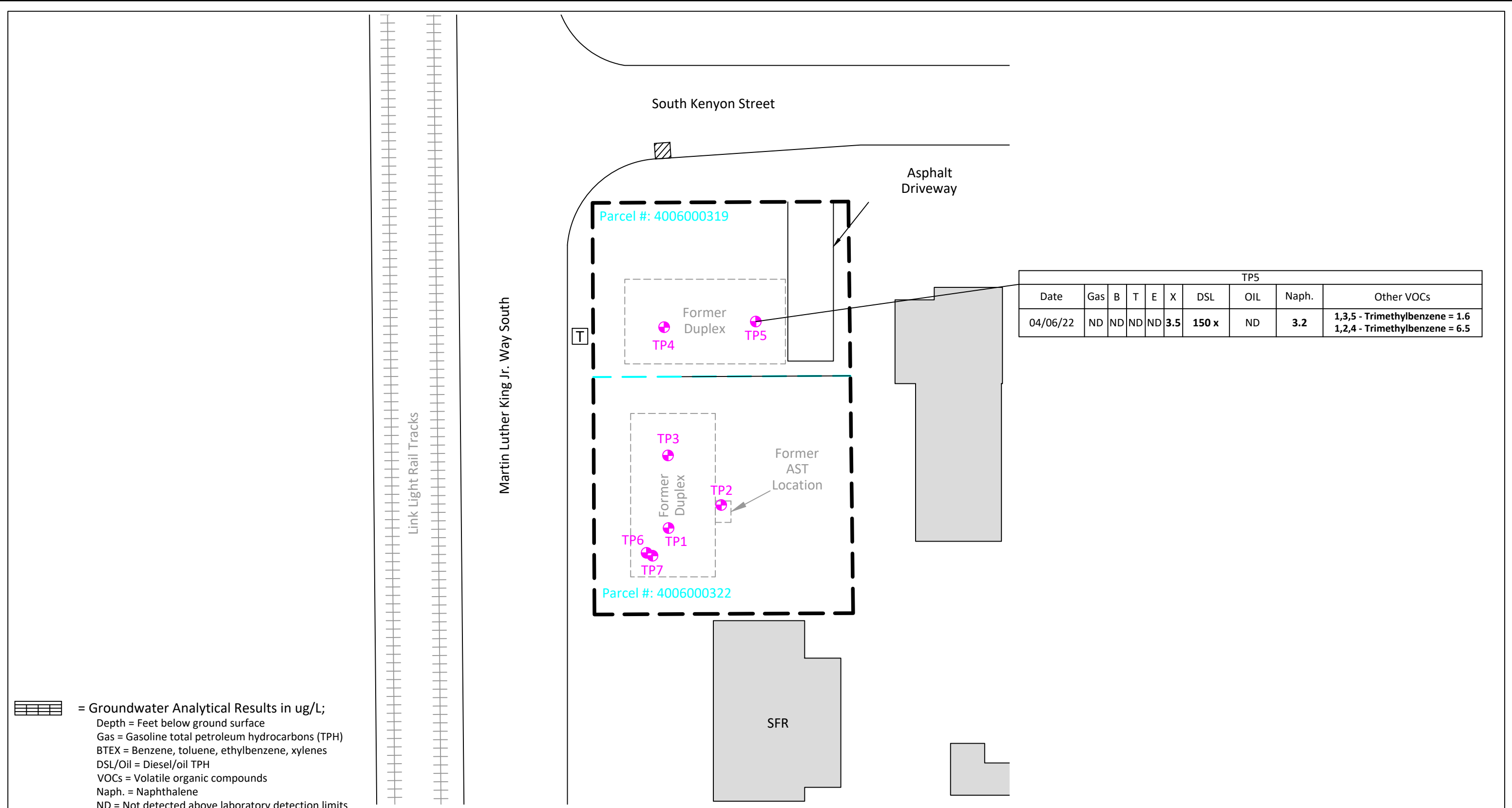
 = Test probe by RGI, 04/06/22
 = Pad-mounted transformer
 = Stormwater catch basin
 = Single-family residence
 = Property boundary

Approximate Scale: 1"=30'




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 17522 Bothell Way Northeast
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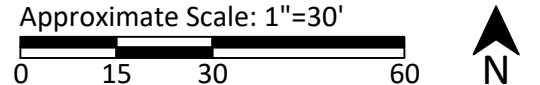
Kenyon Street Vacant Lot - Site 5		Figure 2
RGI Project Number: 2021-552-11	Property Representation with Soil Analytical Data	Date Drawn: 05/2022
Address: 4203 South Kenyon Street and 7908 MLK Jr. Way South, Seattle, Washington 98118		



TP5										
Date	Gas	B	T	E	X	DSL	OIL	Naph.	Other VOCs	
04/06/22	ND	ND	ND	ND	3.5	150 x	ND	3.2	1,3,5 - Trimethylbenzene = 1.6 1,2,4 - Trimethylbenzene = 6.5	

= Groundwater Analytical Results in ug/L;
 Depth = Feet below ground surface
 Gas = Gasoline total petroleum hydrocarbons (TPH)
 BTEX = Benzene, toluene, ethylbenzene, xylenes
 DSL/Oil = Diesel/oil TPH
 VOCs = Volatile organic compounds
 Naph. = Naphthalene
 ND = Not detected above laboratory detection limits
 Bold results indicate concentrations above laboratory detection limits
 Bold and highlighted results (if any) indicate concentrations above MTCA Groundwater Cleanup Levels
 x = The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

- = Test probe by RGI, 04/06/22
- = Pad-mounted transformer
- = Stormwater catch basin
- = Single-family residence
- = Property boundary



 Corporate Office 17522 Bothell Way Northeast Bothell, Washington 98011 Phone: 425.415.0551 Fax: 425.415.0311	Kenyon Street Vacant Lot - Site 5		Figure 3
	RGI Project Number: 2021-552-11	Property Representation with Groundwater Analytical Data	Date Drawn: 05/2022
	Address: 4203 South Kenyon Street and 7908 MLK Jr. Way South, Seattle, Washington 98118		

Table 1. Summary of Soil Sample Analytical Laboratory Results																						
Kenyon Street Vacant Lot - Site 5																						
4203 South Kenyon Street and 7908 MLK Jr. Way South, Seattle, Washington 98118																						
The Riley Group, Inc. Project No. 2021-552-11																						
Sample Number	Sample Depth	Sample Date	PID	Gasoline TPH	BTEX				Diesel TPH	Oil TPH	PCE	TCE	cis-1,2-DCE	trans-1,2-DCE	VC	1,1-DCE	Other VOCs	cPAH	Other SVOCs	Naph.	Pb	
					B	T	E	X														
TP1-2.5	2.5	04/06/22	0.0	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
TP1-5	5	04/06/22	0.0	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
TP1-7.5	7.5	04/06/22	0.0	ND<5	---	---	---	---	ND<50	ND<250	---	---	---	---	---	---	---	---	---	---	---	
TP1-10	10	04/06/22	2.0	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
TP1-12.5	12.5	04/06/22	20.4	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
TP1-14	14	04/06/22	40.5	940	ND<0.03	ND<0.05	ND<0.05	ND<0.15	5,700	ND<250	ND<0.025	ND<0.02	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	2.43	
TP1-17	17	04/06/22	0.5	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
TP1-18/19	18/19	04/06/22	0.4	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
TP1-21.5	21.5	04/06/22	0.4	ND<5	---	---	---	---	ND<50	ND<250	---	---	---	---	---	---	---	---	---	---	---	
TP1-24	24	04/06/22	0.2	ND<5	ND<0.03	ND<0.05	ND<0.05	ND<0.15	ND<50	ND<250	ND<0.025	ND<0.02	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND	---	---	ND<0.05	---	
TP2-5	5	04/06/22	0.0	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
TP2-7.5	7.5	04/06/22	0.1	ND<5	ND<0.03	ND<0.05	ND<0.05	ND<0.15	ND<50	ND<250	ND<0.025	ND<0.02	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND	---	---	ND<0.05	---	
TP2-10	10	04/06/22	0.0	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
TP2-12.5	12.5	04/06/22	0.0	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
TP2-15	15	04/06/22	0.0	ND<5	---	---	---	---	ND<50	ND<250	---	---	---	---	---	---	---	---	---	---	---	
TP3-5	5	04/06/22	0.1	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
TP3-7.5	7.5	04/06/22	0.0	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
TP3-10	10	04/06/22	0.2	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
TP3-12.5	12.5	04/06/22	0.1	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
TP3-14	14	04/06/22	0.0	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
TP3-16.5	16.5	04/06/22	0.3	ND<5	ND<0.03	ND<0.05	ND<0.05	ND<0.15	ND<50	ND<250	ND<0.025	ND<0.02	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND	---	---	ND<0.05	---	
TP3-18	18	04/06/22	0.4	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
TP4-5	5	04/06/22	0.1	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
TP4-7.5	7.5	04/06/22	0.2	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
TP4-10	10	04/06/22	0.3	ND<5	ND<0.03	ND<0.05	ND<0.05	ND<0.15	ND<50	ND<250	ND<0.025	ND<0.02	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND	---	---	ND<0.05	---	
TP4-12.5	12.5	04/06/22	0.3	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
TP4-15	15	04/06/22	0.0	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
TP5-2.5	2.5	04/06/22	0.5	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
TP5-5	5	04/06/22	1.4	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
TP5-7.5	7.5	04/06/22	2.1	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
TP5-10	10	04/06/22	192.4	1,700	ND<0.03	ND<0.05	ND<0.05	ND<0.15	ND<50	ND<250	ND<0.025	ND<0.02	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	0.19	3.32
TP5-12.5	12.5	04/06/22	20.3	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
TP5-15	15	04/06/22	5.7	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
TP5-17.5	17.5	04/06/22	0.9	ND<5	ND<0.03	ND<0.05	ND<0.05	ND<0.15	ND<50	ND<250	ND<0.025	ND<0.02	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND	---	---	ND<0.05	---	
TP5-19	19	04/06/22	0.9	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
TP6-2.5	2.5	04/06/22	0.4	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MTCA Method A Soil Cleanup Levels for Unrestricted Land Uses				100/30 ¹	0.03	7	6	9	2,000		0.05	0.03	---	---	---	---	Analyte Specific	TEF = 0.1	Analyte Specific	5	250	
MTCA Method B Soil Cleanup Levels for Unrestricted Land Uses ³				---	---	---	---	---	---	---	---	---	160	1,600	0.67 ³	4,000	sec-Butylbenzene = 8000 n-Propylbenzene = 8000 1,2,4 - Trimethylbenzene = 800 1,3,5 - Trimethylbenzene = 800 p-Isopropyltoluene = Not Published ⁵	---	2-Methylnaphthalene = 320 1-Methylnaphthalene = 5,600 Acenaphthene = 4,800 Fluorene = 3,200 Phenanthrene = Not Published ⁵ Fluoranthene = 3,200 Pyrene = 2,400	---	---	

cPAHs (carcinogenic polycyclic aromatic hydrocarbons) and Other SVOCs (semi-volatile organic compounds) determined using EPA Test Method 8270E.

Kenyon Street Vacant Lot - Site 5

4203 South Kenyon Street and 7908 MLK Jr. Way South, Seattle, Washington 98118

The Riley Group, Inc. Project No. 2021-552-11

Sample Number	Sample Depth	Sample Date	PID	Gasoline TPH	BTEX				Diesel TPH	Oil TPH	PCE	TCE	cis-1,2-DCE	trans-1,2-DCE	VC	1,1-DCE	Other VOCs	cPAH	Other SVOCs	Naph.	Pb
					B	T	E	X													
TP6-5	5	04/06/22	0.6	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
TP6-7.5	7.5	04/06/22	0.0	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
TP7-10	10	04/06/22	0.1	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
TP7-12.5	12.5	04/06/22	0.0	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
TP7-14	14	04/06/22	0.3	ND<5	ND<0.03	ND<0.05	ND<0.05	ND<0.15	ND<50	ND<250	ND<0.025	ND<0.02	ND<0.05	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		0.05	0.03	----	----	----	----	Analyte Specific	TEF = 0.1	Analyte Specific	5	250
MTCA Method B Soil Cleanup Levels for Unrestricted Land Uses³				---	---	---	---	---	---	---	----	----	160	1,600	0.67 ⁴	4,000	sec-Butylbenzene = 8000 n-Propylbenzene = 8000 1,2,4 - Trimethylbenzene = 800 1,3,5 - Trimethylbenzene = 800 p-Isopropyltoulene = Not Published 5	----	2-Methylnaphthalene = 320 1-Methylnaphthalene = 5,600 Acenaphthene = 4,800 Fluorene = 3,200 Phenanthrene = Not Published ⁵ Fluoranthene = 3,200 Pyrene = 2,400	---	---

Notes:

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

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

PID = Photoionization detector.

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

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

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

PCE (tetrachloroethene), TCE (trichloroethene), cis-1,2-DCE (cis-1,2-dichloroethene), trans-1,2-DCE (trans-1,2-dichloroethene), VC (vinyl chloride), 1,1-DCE (1,1-dichloroethene), and other VOCs (volatile organic compounds) determined using EPA Test Method 8260D Dual Acquisition.

Total Metals (Pb = lead) determined using EPA Method 6020B.

Naph. (naphthalene) determined using EPA Test Method 8260D Dual Acquisition.

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 Screening Levels from Ecology's Cleanup Level and Risk Calculation (CLARC) database.

cPAHs (carcinogenic polycyclic aromatic hydrocarbons) and Other SVOCs (semi-volatile organic compounds) determined using EPA Test Method 8270E.

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

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 MTCA Method B Non-Carcinogenic Standard Formula Value is listed for reference.

⁴ No MTCA Method A Cleanup Level has been established. Therefore, the MTCA Method B Carcinogenic Standard Formula Value is listed for reference.

⁵ No Clean Up level has been published from Ecology's Cleanup Level and Risk Calculation (CLARC) database.

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 2. Summary of Groundwater Grab Sample Analytical Laboratory Results

Kenyon Street Vacant Lot - Site 5

4203 South Kenyon Street and 7908 MLK Jr. Way South, Seattle, Washington 98118

The Riley Group, Inc. Project No. 2021-552-11

Sample Number	Sample Date	Gasoline TPH	BTEX				Diesel TPH	Oil TPH	PCE	TCE	cis-1,2-DCE	trans-1,2-DCE	VC	1,1-DCE	Other VOCs	Naph.
			B	T	E	X										
TP5	04/06/22	ND<100	ND<0.35	ND<1	ND<1	3.5	150 x	ND<250	ND<1	ND<0.5	ND<1	ND<1	ND<0.02	ND<1	1,3,5 - Trimethylbenzene = 1.6 1,2,4 - Trimethylbenzene = 6.5	3.2
MTCA Method A Cleanup Levels for Ground Water		800/1,000¹	5	1,000	700	1,000	500	500	5	5	----	----	0.2	----	Analyte Specific	5
MTCA Method B Cleanup Levels for Ground Water²		----	----	----	----	----	----	----	----	----	16	160	----	400	1,3,5 - Trimethylbenzene = 80 1,2,4 - Trimethylbenzene = 80	----

Notes:

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

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

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

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

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

PCE (tetrachloroethene), TCE (trichloroethene), cis-1,2-DCE (cis-1,2-dichloroethene), trans-1,2-DCE (trans-1,2-dichloroethene), VC (vinyl chloride), 1,1-DCE (1,1-dichloroethene), and other VOCs (volatile organic compounds) determined using EPA Method 8260D Dual Acquisition.

VOCs (volatile organic compounds) determined using EPA Test Method 8260D Dual Acquisition.

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

---- = Not analyzed or not applicable.

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

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

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

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

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 Cleanup Levels for Ground Water.

Project Name: **Kenyon Street Vacant Lot - Site 5**

Project Number: **2021-552-11**

Client: **City of Seattle, Office of Housing**



Test Probe No.: **TP1**

Sheet 1 of 1

Date(s) Drilled: 04/06/22	Logged By: JD/SK	Surface Conditions: Grass
Drilling Method(s): Direct Push	Drill Bit Size/Type: 2.25"	Total Depth of Borehole: 24 feet bgs
Drill Rig Type: Geoprobe 7730 DT	Drilling Contractor: RGI	Approximate Surface Elevation: n/a
Groundwater Level: Not Encountered	Sampling Method(s): Continuous	Hammer Data : n/a
Borehole Backfill: Bentonite	Location: 4203 South Kenyon Street and 7908 MLK Jr. Way South, Seattle, Washington 98118	

PID Reading, ppb	Sample ID	Sample Type	Recovery (percent)	GW Depth	Depth (feet)	MATERIAL DESCRIPTION	Graphic Log
					0	Grass	
0.0	TP1-2.5		50%			Brown, sandy SILT with trace gravel, firm, moist, no odor, no sheen	
0.0	TP1-5				5	Brown with trace oxidation, sandy SILT with trace gravel, firm, moist, no odor	
0.0	TP1-7.5		100%			Red, silty SAND, medium dense, moist, petroleum odor, sheen observed	
2.0	TP1-10				10	Gray, silty fine SAND, dense	
20.4	TP1-12		90%			Gray, sandy SILT with gravel, dense, petroleum odor	
40.5	TP1-14				15	Black, SAND, medium dense, petroleum odor, no sheen	
0.5	TP1-17		90%			Petroleum odor, no sheen	
0.4	TP1-18				20	Black, SAND, medium dense, petroleum odor, no sheen	
						Dense, no odor, no sheen	
0.2	TP1-21.5		95%			Black, SAND, medium dense, petroleum odor, no sheen	
						Dense, no odor, no sheen	
0.2	TP1-24				25	Test probe terminated at 24 feet bgs	

Project Name: **Kenyon Street Vacant Lot - Site 5**

Project Number: **2021-552-11**

Client: **City of Seattle, Office of Housing**



Test Probe No.: **TP2**

Sheet 1 of 1

Date(s) Drilled: 04/06/22	Logged By: JD/SK	Surface Conditions: Grass
Drilling Method(s): Direct Push	Drill Bit Size/Type: 2.25"	Total Depth of Borehole: 15 feet bgs
Drill Rig Type: Geoprobe 7730 DT	Drilling Contractor: RGI	Approximate Surface Elevation: n/a
Groundwater Level: Not Encountered	Sampling Method(s): Continuous	Hammer Data : n/a
Borehole Backfill: Bentonite	Location: 4203 South Kenyon Street and 7908 MLK Jr. Way South, Seattle, Washington 98118	

PID Reading, ppb	Sample ID	Sample Type	Recovery (percent)	GW Depth	Depth (feet)	MATERIAL DESCRIPTION	Graphic Log
					0	Grass	
					0	Silty SAND with gravel, dense, no odor, no sheen	
			30%			SAND with gravel, dense, no odor, no sheen	
0.0	TP2-5						
					5	Gray silty SAND with oxidation, very firm, no odor, no sheen	
0.1	TP2-7.5		100%			Brown, silty SAND, very firm, no odor, no sheen	
0.0	TP2-10						
					10	Brown SAND, dense, no odor, no sheen	
0.0	TP2-12.5		100%			Gray, SAND, dense, no odor, no sheen	
0.0	TP2-15				15	Test probe terminated at 15 feet bgs	
					20		
					25		

Project Name: **Kenyon Street Vacant Lot - Site 5**

Project Number: **2021-552-11**

Client: **City of Seattle, Office of Housing**



Test Probe No.: **TP3**

Sheet 1 of 1

Date(s) Drilled: 04/06/22	Logged By: JD/SK	Surface Conditions: Grass
Drilling Method(s): Direct Push	Drill Bit Size/Type: 2.25"	Total Depth of Borehole: 18 feet bgs
Drill Rig Type: Geoprobe 7730 DT	Drilling Contractor: RGI	Approximate Surface Elevation: n/a
Groundwater Level: Not Encountered	Sampling Method(s): Continuous	Hammer Data : n/a
Borehole Backfill: Bentonite	Location: 4203 South Kenyon Street and 7908 MLK Jr. Way South, Seattle, Washington 98118	

PID Reading, ppb	Sample ID	Sample Type	Recovery (percent)	GW Depth	Depth (feet)	MATERIAL DESCRIPTION	Graphic Log
					0	Grass	
0.1	TP3-5		50%			Gray, silty SAND with some gravel, very dense, moist, no odor, no sheen	
0.0	TP3-7.5		100%		5	Brownish gray, silty SAND, medium dense, moist, no odor, no sheen	
0.2	TP3-10					Brownish gray, silty SAND, dense, moist, no odor, no sheen	
0.1	TP3-12.5		90%				
0.0	TP3-14						
0.3	TP3-16.5		90%		15	Black, SAND, medium dense, moist, no odor, no sheen	
0.4	TP3-18					Test Probe terminated at 18 feet bgs	
					20		
					25		

Project Name: **Kenyon Street Vacant Lot - Site 5**

Project Number: **2021-552-11**

Client: **City of Seattle, Office of Housing**



Test Probe No.: **TP4**

Sheet 1 of 1

Date(s) Drilled: 04/06/22	Logged By: JD/SK	Surface Conditions: Grass
Drilling Method(s): Direct Push	Drill Bit Size/Type: 2.25"	Total Depth of Borehole: 15 feet bgs
Drill Rig Type: Geoprobe 7730 DT	Drilling Contractor: RGI	Approximate Surface Elevation: n/a
Groundwater Level: Not Encountered	Sampling Method(s): Continuous	Hammer Data : n/a
Borehole Backfill: Bentonite	Location: 4203 South Kenyon Street and 7908 MLK Jr. Way South, Seattle, Washington 98118	

PID Reading, ppb	Sample ID	Sample Type	Recovery (percent)	GW Depth	Depth (feet)	MATERIAL DESCRIPTION	Graphic Log
					0	Grass	
					0	Gray, sandy SILT, firm, moist, no odor, no sheen	
			0%			*Not enough for Geotech sample	
0.1	TP4-4.5				5		
0.2	TP4-7.5		85%			Gray, sandy GRAVEL, moist, dense, no odor, no sheen	
0.3	TP4-10				10	Brown with oxidation, silty SAND, moist, dense, no odor, no sheen	
0.3	TP4-12.5		80%			Black sand, moist, dense no odor, no sheen	
0.0	TP4-15				15	Test probe terminated at 15 feet bgs	
					20		
					25		

Project Name: **Kenyon Street Vacant Lot - Site 5**

Project Number: **2021-552-11**

Client: **City of Seattle, Office of Housing**



Test Probe No.: **TP5**

Sheet 1 of 1

Date(s) Drilled: 04/06/22	Logged By: JD/SK	Surface Conditions: Grass
Drilling Method(s): Direct Push	Drill Bit Size/Type: 2.25"	Total Depth of Borehole: 19 feet bgs
Drill Rig Type: Geoprobe 7730 DT	Drilling Contractor: RGI	Approximate Surface Elevation: n/a
Groundwater Level: 15'	Sampling Method(s): Continuous	Hammer Data : n/a
Borehole Backfill: Bentonite	Location: 4203 South Kenyon Street and 7908 MLK Jr. Way South, Seattle, Washington 98118	

PID Reading, ppb	Sample ID	Sample Type	Recovery (percent)	GW Depth	Depth (feet)	MATERIAL DESCRIPTION	Graphic Log
					0	Grass	
0.5	TP2-2.5		70%			Gray, sandy GRAVEL, dense, no odor, no sheen	
1.4	TP5-5					Brown, silty SAND with gravel, very dense, no odor, no sheen	
						Petroleum odor, no sheen	
2.1	TP5-7.5		100%			Gray with oxidation, silty SAND, petroleum odor, sheen	
192.4	TP5-10						
20.3	TP6-12.5		100%				
5.7	TP5-15					Black, SAND, moist, petroleum odor, sheen	
0.9	17.5		30%				
0.9	TP5-19					Test probe terminated at 19 feet bgs	

Project Name: **Kenyon Street Vacant Lot - Site 5**

Project Number: **2021-552-11**

Client: **City of Seattle, Office of Housing**



Test Probe No.: **TP6**

Sheet 1 of 1

Date(s) Drilled: 04/06/22	Logged By: JD/SK	Surface Conditions: Grass
Drilling Method(s): Direct Push	Drill Bit Size/Type: 2.25"	Total Depth of Borehole: 9 feet bgs
Drill Rig Type: Geoprobe 7730 DT	Drilling Contractor: RGI	Approximate Surface Elevation: n/a
Groundwater Level: Not Encountered	Sampling Method(s): Continuous	Hammer Data : n/a
Borehole Backfill: Bentonite	Location: 4203 South Kenyon Street and 7908 MLK Jr. Way South, Seattle, Washington 98118	

PID Reading, ppb	Sample ID	Sample Type	Recovery (percent)	GW Depth	Depth (feet)	MATERIAL DESCRIPTION	Graphic Log
					0	Grass	
0.4	TP6-2.5		100%			Black, silty SAND with gravel, medium firm, moist, no odor, no sheen	
0.6	TP6-5				5	Brown, silty SAND, medium firm, moist, no odor, no sheen	
0.0	TP6-7.5		40%			Brown, oxidation, silty SAND, medium firm, no odor, no sheen	
					10	Test probe terminated at 9 feet bgs	
					15		
					20		
					25		

Project Name: **Kenyon Street Vacant Lot - Site 5**

Project Number: **2021-552-11**

Client: **City of Seattle, Office of Housing**



Test Probe No.: **TP7**

Sheet 1 of 1

Date(s) Drilled: 04/06/22	Logged By: JD/SK	Surface Conditions: Grass
Drilling Method(s): Direct Push	Drill Bit Size/Type: 2.25"	Total Depth of Borehole: 14 feet bgs
Drill Rig Type: Geoprobe 7730 DT	Drilling Contractor: RGI	Approximate Surface Elevation: n/a
Groundwater Level: Not Encountered	Sampling Method(s): Continuous	Hammer Data : n/a
Borehole Backfill: Bentonite	Location: 4203 South Kenyon Street and 7908 MLK Jr. Way South, Seattle, Washington 98118	

PID Reading, ppb	Sample ID	Sample Type	Recovery (percent)	GW Depth	Depth (feet)	MATERIAL DESCRIPTION	Graphic Log
					0	Grass	
			100%			Black, silty SAND with gravel, medium firm, no odor, no sheen	
			100%			Brown, silty SAND, firm, no odor, no sheen	
0.1	TP7-10		100%		10	Brownish gray, some oxidation, silty SAND, very dense, moist, no odor, no sheen	
0.0	TP7-12.5						
0.3	TP7-14		70%			Dark brown, SAND, dense, moist, no odor, no sheen	
					15	Test probe terminated at 14 feet bgs	
					20		
					25		



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

COLUMN DESCRIPTIONS

- 1** PID Reading, ppb: 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 (percent): Percent Recovery
- 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

- Grass and/or topsoil
- SILT, SILT w/SAND, SANDY SILT (ML)
- Silty SAND (SM)
- Poorly graded SAND (SP)

TYPICAL SAMPLER GRAPHIC SYMBOLS

- Auger sampler
- Bulk Sample
- 3-inch-OD California w/ brass rings
- CME Sampler
- Continuous
- Grab Sample
- 2.5-inch-OD Modified California w/ brass liners
- Pitcher Sample

OTHER GRAPHIC SYMBOLS

- 2-inch-OD unlined split spoon (SPT)
- Shelby Tube (Thin-walled, fixed head)
- 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.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
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April 28, 2022

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

Dear Mr Zuern:

Included are the additional results from the testing of material submitted on April 7, 2022 from the Site 5 Kenyon Street Vacant Lot 2021-552-11, F&BI 204093 project. There are 14 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
TRG0428R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on April 7, 2022 by Friedman & Bruya, Inc. from the The Riley Group Site 5 Kenyon Street Vacant Lot 2021-552-11, F&BI 204093 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u>	<u>The Riley Group</u>
204093 -01	TP1-2.5
204093 -02	TP1-5
204093 -03	TP1-7.5
204093 -04	TP1-10
204093 -05	TP1-12.5
204093 -06	TP1-14
204093 -07	TP1-17
204093 -08	TP1-18/19
204093 -09	TP1-21.5
204093 -10	TP1-24
204093 -11	TP2-5
204093 -12	TP2-7.5
204093 -13	TP2-10
204093 -14	TP2-12.5
204093 -15	TP2-15
204093 -16	TP3-5
204093 -17	TP3-7.5
204093 -18	TP3-10
204093 -19	TP3-12.5
204093 -20	TP3-14
204093 -21	TP3-16.5
204093 -22	TP3-18
204093 -23	TP4-5
204093 -24	TP4-7.5
204093 -25	TP4-10
204093 -26	TP4-12.5
204093 -27	TP4-15
204093 -28	TP5-2.5
204093 -29	TP5-5
204093 -30	TP5-7.5
204093 -31	TP5-10
204093 -32	TP5-12.5
204093 -33	TP5-15
204093 -34	TP5-17.5
204093 -35	TP5-19
204093 -36	TP6-2.5
204093 -37	TP6-5
204093 -38	TP6-7.5
204093 -39	TP7-10
204093 -40	TP7-14
204093 -41	TP5
204093 -42	TP7-12.5

All quality control requirements were acceptable.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 04/28/22

Date Received: 04/07/22

Project: Site 5 Kenyon Street Vacant Lot 2021-552-11, F&BI 204093

Date Analyzed: 04/20/22

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

Results Reported on a Dry Weight Basis

Results Reported as mg/kg (ppm)

<u>Sample ID</u> Laboratory ID	<u>Gasoline Range</u>	Surrogate (% Recovery) (Limit 50-150)
TP1-7.5 204093-03	<5	78
TP1-21.5 204093-09	<5	80
TP2-15 204093-15	<5	71
Method Blank 02-881 MB	<5	86

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 04/28/22

Date Received: 04/07/22

Project: Site 5 Kenyon Street Vacant Lot 2021-552-11, F&BI 204093

Date Extracted: 04/20/22

Date Analyzed: 04/20/22

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

Results Reported on a Dry Weight Basis

Results Reported as mg/kg (ppm)

<u>Sample ID</u> Laboratory ID	<u>Diesel Range</u> (C ₁₀ -C ₂₅)	<u>Motor Oil Range</u> (C ₂₅ -C ₃₆)	<u>Surrogate</u> <u>(% Recovery)</u> (Limit 56-165)
TP1-7.5 204093-03	<50	<250	104
TP1-21.5 204093-09	<50	<250	98
TP2-15 204093-15	<50	<250	100
Method Blank 02-967 mb 04-20-22 08:19	<50	<250	98

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 6020B

Client ID:	TP1-14	Client:	The Riley Group
Date Received:	04/07/22	Project:	2021-552-11, F&BI 204093
Date Extracted:	04/20/22	Lab ID:	204093-06
Date Analyzed:	04/20/22	Data File:	204093-06.112
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
----------	------------------------------

Lead	2.43
------	------

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 6020B

Client ID:	TP5-10	Client:	The Riley Group
Date Received:	04/07/22	Project:	2021-552-11, F&BI 204093
Date Extracted:	04/20/22	Lab ID:	204093-31
Date Analyzed:	04/20/22	Data File:	204093-31.100
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
----------	------------------------------

Lead	3.32
------	------

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 6020B

Client ID:	Method Blank	Client:	The Riley Group
Date Received:	NA	Project:	2021-552-11, F&BI 204093
Date Extracted:	04/20/22	Lab ID:	I2-298 mb2
Date Analyzed:	04/20/22	Data File:	I2-298 mb2.078
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
----------	------------------------------

Lead	<1
------	----

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Semivolatile Compounds By EPA Method 8270E

Client Sample ID:	TP1-14	Client:	The Riley Group
Date Received:	04/07/22	Project:	2021-552-11, F&BI 204093
Date Extracted:	04/20/22	Lab ID:	204093-06 1/5
Date Analyzed:	04/21/22	Data File:	042109.D
Matrix:	Soil	Instrument:	GCMS12
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
2-Fluorophenol	77	39	103
Phenol-d6	84	48	109
Nitrobenzene-d5	98	23	138
2-Fluorobiphenyl	93	50	150
2,4,6-Tribromophenol	94	40	127
Terphenyl-d14	93	50	150

Compounds:	Concentration mg/kg (ppm)
Naphthalene	<0.01
2-Methylnaphthalene	0.098
1-Methylnaphthalene	0.34
Acenaphthylene	<0.01
Acenaphthene	0.51
Fluorene	1.3
Phenanthrene	2.4
Anthracene	<0.01
Fluoranthene	0.039
Pyrene	0.10
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
Benzo(g,h,i)perylene	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Semivolatile Compounds By EPA Method 8270E

Client Sample ID:	Method Blank	Client:	The Riley Group
Date Received:	Not Applicable	Project:	2021-552-11, F&BI 204093
Date Extracted:	04/20/22	Lab ID:	02-965 mb2 1/5
Date Analyzed:	04/21/22	Data File:	042107.D
Matrix:	Soil	Instrument:	GCMS12
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
2-Fluorophenol	83	39	103
Phenol-d6	89	48	109
Nitrobenzene-d5	89	23	138
2-Fluorobiphenyl	93	50	150
2,4,6-Tribromophenol	78	40	127
Terphenyl-d14	99	50	150

Compounds:	Concentration mg/kg (ppm)
Naphthalene	<0.01
2-Methylnaphthalene	<0.01
1-Methylnaphthalene	<0.01
Acenaphthylene	<0.01
Acenaphthene	<0.01
Fluorene	<0.01
Phenanthrene	<0.01
Anthracene	<0.01
Fluoranthene	<0.01
Pyrene	<0.01
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
Benzo(g,h,i)perylene	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 04/28/22

Date Received: 04/07/22

Project: Site 5 Kenyon Street Vacant Lot 2021-552-11, F&BI 204093

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

Laboratory Code: 204252-01 (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	105	71-131

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 04/28/22

Date Received: 04/07/22

Project: Site 5 Kenyon Street Vacant Lot 2021-552-11, F&BI 204093

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

Laboratory Code: 204291-01 (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	86	86	63-146	0

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Diesel Extended	mg/kg (ppm)	5,000	80	79-144

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 04/28/22

Date Received: 04/07/22

Project: Site 5 Kenyon Street Vacant Lot 2021-552-11, F&BI 204093

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

Laboratory Code: 204282-01 (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	4.11	93	93	75-125	0

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Lead	mg/kg (ppm)	50	98	80-120

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 04/28/22

Date Received: 04/07/22

Project: Site 5 Kenyon Street Vacant Lot 2021-552-11, F&BI 204093

**QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES
FOR SEMIVOLATILES BY EPA METHOD 8270E**

Laboratory Code: 204252-01 1/5 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet wt)	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Naphthalene	mg/kg (ppm)	0.83	<0.01	82	85	34-118	4
2-Methylnaphthalene	mg/kg (ppm)	0.83	<0.01	86	91	29-130	6
1-Methylnaphthalene	mg/kg (ppm)	0.83	<0.01	85	91	37-119	7
Acenaphthylene	mg/kg (ppm)	0.83	<0.01	92	97	45-128	5
Acenaphthene	mg/kg (ppm)	0.83	<0.01	90	94	36-125	4
Fluorene	mg/kg (ppm)	0.83	<0.01	94	99	48-121	5
Phenanthrene	mg/kg (ppm)	0.83	<0.01	96	95	50-150	1
Anthracene	mg/kg (ppm)	0.83	<0.01	96	97	50-150	1
Fluoranthene	mg/kg (ppm)	0.83	<0.01	102	99	50-150	3
Pyrene	mg/kg (ppm)	0.83	<0.01	98	107	50-150	9
Benzo(a)anthracene	mg/kg (ppm)	0.83	<0.01	95	98	50-150	3
Chrysene	mg/kg (ppm)	0.83	<0.01	96	100	50-150	4
Benzo(a)pyrene	mg/kg (ppm)	0.83	<0.01	97	99	50-150	2
Benzo(b)fluoranthene	mg/kg (ppm)	0.83	<0.01	96	98	50-150	2
Benzo(k)fluoranthene	mg/kg (ppm)	0.83	<0.01	99	100	50-150	1
Indeno(1,2,3-cd)pyrene	mg/kg (ppm)	0.83	<0.01	102	107	41-134	5
Dibenz(a,h)anthracene	mg/kg (ppm)	0.83	<0.01	106	103	44-130	3
Benzo(g,h,i)perylene	mg/kg (ppm)	0.83	<0.01	104	101	33-131	3

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 04/28/22

Date Received: 04/07/22

Project: Site 5 Kenyon Street Vacant Lot 2021-552-11, F&BI 204093

**QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES
FOR SEMIVOLATILES BY EPA METHOD 8270E**

Laboratory Code: Laboratory Control Sample 1/5

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Naphthalene	mg/kg (ppm)	0.83	89	58-108
2-Methylnaphthalene	mg/kg (ppm)	0.83	93	67-108
1-Methylnaphthalene	mg/kg (ppm)	0.83	93	66-107
Acenaphthylene	mg/kg (ppm)	0.83	94	70-130
Acenaphthene	mg/kg (ppm)	0.83	92	66-112
Fluorene	mg/kg (ppm)	0.83	96	67-117
Phenanthrene	mg/kg (ppm)	0.83	97	70-130
Anthracene	mg/kg (ppm)	0.83	98	70-130
Fluoranthene	mg/kg (ppm)	0.83	104	70-130
Pyrene	mg/kg (ppm)	0.83	97	70-130
Benz(a)anthracene	mg/kg (ppm)	0.83	98	70-130
Chrysene	mg/kg (ppm)	0.83	99	70-130
Benzo(a)pyrene	mg/kg (ppm)	0.83	100	68-120
Benzo(b)fluoranthene	mg/kg (ppm)	0.83	99	69-125
Benzo(k)fluoranthene	mg/kg (ppm)	0.83	101	70-130
Indeno(1,2,3-cd)pyrene	mg/kg (ppm)	0.83	112	67-129
Dibenz(a,h)anthracene	mg/kg (ppm)	0.83	110	67-128
Benzo(g,h,i)perylene	mg/kg (ppm)	0.83	109	64-127

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Data Qualifiers & Definitions

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

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

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

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

cf - The sample was centrifuged prior to analysis.

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

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

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

fc - The 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.

Report To Eric Zucern **204093**

Company Riley Group Inc.

Address 17522 Redell Way NE

City, State, ZIP Bellevue, WA 98011

Phone 425-415-0571 Email: ezucern@riley-group.com

SAMPLE CHAIN OF CUSTODY

SAMPLERS (signature) 

PROJECT NAME

Site 5
Kenyon Street Vacant Lot

PO #

2021-552-11

REMARKS

INVOICE TO
RCI

Project specific PLS? - Yes No

Page # 1 of 5

TURNAROUND TIME

- Standard turnaround
- RUSH
- Rush charges authorized by: _____




SAMPLE DISPOSAL

- Archive samples
- Other _____
- Default: Dispose after 30 days

EOZ/VW1/AS1/ROS

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	ANALYSES REQUESTED							Notes	
						NWTPH-Dx	NWTPH-Gx	BTEX EPA 8021	NWTPH-HCID	VOCs EPA 8260	PAHs EPA 8270	PCBs EPA 8082		
TP1-2.5	01A-E	4-6-22	8:00	Soil	5									● PE E2 4/20/22 ME
TP1-5	02		8:00		5									
TP1-7.5	03		8:15		5	●	●							
TP1-10	04		8:15		5									
TP1-12.5	05		8:30		5									
TP1-14	06		8:30		5	X	X				●			
TP1-17	07		8:45		5									
TP1-18/19	08		8:45		5									
TP1-21.5	09		9:00		5	●	●							Samples received at 2:00
TP1-24	10		9:00		5	X	X			X				

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

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
	Jacob Davies	RCI	4/17	1:30
	Eric Zucern	RCI		2:38
	Torale Christensen	F&B	4/14/22	14:30

SAMPLE CHAIN OF CUSTODY 04-07-22

Page # 2 of 5 VS-04
E02/02/14/1/BoS

Report No. Eric Zuerin **204093**
 Company PGI
 Address _____
 City, State, ZIP _____
 Phone _____ Email _____

SAMPLERS (signature)	PROJECT NAME <u>Site 5</u>	PO #
REMARKS <u>Kenyon Street Vacant Lot</u>	INVOICE TO <u>PGI</u>	
Project specific RI's? - 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	ANALYSES REQUESTED						Notes		
						NWTPH-Dx	NWTPH-Gx	BTEX EPA 8021	NWTPH-HCID	VOCs EPA 8260	PAHs EPA 8270		PCBs EPA 8082	
TP2-5	11A-E	4/6/22	9:15	Soil	5		X							
TP2-7.5	12		9:30		5		X			X				
TP2-10	13		9:30		5									
TP2-12.5	14		9:40		5									
TP2-15	15		9:40		5		●	●						
TP3-5	16	10:00	10:00		5									
TP3-7.5	17	10:20	10:20		5									
TP3-10	18	10:20	10:20		5									
TP3-12.5	19	10:30	10:30		5									
TP3-14	20	10:30	10:30		5									

Samples received at 2 °C

SIGNATURE		PRINT NAME		COMPANY		DATE	TIME
Relinquished by:	<i>[Signature]</i>	Jaycob Davies	PGI	4/7	13:30		
Received by:	<i>[Signature]</i>	Eric Zuerin	PGI		1:30		
Relinquished by:	<i>[Signature]</i>	Eric Zuerin	PGI		2:30		
Received by:	<i>[Signature]</i>	Tokala Andersen	FTB	4/7/22	14:30		

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

SAMPLE CHAIN OF CUSTODY 04.07.22

Page # 3 of 5 WS-04
E02101101/1805

Report To Eric Zuerch 204093
 Company PGI
 Address _____
 City, State, ZIP _____
 Phone _____ Email _____

SAMPLERS (signature)	PROJECT NAME <u>Site 5</u>	PO # <u>2021-552-11</u>
REMARKS <u>Kayon Street Vacant Lot</u>	INVOICE TO <u>PGI</u>	
Project specific PIs? 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	ANALYSES REQUESTED						Notes		
						NWTPH-Dx	NWTPH-Gx	BTEX EPA 8021	NWTPH-HCID	VOCs EPA 8260	PAHs EPA 8270		PCBs EPA 8082	
TP3-16.5	21A-E	4-6-22	10:45	Soil	5	X	X			X				
TP3-18	22		10:45		5									
TP4-5	23		11:65		5									
TP4-7.5	24		11:15		5									
TP4-10	25		11:15		5	X	X			X				
TP4-12.5	26		11:35		5									
TP4-15	27		11:35		5									
TP5-2.5	28		11:45		5									
TP5-5	29		11:45		5									
TP5-7.5	30		12:05		5									

SIGNATURE

PRINT NAME

COMPANY

DATE

TIME

Relinquished by: <u>Samuel Davies</u>	<u>Samuel Davies</u>	<u>PGI</u>	<u>4/7</u>	<u>1:30</u>
Received by: <u>Eric Zuerch</u>	<u>Eric Zuerch</u>	<u>PGI</u>	<u>4/7</u>	<u>2:30</u>
Relinquished by: <u>Tokala Christian</u>	<u>Tokala Christian</u>	<u>FTS</u>	<u>4/7/22</u>	<u>14:30</u>

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

SAMPLE CHAIN OF CUSTODY 04.07.22

Page # 4 of 5 V-84

TURNAROUND TIME

Standard turnaround

RUSH

Rush charges authorized by: _____

SAMPLE DISPOSAL

Archive samples

Other

Default: Dispose after 30 days

Report To Eric Zuern 204093

Company RGI

Address _____

City, State, ZIP _____

Phone _____ Email _____

SAMPLERS (signature) _____

PROJECT NAME
Sites

REMARKS
Kenish Street Vacant Lot

PO #
2021-552-11

INVOICE TO
RGI

Project specific Pls? - Yes / No

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	Notes
TPS-10	31A-E	4-6-22	12:05	Soil	5	XX	XX			X			Lead
TPS-12.5	32		12:30		5								
TPS-15	33		12:30		5								
TPS-17.5	34		12:45		5	XX	XX		X				
TPS-19	35		12:45		5	XX	XX		X				
TPG-2.5	36		1:20		1								
TPG-5	37A-E		1:20		5								5 containers received Tue 4/7
TPG-7.5	38		1:35		1								
TP7-10	39A-E		1:50		5								Samples received at 2:00
TP7-14	40		2:10		5	XX	XX		X				

SIGNATURE

PRINT NAME

COMPANY

DATE

TIME

Relinquished by: Jacob Davies

Received by: _____

Relinquished by: _____

Received by: _____

Friedman & Bruya, Inc.
Ph. (306) 285-8282

Relinquished by: <u>Jacob Davies</u>	PRINT NAME: <u>Jacob Davies</u>	COMPANY: <u>RGI</u>	DATE: <u>4/7</u>	TIME: <u>1:30</u>
Received by: _____				
Relinquished by: _____	Eric Zuern	RGI		1:30
Received by: _____	Tokara Oshiro	FTB	4/7/22	14:30

SAMPLE CHAIN OF CUSTODY

204093

04.04.22

Page # 5 of 5-15-18

Report To Eric Zuen
 Company PGI
 Address _____
 City, State, ZIP _____
 Phone _____ Email _____

SAMPLERS (signature)	PROJECT NAME <u>Site 5</u>	PO # <u>2021-552-11</u>
REMARKS <u>Kruson Street Vacant lot</u>	INVOICE TO <u>PGI</u>	
Project specific Ris? . 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	ANALYSES REQUESTED								Notes			
						NWTPH-Dx	NWTPH-Gx	BTEX EPA 8021	NWTPH-HCID	VOCs EPA 8260	PAHs EPA 8270	PCBs EPA 8082					
TPS	41A-F	4-6-22	1400	Water	6	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>										
TP7-12.5	42A-E	4-6-22	1350	Soil	5					<input checked="" type="checkbox"/>							

Samples received at 2 °C

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
<u>[Signature]</u>	Jacob Davies	PGI	4/7	1330
<u>[Signature]</u>	Eric Zuen	PGI		1:30
<u>[Signature]</u>	Eric Zuen	PGI		2:30
<u>[Signature]</u>	Thomas Anderson	FTS	4/7/22	1415

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

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

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April 15, 2022

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

Dear Mr Zuern:

Included are the results from the testing of material submitted on April 7, 2022 from the Site 5 Kenyon Street Vacant Lot 2021-552-11, F&BI 204093 project. There are 26 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
TRG0415R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on April 7, 2022 by Friedman & Bruya, Inc. from the The Riley Group Site 5 Kenyon Street Vacant Lot 2021-552-11, F&BI 204093 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u>	<u>The Riley Group</u>
204093 -01	TP1-2.5
204093 -02	TP1-5
204093 -03	TP1-7.5
204093 -04	TP1-10
204093 -05	TP1-12.5
204093 -06	TP1-14
204093 -07	TP1-17
204093 -08	TP1-18/19
204093 -09	TP1-21.5
204093 -10	TP1-24
204093 -11	TP2-5
204093 -12	TP2-7.5
204093 -13	TP2-10
204093 -14	TP2-12.5
204093 -15	TP2-15
204093 -16	TP3-5
204093 -17	TP3-7.5
204093 -18	TP3-10
204093 -19	TP3-12.5
204093 -20	TP3-14
204093 -21	TP3-16.5
204093 -22	TP3-18
204093 -23	TP4-5
204093 -24	TP4-7.5
204093 -25	TP4-10
204093 -26	TP4-12.5
204093 -27	TP4-15
204093 -28	TP5-2.5
204093 -29	TP5-5
204093 -30	TP5-7.5
204093 -31	TP5-10
204093 -32	TP5-12.5
204093 -33	TP5-15
204093 -34	TP5-17.5
204093 -35	TP5-19
204093 -36	TP6-2.5

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE (continued)

<u>Laboratory ID</u>	<u>The Riley Group</u>
204093 -37	TP6-5
204093 -38	TP6-7.5
204093 -39	TP7-10
204093 -40	TP7-14
204093 -41	TP5
204093 -42	TP7-12.5

The 8260D water calibration standard failed the acceptance criteria for bromomethane and chlorethane. The data were flagged accordingly.

All other quality control requirements were acceptable.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 04/15/22

Date Received: 04/07/22

Project: Site 5 Kenyon Street Vacant Lot 2021-552-11, F&BI 204093

Date Extracted: 04/08/22

Date Analyzed: 04/11/22

**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)

<u>Sample ID</u> Laboratory ID	<u>Gasoline Range</u>	<u>Surrogate</u> <u>(% Recovery)</u> (Limit 50-150)
TP1-14 204093-06 1/5	940	132
TP1-24 204093-10	<5	96
TP2-7.5 204093-12	<5	98
TP3-16.5 204093-21	<5	74
TP4-10 204093-25	<5	82
TP5-10 204093-31 1/50	1,700	92
TP5-17.5 204093-34	<5	74
TP7-14 204093-40	<5	85
Method Blank 02-817 MB2	<5	90

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 04/15/22

Date Received: 04/07/22

Project: Site 5 Kenyon Street Vacant Lot 2021-552-11, F&BI 204093

Date Extracted: 04/12/22

Date Analyzed: 04/12/22

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

<u>Sample ID</u> Laboratory ID	<u>Gasoline Range</u>	<u>Surrogate</u> <u>(% Recovery)</u> (Limit 51-134)
TP5 204093-41	<100	95
Method Blank 02-819 MB	<100	86

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 04/15/22

Date Received: 04/07/22

Project: Site 5 Kenyon Street Vacant Lot 2021-552-11, F&BI 204093

Date Extracted: 04/08/22

Date Analyzed: 04/08/22

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

Results Reported on a Dry Weight Basis

Results Reported as mg/kg (ppm)

<u>Sample ID</u> Laboratory ID	<u>Diesel Range</u> (C ₁₀ -C ₂₅)	<u>Motor Oil Range</u> (C ₂₅ -C ₃₆)	<u>Surrogate</u> <u>(% Recovery)</u> (Limit 48-168)
TP1-14 204093-06	5,700	<250	103
TP1-24 204093-10	<50	<250	98
TP2-7.5 204093-12	<50	<250	95
TP3-16.5 204093-21	<50	<250	97
TP4-10 204093-25	<50	<250	95
TP5-10 204093-31	<50	<250	96
TP5-17.5 204093-34	<50	<250	100
TP7-14 204093-40	<50	<250	103
Method Blank 02-860 MB	<50	<250	95

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 04/15/22

Date Received: 04/07/22

Project: Site 5 Kenyon Street Vacant Lot 2021-552-11, F&BI 204093

Date Extracted: 04/08/22

Date Analyzed: 04/08/22

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

Results Reported as ug/L (ppb)

<u>Sample ID</u> Laboratory ID	<u>Diesel Range</u> (C ₁₀ -C ₂₅)	<u>Motor Oil Range</u> (C ₂₅ -C ₃₆)	<u>Surrogate</u> <u>(% Recovery)</u> (Limit 41-152)
TP5 204093-41	150 x	<250	113
Method Blank 02-851 MB2	<50	<250	127

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260D

Client Sample ID:	TP1-14	Client:	The Riley Group
Date Received:	04/07/22	Project:	2021-552-11, F&BI 204093
Date Extracted:	04/08/22	Lab ID:	204093-06
Date Analyzed:	04/08/22	Data File:	040814.D
Matrix:	Soil	Instrument:	GCMS4
Units:	mg/kg (ppm) Dry Weight	Operator:	RF

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	99	90	109
Toluene-d8	92	89	112
4-Bromofluorobenzene	112	84	115

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	0.12
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)	<1	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	0.11
Benzene	<0.03	sec-Butylbenzene	0.66
Trichloroethene	<0.02	p-Isopropyltoluene	0.33
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	<1	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		

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260D

Client Sample ID:	TP1-24	Client:	The Riley Group
Date Received:	04/07/22	Project:	2021-552-11, F&BI 204093
Date Extracted:	04/08/22	Lab ID:	204093-10
Date Analyzed:	04/08/22	Data File:	040815.D
Matrix:	Soil	Instrument:	GCMS4
Units:	mg/kg (ppm) Dry Weight	Operator:	RF

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	98	90	109
Toluene-d8	93	89	112
4-Bromofluorobenzene	105	84	115

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)	<1	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	<1	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		

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260D

Client Sample ID:	TP2-7.5	Client:	The Riley Group
Date Received:	04/07/22	Project:	2021-552-11, F&BI 204093
Date Extracted:	04/08/22	Lab ID:	204093-12
Date Analyzed:	04/08/22	Data File:	040816.D
Matrix:	Soil	Instrument:	GCMS4
Units:	mg/kg (ppm) Dry Weight	Operator:	RF

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	99	90	109
Toluene-d8	96	89	112
4-Bromofluorobenzene	109	84	115

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)	<1	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	<1	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		

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260D

Client Sample ID:	TP3-16.5	Client:	The Riley Group
Date Received:	04/07/22	Project:	2021-552-11, F&BI 204093
Date Extracted:	04/08/22	Lab ID:	204093-21
Date Analyzed:	04/08/22	Data File:	040817.D
Matrix:	Soil	Instrument:	GCMS4
Units:	mg/kg (ppm) Dry Weight	Operator:	RF

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	103	90	109
Toluene-d8	94	89	112
4-Bromofluorobenzene	106	84	115

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)	<1	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	<1	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		

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260D

Client Sample ID:	TP4-10	Client:	The Riley Group
Date Received:	04/07/22	Project:	2021-552-11, F&BI 204093
Date Extracted:	04/08/22	Lab ID:	204093-25
Date Analyzed:	04/08/22	Data File:	040819.D
Matrix:	Soil	Instrument:	GCMS4
Units:	mg/kg (ppm) Dry Weight	Operator:	RF

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	96	90	109
Toluene-d8	94	89	112
4-Bromofluorobenzene	108	84	115

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)	<1	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	<1	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		

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260D

Client Sample ID:	TP5-10	Client:	The Riley Group
Date Received:	04/07/22	Project:	2021-552-11, F&BI 204093
Date Extracted:	04/08/22	Lab ID:	204093-31
Date Analyzed:	04/08/22	Data File:	040818.D
Matrix:	Soil	Instrument:	GCMS4
Units:	mg/kg (ppm) Dry Weight	Operator:	RF

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	96	90	109
Toluene-d8	95	89	112
4-Bromofluorobenzene	103	84	115

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	0.11
Chloroform	<0.05	1,1,2,2-Tetrachloroethane	<0.05
2-Butanone (MEK)	<1	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	0.37
Benzene	<0.03	sec-Butylbenzene	0.083
Trichloroethene	<0.02	p-Isopropyltoluene	0.052
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	<1	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	0.19
1,1,2-Trichloroethane	<0.05	1,2,3-Trichlorobenzene	<0.25
2-Hexanone	<0.5		

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260D

Client Sample ID:	TP5-17.5	Client:	The Riley Group
Date Received:	04/07/22	Project:	2021-552-11, F&BI 204093
Date Extracted:	04/08/22	Lab ID:	204093-34
Date Analyzed:	04/08/22	Data File:	040820.D
Matrix:	Soil	Instrument:	GCMS4
Units:	mg/kg (ppm) Dry Weight	Operator:	RF

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	93	90	109
Toluene-d8	96	89	112
4-Bromofluorobenzene	106	84	115

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)	<1	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	<1	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		

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260D

Client Sample ID:	TP7-14	Client:	The Riley Group
Date Received:	04/07/22	Project:	2021-552-11, F&BI 204093
Date Extracted:	04/08/22	Lab ID:	204093-40
Date Analyzed:	04/08/22	Data File:	040821.D
Matrix:	Soil	Instrument:	GCMS4
Units:	mg/kg (ppm) Dry Weight	Operator:	RF

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	95	90	109
Toluene-d8	94	89	112
4-Bromofluorobenzene	106	84	115

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)	<1	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	<1	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		

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260D

Client Sample ID:	Method Blank	Client:	The Riley Group
Date Received:	Not Applicable	Project:	2021-552-11, F&BI 204093
Date Extracted:	04/08/22	Lab ID:	02-791 mb
Date Analyzed:	04/08/22	Data File:	040811.D
Matrix:	Soil	Instrument:	GCMS4
Units:	mg/kg (ppm) Dry Weight	Operator:	RF

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	96	90	109
Toluene-d8	90	89	112
4-Bromofluorobenzene	106	84	115

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)	<1	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	<1	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		

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260D Dual Acquisition

Client Sample ID: TP5	Client: The Riley Group
Date Received: 04/07/22	Project: 2021-552-11, F&BI 204093
Date Extracted: 04/13/22	Lab ID: 204093-41
Date Analyzed: 04/13/22	Data File: 041318.D
Matrix: Water	Instrument: GCMS13
Units: ug/L (ppb)	Operator: WE

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	100	85	117
Toluene-d8	105	88	112
4-Bromofluorobenzene	98	90	111

Compounds:	Concentration ug/L (ppb)	Compounds:	Concentration ug/L (ppb)
Dichlorodifluoromethane	<1	1,3-Dichloropropane	<1
Chloromethane	<10	Tetrachloroethene	<1
Vinyl chloride	<0.02	Dibromochloromethane	<0.5
Bromomethane	<5 ca	1,2-Dibromoethane (EDB)	<1
Chloroethane	<1 ca	Chlorobenzene	<1
Trichlorofluoromethane	<1	Ethylbenzene	<1
Acetone	<50	1,1,1,2-Tetrachloroethane	<1
1,1-Dichloroethene	<1	m,p-Xylene	2.2
Hexane	<5	o-Xylene	1.3
Methylene chloride	<5	Styrene	<1
Methyl t-butyl ether (MTBE)	<1	Isopropylbenzene	<1
trans-1,2-Dichloroethene	<1	Bromoform	<5
1,1-Dichloroethane	<1	n-Propylbenzene	<1
2,2-Dichloropropane	<1	Bromobenzene	<1
cis-1,2-Dichloroethene	<1	1,3,5-Trimethylbenzene	1.6
Chloroform	<1	1,1,2,2-Tetrachloroethane	<0.2
2-Butanone (MEK)	<20	1,2,3-Trichloropropane	<1
1,2-Dichloroethane (EDC)	<0.2	2-Chlorotoluene	<1
1,1,1-Trichloroethane	<1	4-Chlorotoluene	<1
1,1-Dichloropropene	<1	tert-Butylbenzene	<1
Carbon tetrachloride	<0.5	1,2,4-Trimethylbenzene	6.5
Benzene	<0.35	sec-Butylbenzene	<1
Trichloroethene	<0.5	p-Isopropyltoluene	<1
1,2-Dichloropropane	<1	1,3-Dichlorobenzene	<1
Bromodichloromethane	<0.5	1,4-Dichlorobenzene	<1
Dibromomethane	<1	1,2-Dichlorobenzene	<1
4-Methyl-2-pentanone	<10	1,2-Dibromo-3-chloropropane	<10
cis-1,3-Dichloropropene	<0.4	1,2,4-Trichlorobenzene	<1
Toluene	<1	Hexachlorobutadiene	<0.5
trans-1,3-Dichloropropene	<0.4	Naphthalene	3.2
1,1,2-Trichloroethane	<0.5	1,2,3-Trichlorobenzene	<1
2-Hexanone	<10		

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260D Dual Acquisition

Client Sample ID:	Method Blank	Client:	The Riley Group
Date Received:	Not Applicable	Project:	2021-552-11, F&BI 204093
Date Extracted:	04/13/22	Lab ID:	02-807 mb
Date Analyzed:	04/13/22	Data File:	041307.D
Matrix:	Water	Instrument:	GCMS13
Units:	ug/L (ppb)	Operator:	WE

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	94	85	117
Toluene-d8	97	88	112
4-Bromofluorobenzene	103	90	111

Compounds:	Concentration ug/L (ppb)	Compounds:	Concentration ug/L (ppb)
Dichlorodifluoromethane	<1	1,3-Dichloropropane	<1
Chloromethane	<10	Tetrachloroethene	<1
Vinyl chloride	<0.02	Dibromochloromethane	<0.5
Bromomethane	<5 ca	1,2-Dibromoethane (EDB)	<1
Chloroethane	<1 ca	Chlorobenzene	<1
Trichlorofluoromethane	<1	Ethylbenzene	<1
Acetone	<50	1,1,1,2-Tetrachloroethane	<1
1,1-Dichloroethene	<1	m,p-Xylene	<2
Hexane	<5	o-Xylene	<1
Methylene chloride	<5	Styrene	<1
Methyl t-butyl ether (MTBE)	<1	Isopropylbenzene	<1
trans-1,2-Dichloroethene	<1	Bromoform	<5
1,1-Dichloroethane	<1	n-Propylbenzene	<1
2,2-Dichloropropane	<1	Bromobenzene	<1
cis-1,2-Dichloroethene	<1	1,3,5-Trimethylbenzene	<1
Chloroform	<1	1,1,2,2-Tetrachloroethane	<0.2
2-Butanone (MEK)	<20	1,2,3-Trichloropropane	<1
1,2-Dichloroethane (EDC)	<0.2	2-Chlorotoluene	<1
1,1,1-Trichloroethane	<1	4-Chlorotoluene	<1
1,1-Dichloropropene	<1	tert-Butylbenzene	<1
Carbon tetrachloride	<0.5	1,2,4-Trimethylbenzene	<1
Benzene	<0.35	sec-Butylbenzene	<1
Trichloroethene	<0.5	p-Isopropyltoluene	<1
1,2-Dichloropropane	<1	1,3-Dichlorobenzene	<1
Bromodichloromethane	<0.5	1,4-Dichlorobenzene	<1
Dibromomethane	<1	1,2-Dichlorobenzene	<1
4-Methyl-2-pentanone	<10	1,2-Dibromo-3-chloropropane	<10
cis-1,3-Dichloropropene	<0.4	1,2,4-Trichlorobenzene	<1
Toluene	<1	Hexachlorobutadiene	<0.5
trans-1,3-Dichloropropene	<0.4	Naphthalene	<1
1,1,2-Trichloroethane	<0.5	1,2,3-Trichlorobenzene	<1
2-Hexanone	<10		

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 04/15/22

Date Received: 04/07/22

Project: Site 5 Kenyon Street Vacant Lot 2021-552-11, F&BI 204093

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

Laboratory Code: 203574-05 (Duplicate)

Analyte	Reporting Units	Sample Result (Wet Wt)	Duplicate Result (Wet Wt)	RPD (Limit 20)
Gasoline	mg/kg (ppm)	130	150	14

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Gasoline	mg/kg (ppm)	20	90	61-153

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 04/15/22

Date Received: 04/07/22

Project: Site 5 Kenyon Street Vacant Lot 2021-552-11, F&BI 204093

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

Laboratory Code: 204117-01 (Duplicate)

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

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Gasoline	ug/L (ppb)	1,000	88	69-134

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 04/15/22

Date Received: 04/07/22

Project: Site 5 Kenyon Street Vacant Lot 2021-552-11, F&BI 204093

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

Laboratory Code: 204100-02 (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	100	100	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	102	74-139

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 04/15/22

Date Received: 04/07/22

Project: Site 5 Kenyon Street Vacant Lot 2021-552-11, F&BI 204093

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

Laboratory Code: Laboratory Control Sample Silica Gel

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Diesel Extended	ug/L (ppb)	2,500	120	128	63-142	6

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 04/15/22

Date Received: 04/07/22

Project: Site 5 Kenyon Street Vacant Lot 2021-552-11, F&BI 204093

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

Laboratory Code: 204107-01 (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)	1	<0.5	18	18	10-142	0
Chloromethane	mg/kg (ppm)	1	<0.5	48	45	10-126	6
Vinyl chloride	mg/kg (ppm)	1	<0.05	51	50	10-138	2
Bromomethane	mg/kg (ppm)	1	<0.5	54	58	10-163	7
Chloroethane	mg/kg (ppm)	1	<0.5	57	57	10-176	0
Trichlorofluoromethane	mg/kg (ppm)	1	<0.5	49	48	10-176	2
Acetone	mg/kg (ppm)	5	<5	89	85	10-163	5
1,1-Dichloroethene	mg/kg (ppm)	1	<0.05	56	53	10-160	6
Hexane	mg/kg (ppm)	1	<0.25	58	52	10-137	11
Methylene chloride	mg/kg (ppm)	1	<0.5	68	62	10-156	9
Methyl t-butyl ether (MTBE)	mg/kg (ppm)	1	<0.05	78	74	21-145	5
trans-1,2-Dichloroethene	mg/kg (ppm)	1	<0.05	65	63	14-137	3
1,1-Dichloroethane	mg/kg (ppm)	1	<0.05	71	67	19-140	6
2,2-Dichloropropane	mg/kg (ppm)	1	<0.05	64	60	10-158	6
cis-1,2-Dichloroethene	mg/kg (ppm)	1	<0.05	71	69	25-135	3
Chloroform	mg/kg (ppm)	1	0.24	55 b	52 b	21-145	6 b
2-Butanone (MEK)	mg/kg (ppm)	5	<1	85	79	19-147	7
1,2-Dichloroethane (EDC)	mg/kg (ppm)	1	<0.05	75	71	12-160	5
1,1,1-Trichloroethane	mg/kg (ppm)	1	<0.05	65	64	10-156	2
1,1-Dichloropropene	mg/kg (ppm)	1	<0.05	71	68	17-140	4
Carbon tetrachloride	mg/kg (ppm)	1	<0.05	57	57	9-164	0
Benzene	mg/kg (ppm)	1	<0.03	72	67	29-129	7
Trichloroethene	mg/kg (ppm)	1	<0.02	72	70	21-139	3
1,2-Dichloropropane	mg/kg (ppm)	1	<0.05	78	75	30-135	4
Bromodichloromethane	mg/kg (ppm)	1	<0.05	67	65	23-155	3
Dibromomethane	mg/kg (ppm)	1	<0.05	75	71	23-145	5
4-Methyl-2-pentanone	mg/kg (ppm)	5	<1	84	78	24-155	7
cis-1,3-Dichloropropene	mg/kg (ppm)	1	<0.05	71	68	28-144	4
Toluene	mg/kg (ppm)	1	<0.05	87	82	35-130	6
trans-1,3-Dichloropropene	mg/kg (ppm)	1	<0.05	79	75	26-149	5
1,1,2-Trichloroethane	mg/kg (ppm)	1	<0.05	91	83	10-205	9
2-Hexanone	mg/kg (ppm)	5	<0.5	103	96	15-166	7
1,3-Dichloropropene	mg/kg (ppm)	1	<0.05	92	85	31-137	8
Tetrachloroethene	mg/kg (ppm)	1	<0.025	85	81	20-133	5
Dibromochloromethane	mg/kg (ppm)	1	<0.05	69	67	28-150	3
1,2-Dibromoethane (EDB)	mg/kg (ppm)	1	<0.05	87	83	28-142	5
Chlorobenzene	mg/kg (ppm)	1	<0.05	87	81	32-129	7
Ethylbenzene	mg/kg (ppm)	1	<0.05	87	83	32-137	5
1,1,1,2-Tetrachloroethane	mg/kg (ppm)	1	<0.05	68	67	31-143	1
m,p-Xylene	mg/kg (ppm)	2	<0.1	88	84	34-136	5
o-Xylene	mg/kg (ppm)	1	<0.05	86	80	33-134	7
Styrene	mg/kg (ppm)	1	<0.05	89	83	35-137	7
Isopropylbenzene	mg/kg (ppm)	1	<0.05	88	84	31-142	5
Bromoform	mg/kg (ppm)	1	<0.05	64	62	21-156	3
n-Propylbenzene	mg/kg (ppm)	1	<0.05	97	92	23-146	5
Bromobenzene	mg/kg (ppm)	1	<0.05	93	89	34-130	4
1,3,5-Trimethylbenzene	mg/kg (ppm)	1	<0.05	96	93	18-149	3
1,1,2,2-Tetrachloroethane	mg/kg (ppm)	1	<0.05	95	89	28-140	7
1,2,3-Trichloropropane	mg/kg (ppm)	1	<0.05	94	90	25-144	4
2-Chlorotoluene	mg/kg (ppm)	1	<0.05	94	90	31-134	4
4-Chlorotoluene	mg/kg (ppm)	1	<0.05	95	92	31-136	3
tert-Butylbenzene	mg/kg (ppm)	1	<0.05	97	94	30-137	3
1,2,4-Trimethylbenzene	mg/kg (ppm)	1	<0.05	95	92	10-182	3
sec-Butylbenzene	mg/kg (ppm)	1	<0.05	95	94	23-145	1
p-Isopropyltoluene	mg/kg (ppm)	1	<0.05	95	92	21-149	3
1,3-Dichlorobenzene	mg/kg (ppm)	1	<0.05	93	90	30-131	3
1,4-Dichlorobenzene	mg/kg (ppm)	1	<0.05	93	88	29-129	6
1,2-Dichlorobenzene	mg/kg (ppm)	1	<0.05	95	90	31-132	5
1,2-Dibromo-3-chloropropane	mg/kg (ppm)	1	<0.5	75	70	11-161	7
1,2,4-Trichlorobenzene	mg/kg (ppm)	1	<0.25	92	90	22-142	2
Hexachlorobutadiene	mg/kg (ppm)	1	<0.25	89	88	10-142	1
Naphthalene	mg/kg (ppm)	1	<0.05	94	92	14-157	2
1,2,3-Trichlorobenzene	mg/kg (ppm)	1	<0.25	93	89	20-144	4

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 04/15/22

Date Received: 04/07/22

Project: Site 5 Kenyon Street Vacant Lot 2021-552-11, F&BI 204093

**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	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Dichlorodifluoromethane	mg/kg (ppm)	1	38	41	10-146	8
Chloromethane	mg/kg (ppm)	1	57	65	27-133	13
Vinyl chloride	mg/kg (ppm)	1	70	78	22-139	11
Bromomethane	mg/kg (ppm)	1	78	67	38-114	15
Chloroethane	mg/kg (ppm)	1	69	74	9-163	7
Trichlorofluoromethane	mg/kg (ppm)	1	69	76	10-196	10
Acetone	mg/kg (ppm)	5	90	98	52-141	9
1,1-Dichloroethene	mg/kg (ppm)	1	66	73	47-128	10
Hexane	mg/kg (ppm)	1	82	86	43-142	5
Methylene chloride	mg/kg (ppm)	1	65	71	10-184	9
Methyl t-butyl ether (MTBE)	mg/kg (ppm)	1	76	87	60-123	13
trans-1,2-Dichloroethene	mg/kg (ppm)	1	72	79	67-129	9
1,1-Dichloroethane	mg/kg (ppm)	1	72	81	68-115	12
2,2-Dichloropropane	mg/kg (ppm)	1	84	92	52-170	9
cis-1,2-Dichloroethene	mg/kg (ppm)	1	72	81	72-127	12
Chloroform	mg/kg (ppm)	1	68	78	66-120	14
2-Butanone (MEK)	mg/kg (ppm)	5	82	95	30-197	15
1,2-Dichloroethane (EDC)	mg/kg (ppm)	1	73	82	56-135	12
1,1,1-Trichloroethane	mg/kg (ppm)	1	75	80	62-131	6
1,1-Dichloropropene	mg/kg (ppm)	1	76	83	69-128	9
Carbon tetrachloride	mg/kg (ppm)	1	76	83	60-139	9
Benzene	mg/kg (ppm)	1	71	79	71-118	11
Trichloroethene	mg/kg (ppm)	1	72	78	63-121	8
1,2-Dichloropropane	mg/kg (ppm)	1	76	85	72-127	11
Bromodichloromethane	mg/kg (ppm)	1	75	84	57-126	11
Dibromomethane	mg/kg (ppm)	1	73	85	62-123	15
4-Methyl-2-pentanone	mg/kg (ppm)	5	82	93	45-145	13
cis-1,3-Dichloropropene	mg/kg (ppm)	1	76	83	67-122	9
Toluene	mg/kg (ppm)	1	85	93	66-126	9
trans-1,3-Dichloropropene	mg/kg (ppm)	1	88	96	72-132	9
1,1,2-Trichloroethane	mg/kg (ppm)	1	86	97	64-115	12
2-Hexanone	mg/kg (ppm)	5	101	111	33-152	9
1,3-Dichloropropane	mg/kg (ppm)	1	89	98	72-130	10
Tetrachloroethene	mg/kg (ppm)	1	87	95	72-114	9
Dibromochloromethane	mg/kg (ppm)	1	85	91	55-121	7
1,2-Dibromoethane (EDB)	mg/kg (ppm)	1	91	98	74-132	7
Chlorobenzene	mg/kg (ppm)	1	85	94	76-111	10
Ethylbenzene	mg/kg (ppm)	1	86	94	64-123	9
1,1,1,2-Tetrachloroethane	mg/kg (ppm)	1	84	89	64-121	6
m,p-Xylene	mg/kg (ppm)	2	87	94	78-122	8
o-Xylene	mg/kg (ppm)	1	84	95	77-124	12
Styrene	mg/kg (ppm)	1	83	95	74-126	13
Isopropylbenzene	mg/kg (ppm)	1	86	96	76-127	11
Bromoform	mg/kg (ppm)	1	84	89	56-132	6
n-Propylbenzene	mg/kg (ppm)	1	90	104	74-124	14
Bromobenzene	mg/kg (ppm)	1	87	100	72-122	14
1,3,5-Trimethylbenzene	mg/kg (ppm)	1	90	103	76-126	13
1,1,2,2-Tetrachloroethane	mg/kg (ppm)	1	92	104	56-143	12
1,2,3-Trichloropropane	mg/kg (ppm)	1	88	101	61-137	14
2-Chlorotoluene	mg/kg (ppm)	1	89	101	74-121	13
4-Chlorotoluene	mg/kg (ppm)	1	89	101	75-122	13
tert-Butylbenzene	mg/kg (ppm)	1	90	103	73-130	13
1,2,4-Trimethylbenzene	mg/kg (ppm)	1	87	102	76-125	16
sec-Butylbenzene	mg/kg (ppm)	1	89	102	71-130	14
p-Isopropyltoluene	mg/kg (ppm)	1	89	103	70-132	15
1,3-Dichlorobenzene	mg/kg (ppm)	1	87	100	75-121	14
1,4-Dichlorobenzene	mg/kg (ppm)	1	85	99	74-117	15
1,2-Dichlorobenzene	mg/kg (ppm)	1	86	101	76-121	16
1,2-Dibromo-3-chloropropane	mg/kg (ppm)	1	89	98	58-138	10
1,2,4-Trichlorobenzene	mg/kg (ppm)	1	84	99	64-135	16
Hexachlorobutadiene	mg/kg (ppm)	1	88	95	50-153	8
Naphthalene	mg/kg (ppm)	1	85	102	63-140	18
1,2,3-Trichlorobenzene	mg/kg (ppm)	1	83	102	63-138	21 vo

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 04/15/22

Date Received: 04/07/22

Project: Site 5 Kenyon Street Vacant Lot 2021-552-11, F&BI 204093

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

Laboratory Code: 204055-01 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result	Percent	Acceptance
				Recovery MS	Criteria
Dichlorodifluoromethane	ug/L (ppb)	10	<1	120	50-150
Chloromethane	ug/L (ppb)	10	<10	97	50-150
Vinyl chloride	ug/L (ppb)	10	<0.02	100	16-176
Bromomethane	ug/L (ppb)	10	<5	112	10-193
Chloroethane	ug/L (ppb)	10	<1	103	50-150
Trichlorofluoromethane	ug/L (ppb)	10	<1	98	50-150
Acetone	ug/L (ppb)	50	<50	89	15-179
1,1-Dichloroethene	ug/L (ppb)	10	<1	100	50-150
Hexane	ug/L (ppb)	10	<5	99	49-161
Methylene chloride	ug/L (ppb)	10	<5	114	40-143
Methyl t-butyl ether (MTBE)	ug/L (ppb)	10	<1	99	50-150
trans-1,2-Dichloroethene	ug/L (ppb)	10	<1	98	50-150
1,1-Dichloroethane	ug/L (ppb)	10	<1	96	50-150
2,2-Dichloropropane	ug/L (ppb)	10	<1	95	10-335
cis-1,2-Dichloroethene	ug/L (ppb)	10	<1	95	50-150
Chloroform	ug/L (ppb)	10	<1	99	50-150
2-Butanone (MEK)	ug/L (ppb)	50	<20	98	34-168
1,2-Dichloroethane (EDC)	ug/L (ppb)	10	<0.2	94	50-150
1,1,1-Trichloroethane	ug/L (ppb)	10	<1	98	50-150
1,1-Dichloropropene	ug/L (ppb)	10	<1	100	50-150
Carbon tetrachloride	ug/L (ppb)	10	<0.5	97	50-150
Benzene	ug/L (ppb)	10	<0.35	98	50-150
Trichloroethene	ug/L (ppb)	10	<0.5	98	43-133
1,2-Dichloropropane	ug/L (ppb)	10	<1	93	50-150
Bromodichloromethane	ug/L (ppb)	10	<0.5	95	50-150
Dibromomethane	ug/L (ppb)	10	<1	94	50-150
4-Methyl-2-pentanone	ug/L (ppb)	50	<10	99	50-150
cis-1,3-Dichloropropene	ug/L (ppb)	10	<0.4	95	48-145
Toluene	ug/L (ppb)	10	<1	96	50-150
trans-1,3-Dichloropropene	ug/L (ppb)	10	<0.4	93	37-152
1,1,2-Trichloroethane	ug/L (ppb)	10	<0.5	99	50-150
2-Hexanone	ug/L (ppb)	50	<10	102	50-150
1,3-Dichloropropane	ug/L (ppb)	10	<1	94	50-150
Tetrachloroethene	ug/L (ppb)	10	<1	98	50-150
Dibromochloromethane	ug/L (ppb)	10	<0.5	95	33-164
1,2-Dibromoethane (EDB)	ug/L (ppb)	10	<1	98	50-150
Chlorobenzene	ug/L (ppb)	10	<1	102	50-150
Ethylbenzene	ug/L (ppb)	10	<1	101	50-150
1,1,1,2-Tetrachloroethane	ug/L (ppb)	10	<1	103	50-150
m,p-Xylene	ug/L (ppb)	20	<2	101	50-150
o-Xylene	ug/L (ppb)	10	<1	100	50-150
Styrene	ug/L (ppb)	10	<1	103	50-150
Isopropylbenzene	ug/L (ppb)	10	<1	103	50-150
Bromoform	ug/L (ppb)	10	<5	94	23-161
n-Propylbenzene	ug/L (ppb)	10	<1	99	50-150
Bromobenzene	ug/L (ppb)	10	<1	97	50-150
1,3,5-Trimethylbenzene	ug/L (ppb)	10	<1	100	50-150
1,1,2,2-Tetrachloroethane	ug/L (ppb)	10	<0.2	93	10-235
1,2,3-Trichloropropane	ug/L (ppb)	10	<1	96	33-151
2-Chlorotoluene	ug/L (ppb)	10	<1	99	50-150
4-Chlorotoluene	ug/L (ppb)	10	<1	99	50-150
tert-Butylbenzene	ug/L (ppb)	10	<1	97	50-150
1,2,4-Trimethylbenzene	ug/L (ppb)	10	<1	101	50-150
sec-Butylbenzene	ug/L (ppb)	10	<1	99	46-139
p-Isopropyltoluene	ug/L (ppb)	10	<1	102	46-140
1,3-Dichlorobenzene	ug/L (ppb)	10	<1	97	50-150
1,4-Dichlorobenzene	ug/L (ppb)	10	<1	99	50-150
1,2-Dichlorobenzene	ug/L (ppb)	10	<1	98	50-150
1,2-Dibromo-3-chloropropane	ug/L (ppb)	10	<10	89	50-150
1,2,4-Trichlorobenzene	ug/L (ppb)	10	<1	98	50-150
Hexachlorobutadiene	ug/L (ppb)	10	<0.5	96	42-150
Naphthalene	ug/L (ppb)	10	<1	100	50-150
1,2,3-Trichlorobenzene	ug/L (ppb)	10	<1	98	44-155

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 04/15/22

Date Received: 04/07/22

Project: Site 5 Kenyon Street Vacant Lot 2021-552-11, F&BI 204093

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

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Dichlorodifluoromethane	ug/L (ppb)	10	102	107	70-130	5
Chloromethane	ug/L (ppb)	10	92	98	70-130	6
Vinyl chloride	ug/L (ppb)	10	99	103	70-130	4
Bromomethane	ug/L (ppb)	10	105	107	28-182	2
Chloroethane	ug/L (ppb)	10	95	107	70-130	12
Trichlorofluoromethane	ug/L (ppb)	10	87	97	70-130	11
Acetone	ug/L (ppb)	50	84	96	42-155	13
1,1-Dichloroethene	ug/L (ppb)	10	91	100	70-130	9
Hexane	ug/L (ppb)	10	87	94	50-161	8
Methylene chloride	ug/L (ppb)	10	82	89	29-192	8
Methyl t-butyl ether (MTBE)	ug/L (ppb)	10	86	94	70-130	9
trans-1,2-Dichloroethene	ug/L (ppb)	10	87	94	70-130	8
1,1-Dichloroethane	ug/L (ppb)	10	86	93	70-130	8
2,2-Dichloropropane	ug/L (ppb)	10	85	88	70-130	3
cis-1,2-Dichloroethene	ug/L (ppb)	10	86	92	70-130	7
Chloroform	ug/L (ppb)	10	87	96	70-130	10
2-Butanone (MEK)	ug/L (ppb)	50	90	100	50-157	11
1,2-Dichloroethane (EDC)	ug/L (ppb)	10	86	94	70-130	9
1,1,1-Trichloroethane	ug/L (ppb)	10	87	95	70-130	9
1,1-Dichloropropene	ug/L (ppb)	10	90	98	70-130	9
Carbon tetrachloride	ug/L (ppb)	10	84	94	70-130	11
Benzene	ug/L (ppb)	10	89	95	70-130	7
Trichloroethene	ug/L (ppb)	10	88	91	70-130	3
1,2-Dichloropropane	ug/L (ppb)	10	85	91	70-130	7
Bromodichloromethane	ug/L (ppb)	10	86	90	70-130	5
Dibromomethane	ug/L (ppb)	10	87	92	70-130	6
4-Methyl-2-pentanone	ug/L (ppb)	50	86	91	70-130	6
cis-1,3-Dichloropropene	ug/L (ppb)	10	84	86	70-130	2
Toluene	ug/L (ppb)	10	86	94	70-130	9
trans-1,3-Dichloropropene	ug/L (ppb)	10	86	92	70-130	7
1,1,2-Trichloroethane	ug/L (ppb)	10	87	96	70-130	10
2-Hexanone	ug/L (ppb)	50	95	105	69-130	10
1,3-Dichloropropane	ug/L (ppb)	10	88	96	70-130	9
Tetrachloroethene	ug/L (ppb)	10	86	95	70-130	10
Dibromochloromethane	ug/L (ppb)	10	85	90	63-142	6
1,2-Dibromoethane (EDB)	ug/L (ppb)	10	85	95	70-130	11
Chlorobenzene	ug/L (ppb)	10	87	98	70-130	12
Ethylbenzene	ug/L (ppb)	10	88	98	70-130	11
1,1,1,2-Tetrachloroethane	ug/L (ppb)	10	85	96	70-130	12
m,p-Xylene	ug/L (ppb)	20	88	98	70-130	11
o-Xylene	ug/L (ppb)	10	87	96	70-130	10
Styrene	ug/L (ppb)	10	88	98	70-130	11
Isopropylbenzene	ug/L (ppb)	10	89	98	70-130	10
Bromoform	ug/L (ppb)	10	80	90	50-157	12
n-Propylbenzene	ug/L (ppb)	10	85	97	70-130	13
Bromobenzene	ug/L (ppb)	10	84	95	70-130	12
1,3,5-Trimethylbenzene	ug/L (ppb)	10	86	96	52-150	11
1,1,2,2-Tetrachloroethane	ug/L (ppb)	10	83	94	70-130	12
1,2,3-Trichloropropane	ug/L (ppb)	10	84	96	70-130	13
2-Chlorotoluene	ug/L (ppb)	10	85	98	70-130	14
4-Chlorotoluene	ug/L (ppb)	10	86	95	70-130	10
tert-Butylbenzene	ug/L (ppb)	10	84	95	70-130	12
1,2,4-Trimethylbenzene	ug/L (ppb)	10	87	98	70-130	12
sec-Butylbenzene	ug/L (ppb)	10	85	96	70-130	12
p-Isopropyltoluene	ug/L (ppb)	10	86	98	70-130	13
1,3-Dichlorobenzene	ug/L (ppb)	10	85	96	70-130	12
1,4-Dichlorobenzene	ug/L (ppb)	10	84	94	70-130	11
1,2-Dichlorobenzene	ug/L (ppb)	10	84	96	70-130	13
1,2-Dibromo-3-chloropropane	ug/L (ppb)	10	87	95	70-130	9
1,2,4-Trichlorobenzene	ug/L (ppb)	10	82	92	70-130	11
Hexachlorobutadiene	ug/L (ppb)	10	80	91	70-130	13
Naphthalene	ug/L (ppb)	10	85	95	70-130	11
1,2,3-Trichlorobenzene	ug/L (ppb)	10	81	92	69-143	13

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Data Qualifiers & Definitions

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

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

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

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

cf - The sample was centrifuged prior to analysis.

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

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

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

fc - The 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

04.07.22

E02/W01/AT1/B05

Report To Eric Zuern **204093**

Company Riley Group Inc.

Address 17522 Rydell Way NE

City, State, ZIP Rydell, WA 98511

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

SAMPLERS (signature)

PROJECT NAME

Site 5
Kangou Street Vacant Lot

REMARKS

Project specific RI's? Yes No

PO #
2021-552-11

INVOICE TO
RGT

Page # 1 of 5 VS-64

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						Notes		
						NWTPH-Dx	NWTPH-Gx	BTEX EPA 8021	NWTPH-HCID	VOCs EPA 8260	PAHs EPA 8270		PCBs EPA 8082	
TRP-2.5	01A-E	4-6-22	8:00	Soil	5									
TRP-5	02		8:00		5									
TRP-7.5	03		8:15		5									
TRP-10	04		8:15		5									
TRP-12.5	05		8:30		5									
TRP-14	06		8:30		5	XX			X					
TRP-17	07		8:45		5									
TRP-18/19	08		8:45		5									
TRP-21.5	09		9:00		5									Samples received at 2:00
TRP-24	10		9:00		5	X	X		X					

SIGNATURE		PRINT NAME		COMPANY		DATE	TIME
Reinquished by:	<i>Jacob Davies</i>	Jacob Davies	RGT	4/7	1:30		
Received by:	<i>Eric Zuern</i>	Eric Zuern	RGT		2:38		
Reinquished by:	<i>Eric Zuern</i>	Eric Zuern	RGT				
Received by:	<i>Torale Christensen</i>	Torale Christensen	F+R	4/7/22	14:30		

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Report To Eric Zuern
 Company RGI
 Address _____
 City, State, ZIP _____
 Phone _____ Email _____

SAMPLES (signature)		PROJECT NAME <u>Sit 5</u>	PO #
Kenyon Street Vacant Lot		2021-532-11	
REMARKS		INVOICE TO	
Project specific RI? - Yes / No		RGI	

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						Notes		
						NWTPH-Dx	NWTPH-Gx	BTEX EPA 8021	NWTPH-HCID	VOCs EPA 8260	PAHs EPA 8270		PCBs EPA 8082	
TP2-5	11A-E	4-6-22	9:15	Soil	5									
TP2-7.5	12		9:30		5	X	X			X				
TP2-10	13		9:30		5									
TP2-12.5	14		9:40		5									
TP2-15	15		9:40		5									
TP3-5	16	10:00	10:00		5									
TP3-7.5	17	10:20	10:20		5									
TP3-10	18	10:20	10:20		5									
TP3-12.5	19	10:30	10:30		5									Samples received at 20°C
TP3-14	20	10:30	10:30		5									

SIGNATURE		PRINT NAME		COMPANY		DATE	TIME
Relinquished by:	<u>Jaycob Davies</u>	Jaycob Davies	RGI	4/7	13:30		
Received by:	<u>Eric Zuern</u>	Eric Zuern	RGI		1:30		
Relinquished by:	<u>Eric Zuern</u>	Eric Zuern	RGI		2:30		
Received by:	<u>Tokala C</u>	Tokala C	FTR	4/7/22	14:30		

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SAMPLE CHAIN OF CUSTODY

04.07.22

Page #

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Report To Eric Zuern 204093

Company PGI

Address _____

City, State, ZIP _____

Phone _____ Email _____

SAMPLERS (signature)	PROJECT NAME <u>Site 5</u>	PO # <u>2021-552-11</u>
REMARKS <u>Keaton Street Vacant Lot</u>	INVOICE TO <u>PGI</u>	
Project specific RI's? - 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	ANALYSES REQUESTED						Notes	
						NWTPH-Dx	NWTPH-Gx	BTEX EPA 8021	NWTPH-HCID	VOCs EPA 8260	PAHs EPA 8270		PCBs EPA 8082
TP3-16.5	21 A-E	4-6-22	10:45	Soil	5	X	X			X			
TP3-18	22		10:45		5								
TP4-5	23		11:05		5								
TP4-7.5	24		11:15		5								
TP4-10	25		11:15		5	X	X						
TP4-12.5	26		11:35		5								
TP4-15	27		11:35		5					X			
TP5-2.5	28		11:45		5								
TP5-5	29		11:45		5								Samples received at 2 °C
TP5-7.5	30		12:05		5								

SIGNATURE		PRINT NAME		COMPANY		DATE	TIME
Reinquished by: <u>Sageel Davles</u>		Sageel Davles		PGI		4/7	1330
Received by: <u>Eric Zuern</u>		Eric Zuern		PGI			1:30
Reinquished by: <u>Eric Zuern</u>		Eric Zuern		PGI			2:30
Received by: <u>Tokada Christian</u>		Tokada Christian		FTB		4/7/22	14:30

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SAMPLE CHAIN OF CUSTODY

04.07.22

E02/Vul/AR1/B05

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TURNAROUND TIME

Standard turnaround

RUSH

Rush charges authorized by: _____

SAMPLE DISPOSAL

Archive samples

Other

Default: Dispose after 30 days

SAMPLERS (signature)

04.07.22

PROJECT NAME

SITE 5

PO #

2021-552-11

REMARKS

Kenyon Street Vacant Lot

INVOICE TO

RGI

Project specific RIs? - Yes / No

RGI

ANALYSES REQUESTED

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	ANALYSES REQUESTED							Notes	
						NWTPH-Dx	NWTPH-Gx	BTEX EPA 8021	NWTPH-HCID	VOCs EPA 8260	PAHs EPA 8270	PCBs EPA 8082		
TPS-10	31A-E	4-6-22	12:05	Soil	5	X	X			X				
TPS-12.5	32		12:30		5									
TPS-15	33		12:30		5									
TPS-17.5	34		12:45		5	X	X							
TPS-19	35		12:45		5	X	X							
TPG-2.5	36		1:20		1									
TPG-5	37A-E		1:20		1									5 Containers Received Tue 4/7
TPG-7.5	38		1:35		1									
TP7-10	39A-E		1:50		5									Samples received at 2 °C
TP7-14	40		2:10		5	X	X			X				

SIGNATURE

PRINT NAME

COMPANY

DATE

TIME

Relinquished by: *Jacob Davies*

Jacob Davies

RGI

4/7

1330

Received by: _____

Eric Zuehl

RGI

4/7

1:30

Relinquished by: _____

Eric Zuehl

RGI

4/7

2:30

Received by: _____

Tokala Cantor

FTB

4/12

14:30

Friedman & Bruya, Inc.

Ph. (206) 285-8282

Report To *Eric Zuehl* 204093

Company *RGI*

Address _____

City, State, ZIP _____

Phone _____ Email _____

