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**Underground Storage Tank Closure Report
3608 Airport Drive
Hood River, Oregon 97031
DEQ File #14-21-1213**

Prepared for:

Port of Hood River
c/o Greg Hagbery
1000 East Port Marina Drive
Hood River, Oregon 97031

&

Oregon Department of Environmental Quality
Eastern Region
Underground Storage Tank Program
475 Northeast Bellevue, Suite 110
Bend, Oregon 97701

November 29, 2022

Prepared by:

Soil Solutions Environmental Services, Inc.
3540 Southeast 28th Avenue
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1.0 INTRODUCTION

This report summarizes the activities conducted by Soil Solutions Environmental Services, Inc. (SSES) at 3608 Airport Drive in Hood River, Oregon (site). Site activities included the decommissioning by removal of a 1,400-gallon underground storage tank (UST), removal of petroleum contaminated soil (PCS), and soil and groundwater sampling and analysis. This report describes our activities and summarizes the results of the work.

2.0 SITE DESCRIPTION

As shown on the Vicinity Map, Figure 1, the site is in a rural area called Hood River Heights, approximately 2.83 miles southwest of downtown Hood River, Oregon in Hood River County. The site is located on the Ken Jernstedt Airfield (Tax lot: 02N10E11B02600) and the UST was located between two hangars serviced by Airport Drive, along the south property boundary. The hangars are located at 3604 and 3602 Airport Drive, and the removed UST location is shown on Figure 2. Surrounding properties are mostly orchard and pastureland with associated residences. Drinking water at the site is supplied by the Ice Fountain Water District.

The site gently slopes to the northeast towards Cedar Creek, a temporal creek that crosses the airfield from south to north before flowing northeast for approximately 1.55 miles towards the Hood River (shown on Figure 1). The surrounding areas slope southeast, east, or northeast towards the Hood River, which flows north to meet the Columbia River. According to the United States Geological Survey Topographic 7.5-minute map for the Hood River, Oregon quadrangle, the site lies at an elevation of approximately 560 to 640-ft above mean sea level. The site is located in township 2N range 10E section 11 of the Willamette Meridian. Korosec (1987) maps the surface geology of the site as Quaternary alluvium, consisting of unconsolidated sediments of eolian, landslide, river terrace, glacial, and Missoula Flood outburst origins. The site is also characterized by artificial fill deposits relating to the construction of the airfield. Grady (1983) indicates deep, regional groundwater in the vicinity of the site is typically greater than 100-ft below ground surface (bgs), and England (2018) indicates the local drinking water aquifer is at a depth of 440-ft bgs. England also indicates a nearby agricultural well has a static water level of 75-ft bgs. Shallow groundwater was encountered during site activities between 6.3 to 12.5-ft bgs.

3.0 FIELD ACTIVITIES

Field activities were completed between December 14, 2021, and April 27, 2022. Photographs of field activities are included in Appendix A and disposal receipts are included in Appendix C. Activities included the decommissioning by removal of a 1,400-gallon UST, removal of PCS, and collection and analysis of soil and groundwater samples. Site features and sample locations are shown on Figure 2. All depths are measured from the ground surface at the tank. All equipment was decontaminated between sampling locations. New nitrile gloves were donned by the sampler prior to each sample collected. Soil and groundwater samples collected during field activities were placed in laboratory-supplied clean glass jars or bottles, labeled, and placed in a cooler with ice.

3.1 Tank Decommissioning

On December 14, 2021, SSES completed four borings, designated 1 through 4, on each side of the UST. Soil samples were collected in the borings at a depth of 9 to 11-ft bgs, approximately 1-ft below the bottom of the tank and analyzed by Northwest Total Petroleum Hydrocarbon Identification Method (NWTPH-HCID). Laboratory analysis detected diesel in soil collected in borings 3 and 4. Gasoline was not detected in any of the soil samples. The owner was notified, and a release was reported to the Oregon Department of Environmental Quality (DEQ) on December 15, 2021.

On February 10, 2022, SSES uncovered the tank and cut it open. The tank was found to contain approximately 909.6 gallons of fuel. The contents were removed, and the interior of the tank was thoroughly pressure-washed using approximately 10 gallons of rinsate. The tank contents were transported to the SSES equipment yard for temporary storage and then transported for recycling, in bulk, by Oil Re-Refining Company (ORRCO). On February 11, 2022, SSES cut the tank in half and removed it from the ground. The tank was transported to the SSES equipment yard for recycling, in bulk, by Metro Metals Northwest, Inc. The tank measured 6-feet in length and 6.3-feet in diameter for a capacity of 1,400 gallons. The UST appeared corroded with many holes in the exterior, and dark brown and gray petroleum-impacted soil was observed when the tank was removed. One worst-case soil sample, SG5@10', was collected from the worst area of stained soil, under the east half of the former tank. This sample was analyzed using Northwest Total Petroleum Hydrocarbons Diesel Analysis (NWTPH-Dx). Laboratory analysis revealed a diesel concentration of 14,000 ppm and a heavy oil concentration of <2,500 ppm.

Groundwater was encountered in the excavation at approximately 11-feet bgs. On March 8, 2022, ORRCO pumped approximately 1,374 gallons of water from the excavation to facilitate removal of PCS.

On March 8 and 9, 2022, SSES removed PCS to a depth of approximately 12.5-ft bgs around the former tank area. A total of 36.23 tons of PCS was removed and placed in a metal dropbox for transport and disposal at Wasco County Landfill.

Following receipt of all laboratory soil sampling reports, the removed tank excavation was backfilled with gravel and restored to grade with clean overburden.

3.2 Additional Site Assessment Activities

On March 9, 2022, SSES collected six soil grab samples, designated SG6 through SG11, from the extents of the excavation. SG6 and SG8 were collected from the bottom of the excavation at a depth of 12.5-ft bgs. Samples SG7, SG9, SG10, and SG11 were collected from the excavation sidewalls at a depth of 10.5-ft bgs.

On March 18, 2022, ORRCO pumped approximately 1,856 gallons of water from the excavation before it was backfilled with compacted gravel and restored to grade.

On March 24, 2022, SSES completed boring 12, approximately 4-ft northeast of the tank area, in the assumed downgradient direction. Groundwater was encountered at approximately 10.5-ft bgs. Collocated soil and groundwater samples were collected at depths of 10.5-ft and 12.5-ft bgs, respectively.

On April 7, 2022, SSES completed borings 13 to 15, located south, north, and southeast of the tank area, respectively. Soil samples were collected at depths of 12-ft and 13-ft bgs in borings 13 and 15, respectively. Groundwater was encountered in boring 14 at 12.5-ft bgs, where one soil sample was collected. One groundwater sample was collected in boring 13 at a depth of 15-ft bgs.

On April 13, 2022, SSES completed boring 16 north-northwest of the tank area. Collocated soil and groundwater samples were collected at a depth of 15-ft bgs. One groundwater sample was collected from boring 14 at a depth of 13-ft bgs.

On April 13, 2022, SSES completed a groundwater recovery trench located approximately 10-ft northeast of the tank excavation. The trench was dug to a depth of 11-ft bgs and measured approximately 10-ft long and approximately 6-ft wide at ground surface. Groundwater was encountered approximately 7-ft bgs but was slow to flow into the trench. Groundwater did not show visual or olfactory signs of contamination.

On April 21, 2022, approximately 920-gallons of groundwater was removed from the recovery trench.

On April 25, 2022, approximately 897-gallons of groundwater was removed from the recovery trench.

On April 27, 2022, SSES collected one groundwater sample from boring 15 at a depth of 15-ft bgs. One confirmation groundwater grab sample was also collected from trench, identified as WG17@12.

On May 9, 2022, approximately 879-gallons of water was pumped from the groundwater recovery trench before it was backfilled and restored to grade.

4.0 ANALYTICAL RESULTS

Samples were transported under chain of custody documentation to Friedman & Bruya, Inc. laboratory in Seattle, Washington. Laboratory analysis of soil included gasoline, diesel, and residual range oil using NWTPH-HCID, Northwest Total Petroleum Hydrocarbons Diesel Analysis (NWTPH-Dx); benzene, toluene, ethylbenzene, and xylenes (BTEX) using Environmental Protection Agency (EPA) Method 8021B; and polycyclic aromatic hydrocarbons (PAHs) by EPA Method 8270E. Laboratory analytical results are included in Tables 1 and 2.

NWTPH-HCID is a semi-quantitative method of determining if gasoline, diesel, and/or heavy oil are present in PCS above laboratory reporting limits; however, this method does not produce quantitative levels of contaminant concentrations but acts as a reliable low-resolution screening

method for determining what type of petroleum is present. NWTPH-HCID was performed on soil samples S1 through S4, and soil grab samples SG6 through SG11. Laboratory analysis revealed diesel detections above 50 ppm in samples S3 and S4.

NWTPH-Dx is a quantitative method for determining diesel and heavy oil concentrations in petroleum-contaminated soil. NWTPH-Dx was performed on soil samples SG5 and S12 to S16, and on groundwater samples W12 to W16, and WG17. Diesel was detected in soil at a maximum concentration of 14,000 ppm at a depth of 10-ft bgs in sample SG5@10'; however, this sample location was removed from the site during excavation on March 8, 2022. Following excavation activities on March 8 and 9, 2022, diesel was not detected in soil above laboratory reporting limits in any of the final excavation sidewall or bottom samples.

Diesel was detected in groundwater at a maximum concentration of 1,300,000 ppb at a depth of 12.5-ft bgs in sample W12@12.5. The extent of groundwater contamination was constrained by borings 13 to 16 as no diesel or heavy oil were detected in groundwater samples above laboratory reporting limits from these locations. Following completion of the groundwater recovery trench on April 13, 2022, and subsequent groundwater pumping on April 21 and 25, 2022, diesel and heavy oil were not detected above laboratory reporting limits in confirmation groundwater sample WG17, collected from the trench.

5.0 SOIL MATRIX CLEANUP EVALUATION

As required under Oregon Administrative rule 340-122-325, SSES completed a Soil Matrix Cleanup evaluation of this site. Appendix D contains the Soil Matrix Checklist and Score Sheet. Based on site-specific parameters, a Soil Matrix score of 28 was calculated giving a Level 2 cleanup standard of 500 ppm diesel. Final confirmation samples collected from the excavation extents did not exceed the soil matrix level of 500 ppm diesel established for the site. An initial groundwater sample, collected in boring 12 to the northeast of the tank area, showed high levels of diesel and heavy oil contamination. Following contaminated soil removal, pumping, and disposal of groundwater from the tank excavation and groundwater recovery trench, a confirmation groundwater sample showed no impact from diesel and heavy oil.

6.0 SUMMARY, DISCUSSION, AND CONCLUSIONS

One 1,400-gallon UST was decommissioned by removal at 3608 Airport Drive in Hood River, Oregon. The site is in a rural setting and drinking water is supplied by the Ice Fountain Water District. The project site was in a grassy area between two hangars at the Ken Jernstedt Airfield located in Hood River County (Tax lot: 02N10E11B02600). The site has been an airfield since 1946.

Initial soil samples were collected on December 14, 2021, and the leaking tank reported to DEQ on December 15, 2021. A total of nine soil, seven soil grab, four groundwater, and one groundwater grab sample was collected for analysis. A total of 36.23 tons of contaminated soil was removed from the site.

Oregon Water Resources Department (OWRD) well logs were reviewed for township, range, and section of the site as well as surrounding sections. No beneficial use water wells logs (domestic and/or irrigation) were identified within ¼-mile of the site. Shallow groundwater was encountered from 6.3-ft to 12.5-ft bgs during site activities. Laboratory analytical results of final excavation confirmation soil samples showed that no remaining concentrations exceed the calculated Soil Matrix Level 2 cleanup standard of 500 ppm of diesel. The local aquifer is located 440-ft bgs, significantly deeper than the groundwater encountered during site activities. Therefore, it is not probable that contamination at this site will complete a pathway for ingestion or inhalation of contaminants as tap water.

7.0 RECOMMENDATION

SSES requests a finding of No Further Action and file closure for the above referenced site, DEQ file #14-21-1213.

8.0 limitations

This report was prepared by Soil Solutions Environmental Services, Inc. (SSES) for Greg Hagbery on behalf of the Port of Hood River, and summarizes the results of our work at 3608 Airport Drive, Hood River, Oregon. We have performed our services in accordance with our agreement and understanding with the client. The scope of work was limited to the specific project, location, and activities described herein. The material in it reflects our best judgment in light of the information available at report preparation.

This report may not be used or relied upon by any other party without the written consent of SSES. Any use which a third party makes of this report, or any reliance on or decisions to be made based on it, are the responsibility of such third parties. SSES is not responsible for the independent conclusions, opinions or recommendations made by others based on this report and accepts no responsibility for damages, if any, suffered by any third party as a result of decisions made or actions based on this report. The scope of services performed in execution of this evaluation may not be appropriate to satisfy the needs of other users and use or re-use of this document or the findings, conclusions, or recommendations is at the risk of said user.

SSES performed this work in accordance with generally accepted professional practices related to the nature of the work accomplished, in the same or similar localities, at the time the services were performed. The conclusions presented in this report are, in part, based upon subsurface sampling performed at selected locations and depths. There may be conditions between sample points or samples that differ significantly from those presented in this report and which cannot be predicted by this study. For these types of evaluations, it is often necessary to use information prepared by others and SSES cannot be responsible for the accuracy of such information. Additionally, the passage of time may result in a change in the environmental characteristics at this site and surrounding properties. This report does not warrant against future operations or conditions, nor does this warrant operations or conditions present of a type or at a location not investigated. This report is not a regulatory

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compliance audit and is not intended to satisfy the requirements of any state, federal, or local real estate transfer laws.

9.0 REFERENCES

Tracy J. England, 2018, Ken Jernstedt Airfield [LUST #14-17-1161]: Salem, Oregon, State of Oregon Department of Environmental Quality Staff Memorandum in support of a No Further Action determination, p. 1.

Stephen J. Grady, 1983, Ground-Water Resources in the Hood Basin, Oregon: Reston, Virginia, U.S. Geological Survey Water Resources Investigations Report 81-1108, p. 19.

Michael A. Korosec, 1987, Geologic Map of the Hood River Quadrangle, Washington and Oregon: Olympia, Washington, Washington State Department of Ecology, 1:24,000.

10.0 SIGNATURE

SOIL SOLUTIONS ENVIRONMENTAL SERVICES, INC

Report prepared by:

Adam Jones

Adam Jones, Technical Report Writer, Project Manager

Kendra J. Williams, Registered Geologist, Project Manager



Expires 5/31/2023

Kendra J. Williams, R.G.

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FIGURES

Vicinity and Site Map

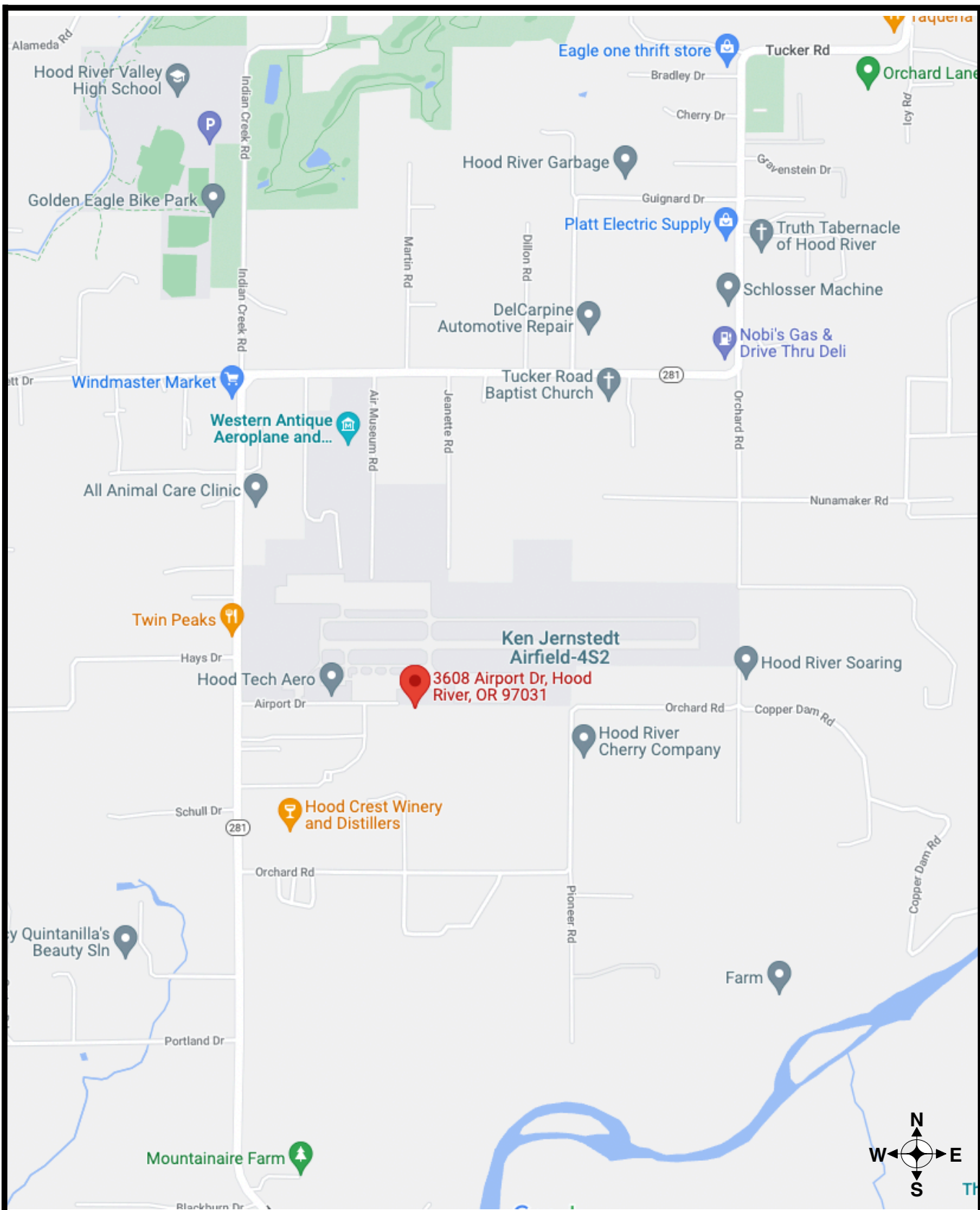
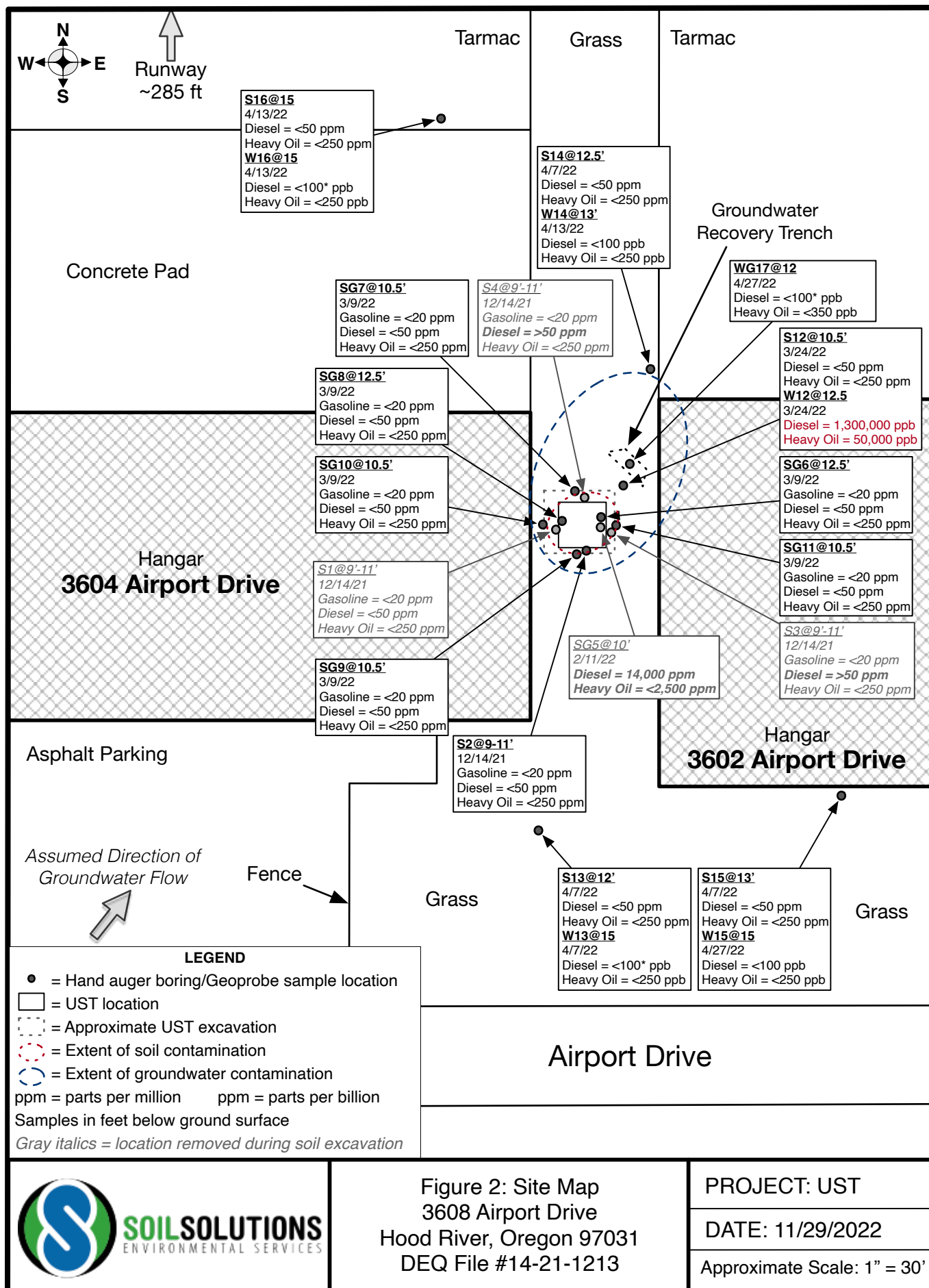


Figure 1: Vicinity Map
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PROJECT: UST

DATE: 11/29/2022

Approximate Scale: 1" = 1000'



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TABLES

Soil and Groundwater Sample Analytical Results

Table 1
Soil Sample Analytical Results

Sample Identification	Depth ¹	Date Collected	Analytical Results (mg/kg)								
			Total Petroleum Hydrocarbons (TPH)					Volatile Organic Carbons (VOCs) by EPA Method 8021B			
			Gasoline Range (C ₂ -C ₉) by NWTPH-HCID	Diesel Range (C ₁₀ -C ₂₄) by NWTPH-HCID	Residual Range (C ₂₅ -C ₃₄) by NWTPH-HCID	Diesel Range (C ₁₀ -C ₂₄) by NWTPH-Dx	Residual Range (C ₂₅ -C ₃₄) by NWTPH-Dx	Benzene	Toluene	Ethyl-benzene	Total Xylenes
S1@9'-11'	9-11	12/14/21	<20	<50	<250	--	--	--	--	--	--
S2@9'-11'	9-11	12/14/21	<20	<50	<250	--	--	--	--	--	--
S3@9'-11'	9-11	12/14/21	<20	>50	<250	--	--	--	--	--	--
S4@9'-11'	9-11	12/14/21	<20	>50	<250	--	--	--	--	--	--
SG5@10'	10	2/11/22	--	--	--	14,000	<2,500	--	--	--	--
SG6@12.5'	12.5	3/9/22	<20	<50	<250	--	--	--	--	--	--
SG7@10.5'	10.5	3/9/22	<20	<50	<250	--	--	--	--	--	--
SG8@12.5'	12.5	3/9/22	<20	<50	<250	--	--	--	--	--	--
SG9@10.5'	10.5	3/9/22	<20	<50	<250	--	--	--	--	--	--
SG10@10.5'	10.5	3/9/22	<20	<50	<250	--	--	--	--	--	--
SG11@10.5'	10.5	3/9/22	<20	<50	<250	--	--	--	--	--	--
S12@10.5	10.5	3/24/22	--	<50	<250	--	--	<0.02	<0.1	<0.1	<0.3
S13@12'	12	4/7/22	--	<50	<250	--	--	<0.02	<0.02	<0.02	<0.06
S14@12.5'	12.5	4/7/22	--	<50	<250	--	--	<0.02	<0.02	<0.02	<0.06
S15@13'	13	4/7/22	--	<50	<250	--	--	<0.02	<0.02	<0.02	<0.06
S16@15	15	4/13/22	--	<50	<250	<50	<250	<0.02	<0.02	<0.02	<0.06

Notes:

Gray Italics Indicate Sample Location has been Removed

Bold indicates a detection

1 - Depth in feet below ground surface

-- Not analyzed

x - Sample chromatograph does not resemble fuel standard used for quantitation

* sample passed through silica gel cleanup prior to analysis

Table 2
Groundwater Sample Analytical Results

Sample Identification	Depth ¹	Date	Analytical Results (ug/l) ²																							
			Diesel Range (C ₁₀ -C ₁₅) ⁽³⁾	Residual Range (C ₁₅ -C ₃₀) ⁽³⁾	Benzene ⁽⁴⁾	Toluene ⁽⁴⁾	Ethyl-benzene ⁽⁴⁾	Total Xylenes ⁽⁴⁾	Naphthalene ⁽⁴⁾	1-Methylnaphthalene ⁽⁵⁾	2-Methylnaphthalene ⁽⁵⁾	Acenaphthylene ⁽⁵⁾	Acenaphthene ⁽⁵⁾	Fluorene ⁽⁵⁾	Phenanthrene ⁽⁵⁾	Anthracene ⁽⁵⁾	Fluoranthene ⁽⁵⁾	Pyrene ⁽⁵⁾	Benz(a)anthracene ⁽⁵⁾	Chrysene ⁽⁵⁾	Benzo(a)pyrene ⁽⁵⁾	Benzo(b)fluoranthene ⁽⁵⁾	Benzo(k)fluoranthene ⁽⁵⁾	Ideno(1,2,3-cd)pyrene ⁽⁵⁾	Dibenz(a,h)anthracene ⁽⁵⁾	Benzo(g,h,i)perylene ⁽⁵⁾
W12@12.5	12.5	3/24/22	1300000 ve	50000 x	<5	6.2	95	280	130	1,100	720	<2	50	420	500	<2	14	160	2.5	15	<2	<2	<2	<2	<2	<4
W13@15	15	4/7/22	<100*	<250	<1	<1	<1	<3	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
W14@13'	13	4/13/22	<100	<250	<1	<1	<1	<3	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
W15@15	15	4/27/22	<100	<250	<1	<1	<1	<3	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
W16@15	15	4/13/22	<100*	<250	<1	<1	<1	<3	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
WG17@12	12	4/27/22	<100*	<350	<1	<1	<1	<3	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Notes:

Gray Italics Indicate Sample Location has been Removed

1 – Depth in feet below ground surface

2 – Results reported in micrograms per liter (ug/l)

3 - Analyzed by NWTPH-Dx

4 - Analyzed by EPA Methods 8260D/8021B

5 - Analyzed by EPA Method 8270E

x - Sample chromatograph does not resemble fuel standard used for quantitation

ve - Estimated concentration calculated for an analyte response is outside of instrument calibration range

* sample passed through silica gel cleanup prior to analysis

-- - Not analyzed

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APPENDICES

Appendix A Photographs of Field Activities
Appendix B Certified Analytical Reports, Chain of Custody Documents
Appendix C Disposal Receipts
Appendix D DEQ Forms

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Appendix A

Photographs of Field Activities



Photo 1. Hangar at 3604 Airport Drive in Hood River, OR. The UST is roughly halfway down left side of hangar. View is to the SW.



Photo 2. Fill pipe over W end of UST with SSES pump running down pipe. View is to the NNW.



Photo 3. Wider view of UST site. View is to the NNW. Notice slope is towards the hangar on the right.



Photo 4. Location of UST before digging. View is to the N. Mt. Adams in background for reference.



Photo 5. Exposed 1,400-gallon diesel UST.



Photo 6. Interior of UST. Approximately 909.6 gallons of fuel was removed.



Photo 7. Triple-rinsing the interior of the UST after pumping the fuel found inside.



Photo 8. Water recharging the tank through holes after pumping the fuel and triple-rinsing the interior.



Photo 9. Holes in the UST exterior circled in red.



Photo 10. UST being removed from the tank pit. Tank was cut in half for removal.



Photo 11. Groundwater in the tank pit.



Photo 12. ORRCO pump hose removing groundwater in the tank pit.



Photo 13. Overview of site. UST excavation fenced off in center of photo. Contaminated soil on left side of photo under white tarp.



Photo 14. Groundwater in tank pit with ORRCO pumping hose.



Photo 15. Drained tank pit from Photo 14.



Photo 16. Compacting gravel during backfilling process of the tank pit.



Photo 17. Tank excavation pit restored to grade with clean soil. View is to the NNE.



Photo 18. Groundwater recovery trench to the NE of the former tank excavation pit. View is to the SE.



Photo 19. Groundwater recovery trench being recharged by groundwater.



Photo 20. Groundwater recharge trench full of groundwater. No oily sheen or smell was observed.



Photo 21. Groundwater recovery trench backfilled and restored to grade with clean overburden.



Photo 22. Overview of restored site. View is to the NNW.



Photo 23. Geoprobe completing boring 15 on the S side of 3602 Airport Drive, to the SE of the removed tank area.



Photo 24. Collecting groundwater in boring 15.

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Appendix B

Certified Analytical Reports, Chain of Custody Documents

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

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

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(206) 285-8282
fbi@isomedia.com
www.friedmanandbruya.com

December 21, 2021

Project Managers
Soil Solutions
3540 SE 28th Ave
Portland, OR 97202

Dear Project Managers:

Included are the results from the testing of material submitted on December 15, 2021 from the 3608 Airport Rd, F&BI 112294 project. There are 2 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 should have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.



Michael Erdahl
Project Manager

Enclosures
c: Soil Solutions Reports
SSI1221R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 12/21/21
Date Received: 12/15/21
Project: 3608 Airport Rd, F&BI 112294
Date Extracted: 12/15/21
Date Analyzed: 12/15/21

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

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

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

<u>Sample ID</u> Laboratory ID	<u>Gasoline</u>	<u>Diesel</u>	<u>Heavy Oil</u>	Surrogate (% Recovery) (Limit 56-165)
S1@9'-11' 112294-01	ND	ND	ND	104
S2@9'-11' 112294-02	ND	ND	ND	104
S3@9'-11' 112294-03	ND	D	ND	114
04 112294-04	ND	D	ND	105
Method Blank 01-2892 MB	ND	ND	ND	109

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

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.

112294

SAMPLE CHAIN OF CUSTODY

12-15-21

C03/US4

Send Report To _____

Company Soil SolutionsAddress 3540 SE 28th AvenueCity, State, Zip Portland, OR 97202Phone # (503) 234-2118 Fax # (503) 331-7133

SAMPLERS (signature)

PROJECT NAME/NO.

PO #

REMARKS

Page # _____ of _____

TURNAROUND TIME

☐ Standard☐ RUSH

Rush charges authorized by: _____

SAMPLE DISPOSAL

☐ Dispose after 30 days☐ Return samples☐ Will call with instructions

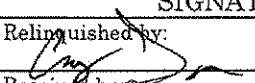
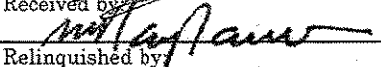
Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of containers	ANALYSES REQUESTED										Notes
						NWTPH-Dx	NWTPH-HCID	NWTPH-Gx	BTEX 8021B	BTEXN 8260C	PAHs (No N) 8270CCIM	PAHs 8270C SIM	Lead by 200.8			
S10A-11'	01	12-14-21		Soil	1		X									
S20A-11'	02	↓		↓	1		X									
S30A-11'	03 AC	↓		↓	3		X									
S40A-11'	04	↓		↓	1		X									-project ID not labeled on sample

Friedman & Bruya, Inc.
3012 16th Avenue West

Seattle, WA 98119-2029

Ph. (206) 285-8282

Fax (206) 283-5044

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: 	Corey Davidson	SS	12-14-21	
Received by: 	Nhan Phan	FRB	12/15/21	1220
Relinquished by: _____				
Received by: _____		Samples received at 4°C		

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

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

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

February 18, 2022

Project Managers
Soil Solutions
3540 SE 28th Ave
Portland, OR 97202

Dear Project Managers:

Included are the results from the testing of material submitted on February 14, 2022 from the 3608 Airport Dr, F&BI 202244 project. There are 3 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days, or as directed by the Chain of Custody document. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

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

Sincerely,

FRIEDMAN & BRUYA, INC.



Michael Erdahl
Project Manager

Enclosures
c: Soil Solutions Reports
SSI0218R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 02/18/22

Date Received: 02/14/22

Project: 3608 Airport Dr, F&BI 202244

Date Extracted: 02/14/22

Date Analyzed: 02/14/22

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

Results Reported on a Dry Weight Basis

Results Reported as mg/kg (ppm)

<u>Sample ID</u>	<u>Diesel Range</u>	<u>Residual Range</u>	Surrogate
Laboratory ID	(C ₁₀ -C ₂₅)	(C ₂₅ -C ₃₆)	<u>(% Recovery)</u>
			(Limit 56-165)
SG5@10.0'	14,000	<2,500	126
202244-01 1/10			
Method Blank	<50	<250	96
02-430 MB			

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 02/18/22

Date Received: 02/14/22

Project: 3608 Airport Dr, F&BI 202244

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

Laboratory Code: 202235-01 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet Wt)	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Diesel Extended	mg/kg (ppm)	5,000	<50	84	86	63-146	2

Laboratory Code: Laboratory Control Sample

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

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.

202244

Send Report To

pm's

SAMPLE CHAIN OF CUSTODY

62.14.22

Page # of 1

TURNAROUND TIME

☐ Standard☒ RUSH = Same Day

Rush charges authorized by:

SAMPLE DISPOSAL

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

Company Soil Solutions

Address 3540 SE 28th Avenue

City, State, Zip Portland, OR 97202

Phone # (503) 234-2118 Fax # (503) 331-7133

SAMPLERS (signature)

PROJECT NAME/NO.

PO #

3608 Airport Dr

REMARKS

ANALYSES REQUESTED

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of containers	NWTPH-Dx	NWTPH-HCHD	NWTPH-Gx	BTEX 8021B	BTEXN 8260C	PAHs (No N) 8270CCIM	PAHs 8270C SIM	Lead by 200.8	Notes
SG5 E10.01	01A-C	2/11/22		Soil	1/2" 2x200A	⊗	⊗							2608 Airport Dr ⊗ per PT 2/14/22 ml

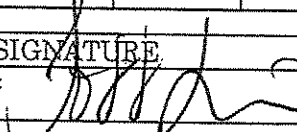
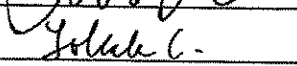
Friedman & Bruya, Inc.
3012 16th Avenue West

Seattle, WA 98119-2029

Ph. (206) 285-8282

Fax (206) 283-5044

NP

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: 	Todd Lusk	SS	2/11/22	
Received by: 	Tereasa Christensen	F+B	2/14/22	12:30
Relinquished by:				
Received by:				
			Samples received at 6:00	

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

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

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

March 14, 2022

Project Managers
Soil Solutions
3540 SE 28th Ave
Portland, OR 97202

Dear Project Managers:

Included are the results from the testing of material submitted on March 10, 2022 from the 3608 Airport Dr, F&BI 203179 project. There are 2 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 should have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.



Michael Erdahl
Project Manager

Enclosures
c: Soil Solutions Reports
SSI0314R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 03/14/22

Date Received: 03/10/22

Project: 3608 Airport Dr, F&BI 203179

Date Extracted: 03/10/22

Date Analyzed: 03/10/22

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

Results Reported on a Dry Weight Basis

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

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

<u>Sample ID</u> Laboratory ID	<u>Gasoline</u>	<u>Diesel</u>	<u>Heavy Oil</u>	Surrogate (% Recovery) (Limit 53-144)
SG6@12.5' 203179-01	ND	ND	ND	94
SG7@10.5' 203179-02	ND	ND	ND	94
SG8@12.5' 203179-03	ND	ND	ND	99
SG9@10.5' 203179-04	ND	ND	ND	94
SG10@10.5' 203179-05	ND	ND	ND	98
SG11@10.5' 203179-06	ND	ND	ND	93
Method Blank 02-632 MB	ND	ND	ND	94

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

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.

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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.

203179

SAMPLE CHAIN OF CUSTODY

03.10.22

VS4

1003

Send Report To

Am's

Company Soil Solutions

Address 3540 SE 28th Avenue

City, State, Zip Portland, OR 97202

Phone # (503) 234-2118 Fax # (503) 331-7133

SAMPLERS (signature)

PROJECT NAME/NO.

3608 Airport Dr

PO #

REMARKS

Page # 1 of 1

TURNAROUND TIME

☐ Standard
☒ RUSH Same Day
 Rush charges authorized by:

SAMPLE DISPOSAL

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

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of containers	ANALYSES REQUESTED										Notes
						NWTPH-Dx	NWTPH-HCID	NWTPH-Gx	BTEX 8021B	BTEXN 8260C	PAHs (No N) 8270CCIM	PAHs 8270C SIM	Lead by 200.8			
SG 6 @ 12.5'	01 A-C	3/9/22		Soil	1x22 2xVIA	✓	✓									
SG 7 @ 10.5'	02	3/9/22		Soil	1x22 2xVIA	✓	✓									
SG 8 @ 12.5'	03	3/9/22		Soil	1x22 2xVIA	✓	✓									
SG 9 @ 10.5'	04	3/9/22		Soil	1x22 2xVIA	✓	✓									
SG 10 @ 10.5'	05	3/9/22		Soil	1x22 2xVIA	✓	✓									
SG 11 @ 10.5'	06 ✓	3/9/22		Soil	1x22 2xVIA	✓	✓									

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

SIGNATURE		PRINT NAME		COMPANY	DATE	TIME
Relinquished by:		Todd J. J.		SS	3/9/22	
Received by:		Tokada G. J. J.		FJB	3/10/22	10:00
Relinquished by:						
Received by:						
Samples received at					4	00

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

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

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

April 1, 2022

Project Managers
Soil Solutions
3540 SE 28th Ave
Portland, OR 97202

Dear Project Managers:

Included are the results from the testing of material submitted on March 25, 2022 from the 3608 Airport Dr, F&BI 203460 project. There are 12 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days, or as directed by the Chain of Custody document. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

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

Sincerely,

FRIEDMAN & BRUYA, INC.



Michael Erdahl
Project Manager

Enclosures
c: Soil Solutions Reports
SSI0401R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 04/01/22

Date Received: 03/25/22

Project: 3608 Airport Dr, F&BI 203460

Date Extracted: 03/25/22

Date Analyzed: 03/25/22

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

Results Reported on a Dry Weight Basis

Results Reported as mg/kg (ppm)

<u>Sample ID</u> Laboratory ID	<u>Benzene</u>	<u>Toluene</u>	<u>Ethyl Benzene</u>	<u>Total Xylenes</u>	<u>Surrogate (% Recovery)</u> (Limit 50-150)
S12@10.5 203460-01 1/5	<0.02 j	<0.1	<0.1	<0.3	95
Method Blank 02-617 MB	<0.02	<0.02	<0.02	<0.06	98

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 04/01/22

Date Received: 03/25/22

Project: 3608 Airport Dr, F&BI 203460

Date Extracted: 03/25/22

Date Analyzed: 03/25/22

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

Results Reported as ug/L (ppb)

<u>Sample ID</u> Laboratory ID	<u>Benzene</u>	<u>Toluene</u>	<u>Ethyl Benzene</u>	<u>Total Xylenes</u>	<u>Surrogate (% Recovery)</u> Limit (50-150)
W12@12.5 203460-02 1/5	<5	6.2	95	280	123
Method Blank 02-618 MB	<1	<1	<1	<3	85

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 04/01/22

Date Received: 03/25/22

Project: 3608 Airport Dr, F&BI 203460

Date Extracted: 03/25/22

Date Analyzed: 03/25/22

**RESULTS FROM THE ANALYSIS OF SOIL SAMPLES
FOR TOTAL PETROLEUM HYDROCARBONS AS
DIESEL AND RESIDUAL RANGE
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>Residual Range</u> (C ₂₅ -C ₃₆)	Surrogate <u>(% Recovery)</u> (Limit 53-144)
S12@10.5 203460-01	<50	<250	95
Method Blank 02-743 MB2	<50	<250	96

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 04/01/22

Date Received: 03/25/22

Project: 3608 Airport Dr, F&BI 203460

Date Extracted: 03/25/22

Date Analyzed: 03/25/22

**RESULTS FROM THE ANALYSIS OF WATER SAMPLES
FOR TOTAL PETROLEUM HYDROCARBONS AS
DIESEL AND RESIDUAL RANGE
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>Residual Range</u> (C ₂₅ -C ₃₆)	<u>Surrogate</u> <u>(% Recovery)</u> (Limit 41-152)
W12@12.5 203460-02 1/14	1,300,000 ve	50,000 x	ip
Method Blank 02-746 mb 03-25-22 12:57	<100	<250	123

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Semivolatile Compounds By EPA Method 8270E

Client Sample ID:	W12@12.5	Client:	Soil Solutions
Date Received:	03/25/22	Project:	3608 Airport Dr, F&BI 203460
Date Extracted:	03/29/22	Lab ID:	203460-02 1/100
Date Analyzed:	03/29/22	Data File:	032909.D
Matrix:	Water	Instrument:	GCMS12
Units:	ug/L (ppb)	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
2-Fluorophenol	10 d	11	65
Phenol-d6	34 d	11	65
Nitrobenzene-d5	315 d	50	150
2-Fluorobiphenyl	60 d	44	108
2,4,6-Tribromophenol	124 d	10	140
Terphenyl-d14	50 d	50	150

Compounds:	Concentration ug/L (ppb)
Naphthalene	130
2-Methylnaphthalene	1,100
1-Methylnaphthalene	720
Acenaphthylene	<2
Acenaphthene	50
Fluorene	420
Phenanthrene	500
Anthracene	<2
Fluoranthene	14
Pyrene	160
Benz(a)anthracene	2.5
Chrysene	15
Benzo(a)pyrene	<2
Benzo(b)fluoranthene	<2
Benzo(k)fluoranthene	<2
Indeno(1,2,3-cd)pyrene	<2
Dibenz(a,h)anthracene	<2
Benzo(g,h,i)perylene	<4

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Semivolatile Compounds By EPA Method 8270E

Client Sample ID:	Method Blank	Client:	Soil Solutions
Date Received:	Not Applicable	Project:	3608 Airport Dr, F&BI 203460
Date Extracted:	03/29/22	Lab ID:	02-748 mb2
Date Analyzed:	03/29/22	Data File:	032908.D
Matrix:	Water	Instrument:	GCMS12
Units:	ug/L (ppb)	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
2-Fluorophenol	29	11	65
Phenol-d6	17	11	65
Nitrobenzene-d5	90	50	150
2-Fluorobiphenyl	96	44	108
2,4,6-Tribromophenol	84	10	140
Terphenyl-d14	102	50	150

Compounds:	Concentration ug/L (ppb)
Naphthalene	<0.2
2-Methylnaphthalene	<0.2
1-Methylnaphthalene	<0.2
Acenaphthylene	<0.02
Acenaphthene	<0.02
Fluorene	<0.02
Phenanthrene	<0.02
Anthracene	<0.02
Fluoranthene	<0.02
Pyrene	<0.02
Benz(a)anthracene	<0.02
Chrysene	<0.02
Benzo(a)pyrene	<0.02
Benzo(b)fluoranthene	<0.02
Benzo(k)fluoranthene	<0.02
Indeno(1,2,3-cd)pyrene	<0.02
Dibenz(a,h)anthracene	<0.02
Benzo(g,h,i)perylene	<0.04

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 04/01/22

Date Received: 03/25/22

Project: 3608 Airport Dr, F&BI 203460

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

Laboratory Code: 203385-01 (Duplicate)

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

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Benzene	mg/kg (ppm)	0.5	94	69-120
Toluene	mg/kg (ppm)	0.5	93	70-117
Ethylbenzene	mg/kg (ppm)	0.5	95	65-123
Xylenes	mg/kg (ppm)	1.5	95	66-120

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 04/01/22

Date Received: 03/25/22

Project: 3608 Airport Dr, F&BI 203460

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

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Benzene	ug/L (ppb)	50	97	94	65-118	3
Toluene	ug/L (ppb)	50	95	92	72-122	3
Ethylbenzene	ug/L (ppb)	50	103	101	73-126	2
Xylenes	ug/L (ppb)	150	100	100	74-118	0

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 04/01/22

Date Received: 03/25/22

Project: 3608 Airport Dr, F&BI 203460

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

Laboratory Code: 203419-04 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet Wt)	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Diesel Extended	mg/kg (ppm)	5,000	<50	96	96	64-133	0

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Diesel Extended	mg/kg (ppm)	5,000	94	58-147

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 04/01/22

Date Received: 03/25/22

Project: 3608 Airport Dr, F&BI 203460

**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

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Diesel Extended	ug/L (ppb)	2,500	116	112	63-142	4

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 04/01/22

Date Received: 03/25/22

Project: 3608 Airport Dr, F&BI 203460

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

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Naphthalene	ug/L (ppb)	5	79	85	62-90	7
2-Methylnaphthalene	ug/L (ppb)	5	80	86	64-93	7
1-Methylnaphthalene	ug/L (ppb)	5	79	84	64-93	6
Acenaphthylene	ug/L (ppb)	5	88	93	70-130	6
Acenaphthene	ug/L (ppb)	5	87	92	70-130	6
Fluorene	ug/L (ppb)	5	90	94	70-130	4
Phenanthrene	ug/L (ppb)	5	93	95	70-130	2
Anthracene	ug/L (ppb)	5	97	98	70-130	1
Fluoranthene	ug/L (ppb)	5	100	102	70-130	2
Pyrene	ug/L (ppb)	5	96	98	70-130	2
Benz(a)anthracene	ug/L (ppb)	5	96	97	70-130	1
Chrysene	ug/L (ppb)	5	97	98	70-130	1
Benzo(a)pyrene	ug/L (ppb)	5	101	103	70-130	2
Benzo(b)fluoranthene	ug/L (ppb)	5	98	105	70-130	7
Benzo(k)fluoranthene	ug/L (ppb)	5	99	100	70-130	1
Indeno(1,2,3-cd)pyrene	ug/L (ppb)	5	108	101	70-130	7
Dibenz(a,h)anthracene	ug/L (ppb)	5	108	95	70-130	13
Benzo(g,h,i)perylene	ug/L (ppb)	5	107	94	70-130	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

0325.22

E02
A02
V54
VW1

Send Report To Project Manager
 Company Soil Solutions
 Address 3540 SE 28th Avenue
 City, State, Zip Portland, OR 97202
 Phone # (503) 234-2118 Fax # (503) 331-7133

SAMPLERS (signature) <i>Joseph Thayer</i>	
PROJECT NAME/NO. <u>3608 Airport Dr</u>	PO #
REMARKS	

Page # _____ of _____
TURNAROUND TIME
☐ Standard
☐ RUSH
Rush charges authorized by: _____
SAMPLE DISPOSAL
☐ Dispose after 30 days
☐ Return samples
☐ Will call with instructions

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of containers	ANALYSES REQUESTED										Notes
						NWTPH-Dx	NWTPH-HCID	NWTPH-Gx	BTEX 8021B	BTEXN 8260C	PAHs (No N) 8270CCIM	PAHs 8270C SIM	Lead by 200.8			
512@10.5	61A-C	3/24/22		Soil	3	✓			✓							(X) per PT
412@12.5	02A-E	✓		Water	5	✓			✓		(X)					(C) 3/25

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

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: <i>Joseph Thayer</i>	Joseph Thayer	Soil Solutions	3/24/22	
Received by: <i>Tokala Christensen</i>	Tokala Christensen	F+B	3/25/22	10:00
Relinquished by:				
Received by:		Samples received at	3°C	

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

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

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

April 13, 2022

Project Managers
Soil Solutions
3540 SE 28th Ave
Portland, OR 97202

Dear Project Managers:

Included are the results from the testing of material submitted on April 9, 2022 from the 3608 Airport Dr, F&BI 204126 project. There are 9 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 should have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.



Michael Erdahl
Project Manager

Enclosures
c: Soil Solutions Reports
SSI0413R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 04/13/22

Date Received: 04/09/22

Project: 3608 Airport Dr, F&BI 204126

Date Extracted: 04/11/22

Date Analyzed: 04/11/22

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

Results Reported on a Dry Weight Basis

Results Reported as mg/kg (ppm)

<u>Sample ID</u> Laboratory ID	<u>Benzene</u>	<u>Toluene</u>	<u>Ethyl Benzene</u>	<u>Total Xylenes</u>	<u>Surrogate (% Recovery)</u> (Limit 50-132)
S13@12' 204126-01	<0.02	<0.02	<0.02	<0.06	78
S14@12.5' 204126-02	<0.02	<0.02	<0.02	<0.06	77
S15@13' 204126-03	<0.02	<0.02	<0.02	<0.06	77
Method Blank 02-820 MB	<0.02	<0.02	<0.02	<0.06	76

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 04/13/22

Date Received: 04/09/22

Project: 3608 Airport Dr, F&BI 204126

Date Extracted: 04/11/22

Date Analyzed: 04/11/22

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

Results Reported as ug/L (ppb)

<u>Sample ID</u> Laboratory ID	<u>Benzene</u>	<u>Toluene</u>	<u>Ethyl Benzene</u>	<u>Total Xylenes</u>	<u>Surrogate (% Recovery)</u> Limit (52-124)
W14@13' 204126-04	<1	<1	<1	<3	79
Method Blank 02-819 MB	<1	<1	<1	<3	79

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 04/13/22

Date Received: 04/09/22

Project: 3608 Airport Dr, F&BI 204126

Date Extracted: 04/11/22

Date Analyzed: 04/11/22

**RESULTS FROM THE ANALYSIS OF SOIL SAMPLES
FOR TOTAL PETROLEUM HYDROCARBONS AS
DIESEL AND RESIDUAL RANGE
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>Residual Range</u> (C ₂₅ -C ₃₆)	Surrogate <u>(% Recovery)</u> (Limit 56-165)
S13@12' 204126-01	<50	<250	100
S14@12.5' 204126-02	<50	<250	102
S15@13' 204126-03	<50	<250	101
Method Blank 02-862 MB	<50	<250	105

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 04/13/22

Date Received: 04/09/22

Project: 3608 Airport Dr, F&BI 204126

Date Extracted: 04/11/22

Date Analyzed: 04/11/22

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

Results Reported as ug/L (ppb)

<u>Sample ID</u>	<u>Diesel Range</u>	<u>Residual Range</u>	<u>Surrogate</u>
Laboratory ID	(C ₁₀ -C ₂₅)	(C ₂₅ -C ₃₆)	(% Recovery) (Limit 41-152)
W14@13' 204126-04	<100	<250	ip
Method Blank 02-861 MB	<100	<250	121

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 04/13/22

Date Received: 04/09/22

Project: 3608 Airport Dr, F&BI 204126

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

Laboratory Code: 204126-01 (Duplicate)

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

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Benzene	mg/kg (ppm)	0.5	92	66-121
Toluene	mg/kg (ppm)	0.5	88	72-128
Ethylbenzene	mg/kg (ppm)	0.5	97	69-132
Xylenes	mg/kg (ppm)	1.5	96	69-131

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 04/13/22

Date Received: 04/09/22

Project: 3608 Airport Dr, F&BI 204126

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

Laboratory Code: 204117-01 (Duplicate)

Analyte	Reporting Units	Sample Result	Duplicate Result	RPD (Limit 20)
Benzene	ug/L (ppb)	<1	<1	nm
Toluene	ug/L (ppb)	<1	<1	nm
Ethylbenzene	ug/L (ppb)	<1	<1	nm
Xylenes	ug/L (ppb)	<3	<3	nm

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent	
			Recovery LCS	Acceptance Criteria
Benzene	ug/L (ppb)	50	95	65-118
Toluene	ug/L (ppb)	50	92	72-122
Ethylbenzene	ug/L (ppb)	50	99	73-126
Xylenes	ug/L (ppb)	150	96	74-118

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 04/13/22

Date Received: 04/09/22

Project: 3608 Airport Dr, F&BI 204126

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

Laboratory Code: 204123-01 (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	88	63-146	2

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Diesel Extended	mg/kg (ppm)	5,000	84	79-144

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 04/13/22

Date Received: 04/09/22

Project: 3608 Airport Dr, F&BI 204126

**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

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Diesel Extended	ug/L (ppb)	2,500	96	88	63-142	9

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

04-09-22

E03/VW1/V54/B03
Page # of

Send Report To Project Managers

Company Soil Solutions

Address 3540 SE 28th Avenue

City, State, Zip Portland, OR 97202

Phone # (503) 234-2118 Fax # (503) 331-7133

SAMPLERS (signature)

PROJECT NAME/NO.

PO #

REMARKS

TURNAROUND TIME

☐ Standard

☐ RUSH

Rush charges authorized by:

SAMPLE DISPOSAL

☐ Dispose after 30 days

☐ Return samples

☐ Will call with instructions

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of containers	ANALYSES REQUESTED										Notes
						NWTPH-Dx	NWTPH-HCID	NWTPH-Gx	BTEX 8021B	BTEXN 8260C	PAHs (No N) 8270CCIM	PAHs 8270C SIM	Lead by 200.8			
513 @ 12'	01A-C	4/07/22		Soil	3	/			/							
514 @ 12.5'	02A-B			Soil	3	/			/							
515 @ 13'	03A-C			Soil	3	/			/							
W14 @ 13'	04A-B			Water	5	/			/							

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

SIGNATURE		PRINT NAME		COMPANY	DATE	TIME
Relinquished by:		Joseph Thayer		Soil Solutions	4/07/22	
Received by:		James Bruya		F&B	4/7	1600
Relinquished by:						
Received by:						

Samples received at 4°C

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

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

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

April 19, 2022

Project Managers
Soil Solutions
3540 SE 28th Ave
Portland, OR 97202

Dear Project Managers:

Included are the results from the testing of material submitted on April 14, 2022 from the 3608 Airport Dr, F&BI 204203 project. There are 11 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 should have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.



Michael Erdahl
Project Manager

Enclosures
c: Soil Solutions Reports
SSI0419R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 04/19/22

Date Received: 04/14/22

Project: 3608 Airport Dr, F&BI 204203

Date Extracted: 04/14/22

Date Analyzed: 04/14/22

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

Results Reported as ug/L (ppb)

<u>Sample ID</u> Laboratory ID	<u>Benzene</u>	<u>Toluene</u>	<u>Ethyl Benzene</u>	<u>Total Xylenes</u>	<u>Surrogate (% Recovery)</u> Limit (50-150)
W13@15 204203-01	<1	<1	<1	<3	85
W16@15 204203-02	<1	<1	<1	<3	66
Method Blank 02-823 MB	<1	<1	<1	<3	70

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 04/19/22

Date Received: 04/14/22

Project: 3608 Airport Dr, F&BI 204203

Date Extracted: 04/14/22

Date Analyzed: 04/14/22

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

Results Reported on a Dry Weight Basis

Results Reported as mg/kg (ppm)

<u>Sample ID</u> Laboratory ID	<u>Benzene</u>	<u>Toluene</u>	<u>Ethyl Benzene</u>	<u>Total Xylenes</u>	<u>Surrogate (% Recovery)</u> (Limit 50-150)
S16@15 204203-03	<0.02	<0.02	<0.02	<0.06	88
Method Blank 02-824 MB	<0.02	<0.02	<0.02	<0.06	87

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 04/19/22

Date Received: 04/14/22

Project: 3608 Airport Dr, F&BI 204203

Date Extracted: 04/14/22

Date Analyzed: 04/15/22

**RESULTS FROM THE ANALYSIS OF WATER SAMPLES
FOR TOTAL PETROLEUM HYDROCARBONS AS
DIESEL AND RESIDUAL RANGE
USING METHOD NWTPH-D_x
Sample Extracts Passed Through a
Silica Gel Column Prior to Analysis
Results Reported as ug/L (ppb)**

<u>Sample ID</u>	<u>Diesel Range</u>	<u>Residual Range</u>	<u>Surrogate</u>
Laboratory ID	(C ₁₀ -C ₂₅)	(C ₂₅ -C ₃₆)	(% Recovery) (Limit 47-140)
W13@15 204203-01	<100	<250	103
Method Blank 02-916 MB	<100	<250	130

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 04/19/22

Date Received: 04/14/22

Project: 3608 Airport Dr, F&BI 204203

Date Extracted: 04/14/22

Date Analyzed: 04/14/22

**RESULTS FROM THE ANALYSIS OF WATER SAMPLES
FOR TOTAL PETROLEUM HYDROCARBONS AS
DIESEL AND RESIDUAL RANGE
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>Residual Range</u> (C ₂₅ -C ₃₆)	<u>Surrogate</u> <u>(% Recovery)</u> (Limit 41-152)
W13@15 204203-01	200 x	<250	99
W16@15 204203-02	<100	<250	105
Method Blank 02-916 MB	<100	<250	143

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 04/19/22

Date Received: 04/14/22

Project: 3608 Airport Dr, F&BI 204203

Date Extracted: 04/14/22

Date Analyzed: 04/14/22

**RESULTS FROM THE ANALYSIS OF SOIL SAMPLES
FOR TOTAL PETROLEUM HYDROCARBONS AS
DIESEL AND RESIDUAL RANGE
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>Residual Range</u> (C ₂₅ -C ₃₆)	Surrogate <u>(% Recovery)</u> (Limit 48-168)
S16@15 204203-03	<50	<250	98
Method Blank 02-914 MB2	<50	<250	98

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 04/19/22

Date Received: 04/14/22

Project: 3608 Airport Dr, F&BI 204203

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

Laboratory Code: 204176-01 (Duplicate)

Analyte	Reporting Units	Sample Result	Duplicate Result	RPD (Limit 20)
Benzene	ug/L (ppb)	<1	<1	nm
Toluene	ug/L (ppb)	<1	<1	nm
Ethylbenzene	ug/L (ppb)	<1	<1	nm
Xylenes	ug/L (ppb)	<3	<3	nm

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent	
			Recovery LCS	Acceptance Criteria
Benzene	ug/L (ppb)	50	86	65-118
Toluene	ug/L (ppb)	50	86	72-122
Ethylbenzene	ug/L (ppb)	50	92	73-126
Xylenes	ug/L (ppb)	150	91	74-118

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 04/19/22

Date Received: 04/14/22

Project: 3608 Airport Dr, F&BI 204203

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

Laboratory Code: 204177-02 (Duplicate)

Analyte	Reporting Units	Sample Result (Wet Wt)	Duplicate Result (Wet Wt)	RPD (Limit 20)
Benzene	mg/kg (ppm)	<0.1	<0.1	nm
Toluene	mg/kg (ppm)	<0.1	<0.1	nm
Ethylbenzene	mg/kg (ppm)	<0.1	<0.1	nm
Xylenes	mg/kg (ppm)	<0.3	<0.3	nm

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Benzene	mg/kg (ppm)	0.5	98	69-120
Toluene	mg/kg (ppm)	0.5	96	70-117
Ethylbenzene	mg/kg (ppm)	0.5	98	65-123
Xylenes	mg/kg (ppm)	1.5	100	66-120

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 04/19/22

Date Received: 04/14/22

Project: 3608 Airport Dr, F&BI 204203

**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	136 vo	124	61-133	9

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 04/19/22

Date Received: 04/14/22

Project: 3608 Airport Dr, F&BI 204203

**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

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Diesel Extended	ug/L (ppb)	2,500	108	96	63-142	12

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 04/19/22

Date Received: 04/14/22

Project: 3608 Airport Dr, F&BI 204203

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

Laboratory Code: 204183-03 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet Wt)	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Diesel Extended	mg/kg (ppm)	5,000	<50	86	84	63-146	2

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Diesel Extended	mg/kg (ppm)	5,000	84	79-144

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.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

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

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

May 4, 2022

Project Managers
Soil Solutions
3540 SE 28th Ave
Portland, OR 97202

Dear Project Managers:

Included are the results from the testing of material submitted on April 28, 2022 from the 3608 Airport Dr, F&BI 204465 project. There are 6 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days, or as directed by the Chain of Custody document. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

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

Sincerely,

FRIEDMAN & BRUYA, INC.



Michael Erdahl
Project Manager

Enclosures
c: Soil Solutions Reports
SSI0504R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 05/04/22

Date Received: 04/28/22

Project: 3608 Airport Dr, F&BI 204465

Date Extracted: 04/28/22

Date Analyzed: 04/28/22

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

Results Reported as ug/L (ppb)

<u>Sample ID</u> Laboratory ID	<u>Benzene</u>	<u>Toluene</u>	<u>Ethyl Benzene</u>	<u>Total Xylenes</u>	<u>Surrogate (% Recovery)</u> Limit (52-124)
W15@15 204465-01	<1	<1	<1	<3	87
WG17@12 204465-02	<1	<1	<1	<3	85
Method Blank 02-0893 MB	<1	<1	<1	<3	81

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 05/04/22

Date Received: 04/28/22

Project: 3608 Airport Dr, F&BI 204465

Date Extracted: 04/28/22

Date Analyzed: 04/29/22

**RESULTS FROM THE ANALYSIS OF WATER SAMPLES
FOR TOTAL PETROLEUM HYDROCARBONS AS
DIESEL AND MOTOR OIL
USING METHOD NWTPH-Dx
Sample Extracts Passed Through a
Silica Gel Column Prior to Analysis
Results Reported as ug/L (ppb)**

<u>Sample ID</u>	<u>Diesel Range</u>	<u>Motor Oil Range</u>	<u>Surrogate</u>
Laboratory ID	(C ₁₀ -C ₂₅)	(C ₂₅ -C ₃₆)	(% Recovery)
			(Limit 41-152)
W15@15	<100	<250	146
204465-01			
WG17@12	<100	<350	142
204465-02			
Method Blank	<100	<250	150
02-1045 MB			

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 05/04/22

Date Received: 04/28/22

Project: 3608 Airport Dr, F&BI 204465

Date Extracted: 04/28/22

Date Analyzed: 04/28/22

**RESULTS FROM THE ANALYSIS OF WATER SAMPLES
FOR TOTAL PETROLEUM HYDROCARBONS AS
DIESEL AND RESIDUAL RANGE
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>Residual Range</u> (C ₂₅ -C ₃₆)	<u>Surrogate</u> <u>(% Recovery)</u> (Limit 41-152)
W15@15 204465-01	110 x	<250	145
WG17@12 204465-02	130 x	<350	ip
Method Blank 02-1045 MB	<100	<250	150

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 05/04/22

Date Received: 04/28/22

Project: 3608 Airport Dr, F&BI 204465

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

Laboratory Code: 204465-01 (Duplicate)

Analyte	Reporting Units	Sample Result	Duplicate Result	RPD (Limit 20)
Benzene	ug/L (ppb)	<1	<1	nm
Toluene	ug/L (ppb)	<1	<1	nm
Ethylbenzene	ug/L (ppb)	<1	<1	nm
Xylenes	ug/L (ppb)	<3	<3	nm

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent	
			Recovery LCS	Acceptance Criteria
Benzene	ug/L (ppb)	50	107	65-118
Toluene	ug/L (ppb)	50	109	72-122
Ethylbenzene	ug/L (ppb)	50	116	73-126
Xylenes	ug/L (ppb)	150	115	74-118

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 05/04/22

Date Received: 04/28/22

Project: 3608 Airport Dr, F&BI 204465

**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	108	63-142	11

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.

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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.

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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.

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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.

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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.

204465

SAMPLE CHAIN OF CUSTODY

04-28-22

503/MU

Send Report to Project Managers
 Company Soil Solutions
 Address 3540 SE 28th Avenue
 City, State, Zip Portland, OR 97202
 Phone # (503) 234-2118 Fax # (503) 331-7133

SAMPLERS (signature)

PROJECT NAME/NO.

PO #

3608 Airport Dr

REMARKS

Page # _____ of _____

TURNAROUND TIME

- ☐ Standard
☐ RUSH

Rush charges authorized by: _____

SAMPLE DISPOSAL

- ☐ Dispose after 30 days
☐ Return samples
☐ Will call with instructions

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of containers	ANALYSES REQUESTED									Notes	
						NWTPH-Dx	NWTPH-HCID	NWTPH-Gx	BTEX 8021B	BTEXN 8260C	PAHs (No N) 8270CCIM	PAHs 8270C SIM	Lead by 200.8	SILICA GEL		
W15 @ 15	01A-D	4-27-22		H ₂ O	2 canisters 2 vials	X			X						✓	✓ - per PT
W17 @ 12	02 ↓	↓		↓	↓	X			X						✓	4/29

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

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: <u>Paul Tate</u>	Paul Tate	Soil Solutions	4-27-22	
Received by: <u>Nhan Phan</u>	Nhan Phan	F&BI	4/28/22	1010
Relinquished by: _____				
Received by: _____				

Samples received at 400

Underground Storage Tank Closure Report
3608 Airport Drive
Hood River, Oregon 97031
DEQ File #14-21-1213

Appendix C

Disposal Receipts

WASCO COUNTY LANDFILL

2550 Steele Road

The Dalles, OR 97058

415

SOIL SOLUTIONS ENVIRONMENTA

Ticket: 416257

Date In: 3/8/2022

Time In: 14:09:37

Date Out: 3/8/2022

Time Out: 14:33:12

Ref: 28 SOIL S

Description

Scale 3 Gross Weight: 52600

Vehicle: WC-22-53

Scale 7 Tare Weight: 32140

Roll- Off:

Net Weight: 20460

Tons: 10.23

PETR CONT SOIL - OUT

PETR CONT SOIL - OUT

OPERATOR: SBEAVER

PO:

TRAILER:

DRIVER: SOIL SOLUTIONS 28

BY SIGNING THIS, I CERTIFY THAT THIS DISPOSAL MATERIAL
ORIGINATED IN THE COUNTY/STATE AS STATED ABOVE. I ALSO
CERTIFY THAT TO THE BEST OF MY KNOWLEDGE THIS LOAD
CONTAINS NO HAZARDOUS WASTE. **OFFICE PH# (541)296-4082**

Signature: _____

WASCO COUNTY LANDFILL

2550 Steele Road

The Dalles, OR 97058

415

SOIL SOLUTIONS ENVIRONMENTA

Ticket: 416352

Date In: 3/9/2022

Time In: 08:22:06

Date Out: 3/9/2022

Time Out: 08:45:55

Ref: FILLUP 20

Description

Scale 3 Gross Weight: 57760

Vehicle: WC-22-53

Scale 7 Tare Weight: 29500

Roll- Off:

Net Weight: 28260

Tons: 14.13

PETR CONT SOIL - OUT

PETR CONT SOIL - OUT

OPERATOR: LINDAM

PO:

TRAILER:

DRIVER: FILLUP 20

BY SIGNING THIS, I CERTIFY THAT THIS DISPOSAL MATERIAL
ORIGINATED IN THE COUNTY/STATE AS STATED ABOVE. I ALSO
CERTIFY THAT TO THE BEST OF MY KNOWLEDGE THIS LOAD
CONTAINS NO HAZARDOUS WASTE. **OFFICE PH# (541)296-4082**

Signature: _____

WASCO COUNTY LANDFILL

2550 Steele Road

The Dalles, OR 97058

415

SOIL SOLUTIONS ENVIRONMENTA

Ticket: 416413

Date In: 3/9/2022

Time In: 11:20:12

Date Out: 3/9/2022

Time Out: 11:42:37

Ref: FILLUP 20

Description

Scale 3 Gross Weight:	53000	Vehicle:	WC-22-53
Scale 7 Tare Weight:	29260	Roll- Off:	
Net Weight:	23740	Tons:	11.87

PETR CONT SOIL - OUT

PETR CONT SOIL - OUT

OPERATOR: LINDAM

PO:

TRAILER:

DRIVER: FILLUP 20

BY SIGNING THIS, I CERTIFY THAT THIS DISPOSAL MATERIAL
ORIGINATED IN THE COUNTY/STATE AS STATED ABOVE. I ALSO
CERTIFY THAT TO THE BEST OF MY KNOWLEDGE THIS LOAD
CONTAINS NO HAZARDOUS WASTE. **OFFICE PH# (541)296-4082**

Signature: _____

Headquarters
4150 N. Suttle Road
Portland, Oregon 97217
Phone 503-286-8352
Toll Free 800-367-8894
EPA# ORD980975692



Orrco™
The oil recycler.

Goshen, OR:
Hoquiam, WA:
Klamath Falls, OR:
Kennewick, WA:
Medford, OR:
Coos Bay, OR:
Spokane, WA:

EPA# ORQ000024941
EPA# WAD988519419
EPA# ORD980980775
EPA# WAH000011577
EPA# ORD987197092
EPA# ORD980978266
EPA# WAH000011585

BILL OF LADING 326135

Date **3-8-22** Customer # **9186**

Dispatch #

Generator

PORT OF HOOD RIVER PAUL 503-234-4118

Name Contact Person Phone

3608 AIRPORT DR. HOOD RIVER, OR. 97031

Address City State Zip County

Transportation

Consigned To: **OIL REFINING**

Destination: **4150 N SUTTLE RD PORTLAND, OR. 97217**

Via Carrier: **ORRSCO**

Driver: **DANNY W**

Truck # **4102**

Load Ticket #

Billing Information

SOIL SOLUTIONS

211 GALS

10 HRS

Check#

PO#

Gal./Brl.	Description	Profile Date	CDT / HCDT	pH	Flash Point	Rate per Gal./Brl.	Rate Per Hour	Charge
1374	EMULSIFIED FUEL & WATER	3/8/22	DDM	7.7	200°F			
2	SUSPENDED SOLIDS							*
1	HYDROCLON TEST							
18 Hrs	TRUCK & DRIVER							

Above material is being transported for Recycling

EPA# **NONE**

Total:

As an authorized representative of the generator of the material described above, I certify that the information contained in this document is 100% accurate and complete. I further certify that this material does NOT constitute a hazardous waste and has NOT been mixed with any hazardous waste such as spent chlorinated solvents or any other contaminants including, without limitation, PCBs, pesticides, or any other hazardous wastes or substances. In the event that the material described in this document is in fact a hazardous waste, or contains 2 ppm or more of PCBs, I guarantee to pay all costs necessary for proper analysis, transportation, storage, and disposal as well as any fines, penalties, attorneys fees, expert witness fees and the loss of the petroleum product resulting from contamination and / or inaccurate and / or incomplete information concerning the material described above.

Signed X

Date:

3-8-22

Headquarters
4150 N. Suttle Road
Portland, Oregon 97217
Phone 503-286-8352
Toll Free 800-367-8894
EPA# ORD980975692



OrrcoTM
The oil recycler.

Goshen, OR:
Hoquiam, WA:
Klamath Falls, OR:
Kennewick, WA:
Medford, OR:
Coos Bay, OR:
Spokane, WA:

EPA# ORQ000024941
EPA# WAD988519419
EPA# ORD980980775
EPA# WAH000011577
EPA# ORD987197092
EPA# ORD980978266
EPA# WAH000011585

BILL OF LADING 326148

Date 3-18-22 Customer # 9186
Dispatch #

Generator
Name: PORT OF HOOD RIVER
Contact Person: PAUL
Phone: 503-234-2118
Address: 3608 AIRPORT DR. Hood River, OR
City: Hood River, OR
State: OR
Zip: 97031
County: Hood River

Billing Information
SOIL SOLUTIONS
Check# PO#

Transportation
Consigned To: OIL REFINING
Destination: 4150 N SUTTLE RD PORTLAND, OR 97217
Via Carrier: ORRICO
Driver: DANNY W
Truck # 4102

Load Ticket #

Gal./Brl.	Description	Profile Date	CDT / HCDT	pH	Flash Point	Rate per Gal./Brl.	Rate Per Hour	Charge
1856	FUEL / WATER - EMULSIFIED FUEL	3/9/22	ATM	7.200F				
1	HYDROCLON TEST							
6 Hrs	TRUCK & TRAILER							

Above material is being transported for Recycling

EPA# NONE

Total:

As an authorized representative of the generator of the material described above, I certify that the information contained in this document is 100% accurate and complete. I further certify that this material does NOT constitute a hazardous waste and has NOT been mixed with any hazardous waste such as spent chlorinated solvents or any other contaminants including, without limitation, PCBs, pesticides, or any other hazardous wastes or substances. In the event that the material described in this document is in fact a hazardous waste, or contains 2 ppm or more of PCBs, I guarantee to pay all costs necessary for proper analysis, transportation, storage, and disposal as well as any fines, penalties, attorneys fees, expert witness fees and the loss of the petroleum product resulting from contamination and / or inaccurate and / or incomplete information concerning the material described above.

Signed X

Date:

3-18-22

Headquarters
4150 N. Suttle Road
Portland, Oregon 97217
Phone 503-286-8352
Toll Free 800-367-8894
EPA# ORD980975692



Goshen, OR: EPA# ORQ000024941
Hoquiam, WA: EPA# WAD988519419
Klamath Falls, OR: EPA# ORD980980775
Kennewick, WA: EPA# WAH000011577
Medford, OR: EPA# ORD987197092
Coos Bay, OR: EPA# ORD980978266
Spokane, WA: EPA# WAH000011585

BILL OF LADING 326336

Date **4-21-22** Customer # **9186**

Dispatch #

Generator
PORT OF HOOD RIVER **PAUL** **503-234-2118**
3608 AIRPORT DR HOOD RIVER, OR. 97031
 Name Contact Person Phone
 Address City State Zip County

Billing Information
SOIL SOLUTIONS
 Check# PO#

Transportation
Consigned To: OIL REFINING
Destination: 4150 N SUTTLE RD PORTLAND, OR. 97217
Via Carrier: ORULLO
Driver: DANNY W **Truck # 4102**

Load Ticket #

Gal./Brl.	Description	Profile Date	CDT/HCDT	pH	Flash Point	Rate per Gal./Brl.	Rate Per Hour	Charge
920	EMULSIFIED FUEL & WATER		OPPM	7 >	200#	50		460.00
1	HYDROCLON TEST					40.00		40.00
4 HRS	TRUCK & DRIVER					120.00		480.00

Above material is being transported for Recycling EPA# **NONE** Total: **\$980.00**

As an authorized representative of the generator of the material described above, I certify that the information contained in this document is 100% accurate and complete. I further certify that this material does NOT constitute a hazardous waste and has NOT been mixed with any hazardous waste such as spent chlorinated solvents or any other contaminants including, without limitation, PCBs, pesticides, or any other hazardous wastes or substances. In the event that the material described in this document is in fact a hazardous waste, or contains 2 ppm or more of PCBs, I guarantee to pay all costs necessary for proper analysis, transportation, storage, and disposal as well as any fines, penalties, attorneys fees, expert witness fees and the loss of the petroleum product resulting from contamination and / or inaccurate and / or incomplete information concerning the material described above.

Signed X Date: **4-21-22**

Headquarters
4150 N. Suttle Road
Portland, Oregon 97217
Phone 503-286-8352
Toll Free 800-367-8894
EPA# ORD980975692



Goshen, OR: EPA# ORQ000024941
Hoquiam, WA: EPA# WAD988519419
Klamath Falls, OR: EPA# ORD980980775
Kennewick, WA: EPA# WAH000011577
Medford, OR: EPA# ORD987197092
Coos Bay, OR: EPA# ORD980978266
Spokane, WA: EPA# WAH000011585

BILL OF LADING 326340

Date: **4-25-22** Customer #: **9186**

Dispatch #

Generator: **PORT OF HOOD RIVER PAUL 503-234-2118**
Name: **3608 AIRPORT DR HOOD RIVER, OR 97031**
Address: City: State: Zip: County:

Billing Information: **SOIL SOLUTIONS**
Check# PO#

Transportation: Consigned To: **OIL REFINING**
Destination: **4150 N SUTTLE RD PORTLAND, OR 97217**
Via Carrier: **OORCO**
Driver: **DANNY W** Truck # **4102**

Load Ticket #

Gal./Brl.	Description	Profile Date	CDT / HCDT	pH	Flash Point	Rate per Gal./Brl.	Rate Per Hour	Charge
89.7	EMULSIFIED FUEL & WATER	3/2/22	HPM	7	>200°F	.50		448.50
1	HYDROCLON TEST					40.00		40.00
4 HRS	TRUCK & DRIVER					120.00		480.00

Above material is being transported for Recycling EPA# ~~0000~~ **NONE** Total: **\$ 968.50**

As an authorized representative of the generator of the material described above, I certify that the information contained in this document is 100% accurate and complete. I further certify that this material does NOT constitute a hazardous waste and has NOT been mixed with any hazardous waste such as spent chlorinated solvents or any other contaminants including, without limitation, PCBs, pesticides, or any other hazardous wastes or substances. In the event that the material described in this document is in fact a hazardous waste, or contains 2 ppm or more of PCBs, I guarantee to pay all costs necessary for proper analysis, transportation, storage, and disposal as well as any fines, penalties, attorneys fees, expert witness fees and the loss of the petroleum product resulting from contamination and / or inaccurate and / or incomplete information concerning the material described above.

Signed X Date: **4-25-22**

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Toll Free 800-367-8894
EPA# ORD980975692



OrrcoTM
The oil recycler.

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Hoquiam, WA:
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Kennewick, WA:
Medford, OR:
Coos Bay, OR:
Spokane, WA:

EPA# ORQ000024941
EPA# WAD988519419
EPA# ORD980980775
EPA# WAH000011577
EPA# ORD987197092
EPA# ORD980978266
EPA# WAH000011585

BILL OF LADING 327304

Date 5-9-22 Customer # 9186

Dispatch #

Generator
Name: PORT OF HOODRIVER
Address: 3608 AIRPORT DR
City: HOODRIVER, OR
State: OR
Zip: 97031
Contact Person: PAUL
Phone: 303-234-2118

Billing Information
SOIL SOLUTIONS

Transportation
Consigned To: OIL REFINING
Destination: 4150 N SUTTLE RD PORTLAND, OR 97217
Via Carrier: ORRICO
Driver: DANNY W
Truck # 4102

Check# PO#

Load Ticket #

Gal./Brl.	Description	Profile Date	CDT / HCDT	pH	Flash Point	Rate per Gal./Brl.	Rate Per Hour	Charge
879	EMULSIFIED FUEL & WATER	5/2/22	AM	7.200				
1	HYDROCLON TEST							
4 Hrs	TRUCK & DRIVER							

Above material is being transported for Recycling EPA# NONE

Total:

As an authorized representative of the generator of the material described above, I certify that the information contained in this document is 100% accurate and complete. I further certify that this material does NOT constitute a hazardous waste and has NOT been mixed with any hazardous waste such as spent chlorinated solvents or any other contaminants including, without limitation, PCBs, pesticides, or any other hazardous wastes or substances. In the event that the material described in this document is in fact a hazardous waste, or contains 2 ppm or more of PCBs, I guarantee to pay all costs necessary for proper analysis, transportation, storage, and disposal as well as any fines, penalties, attorneys fees, expert witness fees and the loss of the petroleum product resulting from contamination and / or inaccurate and / or incomplete information concerning the material described above.

Signed X

Date: 5-9-22

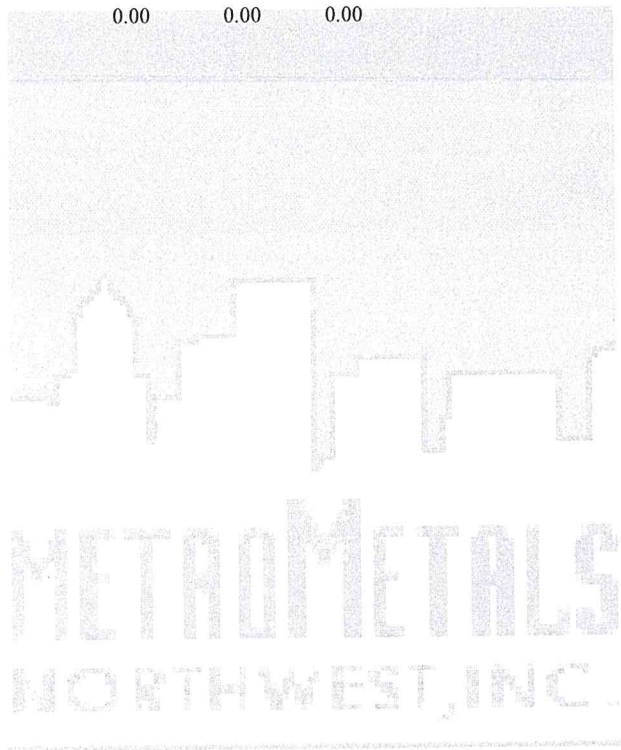
METRO METALS NORTHWEST, INC
5611 NE COLUMBIA BLVD
PORTLAND, OR 97218

Date: 03/09/2022
Vendor # 10 = 0001483

SETTLEMENT REPORT
DETAIL

SOIL SOLUTIONS
3540 SE 28th Ave
Portland, OR 97202

Ticket	Date	Material	Gross	Tare	Contamination	Net-Wgt (lbs)	UM	Price/UM	Amount
1187466	2/23/2022	#2 Steel Unprepared	41,460.00	33,040.00	0.00	8,420.00	G	190.00	714.20
1187466	2/23/2022	Environmental Surcharge	0.00	0.00	0.00	0.00	EA	0.00	-10.00



Totals:	8,420.00	704.20
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Underground Storage Tank Closure Report
3608 Airport Drive
Hood River, Oregon 97031
DEQ File #14-21-1213

Appendix D

DEQ Forms

Forms included:

Soil Matrix Checklist

Soil Matrix Scoresheet



State of Oregon
Department of
Environmental
Quality

OREGON DEPARTMENT OF ENVIRONMENTAL QUALITY
Underground Storage Tank Program

SOIL MATRIX CHECKLIST AND SOIL MATRIX SCORESHEET

- ☒ 1. The release of petroleum has been reported to the DEQ (0220).
- ☒ 2. The matrix score sheet has been completed for this site, unless the site is cleaned up to the most stringent cleanup level (0320).
- ☒ 3. The required hydrocarbon identification test (NWTPH-HCID) has been performed (0335(3)), and, if detectable levels were found, the appropriate analytical method or methods have been used to measure the levels of contamination (0218).
- ☒ 4. A sketch has been made of this site (0345(1)) which clearly shows:
 - ☒ a. The location of all buildings and other key features, both man-made and natural;
 - ☒ b. The names of adjacent streets and properties;
 - ☒ c. The location of all excavations including those that were for the removal of tanks and associated piping as well as those that were strictly for the removal of contaminated soils;
 - ☒ d. The location of all product storage tanks, lines and dispensers, including those that were decommissioned as well as those that remain on the site; and
 - ☒ e. All soil and water sample locations.
- ☒ 5. If any contaminated soil exceeding matrix limits has been left on site, the reason for leaving this soil has been explained and the requirements of 0340(1)(f) and 0355(4) have been met.
- ☒ 6. If water was present in the tank pit, the Department was notified, the water was pumped from the pit, and the requirements of 0340(4) have been met.
- ☒ 7. All soil and/or water samples have been collected, coded, stored and shipped as specified in the rules, and proper chain-of-custody forms have been filled out (0345).
- ☒ 8. If a release from a waste oil tank was discovered, at least one sample has been analyzed by the methods specified in 0218(1)(b)(D).
- ☒ 9. If a tank was decommissioned in place, the Department gave prior approval for a site-specific sampling plan (0340(5)).
- ☒ 10. A report has been prepared which includes a detailed description of everything that was observed and performed at the site, contains all of the information required by the rules (0360), and presents findings and recommendations which are consistent with Department regulations.

SOIL MATRIX SCORE SHEET

1.	Depth to Groundwater		10
	< 25 feet	(10)	
	25 - 50 feet	(7)	
	51 - 100 feet	(4)	
	> 100 feet	(1)	
2.	Mean Annual Precipitation		4
	> 45 inches	(10)	
	20 - 45 inches	(4)	
	< 20 inches	(1)	
3.	Native Soil Type		5
	Course sands, gravels	(10)	
	Silts, fine sands	(5)	
	Clays	(1)	
4.	Sensitivity of Uppermost Aquifer		4
		(10)	
	Sole Source	(7)	
	Current Potable	(4)	
	Future Potable	(1)	
	Non-potable		
5.	Potential Receptors		5
	Many, near	(10)	
	Medium	(5)	
	Few, far	(1)	
TOTAL SCORE =			28
MATRIX SCORE		Cleanup Level (ppm TPH)	
		Gasoline	Diesel
Level 1: > 40 pts.		40	100
Level 2: 25 - 40 pts.		80	500
Level 3: < 25 pts.		130	1000

Clear All Entries

Print Form