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Aboveground Storage Tank Cleanup Report
1234 NE Highland Street
Portland, Oregon 97211
DEQ File #26-24-0634
Cleanup ID #6713

Prepared for:

Darrell Hill
13477 Appalachian Way
San Diego, California 92129

October 4, 2024

Prepared by:

Soil Solutions Environmental Services, Inc.
3540 SE 28th Avenue
Portland, Oregon 97202

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1.0 INTRODUCTION

This report summarizes the activities conducted by Soil Solutions Environmental Services, Inc. (SSES) at 1234 NE Highland Street in Portland, Oregon.

Site activities included the decommissioning by removal of an approximately 275-gallon aboveground heating oil storage tank (AST), removal of contaminated soil, soil 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 located in a residential area of Portland, Oregon in Multnomah County. The residence is located south of the intersection of NE Highland Street and NE 13th Avenue. The residence was constructed in approximately 1951 and drinking water is supplied by the City of Portland. The AST was located in the southwest portion of the crawlspace. A single copper product line and filter were attached to the AST. A disconnected oil-burning furnace, laying on its side, was located northeast of the AST area in the crawlspace. The fill and vent pipes were identified on the south side of the southwest corner of the house.

According to the United States Geological Survey Topographic 7.5-minute map for Portland South, Oregon Quadrangle the site lies at an elevation of approximately 160-feet above mean sea level. The site is located in township 1N range 1E section 14 of the Willamette Meridian.

Ma et al (2012) maps the surface geology of the site as Quaternary age coarse-grained sediments of the Missoula Flood Deposits. Snyder (2008) indicates groundwater in the vicinity is typically 120-feet below ground surface (bgs) and generally flows to the north or northeast, towards the Columbia River. Perched groundwater is unlikely to be present at the site during wet winter months.

3.0 FIELD ACTIVITIES

A fuel smell had been reported by the occupants of the residence. On August 23, 2024, Environmental Works, (EW) collected two soil samples, located below the east and west ends of the AST at depths of 6-inches below ground surface (bgs). Laboratory analysis performed by Apex Laboratories, LLC revealed diesel concentrations of 21,200 parts per million (ppm) in sample ETE@6”BGS and 36,500 ppm in sample WTE@6”BGS. A release was reported to the Oregon Department of Environmental Quality (DEQ) on August 26, 2024, by EW.

Field activities performed by SSES were completed on October 2, 2024, and October 3, 2024. Photographs of field activities are included in Appendix A. Soil sample locations are shown on Figure 2. Depths are measured from ground surface at the tank. All equipment was decontaminated

between boring locations. Soil 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 October 2, 2024, following the removal of flooring above the AST location, SSES removed product residue from the AST and the interior was thoroughly pressure-washed. The tank contents were transported to SSES equipment yard for temporary storage. The oily water was consolidated for transportation, in bulk, by Oil Re-Refining Company (ORRCO) for proper disposal.

The tank was cut into pieces and removed from the crawlspace and transported to the SSES equipment yard for temporary storage. The tank and piping were recycled, in bulk, by Metro Metals Northwest, Inc. Diesel-stained soil was observed below the former AST location.

3.2 Site Assessment Activities

On October 3, 2024, petroleum-contaminated soil (PCS) was removed from the AST area. Approximately 1.78-tons of PCS was removed by Emeritec, under SSES oversight, using a vac truck. Final dimensions of the excavation were approximately 9.5-feet bgs in length, 6-feet in width, and 2-feet in depth. The PCS was transported to Waste Management Hillsboro Landfill for DEQ approved disposal.

SSES collected six soil grab samples, designated 1 through 6, located on the excavation center, at a depth of 2-feet, the east, north, west, and south excavation walls at 1-foot bgs, and the east excavation bottom at 2-feet bgs. Laboratory analysis revealed no diesel and heavy oil concentrations were detected above laboratory reporting limits in samples 1 through 6. Associated product lines, vent and fill pipes were removed and properly disposed.

4.0 ANALYTICAL RESULTS

Samples were transported under chain of custody documentation to Friedman & Bruya, Inc. laboratory in Seattle, Washington. Laboratory analysis in soil included diesel and residual range oil by Northwest Total Petroleum Hydrocarbons diesel extended method (NWTPH-Dx). Laboratory results are presented in Table 1 and results are shown on Figure 2.

A magnitude of 36,500 ppm diesel was detected by EW. Following removal of PCS, diesel and heavy oil were not detected above laboratory reporting limits in confirmation soil samples 1 through 6.

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5.0 SOIL MATRIX CLEANUP LEVEL

As required by Oregon Administrative Rule 340-122-325 (340-122-325) SSES determined an Oregon DEQ Soil Matrix score for the site. Appendix D contains the Soil Matrix checklist and score sheet. Based on site-specific parameters, a Soil Matrix score of 29 was calculated giving a Level 2 cleanup standard of 500 ppm diesel in the soil.

6.0 SUMMARY, DISCUSSION, AND CONCLUSIONS

An approximately 275-gallon aboveground heating oil tank was decommissioned by removal at 1234 NE Highland Street in Portland, Oregon. The project site is in a residential neighborhood and drinking water is supplied by the City of Portland.

Six soil samples were collected and analyzed to investigate the magnitude and extent of contaminated soil by SSES. Samples encountered silty clay to the full extent explored. Following excavation of approximately 1.78-tons of PCS, diesel and heavy oil concentrations were not detected to remain above laboratory reporting limits. A soil matrix score of 29 was calculated for the site resulting in a Level 2 cleanup standard of 500 ppm of diesel.

7.0 RECOMMENDATION

Remaining diesels present at the site do not appear to present a threat to human health or the environment. SSES requests a finding of No Further Action and file closures for the above referenced site, DEQ file #26-24-0634 and Cleanup ID #6713.

8.0 LIMITATIONS

This report was prepared by Soil Solutions Environmental Services, Inc. (SSES) for Darrell Hill, and summarizes the results of our work at 1234 NE Highland Street, Portland, 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.

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

9.0 REFERENCES

Lina Ma, Ian P. Madin, Serin Duplantis, and Kendra J. Williams, 2012, Lidar-Based Surficial Geologic Map and Database of the Greater Portland Area, Clackamas, Columbia, Marion, Multnomah, Washington, and Yamhill Counties, Oregon, and Clark County, Washington, Oregon Department of Geology and Mineral Industries, Open File Report O-12-02.

Daniel T. Snyder, 2008, Estimated Depth to Ground Water and Configuration of the Water Table in the Portland, Oregon Area, U.S. Geological Survey, Scientific Investigations Report 2008-5059.

Report prepared by:

SOIL SOLUTIONS ENVIRONMENTAL SERVICES, INC

Mary Groff, Technical Report Writer

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FIGURES



Portland Maps 2024



Figure 1:
Vicinity Map
1234 NE Highland Street
Portland, Oregon 97211
LUST #26-24-0634 Project #6713

PROJECT: Hill

DATE: 10/4/24

0 |—————| 300 feet

LEGEND

- = Hand auger boring/Geoprobe/grab sample location
- = former ~275 gallon AST location
- ▭ = excavation area
- ppm = parts per million
- italics* = sample location was removed from site
- * = sample collected by Environmental Works

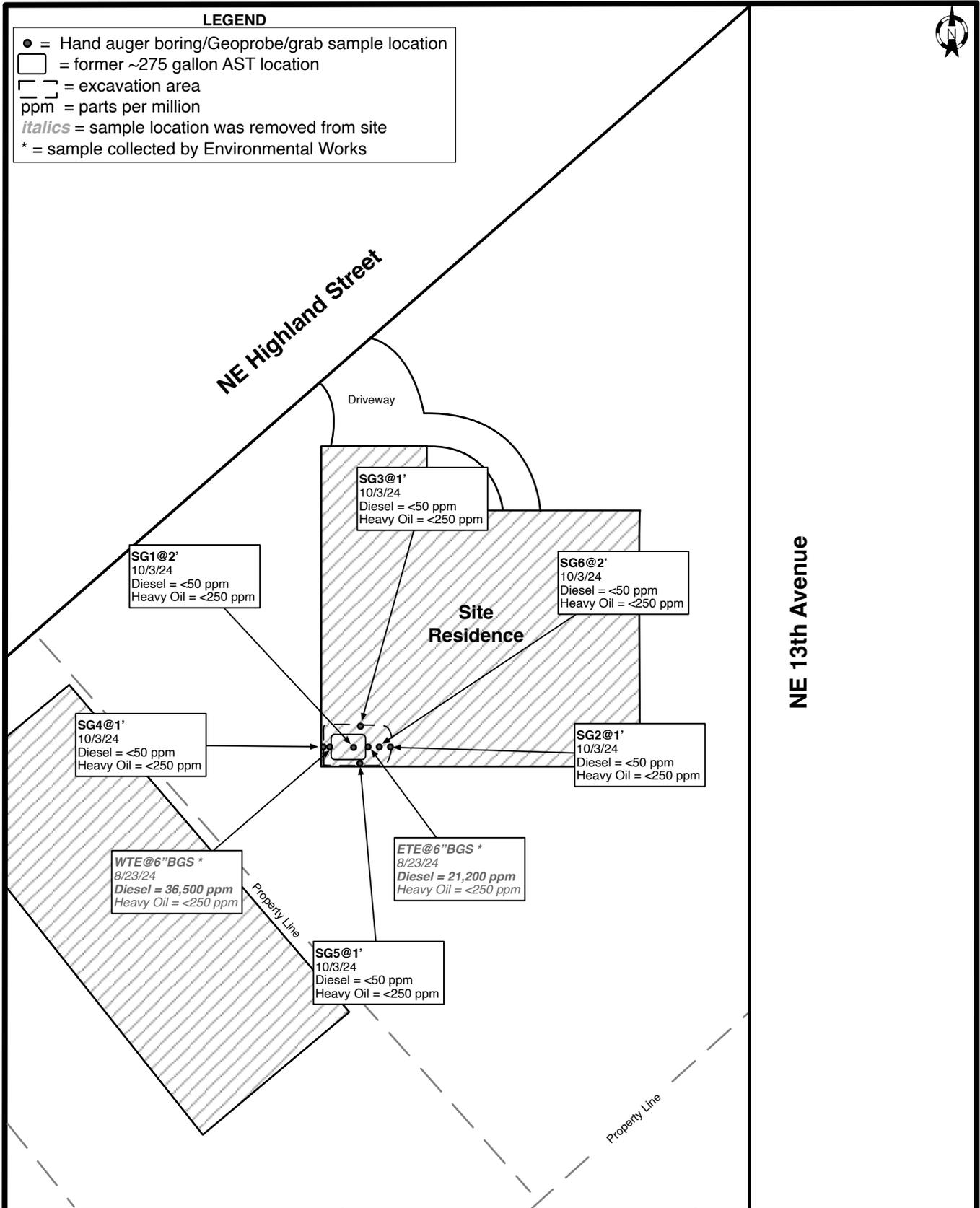


Figure 2:
Soil Sample Location Map
1234 NE Highland Street
Portland, Oregon 97211
LUST #26-24-0634 Project #6713

PROJECT: Hill
DATE: 10/4/24
SCALE: 1" = 20 feet

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TABLES

Table 1
Soil Sample Analytical Results

Sample Identification	Depth ¹	Date	Soil Disposition	Total Petroleum Hydrocarbons (TPH)		Analytical Results (mg/kg)					
				Diesel Range (C ₁₀ -C ₂₅) by NWTPH-Dx	Residual Range (C ₂₅ -C ₃₆) by NWTPH-Dx	Benzene	Toluene	Ethylbenzene	m,p-Xylene	o-Xylene	Naphthalene
<i>EFE@6"BGS *</i>	0.5	8/23/24	<i>Removed</i>	<i>21,200</i>	<i><250</i>	<i><0.03</i>	<i>0.39</i>	<i>1.7</i>	<i>7.4</i>	<i>3.5</i>	<i>8</i>
<i>WTE@6"BGS *</i>	0.5	8/23/24	<i>Removed</i>	<i>36,500</i>	<i><250</i>	--	--	--	--	--	--
SG1@2	2	10/3/24	Remains	<50	<250	--	--	--	--	--	--
SG2@1	1	10/3/24	Remains	<50	<250	--	--	--	--	--	--
SG3@1	1	10/3/24	Remains	<50	<250	--	--	--	--	--	--
SG4@1	1	10/3/24	Remains	<50	<250	--	--	--	--	--	--
SG5@1	1	10/3/24	Remains	<50	<250	--	--	--	--	--	--
SG6@2	2	10/3/24	Remains	<50	<250	--	--	--	--	--	--

Notes:

Gray italics indicate sample location has been removed from the site.

1 - Depth in feet below ground surface

mg/kg - Results reported in milligrams per kilogram

--- - Not analyzed

* - sample collected by Eworks

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Appendix A

Photographs of Field Activities



Photo 1. North side of the site residence. View is to the south.



Photo 2. Vent and fill pipes were located on the south side of the southwest corner of the house. View is to the northwest.



Photo 3. The AST was located in the southwest corner of the crawlspace.



Photo 4. View is of the oil burning furnace located northeast of the AST in crawlspace.



Photo 5. Fuel was removed from the AST and the interior was thoroughly pressure-washed. View is of the tank top.



Photo 6. AST was cut into pieces and removed. View is to the south.



Photo 7. View is of contaminated soil present below the former AST location.

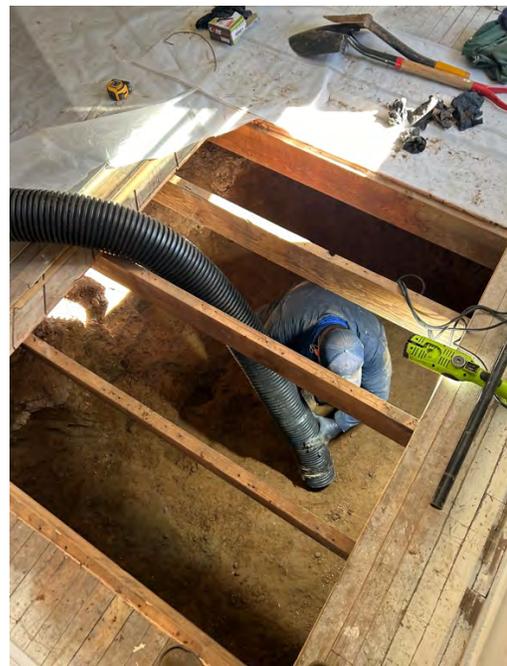


Photo 8. Contaminated soil was removed from AST area. View is of the vacuum excavation.



Photo 9. Approximately 1.78-tons of contaminated soil was removed. View is to the southwest.



Photo 10. Contamination was not detected to remain in the AST area. View is to the east.

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Appendix B

Certified Analytical Reports, Chain of Custody Documents



ANALYTICAL REPORT

Apex Laboratories, LLC
6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
ORELAP ID: OR100062

Monday, August 26, 2024
Lionel Mills
Environmental Works
22820 NE Sandy Blvd
Fairview, OR 97024

RE: A4H1455 - 1234 NE Highland St.

Thank you for using Apex Laboratories. We greatly appreciate your business and strive to provide the highest quality services to the environmental industry.

Enclosed are the results of analyses for work order A4H1455, which was received by the laboratory on 8/23/2024 at 5:00:00PM.

If you have any questions concerning this report or the services we offer, please feel free to contact me by email at: cobrien@apex-labs.com, or by phone at 503-718-2323.

Please note: All samples will be disposed of within 30 days of sample receipt, unless prior arrangements have been made.

Cooler Receipt Information
Acceptable Receipt Temperature is less than, or equal to, 6 degC (not frozen), or received on ice the same day as sampling.
(See Cooler Receipt Form for details)
Default Cooler 3.9 degC



DRAFT REPORT

The results provided in this report are PRELIMINARY and are subject to change based on subsequent analysis, QC validation or final data review. Please use these results with the understanding that they may have not been finalized by the laboratory.



ANALYTICAL REPORT

Apex Laboratories, LLC

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Tigard, OR 97223
503-718-2323
ORELAP ID: OR100062

Environmental Works 22820 NE Sandy Blvd Fairview, OR 97024	Project/#: 1234 NE Highland St. Project Manager: Lionel Mills	Report ID: A4H1455 - 08 26 24 1550
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ANALYTICAL REPORT FOR SAMPLES

SAMPLE INFORMATION

Client Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
OT-ETE@6"BGS	A4H1455-01	Soil	08/23/24 08:00	08/23/24 17:00
OT-WTE@6"BGS	A4H1455-02	Soil	08/23/24 08:15	08/23/24 17:00

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Tigard, OR 97223
503-718-2323
ORELAP ID: OR100062

Environmental Works 22820 NE Sandy Blvd Fairview, OR 97024	Project/#: 1234 NE Highland St. Project Manager: Lionel Mills	Report ID: A4H1455 - 08 26 24 1550
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ANALYTICAL SAMPLE RESULTS

Diesel and/or Oil Hydrocarbons by NWTPH-Dx

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
OT-E TE@6" BGS (A4H1455-01)				Matrix: Soil		Batch: 24H0867		
Diesel	21200	---	856	mg/kg dry	40	08/23/24 21:02	NWTPH-Dx	
Oil	ND	---	1710	mg/kg dry	40	08/23/24 21:02	NWTPH-Dx	
<i>Surrogate: o-Terphenyl (Surr)</i>			<i>Recovery: %</i>	<i>Limits: 50-150 %</i>	40	08/23/24 21:02	NWTPH-Dx	S-01
OT-WTE@6" BGS (A4H1455-02)				Matrix: Soil		Batch: 24H0867		
Diesel	36500	---	384	mg/kg dry	20	08/23/24 21:22	NWTPH-Dx	
Oil	ND	---	768	mg/kg dry	20	08/23/24 21:22	NWTPH-Dx	
<i>Surrogate: o-Terphenyl (Surr)</i>			<i>Recovery: %</i>	<i>Limits: 50-150 %</i>	20	08/23/24 21:22	NWTPH-Dx	S-01

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ANALYTICAL SAMPLE RESULTS

Percent Dry Weight

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
OT-E TE@6" BGS (A4H1455-01)				Matrix: Soil		Batch: 24H0860		
% Solids	80.2	---	1.00	%	1	08/26/24 06:27	EPA 8000D	
OT-W TE@6" BGS (A4H1455-02)				Matrix: Soil		Batch: 24H0860		
% Solids	89.5	---	1.00	%	1	08/26/24 06:27	EPA 8000D	

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QUALITY CONTROL (QC) SAMPLE RESULTS

Diesel and/or Oil Hydrocarbons by NWTPH-Dx

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 24H0867 - EPA 3546 (Fuels)						Soil						
Blank (24H0867-BLK1)		Prepared: 08/23/24 08:58 Analyzed: 08/23/24 20:23										
<u>NWTPH-Dx</u>												
Diesel	ND	---	20.0	mg/kg wet	1	---	---	---	---	---	---	---
Oil	ND	---	40.0	mg/kg wet	1	---	---	---	---	---	---	---
<i>Surr: o-Terphenyl (Surr)</i>		<i>Recovery: 114 %</i>			<i>Limits: 50-150 %</i>		<i>Dilution: 1x</i>					
LCS (24H0867-BS1)		Prepared: 08/23/24 08:58 Analyzed: 08/23/24 20:47										
<u>NWTPH-Dx</u>												
Diesel	135	---	20.0	mg/kg wet	1	125	---	108	38 - 132%	---	---	---
<i>Surr: o-Terphenyl (Surr)</i>		<i>Recovery: 117 %</i>			<i>Limits: 50-150 %</i>		<i>Dilution: 1x</i>					

No Client related Batch QC samples analyzed for this batch. See notes page for more information.

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QUALITY CONTROL (QC) SAMPLE RESULTS

Percent Dry Weight

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 24H0860 - Dry Weight Prep (EPA 8000D)							Soil					

No Client related Batch QC samples analyzed for this batch. See notes page for more information.

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Environmental Works 22820 NE Sandy Blvd Fairview, OR 97024	Project/#: 1234 NE Highland St. Project Manager: Lionel Mills	Report ID: A4H1455 - 08 26 24 1550
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SAMPLE PREPARATION INFORMATION

Diesel and/or Oil Hydrocarbons by NWTPH-Dx

Prep: EPA 3546 (Fuels)

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
<u>Batch: 24H0867</u>							
A4H1455-01	Soil	NWTPH-Dx	08/23/24 08:00	08/23/24 18:45	11.65g/5mL	10g/5mL	0.86
A4H1455-02	Soil	NWTPH-Dx	08/23/24 08:15	08/23/24 18:45	11.64g/5mL	10g/5mL	0.86

Percent Dry Weight

Prep: Dry Weight Prep (EPA 8000D)

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
<u>Batch: 24H0860</u>							
A4H1455-01	Soil	EPA 8000D	08/23/24 08:00	08/23/24 19:03			NA
A4H1455-02	Soil	EPA 8000D	08/23/24 08:15	08/23/24 19:03			NA

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<u>Environmental Works</u> 22820 NE Sandy Blvd Fairview, OR 97024	Project/#: <u>1234 NE Highland St.</u> Project Manager: Lionel Mills	<u>Report ID:</u> A4H1455 - 08 26 24 1550
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QUALIFIER DEFINITIONS

Client Sample and Quality Control (QC) Sample Qualifier Definitions:

Apex Laboratories

S-01 Surrogate recovery for this sample is not available due to sample dilution required from high analyte concentration and/or matrix interference.

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REPORTING NOTES AND CONVENTIONS:

Abbreviations:

- DET Analyte DETECTED at or above the detection or reporting limit.
- ND Analyte NOT DETECTED at or above the detection or reporting limit.
- NR Result Not Reported.
- RPD Relative Percent Difference. RPDs for Matrix Spikes and Matrix Spike Duplicates are based on concentration, not recovery.

Detection Limits: Limit of Detection (LOD)

Limits of Detection (LODs) are normally set at a level of one half the validated Limit of Quantitation (LOQ).
If no value is listed ('----'), then the data has not been evaluated below the Reporting Limit.

Reporting Limits: Limit of Quantitation (LOQ)

Validated Limits of Quantitation (LOQs) are reported as the Reporting Limits for all analyses where the LOQ, MRL, PQL or CRL are requested. The LOQ represents a level at or above the low point of the calibration curve, that has been validated according to Apex Laboratories' comprehensive LOQ policies and procedures.

Reporting Conventions:

- Basis: Results for soil samples are generally reported on a 100% dry weight basis.
The Result Basis is listed following the units as " dry", " wet", or " " (blank) designation.
- " dry" Sample results and Reporting Limits are reported on a dry weight basis. (i.e. "ug/kg dry")
See Percent Solids section for details of dry weight analysis.
- " wet" Sample results and Reporting Limits for this analysis are normally dry weight corrected, but have not been modified in this case.
- " " Results without 'wet' or 'dry' designation are not normally dry weight corrected. These results are considered 'As Received'.

QC Source:

In cases where there is insufficient sample provided for Sample Duplicates and/or Matrix Spikes, a Lab Control Sample Duplicate (LCS Dup) may be analyzed to demonstrate accuracy and precision of the extraction batch.

Non-Client Batch QC Samples (Duplicates and Matrix Spike/Duplicates) are not included in this report. Please request a Full QC report if this data is required.

Miscellaneous Notes:

- " --- " QC results are not applicable. For example, % Recoveries for Blanks and Duplicates, % RPD for Blanks, Blank Spikes and Matrix Spikes, etc.
- " *** " Used to indicate a possible discrepancy with the Sample and Sample Duplicate results when the %RPD is not available. In this case, either the Sample or the Sample Duplicate has a reportable result for this analyte, while the other is Non Detect (ND).

Blanks:

- Standard practice is to evaluate the results from Blank QC Samples down to a level equal to one half of the Reporting Limit (RL).
- Blank results for gravimetric analyses are evaluated to the Reporting Level, not to half of the Reporting Level.
- For Blank hits falling between 1/2 the RL and the RL (J flagged hits), the associated sample and QC data will receive a 'B-02' qualifier.
- For Blank hits above the RL, the associated sample and QC data will receive a 'B' qualifier, per Apex Laboratories' Blank Policy.

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ANALYTICAL REPORT

Apex Laboratories, LLC

6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
ORELAP ID: OR100062

Environmental Works 22820 NE Sandy Blvd Fairview, OR 97024	Project#: 1234 NE Highland St. Project Manager: Lionel Mills	Report ID: A4H1455 - 08 26 24 1550
---	---	---

REPORTING NOTES AND CONVENTIONS (Cont.):

Blanks (Cont.):

Sample results flagged with a 'B' or 'B-02' qualifier are potentially biased high if the sample results are less than ten times the level found in the blank for inorganic analyses, or less than five times the level found in the blank for organic analyses. 'B' and 'B-02' qualifications are only applied to sample results detected above the Reporting Level.

Preparation Notes:

Mixed Matrix Samples:

Water Samples:

Water samples containing significant amounts of sediment are decanted or separated prior to extraction, and only the water portion analyzed, unless otherwise directed by the client.

Soil and Sediment Samples:

Soil and Sediment samples containing significant amounts of water are decanted prior to extraction, and only the solid portion analyzed, unless otherwise directed by the client.

Sampling and Preservation Notes:

Certain regulatory programs, such as National Pollutant Discharge Elimination System (NPDES), require that activities such as sample filtration (for dissolved metals, orthophosphate, hexavalent chromium, etc.) and testing of short hold analytes (pH, Dissolved Oxygen, etc.) be performed in the field (on-site) within a short time window. In addition, sample matrix spikes are required for some analyses, and sufficient volume must be provided, and billable site specific QC requested, if this is required. All regulatory permits should be reviewed to ensure that these requirements are being met.

Data users should be aware of which regulations pertain to the samples they submit for testing. If related sample collection activities are not approved for a particular regulatory program, results should be considered estimates. Apex Laboratories will qualify these analytes according to the most stringent requirements, however results for samples that are for non-regulatory purposes may be acceptable.

Samples that have been filtered and preserved at Apex Laboratories per client request are listed in the preparation section of the report with the date and time of filtration listed.

Apex Laboratories maintains detailed records on sample receipt, including client label verification, cooler temperature, sample preservation, hold time compliance and field filtration. Data is qualified as necessary, and the lack of qualification indicates compliance with required parameters.

DRAFT REPORT

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---	---	---

LABORATORY ACCREDITATION INFORMATION

ORELAP Certification ID: OR100062 (Primary Accreditation)

EPA ID: OR01039

All methods and analytes reported from work performed at Apex Laboratories are included on Apex Laboratories' ORELAP Scope of Certification, with the exception of any analyte(s) listed below:

Apex Laboratories

Matrix	Analysis	TNI_ID	Analyte	TNI_ID	Accreditation
--------	----------	--------	---------	--------	---------------

All reported analytes are included in Apex Laboratories' current ORELAP scope.

Secondary Accreditations

Apex Laboratories also maintains reciprocal accreditation with non-TNI states (Washington DOE), as well as other state specific accreditations not listed here.

Subcontract Laboratory Accreditations

Subcontracted data falls outside of Apex Laboratories' Scope of Accreditation. Please see the Subcontract Laboratory report for full details, or contact your Project Manager for more information.

Field Testing Parameters

Results for Field Tested data are provided by the client or sampler, and fall outside of Apex Laboratories' Scope of Accreditation.

DRAFT REPORT

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ANALYTICAL REPORT

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503-718-2323
ORELAP ID: OR100062

Environmental Works 22820 NE Sandy Blvd Fairview, OR 97024	Project#: 1234 NE Highland St. Project Manager: Lionel Mills	Report ID: A4H1455 - 08 26 24 1550
---	---	---

APEX LABS COOLER RECEIPT FORM

Client: E Works Element WO#: A4 H1455

Project/Project #: 1234 NE Highland St

Delivery Info:

Date/time received: 8/23/24 @ 1700 By: AJM

Delivered by: Apex Client ESS FedEx UPS Radio Morgan SDS Evergreen Other

From USDA Regulated Origin? Yes No

Cooler Inspection Date/time inspected: 8/23/24 @ 1740 By: AJM

Chain of Custody included? Yes No

Signed/dated by client? Yes No

Contains USDA Reg. Soils? Yes No Unsure (email RegSoils)

	Cooler #1	Cooler #2	Cooler #3	Cooler #4	Cooler #5	Cooler #6	Cooler #7
Temperature (°C)	<u>3.9</u>						
Custody seals? (Y/N)	<u>N</u>						
Received on ice? (Y/N)	<u>Y</u>						
Temp. blanks? (Y/N)	<u>Y</u>						
Ice type: (Gel/Real/Other)	<u>Gel</u>						
Condition (In/Out):	<u>In</u>						

Cooler out of temp? (Y/N) Possible reason why: _____

Green dots applied to out of temperature samples? Yes No

Out of temperature samples form initiated? Yes No

Sample Inspection: Date/time inspected: 8/23/24 @ 17:48 By: AKM

All samples intact? Yes No Comments: _____

Bottle labels/COCs agree? Yes No Comments: _____

COC/container discrepancies form initiated? Yes No

Containers/volumes received appropriate for analysis? Yes No Comments: _____

Do VOA vials have visible headspace? Yes No NA

Comments: _____

Water samples: pH checked: Yes No NA pH appropriate? Yes No NA pH ID: _____

Comments: _____

Labeled by: AKM

Witness: AKW

Cooler Inspected by: AJM

Form Y-003 R-02

DRAFT REPORT

The results provided in this report are PRELIMINARY and are subject to change based on subsequent analysis, QC validation or final data review. Please use these results with the understanding that they may have not been finalized by the laboratory.

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.

5500 4th Ave South
Seattle, WA 98108-2419
(206) 285-8282
office@friedmanandbruya.com
www.friedmanandbruya.com

October 8, 2024

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 October 4, 2024 from the 1234 NE Highland St, F&BI 410090 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.



Mac Goldman
Project Manager

Enclosures
c: Soil Solutions Reports
SSI1008R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 10/08/24
Date Received: 10/04/24
Project: 1234 NE Highland St, F&BI 410090
Date Extracted: 10/04/24
Date Analyzed: 10/04/24

**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)	<u>Surrogate</u> <u>(% Recovery)</u> (Limit 50-150)
SG1@2' 410090-01	<50	<250	90
SG2@1' 410090-02	<50	<250	93
SG3@1' 410090-03	<50	<250	87
SG4@1' 410090-04	<50	<250	92
SG5@1' 410090-05	<50	<250	90
SG6@2' 410090-06	<50	<250	87
Method Blank 04-2459 MB	<50	<250	85

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 10/08/24

Date Received: 10/04/24

Project: 1234 NE Highland St, F&BI 410090

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

Laboratory Code: 410087-01 (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	9,100	118	138	63-146	16

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Diesel Extended	mg/kg (ppm)	5,000	100	77-123

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, biased low; or, the calibration results for the analyte were outside of acceptance criteria, biased high, with a detection for the analyte in the sample. 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 standard reporting limit. 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.
- k - The calibration results for the analyte were outside of acceptance criteria, biased high, and the analyte was not detected in the sample.
- 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.

410090

PMs

SAMPLE CHAIN OF CUSTODY

10/04/24 A2

Send Report To

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. 1234 NE Highland St

REMARKS

PO #

Page # 1 of 1

TURNAROUND TIME

Rush charges authorized by: 24 hr

SAMPLE DISPOSAL

Standard
 RUSH
 Dispose after 30 days
 Return samples
 Will call with instructions

ANALYSES REQUESTED

NWTPH-Dx
NWTPH-HCID
NWTPH-Gx
BTEXN 8260C
PAHs (No N) 8270CCIM
PAHs 8270C SIM
Lead by 200.8

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of containers	ANALYSES REQUESTED	Notes
SG1001	01	10/3/24		Soil	1		
SG2001	02				1		
SG3001	03				1		
SG4001	04				1		
SG5001	05				1		
SG6001	06				1		

Samples received at 1 oC

Friedman & Bruya, Inc.
3012 16th Avenue West
Seattle, WA 98119-3029
Ph. (206) 285-8282
Fax (206) 283-5044
FORMS\COC\SOIL SOLUTIONS.DOC

Relinquished by: <u>SIGNATURE</u>	PRINT NAME <u>JORDAN FERG</u>	COMPANY <u>SOIL SOLUTIONS</u>	DATE <u>10/3/24</u>
Received by: <u>[Signature]</u>	PRINT NAME <u>John Pham</u>	COMPANY <u>FBI</u>	DATE <u>10/04/24</u>
Relinquished by:			
Received by:			

DATE	TIME
10/04/24	10:09

SAMPLE CONDITION UPON RECEIPT CHECKLIST

PROJECT # 410090 CLIENT BST INITIALS/ DATE: AP 10/04/24

If custody seals are present on cooler, are they intact? NA YES NO

Cooler/Sample temperature _____ °C
Thermometer ID: Fluke 96312917

Were samples received on ice/cold packs? YES NO

How did samples arrive?
 Over the Counter Picked up by F&BI FedEx/UPS/GSO

Is there a Chain-of-Custody* (COC)? YES NO Initials/ Date: AP 10/04/24
*or other representative documents, letters, and/or shipping memos

Number of days samples have been sitting prior to receipt at laboratory 1 days

Are the samples clearly identified? (explain "no" answer below) YES NO

Were all sample containers received intact (i.e. not broken, leaking etc.)? (explain "no" answer below) YES NO

Were appropriate sample containers used? YES NO Unknown

If custody seals are present on samples, are they intact? NA YES NO

Are samples requiring no headspace, headspace free? NA YES NO

Is the following information provided on the COC, and does it match the sample label? (explain "no" answer below)

- | | | | |
|--------------------|--|-------|--|
| Sample ID's | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No | _____ | <input type="checkbox"/> Not on COC/label |
| Date Sampled | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No | _____ | <input type="checkbox"/> Not on COC/label |
| Time Sampled | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | _____ | <input checked="" type="checkbox"/> Not on COC/label |
| # of Containers | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No | _____ | |
| Relinquished | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No | _____ | |
| Requested analysis | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> On Hold | _____ | |

Other comments (use a separate page if needed)

Air Samples: Were any additional canisters/tubes received? NA YES NO
Number of unused TO15 canisters _____ Number of unused TO17 tubes _____

10/2/24, 5:26 PM

about:blank

GLS.

800-322-5555
www.gls-us.com

Ship From

SOIL SOLUTIONS
KALANI RYCRAFT
3540 SE 28TH AVENUE
PORTLAND, OR 97202

Tracking #: 562071163

CPS



Ship To

FRIEDMAN & BRUYA, INC.
SAMPLE RECEIVING
5500 4TH AVENUE SOUTH
SEATTLE, WA 98108

SEATTLE

S06437C

COD: \$0.00

Weight: 0 lb(s)

Reference:

Delivery Instructions:

Signature Type: NOT REQUIRED



16985274

KNT WA980-7C1

GLS.COM 44888881 5786 0001

Aboveground Storage Tank Cleanup Report
1234 NE Highland Street
Portland, Oregon 97211
DEQ File #26-24-0634
Cleanup ID #6713

Appendix C

Disposal Receipts

Oil Re-Refining Company

EPA# ORD980975692
 4150 N Suttle Rd
 Portland, OR 97217
 Phone: 503-286-8352

Work Order
 11/21/2024

Service Information

Soil Solutions
 3540 SE 28th Ave
 Portland, OR 97212
 Contact: Tess
 Phone: (503) 234-2118
 E-mail: charlie@soilsolutionsenvironmental.com

Billing Information

Soil Solutions
 3540 SE 28th Ave
 Portland, OR 97212

Job Name

Soil Solutions - 2404755

Job Type	PO #	Invoice #	Scheduled	Start	End
Commercial			11/21/2024	8:00 AM	9:00 AM

Item	Description	Quantity	Rate	Amount
Wastewater (fuel & water CCP)	For recycling, CDT test:Nd	1793.00	\$0.30	\$537.90
Hydro Clor D Tect Test	Field test for chlorinates in aqueous materials	1.00	\$40.00	\$40.00
Truck & Gear Labor	Per hour (includes stop fee, job time and travel time when applicable).	2.00	\$120.00	\$240.00
PH Test	PH Test 6	1.00	\$0.00	\$0.00

Job Subtotal:	\$817.90
OREGON:	\$0.00
Payment Total:	\$0.00
Total:	\$817.90

GEN EPA ID#	GEN Status	Profile 1	Profile 2	Profile 3	Profile 4
None	N/A	Emul fuel water 10/28/25	analytical 3/18/20		
Profile 5	Profile 6	Profile 7	Profile 8		

Consigned to	Via carrier	Destination	City/State	EPA #	Truck #
ORRCO/Portland	ORRCO	4150 N Suttle Rd	Portland, OR	ORD980975692	2797

Driver	Manifest #	CA waste codes
Steve Barrett		

Job Notes and Instructions:

11/21- Thank You- Emily

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. Customer Not Available: Other /COVID-Social Distance VERBAL Signature.

Date: 11/13/2024
Vendor #: 10 = 0001483

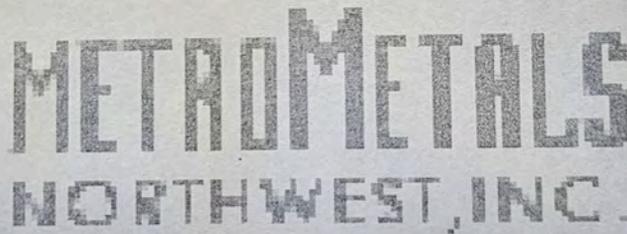
METRO METALS NORTHWEST, INC
5611 NE COLUMBIA BLVD
PORTLAND, OR 97218

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
						7,040.00	G	130.00	408.57
1359631	10/29/2024	#2 Steel Unprepared Vendor Reference #: charlie	41,460.00	34,420.00	0.00				
						0.00	EA	0.00	-15.00
1359631	10/29/2024	Environmental/Fuel Surcha Vendor Reference #: charlie	0.00	0.00	0.00				



METRO METALS
NORTHWEST, INC.

Totals 7,040.00 393.57



Hillsboro Landfill, Inc
 3205 SE Minter Bridge
 Hillsboro, OR, 97123
 Ph: (503)-640-9427

Reprint
 Ticket# 1735279

Customer Name SOILSOLUTION SOIL SOLUTIONS E Carrier EMERITEC
 Ticket Date 10/03/2024 Vehicle# 1 Volume
 Payment Type Credit Account Container
 Manual Ticket# Driver MICHAEL
 Hauling Ticket# Check#
 Route Billing # 0002022
 State Waste Code Gen EPA ID N/A
 Manifest na
 Destination Grid
 PO
 Profile 134996OR (Diesel Fuel/Fuel Oil Contaminated Soil)
 Generator OR-SOIL SOLUTIONS SOIL SOLUTIONS 3540 SE 28TH AVE

	Time	Scale	Operator	Inbound	Gross	59960 lb
In	10/03/2024 13:03:54	Inbound 2	cduneven		Tare	56400 lb
Out	10/03/2024 13:33:53	Outbound	MRAMOS14		Net	3560 lb
					Tons	1.78

Comments

Consumer Comments? We want to know. Please call.

Product	LD%	Qty	UOM	Rate	Tax	Amount	Origin
1 Cont Soil Pet-RGC-	100	1.78	Tons				MULT-IN
2 FUEL-Fuel Surcharg	100		%				MULT-IN

1234 NE Highland St

10-3-24

Total Tax
 Total Ticket

Driver's Signature

Aboveground Storage Tank Cleanup Report
1234 NE Highland Street
Portland, Oregon 97211
DEQ File #26-24-0634
Cleanup ID #6713

Appendix D

DEQ Forms



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		
	< 25 feet	(10)	1
	25 - 50 feet	(7)	
	51 - 100 feet	(4)	
	> 100 feet	(1)	
2.	Mean Annual Precipitation		
	> 45 inches	(10)	10
	20 - 45 inches	(4)	
	< 20 inches	(1)	
3.	Native Soil Type		
	Course sands, gravels	(10)	1
	Silts, fine sands	(5)	
	Clays	(1)	
4.	Sensitivity of Uppermost Aquifer		
		(10)	7
	Sole Source	(7)	
	Current Potable	(4)	
	Future Potable	(1)	
	Non-potable		
5.	Potential Receptors		
	Many, near	(10)	10
	Medium	(5)	
	Few, far	(1)	
TOTAL SCORE =			29
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



OREGON DEPARTMENT OF ENVIRONMENTAL QUALITY
Underground Storage Tank Program

HEATING OIL TANK SERVICES
SERVICE PROVIDER REPORT CERTIFICATION

CLEANUP CHECKLIST

This checklist is divided into five sections. **Section A must be completed for all cleanup projects.** Complete Sections B, C, D, or E as appropriate for the type of cleanup option selected. The checklist must be filled out as completely as possible and any exceptions noted for the certification to be valid.

GENERAL INFORMATION

Tank Owner Name: Darrell Hill

Tank Site Address: 1234 NE Highland Street

Portland, Oregon 97211

DEQ Cleanup File Number: 26-24-0634

Date Release Reported: 08/26/24

Licensed HOT Service
Provider Company Name: Soil Solutions Environmental

16539

License Number

03/15/25

Expiration Date

✓ **Check each item as complete and correct.** By checking any of the boxes in this checklist, you are indicating that the statement applies to this project. If there are any exceptions to the statement, please note them in the comment area provided at the end of the checklist. If the statement does not apply, please do not check the box.

NOTE: TPH = Total Petroleum Hydrocarbons as diesel by method NWTPH-Dx

Note: The submittal of this checklist does not replace a final cleanup report

This checklist MUST be signed and dated on page 4

SECTION A - ALL CLEANUP PROJECTS

- A1. The release of petroleum was reported to DEQ (OAR 340-163-0020(4)).
- A2. No free product is present or was removed during initial abatement actions.
- A3. Water is present at the site and DEQ was notified. Please note the name of the DEQ Staff person notified and the date of notification _____

- A4. A site sketch, drawn approximately to scale, is included in the report (OAR 340-122-0345) which clearly shows:
 - The location of all buildings and other key features, both man-made and natural;
 - The names of adjacent streets and properties;
 - 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;
 - The location of all identified underground storage tanks, including those that were decommissioned as well as those that remain on the site in the vicinity of the cleanup;
 - All soil and water sample locations including sample depths and analytical results; and
 - Location of remaining contaminated soil (for risk-based decision making and generic remedy only).
- A5. All soil and/or water samples have been properly collected, coded, stored, shipped, and analyzed as required, and chain-of-custody forms have been filled out (OAR 340-122-0218, 340-122-0340 and 340-122-0345).

CHECK EITHER A6a or A6b, NOT BOTH

- A6a. Petroleum-contaminated soil has been removed from the property and properly handled, disposed of, or treated.

Amount of soil taken off-site for treatment/disposal: 1.78 tons

Disposal/treatment location: Waste Management Hillsboro Landfill

- A6b. No petroleum-contaminated soil removal occurred.

- A7. A report has been prepared which includes a detailed description of everything that was observed and performed at the site and contains all of the information required by (check one):

- OAR 340-122-0360 and OAR 340-177-0055
- DEQ's "Heating Oil Tank Generic Remedy Guidance Document" (January 24, 2000)
- DEQ's "Risk-Based Decision Making for the Remediation of Petroleum-Contaminated Sites" (September, 2003)

For Soil Matrix cleanup project, complete Section B.



For Generic Remedy cleanup project, complete Section C.



For Risk-Based cleanup project (simple, soil-only), complete Section D.



Complete Section E for:

All sites where groundwater is encountered and soil matrix standards for closure are not met.
All sites where heating oil tank constituent concentrations exceed the risk based concentrations in
Appendix A of the DEQ's "Risk-Based Decision Making for the Remediation
of Petroleum-Contaminated Sites" (September, 2003).

SECTION B - SOIL MATRIX CLEANUP

- B8. No contaminated soil exceeding the soil matrix level established for this site remains onsite. If a pocket of contamination exceeding the matrix level remains, use the appropriate checklist in Section C, D, or E instead.

CHECK EITHER B9a or B9b, NOT BOTH

- B9a. TPH concentrations were all below 100 mg/kg.

- B9b. TPH concentrations greater than 100 mg/kg remain in the soil and a Matrix Score Sheet has been completed. Supporting documentation for the matrix evaluation is included in the report. This project is a (check one):

Level 2 site (500 ppm TPH)

Level 3 site (1,000 ppm TPH)

- B10. Groundwater was encountered, but no benzene, toluene, ethylbenzene, and total xylenes (BTEX) or polynuclear aromatic hydrocarbons (PAHs) were detected in water above risk-based concentrations. No BTEX was detected in soil samples collected from the soil/water interface pursuant to OAR-340-122-340.

SECTION C - GENERIC REMEDY

- C8. Contamination is limited to soil only, and the remaining contaminated soil is a minimum of _____ feet above the seasonal high groundwater level.

- C9. The magnitude and extent of contamination has been clearly delineated both horizontally and vertically to at least 500 mg/kg TPH.

- C10. The volume of contaminated soil remaining in the subsurface above 500 mg/kg TPH is less than 65 cubic yards. Volume calculations are included in the cleanup report.

- C11. Any contaminated soil left in place is deeper than 3 feet below ground surface.

- C12. The maximum heating oil TPH concentration remaining in the soil is less than 10,000 mg/kg. The maximum TPH concentration detected remaining in the soil is _____ (mg/kg).

- C13. Contaminated soil left in place is greater than 2,500 mg/kg TPH. A representative soil sample was collected from the most contaminated soil remaining at the site and analyzed for benzene, ethylbenzene and naphthalene. No benzene detected in the soil in excess of 0.1 ppm, no ethylbenzene detected in soil in excess of 0.82 ppm and no naphthalene in soil in excess of 6.5 ppm.

SECTION D - SOIL ONLY RISK-BASED EVALUATIONS

- D8. Contamination is limited to soil only. The magnitude and extent of heating oil contamination (as TPH), has been clearly delineated vertically and horizontally (OAR 340-122-0240). *Note: It is often a site-by-site decision on the adequacy of this determination. Contact the Department if there are questions on this issue.*

- D9. A sample representative of the most contaminated soil remaining at the site was obtained and analyzed. No BTEX or PAHs were detected in the soil in excess of any risk-based concentration in DEQ's "Risk-Based Decision Making for the Remediation of Petroleum Contaminated Sites" (September 2003) guidance document.

**SECTION E - GROUNDWATER AND
COMPLEX RISK-BASED EVALUATIONS**

*Note: These certifications are complex and may require Department involvement.
Please contact the Department for assistance as appropriate.*

- E8. The magnitude and extent of heating oil contamination as TPH in soil, and BTEX & PAHs in groundwater, have been clearly delineated vertically and horizontally (OAR 340-122-0240). *Note: It is often a site-by-site decision on the adequacy of this determination. Contact the Department if there are questions on this issue.*

- E9. A mass balance calculation for vapor intrusion into the structure of benzene was performed using the air screening model posted on the Department's web page @ www.deq.state.or.us/lq/tanks/hot/screeningmodel.htm.

- E10. A detailed risk based evaluation has been conducted and the site has been found to be in compliance with OAR 340-122-0205 through 340-122-260. A detailed report documenting the finding has been prepared.

General
Comments: _____

SIGNATURE

Licensed HOT
Supervisor Name: Anthony Bustamonte
(please print)

<u>27402</u> License Number	<u>11/01/26</u> Expiration Date
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Check the correct box for each section completed in this checklist:

Section A *AND* Section B *OR* Section C *OR* Section D *OR* Section E

“By my signature below, I state that the information contained in this checklist is true and complete to the best of my knowledge.”

Supervisor Signature:  Date: 10/04/24

Note: If more than one supervisor was involved with the project, please add a second sheet with the license information and a signature block.

Clear All Entries

Print Form



OREGON DEPARTMENT OF ENVIRONMENTAL QUALITY
Underground Storage Tank Program

HEATING OIL TANK SERVICES
SERVICE PROVIDER REPORT CERTIFICATION

FINAL HEATING OIL CLEANUP REPORT FORM

Complete this FINAL report and submit it to the DEQ Northwest Regional Office (700 NE Multnomah St., Suite 600, Portland, OR 97232) as soon as possible, but within sixty (60) days from the date the release from a heating oil tank is cleaned up.

Property Owner Name: Darrell Hill DEQ Cleanup File No.: 26-24-0634

Property Address: 1234 NE Highland Street

City/State/Zip Code: Portland, Oregon 97211 County: Multnomah

Owner Phone Number:

Owner Mailing Address (if different): 13477 Appalachian Wy San Diego, CA 92129

Licensed Cleanup Service Provider Company: Soil Solutions Environmental

License Number: 16539 Expiration Date: 3/15/24

10/2/24 Date tank [checked] removed or decommissioned [] in-place. Approx. size of tank: 275 gallons

If tank filled in-place: What type of fill material was used? How much? gallons Tank must be completely filled with inert solid material that is compacted and appropriate for site conditions.

If tank was removed, where was it recycled or disposed? Metro Metals NW

What national code of practice was followed during decommissioning? API 1604

Describe how the tank was cleaned as thoroughly as possible to the maximum extent practicable: Tank contents were removed and tank interior was thoroughly pressure-washed.

How much product (oil) was removed? 1 gal. Sludge? gal. Water? 20 gal.

Where was the product/sludge/water recycled? Disposed? ORRCO

10/2/24 Date cleanup started. 10/4/24 Date cleanup completed.

(Check Yes or No) Yes [checked] No [] An INITIAL heating oil cleanup report form has already been submitted. If cleanup had not been started at the time of the initial report, include a new initial report form that has the missing information completed. Yes [checked] No [] A narrative report is attached.

Complete the rest of this form. Be sure to sign and date page two after answering all questions.

1. How was the release discovered? Describe: From soil samples collected by Environmental Works.

2. What initial measures were taken to control the spread of contamination? Describe: AST contents were removed, interior was thoroughly pressure-washed, and tank was removed.

3. What was observed when the tank was removed from the pit or decommissioned in-place? Describe: AST was removed from crawlspace and stained soil was observed.

