



Office 503.234.2118
Toll Free 877.234.2118
Fax 503.331.7133

www.soilsolutionsenvironmental.com

Aboveground Storage Tank Progress Report 19251 SE Wooded Hills Drive Damascus, Oregon 97089 ECSI ID#6564

Prepared for:

Kirk Loders 19251 SE Wooded Hills Drive Damascus, Oregon 97089

June 1, 2023

Prepared by:

Soil Solutions Environmental Services, Inc. 3540 SE 28<sup>th</sup> Avenue Portland, Oregon 97202

TA	RI	$\mathbf{E}$	$\mathbf{OF}$	CO	NT	EN	JTS
		1 . 1	<b>`</b>			.71	

UCTION	1
SCRIPTION	1
ecommissioning	
ICAL RESULTS	
RY, DISCUSSION, AND CONCLUSIONS	3
MENDATION	3
ENCES	4
Vicinity Map	
Soil Sample Location Map	
Proposed Sample Locations Map	
Soil Sample Analytical Results	
	Soil Sample Location Map Proposed Sample Locations Map

## **APPENDICES**

Appendix A
Appendix B
Appendix C

Photographs of Field Activities Certified Analytical Reports, Chain of Custody Documents

Disposal Receipts

#### 1.0 INTRODUCTION

This report summarizes the activities conducted by Soil Solutions Environmental Services, Inc. (SSES) at 19251 SE Wooded Hills Drive in Damascus, Oregon.

Site activities included the decommissioning by removal of a 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 rural residential farm/forest area of Damascus, Oregon in Clackamas County. The residence is located northeast of the intersection of SE 190<sup>th</sup> Drive and SE Wooded Hills Drive. The residence was constructed in approximately 1965 and drinking water is supplied by an active well on site located approximately 150-feet south of the residence. The AST was located approximately 8-feet east of the residence on a concrete pad. An associated well log was not found.

According to the United States Geological Survey Topographic 7.5-minute map for the Damascus, Oregon Quadrangle the site lies at an elevation of approximately 660-feet above mean sea level. The site is located in township 1S range 3E section 29 of the Willamette Meridian.

Ma et al (2012) maps the surface geology of the site as Pliocene age small basalt and basaltic andesite flows of the Boring Volcanic Field. Snyder (2008) indicates groundwater in the vicinity is typically 140-feet below ground surface (bgs) and generally flows to the west or southwest, towards the Clackamas River.

### 3.0 FIELD ACTIVITIES

Prior to SSES arrival on site, indications of a release from the AST were discovered by the homeowner. Field activities were completed between January 13, 2023, and May 31, 2023. 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 January 13, 2023, holes were observed on the tank bottom and concrete pad below showed visual and olfactory indications of petroleum contamination. Traces of product and approximately 3 gallons of sludge were removed from the tank and the interior was thoroughly pressure-washed. The oily rinse water was transported to SSES equipment yard for temporary storage and later transported, in bulk, by Oil Re-Refining Company (ORRCO) for proper disposal. The tank was removed from concrete pad and transported to SSES equipment yard for temporary storage. The

tank was later recycled, in bulk, by Metro Metals Northwest, Inc. Disposal receipts are included in Appendix C.

The concrete pad was cut and removed from the former AST area and placed into a dropbox on site. Approximately 4 tons of contaminated soil were removed from below the former AST area and placed into a dropbox on site.

On January 16, 2023, an additional approximately 8-tons of petroleum-contaminated soil (PCS) was placed into a dropbox on site. The PCS was transported to Waste Management Hillsboro Landfill for Department of Environmental Quality (DEQ) approved disposal.

SSES collected nine soil samples, designated 1 through 9 from around the former tank area. Sample 1 was collected southwest of the AST area at a depth of 3-feet bgs. Samples 2, 3, 4, 5, and 9 were collected southwest, west, northwest, northeast, and east of the excavation at depths of 3-feet bgs. Sample 6 was collected at the southwest excavation bottom at 2-feet bgs, sample 7 was collected at the northwest excavation bottom at a depth of 2.8-feet bgs and sample 8 was collected at the northeast excavation bottom at a depth of 1-foot bgs.

Indications of an oil sheen were observed on puddled water adjacent to the west side of the residence near the garage door. An additional sample, designated 10, was collected adjacent to the west side house at a depth of 0.3-feet bgs. Absorbent booms were placed along the driveway to contain the oily water.

Laboratory analysis revealed a diesel concentration of 1,200 parts per million (ppm) in samples SG2 and SG4. There was 1,100 ppm diesel detected in sample SG3. Diesel and heavy oil were not detected above laboratory reporting limits in soil samples SG1, SG5, SG6, SG7, SG8 and SG9. Laboratory results revealed diesel and heavy oil concentration of 9,780 ppm in sample SG10.

### 3.2 Site Assessment Activities

On February 21, 2023, SSES removed an additional approximately 4.2-tons of PCS from around the former AST pad location. SSES collected four soil grab samples, designated 11 through 14, from below the former tank location. Samples were located on the south excavation bottom at 3-feet bgs, the east, southeast and southwest excavation bottom, at depths of 1-foot bgs, respectively. Laboratory analysis revealed 110 ppm diesel contamination was detected in sample SG14 on the south excavation bottom. Diesel and heavy oil were not detected above laboratory reporting limits in samples 11 through 13.

On February 22, 2023, the excavation area was backfilled with gravel and compacted, and the surface was later restored to grade with soil.

On April 3, 2023, SSES installed a sub-slab depressurization system to mitigate any potential harmful vapors from entering the residence.

#### 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).

Following removal of PCS, diesel and heavy oil were detected at a maximum concentration of 9,780 ppm in soil at a depth of 0.3-feet adjacent to the west side of the residence. The magnitude of diesel detected to remain in the former excavation area was 1,200 ppm on both the northwest and southwest excavation bottom at depths of 2 and 3-feet bgs.

## 5.0 SUMMARY, DISCUSSION, AND CONCLUSIONS

A 275-gallon aboveground heating oil tank was decommissioned by removal at 19251 SE Wooded Hills Drive in Damascus, Oregon. The project site is in a rural residential neighborhood and drinking water is supplied by an active well located approximately 150-feet south of the former AST area. On January 4, 2023, a drinking water sample was collected by the homeowner from the bathroom sink and was submitted to Columbia Laboratories in Portland, Oregon. The water sample was analyzed for NWTPH-Dx by Specialty Analytical in Clackamas, Oregon. Diesel and heavy oil were not detected above laboratory reporting limits. A copy of the laboratory report is included in Appendix B.

The property owner has enrolled the site in DEQ's Voluntary Cleanup Program and cost recovery program. The property was assigned Environmental Cleanup Site Information (ECSI) ID #6564).

Fourteen soil samples were collected and analyzed to investigate the magnitude and extent of contaminated soil by SSES. The borings encountered brown silt loam with silt and clay to the full extent explored. Following excavation of approximately 16.13-tons of PCS, diesel and heavy oil concentrations in soil remained at a maximum concentration of 9,780 ppm. A groundwater assessment was not performed.

#### **6.0 RECOMMENDATION**

Additional site investigation is needed to determine the extent of soil contamination and investigate the risk to groundwater, soil vapor gas, and indoor air to and assess whether remaining contamination presents a threat to human health or the environment. Figure 3 shows proposed locations of additional borings for soil and groundwater samples, if groundwater is encountered.

## 9.0 LIMITATIONS

This report was prepared by Soil Solutions Environmental Services, Inc. (SSES) for Kirk Loders, and summarizes the results of our work at 19251 SE Wooded Hills Drive, Damascus, 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 compliance audit and is not intended to satisfy the requirements of any state, federal, or local real estate transfer laws.

#### 10.0 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.

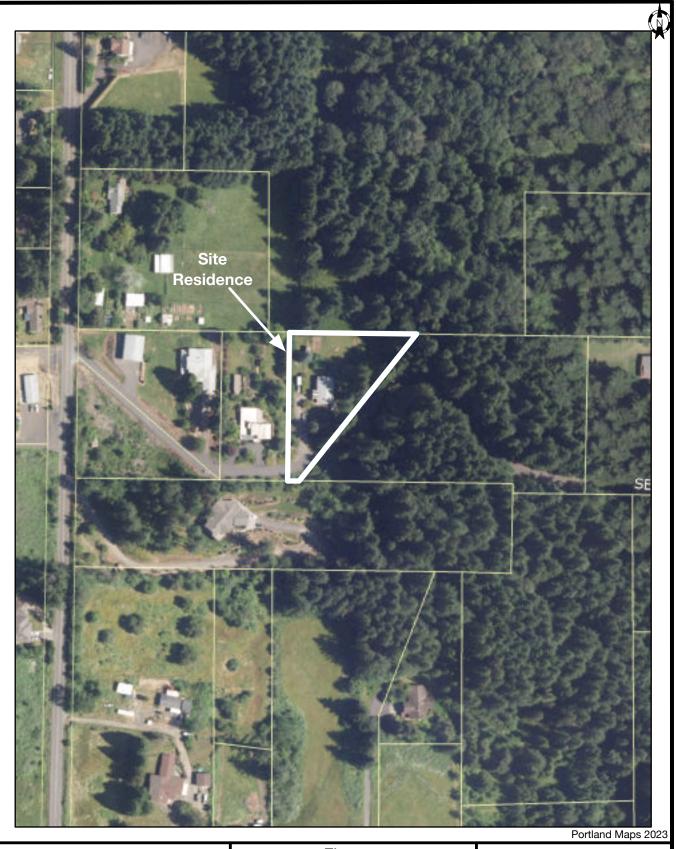
Daniel T. Snyder, 2008, Estimated Depth to Ground Water and Configuration of the Water Table in the Portland, Oregon Area, U.S. Geological Survey, Scientific Investigations Report 2008-5059.

Report prepared by:

## SOIL SOLUTIONS ENVIRONMENTAL SERVICES, INC

Mary Groff, Technical Report Writer

**FIGURES** 



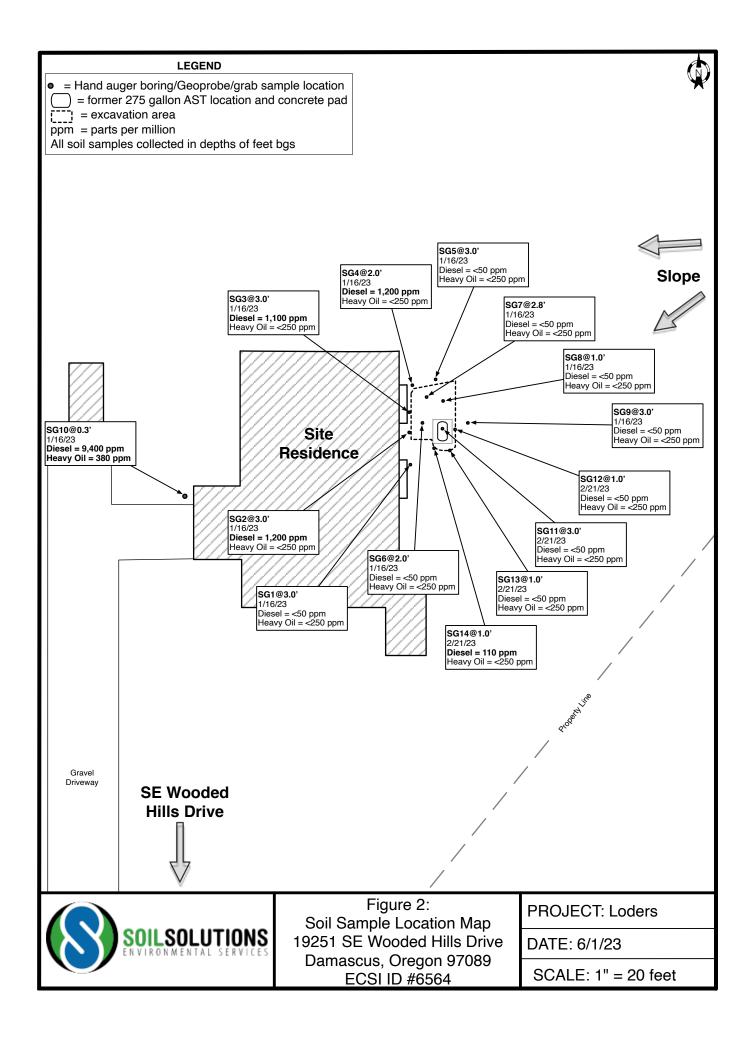
SOIL SOLUTIONS EN VIRONMENTAL SERVICES

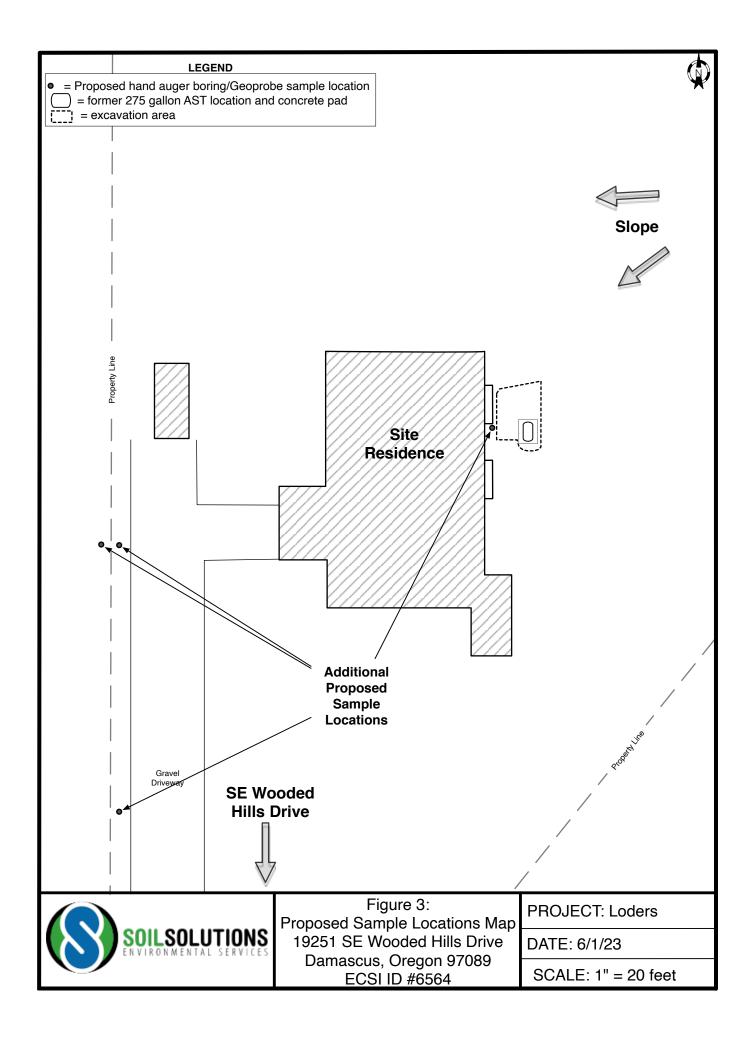
Figure 1: Vicinity Map 19251 SE Wooded Hills Drive Damascus, Oregon 97089 ECSI ID #6564

PROJECT: Loders

DATE: 6/1/23

0 ├───── 300 feet





**TABLES** 

Damascus, Oregon 97089
Table 1
Soil Sample Analytical Results

_		ı														
		Sample Identification	SG1@3.0'	SG2@3.0'	SG3@3.0'	SG4@2.0'	SG5@3.0'	SG6@2.0'	SG7@2.8'	SG8@1.0'	SG9@3.0'	SG10@0.3'	SG11@3.0'	SG12@1.0'	SG13@1.0'	SG14@1.0'
		Depth <sup>1</sup>	3	3	3	2	з	2	2.8	1	3	0.3	з	1	1	1
		Date	1/16/23	1/16/23	1/16/23	1/16/23	1/16/23	1/16/23	1/16/23	1/16/23	1/16/23	1/16/23	1/21/23	1/21/23	1/21/23	1/21/23
		Soil Disposition	Remains	Remains	Remains	Remains	Remains									
	Total Petroleum Hydrocarbons (TPH)	Diesel Range (C <sub>10</sub> -C <sub>25</sub> ) by NWTPH-Dx	<50	1,200	1,100	1,200	<50	<50	<50	<50	<50	9,400	<50	<50	<50	110
	Petroleum rocarbons (TPH)	Residual Range (C <sub>25</sub> -C <sub>36</sub> ) by NWTPH-Dx	<250	<250	<250	<250	<250	<250	<250	<250	<250	380	<250	<250	<250	<250
	Vola	Benzene	1	1	1	1	ı	ı	-		-	-	ı	1	1	-
	Volatile Organic Carbons (VOCs) by EPA Method 8260C or 8021B	Toluene	1	1	ı	ı	1	1	ı		ı	1	ı	1	1	1
	le Organic Carbons (VOCs Method 8260C or 8021B	Ethylbenzene	ı	ı	ı	ı	ı	ı	-		-		ı	1	ı	ı
	bons (V	m,p-Xylene	-	-	-	-	1	1	-		-		1		-	1
	OCs) by I	o-Xylene	1	!	1	1	1	1	-		-	1	1	1	!	ı
	EPA	Naphthalene	1	1	ı	ı	1	1	ı		ı	1	ı	1	1	ı
		Acenaphthylene	1	1	ı	ı	1	1	1		1	1	1	1	1	ı
Analy		Acenapthene	1	!	ı	ı	1	1	ı		ı	1	ı	!	!	ı
<b>Analytical Results</b>		Fluorene	1	1	1	1	ı	ı	-		-	-	ı	1	1	ı
sults (m	Polycyc	Phenanthrene	1	!	1	1	1	1	1		1	1	1	1	!	ı
(mg/kg)	lic Aron	Anthracene	ı	1	ı	ı	ı	ı	ı		ı	1	ı	1	1	ı
	natic Hy	Fluoranthene	1	1	1	1	ı	ı					ı	ı	1	ı
	drocarbo	Pyrene		-	-	-	-	-	-	***	-	-	-	-	-	-
	ons (PAH	Benz(a)anthracene	ı	ı	ı	ı	ı	ı	ı	-	ı	-	ı	ı	ı	ı
	ls) by EP	Chrysene	1	!	ı	ı	ı	ı	ı		ı	1	ı	!	!	ı
	A Meth	Benzo(a)pyrene	!	1	1	1	1	1	1		1	-	1	1	1	ı
	Polycyclic Aromatic Hydrocarbons (PAHs) by EPA Method 8270D	Benzo(b)fluoranthene	1	!	1	1	1	1	1		1	1	1	1	!	1
	ğ	Benzo(k)fluoranthene	1	!	1	1	1	1	1		1	1	1	1	!	1
		Ideno(1,2,3-cd)pyrene	-	-	-	-	-	-	-		-		-	-	-	-
		Dibenz(a,h)anthracene  Benzo(g,h,i)perylene	-	-	-	-	-	-	-		-		-	-	-	
		Denizo(g,n,n)peryiene	í	, ,	1	1	Í	Í	Ľ	Í	Ľ	Ľ	Ľ	1	, ,	Ľ

# **APPENDICES**

# Appendix A

Photographs of Field Activities



Photo 1. View of the residence from the bottom of driveway. View is to the northeast.



Photo 3. The AST was located east of the house. View is to the north.



Photo 2. West side of house. View is to the southeast.



Photo 4. View of the AST and concrete pad. View is to the southwest.





Photo 5. The AST contents were removed and product lines were transferred to a temporary AST for future use. View is to the southeast.



Photo 6. A pinhole and pitting were observed on the tank bottom. View is from under the tank.



Photo 7. The AST was emptied and removed from the property. View is to the northwest.



Photo 8. Contaminated concrete was observed below the former AST location. View of concrete pad.





Photo 9. The concrete pad was removed. View is to the northwest.



Photo 10. Contaminated soil removal began below the former AST location. View is to the south.



Photo 11. Contaminated soil was transported for proper disposal. View is of removed soil.



Photo 12. Excavation area. View is to the north.





Photo 13. Excavation area. View is to the west.



Photo 15. The former AST area was restored to grade with soil. View is to the southwest.



Photo 14. The excavation area was backfilled with gravel. View is to the west.



Photo 16. A vapor mitigation system was installed on the east side of the house. View is to the northwest.



# Appendix B

Certified Analytical Reports, Chain of Custody Documents

#### **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 Avenue South Seattle, WA 98108 (206) 285-8282 fbi@isomedia.com www.friedmanandbruya.com

January 27, 2023

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 January 17, 2023 from the 19251 SE Wooded Hills Dr, F&BI 301233 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

SSI0127R.DOC

## **ENVIRONMENTAL CHEMISTS**

Date of Report: 01/27/23 Date Received: 01/17/23

Project: 19251 SE Wooded Hills Dr, F&BI 301233

Date Extracted: 01/17/23 Date Analyzed: 01/17/23

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

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

Sample ID Laboratory ID	$\frac{\text{Diesel Range}}{(\text{C}_{10}\text{-C}_{25})}$	$rac{ ext{Residual Range}}{ ext{(C}_{25} ext{-C}_{36})}$	Surrogate (% Recovery) (Limit 50-150)
SG1@3.0' 301233-01	<50	<250	114
SG2@3.0' 301233-02	1,200	<250	126
SG3@3.0' 301233-03	1,100	<250	124
SG4@2.0' 301233-04	1,200	<250	125
SG5@3.0' 301233-05	<50	<250	112
SG6@2.0' 301233-06	<50	<250	111
SG7@2.8' 301233-07	<50	<250	113
SG8@1.0' 301233-08	<50	<250	114
SG9@3.0' 301233-09	<50	<250	111
SG10@0.3' 301233-10	9,400	380 x	139
Method Blank 03-162 MB	<50	<250	111

## **ENVIRONMENTAL CHEMISTS**

Date of Report: 01/27/23 Date Received: 01/17/23

Project: 19251 SE Wooded Hills Dr, F&BI 301233

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

Laboratory Code: 301222-01 (Matrix Spike)

			(Wet wt)	Percent	Percent		
	Reporting	Spike	Sample	Recovery	Recovery	Acceptance	RPD
Analyte	Units	Level	Result	MS	MSD	Criteria	(Limit 20)
Diesel Extended	mg/kg (ppm)	5,000	< 50	106	106	70-130	0

Laboratory Code: Laboratory Control Sample

			Percent		
	Reporting	Spike	Recovery	Acceptance	
Analyte	Units	Level	LCS	Criteria	
Diesel Extended	mg/kg (ppm)	5,000	110	70-130	•

#### **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.

FORMS\COC\SOIL SOLUTIONS.DOC	Fax (206) 283-5044	Ph. (206) 285-8282	Seattle, WA 98119-2029	3012 16th Avenue West	Friedman & Bruya, Inc.	St10 C 03'	St90 30	St. 8 P 1.0'	St 10 28'	St6 (20)	St-56 2-01	S54620	SG-3 0 3.0'	420 3-0	St-1 @ 3.01	Sample ID		Phone # (503) 234-2118	City, State, Zip <u>Portl</u>		Company Soil S	Sout Report To	
S.DOC	Received by:	Relinquished by:	Received by:	Relinquished by:		10 A-C	09	08	07	0%	05	04	05	02 A-C	٥ <sub>ا</sub>	Lab ID		Fax #	Portland, OR 97202	3540 SE 28th Avenue	Soil Solutions	PM5	
		y:	1	y: \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	SIGNATU	1/16/23	1/1423	1/16/23	1/16/23	111/23	1/16/28	1/16/23	1/16/23	1/16/23	1/16/23	Date Sampled		(503) 331-7133	2	Je .			
			hul		TRIE ()											Time Sampled		7133					SA
<u></u>				Ĺ		\$.	Se)	(S)	\$2 \$2	Soil	<u>\$.</u>	50)	50.	Soi	561	Sample Type			REMARKS	14251	PROJECT NAME/NO	SAMPLERS (sie col	SAMPLE CHAIN/OF/CUST
			ANHPHAN	Told	PRIN	14 0 AZ		_			حد	2400	2400	ACAL ACAL	1	# of containers				50	NAME/NO.	(suggarde	AIN/OF
			РНА	7	T NAMI	7	1	7	7	4	7	4	<u> </u>	~	Ť	NWTPH-Dx NWTPH-HCID				15000	•	7	cysi
			$\Sigma$	Thus	Æ							·				NWTPH-Gx				360			YQQ1
}																BTEX 8021B	ANA			1700	I.	M	7
			34	S	CO											BTEXN 8260C PAHs (No N) 8270CCIM	ANALYSES REQUESTED			,	PO# PO#		01/10
	Searol		481	S	COMPANY											PAHs 8270C SIM	ESTE				<del></del>		01/17/23
İ	Cestoles receivad				Y	-										Lead by 200.8		□ Will	Disp	Rush c	□ Standard  □ RUSH	ין	18
-	oived at		0	<i>[1]</i>	I													call w	SAMPI ose aft	harges	dard	Page #_ TURNA	VS-A31
	0		58/41/10	16/23	DATE													☐ Will call with instructions	SAMPLE DISPOSAL WDispose after 30 days	Rush charges authorized by:	24 トン	Page # of TURNAROUND TIME	A3/A3
			10:02		TIME						i					Notes		uctions	POSAL 1ys	ized by:	1	of /	·

#### **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 Avenue South Seattle, WA 98108 (206) 285-8282 fbi@isomedia.com www.friedmanandbruya.com

February 24, 2023

**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 22, 2023 from the 19251 SE Wooded Hills Dr, F&BI 302307 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

SSI0224R.DOC

## **ENVIRONMENTAL CHEMISTS**

Date of Report: 02/24/23 Date Received: 02/22/23

Project: 19251 SE Wooded Hills Dr, F&BI 302307

Date Extracted: 02/22/23 Date Analyzed: 02/22/23

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

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

			Surrogate
Sample ID	Diesel Range	Residual Range	(% Recovery)
Laboratory ID	$(C_{10}\text{-}C_{25})$	$(C_{25}\text{-}C_{36})$	(Limit 50-150)
SG11@3.0' 302307-01	<50	<250	90
SG12@1.0' 302307-02	<50	<250	88
SG13@1.0' 302307-03	<50	<250	92
SG14@1.0' 302307-04	110	<250	96
Method Blank 03-483 MB	<50	<250	91

## **ENVIRONMENTAL CHEMISTS**

Date of Report: 02/24/23 Date Received: 02/22/23

Project: 19251 SE Wooded Hills Dr, F&BI 302307

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

Laboratory Code: 302297-01 (Matrix Spike)

			(Wet wt)	Percent	Percent		
	Reporting	Spike	Sample	Recovery	Recovery	Acceptance	RPD
Analyte	Units	Level	Result	MS	MSD	Criteria	(Limit 20)
Diesel Extended	mg/kg (ppm)	5,000	<50	94	94	70-130	0

Laboratory Code: Laboratory Control Sample

			Percent		
	Reporting	Spike	Recovery	Acceptance	
Analyte	Units	Level	LCS	Criteria	
Diesel Extended	mg/kg (ppm)	5,000	92	70-130	•

#### **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 high; 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.

PROJECT NAME/NO.  (925)  REMARKS  # of Containers Hold octal  Son PRINT NAM  NWTPH-HCID  ANHPHA	
	NWTPH-Gx

BRUSH 24 Lx Dispose after 30 days Rush charges authorized by: EX EX Page # \_ \_\_\_\_ of \_\_\_\_ TURNAROUND TIME SAMPLE DISPOSAL

ANALYSES REQUESTED

√☐ Return samples
☐ Will call with instructions

BTEX 8021B

BTEXN 8260C

PAHs 8270C SIM

Notes

PAHs (No N) 8270CCIM

Lead by 200.8

FORMS\COC\SOIL SOLUTIONS.DOC	Fax (206) 283-5044 Received by:	Ph. (206) 285-8282 Relinquished by:	Seattle, WA 98119-2029 Received by:	3012 16th Avenue West Relinquished by:	Friedman & Bruya, Inc. SI					
			Just	18110	SIGNATURE /	<b>)</b>				
			ANHPHAN	Took Trong	PRINT NAME					
			F83	SS	COMPANY			Samples received at 2000		
			02/22/23 10:20	22/23	DATE			gyod at 🔏		
			10:20		TIME			 ) o C	2	





Report Number: 23-000093/D002.R00

**Report Date:** 01/17/2023 **ORELAP#:** OR100028

**Purchase Order:** 

Project Name: 19251 SE Wooded

Project No: Hills Dr

**Cover Letter** 

Kirk B. Loders 19251 SE Wooded Hills Dr Boring Oregon 97089 United States of America (USA)

Dear Kirk B. Loders,

Enclosed please find Columbia Laboratories analytical report for samples received as order number 23-000093 on 01/04/2023 at 12:55. Should you have any questions about this report or any other matter, please do not hesitate to contact us. We are here to help you.

Analysis for Diesel-Range Organics was subcontracted to Specialty Analytical in Clackamas, OR Please see attached report for results.

NOTE: Some or all of this analysis was subcontracted to Specialty Analytical in Clackamas, OR. Specialty Analytical is not an ORELAP accredited laboratory.

Thank you for allowing Columbia Laboratories to be of service to you, we appreciate your business.

Sincerely,

Derrick Tanner General Manager





Report Number: 23-000093/D002.R00

**Report Date:** 01/17/2023 **ORELAP#:** OR100028

**Purchase Order:** 

Project Name: 19251 SE Wooded

Project No: Hills Dr

01/04/23 17:35 01/05/23 11:43

## **Sample Results**

Sample:Bathroom SinkCollected: 1/4/23 12:06Temp: 11.1 °CMatrix:Lab ID: 23-000093-0001Received: 1/4/23 12:55Evidence of Cooling: YDrinking Water

Method: EPA 200.8 in mg/l									
Analyte	Result	Limit	Units	LOQ	Dil.	Batch	Start/Extract	Analyzed	Notes
Arsenic*	< LOQ	0.010	mg/l	0.0010	1.00	2300254		01/09/23 18:13	
Method: EPA300.0									
Analyte	Result	Limit	Units	LOQ	Dil.	Batch	Start/Extract	Analyzed	Notes
Nitrate*	0.143	10.000	mg/l	0.0500	1.00	2300106		01/04/23 19:21	
Method: SM9223BColilert	18								
Analyte	Result	Limit	Units	LOQ	Dil.	Batch	Start/Extract	Analyzed	Notes
E. coli¥	Absent	Absent	/100 mL		1.00	2300088	01/04/23 17:35	01/05/23 11:43	

1.00

2300088

/100 mL

#### Units of Measure

Total Coliform¥

mg/l = milligrams per liter /100 mL = per 100 milliliter

Absent

#### **Abbreviations**

LOQ Limit of quantification

\* = TNI accredited analyte.





Report Number: 23-000093/D002.R00

**Report Date:** 01/17/2023 **ORELAP#:** OR100028

Purchase Order:

Project Name: 19251 SE Wooded

Project No: Hills Dr



# Specialty Analytical

9011 SE Jannsen Rd Clackamas, OR 97015 TEL: (503) 607-1331

Website: www.specialtyanalytical.com

January 12, 2023 Mark Leed Columbia Laboratories 12423 NE Whitaker Way Portland, OR 97230 TEL: (503) 254-1794

TEL: (503) 254-1794 FAX: (503) 254-1454

RE: 23-000093 Order No.: 2301046

Dear Mark Leed:

There were no problems with the analysis and all data for associated QC met EPA or laboratory specifications, except where noted in the Case Narrative, or as qualified with flags. Results apply only to the samples analyzed. Without approval of the laboratory, the reproduction of this report is only permitted in its entirety.

If you have any questions regarding these tests, please feel free to call.

Sincerely,

Marty French Lab Director

Page 1 of 10





Report Number: 23-000093/D002.R00

**Report Date:** 01/17/2023 **ORELAP#:** OR100028

**Purchase Order:** 

Project Name: 19251 SE Wooded

Project No: Hills Dr

Specialty Analytical

WO#: 2301046 Date Reported: 1/12/2023

CLIENT: Columbia Laboratories Collection Date: 1/4/2023 12:06:00 PM Project: 23-000093

Lab ID: 2301046-001 Matrix: DRINKING WATER Client Sample ID Bathroom Sink

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
NWTPH-DX - RBC			NWTPH-DX	SW	/ 3510C Analyst: KH
Diesel	ND	0.0898	mg/L	1	1/11/2023 2:00:00 AM
Lube Oil	ND	0.224	mg/L	1	1/11/2023 2:00:00 AM
Surr: o-Terphenyl	103	50 - 150	%Rec	1	1/11/2023 2:00:00 AM

Page 2 of 10





Report Number: 23-000093/D002.R00

**Report Date:** 01/17/2023 ORELAP#: OR100028

**Purchase Order:** 

**Project Name:** 19251 SE Wooded

**Project No:** Hills Dr

# QC SUMMARY REPORT

WO#: 2301046

1/12/2023

Specialty Analytical

Client: Columbia Laboratories

23-000093 TestCode: NWTPHDXLL\_W Pro ject:

Sample ID: CCV1	SampType: CCV	TestCo	de: NWTPHD)	XLL Units: mg/L		Prep Da	te:		RunNo: 479	916	
Client ID: CCV	Batch ID: 20754	Test	No: NWTPH-D	x SW 3510C		Analysis Da	te: 1/10/20	23	SeqNo: 618	5385	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	6.39	0.0800	6.000	0	106	85	115				
Lube Oil	2.81	0.200	3.000	0	93.8	85	115				

Sample ID: MB-20754	SampType: MBLK	TestCode: NWT	PHDXLL Units: mg/L		Prep Da	te: 1/9/2023	3	RunNo: 479	916	
Client ID: PBW	Batch ID: 20754	TestNo: NWT	PH-Dx SW 3510C		Analysis Da	te: 1/10/202	23	SeqNo: 61	5386	
Analyte	Result	PQL SPK v	alue SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	ND	0.0800								
Lube Oil	ND	0.200								
Surr: o-Terphenyl	0.200	0.2	000	99.9	50	150				

Sample ID: LCS-20754	SampType: LCS	TestCod	le: NWTPHD)	(LL Units: mg/L		Prep Da	te: 1/9/202	3	RunNo: 479	916	
Client ID: LCSW	Batch ID: 20754	TestN	lo: NWTPH-D	x SW 3510C		Analysis Da	te: 1/10/202	23	SeqNo: 615	5387	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	0.780	0.0800	1.000	0	78.0	60.7	121				
Lube Oil	1.01	0.200	1.000	0	101	64	126				

Qualifiers:

H Holding times for preparation or analysis exceeded

S Spike Recovery outside accepted recovery limits

Page 3 of 10





Report Number: 23-000093/D002.R00

**Report Date:** 01/17/2023 **ORELAP#:** OR100028

**Purchase Order:** 

Project Name: 19251 SE Wooded

Project No: Hills Dr

# QC SUMMARY REPORT

WO#: 2301046

1/12/2023

Specialty Analytical

Pro ject:

Client: Columbia Laboratories

23-000093 TestCode: NWTPHDXLL\_W

Sample ID: LCSD-20754	SampType: LCSD	TestCoo	de: NWTPHD)	(LL Units: mg/L		Prep Da	te: 1/9/202	3	RunNo: 479	916	
Client ID: LCSS02	Batch ID: 20754	TestN	No: NWTPH-D	x SW 3510C		Analysis Da	te: 1/10/20	23	SeqNo: 615	5388	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	0.857	0.0800	1.000	0	85.7	60.7	121	0.7798	9.38	20	
Lube Oil	1.04	0.200	1.000	0	104	64	126	1.005	2.92	20	

Sample ID: CCV2	SampType: CCV	TestCo	de: NWTPHD)	(LL Units: mg/L		Prep Da	te:	RunNo: 47916	
Client ID: CCV	Batch ID: 20754	Test	No: NWTPH-D	x SW 3510C		Analysis Da	te: 1/11/2023	SeqNo: 615400	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit RPD Ref \	/al %RPD RPDLimit	Qual
Diesel	8.62	0.0800	8.000	0	108	85	115		
Lube Oil	3.86	0.200	4.000	0	96.4	85	115		

Qualifiers: H Holding times for preparation or analysis exceeded

S Spike Recovery outside accepted recovery limits

Page 4 of 10





**Report Number:** 23-000093/D002.R00

**Report Date:** 01/17/2023 **ORELAP#:** OR100028

**Purchase Order:** 

Project Name: 19251 SE Wooded

Project No: Hills Dr



Client Name COLUMBIA

Specialty Analytical 9011 SE Jannsen Rd Clackamas, Oregon 97015 TEL: 503-607-1331 FAX: 503-607-1336 Website: www.specialtyanalytical.com

## Sample Receipt Check list

Work Order Number 2301046

RcptNo: 1	Date and Time Receive	1/5/2023 1:52:17	РМ	Received	d by: Mandy We	ehe
Completed by			Rev	iewed by:		
Completed Date:	<u>1/5/20</u>	023	Rev	iewed Date:		1/5/2023 3:23:35 PM
Carrier name: Client						
Chain of custody present?		Yes	<b>✓</b>	No 🗌		
Chain of custody signed when	relinquished and received?	Yes	✓	No		
Chain of custody agrees with s	ample labels?	Yes	✓	No	Not Present	
Are matrices correctly identifie	d on Chain of custody?	Yes	✓	No		
Is it clear what analyses were	requested?	Yes	✓	No 🗌		
Custody seals intact on sample	e bottles?	Yes		No 🗆	Not Present	✓
Samples in proper container/bo	ottle?	Yes	✓	No 🗆		
Were correct preservatives use	ed and noted?	Yes	✓	No	NA	
Sample containers intact?		Yes	✓	No		
Sufficient sample volume for in	dicated test?	Yes	✓	No		
Were container lables complet	e (ID, Pres, Date)?	Yes	✓	No		
All samples received within ho	lding time?	Yes	~	No 🗌		
Was an attempt made to cool	the samples?	Yes	~	No 🗌	NA	
All samples received at a temp	o. of > 0° C to 6.0° C?	Yes	~	No	NA	
Response when temperature is	s outside of range:					
Preservative added to bottles:						
Sample Temp. taken and reco		Yes	~	No 🗀		.6 °C
Water - Were bubbles absent i		Yes		No 🗀	No Vials	•
Water - Was there Chlorine Pr		Yes		No 🗀	NA	<b>✓</b>
Water - pH acceptable upon re	•	Yes	•	No 🗀	NA	
Are Samples considered accep	otable?	Yes	~	No 🗆		
Custody Seals present?		Yes		No 🗸		
Traffic Report or Packing Lists	present?	Yes	Ш	No 🗹		
Airbill or Sticker? Airbill No:		Air Bill		Sticker	Not Present	✓
Sample Tags Present?		Yes		No 🗸		
Sample Tags Listed on COC?		Yes		No 🗸		
Tag Numbers:						
Sample Condition?		Intact	✓	Broken	Leaking	
Case Number:	SDG:		S	AS:		
			Adj	usted?	Ch	ecked by
Any No and/or NA (not applica	ble) response must be deta	ailed in the comme	nts se	ction be		

Page 5 of 10





Report Number: 23-000093/D002.R00

**Report Date:** 01/17/2023 **ORELAP#:** OR100028

**Purchase Order:** 

Project Name: 19251 SE Wooded

Project No: Hills Dr



Specialty Analytical 9011 SE Jannsen Rd Clackamas, Oregon 97015 TEL: 503-607-1331 FAX: 503-607-1336 Website: www.specialtyanalytical.com

Sample Receipt Check list

Client Contacted?	Yes ✓ No NA Person Contacted: Comments:
Contact Mode:	Phone: Fax: Email: In Person:
Client Instructions:	
Date Contacted:	Contacted By:
Regarding:	
CorrectiveAction:	

Page 6 of 10





Report Number: 23-000093/D002.R00

**Report Date:** 01/17/2023 **ORELAP#:** OR100028

**Purchase Order:** 

Project Name: 19251 SE Wooded

Project No: Hills Dr

9011 SE Jannsen	S4	Chain of Custoo	ly Record		
Specialty Clackamas, OR 97	15 Date: 1/5/2025		Laboratory Project No (internal): 7,20 \ 04 (a		
Analytical Phone: 503-607-1	31	Account to the second s	Temperature on Receipt: 5.6°C 1 Cu		
Gient: Columbia Laboratories	Project No:23-000	093 PO No:	Custody Seal: Y (N		
Address: 12423 NE Whitaker Way	Collected by:	a the grant the second	Notes:		
City, State, Zip: Portland OR, 97230	State Collected: OR	WA OTHER	Shipped Via: Clund		
Telephone: 503-254-1794	Report To (PM); Mark Lo	eed	Sample Disposal: Return to dient (SDisposal by lab (after 60 days)		
Invoice To: shallah.gale@tentamus.com	PM Email: mark.leed	@tentamus.com	,		
Sample Name  Sample Name  1 Dath Marin: A=Air, AQ=Aqueous, O=Other, P=Rroduct, S=Soil, SD=Single Sample Sam	Iment, S.=Solid, W=Water, DW=Drin	Requested Tests  Sing Water, GW=Gound Water, SW=Sorm Water			
Turn-around Time: Standard (5-7 Busines		2 Day: Next Day: _	Same Day:		
x Ryan Gibbons 1/5	1:33	1:33 Received \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \			
Relinquished Date/Time x		Received X	Date/Time		

www.specialtyanalytical.com

Page 7 of 10





Report Number: 23-000093/D002.R00

**Report Date:** 01/17/2023 **ORELAP#:** OR100028

**Purchase Order:** 

Project Name: 19251 SE Wooded

Project No: Hills Dr



Specialty Analytical 9011 SE Jannsen Rd Clackamas, Oregon 97015 TEL: 503-607-1331 FAX: 503-607-1336 Website: www.specialtyanalytical.com

## Definition Only

WO#: 2301046 Date: 1/12/2023

#### Definitions:

#### KEY TO FLAGS

A: This sample contains a Gasoline Range Organic not identified as a specific hydrocarbon product. The result was qualified against gasoline calibration standards.

A1: This sample contains a Diesel Range Organic not identified as a specific hydrocarbon product. The result was qualified against diesel calibration standards.

A2: This sample contains a Lube Oil Range Organic not identified as a specific hydrocarbon product. The result was qualified against lube oil calibration standards.

A3: The results was determined to be Non-Detect based on hydrocarbon pattern recognition. The product was carry-over from another hydrocarbon type.

A4:, The product appears to be aged or degraded.

B: The blank exhibited a positive result greater than the reporting limit for this compound.

CN:, See Case Narrative.

E: Result exceeds the calibration range for this compound. The result should be considered an estimate.

F: The positive result for this hydrocarbon is due to single component contamination. The product does not match any hydrocarbon in the fuels library.

FS: , Follow-up testing is suggested.

G: Result may be biased high due to biogenic interferences. Clean up is recommended.

H: Sample was analyzed outside recommended holding time.

HT: 

At client's request, samples was analyzed outside of recommended holding time.

HP: Sample was analyzed outside recommended holding time due to VOA having pH >2.

J: The results for this analyte is between the MDL and the PQL and should be considered an

Page 8 of 10





Report Number: 23-000093/D002.R00

**Report Date:** 01/17/2023 **ORELAP#:** OR100028

**Purchase Order:** 

Project Name: 19251 SE Wooded

Project No: Hills Dr



Specialty Analytical 9011 SE Jannsen Rd Clackamas, Oregon 97015 TEL: 503-607-1331 FAX: 503-607-1336 Website: www.specialtyanalytical.com

### Definition Only

WO#: 2301046 Date: 1/12/2023

#### Definitions:

estimated concentration.

K: Diesel result is biased high due to amount of Oil contained in the sample.

L: Diesel result is biased high due to amount of Gasoline contained in the sample.

M: Qil result is biased high due to amount of Diesel contained in the sample.

N; Gasoline result is biased high due to amount of Diesel contained in the sample.

MC: Sample concentration is greater than 4x the spiked value, the spiked value is considered insignificant.

MI; Result is outside control limits due to matrix interference.

NH: Sample matrix is non-homogeneous

MSA: Value determined by Method of Standard Addition.

O: Laboratory Control Standard (LCS) exceeded laboratory control limits but meets CCV criteria. Data meets EPA requirements.

Q: Detection levels elevated due to sample matrix.

R: RPD control limits were exceeded

RF; Duplicate failed due to result being at or near the method-reporting limit.

RP: Matrix spike values exceed established QC limits; post digestion spike is in control.

S: Recovery is outside control limits.

SC: CCV or LCS exceeded high recovery control limits, but associated samples are non-detect. Data meets EPA requirements.

SL: LCS exceeded recovery control limits, but associated MS/MSD passing. Data meets EPA requirements.

Page 9 of 10





Report Number: 23-000093/D002.R00

**Report Date:** 01/17/2023 **ORELAP#:** OR100028

**Purchase Order:** 

Project Name: 19251 SE Wooded

Project No: Hills Dr



Specialty Analytical 9011 SE Jannsen Rd Clackamas, Oregon 97015 TEL: 503-607-1331 FAX: 503-607-1336 Website: www.specialtyanalytical.com

Definition Only

WO#: 2301046 Date: 1/12/2023

#### Definitions:

SV: CCV exceded low recovery control limits. ND as reported evaluated using EPA method 8260D section 11.4.3.2

TA: Sample treated with ascorbic acid for the removal of thiocyanates.

Page 10 of 10





Report Number: 23-000093/D002.R00

**Report Date:** 01/17/2023 ORELAP#: OR100028

**Purchase Order:** 

**Project Name:** 19251 SE Wooded

**Project No:** Hills Dr



#### Real-Estate Water Analysis E9007 - Arsenic, Nitrate, and Coliform

Document Control ID: 2728 Revision: 5 Effective: 04/22/2022 Page 1 of 1 + NWIPH - DX

Information from Location where Sample was Taken Realtor or Second Party Information Name: KIKK & Lynn Loders Address: 19291 SE Wooded Hills Dr. Attention: City Damascus State: OR Zip Code: 97089 Address: Phone: 503 · 703 · 1801 (cell:) State: Zip Code: E-Mail: loderskirk 68 B. gmail. com Point Where Sample was Taken: <u>bathroam</u> Sink Collection Date/Time: 01 , 04, 23 12:06 am/pm) Send Report to: ☐ Home Owner ynn Loders Realtor or Second Party (email): Special Instructions: AU009V ×1 8417 ×2

+\$100

# ARSENIC, NITRATE, AND COLIFORM BACTERIA INSTRUCTIONS + NWTPH - Dx

- Fill out the address and sample collection information at the top of the form and attach payment. 8-day TAT for test package E9007 = \$79. Call our Customer Service Department for information and pricing on rush samples or sample pick-up.
- The Coliform test sample must be collected in the sealed, sterile bottle. The sample must be collected from the source prior to any form of treatment, or after injection points where the treatment has been disabled or bypassed. Before collection, remove any strainers and wipe the faucet clean with an alcohol swab. Run the water for 5 minutes or until it reaches constant temperature before collecting the sample. Remove the sterile seal from the bottle and remove the cap. Do not rinse out the bottle. Take care to not touch the inside of the cap or bottle. Fill the bottle between the 100 ml and the fill line. Be sure to leave a 1-inch airspace. Do not overfill or overflow the bottle.
- Fill both the Arsenic and Nitrate sample bottles.
- Arsenic, Nitrate, and Total Coliform samples must be received by the laboratory within 24 hours of sample collection. Samples must be kept cool, between 36° and 43°F.

Samples may be rejected if sampling instructions are not followed or if the microbiological sample has leaked, is not filled properly, and/or is over 30 hours old.

		CHAI	IN OF CUSTODY:		
Relinquished By	Bynn far	ers Date/Time:	2:56 Received By: 785	Date/Time	1255
Relinquished By	y:	Date/Time:	Received By:	Date/Time	:
			Lab Use Only		
Client Alias:			Order Number:		
Cash \$:	Check \$:	Check No.:	Visa/MC \$: M	00143356868	179.00
credit application accounts. Accou past and current	e accepted with ful	l payment in advance by cash, counts are payable within 30 de s past due will automatically de l.	MYes ☐ No ☐ Temp: ☐ on the within 2 has a property of the check, Visa, or MasterCard. A cred and any following the date of invoice and efault into cash on delivery (COD).	ours of collection. dit line may be established wit. nd subject to legal interest on p Reports will not be released u	Kirk B. Loders
	d by" you are agreeing to es, Inc.	o these terms.	in agreement for services in accordance with itaker Way Portland, OR 97230 503-254-1794	the <u>current terms of service</u> associated www.columbi info@columb	

Order 23-000093-0001

www.columbialaboratories.com

Page 13 of 14





Report Number: 23-000093/D002.R00

**Report Date:** 01/17/2023 **ORELAP#:** OR100028

**Purchase Order:** 

Project Name: 19251 SE Wooded

Project No: Hills Dr

**Case Narrative** 

No Case Narrative notes to report.

Aboveground Storage Tank Progress Report 19251 SE Wooded Hills Drive Damascus, Oregon 97089 ECSI ID#6564

Appendix C

Disposal Receipts

Above material is being transported for Recycling Transportation Generator EPA# ORD980975692 Phone 503-286-8352 Portland, Oregon 97217 4150 N. Suttle Road Headquarters 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 Toll Free 800-367-8894 Gal./Brl. Via Carrier: Driver: Consigned To: Destination: Name 40 SE Soll Saumons COMMO > STHAJE 2 SUTTO Description くくく Truck # 3 EPA# THANC 40 MRAND Goshen, OR:
Hoquiam, WA:
Klamath Falls, OR:
Kennewick, WA:
Medford, OR:
Coos Bay, OR:
Spokane, WA: Contact Person 503-276.10 EPA# ORQ000024941 EPA# WAD988519419 EPA# ORD980980775 EPA# WAH000011577 EPA# ORD987197092 EPA# ORD980978266 EPA# WAH000011585 Phone Profile HCDT PH Load Ticket # **Billing Information** LADING BILL OF Check# Dispatch # Date Total: Flash Point Rate per Rate Per Gal./Brl. Hour 0 PO# Customer # Charge

Signed X

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 contaminapesticides, 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 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

Date:

tion and / or inaccurate and / or incomplete information concerning the material described above

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

Date: 09/13/2023

Vendor #. 10 = 0001483

# SETTLEMENT REPORT **DETAIL**

# **SOIL SOLUTIONS**

3540 SE 28th Ave Portland, OR 97202

Ticket	Date	Material	Gross	Tare	Conta	mination	Net-Wgt (lbs)	UM	Price/UM	Amount
1286148	9/1/2023 Vendor Re	Environmental/Fuel Surcha eference #: Charlie	0.00	0.00	0.00		0.00	EA	0.00	-15.00
1286148	9/1/2023 Vendor Re	#2 Steel Unprepared eference #: Charlie	40,780.00	33,640.00	0.00		7,140.00	G	160.00	. 510.00

Totals:

7,140.00

495.00



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

wooded Hills Original

Ticket# 1671717

Customer Name SOILSOLUTION SOIL SOLUTIONS E Carrier SOIL SOLUTIONS ENVIR Ticket Date 01/19/2023 Payment Type Credit Account Volume Vehicle# 28 Container

Manual Ticket# Hauling Ticket#

Route

State Waste Code Manifest

Destination

PO

Profile Generator

134996OR (LF02 Diesel Fuel/Fuel Oil Contaminated Soil) OR-SOIL SOLUTIONS SOIL SOLUTIONS 3540 SE 28TH AVE

54200 lb Time Scale Operator Inbound Gross 01/19/2023 09:01:15 Inbound 2 In jbrown40 30340 lb Tare Outbound 23860 lb Out 01/19/2023 09:17:19 jdrury Net Tons 11.93

Driver

Check#

Grid

Billing #

Gen EPA ID N/A

DAN

0002022

Comments

Consumer Comments? We want to know. Please call.

Product		LD%	Qty	UOM	Rate	Tax	Amount	Origin
1 2	Cont Soil Pet-RGC- FUEL-Fuel Surchard		11.93	Tons				MULT-IN MULT-IN

Total Tax Total Ticket

Driver's Signature



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

Original Ticket# 1674215

Customer Name SOILSOLUTION SOIL SOLUTIONS E Carrier SOIL SOLUTIONS ENVIR Ticket Date 02/22/2023
Payment Type Credit Account Vehicle# 28 Volume Container Manual Ticket# Driver DAN Hauling Ticket# Check# Rout.e Billing # 0002022 State Waste Code Gen EPA ID N/A Manifest na

Destination PO

Profile 134996OR (LF02 Diesel Fuel/Fuel Oil Contaminated Soil)
Generator OR-SOTL SOLUTIONS SOIL SOLUTIONS 3540 SE 28TH AVE

Scalle Operator Inbound Gross 39520 lb 31120 lb In 02/22/2023 08:25:21 Inbound 1 Jbrown40 Tare Out 02/22/2023 08:49:44 Outbound LGILLILA Net 8400 lb 4.20 Tons

Grid

Comments

Consumer Comments? We want to know. Please call.

Proc	luct	*	LD%	Qty	MOU	Rate	Tax	Amount	Origin
	Cont Soil FUEL-Fuel		000000000000000000000000000000000000000	4.20	Tons	s.			MULT-IN

Total Tax Total Ticket

Driver's Signature