Site Assessment

Lenox Acres – Former Parks Property

PREPARED FOR
Quality Technology Services, LLC

DATE
17 December 2024

REFERENCE
0755199

SIGNATURE PAGE

Site Assessment

Lenox Acres – Former Parks Property

0755199

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ACRONYMS AND ABBREVIATIONS

Acronym	Description
bgs	Below ground surface
BTEX	Benzene, toluene, ethylbenzene, xylenes
LUST	Leaking underground storage tank
mg/kg	Milligram per kilogram
ODEQ	Oregon Department of Environmental Quality
PAH	Polynuclear aromatic hydrocarbon
PCS	Petroleum-contaminated soil
PID	Photoionization detector
QTS	Quality Technology Services
RBC	Risk-based concentration
UST	Underground storage tank
VOC	Volatile organic compound

1. BACKGROUND

Quality Technology Services, LLC (QTS) requested Environmental Resources Management, Inc. (ERM) perform an environmental site assessment (ESA) and remove petroleum-contaminated soils (PCS) at the QTS Lennox Acres property in Hillsboro, Oregon. The ESA is in response to Oregon Department of Environmental Quality (ODEQ) diesel leaking underground storage tank (LUST) number 34-24-0173, which was removed by Xavier Environmental Inc. on 27 March 2024[1].

Following underground storage tank (UST) removal, Xavier Environmental Inc. collected two soil samples at 79 inches (approximately 6.5 feet) below ground surface (bgs) on the north and south sides of the diesel UST excavation. Both north and south soil samples had detected concentrations of diesel at 42,800 and 20,800 milligrams per kilogram [mg/kg], respectively.

2. SUBSURFACE CLEARANCE

Prior to initiating investigation activities, ERM implemented subsurface clearance procedures. ERM reviewed subsurface utility records, historical information, and confirmed utilities at the property were abandoned. The Oregon Utility Notification Center was called, and public utility mark-outs were performed at least 48 hours before commencing ground disturbance activities. On 15 October 2024, Ground Penetrating Radar Systems, LLC, was subcontracted by ERM to clear the excavation area, including an approximate 20-foot radius using ground penetrating radar, magnetometer, conductive tracer equipment, and electromagnetic detection. No active utilities were detected within the scanned area.

3. SOIL EXCAVATION AND CONFIRMATION SOIL SAMPLING

On 15 October 2024, Steadfast Services Northwest, LLC, under contract to ERM, excavated approximately 8.07 tons of soil from the former diesel UST footprint to a total depth of approximately 7.5 feet bgs using a rubber track-mounted mini-excavator. Appendix A contains a photograph of the excavated area. ERM field screened excavated soil for diesel impacts using visual cues (staining, discoloration) and a calibrated photoionization detector (PID). Grey staining and PID readings (126 parts per million) were observed in an isolated area, limited to approximately 6 feet bgs, along the southwest excavation wall. Visually impacted soil (staining) was also observed in the northern portion of the excavation at approximately 6 feet bgs. The impacted soil was excavated and placed into a 10-cubic yard roll-off bin for disposal. Four confirmation soil samples were collected at the base of the excavation, near the center of each sidewall at 7.5 feet bgs (Figure 1). Soil samples were collected using a hand auger, placed in laboratory-provided containers, and delivered to Apex Laboratories LLC under chain of custody protocols. Groundwater was not encountered during excavation activities. Confirmation soil samples were analyzed for Northwest TPH-Dx/oil range, Northwest TPH-Gx, polynuclear aromatic hydrocarbons (PAH) by 8270E, Full List volatile organic compounds (VOC) by 8260D, and total

[1] Xavier Environmental Inc. 2024. *Initial (Twenty Day) Report Form for UST Cleanup Projects – DEQ USTC File No. 34-24-0173. Portland, Oregon*. 3 April.

lead by 6020B on a standard 10-day turnaround time. Confirmation soil sample analytical results are displayed in Table 1.

TABLE 1 CONFIRMATION SOIL SAMPLE RESULTS

Analyte	**Diesel** (NWTPH-Dx) (mg/kg)	**Oil** (NWTPH-Dx) (mg/kg)	**Gasoline-Range Organics** (NWTPH-Gx) (mg/kg)	**PAHs** (EPA 8270E) (mg/kg)	**BTEX** (EPA 8260D) (mg/kg)	**Lead** (EPA 6020B) (mg/kg)
ODEQ RBC*	**1,100** (Direct Contact–Residential)	**1,100** (Direct Contact–Residential)	**1,200** (Direct Contact – Residential)	**0.11** (Benzo[a]pyrene Direct Contact – Residential)	**8.2** (Benzene, Direct Contact – Residential)	**400** (Direct Contact – Residential)
EXW-S-7.5-20241015	ND	ND	ND	ND	ND	**10.9**
EXS-S-7.5-20241015	**32.2**	ND	ND	ND	ND	**13**
EXE-S-7.5-20241015	ND	ND	ND	ND	ND	**12.4**
EXN-S-7.5-20241015	**26.1**	ND	ND	ND	ND	**12.7**
Comp-SS-20241015	ND	**149**	ND	ND	ND	**14.1**

Source: Apex Laboratories report for work order A4J1375
mg/kg = milligrams per kilogram
BTEX = Benzene, toluene, ethylbenzene, xylenes
ND= Non-detect; EPA = Environmental Protection Agency
Detected values are **bolded**
*Most conservative RBC from the Soil Ingestion, Dermal Contact, and Inhalation (Direct Contact) pathway and Volatilization to Outdoor Air (Indirect) exposure pathway.

Diesel was detected in samples collected from the center of the northern and southern excavation walls and lead was detected in the four confirmation soil samples collected. No gasoline-range hydrocarbons, PAHs, or BTEX were detected in the confirmation soil samples. Detected concentrations of diesel and lead are below the ODEQ RBCs for the Soil Ingestion, Dermal Contact, and Inhalation pathway and the Soil Volatilization to Outdoor Air pathway. Groundwater was not encountered during the excavation, and there is no municipal water source at the property; therefore, the Leaching to Groundwater and Ingestion & Inhalation from Tapwater pathways are not applicable. The lab report and accompanying data validation memorandum are included in Appendix B.

4. SOIL STOCKPILING AND DISPOSAL

Soil within the diesel UST excavation footprint was separated into two waste streams. As a result of PCS being identified at approximately 6 feet bgs, all excavation material below 5.5 feet bgs was placed in an onsite roll-off bin. Clean overburden soil that did not have indication of petroleum

contamination during field screening was stockpiled separately adjacent to the excavation atop polyethylene plastic sheeting.

One composite sample of the overburden soil was collected, placed into laboratory-provided containers, and shipped to Apex Laboratories LLC under chain of custody protocols. The composite soil sample was analyzed for Northwest TPH-Dx/oil range, Northwest TPH-Gx, PAHs by 8270E, Full List VOCs by 8260D, and total lead by 6020B on a rush 1-day turnaround time. A concentration of oil-range hydrocarbons was detected at 149 mg/kg in the overburden composite sample. The detected concentration of oil is below the ODEQ RBCs for the applicable pathways and receptor scenarios.

The excavation was filled with 10 cubic yards of clean, three-quarter-inch-minus rock from 7.5 feet bgs to approximately 6.5 to 6.0 feet bgs. The remainder of the excavation was backfilled with clean overburden soil. Steadfast arranged for the transport of 8.07 tons of PCS to Waste Management's Hillsboro, Oregon, landfill under profile 143744OR. The waste disposal receipt is provided in Appendix C.

5. CONCLUSION

ERM oversaw the excavation of approximately 8.07 tons of PCS within the excavation footprint of the former diesel UST location (LUST number 34-24-0173). Groundwater was not encountered during excavation activities. Confirmation soil samples collected from 7.5 feet bgs indicated concentrations of diesel and lead are below the ODEQ RBCs for applicable pathways and receptor scenarios. The excavation was backfilled with three-quarter-inch-minus rock and clean backfill. ERM recommends that the ODEQ require no further action at the site.

FIGURE

Drawn By: donovan.murphy

M:\US\Projects\P-R\QTS\0646023 Lenox Acres\ArcGIS\LenoxAcres_working.aprx\Figure 1 Soil Excavation Footprint and Confirmation Sample Locations, REVISED: 11/13/2024, SCALE: 1:1,100 when printed at 8.5x11

Legend

- Confirmation Soil Sample from 7.5 feet bgs
- Former Diesel UST Soil Excavation Footprint
- Washington County Tax Parcels

Notes:
- Excavation depth of approximately 7.5 feet below ground surface (bgs) achieved throughout excavation footprint.
- Approximate footprint area = 196 square feet

Confirmation soil samples from 7.5 feet bgs:
1 = EXW-S-7.5-20241015
2 = EXS-S-7.5-20241015
3 = EXE-S-7.5-20241015
4 = EXN-S-7.5-20241015

Figure 1
Soil Excavation Footprint and Confirmation Sample Locations
QTS Lenox Acres
Hillsboro, Oregon

ERM

Source: Google Earth Imagery, February 2024; NAD 1983 StatePlane Oregon North FIPS 3601 Feet

APPENDIX A SITE ASSESSMENT PHOTO LOG

Photographic Log

CLIENT:	SITE LOCATION:	PROJECT NO.:
Quality Technology Services, LLC	Lenox Acres – Former Parks Property	0755199

PHOTO 1
Excavation footprint looking to the south

APPENDIX B LAB REPORT AND DATA VALIDATION MEMORANDUM

ERM

1050 SW 6th Avenue
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Portland, OR 97204

T +1 503 488 5282

erm.com

MEMO

TO	Justin Dauphinais
FROM	Jack James
DATE	2024-11-11
REFERENCE	0755199
SUBJECT	Data Review of QTS Lennox Acres, UST Soil Excavation. Samples Collected October 2024: Apex Laboratories, Data Package(s) A4J1375.

Environmental Resources Management, Inc. (ERM) assessed the data quality and applied any necessary qualifiers following the *USEPA National Functional Guidelines for Organic Superfund Methods Data Review*, November 2020 and *USEPA National Functional Guidelines for Inorganic Superfund Methods Data Review*, November 2020.

ERM performed a Stage 2A data validation on 100 percent of the laboratory data.

ERM reviewed the following items as part of the data validation.

- **Chain of Custody:** The chains of custody were reviewed for proper completion and that the laboratory performed the requested methods and reported the requested target analytes for each sample.
- **Dilutions and Reanalysis:** Dilutions, calibration ranges, and reanalyses were reviewed as applicable. The best result was chosen when more than one result was reported as final.
- **Case Narrative:** The case narrative was reviewed for comments and any necessary qualifiers added.
- **Sample Preservation:** The appropriate temperature and chemical preservation requirements were reviewed. Headspace for volatile sample analysis was reviewed.
- **Holding Times:** The period of time between collection of the sample and preparation/analysis of the sample was evaluated.
- **Laboratory Blank Samples:** The preparation and analysis of reagent (contaminant-free) water was evaluated, along with the required frequency.
- **Field Blank Samples:** The collection and analysis of field blanks was evaluated. The reviewed data package(s) included the following associated field blanks: trip.

- **Laboratory Control Spike Samples:** Laboratory control spike sample preparation frequency and recoveries were reviewed as applicable.
- **Matrix Spike Samples:** Matrix spike and post digestion spike sample preparation frequency and recoveries were reviewed as applicable.
- **Surrogate Spikes:** The addition of appropriate surrogates and their recoveries were evaluated.
- **Laboratory Duplicate Samples:** Laboratory duplicate frequencies and recoveries were reviewed as applicable.

Data validation findings are summarized in the sections below. As necessary, the following data quality flags were applied during validation. Professional judgment was used when multiple flags were applied to one result; therefore, the final flag may differ from the one presented in an individual table.

- J = estimated concentration
- J+ = the result is an estimated concentration, but may be biased high
- J- = the result is an estimated concentration, but may be biased low
- UJ = estimated reporting limit
- U = evaluated to be non-detected at the reporting limit
- R = rejected, data not usable
- NJ = tentative identification and estimated concentration

Validation outliers and any necessary data qualifications are summarized in tables at the end of this memo. The table below indicates the included validation tables with findings.

List of Attached Tables	
Table 1:	Matrix Spike Evaluation
Table 2:	Professional Judgement Evaluation

CHAIN-OF-CUSTODY DISCREPANCIES

The laboratory did not note discrepancies between the chains-of-custody and the received sample containers.

SAMPLES WITH NON-PREFERRED RESULTS

All samples had only one final result reported for each analyte and method combination. All results are considered preferred.

CASE NARRATIVE EVALUATION

The laboratory did not note issues in the case narrative that warranted further explanation.

PRESERVATION EVALUATION

The laboratory received the sample shipments in good condition, within the method-prescribed temperature preservation requirements of less than 6°C, with acceptable sample pH values, and, as applicable, all vials for volatile analysis were received with no documented headspace.

HOLDING TIME EVALUATION

The samples were prepared and analyzed within the method-prescribed time period from the date of collection, with appropriate considerations for sample preservation requirements.

LABORATORY BLANK EVALUATION

The laboratory blank sample results were non-detected for each of the target analytes. The blank results indicate that contaminants were not introduced to the samples during processing or analysis in the laboratory.

FIELD BLANK EVALUATION

The trip blank sample results were non-detected for each of the target analytes or were qualified as non-detected due to laboratory blank contamination. The blank results indicate that contaminants were not introduced to the samples during collection, shipment, handling, and storage.

Field blank situations requiring additional professional judgement are detailed below.

- A trip blank sample was not analyzed for gasoline range organics (GRO). However, GRO was not detected in these samples and cross-contamination is not suspected.

LABORATORY CONTROL SPIKE EVALUATION

The laboratory control sample (LCS) recoveries and, if included, the laboratory control sample duplicate (LCSD) recoveries and relative percent differences (RPD) were within the laboratory's limits of acceptance. The LCS/LCSD recoveries and RPDs indicate acceptable laboratory accuracy and precision.

MATRIX SPIKE EVALUATION

The matrix spike (MS) recoveries and, if included, the matrix spike duplicate (MSD) recoveries and RPDs were within the laboratory's limits of acceptance for target analytes for spiked project samples, with the exceptions and any necessary qualifications noted in Table 1. MS/MSDs performed on non-project parent samples, if included, are not representative of the matrix for this project and were therefore not reviewed or presented. Results were not qualified if the paired spiked sample recovery was acceptable, if high recoveries or RPDs were associated with non-detected results, if the parent sample result was greater than four times that of the spike, if the spike was diluted out, or if the exception was not associated with reported results.

SURROGATE EVALUATION

The surrogate recoveries were within the laboratory limits of acceptance. The acceptable surrogate recoveries indicate minimal matrix interference in the samples.

LABORATORY DUPLICATE EVALUATION

The laboratory prepared project samples as laboratory duplicates. The RPDs between the primary sample and the duplicate were within laboratory control limits, indicating acceptable laboratory precision. Laboratory duplicates performed on non-project samples, if included, are not representative of the matrix for this project and were therefore not reviewed.

CALIBRATION RANGE EVALUATION

All results were reported within each instrument's calibration range.

PROFESSIONAL JUDGEMENT EVALUATION

Using the validator's professional judgement, additional qualifiers, if needed, as noted in Table 2 were assigned for the following reasons.

- The hydrocarbon pattern indicates possible weathered diesel, mineral oil, or a contribution from a related component.
- The chromatographic pattern does not resemble the fuel standard used for quantitation.

OVERALL ASSESSMENT

None of the data required rejection. All the data, including any qualified data, can be used for decision-making purposes; however, the limitations indicated by the applied qualifiers should be considered when using the data. The quality of the data generated during this investigation is acceptable for the preparation of technically defensible documents.

Table 1
Matrix Spike Evaluation
UST Soil Excavation
QTS Lennox Acres
Hillsboro, Oregon

Lab Package	Spike Sample ID	Associated Sample	Analyte	Recovery (%)	Limit (%)	RPD	RPD Limit	Result	Units	ERM Qualifier
A4J1375	EXN-S-7.5-20241015 MS/MSD	None for qualification, sample ND	Benzene	126	77-121	--	--	ND	mg/kg	--

Notes:
-- = not applicable; associated data not affected
MS = matrix spike
MSD = matrix spike duplicate
mg/kg = milligrams per kilogram
ND = not detected
RPD = relative percent difference

Table 2
Professional Judgement Evaluation
UST Soil Excavation
QTS Lennox Acres
Hillsboro, Oregon

Lab Package	Sample ID	Method	Analyte	Reason	ERM Qualifier
A4J1375	EXS-S-7.5-20241015	NWTPH-Dx	Diesel	The hydrocarbon pattern indicates possible weathered diesel, mineral oil, or a contribution from a related component.	J
	EXN-S-7.5-20241015	NWTPH-Dx	Diesel		J
	Comp-SS-20241015	NWTPH-Dx	Oil	The chromatographic pattern does not resemble the fuel standard used for quantitation	NJ

Notes:
J = estimated detected result
NJ = tentatively identified and estimated - chromatogram did not resemble the standard hydrocarbon pattern

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

ANALYTICAL REPORT

Monday, October 28, 2024

Justin Dauphinais
ERM
1050 SW 6th Ave. Suite 1650
Portland, OR 97204

RE: A4J1375 - Hillsboro, Oregon - [none]

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 A4J1375, which was received by the laboratory on 10/15/2024 at 5:43:00PM.

If you have any questions concerning this report or the services we offer, please feel free to contact me by email at: pnerenberg@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 5.6 degC

This Final Report is the official version of the data results for this sample submission, unless superseded by a subsequent, labeled amended report.
All other deliverables derived from this data, including Electronic Data Deliverables (EDDs), CLP-like forms, client requested summary sheets, and all other products are considered secondary to this report.

Apex Laboratories

Philip Nerenberg, Lab Director

The results in this report apply to the samples analyzed in accordance with the chain of custody document(s) and updated by any subsequent written communications. This analytical report must be reproduced in its entirety.

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

ANALYTICAL REPORT

ERM	Project: **Hillsboro, Oregon**	
1050 SW 6th Ave. Suite 1650	Project Number: **[none]**	**Report ID:**
Portland, OR 97204	Project Manager: **Justin Dauphinais**	**A4J1375 - 10 28 24 1710**

ANALYTICAL REPORT FOR SAMPLES

SAMPLE INFORMATION

Client Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
TB-01-20241015	A4J1375-01	Soil	10/15/24 00:00	10/15/24 17:43
EXW-S-7.5-20241015	A4J1375-02	Soil	10/15/24 15:20	10/15/24 17:43
EXS-S-7.5-20241015	A4J1375-03	Soil	10/15/24 15:30	10/15/24 17:43
EXE-S-7.5-20241015	A4J1375-04	Soil	10/15/24 15:45	10/15/24 17:43
EXN-S-7.5-20241015	A4J1375-05	Soil	10/15/24 16:00	10/15/24 17:43
Comp-SS-20241015	A4J1375-06	Soil	10/15/24 00:00	10/15/24 17:43
Comp-SS-20241015 D1	A4J1375-07	Soil	10/15/24 00:00	10/15/24 17:43
Comp-SS-20241015 D2	A4J1375-08	Soil	10/15/24 00:00	10/15/24 17:43
Comp-SS-20241015 D3	A4J1375-09	Soil	10/15/24 00:00	10/15/24 17:43
Comp-SS-20241015 D4	A4J1375-10	Soil	10/15/24 00:00	10/15/24 17:43
Comp-SS-20241015 Vols Composite	A4J1375-11	Soil	10/15/24 00:00	10/15/24 17:43

Apex Laboratories

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ANALYTICAL REPORT

ERM	Project: **Hillsboro, Oregon**	
1050 SW 6th Ave. Suite 1650	Project Number: **[none]**	**Report ID:**
Portland, OR 97204	Project Manager: **Justin Dauphinais**	**A4J1375 - 10 28 24 1710**

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
EXW-S-7.5-20241015 (A4J1375-02)				**Matrix: Soil**		**Batch: 24J0998**		**CONT**
Diesel	ND	---	20.7	mg/kg dry	1	10/25/24 23:14	NWTPH-Dx	
Oil	ND	---	41.4	mg/kg dry	1	10/25/24 23:14	NWTPH-Dx	
Surrogate: o-Terphenyl (Surr)		*Recovery: 80 %*		*Limits: 50-150 %*	*1*	*10/25/24 23:14*	*NWTPH-Dx*	
EXS-S-7.5-20241015 (A4J1375-03)				**Matrix: Soil**		**Batch: 24J0998**		**CONT**
Diesel	**32.2**	---	23.3	mg/kg dry	1	10/25/24 23:55	NWTPH-Dx	**F-11**
Oil	ND	---	46.5	mg/kg dry	1	10/25/24 23:55	NWTPH-Dx	
Surrogate: o-Terphenyl (Surr)		*Recovery: 88 %*		*Limits: 50-150 %*	*1*	*10/25/24 23:55*	*NWTPH-Dx*	
EXE-S-7.5-20241015 (A4J1375-04)				**Matrix: Soil**		**Batch: 24J0998**		**CONT**
Diesel	ND	---	22.8	mg/kg dry	1	10/26/24 00:15	NWTPH-Dx	
Oil	ND	---	45.6	mg/kg dry	1	10/26/24 00:15	NWTPH-Dx	
Surrogate: o-Terphenyl (Surr)		*Recovery: 82 %*		*Limits: 50-150 %*	*1*	*10/26/24 00:15*	*NWTPH-Dx*	
EXN-S-7.5-20241015 (A4J1375-05)				**Matrix: Soil**		**Batch: 24J0998**		**CONT**
Diesel	**26.1**	---	23.3	mg/kg dry	1	10/26/24 00:36	NWTPH-Dx	**F-11**
Oil	ND	---	46.7	mg/kg dry	1	10/26/24 00:36	NWTPH-Dx	
Surrogate: o-Terphenyl (Surr)		*Recovery: 79 %*		*Limits: 50-150 %*	*1*	*10/26/24 00:36*	*NWTPH-Dx*	
Comp-SS-20241015 (A4J1375-06)				**Matrix: Soil**		**Batch: 24J0620**		**CONT**
Diesel	ND	---	21.2	mg/kg dry	1	10/16/24 07:20	NWTPH-Dx	
Oil	**149**	---	42.4	mg/kg dry	1	10/16/24 07:20	NWTPH-Dx	**F-13**
Surrogate: o-Terphenyl (Surr)		*Recovery: 79 %*		*Limits: 50-150 %*	*1*	*10/16/24 07:20*	*NWTPH-Dx*	

Apex Laboratories

Philip Nerenberg, Lab Director

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

ANALYTICAL REPORT

ERM	Project: **Hillsboro, Oregon**	
1050 SW 6th Ave. Suite 1650	Project Number: **[none]**	**Report ID:**
Portland, OR 97204	Project Manager: **Justin Dauphinais**	**A4J1375 - 10 28 24 1710**

ANALYTICAL SAMPLE RESULTS

Gasoline Range Hydrocarbons (Benzene through Naphthalene) by NWTPH-Gx

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
EXW-S-7.5-20241015 (A4J1375-02)				**Matrix: Soil**		**Batch: 24J0748**		**CONT**
Gasoline Range Organics	ND	---	5.61	mg/kg dry	50	10/18/24 14:46	NWTPH-Gx (MS)	
Surrogate: 4-Bromofluorobenzene (Sur)		*Recovery: 99 %*		*Limits: 50-150 %*	*1*	*10/18/24 14:46*	*NWTPH-Gx (MS)*	
1,4-Difluorobenzene (Sur)			*97 %*	*50-150 %*	*1*	*10/18/24 14:46*	*NWTPH-Gx (MS)*	
EXS-S-7.5-20241015 (A4J1375-03)				**Matrix: Soil**		**Batch: 24J0748**		**CONT**
Gasoline Range Organics	ND	---	6.83	mg/kg dry	50	10/18/24 15:14	NWTPH-Gx (MS)	
Surrogate: 4-Bromofluorobenzene (Sur)		*Recovery: 100 %*		*Limits: 50-150 %*	*1*	*10/18/24 15:14*	*NWTPH-Gx (MS)*	
1,4-Difluorobenzene (Sur)			*99 %*	*50-150 %*	*1*	*10/18/24 15:14*	*NWTPH-Gx (MS)*	
EXE-S-7.5-20241015 (A4J1375-04)				**Matrix: Soil**		**Batch: 24J0748**		**CONT**
Gasoline Range Organics	ND	---	6.80	mg/kg dry	50	10/18/24 15:41	NWTPH-Gx (MS)	
Surrogate: 4-Bromofluorobenzene (Sur)		*Recovery: 99 %*		*Limits: 50-150 %*	*1*	*10/18/24 15:41*	*NWTPH-Gx (MS)*	
1,4-Difluorobenzene (Sur)			*100 %*	*50-150 %*	*1*	*10/18/24 15:41*	*NWTPH-Gx (MS)*	
EXN-S-7.5-20241015 (A4J1375-05)				**Matrix: Soil**		**Batch: 24J0748**		**CONT**
Gasoline Range Organics	ND	---	7.05	mg/kg dry	50	10/18/24 12:03	NWTPH-Gx (MS)	
Surrogate: 4-Bromofluorobenzene (Sur)		*Recovery: 100 %*		*Limits: 50-150 %*	*1*	*10/18/24 12:03*	*NWTPH-Gx (MS)*	
1,4-Difluorobenzene (Sur)			*100 %*	*50-150 %*	*1*	*10/18/24 12:03*	*NWTPH-Gx (MS)*	
Comp-SS-20241015 Vols Composite (A4J1375-11)				**Matrix: Soil**		**Batch: 24J0656**		**COMP, CONT**
Gasoline Range Organics	ND	---	6.30	mg/kg dry	50	10/16/24 12:51	NWTPH-Gx (MS)	
Surrogate: 4-Bromofluorobenzene (Sur)		*Recovery: 99 %*		*Limits: 50-150 %*	*1*	*10/16/24 12:51*	*NWTPH-Gx (MS)*	
1,4-Difluorobenzene (Sur)			*102 %*	*50-150 %*	*1*	*10/16/24 12:51*	*NWTPH-Gx (MS)*	

Apex Laboratories

Philip Nerenberg, Lab Director

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

ANALYTICAL REPORT

ERM	Project: **Hillsboro, Oregon**	
1050 SW 6th Ave. Suite 1650	Project Number: **[none]**	**Report ID:**
Portland, OR 97204	Project Manager: **Justin Dauphinais**	**A4J1375 - 10 28 24 1710**

ANALYTICAL SAMPLE RESULTS

BTEX Compounds by EPA 8260D

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
TB-01-20241015 (A4J1375-01)				**Matrix: Soil**		**Batch: 24J0748**		**CONT**
Benzene	ND	---	10.0	ug/kg wet	50	10/18/24 11:35	5035A/8260D	
Toluene	ND	---	50.0	ug/kg wet	50	10/18/24 11:35	5035A/8260D	
Ethylbenzene	ND	---	25.0	ug/kg wet	50	10/18/24 11:35	5035A/8260D	
Xylenes, total	ND	---	75.0	ug/kg wet	50	10/18/24 11:35	5035A/8260D	
Surrogate: 1,4-Difluorobenzene (Surr)		*Recovery: 94 %*		*Limits: 80-120 %*	*1*	*10/18/24 11:35*	*5035A/8260D*	
Toluene-d8 (Surr)			*99 %*	*80-120 %*	*1*	*10/18/24 11:35*	*5035A/8260D*	
4-Bromofluorobenzene (Surr)			*104 %*	*79-120 %*	*1*	*10/18/24 11:35*	*5035A/8260D*	
EXW-S-7.5-20241015 (A4J1375-02)				**Matrix: Soil**		**Batch: 24J0748**		**CONT**
Benzene	ND	---	11.2	ug/kg dry	50	10/18/24 14:46	5035A/8260D	
Toluene	ND	---	56.1	ug/kg dry	50	10/18/24 14:46	5035A/8260D	
Ethylbenzene	ND	---	28.0	ug/kg dry	50	10/18/24 14:46	5035A/8260D	
Xylenes, total	ND	---	84.1	ug/kg dry	50	10/18/24 14:46	5035A/8260D	
Surrogate: 1,4-Difluorobenzene (Surr)		*Recovery: 111 %*		*Limits: 80-120 %*	*1*	*10/18/24 14:46*	*5035A/8260D*	
Toluene-d8 (Surr)			*96 %*	*80-120 %*	*1*	*10/18/24 14:46*	*5035A/8260D*	
4-Bromofluorobenzene (Surr)			*106 %*	*79-120 %*	*1*	*10/18/24 14:46*	*5035A/8260D*	
EXS-S-7.5-20241015 (A4J1375-03)				**Matrix: Soil**		**Batch: 24J0748**		**CONT**
Benzene	ND	---	13.7	ug/kg dry	50	10/18/24 15:14	5035A/8260D	
Toluene	ND	---	68.3	ug/kg dry	50	10/18/24 15:14	5035A/8260D	
Ethylbenzene	ND	---	34.1	ug/kg dry	50	10/18/24 15:14	5035A/8260D	
Xylenes, total	ND	---	102	ug/kg dry	50	10/18/24 15:14	5035A/8260D	
Surrogate: 1,4-Difluorobenzene (Surr)		*Recovery: 107 %*		*Limits: 80-120 %*	*1*	*10/18/24 15:14*	*5035A/8260D*	
Toluene-d8 (Surr)			*96 %*	*80-120 %*	*1*	*10/18/24 15:14*	*5035A/8260D*	
4-Bromofluorobenzene (Surr)			*105 %*	*79-120 %*	*1*	*10/18/24 15:14*	*5035A/8260D*	
EXE-S-7.5-20241015 (A4J1375-04)				**Matrix: Soil**		**Batch: 24J0748**		**CONT**
Benzene	ND	---	13.6	ug/kg dry	50	10/18/24 15:41	5035A/8260D	
Toluene	ND	---	68.0	ug/kg dry	50	10/18/24 15:41	5035A/8260D	
Ethylbenzene	ND	---	34.0	ug/kg dry	50	10/18/24 15:41	5035A/8260D	
Xylenes, total	ND	---	102	ug/kg dry	50	10/18/24 15:41	5035A/8260D	
Surrogate: 1,4-Difluorobenzene (Surr)		*Recovery: 104 %*		*Limits: 80-120 %*	*1*	*10/18/24 15:41*	*5035A/8260D*	
Toluene-d8 (Surr)			*96 %*	*80-120 %*	*1*	*10/18/24 15:41*	*5035A/8260D*	
4-Bromofluorobenzene (Surr)			*106 %*	*79-120 %*	*1*	*10/18/24 15:41*	*5035A/8260D*	

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Philip Nerenberg, Lab Director

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ANALYTICAL REPORT

ERM	Project: **Hillsboro, Oregon**	
1050 SW 6th Ave. Suite 1650	Project Number: **[none]**	**Report ID:**
Portland, OR 97204	Project Manager: **Justin Dauphinais**	**A4J1375 - 10 28 24 1710**

ANALYTICAL SAMPLE RESULTS

BTEX Compounds by EPA 8260D

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
EXN-S-7.5-20241015 (A4J1375-05)				**Matrix: Soil**		**Batch: 24J0748**		**CONT**
Benzene	ND	---	14.1	ug/kg dry	50	10/18/24 12:03	5035A/8260D	
Toluene	ND	---	70.5	ug/kg dry	50	10/18/24 12:03	5035A/8260D	
Ethylbenzene	ND	---	35.3	ug/kg dry	50	10/18/24 12:03	5035A/8260D	
Xylenes, total	ND	---	106	ug/kg dry	50	10/18/24 12:03	5035A/8260D	
Surrogate: 1,4-Difluorobenzene (Surr)		*Recovery:*	*93 %*	*Limits: 80-120 %*	*1*	*10/18/24 12:03*	*5035A/8260D*	
Toluene-d8 (Surr)			*98 %*	*80-120 %*	*1*	*10/18/24 12:03*	*5035A/8260D*	
4-Bromofluorobenzene (Surr)			*106 %*	*79-120 %*	*1*	*10/18/24 12:03*	*5035A/8260D*	
Comp-SS-20241015 Vols Composite (A4J1375-11)				**Matrix: Soil**		**Batch: 24J0656**		**COMP, CONT**
Benzene	ND	---	12.6	ug/kg dry	50	10/16/24 12:51	5035A/8260D	
Toluene	ND	---	63.0	ug/kg dry	50	10/16/24 12:51	5035A/8260D	
Ethylbenzene	ND	---	31.5	ug/kg dry	50	10/16/24 12:51	5035A/8260D	
Xylenes, total	ND	---	94.5	ug/kg dry	50	10/16/24 12:51	5035A/8260D	
Surrogate: 1,4-Difluorobenzene (Surr)		*Recovery:*	*92 %*	*Limits: 80-120 %*	*1*	*10/16/24 12:51*	*5035A/8260D*	
Toluene-d8 (Surr)			*99 %*	*80-120 %*	*1*	*10/16/24 12:51*	*5035A/8260D*	
4-Bromofluorobenzene (Surr)			*104 %*	*79-120 %*	*1*	*10/16/24 12:51*	*5035A/8260D*	

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Philip Nerenberg, Lab Director

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ERM	Project: **Hillsboro, Oregon**	
1050 SW 6th Ave. Suite 1650	Project Number: **[none]**	**Report ID:**
Portland, OR 97204	Project Manager: **Justin Dauphinais**	**A4J1375 - 10 28 24 1710**

ANALYTICAL SAMPLE RESULTS

Polyaromatic Hydrocarbons (PAHs) by EPA 8270E (SIM)

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
EXW-S-7.5-20241015 (A4J1375-02)				**Matrix: Soil**		**Batch: 24J0907**		**CONT**
Acenaphthene	ND	---	10.2	ug/kg dry	1	10/23/24 14:34	EPA 8270E SIM	
Acenaphthylene	ND	---	10.2	ug/kg dry	1	10/23/24 14:34	EPA 8270E SIM	
Anthracene	ND	---	10.2	ug/kg dry	1	10/23/24 14:34	EPA 8270E SIM	
Benz(a)anthracene	ND	---	10.2	ug/kg dry	1	10/23/24 14:34	EPA 8270E SIM	
Benzo(a)pyrene	ND	---	10.2	ug/kg dry	1	10/23/24 14:34	EPA 8270E SIM	
Benzo(b)fluoranthene	ND	---	10.2	ug/kg dry	1	10/23/24 14:34	EPA 8270E SIM	
Benzo(k)fluoranthene	ND	---	10.2	ug/kg dry	1	10/23/24 14:34	EPA 8270E SIM	
Benzo(g,h,i)perylene	ND	---	10.2	ug/kg dry	1	10/23/24 14:34	EPA 8270E SIM	
Chrysene	ND	---	10.2	ug/kg dry	1	10/23/24 14:34	EPA 8270E SIM	
Dibenz(a,h)anthracene	ND	---	10.2	ug/kg dry	1	10/23/24 14:34	EPA 8270E SIM	
Fluoranthene	ND	---	10.2	ug/kg dry	1	10/23/24 14:34	EPA 8270E SIM	
Fluorene	ND	---	10.2	ug/kg dry	1	10/23/24 14:34	EPA 8270E SIM	
Indeno(1,2,3-cd)pyrene	ND	---	10.2	ug/kg dry	1	10/23/24 14:34	EPA 8270E SIM	
1-Methylnaphthalene	ND	---	10.2	ug/kg dry	1	10/23/24 14:34	EPA 8270E SIM	
2-Methylnaphthalene	ND	---	10.2	ug/kg dry	1	10/23/24 14:34	EPA 8270E SIM	
Naphthalene	ND	---	10.2	ug/kg dry	1	10/23/24 14:34	EPA 8270E SIM	
Phenanthrene	ND	---	10.2	ug/kg dry	1	10/23/24 14:34	EPA 8270E SIM	
Pyrene	ND	---	10.2	ug/kg dry	1	10/23/24 14:34	EPA 8270E SIM	
Dibenzofuran	ND	---	10.2	ug/kg dry	1	10/23/24 14:34	EPA 8270E SIM	
Surrogate: 2-Fluorobiphenyl (Surr)		*Recovery:*	*82 %*	*Limits: 44-120 %*	*1*	*10/23/24 14:34*	*EPA 8270E SIM*	
p-Terphenyl-d14 (Surr)			*71 %*	*54-127 %*	*1*	*10/23/24 14:34*	*EPA 8270E SIM*	
EXS-S-7.5-20241015 (A4J1375-03)				**Matrix: Soil**		**Batch: 24J0907**		**CONT**
Acenaphthene	ND	---	11.7	ug/kg dry	1	10/23/24 14:59	EPA 8270E SIM	
Acenaphthylene	ND	---	11.7	ug/kg dry	1	10/23/24 14:59	EPA 8270E SIM	
Anthracene	ND	---	11.7	ug/kg dry	1	10/23/24 14:59	EPA 8270E SIM	
Benz(a)anthracene	ND	---	11.7	ug/kg dry	1	10/23/24 14:59	EPA 8270E SIM	
Benzo(a)pyrene	ND	---	11.7	ug/kg dry	1	10/23/24 14:59	EPA 8270E SIM	
Benzo(b)fluoranthene	ND	---	11.7	ug/kg dry	1	10/23/24 14:59	EPA 8270E SIM	
Benzo(k)fluoranthene	ND	---	11.7	ug/kg dry	1	10/23/24 14:59	EPA 8270E SIM	
Benzo(g,h,i)perylene	ND	---	11.7	ug/kg dry	1	10/23/24 14:59	EPA 8270E SIM	
Chrysene	ND	---	11.7	ug/kg dry	1	10/23/24 14:59	EPA 8270E SIM	
Dibenz(a,h)anthracene	ND	---	11.7	ug/kg dry	1	10/23/24 14:59	EPA 8270E SIM	

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Philip Nerenberg

Philip Nerenberg, Lab Director

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ANALYTICAL REPORT

ERM	Project: **Hillsboro, Oregon**	
1050 SW 6th Ave. Suite 1650	Project Number: **[none]**	**Report ID:**
Portland, OR 97204	Project Manager: **Justin Dauphinais**	**A4J1375 - 10 28 24 1710**

ANALYTICAL SAMPLE RESULTS

Polyaromatic Hydrocarbons (PAHs) by EPA 8270E (SIM)

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
EXS-S-7.5-20241015 (A4J1375-03)				**Matrix: Soil**		**Batch: 24J0907**		**CONT**
Fluoranthene	ND	---	11.7	ug/kg dry	1	10/23/24 14:59	EPA 8270E SIM	
Fluorene	ND	---	11.7	ug/kg dry	1	10/23/24 14:59	EPA 8270E SIM	
Indeno(1,2,3-cd)pyrene	ND	---	11.7	ug/kg dry	1	10/23/24 14:59	EPA 8270E SIM	
1-Methylnaphthalene	ND	---	11.7	ug/kg dry	1	10/23/24 14:59	EPA 8270E SIM	
2-Methylnaphthalene	ND	---	11.7	ug/kg dry	1	10/23/24 14:59	EPA 8270E SIM	
Naphthalene	ND	---	11.7	ug/kg dry	1	10/23/24 14:59	EPA 8270E SIM	
Phenanthrene	ND	---	11.7	ug/kg dry	1	10/23/24 14:59	EPA 8270E SIM	
Pyrene	ND	---	11.7	ug/kg dry	1	10/23/24 14:59	EPA 8270E SIM	
Dibenzofuran	ND	---	11.7	ug/kg dry	1	10/23/24 14:59	EPA 8270E SIM	
Surrogate: 2-Fluorobiphenyl (Surr)		*Recovery:*	*86 %*	*Limits: 44-120 %*	*1*	*10/23/24 14:59*	*EPA 8270E SIM*	
p-Terphenyl-d14 (Surr)			*73 %*	*54-127 %*	*1*	*10/23/24 14:59*	*EPA 8270E SIM*	
EXE-S-7.5-20241015 (A4J1375-04)				**Matrix: Soil**		**Batch: 24J0907**		**CONT**
Acenaphthene	ND	---	10.7	ug/kg dry	1	10/23/24 15:24	EPA 8270E SIM	
Acenaphthylene	ND	---	10.7	ug/kg dry	1	10/23/24 15:24	EPA 8270E SIM	
Anthracene	ND	---	10.7	ug/kg dry	1	10/23/24 15:24	EPA 8270E SIM	
Benz(a)anthracene	ND	---	10.7	ug/kg dry	1	10/23/24 15:24	EPA 8270E SIM	
Benzo(a)pyrene	ND	---	10.7	ug/kg dry	1	10/23/24 15:24	EPA 8270E SIM	
Benzo(b)fluoranthene	ND	---	10.7	ug/kg dry	1	10/23/24 15:24	EPA 8270E SIM	
Benzo(k)fluoranthene	ND	---	10.7	ug/kg dry	1	10/23/24 15:24	EPA 8270E SIM	
Benzo(g,h,i)perylene	ND	---	10.7	ug/kg dry	1	10/23/24 15:24	EPA 8270E SIM	
Chrysene	ND	---	10.7	ug/kg dry	1	10/23/24 15:24	EPA 8270E SIM	
Dibenz(a,h)anthracene	ND	---	10.7	ug/kg dry	1	10/23/24 15:24	EPA 8270E SIM	
Fluoranthene	ND	---	10.7	ug/kg dry	1	10/23/24 15:24	EPA 8270E SIM	
Fluorene	ND	---	10.7	ug/kg dry	1	10/23/24 15:24	EPA 8270E SIM	
Indeno(1,2,3-cd)pyrene	ND	---	10.7	ug/kg dry	1	10/23/24 15:24	EPA 8270E SIM	
1-Methylnaphthalene	ND	---	10.7	ug/kg dry	1	10/23/24 15:24	EPA 8270E SIM	
2-Methylnaphthalene	ND	---	10.7	ug/kg dry	1	10/23/24 15:24	EPA 8270E SIM	
Naphthalene	ND	---	10.7	ug/kg dry	1	10/23/24 15:24	EPA 8270E SIM	
Phenanthrene	ND	---	10.7	ug/kg dry	1	10/23/24 15:24	EPA 8270E SIM	
Pyrene	ND	---	10.7	ug/kg dry	1	10/23/24 15:24	EPA 8270E SIM	
Dibenzofuran	ND	---	10.7	ug/kg dry	1	10/23/24 15:24	EPA 8270E SIM	
Surrogate: 2-Fluorobiphenyl (Surr)		*Recovery:*	*80 %*	*Limits: 44-120 %*	*1*	*10/23/24 15:24*	*EPA 8270E SIM*	
p-Terphenyl-d14 (Surr)			*66 %*	*54-127 %*	*1*	*10/23/24 15:24*	*EPA 8270E SIM*	

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Philip Nerenberg, Lab Director

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ERM	Project: **Hillsboro, Oregon**	
1050 SW 6th Ave. Suite 1650	Project Number: **[none]**	**Report ID:**
Portland, OR 97204	Project Manager: **Justin Dauphinais**	**A4J1375 - 10 28 24 1710**

ANALYTICAL SAMPLE RESULTS

Polyaromatic Hydrocarbons (PAHs) by EPA 8270E (SIM)

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
EXE-S-7.5-20241015 (A4J1375-04)				**Matrix: Soil**		**Batch: 24J0907**		**CONT**
EXN-S-7.5-20241015 (A4J1375-05)				**Matrix: Soil**		**Batch: 24J0907**		**CONT**
Acenaphthene	ND	---	12.1	ug/kg dry	1	10/23/24 15:49	EPA 8270E SIM	
Acenaphthylene	ND	---	12.1	ug/kg dry	1	10/23/24 15:49	EPA 8270E SIM	
Anthracene	ND	---	12.1	ug/kg dry	1	10/23/24 15:49	EPA 8270E SIM	
Benz(a)anthracene	ND	---	12.1	ug/kg dry	1	10/23/24 15:49	EPA 8270E SIM	
Benzo(a)pyrene	ND	---	12.1	ug/kg dry	1	10/23/24 15:49	EPA 8270E SIM	
Benzo(b)fluoranthene	ND	---	12.1	ug/kg dry	1	10/23/24 15:49	EPA 8270E SIM	
Benzo(k)fluoranthene	ND	---	12.1	ug/kg dry	1	10/23/24 15:49	EPA 8270E SIM	
Benzo(g,h,i)perylene	ND	---	12.1	ug/kg dry	1	10/23/24 15:49	EPA 8270E SIM	
Chrysene	ND	---	12.1	ug/kg dry	1	10/23/24 15:49	EPA 8270E SIM	
Dibenz(a,h)anthracene	ND	---	12.1	ug/kg dry	1	10/23/24 15:49	EPA 8270E SIM	
Fluoranthene	ND	---	12.1	ug/kg dry	1	10/23/24 15:49	EPA 8270E SIM	
Fluorene	ND	---	12.1	ug/kg dry	1	10/23/24 15:49	EPA 8270E SIM	
Indeno(1,2,3-cd)pyrene	ND	---	12.1	ug/kg dry	1	10/23/24 15:49	EPA 8270E SIM	
1-Methylnaphthalene	ND	---	12.1	ug/kg dry	1	10/23/24 15:49	EPA 8270E SIM	
2-Methylnaphthalene	ND	---	12.1	ug/kg dry	1	10/23/24 15:49	EPA 8270E SIM	
Naphthalene	ND	---	12.1	ug/kg dry	1	10/23/24 15:49	EPA 8270E SIM	
Phenanthrene	ND	---	12.1	ug/kg dry	1	10/23/24 15:49	EPA 8270E SIM	
Pyrene	ND	---	12.1	ug/kg dry	1	10/23/24 15:49	EPA 8270E SIM	
Dibenzofuran	ND	---	12.1	ug/kg dry	1	10/23/24 15:49	EPA 8270E SIM	
Surrogate: 2-Fluorobiphenyl (Surr)		*Recovery:*	*76 %*	*Limits: 44-120 %*	*1*	*10/23/24 15:49*	*EPA 8270E SIM*	
p-Terphenyl-d14 (Surr)			*64 %*	*54-127 %*	*1*	*10/23/24 15:49*	*EPA 8270E SIM*	
Comp-SS-20241015 (A4J1375-06)				**Matrix: Soil**		**Batch: 24J0668**		**CONT**
Acenaphthene	ND	---	10.3	ug/kg dry	1	10/16/24 17:34	EPA 8270E SIM	
Acenaphthylene	ND	---	10.3	ug/kg dry	1	10/16/24 17:34	EPA 8270E SIM	
Anthracene	ND	---	10.3	ug/kg dry	1	10/16/24 17:34	EPA 8270E SIM	
Benz(a)anthracene	ND	---	16.4	ug/kg dry	1	10/16/24 17:34	EPA 8270E SIM	R-02
Benzo(a)pyrene	ND	---	10.3	ug/kg dry	1	10/16/24 17:34	EPA 8270E SIM	
Benzo(b)fluoranthene	ND	---	10.3	ug/kg dry	1	10/16/24 17:34	EPA 8270E SIM	
Benzo(k)fluoranthene	ND	---	10.3	ug/kg dry	1	10/16/24 17:34	EPA 8270E SIM	
Benzo(g,h,i)perylene	ND	---	10.3	ug/kg dry	1	10/16/24 17:34	EPA 8270E SIM	
Chrysene	ND	---	17.5	ug/kg dry	1	10/16/24 17:34	EPA 8270E SIM	R-02

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ANALYTICAL REPORT

ERM	Project: **Hillsboro, Oregon**	
1050 SW 6th Ave. Suite 1650	Project Number: **[none]**	**Report ID:**
Portland, OR 97204	Project Manager: **Justin Dauphinais**	**A4J1375 - 10 28 24 1710**

ANALYTICAL SAMPLE RESULTS

Polyaromatic Hydrocarbons (PAHs) by EPA 8270E (SIM)

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
Comp-SS-20241015 (A4J1375-06)				**Matrix: Soil**		**Batch: 24J0668**		**CONT**
Dibenz(a,h)anthracene	ND	---	10.3	ug/kg dry	1	10/16/24 17:34	EPA 8270E SIM	
Fluoranthene	**30.8**	---	10.3	ug/kg dry	1	10/16/24 17:34	EPA 8270E SIM	
Fluorene	ND	---	10.3	ug/kg dry	1	10/16/24 17:34	EPA 8270E SIM	
Indeno(1,2,3-cd)pyrene	ND	---	10.3	ug/kg dry	1	10/16/24 17:34	EPA 8270E SIM	
1-Methylnaphthalene	ND	---	10.3	ug/kg dry	1	10/16/24 17:34	EPA 8270E SIM	
2-Methylnaphthalene	ND	---	10.3	ug/kg dry	1	10/16/24 17:34	EPA 8270E SIM	
Naphthalene	ND	---	10.3	ug/kg dry	1	10/16/24 17:34	EPA 8270E SIM	
Phenanthrene	**13.1**	---	10.3	ug/kg dry	1	10/16/24 17:34	EPA 8270E SIM	
Pyrene	**20.0**	---	10.3	ug/kg dry	1	10/16/24 17:34	EPA 8270E SIM	
Dibenzofuran	ND	---	10.3	ug/kg dry	1	10/16/24 17:34	EPA 8270E SIM	
Surrogate: 2-Fluorobiphenyl (Surr)		*Recovery:*	*81 %*	*Limits: 44-120 %*	*1*	*10/16/24 17:34*	*EPA 8270E SIM*	
p-Terphenyl-d14 (Surr)			*77 %*	*54-127 %*	*1*	*10/16/24 17:34*	*EPA 8270E SIM*	

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Philip Nerenberg

Philip Nerenberg, Lab Director

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

ANALYTICAL REPORT

ERM	Project: **Hillsboro, Oregon**	
1050 SW 6th Ave. Suite 1650	Project Number: **[none]**	**Report ID:**
Portland, OR 97204	Project Manager: **Justin Dauphinais**	**A4J1375 - 10 28 24 1710**

ANALYTICAL SAMPLE RESULTS

Total Metals by EPA 6020B (ICPMS)

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
EXW-S-7.5-20241015 (A4J1375-02)				**Matrix: Soil**				
Batch: 24J0987								
Lead	**10.9**	---	0.252	mg/kg dry	10	10/25/24 11:39	EPA 6020B	**CONT**
EXS-S-7.5-20241015 (A4J1375-03)				**Matrix: Soil**				
Batch: 24J0987								
Lead	**13.0**	---	0.283	mg/kg dry	10	10/25/24 11:44	EPA 6020B	**CONT**
EXE-S-7.5-20241015 (A4J1375-04)				**Matrix: Soil**				
Batch: 24J0987								
Lead	**12.4**	---	0.263	mg/kg dry	10	10/25/24 11:50	EPA 6020B	**CONT**
EXN-S-7.5-20241015 (A4J1375-05)				**Matrix: Soil**				
Batch: 24J0987								
Lead	**12.7**	---	0.297	mg/kg dry	10	10/25/24 11:55	EPA 6020B	**CONT**
Comp-SS-20241015 (A4J1375-06)				**Matrix: Soil**				
Batch: 24J0654								
Lead	**14.1**	---	0.239	mg/kg dry	10	10/16/24 14:19	EPA 6020B	**CONT**

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ORELAP ID: **OR100062**

ANALYTICAL REPORT

ERM	Project: **Hillsboro, Oregon**	
1050 SW 6th Ave. Suite 1650	Project Number: **[none]**	**Report ID:**
Portland, OR 97204	Project Manager: **Justin Dauphinais**	**A4J1375 - 10 28 24 1710**

ANALYTICAL SAMPLE RESULTS

Percent Dry Weight

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
EXW-S-7.5-20241015 (A4J1375-02)				**Matrix: Soil**		**Batch: 24J0653**		**CONT**
% Solids	**83.1**	---	1.00	%	1	10/17/24 05:47	EPA 8000D	
EXS-S-7.5-20241015 (A4J1375-03)				**Matrix: Soil**		**Batch: 24J0653**		**CONT**
% Solids	**75.0**	---	1.00	%	1	10/17/24 05:47	EPA 8000D	
EXE-S-7.5-20241015 (A4J1375-04)				**Matrix: Soil**		**Batch: 24J0653**		**CONT**
% Solids	**78.2**	---	1.00	%	1	10/17/24 05:47	EPA 8000D	
EXN-S-7.5-20241015 (A4J1375-05)				**Matrix: Soil**		**Batch: 24J0653**		**CONT**
% Solids	**73.6**	---	1.00	%	1	10/17/24 05:47	EPA 8000D	
Comp-SS-20241015 (A4J1375-06)				**Matrix: Soil**		**Batch: 24J0593**		**CONT**
% Solids	**85.4**	---	1.00	%	1	10/16/24 07:48	EPA 8000D	
Comp-SS-20241015 Vols Composite (A4J1375-11)				**Matrix: Soil**		**Batch: 24J0593**		**CONT**
% Solids	**85.4**	---	1.00	%	1	10/16/24 07:48	EPA 8000D	**A-01a**

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ERM	Project: **Hillsboro, Oregon**	
1050 SW 6th Ave. Suite 1650	Project Number: **[none]**	**Report ID:**
Portland, OR 97204	Project Manager: **Justin Dauphinais**	**A4J1375 - 10 28 24 1710**

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 24J0620 - EPA 3546 (Fuels)								Soil				
Blank (24J0620-BLK1)			Prepared: 10/15/24 12:24		Analyzed: 10/15/24 19:26							
NWTPH-Dx												
Diesel	ND	---	20.0	mg/kg wet	1	---	---	---	---	---	---	
Oil	ND	---	40.0	mg/kg wet	1	---	---	---	---	---	---	
Surr: o-Terphenyl (Surr)			*Recovery: 84 %*		*Limits: 50-150 %*		*Dilution: 1x*					
LCS (24J0620-BS1)			Prepared: 10/15/24 12:24		Analyzed: 10/15/24 19:47							
NWTPH-Dx												
Diesel	117	---	20.0	mg/kg wet	1	125	---	93	38-132%	---	---	
Surr: o-Terphenyl (Surr)			*Recovery: 94 %*		*Limits: 50-150 %*		*Dilution: 1x*					
Duplicate (24J0620-DUP2)			Prepared: 10/15/24 18:18		Analyzed: 10/16/24 08:07							CONT
QC Source Sample: Comp-SS-20241015 (A4J1375-06)												
NWTPH-Dx												
Diesel	ND	---	21.0	mg/kg dry	1	---	ND	---	---	---	30%	
Oil	**130**	---	42.0	mg/kg dry	1	---	149	---	---	14	30%	F-13
Surr: o-Terphenyl (Surr)			*Recovery: 83 %*		*Limits: 50-150 %*		*Dilution: 1x*					
Duplicate (24J0620-DUP3)			Prepared: 10/15/24 12:24		Analyzed: 10/16/24 08:58							CONT
QC Source Sample: Non-SDG (A4J1342-01RE1)												
Diesel	ND	---	21.2	mg/kg dry	1	---	ND	---	---	---	30%	
Oil	**205**	---	42.4	mg/kg dry	1	---	173	---	---	17	30%	F-03
Surr: o-Terphenyl (Surr)			*Recovery: 85 %*		*Limits: 50-150 %*		*Dilution: 1x*					
Batch 24J0998 - EPA 3546 (Fuels)								Soil				
Blank (24J0998-BLK1)			Prepared: 10/25/24 07:48		Analyzed: 10/25/24 20:32							
NWTPH-Dx												
Diesel	ND	---	20.0	mg/kg wet	1	---	---	---	---	---	---	
Oil	ND	---	40.0	mg/kg wet	1	---	---	---	---	---	---	
Mineral Oil	ND	---	40.0	mg/kg wet	1	---	---	---	---	---	---	
Surr: o-Terphenyl (Surr)			*Recovery: 98 %*		*Limits: 50-150 %*		*Dilution: 1x*					
LCS (24J0998-BS1)			Prepared: 10/25/24 07:48		Analyzed: 10/25/24 20:52							

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ERM	Project: **Hillsboro, Oregon**	
1050 SW 6th Ave. Suite 1650	Project Number: **[none]**	**Report ID:**
Portland, OR 97204	Project Manager: **Justin Dauphinais**	**A4J1375 - 10 28 24 1710**

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 24J0998 - EPA 3546 (Fuels)							**Soil**					
LCS (24J0998-BS1)			Prepared: 10/25/24 07:48		Analyzed: 10/25/24 20:52							
NWTPH-Dx												
Diesel	108	---	20.0	mg/kg wet	1	125	---	86	38-132%	---	---	
Surr: o-Terphenyl (Surr)		*Recovery: 103 %*	*Limits: 50-150 %*		*Dilution: 1x*							
Duplicate (24J0998-DUP1)			Prepared: 10/25/24 07:48		Analyzed: 10/25/24 21:33							
QC Source Sample: Non-SDG (A4J1703-01)												
Diesel	**145**	---	21.3	mg/kg dry	1	---	173	---	---	18	30%	
Oil	ND	---	42.5	mg/kg dry	1	---	ND	---	---	---	30%	
Mineral Oil	ND	---	42.5	mg/kg dry	1	---	ND	---	---	---	30%	
Surr: o-Terphenyl (Surr)		*Recovery: 93 %*	*Limits: 50-150 %*		*Dilution: 1x*							
Duplicate (24J0998-DUP2)			Prepared: 10/25/24 11:48		Analyzed: 10/26/24 05:41							
QC Source Sample: Non-SDG (A4J1718-02)												
Diesel	ND	---	18.7	mg/kg dry	1	---	ND	---	---	---	30%	
Oil	ND	---	37.5	mg/kg dry	1	---	28.6	---	---	***	**30%**	
Mineral Oil	ND	---	37.5	mg/kg dry	1	---	ND	---	---	---	30%	
Surr: o-Terphenyl (Surr)		*Recovery: 90 %*	*Limits: 50-150 %*		*Dilution: 1x*							

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Portland, OR 97204	Project Manager: **Justin Dauphinais**	**A4J1375 - 10 28 24 1710**

QUALITY CONTROL (QC) SAMPLE RESULTS

Gasoline Range Hydrocarbons (Benzene through Naphthalene) by NWTPH-Gx

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 24J0656 - EPA 5035A									Soil			
Blank (24J0656-BLK1)			Prepared: 10/16/24 10:00 Analyzed: 10/16/24 12:24									
NWTPH-Gx (MS)												
Gasoline Range Organics	ND	---	5.00	mg/kg wet	50	---	---	---	---	---	---	
Surr: 4-Bromofluorobenzene (Sur)			*Recovery: 107 %*		*Limits: 50-150 %*				*Dilution: 1x*			
1,4-Difluorobenzene (Sur)			*103 %*		*50-150 %*				*"*			
LCS (24J0656-BS2)			Prepared: 10/16/24 10:00 Analyzed: 10/16/24 11:57									
NWTPH-Gx (MS)												
Gasoline Range Organics	26.2	---	5.00	mg/kg wet	50	25.0	---	105	80-120%	---	---	
Surr: 4-Bromofluorobenzene (Sur)			*Recovery: 105 %*		*Limits: 50-150 %*				*Dilution: 1x*			
1,4-Difluorobenzene (Sur)			*101 %*		*50-150 %*				*"*			

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1050 SW 6th Ave. Suite 1650	Project Number: **[none]**	**Report ID:**
Portland, OR 97204	Project Manager: **Justin Dauphinais**	**A4J1375 - 10 28 24 1710**

QUALITY CONTROL (QC) SAMPLE RESULTS

Gasoline Range Hydrocarbons (Benzene through Naphthalene) by NWTPH-Gx

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 24J0748 - EPA 5035A												**Soil**
Blank (24J0748-BLK1)			Prepared: 10/18/24 08:00		Analyzed: 10/18/24 11:08							
NWTPH-Gx (MS)												
Gasoline Range Organics	ND	---	5.00	mg/kg wet	50	---	---	---	---	---	---	
Surr: 4-Bromofluorobenzene (Sur)		*Recovery:*	*94 %*	*Limits:*	*50-150 %*		*Dilution:*	*1x*				
1,4-Difluorobenzene (Sur)			*99 %*		*50-150 %*			*"*				
LCS (24J0748-BS2)			Prepared: 10/18/24 08:00		Analyzed: 10/18/24 10:41							
NWTPH-Gx (MS)												
Gasoline Range Organics	21.7	---	5.00	mg/kg wet	50	25.0	---	87	80-120%	---	---	
Surr: 4-Bromofluorobenzene (Sur)		*Recovery:*	*97 %*	*Limits:*	*50-150 %*		*Dilution:*	*1x*				
1,4-Difluorobenzene (Sur)			*99 %*		*50-150 %*			*"*				
Duplicate (24J0748-DUP1)			Prepared: 10/17/24 16:45		Analyzed: 10/18/24 13:24							**H-01, V-16, V-21**
QC Source Sample: Non-SDG (A4I1524-01)												
Gasoline Range Organics	**1570**	---	24.1	mg/kg dry	200	---	1940	---	---	21	30%	
Surr: 4-Bromofluorobenzene (Sur)		*Recovery:*	*107 %*	*Limits:*	*50-150 %*		*Dilution:*	*1x*				
1,4-Difluorobenzene (Sur)			*100 %*		*50-150 %*			*"*				

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ANALYTICAL REPORT

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Portland, OR 97204	Project Manager: **Justin Dauphinais**	**A4J1375 - 10 28 24 1710**

QUALITY CONTROL (QC) SAMPLE RESULTS

BTEX Compounds by EPA 8260D

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 24J0656 - EPA 5035A									Soil			
Blank (24J0656-BLK1)			Prepared: 10/16/24 10:00 Analyzed: 10/16/24 12:24									
5035A/8260D												
Benzene	ND	---	10.0	ug/kg wet	50	---	---	---	---	---	---	
Toluene	ND	---	50.0	ug/kg wet	50	---	---	---	---	---	---	
Ethylbenzene	ND	---	25.0	ug/kg wet	50	---	---	---	---	---	---	
Xylenes, total	ND	---	75.0	ug/kg wet	50	---	---	---	---	---	---	
Surr: 1,4-Difluorobenzene (Surr)		*Recovery:*	*91 %*	*Limits:*	*80-120 %*		*Dilution:*	*1x*				
Toluene-d8 (Surr)			*95 %*		*80-120 %*			*"*				
4-Bromofluorobenzene (Surr)			*109 %*		*79-120 %*			*"*				
LCS (24J0656-BS1)			Prepared: 10/16/24 10:00 Analyzed: 10/16/24 11:30									
5035A/8260D												
Benzene	930	---	10.0	ug/kg wet	50	1000	---	93	80-120%	---	---	
Toluene	996	---	50.0	ug/kg wet	50	1000	---	100	80-120%	---	---	
Ethylbenzene	1120	---	25.0	ug/kg wet	50	1000	---	112	80-120%	---	---	
Xylenes, total	3320	---	75.0	ug/kg wet	50	3000	---	111	80-120%	---	---	
Surr: 1,4-Difluorobenzene (Surr)		*Recovery:*	*89 %*	*Limits:*	*80-120 %*		*Dilution:*	*1x*				
Toluene-d8 (Surr)			*101 %*		*80-120 %*			*"*				
4-Bromofluorobenzene (Surr)			*92 %*		*79-120 %*			*"*				
Matrix Spike (24J0656-MS1)			Prepared: 10/09/24 12:00 Analyzed: 10/16/24 21:58									
QC Source Sample: Non-SDG (A4J1208-01)												
5035A/8260D												
Benzene	2100	---	16.0	ug/kg dry	50	1600	ND	**132**	**77-121%**	---	---	Q-01
Toluene	1630	---	79.9	ug/kg dry	50	1600	ND	102	77-121%	---	---	
Ethylbenzene	1790	---	40.0	ug/kg dry	50	1600	ND	112	76-122%	---	---	
Xylenes, total	5370	---	120	ug/kg dry	50	4790	ND	112	78-124%	---	---	
Surr: 1,4-Difluorobenzene (Surr)		*Recovery:*	*116 %*	*Limits:*	*80-120 %*		*Dilution:*	*1x*				
Toluene-d8 (Surr)			*98 %*		*80-120 %*			*"*				
4-Bromofluorobenzene (Surr)			*103 %*		*79-120 %*			*"*				

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ANALYTICAL REPORT

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1050 SW 6th Ave. Suite 1650	Project Number: **[none]**	**Report ID:**
Portland, OR 97204	Project Manager: **Justin Dauphinais**	**A4J1375 - 10 28 24 1710**

QUALITY CONTROL (QC) SAMPLE RESULTS

BTEX Compounds by EPA 8260D

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 24J0748 - EPA 5035A							**Soil**					
Blank (24J0748-BLK1)			Prepared: 10/18/24 08:00		Analyzed: 10/18/24 11:08							
5035A/8260D												
Benzene	ND	---	10.0	ug/kg wet	50	---	---	---	---	---	---	
Toluene	ND	---	50.0	ug/kg wet	50	---	---	---	---	---	---	
Ethylbenzene	ND	---	25.0	ug/kg wet	50	---	---	---	---	---	---	
Xylenes, total	ND	---	75.0	ug/kg wet	50	---	---	---	---	---	---	
Surr: 1,4-Difluorobenzene (Surr)		*Recovery:*	*95 %*	*Limits:*	*80-120 %*		*Dilution:*	*1x*				
Toluene-d8 (Surr)			*99 %*		*80-120 %*			*"*				
4-Bromofluorobenzene (Surr)			*103 %*		*79-120 %*			*"*				
LCS (24J0748-BS1)			Prepared: 10/18/24 08:00		Analyzed: 10/18/24 10:13							
5035A/8260D												
Benzene	1060	---	10.0	ug/kg wet	50	1000	---	106	80-120%	---	---	
Toluene	1020	---	50.0	ug/kg wet	50	1000	---	102	80-120%	---	---	
Ethylbenzene	1140	---	25.0	ug/kg wet	50	1000	---	114	80-120%	---	---	
Xylenes, total	3400	---	75.0	ug/kg wet	50	3000	---	113	80-120%	---	---	
Surr: 1,4-Difluorobenzene (Surr)		*Recovery:*	*96 %*	*Limits:*	*80-120 %*		*Dilution:*	*1x*				
Toluene-d8 (Surr)			*100 %*		*80-120 %*			*"*				
4-Bromofluorobenzene (Surr)			*96 %*		*79-120 %*			*"*				
Duplicate (24J0748-DUP1)			Prepared: 10/17/24 16:45		Analyzed: 10/18/24 13:24							**H-01, V-16, V-21**
QC Source Sample: Non-SDG (A4I1524-01)												
Benzene	ND	---	48.2	ug/kg dry	200	---	ND	---	---	---	30%	
Toluene	ND	---	241	ug/kg dry	200	---	ND	---	---	---	30%	
Ethylbenzene	**323**	---	120	ug/kg dry	200	---	320	---	---	0.7	30%	
Xylenes, total	**12400**	---	361	ug/kg dry	200	---	12700	---	---	2	30%	
Surr: 1,4-Difluorobenzene (Surr)		*Recovery:*	*112 %*	*Limits:*	*80-120 %*		*Dilution:*	*1x*				
Toluene-d8 (Surr)			*93 %*		*80-120 %*			*"*				
4-Bromofluorobenzene (Surr)			*103 %*		*79-120 %*			*"*				
Matrix Spike (24J0748-MS1)			Prepared: 10/15/24 16:00		Analyzed: 10/18/24 13:52							**CONT**
QC Source Sample: EXN-S-7.5-20241015 (A4J1375-05)												
5035A/8260D												
Benzene	1780	---	14.1	ug/kg dry	50	1410	ND	**126**	**77-121%**	---	---	Q-01

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ANALYTICAL REPORT

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1050 SW 6th Ave. Suite 1650	Project Number: **[none]**	**Report ID:**
Portland, OR 97204	Project Manager: **Justin Dauphinais**	**A4J1375 - 10 28 24 1710**

QUALITY CONTROL (QC) SAMPLE RESULTS

BTEX Compounds by EPA 8260D

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 24J0748 - EPA 5035A							**Soil**					
Matrix Spike (24J0748-MS1)			Prepared: 10/15/24 16:00		Analyzed: 10/18/24 13:52							**CONT**
QC Source Sample: EXN-S-7.5-20241015 (A4J1375-05)												
Toluene	1400	---	70.5	ug/kg dry	50	1410	ND	99	77-121%	---	---	
Ethylbenzene	1530	---	35.3	ug/kg dry	50	1410	ND	109	76-122%	---	---	
Xylenes, total	4570	---	106	ug/kg dry	50	4230	ND	108	78-124%	---	---	
Surr: 1,4-Difluorobenzene (Surr)			*Recovery: 114 %*		*Limits: 80-120 %*				*Dilution: 1x*			
Toluene-d8 (Surr)			*95 %*		*80-120 %*				*"*			
4-Bromofluorobenzene (Surr)			*103 %*		*79-120 %*				*"*			

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Philip Nerenberg

Philip Nerenberg, Lab Director

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

ANALYTICAL REPORT

ERM	Project: **Hillsboro, Oregon**	
1050 SW 6th Ave. Suite 1650	Project Number: **[none]**	**Report ID:**
Portland, OR 97204	Project Manager: **Justin Dauphinais**	**A4J1375 - 10 28 24 1710**

QUALITY CONTROL (QC) SAMPLE RESULTS

Polyaromatic Hydrocarbons (PAHs) by EPA 8270E (SIM)

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 24J0668 - EPA 3546							Soil					
Blank (24J0668-BLK1)			Prepared: 10/16/24 12:03 Analyzed: 10/16/24 16:44									
EPA 8270E SIM												
Acenaphthene	ND	---	10.0	ug/kg wet	1	---	---	---	---	---	---	
Acenaphthylene	ND	---	10.0	ug/kg wet	1	---	---	---	---	---	---	
Anthracene	ND	---	10.0	ug/kg wet	1	---	---	---	---	---	---	
Benz(a)anthracene	ND	---	10.0	ug/kg wet	1	---	---	---	---	---	---	
Benzo(a)pyrene	ND	---	10.0	ug/kg wet	1	---	---	---	---	---	---	
Benzo(b)fluoranthene	ND	---	10.0	ug/kg wet	1	---	---	---	---	---	---	
Benzo(k)fluoranthene	ND	---	10.0	ug/kg wet	1	---	---	---	---	---	---	
Benzo(g,h,i)perylene	ND	---	10.0	ug/kg wet	1	---	---	---	---	---	---	
Chrysene	ND	---	10.0	ug/kg wet	1	---	---	---	---	---	---	
Dibenz(a,h)anthracene	ND	---	10.0	ug/kg wet	1	---	---	---	---	---	---	
Fluoranthene	ND	---	10.0	ug/kg wet	1	---	---	---	---	---	---	
Fluorene	ND	---	10.0	ug/kg wet	1	---	---	---	---	---	---	
Indeno(1,2,3-cd)pyrene	ND	---	10.0	ug/kg wet	1	---	---	---	---	---	---	
1-Methylnaphthalene	ND	---	10.0	ug/kg wet	1	---	---	---	---	---	---	
2-Methylnaphthalene	ND	---	10.0	ug/kg wet	1	---	---	---	---	---	---	
Naphthalene	ND	---	10.0	ug/kg wet	1	---	---	---	---	---	---	
Phenanthrene	ND	---	10.0	ug/kg wet	1	---	---	---	---	---	---	
Pyrene	ND	---	10.0	ug/kg wet	1	---	---	---	---	---	---	
Dibenzofuran	ND	---	10.0	ug/kg wet	1	---	---	---	---	---	---	
Surr: 2-Fluorobiphenyl (Surr)		*Recovery: 83 %*	*Limits: 44-120 %*		*Dilution: 1x*							
p-Terphenyl-d14 (Surr)			*90 %*	*54-127 %*		*"*						
LCS (24J0668-BS1)			Prepared: 10/16/24 12:03 Analyzed: 10/16/24 17:09									
EPA 8270E SIM												
Acenaphthene	708	---	10.0	ug/kg wet	1	800	---	89	40-123%	---	---	
Acenaphthylene	664	---	10.0	ug/kg wet	1	800	---	83	32-132%	---	---	
Anthracene	709	---	10.0	ug/kg wet	1	800	---	89	47-123%	---	---	
Benz(a)anthracene	701	---	10.0	ug/kg wet	1	800	---	88	49-126%	---	---	
Benzo(a)pyrene	720	---	10.0	ug/kg wet	1	800	---	90	45-129%	---	---	
Benzo(b)fluoranthene	672	---	10.0	ug/kg wet	1	800	---	84	45-132%	---	---	
Benzo(k)fluoranthene	762	---	10.0	ug/kg wet	1	800	---	95	47-132%	---	---	
Benzo(g,h,i)perylene	739	---	10.0	ug/kg wet	1	800	---	92	43-134%	---	---	
Chrysene	746	---	10.0	ug/kg wet	1	800	---	93	50-124%	---	---	

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

ANALYTICAL REPORT

ERM	Project: **Hillsboro, Oregon**	
1050 SW 6th Ave. Suite 1650	Project Number: **[none]**	**Report ID:**
Portland, OR 97204	Project Manager: **Justin Dauphinais**	**A4J1375 - 10 28 24 1710**

QUALITY CONTROL (QC) SAMPLE RESULTS

Polyaromatic Hydrocarbons (PAHs) by EPA 8270E (SIM)

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 24J0668 - EPA 3546							Soil					
LCS (24J0668-BS1)			Prepared: 10/16/24 12:03		Analyzed: 10/16/24 17:09							
Dibenz(a,h)anthracene	796	---	10.0	ug/kg wet	1	800	---	99	45-134%	---	---	
Fluoranthene	719	---	10.0	ug/kg wet	1	800	---	90	50-127%	---	---	
Fluorene	669	---	10.0	ug/kg wet	1	800	---	84	43-125%	---	---	
Indeno(1,2,3-cd)pyrene	769	---	10.0	ug/kg wet	1	800	---	96	45-133%	---	---	
1-Methylnaphthalene	678	---	10.0	ug/kg wet	1	800	---	85	40-120%	---	---	
2-Methylnaphthalene	706	---	10.0	ug/kg wet	1	800	---	88	38-122%	---	---	
Naphthalene	687	---	10.0	ug/kg wet	1	800	---	86	35-123%	---	---	
Phenanthrene	715	---	10.0	ug/kg wet	1	800	---	89	50-121%	---	---	
Pyrene	711	---	10.0	ug/kg wet	1	800	---	89	47-127%	---	---	
Dibenzofuran	672	---	10.0	ug/kg wet	1	800	---	84	44-120%	---	---	
Surr: 2-Fluorobiphenyl (Surr)			*Recovery: 89 %*		*Limits: 44-120 %*				*Dilution: 1x*			
p-Terphenyl-d14 (Surr)			*91 %*		*54-127 %*				*"*			
Duplicate (24J0668-DUP1)			Prepared: 10/16/24 12:03		Analyzed: 10/16/24 17:59							**CONT**
QC Source Sample: Comp-SS-20241015 (A4J1375-06)												
EPA 8270E SIM												
Acenaphthene	ND	---	10.5	ug/kg dry	1	---	ND	---	---	---	30%	
Acenaphthylene	ND	---	10.5	ug/kg dry	1	---	ND	---	---	---	30%	
Anthracene	ND	---	10.5	ug/kg dry	1	---	ND	---	---	---	30%	
Benz(a)anthracene	ND	---	13.7	ug/kg dry	1	---	ND	---	---	---	30%	R-02
Benzo(a)pyrene	ND	---	10.5	ug/kg dry	1	---	ND	---	---	---	30%	
Benzo(b)fluoranthene	ND	---	10.5	ug/kg dry	1	---	7.06	---	---	***	30%	
Benzo(k)fluoranthene	ND	---	10.5	ug/kg dry	1	---	ND	---	---	---	30%	
Benzo(g,h,i)perylene	ND	---	10.5	ug/kg dry	1	---	ND	---	---	---	30%	
Chrysene	ND	---	15.8	ug/kg dry	1	---	ND	---	---	---	30%	R-02
Dibenz(a,h)anthracene	ND	---	10.5	ug/kg dry	1	---	ND	---	---	---	30%	
Fluoranthene	**24.3**	---	10.5	ug/kg dry	1	---	30.8	---	---	24	30%	
Fluorene	ND	---	10.5	ug/kg dry	1	---	ND	---	---	---	30%	
Indeno(1,2,3-cd)pyrene	ND	---	10.5	ug/kg dry	1	---	ND	---	---	---	30%	
1-Methylnaphthalene	ND	---	10.5	ug/kg dry	1	---	ND	---	---	---	30%	
2-Methylnaphthalene	ND	---	10.5	ug/kg dry	1	---	ND	---	---	---	30%	
Naphthalene	ND	---	10.5	ug/kg dry	1	---	ND	---	---	---	30%	
Phenanthrene	**14.5**	---	10.5	ug/kg dry	1	---	13.1	---	---	10	30%	
Pyrene	**16.5**	---	10.5	ug/kg dry	1	---	20.0	---	---	19	30%	

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Philip Nerenberg, Lab Director

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

ANALYTICAL REPORT

ERM	Project: **Hillsboro, Oregon**	
1050 SW 6th Ave. Suite 1650	Project Number: **[none]**	**Report ID:**
Portland, OR 97204	Project Manager: **Justin Dauphinais**	**A4J1375 - 10 28 24 1710**

QUALITY CONTROL (QC) SAMPLE RESULTS

Polyaromatic Hydrocarbons (PAHs) by EPA 8270E (SIM)

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 24J0668 - EPA 3546							**Soil**					
Duplicate (24J0668-DUP1)			Prepared: 10/16/24 12:03		Analyzed: 10/16/24 17:59							**CONT**
QC Source Sample: Comp-SS-20241015 (A4J1375-06)												
Dibenzofuran	ND	---	10.5	ug/kg dry	1	---	ND	---	---	---	30%	
Surr: 2-Fluorobiphenyl (Surr)		*Recovery: 78 %*		*Limits: 44-120 %*			*Dilution: 1x*					
p-Terphenyl-d14 (Surr)			*73 %*		*54-127 %*			*"*				
Matrix Spike (24J0668-MS1)			Prepared: 10/16/24 12:03		Analyzed: 10/16/24 18:25							**CONT**
QC Source Sample: Comp-SS-20241015 (A4J1375-06)												
EPA 8270E SIM												
Acenaphthene	661	---	10.5	ug/kg dry	1	837	ND	79	40-123%	---	---	
Acenaphthylene	622	---	10.5	ug/kg dry	1	837	ND	74	32-132%	---	---	
Anthracene	652	---	10.5	ug/kg dry	1	837	ND	78	47-123%	---	---	
Benz(a)anthracene	642	---	16.7	ug/kg dry	1	837	ND	77	49-126%	---	---	
Benzo(a)pyrene	657	---	10.5	ug/kg dry	1	837	ND	78	45-129%	---	---	
Benzo(b)fluoranthene	643	---	10.5	ug/kg dry	1	837	7.06	76	45-132%	---	---	
Benzo(k)fluoranthene	666	---	10.5	ug/kg dry	1	837	ND	80	47-132%	---	---	
Benzo(g,h,i)perylene	645	---	10.5	ug/kg dry	1	837	ND	77	43-134%	---	---	
Chrysene	707	---	17.8	ug/kg dry	1	837	ND	84	50-124%	---	---	
Dibenz(a,h)anthracene	703	---	10.5	ug/kg dry	1	837	ND	84	45-134%	---	---	
Fluoranthene	697	---	10.5	ug/kg dry	1	837	30.8	80	50-127%	---	---	
Fluorene	616	---	10.5	ug/kg dry	1	837	ND	74	43-125%	---	---	
Indeno(1,2,3-cd)pyrene	658	---	10.5	ug/kg dry	1	837	ND	79	45-133%	---	---	
1-Methylnaphthalene	621	---	10.5	ug/kg dry	1	837	ND	74	40-120%	---	---	
2-Methylnaphthalene	658	---	10.5	ug/kg dry	1	837	ND	79	38-122%	---	---	
Naphthalene	638	---	10.5	ug/kg dry	1	837	ND	76	35-123%	---	---	
Phenanthrene	662	---	10.5	ug/kg dry	1	837	13.1	77	50-121%	---	---	
Pyrene	698	---	10.5	ug/kg dry	1	837	20.0	81	47-127%	---	---	
Dibenzofuran	631	---	10.5	ug/kg dry	1	837	ND	75	44-120%	---	---	
Surr: 2-Fluorobiphenyl (Surr)		*Recovery: 83 %*		*Limits: 44-120 %*			*Dilution: 1x*					
p-Terphenyl-d14 (Surr)			*78 %*		*54-127 %*			*"*				

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Philip Nerenberg

Philip Nerenberg, Lab Director

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

ANALYTICAL REPORT

ERM	Project: **Hillsboro, Oregon**	
1050 SW 6th Ave. Suite 1650	Project Number: **[none]**	**Report ID:**
Portland, OR 97204	Project Manager: **Justin Dauphinais**	**A4J1375 - 10 28 24 1710**

QUALITY CONTROL (QC) SAMPLE RESULTS

Polyaromatic Hydrocarbons (PAHs) by EPA 8270E (SIM)

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 24J0907 - EPA 3546							Soil					
Blank (24J0907-BLK1)			Prepared: 10/23/24 08:41 Analyzed: 10/23/24 12:27									
EPA 8270E SIM												
Acenaphthene	ND	---	10.0	ug/kg wet	1	---	---	---	---	---	---	
Acenaphthylene	ND	---	10.0	ug/kg wet	1	---	---	---	---	---	---	
Anthracene	ND	---	10.0	ug/kg wet	1	---	---	---	---	---	---	
Benz(a)anthracene	ND	---	10.0	ug/kg wet	1	---	---	---	---	---	---	
Benzo(a)pyrene	ND	---	10.0	ug/kg wet	1	---	---	---	---	---	---	
Benzo(b)fluoranthene	ND	---	10.0	ug/kg wet	1	---	---	---	---	---	---	
Benzo(k)fluoranthene	ND	---	10.0	ug/kg wet	1	---	---	---	---	---	---	
Benzo(g,h,i)perylene	ND	---	10.0	ug/kg wet	1	---	---	---	---	---	---	
Chrysene	ND	---	10.0	ug/kg wet	1	---	---	---	---	---	---	
Dibenz(a,h)anthracene	ND	---	10.0	ug/kg wet	1	---	---	---	---	---	---	
Fluoranthene	ND	---	10.0	ug/kg wet	1	---	---	---	---	---	---	
Fluorene	ND	---	10.0	ug/kg wet	1	---	---	---	---	---	---	
Indeno(1,2,3-cd)pyrene	ND	---	10.0	ug/kg wet	1	---	---	---	---	---	---	
1-Methylnaphthalene	ND	---	10.0	ug/kg wet	1	---	---	---	---	---	---	
2-Methylnaphthalene	ND	---	10.0	ug/kg wet	1	---	---	---	---	---	---	
Naphthalene	ND	---	10.0	ug/kg wet	1	---	---	---	---	---	---	
Phenanthrene	ND	---	10.0	ug/kg wet	1	---	---	---	---	---	---	
Pyrene	ND	---	10.0	ug/kg wet	1	---	---	---	---	---	---	
Dibenzofuran	ND	---	10.0	ug/kg wet	1	---	---	---	---	---	---	
Surr: 2-Fluorobiphenyl (Surr)		*Recovery: 91 %*	*Limits: 44-120 %*		*Dilution: 1x*							
p-Terphenyl-d14 (Surr)			*85 %*	*54-127 %*		*"*						
LCS (24J0907-BS1)			Prepared: 10/23/24 08:41 Analyzed: 10/23/24 12:52									
EPA 8270E SIM												
Acenaphthene	862	---	10.0	ug/kg wet	1	800	---	108	40-123%	---	---	
Acenaphthylene	791	---	10.0	ug/kg wet	1	800	---	99	32-132%	---	---	
Anthracene	861	---	10.0	ug/kg wet	1	800	---	108	47-123%	---	---	
Benz(a)anthracene	832	---	10.0	ug/kg wet	1	800	---	104	49-126%	---	---	
Benzo(a)pyrene	893	---	10.0	ug/kg wet	1	800	---	112	45-129%	---	---	
Benzo(b)fluoranthene	825	---	10.0	ug/kg wet	1	800	---	103	45-132%	---	---	
Benzo(k)fluoranthene	943	---	10.0	ug/kg wet	1	800	---	118	47-132%	---	---	
Benzo(g,h,i)perylene	860	---	10.0	ug/kg wet	1	800	---	107	43-134%	---	---	
Chrysene	915	---	10.0	ug/kg wet	1	800	---	114	50-124%	---	---	

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Philip Nerenberg, Lab Director

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ORELAP ID: **OR100062**

ANALYTICAL REPORT

ERM	Project: **Hillsboro, Oregon**	
1050 SW 6th Ave. Suite 1650	Project Number: **[none]**	**Report ID:**
Portland, OR 97204	Project Manager: **Justin Dauphinais**	**A4J1375 - 10 28 24 1710**

QUALITY CONTROL (QC) SAMPLE RESULTS

Polyaromatic Hydrocarbons (PAHs) by EPA 8270E (SIM)

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 24J0907 - EPA 3546							Soil					
LCS (24J0907-BS1)			Prepared: 10/23/24 08:41		Analyzed: 10/23/24 12:52							
Dibenz(a,h)anthracene	969	---	10.0	ug/kg wet	1	800	---	121	45-134%	---	---	
Fluoranthene	924	---	10.0	ug/kg wet	1	800	---	116	50-127%	---	---	
Fluorene	810	---	10.0	ug/kg wet	1	800	---	101	43-125%	---	---	
Indeno(1,2,3-cd)pyrene	921	---	10.0	ug/kg wet	1	800	---	115	45-133%	---	---	
1-Methylnaphthalene	803	---	10.0	ug/kg wet	1	800	---	100	40-120%	---	---	
2-Methylnaphthalene	846	---	10.0	ug/kg wet	1	800	---	106	38-122%	---	---	
Naphthalene	821	---	10.0	ug/kg wet	1	800	---	103	35-123%	---	---	
Phenanthrene	862	---	10.0	ug/kg wet	1	800	---	108	50-121%	---	---	
Pyrene	925	---	10.0	ug/kg wet	1	800	---	116	47-127%	---	---	
Dibenzofuran	832	---	10.0	ug/kg wet	1	800	---	104	44-120%	---	---	
Surr: 2-Fluorobiphenyl (Surr)			*Recovery: 109 %*		*Limits: 44-120 %*				*Dilution: 1x*			
p-Terphenyl-d14 (Surr)			*95 %*		*54-127 %*				*"*			
Duplicate (24J0907-DUP1)			Prepared: 10/23/24 08:41		Analyzed: 10/23/24 13:44							
QC Source Sample: Non-SDG (A4J1225-03)												
Acenaphthene	ND	---	11.5	ug/kg dry	1	---	ND	---	---	---	30%	
Acenaphthylene	ND	---	11.5	ug/kg dry	1	---	ND	---	---	---	30%	
Anthracene	ND	---	11.5	ug/kg dry	1	---	ND	---	---	---	30%	
Benz(a)anthracene	ND	---	11.5	ug/kg dry	1	---	ND	---	---	---	30%	
Benzo(a)pyrene	ND	---	11.5	ug/kg dry	1	---	ND	---	---	---	30%	
Benzo(b)fluoranthene	ND	---	11.5	ug/kg dry	1	---	ND	---	---	---	30%	
Benzo(k)fluoranthene	ND	---	11.5	ug/kg dry	1	---	ND	---	---	---	30%	
Benzo(g,h,i)perylene	ND	---	11.5	ug/kg dry	1	---	ND	---	---	---	30%	
Chrysene	ND	---	12.6	ug/kg dry	1	---	ND	---	---	---	30%	R-02
Dibenz(a,h)anthracene	ND	---	11.5	ug/kg dry	1	---	ND	---	---	---	30%	
Fluoranthene	ND	---	11.5	ug/kg dry	1	---	ND	---	---	---	30%	
Fluorene	ND	---	11.5	ug/kg dry	1	---	ND	---	---	---	30%	
Indeno(1,2,3-cd)pyrene	ND	---	11.5	ug/kg dry	1	---	ND	---	---	---	30%	
1-Methylnaphthalene	ND	---	11.5	ug/kg dry	1	---	ND	---	---	---	30%	
2-Methylnaphthalene	ND	---	11.5	ug/kg dry	1	---	ND	---	---	---	30%	
Naphthalene	ND	---	11.5	ug/kg dry	1	---	ND	---	---	---	30%	
Phenanthrene	ND	---	11.5	ug/kg dry	1	---	ND	---	---	---	30%	
Pyrene	ND	---	11.5	ug/kg dry	1	---	ND	---	---	---	30%	
Dibenzofuran	ND	---	11.5	ug/kg dry	1	---	ND	---	---	---	30%	

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Philip Nerenberg

Philip Nerenberg, Lab Director

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ORELAP ID: **OR100062**

ANALYTICAL REPORT

ERM	Project: **Hillsboro, Oregon**	
1050 SW 6th Ave. Suite 1650	Project Number: **[none]**	**Report ID:**
Portland, OR 97204	Project Manager: **Justin Dauphinais**	**A4J1375 - 10 28 24 1710**

QUALITY CONTROL (QC) SAMPLE RESULTS

Polyaromatic Hydrocarbons (PAHs) by EPA 8270E (SIM)

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 24J0907 - EPA 3546							**Soil**					
Duplicate (24J0907-DUP1)			Prepared: 10/23/24 08:41		Analyzed: 10/23/24 13:44							
QC Source Sample: Non-SDG (A4J1225-03)												
Surr: 2-Fluorobiphenyl (Surr)			*Recovery: 86 %*		*Limits: 44-120 %*			*Dilution: 1x*				
p-Terphenyl-d14 (Surr)			*75 %*		*54-127 %*			*"*				
Matrix Spike (24J0907-MS1)			Prepared: 10/23/24 08:41		Analyzed: 10/23/24 14:09							
QC Source Sample: Non-SDG (A4J1225-03)												
EPA 8270E SIM												
Acenaphthene	799	---	11.2	ug/kg dry	1	896	ND	89	40-123%	---	---	
Acenaphthylene	738	---	11.2	ug/kg dry	1	896	ND	82	32-132%	---	---	
Anthracene	798	---	11.2	ug/kg dry	1	896	ND	89	47-123%	---	---	
Benz(a)anthracene	790	---	11.2	ug/kg dry	1	896	ND	87	49-126%	---	---	
Benzo(a)pyrene	839	---	11.2	ug/kg dry	1	896	ND	94	45-129%	---	---	
Benzo(b)fluoranthene	763	---	11.2	ug/kg dry	1	896	ND	85	45-132%	---	---	
Benzo(k)fluoranthene	820	---	11.2	ug/kg dry	1	896	ND	91	47-132%	---	---	
Benzo(g,h,i)perylene	743	---	11.2	ug/kg dry	1	896	ND	83	43-134%	---	---	
Chrysene	851	---	11.2	ug/kg dry	1	896	ND	94	50-124%	---	---	
Dibenz(a,h)anthracene	846	---	11.2	ug/kg dry	1	896	ND	94	45-134%	---	---	
Fluoranthene	961	---	11.2	ug/kg dry	1	896	ND	107	50-127%	---	---	
Fluorene	753	---	11.2	ug/kg dry	1	896	ND	84	43-125%	---	---	
Indeno(1,2,3-cd)pyrene	810	---	11.2	ug/kg dry	1	896	ND	90	45-133%	---	---	
1-Methylnaphthalene	757	---	11.2	ug/kg dry	1	896	ND	84	40-120%	---	---	
2-Methylnaphthalene	799	---	11.2	ug/kg dry	1	896	ND	89	38-122%	---	---	
Naphthalene	788	---	11.2	ug/kg dry	1	896	ND	88	35-123%	---	---	
Phenanthrene	825	---	11.2	ug/kg dry	1	896	ND	92	50-121%	---	---	
Pyrene	997	---	11.2	ug/kg dry	1	896	ND	111	47-127%	---	---	
Dibenzofuran	761	---	11.2	ug/kg dry	1	896	ND	85	44-120%	---	---	
Surr: 2-Fluorobiphenyl (Surr)			*Recovery: 91 %*		*Limits: 44-120 %*			*Dilution: 1x*				
p-Terphenyl-d14 (Surr)			*79 %*		*54-127 %*			*"*				

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Philip Nerenberg, Lab Director

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503-718-2323
ORELAP ID: OR100062

ANALYTICAL REPORT

ERM	Project: **Hillsboro, Oregon**	
1050 SW 6th Ave. Suite 1650	Project Number: **[none]**	**Report ID:**
Portland, OR 97204	Project Manager: **Justin Dauphinais**	**A4J1375 - 10 28 24 1710**

QUALITY CONTROL (QC) SAMPLE RESULTS

Total Metals by EPA 6020B (ICPMS)

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 24J0654 - EPA 3051A							**Soil**					
Blank (24J0654-BLK1)			Prepared: 10/16/24 09:08		Analyzed: 10/16/24 13:25							
EPA 6020B												
Lead	ND	---	0.200	mg/kg wet	10	---	---	---	---	---	---	
LCS (24J0654-BS1)			Prepared: 10/16/24 09:08		Analyzed: 10/16/24 13:47							
EPA 6020B												
Lead	52.8	---	0.200	mg/kg wet	10	50.0	---	106	80-120%	---	---	
Duplicate (24J0654-DUP1)			Prepared: 10/16/24 09:08		Analyzed: 10/16/24 14:08							
QC Source Sample: Non-SDG (A4J1067-04)												
Lead	**18.7**	---	0.222	mg/kg dry	10	---	18.7	---	---	0.4	20%	PRO
Matrix Spike (24J0654-MS1)			Prepared: 10/16/24 09:08		Analyzed: 10/16/24 14:13							
QC Source Sample: Non-SDG (A4J1067-04)												
EPA 6020B												
Lead	73.7	---	0.213	mg/kg dry	10	53.2	18.7	103	75-125%	---	---	PRO

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ANALYTICAL REPORT

ERM	Project: **Hillsboro, Oregon**	
1050 SW 6th Ave. Suite 1650	Project Number: **[none]**	**Report ID:**
Portland, OR 97204	Project Manager: **Justin Dauphinais**	**A4J1375 - 10 28 24 1710**

QUALITY CONTROL (QC) SAMPLE RESULTS

Total Metals by EPA 6020B (ICPMS)

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 24J0987 - EPA 3051A							**Soil**					
Blank (24J0987-BLK1)			Prepared: 10/24/24 15:56 Analyzed: 10/25/24 11:12									
EPA 6020B												
Lead	ND	---	0.200	mg/kg wet	10	---	---	---	---	---	---	
LCS (24J0987-BS1)			Prepared: 10/24/24 15:56 Analyzed: 10/25/24 11:18									
EPA 6020B												
Lead	54.3	---	0.200	mg/kg wet	10	50.0	---	109	80-120%	---	---	
Duplicate (24J0987-DUP1)			Prepared: 10/24/24 15:56 Analyzed: 10/25/24 11:28									
QC Source Sample: Non-SDG (A4J1225-03)												
Lead	**13.2**	---	0.283	mg/kg dry	10	---	14.3	---	---	8	20%	
Matrix Spike (24J0987-MS1)			Prepared: 10/24/24 15:56 Analyzed: 10/25/24 11:34									
QC Source Sample: Non-SDG (A4J1225-03)												
EPA 6020B												
Lead	82.4	---	0.276	mg/kg dry	10	69.0	14.3	99	75-125%	---	---	

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ERM	Project: **Hillsboro, Oregon**	
1050 SW 6th Ave. Suite 1650	Project Number: **[none]**	**Report ID:**
Portland, OR 97204	Project Manager: **Justin Dauphinais**	**A4J1375 - 10 28 24 1710**

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 24J0593 - Dry Weight Prep (EPA 8000D)							**Soil**					
Duplicate (24J0593-DUP1)			Prepared: 10/15/24 08:47			Analyzed: 10/16/24 07:48						
QC Source Sample: Non-SDG (A4J1274-01)												
% Solids	**93.7**	---	1.00	%	1	---	93.7	---	---	0.01	10%	
Duplicate (24J0593-DUP2)			Prepared: 10/15/24 08:47			Analyzed: 10/16/24 07:48						
QC Source Sample: Non-SDG (A4J1274-02)												
% Solids	**94.1**	---	1.00	%	1	---	93.1	---	---	1	10%	
Duplicate (24J0593-DUP3)			Prepared: 10/15/24 08:47			Analyzed: 10/16/24 07:48						
QC Source Sample: Non-SDG (A4J1274-03)												
% Solids	**97.2**	---	1.00	%	1	---	92.6	---	---	5	10%	
Duplicate (24J0593-DUP4)			Prepared: 10/15/24 08:47			Analyzed: 10/16/24 07:48						
QC Source Sample: Non-SDG (A4J1274-04)												
% Solids	**91.4**	---	1.00	%	1	---	92.0	---	---	0.6	10%	
Duplicate (24J0593-DUP5)			Prepared: 10/15/24 08:47			Analyzed: 10/16/24 07:48						
QC Source Sample: Non-SDG (A4J1274-05)												
% Solids	**91.6**	---	1.00	%	1	---	92.3	---	---	0.7	10%	
Duplicate (24J0593-DUP6)			Prepared: 10/15/24 08:47			Analyzed: 10/16/24 07:48						
QC Source Sample: Non-SDG (A4J1274-06)												
% Solids	**95.5**	---	1.00	%	1	---	96.6	---	---	1	10%	
Duplicate (24J0593-DUP7)			Prepared: 10/15/24 08:47			Analyzed: 10/16/24 07:48						
QC Source Sample: Non-SDG (A4J1274-07)												
% Solids	**95.4**	---	1.00	%	1	---	95.8	---	---	0.4	10%	
Duplicate (24J0593-DUP8)			Prepared: 10/15/24 08:47			Analyzed: 10/16/24 07:48						
QC Source Sample: Non-SDG (A4J1274-08)												
% Solids	**94.8**	---	1.00	%	1	---	94.4	---	---	0.4	10%	

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ERM	Project: **Hillsboro, Oregon**	
1050 SW 6th Ave. Suite 1650	Project Number: **[none]**	**Report ID:**
Portland, OR 97204	Project Manager: **Justin Dauphinais**	**A4J1375 - 10 28 24 1710**

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 24J0593 - Dry Weight Prep (EPA 8000D)							**Soil**					
Duplicate (24J0593-DUP9)			Prepared: 10/15/24 08:47		Analyzed: 10/16/24 07:48							
QC Source Sample: Non-SDG (A4J1274-10)												
% Solids	**88.3**	---	1.00	%	1	---	89.9	---	---	2	10%	
Duplicate (24J0593-DUPA)			Prepared: 10/15/24 08:47		Analyzed: 10/16/24 07:48							
QC Source Sample: Non-SDG (A4J1274-11)												
% Solids	**72.6**	---	1.00	%	1	---	72.5	---	---	0.1	10%	
Duplicate (24J0593-DUPB)			Prepared: 10/15/24 08:47		Analyzed: 10/16/24 07:48							
QC Source Sample: Non-SDG (A4J1274-12)												
% Solids	**74.1**	---	1.00	%	1	---	75.1	---	---	1	10%	
Duplicate (24J0593-DUPC)			Prepared: 10/15/24 19:55		Analyzed: 10/16/24 07:48							**CONT**
QC Source Sample: Non-SDG (A4J1342-01)												
% Solids	**82.0**	---	1.00	%	1	---	81.6	---	---	0.5	10%	
Duplicate (24J0593-DUPD)			Prepared: 10/15/24 19:55		Analyzed: 10/16/24 07:48							**CONT**
QC Source Sample: Non-SDG (A4J1342-02)												
% Solids	**92.4**	---	1.00	%	1	---	90.9	---	---	2	10%	

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

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ERM	Project: **Hillsboro, Oregon**	
1050 SW 6th Ave. Suite 1650	Project Number: **[none]**	**Report ID:**
Portland, OR 97204	Project Manager: **Justin Dauphinais**	**A4J1375 - 10 28 24 1710**

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 24J0653 - Dry Weight Prep (EPA 8000D)								Soil				
Duplicate (24J0653-DUP1)			Prepared: 10/16/24 08:55			Analyzed: 10/17/24 05:47						
QC Source Sample: Non-SDG (A4J1315-01)												
% Solids	**91.4**	---	1.00	%	1	---	94.0	---	---	3	10%	
Duplicate (24J0653-DUP2)			Prepared: 10/16/24 08:55			Analyzed: 10/17/24 05:47						
QC Source Sample: Non-SDG (A4J1315-02)												
% Solids	**95.5**	---	1.00	%	1	---	94.8	---	---	0.8	10%	
Duplicate (24J0653-DUP3)			Prepared: 10/16/24 08:55			Analyzed: 10/17/24 05:47						
QC Source Sample: Non-SDG (A4J1315-03)												
% Solids	**95.2**	---	1.00	%	1	---	95.4	---	---	0.2	10%	
Duplicate (24J0653-DUP4)			Prepared: 10/16/24 08:55			Analyzed: 10/17/24 05:47						
QC Source Sample: Non-SDG (A4J1351-01)												
% Solids	**74.7**	---	1.00	%	1	---	75.1	---	---	0.5	10%	
Duplicate (24J0653-DUP5)			Prepared: 10/16/24 08:55			Analyzed: 10/17/24 05:47						
QC Source Sample: Non-SDG (A4J1351-02)												
% Solids	**78.8**	---	1.00	%	1	---	77.3	---	---	2	10%	
Duplicate (24J0653-DUP6)			Prepared: 10/16/24 08:55			Analyzed: 10/17/24 05:47						
QC Source Sample: Non-SDG (A4J1351-03)												
% Solids	**72.7**	---	1.00	%	1	---	74.3	---	---	2	10%	
Duplicate (24J0653-DUP7)			Prepared: 10/16/24 18:32			Analyzed: 10/17/24 05:47						
QC Source Sample: Non-SDG (A4J1427-01)												
% Solids	**79.0**	---	1.00	%	1	---	79.0	---	---	0.08	10%	
Duplicate (24J0653-DUP8)			Prepared: 10/16/24 18:32			Analyzed: 10/17/24 05:47						
QC Source Sample: Non-SDG (A4J1442-01)												
% Solids	**78.3**	---	1.00	%	1	---	78.2	---	---	0.05	10%	

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ANALYTICAL REPORT

ERM	Project: **Hillsboro, Oregon**	
1050 SW 6th Ave. Suite 1650	Project Number: **[none]**	**Report ID:**
Portland, OR 97204	Project Manager: **Justin Dauphinais**	**A4J1375 - 10 28 24 1710**

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

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

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ANALYTICAL REPORT

ERM	Project: **Hillsboro, Oregon**	
1050 SW 6th Ave. Suite 1650	Project Number: **[none]**	**Report ID:**
Portland, OR 97204	Project Manager: **Justin Dauphinais**	**A4J1375 - 10 28 24 1710**

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
Batch: 24J0620							
A4J1375-06	Soil	NWTPH-Dx	10/15/24 00:00	10/15/24 18:18	11.06g/5mL	10g/5mL	0.90
Batch: 24J0998							
A4J1375-02	Soil	NWTPH-Dx	10/15/24 15:20	10/25/24 11:53	11.63g/5mL	10g/5mL	0.86
A4J1375-03	Soil	NWTPH-Dx	10/15/24 15:30	10/25/24 11:53	11.47g/5mL	10g/5mL	0.87
A4J1375-04	Soil	NWTPH-Dx	10/15/24 15:45	10/25/24 11:53	11.22g/5mL	10g/5mL	0.89
A4J1375-05	Soil	NWTPH-Dx	10/15/24 16:00	10/25/24 11:53	11.64g/5mL	10g/5mL	0.86

Gasoline Range Hydrocarbons (Benzene through Naphthalene) by NWTPH-Gx

Prep: EPA 5035A

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 24J0656							
A4J1375-11	Soil	NWTPH-Gx (MS)	10/15/24 00:00	10/15/24 00:00	42.99g/40mL	5g/5mL	0.93
Batch: 24J0748							
A4J1375-02	Soil	NWTPH-Gx (MS)	10/15/24 15:20	10/15/24 15:20	13.118g/10mL	5g/5mL	0.76
A4J1375-03	Soil	NWTPH-Gx (MS)	10/15/24 15:30	10/15/24 15:30	12.917g/10mL	5g/5mL	0.77
A4J1375-04	Soil	NWTPH-Gx (MS)	10/15/24 15:45	10/15/24 15:45	11.827g/10mL	5g/5mL	0.85
A4J1375-05	Soil	NWTPH-Gx (MS)	10/15/24 16:00	10/15/24 16:00	12.912g/10mL	5g/5mL	0.77

BTEX Compounds by EPA 8260D

Prep: EPA 5035A

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 24J0656							
A4J1375-11	Soil	5035A/8260D	10/15/24 00:00	10/15/24 00:00	42.99g/40mL	5g/5mL	0.93
Batch: 24J0748							
A4J1375-01	Soil	5035A/8260D	10/15/24 00:00	10/15/24 00:00	5g/5mL	5g/5mL	1.00
A4J1375-02	Soil	5035A/8260D	10/15/24 15:20	10/15/24 15:20	13.118g/10mL	5g/5mL	0.76
A4J1375-03	Soil	5035A/8260D	10/15/24 15:30	10/15/24 15:30	12.917g/10mL	5g/5mL	0.77
A4J1375-04	Soil	5035A/8260D	10/15/24 15:45	10/15/24 15:45	11.827g/10mL	5g/5mL	0.85
A4J1375-05	Soil	5035A/8260D	10/15/24 16:00	10/15/24 16:00	12.912g/10mL	5g/5mL	0.77

Polyaromatic Hydrocarbons (PAHs) by EPA 8270E (SIM)

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ANALYTICAL REPORT

ERM	Project: Hillsboro, Oregon	
1050 SW 6th Ave. Suite 1650	Project Number: [none]	Report ID:
Portland, OR 97204	Project Manager: Justin Dauphinais	A4J1375 - 10 28 24 1710

SAMPLE PREPARATION INFORMATION

Polyaromatic Hydrocarbons (PAHs) by EPA 8270E (SIM)

Prep: EPA 3546

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 24J0668							
A4J1375-06	Soil	EPA 8270E SIM	10/15/24 00:00	10/16/24 12:03	11.4g/5mL	10g/5mL	0.88
Batch: 24J0907							
A4J1375-02	Soil	EPA 8270E SIM	10/15/24 15:20	10/23/24 08:41	11.79g/5mL	10g/5mL	0.85
A4J1375-03	Soil	EPA 8270E SIM	10/15/24 15:30	10/23/24 08:41	11.36g/5mL	10g/5mL	0.88
A4J1375-04	Soil	EPA 8270E SIM	10/15/24 15:45	10/23/24 08:41	11.9g/5mL	10g/5mL	0.84
A4J1375-05	Soil	EPA 8270E SIM	10/15/24 16:00	10/23/24 08:41	11.26g/5mL	10g/5mL	0.89

Total Metals by EPA 6020B (ICPMS)

Prep: EPA 3051A

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 24J0654							
A4J1375-06	Soil	EPA 6020B	10/15/24 00:00	10/16/24 09:08	0.489g/50mL	0.5g/50mL	1.02
Batch: 24J0987							
A4J1375-02	Soil	EPA 6020B	10/15/24 15:20	10/24/24 15:56	0.478g/50mL	0.5g/50mL	1.05
A4J1375-03	Soil	EPA 6020B	10/15/24 15:30	10/24/24 15:56	0.472g/50mL	0.5g/50mL	1.06
A4J1375-04	Soil	EPA 6020B	10/15/24 15:45	10/24/24 15:56	0.486g/50mL	0.5g/50mL	1.03
A4J1375-05	Soil	EPA 6020B	10/15/24 16:00	10/24/24 15:56	0.457g/50mL	0.5g/50mL	1.09

Percent Dry Weight

Prep: Dry Weight Prep (EPA 8000D)

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 24J0593							
A4J1375-06	Soil	EPA 8000D	10/15/24 00:00	10/15/24 19:55			NA
A4J1375-11	Soil	EPA 8000D	10/15/24 00:00	10/15/24 19:55			NA
Batch: 24J0653							
A4J1375-02	Soil	EPA 8000D	10/15/24 15:20	10/16/24 08:55			NA
A4J1375-03	Soil	EPA 8000D	10/15/24 15:30	10/16/24 08:55			NA
A4J1375-04	Soil	EPA 8000D	10/15/24 15:45	10/16/24 08:55			NA
A4J1375-05	Soil	EPA 8000D	10/15/24 16:00	10/16/24 08:55			NA

Apex Laboratories

Philip Nerenberg, Lab Director

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

ANALYTICAL REPORT

ERM	Project: **Hillsboro, Oregon**	
1050 SW 6th Ave. Suite 1650	Project Number: **[none]**	**Report ID:**
Portland, OR 97204	Project Manager: **Justin Dauphinais**	**A4J1375 - 10 28 24 1710**

QUALIFIER DEFINITIONS

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

Apex Laboratories

A-01	Internal Standard recovery passes analytical method criteria.
A-01a	Referencing data from A4J1375-06
COMP	Analyzed sample is a composite of discrete samples that was performed in the laboratory.
CONT	The Sample Container provided for this analysis was not provided by Apex Laboratories, and has not been verified as part of the Apex Quality System.
F-03	The result for this hydrocarbon range is elevated due to the presence of individual analyte peaks in the quantitation range that are not representative of the fuel pattern reported.
F-11	The hydrocarbon pattern indicates possible weathered diesel, mineral oil, or a contribution from a related component.
F-13	The chromatographic pattern does not resemble the fuel standard used for quantitation
H-01	Analyzed outside the recommended holding time.
PRO	Sample has undergone sample processing prior to extraction and analysis.
Q-01	Spike recovery and/or RPD is outside acceptance limits.
Q-06	Internal Standard area outside of method specified limits. Data is Not Reported. See previous or subsequent runs for reportable sample data.
R-02	The Reporting Limit for this analyte has been raised to account for interference from coeluting organic compounds present in the sample.
V-16	Sample aliquot was subsampled from the sample container in the laboratory. The subsampled aliquot was not preserved within 48 hours of sampling.
V-21	Sample aliquot was subsampled from a sample container that had been previously opened and had sample removed for another analysis.

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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)

Validated 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'.

Results for Volatiles analyses on soils and sediments that are reported on a “dry weight” basis include the water miscible solvent (WMS) correction referenced in the EPA 8000 Method guidance documents. Solid and Liquid samples reported on an “As Received” basis do not have the WMS correction applied, as dry weight was not performed.

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) may not be 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).

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REPORTING NOTES AND CONVENTIONS (Cont.):

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 ½ 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.
For further details, please request a copy of this document.
-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, if results are not reported to the MDL.

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.

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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 provded by the client or sampler, and fall outside of Apex Laboratories' Scope of Accreditation.

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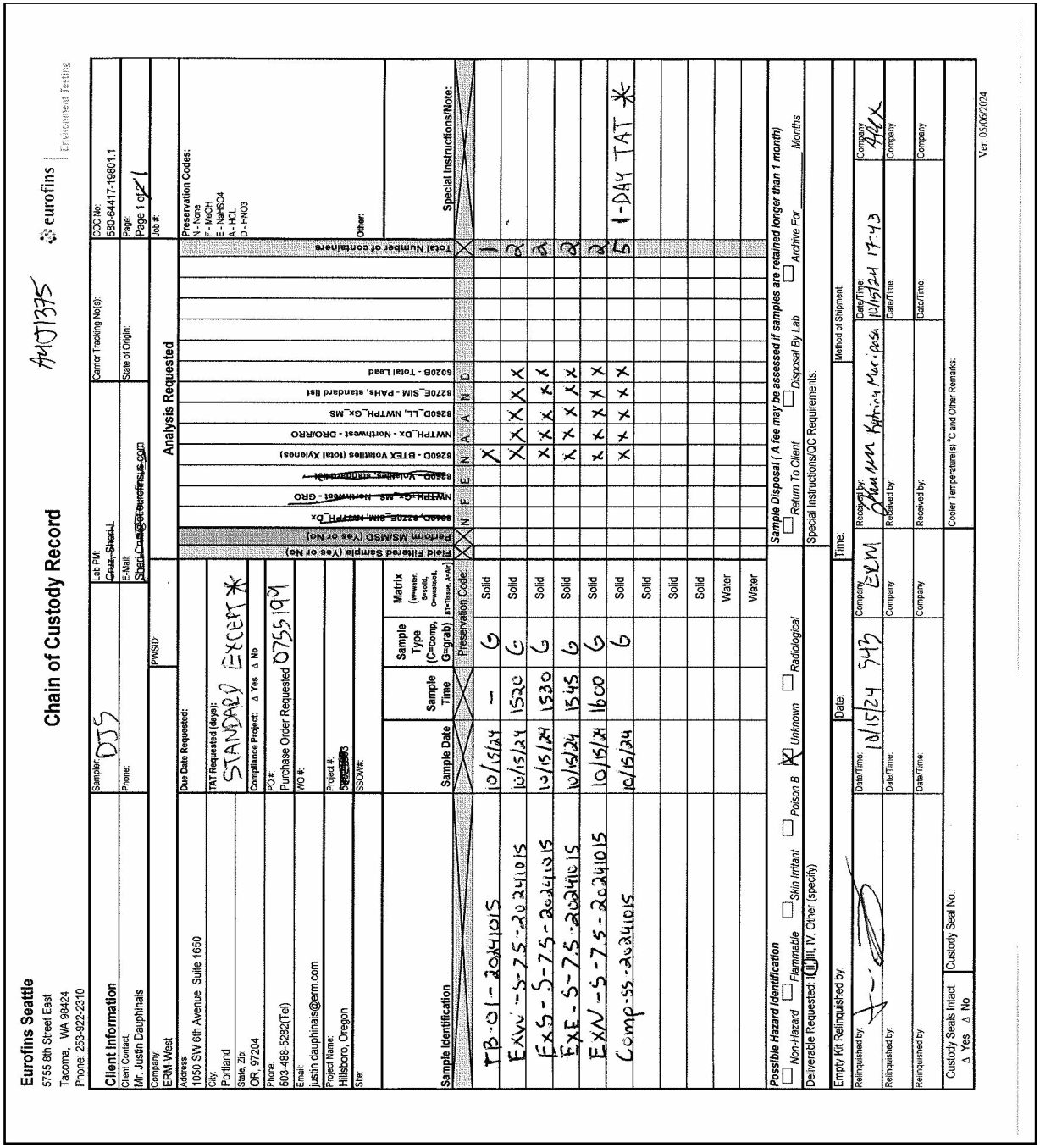

Eurofins Seattle
5755 8th Street East
Tacoma, WA 98424
Phone: 253-922-2310

Chain of Custody Record

A4J1375

eurofins | Environment Testing

Client Information: Client Contact: Mr. Justin Dauphinais; Company: ERM-West; Address: 1050 SW 6th Avenue Suite 1650; City: Portland; State, Zip: OR, 97204; Phone: 503-486-5282(Tel); Email: justin.dauphinais@erm.com; Project Name: Hillsboro, Oregon; Site:

Sampler: DJS; Phone: ; PWSID:

Lab PM: Cruz, Shiela L; E-Mail: Sheila.Cruz@EurofinsUS.com

Carrier Tracking No(s): ; State of Origin:

COC No: 580-64417-19801.1; Page: Page 1 of 1; Job #:

Due Date Requested: ; TAT Requested (days): STANDARD EXCEPT *; Compliance Project: Δ Yes Δ No; PO #: Purchase Order Requested 0755199; WO #: ; Project #: ; SSOW#:

Analysis Requested

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (w=water, s=solid, o=waste/oil, BT=Tissue, A=Air)	Preservation Code:	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260D_8270E_SIM_NWTPH_Dx	NWTPH-Gx_MS_Northwest - GRO	8260D - BTEX Volatiles (total Xylenes)	NWTPH_Dx - Northwest - DRO/RRO	8260D_LL, NWTPH_Gx_MS	8270E_SIM - PAHs, standard list	6020B - Total Lead	Total Number of containers	Special Instructions/Note:
TB-01-20241015	10/15/24	-	G	Solid						X	X	X	X	X	1	
EXW-S-7.5-20241015	10/15/24	1520	G	Solid						X	X	X	X	X	2	
EXS-S-7.5-20241015	10/15/24	1530	G	Solid						X	X	X	X	X	2	
EXE-S-7.5-20241015	10/15/24	1545	G	Solid						X	X	X	X	X	2	
EXN-S-7.5-20241015	10/15/24	1600	G	Solid						X	X	X	X	X	2	
Comp-SS-20241015	10/15/24		G	Solid						X	X	X	X	X	5	1-DAY TAT *
				Solid												
				Solid												
				Solid												
				Water												
				Water												

Preservation Codes: N - None; F - MeOH; E - NaHSO4; A - HCL; D - HNO3; Other:

Possible Hazard Identification: Non-Hazard; Flammable; Skin Irritant; Poison B; Unknown; Radiological

Deliverable Requested: I, II, III, IV, Other (specify)

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month): Return To Client; Disposal By Lab; Archive For ____ Months

Special Instructions/QC Requirements:

Empty Kit Relinquished by: ; Date: ; Time: ; Method of Shipment:

Relinquished by: ; Date/Time: 10/15/24 5pm; Company: ERM; Received by: ; Company: ; Date/Time: ; Company:

Relinquished by: ; Date/Time: ; Company: ; Received by: ; Company: ; Date/Time: ; Company:

Relinquished by: ; Date/Time: ; Company: ; Received by: ; Company: ; Date/Time: ; Company:

Custody Seals Intact: Δ Yes Δ No; Custody Seal No.: ; Cooler Temperature(s) °C and Other Remarks:

Ver: 05/06/2024

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APEX LABS COOLER RECEIPT FORM

Client: ERM Element WO#: A4J1375

Project/Project #: Hillsboro, Oregon

Delivery Info:

Date/time received: 10/15/24 @ 17:43 By: [illegible]

Delivered by: Apex__Client X ESS__FedEx__UPS__Radio__Morgan__SDS__Evergreen__Other__

From USDA Regulated Origin? Yes ____ No X

Cooler Inspection Date/time inspected: 10/15/24 @ 17:43 By: [illegible]

Chain of Custody included? Yes X No ____

Signed/dated by client? Yes X No ____

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

	Cooler #1	Cooler #2	Cooler #3	Cooler #4	Cooler #5	Cooler #6	Cooler #7
Temperature (°C)	5.6						
Custody seals? (Y/N)	N						
Received on ice? (Y/N)	Y						
Temp. blanks? (Y/N)	Y						
Ice type: (Gel/Real/Other)	Real						
Condition (In/Out):	In						

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: 10/15/24 @ 17:55 By: [illegible]

All samples intact? Yes X No ___ Comments: ____

Bottle labels/COCs agree? Yes X No ___ Comments: ____

COC/container discrepancies form initiated? Yes ___ No X

Containers/volumes received appropriate for analysis? Yes X No ___ Comments: ____

Do VOA vials have visible headspace? Yes ___ No ___ NA X

Comments ____

Water samples: pH checked: Yes___No___NA X pH appropriate? Yes___No___NA X pH ID: ____

Comments: ____

Labeled by: [illegible] Witness: [illegible] Cooler Inspected by: [illegible]

Form Y-003 R-02

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APPENDIX C WASTE RECEIPT

WASTE MANAGEMENT

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

Reprint
Ticket# 1737026

Customer Name	ENVIRONMENTAL RESOURCES MGMT	Carrier	GARB GARBARINO DISPOSAL SERVICE
Ticket Date	10/18/2024	Vehicle#	241 Volume
Payment Type	Credit Account	Container	9099
Manual Ticket#		Driver	MIKE
Hauling Ticket#		Check#	
Route		Billing #	0005176
State Waste Code		Gen EPA ID	
Manifest	NA		
Destination		Grid	
PO	0755199		
Profile	143744OR (DIESEL FUEL/FUEL OIL CONTAMINATED SOIL (LF02))		
Generator	QUALITY TECHNOLOGY-6185 QUALITY TECHNOLOGY SERVICES 6185 NE SCHAAF ST HILLSB		

	Time	Scale	Operator	Inbound		
In	10/18/2024 11:51:46	Inbound 2	mmalone2		Gross	47020 lb
Out	10/18/2024 11:51:46		mmalone2		Tare	30880 lb
					Net	16140 lb
					Tons	8.07

Comments

Consumer Comments? We want to know. Please call.

	Product	LD%	Qty	UOM	Rate	Tax	Amount	Origin
1	Cont Soil Pet-RGC-	100	8.07	Tons				WASH-IN
2	EVC-Energy/Adminis	100		%				WASH-IN

Total Tax
Total Ticket

Driver`s Signature

ERM HAS OVER 160 OFFICES ACROSS THE FOLLOWING COUNTRIES AND TERRITORIES WORLDWIDE

Argentina
Australia
Belgium
Brazil
Canada
China
Colombia
France
Germany
Ghana
Guyana
Hong Kong
India
Indonesia
Ireland
Italy
Japan
Kazakhstan
Kenya
Malaysia
Mexico
Mozambique
The Netherlands
New Zealand
Peru
Poland
Portugal
Romania
Senegal
Singapore
South Africa
South Korea
Spain
Switzerland
Taiwan
Tanzania
Thailand
UAE
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US
Vietnam

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