



**SUPPLEMENTAL ENVIRONMENTAL
SITE INVESTIGATION**

Property Identification:

**LUST #26-90-0001
BINGHAM CONSTRUCTION
3939 NW ST HELENS ROAD
PORTLAND, OREGON 97210**

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1.0 INTRODUCTION

On behalf of Jay Poizer, Alpha Environmental Services, Inc (Alpha) has prepared this Supplemental Environmental Site Assessment Report to present the results of the recent site testing.

1.1 Site Description

The Property consists of one Tax Lot R315807 located in Township 1 North, Range 1 East, Section 19, Willamette Meridian. The parcels have a total of 1.19-acres. The roughly central part of the Property is occupied by the building, surrounded by storage and parking areas.

The vicinity of the Property can generally be described as industrial. Current usage of the adjoining properties includes: north – Overhead Door Company; south – Bridge City Steel; east – NW St Helens Road with Western Group (metal manufacturer) and Shell Products Loading Terminal beyond; and west – Forest Park.

1.2 Current Zoning and Future Land Use

The zoning is Heavy Industrial (IH) by the City of Portland. Currently the property is occupied by the Tahoe Corporation owned by Bing Bingham. The future use of the property is anticipated to remain industrial use.

1.3 Geology and Groundwater

The Property is situated within the Willamette Valley, which is a portion of the Puget Trough physiographic sub province of the Pacific Mountain System geological province of the State of Oregon. This area consists of fluviolacustrine sedimentary deposits. Underlying the area is unconsolidated silt, sand, gravel and clay. Generally, this specific area consists of fine-grained material, but gravel layers may also be found there to some extent. (Walker, et al., 1991).

According to the Water Resources Department (WRD) online database and the USGS Depth to Groundwater Interactive Map of Portland, static groundwater onsite is estimated to be located approximately 45 feet below surface grade (bsg), although some monitoring wells in the area indicate it may be as shallow as 10 to 15 feet.

The flow of groundwater typically imitates the surface topography and ordinarily flows from higher to lower elevations. The near surface flow may be influenced by stratigraphy, water bodies, rainfall, underground utilities and other subsurface features. Based on the topography and site observations, groundwater is anticipated to flow to the northeast.

The nearest major surface water in the vicinity of the Property is the Willamette River located approximately 0.51 miles northeast of the site.

2.0 BENEFICIAL LAND AND WATER USE DETERMINATIONS

2.1 Land Use

The subject property is zoned Heavy Industrial (IH) by the City of Portland. The zoning permits industrial uses. Residential use is not considered a likely future use for this property. Surrounding properties do not include residential uses and the residential receptor scenario pathway is deemed incomplete.

2.2 Groundwater Use

A search of the Oregon Water Resources Department (OWRD) database was conducted. No industrial water wells were identified within 0.4 miles of the subject property and no residential water wells were identified within 1.0 mile of the subject property.

The City of Portland supplies potable water to the property and nearby businesses.

Based on the information provided, there is no known current or likely future beneficial use of shallow groundwater within 0.4 miles of the site that might be impacted by site-related contamination.

2.3 Surface Water Use

The closest surface water to the site is the Willamette River located approximately 0.5 miles northeast of the property. The subject property partially paved and covered by the site buildings. For paved areas, stormwater runoff either drains to unpaved areas or drains to the adjoining city streets. In the non-paved areas of the property, water infiltrates naturally into the subsurface.

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3.0 FIELD INVESTIGATION AND SAMPLING PROCEDURES

3.1 Preliminary Field Work

Prior to sampling, Alpha filed a public utility locate request with One Call Oregon and utilities were marked by respective utility companies where they entered the Property.

Alpha subcontracted Pacific NW Locating to perform a utility survey of the Property in preparation for the drilling.

3.2 Boring Location Rationale

The boring locations were chosen based on the previous sampling by GEM and in accordance with locations approved by the DEQ.

3.3 Drilling and Sampling Activities

Field investigation and drilling activities were conducted on December 23, 2024, under the supervision of Mr. Matt Holmstrom, staff geologist and UST Supervisor for Alpha. Work was reviewed by Jim Cooper, R.G. senior geologist for Alpha. The subsurface sampling consisted of the advancement of seven shallow soil borings advanced by Cascade Drilling using a track-mounted direct-push drill rig.

Soil samples were collected using a single-use thin-walled polyethylene tube inserted inside a stainless-steel sampling tube. In between each boring, the push probe sampler, the outer tubing and inner sampling rods were decontaminated.

Soil lithology was observed and logged by slicing the disposable sample tube along the longitudinal axis. Soil samples were field screened for visual and olfactory signs of petroleum contamination.

Temporary groundwater wells were installed by Cascade using sacrificial drill points to reach the depth of groundwater. No soil samples were collected from these borings.

The soil and groundwater samples were placed in laboratory-provided glass jars and placed in a cooler on ice. The soil samples were transported to Alpha's designated sample refrigerator until picked up by an Apex Laboratory courier.

Samples were handled under chain-of-custody protocol and initial analyzed by test method NWTPH-Dx (quantifies diesel and oil range petroleum hydrocarbons), NWTPH-Gx (quantifies gasoline range petroleum hydrocarbons) and EPA Test Method 8260 RBDM VOCs.

4.0 QUALITY ASSURANCE & QUALITY CONTROL

For the project, Alpha comply with the DEQ's Quality Assurance Project Plan (QAPP) for Preliminary Assessments, DEQ05-LQ-069-QAPP, Version 2.2 dated August 14, 2012 or the Underground Storage Tanks Programs, DEQ02-LQ-0002-QAPP, Version 3.1, dated June 20, 2016.

4.1 Field Equipment & Decontamination

Disposable field equipment used for this project include nitrile gloves, plastic spoons, drill core liners, Terra Core™ samplers and Ziplock bags. Reusable field equipment included a soil cutting knife.

Decontamination of Alpha supplied reusable field equipment included manual removal of particles, wash with Alconox solution, rinse with tap water, wash with Alconox solution and rinse with distilled water. In between each boring, the driller rinsed all sample tubing, cutting bits, etc. with a hot water pressure rinse.

4.2 Field Screening

The soil samples from the investigation were obtained directly from direct-push disposable liners. The liners were split open along the longitudinal axis and laid open for visual observation. Any obviously impacted soil was placed directly into both laboratory-provided jars and a Ziplock bag using new disposable nitrile gloves. A new set of gloves was donned after any sample handling and between each interval of sample collected.

4.3 Sample Collection

Soil samples from the investigation were collected directly from direct-push disposable liners. For samples collected for gasoline/ VOC analysis, the sample of the soil was collected following EPA Method 5035A using a Terra Core™ sampling tool and placed in a pre-tared vial containing preservative with a septum-sealed screw cap. Once sealed, the sample was not exposed to the atmosphere until analysis was conducted. The sample collection process was completed in the least amount of time in order to minimize the loss of VOCs due to volatilization.

Groundwater samples from the investigation were collected directly from temporary PVC wells using a low flow peristaltic pump. The groundwater samples were dispensed directly into appropriate laboratory provided containers.

4.4 Sample Identification

Soil sample containers were labeled with the project name and number, the time of sampling, sampler's initials, sample designation and date. The chain of custody was completed, placed in a Ziplock bag and put to the cooler.

4.5 Field Duplicates

Field duplicates were collected at a rate of 1 per 20 analytical samples for each matrix sampled, except for soil vapor (not enough canisters were available). The field duplicate for the soil sample was collected from an area of obvious impacts. For non-VOCs, the sample was homogenized and then the field investigation and duplicate sample alternately collected. For VOCs, two separate field plugs were taken side by side from the undisturbed sample, with as little time between samples as possible.

The field duplicate for the groundwater sample was collected from the temporary monitoring well after the collection of the initial sample.

4.6 Sample Transport

The samples were packed in reusable ice with an appropriate temperature blank(s), which consisted of a 100-ml polyethylene bottle filled with clean water.

Containers were placed upright in the cooler and cushioned by bubble wrap. Ice packets were placed around and on top of the sample containers. The samples were transported by the geologist to Alpha's personnel protected sample refrigerator. A courier from Apex picked the samples up directly from Alpha's designated sample refrigerator and delivered the samples to Apex Laboratories in Tigard, Oregon. Delivery occurred within 24 hours of sampling and samples were kept refrigerated and/ or on ice during storage and transport.

Samples were handled under chain-of-custody protocol in which the custody form was signed and dated by the Alpha personnel. Upon pickup of the samples, personnel at Apex Laboratories examined and recorded the condition of the sample containers, signed the custody form, and transferred the samples to their coolers. A completed copy of the chain-of-custody form is included at the end of the laboratory analytical report.

Soil-gas sample canisters were labeled with the project name and number, the time of sampling, sampler's initials, sample designation and date. The quality control procedures for the assessment also included the use of nitrile gloves during assembly and disassembly. The regulator flow rates for the Summa canisters are set by the laboratory before shipping and re-checked upon return. Field notes were used to record the test start and end times, flow rates, and other pertinent field information.

Samples were handled under chain-of-custody protocol in which the custody form was signed and dated by the Alpha personnel. Upon receipt of the samples, personnel at Pace Laboratories inspected and recorded the condition of the sample canisters and signed the custody form. A copy of the completed chain-of-custody form is included at the end of the laboratory analytical reports (Appendix A).

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5.0 SAMPLE ANALYTICAL RESULTS

5.1 Soil Findings

Petroleum Results – August 6, 2024

The NWTPH-Gx analytical results indicate that gasoline was detected in Borings D1, D2, D3, D5 and D6. The NWTPH-Dx analytical results indicate that diesel was only detected in Boring D2 and D3; however, the laboratory determined the detection was likely from overlap of the Gasoline Range product.

The concentrations of gasoline in several samples exceed the Leaching to Groundwater Pathway.

Petroleum Results – December 23, 2024

The NWTPH-Gx analytical results indicate that gasoline was detected in Boring D8. Soil samples were not collected from Boring D9 or D10 because these were temporary groundwater sample locations installed with a sacrificial drill tip. Diesel and oil were not analyzed because previous testing indicated only gasoline range hydrocarbons are present.

The concentrations of gasoline in the D8 samples exceeds the Leaching to Groundwater Pathway.

A summary of the results for the soil analysis is presented in Table 1. Laboratory analytical reports are included as Appendix A.

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Table 1 - Soil Sample Analytical Results – Petroleum

Boring No.	Date	Location of Sample	Sample Depth in Feet	Petroleum		
				Gasoline	Diesel	Heavy Oil
				mg/kg	mg/kg	mg/kg
D1	8/6/24	East end of tank pit based on GEM map	12	11.4	ND <24.1	ND <48.2
			15	ND <8.08	ND <25.7	ND <51.4
D2	8/6/24	East center of tank pit based on GEM map	12	203	25.3	ND <48.8
			15	39.1	ND <25.9	ND <51.8
D3	8/6/24	East end of tank pit based on field observations	12	4,040	187	ND <48.2
			15	13.9	ND <25.1	ND <50.3
D4	8/6/24	East of tank pit based on GEM map	12	ND <6.97	ND <23.2	ND <46.4
			15	ND <7.98	ND <24.4	ND <48.7
D5	8/6/24	Center of tank pit based on field observations	12	172	ND <23.6	ND <47.1
			15	33.0	ND <25.7	ND <51.4
D6	8/6/24	North side of tank pit based on field observations	12	2,360	114	ND <48.4
			15	1,200	ND <23.2	ND <51.3
D7	8/6/24	South side of tank pit based on field observations	12	ND <6.13	ND <23.1	ND <46.1
D8	12/23/24	North of southern tank pit	12	4,370	-	-
			15	2,410	-	-
			17	932	-	-
			20	142	-	-
D9	12/23/24	Eastern portion of site – GW only, no soil samples collected	-	-	-	-
D10	12/23/24	Eastern portion of site – GW only, no soil samples collected	-	-	-	-
D11	12/23/24	North of southern tank pit and at the west end of northern tank pit	12	ND	-	-
			15	ND	-	-
			20	ND	-	-
DEQ Risk-Based Concentrations						
Leaching to Groundwater (Occupational Use)				130	>Max	>Max
Dermal Contact (Construction Worker)				9,700	4,000	11,000
Dermal Contact (Excavation Worker)				>Max	>Max	>Max

ND = Analyte Not Detected at or above laboratory reporting limit (See Laboratory Report) All reporting limits are below the RBCs.

mg/kg = milligram per kilogram or parts per million (ppm)

203 = Exceeds Leaching to Groundwater RBC

VOC Results– August 6, 2024

The VOC analytical results for Boring D3@12’ and D6@12’ indicate that several VOCs were detected in the sample above the laboratory reporting limits.

A summary of the results for the soil analysis is presented in Table 1A. Laboratory analytical reports are included as Appendix A.

VOC Results– December 23, 2024

The VOC analytical results for Boring D8 indicate that several VOCs were detected in the sample above the laboratory reporting limits.

A summary of the results for the soil analysis is presented in Table 1A. Laboratory analytical reports are included as Appendix A.

Table 1A – Soil Sample Analytical Results – RBDM VOCs

Boring Number and Depth	RBDM VOCs										
	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE	Naphthalene	EDB	EDC	Isopropylbenzene	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene
	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
D3@12’	ND <0.579	ND <2.89	143	4.72	ND <2.89	22.2	ND <2.89	ND <1.45	17.6	ND <2.89	ND <2.89
D6@12’	ND <0.146	ND <0.732	5.14	ND <1.10	ND <0.732	ND <1.46	ND <0.732	ND <0.366	ND <0.732	ND <0.732	ND <0.732
D8@12’	ND <0.579	ND <2.89	176	ND <5.23	ND <3.49	24.0	ND <3.49	ND <1.74	21.5	71.8	7.26
D8@15’	ND <0.579	ND <1.70	71.8	ND <2.54	ND <1.70	8.38	ND <1.70	ND <0.848	6.72	96.6	28.0
D8@17’	ND <0.579	ND <0.363	24.5	40.5	ND <0.363	3.46	ND <0.363	ND <0.182	2.64	35.3	10.3
D8@20’	ND <0.579	ND <0.0814	4.76	1.43	ND <0.0814	0.568	ND <0.0814	ND <0.0407	ND <0.0883	3.73	0.120
D11@12’	ND <0.579	ND <0.0638	ND <0.0469	ND <0.141	ND <0.938	ND <0.188	ND <0.0938	ND <0.0469	ND <0.0938	ND <0.0938	ND <0.0938
D11@15’	ND <0.579	ND <0.105	ND <0.0526	ND <0.158	ND <0.105	ND <0.210	ND <0.105	ND <0.0526	ND <0.105	ND <0.105	ND <0.105
D11@20’	ND <0.579	ND <0.0857	ND <0.0857	ND <0.129	ND <0.0857	ND <0.171	ND <0.0857	ND <0.0429	ND <0.0857	ND <0.0857	ND <0.0857
DEQ Risk-Based Screening Levels											
Leaching to Groundwater	0.10	490	0.90	100	0.54	0.34	0.00056	0.013	-	48	53
Direct Contact (Const. Worker)	380	28,000	1,700	20,000	12,000	580	9.0	200	-	2,900	2,900
Direct Contact (Excv. Worker)	11,000	770k	48,000	560k	320k	16,000	250	5,600	-	81,000	81,000

ND = Analyte Not Detected at or above laboratory reporting limit (See Laboratory Report) All reporting limits are below the RBCs.

>Csat = This soil RBC exceeds the limit of the three-phase equilibrium partitioning.

143 = Exceeds Leaching to Groundwater RBC

5.2 Groundwater Findings

Petroleum Results – December 23, 2024

The groundwater analytical results indicate that gasoline or VOCs were not detected in Boring D9 or D10. Diesel and oil were not analyzed because previous testing indicated only gasoline range hydrocarbons are present.

Table 2 – GW Sample Analytical Results – Petroleum

Boring No.	Date	Location of Sample	Boring Depth in Feet	Petroleum
				Gasoline
				ug/l
D9	12/23/24	Eastern portion of site – GW only, no soil samples collected	20	ND <100
D10	12/23/24	Eastern portion of site – GW only, no soil samples collected	20	ND <100
DEQ Risk-Based Concentrations				
Vapor Intrusion into Buildings (Occupational Use)				520
Groundwater in Excavation				14,000

ND = Analyte Not Detected at or above laboratory reporting limit (See Laboratory Report) All reporting limits are below the RBCs.
 ug/l = microgram per liter or parts per billion (ppb)

Table 2A – Groundwater Sample Analytical Results – RBDM VOCs

Boring Number	RBDM VOCs										
	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE	Naphthalene	EDB	EDC	Isopropylbenzene	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene
	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
D9	ND <0.200	ND <1.00	ND <0.500	ND <1.50	ND <1.00	ND <5.00	ND <0.500	ND <0.400	ND <1.00	ND <1.00	ND <1.00
D10	ND <0.200	ND <1.00	ND <0.500	ND <1.50	ND <1.00	ND <5.00	ND <0.500	ND <0.400	ND <1.00	ND <1.00	ND <1.00
DEQ Risk-Based Screening Levels											
Vapor Intrusion into Buildings	12	150,000	31	3,300	3,200	50	1.5	18	-	2,400	1,700
Groundwater in Excavation	1,800	220,000	4,500	560k	63,000	500	27	630	-	81,000	81,000

ND = Analyte Not Detected at or above laboratory reporting limit (See Laboratory Report) All reporting limits are below the RBCs.
 ug/l = microgram per liter or parts per billion (ppb)

5.2 Soil-Gas Findings

The laboratory analytical results indicate that several VOCs and Total Petroleum Hydrocarbons (TPH) were detected in samples. The detected concentrations were compared to the DEQ RBCs and the concentrations of Total Petroleum Hydrocarbons (TPH) in Sample SS1 exceed the Vapor Intrusion into Buildings RBCs for occupational receptors. A summary of the results for the soil vapor analysis is presented in Table 1. Only analytes that had a detection and have a corresponding RBC, are in the table below. The complete laboratory analytical report is included as Appendix A.

Table 3 – Soil Vapor Sample Analytical Results

	SSI	SS2	SS3	RBC _{sv} (Occupational)
Depth bsg (feet)	Sub-Slab	Sub-Slab	Sub-Slab	-
	Result µg/m3	Result µg/m3	Result µg/m3	µg/m3
Benzene	17.0	2.26	0.76	52
Cyclohexane	272	4.34	ND	880,000
Ethylbenzene	49.9	3.56	1.79	160
Dichlorofluoromethane	2.77	2.61	2.74	15,000
Trichloro-1,2,2-trifluoroethane, 1,1,2-	ND	0.642	ND	730,000
Heptane	438	8.18	ND	58,000
n-Hexane	32,300	367	6.49	100,000
Methyl Ethyl Ketone (2-Butanone)	425	19.0	13.2	730,000
2-Propanol	1,840	693	2,950	Leak Detection Compound
Toluene	22.9	4.48		730,000
Tetrachloroethylene	ND	ND	1.09	1,600
1,2,4-Trimethybenzene	15.6	5.89	8.69	8,800
1,3,5-Trimethybenzene	5.50	2.04	3.09	8,800
Xylenes	250	20.2	14.0	15,000
TPH	48,700	2,470	ND	40,000

ND = Analyte Not Detected at or above laboratory reporting limit (See Appendix A for reporting limits). All reporting limits are below the RBCs.

µg/m3 = microgram per meter cubed

48,700 = Exceeds Vapor Intrusion into Building RBC

RBC_{sv} = Soil-Gas risk-based concentration for Vapor Intrusion into Buildings – Occupational & Residential Pathway. Only analytes with RBCs are listed above, for a complete list, see Appendix B.

6.0 RISK-BASED EVALUATIONS

6.1 Conceptual Site Models

A conceptual site model (CSM) describes the known or suspected sources of contamination, considers how the contaminants are likely to migrate (pathways), and identifies who is likely to be affected by the contaminants (receptors). In order for risk to be present at the site, a source must be present, a pathway must be complete and a receptor must be present.

The risk is evaluated for each contaminant of interest (COI) in order to determine whether risk is present at a site. Current conditions as well as anticipated future conditions are considered when developing the CSM.

6.2 Expected Future Use of the Site

The future use of the subject property, currently zoned heavy industrial, and based on site uses in the area, is not likely to change for the foreseeable future.

6.3 Conceptual Site Model Summary

The Conceptual Site Model (CSM) summary is designed to provide a depiction of relevant site features and the surface/subsurface conditions. The table helps to define the transport mechanisms, exposure pathways and the risk to potential receptors.

TABLE 2: - Conceptual Site Model Risk Table

Pathway	Receptor	Applicable RBC?	Basis for selection/exclusion
SOURCE: GASOLINE TANK; CURRENT AND FUTURE LAND USE: INDUSTRIAL; IMPACTED MEDIUM: SOIL			
Ingestion, dermal contact, and inhalation	Residential	No	
	Occupational	Yes	Pathway is complete; however, contaminates appear to be greater than 3'
	Construction worker	Yes	Pathway is complete; however, contaminates do not exceed the RBCs
	Excavation worker	Yes	Pathway is complete; however, contaminates do not exceed the RBCs
Vapor intrusion into buildings	Residential	No	
	Occupational	Yes	Pathway is complete and soil vapors in SS1 exceed the RBCs
Leaching to groundwater	Residential	No	No impacts were detected in the groundwater samples. See Note 1.
	Occupational	No	

Notes:

1. City water is provided. Deep groundwater wells or surface water from Bull Run are currently used for drinking water in Portland.

6.4 Contaminant Concentrations

As noted above, the contaminants identified at the site are petroleum products as gasoline and related VOC constituents. The previous Tables are a summary of soils collected by Alpha during the sampling event from August 2024 and December 2024.

6.5 Human Health Risk

The following Contaminants of Potential Concern (COPCs) were identified for the applicable soil exposure pathways.

Soil:

Soil ingestion, dermal contact, and inhalation: Petroleum was detected, but at concentrations below applicable screening levels for occupational receptors and construction and excavation workers.

Groundwater:

Groundwater samples indicate that groundwater has not been significantly impacted in the downgradient and there does not appear to be a vapor intrusion risk from groundwater. The drinking water is supplied by the municipal system.

Vapor intrusion into buildings:

There is a possible human health risk to building occupants as one of the vapor samples (SS1) exceeded the RBCs for petroleum hydrocarbons.

6.6 Ecological Receptors

The nearest major surface water in the vicinity of the Property is the Willamette River located 0.5 miles from the property. Based on the intervening distance and site uses surrounding the property no ecological risk is anticipated.

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7.0 FINDINGS, CONCLUSIONS, RISK EVALUATION AND RECOMMENDATIONS

Alpha has conducted the Site Investigation for the Property located at 3939 NW St Helens Road, Portland, Oregon. The assessment was performed in accordance with the agreed-upon scope of services. The assessment followed the standard practice for conducting Environmental Site Assessments from the ASTM Standard E1903-19 and DEQ Site Assessment regulations. Based on the evaluation of the current findings of this assessment, the following findings, conclusions and recommendations have been developed.

7.1 Findings

GEM Report Review and Field Observation Findings

- All boring locations performed by GEM were field located by Alpha, except for Boring B2.
- The location of the southern tank pit shown on the GEM map (Figure 2 - Site Plan) does not appear to correspond to field markings painted on the ground during the geophysical survey.
- Gasoline only detected from Boring B2 at the east end of the southern suspected tank pit location.
- Low VOCs detected in Boring B2.

Summary of Alpha Previous Soil Findings

- Gasoline was detected in Borings D1, D2, D3, D5 and D6.
- The highest detected concentration of gasoline was in Boring D3@12' (4,040 ppm).
- Concentrations appear to rapidly attenuate in all borings except for Boring D3 (2,360 ppm at 12' and 1,200 ppm at 15').
- Visual observations in the upper 3 feet of soil did not indicate petroleum impacts from this depth interval. Field observations and soil results are consistent with a below ground tank release. Based on these factors, the occupational direct contact risk does not appear to be applicable.
- The detections of gasoline and VOCs indicate a vapor intrusion risk may exist.

Summary of Alpha Current Findings

- The maximum gasoline detection was in Boring D8@12' (4,370 ppm) and rapidly attenuates with depth to Boring D8@20' (142 ppm).
- Visual observations in the upper 3 feet of soil did not indicate petroleum impacts from this depth interval. Field observations and soil results are consistent with a below ground tank release. Based on these factors, the occupational direct contact risk does not appear to be applicable.
- The groundwater analytical results from the two downgradient wells indicate that gasoline or VOCs were not detected in Boring D9 or D10.
- The laboratory analytical results indicate TPH detections in Sub-Slab Vapor Sample SS1 exceed the Vapor Intrusion into Buildings RBCs for occupational receptors. The detected concentration was 47,800 µg/m³ and the occupational RBC is 40,000 µg/m³.

7.2 Conclusions

Soil

Gasoline impacts in the soils appear to be isolated around the area of the southern tank pit. Based on previous and current data, the impacted area measures approximately 30'x 30' or 900 square feet. Soil impacts are relatively deep ranging from approximately 12 to 20 feet. The lateral and vertical impacts appear to have been sufficiently delineated.

Groundwater

Gasoline impacts were not encountered in the two downgradient wells. If any groundwater impacts on the site exist, they would be restricted to the immediate area around the former tank.

7.3 Risk Evaluation

Based on the current Sub-Slab Vapor findings, a vapor intrusion risk may exist for occupation receptors.

7.4 Recommendations

Alpha recommends conducting additional sub-slab soil vapor testing in the area of Sample SS1 in the building.

DRAFT

8.0 LIMITATIONS & USE RELIANCE

The investigation considered the past activities and operations conducted on the Property and adjacent properties to identify the potential for releases to have occurred or other reasons to conclude that there is a presence or likely presence of substances relevant to the objectives of the investigation. Alpha makes every attempt to fulfill the user's objectives which dictate the thresholds of concern or confidence desired in the conclusions to be derived from this assessment.

There is a possibility that, even with the proper application of these methodologies, there may exist at the Property conditions that could not be identified within the scope of the assessment or which were not reasonably identifiable from the available information. The methodologies of this assessment are not intended to produce all inclusive or comprehensive results, but rather to provide the client and interested parties with an indication of subsurface environmental conditions in specifically targeted areas of the property at this time.

8.1 Limitations and Exceptions

In preparing the investigation sampling plans and reports, Alpha has relied upon certain information and representations contained in the historical documents provided to Alpha and the verbal statements of other consultants, field data (soil/groundwater) and additional information provided to Alpha. Therefore, this report is limited to the conclusions drawn based on information obtained and assumptions made during the review process and analytical results for this investigation.

Alpha relied upon the information and did not attempt to independently re-verify its accuracy or completeness, except as discussed. Potential inconsistencies or omissions of a nature that might call into question the validity of the information were not detected. To the extent that the conclusions in this report are based in whole or in part on such information, they are contingent on its validity. Alpha assumes no responsibility for any consequence arising from any information or condition that was concealed, withheld, misrepresented, or otherwise not fully disclosed or available to Alpha.

Within the limitations of the agreed-upon scope of services or the time and budgeting restraints imposed by the client, this investigation has been undertaken and performed in a professional manner, in accordance with generally accepted engineering practices, using the degree of skill and care ordinarily exercised by reputable environmental consultants under similar circumstances. No representations or warranties are made concerning the nature or quality of the air, soil, water, building materials, or any other substance on the Property (including the potential for any substance to migrate into a structure), other than the immediate subject sampling areas as stated in this report. The investigation is a screening and is not intended to be a definitive investigation of existing or potential adverse environmental impacts; thus, it is possible that such an impact exists on the Property or adjacent properties, but was not identified during the investigation. The investigation is not intended to satisfy the level of inquiry that may be necessary to support remedial solutions for a site. Conclusions in this report represent professional judgments based upon the information evaluated during the course of the assessment, not scientific certainties.

8.2 Use Reliance

This report has been prepared for the express use of Jay Poizer, his representatives and the Oregon DEQ. The client and/or Users of this report and its legal counsel may release all or parts of this report to third parties; however, in using this report, such third parties agree that they shall have no legal recourse against Alpha or its parent or subsidiaries, and shall indemnify and defend Alpha from and against all claims arising out of or in conjunction with such use or reliance. This report does not constitute legal advice. In addition, Alpha makes no determination or recommendations regarding the decision to purchase, sell, or provide financing for this Property.

9.0 SIGNATURES OF ENVIRONMENTAL PROFESSIONALS

Alpha is providing the client with the results of our investigation for the Property. Alpha completed the investigation of the Property in a professional manner according with generally accepted engineering practices, using the degree of skill and care ordinarily exercised by reputable environmental consultants under similar circumstances.

The environmental consultants listed below exercised professional judgment based on knowledge of the manner in which releases commonly occur in connection with commercial or industrial activities and operations similar to those currently or historically conducted on or adjacent to the Property.

The consultants also possess applicable education, professional training, licensing and relevant experience to conduct the environmental investigation and other activities in accordance with the relevant standards and to develop opinions and conclusions regarding target analytes in the environmental media.

Alpha appreciates the opportunity to provide environmental services to you. If you have any questions concerning this report, or if we can assist you in any other matter, please contact our office at 503-292-5346.



Jim Cooper, R.G.
Senior Geologist



ALPHA ENVIRONMENTAL SERVICES, INC.

10.0 REFERENCES

American Society for Testing and Materials, *Standard Practice for Environmental Site Assessments: Phase II Environmental Site Assessment Process*, ASTM Designation: E 1903-19

Oregon DEQ, *Files from Public Records*.

State of Oregon Water Resources Department, Agency Resources, *Online Well Log Search and Groundwater Level Data*, accessed via website.

United States Geological Survey, *Depth to Groundwater in Portland*, Interactive Map.

Walker, 1991. *Geological Map of Oregon*, United States Geological Survey, Walker, G.W. and MacLeod, N.S., 1991.

DRAFT

11.0 ACRONYMS

ASTM	American Society for Testing and Materials
bsg	below surface grade
COPC	Contaminants of Potential Concern
CSM	Conceptual Site Model
DEQ	Department of Environmental Quality (Oregon)
EPA	Environmental Protection Agency
ESA	Environmental Site Assessment
ND	Not Detected At or Above Laboratory Reporting Limits
ppm	parts per million
RBCs	Risk-based Concentrations
RBDM	Risk-based Decision Making
RCRA	Resource Conservation & Recovery Act
RECs	Recognized Environmental Conditions
TPH	Total Petroleum Hydrocarbons
VOCs	Volatile Organic Compounds
WRD	Water Resources Department (Oregon)

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FIGURES:

SITE OVERVIEW MAP
SITE SAMPLING MAP



LEGEND

 PROPERTY BOUNDARY

FIGURE 1: SITE OVERVIEW MAP

3939 NW ST HELENS ROAD
 PORTLAND, OREGON 97210

NOTES

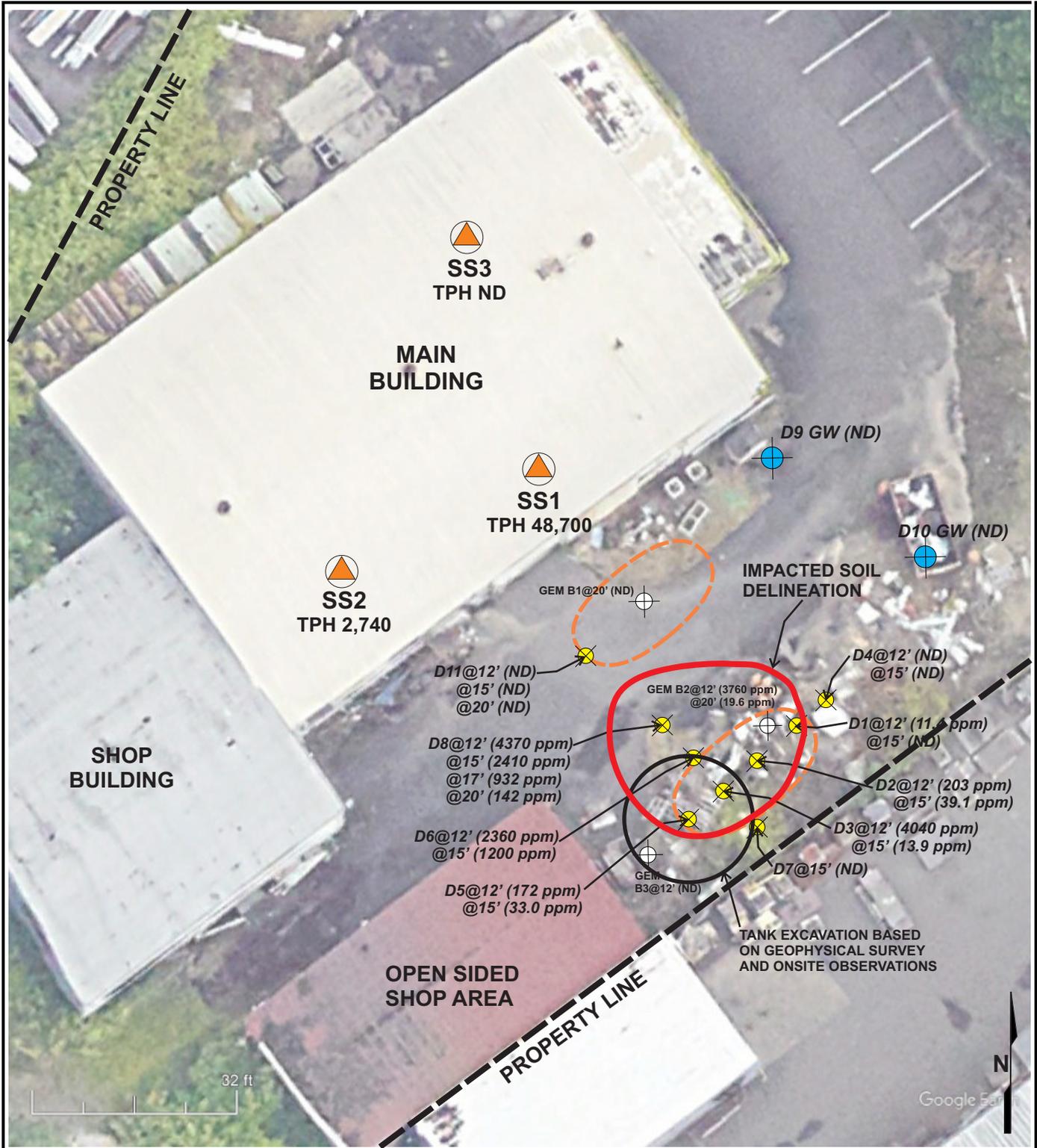
MAP SYMBOLS DENOTE LOCATIONS AND MAY NOT BE TO SCALE

GOOGLE MAPS BASE IMAGE MAY BE SKEWED BY SATELLITE POSITION



11080 SW ALLEN BVLD, STE 100
 BEAVERTON, OREGON 97005
 (503) 292-5346

PROJECT NO: 24-63060



LEGEND SOIL SAMPLE LOCATIONS GEM SOIL SAMPLE LOCATIONS GW SAMPLE LOCATION SUB-SLAB VAPOR SAMPLE LOCATIONS TANK EXCAVATION BASED ON GEM MAP	FIGURE 2: SITE SAMPLING MAP	
	3939 NW ST HELENS ROAD PORTLAND, OREGON 97210	
	NOTES MAP SYMBOLS DENOTE LOCATIONS AND MAY NOT BE TO SCALE GOOGLE MAPS BASE IMAGE MAY BE SKEWED BY SATELLITE POSITION	 11080 SW ALLEN BVLD, STE 100 BEAVERTON, OREGON 97005 (503) 292-5346
	PROJECT NO: 24-63060	



APPENDIX A:
ANALYTICAL LABORATORY REPORTS



ANALYTICAL REPORT

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

Monday, January 6, 2025
Jim Cooper
Alpha Environmental
11080 SW Allen Blvd, Suite 100
Beaverton, OR 97005

RE: A4L1669 - Default- Env Dept. - 3939 NW St. Helens Rd 24-63060

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 A4L1669, which was received by the laboratory on 12/23/2024 at 4:00:00PM.

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

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

Cooler Receipt Information	
<u>Acceptable Receipt Temperature is less than, or equal to, 6 degC (not frozen), or received on ice the same day as sampling.</u>	
(See Cooler Receipt Form for details)	
<u>Default Cooler</u>	<u>1.9 degC</u>

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

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Cameron O'Brien, Project Manager



ANALYTICAL REPORT

Apex Laboratories, LLC

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

Alpha Environmental 11080 SW Allen Blvd, Suite 100 Beaverton, OR 97005	Project: Default- Env Dept. Project Number: 3939 NW St. Helens Rd 24-C Project Manager: Jim Cooper	Report ID: A4L1669 - 01 06 25 1856
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ANALYTICAL REPORT FOR SAMPLES

SAMPLE INFORMATION

Client Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
24-63060 D8-12'	A4L1669-01	Soil	12/23/24 10:00	12/23/24 16:00
24-63060 D8-15'	A4L1669-02	Soil	12/23/24 10:10	12/23/24 16:00
24-63060 D8-17'	A4L1669-03	Soil	12/23/24 10:15	12/23/24 16:00
24-63060 D8-17'-Dup	A4L1669-04	Soil	12/23/24 10:15	12/23/24 16:00
24-63060 D8-20'	A4L1669-05	Soil	12/23/24 10:20	12/23/24 16:00
24-63060 D11-12'	A4L1669-06	Soil	12/23/24 11:30	12/23/24 16:00
24-63060 D11-15'	A4L1669-07	Soil	12/23/24 11:35	12/23/24 16:00
24-63060 D11-20'	A4L1669-08	Soil	12/23/24 11:40	12/23/24 16:00
24-63060 D9	A4L1669-09	Water	12/23/24 11:00	12/23/24 16:00
24-63060 D10	A4L1669-10	Water	12/23/24 11:30	12/23/24 16:00
24-63060 D9 DUP	A4L1669-11	Water	12/23/24 11:00	12/23/24 16:00

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ANALYTICAL REPORT

Apex Laboratories, LLC

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

Alpha Environmental 11080 SW Allen Blvd, Suite 100 Beaverton, OR 97005	Project: Default- Env Dept. Project Number: 3939 NW St. Helens Rd 24-c Project Manager: Jim Cooper	Report ID: A4L1669 - 01 06 25 1856
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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
24-63060 D8-12' (A4L1669-01)				Matrix: Soil		Batch: 24L0900		
Gasoline Range Organics	4370	---	349	mg/kg dry	2000	12/25/24 01:07	NWTPH-Gx (MS)	
<i>Surrogate: 4-Bromofluorobenzene (Sur)</i>			<i>Recovery: 104 %</i>	<i>Limits: 50-150 %</i>	<i>1</i>	<i>12/25/24 01:07</i>	<i>NWTPH-Gx (MS)</i>	
<i>1,4-Difluorobenzene (Sur)</i>			<i>99 %</i>	<i>50-150 %</i>	<i>1</i>	<i>12/25/24 01:07</i>	<i>NWTPH-Gx (MS)</i>	
24-63060 D8-15' (A4L1669-02)				Matrix: Soil		Batch: 24L0900		
Gasoline Range Organics	2410	---	170	mg/kg dry	1000	12/24/24 23:44	NWTPH-Gx (MS)	
<i>Surrogate: 4-Bromofluorobenzene (Sur)</i>			<i>Recovery: 100 %</i>	<i>Limits: 50-150 %</i>	<i>1</i>	<i>12/24/24 23:44</i>	<i>NWTPH-Gx (MS)</i>	
<i>1,4-Difluorobenzene (Sur)</i>			<i>100 %</i>	<i>50-150 %</i>	<i>1</i>	<i>12/24/24 23:44</i>	<i>NWTPH-Gx (MS)</i>	
24-63060 D8-17' (A4L1669-03RE2)				Matrix: Soil		Batch: 24L1029		
Gasoline Range Organics	932	---	36.3	mg/kg dry	200	12/30/24 23:17	NWTPH-Gx (MS)	
<i>Surrogate: 4-Bromofluorobenzene (Sur)</i>			<i>Recovery: 104 %</i>	<i>Limits: 50-150 %</i>	<i>1</i>	<i>12/30/24 23:17</i>	<i>NWTPH-Gx (MS)</i>	
<i>1,4-Difluorobenzene (Sur)</i>			<i>99 %</i>	<i>50-150 %</i>	<i>1</i>	<i>12/30/24 23:17</i>	<i>NWTPH-Gx (MS)</i>	
24-63060 D8-17'-Dup (A4L1669-04)				Matrix: Soil		Batch: 24L0900		
Gasoline Range Organics	24.3	---	8.83	mg/kg dry	50	12/24/24 22:50	NWTPH-Gx (MS)	
<i>Surrogate: 4-Bromofluorobenzene (Sur)</i>			<i>Recovery: 105 %</i>	<i>Limits: 50-150 %</i>	<i>1</i>	<i>12/24/24 22:50</i>	<i>NWTPH-Gx (MS)</i>	
<i>1,4-Difluorobenzene (Sur)</i>			<i>100 %</i>	<i>50-150 %</i>	<i>1</i>	<i>12/24/24 22:50</i>	<i>NWTPH-Gx (MS)</i>	
24-63060 D8-20' (A4L1669-05RE2)				Matrix: Soil		Batch: 24L1029		
Gasoline Range Organics	142	---	8.14	mg/kg dry	50	12/30/24 22:49	NWTPH-Gx (MS)	
<i>Surrogate: 4-Bromofluorobenzene (Sur)</i>			<i>Recovery: 106 %</i>	<i>Limits: 50-150 %</i>	<i>1</i>	<i>12/30/24 22:49</i>	<i>NWTPH-Gx (MS)</i>	
<i>1,4-Difluorobenzene (Sur)</i>			<i>99 %</i>	<i>50-150 %</i>	<i>1</i>	<i>12/30/24 22:49</i>	<i>NWTPH-Gx (MS)</i>	
24-63060 D11-12' (A4L1669-06)				Matrix: Soil		Batch: 24L0900		
Gasoline Range Organics	ND	---	9.38	mg/kg dry	50	12/24/24 21:28	NWTPH-Gx (MS)	
<i>Surrogate: 4-Bromofluorobenzene (Sur)</i>			<i>Recovery: 106 %</i>	<i>Limits: 50-150 %</i>	<i>1</i>	<i>12/24/24 21:28</i>	<i>NWTPH-Gx (MS)</i>	
<i>1,4-Difluorobenzene (Sur)</i>			<i>99 %</i>	<i>50-150 %</i>	<i>1</i>	<i>12/24/24 21:28</i>	<i>NWTPH-Gx (MS)</i>	
24-63060 D11-15' (A4L1669-07)				Matrix: Soil		Batch: 24L0900		
Gasoline Range Organics	ND	---	10.5	mg/kg dry	50	12/24/24 21:55	NWTPH-Gx (MS)	
<i>Surrogate: 4-Bromofluorobenzene (Sur)</i>			<i>Recovery: 105 %</i>	<i>Limits: 50-150 %</i>	<i>1</i>	<i>12/24/24 21:55</i>	<i>NWTPH-Gx (MS)</i>	
<i>1,4-Difluorobenzene (Sur)</i>			<i>99 %</i>	<i>50-150 %</i>	<i>1</i>	<i>12/24/24 21:55</i>	<i>NWTPH-Gx (MS)</i>	

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ANALYTICAL REPORT

Apex Laboratories, LLC

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

Alpha Environmental 11080 SW Allen Blvd, Suite 100 Beaverton, OR 97005	Project: Default- Env Dept. Project Number: 3939 NW St. Helens Rd 24-0 Project Manager: Jim Cooper	Report ID: A4L1669 - 01 06 25 1856
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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
24-63060 D11-20' (A4L1669-08)				Matrix: Soil		Batch: 24L0900		
Gasoline Range Organics	ND	---	8.57	mg/kg dry	50	12/24/24 22:22	NWTPH-Gx (MS)	
<i>Surrogate: 4-Bromofluorobenzene (Sur)</i>		<i>Recovery:</i>	<i>104 %</i>	<i>Limits:</i>	<i>50-150 %</i>	<i>1</i>	<i>12/24/24 22:22</i>	<i>NWTPH-Gx (MS)</i>
<i>1,4-Difluorobenzene (Sur)</i>			<i>100 %</i>	<i>50-150 %</i>	<i>1</i>	<i>12/24/24 22:22</i>	<i>NWTPH-Gx (MS)</i>	
24-63060 D9 (A4L1669-09RE1)				Matrix: Water		Batch: 24L0985		
Gasoline Range Organics	ND	---	100	ug/L	1	12/27/24 15:59	NWTPH-Gx (MS)	
<i>Surrogate: 4-Bromofluorobenzene (Sur)</i>		<i>Recovery:</i>	<i>96 %</i>	<i>Limits:</i>	<i>50-150 %</i>	<i>1</i>	<i>12/27/24 15:59</i>	<i>NWTPH-Gx (MS)</i>
<i>1,4-Difluorobenzene (Sur)</i>			<i>111 %</i>	<i>50-150 %</i>	<i>1</i>	<i>12/27/24 15:59</i>	<i>NWTPH-Gx (MS)</i>	
24-63060 D10 (A4L1669-10RE1)				Matrix: Water		Batch: 24L0985		
Gasoline Range Organics	ND	---	100	ug/L	1	12/27/24 16:22	NWTPH-Gx (MS)	
<i>Surrogate: 4-Bromofluorobenzene (Sur)</i>		<i>Recovery:</i>	<i>98 %</i>	<i>Limits:</i>	<i>50-150 %</i>	<i>1</i>	<i>12/27/24 16:22</i>	<i>NWTPH-Gx (MS)</i>
<i>1,4-Difluorobenzene (Sur)</i>			<i>113 %</i>	<i>50-150 %</i>	<i>1</i>	<i>12/27/24 16:22</i>	<i>NWTPH-Gx (MS)</i>	
24-63060 D9 DUP (A4L1669-11)				Matrix: Water		Batch: 24L0985		
Gasoline Range Organics	ND	---	100	ug/L	1	12/27/24 15:37	NWTPH-Gx (MS)	
<i>Surrogate: 4-Bromofluorobenzene (Sur)</i>		<i>Recovery:</i>	<i>96 %</i>	<i>Limits:</i>	<i>50-150 %</i>	<i>1</i>	<i>12/27/24 15:37</i>	<i>NWTPH-Gx (MS)</i>
<i>1,4-Difluorobenzene (Sur)</i>			<i>111 %</i>	<i>50-150 %</i>	<i>1</i>	<i>12/27/24 15:37</i>	<i>NWTPH-Gx (MS)</i>	

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Cameron O'Brien, Project Manager



ANALYTICAL REPORT

Apex Laboratories, LLC

6700 S.W. Sandburg Street
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503-718-2323
ORELAP ID: OR100062

Alpha Environmental 11080 SW Allen Blvd, Suite 100 Beaverton, OR 97005	Project: Default- Env Dept. Project Number: 3939 NW St. Helens Rd 24-C Project Manager: Jim Cooper	Report ID: A4L1669 - 01 06 25 1856
-------------------------------------------------------------------------------------	-------------------------------------------------------------------------------------------------------------------------------	-----------------------------------------------------

ANALYTICAL SAMPLE RESULTS

Selected Volatile Organic Compounds by EPA 8260D

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
24-63060 D9 (A4L1669-09RE1)			Matrix: Water		Batch: 24L0985			
Benzene	ND	---	0.200	ug/L	1	12/27/24 15:59	EPA 8260D	
Toluene	ND	---	1.00	ug/L	1	12/27/24 15:59	EPA 8260D	
Ethylbenzene	ND	---	0.500	ug/L	1	12/27/24 15:59	EPA 8260D	
Xylenes, total	ND	---	1.50	ug/L	1	12/27/24 15:59	EPA 8260D	
Methyl tert-butyl ether (MTBE)	ND	---	1.00	ug/L	1	12/27/24 15:59	EPA 8260D	
Naphthalene	ND	---	5.00	ug/L	1	12/27/24 15:59	EPA 8260D	
1,2-Dibromoethane (EDB)	ND	---	0.500	ug/L	1	12/27/24 15:59	EPA 8260D	
1,2-Dichloroethane (EDC)	ND	---	0.400	ug/L	1	12/27/24 15:59	EPA 8260D	
Isopropylbenzene	ND	---	1.00	ug/L	1	12/27/24 15:59	EPA 8260D	
1,2,4-Trimethylbenzene	ND	---	1.00	ug/L	1	12/27/24 15:59	EPA 8260D	
1,3,5-Trimethylbenzene	ND	---	1.00	ug/L	1	12/27/24 15:59	EPA 8260D	
<i>Surrogate: 1,4-Difluorobenzene (Surr)</i>			<i>Recovery: 106 %</i>	<i>Limits: 80-120 %</i>	<i>1</i>	<i>12/27/24 15:59</i>	<i>EPA 8260D</i>	
<i>Toluene-d8 (Surr)</i>			<i>107 %</i>	<i>80-120 %</i>	<i>1</i>	<i>12/27/24 15:59</i>	<i>EPA 8260D</i>	
<i>4-Bromofluorobenzene (Surr)</i>			<i>104 %</i>	<i>80-120 %</i>	<i>1</i>	<i>12/27/24 15:59</i>	<i>EPA 8260D</i>	
24-63060 D10 (A4L1669-10RE1)			Matrix: Water		Batch: 24L0985			
Benzene	ND	---	0.200	ug/L	1	12/27/24 16:22	EPA 8260D	
Toluene	ND	---	1.00	ug/L	1	12/27/24 16:22	EPA 8260D	
Ethylbenzene	ND	---	0.500	ug/L	1	12/27/24 16:22	EPA 8260D	
Xylenes, total	ND	---	1.50	ug/L	1	12/27/24 16:22	EPA 8260D	
Methyl tert-butyl ether (MTBE)	ND	---	1.00	ug/L	1	12/27/24 16:22	EPA 8260D	
Naphthalene	ND	---	5.00	ug/L	1	12/27/24 16:22	EPA 8260D	
1,2-Dibromoethane (EDB)	ND	---	0.500	ug/L	1	12/27/24 16:22	EPA 8260D	
1,2-Dichloroethane (EDC)	ND	---	0.400	ug/L	1	12/27/24 16:22	EPA 8260D	
Isopropylbenzene	ND	---	1.00	ug/L	1	12/27/24 16:22	EPA 8260D	
1,2,4-Trimethylbenzene	ND	---	1.00	ug/L	1	12/27/24 16:22	EPA 8260D	
1,3,5-Trimethylbenzene	ND	---	1.00	ug/L	1	12/27/24 16:22	EPA 8260D	
<i>Surrogate: 1,4-Difluorobenzene (Surr)</i>			<i>Recovery: 105 %</i>	<i>Limits: 80-120 %</i>	<i>1</i>	<i>12/27/24 16:22</i>	<i>EPA 8260D</i>	
<i>Toluene-d8 (Surr)</i>			<i>107 %</i>	<i>80-120 %</i>	<i>1</i>	<i>12/27/24 16:22</i>	<i>EPA 8260D</i>	
<i>4-Bromofluorobenzene (Surr)</i>			<i>104 %</i>	<i>80-120 %</i>	<i>1</i>	<i>12/27/24 16:22</i>	<i>EPA 8260D</i>	
24-63060 D9 DUP (A4L1669-11)			Matrix: Water		Batch: 24L0985			
Benzene	ND	---	0.200	ug/L	1	12/27/24 15:37	EPA 8260D	
Toluene	ND	---	1.00	ug/L	1	12/27/24 15:37	EPA 8260D	
Ethylbenzene	ND	---	0.500	ug/L	1	12/27/24 15:37	EPA 8260D	
Xylenes, total	ND	---	1.50	ug/L	1	12/27/24 15:37	EPA 8260D	

Apex Laboratories

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ANALYTICAL REPORT

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-------------------------------------------------------------------------------------	-------------------------------------------------------------------------------------------------------------------------------	-----------------------------------------------------

ANALYTICAL SAMPLE RESULTS

Selected Volatile Organic Compounds by EPA 8260D

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
24-63060 D9 DUP (A4L1669-11)				Matrix: Water		Batch: 24L0985		
Methyl tert-butyl ether (MTBE)	ND	---	1.00	ug/L	1	12/27/24 15:37	EPA 8260D	
Naphthalene	ND	---	5.00	ug/L	1	12/27/24 15:37	EPA 8260D	
1,2-Dibromoethane (EDB)	ND	---	0.500	ug/L	1	12/27/24 15:37	EPA 8260D	
1,2-Dichloroethane (EDC)	ND	---	0.400	ug/L	1	12/27/24 15:37	EPA 8260D	
Isopropylbenzene	ND	---	1.00	ug/L	1	12/27/24 15:37	EPA 8260D	
1,2,4-Trimethylbenzene	ND	---	1.00	ug/L	1	12/27/24 15:37	EPA 8260D	
1,3,5-Trimethylbenzene	ND	---	1.00	ug/L	1	12/27/24 15:37	EPA 8260D	
<i>Surrogate: 1,4-Difluorobenzene (Surr)</i>		<i>Recovery: 105 %</i>		<i>Limits: 80-120 %</i>		<i>1</i>	<i>12/27/24 15:37</i>	<i>EPA 8260D</i>
<i>Toluene-d8 (Surr)</i>		<i>106 %</i>		<i>80-120 %</i>		<i>1</i>	<i>12/27/24 15:37</i>	<i>EPA 8260D</i>
<i>4-Bromofluorobenzene (Surr)</i>		<i>104 %</i>		<i>80-120 %</i>		<i>1</i>	<i>12/27/24 15:37</i>	<i>EPA 8260D</i>

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Cameron O'Brien, Project Manager



ANALYTICAL REPORT

Apex Laboratories, LLC

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

Alpha Environmental 11080 SW Allen Blvd, Suite 100 Beaverton, OR 97005	Project: Default- Env Dept. Project Number: 3939 NW St. Helens Rd 24-c Project Manager: Jim Cooper	Report ID: A4L1669 - 01 06 25 1856
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ANALYTICAL SAMPLE RESULTS

Selected Volatile Organic Compounds by EPA 5035A/8260D

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
24-63060 D8-12' (A4L1669-01)				Matrix: Soil		Batch: 24L0900		
Benzene	ND	---	0.698	mg/kg dry	2000	12/25/24 01:07	5035A/8260D	
Toluene	ND	---	3.49	mg/kg dry	2000	12/25/24 01:07	5035A/8260D	
Ethylbenzene	176	---	1.74	mg/kg dry	2000	12/25/24 01:07	5035A/8260D	
Xylenes, total	ND	---	5.23	mg/kg dry	2000	12/25/24 01:07	5035A/8260D	
Methyl tert-butyl ether (MTBE)	ND	---	3.49	mg/kg dry	2000	12/25/24 01:07	5035A/8260D	
Naphthalene	24.0	---	6.98	mg/kg dry	2000	12/25/24 01:07	5035A/8260D	
1,2-Dibromoethane (EDB)	ND	---	3.49	mg/kg dry	2000	12/25/24 01:07	5035A/8260D	
1,2-Dichloroethane (EDC)	ND	---	1.74	mg/kg dry	2000	12/25/24 01:07	5035A/8260D	
Isopropylbenzene	21.5	---	3.49	mg/kg dry	2000	12/25/24 01:07	5035A/8260D	
1,2,4-Trimethylbenzene	71.8	---	3.49	mg/kg dry	2000	12/25/24 01:07	5035A/8260D	
1,3,5-Trimethylbenzene	7.26	---	3.49	mg/kg dry	2000	12/25/24 01:07	5035A/8260D	
<i>Surrogate: 1,4-Difluorobenzene (Surr)</i>			<i>Recovery: 106 %</i>	<i>Limits: 80-120 %</i>	<i>1</i>	<i>12/25/24 01:07</i>	<i>5035A/8260D</i>	
<i>Toluene-d8 (Surr)</i>			<i>95 %</i>	<i>80-120 %</i>	<i>1</i>	<i>12/25/24 01:07</i>	<i>5035A/8260D</i>	
<i>4-Bromofluorobenzene (Surr)</i>			<i>99 %</i>	<i>79-120 %</i>	<i>1</i>	<i>12/25/24 01:07</i>	<i>5035A/8260D</i>	

24-63060 D8-15' (A4L1669-02)				Matrix: Soil		Batch: 24L0900		
Benzene	ND	---	0.339	mg/kg dry	1000	12/24/24 23:44	5035A/8260D	
Toluene	ND	---	1.70	mg/kg dry	1000	12/24/24 23:44	5035A/8260D	
Ethylbenzene	71.8	---	0.848	mg/kg dry	1000	12/24/24 23:44	5035A/8260D	
Xylenes, total	108	---	2.54	mg/kg dry	1000	12/24/24 23:44	5035A/8260D	
Methyl tert-butyl ether (MTBE)	ND	---	1.70	mg/kg dry	1000	12/24/24 23:44	5035A/8260D	
Naphthalene	8.38	---	3.39	mg/kg dry	1000	12/24/24 23:44	5035A/8260D	
1,2-Dibromoethane (EDB)	ND	---	1.70	mg/kg dry	1000	12/24/24 23:44	5035A/8260D	
1,2-Dichloroethane (EDC)	ND	---	0.848	mg/kg dry	1000	12/24/24 23:44	5035A/8260D	
Isopropylbenzene	6.72	---	1.70	mg/kg dry	1000	12/24/24 23:44	5035A/8260D	
1,2,4-Trimethylbenzene	96.6	---	1.70	mg/kg dry	1000	12/24/24 23:44	5035A/8260D	
1,3,5-Trimethylbenzene	28.0	---	1.70	mg/kg dry	1000	12/24/24 23:44	5035A/8260D	
<i>Surrogate: 1,4-Difluorobenzene (Surr)</i>			<i>Recovery: 106 %</i>	<i>Limits: 80-120 %</i>	<i>1</i>	<i>12/24/24 23:44</i>	<i>5035A/8260D</i>	
<i>Toluene-d8 (Surr)</i>			<i>97 %</i>	<i>80-120 %</i>	<i>1</i>	<i>12/24/24 23:44</i>	<i>5035A/8260D</i>	
<i>4-Bromofluorobenzene (Surr)</i>			<i>97 %</i>	<i>79-120 %</i>	<i>1</i>	<i>12/24/24 23:44</i>	<i>5035A/8260D</i>	

24-63060 D8-17' (A4L1669-03RE2)				Matrix: Soil		Batch: 24L1029		
Benzene	ND	---	0.0727	mg/kg dry	200	12/30/24 23:17	5035A/8260D	
Toluene	ND	---	0.363	mg/kg dry	200	12/30/24 23:17	5035A/8260D	
Ethylbenzene	24.5	---	0.182	mg/kg dry	200	12/30/24 23:17	5035A/8260D	
Xylenes, total	40.5	---	0.545	mg/kg dry	200	12/30/24 23:17	5035A/8260D	

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ANALYTICAL REPORT

Apex Laboratories, LLC

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503-718-2323
ORELAP ID: OR100062

Alpha Environmental 11080 SW Allen Blvd, Suite 100 Beaverton, OR 97005	Project: Default- Env Dept. Project Number: 3939 NW St. Helens Rd 24-C Project Manager: Jim Cooper	Report ID: A4L1669 - 01 06 25 1856
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ANALYTICAL SAMPLE RESULTS

Selected Volatile Organic Compounds by EPA 5035A/8260D

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
24-63060 D8-17' (A4L1669-03RE2)			Matrix: Soil		Batch: 24L1029			
Methyl tert-butyl ether (MTBE)	ND	---	0.363	mg/kg dry	200	12/30/24 23:17	5035A/8260D	
Naphthalene	3.46	---	0.727	mg/kg dry	200	12/30/24 23:17	5035A/8260D	
1,2-Dibromoethane (EDB)	ND	---	0.363	mg/kg dry	200	12/30/24 23:17	5035A/8260D	
1,2-Dichloroethane (EDC)	ND	---	0.182	mg/kg dry	200	12/30/24 23:17	5035A/8260D	
Isopropylbenzene	2.64	---	0.363	mg/kg dry	200	12/30/24 23:17	5035A/8260D	
1,2,4-Trimethylbenzene	35.3	---	0.363	mg/kg dry	200	12/30/24 23:17	5035A/8260D	
1,3,5-Trimethylbenzene	10.3	---	0.363	mg/kg dry	200	12/30/24 23:17	5035A/8260D	
<i>Surrogate: 1,4-Difluorobenzene (Surr)</i>			<i>Recovery: 106 %</i>	<i>Limits: 80-120 %</i>	<i>1</i>	<i>12/30/24 23:17</i>	<i>5035A/8260D</i>	
<i>Toluene-d8 (Surr)</i>			<i>95 %</i>	<i>80-120 %</i>	<i>1</i>	<i>12/30/24 23:17</i>	<i>5035A/8260D</i>	
<i>4-Bromofluorobenzene (Surr)</i>			<i>99 %</i>	<i>79-120 %</i>	<i>1</i>	<i>12/30/24 23:17</i>	<i>5035A/8260D</i>	

24-63060 D8-17'-Dup (A4L1669-04)			Matrix: Soil		Batch: 24L0900			
Benzene	ND	---	0.0177	mg/kg dry	50	12/24/24 22:50	5035A/8260D	
Toluene	ND	---	0.0883	mg/kg dry	50	12/24/24 22:50	5035A/8260D	
Ethylbenzene	1.66	---	0.0442	mg/kg dry	50	12/24/24 22:50	5035A/8260D	
Xylenes, total	2.14	---	0.133	mg/kg dry	50	12/24/24 22:50	5035A/8260D	
Methyl tert-butyl ether (MTBE)	ND	---	0.0883	mg/kg dry	50	12/24/24 22:50	5035A/8260D	
Naphthalene	ND	---	0.177	mg/kg dry	50	12/24/24 22:50	5035A/8260D	
1,2-Dibromoethane (EDB)	ND	---	0.0883	mg/kg dry	50	12/24/24 22:50	5035A/8260D	
1,2-Dichloroethane (EDC)	ND	---	0.0442	mg/kg dry	50	12/24/24 22:50	5035A/8260D	
Isopropylbenzene	ND	---	0.0883	mg/kg dry	50	12/24/24 22:50	5035A/8260D	
1,2,4-Trimethylbenzene	0.710	---	0.0883	mg/kg dry	50	12/24/24 22:50	5035A/8260D	
1,3,5-Trimethylbenzene	0.185	---	0.0883	mg/kg dry	50	12/24/24 22:50	5035A/8260D	
<i>Surrogate: 1,4-Difluorobenzene (Surr)</i>			<i>Recovery: 107 %</i>	<i>Limits: 80-120 %</i>	<i>1</i>	<i>12/24/24 22:50</i>	<i>5035A/8260D</i>	
<i>Toluene-d8 (Surr)</i>			<i>97 %</i>	<i>80-120 %</i>	<i>1</i>	<i>12/24/24 22:50</i>	<i>5035A/8260D</i>	
<i>4-Bromofluorobenzene (Surr)</i>			<i>95 %</i>	<i>79-120 %</i>	<i>1</i>	<i>12/24/24 22:50</i>	<i>5035A/8260D</i>	

24-63060 D8-20' (A4L1669-05RE2)			Matrix: Soil		Batch: 24L1029			
Benzene	ND	---	0.0163	mg/kg dry	50	12/30/24 22:49	5035A/8260D	
Toluene	ND	---	0.0814	mg/kg dry	50	12/30/24 22:49	5035A/8260D	
Ethylbenzene	4.76	---	0.0407	mg/kg dry	50	12/30/24 22:49	5035A/8260D	
Xylenes, total	1.43	---	0.122	mg/kg dry	50	12/30/24 22:49	5035A/8260D	
Methyl tert-butyl ether (MTBE)	ND	---	0.0814	mg/kg dry	50	12/30/24 22:49	5035A/8260D	
Naphthalene	0.568	---	0.163	mg/kg dry	50	12/30/24 22:49	5035A/8260D	
1,2-Dibromoethane (EDB)	ND	---	0.0814	mg/kg dry	50	12/30/24 22:49	5035A/8260D	
1,2-Dichloroethane (EDC)	ND	---	0.0407	mg/kg dry	50	12/30/24 22:49	5035A/8260D	

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Cameron O'Brien, Project Manager



ANALYTICAL REPORT

Apex Laboratories, LLC

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

Alpha Environmental 11080 SW Allen Blvd, Suite 100 Beaverton, OR 97005	Project: Default- Env Dept. Project Number: 3939 NW St. Helens Rd 24-C Project Manager: Jim Cooper	Report ID: A4L1669 - 01 06 25 1856
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ANALYTICAL SAMPLE RESULTS

Selected Volatile Organic Compounds by EPA 5035A/8260D

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
24-63060 D8-20' (A4L1669-05RE2)				Matrix: Soil		Batch: 24L1029		
Isopropylbenzene	0.587	---	0.0814	mg/kg dry	50	12/30/24 22:49	5035A/8260D	
1,2,4-Trimethylbenzene	3.73	---	0.0814	mg/kg dry	50	12/30/24 22:49	5035A/8260D	
1,3,5-Trimethylbenzene	0.120	---	0.0814	mg/kg dry	50	12/30/24 22:49	5035A/8260D	
<i>Surrogate: 1,4-Difluorobenzene (Surr)</i>			<i>Recovery: 105 %</i>	<i>Limits: 80-120 %</i>	<i>1</i>	<i>12/30/24 22:49</i>	<i>5035A/8260D</i>	
<i>Toluene-d8 (Surr)</i>			<i>94 %</i>	<i>80-120 %</i>	<i>1</i>	<i>12/30/24 22:49</i>	<i>5035A/8260D</i>	
<i>4-Bromofluorobenzene (Surr)</i>			<i>99 %</i>	<i>79-120 %</i>	<i>1</i>	<i>12/30/24 22:49</i>	<i>5035A/8260D</i>	
24-63060 D11-12' (A4L1669-06)				Matrix: Soil		Batch: 24L0900		
Benzene	ND	---	0.0188	mg/kg dry	50	12/24/24 21:28	5035A/8260D	
Toluene	ND	---	0.0938	mg/kg dry	50	12/24/24 21:28	5035A/8260D	
Ethylbenzene	ND	---	0.0469	mg/kg dry	50	12/24/24 21:28	5035A/8260D	
Xylenes, total	ND	---	0.141	mg/kg dry	50	12/24/24 21:28	5035A/8260D	
Methyl tert-butyl ether (MTBE)	ND	---	0.0938	mg/kg dry	50	12/24/24 21:28	5035A/8260D	
Naphthalene	ND	---	0.188	mg/kg dry	50	12/24/24 21:28	5035A/8260D	
1,2-Dibromoethane (EDB)	ND	---	0.0938	mg/kg dry	50	12/24/24 21:28	5035A/8260D	
1,2-Dichloroethane (EDC)	ND	---	0.0469	mg/kg dry	50	12/24/24 21:28	5035A/8260D	
Isopropylbenzene	ND	---	0.0938	mg/kg dry	50	12/24/24 21:28	5035A/8260D	
1,2,4-Trimethylbenzene	ND	---	0.0938	mg/kg dry	50	12/24/24 21:28	5035A/8260D	
1,3,5-Trimethylbenzene	ND	---	0.0938	mg/kg dry	50	12/24/24 21:28	5035A/8260D	
<i>Surrogate: 1,4-Difluorobenzene (Surr)</i>			<i>Recovery: 104 %</i>	<i>Limits: 80-120 %</i>	<i>1</i>	<i>12/24/24 21:28</i>	<i>5035A/8260D</i>	
<i>Toluene-d8 (Surr)</i>			<i>95 %</i>	<i>80-120 %</i>	<i>1</i>	<i>12/24/24 21:28</i>	<i>5035A/8260D</i>	
<i>4-Bromofluorobenzene (Surr)</i>			<i>99 %</i>	<i>79-120 %</i>	<i>1</i>	<i>12/24/24 21:28</i>	<i>5035A/8260D</i>	
24-63060 D11-15' (A4L1669-07)				Matrix: Soil		Batch: 24L0900		
Benzene	ND	---	0.0210	mg/kg dry	50	12/24/24 21:55	5035A/8260D	
Toluene	ND	---	0.105	mg/kg dry	50	12/24/24 21:55	5035A/8260D	
Ethylbenzene	ND	---	0.0526	mg/kg dry	50	12/24/24 21:55	5035A/8260D	
Xylenes, total	ND	---	0.158	mg/kg dry	50	12/24/24 21:55	5035A/8260D	
Methyl tert-butyl ether (MTBE)	ND	---	0.105	mg/kg dry	50	12/24/24 21:55	5035A/8260D	
Naphthalene	ND	---	0.210	mg/kg dry	50	12/24/24 21:55	5035A/8260D	
1,2-Dibromoethane (EDB)	ND	---	0.105	mg/kg dry	50	12/24/24 21:55	5035A/8260D	
1,2-Dichloroethane (EDC)	ND	---	0.0526	mg/kg dry	50	12/24/24 21:55	5035A/8260D	
Isopropylbenzene	ND	---	0.105	mg/kg dry	50	12/24/24 21:55	5035A/8260D	
1,2,4-Trimethylbenzene	ND	---	0.105	mg/kg dry	50	12/24/24 21:55	5035A/8260D	
1,3,5-Trimethylbenzene	ND	---	0.105	mg/kg dry	50	12/24/24 21:55	5035A/8260D	
<i>Surrogate: 1,4-Difluorobenzene (Surr)</i>			<i>Recovery: 105 %</i>	<i>Limits: 80-120 %</i>	<i>1</i>	<i>12/24/24 21:55</i>	<i>5035A/8260D</i>	

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ANALYTICAL REPORT

Apex Laboratories, LLC

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

Alpha Environmental 11080 SW Allen Blvd, Suite 100 Beaverton, OR 97005	Project: Default- Env Dept. Project Number: 3939 NW St. Helens Rd 24-C Project Manager: Jim Cooper	Report ID: A4L1669 - 01 06 25 1856
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ANALYTICAL SAMPLE RESULTS

Selected Volatile Organic Compounds by EPA 5035A/8260D

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
24-63060 D11-15' (A4L1669-07)				Matrix: Soil		Batch: 24L0900		
<i>Surrogate: Toluene-d8 (Surr)</i>		<i>Recovery: 95 %</i>		<i>Limits: 80-120 %</i>		<i>1</i>	<i>12/24/24 21:55</i>	<i>5035A/8260D</i>
<i>4-Bromofluorobenzene (Surr)</i>		<i>99 %</i>		<i>79-120 %</i>		<i>1</i>	<i>12/24/24 21:55</i>	<i>5035A/8260D</i>
24-63060 D11-20' (A4L1669-08)				Matrix: Soil		Batch: 24L0900		
Benzene	ND	---	0.0171	mg/kg dry	50	12/24/24 22:22	5035A/8260D	
Toluene	ND	---	0.0857	mg/kg dry	50	12/24/24 22:22	5035A/8260D	
Ethylbenzene	ND	---	0.0429	mg/kg dry	50	12/24/24 22:22	5035A/8260D	
Xylenes, total	ND	---	0.129	mg/kg dry	50	12/24/24 22:22	5035A/8260D	
Methyl tert-butyl ether (MTBE)	ND	---	0.0857	mg/kg dry	50	12/24/24 22:22	5035A/8260D	
Naphthalene	ND	---	0.171	mg/kg dry	50	12/24/24 22:22	5035A/8260D	
1,2-Dibromoethane (EDB)	ND	---	0.0857	mg/kg dry	50	12/24/24 22:22	5035A/8260D	
1,2-Dichloroethane (EDC)	ND	---	0.0429	mg/kg dry	50	12/24/24 22:22	5035A/8260D	
Isopropylbenzene	ND	---	0.0857	mg/kg dry	50	12/24/24 22:22	5035A/8260D	
1,2,4-Trimethylbenzene	ND	---	0.0857	mg/kg dry	50	12/24/24 22:22	5035A/8260D	
1,3,5-Trimethylbenzene	ND	---	0.0857	mg/kg dry	50	12/24/24 22:22	5035A/8260D	
<i>Surrogate: 1,4-Difluorobenzene (Surr)</i>		<i>Recovery: 106 %</i>		<i>Limits: 80-120 %</i>		<i>1</i>	<i>12/24/24 22:22</i>	<i>5035A/8260D</i>
<i>Toluene-d8 (Surr)</i>		<i>96 %</i>		<i>80-120 %</i>		<i>1</i>	<i>12/24/24 22:22</i>	<i>5035A/8260D</i>
<i>4-Bromofluorobenzene (Surr)</i>		<i>97 %</i>		<i>79-120 %</i>		<i>1</i>	<i>12/24/24 22:22</i>	<i>5035A/8260D</i>

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ANALYTICAL REPORT

Apex Laboratories, LLC

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503-718-2323
ORELAP ID: OR100062

Alpha Environmental 11080 SW Allen Blvd, Suite 100 Beaverton, OR 97005	Project: Default- Env Dept. Project Number: 3939 NW St. Helens Rd 24-0 Project Manager: Jim Cooper	Report ID: A4L1669 - 01 06 25 1856
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ANALYTICAL SAMPLE RESULTS

Percent Dry Weight

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
24-63060 D8-12' (A4L1669-01)				Matrix: Soil		Batch: 24L0936		
% Solids	69.8	---	1.00	%	1	12/27/24 05:06	EPA 8000D	
24-63060 D8-15' (A4L1669-02)				Matrix: Soil		Batch: 24L0936		
% Solids	68.1	---	1.00	%	1	12/27/24 05:06	EPA 8000D	
24-63060 D8-17' (A4L1669-03)				Matrix: Soil		Batch: 24L0936		
% Solids	68.7	---	1.00	%	1	12/27/24 05:06	EPA 8000D	
24-63060 D8-17'-Dup (A4L1669-04)				Matrix: Soil		Batch: 24L0936		
% Solids	69.9	---	1.00	%	1	12/27/24 05:06	EPA 8000D	
24-63060 D8-20' (A4L1669-05)				Matrix: Soil		Batch: 24L0936		
% Solids	71.2	---	1.00	%	1	12/27/24 05:06	EPA 8000D	
24-63060 D11-12' (A4L1669-06)				Matrix: Soil		Batch: 24L0936		
% Solids	67.3	---	1.00	%	1	12/27/24 05:06	EPA 8000D	
24-63060 D11-15' (A4L1669-07)				Matrix: Soil		Batch: 24L0936		
% Solids	79.3	---	1.00	%	1	12/27/24 05:06	EPA 8000D	
24-63060 D11-20' (A4L1669-08)				Matrix: Soil		Batch: 24L0936		
% Solids	70.6	---	1.00	%	1	12/27/24 05:06	EPA 8000D	

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Alpha Environmental 11080 SW Allen Blvd, Suite 100 Beaverton, OR 97005	Project: Default- Env Dept. Project Number: 3939 NW St. Helens Rd 24-C Project Manager: Jim Cooper	Report ID: A4L1669 - 01 06 25 1856
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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 24L0900 - EPA 5035A						Soil						
Blank (24L0900-BLK1)		Prepared: 12/24/24 13:08 Analyzed: 12/24/24 15:31										
NWTPH-Gx (MS)												
Gasoline Range Organics	ND	---	5.00	mg/kg wet	50	---	---	---	---	---	---	---
<i>Surr: 4-Bromofluorobenzene (Sur)</i>		<i>Recovery: 100 %</i>		<i>Limits: 50-150 %</i>		<i>Dilution: 1x</i>						
<i>1,4-Difluorobenzene (Sur)</i>		<i>99 %</i>		<i>50-150 %</i>		<i>"</i>						
LCS (24L0900-BS2)		Prepared: 12/24/24 13:08 Analyzed: 12/24/24 15:04										
NWTPH-Gx (MS)												
Gasoline Range Organics	22.5	---	5.00	mg/kg wet	50	25.0	---	90	80 - 120%	---	---	---
<i>Surr: 4-Bromofluorobenzene (Sur)</i>		<i>Recovery: 101 %</i>		<i>Limits: 50-150 %</i>		<i>Dilution: 1x</i>						
<i>1,4-Difluorobenzene (Sur)</i>		<i>97 %</i>		<i>50-150 %</i>		<i>"</i>						
Duplicate (24L0900-DUP1)		Prepared: 12/23/24 10:15 Analyzed: 12/25/24 00:39										
QC Source Sample: 24-63060 D8-17' (A4L1669-03)												
NWTPH-Gx (MS)												
Gasoline Range Organics	938	---	182	mg/kg dry	1000	---	906	---	---	3	30%	---
<i>Surr: 4-Bromofluorobenzene (Sur)</i>		<i>Recovery: 98 %</i>		<i>Limits: 50-150 %</i>		<i>Dilution: 1x</i>						
<i>1,4-Difluorobenzene (Sur)</i>		<i>99 %</i>		<i>50-150 %</i>		<i>"</i>						
Duplicate (24L0900-DUP2)		Prepared: 12/23/24 10:00 Analyzed: 12/25/24 01:34										
QC Source Sample: 24-63060 D8-12' (A4L1669-01)												
NWTPH-Gx (MS)												
Gasoline Range Organics	4470	---	349	mg/kg dry	2000	---	4370	---	---	2	30%	---
<i>Surr: 4-Bromofluorobenzene (Sur)</i>		<i>Recovery: 105 %</i>		<i>Limits: 50-150 %</i>		<i>Dilution: 1x</i>						
<i>1,4-Difluorobenzene (Sur)</i>		<i>99 %</i>		<i>50-150 %</i>		<i>"</i>						
Batch 24L0911 - EPA 5030C						Water						
Blank (24L0911-BLK1)		Prepared: 12/24/24 15:00 Analyzed: 12/24/24 18:21										
NWTPH-Gx (MS)												
Gasoline Range Organics	ND	---	100	ug/L	1	---	---	---	---	---	---	---
<i>Surr: 4-Bromofluorobenzene (Sur)</i>		<i>Recovery: 100 %</i>		<i>Limits: 50-150 %</i>		<i>Dilution: 1x</i>						
<i>1,4-Difluorobenzene (Sur)</i>		<i>110 %</i>		<i>50-150 %</i>		<i>"</i>						

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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 24L0911 - EPA 5030C						Water						
LCS (24L0911-BS2)		Prepared: 12/24/24 15:00 Analyzed: 12/24/24 17:47										
NWTPH-Gx (MS)												
Gasoline Range Organics	481	---	100	ug/L	1	500	---	96	80 - 120%	---	---	
<i>Surr: 4-Bromofluorobenzene (Sur)</i>		<i>Recovery: 97 %</i>		<i>Limits: 50-150 %</i>		<i>Dilution: 1x</i>						
<i>1,4-Difluorobenzene (Sur)</i>		<i>104 %</i>		<i>50-150 %</i>		<i>"</i>						

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

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QUALITY CONTROL (QC) SAMPLE RESULTS

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 24L0985 - EPA 5030C						Water						
Blank (24L0985-BLK1)		Prepared: 12/27/24 10:00 Analyzed: 12/27/24 15:14										
<u>NWTPH-Gx (MS)</u>												
Gasoline Range Organics	ND	---	100	ug/L	1	---	---	---	---	---	---	
<i>Surr: 4-Bromofluorobenzene (Sur)</i>		<i>Recovery: 88 %</i>		<i>Limits: 50-150 %</i>		<i>Dilution: 1x</i>						
<i>1,4-Difluorobenzene (Sur)</i>		<i>109 %</i>		<i>50-150 %</i>		<i>"</i>						
LCS (24L0985-BS2)		Prepared: 12/27/24 10:00 Analyzed: 12/27/24 14:52										
<u>NWTPH-Gx (MS)</u>												
Gasoline Range Organics	496	---	100	ug/L	1	500	---	99	80 - 120%	---	---	
<i>Surr: 4-Bromofluorobenzene (Sur)</i>		<i>Recovery: 97 %</i>		<i>Limits: 50-150 %</i>		<i>Dilution: 1x</i>						
<i>1,4-Difluorobenzene (Sur)</i>		<i>109 %</i>		<i>50-150 %</i>		<i>"</i>						

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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 24L0991 - EPA 5035A						Soil						
Blank (24L0991-BLK1)		Prepared: 12/27/24 11:56 Analyzed: 12/27/24 17:32										
<u>NWTPH-Gx (MS)</u>												
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)		92 %		50-150 %		"						
LCS (24L0991-BS2)						Prepared: 12/27/24 11:56 Analyzed: 12/27/24 17:05						
<u>NWTPH-Gx (MS)</u>												
Gasoline Range Organics	20.8	---	5.00	mg/kg wet	50	25.0	---	83	80 - 120%	---	---	
Surr: 4-Bromofluorobenzene (Sur)		Recovery: 96 %		Limits: 50-150 %		Dilution: 1x						
1,4-Difluorobenzene (Sur)		92 %		50-150 %		"						

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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 24L1029 - EPA 5035A						Soil						
Blank (24L1029-BLK1)		Prepared: 12/30/24 10:00 Analyzed: 12/30/24 12:19										
<u>NWTPH-Gx (MS)</u>												
Gasoline Range Organics	ND	---	5.00	mg/kg wet	50	---	---	---	---	---	---	---
Surr: 4-Bromofluorobenzene (Sur)		Recovery: 99 %		Limits: 50-150 %		Dilution: 1x						
1,4-Difluorobenzene (Sur)		98 %		50-150 %		"						
LCS (24L1029-BS2)		Prepared: 12/30/24 10:00 Analyzed: 12/30/24 11:52										
<u>NWTPH-Gx (MS)</u>												
Gasoline Range Organics	24.0	---	5.00	mg/kg wet	50	25.0	---	96	80 - 120%	---	---	---
Surr: 4-Bromofluorobenzene (Sur)		Recovery: 102 %		Limits: 50-150 %		Dilution: 1x						
1,4-Difluorobenzene (Sur)		98 %		50-150 %		"						

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QUALITY CONTROL (QC) SAMPLE RESULTS

Selected Volatile Organic Compounds by EPA 8260D

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 24L0911 - EPA 5030C						Water						
Blank (24L0911-BLK1)		Prepared: 12/24/24 15:00 Analyzed: 12/24/24 18:21										
EPA 8260D												
Benzene	ND	---	0.200	ug/L	1	---	---	---	---	---	---	---
Toluene	ND	---	1.00	ug/L	1	---	---	---	---	---	---	---
Ethylbenzene	ND	---	0.500	ug/L	1	---	---	---	---	---	---	---
Xylenes, total	ND	---	1.50	ug/L	1	---	---	---	---	---	---	---
Methyl tert-butyl ether (MTBE)	ND	---	1.00	ug/L	1	---	---	---	---	---	---	---
Naphthalene	ND	---	5.00	ug/L	1	---	---	---	---	---	---	---
1,2-Dibromoethane (EDB)	ND	---	0.500	ug/L	1	---	---	---	---	---	---	---
1,2-Dichloroethane (EDC)	ND	---	0.400	ug/L	1	---	---	---	---	---	---	---
Isopropylbenzene	ND	---	1.00	ug/L	1	---	---	---	---	---	---	---
1,2,4-Trimethylbenzene	ND	---	1.00	ug/L	1	---	---	---	---	---	---	---
1,3,5-Trimethylbenzene	ND	---	1.00	ug/L	1	---	---	---	---	---	---	---
<i>Surr: 1,4-Difluorobenzene (Surr)</i>		<i>Recovery: 106 %</i>		<i>Limits: 80-120 %</i>		<i>Dilution: 1x</i>						
<i>Toluene-d8 (Surr)</i>		<i>105 %</i>		<i>80-120 %</i>		<i>"</i>						
<i>4-Bromofluorobenzene (Surr)</i>		<i>103 %</i>		<i>80-120 %</i>		<i>"</i>						
LCS (24L0911-BS1)						Prepared: 12/24/24 15:00 Analyzed: 12/24/24 17:20						
EPA 8260D												
Benzene	20.2	---	0.200	ug/L	1	20.0	---	101	80 - 120%	---	---	---
Toluene	19.8	---	1.00	ug/L	1	20.0	---	99	80 - 120%	---	---	---
Ethylbenzene	21.6	---	0.500	ug/L	1	20.0	---	108	80 - 120%	---	---	---
Xylenes, total	58.6	---	1.50	ug/L	1	60.0	---	98	80 - 120%	---	---	---
Methyl tert-butyl ether (MTBE)	20.0	---	1.00	ug/L	1	20.0	---	100	80 - 120%	---	---	---
Naphthalene	17.4	---	5.00	ug/L	1	20.0	---	87	80 - 120%	---	---	---
1,2-Dibromoethane (EDB)	20.7	---	0.500	ug/L	1	20.0	---	103	80 - 120%	---	---	---
1,2-Dichloroethane (EDC)	20.6	---	0.400	ug/L	1	20.0	---	103	80 - 120%	---	---	---
Isopropylbenzene	18.5	---	1.00	ug/L	1	20.0	---	92	80 - 120%	---	---	---
1,2,4-Trimethylbenzene	20.2	---	1.00	ug/L	1	20.0	---	101	80 - 120%	---	---	---
1,3,5-Trimethylbenzene	21.8	---	1.00	ug/L	1	20.0	---	109	80 - 120%	---	---	---
<i>Surr: 1,4-Difluorobenzene (Surr)</i>		<i>Recovery: 100 %</i>		<i>Limits: 80-120 %</i>		<i>Dilution: 1x</i>						
<i>Toluene-d8 (Surr)</i>		<i>101 %</i>		<i>80-120 %</i>		<i>"</i>						
<i>4-Bromofluorobenzene (Surr)</i>		<i>95 %</i>		<i>80-120 %</i>		<i>"</i>						

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QUALITY CONTROL (QC) SAMPLE RESULTS

Selected Volatile Organic Compounds by EPA 8260D

Analyte	Detection Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
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No Client related Batch QC samples analyzed for this batch. See notes page for more information.

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QUALITY CONTROL (QC) SAMPLE RESULTS

Selected Volatile Organic Compounds by EPA 8260D

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 24L0985 - EPA 5030C						Water						
Blank (24L0985-BLK1)		Prepared: 12/27/24 10:00		Analyzed: 12/27/24 15:14								
EPA 8260D												
Benzene	ND	---	0.200	ug/L	1	---	---	---	---	---	---	---
Toluene	ND	---	1.00	ug/L	1	---	---	---	---	---	---	---
Ethylbenzene	ND	---	0.500	ug/L	1	---	---	---	---	---	---	---
Xylenes, total	ND	---	1.50	ug/L	1	---	---	---	---	---	---	---
Methyl tert-butyl ether (MTBE)	ND	---	1.00	ug/L	1	---	---	---	---	---	---	---
Naphthalene	ND	---	5.00	ug/L	1	---	---	---	---	---	---	---
1,2-Dibromoethane (EDB)	ND	---	0.500	ug/L	1	---	---	---	---	---	---	---
1,2-Dichloroethane (EDC)	ND	---	0.400	ug/L	1	---	---	---	---	---	---	---
Isopropylbenzene	ND	---	1.00	ug/L	1	---	---	---	---	---	---	---
1,2,4-Trimethylbenzene	ND	---	1.00	ug/L	1	---	---	---	---	---	---	---
1,3,5-Trimethylbenzene	ND	---	1.00	ug/L	1	---	---	---	---	---	---	---
<i>Surr: 1,4-Difluorobenzene (Surr)</i>		<i>Recovery: 105 %</i>		<i>Limits: 80-120 %</i>		<i>Dilution: 1x</i>						
<i>Toluene-d8 (Surr)</i>		<i>107 %</i>		<i>80-120 %</i>		<i>"</i>						
<i>4-Bromofluorobenzene (Surr)</i>		<i>111 %</i>		<i>80-120 %</i>		<i>"</i>						
LCS (24L0985-BS1)						Prepared: 12/27/24 10:00 Analyzed: 12/27/24 14:19						
EPA 8260D												
Benzene	21.2	---	0.200	ug/L	1	20.0	---	106	80 - 120%	---	---	---
Toluene	21.0	---	1.00	ug/L	1	20.0	---	105	80 - 120%	---	---	---
Ethylbenzene	22.7	---	0.500	ug/L	1	20.0	---	114	80 - 120%	---	---	---
Xylenes, total	65.1	---	1.50	ug/L	1	60.0	---	109	80 - 120%	---	---	---
Methyl tert-butyl ether (MTBE)	21.0	---	1.00	ug/L	1	20.0	---	105	80 - 120%	---	---	---
Naphthalene	16.8	---	5.00	ug/L	1	20.0	---	84	80 - 120%	---	---	---
1,2-Dibromoethane (EDB)	21.5	---	0.500	ug/L	1	20.0	---	107	80 - 120%	---	---	---
1,2-Dichloroethane (EDC)	23.3	---	0.400	ug/L	1	20.0	---	117	80 - 120%	---	---	---
Isopropylbenzene	20.3	---	1.00	ug/L	1	20.0	---	102	80 - 120%	---	---	---
1,2,4-Trimethylbenzene	22.4	---	1.00	ug/L	1	20.0	---	112	80 - 120%	---	---	---
1,3,5-Trimethylbenzene	22.6	---	1.00	ug/L	1	20.0	---	113	80 - 120%	---	---	---
<i>Surr: 1,4-Difluorobenzene (Surr)</i>		<i>Recovery: 102 %</i>		<i>Limits: 80-120 %</i>		<i>Dilution: 1x</i>						
<i>Toluene-d8 (Surr)</i>		<i>102 %</i>		<i>80-120 %</i>		<i>"</i>						
<i>4-Bromofluorobenzene (Surr)</i>		<i>89 %</i>		<i>80-120 %</i>		<i>"</i>						

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QUALITY CONTROL (QC) SAMPLE RESULTS

Selected Volatile Organic Compounds by EPA 8260D

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
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No Client related Batch QC samples analyzed for this batch. See notes page for more information.

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Cameron O'Brien, Project Manager



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QUALITY CONTROL (QC) SAMPLE RESULTS

Selected Volatile Organic Compounds by EPA 5035A/8260D

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 24L0900 - EPA 5035A						Soil						
Blank (24L0900-BLK1)		Prepared: 12/24/24 13:08 Analyzed: 12/24/24 15:31										
<u>5035A/8260D</u>												
Benzene	0.0120	---	0.0100	mg/kg wet	50	---	---	---	---	---	---	B
Toluene	ND	---	0.0500	mg/kg wet	50	---	---	---	---	---	---	
Ethylbenzene	ND	---	0.0250	mg/kg wet	50	---	---	---	---	---	---	
Xylenes, total	ND	---	0.0750	mg/kg wet	50	---	---	---	---	---	---	
Methyl tert-butyl ether (MTBE)	ND	---	0.0500	mg/kg wet	50	---	---	---	---	---	---	
Naphthalene	ND	---	0.100	mg/kg wet	50	---	---	---	---	---	---	
1,2-Dibromoethane (EDB)	ND	---	0.0500	mg/kg wet	50	---	---	---	---	---	---	
1,2-Dichloroethane (EDC)	ND	---	0.0250	mg/kg wet	50	---	---	---	---	---	---	
Isopropylbenzene	ND	---	0.0500	mg/kg wet	50	---	---	---	---	---	---	
1,2,4-Trimethylbenzene	ND	---	0.0500	mg/kg wet	50	---	---	---	---	---	---	
1,3,5-Trimethylbenzene	ND	---	0.0500	mg/kg wet	50	---	---	---	---	---	---	
<i>Surr: 1,4-Difluorobenzene (Surr)</i>		<i>Recovery: 105 %</i>		<i>Limits: 80-120 %</i>		<i>Dilution: 1x</i>						
<i>Toluene-d8 (Surr)</i>		<i>96 %</i>		<i>80-120 %</i>		<i>"</i>						
<i>4-Bromofluorobenzene (Surr)</i>		<i>99 %</i>		<i>79-120 %</i>		<i>"</i>						
LCS (24L0900-BS1)						Prepared: 12/24/24 13:08 Analyzed: 12/24/24 14:36						
<u>5035A/8260D</u>												
Benzene	1.01	---	0.0100	mg/kg wet	50	1.00	---	101	80 - 120%	---	---	B
Toluene	0.958	---	0.0500	mg/kg wet	50	1.00	---	96	80 - 120%	---	---	
Ethylbenzene	1.03	---	0.0250	mg/kg wet	50	1.00	---	103	80 - 120%	---	---	
Xylenes, total	3.07	---	0.0750	mg/kg wet	50	3.00	---	102	80 - 120%	---	---	
Methyl tert-butyl ether (MTBE)	1.01	---	0.0500	mg/kg wet	50	1.00	---	101	80 - 120%	---	---	
Naphthalene	0.918	---	0.100	mg/kg wet	50	1.00	---	92	80 - 120%	---	---	
1,2-Dibromoethane (EDB)	1.08	---	0.0500	mg/kg wet	50	1.00	---	108	80 - 120%	---	---	
1,2-Dichloroethane (EDC)	0.998	---	0.0250	mg/kg wet	50	1.00	---	100	80 - 120%	---	---	
Isopropylbenzene	1.02	---	0.0500	mg/kg wet	50	1.00	---	102	80 - 120%	---	---	
1,2,4-Trimethylbenzene	1.03	---	0.0500	mg/kg wet	50	1.00	---	103	80 - 120%	---	---	
1,3,5-Trimethylbenzene	1.04	---	0.0500	mg/kg wet	50	1.00	---	104	80 - 120%	---	---	
<i>Surr: 1,4-Difluorobenzene (Surr)</i>		<i>Recovery: 103 %</i>		<i>Limits: 80-120 %</i>		<i>Dilution: 1x</i>						
<i>Toluene-d8 (Surr)</i>		<i>97 %</i>		<i>80-120 %</i>		<i>"</i>						
<i>4-Bromofluorobenzene (Surr)</i>		<i>97 %</i>		<i>79-120 %</i>		<i>"</i>						
Duplicate (24L0900-DUP1)						Prepared: 12/23/24 10:15 Analyzed: 12/25/24 00:39						

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503-718-2323
ORELAP ID: OR100062

Alpha Environmental 11080 SW Allen Blvd, Suite 100 Beaverton, OR 97005	Project: Default- Env Dept. Project Number: 3939 NW St. Helens Rd 24-C Project Manager: Jim Cooper	Report ID: A4L1669 - 01 06 25 1856
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QUALITY CONTROL (QC) SAMPLE RESULTS

Selected Volatile Organic Compounds by EPA 5035A/8260D

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 24L0900 - EPA 5035A						Soil						
Duplicate (24L0900-DUP1)		Prepared: 12/23/24 10:15 Analyzed: 12/25/24 00:39										
QC Source Sample: 24-63060 D8-17' (A4L1669-03)												
5035A/8260D												
Benzene	ND	---	0.363	mg/kg dry	1000	---	ND	---	---	---	30%	
Toluene	ND	---	1.82	mg/kg dry	1000	---	ND	---	---	---	30%	
Ethylbenzene	25.3	---	0.908	mg/kg dry	1000	---	24.6	---	---	3	30%	
Xylenes, total	38.9	---	2.72	mg/kg dry	1000	---	38.2	---	---	2	30%	
Methyl tert-butyl ether (MTBE)	ND	---	1.82	mg/kg dry	1000	---	ND	---	---	---	30%	
Naphthalene	ND	---	3.63	mg/kg dry	1000	---	2.82	---	---	***	30%	
1,2-Dibromoethane (EDB)	ND	---	1.82	mg/kg dry	1000	---	ND	---	---	---	30%	
1,2-Dichloroethane (EDC)	ND	---	0.908	mg/kg dry	1000	---	ND	---	---	---	30%	
Isopropylbenzene	2.34	---	1.82	mg/kg dry	1000	---	2.34	---	---	0	30%	
1,2,4-Trimethylbenzene	33.8	---	1.82	mg/kg dry	1000	---	33.1	---	---	2	30%	
1,3,5-Trimethylbenzene	9.76	---	1.82	mg/kg dry	1000	---	9.88	---	---	1	30%	
<i>Surr: 1,4-Difluorobenzene (Surr)</i>		<i>Recovery: 105 %</i>		<i>Limits: 80-120 %</i>		<i>Dilution: 1x</i>						
<i>Toluene-d8 (Surr)</i>		<i>98 %</i>		<i>80-120 %</i>		<i>"</i>						
<i>4-Bromofluorobenzene (Surr)</i>		<i>97 %</i>		<i>79-120 %</i>		<i>"</i>						

Duplicate (24L0900-DUP2)						Prepared: 12/23/24 10:00 Analyzed: 12/25/24 01:34						
QC Source Sample: 24-63060 D8-12' (A4L1669-01)												
5035A/8260D												
Benzene	ND	---	0.698	mg/kg dry	2000	---	ND	---	---	---	30%	
Toluene	ND	---	3.49	mg/kg dry	2000	---	ND	---	---	---	30%	
Ethylbenzene	175	---	1.74	mg/kg dry	2000	---	176	---	---	0.7	30%	
Xylenes, total	ND	---	5.23	mg/kg dry	2000	---	3.98	---	---	***	30%	
Methyl tert-butyl ether (MTBE)	ND	---	3.49	mg/kg dry	2000	---	ND	---	---	---	30%	
Naphthalene	24.7	---	6.98	mg/kg dry	2000	---	24.0	---	---	3	30%	
1,2-Dibromoethane (EDB)	ND	---	3.49	mg/kg dry	2000	---	ND	---	---	---	30%	
1,2-Dichloroethane (EDC)	ND	---	1.74	mg/kg dry	2000	---	ND	---	---	---	30%	
Isopropylbenzene	22.0	---	3.49	mg/kg dry	2000	---	21.5	---	---	2	30%	
1,2,4-Trimethylbenzene	70.1	---	3.49	mg/kg dry	2000	---	71.8	---	---	2	30%	
1,3,5-Trimethylbenzene	6.88	---	3.49	mg/kg dry	2000	---	7.26	---	---	5	30%	
<i>Surr: 1,4-Difluorobenzene (Surr)</i>		<i>Recovery: 105 %</i>		<i>Limits: 80-120 %</i>		<i>Dilution: 1x</i>						
<i>Toluene-d8 (Surr)</i>		<i>95 %</i>		<i>80-120 %</i>		<i>"</i>						

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Alpha Environmental 11080 SW Allen Blvd, Suite 100 Beaverton, OR 97005	Project: Default- Env Dept. Project Number: 3939 NW St. Helens Rd 24-C Project Manager: Jim Cooper	Report ID: A4L1669 - 01 06 25 1856
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QUALITY CONTROL (QC) SAMPLE RESULTS

Selected Volatile Organic Compounds by EPA 5035A/8260D

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 24L0900 - EPA 5035A						Soil						
Duplicate (24L0900-DUP2)		Prepared: 12/23/24 10:00 Analyzed: 12/25/24 01:34										
QC Source Sample: 24-63060 D8-12' (A4L1669-01)												
Surr: 4-Bromofluorobenzene (Surr)		Recovery: 99 %			Limits: 79-120 %			Dilution: 1x				

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Cameron O'Brien, Project Manager



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QUALITY CONTROL (QC) SAMPLE RESULTS

Selected Volatile Organic Compounds by EPA 5035A/8260D

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 24L0991 - EPA 5035A						Soil						
Blank (24L0991-BLK1)		Prepared: 12/27/24 11:56 Analyzed: 12/27/24 17:32										
<u>5035A/8260D</u>												
Benzene	ND	---	0.0100	mg/kg wet	50	---	---	---	---	---	---	---
Toluene	ND	---	0.0500	mg/kg wet	50	---	---	---	---	---	---	---
Ethylbenzene	ND	---	0.0250	mg/kg wet	50	---	---	---	---	---	---	---
Xylenes, total	ND	---	0.0750	mg/kg wet	50	---	---	---	---	---	---	---
Methyl tert-butyl ether (MTBE)	ND	---	0.0500	mg/kg wet	50	---	---	---	---	---	---	---
Naphthalene	ND	---	0.100	mg/kg wet	50	---	---	---	---	---	---	---
1,2-Dibromoethane (EDB)	ND	---	0.0500	mg/kg wet	50	---	---	---	---	---	---	---
1,2-Dichloroethane (EDC)	ND	---	0.0250	mg/kg wet	50	---	---	---	---	---	---	---
Isopropylbenzene	ND	---	0.0500	mg/kg wet	50	---	---	---	---	---	---	---
1,2,4-Trimethylbenzene	ND	---	0.0500	mg/kg wet	50	---	---	---	---	---	---	---
1,3,5-Trimethylbenzene	ND	---	0.0500	mg/kg wet	50	---	---	---	---	---	---	---
<i>Surr: 1,4-Difluorobenzene (Surr)</i>		<i>Recovery: 119 %</i>		<i>Limits: 80-120 %</i>		<i>Dilution: 1x</i>						
<i>Toluene-d8 (Surr)</i>		<i>96 %</i>		<i>80-120 %</i>		<i>"</i>						
<i>4-Bromofluorobenzene (Surr)</i>		<i>105 %</i>		<i>79-120 %</i>		<i>"</i>						
LCS (24L0991-BS1)						Prepared: 12/27/24 11:56 Analyzed: 12/27/24 16:34						
<u>5035A/8260D</u>												
Benzene	1.09	---	0.0100	mg/kg wet	50	1.00	---	109	80 - 120%	---	---	---
Toluene	0.912	---	0.0500	mg/kg wet	50	1.00	---	91	80 - 120%	---	---	---
Ethylbenzene	0.961	---	0.0250	mg/kg wet	50	1.00	---	96	80 - 120%	---	---	---
Xylenes, total	2.87	---	0.0750	mg/kg wet	50	3.00	---	96	80 - 120%	---	---	---
Methyl tert-butyl ether (MTBE)	0.967	---	0.0500	mg/kg wet	50	1.00	---	97	80 - 120%	---	---	---
Naphthalene	0.974	---	0.100	mg/kg wet	50	1.00	---	97	80 - 120%	---	---	---
1,2-Dibromoethane (EDB)	1.03	---	0.0500	mg/kg wet	50	1.00	---	103	80 - 120%	---	---	---
1,2-Dichloroethane (EDC)	0.874	---	0.0250	mg/kg wet	50	1.00	---	87	80 - 120%	---	---	---
Isopropylbenzene	0.999	---	0.0500	mg/kg wet	50	1.00	---	100	80 - 120%	---	---	---
1,2,4-Trimethylbenzene	0.985	---	0.0500	mg/kg wet	50	1.00	---	99	80 - 120%	---	---	---
1,3,5-Trimethylbenzene	1.01	---	0.0500	mg/kg wet	50	1.00	---	101	80 - 120%	---	---	---
<i>Surr: 1,4-Difluorobenzene (Surr)</i>		<i>Recovery: 119 %</i>		<i>Limits: 80-120 %</i>		<i>Dilution: 1x</i>						
<i>Toluene-d8 (Surr)</i>		<i>97 %</i>		<i>80-120 %</i>		<i>"</i>						
<i>4-Bromofluorobenzene (Surr)</i>		<i>102 %</i>		<i>79-120 %</i>		<i>"</i>						

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QUALITY CONTROL (QC) SAMPLE RESULTS

Selected Volatile Organic Compounds by EPA 5035A/8260D

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
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No Client related Batch QC samples analyzed for this batch. See notes page for more information.

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QUALITY CONTROL (QC) SAMPLE RESULTS

Selected Volatile Organic Compounds by EPA 5035A/8260D

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 24L1029 - EPA 5035A						Soil						
Blank (24L1029-BLK1)		Prepared: 12/30/24 10:00 Analyzed: 12/30/24 12:19										
5035A/8260D												
Benzene	ND	---	0.0100	mg/kg wet	50	---	---	---	---	---	---	---
Toluene	ND	---	0.0500	mg/kg wet	50	---	---	---	---	---	---	---
Ethylbenzene	ND	---	0.0250	mg/kg wet	50	---	---	---	---	---	---	---
Xylenes, total	ND	---	0.0750	mg/kg wet	50	---	---	---	---	---	---	---
Methyl tert-butyl ether (MTBE)	ND	---	0.0500	mg/kg wet	50	---	---	---	---	---	---	---
Naphthalene	ND	---	0.100	mg/kg wet	50	---	---	---	---	---	---	---
1,2-Dibromoethane (EDB)	ND	---	0.0500	mg/kg wet	50	---	---	---	---	---	---	---
1,2-Dichloroethane (EDC)	ND	---	0.0250	mg/kg wet	50	---	---	---	---	---	---	---
Isopropylbenzene	ND	---	0.0500	mg/kg wet	50	---	---	---	---	---	---	---
1,2,4-Trimethylbenzene	ND	---	0.0500	mg/kg wet	50	---	---	---	---	---	---	---
1,3,5-Trimethylbenzene	ND	---	0.0500	mg/kg wet	50	---	---	---	---	---	---	---
<i>Surr: 1,4-Difluorobenzene (Surr)</i>		<i>Recovery: 104 %</i>		<i>Limits: 80-120 %</i>		<i>Dilution: 1x</i>						
<i>Toluene-d8 (Surr)</i>		<i>96 %</i>		<i>80-120 %</i>		<i>"</i>						
<i>4-Bromofluorobenzene (Surr)</i>		<i>99 %</i>		<i>79-120 %</i>		<i>"</i>						
LCS (24L1029-BS1)						Prepared: 12/30/24 10:00 Analyzed: 12/30/24 11:25						
5035A/8260D												
Benzene	1.04	---	0.0100	mg/kg wet	50	1.00	---	104	80 - 120%	---	---	---
Toluene	0.947	---	0.0500	mg/kg wet	50	1.00	---	95	80 - 120%	---	---	---
Ethylbenzene	0.992	---	0.0250	mg/kg wet	50	1.00	---	99	80 - 120%	---	---	---
Xylenes, total	2.98	---	0.0750	mg/kg wet	50	3.00	---	99	80 - 120%	---	---	---
Methyl tert-butyl ether (MTBE)	1.04	---	0.0500	mg/kg wet	50	1.00	---	104	80 - 120%	---	---	---
Naphthalene	0.908	---	0.100	mg/kg wet	50	1.00	---	91	80 - 120%	---	---	---
1,2-Dibromoethane (EDB)	1.10	---	0.0500	mg/kg wet	50	1.00	---	110	80 - 120%	---	---	---
1,2-Dichloroethane (EDC)	1.02	---	0.0250	mg/kg wet	50	1.00	---	102	80 - 120%	---	---	---
Isopropylbenzene	0.983	---	0.0500	mg/kg wet	50	1.00	---	98	80 - 120%	---	---	---
1,2,4-Trimethylbenzene	1.01	---	0.0500	mg/kg wet	50	1.00	---	101	80 - 120%	---	---	---
1,3,5-Trimethylbenzene	1.02	---	0.0500	mg/kg wet	50	1.00	---	102	80 - 120%	---	---	---
<i>Surr: 1,4-Difluorobenzene (Surr)</i>		<i>Recovery: 104 %</i>		<i>Limits: 80-120 %</i>		<i>Dilution: 1x</i>						
<i>Toluene-d8 (Surr)</i>		<i>98 %</i>		<i>80-120 %</i>		<i>"</i>						
<i>4-Bromofluorobenzene (Surr)</i>		<i>99 %</i>		<i>79-120 %</i>		<i>"</i>						

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QUALITY CONTROL (QC) SAMPLE RESULTS

Selected Volatile Organic Compounds by EPA 5035A/8260D

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
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No Client related Batch QC samples analyzed for this batch. See notes page for more information.

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Cameron O'Brien, Project Manager



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QUALITY CONTROL (QC) SAMPLE RESULTS

Percent Dry Weight

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 24L0936 - Dry Weight Prep (EPA 8000D)						Soil						

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

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SAMPLE PREPARATION INFORMATION

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

Prep: EPA 5030C

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
<u>Batch: 24L0985</u>							
A4L1669-09RE1	Water	NWTPH-Gx (MS)	12/23/24 11:00	12/27/24 15:01	5mL/5mL	5mL/5mL	1.00
A4L1669-10RE1	Water	NWTPH-Gx (MS)	12/23/24 11:30	12/27/24 15:01	5mL/5mL	5mL/5mL	1.00
A4L1669-11	Water	NWTPH-Gx (MS)	12/23/24 11:00	12/27/24 15:01	5mL/5mL	5mL/5mL	1.00

Prep: EPA 5035A

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
<u>Batch: 24L0900</u>							
A4L1669-01	Soil	NWTPH-Gx (MS)	12/23/24 10:00	12/23/24 10:00	5.46g/5mL	5g/5mL	0.92
A4L1669-02	Soil	NWTPH-Gx (MS)	12/23/24 10:10	12/23/24 10:10	5.97g/5mL	5g/5mL	0.84
A4L1669-04	Soil	NWTPH-Gx (MS)	12/23/24 10:15	12/23/24 10:15	5.35g/5mL	5g/5mL	0.94
A4L1669-06	Soil	NWTPH-Gx (MS)	12/23/24 11:30	12/23/24 11:30	5.34g/5mL	5g/5mL	0.94
A4L1669-07	Soil	NWTPH-Gx (MS)	12/23/24 11:35	12/23/24 11:35	3.42g/5mL	5g/5mL	1.46
A4L1669-08	Soil	NWTPH-Gx (MS)	12/23/24 11:40	12/23/24 11:40	5.45g/5mL	5g/5mL	0.92
<u>Batch: 24L1029</u>							
A4L1669-03RE2	Soil	NWTPH-Gx (MS)	12/23/24 10:15	12/23/24 10:15	5.34g/5mL	5g/5mL	0.94
A4L1669-05RE2	Soil	NWTPH-Gx (MS)	12/23/24 10:20	12/23/24 10:20	5.74g/5mL	5g/5mL	0.87

Selected Volatile Organic Compounds by EPA 8260D

Prep: EPA 5030C

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
<u>Batch: 24L0985</u>							
A4L1669-09RE1	Water	EPA 8260D	12/23/24 11:00	12/27/24 15:01	5mL/5mL	5mL/5mL	1.00
A4L1669-10RE1	Water	EPA 8260D	12/23/24 11:30	12/27/24 15:01	5mL/5mL	5mL/5mL	1.00
A4L1669-11	Water	EPA 8260D	12/23/24 11:00	12/27/24 15:01	5mL/5mL	5mL/5mL	1.00

Selected Volatile Organic Compounds by EPA 5035A/8260D

Prep: EPA 5035A

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
<u>Batch: 24L0900</u>							
A4L1669-01	Soil	5035A/8260D	12/23/24 10:00	12/23/24 10:00	5.46g/5mL	5g/5mL	0.92
A4L1669-02	Soil	5035A/8260D	12/23/24 10:10	12/23/24 10:10	5.97g/5mL	5g/5mL	0.84
A4L1669-04	Soil	5035A/8260D	12/23/24 10:15	12/23/24 10:15	5.35g/5mL	5g/5mL	0.94
A4L1669-06	Soil	5035A/8260D	12/23/24 11:30	12/23/24 11:30	5.34g/5mL	5g/5mL	0.94

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503-718-2323
ORELAP ID: OR100062

Alpha Environmental 11080 SW Allen Blvd, Suite 100 Beaverton, OR 97005	Project: Default- Env Dept. Project Number: 3939 NW St. Helens Rd 24-C Project Manager: Jim Cooper	Report ID: A4L1669 - 01 06 25 1856
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SAMPLE PREPARATION INFORMATION

Selected Volatile Organic Compounds by EPA 5035A/8260D

<u>Prep: EPA 5035A</u>					Sample	Default	RL Prep
Lab Number	Matrix	Method	Sampled	Prepared	Initial/Final	Initial/Final	Factor
A4L1669-07	Soil	5035A/8260D	12/23/24 11:35	12/23/24 11:35	3.42g/5mL	5g/5mL	1.46
A4L1669-08	Soil	5035A/8260D	12/23/24 11:40	12/23/24 11:40	5.45g/5mL	5g/5mL	0.92
<u>Batch: 24L1029</u>							
A4L1669-03RE2	Soil	5035A/8260D	12/23/24 10:15	12/23/24 10:15	5.34g/5mL	5g/5mL	0.94
A4L1669-05RE2	Soil	5035A/8260D	12/23/24 10:20	12/23/24 10:20	5.74g/5mL	5g/5mL	0.87

Percent Dry Weight

<u>Prep: Dry Weight Prep (EPA 8000D)</u>					Sample	Default	RL Prep
Lab Number	Matrix	Method	Sampled	Prepared	Initial/Final	Initial/Final	Factor
<u>Batch: 24L0936</u>							
A4L1669-01	Soil	EPA 8000D	12/23/24 10:00	12/26/24 10:28	1g	1g	1.00
A4L1669-02	Soil	EPA 8000D	12/23/24 10:10	12/26/24 10:28	1g	1g	1.00
A4L1669-03	Soil	EPA 8000D	12/23/24 10:15	12/26/24 10:28	1g	1g	1.00
A4L1669-04	Soil	EPA 8000D	12/23/24 10:15	12/26/24 10:28	1g	1g	1.00
A4L1669-05	Soil	EPA 8000D	12/23/24 10:20	12/26/24 10:28	1g	1g	1.00
A4L1669-06	Soil	EPA 8000D	12/23/24 11:30	12/26/24 10:28	1g	1g	1.00
A4L1669-07	Soil	EPA 8000D	12/23/24 11:35	12/26/24 10:28	1g	1g	1.00
A4L1669-08	Soil	EPA 8000D	12/23/24 11:40	12/26/24 10:28	1g	1g	1.00

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Alpha Environmental 11080 SW Allen Blvd, Suite 100 Beaverton, OR 97005	Project: Default- Env Dept. Project Number: 3939 NW St. Helens Rd 24-C Project Manager: Jim Cooper	Report ID: A4L1669 - 01 06 25 1856
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QUALIFIER DEFINITIONS

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

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B Analyte detected in an associated blank at a level above the MRL. (See Notes and Conventions below.)

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Cameron O'Brien, Project Manager



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REPORTING NOTES AND CONVENTIONS:

Abbreviations:

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

Detection Limits: Limit of Detection (LOD)

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

Reporting Limits: Limit of Quantitation (LOQ)

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

Reporting Conventions:

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

QC Source:

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

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

Miscellaneous Notes:

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

Blanks:

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

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REPORTING NOTES AND CONVENTIONS (Cont.):

Blanks (Cont.):

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

Preparation Notes:

Mixed Matrix Samples:

Water Samples:

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

Soil and Sediment Samples:

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

Sampling and Preservation Notes:

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

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

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

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

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Decanted Samples:

Soils/Sediments:

Unless TCLP analysis is required or there is notification otherwise for a specific project, all Soil and Sediments containing excess water are decanted prior to analysis in order to provide the most representative sample for analysis.

Water Samples:

Water samples containing solids and sediment may need to be decanted in order to eliminate these particulates from the water extractions. In the case of organics extractions, a solvent rinse of the container will not be performed.

Volatiles Soils (5035s)

Samples that are field preserved by 5035 for volatiles are dry weight corrected using the same dry weight correction as for normal analyses. In the case of decanted samples, the dry weight may be performed on a decanted sample, while the aliquot for 5035 may not have been treated the same way. If this is a concern, please submit separate containers for dry weight analysis for volatiles can be provided.

All samples decanted in the laboratory are noted in this report with the DCNT qualifier indicating the sample was decanted.

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ANALYTICAL REPORT

Apex Laboratories, LLC

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

Table with 3 columns: Client info (Alpha Environmental), Project info (Default- Env Dept), and Report ID (A4L1669 - 01 06 25 1856).

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:

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Table header with columns: Matrix, Analysis, TNI_ID, Analyte, TNI_ID, Accreditation

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

Secondary Accreditations

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

Subcontract Laboratory Accreditations

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

Field Testing Parameters

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

Apex Laboratories

Handwritten signature of Cameron O'Brien

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APEX LABS COOLER RECEIPT FORM

Client: Alpha Element WO#: A4 L1669

Project/Project #: 3439 NW ST HELENS RD 124-63060

Delivery Info:

Date/time received: 12/23/24 @ 1600 By: JPE

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

From USDA Regulated Origin? Yes No

Cooler Inspection Date/time inspected: 12/23/24 @ 1628 By: JPE

Chain of Custody included? Yes No

Signed/dated by client? Yes No

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

	Cooler #1	Cooler #2	Cooler #3	Cooler #4	Cooler #5	Cooler #6	Cooler #7
Temperature (°C)	<u>1.9</u>						
Custody seals? (Y/N)	<u>N</u>						
Received on ice? (Y/N)	<u>Y</u>						
Temp. blanks? (Y/N)	<u>Y</u>						
Ice type: (Gel/Real/Other)	<u>60/Real</u>						
Condition (In/Out):	<u>IN</u>						

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

Green dots applied to out of temperature samples? Yes No

Out of temperature samples form initiated? Yes No

Sample Inspection: Date/time inspected: 12/23/24 @ 1634 By: KN

All samples intact? Yes No Comments: _____

Bottle labels/COCs agree? Yes No Comments: _____

COC/container discrepancies form initiated? Yes No

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

Do VOA vials have visible headspace? Yes No NA

Comments 3/3 VOAs have seal for D9 and D10

Water samples: pH checked: Yes No NA pH appropriate? Yes No NA pH ID: A23I172

Comments: _____

Labeled by:

KN

Witness:

ZAM

Cooler Inspected by:

KN

Form Y-003 R-02

Apex Laboratories

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CABri

Cameron O'Brien, Project Manager

January 02, 2025

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Alpha Environmental Services, Inc

Sample Delivery Group: L1812794
Samples Received: 12/26/2024
Project Number: 24-63060
Description: 3939 NW St. Helens Rd.

Report To: Jim Cooper
11080 SW Allen Blvd.
Suite 100
Beaverton, OR 97005

Entire Report Reviewed By:



Jordan N Zito
Project Manager

Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by Pace Analytical National is performed per guidance provided in laboratory standard operating procedures ENV-SOP-MTJL-0067 and ENV-SOP-MTJL-0068. Where sampling conducted by the customer, results relate to the accuracy of the information provided, and as the samples are received.

Pace Analytical National

12065 Lebanon Rd Mount Juliet, TN 37122 615-758-5858 800-767-5859 mydata.pacelabs.com

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		⁹Sc

SAMPLE SUMMARY

SS1 L1812794-01 Air

Collected by
Collected date/time
Received date/time

12/23/24 13:30
12/26/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG2424998	1	12/27/24 00:13	12/27/24 00:13	DAH	Mt. Juliet, TN
Volatile Organic Compounds (MS) by Method TO-15	WG2426811	100	12/31/24 17:16	12/31/24 17:16	ED	Mt. Juliet, TN

1 Cp

2 Tc

3 Ss

SS2 L1812794-02 Air

Collected by
Collected date/time
Received date/time

12/23/24 13:44
12/26/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG2424998	1	12/27/24 00:54	12/27/24 00:54	DAH	Mt. Juliet, TN
Volatile Organic Compounds (MS) by Method TO-15	WG2426811	5	12/31/24 16:46	12/31/24 16:46	ED	Mt. Juliet, TN

4 Cn

5 Sr

6 Qc

SS3 L1812794-03 Air

Collected by
Collected date/time
Received date/time

12/23/24 13:51
12/26/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG2424998	1	12/27/24 01:34	12/27/24 01:34	DAH	Mt. Juliet, TN
Volatile Organic Compounds (MS) by Method TO-15	WG2426811	20	12/31/24 17:44	12/31/24 17:44	ED	Mt. Juliet, TN

7 Gl

8 Al

9 Sc

CASE NARRATIVE

All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times, unless qualified or notated within the report. Where applicable, all MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.



Jordan N Zito
Project Manager

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	MDL	RDL	Result	Qualifier	Dilution	Batch
			ug/m3	ug/m3	ug/m3			
TPH (GC/MS) Low Fraction	8006-61-9	101	28200	82600	48700	J	100	WG2426811
Acetone	67-64-1	58.10	124	297	27600	E	100	WG2426811
Allyl chloride	107-05-1	76.53	0.582	0.626	U		1	WG2424998
Benzene	71-43-2	78.10	0.351	0.639	17.0		1	WG2424998
Benzyl Chloride	100-44-7	127	0.461	1.04	U		1	WG2424998
Bromodichloromethane	75-27-4	164	0.466	1.34	U		1	WG2424998
Bromoform	75-25-2	253	0.781	6.52	U		1	WG2424998
Bromomethane	74-83-9	94.90	0.364	0.776	U		1	WG2424998
1,3-Butadiene	106-99-0	54.10	0.350	4.43	U		1	WG2424998
Carbon disulfide	75-15-0	76.10	0.498	1.24	U		1	WG2424998
Carbon tetrachloride	56-23-5	154	0.470	1.26	U		1	WG2424998
Chlorobenzene	108-90-7	113	0.545	0.924	U		1	WG2424998
Chloroethane	75-00-3	64.50	0.290	0.528	U		1	WG2424998
Chloroform	67-66-3	119	0.506	0.973	U		1	WG2424998
Chloromethane	74-87-3	50.50	0.227	0.413	U		1	WG2424998
2-Chlorotoluene	95-49-8	126	0.406	1.03	U		1	WG2424998
Cyclohexane	110-82-7	84.20	0.585	0.689	272		1	WG2424998
Dibromochloromethane	124-48-1	208	0.592	1.70	U		1	WG2424998
1,2-Dibromoethane	106-93-4	188	0.531	1.54	U		1	WG2424998
1,2-Dichlorobenzene	95-50-1	147	0.441	1.20	U		1	WG2424998
1,3-Dichlorobenzene	541-73-1	147	0.453	1.20	U		1	WG2424998
1,4-Dichlorobenzene	106-46-7	147	0.462	1.20	U		1	WG2424998
1,2-Dichloroethane	107-06-2	99	0.296	0.810	U		1	WG2424998
1,1-Dichloroethane	75-34-3	98	0.285	0.802	U		1	WG2424998
1,1-Dichloroethene	75-35-4	96.90	0.296	0.793	U		1	WG2424998
cis-1,2-Dichloroethene	156-59-2	96.90	0.315	0.793	U		1	WG2424998
trans-1,2-Dichloroethene	156-60-5	96.90	0.291	0.793	U		1	WG2424998
1,2-Dichloropropane	78-87-5	113	0.348	0.924	U		1	WG2424998
cis-1,3-Dichloropropene	10061-01-5	111	0.337	0.908	U		1	WG2424998
trans-1,3-Dichloropropene	10061-02-6	111	0.361	0.908	U		1	WG2424998
1,4-Dioxane	123-91-1	88.10	0.591	2.27	U		1	WG2424998
Ethanol	64-17-5	46.10	4.47	4.71	924	E	1	WG2424998
Ethylbenzene	100-41-4	106	0.337	0.867	49.9		1	WG2424998
4-Ethyltoluene	622-96-8	120	0.435	0.982	19.3		1	WG2424998
Trichlorofluoromethane	75-69-4	137.40	0.433	1.12	1.38		1	WG2424998
Dichlorodifluoromethane	75-71-8	120.92	0.399	0.989	2.77		1	WG2424998
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.576	1.53	U		1	WG2424998
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.529	1.40	U		1	WG2424998
Heptane	142-82-5	100	46.6	81.8	438		100	WG2426811
Hexachloro-1,3-butadiene	87-68-3	261	0.854	6.73	U		1	WG2424998
n-Hexane	110-54-3	86.20	50.4	222	32300		100	WG2426811
Isopropylbenzene	98-82-8	120.20	0.355	0.983	U		1	WG2424998
Methylene Chloride	75-09-2	84.90	0.587	0.694	U		1	WG2424998
Methyl Butyl Ketone	591-78-6	100	0.544	5.11	U		1	WG2424998
2-Butanone (MEK)	78-93-3	72.10	34.2	369	425		100	WG2426811
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	0.434	5.12	U		1	WG2424998
Methyl methacrylate	80-62-6	100.12	0.692	0.819	U		1	WG2424998
MTBE	1634-04-4	88.10	0.293	0.721	U		1	WG2424998
Naphthalene	91-20-3	128	3.23	3.30	U		1	WG2424998
2-Propanol	67-63-0	60.10	1.67	3.07	1840	E	1	WG2424998
Propene	115-07-1	42.10	0.368	2.15	U		1	WG2424998
Styrene	100-42-5	104	0.341	1.70	U		1	WG2424998
1,1,2,2-Tetrachloroethane	79-34-5	168	0.478	1.37	U		1	WG2424998
Tetrachloroethylene	127-18-4	166	0.754	1.36	U		1	WG2424998
Tetrahydrofuran	109-99-9	72.10	0.484	0.590	U		1	WG2424998
Toluene	108-88-3	92.10	0.490	1.88	22.9		1	WG2424998

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	MDL ug/m3	RDL ug/m3	Result ug/m3	Qualifier	Dilution	Batch
1,2,4-Trichlorobenzene	120-82-1	181	3.42	4.66	U		1	WG2424998
1,1,1-Trichloroethane	71-55-6	133	0.391	1.09	U		1	WG2424998
1,1,2-Trichloroethane	79-00-5	133	0.372	1.09	U		1	WG2424998
Trichloroethylene	79-01-6	131	0.364	1.07	U		1	WG2424998
1,2,4-Trimethylbenzene	95-63-6	120	0.455	0.982	15.6		1	WG2424998
1,3,5-Trimethylbenzene	108-67-8	120	0.419	0.982	5.50		1	WG2424998
2,2,4-Trimethylpentane	540-84-1	114.22	0.420	0.934	U		1	WG2424998
Vinyl chloride	75-01-4	62.50	0.211	0.511	U		1	WG2424998
Vinyl Bromide	593-60-2	106.95	0.328	0.875	U		1	WG2424998
Vinyl acetate	108-05-4	86.10	0.341	2.22	U		1	WG2424998
m&p-Xylene	179601-23-1	106	0.754	1.73	186		1	WG2424998
o-Xylene	95-47-6	106	0.385	0.867	64.2		1	WG2424998
^(S) 1,4-Bromofluorobenzene	460-00-4	175			150	<u>J1</u>	60.0-140	WG2424998
^(S) 1,4-Bromofluorobenzene	460-00-4	175			96.2		60.0-140	WG2426811

1
Cp

2
Tc

3
Ss

4
Cn

5
Sr

6
Qc

7
Gl

8
Al

9
Sc

Sample Narrative:

L1812794-01 WG2424998: Surrogate failure due to matrix interference

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	MDL	RDL	Result	Qualifier	Dilution	Batch
			ug/m3	ug/m3	ug/m3			
TPH (GC/MS) Low Fraction	8006-61-9	101	282	826	2470		1	WG2424998
Acetone	67-64-1	58.10	1.24	2.97	1380	E	1	WG2424998
Allyl chloride	107-05-1	76.53	0.582	0.626	U		1	WG2424998
Benzene	71-43-2	78.10	0.351	0.639	2.26		1	WG2424998
Benzyl Chloride	100-44-7	127	0.461	1.04	U		1	WG2424998
Bromodichloromethane	75-27-4	164	0.466	1.34	U		1	WG2424998
Bromoform	75-25-2	253	0.781	6.52	U		1	WG2424998
Bromomethane	74-83-9	94.90	0.364	0.776	U		1	WG2424998
1,3-Butadiene	106-99-0	54.10	0.350	4.43	U		1	WG2424998
Carbon disulfide	75-15-0	76.10	0.498	1.24	U		1	WG2424998
Carbon tetrachloride	56-23-5	154	0.470	1.26	U		1	WG2424998
Chlorobenzene	108-90-7	113	0.545	0.924	U		1	WG2424998
Chloroethane	75-00-3	64.50	0.290	0.528	U		1	WG2424998
Chloroform	67-66-3	119	0.506	0.973	U		1	WG2424998
Chloromethane	74-87-3	50.50	0.227	0.413	U		1	WG2424998
2-Chlorotoluene	95-49-8	126	0.406	1.03	U		1	WG2424998
Cyclohexane	110-82-7	84.20	0.585	0.689	4.34		1	WG2424998
Dibromochloromethane	124-48-1	208	0.592	1.70	U		1	WG2424998
1,2-Dibromoethane	106-93-4	188	0.531	1.54	U		1	WG2424998
1,2-Dichlorobenzene	95-50-1	147	0.441	1.20	U		1	WG2424998
1,3-Dichlorobenzene	541-73-1	147	0.453	1.20	U		1	WG2424998
1,4-Dichlorobenzene	106-46-7	147	0.462	1.20	U		1	WG2424998
1,2-Dichloroethane	107-06-2	99	0.296	0.810	U		1	WG2424998
1,1-Dichloroethane	75-34-3	98	0.285	0.802	U		1	WG2424998
1,1-Dichloroethene	75-35-4	96.90	0.296	0.793	U		1	WG2424998
cis-1,2-Dichloroethene	156-59-2	96.90	0.315	0.793	U		1	WG2424998
trans-1,2-Dichloroethene	156-60-5	96.90	0.291	0.793	U		1	WG2424998
1,2-Dichloropropane	78-87-5	113	0.348	0.924	U		1	WG2424998
cis-1,3-Dichloropropene	10061-01-5	111	0.337	0.908	U		1	WG2424998
trans-1,3-Dichloropropene	10061-02-6	111	0.361	0.908	U		1	WG2424998
1,4-Dioxane	123-91-1	88.10	0.591	2.27	U		1	WG2424998
Ethanol	64-17-5	46.10	4.47	4.71	46.0		1	WG2424998
Ethylbenzene	100-41-4	106	0.337	0.867	3.56		1	WG2424998
4-Ethyltoluene	622-96-8	120	0.435	0.982	4.54		1	WG2424998
Trichlorofluoromethane	75-69-4	137.40	0.433	1.12	2.48		1	WG2424998
Dichlorodifluoromethane	75-71-8	120.92	0.399	0.989	2.61		1	WG2424998
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.576	1.53	0.642	J	1	WG2424998
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.529	1.40	U		1	WG2424998
Heptane	142-82-5	100	2.33	4.09	8.18		5	WG2426811
Hexachloro-1,3-butadiene	87-68-3	261	0.854	6.73	U		1	WG2424998
n-Hexane	110-54-3	86.20	2.52	11.1	367		5	WG2426811
Isopropylbenzene	98-82-8	120.20	0.355	0.983	U		1	WG2424998
Methylene Chloride	75-09-2	84.90	0.587	0.694	U		1	WG2424998
Methyl Butyl Ketone	591-78-6	100	0.544	5.11	U		1	WG2424998
2-Butanone (MEK)	78-93-3	72.10	1.71	18.4	19.0		5	WG2426811
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	0.434	5.12	U		1	WG2424998
Methyl methacrylate	80-62-6	100.12	0.692	0.819	U		1	WG2424998
MTBE	1634-04-4	88.10	0.293	0.721	U		1	WG2424998
Naphthalene	91-20-3	128	3.23	3.30	U		1	WG2424998
2-Propanol	67-63-0	60.10	1.67	3.07	693	E	1	WG2424998
Propene	115-07-1	42.10	0.368	2.15	U		1	WG2424998
Styrene	100-42-5	104	0.341	1.70	U		1	WG2424998
1,1,2,2-Tetrachloroethane	79-34-5	168	0.478	1.37	U		1	WG2424998
Tetrachloroethylene	127-18-4	166	0.754	1.36	U		1	WG2424998
Tetrahydrofuran	109-99-9	72.10	0.484	0.590	U		1	WG2424998
Toluene	108-88-3	92.10	0.490	1.88	4.48		1	WG2424998

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	MDL ug/m3	RDL ug/m3	Result ug/m3	Qualifier	Dilution	Batch
1,2,4-Trichlorobenzene	120-82-1	181	3.42	4.66	U		1	WG2424998
1,1,1-Trichloroethane	71-55-6	133	0.391	1.09	U		1	WG2424998
1,1,2-Trichloroethane	79-00-5	133	0.372	1.09	U		1	WG2424998
Trichloroethylene	79-01-6	131	0.364	1.07	U		1	WG2424998
1,2,4-Trimethylbenzene	95-63-6	120	0.455	0.982	5.89		1	WG2424998
1,3,5-Trimethylbenzene	108-67-8	120	0.419	0.982	2.04		1	WG2424998
2,2,4-Trimethylpentane	540-84-1	114.22	0.420	0.934	U		1	WG2424998
Vinyl chloride	75-01-4	62.50	0.211	0.511	U		1	WG2424998
Vinyl Bromide	593-60-2	106.95	0.328	0.875	U		1	WG2424998
Vinyl acetate	108-05-4	86.10	0.341	2.22	U		1	WG2424998
m&p-Xylene	179601-23-1	106	0.754	1.73	14.3		1	WG2424998
o-Xylene	95-47-6	106	0.385	0.867	5.90		1	WG2424998
^(S) 1,4-Bromofluorobenzene	460-00-4	175			102		60.0-140	WG2424998
^(S) 1,4-Bromofluorobenzene	460-00-4	175			99.5		60.0-140	WG2426811

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	MDL	RDL	Result	Qualifier	Dilution	Batch
			ug/m3	ug/m3	ug/m3			
TPH (GC/MS) Low Fraction	8006-61-9	101	282	826	U		1	WG2424998
Acetone	67-64-1	58.10	1.24	2.97	383	E	1	WG2424998
Allyl chloride	107-05-1	76.53	0.582	0.626	U		1	WG2424998
Benzene	71-43-2	78.10	0.351	0.639	0.760		1	WG2424998
Benzyl Chloride	100-44-7	127	0.461	1.04	U		1	WG2424998
Bromodichloromethane	75-27-4	164	0.466	1.34	U		1	WG2424998
Bromoform	75-25-2	253	0.781	6.52	U		1	WG2424998
Bromomethane	74-83-9	94.90	0.364	0.776	U		1	WG2424998
1,3-Butadiene	106-99-0	54.10	0.350	4.43	U		1	WG2424998
Carbon disulfide	75-15-0	76.10	0.498	1.24	U		1	WG2424998
Carbon tetrachloride	56-23-5	154	0.470	1.26	U		1	WG2424998
Chlorobenzene	108-90-7	113	0.545	0.924	U		1	WG2424998
Chloroethane	75-00-3	64.50	0.290	0.528	U		1	WG2424998
Chloroform	67-66-3	119	0.506	0.973	U		1	WG2424998
Chloromethane	74-87-3	50.50	0.227	0.413	U		1	WG2424998
2-Chlorotoluene	95-49-8	126	0.406	1.03	U		1	WG2424998
Cyclohexane	110-82-7	84.20	0.585	0.689	U		1	WG2424998
Dibromochloromethane	124-48-1	208	0.592	1.70	U		1	WG2424998
1,2-Dibromoethane	106-93-4	188	0.531	1.54	U		1	WG2424998
1,2-Dichlorobenzene	95-50-1	147	0.441	1.20	U		1	WG2424998
1,3-Dichlorobenzene	541-73-1	147	0.453	1.20	U		1	WG2424998
1,4-Dichlorobenzene	106-46-7	147	0.462	1.20	U		1	WG2424998
1,2-Dichloroethane	107-06-2	99	0.296	0.810	U		1	WG2424998
1,1-Dichloroethane	75-34-3	98	0.285	0.802	U		1	WG2424998
1,1-Dichloroethene	75-35-4	96.90	0.296	0.793	U		1	WG2424998
cis-1,2-Dichloroethene	156-59-2	96.90	0.315	0.793	U		1	WG2424998
trans-1,2-Dichloroethene	156-60-5	96.90	0.291	0.793	U		1	WG2424998
1,2-Dichloropropane	78-87-5	113	0.348	0.924	U		1	WG2424998
cis-1,3-Dichloropropene	10061-01-5	111	0.337	0.908	U		1	WG2424998
trans-1,3-Dichloropropene	10061-02-6	111	0.361	0.908	U		1	WG2424998
1,4-Dioxane	123-91-1	88.10	0.591	2.27	U		1	WG2424998
Ethanol	64-17-5	46.10	4.47	4.71	47.3		1	WG2424998
Ethylbenzene	100-41-4	106	0.337	0.867	1.79		1	WG2424998
4-Ethyltoluene	622-96-8	120	0.435	0.982	5.35		1	WG2424998
Trichlorofluoromethane	75-69-4	137.40	0.433	1.12	1.43		1	WG2424998
Dichlorodifluoromethane	75-71-8	120.92	0.399	0.989	2.74		1	WG2424998
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.576	1.53	U		1	WG2424998
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.529	1.40	U		1	WG2424998
Heptane	142-82-5	100	0.466	0.818	U		1	WG2424998
Hexachloro-1,3-butadiene	87-68-3	261	0.854	6.73	U		1	WG2424998
n-Hexane	110-54-3	86.20	0.504	2.22	6.49		1	WG2424998
Isopropylbenzene	98-82-8	120.20	0.355	0.983	U		1	WG2424998
Methylene Chloride	75-09-2	84.90	0.587	0.694	U		1	WG2424998
Methyl Butyl Ketone	591-78-6	100	0.544	5.11	U		1	WG2424998
2-Butanone (MEK)	78-93-3	72.10	0.342	3.69	13.2		1	WG2424998
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	0.434	5.12	3.68	J	1	WG2424998
Methyl methacrylate	80-62-6	100.12	0.692	0.819	U		1	WG2424998
MTBE	1634-04-4	88.10	0.293	0.721	U		1	WG2424998
Naphthalene	91-20-3	128	3.23	3.30	U		1	WG2424998
2-Propanol	67-63-0	60.10	33.4	61.5	2950		20	WG2426811
Propene	115-07-1	42.10	0.368	2.15	U		1	WG2424998
Styrene	100-42-5	104	0.341	1.70	U		1	WG2424998
1,1,2,2-Tetrachloroethane	79-34-5	168	0.478	1.37	U		1	WG2424998
Tetrachloroethylene	127-18-4	166	0.754	1.36	1.09	J	1	WG2424998
Tetrahydrofuran	109-99-9	72.10	0.484	0.590	U		1	WG2424998
Toluene	108-88-3	92.10	0.490	1.88	4.52		1	WG2424998

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	MDL ug/m3	RDL ug/m3	Result ug/m3	Qualifier	Dilution	Batch
1,2,4-Trichlorobenzene	120-82-1	181	3.42	4.66	U		1	WG2424998
1,1,1-Trichloroethane	71-55-6	133	0.391	1.09	U		1	WG2424998
1,1,2-Trichloroethane	79-00-5	133	0.372	1.09	U		1	WG2424998
Trichloroethylene	79-01-6	131	0.364	1.07	U		1	WG2424998
1,2,4-Trimethylbenzene	95-63-6	120	0.455	0.982	8.69		1	WG2424998
1,3,5-Trimethylbenzene	108-67-8	120	0.419	0.982	3.09		1	WG2424998
2,2,4-Trimethylpentane	540-84-1	114.22	0.420	0.934	U		1	WG2424998
Vinyl chloride	75-01-4	62.50	0.211	0.511	U		1	WG2424998
Vinyl Bromide	593-60-2	106.95	0.328	0.875	U		1	WG2424998
Vinyl acetate	108-05-4	86.10	0.341	2.22	U		1	WG2424998
m&p-Xylene	179601-23-1	106	0.754	1.73	9.41		1	WG2424998
o-Xylene	95-47-6	106	0.385	0.867	4.55		1	WG2424998
^(S) 1,4-Bromofluorobenzene	460-00-4	175			95.9		60.0-140	WG2424998
^(S) 1,4-Bromofluorobenzene	460-00-4	175			91.5		60.0-140	WG2426811

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

Method Blank (MB)

(MB) R4163361-3 12/26/24 10:05

Analyte	MB Result ug/m3	MB Qualifier	MB MDL ug/m3	MB RDL ug/m3
TPH (GC/MS) Low Fraction	U		282	826
Acetone	U		1.24	2.97
Allyl chloride	U		0.582	0.626
Benzene	U		0.351	0.639
Benzyl Chloride	U		0.461	1.04
Bromodichloromethane	U		0.466	1.34
Bromoform	U		0.781	6.52
Bromomethane	U		0.364	0.776
1,3-Butadiene	U		0.350	4.43
Carbon disulfide	U		0.498	1.24
Carbon tetrachloride	U		0.470	1.26
Chlorobenzene	U		0.545	0.924
Chloroethane	U		0.290	0.528
Chloroform	U		0.506	0.973
Chloromethane	U		0.227	0.413
2-Chlorotoluene	U		0.406	1.03
Cyclohexane	U		0.585	0.689
Dibromochloromethane	U		0.592	1.70
1,2-Dibromoethane	U		0.531	1.54
1,2-Dichlorobenzene	U		0.441	1.20
1,3-Dichlorobenzene	U		0.453	1.20
1,4-Dichlorobenzene	U		0.462	1.20
1,2-Dichloroethane	U		0.296	0.810
1,1-Dichloroethane	U		0.285	0.802
1,1-Dichloroethene	U		0.296	0.793
cis-1,2-Dichloroethene	U		0.315	0.793
trans-1,2-Dichloroethene	U		0.291	0.793
1,2-Dichloropropane	U		0.348	0.924
cis-1,3-Dichloropropene	U		0.337	0.908
trans-1,3-Dichloropropene	U		0.361	0.908
1,4-Dioxane	U		0.591	2.27
Ethanol	U		4.47	4.71
Ethylbenzene	U		0.337	0.867
4-Ethyltoluene	U		0.435	0.982
Trichlorofluoromethane	U		0.433	1.12
Dichlorodifluoromethane	U		0.399	0.989
1,1,2-Trichlorotrifluoroethane	U		0.576	1.53
1,2-Dichlorotetrafluoroethane	U		0.529	1.40
Heptane	U		0.466	0.818
Hexachloro-1,3-butadiene	U		0.854	6.73

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

Method Blank (MB)

(MB) R4163361-3 12/26/24 10:05

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/m3		ug/m3	ug/m3
n-Hexane	U		0.504	2.22
Isopropylbenzene	U		0.355	0.983
Methylene Chloride	U		0.587	0.694
Methyl Butyl Ketone	U		0.544	5.11
2-Butanone (MEK)	U		0.342	3.69
4-Methyl-2-pentanone (MIBK)	U		0.434	5.12
Methyl methacrylate	U		0.692	0.819
MTBE	U		0.293	0.721
Naphthalene	U		3.23	3.30
2-Propanol	U		1.67	3.07
Propene	U		0.368	2.15
Styrene	U		0.341	1.70
1,1,2,2-Tetrachloroethane	U		0.478	1.37
Tetrachloroethylene	U		0.754	1.36
Tetrahydrofuran	U		0.484	0.590
Toluene	U		0.490	1.88
1,2,4-Trichlorobenzene	U		3.42	4.66
1,1,1-Trichloroethane	U		0.391	1.09
1,1,2-Trichloroethane	U		0.372	1.09
Trichloroethylene	U		0.364	1.07
1,2,4-Trimethylbenzene	U		0.455	0.982
1,3,5-Trimethylbenzene	U		0.419	0.982
2,2,4-Trimethylpentane	U		0.420	0.934
Vinyl chloride	U		0.211	0.511
Vinyl Bromide	U		0.328	0.875
Vinyl acetate	U		0.341	2.22
m&p-Xylene	U		0.754	1.73
o-Xylene	U		0.385	0.867
(S) 1,4-Bromofluorobenzene	86.3			60.0-140



Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R4163361-1 12/26/24 08:48 • (LCSD) R4163361-2 12/26/24 09:27

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
	ug/m3	ug/m3	ug/m3	%	%	%			%	%
TPH (GC/MS) Low Fraction	777	723	727	93.1	93.6	70.0-130	J	J	0.570	25
Acetone	8.91	9.22	9.20	103	103	70.0-130			0.258	25
Allyl chloride	11.7	9.83	9.89	83.7	84.3	70.0-130			0.635	25
Benzene	12.0	13.5	13.6	113	113	70.0-130			0.472	25

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R4163361-1 12/26/24 08:48 • (LCSD) R4163361-2 12/26/24 09:27

Analyte	Spike Amount ug/m3	LCS Result ug/m3	LCSD Result ug/m3	LCS Rec. %	LCSD Rec. %	Rec. Limits %	<u>LCS Qualifier</u>	<u>LCSD Qualifier</u>	RPD %	RPD Limits %
Benzyl Chloride	19.5	22.9	22.8	117	117	70.0-152			0.456	25
Bromodichloromethane	25.2	29.2	29.0	116	115	70.0-130			0.922	25
Bromoform	38.8	45.6	45.8	118	118	70.0-130			0.452	25
Bromomethane	14.6	17.1	16.8	118	115	70.0-130			1.83	25
1,3-Butadiene	8.30	8.85	8.78	107	106	70.0-130			0.753	25
Carbon disulfide	23.3	26.2	26.2	112	112	70.0-130			0.119	25
Carbon tetrachloride	23.6	27.6	27.7	117	117	70.0-130			0.456	25
Chlorobenzene	17.3	19.5	19.5	113	113	70.0-130			0.000	25
Chloroethane	9.89	11.1	11.1	112	112	70.0-130			0.238	25
Chloroform	18.3	21.1	21.4	116	117	70.0-130			1.15	25
Chloromethane	7.75	8.12	8.01	105	103	70.0-130			1.28	25
2-Chlorotoluene	19.3	22.5	22.2	116	115	70.0-130			1.15	25
Cyclohexane	12.9	14.9	14.6	116	113	70.0-130			2.33	25
Dibromochloromethane	31.9	37.1	37.3	116	117	70.0-130			0.458	25
1,2-Dibromoethane	28.8	33.4	33.8	116	117	70.0-130			0.915	25
1,2-Dichlorobenzene	22.5	26.8	26.7	119	118	70.0-130			0.449	25
1,3-Dichlorobenzene	22.5	26.7	27.0	118	120	70.0-130			1.12	25
1,4-Dichlorobenzene	22.5	26.6	27.0	118	120	70.0-130			1.35	25
1,2-Dichloroethane	15.2	17.4	17.4	115	114	70.0-130			0.233	25
1,1-Dichloroethane	15.0	16.8	17.4	111	116	70.0-130			3.99	25
1,1-Dichloroethene	14.9	16.8	17.0	113	114	70.0-130			0.703	25
cis-1,2-Dichloroethene	14.9	16.5	16.8	111	113	70.0-130			1.43	25
trans-1,2-Dichloroethene	14.9	16.7	15.3	112	103	70.0-130			8.67	25
1,2-Dichloropropane	17.3	19.1	18.9	110	109	70.0-130			0.971	25
cis-1,3-Dichloropropene	17.0	18.8	19.3	110	114	70.0-130			2.86	25
trans-1,3-Dichloropropene	17.0	18.7	19.1	110	112	70.0-130			2.17	25
1,4-Dioxane	13.5	15.8	16.0	117	118	70.0-140			0.907	25
Ethanol	7.07	7.52	7.71	106	109	55.0-148			2.48	25
Ethylbenzene	16.3	18.8	18.7	115	115	70.0-130			0.231	25
4-Ethyltoluene	18.4	22.0	22.1	119	120	70.0-130			0.667	25
Trichlorofluoromethane	21.1	24.8	24.5	118	116	70.0-130			1.37	25
Dichlorodifluoromethane	18.5	21.7	21.6	117	116	64.0-139			0.686	25
1,1,2-Trichlorotrifluoroethane	28.7	33.6	33.7	117	117	70.0-130			0.456	25
1,2-Dichlorotetrafluoroethane	26.2	30.3	30.1	115	115	70.0-130			0.695	25
Heptane	15.3	17.5	17.2	114	112	70.0-130			2.12	25
Hexachloro-1,3-butadiene	40.0	46.6	46.8	117	117	70.0-151			0.229	25
n-Hexane	13.2	14.6	14.7	110	111	70.0-130			0.964	25
Isopropylbenzene	18.4	21.5	21.5	117	117	70.0-130			0.000	25
Methylene Chloride	13.0	14.5	14.7	111	113	70.0-130			1.43	25
Methyl Butyl Ketone	15.3	17.3	18.0	113	117	70.0-149			3.70	25

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R4163361-1 12/26/24 08:48 • (LCSD) R4163361-2 12/26/24 09:27

Analyte	Spike Amount ug/m3	LCS Result ug/m3	LCSD Result ug/m3	LCS Rec. %	LCSD Rec. %	Rec. Limits %	<u>LCS Qualifier</u>	<u>LCSD Qualifier</u>	RPD %	RPD Limits %
2-Butanone (MEK)	11.1	12.6	12.8	114	116	70.0-130			2.09	25
4-Methyl-2-pentanone (MIBK)	15.4	17.1	17.2	111	112	70.0-139			0.955	25
Methyl methacrylate	15.4	16.7	16.9	109	110	70.0-130			1.22	25
MTBE	13.5	15.3	15.3	113	113	70.0-130			0.000	25
Naphthalene	19.6	22.5	22.3	115	114	70.0-159			0.935	25
2-Propanol	9.22	9.76	10.2	106	110	70.0-139			3.95	25
Propene	6.46	6.34	6.46	98.1	100	64.0-144			1.88	25
Styrene	31.9	38.0	37.4	119	117	70.0-130			1.47	25
1,1,2,2-Tetrachloroethane	25.8	29.2	29.3	113	114	70.0-130			0.469	25
Tetrachloroethylene	25.5	29.8	29.8	117	117	70.0-130			0.000	25
Tetrahydrofuran	11.1	11.7	12.4	106	113	70.0-137			6.36	25
Toluene	14.1	16.2	16.0	114	114	70.0-130			0.702	25
1,2,4-Trichlorobenzene	27.8	31.2	31.3	113	113	70.0-160			0.237	25
1,1,1-Trichloroethane	20.4	24.3	24.3	119	119	70.0-130			0.224	25
1,1,2-Trichloroethane	20.4	23.5	23.4	115	115	70.0-130			0.464	25
Trichloroethylene	20.1	22.5	23.2	112	115	70.0-130			3.05	25
1,2,4-Trimethylbenzene	18.4	21.8	21.6	118	118	70.0-130			0.678	25
1,3,5-Trimethylbenzene	18.4	22.0	22.2	119	121	70.0-130			0.889	25
2,2,4-Trimethylpentane	17.5	19.4	19.2	111	110	70.0-130			0.726	25
Vinyl chloride	9.59	10.7	10.9	111	113	70.0-130			1.90	25
Vinyl Bromide	16.4	19.5	18.8	119	115	70.0-130			3.65	25
Vinyl acetate	13.2	10.1	10.9	76.3	82.4	70.0-130			7.73	25
m&p-Xylene	32.5	37.4	37.1	115	114	70.0-130			0.698	25
o-Xylene	16.3	18.9	18.9	117	116	70.0-130			0.459	25
(S) 1,4-Bromofluorobenzene				97.6	97.7	60.0-140				

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Method Blank (MB)

(MB) R4163302-3 12/31/24 09:34

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/m3		ug/m3	ug/m3
TPH (GC/MS) Low Fraction	U		282	826
Acetone	U		1.24	2.97
Heptane	U		0.466	0.818
n-Hexane	U		0.504	2.22
2-Butanone (MEK)	U		0.342	3.69
2-Propanol	U		1.67	3.07
(S) 1,4-Bromofluorobenzene	90.6			60.0-140

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R4163302-1 12/31/24 08:32 • (LCSD) R4163302-2 12/31/24 09:04

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
	ug/m3	ug/m3	ug/m3	%	%	%			%	%
TPH (GC/MS) Low Fraction	777	785	785	101	101	70.0-130	J	J	0.000	25
Acetone	8.91	9.17	9.12	103	102	70.0-130			0.519	25
Heptane	15.3	17.7	17.1	115	111	70.0-130			3.76	25
n-Hexane	13.2	14.2	14.2	107	107	70.0-130			0.248	25
2-Butanone (MEK)	11.1	11.5	11.4	104	103	70.0-130			0.257	25
2-Propanol	9.22	9.54	9.78	103	106	70.0-139			2.54	25
(S) 1,4-Bromofluorobenzene				103	102	60.0-140				

7 Gl

8 Al

9 Sc

GLOSSARY OF TERMS

Guide to Reading and Understanding Your Laboratory Report

The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

Results Disclaimer - Information that may be provided by the customer, and contained within this report, include Permit Limits, Project Name, Sample ID, Sample Matrix, Sample Preservation, Field Blanks, Field Spikes, Field Duplicates, On-Site Data, Sampling Collection Dates/Times, and Sampling Location. Results relate to the accuracy of this information provided, and as the samples are received.

Abbreviations and Definitions

MDL	Method Detection Limit.
RDL	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
(S)	Surrogate (Surrogate Standard) - Analytes added to every blank, sample, Laboratory Control Sample/Duplicate and Matrix Spike/Duplicate; used to evaluate analytical efficiency by measuring recovery. Surrogates are not expected to be detected in all environmental media.
U	Not detected at the Reporting Limit (or MDL where applicable).
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.
Dilution	If the sample matrix contains an interfering material, the sample preparation volume or weight values differ from the standard, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor.
Limits	These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges.
Qualifier	This column provides a letter and/or number designation that corresponds to additional information concerning the result reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable.
Result	The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state "ND" (Not Detected) or "BDL" (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte.
Uncertainty (Radiochemistry)	Confidence level of 2 sigma.
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.
Quality Control Summary (Qc)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.



Qualifier	Description
E	The analyte concentration exceeds the upper limit of the calibration range of the instrument established by the initial calibration (ICAL).
J	The identification of the analyte is acceptable; the reported value is an estimate.
J1	Surrogate recovery limits have been exceeded; values are outside upper control limits.

ACCREDITATIONS & LOCATIONS

Pace Analytical National 12065 Lebanon Rd Mount Juliet, TN 37122

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN000032021-1
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey–NELAP	TN002
California	2932	New Mexico ¹	TN00003
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina ¹	DW21704
Georgia	NELAP	North Carolina ³	41
Georgia ¹	923	North Dakota	R-140
Idaho	TN00003	Ohio–VAP	CL0069
Illinois	200008	Oklahoma	9915
Indiana	C-TN-01	Oregon	TN200002
Iowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	LA000356
Kentucky ^{1,6}	KY90010	South Carolina	84004002
Kentucky ²	16	South Dakota	n/a
Louisiana	AI30792	Tennessee ^{1,4}	2006
Louisiana	LA018	Texas	T104704245-20-18
Maine	TN00003	Texas ⁵	LAB0152
Maryland	324	Utah	TN000032021-11
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	110033
Minnesota	047-999-395	Washington	C847
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	998093910
Montana	CERT0086	Wyoming	A2LA
A2LA – ISO 17025	1461.01	AIHA-LAP,LLC EMLAP	100789
A2LA – ISO 17025 ⁵	1461.02	DOD	1461.01
Canada	1461.01	USDA	P330-15-00234
EPA–Crypto	TN00003		

¹ Drinking Water ² Underground Storage Tanks ³ Aquatic Toxicity ⁴ Chemical/Microbiological ⁵ Mold ⁶ Wastewater n/a Accreditation not applicable

* Not all certifications held by the laboratory are applicable to the results reported in the attached report.

* Accreditation is only applicable to the test methods specified on each scope of accreditation held by Pace Analytical.

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc

Pace Pace* Location Requested (City/State): **Air CHAIN-OF-CUSTODY Analytical Request Document**
Chain-of-Custody is a LEGAL DOCUMENT - Complete all relevant fields

LAB USE ONLY - Affix Workorder/Login Label Here

Company Name: **Alpha Environmental Services, Inc** Contact/Report To: **Jim Cooper**
Street Address: **11080 SW Allen Blvd.** Phone #: **503-292-5346**
City, State Zip: E-Mail: **jim@alphaenvironmental.net**
Customer Project #: **24-63060** Invoice to:
Project Name: **3939 NW St. Helens Rd.** Invoice
Site Collection Info/Facility ID (as applicable): **ALPHAENVBOR-AIR** Purchase Order # (if applicable):
Quote #:
Time Zone Collected: [] AK [X] PT [] MT [] CT [] ET State origin of sample(s):

Data Deliverables: [] Level II [] Level III [] Level IV Regulatory Program (CAA, RCRA, etc.) as applicable:
[] EQUIS Rush (Pre-approval required): 2 Day 3 day 5 day Other
[] Other Date Results Requested: Units for Reporting: ug/m³ PPBV mg/m³ PPMV

* Matrix Codes (Insert in Matrix box below): Ambient (A), Indoor (I), Soil Vapor (SV), Other (O)

Customer Sample ID	Matrix *	Summa Canister ID	Flow Controller ID	Begin Collection		End Collection		Start Pressure / Vacuum (in Hg)	End Pressure / Vacuum (in Hg)	Duration (minutes)	Flow Rate (m ³ /min or L/min)	Total Volume Sampled (m ³ or L)	TO-15 Summa	VOC's	TPH	Sample Comment
				Date	Time	Date	Time									
SS1	SV	15031	6411	12/23	13:25	12/23	13:30	29.5	5	5			X			-01
SS2	SV	21841	6433	12/23	13:40	12/23	13:44	28	5	4.5			X	X	X	-02
SS3	SV	21849	13172	12/23	13:47	12/23	13:51	30	5	4.5			X	X	X	-03

Sample Receipt Checklist
 COC Seal Present/Intact: N
 COC Signed/Accurate: N Size: 3 ^{Airs} 1L 6L 1.4L
 Bottles arrive intact: N Taps Color: G W B
 Correct bottles used: N Tubing Shunt

Unused: _____ T/P#: _____

Customer Remarks / Special Conditions / Possible Hazards: _____ Collected By: _____ Additional Instructions from Pace*: _____
 Printed Name: _____
 Signature: _____ # Coolers: _____ Thermometer ID: _____ Correction Factor (°C): _____ Obs. Temp. (°C): AMWS 9199 3945

Relinquished by/Company: (Signature) Mark Halverson Alpha Date/Time: 12/23/24:00 Received by/Company: (Signature) _____ Date/Time: _____
 Relinquished by/Company: (Signature) _____ Date/Time: _____ Received by/Company: (Signature) _____ Date/Time: _____
 Relinquished by/Company: (Signature) _____ Date/Time: _____ Received by/Company: (Signature) _____ Date/Time: _____
 Relinquished by/Company: (Signature) _____ Date/Time: _____ Received by/Company: (Signature) Walter Widen 12/26/24 0900 Date/Time: _____

Delivered by: In-Person Courier FedEx UPS Other

Page: 1 of: 1



Scan QR code for instructions

M002

L181279M

2 11/19

Proj. Manager:
942 - Jordan N Zito
AcctNum / Client ID:
ALPHAENVBOR
Table #:
Profile / Template: **T264030**
Prelog / Bottle Ord. ID: **P1114527**



APPENDIX B:

BORING LOGS