ENVIRONMENTAL SITE ASSESSMENT REPORT

Property Identification:

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

Prepared For:

JAY POIZER

Prepared By:

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1.0 INTRODUCTION

On behalf of Jay Poizer, Alpha Environmental Services, Inc (Alpha) has prepared this Environmental Site Assessment (ESA) Report. The site located at 3939 NW St Helens Road, Portland, Oregon (the Property).

This Report includes a presentation of Site background/historical information, summary of previous sampling, and a summary of findings from the current soil sampling, and recommendations for future actions.

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 PREVIOUS SITE WORK

2.1 Site History

The following summary information has been reproduced from the Phase II Environmental Site Assessment conducted by GEM dated June 24, 2024. Alpha was not contracted to verify the following information. Additional details of the Phase II report can be found in the GEM report.

GIEIM completed a Phase I Environmental Site Assessment (Phase I) of the subject property and issued a report of our findings April 22, 2024. The property consists of a single, 1.19-acre industrial use Multnomah County tax lot developed with a 10,590 square-foot office/warehouse building and an 1,800 square foot plant nursery/grow room.

According to information reviewed for the Phase I, the subject property consisted of vacant land from at least 1897 until 1947 when the warehouse was built. This warehouse was occupied by three different companies between 1947 and 1962: Transport Bodies & Equipment Manufacturers, Thermomould Co Rubber Products, and Tri State Holies Inc Prefabrication. The subject property building was expanded by Bingham Construction in 1963 who has occupied the property continuously since. In addition, a beverage company, Charge Beverage, operated on the subject property during at least 2010, and a Real Estate\ Investment firm, Tahoe Corporation, operates on the subject property currently.

A recognized environmental condition (REC) refers to (1) the presence of hazardous substances or petroleum products in, on, or at the subject property due to a release to the environment; (2) the likely presence of hazardous substances or petroleum products in, on, or at the subject property due to a release or likely release to the environment; or (3) the presence of hazardous substances or petroleum products in, on, or at the subject property under conditions that pose a material threat of a future release to the environment. RECs identified during the course of the Phase I are summarized as follows:

- The adjacent property to the south, LaGrande Chain Corp (aka LaGrande Steel), at 3865 NW St Helens Road, is identified as the site of a leaking underground storage tank (LUST). Oregon Department of Environmental Quality (DEQ) records reviewed for the site imply the location of the UST field was near the south boundary of the subject property. Of note, soil samples collected from associated monitoring well installations were not analyzed. The other documents provided by DEQ included a LUST Incident form dated February 27, 1987, stating that a release to soil was discovered January 19, 1987. No Further Action documentation issued by DEQ for this site is an administrative closure memo dated November 16, 1992 that refers to a Northwest Region SPILLS file. GlElM requested the SPILLS file and no information or a SPILLS record was provided. Furthermore, a SPILLS listing is not included in reviewed database listings for this site. GlElM reviewed UST records at Portland Fire Marshall on April 11, 2024, which indicate permits for one 5,000-gallon tank and two 9,000-gallon tanks for this site. An assessment is required to be conducted by DEQ at all tank sites adhering to requirements OAR 340-122-301 through 340-122-360 for decommissioning USTs. Three USTs are listed as decommissioned at this site on the DEQ UST Facility List. The lack of documentation of assessment at the time of the closure of these tanks with DEQ, and the proximity and hydraulic gradient of the tank field to the subject property constitutes a REC for the subject property.

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- Two UST vent pipes were observed along the south facing exterior of the warehouse building, near the location of a former onsite UST field. Four USTs were removed from the subject property. It is possible these vent pipes were left in place at the time the USTs were removed. However, when

tanks are removed, the vent pipes and other appurtenances are also typically removed. These vent pipes may be associated with another set of USTs that were not identified in the records provided by DEQ or elsewhere. On this basis the vent pipes are a REC.

.• An historical 1969 Sanborn Fire Insurance map depicts a small structure on the south adjacent property with a building labeled "spray painting". Paints and/or solvents storage and use was not regulated at this time. For this reason, it is unknown if this structure stored and/ or utilized paints and solvents onsite, but this activity cannot be ruled out. This structure is depicted adjacent to the south boundary of the subject property and is hydraulically up-gradient form the subject property, therefore possible storage and/or use of hazardous materials (e.g. paints and solvents) on the adjacent property is considered a REC for the subject property.

• Old industrial electrical equipment was observed stored along the west interior of the subject property open-sided shed. The concrete floor of the shed was observed to be in poor condition where direct observation was possible. GlElM cannot rule out the possibility of leaking PCB containing equipment being stored in the open-sided shed. This is a REC for the subject property.

• In addition, two rusted 55-gallon drums were observed lying on the ground outside of the subject property open-sided shed on the soil, exposed to the elements. A large dry-storage bag full of rusted paint cans was also observed stored directly on soil east of the open sided storage shed. The unlabeled rusted 55-gallon drums laying on soil exposed to the elements, and the large bag of paint cans on soil is a REC.

GIEIM recommended a Phase II investigation at the site consisting of a geophysical survey to trace the two suspected UST vent lines in a search for potentially remaining abandoned USTs and/or evidence of removed USTs followed by the advancement of four (4) direct-push soil borings to approximately 20 feet below ground surface (bgs), groundwater or refusal, whichever is first encountered, for field screening, collection, and analysis of four (4) soil samples and up to four (4) groundwater samples (if groundwater is encountered). Soil borings will be advanced:

1. In the vicinity of the rusted drums and paint cans, in a colocation that is also proximal and down gradient from the adjacent offsite former USTs;

2. Proximal and down gradient from the adjacent offsite former spray painting shed;

3. Proximal to any potentially identified abandoned USTs. Absent any abandoned USTs found onsite, proximal to the two vent pipes;

4. In the shed near the old electrical equipment.

Of note, the subject property itself was the site of a LUST cleanup (LUST 26-90-001). Four USTs containing gasoline and diesel were removed from two areas to the south of the subject warehouse building in 1990. Gasoline contaminated soil was encountered during the tank decommissioning and removal. Groundwater was reportedly encountered during the excavation activities, although no groundwater sampling or analysis appears to have been undertaken. The contaminated soil was over excavated and aerated onsite. The Oregon DEQ issued a No Further Action ruling for the cleanup in 1995. Due to the regulatory closure of this listing, the LUST was determined to constitute an historical recognized environmental condition (HREC). HREC refers to a previous release of hazardous substances or petroleum products affecting the subject property that has been addressed to the satisfaction of the applicable regulatory authority or authorities and meeting unrestricted use criteria established by the applicable regulatory authority or authorities without subjecting the subject property to any controls.

GEM Soil Sample Analytical Results – Petroleum

Boring No.	Location of Sample	Sample Depth in Feet	Petroleum		
			Gasoline	Diesel	Heavy Oil
			mg/kg	mg/kg	mg/kg
B1	Center of suspected northern tank pit	20	*ND <7.73*	*ND <25.8*	*ND <51.7*
B2	East end of suspected southern tank pit	12	**3,760**	**56.1**	*ND <48.7*
		20	**19.6**	*ND <25.5*	*ND <51.1*
B3	West end of suspected southern tank pit	12	*ND <7.47*	*ND <23.9*	*ND <47.8*
B4	North of open sided shed	12	*ND <7.94*	*ND <24.2*	*ND <48.3*
DEQ Risk-Based Concentrations					
Dermal Contact (Occupational Use)			20,000	14,000	36,000
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)

3.0 BENEFICIAL LAND AND WATER USE DETERMINATIONS

3.1 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.

3.2 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.

3.3 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.

4.0 FIELD INVESTIGATION AND SAMPLING PROCEDURES

4.1 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.

4.2 Boring Location Rationale

The boring locations were chosen based on the site maps provided by GEM, site observations and paint markings from the geophysical survey.

4.3 Drilling and Sampling Activities

Field investigation and drilling activities were conducted on August 6, 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.

The soil samples were placed in laboratory-provided glass jars, capped with Teflon®-lined lids 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.

4.4 Soil Boring Details

Identification	Date	Purpose	Type	Drilling Depth	Sampled Media	Analysis
D1	Aug 6, 2024	Site Assessment	Direct-push	15’	Soil	NWTPH-Gx & Dx
D2	Aug 6, 2024	Site Assessment	Direct-push	15’	Soil	NWTPH-Gx & Dx
D3	Aug 6, 2024	Site Assessment	Direct-push	15’	Soil	NWTPH-Gx, Dx & VOCs
D4	Aug 6, 2024	Site Assessment	Direct-push	15’	Soil	NWTPH-Gx & Dx
D5	Aug 6, 2024	Site Assessment	Direct-push	15’	Soil	NWTPH-Gx & Dx
D6	Aug 6, 2024	Site Assessment	Direct-push	15’	Soil	NWTPH-Gx, Dx & VOCs
D7	Aug 6, 2024	Site Assessment	Direct-push	15’	Soil	NWTPH-Gx & Dx

4.5 Selection of Soil Samples for Chemical Analyses

Soil samples from select borings were collected from the depth interval with the greatest contamination, or based on field observations. Additional samples were collected and analyzed from several borings to help determine vertical extent of impacts.

4.6 Boring Abandonment

After samples were collected, the borings were abandoned by filling with bentonite chips in accordance with the Oregon Water Resources Department (WRD) requirements.

5.0 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.

5.1 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.

5.2 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.

5.3 Sample Collection

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.

5.4 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.

5.5 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.

6.0 SAMPLE ANALYTICAL RESULTS

6.1 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.

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

Table 1 - Soil Sample Analytical Results – Petroleum

Boring No.	Location of Sample	Sample Depth in Feet	Petroleum		
			Gasoline	Diesel	Heavy Oil
			mg/kg	mg/kg	mg/kg
D1	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	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	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	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	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	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	South side of tank pit based on field observations	12	*ND <6.13*	*ND <23.1*	*ND <46.1*
DEQ Risk-Based Concentrations					
Dermal Contact (Occupational Use)			20,000	14,000	36,000
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)

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.

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-Trimathybenzene**	**1,3,5-Trimethybenzene**
	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*
DEQ Risk-Based Screening Levels											
Direct Contact (Occupational)	37	88,000	150	25,000	1,100	23	0.73	16	-	6,900	6,900
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.

7.0 RISK-BASED EVALUATIONS

7.1 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 (COl) 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.

7.2 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.

7.3 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	
	Excavation worker	Yes	
Vapor intrusion into buildings	Residential	No	
	Occupational	Yes	
Leaching to groundwater	Residential	No	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.

7.4 Contaminant Concentrations

As noted above, the contaminants identified at the site are petroleum products as gasoline and related VOC constituents. Table 1 and 1A are a summary of soils collected by Alpha during the sampling event from August 2024.

7.5 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 was not encountered at the site and drinking water is supplied by the municipal system.

Vapor intrusion into buildings:

Since gasoline and volatile constituents were detected in the subsurface and the exposure pathway is complete, there is a potential vapor intrusion risk.

7.6 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.

8.0 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.

8.1 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 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.

8.2 Conclusions

Soil

Gasoline impacts appear to be isolated around the area of the southern tank pit. Based on current data, the impacted area measures approximately 20'x 20' or 400 square feet. Soil impacts are relatively deep ranging from approximately 12 to 15 plus feet. The lateral and vertical impacts have been delineated except within the vicinity of Boring D6 to the north of the southern tank pit.

8.3 Risk Evaluation

Based on the current findings and conclusions discussed above, a vapor intrusion risk may exist for occupation receptors.

8.4 Recommendations

Alpha recommends delineating petroleum impacts north of the southern tank pit, conducting sub-slab soil vapor testing in the building and verifying if shallow groundwater impacts exist.

9.0 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.

9.1 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.

9.2 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.

10.0 SIGNATURES OF ENVIROMENTAL 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.

11.0 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.

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12.0 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)

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

PROJECT NO: 24-63060

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

LEGEND

- SOIL SAMPLE LOCATIONS
- GEM SOIL SAMPLE LOCATIONS

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

PROJECT NO: 24-63060

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

APPENDIX A:

ANALYTICAL LABORATORY REPORTS

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

ANALYTICAL REPORT

Thursday, August 22, 2024

Jim Cooper
Alpha Environmental
11080 SW Allen Blvd, Suite 100
Beaverton, OR 97005

RE: A4H0864 - 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 A4H0864, which was received by the laboratory on 8/6/2024 at 4:45:00PM.

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

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

Cooler Receipt Information		
Acceptable Receipt Temperature is less than, or equal to, 6 degC (not frozen), or received on ice the same day as sampling.		
(See Cooler Receipt Form for details)		
Default Cooler	0.6	degC

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

Apex Laboratories

Cameron O'Brien, Project Manager

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

ANALYTICAL REPORT

Alpha Environmental	Project: **Default- Env Dept.**	
11080 SW Allen Blvd, Suite 100	Project Number: **3939 NW St. Helens Rd 24-(**	**Report ID:**
Beaverton, OR 97005	Project Manager: **Jim Cooper**	**A4H0864 - 08 22 24 1630**

ANALYTICAL REPORT FOR SAMPLES

SAMPLE INFORMATION

Client Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
24-63060 D1@12'	A4H0864-01	Soil	08/06/24 10:40	08/06/24 16:45
24-63060 D1@15'	A4H0864-02	Soil	08/06/24 10:40	08/06/24 16:45
24-63060 D2@12'	A4H0864-03	Soil	08/06/24 11:15	08/06/24 16:45
24-63060 D2@15'	A4H0864-04	Soil	08/06/24 11:15	08/06/24 16:45
24-63060 D3@12'	A4H0864-05	Soil	08/06/24 11:45	08/06/24 16:45
24-63060 D3@15'	A4H0864-06	Soil	08/06/24 11:45	08/06/24 16:45
24-63060 D4@12'	A4H0864-07	Soil	08/06/24 12:10	08/06/24 16:45
24-63060 D4@15'	A4H0864-08	Soil	08/06/24 12:10	08/06/24 16:45
24-63060 D5@12'	A4H0864-09	Soil	08/06/24 12:50	08/06/24 16:45
24-63060 D5@15'	A4H0864-10	Soil	08/06/24 12:50	08/06/24 16:45
24-63060 D6@12'	A4H0864-11	Soil	08/06/24 13:10	08/06/24 16:45
24-63060 D6@15'	A4H0864-12	Soil	08/06/24 13:10	08/06/24 16:45
24-63060 D7@15'	A4H0864-13	Soil	08/06/24 13:35	08/06/24 16:45

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Cameron O'Brien, Project Manager

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ORELAP ID: **OR100062**

ANALYTICAL REPORT

Alpha Environmental	Project: **Default- Env Dept.**	
11080 SW Allen Blvd, Suite 100	Project Number: **3939 NW St. Helens Rd 24-(**	**Report ID:**
Beaverton, OR 97005	Project Manager: **Jim Cooper**	**A4H0864 - 08 22 24 1630**

ANALYTICAL SAMPLE RESULTS

Diesel and/or Oil Hydrocarbons by NWTPH-Dx

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
24-63060 D1@12' (A4H0864-01)				**Matrix: Soil**		**Batch: 24H0298**		
Diesel	ND	---	24.1	mg/kg dry	1	08/08/24 21:31	NWTPH-Dx	
Oil	ND	---	48.2	mg/kg dry	1	08/08/24 21:31	NWTPH-Dx	
Surrogate: o-Terphenyl (Surr)		*Recovery: 74 %*		*Limits: 50-150 %*	*1*	*08/08/24 21:31*	*NWTPH-Dx*	
24-63060 D1@15' (A4H0864-02)				**Matrix: Soil**		**Batch: 24H0298**		
Diesel	ND	---	25.7	mg/kg dry	1	08/08/24 22:12	NWTPH-Dx	
Oil	ND	---	51.4	mg/kg dry	1	08/08/24 22:12	NWTPH-Dx	
Surrogate: o-Terphenyl (Surr)		*Recovery: 78 %*		*Limits: 50-150 %*	*1*	*08/08/24 22:12*	*NWTPH-Dx*	
24-63060 D2@12' (A4H0864-03)				**Matrix: Soil**		**Batch: 24H0298**		
Diesel	**25.3**	---	24.4	mg/kg dry	1	08/08/24 22:32	NWTPH-Dx	**F-18**
Oil	ND	---	48.8	mg/kg dry	1	08/08/24 22:32	NWTPH-Dx	
Surrogate: o-Terphenyl (Surr)		*Recovery: 84 %*		*Limits: 50-150 %*	*1*	*08/08/24 22:32*	*NWTPH-Dx*	
24-63060 D2@15' (A4H0864-04)				**Matrix: Soil**		**Batch: 24H0298**		
Diesel	ND	---	25.9	mg/kg dry	1	08/08/24 22:53	NWTPH-Dx	
Oil	ND	---	51.8	mg/kg dry	1	08/08/24 22:53	NWTPH-Dx	
Surrogate: o-Terphenyl (Surr)		*Recovery: 82 %*		*Limits: 50-150 %*	*1*	*08/08/24 22:53*	*NWTPH-Dx*	
24-63060 D3@12' (A4H0864-05)				**Matrix: Soil**		**Batch: 24H0298**		
Diesel	**187**	---	24.1	mg/kg dry	1	08/08/24 23:13	NWTPH-Dx	**F-18**
Oil	ND	---	48.2	mg/kg dry	1	08/08/24 23:13	NWTPH-Dx	
Surrogate: o-Terphenyl (Surr)		*Recovery: 82 %*		*Limits: 50-150 %*	*1*	*08/08/24 23:13*	*NWTPH-Dx*	
24-63060 D3@15' (A4H0864-06)				**Matrix: Soil**		**Batch: 24H0298**		
Diesel	ND	---	25.1	mg/kg dry	1	08/08/24 23:33	NWTPH-Dx	
Oil	ND	---	50.3	mg/kg dry	1	08/08/24 23:33	NWTPH-Dx	
Surrogate: o-Terphenyl (Surr)		*Recovery: 77 %*		*Limits: 50-150 %*	*1*	*08/08/24 23:33*	*NWTPH-Dx*	
24-63060 D4@12' (A4H0864-07)				**Matrix: Soil**		**Batch: 24H0298**		
Diesel	ND	---	23.2	mg/kg dry	1	08/08/24 23:54	NWTPH-Dx	
Oil	ND	---	46.4	mg/kg dry	1	08/08/24 23:54	NWTPH-Dx	
Surrogate: o-Terphenyl (Surr)		*Recovery: 71 %*		*Limits: 50-150 %*	*1*	*08/08/24 23:54*	*NWTPH-Dx*	

Apex Laboratories

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Cameron O'Brien, Project Manager

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

ANALYTICAL REPORT

Alpha Environmental	Project: **Default- Env Dept.**	
11080 SW Allen Blvd, Suite 100	Project Number: **3939 NW St. Helens Rd 24-(**	**Report ID:**
Beaverton, OR 97005	Project Manager: **Jim Cooper**	**A4H0864 - 08 22 24 1630**

ANALYTICAL SAMPLE RESULTS

Diesel and/or Oil Hydrocarbons by NWTPH-Dx

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
24-63060 D4@15' (A4H0864-08)				**Matrix: Soil**		**Batch: 24H0298**		
Diesel	ND	---	24.4	mg/kg dry	1	08/09/24 00:14	NWTPH-Dx	
Oil	ND	---	48.7	mg/kg dry	1	08/09/24 00:14	NWTPH-Dx	
Surrogate: o-Terphenyl (Surr)		*Recovery: 87 %*		*Limits: 50-150 %*	*1*	*08/09/24 00:14*	*NWTPH-Dx*	
24-63060 D5@12' (A4H0864-09)				**Matrix: Soil**		**Batch: 24H0298**		
Diesel	ND	---	23.6	mg/kg dry	1	08/09/24 00:34	NWTPH-Dx	
Oil	ND	---	47.1	mg/kg dry	1	08/09/24 00:34	NWTPH-Dx	
Surrogate: o-Terphenyl (Surr)		*Recovery: 79 %*		*Limits: 50-150 %*	*1*	*08/09/24 00:34*	*NWTPH-Dx*	
24-63060 D5@15' (A4H0864-10)				**Matrix: Soil**		**Batch: 24H0298**		
Diesel	ND	---	25.7	mg/kg dry	1	08/09/24 00:55	NWTPH-Dx	
Oil	ND	---	51.4	mg/kg dry	1	08/09/24 00:55	NWTPH-Dx	
Surrogate: o-Terphenyl (Surr)		*Recovery: 77 %*		*Limits: 50-150 %*	*1*	*08/09/24 00:55*	*NWTPH-Dx*	
24-63060 D6@12' (A4H0864-11)				**Matrix: Soil**		**Batch: 24H0298**		
Diesel	**114**	---	24.2	mg/kg dry	1	08/09/24 01:15	NWTPH-Dx	**F-18**
Oil	ND	---	48.4	mg/kg dry	1	08/09/24 01:15	NWTPH-Dx	
Surrogate: o-Terphenyl (Surr)		*Recovery: 81 %*		*Limits: 50-150 %*	*1*	*08/09/24 01:15*	*NWTPH-Dx*	
24-63060 D6@15' (A4H0864-12)				**Matrix: Soil**		**Batch: 24H0298**		
Diesel	ND	---	25.6	mg/kg dry	1	08/09/24 01:35	NWTPH-Dx	
Oil	ND	---	51.3	mg/kg dry	1	08/09/24 01:35	NWTPH-Dx	
Surrogate: o-Terphenyl (Surr)		*Recovery: 75 %*		*Limits: 50-150 %*	*1*	*08/09/24 01:35*	*NWTPH-Dx*	
24-63060 D7@15' (A4H0864-13)				**Matrix: Soil**		**Batch: 24H0298**		
Diesel	ND	---	23.1	mg/kg dry	1	08/09/24 03:16	NWTPH-Dx	
Oil	ND	---	46.1	mg/kg dry	1	08/09/24 03:16	NWTPH-Dx	
Surrogate: o-Terphenyl (Surr)		*Recovery: 76 %*		*Limits: 50-150 %*	*1*	*08/09/24 03:16*	*NWTPH-Dx*	

Apex Laboratories

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Cameron O'Brien, Project Manager

APEX LABORATORIES

Apex Laboratories, LLC
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ORELAP ID: **OR100062**

ANALYTICAL REPORT

Alpha Environmental	Project: **Default- Env Dept.**	
11080 SW Allen Blvd, Suite 100	Project Number: **3939 NW St. Helens Rd 24-(**	**Report ID:**
Beaverton, OR 97005	Project Manager: **Jim Cooper**	**A4H0864 - 08 22 24 1630**

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 D1@12' (A4H0864-01)				**Matrix: Soil**		**Batch: 24H0349**		
Gasoline Range Organics	**11.4**	---	6.87	mg/kg dry	50	08/09/24 16:23	NWTPH-Gx (MS)	
Surrogate: 4-Bromofluorobenzene (Sur)		*Recovery: 102 %*	*Limits: 50-150 %*		*1*	*08/09/24 16:23*	*NWTPH-Gx (MS)*	
1,4-Difluorobenzene (Sur)			*99 %*	*50-150 %*	*1*	*08/09/24 16:23*	*NWTPH-Gx (MS)*	
24-63060 D1@15' (A4H0864-02)				**Matrix: Soil**		**Batch: 24H0349**		
Gasoline Range Organics	ND	---	8.08	mg/kg dry	50	08/09/24 16:50	NWTPH-Gx (MS)	
Surrogate: 4-Bromofluorobenzene (Sur)		*Recovery: 103 %*	*Limits: 50-150 %*		*1*	*08/09/24 16:50*	*NWTPH-Gx (MS)*	
1,4-Difluorobenzene (Sur)			*99 %*	*50-150 %*	*1*	*08/09/24 16:50*	*NWTPH-Gx (MS)*	
24-63060 D2@12' (A4H0864-03RE1)				**Matrix: Soil**		**Batch: 24H0391**		
Gasoline Range Organics	**203**	---	7.05	mg/kg dry	50	08/12/24 20:19	NWTPH-Gx (MS)	
Surrogate: 4-Bromofluorobenzene (Sur)		*Recovery: 99 %*	*Limits: 50-150 %*		*1*	*08/12/24 20:19*	*NWTPH-Gx (MS)*	
1,4-Difluorobenzene (Sur)			*100 %*	*50-150 %*	*1*	*08/12/24 20:19*	*NWTPH-Gx (MS)*	
24-63060 D2@15' (A4H0864-04)				**Matrix: Soil**		**Batch: 24H0349**		
Gasoline Range Organics	**39.1**	---	7.80	mg/kg dry	50	08/09/24 20:27	NWTPH-Gx (MS)	
Surrogate: 4-Bromofluorobenzene (Sur)		*Recovery: 96 %*	*Limits: 50-150 %*		*1*	*08/09/24 20:27*	*NWTPH-Gx (MS)*	
1,4-Difluorobenzene (Sur)			*99 %*	*50-150 %*	*1*	*08/09/24 20:27*	*NWTPH-Gx (MS)*	
24-63060 D3@12' (A4H0864-05)				**Matrix: Soil**		**Batch: 24H0349**		
Gasoline Range Organics	**4040**	---	289	mg/kg dry	2000	08/09/24 21:49	NWTPH-Gx (MS)	
Surrogate: 4-Bromofluorobenzene (Sur)		*Recovery: 95 %*	*Limits: 50-150 %*		*1*	*08/09/24 21:49*	*NWTPH-Gx (MS)*	
1,4-Difluorobenzene (Sur)			*99 %*	*50-150 %*	*1*	*08/09/24 21:49*	*NWTPH-Gx (MS)*	
24-63060 D3@15' (A4H0864-06)				**Matrix: Soil**		**Batch: 24H0349**		
Gasoline Range Organics	**13.9**	---	7.78	mg/kg dry	50	08/09/24 17:17	NWTPH-Gx (MS)	
Surrogate: 4-Bromofluorobenzene (Sur)		*Recovery: 99 %*	*Limits: 50-150 %*		*1*	*08/09/24 17:17*	*NWTPH-Gx (MS)*	
1,4-Difluorobenzene (Sur)			*99 %*	*50-150 %*	*1*	*08/09/24 17:17*	*NWTPH-Gx (MS)*	
24-63060 D4@12' (A4H0864-07)				**Matrix: Soil**		**Batch: 24H0349**		
Gasoline Range Organics	ND	---	6.97	mg/kg dry	50	08/09/24 17:44	NWTPH-Gx (MS)	
Surrogate: 4-Bromofluorobenzene (Sur)		*Recovery: 100 %*	*Limits: 50-150 %*		*1*	*08/09/24 17:44*	*NWTPH-Gx (MS)*	
1,4-Difluorobenzene (Sur)			*99 %*	*50-150 %*	*1*	*08/09/24 17:44*	*NWTPH-Gx (MS)*	

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Cameron O'Brien, Project Manager

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ORELAP ID: **OR100062**

ANALYTICAL REPORT

Alpha Environmental	Project: **Default- Env Dept.**	
11080 SW Allen Blvd, Suite 100	Project Number: **3939 NW St. Helens Rd 24-(**	**Report ID:**
Beaverton, OR 97005	Project Manager: **Jim Cooper**	**A4H0864 - 08 22 24 1630**

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 D4@15' (A4H0864-08)				**Matrix: Soil**		**Batch: 24H0349**		
Gasoline Range Organics	ND	---	7.98	mg/kg dry	50	08/09/24 18:12	NWTPH-Gx (MS)	
Surrogate: 4-Bromofluorobenzene (Sur)		*Recovery: 101 %*	*Limits: 50-150 %*		*1*	*08/09/24 18:12*	*NWTPH-Gx (MS)*	
1,4-Difluorobenzene (Sur)			*99 %*	*50-150 %*	*1*	*08/09/24 18:12*	*NWTPH-Gx (MS)*	
24-63060 D5@12' (A4H0864-09RE1)				**Matrix: Soil**		**Batch: 24H0391**		
Gasoline Range Organics	**172**	---	6.87	mg/kg dry	50	08/12/24 20:47	NWTPH-Gx (MS)	
Surrogate: 4-Bromofluorobenzene (Sur)		*Recovery: 104 %*	*Limits: 50-150 %*		*1*	*08/12/24 20:47*	*NWTPH-Gx (MS)*	
1,4-Difluorobenzene (Sur)			*102 %*	*50-150 %*	*1*	*08/12/24 20:47*	*NWTPH-Gx (MS)*	
24-63060 D5@15' (A4H0864-10)				**Matrix: Soil**		**Batch: 24H0349**		
Gasoline Range Organics	**33.0**	---	7.90	mg/kg dry	50	08/09/24 18:39	NWTPH-Gx (MS)	
Surrogate: 4-Bromofluorobenzene (Sur)		*Recovery: 103 %*	*Limits: 50-150 %*		*1*	*08/09/24 18:39*	*NWTPH-Gx (MS)*	
1,4-Difluorobenzene (Sur)			*100 %*	*50-150 %*	*1*	*08/09/24 18:39*	*NWTPH-Gx (MS)*	
24-63060 D6@12' (A4H0864-11RE1)				**Matrix: Soil**		**Batch: 24H0391**		
Gasoline Range Organics	**2360**	---	73.2	mg/kg dry	500	08/12/24 21:14	NWTPH-Gx (MS)	
Surrogate: 4-Bromofluorobenzene (Sur)		*Recovery: 99 %*	*Limits: 50-150 %*		*1*	*08/12/24 21:14*	*NWTPH-Gx (MS)*	
1,4-Difluorobenzene (Sur)			*100 %*	*50-150 %*	*1*	*08/12/24 21:14*	*NWTPH-Gx (MS)*	
24-63060 D6@15' (A4H0864-12RE1)				**Matrix: Soil**		**Batch: 24H0391**		
Gasoline Range Organics	**1200**	---	76.5	mg/kg dry	500	08/12/24 19:52	NWTPH-Gx (MS)	
Surrogate: 4-Bromofluorobenzene (Sur)		*Recovery: 95 %*	*Limits: 50-150 %*		*1*	*08/12/24 19:52*	*NWTPH-Gx (MS)*	
1,4-Difluorobenzene (Sur)			*100 %*	*50-150 %*	*1*	*08/12/24 19:52*	*NWTPH-Gx (MS)*	
24-63060 D7@15' (A4H0864-13)				**Matrix: Soil**		**Batch: 24H0349**		
Gasoline Range Organics	ND	---	6.13	mg/kg dry	50	08/09/24 19:06	NWTPH-Gx (MS)	
Surrogate: 4-Bromofluorobenzene (Sur)		*Recovery: 99 %*	*Limits: 50-150 %*		*1*	*08/09/24 19:06*	*NWTPH-Gx (MS)*	
1,4-Difluorobenzene (Sur)			*100 %*	*50-150 %*	*1*	*08/09/24 19:06*	*NWTPH-Gx (MS)*	

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Cameron O'Brien, Project Manager

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503-718-2323
ORELAP ID: **OR100062**

ANALYTICAL REPORT

Alpha Environmental	Project: **Default- Env Dept.**	
11080 SW Allen Blvd, Suite 100	Project Number: **3939 NW St. Helens Rd 24-(**	**Report ID:**
Beaverton, OR 97005	Project Manager: **Jim Cooper**	**A4H0864 - 08 22 24 1630**

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 D3@12' (A4H0864-05)				**Matrix: Soil**		**Batch: 24H0349**		
Benzene	ND	---	0.579	mg/kg dry	2000	08/09/24 21:49	5035A/8260D	
Toluene	ND	---	2.89	mg/kg dry	2000	08/09/24 21:49	5035A/8260D	
Ethylbenzene	**143**	---	1.45	mg/kg dry	2000	08/09/24 21:49	5035A/8260D	
Xylenes, total	**4.72**	---	4.34	mg/kg dry	2000	08/09/24 21:49	5035A/8260D	
Methyl tert-butyl ether (MTBE)	ND	---	2.89	mg/kg dry	2000	08/09/24 21:49	5035A/8260D	
Naphthalene	**22.2**	---	5.79	mg/kg dry	2000	08/09/24 21:49	5035A/8260D	
1,2-Dibromoethane (EDB)	ND	---	2.89	mg/kg dry	2000	08/09/24 21:49	5035A/8260D	
1,2-Dichloroethane (EDC)	ND	---	1.45	mg/kg dry	2000	08/09/24 21:49	5035A/8260D	
Isopropylbenzene	**17.6**	---	2.89	mg/kg dry	2000	08/09/24 21:49	5035A/8260D	
1,2,4-Trimethylbenzene	**172**	---	2.89	mg/kg dry	2000	08/09/24 21:49	5035A/8260D	
1,3,5-Trimethylbenzene	**26.2**	---	2.89	mg/kg dry	2000	08/09/24 21:49	5035A/8260D	
Surrogate: 1,4-Difluorobenzene (Surr)		*Recovery:*	*98 %*	*Limits: 80-120 %*	*1*	*08/09/24 21:49*	*5035A/8260D*	
Toluene-d8 (Surr)			*100 %*	*80-120 %*	*1*	*08/09/24 21:49*	*5035A/8260D*	
4-Bromofluorobenzene (Surr)			*99 %*	*79-120 %*	*1*	*08/09/24 21:49*	*5035A/8260D*	
24-63060 D6@12' (A4H0864-11RE1)				**Matrix: Soil**		**Batch: 24H0391**		
Benzene	ND	---	0.146	mg/kg dry	500	08/12/24 21:14	5035A/8260D	
Toluene	ND	---	0.732	mg/kg dry	500	08/12/24 21:14	5035A/8260D	
Ethylbenzene	**5.14**	---	0.366	mg/kg dry	500	08/12/24 21:14	5035A/8260D	
Xylenes, total	ND	---	1.10	mg/kg dry	500	08/12/24 21:14	5035A/8260D	
Methyl tert-butyl ether (MTBE)	ND	---	0.732	mg/kg dry	500	08/12/24 21:14	5035A/8260D	
Naphthalene	ND	---	1.46	mg/kg dry	500	08/12/24 21:14	5035A/8260D	
1,2-Dibromoethane (EDB)	ND	---	0.732	mg/kg dry	500	08/12/24 21:14	5035A/8260D	
1,2-Dichloroethane (EDC)	ND	---	0.366	mg/kg dry	500	08/12/24 21:14	5035A/8260D	
Isopropylbenzene	**7.07**	---	0.732	mg/kg dry	500	08/12/24 21:14	5035A/8260D	
1,2,4-Trimethylbenzene	**6.30**	---	0.732	mg/kg dry	500	08/12/24 21:14	5035A/8260D	
1,3,5-Trimethylbenzene	**0.798**	---	0.732	mg/kg dry	500	08/12/24 21:14	5035A/8260D	
Surrogate: 1,4-Difluorobenzene (Surr)		*Recovery:*	*99 %*	*Limits: 80-120 %*	*1*	*08/12/24 21:14*	*5035A/8260D*	
Toluene-d8 (Surr)			*98 %*	*80-120 %*	*1*	*08/12/24 21:14*	*5035A/8260D*	
4-Bromofluorobenzene (Surr)			*101 %*	*79-120 %*	*1*	*08/12/24 21:14*	*5035A/8260D*	

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

ANALYTICAL REPORT

Alpha Environmental	Project: **Default- Env Dept.**	
11080 SW Allen Blvd, Suite 100	Project Number: **3939 NW St. Helens Rd 24-(**	**Report ID:**
Beaverton, OR 97005	Project Manager: **Jim Cooper**	**A4H0864 - 08 22 24 1630**

ANALYTICAL SAMPLE RESULTS

Percent Dry Weight

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
24-63060 D1@12' (A4H0864-01)				**Matrix: Soil**		**Batch: 24H0241**		
% Solids	**73.1**	---	1.00	%	1	08/08/24 06:11	EPA 8000D	
24-63060 D1@15' (A4H0864-02)				**Matrix: Soil**		**Batch: 24H0241**		
% Solids	**68.1**	---	1.00	%	1	08/08/24 06:11	EPA 8000D	
24-63060 D2@12' (A4H0864-03)				**Matrix: Soil**		**Batch: 24H0241**		
% Solids	**72.1**	---	1.00	%	1	08/08/24 06:11	EPA 8000D	
24-63060 D2@15' (A4H0864-04)				**Matrix: Soil**		**Batch: 24H0241**		
% Solids	**69.4**	---	1.00	%	1	08/08/24 06:11	EPA 8000D	
24-63060 D3@12' (A4H0864-05)				**Matrix: Soil**		**Batch: 24H0241**		
% Solids	**71.5**	---	1.00	%	1	08/08/24 06:11	EPA 8000D	
24-63060 D3@15' (A4H0864-06)				**Matrix: Soil**		**Batch: 24H0241**		
% Solids	**68.6**	---	1.00	%	1	08/08/24 06:11	EPA 8000D	
24-63060 D4@12' (A4H0864-07)				**Matrix: Soil**		**Batch: 24H0241**		
% Solids	**73.7**	---	1.00	%	1	08/08/24 06:11	EPA 8000D	
24-63060 D4@15' (A4H0864-08)				**Matrix: Soil**		**Batch: 24H0241**		
% Solids	**69.6**	---	1.00	%	1	08/08/24 06:11	EPA 8000D	
24-63060 D5@12' (A4H0864-09)				**Matrix: Soil**		**Batch: 24H0241**		
% Solids	**72.8**	---	1.00	%	1	08/08/24 06:11	EPA 8000D	
24-63060 D5@15' (A4H0864-10)				**Matrix: Soil**		**Batch: 24H0241**		
% Solids	**69.4**	---	1.00	%	1	08/08/24 06:11	EPA 8000D	
24-63060 D6@12' (A4H0864-11)				**Matrix: Soil**		**Batch: 24H0241**		
% Solids	**70.6**	---	1.00	%	1	08/08/24 06:11	EPA 8000D	
24-63060 D6@15' (A4H0864-12)				**Matrix: Soil**		**Batch: 24H0241**		
% Solids	**69.2**	---	1.00	%	1	08/08/24 06:11	EPA 8000D	
24-63060 D7@15' (A4H0864-13)				**Matrix: Soil**		**Batch: 24H0241**		

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ANALYTICAL REPORT

Alpha Environmental	Project: **Default- Env Dept.**	
11080 SW Allen Blvd, Suite 100	Project Number: **3939 NW St. Helens Rd 24-(**	**Report ID:**
Beaverton, OR 97005	Project Manager: **Jim Cooper**	**A4H0864 - 08 22 24 1630**

ANALYTICAL SAMPLE RESULTS

Percent Dry Weight

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
24-63060 D7@15' (A4H0864-13)				**Matrix: Soil**		**Batch: 24H0241**		
% Solids	**76.4**	---	1.00	%	1	08/08/24 06:11	EPA 8000D	

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11080 SW Allen Blvd, Suite 100	Project Number: **3939 NW St. Helens Rd 24-(**	**Report ID:**
Beaverton, OR 97005	Project Manager: **Jim Cooper**	**A4H0864 - 08 22 24 1630**

QUALITY CONTROL (QC) SAMPLE RESULTS

Diesel and/or Oil Hydrocarbons by NWTPH-Dx

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 24H0298 - EPA 3546 (Fuels)							Soil					
Blank (24H0298-BLK1)		Prepared: 08/08/24 10:07 Analyzed: 08/08/24 20:51										
NWTPH-Dx												
Diesel	ND	---	20.0	mg/kg wet	1	---	---	---	---	---	---	
Oil	ND	---	40.0	mg/kg wet	1	---	---	---	---	---	---	
Surr: o-Terphenyl (Surr)		*Recovery: 88 %*	*Limits: 50-150 %*		*Dilution: 1x*							
LCS (24H0298-BS1)		Prepared: 08/08/24 10:07 Analyzed: 08/08/24 21:11										
NWTPH-Dx												
Diesel	110	---	20.0	mg/kg wet	1	125	---	88	38 - 132%	---	---	
Surr: o-Terphenyl (Surr)		*Recovery: 89 %*	*Limits: 50-150 %*		*Dilution: 1x*							
Duplicate (24H0298-DUP1)		Prepared: 08/08/24 10:07 Analyzed: 08/08/24 21:52										
QC Source Sample: 24-63060 D1@12' (A4H0864-01)												
NWTPH-Dx												
Diesel	ND	---	24.0	mg/kg dry	1	---	ND	---	---	---	30%	
Oil	ND	---	47.9	mg/kg dry	1	---	ND	---	---	---	30%	
Surr: o-Terphenyl (Surr)		*Recovery: 74 %*	*Limits: 50-150 %*		*Dilution: 1x*							
Duplicate (24H0298-DUP2)		Prepared: 08/08/24 10:07 Analyzed: 08/09/24 03:37										
QC Source Sample: 24-63060 D7@15' (A4H0864-13)												
NWTPH-Dx												
Diesel	ND	---	22.1	mg/kg dry	1	---	ND	---	---	---	30%	
Oil	ND	---	44.2	mg/kg dry	1	---	ND	---	---	---	30%	
Surr: o-Terphenyl (Surr)		*Recovery: 70 %*	*Limits: 50-150 %*		*Dilution: 1x*							

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ANALYTICAL REPORT

Alpha Environmental	Project: **Default- Env Dept.**	
11080 SW Allen Blvd, Suite 100	Project Number: **3939 NW St. Helens Rd 24-(**	**Report ID:**
Beaverton, OR 97005	Project Manager: **Jim Cooper**	**A4H0864 - 08 22 24 1630**

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 24H0349 - EPA 5035A												**Soil**
Blank (24H0349-BLK1)		Prepared: 08/09/24 08:00 Analyzed: 08/09/24 12:05										
NWTPH-Gx (MS)												
Gasoline Range Organics	ND	---	5.00	mg/kg wet	50	---	---	---	---	---	---	
Surr: 4-Bromofluorobenzene (Sur)		*Recovery: 93 %*		*Limits: 50-150 %*			*Dilution: 1x*					
1,4-Difluorobenzene (Sur)			*98 %*		*50-150 %*			*"*				
LCS (24H0349-BS2)		Prepared: 08/09/24 08:00 Analyzed: 08/09/24 11:38										
NWTPH-Gx (MS)												
Gasoline Range Organics	24.1	---	5.00	mg/kg wet	50	25.0	---	96	80 - 120%	---	---	
Surr: 4-Bromofluorobenzene (Sur)		*Recovery: 93 %*		*Limits: 50-150 %*			*Dilution: 1x*					
1,4-Difluorobenzene (Sur)			*97 %*		*50-150 %*			*"*				

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

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ANALYTICAL REPORT

Alpha Environmental	Project: **Default- Env Dept.**	
11080 SW Allen Blvd, Suite 100	Project Number: **3939 NW St. Helens Rd 24-(**	**Report ID:**
Beaverton, OR 97005	Project Manager: **Jim Cooper**	**A4H0864 - 08 22 24 1630**

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 24H0391 - EPA 5035A							Soil					
Blank (24H0391-BLK1)		Prepared: 08/12/24 08:00 Analyzed: 08/12/24 11:17										
NWTPH-Gx (MS)												
Gasoline Range Organics	ND	---	5.00	mg/kg wet	50	---	---	---	---	---	---	
Surr: 4-Bromofluorobenzene (Sur)		*Recovery: 95 %*		*Limits: 50-150 %*			*Dilution: 1x*					
1,4-Difluorobenzene (Sur)		*101 %*		*50-150 %*			*"*					
LCS (24H0391-BS2)		Prepared: 08/12/24 08:00 Analyzed: 08/12/24 10:50										
NWTPH-Gx (MS)												
Gasoline Range Organics	24.9	---	5.00	mg/kg wet	50	25.0	---	100	80 - 120%	---	---	
Surr: 4-Bromofluorobenzene (Sur)		*Recovery: 115 %*		*Limits: 50-150 %*			*Dilution: 1x*					
1,4-Difluorobenzene (Sur)		*100 %*		*50-150 %*			*"*					

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

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11080 SW Allen Blvd, Suite 100	Project Number: **3939 NW St. Helens Rd 24-(**	**Report ID:**
Beaverton, OR 97005	Project Manager: **Jim Cooper**	**A4H0864 - 08 22 24 1630**

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 24H0349 - EPA 5035A							**Soil**					
Blank (24H0349-BLK1)		Prepared: 08/09/24 08:00 Analyzed: 08/09/24 12:05										
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	---	---	---	---	---	---	
Surr: 1,4-Difluorobenzene (Surr)		*Recovery: 98 %*		*Limits: 80-120 %*			*Dilution: 1x*					
Toluene-d8 (Surr)		*100 %*		*80-120 %*			*"*					
4-Bromofluorobenzene (Surr)		*99 %*		*79-120 %*			*"*					
LCS (24H0349-BS1)		Prepared: 08/09/24 08:00 Analyzed: 08/09/24 11:11										
5035A/8260D												
Benzene	1.01	---	0.0100	mg/kg wet	50	1.00	---	101	80 - 120%	---	---	
Toluene	1.02	---	0.0500	mg/kg wet	50	1.00	---	102	80 - 120%	---	---	
Ethylbenzene	1.03	---	0.0250	mg/kg wet	50	1.00	---	103	80 - 120%	---	---	
Xylenes, total	3.16	---	0.0750	mg/kg wet	50	3.00	---	105	80 - 120%	---	---	
Methyl tert-butyl ether (MTBE)	1.04	---	0.0500	mg/kg wet	50	1.00	---	104	80 - 120%	---	---	
Naphthalene	0.905	---	0.100	mg/kg wet	50	1.00	---	91	80 - 120%	---	---	
1,2-Dibromoethane (EDB)	1.09	---	0.0500	mg/kg wet	50	1.00	---	109	80 - 120%	---	---	
1,2-Dichloroethane (EDC)	0.968	---	0.0250	mg/kg wet	50	1.00	---	97	80 - 120%	---	---	
Isopropylbenzene	1.02	---	0.0500	mg/kg wet	50	1.00	---	102	80 - 120%	---	---	
1,2,4-Trimethylbenzene	1.11	---	0.0500	mg/kg wet	50	1.00	---	111	80 - 120%	---	---	
1,3,5-Trimethylbenzene	1.14	---	0.0500	mg/kg wet	50	1.00	---	114	80 - 120%	---	---	
Surr: 1,4-Difluorobenzene (Surr)		*Recovery: 96 %*		*Limits: 80-120 %*			*Dilution: 1x*					
Toluene-d8 (Surr)		*102 %*		*80-120 %*			*"*					
4-Bromofluorobenzene (Surr)		*99 %*		*79-120 %*			*"*					
Matrix Spike (24H0349-MS1)		Prepared: 08/06/24 13:35 Analyzed: 08/09/24 19:33										

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Alpha Environmental	Project: **Default- Env Dept.**	
11080 SW Allen Blvd, Suite 100	Project Number: **3939 NW St. Helens Rd 24-(**	**Report ID:**
Beaverton, OR 97005	Project Manager: **Jim Cooper**	**A4H0864 - 08 22 24 1630**

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 24H0349 - EPA 5035A							**Soil**					
Matrix Spike (24H0349-MS1)		Prepared: 08/06/24 13:35 Analyzed: 08/09/24 19:33										
QC Source Sample: 24-63060 D7@15' (A4H0864-13)												
5035A/8260D												
Benzene	1.32	---	0.0123	mg/kg dry	50	1.22	ND	107	77 - 121%	---	---	
Toluene	1.30	---	0.0613	mg/kg dry	50	1.22	ND	106	77 - 121%	---	---	
Ethylbenzene	1.33	---	0.0306	mg/kg dry	50	1.22	ND	109	76 - 122%	---	---	
Xylenes, total	4.06	---	0.0919	mg/kg dry	50	3.67	ND	110	78 - 124%	---	---	
Methyl tert-butyl ether (MTBE)	1.33	---	0.0613	mg/kg dry	50	1.22	ND	109	73 - 125%	---	---	
Naphthalene	1.11	---	0.123	mg/kg dry	50	1.22	ND	91	62 - 129%	---	---	
1,2-Dibromoethane (EDB)	1.35	---	0.0613	mg/kg dry	50	1.22	ND	111	78 - 122%	---	---	
1,2-Dichloroethane (EDC)	1.24	---	0.0306	mg/kg dry	50	1.22	ND	101	73 - 128%	---	---	
Isopropylbenzene	1.32	---	0.0613	mg/kg dry	50	1.22	ND	108	68 - 134%	---	---	
1,2,4-Trimethylbenzene	1.42	---	0.0613	mg/kg dry	50	1.22	ND	116	75 - 123%	---	---	
1,3,5-Trimethylbenzene	1.47	---	0.0613	mg/kg dry	50	1.22	ND	120	73 - 124%	---	---	
Surr: 1,4-Difluorobenzene (Surr)		*Recovery: 96 %*		*Limits: 80-120 %*			*Dilution: 1x*					
Toluene-d8 (Surr)		*100 %*		*80-120 %*			*"*					
4-Bromofluorobenzene (Surr)		*98 %*		*79-120 %*			*"*					

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

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Alpha Environmental	Project: **Default- Env Dept.**	
11080 SW Allen Blvd, Suite 100	Project Number: **3939 NW St. Helens Rd 24-(**	**Report ID:**
Beaverton, OR 97005	Project Manager: **Jim Cooper**	**A4H0864 - 08 22 24 1630**

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 24H0391 - EPA 5035A							**Soil**					
Blank (24H0391-BLK1)		Prepared: 08/12/24 08:00 Analyzed: 08/12/24 11:17										
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	---	---	---	---	---	---	B-02
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	---	---	---	---	---	---	
Surr: 1,4-Difluorobenzene (Surr)		*Recovery: 99 %*		*Limits: 80-120 %*			*Dilution: 1x*					
Toluene-d8 (Surr)		*100 %*		*80-120 %*			*"*					
4-Bromofluorobenzene (Surr)		*99 %*		*79-120 %*			*"*					
LCS (24H0391-BS1)		Prepared: 08/12/24 08:00 Analyzed: 08/12/24 10:23										
5035A/8260D												
Benzene	0.974	---	0.0100	mg/kg wet	50	1.00	---	97	80 - 120%	---	---	
Toluene	0.978	---	0.0500	mg/kg wet	50	1.00	---	98	80 - 120%	---	---	
Ethylbenzene	0.994	---	0.0250	mg/kg wet	50	1.00	---	99	80 - 120%	---	---	
Xylenes, total	2.99	---	0.0750	mg/kg wet	50	3.00	---	100	80 - 120%	---	---	
Methyl tert-butyl ether (MTBE)	0.997	---	0.0500	mg/kg wet	50	1.00	---	100	80 - 120%	---	---	
Naphthalene	0.806	---	0.100	mg/kg wet	50	1.00	---	81	80 - 120%	---	---	B-02
1,2-Dibromoethane (EDB)	1.04	---	0.0500	mg/kg wet	50	1.00	---	104	80 - 120%	---	---	
1,2-Dichloroethane (EDC)	0.948	---	0.0250	mg/kg wet	50	1.00	---	95	80 - 120%	---	---	
Isopropylbenzene	0.941	---	0.0500	mg/kg wet	50	1.00	---	94	80 - 120%	---	---	
1,2,4-Trimethylbenzene	1.07	---	0.0500	mg/kg wet	50	1.00	---	107	80 - 120%	---	---	
1,3,5-Trimethylbenzene	1.10	---	0.0500	mg/kg wet	50	1.00	---	110	80 - 120%	---	---	
Surr: 1,4-Difluorobenzene (Surr)		*Recovery: 95 %*		*Limits: 80-120 %*			*Dilution: 1x*					
Toluene-d8 (Surr)		*101 %*		*80-120 %*			*"*					
4-Bromofluorobenzene (Surr)		*98 %*		*79-120 %*			*"*					

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Cameron O'Brien, Project Manager

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

Alpha Environmental	Project: **Default- Env Dept.**	
11080 SW Allen Blvd, Suite 100	Project Number: **3939 NW St. Helens Rd 24-(**	**Report ID:**
Beaverton, OR 97005	Project Manager: **Jim Cooper**	**A4H0864 - 08 22 24 1630**

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

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

Apex Laboratories

Cameron O'Brien, Project Manager

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503-718-2323
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Alpha Environmental	Project: **Default- Env Dept.**	
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Beaverton, OR 97005	Project Manager: **Jim Cooper**	**A4H0864 - 08 22 24 1630**

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 24H0241 - Dry Weight Prep (EPA 8000D)												**Soil**
Duplicate (24H0241-DUP1)		Prepared: 08/07/24 08:52		Analyzed: 08/08/24 06:11								
QC Source Sample: 24-63060 D1@12' (A4H0864-01)												
EPA 8000D												
% Solids	**72.5**	---	1.00	%	1	---	73.1	---	---	0.8	10%	
Duplicate (24H0241-DUP2)		Prepared: 08/07/24 08:52		Analyzed: 08/08/24 06:11								
QC Source Sample: 24-63060 D1@15' (A4H0864-02)												
EPA 8000D												
% Solids	**67.7**	---	1.00	%	1	---	68.1	---	---	0.6	10%	

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Cameron O'Brien, Project Manager

APEX LABORATORIES

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

ANALYTICAL REPORT

Alpha Environmental	Project: **Default- Env Dept.**	
11080 SW Allen Blvd, Suite 100	Project Number: **3939 NW St. Helens Rd 24-(**	**Report ID:**
Beaverton, OR 97005	Project Manager: **Jim Cooper**	**A4H0864 - 08 22 24 1630**

SAMPLE PREPARATION INFORMATION

Diesel and/or Oil Hydrocarbons by NWTPH-Dx

Prep: EPA 3546 (Fuels)

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 24H0298							
A4H0864-01	Soil	NWTPH-Dx	08/06/24 10:40	08/08/24 10:07	11.34g/5mL	10g/5mL	0.88
A4H0864-02	Soil	NWTPH-Dx	08/06/24 10:40	08/08/24 10:07	11.41g/5mL	10g/5mL	0.88
A4H0864-03	Soil	NWTPH-Dx	08/06/24 11:15	08/08/24 10:07	11.36g/5mL	10g/5mL	0.88
A4H0864-04	Soil	NWTPH-Dx	08/06/24 11:15	08/08/24 10:07	11.12g/5mL	10g/5mL	0.90
A4H0864-05	Soil	NWTPH-Dx	08/06/24 11:45	08/08/24 10:07	11.59g/5mL	10g/5mL	0.86
A4H0864-06	Soil	NWTPH-Dx	08/06/24 11:45	08/08/24 10:07	11.6g/5mL	10g/5mL	0.86
A4H0864-07	Soil	NWTPH-Dx	08/06/24 12:10	08/08/24 10:07	11.7g/5mL	10g/5mL	0.86
A4H0864-08	Soil	NWTPH-Dx	08/06/24 12:10	08/08/24 10:07	11.79g/5mL	10g/5mL	0.85
A4H0864-09	Soil	NWTPH-Dx	08/06/24 12:50	08/08/24 10:07	11.66g/5mL	10g/5mL	0.86
A4H0864-10	Soil	NWTPH-Dx	08/06/24 12:50	08/08/24 10:07	11.21g/5mL	10g/5mL	0.89
A4H0864-11	Soil	NWTPH-Dx	08/06/24 13:10	08/08/24 10:07	11.7g/5mL	10g/5mL	0.86
A4H0864-12	Soil	NWTPH-Dx	08/06/24 13:10	08/08/24 10:07	11.28g/5mL	10g/5mL	0.89
A4H0864-13	Soil	NWTPH-Dx	08/06/24 13:35	08/08/24 10:07	11.35g/5mL	10g/5mL	0.88

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

Prep: EPA 5035A

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 24H0349							
A4H0864-01	Soil	NWTPH-Gx (MS)	08/06/24 10:40	08/06/24 10:40	6.8g/5mL	5g/5mL	0.74
A4H0864-02	Soil	NWTPH-Gx (MS)	08/06/24 10:40	08/06/24 10:40	6.39g/5mL	5g/5mL	0.78
A4H0864-04	Soil	NWTPH-Gx (MS)	08/06/24 11:15	08/06/24 11:15	6.44g/5mL	5g/5mL	0.78
A4H0864-05	Soil	NWTPH-Gx (MS)	08/06/24 11:45	08/06/24 11:45	6.66g/5mL	5g/5mL	0.75
A4H0864-06	Soil	NWTPH-Gx (MS)	08/06/24 11:45	08/06/24 11:45	6.64g/5mL	5g/5mL	0.75
A4H0864-07	Soil	NWTPH-Gx (MS)	08/06/24 12:10	08/06/24 12:10	6.54g/5mL	5g/5mL	0.77
A4H0864-08	Soil	NWTPH-Gx (MS)	08/06/24 12:10	08/06/24 12:10	6.2g/5mL	5g/5mL	0.81
A4H0864-10	Soil	NWTPH-Gx (MS)	08/06/24 12:50	08/06/24 12:50	6.33g/5mL	5g/5mL	0.79
A4H0864-13	Soil	NWTPH-Gx (MS)	08/06/24 13:35	08/06/24 13:35	7.14g/5mL	5g/5mL	0.70
Batch: 24H0391							
A4H0864-03RE1	Soil	NWTPH-Gx (MS)	08/06/24 11:15	08/06/24 11:15	6.77g/5mL	5g/5mL	0.74
A4H0864-09RE1	Soil	NWTPH-Gx (MS)	08/06/24 12:50	08/06/24 12:50	6.87g/5mL	5g/5mL	0.73
A4H0864-11RE1	Soil	NWTPH-Gx (MS)	08/06/24 13:10	08/06/24 13:10	6.75g/5mL	5g/5mL	0.74
A4H0864-12RE1	Soil	NWTPH-Gx (MS)	08/06/24 13:10	08/06/24 13:10	6.67g/5mL	5g/5mL	0.75

Selected Volatile Organic Compounds by EPA 5035A/8260D

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Cameron O'Brien, Project Manager

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

ANALYTICAL REPORT

Alpha Environmental	Project: **Default- Env Dept.**	
11080 SW Allen Blvd, Suite 100	Project Number: **3939 NW St. Helens Rd 24-(**	**Report ID:**
Beaverton, OR 97005	Project Manager: **Jim Cooper**	**A4H0864 - 08 22 24 1630**

SAMPLE PREPARATION INFORMATION

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
Batch: 24H0349							
A4H0864-05	Soil	5035A/8260D	08/06/24 11:45	08/06/24 11:45	6.66g/5mL	5g/5mL	0.75
Batch: 24H0391							
A4H0864-11RE1	Soil	5035A/8260D	08/06/24 13:10	08/06/24 13:10	6.75g/5mL	5g/5mL	0.74

Percent Dry Weight

Prep: Dry Weight Prep (EPA 8000D)

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 24H0241							
A4H0864-01	Soil	EPA 8000D	08/06/24 10:40	08/07/24 08:52			NA
A4H0864-02	Soil	EPA 8000D	08/06/24 10:40	08/07/24 08:52			NA
A4H0864-03	Soil	EPA 8000D	08/06/24 11:15	08/07/24 08:52			NA
A4H0864-04	Soil	EPA 8000D	08/06/24 11:15	08/07/24 08:52			NA
A4H0864-05	Soil	EPA 8000D	08/06/24 11:45	08/07/24 08:52			NA
A4H0864-06	Soil	EPA 8000D	08/06/24 11:45	08/07/24 08:52			NA
A4H0864-07	Soil	EPA 8000D	08/06/24 12:10	08/07/24 08:52			NA
A4H0864-08	Soil	EPA 8000D	08/06/24 12:10	08/07/24 08:52			NA
A4H0864-09	Soil	EPA 8000D	08/06/24 12:50	08/07/24 08:52			NA
A4H0864-10	Soil	EPA 8000D	08/06/24 12:50	08/07/24 08:52			NA
A4H0864-11	Soil	EPA 8000D	08/06/24 13:10	08/07/24 08:52			NA
A4H0864-12	Soil	EPA 8000D	08/06/24 13:10	08/07/24 08:52			NA
A4H0864-13	Soil	EPA 8000D	08/06/24 13:35	08/07/24 08:52			NA

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11080 SW Allen Blvd, Suite 100	Project Number: **3939 NW St. Helens Rd 24-(**	**Report ID:**
Beaverton, OR 97005	Project Manager: **Jim Cooper**	**A4H0864 - 08 22 24 1630**

QUALIFIER DEFINITIONS

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

Apex Laboratories

B-02	Analyte detected in an associated blank at a level between one-half the MRL and the MRL. (See Notes and Conventions below.)
F-18	Result for Diesel (Diesel Range Organics, C12-C25) is due to overlap from Gasoline or a Gasoline Range product.

Apex Laboratories

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ANALYTICAL REPORT

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Beaverton, OR 97005	Project Manager: **Jim Cooper**	**A4H0864 - 08 22 24 1630**

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 ½ the RL and the RL (J flagged hits), the associated sample and QC data will receive a 'B-02' qualifier.
-For Blank hits above the RL, the associated sample and QC data will receive a 'B' qualifier, per Apex Laboratories' Blank Policy.

Apex Laboratories

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11080 SW Allen Blvd, Suite 100	Project Number: **3939 NW St. Helens Rd 24-(**	**Report ID:**
Beaverton, OR 97005	Project Manager: **Jim Cooper**	**A4H0864 - 08 22 24 1630**

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.

Apex Laboratories

Cameron O'Brien, Project Manager

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ANALYTICAL REPORT

Alpha Environmental	Project: **Default- Env Dept.**	
11080 SW Allen Blvd, Suite 100	Project Number: **3939 NW St. Helens Rd 24-(**	**Report ID:**
Beaverton, OR 97005	Project Manager: **Jim Cooper**	**A4H0864 - 08 22 24 1630**

LABORATORY ACCREDITATION INFORMATION

ORELAP Certification ID: OR100062 (Primary Accreditation)
EPA ID: OR01039

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

Apex Laboratories

Matrix	Analysis	TNI_ID	Analyte	TNI_ID	Accreditation

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

Secondary Accreditations

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

Subcontract Laboratory Accreditations

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

Field Testing Parameters

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

Apex Laboratories

Cameron O'Brien, Project Manager

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ANALYTICAL REPORT

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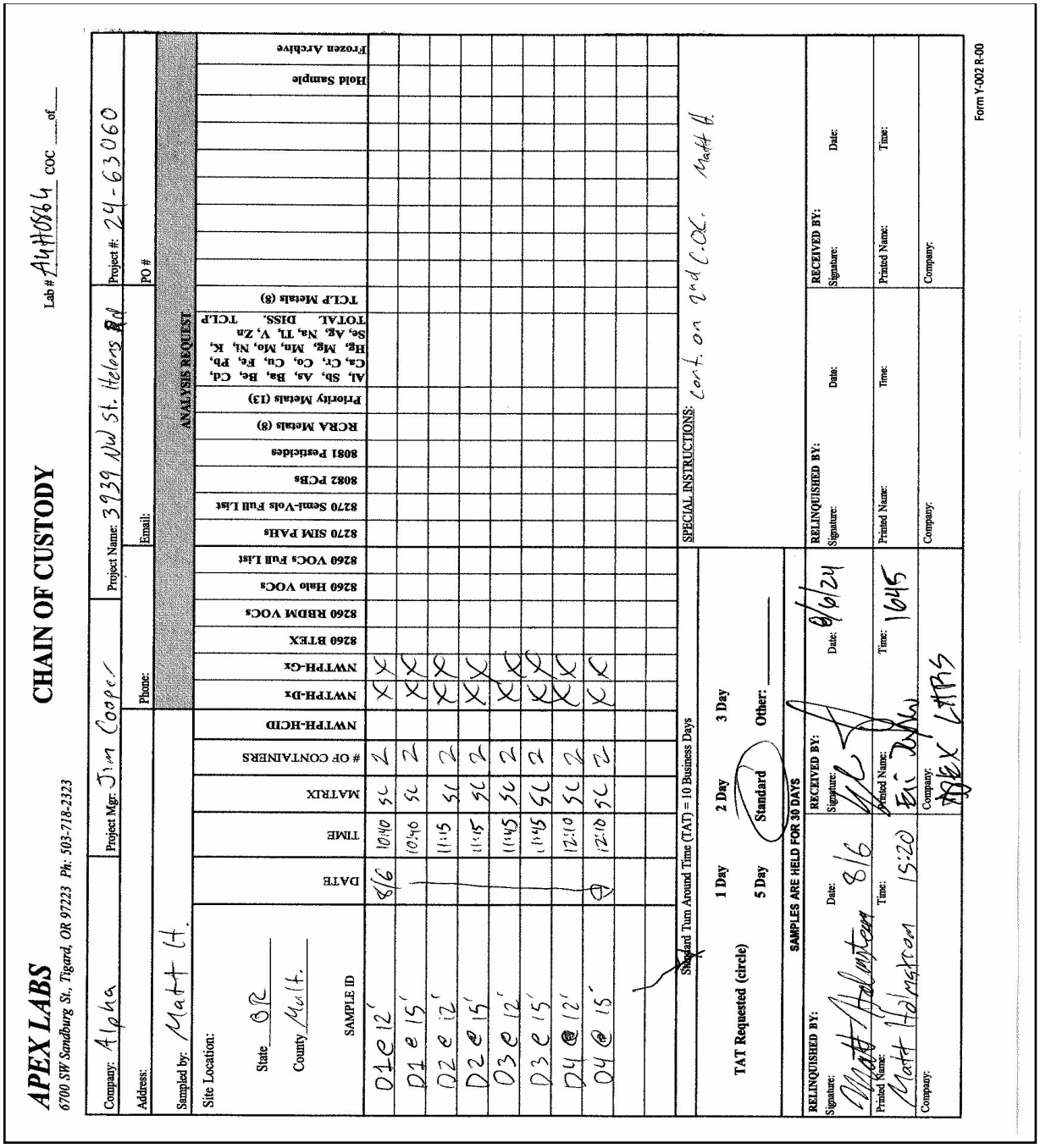
11080 SW Allen Blvd, Suite 100	Project Number: **3939 NW St. Helens Rd 24-(**	**Report ID:**
Beaverton, OR 97005	Project Manager: **Jim Cooper**	**A4H0864 - 08 22 24 1630**



CHAIN OF CUSTODY

APEX LABS
6700 SW Sandburg St., Tigard, OR 97223 Ph: 503-718-2323

Lab # A4H0864 COC ___ of ___

Company: Alpha | Project Mgr: Jim Cooper | Project Name: 3939 NW St. Helens Rd | Project #: 24-63060
Address: | Phone: | Email: | PO #
Sampled by: Matt H.
Site Location: State OR County Mult.

SAMPLE ID	DATE	TIME	MATRIX	# OF CONTAINERS	NWTPH-HCID	NWTPH-Dx	NWTPH-Gx	8260 BTEX	8260 RBDM VOCs	8260 Halo VOCs	8260 VOCs Full List	8270 SIM PAHs	8270 Semi-Vols Full List	8082 PCBs	8081 Pesticides	RCRA Metals (8)	Priority Metals (13)	Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Hg, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Tl, V, Zn TOTAL DISS. TCLP	TCLP Metals (8)	Hold Sample	Frozen Archive
D1@12'	8/6	10:40	SC	2		X	X														
D1@15'		10:40	SC	2		X	X														
D2@12'		11:15	SC	2		X	X														
D2@15'		11:15	SC	2		X	X														
D3@12'		11:45	SC	2		X	X														
D3@15'		11:45	SC	2		X	X														
D4@12'		12:10	SC	2		X	X														
D4@15'		12:10	SC	2		X	X														

Standard Turn Around Time (TAT) = 10 Business Days

TAT Requested (circle): 1 Day | 2 Day | 3 Day | 5 Day | Standard | Other: ___

SPECIAL INSTRUCTIONS: Cont. on 2nd C.OC. Matt H.

SAMPLES ARE HELD FOR 30 DAYS

RELINQUISHED BY: Signature: Matt Hallmyer Date: 8/6 Time: 15:20 Printed Name: Matt Hallmyer Company: Apex

RECEIVED BY: Signature: Date: 8/6/24 Time: 1645 Printed Name: Eric Jones Company: Apex Labs

RELINQUISHED BY: Signature: Date: Time: Printed Name: Company:

RECEIVED BY: Signature: Date: Time: Printed Name: Company:

Form Y-002 R-00

Apex Laboratories

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Cameron O'Brien, Project Manager

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

Alpha Environmental	Project: **Default- Env Dept.**	
11080 SW Allen Blvd, Suite 100	Project Number: **3939 NW St. Helens Rd 24-(**	**Report ID:**
Beaverton, OR 97005	Project Manager: **Jim Cooper**	**A4H0864 - 08 22 24 1630**

APEX LABS
6700 SW Sandburg St., Tigard, OR 97223 Ph: 503-718-2323

CHAIN OF CUSTODY

Lab # A4H0864 COC ___of___

Company: Alpha | Project Mgr: Jim Cooper | Project Name: 3939 NW St. Helens Rd. | Project #: 24-63060
Address: | Phone: | Email: | PO #
Sampled by: Matt H
Site Location:
State OR
County

ANALYSIS REQUEST

SAMPLE ID	DATE	TIME	MATRIX	# OF CONTAINERS	NWTPH-HCID	NWTPH-Dx	NWTPH-Gx	8260 BTEX	8260 RBDM VOCs	8260 Halo VOCs	8260 VOCs Full List	8270 SIM PAHs	8270 Semi-Vols Full List	8082 PCBs	8081 Pesticides	RCRA Metals (8)	Priority Metals (13)	Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Hg, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Tl, V, Zn TOTAL DISS. TCLP	TCLP Metals (8)	Hold Sample	Frozen Archive
D5@12'	8/6	12:50	SL	2		X	X														
D5@15'		12:50	SL	2		X	X														
D6@12'		13:10	SL	2		X	X														
D6@15'		13:10	SL	2		X	X														
D7@15'		13:35	SL	2		X	X														

Standard Turn Around Time (TAT) = 10 Business Days

TAT Requested (circle): 1 Day 2 Day 3 Day 5 Day **Standard** (circled) Other: ________

SAMPLES ARE HELD FOR 30 DAYS

SPECIAL INSTRUCTIONS:

RELINQUISHED BY:	RECEIVED BY:	RELINQUISHED BY:	RECEIVED BY:
Signature: Matt Holmstrom Date: 8/6	Signature: [signature] Date: 8/6/24	Signature: Date:	Signature: Date:
Printed Name: Matt Holmstrom Time: 15:20	Printed Name: Eli [illegible] Time: 1645	Printed Name: Time:	Printed Name: Time:
Company:	Company: APEX LAB	Company:	Company:

Form Y-002 R-08

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

ANALYTICAL REPORT

Alpha Environmental	Project: **Default- Env Dept.**	
11080 SW Allen Blvd, Suite 100	Project Number: **3939 NW St. Helens Rd 24-(**	**Report ID:**
Beaverton, OR 97005	Project Manager: **Jim Cooper**	**A4H0864 - 08 22 24 1630**

APEX LABS COOLER RECEIPT FORM

Client: Alpha Element WO#: A4 H0864

Project/Project #: 3939 NW St. Helens Rd 24-63060

Delivery Info:
Date/time received: 8/6/24 @ 1645 By: EST

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

From USDA Regulated Origin? Yes ___ No X

Cooler Inspection Date/time inspected: 8/6/24 @ 1705 By: EST

Chain of Custody included? Yes X No ___

Signed/dated by client? Yes X No ___

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

	Cooler #1	Cooler #2	Cooler #3	Cooler #4	Cooler #5	Cooler #6	Cooler #7
Temperature (°C)	0.6						
Custody seals? (Y/N)	N						
Received on ice? (Y/N)	Y						
Temp. blanks? (Y/N)	Y						
Ice type: (Gel/Real/Other)	Gel						
Condition (In/Out):	In						

Cooler out of temp? (Y/N) Possible reason why:
Green dots applied to out of temperature samples? Yes/No
Out of temperature samples form initiated? Yes/No

Sample Inspection: Date/time inspected: 8/6/24 @ 1718 By: ZA

All samples intact? Yes X No ___ Comments:

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

COC/container discrepancies form initiated? Yes ___ No X

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

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

Comments

Water samples: pH checked: Yes ___ No ___ NA X pH appropriate? Yes ___ No ___ NA X pH ID:

Comments:

Labeled by: ZA Witness: [signature] Cooler Inspected by: EST

Form Y-003 R-02

Apex Laboratories

[signature]

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

Cameron O'Brien, Project Manager

APPENDIX B:

BORING LOGS

BOREHOLE LITHOLOGIC LOG

BORING # D1	PROJECT # 24-63060	SHEET 1 of 1

PROJECT NAME: 3939 NW St. Helens Rd, Portland, OR. 97210
LOGGED BY: Matt Holmstrom
DRILLED BY: Cascade Drilling

START/END DATE: 08/06/2024
BORING METHOD: Direct-Push Sampler
BORING DEPTH: 15'
BORING DIAMETER: 2-3/8"

DEPTH (ft.)	TEMP. WELL DETAILS	SAMPLING INTERVAL 2.5 feet	PID (ppm)	SAMPLE #	~ % RECOVERY	APPARENT MOISTURE CONDITIONS	SOIL DESCRIPTION
1						Dry	**Brown Silt w/ Gravel**
			<5		62		
						Damp	
5							**Gray Silt (Organic)**
							No Recovery from 5'-10'
			<5		0		
10							
							Brown/Gray Silt
			<5	D1@12'			**Gravel**
					100		**Gray Silt**
15			<5	D1@15'			**Brown Sitl**
						Bottom of boring at 15'	

Boreholes are continuously sampled at 5 ft. intervals. Samples are collected and field checked with PID meter and for soil discoloration/odors. ***Boring was abandoned with 3/8 Bentonite chips.***

NOTE: THE LOG OF SUBSURFACE CONDITIONS SHOWN ONLY APPLIES AT THE SPECIFIC BORING LOCATION AT THE DATE INDICATED. IT IS NOT WARRANTED TO BE REPRESENTATIVE OF SUBSURFACE CONDITIONS AT OTHER LOCATIONS AND TIMES.

BOREHOLE LITHOLOGIC LOG

BORING # D2	PROJECT # 24-63060	SHEET 1 of 1

PROJECT NAME: 3939 NW St. Helens Rd
Portland, OR. 97210
LOGGED BY: Matt Holmstrom
DRILLED BY: Cascade Drilling

START/END DATE: 08/06/2024
BORING METHOD: Direct-Push Sampler
BORING DEPTH: 15'
BORING DIAMETER: 2-3/8"

DEPTH (ft.)	TEMP. WELL DETAILS	SAMPLING INTERVAL 2.5 feet	PID (ppm)	SAMPLE #	~ % RECOVERY	APPARENT MOISTURE CONDITIONS	SOIL DESCRIPTION
1					87		Brown Silt w/ Gravel
5							Gray Silt (Organic)
10					100		
15			<5	D2@12'	100		Brown Silt
			<5	D2@15'			
						Bottom of boring at 15'	

Boreholes are continuously sampled at 5 ft. intervals. Samples are collected and field checked with PID meter and for soil discoloration/odors. *Boring was abandoned with 3/8 Bentonite chips.*

BOREHOLE LITHOLOGIC LOG

BORING # D3 | **PROJECT #** 24-63060 | **SHEET** 1 of 1

PROJECT NAME: 3939 NW St. Helens Rd
Portland, OR. 97210
LOGGED BY: Matt Holmstrom
DRILLED BY: Cascade Drilling

START/END DATE: 08/06/2024
BORING METHOD: Direct-Push Sampler
BORING DEPTH: 15'
BORING DIAMETER: 2-3/8"

DEPTH (ft.)	TEMP. WELL DETAILS	SAMPLING INTERVAL 2.5 feet	PID (ppm)	SAMPLE #	~ % RECOVERY	APPARENT MOISTURE CONDITIONS	SOIL DESCRIPTION
1					80	Dry	**Brown Silt w/ Gravel**
5						Damp	**Gray Silt**
10					100		**Gray/Brown Silt**
15			89	D3@12'	100	Moist	**Dark Gray Silt**
			<5	D3@15'			**Brown Silt**
						Bottom of boring at 15'	

Boreholes are continuously sampled at 5 ft. intervals. Samples are collected and field checked with PID meter and for soil discoloration/odors. *Boring was abandoned with 3/8 Bentonite chips.*

NOTE: THE LOG OF SUBSURFACE CONDITIONS SHOWN ONLY APPLIES AT THE SPECIFIC BORING LOCATION AT THE DATE INDICATED. IT IS NOT WARRANTED TO BE REPRESENTATIVE OF SUBSURFACE CONDITIONS AT OTHER LOCATIONS AND TIMES.

BOREHOLE LITHOLOGIC LOG

BORING # D4 | **PROJECT #** 24-63060 | **SHEET** 1 of 1

PROJECT NAME: 3939 NW St. Helens Rd
Portland, OR. 97210
LOGGED BY: Matt Holmstrom
DRILLED BY: Cascade Drilling

START/END DATE: 08/06/2024
BORING METHOD: Direct-Push Sampler
BORING DEPTH: 15'
BORING DIAMETER: 2-3/8"

DEPTH (ft.)	TEMP. WELL DETAILS	SAMPLING INTERVAL 2.5 feet	PID (ppm)	SAMPLE #	~ % RECOVERY	APPARENT MOISTURE CONDITIONS	SOIL DESCRIPTION
1					80	Dry	**Gravel**
							Brown Silt
5			<5			Damp	**Gray Silt**
					80		**Brown/Gray Silt**
10							
					100		**Gray Silt**
			<5	D4@12'			
15			<5	D4@15'			
						Bottom of boring at 15'	

Boreholes are continuously sampled at 5 ft. intervals. Samples are collected and field checked with PID meter and for soil discoloration/odors. *Boring was abandoned with 3/8 Bentonite chips.*

NOTE: THE LOG OF SUBSURFACE CONDITIONS SHOWN ONLY APPLIES AT THE SPECIFIC BORING LOCATION AT THE DATE INDICATED. IT IS NOT WARRANTED TO BE REPRESENTATIVE OF SUBSURFACE CONDITIONS AT OTHER LOCATIONS AND TIMES.

BOREHOLE LITHOLOGIC LOG

BORING # D5 | **PROJECT #** 24-63060 | **SHEET** 1 of 1

PROJECT NAME: 3939 NW St. Helens Rd
Portland, OR. 97210
LOGGED BY: Matt Holmstrom
DRILLED BY: Cascade Drilling

START/END DATE: 08/06/2024
BORING METHOD: Direct-Push Sampler
BORING DEPTH: 15'
BORING DIAMETER: 2-3/8"

DEPTH (ft.)	TEMP. WELL DETAILS	SAMPLING INTERVAL 2.5 feet	PID (ppm)	SAMPLE #	~ % RECOVERY	APPARENT MOISTURE CONDITIONS	SOIL DESCRIPTION
1						Dry	**Brown Silt w/ Gravel**
			<5		67		
5							
			<5		100		**Gray Silt (Organic)**
10						Damp	
			<5	D5@12'			
					100		
15			<5	D5@15'			
						Bottom of boring at 15'	

Boreholes are continuously sampled at 5 ft. intervals. Samples are collected and field checked with PID meter and for soil discoloration/odors. ***Boring was abandoned with 3/8 Bentonite chips.***

BOREHOLE LITHOLOGIC LOG

BORING # D6	PROJECT # 24-63060	SHEET 1 of 1

PROJECT NAME: 3939 NW St. Helens Rd
Portland, OR. 97210
LOGGED BY: Matt Holmstrom
DRILLED BY: Cascade Drilling

START/END DATE: 08/06/2024
BORING METHOD: Direct-Push Sampler
BORING DEPTH: 15'
BORING DIAMETER: 2-3/8"

DEPTH (ft.)	TEMP. WELL DETAILS	SAMPLING INTERVAL 2.5 feet	PID (ppm)	SAMPLE #	~ % RECOVERY	APPARENT MOISTURE CONDITIONS	SOIL DESCRIPTION
1					60	Dry	**Asphalt**
							Brown Sandy Silt w/ Gravel
5							**Brown Silt**
					37		
10			<5				
					100	Moist	**Gray Silt**
			46	D6@12'			
15			15	D6@15'			**Brown Silt**
						Bottom of boring at 15'	

Boreholes are continuously sampled at 5 ft. intervals. Samples are collected and field checked with PID meter and for soil discoloration/odors. ***Boring was abandoned with 3/8 Bentonite chips.***

BOREHOLE LITHOLOGIC LOG

BORING # D7	PROJECT # 24-63060	SHEET 1 of 1

PROJECT NAME: 3939 NW St. Helens Rd
Portland, OR. 97210
LOGGED BY: Matt Holmstrom
DRILLED BY: Cascade Drilling

START/END DATE: 08/06/2024
BORING METHOD: Direct-Push Sampler
BORING DEPTH: 15'
BORING DIAMETER: 2-3/8"

DEPTH (ft.)	TEMP. WELL DETAILS	SAMPLING INTERVAL 2.5 feet	PID (ppm)	SAMPLE #	~ % RECOVERY	APPARENT MOISTURE CONDITIONS	SOIL DESCRIPTION
1						Dry	**Gravel with Sand and Silt**
							Brown Silt
					87		
5							
						Damp	
					100		**Gray Silt (Organic)**
10							
							Gray/Brown Silt
					100		
15			<5	D7@15'			
						Bottom of boring at 15'	

Boreholes are continuously sampled at 5 ft. intervals. Samples are collected and field checked with PID meter and for soil discoloration/odors. ***Boring was abandoned with 3/8 Bentonite chips.***