



**SUPPLEMENTAL  
SITE ASSESSMENT REPORT**

*Property Identification:*

**LUST ID 24-89-4187  
FIREHOUSE 5 CAR WASH  
1212 MISSION ST SE (808 12TH ST SE)  
SALEM, OREGON 97302**

*Prepared For:*

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AND  
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Date Issued: January 12, 2026  
Alpha Project Number: 24-64842

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## 1.0 INTRODUCTION

Alpha Environmental Services (Alpha) conducted a Supplemental Environmental Site Assessment at the property located at 1212 Mission Street SE (808 12th Street SE), Salem, Oregon (the Property). The purpose of the investigation was to sample the Vapor Point and the newly installed monitoring well. This report summarizes the current scope of work, field investigation activities and laboratory analyses, and provides conclusions and recommendations.

### 1.1 Site Description

The Property consists of two Tax Lots 073W26CC10600 (596682) and 073W26CC10500 (596683) located in Township 7 South, Range 3 West, Section 26, Willamette Meridian. The two parcels have a total of 0.48-acres. The southern part of the Property is occupied by the building and the northern part is paved parking. The site is currently occupied by Mohr Motors.

The vicinity of the Property can generally be described as commercial and residential. Current usage of the adjoining properties includes: north – Mission Street SE with commercial development beyond including to the northwest LUST #24-11-1116 (795 12th Street SE); south – commercial development; east – commercial development with Mission Street SE beyond; and west – 12<sup>th</sup> Street SE with Deepwood Museum and Gardens beyond.

Historically, all four corners of the intersection were occupied by gas stations. Northwest corner – 795 12 Street SE (LUST #24-11-1116), northeast corner – 790 12<sup>th</sup> Street SE, southwest corner – 1190 Mission Street SE and southeast corner – 1212 Mission Street SE.

### 1.2 Current Zoning and Future Land Use

The zoning is General Commercial by the City of Salem. Currently the property is occupied by Mohr Motors, a used car dealership. The future use of the property is anticipated to remain the same.

### 1.3 Site Drainage

The majority of the developed areas of the property are covered with the building or impervious asphalt. Stormwater appears to sheet flow across the asphalt and collects in a catch basins directed to the municipal system or flows to the adjoining streets.

### 1.4 Sewer Connections

The property connected to the sanitary sewer and is serviced by the City of Salem.

### 1.5 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 groundwater monitoring wells in the area, static groundwater appears to be located approximately 8 to 16 feet below surface grade (bsg). 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 onsite groundwater monitoring and information from 795 Mission Street SE, groundwater is anticipated to flow to the north/northeast.

The nearest major surface water in the vicinity of the Property is the Pringle Creek, located approximately 0.15 miles west of the Property and the Willamette Slough, located approximately 0.80 miles west of the Property.

### 1.6 Groundwater Wells

According to the Oregon Water Resources Department (WRD) online database, a total of 79 water wells were identified within the same township and range sections of (T7S R3W S26 & 27). Of these wells, only 2 were identified as domestic wells. Both wells are hydraulically separated from the site by Pringle Creek and are greater than 2,500 feet away. The table below summarizes the well use, well status and approximate distance for the Property.

Type of Water Well	Total Wells	Abandoned	No Address	> 2,500 ft	> 5,000 ft
Domestic	2	0	0	2	0

#### *Well Summary and Potential Pathway*

The well log search indicates there are no domestic wells in the vicinity of the Property that could be affected by impacted groundwater at the site.

Based on the above information, the shallow groundwater pathway appears to be incomplete for human receptors.

Four monitoring wells exist on the site and the most recently installed one (MW4) was sampled as part of this investigation.

## 2.0 PREVIOUS INVESTIGATIONS

### 2.1 Site History

On April 29, 2010, DEQ Hydrogeologist, Jack Arendt, completed a memorandum summarizing the past environmental site history. The following sections describing the site is reproduced (with formatting changes) from the DEQ memorandum.

1. December 13, 1989, C. Woods's inspection report states contamination was noted below tank level in soil. Consultant (CES) was onsite to do an assessment.
2. January 2, 1990, Tom McEwen, property owner, states in a letter that he has no ability to pay.
3. May 16, 1991, a letter from Gil Hargreaves (DEQ), addressed to Mr. McEwen and Mr. Woody Obert, states the RP has until June 10, 1991, to submit a report that summarizes the steps taken to abate the spread of contamination.
4. June 10, 1991, 20-day report by CES is received. The report states:
  - a. Three phases of work were completed, tank removal and discovery of contamination, soil gas survey, installation of one monitoring well.
  - b. During the first phase, two 10,000 and one 8,000-gallon tank were removed;
  - c. The soil gas testing phase indicated adverse impacts down-gradient (NW direction) from the tanks.
  - d. The one monitoring well installed was not recorded in the WRD database.
  - e. BTEX in groundwater analytical results were:
    - i. 159 ppm benzene,
    - ii. 17,700 ppm toluene,
    - iii. 3,970 ppm Ethyl-benzene, and
    - iv. 22,800 ppm total xylenes;
  - f. Uncertainty exists as to the source of the contamination. The reports states that several USTs have been located north and east of the property.
5. September 6, 1991- based on a search of the WRD well log database, two additional wells MW-2 (Mari 17486) and MW-3 (Mari 17487) were drilled and installed at the site. There was no reference to these wells in the file'
6. September 9, 1992- hand written note by Rick Silverman (DEQ-NWR) outlines the above reference report;
7. September 10, 1992, form letter is sent by the Department stating that the RP is required to clean up the release.
8. Also on September 9, 1992, there's a note to the file stating that Carol Kersh, attorney for Mr. McEwen had called.
9. No date- Human Health Score Sheet (Incident Number 2021). States a combined score of 507.688843

10. January 27, 1993 another note to the file states that Mr. McEwen went bankrupt.
11. No further correspondence was in the file.
12. Based on my review of the site conditions, as reported to the Department, there may be a significant amount of cleanup work left to be done at the site. A recent aerial photo of the site (Google Earth) indicates a building remains in a similar location as described in the 20 day Report Site Plan. The photo also indicates pavement patches in areas north and northwest of the former tank locations which may indicate additional remedial activities.
13. A review of the Marion County Tax Assessor's database indicated the property is now an Enterprise Rental car lot owned by Elwood Obert. The address has also changed from 1212 Mission in the report to 808 and 828 12th Street

#### DEQ Recommendations

The Department recommends further site assessment activities at the site. The property owner should have the magnitude and extent of the petroleum release in soil and groundwater delineated and complete a conceptual site model. All future assessments must be reviewed, signed, and stamped by an Oregon Registered Geologist.

In December 2012, Coffey Geoscience, LLC conducted groundwater sampling at the site. On August 21, 2013, DEQ Project Manager, Rob Hood, commented via email to Nick Coffey regarding the current testing and site requirements for closure. The following sections describing the site is reproduced (with formatting changes) from the DEQ email.

Hi Nick. I reviewed the file and your information. I think it is premature for a meeting since there is a lot of missing information in the file and the site is not near closure given the lack of data. Below are some items that need to be completed or submitted to get a better grasp of the site:

-From the Cascade 20-day report (undated, but work was completed in Dec. 1989), adequate soil sampling was not completed at the time (only one soil sample was taken from the pit, which is greater than 150 square feet for multiple tanks and there is no information on the location of pump islands and any sampling). Additional sampling will be necessary in this area to confirm conditions. Also, no receipts for the tanks, rinsate/product, and soil disposal were provided.

-Monitoring well MW-1 was installed as part of the above work and I have that boring log. However, at some time two additional monitoring wells were installed. I have no information on that work. Also, it appears that some groundwater sampling events occurred, but I have no information. Can you see if your client has that information?

-From your information, I don't know from where the samples were collected (which monitoring wells are which?). No figure was provided, and I would need explanation of the data and how you derived the RBCs for the analysis. I am not sure why EPH/VPH was analyzed at this point since there isn't any Gx or Dx information, that the site could possibly be evaluated using the generic RBCs. For the CSM, you will need to evaluate and provide the zoning information. I do not know the current use, but I am assuming it is still occupational. The only way to eliminate the residential and occupational receptors outright would be to deed restrict it and then the property could only be used for above ground, open lot parking or it would need to remain vacant. I am guessing that is not going to be the case.

Based on the work provided to date, the magnitude and extent of contamination has not been determined and will need to be if there is no additional information to show otherwise. Please provide the information and a work plan by 13 September 2013. -Rob

In January 2023, Alpha conducted Phase II drilling and sampling at the property. The subsurface sampling consisted of the advancement of nine shallow soil borings advanced by Cascade Drilling using a track-mounted direct-push drill rig. The results of the investigation are presented below.

### Findings

- Soil samples from Boring B1@15' (765 ppm), B3@15' (463 ppm), B4@15' (480 ppm), B6@13' (9.31 ppm), Boring B7@15' (43.1 ppm), Boring B7@17' (129 ppm), Boring B8@15' (1,380 ppm), Boring B8@17' (3,460 ppm), Boring B8@19' (129 ppm), Boring B9@17' (3,520 ppm) and B9@19' (12.8 ppm) confirm gasoline detections between 13 to 19 feet below ground surface.
- The highest detection occurred in Boring B8@17' with a concentration of 3,460 ppm and Boring B9@17' with a concentration of 3,520 ppm. Detection levels rapidly attenuate in both borings with depth at approximately 19 feet (129 ppm & 12.8 ppm).
- The soil sample from Boring B8@17' had a detection of ethylbenzene at of 41.0 ppm and Boring B9@17' had a detection of ethylbenzene at of 27.1 ppm. These both exceed the level for the occupational RBC for Vapor Intrusion into Buildings of 17 ppm.
- Cadmium, chromium and lead were not detected in the soil samples.
- There were detections in the groundwater samples from MW2 (1,420 ppb) and MW3 (870 ppb).
- Lead was detected at low concentrations in MW1 (1.00 ppb), MW2 (0.652 ppb) and MW3 (0.853 ppb).

### Conclusions

- Gasoline concentrations in soil did not exceed any applicable RBCs.
- The vertical extent of the soil impacts appears to be approximately 19 to 20 feet bsg.
- Ethylbenzene was detected in Boring B8@17' (41.0 ppm) and Boring B9@17' (27.1 ppm) at concentrations that exceed occupational RBC for Vapor Intrusion into Buildings. This exceedance indicates the testing of soil vapors will be necessary.
- Gasoline, VOC and metal concentrations in groundwater did not exceed any applicable RBCs.

### Risk Evaluation

Based on the findings and conclusions discussed above, there is a potential vapor intrusion risk at the Property that could pose an adverse risk to site occupants.

### Recommendations

Alpha recommends the following for site closure:

- The collection of soil vapor samples between the impacted area and the onsite building.
- The installation of a new monitoring well in the northeast corner of the property.

### 3.0 PURPOSE AND SCOPE

#### 3.1 Purpose

The purpose of the investigation was to sample the Vapor Point and the newly installed monitoring well. Alpha relied upon the previous reports, maps and communication with the DEQ to develop the scope of work for this investigation. The general scope of work for this investigation consisted of the following activities:

- The collection of a groundwater sample from the newly installed monitoring well for laboratory analysis.
- The collection of soil vapors from the Vapor Point installed north of the existing building for laboratory analysis.
- The presentation of results for the investigation including findings, conclusions and recommendations.

#### 3.2 Accepted Scope of Services

The assessment was performed according to the agreed-upon scope of services between Alpha and Jeff Obert. The assessment was completed in general accordance with the authorized scope of work listed above.

#### 3.3 Monitoring Well Installation

On November 13, 2024, one groundwater monitoring well (MW4) was installed using a direct push drill rig equipped with approximately 4-inch diameter rods. The boring was advanced to 20 feet bgs using a disposable point and no soil samples were collected during well installation.

The monitoring well was constructed using a pre-pack well consisting of two-inch diameter poly vinyl chloride (PVC) casing with a 0.020-inch slotted screen interval extending from 15 feet to 20 feet bgs. The premade filter pack of sand extended to approximately one foot above the top of the screen, followed by a 2-foot-thick bentonite seal (hydrated chips) that was placed atop the sand pack. Neat cement grout was then placed from approximately one-foot bgs to the top of the bentonite seal. The wells were completed at the surface with a traffic-rated well lid and locking well caps.

The newly installed monitoring well was developed using a surge and bail technique to improve hydraulic communication between well and formation.

#### 3.4 Vapor Point Installation

On November 13, 2024, one permanent Vapor Point was installed using a direct-push drill rig to a depth of approximately five feet below ground surface. The drilling method was used to install the permanent sampling point by advancing hollow steel rods with an expendable drive point. The rods were then retracted slightly, leaving the drive point place. Inert tubing with a stainless-steel screen was inserted to the sampling interval, followed by placement of a sand filter pack around the screened section. The annular space above the filter pack was sealed with bentonite to prevent surface water or air intrusion. The installation was completed with a protective flush-mounted cover to secure the tubing.

## 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 additional drilling.

### 4.2 Boring Location Rationale

The boring locations were chosen based on the previous sample locations and approved by the DEQ.

### 4.3 Drilling and Sampling Activities

Field investigation and drilling activities were conducted on November 13, 2024 under the supervision of Mr. Jim Cooper, senior geologist for Alpha. The borings were advanced, and wells installed by Cascade Drilling using a track-mounted direct-push drill rig. Sample collection was completed on October 10, 2025.

The groundwater samples were placed in laboratory-provided glass jars and placed in a cooler on ice. The water 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 analyzed by test method NWTPH-Gx (quantifies gasoline range petroleum hydrocarbons), NWTPH-Dx (quantifies diesel and oil range hydrocarbons) and EPA Test Method 8260 RBDM VOCs.

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

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

## 5.0 QUALITY ASSURANCE & QUALITY CONTROL

For the project, all data used for closure purposes will comply with the DEQ's Quality Assurance Project Plan (QAPP) for 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.

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.

### 5.2 Sample Collection

Groundwater samples from the investigation were collected directly from the monitoring well and vapor samples for the permanent vapor point.

### 5.3 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.

### 5.4 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.

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. Pace Analytical processed the receipt of the samples and prepared for testing. A completed copy of the chain-of-custody form is included at the end of the laboratory analytical report.

### 5.5 Fixed Gases

Fixed gases including oxygen, carbon dioxide and methane were measured using a GEM 5000 landfill gas meter. A summary of the fixed gas measurements is presented below.

	<i>SVI</i>
Depth bsg (feet)	5'
Date	10-10-25
Time	2:03
	%
Oxygen	20.5
Carbon Dioxide	0.2
Methane	0.0

### 5.6 Weather Data

Weather conditions can cause temporal differences in how soil vapors react that can affect vapor intrusion. Historical weather data for two days prior to the sampling event, the day of the sampling event and one day following the sampling events is presented below.

Vapor Sampling Event				
<b>Date</b>	10-8-25	10-9-25	<b>10-10-25</b>	10-11-25
Precipitation (past 24 hours)	0.00	0.00	0.08	0.08
Max. Wind Speed (mph)	10	8	10	13
High Temperature	57	61	61	58
Low Temperature	48	43	51	50
Sea Level Pressure	29.64	29.74	29.67	29.80

## 6.0 SAMPLE ANALYTICAL RESULTS

### 6.1 Sample Results Evaluation

In order to evaluate the current and reasonably likely future risk to human health and the environment, Alpha compared the data from the current investigation to the Oregon Department of Environmental Quality (DEQ) risk-based decision making (RBDM) guidelines.

The RBDM process involves investigating potential sources of the contaminants and the environmental media in which they are contained (e.g., soil or groundwater), receptors (who could potentially be exposed to contaminants), and the exposure pathway (how a receptor might come in contact with contaminants [e.g., inhalation, ingestion or dermal contact]). If any of these elements is missing, the pathway is considered incomplete. This was accomplished by constructing a Conceptual Site Model (CSM).

Using the parameters listed above, the laboratory detected concentrations and/or the reporting limits were compared to DEQ risk-based concentrations (RBCs). An RBC is the concentration of a hazardous substance in soil, water, air or sediment that is determined to be protective of human health and the environment under specified exposure conditions.

The completed Conceptual Site Model (CSM) summary is presented in Section 7.3.

Based on the CSM and since contamination exists on the site, the following receptors and pathways are applicable for the site.

#### Potential Receptors:

##### Occupational

##### *Selected Pathways for Receptor:*

- Vapor intrusion into buildings from soil
- Vapor intrusion into buildings from groundwater

##### Construction and Excavation Worker

##### *Selected Pathways for Receptor:*

- Dermal Contact, Ingestion & Inhalation from soils greater than 3 feet below surface
- Groundwater in excavation

## 6.2 Groundwater Findings

### Petroleum

The analytical results indicate that gasoline was detected in MW4.

A summary of the results for the groundwater analysis is presented in Table 4. Laboratory analytical reports are included as Appendix A.

**Table 1 - Groundwater Sample Analytical Results – Petroleum**

Monitoring Well Number	Location of Sample	Petroleum		
		Gasoline	Diesel	Heavy Oil
		ug/L	ug/L	ug/L
MW4	Northeast corner of parking lot	41,600	14,700	ND
<b>Risk-Based Screening Levels</b>				
Vapor Intrusion into Buildings (Occupational)		520	1,700	1,500
GW in Excavation		14,000	>S	>S

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

ug/L = microgram per liter (ppb)

41,600 = exceeds the vapor intrusion into building and or GW in excavation RBC

>S = The groundwater RBC exceeds the solubility limit.

RBDM VOCs

The analytical results indicate that several VOCs were detected in MW4.

A summary of the results for the groundwater analysis is presented in Table 2. Laboratory analytical reports are included as Appendix A.

**Table 2 – Groundwater Sample Analytical Results – RBDM VOCs**

Well No.	RBDM VOCs										
	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE	Naphthalene	EDB	EDC	Isopropylbenzene	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene
	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
MW4	ND < 2.00	ND < 10.0	59.3	317	ND < 10.0	127	ND < 5.00	ND < 5.00	46.0	1,920	984
<b>Risk-Based Screening Levels</b>											
Vapor Intrusion into Buildings (Occupational)	2,800	>S	8,200	>S	870k	11,000	590	3,900	-	>S	>S
GW in Excavation	1,800	220k	4,500	23,000	63,000	500	27	630	-	6,300	7,500

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

ug/L = microgram per liter (ppb)

>S = The groundwater RBC exceeds the solubility limit.

### 6.3 Soil Vapor Findings

On October 10, 2025, Alpha collected one soil vapor sample from the permanent vapor point in parking adjacent to the front of the building. The laboratory analytical results indicate that several VOCs and Total Petroleum Hydrocarbons (TPH) were detected in samples. All detected concentrations are below the respected RBCs.

A summary of the results for the soil vapor analysis is presented in Table 3. Only analytes that had a detection and have a corresponding RBC, are in the table below. The complete laboratory analytical report is included as Appendix B.

**Table 3 – Soil Vapor Sample Analytical Results**

	<i>SVI</i>	<i>RBC<sub>sv</sub> (Occupational)</i>
Depth bsg (feet)	5'	-
Date	10-10-25	
	<b>Result</b> µg/m <sup>3</sup>	µg/m <sup>3</sup>
Benzene	<b>2.46</b>	52
Chloromethane	<b>0.539</b>	13,000
Dichlorodifluoromet hane	<b>2.16</b>	15,000
Ethylbenzene	<b>4.14</b>	160
Heptane	<b>6.79</b>	58,000
n-Hexane	<b>6.95</b>	100,000
Isopropyl benzene (Cumene)	<b>0.497</b>	58,000
Methyl Ethyl Ketone (2- Butanone)	<b>3.98</b>	730,000
2-Propanol	<b>26.8</b>	Leak Detection Compound
Styrene	<b>0.351</b>	150,000
Tetrachloroethylene	<b>39.9</b>	1,600
Toluene	<b>27.6</b>	730,000
1,2,4- Trimethybenzene	<b>11.1</b>	8,800
1,3,5- Trimethybenzene	<b>3.27</b>	8,800
Xylenes	<b>21.0</b>	15,000
TPH	<b>442</b>	40,000

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

µg/m<sup>3</sup> = microgram per meter cubed

RBC<sub>sv</sub> = Soil-Gas risk-based concentration for Vapor Intrusion into Buildings – Occupational & Residential Pathway. Only analytes with RBCs are listed above, for a complete list, see Appendix A.

## 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 (COI) in order to determine whether risk is present at a site. Current conditions as well as anticipated future conditions are considered when developing the CSM.

### 7.2 Expected Future Use of the Site

The future use of the subject property, currently zoned general commercial, and according to the City of Salem, is not likely to change for the foreseeable future.

### 7.3 Conceptual Site Model Summary

Potentially Exposed Population	Exposure Route, Medium and Exposure Point	Pathway Selected?	Potential Risk from This Pathway?	Reason for Selection or Exclusion
<b>CURRENT AND FUTURE LAND USE: OCCUPATIONAL; IMPACTED MEDIUM: SOIL</b>				
Adults (Occupational)	Soil Ingestion, Dermal Contact or Inhalation from on-site soils above 3 feet (RBC <sub>ss</sub> )	No	No	The pathway is incomplete because contaminated soils are not within 3 feet of the surface.
Adults (Construction & Excavation Workers)	Soil Ingestion, Dermal Contact or Inhalation from on-site soils below 3 feet (RBC <sub>ss</sub> ).	Yes	No	The pathway is complete; however, detected concentrations are below the RBCs or work is not anticipated.
Adults (Occupational)	Volatilization to Outdoor Air (RBC <sub>so</sub> )	Yes	No	The pathway is complete; however, detected concentrations are below the RBCs.
Adults (Occupational)	Vapor Intrusion into Buildings (RBC <sub>si</sub> )	Yes	No	The pathway is complete however the detected concentrations did not exceed the RBCs
Adults (Occupational)	Soil Leaching to Groundwater (RBC <sub>sw</sub> )	No	No	The pathway is not complete since drinking water is supplied by the municipal system and there are no wells within ½ mile of the site.

Potentially Exposed Population	Exposure Route, Medium and Exposure Point	Pathway Selected?	Potential Risk from This Pathway?	Reason for Selection or Exclusion
CURRENT AND FUTURE LAND USE: <b>OCCUPATIONAL</b> ; IMPACTED MEDIUM: <b>GROUNDWATER</b>				
Adults (Occupational)	Ingestion & Inhalation from Tapwater (RBC <sub>tw</sub> )	No	<b>No</b>	The pathway is not complete since drinking water is supplied by the municipal system.
Adults (Occupational)	Volatilization to Outdoor Air (RBC <sub>wo</sub> )	Yes	<b>No</b>	The pathway is complete; however, detected concentrations are below the RBCs.
Adults (Occupational)	Vapor Intrusion into Buildings (RBC <sub>wi</sub> )	Yes	<b>No</b>	The pathway is complete; however, detected concentrations are below the RBCs.
Construction & Excavation Workers	Groundwater encountered during excavation activities, dermal contact (RBC <sub>we</sub> )	Yes	<b>Yes</b>	The pathway is complete and detected concentrations are above the RBCs.

#### 7.4 Ecological Receptors

Surface water or sediments were not encountered at the site. The nearest surface water is Pringle Creek, located approximately 0.15 miles west from the Property. No ecological risk is anticipated as it can be demonstrated that:

- Contaminated soils are only present at a depth greater than three feet below the ground surface
- Surface water has not been affected, nor is it likely to be affected in the future as a result of the release
- Contaminated groundwater does not and is not reasonably likely to discharge to surface waters or otherwise reach the surface in a manner that might result in contact with ecological receptors
- Contaminated groundwater does not and is not reasonably likely to come into contact with aquatic sediments.

## 8.0 FINDINGS, CONCLUSIONS, RISK EVALUATION AND RECOMMENDATIONS

Alpha has conducted a Supplemental Site Assessment Investigation at the Property located at 1212 Mission Street SE (808 12th Street SE), Salem, 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

#### Groundwater Sampling

- Detections of gasoline in the groundwater sample from MW4 (41,600 ppb).
- Detections of diesel in the groundwater sample from MW4 (14,700 ppb).
- Several VOCs were detected in low concentrations in MW4

#### Vapor Sampling

- Several VOCs and TPH were detected in the vapor sample at low concentrations.

### 8.2 Conclusions

#### Groundwater Sampling

- Gasoline concentrations in groundwater exceed the applicable RBCs for Vapor Intrusion into Buildings and Groundwater in Excavations for Construction Workers.
- Detected VOCs in groundwater are below the applicable RBCs.

#### Vapor Sampling

- Vapor sample concentrations did not exceed any applicable RBCs.

### 8.3 Risk Evaluation

Based on the findings and conclusions discussed above, there is a potential dermal contact condition for Construction and Excavation Workers if they were to come in contact with impacted groundwater.

Vapor conditions near the onsite building are below applicable RBCs; however, vapor conditions on the northern portion of the Property have not been evaluated and based on the levels measured in the groundwater, a potential vapor intrusion risk may exist.

### 8.4 Recommendations

Based on the analytical results and comparison with current DEQ RBCs, it is our opinion that the site may be a candidate for a Conditional NFA determination by the DEQ.

Basis for Conditional NFA recommendation:

- Near surface impacts (less than 3 feet) do not appear to be present as the release was from an underground storage tank.
- The concentrations of petroleum and VOCs in soils greater than three feet are below all RBCs, except leaching to groundwater.



- Groundwater at the site is not used and the area in the vicinity of the Property is supplied by the municipal water system.
- Vapors are not a significant risk to site occupants in the current building.

Expected Conditions of the NFA:

No construction of buildings on the central to northern portion of the Property without additional requirements:

- Vapor testing in the central portion of the site and near MW4.
- Engineered vapor barrier beneath all structures.
- DEQ approval.
- CMMP for any excavation work.



## 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 Jeff Obert, 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 ENVIRONMENTAL PROFESSIONALS

Alpha is providing the client with the results of our investigation for the Property located at 1212 Mission Street SE (808 12th Street SE), Salem, Oregon. 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 Department of Environmental Quality, *File Review Documents*, accessed via Public Records Request, 2022.

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

United States Geological Survey, *7.5 Minute Topographic Quadrangle of Salem West, OR*, 1986.

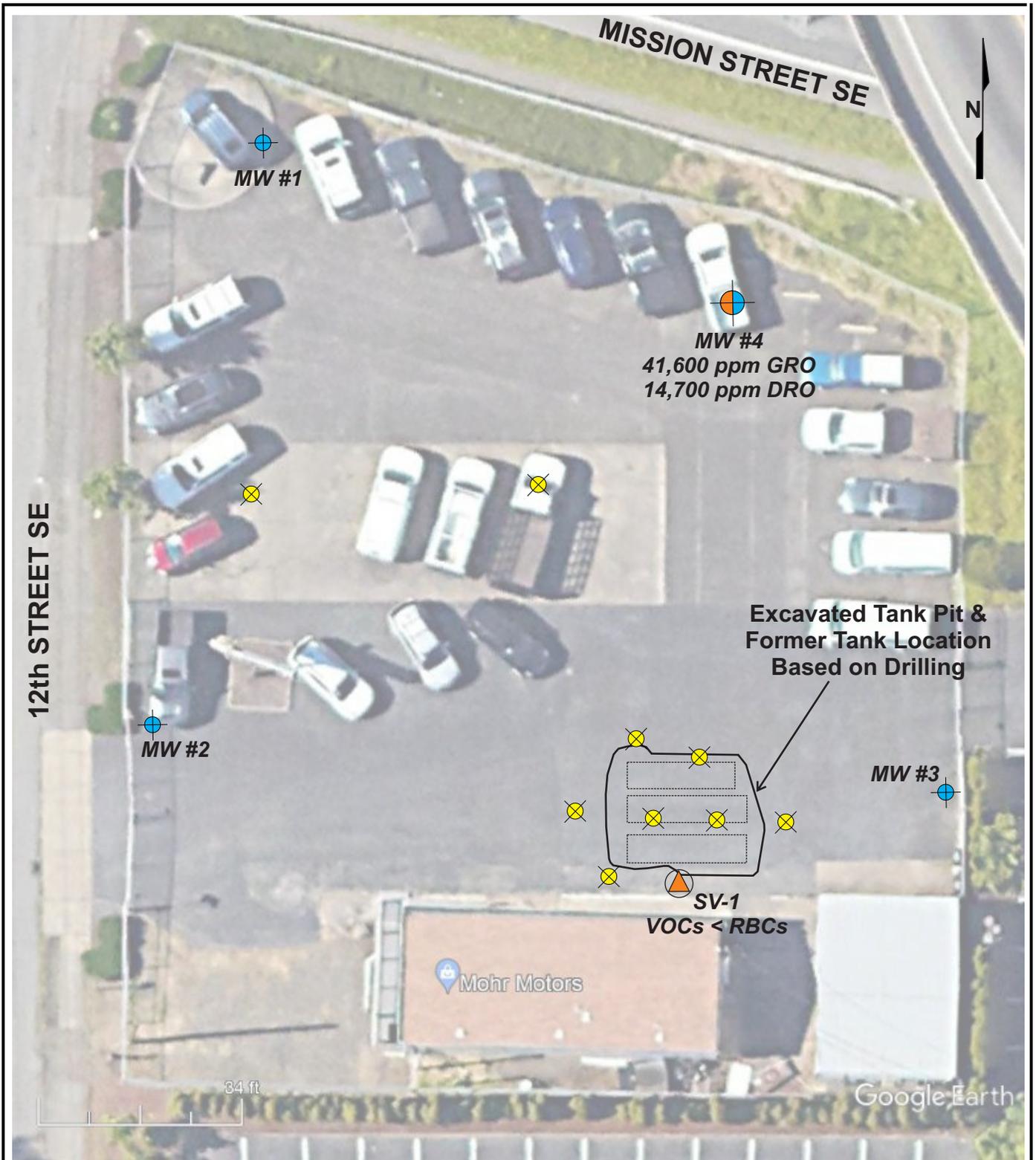
Walker, 1991. *Geological Map of Oregon*, United States Geological Survey, Walker, G.W. and MacLeod, N.S., 1991.

## 12.0 ACRONYMS

ASTM	American Society for Testing and Materials
bsg	below surface grade
CSM	Conceptual Site Model
DEQ	Department of Environmental Quality (Oregon)
EPA	Environmental Protection Agency
ESA	Environmental Site Assessment
HCID	Hydrocarbon Identification
ND	Not Detected At or Above Laboratory Reporting Limits
PID	Photoionization Detector
PVC	Poly Vinyl Chloride
ppb	parts per billion
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 SAMPLING MAP**



**LEGEND**

- ⊗ SOIL SAMPLE LOCATIONS (SAMPLED 1/26/23)
- ⊕ MONITORING WELL LOCATIONS (SAMPLED 1/26/23)
- ⊕ NEW MONITORING WELL LOCATION (SAMPLED 10/10/25)
- ⊕ SOIL VAPOR SAMPLE LOCATIONS (SAMPLED 10/10/25)

**FIGURE 1: SITE SAMPLING MAP**

1212 MISSION STREET  
SALEM, OREGON 97302

**NOTES**

MAP SYMBOLS DENOTE LOCATIONS AND MAY NOT BE TO SCALE  
GOOGLE MAPS BASE IMAGE MAY BE SKEWED BY SATELLITE POSITION



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

PROJECT NO: 24-64842



## **APPENDIX A:**

### **ANALYTICAL LABORATORY REPORTS**



ANALYTICAL REPORT

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

Thursday, October 23, 2025

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

RE: A5J1436 - Default- Env Dept. - 808 12th St. SE 24-64842

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 A5J1436, which was received by the laboratory on 10/13/2025 at 4:35:00PM.

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](mailto:cobrien@apex-labs.com), or by phone at 503-718-2323.

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

Cooler Receipt Information	
<u>Acceptable Receipt Temperature is less than, or equal to, 6 degC (not frozen), or received on ice the same day as sampling.</u>	
(See Cooler Receipt Form for details)	
<u>Default Cooler</u>	<u>1.7 degC</u>

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



Apex Laboratories

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Cameron O'Brien, Project Manager



**ANALYTICAL REPORT**

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ORELAP ID: OR100062

<b>Alpha Environmental</b> 11080 SW Allen Blvd, Suite 100 Beaverton, OR 97005	Project: <b>Default- Env Dept.</b> Project Number: <b>808 12th St. SE 24-64842</b> Project Manager: <b>Jim Cooper</b>	<b>Report ID:</b> A5J1436 - 10 23 25 1854
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**ANALYTICAL REPORT FOR SAMPLES**

**SAMPLE INFORMATION**

Client Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
24-64842 MW4	A5J1436-01	Water	10/10/25 14:00	10/13/25 16:35

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Cameron O'Brien, Project Manager



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**ANALYTICAL SAMPLE RESULTS**

**Diesel and/or Oil Hydrocarbons by NWTPH-Dx**

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
<b>24-64842 MW4 (A5J1436-01)</b>				<b>Matrix: Water</b>		<b>Batch: 25J0523</b>		<b>DCNT</b>
<b>Diesel</b>	<b>14700</b>	---	8080	ug/L	100	10/15/25 23:45	NWTPH-Dx LL	<b>F-18</b>
<b>Oil</b>	ND	---	16200	ug/L	100	10/15/25 23:45	NWTPH-Dx LL	
<i>Surrogate: o-Terphenyl (Surr)</i>			<i>Recovery: %</i>	<i>Limits: 50-150 %</i>	<i>100</i>	<i>10/15/25 23:45</i>	<i>NWTPH-Dx LL</i>	<i>S-01</i>

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**ANALYTICAL SAMPLE RESULTS**

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

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
<b>24-64842 MW4 (A5J1436-01)</b>				<b>Matrix: Water</b>		<b>Batch: 25J0498</b>		
<b>Gasoline Range Organics</b>	<b>41600</b>	---	1000	ug/L	10	10/14/25 16:48	NWTPH-Gx (MS)	
<i>Surrogate: 4-Bromofluorobenzene (Sur)</i>			<i>Recovery: 99 %</i>	<i>Limits: 50-150 %</i>	<i>1</i>	<i>10/14/25 16:48</i>	<i>NWTPH-Gx (MS)</i>	
<i>1,4-Difluorobenzene (Sur)</i>			<i>99 %</i>	<i>50-150 %</i>	<i>1</i>	<i>10/14/25 16:48</i>	<i>NWTPH-Gx (MS)</i>	

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**ANALYTICAL SAMPLE RESULTS**

**Selected Volatile Organic Compounds by EPA 8260D**

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
<b>24-64842 MW4 (A5J1436-01)</b>				<b>Matrix: Water</b>		<b>Batch: 25J0498</b>		
Benzene	ND	---	2.00	ug/L	10	10/14/25 16:48	EPA 8260D	
Toluene	ND	---	10.0	ug/L	10	10/14/25 16:48	EPA 8260D	
<b>Ethylbenzene</b>	<b>59.3</b>	---	5.00	ug/L	10	10/14/25 16:48	EPA 8260D	
<b>Xylenes, total</b>	<b>317</b>	---	15.0	ug/L	10	10/14/25 16:48	EPA 8260D	
Methyl tert-butyl ether (MTBE)	ND	---	10.0	ug/L	10	10/14/25 16:48	EPA 8260D	
<b>Naphthalene</b>	<b>127</b>	---	50.0	ug/L	10	10/14/25 16:48	EPA 8260D	
1,2-Dibromoethane (EDB)	ND	---	5.00	ug/L	10	10/14/25 16:48	EPA 8260D	
1,2-Dichloroethane (EDC)	ND	---	4.00	ug/L	10	10/14/25 16:48	EPA 8260D	
<b>Isopropylbenzene</b>	<b>46.0</b>	---	10.0	ug/L	10	10/14/25 16:48	EPA 8260D	
<b>1,2,4-Trimethylbenzene</b>	<b>1920</b>	---	10.0	ug/L	10	10/14/25 16:48	EPA 8260D	
<b>1,3,5-Trimethylbenzene</b>	<b>984</b>	---	10.0	ug/L	10	10/14/25 16:48	EPA 8260D	
<i>Surrogate: 1,4-Difluorobenzene (Surr)</i>			<i>Recovery: 102 %</i>	<i>Limits: 80-120 %</i>	<i>1</i>	<i>10/14/25 16:48</i>	<i>EPA 8260D</i>	
<i>Toluene-d8 (Surr)</i>			<i>98 %</i>	<i>80-120 %</i>	<i>1</i>	<i>10/14/25 16:48</i>	<i>EPA 8260D</i>	
<i>4-Bromofluorobenzene (Surr)</i>			<i>99 %</i>	<i>80-120 %</i>	<i>1</i>	<i>10/14/25 16:48</i>	<i>EPA 8260D</i>	

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Cameron O'Brien, Project Manager



ANALYTICAL REPORT

**Apex Laboratories, LLC**

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ORELAP ID: OR100062

<b>Alpha Environmental</b> 11080 SW Allen Blvd, Suite 100 Beaverton, OR 97005	Project: <b>Default- Env Dept.</b> Project Number: <b>808 12th St. SE 24-64842</b> Project Manager: <b>Jim Cooper</b>	<b>Report ID:</b> <b>A5J1436 - 10 23 25 1854</b>
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**QUALITY CONTROL (QC) SAMPLE RESULTS**

**Diesel and/or Oil Hydrocarbons by NWTPH-Dx**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
<b>Batch 25J0523 - EPA 3510C (Fuels/Acid Ext.)</b>						<b>Water</b>						
<b>Blank (25J0523-BLK1)</b>		Prepared: 10/15/25 08:02		Analyzed: 10/15/25 20:02								
<u>NWTPH-Dx LL</u>												
Diesel	ND	---	80.0	ug/L	1	---	---	---	---	---	---	
Oil	ND	---	160	ug/L	1	---	---	---	---	---	---	
<i>Surr: o-Terphenyl (Surr)</i>		<i>Recovery: 91 %</i>		<i>Limits: 50-150 %</i>		<i>Dilution: 1x</i>						
<b>LCS (25J0523-BS1)</b>		Prepared: 10/15/25 08:02		Analyzed: 10/15/25 20:23								
<u>NWTPH-Dx LL</u>												
Diesel	406	---	80.0	ug/L	1	500	---	81	36 - 132%	---	---	
<i>Surr: o-Terphenyl (Surr)</i>		<i>Recovery: 99 %</i>		<i>Limits: 50-150 %</i>		<i>Dilution: 1x</i>						
<b>LCS Dup (25J0523-BSD1)</b>		Prepared: 10/15/25 08:02		Analyzed: 10/15/25 20:43		<b>Q-19</b>						
<u>NWTPH-Dx LL</u>												
Diesel	401	---	80.0	ug/L	1	500	---	80	36 - 132%	1	30%	
<i>Surr: o-Terphenyl (Surr)</i>		<i>Recovery: 97 %</i>		<i>Limits: 50-150 %</i>		<i>Dilution: 1x</i>						

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

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**QUALITY CONTROL (QC) SAMPLE RESULTS**

**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
<b>Batch 25J0498 - EPA 5030C</b>						<b>Water</b>						
<b>Blank (25J0498-BLK1)</b>		Prepared: 10/14/25 10:03 Analyzed: 10/14/25 12:09										
<u>NWTPH-Gx (MS)</u>												
Gasoline Range Organics	ND	---	100	ug/L	1	---	---	---	---	---	---	---
Surr: 4-Bromofluorobenzene (Sur)		Recovery: 94 %		Limits: 50-150 %		Dilution: 1x						
1,4-Difluorobenzene (Sur)		98 %		50-150 %		"						
<b>LCS (25J0498-BS2)</b>		Prepared: 10/14/25 10:03 Analyzed: 10/14/25 11:48										
<u>NWTPH-Gx (MS)</u>												
Gasoline Range Organics	413	---	100	ug/L	1	500	---	83	80 - 120%	---	---	---
Surr: 4-Bromofluorobenzene (Sur)		Recovery: 94 %		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.*

Apex Laboratories

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ANALYTICAL REPORT

**Apex Laboratories, LLC**

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<b>Alpha Environmental</b> 11080 SW Allen Blvd, Suite 100 Beaverton, OR 97005	Project: <b>Default- Env Dept.</b> Project Number: <b>808 12th St. SE 24-64842</b> Project Manager: <b>Jim Cooper</b>	<b>Report ID:</b> A5J1436 - 10 23 25 1854
---	---	--

**QUALITY CONTROL (QC) SAMPLE RESULTS**

**Selected Volatile Organic Compounds by EPA 8260D**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
<b>Batch 25J0498 - EPA 5030C</b>						<b>Water</b>						
<b>Blank (25J0498-BLK1)</b>		Prepared: 10/14/25 10:03		Analyzed: 10/14/25 12:09								
<b>EPA 8260D</b>												
Benzene	ND	---	0.200	ug/L	1	---	---	---	---	---	---	---
Toluene	ND	---	1.00	ug/L	1	---	---	---	---	---	---	---
Ethylbenzene	ND	---	0.500	ug/L	1	---	---	---	---	---	---	---
Xylenes, total	ND	---	1.50	ug/L	1	---	---	---	---	---	---	---
Methyl tert-butyl ether (MTBE)	ND	---	1.00	ug/L	1	---	---	---	---	---	---	---
Naphthalene	ND	---	5.00	ug/L	1	---	---	---	---	---	---	---
1,2-Dibromoethane (EDB)	ND	---	0.500	ug/L	1	---	---	---	---	---	---	---
1,2-Dichloroethane (EDC)	ND	---	0.400	ug/L	1	---	---	---	---	---	---	---
Isopropylbenzene	ND	---	1.00	ug/L	1	---	---	---	---	---	---	---
1,2,4-Trimethylbenzene	ND	---	1.00	ug/L	1	---	---	---	---	---	---	---
1,3,5-Trimethylbenzene	ND	---	1.00	ug/L	1	---	---	---	---	---	---	---
<i>Surr: 1,4-Difluorobenzene (Surr)</i>		<i>Recovery: 101 %</i>		<i>Limits: 80-120 %</i>		<i>Dilution: 1x</i>						
<i>Toluene-d8 (Surr)</i>		<i>99 %</i>		<i>80-120 %</i>		<i>"</i>						
<i>4-Bromofluorobenzene (Surr)</i>		<i>98 %</i>		<i>80-120 %</i>		<i>"</i>						
<b>LCS (25J0498-BS1)</b>						Prepared: 10/14/25 10:03 Analyzed: 10/14/25 11:26						
<b>EPA 8260D</b>												
Benzene	18.6	---	0.200	ug/L	1	20.0	---	93	80 - 120%	---	---	---
Toluene	19.1	---	1.00	ug/L	1	20.0	---	95	80 - 120%	---	---	---
Ethylbenzene	19.0	---	0.500	ug/L	1	20.0	---	95	80 - 120%	---	---	---
Xylenes, total	57.6	---	1.50	ug/L	1	60.0	---	96	80 - 120%	---	---	---
Methyl tert-butyl ether (MTBE)	19.9	---	1.00	ug/L	1	20.0	---	100	80 - 120%	---	---	---
Naphthalene	19.5	---	5.00	ug/L	1	20.0	---	97	80 - 120%	---	---	---
1,2-Dibromoethane (EDB)	20.0	---	0.500	ug/L	1	20.0	---	100	80 - 120%	---	---	---
1,2-Dichloroethane (EDC)	19.5	---	0.400	ug/L	1	20.0	---	98	80 - 120%	---	---	---
Isopropylbenzene	19.7	---	1.00	ug/L	1	20.0	---	99	80 - 120%	---	---	---
1,2,4-Trimethylbenzene	19.8	---	1.00	ug/L	1	20.0	---	99	80 - 120%	---	---	---
1,3,5-Trimethylbenzene	19.8	---	1.00	ug/L	1	20.0	---	99	80 - 120%	---	---	---
<i>Surr: 1,4-Difluorobenzene (Surr)</i>		<i>Recovery: 102 %</i>		<i>Limits: 80-120 %</i>		<i>Dilution: 1x</i>						
<i>Toluene-d8 (Surr)</i>		<i>100 %</i>		<i>80-120 %</i>		<i>"</i>						
<i>4-Bromofluorobenzene (Surr)</i>		<i>96 %</i>		<i>80-120 %</i>		<i>"</i>						

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Cameron O'Brien, Project Manager



ANALYTICAL REPORT

**Apex Laboratories, LLC**

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

<b>Alpha Environmental</b> 11080 SW Allen Blvd, Suite 100 Beaverton, OR 97005	Project: <b>Default- Env Dept.</b> Project Number: <b>808 12th St. SE 24-64842</b> Project Manager: <b>Jim Cooper</b>	<b>Report ID:</b> <b>A5J1436 - 10 23 25 1854</b>
---	---	---

**QUALITY CONTROL (QC) SAMPLE RESULTS**

**Selected Volatile Organic Compounds by EPA 8260D**

Analyte	Detection Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
---------	---------------------	--------------------	--------------------	-------	----------	-----------------	------------------	-------	-----------------	-----	--------------	-------

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

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---	---	---

**SAMPLE PREPARATION INFORMATION**

Diesel and/or Oil Hydrocarbons by NWTPH-Dx

Prep: EPA 3510C (Fuels/Acid Ext.)

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
<u>Batch: 25J0523</u>							
A5J1436-01	Water	NWTPH-Dx LL	10/10/25 14:00	10/15/25 08:02	990mL/2mL	1000mL/2mL	1.01

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

Prep: EPA 5030C

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
<u>Batch: 25J0498</u>							
A5J1436-01	Water	NWTPH-Gx (MS)	10/10/25 14:00	10/14/25 12:05	5mL/5mL	5mL/5mL	1.00

Selected Volatile Organic Compounds by EPA 8260D

Prep: EPA 5030C

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
<u>Batch: 25J0498</u>							
A5J1436-01	Water	EPA 8260D	10/10/25 14:00	10/14/25 12:05	5mL/5mL	5mL/5mL	1.00

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Cameron O'Brien, Project Manager



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---	---	---

**QUALIFIER DEFINITIONS**

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

**Apex Laboratories**

- DCNT**     Sample decanted due to the presence of sediment in water samples, or water in sediment or soil samples. (Note: Decanted aqueous sample bottles are not solvent rinsed.)
- F-18**     Result for Diesel (Diesel Range Organics, C12-C25) is due to overlap from Gasoline or a Gasoline Range product.
- Q-19**     Blank Spike Duplicate (BSD) sample analyzed in place of Matrix Spike/Duplicate samples due to limited sample amount available for analysis.
- S-01**     Surrogate recovery for this sample is not available due to sample dilution required from high analyte concentration and/or matrix interference.

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Cameron O'Brien, Project Manager



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**REPORTING NOTES AND CONVENTIONS:**

**Abbreviations:**

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

**Detection Limits: Limit of Detection (LOD)**

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

**Reporting Limits: Limit of Quantitation (LOQ)**

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

**Reporting and Detection Limits: Default Limits**

Default Reporting and Detection Limits are based on 100% dry weight with the minimum dilution for the analysis. Reporting and Detection Limits are raised due to moisture content, additional dilutions required for analysis, matrix interferences and in other cases, as necessary.

**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).

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Table with 3 columns: Client (Alpha Environmental), Project (Default- Env Dept.), and Report ID (A5J1436 - 10 23 25 1854).

REPORTING NOTES AND CONVENTIONS (Cont.):

Blanks:

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

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

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.

Apex Laboratories

Cameron O'Brien signature

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Decanted Samples:

Soils/Sediments:

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

Water Samples:

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

Volatiles Soils (5035s)

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

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

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**LABORATORY ACCREDITATION INFORMATION**

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

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

**Apex Laboratories**

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

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

**Secondary Accreditations**

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

**Subcontract Laboratory Accreditations**

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

**Field Testing Parameters**

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

Apex Laboratories

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---	---	---

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

**CHAIN OF CUSTODY**

Lab # A5J1436 COC # of \_\_\_\_\_

Company: <u>Alpha</u>	Project Mgr: <u>Jim Cooper</u>	Project Name: <u>808 12th St SE</u>	Project #: <u>24-64842</u>	PO #
Address:		Email:		
<b>ANALYSIS REQUEST</b>				
Sampled by: <u>Math H</u>	Phone:	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, TCIP	TCIP Metals (8) TOTAL DISS. TCIP	Hold Sample
Site Location: State <u>OR</u> County _____		RCRA Metals (8) 8081 Pesticides 8082 PCBs 8270 Semi-Vols Full List 8270 SIM PAHs 8260 VOCs Full List 8260 Halo VOCs 8260 RBDM VOCs 8260 BTEX NWTPH-GX NWTPH-DX NWTPH-CID	8081 Pesticides 8082 PCBs 8270 Semi-Vols Full List 8270 SIM PAHs 8260 VOCs Full List 8260 Halo VOCs 8260 RBDM VOCs 8260 BTEX NWTPH-GX NWTPH-DX NWTPH-CID	Frozen Archive
SAMPLE ID: <u>808A MW4</u>	DATE: <u>10/10 14:00</u>	TIME: <u>6W</u>	# OF CONTAINERS: <u>5</u>	MATRIX
Standard Turn Around Time (TAT) = 10 Business Days				
SPECIAL INSTRUCTIONS:				
TAT Requested (circle)    1 Day    2 Day    3 Day    5 Day    Standard    Other: _____				
SAMPLES ARE HELD FOR 30 DAYS				
RELINQUISHED BY: Signature: <u>Math Holmstrom</u> Printed Name: <u>Math Holmstrom</u> Company: <u>APEX LABS</u>	RECEIVED BY: Signature: <u>[Signature]</u> Printed Name: <u>Eli Doyko</u> Company: <u>APEX LABS</u>	RELINQUISHED BY: Signature: _____ Printed Name: _____ Company: _____	RECEIVED BY: Signature: _____ Printed Name: _____ Company: _____	Date: <u>10/13/25</u> Time: <u>1635</u>

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C O'Brien

Cameron O'Brien, Project Manager



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---	---	---

**APEX LABS COOLER RECEIPT FORM**

**Client:** Alpha **Element WO#:** A5J1436

**Project/Project #:** 808 12<sup>th</sup> St SE 24-64842

**Delivery Info:**

**Date/time received:** 10/13/25 @ 1635 **By:** EST

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

**From USDA Regulated Origin?** Yes  No

**Cooler Inspection** **Date/time inspected:** 10/13/25 @ 1656 **By:** EST

**Chain of Custody included?** Yes  No

**Signed/dated by client?** Yes  No

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

	Cooler #1	Cooler #2	Cooler #3	Cooler #4	Cooler #5	Cooler #6	Cooler #7
Temperature (°C)	<u>1.7</u>						
Custody seals? (Y/N)	<u>N</u>						
Received on ice? (Y/N)	<u>Y</u>						
Temp. blanks? (Y/N)	<u>Y</u>						
Ice type: (Gel/Real/Other)	<u>gel</u>						
Condition (In/Out):	<u>In</u>						

**Cooler out of temp? (Y/N)**  Possible reason why: \_\_\_\_\_

**Green dots applied to out of temperature samples?** Yes  No

**Out of temperature samples form initiated?** Yes  No

**Sample Inspection:** **Date/time inspected:** 10/13/25 @ 17:29 **By:** RAM

**All samples intact?** Yes  No  **Comments:** \_\_\_\_\_

**Bottle labels/COCs agree?** Yes  No  **Comments:** \_\_\_\_\_

**COC/container discrepancies form initiated?** Yes  No

**Containers/volumes received appropriate for analysis?** Yes  No  **Comments:** \_\_\_\_\_

**Do VOA vials have visible headspace?** Yes  No  NA  RAM 10/13

**Comments** 1/3 have HS

**Water samples: pH checked:** Yes  No  NA  **pH appropriate?** Yes  No  NA  **pH ID:** A256271

**Comments:** \_\_\_\_\_

**Labeled by:** RAM

**Witness:** AAW

**Cooler Inspected by:** EST

Form Y-003 R-02

C O'Brien

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

**Alpha Environmental Services, Inc**

Sample Delivery Group: L1907678  
Samples Received: 10/14/2025  
Project Number: 24-64842  
Description: 808 12th St SE, Salem

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

Entire Report Reviewed By:



Jordan N Zito  
Project Manager

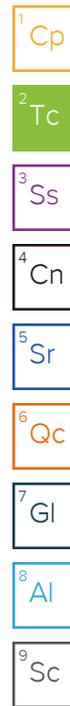
Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by Pace Analytical National is performed per guidance provided in laboratory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

**Pace Analytical National**

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

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# SAMPLE SUMMARY

SV-1 L1907678-01

Collected by  
Collected date/time  
Received date/time

10/10/25 15:01  
10/14/25 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG2620850	1	10/16/25 04:59	10/16/25 04:59	DAH	Mt. Juliet, TN

<sup>1</sup> Cp

<sup>2</sup> Tc

<sup>3</sup> Ss

<sup>4</sup> Cn

<sup>5</sup> Sr

<sup>6</sup> Qc

<sup>7</sup> Gl

<sup>8</sup> Al

<sup>9</sup> Sc

# CASE NARRATIVE

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



Jordan N Zito  
Project Manager

<sup>1</sup> Cp

<sup>2</sup> Tc

<sup>3</sup> Ss

<sup>4</sup> Cn

<sup>5</sup> Sr

<sup>6</sup> Qc

<sup>7</sup> Gl

<sup>8</sup> Al

<sup>9</sup> Sc

## Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	MDL	RDL	Result	Qualifier	Dilution	Batch
			ug/m3	ug/m3	ug/m3			
TPH (GC/MS) Low Fraction	8006-61-9	101	282	826	442	J	1	WG2620850
Acetone	67-64-1	58.10	1.24	2.97	22.6		1	WG2620850
Allyl chloride	107-05-1	76.53	0.582	0.626	U		1	WG2620850
Benzene	71-43-2	78.10	0.351	0.639	2.46		1	WG2620850
Benzyl Chloride	100-44-7	127	0.461	1.04	U		1	WG2620850
Bromodichloromethane	75-27-4	164	0.466	1.34	U		1	WG2620850
Bromoform	75-25-2	253	0.781	6.52	U		1	WG2620850
Bromomethane	74-83-9	94.90	0.364	0.776	U		1	WG2620850
1,3-Butadiene	106-99-0	54.10	0.350	4.43	U		1	WG2620850
Carbon disulfide	75-15-0	76.10	0.498	1.24	U		1	WG2620850
Carbon tetrachloride	56-23-5	154	0.470	1.26	U		1	WG2620850
Chlorobenzene	108-90-7	113	0.545	0.924	U		1	WG2620850
Chloroethane	75-00-3	64.50	0.290	0.528	U		1	WG2620850
Chloroform	67-66-3	119	0.506	0.973	U		1	WG2620850
Chloromethane	74-87-3	50.50	0.227	0.413	0.539		1	WG2620850
2-Chlorotoluene	95-49-8	126	0.406	1.03	U		1	WG2620850
Cyclohexane	110-82-7	84.20	0.585	0.689	4.13		1	WG2620850
Dibromochloromethane	124-48-1	208	0.592	1.70	U		1	WG2620850
1,2-Dibromoethane	106-93-4	188	0.531	1.54	U		1	WG2620850
1,2-Dichlorobenzene	95-50-1	147	0.441	1.20	U		1	WG2620850
1,3-Dichlorobenzene	541-73-1	147	0.453	1.20	U		1	WG2620850
1,4-Dichlorobenzene	106-46-7	147	0.462	1.20	U		1	WG2620850
1,2-Dichloroethane	107-06-2	99	0.296	0.810	U		1	WG2620850
1,1-Dichloroethane	75-34-3	98	0.285	0.802	U		1	WG2620850
1,1-Dichloroethene	75-35-4	96.90	0.296	0.793	U		1	WG2620850
cis-1,2-Dichloroethene	156-59-2	96.90	0.315	0.793	U		1	WG2620850
trans-1,2-Dichloroethene	156-60-5	96.90	0.291	0.793	U		1	WG2620850
1,2-Dichloropropane	78-87-5	113	0.348	0.924	U		1	WG2620850
cis-1,3-Dichloropropene	10061-01-5	111	0.337	0.908	U		1	WG2620850
trans-1,3-Dichloropropene	10061-02-6	111	0.361	0.908	U		1	WG2620850
1,4-Dioxane	123-91-1	88.10	0.591	2.27	U		1	WG2620850
Ethanol	64-17-5	46.10	4.47	4.71	85.0		1	WG2620850
Ethylbenzene	100-41-4	106	0.337	0.867	4.14		1	WG2620850
4-Ethyltoluene	622-96-8	120	0.435	0.982	2.29		1	WG2620850
Trichlorofluoromethane	75-69-4	137.40	0.433	1.12	1.06	J	1	WG2620850
Dichlorodifluoromethane	75-71-8	120.92	0.399	0.989	2.16		1	WG2620850
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.576	1.53	U		1	WG2620850
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.529	1.40	U		1	WG2620850
Heptane	142-82-5	100	0.466	0.818	6.79		1	WG2620850
Hexachloro-1,3-butadiene	87-68-3	261	0.854	6.73	U		1	WG2620850
n-Hexane	110-54-3	86.20	0.504	2.22	6.95		1	WG2620850
Isopropylbenzene	98-82-8	120.20	0.355	0.983	0.497	J	1	WG2620850
Methylene Chloride	75-09-2	84.90	0.587	0.694	U		1	WG2620850
Methyl Butyl Ketone	591-78-6	100	0.544	5.11	U		1	WG2620850
2-Butanone (MEK)	78-93-3	72.10	0.342	3.69	3.98		1	WG2620850
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	0.434	5.12	U		1	WG2620850
Methyl methacrylate	80-62-6	100.12	0.692	0.819	U		1	WG2620850
MTBE	1634-04-4	88.10	0.293	0.721	U		1	WG2620850
Naphthalene	91-20-3	128	3.23	3.30	U		1	WG2620850
2-Propanol	67-63-0	60.10	1.67	3.07	26.8		1	WG2620850
Propene	115-07-1	42.10	0.368	2.15	U		1	WG2620850
Styrene	100-42-5	104	0.341	1.70	0.351	J	1	WG2620850
1,1,2,2-Tetrachloroethane	79-34-5	168	0.478	1.37	U		1	WG2620850
Tetrachloroethylene	127-18-4	166	0.754	1.36	39.9		1	WG2620850
Tetrahydrofuran	109-99-9	72.10	0.484	0.590	U		1	WG2620850
Toluene	108-88-3	92.10	0.490	1.88	27.6		1	WG2620850

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

## Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	MDL ug/m3	RDL ug/m3	Result ug/m3	Qualifier	Dilution	Batch
1,2,4-Trichlorobenzene	120-82-1	181	3.42	4.66	U		1	<a href="#">WG2620850</a>
1,1,1-Trichloroethane	71-55-6	133	0.391	1.09	U		1	<a href="#">WG2620850</a>
1,1,2-Trichloroethane	79-00-5	133	0.372	1.09	U		1	<a href="#">WG2620850</a>
Trichloroethylene	79-01-6	131	0.364	1.07	U		1	<a href="#">WG2620850</a>
1,2,4-Trimethylbenzene	95-63-6	120	0.455	0.982	11.1		1	<a href="#">WG2620850</a>
1,3,5-Trimethylbenzene	108-67-8	120	0.419	0.982	3.27		1	<a href="#">WG2620850</a>
2,2,4-Trimethylpentane	540-84-1	114.22	0.420	0.934	9.90		1	<a href="#">WG2620850</a>
Vinyl chloride	75-01-4	62.50	0.211	0.511	U		1	<a href="#">WG2620850</a>
Vinyl Bromide	593-60-2	106.95	0.328	0.875	U		1	<a href="#">WG2620850</a>
Vinyl acetate	108-05-4	86.10	0.341	2.22	U		1	<a href="#">WG2620850</a>
m&p-Xylene		106	0.754	1.73	13.9		1	<a href="#">WG2620850</a>
o-Xylene	95-47-6	106	0.385	0.867	6.68		1	<a href="#">WG2620850</a>
<sup>(S)</sup> 1,4-Bromofluorobenzene	460-00-4	175			98.1		60.0-140	<a href="#">WG2620850</a>

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Method Blank (MB)

(MB) R4288177-3 10/15/25 10:48

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

<sup>1</sup>Cp

<sup>2</sup>Tc

<sup>3</sup>Ss

<sup>4</sup>Cn

<sup>5</sup>Sr

<sup>6</sup>Qc

<sup>7</sup>Gl

<sup>8</sup>Al

<sup>9</sup>Sc

Method Blank (MB)

(MB) R4288177-3 10/15/25 10:48

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/m3		ug/m3	ug/m3
n-Hexane	U		0.504	2.22
Isopropylbenzene	U		0.355	0.983
Methylene Chloride	U		0.587	0.694
Methyl Butyl Ketone	U		0.544	5.11
2-Butanone (MEK)	U		0.342	3.69
4-Methyl-2-pentanone (MIBK)	U		0.434	5.12
Methyl methacrylate	U		0.692	0.819
MTBE	U		0.293	0.721
Naphthalene	U		3.23	3.30
2-Propanol	U		1.67	3.07
Propene	U		0.368	2.15
Styrene	U		0.341	1.70
1,1,2,2-Tetrachloroethane	U		0.478	1.37
Tetrachloroethylene	U		0.754	1.36
Tetrahydrofuran	U		0.484	0.590
Toluene	U		0.490	1.88
1,2,4-Trichlorobenzene	U		3.42	4.66
1,1,1-Trichloroethane	U		0.391	1.09
1,1,2-Trichloroethane	U		0.372	1.09
Trichloroethylene	U		0.364	1.07
1,2,4-Trimethylbenzene	U		0.455	0.982
1,3,5-Trimethylbenzene	U		0.419	0.982
2,2,4-Trimethylpentane	U		0.420	0.934
Vinyl chloride	U		0.211	0.511
Vinyl Bromide	U		0.328	0.875
Vinyl acetate	U		0.341	2.22
m&p-Xylene	U		0.754	1.73
o-Xylene	U		0.385	0.867
(S) 1,4-Bromofluorobenzene	85.3			60.0-140

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

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

(LCS) R4288177-1 10/15/25 09:15 • (LCSD) R4288177-2 10/15/25 09:47

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
	ug/m3	ug/m3	ug/m3	%	%	%			%	%
TPH (GC/MS) Low Fraction	777	789	789	102	102	70.0-130	↓	↓	0.000	25
Acetone	8.91	9.27	9.39	104	105	70.0-130			1.27	25
Allyl chloride	11.7	13.9	13.7	118	117	70.0-130			0.907	25
Benzene	12.0	12.9	13.1	108	110	70.0-130			1.47	25

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

(LCS) R4288177-1 10/15/25 09:15 • (LCSD) R4288177-2 10/15/25 09:47

Analyte	Spike Amount ug/m3	LCS Result ug/m3	LCSD Result ug/m3	LCS Rec. %	LCSD Rec. %	Rec. Limits %	<u>LCS Qualifier</u>	<u>LCSD Qualifier</u>	RPD %	RPD Limits %
Benzyl Chloride	19.5	20.8	21.3	107	110	70.0-152			2.46	25
Bromodichloromethane	25.2	26.8	27.1	106	108	70.0-130			1.25	25
Bromoform	38.8	38.0	37.9	97.9	97.6	70.0-130			0.273	25
Bromomethane	14.6	15.5	15.2	106	105	70.0-130			1.77	25
1,3-Butadiene	8.30	8.85	8.81	107	106	70.0-130			0.501	25
Carbon disulfide	23.3	24.9	25.1	107	107	70.0-130			0.872	25
Carbon tetrachloride	23.6	25.1	24.9	106	106	70.0-130			0.755	25
Chlorobenzene	17.3	18.4	18.8	106	108	70.0-130			1.74	25
Chloroethane	9.89	10.6	10.7	107	108	70.0-130			0.248	25
Chloroform	18.3	19.7	19.9	108	109	70.0-130			0.738	25
Chloromethane	7.75	8.24	8.26	106	107	70.0-130			0.250	25
2-Chlorotoluene	19.3	20.5	21.1	106	109	70.0-130			2.73	25
Cyclohexane	12.9	13.7	13.8	106	107	70.0-130			0.500	25
Dibromochloromethane	31.9	32.7	33.0	102	103	70.0-130			1.04	25
1,2-Dibromoethane	28.8	31.1	31.5	108	109	70.0-130			1.23	25
1,2-Dichlorobenzene	22.5	25.4	26.3	113	117	70.0-130			3.26	25
1,3-Dichlorobenzene	22.5	26.3	27.0	117	120	70.0-130			2.71	25
1,4-Dichlorobenzene	22.5	25.9	26.2	115	116	70.0-130			1.16	25
1,2-Dichloroethane	15.2	16.4	16.6	108	110	70.0-130			1.47	25
1,1-Dichloroethane	15.0	16.3	16.2	108	107	70.0-130			0.742	25
1,1-Dichloroethene	14.9	15.7	15.9	106	107	70.0-130			1.25	25
cis-1,2-Dichloroethene	14.9	16.4	16.2	110	109	70.0-130			0.971	25
trans-1,2-Dichloroethene	14.9	15.8	16.1	106	108	70.0-130			1.49	25
1,2-Dichloropropane	17.3	18.3	18.8	106	109	70.0-130			2.49	25
cis-1,3-Dichloropropene	17.0	17.9	18.3	105	108	70.0-130			2.25	25
trans-1,3-Dichloropropene	17.0	18.3	18.6	108	109	70.0-130			1.23	25
1,4-Dioxane	13.5	17.0	16.6	126	123	70.0-140			2.57	25
Ethanol	7.07	7.35	7.52	104	106	55.0-148			2.28	25
Ethylbenzene	16.3	17.4	18.1	107	111	70.0-130			3.91	25
4-Ethyltoluene	18.4	21.4	22.0	117	120	70.0-130			2.71	25
Trichlorofluoromethane	21.1	22.2	22.3	105	106	70.0-130			0.253	25
Dichlorodifluoromethane	18.5	19.8	19.7	107	106	64.0-139			0.500	25
1,1,2-Trichlorotrifluoroethane	28.7	30.2	30.6	105	106	70.0-130			1.26	25
1,2-Dichlorotetrafluoroethane	26.2	27.3	27.8	104	106	70.0-130			1.77	25
Heptane	15.3	17.7	18.0	115	117	70.0-130			1.60	25
Hexachloro-1,3-butadiene	40.0	43.4	43.0	109	107	70.0-151			0.988	25
n-Hexane	13.2	14.6	14.6	111	110	70.0-130			0.241	25
Isopropylbenzene	18.4	19.9	20.4	108	110	70.0-130			2.20	25
Methylene Chloride	13.0	14.0	14.1	107	108	70.0-130			0.742	25
Methyl Butyl Ketone	15.3	18.0	18.3	117	119	70.0-149			1.58	25

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

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

(LCS) R4288177-1 10/15/25 09:15 • (LCSD) R4288177-2 10/15/25 09:47

Analyte	Spike Amount ug/m3	LCS Result ug/m3	LCSD Result ug/m3	LCS Rec. %	LCSD Rec. %	Rec. Limits %	<u>LCS Qualifier</u>	<u>LCSD Qualifier</u>	RPD %	RPD Limits %
2-Butanone (MEK)	11.1	12.2	11.9	110	108	70.0-130			2.20	25
4-Methyl-2-pentanone (MIBK)	15.4	17.4	17.9	114	117	70.0-139			2.78	25
Methyl methacrylate	15.4	17.2	17.6	112	115	70.0-130			2.35	25
MTBE	13.5	14.7	14.8	109	110	70.0-130			0.731	25
Naphthalene	19.6	23.2	23.7	118	121	70.0-159			2.23	25
2-Propanol	9.22	9.54	9.64	103	105	70.0-139			1.03	25
Propene	6.46	7.09	6.96	110	108	64.0-144			1.96	25
Styrene	31.9	38.2	39.6	120	124	70.0-130			3.61	25
1,1,2,2-Tetrachloroethane	25.8	27.8	28.7	108	111	70.0-130			3.16	25
Tetrachloroethylene	25.5	27.2	27.8	107	109	70.0-130			2.22	25
Tetrahydrofuran	11.1	12.4	12.9	112	117	70.0-137			3.96	25
Toluene	14.1	15.2	15.6	107	111	70.0-130			2.93	25
1,2,4-Trichlorobenzene	27.8	29.6	30.4	107	110	70.0-160			2.71	25
1,1,1-Trichloroethane	20.4	21.6	22.2	106	109	70.0-130			2.48	25
1,1,2-Trichloroethane	20.4	21.4	22.5	105	110	70.0-130			4.96	25
Trichloroethylene	20.1	21.5	21.8	107	109	70.0-130			1.49	25
1,2,4-Trimethylbenzene	18.4	21.2	21.8	115	118	70.0-130			2.74	25
1,3,5-Trimethylbenzene	18.4	20.9	21.6	114	118	70.0-130			3.46	25
2,2,4-Trimethylpentane	17.5	20.0	20.6	114	117	70.0-130			2.76	25
Vinyl chloride	9.59	10.2	10.3	107	107	70.0-130			0.499	25
Vinyl Bromide	16.4	17.1	17.4	105	106	70.0-130			1.52	25
Vinyl acetate	13.2	13.5	13.5	102	102	70.0-130			0.261	25
m&p-Xylene	32.5	36.0	37.3	111	115	70.0-130			3.67	25
o-Xylene	16.3	19.1	19.3	117	119	70.0-130			1.35	25
(S) 1,4-Bromofluorobenzene				100	99.1	60.0-140				

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

# GLOSSARY OF TERMS

## Guide to Reading and Understanding Your Laboratory Report

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

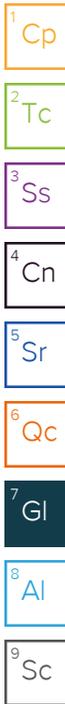
Results Disclaimer - Information that may be provided by the customer, and contained within this report, include Permit Limits, Project Name, Sample ID, Sample Matrix, Sample Preservation, Field Blanks, Field Spikes, Field Duplicates, On-Site Data, Sampling Collection Dates/Times, and Sampling Location.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

### Abbreviations and Definitions

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

### Qualifier Description

J	The identification of the analyte is acceptable; the reported value is an estimate.
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# ACCREDITATIONS & LOCATIONS

## Pace Analytical National 12065 Lebanon Rd Mount Juliet, TN 37122

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

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

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

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

<sup>1</sup> Cp

<sup>2</sup> Tc

<sup>3</sup> Ss

<sup>4</sup> Cn

<sup>5</sup> Sr

<sup>6</sup> Qc

<sup>7</sup> Gl

<sup>8</sup> Al

<sup>9</sup> Sc

